
Appendix B – System Check Plots

Date: 2024/8/14

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; $\sigma = 1.817$ S/m; $\epsilon_r = 40.676$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.5 W/Kg
- 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) = 3.53 W/kg

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

Reference Value = 46.56 V/m; Power Drift = -0.11 dB

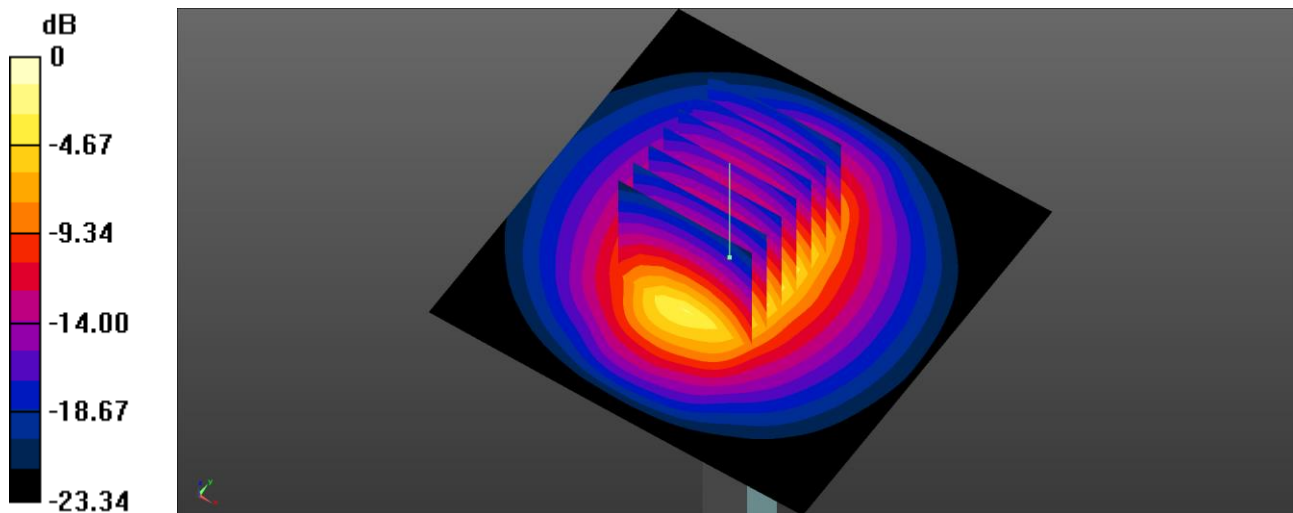
Peak SAR (extrapolated) = 4.33 W/kg

SAR(1 g) = 2.56 W/kg; SAR(10 g) = 1.22 W/kg

Smallest distance from peaks to all points 3 dB below = 9.2 mm

Ratio of SAR at M2 to SAR at M1 = 50.8%

Maximum value of SAR (measured) = 3.53 W/kg



Date: 2024/8/15

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; $\sigma = 4.507$ S/m; $\epsilon_r = 35.563$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(5.2, 5.3, 6.06) @ 5250 MHz; Calibrated: 2024/4/24
- Sensor-Surface: 1.4 mm (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 5250 MHz/Area Scan (91x91x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm
Maximum value of SAR (interpolated) = 8.68 W/kg

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

Reference Value = 48.89 V/m; Power Drift = -0.11 dB

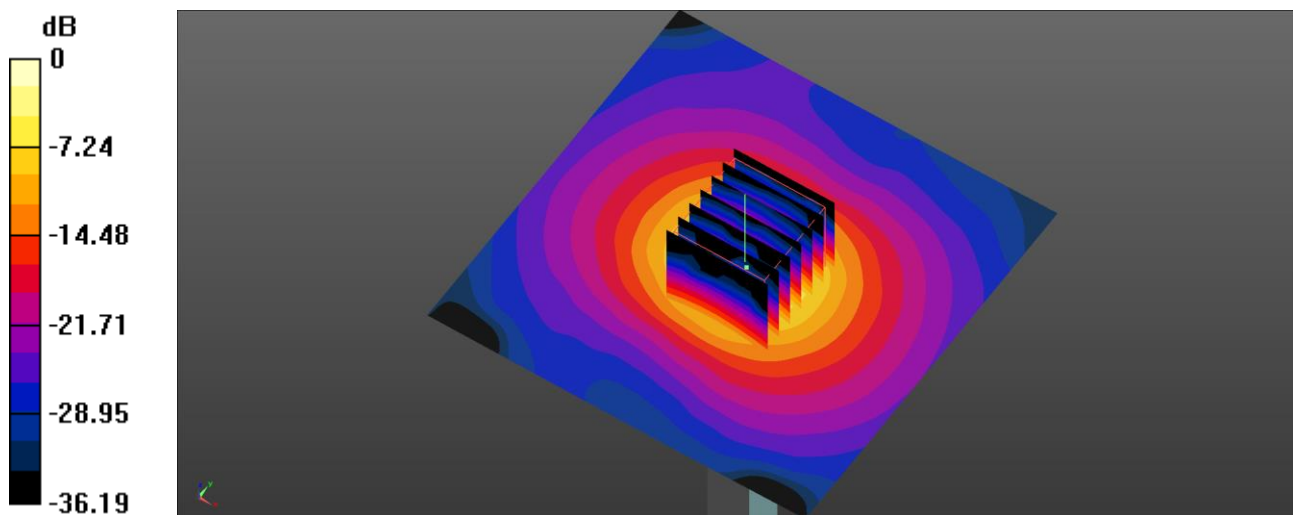
Peak SAR (extrapolated) = 17.0 W/kg

SAR(1 g) = 3.88 W/kg; SAR(10 g) = 1.12 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 60.1%

Maximum value of SAR (measured) = 9.18 W/kg



Date: 2024/8/15

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; $\sigma = 4.854$ S/m; $\epsilon_r = 35.149$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(4.54, 4.58, 5.27) @ 5600 MHz; Calibrated: 2024/4/24
- Sensor-Surface: 1.4 mm (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 5600 MHz/Area Scan (91x91x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm
Maximum value of SAR (interpolated) = 9.84 W/kg

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

Reference Value = 48.78 V/m; Power Drift = -0.01 dB

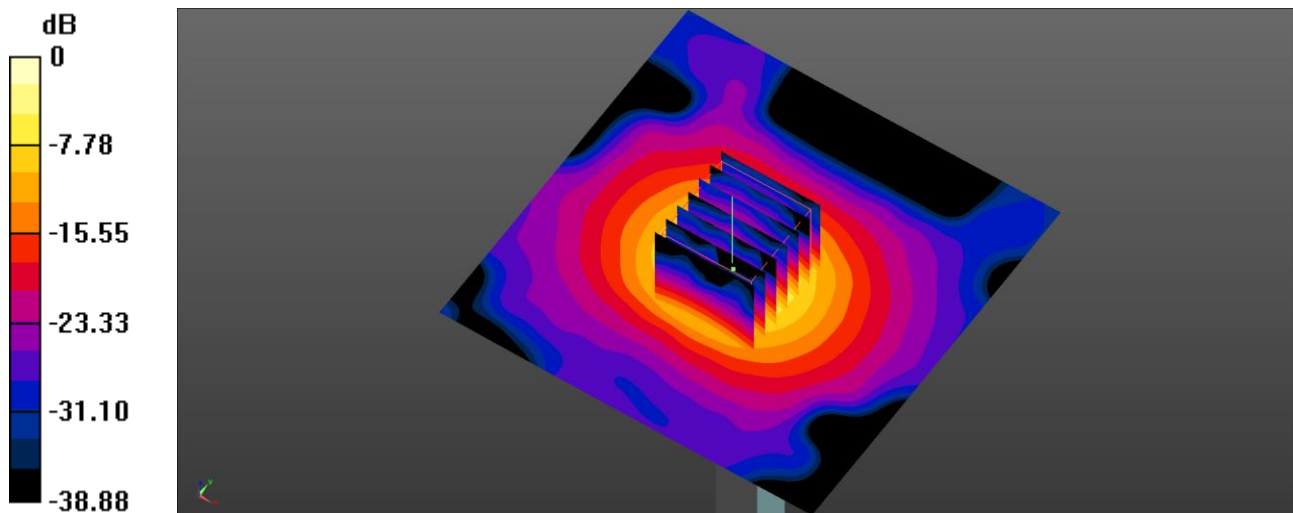
Peak SAR (extrapolated) = 19.0 W/kg

SAR(1 g) = 4.12 W/kg; SAR(10 g) = 1.14 W/kg

Smallest distance from peaks to all points 3 dB below = 7.6 mm

Ratio of SAR at M2 to SAR at M1 = 63.3%

Maximum value of SAR (measured) = 10.5 W/kg



Date: 2024/8/15

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; $\sigma = 5.074$ S/m; $\epsilon_r = 34.783$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(4.55, 4.63, 5.33) @ 5800 MHz; Calibrated: 2024/4/24
- Sensor-Surface: 1.4 mm (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 5800 MHz/Area Scan (91x91x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm
Maximum value of SAR (interpolated) = 7.92 W/kg

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

Reference Value = 44.26 V/m; Power Drift = -0.06 dB

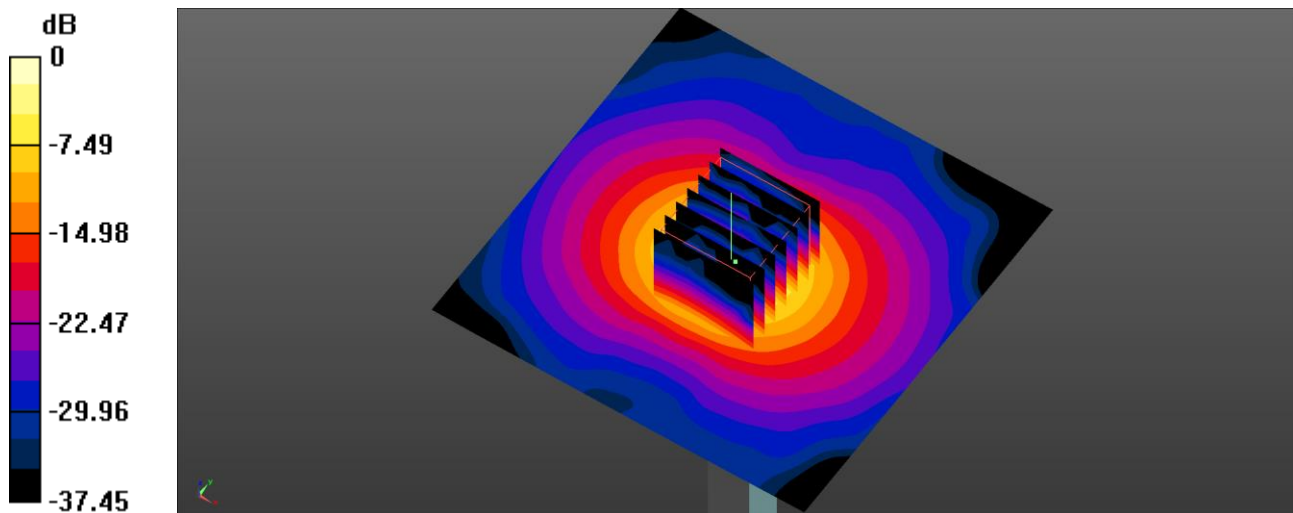
Peak SAR (extrapolated) = 16.4 W/kg

SAR(1 g) = 3.81 W/kg; SAR(10 g) = 1.09 W/kg

Smallest distance from peaks to all points 3 dB below = 7.6 mm

Ratio of SAR at M2 to SAR at M1 = 59.2%

Maximum value of SAR (measured) = 8.62 W/kg



0 dB = 8.62 W/kg = 9.36 dBW/kg