

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 1(15)
Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1	FCC ID: L6ARBW70CW

APPENDIX A: SAR DISTRIBUTION COMPARISON FOR ACCURACY VERIFICATION

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 2(15)
	Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1

Date/Time: 07/08/2008 9:03:35 AM

Test Laboratory: RTS

File Name: [DipoleValidation 835MHz Amb Tem 23 0 Liq Tem 22 4C.da4](#)

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446
Program Name: System Performance Check at 835 MHz

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 835 \text{ MHz}$; $s = 0.868 \text{ mho/m}$; $\epsilon_r = 41.4$; density = 1000 kg/m^3
Phantom section: Flat Section

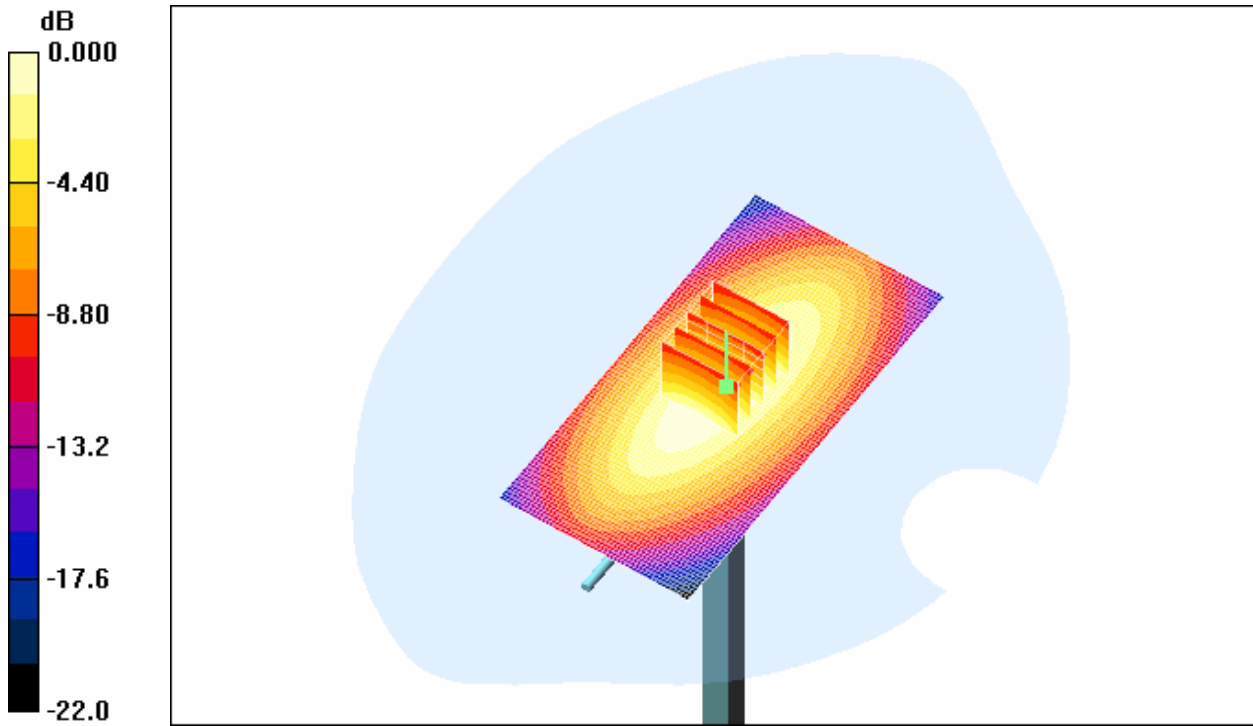
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.42, 6.42, 6.42); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 109.6 V/m; Power Drift = -0.035 dB
Peak SAR (extrapolated) = 12.6 W/kg
SAR(1 g) = 8.76 mW/g; SAR(10 g) = 5.76 mW/g
Maximum value of SAR (measured) = 9.52 mW/g

d=15mm, Pin=1000mW/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 9.45 mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 3(15)
	Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1



0 dB = 9.45mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 4(15)
	Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1

Date/Time: 08/08/2008 3:11:47 PM

Test Laboratory: RTS

File Name:

[DipoleValidation_835MHz_Amb_Tem_23_1_Liq_Tem_22_5C_08_08_08.da4](#)

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446
Program Name: System Performance Check at 835 MHz

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 835 \text{ MHz}$; $s = 0.868 \text{ mho/m}$; $\epsilon_r = 41.5$; density = 1000 kg/m^3
Phantom section: Flat Section

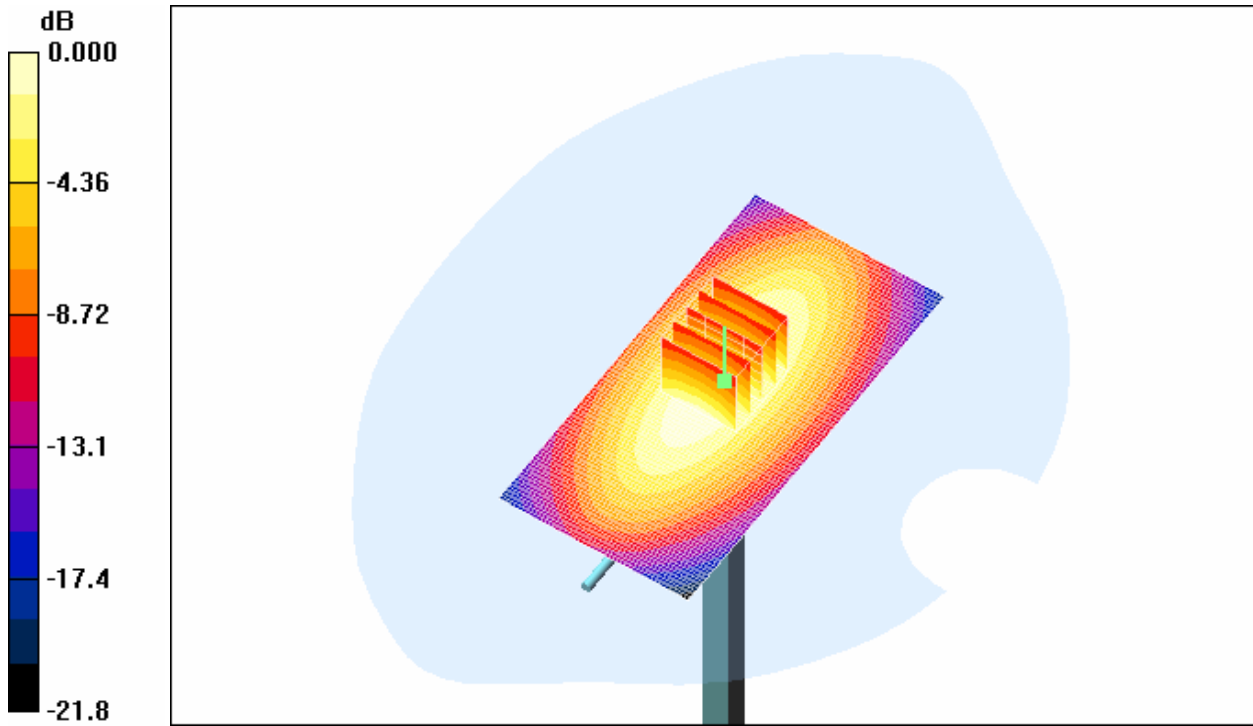
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.42, 6.42, 6.42); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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 = 111.8 V/m ; Power Drift = -0.104 dB
Peak SAR (extrapolated) = 12.9 W/kg
SAR(1 g) = 9.01 mW/g; SAR(10 g) = 5.93 mW/g
Maximum value of SAR (measured) = 9.77 mW/g

d=15mm, Pin=1000mW/Area Scan (51x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 9.84 mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 5(15)
	Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1



0 dB = 9.84mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 6(15)
	Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1

Date/Time: 17/09/2008 3:55:45 PM

Test Laboratory: RTS

File Name: [DipoleValidation_835MHz_Amb_Tem_22.4_Liq_Tem_21.6C.da4](#)

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

Program Name: System Performance Check at 835 MHz

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

Medium parameters used: $f = 835 \text{ MHz}$; $s = 0.863 \text{ mho/m}$; $\epsilon_r = 41.5$; density = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.42, 6.42, 6.42); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement

grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 111.4 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 12.9 W/kg

SAR(1 g) = 9.04 mW/g; SAR(10 g) = 6 mW/g

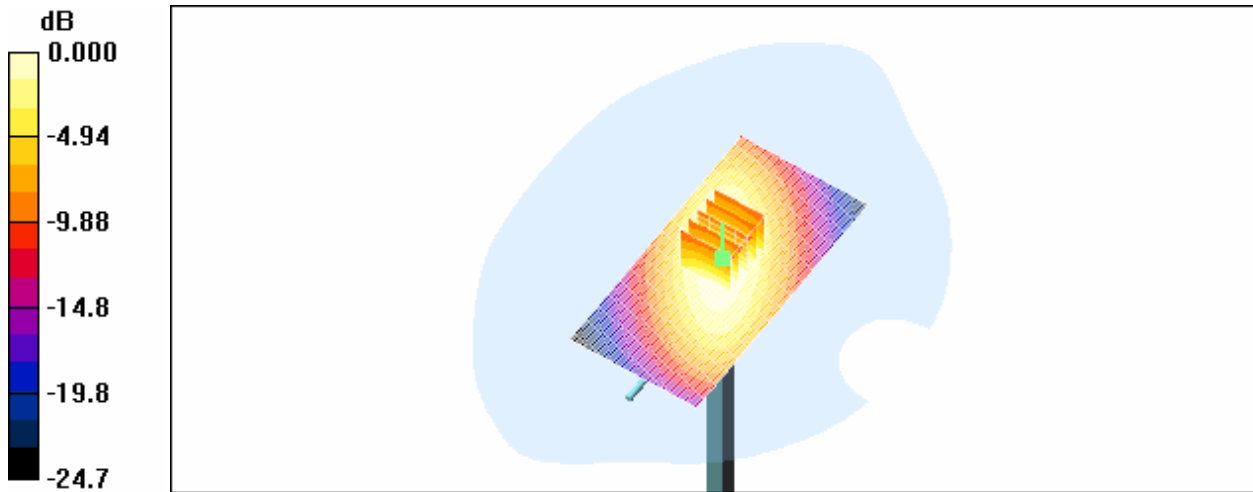
Maximum value of SAR (measured) = 9.80 mW/g

d=15mm, Pin=1000mW/Area Scan (51x101x1): Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (interpolated) = 9.75 mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 7(15)
	Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1



0 dB = 9.75mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 8(15)
	Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1

Date/Time: 11/08/2008 11:10:40 PM

Test Laboratory: RTS

File Name: [DipoleValidation_1900MHz_Amb_Tem_22.9_Liq_Tem_22.0_C.da4](#)

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

Program Name: System Performance Check at 1900 MHz

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

Medium parameters used: $f = 1900$ MHz; $s = 1.46$ mho/m; $\epsilon_r = 38.5$; density = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(5.15, 5.15, 5.15); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement

grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 184.7 V/m; Power Drift = 0.002 dB

Peak SAR (extrapolated) = 66.0 W/kg

SAR(1 g) = 38.8 mW/g; SAR(10 g) = 20.3 mW/g

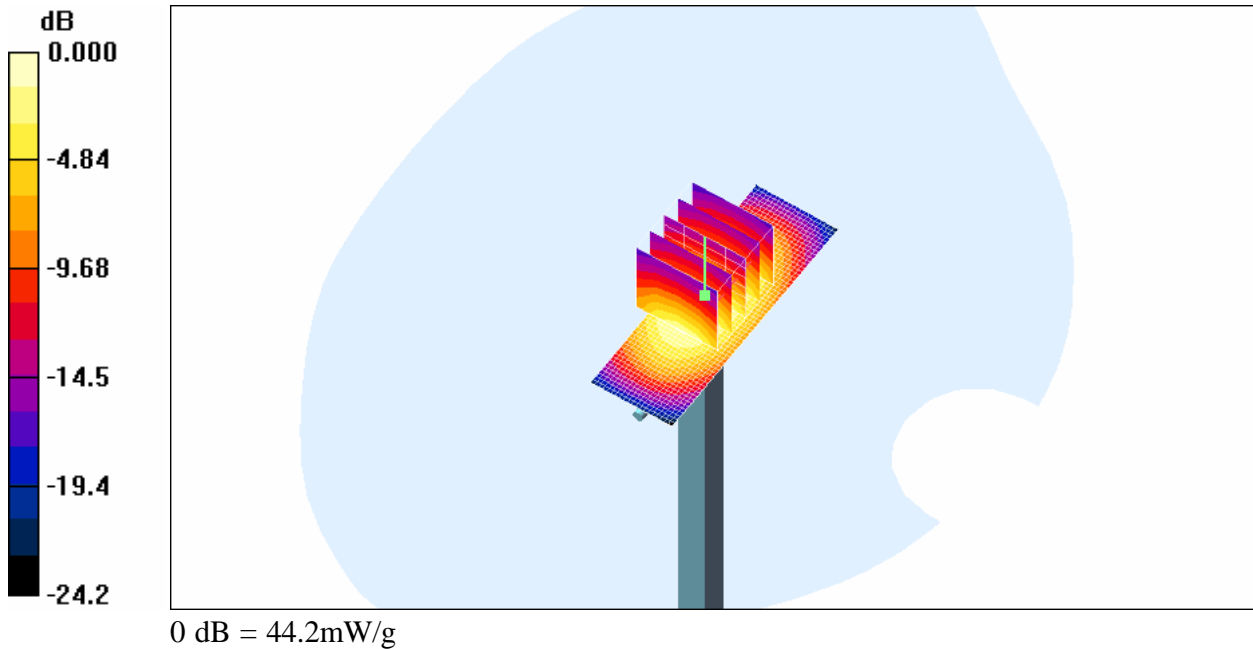
Maximum value of SAR (measured) = 44.0 mW/g

d=15mm, Pin=1000mW/Area Scan (21x61x1): Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (interpolated) = 44.2 mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 9(15)
	Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1



RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 10(15)
	Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1

Date/Time: 13/08/2008 1:50:09 PM

Test Laboratory: RTS

File Name: [DipoleValidation_1900MHz_Amb_Tem_23.0_Liq_Tem_22.4_C.da4](#)

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

Program Name: System Performance Check at 1900 MHz

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

Medium parameters used: $f = 1900$ MHz; $s = 1.45$ mho/m; $\epsilon_r = 38.1$; density = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(5.15, 5.15, 5.15); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement

grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 188.5 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 68.2 W/kg

SAR(1 g) = 39.6 mW/g; SAR(10 g) = 20.7 mW/g

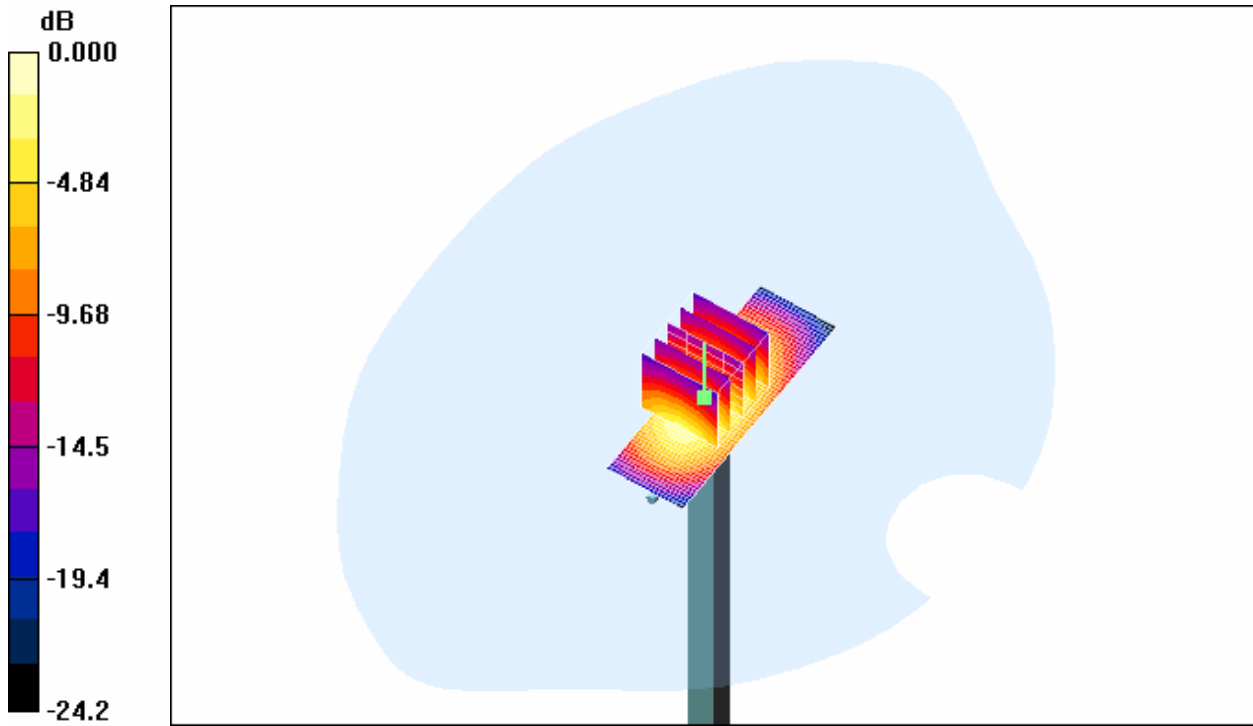
Maximum value of SAR (measured) = 45.1 mW/g

d=15mm, Pin=1000mW/Area Scan (21x61x1): Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (interpolated) = 45.6 mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 11(15)
	Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1



0 dB = 45.6mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 12(15)
	Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1

Date/Time: 06/08/2008 5:44:57 PM

Test Laboratory: RTS

File Name: [DipoleValidation_2450MHz_Amb_Tem_23.6_Liq_Tem_22.4_C.da4](#)

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

Program Name: System Performance Check at 2450 MHz

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

Medium parameters used: $f = 2450$ MHz; $s = 1.93$ mho/m; $\epsilon_r = 37.2$; density = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.52, 4.52, 4.52); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement

grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 182.2 V/m; Power Drift = 0.115 dB

Peak SAR (extrapolated) = 126.0 W/kg

SAR(1 g) = 55.4 mW/g; SAR(10 g) = 25.2 mW/g

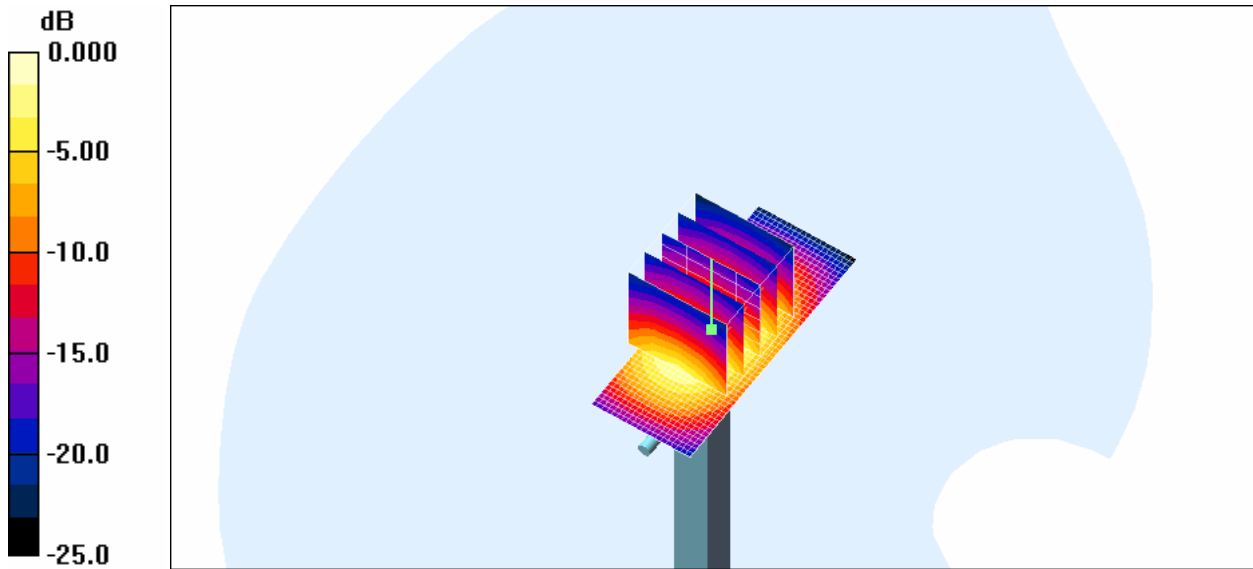
Maximum value of SAR (measured) = 61.7 mW/g

d=15mm, Pin=1000mW/Area Scan (21x51x1): Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (interpolated) = 63.2 mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 13(15)
	Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1



0 dB = 63.2mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 14(15)
	Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1

Date/Time: 15/09/2008 4:18:45 PM

Test Laboratory: RTS

File Name: [DipoleValidation_1900MHz_Amb_Tem_22.9_Liq_Tem_23.8_C.da4](#)

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

Program Name: System Performance Check at 1900 MHz

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

Medium parameters used: $f = 1900$ MHz; $s = 1.46$ mho/m; $\epsilon_r = 38.8$; density = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(5.15, 5.15, 5.15); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement

grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 189.2 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 69.0 W/kg

SAR(1 g) = 40.3 mW/g; SAR(10 g) = 21.1 mW/g

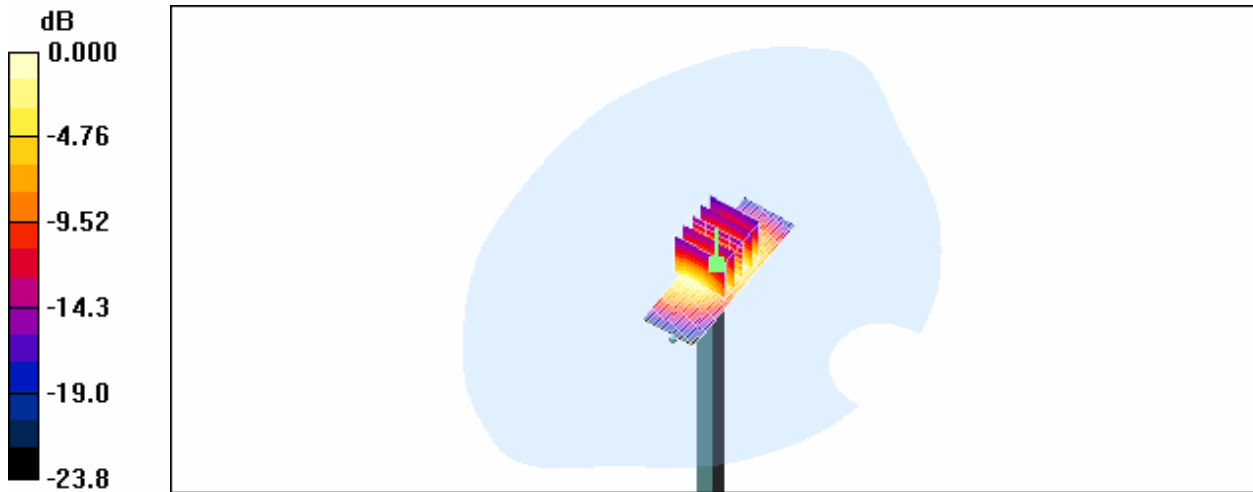
Maximum value of SAR (measured) = 45.9 mW/g

d=15mm, Pin=1000mW/Area Scan (21x61x1): Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (interpolated) = 47.2 mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBW71CW SAR Report		Page 15(15)
	Author Data Shahriar Ninad	Dates of Test Aug 06-14, Sep 15-18, 2008	Test Report No RTS-1191-0808-22 Rev 1



0 dB = 47.2mW/g