

## 5.6.2. GSM/PCS &amp; WCDMA Function

Test Date: May 13, 2013    Temperature : 22    Humidity : 48%  
 Test Date: May 15, 2013    Temperature : 22    Humidity : 50%

Liquid Temperature : 21.5				Depth of Liquid: > 15cm		
<b>Test Mode: GSM (Head)</b>						
Test Position Head	Antenna Position	Frequency		Conducted power (dBm)	SAR 1g (W/kg)	Limit (W/kg)
		Channel	MHz			
GSM 850						
Left Cheek	Fixed	190	836.6	32.8	<b>0.104</b>	1.6
Left Tilt	Fixed	190	836.6	32.8	<b>0.089</b>	1.6
Right Cheek	Fixed	190	836.6	32.8	<b>0.098</b>	1.6
Right Tilt	Fixed	190	836.6	32.8	<b>0.083</b>	1.6
<b>Test Mode: PCS (Head)</b>						
Test Position Head	Antenna Position	Frequency		Conducted power (dBm)	SAR 1g (W/kg)	Limit (W/kg)
		Channel	MHz			
PCS 1900						
Left Cheek	Fixed	661	1880.0	29.70	<b>0.112</b>	1.6
Left Tilt	Fixed	661	1880.0	29.70	<b>0.035</b>	1.6
Right Cheek	Fixed	661	1880.0	29.70	<b>0.181</b>	1.6
Right Tilt	Fixed	661	1880.0	29.70	<b>0.023</b>	1.6
<b>Test Mode: WCDMA (Head)</b>						
Test Position Body	Antenna Position	Frequency		Conducted power (dBm)	SAR 1g (W/kg)	Limit (W/kg)
		Channel	MHz			
Band II						
Left Cheek	Fixed	9400	1880.0	22.79	<b>0.173</b>	1.6
Left Tilt	Fixed	9400	1880.0	22.79	<b>0.038</b>	1.6
Right Cheek	Fixed	9400	1880.0	22.79	<b>0.226</b>	1.6
Right Tilt	Fixed	9400	1880.0	22.79	<b>0.059</b>	1.6
Band V						
Left Cheek	Fixed	4180	836.6	23.15	<b>0.043</b>	1.6
Left Tilt	Fixed	4180	836.6	23.15	<b>0.026</b>	1.6
Right Cheek	Fixed	4180	836.6	23.15	<b>0.043</b>	1.6
Right Tilt	Fixed	4180	836.6	23.15	<b>0.077</b>	1.6

## Test Mode: GSM850, CH 190, Left Cheek (Head)

Date/Time: 5/13/2013 PM 03:36:57

Test Laboratory: Audix\_SAR Lab

### GSM850 MID LEFT CHEEK

DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A

Communication System: Generic GSM; Frequency: 836.6 MHz

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.89$  S/m;  $\epsilon_r = 41.478$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

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

#### DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(9.76, 9.76, 9.76); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASYS2 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (9x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.106 W/kg

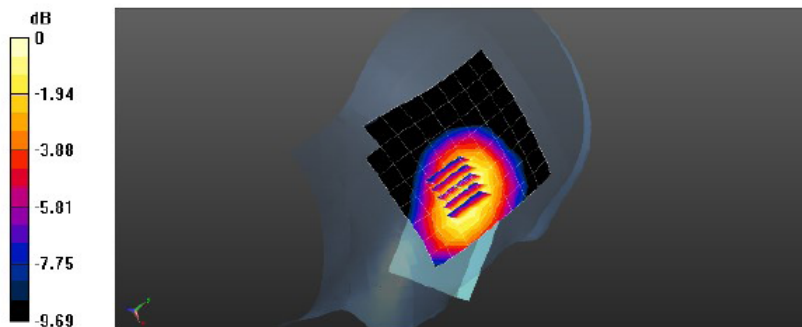
**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 7.019 V/m; Power Drift = 0.26 dB

Peak SAR (extrapolated) = 0.135 W/kg

SAR(1 g) = 0.104 W/kg; SAR(10 g) = 0.077 W/kg

Maximum value of SAR (measured) = 0.110 W/kg



**Test Mode: GSM850, CH 190, Left Tilt (Head)**

Date/Time: 5/13/2013 PM 04:11:15

Test Laboratory: Audix\_SAR Lab

**GSM850 MID LEFT TILT**

**DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A**

Communication System: Generic GSM; Frequency: 836.6 MHz

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.89$  S/m;  $\epsilon_r = 41.478$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

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

**DASY Configuration:**

- Probe: EX3DV4 - SN3855; ConvF(9.76, 9.76, 9.76); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASYS2 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (9x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.0945 W/kg

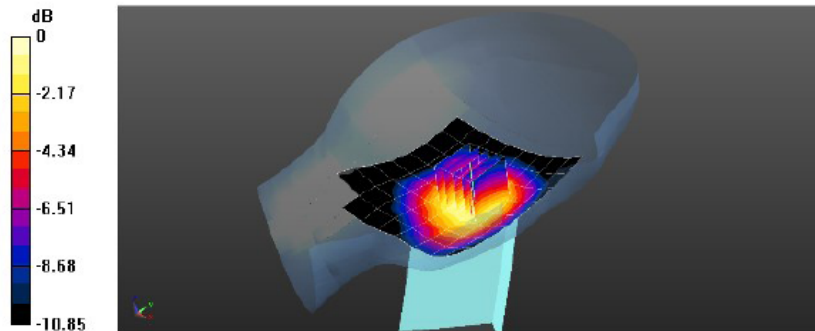
**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 8.887 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.119 W/kg

**SAR(1 g) = 0.089 W/kg; SAR(10 g) = 0.064 W/kg**

Maximum value of SAR (measured) = 0.0957 W/kg



## Test Mode: GSM850, CH 190, Right Cheek (Head)

Date/Time: 5/13/2013 PM 04:49:24

Test Laboratory: Audix\_SAR Lab

### GSM850 MID RIGHT CHEEK

DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A

Communication System: Generic GSM; Frequency: 836.6 MHz

Medium parameters used (interpolated):  $f = 836.6$  MHz,  $\sigma = 0.89$  S/m,  $\epsilon_r = 41.478$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

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

#### DASY Configuration

- Probe: EX3DV4 - SN3855; ConvF(9.76, 9.76, 9.76); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASYS2 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (9x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

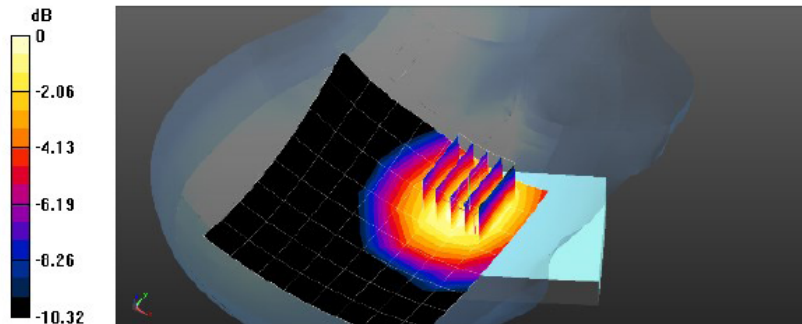
Maximum value of SAR (measured) = 0.103 W/kg

**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 6.902 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.119 W/kg

SAR(1 g) = 0.098 W/kg; SAR(10 g) = 0.073 W/kg



**Test Mode: GSM850, CH 190, Right Tilt (Head)**

Date/Time: 5/13/2013 PM 05:12

Test Laboratory: Audix\_SAR Lab

**GSM850 MID RIGHT TILT****DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A**

Communication System: Generic GSM; Frequency: 836.6 MHz

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.89$  S/m;  $\epsilon_r = 41.478$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Measurement Standard: DAS Y5 (IEEE/IEC/ANSI C63.19-2007)

## DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(9.76, 9.76, 9.76); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (9x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.0815 W/kg

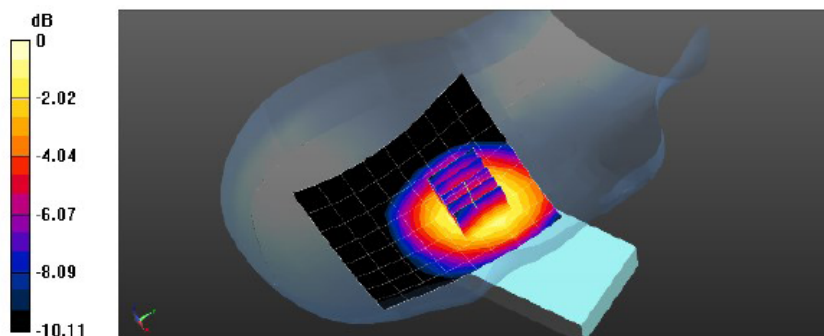
**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.976 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.109 W/kg

**SAR(1 g) = 0.082 W/kg; SAR(10 g) = 0.059 W/kg**

Maximum value of SAR (measured) = 0.0871 W/kg



**Test Mode: PCS1900, CH 661, Left Cheek (Head)**

Date/Time: 5/15/2013 PM 04:41:58

Test Laboratory: Audix\_SAR Lab

**GSM1900 MID LEFT CHEEK****DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A**

Communication System: Generic GSM, Frequency: 1880 MHz

Medium parameters used  $f = 1880$  MHz;  $\sigma = 1.45$  S/m;  $\epsilon_r = 39.74$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

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

## DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(8.57, 8.57, 8.57); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD00P40CD; Serial: SN1706
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (8x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.111 W/kg

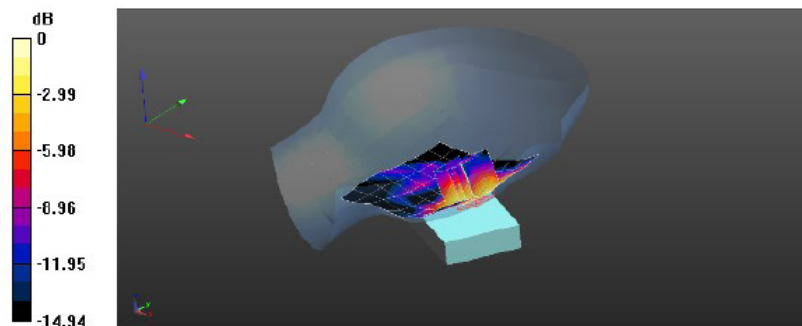
**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 2.596 V/m; Power Drift = 1.44 dB

Peak SAR (extrapolated) = 0.164 W/kg

**SAR(1 g) = 0.112 W/kg; SAR(10 g) = 0.073 W/kg**

Maximum value of SAR (measured) = 0.119 W/kg



**Test Mode: PCS1900, CH 661, Left Tilt (Head)**

Date/Time: 5/15/2013 PM 05:01:

Test Laboratory: Audix\_SAR Lab

**GSM1900 MID LEFT TILT****DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A**

Communication System: Generic GSM; Frequency: 1880 MHz

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.45$  S/m;  $\epsilon_r = 39.74$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

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

**DASY Configuration:**

- Probe: EX3DV4 - SN3855; ConvF(8.57, 8.57, 8.57); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASYS2 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (8x9x1);** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.0347 W/kg

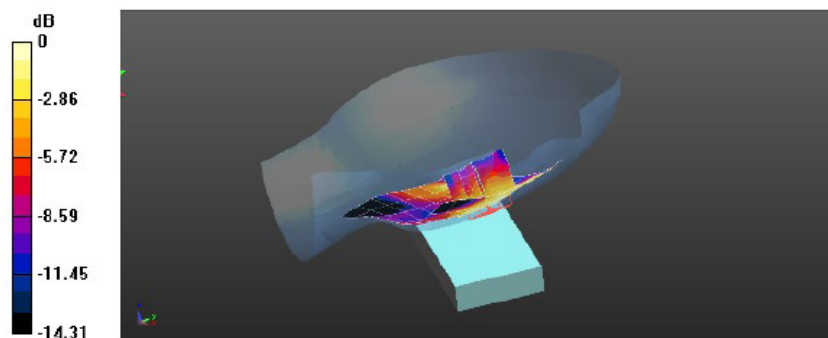
**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0;** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 5.081 V/m; Power Drift = -1.34 dB

Peak SAR (extrapolated) = 0.0530 W/kg

**SAR(1 g) = 0.035 W/kg; SAR(10 g) = 0.024 W/kg**

Maximum value of SAR (measured) = 0.0386 W/kg



**Test Mode: PCS1900, CH 661, Right Cheek (Head)**

Date/Time: 5/15/2013 PM 06:11:59

Test Laboratory: Audix\_SAR Lab

**GSM1900 MID RIGHT CHEEK**

**DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A**

Communication System: Generic GSM; Frequency: 1880 MHz

Medium parameters used  $f = 1880$  MHz;  $\sigma = 1.45$  S/m;  $\epsilon_r = 39.74$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

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

**DASY Configuration:**

- Probe: EX3DV4 - SN3855; ConvF(8.57, 8.57, 8.57); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASYS2 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (8x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.183 W/kg

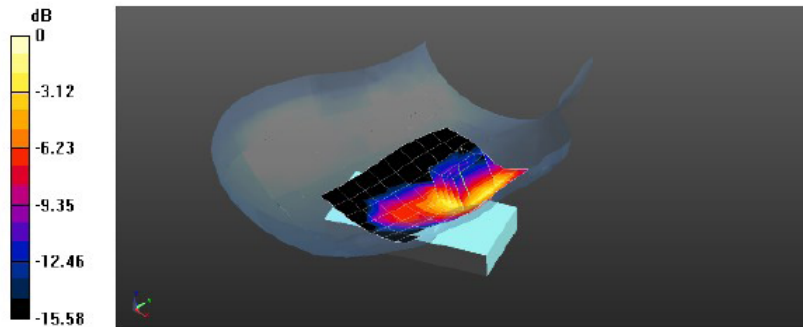
**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 1.858 V/m; Power Drift = -0.25 dB

Peak SAR (extrapolated) = 0.289 W/kg

**SAR(1 g) = 0.181 W/kg; SAR(10 g) = 0.108 W/kg**

Maximum value of SAR (measured) = 0.199 W/kg





**Test Mode: PCS1900, CH 661, Right Tilt (Head)**

Date/Time: 5/15/2013 PM 05:20:06

Test Laboratory: Audix\_SAR Lab

**GSM1900 MID RIGHT TILT**

**DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A**

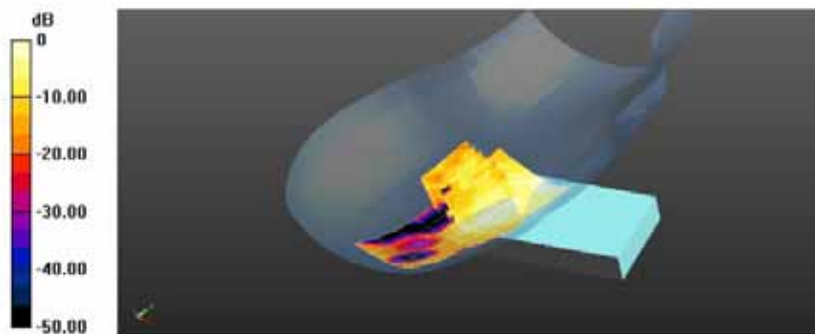
Communication System: Generic GSM; Frequency: 1880 MHz  
 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.45$  S/m;  $\epsilon_r = 39.74$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Right Section  
 Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

**DASY Configuration:**

- Probe: EX3DV4 - SN3855; ConvF(8.57, 8.57, 8.57); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (8x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm  
 Maximum value of SAR (measured) = 0.0284 W/kg

**Configuration/Unnamed procedure/Zoom Scan (6x6x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm  
 Reference Value = 4.198 V/m; Power Drift = -0.55 dB  
 Peak SAR (extrapolated) = 0.0370 W/kg  
**SAR(1 g) = 0.023 W/kg; SAR(10 g) = 0.014 W/kg**  
 Maximum value of SAR (measured) = 0.0269 W/kg



**Test Mode: WCDMA (Band II), CH 9400, Left Cheek (Head)**

Date/Time: 5/15/2013 PM 08:58:24

Test Laboratory: Audix\_SAR Lab

**WCDMA B2 MID LEFT CHEEK**

**DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A**

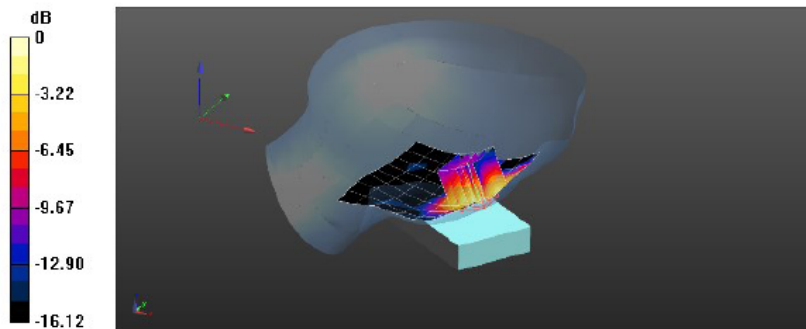
Communication System: UMTS-FDD (WCDMA); Frequency: 1880 MHz  
 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.45$  S/m;  $\epsilon_r = 39.74$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Left Section  
 Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

**DASY Configuration:**

- Probe: EX3DV4 - SN3855; ConvF(8.57, 8.57, 8.57); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASYS2 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (8x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm  
 Maximum value of SAR (measured) = 0.153 W/kg

**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm  
 Reference Value = 3.120 V/m; Power Drift = -0.09 dB  
 Peak SAR (extrapolated) = 0.256 W/kg  
**SAR(1 g) = 0.173 W/kg; SAR(10 g) = 0.111 W/kg**  
 Maximum value of SAR (measured) = 0.188 W/kg



**Test Mode: WCDMA (Band II), CH 9400, Left Tilt (Head)**

Date/Time: 5/15/2013 PM 08:24

Test Laboratory: Audix\_SAR Lab

**WCDMA B2 MID LEFT TILT**

**DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A**

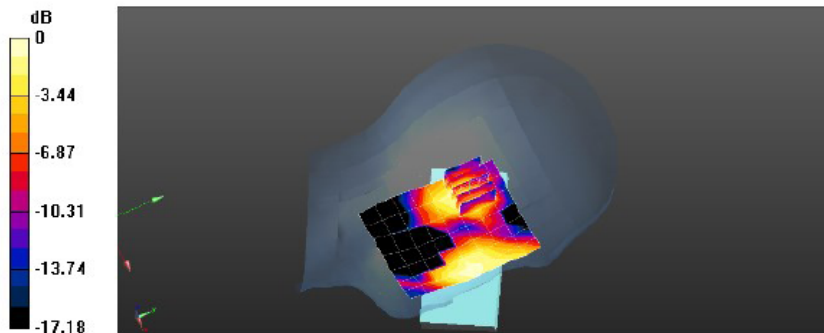
Communication System: UMTS-FDD (WCDMA); Frequency: 1880 MHz  
 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.45$  S/m;  $\epsilon_r = 39.74$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Left Section  
 Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

**DASY Configuration:**

- Probe: EX3DV4 - SN3855; ConvF(8.57, 8.57, 8.57); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASYS2 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (8x9x1);** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 0.0455 W/kg

**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0;** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 6.011 V/m; Power Drift = -0.65 dB  
 Peak SAR (extrapolated) = 0.0640 W/kg  
**SAR(1 g) = 0.038 W/kg; SAR(10 g) = 0.021 W/kg**  
 Maximum value of SAR (measured) = 0.0402 W/kg



**Test Mode: WCDMA (Band II), CH 9400, Right Cheek (Head)**

Date/Time: 5/15/2013 PM 07:38:3

Test Laboratory: Audix\_SAR Lab

**WCDMA B2 MID RIGHT CHEEK****DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A**

Communication System: UMTS-FDD (WCDMA); Frequency: 1880 MHz

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.45$  S/m;  $\epsilon_r = 39.74$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

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

## DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(8.57, 8.57, 8.57); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASYS2 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (8x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.285 W/kg

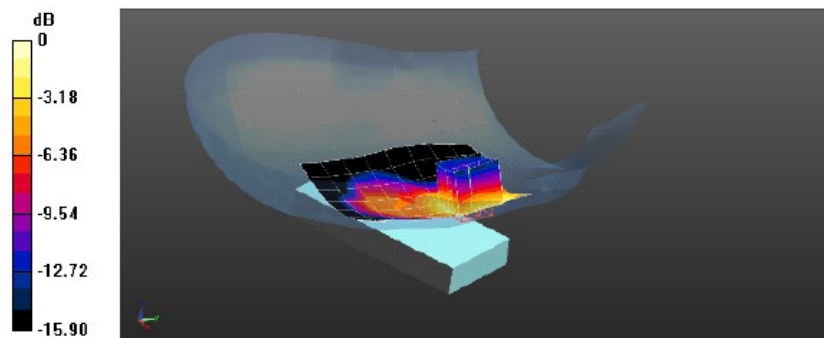
**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 3.195 V/m; Power Drift = -0.77 dB

Peak SAR (extrapolated) = 0.359 W/kg

**SAR(1 g) = 0.226 W/kg; SAR(10 g) = 0.135 W/kg**

Maximum value of SAR (measured) = 0.247 W/kg



**Test Mode: WCDMA (Band II), CH 9400, Right Tilt (Head)**

Date/Time: 5/15/2013 PM 08:02:02

Test Laboratory: Audix\_SAR Lab

**WCDMA B2 MID RIGHT TILT****DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A**

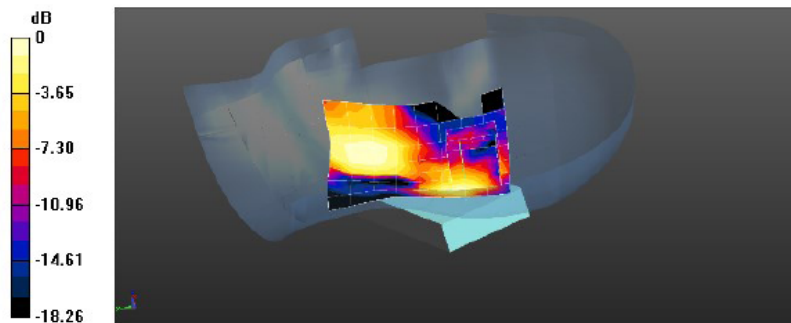
Communication System: UMTS-FDD (WCDMA); Frequency: 1880 MHz  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.45$  S/m;  $\epsilon_r = 39.74$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section  
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

**DASY Configuration:**

- Probe: EX3DV4 - SN3855; ConvF(8.57, 8.57, 8.57); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASYS2 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (8x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm  
Maximum value of SAR (measured) = 0.0593 W/kg

**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm  
Reference Value = 6.034 V/m; Power Drift = 0.84 dB  
Peak SAR (extrapolated) = 0.0920 W/kg  
**SAR(1 g) = 0.059 W/kg; SAR(10 g) = 0.036 W/kg**  
Maximum value of SAR (measured) = 0.0616 W/kg



**Test Mode: WCDMA (Band V), CH 4180, Left Cheek (Head)**

Date/Time: 5/13/2013 PM 07:53:08

Test Laboratory: Audix\_SAR Lab

**WCDMA MID LEFT CHEEK****DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A**

Communication System: UMTS-FDD (WCDMA); Frequency: 836.6 MHz

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.89$  S/m;  $\epsilon_r = 41.478$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

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

## DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(9.76, 9.76, 9.76); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASYS2 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (9x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.0465 W/kg

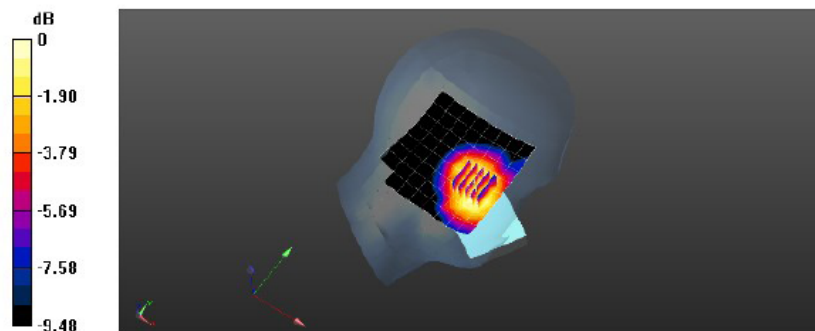
**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 6.069 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.0540 W/kg

**SAR(1 g) = 0.043 W/kg; SAR(10 g) = 0.032 W/kg**

Maximum value of SAR (measured) = 0.0439 W/kg



**Test Mode: WCDMA (Band V), CH 4180, Left Tilt (Head)**

Date/Time: 5/13/2013 PM 08:13:0

Test Laboratory: Audix\_SAR Lab

**WCDMA MID LEFT TILT**

**DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A**

Communication System: UMTS-FDD (WCDMA); Frequency: 836.6 MHz

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.89$  S/m;  $\epsilon_r = 41.478$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(9.76, 9.76, 9.76); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (9x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.0287 W/kg

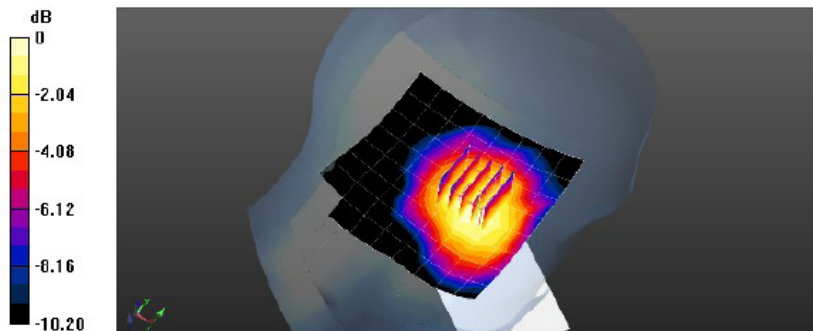
**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.341 V/m; Power Drift = 0.51 dB

Peak SAR (extrapolated) = 0.0320 W/kg

**SAR(1 g) = 0.026 W/kg; SAR(10 g) = 0.020 W/kg**

Maximum value of SAR (measured) = 0.0275 W/kg



**Test Mode: WCDMA (Band V), CH 4180, Right Cheek (Head)**

Date/Time: 5/13/2013 PM 07:29:05

Test Laboratory: Audix\_SAR Lab

**WCDMA MID RIGHT CHEEK****DUT: HMI45; Type: Bluebird Soft Inc; Serial: N/A**

Communication System: UMTS-FDD (WCDMA); Frequency: 836.6 MHz

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.89$  S/m;  $\epsilon_r = 41.478$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

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

**DASY Configuration:**

- Probe: EX3DV4 - SN3855; ConvF(9.76, 9.76, 9.76); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASYS2 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (9x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.0507 W/kg

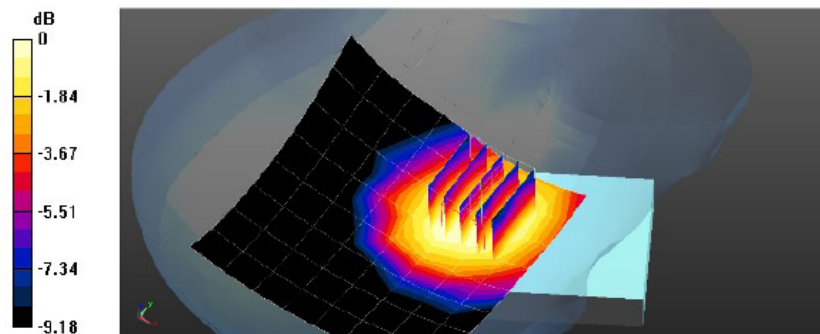
**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 7.170 V/m; Power Drift = -0.46 dB

Peak SAR (extrapolated) = 0.0500 W/kg

**SAR(1 g) = 0.043 W/kg; SAR(10 g) = 0.034 W/kg**

Maximum value of SAR (measured) = 0.0466 W/kg





**Test Mode: WCDMA (Band V), CH 4180, Right Tilt (Head)**

Date/Time: 5/13/2013 PM 07:09:0

Test Laboratory: Audix\_SAR Lab

**WCDMA MID RIGHT TILT**

**DUT: HM45; Type: Bluebird Soft Inc; Serial: N/A**

Communication System: UMTS-FDD (WCDMA); Frequency: 836.6 MHz

Medium parameters used (interpolated):  $f = 836.6$  MHz,  $\sigma = 0.89$  S/m,  $\epsilon_r = 41.478$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

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

**DASY Configuration:**

- Probe: EX3DV4 - SN3855; ConvF(9.76, 9.76, 9.76); Calibrated: 5/9/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 5/7/2012
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: SN1706
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

**Configuration/Unnamed procedure/Area Scan (9x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.0794 W/kg

**Configuration/Unnamed procedure/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.697 V/m; Power Drift = -0.51 dB

Peak SAR (extrapolated) = 0.0980 W/kg

**SAR(1 g) = 0.077 W/kg; SAR(10 g) = 0.057 W/kg**

Maximum value of SAR (measured) = 0.0807 W/kg

