

**12.2. System Check Plots**

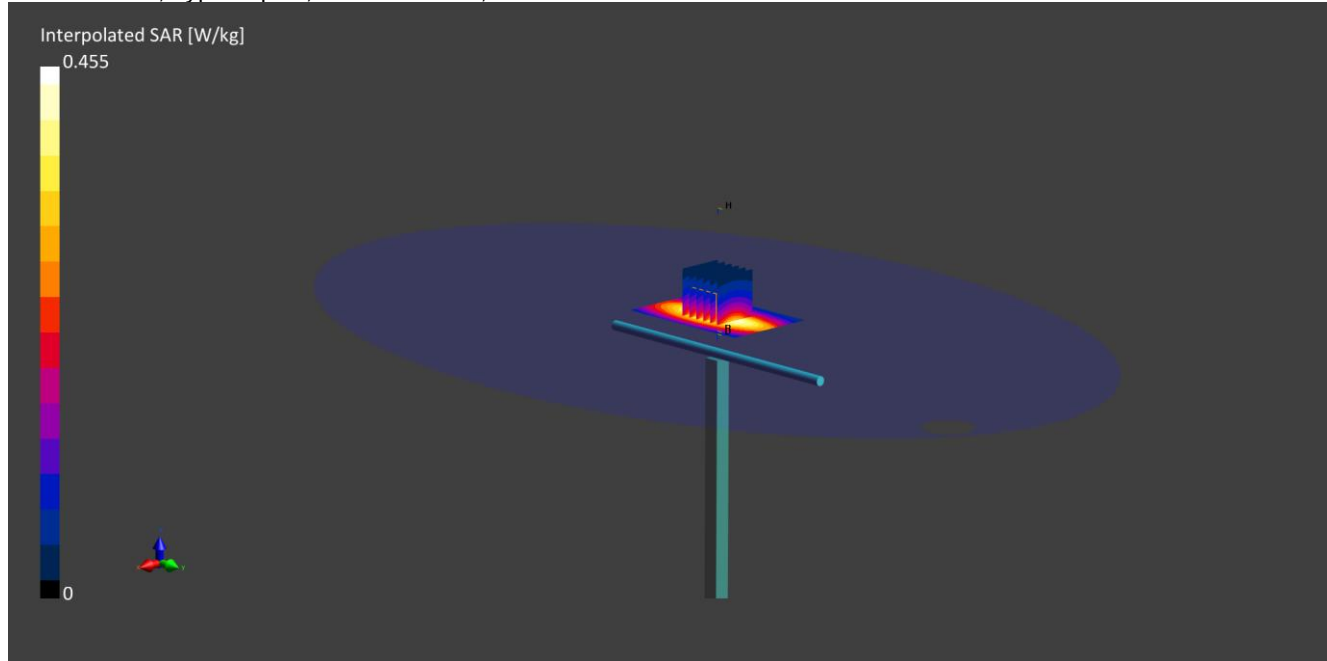
This appendix contains the following system performance distributions plot

| Scan Reference Number | Title                   |
|-----------------------|-------------------------|
| SYS/001               | Site63_27Sep22_750_HSL  |
| SYS/002               | Site63_26Sep22_900_HSL  |
| SYS/003               | Site63_27Sep22_1800_HSL |
| SYS/004               | Site63_03Oct22_1800_HSL |
| SYS/005               | Site63_23Sep22_1900_HSL |

SYS/001: Site63\_27Sep22\_750\_HSL

Date: 27 Sep 2022

DUT: D750V3; Type: Dipole; Serial: SN1011;



Communication System: CW UID: 0; Frequency: 750.0 MHz; Duty Cycle: 1;  
 Medium: HSL; Site63\_26Sep2022\_121719\_Head - 750 900 1800 5%; Medium parameters used:  $f = 750.0$  MHz;  $\sigma = 0.89$  S/m;  $\epsilon_r = 42.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>;  $\Delta\epsilon_r = 2.15$  %;  $\Delta\sigma = -0.04$  %; No correction

Phantom section: Flat;

DASY 6 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(10.22, 10.22, 10.22); Calibrated: 20 Apr 2022
- Sensor-Surface: 1.4 mm; VMS + 6p
- Electronics: DAE4 - SN1543; Calibrated: 22 Feb 2022
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2091
- Measurement SW: cDASY6.14.0.959

**Area Scan (60x90):** Interpolated grid: dx=15 mm, dy=15 mm**Zoom Scan1(30x30x30):** Measurement grid: dx=6 mm, dy=6 mm, dz=1.5 mm; Grading Ratio: 1.5; Reference Value = 0.460 V/m; Power Drift = 0.02 dB

Minimum horizontal 3dB distance: 16.8 mm;

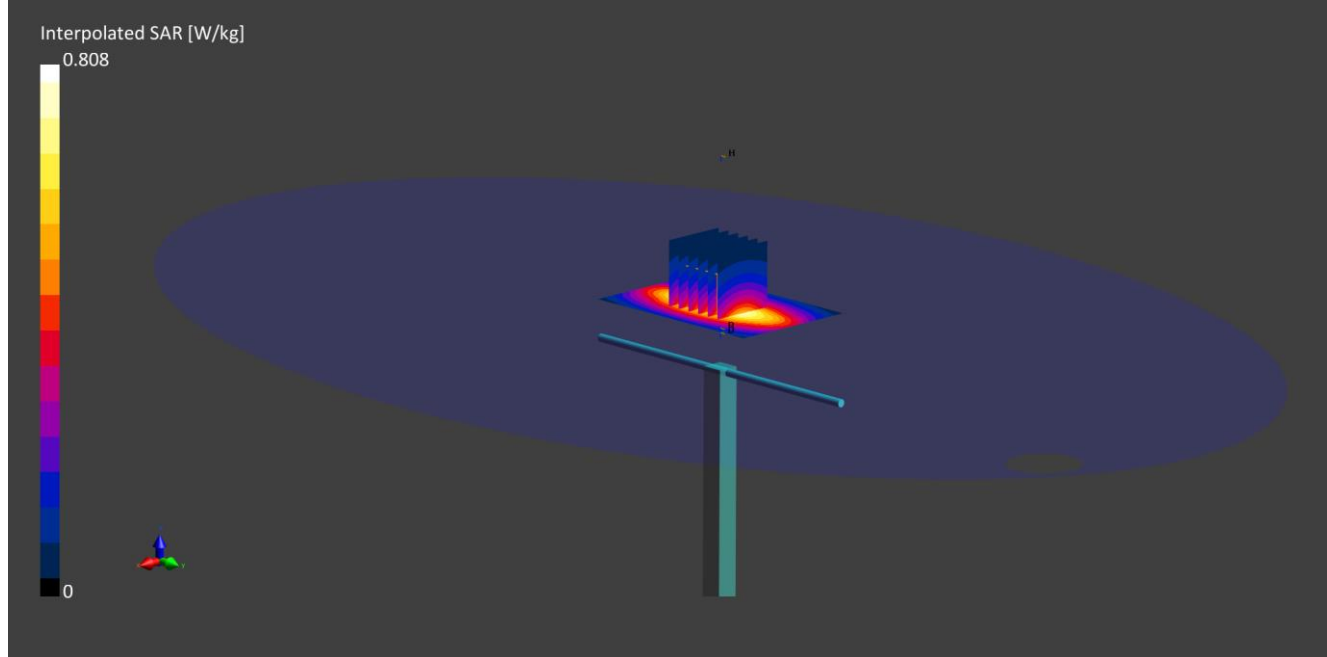
Vertical M2/M1 Ratio: 87.7 %;

**SAR(1 g) = 0.396 W/kg; SAR(10 g) = 0.263 W/kg**

SYS/002: Site63\_26Sep22\_900\_HSL

Date: 26 Sep 2022

DUT: D900V2; Type: Dipole; Serial: SN035;



Communication System: CW UID: 0; Frequency: 900.0 MHz; Duty Cycle: 1;  
 Medium: HSL; Site63\_26Sep2022\_121719\_Head - 750 900 1800 5%; Medium parameters used:  $f = 900.0$  MHz;  $\sigma = 0.95$  S/m;  $\epsilon_r = 42.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>;  $\Delta\epsilon_r = 2.25$  %;  $\Delta\sigma = -2.33$  %; No correction

Phantom section: Flat;

DASY 6 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(9.81, 9.81, 9.81); Calibrated: 20 Apr 2022
- Sensor-Surface: 1.4 mm; VMS + 6p
- Electronics: DAE4 - SN1543; Calibrated: 22 Feb 2022
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2091
- Measurement SW: cDASY6.14.0.959

**Area Scan (60x90):** Interpolated grid: dx=15 mm, dy=15 mm**Zoom Scan1(30x30x30):** Measurement grid: dx=6 mm, dy=6 mm, dz=1.5 mm; Grading Ratio: 1.5; Reference Value = 0.620 V/m; Power Drift = -0.16 dB

Minimum horizontal 3dB distance: 18.3 mm;

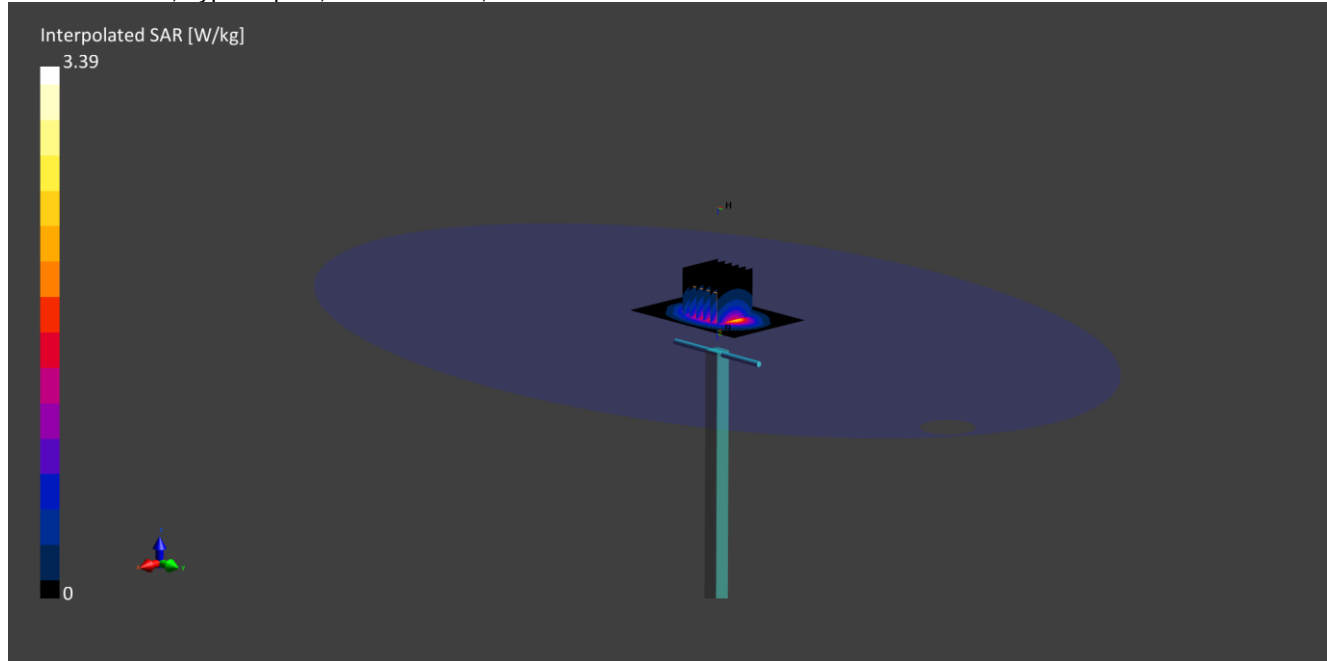
Vertical M2/M1 Ratio: 86.3 %;

**SAR(1 g) = 0.520 W/kg; SAR(10 g) = 0.339 W/kg**

SYS/003: Site63\_27Sep22\_1800\_HSL

Date: 27 Sep 2022

DUT: D1800V2; Type: Dipole; Serial: SN264;



Communication System: CW UID: 0; Frequency: 1800.0 MHz; Duty Cycle: 1;  
 Medium: HSL; Site63\_26Sep2022\_121719\_Head - 750 900 1800 5%; Medium parameters used:  $f = 1800.0$  MHz;  $\sigma = 1.39$  S/m;  $\epsilon_r = 40.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>;  $\Delta\epsilon_r = 2.03$  %;  $\Delta\sigma = -1.00$  %; No correction

Phantom section: Flat;

DASY 6 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(8.7, 8.7, 8.7); Calibrated: 20 Apr 2022
- Sensor-Surface: 1.4 mm; VMS + 6p
- Electronics: DAE4 - SN1543; Calibrated: 22 Feb 2022
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2091
- Measurement SW: cDASY6.14.0.959

**Area Scan (60x90):** Interpolated grid: dx=15 mm, dy=15 mm**Zoom Scan1(30x30x30):** Measurement grid: dx=6 mm, dy=6 mm, dz=1.5 mm; Grading Ratio: 1.5; Reference Value = 2.180 V/m; Power Drift = 0.00 dB

Minimum horizontal 3dB distance: 9.9 mm;

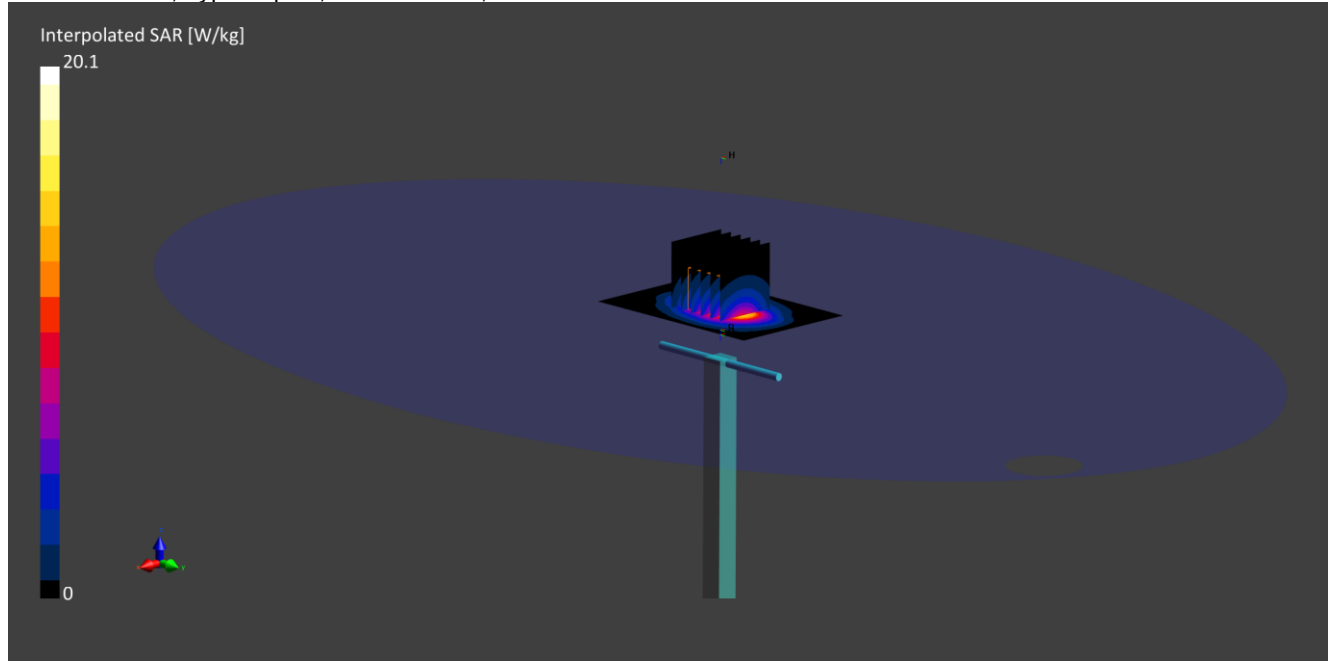
Vertical M2/M1 Ratio: 80.3 %;

**SAR(1 g) = 1.760 W/kg; SAR(10 g) = 0.925 W/kg**

SYS/004: Site63\_03Oct22\_1800\_HSL

Date: 03 Oct 2022

DUT: D1800V2; Type: Dipole; Serial: SN264;



Communication System: CW UID: 0; Frequency: 1800.0 MHz; Duty Cycle: 1;  
 Medium: HSL; Site63\_03Oct2022\_091048\_Head - 1800 5%; Medium parameters used:  $f = 1800.0$  MHz;  $\sigma = 1.4$  S/m;  $\epsilon_r = 40.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>;  $\Delta\epsilon_r = 1.19$  %;  $\Delta\sigma = -0.21$  %; No correction

Phantom section: Flat;

DASY 6 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(8.7, 8.7, 8.7); Calibrated: 20 Apr 2022
- Sensor-Surface: 1.4 mm; VMS + 6p
- Electronics: DAE4 - SN1543; Calibrated: 22 Feb 2022
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2091
- Measurement SW: cDASY6.14.0.959

**Area Scan (60x90):** Interpolated grid: dx=15 mm, dy=15 mm**Zoom Scan1(30x30x30):** Measurement grid: dx=6 mm, dy=6 mm, dz=1.5 mm; Grading Ratio: 1.5; Reference Value = 13.250 V/m; Power Drift = -0.04 dB

Minimum horizontal 3dB distance: 9.9 mm;

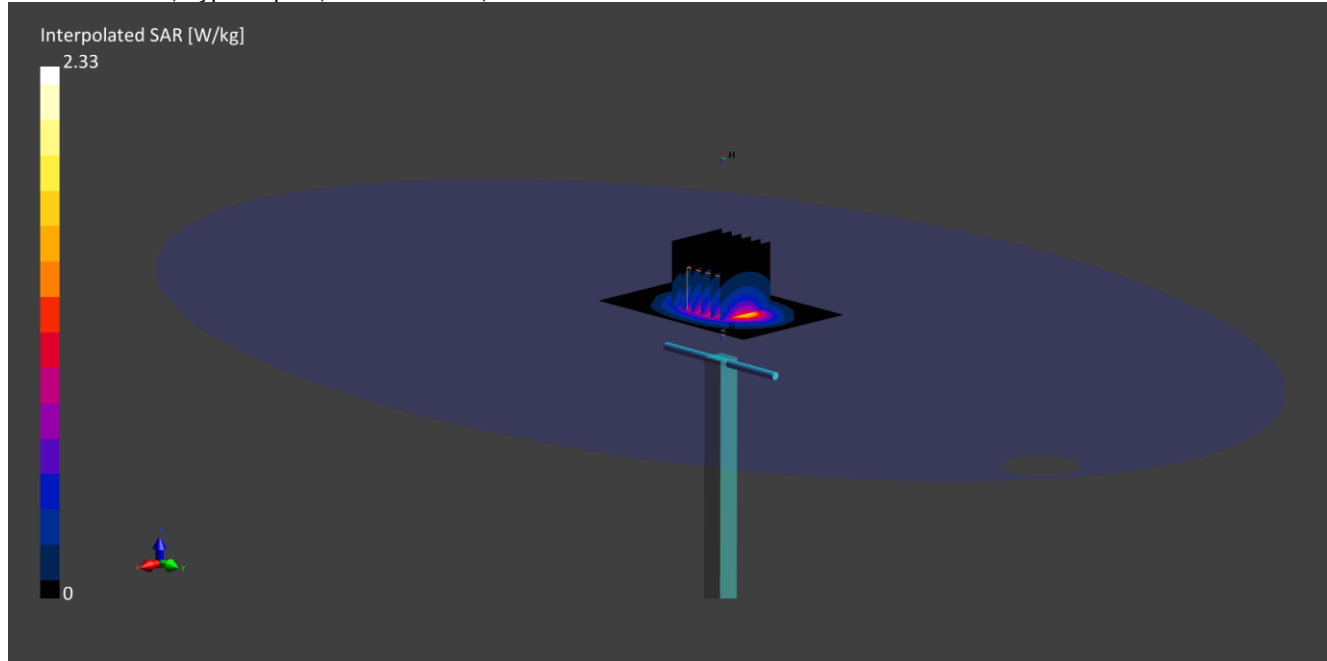
Vertical M2/M1 Ratio: 80.3 %;

**SAR(1 g) = 10.400 W/kg; SAR(10 g) = 5.490 W/kg**

SYS/005: Site63\_23Sep22\_1900\_HSL

Date: 23 Sep 2022

DUT: D1900V2; Type: Dipole; Serial: SN537;



Communication System: CW UID: 0; Frequency: 1900.0 MHz; Duty Cycle: 1;  
 Medium: HSL; Site63\_23Sep2022\_100238\_Head - 1900 5%; Medium parameters used:  $f = 1900.0$  MHz;  $\sigma = 1.45$  S/m;  $\epsilon_r = 41$ ;  $\rho = 1000$  kg/m<sup>3</sup>;  $\Delta\epsilon_r = 2.61$  %;  $\Delta\sigma = 3.24$  %; No correction

Phantom section: Flat;

DASY 6 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(8.36, 8.36, 8.36); Calibrated: 20 Apr 2022
- Sensor-Surface: 1.4 mm; VMS + 6p
- Electronics: DAE4 - SN1543; Calibrated: 22 Feb 2022
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2091
- Measurement SW: cDASY6.14.0.959

**Area Scan (60x90):** Interpolated grid: dx=15 mm, dy=15 mm**Zoom Scan1(30x30x30):** Measurement grid: dx=6 mm, dy=6 mm, dz=1.5 mm; Grading Ratio: 1.5; Reference Value = 2.300 V/m; Power Drift = 0.11 dB

Minimum horizontal 3dB distance: 9.9 mm;

Vertical M2/M1 Ratio: 80.9 %;

**SAR(1 g) = 1.860 W/kg; SAR(10 g) = 0.965 W/kg**

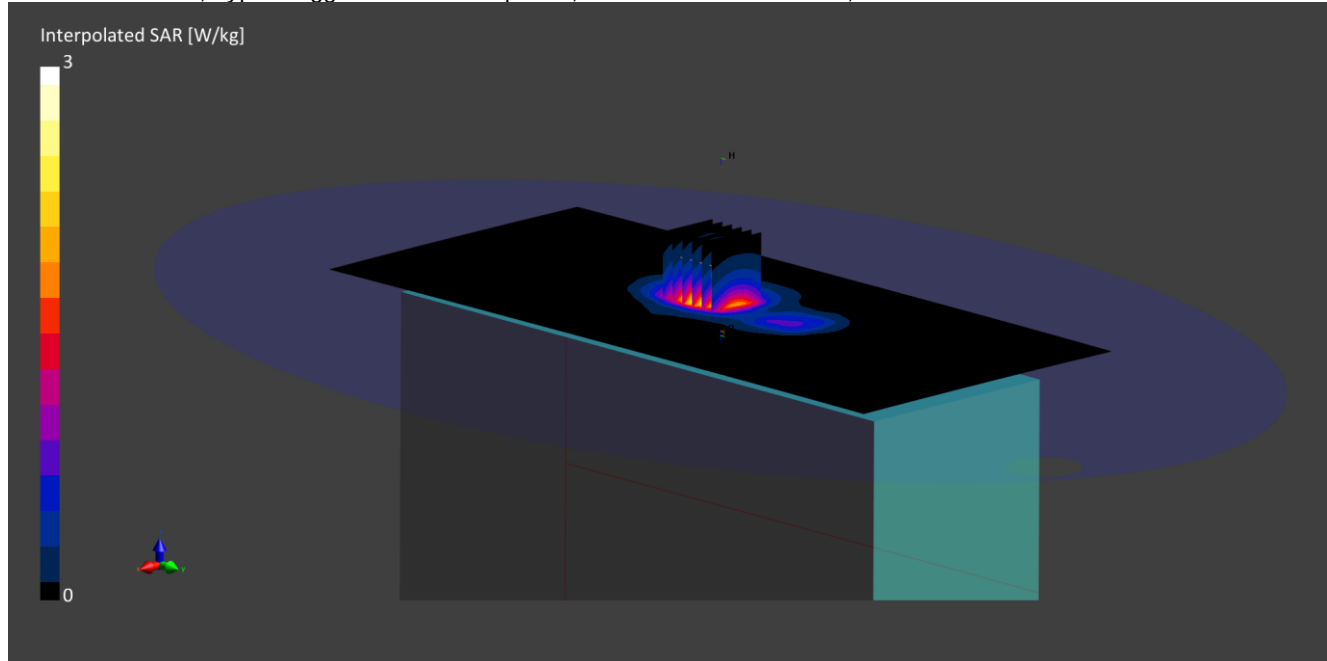
**12.3. SAR Distribution Plots**

| Scan Reference Number | Title                                        |
|-----------------------|----------------------------------------------|
| SAR/001               | Edge Right 0mm LTE 2 1 RB High Ant1 CH19100  |
| SAR/002               | Edge Right 0mm LTE 4 1 RB High Ant1 CH20300  |
| SAR/003               | Edge Right 0mm LTE 5 1 RB Mid Ant1 CH20525   |
| SAR/004               | Edge Right 0mm LTE 12 1 RB Mid Ant1 CH23095  |
| SAR/005               | Edge Right 0mm LTE 66 1 RB Mid Ant1 CH132572 |

SAR/001: Edge Right 0mm LTE 2 1 RB High Ant1 CH19100

Date: 26 Sep 2022

DUT: GAI-Tronics; Type: Rugged Cellular Telephone; Model: 231-02-304J-612;



Communication System: LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK) UID: 10169; Frequency: 1900.0 MHz; Duty Cycle: 1;  
 Medium: HSL; Site63\_23Sep2022\_100238\_Head - 1900 5%; Medium parameters used:  $f = 1900.0$  MHz;  $\sigma = 1.45$  S/m;  $\epsilon_r = 41$ ;  $\rho = 1000$  kg/m<sup>3</sup>;  $\Delta\epsilon_r = 2.61$  %;  $\Delta\sigma = 3.24$  %; No correction

Phantom section: Flat;

DASY 6 Configuration:

- Laboratory Name: Site63;
- Probe: EX3DV4 - SN3995; ConvF(8.36, 8.36, 8.36); Calibrated: 20 Apr 2022
- Sensor-Surface: 1.4 mm; VMS + 6p
- Electronics: DAE4 - SN1543; Calibrated: 22 Feb 2022
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2091
- Measurement SW: cDASY6.14.0.959

**Area Scan (150x330):** Interpolated grid: dx=15 mm, dy=15 mm**Zoom Scan1(30x30x30):** Measurement grid: dx=6 mm, dy=6 mm, dz=1.5 mm; Grading Ratio: 1.5; Reference Value = 3.500 V/m; Power Drift = 0.01 dB

Minimum horizontal 3dB distance: 12.0 mm;

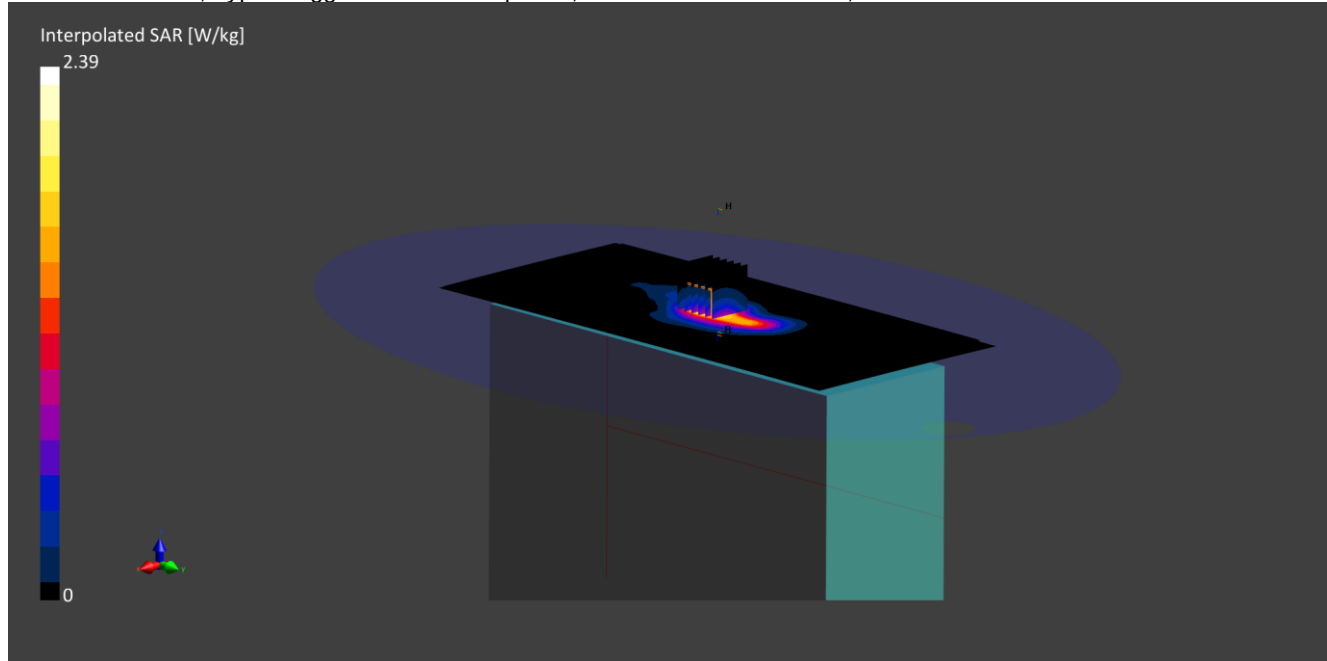
Vertical M2/M1 Ratio: 83.2 %;

**SAR(1 g) = 2.800 W/kg; SAR(10 g) = 1.490 W/kg**

SAR/002: Edge Right 0mm LTE 4 1 RB High Ant1 CH20300

Date: 27 Sep 2022

DUT: GAI-Tronics; Type: Rugged Cellular Telephone; Model: 231-02-304J-612;



Communication System: LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK) UID: 10169; Frequency: 1745.0 MHz; Duty Cycle: 1;  
 Medium: HSL; Site63\_26Sep2022\_121719\_Head - 750 900 1800 5%; Medium parameters used:  $f = 1745.0$  MHz;  $\sigma = 1.35$  S/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>;  $\Delta\epsilon_r = 2.05$  %;  $\Delta\sigma = -1.08$  %; No correction

Phantom section: Flat;

DASY 6 Configuration:

- Laboratory Name: Site63;
- Probe: EX3DV4 - SN3995; ConvF(8.7, 8.7, 8.7); Calibrated: 20 Apr 2022
- Sensor-Surface: 1.4 mm; VMS + 6p
- Electronics: DAE4 - SN1543; Calibrated: 22 Feb 2022
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2091
- Measurement SW: cDASY6.14.0.959

**Area Scan (150x330):** Interpolated grid: dx=15 mm, dy=15 mm**Zoom Scan1(30x30x30):** Measurement grid: dx=6 mm, dy=6 mm, dz=1.5 mm; Grading Ratio: 1.5; Reference Value = 1.620 V/m; Power Drift = -0.01 dB

Minimum horizontal 3dB distance: 13.3 mm;

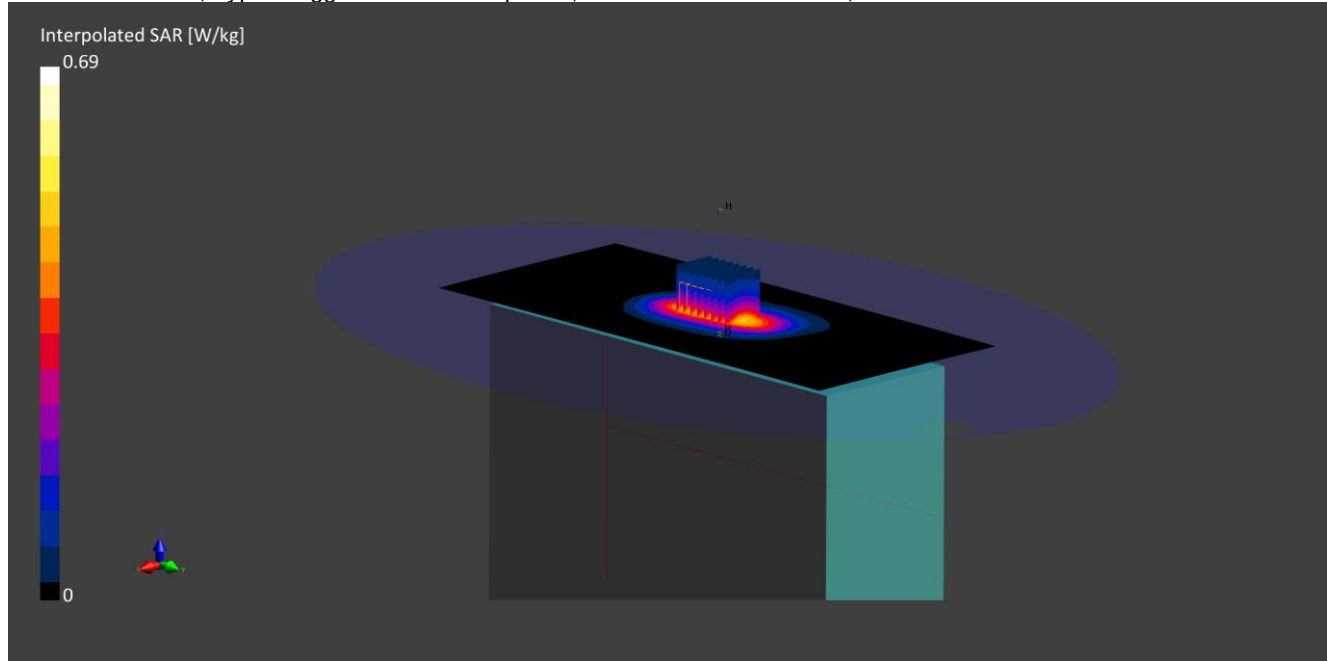
Vertical M2/M1 Ratio: 81.6 %;

**SAR(1 g) = 1.290 W/kg; SAR(10 g) = 0.706 W/kg**

SAR/003: Edge Right 0mm LTE 5 1 RB Mid Ant1 CH20525

Date: 27 Sep 2022

DUT: GAI-Tronics; Type: Rugged Cellular Telephone; Model: 231-02-304J-612;



Communication System: LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK) UID: 10175; Frequency: 836.5 MHz; Duty Cycle: 1;  
 Medium: HSL; Site63\_26Sep2022\_121719\_Head - 750 900 1800 5%; Medium parameters used:  $f = 836.5$  MHz;  $\sigma = 0.92$  S/m;  $\epsilon_r = 42.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>;  $\Delta\epsilon_r = 2.49$  %;  $\Delta\sigma = 1.43$  %; No correction

Phantom section: Flat;

DASY 6 Configuration:

- Laboratory Name: Site63;
- Probe: EX3DV4 - SN3995; ConvF(9.95, 9.95, 9.95); Calibrated: 20 Apr 2022
- Sensor-Surface: 1.4 mm; VMS + 6p
- Electronics: DAE4 - SN1543; Calibrated: 22 Feb 2022
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2091
- Measurement SW: cDASY6.14.0.959

**Area Scan (150x330):** Interpolated grid: dx=15 mm, dy=15 mm**Zoom Scan1(30x30x30):** Measurement grid: dx=6 mm, dy=6 mm, dz=1.5 mm; Grading Ratio: 1.5; Reference Value = 0.530 V/m; Power Drift = 0.06 dB

Minimum horizontal 3dB distance: 18.0 mm;

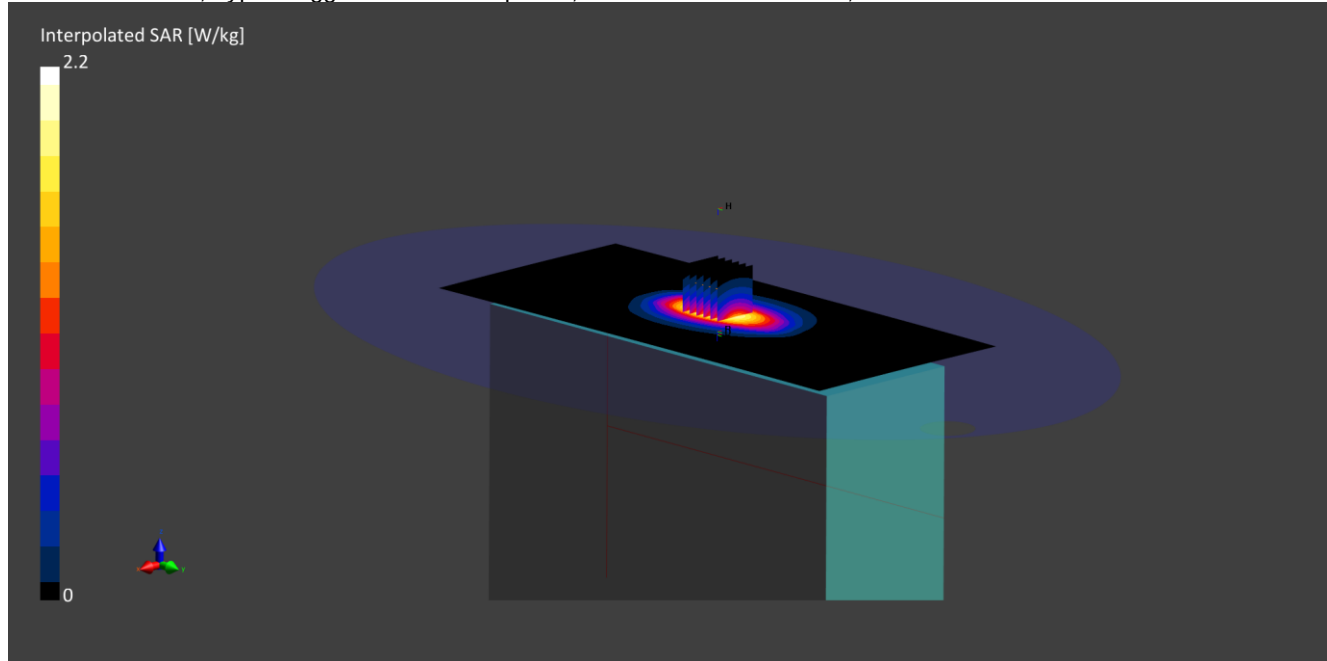
Vertical M2/M1 Ratio: 87.6 %;

**SAR(1 g) = 0.457 W/kg; SAR(10 g) = 0.305 W/kg**

SAR/004: Edge Right 0mm LTE 12 1 RB Mid Ant1 CH23095

Date: 27 Sep 2022

DUT: GAI-Tronics; Type: Rugged Cellular Telephone; Model: 231-02-304J-612;



Communication System: LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK) UID: 10175; Frequency: 707.5 MHz; Duty Cycle: 1;  
 Medium: HSL; Site63\_26Sep2022\_121719\_Head - 750 900 1800 5%; Medium parameters used:  $f = 707.5$  MHz;  $\sigma = 0.88$  S/m;  $\epsilon_r = 43$ ;  $\rho = 1000$  kg/m<sup>3</sup>;  $\Delta\epsilon_r = 1.89$  %;  $\Delta\sigma = -1.49$  %; No correction

Phantom section: Flat;

DASY 6 Configuration:

- Laboratory Name: Site63;
- Probe: EX3DV4 - SN3995; ConvF(10.22, 10.22, 10.22); Calibrated: 20 Apr 2022
- Sensor-Surface: 1.4 mm; VMS + 6p
- Electronics: DAE4 - SN1543; Calibrated: 22 Feb 2022
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2091
- Measurement SW: cDASY6.14.0.959

**Area Scan (150x330):** Interpolated grid: dx=15 mm, dy=15 mm**Zoom Scan1(30x30x30):** Measurement grid: dx=6 mm, dy=6 mm, dz=1.5 mm; Grading Ratio: 1.5; Reference Value = 1.640 V/m; Power Drift = 0.11 dB

Minimum horizontal 3dB distance: 19.5 mm;

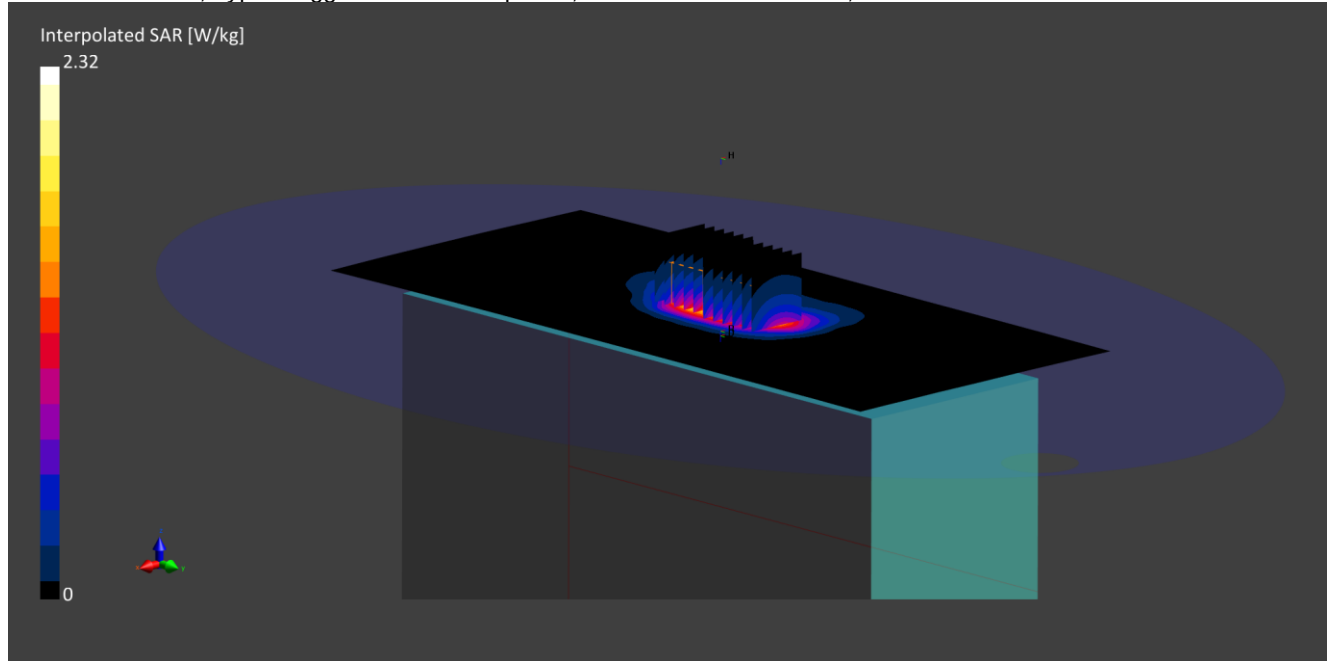
Vertical M2/M1 Ratio: 87.5 %;

**SAR(1 g) = 1.440 W/kg; SAR(10 g) = 0.954 W/kg**

SAR/005: Edge Right 0mm LTE 66 1 RB Mid Ant1 CH132572

Date: 03 Oct 2022

DUT: GAI-Tronics; Type: Rugged Cellular Telephone; Model: 231-02-304J-612;



Communication System: LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK) UID: 10169; Frequency: 1770.0 MHz; Duty Cycle: 1; Medium: HSL; Site63\_03Oct2022\_091048\_Head - 1800 5%; Medium parameters used:  $f = 1770.0$  MHz;  $\sigma = 1.38$  S/m;  $\epsilon_r = 40.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>;  $\Delta\epsilon_r = 1.18$  %;  $\Delta\sigma = -0.23$  %; No correction

Phantom section: Flat;

DASY 6 Configuration:

- Laboratory Name: Site63;
- Probe: EX3DV4 - SN3995; ConvF(8.7, 8.7, 8.7); Calibrated: 20 Apr 2022
- Sensor-Surface: 1.4 mm; All points
- Electronics: DAE4 - SN1543; Calibrated: 22 Feb 2022
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2091
- Measurement SW: cDASY6.14.0.959

**Area Scan (150x330):** Interpolated grid:  $dx=15$  mm,  $dy=15$  mm**Zoom Scan1(30x30x30):** Measurement grid:  $dx=6$  mm,  $dy=6$  mm,  $dz=1.5$  mm; Grading Ratio: 1.5; Reference Value = 1.190 V/m; Power Drift = 0.00 dB

Minimum horizontal 3dB distance: 14.4 mm;

Vertical M2/M1 Ratio: 81.4 %;

**SAR(1 g) = 1.280 W/kg; SAR(10 g) = 0.734 W/kg****Zoom Scan2(30x30x30):** Measurement grid:  $dx=6$  mm,  $dy=6$  mm,  $dz=1.5$  mm; Grading Ratio: 1.5; Reference Value = 1.190 V/m; Power Drift = 0.00 dB

Minimum horizontal 3dB distance: 12.0 mm;

Vertical M2/M1 Ratio: 83.1 %;

**SAR(1 g) = 0.983 W/kg; SAR(10 g) = 0.599 W/kg**