

Test Laboratory: Compliance Certification Services Inc.

D835V2-SN 4d015-Head

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d015

Communication System: CW 835; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 835 \text{ MHz}$; $\sigma = 0.908 \text{ mho/m}$; $\epsilon_r = 41.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Air Temperature: 24.5 deg C; Liquid Temperature: 23.5 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.44, 8.44, 8.44);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2/22/2010
- Phantom: SAM 34; Type: SAM V4.0; Serial: TP-1150
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (7x7x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.61 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.3 V/m; Power Drift = -0.036 dB

Peak SAR (extrapolated) = 3.22 W/kg

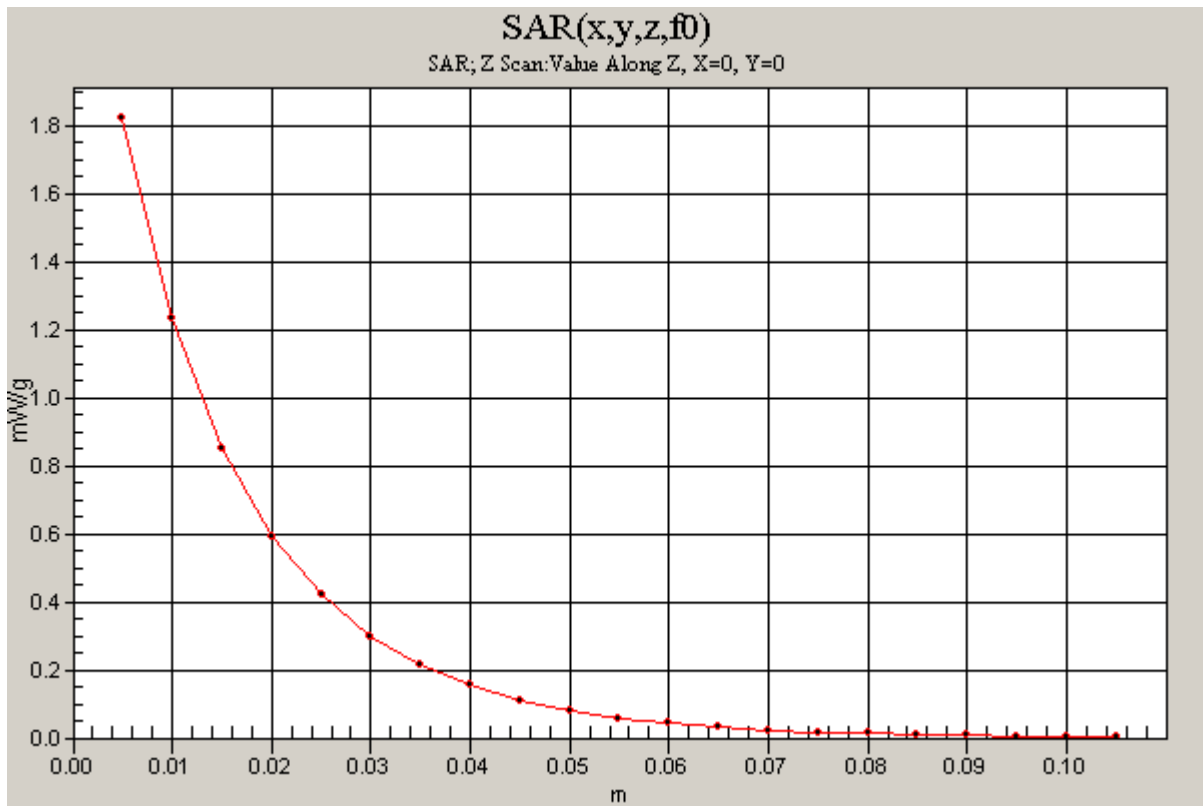
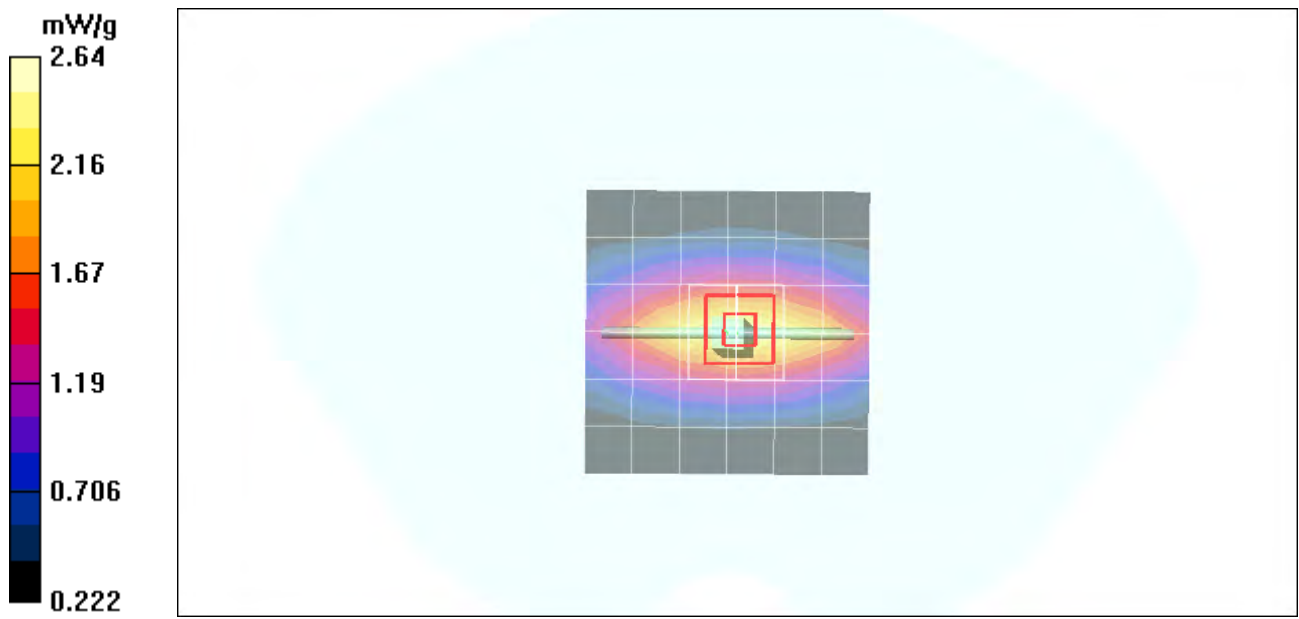
SAR(1 g) = 2.35 mW/g; SAR(10 g) = 1.51 mW/g

Maximum value of SAR (measured) = 2.64 mW/g

d=10mm, Pin=250mW/Z Scan (1x1x21):

Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 1.82 mW/g



Test Laboratory: Compliance Certification Services Inc.

D835V2-SN 4d015-Body

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d015

Communication System: CW 835; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 835 \text{ MHz}$; $\sigma = 0.971 \text{ mho/m}$; $\epsilon_r = 54.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Air Temperature: 24.5 deg C; Liquid Temperature: 23.5 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2/22/2010
- Phantom: SAM 34; Type: SAM V4.0; Serial: TP-1150
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (7x7x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.90 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 51.9 V/m; Power Drift = -0.002 dB

Peak SAR (extrapolated) = 3.64 W/kg

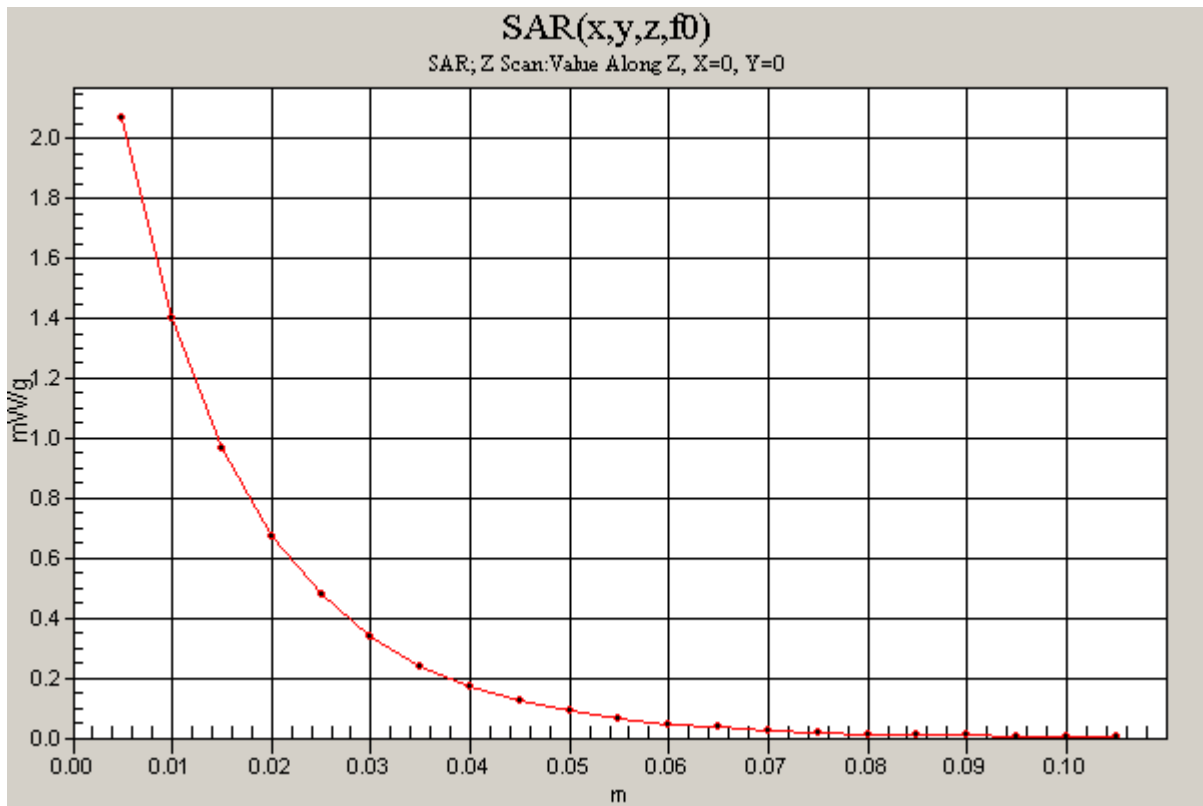
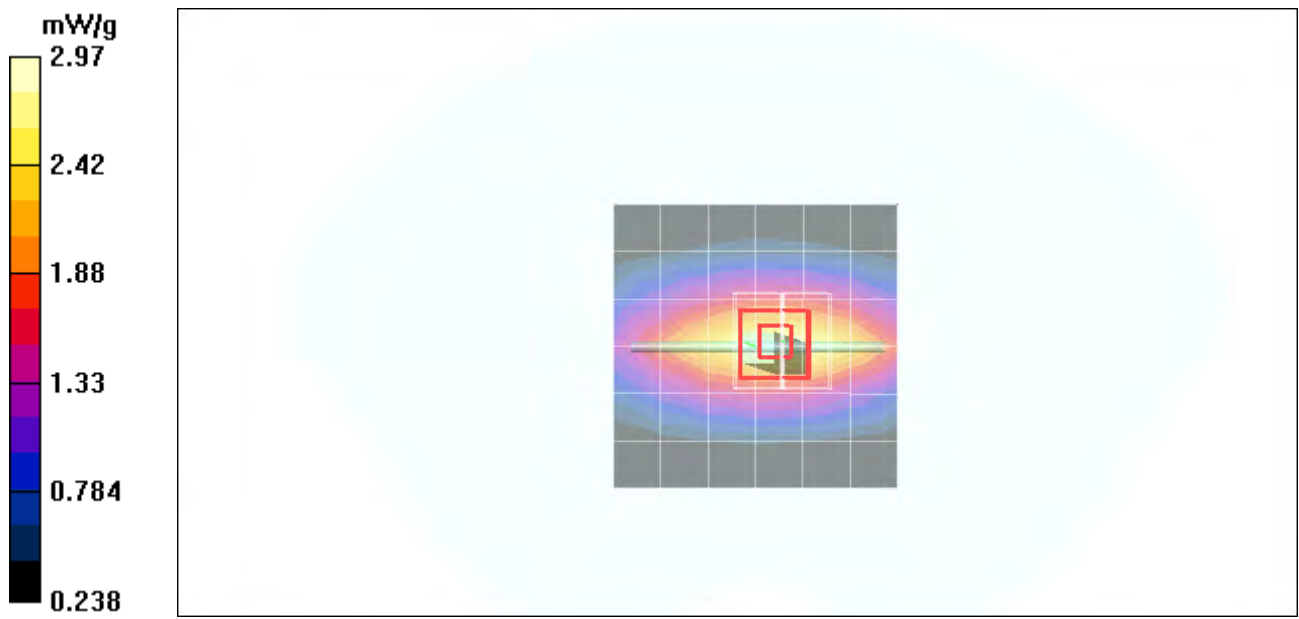
SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.58 mW/g

Maximum value of SAR (measured) = 2.92 mW/g

d=10mm, Pin=250mW/Z Scan (1x1x21):

Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 2.07 mW/g



Test Laboratory: Compliance Certification Services Inc.

D835V2-SN 4d015-Body

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d015

Communication System: CW 835; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 835 \text{ MHz}$; $\sigma = 0.971 \text{ mho/m}$; $\epsilon_r = 54.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Air Temperature: 24.5 deg C; Liquid Temperature: 23.5 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2/22/2010
- Phantom: SAM 34; Type: SAM V4.0; Serial: TP-1150
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (7x7x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.70 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 51.7 V/m; Power Drift = -0.002 dB

Peak SAR (extrapolated) = 3.54 W/kg

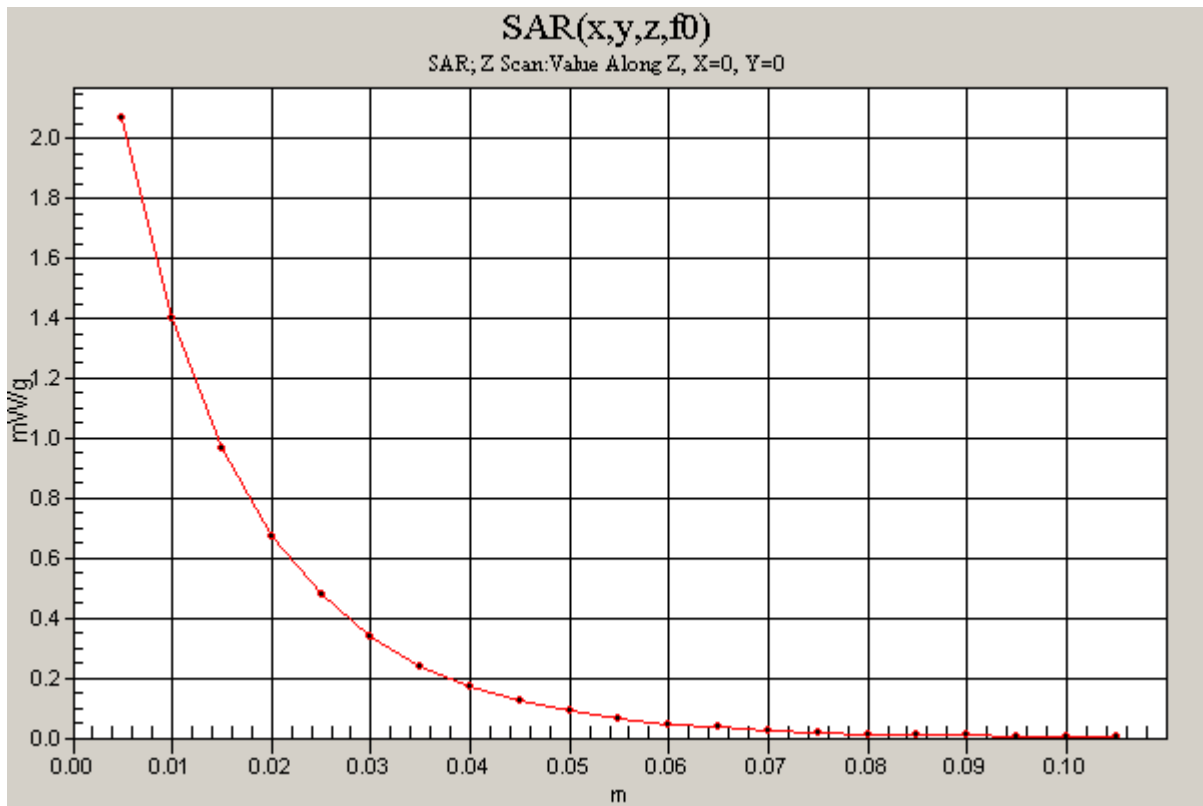
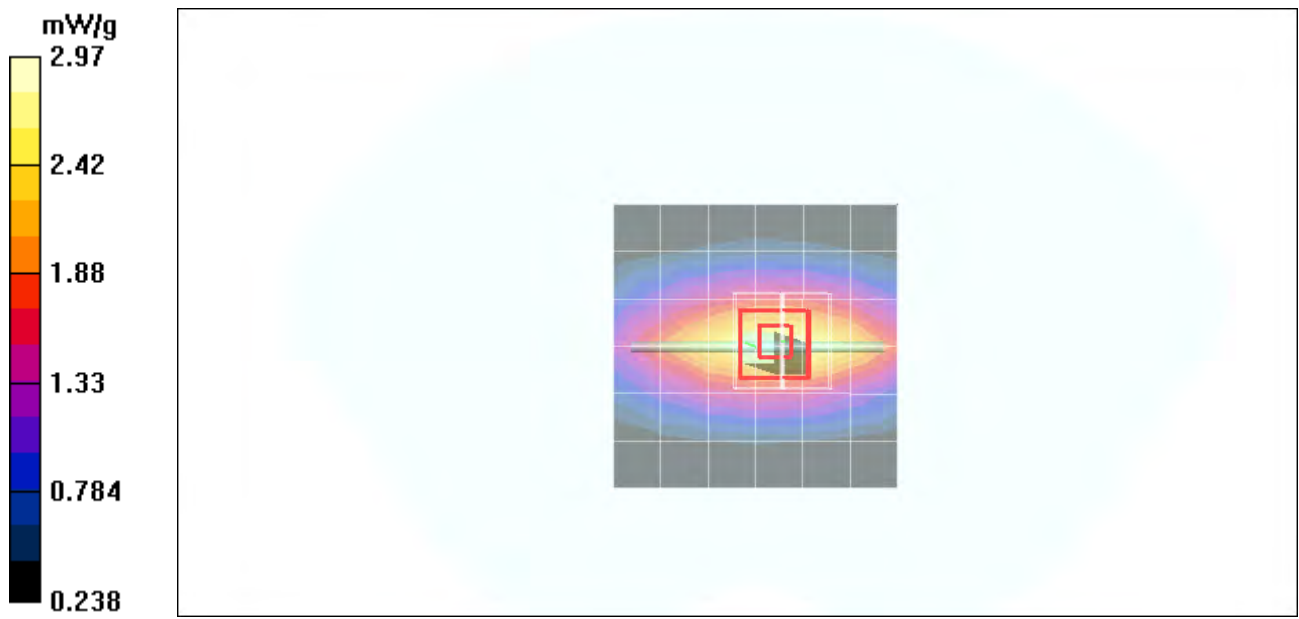
SAR(1 g) = 2.44 mW/g; SAR(10 g) = 1.55 mW/g

Maximum value of SAR (measured) = 2.82 mW/g

d=10mm, Pin=250mW/Z Scan (1x1x21):

Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 2.02 mW/g



Test Laboratory: Compliance Certification Services Inc.

D835V2-SN 4d015-Body

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d015

Communication System: CW 835; Frequency: 835 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.948$ mho/m; $\epsilon_r = 54.3$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C
Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- Probe: EX3DV4 - SN3665; ConvF(9.18, 9.18, 9.18);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2010/2/17
- Phantom: SAM with CRP; Type: SAM; Serial: 1506
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

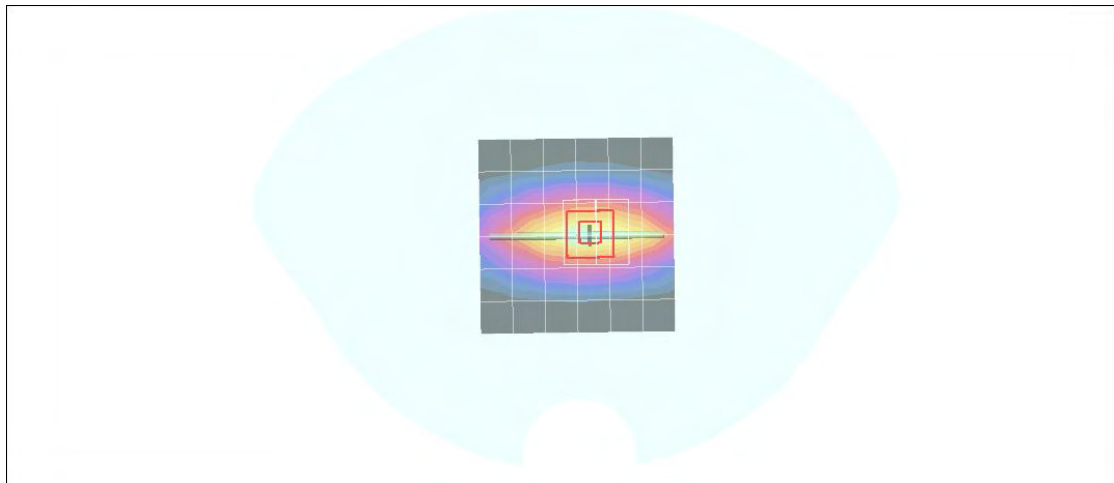
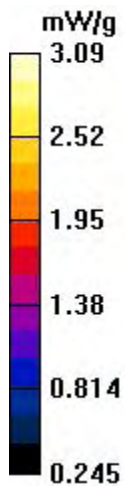
Maximum value of SAR (measured) = 3.02 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.1 V/m; Power Drift = -0.001 dB
Peak SAR (extrapolated) = 3.85 W/kg
SAR(1 g) = 2.45 mW/g; SAR(10 g) = 1.63 mW/g
Maximum value of SAR (measured) = 3.09 mW/g

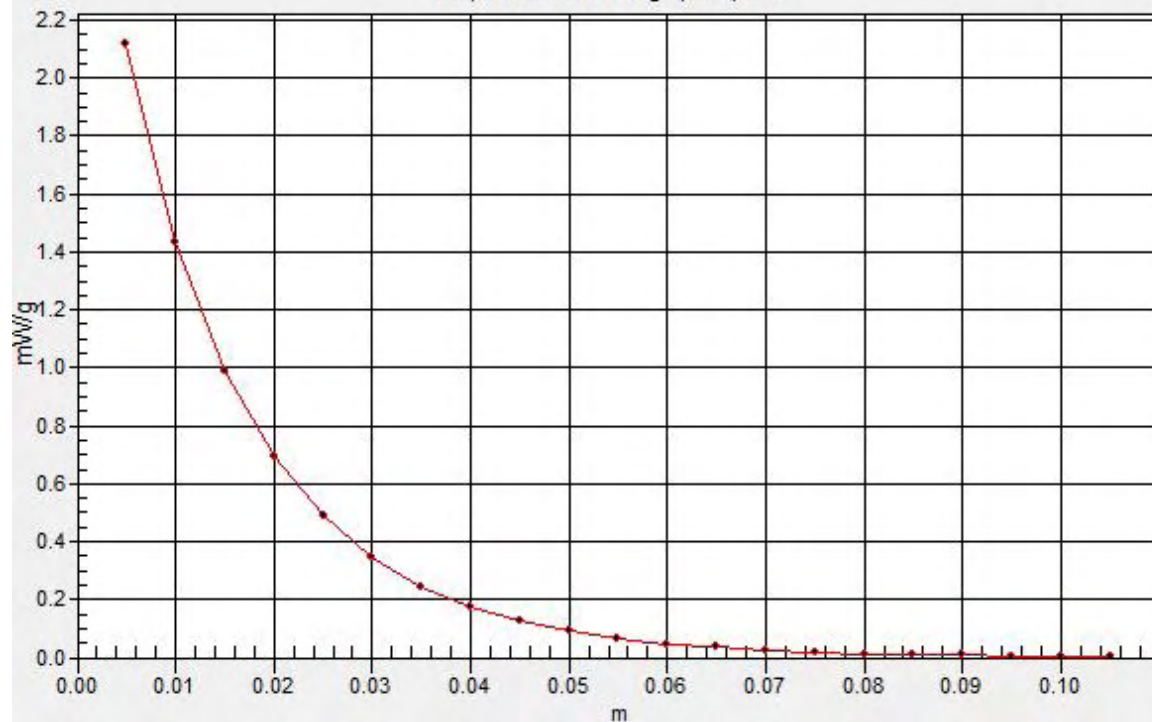
d=15mm, Pin=250mW/Z Scan (1x1x21): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 2.12 mW/g



SAR(x,y,z,f0)

SAR; Z Scan: Value Along Z, X=0, Y=0



Test Laboratory: Compliance Certification Services Inc.

D1900V2 SN-5d018 Head

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d018

Communication System: CW1900; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.35$ mho/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(7.05, 7.05, 7.05);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2/22/2010
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1150
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW,d=10mm/Area Scan (6x6x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 8.00 mW/g

Pin=250mW,d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.3 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 17.3 W/kg

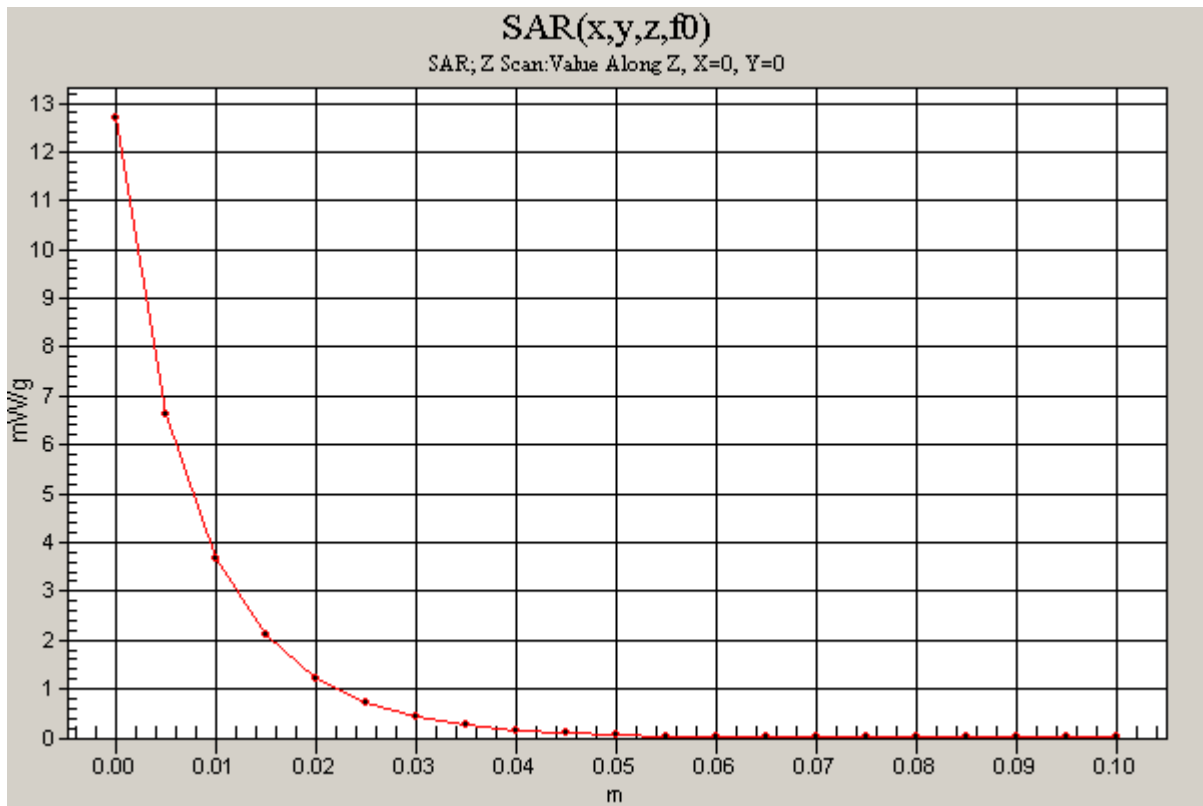
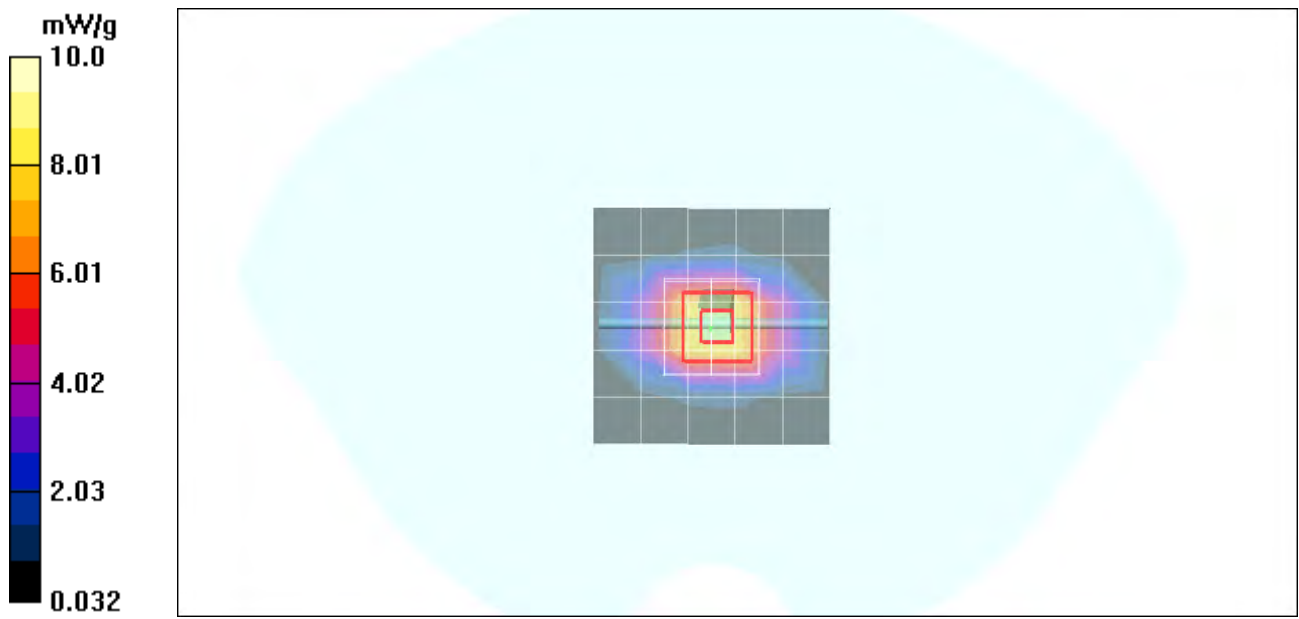
SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.08 mW/g

Maximum value of SAR (measured) = 12.8 mW/g

Pin=250mW,d=10mm/Z Scan (1x1x21):

Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 12.7 mW/g



Test Laboratory: Compliance Certification Services Inc.

D1900V2 SN-5d018 Body

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d018

Communication System: CW1900; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2/22/2010
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1150
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW,d=10mm/Area Scan (6x6x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 8.48 mW/g

Pin=250mW,d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 96.3 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 19.1 W/kg

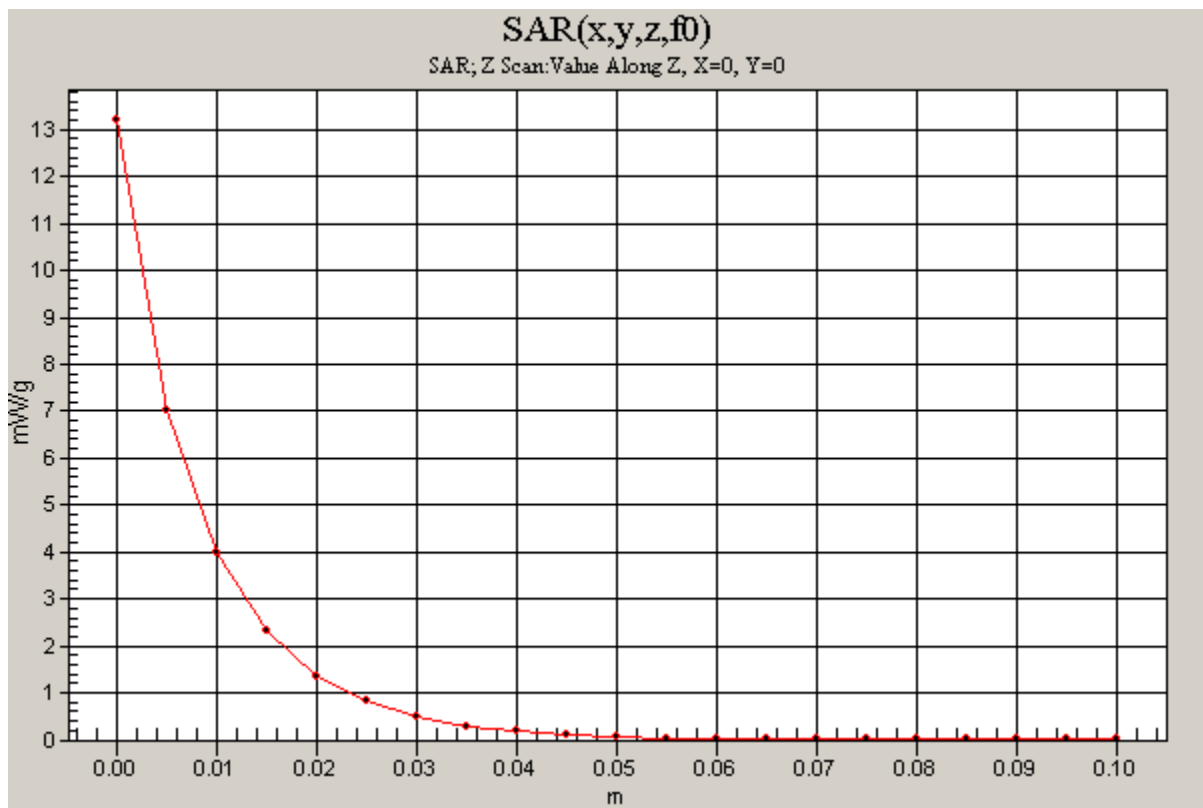
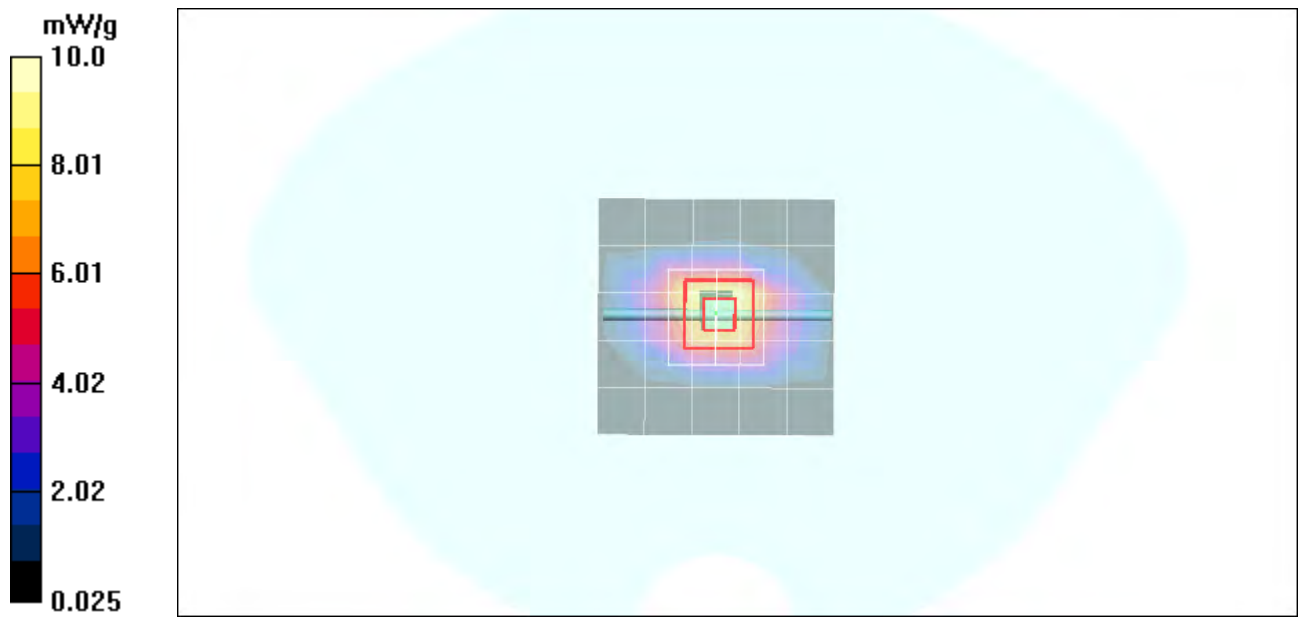
SAR(1 g) = 10.2 mW/g; SAR(10 g) = 5.35 mW/g

Maximum value of SAR (measured) = 13.8 mW/g

Pin=250mW,d=10mm/Z Scan (1x1x21):

Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 13.2 mW/g



Test Laboratory: Compliance Certification Services Inc.

D1900V2 SN-5d018 Body

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d018

Communication System: CW1900; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2/22/2010
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1150
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW,d=10mm/Area Scan (6x6x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 8.28 mW/g

Pin=250mW,d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.3 V/m; Power Drift = -0.005 dB

Peak SAR (extrapolated) = 18.1 W/kg

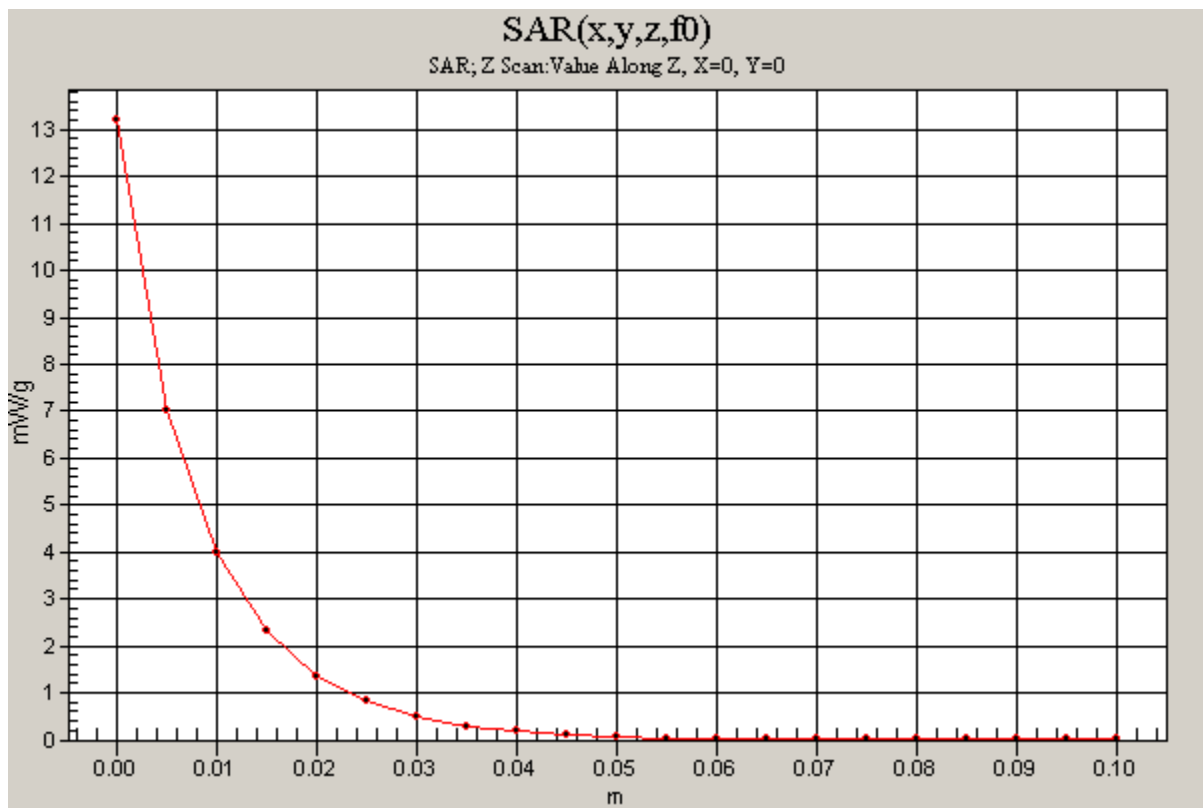
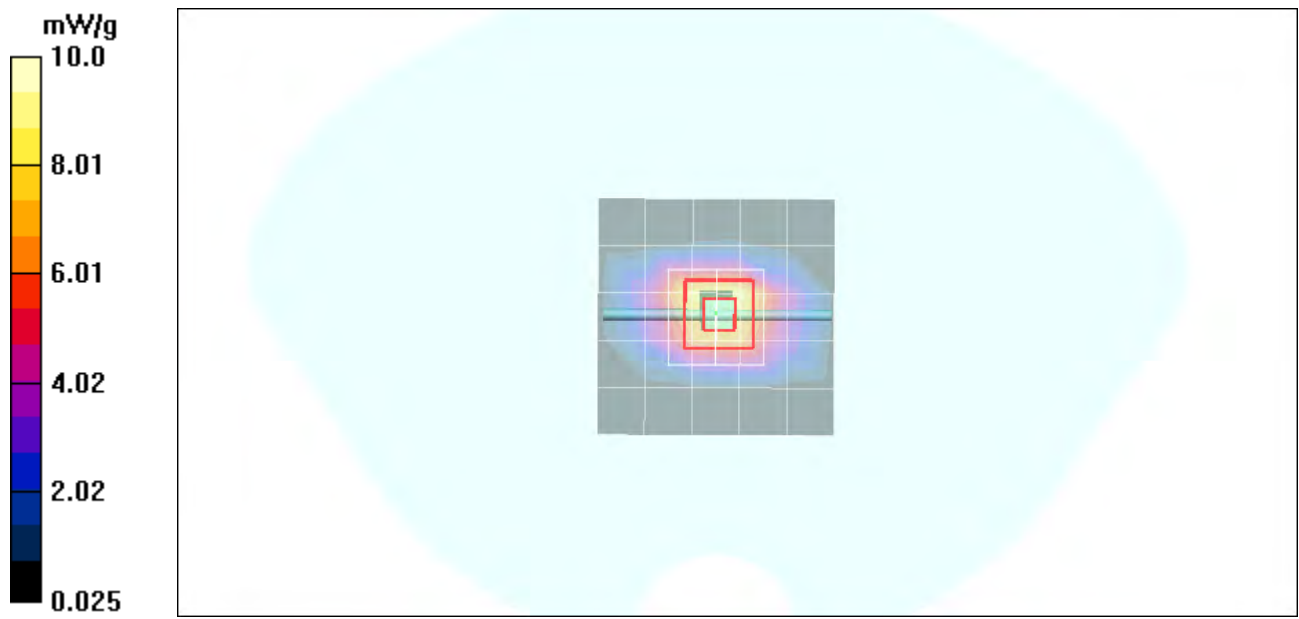
SAR(1 g) = 9.97 mW/g; SAR(10 g) = 5.05 mW/g

Maximum value of SAR (measured) = 13.8 mW/g

Pin=250mW,d=10mm/Z Scan (1x1x21):

Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 12.2 mW/g



Test Laboratory: Compliance Certification Services Inc.

D1900V2 SN-5d056 Body

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d056

Communication System: CW1900; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 52.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- Probe: EX3DV4 - SN3665; ConvF(7.66, 7.66, 7.66);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2010/2/17
- Phantom: SAM with CRP; Type: SAM; Serial: 1506
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW,d=10mm/Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.89 mW/g

Pin=250mW,d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 94.5 V/m; Power Drift = -0.026 dB

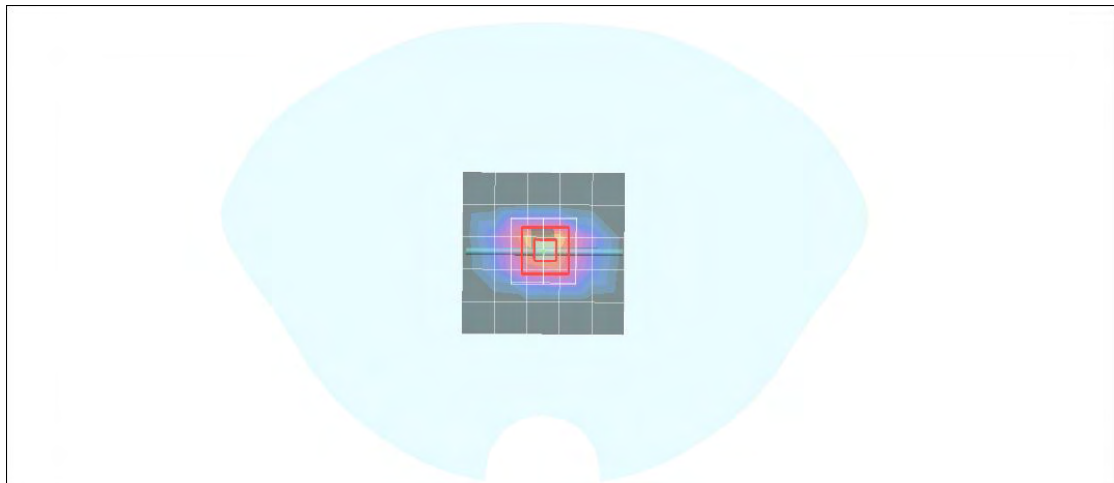
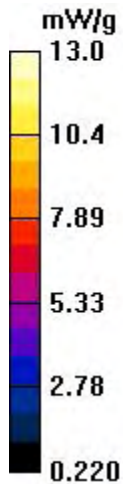
Peak SAR (extrapolated) = 17.9 W/kg

SAR(1 g) = 9.83 mW/g; SAR(10 g) = 5.06 mW/g

Maximum value of SAR (measured) = 13.0 mW/g

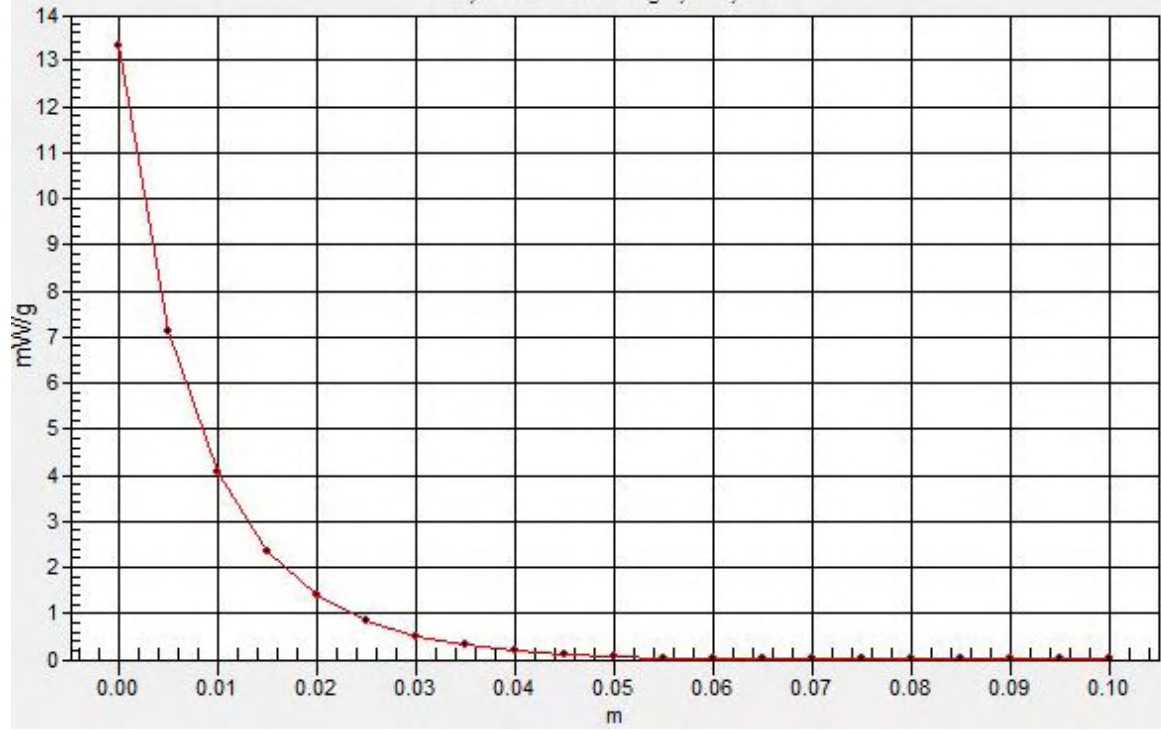
Pin=250mW,d=10mm/Z Scan (1x1x21): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 13.5 mW/g



SAR(x,y,z,f0)

SAR; Z Scan: Value Along Z, X=0, Y=0



Test Laboratory: Compliance Certification Services Inc.

D2450V2 SN-728 Head

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:728

Communication System: CW2450; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.85$ mho/m; $\epsilon_r = 40.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.38, 6.38, 6.38);
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2/22/2010
- Phantom: SAM 34; Type: SAM V4.0; Serial: TP-1150
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW,d=10mm/Area Scan (6x6x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 11.5 mW/g

Pin=250mW,d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.7 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 25.5 W/kg

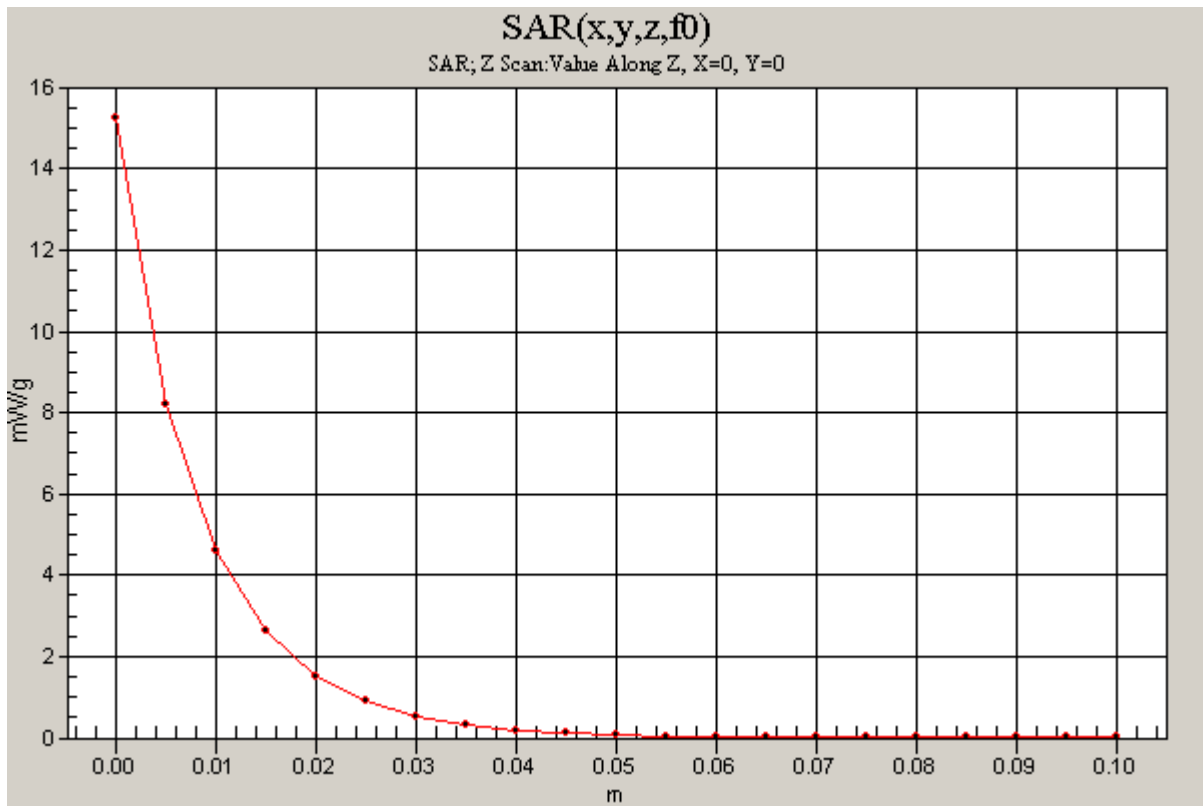
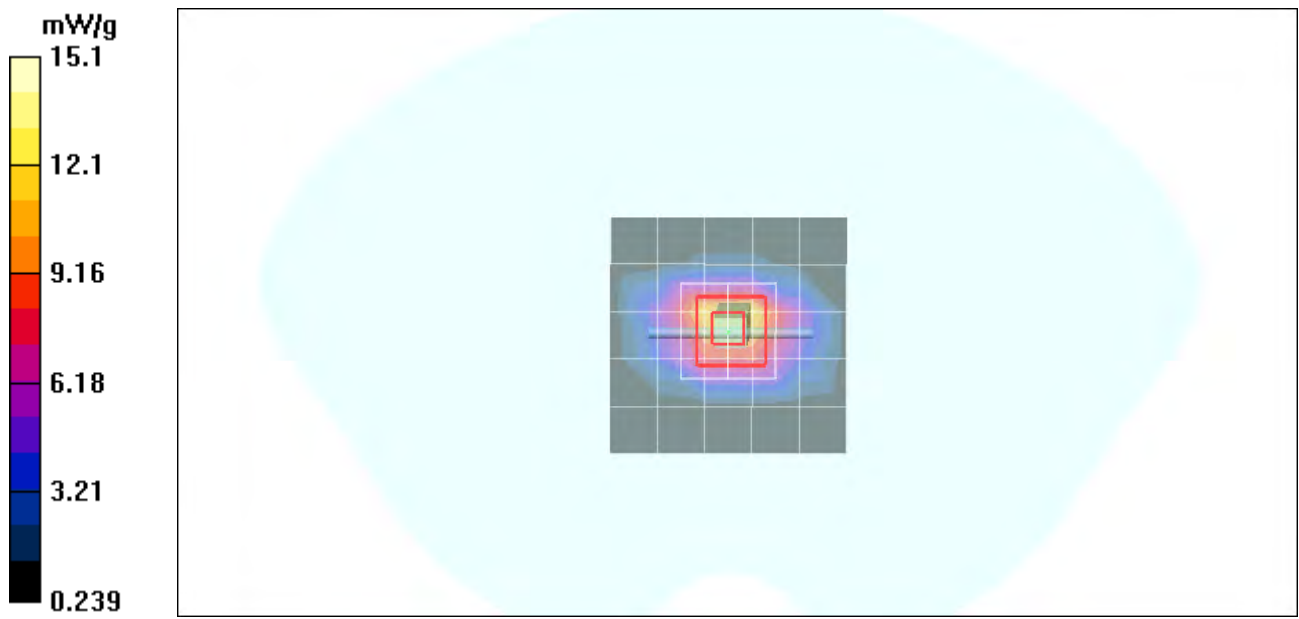
SAR(1 g) = 13.5 mW/g; SAR(10 g) = 6.28 mW/g

Maximum value of SAR (measured) = 15.1 mW/g

Pin=250mW,d=10mm/Z Scan (1x1x21):

Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 15.3 mW/g



Test Laboratory: Compliance Certification Services Inc.

D2450V2 SN-728 Body

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:728

Communication System: CW2450; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.96$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.51, 6.51, 6.51);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2/22/2010
- Phantom: SAM 34; Type: SAM V4.0; Serial: TP-1150
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW,d=10mm/Area Scan (6x6x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 13.4 mW/g

Pin=250mW,d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 94.0 V/m; Power Drift = -0.034 dB

Peak SAR (extrapolated) = 27.2 W/kg

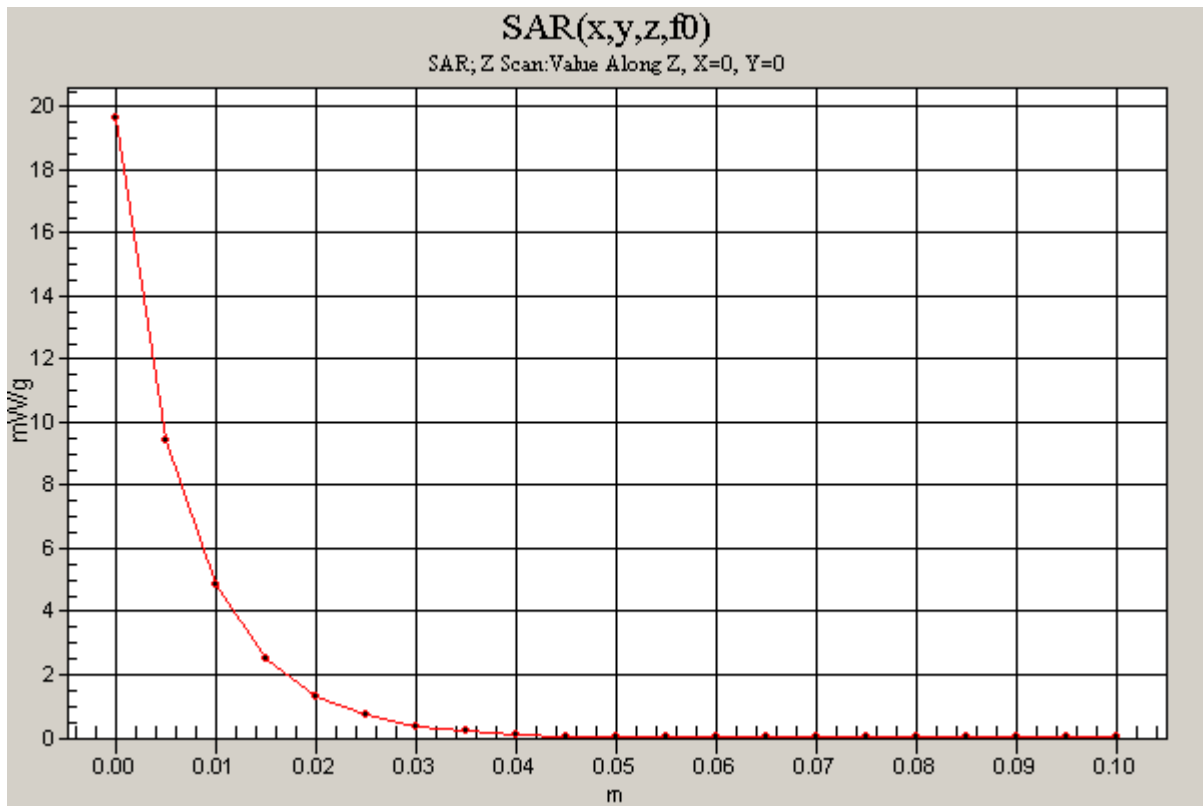
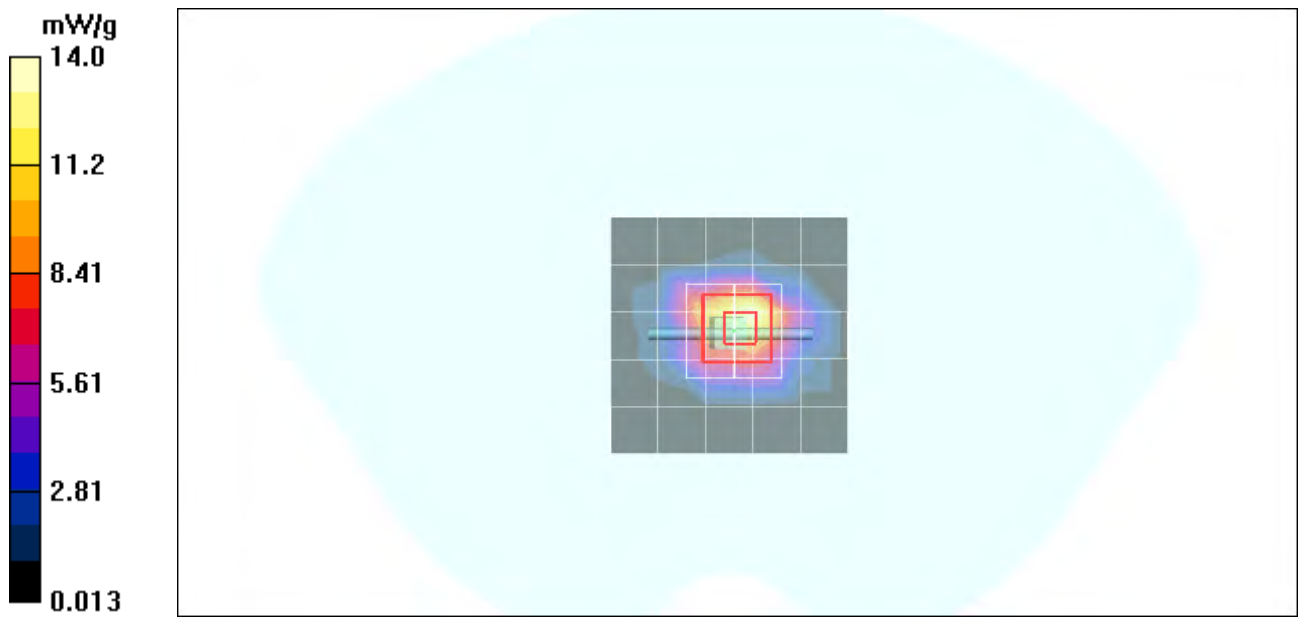
SAR(1 g) = 13.2 mW/g; SAR(10 g) = 6.12 mW/g

Maximum value of SAR (measured) = 17.2 mW/g

Pin=250mW,d=10mm/Z Scan (1x1x21):

Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 19.3 mW/g



Test Laboratory: Compliance Certification Services Inc.

D2450V2 SN-728 Body

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:728

Communication System: CW2450; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Air Temperature: 24.2 deg C; Liquid Temperature: 23.2 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.51, 6.51, 6.51);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2010/2/17
- Phantom: SAM with CRP; Type: SAM; Serial: 1506
- Measurement SW: DASY5, V5.0 Build 125; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW,d=10mm/Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 13.8 mW/g

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

Reference Value = 92.9 V/m; Power Drift = -0.017 dB

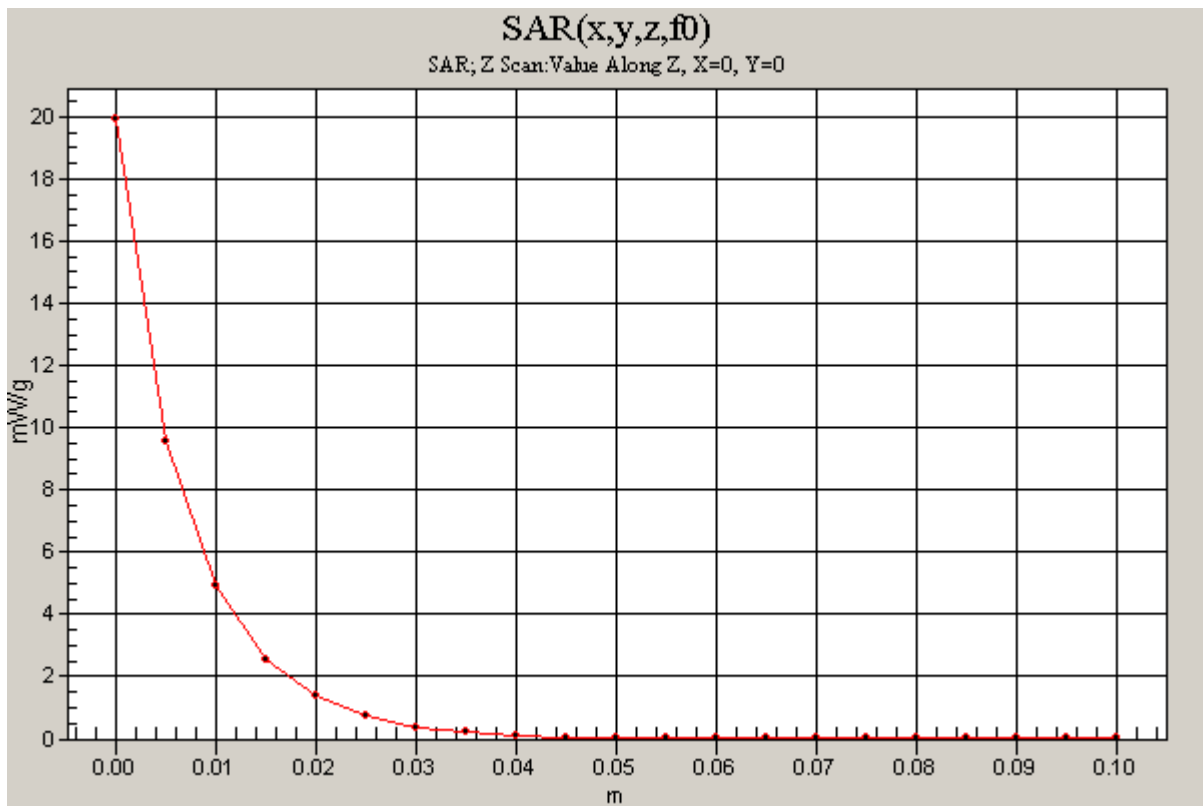
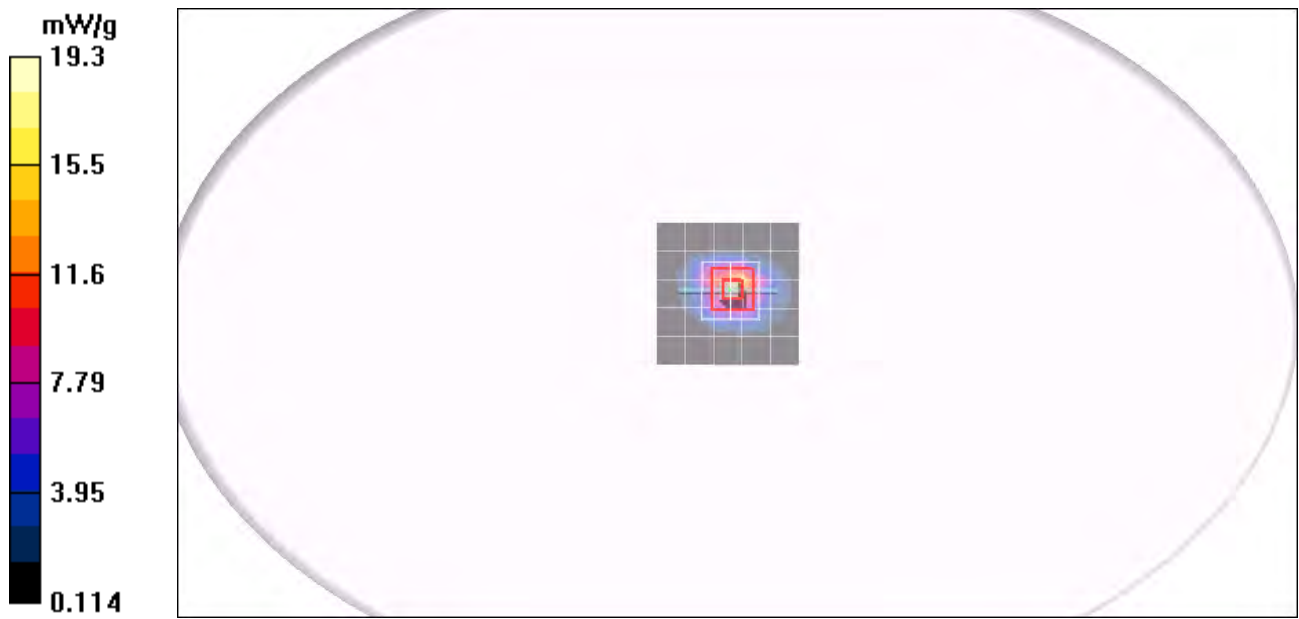
Peak SAR (extrapolated) = 25.2 W/kg

SAR(1 g) = 13.1 mW/g; SAR(10 g) = 6.01 mW/g

Maximum value of SAR (measured) = 16.9 mW/g

Pin=250mW,d=10mm/Z Scan (1x1x21): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 17.3 mW/g



Test Laboratory: Compliance Certification Services Inc.

D2450V2 SN-728 Body

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:728

Communication System: CW2450; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Air Temperature: 24.2 deg C; Liquid Temperature: 23.2 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.51, 6.51, 6.51);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn877; Calibrated: 2010/2/17
- Phantom: SAM with CRP; Type: SAM; Serial: 1506
- Measurement SW: DASY5, V5.0 Build 125; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW,d=10mm/Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 13.8 mW/g

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

Reference Value = 91.9 V/m; Power Drift = -0.007 dB

Peak SAR (extrapolated) = 24.2 W/kg

SAR(1 g) = 13.3 mW/g; SAR(10 g) = 6.05 mW/g

Maximum value of SAR (measured) = 16.8 mW/g

Pin=250mW,d=10mm/Z Scan (1x1x21): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 17.0 mW/g

