MOTOROLA SOLUTIONS

SAMM 826

CERTIFICATE 2518.05

DECLARATION OF COMPLIANCE SAR ASSESSMENT 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: **08/04/2023**
Report Revision: **B**

Responsible Engineer:	Alfred Hoe (EME Engineer)
Report Author:	Muhammad Hizami bin Ismail (EME Senior Technician)
Date/s Tested:	06/08/23 – 06/25/23, 07/08/2023, 07/31/2023, 08/01/2023
Manufacturer:	Motorola Solutions Inc.
DUT Description:	Handheld Portable – TLK 25 Wi-Fi - WAVE PTX TWO-WAY RADIO
Test TX mode(s):	BT, WLAN
Max. Power output:	Refer table 3
Nominal Power:	Refer table 3
Tx Frequency Bands:	Refer table 3
Signaling type:	FHSS (Bluetooth / Bluetooth LE), 802.11b/g/n/a/ac (WLAN)
Model(s) Tested:	HK2198A (HKUN4317A)
Models(s) Certified:	Refer to Section 1.0 Introduction (part 1 of 2)
Serial Number(s):	64222ZJ0081 & 64222ZJ0082
Classification:	General Population / Uncontrolled Environment
Firmware Version:	VANGOGH_BASE_ENG_D00.00.09_AP_D00.00.40_WNA
Applicant Name:	Motorola Solutions Inc.
Applicant Address:	8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322
FCC ID:	AZ499FT7172 This report contains results that are immaterial for FCC equipment approval, which are clearly identified.
FCC Test Firm Registration Number:	823256
IC:	109U-99FT7172 This report contains results that are immaterial for ISED equipment approval, which are clearly identified.
ISED Test Site registration:	24843

The test results clearly demonstrate compliance with 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.

Saw Sun Hock (Approval Signatory)
Approval Date: **8/6/2023**

Appendix D
System Verification Check Scans

Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/14/2023 9:38:49 PM

Robot#: DASY5-PG-1 | Run#:	BL-SYSP-2450H-230614-10
Dipole Model#	D2450V2
Phantom#:	TP1174/3
Tissue Temp:	20.2 (C)
Serial#:	703
Test Freq:	2450.0000 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.087 dB
Adjusted SAR (1W):	56.00 mW/g (1g)

Comments:

Communication System Band: D2450, Communication System UID: 0, Duty Cycle: 1:1,
Medium parameters used: f = 2450 MHz; σ = 1.74 S/m; ε_r = 39.6; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7486, Calibrated: 6/18/2021, Frequency: 2450 MHz, ConvF(7.69, 7.69, 7.69) @ 2450 MHz
Electronics: DAE4 Sn850, Calibrated: 4/14/2022

2-3 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (51x71x1): Interpolated grid:

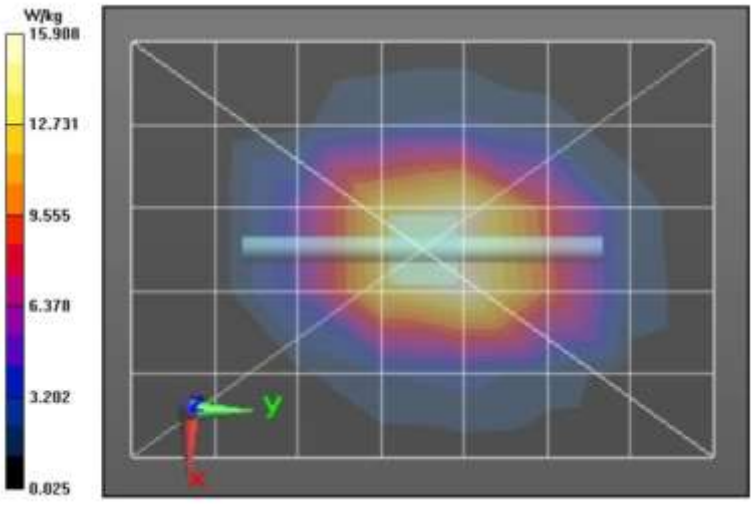
dx=1.200 mm, dy=1.200 mm
Reference Value = 115.4 V/m; Power Drift = -0.06 dB
Fast SAR: SAR(1 g) = 14.2 W/kg; SAR(10 g) = 6.47 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 23.6 W/kg

2-3 GHz-Rev.3/System Performance Check/0-Degree Cube (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 115.4 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 27.1 W/kg
SAR(1 g) = 14 W/kg; SAR(10 g) = 6.71 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 51.3%
Maximum value of SAR (measured) = 22.2 W/kg

2-3 GHz-Rev.3/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid:

dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 22.3 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/10/2023 10:12:38 PM

Robot#: DASY5-PG-1 | Run#:	EMR-SYSP-2450H-230610-15
Dipole Model#	D2450V2
Phantom#:	TP 1174/3
Tissue Temp:	20.5 (C)
Serial#:	781
Test Freq:	2450.0000 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.054 dB
Adjusted SAR (1W):	55.60 mW/g (1g)

Comments:

Communication System Band: D2450, Communication System UID: 0, Duty Cycle: 1:1,
Medium parameters used: f = 2450 MHz; σ = 1.73 S/m; ε_r = 42.9; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7486, Calibrated: 6/18/2021, Frequency: 2450 MHz, ConvF(7.69, 7.69, 7.69) @ 2450 MHz
Electronics: DAE4 Sn850, Calibrated: 4/14/2022

2-3 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (51x101x1): Interpolated

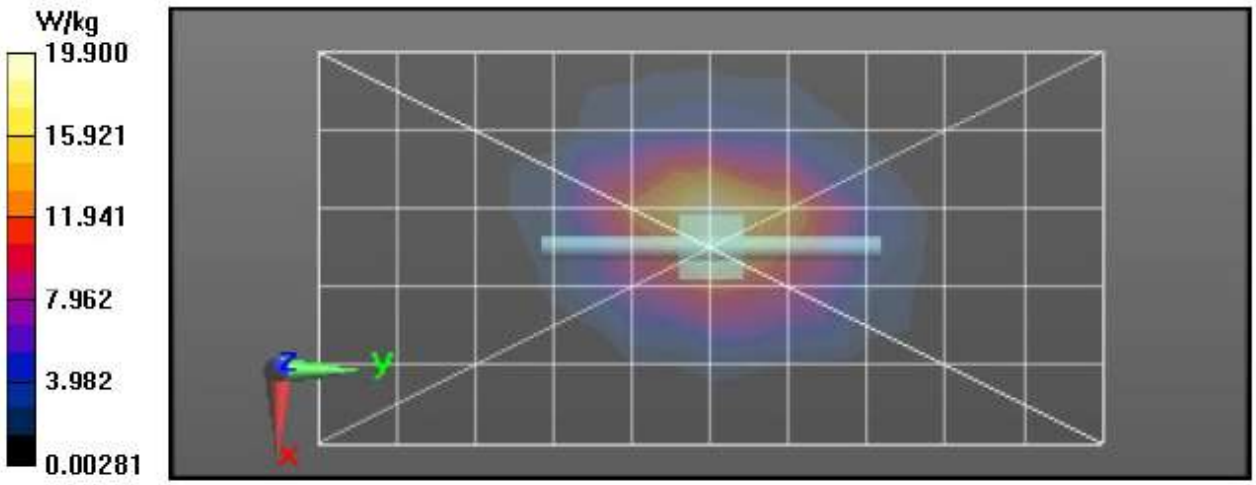
grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 118.4 V/m; Power Drift = 0.16 dB
Fast SAR: SAR(1 g) = 14.4 W/kg; SAR(10 g) = 6.48 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 22.5 W/kg

2-3 GHz-Rev.3/System Performance Check/0-Degree Cube (7x7x7)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 118.4 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 26.3 W/kg
SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.63 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 51.6%
Maximum value of SAR (measured) = 21.6 W/kg

2-3 GHz-Rev.3/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid:

dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 24.4 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/15/2023 4:13:00 AM

Robot#: DASY5-PG-1 | Run#: BL-SYSP-5250H-230615-05
Dipole Model# D5GHzV2
Phantom#: TP1174/3
Tissue Temp: 20.3 (C)
Serial#: 1027
Test Freq: 5250.0000 (MHz)
Start Power: 100 (mW)
Rotation (1D): 0.15 dB
Adjusted SAR (1W): 85.20 mW/g (1g)

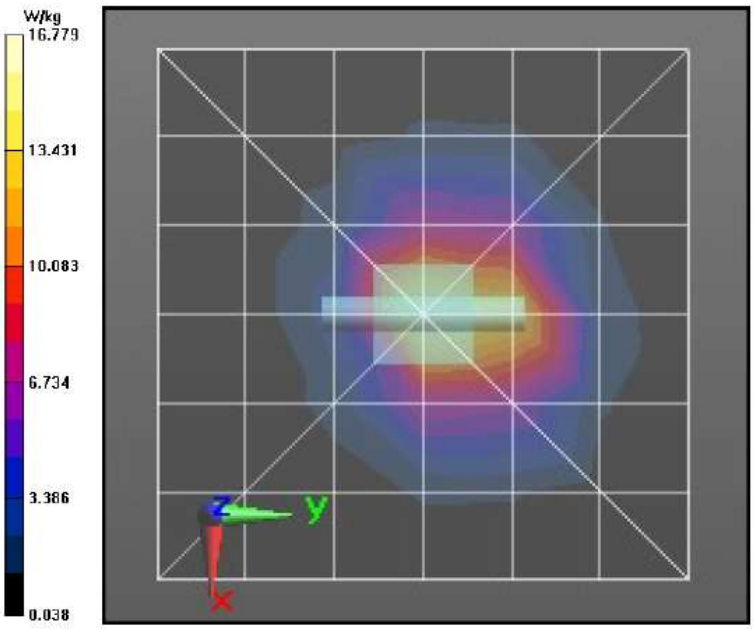
Comments:

Communication System Band: D5GHz, Communication System UID: 0, Duty Cycle: 1:1,
Medium parameters used: f = 5250 MHz; σ = 4.77 S/m; ε_r = 34.2; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7486, Calibrated: 6/18/2021, Frequency: 5250 MHz, ConvF(5.46, 5.46, 5.46) @ 5250 MHz
Electronics: DAE4 Sn850, Calibrated: 4/14/2022

4-6 GHz-Rev.5/System Performance Check/Dipole Area Scan 2 (61x61x1): Interpolated grid: dx=0.9000 mm, dy=0.9000 mm
Reference Value = 71.75 V/m; Power Drift = -0.11 dB
Fast SAR: SAR(1 g) = 7.85 W/kg; SAR(10 g) = 2.14 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 20.5 W/kg

4-6 GHz-Rev.5/System Performance Check/0-Degree Cube (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 71.75 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 29.9 W/kg
SAR(1 g) = 8.52 W/kg; SAR(10 g) = 2.5 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 59.7%
Maximum value of SAR (measured) = 18.4 W/kg

4-6 GHz-Rev.5/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 20.5 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/15/2023 5:21:03 AM

Robot#: DASY5-PG-1 | Run#: BL-SYSP-5600H-230615-06
Dipole Model# D5GHzV2
Phantom#: TP1174/3
Tissue Temp: 20.3 (C)
Serial#: 1027
Test Freq: 5600.0000 (MHz)
Start Power: 100 (mW)
Rotation (1D): 0.16 dB
Adjusted SAR (1W): 92.10 mW/g (1g)

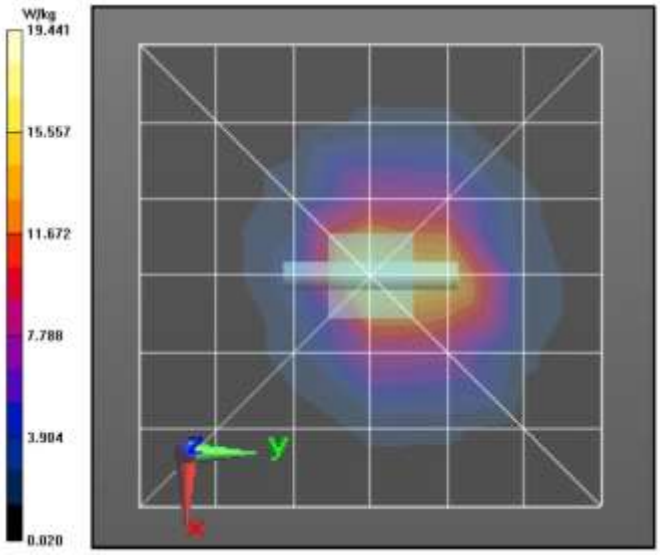
Comments:

Communication System Band: D5GHz, Communication System UID: 0, Duty Cycle: 1:1,
Medium parameters used: f = 5600 MHz; σ = 5.18 S/m; ε_r = 33.4; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7486, Calibrated: 6/18/2021, Frequency: 5600 MHz, ConvF(4.73, 4.73, 4.73) @ 5600 MHz
Electronics: DAE4 Sn850, Calibrated: 4/14/2022

4-6 GHz-Rev.5/System Performance Check/Dipole Area Scan 2 (61x61x1): Interpolated grid: dx=0.9000 mm, dy=0.9000 mm
Reference Value = 75.55 V/m; Power Drift = -0.20 dB
Fast SAR: SAR(1 g) = 8.69 W/kg; SAR(10 g) = 2.37 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 23.5 W/kg

4-6 GHz-Rev.5/System Performance Check/0-Degree Cube (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 75.55 V/m; Power Drift = -0.20 dB
Peak SAR (extrapolated) = 35.0 W/kg
SAR(1 g) = 9.21 W/kg; SAR(10 g) = 2.69 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 6.8 mm
Ratio of SAR at M2 to SAR at M1 = 57.3%
Maximum value of SAR (measured) = 20.5 W/kg

4-6 GHz-Rev.5/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 23.5 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 8/1/2023 8:11:15 PM

Robot#: DASY5-PG-1 | Run#: BL-SYSP-5750H-230801-05
Dipole Model# D5GHzV2
Phantom#: TP1174/3
Tissue Temp: 19.0 (C)
Serial#: 1027
Test Freq: 5750.0000 (MHz)
Start Power: 100 (mW)
Rotation (1D): 0.069 dB
Adjusted SAR (1W): 87.50 mW/g (1g)

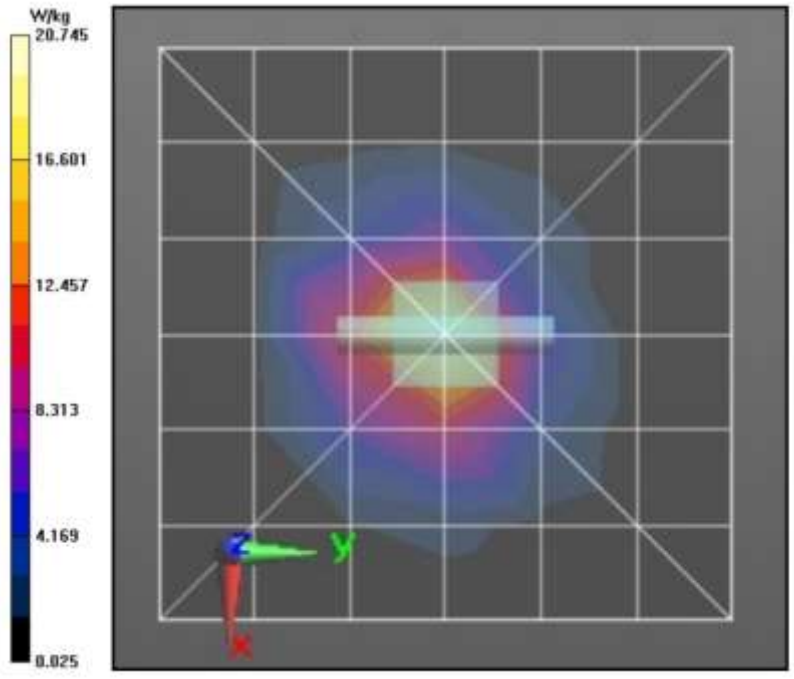
Comments:

Communication System Band: D5GHz, Communication System UID: 0, Duty Cycle: 1:1,
Medium parameters used: f = 5750 MHz; σ = 4.86 S/m; ε_r = 38; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7486, Calibrated: 6/18/2021, Frequency: 5750 MHz, ConvF(4.9, 4.9, 4.9) @ 5750 MHz
Electronics: DAE4 Sn850, Calibrated: 4/14/2022

4-6 GHz-Rev.5/System Performance Check/Dipole Area Scan 2 (61x61x1): Interpolated grid: dx=0.9000 mm, dy=0.9000 mm
Reference Value = 68.69 V/m; Power Drift = 0.13 dB
Fast SAR: SAR(1 g) = 8.08 W/kg; SAR(10 g) = 2.2 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 21.9 W/kg

4-6 GHz-Rev.5/System Performance Check/0-Degree Cube (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 68.69 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 33.3 W/kg
SAR(1 g) = 8.75 W/kg; SAR(10 g) = 2.54 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 56.1%
Maximum value of SAR (measured) = 19.8 W/kg

4-6 GHz-Rev.5/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 19.7 W/kg



Appendix E
DUT Scans

Assessment at the Body for FCC WLAN 2.4GHz (802.11 b) – Table 18

Motorola Solutions, Inc. EME Laboratory

Date/Time: 7/8/2023 12:15:05 PM

Robot#: DASY5-PG-3 | Run#: IRA-AB-230708-06
Model#: HK2198A [HKUN4317A]
Phantom#: ELI4 1028
Tissue Temp: 21.1(C)
Serial#: 64222ZJ0081
Antenna: LDS MDA-LB-008
Test Freq: 2412.0000 (MHz)
Battery: PMNN4602A
Carry Acc: PMLN8538A
Audio Acc: None
Start Power: 0.0542 (W)

Comments:

Communication System Band: WLAN 2.4GHz (2412.0 - 2484.0 MHz), Communication System UID: 10415 - AAA, Duty Cycle: 1:1.4243,

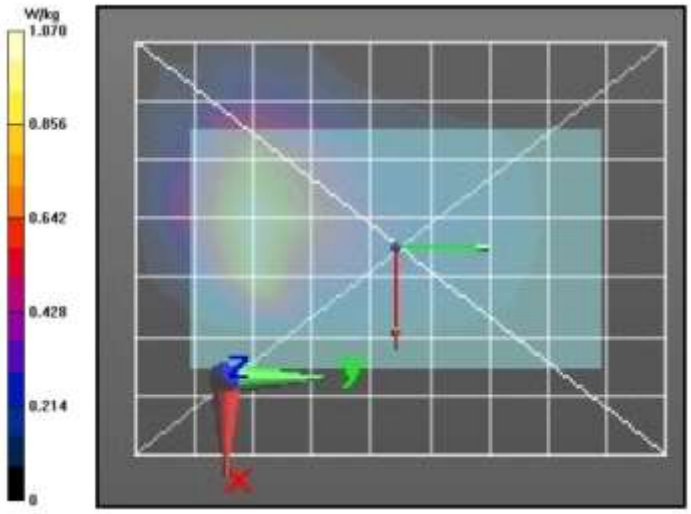
Medium parameters used: f = 2412 MHz; σ = 1.76 S/m; ε_r = 41.5; ρ = 1000 kg/m^3

Probe: EX3DV4 - SN7519, Calibrated: 2/28/2022, Frequency: 2412 MHz, ConvF(7.71, 7.71, 7.71) @ 2412 MHz
Electronics: DAE4 Sn684, Calibrated: 2/22/2022

2-3 GHz-Rev.3/Ab Scan/1-Area Scan (71x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 23.21 V/m; Power Drift = -0.09 dB
Fast SAR: SAR(1 g) = 0.750 W/kg; SAR(10 g) = 0.366 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.30 W/kg

2-3 GHz-Rev.3/Ab Scan/3-Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.21 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 1.34 W/kg
SAR(1 g) = 0.710 W/kg; SAR(10 g) = 0.359 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7.8 mm
Ratio of SAR at M2 to SAR at M1 = 56.5%
Maximum value of SAR (measured) = 1.05 W/kg

2-3 GHz-Rev.3/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.08 W/kg



Assessments at the Body for FCC U-NII-2A (5.25-5.35GHz) – Table 21

Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/9/2023 1:58:03 PM

Robot#: DASY5-PG-1 | Run#: BL-AB-230609-13@
Model#: HK2198A [HKUN4317A]
Phantom#: TP1174/3
Tissue Temp: 20.2 (C)
Serial#: 64222ZJ0081
Antenna: LDS MDA-LB-008
Test Freq: 5320.0000 (MHz)
Battery: PMNN4602A
Carry Acc: PMLN8538A
Audio Acc: None
Start Power: 0.052 (W)

Comments: Full Scan

Communication System Band: WLAN 5GHz (4915.0 - 5825.0 MHz), Communication System UID: 10583 - AAC, Duty Cycle: 1:7.22936,

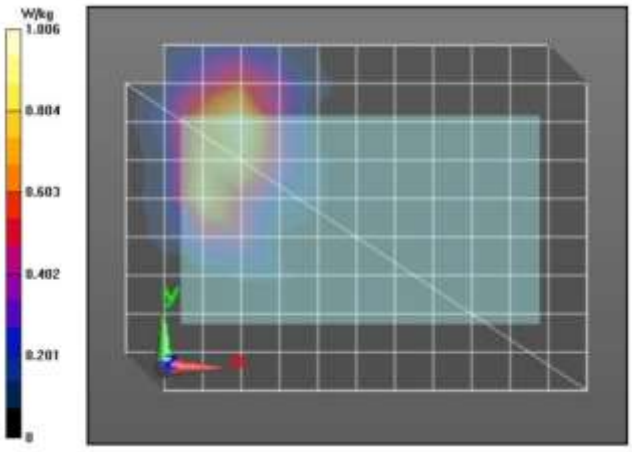
Medium parameters used: f = 5320 MHz; σ = 4.57 S/m; ε_r = 38.1; ρ = 1000 kg/m^3

Probe: EX3DV4 - SN7486, Calibrated: 6/18/2021, Frequency: 5320 MHz, ConvF(5.46, 5.46, 5.46) @ 5320 MHz
Electronics: DAE4 Sn850, Calibrated: 4/14/2022

4-6 GHz-Rev.5/Full Ab Scan/1-Area Scan (91x121x1): Interpolated grid: dx=0.9000 mm, dy=0.9000 mm
Reference Value = 14.95 V/m; Power Drift = 0.25 dB
Fast SAR: SAR(1 g) = 0.474 W/kg; SAR(10 g) = 0.176 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.09 W/kg

4-6 GHz-Rev.5/Full Ab Scan/2-Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 14.95 V/m; Power Drift = -0.41 dB
Peak SAR (extrapolated) = 1.77 W/kg
SAR(1 g) = 0.494 W/kg; SAR(10 g) = 0.184 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 5.8 mm
Ratio of SAR at M2 to SAR at M1 = 58.3%
Maximum value of SAR (measured) = 1.15 W/kg

4-6 GHz-Rev.5/Full Ab Scan/3-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.15 W/kg



Assessments at the Body for FCC U-NII-2C (5.47-5.725GHz) – Table 22

Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/10/2023 12:32:46 AM

Robot#: DASY5-PG-1 | Run#: EMR-AB-230610-01@
Model#: HK2198A [HKUN4317A]
Phantom#: TP1174/3
Tissue Temp: 20.2 (C)
Serial#: 64222ZJ0082
Antenna: LDS MDA-LB-008
Test Freq: 5500.0000 (MHz)
Battery: PMNN4602A
Carry Acc: PMLN8538A
Audio Acc: None
Start Power: 0.0556 (W)

Comments: Full Scan

Communication System Band: WLAN 5GHz (4915.0 - 5825.0 MHz), Communication System UID: 10583 - AAC, Duty Cycle: 1:7.22936,

Medium parameters used: f = 5500 MHz; σ = 4.55 S/m; ε_r = 37.8; ρ = 1000 kg/m^3

Probe: EX3DV4 - SN7486, Calibrated: 6/18/2021, Frequency: 5500 MHz, ConvF(4.93, 4.93, 4.93) @ 5500 MHz

Electronics: DAE4 Sn850, Calibrated: 4/14/2022

4-6 GHz-Rev.5/Full Ab Scan/1-Area Scan (91x121x1): Interpolated grid: dx=0.9000 mm, dy=0.9000 mm

Reference Value = 16.44 V/m; Power Drift = -0.29 dB

Fast SAR: SAR(1 g) = 0.380 W/kg; SAR(10 g) = 0.138 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 0.935 W/kg

4-6 GHz-Rev.5/Full Ab Scan/2-Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 16.44 V/m; Power Drift = -0.24 dB

Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 0.432 W/kg; SAR(10 g) = 0.143 W/kg (SAR corrected for target medium)

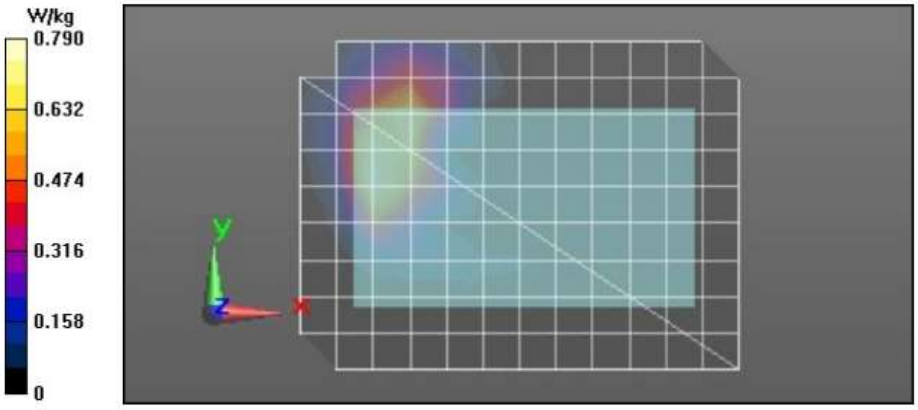
Smallest distance from peaks to all points 3 dB below = 6.2 mm

Ratio of SAR at M2 to SAR at M1 = 56.4%

Maximum value of SAR (measured) = 0.998 W/kg

4-6 GHz-Rev.5/Full Ab Scan/3-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.07 W/kg



Assessments at the Body for FCC U-NII-3 (5.725-5.825GHz) – Table 23

Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/25/2023 4:21:37 AM

Robot#: DASY5-PG-1 | Run#: BL-AB-230625-04@
Model#: HK2198A [HKUN4317A]
Phantom#: ELI4 1028
Tissue Temp: 20.1 (C)
Serial#: 64222ZJ0081
Antenna: LDS MDA-LB-008
Test Freq: 5825.0000 (MHz)
Battery: PMNN4602A
Carry Acc: PMLN8538A
Audio Acc: None
Start Power: 0.0445 (W)

Comments: Full Scan

Communication System Band: WLAN 5GHz (4915.0 - 5825.0 MHz), Communication System UID: 10583 - AAC, Duty Cycle: 1:7.22936,

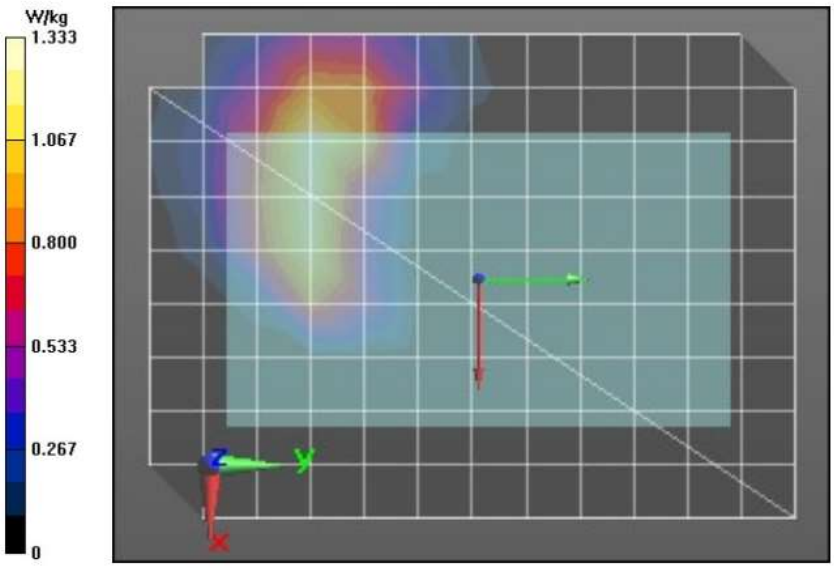
Medium parameters used: f = 5825 MHz; σ = 4.87 S/m; ε_r = 37.7; ρ = 1000 kg/m^3

Probe: EX3DV4 - SN7486, Calibrated: 6/18/2021, Frequency: 5825 MHz, ConvF(4.9, 4.9, 4.9) @ 5825 MHz
Electronics: DAE4 Sn850, Calibrated: 4/14/2022

4-6 GHz-Rev.5/Full Ab Scan/1-Area Scan (91x121x1): Interpolated grid: dx=0.9000 mm, dy=0.9000 mm
Reference Value = 18.72 V/m; Power Drift = -0.14 dB
Fast SAR: SAR(1 g) = 0.603 W/kg; SAR(10 g) = 0.228 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.89 W/kg

4-6 GHz-Rev.5/Full Ab Scan/2-Zoom Scan (12x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 18.72 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 2.65 W/kg
SAR(1 g) = 0.667 W/kg; SAR(10 g) = 0.237 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 55.8%
Maximum value of SAR (measured) = 1.60 W/kg

4-6 GHz-Rev.5/Full Ab Scan/3-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.67 W/kg



Assessments at the FCC Body Bluetooth Band – Table 28

Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/14/2023 10:48:41 PM

Robot#: DASY5-PG-1 | Run#: BL-AB-230614-11
Model#: HK2198A [HKUN4317A]
Phantom#: TP 1174/3
Tissue Temp: 20.2 (C)
Serial#: 64222ZJ0082
Antenna: LDS MDA-LB-008
Test Freq: 2441.0000 (MHz)
Battery: PMNN4602A
Carry Acc: PMLN8538A
Audio Acc: None
Start Power: 0.0127 (W)

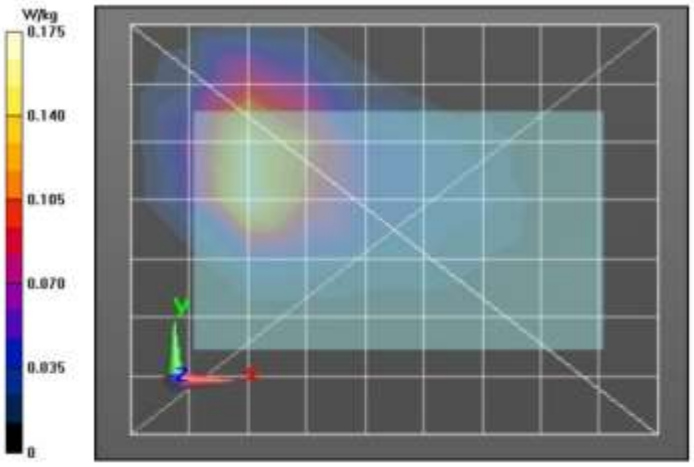
Comments:

Communication System Band: VanGogh, Communication System UID: 0, Duty Cycle: 1:1.27938,
Medium parameters used: f = 2441 MHz; σ = 1.73 S/m; ε_r = 39.6; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7486, Calibrated: 6/18/2021, Frequency: 2441 MHz, ConvF(7.69, 7.69, 7.69) @ 2441 MHz
Electronics: DAE4 Sn850, Calibrated: 4/14/2022

2-3 GHz-Rev.3/Ab Scan/1-Area Scan (71x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 10.44 V/m; Power Drift = 0.11 dB
Fast SAR: SAR(1 g) = 0.135 W/kg; SAR(10 g) = 0.063 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.220 W/kg

2-3 GHz-Rev.3/Ab Scan/3-Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.44 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.226 W/kg
SAR(1 g) = 0.125 W/kg; SAR(10 g) = 0.063 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 10 mm
Ratio of SAR at M2 to SAR at M1 = 51.7%
Maximum value of SAR (measured) = 0.188 W/kg

2-3 GHz-Rev.3/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.188 W/kg



Assessment at the ISED Body WLAN 2.4GHz (802.11 b) – Table 19

Motorola Solutions, Inc. EME Laboratory

Date/Time: 7/8/2023 12:15:05 PM

Robot#: DASY5-PG-3 | Run#: IRA-AB-230708-06
Model#: HK2198A [HKUN4317A]
Phantom#: ELI4 1028
Tissue Temp: 21.1(C)
Serial#: 64222ZJ0081
Antenna: LDS MDA-LB-008
Test Freq: 2412.0000 (MHz)
Battery: PMNN4602A
Carry Acc: PMLN8538A
Audio Acc: None
Start Power: 0.0542 (W)

Comments:

Communication System Band: WLAN 2.4GHz (2412.0 - 2484.0 MHz), Communication System UID: 10415 - AAA, Duty Cycle: 1:1.4243,

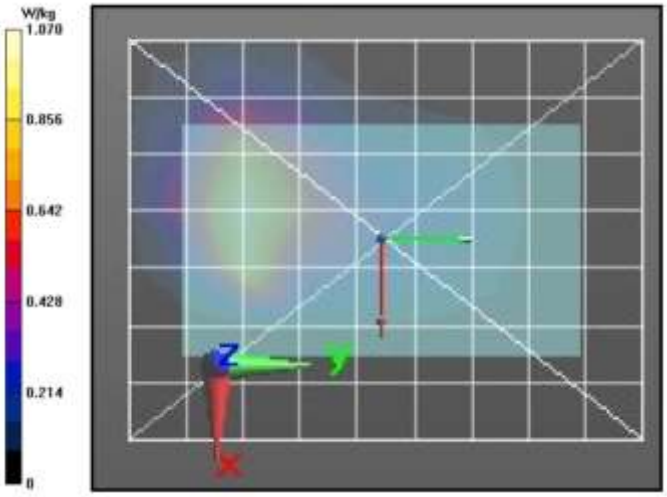
Medium parameters used: f = 2412 MHz; σ = 1.76 S/m; ε_r = 41.5; ρ = 1000 kg/m^3

Probe: EX3DV4 - SN7519, Calibrated: 2/28/2022, Frequency: 2412 MHz, ConvF(7.71, 7.71, 7.71) @ 2412 MHz
Electronics: DAE4 Sn684, Calibrated: 2/22/2022

2-3 GHz-Rev.3/Ab Scan/1-Area Scan (71x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 23.21 V/m; Power Drift = -0.09 dB
Fast SAR: SAR(1 g) = 0.750 W/kg; SAR(10 g) = 0.366 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.30 W/kg

2-3 GHz-Rev.3/Ab Scan/3-Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.21 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 1.34 W/kg
SAR(1 g) = 0.710 W/kg; SAR(10 g) = 0.359 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7.8 mm
Ratio of SAR at M2 to SAR at M1 = 56.5%
Maximum value of SAR (measured) = 1.05 W/kg

2-3 GHz-Rev.3/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.08 W/kg



Assessments at the ISED Body U-NII-2A (5.25-5.35GHz) – Table 24

Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/9/2023 2:50:52 PM

Robot#: DASY5-PG-1 | Run#: BL-AB-230609-14@
Model#: HK2198A [HKUN4317A]
Phantom#: TP1174/3
Tissue Temp: 20.2 (C)
Serial#: 64222ZJ0082
Antenna: LDS MDA-LB-008
Test Freq: 5300.0000 (MHz)
Battery: PMNN4602A
Carry Acc: PMLN8538A
Audio Acc: None
Start Power: 0.0483 (W)

Comments: Full Scan

Communication System Band: WLAN 5GHz (4915.0 - 5825.0 MHz), Communication System UID: 10583 - AAC, Duty Cycle: 1:7.22936,

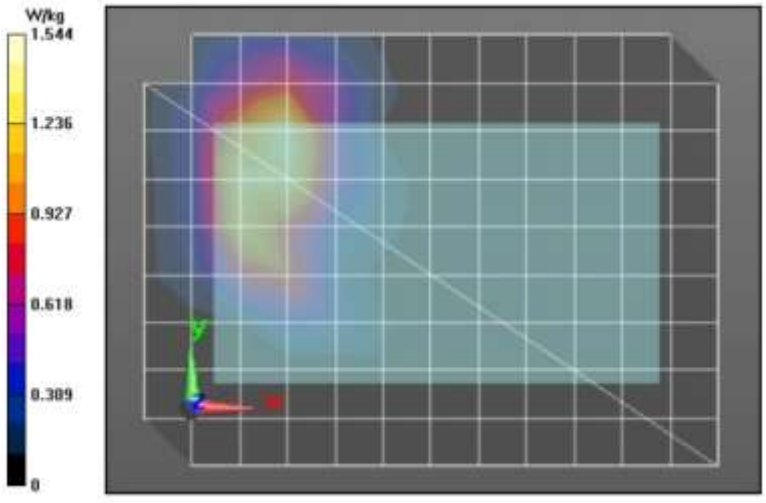
Medium parameters used: f = 5300 MHz; σ = 4.55 S/m; ε_r = 38.2; ρ = 1000 kg/m^3

Probe: EX3DV4 - SN7486, Calibrated: 6/18/2021, Frequency: 5300 MHz, ConvF(5.46, 5.46, 5.46) @ 5300 MHz
Electronics: DAE4 Sn850, Calibrated: 4/14/2022

4-6 GHz-Rev.5/Full Ab Scan/1-Area Scan (91x121x1): Interpolated grid: dx=0.9000 mm, dy=0.9000 mm
Reference Value = 18.29 V/m; Power Drift = -0.45 dB
Fast SAR: SAR(1 g) = 0.765 W/kg; SAR(10 g) = 0.274 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.81 W/kg

4-6 GHz-Rev.5/Full Ab Scan/2-Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 18.29 V/m; Power Drift = -0.42 dB
Peak SAR (extrapolated) = 2.59 W/kg
SAR(1 g) = 0.793 W/kg; SAR(10 g) = 0.296 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 6.1 mm
Ratio of SAR at M2 to SAR at M1 = 59.8%
Maximum value of SAR (measured) = 1.73 W/kg

4-6 GHz-Rev.5/Full Ab Scan/3-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.76 W/kg



Assessments at the ISED Body U-NII-2C (5.47-5.725GHz) – Table 25

Motorola Solutions, Inc. EME Laboratory
Date/Time: 6/10/2023 2:42:19 AM

Robot#: DASY5-PG-1 | Run#: EMR-AB-230610-03@
Model#: HK2198A [HKUN4317A]
Phantom#: TP1174/3
Tissue Temp: 20.7 (C)
Serial#: 64222ZJ0082
Antenna: LDS MDA-LB-008
Test Freq: 5640.0000 (MHz)
Battery: PMNN4602A
Carry Acc: PMLN8538A
Audio Acc: None
Start Power: 0.0528 (W)

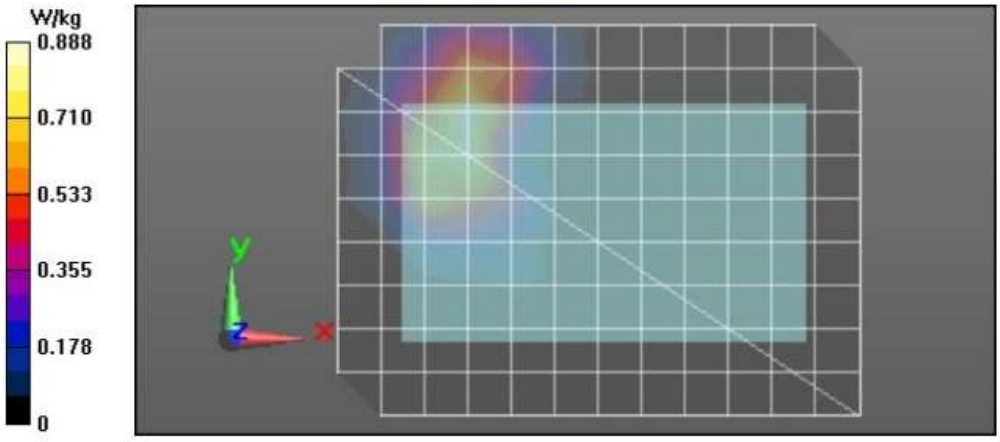
Comments: Full Scan

Communication System Band: WLAN 5GHz (4915.0 - 5825.0 MHz), Communication System UID: 10583 - AAC, Duty Cycle: 1:7.22936,
Medium parameters used: f = 5640 MHz; σ = 4.71 S/m; ε_r = 37.5; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7486, Calibrated: 6/18/2021, Frequency: 5640 MHz, ConvF(4.73, 4.73, 4.73) @ 5640 MHz
Electronics: DAE4 Sn850, Calibrated: 4/14/2022

4-6 GHz-Rev.5/Full Ab Scan/1-Area Scan (91x121x1): Interpolated grid: dx=0.9000 mm, dy=0.9000 mm
Reference Value = 15.40 V/m; Power Drift = 0.12 dB
Fast SAR: SAR(1 g) = 0.417 W/kg; SAR(10 g) = 0.157 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.999 W/kg

4-6 GHz-Rev.5/Full Ab Scan/2-Zoom Scan (9x10x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 15.40 V/m; Power Drift = 0.31 dB
Peak SAR (extrapolated) = 4.25 W/kg
SAR(1 g) = 0.472 W/kg; SAR(10 g) = 0.158 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 6.8 mm
Ratio of SAR at M2 to SAR at M1 = 55.9%
Maximum value of SAR (measured) = 1.19 W/kg

4-6 GHz-Rev.5/Full Ab Scan/3-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.116 W/kg



Assessments at the ISED Body U-NII-3 (5.725-5.825GHz) – Table 26

Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/25/2023 4:21:37 AM

Robot#: DASY5-PG-1 | Run#: BL-AB-230625-04@
Model#: HK2198A [HKUN4317A]
Phantom#: ELI4 1028
Tissue Temp: 20.1 (C)
Serial#: 64222ZJ0081
Antenna: LDS MDA-LB-008
Test Freq: 5825.0000 (MHz)
Battery: PMNN4602A
Carry Acc: PMLN8538A
Audio Acc: None
Start Power: 0.0445 (W)

Comments: Full Scan

Communication System Band: WLAN 5GHz (4915.0 - 5825.0 MHz), Communication System UID: 10583 - AAC, Duty Cycle: 1:7.22936,

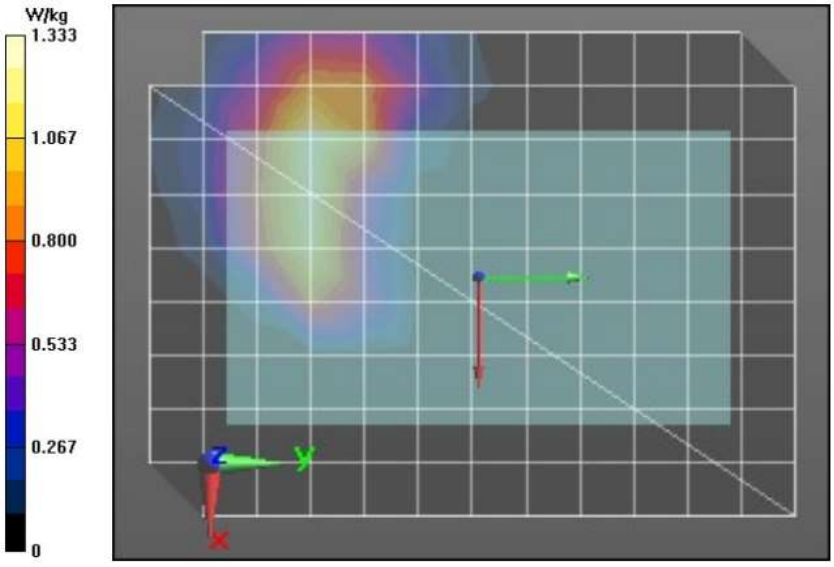
Medium parameters used: f = 5825 MHz; σ = 4.87 S/m; ε_r = 37.7; ρ = 1000 kg/m^3

Probe: EX3DV4 - SN7486, Calibrated: 6/18/2021, Frequency: 5825 MHz, ConvF(4.9, 4.9, 4.9) @ 5825 MHz
Electronics: DAE4 Sn850, Calibrated: 4/14/2022

4-6 GHz-Rev.5/Full Ab Scan/1-Area Scan (91x121x1): Interpolated grid: dx=0.9000 mm, dy=0.9000 mm
Reference Value = 18.72 V/m; Power Drift = -0.14 dB
Fast SAR: SAR(1 g) = 0.603 W/kg; SAR(10 g) = 0.228 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.89 W/kg

4-6 GHz-Rev.5/Full Ab Scan/2-Zoom Scan (12x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 18.72 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 2.65 W/kg
SAR(1 g) = 0.667 W/kg; SAR(10 g) = 0.237 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 55.8%
Maximum value of SAR (measured) = 1.60 W/kg

4-6 GHz-Rev.5/Full Ab Scan/3-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.67 W/kg



Assessments at the ISED Body Bluetooth Band – Table 29

Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/26/2023 8:17:52 AM

Robot#: DASY5-PG-1 | Run#:	SHM-AB-230626-04@
Model#:	HK2198A[HKUN4317]
A]Phantom#:	ELI4 1028
Tissue Temp:	20.7 (C)
Serial#:	64222ZJ0082
Antenna:	LDS MDA-LB-008
Test Freq:	2402.0000 (MHz)
Battery:	PMNN4602A
Carry Acc:	PMLN8538A
Audio Acc:	None
Start Power:	0.0123 (W)

Comments:

Communication System Band: VanGogh, Communication System UID: 0, Duty Cycle: 1:1.27938,
Medium parameters used: f = 2402 MHz; σ = 1.69 S/m; ε_r = 41.2; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7486, Calibrated: 6/18/2021, Frequency: 2402 MHz, ConvF(7.69, 7.69, 7.69) @ 2402 MHz
Electronics: DAE4 Sn850, Calibrated: 4/14/2022

2-3 GHz-Rev.3/Ab Scan/1-Area Scan (71x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 11.28 V/m; Power Drift = -0.20 dB
Fast SAR: SAR(1 g) = 0.162 W/kg; SAR(10 g) = 0.077 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.255 W/kg

2-3 GHz-Rev.3/Ab Scan/3-Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.28 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.268 W/kg
SAR(1 g) = 0.145 W/kg; SAR(10 g) = 0.072 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 10.2 mm
Ratio of SAR at M2 to SAR at M1 = 55.1%
Maximum value of SAR (measured) = 0.221 W/kg

2-3 GHz-Rev.3/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.220 W/kg