

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; $\sigma = 0.91$ S/m; $\epsilon_r = 42.22$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7623; ConvF(10.28, 10.28, 10.28) @ 755 MHz; Calibrated: 2022-01-24
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1636; Calibrated: 2021-12-30
- Phantom: SAM3; Type: QD 000 P41 AA;
- DASYS5 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 = 57.18 V/m; Power Drift = -0.01 dB

Fast SAR: SAR(1 g) = 2.24 W/kg; SAR(10 g) = 1.49 W/kg

Maximum value of SAR (interpolated) = 2.96 W/kg

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

Reference Value = 57.18 V/m; Power Drift = -0.01 dB

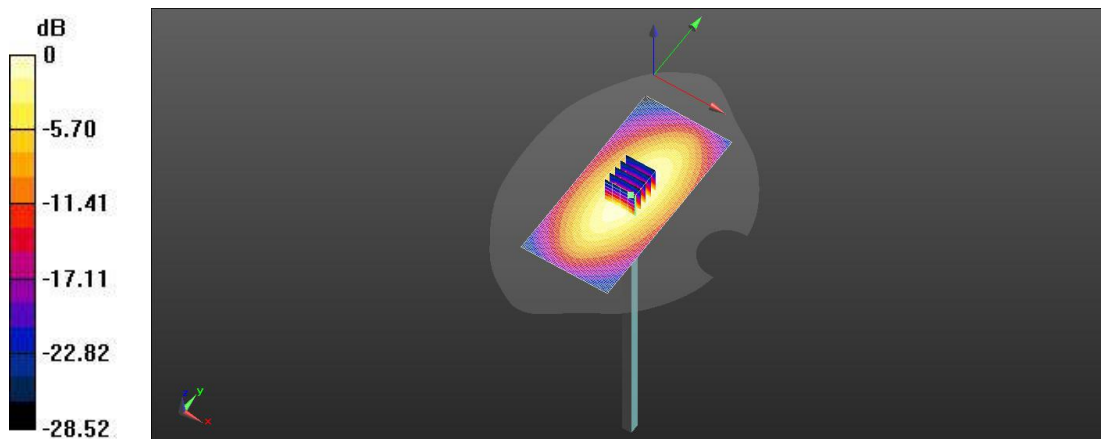
Peak SAR (extrapolated) = 3.14 W/kg

SAR(1 g) = 2.16 W/kg; SAR(10 g) = 1.43 W/kg

Smallest distance from peaks to all points 3 dB below = 23.0 mm

Ratio of SAR at M2 to SAR at M1 = 62.5%

Maximum value of SAR (measured) = 2.73 W/kg



0 dB = 2.96 W/kg = 4.36 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; $\sigma = 0.88$ S/m; $\epsilon_r = 40.70$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 –SN7623; ConvF(9.90, 9.90, 9.90) @ 835 MHz; Calibrated: 2022-01-24
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1636; Calibrated: 2021-12-30
- Phantom: SAM3; Type: QD 000 P41 AA;
- DASYS2 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 = 58.90 V/m; Power Drift = 0.17 dB

Fast SAR: SAR(1 g) = 2.41 W/kg; SAR(10 g) = 1.54 W/kg

Maximum value of SAR (interpolated) = 3.05 W/kg

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

Reference Value = 58.90 V/m; Power Drift = 0.17 dB

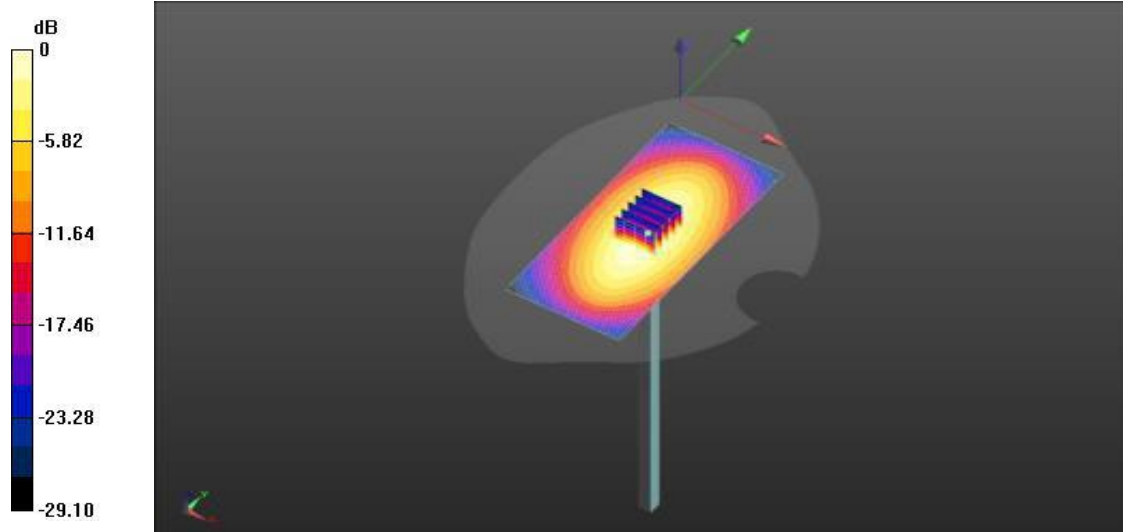
Peak SAR (extrapolated) = 3.54 W/kg

SAR(1 g) = 2.27 W/kg; SAR(10 g) = 1.52 W/kg

Smallest distance from peaks to all points 3 dB below = 18.5 mm

Ratio of SAR at M2 to SAR at M1 = 65.0%

Maximum value of SAR (measured) = 2.92 W/kg



0 dB = 3.05 W/kg = 4.59 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; $\sigma = 1.33$ S/m; $\epsilon_r = 40.40$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7623; ConvF(8.50, 8.50, 8.50) @ 1750 MHz; Calibrated: 2022-01-24
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1636; Calibrated: 2021-12-30
- Phantom: SAM3; Type: QD 000 P41 AA;
- DASYS2 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 = 99.16 V/m; Power Drift = 0.04 dB

Fast SAR: SAR(1 g) = 9.07 W/g; SAR(10 g) = 4.77 W/g

Maximum value of SAR (interpolated) = 11.3 W/kg

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

Reference Value = 99.16 V/m; Power Drift = 0.04 dB

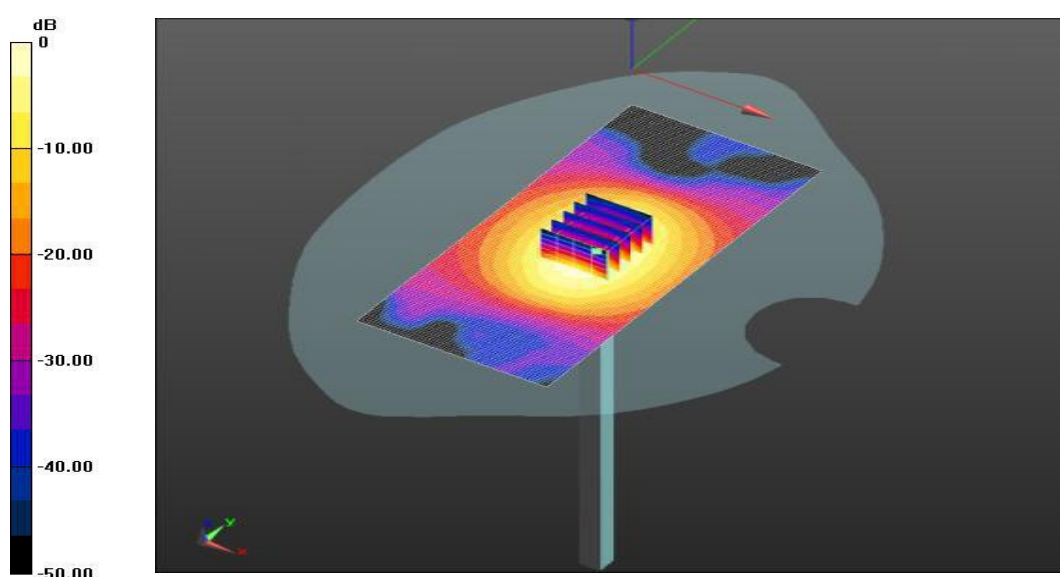
Peak SAR (extrapolated) = 16.9 W/g

SAR(1 g) = 8.99 W/g; SAR(10 g) = 4.75 W/g

Smallest distance from peaks to all points 3 dB below = 9.7 mm

Ratio of SAR at M2 to SAR at M1 = 52.4%

Maximum value of SAR (measured) = 11.1 W/kg



0 dB = 11.3 W/kg = 9.12 dB W/kg

Dipole1900V2

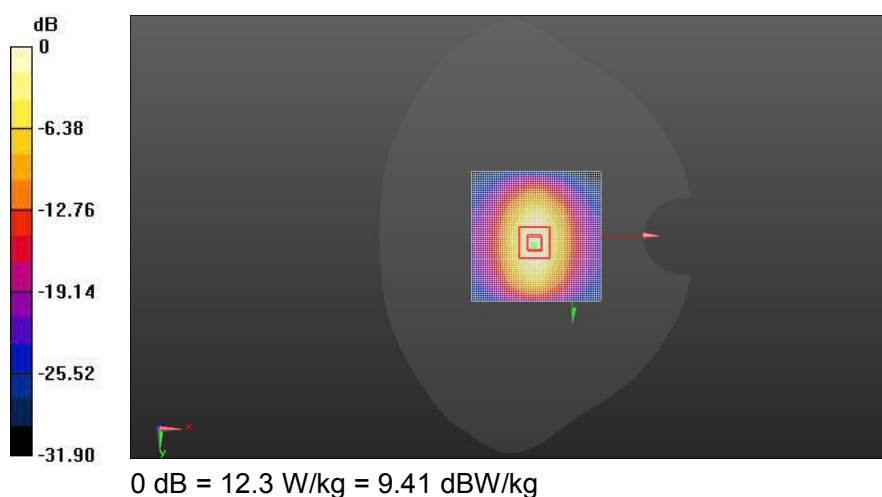
Communication System: UID 0, CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz; Communication System PAR: 0 dB; PMF: 1
 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.37$ S/m; $\epsilon_r = 40.44$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section
 Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7623; ConvF(8.28, 8.28, 8.28) @ 1900 MHz; Calibrated: 2022-01-24
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1636; Calibrated: 2021-12-30
- Phantom: SAM3; Type: QD 000 P41 AA;
- 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 = 103.9 V/m; Power Drift = -0.03 dB
Fast SAR: SAR(1 g) = 9.93 W/kg; SAR(10 g) = 5.05 W/kg
 Maximum value of SAR (interpolated) = 12.3 W/kg

Head/Dipole1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm
 Reference Value = 103.9 V/m; Power Drift = -0.03 dB
 Peak SAR (extrapolated) = 19.1 W/kg
SAR(1 g) = 9.86 W/kg; SAR(10 g) = 5.01 W/kg
 Smallest distance from peaks to all points 3 dB below = 10.3 mm
 Ratio of SAR at M2 to SAR at M1 = 51.4%
 Maximum value of SAR (measured) = 12.4 W/kg



Dipole2450V2

Communication System: UID 0, CW; Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz; Communication System PAR: 0 dB; PMF: 1
Medium parameters used: $f = 2450$ MHz; $\sigma = 1.84$ S/m; $\epsilon_r = 38.76$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7623; ConvF(7.75, 7.75, 7.75) @ 2450 MHz; Calibrated: 2022-01-24
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1636; Calibrated: 2021-12-30
- Phantom: SAM3; Type: QD 000 P41 AA;
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Head/Dipole2450/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Reference Value = 108.4 V/m; Power Drift = 0.10 dB

Fast SAR: SAR(1 g) = 13.0 W/kg; SAR(10 g) = 5.97 W/kg

Maximum value of SAR (interpolated) = 16.4 W/kg

Head/Dipole2450/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 108.4 V/m; Power Drift = 0.10 dB

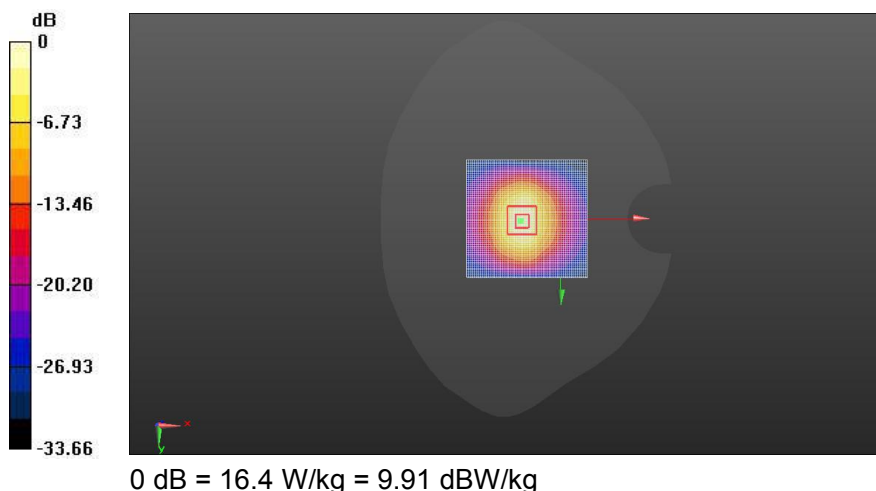
Peak SAR (extrapolated) = 27.3 W/kg

SAR(1 g) = 12.9 W/kg; SAR(10 g) = 5.92 W/kg

Smallest distance from peaks to all points 3 dB below = 9.0 mm

Ratio of SAR at M2 to SAR at M1 = 48.7%

Maximum value of SAR (measured) = 16.2 W/kg



Dipole2600V2

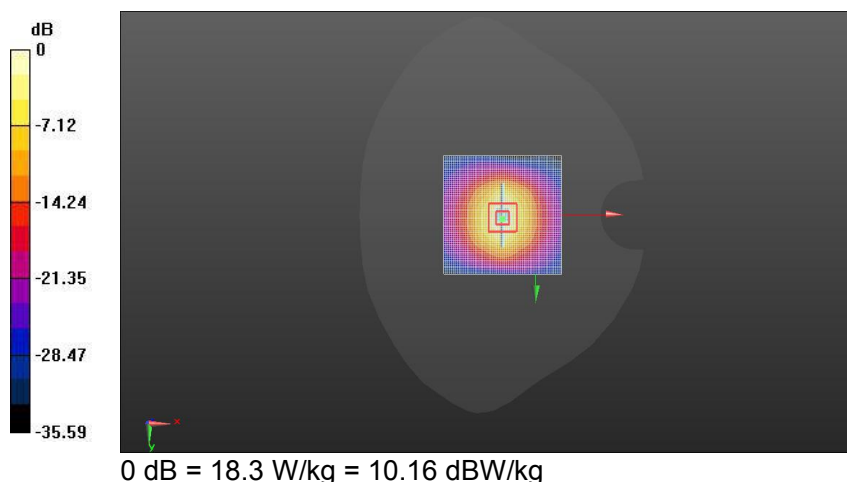
Communication System: UID 0, CW; Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz; Communication System PAR: 0 dB; PMF: 1
Medium parameters used: $f = 2600$ MHz; $\sigma = 2.03$ S/m; $\epsilon_r = 38.23$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7623; ConvF(7.55, 7.55, 7.55) @ 2600 MHz; Calibrated: 2022-01-24
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1636; Calibrated: 2021-12-30
- Phantom: SAM3; Type: QD 000 P41 AA;
- 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 = 105.2 V/m; Power Drift = 0.13 dB
Fast SAR: SAR(1 g) = 14.5 W/kg; SAR(10 g) = 6.38 W/kg
Maximum value of SAR (interpolated) = 18.3 W/kg

Head/Dipole2600MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm
Reference Value = 105.2 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 31.1 W/kg
SAR(1 g) = 14.3 W/kg; SAR(10 g) = 6.38 W/kg
Smallest distance from peaks to all points 3 dB below = 9.1 mm
Ratio of SAR at M2 to SAR at M1 = 44.9%
Maximum value of SAR (measured) = 18.1 W/kg



Dipole 5.2GV2

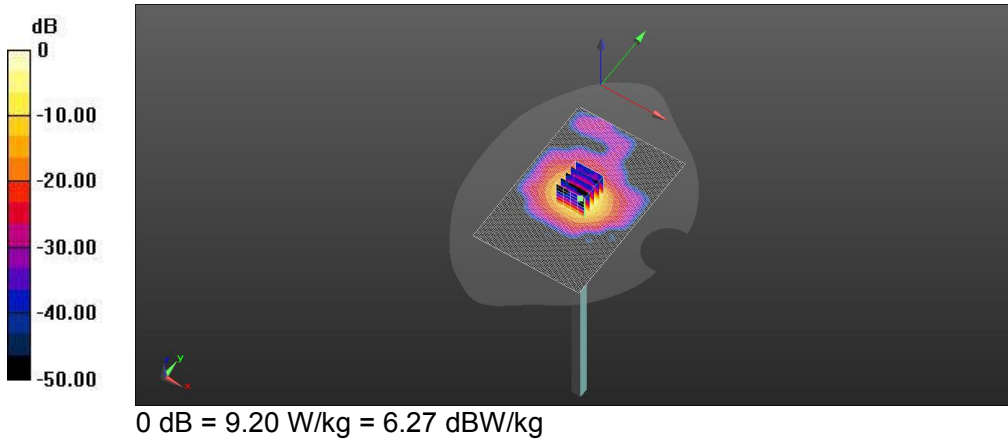
Communication System: UID 0, CW (0); Communication System Band: CW5250; Frequency: 5250 MHz; Communication System PAR: 0 dB; PMF: 1.12202e-005
Medium parameters used: $f = 5200$ MHz; $\sigma = 4.70$ S/m; $\epsilon_r = 35.33$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7623; ConvF(5.45,5.45, 5.45) @ 5250 MHz; Calibrated: 2022-01-24
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1636; Calibrated: 2021-12-30
- Phantom: SAM3; Type: QD 000 P41 AA;
- DASYS 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 = 62.56 V/m; Power Drift = 0.17 dB
Fast SAR: SAR(1 g) = 7.42 W/kg; SAR(10 g) = 2.17 W/kg
Maximum value of SAR (interpolated) = 9.20 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 = 62.56 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 30.4 W/kg
SAR(1 g) = 7.36 W/kg; SAR(10 g) = 2.12 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 67.9%
Maximum value of SAR (measured) = 9.22 W/kg



Dipole 5.6GV2

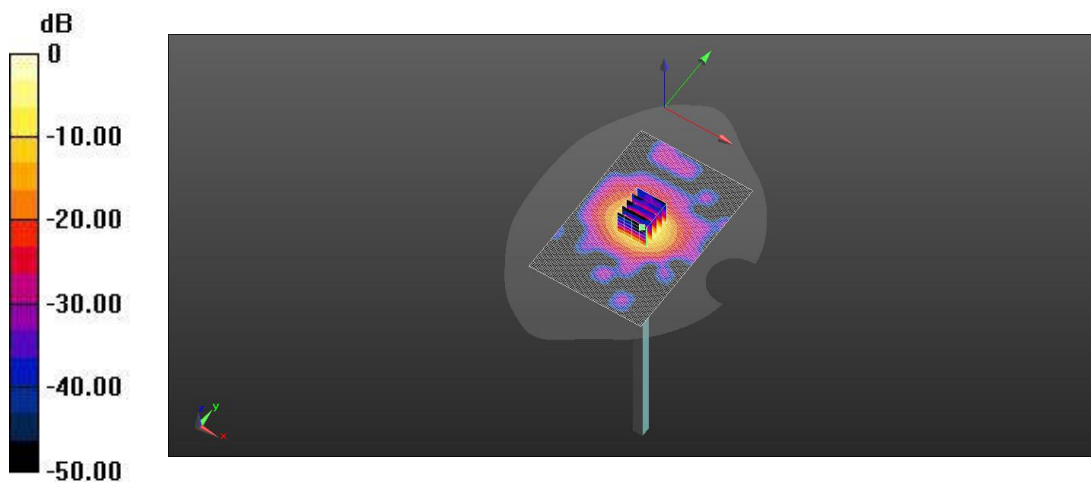
Communication System: UID 0, CW (0); Communication System Band: CW5600; Frequency: 5600 MHz; Communication System PAR: 0 dB; PMF: 1.12202e-005
Medium parameters used: $f = 5600$ MHz; $\sigma = 5.19$ S/m; $\epsilon_r = 36.05$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7623; ConvF(4.90, 4.90, 4.90) @ 5600 MHz; Calibrated: 2022-01-24
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1636; Calibrated: 2021-12-30
- Phantom: SAM3; Type: QD 000 P41 AA;
- 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 = 65.11 V/m; Power Drift = 0.15 dB
Fast SAR: SAR(1 g) = 8.14 W/kg; SAR(10 g) = 2.32 W/kg
Maximum value of SAR (interpolated) = 10.3 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 = 65.11 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 36.8 W/kg
SAR(1 g) = 8.12 W/kg; SAR(10 g) = 2.30 W/kg
Smallest distance from peaks to all points 3 dB below = 7.1 mm
Ratio of SAR at M2 to SAR at M1 = 62.4%
Maximum value of SAR (measured) = 10.3 W/kg



0 dB = 10.3 W/kg = 6.90 dBW/kg

Dipole 5.75GV2

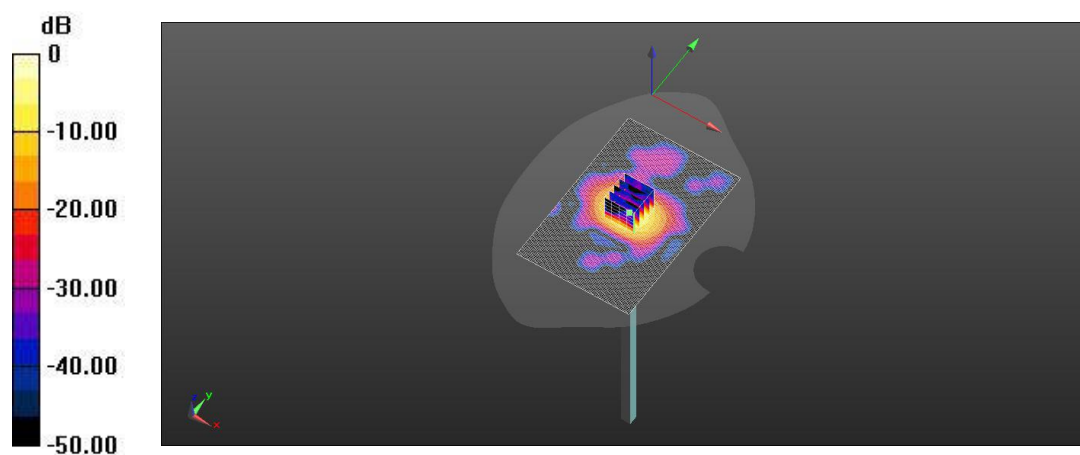
Communication System: UID 0, CW (0); Communication System Band: CW5750; Frequency: 5750 MHz; Communication System PAR: 0 dB; PMF: 1.12202e-005
 Medium parameters used: $f = 5750$ MHz; $\sigma = 5.15$ S/m; $\epsilon_r = 35.72$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section
 Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7623; ConvF(4.99, 4.99, 4.99) @ 5750 MHz; Calibrated: 2022-01-24
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1636; Calibrated: 2021-12-30
- Phantom: SAM3; Type: QD 000 P41 AA;
- 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 = 63.57 V/m; Power Drift = 0.14 dB
Fast SAR: SAR(1 g) = 7.86 W/kg; SAR(10 g) = 2.27 W/kg
 Maximum value of SAR (interpolated) = 9.89 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 = 63.57 V/m; Power Drift = 0.14 dB
 Peak SAR (extrapolated) = 37.1 W/kg
SAR(1 g) = 7.84 W/kg; SAR(10 g) = 2.20 W/kg
 Smallest distance from peaks to all points 3 dB below = 7.1 mm
 Ratio of SAR at M2 to SAR at M1 = 61.6%
 Maximum value of SAR (measured) = 9.97 W/kg



0 dB = 9.89 W/kg = 6.48 dBW/kg

Dipole 5.2GV2

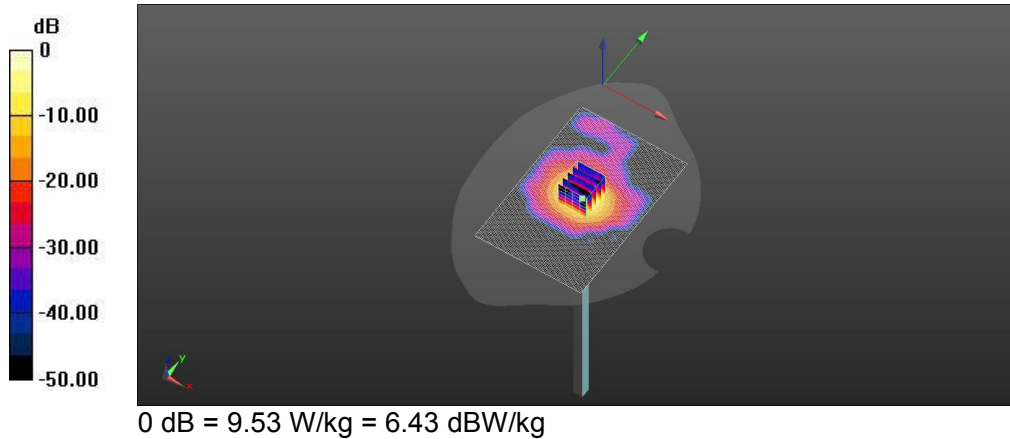
Communication System: UID 0, CW (0); Communication System Band: CW5250; Frequency: 5250 MHz; Communication System PAR: 0 dB; PMF: 1.12202e-005
Medium parameters used: $f = 5200$ MHz; $\sigma = 4.69$ S/m; $\epsilon_r = 36.23$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7623; ConvF(5.45, 5.45, 5.45) @ 5250 MHz; Calibrated: 2022-01-24
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1636; Calibrated: 2021-12-30
- Phantom: SAM3; Type: QD 000 P41 AA;
- DASYS 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 = 64.56 V/m; Power Drift = 0.16 dB
Fast SAR: SAR(1 g) = 7.64 W/kg; SAR(10 g) = 2.22 W/kg
Maximum value of SAR (interpolated) = 9.53 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 = 64.56 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 31.4 W/kg
SAR(1 g) = 7.59 W/kg; SAR(10 g) = 2.21 W/kg
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 66.5%
Maximum value of SAR (measured) = 9.45 W/kg



Dipole 5.6GV2

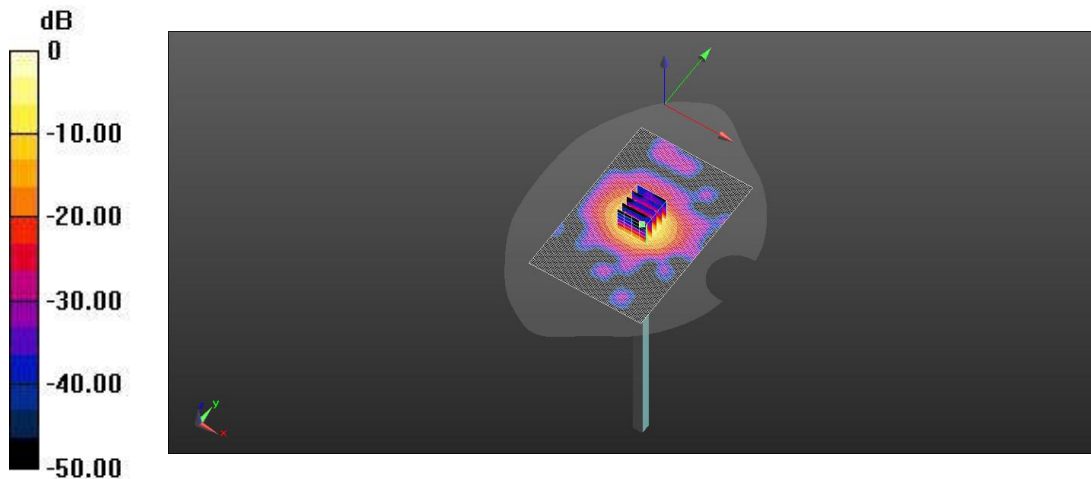
Communication System: UID 0, CW (0); Communication System Band: CW5600; Frequency: 5600 MHz; Communication System PAR: 0 dB; PMF: 1.12202e-005
Medium parameters used: $f = 5600$ MHz; $\sigma = 5.08$ S/m; $\epsilon_r = 36.00$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7623; ConvF(4.90, 4.90, 4.90) @ 5600 MHz; Calibrated: 2022-01-24
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1636; Calibrated: 2021-12-30
- Phantom: SAM3; Type: QD 000 P41 AA;
- 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 = 63.04 V/m; Power Drift = 0.05 dB
Fast SAR: SAR(1 g) = 7.91 W/kg; SAR(10 g) = 2.27 W/kg
Maximum value of SAR (interpolated) = 10.1 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 = 63.04 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 35.6 W/kg
SAR(1 g) = 7.86 W/kg; SAR(10 g) = 2.24 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 60.8%
Maximum value of SAR (measured) = 9.90 W/kg



0 dB = 10.1 W/kg = 6.63 dBW/kg

Dipole 5.75GV2

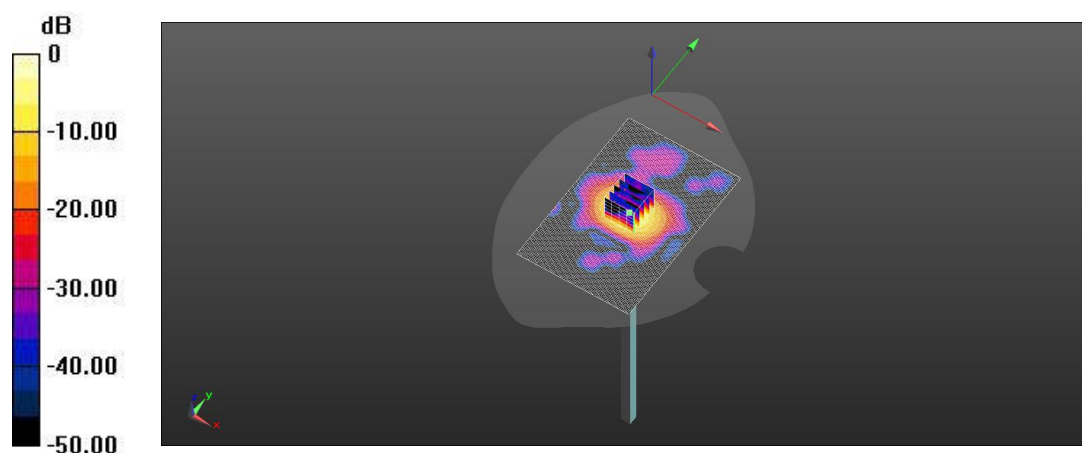
Communication System: UID 0, CW (0); Communication System Band: CW5750; Frequency: 5750 MHz; Communication System PAR: 0 dB; PMF: 1.12202e-005
Medium parameters used: $f = 5750$ MHz; $\sigma = 5.43$ S/m; $\epsilon_r = 35.88$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7623; ConvF(4.99, 4.99, 4.99) @ 5750 MHz; Calibrated: 2022-01-24
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1636; Calibrated: 2021-12-30
- Phantom: SAM3; Type: QD 000 P41 AA;
- DASYS 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 = 61.44 V/m; Power Drift = 0.06 dB
Fast SAR: SAR(1 g) = 7.67 W/kg; SAR(10 g) = 2.19 W/kg
Maximum value of SAR (interpolated) = 9.74 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 = 61.44 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 35.8 W/kg
SAR(1 g) = 7.56 W/kg; SAR(10 g) = 2.13 W/kg
Smallest distance from peaks to all points 3 dB below = 7.0 mm
Ratio of SAR at M2 to SAR at M1 = 58.6%
Maximum value of SAR (measured) = 9.41 W/kg



0 dB = 9.74 W/kg = 6.12 dBW/kg