

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBY41GW SAR Report		Page 1(13)
Author Data Shahriar Ninad	Dates of Test June 02-24, 2008	Test Report No RTS-1114-0806-05	FCC ID: L6ARBY40GW

APPENDIX A: SAR DISTRIBUTION COMPARISON FOR ACCURACY VERIFICATION

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBY41GW SAR Report		Page 2(13)
	Author Data Shahriar Ninad	Dates of Test June 02-24, 2008	Test Report No RTS-1114-0806-05

Date/Time: 09/06/2008 10:43:25 AM

Test Laboratory: RTS

File Name:

[DipoleValidation_835MHz_Amb_Tem_23_0_Liq_Tem_22_2_C_06_09_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: $f = 835 \text{ MHz}$; $\sigma = 0.892 \text{ mho/m}$; $\epsilon_r = 41.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1644; ConvF(6.41, 6.41, 6.41); Calibrated: 12/11/2007
- 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 = 110.4 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 13.4 W/kg

SAR(1 g) = 9.28 mW/g; SAR(10 g) = 6.11 mW/g

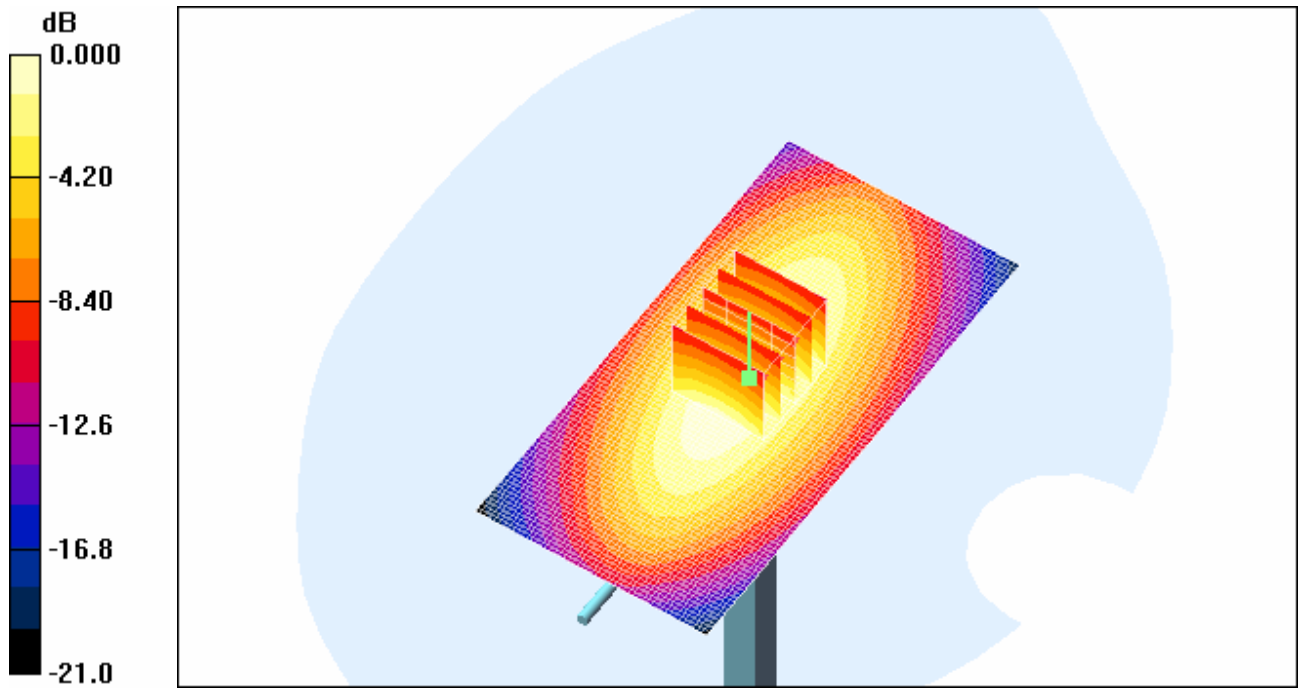
Maximum value of SAR (measured) = 10.1 mW/g

d=15mm, Pin=1000mW/Area Scan (51x101x1): Measurement grid: $dx=15\text{mm}$,

$dy=15\text{mm}$

Maximum value of SAR (interpolated) = 10.0 mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBY41GW SAR Report		Page 3(13)
	Author Data Shahriar Ninad	Dates of Test June 02-24, 2008	Test Report No RTS-1114-0806-05



0 dB = 10.0mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBY41GW SAR Report		Page 4(13)
	Author Data Shahriar Ninad	Dates of Test June 02-24, 2008	Test Report No RTS-1114-0806-05

Date/Time: 24/06/2008 10:58:33 AM

Test Laboratory: RTS

File Name:

[DipoleValidation_835MHz_Amb_Tem_23_3_Liq_Tem_22_6_C_06_24_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: $f = 835 \text{ MHz}$; $\sigma = 0.86 \text{ mho/m}$; $\epsilon_r = 40.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1644; ConvF(6.41, 6.41, 6.41); Calibrated: 12/11/2007
- 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 (7x5x5) (7x5x5)/Cube 0: Measurement

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

Reference Value = 109.7 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 13.1 W/kg

SAR(1 g) = 8.96 mW/g; SAR(10 g) = 5.89 mW/g

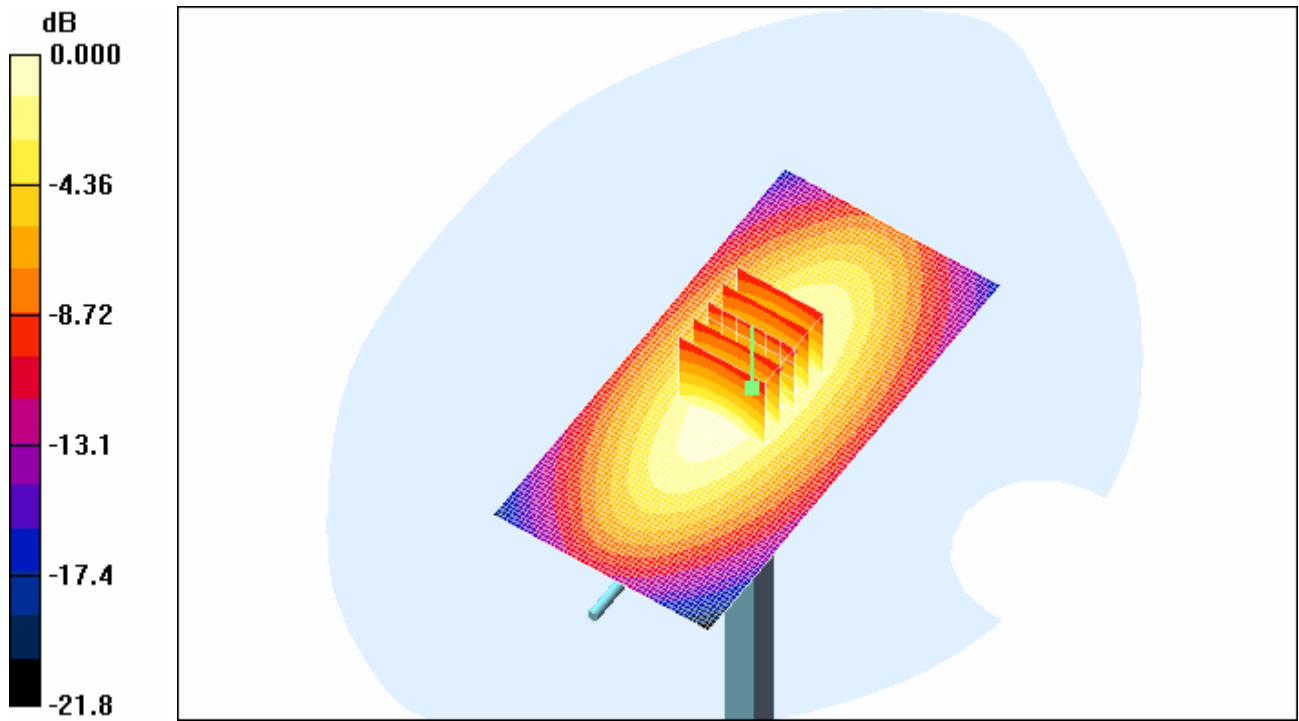
Maximum value of SAR (measured) = 9.66 mW/g

d=15mm, Pin=1000mW/Area Scan (51x101x1): Measurement grid: $dx=15\text{mm}$,

$dy=15\text{mm}$

Maximum value of SAR (interpolated) = 9.68 mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBY41GW SAR Report		Page 5(13)
	Author Data Shahriar Ninad	Dates of Test June 02-24, 2008	Test Report No RTS-1114-0806-05



0 dB = 9.68mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBY41GW SAR Report		Page 6(13)
	Author Data Shahriar Ninad	Dates of Test June 02-24, 2008	Test Report No RTS-1114-0806-05

Date/Time: 12/06/2008 6:26:32 PM

Test Laboratory: RTS

File Name: [DipoleValidation_1900MHz_Amb_Tem_23_3_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; $\sigma = 1.44$ mho/m; $\epsilon_r = 38.4$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

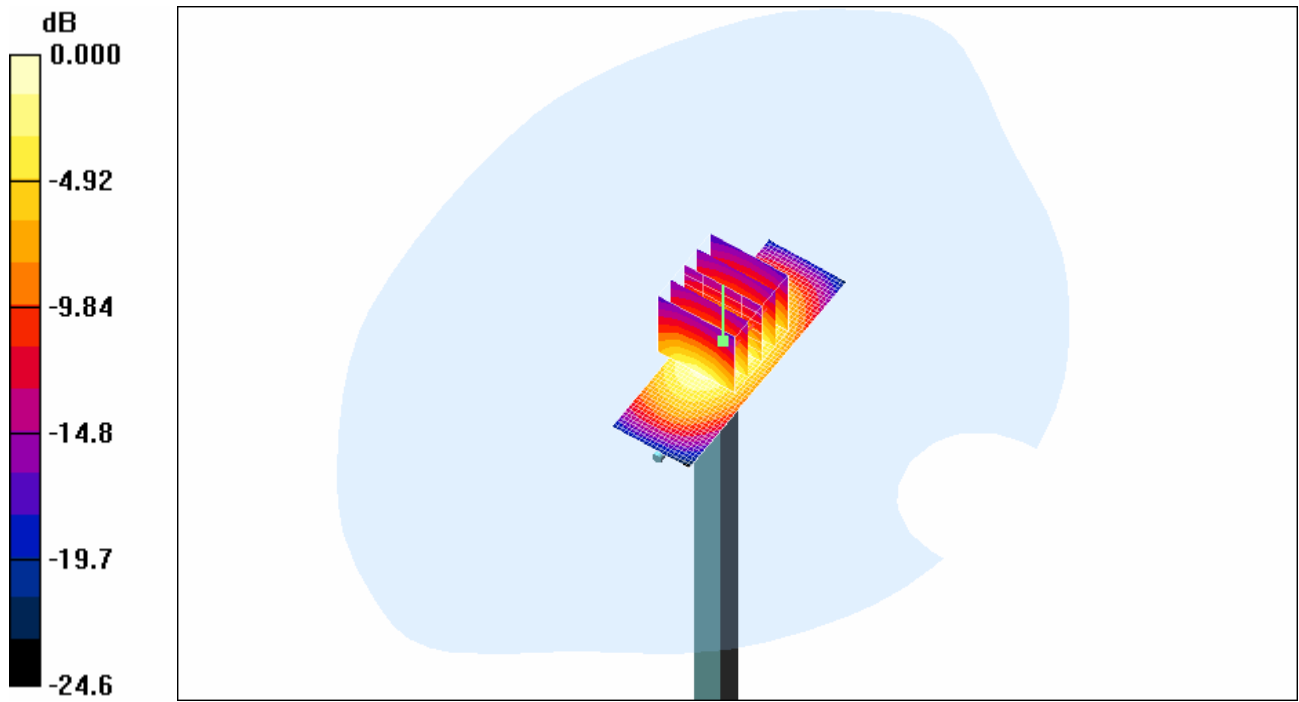
DASY4 Configuration:

- Probe: ET3DV6 - SN1644; ConvF(5.24, 5.24, 5.24); Calibrated: 12/11/2007
- 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 = 182.6 V/m; Power Drift = 0.017 dB
Peak SAR (extrapolated) = 69.7 W/kg
SAR(1 g) = 38.7 mW/g; SAR(10 g) = 20.2 mW/g
Maximum value of SAR (measured) = 43.3 mW/g

d=15mm, Pin=1000mW/Area Scan (21x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 44.5 mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBY41GW SAR Report		Page 7(13)
	Author Data Shahriar Ninad	Dates of Test June 02-24, 2008	Test Report No RTS-1114-0806-05



0 dB = 44.5mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBY41GW SAR Report		Page 8(13)
	Author Data Shahriar Ninad	Dates of Test June 02-24, 2008	Test Report No RTS-1114-0806-05

Date/Time: 20/06/2008 6:08:59 PM

Test Laboratory: RTS

File Name: [DipoleValidation_1900MHz_Amb_Tem_22_9_Liq_Tem_21_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; $\sigma = 1.46$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

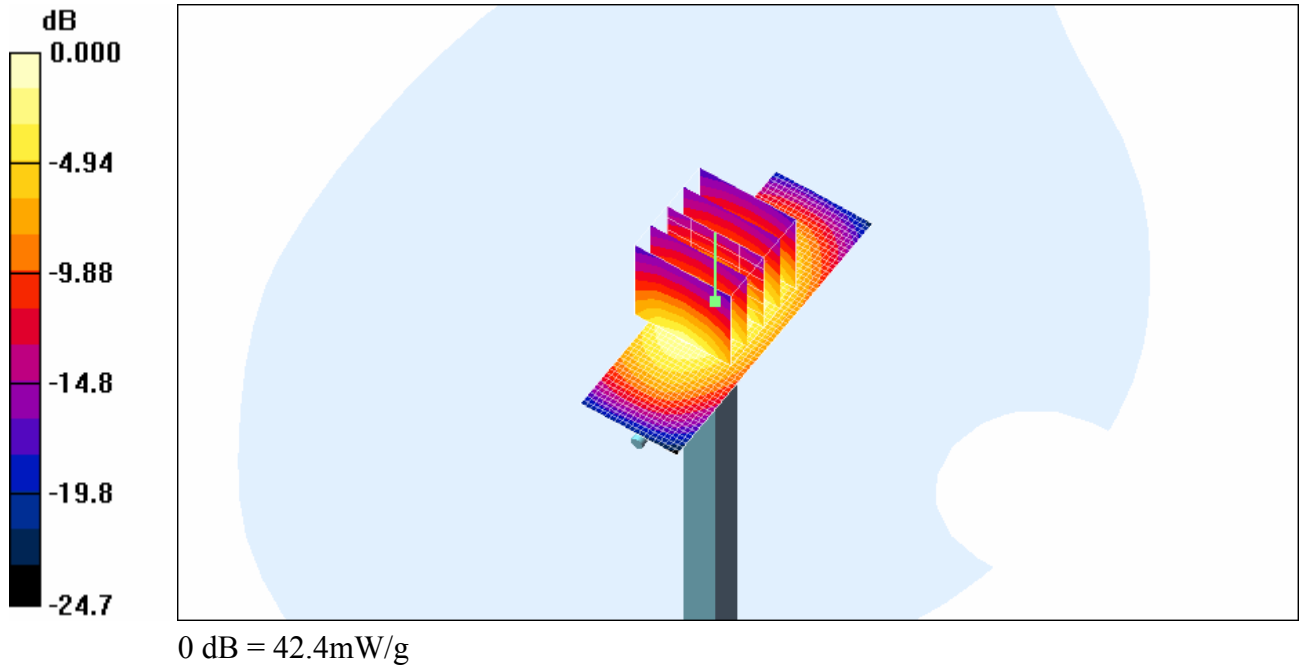
DASY4 Configuration:

- Probe: ET3DV6 - SN1644; ConvF(5.24, 5.24, 5.24); Calibrated: 12/11/2007
- 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 = 177.1 V/m; Power Drift = -0.020 dB
Peak SAR (extrapolated) = 66.9 W/kg
SAR(1 g) = 36.8 mW/g; SAR(10 g) = 19 mW/g
Maximum value of SAR (measured) = 41.7 mW/g

d=15mm, Pin=1000mW/Area Scan (21x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 42.4 mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBY41GW SAR Report		Page 9(13)
	Author Data Shahriar Ninad	Dates of Test June 02-24, 2008	Test Report No RTS-1114-0806-05



RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBY41GW SAR Report		Page 10(13)
	Author Data Shahriar Ninad	Dates of Test June 02-24, 2008	Test Report No RTS-1114-0806-05

Date/Time: 02/06/2008 1:21:12 PM

Test Laboratory: RTS

File Name: [DipoleValidation_2450MHz_Amb_Tem_23_5_Liq_Tem_22_4_C.da4](#)

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:xxx
Program Name: Dipole Validation (2450 MHz)

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2450$ MHz; $\sigma = 1.94$ mho/m; $\epsilon_r = 38.4$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

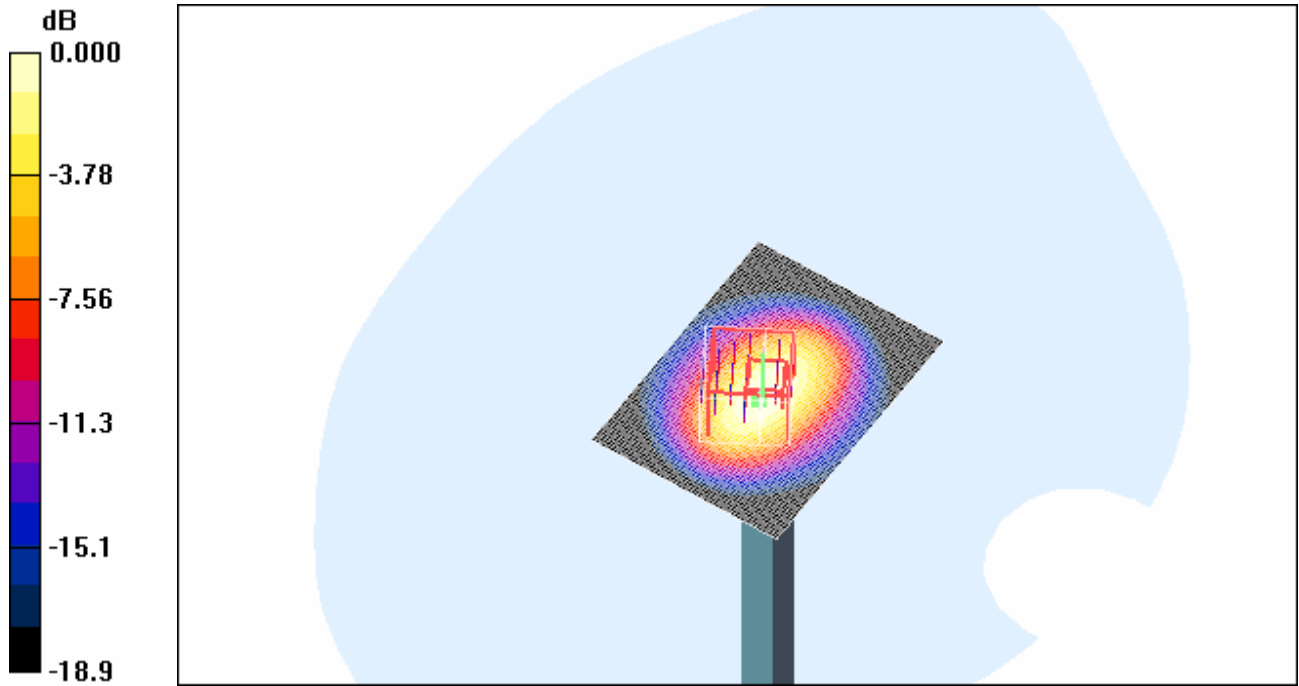
- Probe: EX3DV4 - SN3592; ConvF(6.65, 6.65, 6.65); Calibrated: 06/11/2007
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Validation/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 91.7 mW/g

Validation/Zoom Scan (7x7x9) (7x7x5)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 219.7 V/m; Power Drift = -0.010 dB
Peak SAR (extrapolated) = 121.5 W/kg
SAR(1 g) = 57.9 mW/g; SAR(10 g) = 24.8 mW/g

Maximum value of SAR (measured) = 89.3 mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBY41GW SAR Report		Page 11(13)
	Author Data Shahriar Ninad	Dates of Test June 02-24, 2008	Test Report No RTS-1114-0806-05



0 dB = 89.3mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBY41GW SAR Report		Page 12(13)
	Author Data Shahriar Ninad	Dates of Test June 02-24, 2008	Test Report No RTS-1114-0806-05

Date/Time: 10/06/2008 10:57:47 PM

Test Laboratory: RTS

File Name: [DipoleValidation_2450MHz_Amb_Tem_22_9_Liq_Tem_21_8_C.da4](#)

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:xxx
Program Name: Dipole Validation (2450 MHz)

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2450$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 37.3$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3592; ConvF(6.65, 6.65, 6.65); Calibrated: 06/11/2007
- Sensor-Surface: 2mm (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

Validation/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 83.1 mW/g

Validation/Zoom Scan (7x7x9) (7x7x5)/Cube 0: Measurement grid: dx=4mm,
dy=4mm, dz=2.5mm
Reference Value = 208.1 V/m; Power Drift = 0.006 dB
Peak SAR (extrapolated) = 110.5 W/kg
SAR(1 g) = 52.6 mW/g; SAR(10 g) = 24 mW/g

Maximum value of SAR (measured) = 80.7 mW/g

RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBY41GW SAR Report		Page 13(13)
	Author Data Shahriar Ninad	Dates of Test June 02-24, 2008	Test Report No RTS-1114-0806-05

