

		Document Appendix A for the BlackBerry® Smartphone Model RFV121LW SAR Report		Page 1(35)
Author Data Andrew Becker	Dates of Test July 12 – October 16, 2013	Test Report No RTS-6046-1310-25	FCC ID: L6ARFV120LW	

APPENDIX A: SAR DISTRIBUTION COMPARISON FOR ACCURACY VERIFICATION

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Author Data Andrew Becker	Dates of Test July 12 – October 16, 2013	Test Report No RTS-6046-1310-25	FCC ID: L6ARFV120LW	

Date/Time: 7/12/2013 12:16:30 PM

Test Laboratory: RIM Testing Services

DipoleValidation_750MHz_07_12_13_Amb_Tem_23.4_Liq_Tem_22.8C

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1021

Communication System: UID 0 - n/a, CW; Frequency: 750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.89 \text{ S/m}$; $\epsilon_r = 41.106$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.56, 6.56, 6.56); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS2 52.8.6(1115); SEMCAD X 14.6.9(7117)

Configuration/d=15mm, Pin=1000mW/Area Scan (31x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Reference Value = 104.5 V/m ; Power Drift = -0.03 dB

Fast SAR: SAR(1 g) = 7.75 W/kg ; SAR(10 g) = 5.2 W/kg

Maximum value of SAR (interpolated) = 8.91 W/kg

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 2

(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

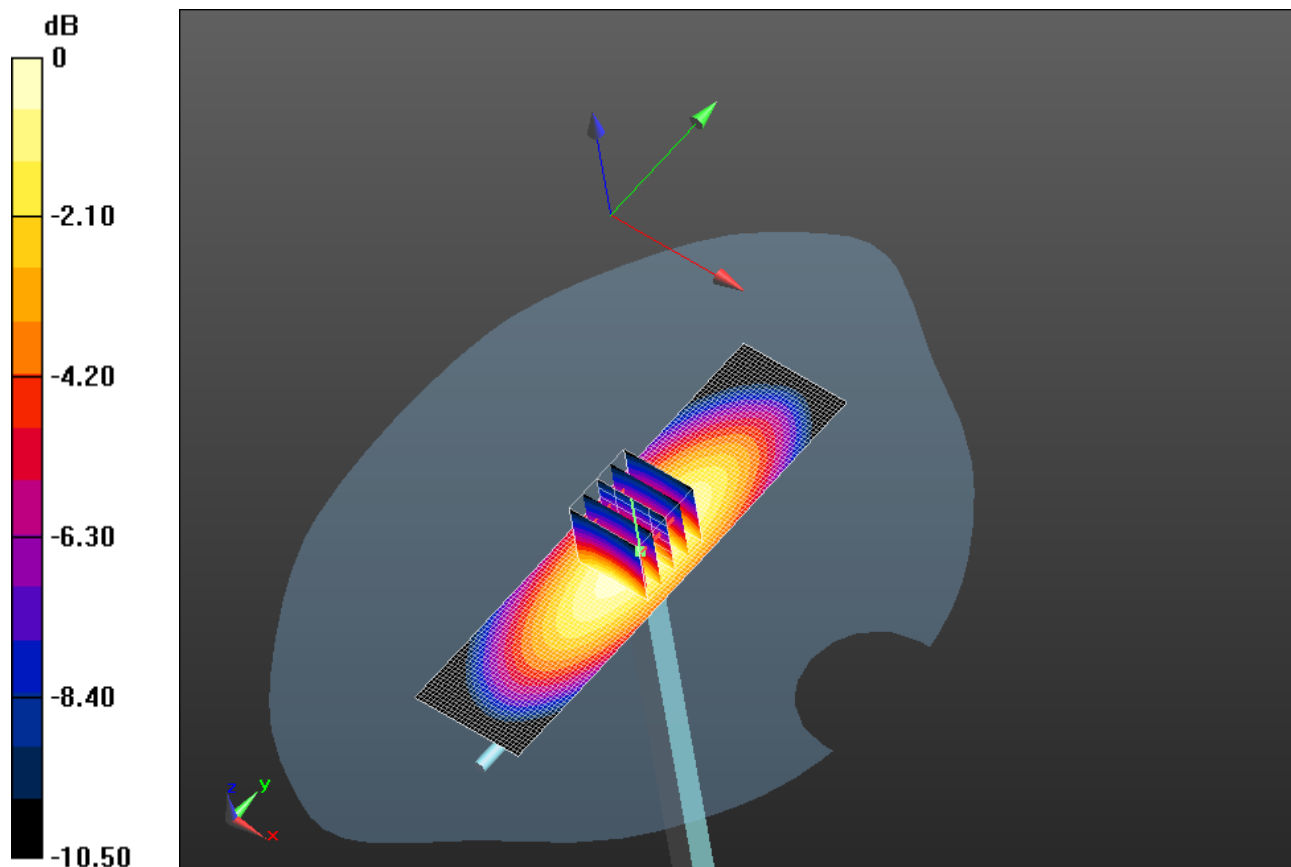
Reference Value = 104.5 V/m ; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 11.4 W/kg

SAR(1 g) = 7.67 W/kg ; SAR(10 g) = 5.02 W/kg

Maximum value of SAR (measured) = 8.97 W/kg

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0 dB = 8.97 W/kg = 9.53 dBW/kg

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Date/Time: 7/13/2013 12:26:59 AM

Test Laboratory: RIM Testing Services

DipoleValidation_835MHz_07_13_13_Amb_Tem_24.1C_Liq_Tem_23.0

C

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446

Communication System: UID 0 - n/a, CW; Frequency: 835 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.898 \text{ S/m}$; $\epsilon_r = 41.565$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.19, 6.19, 6.19); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

Configuration/d=15mm, Pin=1000mW/Area Scan (31x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Reference Value = 112.0 V/m ; Power Drift = -0.02 dB

Fast SAR: SAR(1 g) = 9.09 W/kg ; SAR(10 g) = 6.03 W/kg

Maximum value of SAR (interpolated) = 10.5 W/kg

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube

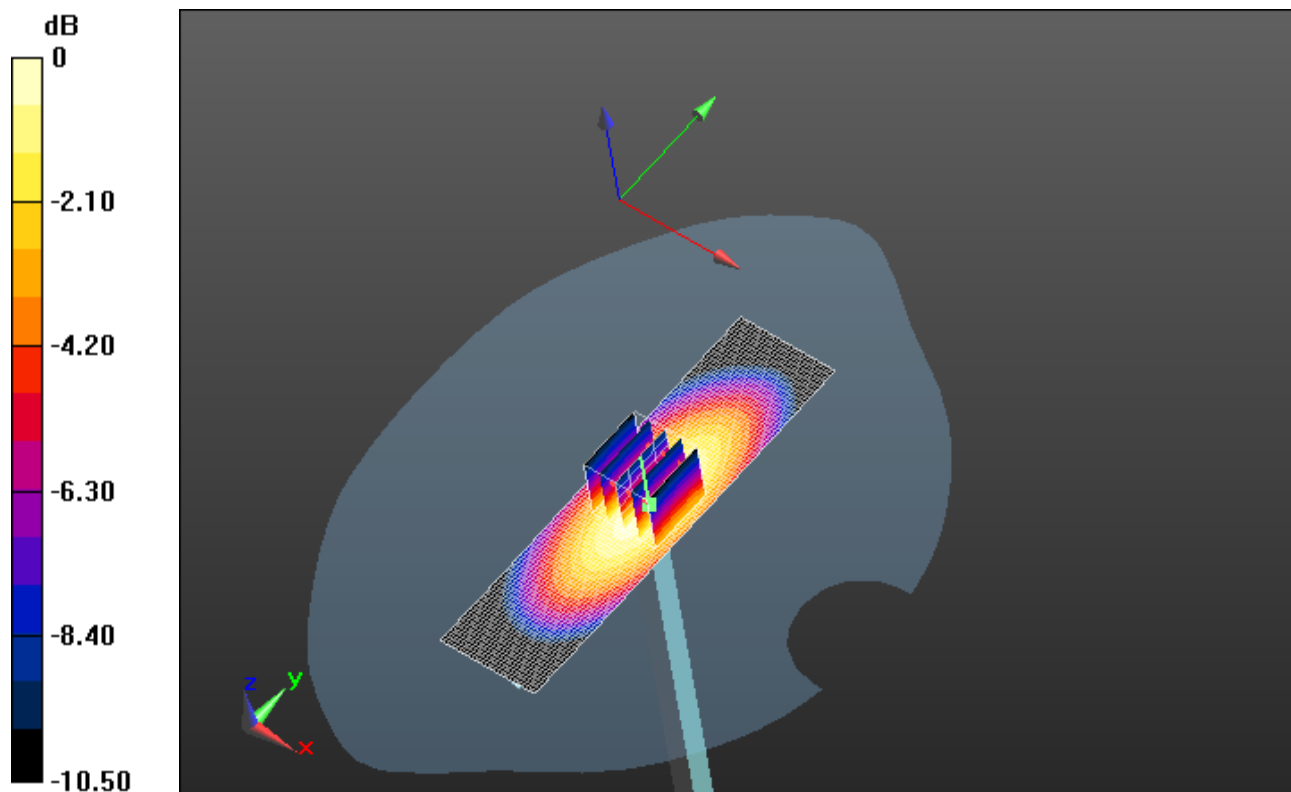
0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 112.0 V/m ; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 13.4 W/kg

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SAR(1 g) = 9.06 W/kg; SAR(10 g) = 5.94 W/kg
 Maximum value of SAR (measured) = 10.6 W/kg



0 dB = 10.6 W/kg = 10.25 dBW/kg

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Author Data Andrew Becker	Dates of Test July 12 – October 16, 2013	Test Report No RTS-6046-1310-25	FCC ID: L6ARFV120LW	

Date/Time: 7/16/2013 1:18:07 AM

Test Laboratory: RIM Testing Services

DipoleValidation_835MHz_07_16_13_Amb_Tem_23.9C_Liq_Tem_23.1C

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446

Communication System: UID 0 - n/a, CW; Frequency: 835 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.881 \text{ S/m}$; $\epsilon_r = 40.559$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.19, 6.19, 6.19); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

Configuration/d=15mm, Pin=1000mW/Area Scan (31x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Reference Value = 113.2 V/m; Power Drift = -0.20 dB

Fast SAR: SAR(1 g) = 9.08 W/kg; SAR(10 g) = 6.03 W/kg

Maximum value of SAR (interpolated) = 10.5 W/kg

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube

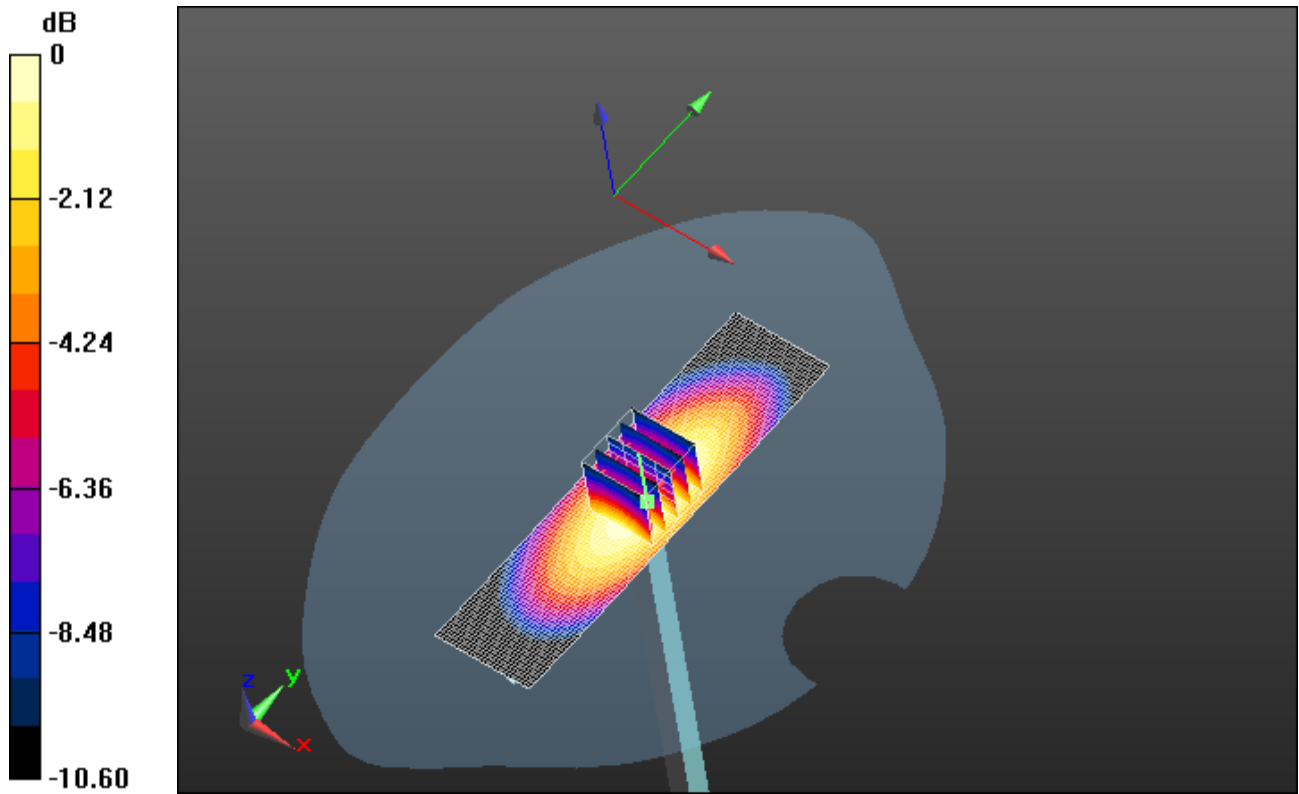
0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 113.2 V/m; Power Drift = -0.20 dB

Peak SAR (extrapolated) = 13.0 W/kg

SAR(1 g) = 8.8 W/kg; SAR(10 g) = 5.76 W/kg

Maximum value of SAR (measured) = 10.3 W/kg



0 dB = 10.3 W/kg = 10.13 dBW/kg

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Author Data Andrew Becker	Dates of Test July 12 – October 16, 2013	Test Report No RTS-6046-1310-25	FCC ID: L6ARFV120LW	

Date/Time: 8/16/2013 12:49:10 AM

Test Laboratory: RIM Testing Services

DipoleValidation_835MHz_08_16_13_Amb_Tem_23.6C_Liq_Tem_21.5C

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446

Communication System: UID 0 - n/a, CW; Frequency: 835 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.881 \text{ S/m}$; $\epsilon_r = 40.395$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.19, 6.19, 6.19); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

Configuration/d=15mm, Pin=1000mW/Area Scan (31x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Reference Value = 110.6 V/m; Power Drift = -0.01 dB

Fast SAR: SAR(1 g) = 8.7 W/kg; SAR(10 g) = 5.76 W/kg

Maximum value of SAR (interpolated) = 10.0 W/kg

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube

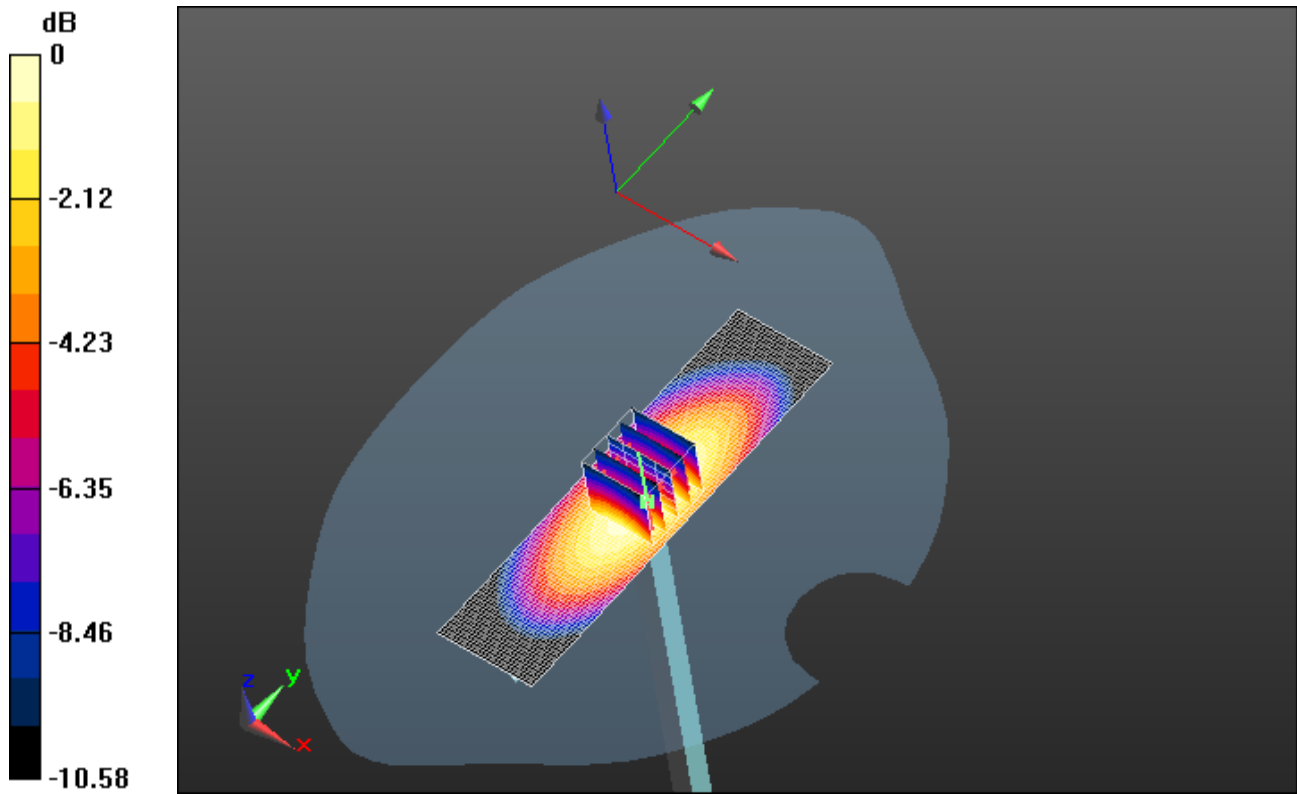
0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 110.6 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 12.7 W/kg

SAR(1 g) = 8.61 W/kg; SAR(10 g) = 5.64 W/kg

Maximum value of SAR (measured) = 10.0 W/kg



0 dB = 10.0 W/kg = 10.00 dBW/kg

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Date/Time: 7/10/2013 11:50:26 AM

Test Laboratory: RIM Testing Services

DipoleValidation_1800MHz_07_10_13_Amb_Tem_23.6_Liq_Tem_22.9C

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d020

Communication System: UID 0 - n/a, CW; Frequency: 1800 MHz

Medium parameters used: $f = 1800 \text{ MHz}$; $\sigma = 1.42 \text{ S/m}$; $\epsilon_r = 38.217$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1): Interpolated

grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Reference Value = 186.1 V/m ; Power Drift = 0.03 dB

Fast SAR: SAR(1 g) = 36.3 W/kg ; SAR(10 g) = 19.8 W/kg

Maximum value of SAR (interpolated) = 44.8 W/kg

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube

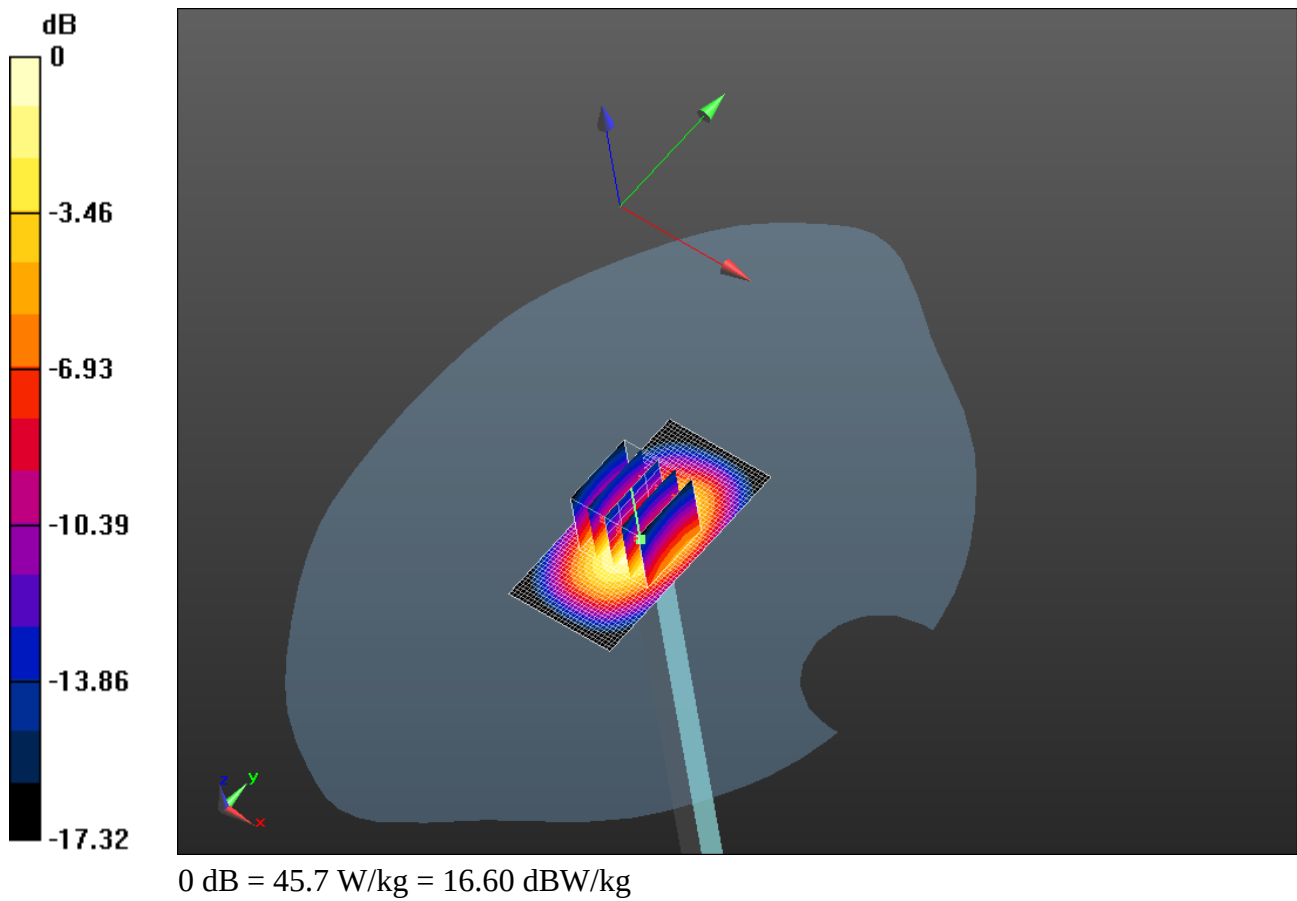
0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 186.1 V/m ; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 64.4 W/kg

SAR(1 g) = 36 W/kg ; SAR(10 g) = 18.9 W/kg

Maximum value of SAR (measured) = 45.7 W/kg



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Date/Time: 7/2/2013 12:46:05 AM

Test Laboratory: RIM Testing Services

DipoleValidation_1900MHz_07_02_13_Amb_Tem_23.2C_Liq_Tem_21.6C

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545

Communication System: UID 0 - n/a, CW; Frequency: 1900 MHz

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.387 \text{ S/m}$; $\epsilon_r = 38.399$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Reference Value = 190.8 V/m ; Power Drift = 0.03 dB

Fast SAR: SAR(1 g) = 37.6 W/kg ; SAR(10 g) = 19.8 W/kg

Maximum value of SAR (interpolated) = 47.1 W/kg

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube

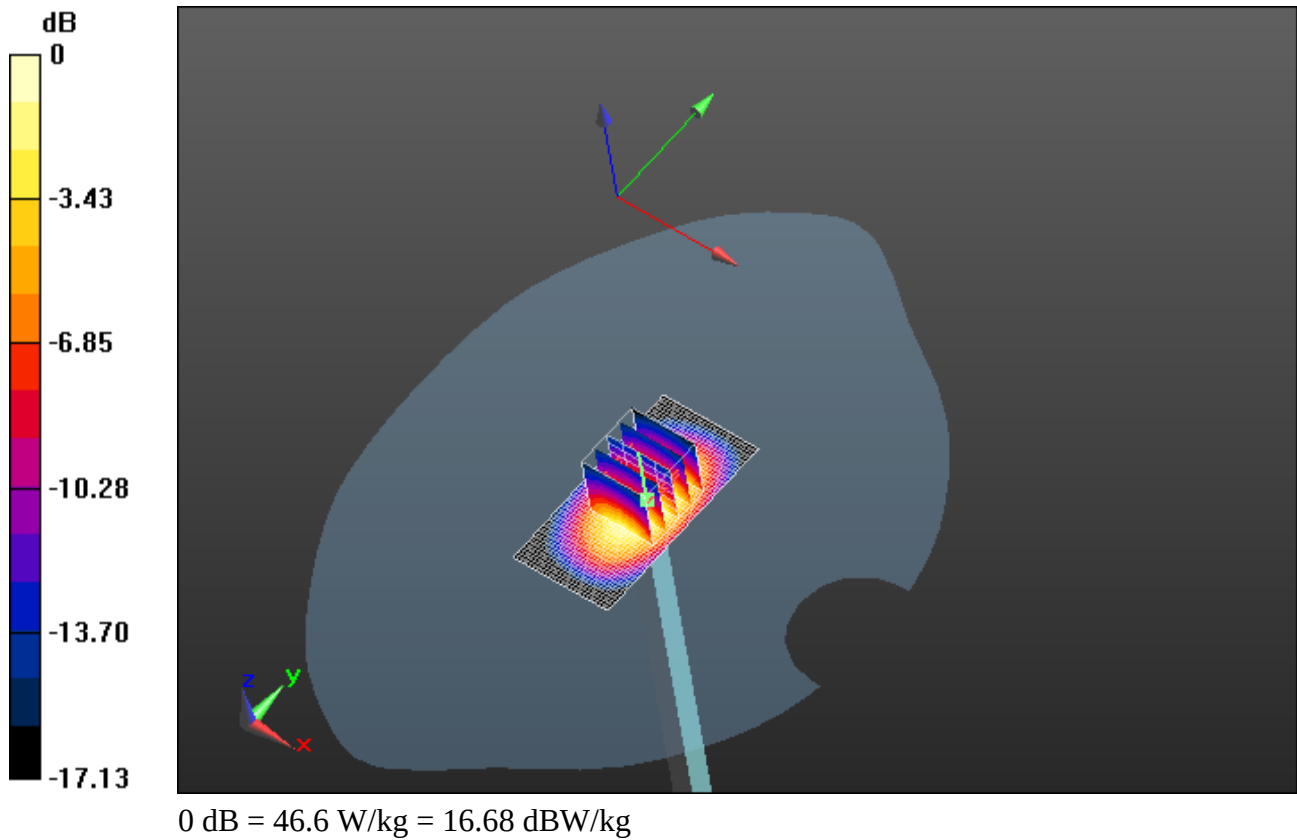
0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 190.8 V/m ; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 65.5 W/kg

SAR(1 g) = 37 W/kg ; SAR(10 g) = 19.5 W/kg

Maximum value of SAR (measured) = 46.6 W/kg



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Date/Time: 7/5/2013 12:57:00 AM

Test Laboratory: RIM Testing Services

DipoleValidation_1900MHz_07_05_13_Amb_Tem_23.3C_Liq_Tem_21.7 C

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545

Communication System: UID 0 - n/a, CW; Frequency: 1900 MHz

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.408 \text{ S/m}$; $\epsilon_r = 38.666$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS2 52.8.6(1115); SEMCAD X 14.6.9(7117)

Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1): Interpolated
grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Reference Value = 186.9 V/m ; Power Drift = -0.02 dB

Fast SAR: SAR(1 g) = 36.7 W/kg ; SAR(10 g) = 19.4 W/kg

Maximum value of SAR (interpolated) = 45.9 W/kg

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube

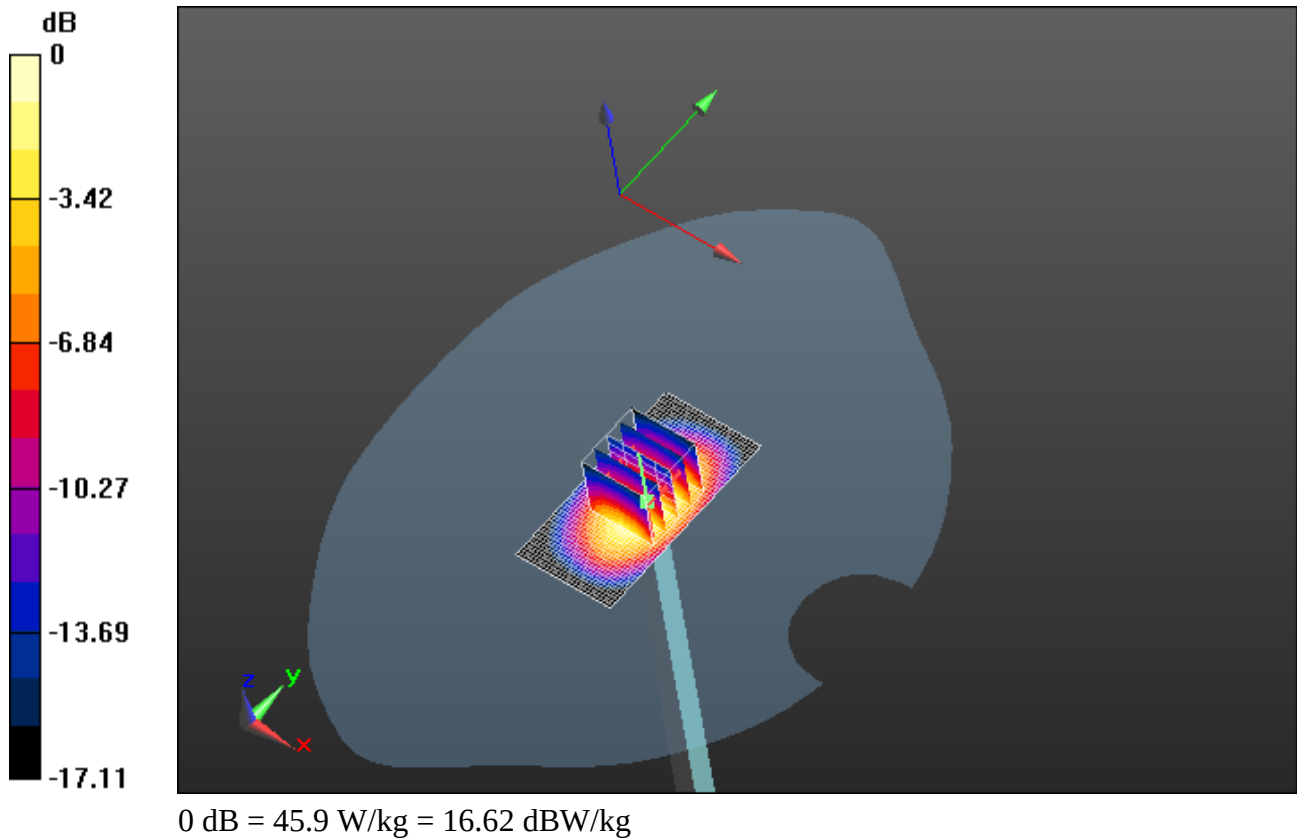
0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 186.9 V/m ; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 63.9 W/kg

SAR(1 g) = 36.2 W/kg ; SAR(10 g) = 19.1 W/kg

Maximum value of SAR (measured) = 45.9 W/kg



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Date/Time: 7/8/2013 11:04:31 AM

Test Laboratory: RIM Testing Services

DipoleValidation_1900MHz_07_08_13_Amb_Tem_23.0C_Liq_Tem_22.5 C

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545

Communication System: UID 0 - n/a, CW; Frequency: 1900 MHz

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.375$ S/m; $\epsilon_r = 38.543$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1): Interpolated
grid: $dx=1.500$ mm, $dy=1.500$ mm

Reference Value = 190.8 V/m; Power Drift = -0.03 dB

Fast SAR: SAR(1 g) = 37.3 W/kg; SAR(10 g) = 19.6 W/kg

Maximum value of SAR (interpolated) = 46.9 W/kg

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube

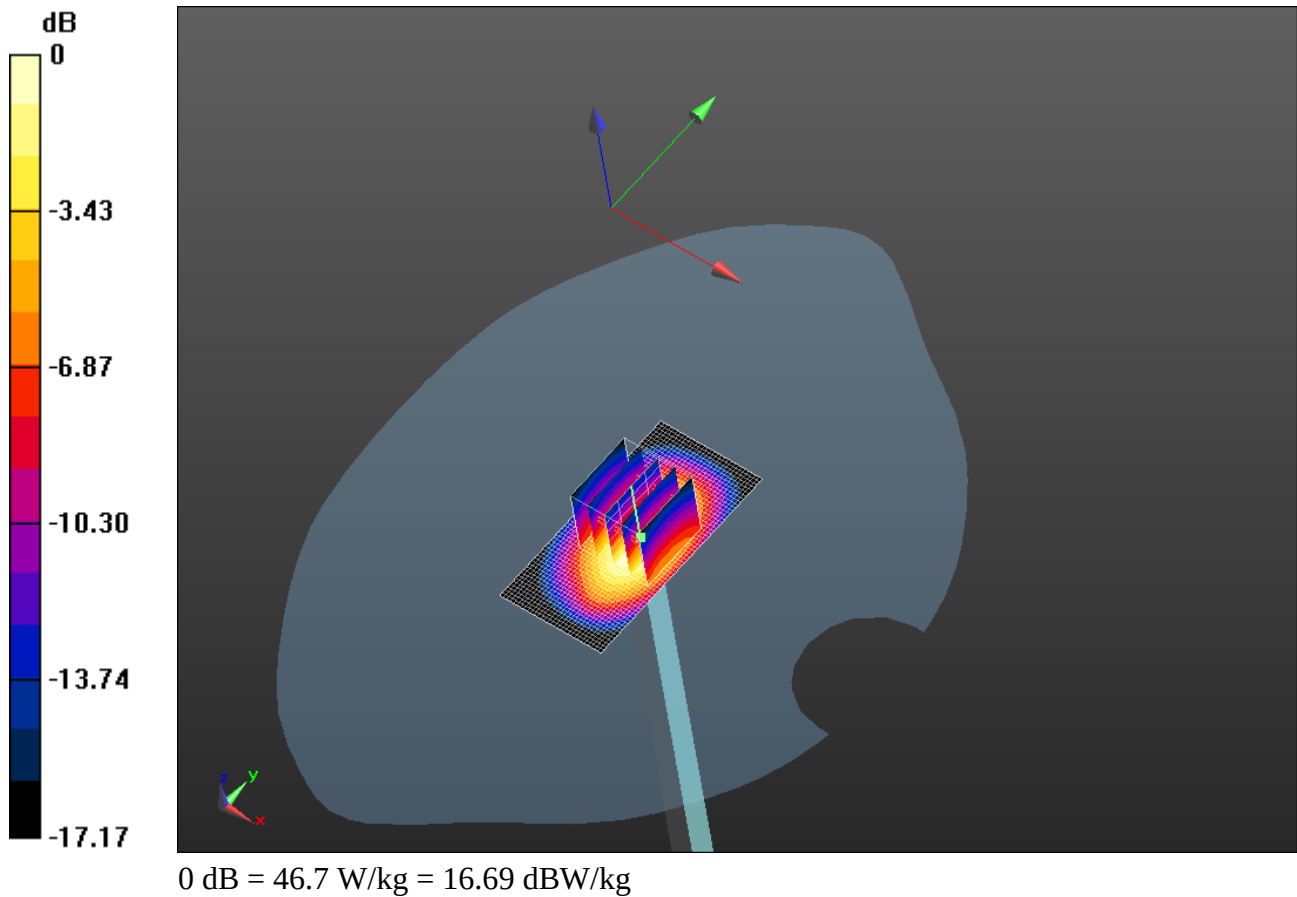
0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 190.8 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 65.1 W/kg

SAR(1 g) = 36.6 W/kg; SAR(10 g) = 19.2 W/kg

Maximum value of SAR (measured) = 46.7 W/kg



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Date/Time: 8/7/2013 3:04:00 PM

Test Laboratory: RIM Testing Services

DipoleValidation_1900MHz_08_07_13_Amb_Tem_23.5C_Liq_Tem_22.2 C

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545

Communication System: UID 0 - n/a, CW; Frequency: 1900 MHz

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.378 \text{ S/m}$; $\epsilon_r = 38.172$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1): Interpolated
grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Reference Value = 194.4 V/m ; Power Drift = -0.01 dB

Fast SAR: SAR(1 g) = 38.7 W/kg ; SAR(10 g) = 20.5 W/kg

Maximum value of SAR (interpolated) = 48.5 W/kg

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube

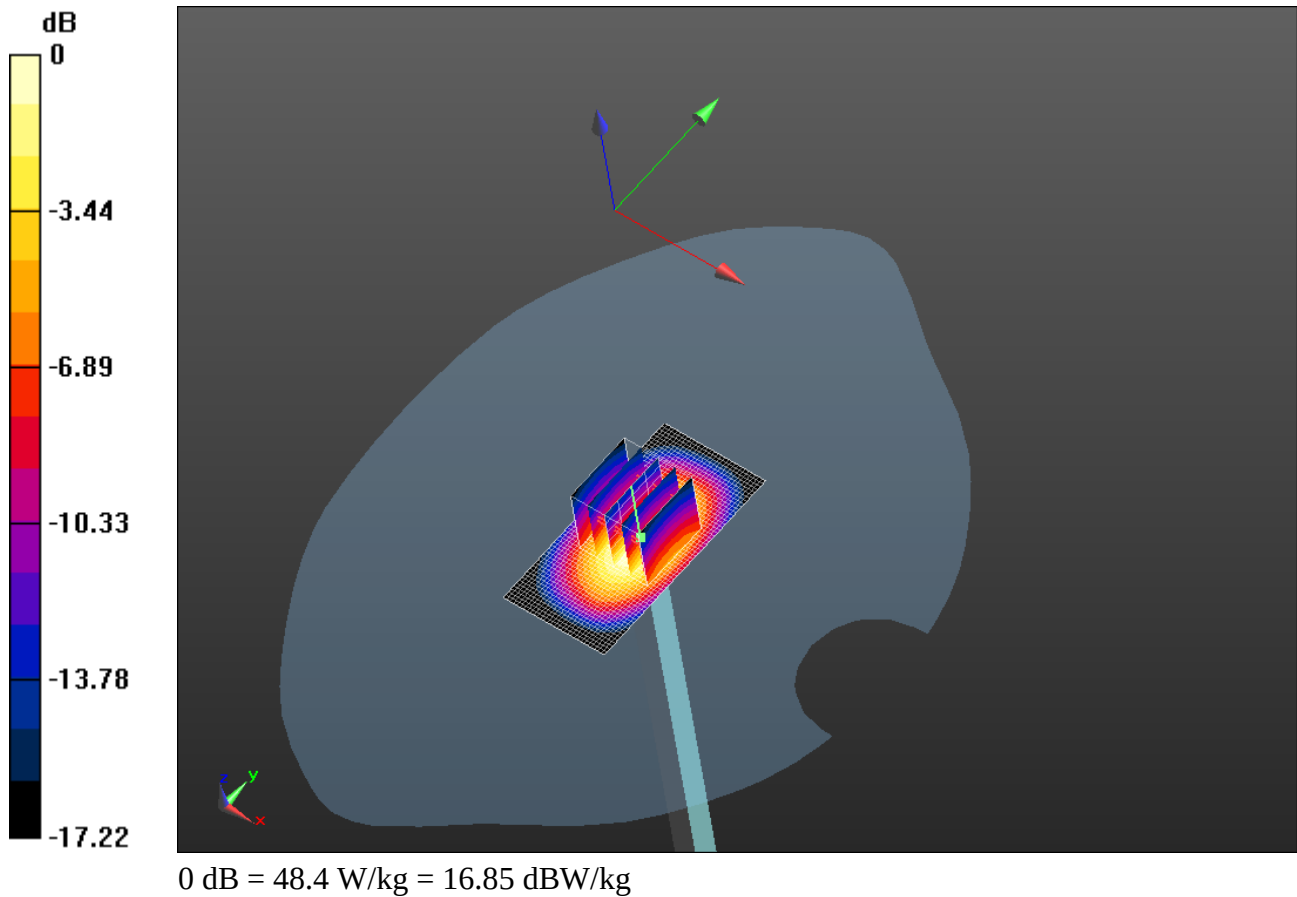
0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 194.4 V/m ; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 67.7 W/kg

SAR(1 g) = 38 W/kg ; SAR(10 g) = 19.9 W/kg

Maximum value of SAR (measured) = 48.4 W/kg



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Date/Time: 7/19/2013 8:54:16 AM

Test Laboratory: RIM Testing Services

DipoleValidation_2450MHz_07_19_13_Amb_Tem_23.0C_Liq_Tem_22.8 C

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:747

Communication System: UID 0 - n/a, CW; Frequency: 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.831$ S/m; $\epsilon_r = 37.795$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.65, 4.65, 4.65); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=1000 mW, dist=3.0mm (ES-Probe)/Area Scan (41x71x1): Interpolated

grid: $dx=1.200$ mm, $dy=1.200$ mm

Reference Value = 204.6 V/m; Power Drift = -0.09 dB

Fast SAR: SAR(1 g) = 52.5 W/kg; SAR(10 g) = 23.2 W/kg

Maximum value of SAR (interpolated) = 71.2 W/kg

System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=1000 mW, dist=3.0mm (ES-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube

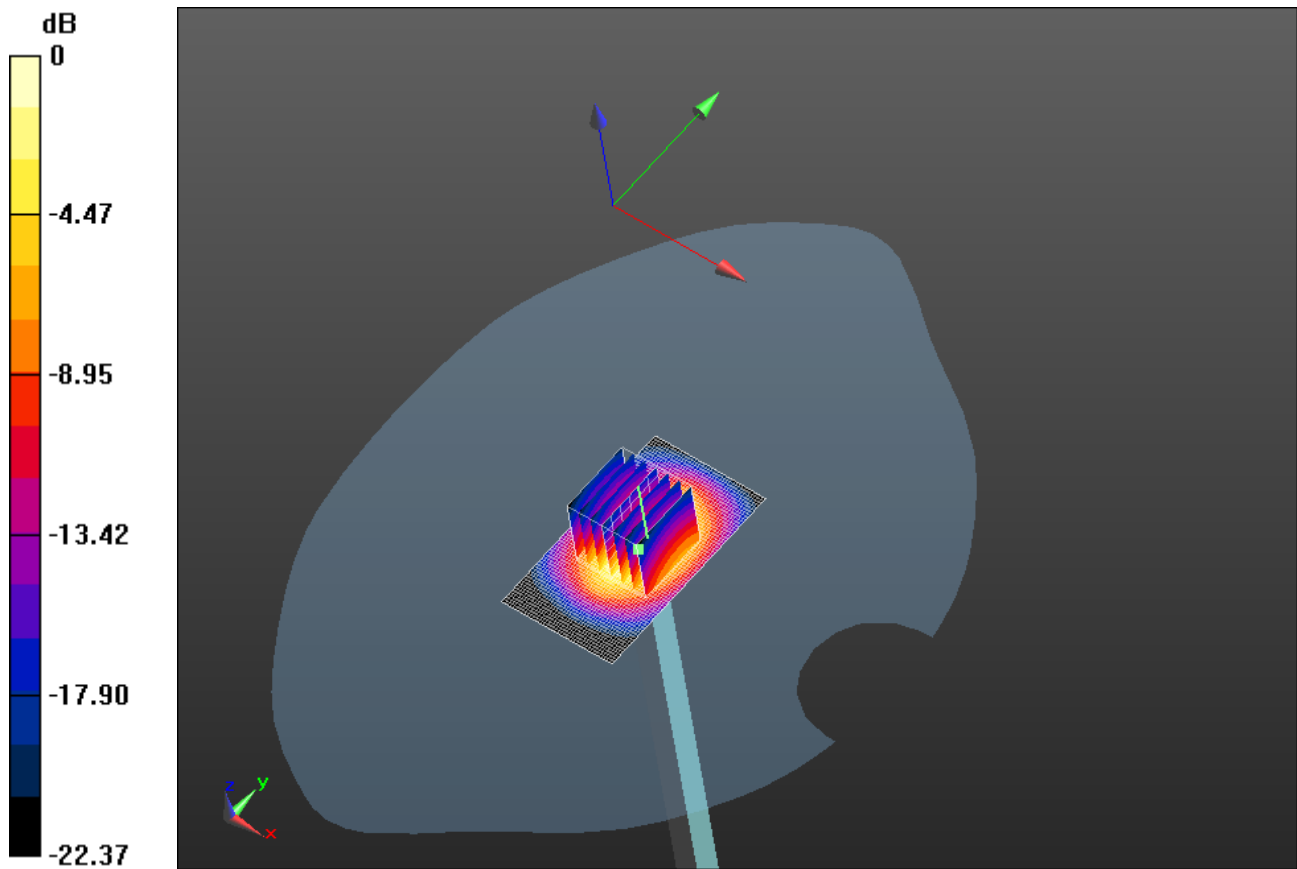
0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 204.6 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 102 W/kg

SAR(1 g) = 52.1 W/kg; SAR(10 g) = 24.6 W/kg

Maximum value of SAR (measured) = 67.6 W/kg



0 dB = 67.6 W/kg = 18.30 dBW/kg

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Date/Time: 10/8/2013 12:07:31 AM

Test Laboratory: BlackBerry RTS

DipoleValidation_2450MHz_10_08_13_Amb_Tem_24.6C_Liq_Tem_22.4 C

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:747

Communication System: UID 0 - n/a, CW; Frequency: 2450 MHz

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.831 \text{ S/m}$; $\epsilon_r = 37.444$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.65, 4.65, 4.65); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

System Performance Check at Frequencies above 1 GHz/ $d=10\text{mm}$, $P_{in}=1000 \text{ mW}$, $\text{dist}=3.0\text{mm}$ (ES-Probe)/Area Scan (41x71x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

Reference Value = 205.1 V/m ; Power Drift = 0.00 dB

Fast SAR: $\text{SAR}(1 \text{ g}) = 53 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 23.5 \text{ W/kg}$

Maximum value of SAR (interpolated) = 72.3 W/kg

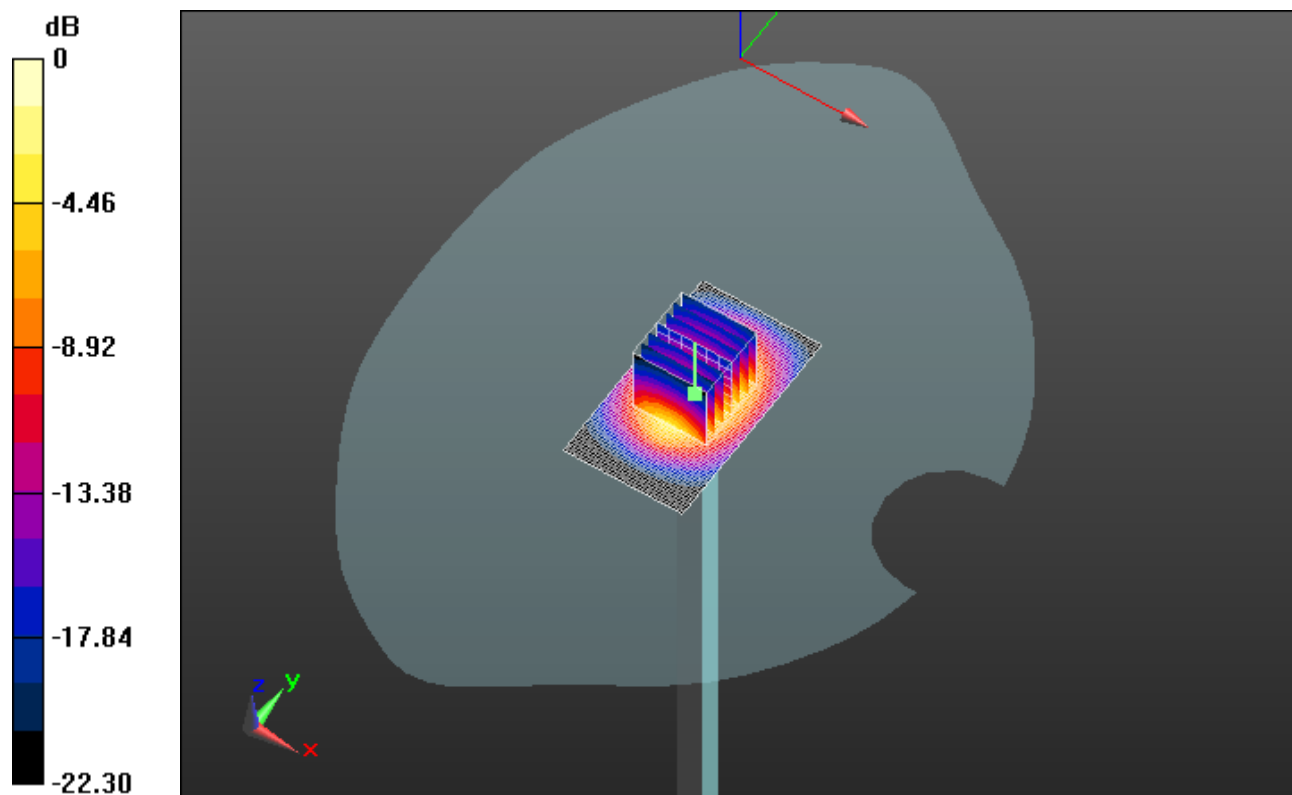
System Performance Check at Frequencies above 1 GHz/ $d=10\text{mm}$, $P_{in}=1000 \text{ mW}$, $\text{dist}=3.0\text{mm}$ (ES-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube

0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 205.1 V/m ; Power Drift = 0.00 dB

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Peak SAR (extrapolated) = 104 W/kg
SAR(1 g) = 52.8 W/kg; SAR(10 g) = 24.9 W/kg
Maximum value of SAR (measured) = 68.3 W/kg



0 dB = 68.3 W/kg = 18.34 dBW/kg

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Date: 10/10/2013

Test Lab: BlackBerry RTS

DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033

Configuration: System Performance Check with D5GHzV2 Dipole - 5200 MHz

Communication System: CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5200 MHz

Medium Parameters used: $f=5200$ MHz; $\sigma = 4.669$ S/m; $\epsilon_r = 34.725$; $\rho = 1.000$ g/cm³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3548; ConvF: (5.13,5.13,5.13); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

System Performance Check with D5GHzV2 Dipole - 5200 MHz/d=10mm, Pin=1000 mW, f=5200 MHz/Area Scan (41x51x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 207.2 V/m; **Power Drift = 0.046 dB**

Fast SAR: SAR(1g) = 82.4 W/kg; SAR(10g) = 22.8 W/kg

Maximum value of SAR (interpolated) = 194 W/kg

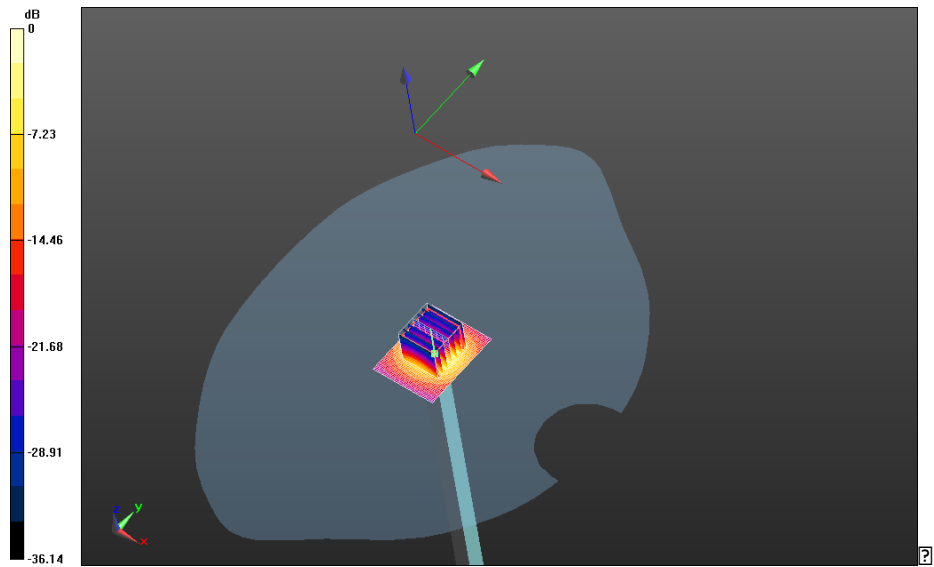
System Performance Check with D5GHzV2 Dipole - 5200 MHz/d=10mm, Pin=1000 mW, f=5200 MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (31x31x61)/Cube 0:

Interpolated grid: dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 207.2 V/m; **Power Drift = 0.046 dB**

Averaged SAR: SAR(1g) = 86.0 W/kg; SAR(10g) = 25.0 W/kg

Maximum value of SAR (interpolated) = 328 W/kg



0 dB = 174 W/kg = 22.41 dBW/kg

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Date: 10/10/2013

Test Lab: BlackBerry RTS

DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033

Configuration: System Performance Check with D5GHzV2 Dipole - 5500 MHz

Communication System: CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5500 MHz

Medium Parameters used: $f=5500$ MHz; $\sigma = 4.971$ S/m; $\epsilon_r = 34.125$; $\rho = 1.000$ g/cm³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3548; ConvF: (4.79,4.79,4.79); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

System Performance Check with D5GHzV2 Dipole - 5500 MHz/d=10mm, Pin=1000mW, f=5500 MHz/Area Scan (41x51x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 211.7 V/m; **Power Drift = 0.013 dB**

Fast SAR: SAR(1g) = 88.7 W/kg; SAR(10g) = 24.3 W/kg

Maximum value of SAR (interpolated) = 212 W/kg

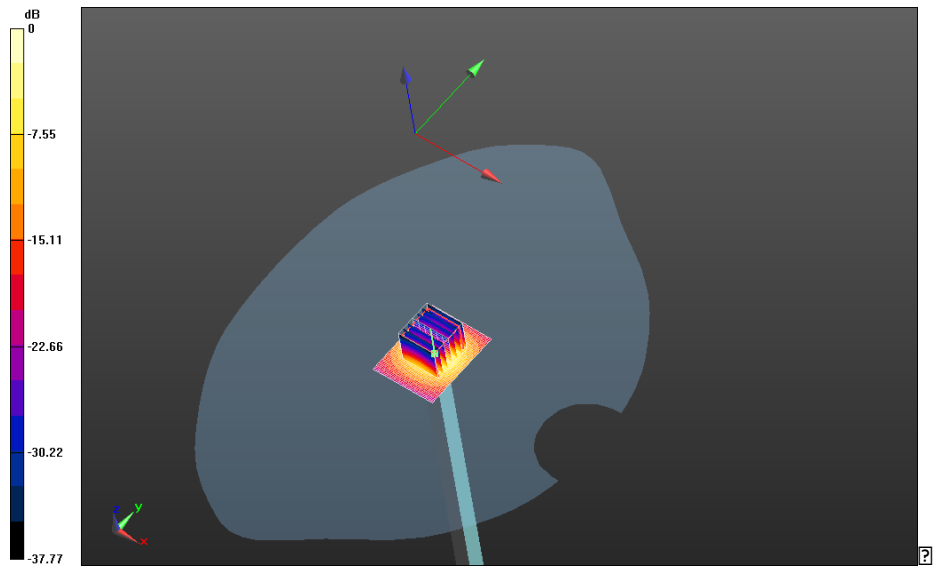
System Performance Check with D5GHzV2 Dipole - 5500 MHz/d=10mm, Pin=1000mW, f=5500 MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (31x31x61)/Cube 0:

Interpolated grid: dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 211.7 V/m; **Power Drift = 0.013 dB**

Averaged SAR: SAR(1g) = 93.1 W/kg; SAR(10g) = 26.8 W/kg

Maximum value of SAR (interpolated) = 383 W/kg



0 dB = 192 W/kg = 22.83 dBW/kg

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Date: 10/10/2013

Test Lab: BlackBerry RTS

DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033

Configuration: System Performance Check with D5GHzV2 Dipole - 5800 MHz

Communication System: CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5800 MHz

Medium Parameters used: $f=5800$ MHz; $\sigma = 5.399$ S/m; $\epsilon_r = 33.831$; $\rho = 1.000$ g/cm³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3548; ConvF: (4.61,4.61,4.61); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

System Performance Check with D5GHzV2 Dipole - 5800 MHz/d=10mm, Pin=1000 mW, f=5800 MHz/Area Scan (41x51x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 193.3 V/m; **Power Drift = -0.00774 dB**

Fast SAR: SAR(1g) = 81.5 W/kg; SAR(10g) = 22.2 W/kg

Maximum value of SAR (interpolated) = 197 W/kg

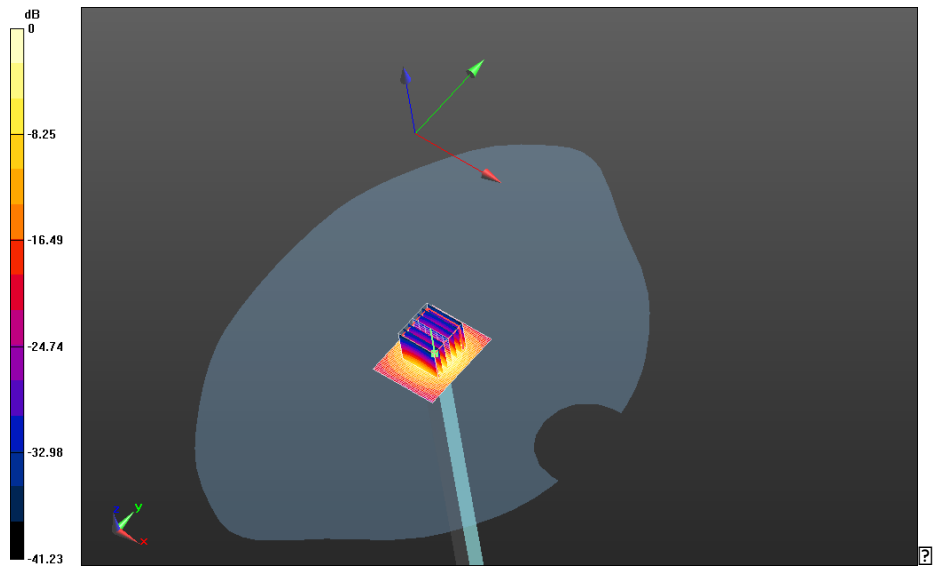
System Performance Check with D5GHzV2 Dipole - 5800 MHz/d=10mm, Pin=1000 mW, f=5800 MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (31x31x61)/Cube 0:

Interpolated grid: dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 193.3 V/m; **Power Drift = -0.00774 dB**

Averaged SAR: SAR(1g) = 84.8 W/kg; SAR(10g) = 24.4 W/kg

Maximum value of SAR (interpolated) = 354 W/kg



0 dB = 176 W/kg = 22.46 dBW/kg

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Date: 10/15/2013

Test Lab: BlackBerry RTS

DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033

Configuration: System Performance Check with D5GHzV2 Dipole - 5200 MHz

Communication System: CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5200 MHz

Medium Parameters used: $f=5200$ MHz; $\sigma = 4.708$ S/m; $\epsilon_r = 34.626$; $\rho = 1.000$ g/cm³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3548; ConvF: (5.13,5.13,5.13); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

System Performance Check with D5GHzV2 Dipole - 5200 MHz/d=10mm, Pin=1000 mW, f=5200 MHz/Area Scan (41x51x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 203.6 V/m; **Power Drift = 0.042 dB**

Fast SAR: SAR(1g) = 81.1 W/kg; SAR(10g) = 22.7 W/kg

Maximum value of SAR (interpolated) = 187 W/kg

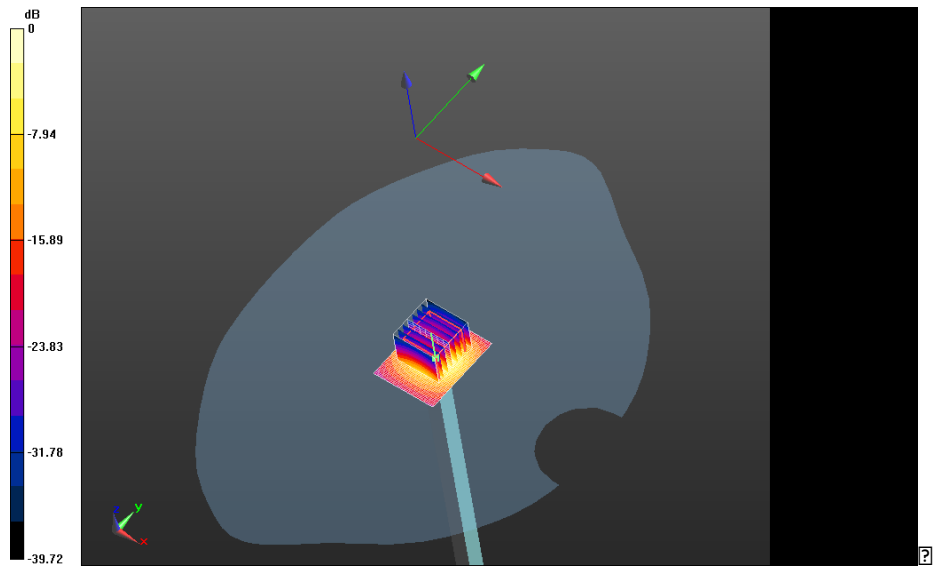
System Performance Check with D5GHzV2 Dipole - 5200 MHz/d=10mm, Pin=1000 mW, f=5200 MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (36x36x61)/Cube 0: Interpolated

grid: dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 203.6 V/m; **Power Drift = 0.042 dB**

Averaged SAR: SAR(1g) = 84.6 W/kg; SAR(10g) = 24.8 W/kg

Maximum value of SAR (interpolated) = 321 W/kg



0 dB = 171 W/kg = 22.33 dBW/kg

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Date: 10/15/2013

Test Lab: BlackBerry RTS

DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033

Configuration: System Performance Check with D5GHzV2 Dipole - 5500 MHz

Communication System: CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5500 MHz

Medium Parameters used: $f=5500$ MHz; $\sigma = 5.098$ S/m; $\epsilon_r = 34.532$; $\rho = 1.000$ g/cm³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3548; ConvF: (4.79,4.79,4.79); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

System Performance Check with D5GHzV2 Dipole - 5500 MHz/d=10mm, Pin=1000mW, f=5500 MHz/Area Scan (41x51x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 199.3 V/m; **Power Drift = -0.014 dB**

Fast SAR: SAR(1g) = 87.7 W/kg; SAR(10g) = 24.1 W/kg

Maximum value of SAR (interpolated) = 209 W/kg

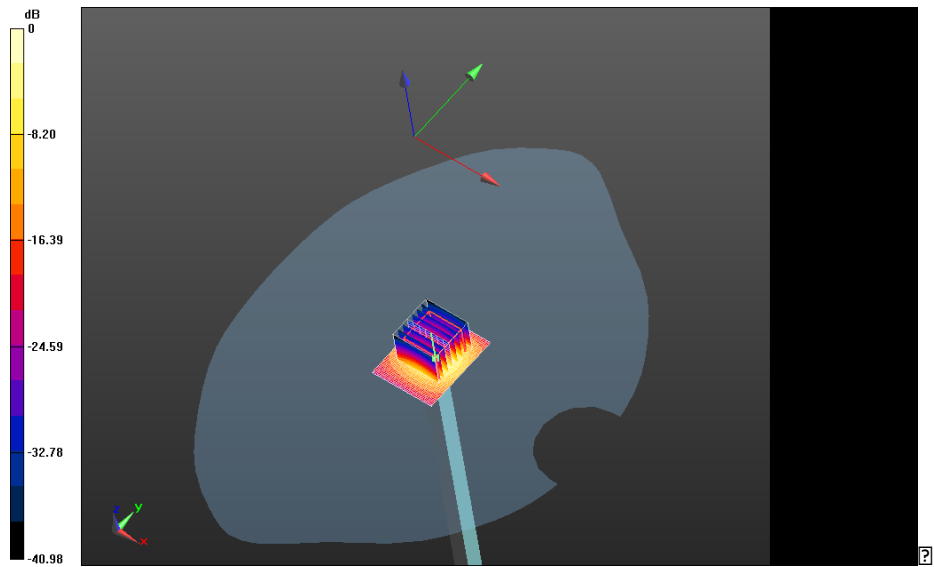
System Performance Check with D5GHzV2 Dipole - 5500 MHz/d=10mm, Pin=1000mW, f=5500 MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (36x36x61)/Cube 0:

Interpolated grid: dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 199.3 V/m; **Power Drift = -0.014 dB**

Averaged SAR: SAR(1g) = 90.5 W/kg; SAR(10g) = 26.2 W/kg

Maximum value of SAR (interpolated) = 376 W/kg



0 dB = 189 W/kg = 22.76 dBW/kg

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Date: 10/15/2013

Test Lab: BlackBerry RTS

DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033

Configuration: System Performance Check with D5GHzV2 Dipole - 5800 MHz

Communication System: CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5800 MHz

Medium Parameters used: $f=5800$ MHz; $\sigma = 5.342$ S/m; $\epsilon_r = 33.612$; $\rho = 1.000$ g/cm³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3548; ConvF: (4.61,4.61,4.61); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

System Performance Check with D5GHzV2 Dipole - 5800 MHz/d=10mm, Pin=1000 mW, f=5800 MHz/Area Scan (41x51x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 190.6 V/m; **Power Drift = -0.039 dB**

Fast SAR: SAR(1g) = 80.0 W/kg; SAR(10g) = 22.0 W/kg

Maximum value of SAR (interpolated) = 191 W/kg

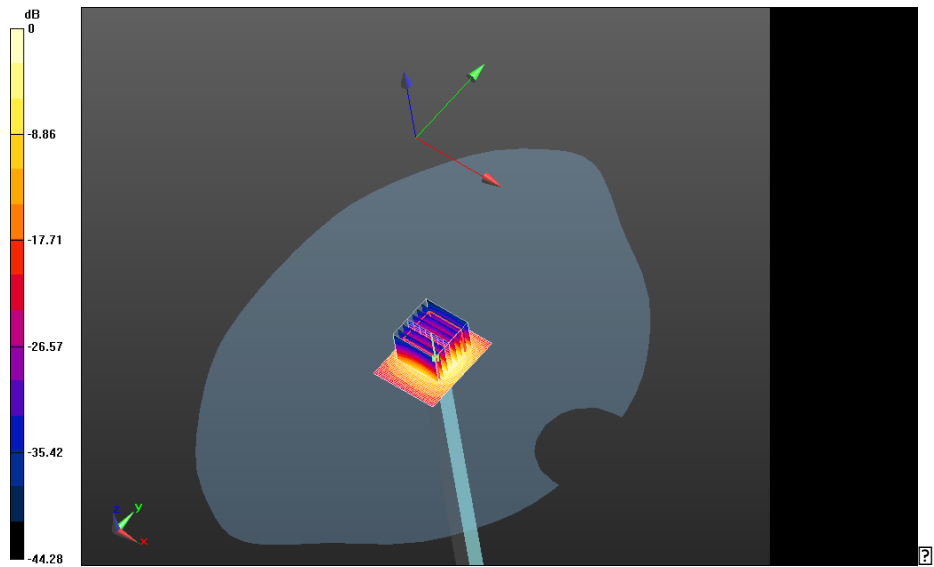
System Performance Check with D5GHzV2 Dipole - 5800 MHz/d=10mm, Pin=1000 mW, f=5800 MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (36x36x61)/Cube 0:

Interpolated grid: dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 190.6 V/m; **Power Drift = -0.039 dB**

Averaged SAR: SAR(1g) = 84.5 W/kg; SAR(10g) = 24.5 W/kg

Maximum value of SAR (interpolated) = 349 W/kg



0 dB = 174 W/kg = 22.41 dBW/kg