

Appendix A - System Verification

Test Laboratory: TUV Inc.

Date: 2025/1/15

System Check_HSL2450MHz

DUT: D2450V2 - SN804

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: HSL2450_250115 Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.815 \text{ S/m}$; $\epsilon_r = 40.006$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 23.4 °C; Liquid Temperature : 22.4°C

DASY Configuration:

- Electronics: DAE4 Sn855; Calibrated: 2024/4/22
- Probe: EX3DV4 - SN7400; ConvF(7.67, 7.67, 7.67) @ 2450 MHz; Calibrated: 2024/4/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -9.0, 31.0$
- Phantom: Right_Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CC; Serial: TP-1467
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Pin=250mW/Area Scan (9x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 21.0 W/kg

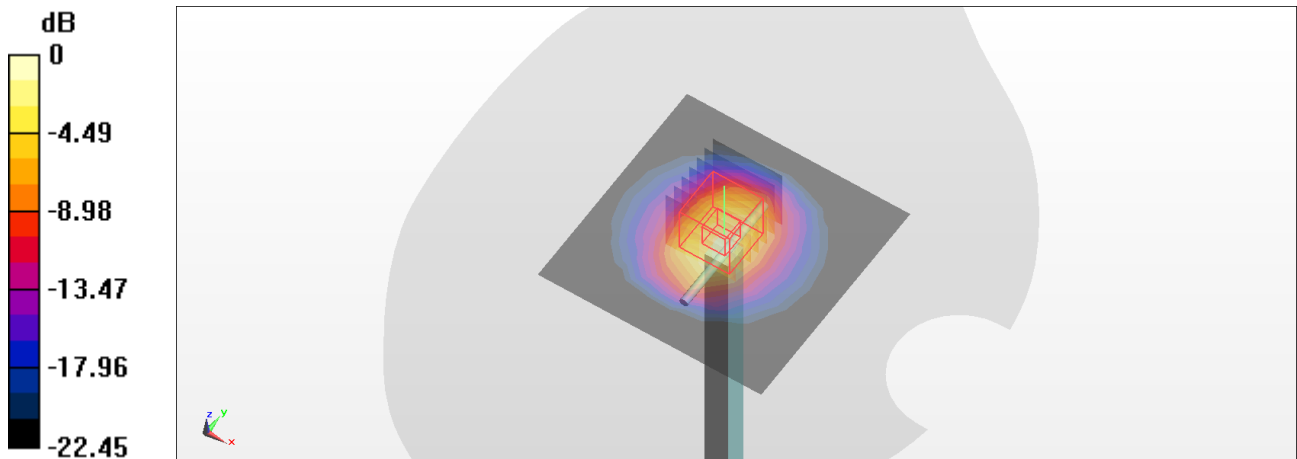
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 106.3 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 27.6 W/kg

SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.2 W/kg

Maximum value of SAR (measured) = 22.2 W/kg



0 dB = 22.2 W/kg = 13.46 dBW/kg

System Check_HSL5250MHz

DUT: D5GHzV2 - SN1235

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: HSL5G_251113 Medium parameters used: $f = 5250$ MHz; $\sigma = 4.539$ S/m; $\epsilon_r = 35.65$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.1 °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) @ 5250 MHz; Calibrated: 2024/4/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -9.0, 23.0$
- 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)

Pin=100mW/Area Scan (10x10x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 14.7 W/kg

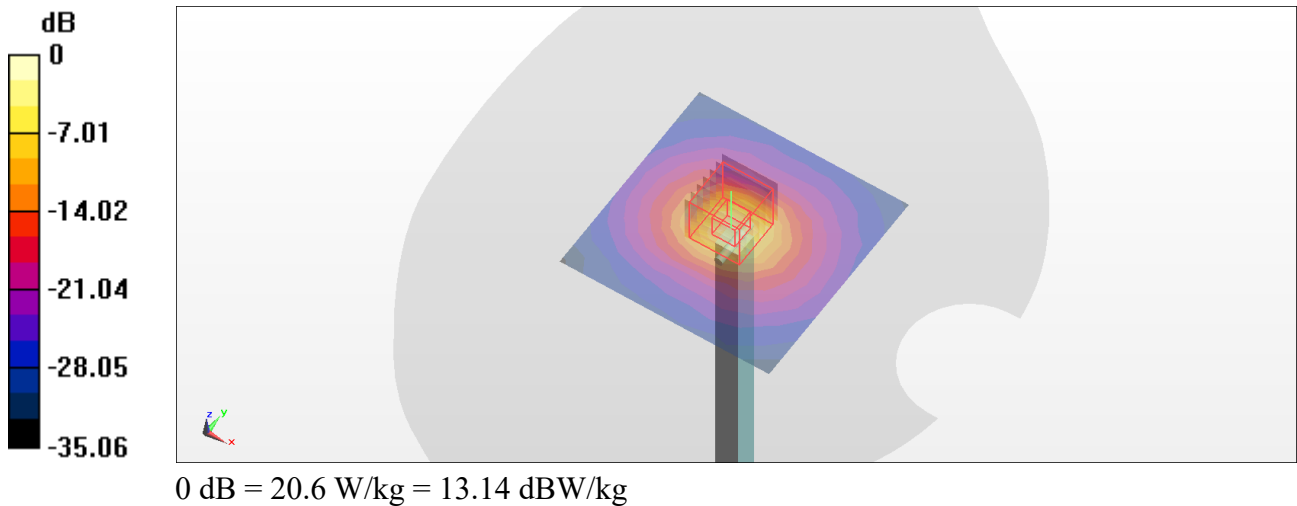
Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 65.14 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 32.9 W/kg

SAR(1 g) = 8.17 W/kg; SAR(10 g) = 2.33 W/kg

Maximum value of SAR (measured) = 20.6 W/kg



System Check_HSL5600MHz

DUT: D5GHzV2 - SN1235

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: HSL5G_251113 Medium parameters used: $f = 5600$ MHz; $\sigma = 4.9$ S/m; $\epsilon_r = 34.994$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.1 °C; Liquid Temperature : 22.3 °C

DASY Configuration:

- Electronics: DAE4 Sn855; Calibrated: 2024/4/22
- Probe: EX3DV4 - SN7400; ConvF(4.74, 4.74, 4.74) @ 5600 MHz; Calibrated: 2024/4/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -9.0, 23.0$
- 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)

Pin=100mW/Area Scan (10x10x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 15.7 W/kg

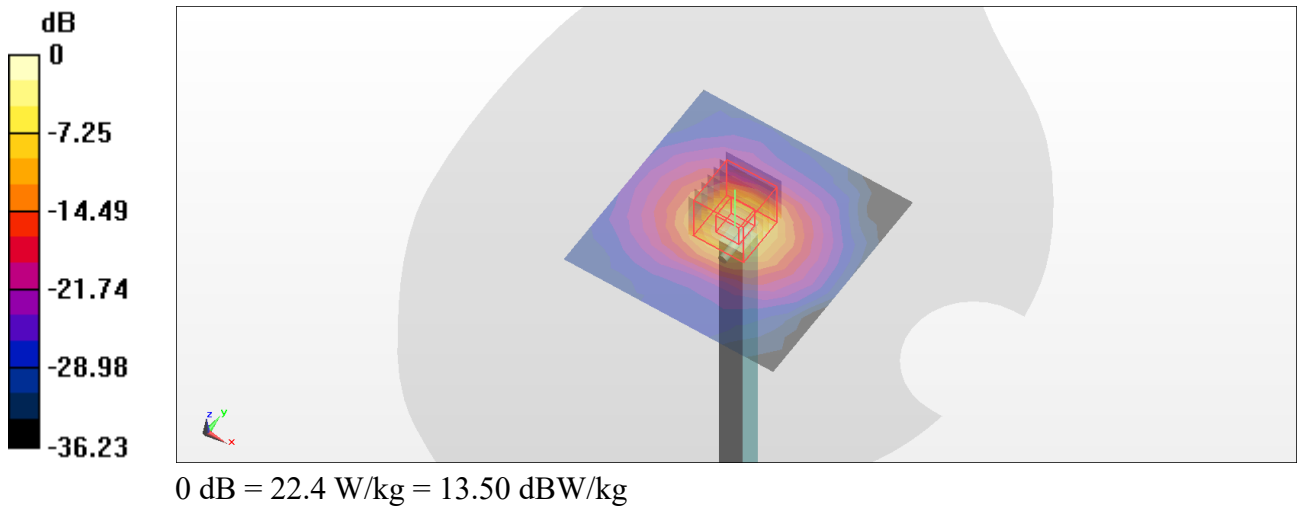
Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 63.29 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 38.4 W/kg

SAR(1 g) = 8.44 W/kg; SAR(10 g) = 2.35 W/kg

Maximum value of SAR (measured) = 22.4 W/kg



System Check_HSL5750MHz

DUT: D5GHzV2 - SN1235

Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: HSL5G_251113 Medium parameters used: $f = 5750$ MHz; $\sigma = 5.055$ S/m; $\epsilon_r = 34.741$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.1 °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) @ 5750 MHz; Calibrated: 2024/4/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -9.0, 23.0$
- 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)

Pin=100mW/Area Scan (10x10x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 15.5 W/kg

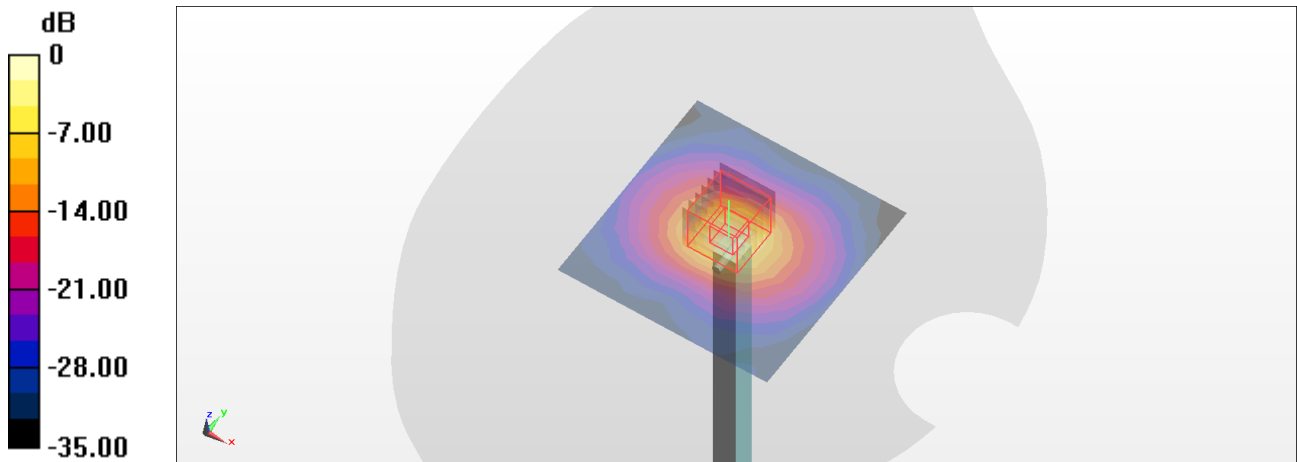
Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 63.08 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 36.5 W/kg

SAR(1 g) = 7.82 W/kg; SAR(10 g) = 2.2 W/kg

Maximum value of SAR (measured) = 20.8 W/kg



0 dB = 20.8 W/kg = 13.18 dBW/kg

Test Laboratory: TUV International Inc.

System Check_HSL6500MHz_250111

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
D6.5GHzV2	16.0 x 6.0 x 300.0	SN: 1044	Dipole

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	5,		CW, 0--	6500.000, 0	5.35	6.11	34.5

Hardware Setup

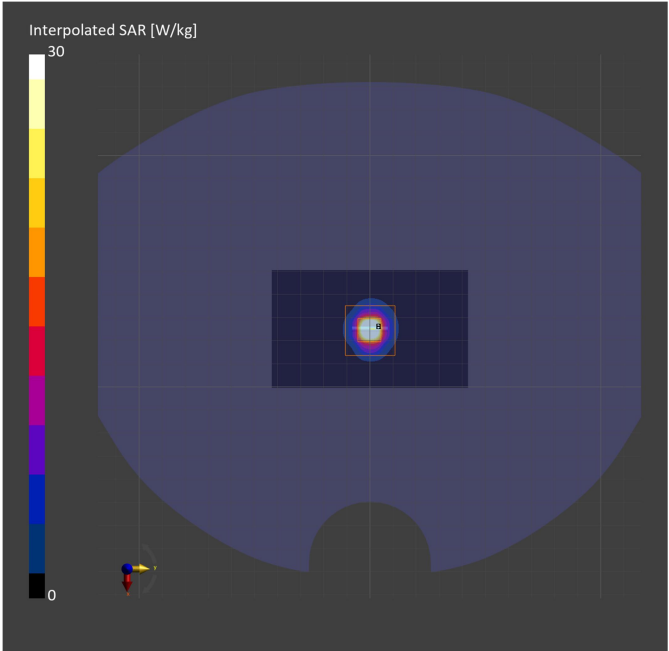
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 - 1806	HSL6500_250111 , --	EX3DV4 - SN7400, 2024-04-25	DAE4 Sn855, 2024-04-22

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	51.0 x 85.0	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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2025-01-11, 15:52	2025-01-11, 16:09
psSAR1g [W/kg]	25.8	29.8
psSAR10g [W/kg]	4.90	5.54
Power Drift [dB]	0.02	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.1
Dist 3dB Peak [mm]		4.8



Test Laboratory: TUV International Inc.

System Check_5G Verification source 10GHz_20250109

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device ,10GHz	100.0 x 100.0 x 100.0	SN: 2013	5G Verification Source

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	FRONT, 10.00	Validation band	CW, 0--	10000.0, 10000	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
Sensor Surface [mm]	10.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2025-01-10, 06:05
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	103
psPDtot+ [W/m ²]	104
psPDmod+ [W/m ²]	106
E _{max} [V/m]	235
Power Drift [dB]	0.00

