| | esting ervices™ | Appendix A for the BlackBerry® Smartphone Model REQ71UW Mobile Hot Spot SAR Report | | | | | |
|----------------------|--------------------|--|------------------|------------|--------|---------|--|
| Author Data | Dates of Test | | Test Report No | FCC ID: | IC ID | | |
| Andrew Becker | Decemb | er 25, 2011 – January 25 , 2012 | RTS-5955-1201-37 | L6AREQ70UW | 2503A- | REQ70UW | |

APPENDIX A: SAR DISTRIBUTION COMPARISON FOR ACCURACY VERIFICATION



Appendix A for the BlackBerry® Smartphone Model REQ71UW Mobile Hot Spot SAR Report

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Andrew Becker

Dates of Test

December 25, 2011 - January 25, 2012

Test Report No **RTS-5955-1201-37**

FCC ID: L6AREQ70UW

2503A-REO70UW

Date/Time: 1/9/2012 1:07:59 PM

Test Laboratory: RIM Testing Services

DipoleValidation_835MHz_01_09_12_Amb_Tem_24.0_Liq_Tem_22.4C

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

Communication System: CW; Frequency: 835 MHz

Medium parameters used: f = 835 MHz; $\sigma = 0.886$ mho/m; $\varepsilon_r = 41.722$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ET3DV6 SN1643; ConvF(6.59, 6.59, 6.59); Calibrated: 3/9/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 9.829 mW/g

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 2

(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

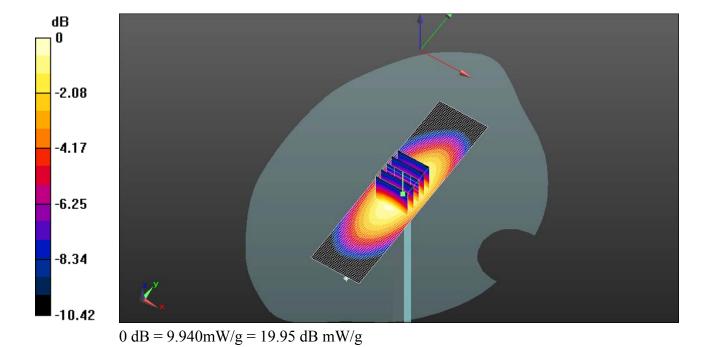
Reference Value = 110.8 V/m; Power Drift = -0.0045 dB

Peak SAR (extrapolated) = 13.0850

SAR(1 g) = 9.18 mW/g; SAR(10 g) = 6.05 mW/g

Maximum value of SAR (measured) = 9.938 mW/g

| 謝 | Testing Services™ | Appendix A for the BlackBerry Spot SAR Report | ® Smartphone Model R | EQ71UW Mobile I | Iot | Page 3(13) |
|---------------|----------------------|---|----------------------|-----------------|-------|-------------------|
| Author Data | Dates of Test | | Test Report No | FCC ID: | IC ID | |
| Andrew Becker | Decemb | per 25, 2011 – January 25, 2012 | RTS-5955-1201-37 | L6AREO70UW | 2503A | -REO70UW |





Appendix A for the BlackBerry® Smartphone Model REQ71UW Mobile Hot **Spot SAR Report**

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Andrew Becker

December 25, 2011 - January 25, 2012

Test Report No RTS-5955-1201-37 FCC ID: L6AREO70UW

2503A-REO70UW

Date/Time: 1/12/2012 11:09:50 AM

Test Laboratory: RIM Testing Services

DipoleValidation_1900MHz_01_12_12_Amb_Tem_23.9_Liq_Tem_22.0C

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

Communication System: CW; Frequency: 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.405 \text{ mho/m}$; $\varepsilon_r = 40.689$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ET3DV6 SN1643; ConvF(5.15, 5.15, 5.15); Calibrated: 3/9/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 42.956 mW/g

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

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

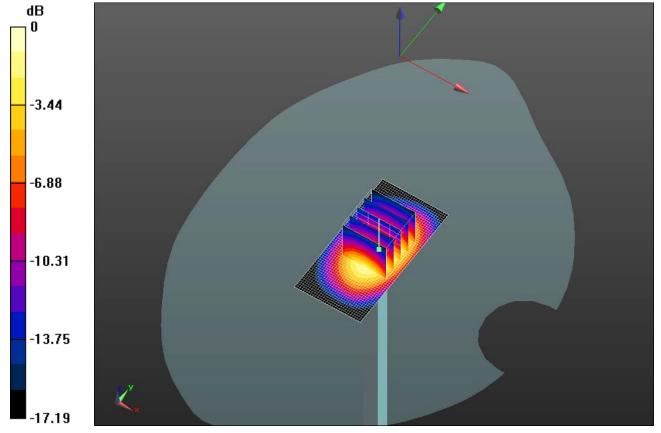
Reference Value = 181.3 V/m; Power Drift = -0.0031 dB

Peak SAR (extrapolated) = 64.6580

SAR(1 g) = 37.4 mW/g; SAR(10 g) = 19.8 mW/g

Maximum value of SAR (measured) = 42.035 mW/g

| | Te Se | sting rvices™ | Appendix A for the BlackBerry@ Spot SAR Report | Smartphone Model RF | Q71UW Mobile H | lot | Page 5(13) |
|---|---------------|--------------------------------------|--|---------------------|----------------|-------|-------------------|
| Α | uthor Data | Dates of Test | | Test Report No | FCC ID: | IC ID | |
| A | Andrew Becker | December 25, 2011 – January 25, 2012 | | RTS-5955-1201-37 | L6AREQ70UW | 2503A | -REQ70UW |



 $\frac{1}{0 \text{ dB}} = 42.040 \text{mW/g} = 32.47 \text{ dB mW/g}$



Appendix A for the BlackBerry $\mbox{\ensuremath{\mathbb{R}}}$ Smartphone Model REQ71UW Mobile Hot Spot SAR Report

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Andrew Becker

Dates of Test

December 25, 2011 - January 25, 2012

Test Report No **RTS-5955-1201-37**

FCC ID: **L6AREQ70UW**

2503A-REO70UW

Date/Time: 1/23/2012 4:18:19 PM

Test Laboratory: RIM Testing Services

DipoleValidation_1900MHz_01_23_12_Amb_Tem_23.4_Liq_Tem_20.1C

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

Communication System: CW; Frequency: 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.429 \text{ mho/m}$; $\varepsilon_r = 39.982$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ET3DV6 SN1643; ConvF(5.15, 5.15, 5.15); Calibrated: 3/9/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 43.826 mW/g

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

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

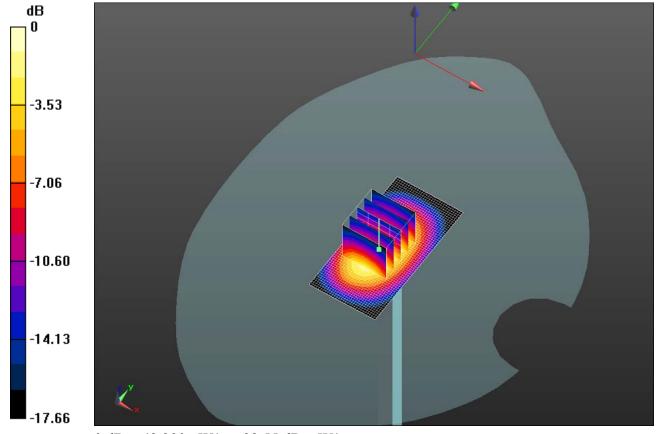
Reference Value = 165.0 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 67.3020

SAR(1 g) = 37.8 mW/g; SAR(10 g) = 19.8 mW/g

Maximum value of SAR (measured) = 42.389 mW/g

| | Je Se | esting ervices™ | Appendix A for the BlackBerry@ Spot SAR Report | Smartphone Model RF | EQ71UW Mobile H | lot | Page 7(13) |
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| Α | Author Data | Dates of Test | | Test Report No | FCC ID: | IC ID | |
| A | Andrew Becker | December 25, 2011 – January 25, 2012 | | RTS-5955-1201-37 | L6AREQ70UW | 2503A | -REQ70UW |





Appendix A for the BlackBerry ${\rm \rlap{I}}{\rm \rlap{I$

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Andrew Becker

Dates of Test

December 25, 2011 - January 25, 2012

Test Report No **RTS-5955-1201-37**

FCC ID: L6AREQ70UW

2503A-REQ70UW

Date/Time: 12/5/2011 9:30:12 PM, Date/Time: 12/5/2011 9:32:00 PM

Test Laboratory: RIM Testing Services

DipoleValidation_2450MHz_12_05_11_Amb_Tem_23.1_Liq_Tem_22.5C

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

Communication System: CW; Frequency: 2450 MHz

Medium parameters used: f = 2450 MHz; $\sigma = 1.863 \text{ mho/m}$; $\varepsilon_r = 38.583$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 SN3225; ConvF(4.6, 4.6, 4.6); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/d=10mm, Pin=1000mW/Area Scan (31x41x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 72.011 mW/g

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

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

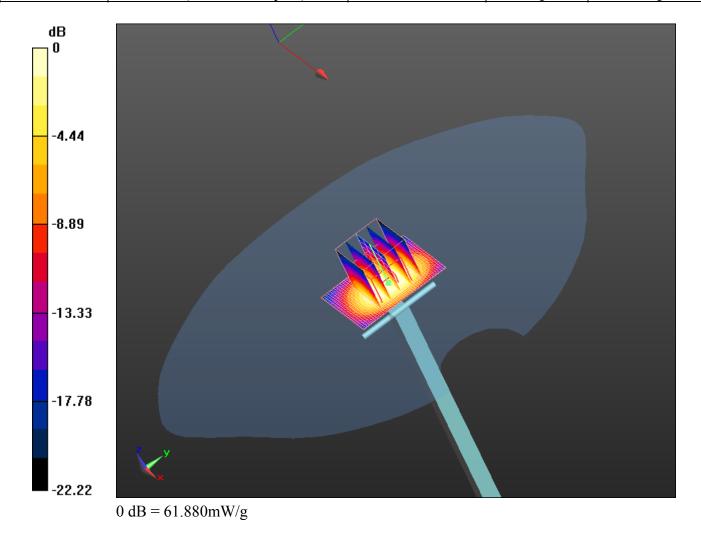
Reference Value = 202.8 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 116.4 W/kg

SAR(1 g) = 54.7 mW/g; SAR(10 g) = 25.2 mW/g

Maximum value of SAR (measured) = 61.877 mW/g

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Dates of Test

December 25, 2011 - January 25, 2012

Test Report No **RTS-5955-1201-37**

FCC ID: L6AREQ70UW

2503A-REO70UW

Date/Time: 12/7/2011 9:31:43 PM, Date/Time: 12/7/2011 9:35:41 PM

Test Laboratory: RIM Testing Services

DipoleValidation_2450MHz_12_07_11_Amb_Tem_23.5_Lig_Tem_22.0C

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

Communication System: CW; Frequency: 2450 MHz

Medium parameters used: f = 2450 MHz; $\sigma = 1.803 \text{ mho/m}$; $\varepsilon_r = 37.718$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 SN3225; ConvF(4.6, 4.6, 4.6); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/d=10mm, Pin=1000mW/Area Scan (31x41x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 70.139 mW/g

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

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

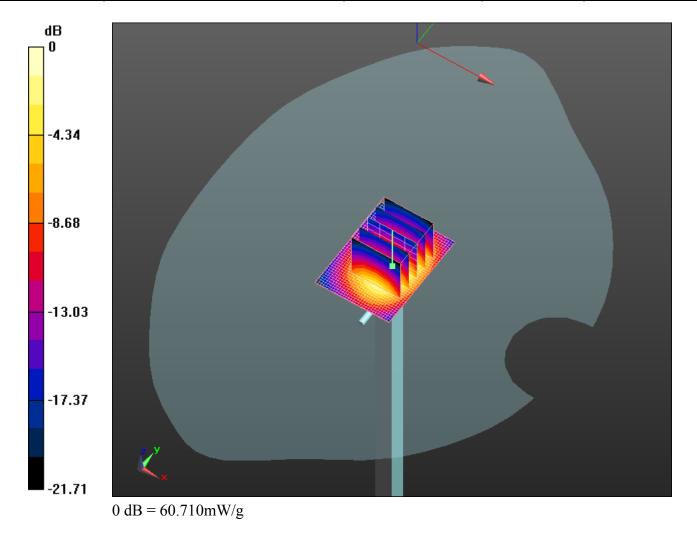
Reference Value = 203.4 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 111.8 W/kg

SAR(1 g) = 53.3 mW/g; SAR(10 g) = 24.6 mW/g

Maximum value of SAR (measured) = 60.711 mW/g

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Andrew Becker

December 25, 2011 - January 25, 2012

Test Report No RTS-5955-1201-37 FCC ID: L6AREQ70UW

2503A-REO70UW

Date/Time: 1/25/2012 11:27:24 AM

Test Laboratory: RIM Testing Services

DipoleValidation_2450MHz_01_25_12_Amb_Tem_22.2_Liq_Tem_21.2C

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

Communication System: CW; Frequency: 2450 MHz

Medium parameters used: f = 2450 MHz; $\sigma = 1.893 \text{ mho/m}$; $\varepsilon_r = 40.721$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ET3DV6 SN1644; ConvF(4.34, 4.34, 4.34); Calibrated: 11/15/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/d=10mm, Pin=1000mW/Area Scan (31x41x1): Measurement

grid: dx=15mm, dv=15mm

Maximum value of SAR (interpolated) = 68.877 mW/g

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (7x7x7)/Cube

0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 190.2 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 135.00

SAR(1 g) = 59.1 mW/g; SAR(10 g) = 26.9 mW/g

Maximum value of SAR (measured) = 66.114 mW/g

| Se Se | esting ervices™ | Appendix A for the BlackBerry Spot SAR Report | Smartphone Model RE | EQ71UW Mobile F | lot | Page 13(13) |
|---------------|--------------------|---|---------------------|-----------------|--------|----------------|
| Author Data | Dates of Test | | Test Report No | FCC ID: | IC ID | |
| Andrew Becker | Decemb | er 25, 2011 – January 25, 2012 | RTS-5955-1201-37 | L6AREQ70UW | 2503A- | REQ70UW |

