

Test Laboratory: Compliance Certification Services

6_System Performance Check @ 2450MHz (Body Tissue) - 071608

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:748

Communication System: CW - 2450 MHz; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 23.5 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(7.91, 7.91, 7.91); Calibrated: 4/23/2008
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 11/16/2007
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=10mm, Pin=250mW/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 17.1 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

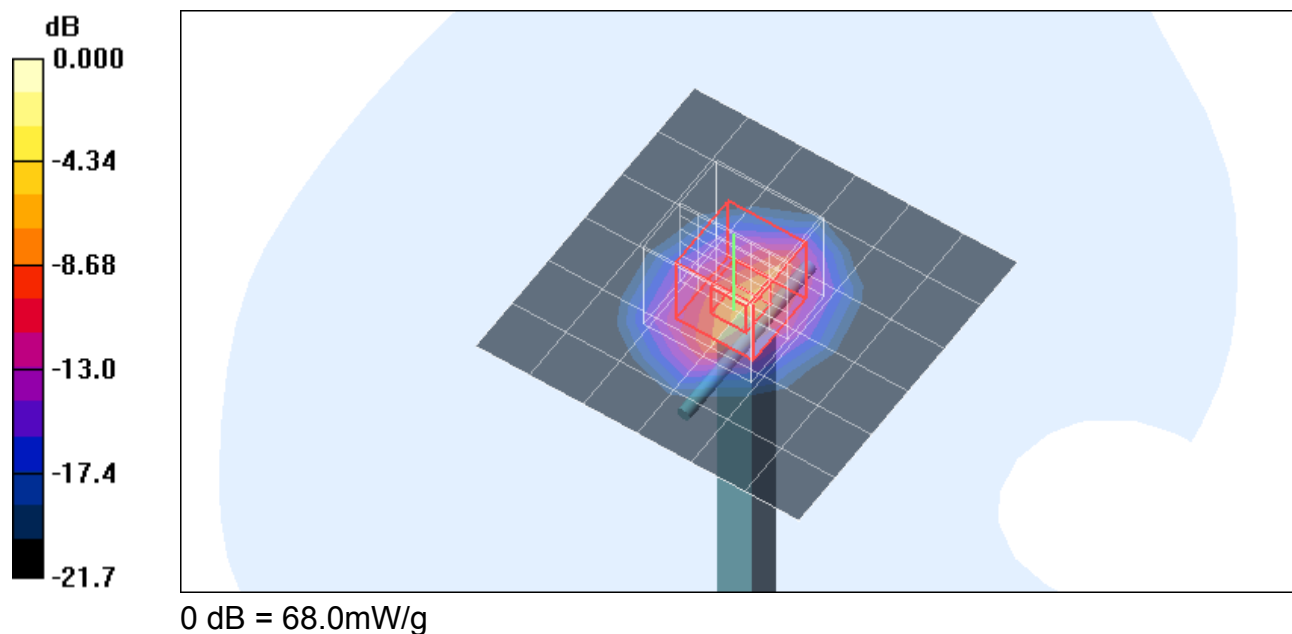
Reference Value = 93.3 V/m; Power Drift = 0.080 dB

Peak SAR (extrapolated) = 96.9 W/kg

SAR(1 g) = 48.5 mW/g; SAR(10 g) = 22.7 mW/g

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 68.0 mW/g



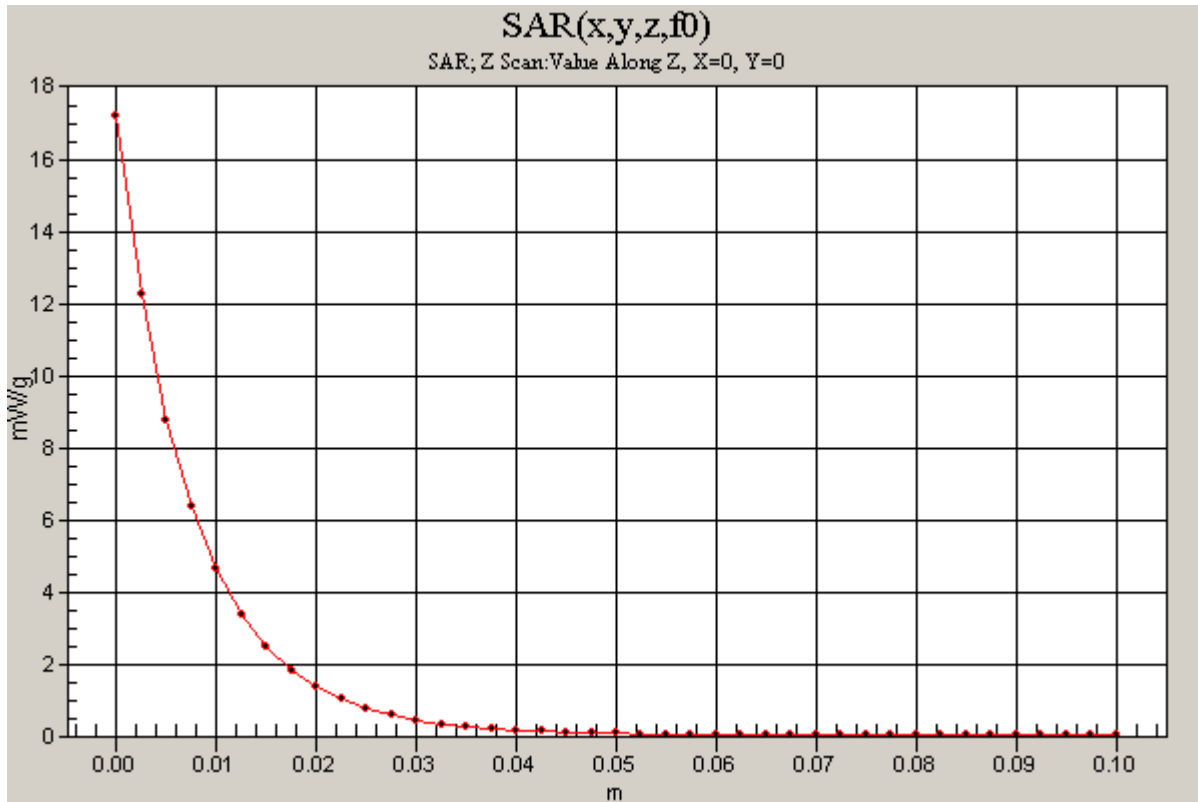
Test Laboratory: Compliance Certification Services

6_System Performance Check @ 2450MHz (Body Tissue) - 071608

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:748

Communication System: CW - 2450 MHz; Frequency: 2450 MHz; Duty Cycle: 1:1

d=10mm, Pin=250mW/Z Scan (1x1x41): Measurement grid: dx=20mm, dy=20mm, dz=2.5mm
Maximum value of SAR (measured) = 17.2 mW/g



Test Laboratory: Compliance Certification Services

System Performance Check - D2450V2

DUT: Dipole ; Type: D2450V2; Serial: 748

Communication System: System Check Signal - CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.94$ mho/m; $\epsilon_r = 50.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(7.91, 7.91, 7.91); Calibrated: 4/23/2008
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 11/16/2007
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:XXXX
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=10mm, Pin=250mW/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 15.6 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

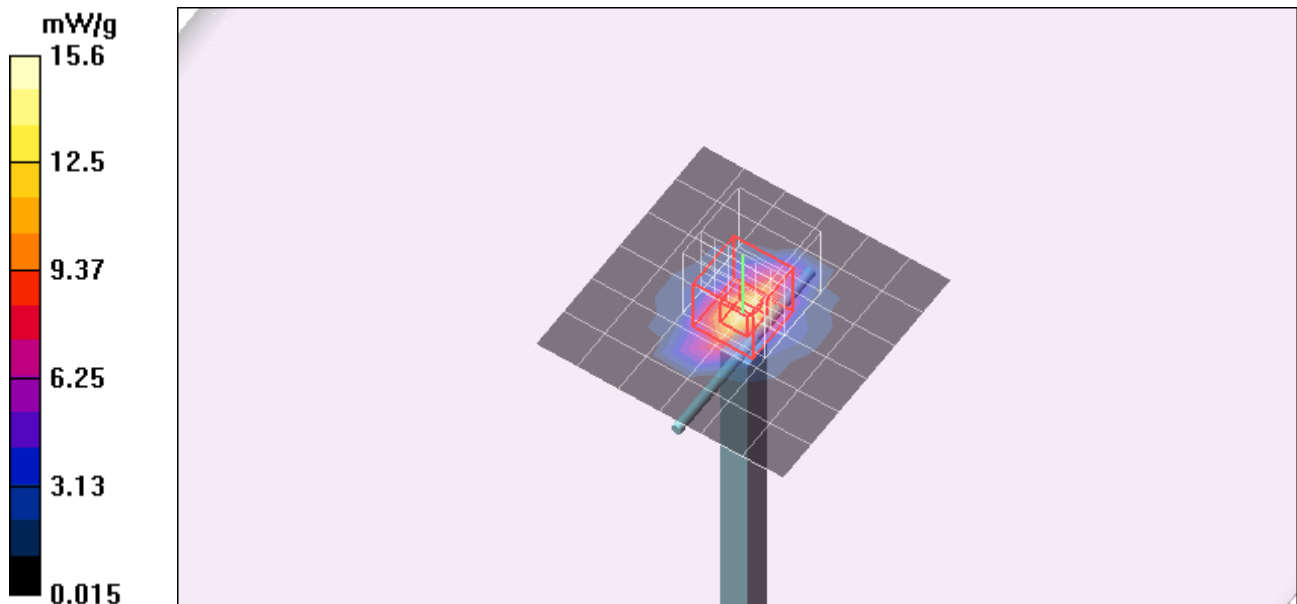
Reference Value = 90.6 V/m; Power Drift = -0.220 dB

Peak SAR (extrapolated) = 94.0 W/kg

SAR(1 g) = 47.9 mW/g; SAR(10 g) = 22.7 mW/g

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 62.9 mW/g



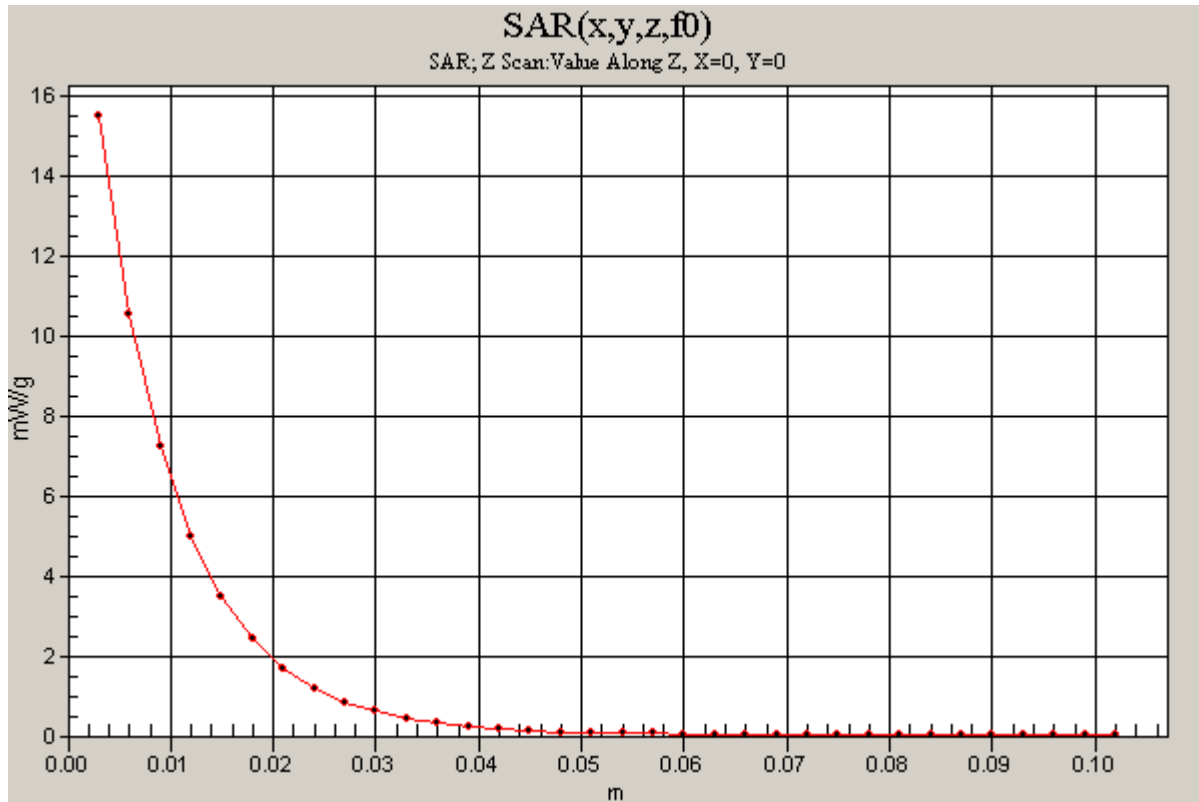
Test Laboratory: Compliance Certification Services

System Performance Check - D2450V2

DUT: Dipole ; Type: D2450V2; Serial: 748

Communication System: System Check Signal - CW; Frequency: 2450 MHz;Duty Cycle: 1:1

d=10mm, Pin=250mW/Z Scan (1x1x34): Measurement grid: dx=20mm, dy=20mm, dz=3mm
Maximum value of SAR (measured) = 15.5 mW/g



Test Laboratory: Compliance Certification Services

System Performance Check @ 5 GHz

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: CW 5200MHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.42$ mho/m; $\epsilon_r = 45.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Room Ambient Temperature: 25.5 deg. C; Liquid Temperature: 23.5 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(4.21, 4.21, 4.21); Calibrated: 4/23/2008
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 11/16/2007
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=10mm, Pin=250mW/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 21.8 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

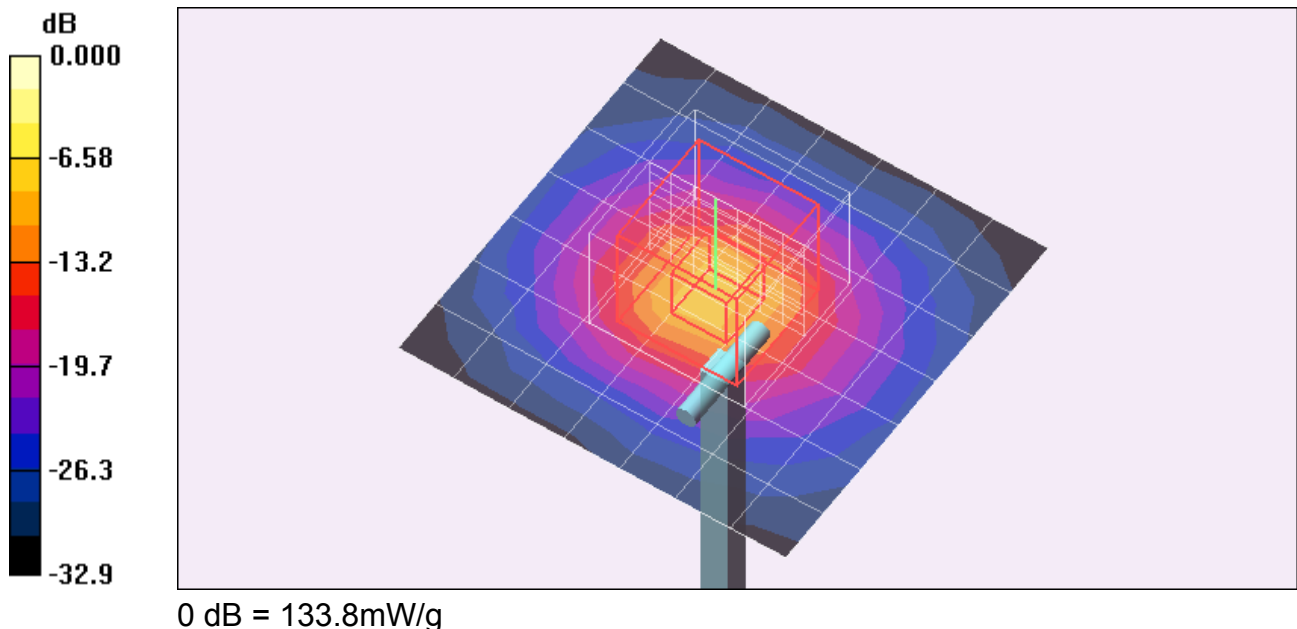
Reference Value = 82.2 V/m; Power Drift = 0.132 dB

Peak SAR (extrapolated) = 300.3 W/kg

SAR(1 g) = 76.9 mW/g; SAR(10 g) = 22.1 mW/g

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 133.8 mW/g



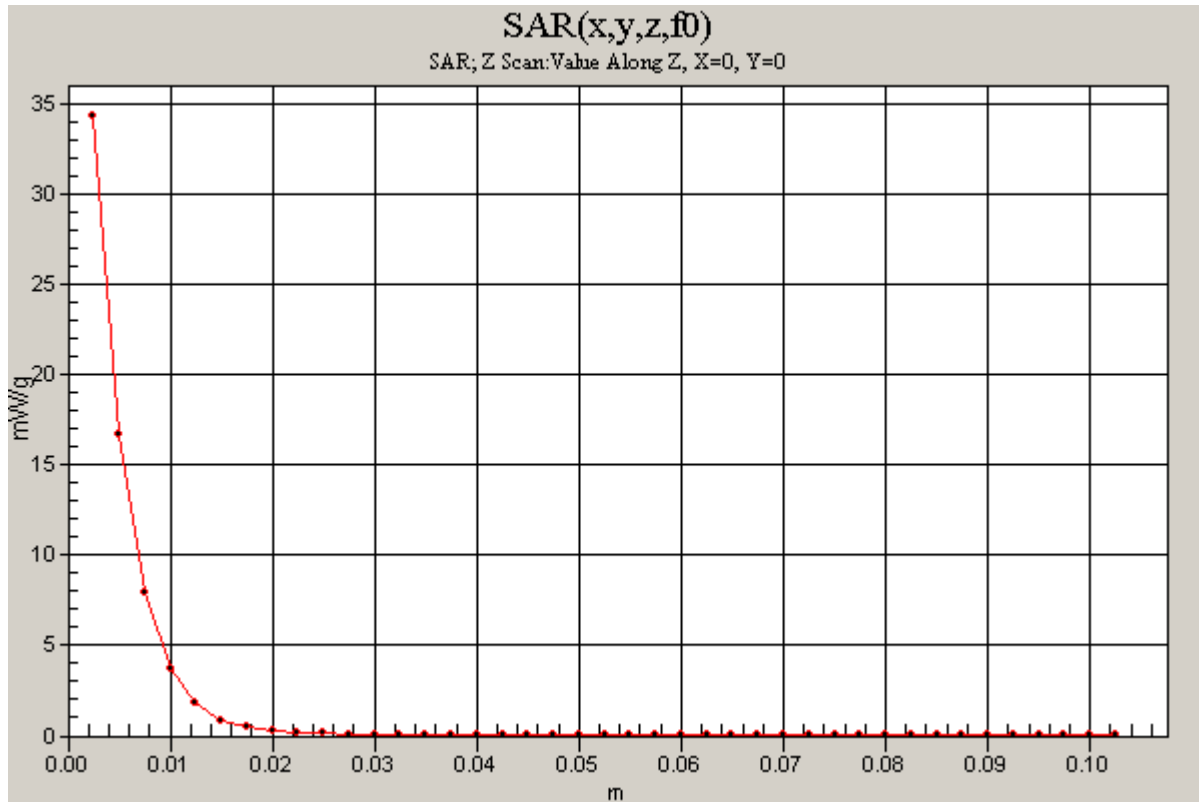
Test Laboratory: Compliance Certification Services

System Performance Check @ 5 GHz

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: CW 5200MHz; Frequency: 5200 MHz;Duty Cycle: 1:1

d=10mm, Pin=250mW/Z Scan (1x1x41): Measurement grid: dx=20mm, dy=20mm, dz=2.5mm
Maximum value of SAR (measured) = 34.3 mW/g



Test Laboratory: Compliance Certification Services

System Performance Check @ 5 GHz

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: CW 5200MHz; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.83$ mho/m; $\epsilon_r = 45.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Room Ambient Temperature: 25.5 deg. C; Liquid Temperature: 23.5 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(3.99, 3.99, 3.99); Calibrated: 4/23/2008
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 11/16/2007
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

5.5 GHz d=10mm, Pin=250mW/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 24.0 mW/g

5.5 GHz d=10mm, Pin=250mW/Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

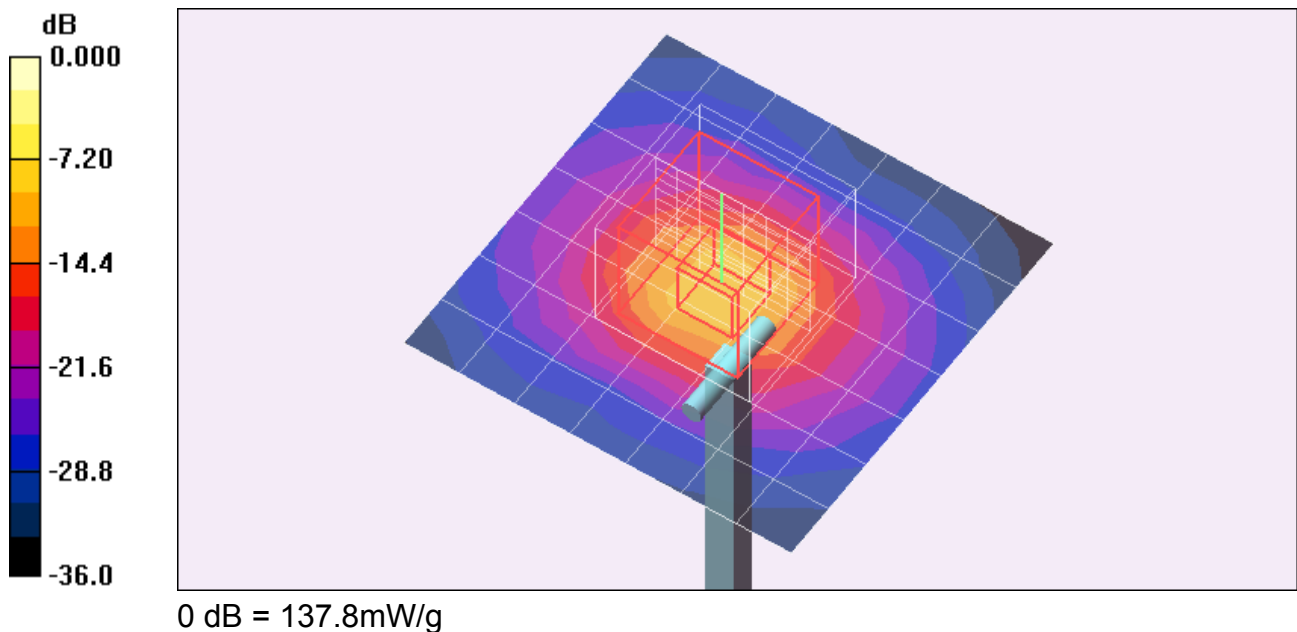
Reference Value = 81.2 V/m; Power Drift = 0.100 dB

Peak SAR (extrapolated) = 326.7 W/kg

SAR(1 g) = 79.3 mW/g; SAR(10 g) = 22.6 mW/g

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 137.8 mW/g



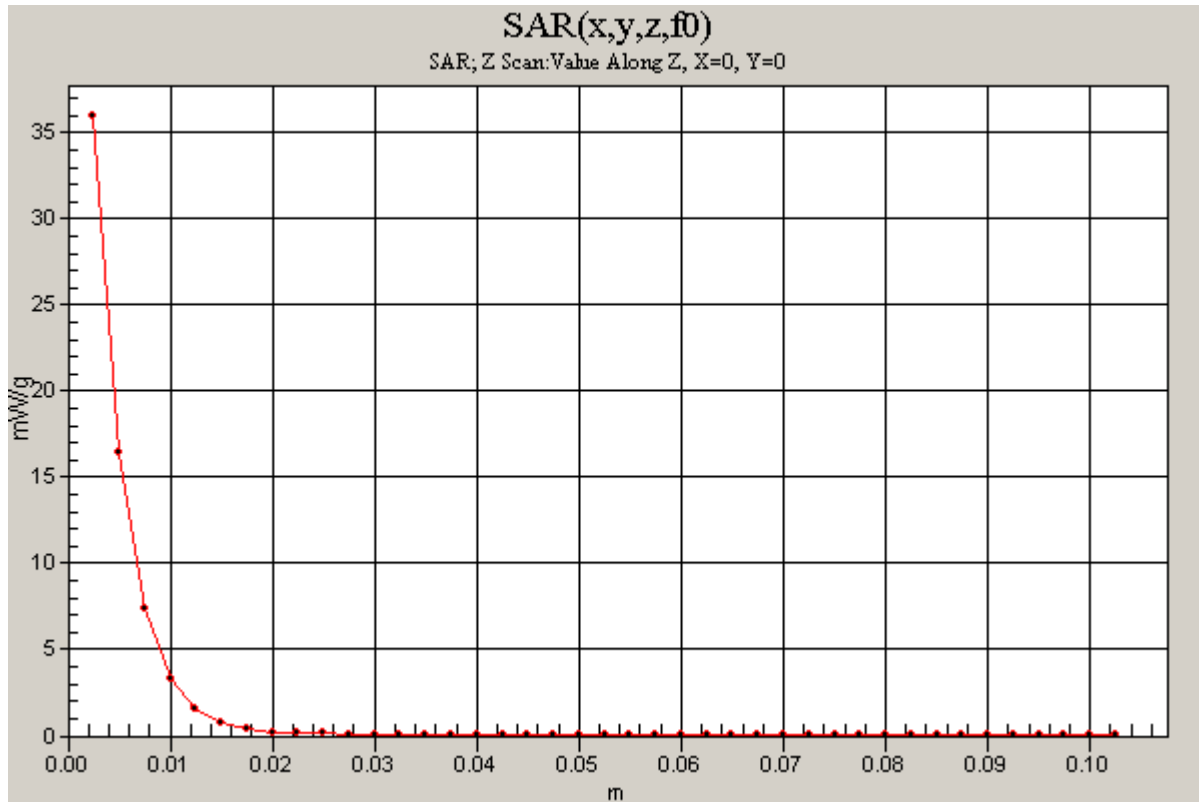
Test Laboratory: Compliance Certification Services

System Performance Check @ 5 GHz

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: CW 5200MHz; Frequency: 5500 MHz;Duty Cycle: 1:1

5.5 GHz d=10mm, Pin=250mW/Z Scan (1x1x41): Measurement grid: dx=20mm, dy=20mm, dz=2.5mm
Maximum value of SAR (measured) = 36.0 mW/g



Test Laboratory: Compliance Certification Services

System Performance Check @ 5 GHz

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: CW 5200MHz; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 6.26 \text{ mho/m}$; $\epsilon_r = 44.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Room Ambient Temperature: 25.5 deg. C; Liquid Temperature: 23.5 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(3.7, 3.7, 3.7); Calibrated: 4/23/2008
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 11/16/2007
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

5.8 GHz d=10mm, Pin=250mW/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 22.5 mW/g

5.8 GHz d=10mm, Pin=250mW/Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

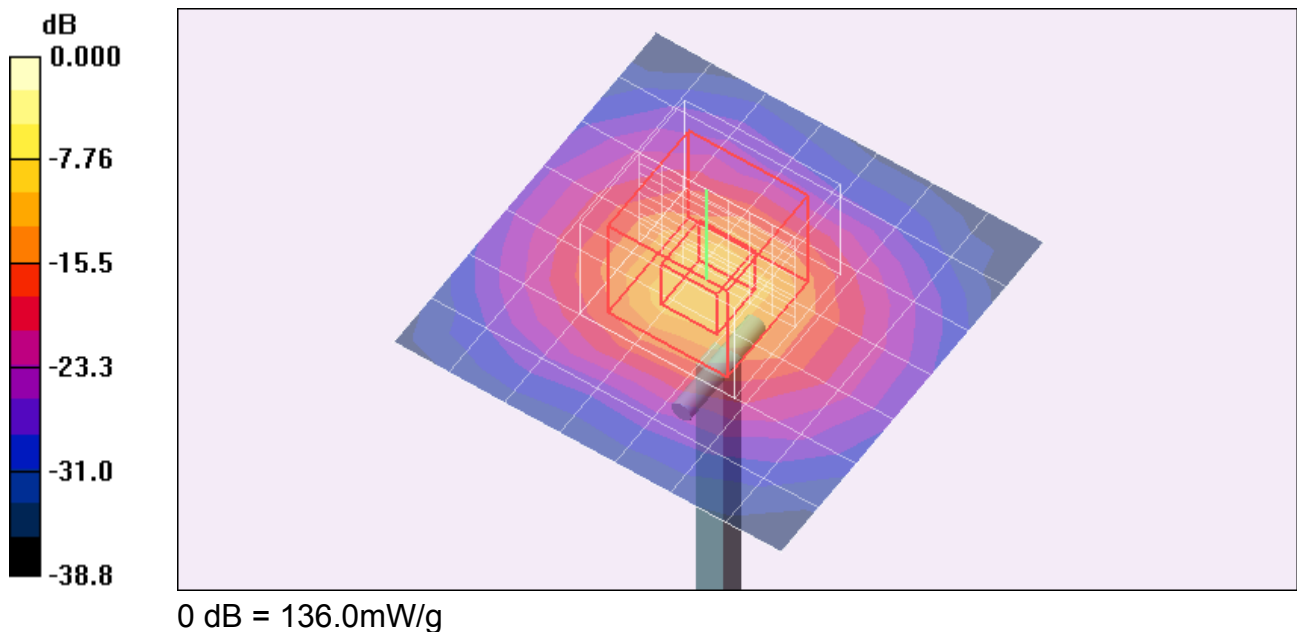
Reference Value = 75.9 V/m; Power Drift = 0.190 dB

Peak SAR (extrapolated) = 339.4 W/kg

SAR(1 g) = 77.9 mW/g; SAR(10 g) = 22.2 mW/g

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 136.0 mW/g



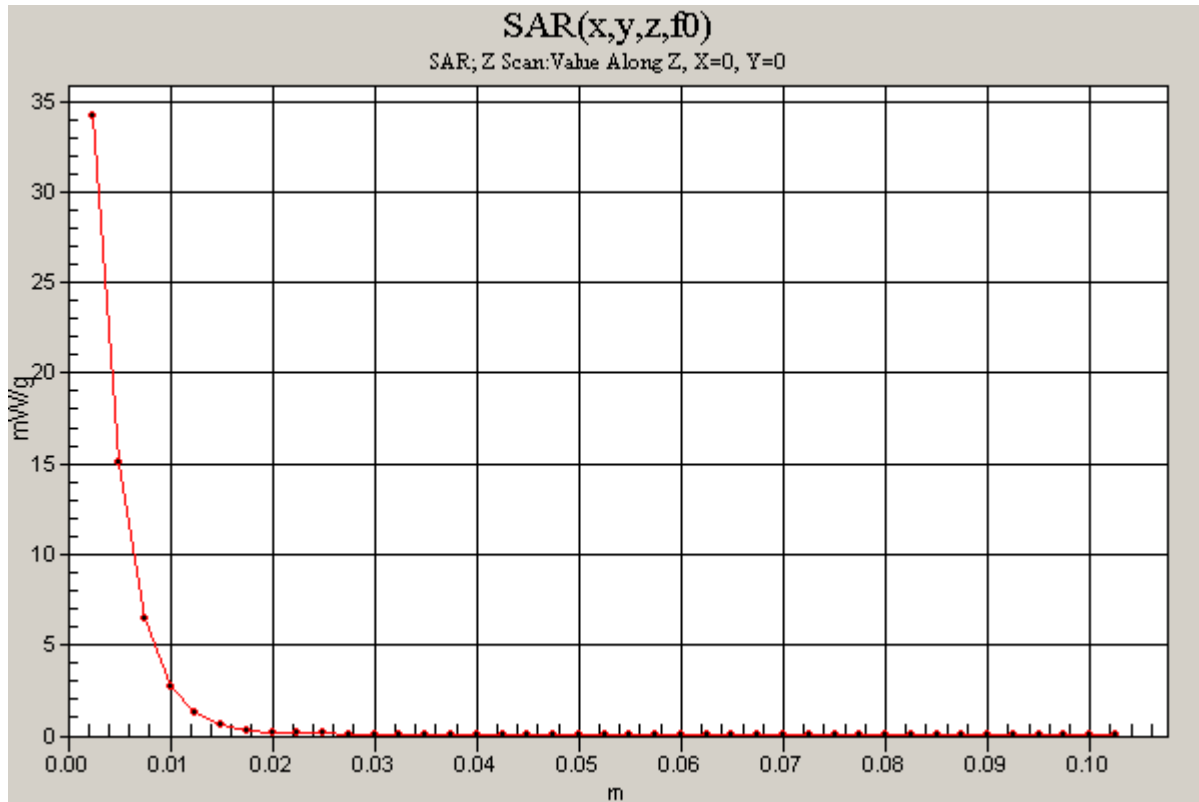
Test Laboratory: Compliance Certification Services

System Performance Check @ 5 GHz

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: CW 5200MHz; Frequency: 5800 MHz;Duty Cycle: 1:1

5.8 GHz d=10mm, Pin=250mW/Z Scan (1x1x41): Measurement grid: dx=20mm, dy=20mm, dz=2.5mm
Maximum value of SAR (measured) = 34.2 mW/g



Test Laboratory: Compliance Certification Services

System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.39$ mho/m; $\epsilon_r = 45.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(4.21, 4.21, 4.21); Calibrated: 4/23/2008
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 11/16/2007
- Phantom: SAM 2 (Twin); Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

5.2 GHz d=10mm, Pin=250mW/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 21.9 mW/g

5.2 GHz d=10mm, Pin=250mW/Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

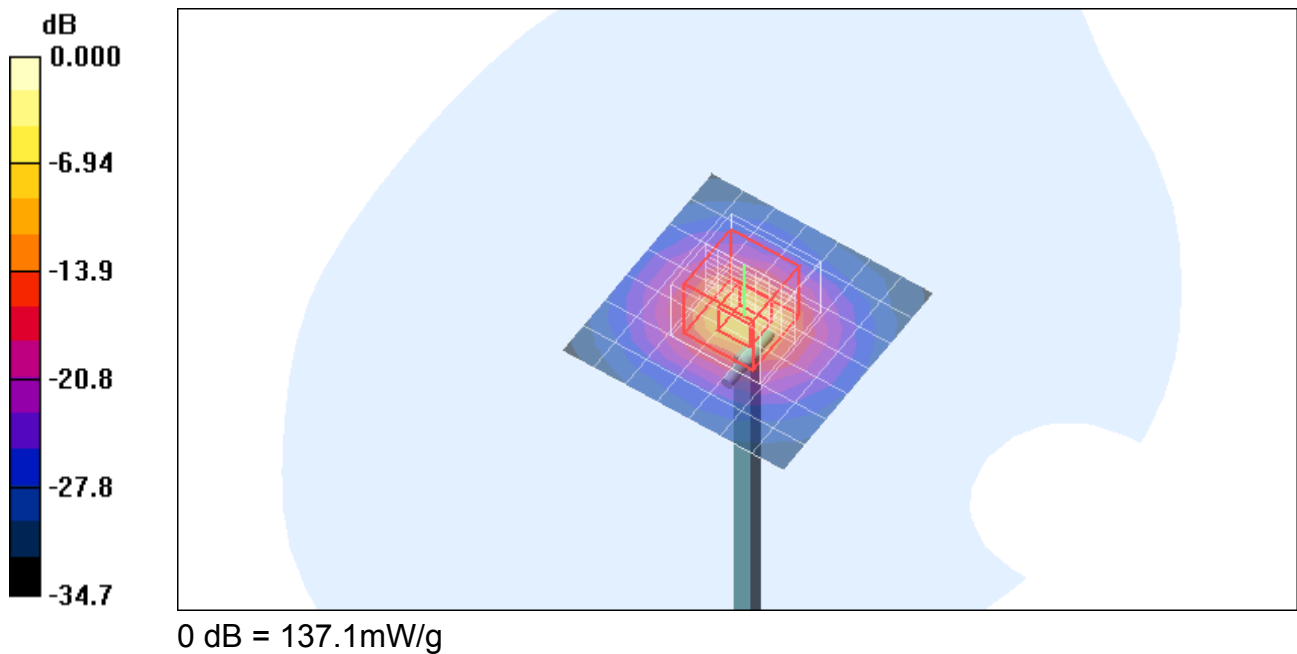
Reference Value = 83.2 V/m; Power Drift = 0.082 dB

Peak SAR (extrapolated) = 302.9 W/kg

SAR(1 g) = 77.3 mW/g; SAR(10 g) = 21.8 mW/g

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 137.1 mW/g



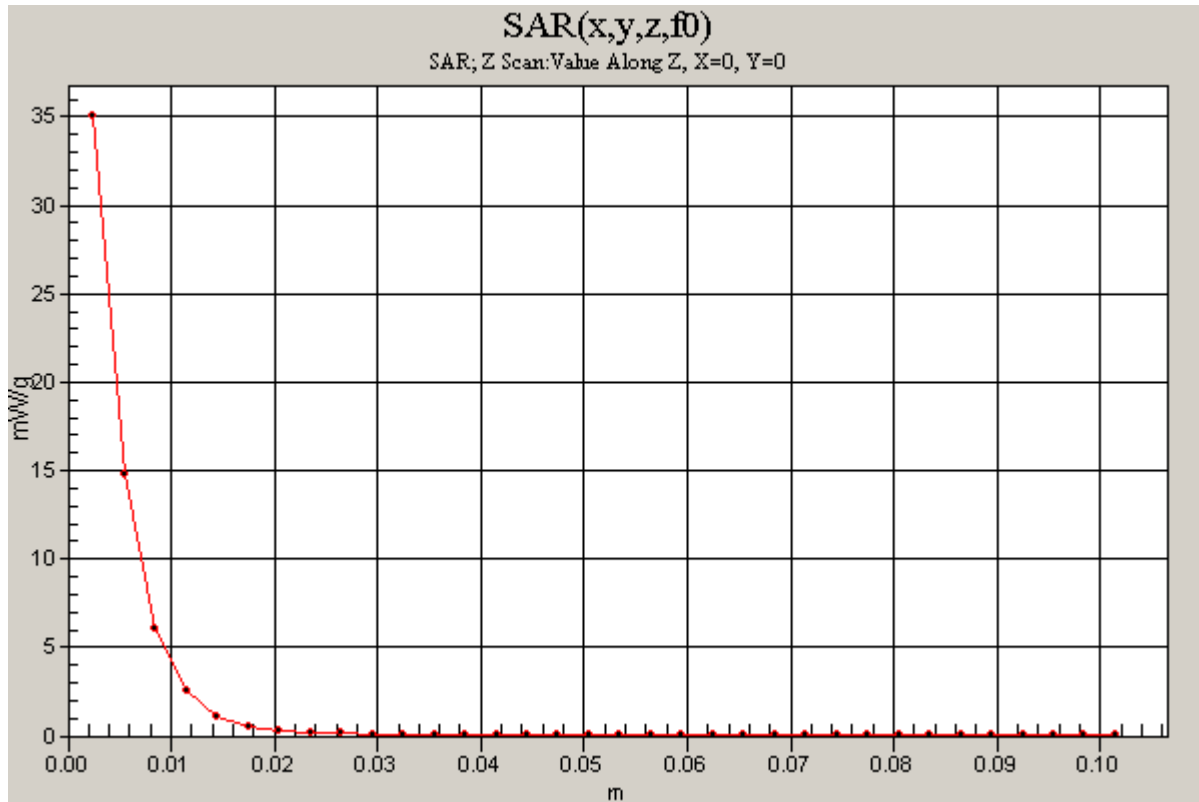
Test Laboratory: Compliance Certification Services

System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5200 MHz; Duty Cycle: 1:1

5.2 GHz d=10mm, Pin=250mW/Z Scan (1x1x34): Measurement grid: dx=20mm, dy=20mm, dz=3mm
Maximum value of SAR (measured) = 35.1 mW/g



Test Laboratory: Compliance Certification Services

System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.72$ mho/m; $\epsilon_r = 45.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(3.99, 3.99, 3.99); Calibrated: 4/23/2008
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 11/16/2007
- Phantom: SAM 2 (Twin); Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

5.5 GHz d=10mm, Pin=250mW/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 23.5 mW/g

5.5 GHz d=10mm, Pin=250mW/Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

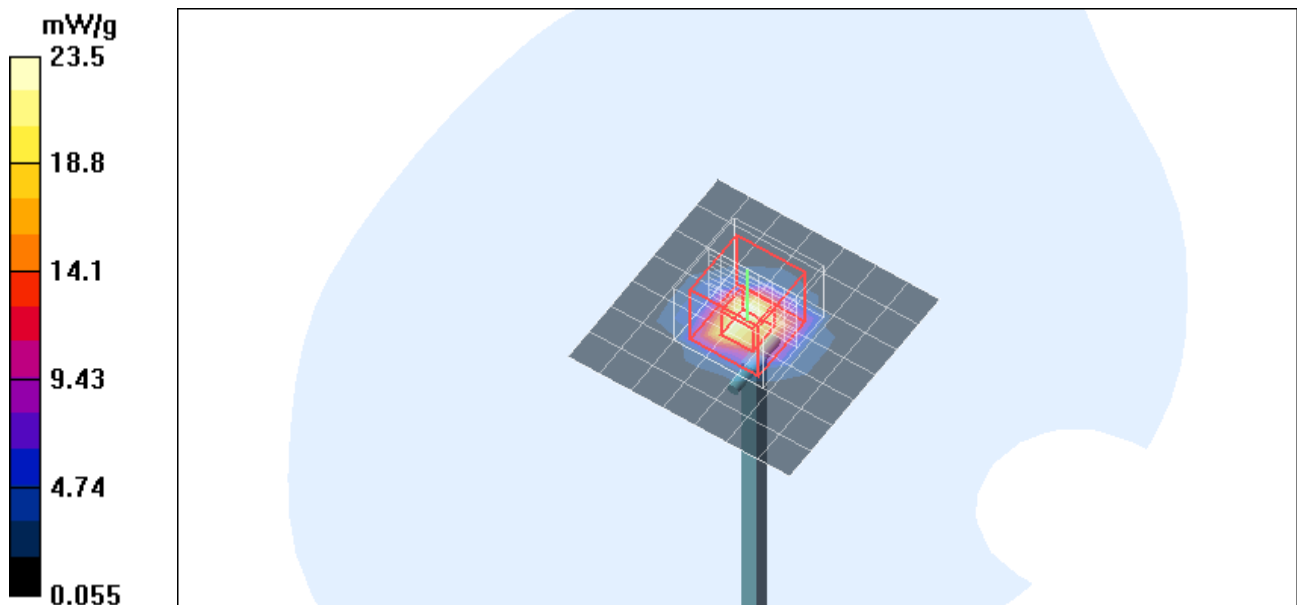
Reference Value = 80.6 V/m; Power Drift = 0.173 dB

Peak SAR (extrapolated) = 320.0 W/kg

SAR(1 g) = 77.6 mW/g; SAR(10 g) = 21.9 mW/g

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 135.9 mW/g



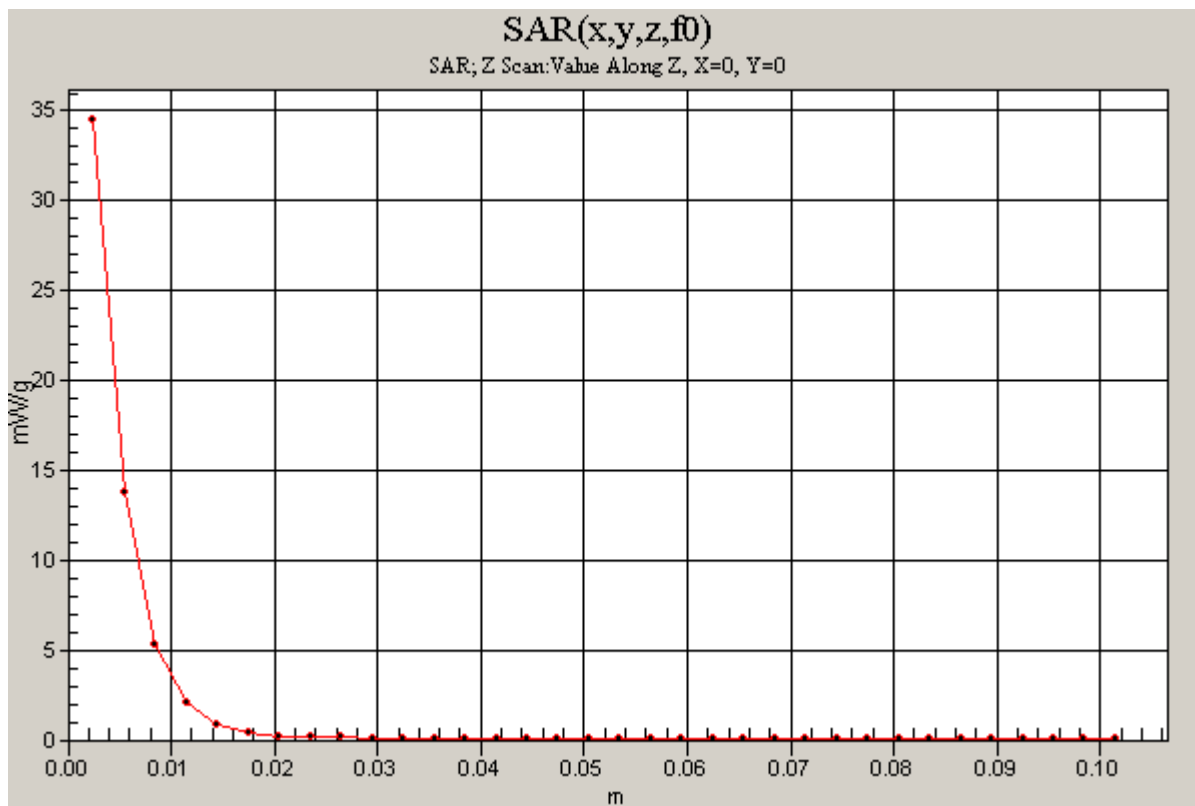
Test Laboratory: Compliance Certification Services

System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5500 MHz; Duty Cycle: 1:1

5.5 GHz d=10mm, Pin=250mW/Z Scan (1x1x34): Measurement grid: dx=20mm, dy=20mm, dz=3mm
Maximum value of SAR (measured) = 34.5 mW/g



Test Laboratory: Compliance Certification Services

System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 6.12 \text{ mho/m}$; $\epsilon_r = 44.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(3.7, 3.7, 3.7); Calibrated: 4/23/2008
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 11/16/2007
- Phantom: SAM 2 (Twin); Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

5.8 GHz d=10mm, Pin=250mW/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 23.7 mW/g

5.8 GHz d=10mm, Pin=250mW/Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

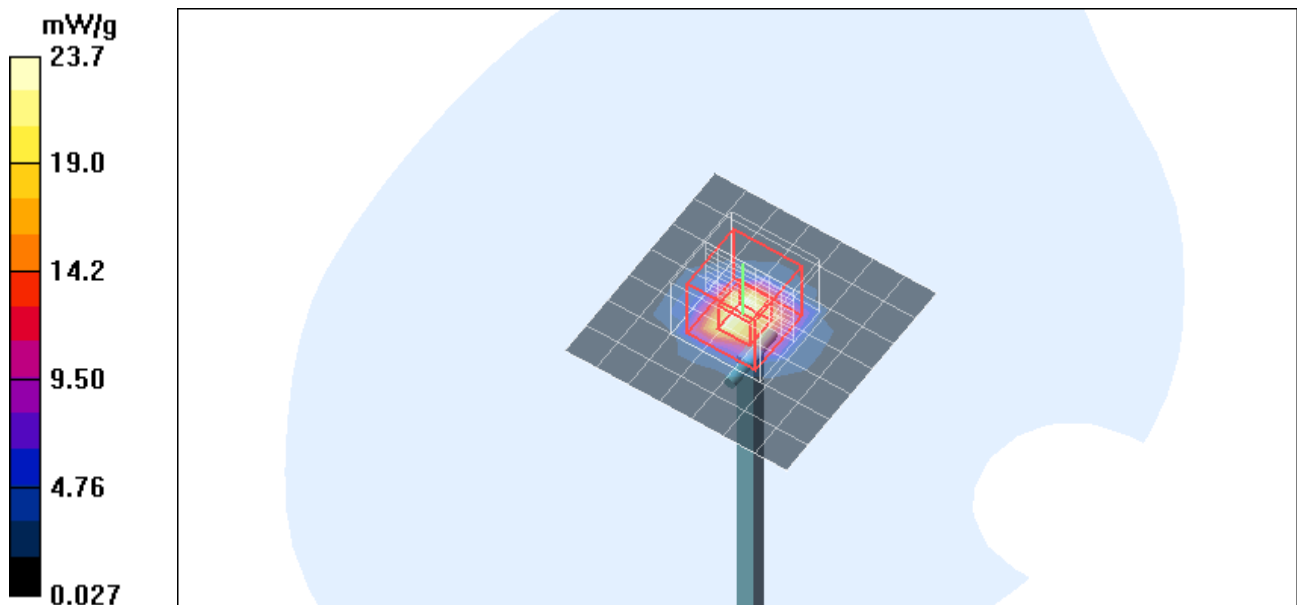
Reference Value = 76.4 V/m; Power Drift = 0.213 dB

Peak SAR (extrapolated) = 340.9 W/kg

SAR(1 g) = 76.8 mW/g; SAR(10 g) = 21.6 mW/g

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 135.3 mW/g



Test Laboratory: Compliance Certification Services

System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5800 MHz; Duty Cycle: 1:1

5.8 GHz d=10mm, Pin=250mW/Z Scan (1x1x34): Measurement grid: dx=20mm, dy=20mm, dz=3mm
Maximum value of SAR (measured) = 32.9 mW/g

