## APPENDIX B: SAR DISTRIBUTION PLOTS FOR HEAD CONFIGURATION

Date/Time: 3/16/2010 10:43:21 AM

Test Laboratory: RIM TESTING SERVICES
File Name:
LeftHandSide_EDGE850_high_chan_Amb_Tem_22.5_Liq_Tem_21.1_C.da4

**DUT: BlackBerry Smartphone; Type: Sample ; Serial: 21FA2D14**
**Program Name: Compliance Testing: P1528 Protocol (Left-Hand Side)**

Communication System: EDGE 850 (2slots); Frequency: 848.8 MHz;Duty Cycle: 1:4.2
Medium parameters used (interpolated): f = 848.8 MHz; $\sigma$ = 0.87 mho/m; $\varepsilon_r$ = 42.9; $\rho$ = 1000 kg/m$^3$
Phantom section: Left Section

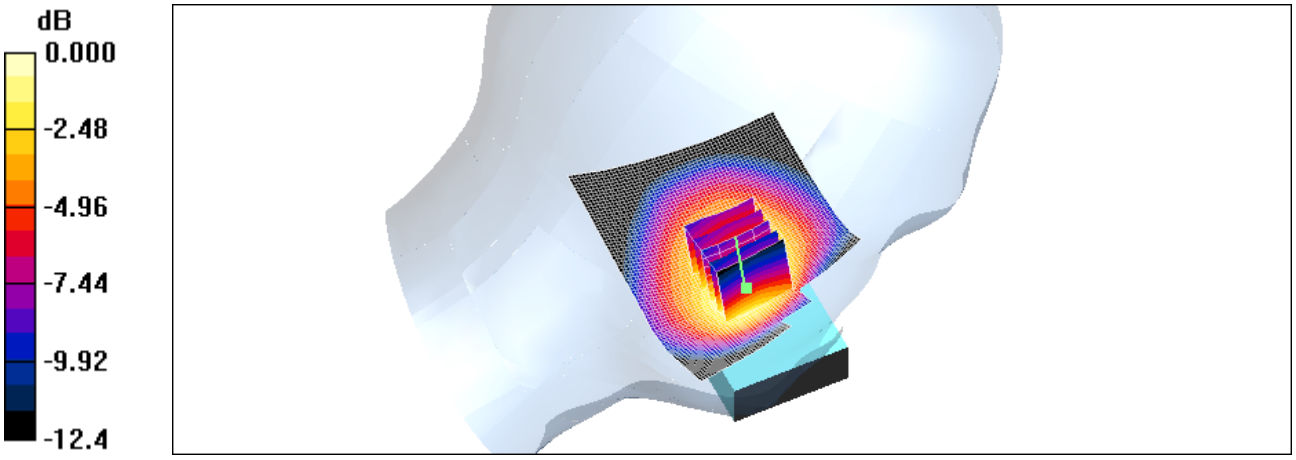
DASY4 Configuration:
- Probe: ET3DV6 - SN1644; ConvF(6.08, 6.08, 6.08); Calibrated: 11/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.26 mW/g

**Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 13.3 V/m; Power Drift = -0.168 dB
Peak SAR (extrapolated) = 1.64 W/kg
**SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.790 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.26 mW/g




0 dB = 1.26mW/g

Date/Time: 3/16/2010 11:21:38 AM

Test Laboratory: RIM TESTING SERVICES
File Name:
LeftHandSide_UMTS_Band_V_high_chan_Amb_Tem_22.6_Liq_Tem_21.0C.da4

**DUT: BlackBerry Smartphone; Type: Sample ; Serial: 21FA2D14**
**Program Name: Compliance Testing: P1528 Protocol (Left-Hand Side)**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 846.6 MHz; $\sigma$ = 0.867 mho/m; $\varepsilon_r$ = 42.9; $\rho$ = 1000 kg/m$^3$
Phantom section: Left Section

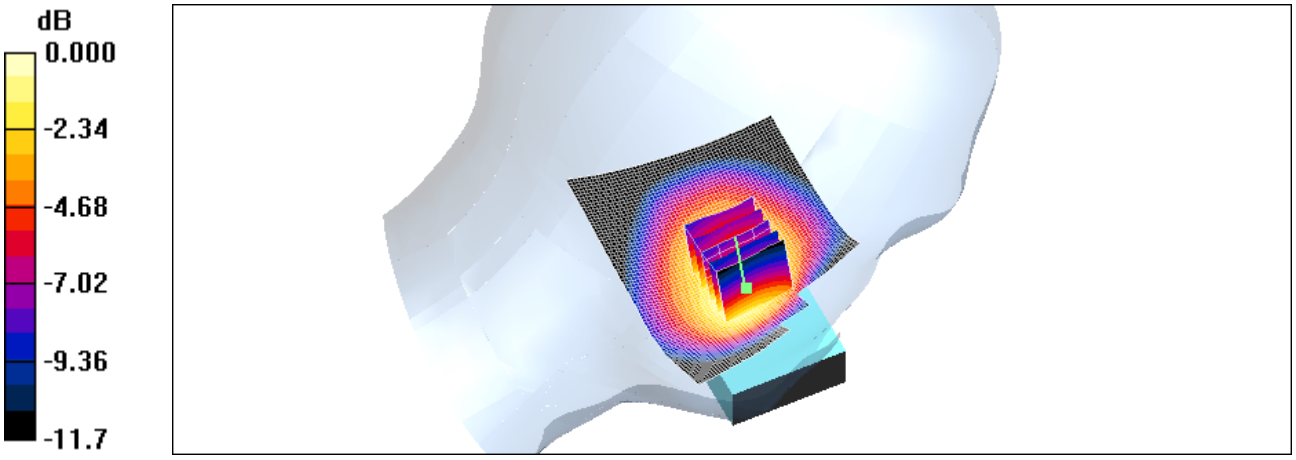
DASY4 Configuration:
- Probe: ET3DV6 - SN1644; ConvF(6.08, 6.08, 6.08); Calibrated: 11/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.16 mW/g

**Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 13.6 V/m; Power Drift = -0.105 dB
Peak SAR (extrapolated) = 1.53 W/kg
**SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.742 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.16 mW/g




0 dB = 1.16mW/g

Date/Time: 3/16/2010 9:35:29 PM

Test Laboratory: RIM TESTING SERVICES
File Name:
LeftHandSide_EDGE1900_mid_chan_Amb_Tem_22.5_Liq_Tem_21.3_C.da4

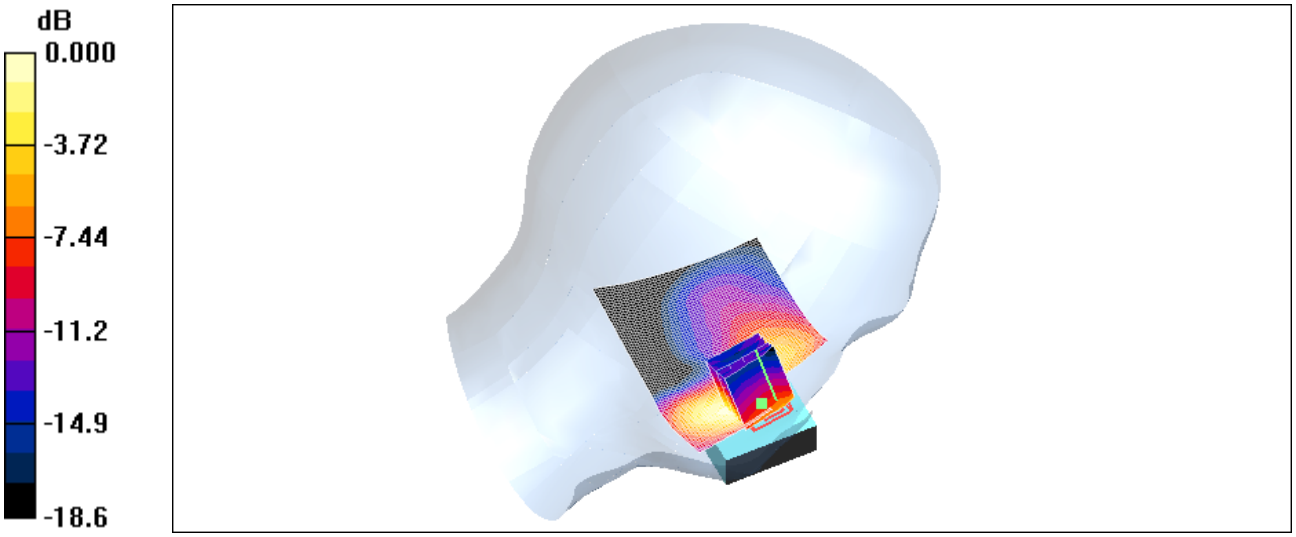
**DUT: BlackBerry Smartphone; Type: Sample ; Serial: 21FA2D14**
**Program Name: Compliance Testing: P1528 Protocol (Left-Hand Side)**

Communication System: EDGE 1900; Frequency: 1880 MHz;Duty Cycle: 1:4.2
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.41 mho/m; $\varepsilon_r$ = 40.3; $\rho$ = 1000 kg/m$^3$
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1644; ConvF(5.17, 5.17, 5.17); Calibrated: 11/11/2009
- 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=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.415 mW/g

**Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 3.37 V/m; Power Drift = 0.004 dB
Peak SAR (extrapolated) = 0.719 W/kg
**SAR(1 g) = 0.388 mW/g; SAR(10 g) = 0.198 mW/g**
Maximum value of SAR (measured) = 0.436 mW/g




0 dB = 0.436mW/g

Date/Time: 3/16/2010 8:41:13 PM

Test Laboratory: RIM TESTING SERVICES
File Name:
RightHandSide_UMTS_band_II_mid_chan_Amb_Tem_22.3_Liq_Tem_21.1C.da4

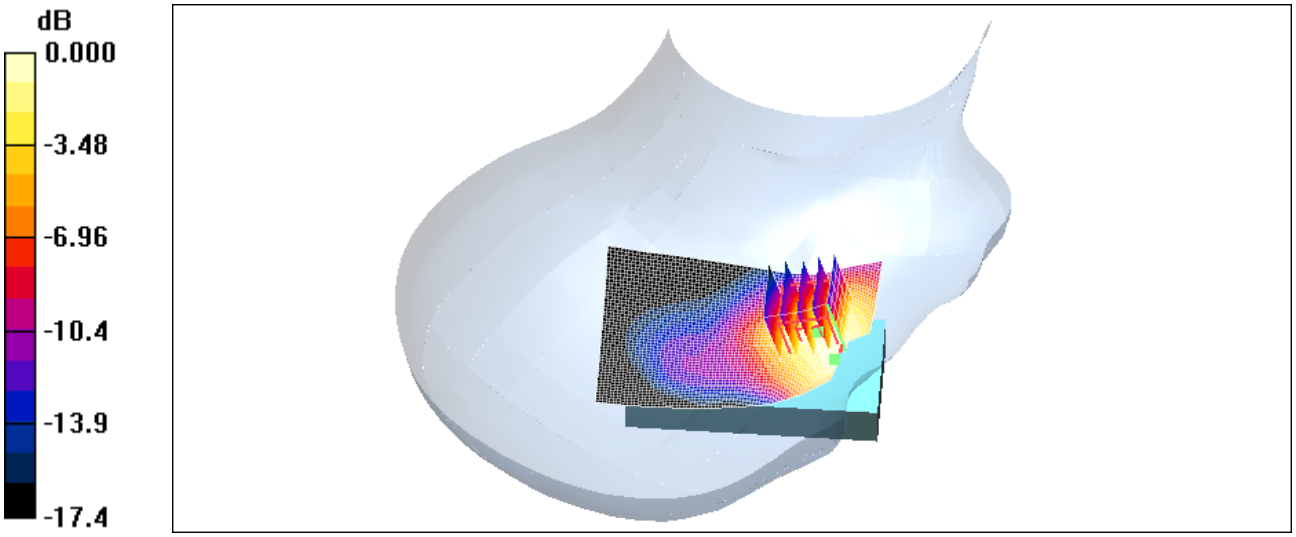
**DUT: BlackBerry Smartphone; Type: Sample ; Serial: 21FA2D14**
**Program Name: Compliance Testing: P1528 Protocol (Right-Hand Side)**

Communication System: WCDMA FDD II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.41 mho/m; $\varepsilon_r$ = 40.3; $\rho$ = 1000 kg/m$^3$
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1644; ConvF(5.17, 5.17, 5.17); Calibrated: 11/11/2009
- 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=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.617 mW/g

**Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 4.52 V/m; Power Drift = -0.056 dB
Peak SAR (extrapolated) = 0.827 W/kg
**SAR(1 g) = 0.527 mW/g; SAR(10 g) = 0.298 mW/g**
Maximum value of SAR (measured) = 0.582 mW/g




0 dB = 0.582mW/g

Date/Time: 3/15/2010 12:09:31 PM

Test Laboratory: RIM TESTING SERVICES
File Name: LeftHandSide_802.11b_low_chan_Amb_Tem_23.0_Liq_Tem_21.2_C.da4

**DUT: BlackBerry Smartphone; Type: Sample ; Serial: 21FA2D14**
**Program Name: Compliance Testing: P1528 Protocol (Left-Hand Side)**

Communication System: 802.11 b (2450); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2412 MHz; $\sigma$ = 1.83 mho/m; $\varepsilon_r$ = 38.1; $\rho$ = 1000 kg/$m^3$
Phantom section: Left Section

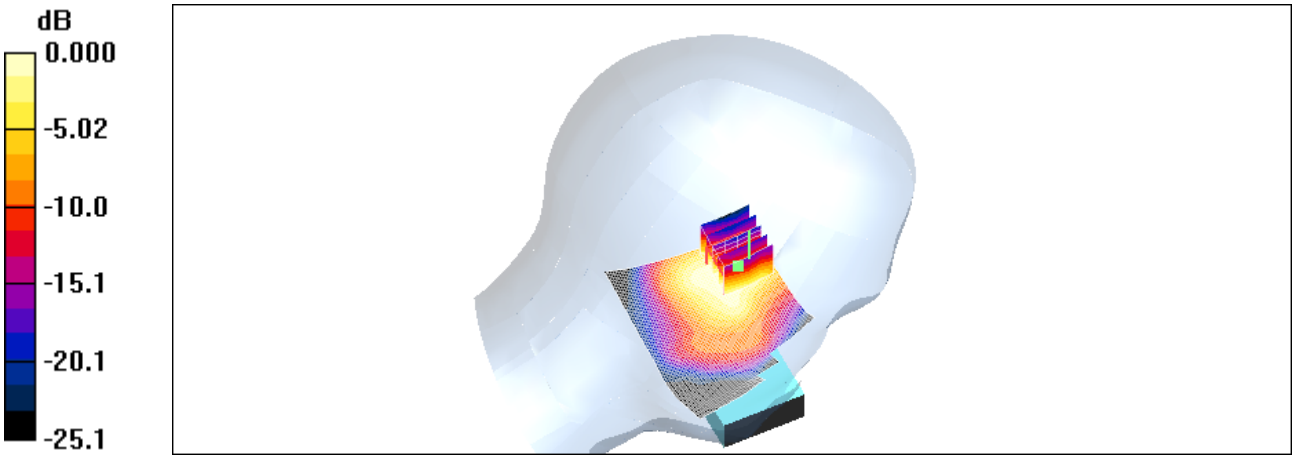
DASY4 Configuration:
- Probe: ET3DV6 - SN1644; ConvF(4.5, 4.5, 4.5); Calibrated: 11/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.597 mW/g

**Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = -0.030 dB
Peak SAR (extrapolated) = 1.18 W/kg
**SAR(1 g) = 0.449 mW/g; SAR(10 g) = 0.223 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.485 mW/g




0 dB = 0.485mW/g

Date/Time: 3/15/2010 1:45:19 PM

File Name: RightHandSide_802.11b_low_chan_Amb_Tem_23.1_Liq_Tem_21.2C.da4

**DUT: BlackBerry Smartphone; Type: Sample ; Serial: 21FA2D14**
**Program Name: Compliance Testing: P1528 Protocol (Right-Hand Side)**

Communication System: 802.11 b (2450); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2412 MHz; $\sigma$ = 1.83 mho/m; $\varepsilon_r$ = 38.1; $\rho$ = 1000 kg/m$^3$
Phantom section: Right Section

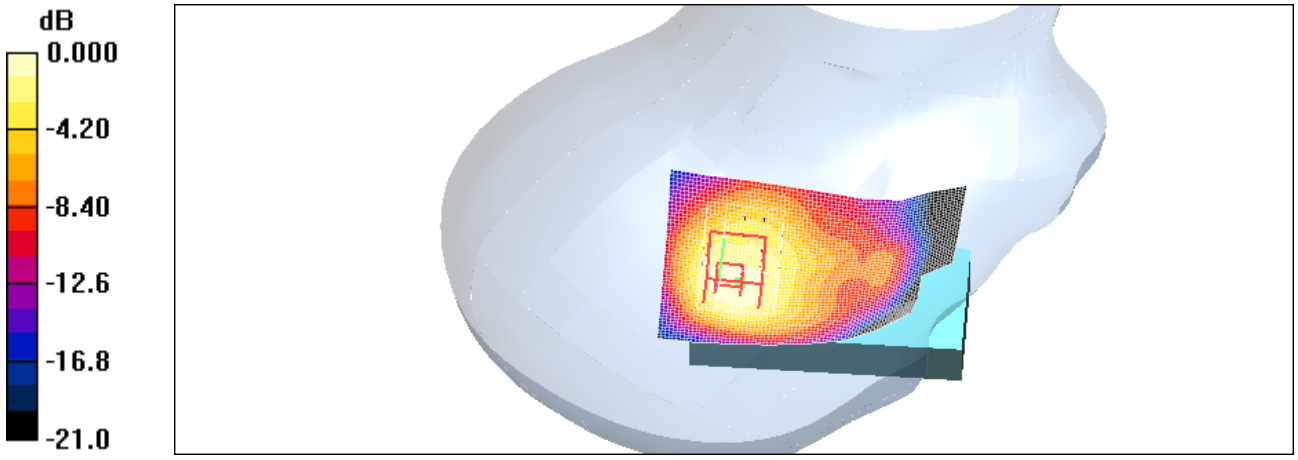
DASY4 Configuration:
- Probe: ET3DV6 - SN1644; ConvF(4.5, 4.5, 4.5); Calibrated: 11/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.386 mW/g

**Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.7 V/m; Power Drift = -0.070 dB
Peak SAR (extrapolated) = 0.692 W/kg
**SAR(1 g) = 0.376 mW/g; SAR(10 g) = 0.196 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.403 mW/g




0 dB = 0.403mW/g

## Z axis plot for the worst case head configuration: