

 MOTOROLA SOLUTIONS	    SMM 826 CERTIFICATE 2518.05
SAR TEST REPORT	
Motorola Solutions Inc. EME Test Laboratory Motorola Solutions Malaysia Sdn Bhd Plot 2A, Medan Bayan Lepas, Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia.	Date of Report: 09/11/2026 Report Revision: A
Responsible Engineer: Report Author: Date/s Tested: Test Location: Manufacturer: Manufacturer Location: Hardware Receive Date: DUT Description: Test TX mode(s): Max. Power output: Tx Frequency Bands: Signaling type: Model(s) Tested: Model(s) Certified: (HVIN/PMN) Serial Number(s): Classification: Applicant Name: Applicant Address: Firmware Version (FVIN): FCC ID: FCC Test Firm Registration Number: FCC Designation Number: IC: ISED Test Site registration: CAB ID:	Yeng Yee Yeong (EME Engineer) Muhammad Hizami bin Ismail (Senior Technician) 05/06/2026 - 05/09/2026, 09/09/2026 – 09/10/2026 Penang EME Laboratory Motorola Solutions Malaysia Sdn Bhd. Plot 2A, Medan Bayan Lepas Mukim, 12 SWD, 11900 Bayan Lepas, Penang, Malaysia 04/27/2026 Handheld Portable – Guardian Tanapa US; BT, WLAN FHSS (Bluetooth / Bluetooth LE), 802.11b/g/n/a/ac/ax (WLAN) Refer table 3 Refer table 3 Refer table 3 HK2227A Refer 1.0 Introduction 64222CG2312 General Population / Uncontrolled Environment Motorola Solutions Inc. Plot 2A, Medan Bayan Lepas Mukim, 12 SWD, 11900 Bayan Lepas, Penang, Malaysia F.02.02.01.20260415.02 AZ499FT7192 This report contains results that are immaterial for FCC equipment approval, which are clearly identified. 823256 MY0004 109U-99FT7192 This report contains results that are immaterial for ISED equipment approval, which are clearly identified. 24843 MY0002
The test results clearly demonstrate compliance with General Population/Uncontrolled RF Exposure limits of 1.6 W/kg averaged over 1 gram per the requirements of FCC 47 CFR § 2.1093 and RSS-102 (Issue 6)	
Based on the information and the testing results provided herein, the undersigned certifies that when used as stated in the operating instructions supplied, said product complies with the national and international reference standards and guidelines listed in section 4.0 of this report (no deviation from standard methods). This report shall not be reproduced without written approval from an officially designated representative of the Motorola Solutions Inc EME Laboratory. I attest to the accuracy of the data and assume full responsibility for the completeness of these measurements. The results and statements contained in this report pertain only to the device(s) evaluated.	
 Saw Sun Hock (Approval Signatory) Approved Date: 09/11/2026	

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DUT, Body worn and audio accessories Photos

Report Revision History

Date	Revision	Comments
09/11/2026	A	Initial release

1.0 Introduction

This report details the utilization, test setup, test equipment, and test results of the Specific Absorption Rate (SAR) measurements performed at the Motorola Solutions Inc. EME Test Laboratory for handheld portable model number HK2227A. This device is classified as General Population/Uncontrolled and model certified is listed as below:

Models	Hardware Version ID Number (HVIN)	Product Marketing Name (PMN)	Description
HK2227A	HK2227A	C5	Guardian Tanapa US

2.0 FCC SAR Summary

Table 1

Equipment Class	Frequency band (MHz)	Max Calc at Body (W/kg)
		1g-SAR
DSS	2402 - 2480 MHz	*NA
DTS	2412 – 2462 MHZ (WLAN 2.4 GHz)	1.159
NII	5180 – 5845 MHz (WLAN 5 GHz)	0.424
**Simultaneous Results		**N/A

* denotes results not required per KDB (refer to section 14.0)

*Not applicable, refer to section 15.0 Simultaneous Transmission.

3.0 Abbreviations / Definitions

BT:	Bluetooth
CNR:	Calibration Not Required
DSS	Part 15 Spread Spectrum Transmitter
DSSS:	Direct Sequence Spread Spectrum
DUT:	Device Under Test
DTS	Digital Transmission System
EME:	Electromagnetic Energy
FHSS:	Frequency Hopping Spread Spectrum
GFSK:	Gaussian Frequency-Shift Keying
NA:	Not Applicable
OFDM:	Orthogonal Frequency Division Multiplexing
PTT:	Push to Talk
SAR:	Specific Absorption Rate

Audio accessories: These accessories allow communication while the DUT is worn on the body.

Body worn accessories: These accessories allow the DUT to be worn on the body of the user.

Maximum Power: Defined as the upper limit of the production line final test station

4.0 Referenced Standards and Guidelines

This product is designed to comply with the following applicable national and international standards and guidelines.

- Federal Communications Commission, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields", OET Bulletin 65, FCC, Washington, D.C.: 1997.
- Institute of Electrical and Electronics Engineers (IEEE) C95.1-2019
- Ministry of Health (Canada) Safety Code 6 (2015), Limits of Human Exposure to Radio frequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz
- RSS-102 (Issue 6) – Radio Frequency (RF) Exposure Compliance of Radio communication Apparatus (All Frequency Bands)
- ANATEL, Brazil Regulatory Authority, Resolution No 700 of September 28, 2018 "Approves the Regulation on the Assessment of Human Exposure to Electric, Magnetic and Electromagnetic Fields Associated with the Operation of Radio communication Transmitting Stations.
- IEC/IEEE 62209-1528-2020- Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)

- FCC KDB – 643646 D01 SAR Test for PTT Radios v01r03
- FCC KDB – 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB – 865664 D02 RF Exposure Reporting v01r02
- FCC KDB – 447498 D04 Interim General RF Exposure Guidance v01
- FCC KDB – 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB - 648474 D04 Handset SAR v01r03

5.0 SAR Limits

Table 2

EXPOSURE LIMITS	SAR (W/kg)	
	(General Population / Uncontrolled Exposure Environment)	(Occupational / Controlled Exposure Environment)
Spatial Average - ANSI - (averaged over the whole body)	0.08	0.4
Spatial Peak - ANSI - (averaged over any 1-g of tissue)	1.6	8.0
Spatial Peak – ICNIRP/ANSI - (hands/wrists/feet/ankles averaged over 10-g)	4.0	20.0
Spatial Peak - ICNIRP - (Head and Trunk 10-g)	2.0	10.0

6.0 Description of Device Under Test (DUT)

This portable device operates in WLAN technology for data applications and Bluetooth technology for short range wireless devices.

This device also incorporates a GFSK Bluetooth device which is a Frequency Hopping Spread Spectrum (FHSS) technology. The Bluetooth radio modem is used to wireless link audio accessories. The maximum actual transmission duty cycle is imposed by the Bluetooth standard. The maximum duty cycle for BT is 76.93%.

This device included WLAN 2.4GHz 802.11b/g/n/ax operate using Direct Sequence Spread Spectrum(DSSS) and Orthogonal Frequency-Division Multiplexing(OFDM) with channel bandwidth of 20MHz. WLAN 5GHz 802.11 a/n/ac/ax operate using Orthogonal Frequency-Division Multiplexing(OFDM) with channel bandwidth of 20MHz.

Table 3 below summarizes the technologies, bands, maximum duty cycles and maximum output powers. Maximum output powers are defined as upper limit of the production line final test station.

Table 3

Technology	Transmit Band (MHz)	Transmission	Duty Cycle (%)	Conducted (Average Detector) Maximum Power (W)
Bluetooth	2402 - 2480	FHSS	76.93	0.01259
Bluetooth LE (1M)				
802.11 b/g/n/ax	2412 - 2484	DSSS, OFDM	99.86	0.06310
802.11 a/n/ac/ax	5160 - 5855	OFDM	98.96	0.03981

The intended operating positions “at the body” by means of the offered body worn accessories. Body worn audio and PTT operation is accomplished by means of optional remote accessories that are connected to the radio. Operation at the body without an audio accessory attached is possible by means of BT accessories.

7.0 Optional Accessories and Test Criteria

This device is offered with optional accessories. All accessories were individually evaluated during the test plan creation to determine if testing was required per the guidelines outlined in "SAR Test Reduction Considerations for Occupational PTT Radios" FCC KDB 643646 to assess compliance of this device. The following sections identify the test criteria and details for each accessory category. Refer to Exhibit 7B for antenna separation distances.

7.1 Antennas

Table 4

Antenna No.	Antenna Models	Description	Selected for test	Tested
1	Internal Antenna	Antenna Wifi/BT, ¼ wave, 2400 – 2500MHz (0.87dBi), 5150 – 5250 MHz (2.00dBi), 5250 – 5350MHz (1.60dBi), 5470 -5725MHz (1.56dBi), 5725 – 5850MHz (2.70dBi)	Yes	Yes

7.2 Battery

Table 5

Battery No.	Battery Models	Description	Selected for test	Tested	Comments
1	PMNN4912A	BATTERY PACK, GUARDIAN BATTERY PACK	Yes	Yes	

7.3 Body worn Accessories

Table 6

Body worn No.	Body worn Models	Description	Selected for test	Tested	Comments
1	PMLN8929A	GUARDIAN BADGE CLIP	Yes	Yes	

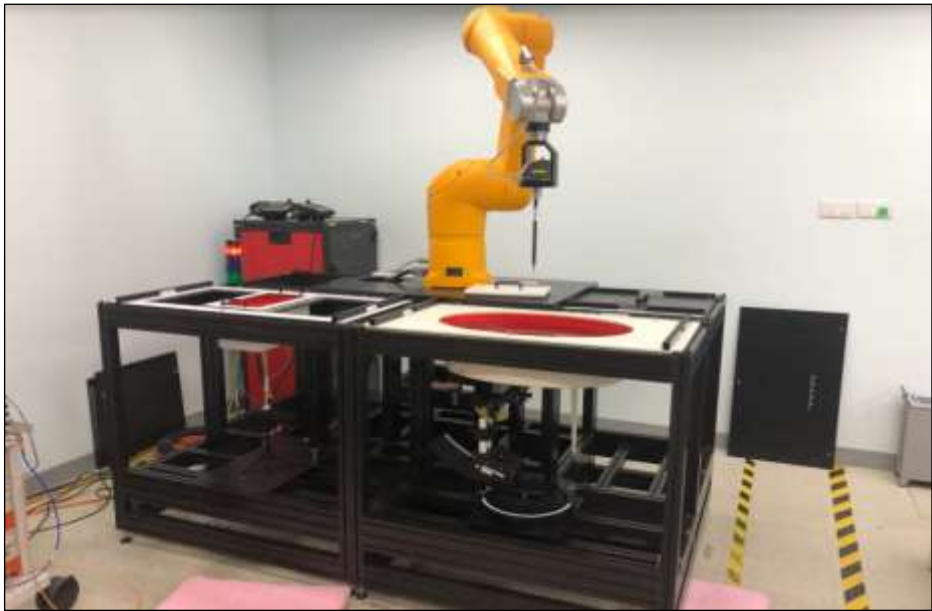
7.4 Audio Accessories

Table 7

Audio No.	Audio Acc. Models	Description	Selected for test	Tested	Comments
1	PMLN8928A	GUARDIAN EAEPiece WITH CABLE CLIP AND FLAG LABEL	Yes	Yes	

8.0 Description of Test System

DASY6™ Test System



8.1 Descriptions of Robotics/Probes/Readout Electronics

Table 8

Dosimetric System type	System version	DAE type	Probe Type
Schmid & Partner Engineering AG SPEAG DASY 6	V18.0.0.7250	DAE4	EX3DV4 (E-Field)

The DASY6™ system is operated per the instructions in the DASY6™ Users Manual. The complete manual is available directly from SPEAG™. All measurement equipment used to assess SAR compliance was calibrated according to ISO/IEC 17025 A2LA guidelines. Section 9.0 presents additional test equipment information. Appendices B and C present the applicable calibration certificates.

8.2 Description of Phantom(s)

Table 9

Phantom Type	Phantom(s) Used	Material Parameters	Phantom Dimensions LxWxD (mm)	Material Thickness (mm)	Support Structure Material	Loss Tangent (wood)
Triple Flat	NA	200MHz - 6GHz; Er = 3-5, Loss Tangent = ≤ 0.05	280x175x175	2mm +/- 0.2mm	Wood	< 0.05
SAM	NA	300MHz - 6GHz; Er = < 5, Loss Tangent = ≤ 0.05	Human Model			
Oval Flat	✓	300MHz - 6GHz; Er = 4+/- 1, Loss Tangent = ≤ 0.05	600x400x190			

8.3 Description of Simulated Tissue

The sugar based simulate tissue is produced by placing the correct measured amount of De-ionized water into a large container. Each of the dried ingredients are weighed and added to the water carefully to avoid clumping. If the solution has a high sugar concentration the water is pre-heated to aid in dissolving the ingredients. The solution is mixed thoroughly, covered, and allowed to sit overnight prior to use.

The simulated tissue mixture was mixed based on the Simulated Tissue Composition indicated in Table 10. During the daily testing of this product, the applicable mixture was used to measure the Di-electric parameters at each of the tested frequencies to verify that the Di-electric parameters were within the tolerance of the tissue specifications.

Simulated Tissue Composition (percent by mass)

Table 10

Ingredients	2450MHz ⁽¹⁾	5GHz ⁽¹⁾
	Head	Head
Sugar	NA	NA
Diacetin	NA	NA
De ionized-Water	NA	NA
Salt	NA	NA
HEC	NA	NA
Bact.	NA	NA

Note: (1) SPEAG provides Motorola proprietary stimulant ingredients for the 2.4GHz and 5GHz band.

9.0 Additional Test Equipment

The Table below lists additional test equipment used during the SAR assessment.

Table 11

Equipment Type	Model Number	Serial Number	Calibration Date	Calibration Due Date
SPEAG PROBE	EX3DV4	7816	10/6/2023	10/06/2026
SPEAG DAE	DAE4	729	07/10/2024	07/10/2027
POWER SOURCE*	SE UMS 160 CA	4320	08/27/2025	08/27/2026
POWER SOURCE	SE UMS 160 CA	4251	03/19/2026	03/19/2027
DATA LOGGER	DSB	16326831	12/18/2025	12/18/2026
DATA LOGGER	DSB	16326820	12/18/2025	12/18/2026
THERMOMETER*	HH806AU	080307	08/29/2025	08/29/2026
THERMOMETER	HH806AU	080307	09/05/2026	09/05/2027
TEMPERATURE PROBE	80PK-22	05032017	01/24/2026	01/24/2027
NETWORK ANALYZER*	E5071B	MY42403147	07/03/2025	07/03/2026
NETWORK ANALYZER	E5071B	MY42403218	12/31/2025	12/31/2026
DIELECTRIC ASSESSMENT KIT*	DAK-3.5	1120	07/28/2025	07/28/2026
DIELECTRIC ASSESSMENT KIT	DAK-3.5	1156	03/30/2026	03/30/2027
SPEAG DIPOLE	D2450V2	703	01/05/2026	01/05/2029
SPEAG DIPOLE	D2450V2	782	07/16/2024	07/16/2027
SPEAG DIPOLE	D5GHZV2	1026	07/17/2024	07/17/2027

Note: "*" Equipment used for test dates prior to equipment calibration due date.

10.0 SAR Measurement System Validation and Verification

DASY output files of the probe/dipole calibration certificates and system verification test results are included in appendices B, C & D respectively.

10.1 System Validation

The SAR measurement system was validated according to procedures in KDB 865664. The validation status summary Table is below.

Table 12

Dates	Probe Calibration Point		Probe SN	Measured Tissue Parameters		Validation		
				σ	ϵ_r	Sensitivity	Linearity	Isotropy
CW								
08/22/2025	Body	2450	7816	1.89	53.08	Pass	Pass	Pass
08/17/2025	Head			1.82	40.21	Pass	Pass	Pass
08/24/2025	Body	5250		5.68	48.20	Pass	Pass	Pass
08/18/2025	Head			4.46	37.61	Pass	Pass	Pass
08/25/2025	Body	5600		6.17	45.37	Pass	Pass	Pass
08/19/2025	Head			4.70	38.95	Pass	Pass	Pass
08/25/2025	Body	5800		6.47	44.88	Pass	Pass	Pass
08/19/2025	Head			4.92	38.60	Pass	Pass	Pass

10.2 System Verification

System verification checks were conducted each day during the SAR assessment. The results are normalized to 1W. Appendix D includes DASY plots with the largest deviation from the qualified source SAR target for each dipole. The Table below summarizes the daily system check results used for the SAR assessment.

Table 13

Probe Serial #	Tissue Type	Dipole Kit / Serial #	Ref SAR @ 1W (W/kg)	System Check Results Measured (W/kg)	System Check Test Results when normalized to 1W (W/kg)	Tested Date	Deviation (%)
7816	IEEE/IE C Head	SPEAG D2450V2 / 703	52.2 +/- 10%	1.54	48.73	05/07/2026	-6.64
		SPEAG D2450V2 / 782	52.8 +/- 10%	1.56	49.37	09/09/2026@	-6.50
		SPEAG D5250V3 / 1026	78.7 +/- 10%	2.34	74.29	05/07/2026@	-5.61
				2.40	75.95	09/09/2026@	-3.50
		SPEAG D5600V3 / 1026	82.2 +/- 10%	2.54	80.63	05/07/2026@	-1.90
				2.62	82.91	09/09/2026@	0.87
		SPEAG D5800V3 / 1026	80.7 +/- 10%	2.31	73.33	05/08/2026	-9.13
				2.38	75.32	09/09/2026@	-6.67

Note: '@' indicates that system verification check covers next day (within 24 hours)

10.3 Equivalent Tissue Test Results

Simulated tissue prepared for SAR measurements is measured daily and within 24 hours prior to actual SAR testing to verify that the tissue is within +/- 5% of target parameters at the center of the transmit band. This measurement is done using the applicable equipment indicated in section 9.0. The Table below summarizes the measured tissue parameters used for the SAR assessment.

Table 14

Frequency (MHz)	Tissue Type	Conductivity Target (S/m)	Dielectric Constant Target	Conductivity Meas. (S/m)	Dielectric Constant Meas.	Tested Date
2412	IEEE/IEC Head	1.77 (1.68-1.86)	39.3 (35.3-43.2)	1.70	39.6	05/07/2026@
2437		1.79 (1.7-1.88)	39.2 (35.3-43.1)	1.72	39.6	05/07/2026@
2450		1.8 (1.71-1.89)	39.2 (35.3-43.1)	1.73	39.6	05/07/2026@
				1.82	42.2	09/09/2026@
2462		1.81 (1.72-1.9)	39.2 (35.3-43.1)	1.83	42.2	09/09/2026@
5250		4.71 (4.24-5.18)	36 (32.4-39.5)	4.66	36.4	05/07/2026@
				4.57	37.6	09/09/2026@
5260		4.72 (4.25-5.19)	35.9 (32.3-39.5)	4.58	37.6	09/09/2026@
5280		4.74 (4.27-5.21)	35.9 (32.3-39.5)	4.70	36.3	05/07/2026@
5320		4.78 (4.3-5.26)	35.9 (32.3-39.5)	4.64	37.5	09/09/2026@
5500		4.97 (4.47-5.46)	35.7 (32.1-39.2)	4.94	35.9	05/07/2026@
5600		5.07 (4.56-5.58)	35.5 (32-39.1)	5.06	35.7	05/07/2026@
				4.95	36.9	09/09/2026@
5720		5.19 (4.67-5.71)	35.4 (31.8-38.9)	5.10	36.7	09/09/2026@
5745		5.22 (4.69-5.74)	35.4 (31.8-38.9)	5.07	33.3	05/08/2026
5785		5.26 (4.73-5.78)	35.3 (31.8-38.8)	5.17	36.6	09/09/2026@
5800		5.27 (4.74-5.8)	35.3 (31.8-38.8)	5.13	33.2	05/08/2026
	5.19			36.6	09/09/2026@	
5825	5.3 (4.77-5.83)	35.3 (31.7-38.8)	5.22	36.5	09/09/2026@	

Note: '@' indicates that tissue test result covers next day (within 24 hours)

11.0 Environmental Test Conditions

The EME Laboratory's ambient environment is well controlled resulting in very stable simulated tissue temperature and therefore stable dielectric properties. Simulated tissue temperature is measured prior to each scan to insure it is within $\pm 2^{\circ}\text{C}$ of the temperature at which the dielectric properties were determined. The liquid depth within the phantom used for measurements was at least 15cm. Additional precautions are routinely taken to ensure the stability of the simulated tissue such as covering the phantoms when scans are not actively in process in order to minimize evaporation. The lab environment is continuously monitored. The Table below presents the range and average environmental conditions during the SAR tests reported herein:

Table 15

	Target	Measured
Ambient Temperature	18 – 25 °C	Range: 21.3 – 23.4°C Avg. 22.0 °C
Tissue Temperature	18 – 25 °C	Range: 20.7-22.6°C Avg. 21.6°C

Relative humidity target range is a recommended target

The EME Lab RF environment uses a Spectrum Analyzer to monitor for extraneous large signal RF contaminants that could possibly affect the test results. If such unwanted signals are discovered the SAR scans are repeated.

12.0 DUT Test Setup and Methodology

12.1 Measurements

SAR measurements were performed using the DASY system described in section 8.0 using zoom scans. Oval flat phantoms filled with applicable simulated tissue were used for body testing.

The Table below includes the step sizes and resolution of area and zoom scans per KDB 865664 requirements.

Table 16

Description		≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ 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.	
Maximum zoom scan spatial resolution: Δx_{Zoom} , Δy_{Zoom}		≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$	≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
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. * 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 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.			

12.2 DUT Configuration(s)

The DUT is a portable device operational at the body as described in section 6.0 while using the applicable accessories listed in section 7.0. All accessories listed in section 7.0 of this report were considered when implementing the guidelines specified in KDB 643646.

12.3 DUT Positioning Procedures

The positioning of the device for each body location is described below and illustrated in Appendix G.

12.3.1 Body

The DUT was positioned in normal use configuration against the phantom with the offered body worn accessory as well as with and without the offered audio accessories as applicable.

12.3.2 Head

Not applicable.

12.3.3 Face

Not applicable.

12.4 DUT Test Channels

The number of test channels was determined by using the following IEEE 1528 equation. The use of this equation produces the same or more test channels compared to the FCC KDB 447498 number of test channels formula.

$$N_c = 2 * \text{roundup}[10 * (f_{\text{high}} - f_{\text{low}}) / f_c] + 1$$

Where

N_c = Number of channelsF_{high} = Upper channelF_{low} = Lower channelF_c = Center channel

12.5 SAR Result Scaling Methodology

The calculated 1-gram SAR results indicated as “Max Calc. 1g-SAR” in the data Tables is determined by scaling the measured SAR to account for power leveling variations and drift. Appendix F includes a shortened scan to justify SAR scaling for drift. For this device the “Max Calc. 1g-SAR” are scaled using the following formula:

$$\text{Max_Calc} = \text{SAR_meas} \cdot 10^{\frac{-\text{Drift}}{10}} \cdot \frac{P_{\text{max}}}{P_{\text{int}}} \cdot \text{DC}$$

P_{max} = Maximum Power (W)P_{int} = Initial Power (W)

Drift = DASY drift results (dB)

SAR_{meas} = Measured 1-g Avg. SAR (W/kg)

DC = Transmission mode duty cycle in % where applicable

50% duty cycle is applied for PTT operation

Note: for conservative results, the following are applied:

If P_{int} > P_{max}, then P_{max}/P_{int} = 1.

Drift = 1 for positive drift

Additional SAR scaling was applied using the methodologies outlined in FCC KDB 865664 using tissue sensitivity values. SAR was scaled for conditions where the tissue permittivity was measured above the nominal target and for tissue conductivity that was measured below the nominal target. Negative or reduced SAR scaling is not permitted.

12.6 DUT Test Plan

The guidelines and requirements outlined in section 4.0 were used to assess compliance of this device. All modes of operation identified in section 6.0 were considered during the development of the test plan. Standalone and simultaneous BT testing were assessed in sections 14.0 per the guidelines of KDB 447498.

13.0 DUT Test Data for WLAN 2.4GHz and 5GHz

SAR test reduction is applied using the following criteria according to KDB 248227 D01:

For 2.4GHz 802.11 g/n SAR testing is not required when then highest reported SAR for DSSS is adjusted by ratio of OFDM to DSSS specified maximum output power and adjusted SAR is ≤ 1.2 W/kg.

U-NII-1 SAR testing not required when U-NII-2A band highest reported SAR for a test configuration is ≤ 1.2 W/kg.

For all positions/configurations, when reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required test positions/configurations are tested.

13.1 WLAN assessments for WLAN 2.4GHz (802.11 b/g/n/ax)

Table 17

SAR Plot	Test Position	Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)
1	Body	Internal antenna	PMNN4912A	PMLN8929A	PMLN8928A	2437.0000	0.060	-0.07	0.897	0.964
						2412.0000	0.059	0.03	0.834	0.886

Additional Assessments for ISED Canada

Based on the assessment results for body from above, additional tests were not required for the Industry Canada frequency range (2412-2462 MHz) as the testing performed is in compliance with Industry Canada frequency range.

As per ISED Notice 2016-DRS001, additional tests were required for the low, mid and high frequency channels for the configuration with the highest SAR value. The SAR results are in Tables below.

Table 18

SAR Plot	Test Position	Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)
	Body	Internal antenna	PMNN4912A	PMLN8929A	PMLN8928A	2412.0000	0.059	0.03	0.834	0.886
						2437.0000	0.060	-0.07	0.897	0.964
2						2462.0000	0.057	-0.08	1.030	1.159

13.2 WLAN assessments for WLAN 5.0 GHz (802.11 a/n/ac/ax)

Table 19

SAR Plot	Test Position	Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)
U-NII-2A - 802.11a (20MHz)										
3	Body	Internal antenna	PMNN4912A	PMLN8929A	PMLN8928A	5280.0000	0.033	-0.03	0.290	0.356
U-NII-2C - 802.11a (20MHz)										
4	Body	Internal antenna	PMNN4912A	PMLN8929A	PMLN8928A	5500.0000	0.036	-0.13	0.334	0.390
U-NII-3 - 802.11a (20MHz)										
5	Body	Internal antenna	PMNN4912A	PMLN8929A	PMLN8928A	5745.0000	0.037	-0.20	0.324	0.368

Additional Assessments for ISED Canada

Based on the assessment results for body from above, additional tests were not required for the Industry Canada frequency range (U-NII-2A, U-NII-2C and U-NII-3) as the testing performed is in compliance with Industry Canada frequency range.

As per ISED Notice 2016-DRS001, additional tests were required for the low, mid and high frequency channels for the configuration with the highest SAR value. The SAR results are in Tables below.

Table 20

SAR Plot	Test Position	Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq (MHz)	Init Pwr (W)	SAR Drift (dB)	Meas. 1g-SAR (W/kg)	Max Calc. 1g-SAR (W/kg)
U-NII-2A - 802.11a (20MHz)										
	Body	Internal antenna	PMNN4912A	PMLN8929A	PMLN8928A	5260.0000	0.028	-0.25	0.242	0.366
						5280.0000	0.033	-0.03	0.290	0.356
6						5320.0000	0.027	-0.24	0.238	0.379
U-NII-2C - 802.11a (20MHz)										
	Body	Internal antenna	PMNN4912A	PMLN8929A	PMLN8928A	5500.0000	0.036	-0.13	0.334	0.390
						5600.0000	0.034	0.03	0.316	0.379
7						5720.0000	0.030	-0.35	0.292	0.424
U-NII-3 - 802.11a (20MHz)										
	Body	Internal antenna	PMNN4912A	PMLN8929A	PMLN8928A	5745.0000	0.037	-0.20	0.324	0.368
8						5785.0000	0.036	-0.07	0.358	0.403
						5825.0000	0.036	-0.27	0.316	0.380

14.0 Assessment at the Bluetooth band

14.1 FCC Assessments for Standalone BT

The closest separation distance from the Bluetooth Antenna to the phantom is 14.12mm with PMLN8929A, as indicated in the following picture:



Based on the Table B.2 from KDB 447498 D04 Interim General RF Exposure Guidance v01, by applying interpolation formula at separation distance 14.12mm, the power limit is 19.89mW.

Table B.2—Example Power Thresholds (mW)

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

Where:

Max. Power = 9.69 mW (12.6*76.93% duty cycle)

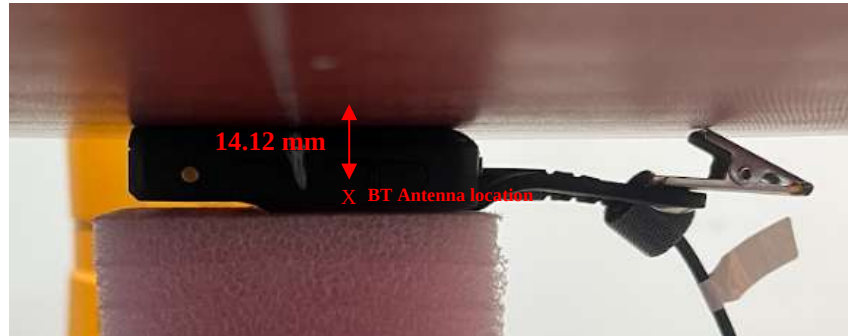
Pmax, exemption: 19.89mW (refer to Table B.2)

Distance: 14.12mm

Since the output power level, 9.69mW is below the power limit of 19.89mW, SAR test is exempt for Bluetooth.

14.2 ISED Assessments for Standalone BT

The closest separation distance from the Bluetooth Antenna to the phantom is 14.12mm with PMLN8929A, as indicated in the following picture:



Based on the Table 11 from RSS-102 (Issue 6), by applying interpolation formula at separation distance 14.12mm, the power limit is 14.42mW.

Table 11: Power limits for exemption from routine SAR evaluation based on the separation distance

Frequency (MHz)	≤ 5 mm (mW)	10 mm (mW)	15 mm (mW)	20 mm (mW)	25 mm (mW)	30 mm (mW)	35 mm (mW)	40 mm (mW)	45 mm (mW)	> 50 mm (mW)
≤ 300	45	116	139	163	189	216	246	280	319	362
450	32	71	87	104	124	147	175	208	248	296
835	21	32	41	54	72	96	129	172	228	298
1900	6	10	18	33	57	92	138	194	257	323
2450	3	7	16	32	56	89	128	170	209	245
3500	2	6	15	29	50	72	94	114	134	158
5800	1	5	13	23	32	41	54	74	102	128

Where:

Max. power = 9.69 mW (12.6*76.93% duty cycle)

Pmax, exemption: 14.42mW (refer to Table 11)

Distance: 14.12mm

Since the output power level, 9.69mW is below the power limit of 14.42mW, SAR test is exempt for Bluetooth.

15.0 Simultaneous Transmission

Simultaneous Transmission assessments is not required as this device is operate as below:

1. BT, WLAN 2.4GHz and WLAN 5GHz are sharing the same antenna, only one technology to transmit at one time.
2. WLAN 2.4GHz + BT and WLAN 5GHz + BT cannot be simultaneous transmit but will be time multiplexed.

16.0 Results Summary

Based on the test guidelines from section 4.0 and satisfying frequencies within FCC bands and ISED Canada Frequency bands, the highest Operational Maximum Calculated 1-gram-average SAR values found for this filing:

Table 21

Designator	Frequency band (MHz)	Max Calc at Body (W/kg)
		1g-SAR
FCC		
BT	2412-2480	*NA
WLAN	2412-2462	1.159
	5180 - 5825	0.424
Simultaneous Result		**N/A
ISED		
BT	2412-2480	*NA
WLAN	2412-2462	1.159
	5180 - 5825	0.424
Simultaneous Result		**N/A

All results are scaled to the maximum output power.

* denotes results not required per KDB (refer to section 14.0)

*Not applicable, refer to section 15.0 Simultaneous Transmission.

The test results clearly demonstrate compliance with FCC/ISED General Population /Uncontrolled RF Exposure limits of 1.6 W/kg averaged over 1 gram per the requirements of FCC 47 CFR § 2.1093 and RSS-102 (Issue 6).

17.0 Variability Assessment

Per the guidelines in KDB 865664 SAR variability assessment is required because SAR results are above 0.8W/kg (General population).

The Table below includes test results of the original measurement(s), the repeated measurement(s), and the ratio (SAR_{high}/SAR_{low}) for the applicable test configuration(s).

Table 22

Antenna	Battery	Carry Accessory	Cable Accessory	Test Freq. (MHz)	Adj Calc. 1g-SAR (W/kg)	Ratio	Comments
Internal antenna	NNTN9217A	PMLN8929A	PMLN8928A	2462.0000	1.016	1.03	No additional repeated scans is required due to the Ratio (SAR_{high}/SAR_{low}) < 1.20
					1.051		

18.0 System Uncertainty

A system uncertainty analysis is not required for this report per KDB 865664 because the highest report SAR value for General Population exposure is less than 1.5W/kg

Per the guidelines of ISO/IEC 17025 a reported system uncertainty is required and therefore measurement uncertainty budget is included in Appendix A.

Appendix A

Measurement Uncertainty Budget

Uncertainty Budget for Device Under Test, for 300 MHz to 3000 MHz

Input quantity X_i (source of uncertainty)	IEEE 1528 section (2020)	Tol. ($\pm$ %)	Prob Dist	Div. ^a q_i	C_i (1 g)	C_i (10 g)	1 g u_i ($\pm$ %)	10 g u_i ($\pm$ %)	
Measurement System									
Probe Calibration	8.4.1.1	12.0	N ($k = 2$)	2.00	1	1	6.0	6.0	
Probe Calibration Drift	8.4.1.2	1.7	R	1.73	1	1	1.0	1.0	
Probe linearity and detection limit	8.4.1.3	4.7	R	1.73	1	1	2.7	2.7	
Broadband signal	8.4.1.4	2.8	R	1.73	1	1	1.6	1.6	
Probe isotropy	8.4.1.5	7.6	R	1.73	1	1	4.4	4.4	
Other probe and data acquisition errors	8.4.1.6	0.7	N	1.00	1	1	0.7	0.7	
RF ambient and noise	8.4.1.7	1.8	N	1.00	1	1	1.8	1.8	
Probe positioning errors	8.4.1.8	0.006 mm	N	1.00	0.14	0.14	0.1	0.1	
Data processing errors	8.4.1.9	1.2	N	1.00	1	1	1.2	1.2	
Phantom and Device									
Measurement of phantom conductivity(σ)	8.4.2.1	2.5	N	1.00	0.78	0.71	2.0	1.8	
Temperature effects (medium)	8.4.2.2	3.3	R	1.73	0.78	0.71	1.5	1.4	
Shell permittivity	8.4.2.3	14	R	1.73	0	0	0.0	0.0	
Distance between the radiating element of the DUT and the phantom medium	8.4.2.4	2	N	1.00	2	2	4.0	4.0	
Repeatability of positioning the DUT or source against the phantom	8.4.2.5	2.8	N	1.00	1	1	2.8	2.8	
Device holder effects	8.4.2.6	4.55	N	1.00	1	1	4.6	4.6	
Effect of operating mode on probe sensitivity	8.4.2.7	2.4	R	1.73	1	1	1.4	1.4	
Time-average SAR	8.4.2.8	1.7	R	1.73	1	1	1.0	1.0	
Variation in SAR due to drift in output of DUT	8.4.2.9	5	R	1.73	1	1	2.9	2.9	
Validation antenna uncertainty (validation measurement only)	8.4.2.10	0	N	1.00	1	1	0.0	0.0	
Uncertainty in accepted power (validation measurement only)	8.4.2.11	0	N	1.00	1	1	0.0	0.0	
Corrections to the SAR result (if applied)									
Phantom deviation from target (ϵ', σ)	8.4.3.1	1.9	N	1.00	1	0.84	1.9	1.6	
SAR scaling	8.4.3.2	0	R	1.73	1	1	0.0	0.0	
Combined Standard Uncertainty			RSS				11.7	11.6	
Expanded Uncertainty (95% CONFIDENCE LEVEL)			$k=2$				23.4	23.2	

Uncertainty Budget for Device Under Test, for 3 GHz to 6 GHz

Input quantity Xi (source of uncertainty)	IEEE 1528 section (2020)	Tol. ($\pm$ %)	Prob Dist	Div. ^a q_i	c_i (1 g)	c_i (10 g)	1 g u_i ($\pm$ %)	10 g u_i ($\pm$ %)
Measurement System								
Probe Calibration	8.4.1.1	14.0	N (k = 2)	2.00	1	1	7.0	7.0
Probe Calibration Drift	8.4.1.2	1.7	R	1.73	1	1	1.0	1.0
Probe linearity and detection limit	8.4.1.3	4.7	R	1.73	1	1	2.7	2.7
Broadband signal	8.4.1.4	2.6	R	1.73	1	1	1.5	1.5
Probe isotropy	8.4.1.5	7.6	R	1.73	1	1	4.4	4.4
Other probe and data acquisition errors	8.4.1.6	1.2	N	1.00	1	1	1.2	1.2
RF ambient and noise	8.4.1.7	1.8	N	1.00	1	1	1.8	1.8
Probe positioning errors	8.4.1.8	0.006 mm	N	1.00	0.29	0.29	0.2	0.2
Data processing errors	8.4.1.9	2.3	N	1.00	1	1	2.3	2.3
Phantom and Device								
Measurement of phantom conductivity(σ)	8.4.2.1	2.5	N	1.00	0.78	0.71	2.0	1.8
Temperature effects (medium)	8.4.2.2	3.4	R	1.73	0.78	0.71	1.5	1.4
Shell permittivity	8.4.2.3	14	R	1.73	0.25	0.25	2.0	2.0
Distance between the radiating element of the DUT and the phantom medium	8.4.2.4	2	N	1.00	2	2	4.0	4.0
Repeatability of positioning the DUT or source against the phantom	8.4.2.5	2.8	N	1.00	1	1	2.8	2.8
Device holder effects	8.4.2.6	4.55	N	1.00	1	1	4.6	4.6
Effect of operating mode on probe sensitivity	8.4.2.7	2.4	R	1.73	1	1	1.4	1.4
Time-average SAR	8.4.2.8	1.7	R	1.73	1	1	1.0	1.0
Variation in SAR due to drift in output of DUT	8.4.2.9	5	R	1.73	1	1	2.9	2.9
Validation antenna uncertainty (validation measurement only)	8.4.2.10	0	N	1.00	1	1	0.0	0.0
Uncertainty in accepted power (validation measurement only)	8.4.2.11	0	N	1.00	1	1	0.0	0.0
Corrections to the SAR result (if applied)								
Phantom deviation from target (ϵ' , σ)	8.4.3.1	1.9	N	1.00	1	0.84	1.9	1.6
SAR scaling	8.4.3.2	0	R	1.73	1	1	0.0	0.0
Combined Standard Uncertainty			RSS				12.6	12.5
Expanded Uncertainty (95% CONFIDENCE LEVEL)			k=2				25.2	25.0

Uncertainty Budget for System Validation (dipole & flat phantom), for 300 MHz to 6000 MHz

Uncertainty Component	IEEE 1528 section (2020)	Tol. (± %)	Prob Dist	Div. ^a _{q_i}	c_i (1 g)	c_i (10 g)	1 g u_i (±%)	10 g u_i (±%)
Measurement System								
Probe Calibration	8.4.1.1	14.0	N	2.00	1	1	7.0	7.0
Probe Calibration Drift	8.4.1.2	1.7	R	1.73	1	1	1.0	1.0
Probe linearity and detection limit	8.4.1.3	4.7	R	1.73	1	1	2.7	2.7
Broadband signal	8.4.1.4	0.0	R	1.73	1	1	0.0	0.0
Probe isotropy	8.4.1.5	4.7	R	1.73	1	1	2.7	2.7
Other probe and data acquisition errors	8.4.1.6	1.2	N	1.00	1	1	1.2	1.2
RF ambient and noise	8.4.1.7	0.6	N	1.00	1	1	0.6	0.6
Probe positioning errors	8.4.1.8	0.005 mm	N	1.00	0.29	0.29	0.2	0.2
Data processing errors	8.4.1.9	0.6	N	1.00	1	1	0.6	0.6
Phantom and Device								
Measurement of phantom conductivity(σ)	8.4.2.1	2.5	N	1.00	0.78	0.71	2.0	1.8
Temperature effects (medium)	8.4.2.2	3.4	R	1.73	0.78	0.71	1.5	1.4
Shell permittivity	8.4.2.3	14	R	1.73	0.25	0.25	2.0	2.0
Distance between the radiating element of the DUT and the phantom medium	8.4.2.4	1.3	N	1.00	2	2	2.6	2.6
Effect of operating mode on probe sensitivity	8.4.2.7	0	R	1.73	1	1	0.0	0.0
Time-average SAR	8.4.2.8	0	R	1.73	1	1	0.0	0.0
Validation antenna uncertainty (validation measurement only)	8.4.2.10	3.2	N	1.00	1	1	3.2	3.2
Uncertainty in accepted power (validation measurement only)	8.4.2.11	2	N	1.00	1	1	2.0	2.0
Corrections to the SAR result (if applied)								
Phantom deviation from target (ϵ', σ)	8.4.3.1	1.9	N	1.00	1	0.84	1.9	1.6
Combined Standard Uncertainty			RSS				10.1	10.0
Expanded Uncertainty (95% CONFIDENCE LEVEL)			$k=2$				20.2	20.0

Appendix D

System Verification Check Scan

Motorola Solutions, EME Laboratory

2026-05-07, 00:43

System Performance Check Report

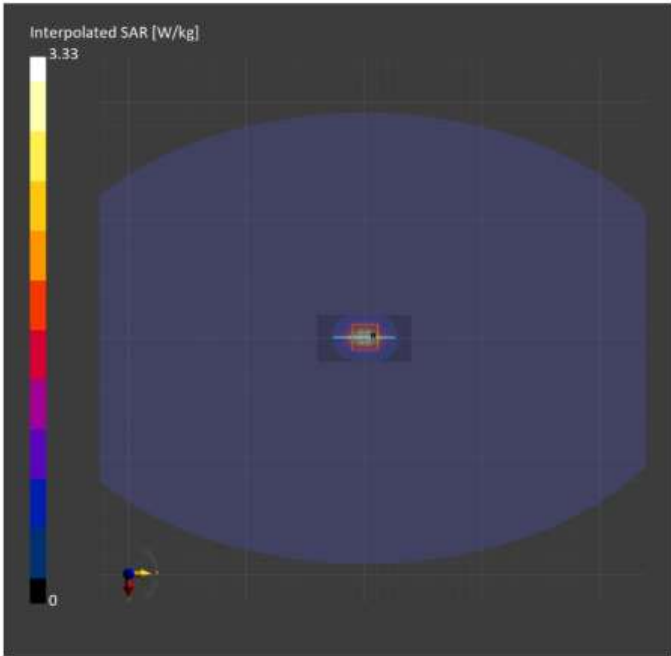
Summary					
Dipole	Frequency [MHz]	TSL	Power [dBm]	Dev. 1g [%]	Dev. 10g [%]
D2450V2 – SN703	2450.0	HSL	15.0	~6.6	~8.6

Exposure Conditions							
Phantom Section, TSL	Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	10	CW, 0--		2450.000, 0	7.84	1.73	39.6

Hardware Setup			
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) – 1037	HBBL-600-10000 , 2026-05-07	EX3DV4 – SN7816, 2023-10-06	DAE4 Sn729, 2024-07-10

Scans Setup		
	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results		
	Area Scan	Zoom Scan
Date	2026-05-07, 00:43	2026-05-07, 00:53
psSAR1g [W/Kg]	1.55	1.54
psSAR10g [W/Kg]	0.712	0.705
Power Drift [dB]	-0.03	-0.02
TSL Correction	Positive / Negative	Positive / Negative



Motorola Solutions, EME Laboratory

2026-09-10, 00:10

System Performance Check Report

Summary

Dipole	Frequency [MHz]	TSL	Power [dBm]	Dev. 1g [%]	Dev. 10g [%]
D2450V2 – SN782	2450.0	HSL	15.0	-6.3	-6.7

Exposure Conditions

Phantom Section, TSL	Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	10		CW, 0-	2450.000, 0	7.74	1.82	42.2

Hardware Setup

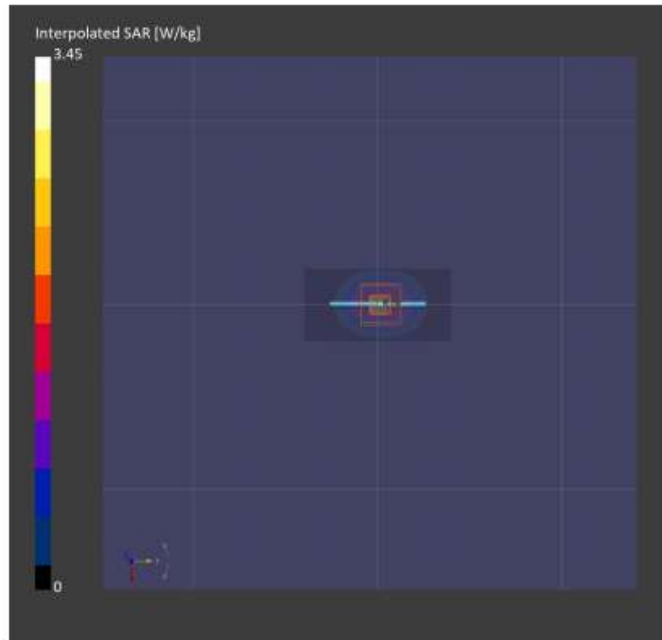
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) – 1037	HBBL-600-10000 , 2026-09-10	EX3DV4 – SN7816, 2023-10-06	DAE4 Sn729, 2024-07-10

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2026-09-10, 00:10	2026-09-10, 00:20
psSAR1g [W/Kg]	1.56	1.56
psSAR10g [W/Kg]	0.730	0.732
Power Drift [dB]	0.01	-0.00
TSL Correction	Positive / Negative	Positive / Negative



Motorola Solutions, EME Laboratory

2026-05-08, 15:14

System Performance Check Report

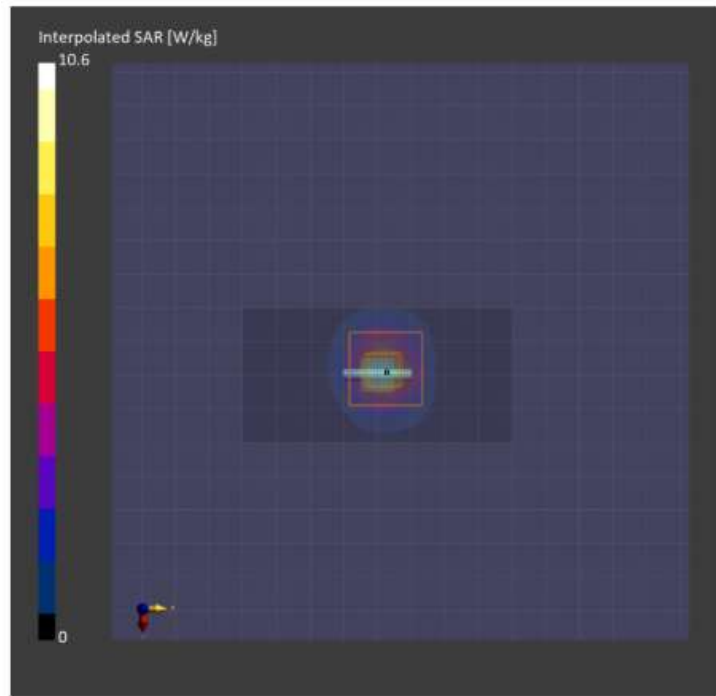
Summary					
Dipole	Frequency [MHz]	TSL	Power [dBm]	Dev. 1g [%]	Dev. 10g [%]
DSGHzV2 - SN1026	5800.0	HSL	15.0	-9.4	-10.3

Exposure Conditions							
Phantom Section, TSL	Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	10	CW, 0--		5800.000, 0	4.83	5.13	33.2

Hardware Setup			
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - 1037	HBBL-600-10000 , 2026-05-08	EX3DV4 - SN7816, 2023-10-06	DAE4 Sn729, 2024-07-10

Scans Setup		
	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	28.0 x 28.0 x 22.4
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method:	Measured	Measured

Measurement Results		
	Area Scan	Zoom Scan
Date	2026-05-08, 15:14	2026-05-08, 15:26
psSAR1g [W/Kg]	2.18	2.31
psSAR10g [W/Kg]	0.633	0.650
Power Drift [dB]	-0.02	0.00
TSL Correction	Positive / Negative	Positive / Negative



Appendix E

DUT Scans

FCC Highest Assessments for WLAN 2.4GHz – SAR Plot 1

Motorola Solutions, EME Laboratory

2026-05-07, 02:56

Measurement Report for HKUN4347A, 64222CG2312,BACK, WLAN 2.4GHz, IEEE 802.11b WIFI 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle), Channel 6 (2437.000 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
HKUN4347A	64222CG2312	67.0 x 47.0 x 15.0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 0.00	WLAN 2.4GHz	WLAN, 10415-AAA	2437.000, 6	7.84	1.72	39.6

Hardware Setup

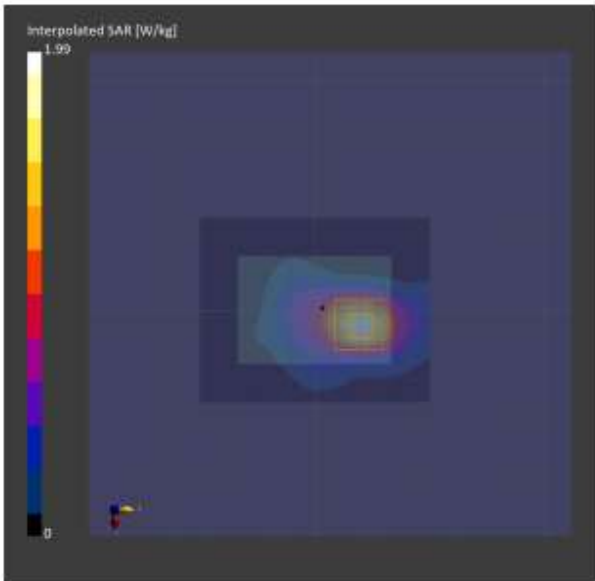
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) – 1037	HBBL-600-10000 , 2026-05-07	EX3DV4 – SN7816, 2023-10-06	DAE4 Sn729, 2024-07-10

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 100.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2026-05-07, 02:56	2026-05-07, 03:08
psSAR1g [W/Kg]	0.924	0.897
psSAR10g [W/Kg]	0.442	0.415
Power Drift [dB]	0.01	-0.07
TSL Correction	Positive only	Positive only
M2/M1 [%]		76.0
Dist 3dB Peak [mm]		9.0



FCC Highest Assessments for WLAN 5GHz (UNI-2A) – SAR Plot 3

Motorola Solutions, EME Laboratory

2026-05-08, 01:18

Measurement Report for HKUN4347A, 64222CG2312, BACK, WLAN 5GHz, IEEE 802.11a WIFI 5 GHz (OFDM, 6 Mbps, 96pc duty cycle), Channel 56 (5280.000 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
HKUN4347A	64222CG2312	67.0 x 47.0 x 15.0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 0.00	WLAN 5GHz	WLAN, 10317~AAD	5280.000, 56	5.34	4.70	36.3

Hardware Setup

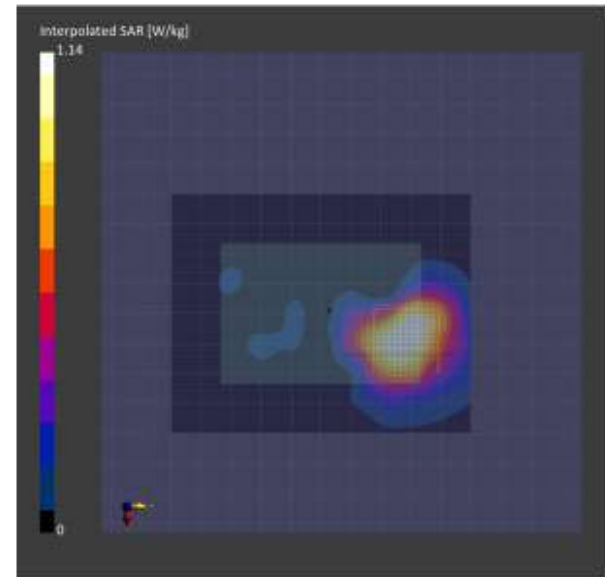
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) – 1037	HBBL-600-10000 , 2026-05-07	EX3DV4 – SN7816, 2023-10-06	DAE4 Sn729, 2024-07-10

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 100.0	28.0 x 28.0 x 22.4
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2026-05-08, 01:18	2026-05-08, 01:39
psSAR1g [W/Kg]	0.307	0.290
psSAR10g [W/Kg]	0.122	0.112
Power Drift [dB]	0.09	-0.03
TSL Correction	Positive only	Positive only
M2/M1 [%]		67.6
Dist 3dB Peak [mm]		7.4



FCC Highest Assessments for WLAN 5GHz (UNI-2C) – SAR Plot 4

Motorola Solutions, EME Laboratory

2026-05-08, 07:37

Measurement Report for HKUN4347A, 64222CG2312,BACK, WLAN 5GHz, IEEE 802.11a WIFI 5 GHz (OFDM, 6 Mbps, 96pc duty cycle), Channel 100 (5500.000 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
HKUN4347A	64222CG2312	67.0 x 47.0 x 15.0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 0.00	WLAN 5GHz	WLAN, 10317-AAD	5500.000, 100	4.8	4.94	35.9

Hardware Setup

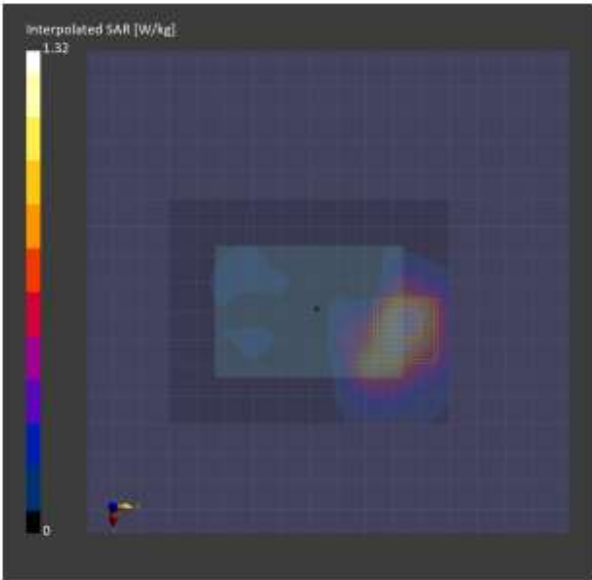
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) – 1037	HBBL-600-10000 , 2026-05-07	EX3DV4 – SN7816, 2023-10-06	DAE4 5n729, 2024-07-10

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 100.0	28.0 x 28.0 x 22.4
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2026-05-08, 07:37	2026-05-08, 07:51
psSAR1g [W/Kg]	0.302	0.334
psSAR10g [W/Kg]	0.118	0.110
Power Drift [dB]	-0.13	-0.13
TSL Correction	Positive only	Positive only
M2/M1 [%]		62.9
Dist 3dB Peak [mm]		6.1



FCC Highest Assessments for WLAN 5GHz (UNI-3) – SAR Plot 5

Motorola Solutions, EME Laboratory

2026-05-08, 19:58

Measurement Report for HKUN4347A, 64222CG2312,BACK, WLAN 5GHz, IEEE 802.11a WIFI 5 GHz (OFDM, 6 Mbps, 96pc duty cycle), Channel 149 (5745.000 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
HKUN4347A	64222CG2312	67.0 x 47.0 x 15.0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 0.00	WLAN 5GHz	WLAN, 10317-AAD	5745.000, 149	4.87	5.07	33.3

Hardware Setup

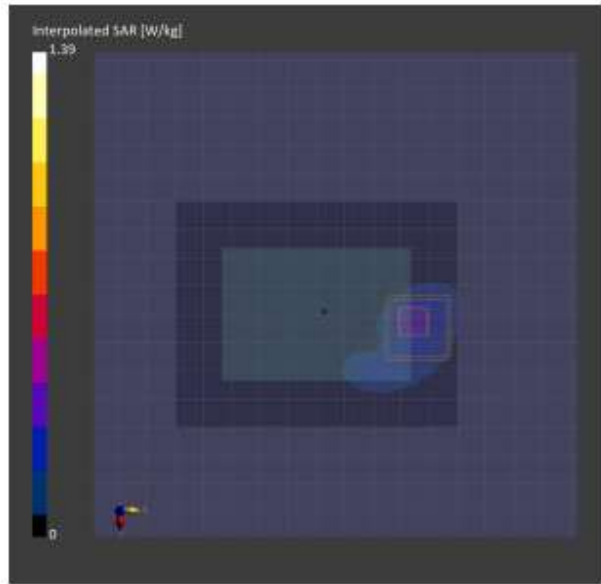
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) – 1037	HBBL-600-10000 , 2026-05-08	EX3DV4 – SN7816, 2023-10-06	DAE4 Sn729, 2024-07-10

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 100.0	28.0 x 28.0 x 22.4
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2026-05-08, 19:58	2026-05-08, 20:19
psSAR1g [W/Kg]	0.303	0.324
psSAR10g [W/Kg]	0.108	0.101
Power Drift [dB]	-0.10	-0.20
TSL Correction	Positive only	Positive only
M2/M1 [%]		64.3
Dist 3dB Peak [mm]		5.4



ISED Highest Assessments for WLAN 2.4GHz – SAR Plot 2

Motorola Solutions, EME Laboratory

2026-09-10, 20:00

Measurement Report for HKUN4347A, 64222CG2312, BACK, 2.4 GHz, WiFi (802.11b): DSSS, DBPSK, 1.0 Mbps, 99.9% DC, Channel 11 (2462.000 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
HKUN4347A	64222CG2312	67.0 x 47.0 x 15.0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 0.00	2.4 GHz	WiFi (802.11b), 10415-	2462.000, 11	7.74	1.82	42.2

Hardware Setup

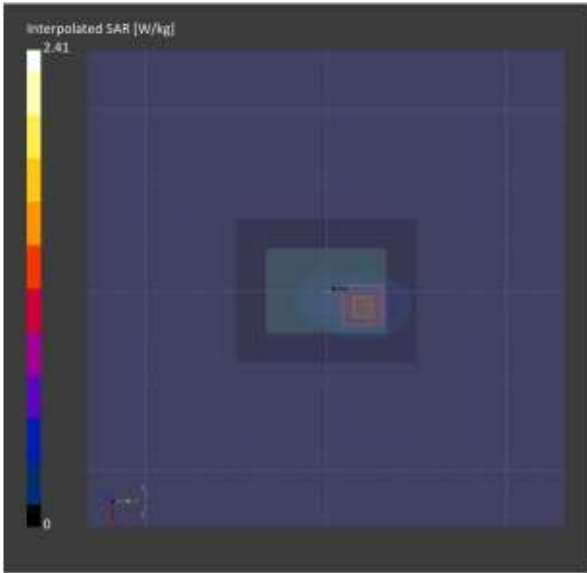
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - 1037	HBBL-600-10000 , 2026-09-10	EX3DV4 - SN7816, 2023-10-06	DAE4 Sn729, 2024-07-10

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 100.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2026-09-10, 20:00	2026-09-10, 20:12
psSAR1g [W/Kg]	1.03	1.03
psSAR10g [W/Kg]	0.480	0.469
Power Drift [dB]	-0.08	-0.08
TSL Correction	Positive only	Positive only
M2/M1 [%]		74.8
Dist 3dB Peak [mm]		8.1



ISED Highest Assessments for WLAN 5GHz (UNI-2A) – SAR Plot 6

Motorola Solutions, EME Laboratory

2026-09-10, 14:59

Measurement Report for HKUN4347A, 64222CG2312,BACK, U-NII 1 / 2A, WiFi (802.11a): OFDM, BPSK, 6.0 Mbps, 99.9% DC, Channel 64 (5320.000 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
HKUN4347A	64222CG2312	67.0 x 47.0 x 15.0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 0.00	U-NII 1 / 2A	WiFi (802.11a), 10417-	5320.000, 64	5.34	4.64	37.5

Hardware Setup

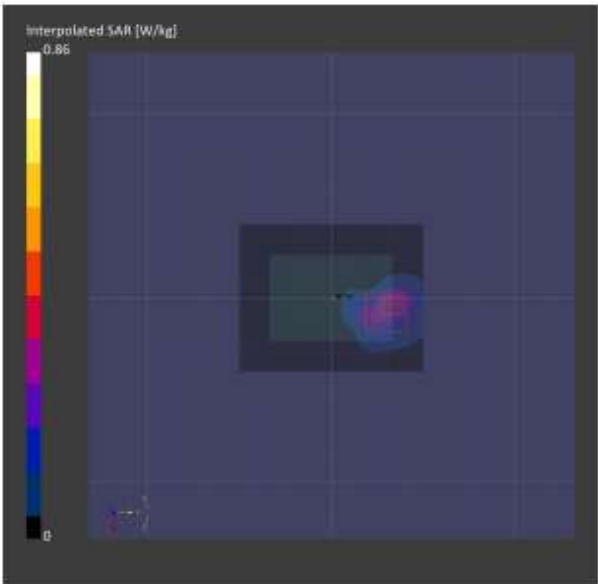
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) – 1037	H8BL-60D-10000 , 2026-09-10	EX3DV4 – SN7816, 2023-10-06	DAE4 Sn729, 2024-07-10

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 100.0	28.0 x 28.0 x 22.4
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2026-09-10, 14:59	2026-09-10, 15:13
psSAR1g [W/Kg]	0.256	0.238
psSAR10g [W/Kg]	0.102	0.088
Power Drift [dB]	-0.13	-0.24
TSL Correction	Positive only	Positive only
M2/M1 [%]		67.5
Dist 3dB Peak [mm]		7.6



ISED Highest Assessments for WLAN 5GHz (UNI-2C) – SAR Plot 7

Motorola Solutions, EME Laboratory

2026-09-10, 10:25

Measurement Report for HKUN4347A, 64222CG2312,BACK, U-NII 2C, WiFi (802.11a): OFDM, BPSK, 6.0 Mbps, 99.9% DC, Channel 144 (5720.000 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
HKUN4347A	64222CG2312	67.0 x 47.0 x 15.0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 0.00	U-NII 2C	WiFi (802.11a), 10417-	5720.000, 144	4.87	5.10	36.7

Hardware Setup

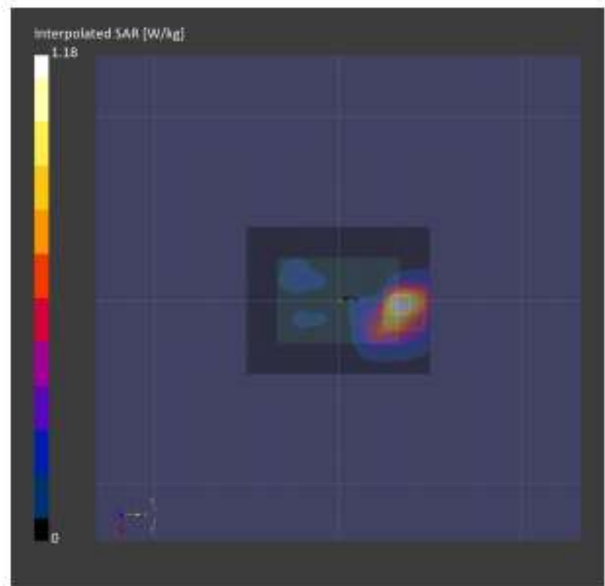
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) – 1037	HBBL-600-10000 , 2026-09-10	EX3DV4 – SN7816, 2023-10-06	DAE4 Sn729, 2024-07-10

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 100.0	28.0 x 28.0 x 22.4
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2026-09-10, 10:25	2026-09-10, 10:39
psSAR1g [W/Kg]	0.288	0.292
psSAR10g [W/Kg]	0.104	0.097
Power Drift [dB]	0.18	-0.35
TSL Correction	Positive only	Positive only
M2/M1 [%]		63.9
Dist 3dB Peak [mm]		5.1



ISED Highest Assessments for WLAN 5GHz (UNI-3) – SAR Plot 8

Motorola Solutions, EME Laboratory

2026-09-10, 11:11

Measurement Report for HKUN4347A, 64222CG2312,BACK, U-NII 3, WIFI (802.11a): OFDM, BPSK, 6.0 Mbps, 99.9% DC, Channel 157 (5785.000 MHz)

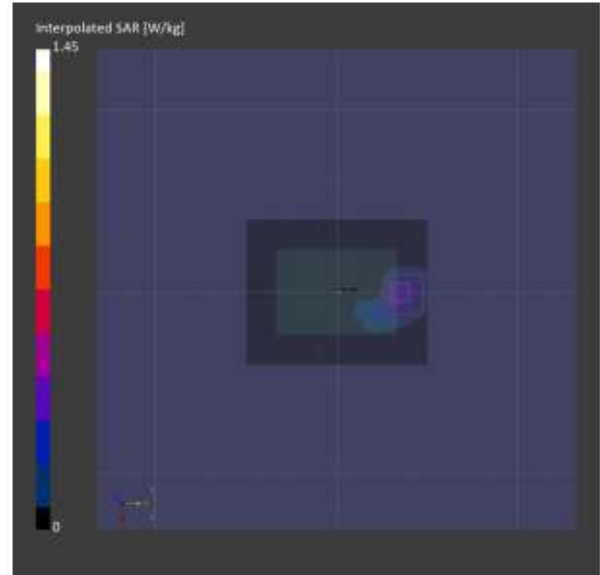
Device Under Test Properties		
Model	Serial Number	Dimensions [mm]
HKUN4347A	64222CG2312	67.0 x 47.0 x 15.0

Exposure Conditions							
Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 0.00	U-NII 3	WiFi (802.11a), 10417-	5785.000, 157	4.83	5.17	36.6

Hardware Setup			
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) – 1037	HBBL-600-10000 , 2026-09-10	EX3DV4 – SN7816, 2023-10-06	DAE4 Sn729, 2024-07-10

Scans Setup		
	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 100.0	28.0 x 28.0 x 22.4
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MA/A	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results		
	Area Scan	Zoom Scan
Date	2026-09-10, 11:11	2026-09-10, 11:26
psSAR1g [W/Kg]	0.335	0.358
psSAR10g [W/Kg]	0.120	0.117
Power Drift [dB]	-0.13	-0.07
TSL Correction	Positive only	Positive only
M2/M1 [%]		63.6
Dist 3dB Peak [mm]		5.6



Appendix F

Conducted Output Power

Conducted Output Power (WLAN 2.4GHz)

Band	802.11	Ch. BW (MHz)	Ch.	Freq. (MHz)	Measured conducted power (W)
2.4 GHz	b	22	1	2412	0.0594
			6	2437	0.0596
			11	2462	0.0571
	g	20	1	2412	0.0505
			6	2437	0.0495
			11	2462	0.0499
	n	20	1	2412	0.0597
			6	2437	0.0566
			11	2462	0.0566
	ax	20	1	2412	0.0512
			6	2437	0.0520
			11	2462	0.0520

Conducted Output Power (WLAN 5GHz)

Band	802.11	Ch. BW (MHz)	Ch.	Freq. (MHz)	Measured conducted power (W)
U-NII-1 (5.15- 5.25GHz)	a	20	36	5180	0.0339
			40	5200	0.0353
			44	5220	0.0335
			48	5240	0.0329
	n	20	36	5180	0.0283
			40	5200	0.0283
			44	5220	0.0281
			48	5240	0.0299
	ac	20	36	5180	0.0283
			40	5200	0.0302
			44	5220	0.0296
			48	5240	0.0297
	ax	20	36	5180	0.0315
			40	5200	0.0330
			44	5220	0.0329
			48	5240	0.0331
U-NII-2A (5.25- 5.35GHz)	a	20	52	5260	0.0282
			56	5280	0.0330
			60	5300	0.0276
			64	5320	0.0267
	n	20	52	5260	0.0295
			56	5280	0.0284
			60	5300	0.0285
			64	5320	0.0284
	ac	20	52	5260	0.0282
			56	5280	0.0289
			60	5300	0.0278
			64	5320	0.0286
	ax	20	52	5260	0.0321
			56	5280	0.0326
			60	5300	0.0330
			64	5320	0.0322

Conducted Output Power (WLAN 5GHz) (Continued)

Band	802.11	Ch. BW (MHz)	Ch.	Freq. (MHz)	Measured conducted power (W)
U-NII-2C (5.47-5.65 GHz)	a	20	100	5500	0.0355
			120	5600	0.0335
			144	5720	0.0300
	n	20	100	5500	0.0357
			120	5600	0.0327
			144	5720	0.0306
	ac	20	100	5500	0.0366
			120	5600	0.0326
			144	5720	0.0314
	ax	20	100	5500	0.0281
			120	5600	0.0275
			144	5720	0.0269
U-NII-3 (5.65-5.85 GHz)	a	20	149	5745	0.0371
			157	5785	0.0363
			165	5825	0.0356
	n	20	149	5745	0.0365
			157	5785	0.0368
			165	5825	0.0348
	ac	20	149	5745	0.0372
			157	5785	0.0369
			165	5825	0.0358
	ax	20	149	5745	0.0293
			157	5785	0.0288
			165	5825	0.0274

Exhibit 7B APPENDIX

DUT Test Position Photos

Photos available in Exhibit 7B

Exhibit 7B APPENDIX

DUT, Body worn and audio accessories Photos

Photos available in Exhibit 7B