

## APPENDIX A: SYSTEM CHECKING SCANS

## Dipole750

Date/Time: 2022-07-16

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;  $\sigma = 0.904$  S/m;  $\epsilon_r = 41.79$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS6 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 –SN7623; ConvF(9.43, 9.43, 9.43) @ 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)

**Configuration/Dipole 750MHz 3/Area Scan (61x131x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Reference Value = 49.77 V/m; Power Drift = 0.05 dB

**Fast SAR: SAR(1 g) = 2.1 W/kg; SAR(10 g) = 1.39 W/kg**

Maximum value of SAR (interpolated) = 2.28 W/kg

**Configuration/Dipole 750MHz 3/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

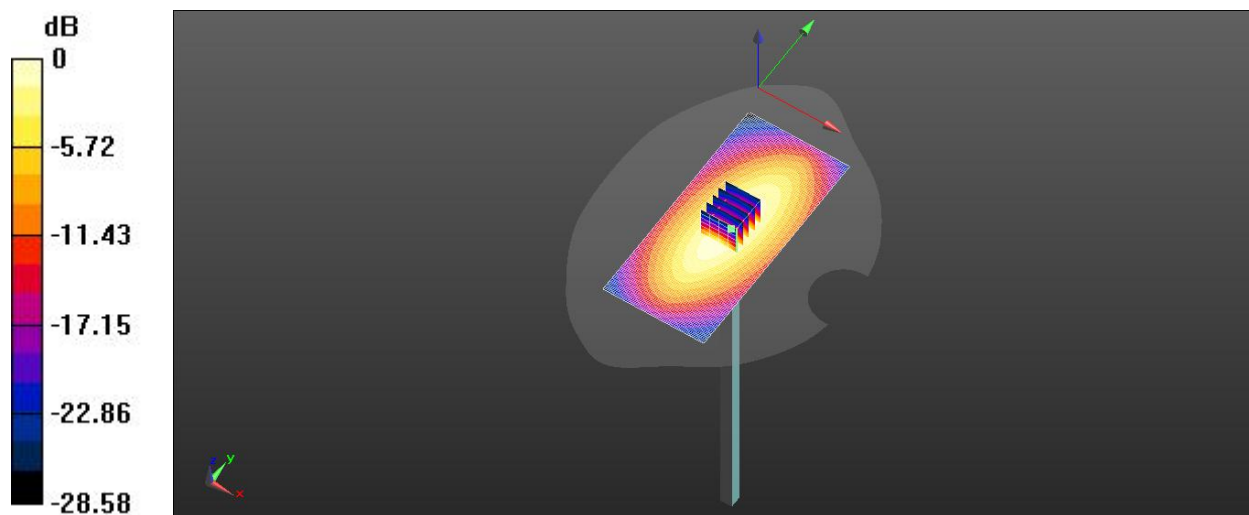
Reference Value = 49.77 V/m; Power Drift = 0.05 dB Peak SAR (extrapolated) = 3.37 W/kg

**SAR(1 g) = 2.12 W/kg; SAR(10 g) = 1.34 W/kg**

Smallest distance from peaks to all points 3 dB below = 17.2 mm

Ratio of SAR at M2 to SAR at M1 = 63.8%

Maximum value of SAR (measured) = 2.30 W/kg



0 dB = 2.28 W/kg = 3.57 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;  $\sigma = 0.94$  S/m;  $\epsilon_r = 42.05$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASy6 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 –SN7623; ConvF(9.43, 9.43, 9.43) @ 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;
- 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 = 60.83 V/m; Power Drift = 0.02 dB

**Fast SAR: SAR(1 g) = 2.49 W/kg; SAR(10 g) = 1.58 W/kg**

Maximum value of SAR (interpolated) = 3.88 W/kg

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

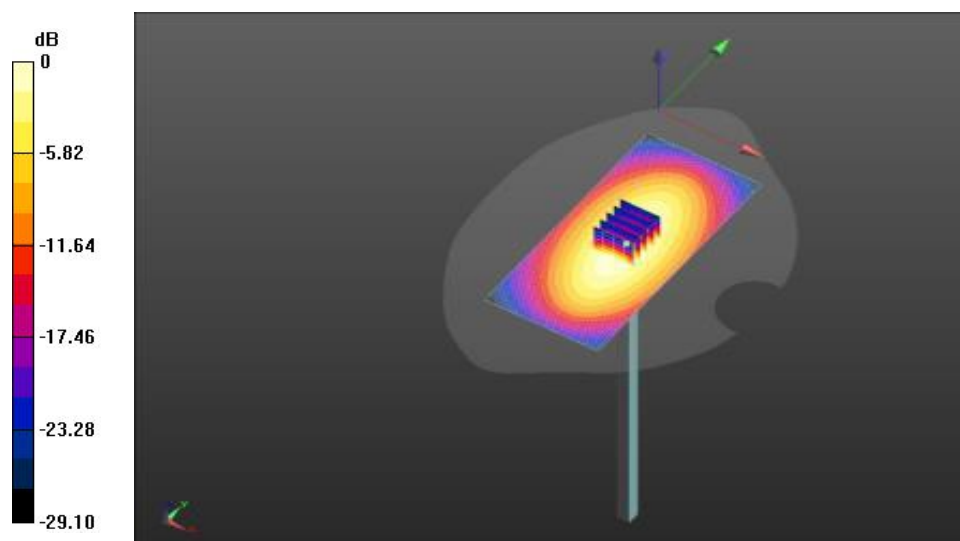
Reference Value = 60.83 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.75 W/kg

**SAR(1 g) = 2.39 W/kg; SAR(10 g) = 1.54 W/kg**

Smallest distance from peaks to all points 3 dB below = 17.6 mm

Ratio of SAR at M2 to SAR at M1 = 65.3% Maximum value of SAR (measured) = 3.31 W/kg



0 dB = 3.88 W/kg = 5.20 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;  $\epsilon_r = 39.50$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASy6 (IEEE/IEC/ANSI C63.19-2007)

DASy Configuration:

- Probe: EX3DV4 - SN7623; ConvF(8.59, 8.59, 8.59) @ 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;
- 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 = 96.99 V/m; Power Drift = -0.13 dB

**Fast SAR: SAR(1 g) = 8.92 W/g; SAR(10 g) = 4.66 W/g**

Maximum value of SAR (interpolated) = 14.01 W/kg

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

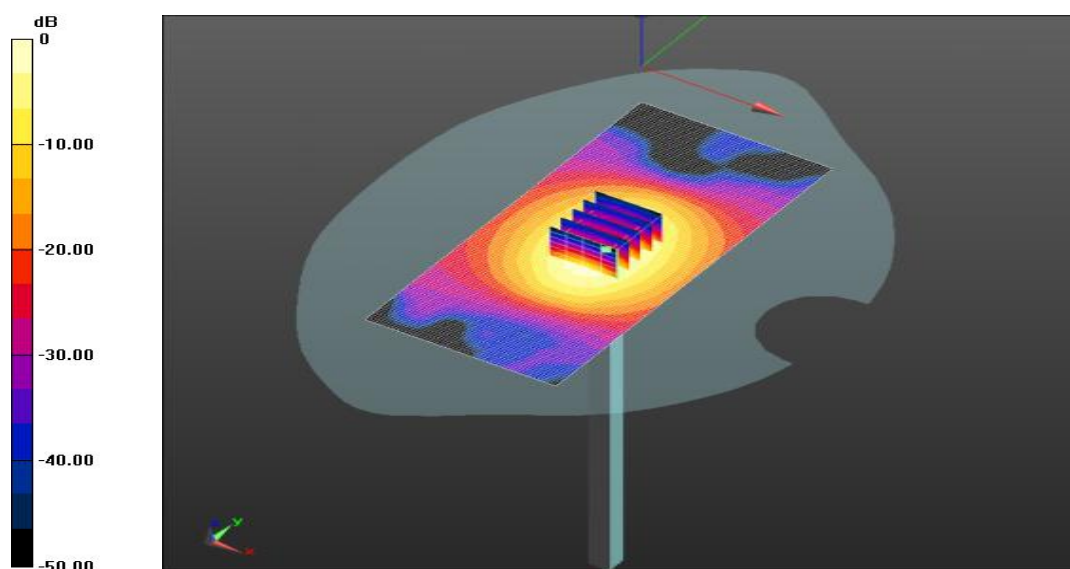
Reference Value = 96.99 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 16.4 W/g

**SAR(1 g) = 8.77 W/g; SAR(10 g) = 4.64 W/g**

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

Ratio of SAR at M2 to SAR at M1 = 53.0% Maximum value of SAR (measured) = 13.52 W/kg



0 dB = 14.01 W/kg = 11.09 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;  $\sigma = 1.42$  S/m;  $\epsilon_r = 39.91$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASy6 (IEEE/IEC/ANSI C63.19-2007)

#### DASY Configuration:

- Probe: EX3DV4 - SN7623; ConvF(8.59, 8.59, 8.59) @ 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 = 103.6 V/m; Power Drift = 0.16 dB

**Fast SAR: SAR(1 g) = 9.94 W/kg; SAR(10 g) = 5.04 W/kg**

Maximum value of SAR (interpolated) = 16.8 W/kg

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

Reference Value = 103.6 V/m; Power Drift = 0.16 dB

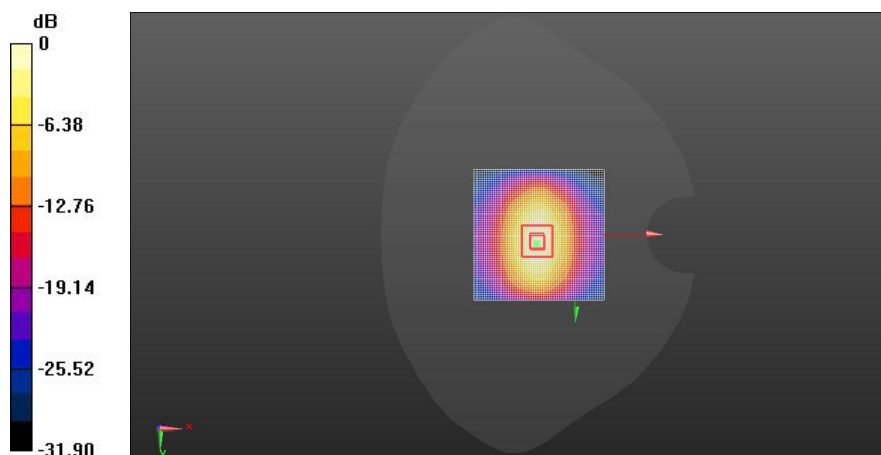
Peak SAR (extrapolated) = 19.0 W/kg

**SAR(1 g) = 9.79 W/kg; SAR(10 g) = 5.01 W/kg**

Smallest distance from peaks to all points 3 dB below = 10.2 mm

Ratio of SAR at M2 to SAR at M1 = 50.4%

Maximum value of SAR (measured) = 16.1 W/kg



0 dB = 16.8 W/kg = 12.21 dBW/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;  $\sigma = 1.74$  S/m;  $\epsilon_r = 39.96$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASy6 (IEEE/IEC/ANSI C63.19-2007)

#### DASY Configuration:

- Probe: EX3DV4 - SN7623; ConvF(8.07, 8.07, 8.07) @ 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 = 110.8 V/m; Power Drift = -0.03 dB

**Fast SAR: SAR(1 g) = 13.32 W/kg; SAR(10 g) = 6.09 W/kg**

Maximum value of SAR (interpolated) = 23.7 W/kg

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

Reference Value = 110.8 V/m; Power Drift = -0.03 dB

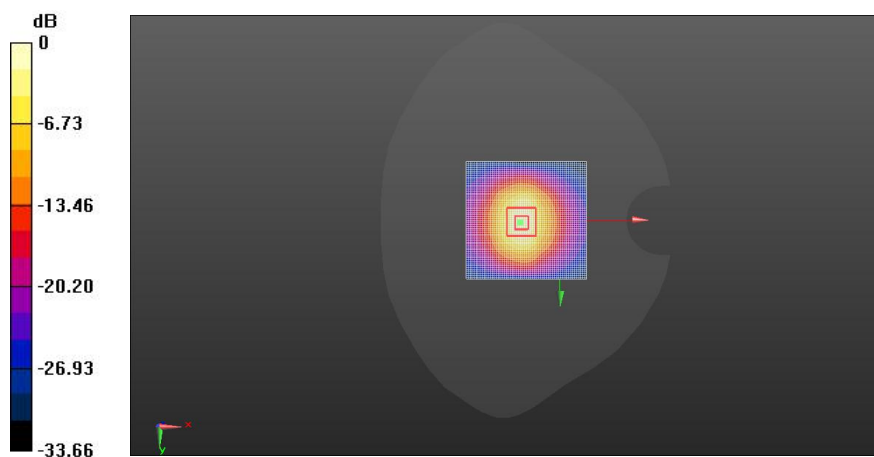
Peak SAR (extrapolated) = 28.0 W/kg

**SAR(1 g) = 13.22 W/kg; SAR(10 g) = 6.05 W/kg**

Smallest distance from peaks to all points 3 dB below = 8.9 mm

Ratio of SAR at M2 to SAR at M1 = 46.4%

Maximum value of SAR (measured) = 23.1 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;  $\sigma = 1.93$  S/m;  $\epsilon_r = 38.24$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASy6 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7623; ConvF(7.86, 7.86, 7.86) @ 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 = 101.6 V/m; Power Drift = -0.04 dB

**Fast SAR: SAR(1 g) = 13.94 W/kg; SAR(10 g) = 6.17 W/kg**

Maximum value of SAR (interpolated) = 25.9 W/kg

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

Reference Value = 101.6 V/m; Power Drift = -0.04 dB

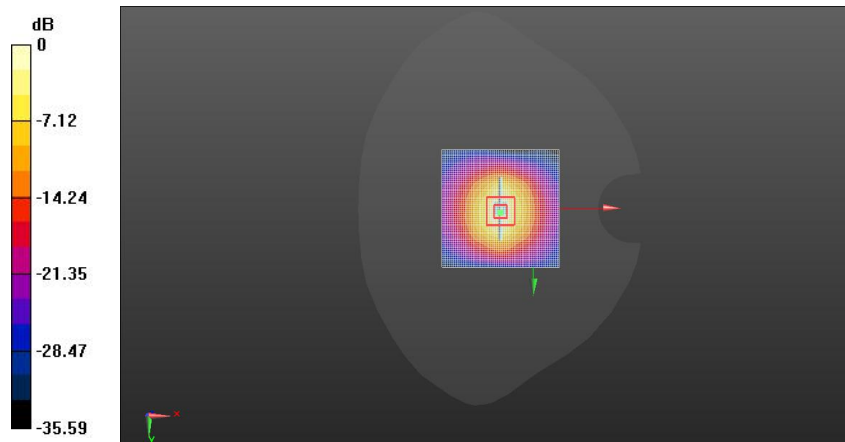
Peak SAR (extrapolated) = 30.2 W/kg

**SAR(1 g) = 13.90 W/kg; SAR(10 g) = 6.15 W/kg**

Smallest distance from peaks to all points 3 dB below = 9.3 mm

Ratio of SAR at M2 to SAR at M1 = 45.6%

Maximum value of SAR (measured) = 25.2 W/kg



0 dB = 25.9 W/kg = 14.14 dBW/kg