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| Author Data<br><b>Andrew Becker</b>                                              | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                   |

## APPENDIX A: SAR DISTRIBUTION COMPARISON FOR ACCURACY VERIFICATION

| Revision History |              |                                                                                                                       |
|------------------|--------------|-----------------------------------------------------------------------------------------------------------------------|
| Rev. Number      | Date         | Changes                                                                                                               |
| Initial          | Aug 21, 2013 | -----                                                                                                                 |
| Rev 2            | Sep 16, 2013 | Separated data and report for model: RGB141LW and added more information to address FCC requirements.                 |
| Rev 3            | Sep 18, 2013 | Reused SAR data from model RFX101W was added to this report to address FCC OET requirement.                           |
| Rev 4            | Dec 15, 2014 | Added Dipole plots used for 802.11a Hotspot mode testing <ul style="list-style-type: none"> <li>Page 56-58</li> </ul> |

|                                                                                   |                                                                                                  |                                                                                                   |                                                 |                                         |
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|                                                                                   | Author Data<br><b>Andrew Becker</b>                                                              | Dates of Test<br><b>June 11 – August 16, 2013<br/>March 24-26, 2014<br/>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b><br><br>IC |

Date/Time: 6/24/2013 3:56:37 PM

Test Laboratory: RIM Testing Services

## DipoleValidation\_835MHz\_06\_24\_13\_Amb\_Tem\_23.7C\_Liq\_Tem\_22.8 C

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

Communication System: UID 0 - n/a, CW; Frequency: 835 MHz

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.889 \text{ S/m}$ ;  $\epsilon_r = 41.397$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.19, 6.19, 6.19); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

**Configuration/d=15mm, Pin=1000mW/Area Scan (31x121x1):** Interpolated  
grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Reference Value =  $110.1 \text{ V/m}$ ; Power Drift =  $-0.02 \text{ dB}$

**Fast SAR: SAR(1 g) =  $8.68 \text{ W/kg}$ ; SAR(10 g) =  $5.76 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $10.0 \text{ W/kg}$

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

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

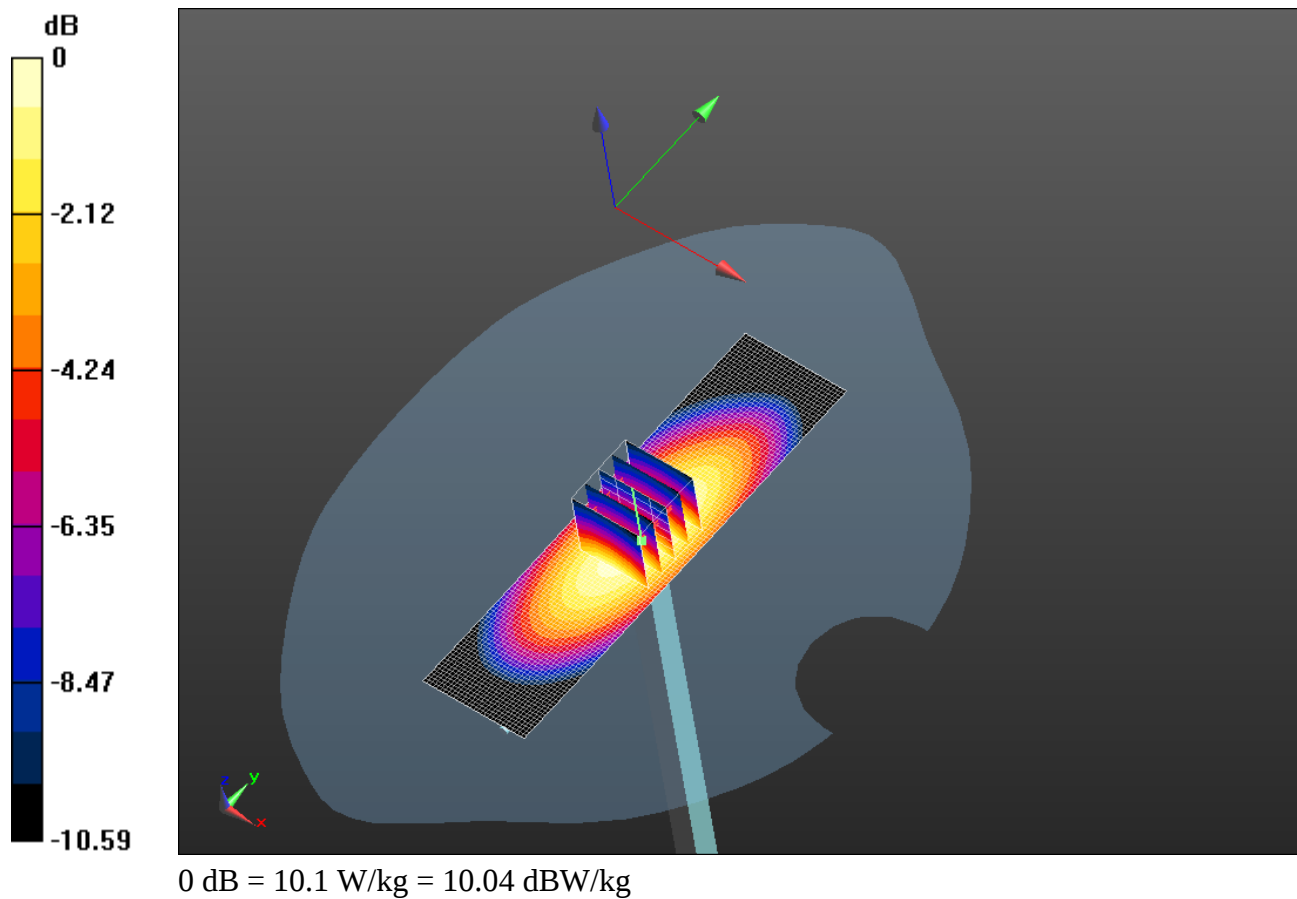
Reference Value =  $110.1 \text{ V/m}$ ; Power Drift =  $-0.02 \text{ dB}$

Peak SAR (extrapolated) =  $12.8 \text{ W/kg}$

**SAR(1 g) =  $8.68 \text{ W/kg}$ ; SAR(10 g) =  $5.68 \text{ W/kg}$**

Maximum value of SAR (measured) =  $10.1 \text{ W/kg}$

|                                                                                   |                                                                                                               |                                                 |                               |                      |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                   |



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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013<br/>March 24-26, 2014<br/>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                   |

Date/Time: 6/26/2013 11:59:26 AM

Test Laboratory: RIM Testing Services

## DipoleValidation\_835MHz\_06\_26\_13\_Amb\_Tem\_23.3C\_Liq\_Tem\_22.7 C

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

Communication System: UID 0 - n/a, CW; Frequency: 835 MHz

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.879 \text{ S/m}$ ;  $\epsilon_r = 40.705$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.19, 6.19, 6.19); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

**Configuration/d=15mm, Pin=1000mW/Area Scan (31x121x1):** Interpolated  
grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Reference Value = 109.9 V/m; Power Drift = 0.00 dB

**Fast SAR: SAR(1 g) = 8.66 W/kg; SAR(10 g) = 5.73 W/kg**

Maximum value of SAR (interpolated) = 10.0 W/kg

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

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

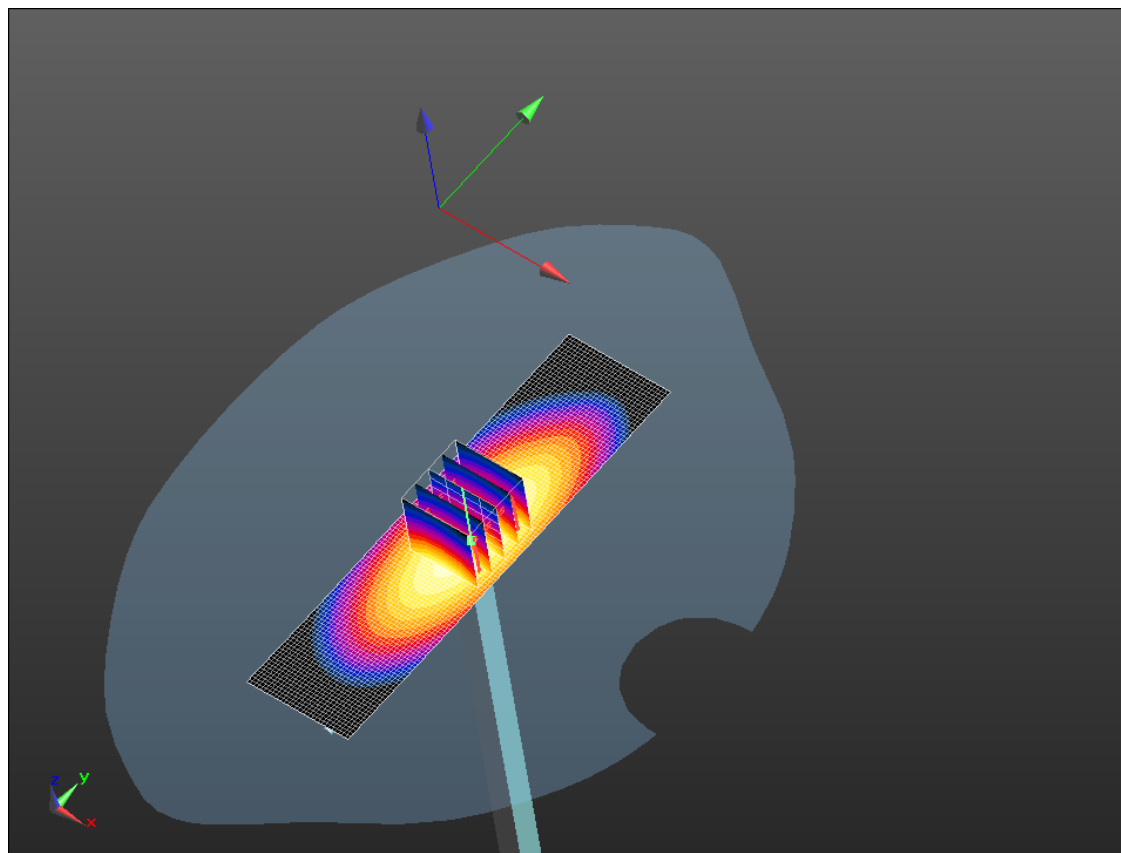
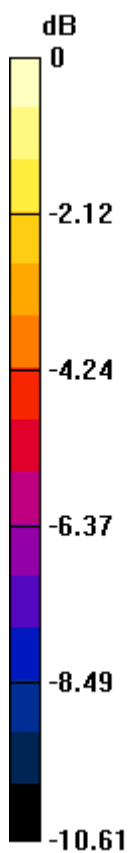
Reference Value = 109.9 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 12.7 W/kg

**SAR(1 g) = 8.59 W/kg; SAR(10 g) = 5.62 W/kg**

Maximum value of SAR (measured) = 10.1 W/kg

|                                                                                   |                                                                                                               |                                                 |                               |                      |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                   |



0 dB = 10.1 W/kg = 10.04 dBW/kg

|                                                                                   |                                                                                                               |                                                 |                               |                      |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                   |

Date/Time: 7/13/2013 12:26:59 AM

Test Laboratory: RIM Testing Services

**DipoleValidation\_835MHz\_07\_13\_13\_Amb\_Tem\_24.1C\_Liq\_Tem\_23.0**

**C**

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

Communication System: UID 0 - n/a, CW; Frequency: 835 MHz

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.898 \text{ S/m}$ ;  $\epsilon_r = 41.565$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.19, 6.19, 6.19); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

**Configuration/d=15mm, Pin=1000mW/Area Scan (31x121x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Reference Value =  $112.0 \text{ V/m}$ ; Power Drift =  $-0.02 \text{ dB}$

**Fast SAR: SAR(1 g) = 9.09 W/kg; SAR(10 g) = 6.03 W/kg**

Maximum value of SAR (interpolated) =  $10.5 \text{ W/kg}$

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

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

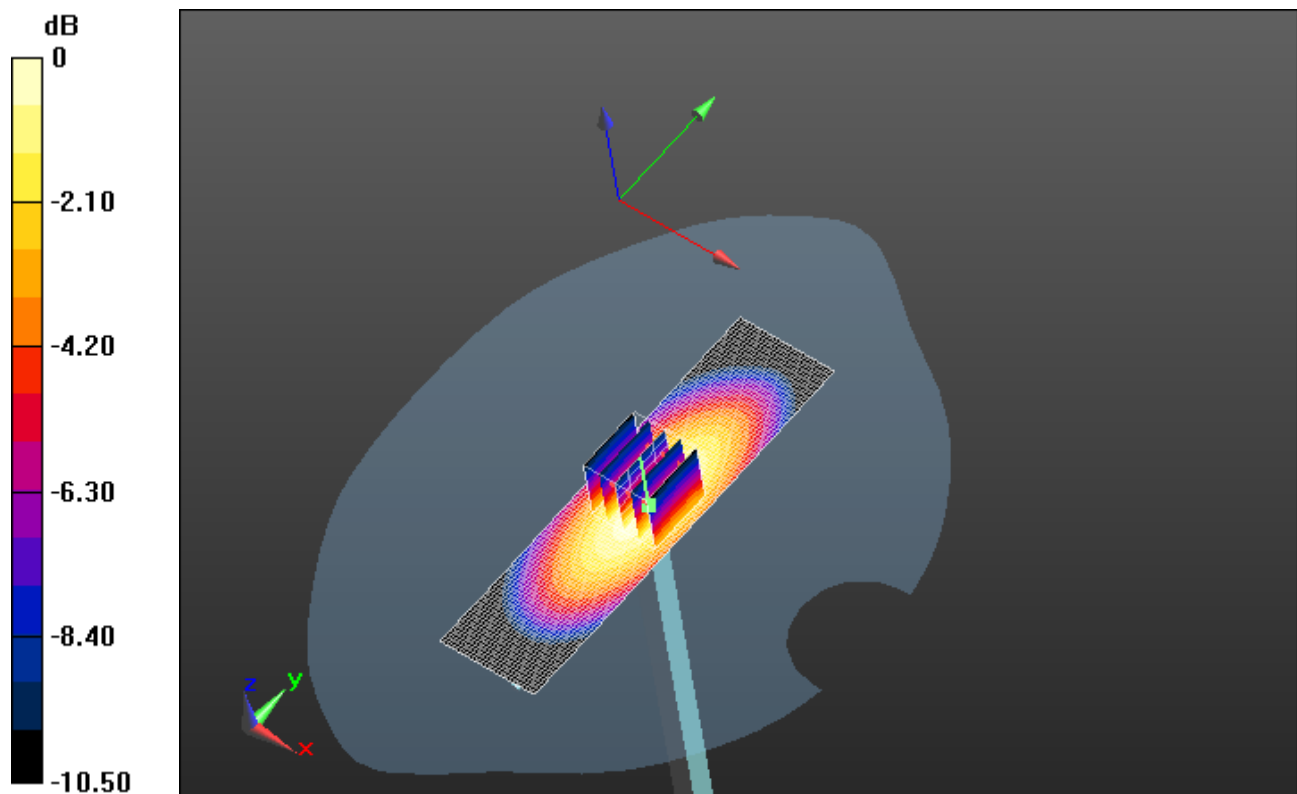
Reference Value =  $112.0 \text{ V/m}$ ; Power Drift =  $-0.02 \text{ dB}$

Peak SAR (extrapolated) =  $13.4 \text{ W/kg}$

**SAR(1 g) = 9.06 W/kg; SAR(10 g) = 5.94 W/kg**

Maximum value of SAR (measured) =  $10.6 \text{ W/kg}$

|                                                                                   |                                                                                                        |                                                                                                               |                                                 |                               |
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| IC                                                                                |                                                                                                        |                                                                                                               |                                                 |                               |



0 dB = 10.6 W/kg = 10.25 dBW/kg

|                                                                                  |                                                                                                               |                                                 |                               |                      |
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| Author Data<br><b>Andrew Becker</b>                                              | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                   |

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Test Laboratory: RIM Testing Services

**DipoleValidation\_835MHz\_07\_16\_13\_Amb\_Tem\_23.9C\_Liq\_Tem\_23.1  
C**

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

Communication System: UID 0 - n/a, CW; Frequency: 835 MHz  
Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.881 \text{ S/m}$ ;  $\epsilon_r = 40.559$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

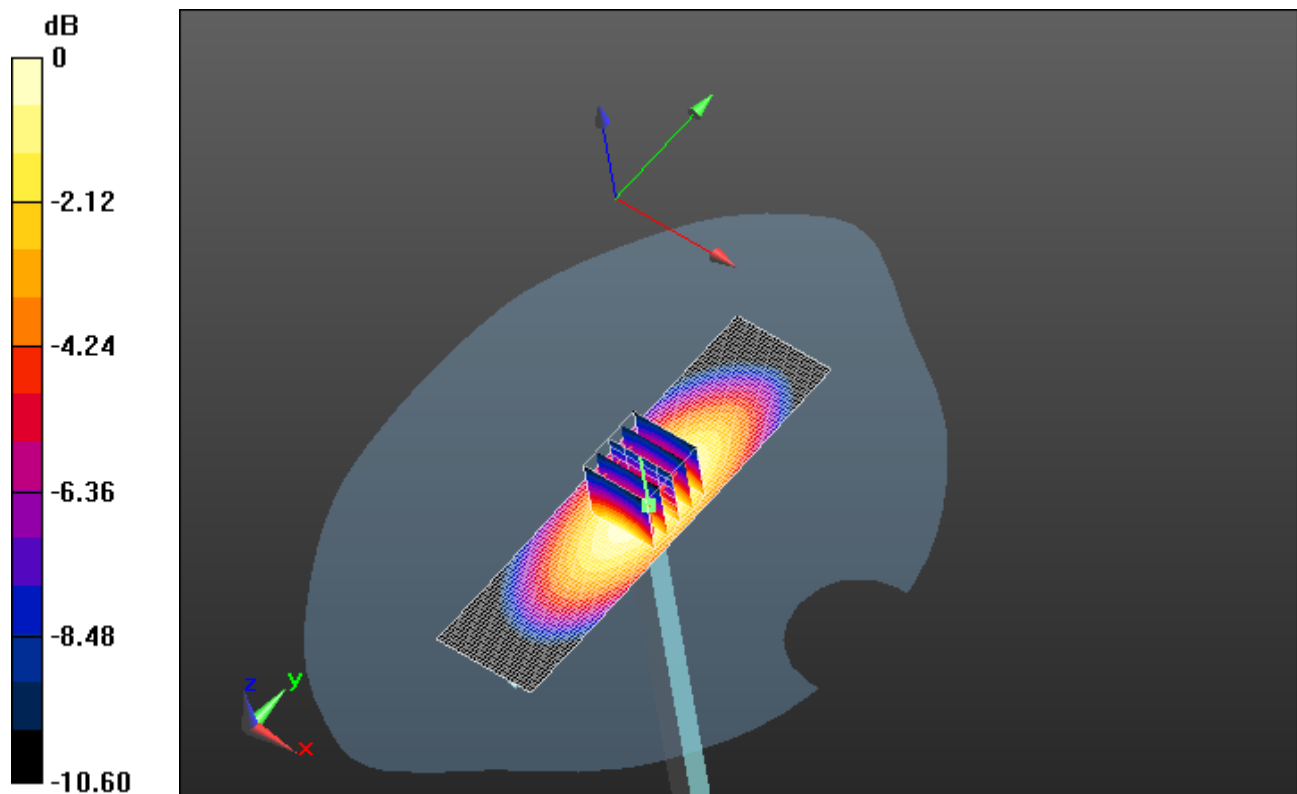
DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.19, 6.19, 6.19); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

**Configuration/d=15mm, Pin=1000mW/Area Scan (31x121x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
Reference Value = 113.2 V/m; Power Drift = -0.20 dB  
**Fast SAR: SAR(1 g) = 9.08 W/kg; SAR(10 g) = 6.03 W/kg**  
Maximum value of SAR (interpolated) = 10.5 W/kg

**Configuration/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 = 113.2 V/m; Power Drift = -0.20 dB  
Peak SAR (extrapolated) = 13.0 W/kg  
**SAR(1 g) = 8.8 W/kg; SAR(10 g) = 5.76 W/kg**  
Maximum value of SAR (measured) = 10.3 W/kg

|                                                                                   |                                                                                                 |                                                                                                               |                                                 |                               |
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|                                                                                   | Author Data<br><b>Andrew Becker</b>                                                             | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> |
| IC                                                                                |                                                                                                 |                                                                                                               |                                                 |                               |



0 dB = 10.3 W/kg = 10.13 dBW/kg

|                                                                                   |                                                                                                   |                                                                                        |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013<br/>March 24-26, 2014<br/>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b><br>FCC ID:<br><b>L6ARGB140LW</b><br>IC |

Date/Time: 8/16/2013 12:49:10 AM

Test Laboratory: RIM Testing Services

**DipoleValidation\_835MHz\_08\_16\_13\_Amb\_Tem\_23.6C\_Liq\_Tem\_21.5  
C**

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

Communication System: UID 0 - n/a, CW; Frequency: 835 MHz  
Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.881 \text{ S/m}$ ;  $\epsilon_r = 40.395$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

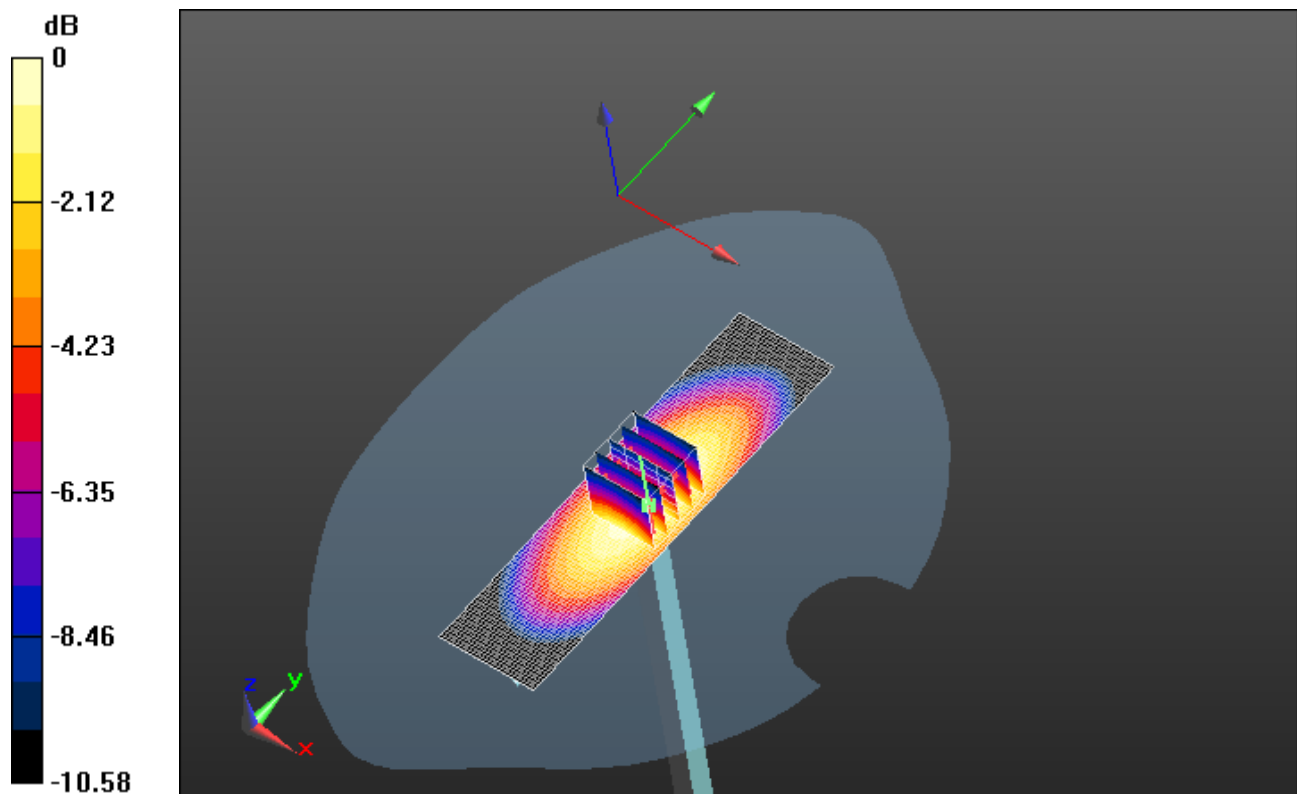
DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.19, 6.19, 6.19); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

**Configuration/d=15mm, Pin=1000mW/Area Scan (31x121x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
Reference Value = 110.6 V/m; Power Drift = -0.01 dB  
**Fast SAR: SAR(1 g) = 8.7 W/kg; SAR(10 g) = 5.76 W/kg**  
Maximum value of SAR (interpolated) = 10.0 W/kg

**Configuration/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 = 110.6 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 12.7 W/kg  
**SAR(1 g) = 8.61 W/kg; SAR(10 g) = 5.64 W/kg**  
Maximum value of SAR (measured) = 10.0 W/kg

|                                                                                   |                                                                                                               |                                                 |                               |                       |
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0 dB = 10.0 W/kg = 10.00 dBW/kg

|                                                                                  |                                                                                                               |                                                 |                               |                       |
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Date/Time: 6/20/2013 11:44:41 PM

Test Laboratory: RIM Testing Services

## DipoleValidation\_1900MHz\_06\_20\_13\_Amb\_Tem\_23.0C\_Liq\_Tem\_22.5 C

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

Communication System: UID 0 - n/a, CW; Frequency: 1900 MHz

Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.409 \text{ S/m}$ ;  $\epsilon_r = 38.655$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

**Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1):** Interpolated  
grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Reference Value =  $191.9 \text{ V/m}$ ; Power Drift =  $-0.04 \text{ dB}$

**Fast SAR: SAR(1 g) =  $38.6 \text{ W/kg}$ ; SAR(10 g) =  $20.2 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $48.6 \text{ W/kg}$

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

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

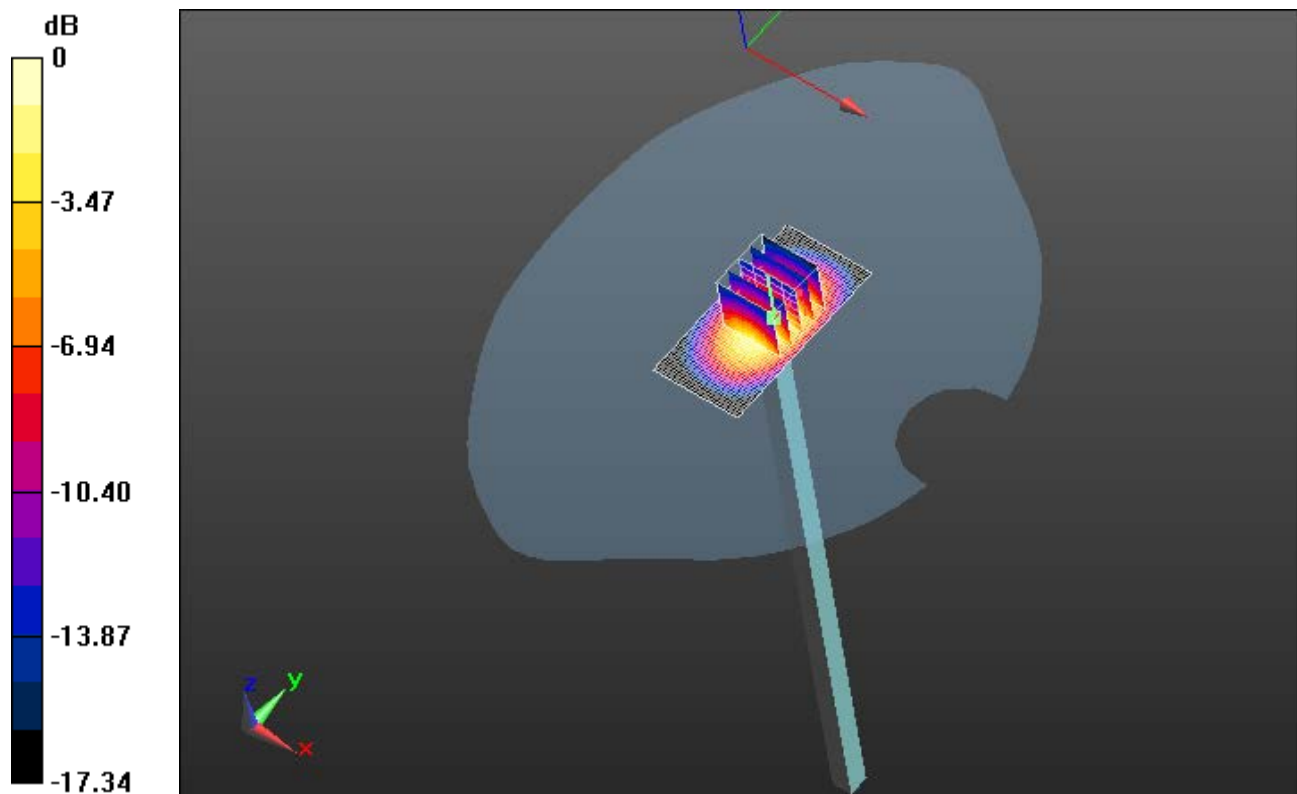
Reference Value =  $191.9 \text{ V/m}$ ; Power Drift =  $-0.04 \text{ dB}$

Peak SAR (extrapolated) =  $67.0 \text{ W/kg}$

**SAR(1 g) =  $38 \text{ W/kg}$ ; SAR(10 g) =  $20 \text{ W/kg}$**

Maximum value of SAR (measured) =  $48.1 \text{ W/kg}$

|                                                                                   |                                                                                                               |                                                 |                               |                       |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                    |



0 dB = 48.1 W/kg = 16.82 dBW/kg

|                                                                                  |                                                                                                               |                                                 |                               |                       |
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Date/Time: 6/24/2013 12:51:56 AM

Test Laboratory: RIM Testing Services

**DipoleValidation\_1900MHz\_06\_24\_13\_Amb\_Tem\_23.3C\_Liq\_Tem\_22.2**

**C**

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

Communication System: UID 0 - n/a, CW; Frequency: 1900 MHz

Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.4 \text{ S/m}$ ;  $\epsilon_r = 39.045$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

**Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Reference Value = 188.8 V/m; Power Drift = -0.06 dB

**Fast SAR: SAR(1 g) = 37.5 W/kg; SAR(10 g) = 19.7 W/kg**

Maximum value of SAR (interpolated) = 47.1 W/kg

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

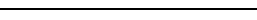
**0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

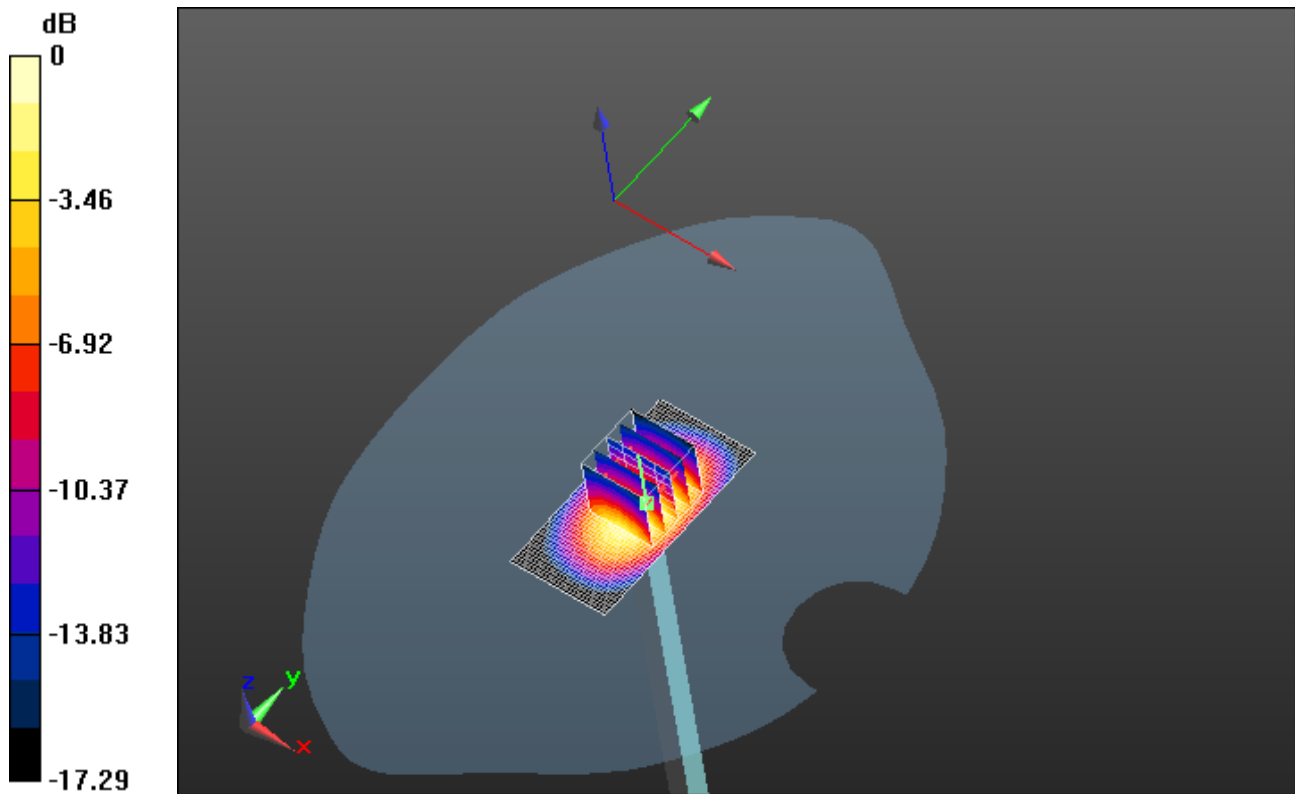
Reference Value = 188.8 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 64.9 W/kg

**SAR(1 g) = 36.6 W/kg; SAR(10 g) = 19.3 W/kg**

Maximum value of SAR (measured) = 46.6 W/kg

|                                                                                  |                                                                                          |                                          |                        |        |
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| Author Data<br>Andrew Becker                                                     | Dates of Test<br>June 11 – August 16, 2013<br>March 24-26, 2014<br>December 8 – 12, 2014 | Test Report No<br>RTS-6046-1308-39 Rev 6 | FCC ID:<br>L6ARGB140LW | IC     |



0 dB = 46.6 W/kg = 16.68 dBW/kg

|                                                                                   |                                                                                                   |                                                 |                               |                       |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013<br/>March 24-26, 2014<br/>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                    |

Date/Time: 6/28/2013 5:34:41 AM

Test Laboratory: RIM Testing Services

## DipoleValidation\_1900MHz\_06\_28\_13\_Amb\_Tem\_23.2C\_Liq\_Tem\_23.0 C

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

Communication System: UID 0 - n/a, CW; Frequency: 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.375$  S/m;  $\epsilon_r = 39.298$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

**Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1):** Interpolated  
grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Reference Value = 188.8 V/m; Power Drift = -0.02 dB

**Fast SAR: SAR(1 g) = 36.9 W/kg; SAR(10 g) = 19.5 W/kg**

Maximum value of SAR (interpolated) = 46.1 W/kg

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

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

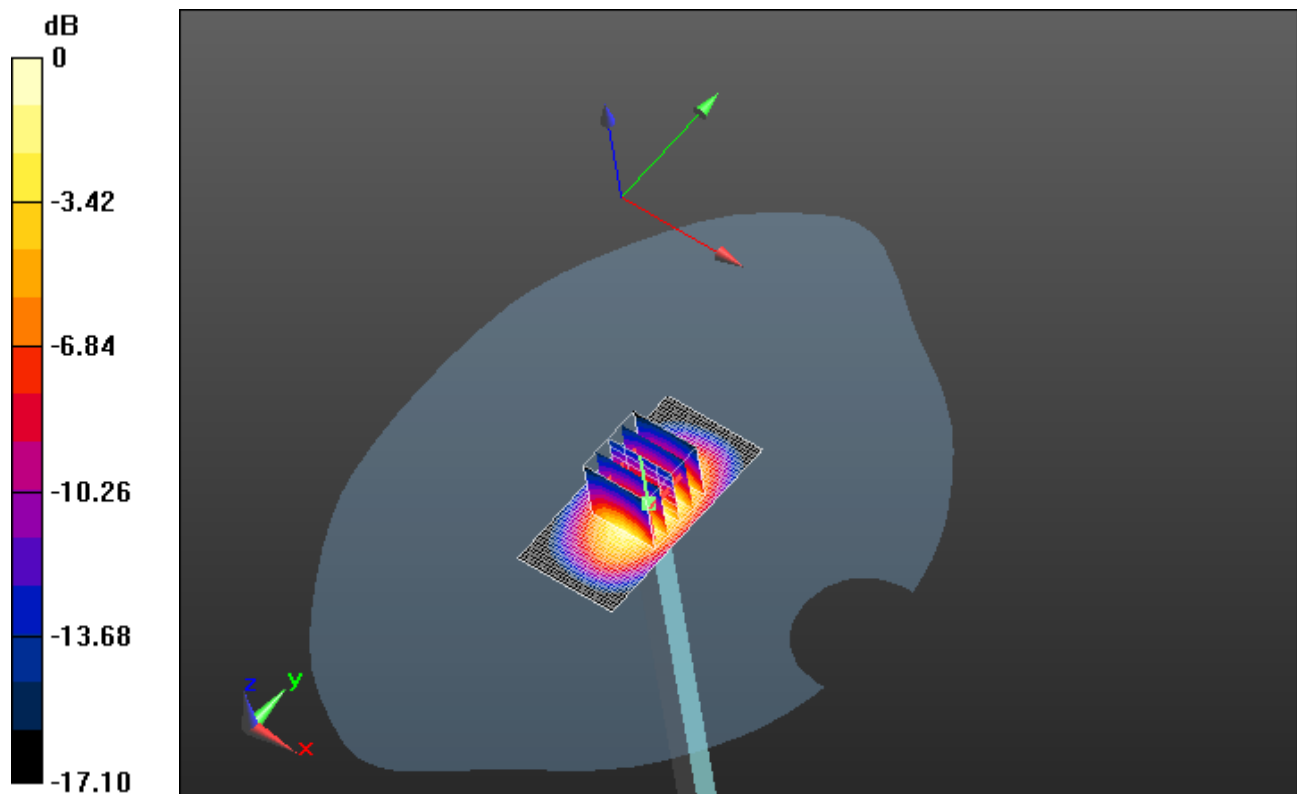
Reference Value = 188.8 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 64.6 W/kg

**SAR(1 g) = 36.4 W/kg; SAR(10 g) = 19.2 W/kg**

Maximum value of SAR (measured) = 46.2 W/kg

|                                                                                   |                                                                                          |                                          |                        |        |
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| Author Data<br>Andrew Becker                                                      | Dates of Test<br>June 11 – August 16, 2013<br>March 24-26, 2014<br>December 8 – 12, 2014 | Test Report No<br>RTS-6046-1308-39 Rev 6 | FCC ID:<br>L6ARGB140LW | IC     |



0 dB = 46.2 W/kg = 16.65 dBW/kg

|                                                                                  |                                                                                                               |                                                 |                               |                       |
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| Author Data<br><b>Andrew Becker</b>                                              | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                    |

Date/Time: 7/2/2013 12:46:05 AM

Test Laboratory: RIM Testing Services

## DipoleValidation\_1900MHz\_07\_02\_13\_Amb\_Tem\_23.2C\_Liq\_Tem\_21.6 C

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

Communication System: UID 0 - n/a, CW; Frequency: 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.387$  S/m;  $\epsilon_r = 38.399$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

**Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1):** Interpolated  
grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Reference Value = 190.8 V/m; Power Drift = 0.03 dB

**Fast SAR: SAR(1 g) = 37.6 W/kg; SAR(10 g) = 19.8 W/kg**

Maximum value of SAR (interpolated) = 47.1 W/kg

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

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

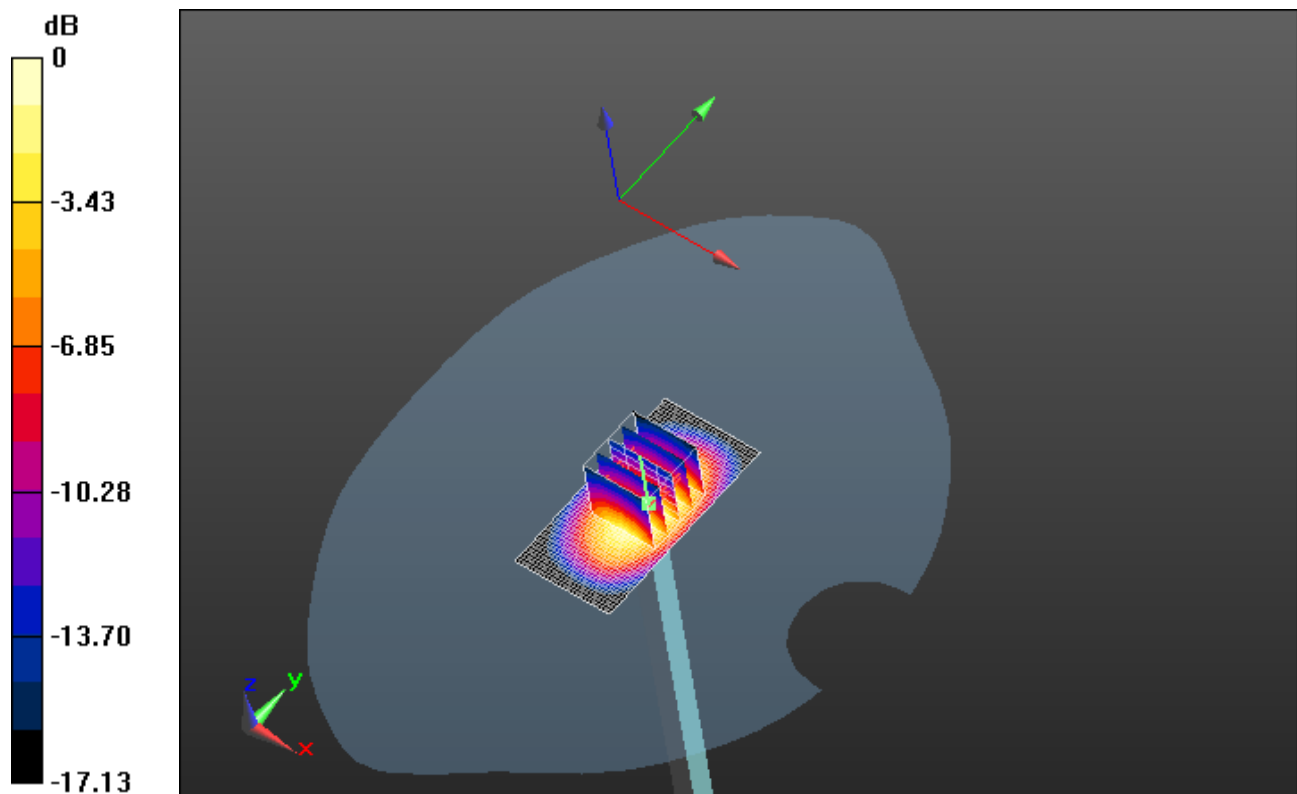
Reference Value = 190.8 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 65.5 W/kg

**SAR(1 g) = 37 W/kg; SAR(10 g) = 19.5 W/kg**

Maximum value of SAR (measured) = 46.6 W/kg

|                                                                                   |                                                                                                               |                                                 |                               |                       |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                    |



0 dB = 46.6 W/kg = 16.68 dBW/kg

|                                                                                  |                                                                                                               |                                                 |                               |                       |
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| Author Data<br><b>Andrew Becker</b>                                              | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                    |

Date/Time: 7/5/2013 12:57:00 AM

Test Laboratory: RIM Testing Services

## DipoleValidation\_1900MHz\_07\_05\_13\_Amb\_Tem\_23.3C\_Liq\_Tem\_21.7 C

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

Communication System: UID 0 - n/a, CW; Frequency: 1900 MHz

Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.408 \text{ S/m}$ ;  $\epsilon_r = 38.666$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

**Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1):** Interpolated  
grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Reference Value =  $186.9 \text{ V/m}$ ; Power Drift =  $-0.02 \text{ dB}$

**Fast SAR: SAR(1 g) =  $36.7 \text{ W/kg}$ ; SAR(10 g) =  $19.4 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $45.9 \text{ W/kg}$

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

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

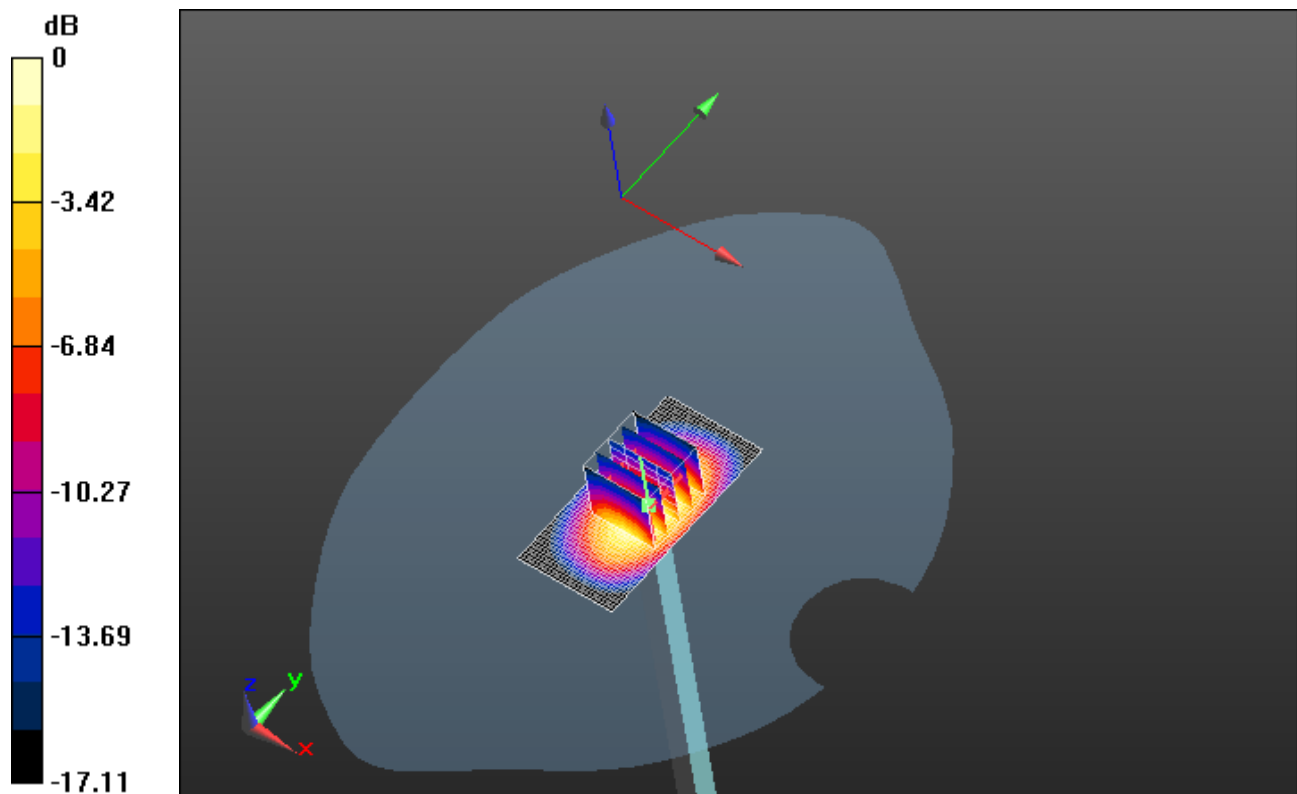
Reference Value =  $186.9 \text{ V/m}$ ; Power Drift =  $-0.02 \text{ dB}$

Peak SAR (extrapolated) =  $63.9 \text{ W/kg}$

**SAR(1 g) =  $36.2 \text{ W/kg}$ ; SAR(10 g) =  $19.1 \text{ W/kg}$**

Maximum value of SAR (measured) =  $45.9 \text{ W/kg}$

|                                                                                   |                                                                                          |                                          |                        |        |
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| Author Data<br>Andrew Becker                                                      | Dates of Test<br>June 11 – August 16, 2013<br>March 24-26, 2014<br>December 8 – 12, 2014 | Test Report No<br>RTS-6046-1308-39 Rev 6 | FCC ID:<br>L6ARGB140LW | IC     |



0 dB = 45.9 W/kg = 16.62 dBW/kg

|                                                                                   |                                                                                                        |                                                                                                               |                                                 |                                     |
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|                                                                                   | Author Data<br><b>Andrew Becker</b>                                                                    | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b><br>IC |

Date/Time: 7/8/2013 11:04:31 AM

Test Laboratory: RIM Testing Services

## DipoleValidation\_1900MHz\_07\_08\_13\_Amb\_Tem\_23.0C\_Liq\_Tem\_22.5 C

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

Communication System: UID 0 - n/a, CW; Frequency: 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.375$  S/m;  $\epsilon_r = 38.543$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

**Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1):** Interpolated  
grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Reference Value = 190.8 V/m; Power Drift = -0.03 dB

**Fast SAR: SAR(1 g) = 37.3 W/kg; SAR(10 g) = 19.6 W/kg**

Maximum value of SAR (interpolated) = 46.9 W/kg

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

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

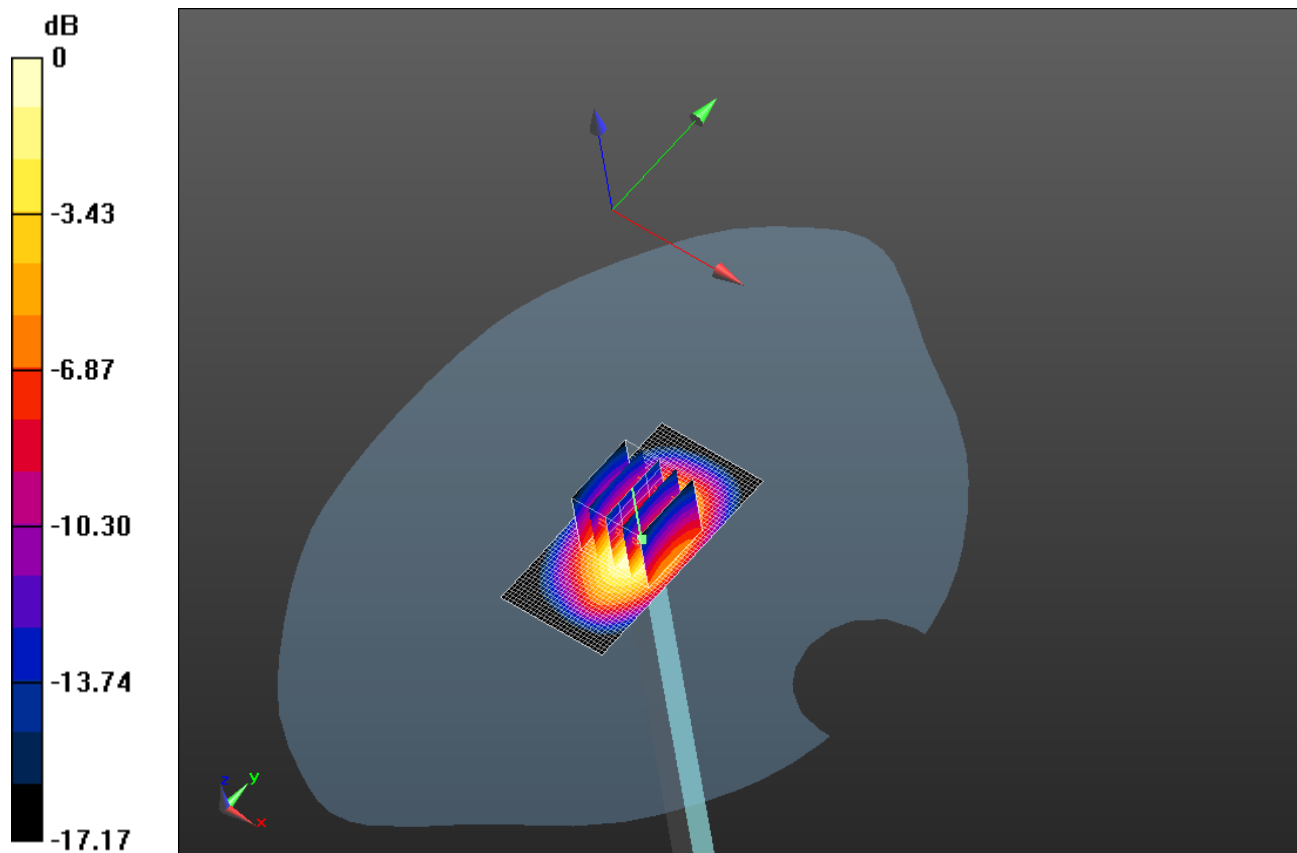
Reference Value = 190.8 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 65.1 W/kg

**SAR(1 g) = 36.6 W/kg; SAR(10 g) = 19.2 W/kg**

Maximum value of SAR (measured) = 46.7 W/kg

|                                                                                   |                                                                                              |                               |                    |               |
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| Author Data                                                                       | Dates of Test                                                                                | Test Report No                | FCC ID:            | IC            |
| <b>Andrew Becker</b>                                                              | <b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | <b>RTS-6046-1308-39 Rev 6</b> | <b>L6ARGB140LW</b> |               |



0 dB = 46.7 W/kg = 16.69 dBW/kg

|                                                                                   |                                                                                                   |                                                 |                               |                       |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013<br/>March 24-26, 2014<br/>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                    |

Date/Time: 8/7/2013 3:04:00 PM

Test Laboratory: RIM Testing Services

## DipoleValidation\_1900MHz\_08\_07\_13\_Amb\_Tem\_23.5C\_Liq\_Tem\_22.2 C

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

Communication System: UID 0 - n/a, CW; Frequency: 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.378$  S/m;  $\epsilon_r = 38.172$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

**Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1):** Interpolated  
grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Reference Value = 194.4 V/m; Power Drift = -0.01 dB

**Fast SAR: SAR(1 g) = 38.7 W/kg; SAR(10 g) = 20.5 W/kg**

Maximum value of SAR (interpolated) = 48.5 W/kg

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

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

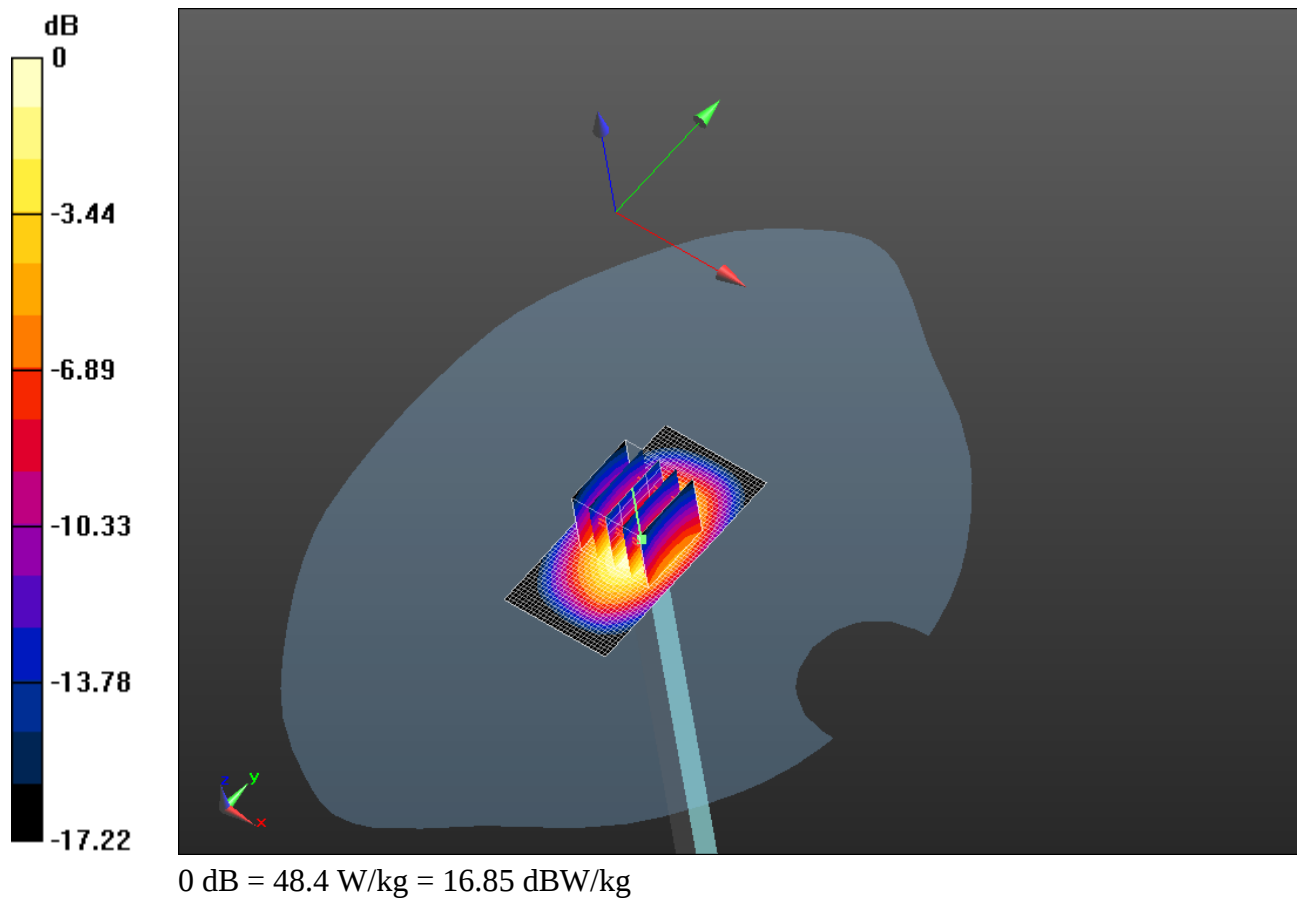
Reference Value = 194.4 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 67.7 W/kg

**SAR(1 g) = 38 W/kg; SAR(10 g) = 19.9 W/kg**

Maximum value of SAR (measured) = 48.4 W/kg

|                                                                                   |                                                                                                               |                                                 |                               |                       |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                    |



|                                                                                   |                                                                                                   |                                                 |                               |                       |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013<br/>March 24-26, 2014<br/>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                    |

Date/Time: 8/15/2013 1:55:03 AM

Test Laboratory: RIM Testing Services

**DipoleValidation\_1900MHz\_08\_15\_13\_Amb\_Tem\_23.2C\_Liq\_Tem\_23.0  
C**

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

Communication System: UID 0 - n/a, CW; Frequency: 1900 MHz

Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.384 \text{ S/m}$ ;  $\epsilon_r = 38.362$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

**Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Reference Value =  $189.0 \text{ V/m}$ ; Power Drift =  $-0.04 \text{ dB}$

**Fast SAR: SAR(1 g) =  $37.6 \text{ W/kg}$ ; SAR(10 g) =  $19.8 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $47.1 \text{ W/kg}$

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

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

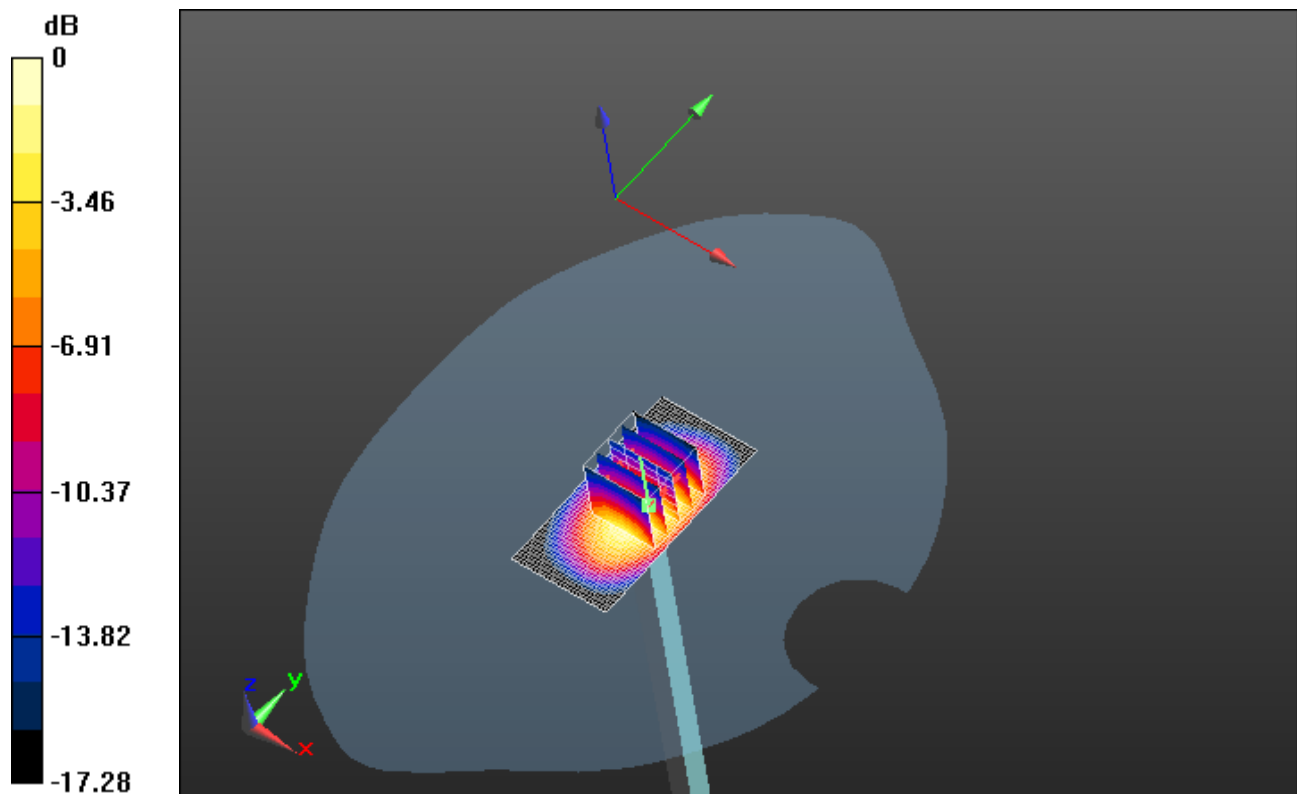
Reference Value =  $189.0 \text{ V/m}$ ; Power Drift =  $-0.04 \text{ dB}$

Peak SAR (extrapolated) =  $65.1 \text{ W/kg}$

**SAR(1 g) =  $36.7 \text{ W/kg}$ ; SAR(10 g) =  $19.3 \text{ W/kg}$**

Maximum value of SAR (measured) =  $46.6 \text{ W/kg}$

|                                                                                   |                                                                                                               |                                                 |                               |                       |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                    |



0 dB = 46.6 W/kg = 16.68 dBW/kg

|                                                                                   |                                                                                                  |                                                                                                   |                                                 |                                         |
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Date/Time: 6/17/2013 12:56:14 AM

Test Laboratory: RIM Testing Services

## DipoleValidation\_2450MHz\_06\_17\_13\_Amb\_Tem\_23.4C\_Liq\_Tem\_22.5 C

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

Communication System: UID 0 - n/a, CW; Frequency: 2450 MHz

Medium parameters used:  $f = 2450 \text{ MHz}$ ;  $\sigma = 1.76 \text{ S/m}$ ;  $\epsilon_r = 39.411$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.65, 4.65, 4.65); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

**System Performance Check at Frequencies above 1 GHz/d=10mm,  
Pin=1000 mW, dist=3.0mm (ES-Probe)/Area Scan (61x71x1):** Interpolated  
grid:  $dx=1.200 \text{ mm}$ ,  $dy=1.200 \text{ mm}$

Reference Value =  $202.9 \text{ V/m}$ ; Power Drift =  $-0.04 \text{ dB}$

**Fast SAR: SAR(1 g) =  $50.3 \text{ W/kg}$ ; SAR(10 g) =  $22.1 \text{ W/kg}$**

Maximum value of SAR (interpolated) =  $69.4 \text{ W/kg}$

**System Performance Check at Frequencies above 1 GHz/d=10mm,  
Pin=1000 mW, dist=3.0mm (ES-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube**

**0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

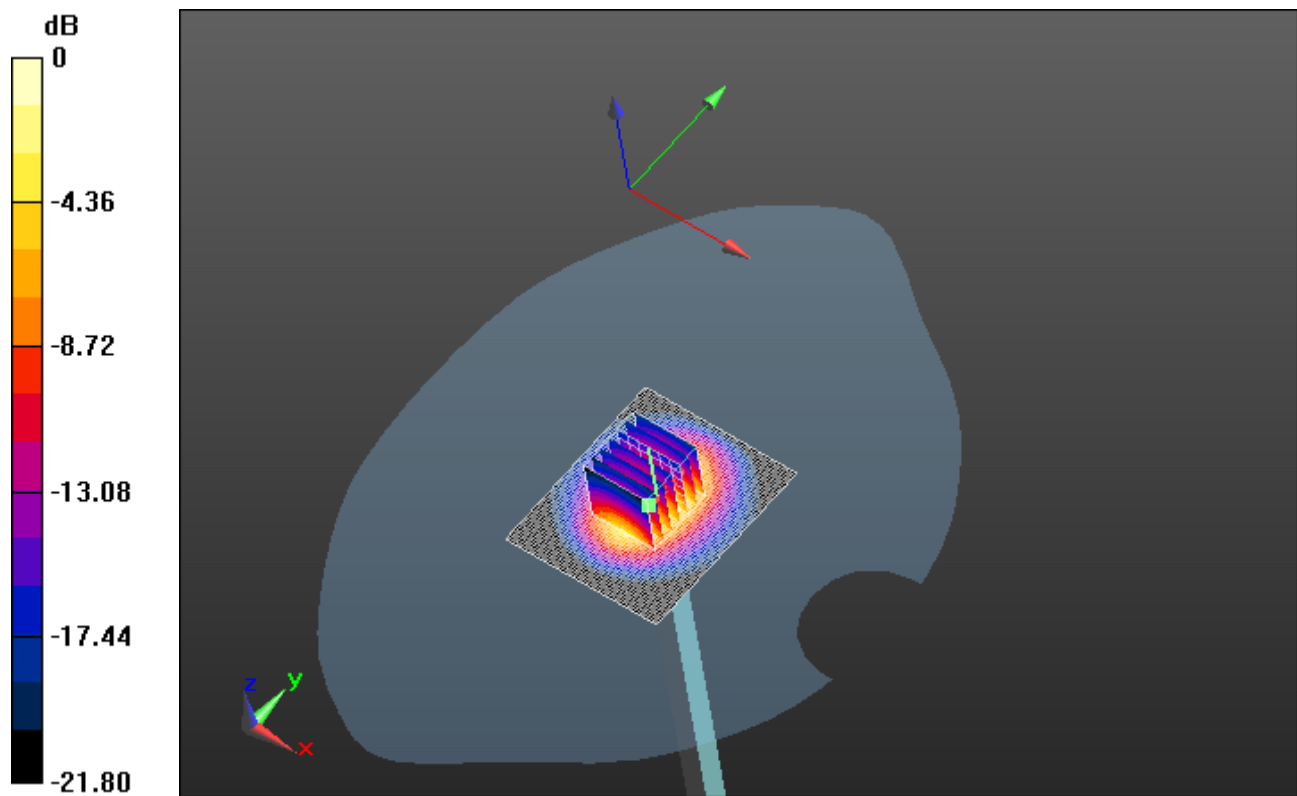
Reference Value =  $202.9 \text{ V/m}$ ; Power Drift =  $-0.04 \text{ dB}$

Peak SAR (extrapolated) =  $95.4 \text{ W/kg}$

**SAR(1 g) =  $49.8 \text{ W/kg}$ ; SAR(10 g) =  $23.8 \text{ W/kg}$**

Maximum value of SAR (measured) =  $64.4 \text{ W/kg}$

|                                                                                   |                                                                                                               |                                                 |                               |                       |
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0 dB = 64.4 W/kg = 18.09 dBW/kg

|                                                                                   |                                                                                                  |                                                                                                   |                                                 |                                         |
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Test Laboratory: RIM Testing Services

## DipoleValidation\_2450MHz\_07\_19\_13\_Amb\_Tem\_23.0C\_Liq\_Tem\_22.8 C

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

Communication System: UID 0 - n/a, CW; Frequency: 2450 MHz

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.831$  S/m;  $\epsilon_r = 37.795$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

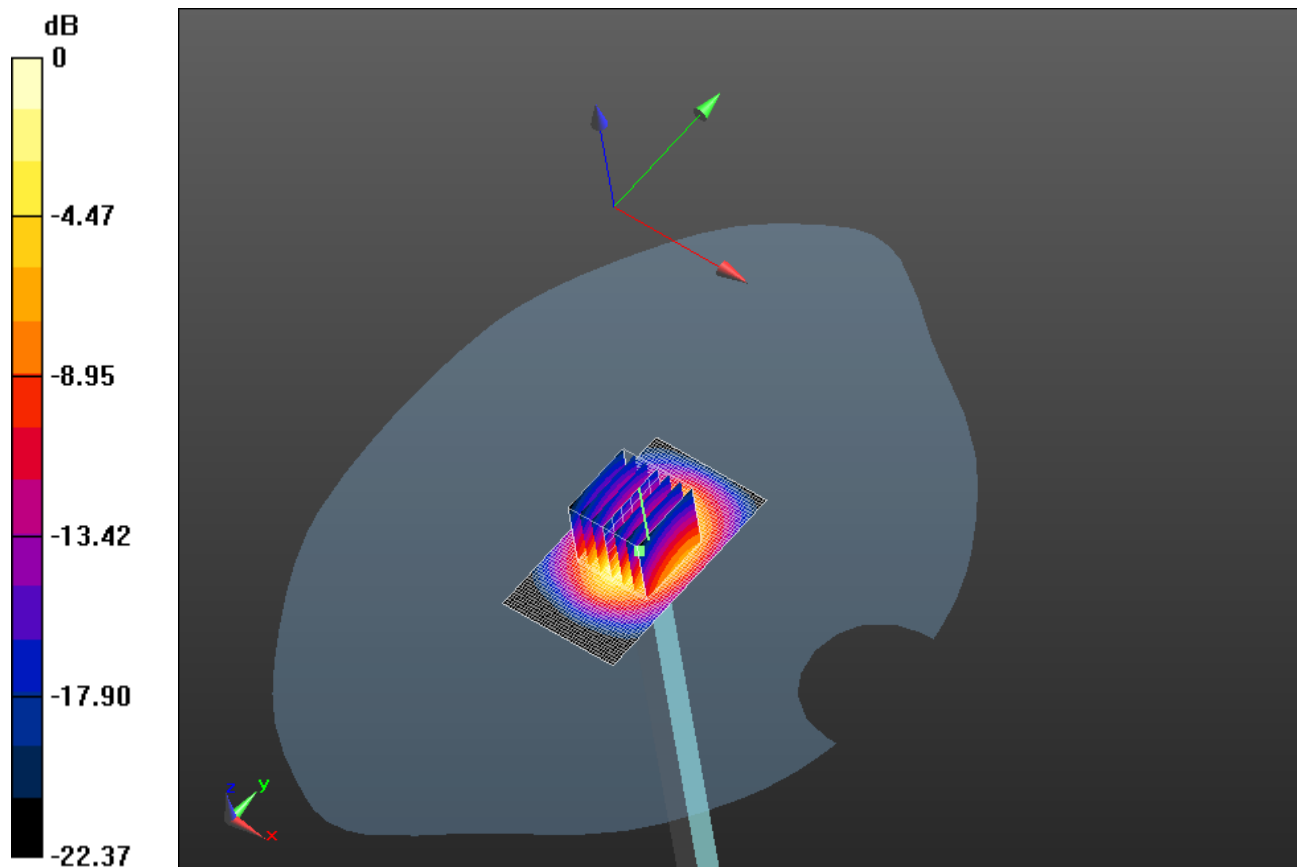
DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.65, 4.65, 4.65); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

**System Performance Check at Frequencies above 1 GHz/d=10mm,  
Pin=1000 mW, dist=3.0mm (ES-Probe)/Area Scan (41x71x1):** Interpolated  
grid: dx=1.200 mm, dy=1.200 mm  
Reference Value = 204.6 V/m; Power Drift = -0.09 dB  
**Fast SAR: SAR(1 g) = 52.5 W/kg; SAR(10 g) = 23.2 W/kg**  
Maximum value of SAR (interpolated) = 71.2 W/kg

**System Performance Check at Frequencies above 1 GHz/d=10mm,  
Pin=1000 mW, dist=3.0mm (ES-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube  
0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 204.6 V/m; Power Drift = -0.09 dB  
Peak SAR (extrapolated) = 102 W/kg  
**SAR(1 g) = 52.1 W/kg; SAR(10 g) = 24.6 W/kg**  
Maximum value of SAR (measured) = 67.6 W/kg

|                                                                                   |                                                                                                               |                                                 |                               |                       |
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0 dB = 67.6 W/kg = 18.30 dBW/kg

|                                                                                   |                                                                                                   |                                                 |                               |                       |
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Test Laboratory: RIM Testing Services

## DipoleValidation\_2450MHz\_07\_23\_13\_Amb\_Tem\_23.2C\_Liq\_Tem\_22.4 C

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

Communication System: UID 0 - n/a, CW; Frequency: 2450 MHz

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.845$  S/m;  $\epsilon_r = 37.878$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.65, 4.65, 4.65); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

**System Performance Check at Frequencies above 1 GHz/d=10mm,  
Pin=1000 mW, dist=3.0mm (ES-Probe)/Area Scan (41x71x1):** Interpolated  
grid: dx=1.200 mm, dy=1.200 mm

Reference Value = 202.1 V/m; Power Drift = -0.06 dB

**Fast SAR: SAR(1 g) = 51.7 W/kg; SAR(10 g) = 22.8 W/kg**

Maximum value of SAR (interpolated) = 70.4 W/kg

**System Performance Check at Frequencies above 1 GHz/d=10mm,  
Pin=1000 mW, dist=3.0mm (ES-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube**

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

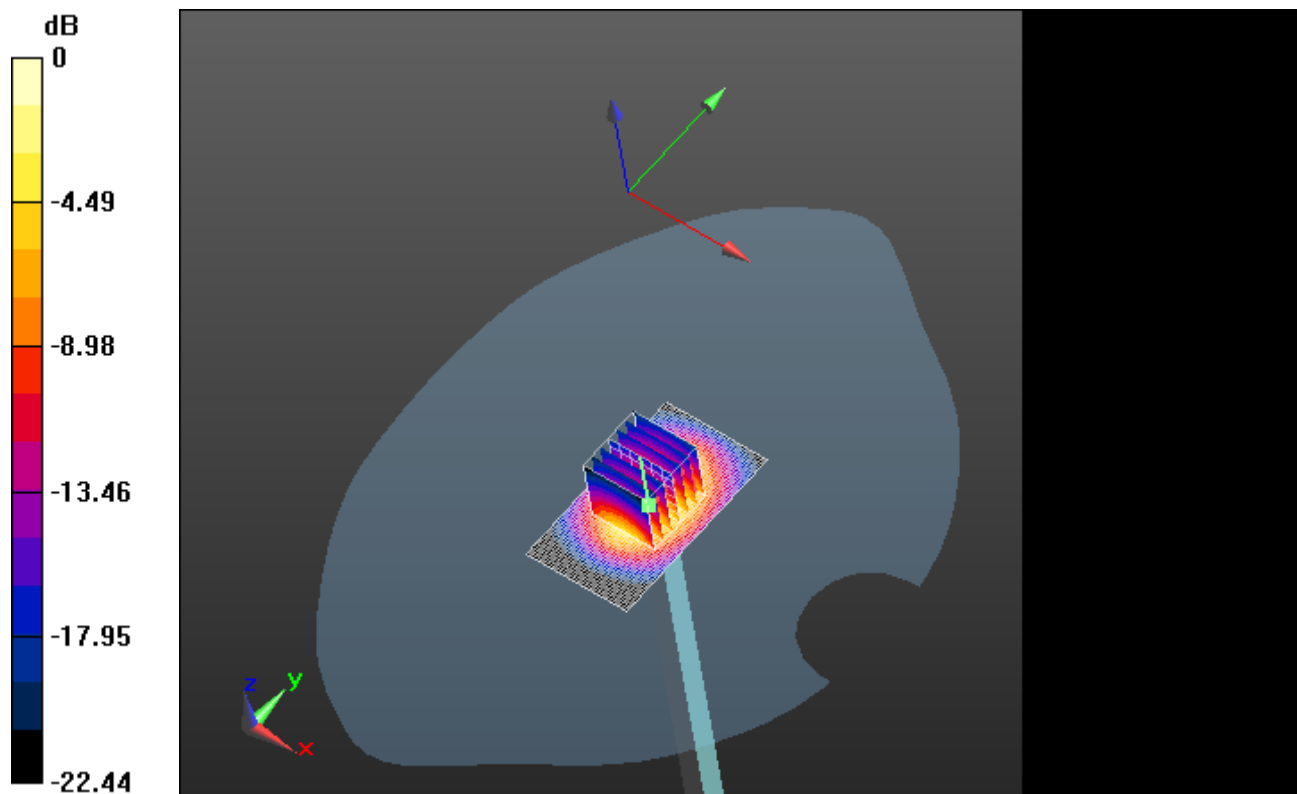
Reference Value = 202.1 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 102 W/kg

**SAR(1 g) = 51.6 W/kg; SAR(10 g) = 24.3 W/kg**

Maximum value of SAR (measured) = 67.1 W/kg

|                                                                                   |                                                                                                               |                                                 |                               |                       |
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0 dB = 67.1 W/kg = 18.27 dBW/kg

|                                                                                   |                                                                                                   |                                                 |                               |               |
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Test Laboratory: RIM Testing Services

## Dipole Validation\_5200-5800

**MHz\_06\_18\_13\_Amb\_Tem\_23.8\_Liq\_Tem\_22.2C**

**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1033**

Communication System: UID 10000 - n/a, CW; Frequency: 5200 MHz

Medium parameters used:  $f = 5200$  MHz;  $\sigma = 4.65$  S/m;  $\epsilon_r = 34.46$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3548; ConvF(5.13, 5.13, 5.13); Calibrated: 1/15/2013;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 23.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

### System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000

**mW, f=5200 MHz/Area Scan (41x51x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 194.1 V/m; Power Drift = 0.02 dB

**Fast SAR: SAR(1 g) = 75.6 W/kg; SAR(10 g) = 21.2 W/kg**

Maximum value of SAR (interpolated) = 176 W/kg

### System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000

**mW, f=5200 MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm**

**(8x8x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 194.1 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 307 W/kg

**SAR(1 g) = 80.2 W/kg; SAR(10 g) = 23.3 W/kg**

Maximum value of SAR (measured) = 163 W/kg

|                                                                                  |                                                                                                               |                                                 |                               |                       |
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Test Laboratory: RIM Testing Services

**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1033**

Communication System: UID 0 - n/a, CW-5GHz; Frequency: 5500 MHz  
Medium parameters used:  $f = 5500$  MHz;  $\sigma = 4.917$  S/m;  $\epsilon_r = 34.144$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3548; ConvF(4.79, 4.79, 4.79); Calibrated: 1/15/2013;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 23.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

**System Performance Check with D5GHzV2 Dipole 2/d=10mm,**  
**Pin=1000mW, f=5500 MHz/Area Scan (41x51x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Reference Value = 193.7 V/m; Power Drift = -0.00 dB  
**Fast SAR: SAR(1 g) = 77.6 W/kg; SAR(10 g) = 21.3 W/kg**  
Maximum value of SAR (interpolated) = 187 W/kg

**System Performance Check with D5GHzV2 Dipole 2/d=10mm,**  
**Pin=1000mW, f=5500 MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm),**  
**dist=2mm (8x8x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
Reference Value = 193.7 V/m; Power Drift = -0.00 dB  
Peak SAR (extrapolated) = 339 W/kg  
**SAR(1 g) = 81.8 W/kg; SAR(10 g) = 23.4 W/kg**  
Maximum value of SAR (measured) = 169 W/kg

|                                                                                   |                                                                                                  |                                                                                                   |                                                 |                                     |
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Test Laboratory: RIM Testing Services

**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1033**

Communication System: UID 0 - n/a, CW; Frequency: 5800 MHz

Medium parameters used:  $f = 5800 \text{ MHz}$ ;  $\sigma = 5.33 \text{ S/m}$ ;  $\epsilon_r = 33.816$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3548; ConvF(4.61, 4.61, 4.61); Calibrated: 1/15/2013;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 23.0$
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.6(1115); SEMCAD X 14.6.9(7117)

**System Performance Check with D5GHzV2 Dipole 3/d=10mm, Pin=1000**

**mW, f=5800 MHz/Area Scan (41x51x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  
 $dy=1.000 \text{ mm}$

Reference Value = 190.9 V/m; Power Drift = -0.00 dB

**Fast SAR: SAR(1 g) = 77.5 W/kg; SAR(10 g) = 21.4 W/kg**

Maximum value of SAR (interpolated) = 187 W/kg

**System Performance Check with D5GHzV2 Dipole 3/d=10mm, Pin=1000**

**mW, f=5800 MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm**

**(8x8x12)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=2\text{mm}$

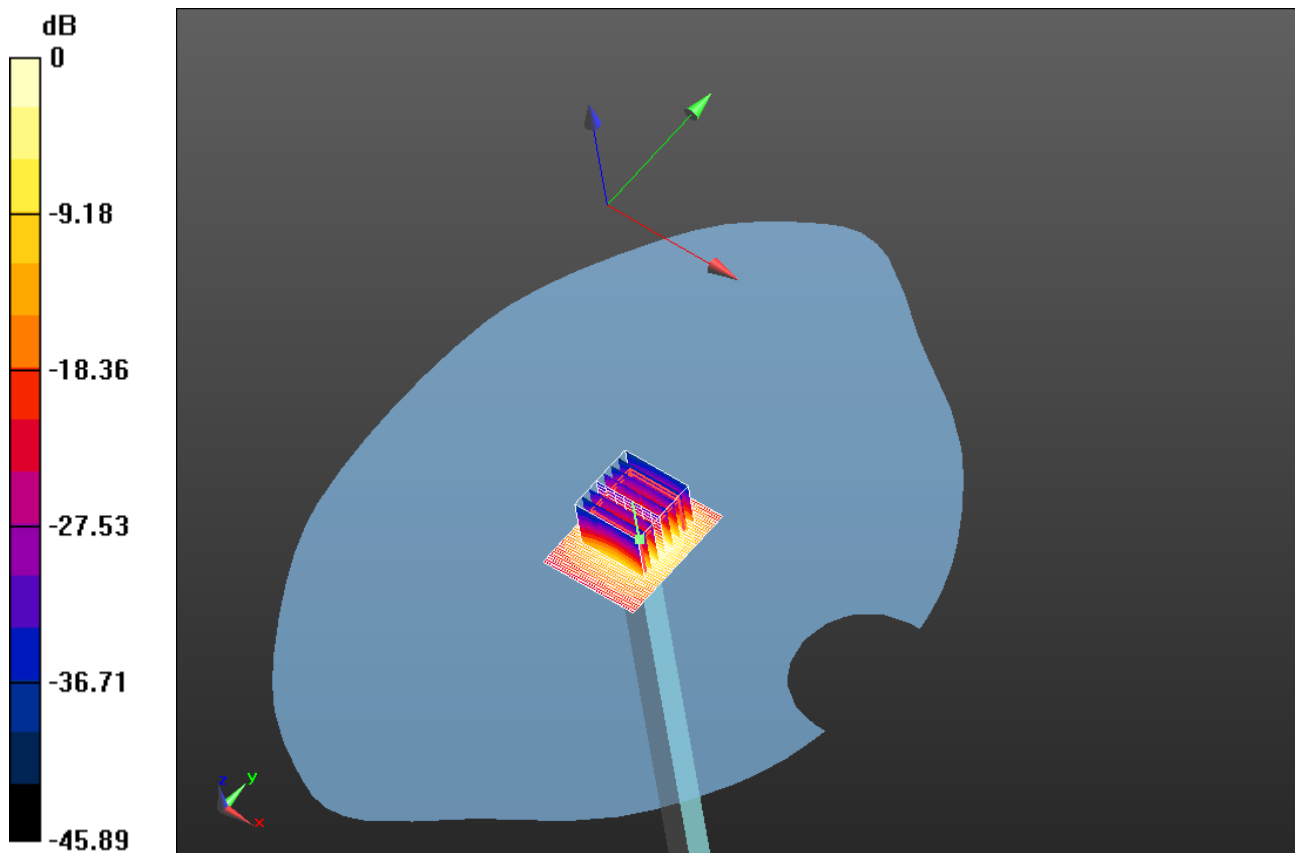
Reference Value = 190.9 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 343 W/kg

**SAR(1 g) = 82.1 W/kg; SAR(10 g) = 23.5 W/kg**

Maximum value of SAR (measured) = 171 W/kg

|                                                                                   |                                                                                                               |                                                 |                               |                       |
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0 dB = 171 W/kg = 22.33 dBW/kg

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Date: 7/22/2013

Test Lab: RIM Testing Services

**DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033**

### **Configuration: System Performance Check with D5GHzV2 Dipole\_5200**

Communication System: CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5200 MHz

Medium Parameters used:  $f=5200$  MHz;  $\sigma = 4.633$  S/m;  $\epsilon_r = 35.221$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: EX3DV4 - SN3548; ConvF: (5.13,5.13,5.13); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

#### **System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000 mW, f=5200 MHz/Area**

**Scan (41x51x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 195.0 V/m; **Power Drift = -0.00767 dB**

**Fast SAR: SAR(1g) = 77.3 W/kg; SAR(10g) = 21.6 W/kg**

Maximum value of SAR (interpolated) = 175 W/kg

#### **System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000 mW, f=5200 MHz/Zoom**

**Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (36x36x61)/Cube 0:** Interpolated grid:

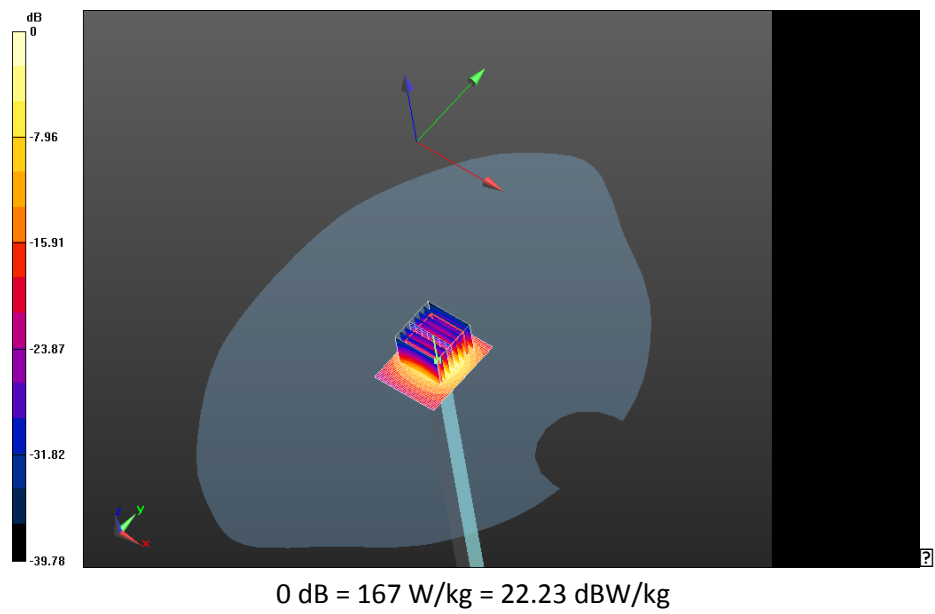
dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 195.0 V/m; **Power Drift = -0.00767 dB**

**Averaged SAR: SAR(1g) = 83.1 W/kg; SAR(10g) = 24.1 W/kg**

Maximum value of SAR (interpolated) = 316 W/kg

|                                                                                   |                                                                                                        |                                                                                                               |                                                 |                               |
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Date: 7/22/2013

Test Lab: RIM Testing Services

**DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033**

### **Configuration: System Performance Check with D5GHzV2 Dipole\_5500**

Communication System: CW-5GHz; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5500 MHz

Medium Parameters used:  $f=5500$  MHz;  $\sigma = 5.007$  S/m;  $\epsilon_r = 34.543$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: EX3DV4 - SN3548; ConvF: (4.79,4.79,4.79); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

#### **System Performance Check with D5GHzV2 Dipole 2/d=10mm, Pin=1000mW, f=5500 MHz/Area Scan (41x51x1):**

Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 197.1 V/m; **Power Drift = 0.028 dB**

**Fast SAR: SAR(1g) = 83.2 W/kg; SAR(10g) = 22.9 W/kg**

Maximum value of SAR (interpolated) = 193 W/kg

#### **System Performance Check with D5GHzV2 Dipole 2/d=10mm, Pin=1000mW, f=5500**

**MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (36x36x61)/Cube 0:** Interpolated

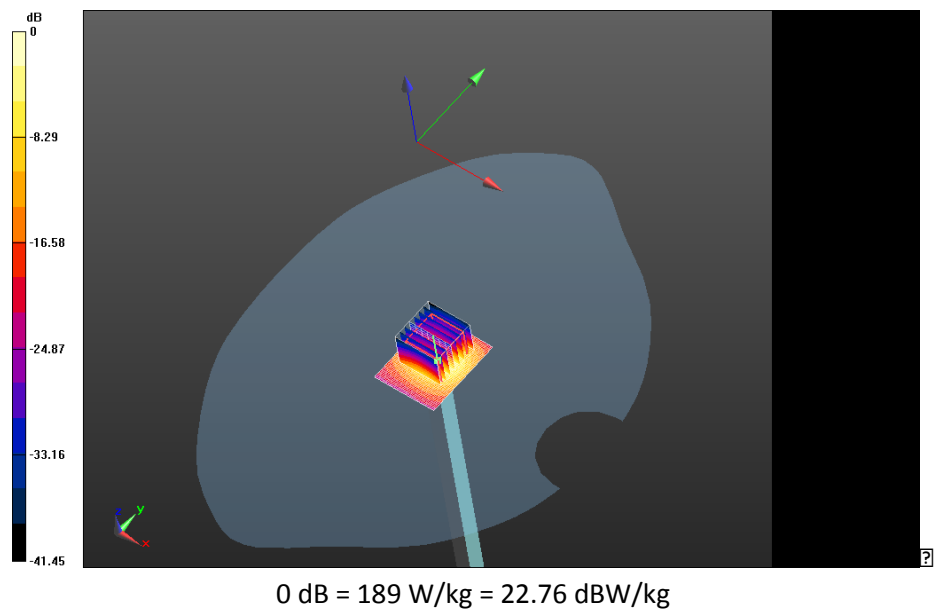
grid: dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 197.1 V/m; **Power Drift = 0.028 dB**

**Averaged SAR: SAR(1g) = 90.0 W/kg; SAR(10g) = 25.7 W/kg**

Maximum value of SAR (interpolated) = 378 W/kg

|                                                                                   |                                                                                                        |                                                                                                               |                                                 |                               |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC            |

Date: 7/22/2013

Test Lab: RIM Testing Services

**DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033**

### **Configuration: System Performance Check with D5GHzV2 Dipole\_5800**

Communication System: CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5800 MHz

Medium Parameters used:  $f=5800$  MHz;  $\sigma = 5.322$  S/m;  $\epsilon_r = 33.887$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: EX3DV4 - SN3548; ConvF: (4.61,4.61,4.61); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

#### **System Performance Check with D5GHzV2 Dipole 3/d=10mm, Pin=1000 mW, f=5800**

**MHz/Area Scan (41x51x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 188.7 V/m; **Power Drift = 0.025 dB**

**Fast SAR: SAR(1g) = 78.1 W/kg; SAR(10g) = 21.6 W/kg**

Maximum value of SAR (interpolated) = 182 W/kg

#### **System Performance Check with D5GHzV2 Dipole 3/d=10mm, Pin=1000 mW, f=5800**

**MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (36x36x61)/Cube 0:** Interpolated

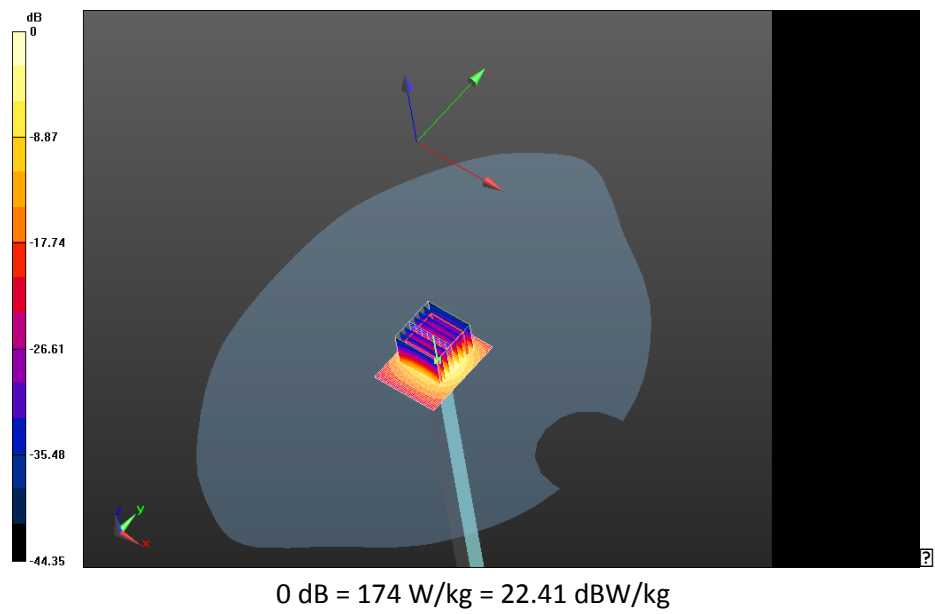
grid: dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 188.7 V/m; **Power Drift = 0.025 dB**

**Averaged SAR: SAR(1g) = 84.5 W/kg; SAR(10g) = 24.3 W/kg**

Maximum value of SAR (interpolated) = 348 W/kg

|                                                                                   |                                                                                                        |                                                                                                               |                                                 |                               |
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Date: 8/8/2013

Test Lab: RIM Testing Services

**DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033**

### **Configuration: System Performance Check with D5GHzV2 Dipole\_5200**

Communication System: CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5200 MHz

Medium Parameters used:  $f=5200$  MHz;  $\sigma = 4.579$  S/m;  $\epsilon_r = 34.269$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

### **DASY Configuration:**

- Probe: EX3DV4 - SN3548; ConvF: (5.13,5.13,5.13); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

### **System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000 mW, f=5200 MHz/Area**

**Scan (41x51x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 205.9 V/m; **Power Drift = -0.100 dB**

**Fast SAR: SAR(1g) = 79.2 W/kg; SAR(10g) = 22.0 W/kg**

Maximum value of SAR (interpolated) = 185 W/kg

### **System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000 mW, f=5200 MHz/Zoom**

**Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (41x41x61)/Cube 0:** Interpolated grid:

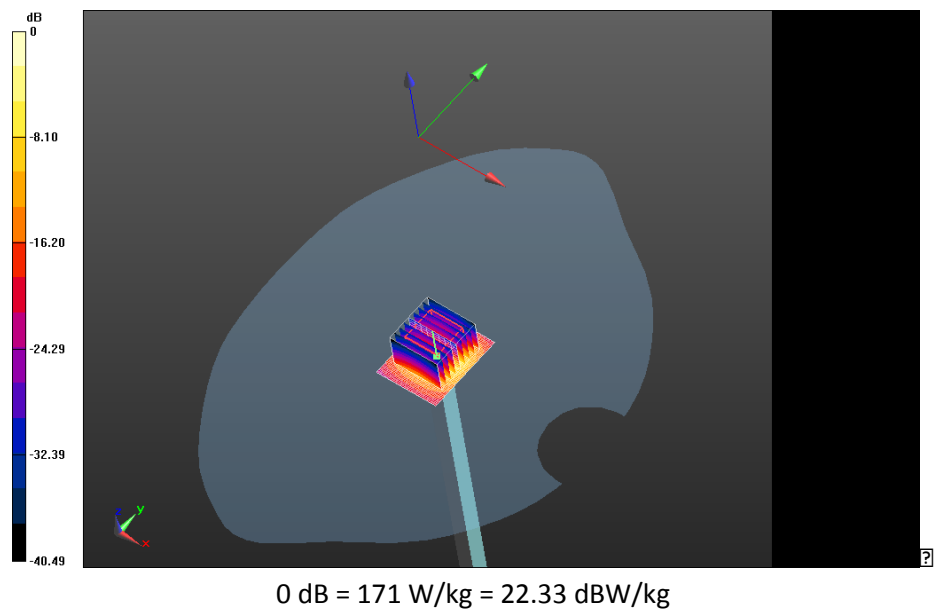
dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 205.9 V/m; **Power Drift = -0.100 dB**

**Averaged SAR: SAR(1g) = 83.4 W/kg; SAR(10g) = 24.3 W/kg**

Maximum value of SAR (interpolated) = 321 W/kg

|                                                                                  |                                                                                          |                                          |                        |        |
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| <b>Andrew Becker</b>                                                              | <b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | <b>RTS-6046-1308-39 Rev 6</b> | <b>L6ARGB140LW</b> |               |

Date: 8/8/2013

Test Lab: RIM Testing Services

**DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033**

### **Configuration: System Performance Check with D5GHzV2 Dipole\_5500**

Communication System: CW-5GHz; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5500 MHz

Medium Parameters used:  $f=5500$  MHz;  $\sigma = 4.998$  S/m;  $\epsilon_r = 34.213$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: EX3DV4 - SN3548; ConvF: (4.79,4.79,4.79); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

#### **System Performance Check with D5GHzV2 Dipole 2/d=10mm, Pin=1000mW, f=5500 MHz/Area Scan (41x51x1):**

Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 211.2 V/m; **Power Drift = 0.036 dB**

**Fast SAR: SAR(1g) = 88.7 W/kg; SAR(10g) = 24.1 W/kg**

Maximum value of SAR (interpolated) = 214 W/kg

#### **System Performance Check with D5GHzV2 Dipole 2/d=10mm, Pin=1000mW, f=5500**

**MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (31x31x61)/Cube 0:**

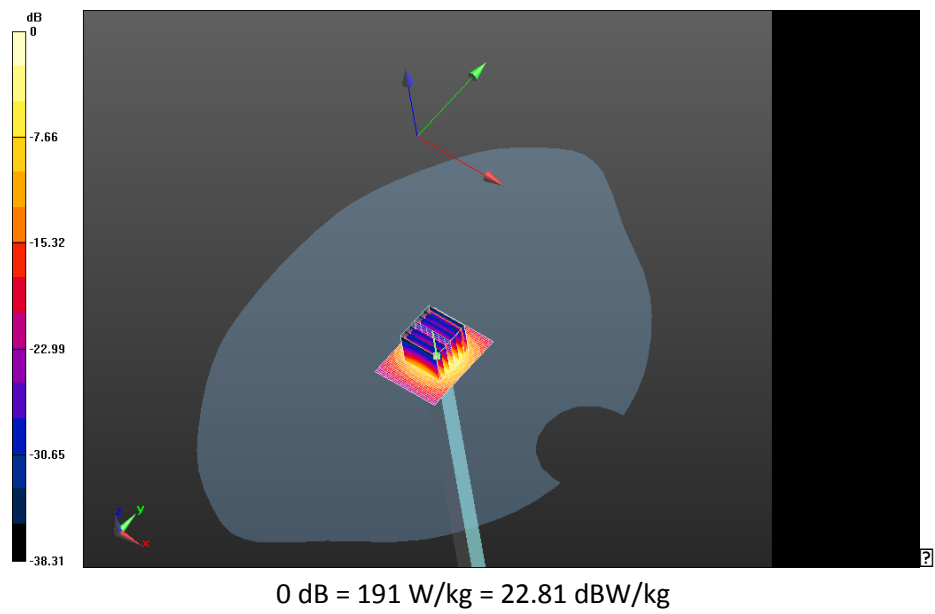
Interpolated grid: dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 211.2 V/m; **Power Drift = 0.036 dB**

**Averaged SAR: SAR(1g) = 93.2 W/kg; SAR(10g) = 26.7 W/kg**

Maximum value of SAR (interpolated) = 380 W/kg

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Date: 8/8/2013

Test Lab: RIM Testing Services

**DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033**

### **Configuration: System Performance Check with D5GHzV2 Dipole\_5800**

Communication System: CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5800 MHz

Medium Parameters used:  $f=5800$  MHz;  $\sigma = 5.289$  S/m;  $\epsilon_r = 33.541$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: EX3DV4 - SN3548; ConvF: (4.61,4.61,4.61); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

#### **System Performance Check with D5GHzV2 Dipole 3/d=10mm, Pin=1000 mW, f=5800**

**MHz/Area Scan (41x51x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 197.8 V/m; **Power Drift = -0.013 dB**

**Fast SAR: SAR(1g) = 79.6 W/kg; SAR(10g) = 21.7 W/kg**

Maximum value of SAR (interpolated) = 191 W/kg

#### **System Performance Check with D5GHzV2 Dipole 3/d=10mm, Pin=1000 mW, f=5800**

**MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (31x31x61)/Cube 0:** Interpolated

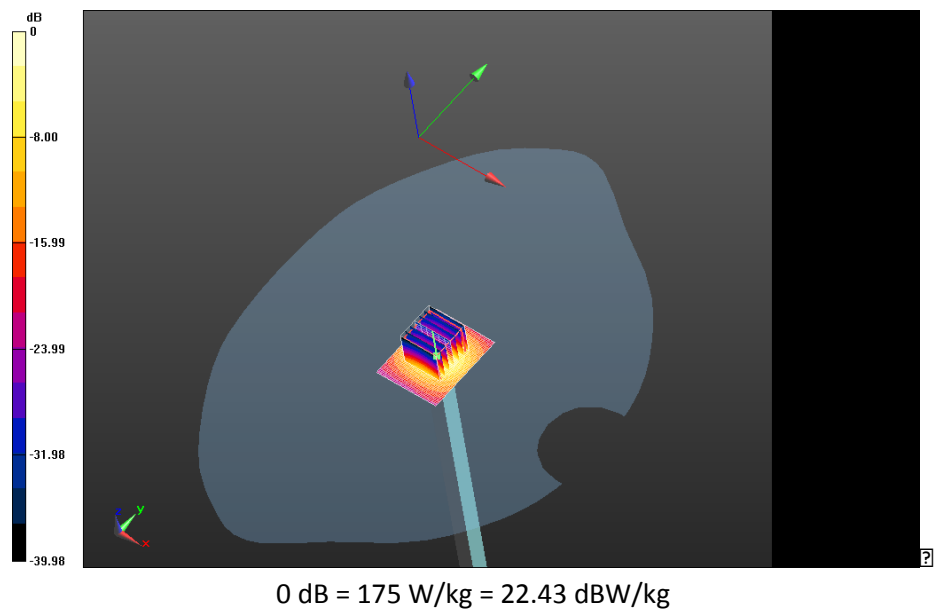
grid: dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 197.8 V/m; **Power Drift = -0.013 dB**

**Averaged SAR: SAR(1g) = 83.7 W/kg; SAR(10g) = 24.0 W/kg**

Maximum value of SAR (interpolated) = 347 W/kg

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Date: 8/12/2013

Test Lab: RIM Testing Services

**DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033**

### **Configuration: System Performance Check with D5GHzV2 Dipole – 5200 MHz**

Communication System: CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5200 MHz

Medium Parameters used:  $f=5200$  MHz;  $\sigma = 4.667$  S/m;  $\epsilon_r = 34.365$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: EX3DV4 - SN3548; ConvF: (5.13,5.13,5.13); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

#### **System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000 mW, f=5200 MHz/Area**

**Scan (41x51x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 195.6 V/m; **Power Drift = 0.00864 dB**

**Fast SAR: SAR(1g) = 74.4 W/kg; SAR(10g) = 20.6 W/kg**

Maximum value of SAR (interpolated) = 174 W/kg

#### **System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000 mW, f=5200 MHz/Zoom**

**Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (31x31x61)/Cube 0:** Interpolated grid:

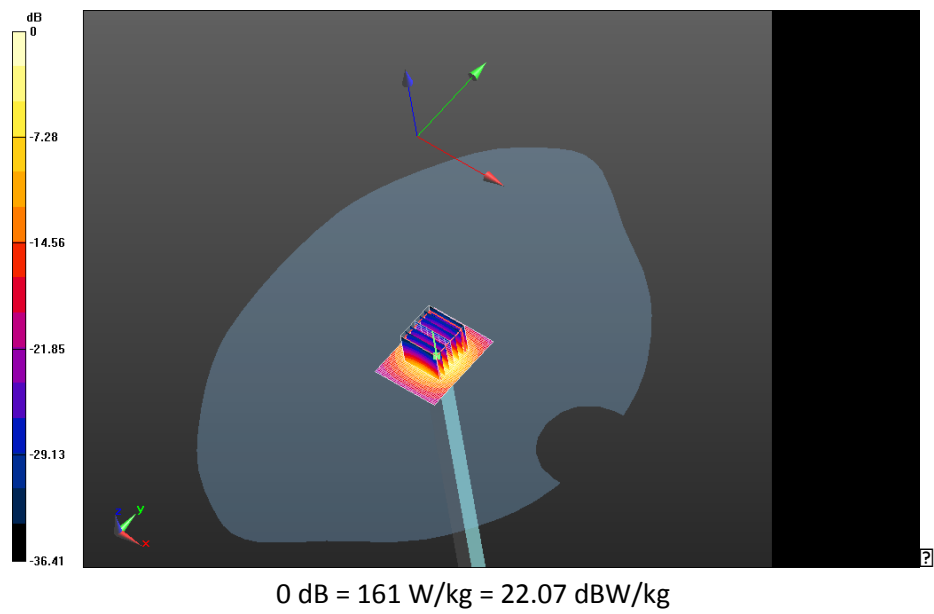
dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 195.6 V/m; **Power Drift = 0.00864 dB**

**Averaged SAR: SAR(1g) = 78.1 W/kg; SAR(10g) = 22.7 W/kg**

Maximum value of SAR (interpolated) = 300 W/kg

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Date: 8/12/2013

Test Lab: RIM Testing Services

**DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033**

### **Configuration: System Performance Check with D5GHzV2 Dipole – 5500 MHz**

Communication System: CW-5GHz; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5500 MHz

Medium Parameters used:  $f=5500$  MHz;  $\sigma = 4.997$  S/m;  $\epsilon_r = 34.755$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: EX3DV4 - SN3548; ConvF: (4.79,4.79,4.79); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

#### **System Performance Check with D5GHzV2 Dipole 2/d=10mm, Pin=1000mW, f=5500 MHz/Area Scan (41x51x1):**

Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 198.0 V/m; **Power Drift = 0.021 dB**

**Fast SAR: SAR(1g) = 80.9 W/kg; SAR(10g) = 21.9 W/kg**

Maximum value of SAR (interpolated) = 197 W/kg

#### **System Performance Check with D5GHzV2 Dipole 2/d=10mm, Pin=1000mW, f=5500**

**MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (41x41x61)/Cube 0:** Interpolated

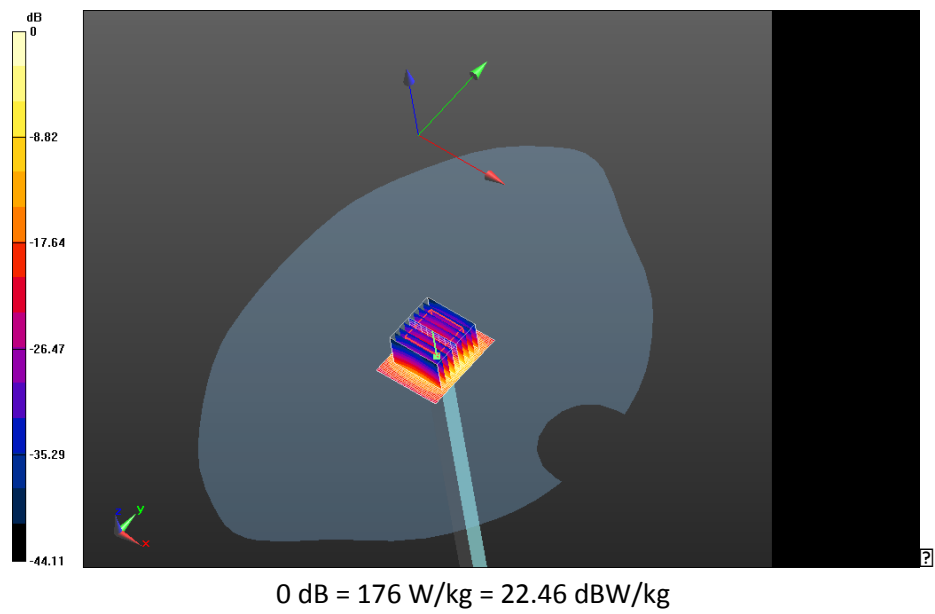
grid: dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 198.0 V/m; **Power Drift = 0.021 dB**

**Averaged SAR: SAR(1g) = 85.1 W/kg; SAR(10g) = 24.3 W/kg**

Maximum value of SAR (interpolated) = 355 W/kg

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Date: 8/12/2013

Test Lab: RIM Testing Services

**DUT Name: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1033**

### **Configuration: System Performance Check with D5GHzV2 Dipole – 5800 MHz**

Communication System: CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5800 MHz

Medium Parameters used:  $f=5800$  MHz;  $\sigma = 5.279$  S/m;  $\epsilon_r = 33.885$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: EX3DV4 - SN3548; ConvF: (4.61,4.61,4.61); Calibrated: 1/15/2013;
- Sensor-Surface: 2 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

#### **System Performance Check with D5GHzV2 Dipole 3/d=10mm, Pin=1000 mW, f=5800**

**MHz/Area Scan (41x51x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 198.4 V/m; **Power Drift = 0.019 dB**

**Fast SAR: SAR(1g) = 81.9 W/kg; SAR(10g) = 22.2 W/kg**

Maximum value of SAR (interpolated) = 201 W/kg

#### **System Performance Check with D5GHzV2 Dipole 3/d=10mm, Pin=1000 mW, f=5800**

**MHz/Zoom Scan -Ext(24x24x22), Step (4x4x2mm), dist=2mm (36x36x61)/Cube 0:** Interpolated

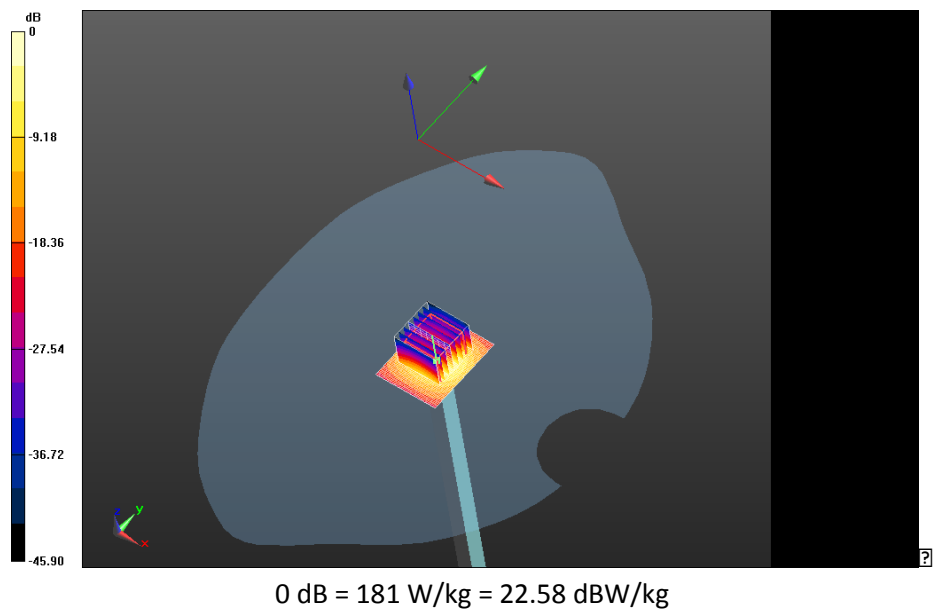
grid: dx=0.800 mm, dy=0.800 mm, dz=0.400 mm

Reference Value = 198.4 V/m; **Power Drift = 0.019 dB**

**Averaged SAR: SAR(1g) = 86.0 W/kg; SAR(10g) = 24.6 W/kg**

Maximum value of SAR (interpolated) = 365 W/kg

|                                                                                   |                                                                                                               |                                                 |                               |                       |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                    |



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Date/Time: 12/8/2014 11:58:15 AM

Test Laboratory: BlackBerry RTS

**DipoleValidation\_5200-5800MHz\_12\_08\_14\_Amb\_Tem\_24.2C**  
**\_Liq\_Tem\_22.6C**

**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN 1033**

Communication System: UID 0, CW (0); Frequency: 5200 MHz  
Medium parameters used:  $f = 5200 \text{ MHz}$ ;  $\sigma = 4.67 \text{ S/m}$ ;  $\epsilon_r = 34.276$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3592; ConvF(4.63, 4.63, 4.63); Calibrated: 11/10/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 23.0$
- Electronics: DAE3 Sn472; Calibrated: 3/18/2014
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**System Performance Check at Frequency 5.2 GHz/d=10mm,**  
**Pin=1000mW, dist=2.0mm (EX-Probe)/Area Scan (61x91x1):** Interpolated  
grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$   
Maximum value of SAR (interpolated) = 180 W/kg

**System Performance Check at Frequency 5.2 GHz/d=10mm,**  
**Pin=1000mW, dist=2.0mm (EX-Probe)/Zoom Scan (7x7x12)**  
**(7x7x12)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=2\text{mm}$   
Reference Value = 203.8 V/m; Power Drift = 0.01 dB  
Peak SAR (extrapolated) = 339 W/kg  
**SAR(1 g) = 83.7 W/kg; SAR(10 g) = 24.2 W/kg** (SAR corrected for target  
medium)  
Maximum value of SAR (measured) = 173 W/kg

|                                                                                   |                                                                                                               |                                                 |                               |                       |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>June 11 – August 16, 2013</b><br><b>March 24-26, 2014</b><br><b>December 8 – 12, 2014</b> | Test Report No<br><b>RTS-6046-1308-39 Rev 6</b> | FCC ID:<br><b>L6ARGB140LW</b> | IC                    |

Date/Time: 12/8/2014 12:46:30 PM

Test Laboratory: BlackBerry RTS

**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN 1033**

Communication System: UID 0, CW (0); Frequency: 5800 MHz

Medium parameters used:  $f = 5800 \text{ MHz}$ ;  $\sigma = 5.403 \text{ S/m}$ ;  $\epsilon_r = 33.704$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3592; ConvF(4.34, 4.34, 4.34); Calibrated: 11/10/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 23.0$
- Electronics: DAE3 Sn472; Calibrated: 3/18/2014
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

**System Performance Check at Frequency 5.8 GHz/d=10mm,**

**Pin=1000mW, dist=2.0mm (EX-Probe)/Area Scan (61x91x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 191 W/kg

**System Performance Check at Frequency 5.8 GHz/d=10mm,**

**Pin=1000mW, dist=2.0mm (EX-Probe)/Zoom Scan (7x7x12)**

**(7x7x12)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=2\text{mm}$

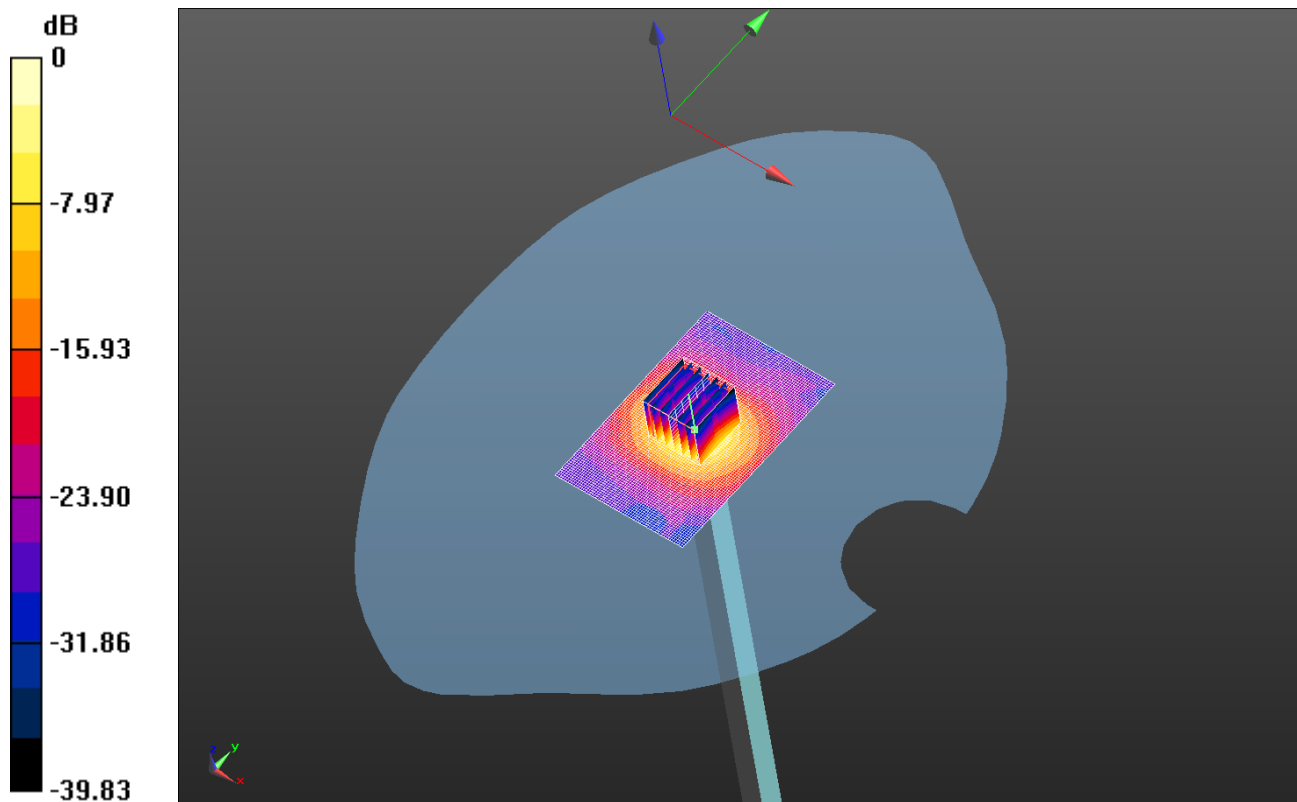
Reference Value = 197.5 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 380 W/kg

**SAR(1 g) = 85.8 W/kg; SAR(10 g) = 24.4 W/kg** (SAR corrected for target medium)

Maximum value of SAR (measured) = 182 W/kg

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0 dB = 182 W/kg = 22.60 dBW/kg