

Appendix A - System Verification

Test Laboratory: TUV Inc.

Date: 2024/11/13

System Check_HSL2450MHz

DUT: D2450V2 - SN804

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

Medium: HSL2450_241113 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.787$ S/m; $\epsilon_r = 40.051$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C; Liquid Temperature : 22.8°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: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 20.7 W/kg

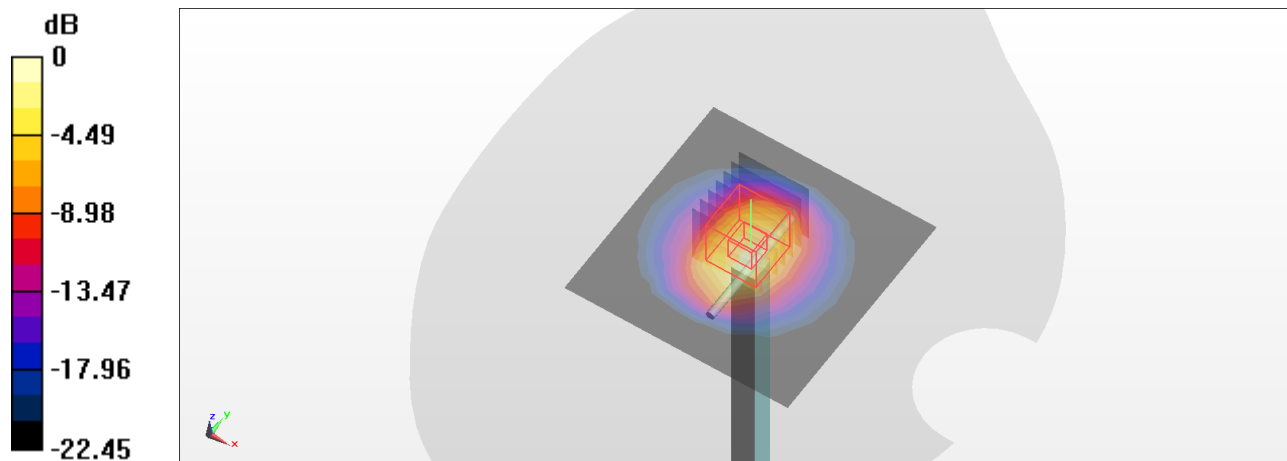
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

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

Peak SAR (extrapolated) = 27.2 W/kg

SAR(1 g) = 13.2 W/kg; SAR(10 g) = 6.11 W/kg

Maximum value of SAR (measured) = 21.9 W/kg



0 dB = 21.9 W/kg = 13.40 dBW/kg

System Check_HSL5250MHz

DUT: D5GHzV2 - SN1235

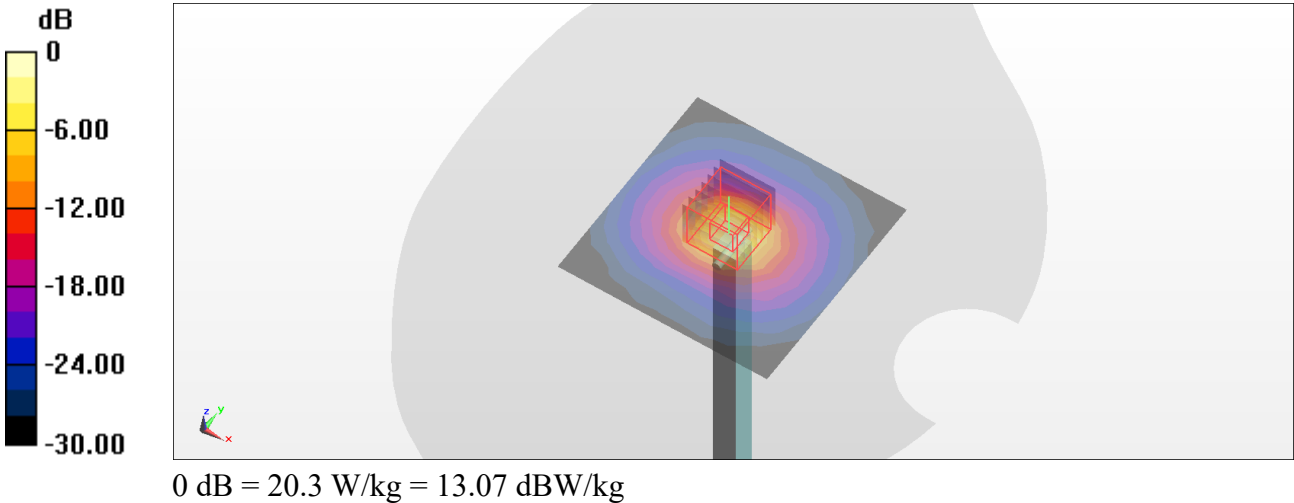
Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1
Medium: HSL5G_241115 Medium parameters used: $f = 5250\text{ MHz}$; $\sigma = 4.543\text{ S/m}$; $\epsilon_r = 35.647$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature : 23.2 °C;Liquid Temperature : 22.6°C

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: 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=100mW/Area Scan (10x10x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 14.6 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 = 63.54 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 32.6 W/kg
SAR(1 g) = 8.01 W/kg; SAR(10 g) = 2.28 W/kg
Maximum value of SAR (measured) = 20.3 W/kg



System Check_HSL5250MHz

DUT: D5GHzV2 - SN1235

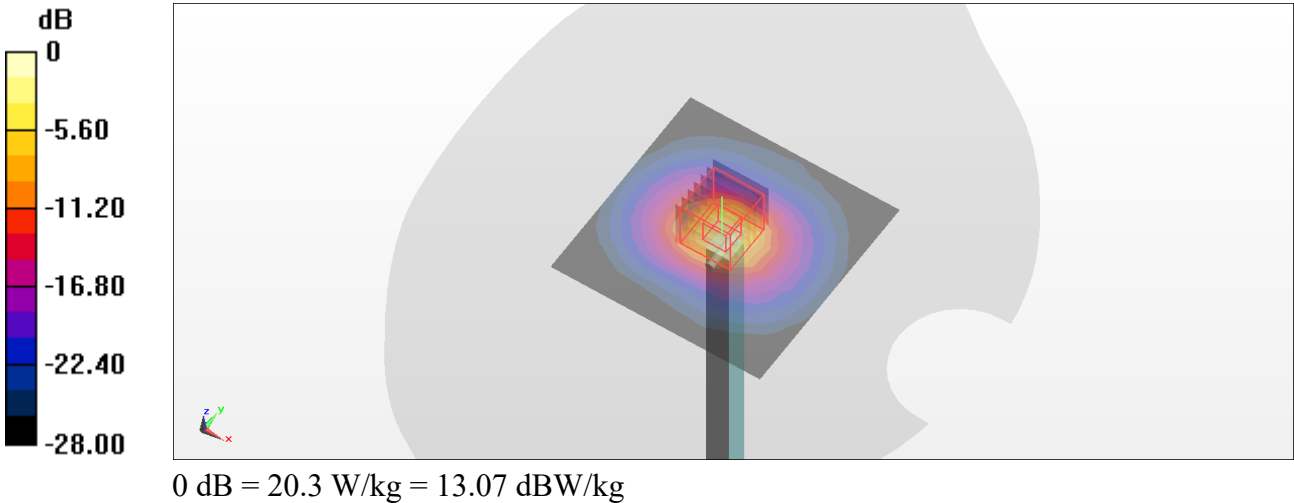
Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1
Medium: HSL5G_250226 Medium parameters used: $f = 5250\text{ MHz}$; $\sigma = 4.551\text{ S/m}$; $\epsilon_r = 35.603$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature : 23.5 °C;Liquid Temperature : 22.3°C

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: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 14.6 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 = 63.54 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 32.7 W/kg
SAR(1 g) = 8.02 W/kg; SAR(10 g) = 2.28 W/kg
Maximum value of SAR (measured) = 20.3 W/kg



System Check_HSL5600MHz

DUT: D5GHzV2 - SN1235

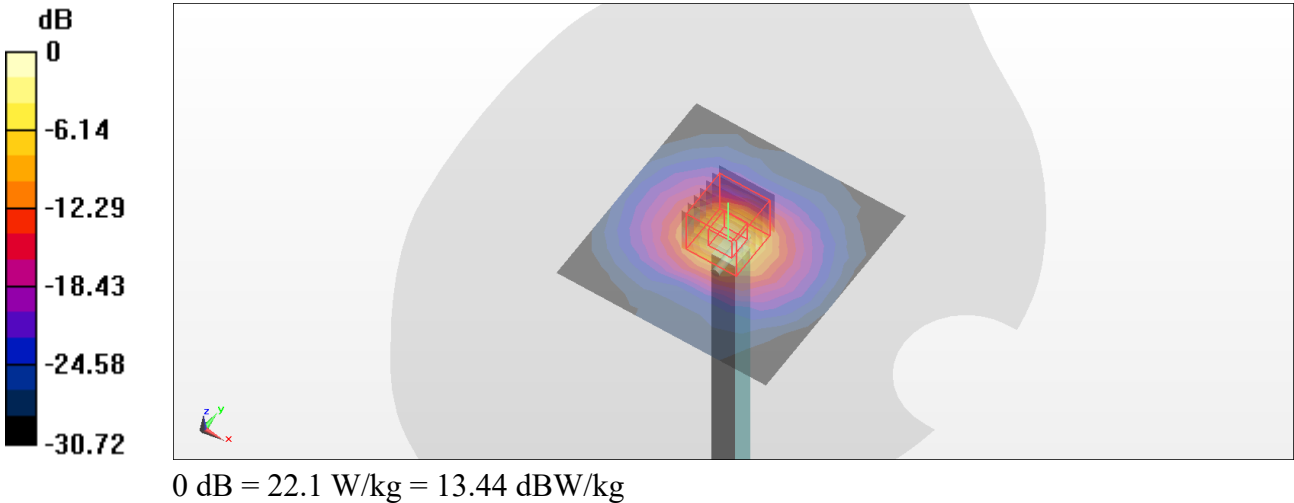
Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1
Medium: HSL5G_241115 Medium parameters used: $f = 5600 \text{ MHz}$; $\sigma = 4.903 \text{ S/m}$; $\epsilon_r = 34.996$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature : 23.2 °C;Liquid Temperature : 22.6°C

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: 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=100mW/Area Scan (10x10x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 15.4 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 = 62.69 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 37.9 W/kg
SAR(1 g) = 8.29 W/kg; SAR(10 g) = 2.31 W/kg
Maximum value of SAR (measured) = 22.1 W/kg



System Check_HSL5600MHz

DUT: D5GHzV2 - SN1235

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

Medium: HSL5G_250226 Medium parameters used: $f = 5600$ MHz; $\sigma = 4.914$ S/m; $\epsilon_r = 34.949$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °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) = 15.4 W/kg

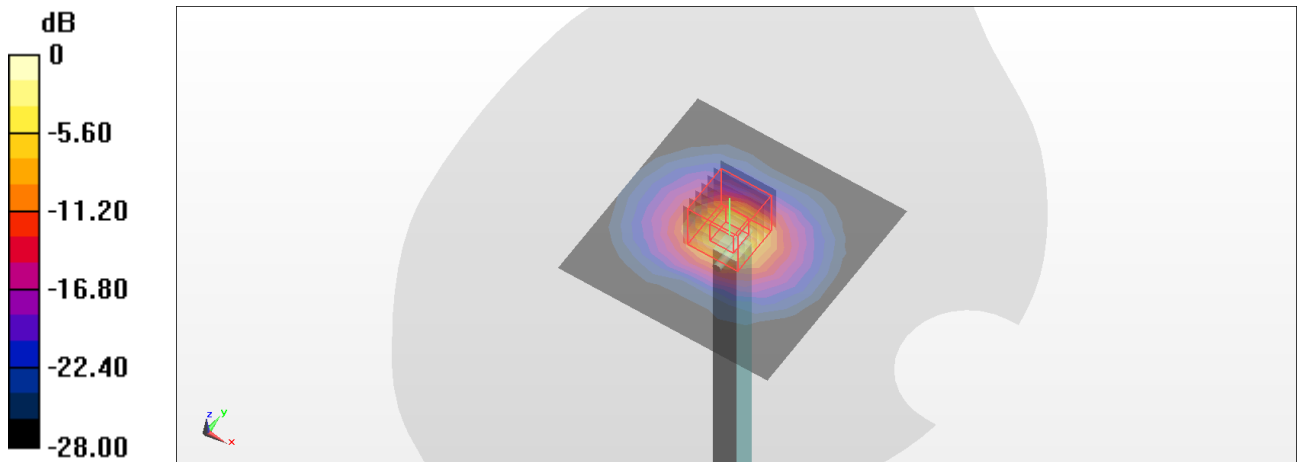
Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 62.69 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 38.0 W/kg

SAR(1 g) = 8.31 W/kg; SAR(10 g) = 2.32 W/kg

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



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

System Check_HSL5750MHz

DUT: D5GHzV2 - SN1235

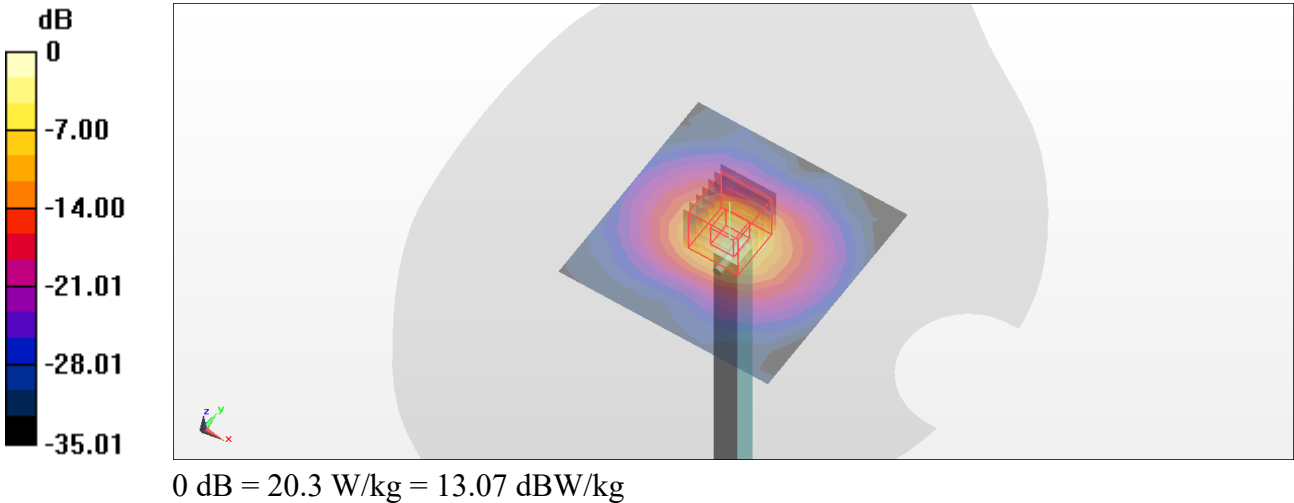
Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1
Medium: HSL5G_241115 Medium parameters used: $f = 5750\text{ MHz}$; $\sigma = 5.058\text{ S/m}$; $\epsilon_r = 34.743$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature : 23.2 °C;Liquid Temperature : 22.6°C

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: 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=100mW/Area Scan (10x10x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 14.7 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 = 59.32 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 35.4 W/kg
SAR(1 g) = 7.66 W/kg; SAR(10 g) = 2.16 W/kg
Maximum value of SAR (measured) = 20.3 W/kg



System Check_HSL5750MHz

DUT: D5GHzV2 - SN1235

Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1
Medium: HSL5G_250226 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 : 23.5 °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: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 14.7 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 = 59.32 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 35.5 W/kg
SAR(1 g) = 7.67 W/kg; SAR(10 g) = 2.16 W/kg
Maximum value of SAR (measured) = 20.3 W/kg

