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## APPENDIX B: SAR DISTRIBUTION PLOTS FOR HEAD CONFIGURATION

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Date/Time: 6/21/2010 5:05:21 PM

Test Laboratory: RIM Testing Services

**RightHandSide\_CDMA800\_low\_chan\_amb\_temp\_22.6\_liq\_temp\_21.7C**

**DUT: BlackBerry Smartphone; Type: Sample ; Serial: 322A2EE0**

Communication System: CDMA 800; Frequency: 824.7 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 825 \text{ MHz}$ ;  $\sigma = 0.864 \text{ mho/m}$ ;  $\epsilon_r = 41.7$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.12, 6.12, 6.12); Calibrated: 12/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Touch position - Low/Area Scan (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.16 mW/g


**Touch position - Low/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

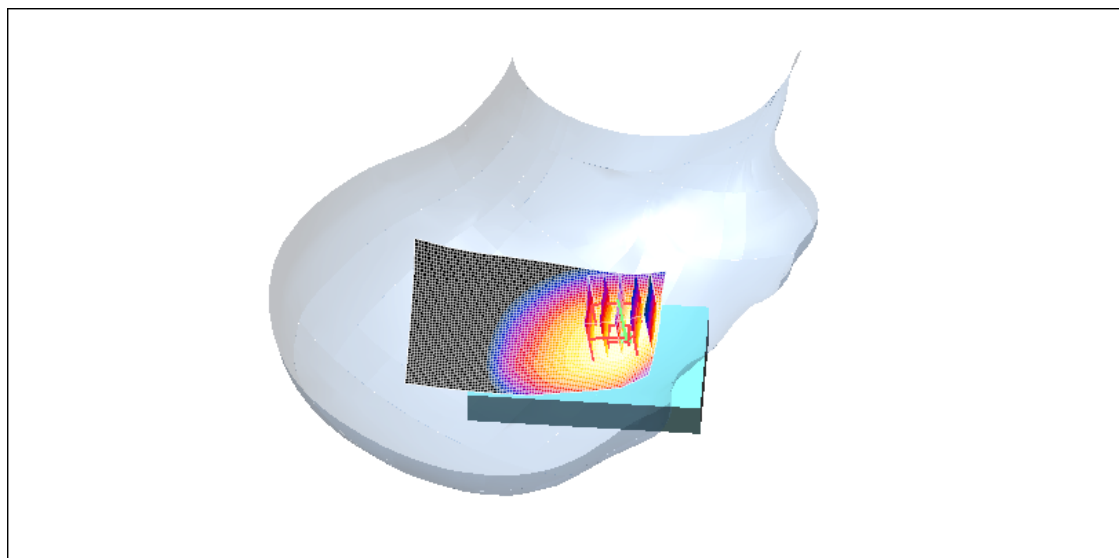
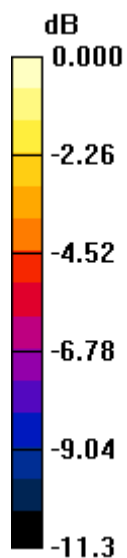
Reference Value = 12.2 V/m; Power Drift = 0.079 dB

Peak SAR (extrapolated) = 1.46 W/kg


**SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.773 mW/g**

Maximum value of SAR (measured) = 1.14 mW/g

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0 dB = 1.14mW/g

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Date/Time: 6/21/2010 4:35:08 PM

Test Laboratory: RIM Testing Services

**LeftHandSide\_CDMA800\_low\_chan\_amb\_temp\_22.9\_liq\_temp\_22.0C**

**DUT: BlackBerry Smartphone; Type: Sample ; Serial: 322A2EE0**


Communication System: CDMA 800; Frequency: 824.7 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 825 \text{ MHz}$ ;  $\sigma = 0.864 \text{ mho/m}$ ;  $\epsilon_r = 41.7$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Left Section

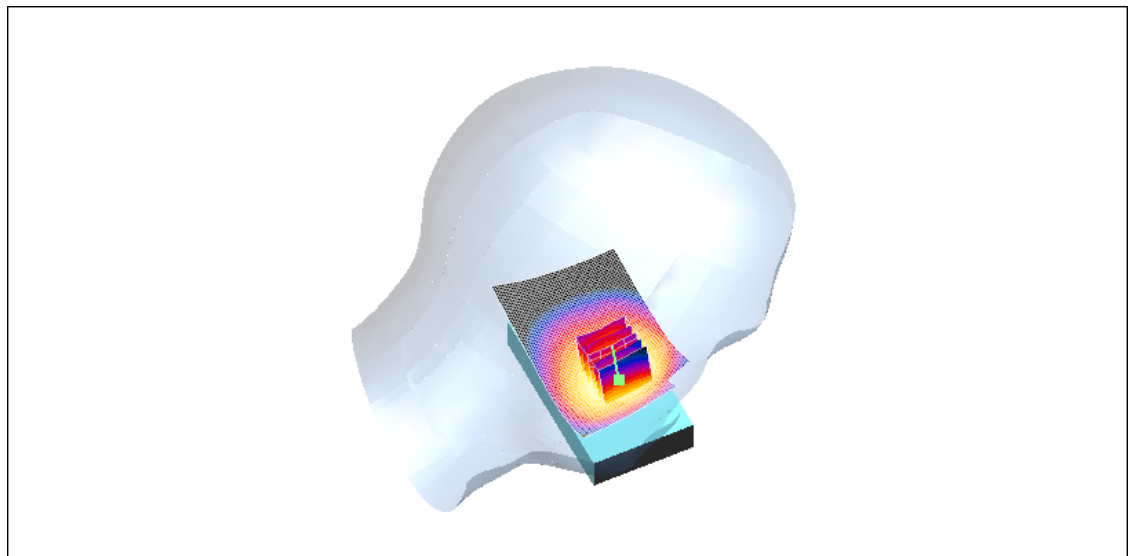
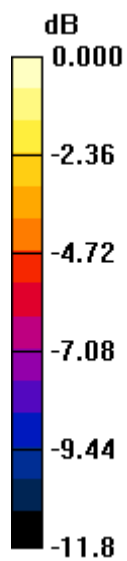
DASY4 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.12, 6.12, 6.12); Calibrated: 12/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186


**Touch position -/Area Scan (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 1.23 mW/g

**Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid:  
 $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 12.5 V/m; Power Drift = 0.150 dB  
Peak SAR (extrapolated) = 1.44 W/kg  
**SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.819 mW/g**  
Maximum value of SAR (measured) = 1.20 mW/g

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0 dB = 1.20mW/g

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Date/Time: 6/15/2010 12:40:31 PM

Test Laboratory: RIM Testing Services

**RightHandSide\_CDMA1900\_low\_chan\_amb\_temp\_22.4\_liq\_temp\_21.6  
C\_**

**DUT: BlackBerry Smartphone; Type: Sample ; Serial: 322A2EE0**

Communication System: CDMA 1900; Frequency: 1851.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1851.25 \text{ MHz}$ ;  $\sigma = 1.29 \text{ mho/m}$ ;  $\epsilon_r = 40.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.14, 5.14, 5.14); Calibrated: 12/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Touch position -/Area Scan (61x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 1.37 mW/g

**Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid:

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


Reference Value = 14.7 V/m; Power Drift = -0.340 dB

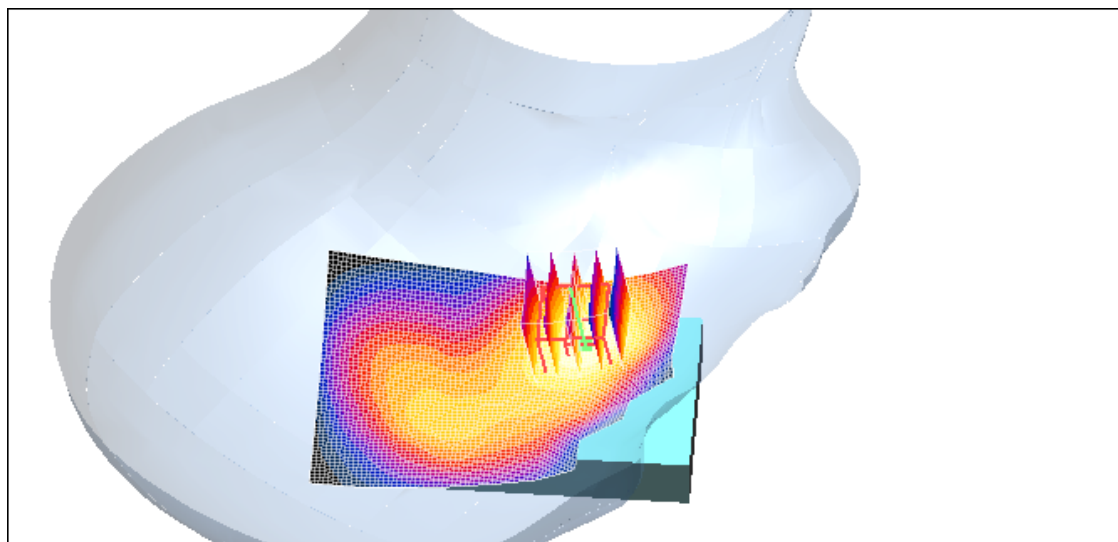
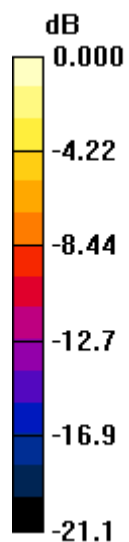
Peak SAR (extrapolated) = 1.72 W/kg

**SAR(1 g) = 1.18 mW/g; SAR(10 g) = 0.679 mW/g**


[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.32 mW/g

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0 dB = 1.32mW/g

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Date/Time: 6/10/2010 11:47:08 PM

Test Laboratory: RIM Testing Services

## LeftHandSide\_CDMA1900\_low\_chan\_amb\_temp\_23.2

**DUT: BlackBerry Smartphone; Type: Sample ; Serial: 322A2EE0**

Communication System: CDMA 1900; Frequency: 1851.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1851.25 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 40.9$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.14, 5.14, 5.14); Calibrated: 12/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Touch position -/Area Scan (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) =  $1.03 \text{ mW/g}$

**Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid:

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

Reference Value =  $14.1 \text{ V/m}$ ; Power Drift =  $-0.160 \text{ dB}$


Peak SAR (extrapolated) =  $1.43 \text{ W/kg}$

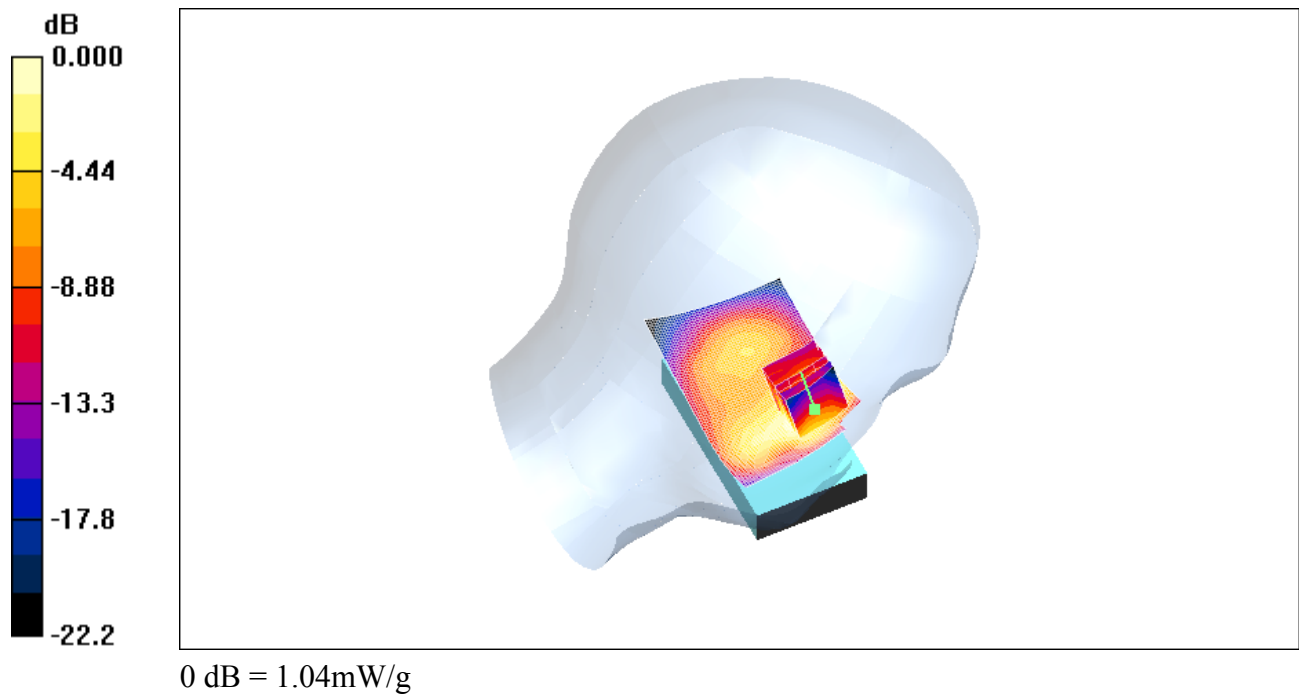
**SAR(1 g) =  $0.954 \text{ mW/g}$ ; SAR(10 g) =  $0.567 \text{ mW/g}$**


[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) =  $1.04 \text{ mW/g}$



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Date/Time: 6/17/2010 11:07:26 PM

Test Laboratory: RIM Testing Services

File Name: [RightHandSide\\_802.11b\\_low\\_chan\\_amb\\_temp\\_22.3\\_liq\\_temp\\_21.4C.da4](#)

**DUT: BlackBerry Smartphone; Type: Sample ; Serial: 322A2EE0**

**Program Name: Compliance Testing: (Right-Hand Side)**

Communication System: 802.11 b (2450); Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.76 \text{ mho/m}$ ;  $\epsilon_r = 39.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.53, 4.53, 4.53); Calibrated: 12/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Touch position -/Area Scan (61x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.376 mW/g

**Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid:


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

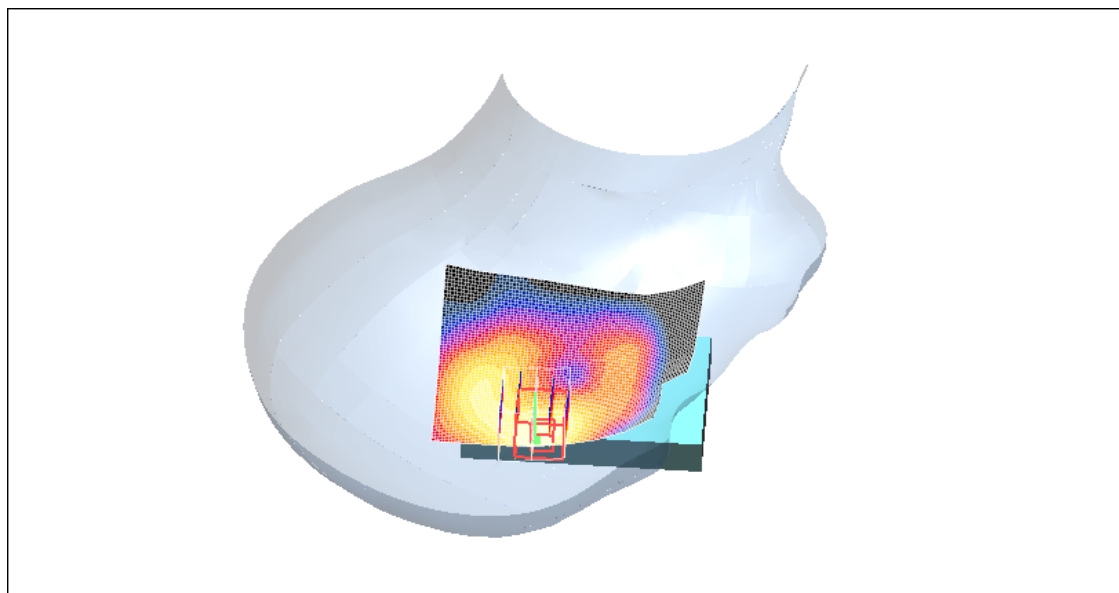
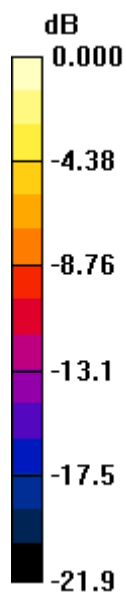
Reference Value = 10.5 V/m; Power Drift = -0.085 dB

Peak SAR (extrapolated) = 0.753 W/kg


**SAR(1 g) = 0.354 mW/g; SAR(10 g) = 0.170 mW/g**

Maximum value of SAR (measured) = 0.392 mW/g

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0 dB = 0.392mW/g

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Date/Time: 6/18/2010 11:42:52 AM

Test Laboratory: RIM Testing Services

**LeftHandSide\_Touch\_802.11b\_mid\_chan\_amb\_temp\_22.4\_liq\_temp\_21.5C**

**DUT: BlackBerry Smartphone; Type: Sample ; Serial: 322A2EE0**

Communication System: 802.11 b (2450); Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.9 \text{ mho/m}$ ;  $\epsilon_r = 40.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.53, 4.53, 4.53); Calibrated: 12/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Touch position -/Area Scan (61x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.234 mW/g

**Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid:


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

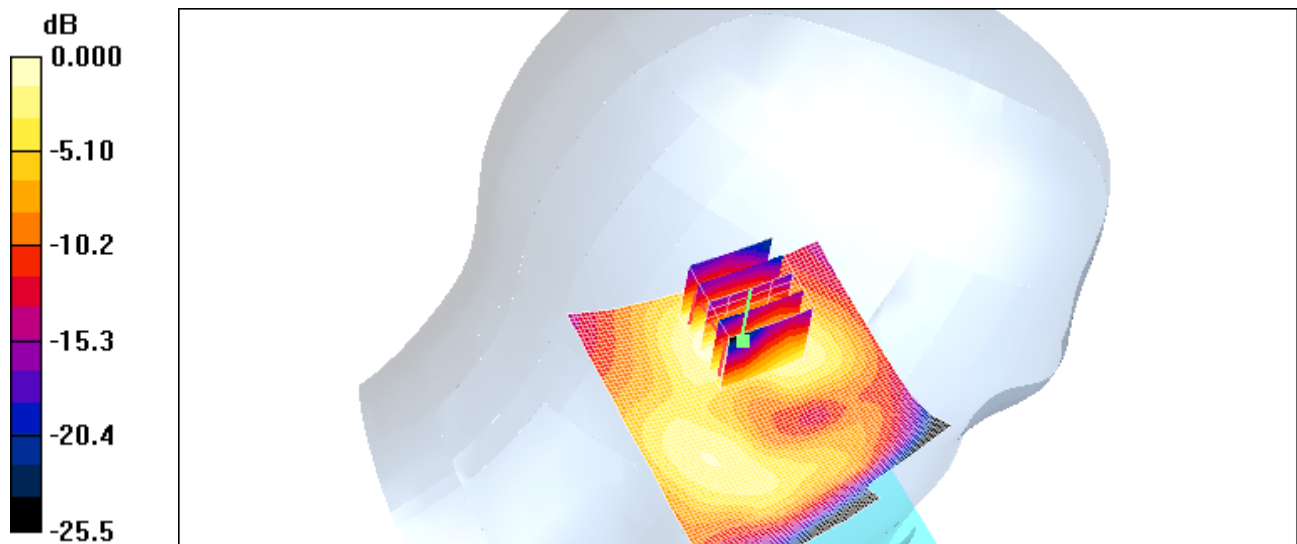
Reference Value = 12.0 V/m; Power Drift = -0.086 dB

Peak SAR (extrapolated) = 0.419 W/kg


**SAR(1 g) = 0.230 mW/g; SAR(10 g) = 0.119 mW/g**

Maximum value of SAR (measured) = 0.259 mW/g

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0 dB = 0.259mW/g

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Date/Time: 6/17/2010 10:44:24 PM

Test Laboratory: RIM Testing Services

File Name:

[LeftHandSide Tilt 802.11b\\_mid\\_chan\\_amb\\_temp\\_22.8\\_liq\\_temp\\_21.9C.da4](#)

**DUT: BlackBerry Smartphone; Type: Sample ; Serial: 322A2EE0**

**Program Name: Compliance Testing: P1528 Protocol (Left-Hand Side)**

Communication System: 802.11 b (2450); Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.9 \text{ mho/m}$ ;  $\epsilon_r = 40.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.53, 4.53, 4.53); Calibrated: 12/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Touch position -/Area Scan (61x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.376 mW/g

**Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid:


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

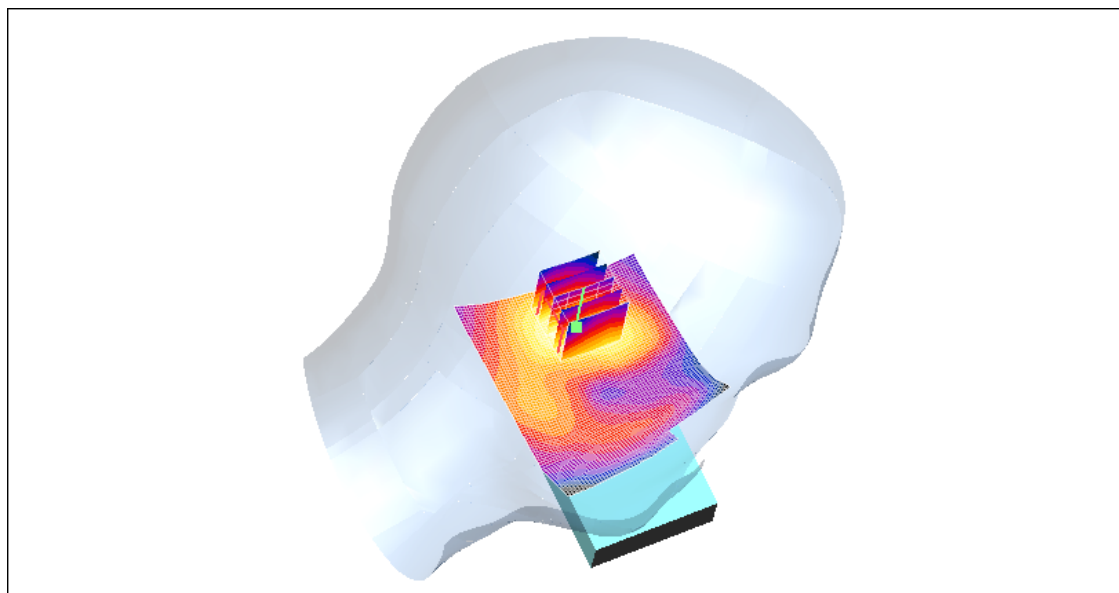
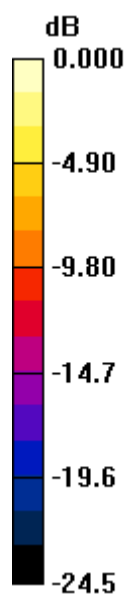
Reference Value = 14.8 V/m; Power Drift = 0.093 dB

Peak SAR (extrapolated) = 0.663 W/kg


**SAR(1 g) = 0.360 mW/g; SAR(10 g) = 0.181 mW/g**

Maximum value of SAR (measured) = 0.401 mW/g

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0 dB = 0.401mW/g

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**Z axis plots for the worst case head worn configuration:**

