

## APPENDIX B - SAR PLOTS

### Test Plot 1#: LTE Band 2 1RB Mid Face Up

**DUT: Network Digital Trunking Radio; Type: AT-700; Serial: 2XX4-1**

Communication System: Generic FDD-LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.438$  S/m;  $\epsilon_r = 39.402$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3220; ConvF(5.24, 5.24, 5.24) @ 1880 MHz; Calibrated: 2024/10/15
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2025/2/17
- Phantom: SAM (30deg probe tilt) with CRP v5.0\_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.14 (7501)

**Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.207 W/kg

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

Reference Value = 8.715 V/m; Power Drift = 0.05 dB

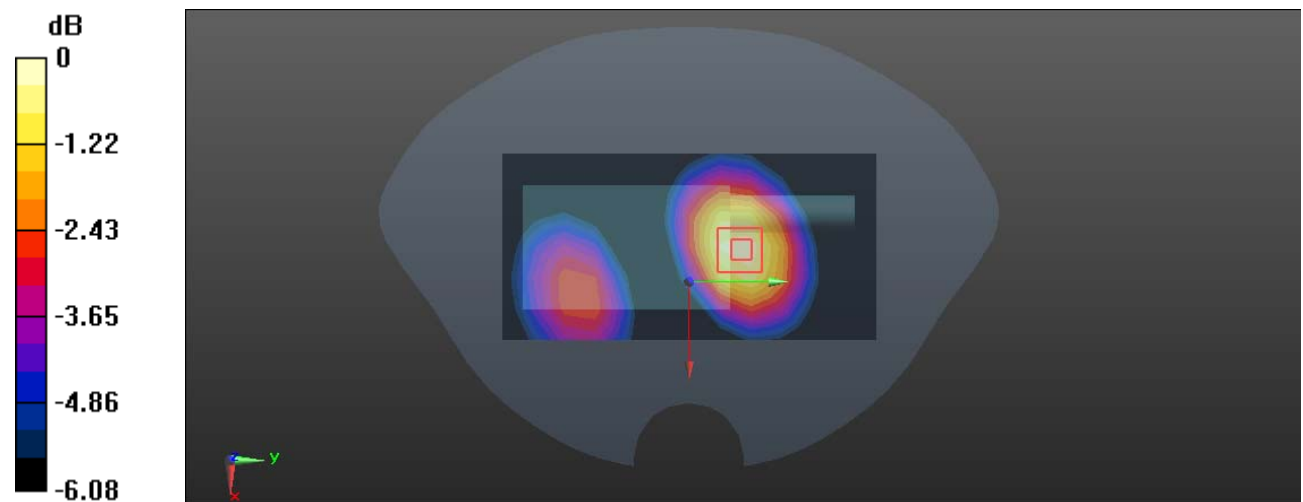
Peak SAR (extrapolated) = 0.257 W/kg

**SAR(1 g) = 0.188 W/kg; SAR(10 g) = 0.135 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)

Ratio of SAR at M2 to SAR at M1 = 73.5%

Maximum value of SAR (measured) = 0.212 W/kg



0 dB = 0.212 W/kg = -6.74 dBW/kg

**Test Plot 2#: LTE Band 2 1RB Mid Body Back With Belt Clip****DUT: Network Digital Trunking Radio; Type: AT-700; Serial: 2XX4-1**

Communication System: Generic FDD-LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.438$  S/m;  $\epsilon_r = 39.402$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3220; ConvF(5.24, 5.24, 5.24) @ 1880 MHz; Calibrated: 2024/10/15
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2025/2/17
- Phantom: SAM (30deg probe tilt) with CRP v5.0\_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.14 (7501)

**Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.379 W/kg

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

Reference Value = 7.085 V/m; Power Drift = -0.01 dB

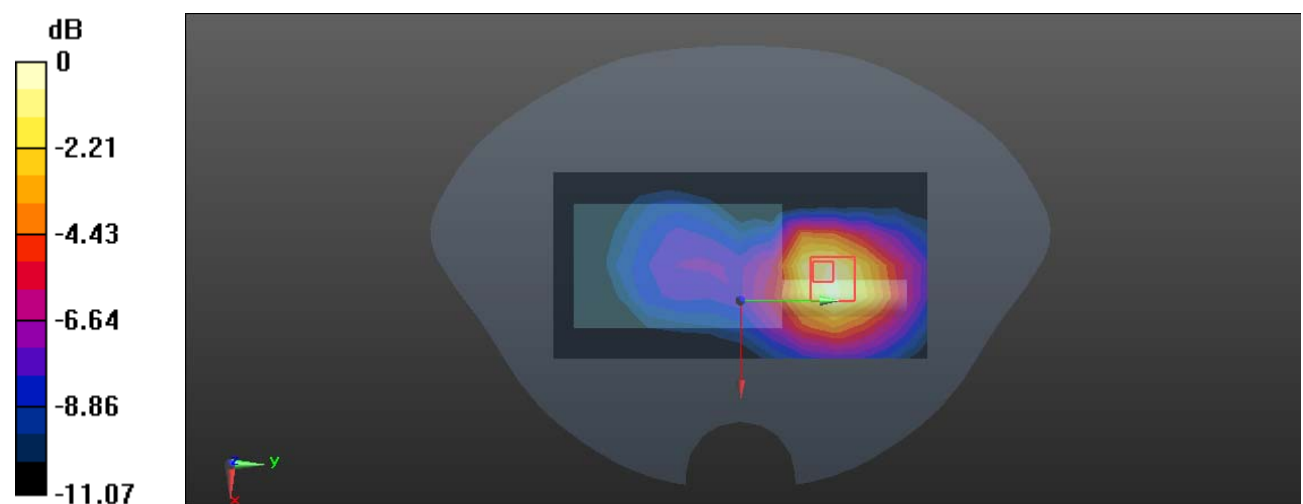
Peak SAR (extrapolated) = 0.567 W/kg

**SAR(1 g) = 0.345 W/kg; SAR(10 g) = 0.225 W/kg**

Smallest distance from peaks to all points 3 dB below = 17.3 mm

Ratio of SAR at M2 to SAR at M1 = 63.5%

Maximum value of SAR (measured) = 0.417 W/kg



0 dB = 0.417 W/kg = -3.80 dBW/kg

**Test Plot 3#: LTE Band 5 1RB Mid Face Up****DUT: Network Digital Trunking Radio; Type: AT-700; Serial: 2XX4-1**

Communication System: Generic FDD-LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 836.5$  MHz;  $\sigma = 0.932$  S/m;  $\epsilon_r = 41.916$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3220; ConvF(6.68, 6.68, 6.68) @ 836.5 MHz; Calibrated: 2024/10/15
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2025/2/17
- Phantom: SAM (30deg probe tilt) with CRP v5.0\_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.14 (7501)

**Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.190 W/kg

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

Reference Value = 13.79 V/m; Power Drift = -0.01 dB

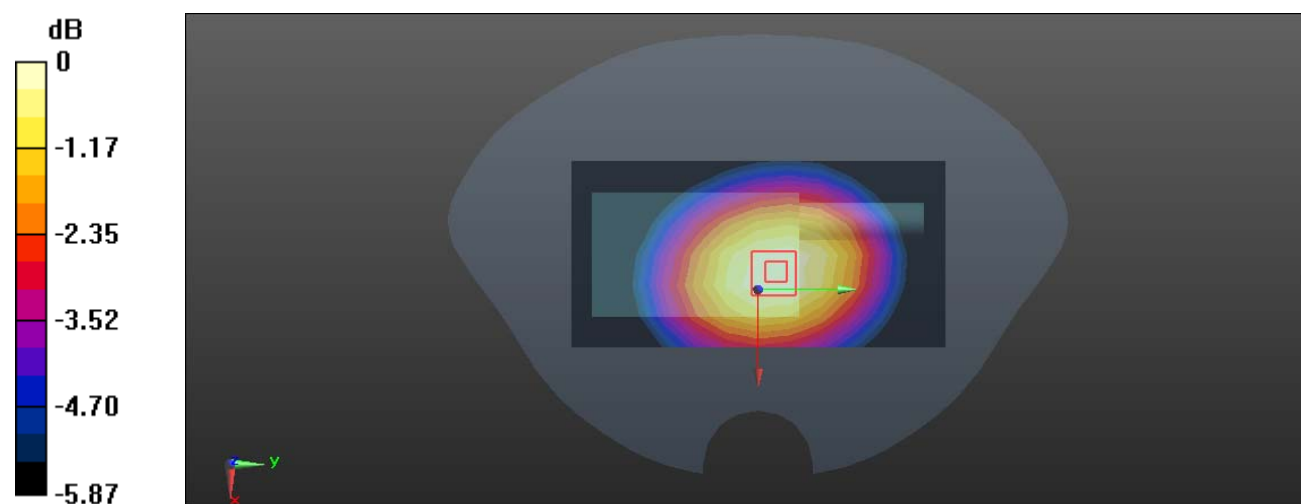
Peak SAR (extrapolated) = 0.215 W/kg

**SAR(1 g) = 0.178 W/kg; SAR(10 g) = 0.143 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (&gt; 16 mm)

Ratio of SAR at M2 to SAR at M1 = 82.6%

Maximum value of SAR (measured) = 0.192 W/kg



0 dB = 0.192 W/kg = -7.17 dBW/kg

**Test Plot 4#: LTE Band 5 1RB Mid Body Back With Belt Clip****DUT: Network Digital Trunking Radio; Type: AT-700; Serial: 2XX4-1**

Communication System: Generic FDD-LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 836.5$  MHz;  $\sigma = 0.932$  S/m;  $\epsilon_r = 41.916$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3220; ConvF(6.68, 6.68, 6.68) @ 836.5 MHz; Calibrated: 2024/10/15
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2025/2/17
- Phantom: SAM (30deg probe tilt) with CRP v5.0\_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.14 (7501)

**Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.506 W/kg

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

Reference Value = 19.01 V/m; Power Drift = -0.03 dB

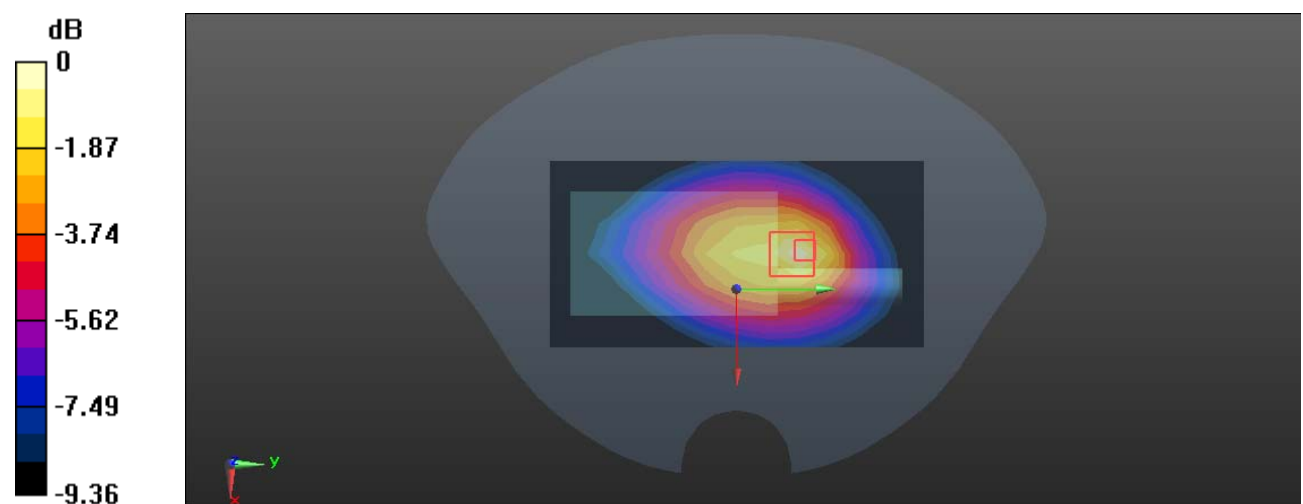
Peak SAR (extrapolated) = 0.723 W/kg

**SAR(1 g) = 0.434 W/kg; SAR(10 g) = 0.290 W/kg**

Smallest distance from peaks to all points 3 dB below = 13.6 mm

Ratio of SAR at M2 to SAR at M1 = 63.1%

Maximum value of SAR (measured) = 0.518 W/kg



0 dB = 0.518 W/kg = -2.86 dBW/kg

**Test Plot 5#: LTE Band 7 1RB Mid Face Up****DUT: Network Digital Trunking Radio; Type: AT-700; Serial: 2XX4-1**

Communication System: Generic FDD-LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 1.955$  S/m;  $\epsilon_r = 40.152$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3220; ConvF(4.83, 4.83, 4.83) @ 2535 MHz; Calibrated: 2024/10/15
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2025/2/17
- Phantom: SAM (30deg probe tilt) with CRP v5.0\_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.14 (7501)

**Area Scan (9x16x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.292 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.90 V/m; Power Drift = -0.17 dB

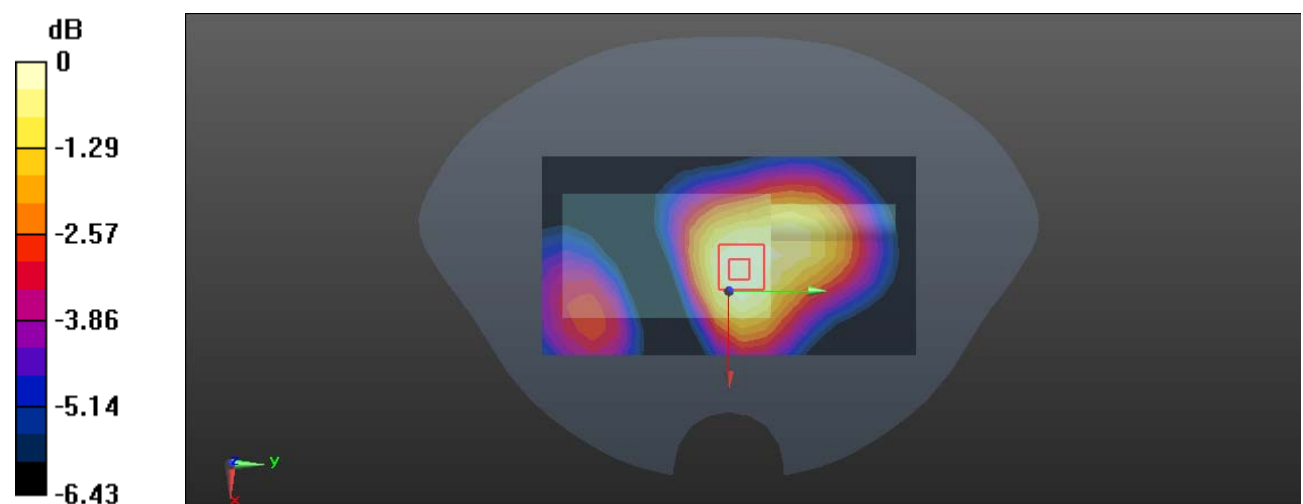
Peak SAR (extrapolated) = 0.378 W/kg

**SAR(1 g) = 0.248 W/kg; SAR(10 g) = 0.169 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (&gt; 15 mm)

Ratio of SAR at M2 to SAR at M1 = 66.4%

Maximum value of SAR (measured) = 0.285 W/kg



0 dB = 0.285 W/kg = -5.45 dBW/kg

**Test Plot 6#: LTE Band 7 1RB Mid Body Back With Belt Clip****DUT: Network Digital Trunking Radio; Type: AT-700; Serial: 2XX4-1**

Communication System: Generic FDD-LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 1.955$  S/m;  $\epsilon_r = 40.152$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3220; ConvF(4.83, 4.83, 4.83) @ 2535 MHz; Calibrated: 2024/10/15
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2025/2/17
- Phantom: SAM (30deg probe tilt) with CRP v5.0\_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.14 (7501)

**Area Scan (9x16x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.601 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.296 V/m; Power Drift = 0.19 dB

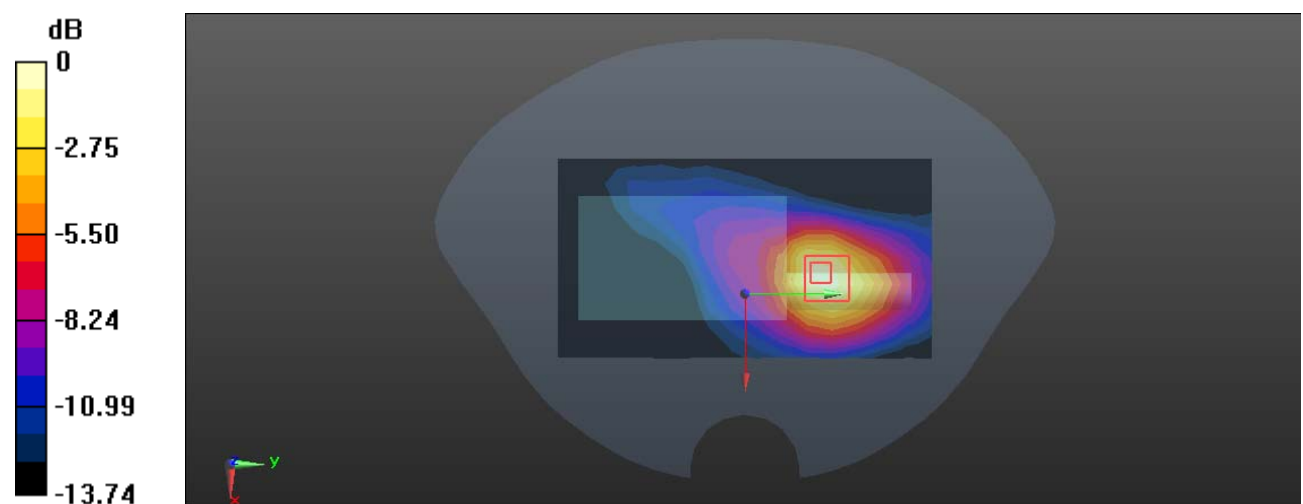
Peak SAR (extrapolated) = 0.957 W/kg

**SAR(1 g) = 0.540 W/kg; SAR(10 g) = 0.317 W/kg**

Smallest distance from peaks to all points 3 dB below = 13.4 mm

Ratio of SAR at M2 to SAR at M1 = 58.3%

Maximum value of SAR (measured) = 0.659 W/kg



0 dB = 0.659 W/kg = -1.81 dBW/kg

**Test Plot 7#: LTE Band 66 1RB Mid Face Up****DUT: Network Digital Trunking Radio; Type: AT-700; Serial: 2XX4-1**

Communication System: Generic FDD-LTE (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1745$  MHz;  $\sigma = 1.366$  S/m;  $\epsilon_r = 39.389$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3220; ConvF(5.53, 5.53, 5.53) @ 1745 MHz; Calibrated: 2024/10/15
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2025/2/17
- Phantom: SAM (30deg probe tilt) with CRP v5.0\_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.14 (7501)

**Face Up/LTE Band 66 1RB Mid/Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.140 W/kg

**Face Up/LTE Band 66 1RB Mid/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.406 V/m; Power Drift = 0.15 dB

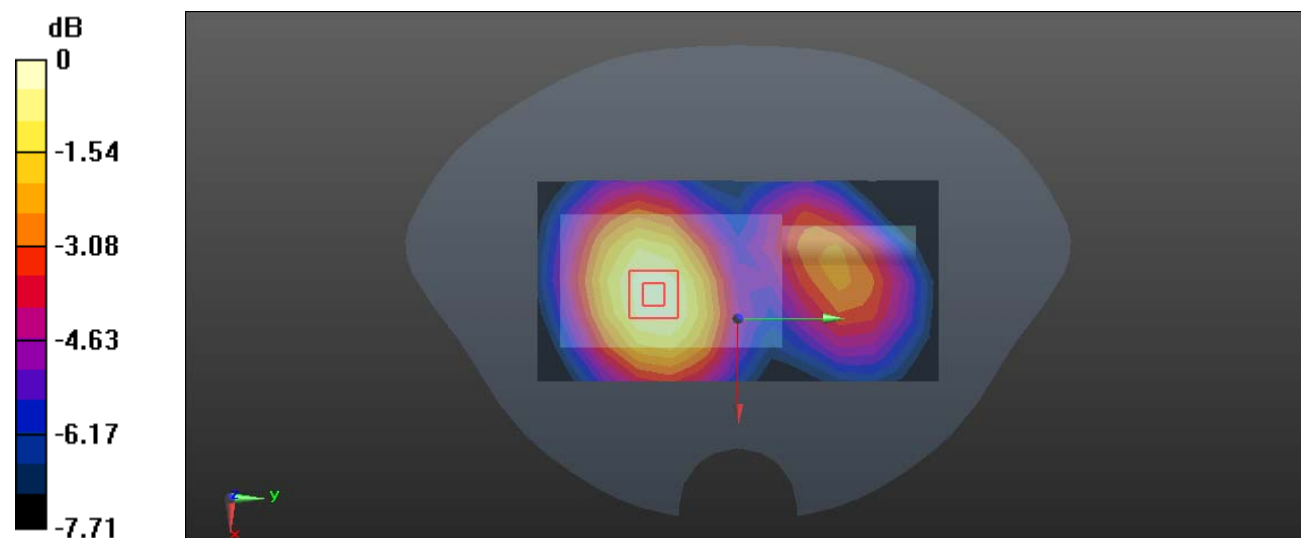
Peak SAR (extrapolated) = 0.168 W/kg

**SAR(1 g) = 0.136 W/kg; SAR(10 g) = 0.103 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (&gt; 16 mm)

Ratio of SAR at M2 to SAR at M1 = 80.2%

Maximum value of SAR (measured) = 0.149 W/kg



0 dB = 0.149 W/kg = -8.27 dBW/kg

**Test Plot 8#: LTE Band 66 1RB Mid Body Back With Belt Clip****DUT: Network Digital Trunking Radio; Type: AT-700; Serial: 2XX4-1**

Communication System: Generic FDD-LTE (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1745$  MHz;  $\sigma = 1.366$  S/m;  $\epsilon_r = 39.389$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3220; ConvF(5.53, 5.53, 5.53) @ 1745 MHz; Calibrated: 2024/10/15
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2025/2/17
- Phantom: SAM (30deg probe tilt) with CRP v5.0\_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.14 (7501)

**Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.273 W/kg

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

Reference Value = 4.895 V/m; Power Drift = 0.17 dB

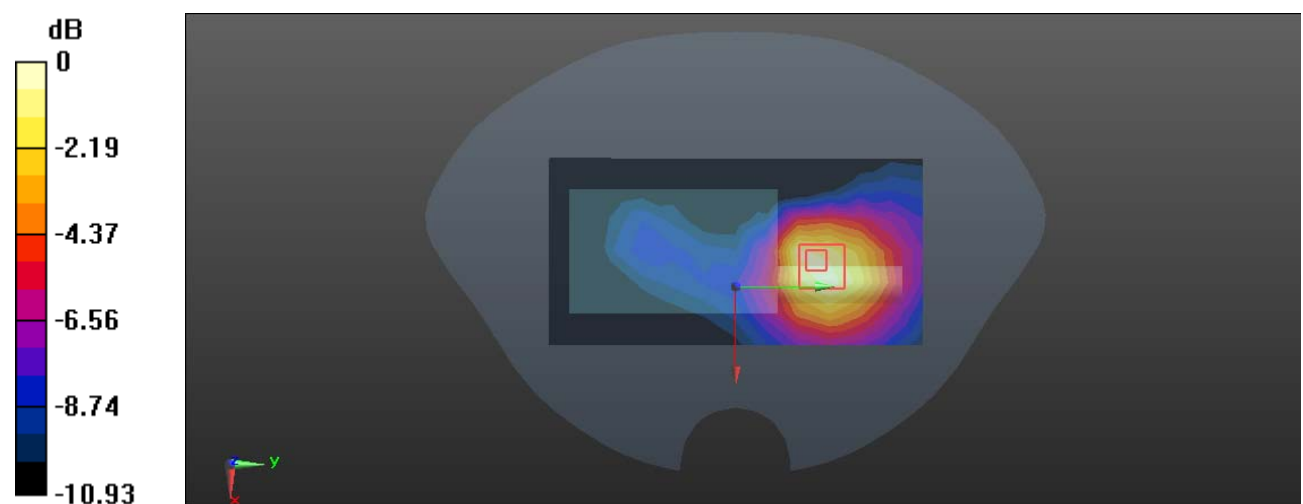
Peak SAR (extrapolated) = 0.380 W/kg

**SAR(1 g) = 0.246 W/kg; SAR(10 g) = 0.166 W/kg**

Smallest distance from peaks to all points 3 dB below = 14.4 mm

Ratio of SAR at M2 to SAR at M1 = 66.7%

Maximum value of SAR (measured) = 0.286 W/kg



0 dB = 0.286 W/kg = -5.44 dBW/kg