
	Document Appendix for the BlackBerry® Smartphone Model RCP51UW SAR Report		Page 1(13)
	Author Data Jean-Paul Hacquoil	Dates of Test July 30-August 19, 2009	Test Report No RTS-1765-0908-02

APPENDIX A: SAR DISTRIBUTION COMPARISON FOR ACCURACY VERIFICATION

	Document		Page
	Appendix for the BlackBerry® Smartphone Model RCP51UW SAR Report		2(13)
Author Data	Dates of Test	Test Report No	FCC ID:
Jean-Paul Hacquoil	July 30-August 19, 2009	RTS-1765-0908-02	L6ARCP50UW

Date/Time: 17/08/2009 4:40:50 PM

Test Laboratory: RTS

File Name: [DipoleValidation_835MHz_Amb_Tem_23.5_Liq_Tem_22.9_C.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: $f = 835 \text{ MHz}$; $\sigma = 0.874 \text{ mho/m}$; $\epsilon_r = 41.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

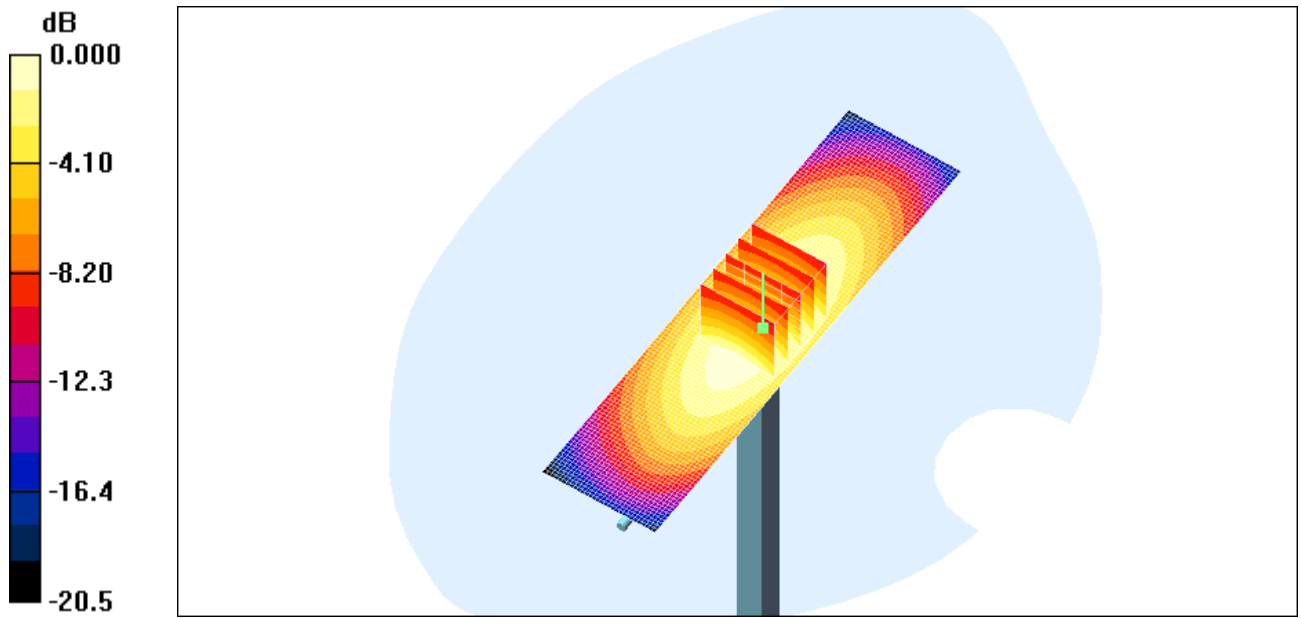
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.06, 6.06, 6.06); Calibrated: 12/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186


d=15mm, 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 = 108.5 V/m; Power Drift = -0.028 dB
Peak SAR (extrapolated) = 12.8 W/kg
SAR(1 g) = 8.84 mW/g; SAR(10 g) = 5.84 mW/g
Maximum value of SAR (measured) = 9.58 mW/g

d=15mm, Pin=1000mW/Area Scan (31x121x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 9.56 mW/g

	Document Appendix for the BlackBerry® Smartphone Model RCP51UW SAR Report		Page 3(13)
	Author Data Jean-Paul Hacquoil	Dates of Test July 30-August 19, 2009	Test Report No RTS-1765-0908-02



0 dB = 9.56mW/g

	Document		Page
	Appendix for the BlackBerry® Smartphone Model RCP51UW SAR Report		4(13)
Author Data	Dates of Test	Test Report No	FCC ID:
Jean-Paul Hacquoil	July 30-August 19, 2009	RTS-1765-0908-02	L6ARCP50UW

Date/Time: 18/08/2009 10:10:13 PM

Test Laboratory: RTS

File Name: [DipoleValidation_835MHz_Amb_Tem_23.3_Liq_Tem_22.6_C.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: $f = 835 \text{ MHz}$; $\sigma = 0.903 \text{ mho/m}$; $\epsilon_r = 42.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.06, 6.06, 6.06); Calibrated: 12/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=15mm, 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 = 107.8 V/m; Power Drift = -0.051 dB

Peak SAR (extrapolated) = 13.2 W/kg


SAR(1 g) = 9.1 mW/g; SAR(10 g) = 6.01 mW/g

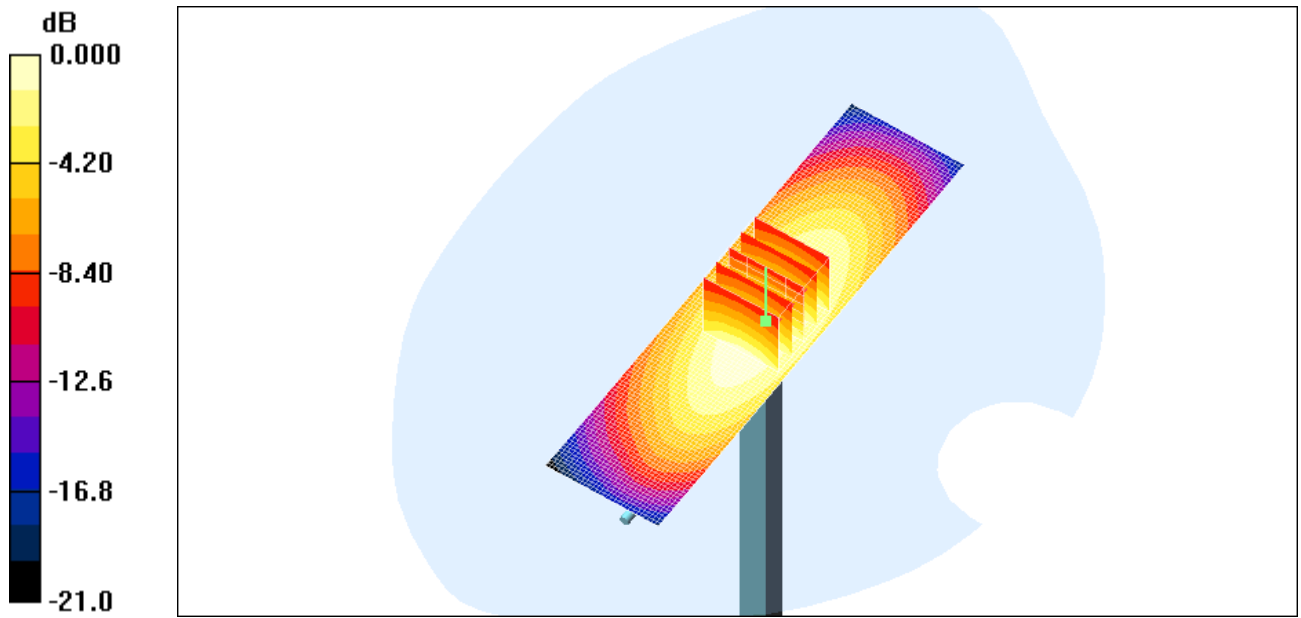
Maximum value of SAR (measured) = 9.82 mW/g

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


$dy=15\text{mm}$

Maximum value of SAR (interpolated) = 9.87 mW/g

	Document Appendix for the BlackBerry® Smartphone Model RCP51UW SAR Report		Page 5(13)
	Author Data Jean-Paul Hacquoil	Dates of Test July 30-August 19, 2009	Test Report No RTS-1765-0908-02



0 dB = 9.87mW/g

	Document		Page
	Appendix for the BlackBerry® Smartphone Model RCP51UW SAR Report		6(13)
Author Data	Dates of Test	Test Report No	FCC ID:
Jean-Paul Hacquoil	July 30-August 19, 2009	RTS-1765-0908-02	L6ARCP50UW

Date/Time: 12/08/2009 11:16:27 PM

Test Laboratory: RTS

File Name: [DipoleValidation_1900MHz_Amb_Tem_23.1_Liq_Tem_22.8_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; $\epsilon_r = 38.1$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

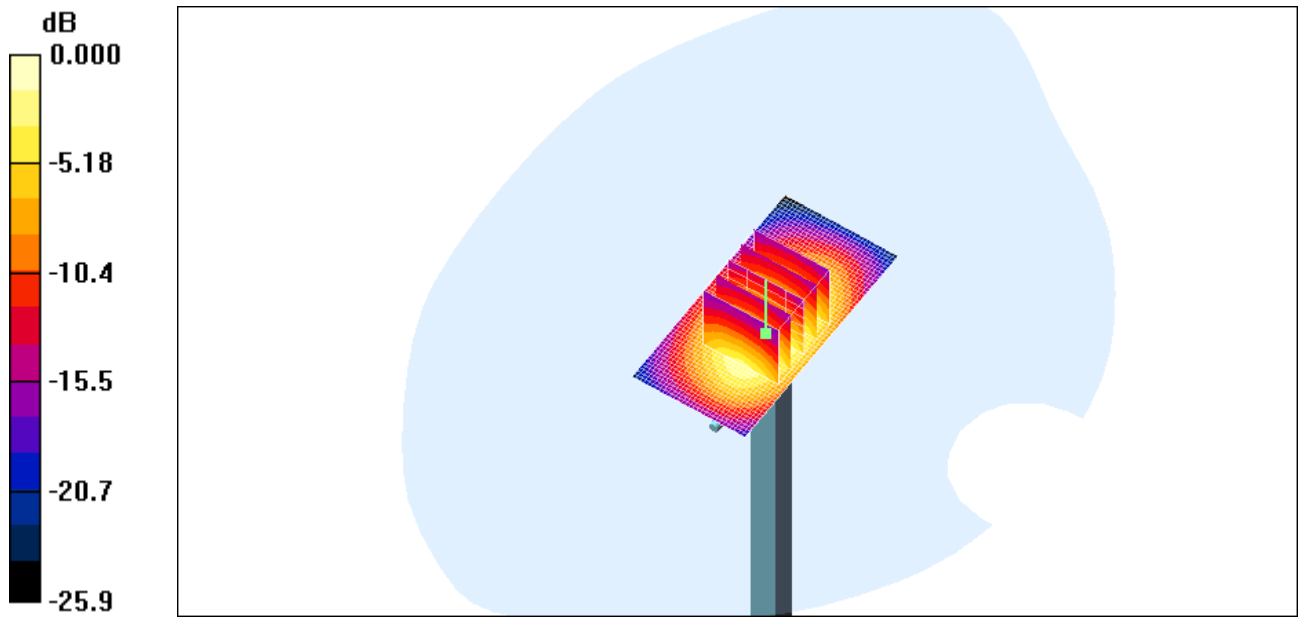
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(5.14, 5.14, 5.14); Calibrated: 12/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186


d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 190.0 V/m; Power Drift = -0.078 dB
Peak SAR (extrapolated) = 70.7 W/kg
SAR(1 g) = 41.3 mW/g; SAR(10 g) = 21.9 mW/g
Maximum value of SAR (measured) = 46.5 mW/g

d=15mm, Pin=1000mW/Area Scan (31x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 48.5 mW/g

	Document Appendix for the BlackBerry® Smartphone Model RCP51UW SAR Report		Page 7(13)
	Author Data Jean-Paul Hacquoil	Dates of Test July 30-August 19, 2009	Test Report No RTS-1765-0908-02



0 dB = 48.5mW/g

	Document		Page
	Appendix for the BlackBerry® Smartphone Model RCP51UW SAR Report		8(13)
Author Data	Dates of Test	Test Report No	FCC ID:
Jean-Paul Hacquoil	July 30-August 19, 2009	RTS-1765-0908-02	L6ARCP50UW

Date/Time: 16/08/2009 4:12:41 PM

Test Laboratory: RTS

File Name: [DipoleValidation_1900MHz_Amb_Tem_23.4_Liq_Tem_22.5_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; $\sigma = 1.47$ mho/m; $\epsilon_r = 38.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(5.14, 5.14, 5.14); Calibrated: 12/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

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

Reference Value = 187.1 V/m; Power Drift = -0.062 dB

Peak SAR (extrapolated) = 67.7 W/kg


SAR(1 g) = 39.8 mW/g; SAR(10 g) = 20.9 mW/g

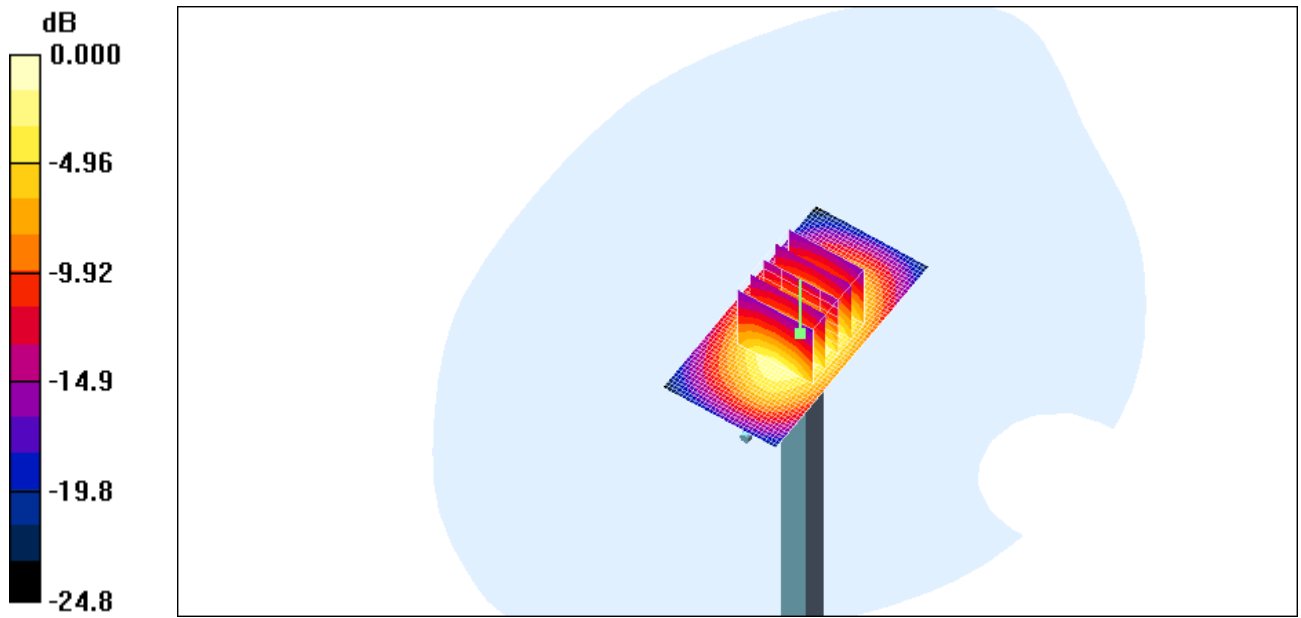
Maximum value of SAR (measured) = 45.6 mW/g

d=15mm, Pin=1000mW/Area Scan (31x61x1): Measurement grid: dx=15mm,


dy=15mm

Maximum value of SAR (interpolated) = 45.5 mW/g

	Document Appendix for the BlackBerry® Smartphone Model RCP51UW SAR Report		Page 9(13)
	Author Data Jean-Paul Hacquoil	Dates of Test July 30-August 19, 2009	Test Report No RTS-1765-0908-02



0 dB = 45.5mW/g

	Document		Page
	Appendix for the BlackBerry® Smartphone Model RCP51UW SAR Report		10(13)
Author Data	Dates of Test	Test Report No	FCC ID:
Jean-Paul Hacquoil	July 30-August 19, 2009	RTS-1765-0908-02	L6ARCP50UW

Date/Time: 30/07/2009 7:34:22 PM

Test Laboratory: RTS

File Name: [DipoleValidation_2450MHz_Amb_Tem_23.2_Liq_Tem_22.8_C.da4](#)

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:747
Program Name: System Performance Check at 1900 MHz


Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2450$ MHz; $\sigma = 1.87$ mho/m; $\epsilon_r = 37.7$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

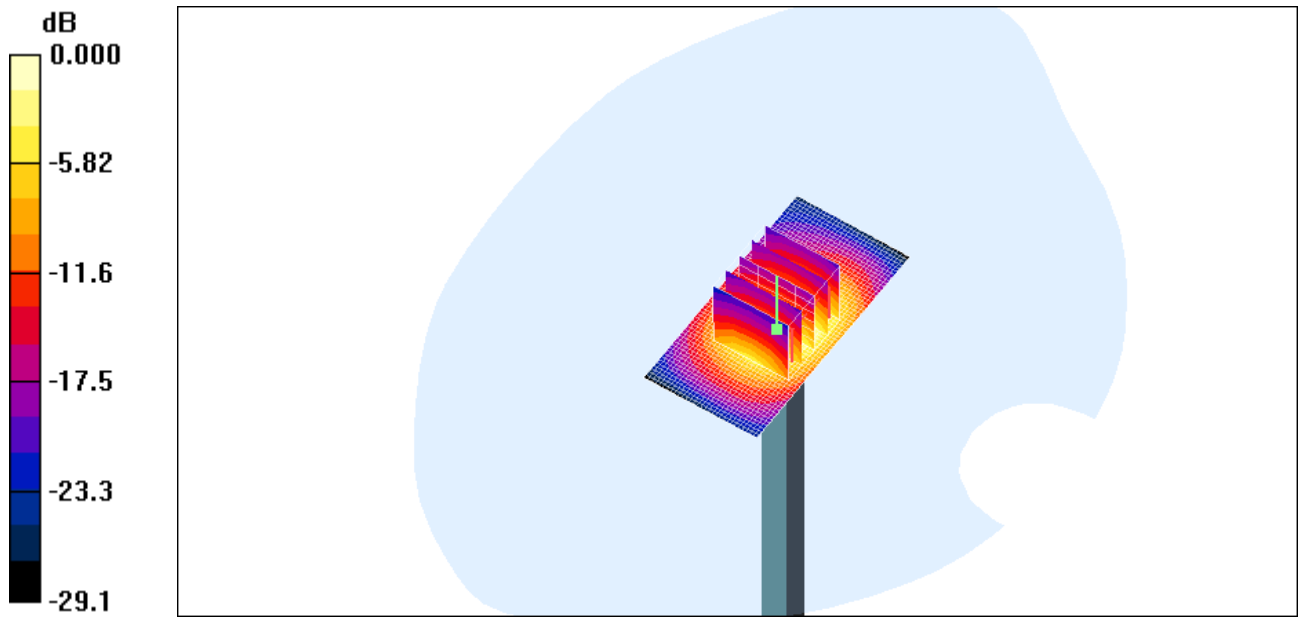
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.54, 4.54, 4.54); Calibrated: 12/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186


d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 192.6 V/m; Power Drift = -0.015 dB
Peak SAR (extrapolated) = 128.6 W/kg
SAR(1 g) = 57.8 mW/g; SAR(10 g) = 26.8 mW/g
Maximum value of SAR (measured) = 63.4 mW/g

d=15mm, Pin=1000mW/Area Scan (31x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 70.1 mW/g

	Document Appendix for the BlackBerry® Smartphone Model RCP51UW SAR Report		Page 11(13)
	Author Data Jean-Paul Hacquoil	Dates of Test July 30-August 19, 2009	Test Report No RTS-1765-0908-02



0 dB = 70.1mW/g

	Document		Page
	Appendix for the BlackBerry® Smartphone Model RCP51UW SAR Report		12(13)
Author Data	Dates of Test	Test Report No	FCC ID:
Jean-Paul Hacquoil	July 30-August 19, 2009	RTS-1765-0908-02	L6ARCP50UW

Date/Time: 19/08/2009 11:59:17 PM

Test Laboratory: RTS

File Name:

[DipoleValidation_2450MHz_Amb_Tem_23.0_Liq_Tem_22.5_C_08_20_09.da4](#)

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

Program Name: System Performance Check at 1900 MHz

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

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.88$ mho/m; $\epsilon_r = 38.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.54, 4.54, 4.54); Calibrated: 12/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

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

Reference Value = 189.4 V/m; Power Drift = 0.006 dB

Peak SAR (extrapolated) = 124.8 W/kg


SAR(1 g) = 56.7 mW/g; SAR(10 g) = 26.4 mW/g

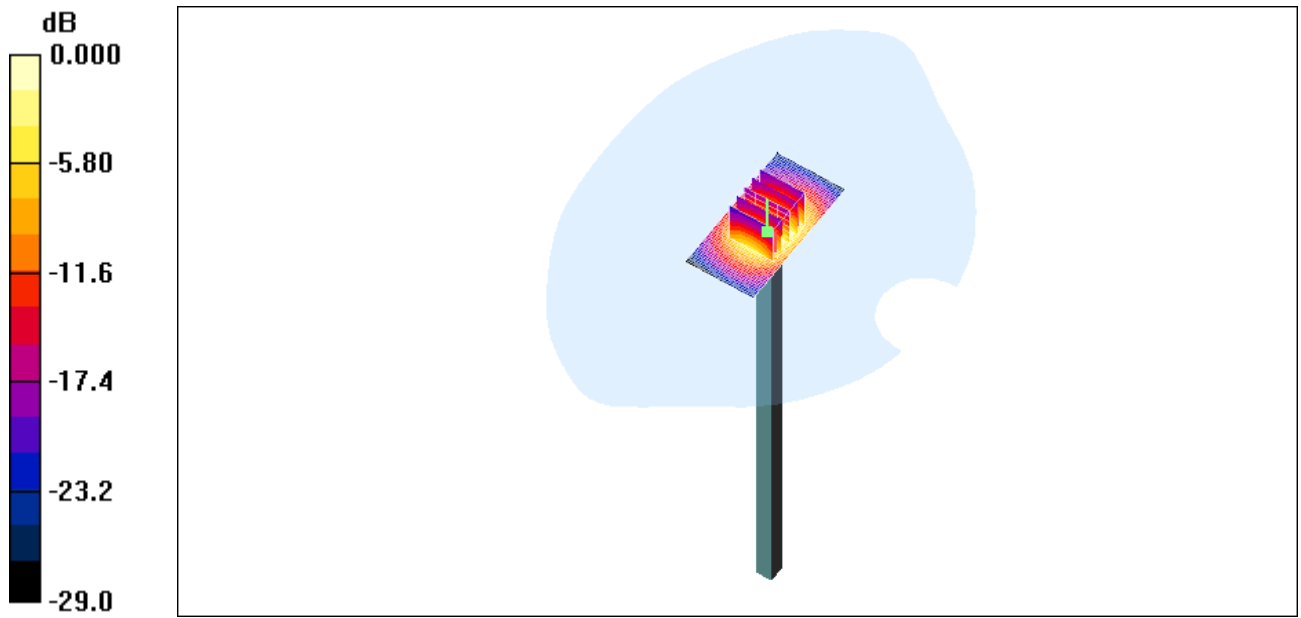
Maximum value of SAR (measured) = 62.5 mW/g

d=15mm, Pin=1000mW/Area Scan (31x61x1): Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (interpolated) = 68.2 mW/g

	Document Appendix for the BlackBerry® Smartphone Model RCP51UW SAR Report		Page 13(13)
	Author Data Jean-Paul Hacquoil	Dates of Test July 30-August 19, 2009	Test Report No RTS-1765-0908-02



0 dB = 68.2mW/g