

<b>RTS</b> <b>RIM Testing Services</b>	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>		Page <b>1(15)</b>
Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>	FCC ID: <b>L6ARCF70CW</b>

**APPENDIX A: SAR DISTRIBUTION COMPARISON FOR ACCURACY VERIFICATION**

<b>RTS</b> <b>RIM Testing Services</b>	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>		Page <b>2(15)</b>
	Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>

Date/Time: 16/03/2009 10:04:43 PM

Test Laboratory: RTS

File Name: [DipoleValidation\\_835MHz\\_Amb\\_Tem\\_23.3\\_Liq\\_Tem\\_23.1C.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:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.864 \text{ mho/m}$ ;  $\epsilon_r = 41.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

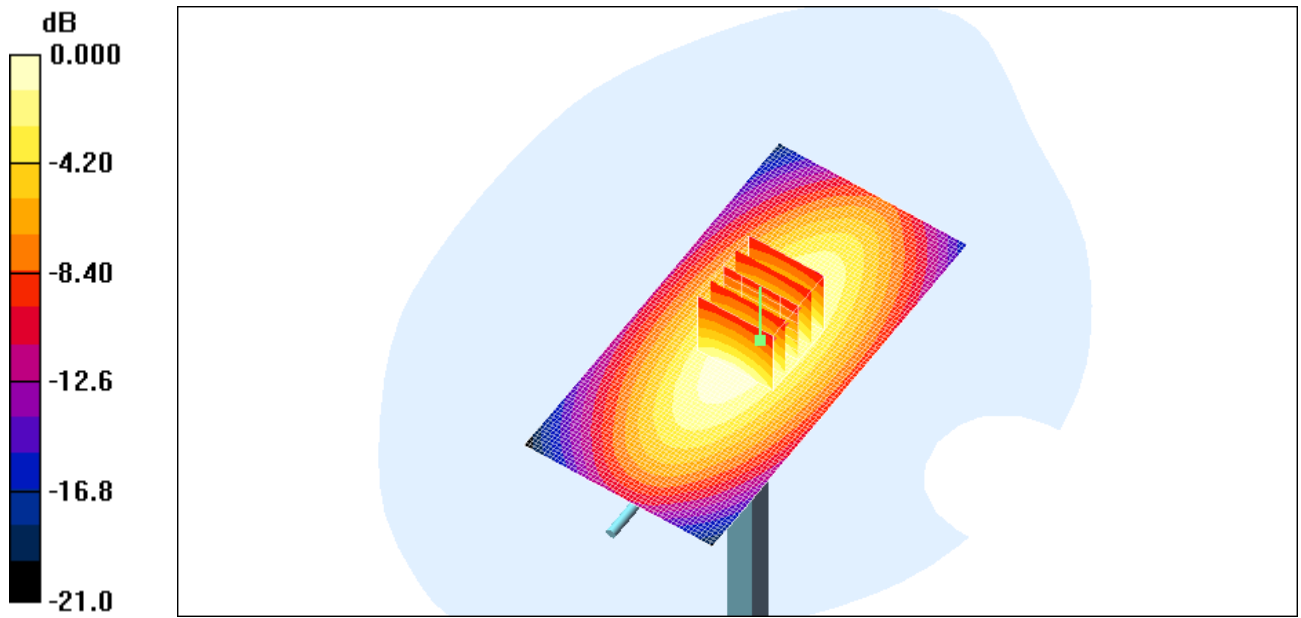
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.42, 6.42, 6.42); Calibrated: 12/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn700; Calibrated: 16/04/2008
- 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 = 105.6 V/m; Power Drift = -0.022 dB  
Peak SAR (extrapolated) = 12.2 W/kg  
**SAR(1 g) = 8.66 mW/g; SAR(10 g) = 5.73 mW/g**  
Maximum value of SAR (measured) = 9.36 mW/g

**d=15mm, Pin=1000mW/Area Scan (51x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 9.42 mW/g

<b>RTS</b> <b>RIM Testing Services</b>	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>		Page <b>3(15)</b>
	Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>



0 dB = 9.42mW/g

<b>RTS</b> <b>RIM Testing Services</b>	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>		Page <b>4(15)</b>
	Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>

Date/Time: 18/03/2009 1:57:20 PM

Test Laboratory: RTS

File Name:

[DipoleValidation\\_835MHz\\_Amb\\_Tem\\_23.4\\_Liq\\_Tem\\_22.2C\\_03\\_18\\_09.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:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.873 \text{ mho/m}$ ;  $\epsilon_r = 41.6$ ;  $\rho = 1000 \text{ kg/m}^3$

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 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 = 112.9 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 13.9 W/kg

**SAR(1 g) = 9.5 mW/g; SAR(10 g) = 6.24 mW/g**

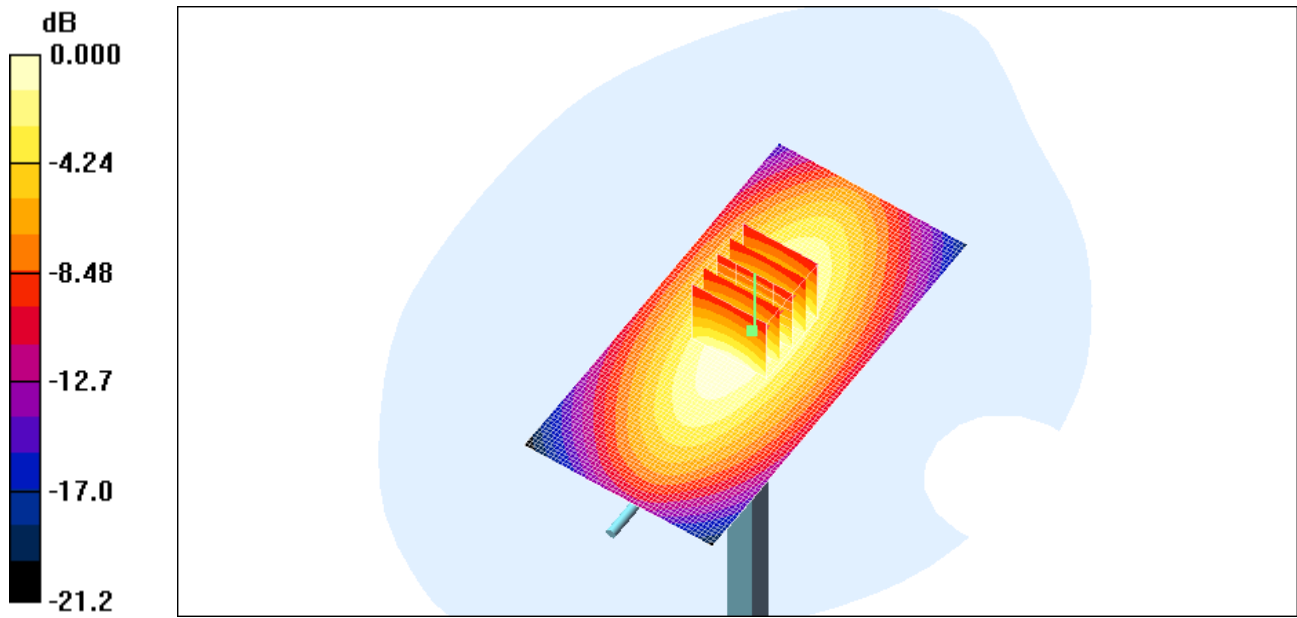
Maximum value of SAR (measured) = 10.3 mW/g

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

$dy=15\text{mm}$

Maximum value of SAR (interpolated) = 10.3 mW/g

<b>RTS</b> <b>RIM Testing Services</b>	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>		Page <b>5(15)</b>
	Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>



0 dB = 10.3mW/g

<b>RTS</b> <b>RIM Testing Services</b>	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>		Page <b>6(15)</b>
	Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>

Date/Time: 04/05/2009 4:06:31 PM

Test Laboratory: RTS

File Name:

[DipoleValidation\\_835MHz\\_Amb\\_Tem\\_23.2\\_Liq\\_Tem\\_22.12C\\_05\\_04\\_09.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:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.879 \text{ mho/m}$ ;  $\epsilon_r = 40.1$ ;  $\rho = 1000 \text{ kg/m}^3$

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) (5x5x7)/Cube 0:** Measurement

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

Reference Value =  $111.5 \text{ V/m}$ ; Power Drift =  $-0.018 \text{ dB}$

Peak SAR (extrapolated) =  $14.0 \text{ W/kg}$

**SAR(1 g) = 9.52 mW/g; SAR(10 g) = 6.25 mW/g**

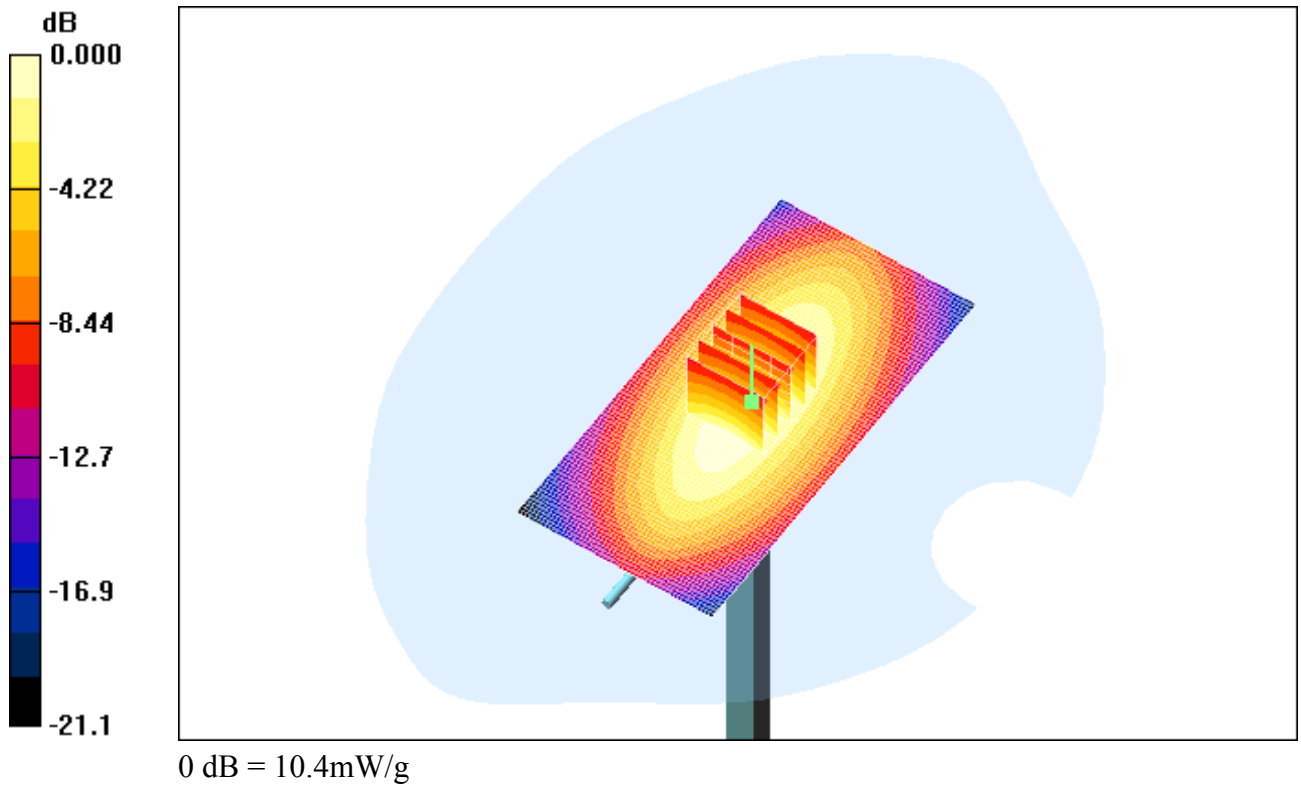
Maximum value of SAR (measured) =  $10.3 \text{ mW/g}$

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

$dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $10.4 \text{ mW/g}$

<b>RTS</b> <b>RIM Testing Services</b>	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>	Page <b>7(15)</b>
Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>
		FCC ID: <b>L6ARCF70CW</b>



<b>RTS</b> <b>RIM Testing Services</b>	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>		Page <b>8(15)</b>
	Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>

Date/Time: 09/03/2009 5:09:22 PM

Test Laboratory: RTS

File Name: [DipoleValidation\\_1900MHz\\_Amb\\_Tem\\_23.3\\_Liq\\_Tem\\_22.2\\_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;  $\epsilon_r = 38$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 Sn473; Calibrated: 09/01/2009
- 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 = 189.4 V/m; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 70.9 W/kg

**SAR(1 g) = 40.9 mW/g; SAR(10 g) = 21.4 mW/g**

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

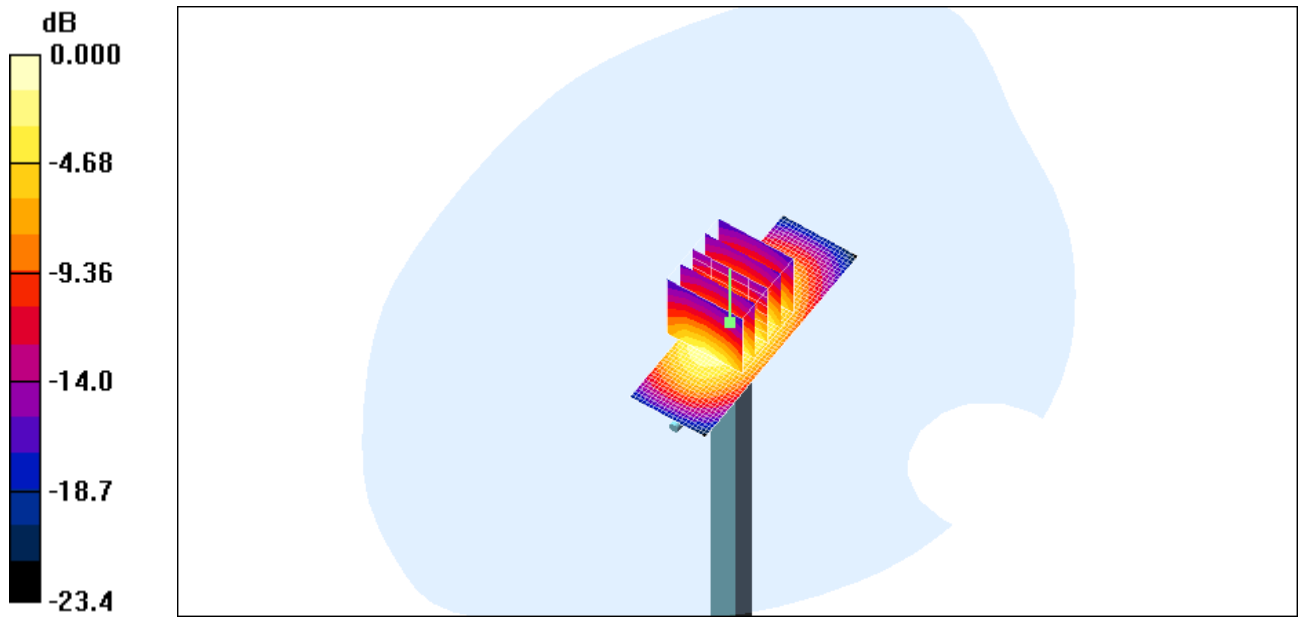
**d=15mm, Pin=1000mW/Area Scan (21x61x1):** Measurement grid: dx=15mm,

dy=15mm

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



<b>RTS</b> <b>RIM Testing Services</b>	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>		Page <b>9(15)</b>
	Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>



0 dB = 47.2mW/g

<b>RTS</b> <b>RIM Testing Services</b>	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>		Page <b>10(15)</b>
	Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>

Date/Time: 10/03/2009 8:39:37 PM

Test Laboratory: RTS

File Name: [DipoleValidation\\_1900MHz\\_Amb\\_Tem\\_23.9\\_Liq\\_Tem\\_22.9\\_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;  $\epsilon_r = 38.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 Sn473; Calibrated: 09/01/2009
- 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 = 187.4 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 68.4 W/kg

**SAR(1 g) = 39.7 mW/g; SAR(10 g) = 20.9 mW/g**

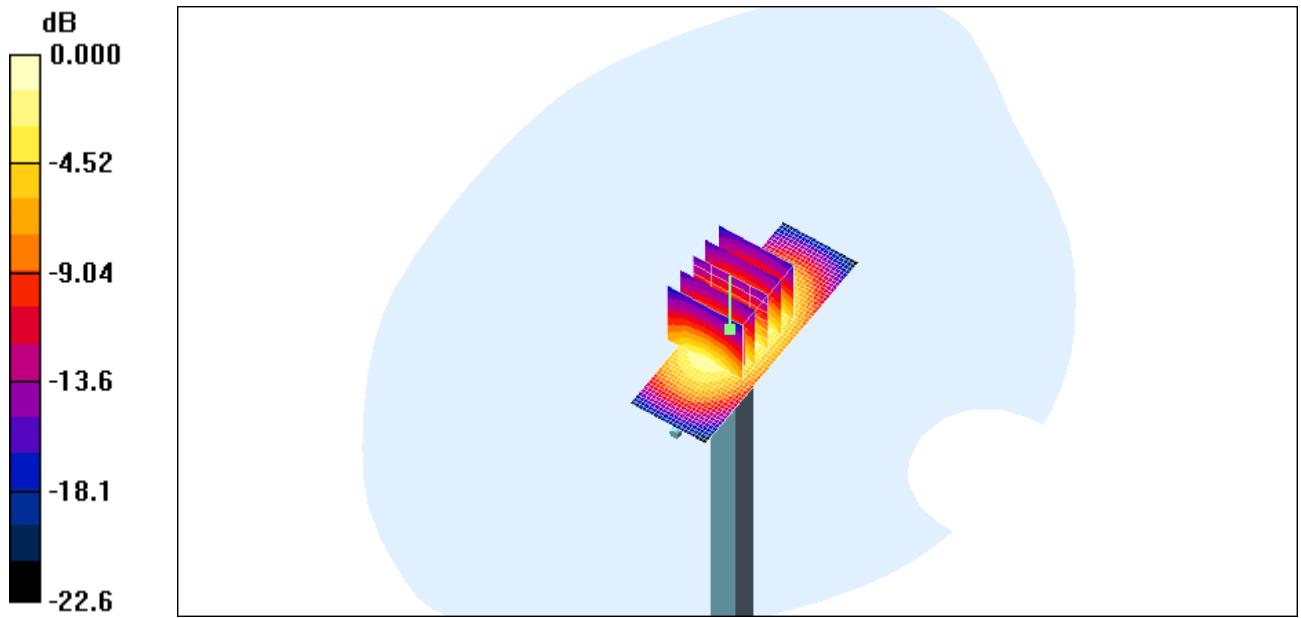
Maximum value of SAR (measured) = 44.6 mW/g

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

dy=15mm

Maximum value of SAR (interpolated) = 45.4 mW/g

<b>RTS</b> <b>RIM Testing Services</b>	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>	Page <b>11(15)</b>
Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>
		FCC ID: <b>L6ARCF70CW</b>



0 dB = 45.4mW/g

<b>RTS</b> <b>RIM Testing Services</b>	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>		Page <b>12(15)</b>
	Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>

Date/Time: 24/03/2009 9:15:29 PM

Test Laboratory: RTS

File Name: [DipoleValidation\\_1900MHz\\_Amb\\_Tem\\_24.0\\_Liq\\_Tem\\_23.3\\_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;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 38.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 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 = 192.9 V/m; Power Drift = 0.049 dB

Peak SAR (extrapolated) = 73.9 W/kg

**SAR(1 g) = 42.8 mW/g; SAR(10 g) = 22.4 mW/g**

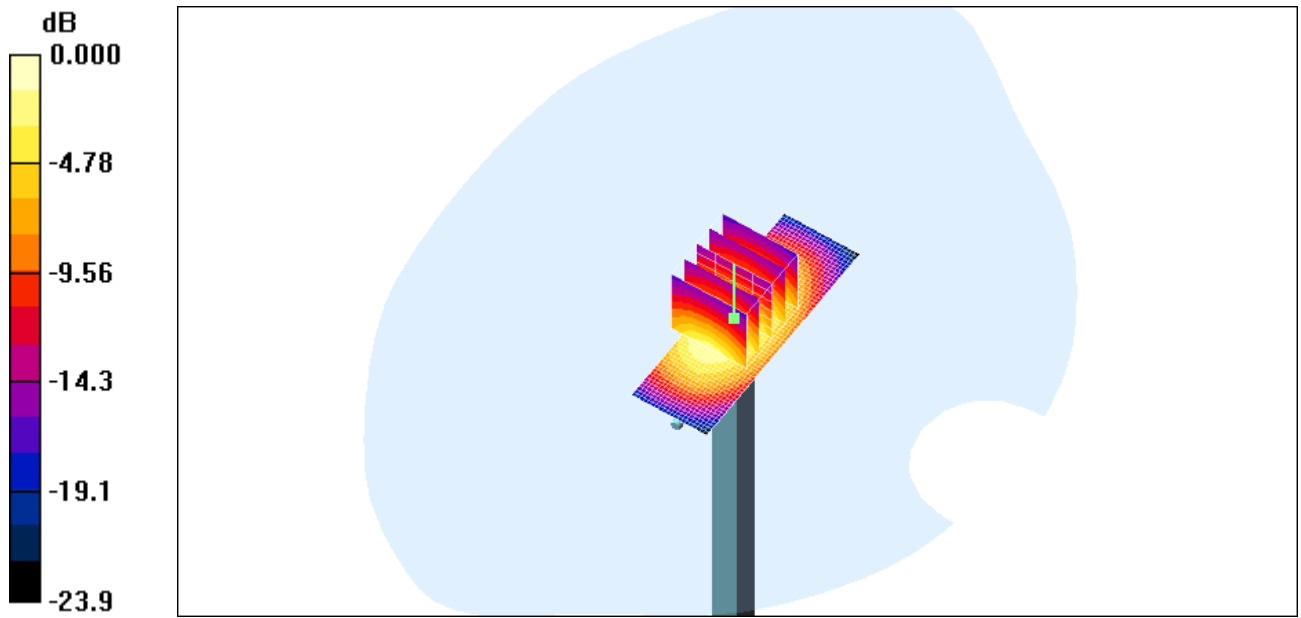
Maximum value of SAR (measured) = 48.9 mW/g

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

dy=15mm

Maximum value of SAR (interpolated) = 49.4 mW/g

<b>RTS</b> <b>RIM Testing Services</b>	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>		Page <b>13(15)</b>
	Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>



0 dB = 49.4mW/g

<b>RTS</b> <b>RIM Testing Services</b>	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>		Page <b>14(15)</b>
	Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>

Date/Time: 06/05/2009 11:43:05 AM

Test Laboratory: RTS

File Name: [DipoleValidation\\_1900MHz\\_Amb\\_Tem\\_22.8\\_Liq\\_Tem\\_22.1\\_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;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 = 186.9 V/m; Power Drift = 0.091 dB

Peak SAR (extrapolated) = 71.1 W/kg

**SAR(1 g) = 41.3 mW/g; SAR(10 g) = 21.7 mW/g**

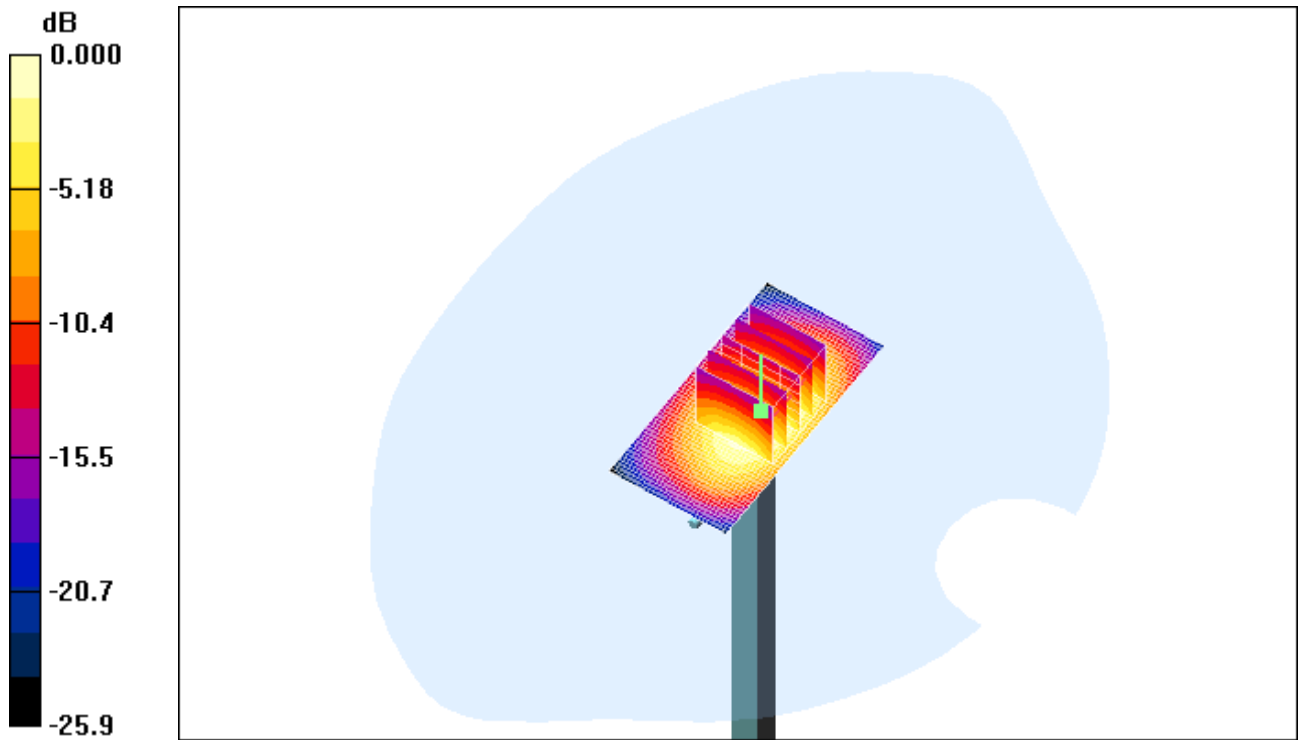
Maximum value of SAR (measured) = 46.9 mW/g

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

dy=15mm

Maximum value of SAR (interpolated) = 47.1 mW/g

<b>RTS</b> RIM Testing Services	Document <b>Appendix for the BlackBerry® Smartphone Model RCF71CW SAR Report</b>		Page <b>15(15)</b>
	Author Data <b>Jean-Paul Hacquoil</b>	Dates of Test <b>March 09-25, May 04-06, 2009</b>	Test Report No <b>RTS-1528-0903-26</b>



0 dB = 47.1mW/g