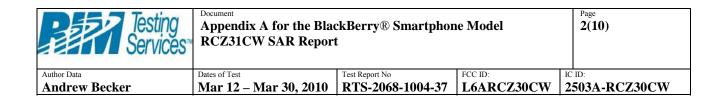
Testing Services [™]	Appendix A for the Blac RCZ31CW SAR Report	Page 1(10)		
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID:
Andrew Becker	Mar 12 – Mar 30, 2010	RTS-2068-1004-37	L6ARCZ30CW	2503A-RCZ30CW

APPENDIX A: SAR DISTRIBUTION COMPARISON FOR ACCURACY VERIFICATION

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Date/Time: 3/30/2010 5:53:43 PM

Test Laboratory: RIM TESTING SERVICES File Name: DipoleValidation 835MHz Amb Tem 23.5 Liq Tem 22.4C 03 30 10.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 MHz; $\sigma = 0.886$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³ Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 SN3225; ConvF(6.12, 6.12, 6.12); Calibrated: 12/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076

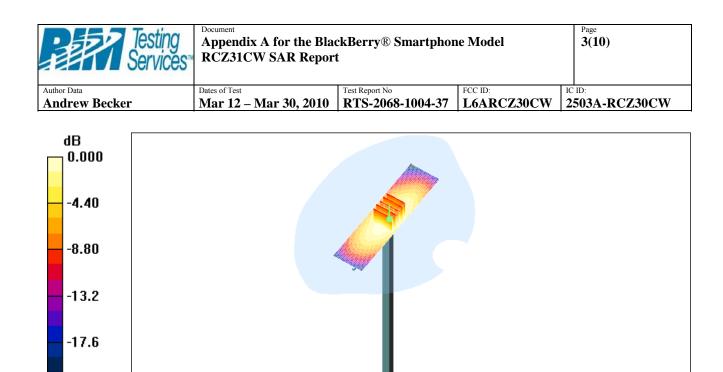
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 107.3 V/m; Power Drift = -0.022 dB Peak SAR (extrapolated) = 13.8 W/kg **SAR(1 g) = 9.31 mW/g; SAR(10 g) = 6.11 mW/g** Maximum value of SAR (measured) = 10.0 mW/g

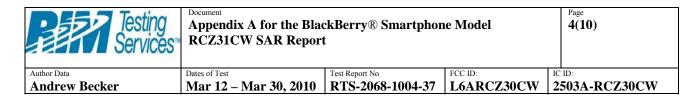
d=15mm, Pin=1000mW/Area Scan (31x121x1): Measurement grid: dx=15mm,

dy=15mm Maximum value of SAR (interpolated) = 10.0 mW/g



 $0 \, dB = 10.0 \, mW/g$

-22.0



Date/Time: 3/29/2010 11:29:55 AM

Test Laboratory: RIM TESTING SERVICES File Name: DipoleValidation 1800MHz Amb Tem 22.7 Liq Tem 20.9C 03 29 10.da4

DUT: Dipole 1800 MHz; Type: D1800V2; Program Name: System Performance Check at 1800 MHz

Communication System: CW; Frequency: 1800 MHz;Duty Cycle: 1:1 Medium parameters used: f = 1800 MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³ Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.14, 5.14, 5.14); Calibrated: 12/11/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn473; Calibrated: 1/4/2010

- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076

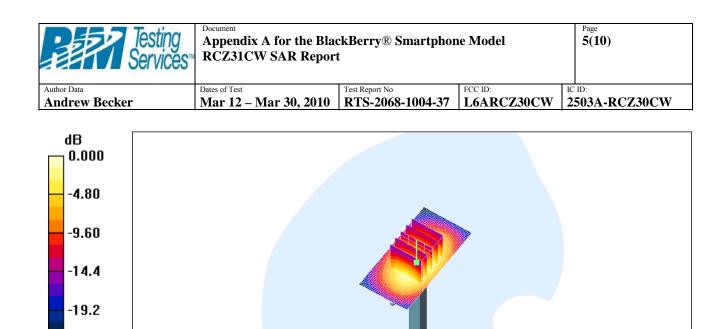
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement

grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 177.2 V/m; Power Drift = 0.009 dB Peak SAR (extrapolated) = 67.1 W/kg SAR(1 g) = 37.5 mW/g; SAR(10 g) = 19.9 mW/g Maximum value of SAR (measured) = 41.9 mW/g

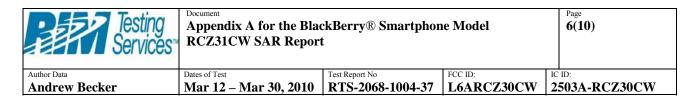
d=10mm, Pin=1000mW/Area Scan (31x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 42.2 mW/g



0 dB = 42.2 mW/g

-24.0



Date/Time: 3/24/2010 8:39:21 PM

Test Laboratory: RIM TESTING SERVICES File Name: DipoleValidation 1900MHz Amb Tem 22.7 Liq Tem 22.3 C 03 24 10.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; $\sigma = 1.43$ mho/m; $\varepsilon_r = 38.3$; $\rho = 1000$ kg/m³ Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.14, 5.14, 5.14); Calibrated: 12/11/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn473; Calibrated: 1/4/2010

- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076

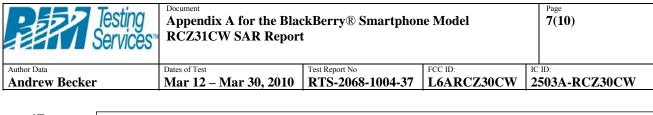
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

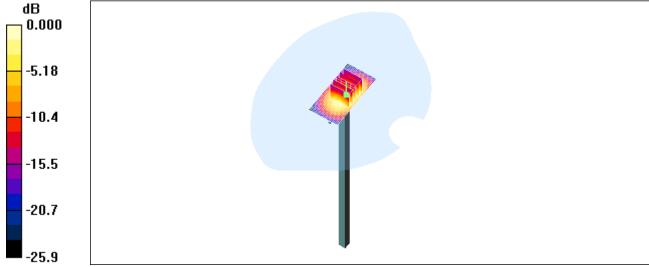
d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement

grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 180.3 V/m; Power Drift = -0.036 dB Peak SAR (extrapolated) = 76.9 W/kg SAR(1 g) = 40.9 mW/g; SAR(10 g) = 21 mW/g Maximum value of SAR (measured) = 46.2 mW/g

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

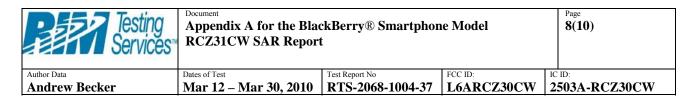
Maximum value of SAR (interpolated) = 46.4 mW/g





0 dB = 46.4 mW/g

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Date/Time: 3/11/2010 3:45:15 PM

Test Laboratory: RIM TESTING SERVICES File Name: <u>DipoleValidation 2450MHz Amb Tem 23.0 Lig Tem 22.5C.da4</u>

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

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1 Medium parameters used: f = 2450 MHz; $\sigma = 1.88$ mho/m; $\epsilon_r = 37.6$; $\rho = 1000$ kg/m³ Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1644; ConvF(4.5, 4.5, 4.5); Calibrated: 11/11/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076

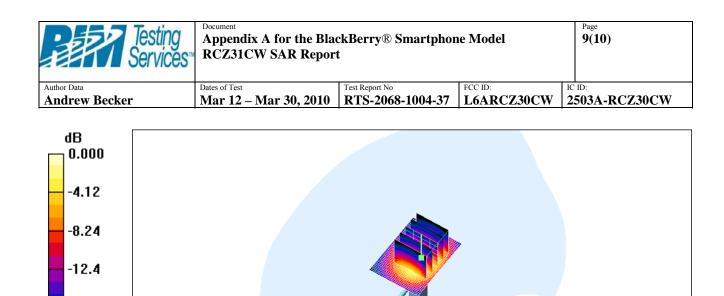
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 188.3 V/m; Power Drift = -0.022 dB Peak SAR (extrapolated) = 126.3 W/kg SAR(1 g) = 55.9 mW/g; SAR(10 g) = 25.7 mW/g Maximum value of SAR (measured) = 62.0 mW/g

d=15mm, Pin=1000mW/Area Scan (31x41x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 63.7 mW/g



-16.5

-20.6

 $0 \, dB = 63.7 \, mW/g$

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Author Data	Dates of Test	Test Report No	FCC ID:	IC ID:
Andrew Becker	Mar 12 – Mar 30, 2010	RTS-2068-1004-37	L6ARCZ30CW	2503A-RCZ30CW