Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date/Time: 2014/3/28

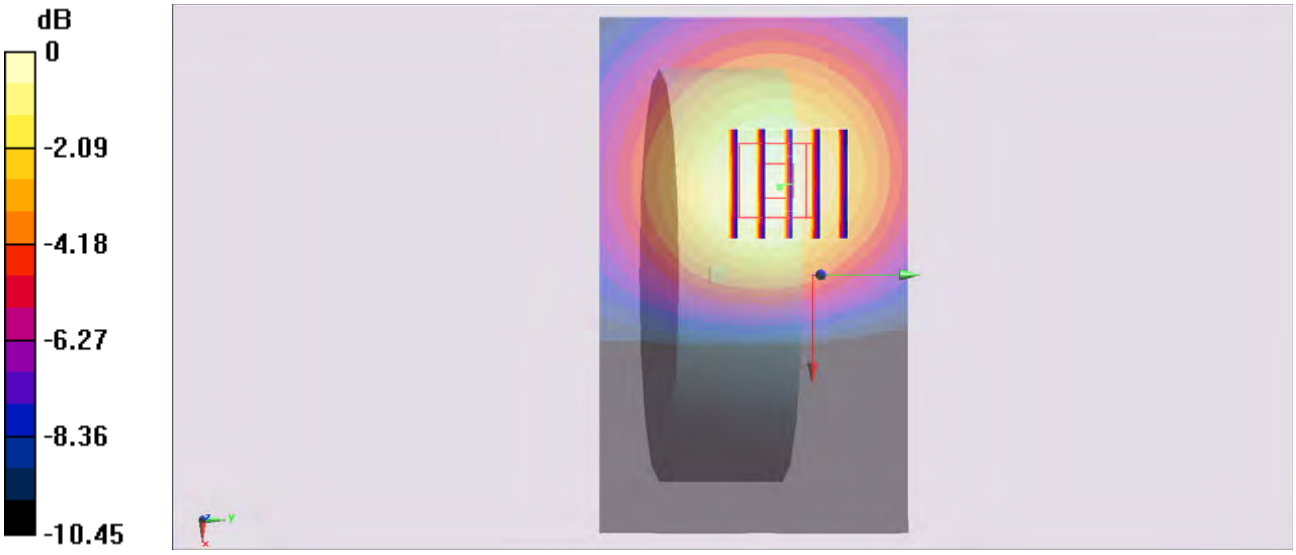
#01_GSM850_GSM Voice_Front_1cm_Ch189

Communication System: GSM850 ; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: HSL_850_140328 Medium parameters used : f = 836.4 MHz; σ = 0.902 S/m; ε_r = 40.816; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3954; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/11/4;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2014/1/30
- Phantom: ELI 4.0_Front; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7331)

Configuration/Ch189/Area Scan (101x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.371 W/kg

Configuration/Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.77 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.427 W/kg
SAR(1 g) = 0.301 W/kg; SAR(10 g) = 0.207 W/kg
Maximum value of SAR (measured) = 0.369 W/kg



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

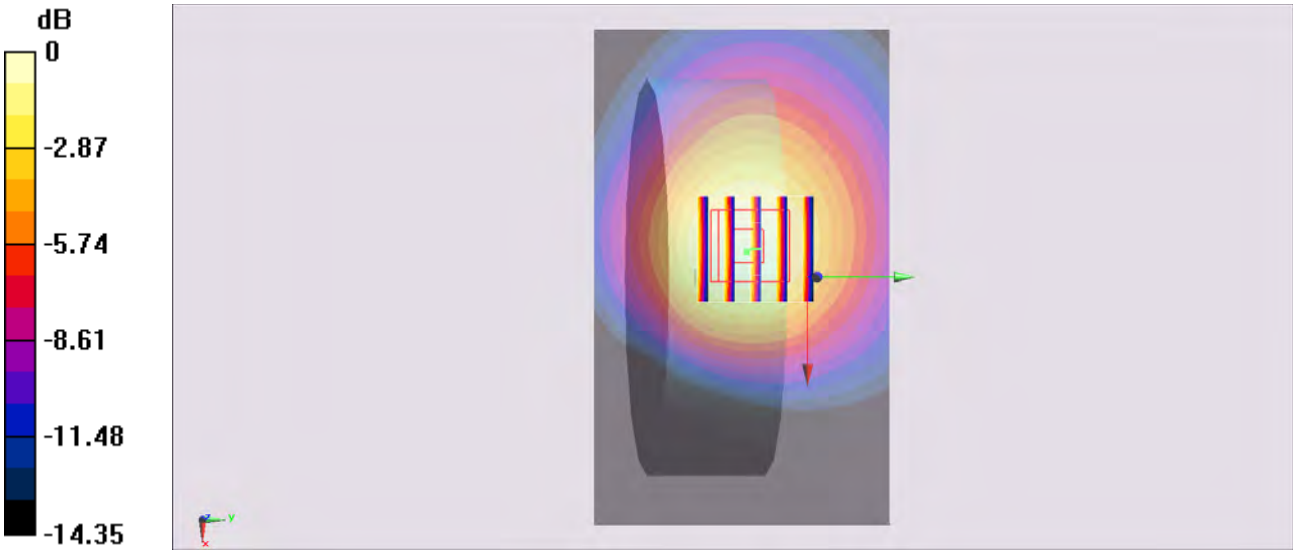
#02_GSM1900_GSM Voice_Front_1cm_Ch810

Communication System: PCS ; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: HSL_1900_140328 Medium parameters used: f = 1910 MHz; σ = 1.448 S/m; ε_r = 39.189; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3954; ConvF(8.13, 8.13, 8.13); Calibrated: 2013/11/4;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2014/1/30
- Phantom: ELI 4.0_Front; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7331)

Configuration/Ch810/Area Scan (101x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.678 W/kg

Configuration/Ch810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.68 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.784 W/kg
SAR(1 g) = 0.514 W/kg; SAR(10 g) = 0.320 W/kg
Maximum value of SAR (measured) = 0.654 W/kg



0 dB = 0.654 W/kg = -1.84 dBW/kg

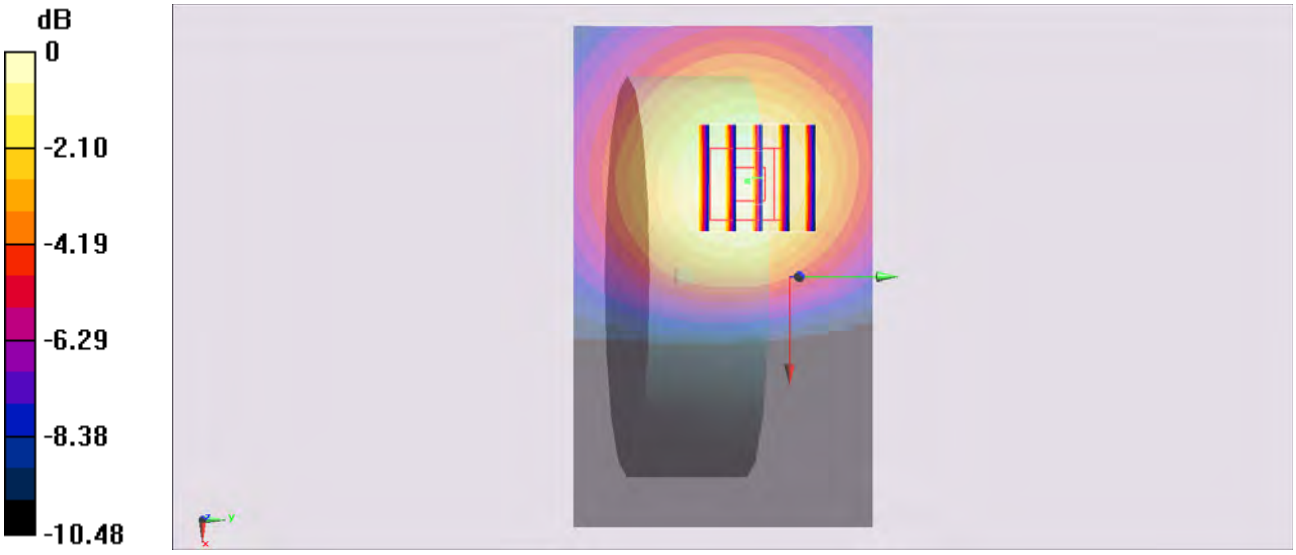
#03_WCDMA V_RMC 12.2Kbps_Front_1cm_Ch4182

Communication System: WCDMA ; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium: HSL_850_140328 Medium parameters used : f = 836.4 MHz; σ = 0.902 S/m; ε_r = 40.816; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3954; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/11/4;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2014/1/30
- Phantom: ELI 4.0_Front; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7331)

Configuration/Ch4182/Area Scan (101x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.331 W/kg

Configuration/Ch4182/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.37 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.375 W/kg
SAR(1 g) = 0.265 W/kg; SAR(10 g) = 0.181 W/kg
Maximum value of SAR (measured) = 0.324 W/kg



0 dB = 0.324 W/kg = -4.89 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date/Time: 2014/3/28

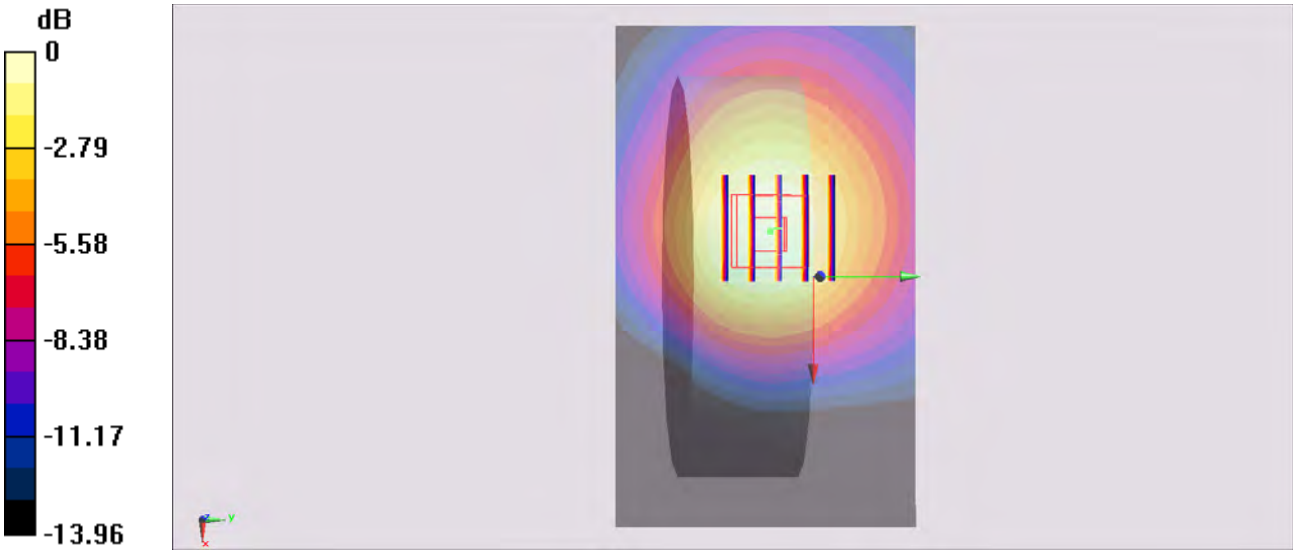
#04_WCDMA II_RMC 12.2Kbps_Front_1cm_Ch9400

Communication System: WCDMA ; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: HSL_1900_140328 Medium parameters used: f = 1880 MHz; σ = 1.416 S/m; ε_r = 39.238; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3954; ConvF(8.13, 8.13, 8.13); Calibrated: 2013/11/4;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2014/1/30
- Phantom: ELI 4.0_Front; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7331)

Configuration/Ch9400/Area Scan (101x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.869 W/kg

Configuration/Ch9400/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.06 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 1.02 W/kg
SAR(1 g) = 0.671 W/kg; SAR(10 g) = 0.423 W/kg
Maximum value of SAR (measured) = 0.849 W/kg



0 dB = 0.849 W/kg = -0.71 dBW/kg

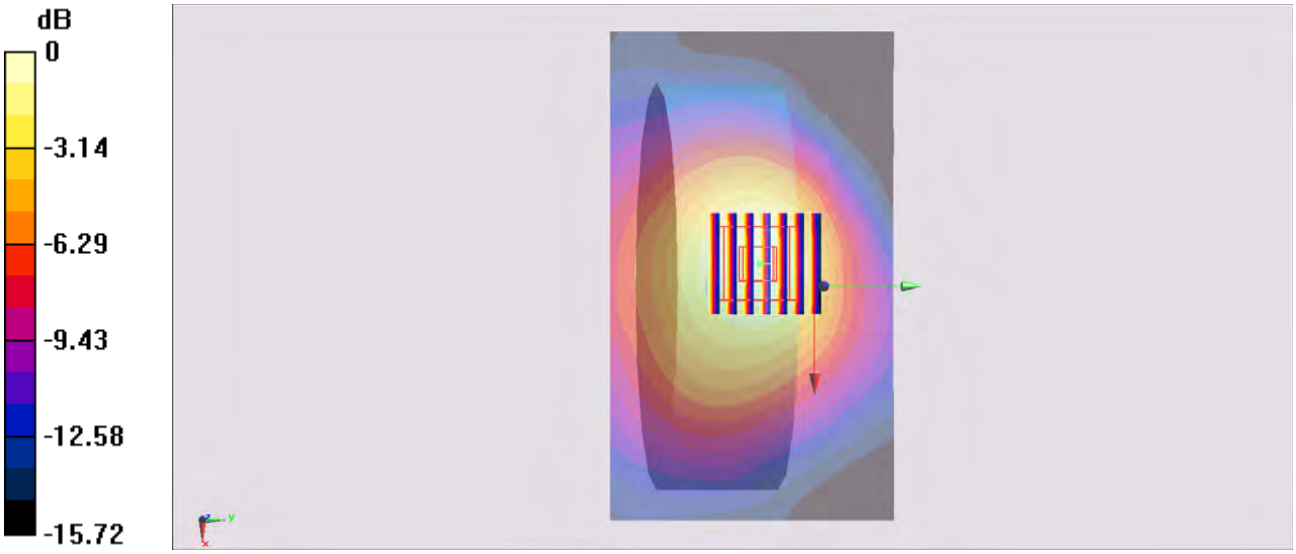
#05_WLAN2.4GHz_802.11b 1Mbps_Front_1cm_Ch6

Communication System: 802.11b ; Frequency: 2437 MHz;Duty Cycle: 1:1.024
Medium: HSL_2450_140328 Medium parameters used: f = 2437 MHz; σ = 1.811 S/m; ε_r = 37.937; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3954; ConvF(7.26, 7.26, 7.26); Calibrated: 2013/11/4;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2014/1/30
- Phantom: ELI 4.0_Front; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7331)

Configuration/Ch6/Area Scan (121x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.201 W/kg

Configuration/Ch6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.66 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.260 W/kg
SAR(1 g) = 0.142 W/kg; SAR(10 g) = 0.080 W/kg
Maximum value of SAR (measured) = 0.198 W/kg



0 dB = 0.198 W/kg = -7.03 dBW/kg

Date/Time: 07.11.2014

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

06_GSM850_GPRS (2TX Slots)_Inner wrist band_0cm_Ch251

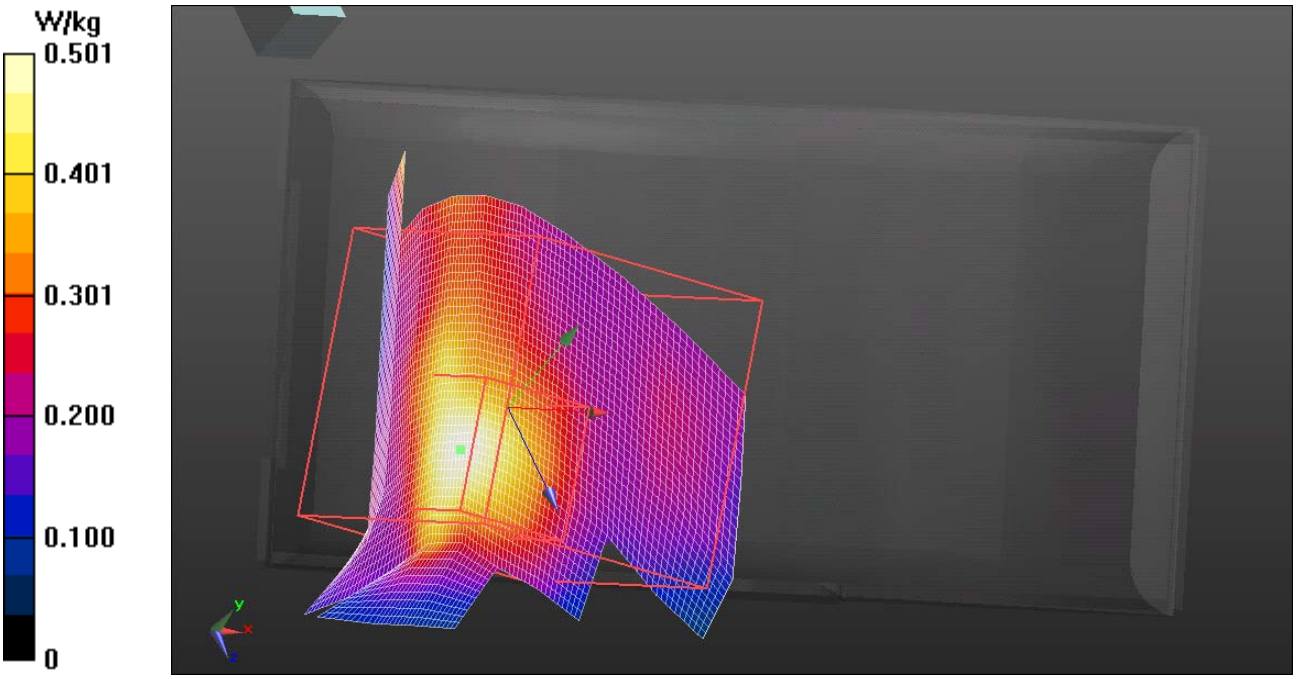
Communication System: UID 0, GSM850 (0); Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 848.8 MHz;Communication System PAR: 6.18 dB; PMF: 2.03704
Medium parameters used: f = 849 MHz; σ = 0.976 S/m; ε_r = 54.407; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: ES3DV3 - SN3270 (no surface detection); ConvF(6.15, 6.15, 6.15); Calibrated: 26.09.2014;
- Sensor-Surface: 3.141mm (Fix Surface), z = 12.0
- Electronics: DAE4 Sn778; Calibrated: 21.08.2014
- Phantom: IWAP_WWAN_NO_GAP; ; Test Bed A(for 850MHz)
- DASY52 52.8.8(1222); SEMCAD X 14.9.7285(0)

STEP 2_ SAR Measurement/Select Communication System and Frequency of EUT/Area Scan (111x91x1): Interpolated grid: dx=0.4000 mm, dy=0.4000 mm
Peak SAR (extrapolated) = 0.62 W/kg
Fast SAR: SAR(1 g) = 0.367 W/kg; SAR(10 g) = 0.181 W/kg

Maximum value of SAR (interpolated) = 0.501 W/kg


W/kg
0.501
0.401
0.301
0.200
0.100
0

Date/Time: 07.11.2014

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

07_GSM1900_GPRS (2 Tx slots)_Inner wrist band_0cm_Ch810

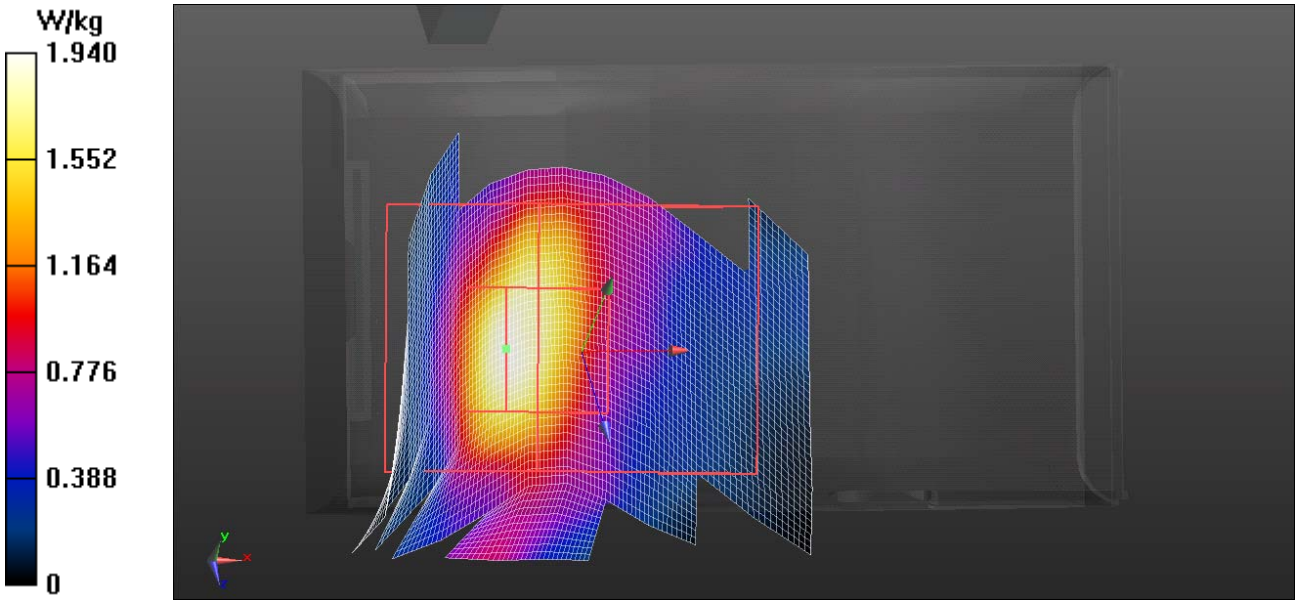
Communication System: UID 0, PCS (0); Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 1909.8 MHz;Communication System PAR: 6.18 dB; PMF: 2.03704
Medium parameters used: f = 1910 MHz; σ = 1.538 S/m; ε_r = 51.27; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: ES3DV3 - SN3270 (no surface detection); ConvF(4.7, 4.7, 4.7); Calibrated: 26.09.2014;
- Sensor-Surface: 3.91mm (Fix Surface), z = 12.0
- Electronics: DAE4 Sn778; Calibrated: 21.08.2014
- Phantom: IWAP_WWAN_NO_GAP; ; Test Bed B(for 1900MHz)
- DASY52 52.8.8(1222); SEMCAD X 14.9.7285(0)

STEP 2_ SAR Measurement/Select Communication System and Frequency of EUT/Area Scan (111x91x1): Interpolated grid: dx=0.4000 mm, dy=0.4000 mm
Peak SAR (extrapolated) = 2.87 W/kg
Fast SAR: SAR(1 g) = 1.48 W/kg; SAR(10 g) = 0.604 W/kg

Maximum value of SAR (interpolated) = 1.94 W/kg



Date/Time: 07.11.2014

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

08_WCDMA V_RMC12.2Kbps_Inner wrist band_0cm_Ch4182

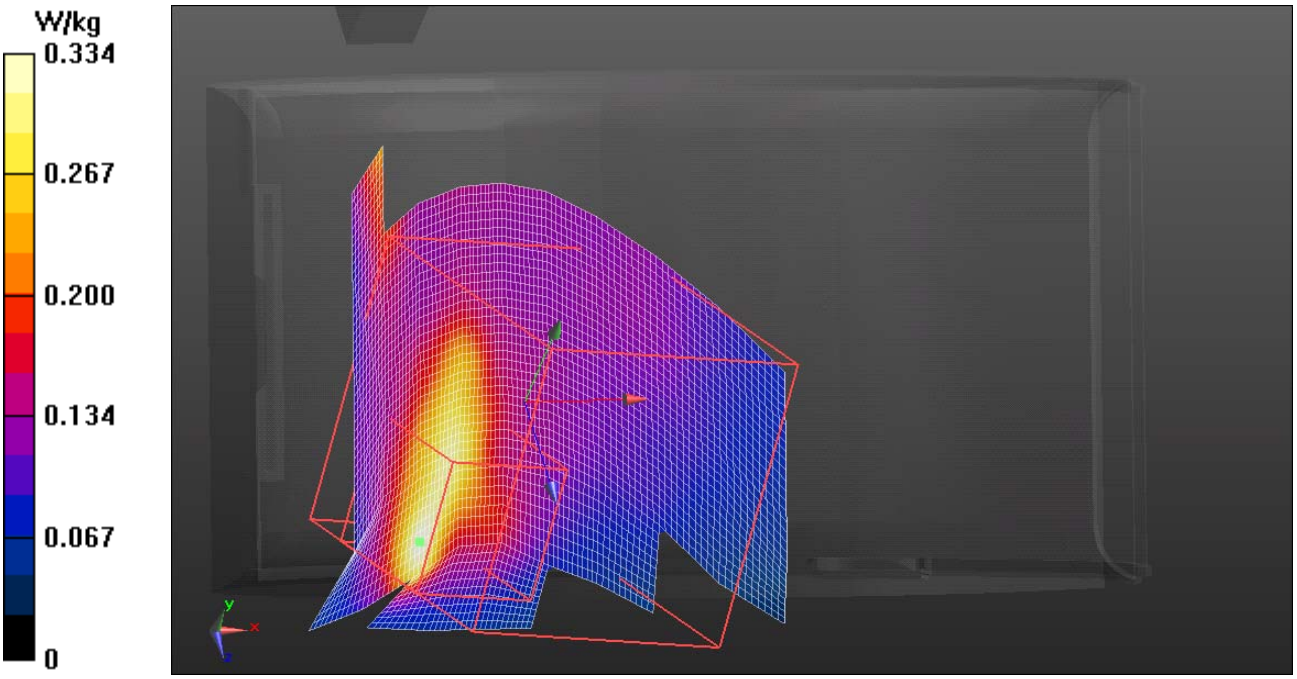
Communication System: UID 0, WCDMA (0); Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 836.4 MHz;Communication System PAR: 0 dB; PMF: 1
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.965 S/m; ε_r = 54.522; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: ES3DV3 - SN3270 (no surface detection); ConvF(6.15, 6.15, 6.15); Calibrated: 26.09.2014;
- Sensor-Surface: 3.141mm (Fix Surface), z = 12.0
- Electronics: DAE4 Sn778; Calibrated: 21.08.2014
- Phantom: IWAP_WWAN_NO_GAP; ; Test Bed A(for 850MHz)
- DASY52 52.8.8(1222); SEMCAD X 14.9.7285(0)

STEP 2_ SAR Measurement/Select Communication System and Frequency of EUT/Area Scan (111x91x1): Interpolated grid: dx=0.4000 mm, dy=0.4000 mm
Peak SAR (extrapolated) = 0.41 W/kg
Fast SAR: SAR(1 g) = 0.191 W/kg; SAR(10 g) = 0.091 W/kg

Maximum value of SAR (interpolated) = 0.334 W/kg


W/kg
0.334
0.267
0.200
0.134
0.067
0
y
x

Date/Time: 07.11.2014

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

09_WCDMA II_RMC12.2Kbps_Inner wrist band_0cm_Ch9400

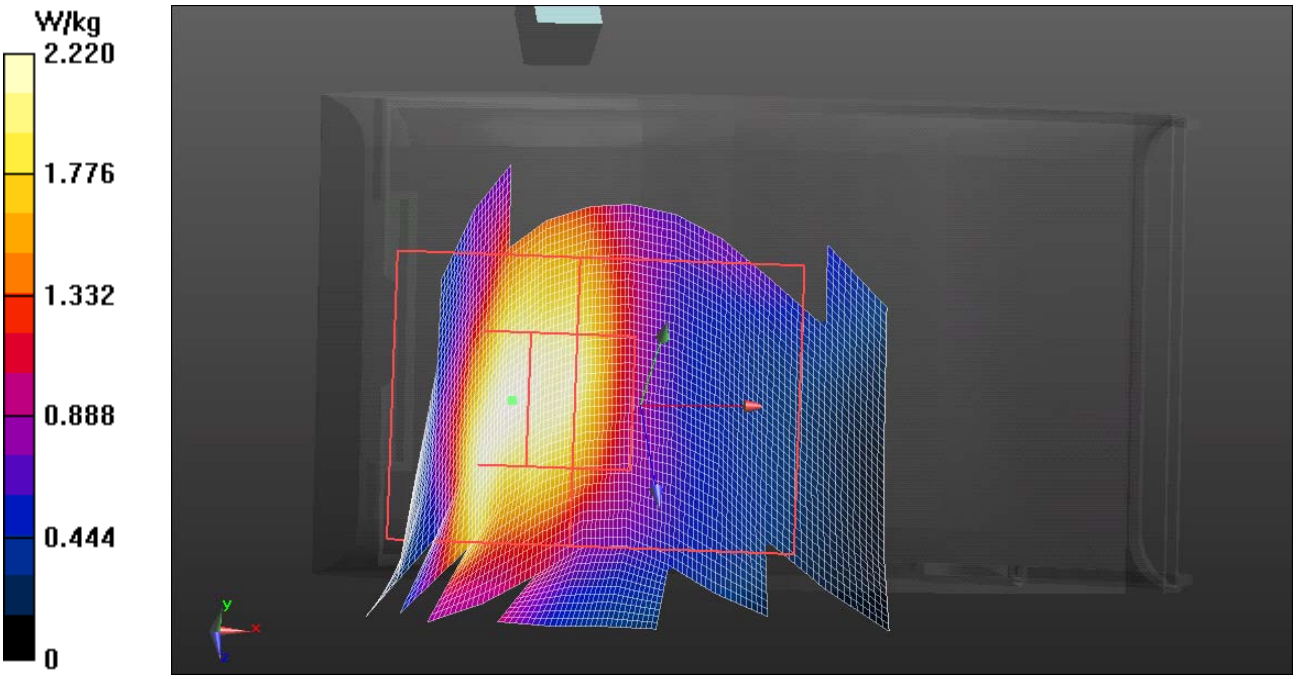
Communication System: UID 0, WCDMA (0); Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 1880 MHz;Communication System PAR: 0 dB; PMF: 1
Medium parameters used: f = 1880 MHz; σ = 1.504 S/m; ε_r = 51.281; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: ES3DV3 - SN3270 (no surface detection); ConvF(4.7, 4.7, 4.7); Calibrated: 26.09.2014;
- Sensor-Surface: 3.91mm (Fix Surface), z = 12.0
- Electronics: DAE4 Sn778; Calibrated: 21.08.2014
- Phantom: IWAP_WWAN_NO_GAP; ; Test Bed B(for 1900MHz)
- DASY52 52.8.8(1222); SEMCAD X 14.9.7285(0)

STEP 2_ SAR Measurement/Select Communication System and Frequency of EUT/Area Scan (111x91x1): Interpolated grid: dx=0.4000 mm, dy=0.4000 mm
Peak SAR (extrapolated) = 3.27 W/kg
Fast SAR: SAR(1 g) = 1.88 W/kg; SAR(10 g) = 0.817 W/kg

Maximum value of SAR (interpolated) = 2.22 W/kg


W/kg
2.220
1.776
1.332
0.888
0.444
0
y
x

Date/Time: 07.11.2014

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

10_WLAN2.4GHz_802.11b 1Mbps_Inner wrist band_0cm_Ch6

Communication System: UID 0, 802.11b (0); Communication System Band: 802.11b;
Frequency: 2437 MHz; Communication System PAR: 0 dB; PMF: 1.12202e-005
Medium parameters used: f = 2437 MHz; σ = 2.001 S/m; ε_r = 53.956; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: ES3DV3 - SN3270 (no surface detection); ConvF(4.29, 4.29, 4.29); Calibrated: 26.09.2014;
- Sensor-Surface: 5.072mm (Fix Surface), z = 12.0
- Electronics: DAE4 Sn778; Calibrated: 21.08.2014
- Phantom: watch_phantom; ; Test Bed C (for 2.4GHz)
- DASY52 52.8.8(1222); SEMCAD X 14.9.7285(0)

STEP 2_ SAR Measurement/Select Communication System and Frequency of EUT/Area Scan (111x111x1): Interpolated grid: dx=0.4000 mm, dy=0.4000 mm
Peak SAR (extrapolated) = 1.14 W/kg
Fast SAR: SAR(1 g) = 0.356 W/kg; SAR(10 g) = 0 W/kg

Maximum value of SAR (interpolated) = 0.620 W/kg