

# Appendix A - System Verification

Test Laboratory: TUV Inc.

Date: 2023/12/18

## System Check\_HSL2450MHz

**DUT: D2450V2 - SN804**

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

Medium: HSL2450\_231218 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.808$  S/m;  $\epsilon_r = 39.806$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C; Liquid Temperature : 21.7°C

DASY Configuration:

- Electronics: DAE4 Sn855; Calibrated: 2023/4/25
- Probe: EX3DV4 - SN7400; ConvF(7.69, 7.69, 7.69) @ 2450 MHz; Calibrated: 2023/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = -4.0, 31.0$
- Phantom: ELI V5.0 (20deg probe tilt); Type: QD OVA 002 AA; Serial: 1153
- 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) = 14.9 W/kg

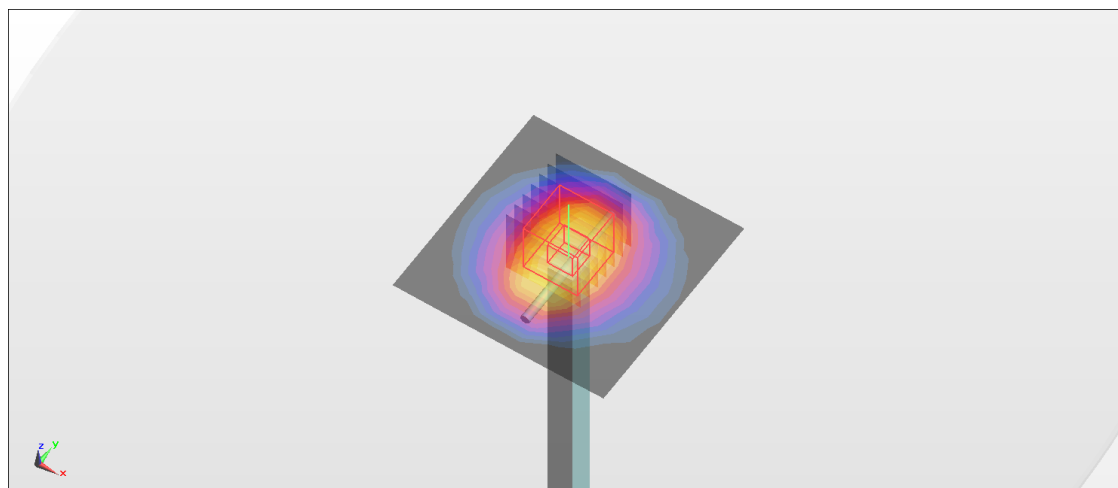
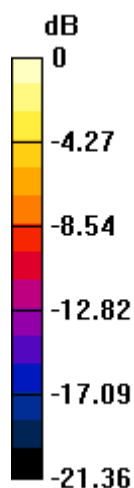
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 114.2 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 27.4 W/kg

**SAR(1 g) = 13.2 W/kg; SAR(10 g) = 6.21 W/kg**

Maximum value of SAR (measured) = 22.1 W/kg



0 dB = 22.1 W/kg = 13.44 dBW/kg

## System Check\_HSL5250MHz

### DUT: D5GHzV2 - SN1235

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

Medium: HSL5G\_231219 Medium parameters used:  $f = 5250$  MHz;  $\sigma = 4.679$  S/m;  $\epsilon_r = 36.791$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.1 °C; Liquid Temperature : 21.8°C

### DASY Configuration:

- Electronics: DAE4 Sn855; Calibrated: 2023/4/25
- Probe: EX3DV4 - SN7400; ConvF(5.07, 5.07, 5.07) @ 5250 MHz; Calibrated: 2023/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = -9.0, 23.0$
- Phantom: ELI V5.0 (20deg probe tilt); Type: QD OVA 002 AA; Serial: 1153
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

**Pin=100mW/Area Scan (9x9x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 20.4 W/kg

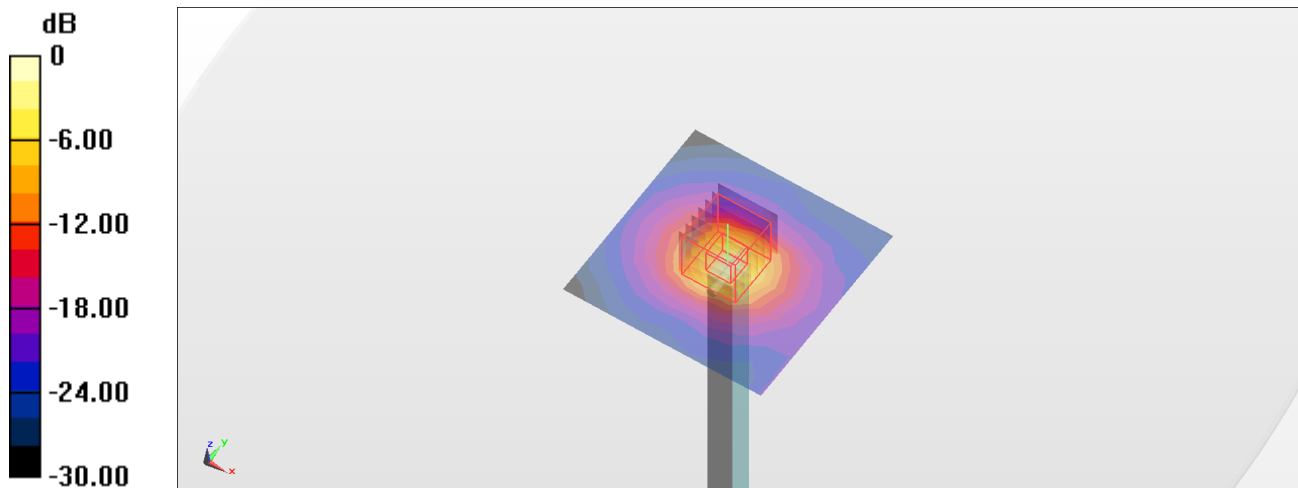
**Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 73.31 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 32.5 W/kg

**SAR(1 g) = 8.18 W/kg; SAR(10 g) = 2.37 W/kg**

Maximum value of SAR (measured) = 20.5 W/kg



0 dB = 20.5 W/kg = 13.12 dBW/kg

## System Check\_HSL5600MHz

**DUT: D5GHzV2-SN:1235**

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

Medium: HSL5G\_231219 Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.075$  S/m;  $\epsilon_r = 36.239$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.1 °C; Liquid Temperature : 21.8°C

DASY Configuration:

- Electronics: DAE4 Sn855; Calibrated: 2023/4/25
- Probe: EX3DV4 - SN7400; ConvF(4.72, 4.72, 4.72) @ 5600 MHz; Calibrated: 2023/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 23.0$
- Phantom: ELI V5.0 (20deg probe tilt); Type: QD OVA 002 AA; Serial: 1153
- 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) = 15.2 W/kg

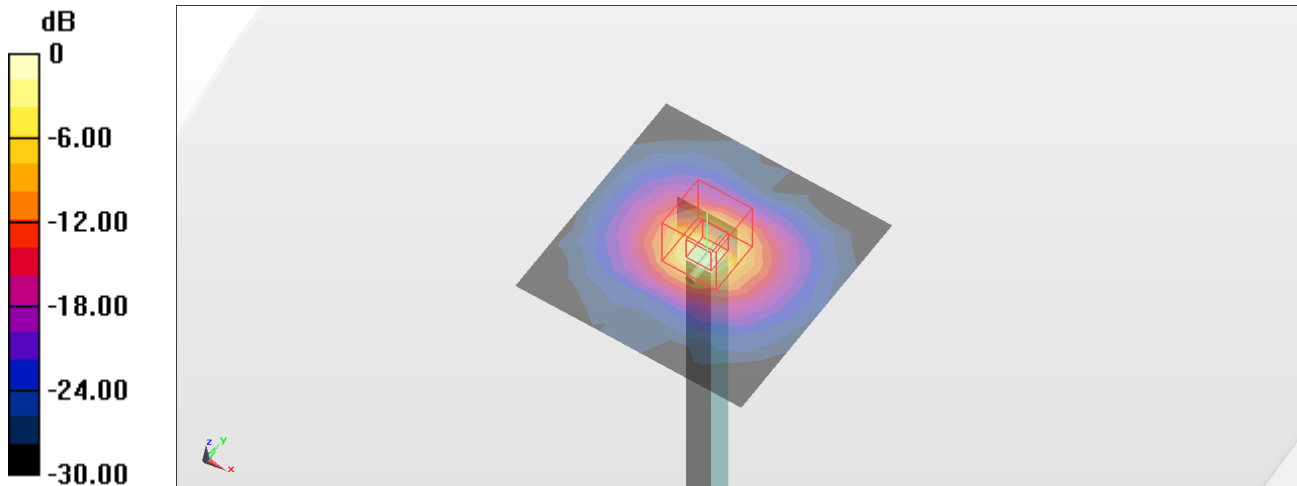
**Pin=100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 61.98 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 38.5 W/kg

**SAR(1 g) = 8.5 W/kg; SAR(10 g) = 2.4 W/kg**

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



0 dB = 22.4 W/kg = 13.50 dBW/kg

## System Check\_HSL5750MHz

### DUT: D5GHzV2 - SN1235

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

Medium: HSL5G\_231219 Medium parameters used:  $f = 5750$  MHz;  $\sigma = 5.245$  S/m;  $\epsilon_r = 36.11$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.1 °C; Liquid Temperature : 21.8°C

### DASY Configuration:

- Electronics: DAE4 Sn855; Calibrated: 2023/4/25
- Probe: EX3DV4 - SN7400; ConvF(4.8, 4.8, 4.8) @ 5750 MHz; Calibrated: 2023/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = -9.0, 23.0$
- Phantom: ELI V5.0 (20deg probe tilt); Type: QD OVA 002 AA; Serial: 1153
- 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) = 22.0 W/kg

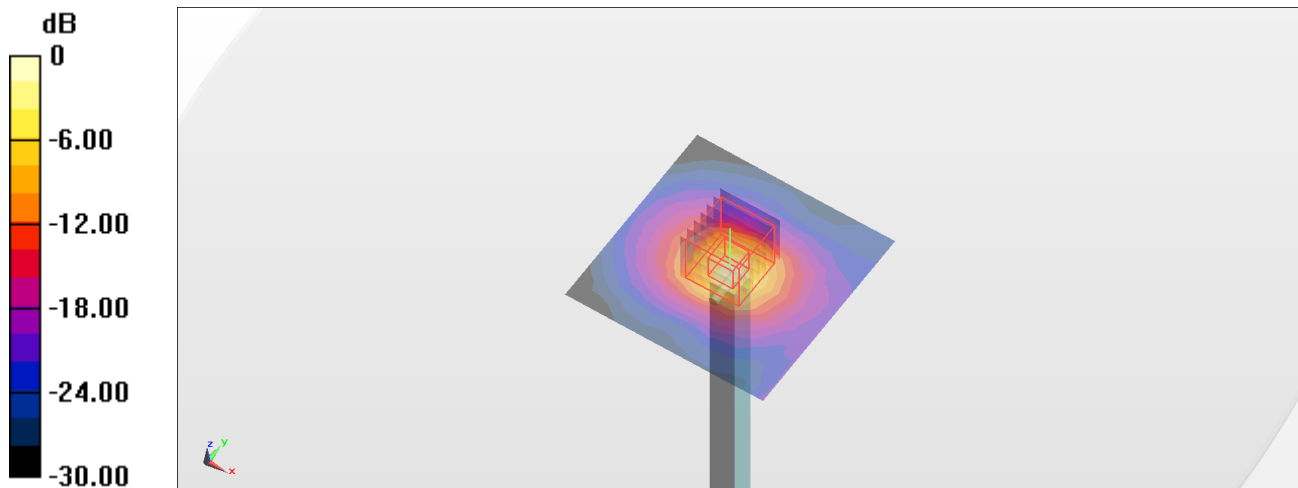
**Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 71.70 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 38.7 W/kg

**SAR(1 g) = 8.46 W/kg; SAR(10 g) = 2.44 W/kg**

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



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