

Appendix A

Detailed System Check Results

1. System Performance Check
System Performance Check 13 MHz
System Performance Check 750 MHz
System Performance Check 835 MHz
System Performance Check 1750 MHz
System Performance Check 1950 MHz
System Performance Check 2450 MHz
System Performance Check 2600 MHz
System Performance Check 5250 MHz
System Performance Check 5600 MHz
System Performance Check 5750 MHz

Test Laboratory: SGS-SAR Lab

System Check_Head_13MHz

DUT: CLA-13; Type: Dipole; Serial: 1032

Communication System: UID 0, CW (0); Frequency: 13 MHz; Duty Cycle: 1:1

Medium: HSL13; Medium parameters used: $f = 13 \text{ MHz}$; $\sigma = 0.762 \text{ S/m}$; $\epsilon_r = 55.3$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7735; ConvF(13.44, 13.44, 13.44); Calibrated: 2023/12/19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2024/10/30
- Phantom: SAM 3; Type: ELI5; Serial: TP:1143
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Configuration/Pin=250mW/Area Scan (8x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 0.159 W/kg

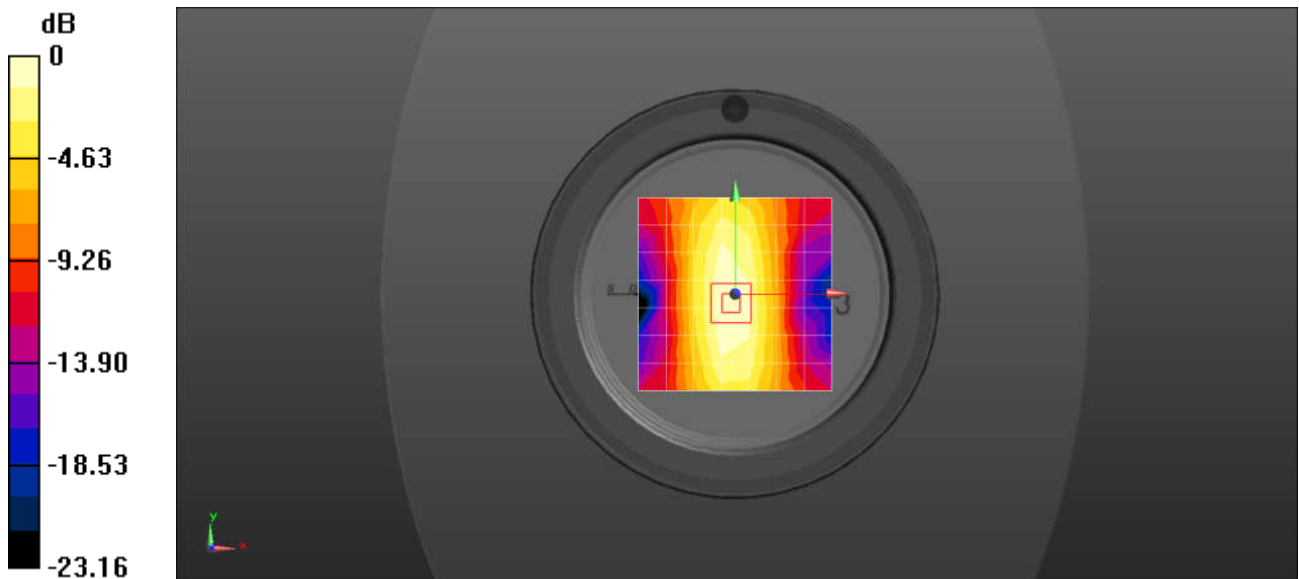
Configuration/Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.03 V/m ; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.213 W/kg

SAR(1 g) = 0.114 W/kg ; SAR(10 g) = 0.072 W/kg

Maximum value of SAR (measured) = 0.169 W/kg



0 dB = 0.169 W/kg = -7.72 dBW/kg

Measurement Report for Device, , CW, Channel 0 (750.000 MHz)

Communication System: ; Frequency: 750.000

Medium: HSL Medium parameters used: $f = 750.000$ MHz; $\sigma = 0.892$ S/m; $\epsilon_r = 41.6$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.29, 9.29, 9.29); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

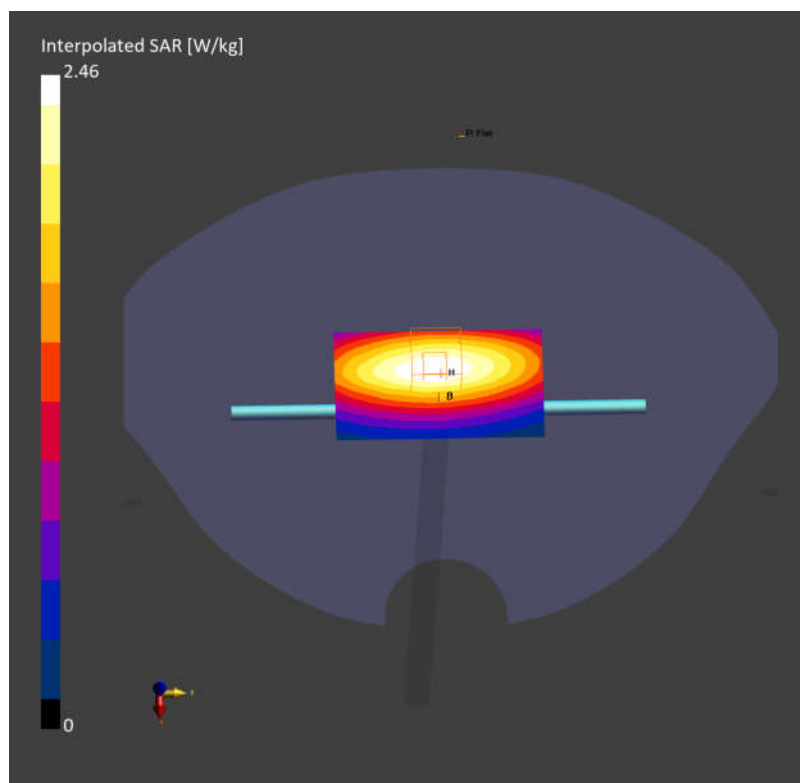
Area Scan (40.0 mm x 90.0 mm): Measurement Grid: 10.0 mm x 15.0 mm

SAR (1g) = 2.11 W/kg; SAR (10g) = 1.40 W/kg;

Zoom Scan (30.0 mm x 30.0 mm x 30.0 mm): Measurement Grid: 6.0 mm x 6.0 mm x 1.5 mm

Power Drift = 0.07 dB

SAR (1g) = 2.15 W/kg; SAR (10g) = 1.36 W/kg;



Measurement Report for Device, , , CW, Channel 0 (835.000 MHz)

Communication System: ; Frequency: 835.000

Medium: HSL Medium parameters used: $f = 835.000$ MHz; $\sigma = 0.908$ S/m; $\epsilon_r = 42.2$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(8.88, 8.88, 8.88); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

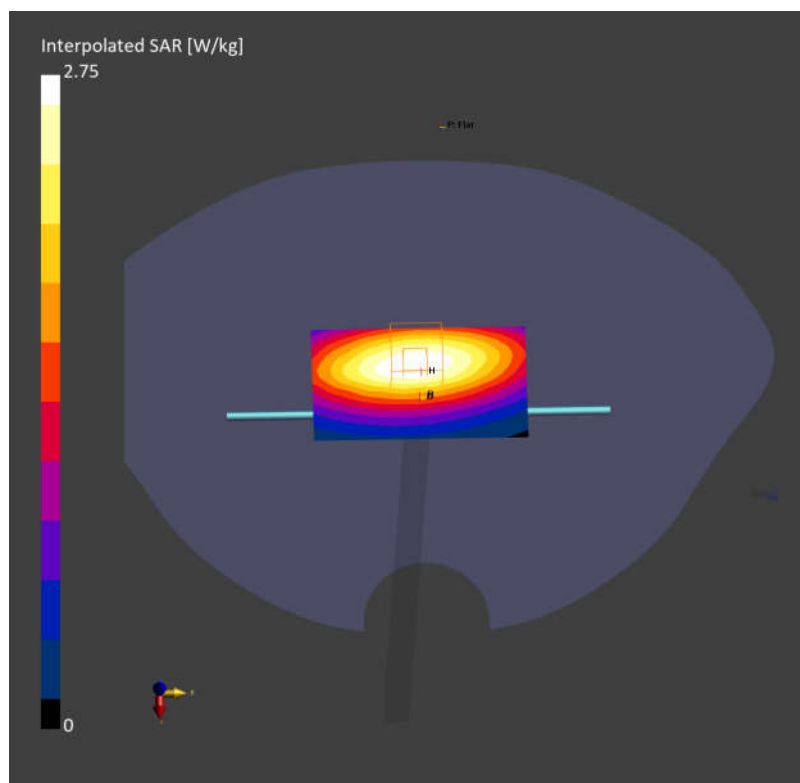
Area Scan (40.0 mm x 90.0 mm): Measurement Grid: 10.0 mm x 15.0 mm

SAR (1g) = 2.33 W/kg; SAR (10g) = 1.54 W/kg;

Zoom Scan (30.0 mm x 30.0 mm x 30.0 mm): Measurement Grid: 6.0 mm x 6.0 mm x 1.5 mm

Power Drift = 0.06 dB

SAR (1g) = 2.41 W/kg; SAR (10g) = 1.53 W/kg;



Measurement Report for Device, , CW, Channel 0 (1750.000 MHz)

Communication System: ; Frequency: 1750.000

Medium: HSL Medium parameters used: $f = 1750.000$ MHz; $\sigma = 1.36$ S/m; $\epsilon_r = 38.6$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.86, 7.86, 7.86); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

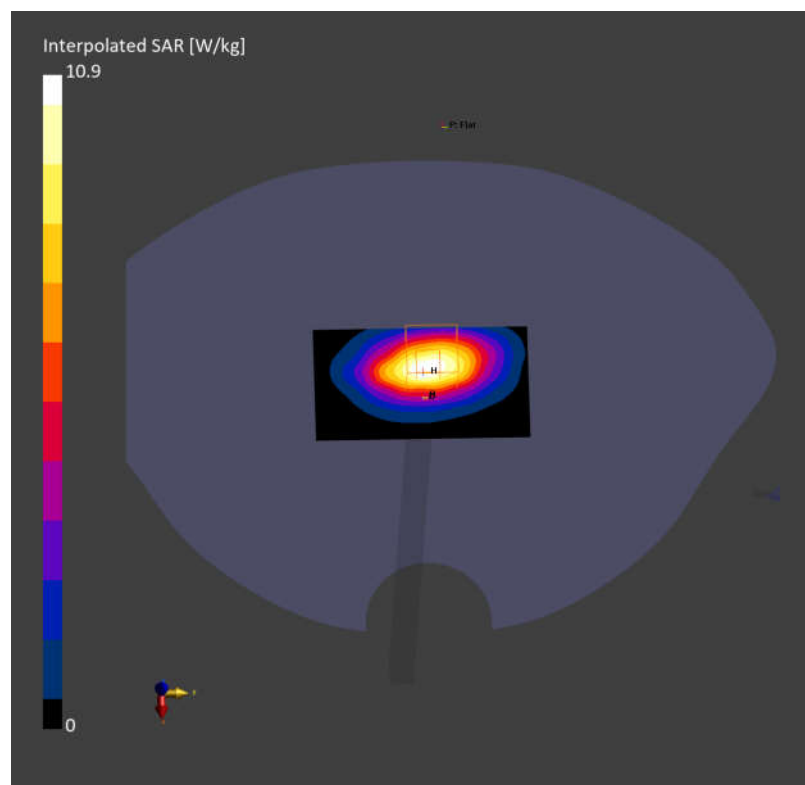
Area Scan (40.0 mm x 90.0 mm): Measurement Grid: 10.0 mm x 15.0 mm

SAR (1g) = 8.93 W/kg; SAR (10g) = 4.92 W/kg;

Zoom Scan (30.0 mm x 30.0 mm x 30.0 mm): Measurement Grid: 6.0 mm x 6.0 mm x 1.5 mm

Power Drift = 0.14 dB

SAR (1g) = 9.48 W/kg; SAR (10g) = 5.03 W/kg;



Measurement Report for Device, , CW, Channel 0 (1950.000 MHz)

Communication System: ; Frequency: 1950.000

Medium: HSL Medium parameters used: $f = 1950.000$ MHz; $\sigma = 1.40$ S/m; $\epsilon_r = 39.1$

DASY8 Configuration:

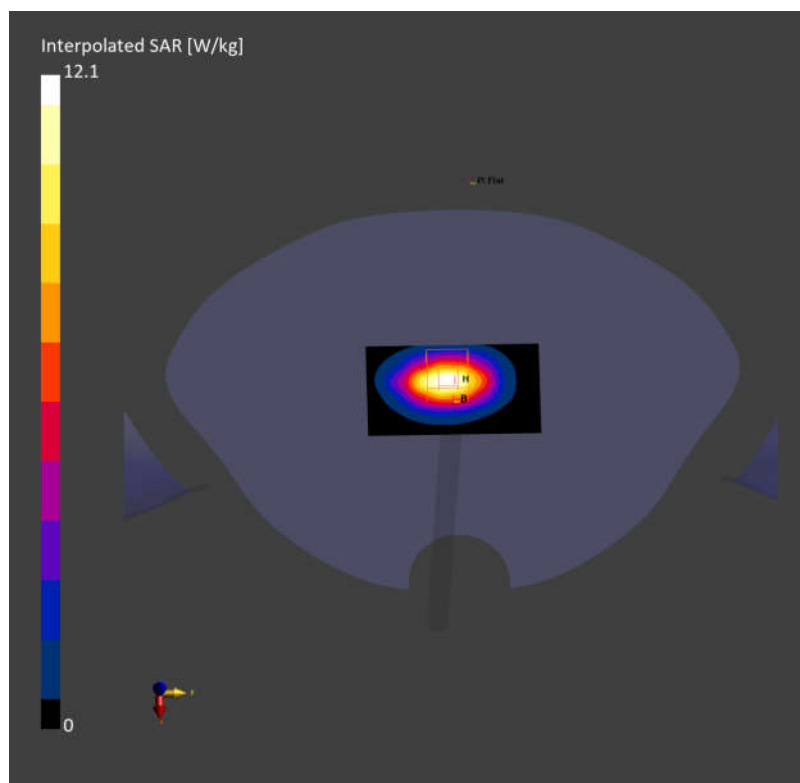
- Probe: EX3DV4 - SN3793; ConvF(7.57, 7.57, 7.57); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

Area Scan (40.0 mm x 90.0 mm): Measurement Grid: 10.0 mm x 15.0 mm

SAR (1g) = 10.1 W/kg; SAR (10g) = 5.19 W/kg;

Zoom Scan (30.0 mm x 30.0 mm x 30.0 mm): Measurement Grid: 6.0 mm x 6.0 mm x 1.5 mm

Power Drift = 0.02 dB

SAR (1g) = 10.3 W/kg; SAR (10g) = 5.33 W/kg;

Measurement Report for Device, , , CW, Channel 0 (2450.000 MHz)

Communication System: ; Frequency: 2450.000

Medium: HSL Medium parameters used: $f = 2450.000$ MHz; $\sigma = 1.82$ S/m; $\epsilon_r = 38.8$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.18, 7.18, 7.18); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

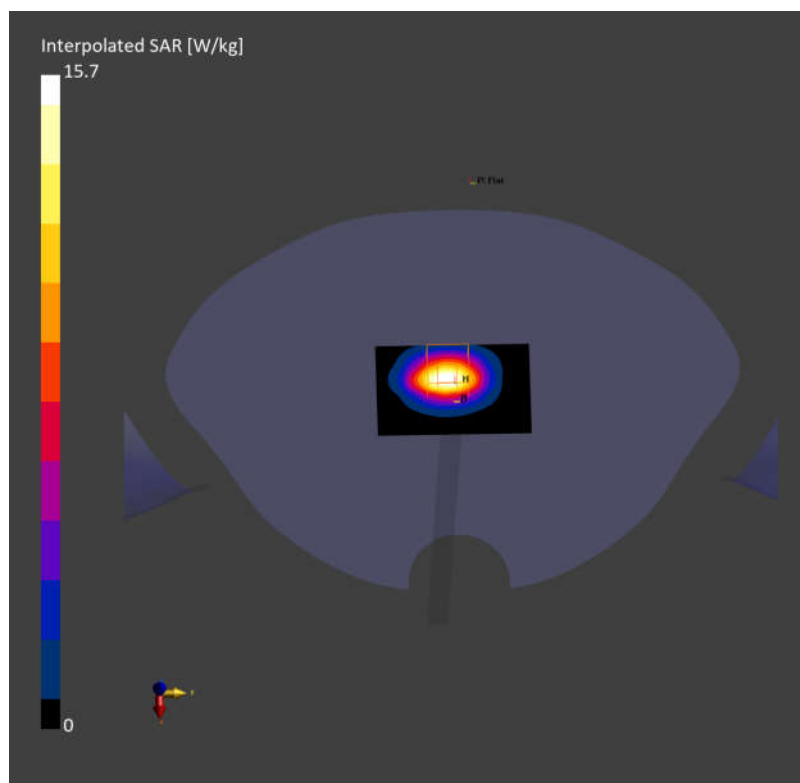
Area Scan (40.0 mm x 80.0 mm): Measurement Grid: 10.0 mm x 10.0 mm

SAR (1g) = 12.2 W/kg; SAR (10g) = 5.72 W/kg;

Zoom Scan (30.0 mm x 30.0 mm x 30.0 mm): Measurement Grid: 5.0 mm x 5.0 mm x 1.5 mm

Power Drift = 0.03 dB

SAR (1g) = 12.3 W/kg; SAR (10g) = 5.67 W/kg;



Measurement Report for Device, , CW, Channel 0 (2600.000 MHz)

Communication System: ; Frequency: 2600.000

Medium: HSL Medium parameters used: $f = 2600.000$ MHz; $\sigma = 1.99$ S/m; $\epsilon_r = 38.6$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(6.94, 6.94, 6.94); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

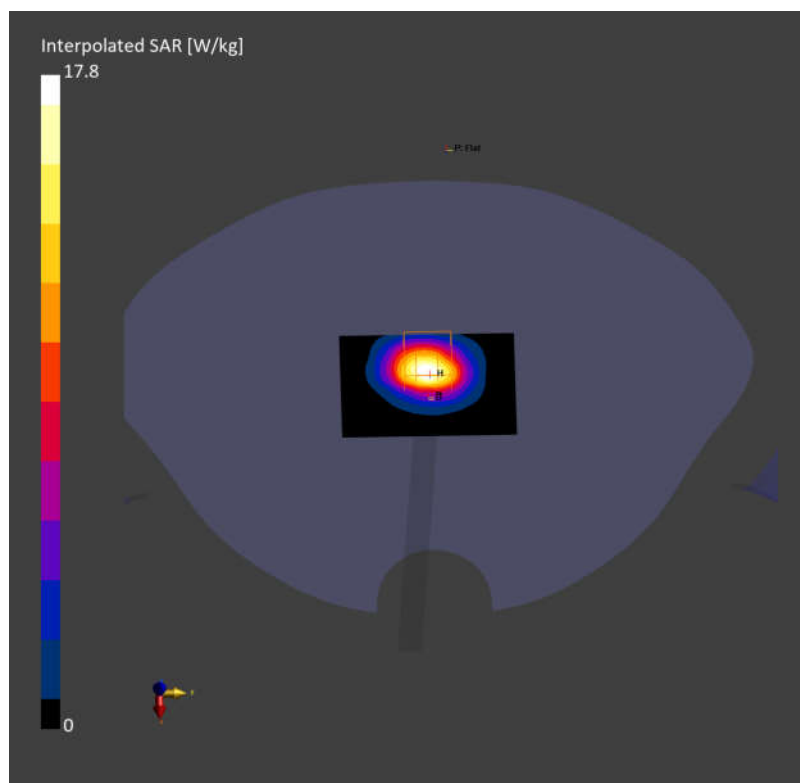
Area Scan (40.0 mm x 80.0 mm): Measurement Grid: 10.0 mm x 10.0 mm

SAR (1g) = 13.6 W/kg; SAR (10g) = 6.22 W/kg;

Zoom Scan (30.0 mm x 30.0 mm x 30.0 mm): Measurement Grid: 5.0 mm x 5.0 mm x 1.5 mm

Power Drift = 0.05 dB

SAR (1g) = 13.7 W/kg; SAR (10g) = 6.16 W/kg;



Measurement Report for Device, , CW, Channel 0 (5250.000 MHz)

Communication System: ; Frequency: 5250.000

Medium: HSL Medium parameters used: $f = 5250.000$ MHz; $\sigma = 4.72$ S/m; $\epsilon_r = 35.8$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(5.02, 5.02, 5.02); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

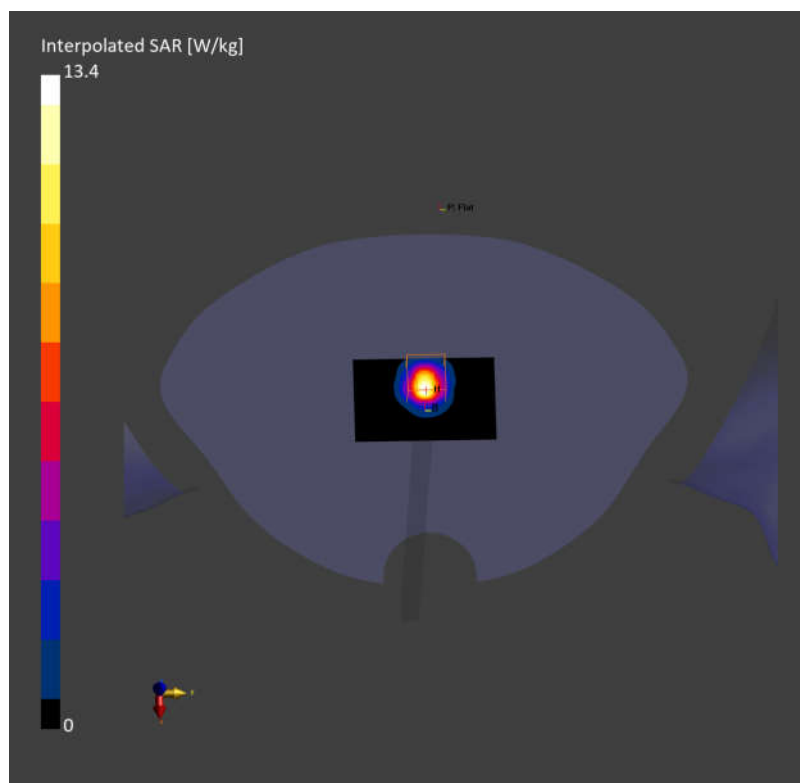
Area Scan (40.0 mm x 80.0 mm): Measurement Grid: 10.0 mm x 10.0 mm

SAR (1g) = 7.84 W/kg; SAR (10g) = 2.16 W/kg;

Zoom Scan (22.0 mm x 22.0 mm x 22.0 mm): Measurement Grid: 4.0 mm x 4.0 mm x 1.4 mm

Power Drift = 0.08 dB

SAR (1g) = 7.68 W/kg; SAR (10g) = 2.11 W/kg;



Measurement Report for Device, , CW, Channel 0 (5600.000 MHz)

Communication System: ; Frequency: 5600.000

Medium: HSL Medium parameters used: $f = 5600.000$ MHz; $\sigma = 5.10$ S/m; $\epsilon_r = 35.1$

DASY8 Configuration:

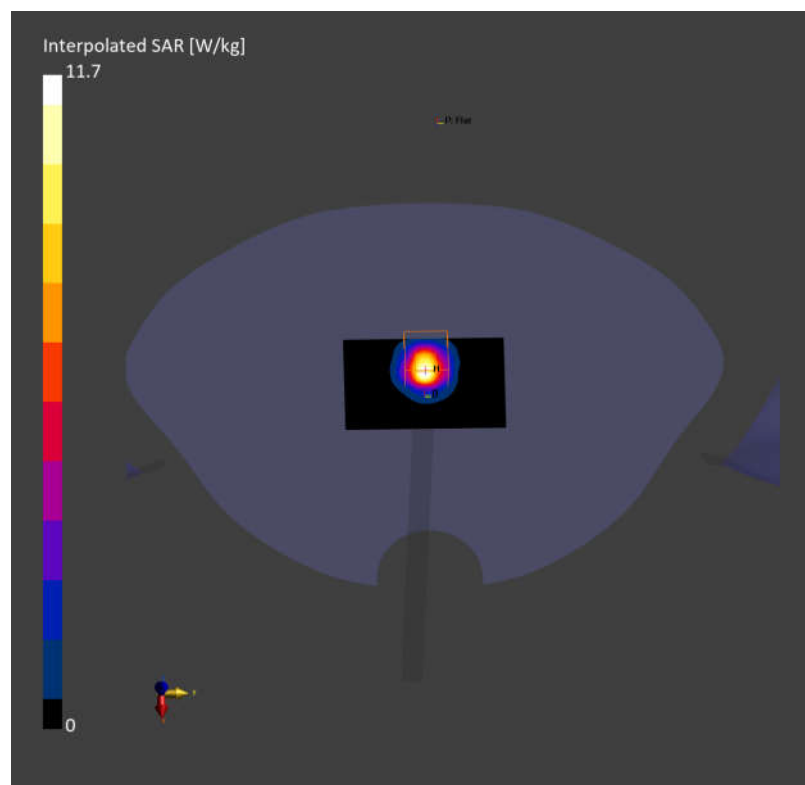
- Probe: EX3DV4 - SN3793; ConvF(4.48, 4.48, 4.48); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

Area Scan (40.0 mm x 80.0 mm): Measurement Grid: 10.0 mm x 10.0 mm

SAR (1g) = 7.71 W/kg; SAR (10g) = 2.22 W/kg;

Zoom Scan (22.0 mm x 22.0 mm x 22.0 mm): Measurement Grid: 4.0 mm x 4.0 mm x 1.4 mm

Power Drift = 0.09 dB

SAR (1g) = 7.84 W/kg; SAR (10g) = 2.22 W/kg;

Measurement Report for Device, , CW, Channel 0 (5750.000 MHz)

Communication System: ; Frequency: 5750.000

Medium: HSL Medium parameters used: $f = 5750.000$ MHz; $\sigma = 5.28$ S/m; $\epsilon_r = 34.7$

DASY8 Configuration:

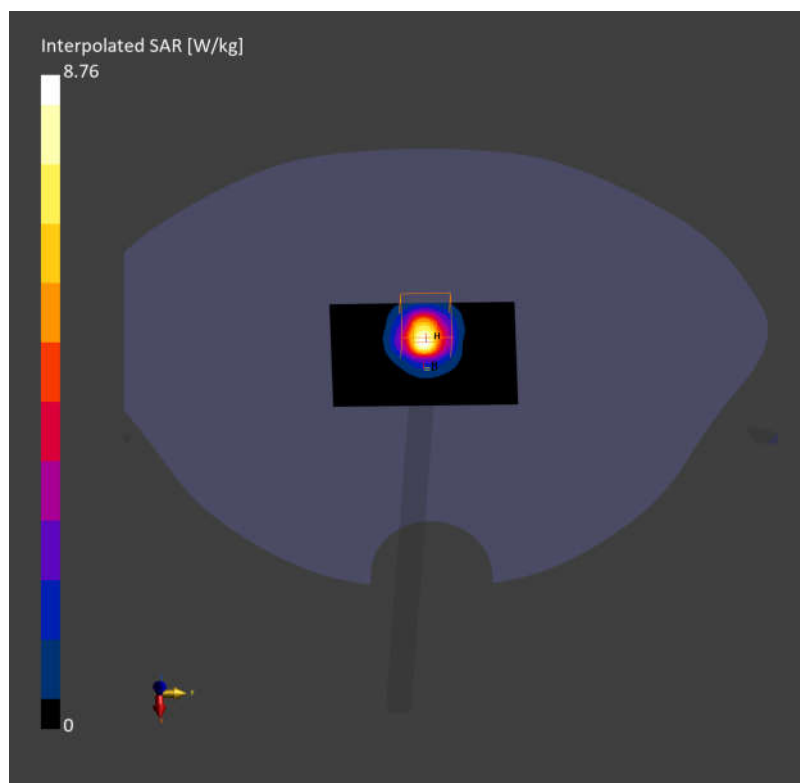
- Probe: EX3DV4 - SN3793; ConvF(4.58, 4.58, 4.58); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

Area Scan (40.0 mm x 80.0 mm): Measurement Grid: 10.0 mm x 10.0 mm

SAR (1g) = 7.91 W/kg; SAR (10g) = 2.08 W/kg;

Zoom Scan (22.0 mm x 22.0 mm x 22.0 mm): Measurement Grid: 4.0 mm x 4.0 mm x 1.4 mm

Power Drift = 0.01 dB

SAR (1g) = 8.01 W/kg; SAR (10g) = 2.19 W/kg;

Measurement Report for Device, , , CW, Channel 0 (750.000 MHz)

Communication System: ; Frequency: 750.000

Medium: HSL Medium parameters used: $f = 750.000$ MHz; $\sigma = 0.882$ S/m; $\epsilon_r = 41.7$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.29, 9.29, 9.29); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

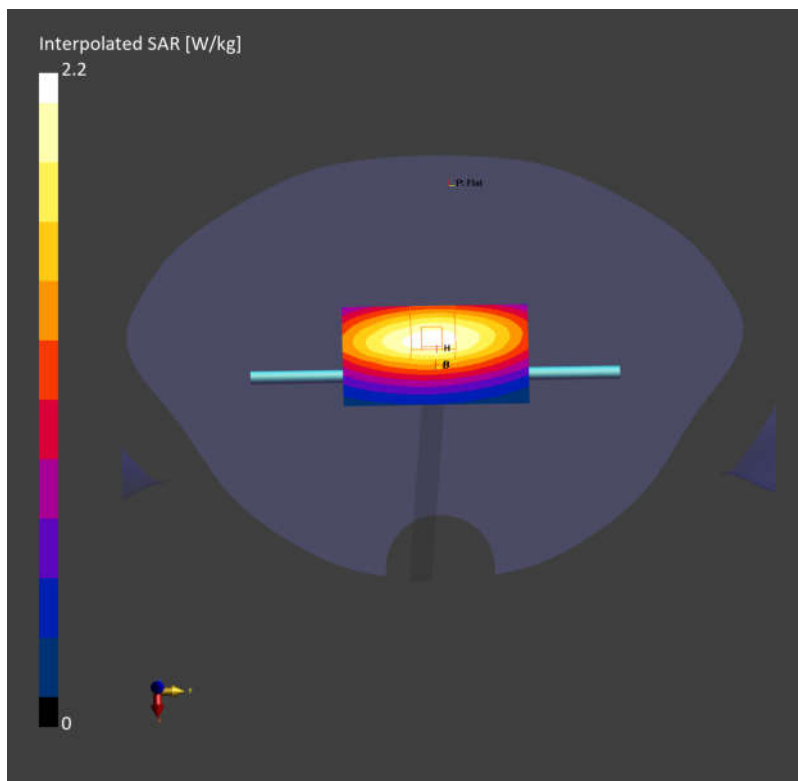
Area Scan (40.0 mm x 90.0 mm): Measurement Grid: 10.0 mm x 15.0 mm

SAR (1g) = 2.16 W/kg; SAR (10g) = 1.25 W/kg;

Zoom Scan (30.0 mm x 30.0 mm x 30.0 mm): Measurement Grid: 6.0 mm x 6.0 mm x 1.5 mm

Power Drift = 0.09 dB

SAR (1g) = 2.28 W/kg; SAR (10g) = 1.40 W/kg;



Measurement Report for Device, , , CW, Channel 0 (835.000 MHz)

Communication System: ; Frequency: 835.000

Medium: HSL Medium parameters used: $f = 835.000$ MHz; $\sigma = 0.904$ S/m; $\epsilon_r = 42.0$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(8.88, 8.88, 8.88); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

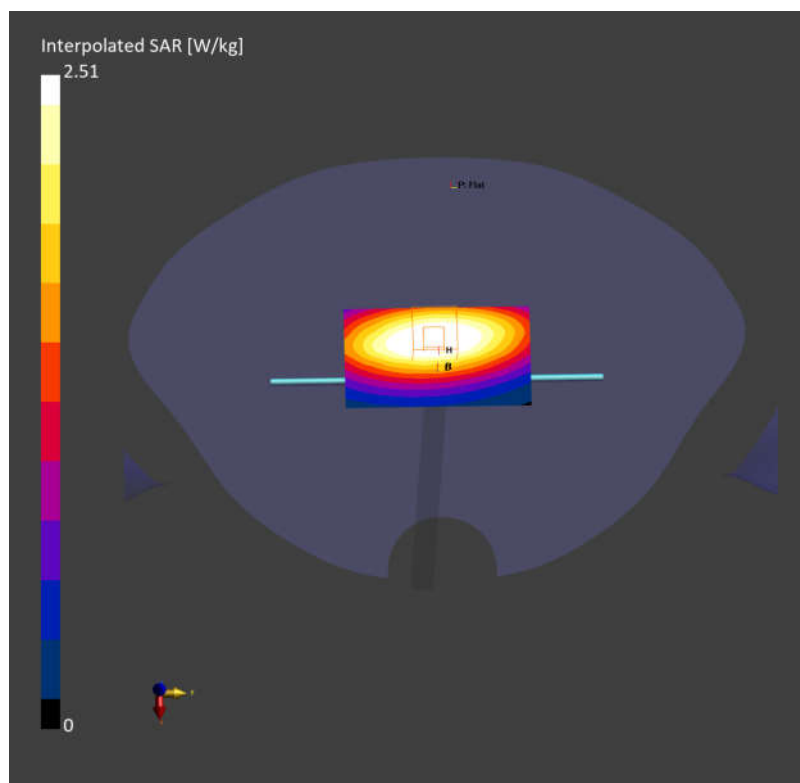
Area Scan (40.0 mm x 90.0 mm): Measurement Grid: 10.0 mm x 15.0 mm

SAR (1g) = 2.35 W/kg; SAR (10g) = 1.51 W/kg;

Zoom Scan (30.0 mm x 30.0 mm x 30.0 mm): Measurement Grid: 6.0 mm x 6.0 mm x 1.5 mm

Power Drift = 0.01 dB

SAR (1g) = 2.51 W/kg; SAR (10g) = 1.59 W/kg;



Measurement Report for Device, , , CW, Channel 0 (1750.000 MHz)

Communication System: ; Frequency: 1750.000

Medium: HSL Medium parameters used: $f = 1750.000$ MHz; $\sigma = 1.34$ S/m; $\epsilon_r = 38.6$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.86, 7.86, 7.86); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

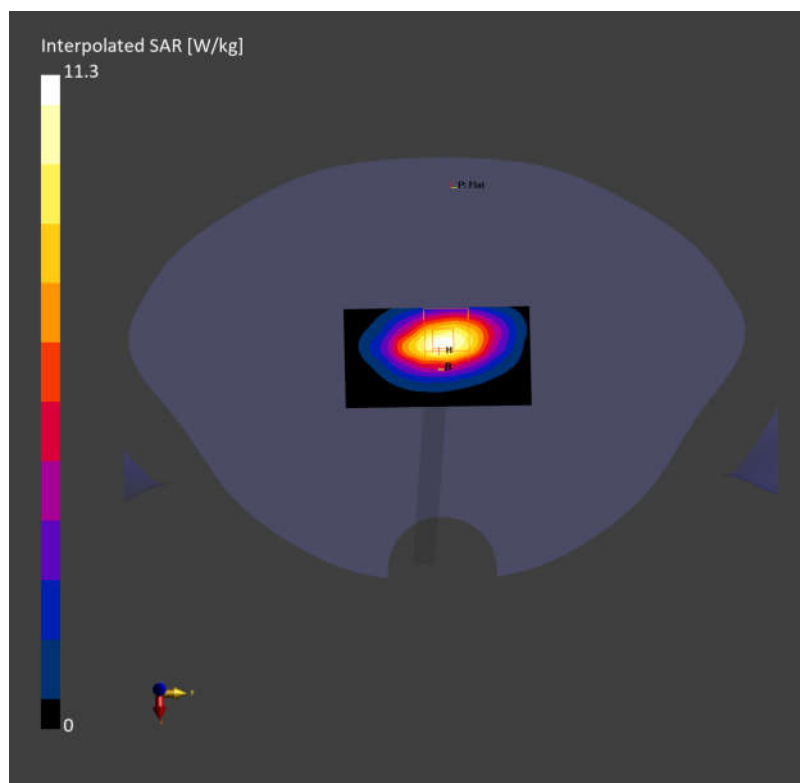
Area Scan (40.0 mm x 90.0 mm): Measurement Grid: 10.0 mm x 15.0 mm

SAR (1g) = 9.03 W/kg; SAR (10g) = 4.74 W/kg;

Zoom Scan (30.0 mm x 30.0 mm x 30.0 mm): Measurement Grid: 6.0 mm x 6.0 mm x 1.5 mm

Power Drift = 0.08 dB

SAR (1g) = 9.48 W/kg; SAR (10g) = 5.02 W/kg;



Measurement Report for Device, , CW, Channel 0 (1950.000 MHz)

Communication System: ; Frequency: 1950.000

Medium: HSL Medium parameters used: $f = 1950.000$ MHz; $\sigma = 1.39$ S/m; $\epsilon_r = 39.1$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.57, 7.57, 7.57); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

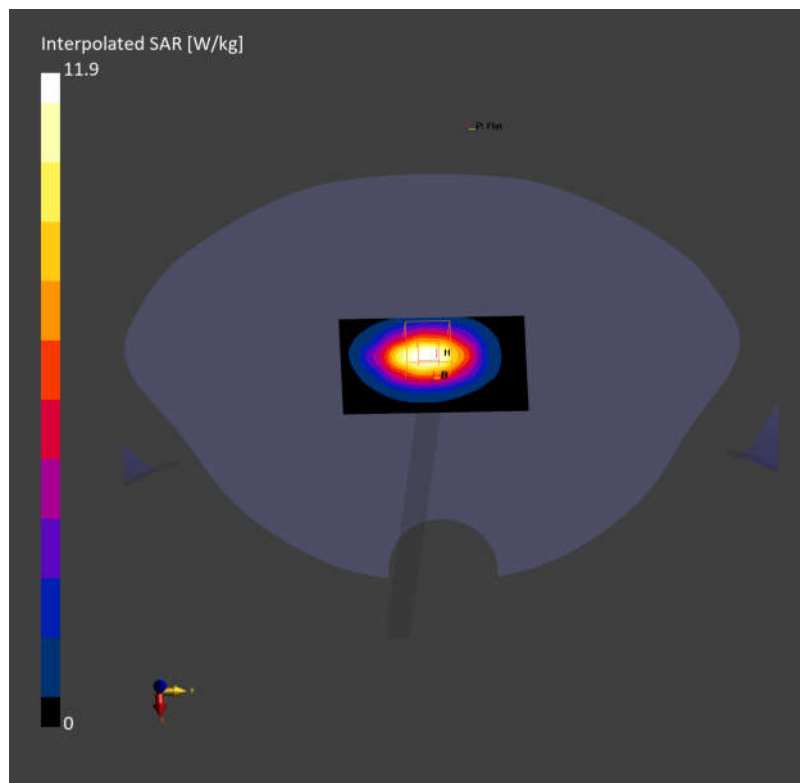
Area Scan (40.0 mm x 90.0 mm): Measurement Grid: 10.0 mm x 15.0 mm

SAR (1g) = 9.95 W/kg; SAR (10g) = 5.15 W/kg;

Zoom Scan (30.0 mm x 30.0 mm x 30.0 mm): Measurement Grid: 6.0 mm x 6.0 mm x 1.5 mm

Power Drift = 0.05 dB

SAR (1g) = 10.4 W/kg; SAR (10g) = 5.30 W/kg;



Measurement Report for Device, , CW, Channel 0 (2450.000 MHz)

Communication System: ; Frequency: 2450.000

Medium: HSL Medium parameters used: $f = 2450.000$ MHz; $\sigma = 1.80$ S/m; $\epsilon_r = 38.7$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.18, 7.18, 7.18); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

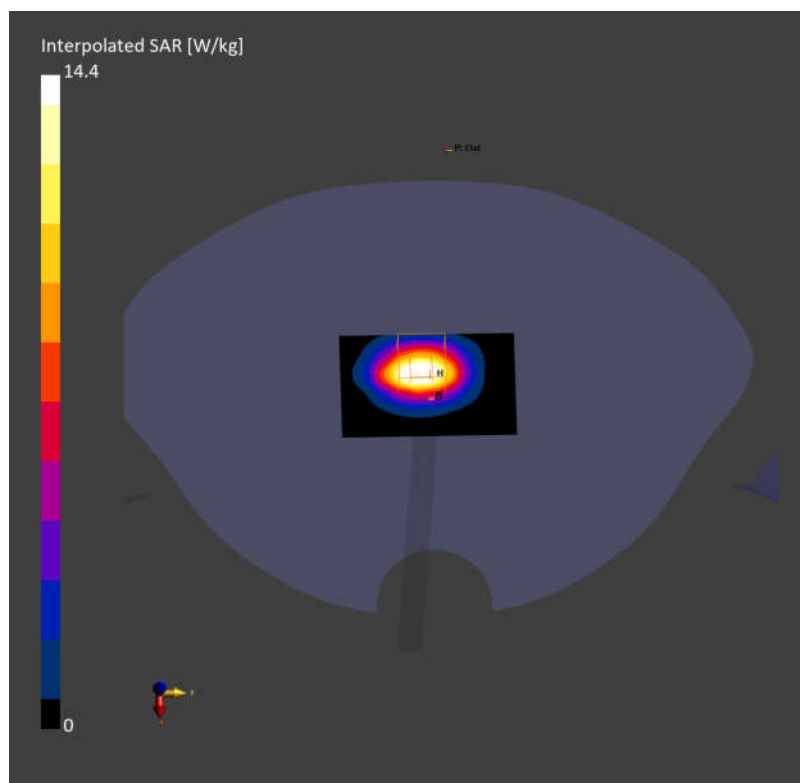
Area Scan (40.0 mm x 80.0 mm): Measurement Grid: 10.0 mm x 10.0 mm

SAR (1g) = 11.6 W/kg; SAR (10g) = 5.68 W/kg;

Zoom Scan (30.0 mm x 30.0 mm x 30.0 mm): Measurement Grid: 5.0 mm x 5.0 mm x 1.5 mm

Power Drift = 0.02 dB

SAR (1g) = 12.1 W/kg; SAR (10g) = 5.71 W/kg;



Measurement Report for Device, , CW, Channel 0 (2600.000 MHz)

Communication System: ; Frequency: 2600.000

Medium: HSL Medium parameters used: $f = 2600.000$ MHz; $\sigma = 1.98$ S/m; $\epsilon_r = 38.4$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(6.94, 6.94, 6.94); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

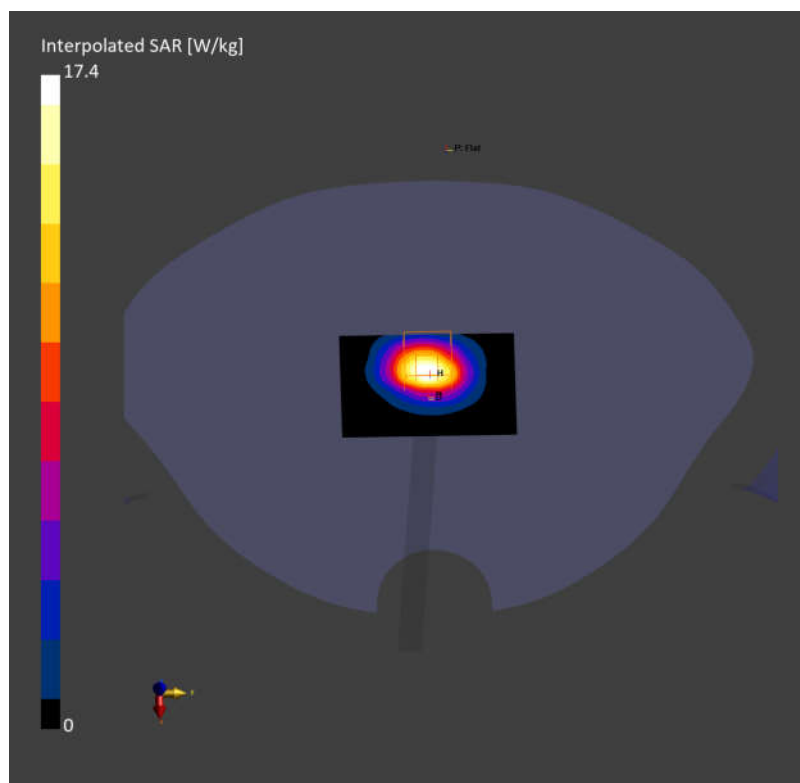
Area Scan (40.0 mm x 80.0 mm): Measurement Grid: 10.0 mm x 10.0 mm

SAR (1g) = 12.5 W/kg; SAR (10g) = 6.01 W/kg;

Zoom Scan (30.0 mm x 30.0 mm x 30.0 mm): Measurement Grid: 5.0 mm x 5.0 mm x 1.5 mm

Power Drift = 0.07 dB

SAR (1g) = 13.8 W/kg; SAR (10g) = 6.16 W/kg;



Measurement Report for Device, , CW, Channel 0 (5250.000 MHz)

Communication System: ; Frequency: 5250.000

Medium: HSL Medium parameters used: $f = 5250.000$ MHz; $\sigma = 4.68$ S/m; $\epsilon_r = 35.6$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(5.02, 5.02, 5.02); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

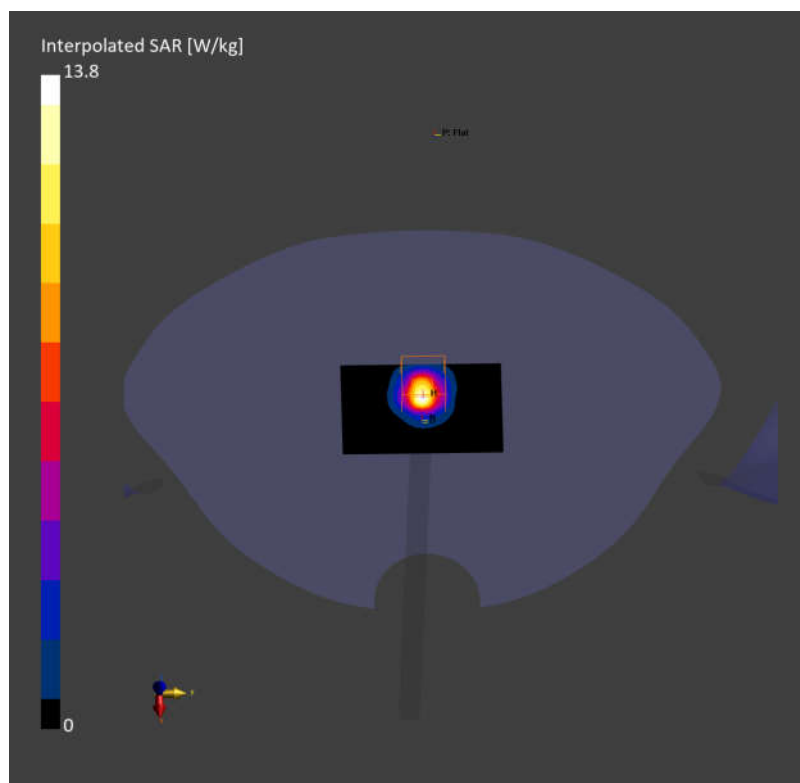
Area Scan (40.0 mm x 80.0 mm): Measurement Grid: 10.0 mm x 10.0 mm

SAR (1g) = 7.64 W/kg; SAR (10g) = 2.06 W/kg;

Zoom Scan (22.0 mm x 22.0 mm x 22.0 mm): Measurement Grid: 4.0 mm x 4.0 mm x 1.4 mm

Power Drift = 0.06 dB

SAR (1g) = 7.80 W/kg; SAR (10g) = 2.15 W/kg;



Measurement Report for Device, , , CW, Channel 0 (5600.000 MHz)

Communication System: ; Frequency: 5600.000

Medium: HSL Medium parameters used: $f = 5600.000$ MHz; $\sigma = 5.06$ S/m; $\epsilon_r = 35.0$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(4.48, 4.48, 4.48); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

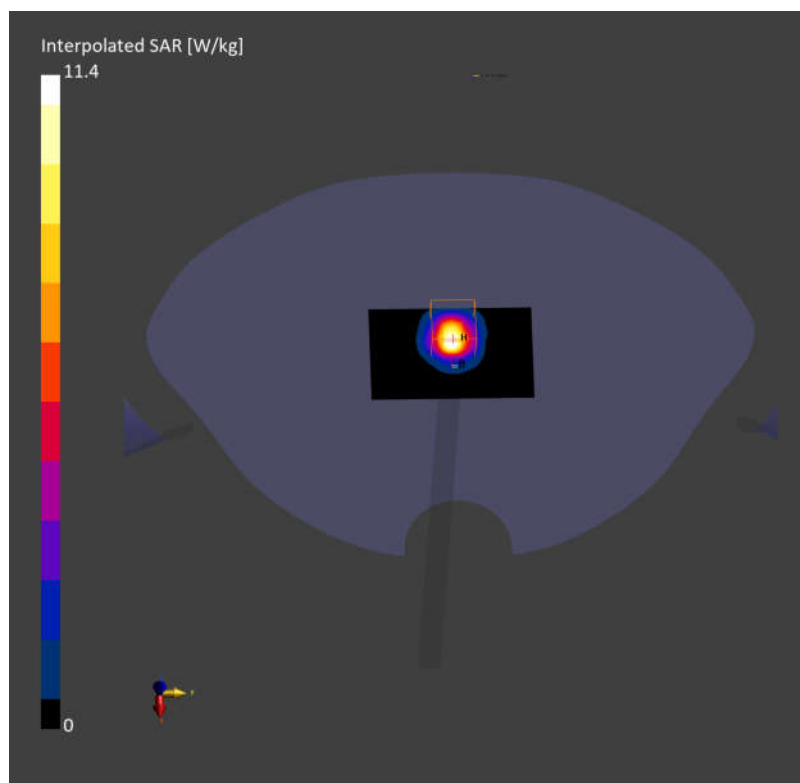
Area Scan (40.0 mm x 80.0 mm): Measurement Grid: 10.0 mm x 10.0 mm

SAR (1g) = 7.16 W/kg; SAR (10g) = 2.02 W/kg;

Zoom Scan (22.0 mm x 22.0 mm x 22.0 mm): Measurement Grid: 4.0 mm x 4.0 mm x 1.4 mm

Power Drift = 0.14 dB

SAR (1g) = 7.95 W/kg; SAR (10g) = 2.27 W/kg;



Measurement Report for Device, , CW, Channel 0 (5750.000 MHz)

Communication System: ; Frequency: 5750.000

Medium: HSL Medium parameters used: $f = 5750.000$ MHz; $\sigma = 5.23$ S/m; $\epsilon_r = 34.6$

DASY8 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(4.58, 4.58, 4.58); Calibrated: 2024-03-04
- Sensor-Surface: 1.4 mm
- Electronics: DAE4ip Sn1374; Calibrated: 2024-10-30
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Serial: 2155
- Measurement Software: cDASY8 V16.4.0.5005

Area Scan (40.0 mm x 80.0 mm): Measurement Grid: 10.0 mm x 10.0 mm

SAR (1g) = 7.84 W/kg; SAR (10g) = 2.13 W/kg;

Zoom Scan (22.0 mm x 22.0 mm x 22.0 mm): Measurement Grid: 4.0 mm x 4.0 mm x 1.4 mm

Power Drift = 0.04 dB

SAR (1g) = 8.09 W/kg; SAR (10g) = 2.26 W/kg;

