SAR Test Datasheet

BlackBerry Closed Loop Antenna Tuning Experiments

Device Information

As per FCC OET, SAR measurements were performed in 3 tunings states on the first mode which resulted in the worst case SAR value to investigate the effect and cover the corners, midpoints of the edges, and the mid-point of the tuning range, in addition to the Closed Loop condition.

Second worst case mode was tested in the 2 corners and mid-point of tuning range to minimize the number of tests, in addition to the Closed Loop condition.

For other band/mode combinations, the single data scan was chosen, based on simulation, to yield the lowest predicted SAR, in addition to the Closed Loop condition.

Please refer to the Confidential Exhibit: Operational Description for detailed information about the Closed Loop Antenna Tuning and the Tuner Test Matrices explaining the capacitor values for the tuning states.

Model #		**RGB141LW**				
FCC ID #		**L6ARGB140LW**				
DeviceType	**Sample #**	**Device PIN**	**HW REV #**	**CPR #**	**Software Bundle**	**Date (mm/dd/yy)**
Radiated	10	303E7691	1	26604	10.2.0.1095	09/13-16/2013

System accuracy verification

f (MHz)	**Limits / Measured**	**Scan Type**	**SAR 1g/10g (W/kg)**	**Dielectric Parameters**		**Liquid Temp. (°C)**
				ε_r	σ [S/m]	
835	Measured	Zoom Scan	8.96/5.87	40.5	0.88	22.7
	Recommended Limits (Dipole: 446)		9.39 / 6.13	41.5	0.90	N/A
1800	Measured	Zoom Scan	35.7/18.6	38.2	1.42	22.6
	Recommended Limits (Dipole: 2d020)		38.5/20.3	40.0	1.40	N/A
1900	Measured	Zoom Scan	38.6/20.3	38.1	1.41	22.6
	Recommended Limits (Dipole: 545)		40.2/21.1	40.0	1.40	N/A

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Electrical parameters of tissue simulating liquid

Band (MHz)	Tissue Type	Limits / Measured	f (MHz)	Dielectric Parameters		Liquid Temp (°C)
				ε_r	σ [S/m]	
835	Head	Measured	815	40.8	0.86	22.7
			825	40.7	0.87	
			835	40.5	0.88	
		Recommended Limits	835	41.5	0.90	N/A
1800	Head	Measured	1710	38.5	1.34	22.6
			1750	38.4	1.38	
			1800	38.2	1.42	
		Recommended Limits	1800	40.0	1.40	N/A
1900	Head	Measured	1850	38.2	1.36	22.6
			1900	38.1	1.41	
			1910	38.0	1.43	
		Recommended Limits	1900	40.0	1.40	N/A

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SAR Test Data:

Measured SAR Values - Head - WCDMA FDD V 850 MHz							
Channel	Freq. (MHz)	Position	1 g SAR (W/kg)	% delta from Closed Loop	Scan #	Comments	Hotspot Coordinates (x, y, z) mm
4182	836.4	Left Cheek	0.23	0.00	1	Closed Loop	65.58, 257.7, -171.2
4182	836.4	Left Cheek	0.11	-52.17	2	Cap 1= Min C	66.00, 259.8, 171.0

Measured SAR Values - Head - WCDMA FDD V 850 MHz						
Channel	Freq. (MHz)	Position	Declared Conducted power (dBm)	Measured Conducted power (dBm)	Measured 1 g SAR (W/kg)	Extrapolated 1 g SAR (W/kg)
4182	836.4	Left Cheek	23.50	23.10	0.23	0.25
4182	836.4	Left Cheek	23.50	23.10	0.11	0.12

Model	RGB141LW
Hardware Rev. #	1
Software Bundle #	10.2.0.1095
Date	09/16/2013

Measured SAR Values - Head - WCDMA FDD II 1900 MHz							
Channel	Freq. (MHz)	Position	1 g SAR (W/kg)	% delta from Closed Loop	Scan #	Comments	Hotspot Coordinates (x,y,z) mm
9400	1880.0	Left Cheek	0.74	0.00	1	Closed Loop	64.47, 257.2, -170.9
9400	1880.0	Left Cheek	0.60	-18.92	2	Cap 1 = Max C	64.45, 257.2, -170.9
9400	1880.0	Left Cheek	0.65	-12.16	3	Cap 1 = Mid C	64.48, 257.2, -170.9
9400	1880.0	Left Cheek	0.71	-4.05	4	Cap 1= Min C	64.47, 257.2, -170.9

Measured SAR Values - Head - WCDMA FDD II 1900 MHz						
Channel	Freq. (MHz)	Position	Declared Conducted power (dBm)	Measured Conducted power (dBm)	Measured 1 g SAR (W/kg)	Extrapolated 1 g SAR (W/kg)
9400	1880.0	Left Cheek	23.50	23.00	0.74	0.83
9400	1880.0	Left Cheek	23.50	23.00	0.60	0.67
9400	1880.0	Left Cheek	23.50	23.00	0.65	0.73
9400	1880.0	Left Cheek	23.50	23.00	0.71	0.80

Device Model	RGB141LW
Hardware Rev. #	1
Software Bundle #	10.2.0.1095
Date	09/13/2013

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Measured SAR Values - Head - LTE Band 25 1900 MHz (20 MHz BW)										
Channel	Freq. (MHz)	Position	Mod.	RB #	OFFSET	1 g SAR (W/kg)	% delta from Closed Loop	Scan #	Comments	Hotspot Coordinates (x,y,z) mm
26140	1860.0	Left Cheek	QPSK	1	99	0.64	0.00	1	Closed Loop	63.5, 255.0, -171.2
26140	1860.0	Left Cheek	QPSK	1	99	0.48	-25.00	2	Cap 1= Max C	62.8, 253.7, -171.3
26140	1860.0	Left Cheek	QPSK	1	99	0.53	-17.19	3	Cap 1= Mid C	62.8, 253.7, -171.3
26140	1860.0	Left Cheek	QPSK	1	99	0.64	0.00	4	Cap 1= Min C	63.5, 254.9, -171.3

Measured SAR Values - Head - LTE Band 25 1900 MHz (20 MHz BW)									
Channel	Freq. (MHz)	Position	Mod.	RB #	OFFSET	Declared Conducted power (dBm)	Measured Conducted power (dBm)	Measured 1 g SAR (W/kg)	Extrapolated 1 g SAR (W/kg)
26140	1860.0	Left Cheek	QPSK	1	99	23.5	23.20	0.64	0.69
26140	1860.0	Left Cheek	QPSK	1	99	23.5	23.20	0.48	0.51
26140	1860.0	Left Cheek	QPSK	1	99	23.5	23.20	0.53	0.57
26140	1860.0	Left Cheek	QPSK	1	99	23.5	23.20	0.64	0.69

Device Model	RGB141LW
Hardware Rev. #	1
Software Bundle #	10.2.0.1095
Date	09/14/2013

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SAR Plots:

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Test Laboratory: RIM Testing Services
DipoleValidation_835MHz_09_11_13_Amb_Tem_24.0C_Liq_Tem_22.9C
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446
Communication System: UID 0 - n/a, CW; Frequency: 835 MHz
Medium parameters used: f = 835 MHz; σ = 0.876 S/m; ε_r = 40.009; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.19, 6.19, 6.19); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

Configuration/d=15mm, Pin=1000mW/Area Scan (31x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 10.1 W/kg

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 110.8 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 13.1 W/kg
SAR(1 g) = 8.83 W/kg; SAR(10 g) = 5.79 W/kg
Maximum value of SAR (measured) = 10.3 W/kg

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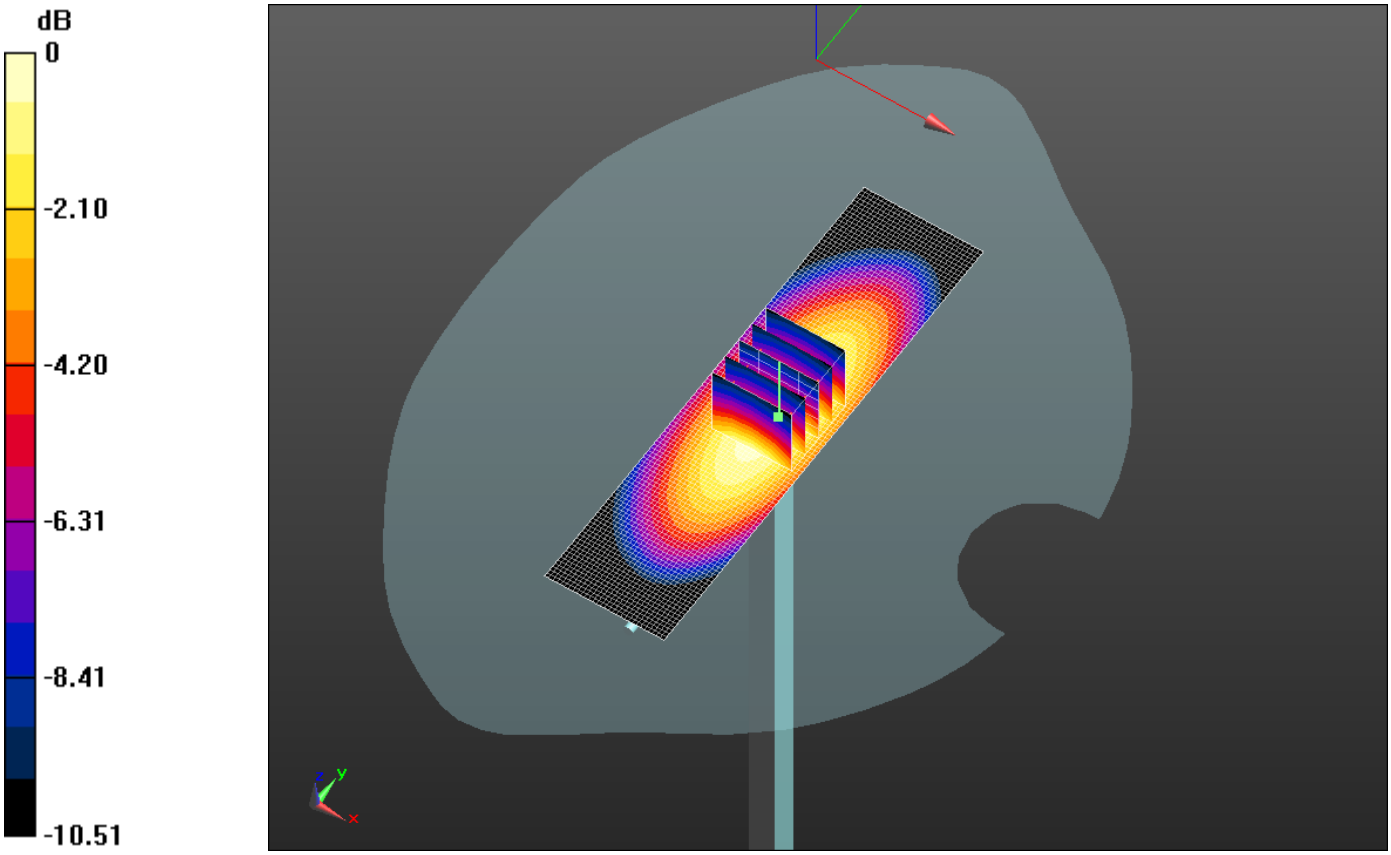

0 dB = 10.3 W/kg = 10.13 dBW/kg

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Test Laboratory: RIM Testing Services

DipoleValidation_835MHz_09_16_13_Amb_Tem_24.3C_Liq_Tem_22.7C

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

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

Medium parameters used: f = 835 MHz; σ = 0.879 S/m; ε_r = 40.51; ρ = 1000 kg/m^3

Phantom section: Flat Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.19, 6.19, 6.19); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

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

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 10.3 W/kg

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 112.3 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 13.2 W/kg

SAR(1 g) = 8.96 W/kg; SAR(10 g) = 5.87 W/kg

Maximum value of SAR (measured) = 10.5 W/kg

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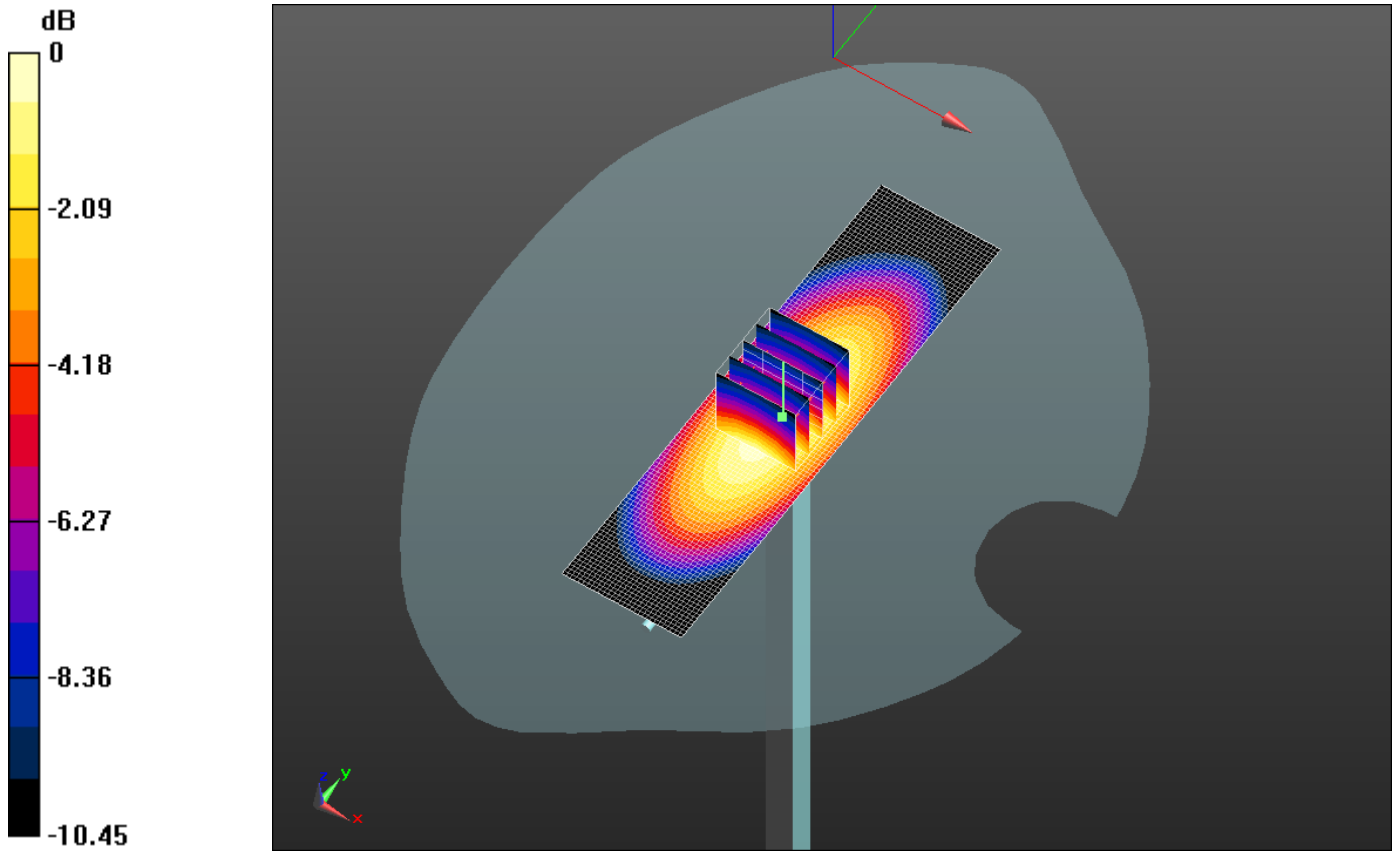

0 dB = 10.5 W/kg = 10.21 dBW/kg

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Date/Time: 9/12/2013 7:13:54 PM

Test Laboratory: RIM Testing Services
DipoleValidation_1800MHz_09_12_13_Amb_Tem_23.5_Liq_Tem_22.6C
DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d020
Communication System: UID 0 - n/a, CW; Frequency: 1800 MHz
Medium parameters used: f = 1800 MHz; σ = 1.424 S/m; ε_r = 38.159; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 44.8 W/kg

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 185.9 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 64.6 W/kg
SAR(1 g) = 35.7 W/kg; SAR(10 g) = 18.6 W/kg
Maximum value of SAR (measured) = 45.6 W/kg

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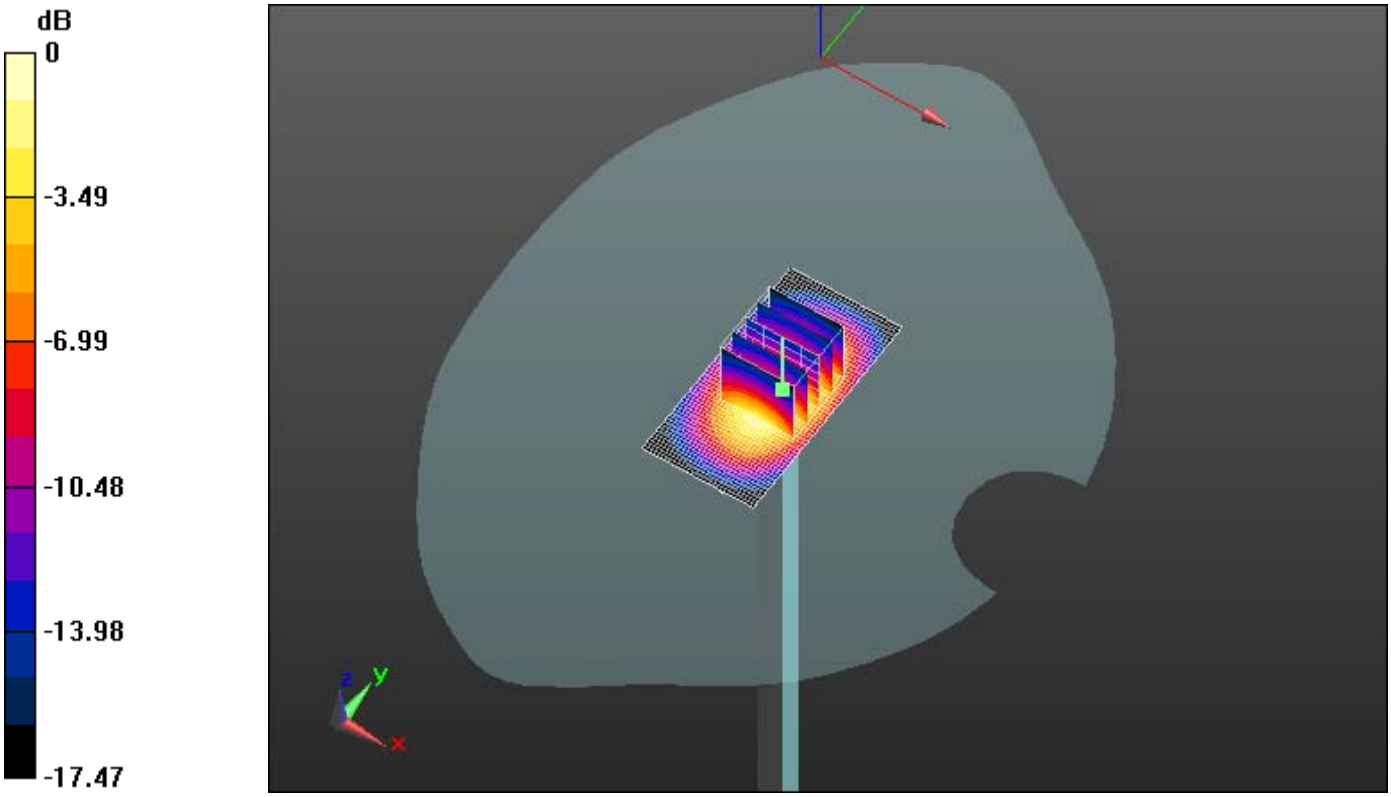

0 dB = 45.6 W/kg = 16.59 dBW/kg

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Date/Time: 9/16/2013 12:29:23 PM

Test Laboratory: RIM Testing Services
DipoleValidation_1800MHz_09_16_13_Amb_Tem_23.9_Liq_Tem_22.8C
DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d020
Communication System: UID 0 - n/a, CW; Frequency: 1800 MHz
Medium parameters used: f = 1800 MHz; σ = 1.423 S/m; ε_r = 39.176; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 46.1 W/kg

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 188.6 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 65.7 W/kg
SAR(1 g) = 36.4 W/kg; SAR(10 g) = 19 W/kg
Maximum value of SAR (measured) = 46.5 W/kg

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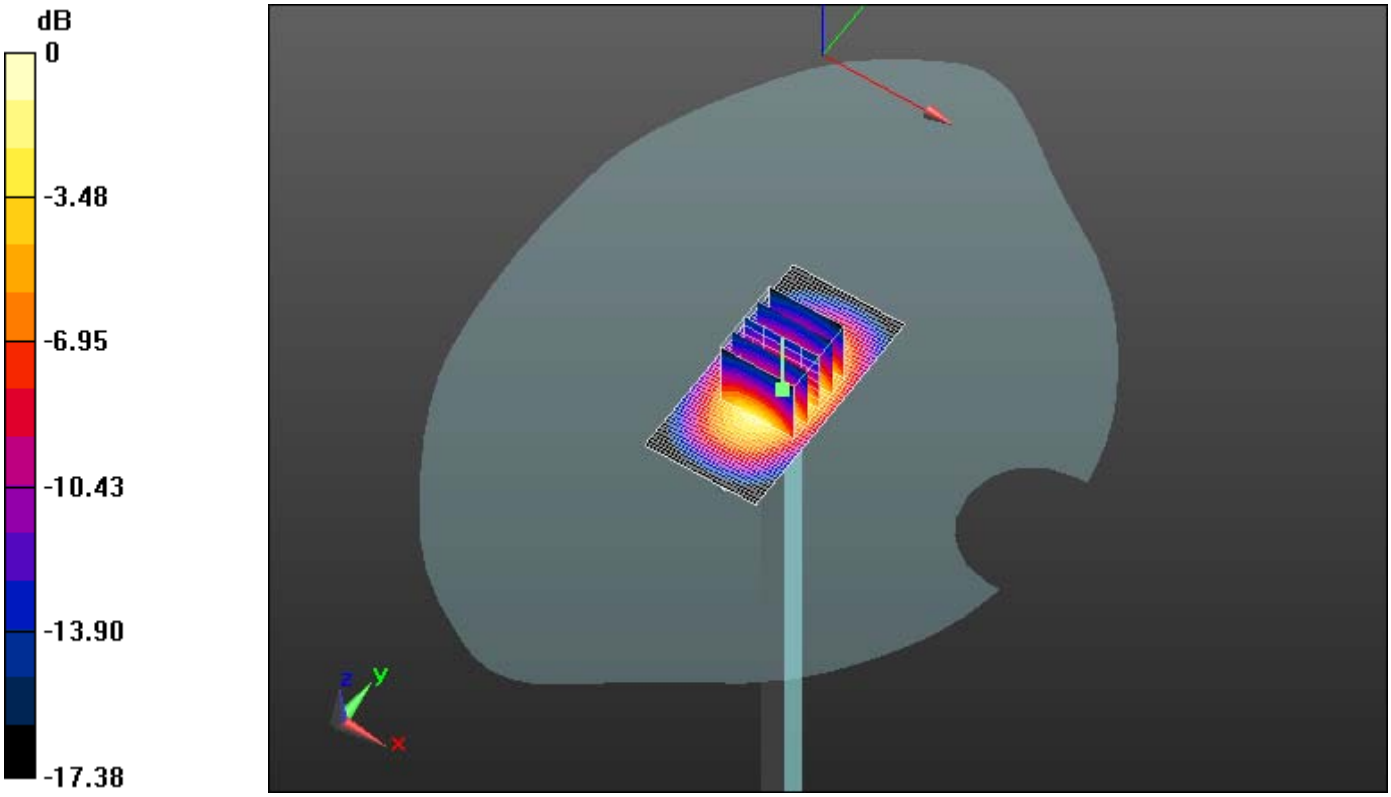

0 dB = 46.5 W/kg = 16.67 dBW/kg

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Date/Time: 9/10/2013 7:40:24 PM

Test Laboratory: RIM Testing Services
DipoleValidation_1900MHz_09_10_13_Amb_Tem_22.9C_Liq_Tem_22.6C
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545
Communication System: UID 0 - n/a, CW; Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.412 S/m; ε_r = 38.067; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

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

Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 49.5 W/kg

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 193.3 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 68.8 W/kg
SAR(1 g) = 38.6 W/kg; SAR(10 g) = 20.3 W/kg
Maximum value of SAR (measured) = 48.6 W/kg

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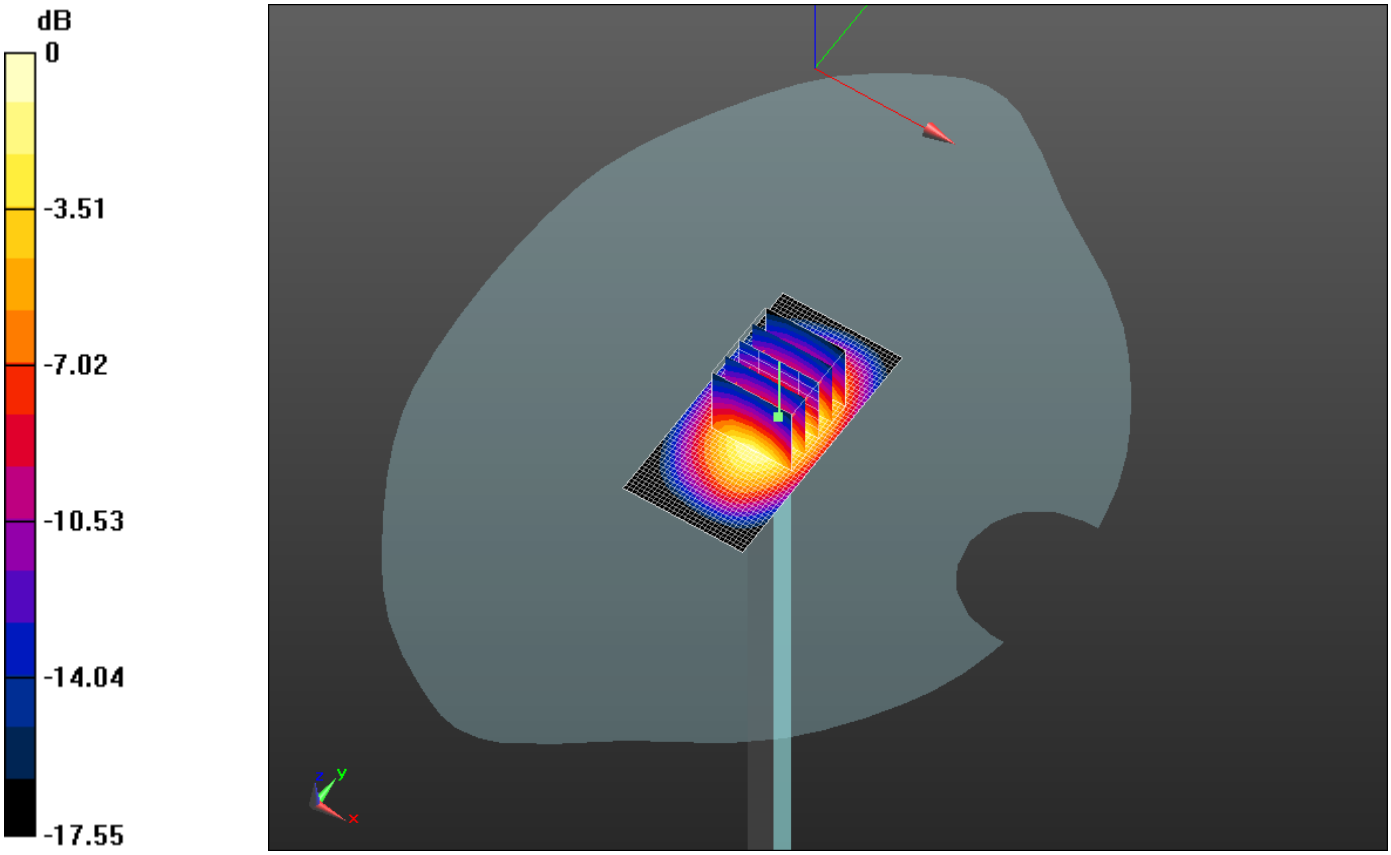

0 dB = 48.6 W/kg = 16.87 dBW/kg

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Date/Time: 9/17/2013 2:42:35 AM

Test Laboratory: RIM Testing Services
DipoleValidation_1900MHz_09_17_13_Amb_Tem_24.5C_Liq_Tem_23.0C
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545
Communication System: UID 0 - n/a, CW; Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.39 S/m; ε_r = 38.642; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.35, 5.35, 5.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

Configuration/d=10mm, Pin=1000mW/Area Scan (31x61x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 47.4 W/kg

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 189.7 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 65.6 W/kg
SAR(1 g) = 37.1 W/kg; SAR(10 g) = 19.5 W/kg
Maximum value of SAR (measured) = 46.8 W/kg

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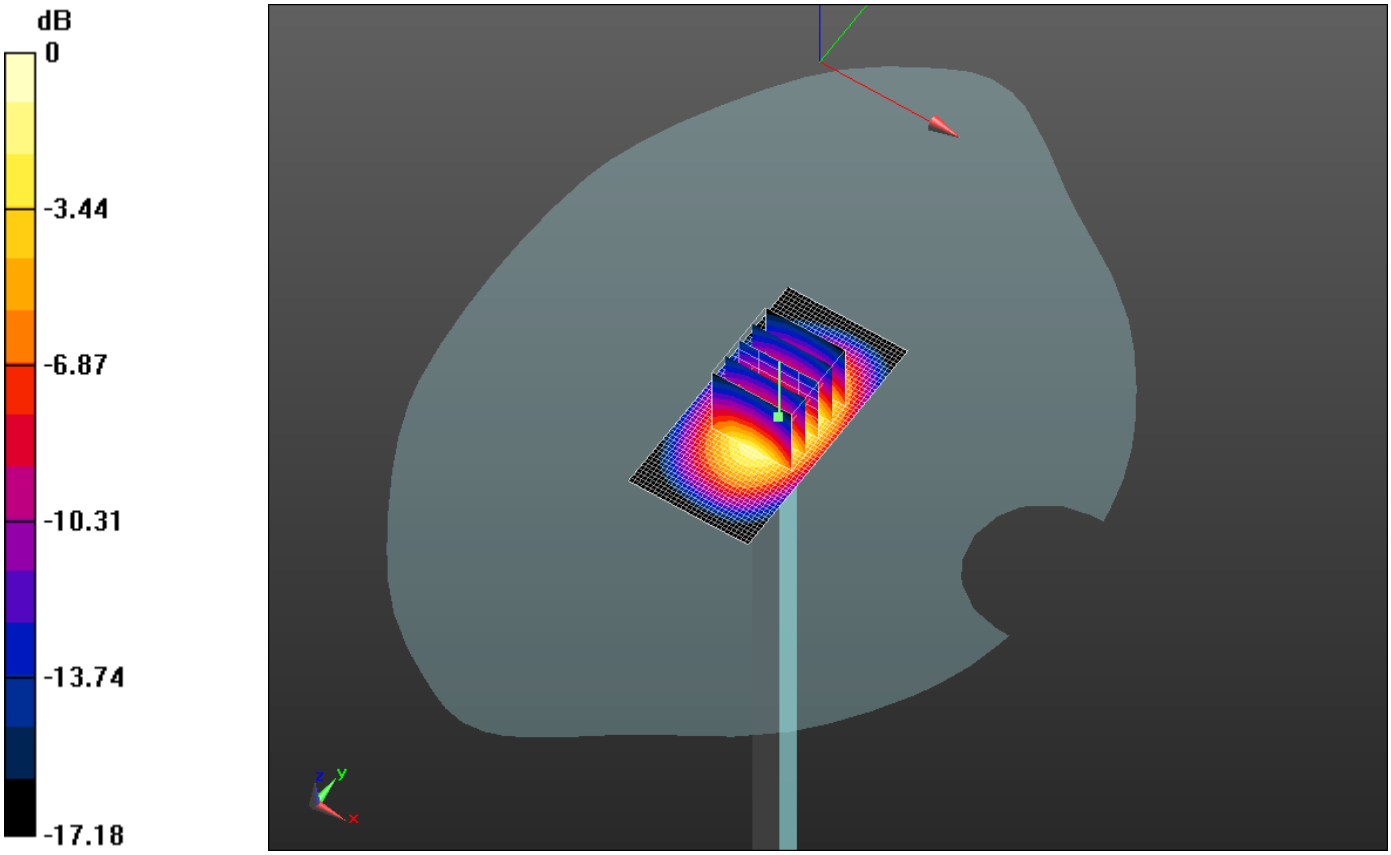

0 dB = 46.8 W/kg = 16.70 dBW/kg

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Date: 9/16/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 303E7691

Configuration: Left-Hand-Side HSL - UMTS V

Communication System: WCDMA FDD V; Communication System Band: UMTS band V;
Frequency: 836.4 MHz
Medium Parameters used: f=836.4 MHz; σ = 0.880 S/m; ε_r = 40.503; ρ = 1.000 g/cm^3
Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF: (6.19,6.19,6.19); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

Left-Hand-Side HSL - UMTS V/Touch Position - UMTS_V_chan4182_Scan#1_amb_temp_24.5C_liq_temp_22.3C/Area Scan (51x81x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.246 W/kg

Left-Hand-Side HSL - UMTS V/Touch Position - UMTS_V_chan4182_Scan#1_amb_temp_24.5C_liq_temp_22.3C/Zoom Scan (31x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 4.394 V/m; **Power Drift = 0.134 dB**

Averaged SAR: SAR(1g) = 0.232 W/kg; SAR(10g) = 0.178 W/kg
Maximum value of SAR (interpolated) = 0.297 W/kg

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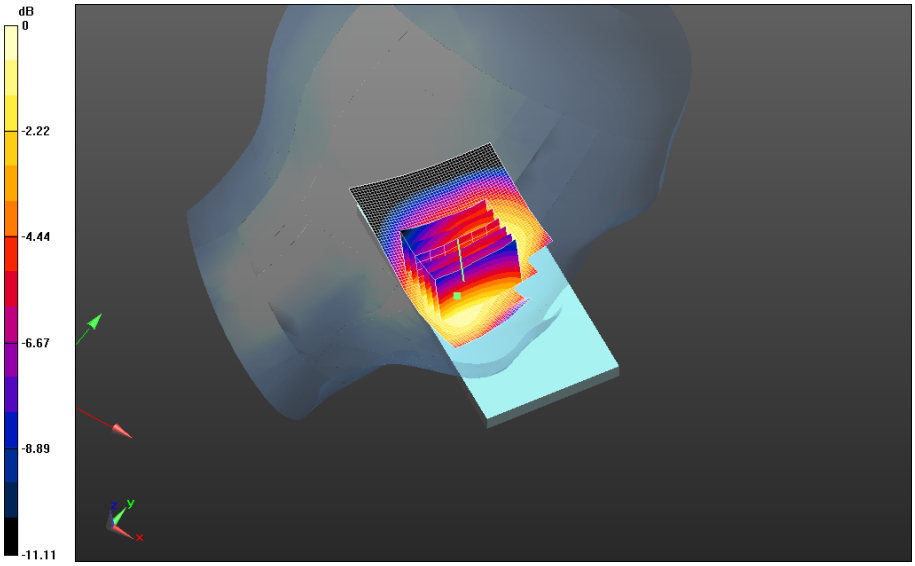

0 dB = 0.254 W/kg = -5.95 dBW/kg

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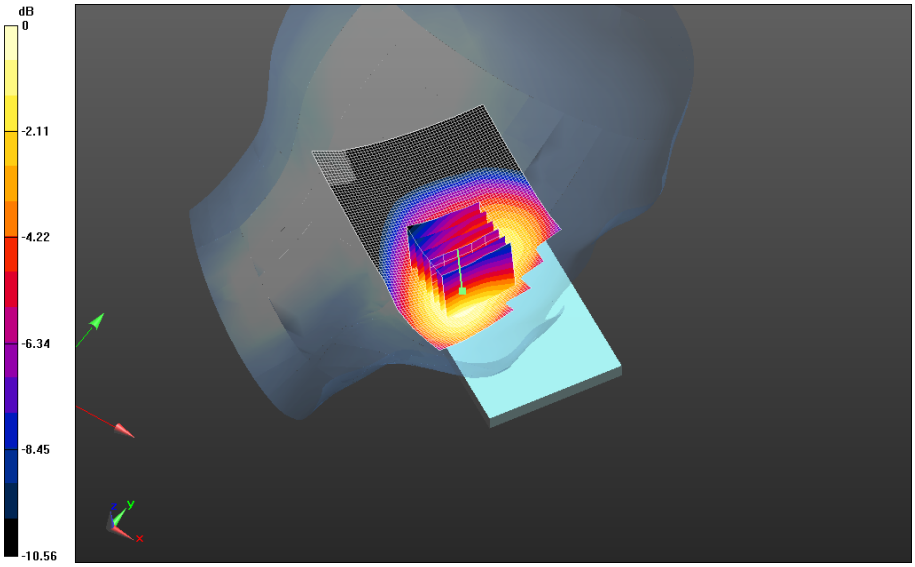
Left-Hand-Side HSL - UMTS V/Touch Position - UMTS_V_chan4182_Scan#2_amb_temp_24.1C_liq_temp_22.3C/Area Scan (61x91x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.117 W/kg

Left-Hand-Side HSL - UMTS V/Touch Position - UMTS_V_chan4182_Scan#2_amb_temp_24.1C_liq_temp_22.3C/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 3.630 V/m; **Power Drift = 0.211 dB**

Averaged SAR: SAR(1g) = 0.105 W/kg; SAR(10g) = 0.0776 W/kg
Maximum value of SAR (interpolated) = 0.140 W/kg



0 dB = 0.254 W/kg = -5.95 dBW/kg

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Date: 9/13/2013
Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 303E7691

Configuration: Left-Hand-Side HSL - UMTS II

Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1880 MHz
Medium Parameters used: f=1880 MHz; σ = 1.391 S/m; ε_r = 38.121; ρ = 1.000 g/cm^3
Phantom section: Left Section

DASY Configuration:

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

Left-Hand-Side HSL - UMTS II/Touch Position - UMTS_II_chan9400_Scan#1_amb_temp_23.0C_liq_temp_22.0C/Area Scan (61x91x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.887 W/kg

Left-Hand-Side HSL - UMTS II/Touch Position - UMTS_II_chan9400_Scan#1_amb_temp_23.0C_liq_temp_22.0C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 6.330 V/m; **Power Drift = 0.162 dB**

Averaged SAR: SAR(1g) = 0.739 W/kg; SAR(10g) = 0.451 W/kg
Maximum value of SAR (interpolated) = 1.11 W/kg

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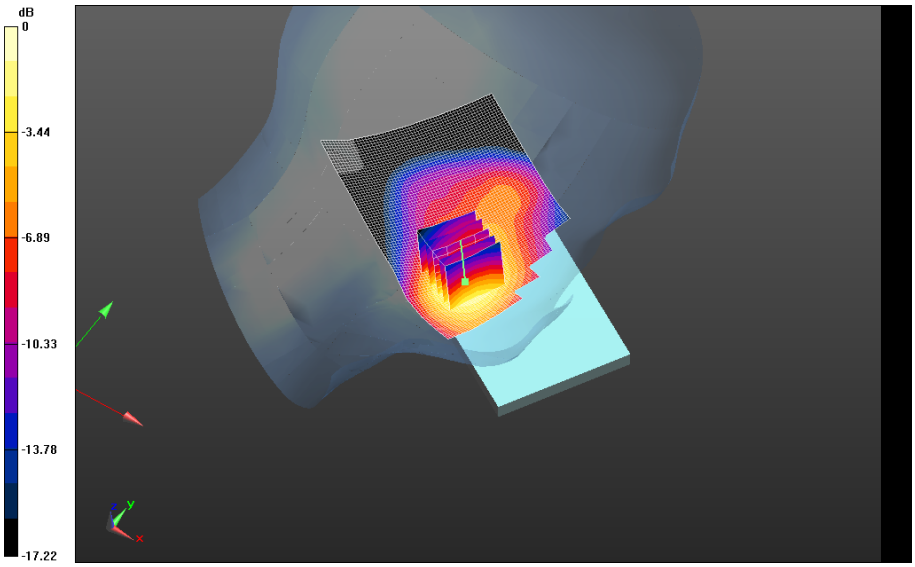

0 dB = 0.866 W/kg = -0.62 dBW/kg

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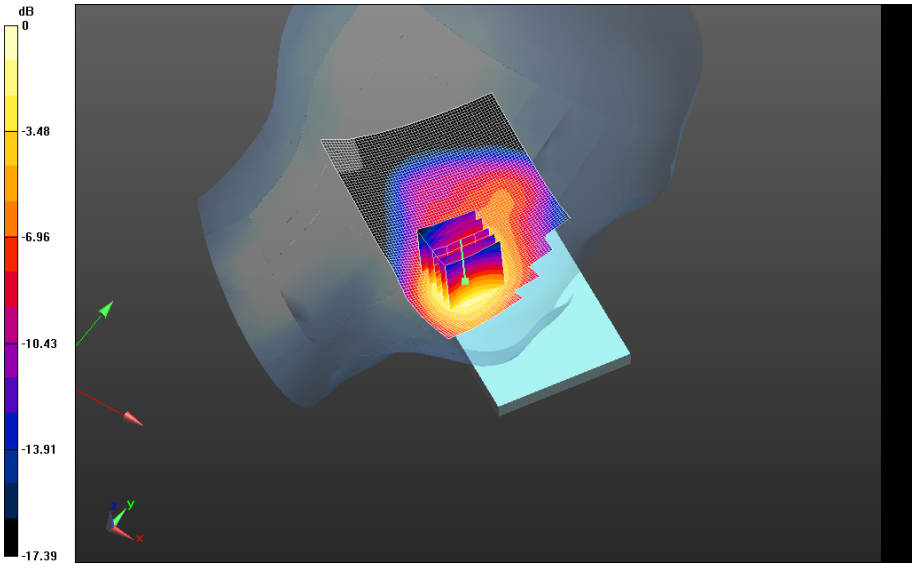
Left-Hand-Side HSL - UMTS II/Touch Position - UMTS_II_chan9400_Scan#2__amb_temp_23.2C_liq_temp_21.9C/Area Scan (61x91x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.721 W/kg

Left-Hand-Side HSL - UMTS II/Touch Position - UMTS_II_chan9400_Scan#2__amb_temp_23.2C_liq_temp_21.9C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 5.777 V/m; **Power Drift = -0.150 dB**

Averaged SAR: SAR(1g) = 0.603 W/kg; SAR(10g) = 0.364 W/kg
Maximum value of SAR (interpolated) = 0.923 W/kg



0 dB = 0.866 W/kg = -0.62 dBW/kg

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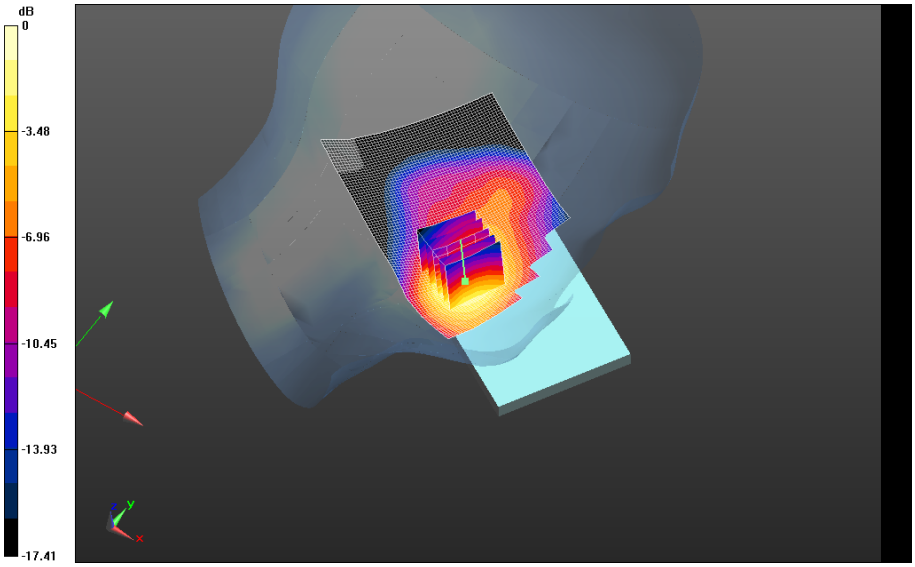
Left-Hand-Side HSL - UMTS II/Touch Position - UMTS_II_chan9400_Scan#3_amb_temp_23.0C_liq_temp_22.0C/Area Scan (61x91x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.783 W/kg

Left-Hand-Side HSL - UMTS II/Touch Position - UMTS_II_chan9400_Scan#3_amb_temp_23.0C_liq_temp_22.0C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 6.011 V/m; **Power Drift = -0.030 dB**

Averaged SAR: SAR(1g) = 0.646 W/kg; SAR(10g) = 0.389 W/kg
Maximum value of SAR (interpolated) = 0.976 W/kg



0 dB = 0.700 W/kg = -1.55 dBW/kg

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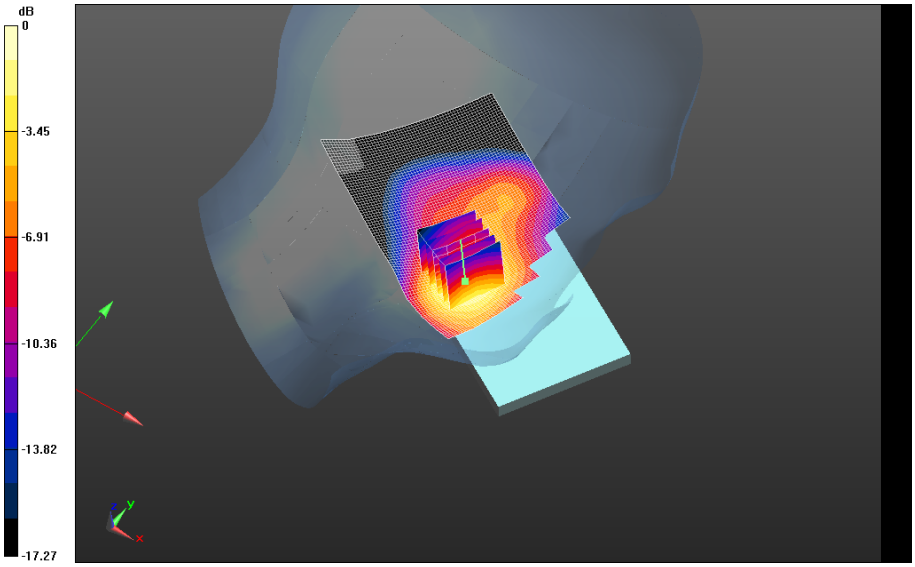
Left-Hand-Side HSL - UMTS II/Touch Position - UMTS_II_chan9400_Scan#4_amb_temp_22.8C_liq_temp_22.0C/Area Scan (61x91x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.866 W/kg

Left-Hand-Side HSL - UMTS II/Touch Position - UMTS_II_chan9400_Scan#4_amb_temp_22.8C_liq_temp_22.0C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 5.640 V/m; **Power Drift = 0.161 dB**

Averaged SAR: SAR(1g) = 0.710 W/kg; SAR(10g) = 0.433 W/kg
Maximum value of SAR (interpolated) = 1.07 W/kg



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

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Date: 9/13/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 303E7691

Configuration: Left-Hand-Side HSL - LTE Band 25

Communication System: LTE band 25; Communication System Band: LTE band 25; Frequency: 1860 MHz
Medium Parameters used: f=1860 MHz; σ = 1.368 S/m; ε_r = 38.194; ρ = 1.000 g/cm^3
Phantom section: Left Section

DASY Configuration:

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

Left-Hand-Side HSL - LTE Band 25/Touch Position - LTE_25_chan26140_QPSK_RB1_OFFSET99_Scan#1_amb_temp_23.5C_liq_temp_21.8C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.786 W/kg

Left-Hand-Side HSL - LTE Band 25/Touch Position - LTE_25_chan26140_QPSK_RB1_OFFSET99_Scan#1_amb_temp_23.5C_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 = 6.391 V/m; **Power Drift = -0.029 dB**

Averaged SAR: SAR(1g) = 0.636 W/kg; SAR(10g) = 0.380 W/kg
Maximum value of SAR (interpolated) = 0.984 W/kg

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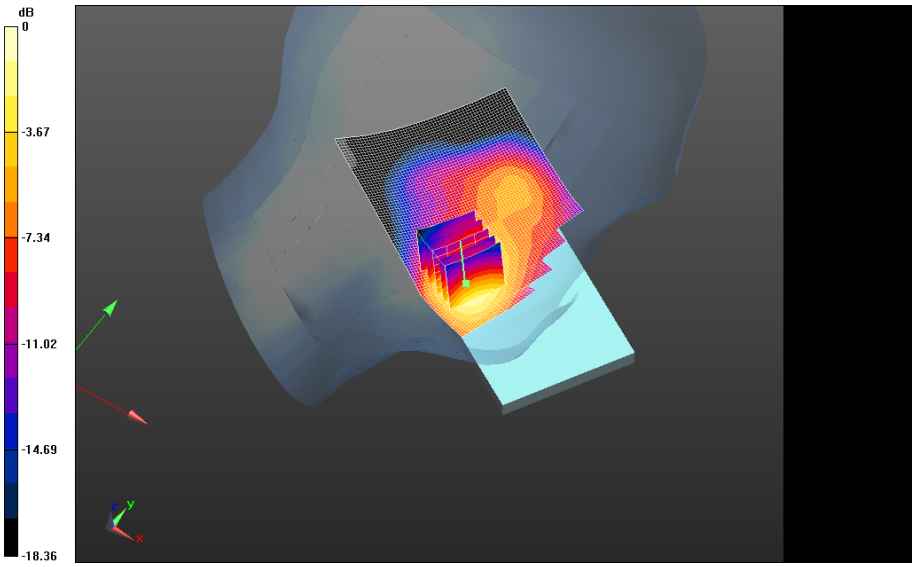

0 dB = 0.765 W/kg = -1.16 dBW/kg

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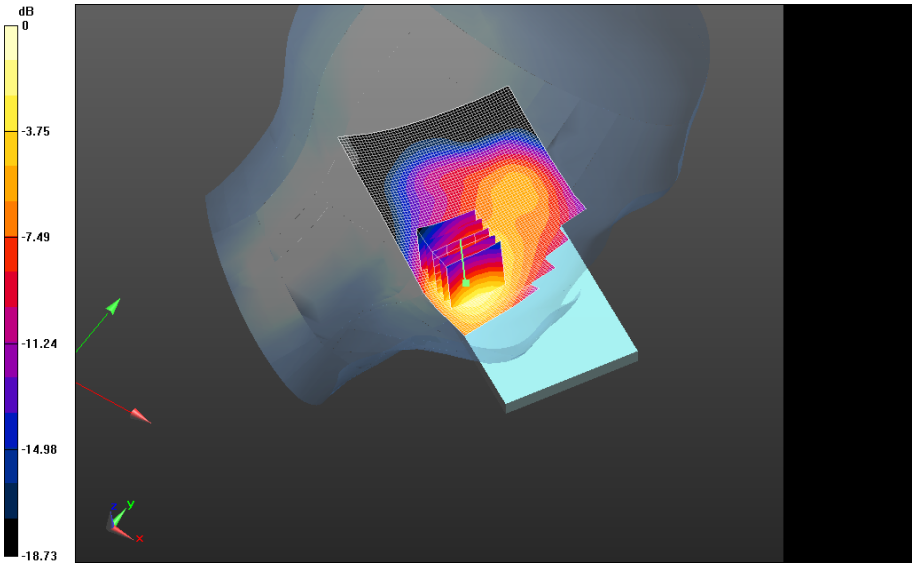
Left-Hand-Side HSL - LTE Band 25/Touch Position - LTE_25_chan26140_QPSK_RB1_OFFSET99_Scan#2_amb_temp_23.4C_liq_temp_21.8C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.604 W/kg

Left-Hand-Side HSL - LTE Band 25/Touch Position - LTE_25_chan26140_QPSK_RB1_OFFSET99_Scan#2_amb_temp_23.4C_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 = 5.438 V/m; **Power Drift = 0.081 dB**

Averaged SAR: SAR(1g) = 0.480 W/kg; SAR(10g) = 0.288 W/kg
Maximum value of SAR (interpolated) = 0.732 W/kg



0 dB = 0.765 W/kg = -1.16 dBW/kg

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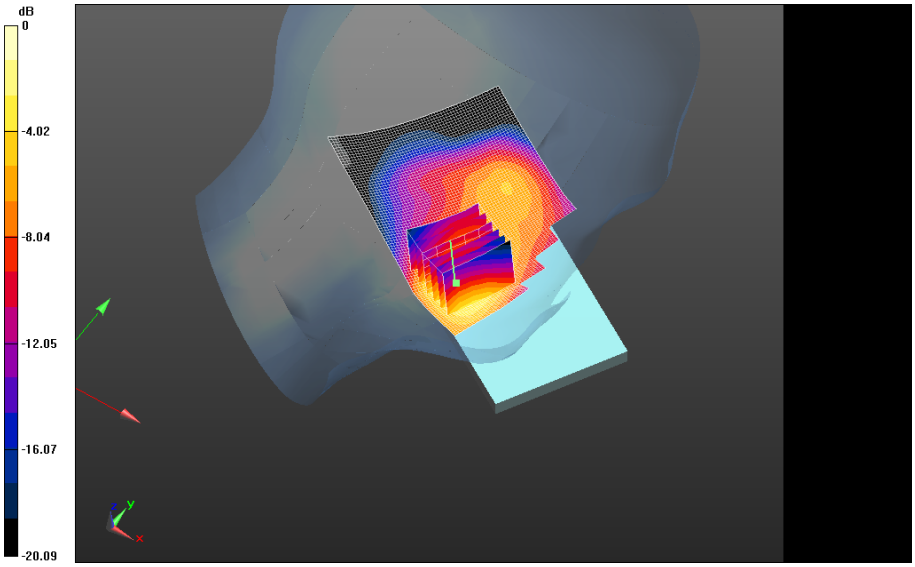
Left-Hand-Side HSL - LTE Band 25/Touch Position - LTE_25_chan26140_QPSK_RB1_OFFSET99_Scan#3_amb_temp_23.5C_liq_temp_22.6C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.641 W/kg

Left-Hand-Side HSL - LTE Band 25/Touch Position - LTE_25_chan26140_QPSK_RB1_OFFSET99_Scan#3_amb_temp_23.5C_liq_temp_22.6C/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 5.653 V/m; **Power Drift = 0.116 dB**

Averaged SAR: SAR(1g) = 0.525 W/kg; SAR(10g) = 0.315 W/kg
Maximum value of SAR (interpolated) = 0.813 W/kg



0 dB = 0.571 W/kg = -2.43 dBW/kg

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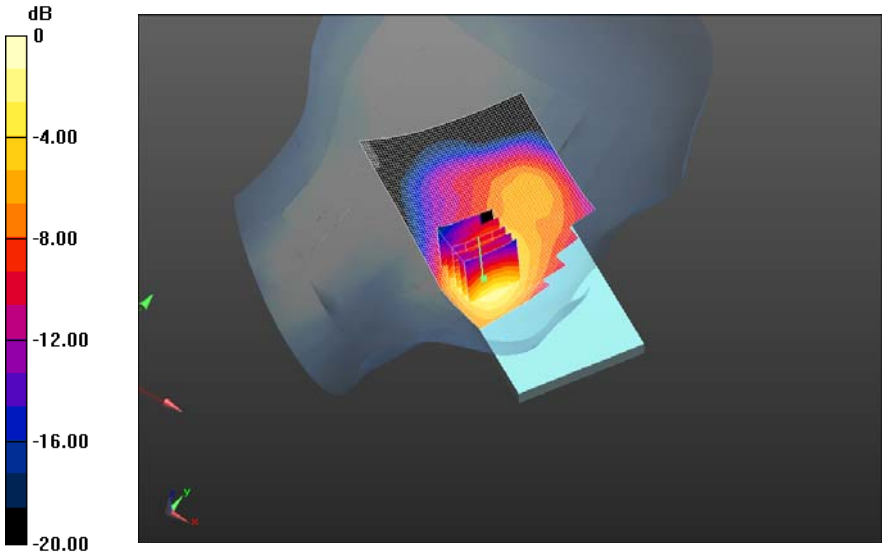
Left-Hand-Side HSL - LTE Band 25/Touch Position - LTE_25_chan26140_QPSK_RB1_OFFSET99_Scan#4_amb_temp_23.4C_liq_temp_21.8C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.791 W/kg

Left-Hand-Side HSL - LTE Band 25/Touch Position - LTE_25_chan26140_QPSK_RB1_OFFSET99_Scan#4_amb_temp_23.4C_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 = 6.048 V/m; **Power Drift = -0.143 dB**

Averaged SAR: SAR(1g) = 0.638 W/kg; SAR(10g) = 0.388 W/kg
Maximum value of SAR (interpolated) = 0.954 W/kg



0 dB = 0.773 W/kg = -1.12 dBW/kg

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