

Appendix B - SAR Measurement

Test Laboratory: TUV Inc.

Date: 2025/3/3

20_WLAN2.4GHz_802.11b 1Mbps_Horizontal Up_5mm_Ch1

DUT: D7

Communication System: WLAN; Frequency: 2412 MHz; Duty Cycle: 1:1.001

Medium: HSL2450_250303 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.817$ S/m; $\epsilon_r = 40.268$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C; Liquid Temperature : 22.6°C

DASY Configuration:

- Electronics: DAE4 Sn855; Calibrated: 2024/4/22
- Probe: EX3DV4 - SN7400; ConvF(7.67, 7.67, 7.67) @ 2412 MHz; Calibrated: 2024/4/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: S/N: 1806
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Area Scan (8x11x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 1.10 W/kg

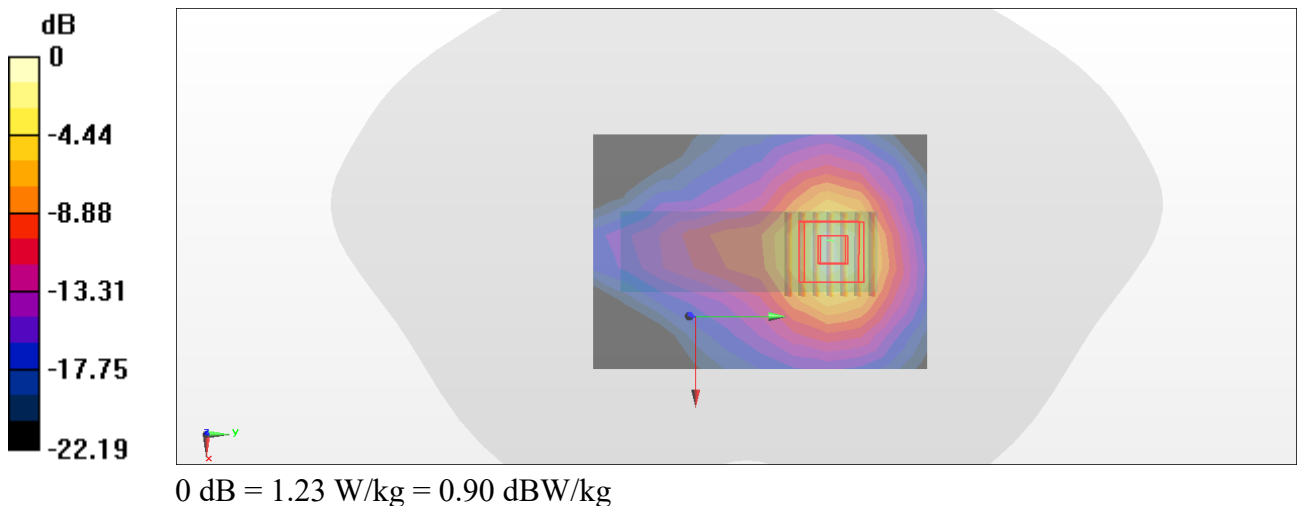
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 24.67 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 0.726 W/kg; SAR(10 g) = 0.352 W/kg

Maximum value of SAR (measured) = 1.23 W/kg



04_WLAN5GHz_802.11a 6Mbps_Horizontal Up_5mm_Ch56**DUT: D7**

Communication System: WLAN; Frequency: 5280 MHz; Duty Cycle: 1:1.013

Medium: HSL5G_250304 Medium parameters used: $f = 5280$ MHz; $\sigma = 4.591$ S/m; $\epsilon_r = 35.509$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.3 °C

DASY Configuration:

- Electronics: DAE4 Sn855; Calibrated: 2024/4/22
- Probe: EX3DV4 - SN7400; ConvF(5.05, 5.05, 5.05) @ 5280 MHz; Calibrated: 2024/4/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -19.0, 23.0$
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: S/N: 1806
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Area Scan (5x8x1): Measurement grid: $dx=20$ mm, $dy=20$ mm

Maximum value of SAR (measured) = 1.80 W/kg

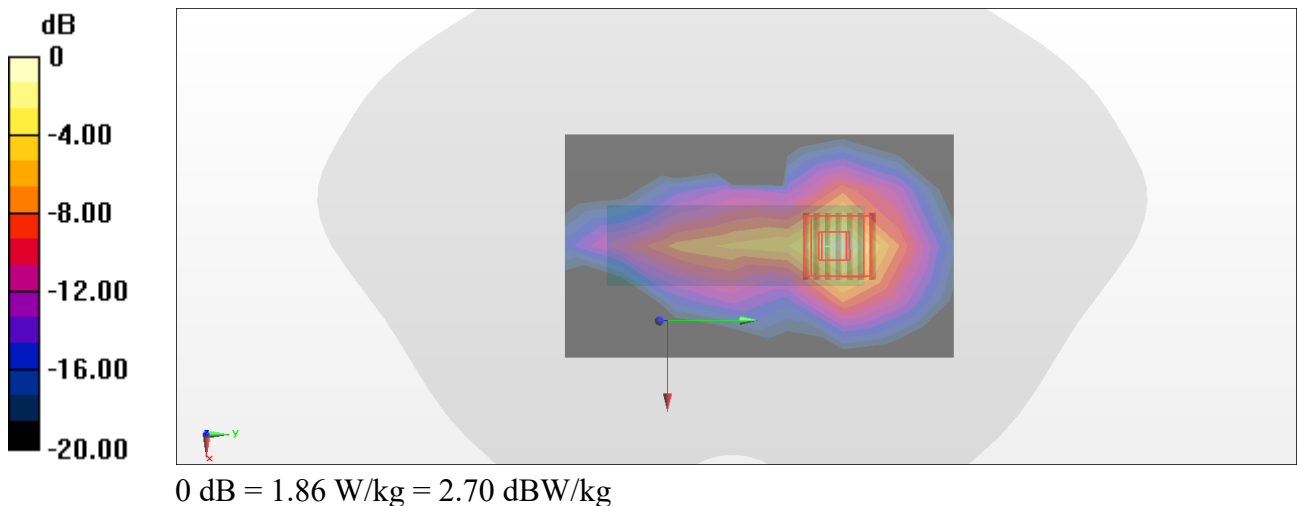
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 21.92 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 2.99 W/kg

SAR(1 g) = 0.827 W/kg; SAR(10 g) = 0.295 W/kg

Maximum value of SAR (measured) = 1.86 W/kg



01_WLAN5GHz_802.11a 6Mbps_Tip Mode_5mm_Ch140**DUT: D7**

Communication System: WLAN; Frequency: 5700 MHz; Duty Cycle: 1:1.013

Medium: HSL5G_250304 Medium parameters used: $f = 5700$ MHz; $\sigma = 5.018$ S/m; $\epsilon_r = 34.774$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.3 °C

DASY Configuration:

- Electronics: DAE4 Sn855; Calibrated: 2024/4/22
- Probe: EX3DV4 - SN7400; ConvF(4.77, 4.77, 4.77) @ 5700 MHz; Calibrated: 2024/4/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -19.0, 23.0$
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: S/N: 1806
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Area Scan (9x11x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 1.37 W/kg

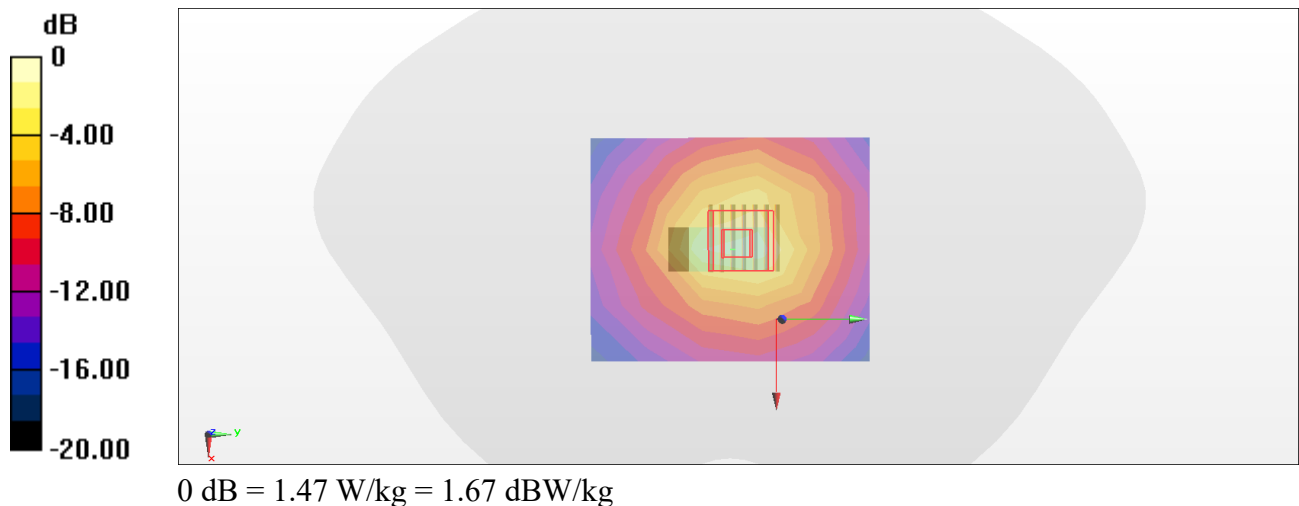
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 17.92 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 2.70 W/kg

SAR(1 g) = 0.647 W/kg; SAR(10 g) = 0.251 W/kg

Maximum value of SAR (measured) = 1.47 W/kg



24_WLAN5GHz_802.11a 6Mbps_Horizontal Up_5mm_Ch165**DUT: D7**

Communication System: WLAN; Frequency: 5825 MHz; Duty Cycle: 1:1.013

Medium: HSL5G_250304 Medium parameters used: $f = 5825$ MHz; $\sigma = 5.156$ S/m; $\epsilon_r = 34.541$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.3 °C

DASY Configuration:

- Electronics: DAE4 Sn855; Calibrated: 2024/4/22
- Probe: EX3DV4 - SN7400; ConvF(4.77, 4.77, 4.77) @ 5825 MHz; Calibrated: 2024/4/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -19.0, 23.0$
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: S/N: 1806
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Area Scan (9x15x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 1.79 W/kg

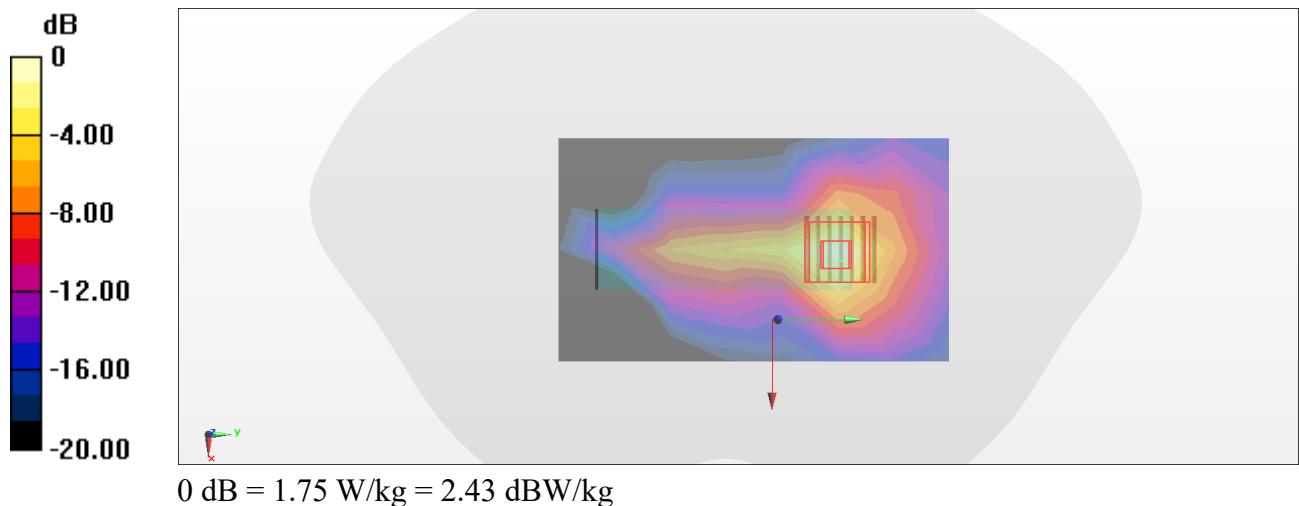
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 20.56 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 3.16 W/kg

SAR(1 g) = 0.760 W/kg; SAR(10 g) = 0.281 W/kg

Maximum value of SAR (measured) = 1.75 W/kg



Test Laboratory: TUV International Inc.

#11_WLAN6GHz_802.11ax-HE160 MCS0_Horizontal Up_5mm_Ch47

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
D7	90.8 x 29.0 x 16.0		Dongle

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	Horizontal Down, 5.00	U-NII-5	WLAN, 10456-AAD	6185.000, 47	5.35	5.57	34.4

Hardware Setup

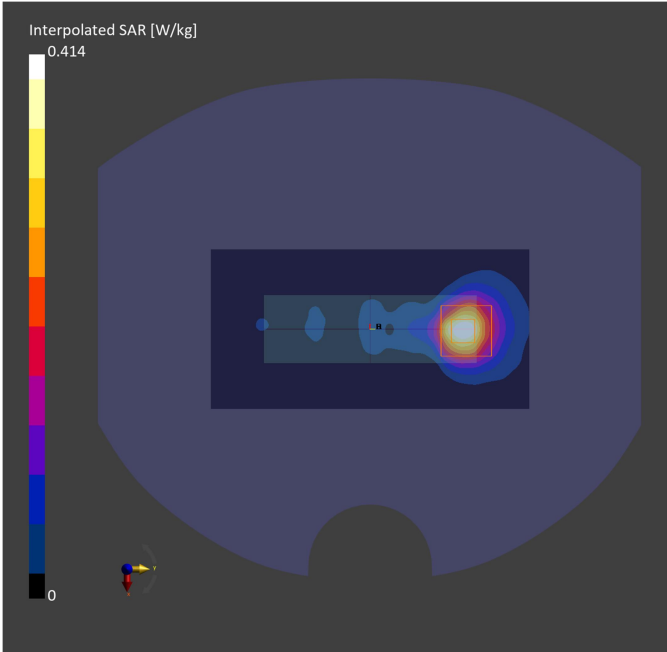
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1806	HSL6500_250225 , --	EX3DV4 - SN7400, 2024-04-25	DAE4 Sn855, 2024-04-22

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 136.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 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	2025-02-25, 17:12	2025-02-25, 17:37
psSAR1g [W/kg]	0.312	0.366
psSAR10g [W/kg]	0.107	0.126
Power Drift [dB]	-0.03	-0.21
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.6
Dist 3dB Peak [mm]		8.7
psAPD 4cm2[W/m2]		2.85



Test Laboratory: TUV Rheinland Inc.

#09_WLAN6GHz_802.11ax-HE160 MCS0_Horizontal Up_2mm_Ch207

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
D7	90.8 x 29.0 x 16.0		Dongle

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	FRONT, 2.00	U-NII-8	WLAN, 10743-AAC	6985.0, 207	1.0

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 1089	---Air	EUmmWV4 - SN9599_F1-55GHz, 2024-04-22	DAE4 Sn855, 2024-04-22

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0
MAIA	Y

Measurement Results

	5G Scan
Date	2025-02-21, 20:47
Avg. Area [cm²]	1.00
psPDn+ [W/m²]	6.24
psPDtot+ [W/m²]	6.58
psPDmod+ [W/m²]	7.25
E _{max} [V/m]	61.0
Power Drift [dB]	-0.16

