

APPENDIX A: SYSTEM CHECKING SCANS

Dipole750V2

Communication System: UID 0, Generic GSM; Communication System Band: GSM 750 (747.0 - 763.0 MHz); Frequency: 755 MHz; Communication System PAR: 9.191 dB; PMF: 2.88104

Medium parameters used (interpolated): $f = 755$ MHz; $\sigma = 0.87$ S/m; $\epsilon_r = 41.49$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3881; ConvF(10.21, 10.21, 10.21) @ 755 MHz; Calibrated: 2021-07-23
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn876; Calibrated: 2021-03-11
- Phantom: SAM4; Type: QD 000 P41 AA; Serial: 2025
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Configuration/Dipole 750MHz 2/Area Scan (61x131x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Reference Value = 58.56 V/m; Power Drift = -0.12 dB

Fast SAR: SAR(1 g) = 2.27 W/kg; SAR(10 g) = 1.53 W/kg

Maximum value of SAR (interpolated) = 3.43 W/kg

Configuration/Dipole 750MHz 2/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

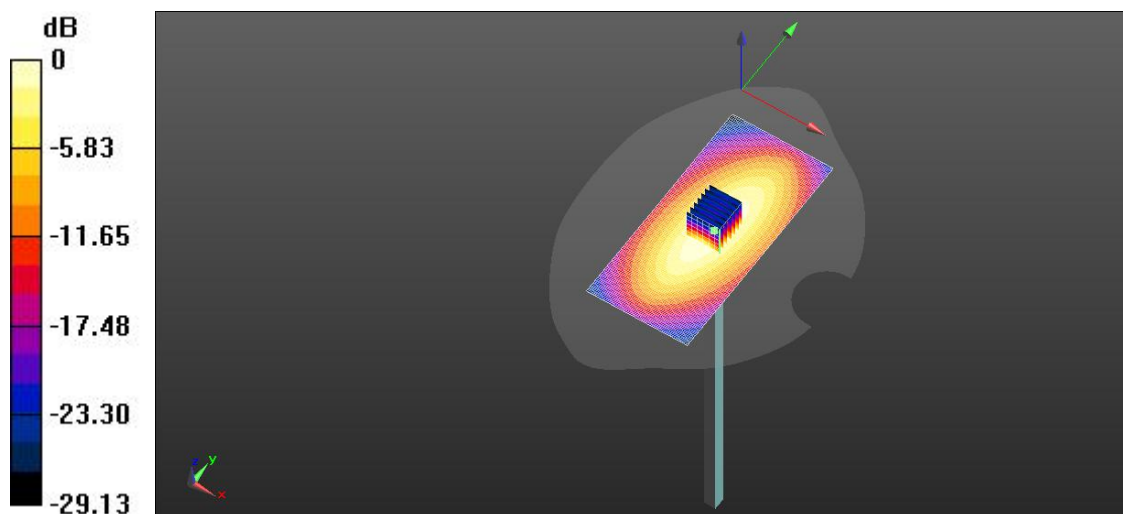
Reference Value = 58.56 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 3.20 W/kg

SAR(1 g) = 2.20 W/kg; SAR(10 g) = 1.47 W/kg

Smallest distance from peaks to all points 3 dB below = 22.7 mm

Ratio of SAR at M2 to SAR at M1 = 64.2% Maximum value of SAR (measured) = 2.92 W/kg



0 dB = 3.43 W/kg = 4.66 dBW/kg

Dipole835V2

Communication System: UID 0, CW; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used: $f = 835$ MHz; $\sigma = 0.92$ S/m; $\epsilon_r = 41.79$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3881; ConvF(10.21, 10.21, 10.21) @ 835 MHz; Calibrated: 2021-07-23
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn876; Calibrated: 2021-03-11
- Phantom: SAM4; Type: QD 000 P41 AA; Serial: 2025
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Head/Dipole835/Area Scan (61x131x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Reference Value = 57.55 V/m; Power Drift = -0.05 dB

Fast SAR: SAR(1 g) = 2.35 W/kg; SAR(10 g) = 1.48 W/kg Maximum value of SAR (interpolated) = 3.69 W/kg

Head/Dipole835/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

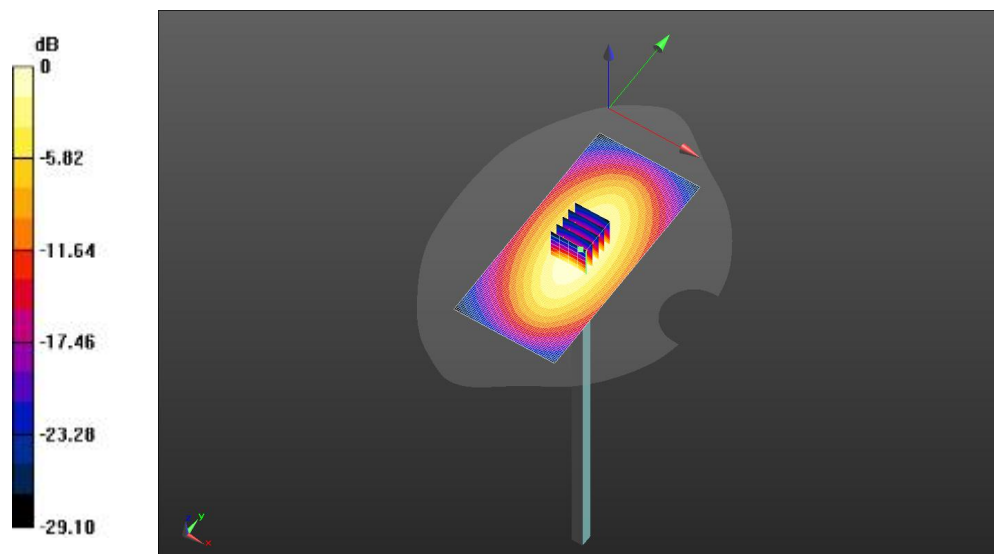
Reference Value = 57.55 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 3.50 W/kg

SAR(1 g) = 2.25 W/kg; SAR(10 g) = 1.44 W/kg

Smallest distance from peaks to all points 3 dB below = 18.1 mm

Ratio of SAR at M2 to SAR at M1 = 63.9% Maximum value of SAR (measured) = 3.04 W/kg



0 dB = 3.69 W/kg = 4.78 dBW/kg

Dipole 1750V2

Communication System: CW; Communication System Band: D1750 (1750.0 MHz); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.34$ S/m; $\epsilon_r = 40.64$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3881; ConvF(10.21, 10.21, 10.21) @ 1750 MHz; Calibrated: 2021-07-23
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn876; Calibrated: 2021-03-11
- Phantom: SAM4; Type: QD 000 P41 AA; Serial: 2025
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Head/Dipole1800/Area Scan (61x131x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Reference Value = 95.62 V/m; Power Drift = 0.09 dB

Fast SAR: SAR(1 g) = 8.72 W/g; SAR(10 g) = 4.60 W/g

Maximum value of SAR (interpolated) = 13.87 W/kg

Head/Dipole1800/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 95.62 V/m; Power Drift = 0.09 dB

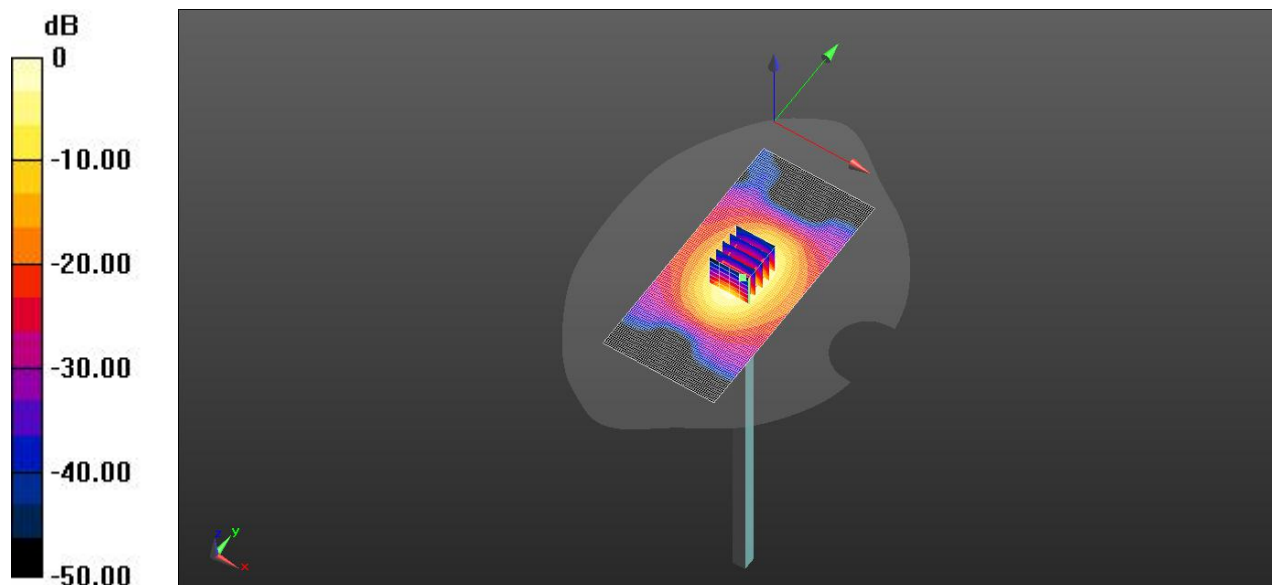
Peak SAR (extrapolated) = 16.2 W/g

SAR(1 g) = 8.64 W/g; SAR(10 g) = 4.57 W/g

Smallest distance from peaks to all points 3 dB below = 9.9 mm

Ratio of SAR at M2 to SAR at M1 = 53.4%

Maximum value of SAR (measured) = 13.19 W/kg



$$0 \text{ dB} = 13.87 \text{ W/kg} = 10.82 \text{ dB W/kg}$$

Dipole1900V2

Communication System: UID 0, CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1900

MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.41$ S/m; $\epsilon_r = 39.97$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3881; ConvF(10.21, 10.21, 10.21) @ 1900 MHz; Calibrated: 2021-07-23
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn876; Calibrated: 2021-03-11
- Phantom: SAM4; Type: QD 000 P41 AA; Serial: 2025
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Head/Dipole1900/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Reference Value = 100.3 V/m; Power Drift = 0.02 dB

Fast SAR: SAR(1 g) = 9.56 W/kg; SAR(10 g) = 4.87 W/kg

Maximum value of SAR (interpolated) = 16.0 W/kg

Head/Dipole1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

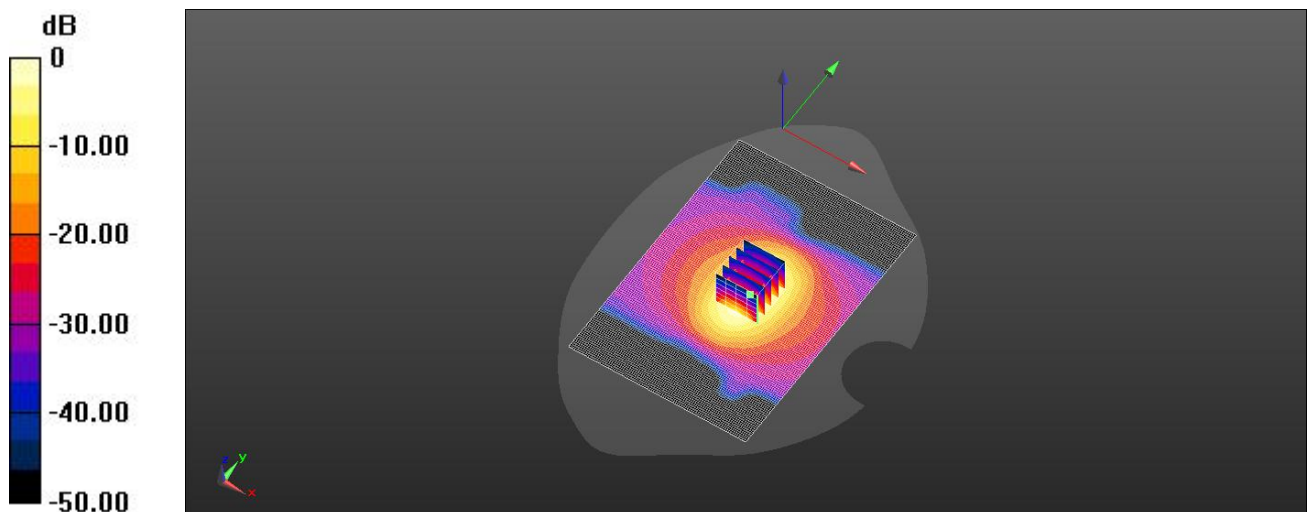
Reference Value = 100.3 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 18.4 W/kg

SAR(1 g) = 9.49 W/kg; SAR(10 g) = 4.84 W/kg

Smallest distance from peaks to all points 3 dB below = 9.9 mm

Ratio of SAR at M2 to SAR at M1 = 50.2% Maximum value of SAR (measured) = 15.5 W/kg



0 dB = 16.0 W/kg = 11.79 dBW/kg

Dipole2600V2

Communication System: UID 0, CW; Communication System Band: D2600 (2600.0 MHz); Frequency: 2600

MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.98$ S/m; $\epsilon_r = 38.60$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3881; ConvF(10.21, 10.21, 10.21) @ 2600 MHz; Calibrated: 2021-07-23
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn876; Calibrated: 2021-03-11
- Phantom: SAM4; Type: QD 000 P41 AA; Serial: 2025
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Head/Dipole2600MHz/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Reference Value = 102.6 V/m; Power Drift = 0.13 dB

Fast SAR: SAR(1 g) = 14.10 W/kg; SAR(10 g) = 6.23 W/kg

Maximum value of SAR (interpolated) = 26.3 W/kg

Head/Dipole2600MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

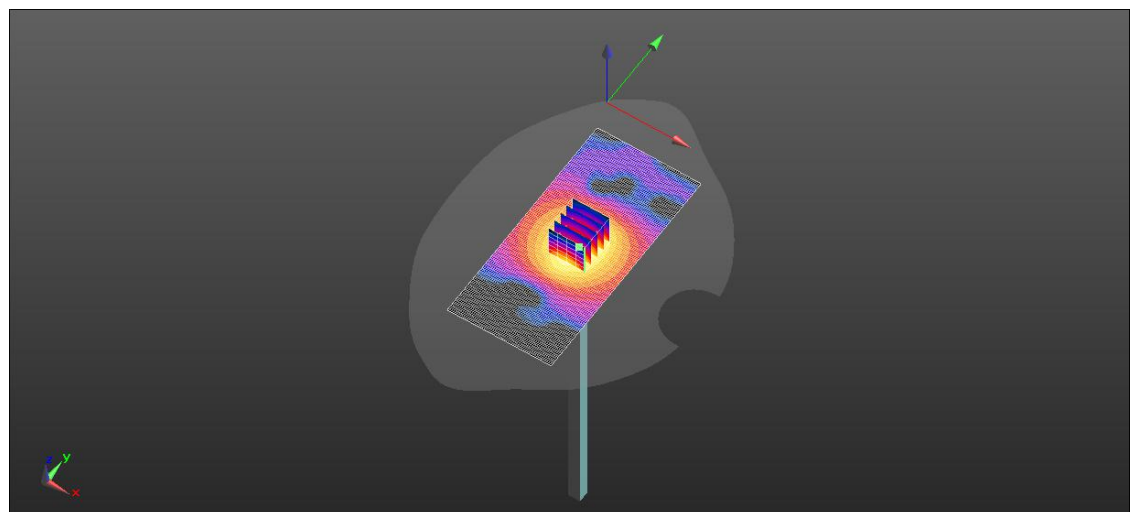
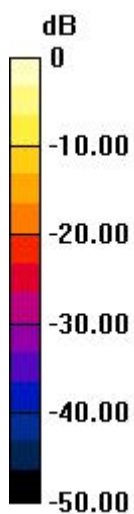
Reference Value = 102.6 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 30.4 W/kg

SAR(1 g) = 13.98 W/kg; SAR(10 g) = 6.20 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 45.4% Maximum value of SAR (measured) = 25.4 W/kg



0 dB = 26.3 W/kg = 14.22 dBW/kg

Dipole 2450

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.807$ S/m; $\epsilon_r = 38.95$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3881; ConvF(10.21, 10.21, 10.21) @ 2450 MHz; Calibrated: 2021-07-23
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn876; Calibrated: 2021-03-11
- Phantom: SAM4; Type: QD 000 P41 AA; Serial: 2025
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 15.2 W/kg

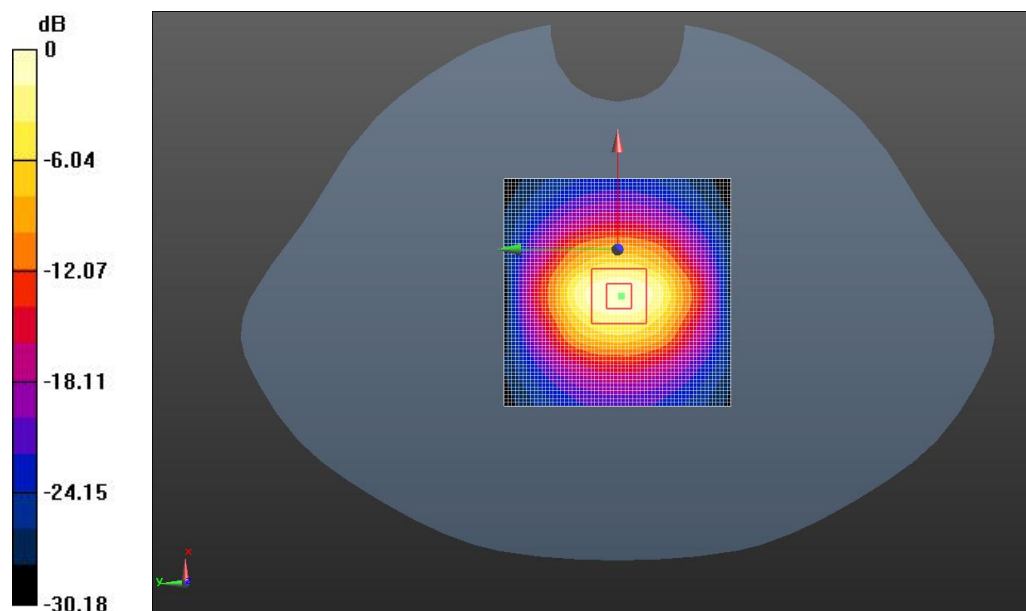
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 92.10 V/m; Power Drift = 0.02dB

Peak SAR (extrapolated) = 31.1 W/kg

SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.16 W/kg

Maximum value of SAR (measured) = 15.4 W/kg



Dipole 5.2G**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:xxx**

Communication System: UID 0, CW (0); Communication System Band: CW5250; Frequency: 5250 MHz; Communication System PAR: 0 dB; PMF: 1.12202e-005

Medium parameters used: $f = 5200$ MHz; $\sigma = 4.47$ S/m; $\epsilon_r = 36.15$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3881; ConvF(10.21, 10.21, 10.21) @ 5200 MHz; Calibrated: 2021-07-23
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn876; Calibrated: 2021-03-11
- Phantom: SAM4; Type: QD 000 P41 AA; Serial: 2025
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Head5.3/5.250G 3/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Reference Value = 43.49 V/m; Power Drift = 0.07 dB

Fast SAR: SAR(1 g) = 6.78 W/kg; SAR(10 g) = 1.89 W/kg

Maximum value of SAR (interpolated) = 8.58 W/kg

Head5.3/5.250G 3/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 43.49 V/m; Power Drift = 0.07 dB

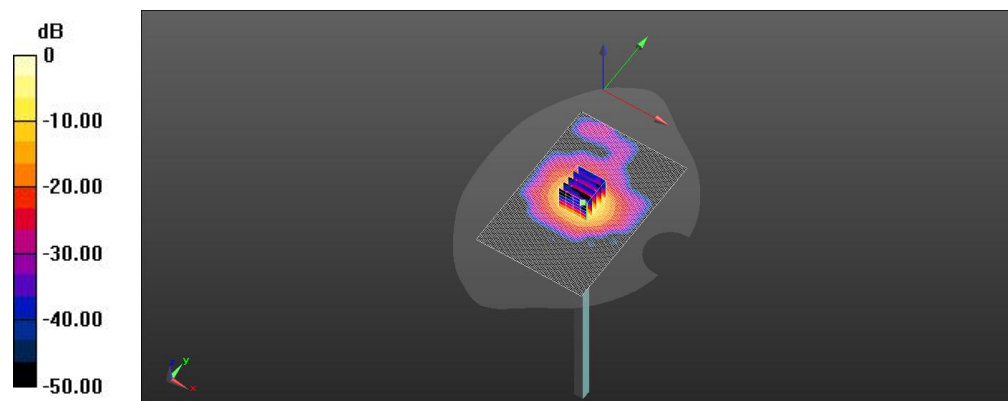
Peak SAR (extrapolated) = 18.7 W/kg

SAR(1 g) = 7.06 W/kg; SAR(10 g) = 2.04 W/kg

Smallest distance from peaks to all points 3 dB below = 6.4 mm

Ratio of SAR at M2 to SAR at M1 = 21.5%

Maximum value of SAR (measured) = 8.86 W/kg



0 dB = 8.58 W/kg = 9.33 dBW/kg

Dipole 5.6G**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:xxx**

Communication System: UID 0, CW (0); Communication System Band: CW5600; Frequency: 5600 MHz; Communication System PAR: 0 dB; PMF: 1.12202e-005

Medium parameters used: $f = 5600$ MHz; $\sigma = 4.94$ S/m; $\epsilon_r = 35.42$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3881; ConvF(10.21, 10.21, 10.21) @ 5600 MHz; Calibrated: 2021-07-23
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn876; Calibrated: 2021-03-11
- Phantom: SAM4; Type: QD 000 P41 AA; Serial: 2025
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Head5.6/5.6G 2/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Reference Value = 44.86 V/m; Power Drift = 0.09 dB

Fast SAR: SAR(1 g) = 7.54 W/kg; SAR(10 g) = 2.17 W/kg

Maximum value of SAR (interpolated) = 10.0 W/kg

Head5.6/5.6G 2/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

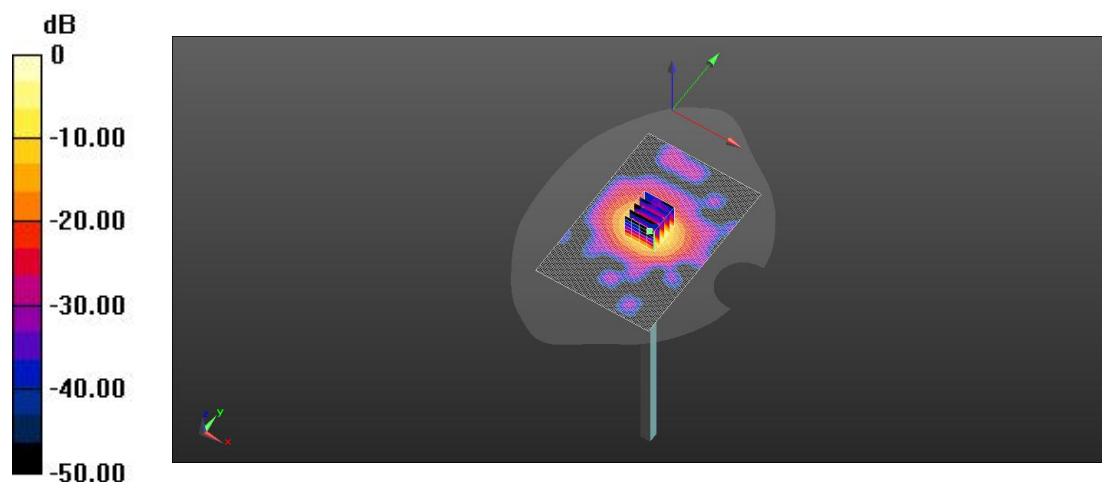
Reference Value = 44.86 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 21.8 W/kg

SAR(1 g) = 7.67 W/kg; SAR(10 g) = 2.19 W/kg

Smallest distance from peaks to all points 3 dB below = 6.4 mm

Ratio of SAR at M2 to SAR at M1 = 21.8% Maximum value of SAR (measured) = 10.4 W/kg



0 dB = 10.0 W/kg = 10.00 dBW/kg

Dipole 5.7G**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:xxx**

Communication System: UID 0, CW (0); Communication System Band: CW5750; Frequency: 5750 MHz; Communication System PAR: 0 dB; PMF: 1.12202e-005

Medium parameters used: $f = 5750$ MHz; $\sigma = 5.21$ S/m; $\epsilon_r = 35.82$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3881; ConvF(10.21, 10.21, 10.21) @ 5750 MHz; Calibrated: 2021-07-23
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn876; Calibrated: 2021-03-11
- Phantom: SAM4; Type: QD 000 P41 AA; Serial: 2025
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Head5.8/5.75G 4/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Reference Value = 42.27 V/m; Power Drift = 0.11 dB

Fast SAR: SAR(1 g) = 7.37 W/kg; SAR(10 g) = 2.12 W/kg

Maximum value of SAR (interpolated) = 9.47 W/kg

Head5.8/5.75G 4/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

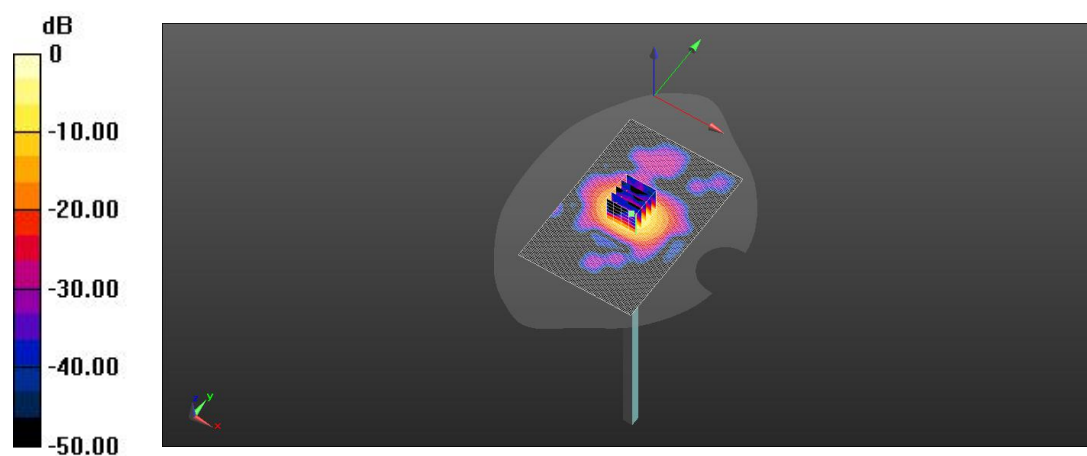
Reference Value = 42.27 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 22.4 W/kg

SAR(1 g) = 7.45 W/kg; SAR(10 g) = 2.18 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 18.2% Maximum value of SAR (measured) = 10.1 W/kg



0 dB = 9.47 W/kg = 9.76 dBW/kg