

Test Laboratory: BTL Inc.

Date: 1/16/2016

### System Check\_H835\_0116

**DUT: Dipole 835 MHz D835V2;SN:4d160;**

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.902$  S/m;  $\epsilon_r = 42.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.1 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(9.75, 9.75, 9.75); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Area Scan (5x12x1):** Interpolated grid:  $dx=15$  mm,  $dy=15$  mm

Maximum value of SAR (interpolated) = 2.95 W/kg

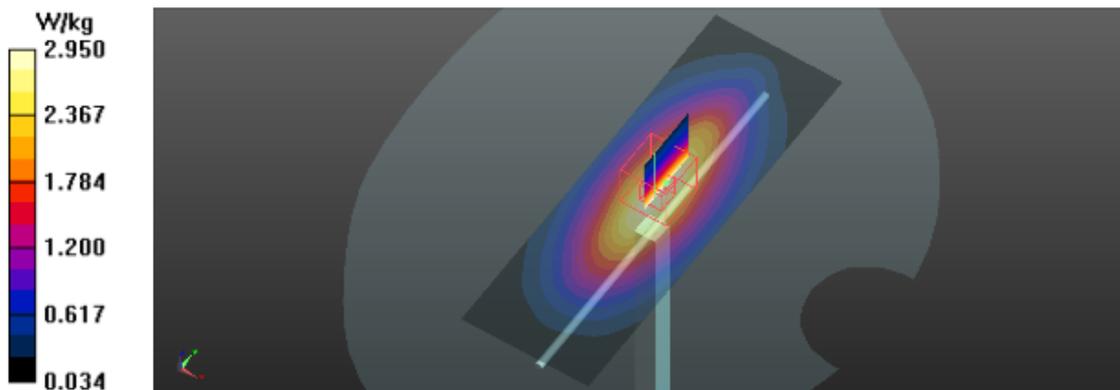
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 57.68 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.26 W/kg

**SAR(1 g) = 2.39 W/kg; SAR(10 g) = 1.55 W/kg**

Maximum value of SAR (measured) = 2.87 W/kg



Test Laboratory: BTL Inc.

Date: 1/18/2016

### System Check\_H1750\_0118

**DUT: Dipole 1750 MHz D1750V2;SN:1101;**

Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.379$  S/m;  $\epsilon_r = 39.47$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 23.1 °C; Liquid Temperature: 22.4 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.42, 8.42, 8.42); Calibrated: 1/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Area Scan (6x6x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 12.8 W/kg

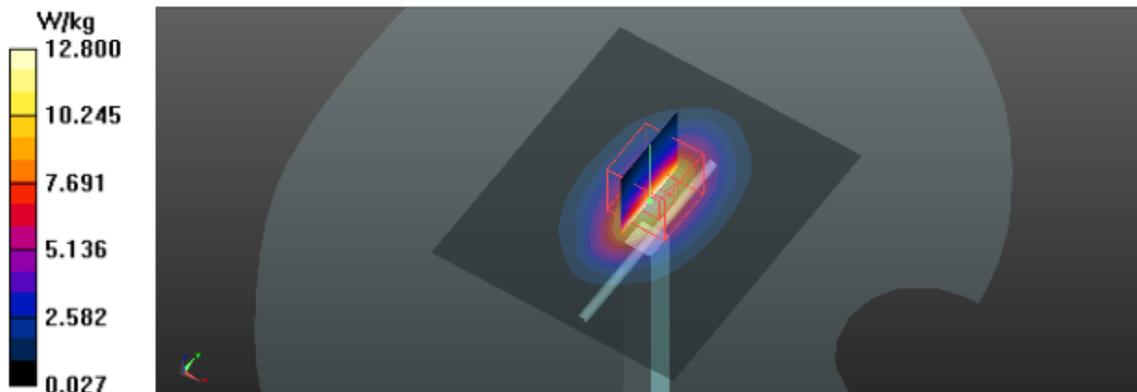
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 93.11 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 14.2 W/kg

**SAR(1 g) = 8.96 W/kg; SAR(10 g) = 4.86 W/kg**

Maximum value of SAR (measured) = 11.7 W/kg



Test Laboratory: BTL Inc.

Date: 01/19/2016

### System Check\_H1900\_0119

**DUT: Dipole 1900 MHz D1900V2;SN:5d179;**

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.423$  S/m;  $\epsilon_r = 39.39$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 23.1 °C; Liquid Temperature: 22.2 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.23, 8.23, 8.23); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Area Scan (6x6x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 14.2 W/kg

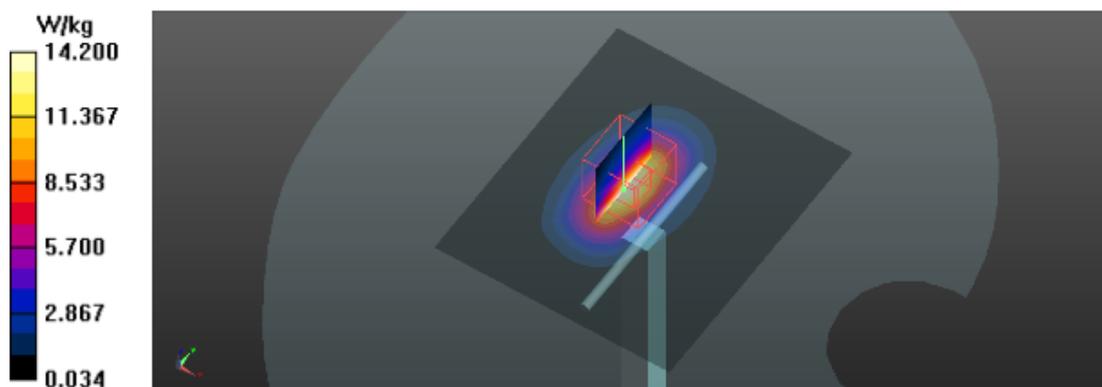
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 83.48 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 15.4 W/kg

**SAR(1 g) = 10.02 W/kg; SAR(10 g) = 5.14 W/kg**

Maximum value of SAR (measured) = 12.7 W/kg



Test Laboratory: BTL Inc.

Date: 1/19/2016

### System Check\_H2450\_0119

**DUT: Dipole 2450 MHz D2450V2;SN:919;**

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.85$  S/m;  $\epsilon_r = 38.88$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.38, 7.38, 7.38); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Area Scan (7x7x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 21.2 W/kg

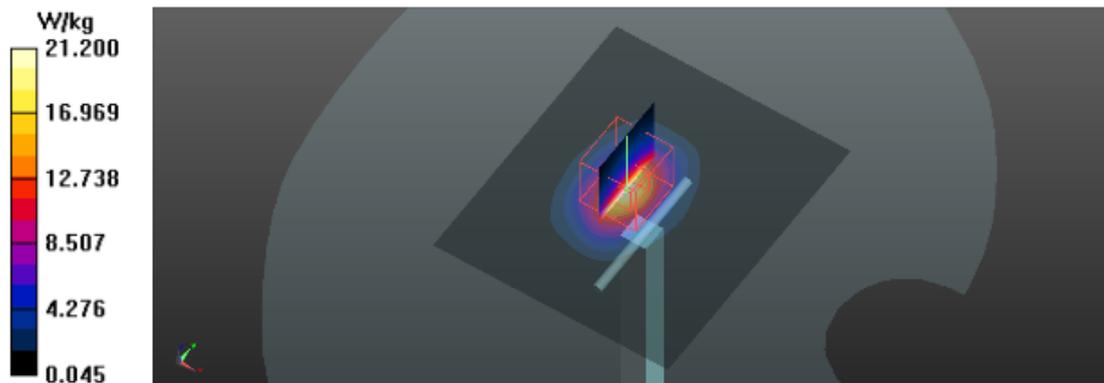
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 89.98 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 23.8 W/kg

**SAR(1 g) = 12.88 W/kg; SAR(10 g) = 6.12 W/kg**

Maximum value of SAR (measured) = 18.9 W/kg



Test Laboratory: BTL Inc.

Date: 01/28/2016

### System Check\_H2600\_0128

**DUT: Dipole 2600 MHz D2450V2;SN:1067;**

Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.983$  S/m;  $\epsilon_r = 38.01$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 23.5 °C; Liquid Temperature: 22.4 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.2, 7.2, 7.2); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Area Scan (7x7x1):** Interpolated grid:  $dx=12$  mm,  $dy=12$  mm

Maximum value of SAR (interpolated) = 23.5 W/kg

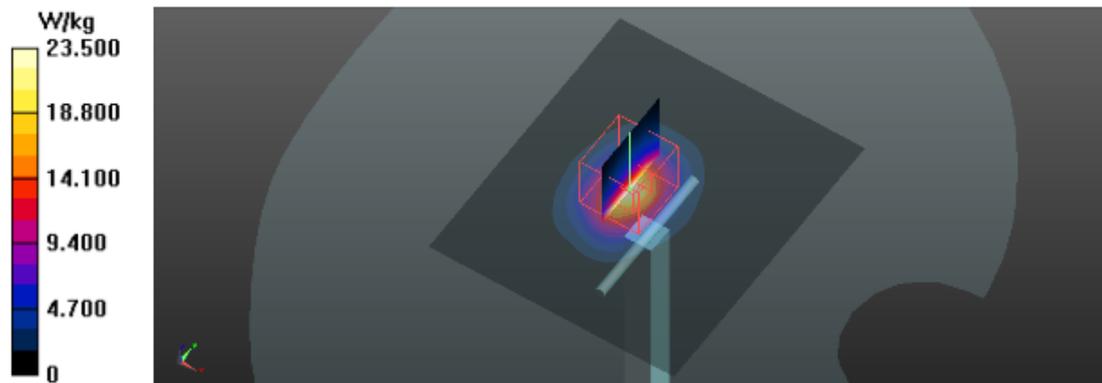
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 89.56 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 27.1 W/kg

**SAR(1 g) = 14.05 W/kg; SAR(10 g) = 6.42 W/kg**

Maximum value of SAR (measured) = 20.8 W/kg



Test Laboratory: BTL Inc.

Date: 01/15/2016

### System Check\_B835\_0115

**DUT: Dipole 835 MHz D835V2;SN:4d160;**

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.973$  S/m;  $\epsilon_r = 54.29$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 23.4 °C; Liquid Temperature: 22.1 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(10.19, 10.19, 10.19); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Area Scan (5x12x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 3.16 W/kg

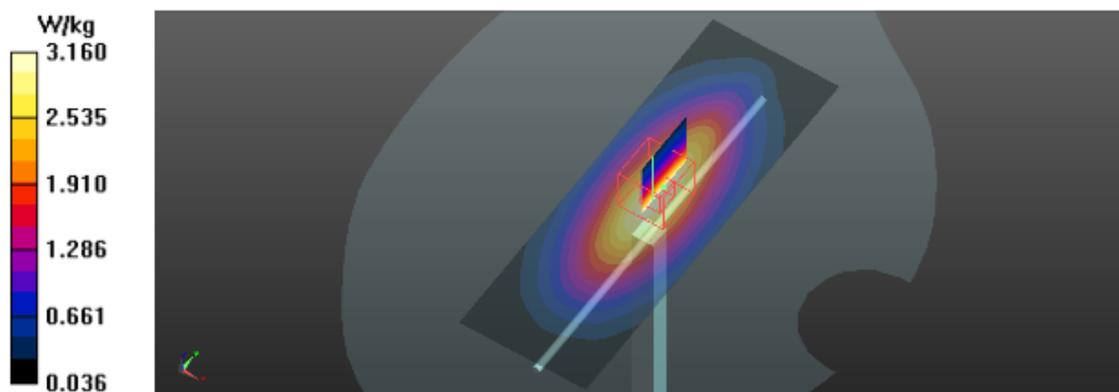
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 58.24 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 3.47 W/kg

**SAR(1 g) = 2.42 W/kg; SAR(10 g) = 1.75 W/kg**

Maximum value of SAR (measured) = 3.05 W/kg



Test Laboratory: BTL Inc.

Date: 01/17/2016

### System Check\_B1750\_0117

**DUT: Dipole 1750 MHz D1750V2;SN:1101;**

Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.461$  S/m;  $\epsilon_r = 54.19$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.4 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.08, 8.08, 8.08); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Area Scan (7x8x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 13.6 W/kg

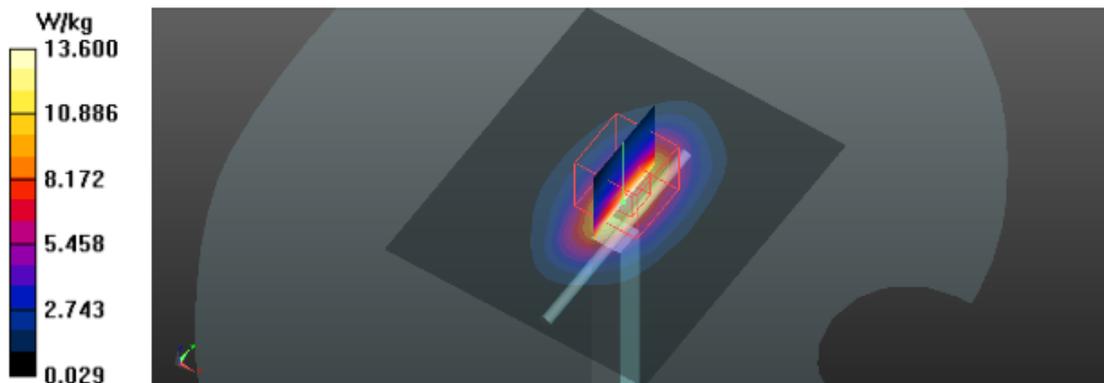
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 92.86 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 15.1 W/kg

**SAR(1 g) = 9.28 W/kg; SAR(10 g) = 5.19 W/kg**

Maximum value of SAR (measured) = 12.5 W/kg



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Date: 01/16/2016

### System Check\_B1900\_0116

**DUT: Dipole 1900 MHz D1900V2;SN:5d179;**

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.55$  S/m;  $\epsilon_r = 52.04$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 23.1 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.86, 7.86, 7.86); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Area Scan (7x8x1):** Interpolated grid:  $dx=15$  mm,  $dy=15$  mm

Maximum value of SAR (interpolated) = 15.0 W/kg

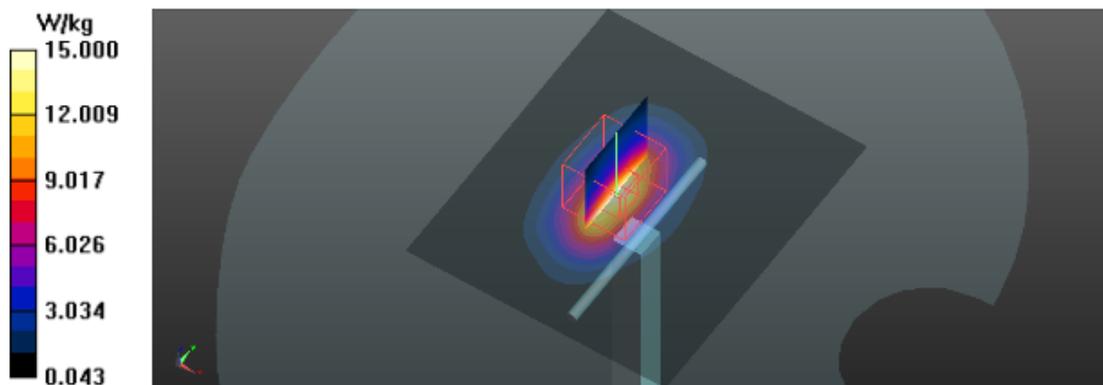
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 82.52 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 15.8 W/kg

**SAR(1 g) = 9.91 W/kg; SAR(10 g) = 5.5 W/kg**

Maximum value of SAR (measured) = 13.4 W/kg



Test Laboratory: BTL Inc.

Date: 01/16/2016

### System Check\_B2450\_0116

**DUT: Dipole 2450 MHz D2450V2;SN:919;**

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.995$  S/m;  $\epsilon_r = 53.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 23.5 °C; Liquid Temperature: 22.2 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.6, 7.6, 7.6); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Area Scan (8x10x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 21.5 W/kg

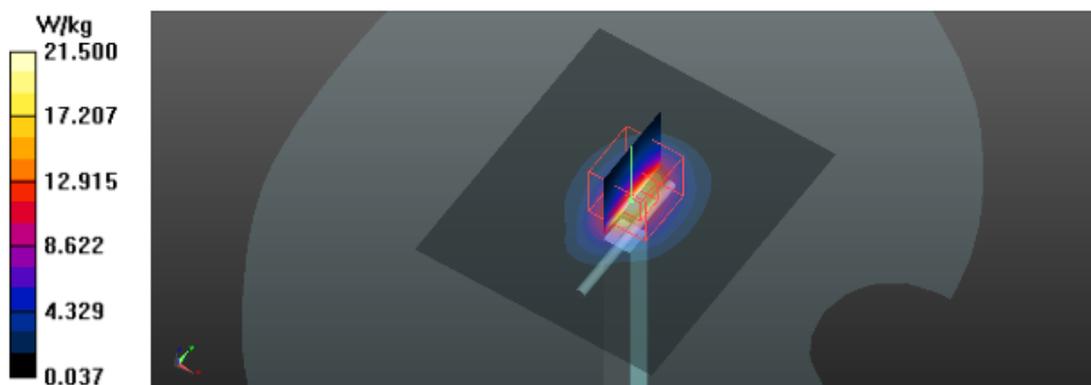
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 99.61 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 24.5 W/kg

**SAR(1 g) = 13.30 W/kg; SAR(10 g) = 6.38 W/kg**

Maximum value of SAR (measured) = 19.4 W/kg



Test Laboratory: BTL Inc.

Date: 01/28/2016

### System Check\_B2600\_0128

**DUT: Dipole 2600 MHz D2450V2;SN:1067;**

Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.2$  S/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 23.4 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.48, 7.48, 7.48); Calibrated: 01/30/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Area Scan (8x10x1):** Interpolated grid:  $dx=12$  mm,  $dy=12$  mm

Maximum value of SAR (interpolated) = 20.6 W/kg

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

Reference Value = 80.47 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 23.9 W/kg

**SAR(1 g) = 13.10 W/kg; SAR(10 g) = 5.97 W/kg**

Maximum value of SAR (measured) = 18.8 W/kg

