



DECLARATION OF COMPLIANCE SAR ASSESSMENT PC II Report Part 2 of 2

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: 12/06/2021**Report Revision:** A

Responsible Engineer: Ch'ng Jian Sheng (EME Engineer)
Report Author: Muhammad Akmal Naim Kasim (EME Engineer)
Date/s Tested: 11/12/2021-11/13/2021, 11/15/2021-11/18/2021 & 12/6/2021
Manufacturer: Motorola Solutions Inc.
DUT Description: Handheld Portable – 403-512 4W GNSS BT WIFI TIA4950
Test TX mode(s): CW (PTT), Bluetooth, and WLAN 802.11b/g/n
Max. Power output: Refer Table 4
Nominal Power: Refer Table 4
Tx Frequency Bands: LMR 403-512 MHz; Bluetooth 2.402-2.480 GHz; WLAN 2.412-2.484 GHz
Signaling type: FM, FHSS (Bluetooth), 802.11b/g/n (WLAN)
Model(s) Tested: AAH56RDC9RA1AN (PMUE5774B) (IC MODEL: PMUE5774ABANAA)
AAH56RDN9RA1AN (PMUE5770B) (IC MODEL: PMUE5770ABCNAA)
Model(s) Certified: Refer to Table 1
Serial Number(s): 807TXV7007, 871TXVC535
Classification: Occupational/Controlled
Applicant Name: Motorola Solutions Inc.
Applicant Address: 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322
FCC ID: AZ489FT7128; LMR 406.1-512 MHz, Bluetooth 2.402-2.480 GHz, WLAN 2.412-2.462 GHz
This report contains results that are immaterial for FCC equipment approval, which are clearly identified
IC: 109U-89FT7128; LMR 406.125-430MHz, 450-470MHz, Bluetooth 2.402-2.480 GHz, WLAN 2.412-2.462 GHz
This report contains results that are immaterial for ISED equipment approval, which are clearly identified.
ISED Test Site registration: 24843
FCC Test Firm Registration Number: 823256

The test results clearly demonstrate compliance with FCC Occupational/Controlled RF Exposure limits of 8 W/kg averaged over 1 gram per the requirements of FCC 47 CFR § 2.1093 and RSS-102 (Issue 5).

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. This reporting format is consistent with the suggested guidelines of the TIA TSB-150 December 2004. The results and statements contained in this report pertain only to the device(s) evaluated.

Pei Loo Tey**(Approved Signatory)****Approval Date: 12/6/2021**

Appendix D

System Verification Check Scans

11/12/21, 11:47 AM

_0_CW_450-00MHz.html

Motorola Solutions, EME Laboratory

2021-11-12, 11:38

System Performance Check Report

Summary

Dipole	Frequency [MHz]	TSL	Power [dBm]	Dev. 1g [%]	Dev. 10g [%]
D450V3 - 5N1054	450.0	HSL	23.98	2.0	1.0

Exposure Conditions

Phantom Section, TSL	Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	15		0	450.0, 0	10.18	0.843	42.5

Hardware Setup

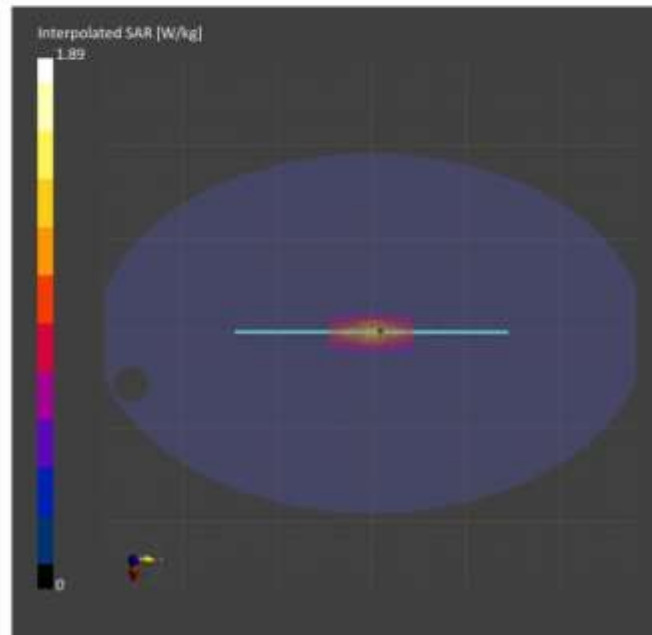
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
EU V4.0 (20deg probe tilt) - EU4 1016	HSL450, 2021-Nov-12	EX30V4 - SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2021-11-12, 11:38	2021-11-12, 11:44
psSAR1g [W/Kg]	1.18	1.17
psSAR10g [W/Kg]	0.822	0.773
Power Drift [dB]	0.00	0.01
TSL Correction	Positive / Negative	Positive / Negative



11/15/21, 10:26 AM

__0_CW_450-00MHz.html

Motorola Solutions, EME Laboratory

2021-11-15, 10:16

System Performance Check Report

Summary

Dipole	Frequency [MHz]	TSL	Power [dBm]	Dev. 1g [%]	Dev. 10g [%]
D450V8 - SN1054	450.0	HSL	28.98	5.0	2.1

Exposure Conditions

Phantom Section, TSL	Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	15		, 0--	450.0, 0	10.18	0.866	48.5

Hardware Setup

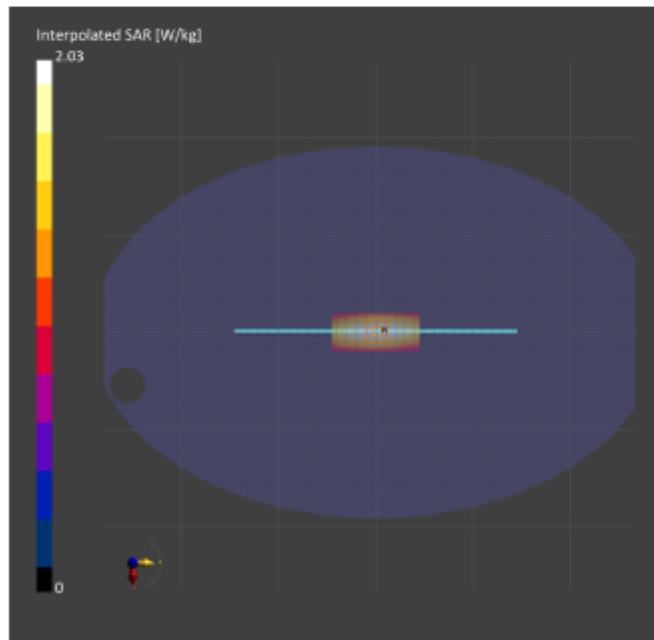
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL450, 2021-Nov-15	EX8DV4 - SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	90.0 x 90.0 x 90.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	8.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2021-11-15, 10:16	2021-11-15, 10:22
psSAR1g [W/Kg]	1.28	1.20
psSAR10g [W/Kg]	0.854	0.781
Power Drift [dB]	0.01	0.01
TSL Correction	Positive / Negative	Positive / Negative



12/1/21, 2:13 PM

___0_CW_2450-00MHz.html

Motorola Solutions, EME Laboratory

2021-11-15, 21:37

System Performance Check Report

Summary

Dipole	Frequency [MHz]	TSL	Power [dBm]	Dev. 1g [u]	Dev. 10g [u]
D2450V2 - 5N782	2450.0	HSL	15.0	-6.3	-8.0

Exposure Conditions

Phantom Section, TSL	Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	10		, 0---	2450.0, 0	7.0	1.88	35.6

Hardware Setup

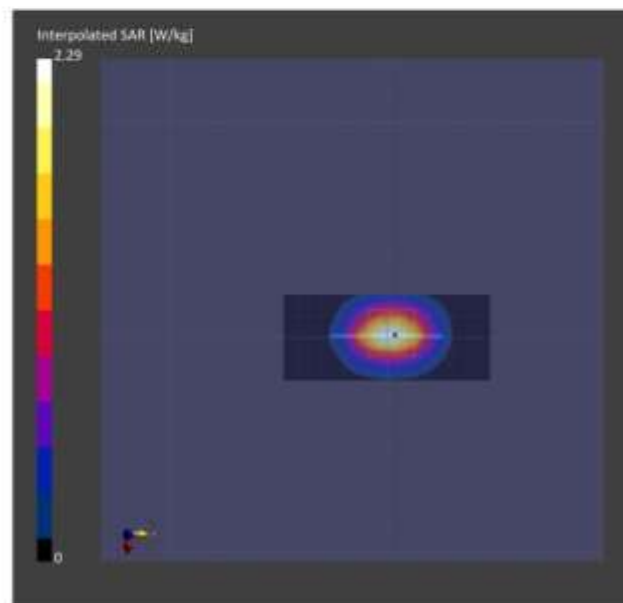
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL2450, 2021-Nov-15	EX3DV4 - 5N7511, 2021-06-18	DAE4 5n729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 96.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 12.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2021-11-15, 21:37	2021-11-15, 21:44
psSAR1g [W/Kg]	1.67	1.61
psSAR10g [W/Kg]	0.798	0.738
Power Drift [dB]	0.02	0.00
TSL Correction	Positive / Negative	Positive / Negative



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11/17/21, 9:32 PM

___0_CW_2450-00MHz.html

Motorola Solutions, EME Laboratory

2021-11-17, 21:18

System Performance Check Report

Summary

Dipole	Frequency [MHz]	TSL	Power [dBm]	Dev. 1g [μ]	Dev. 10g [μ]
D2450V2 - SN782	2450.0	HSL	15.0	-5.2	-7.7

Exposure Conditions

Phantom Section, TSL	Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	10		, 0---	2450.0, 0	7.0	1.87	35.7

Hardware Setup

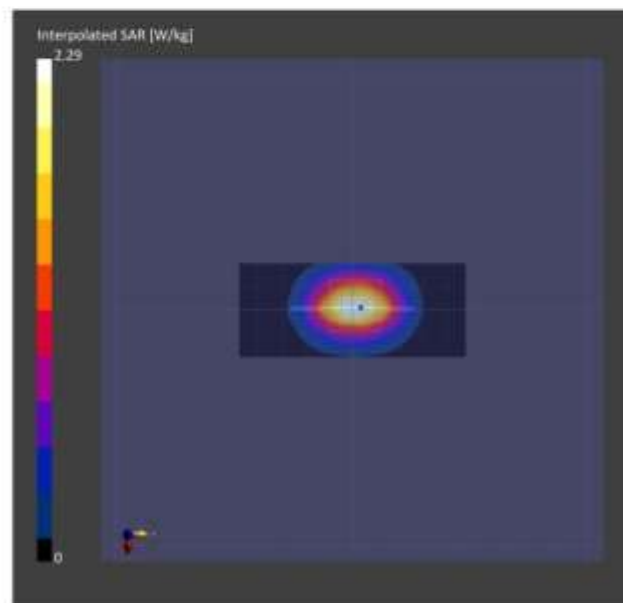
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL2450, 2021-Nov-17	EX3DV4 - SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 96.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 12.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2021-11-17, 21:18	2021-11-17, 21:28
psSAR1g [W/Kg]	1.69	1.63
psSAR10g [W/Kg]	0.806	0.739
Power Drift [dB]	0.00	-0.00
TSL Correction	Positive / Negative	Positive / Negative



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12/6/21, 10:35 AM

_0_CW_450-00MHz.html

Motorola Solutions, EME Laboratory

2021-12-06, 10:27

System Performance Check Report

Summary

Dipole	Frequency [MHz]	TSL	Power [dBm]	Dev. 1g [d]	Dev. 10g [d]
D4S0V3 - SN1054	450.0	HSL	23.98	4.5	4.2

Exposure Conditions

Phantom Section, TSL	Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	15		, 0--	450.0, 0	10.18	0.866	42.4

Hardware Setup

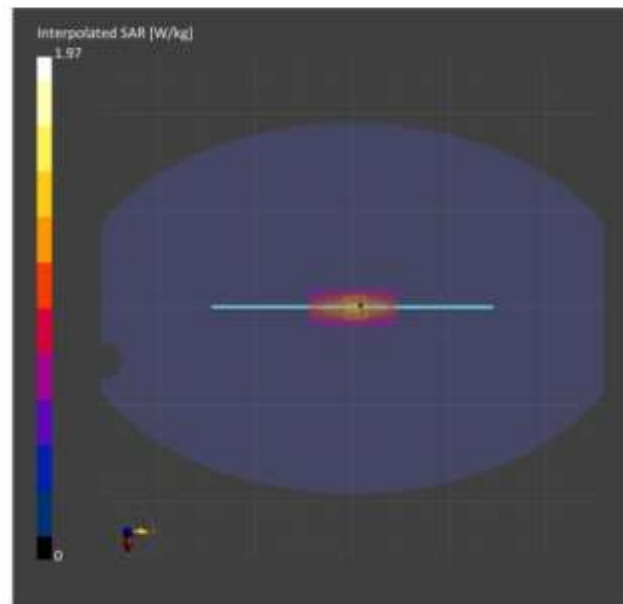
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL450, 2021-Dec-06	EX3DV4 - SN7311, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2021-12-06, 10:27	2021-12-06, 10:33
psSAR1g [W/Kg]	1.21	1.19
psSAR10g [W/Kg]	0.843	0.797
Power Drift [dB]	0.01	0.01
TSL Correction	Positive / Negative	Positive / Negative



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Appendix E

DUT Scans

Assessments at the Highest Body - Table 19

11/12/21, 9:26 PM

BACK_0-00_PMAE4071A_PMNN4407BR_RLN4570A_None BT_0_CW_470-00MHz.html

Motorola Solutions, EME Laboratory

2021-11-12, 21:11

Measurement Report for PMUES7748, 807TXV7007, BACK, D450, CW, Channel 70 (470.0 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
PMUES7748	807TXV7007	225.0 x 65.0 x 40.0

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, HSL	BACK, 0.00	D450	CW, 0---	470.0, 70	10.18	0.860	42.1

Hardware Setup

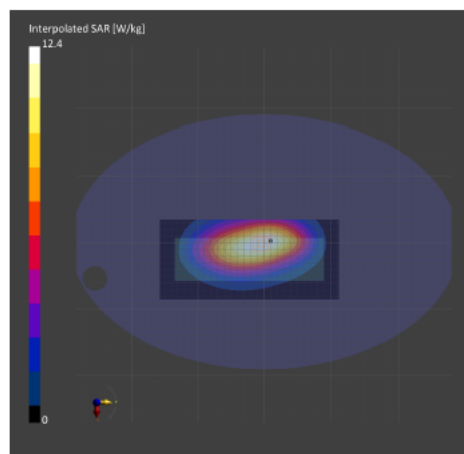
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL450, 2021-Nov-12	EX3DV4 - SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2021-11-12, 21:11	2021-11-12, 21:18
psSAR1g [W/Kg]	11.2	10.7
psSAR10g [W/Kg]	8.10	7.60
Power Drift [dB]	-0.11	-0.41
TSL Correction	Positive only	Positive only
M2/M1 [%]		86.4
Dist 3dB Peak [mm]		> 15.0



Assessments at the Highest Face - Table 20

11/13/21, 10:45 AM

FRONT_25-00_PMAE4071A_PMNN4448B_front_NA_0_CW_470-00MHz.html

Motorola Solutions, EME Laboratory

2021-11-13, 10:27

Measurement Report for PMUE57748, 807TXV7007, FRONT, D450, CW, Channel 70 (470.0 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
PMUE57748	807TXV7007	225.0 x 65.0 x 45.0

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, HSL	FRONT, 25.00	D450	CW, 0---	470.0, 70	10.18	0.870	41.4

Hardware Setup

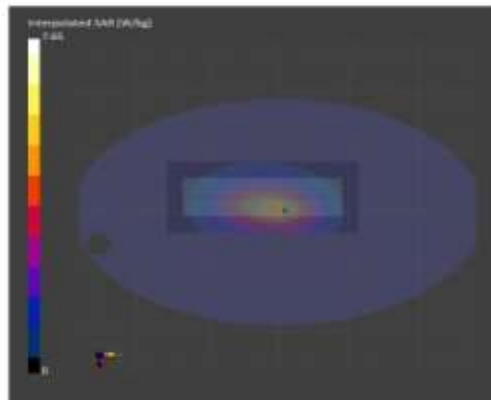
Phantom	TSL Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL450, 2021-Nov-13	EX3DV4 - SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1:5	1:5
MAIA	N/A	N/A
Surface Detection	VMS = 6p	VMS = 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2021-11-13, 10:27	2021-11-13, 10:35
psSAR1g [W/Kg]	5.16	5.12
psSAR10g [W/Kg]	3.77	3.71
Power Drift [dB]	-0.10	-0.21
TSL Correction	Positive only	Positive only
M2/M1 [dB]		86.8
Dist 3dB Peak [mm]		> 15.0



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Assessment ISED – Table 21

Antenna PMAE4069A (406.0125-430MHz)

12/5/21, 11:12 AM

BACK_0-00_PMAE4069A_PMNN4407BR_RLN4570A_PMMN4024A_0_CW_406-10MHz.html

Motorola Solutions, EME Laboratory

Unknown

Measurement Report for PMUES7748, 807TXV7007, BACK, Custom Band, CW, Channel 406100 (406.1 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
PMUES7748	807TXV7007	225.0 x 65.0 x 40.0

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, HSL	BACK, 0.00	Custom Band	CW, 0---	406.1, 406100	10.18	0.827	43.3

Hardware Setup

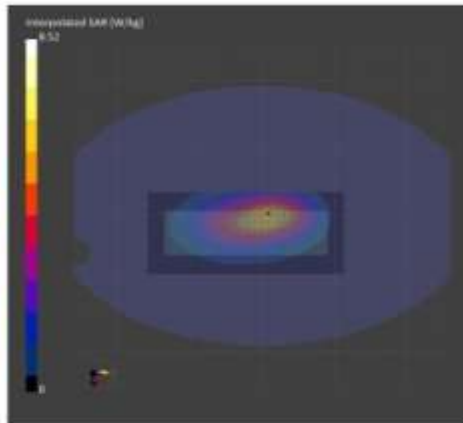
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL450, 2021-Dec-06	EX3DV4 - SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	Unknown	Unknown
psSAR1g [W/Kg]	6.00	5.88
psSAR10g [W/Kg]	4.36	4.23
Power Drift [dB]	-0.13	-0.44
TSL Correction	Positive only	Positive only
M2/M1 [dB]		86.7
Dist 3dB Peak [mm]		> 15.0



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Assessment ISED – Table 21

Antenna PMAE4069A (450-470MHz)

12/6/21, 11:37 AM

BACK_0-00_PMAE4069A_PMNN4407BR_RLN4570A_PMMN4024A_0_CW_450-00MHz.html

Motorola Solutions, EME Laboratory

Unknown

Measurement Report for PMUE57748, 807TXV7007, BACK, D450, CW, Channel 50 (450.0 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
PMUE57748	807TXV7007	225.0 x 65.0 x 40.0

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, HSL	BACK, 0.00	D450	CW, 0—	450.0, 50	10.18	0.866	42.4

Hardware Setup

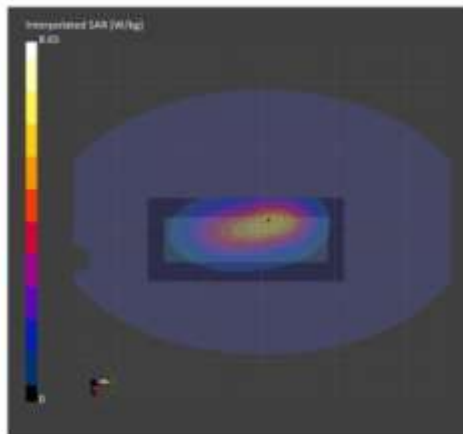
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe 10) – ELI4 1016	HSL450, 2021-Dec-06	EX3DV4 – SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	Unknown	Unknown
psSAR1g [W/Kg]	5.78	5.69
psSAR10g [W/Kg]	4.20	4.08
Power Drift [dB]	-0.12	-0.41
TSL Correction	Positive only	Positive only
M2/M1 [N]		86.7
Dist 3dB Peak [mm]		> 15.0



file:///C:/Users/Labstation_Robot4/Desktop/Product Test Data/Product Test Data 2021/Pilot/P20392 Belize Refresh UHF OnSemi/FCC (PMUE577... 1/1

Assessment ISED – Table 21

Antenna PMAE4070A (450-470MHz)

Page 1 of 1

Motorola Solutions, EME Laboratory

2021-11-13, 01:28

Measurement Report for PMUE5774B, 807TXV7007, BACK, Custom Band, CW, Channel 457900 (457.9 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
PMUE5774B	807TXV7007	225.0 x 85.0 x 40.0

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, HSL	BACK, 0.00	Custom Band	CW, 0---	457.9, 457900	10.18	0.850	42.4

Hardware Setup

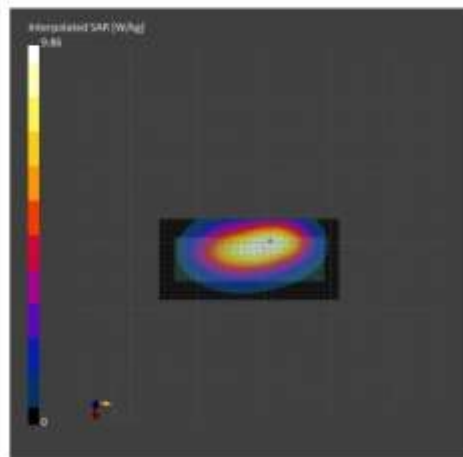
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe 1ft) - EL34 1016	HSL450, 2021-Nov-12	EX3DV4 - SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAJA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2021-11-13, 01:28	2021-11-13, 01:40
psSAR1g [W/Kg]	8.94	8.73
psSAR10g [W/Kg]	6.47	6.15
Power Drift [dB]	-0.12	-0.33
TSL Correction	Positive only	Positive only
M2/M1 [N]		86.6
Dist 3dB Peak [mm]		> 15.0



file:///C:/Users/Labstation_Robot4/Desktop/Product%20Test%20Data/Product%20Test%... 13/11/2021

Assessment ISED – Table 21

Antenna PMAE4071A (450-470MHz)

11/12/21, 9:26 PM

BACK_0-00_PMAE4071A_PMNN4407BR_RLN4570A_None BT_0_CW_470-00MHz.html

Motorola Solutions, EME Laboratory

2021-11-12, 21:11

Measurement Report for PMUE5774B, 807TXV7007, BACK, D450, CW, Channel 70 (470.0 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
PMUE5774B	807TXV7007	225.0 x 65.0 x 40.0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flt, HSL	BACK, 0.00	D450	CW, 0---	470.0, 70	10.18	0.860	42.1

Hardware Setup

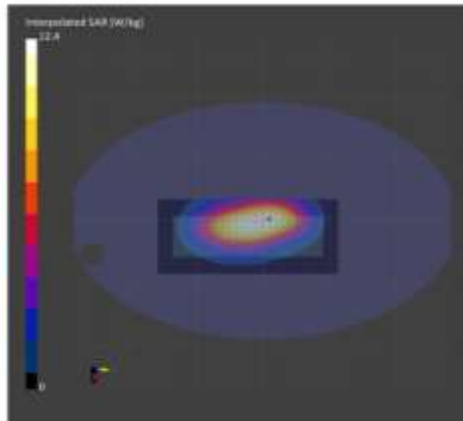
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL450, 2021-Nov-12	EX3DV4 - SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAJA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2021-11-12, 21:11	2021-11-12, 21:18
psSAR1g [W/Kg]	11.2	10.7
psSAR10g [W/Kg]	8.10	7.60
Power Drift [dB]	-0.11	-0.41
TSL Correction	Positive only	Positive only
M2/M1 [dB]		86.4
Dist 3dB Peak [mm]		> 15.0



file:///C:/Users/Labstation_Robot4/Desktop/Product Test Data/Product Test Data 2021/Pilot/P20392 Belize Refresh UHF OnSemi/FCC (PMUE577... 1/1

Assessment ISED – Table 21

Antenna PMAE4079A (450-470MHz)

12/6/21, 12:08 PM

BACK_0-00_PMAE4079A_PMN4491C_HLN6602A_PMMN4024A_0_CW_457-90MHz.html

Motorola Solutions, EME Laboratory

Unknown

Measurement Report for PMUE5774B, 807TXV7007, BACK, Custom Band, CW, Channel 457900 (457.9 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
PMUE5774B	807TXV7007	285.0 x 65.0 x 40.0

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, HSL	BACK, 0.00	Custom Band	CW, 0---	457.9, 457900	10.18	0.873	42.3

Hardware Setup

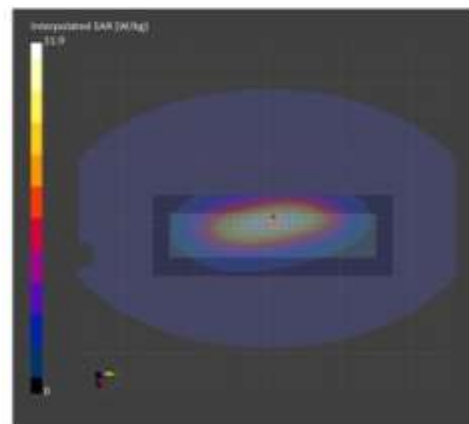
Phantom	TSL, Measured Date	Probe, Calibration Date	DME, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL450, 2021-Dec-06	EX3DV4 - SN7311, 2021-06-18	DME4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	Unknown	Unknown
psSAR1g [W/Kg]	7.88	7.82
psSAR10g [W/Kg]	3.72	5.69
Power Drift [dB]	-0.08	-0.17
TSL Correction	Positive only	Positive only
M2/M1 [n]		86.4
Dist 3dB Peak [mm]		> 15.0



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Assessments at the WLAN Body - Table 23

Motorola Solutions, EME Laboratory

2021-11-16, 03:24

Measurement Report for PMUE5770B, 871TXVC535, BACK, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle), Channel 1 (2412.0 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
PMUE5770B	871TXVC535	225.0 x 65.0 x 40.0

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, HSL	BACK, 0.00	WLAN 2.4GHz	WLAN, 10415-AAA	2412.0, 1	7.0	1.85	35.8

Hardware Setup

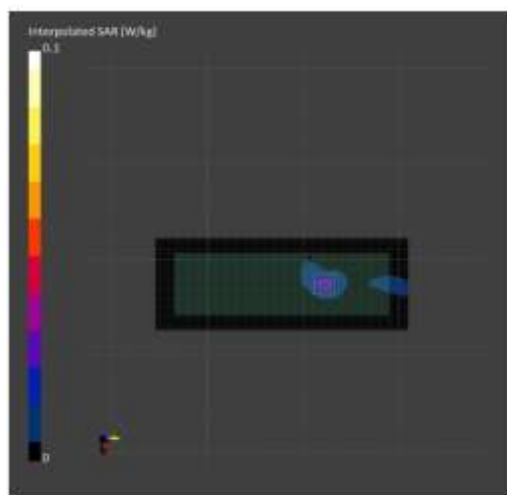
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL2450, 2021-Nov-15	EX3DV4 - SN7511, 2021-06-18	DAE4 5n729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	96.0 x 264.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2021-11-16, 03:24	2021-11-16, 03:39
psSAR1g [W/Kg]	0.024	0.025
psSAR10g [W/Kg]	0.011	0.012
Power Drift [dB]	-0.20	-0.21
TSL Correction	Positive only	Positive only
M2/M1 [%]		86.1
Dist 3dB Peak [mm]		> 15.0



Motorola Solutions, EME Laboratory

Unknown

Measurement Report for PMUE5770B, 871TXVC535, BACK, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle), Channel 6 (2437.0 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
PMUE5770B	871TXVC535	225.0 x 65.0 x 40.0

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, HSL	BACK, 0.00	WLAN 2.4GHz	WLAN, 10415-AAA	2437.0, 6	7.0	1.86	35.7

Hardware Setup

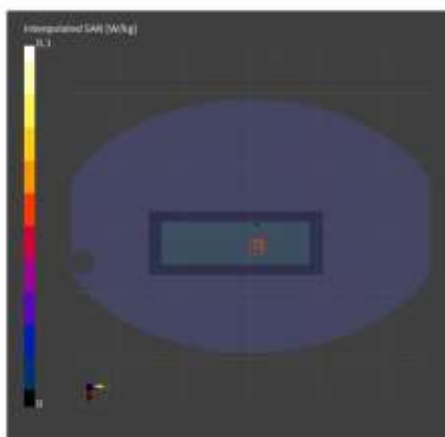
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL2450, 2021-Nov-18	EX3DV4 - SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	96.0 x 264.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	Unknown	Unknown
psSAR1g [W/Kg]	0.006	0.006
psSAR10g [W/Kg]	0.002	0.001
Power Drift [dB]	-1.22	-2.17
TSL Correction	Positive only	Positive only
M2/M1 [%]		81.5
Dist 3dB Peak [mm]		> 15.0



Motorola Solutions, EME Laboratory

Unknown

Measurement Report for PMUE5770B, 871TXVC535, BACK, WLAN 2.4GHz, IEEE 802.11b WIFI 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle), Channel 11 (2462.0 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
PMUE5770B	871TXVC535	225.0 x 65.0 x 40.0

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, HSL	BACK, 0.00	WLAN 2.4GHz	WLAN, 10415-AAA	2462.0, 11	7.0	1.85	35.9

Hardware Setup

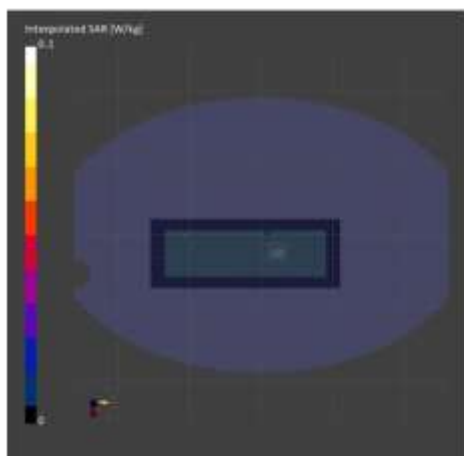
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL2450, 2021-Nov-16	EX3DV4 - SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	96.0 x 264.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	Unknown	Unknown
psSAR1g [W/Kg]	0.008	0.005
psSAR10g [W/Kg]	0.003	0
Power Drift [dB]	-3.91	-0.68
TSL Correction	Positive only	Positive only
M2/M1 [%]		84.0
Dist 3dB Peak [mm]		> 15.0



Assessments at the WLAN Face – Table 23

11/16/21, 12:52 AM FRONT_25-00_0104039J80 WiFi Ant_PMNN4412A_front_None_10415_IEEE 802-11b WiFi 2-4 GHz DSSS 1 Mbps 99pc...

Motorola Solutions, EME Laboratory

2021-11-15, 23:56

Measurement Report for PMUE5770B, 871TXVC535, FRONT, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle), Channel 1 (2412.0 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
PMUE5770B	871TXVC535	225.0 x 65.0 x 40.0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, U/D	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	FRONT, 25.00	WLAN 2.4GHz	WLAN, 10415-AAA	2412.0, 1	7.0	1.85	35.8

Hardware Setup

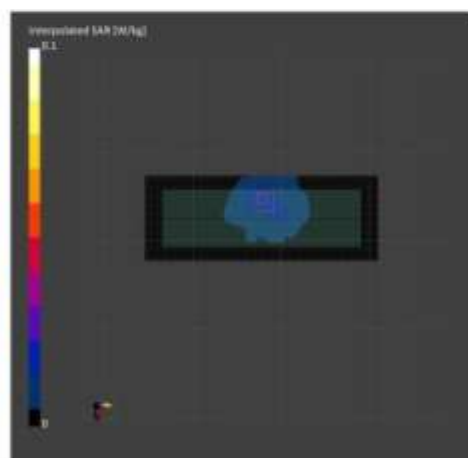
Phantom	TSL Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL2450, 2021-Nov-15	EX3DV4 - SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	96.0 x 264.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	3.0 x 3.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2021-11-15, 23:56	2021-11-16, 00:49
psSAR1g [W/Kg]	0.017	0.018
psSAR10g [W/Kg]	0.010	0.01
Power Drift [dB]	-0.19	0.14
TSL Correction	Positive only	Positive only
M2/M1 [%]		79.9
Dist SdB Peak [mm]		> 15.0



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Motorola Solutions, EME Laboratory

2021-11-18, 01:43

Measurement Report for PMUE5770B, 871TXVC535, FRONT, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle), Channel 6 (2437.0 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
PMUE5770B	871TXVC535	225.0 x 65.0 x 40.0

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, HSL	FRONT, 25.00	WLAN 2.4GHz	WLAN, 10415-AAA	2437.0, 6	7.0	1.86	35.7

Hardware Setup

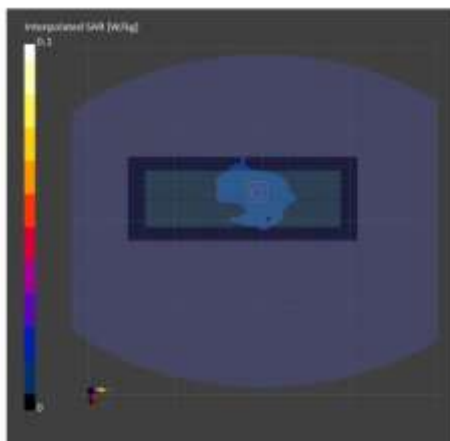
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL2450, 2021-Nov-17	EX3DV4 - SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	96.0 x 264.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2021-11-18, 01:43	2021-11-18, 02:00
psSAR1g [W/Kg]	0.014	0.013
psSAR10g [W/Kg]	0.008	0.006
Power Drift [dB]	-0.12	0.08
TSL Correction	Positive only	Positive only
M2/M1 [%]		82.0
Dist 3dB Peak [mm]		> 15.0



Motorola Solutions, EME Laboratory

Unknown

Measurement Report for PMUE5770B, 871TXVC535, FRONT, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle), Channel 11 (2462.0 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
PMUE5770B	871TXVC535	225.0 x 65.0 x 40.0

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, HSL	FRONT, 25.00	WLAN 2.4GHz	WLAN, 10415-AAA	2462.0, 11	7.0	1.85	35.9

Hardware Setup

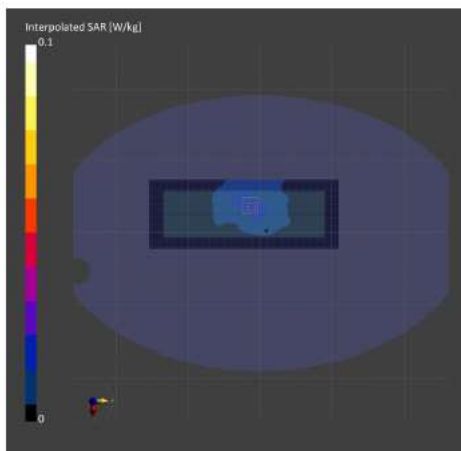
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL2450 , 2021-Nov-16	EX3DV4 - SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	96.0 x 264.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	Unknown	Unknown
psSAR1g [W/Kg]	0.017	0.018
psSAR10g [W/Kg]	0.01	0.009
Power Drift [dB]	-0.65	-0.01
TSL Correction	Positive only	Positive only
M2/M1 [%]		79.1
Dist 3dB Peak [mm]		> 15.0



APPENDIX F

Shorten Scan of Highest SAR Configuration

Shorten Scan- Table 24

11/15/21, 6:29 PM

BACK_0-00_PMAE4071A_PMNN4407BR_RLN4570A_None BT_0_CW_470-00MHz.html

Motorola Solutions, EME Laboratory

2021-11-15, 17:22

Measurement Report for PMUE5774B, 807TXV7007, BACK, D450, CW, Channel 70 (470.0 MHz)

Device Under Test Properties

Model	Serial Number	Dimensions [mm]
PMUE5774B	807TXV7007	225.0 x 65.0 x 40.0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Fiat, HSL	BACK, 0.00	D450	CW, 0--	470.0, 70	10.18	0.883	43.1

Hardware Setup

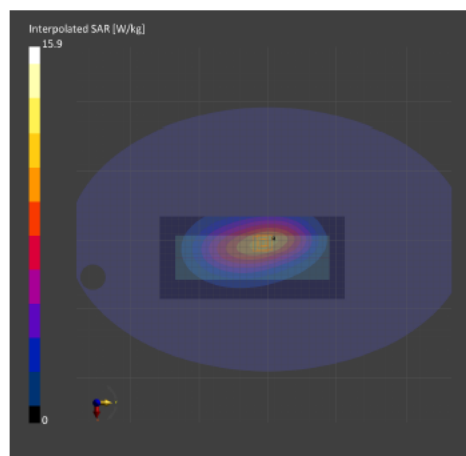
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V4.0 (20deg probe tilt) - ELI4 1016	HSL450, 2021-Nov-15	EX3DV4 - SN7511, 2021-06-18	DAE4 Sn729, 2021-06-09

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2021-11-15, 17:22	2021-11-15, 17:55
psSAR1g [W/Kg]	10.2	10.3
psSAR10g [W/Kg]	7.38	7.31
Power Drift [dB]	-0.13	-0.14
TSL Correction	Positive only	Positive only
M2/M1 [%]		85.9
Dist 3dB Peak [mm]		> 15.0



Shortened scan reflects highest SAR producing configuration and is compared to the full scan.

Scan Description	Referenced Table	Test Time (min.)	SAR 1g (W/kg)
Shorten scan (zoom)	24	4	6.15
Full scan (area & zoom)	18	20	5.61

APPENDIX G

DUT Test Position Photos

1.0 Highest SAR Test Position per body location

1.1 Body

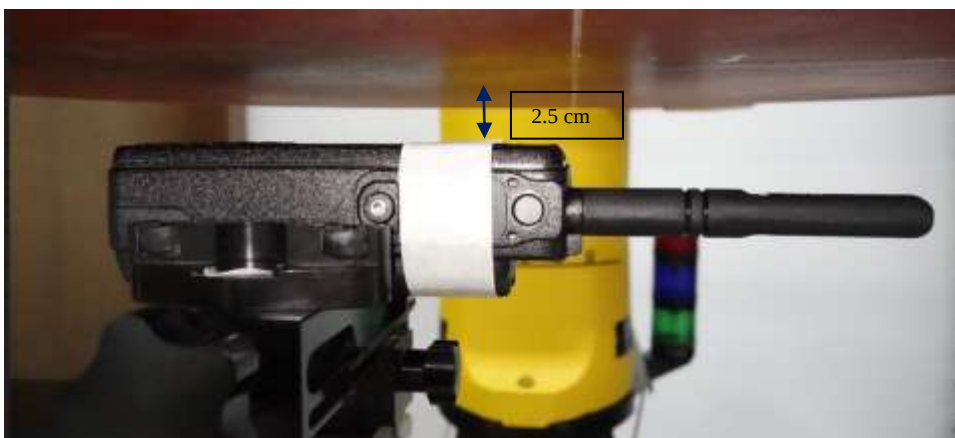
DUT with antenna PMAE4071A with offered battery PMNN4407BR and body worn kit RLN4570A against the phantom without an audio accessory attached.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
PMAE4071A	1	21	18

1.2 Face

Front of DUT w/ antenna PMAE4071A with offered battery PMNN4448B separated 2.5cm from the phantom without an audio accessory attached.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
PMAE4071A	25	38	39