Appendix B – System Check Plots



Date: 2024/8/16

System Performance Check at 2450 MHz

DUT: D2450V2_SN712

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2450 MHz; σ = 1.812 S/m; $ε_r$ = 40.645; ρ = 1000 kg/m³

Phantom section: Flat Section Measurement Standard: DASY5

DASY5.2 Configuration:

- Area Scan setting Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5
- Probe: EX3DV4 SN7647; ConvF(7.67, 7.58, 8.79) @ 2450 MHz; Calibrated: 2024/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2024/3/11
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 2450MHz/Area Scan (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 3.52 W/kg

System Performance Check at 2450MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 45.29 V/m; Power Drift = 0.14 dB

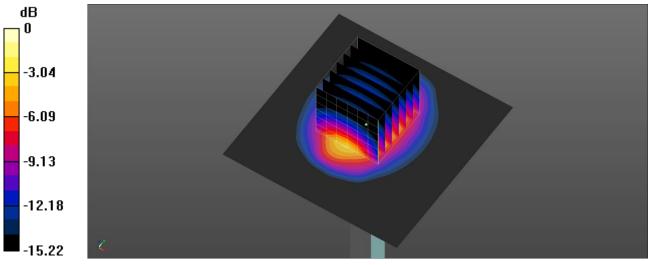
Peak SAR (extrapolated) = 4.41 W/kg

SAR(1 g) = 2.58 W/kg; SAR(10 g) = 1.25 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 50%

Maximum value of SAR (measured) = 3.58 W/kg



0 dB = 3.58 W/kg = 5.54 dBW/kg



Date: 2024/8/17

System Performance Check at 5250 MHz

DUT: D5GHzV2_SN1358

Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5250 MHz; σ = 4.474 S/m; $ε_r$ = 35.452; ρ = 1000 kg/m³

Phantom section: Flat Section Measurement Standard: DASY5

DASY5.2 Configuration:

- Area Scan setting Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5
- Probe: EX3DV4 SN7647; ConvF(5.2, 5.3, 6.06) @ 5250 MHz; Calibrated: 2024/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2024/3/11
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 5250MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 7.60 W/kg

System Performance Check at 5250MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 45.68 V/m; Power Drift = 0.02 dB

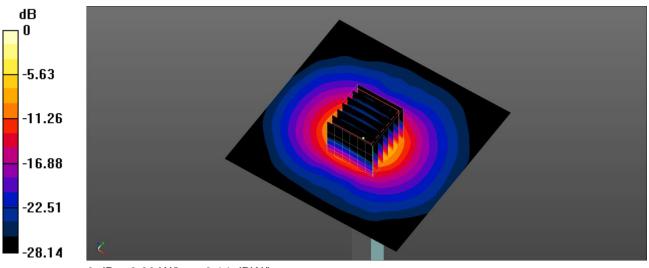
Peak SAR (extrapolated) = 14.2 W/kg

SAR(1 g) = 3.84 W/kg; SAR(10 g) = 1.12 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 62.3%

Maximum value of SAR (measured) = 8.20 W/kg



0 dB = 8.20 W/kg = 9.14 dBW/kg

E&E

Date: 2024/8/17

System Performance Check at 5600 MHz

DUT: D5GHzV2_SN1358

Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5600 MHz; σ = 4.819 S/m; $ε_r$ = 35.038; ρ = 1000 kg/m³

Phantom section: Flat Section Measurement Standard: DASY5

DASY5.2 Configuration:

- Area Scan setting Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5
- Probe: EX3DV4 SN7647; ConvF(4.54, 4.58, 5.27) @ 5600 MHz; Calibrated: 2024/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2024/3/11
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 5600MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 10.3 W/kg

System Performance Check at 5600MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

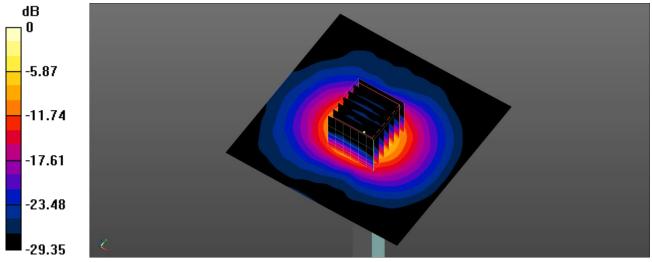
Reference Value = 51.71 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 19.8 W/kg

SAR(1 g) = 4.2 W/kg; SAR(10 g) = 1.13 W/kg

Smallest distance from peaks to all points 3 dB below = 6.8 mm

Ratio of SAR at M2 to SAR at M1 = 59.9%Maximum value of SAR (measured) = 10.8 W/kg



0 dB = 10.8 W/kg = 10.33 dBW/kg



Date: 2024/8/17

System Performance Check at 5800 MHz

DUT: D5GHzV2_SN1358

Communication System: UID 0, CW (0); Frequency: 5800 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5800 MHz; σ = 5.038 S/m; $ε_r$ = 34.672; ρ = 1000 kg/m³

Phantom section: Flat Section Measurement Standard: DASY5

DASY5.2 Configuration:

- Area Scan setting Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5
- Probe: EX3DV4 SN7647; ConvF(4.55, 4.63, 5.33) @ 5800 MHz; Calibrated: 2024/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2024/3/11
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 5800MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 7.86 W/kg

System Performance Check at 5800MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 44.26 V/m; Power Drift = -0.00 dB

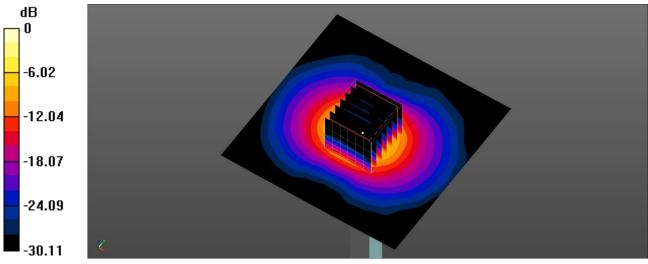
Peak SAR (extrapolated) = 16.3 W/kg

SAR(1 g) = 3.81 W/kg; SAR(10 g) = 1.05 W/kg

Smallest distance from peaks to all points 3 dB below = 7.4 mm

Ratio of SAR at M2 to SAR at M1 = 57.7%

Maximum value of SAR (measured) = 8.56 W/kg



0 dB = 8.56 W/kg = 9.32 dBW/kg