

Appendix A - System Verification

Test Laboratory: TUV Inc.

Date: 2025/3/3

System Check_HSL2450MHz

DUT: D2450V2 - SN804

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

Medium: HSL2450_250303 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.853$ S/m; $\epsilon_r = 40.181$; $\rho = 1000$ 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) @ 2450 MHz; Calibrated: 2024/4/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -9.0, 31.0$
- 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)

Pin=250mW/Area Scan (8x8x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 17.8 W/kg

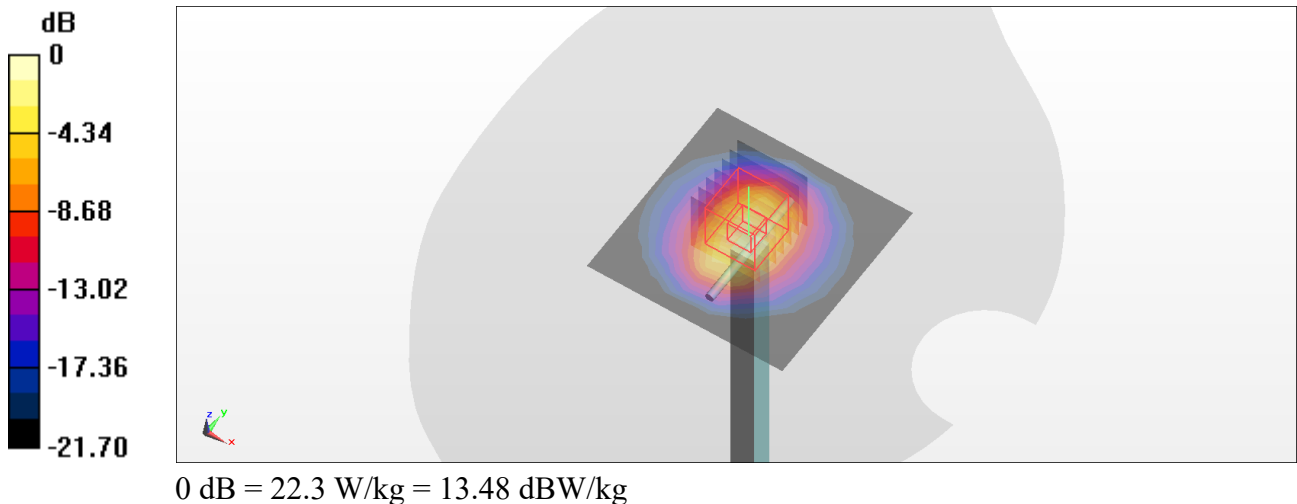
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 106.2 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 27.4 W/kg

SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.26 W/kg

Maximum value of SAR (measured) = 22.3 W/kg



System Check_HSL5250MHz

DUT: D5GHzV2-SN:1235

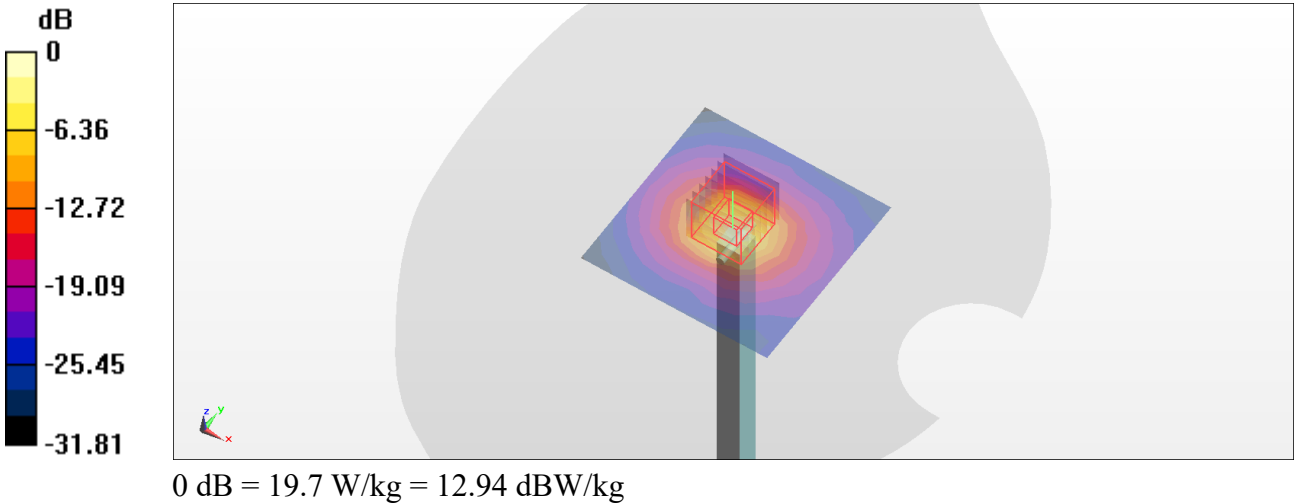
Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1
Medium: HSL5G_250304 Medium parameters used: $f = 5250\text{ MHz}$; $\sigma = 4.551\text{ S/m}$; $\epsilon_r = 35.603$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature : 23.2 °C;Liquid Temperature : 22.3°C

DASY Configuration:

- Electronics: DAE4 Sn855; Calibrated: 2024/4/22
- Probe: EX3DV4 - SN7400; ConvF(5.05, 5.05, 5.05) @ 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 (9x9x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 18.3 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
Reference Value = 61.62 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 31.2 W/kg
SAR(1 g) = 7.79 W/kg; SAR(10 g) = 2.26 W/kg
Maximum value of SAR (measured) = 19.7 W/kg



System Check_HSL5600MHz

DUT: D5GHzV2-SN:1235

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

Medium: HSL5G_250304 Medium parameters used: $f = 5600$ MHz; $\sigma = 4.914$ S/m; $\epsilon_r = 34.949$; $\rho = 1000$ 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(4.74, 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 (9x9x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 18.3 W/kg

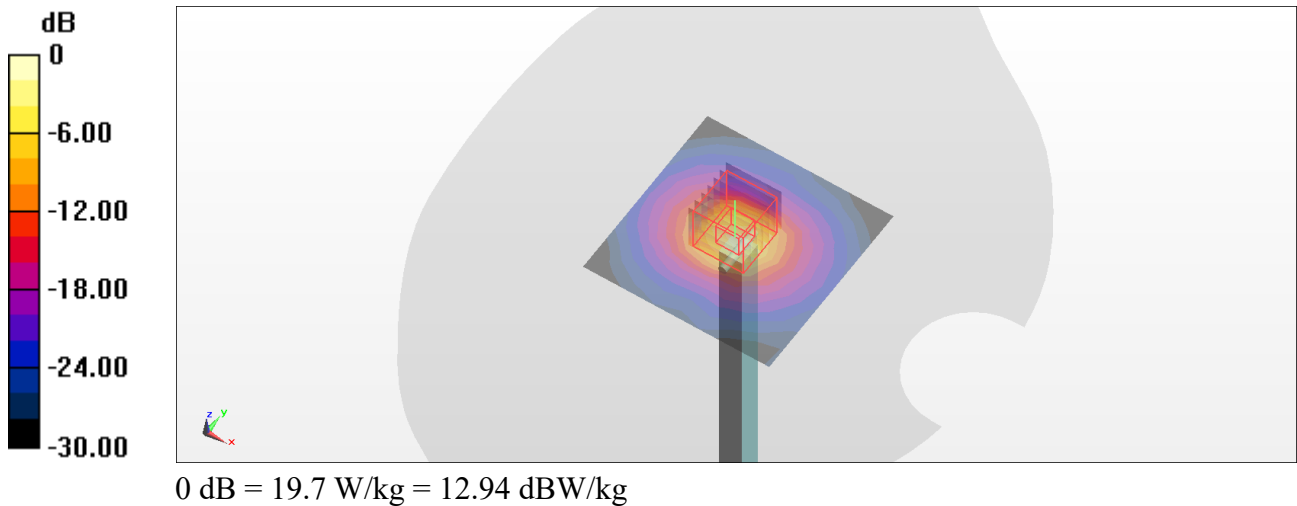
Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 59.26 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 31.3 W/kg

SAR(1 g) = 7.8 W/kg; SAR(10 g) = 2.25 W/kg

Maximum value of SAR (measured) = 19.7 W/kg



System Check_HSL5750MHz

DUT: D5GHzV2-SN:1235

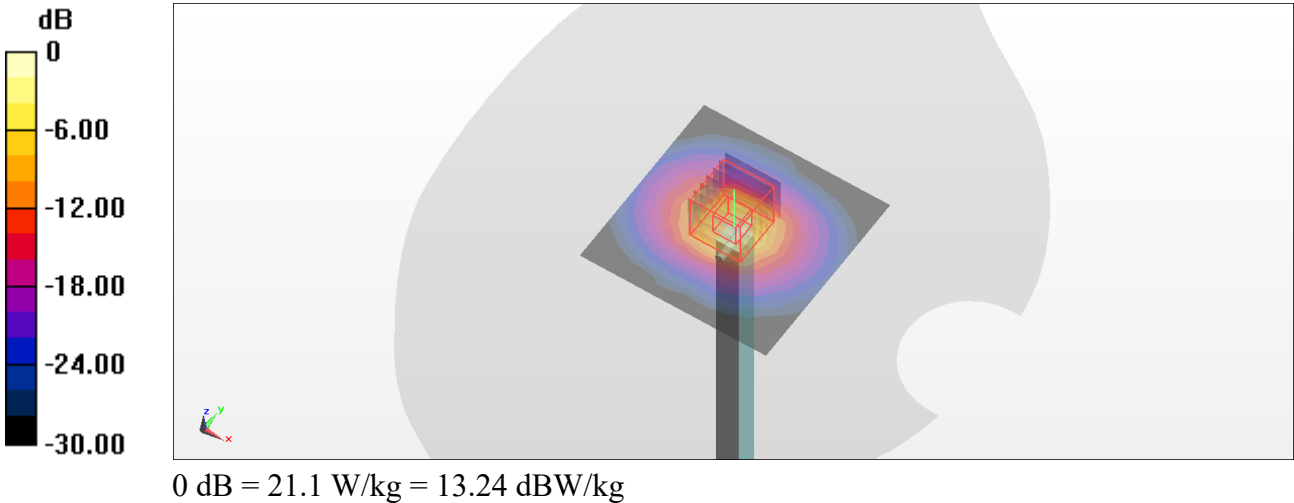
Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1
Medium: HSL5G_250304 Medium parameters used: $f = 5750\text{ MHz}$; $\sigma = 5.069\text{ S/m}$; $\epsilon_r = 34.696$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature : 23.2 °C;Liquid Temperature : 22.3°C

DASY Configuration:

- Electronics: DAE4 Sn855; Calibrated: 2024/4/22
- Probe: EX3DV4 - SN7400; ConvF(4.77, 4.77, 4.77) @ 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 (9x9x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 19.8 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
Reference Value = 60.41 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 37.2 W/kg
SAR(1 g) = 8.09 W/kg; SAR(10 g) = 2.31 W/kg
Maximum value of SAR (measured) = 21.1 W/kg



Test Laboratory: TUV International Inc.

System Check_HSL6500MHz_250225

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
DeviceD6.5GHzV2	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	6.17	34.3

Hardware Setup

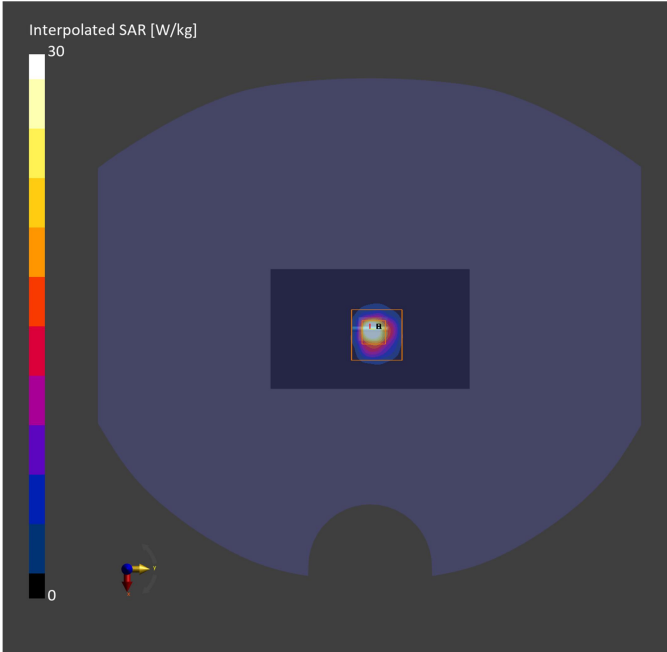
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) - 1467	HSL6500_250225 , --	EX3DV4 - SN7400, 2024-04-25	DAE4 Sn855, 2024-04-22

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	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-15, 16:03	2025-02-25, 16:24
psSAR1g [W/kg]	22.1	28.6
psSAR10g [W/kg]	4.62	5.19
Power Drift [dB]	-0.03	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		49.6
Dist 3dB Peak [mm]		4.6



Test Laboratory: TUV International Inc.

#System Check_5G Verification source 10GHz_20250221

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device ,10GHz	100.0 x 100.0 x 100.0	SN: 2013	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
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2025-02-21, 10:45
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	109
psPDtot+ [W/m²]	110
psPDmod+ [W/m²]	112
E _{max} [V/m]	236
Power Drift [dB]	0.03

