

|                                                                                   |                                               |                                                                                                                      |                               |                             |                       |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |                       |

**APPENDIX B: SAR DISTRIBUTION PLOTS FOR EACH CONFIGURATION PART 1 of 3**  
**(750-850 MHz)**

|                                                                                   |                              |                                                                                                          |                    |                       |  |
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| Author Data                                                                       | Dates of Test                | Test Report No                                                                                           | FCC ID:            | IC                    |  |
| <b>Andrew Becker</b>                                                              | <b>Mar 30 – May 14, 2015</b> | <b>RTS-6067-1505-05</b>                                                                                  | <b>L6ARHR190LW</b> | <b>2503A-RHR190LW</b> |  |

## LTE Band 17

Date: 4/24/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160686730**

### Configuration: Right-Hand-Side HSL - LTE Band 17

Communication System: LTE band 17 (0); Communication System Band: LTE 17; Frequency: 709 MHz

Medium Parameters used:  $f=709$  MHz;  $\sigma = 0.873$  S/m;  $\epsilon_r = 42.753$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Right Section

#### DASY Configuration:

- Probe: ET3DV6 - SN1643; ConvF: (6.69,6.69,6.69); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

#### Right-Hand-Side HSL - LTE Band 17/Touch Position -LTE band

**17\_chan23780\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_24.1C\_liq\_temp\_21.0C/Area Scan**

**(61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 5.679 V/m; **Power Drift = -0.050 dB**

**Fast SAR: SAR(1g) = 0.288 W/kg; SAR(10g) = 0.189 W/kg**

Maximum value of SAR (interpolated) = 0.309 W/kg

#### Right-Hand-Side HSL - LTE Band 17/Touch Position -LTE band

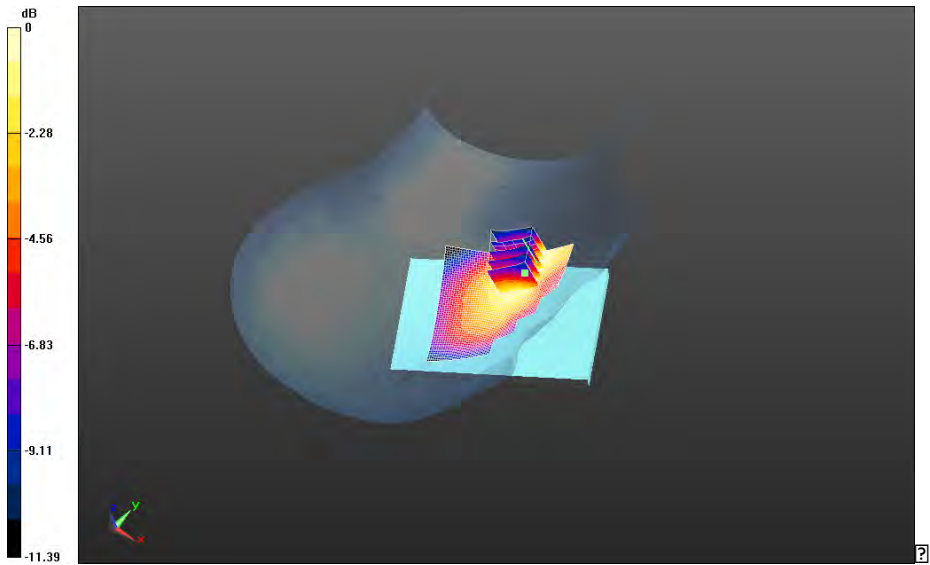
**17\_chan23780\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_24.1C\_liq\_temp\_21.0C/Zoom Scan**

**(21x21x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 5.679 V/m; **Power Drift = -0.050 dB**

**Averaged SAR: SAR(1g) = 0.284 W/kg; SAR(10g) = 0.193 W/kg**

Maximum value of SAR (interpolated) = 0.394 W/kg

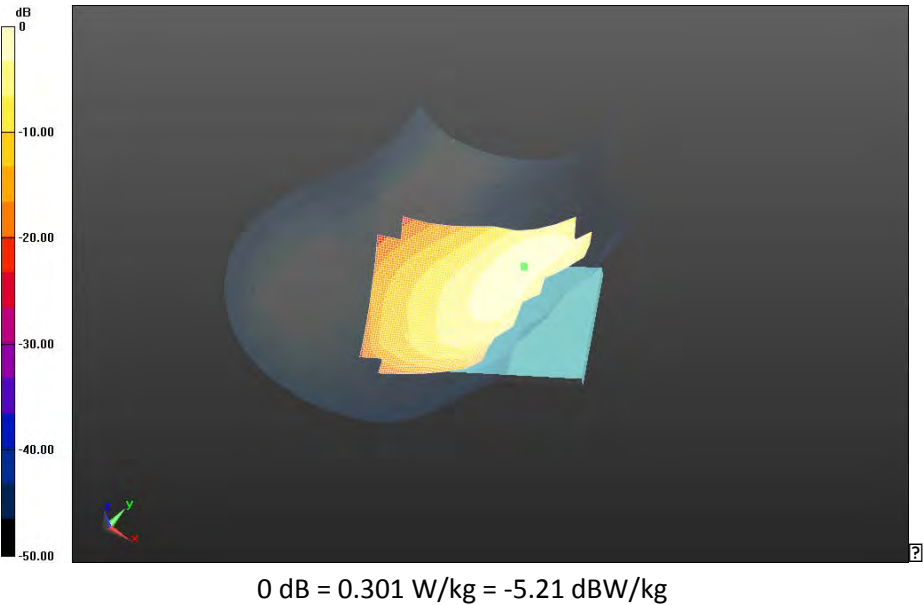


0 dB = 0.298 W/kg = -5.26 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - LTE Band 17/Touch Position -LTE band**  
**17\_chan23790\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_24.1C\_liq\_temp\_21.0C/Area Scan**  
**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 5.758 V/m; **Power Drift = -0.077 dB**

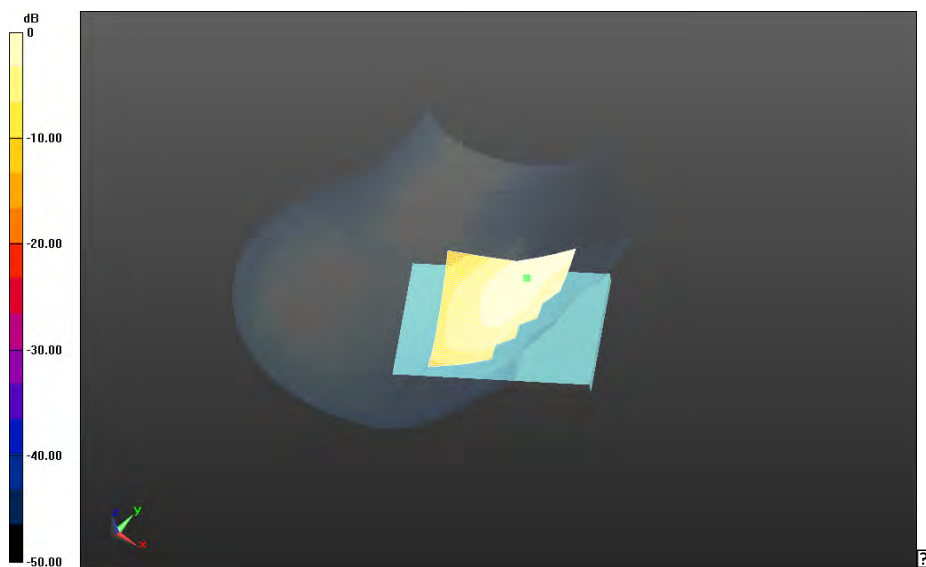
**Fast SAR: SAR(1g) = 0.283 W/kg; SAR(10g) = 0.189 W/kg**  
Maximum value of SAR (interpolated) = 0.301 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - LTE Band 17/Touch Position -LTE band**  
**17\_chan23800\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_21.0C/Area Scan**  
**(61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 5.467 V/m; **Power Drift = -0.191 dB**

**Fast SAR: SAR(1g) = 0.275 W/kg; SAR(10g) = 0.181 W/kg**  
Maximum value of SAR (interpolated) = 0.294 W/kg

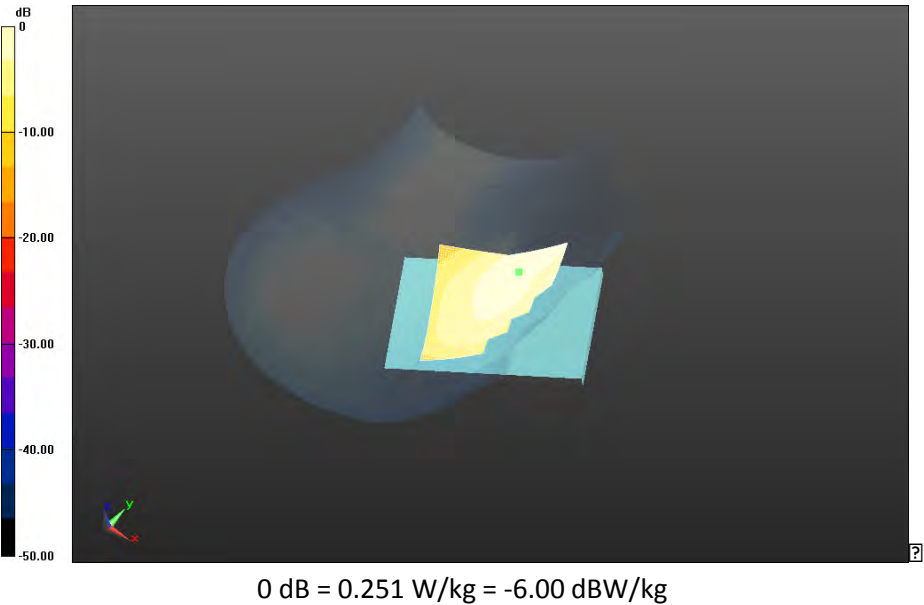


0 dB = 0.294 W/kg = -5.32 dBW/kg

|                                                                                   |                                               |                                                                                                            |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                  | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - LTE Band 17/Touch Position -LTE band 17\_chan23780\_10MHz\_BW\_RB25\_Offset\_High\_amb\_temp\_23.7C\_liq\_temp\_20.9C/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 4.960 V/m; **Power Drift = 0.0023 dB**

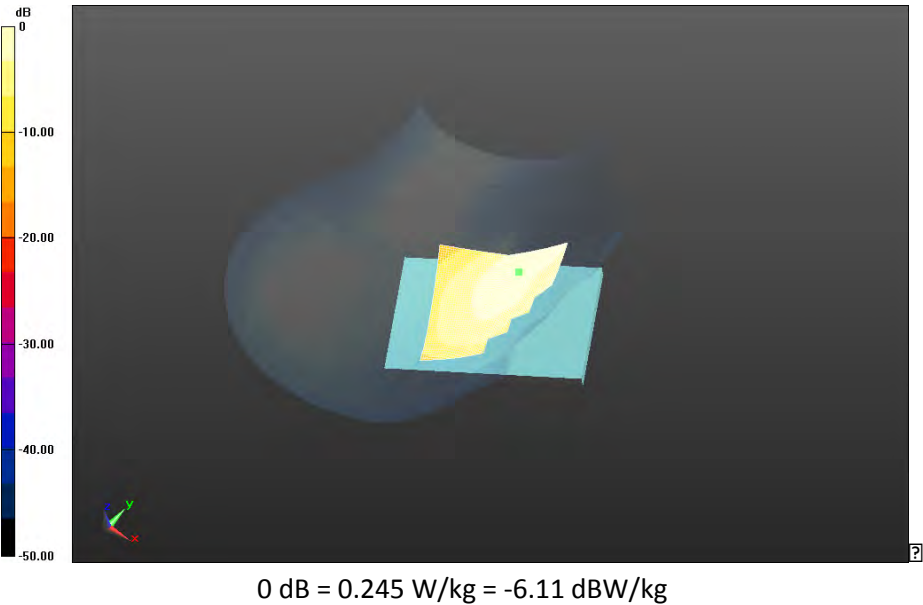
**Fast SAR: SAR(1g) = 0.234 W/kg; SAR(10g) = 0.154 W/kg**  
Maximum value of SAR (interpolated) = 0.251 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - LTE Band 17/Touch Position -LTE band**  
**17\_chan23780\_10MHz\_BW\_RB50\_Offset\_Low\_amb\_temp\_23.6C\_liq\_temp\_20.8C/Area Scan**  
**(61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 4.926 V/m; **Power Drift = -0.033 dB**

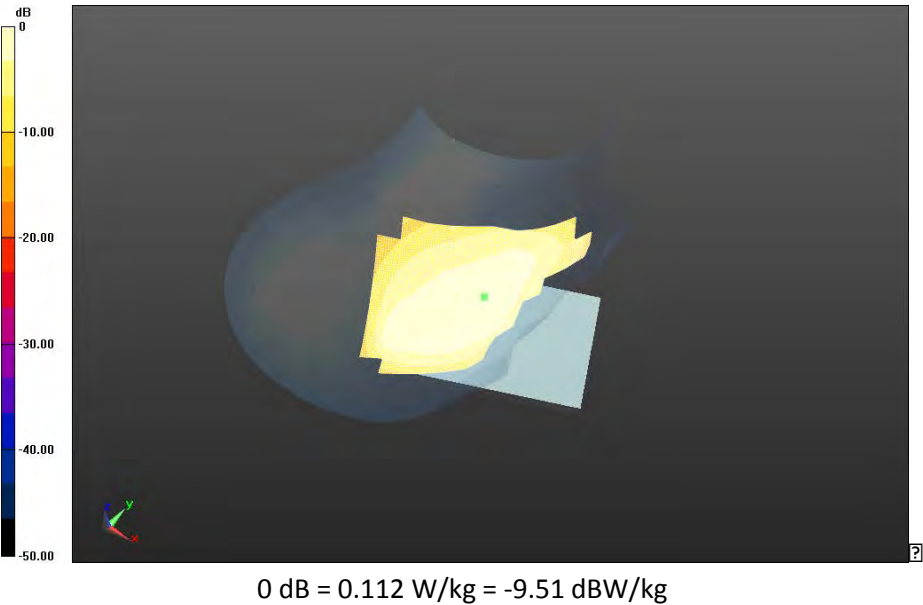
**Fast SAR: SAR(1g) = 0.229 W/kg; SAR(10g) = 0.150 W/kg**  
Maximum value of SAR (interpolated) = 0.245 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - LTE Band 17/Tilt Position -LTE band**  
**17\_chan23790\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_23.5C\_liq\_temp\_20.8C/Area Scan**  
**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 8.517 V/m; **Power Drift = 0.056 dB**

**Fast SAR: SAR(1g) = 0.107 W/kg; SAR(10g) = 0.0745 W/kg**  
Maximum value of SAR (interpolated) = 0.112 W/kg





|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

Date: 4/24/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160686730**

### **Configuration: Left-Hand-Side HSL - LTE Band 17**

Communication System: LTE band 17 (0); Communication System Band: LTE 17; Frequency: 710 MHz

Medium Parameters used:  $f=710$  MHz;  $\sigma = 0.874$  S/m;  $\epsilon_r = 42.743$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Left Section

#### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6.69,6.69,6.69); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

#### **Left-Hand-Side HSL - LTE Band 17/Touch Position -LTE band**

**17\_chan23790\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_24.1C\_liq\_temp\_21.8C/Area Scan**

**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 5.127 V/m; **Power Drift = 0.284 dB**

**Fast SAR: SAR(1g) = 0.142 W/kg; SAR(10g) = 0.0973 W/kg**

Maximum value of SAR (interpolated) = 0.149 W/kg

#### **Left-Hand-Side HSL - LTE Band 17/Touch Position -LTE band**

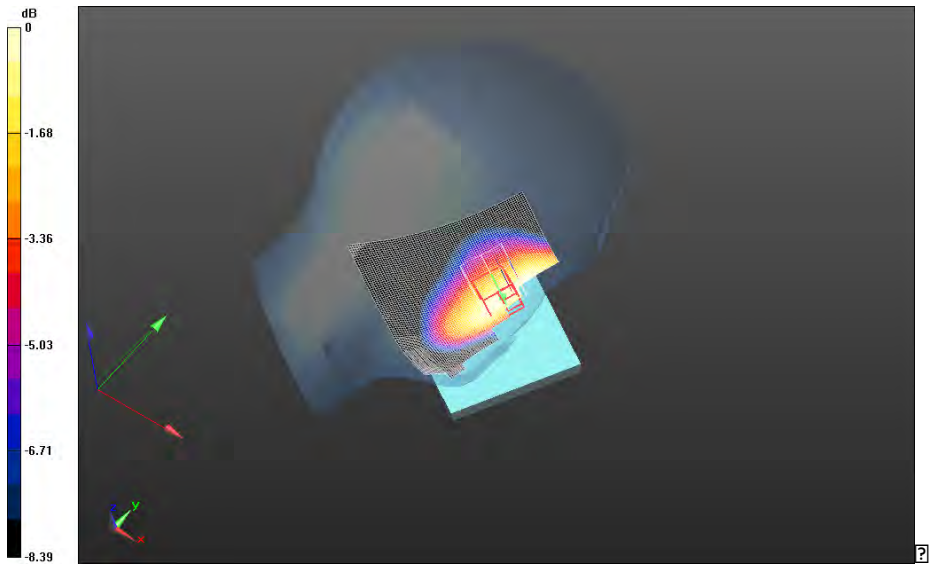
**17\_chan23790\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_24.1C\_liq\_temp\_21.8C/Zoom Scan**

**(21x21x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 5.127 V/m; **Power Drift = 0.284 dB**

**Averaged SAR: SAR(1g) = 0.145 W/kg; SAR(10g) = 0.109 W/kg**

Maximum value of SAR (interpolated) = 0.174 W/kg

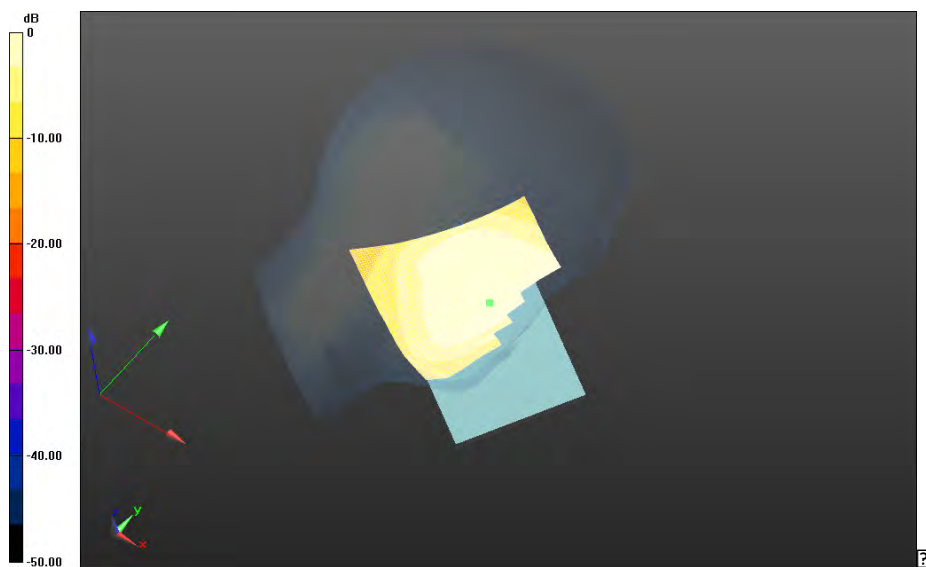


0 dB = 0.149 W/kg = -8.27 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Left-Hand-Side HSL - LTE Band 17/Tilt Position -LTE band**  
**17\_chan23790\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_23.7C\_liq\_temp\_21.8C/Area Scan**  
**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 7.518 V/m; **Power Drift = 0.029 dB**

**Fast SAR: SAR(1g) = 0.0618 W/kg; SAR(10g) = 0.0440 W/kg**  
Maximum value of SAR (interpolated) = 0.0650 W/kg



0 dB = 0.0650 W/kg = -11.87 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                              |                        |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC:<br><b>2503A-RHR190LW</b> |                        |

Date: 4/23/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160686730**

### **Configuration: Mobile Hot Spot MSL - LTE Band 17**

Communication System: LTE band 17 (0); Communication System Band: LTE 17; Frequency: 709 MHz

Medium Parameters used:  $f=709$  MHz;  $\sigma = 0.916$  S/m;  $\epsilon_r = 54.261$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6.29,6.29,6.29); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

#### **Mobile Hot Spot MSL - LTE Band 17/10mm Device Back - LTE band**

**17\_chan23780\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_23.6C\_liq\_temp\_21.4C/Area Scan**

**(71x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 14.125 V/m; **Power Drift = 0.021 dB**

**Fast SAR: SAR(1g) = 0.554 W/kg; SAR(10g) = 0.386 W/kg**

Maximum value of SAR (interpolated) = 0.574 W/kg

#### **Mobile Hot Spot MSL - LTE Band 17/10mm Device Back - LTE band**

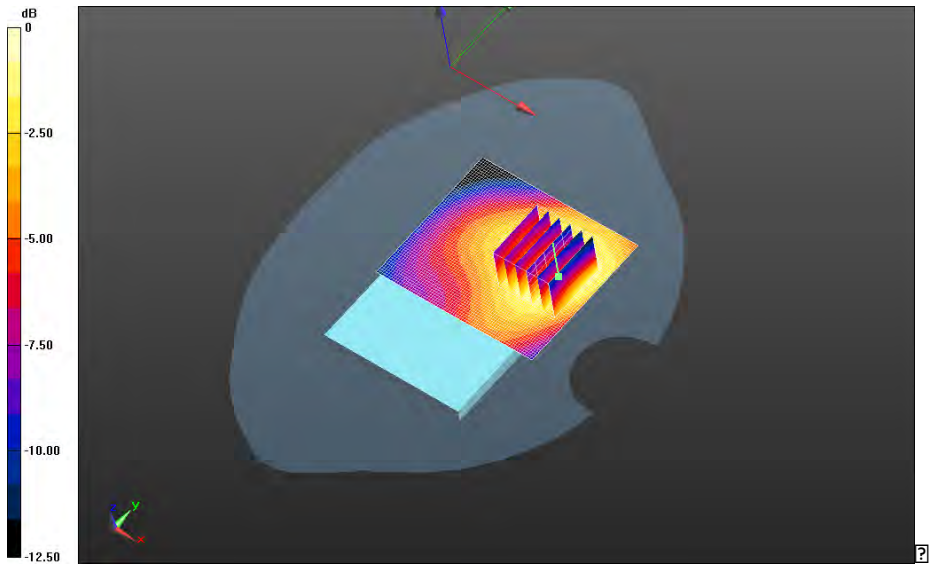
**17\_chan23780\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_23.6C\_liq\_temp\_21.4C/Zoom Scan**

**(26x26x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 14.125 V/m; **Power Drift = 0.021 dB**

**Averaged SAR: SAR(1g) = 0.550 W/kg; SAR(10g) = 0.374 W/kg**

Maximum value of SAR (interpolated) = 0.792 W/kg

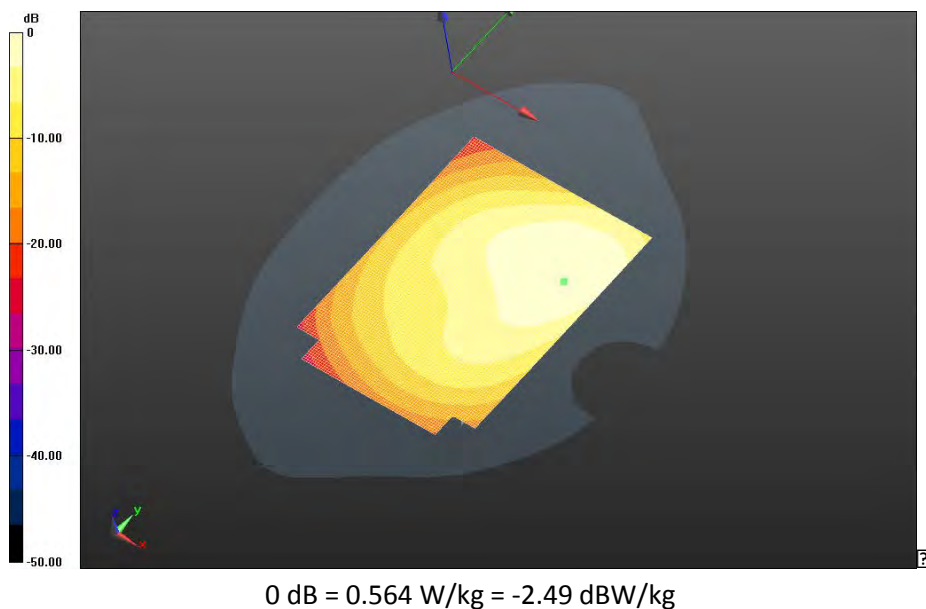


0 dB = 0.569 W/kg = -2.45 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 17/10mm Device Back - LTE band**  
**17\_chan23790\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_24.0C\_liq\_temp\_21.5C/Area Scan**  
**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 13.885 V/m; **Power Drift = 0.050 dB**

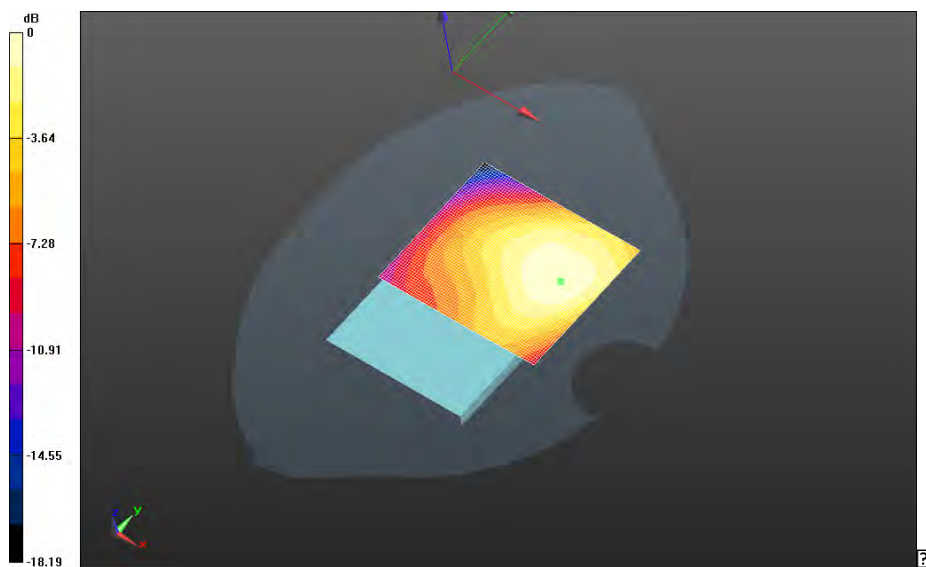
**Fast SAR: SAR(1g) = 0.543 W/kg; SAR(10g) = 0.377 W/kg**  
Maximum value of SAR (interpolated) = 0.564 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 17/10mm Device Back - LTE band**  
**17\_chan23800\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.7C\_liq\_temp\_21.5C/Area Scan**  
**(71x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 13.899 V/m; **Power Drift = 0.062 dB**

**Fast SAR: SAR(1g) = 0.544 W/kg; SAR(10g) = 0.378 W/kg**  
Maximum value of SAR (interpolated) = 0.564 W/kg

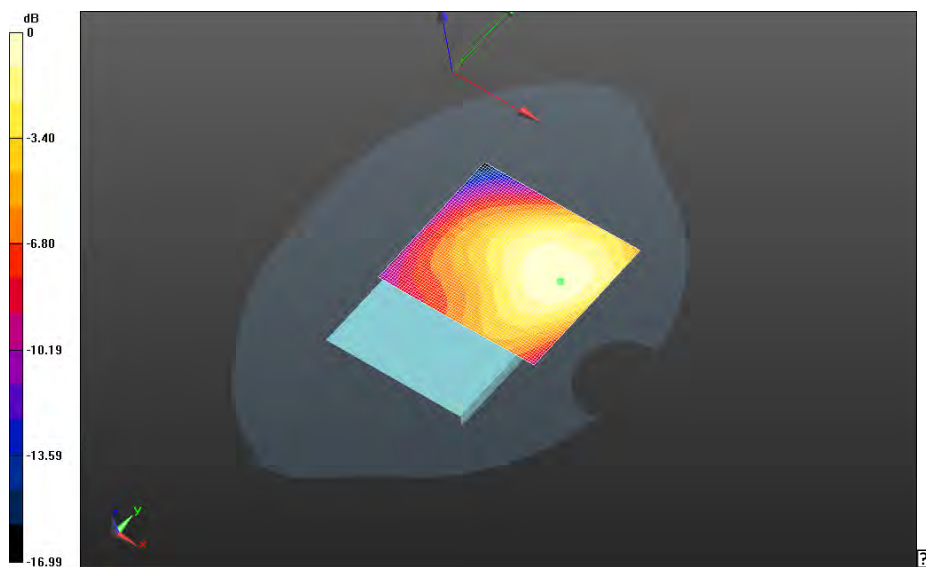


0 dB = 0.564 W/kg = -2.49 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 17/10mm Device Back - LTE band**  
**17\_chan23780\_10MHz\_BW\_RB25\_Offset\_High\_amb\_temp\_23.8C\_liq\_temp\_21.5C/Area Scan**  
**(71x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 12.517 V/m; **Power Drift = 0.017 dB**

**Fast SAR: SAR(1g) = 0.442 W/kg; SAR(10g) = 0.308 W/kg**  
Maximum value of SAR (interpolated) = 0.457 W/kg



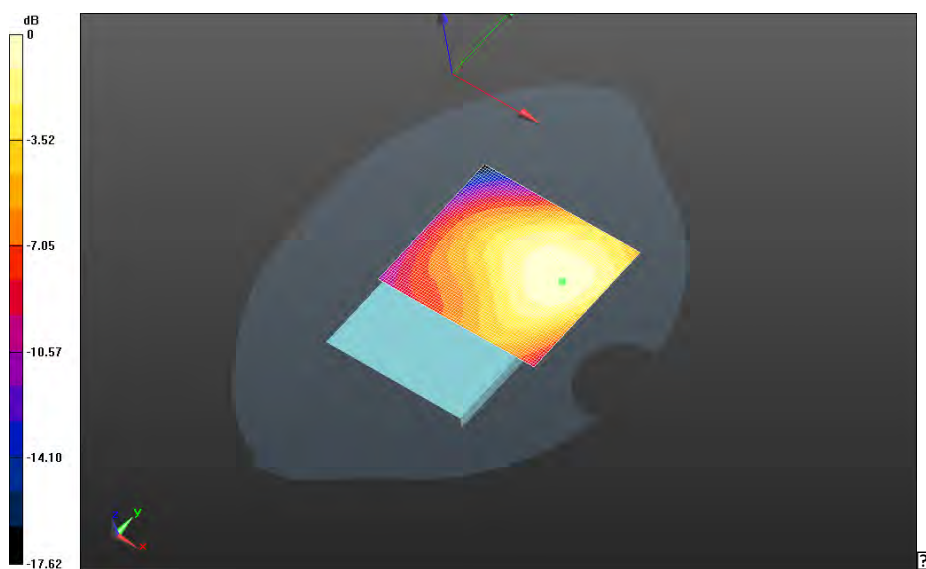
0 dB = 0.457 W/kg = -3.40 dBW/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 17/10mm Device Back - LTE band**  
**17\_chan23780\_10MHz\_BW\_RB50\_Offset\_Low\_amb\_temp\_23.7C\_liq\_temp\_21.4C/Area Scan**  
**(71x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 12.443 V/m; **Power Drift = -0.00998 dB**

**Fast SAR: SAR(1g) = 0.441 W/kg; SAR(10g) = 0.307 W/kg**  
Maximum value of SAR (interpolated) = 0.457 W/kg



0 dB = 0.457 W/kg = -3.40 dBW/kg

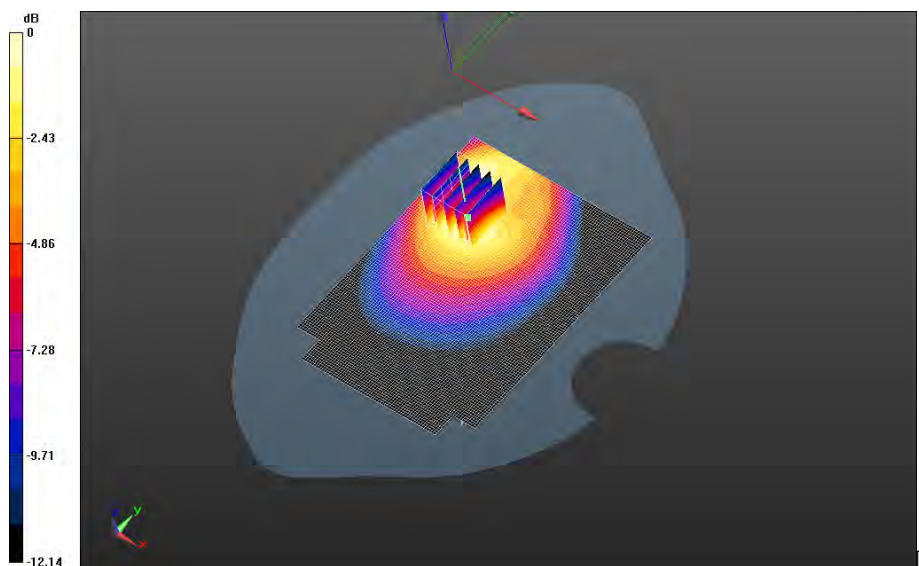
|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 17/10mm Device Front- LTE band**  
**17\_chan23790\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_24.0C\_liq\_temp\_21.4C/Area Scan**  
**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 13.146 V/m; **Power Drift = 0.00398 dB**

**Fast SAR: SAR(1g) = 0.534 W/kg; SAR(10g) = 0.359 W/kg**  
Maximum value of SAR (interpolated) = 0.563 W/kg

**Mobile Hot Spot MSL - LTE Band 17/10mm Device Front- LTE band**  
**17\_chan23790\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_24.0C\_liq\_temp\_21.4C/Zoom Scan**  
**(21x21x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm  
Reference Value = 13.146 V/m; **Power Drift = 0.00398 dB**

**Averaged SAR: SAR(1g) = 0.555 W/kg; SAR(10g) = 0.350 W/kg**  
Maximum value of SAR (interpolated) = 0.864 W/kg



0 dB = 0.580 W/kg = -2.37 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 17/10mm Device Right - LTE band**  
**17\_chan23790\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_23.7C\_liq\_temp\_21.4C/Area Scan**  
**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 14.947 V/m; **Power Drift = -0.131 dB**

**Fast SAR: SAR(1g) = 0.383 W/kg; SAR(10g) = 0.234 W/kg**  
Maximum value of SAR (interpolated) = 0.417 W/kg

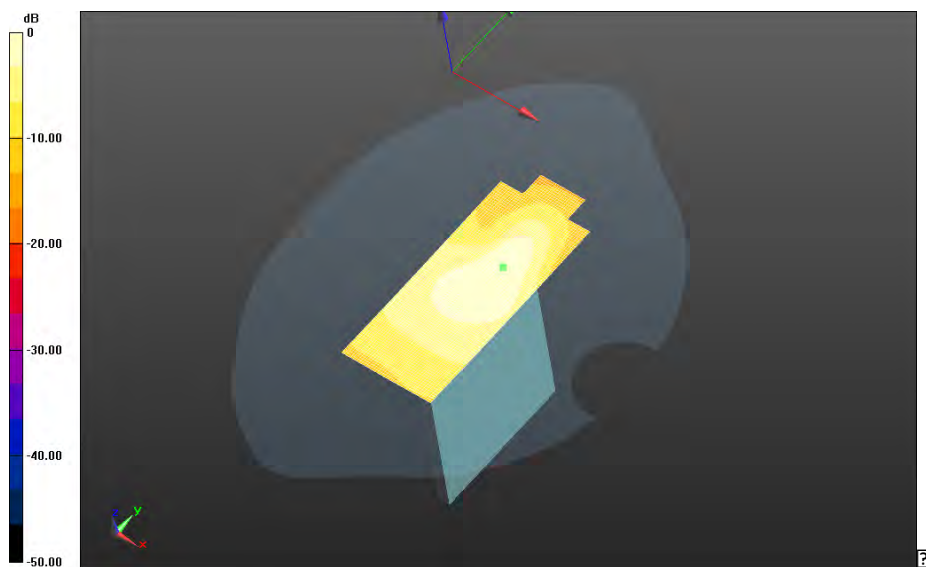


0 dB = 0.417 W/kg = -3.80 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 17/10mm Device Bottom -LTE band**  
**17\_chan23790\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_23.9C\_liq\_temp\_21.5C/Area Scan**  
**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 13.922 V/m; **Power Drift = 0.029 dB**

**Fast SAR: SAR(1g) = 0.210 W/kg; SAR(10g) = 0.133 W/kg**  
Maximum value of SAR (interpolated) = 0.227 W/kg



0 dB = 0.227 W/kg = -6.44 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

Date: 4/23/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160686730**

### **Configuration: Body Worn MSL - LTE Band 17**

Communication System: LTE band 17 (0); Communication System Band: LTE 17; Frequency: 709 MHz

Medium Parameters used:  $f=709$  MHz;  $\sigma = 0.916$  S/m;  $\epsilon_r = 54.261$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6.29,6.29,6.29); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

#### **Body Worn MSL - LTE Band 17/15mm Device Back - LTE band**

**17\_chan23780\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_23.6C\_liq\_temp\_21.4C/Area Scan**

**(71x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 13.206 V/m; **Power Drift = -0.057 dB**

**Fast SAR: SAR(1g) = 0.368 W/kg; SAR(10g) = 0.255 W/kg**

Maximum value of SAR (interpolated) = 0.380 W/kg

#### **Body Worn MSL - LTE Band 17/15mm Device Back - LTE band**

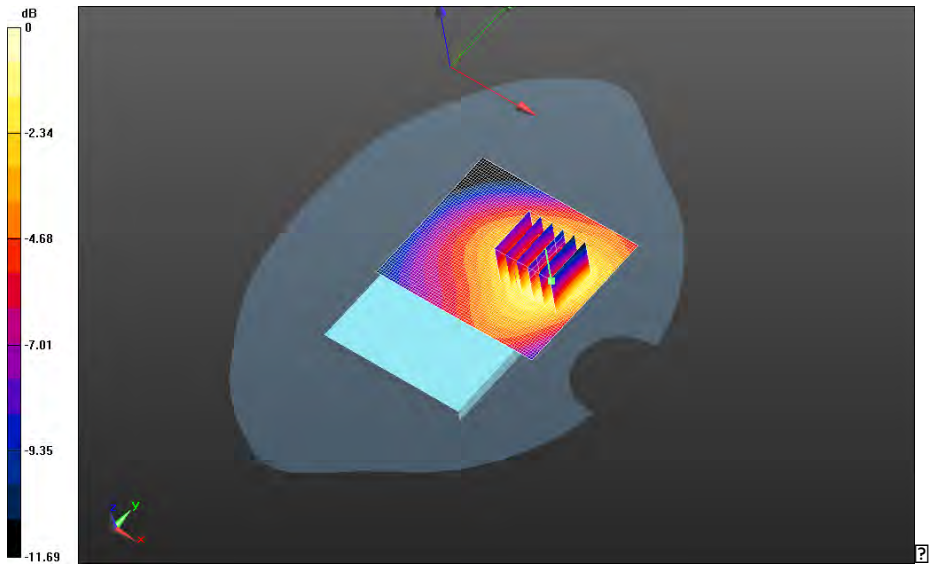
**17\_chan23780\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_23.6C\_liq\_temp\_21.4C/Zoom Scan**

**(26x21x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 13.206 V/m; **Power Drift = -0.057 dB**

**Averaged SAR: SAR(1g) = 0.390 W/kg; SAR(10g) = 0.265 W/kg**

Maximum value of SAR (interpolated) = 0.600 W/kg

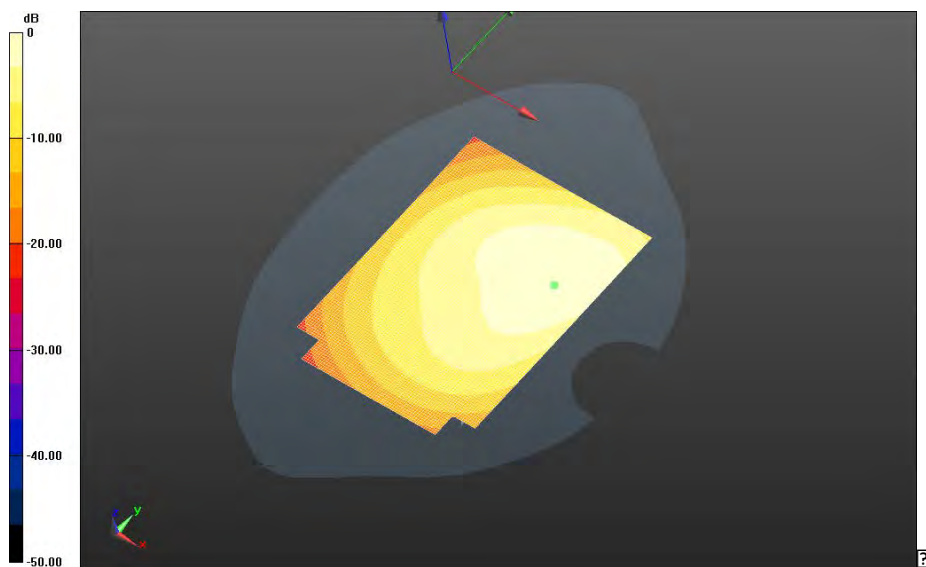


0 dB = 0.438 W/kg = -3.59 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 17/15mm Device Back - LTE band**  
**17\_chan23790\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_23.9C\_liq\_temp\_21.5C/Area Scan**  
**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 13.144 V/m; **Power Drift = 0.020 dB**

**Fast SAR: SAR(1g) = 0.363 W/kg; SAR(10g) = 0.252 W/kg**  
Maximum value of SAR (interpolated) = 0.375 W/kg

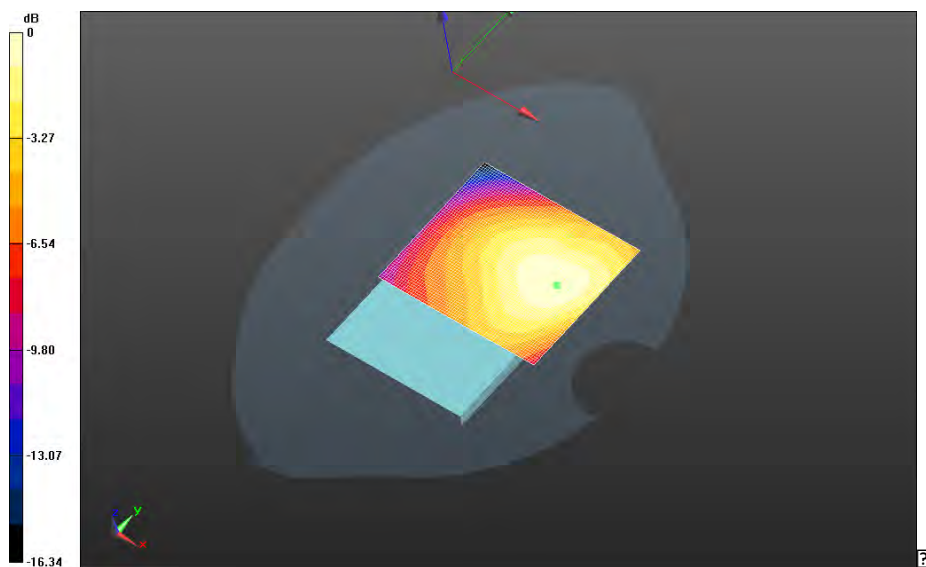


0 dB = 0.375 W/kg = -4.26 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 17/15mm Device Back - LTE band**  
**17\_chan23800\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.7C\_liq\_temp\_21.4C/Area Scan**  
**(71x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 12.855 V/m; **Power Drift = 0.015 dB**

**Fast SAR: SAR(1g) = 0.355 W/kg; SAR(10g) = 0.246 W/kg**  
Maximum value of SAR (interpolated) = 0.369 W/kg



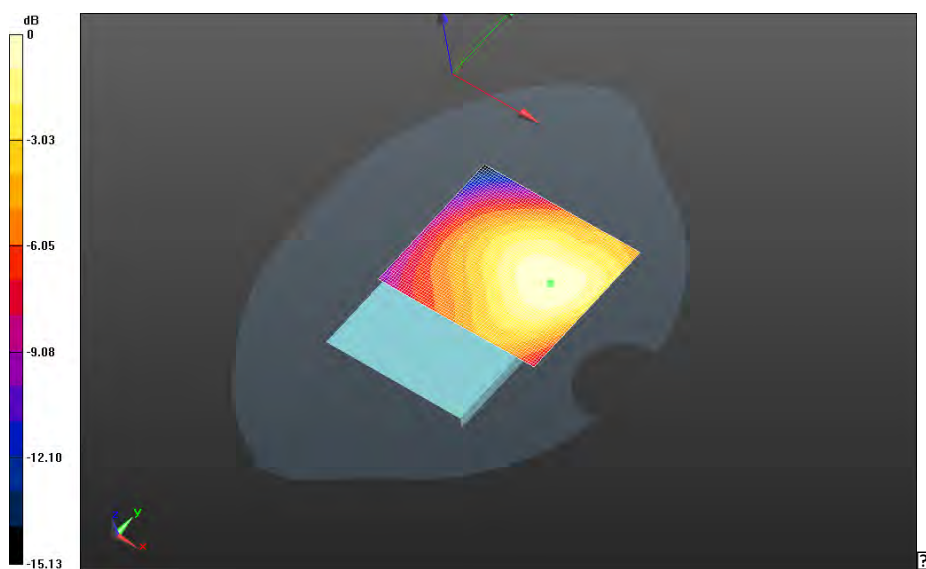
0 dB = 0.369 W/kg = -4.33 dBW/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 17/15mm Device Back - LTE band**  
**17\_chan23780\_10MHz\_BW\_RB25\_Offset\_High\_amb\_temp\_24.1C\_liq\_temp\_21.5C/Area Scan**  
**(71x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 11.603 V/m; **Power Drift = 0.065 dB**

**Fast SAR: SAR(1g) = 0.289 W/kg; SAR(10g) = 0.200 W/kg**  
Maximum value of SAR (interpolated) = 0.298 W/kg

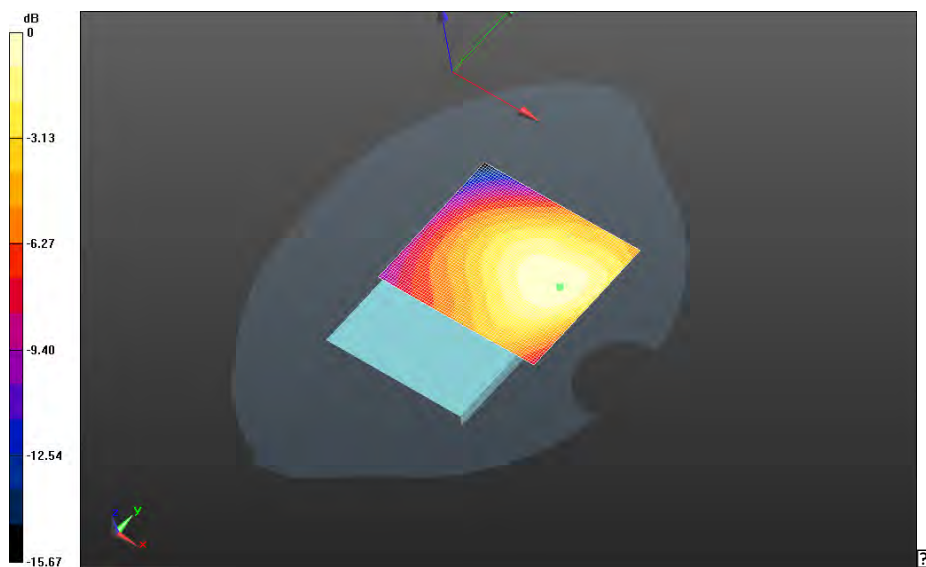


0 dB = 0.298 W/kg = -5.26 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 17/15mm Device Back - LTE band**  
**17\_chan23780\_10MHz\_BW\_RB50\_Offset\_Low\_amb\_temp\_24.1C\_liq\_temp\_21.6C/Area Scan**  
**(71x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 11.516 V/m; **Power Drift = 0.088 dB**

**Fast SAR: SAR(1g) = 0.287 W/kg; SAR(10g) = 0.199 W/kg**  
Maximum value of SAR (interpolated) = 0.299 W/kg

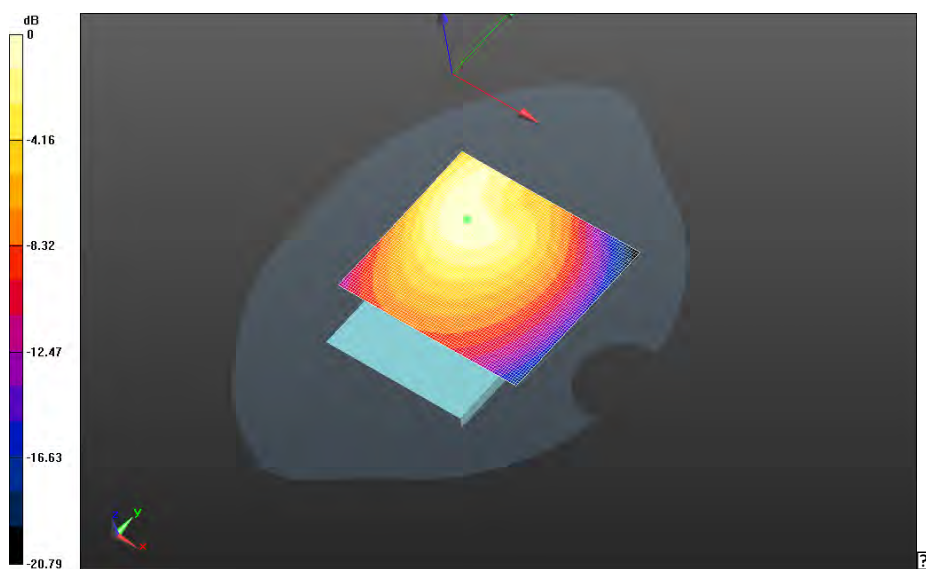


0 dB = 0.299 W/kg = -5.24 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 17/15mm Device Front - LTE band**  
**17\_chan23790\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_23.8C\_liq\_temp\_21.5C/Area Scan**  
**(81x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 11.579 V/m; **Power Drift = 0.072 dB**

**Fast SAR: SAR(1g) = 0.340 W/kg; SAR(10g) = 0.230 W/kg**  
Maximum value of SAR (interpolated) = 0.356 W/kg

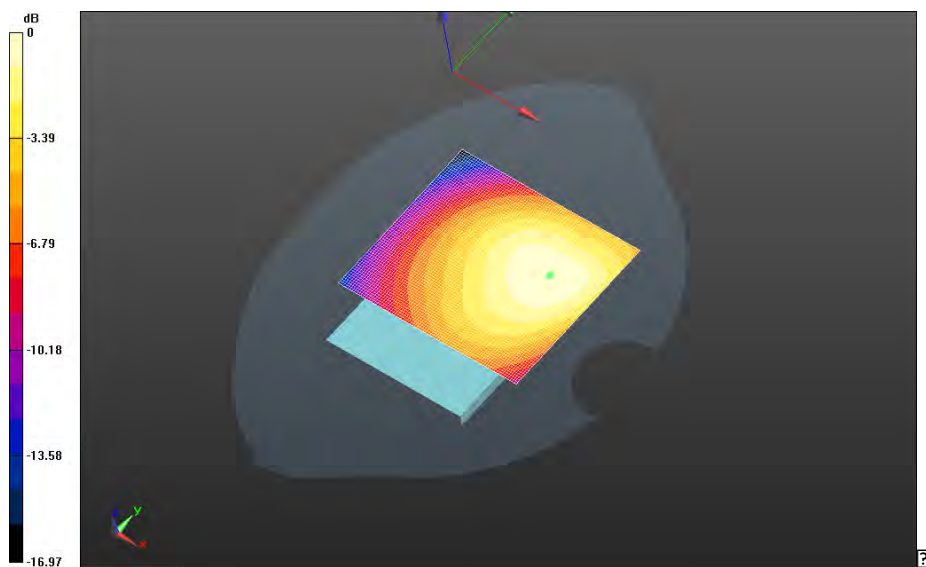


0 dB = 0.356 W/kg = -4.49 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 17/Holster Device Back - LTE band**  
**17\_chan23790\_10MHz\_BW\_RB1\_Offset\_Mid\_amb\_temp\_23.7C\_liq\_temp\_21.4C/Area Scan**  
**(81x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 12.797 V/m; **Power Drift = 0.026 dB**

**Fast SAR: SAR(1g) = 0.276 W/kg; SAR(10g) = 0.193 W/kg**  
Maximum value of SAR (interpolated) = 0.284 W/kg



0 dB = 0.284 W/kg = -5.47 dBW/kg

|                                                                                   |                                               |                                                                                                                |                               |                             |                        |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                      | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |                        |

## LTE Band 13

Date: 4/23/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160701958**

### Configuration: Right-Hand-Side HSL - LTE Band 13

Communication System: LTE band 13 (0); Communication System Band: LTE band 13; Frequency: 782 MHz

Medium Parameters used:  $f=782$  MHz;  $\sigma = 0.939$  S/m;  $\epsilon_r = 41.700$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Right Section

#### DASY Configuration:

- Probe: ET3DV6 - SN1643; ConvF: (6.69,6.69,6.69); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

#### Right-Hand-Side HSL - LTE Band 13/Touch Position -LTE band

**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_24.4C\_liq\_temp\_21.0C/Area Scan**

**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 6.467 V/m; **Power Drift = -0.153 dB**

**Fast SAR: SAR(1g) = 0.341 W/kg; SAR(10g) = 0.225 W/kg**

Maximum value of SAR (interpolated) = 0.370 W/kg

#### Right-Hand-Side HSL - LTE Band 13/Touch Position -LTE band

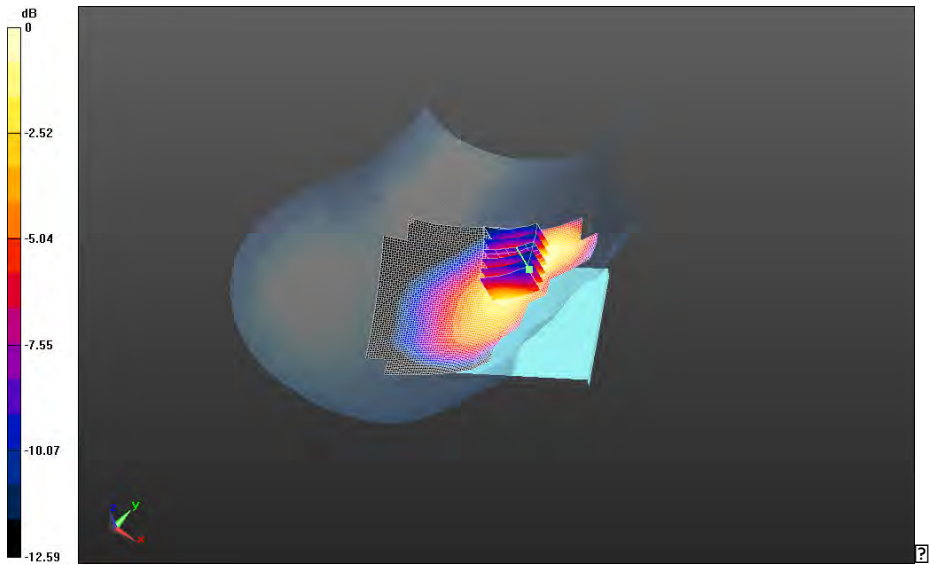
**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_24.4C\_liq\_temp\_21.0C/Zoom Scan**

**(26x26x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 6.467 V/m; **Power Drift = -0.153 dB**

**Averaged SAR: SAR(1g) = 0.339 W/kg; SAR(10g) = 0.224 W/kg**

Maximum value of SAR (interpolated) = 0.477 W/kg

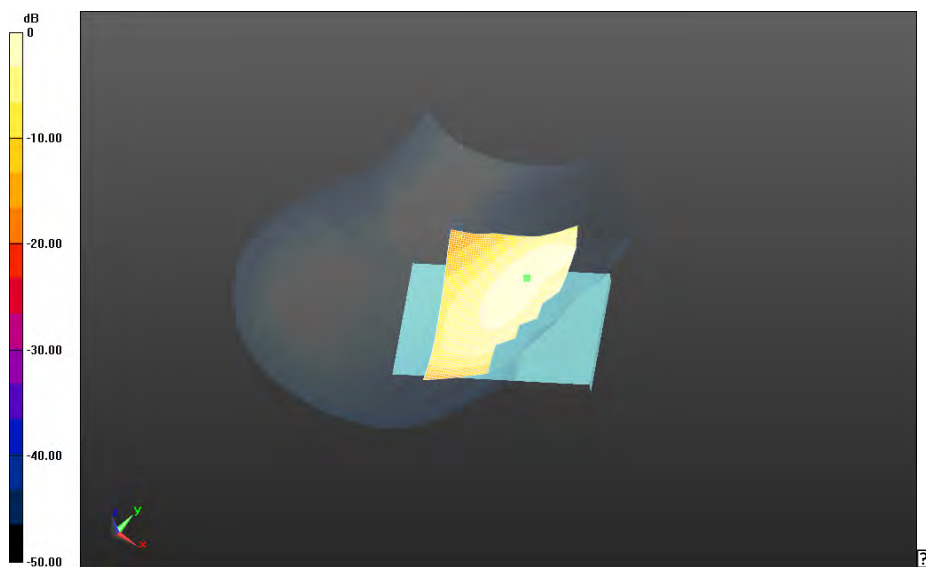


0 dB = 0.362 W/kg = -4.41 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - LTE Band 13/Touch Position -LTE band**  
**13\_chan23230\_10MHz\_BW\_RB25\_Offset\_High\_amb\_temp\_23.8C\_liq\_temp\_21.1C/Area Scan**  
**(121x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm**  
Reference Value = 5.710 V/m; **Power Drift = -0.095 dB**

**Fast SAR: SAR(1g) = 0.302 W/kg; SAR(10g) = 0.197 W/kg**  
Maximum value of SAR (interpolated) = 0.328 W/kg

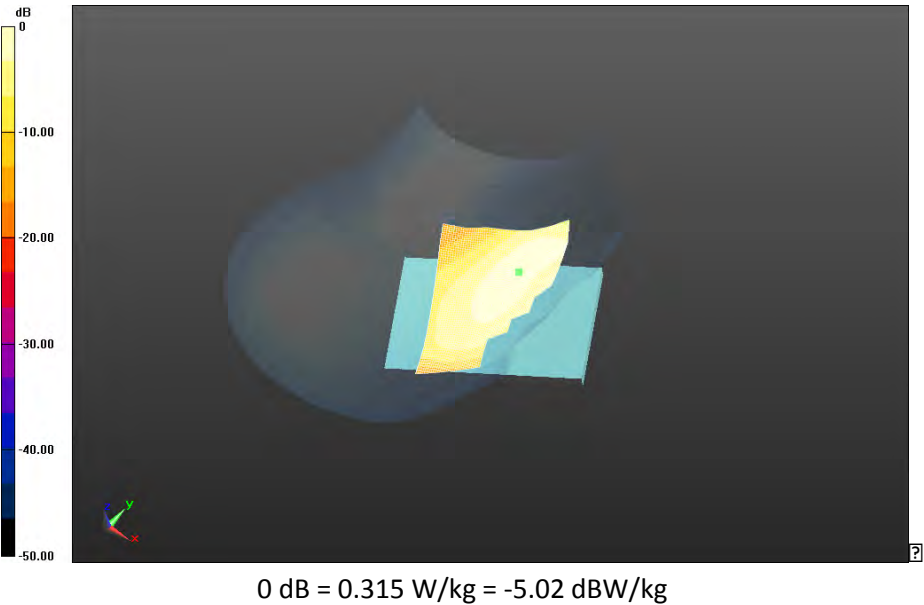


0 dB = 0.328 W/kg = -4.84 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - LTE Band 13/Touch Position -LTE band**  
**13\_chan23230\_10MHz\_BW\_RB50\_Offset\_Low\_amb\_temp\_24.2C\_liq\_temp\_20.9C/Area Scan**  
**(121x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm**  
**Reference Value = 5.497 V/m; Power Drift = 0.129 dB**

**Fast SAR: SAR(1g) = 0.291 W/kg; SAR(10g) = 0.189 W/kg**  
**Maximum value of SAR (interpolated) = 0.315 W/kg**

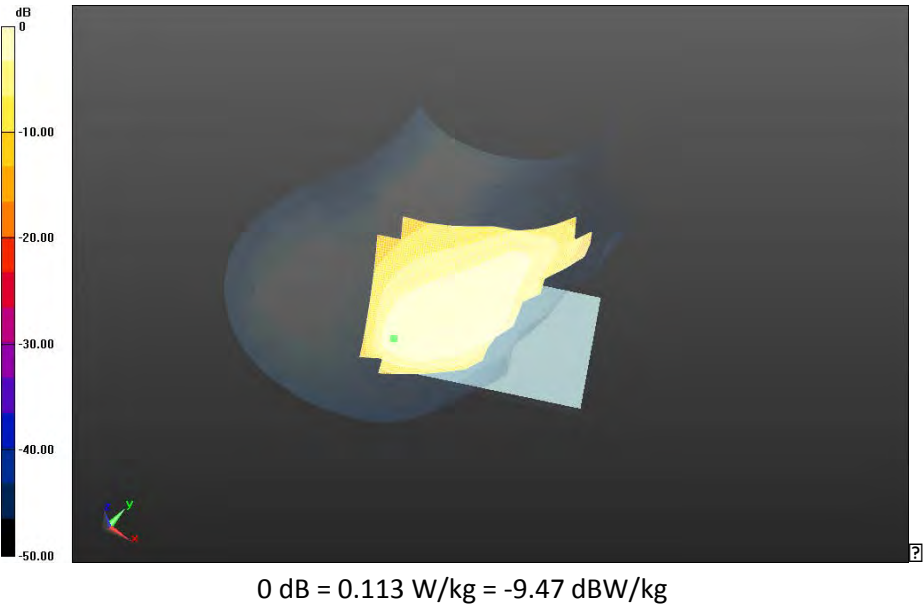




|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - LTE Band 13/Tilt Position -LTE band**  
**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_24.2C\_liq\_temp\_21.8C/Area Scan**  
**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 8.840 V/m; **Power Drift = 0.028 dB**

**Fast SAR: SAR(1g) = 0.103 W/kg; SAR(10g) = 0.0728 W/kg**  
Maximum value of SAR (interpolated) = 0.113 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

Date: 4/23/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160701958**

### **Configuration: Left-Hand-Side HSL - LTE Band 13**

Communication System: LTE band 13 (0); Communication System Band: LTE band 13; Frequency: 782 MHz

Medium Parameters used:  $f=782$  MHz;  $\sigma = 0.939$  S/m;  $\epsilon_r = 41.700$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Left Section

#### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6.69,6.69,6.69); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

#### **Left-Hand-Side HSL - LTE Band 13/Touch Position -LTE band**

**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_24.0C\_liq\_temp\_21.2C/Area Scan**

**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 6.276 V/m; **Power Drift = -0.151 dB**

**Fast SAR: SAR(1g) = 0.178 W/kg; SAR(10g) = 0.123 W/kg**

Maximum value of SAR (interpolated) = 0.190 W/kg

#### **Left-Hand-Side HSL - LTE Band 13/Touch Position -LTE band**

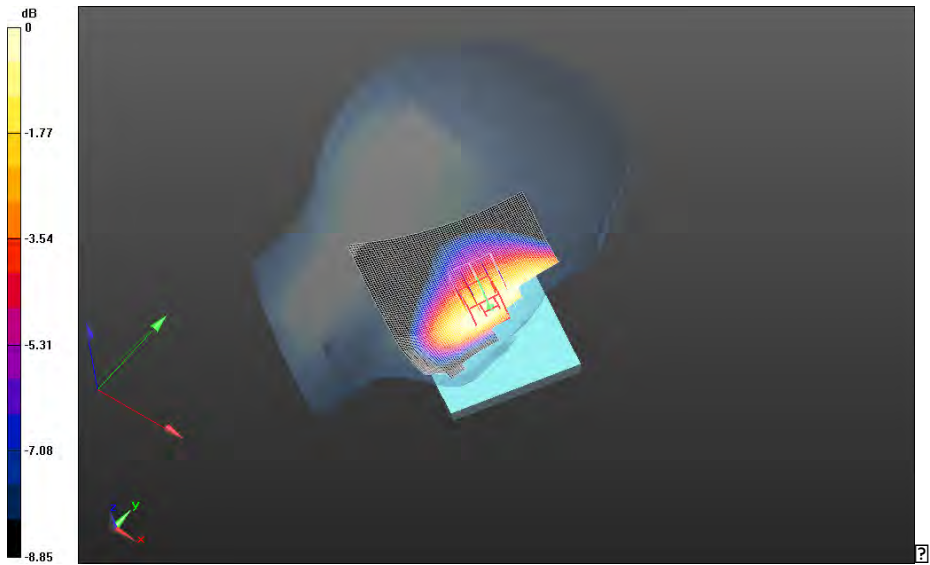
**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_24.0C\_liq\_temp\_21.2C/Zoom Scan**

**(21x21x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 6.276 V/m; **Power Drift = -0.151 dB**

**Averaged SAR: SAR(1g) = 0.184 W/kg; SAR(10g) = 0.139 W/kg**

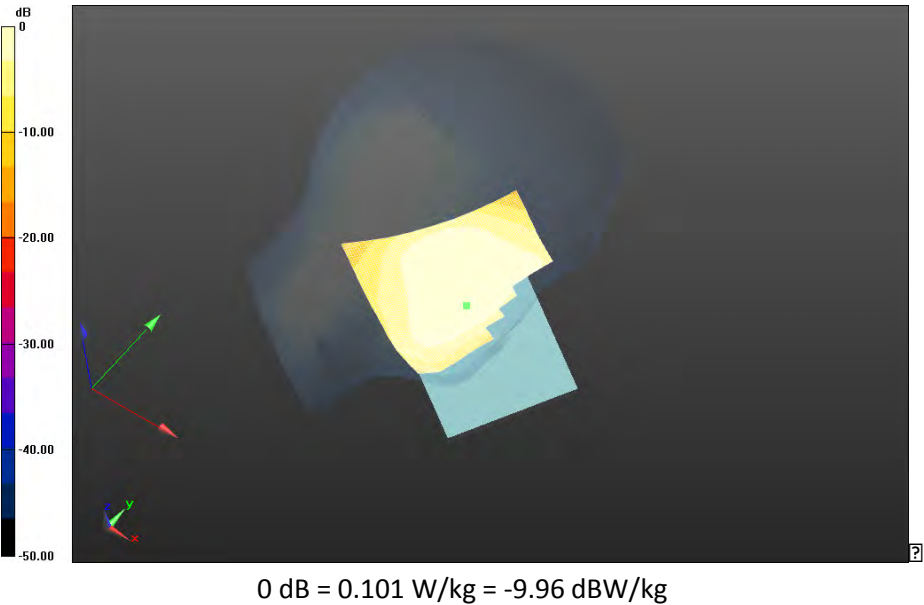
Maximum value of SAR (interpolated) = 0.224 W/kg



0 dB = 0.192 W/kg = -7.17 dBW/kg

**Left-Hand-Side HSL - LTE Band 13/Tilt Position -LTE band  
13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_23.9C\_liq\_temp\_21.1C/Area Scan  
(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 9.702 V/m; **Power Drift = -0.035 dB**

**Fast SAR: SAR(1g) = 0.0952 W/kg; SAR(10g) = 0.0672 W/kg**  
Maximum value of SAR (interpolated) = 0.101 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

Date: 4/23/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160701958**

### **Configuration: Mobile Hot Spot MSL - LTE Band 13**

Communication System: LTE band 13 (0); Communication System Band: LTE band 13; Frequency: 782 MHz

Medium Parameters used:  $f=782$  MHz;  $\sigma = 0.984$  S/m;  $\epsilon_r = 53.419$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6.29,6.29,6.29); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

#### **Mobile Hot Spot MSL - LTE Band 13/10mm Device Back - LTE band**

**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_23.9C\_liq\_temp\_21.4C/Area Scan**

**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 15.861 V/m; **Power Drift = -0.045 dB**

**Fast SAR: SAR(1g) = 0.600 W/kg; SAR(10g) = 0.413 W/kg**

Maximum value of SAR (interpolated) = 0.643 W/kg

#### **Mobile Hot Spot MSL - LTE Band 13/10mm Device Back - LTE band**

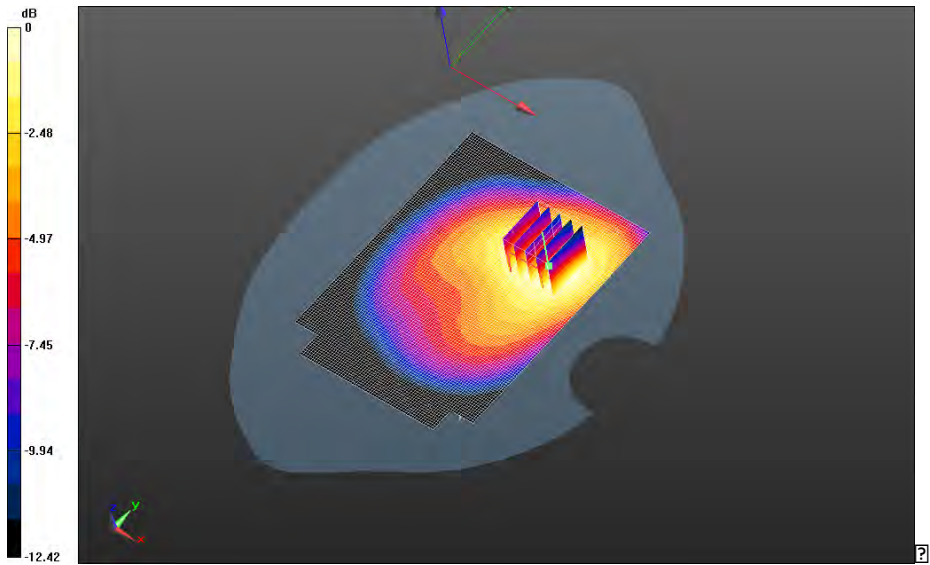
**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_23.9C\_liq\_temp\_21.4C/Zoom Scan**

**(21x21x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 15.861 V/m; **Power Drift = -0.045 dB**

**Averaged SAR: SAR(1g) = 0.598 W/kg; SAR(10g) = 0.412 W/kg**

Maximum value of SAR (interpolated) = 0.847 W/kg



0 dB = 0.645 W/kg = -1.90 dBW/kg

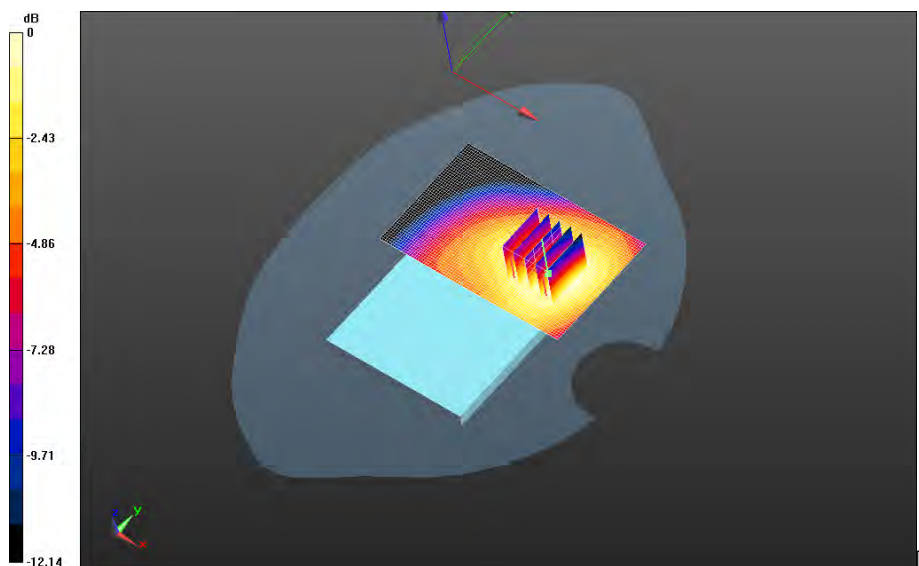
|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 13/10mm Device Back - LTE band**  
**13\_chan23230\_10MHz\_BW\_RB25\_Offset\_High\_amb\_temp\_23.7C\_liq\_temp\_21.3C/Area Scan**  
**(121x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 14.415 V/m; **Power Drift = -0.017 dB**

**Fast SAR: SAR(1g) = 0.498 W/kg; SAR(10g) = 0.343 W/kg**  
Maximum value of SAR (interpolated) = 0.531 W/kg

**Mobile Hot Spot MSL - LTE Band 13/10mm Device Back - LTE band**  
**13\_chan23230\_10MHz\_BW\_RB25\_Offset\_High\_amb\_temp\_23.7C\_liq\_temp\_21.3C/Zoom**  
**Scan (21x21x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm  
Reference Value = 14.415 V/m; **Power Drift = -0.017 dB**

**Averaged SAR: SAR(1g) = 0.500 W/kg; SAR(10g) = 0.344 W/kg**  
Maximum value of SAR (interpolated) = 0.713 W/kg

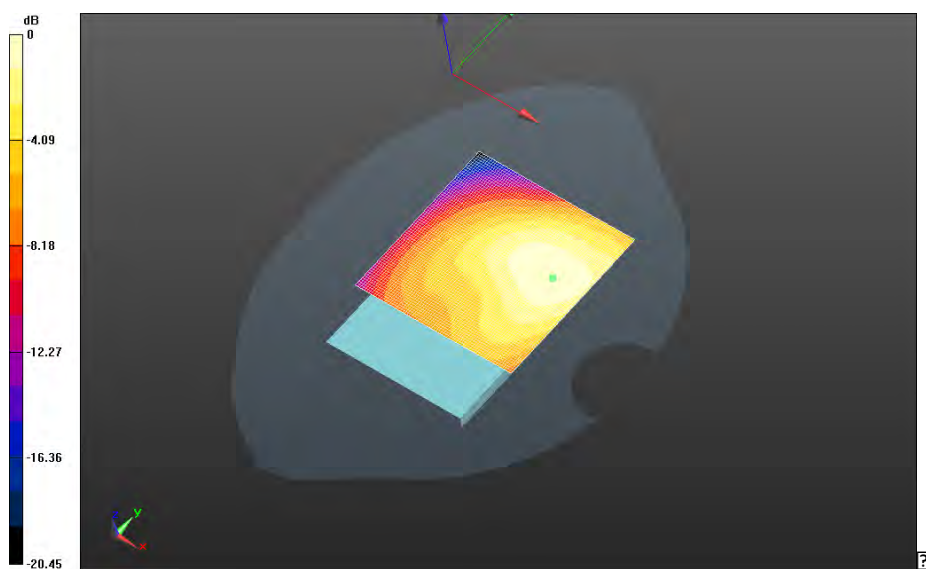


0 dB = 0.534 W/kg = -2.72 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 13/10mm Device Back - LTE band**  
**13\_chan23230\_10MHz\_BW\_RB50\_Offset\_Low\_amb\_temp\_24.2C\_liq\_temp\_21.5C/Area Scan**  
**(71x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 14.185 V/m; **Power Drift = -0.027 dB**

**Fast SAR: SAR(1g) = 0.489 W/kg; SAR(10g) = 0.337 W/kg**  
Maximum value of SAR (interpolated) = 0.523 W/kg



0 dB = 0.523 W/kg = -2.81 dBW/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 13/10mm Device Front- LTE band**  
**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_23.7C\_liq\_temp\_21.5C/Area Scan**  
**(71x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 17.076 V/m; **Power Drift = -0.017 dB**

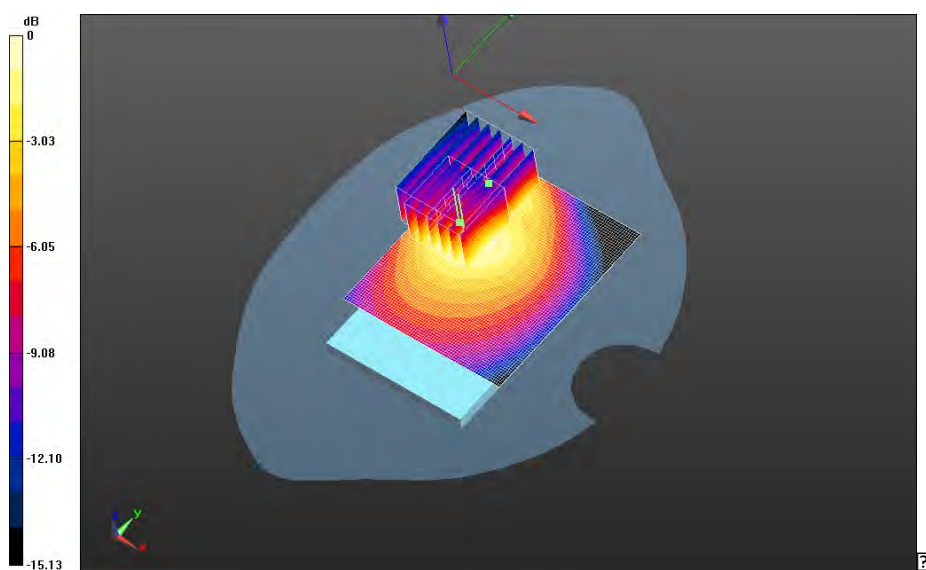
**Fast SAR: SAR(1g) = 0.641 W/kg; SAR(10g) = 0.432 W/kg; Secondary SAR(1g) = 0.533 W/kg**  
Maximum value of SAR (interpolated) = 0.695 W/kg

**Mobile Hot Spot MSL - LTE Band 13/10mm Device Front- LTE band**  
**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_23.7C\_liq\_temp\_21.5C/Zoom Scan**  
**(26x26x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm  
Reference Value = 17.076 V/m; **Power Drift = -0.017 dB**

**Averaged SAR: SAR(1g) = 0.646 W/kg; SAR(10g) = 0.422 W/kg**  
Maximum value of SAR (interpolated) = 0.995 W/kg

**Mobile Hot Spot MSL - LTE Band 13/10mm Device Front- LTE band**  
**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_23.7C\_liq\_temp\_21.5C/Zoom Scan**  
**2 (31x41x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm  
Reference Value = 17.076 V/m; **Power Drift = -0.031 dB**

**Averaged SAR: SAR(1g) = 0.643 W/kg; SAR(10g) = 0.420 W/kg**  
Maximum value of SAR (interpolated) = 0.997 W/kg

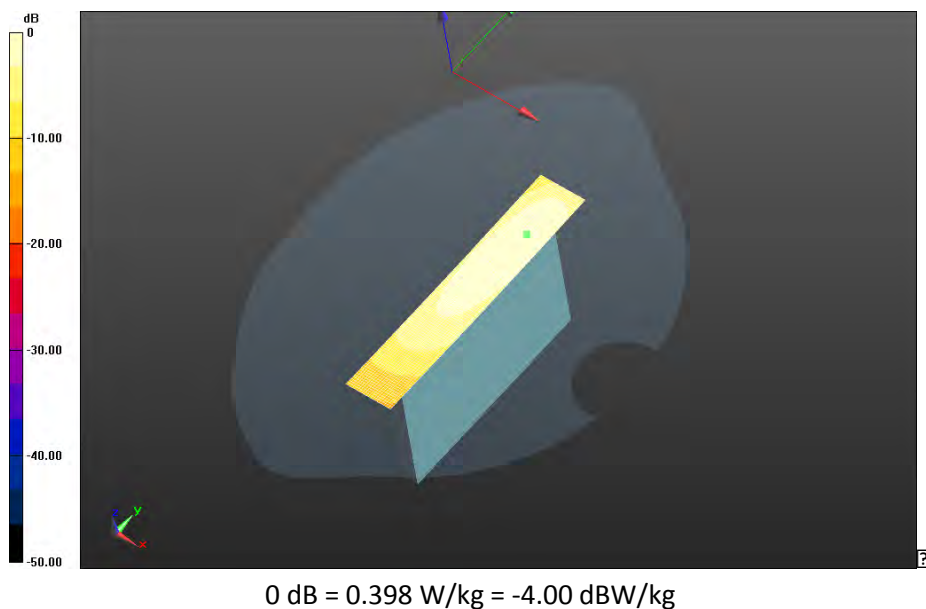


0 dB = 0.688 W/kg = -1.62 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 13/10mm Device Right - LTE band**  
**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_23.7C\_liq\_temp\_21.5C/Area Scan**  
**(121x171x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm**  
Reference Value = 16.518 V/m; **Power Drift = -0.097 dB**

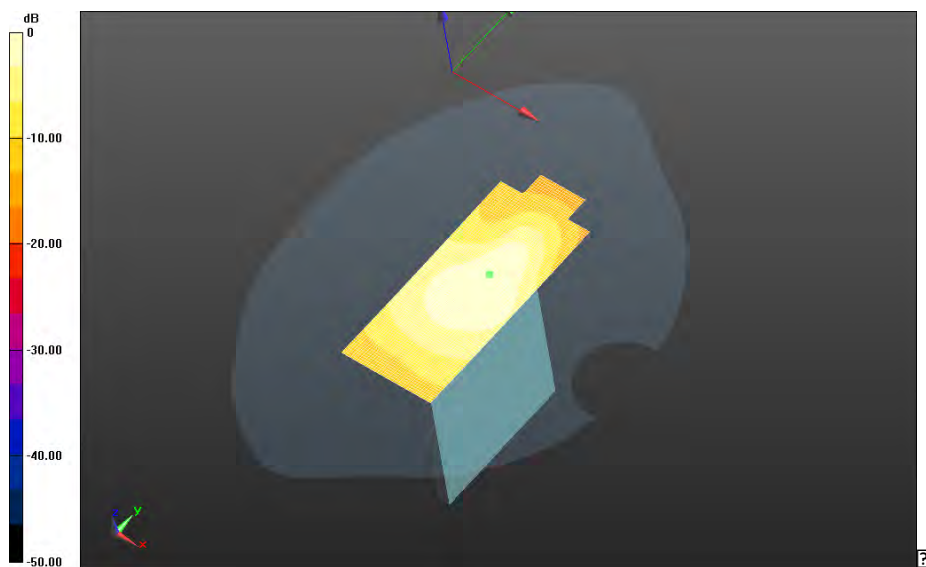
**Fast SAR: SAR(1g) = 0.360 W/kg; SAR(10g) = 0.227 W/kg**  
Maximum value of SAR (interpolated) = 0.398 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 13/10mm Device Bottom -LTE band**  
**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_23.7C\_liq\_temp\_21.5C/Area Scan**  
**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 16.748 V/m; **Power Drift = 0.036 dB**

**Fast SAR: SAR(1g) = 0.272 W/kg; SAR(10g) = 0.179 W/kg**  
Maximum value of SAR (interpolated) = 0.301 W/kg



0 dB = 0.301 W/kg = -5.21 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

Date: 4/23/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160701958**

### **Configuration: Body Worn MSL - LTE Band 13**

Communication System: LTE band 13 (0); Communication System Band: LTE band 13; Frequency: 782 MHz

Medium Parameters used:  $f=782$  MHz;  $\sigma = 0.984$  S/m;  $\epsilon_r = 53.419$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6.29,6.29,6.29); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

#### **Body Worn MSL - LTE Band 13/15mm Device Back - LTE band**

**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_24.0C\_liq\_temp\_21.6C/Area Scan**

**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 15.993 V/m; **Power Drift = 0.103 dB**

**Fast SAR: SAR(1g) = 0.459 W/kg; SAR(10g) = 0.319 W/kg**

Maximum value of SAR (interpolated) = 0.487 W/kg

#### **Body Worn MSL - LTE Band 13/15mm Device Back - LTE band**

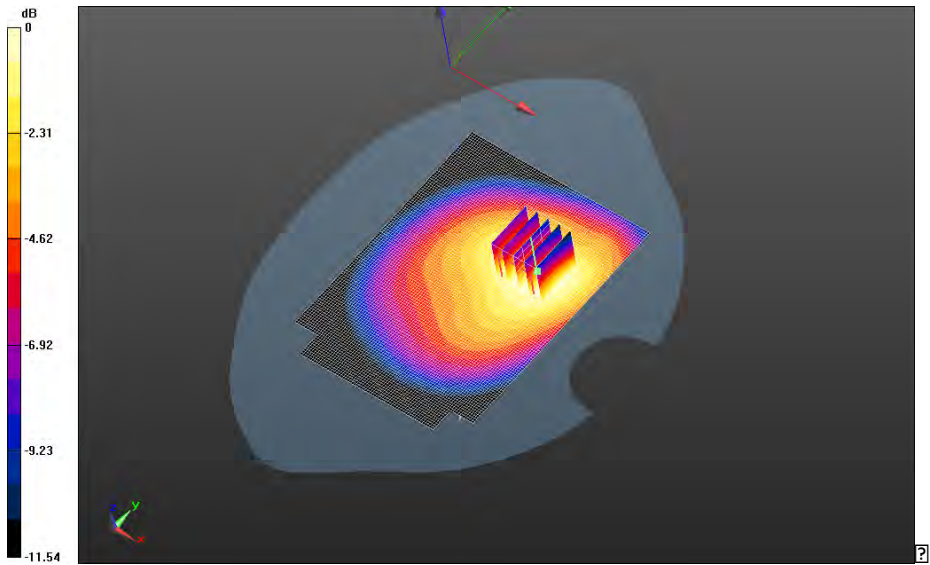
**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_24.0C\_liq\_temp\_21.6C/Zoom Scan**

**(21x21x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 15.993 V/m; **Power Drift = 0.103 dB**

**Averaged SAR: SAR(1g) = 0.460 W/kg; SAR(10g) = 0.324 W/kg**

Maximum value of SAR (interpolated) = 0.629 W/kg

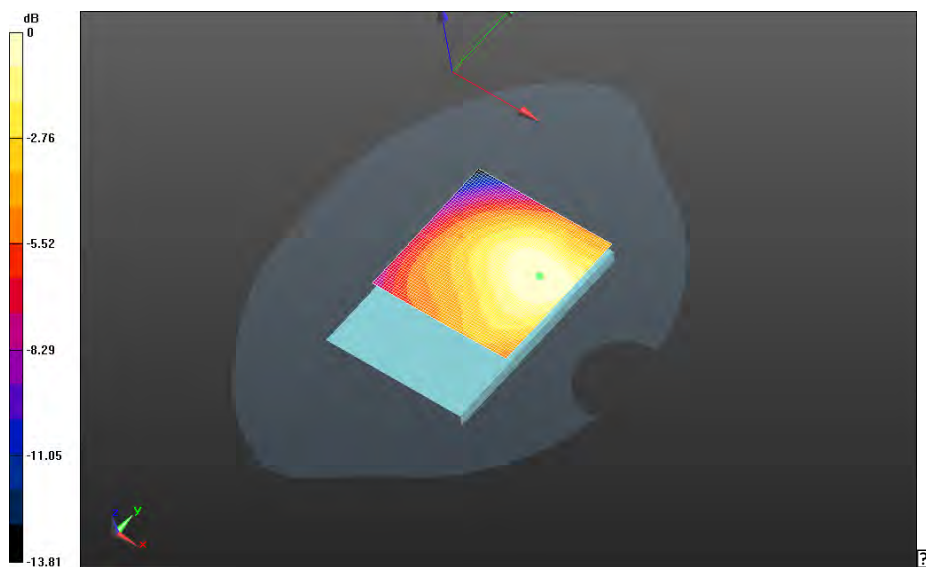


0 dB = 0.491 W/kg = -3.09 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 13/15mm Device Back - LTE band**  
**13\_chan23230\_10MHz\_BW\_RB25\_Offset\_High\_amb\_temp\_23.8C\_liq\_temp\_21.5C/Area Scan**  
**(61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 14.675 V/m; **Power Drift = 0.00805 dB**

**Fast SAR: SAR(1g) = 0.381 W/kg; SAR(10g) = 0.264 W/kg**  
Maximum value of SAR (interpolated) = 0.408 W/kg

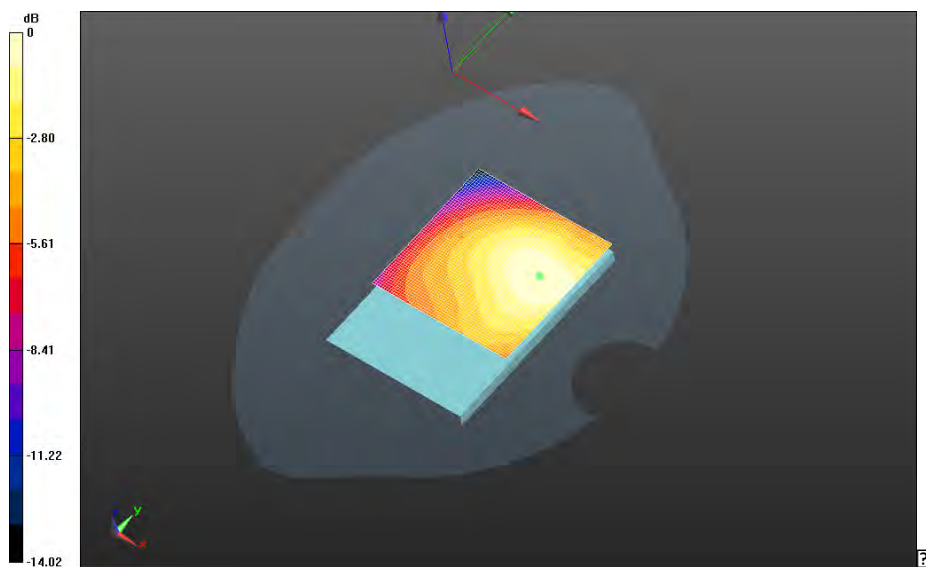


0 dB = 0.408 W/kg = -3.89 dBW/kg

|                                                                                   |                                               |                                                                                                                 |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                       | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 13/15mm Device Back - LTE band  
13\_chan23230\_10MHz\_BW\_RB50\_Offset\_Low\_amb\_temp\_23.9C\_liq\_temp\_21.5C/Area Scan  
(61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 14.470 V/m; **Power Drift = 0.00194 dB****

**Fast SAR: SAR(1g) = 0.368 W/kg; SAR(10g) = 0.255 W/kg  
Maximum value of SAR (interpolated) = 0.393 W/kg**



0 dB = 0.393 W/kg = -4.06 dBW/kg

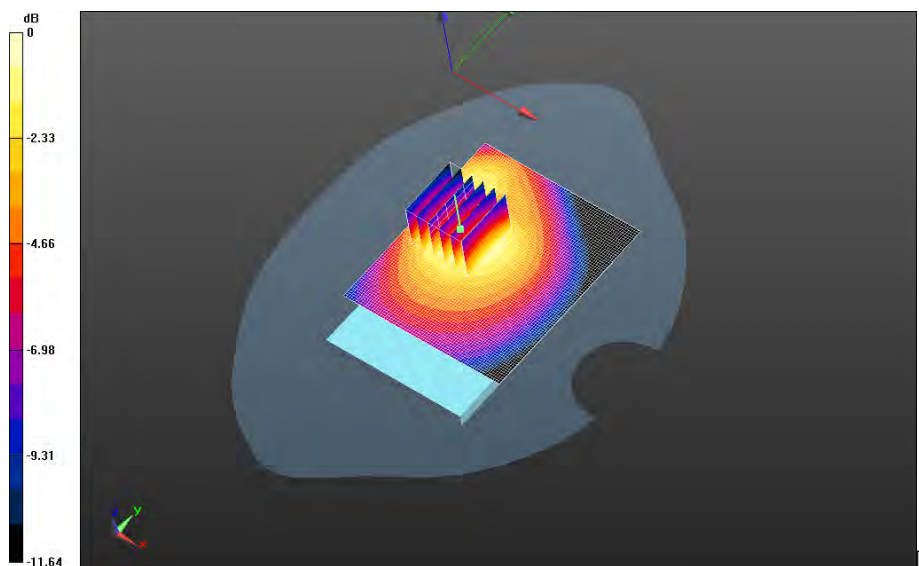
|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 13/15mm Device Front - LTE band 13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_23.6C\_liq\_temp\_21.4C/Area Scan (71x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 16.219 V/m; **Power Drift = -0.012 dB**

**Fast SAR: SAR(1g) = 0.463 W/kg; SAR(10g) = 0.318 W/kg**  
Maximum value of SAR (interpolated) = 0.496 W/kg

**Body Worn MSL - LTE Band 13/15mm Device Front - LTE band 13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_23.6C\_liq\_temp\_21.4C/Zoom Scan (26x26x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm  
Reference Value = 16.219 V/m; **Power Drift = -0.012 dB**

**Averaged SAR: SAR(1g) = 0.467 W/kg; SAR(10g) = 0.319 W/kg**  
Maximum value of SAR (interpolated) = 0.672 W/kg



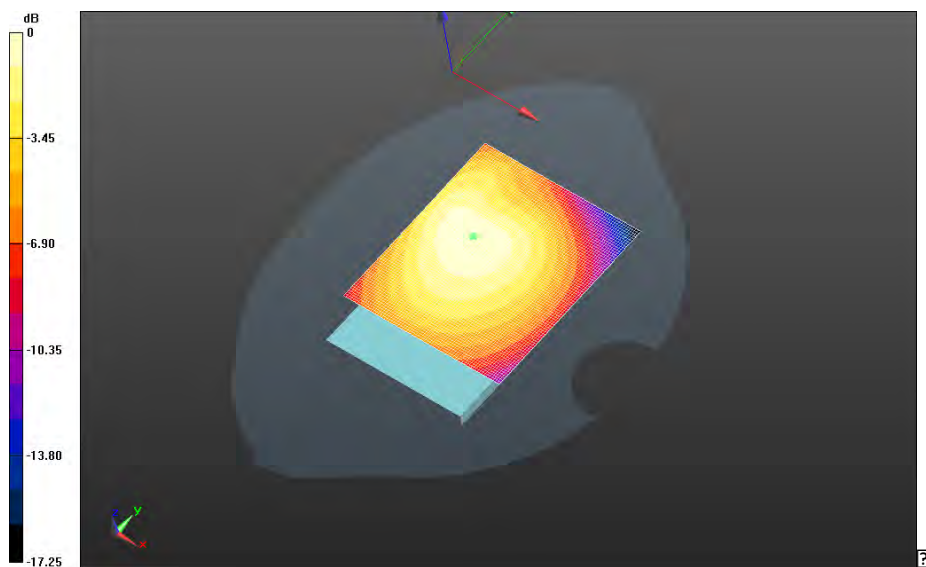
0 dB = 0.502 W/kg = -2.99 dBW/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 13/Holster Device Front - LTE band**  
**13\_chan23230\_10MHz\_BW\_RB1\_Offset\_High\_amb\_temp\_23.7C\_liq\_temp\_21.4C/Area Scan**  
**(71x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 14.865 V/m; **Power Drift = 0.029 dB**

**Fast SAR: SAR(1g) = 0.286 W/kg; SAR(10g) = 0.200 W/kg**  
Maximum value of SAR (interpolated) = 0.304 W/kg



0 dB = 0.304 W/kg = -5.17 dBW/kg

|                                                                                   |                       |                                                                                         |             |                |
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| Author Data                                                                       | Dates of Test         | Test Report No                                                                          | FCC ID:     | IC             |
| Andrew Becker                                                                     | Mar 30 – May 14, 2015 | RTS-6067-1505-05                                                                        | L6ARHR190LW | 2503A-RHR190LW |

## LTE Band 5

Date: 4/21/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160701958**

### Configuration: Right-Hand-Side HSL - LTE Band 5

Communication System: LTE 5 (0); Communication System Band: LTE 5; Frequency: 829 MHz

Medium Parameters used:  $f=829$  MHz;  $\sigma = 0.879$  S/m;  $\epsilon_r = 41.652$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Right Section

### DASY Configuration:

- Probe: ET3DV6 - SN1643; ConvF: (6.09,6.09,6.09); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

### Right-Hand-Side HSL - LTE Band 5/Touch Position -LTE band

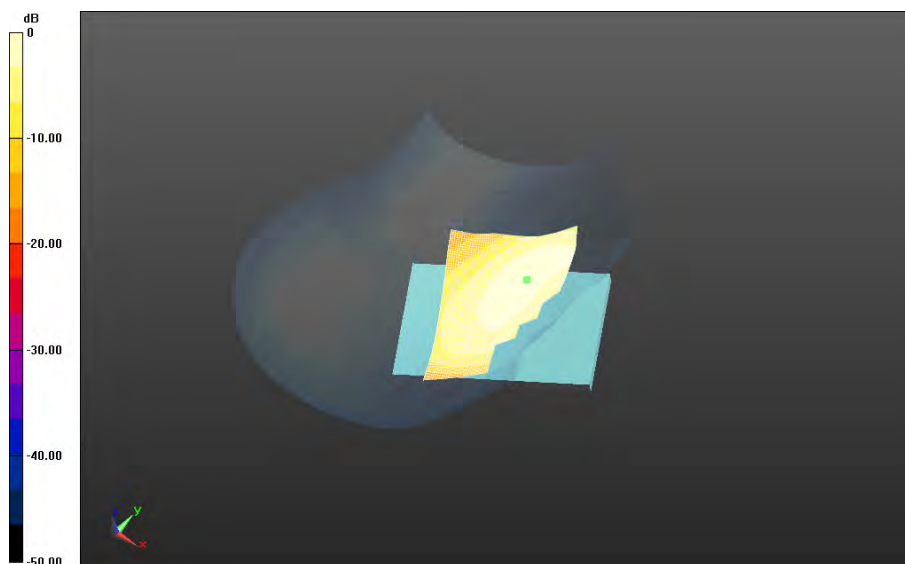
**5\_chan20450\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_21.4C/Area Scan**

**(121x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 7.208 V/m; **Power Drift = 0.039 dB**

**Fast SAR: SAR(1g) = 0.374 W/kg; SAR(10g) = 0.244 W/kg**

Maximum value of SAR (interpolated) = 0.396 W/kg



0 dB = 0.396 W/kg = -4.02 dBW/kg

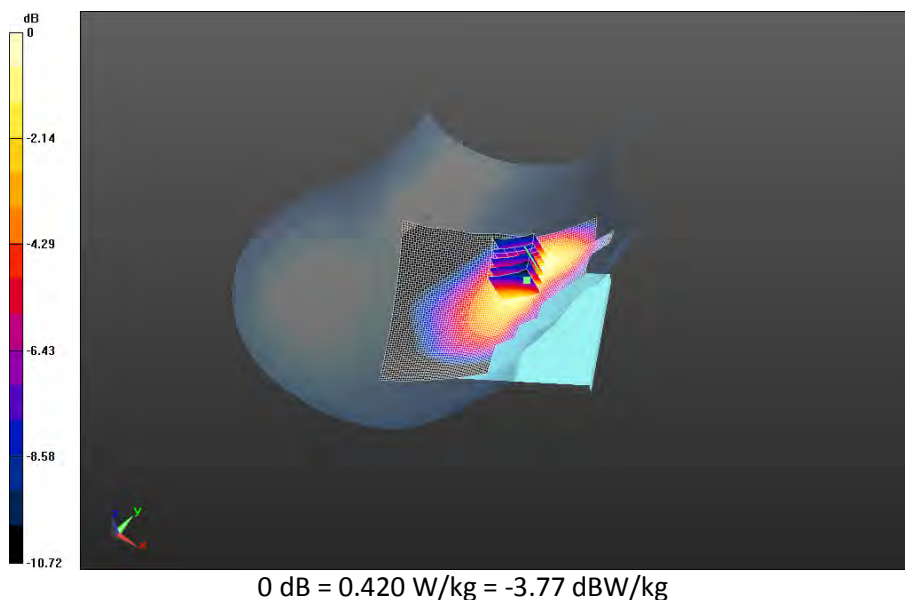
|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - LTE Band 5/Touch Position -LTE band**  
**5\_chan20525\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_21.4C/Area Scan**  
**(121x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 7.088 V/m; **Power Drift = -0.020 dB**

**Fast SAR: SAR(1g) = 0.389 W/kg; SAR(10g) = 0.255 W/kg**  
Maximum value of SAR (interpolated) = 0.414 W/kg

**Right-Hand-Side HSL - LTE Band 5/Touch Position -LTE band**  
**5\_chan20525\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_21.4C/Zoom Scan**  
**(21x21x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm  
Reference Value = 7.088 V/m; **Power Drift = -0.020 dB**

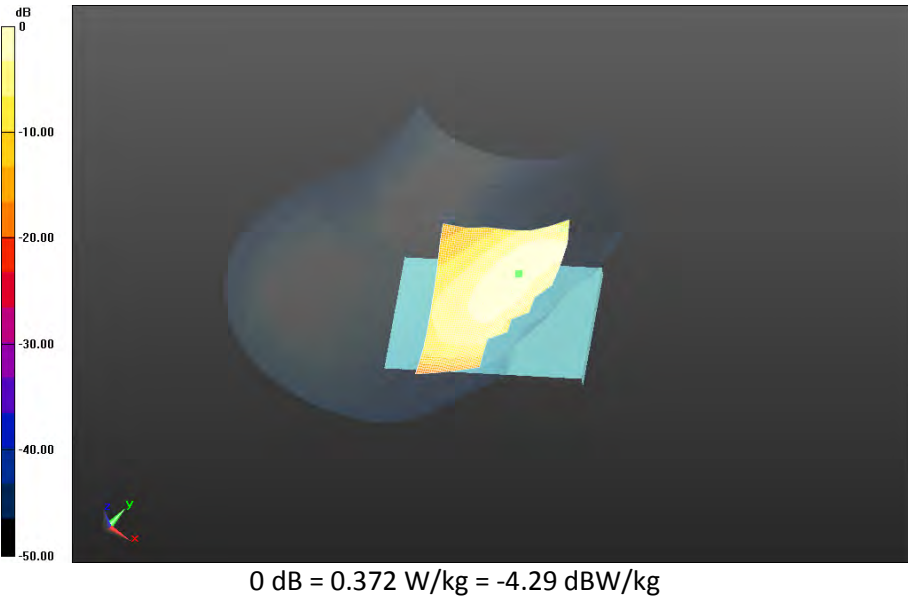
**Averaged SAR: SAR(1g) = 0.393 W/kg; SAR(10g) = 0.266 W/kg**  
Maximum value of SAR (interpolated) = 0.532 W/kg



|                                                                                   |                                               |                                                                                                                |                               |                             |                        |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                      | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |                        |

**Right-Hand-Side HSL - LTE Band 5/Touch Position -LTE band  
5\_chan20600\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_21.4C/Area Scan  
(121x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 7.050 V/m; Power Drift = -0.023 dB**

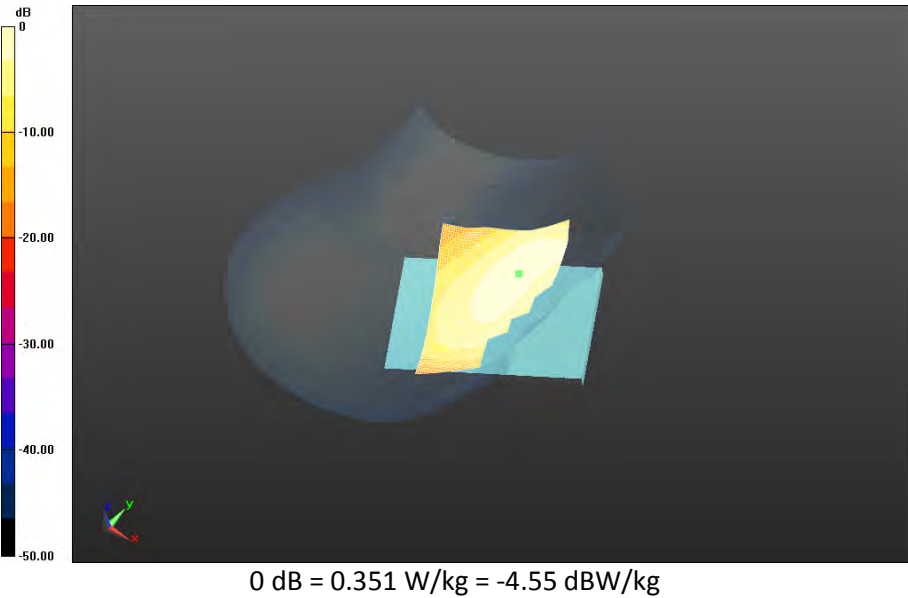
**Fast SAR: SAR(1g) = 0.349 W/kg; SAR(10g) = 0.228 W/kg  
Maximum value of SAR (interpolated) = 0.372 W/kg**



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - LTE Band 5/Touch Position -LTE band**  
**5\_chan20450\_10MHz\_BW\_RB25\_Offset\_Low\_amb\_temp\_23.7C\_liq\_temp\_21.3C/Area Scan**  
**(121x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm**  
**Reference Value = 6.542 V/m; Power Drift = -0.079 dB**

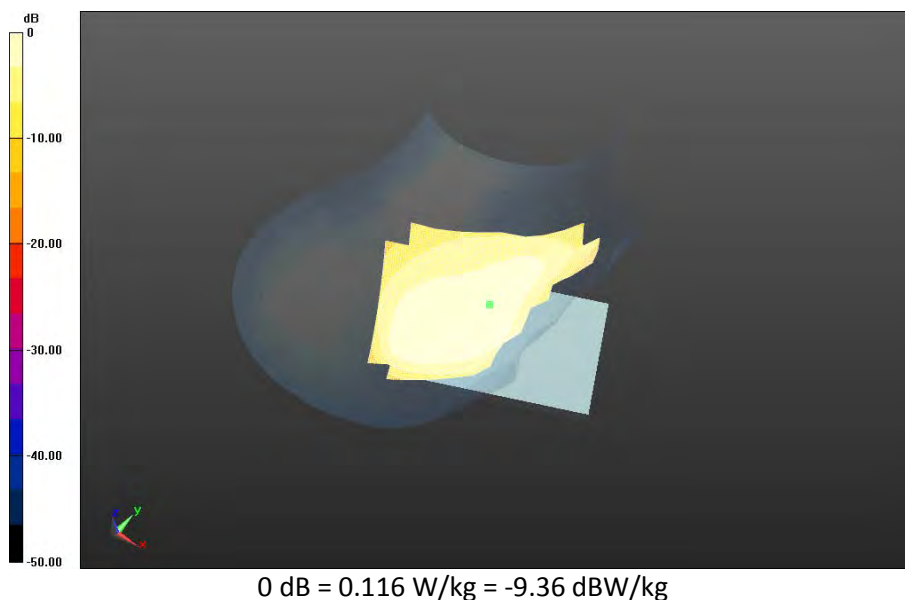
**Fast SAR: SAR(1g) = 0.331 W/kg; SAR(10g) = 0.216 W/kg**  
**Maximum value of SAR (interpolated) = 0.351 W/kg**



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - LTE Band 5/Tilt Position - LTE band**  
**5\_chan20450\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_21.4C/Area Scan**  
**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 10.141 V/m; **Power Drift = 0.063 dB**

**Fast SAR: SAR(1g) = 0.110 W/kg; SAR(10g) = 0.0771 W/kg**  
Maximum value of SAR (interpolated) = 0.116 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

Date: 4/21/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160701958**

### **Configuration: Left-Hand-Side HSL - LTE Band 5**

Communication System: LTE 5 (0); Communication System Band: LTE 5; Frequency: 829 MHz

Medium Parameters used:  $f=829$  MHz;  $\sigma = 0.879$  S/m;  $\epsilon_r = 41.652$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Left Section

#### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6.09,6.09,6.09); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

#### **Left-Hand-Side HSL - LTE Band 5/Touch Position - LTE band**

**5\_chan20450\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_21.5C/Area Scan**

**(121x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 6.407 V/m; **Power Drift = -0.027 dB**

**Fast SAR: SAR(1g) = 0.181 W/kg; SAR(10g) = 0.124 W/kg**

Maximum value of SAR (interpolated) = 0.190 W/kg

#### **Left-Hand-Side HSL - LTE Band 5/Touch Position - LTE band**

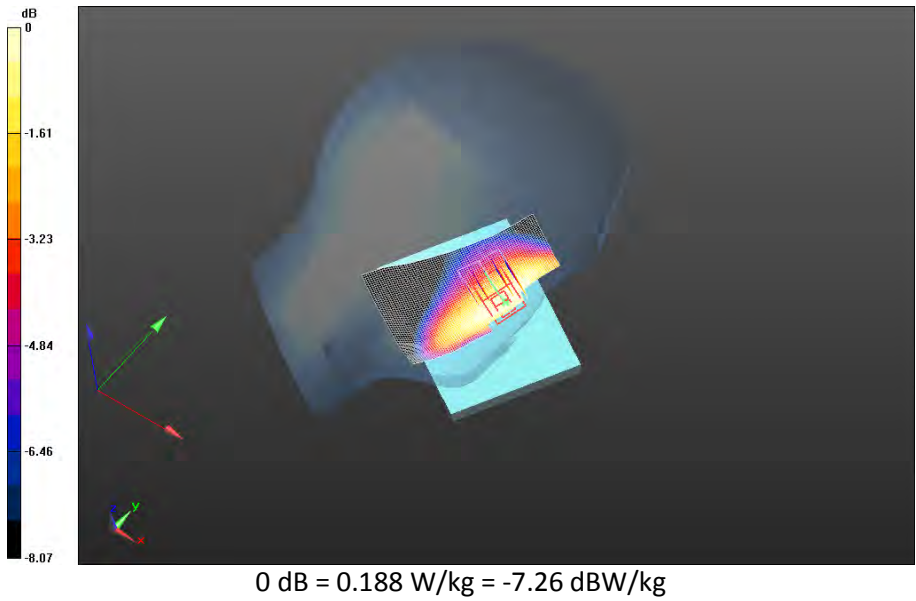
**5\_chan20450\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_21.5C/Zoom Scan**

**(21x21x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 6.407 V/m; **Power Drift = -0.027 dB**

**Averaged SAR: SAR(1g) = 0.183 W/kg; SAR(10g) = 0.140 W/kg**

Maximum value of SAR (interpolated) = 0.213 W/kg

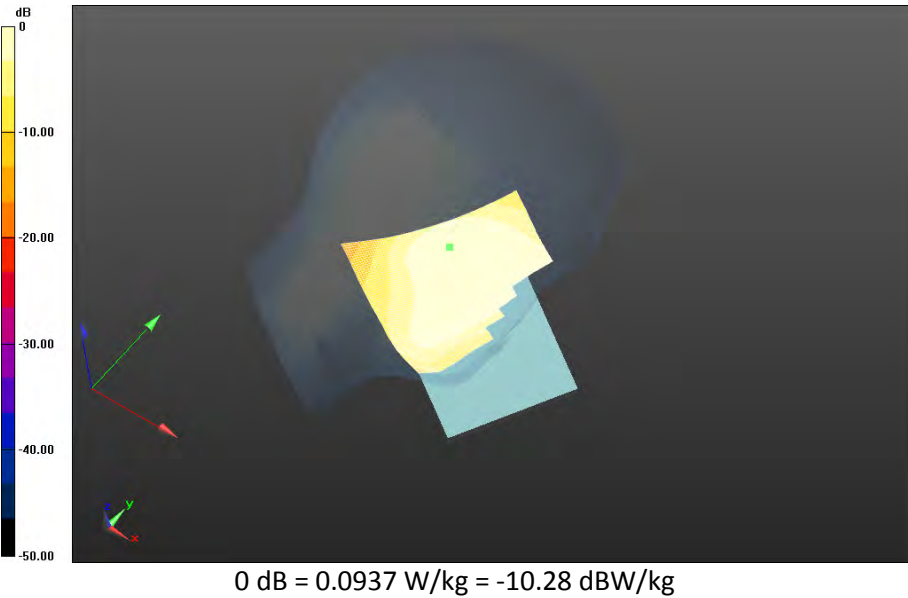




|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Left-Hand-Side HSL - LTE Band 5/Tilt Position - LTE band**  
**5\_chan20450\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_21.5C/Area Scan**  
**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 10.172 V/m; **Power Drift = 0.091 dB**

**Fast SAR: SAR(1g) = 0.0883 W/kg; SAR(10g) = 0.0625 W/kg**  
Maximum value of SAR (interpolated) = 0.0937 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |                        |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |                        |

Date: 4/21/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160701958**

### **Configuration: Mobile Hot Spot MSL - LTE Band 5**

Communication System: LTE 5 (0); Communication System Band: LTE 5; Frequency: 829 MHz

Medium Parameters used:  $f=829$  MHz;  $\sigma = 0.962$  S/m;  $\epsilon_r = 53.618$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6,6,6); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

#### **Mobile Hot Spot MSL - LTE Band 5/10mm Device Back - LTE band**

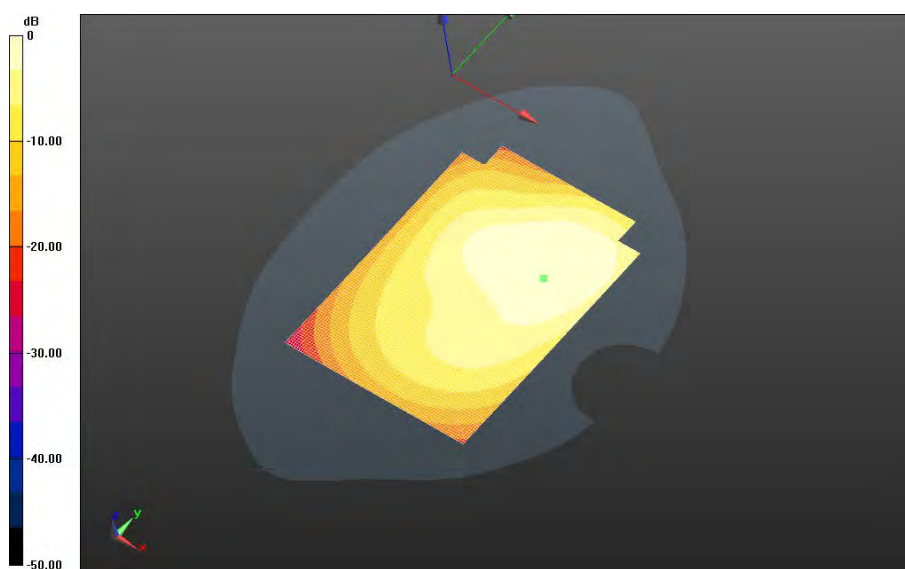
**5\_chan20450\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_24.1C\_liq\_temp\_21.2C/Area Scan**

**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 15.471 V/m; **Power Drift = -0.00978 dB**

**Fast SAR: SAR(1g) = 0.573 W/kg; SAR(10g) = 0.400 W/kg**

Maximum value of SAR (interpolated) = 0.605 W/kg



0 dB = 0.605 W/kg = -2.18 dBW/kg

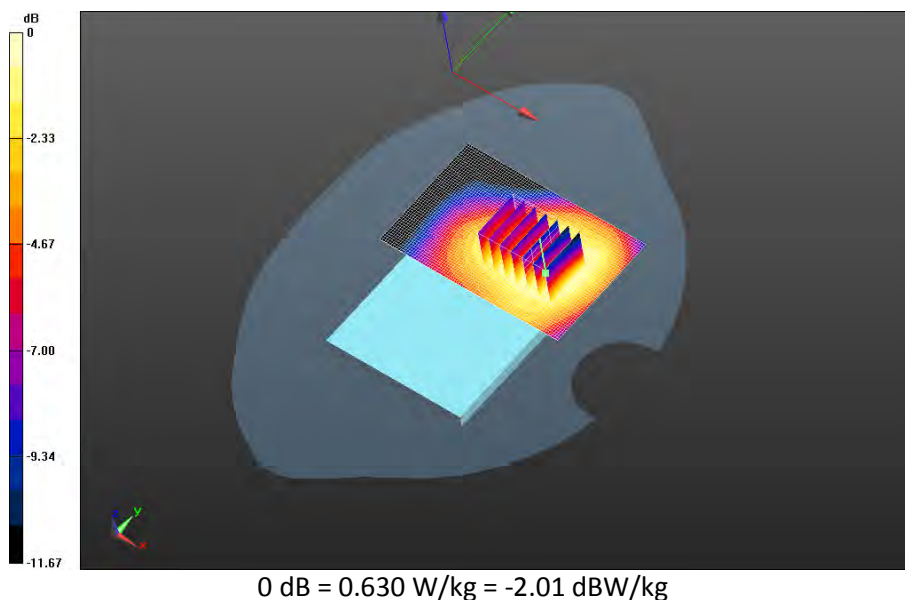
|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 5/10mm Device Back - LTE band**  
**5\_chan20525\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_24.0C\_liq\_temp\_21.1C/Area Scan**  
**(121x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 15.606 V/m; **Power Drift = 0.069 dB**

**Fast SAR: SAR(1g) = 0.581 W/kg; SAR(10g) = 0.401 W/kg**  
Maximum value of SAR (interpolated) = 0.621 W/kg

**Mobile Hot Spot MSL - LTE Band 5/10mm Device Back - LTE band**  
**5\_chan20525\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_24.0C\_liq\_temp\_21.1C/Zoom Scan**  
**(31x21x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm  
Reference Value = 15.606 V/m; **Power Drift = 0.069 dB**

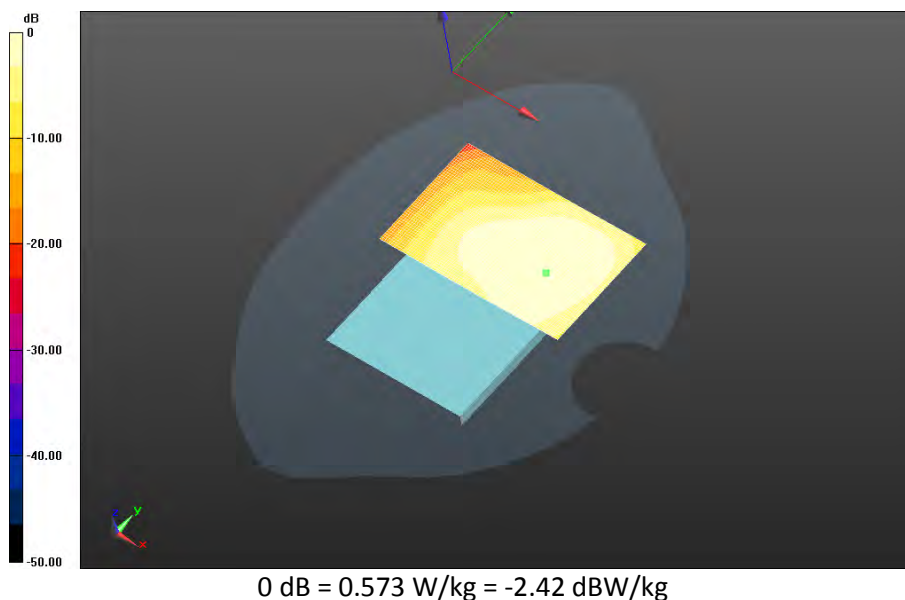
**Averaged SAR: SAR(1g) = 0.586 W/kg; SAR(10g) = 0.415 W/kg**  
Maximum value of SAR (interpolated) = 0.837 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 5/10mm Device Back - LTE band**  
**5\_chan20600\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_21.1C/Area Scan**  
**(121x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm**  
Reference Value = 15.266 V/m; **Power Drift = 0.058 dB**

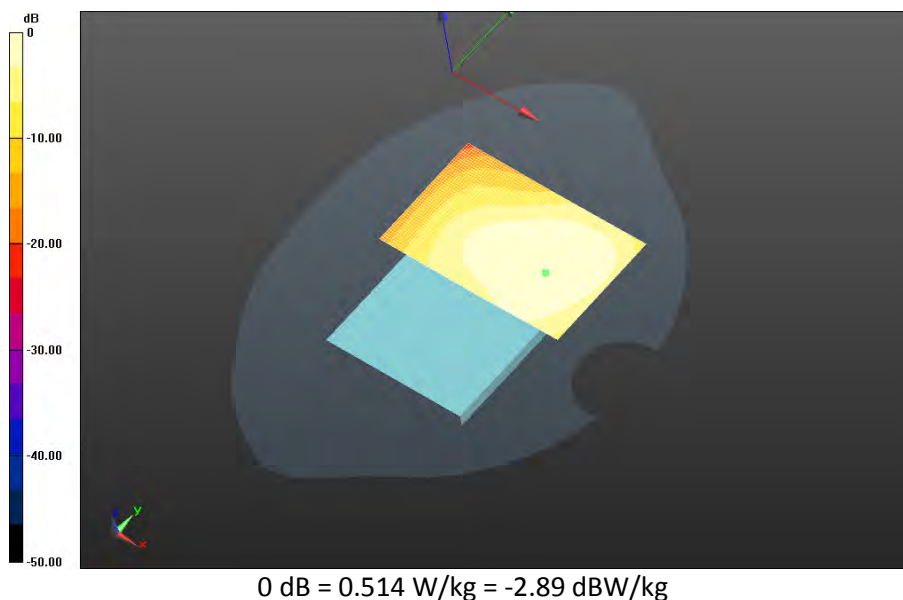
**Fast SAR: SAR(1g) = 0.535 W/kg; SAR(10g) = 0.368 W/kg**  
Maximum value of SAR (interpolated) = 0.573 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 5/10mm Device Back - LTE band**  
**5\_chan20450\_10MHz\_BW\_RB25\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_20.6C/Area Scan**  
**(121x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm**  
**Reference Value = 14.018 V/m; Power Drift = 0.013 dB**

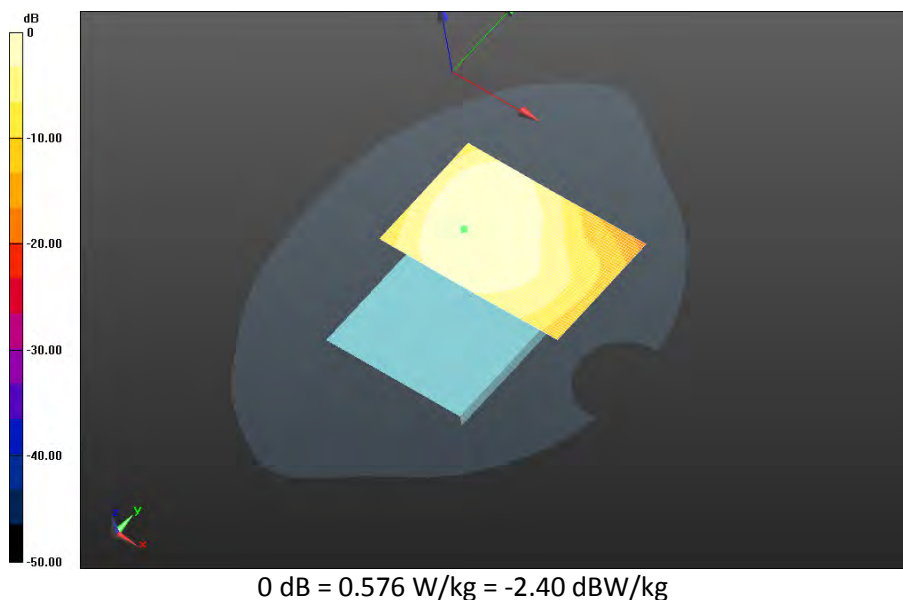
**Fast SAR: SAR(1g) = 0.481 W/kg; SAR(10g) = 0.332 W/kg**  
**Maximum value of SAR (interpolated) = 0.514 W/kg**



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 5/10mm Device Front- LTE band**  
**5\_chan20450\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_20.9C/Area Scan**  
**(121x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm**  
Reference Value = 17.794 V/m; **Power Drift = -0.013 dB**

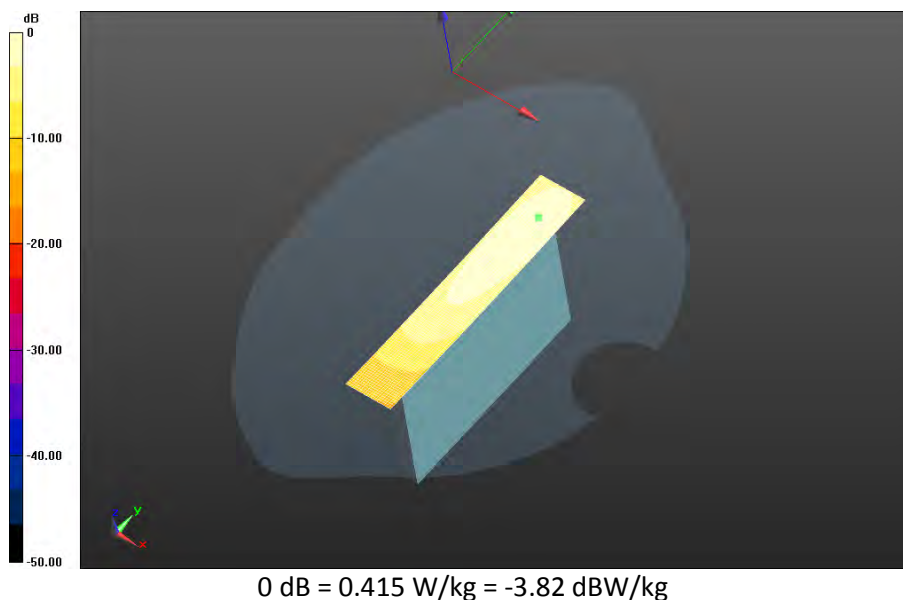
**Fast SAR: SAR(1g) = 0.532 W/kg; SAR(10g) = 0.358 W/kg**  
Maximum value of SAR (interpolated) = 0.576 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 5/10mm Device Right - LTE band**  
**5\_chan20450\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.9C\_liq\_temp\_21.0C/Area Scan**  
**(121x171x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm**  
Reference Value = 16.219 V/m; **Power Drift = -0.00432 dB**

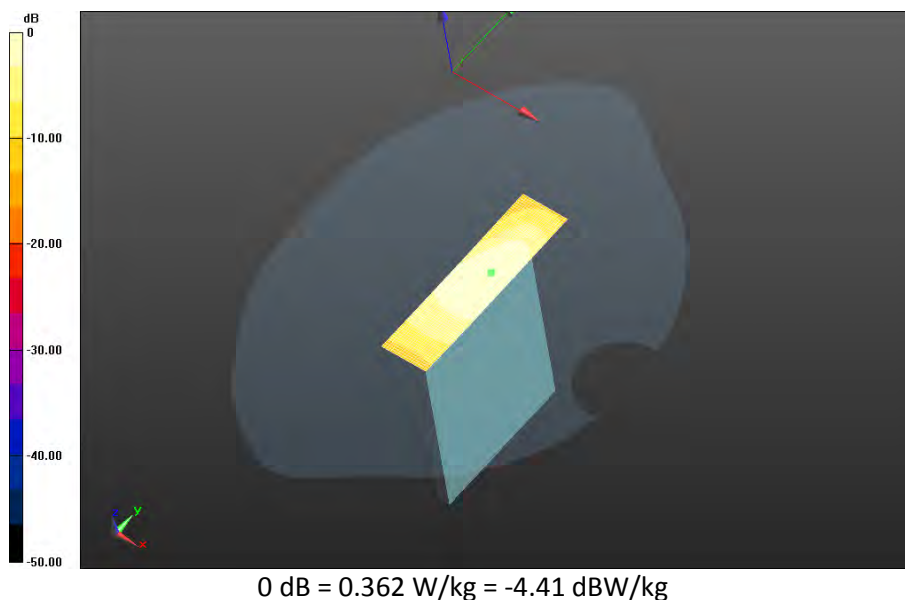
**Fast SAR: SAR(1g) = 0.377 W/kg; SAR(10g) = 0.239 W/kg**  
Maximum value of SAR (interpolated) = 0.415 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - LTE Band 5/10mm Device Bottom - LTE band**  
**5\_chan20450\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.9C\_liq\_temp\_21.0C/Area Scan**  
**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 18.168 V/m; **Power Drift = 0.013 dB**

**Fast SAR: SAR(1g) = 0.331 W/kg; SAR(10g) = 0.211 W/kg**  
Maximum value of SAR (interpolated) = 0.362 W/kg





|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

Date: 4/21/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160701958**

### **Configuration: Body Worn MSL - LTE Band 5**

Communication System: LTE 5 (0); Communication System Band: LTE 5; Frequency: 829 MHz

Medium Parameters used:  $f=829$  MHz;  $\sigma = 0.962$  S/m;  $\epsilon_r = 53.618$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6,6,6); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

### **Body Worn MSL - LTE Band 5/15mm Device Back - LTE band**

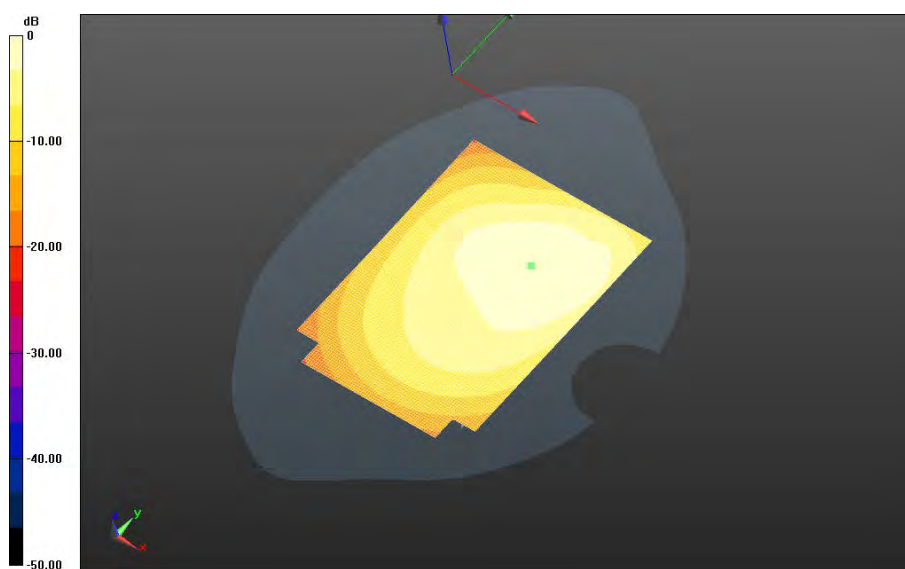
**5\_chan20450\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.7C\_liq\_temp\_21.0C/Area Scan**

**(121x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 15.318 V/m; **Power Drift = 0.021 dB**

**Fast SAR: SAR(1g) = 0.426 W/kg; SAR(10g) = 0.295 W/kg**

Maximum value of SAR (interpolated) = 0.453 W/kg



0 dB = 0.453 W/kg = -3.44 dBW/kg

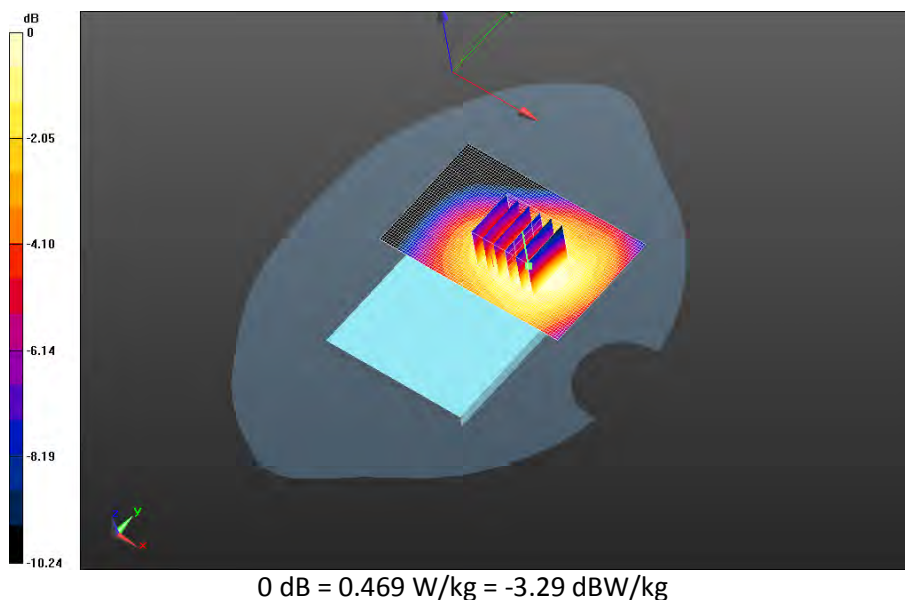
|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 5/15mm Device Back - LTE band**  
**5\_chan20525\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_21.1C/Area Scan**  
**(121x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 15.891 V/m; **Power Drift = 0.00307 dB**

**Fast SAR: SAR(1g) = 0.448 W/kg; SAR(10g) = 0.311 W/kg**  
Maximum value of SAR (interpolated) = 0.476 W/kg

**Body Worn MSL - LTE Band 5/15mm Device Back - LTE band**  
**5\_chan20525\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_21.1C/Zoom Scan**  
**(26x21x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm  
Reference Value = 15.891 V/m; **Power Drift = 0.00307 dB**

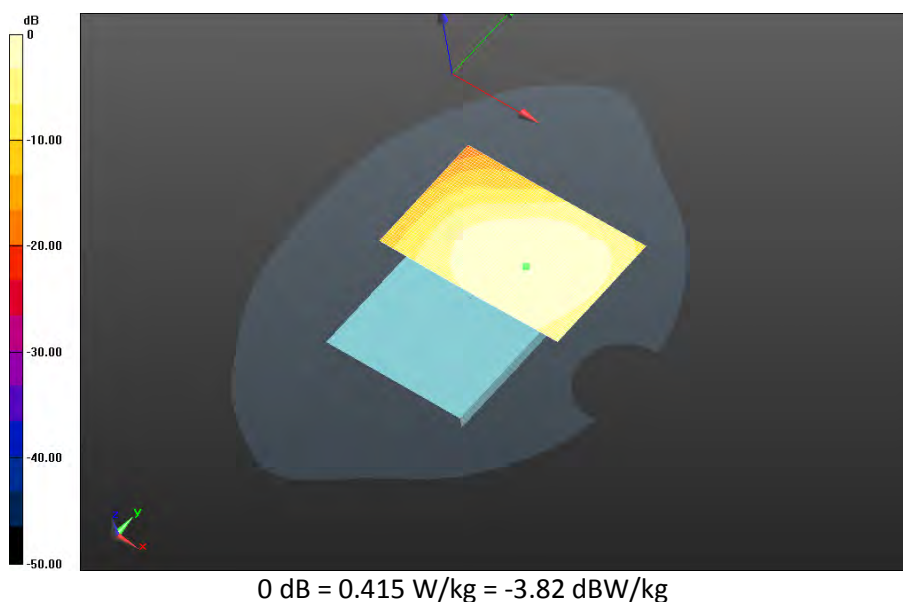
**Averaged SAR: SAR(1g) = 0.443 W/kg; SAR(10g) = 0.323 W/kg**  
Maximum value of SAR (interpolated) = 0.576 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 5/15mm Device Back - LTE band**  
**5\_chan20600\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.8C\_liq\_temp\_20.9C/Area Scan**  
**(121x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm**  
Reference Value = 15.173 V/m; **Power Drift = 0.00698 dB**

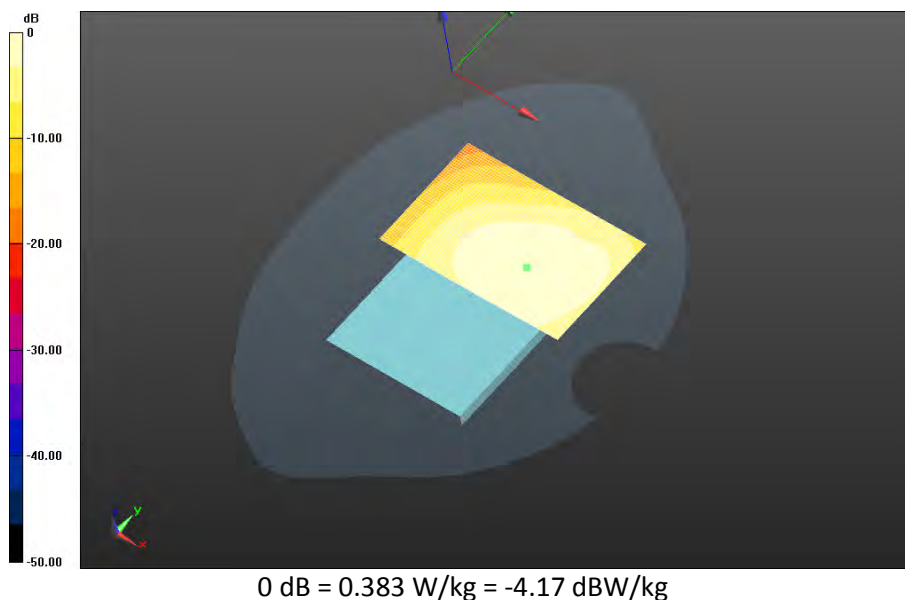
**Fast SAR: SAR(1g) = 0.392 W/kg; SAR(10g) = 0.273 W/kg**  
Maximum value of SAR (interpolated) = 0.415 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 5/15mm Device Back - LTE band**  
**5\_chan20450\_10MHz\_BW\_RB25\_Offset\_Low\_amb\_temp\_23.7C\_liq\_temp\_20.9C/Area Scan**  
**(121x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm**  
Reference Value = 14.472 V/m; **Power Drift = -0.00997 dB**

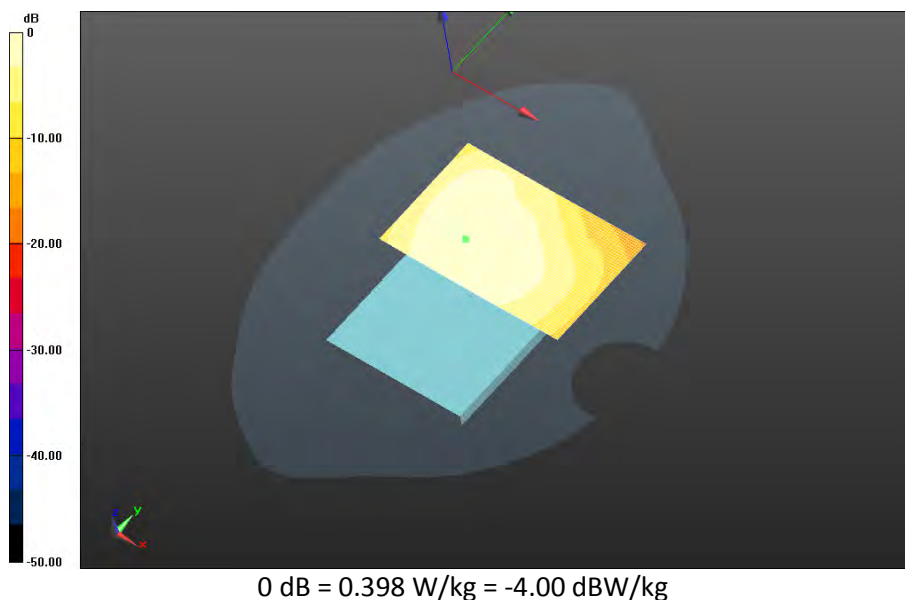
**Fast SAR: SAR(1g) = 0.359 W/kg; SAR(10g) = 0.248 W/kg**  
Maximum value of SAR (interpolated) = 0.383 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 5/15mm Device Front - LTE band**  
**5\_chan20450\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.7C\_liq\_temp\_20.9C/Area Scan**  
**(121x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm**  
Reference Value = 16.844 V/m; **Power Drift = 0.026 dB**

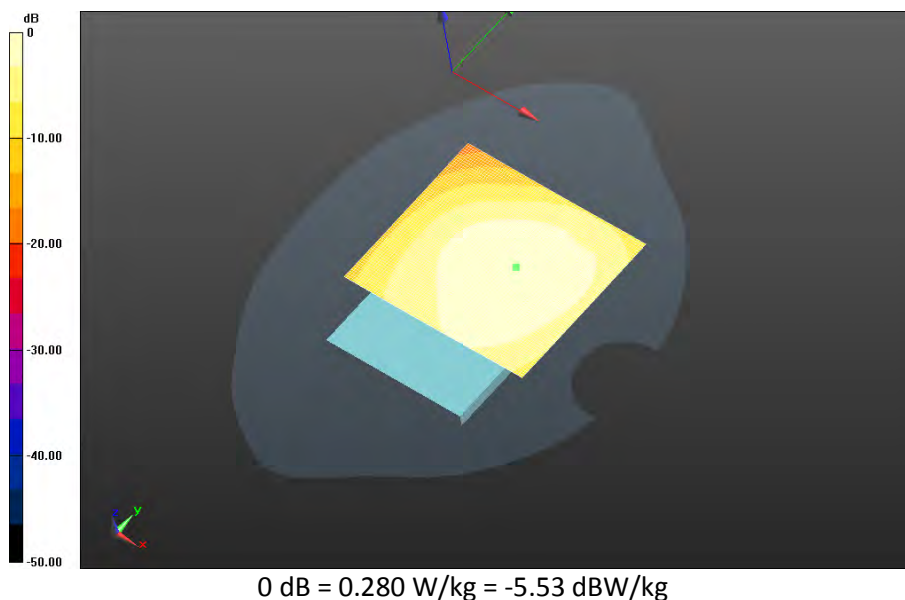
**Fast SAR: SAR(1g) = 0.375 W/kg; SAR(10g) = 0.259 W/kg**  
Maximum value of SAR (interpolated) = 0.398 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - LTE Band 5/Holster Device Back - LTE band**  
**5\_chan20450\_10MHz\_BW\_RB1\_Offset\_Low\_amb\_temp\_23.6C\_liq\_temp\_20.9C/Area Scan**  
**(121x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm**  
Reference Value = 14.545 V/m; **Power Drift = 0.144 dB**

**Fast SAR: SAR(1g) = 0.264 W/kg; SAR(10g) = 0.184 W/kg**  
Maximum value of SAR (interpolated) = 0.280 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                              |                        |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC:<br><b>2503A-RHR190LW</b> |                        |

## GSM 850

Date: 4/21/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160686730**

### **Configuration: Right-Hand-Side HSL - DTM\_GSM 850**

Communication System: GSM 850 (0); Communication System Band: GSM 850; Frequency: 824.2 MHz

Medium Parameters used:  $f=825$  MHz;  $\sigma = 0.875$  S/m;  $\epsilon_r = 41.693$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Right Section

#### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6.09,6.09,6.09); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

#### **Right-Hand-Side HSL - DTM\_GSM 850/Touch Position - GSM 850\_1-**

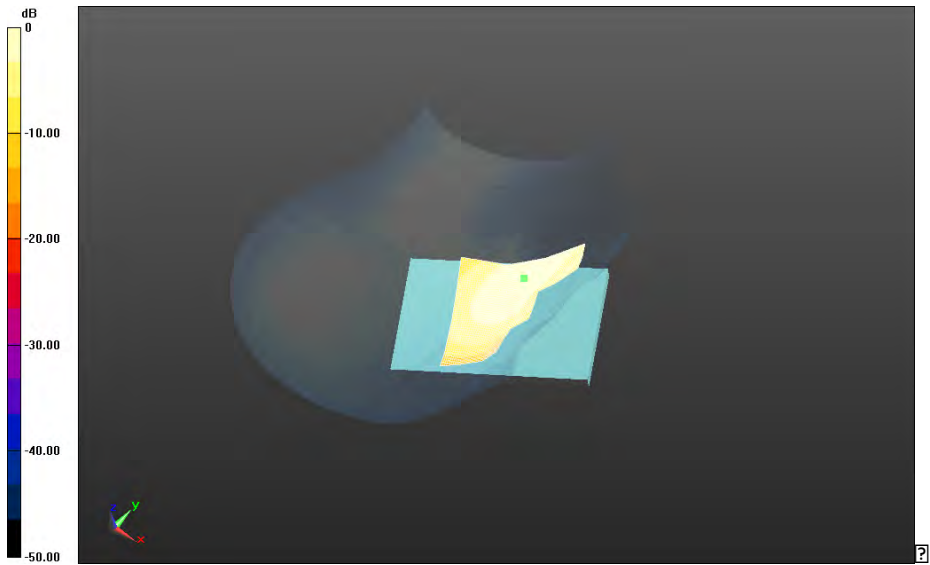
**Slot\_chan128\_amb\_temp\_23.5C\_liq\_temp\_21.0C/Area Scan (61x61x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 7.432 V/m; **Power Drift = -0.137 dB**

**Fast SAR: SAR(1g) = 0.447 W/kg; SAR(10g) = 0.297 W/kg**

Maximum value of SAR (interpolated) = 0.469 W/kg



0 dB = 0.469 W/kg = -3.29 dBW/kg



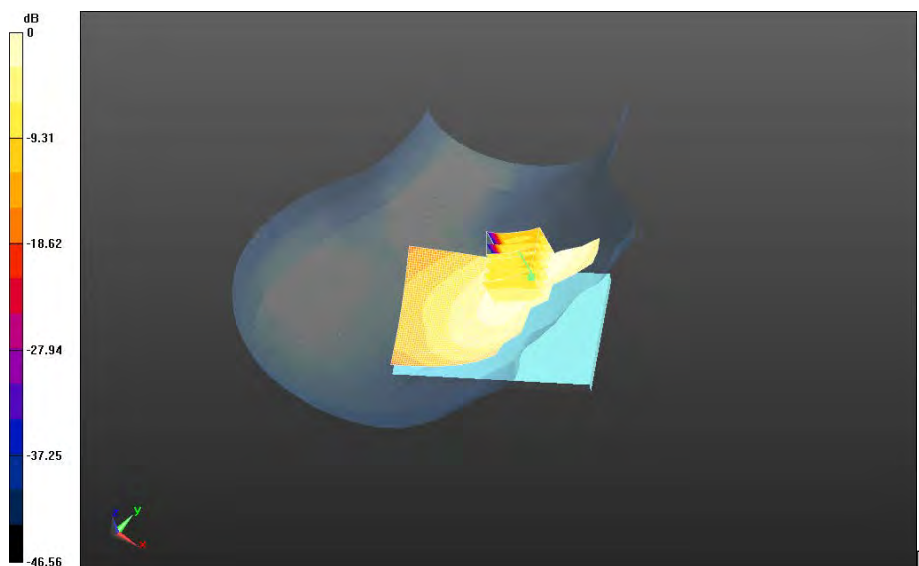
|                                                                                   |                                               |                                                                                                                      |                               |                             |
|-----------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------|
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - DTM\_GSM 850/Touch Position - GSM 850\_1-Slot\_chan190\_amb\_temp\_23.8C\_liq\_temp\_21.2C/Area Scan (121x171x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 7.547 V/m; **Power Drift = -0.038 dB**

**Fast SAR: SAR(1g) = 0.508 W/kg; SAR(10g) = 0.333 W/kg**  
Maximum value of SAR (interpolated) = 0.547 W/kg

**Right-Hand-Side HSL - DTM\_GSM 850/Touch Position - GSM 850\_1-Slot\_chan190\_amb\_temp\_23.8C\_liq\_temp\_21.2C/Zoom Scan (26x26x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm  
Reference Value = 7.547 V/m; **Power Drift = -0.038 dB**

**Averaged SAR: SAR(1g) = 0.532 W/kg; SAR(10g) = 0.355 W/kg**  
Maximum value of SAR (interpolated) = 0.773 W/kg

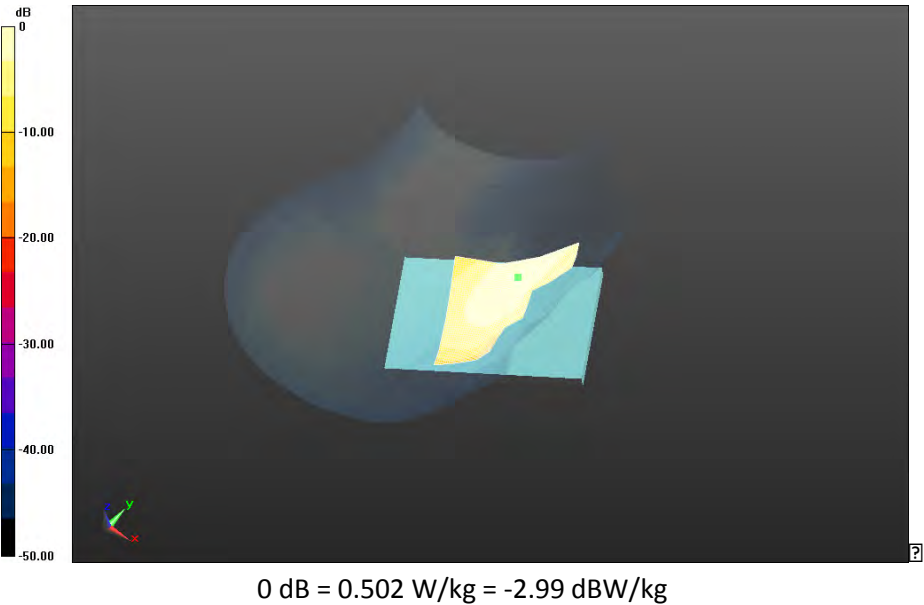


0 dB = 0.557 W/kg = -2.54 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |                        |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |                        |

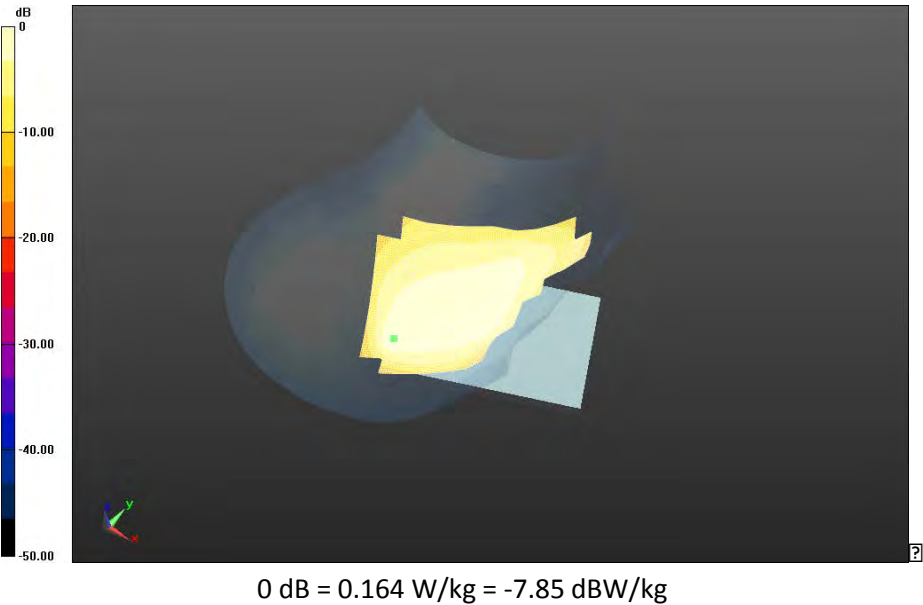
**Right-Hand-Side HSL - DTM\_GSM 850/Touch Position - GSM 850\_1-**  
**Slot\_chan251\_amb\_temp\_23.5C\_liq\_temp\_21.0C/Area Scan (61x61x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 7.534 V/m; **Power Drift = -0.00115 dB**

**Fast SAR: SAR(1g) = 0.470 W/kg; SAR(10g) = 0.310 W/kg**  
Maximum value of SAR (interpolated) = 0.502 W/kg



**Right-Hand-Side HSL - DTM\_GSM 850/Tilt Position -GSM 850\_1-  
Slot\_chan190\_amb\_temp\_23.8C\_liq\_temp\_21.0C/Area Scan (121x171x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 11.200 V/m; **Power Drift = 0.029 dB**

**Fast SAR: SAR(1g) = 0.149 W/kg; SAR(10g) = 0.104 W/kg**  
Maximum value of SAR (interpolated) = 0.164 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |                        |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |                        |

Date: 4/21/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160686730**

### **Configuration: Left-Hand-Side HSL - DTM\_GSM 850**

Communication System: GSM 850 (0); Communication System Band: GSM 850; Frequency: 836.8 MHz

Medium Parameters used:  $f=836.8$  MHz;  $\sigma = 0.887$  S/m;  $\epsilon_r = 41.577$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Left Section

#### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6.09,6.09,6.09); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

#### **Left-Hand-Side HSL - DTM\_GSM 850/Touch Position - GSM 850\_1-**

**Slot\_chan190\_amb\_temp\_23.7C\_liq\_temp\_21.2C/Area Scan (121x171x1):** Interpolated grid:

$dx=1.500$  mm,  $dy=1.500$  mm

Reference Value = 6.286 V/m; **Power Drift = -0.090 dB**

**Fast SAR: SAR(1g) = 0.210 W/kg; SAR(10g) = 0.145 W/kg**

Maximum value of SAR (interpolated) = 0.221 W/kg

#### **Left-Hand-Side HSL - DTM\_GSM 850/Touch Position - GSM 850\_1-**

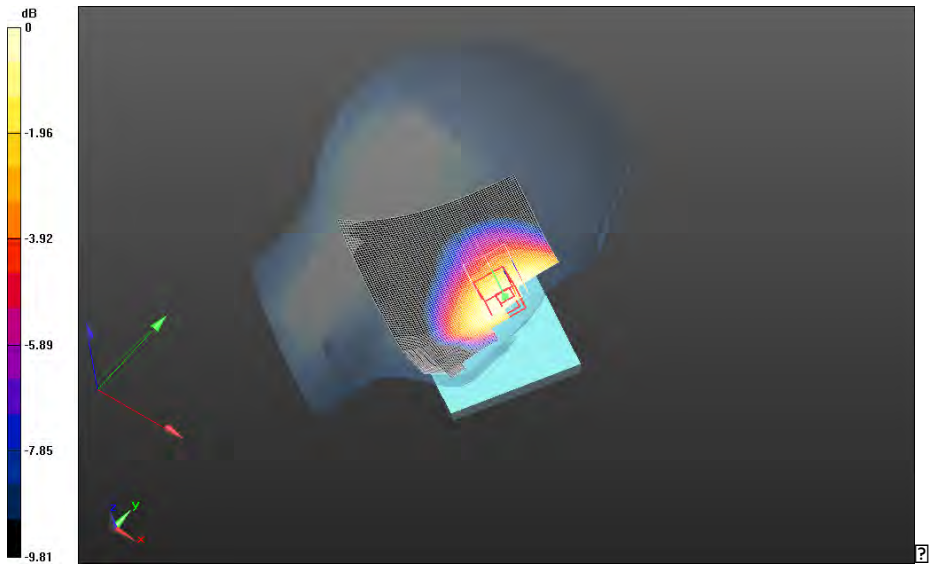
**Slot\_chan190\_amb\_temp\_23.7C\_liq\_temp\_21.2C/Zoom Scan (21x21x36)/Cube 0:** Interpolated

grid:  $dx=1.500$  mm,  $dy=1.500$  mm,  $dz=1.000$  mm

Reference Value = 6.286 V/m; **Power Drift = -0.090 dB**

**Averaged SAR: SAR(1g) = 0.216 W/kg; SAR(10g) = 0.165 W/kg**

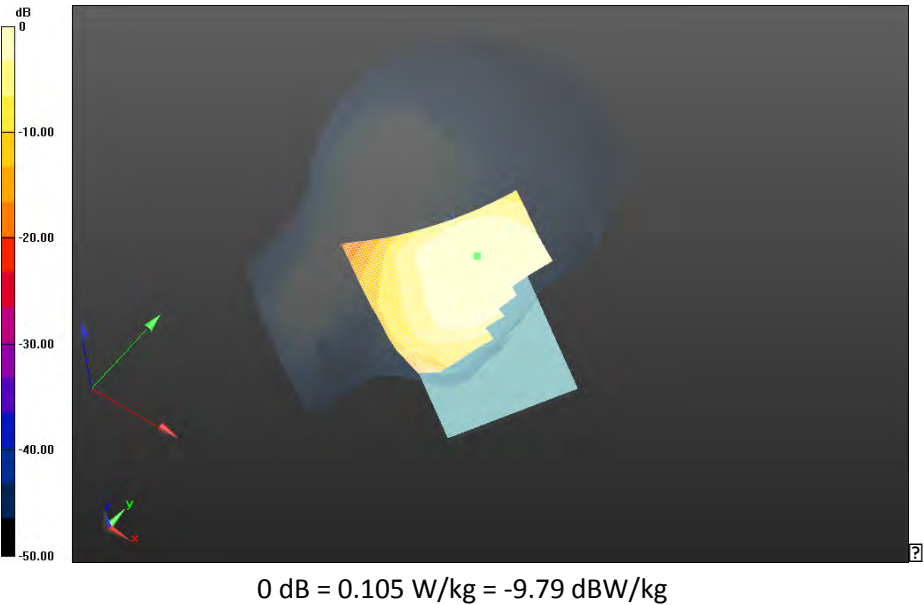
Maximum value of SAR (interpolated) = 0.258 W/kg



0 dB = 0.220 W/kg = -6.58 dBW/kg

**Left-Hand-Side HSL - DTM\_GSM 850/Tilt Position - GSM 850\_1-  
Slot\_chan190\_amb\_temp\_23.8C\_liq\_temp\_21.2C/Area Scan (121x171x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 9.538 V/m; **Power Drift = -0.00761 dB**

**Fast SAR: SAR(1g) = 0.101 W/kg; SAR(10g) = 0.0708 W/kg**  
Maximum value of SAR (interpolated) = 0.105 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

Date: 4/20/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160686730**

### **Configuration: Mobile Hot Spot MSL - GPRS 850**

Communication System: GPRS 850 (4 slots) (0); Communication System Band: GPRS (4 slots);

Frequency: 824.2 MHz

Medium Parameters used:  $f=825$  MHz;  $\sigma = 0.957$  S/m;  $\epsilon_r = 53.644$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6,6,6); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

### **Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850\_4-**

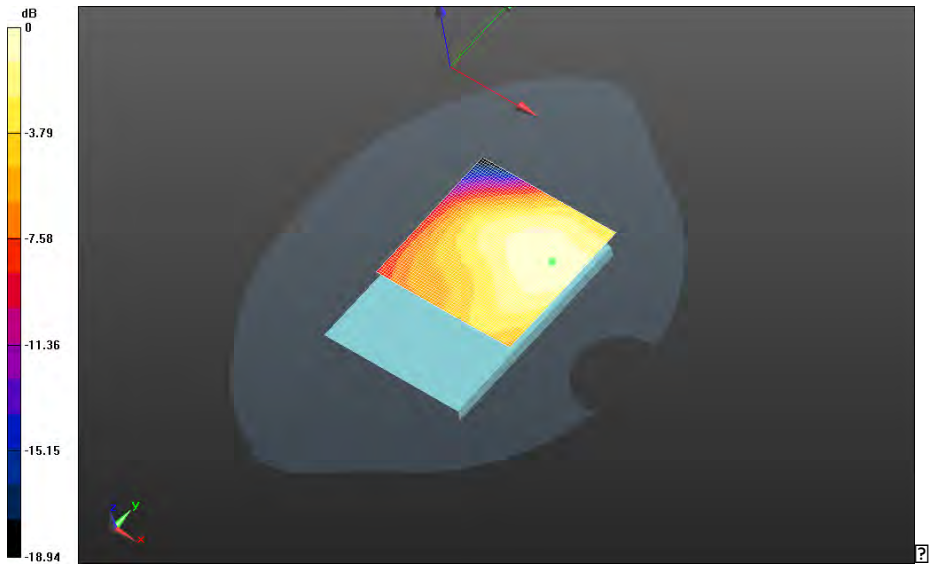
**Slot\_chan128\_amb\_temp\_23.8C\_liq\_temp\_21.4C/Area Scan (61x61x1):** Interpolated grid:

$dx=1.500$  mm,  $dy=1.500$  mm

Reference Value = 18.959 V/m; **Power Drift = -0.031 dB**

**Fast SAR: SAR(1g) = 0.771 W/kg; SAR(10g) = 0.531 W/kg**

Maximum value of SAR (interpolated) = 0.821 W/kg



0 dB = 0.821 W/kg = -0.86 dBW/kg



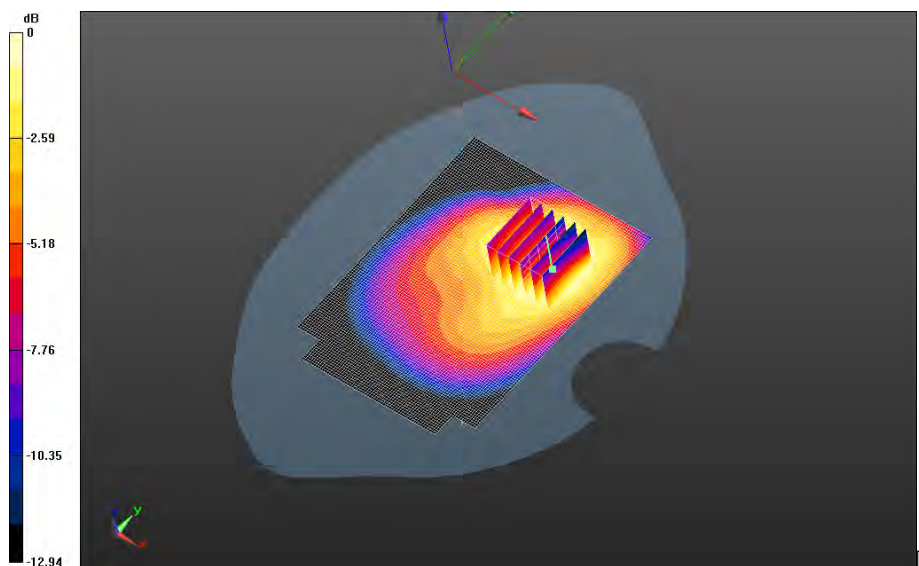
|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850\_4-Slot\_chan190\_amb\_temp\_23.8C\_liq\_temp\_21.4C/Area Scan (121x171x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 19.271 V/m; **Power Drift = -0.160 dB**

**Fast SAR: SAR(1g) = 0.773 W/kg; SAR(10g) = 0.528 W/kg**  
Maximum value of SAR (interpolated) = 0.830 W/kg

**Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850\_4-Slot\_chan190\_amb\_temp\_23.8C\_liq\_temp\_21.4C/Zoom Scan (26x26x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm  
Reference Value = 19.271 V/m; **Power Drift = -0.160 dB**

**Averaged SAR: SAR(1g) = 0.777 W/kg; SAR(10g) = 0.534 W/kg**  
Maximum value of SAR (interpolated) = 1.11 W/kg



0 dB = 0.834 W/kg = -0.79 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850\_4-**

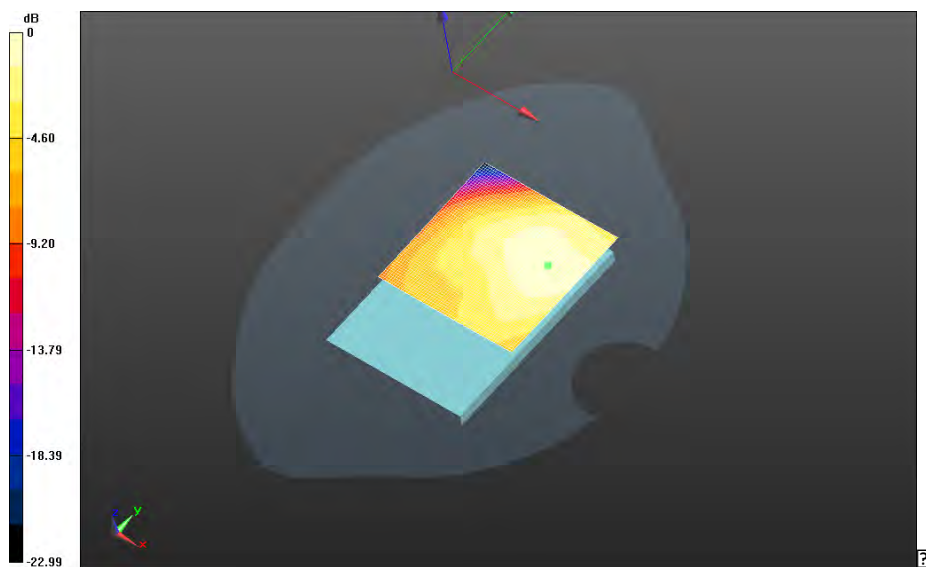
**Slot\_chan251\_amb\_temp\_23.9C\_liq\_temp\_21.5C/Area Scan (61x61x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 17.842 V/m; **Power Drift = -0.038 dB**

**Fast SAR: SAR(1g) = 0.706 W/kg; SAR(10g) = 0.484 W/kg**

Maximum value of SAR (interpolated) = 0.758 W/kg

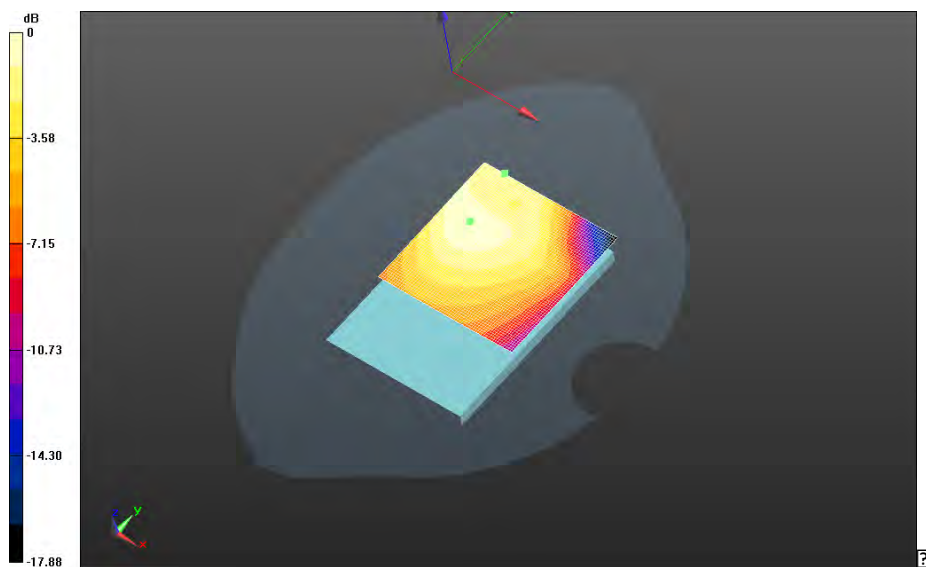


0 dB = 0.758 W/kg = -1.20 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - GPRS 850/10mm Device Front - GPRS 850\_4-**  
**Slot\_chan128\_amb\_temp\_23.8C\_liq\_temp\_21.4C/Area Scan (61x61x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 18.239 V/m; **Power Drift = -0.076 dB**

**Fast SAR: SAR(1g) = 0.624 W/kg; SAR(10g) = 0.423 W/kg**  
Maximum value of SAR (interpolated) = 0.678 W/kg



0 dB = 0.678 W/kg = -1.69 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - GPRS 850/10mm Device Front - GPRS 850\_4-**  
**Slot\_chan190\_amb\_temp\_23.5C\_liq\_temp\_21.5C/Area Scan (121x171x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 19.257 V/m; **Power Drift = -0.098 dB**

**Fast SAR: SAR(1g) = 0.666 W/kg; SAR(10g) = 0.452 W/kg**  
Maximum value of SAR (interpolated) = 0.724 W/kg

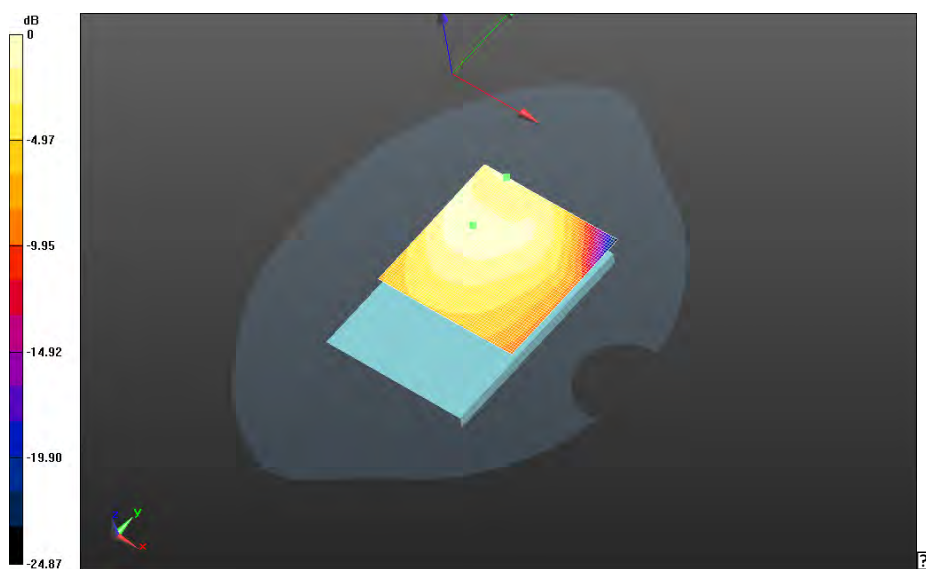


0 dB = 0.724 W/kg = -1.40 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
|-----------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------|
|  |                                               | Document<br><b>Appendix B for the BlackBerry® Smartphone Model RHR191LW</b><br><b>(SQW100-4) SAR Report Part 1/3</b> |                               | Page<br><b>85(115)</b>      |
| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - GPRS 850/10mm Device Front - GPRS 850\_4-**  
**Slot\_chan251\_amb\_temp\_23.9C\_liq\_temp\_21.5C/Area Scan (61x61x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 18.357 V/m; **Power Drift = -0.120 dB**

**Fast SAR: SAR(1g) = 0.638 W/kg; SAR(10g) = 0.430 W/kg**  
Maximum value of SAR (interpolated) = 0.701 W/kg

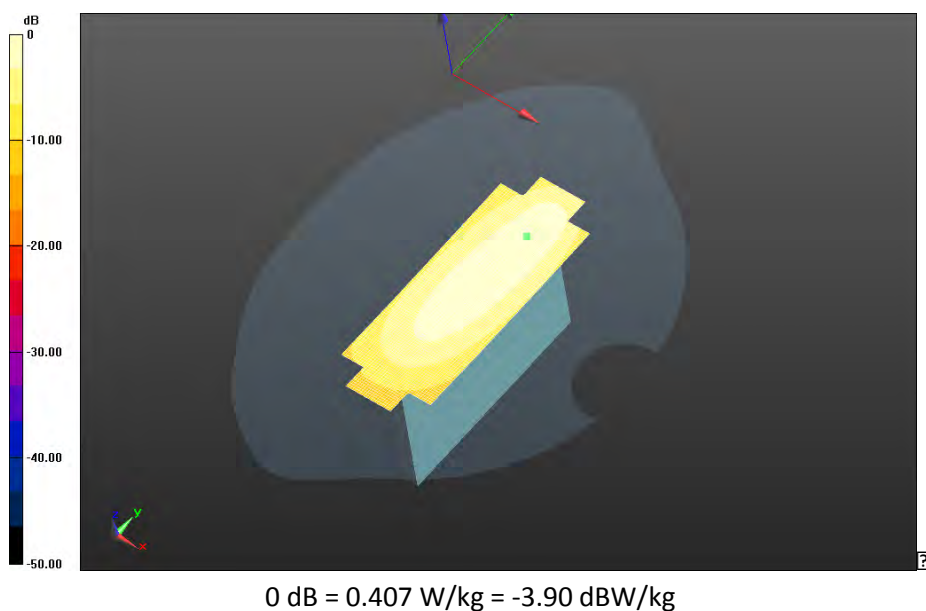


0 dB = 0.701 W/kg = -1.54 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - GPRS 850/10mm Device Right - GPRS 850\_4-**  
**Slot\_chan190\_amb\_temp\_23.9C\_liq\_temp\_21.5C/Area Scan (121x171x1): Interpolated grid:**  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 19.600 V/m; **Power Drift = -0.076 dB**

**Fast SAR: SAR(1g) = 0.370 W/kg; SAR(10g) = 0.240 W/kg**  
Maximum value of SAR (interpolated) = 0.407 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - GPRS 850/10mm Device Bottom - GPRS 850\_4-**

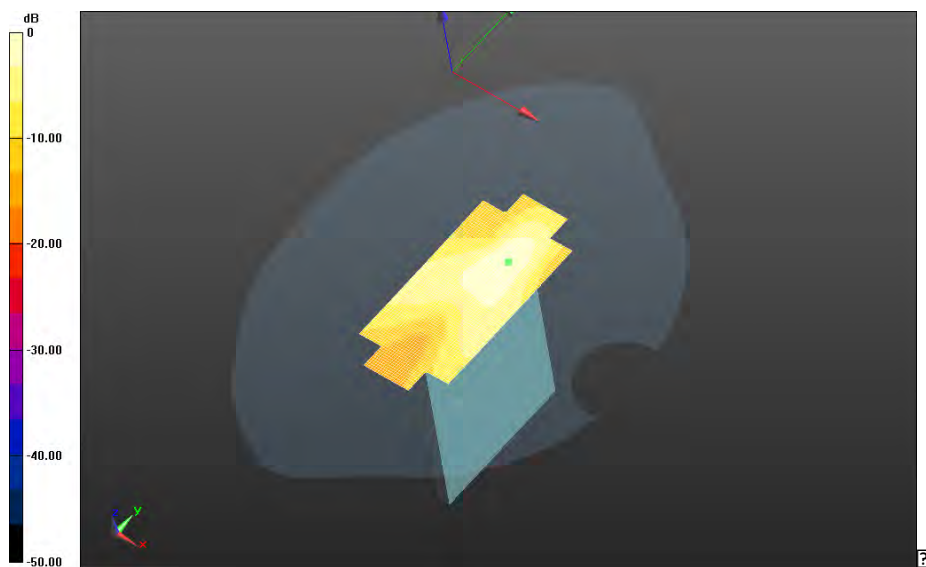
**Slot\_chan190\_amb\_temp\_23.5C\_liq\_temp\_21.4C/Area Scan (121x171x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 14.206 V/m; **Power Drift = 0.046 dB**

**Fast SAR: SAR(1g) = 0.293 W/kg; SAR(10g) = 0.175 W/kg**

Maximum value of SAR (interpolated) = 0.344 W/kg



0 dB = 0.344 W/kg = -4.63 dBW/kg

|                                                                                   |                                               |                                                                                                            |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                  | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

Date: 4/20/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160686730**

### **Configuration: Body Worn MSL - GPRS 850**

Communication System: GPRS 850 (4 slots) (0); Communication System Band: GPRS (4 slots);

Frequency: 824.2 MHz

Medium Parameters used:  $f=825$  MHz;  $\sigma = 0.957$  S/m;  $\epsilon_r = 53.644$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6,6,6); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

### **Body Worn MSL - GPRS 850/15mm Device Back - GPRS 850\_4-**

**Slot\_chan128\_amb\_temp\_23.8C\_liq\_temp\_21.5C/Area Scan (61x61x1):** Interpolated grid:

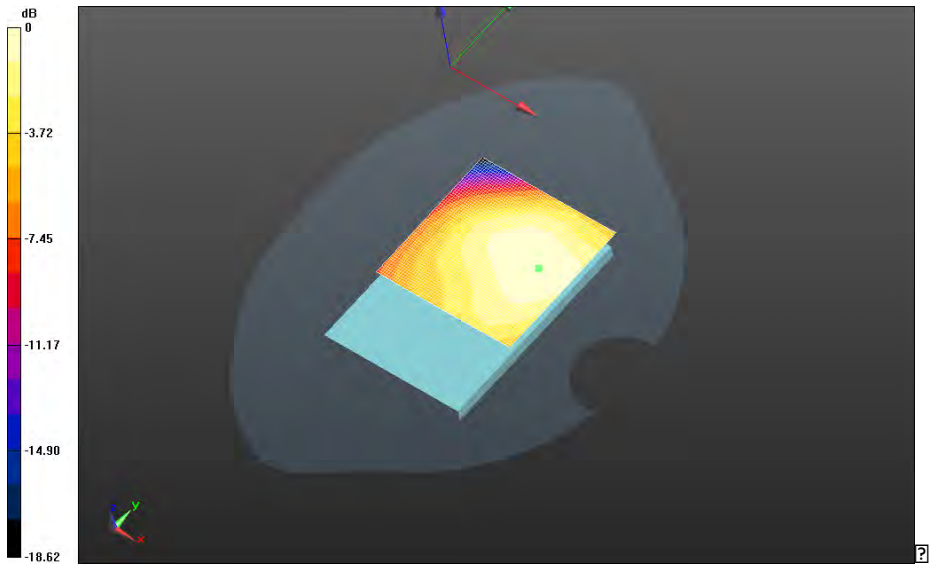
dx=1.500 mm, dy=1.500 mm

Reference Value = 18.935 V/m; **Power Drift = 0.000695 dB**

**Fast SAR: SAR(1g) = 0.543 W/kg; SAR(10g) = 0.380 W/kg**

Maximum value of SAR (interpolated) = 0.575 W/kg





0 dB = 0.575 W/kg = -2.40 dBW/kg

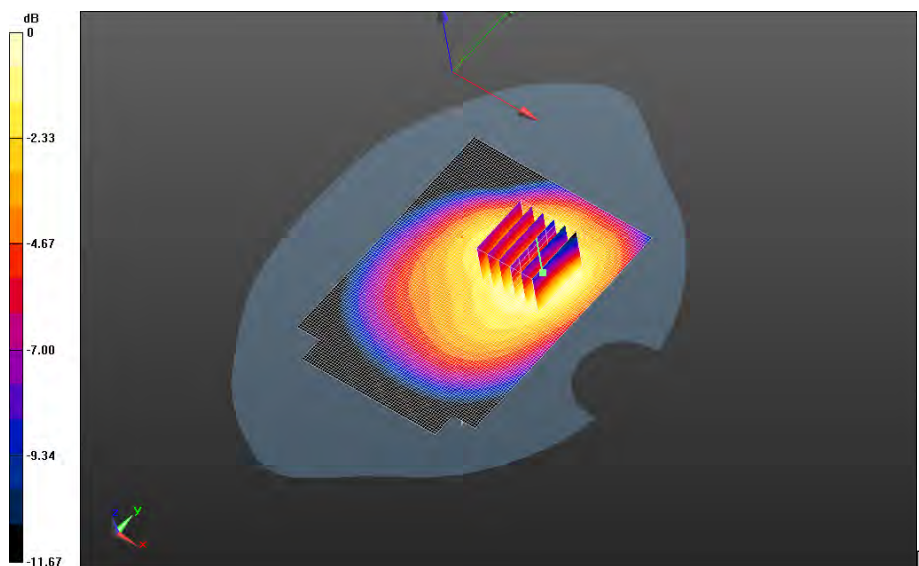
|                                                                                   |                                               |                                                                                                                      |                               |                             |
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|  |                                               | Document<br><b>Appendix B for the BlackBerry® Smartphone Model RHR191LW</b><br><b>(SQW100-4) SAR Report Part 1/3</b> |                               | Page<br><b>90(115)</b>      |
| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - GPRS 850/15mm Device Back - GPRS 850\_4-Slot\_chan190\_amb\_temp\_23.6C\_liq\_temp\_21.5C/Area Scan (121x171x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 19.290 V/m; **Power Drift = -0.039 dB**

**Fast SAR: SAR(1g) = 0.544 W/kg; SAR(10g) = 0.378 W/kg**  
Maximum value of SAR (interpolated) = 0.579 W/kg

**Body Worn MSL - GPRS 850/15mm Device Back - GPRS 850\_4-Slot\_chan190\_amb\_temp\_23.6C\_liq\_temp\_21.5C/Zoom Scan (26x26x36)/Cube 0:** Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm  
Reference Value = 19.290 V/m; **Power Drift = -0.039 dB**

**Averaged SAR: SAR(1g) = 0.544 W/kg; SAR(10g) = 0.395 W/kg**  
Maximum value of SAR (interpolated) = 0.714 W/kg

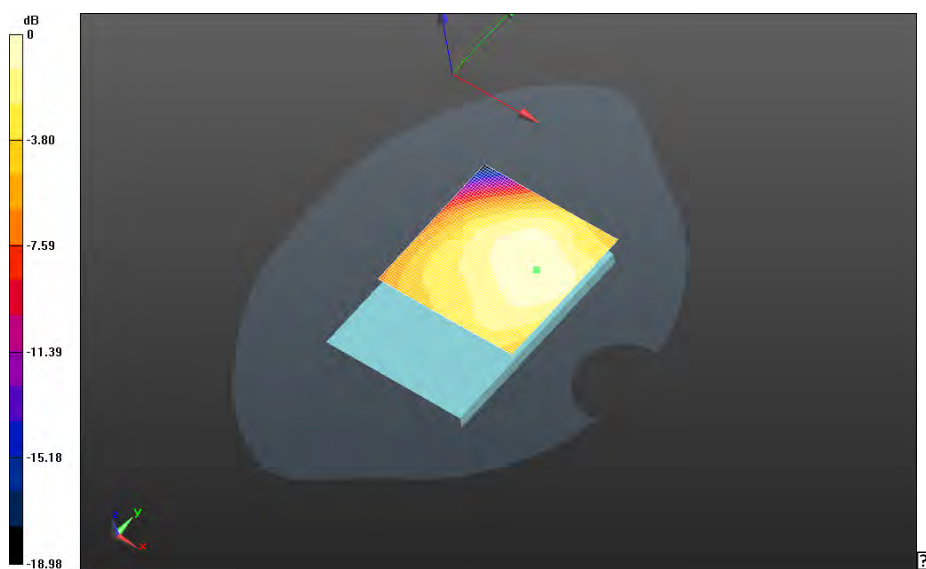


0 dB = 0.576 W/kg = -2.40 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - GPRS 850/15mm Device Back - GPRS 850\_4-**  
**Slot\_chan251\_amb\_temp\_23.8C\_liq\_temp\_21.5C/Area Scan (61x61x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 17.976 V/m; **Power Drift = 0.00292 dB**

**Fast SAR: SAR(1g) = 0.486 W/kg; SAR(10g) = 0.339 W/kg**  
Maximum value of SAR (interpolated) = 0.517 W/kg

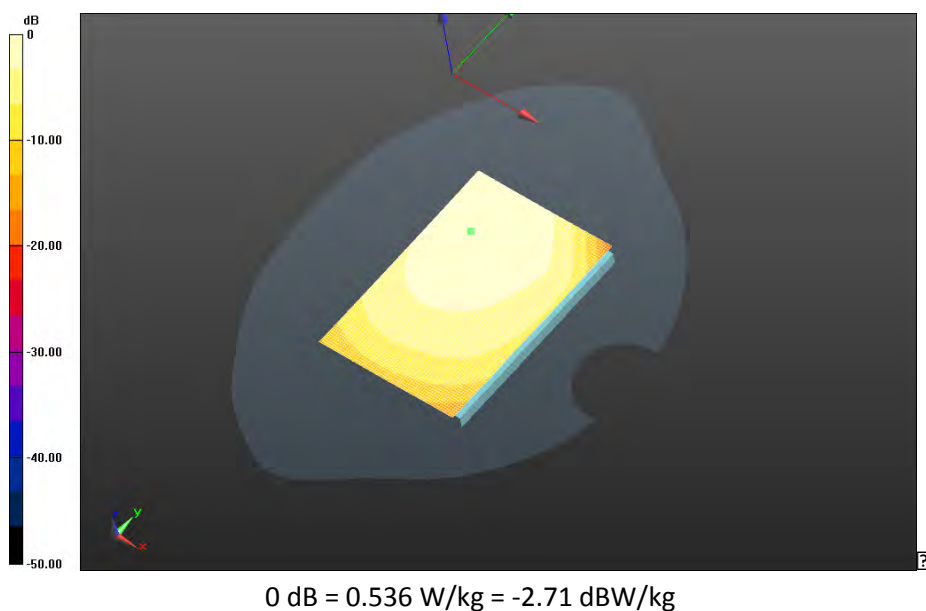


0 dB = 0.517 W/kg = -2.87 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - GPRS 850/15mm Device Front - GPRS 850\_4-**  
**Slot\_chan190\_amb\_temp\_23.8C\_liq\_temp\_21.5C/Area Scan (121x171x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 18.860 V/m; **Power Drift = -0.037 dB**

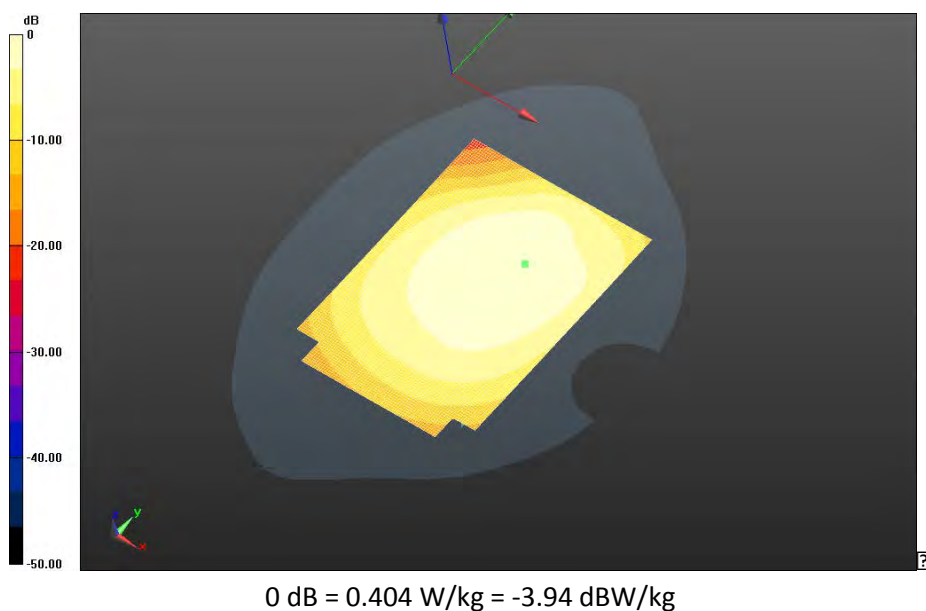
**Fast SAR: SAR(1g) = 0.497 W/kg; SAR(10g) = 0.344 W/kg**  
Maximum value of SAR (interpolated) = 0.536 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - GPRS 850/Holster Device Back - GPRS 850\_4-**  
**Slot\_chan190\_amb\_temp\_23.6C\_liq\_temp\_21.4C/Area Scan (121x171x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 18.471 V/m; **Power Drift = 0.106 dB**

**Fast SAR: SAR(1g) = 0.378 W/kg; SAR(10g) = 0.263 W/kg**  
Maximum value of SAR (interpolated) = 0.404 W/kg



|                                                                                   |                                               |                                                                                                                |                               |                             |                        |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                      | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |                        |

## UMTS Band V

Date: 4/20/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160701958**

### Configuration: Right-Hand-Side HSL - UMTS V

Communication System: WCDMA FDD V (0); Communication System Band: UMTS band V;

Frequency: 826.4 MHz

Medium Parameters used:  $f=826.4$  MHz;  $\sigma = 0.876$  S/m;  $\epsilon_r = 41.679$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Right Section

### DASY Configuration:

- Probe: ET3DV6 - SN1643; ConvF: (6.09,6.09,6.09); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

### Right-Hand-Side HSL - UMTS V/Touch Position -UMTS

**V\_chan4132\_amb\_temp\_23.6C\_liq\_temp\_21.5C/Area Scan (121x61x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 7.807 V/m; **Power Drift = -0.160 dB**

**Fast SAR: SAR(1g) = 0.499 W/kg; SAR(10g) = 0.323 W/kg**

Maximum value of SAR (interpolated) = 0.528 W/kg

### Right-Hand-Side HSL - UMTS V/Touch Position -UMTS

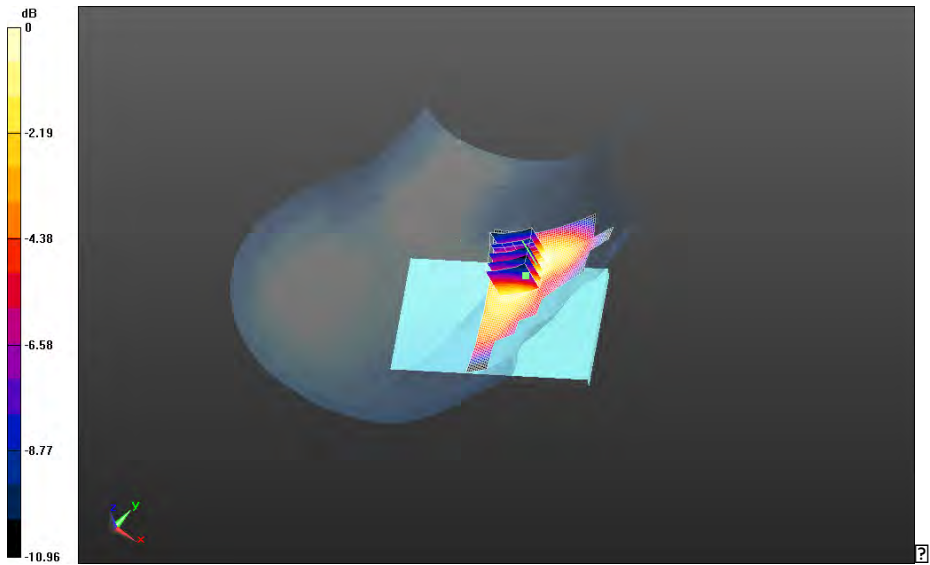
**V\_chan4132\_amb\_temp\_23.6C\_liq\_temp\_21.5C/Zoom Scan (21x21x36)/Cube 0:** Interpolated

grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 7.807 V/m; **Power Drift = -0.160 dB**

**Averaged SAR: SAR(1g) = 0.472 W/kg; SAR(10g) = 0.316 W/kg**

Maximum value of SAR (interpolated) = 0.644 W/kg

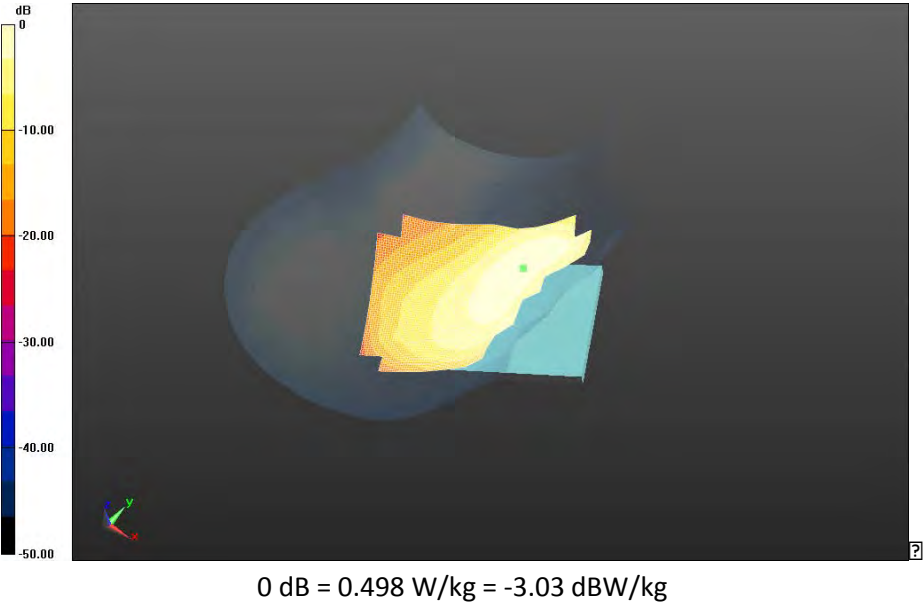


0 dB = 0.496 W/kg = -3.05 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - UMTS V/Touch Position -UMTS**  
**V\_chan4182\_amb\_temp\_23.7C\_liq\_temp\_21.5C/Area Scan (121x171x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 7.784 V/m; **Power Drift = -0.00186 dB**

**Fast SAR: SAR(1g) = 0.464 W/kg; SAR(10g) = 0.303 W/kg**  
Maximum value of SAR (interpolated) = 0.498 W/kg





|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - UMTS V/Touch Position -UMTS**

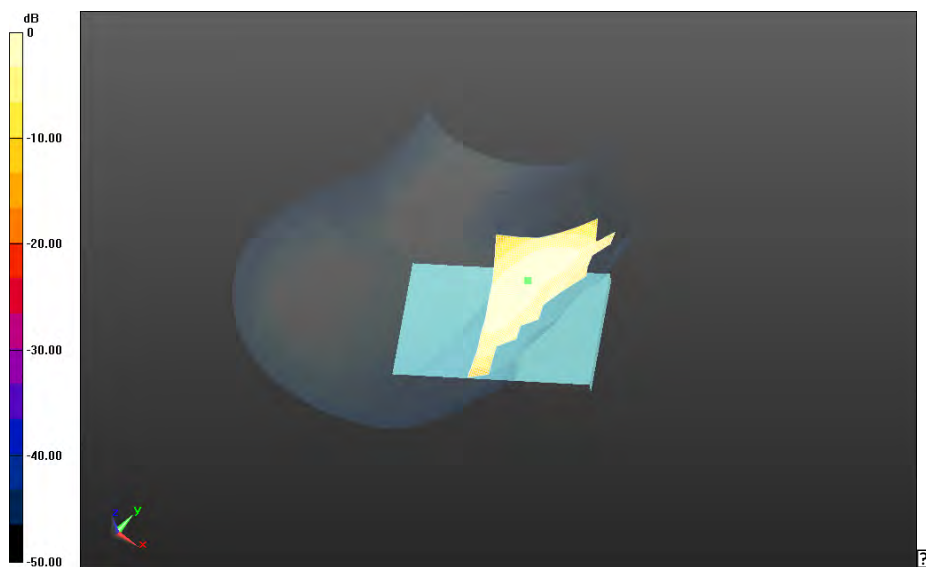
**V\_chan4233\_amb\_temp\_23.6C\_liq\_temp\_21.4C/Area Scan (121x61x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 7.273 V/m; **Power Drift = 0.00604 dB**

**Fast SAR: SAR(1g) = 0.422 W/kg; SAR(10g) = 0.273 W/kg**

Maximum value of SAR (interpolated) = 0.449 W/kg

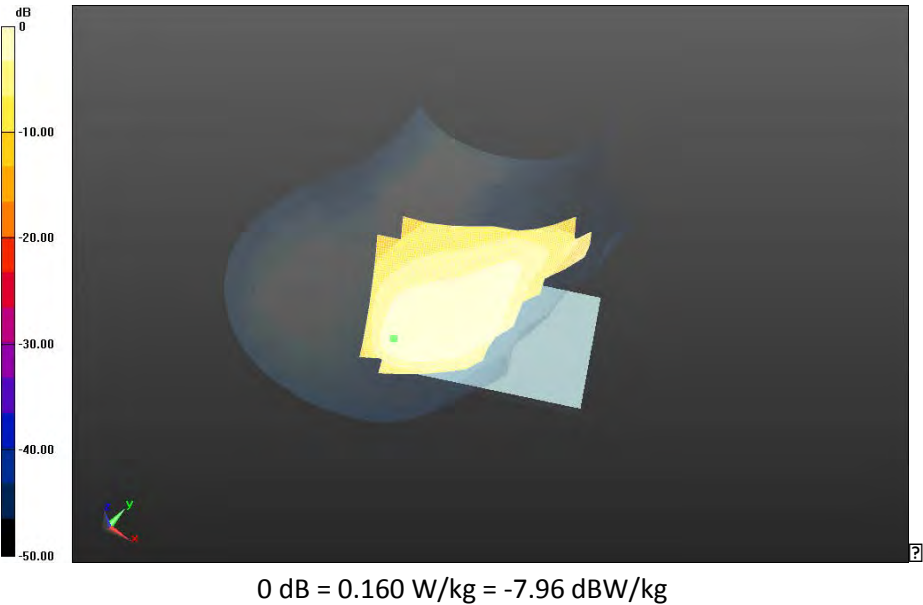


0 dB = 0.449 W/kg = -3.48 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Right-Hand-Side HSL - UMTS V/Tilt Position -UMTS**  
**V\_chan4182\_amb\_temp\_23.6C\_liq\_temp\_21.5C/Area Scan (121x171x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm  
Reference Value = 11.426 V/m; **Power Drift = -0.036 dB**

**Fast SAR: SAR(1g) = 0.140 W/kg; SAR(10g) = 0.0969 W/kg**  
Maximum value of SAR (interpolated) = 0.160 W/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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Date: 4/20/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160701958**

### **Configuration: Left-Hand-Side HSL - UMTS V**

Communication System: WCDMA FDD V (0); Communication System Band: UMTS band V;

Frequency: 836.4 MHz

Medium Parameters used:  $f=836.4$  MHz;  $\sigma = 0.887$  S/m;  $\epsilon_r = 41.584$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Left Section

### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6.09,6.09,6.09); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

### **Left-Hand-Side HSL - UMTS V/Touch Position - UMTS**

**V\_chan4182\_amb\_temp\_24.0C\_liq\_temp\_21.6C/Area Scan (121x171x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 7.003 V/m; **Power Drift = -0.109 dB**

**Fast SAR: SAR(1g) = 0.228 W/kg; SAR(10g) = 0.157 W/kg**

Maximum value of SAR (interpolated) = 0.241 W/kg

### **Left-Hand-Side HSL - UMTS V/Touch Position - UMTS**

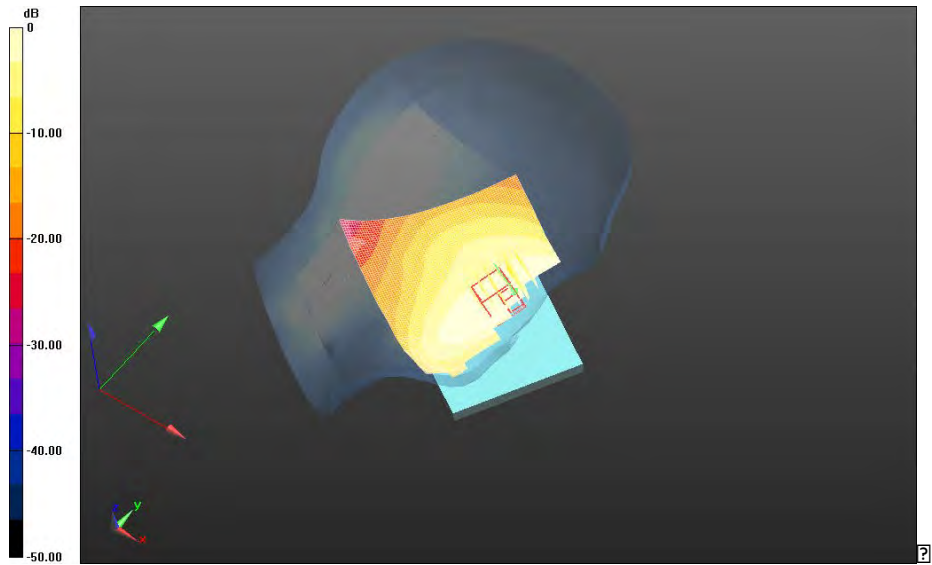
**V\_chan4182\_amb\_temp\_24.0C\_liq\_temp\_21.6C/Zoom Scan (26x26x36)/Cube 0:** Interpolated

grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 7.003 V/m; **Power Drift = -0.109 dB**

**Averaged SAR: SAR(1g) = 0.236 W/kg; SAR(10g) = 0.180 W/kg**

Maximum value of SAR (interpolated) = 0.281 W/kg



0 dB = 0.242 W/kg = -6.16 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Left-Hand-Side HSL - UMTS V/Tilt Position - UMTS**

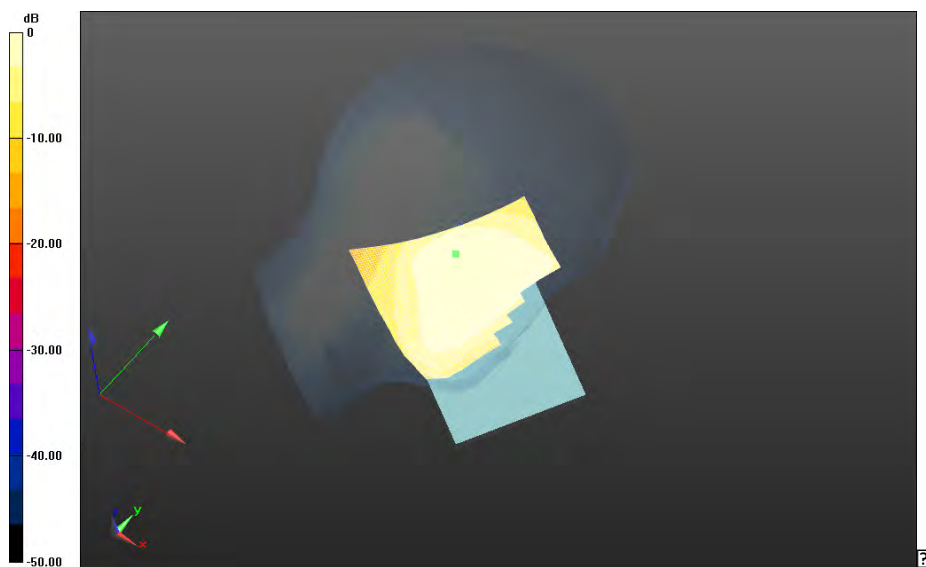
**V\_chan4182\_amb\_temp\_23.7C\_liq\_temp\_21.5C/Area Scan (121x171x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 10.648 V/m; **Power Drift = 0.101 dB**

**Fast SAR: SAR(1g) = 0.102 W/kg; SAR(10g) = 0.0709 W/kg**

Maximum value of SAR (interpolated) = 0.113 W/kg



0 dB = 0.113 W/kg = -9.47 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

Date: 4/21/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160701958**

### **Configuration: Mobile Hot Spot MSL - UMTS V**

Communication System: WCDMA FDD V (0); Communication System Band: UMTS band V;

Frequency: 826.4 MHz

Medium Parameters used:  $f=826.4$  MHz;  $\sigma = 0.959$  S/m;  $\epsilon_r = 53.635$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6,6,6); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

#### **Mobile Hot Spot MSL - UMTS V/10mm Device Back - UMTS**

**V\_chan4132\_amb\_temp\_23.7C\_liq\_temp\_21.4C/Area Scan (121x171x1):** Interpolated grid:

$dx=1.500$  mm,  $dy=1.500$  mm

Reference Value = 18.360 V/m; **Power Drift = -0.108 dB**

**Fast SAR: SAR(1g) = 0.865 W/kg; SAR(10g) = 0.591 W/kg**

Maximum value of SAR (interpolated) = 0.920 W/kg

#### **Mobile Hot Spot MSL - UMTS V/10mm Device Back - UMTS**

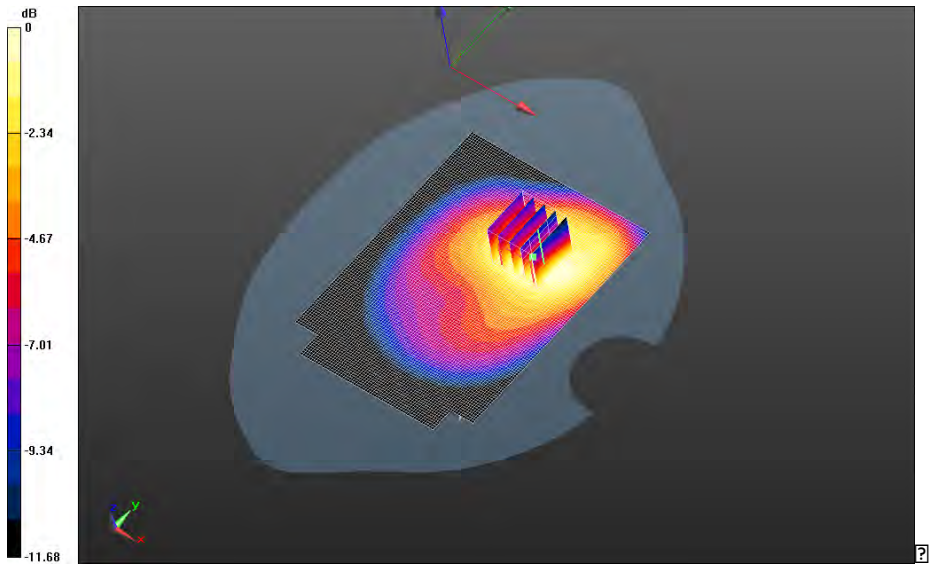
**V\_chan4132\_amb\_temp\_23.7C\_liq\_temp\_21.4C/Zoom Scan (21x21x36)/Cube 0:** Interpolated

grid:  $dx=1.500$  mm,  $dy=1.500$  mm,  $dz=1.000$  mm

Reference Value = 18.360 V/m; **Power Drift = -0.108 dB**

**Averaged SAR: SAR(1g) = 0.854 W/kg; SAR(10g) = 0.593 W/kg**

Maximum value of SAR (interpolated) = 1.20 W/kg



0 dB = 0.917 W/kg = -0.38 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - UMTS V/10mm Device Back - UMTS**

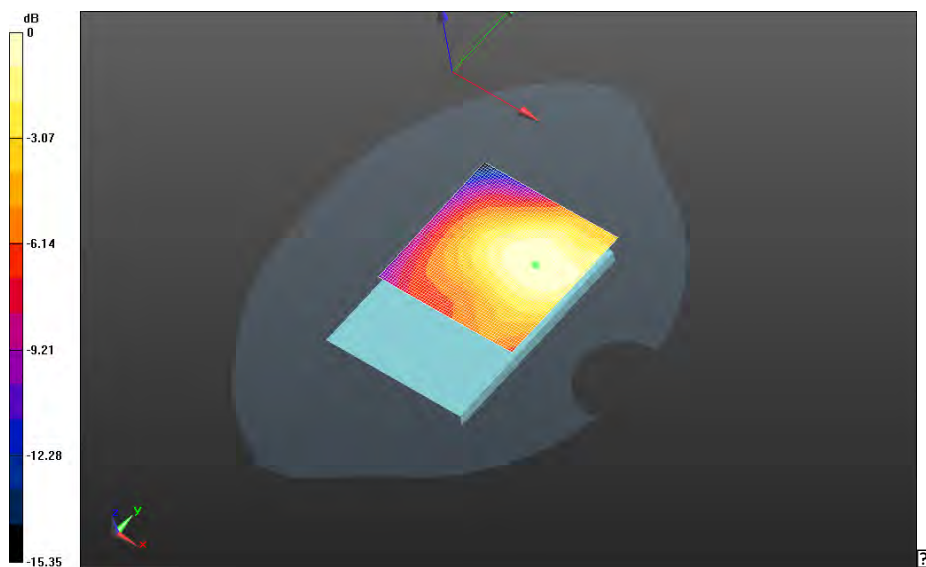
**V\_chan4182\_amb\_temp\_23.7C\_liq\_temp\_21.4C/Area Scan (61x61x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 17.850 V/m; **Power Drift = 0.028 dB**

**Fast SAR: SAR(1g) = 0.817 W/kg; SAR(10g) = 0.561 W/kg**

Maximum value of SAR (interpolated) = 0.871 W/kg



0 dB = 0.871 W/kg = -0.60 dBW/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - UMTS V/10mm Device Back - UMTS**

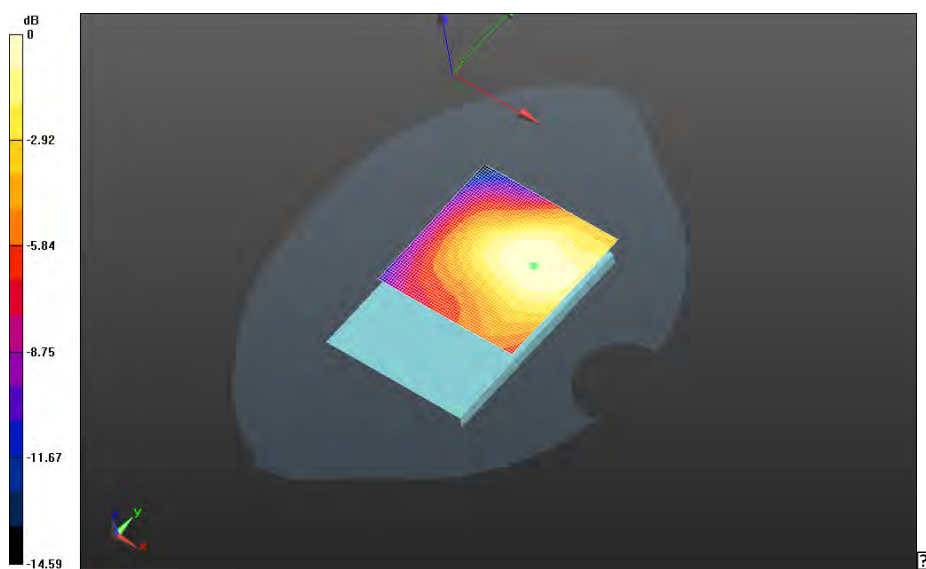
**V\_chan4233\_amb\_temp\_23.5C\_liq\_temp\_21.3C/Area Scan (61x61x1): Interpolated grid:**

dx=1.500 mm, dy=1.500 mm

Reference Value = 16.939 V/m; **Power Drift = 0.110 dB**

**Fast SAR: SAR(1g) = 0.756 W/kg; SAR(10g) = 0.521 W/kg**

Maximum value of SAR (interpolated) = 0.804 W/kg



0 dB = 0.804 W/kg = -0.95 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - UMTS V/10mm Device Front - UMTS**

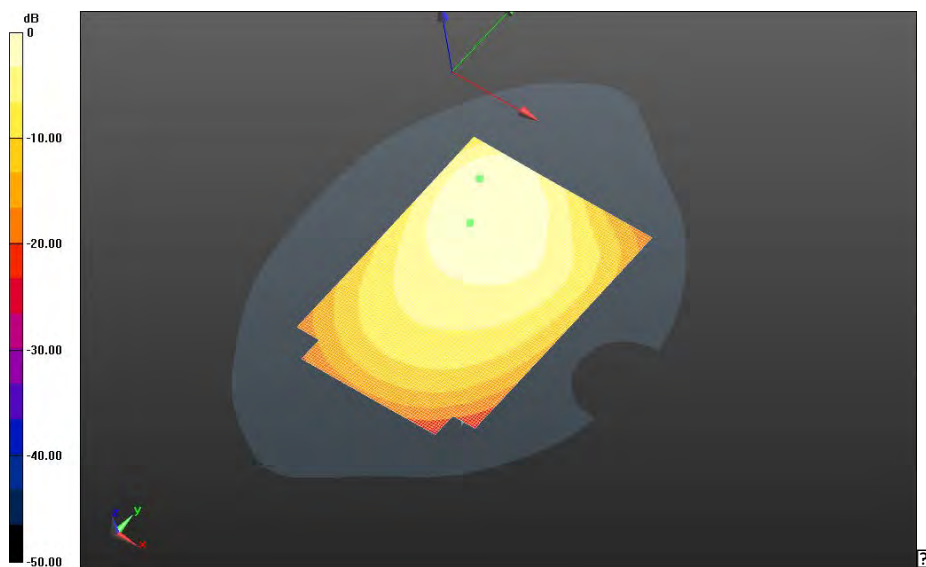
**V\_chan4182\_amb\_temp\_23.6C\_liq\_temp\_21.4C/Area Scan (121x171x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 19.094 V/m; **Power Drift = 0.018 dB**

**Fast SAR: SAR(1g) = 0.723 W/kg; SAR(10g) = 0.489 W/kg; Secondary SAR(1g) = 0.604 W/kg**

Maximum value of SAR (interpolated) = 0.783 W/kg



0 dB = 0.783 W/kg = -1.06 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - UMTS V/10mm Device Right - UMTS**

**V\_chan4182\_amb\_temp\_23.5C\_liq\_temp\_21.3C/Area Scan (121x171x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 16.527 V/m; **Power Drift = -0.155 dB**

**Fast SAR: SAR(1g) = 0.444 W/kg; SAR(10g) = 0.270 W/kg**

Maximum value of SAR (interpolated) = 0.498 W/kg



0 dB = 0.498 W/kg = -3.03 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
|-----------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------|
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - UMTS V/10mm Device Bottom - UMTS**

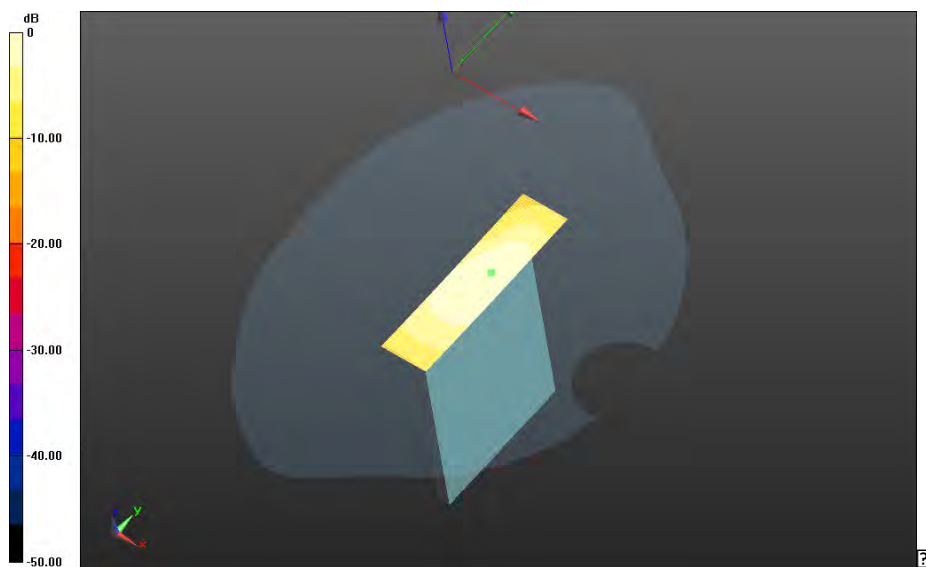
**V\_chan4182\_amb\_temp\_23.6C\_liq\_temp\_21.3C/Area Scan (121x171x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 21.162 V/m; **Power Drift = 0.019 dB**

**Fast SAR: SAR(1g) = 0.436 W/kg; SAR(10g) = 0.279 W/kg**

Maximum value of SAR (interpolated) = 0.473 W/kg



0 dB = 0.473 W/kg = -3.25 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Mobile Hot Spot MSL - UMTS V/2nd Scan 10mm Device Back - UMTS**

**V\_chan4132\_amb\_temp\_23.8C\_liq\_temp\_21.5C/Area Scan (61x61x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 19.550 V/m; **Power Drift = -0.00169 dB**

**Fast SAR: SAR(1g) = 0.897 W/kg; SAR(10g) = 0.617 W/kg; Secondary SAR(1g) = 0.604 W/kg**

Maximum value of SAR (interpolated) = 0.955 W/kg

**Mobile Hot Spot MSL - UMTS V/2nd Scan 10mm Device Back - UMTS**

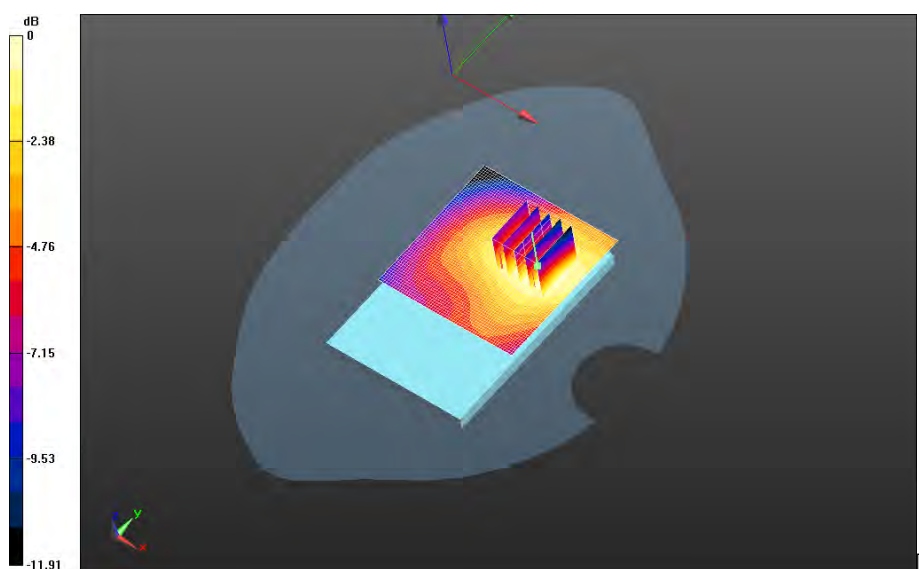
**V\_chan4132\_amb\_temp\_23.8C\_liq\_temp\_21.5C/Zoom Scan (21x21x36)/Cube 0:** Interpolated

grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 19.550 V/m; **Power Drift = -0.00169 dB**

**Averaged SAR: SAR(1g) = 0.905 W/kg; SAR(10g) = 0.630 W/kg**

Maximum value of SAR (interpolated) = 1.24 W/kg



0 dB = 0.972 W/kg = -0.12 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------|-------------------------|
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Date: 4/20/2015

Test Lab: BlackBerry RTS

**DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 1160701958**

### **Configuration: Body Worn MSL - UMTS V**

Communication System: WCDMA FDD V (0); Communication System Band: UMTS band V;

Frequency: 826.4 MHz

Medium Parameters used:  $f=826.4$  MHz;  $\sigma = 0.959$  S/m;  $\epsilon_r = 53.635$ ;  $\rho = 1.000$  g/cm<sup>3</sup>

Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ET3DV6 - SN1643; ConvF: (6,6,6); Calibrated: 3/13/2015;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.8(1222); SEMCAD X Version 14.6.10 (7331)

#### **Body Worn MSL - UMTS V/15mm Device Back - UMTS**

**V\_chan4132\_amb\_temp\_23.6C\_liq\_temp\_21.4C/Area Scan (121x171x1):** Interpolated grid:

$dx=1.500$  mm,  $dy=1.500$  mm

Reference Value = 18.530 V/m; **Power Drift = 0.016 dB**

**Fast SAR: SAR(1g) = 0.614 W/kg; SAR(10g) = 0.421 W/kg**

Maximum value of SAR (interpolated) = 0.655 W/kg

#### **Body Worn MSL - UMTS V/15mm Device Back - UMTS**

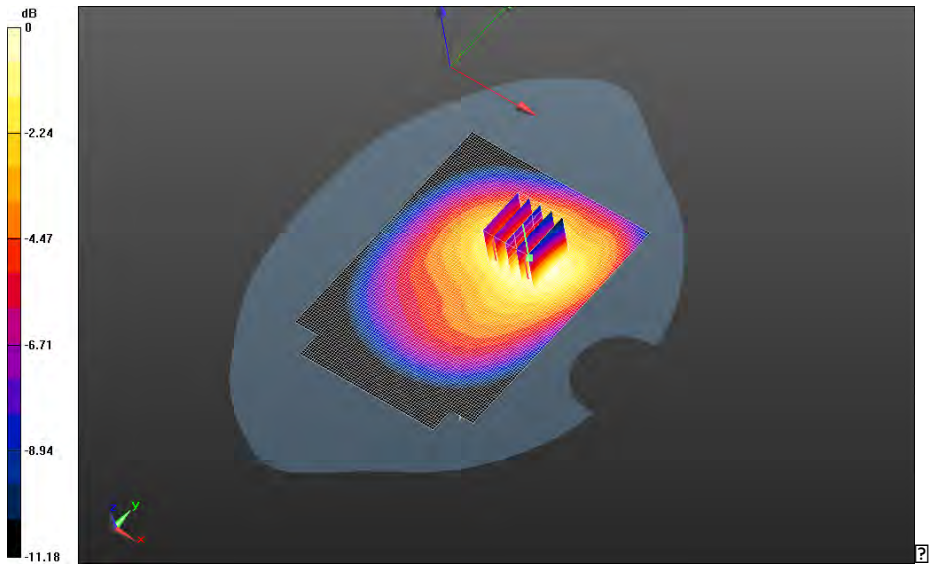
**V\_chan4132\_amb\_temp\_23.6C\_liq\_temp\_21.4C/Zoom Scan (21x21x36)/Cube 0:** Interpolated

grid:  $dx=1.500$  mm,  $dy=1.500$  mm,  $dz=1.000$  mm

Reference Value = 18.530 V/m; **Power Drift = 0.016 dB**

**Averaged SAR: SAR(1g) = 0.615 W/kg; SAR(10g) = 0.441 W/kg**

Maximum value of SAR (interpolated) = 0.801 W/kg



0 dB = 0.655 W/kg = -1.84 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
|-----------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------|
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**Body Worn MSL - UMTS V/15mm Device Back - UMTS**

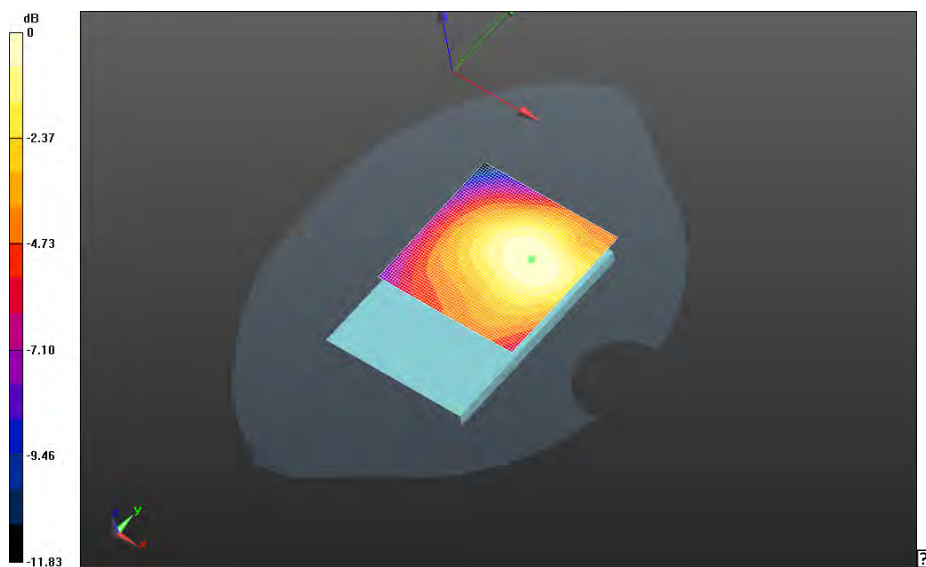
**V\_chan4182\_amb\_temp\_23.6C\_liq\_temp\_21.4C/Area Scan (61x61x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 17.674 V/m; **Power Drift = 0.017 dB**

**Fast SAR: SAR(1g) = 0.585 W/kg; SAR(10g) = 0.403 W/kg**

Maximum value of SAR (interpolated) = 0.626 W/kg



0 dB = 0.626 W/kg = -2.03 dBW/kg



|                                                                                   |                                               |                                                                                                                      |                               |                             |
|-----------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------|
|  |                                               | Document<br><b>Appendix B for the BlackBerry® Smartphone Model RHR191LW</b><br><b>(SQW100-4) SAR Report Part 1/3</b> |                               | Page<br><b>113(115)</b>     |
| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - UMTS V/15mm Device Back - UMTS**

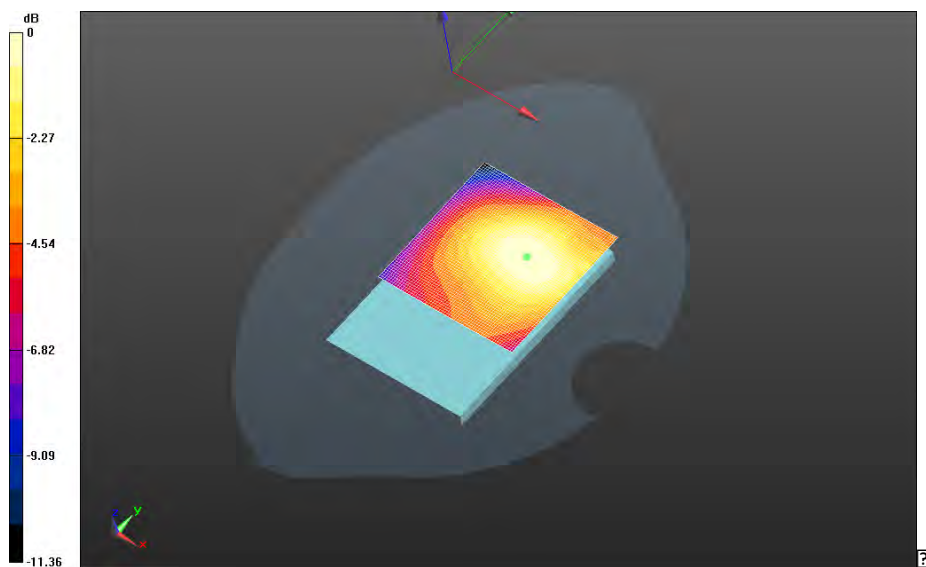
**V\_chan4233\_amb\_temp\_23.7C\_liq\_temp\_21.4C/Area Scan (61x61x1): Interpolated grid:**

dx=1.500 mm, dy=1.500 mm

Reference Value = 16.739 V/m; **Power Drift = 0.00929 dB**

**Fast SAR: SAR(1g) = 0.533 W/kg; SAR(10g) = 0.367 W/kg**

Maximum value of SAR (interpolated) = 0.569 W/kg



0 dB = 0.569 W/kg = -2.45 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
|-----------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------|
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| Author Data<br><b>Andrew Becker</b>                                               | Dates of Test<br><b>Mar 30 – May 14, 2015</b> | Test Report No<br><b>RTS-6067-1505-05</b>                                                                            | FCC ID:<br><b>L6ARHR190LW</b> | IC<br><b>2503A-RHR190LW</b> |

**Body Worn MSL - UMTS V/15mm Device Front - UMTS**

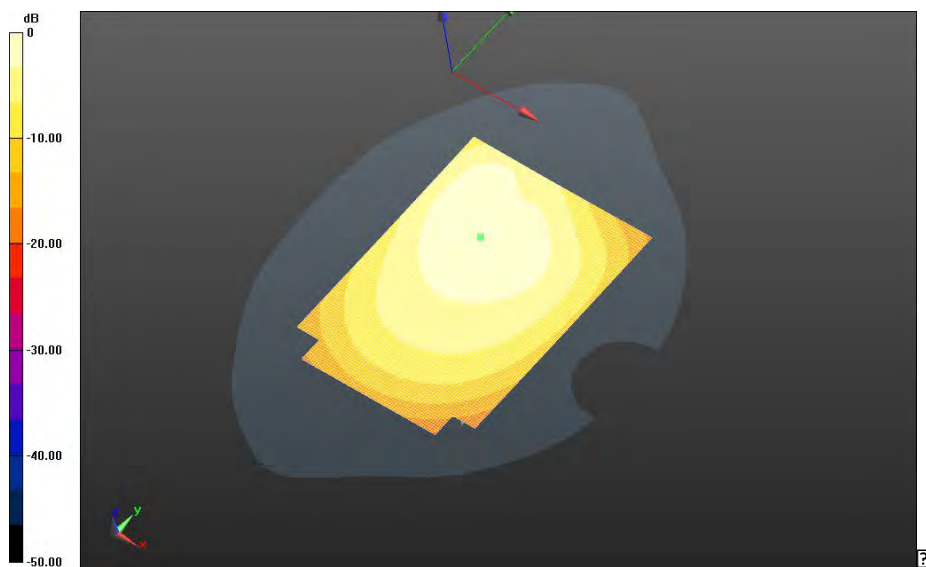
**V\_chan4182\_amb\_temp\_23.6C\_liq\_temp\_21.4C/Area Scan (121x171x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 18.304 V/m; **Power Drift = 0.041 dB**

**Fast SAR: SAR(1g) = 0.505 W/kg; SAR(10g) = 0.347 W/kg**

Maximum value of SAR (interpolated) = 0.541 W/kg



0 dB = 0.541 W/kg = -2.67 dBW/kg

|                                                                                   |                                               |                                                                                                                      |                               |                             |
|-----------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------|
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**Body Worn MSL - UMTS V/Holster Device Back - UMTS**

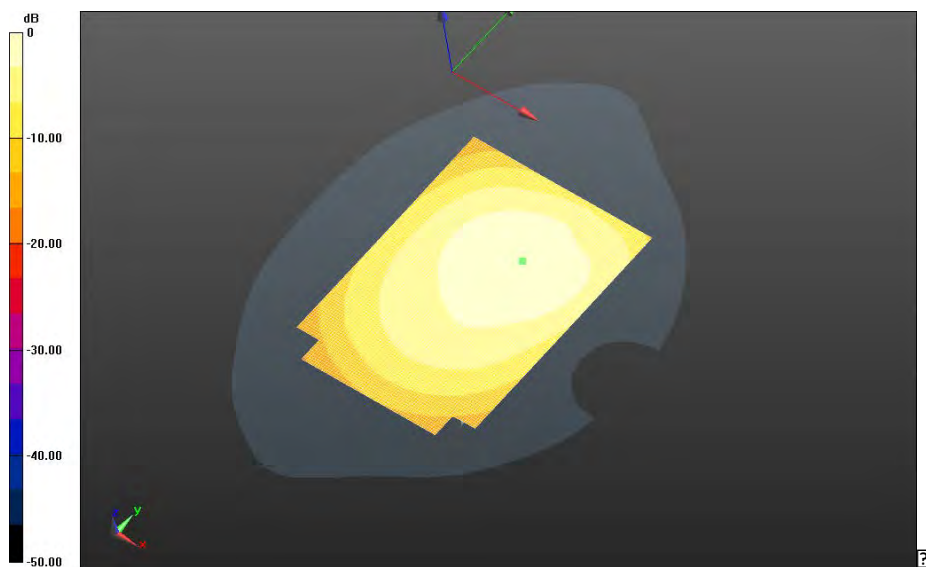
**V\_chan4182\_amb\_temp\_23.5C\_liq\_temp\_21.4C/Area Scan (121x171x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Reference Value = 16.450 V/m; **Power Drift = -0.064 dB**

**Fast SAR: SAR(1g) = 0.380 W/kg; SAR(10g) = 0.262 W/kg**

Maximum value of SAR (interpolated) = 0.405 W/kg



0 dB = 0.405 W/kg = -3.93 dBW/kg