

APPENDIX 1 : SAR Measurement data

1. Evaluation procedure

The evaluation was performed with the following procedure:

Step 1: Measurement of the E-field at a fixed location above the ear point or central position of flat phantom was used as a reference value for assessing the power drop.

Step 2: The SAR distribution at the exposed side of head or body position was measured at a distance of each device from the inner surface of the shell. The area covered the entire dimension of the antenna of EUT and the horizontal grid spacing was 15 mm x 15 mm (or 10mm x 10mm for 5GHz band). Based on these data, the area of the maximum absorption was determined by spline interpolation.

Step 3:

Around this point found in the Step 2 (area scan) , a volume of 30mm x 30mm x 30mm or more was assessed by measuring 7 x 7 x 7 points at least, and a volume of 28mm x 28mm x 22.5mm or more was assessed by measuring 8 x 8 x 10 points at least for 5GHz band. And for any secondary peaks found in the Step2 which are within 2dB of maximum peak and not with this Step3 (Zoom scan) is repeated. On the basis of this data set, the spatial peak SAR value was evaluated under the following procedure:

(1). The data at the surface were extrapolated, since the center of the dipoles is 1mm(EX3DV3) away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.3 mm. The extrapolation was based on a least square algorithm [4]. A polynomial of the fourth order was calculated through the points in z-axes.

This polynomial was then used to evaluate the points between the surface and the probe tip.

(2). The maximum interpolated value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed by the 3D-Spline interpolation algorithm. The 3D-Spline is composed of three one-dimensional splines with the "Not a knot"-condition (in x, y and z-directions) [4], [5]. The volume was integrated with the trapezoidal-algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average.

(3). All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

Step 4: Re-measurement of the E-field at the same location as in Step 1.

2. Measurement data

i) PCS1900 Head

SHW-M410K PCS1900(GSM) Left cheek 1880MHz

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:8.29851

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(8.65, 8.65, 8.65); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.8 (0);

Area Scan (61x91x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.342 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 5.780 V/m; Power Drift = -0.19 dB

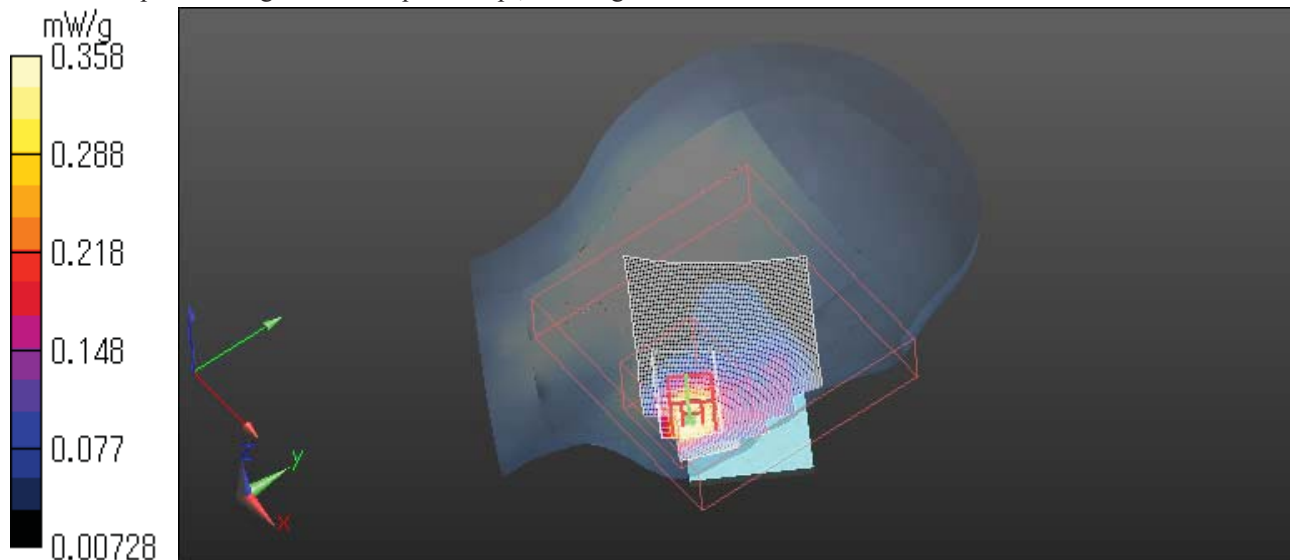
Peak SAR (extrapolated) = 0.431 W/kg

SAR(1 g) = 0.273 mW/g; SAR(10 g) = 0.162 mW/g

Maximum value of SAR (measured) = 0.358 mW/g

Date: 2011/11/22

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



Z Scan at maximum Head SAR in PCS1900 band

SHW-M410K PCS1900(GSM) Left cheek 1880MHz

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:8.29851

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 36.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(8.65, 8.65, 8.65); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

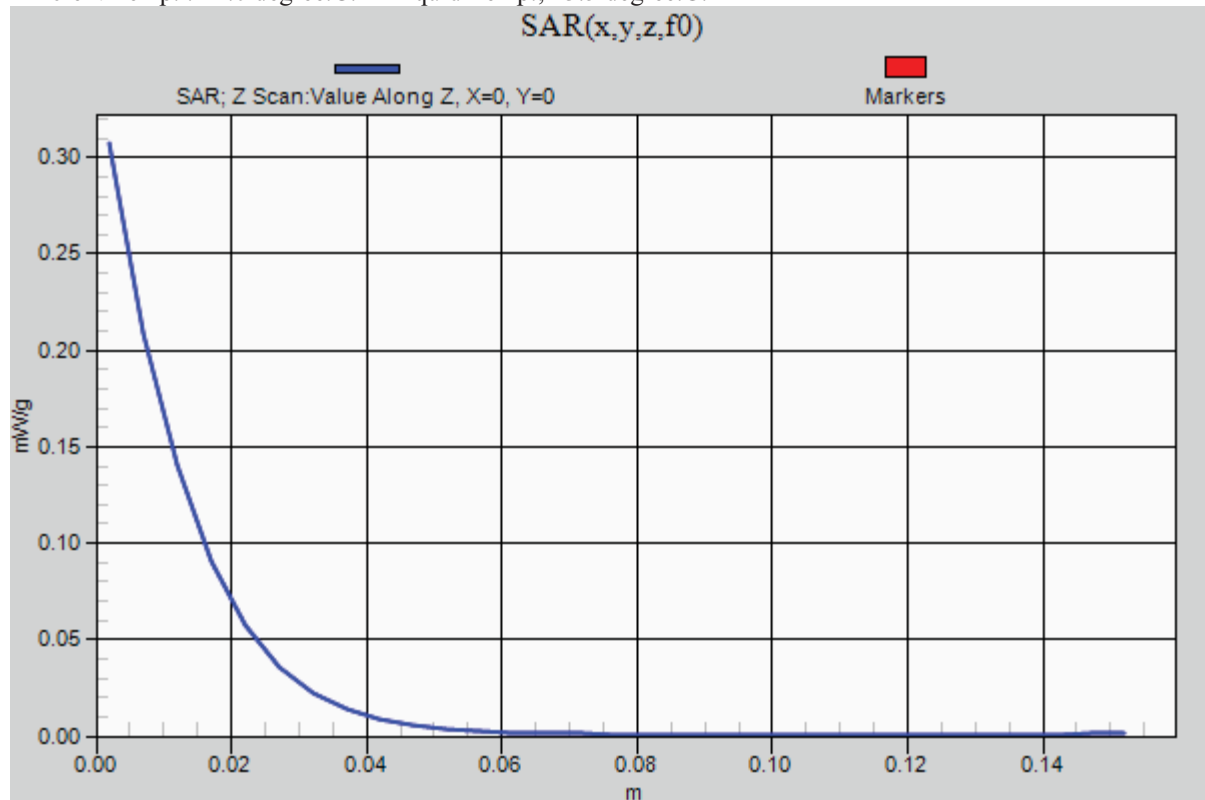
Measurement SW: DASY52, V52.8 Build 0;

Z Scan (1x1x31): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.307 mW/g

Date: 2011/11/22

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K PCS1900(GSM) Left Tilt 1880MHz

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:8.29851

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(8.65, 8.65, 8.65); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.8 (0);

Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.127 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.464 V/m; Power Drift = -0.17 dB

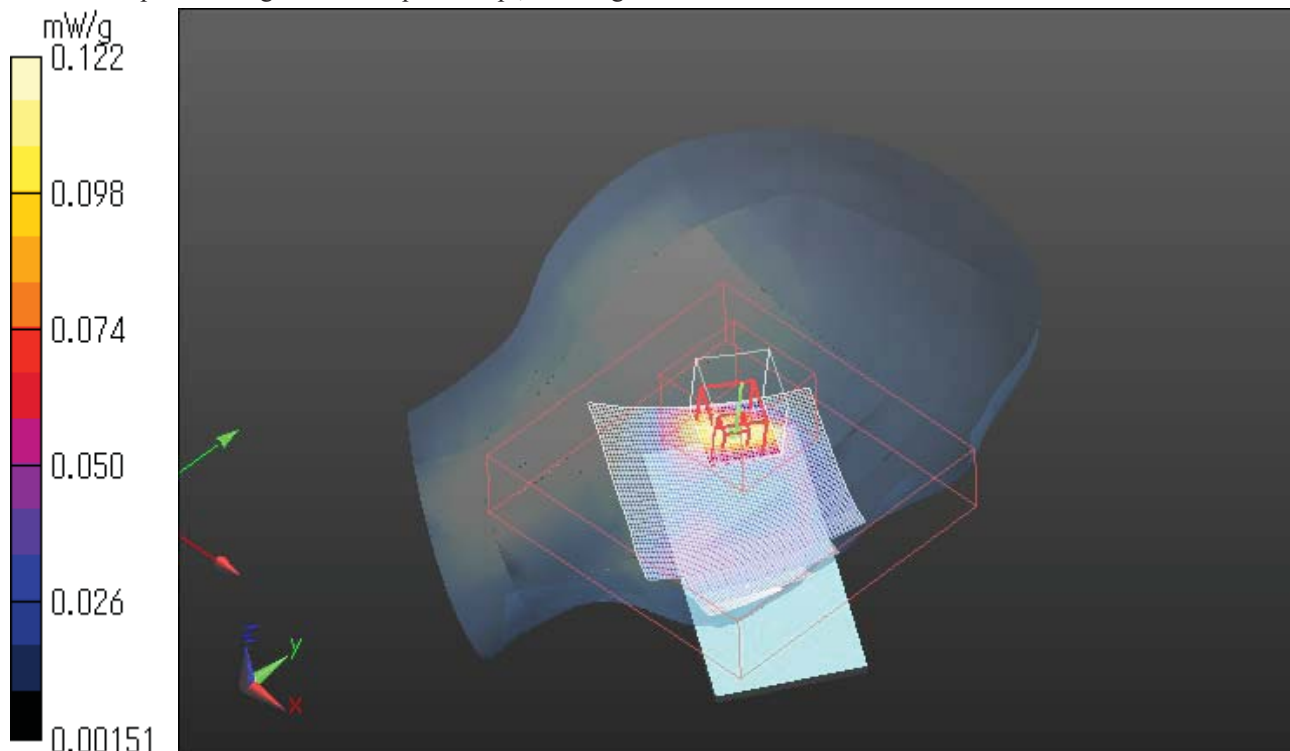
Peak SAR (extrapolated) = 0.153 W/kg

SAR(1 g) = 0.088 mW/g; SAR(10 g) = 0.049 mW/g

Maximum value of SAR (measured) = 0.122 mW/g

Date: 2011/11/22

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K PCS1900(GSM) Right cheek 1880MHz

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:8.29851

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(8.65, 8.65, 8.65); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

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

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.098 V/m; Power Drift = 0.18 dB

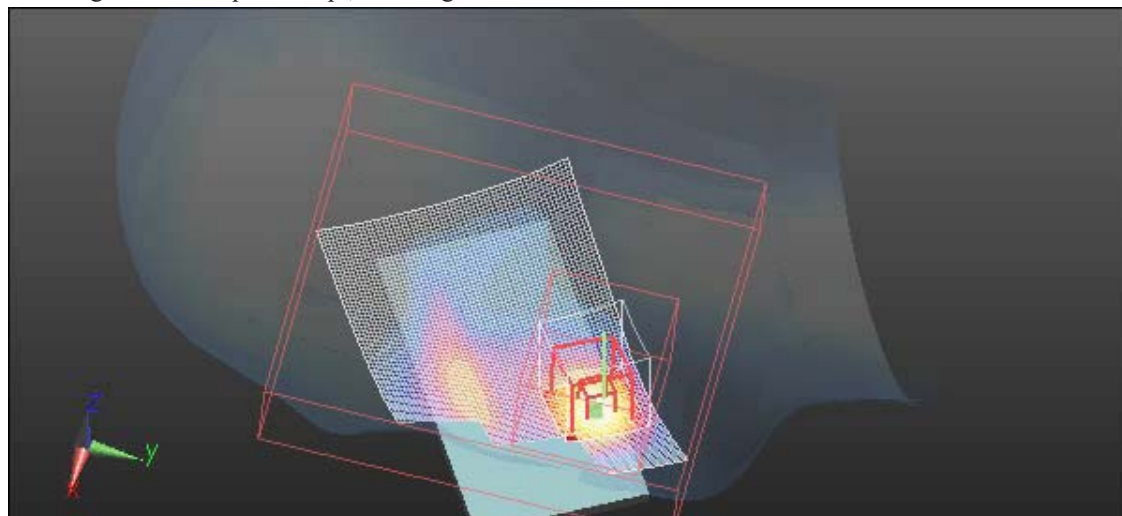
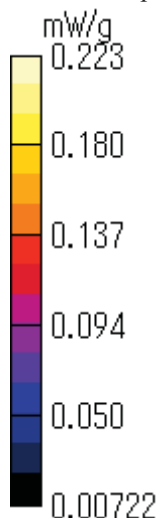
Peak SAR (extrapolated) = 0.272 W/kg

SAR(1 g) = 0.177 mW/g; SAR(10 g) = 0.107 mW/g

Maximum value of SAR (measured) = 0.223 mW/g

Date: 2011/11/22

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K PCS1900(GSM) Right tilt 1880MHz

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:9.7949

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(8.65, 8.65, 8.65); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.104 mW/g

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.517 V/m; Power Drift = 0.15 dB

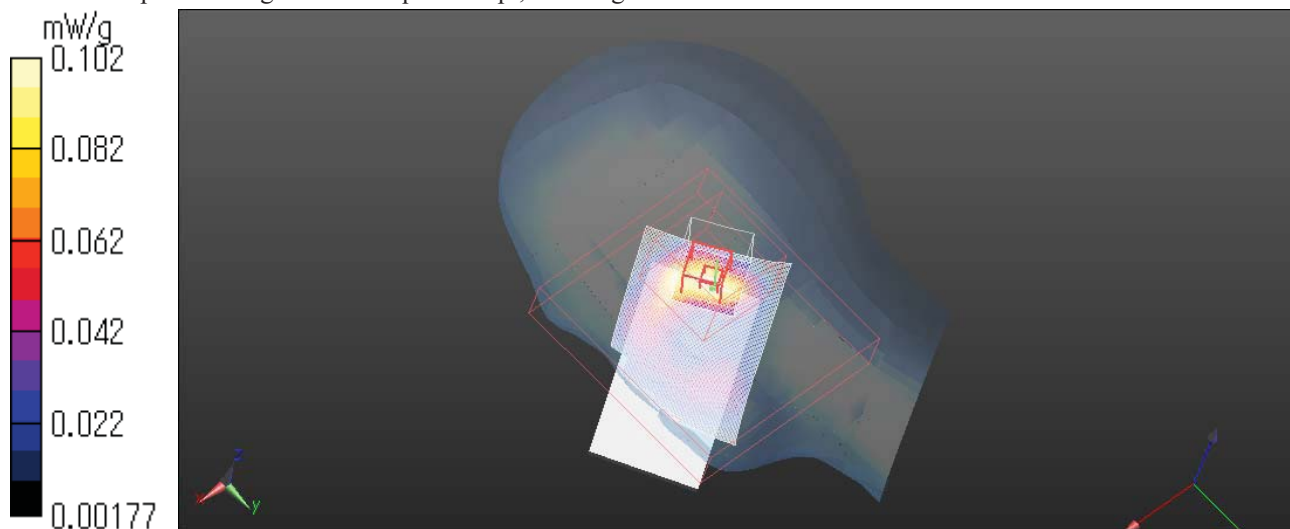
Peak SAR (extrapolated) = 0.127 W/kg

SAR(1 g) = 0.077 mW/g; SAR(10 g) = 0.046 mW/g

Maximum value of SAR (measured) = 0.102 mW/g

Date: 2011/11/22

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



ii) PCS1900 Body/Body-worn

SHW-M410K PCS1900(GPRS 2slots) Front 10mm(Hotspot) 1880MHz

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:4.14954

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 52$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.95, 7.95, 7.95); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: ELI 4.0; Type: QDOVA001BA;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (61x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.582 mW/g

Zoom Scan (8x10x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.096 V/m; Power Drift = -0.13 dB

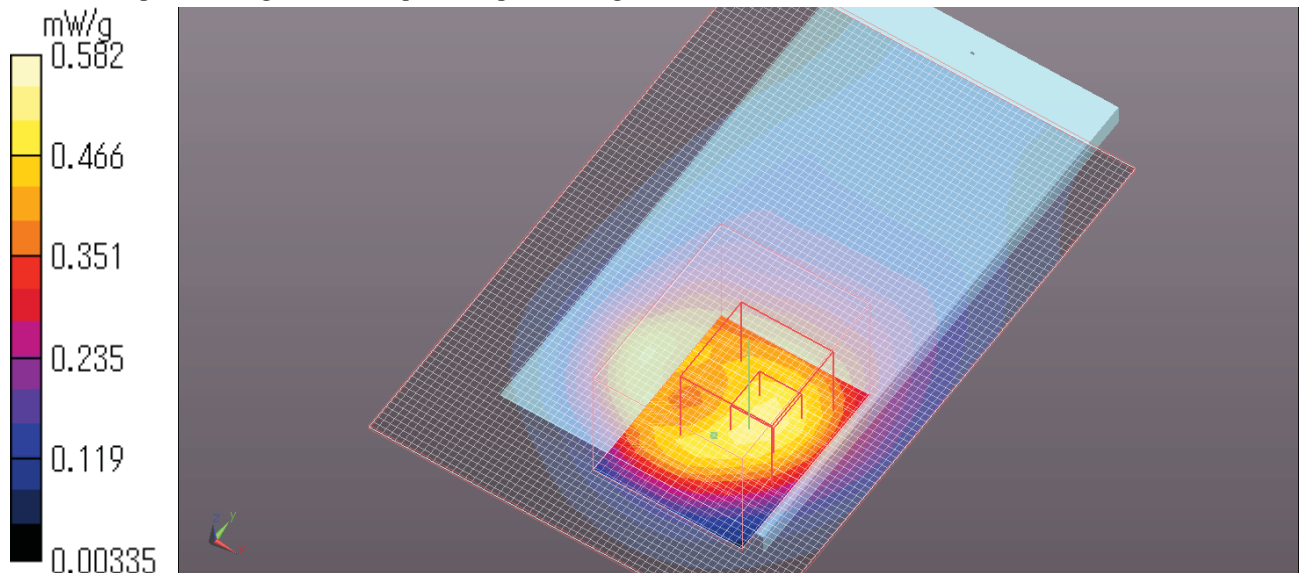
Peak SAR (extrapolated) = 0.645 W/kg

SAR(1 g) = 0.401 mW/g; SAR(10 g) = 0.247 mW/g

Maximum value of SAR (measured) = 0.524 mW/g

Date: 2011/11/28

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K PCS1900(GPRS 2slots) Rear 10mm(Hotspot) 1880MHz

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:4.14954

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.95, 7.95, 7.95); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: ELI 4.0; Type: QDOVA001BA;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.745 mW/g

Zoom Scan (7x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.160 V/m; Power Drift = -0.21 dB

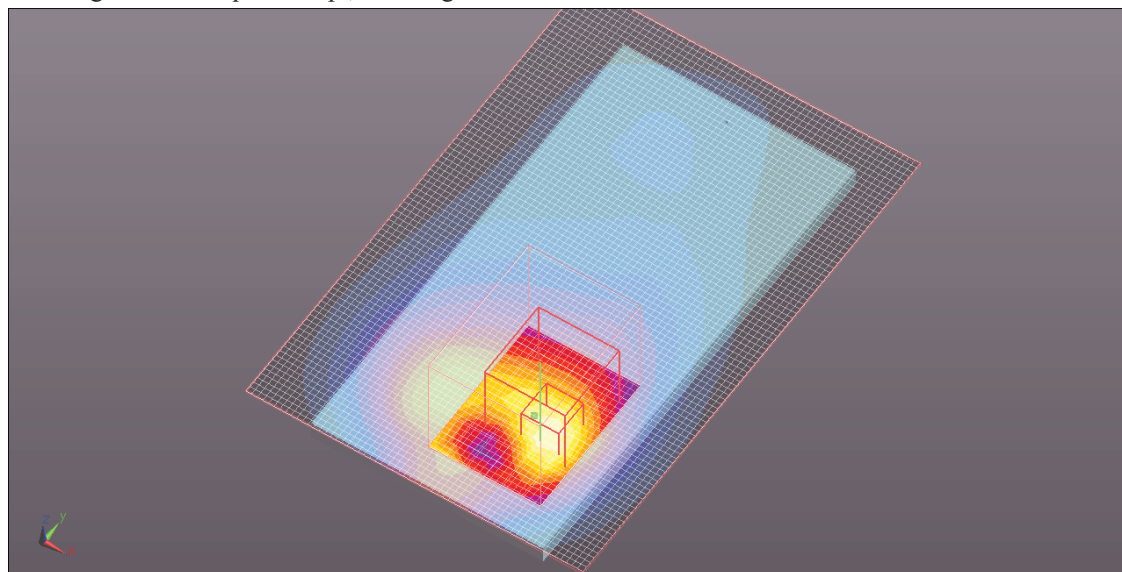
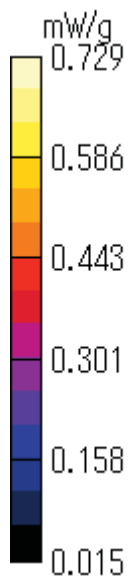
Peak SAR (extrapolated) = 0.953 W/kg

SAR(1 g) = 0.531 mW/g; SAR(10 g) = 0.290 mW/g

Maximum value of SAR (measured) = 0.729 mW/g

Date: 2011/11/28

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



Z Scan at maximum Body SAR in PCS1900 band**SHW-M410K PCS1900(GPRS 2slots) Rear 10mm(Hotspot) 1880MHz**

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:4.14954

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.95, 7.95, 7.95); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: ELI 4.0; Type: QDOVA001BA;

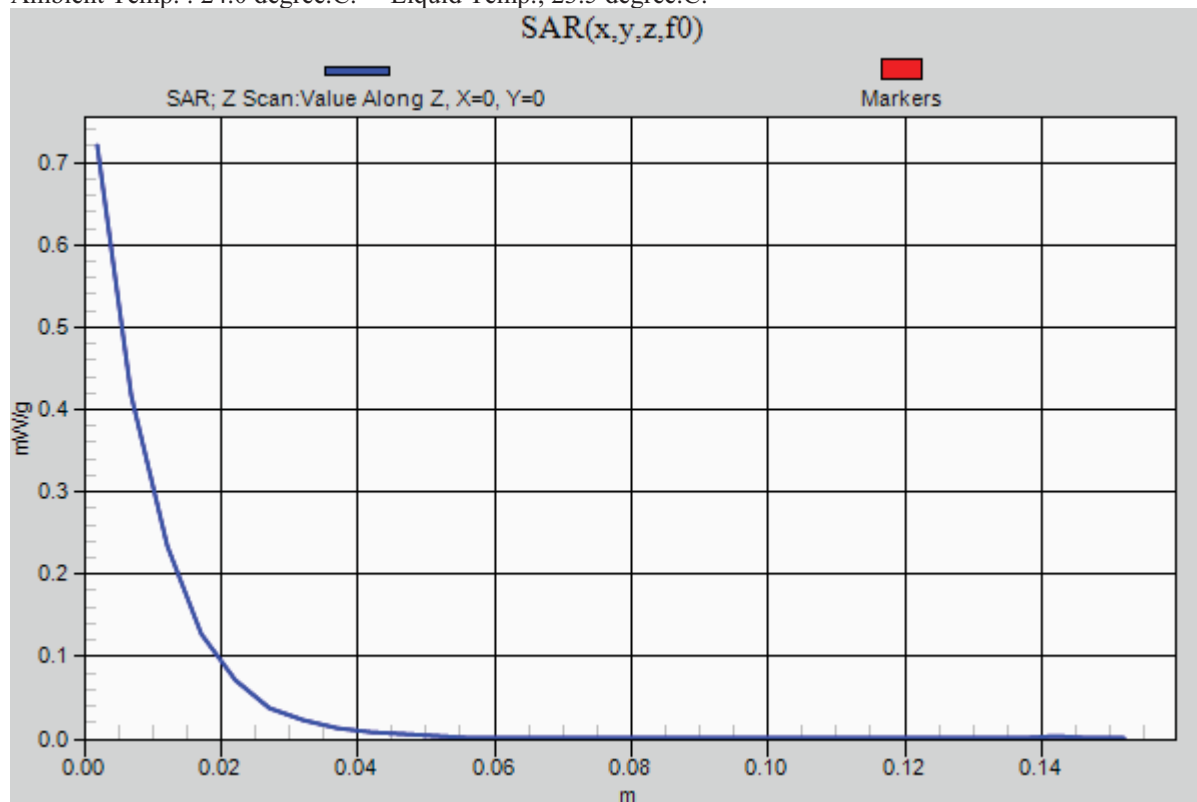
Measurement SW: DASY52, V52.6 Build 2;

Z Scan (1x1x31): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.720 mW/g

Date: 2011/11/28

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K PCS1900(GPRS 2slots) Left edge 10mm(Hotspot) 1880MHz

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:4.14954

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.95, 7.95, 7.95); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: ELI 4.0; Type: QDOVA001BA;

Measurement SW: DASY52, Version 52.6 (2);

Zoom Scan (7x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.532 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.093 W/kg

SAR(1 g) = 0.056 mW/g; SAR(10 g) = 0.034 mW/g

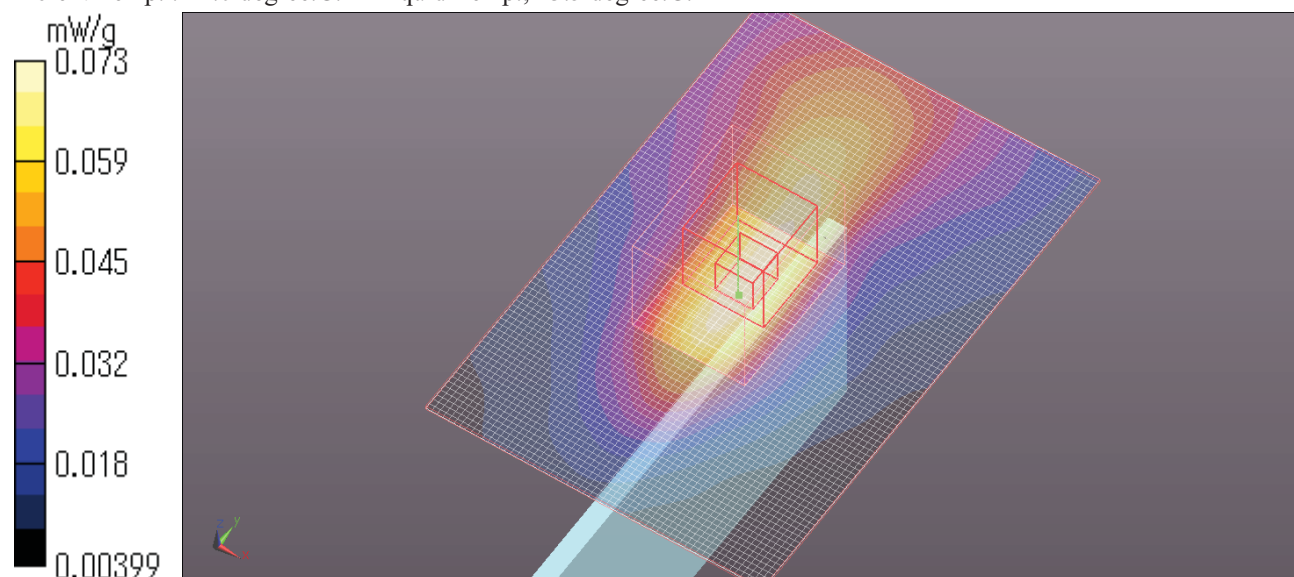
Maximum value of SAR (measured) = 0.075 mW/g

Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.073 mW/g

Date: 2011/11/28

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K PCS1900(GPRS 2slots) Right edge 10mm(Hotspot) 1880MHz

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:4.14954

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.95, 7.95, 7.95); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: ELI 4.0; Type: QDOVA001BA;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.182 mW/g

Zoom Scan (7x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.308 V/m; Power Drift = 0.21 dB

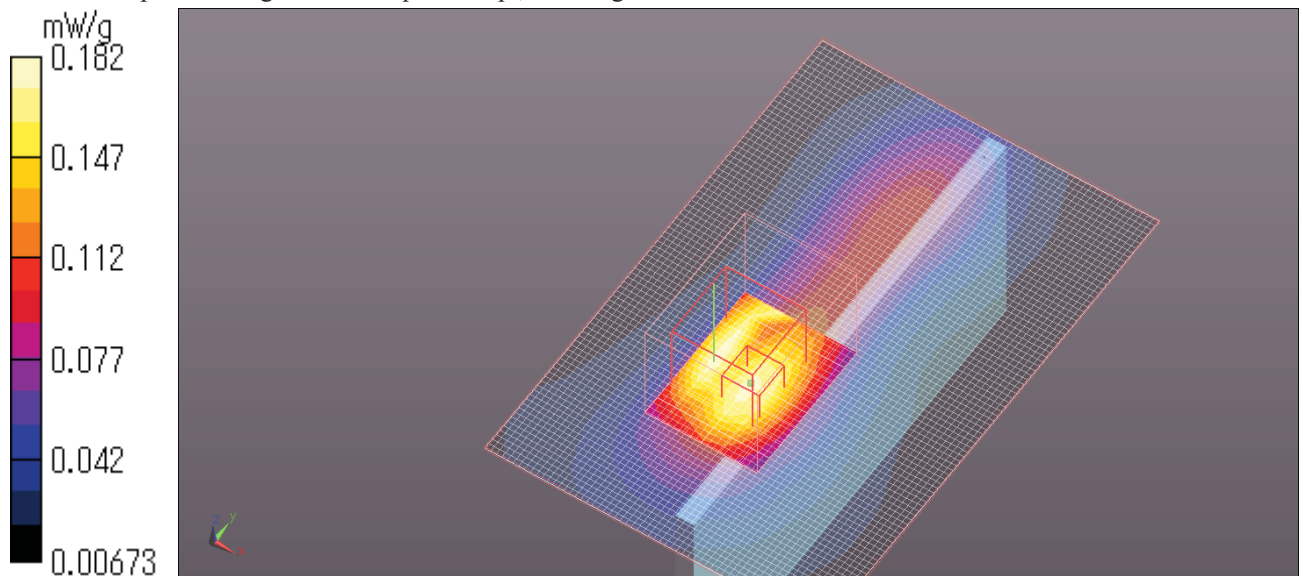
Peak SAR (extrapolated) = 0.223 W/kg

SAR(1 g) = 0.131 mW/g; SAR(10 g) = 0.081 mW/g

Maximum value of SAR (measured) = 0.183 mW/g

Date: 2011/11/28

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K PCS1900(GPRS 2slots) Bottom edge 10mm(Hotspot) 1880MHz

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:4.14954

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.95, 7.95, 7.95); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: ELI 4.0; Type: QDOVA001BA;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.415 mW/g

Zoom Scan (7x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.536 V/m; Power Drift = -0.09 dB

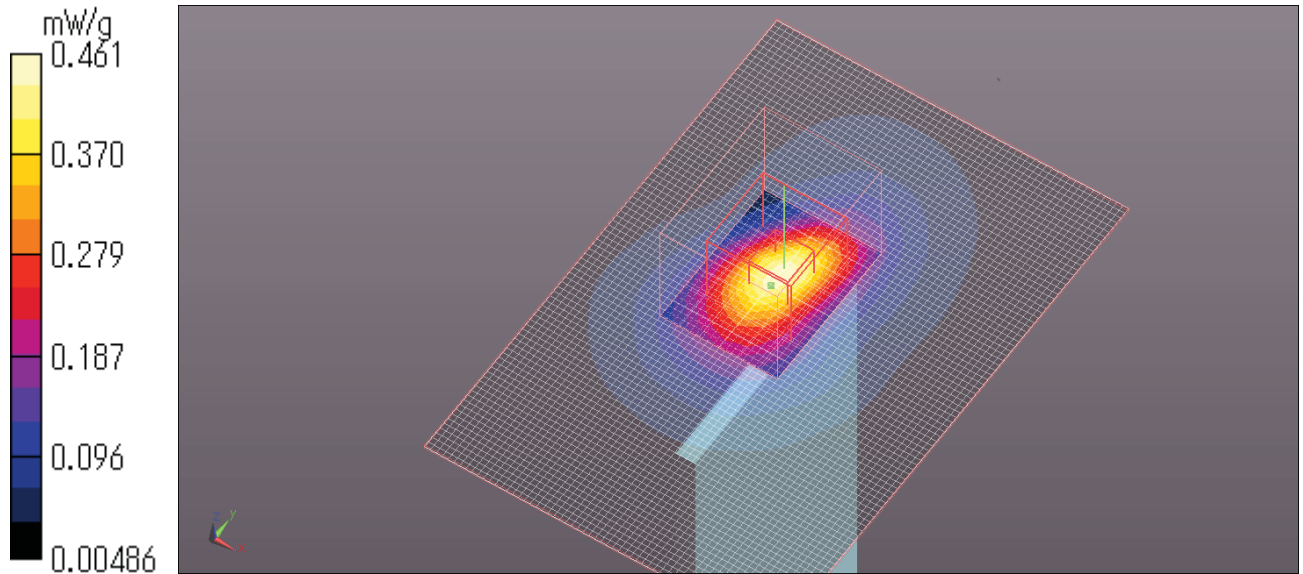
Peak SAR (extrapolated) = 0.578 W/kg

SAR(1 g) = 0.332 mW/g; SAR(10 g) = 0.174 mW/g

Maximum value of SAR (measured) = 0.461 mW/g

Date: 2011/11/28

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



iii) **WLAN (2.4G) Head**

SHW-M410K WLAN 11b 1Mbps Left cheek 2462MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: WLAN 11b/g/n; Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.86$ mho/m; $\epsilon_r = 37.3$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.65, 7.65, 7.65); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.359 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.783 V/m; Power Drift = 0.12 dB

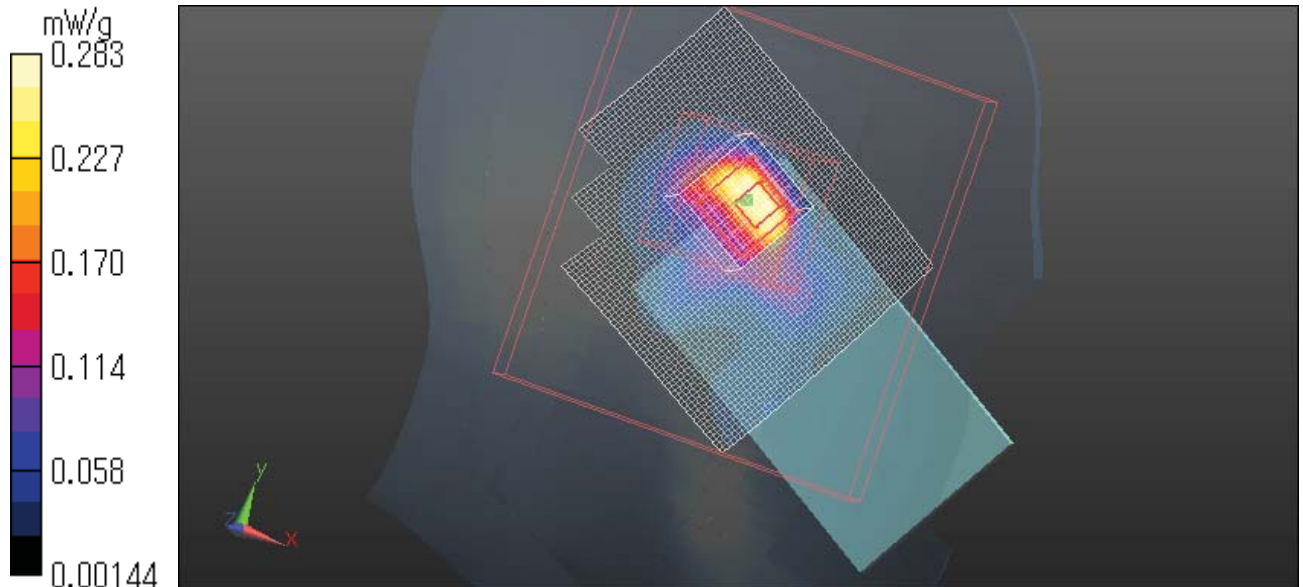
Peak SAR (extrapolated) = 0.401 W/kg

SAR(1 g) = 0.187 mW/g; SAR(10 g) = 0.081 mW/g

Maximum value of SAR (measured) = 0.283 mW/g

Date: 2011/11/26

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.8 degree.C.



Z Scan at maximum Head SAR in WLAN 2.4GHz band

SHW-M410K WLAN 11b 1Mbps Left cheek 2462MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: WLAN 11b/g/n; Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.86$ mho/m; $\epsilon_r = 37.3$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.65, 7.65, 7.65); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

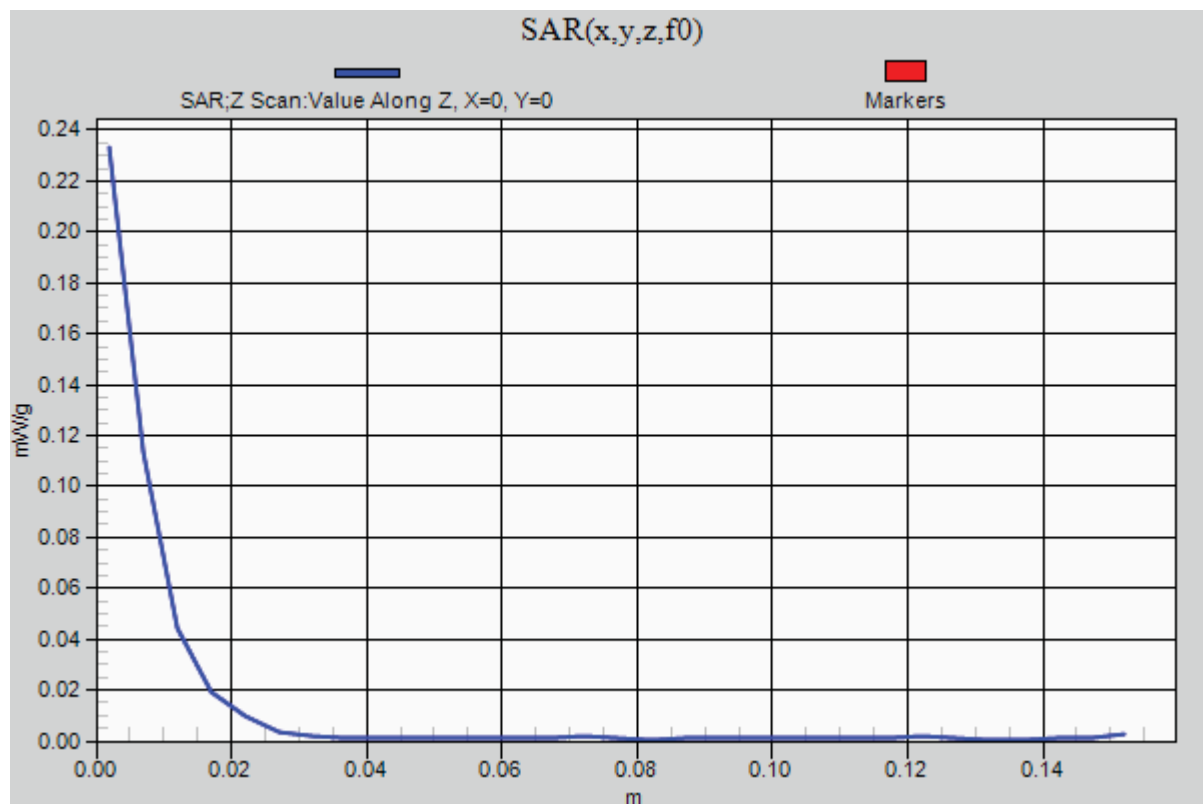
Measurement SW: DASY52, Version 52.6 (2);

Z Scan (1x1x31): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.233 mW/g

Date: 2011/11/26

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.8 degree.C.



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SHW-M410K WLAN 11b 1Mbps Left tilt 2462MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: WLAN 11b/g/n; Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.86$ mho/m; $\epsilon_r = 37.3$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.65, 7.65, 7.65); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.277 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.521 V/m; Power Drift = 0.09 dB

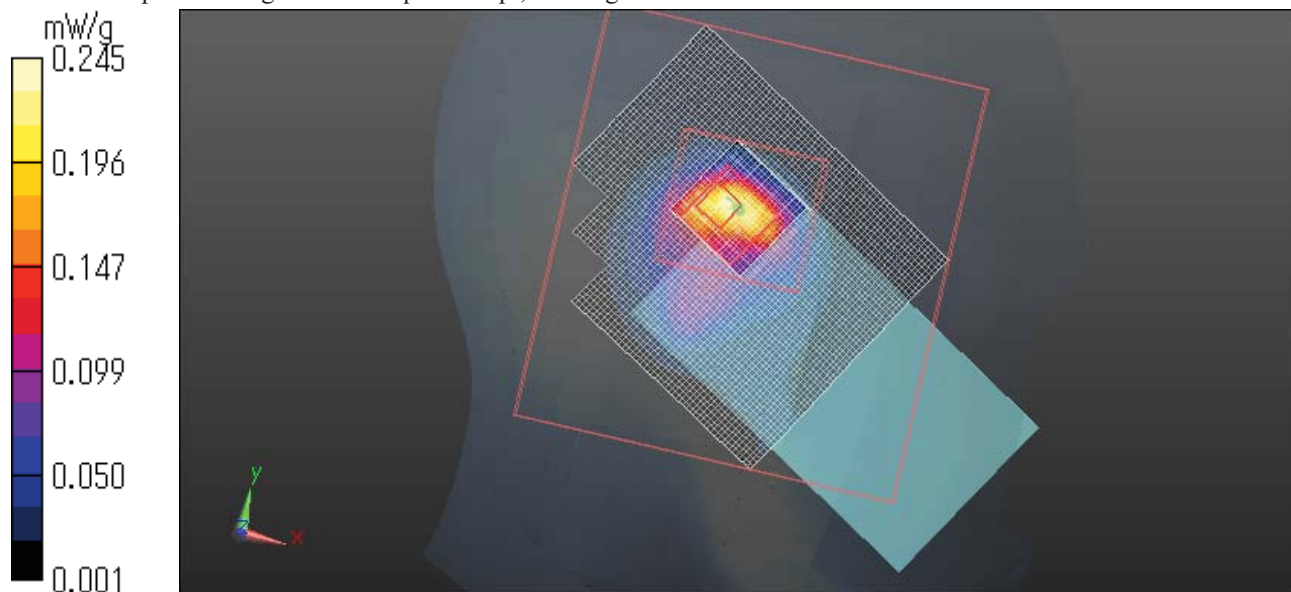
Peak SAR (extrapolated) = 0.360 W/kg

SAR(1 g) = 0.144 mW/g; SAR(10 g) = 0.065 mW/g

Maximum value of SAR (measured) = 0.245 mW/g

Date: 2011/11/26

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.8degree.C.



SHW-M410K WLAN 11b 1Mbps Right cheek 2462MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: WLAN 11b/g/n; Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.86$ mho/m; $\epsilon_r = 37.3$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.65, 7.65, 7.65); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.187 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.665 V/m; Power Drift = 0.08 dB

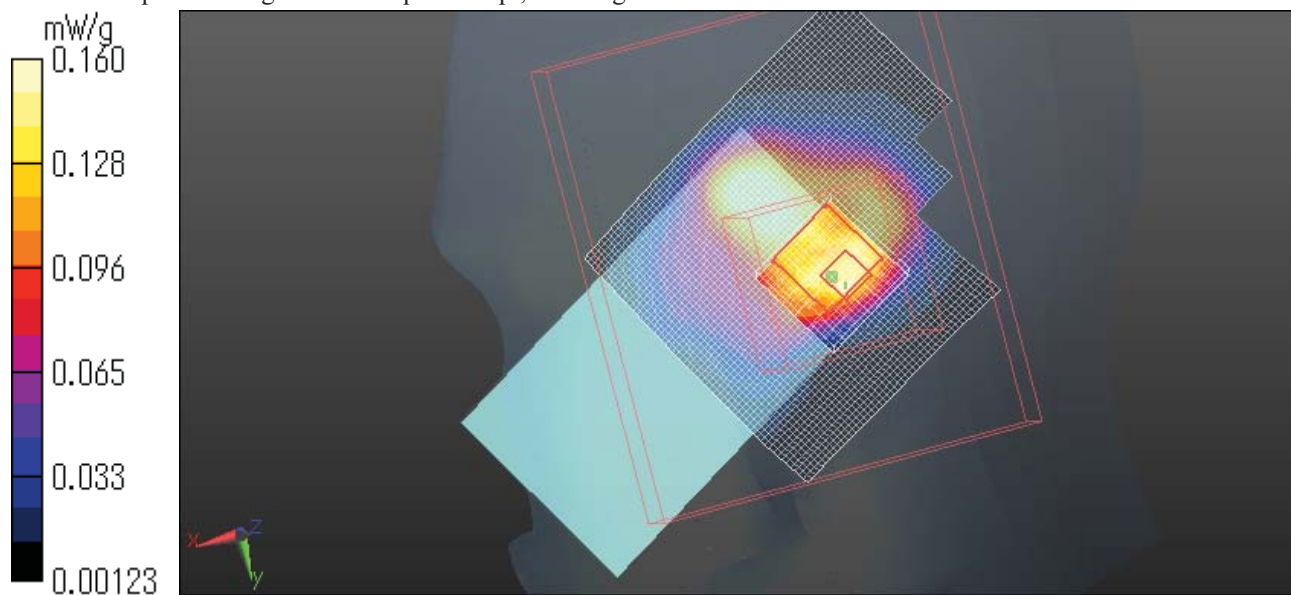
Peak SAR (extrapolated) = 0.219 W/kg

SAR(1 g) = 0.106 mW/g; SAR(10 g) = 0.057 mW/g

Maximum value of SAR (measured) = 0.160 mW/g

Date: 2011/11/26

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.8 degree.C.



SHW-M410K WLAN 11b 1Mbps Right tilt 2462MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: WLAN 11b/g/n; Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.86$ mho/m; $\epsilon_r = 37.3$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.65, 7.65, 7.65); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.159 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.177 V/m; Power Drift = 0.16 dB

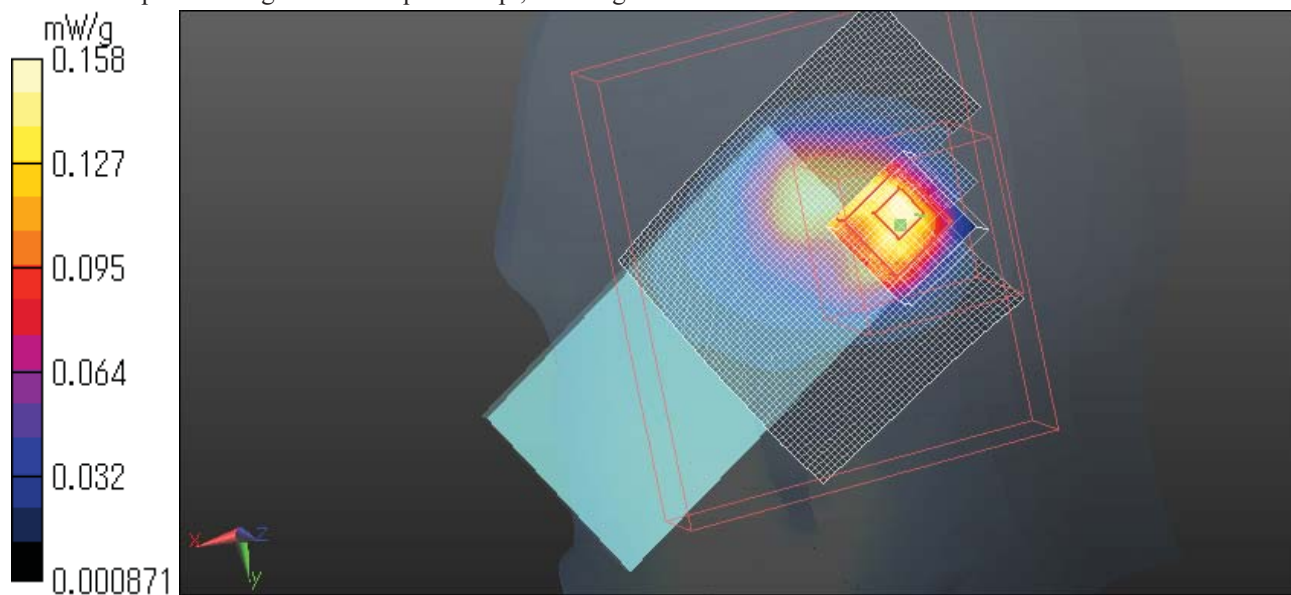
Peak SAR (extrapolated) = 0.225 W/kg

SAR(1 g) = 0.105 mW/g; SAR(10 g) = 0.051 mW/g

Maximum value of SAR (measured) = 0.158 mW/g

Date: 2011/11/26

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.8 degree.C.



iv) **WLAN (2.4G) Body**

SHW-M410K WLAN 11b 1Mbps Front(Hot spot) 10mm 2462MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: WLAN 11b/g/n; Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 50.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.64, 7.64, 7.64); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (61x91x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.070 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.321 V/m; Power Drift = -0.21 dB

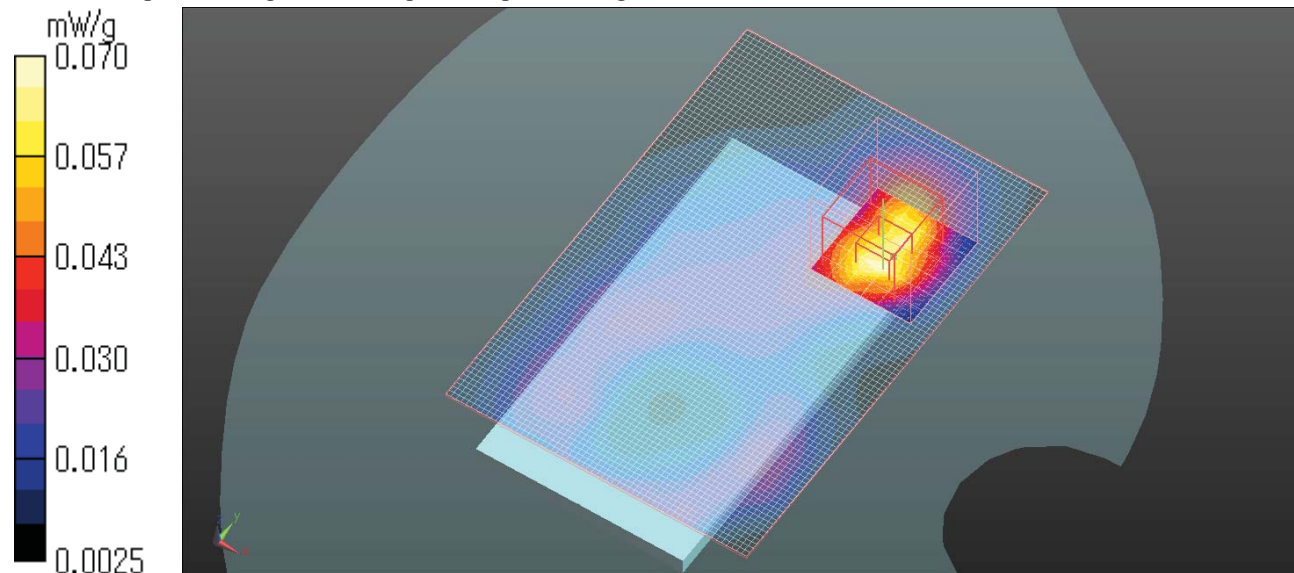
Peak SAR (extrapolated) = 0.096 W/kg

SAR(1 g) = 0.046 mW/g; SAR(10 g) = 0.023 mW/g

Maximum value of SAR (measured) = 0.069 mW/g

Date: 2011/11/28

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K WLAN 11b 1Mbps Rear(Hot spot) 10mm 2462MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: WLAN 11b/g/n; Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 50.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.64, 7.64, 7.64); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.052 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.113 V/m; Power Drift = -0.20 dB

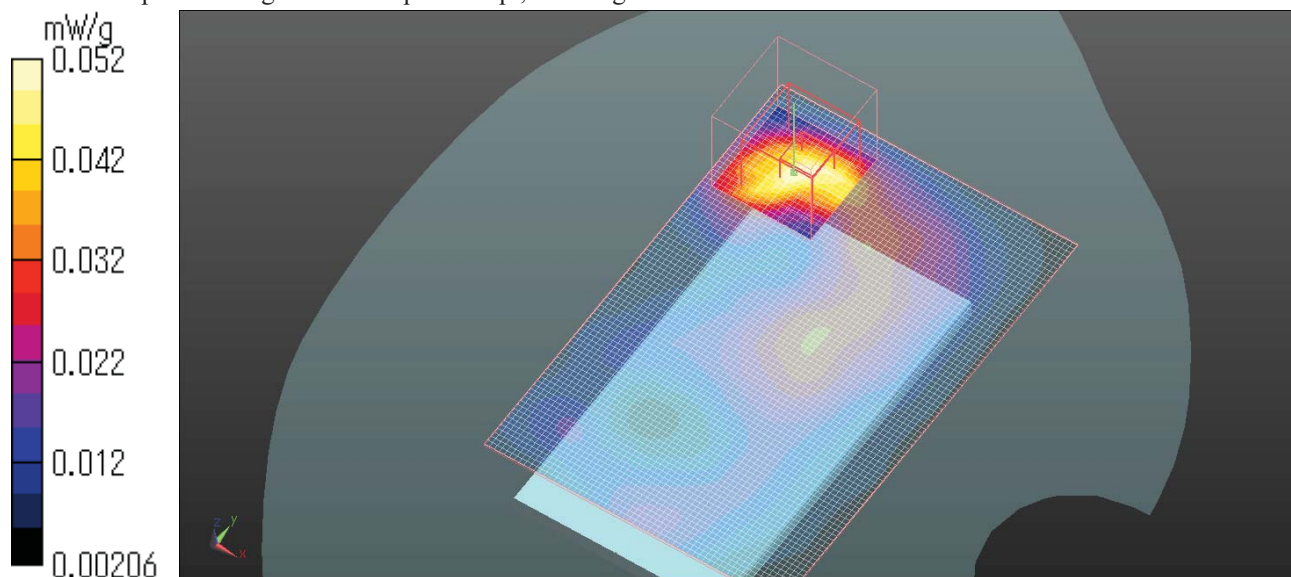
Peak SAR (extrapolated) = 0.083 W/kg

SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.017 mW/g

Maximum value of SAR (measured) = 0.054 mW/g

Date: 2011/11/28

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K WLAN 11b 1Mbps Left edge(Hot spot) 10mm 2462MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: WLAN 11b/g/n; Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 50.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.64, 7.64, 7.64); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.035 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.323 V/m; Power Drift = -0.12 dB

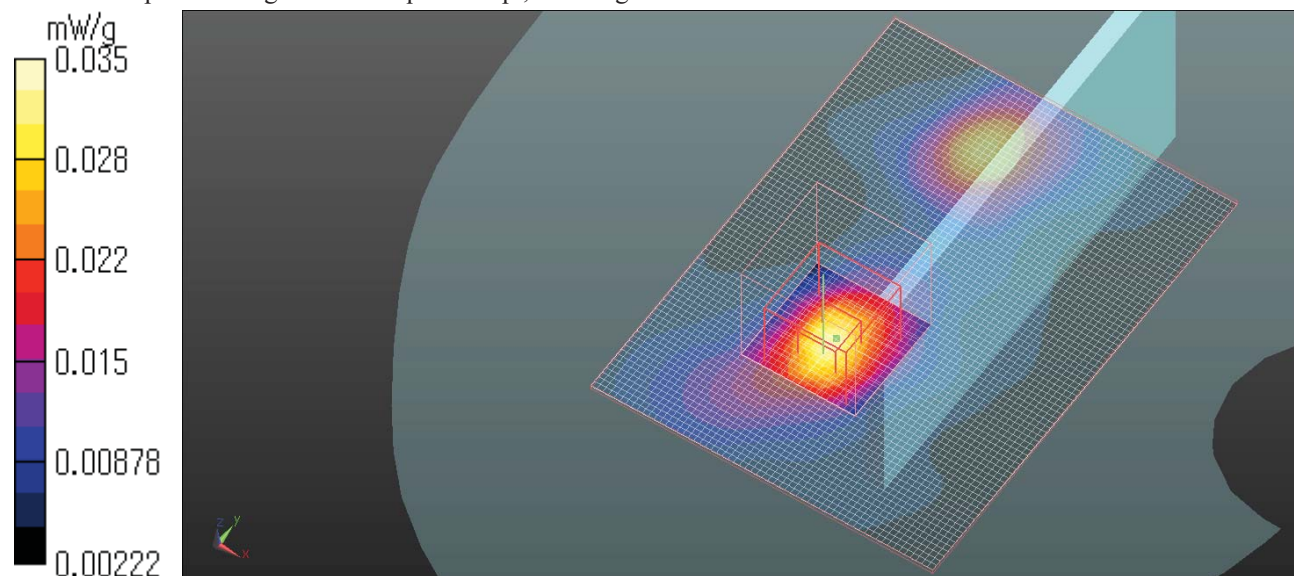
Peak SAR (extrapolated) = 0.047 W/kg

SAR(1 g) = 0.021 mW/g; SAR(10 g) = 0.00985 mW/g

Maximum value of SAR (measured) = 0.033 mW/g

Date: 2011/11/28

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K WLAN 11b 1Mbps Top edge (Hot spot) 10mm 2462MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: WLAN 11b/g/n; Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 50.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.64, 7.64, 7.64); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.070 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.927 V/m; Power Drift = -0.14 dB

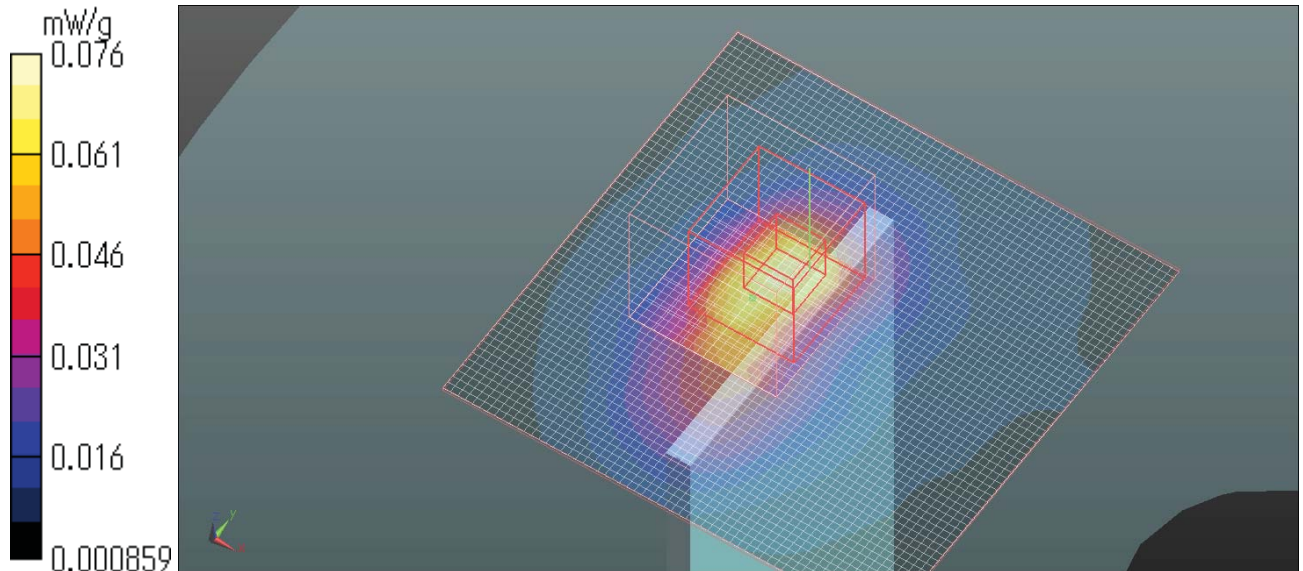
Peak SAR (extrapolated) = 0.107 W/kg

SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.024 mW/g

Maximum value of SAR (measured) = 0.076 mW/g

Date: 2011/11/28

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



Z Scan at maximum Body SAR in WLAN 2.4GHz band

SHW-M410K WLAN 11b 1Mbps Top(Hot spot) 10mm 2462MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: WLAN 11b/g/n; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.05$ mho/m; $\epsilon_r = 50.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(7.64, 7.64, 7.64); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

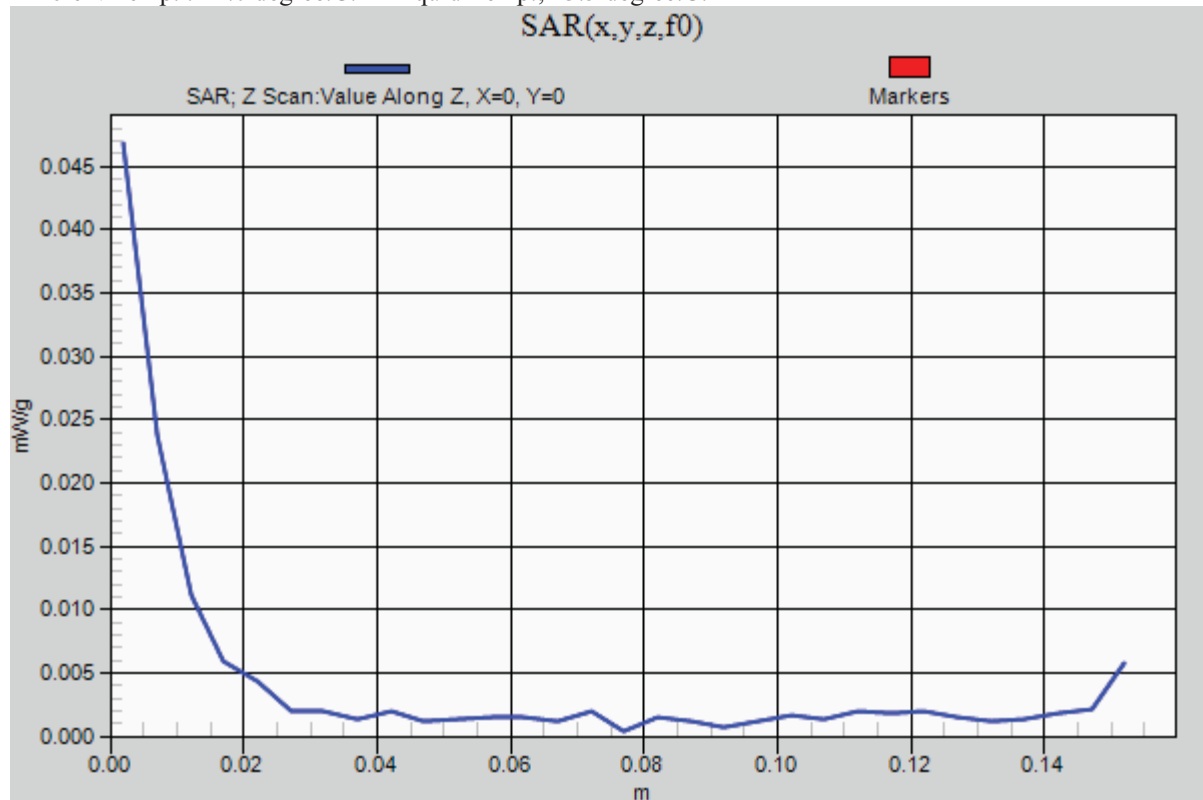
Measurement SW: DASY52, V52.6 Build 2;

Z Scan (1x1x31): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.047 mW/g

Date: 2011/11/28

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



WLAN (5G) Head

SHW-M410K WLAN 6Mbps Left cheek 5260MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n ; Frequency: 5300 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 4.88$ mho/m; $\epsilon_r = 35.1$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4.39, 4.39, 4.39); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (91x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.197 mW/g

Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 3.399 V/m; Power Drift = -0.16 dB

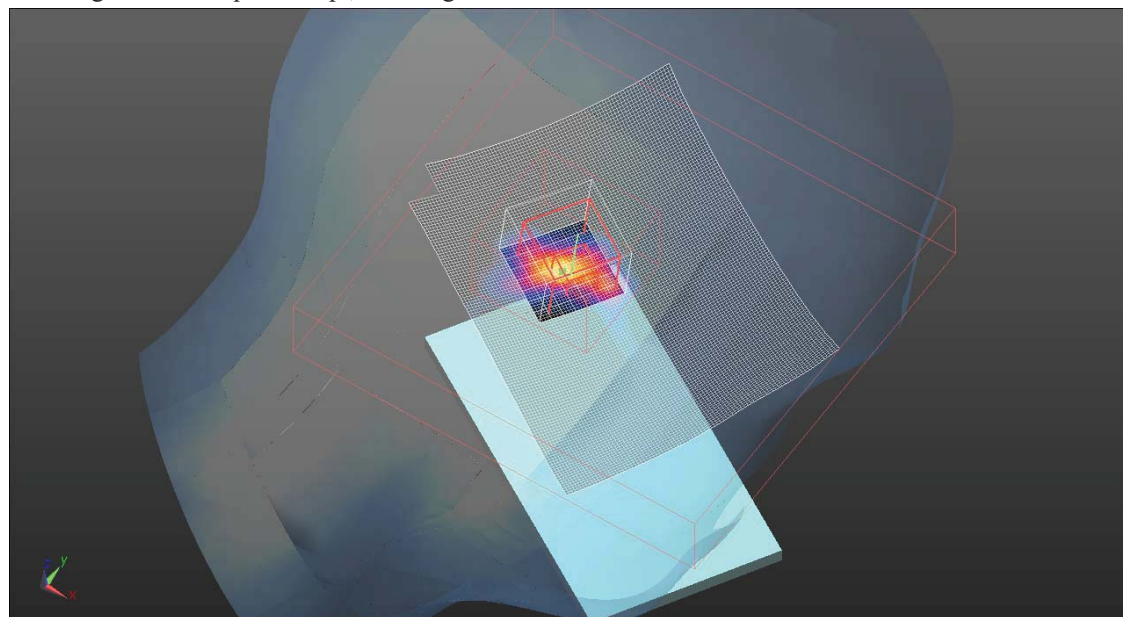
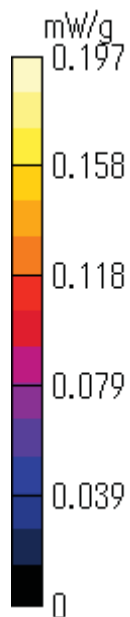
Peak SAR (extrapolated) = 0.443 W/kg

SAR(1 g) = 0.075 mW/g; SAR(10 g) = 0.026 mW/g

Maximum value of SAR (measured) = 0.150 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K WLAN 6Mbps Left tilt 5260MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n ; Frequency: 5300 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 4.88$ mho/m; $\epsilon_r = 35.1$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4.39, 4.39, 4.39); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (91x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.186 mW/g

Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 4.559 V/m; Power Drift = -0.12 dB

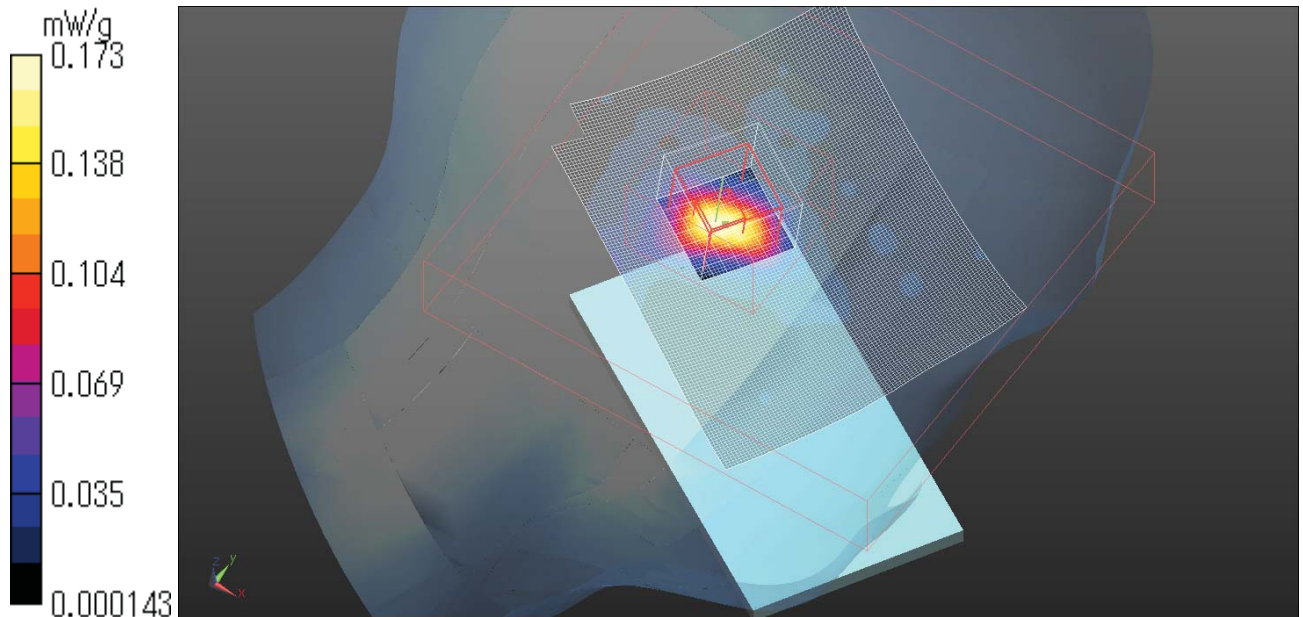
Peak SAR (extrapolated) = 0.322 W/kg

SAR(1 g) = 0.086 mW/g; SAR(10 g) = 0.030 mW/g

Maximum value of SAR (measured) = 0.173 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



Z Scan at maximum Head SAR in WLAN 5.3GHz band**SHW-M410K WLAN 6Mbps Left tilt 5260MHz**

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n ; Frequency: 5300 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 4.88$ mho/m; $\epsilon_r = 35.1$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4.39, 4.39, 4.39); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

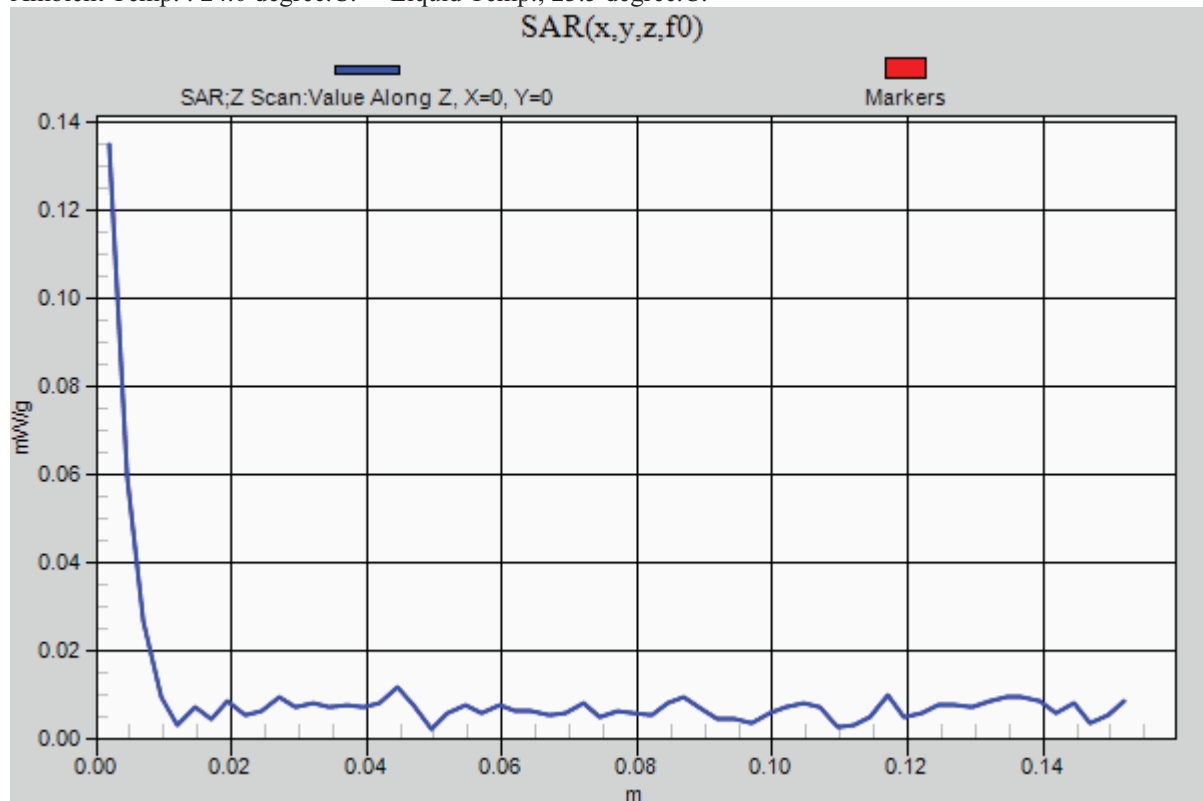
Measurement SW: DASY52, Version 52.6 (2);

Z Scan (1x1x61): Measurement grid: dx=20mm, dy=20mm, dz=2.5mm

Maximum value of SAR (measured) = 0.135 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K WLAN 6Mbps Right cheek 5260MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n ; Frequency: 5300 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 4.88$ mho/m; $\epsilon_r = 35.1$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4.39, 4.39, 4.39); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.094 mW/g

Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 3.305 V/m; Power Drift = -0.17 dB

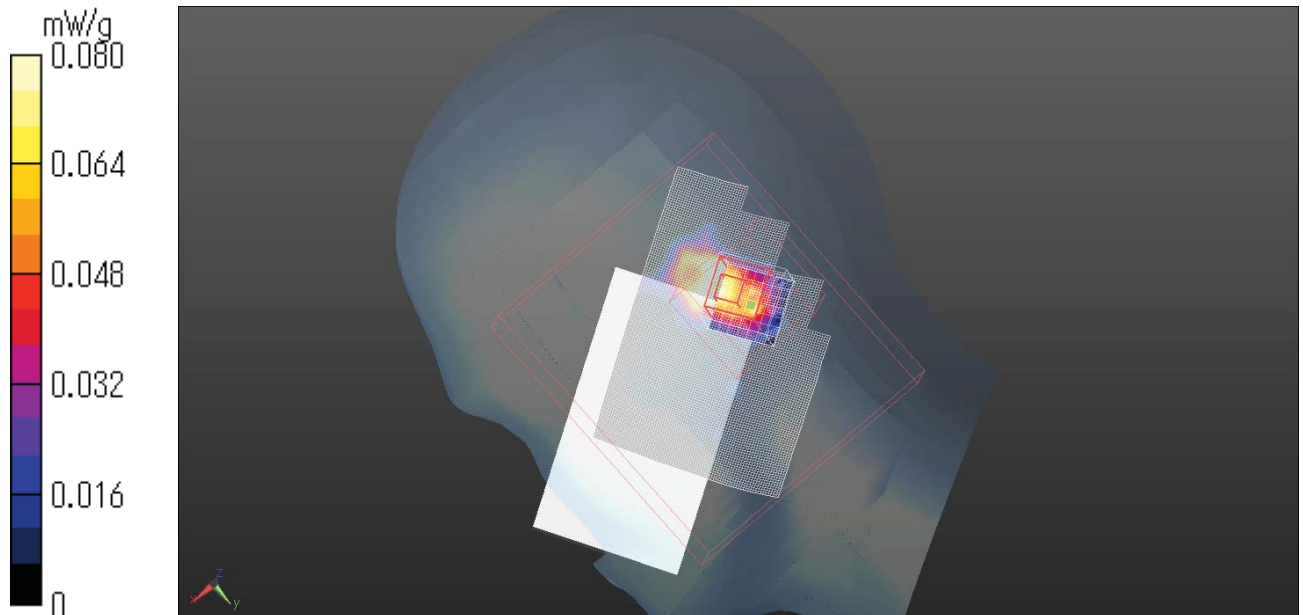
Peak SAR (extrapolated) = 0.149 W/kg

SAR(1 g) = 0.038 mW/g; SAR(10 g) = 0.015 mW/g

Maximum value of SAR (measured) = 0.080 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K WLAN 6Mbps Right tilt 5260MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n ; Frequency: 5300 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 4.88$ mho/m; $\epsilon_r = 35.1$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4.39, 4.39, 4.39); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.126 mW/g

Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 3.976 V/m; Power Drift = -0.17 dB

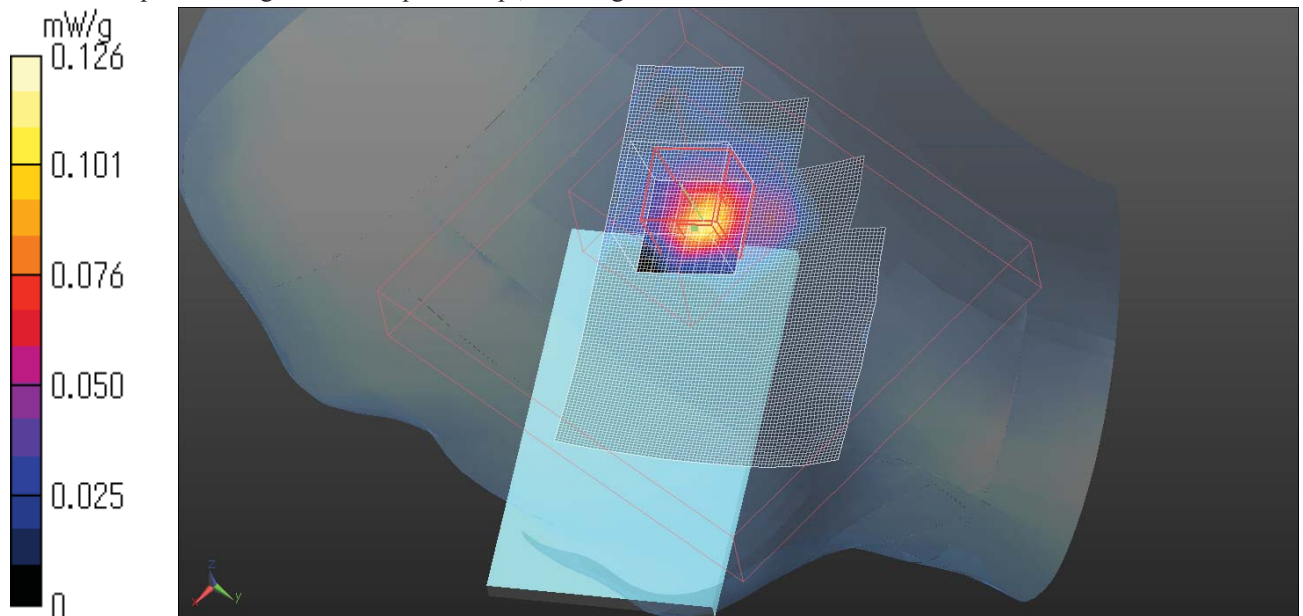
Peak SAR (extrapolated) = 0.436 W/kg

SAR(1 g) = 0.054 mW/g; SAR(10 g) = 0.018 mW/g

Maximum value of SAR (measured) = 0.101 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



Reference SHW-M410K WLAN Left tilt 5240MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n ; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: $f = 5200 \text{ MHz}$; $\sigma = 4.77 \text{ mho/m}$; $\epsilon_r = 35.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4.71, 4.71, 4.71); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (91x121x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.184 mW/g

Zoom Scan (8x8x10)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 3.456 V/m; Power Drift = 0.12 dB

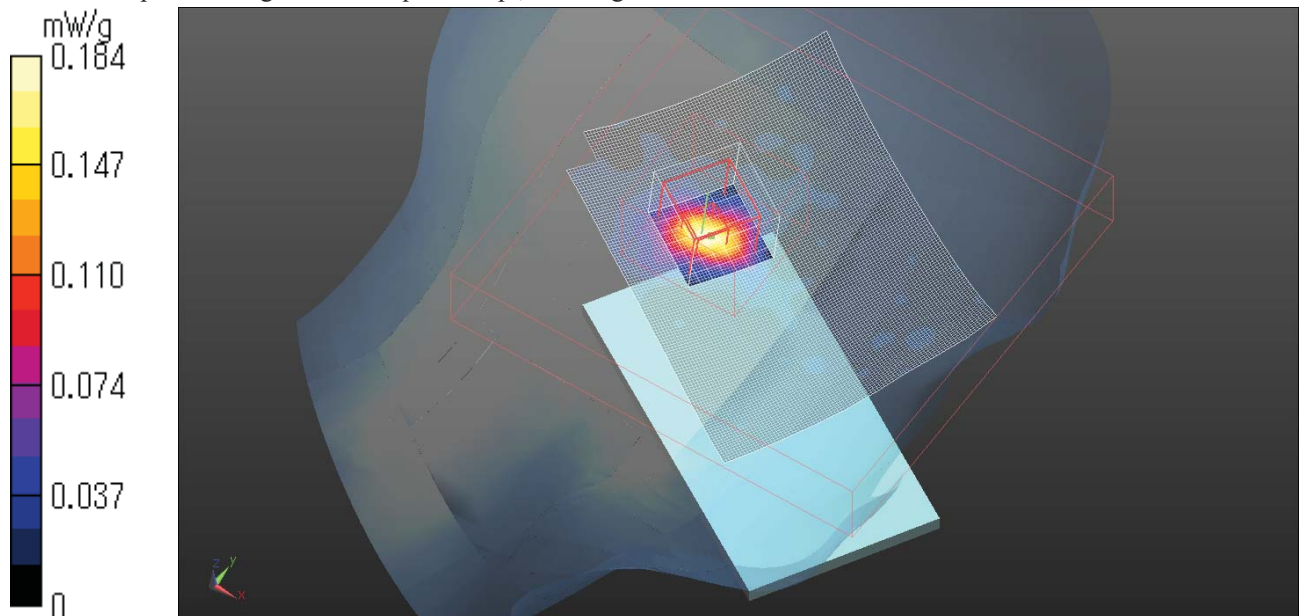
Peak SAR (extrapolated) = 0.346 W/kg

SAR(1 g) = 0.088 mW/g; SAR(10 g) = 0.028 mW/g

Maximum value of SAR (measured) = 0.183 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



Z Scan at maximum Head SAR in WLAN 5.2GHz band**SHW-M410K WLAN Left tilt 5240MHz**

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n ; Frequency: 5200 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 4.77$ mho/m; $\epsilon_r = 35.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4.71, 4.71, 4.71); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

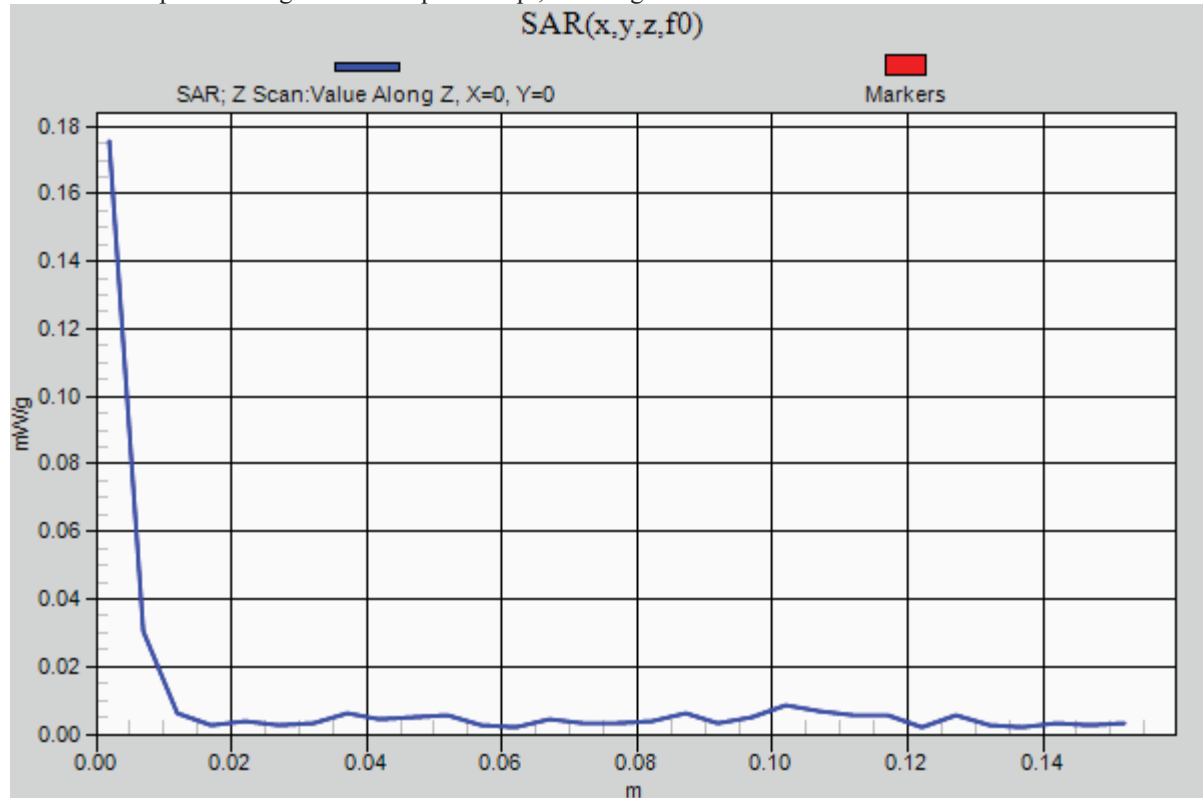
Measurement SW: DASY52, V52.6 Build 2;

Z Scan (1x1x31): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.175 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K WLAN 6Mbps Left cheek 5560MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n; Frequency: 5600 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5600$ MHz; $\sigma = 5.22$ mho/m; $\epsilon_r = 34.5$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4, 4, 4); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.282 mW/g

Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 4.336 V/m; Power Drift = -0.15 dB

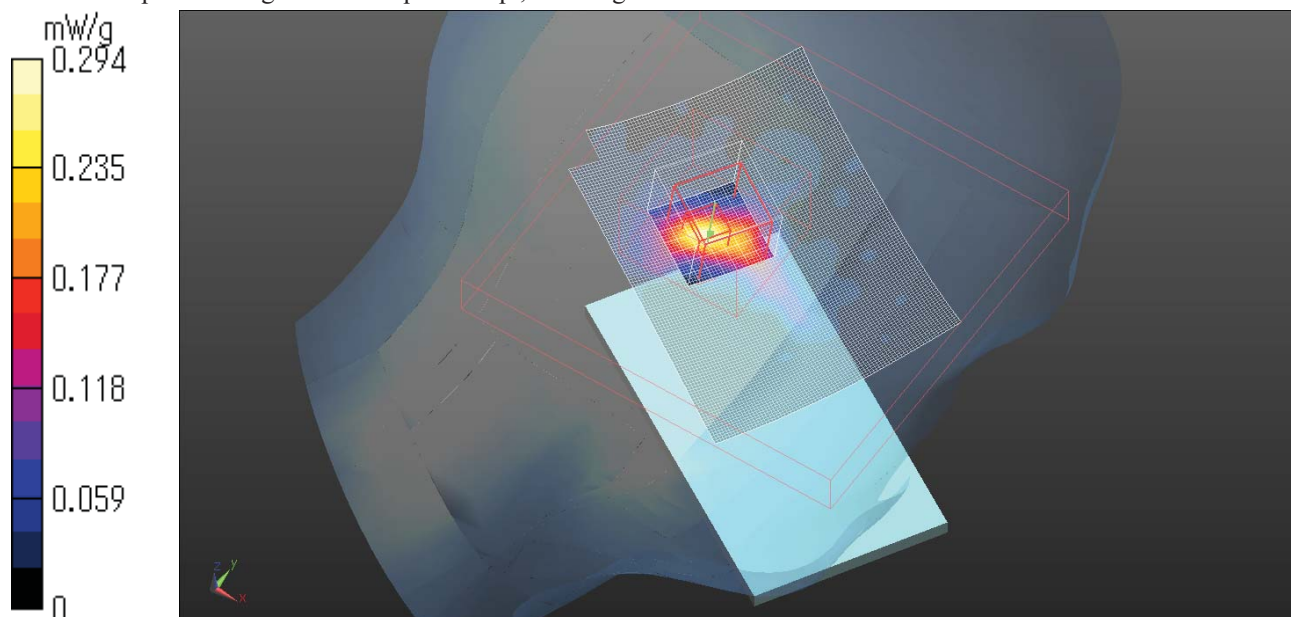
Peak SAR (extrapolated) = 0.563 W/kg

SAR(1 g) = 0.138 mW/g; SAR(10 g) = 0.044 mW/g

Maximum value of SAR (measured) = 0.294 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K WLAN 6Mbps Left tilt 5560MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n; Frequency: 5600 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5600$ MHz; $\sigma = 5.22$ mho/m; $\epsilon_r = 34.5$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4, 4, 4); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.287 mW/g

Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 5.087 V/m; Power Drift = -0.12 dB

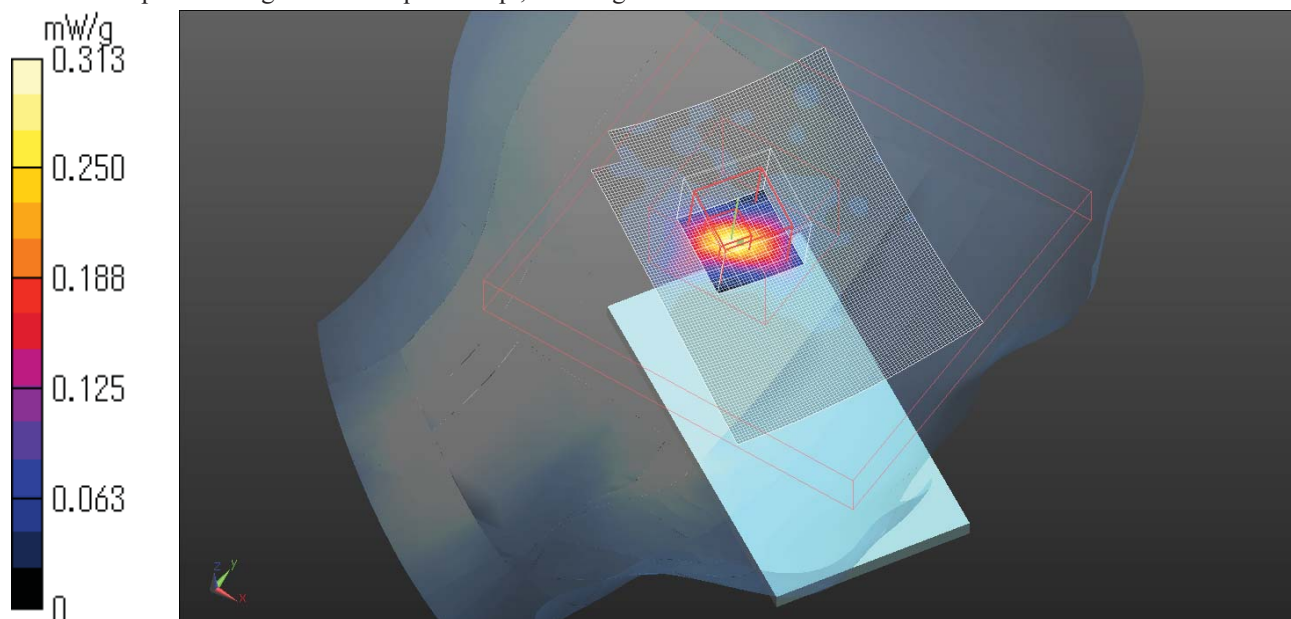
Peak SAR (extrapolated) = 0.656 W/kg

SAR(1 g) = 0.143 mW/g; SAR(10 g) = 0.044 mW/g

Maximum value of SAR (measured) = 0.313 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



Z Scan at maximum Head SAR in WLAN 5.6GHz band**SHW-M410K WLAN 6Mbps Left tilt 5560MHz**

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.22$ mho/m; $\epsilon_r = 34.5$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4, 4, 4); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

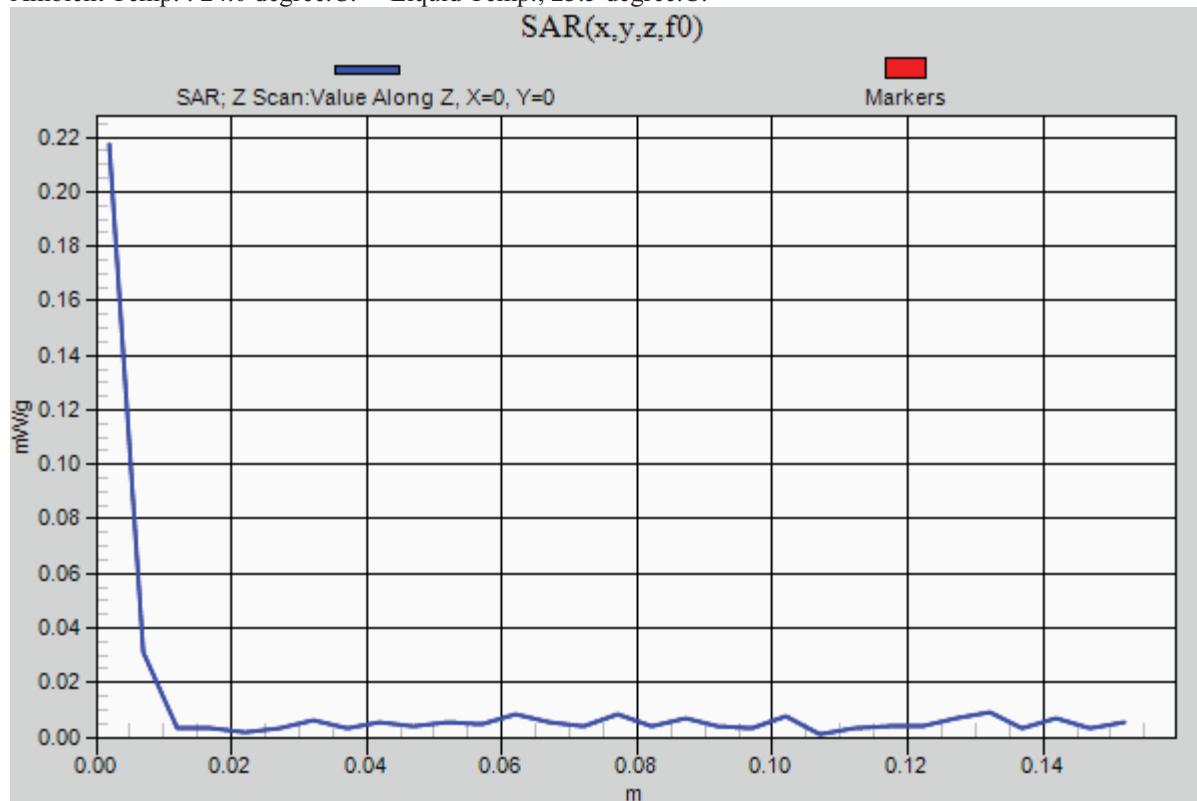
Measurement SW: DASY52, V52.6 Build 2;

Z Scan (1x1x31): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.217 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K WLAN 6Mbps Right cheek 5560MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.22$ mho/m; $\epsilon_r = 34.5$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4, 4, 4); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.248 mW/g

Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 4.776 V/m; Power Drift = -0.12 dB

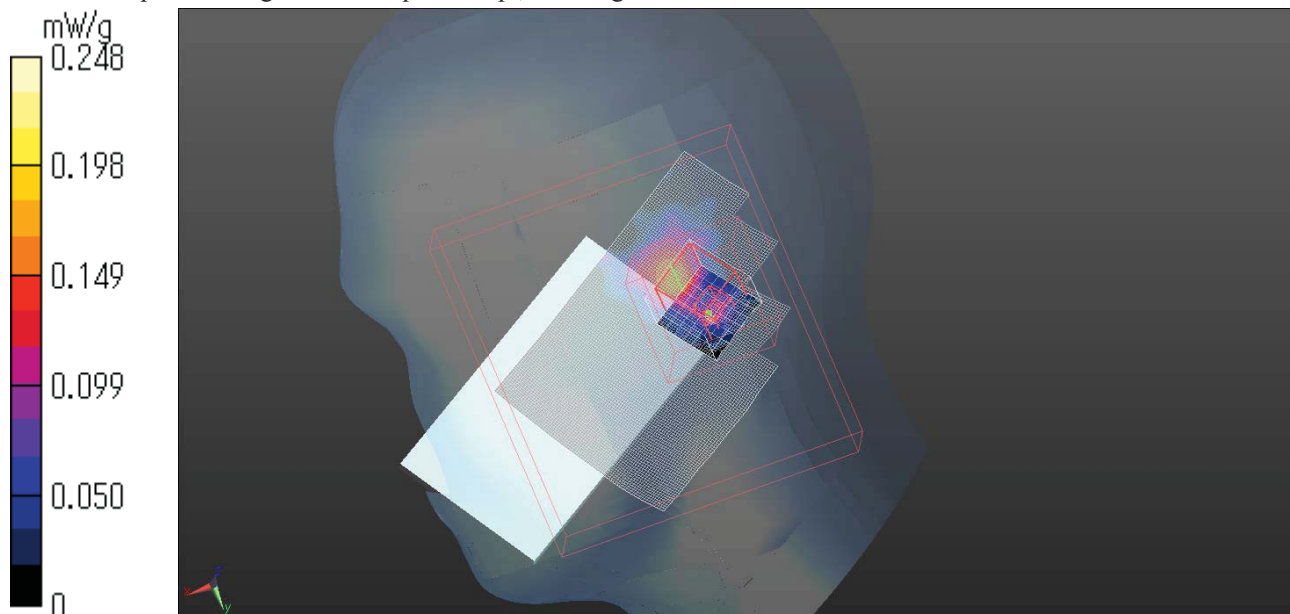
Peak SAR (extrapolated) = 0.339 W/kg

SAR(1 g) = 0.051 mW/g; SAR(10 g) = 0.022 mW/g

Maximum value of SAR (measured) = 0.160 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K WLAN 6Mbps Right tilt 5560MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n; Frequency: 5600 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5600$ MHz; $\sigma = 5.22$ mho/m; $\epsilon_r = 34.5$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4, 4, 4); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.216 mW/g

Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 4.921 V/m; Power Drift = -0.14 dB

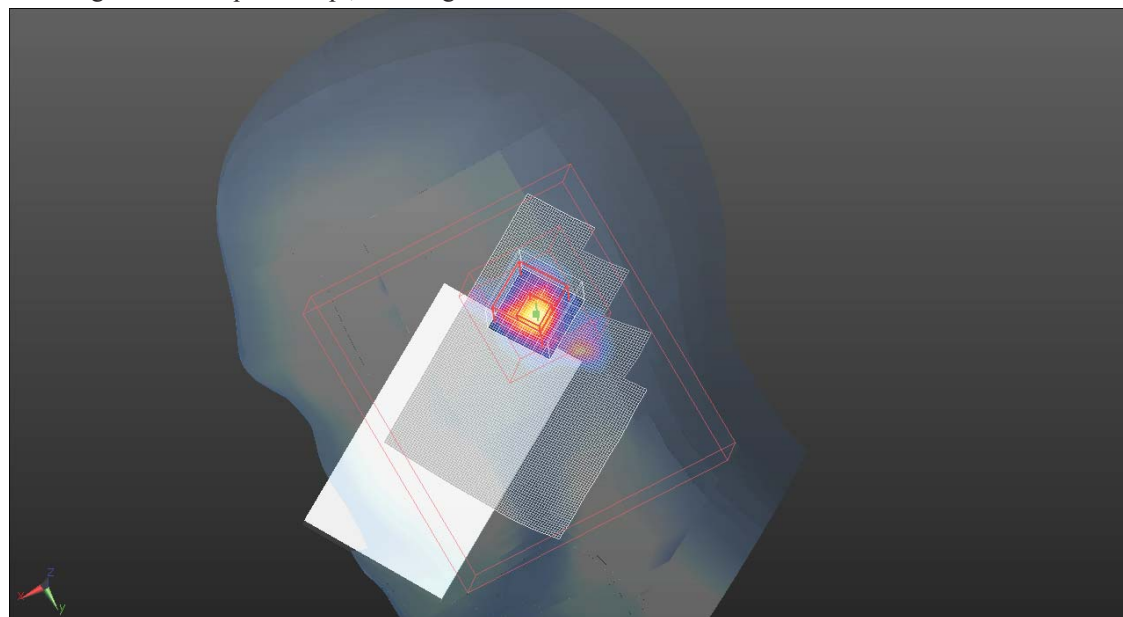
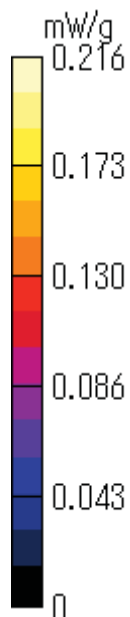
Peak SAR (extrapolated) = 0.354 W/kg

SAR(1 g) = 0.097 mW/g; SAR(10 g) = 0.032 mW/g

Maximum value of SAR (measured) = 0.200 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K WLAN 11a 6Mbps Left cheek 5825MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n; Frequency: 5800 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.44$ mho/m; $\epsilon_r = 34.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4.16, 4.16, 4.16); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.358 mW/g

Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 2.491 V/m; Power Drift = 0.12dB

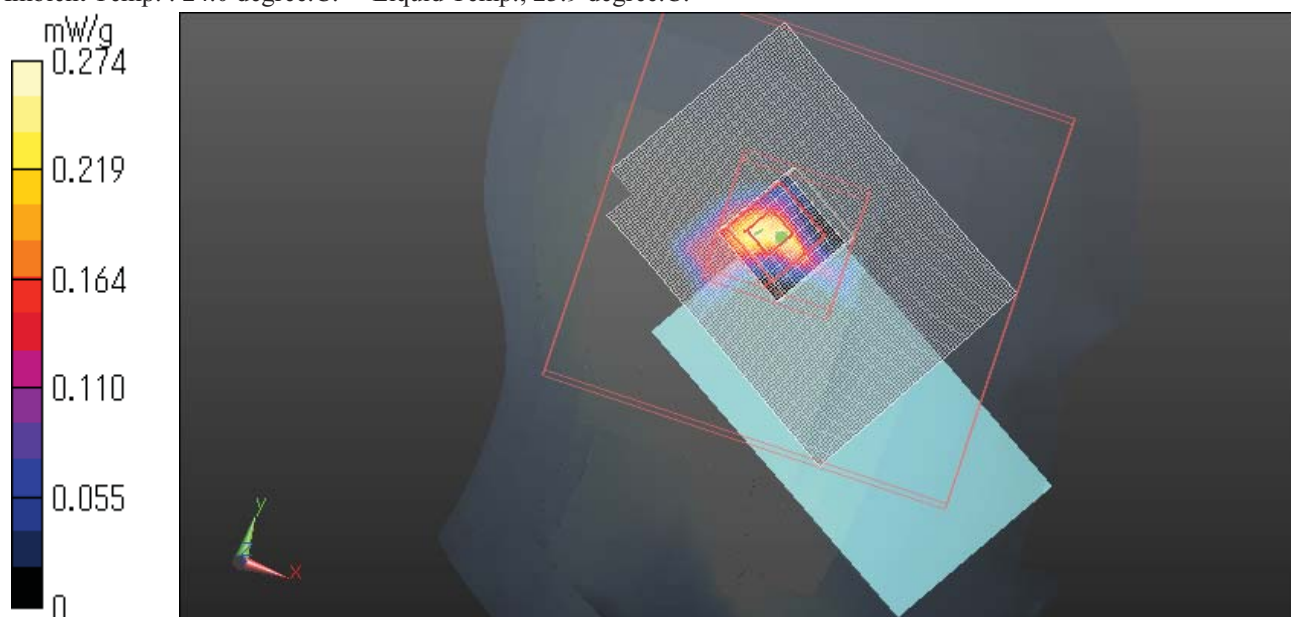
Peak SAR (extrapolated) = 0.565 W/kg

SAR(1 g) = 0.114 mW/g; SAR(10 g) = 0.038 mW/g

Maximum value of SAR (measured) = 0.274 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.9 degree.C.



SHW-M410K WLAN 11a 6Mbps Left tilt 5825MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.44$ mho/m; $\epsilon_r = 34.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4.16, 4.16, 4.16); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.335 mW/g

Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 3.707 V/m; Power Drift = 0.18 dB

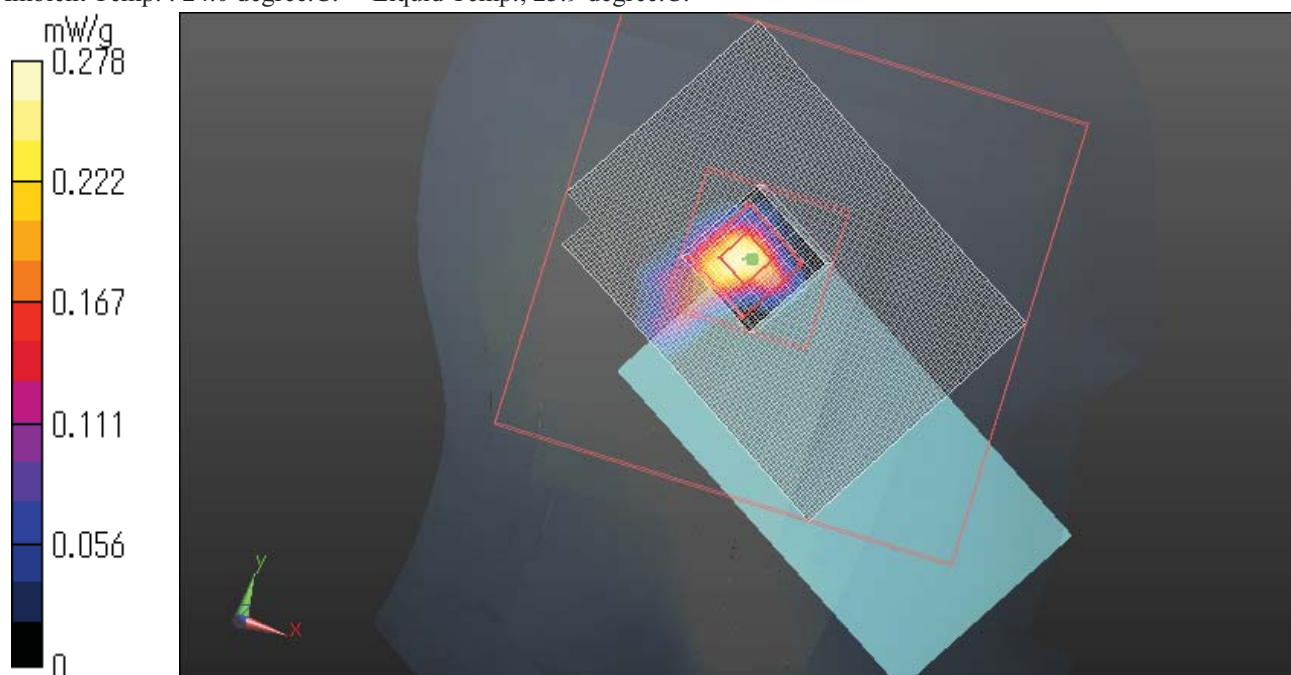
Peak SAR (extrapolated) = 0.551 W/kg

SAR(1 g) = 0.123 mW/g; SAR(10 g) = 0.037 mW/g

Maximum value of SAR (measured) = 0.278 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.9 degree.C.



Z Scan at maximum Head SAR in WLAN 5.8GHz band

SHW-M410K WLAN 11a 6Mbps Left tilt 5825MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.44$ mho/m; $\epsilon_r = 34.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4.16, 4.16, 4.16); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

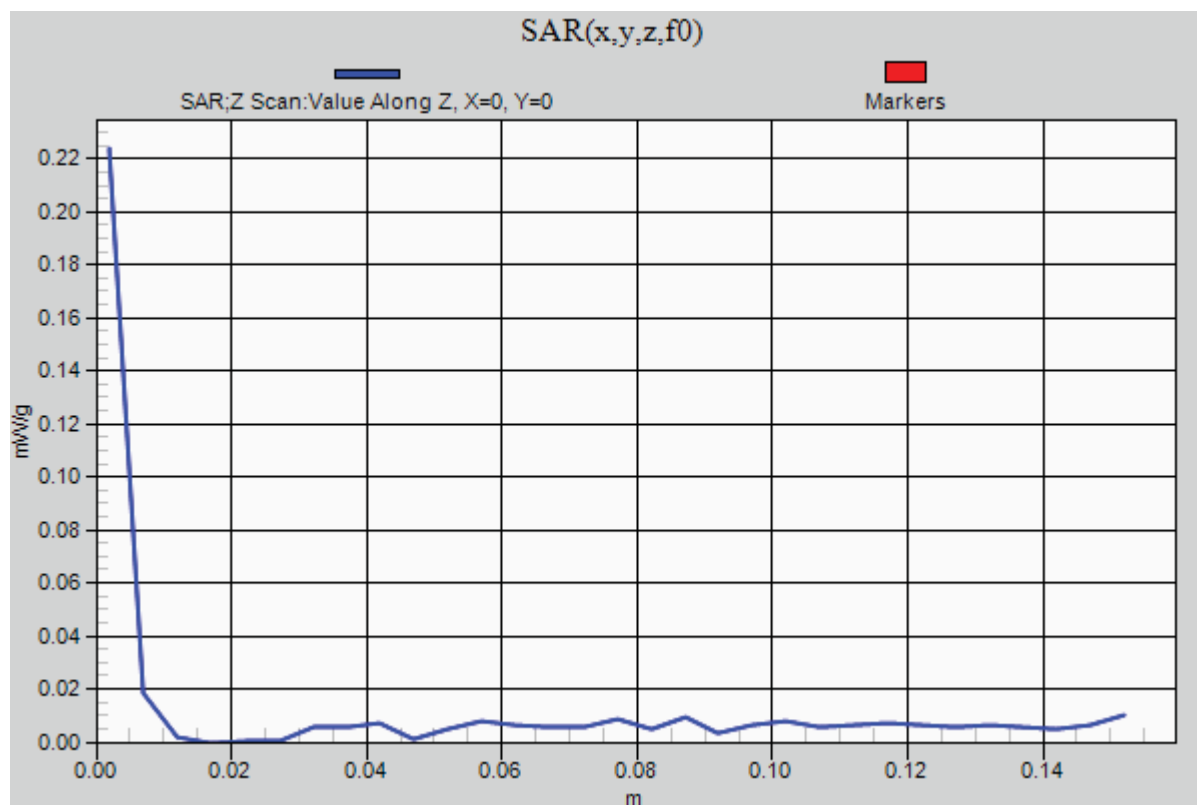
Measurement SW: DASY52, Version 52.6 (2);

Z Scan (1x1x31): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.224 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.9 degree.C.



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SHW-M410K WLAN 11a 6Mbps Right cheek 5825MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.44$ mho/m; $\epsilon_r = 34.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4.16, 4.16, 4.16); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.221 mW/g

Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 2.310 V/m; Power Drift = 0.13 dB

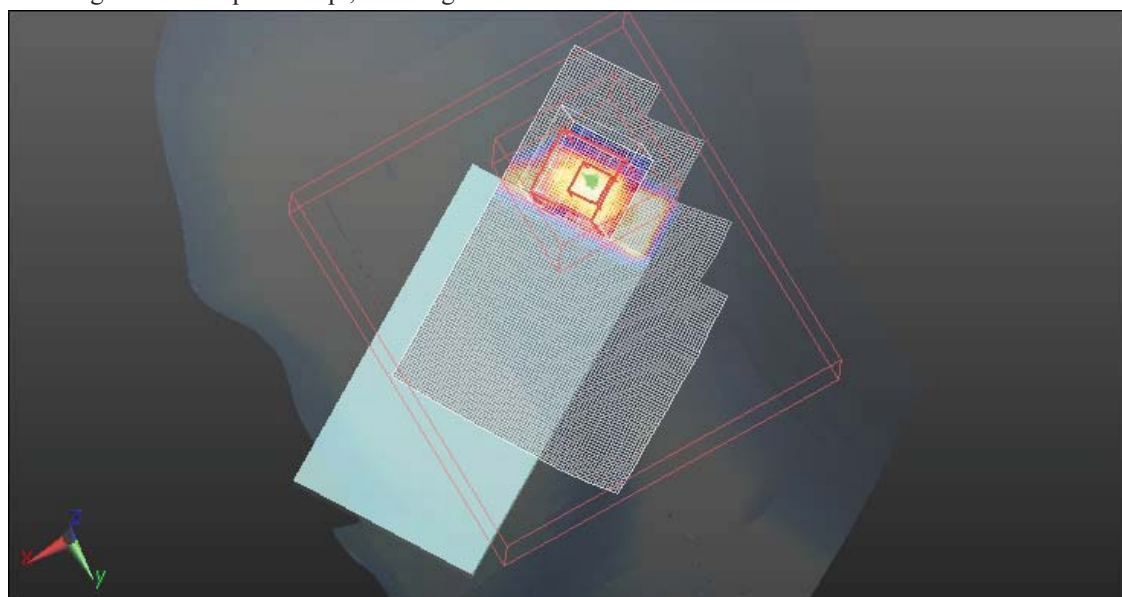
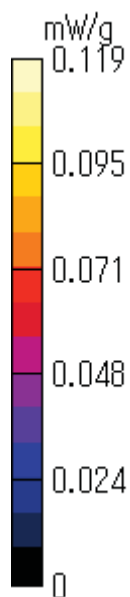
Peak SAR (extrapolated) = 0.350 W/kg

SAR(1 g) = 0.058 mW/g; SAR(10 g) = 0.020 mW/g

Maximum value of SAR (measured) = 0.119 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.9 degree.C.



SHW-M410K WLAN 11a 6Mbps Right tilt 5825MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n; Frequency: 5800 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.44$ mho/m; $\epsilon_r = 34.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(4.16, 4.16, 4.16); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.178 mW/g

Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 1.953 V/m; Power Drift = 0.18 dB

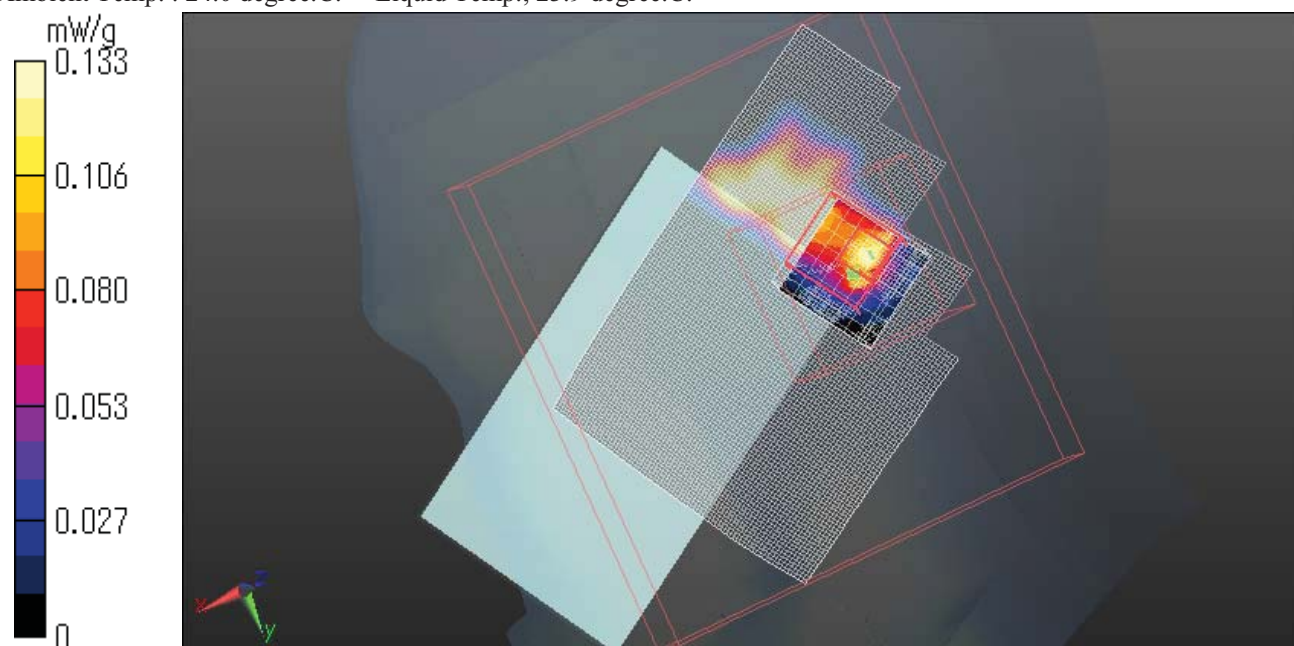
Peak SAR (extrapolated) = 0.215 W/kg

SAR(1 g) = 0.048 mW/g; SAR(10 g) = 0.017 mW/g

Maximum value of SAR (measured) = 0.133 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.9 degree.C.



v) WLAN (5G) Body-worn

SHW-M410K WLAN 11a (6Mbps) Rear 15mm 5260MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n ; Frequency: 5300 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 5.52 \text{ mho/m}$; $\epsilon_r = 48.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(3.59, 3.59, 3.59); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x81x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.072 mW/g

Zoom Scan (9x9x10)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 1.995 V/m; Power Drift = -0.19 dB

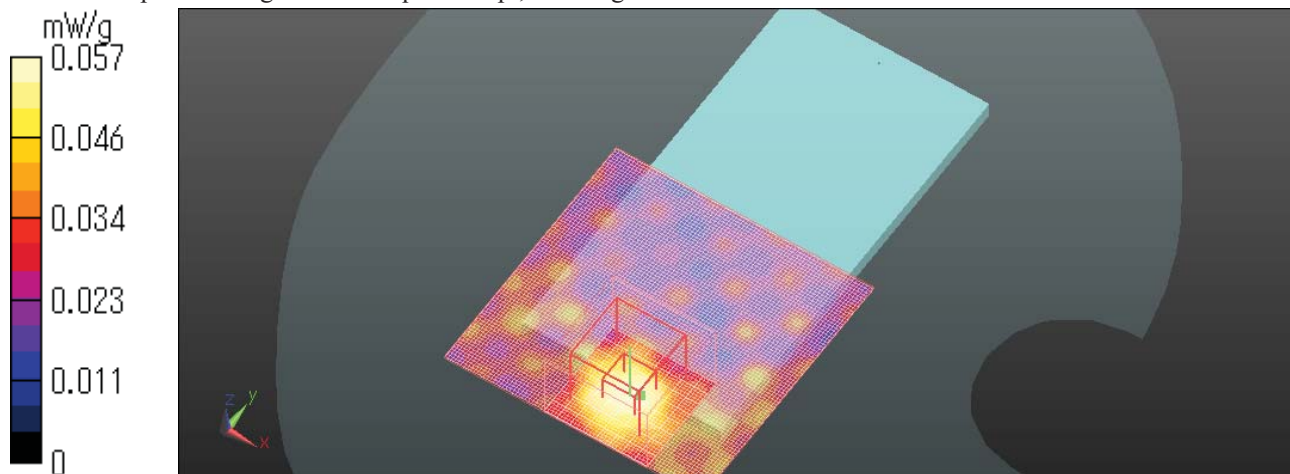
Peak SAR (extrapolated) = 0.194 W/kg

SAR(1 g) = 0.026 mW/g; SAR(10 g) = 0.011 mW/g

Maximum value of SAR (measured) = 0.057 mW/g

Date: 2011/11/25

Ambient Temp. : 24.5 degree.C. Liquid Temp.; 23.5 degree.C.



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Z Scan at maximum Body SAR in WLAN 5.3GHz band**SHW-M410K WLAN 11a (6Mbps) Rear 15mm 5260MHz**

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n ; Frequency: 5300 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 5.52$ mho/m; $\epsilon_r = 48.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(3.59, 3.59, 3.59); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

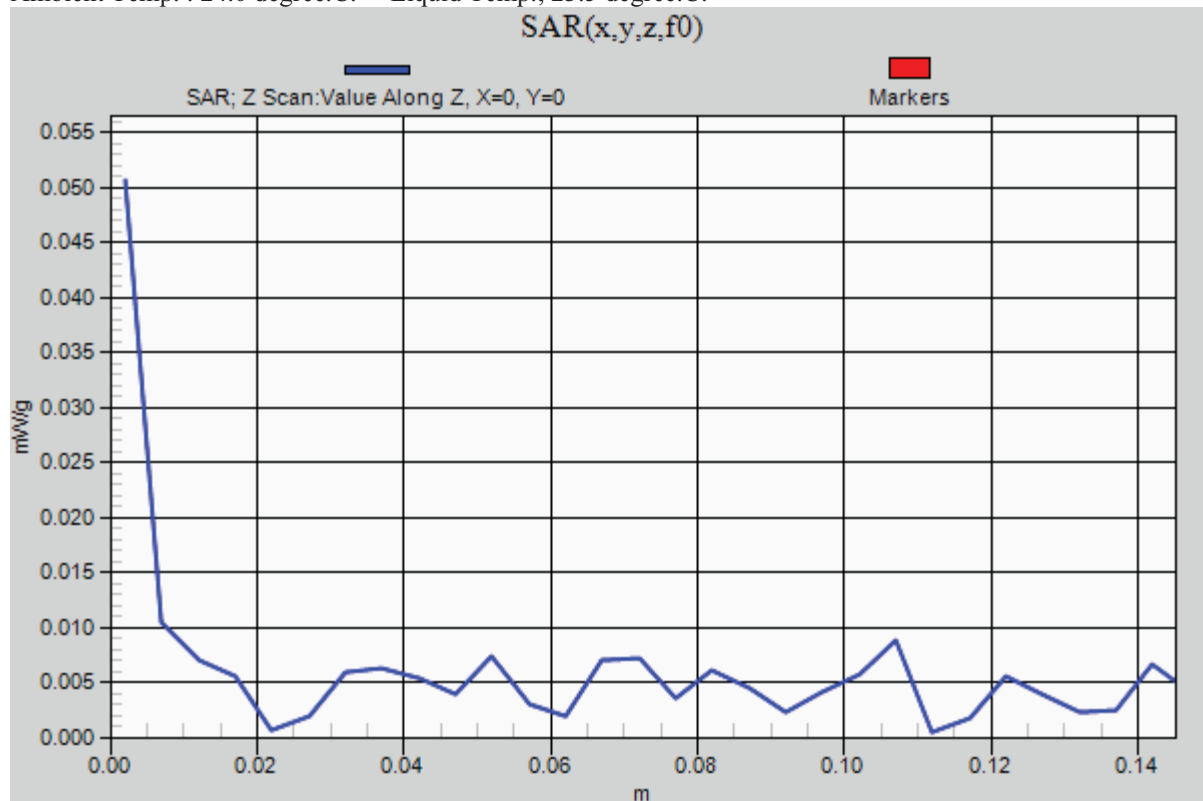
Measurement SW: DASY52, V52.6 Build 2;

Z Scan (1x1x31): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.054 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K WLAN 11a (6Mbps) Rear 15mm 5240MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n ; Frequency: 5200 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.36$ mho/m; $\epsilon_r = 48.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(3.94, 3.94, 3.94); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.064 mW/g

Zoom Scan (9x9x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 1.875 V/m; Power Drift = -0.21 dB

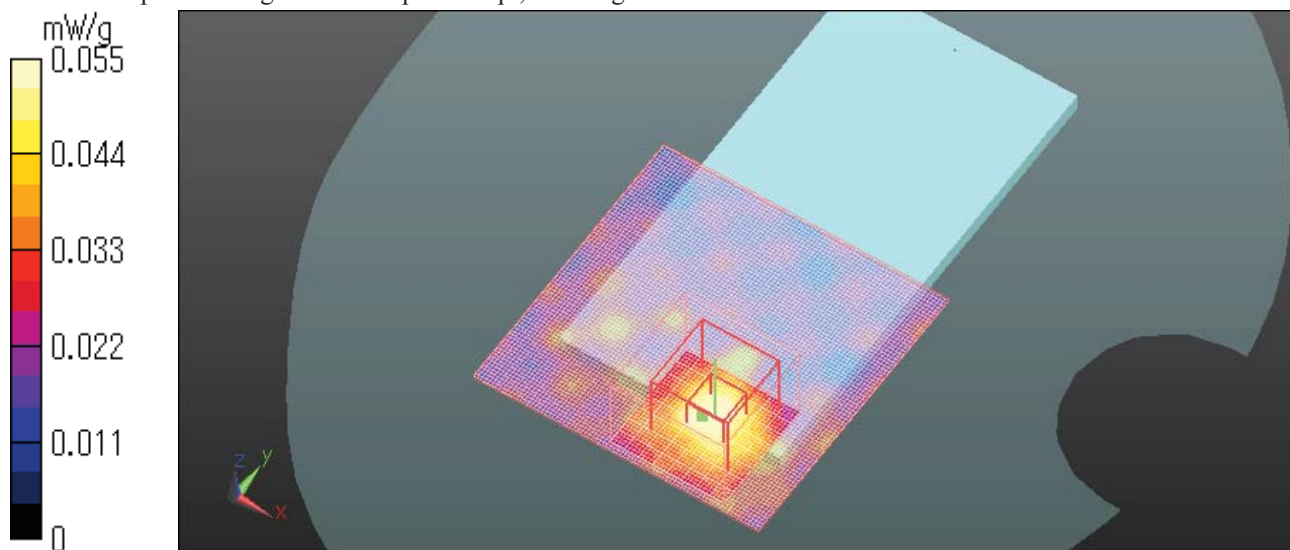
Peak SAR (extrapolated) = 0.123 W/kg

SAR(1 g) = 0.028 mW/g; SAR(10 g) = 0.011 mW/g

Maximum value of SAR (measured) = 0.055 mW/g

Date: 2011/11/25

Ambient Temp. : 24.5 degree.C. Liquid Temp.; 23.5 degree.C.



Z Scan at maximum Body SAR in WLAN 5.2GHz band**SHW-M410K WLAN 11a (6Mbps) Rear 15mm 5240MHz**

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n ; Frequency: 5200 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.36$ mho/m; $\epsilon_r = 48.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(3.94, 3.94, 3.94); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

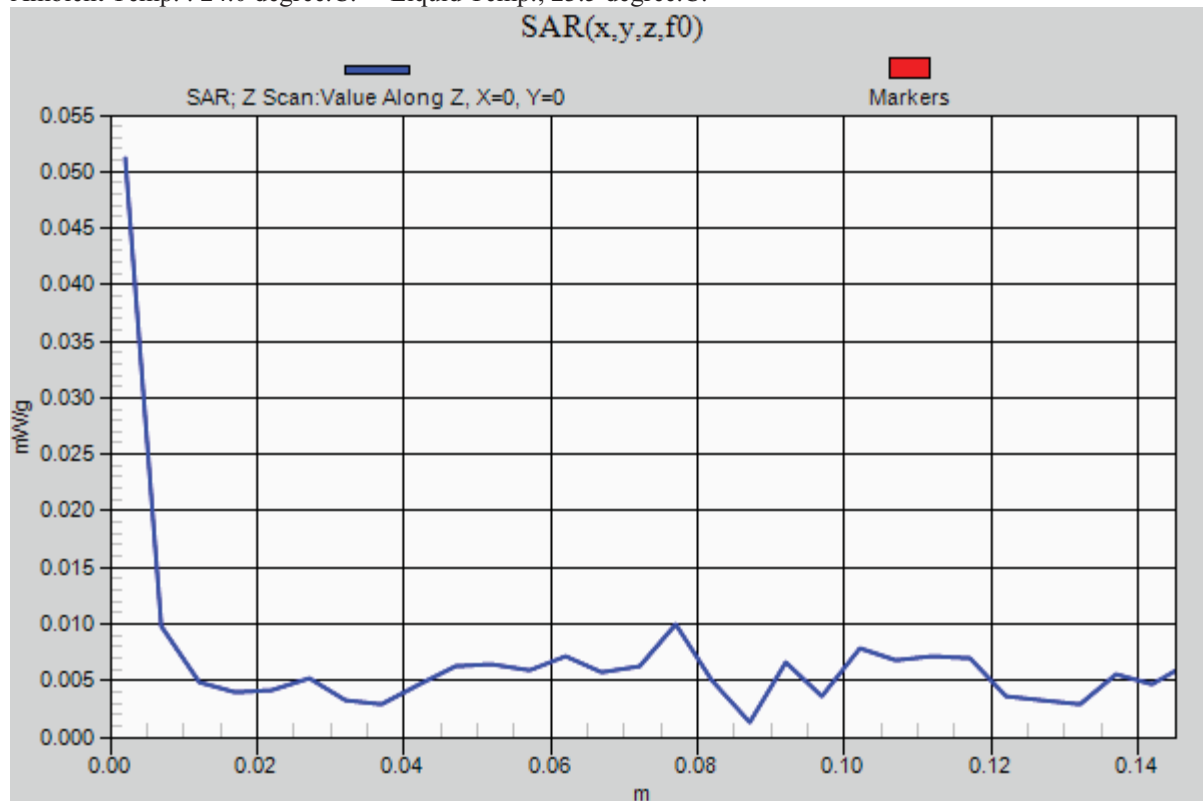
Measurement SW: DASY52, V52.6 Build 2;

Z Scan (1x1x31): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.059 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



SHW-M410K WLAN 11a (6Mbps) Rear 15mm 5560MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.94$ mho/m; $\epsilon_r = 47.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(3.25, 3.25, 3.25); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.078 mW/g

Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 1.615 V/m; Power Drift = -0.21 dB

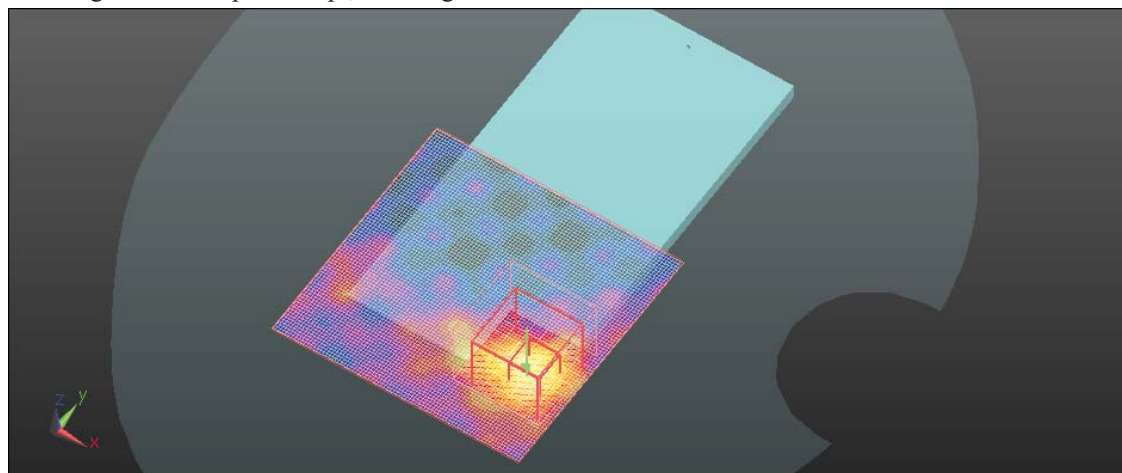
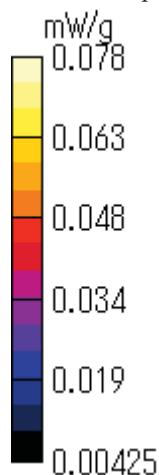
Peak SAR (extrapolated) = 0.118 W/kg

SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.013 mW/g

Maximum value of SAR (measured) = 0.066 mW/g

Date: 2011/11/25

Ambient Temp. : 24.5 degree.C. Liquid Temp.; 23.5 degree.C.



Z Scan at maximum Body SAR in WLAN 5.6GHz band**SHW-M410K WLAN 11a (6Mbps) Rear 15mm 5560MHz**

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.94$ mho/m; $\epsilon_r = 47.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(3.25, 3.25, 3.25); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

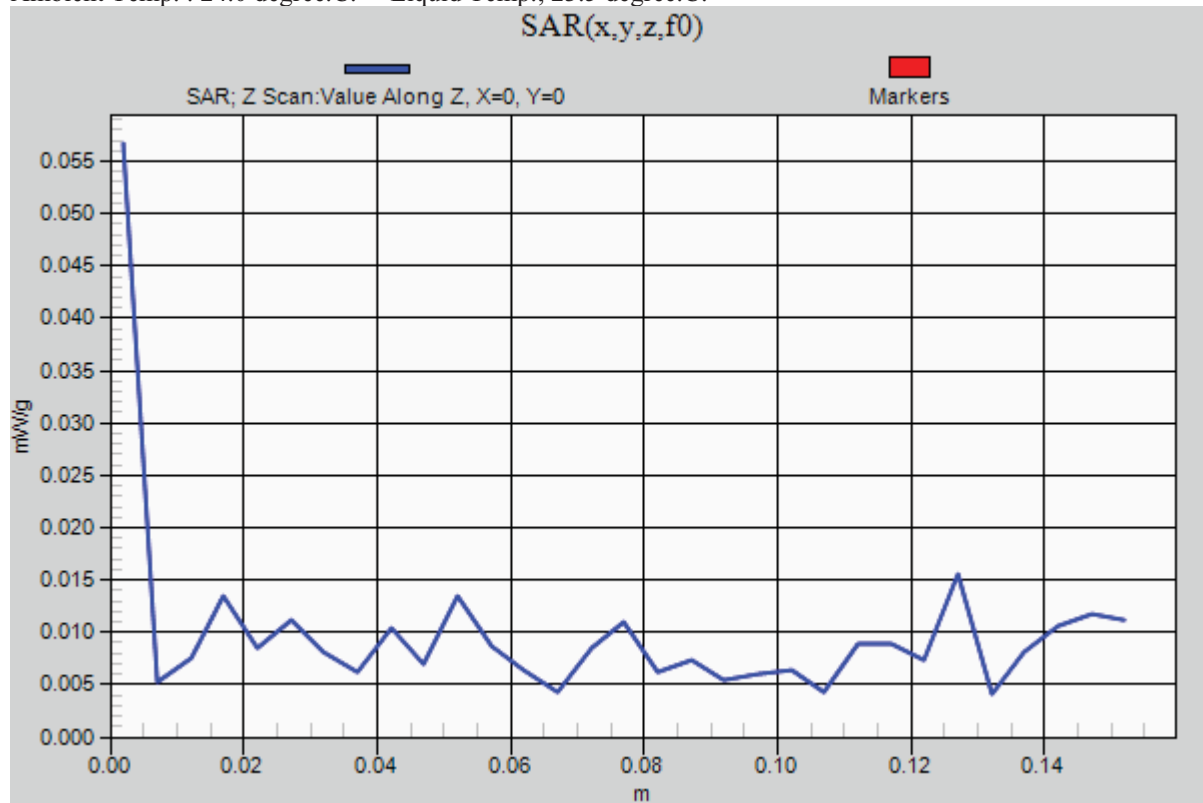
Measurement SW: DASY52, V52.6 Build 2;

Z Scan (1x1x31): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.057 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



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SHW-M410K WLAN 11a (6Mbps) Rear 15mm 5825MHz

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 6.28$ mho/m; $\epsilon_r = 47.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(3.4, 3.4, 3.4); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, Version 52.6 (2);

Area Scan (81x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.063 mW/g

Zoom Scan (9x9x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 1.566 V/m; Power Drift = -0.11 dB

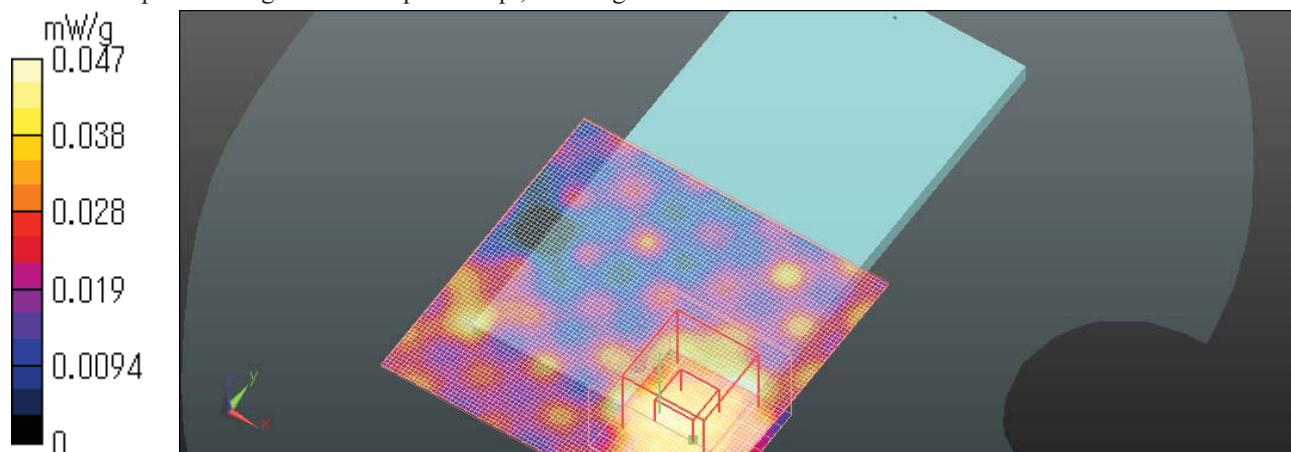
Peak SAR (extrapolated) = 0.152 W/kg

SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.00823 mW/g

Maximum value of SAR (measured) = 0.047 mW/g

Date: 2011/11/25

Ambient Temp. : 24.5 degree.C. Liquid Temp.; 23.5 degree.C.



Z Scan at maximum Body SAR in WLAN 5.8GHz band**SHW-M410K WLAN 11a (6Mbps) Rear 15mm 5825MHz**

Communication System: WLAN 11a/b/g/n ; Communication System Band: 11a/n; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 6.28$ mho/m; $\epsilon_r = 47.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3540; ConvF(3.4, 3.4, 3.4); Calibrated: 2011/07/21

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2011/07/20

Phantom: SAM with CRP; Type: SAM;

Measurement SW: DASY52, V52.6 Build 2;

Z Scan (1x1x31): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.032 mW/g

Date: 2011/11/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.

