D-PL-12111-01-01

CNAS L0447

Registration No.910917

CONFORMANCE TEST REPORT FOR

HUMAN EXPOSURE TO ELECTROMAGNETIC FIELDS

Report No.: SRTC2011-H024-E0026

Product Name: GSM/GPRS/EDGE/WCDMA

Digital Mobile Phone with Bluetooth and WiFi

Marketing Name: one touch 901A

Product Model: yippee 3G_A

Applicant: TCT Mobile Limited

Manufacture: TCT Mobile Limited

Specification: FCC OET Bulletin 65 (Edition 97-01)

Supplement C (Edition 01-01)

47CFR 2.1093

FCC ID: RAD161

The State Radio_monitoring_center Testing Center (SRTC)

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Executive summary

Test report no.:	**SRTC2011-H024-E0026**
Product Model:	**yippee 3G_A**
Date of test:	**2011.04.15**
Date of report:	**2011.05.04**
Laboratory:	**The State Radio_monitoring_center Testing Center (SRTC)**
Test has been Carried out in accordance with:	**47CFR §2.1093** Radiofrequency Radiation Exposure Evaluation: Portable Devices **FCC OET Bulletin 65 (Edition 97-01), Supplement C (Edition 01-01)** Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields **RSS-102** Evaluation Procedure for Mobile and Portable Radio Transmitters with Respect to Health Canada's Safety Code 6 for Exposure of Humans to Radio Frequency Fields **IEEE 1528 - 2003** IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Technique
Documentation:	**The documentation of the testing performed on the tested devices is archived for 5 years at SRTC**

Result summary:

Mode	CH/*f*(MHz)	Power (dBm)	Position	Sar Limit (1g avg) (mW/g)	Measured value (1g avg)(mW/g)	Result
WCDMA B2	9662/1852.4	23.78	Left cheek	1.6	**1.19**	PASS

This Test Report Is Issued by: Mr. Song Qizhu Director of the test lab	Checked by: Mr. Wang Junfeng Deputy director of the test lab
Tested by: Ms. Liu Jia Test engineer	Issued date: **2011.05.17**

Tables of contents

1. GENERAL INFORMATION

1.1 Notes of the test report

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The test results relate only to individual items of the samples which have been tested.

1.2 Information about the testing laboratory

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Fax: +86-21-61460602
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1.5 Test Details

Period of test	2011.04.15
Batteries used in testing	Li-Lon/CAB3120000C1/BYD LITHIUM BATTERY CO., LTD
	Li-Lon/CAB3120000C2/SHENZHEN BAK BATTERY CO., LTD
State of sample	production unit
Headsets used in testing	CCB3160A10C2/Lianyun Electronic Technology CO.,LTD.
	CCB3160A10C0/Shen Zhen Ju Wei Electronic Co.,LTD
H/W Version S/W Version	PIO sw132
IMEI	012596000000797
Device class/ Multislot class DTM	B/12 N/A
Notes	As the information described above, there are two different models of battery manufactured by two different companies, and two different models of headset manufactured by two different companies. The relevant tests have been performed in order to verify in which combination case (EUT exercised by only one model of battery and one model of headset) the EUT would have the worst features. So all the tests shown in this test report are performed when the EUT exercised by the battery CAB3120000C1 and the headset CCB3160A10C2.

1.6 Maximum Results

The maximum measured SAR values for Head configuration and Body Worn configuration are given in section 1.6.1 and 1.6.2 respectively. The device conforms to the requirements of the standard(s) when the maximum measured SAR value is less than or equal to the limit.

1.6.1 GSM

The multi-slot mode configuration level in GPRS and EDGE is the class 12. The configurations including four slot modes below:
1Txslot: 4 downlink and 1 uplink
2Txslots: 3 downlink and 2 uplink
3Txslots: 2 downlink and 3 uplink
4Txslots: 1 downlink and 4 uplink
The DUT's output power was test through the conducted spurious emissions with the four slot modes,and the maximum averaged power was under 2 downlink and 3 uplink mode. Therefore, during GPRS and EDGE test will choose 2 downlink and 3 uplink mode as the basic test mode.

Head Configuration

Mode	CH/*f*(MHz)	Power (dBm)	Position	Sar Limit (1g avg) (mW/g)	Measured value (1g avg)(mW/g)	Result
GSM850	189/836.4	33.25	Right cheek	1.6	**0.949**	PASS
GSM1900	512/1850.2	29.64	Left cheek	1.6	**1.18**	PASS

Body Worn Configuration

Mode	CH/*f*(MHz)	Power (dBm)	Position	Sar Limit (1g avg) (mW/g)	Measured value (1g avg)(mW/g)	Result
GSM850	128/824.2	33.25	Towards ground	1.6	**0.531**	PASS
GSM1900	512/1850.2	29.64	Towards ground	1.6	**0.317**	PASS

1.6.2 WCDMA

The default test configuration is to measure SAR with an established radio link between the DUT and a communication test set using a 12.2 kbps RMC (reference measurement channel) configured in Test Loop Mode 1. The dedicated channel will be set with RMC type, and the transmit power control in ALL UP BITS.

Head Configuration

Mode	CH/*f*(MHz)	Power (dBm)	Position	Sar Limit (1g avg) (mW/g)	Measured value (1g avg)(mW/g)	Result
WCDMA B2	9662/1852.4	23.78	Left cheek	1.6	**1.19**	PASS
WCDMA B5	4123/826.4	23.75	Right cheek	1.6	**1.01**	PASS

Body Worn Configuration

Mode	CH/*f*(MHz)	Power (dBm)	Position	Sar Limit (1g avg) (mW/g)	Measured value (1g avg)(mW/g)	Result
WCDMA B2	9400/1880	22.56	Towards ground	1.6	**0.664**	PASS
WCDMA B5	4183/836.5	23.61	Towards ground	1.6	**0.575**	PASS

1.6.3 Wifi

Head Configuration

Mode	Channel\data rate	Power (dBm)	Position	Sar Limit (1g avg) (mW/g)	Measured value (1g avg)(mW/g)	Result
802.11g	channel 6 /36Mbps	23.47	Right cheek	1.6	**0.35**	PASS

Body Worn Configuration

Mode	Channel\data rate	Power (dBm)	Position	Sar Limit (1g avg) (mW/g)	Measured value (1g avg)(mW/g)	Result
802.11g	channel 6 /36Mbps	23.47	Towards ground	1.6	**0.12**	PASS

2. DESCRIPTION OF THE DEVICE UNDER TEST

Device category	production unit
Exposure enviroment	General population/uncontrolled

Modes and Bands of operation	GSM 850	GSM 1900	GPRS	EGPRS	WCDMA B2	WCDMA B5	WiFi
Modulation Mode	GMSK	GMSK	GMSK	8-PSK /GMSK	QPSK	QPSK	DBPSK/ DQPSK/ CCK/BP SK/QPS K/16QA M/64QA M
Duty Cycle	1/8	1/8	1/4	1/2	1/1	1/1	1/1
Transmitter Frequency Range(MHz)	824-849	1850-1910	824-849 1850-1910	824-849 1850-1910	1850-1910	824-849	2400-2483.5

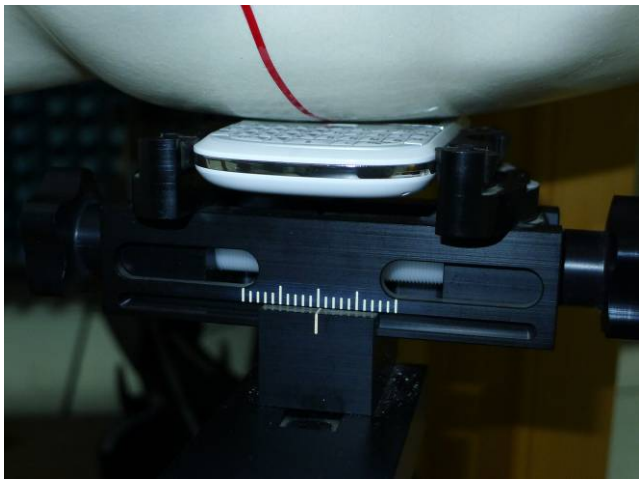
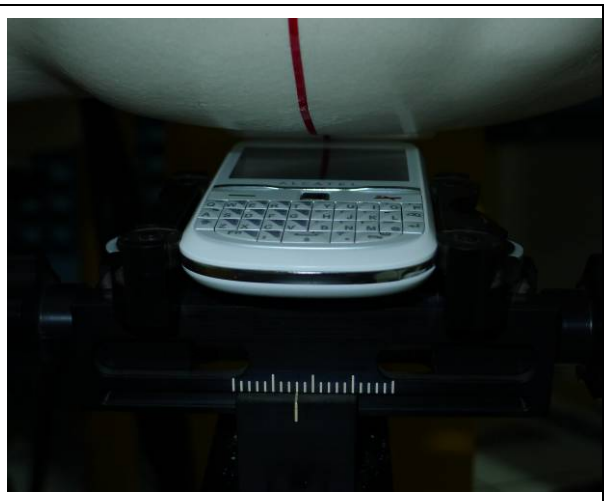
2.1 Description of the Antenna

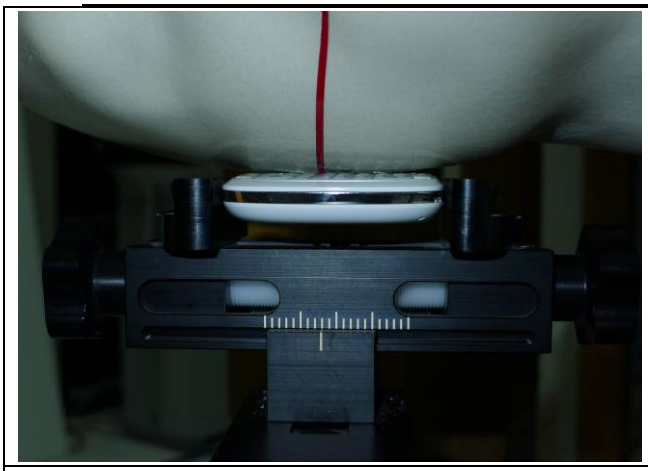
The device has an internal antenna.

2.2 Picture of the EUT

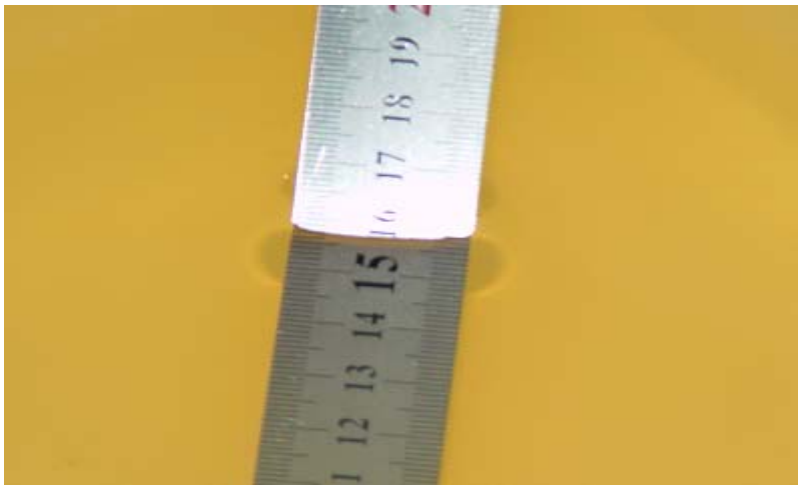
2.3 Test Positions for the Device under test

	
Cheek position, left side	**Tilt position, left side**

	
Cheek position, Right side	**Tilt position, Right side**
	
FLAT position (towards ground)	**15mm spacer**

2.4 Picture to demonstrate the required liquid depth

the liquid depth in the used SAM phantoms



Liquid depth for SAR Measurement

3. TEST CONDITIONS

3.1 Temperature and Humidity

Ambient temperature (° C)	21.0 to 23.0
Ambient humidity (RH %)	30 to 45

3.2 Test Signal, Frequencies and Output Power

The device was put into operation by using a call tester. Communication between the device and the call tester was established by air link.
The device output power was set to maximum power level for all tests; a fully charged battery was used for every test sequence.
In all operating bands the measurements were performed on lowest, middle and highest channels.

3.3 SAR Measurement Set-up

The system is based on a high precision robot (working range greater than 0.9m), which positions the probes with a positional repeatability of better than ± 0.02mm. Special E- and H-field probes have been developed for measurements close to material discontinuity, the sensors of which are directly loaded with a Schottky diode and connected via highly resistive lines (length =300mm) to the data acquisition unit.
A cell controller system contains the power supply, robot controller, teaches pendant (Joystick),and remote control, is used to drive the robot motors.
The PC consists of the Micron Pentium IV computer with Windows 2000 system and SAR Measurement Software DASY4 Professional, A/D interface card, monitor, mouse, and keyboard. The Stäubli Robot is connected
to the cell controller to allow software manipulation of the robot.
A data acquisition electronic (DAE) circuit performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. is connected to the Electro-optical coupler
(EOC). The EOC performs the conversion from the optical into digital electric signal of the DAEand transfers data to the PC plug-in card.The DAE consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the PC-card is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines.
The mechanical probe mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe collision detection
The robot uses its own controller with a built in VME-bus computer.

4. DESCRIPTION OF THE TEST EQUIPMENT

4.1 Measurement System and Components

The measurements were performed using an automated near-field scanning system, DASY4,manufactured by Schmid & Partner Engineering AG (SPEAG) in Switzerland. The SAR extrapolation algorithm used in all measurements was the 'advanced extrapolation' algorithm.

The following table lists calibration dates of SPEAG components:

Test Equipment	Serial Number	Calibration interval	Calibration expiry
DAE4	720	1year	2012.01.19
Dosimetric E-field Probe ES3DV3	3128	1year	2011.06.22
Dipole Validation Kit, D900V2	171	2 years	2012.06.11
Dipole Validation Kit, D1800V2	2d084	2 years	2012.06.11
DASY4 software Version	4.7	N/A	N/A

Note: the Dipole Calibration interval is 24 months

Additional test equipment used in testing:

Test Equipment	Model	Serial Number	Calibration interval	Calibration expiry
Signal Generator	E4428C	MY45280865	1year	2011.08.20
Amplifier	5S1G4	0323472	N/A	N/A
Power meter	E4417A	MY45101182	1year	2011.08.20
Power Sensor	E4412A	MY41502214	1year	2011.08.20
Power Sensor	E4412A	MY41502130	1year	2011.08.20
Call Tester	8960	GB43194054	1year	2011.08.20
Network Analyzer	8714ET	US40372083	1year	2011.08.20
Dielectric Probe Kit	85070D	US33030365	N/A	N/A

Detailed information of Isotropic E-field Probe Type ES3DV3

Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	Calibration certificate in Appendix C
Frequency	10 MHz to 4 GHz; Linearity: ± 0.2 dB (30 MHz to 4 GHz)
Optical Surface Detection	± 0.2 mm repeatability in air and clear liquids over diffuse reflecting surfaces
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 3.9 mm (Body: 12 mm)

	Distance from probe tip to dipole centers: 2.0 mm
Dynamic Range	5 μW/g to > 100 mW/g; Linearity: ± 0.2 dB
Application	General dosimetry up to 4 GHz Dosimetry in strong gradient fields Compliance tests of mobile phones

4.2 Phantoms

The phantom used for all tests i.e. for both system checks and device testing, was the twinheaded "SAM Phantom", manufactured by SPEAG. The phantom conforms to the requirements of IEEE 1528 - 2003.
System checking was performed using the flat section, whilst Head SAR tests used the left and right head profile sections. Body SAR testing also used the flat section between the head profiles.
The SPEAG device holder (see Section 5.1) was used to position the device in all tests whilst a tripod was used to position the validation dipoles against the flat section of phantom.

4.3 Tissue Simulants

Recommended values for the dielectric parameters of the tissue simulants are given in IEEE 1528 - 2003 and FCC Supplement C to OET Bulletin 65. All tests were carried out using simulants whose dielectric parameters were within ± 5% of the recommended values. All tests were carried out within 24 hours of measuring the dielectric parameters.
The depth of the tissue simulant was 15.0 ± 0.5 cm measured from the ear reference point during system checking and device measurements.

4.3.1 Tissue Simulant Recipes

The following recipe(s) were used for Head and Body tissue stimulant(s):

835MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Water	41.45	52.50
Sugar	56.00	45.0
Nacl	1.45	1.40
Cellulose	1.0	1.0
Preventol	0.1	0.10

1900MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Water	44,45	70.17
DGBE	55.24	29.44
Nacl	0.31	0.39

2450MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Water	55.00	68.64
DGBE	45.00	31.37
Nacl	0.00	0.00

4.3.2 System Checking

The manufacturer calibrates the probes annully. Dielectric parameters of the tissue simulants were measured every day using the dielectric probe kit and the network analyser. A system check measurement was made following the determination of the dielectric parameters of the simulant, using the dipole validation kit. A power level of 250 mW was supplied to the dipole antenna, which was placed under the flat section of the twin SAM phantom. The system checking results (dielectric parameters and SAR values) are given in the table below. Test Date is 2011.4.15

System checking,head tissue simulant

		SAR_{1g} [w/kg]	ε_r	σ[S/m]	Temperature	
					Ambient[℃]	Liquid[℃]
900MHz	Target Value	10.8	41.5±2.1	0.97±0.05	15-30	-
	Measured Value	10.9	41.5	0.98	24.0	22.3

All SAR values are normalized to 1W forward power

		SAR_{1g} [w/kg]	ε_r	σ[S/m]	Temperature	
					Ambient[℃]	Liquid[℃]
1800MHz	Target Value	38.1	40±1.9	1.40±0.07	15-30	-
	Measured Value	38.8	39.4	1.35	24.0	22.3

All SAR values are normalized to 1W forward power

		SAR_{1g} [w/kg]	ε_r	σ[S/m]	Temperature	
					Ambient[	Liquid[℃]
2450MHz	Target Value	52.4	39.2±3.92	1.8±0.09	15-30	-
	Measured Value	49.6	37.9	1.88	24.0	22.3

All SAR values are normalized to 1W forward power

Plots of the system checking scans are given in Appendix A.

4.3.3 Tissue Simulants used in the Measurements

For the measurement of the following parameters the HP 85070D dielectric probe kit is used, representing the open-ended coaxial probe measurement procedure. Liquid temperature during the test: 22.3° C。Tested date is 2011.4.15

Head		εr	σ[S/m]	Temperature	
				Ambient [℃]	Liquid [℃]
850MHz	Recommended Value	41.5±2.1	0.97±0.05	15-30	-
	Measured Value	41.5	0.98	24.0	22.3
1900MHz	Recommended Value	40±1.9	1.40±0.07	15-30	-
	Measured Value	39.0	1.44	24.0	22.3
2450MHz	Recommended Value	39.2±3.92	1.8±0.09	15-30	-
	Measured Value	37.9	1.88	24.0	22.3

Body		εr	σ[S/m]	Temperature	
				Ambient [℃]	Liquid [℃]
850MHz	Recommended Value	55.0±2.8	1.05±0.05	15-30	-
	Measured Value	54.6	1.00	24.0	22.3
1900MHz	Recommended Value	53.3±2.7	1.52±0.08	15-30	-
	Measured Value	54.6	1.49	24.0	22.3
2450MHz	Recommended Value	52.7±5.27	1.95±0.0975	15-30	-
	Measured Value	52.9	1.94	24.0	22.3

5. DESCRIPTION OF THE TEST PROCEDURE

5.1 Device Holder

The device was placed in the device holder (illustrated below) that is supplied by SPEAG as an integral part of the Dasy system.

Device holder supplied by SPEAG

5.2 Test positions

5.2.1 Against Phantom Head

Measurements were made in “cheek” and “tilt” positions on both the left hand and right hand sides of the phantom.
The positions used in the measurements were according to IEEE 1528 - 2003 "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques".

5.2.2 Body Worn Configuration

The device was placed in the SPEAG holder below the flat section of the phantom. The distance between the device and the phantom was kept at the separation distance using a separate flat spacer that was removed before the start of the measurements. And the distance is 1.5cm.The device was oriented with its antenna facing the phantom since this orientation gives higher results.

5.3 Scan Procedure

First, area scans were used for determination of the field distribution and the approximate location of the local peak SAR values. The SAR distribution is scanned along the inside surface, at least for an area larger than the projection of the handset and antenna. The angle between the probe axis and the surface normal line is recommended but not required to be less than 30°. The SAR distribution is first measured on a 2-D coarse grid. The scan region should cover all areas that are exposed and encompassed by the projection of the handset. It is a 15 mm × 15 mm measurement grid used when two staggered one-dimensional cubic splines are used to estimate the maximum SAR location. Next, a zoom scan, a minimum of 7 x 7x7 points covering a volume of at least 30x30x30mm, was performed around the highest E-field value to determine the averaged SAR value. Drift was determined by measuring the same point at the start of the area scan and again at the end of the zoom scan.

5.4 SAR Averaging Methods

The maximum SAR value was averaged over a cube of tissue using interpolation and extrapolation.
The interpolation, extrapolation and maximum search routines within Dasy4 are all based on the modified Quadratic Shepard's method (Robert J. Renka, "Multivariate Interpolation Of Large Sets Of Scattered Data", University of North Texas ACM Transactions on Mathematical Software, vol. 14, no. 2, June 1988, pp. 139-148).
The interpolation scheme combines a least-square fitted function method with a weighted average method. A trivariate 3-D / bivariate 2-D quadratic function is computed for each measurement point and fitted to neighbouring points by a least-square method. For the zoom scan, inverse distance weighting is incorporated to fit distant points more accurately. The interpolating function is finally calculated as a weighted average of the quadratics.
In the zoom scan, the interpolation function is used to extrapolate the Peak SAR from the deepest measurement points to the inner surface of the phantom.

6. MEASUREMENT UNCERTAINTY

DASY4 Uncertainty Budget								
Error description	Uncertainty value	Prob. Dist.	Div.	(c_i) 1g	(c_i) 10g	Std.Unc (1g).	Std.Unc. (10g)	$(v_i)\ V_{eff}$
Measurement system								
Probe calibration	±5.9%	N	1	1	1	±5.9%	±5.9%	∞
Axial isotropy	±4.7%	R	$\sqrt{3}$	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical isotropy	±9.6%	R	$\sqrt{3}$	0.7	0.7	±3.9%	±3.9%	∞
Boundary effects	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Linearity	±4.7%	R	$\sqrt{3}$	1	1	±2.7%	±2.7%	∞
System detection limits	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Readout electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response time	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Integration time	±2.6%	R	$\sqrt{3}$	1	1	±1.5%	±1.5%	∞
RF ambient noise	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
RF ambient reflections	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Probe positioner	±0.4%	R	$\sqrt{3}$	1	1	±0.2%	±0.2%	∞
Probe positioning	±2.9%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Max.SAR Eval.	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Test Sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	145
Device holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Power drift	±5.0%	R	$\sqrt{3}$	1	1	±2.9%	±2.9%	∞
Phantom and Setup								
Phantom uncertainty	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
Liquid conductivity(target)	±5.0%	R	$\sqrt{3}$	0.64	0.43	±1.8%	±1.2%	∞
Liquid conductivity(meas.)	±2.5%	N	1	0.64	0.43	±1.6%	±1.1%	∞
Liquid conductivity(target)	±5.0%	R	$\sqrt{3}$	0.6	0.49	±1.7%	±1.4%	∞
Liquid onductivity(means.)	±2.5%	N	1	0.6	0.49	±1.5%	±1.2%	∞
Combined std. Uncertainty						±10.9%	±10.7%	387
Expanded STD Uncertainty						**±21.9%**	**±21.4%**	

Table 6.1 – Measurement uncertainty evaluation

7. RESULTS

7.1 Test result

In order to determine the largest value of the peak spatial-average SAR of a handset, all device positions, configurations, and operational modes should be tested for each frequency band according to Steps 1 to 3 below.
Step 1: The tests should be performed at the channel that is closest to the center of the transmit frequency band.
Step 2: For the condition providing the highest peak spatial-average SAR determined in Step 1 for each frequency, perform all tests at all other test frequency channels, e.g., lowest and highest frequencies. In addition, for all other conditions (device position, configuration, and operational mode) where the peak spatial-average SAR value determined in Step 1 is within 3 dB of the applicable SAR limit, it is recommended that all other test frequencies should be tested as well.
Step 3: Examine all data to determine the largest value of the peak

The measured Head/body SAR values for the test device are tabulated below:

Mode: GSM 850

f_L(MHz)=824.2MHz f_M(MHz)=836.4 MHz f_H(MHz)= 848.8MHz

SAR Values（Head，850MHz Band）

Limit of SAR (W/kg)	1 g Average
	1.6
Test Case	Measurement Result (mW/g)
	1g Average
Left hand, Touch cheek, f_H	0.841
Left hand, Touch cheek, f_M	0.869
Left hand, Touch cheek, f_L	0.877
Left hand, Tilt 15 Degree, f_H	0.62
Left hand, Tilt 15 Degree, f_M	0.643
Left hand, Tilt 15 Degree, f_L	0.64
Right hand, Touch cheek, f_H	0.906
Right hand, Touch cheek, f_M	**0.949**
Right hand, Touch cheek, f_L	0.935
Right hand, Tilt 15 Degree, f_H	0.58
Right hand, Tilt 15 Degree, f_M	0.607
Right hand, Tilt 15 Degree, f_L	0.557

So, the maximum SAR is

Phantom Configuration	Device Test Position	SAR(mW/g)/ (10g/1g)		
		f_L(MHz)	f_M(MHz)	f_H(MHz)
Right Side	Cheek	---	**0.949**	---

Mode: GSM850 (GSM/GPRS/EDGE)

f_L(MHz)=824.2MHz f_M(MHz)=836.4 MHz f_H(MHz)= 848.8MHz

SAR Values（body，850MHz Band）

Limit of SAR (W/kg)	**1 g Average**
	1.6
Test Case	**Measurement Result (mW/g)**
	1 g Average
Towards ground/GSM, with headset 15mm spacer f_H	0.361
Towards ground/GSM, with headset 15mm spacer f_M	0.505
Towards ground/GSM, with headset 15mm spacer f_L	**0.531**
Towards phantom/GSM, with headset 15mm spacer f_M	0.388
Towards ground/GPRS, 15mm spacer f_M	0.352
Towards phantom/GPRS, 15mm spacer f_M	0.378
Towards ground/EGPRS, 15mm spacer f_M	0.103
Towards phantom/EGPRS, 15mm spacer f_M	0.0918

During the body testing GPRS/EDGE work at the “2 downlink and 3 uplink”,at this Tx slot RF averaged power is larger than other Tx slots.

So, the maximum SAR is

Phantom Configuration	Device Test Position	SAR(mW/g)		
		f_L(MHz)	f_M(MHz)	f_H(MHz)
Towards Ground/GSM	15mm spacer	**0.531**	---	---

Mode: GSM1900

f_L(MHz)=1850.2MHz f_M(MHz)=1880.0MHz f_H(MHz)=1909.8MHz

SAR Values（Head, 1900MHz Band）

Limit of SAR (W/kg)	**1 g Average**
	1.6
Test Case	**Measurement Result (mW/g)**
	1g Average
Left hand, Touch cheek, f_H	0.991
Left hand, Touch cheek, f_M	1.1
Left hand, Touch cheek, f_L	1.16
Left hand, Tilt 15 Degree, f_H	0.25
Left hand, Tilt 15 Degree, f_M	0.293
Left hand, Tilt 15 Degree, f_L	0.318
Right hand, Touch cheek, f_H	1.0
Right hand, Touch cheek, f_M	1.11
Right hand, Touch cheek, f_L	**1.18**
Right hand, Tilt 15 Degree, f_H	0.187
Right hand, Tilt 15 Degree, f_M	0.186
Right hand, Tilt 15 Degree, f_L	0.242

So, the maximum SAR is

Phantom Configuration	Device Test Position	SAR(mW/g)		
		f_L(MHz)	f_M(MHz)	f_H(MHz)
Right Side	Cheek	**1.18**	---	---

Mode: GSM1900 (GSM/GPRS/EDGE)

f_L(MHz)=1850.2MHz f_M(MHz)=1880.0MHz f_H(MHz)=1909.8MHz

SAR Values（body，1900MHz Band）

Limit of SAR (W/kg)	**1 g Average**
	1.6
Test Case	**Measurement Result (mW/g)**
	1 g Average
Towards ground/GSM, with headset 15mm spacer f_H	0.258
Towards ground/GSM, with headset 15mm spacer f_M	0.296
Towards ground/GSM, with headset 15mm spacer f_L	**0.317**
Towards phantom/GSM, with headset 15mm spacer f_M	0.279
Towards ground/GPRS, 15mm spacer f_M	0.25
Towards phantom/GPRS, 15mm spacer f_M	0.295
Towards ground/EGPRS, 15mm spacer f_M	0.124
Towards phantom/EGPRS, 15mm spacer f_M	0.105

During the body testing GPRS/EDGE work at the “2 downlink and 3 uplink”,at this Tx slot RF averaged power is larger than other Tx slots.

So, the maximum SAR is

Phantom Configuration	Device Test Position	SAR(mW/g)		
		f_L(MHz)	f_M(MHz)	f_H(MHz)
Towards ground/GPRS	15mm spacer	**0.317**	---	---

Mode: WCDMA B5

f_L(MHz)=826.4MHz f_M(MHz)=836.4MHz f_H(MHz)= 846.6MHz

SAR Values（Head，WCDMA B5）

Limit of SAR (W/kg)	1 g Average 1.6
Test Case	**Measurement Result (mW/g)** **1 g Average**
Left hand, Touch cheek , f_H	0.832
Left hand, Touch cheek, fM	0.947
Left hand, Touch cheek , f_L	0.78
Left hand, Tilt 15 Degree, f_H	0.481
Left hand, Tilt 15 Degree, f_M	0.546
Left hand, Tilt 15 Degree, f_L	0.499
Right hand, Touch cheek, f_H	**1.01**
Right hand, Touch cheek, f_M	0.904
Right hand, Touch cheek, f_L	0.822
Right hand, Tilt 15 Degree f_H	0.526
Right hand, Tilt 15 Degree f_M	0.504
Right hand, Tilt 15 Degree, f_L	0.493

So, the maximum SAR is

Phantom Configuration	Device Test Position	SAR(mW/g)		
		f_L(MHz)	f_M(MHz)	f_H(MHz)
Right Side	Cheek	---	---	**1.01**

Mode: WCDMA B5

f_L(MHz)=826.4MHz f_M(MHz)=836.4MHz f_H(MHz)= 846.6MHz

SAR Values（body，WCDMA B5）

Limit of SAR (W/kg)	**1 g Average**
	1.6
Test Case	**Measurement Result (mW/g)**
	1 g Average
Towards ground, 15mm spacer with headset f_H	0.341
Towards ground, 15mm spacer with headset f_M	**0.575**
Towards ground, 15mm spacer with headset f_L	0.396
Towards phantom,15mm spacer with headset f_M	0.507

So, the maximum SAR is

Phantom Configuration	Device Test Position	SAR(mW/g)		
		f_L(MHz)	f_M(MHz)	f_H(MHz)
Towards ground	with headset 15mm spacer	---	**0.575**	---

Mode: WCDMA B2

f_L(MHz)=1852.4MHz f_M(MHz)=1880MHz f_H(MHz)= 1907.6MHz

SAR Values（Head，WCDMA B2）

Limit of SAR (W/kg)	**1 g Average**
	1.6
Test Case	**Measurement Result (mW/g)**
	1 g Average
Left hand, Touch cheek , f_H	1.03
Left hand, Touch cheek, f_M	1.19
Left hand, Touch cheek , f_L	1.19
Left hand, Tilt 15 Degree, f_H	0.542
Left hand, Tilt 15 Degree, f_M	0.528
Left hand, Tilt 15 Degree, f_L	0.512
Right hand, Touch cheek, f_H	0.915
Right hand, Touch cheek, f_M	1.15
Right hand, Touch cheek, f_L	1.1
Right hand, Tilt 15 Degree f_H	0.272
Right hand, Tilt 15 Degree f_M	0.348
Right hand, Tilt 15 Degree, f_L	0.382

So, the maximum SAR is

Phantom Configuration	Device Test Position	SAR(mW/g)		
		f_L(MHz)	f_M(MHz)	f_H(MHz)
Right Side	cheek	**1.19**	**1.19**	---

Mode: WCDMA B2

f_L(MHz)=1852.4MHz f_M(MHz)=1880MHz f_H(MHz)= 1907.6MHz

SAR Values（body，WCDMA B2）

Limit of SAR (W/kg)	**1 g Average**
	1.6
Test Case	**Measurement Result (mW/g)**
	1 g Average
Towards ground, with headset 15mm spacer f_H	0.495
Towards ground, with headset 15mm spacer f_M	**0.664**
Towards ground, with headset 15mm spacer f_L	0.629
Towards phantom, with headset 15mm spacer f_M	0.558

So, the maximum SAR is

Phantom Configuration	Device Test Position	SAR(mW/g)		
		f_L(MHz)	f_M(MHz)	f_H(MHz)
Towards ground	with headset 15mm spacer	---	**0.664**	---

7.2 Conducted power

Mode	GSM850(Head) Duty cycle: 1:8(12.5%)			GSM1900(Head) Duty cycle: 1:8(12.5%)		
Channel	128	189	251	512	661	810
Frequency(MHz)	824.2	836.4	848.8	1850.2	1880.0	1909.8
Measured Power(dBm)	33.25	33.25	33.26	29.64	29.74	29.80

GPRS/EDGE Measured Power

Mode	GPRS850			GPRS1900		
	EDGE850			EDGE1900		
Channel	128	189	251	512	661	810
Frequency(MHz)	824.2	836.4	848.8	1850.2	1880.0	1909.8
4Downlink1uplink Power(dBm)	33.22	33.23	33.22	29.61	29.71	29.75
	27.37	27.40	27.42	26.17	26.31	26.39
3Downlink2uplink Power(dBm)	31.35	31.35	31.37	27.67	27.77	27.83
	27.34	27.36	27.36	26.15	26.29	26.38
2Downlink3uplink Power(dBm)	30.37	30.36	30.36	26.95	27.04	27.11
	27.30	27.33	27.34	26.14	26.26	26.33
1Downlink4uplink Power(dBm)	27.85	27.87	27.89	24.59	24.70	24.79
	27.27	27.28	27.30	24.56	24.70	24.77

GPRS/EDGE Averaged Power

Mode	GPRS850			GPRS1900		
	EDGE850			EDGE1900		
Channel	128	189	251	512	661	810
Frequency(MHz)	824.2	836.4	848.8	1850.2	1880.0	1909.8
4Downlink1uplink Power(dBm)	24.19	24.20	24.19	20.58	20.68	20.72
	18.34	18.37	18.39	17.14	17.28	17.36
3Downlink2uplink Power(dBm)	25.33	25.33	25.35	21.65	21.75	21.81
	21.32	21.34	21.34	20.13	20.27	20.36
2Downlink3uplink Power(dBm)	26.11	26.10	26.10	22.69	22.78	22.85
	23.04	23.07	23.08	21.88	22.00	22.07
1Downlink4uplink Power(dBm)	24.84	24.86	24.88	21.58	21.69	21.78
	24.26	24.27	24.29	21.55	21.69	21.76

Division Factors(for Measured Power and Averaged Power):

To average the power, the division factor is as follows:

1TX-slot (4Downlink1uplink)= 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots(3Downlink2uplink) = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots (2Downlink3uplink)= 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots (1Downlink4uplink)= 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

According to the conducted power as above, the body measurements are performed with 3Txslots(2Downlink3uplink) for GPRS and EGPRS.

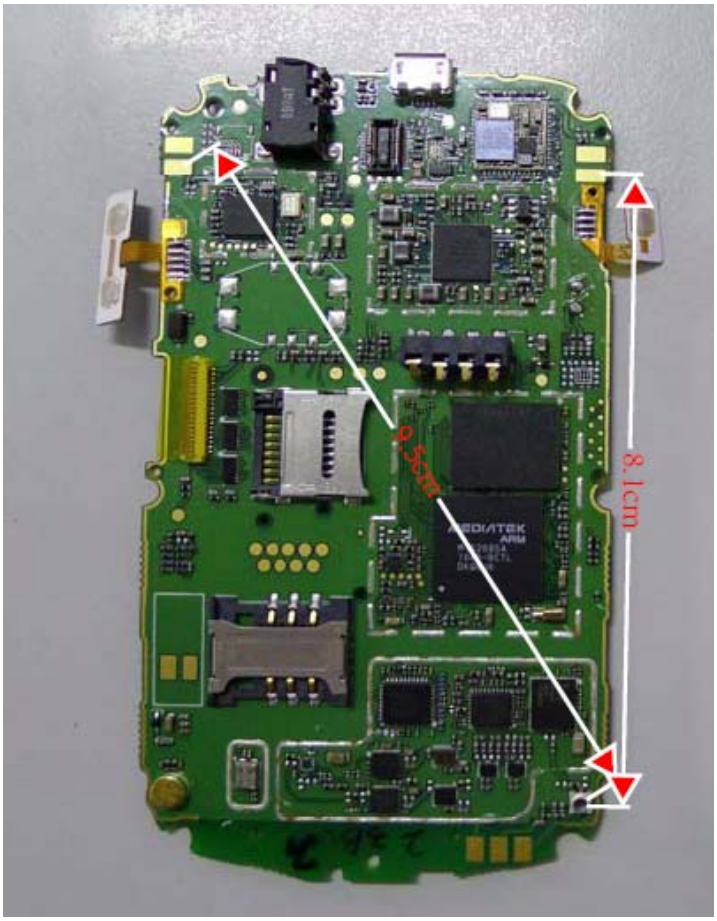
The conducted output power for wcdma:

Duty cycle: 1（100%）

Mode	WCDMA B2			WCDMA B5		
Channel	9262	9400	9538	4132	4183	4233
Frequency(MHz)	1852.4	1880	1907.6	826.4	836.5	846.6
Measured Power(dBm)	23.78	22.56	22.55	23.75	23.61	23.29

7.3 Summary of Measurement Results (Bluetooth and WiFi function)

The distance between BT/WiFi antenna and RF antenna is ＞5cm, the distance between BT antenna and WiFi antenna is >2.5 cm and < 5cm. The location of the antennas inside mobile phone is shown below:



The conducted output power of BT is as following:

Channel	The output power
2402 MHz	8.63dBm
2441MHz	8.10dBm
2480MHz	7.89dBm

The average conducted power for WiFi is as following:

802.11b（dBm）

Channel\data rate	1Mbps	2Mbps	5.5Mbps	11Mbps
1	20.77	20.71	22.38	21.02
6	21.18	21.06	20.64	20.96
11	20.94	20.82	20.46	20.73

802.11g（dBm）

Channel\data rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
1	22.91	22.99	23.24	23.18	23.02	22.89	23.28	23.41
6	23.06	23.12	22.93	23.31	23.17	**23.47**	23.13	23.00
11	22.54	22.73	22.56	22.96	22.52	22.52	22.80	22.49

BT& RF
Separation distance ＞5cm
RF TX: Standard-alone SAR required
BT TX: Standard-alone SAR not required ($P \leq 2P_{ref}$)
No simultaneous Tx SAR(BT SAR=0W/kg)

BT&WIFI
Separation distance >2.5 cm and < 5cm
802.11b/g TX: stand-alone SAR required($P > P_{ref}$)
BT TX: stand-alone SAR not required($P < P_{ref}$) and 802.11b/g Max. SAR<1.2w/kg (refer to the follow test result)
No Simultaneous Tx SAR (BT SAR=0W/kg)

RF&WIFI
Separation distance＞5cm
RF TX: Stand-alone SAR required
802.11b/g Tx: Stand-alone SAR required ($P > 2*P_{ref}$)

According to the conducted power measurement result, we can draw the conclusion that: stand-alone SAR for WiFi should be performed. Then, simultaneous transmission SAR for WiFi is considered with measurement results of GSM and WiFi.

SAR is not required for 802.11b channels if the output power is less than 0.25dB higher than that measured on the corresponding 802.11g channels, and for each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than 0.25dB higher than those measured at the lowest data rate. According to the above conducted power, the EUT should be tested for “802.11g, 36Mbps, channel 6.

SAR Values (WIFI 802.11g - Head)

Limit of SAR (W/kg)	1 g Average
	1.6
Test Case	Measurement Result(W/kg)
	1 g Average
Left hand, Touch cheek, 36Mbps,channel 6	0.345
Left hand, Tilt 15 Degree, 36Mbps,channel 6	0.348
Right hand, Touch cheek, 36Mbps,channel 6	0.35
Right hand, Tilt 15 Degree, 36Mbps,channel 6	0.317

SAR Values (WIFI 802.11g - Body)

Limit of SAR (W/kg)	1 g Average
	1.6
Test Case	Measurement Result (W/kg)
	1 g Average
Toward Ground, 36Mbps,channel 6	0.12
Toward Phantom, 36Mbps,channel 6	0.055

The sum of SAR values for GSM and WiFi

	MAXIMUM SAR VALUE FOR HEAD	MAXIMUM SAR VALUE FOR BODY
GSM	1.18	0.531
WiFi	0.35	0.12
Sum	1.53	0.651

According to the above tables, the sum of SAR values for GSM and WiFi ＜ 1.6W/kg. So simultaneous transmission SAR are not required for WiFi transmitter.

The sum of SAR values for WCDMA and WiFi

	MAXIMUM SAR VALUE FOR HEAD	MAXIMUM SAR VALUE FOR BODY
WCDMA	1.19	0.664
WiFi	0.35	0.12
Sum	1.54	0.784

According to the above tables, the sum of SAR values for WCDMA and WiFi ＜1.6W/kg. So simultaneous transmission SAR are not required for WiFi transmitter.

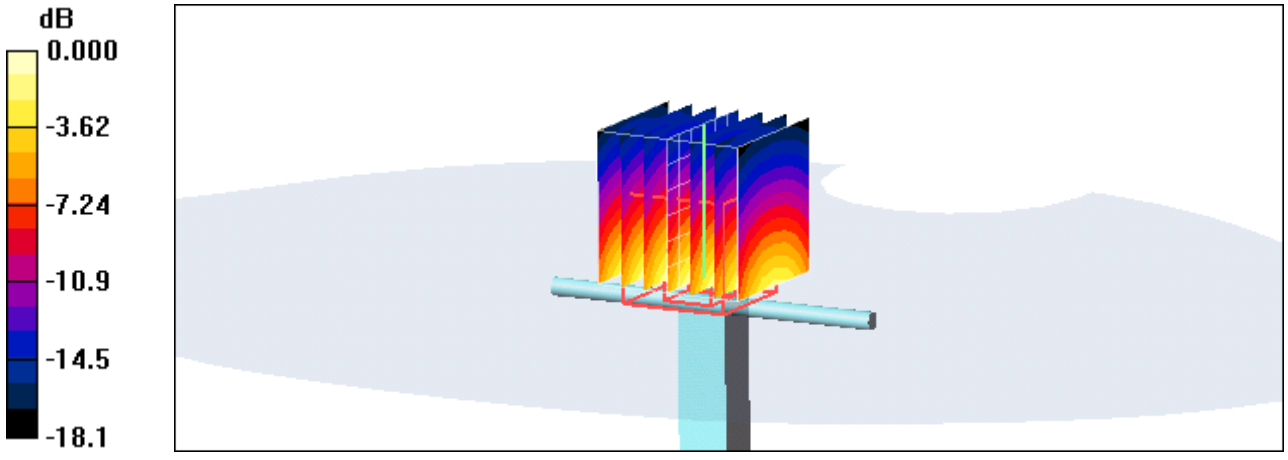
APPENDIX A: SYSTEM CHECKING SCANS

SYSTEM CHECKING SCANS	900MHz

DUT: Dipole 900 MHz; Type: D900V2; Serial: D900V2 - SN:171
Medium parameters used (interpolated): f = 900 MHz; σ = 0.95 mho/m; ε_r = 40.7; ρ = 1000 kg/m^3

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(9.03, 9.53, 9.2); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.3V/m; Power Drift = -0.047 dB
Peak SAR (extrapolated) = 4.08 W/kg
SAR(1 g) = 2.72 mW/g; SAR(10 g) = 1.62 mW/g
Maximum value of SAR (measured) = 2.9 mW/g



0 dB =2.9 mW/g

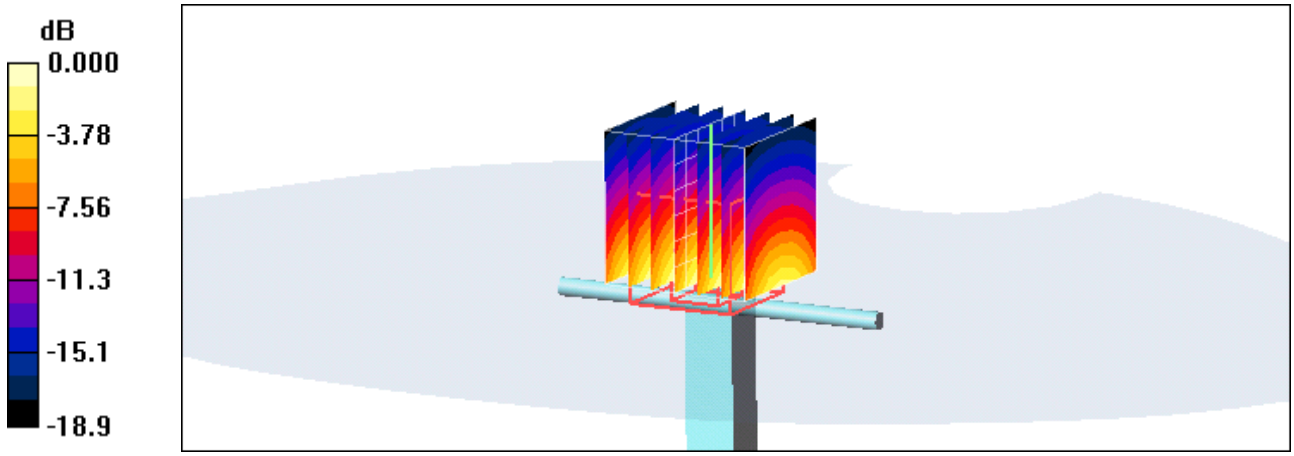
SYSTEM CHECKING SCANS	1800 MHz

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d084
Program Name: System Performance Check at 1800 MHz

Communication System: CW; Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.35 mho/m; εr = 39.4; ρ = 1000 kg/m3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(6.15, 6.5, 6.27); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 90.1 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 17.9 W/kg
SAR(1 g) = 9.71 mW/g; SAR(10 g) = 5.08 mW/g
Maximum value of SAR (measured) = 10.9 mW/g



0 dB =10.9 mW/g

SYSTEM CHECKING SCANS	2450 MHz

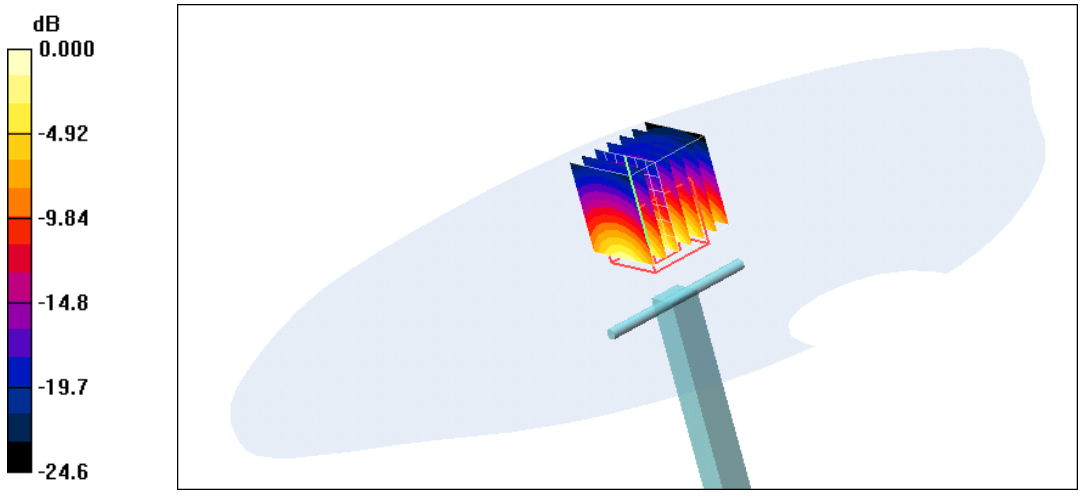
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:738
Program Name: System Performance Check at 1800MHz

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2450 MHz; σ = 1.88 mho/m; ε_r = 37.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: SN3128-HSL2450; ConvF(3.308, 3.487, 3.402); Calibrated: 4/21/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW 3128 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 78.0 V/m; Power Drift = 0.070 dB
Peak SAR (extrapolated) = 27.3 W/kg
SAR(1 g) = 12.4 mW/g; SAR(10 g) = 5.52 mW/g
Maximum value of SAR (measured) = 13.9 mW/g



0 dB =13.9mW/g

APPENDIX B: MEASUREMENT SCANS

GSM (850MHz/Head)

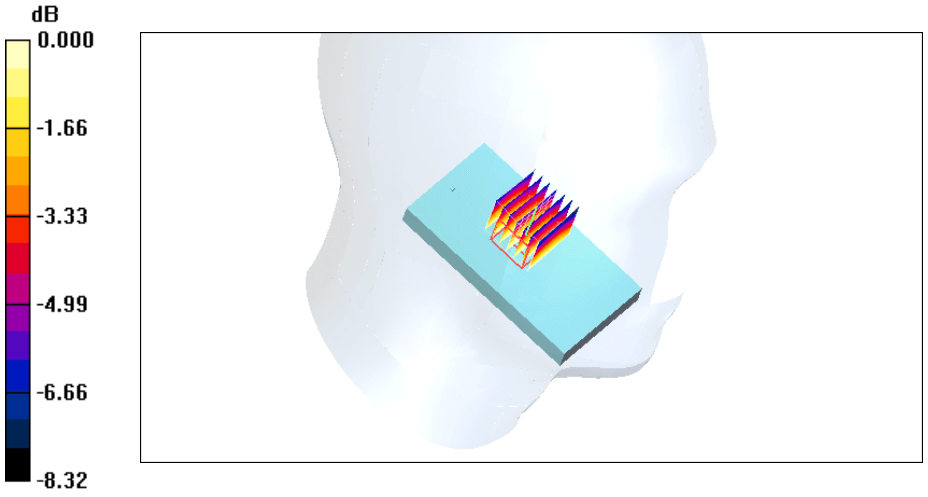
Left Side	Cheek	**824.2 MHz**

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.887 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.4 V/m; Power Drift = 0.009 dB
Peak SAR (extrapolated) = 1.04 W/kg
SAR(1 g) = 0.877 mW/g; SAR(10 g) = 0.685 mW/g
Maximum value of SAR (measured) = 0.919 mW/g



0 dB =0.919mW/g

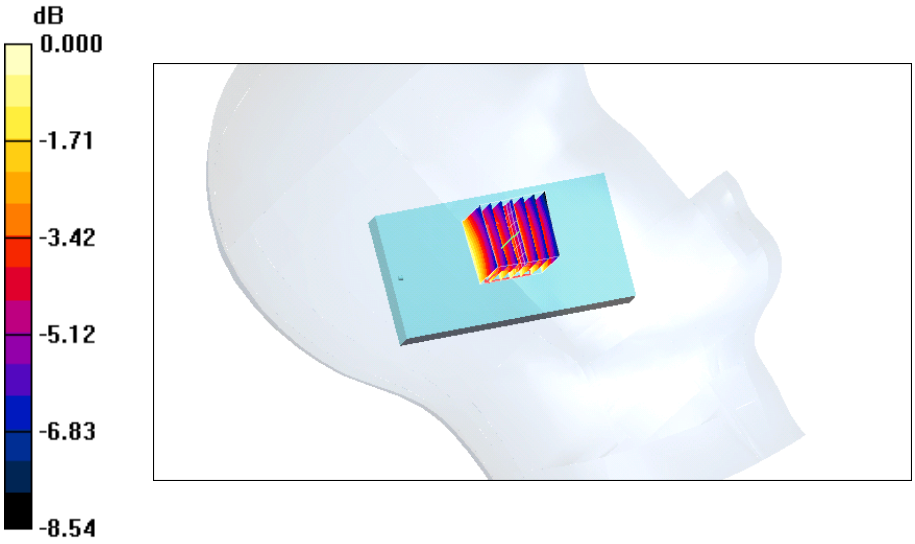
Left Side	Cheek	**836.4 MHz**

Communication System: GSM 850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.897 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.2 V/m; Power Drift = -0.057 dB
Peak SAR (extrapolated) = 1.05 W/kg
SAR(1 g) = 0.869 mW/g; SAR(10 g) = 0.674 mW/g
Maximum value of SAR (measured) = 0.917 mW/g



0 dB =0.917mW/g

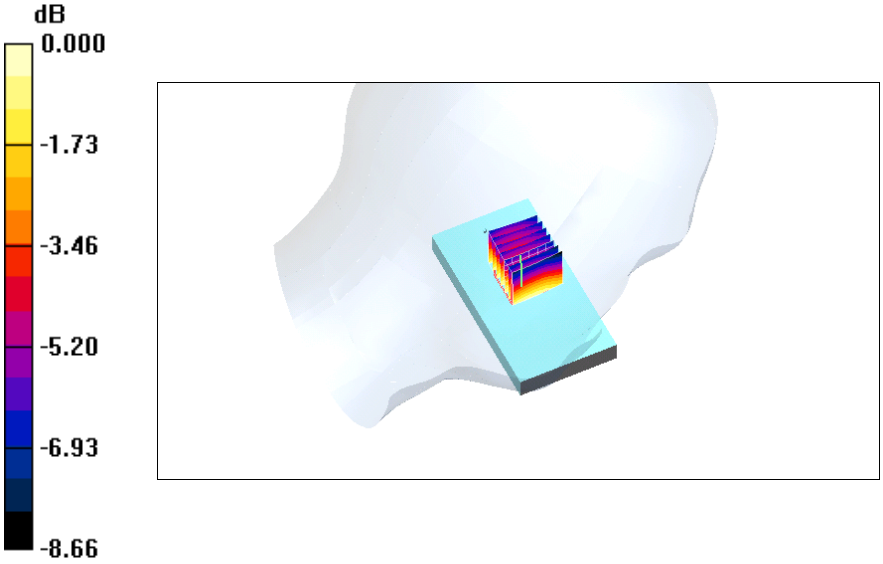
Left Side	Cheek	**848.8 MHz**

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.907 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.8 V/m; Power Drift = -0.035 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.841 mW/g; SAR(10 g) = 0.650 mW/g
Maximum value of SAR (measured) = 0.880 mW/g



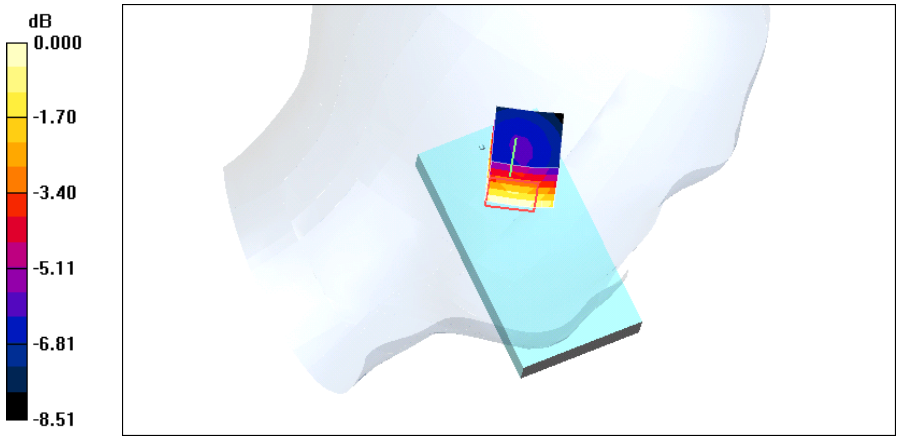
0 dB =0.880mW/g

Left Side	Tilt	**824.2 MHz**

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.887 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.0 V/m; Power Drift = -0.059 dB
Peak SAR (extrapolated) = 0.796 W/kg
SAR(1 g) = 0.640 mW/g; SAR(10 g) = 0.489 mW/g
Maximum value of SAR (measured) = 0.671 mW/g



0 dB =0.671mW/g

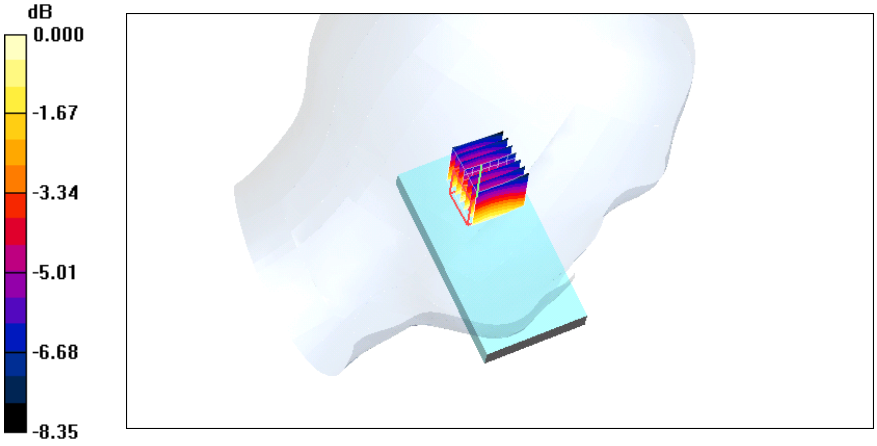
Left Side	Tilt	**836.4 MHz**

Communication System: GSM 850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.897 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.0 V/m; Power Drift = 0.016 dB
Peak SAR (extrapolated) = 0.796 W/kg
SAR(1 g) = 0.643 mW/g; SAR(10 g) = 0.487 mW/g
Maximum value of SAR (measured) = 0.680 mW/g



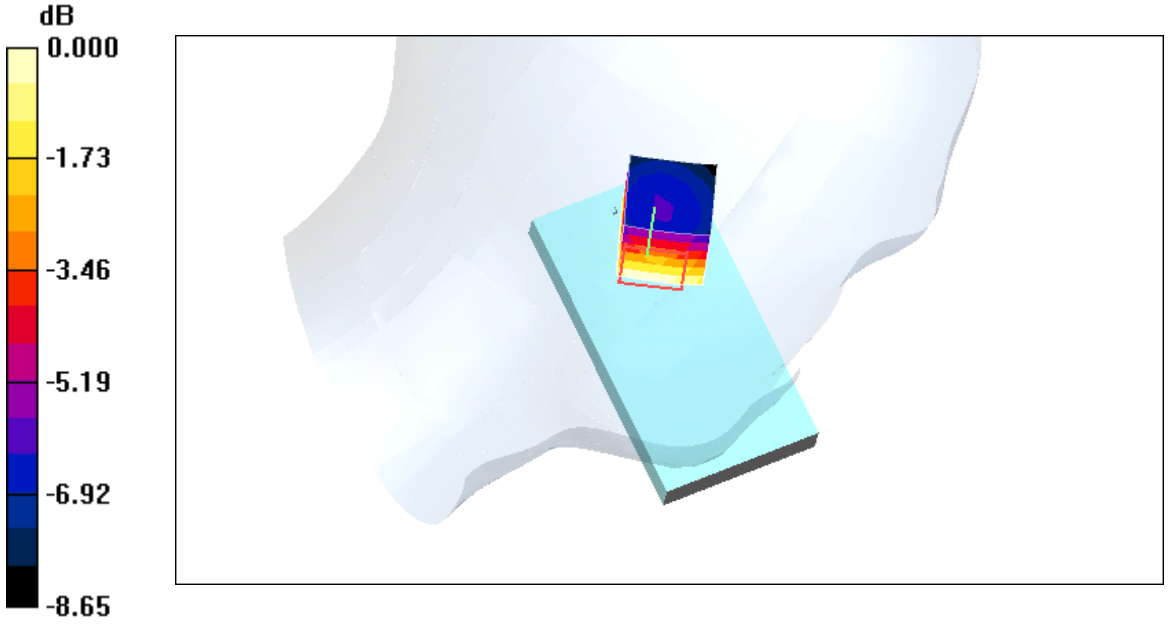
0 dB =0.680mW/g

Left Side	Tilt	**848.8 MHz**

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.907 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.5 V/m; Power Drift = -0.074 dB
Peak SAR (extrapolated) = 0.775 W/kg
SAR(1 g) = 0.620 mW/g; SAR(10 g) = 0.467 mW/g
Maximum value of SAR (measured) = 0.652 mW/g



0 dB =0.652mW/g

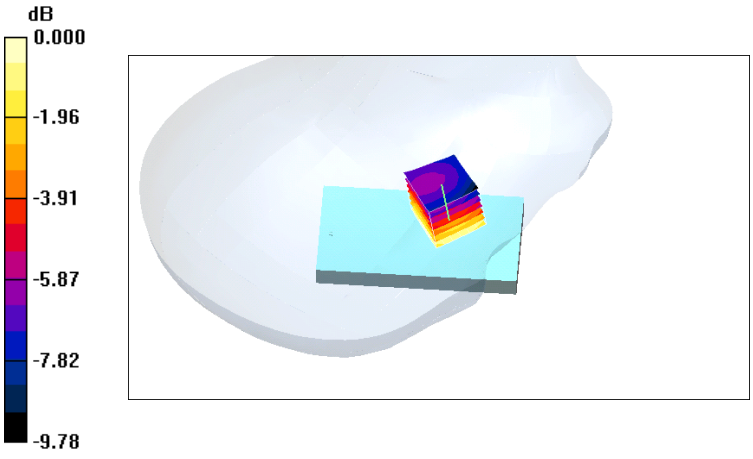
Right Side	Cheek	**824.2 MHz**

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.887 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.3 V/m; Power Drift = 0.055 dB
Peak SAR (extrapolated) = 1.14 W/kg
SAR(1 g) = 0.935 mW/g; SAR(10 g) = 0.710 mW/g
Maximum value of SAR (measured) = 0.983 mW/g



0 dB =0.983mW/g

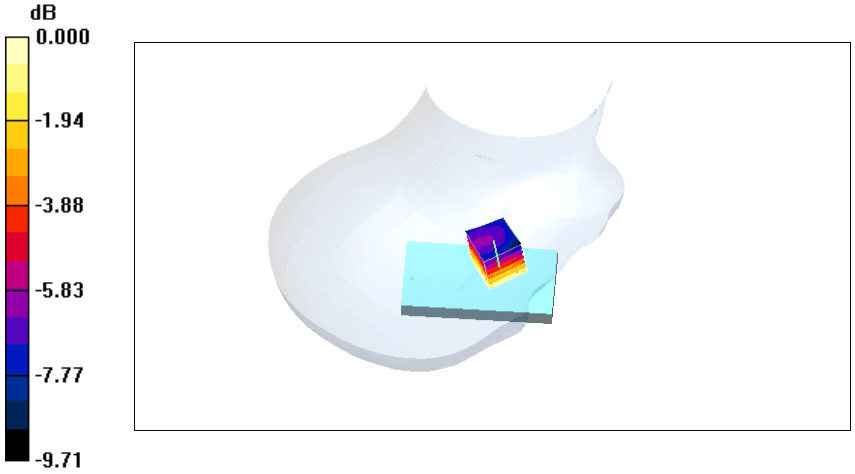
Right Side	Cheek	**836.4 MHz**

Communication System: GSM 850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.897 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Right Section

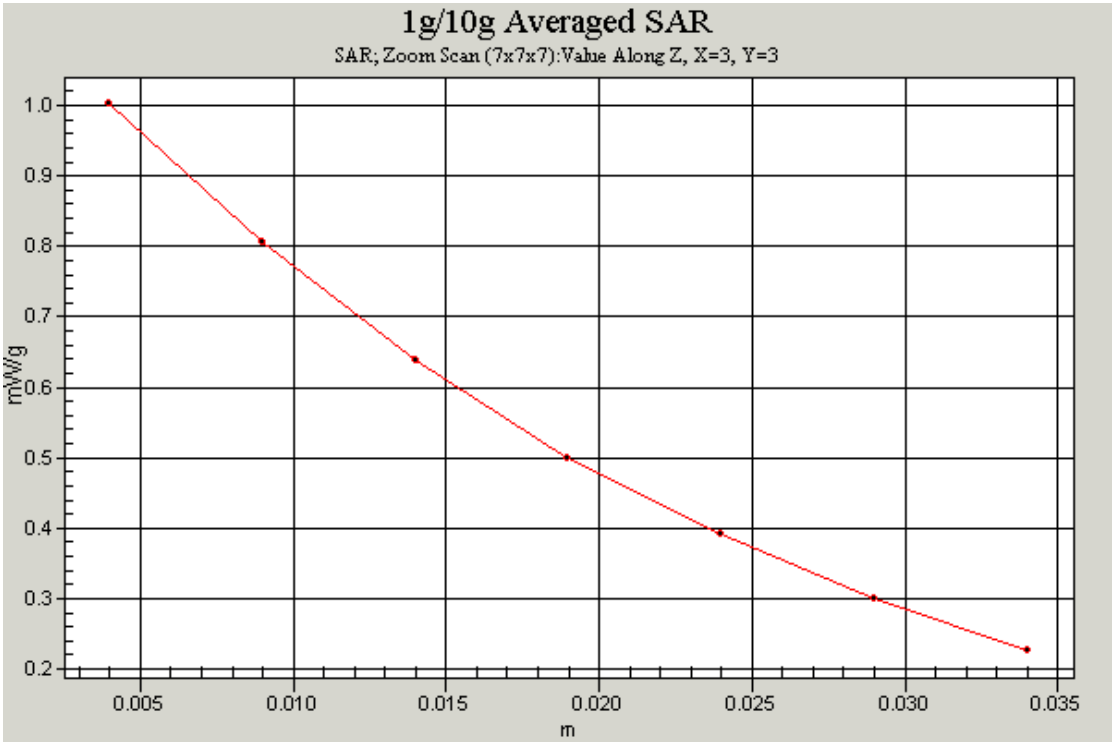
DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.2 V/m; Power Drift = 0.063 dB
Peak SAR (extrapolated) = 1.18 W/kg
SAR(1 g) = 0.949 mW/g; SAR(10 g) = 0.711 mW/g
Maximum value of SAR (measured) = 1.00 mW/g



0 dB =1.00mW/g



Z-Scan at power reference point (850 MHz CH189)

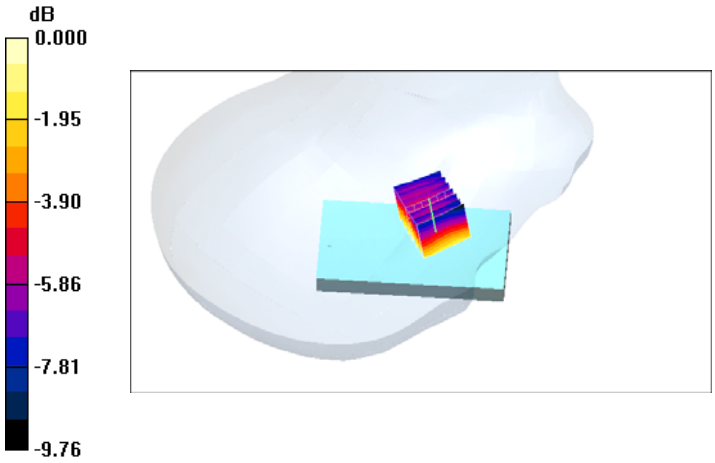
Right Side	Cheek	848.8 MHz

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.907 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.7 V/m; Power Drift = 0.112 dB
Peak SAR (extrapolated) = 1.11 W/kg
SAR(1 g) = 0.906 mW/g; SAR(10 g) = 0.674 mW/g
Maximum value of SAR (measured) = 0.961 mW/g



0 dB = 0.961mW/g

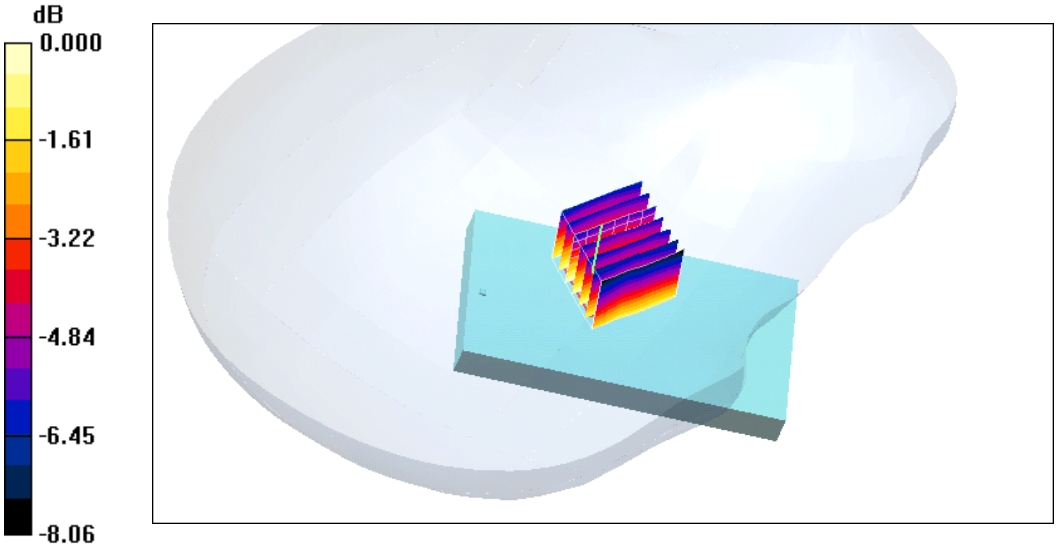
Right Side	Tilt	836.4MHz

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.907 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.4 V/m; Power Drift = 0.015 dB
Peak SAR (extrapolated) = 0.749 W/kg
SAR(1 g) = 0.607 mW/g; SAR(10 g) = 0.465 mW/g
Maximum value of SAR (measured) = 0.634 mW/g



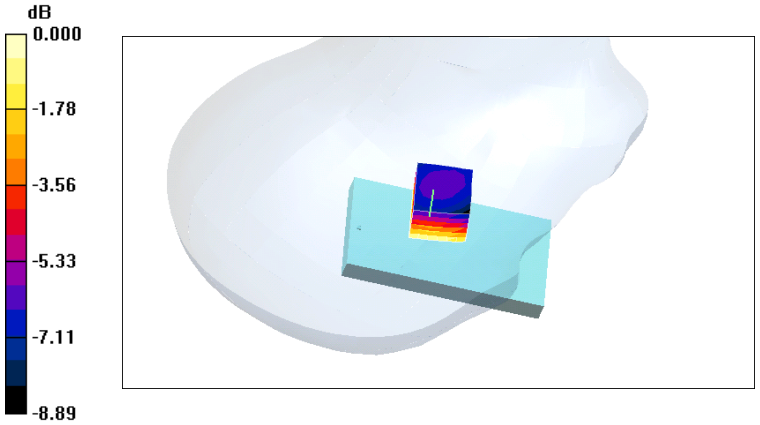
0 dB = 0.634 mW/g

Right Side	Tilt	848.8MHz

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.907 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.8 V/m; Power Drift = 0.017 dB
Peak SAR (extrapolated) = 0.716 W/kg
SAR(1 g) = 0.580 mW/g; SAR(10 g) = 0.440 mW/g
Maximum value of SAR (measured) = 0.615 mW/g



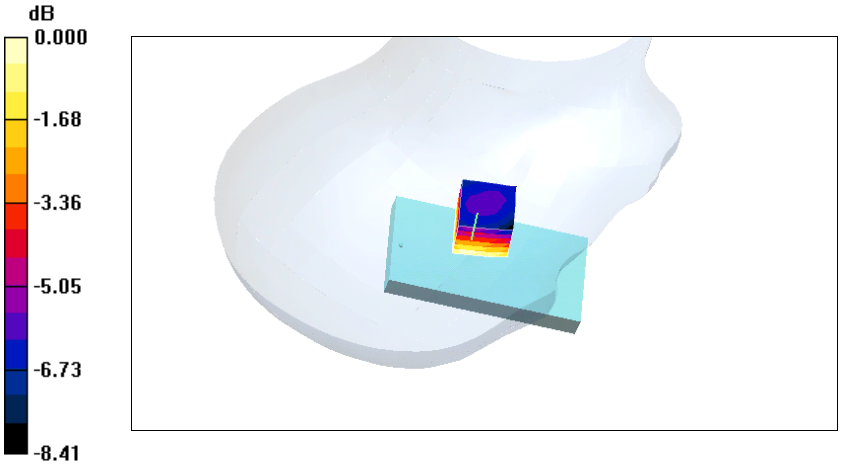
0 dB = 0.615 mW/g

Right Side	Tilt	824.2MHz

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.887 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.9 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 0.683 W/kg
SAR(1 g) = 0.557 mW/g; SAR(10 g) = 0.431 mW/g
Maximum value of SAR (measured) = 0.582 mW/g



0 dB = 0.582 mW/g

GSM with headset (850MHz/Flat)

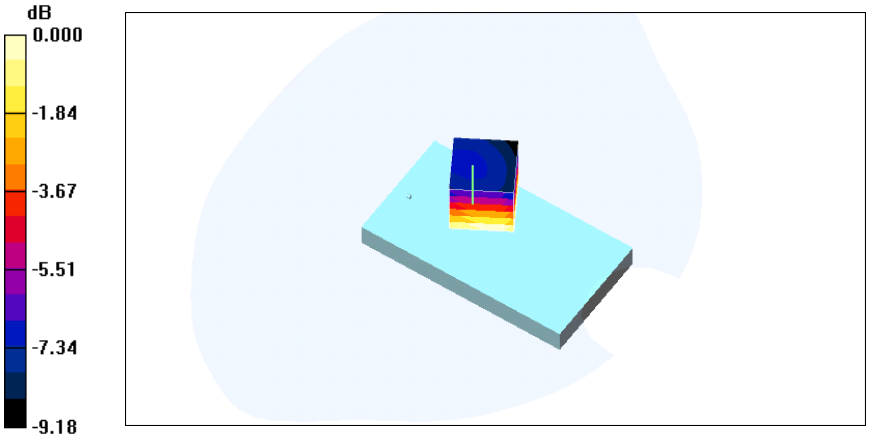
FLAT	Towards ground	**836.4 MHz**

Communication System: GSM 850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.41 MHz; σ = 0.96 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(6.78, 7.02, 6.8); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards ground-middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.1 V/m; Power Drift = -0.022 dB
Peak SAR (extrapolated) = 0.647 W/kg
SAR(1 g) = 0.505 mW/g; SAR(10 g) = 0.373 mW/g
Maximum value of SAR (measured) = 0.531 mW/g



0 dB =0.531mW/g

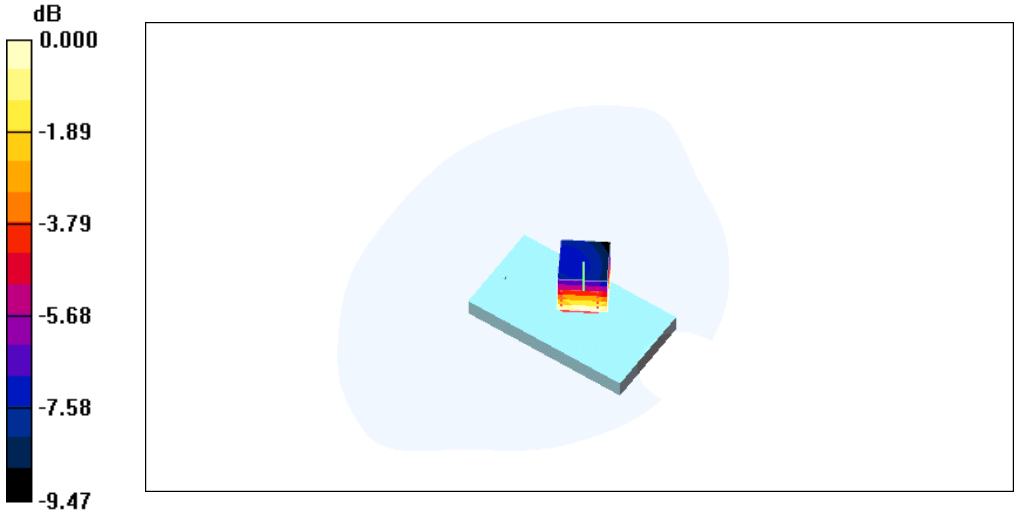
FLAT	Towards ground	824.2 MHz

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.95 mho/m; ε_r = 56; ρ = 1000 kg/m^3
Phantom section: Flat Section

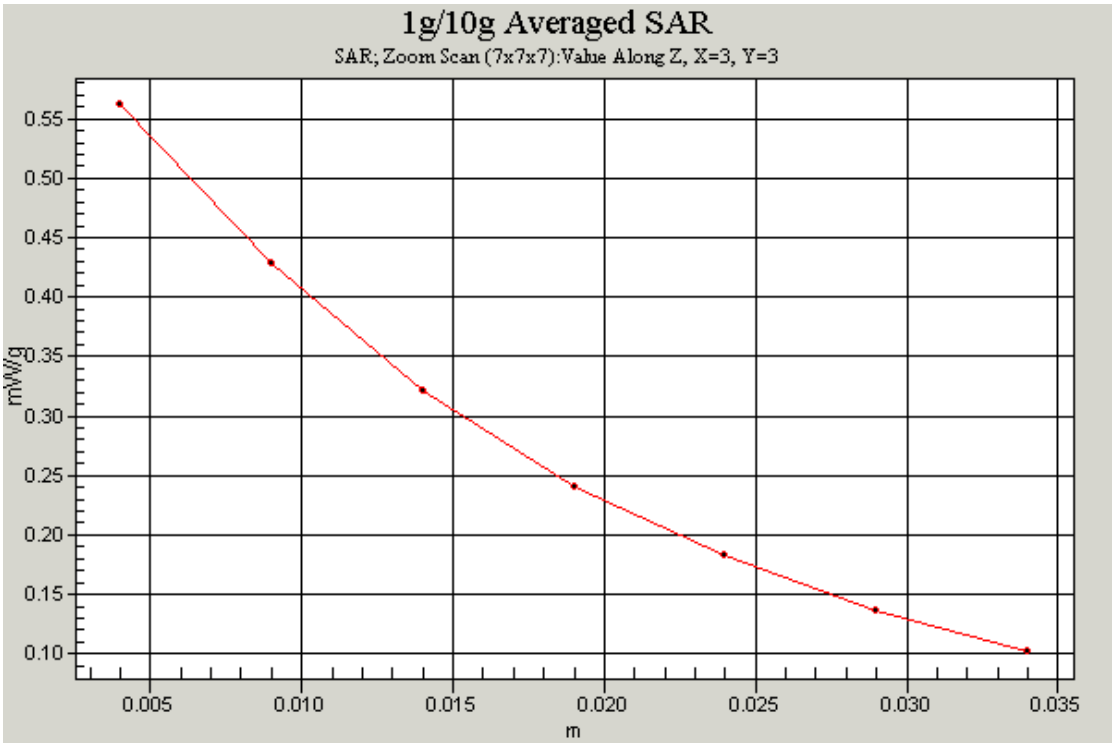
DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(6.78, 7.02, 6.8); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards ground - low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.6 V/m; Power Drift = -0.048 dB
Peak SAR (extrapolated) = 0.687 W/kg
SAR(1 g) = 0.531 mW/g; SAR(10 g) = 0.389 mW/g
Maximum value of SAR (measured) = 0.561 mW/g



0 dB = 0.561mW/g



Z-Scan at power reference point (850 MHz CH128)

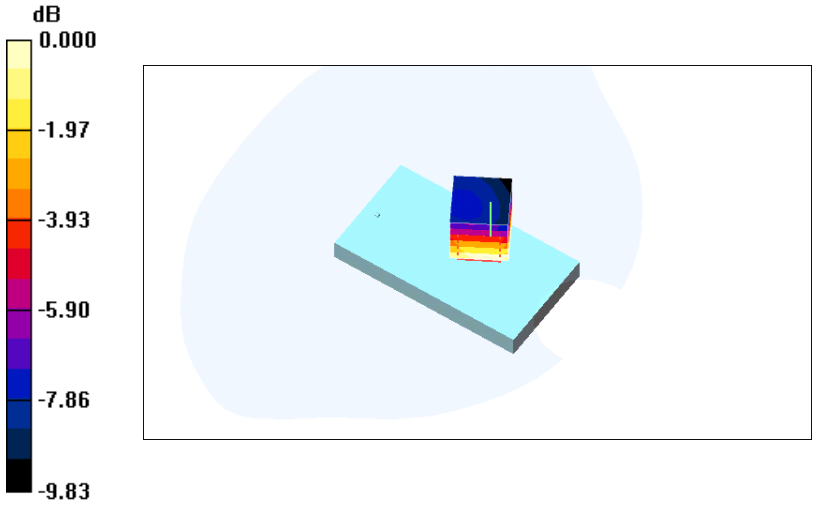
FLAT	Towards ground	**848.8MHz**

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.969 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(6.78, 7.02, 6.8); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards ground -high/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.5 V/m; Power Drift = -0.027 dB
Peak SAR (extrapolated) = 0.482 W/kg
SAR(1 g) = 0.361 mW/g; SAR(10 g) = 0.261 mW/g
Maximum value of SAR (measured) = 0.383 mW/g



0 dB =0.383mW/g

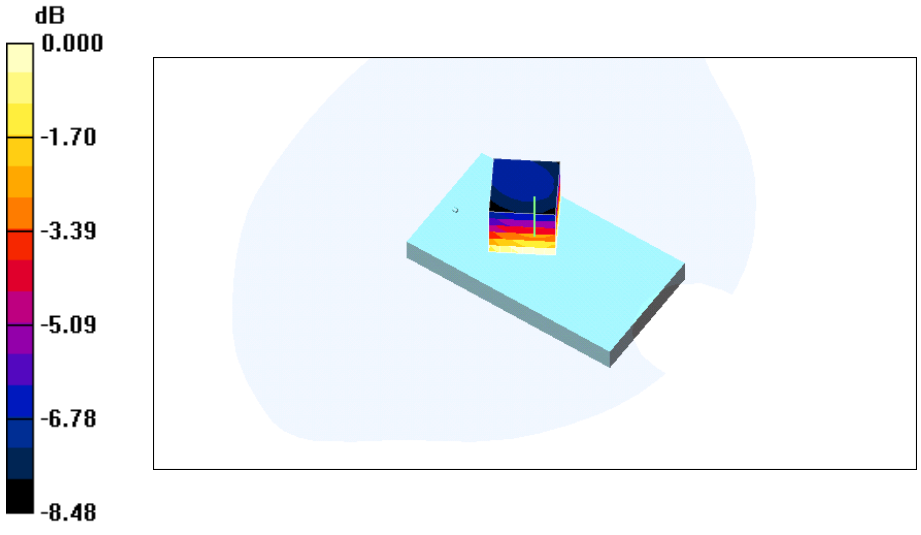
FLAT	Towards phantom	**836.4 MHz**

Communication System: GSM 850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.41 MHz; σ = 0.96 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(6.78, 7.02, 6.8); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards phantom-middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.3 V/m; Power Drift = 0.036 dB
Peak SAR (extrapolated) = 0.493 W/kg
SAR(1 g) = 0.388 mW/g; SAR(10 g) = 0.291 mW/g
Maximum value of SAR (measured) = 0.407 mW/g



0 dB =0.407mW/g

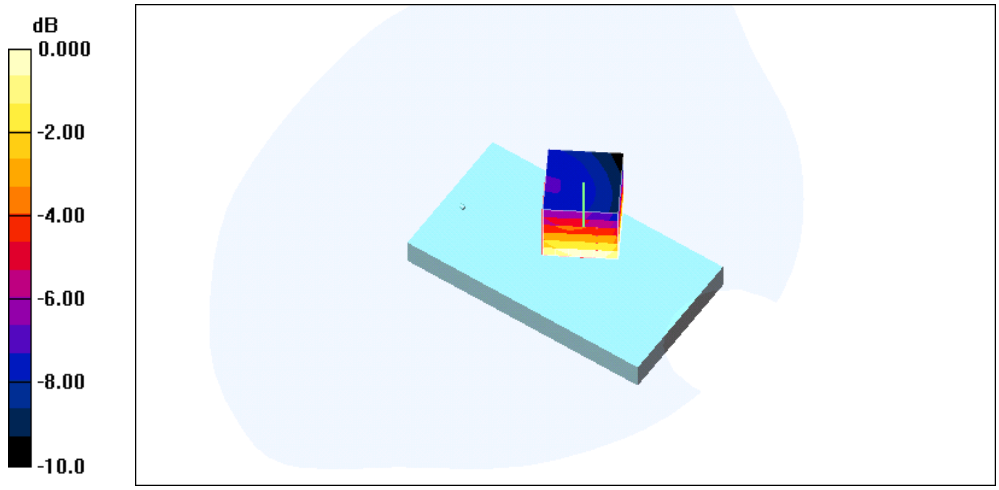
GSM (850MHz with GPRS/Flat)

FLAT	Towards ground	**836.4 MHz**

Communication System: GSM 850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.41 MHz; σ = 0.96 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(6.78, 7.02, 6.8); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards phantom - middle GPRS/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.1 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 0.476 W/kg
SAR(1 g) = 0.378 mW/g; SAR(10 g) = 0.283 mW/g
Maximum value of SAR (measured) = 0.397 mW/g



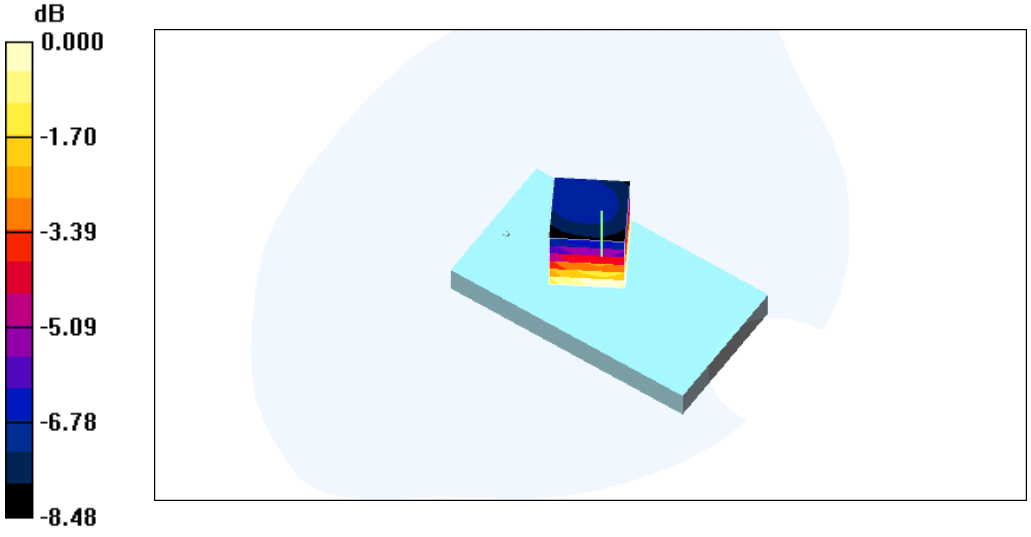
0 dB = 0.397mW/g

FLAT	Towards phantom	**836.4 MHz**

Communication System: GSM 850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.41 MHz; σ = 0.96 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(6.78, 7.02, 6.8); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards phantom - middle GPRS/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.1 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 0.476 W/kg
SAR(1 g) = 0.378 mW/g; SAR(10 g) = 0.283 mW/g
Maximum value of SAR (measured) = 0.397 mW/g



0 dB = 0397mW/g

GSM (850MHz with EGPRS/Flat)

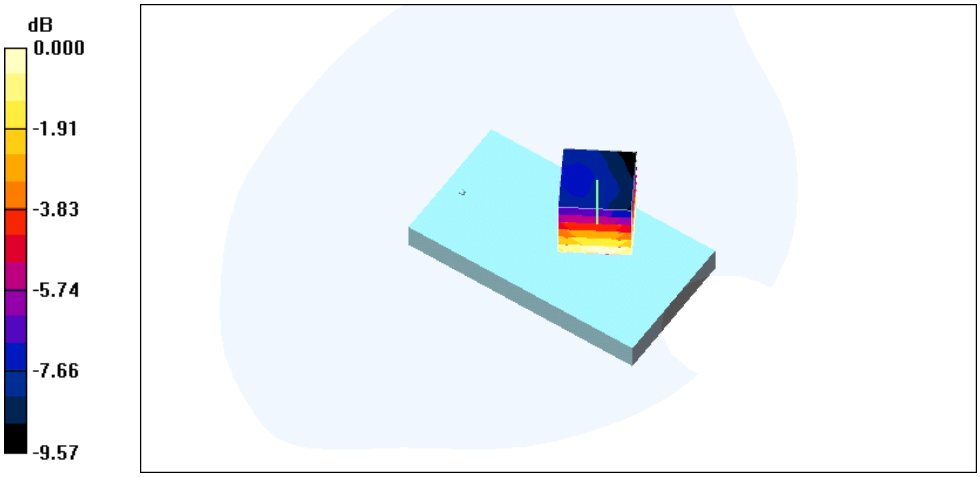
FLAT	Towards ground	**836.4 MHz**

Communication System: GSM 850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.41 MHz; σ = 0.96 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(6.78, 7.02, 6.8); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

towards ground-mid-EDGE/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.70 V/m; Power Drift = 0.036 dB
Peak SAR (extrapolated) = 0.136 W/kg
SAR(1 g) = 0.103 mW/g; SAR(10 g) = 0.075 mW/g
Maximum value of SAR (measured) = 0.109 mW/g



0 dB =0.109mW/g

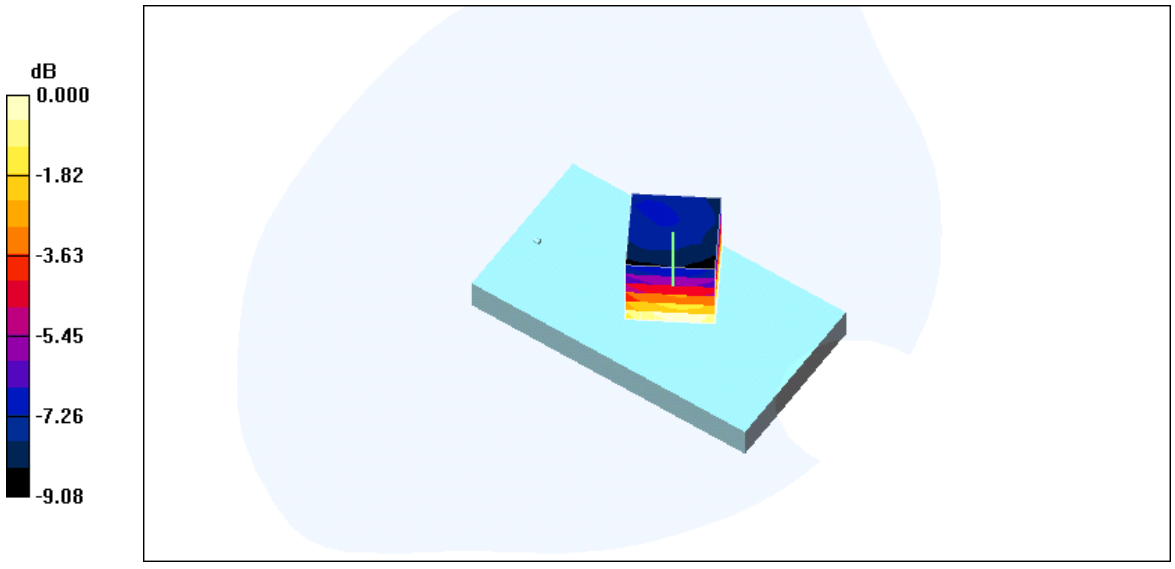
FLAT	Towards phantom	**836.4 MHz**

Communication System: GSM 850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.41 MHz; σ = 0.96 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(6.78, 7.02, 6.8); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards phantom -Mid EDGE/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.85 V/m; Power Drift = -0.058 dB
Peak SAR (extrapolated) = 0.119 W/kg
SAR(1 g) = 0.092 mW/g; SAR(10 g) = 0.068 mW/g
Maximum value of SAR (measured) = 0.097 mW/g



0 dB = 0.097mW/g

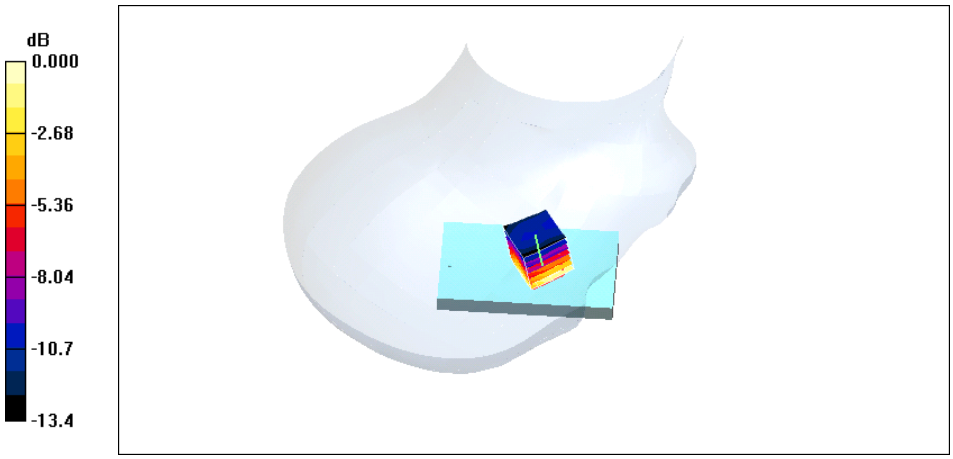
GSM (1900MHz/Head)

Right Side	Cheek	**1850.2 MHz**

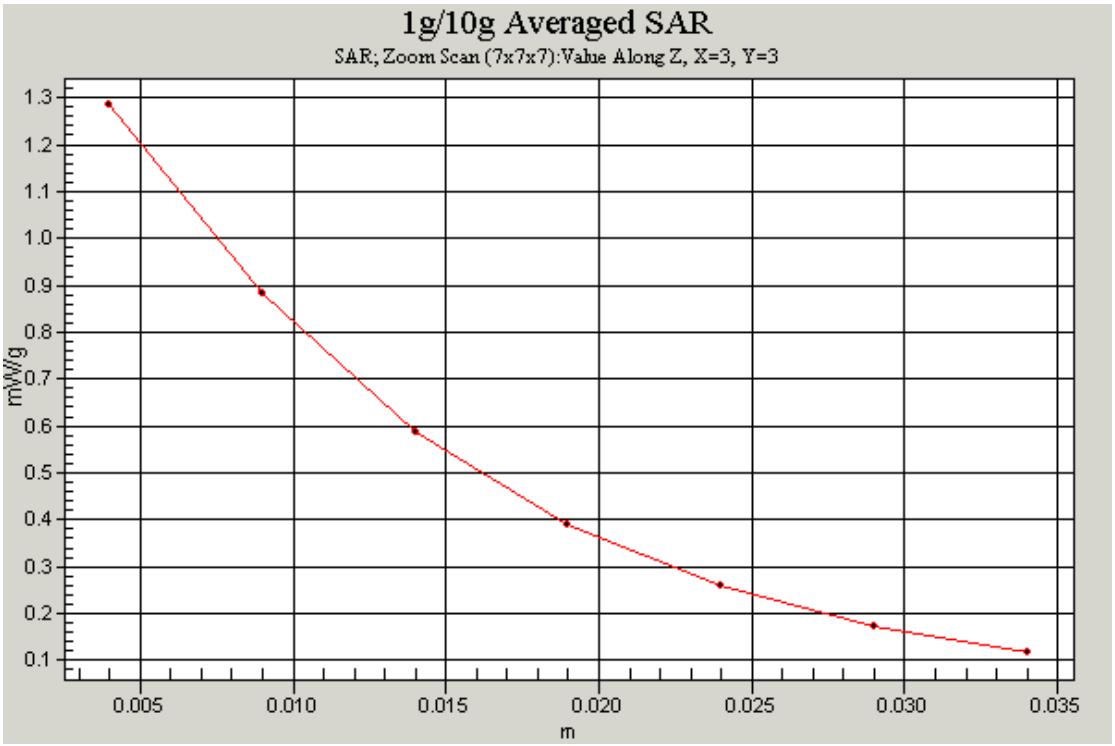
Communication System: PCS1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.41 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.90 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 1.71 W/kg
SAR(1 g) = 1.18 mW/g; SAR(10 g) = 0.745 mW/g
Maximum value of SAR (measured) = 1.28 mW/g



0 dB = 1.28mW/g



Z-Scan at power reference point (1900 MHz CH512)

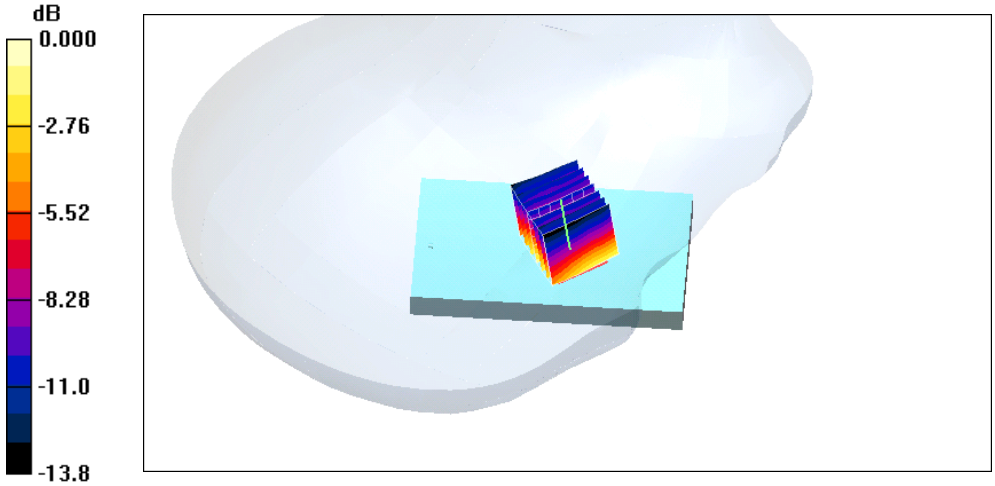
Right Side	Cheek	**1880.0 MHz**

Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.91 V/m; Power Drift = -0.031 dB
Peak SAR (extrapolated) = 1.63 W/kg
SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.693 mW/g
Maximum value of SAR (measured) = 1.22 mW/g



0 dB =1.22mW/g

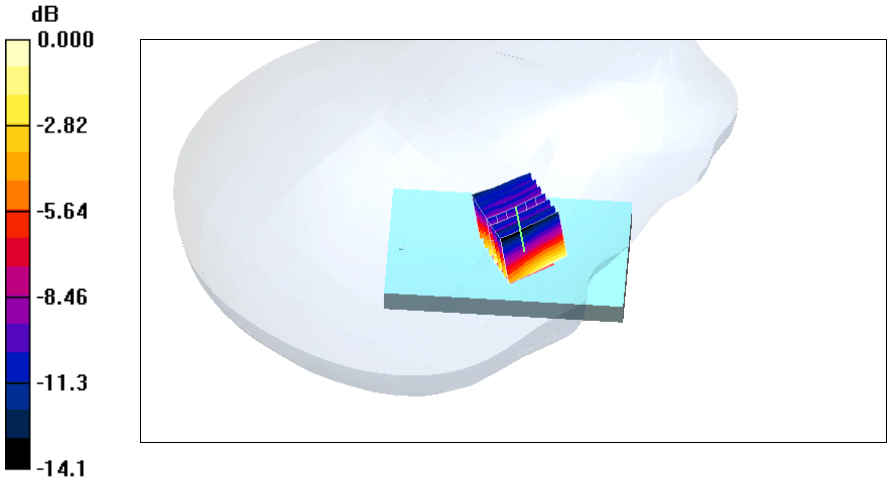
Right Side	Cheek	**1909.8 MHz**

Communication System: PCS1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.46 mho/m; ε_r = 38.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.1 V/m; Power Drift = -0.012 dB
Peak SAR (extrapolated) = 1.48 W/kg
SAR(1 g) = 1 mW/g; SAR(10 g) = 0.620 mW/g
Maximum value of SAR (measured) = 1.08 mW/g



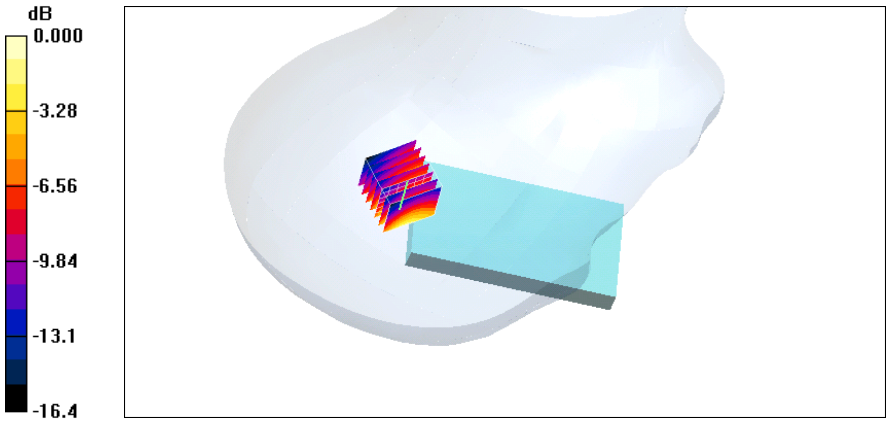
0 dB =1.08mW/g

Right Side	tilt	**1850.2 MHz**

Communication System: PCS1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.41 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.6 V/m; Power Drift = 0.064 dB
Peak SAR (extrapolated) = 0.378 W/kg
SAR(1 g) = 0.242 mW/g; SAR(10 g) = 0.149 mW/g
Maximum value of SAR (measured) = 0.271 mW/g



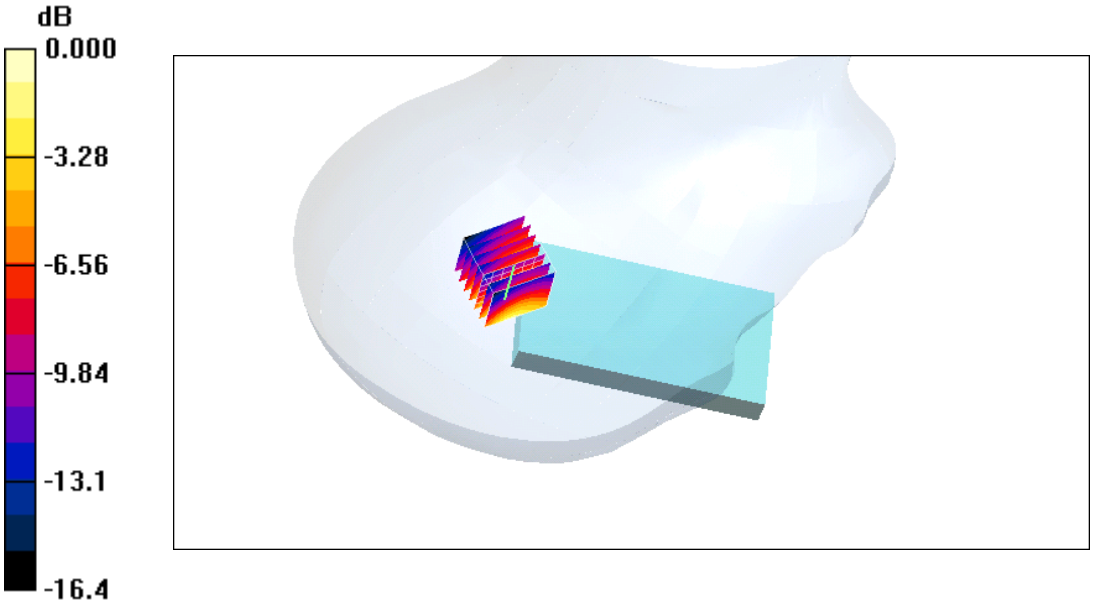
0 dB = 0.271mW/g

Right Side	tilt	**1909.8 MHz**

Communication System: PCS1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.46 mho/m; ε_r = 38.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - High /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.6 V/m; Power Drift = -0.020 dB
Peak SAR (extrapolated) = 0.264 W/kg
SAR(1 g) = 0.187 mW/g; SAR(10 g) = 0.124 mW/g
Maximum value of SAR (measured) = 0.201 mW/g



0 dB =0.201mW/g

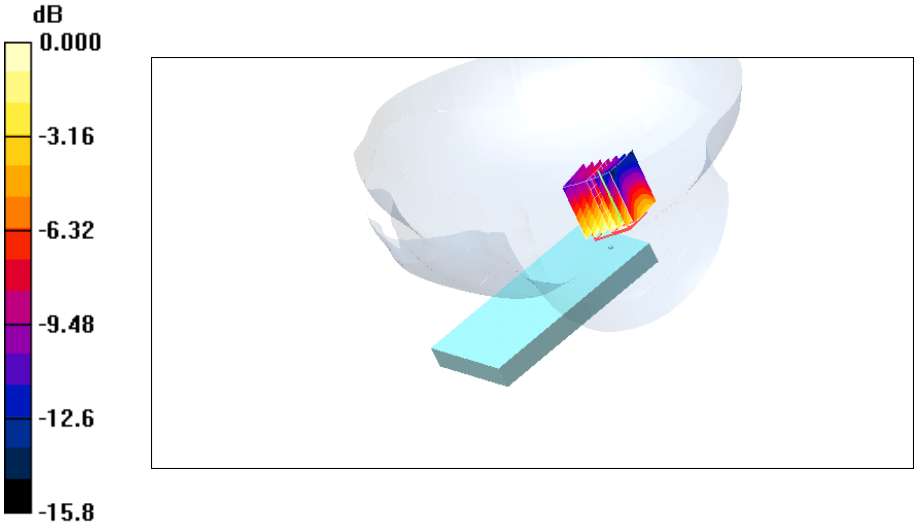
Right Side	tilt	**1880.0 MHz**

Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.2 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 0.264 W/kg
SAR(1 g) = 0.186 mW/g; SAR(10 g) = 0.124 mW/g
Maximum value of SAR (measured) = 0.199 mW/g



0 dB =0.199mW/g

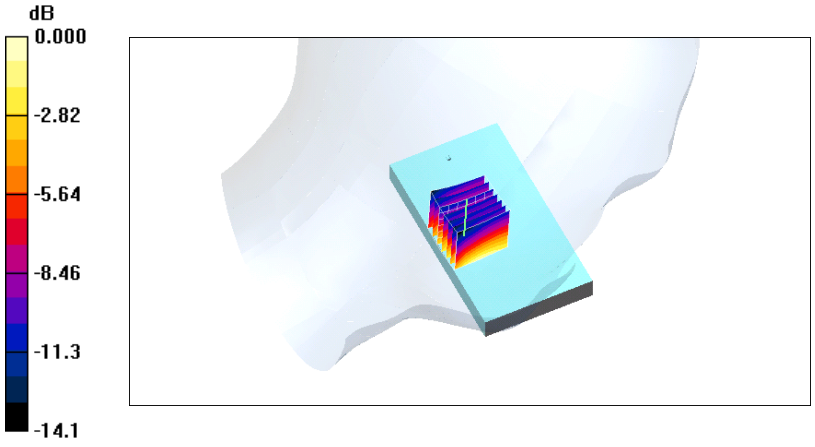
Left Side	Cheek	**1850.2 MHz**

Communication System: PCS1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.41 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.0 V/m; Power Drift = -0.057 dB
Peak SAR (extrapolated) = 1.82 W/kg
SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.721 mW/g
Maximum value of SAR (measured) = 1.27 mW/g



0 dB = 1.27 mW/g

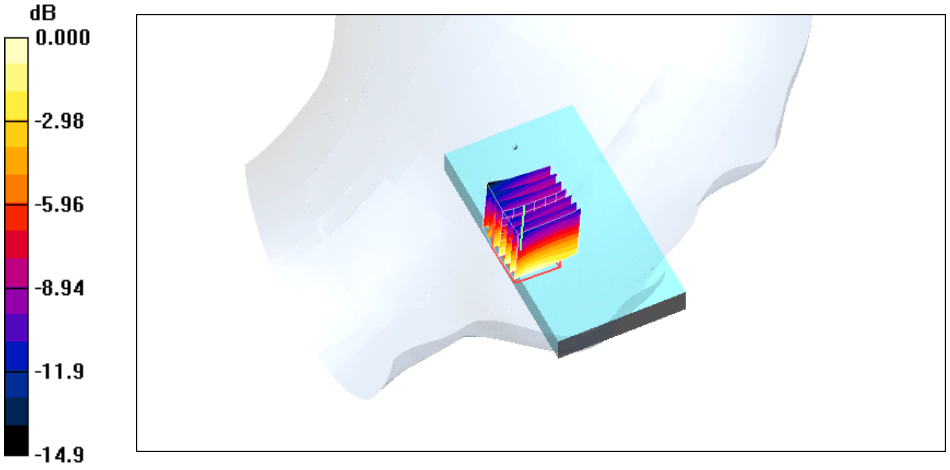
Left Side	Cheek	**1880.0 MHz**

Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.3 V/m; Power Drift = 0.005 dB
Peak SAR (extrapolated) = 1.76 W/kg
SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.682 mW/g
Maximum value of SAR (measured) = 1.21 mW/g



0 dB = 1.21 mW/g

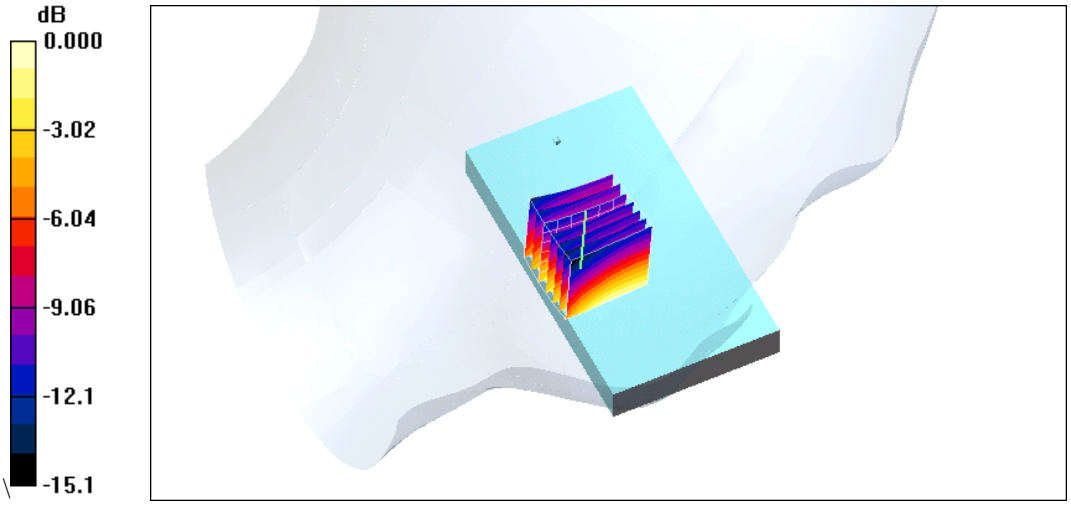
Left Side	Cheek	**1909.8 MHz**

Communication System: PCS1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.46 mho/m; ε_r = 38.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.5 V/m; Power Drift = -0.074 dB
Peak SAR (extrapolated) = 1.61 W/kg
SAR(1 g) = 0.991 mW/g; SAR(10 g) = 0.604 mW/g
Maximum value of SAR (measured) = 1.08 mW/g



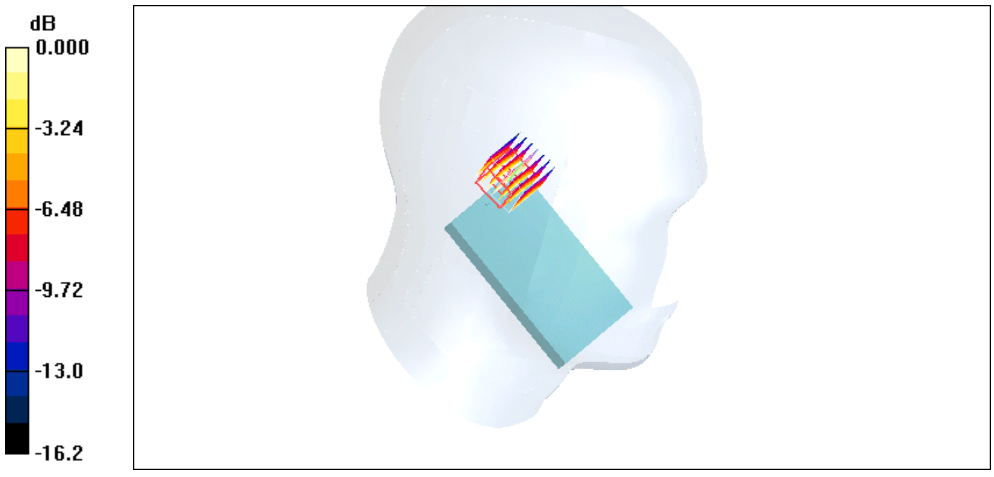
0 dB = 1.08mW/g

Left Side	tilt	**1850.2 MHz**

Communication System: PCS1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.41 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.0 V/m; Power Drift = -0.013 dB
Peak SAR (extrapolated) = 0.468 W/kg
SAR(1 g) = 0.318 mW/g; SAR(10 g) = 0.193 mW/g
Maximum value of SAR (measured) = 0.343 mW/g



0 dB = 0.343 mW/g

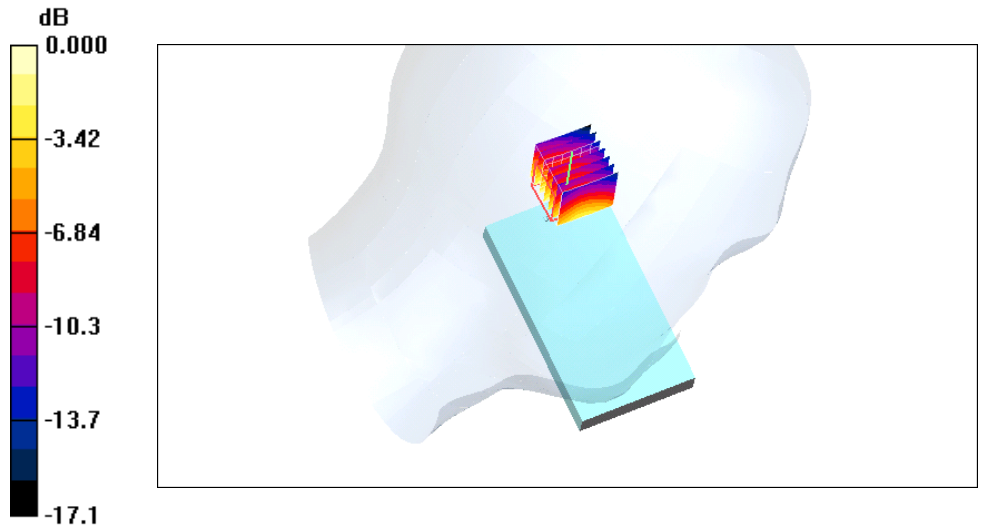
Left Side	tilt	**1880.0 MHz**

Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.2 V/m; Power Drift = -0.038 dB
Peak SAR (extrapolated) = 0.440 W/kg
SAR(1 g) = 0.293 mW/g; SAR(10 g) = 0.175 mW/g
Maximum value of SAR (measured) = 0.316 mW/g



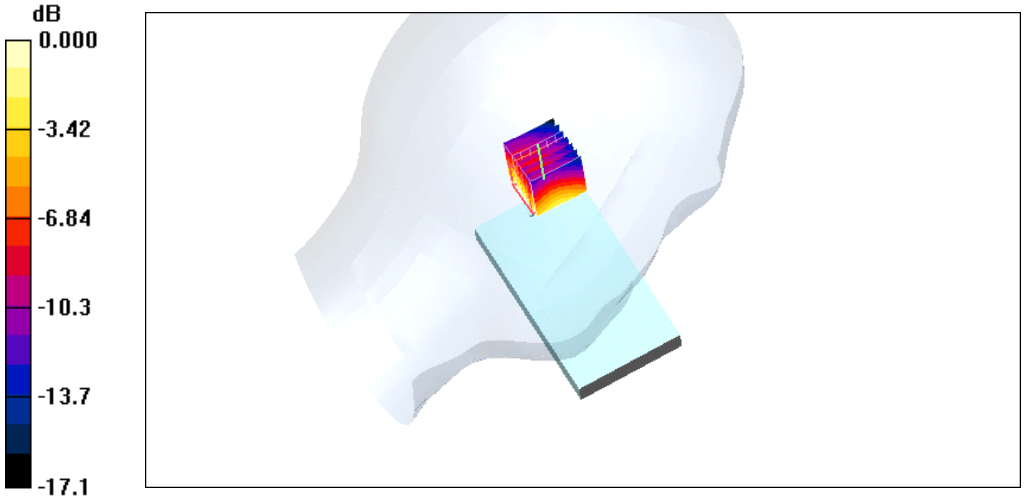
0 dB = 0.316 mW/g

Left Side	tilt	**1909.8 MHz**

Communication System: PCS1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.46 mho/m; ε_r = 38.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.6 V/m; Power Drift = -0.013 dB
Peak SAR (extrapolated) = 0.374 W/kg
SAR(1 g) = 0.250 mW/g; SAR(10 g) = 0.150 mW/g
Maximum value of SAR (measured) = 0.268 mW/g



0 dB = 0.268mW/g

GSM with headset (1900MHz/Flat)

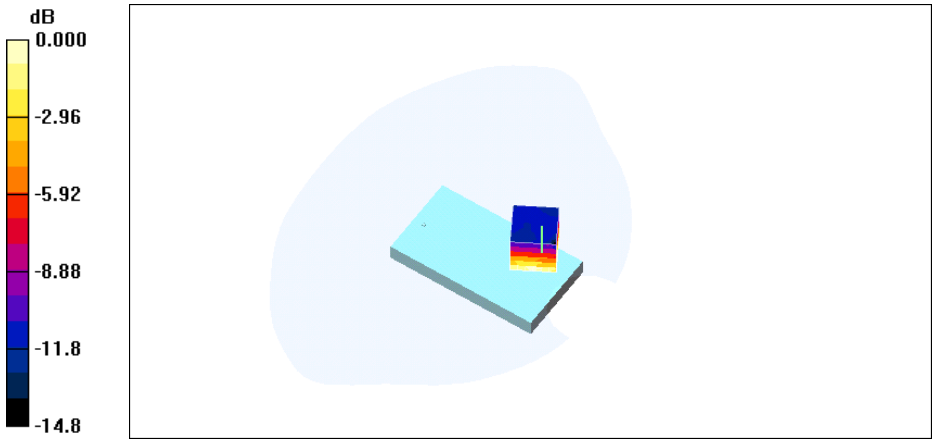
FLAT	Towards ground	**1850.2 MHz**

Communication System: PCS1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.53 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

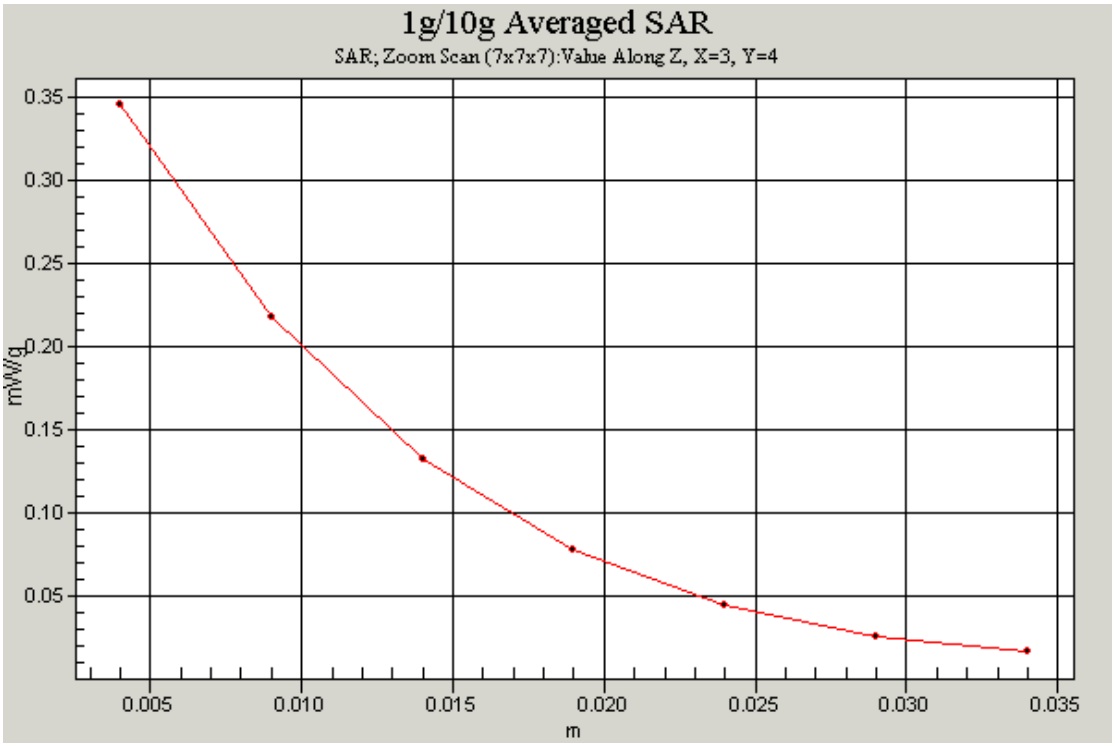
DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.53, 4.79, 4.63); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards ground - low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.82 V/m; Power Drift = -0.089 dB
Peak SAR (extrapolated) = 0.493 W/kg
SAR(1 g) = 0.317 mW/g; SAR(10 g) = 0.193 mW/g
Maximum value of SAR (measured) = 0.345 mW/g



0 dB =0.345mW/g



Z-Scan at power reference point (1900 MHz CH512)

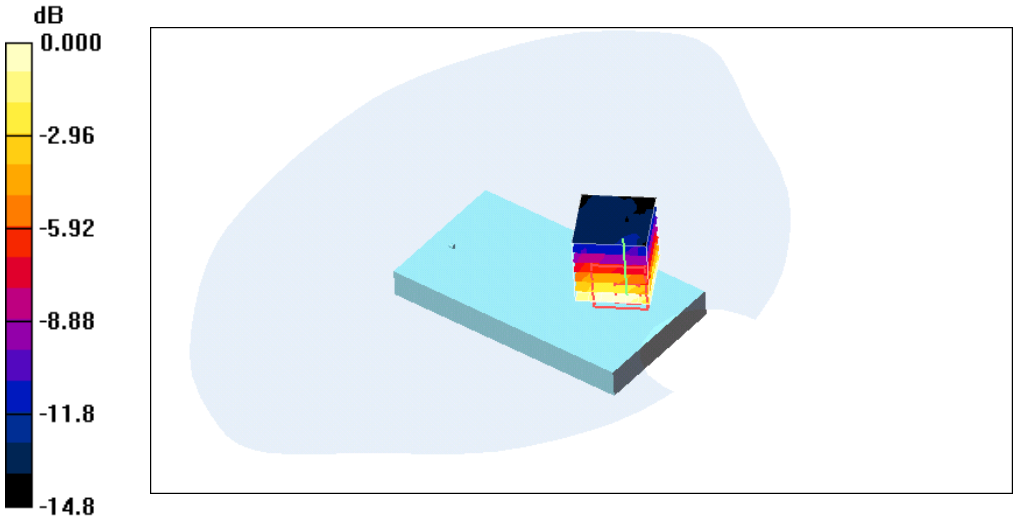
FLAT	Towards ground	**1880 MHz**

Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.53, 4.79, 4.63); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards ground-middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.83 V/m; Power Drift = 0.044 dB
Peak SAR (extrapolated) = 0.468 W/kg
SAR(1 g) = 0.296 mW/g; SAR(10 g) = 0.178 mW/g
Maximum value of SAR (measured) = 0.323 mW/g



0 dB = 0.323mW/g

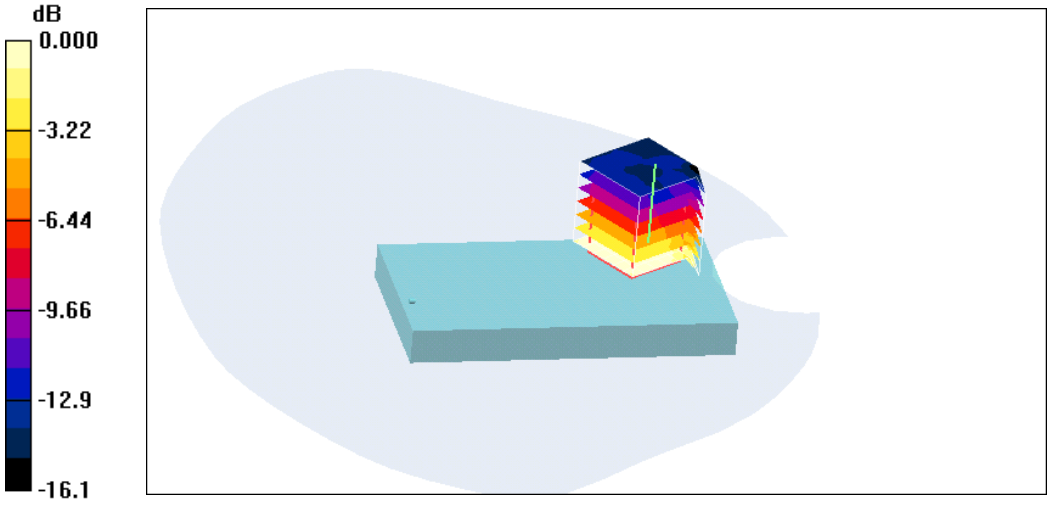
FLAT	Towards ground	**1909.8 MHz**

Communication System: PCS1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.6 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.53, 4.79, 4.63); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards ground -high/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.94 V/m; Power Drift = -0.011 dB
Peak SAR (extrapolated) = 0.420 W/kg
SAR(1 g) = 0.258 mW/g; SAR(10 g) = 0.156 mW/g
Maximum value of SAR (measured) = 0.283 mW/g



0 dB =0.283mW/g

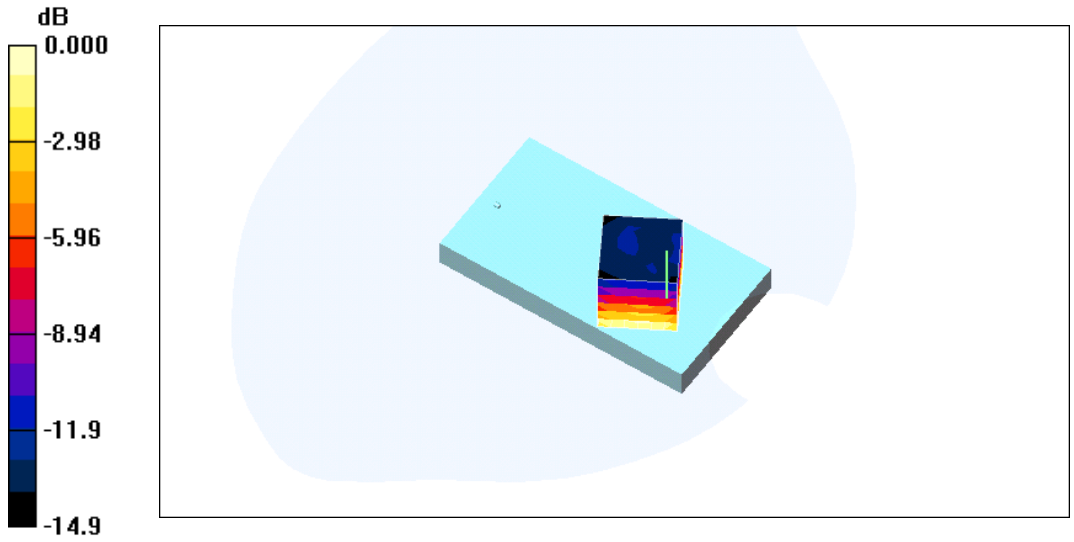
FLAT	Towards Phantom	**1880 MHz**

Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.53, 4.79, 4.63); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards phantom -middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.82 V/m; Power Drift = -0.025 dB
Peak SAR (extrapolated) = 0.422 W/kg
SAR(1 g) = 0.279 mW/g; SAR(10 g) = 0.174 mW/g
Maximum value of SAR (measured) = 0.302 mW/g



0 dB = 0.302mW/g

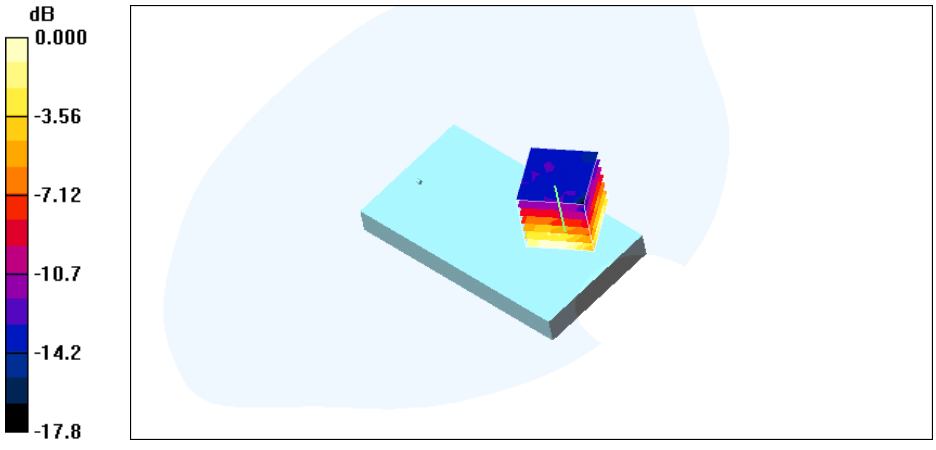
GSM (1900MHz with GPRS/Flat)

FLAT	Towards ground	**1880 MHz**

Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.53, 4.79, 4.63); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

towards ground- middle GPRS/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.46 V/m; Power Drift = -0.097 dB
Peak SAR (extrapolated) = 0.385 W/kg
SAR(1 g) = 0.250 mW/g; SAR(10 g) = 0.152 mW/g
Maximum value of SAR (measured) = 0.274 mW/g



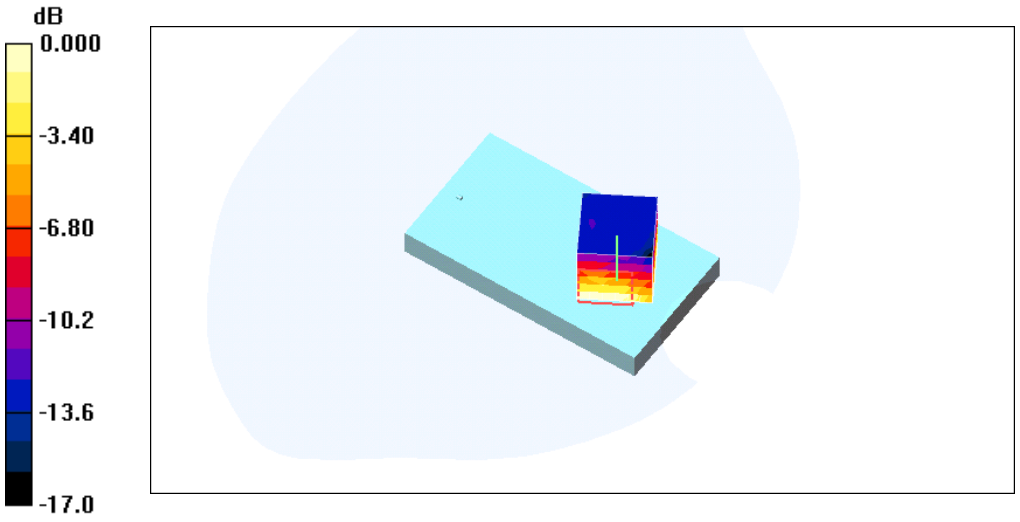
0 dB =0.274mW/g

FLAT	Towards phantom	**1880 MHz**

Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.53, 4.79, 4.63); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

towards phantom- middle GPRS/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.96 V/m; Power Drift = -0.213 dB
Peak SAR (extrapolated) = 0.452 W/kg
SAR(1 g) = 0.295 mW/g; SAR(10 g) = 0.185 mW/g
Maximum value of SAR (measured) = 0.320 mW/g



0 dB =0.320mW/g

GSM (1900MHz with EGPRS/Flat)

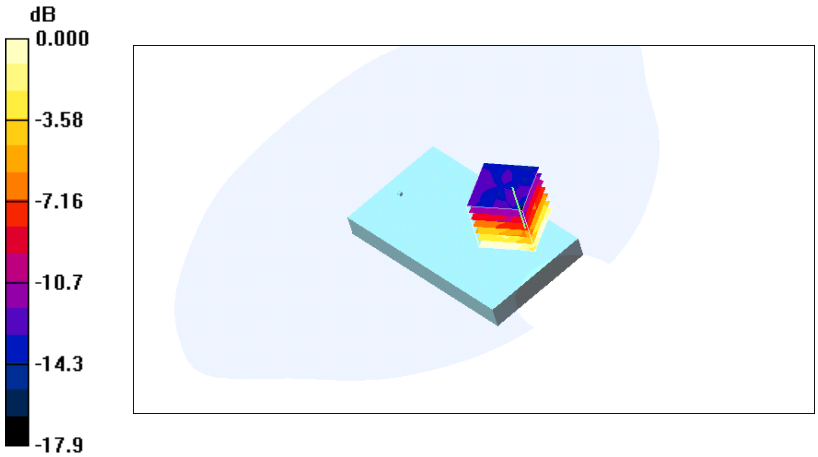
FLAT	Towards ground	**1880 MHz**

Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.53, 4.79, 4.63); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

towards ground-Middle EDGE/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.11 V/m; Power Drift = -0.017 dB
Peak SAR (extrapolated) = 0.164 W/kg
SAR(1 g) = 0.105 mW/g; SAR(10 g) = 0.065 mW/g
Maximum value of SAR (measured) = 0.113 mW/g



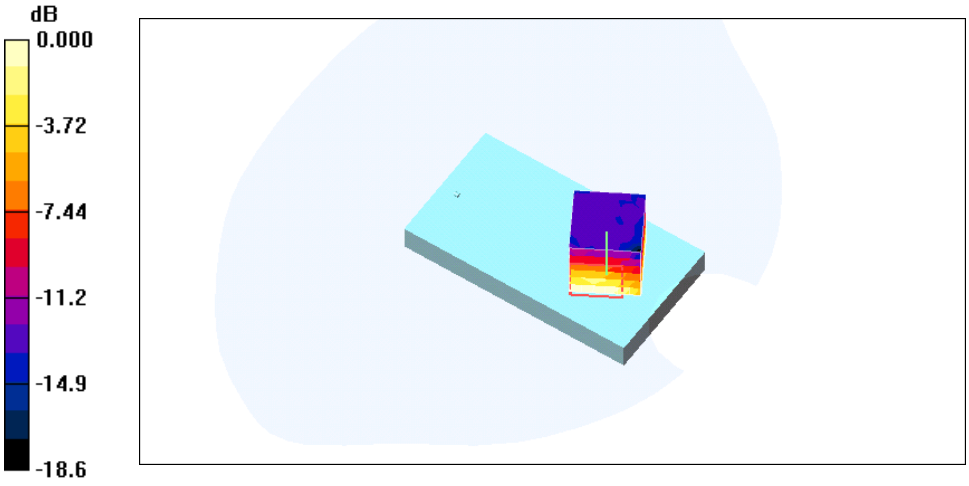
0 dB =0.113mW/g

FLAT	Towards phantom	**1880 MHz**

Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.53, 4.79, 4.63); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

towards phantom-Middle EDGE/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.51 V/m; Power Drift = -0.221 dB
Peak SAR (extrapolated) = 0.188 W/kg
SAR(1 g) = 0.124 mW/g; SAR(10 g) = 0.077 mW/g
Maximum value of SAR (measured) = 0.135 mW/g



0 dB =0.135mW/g

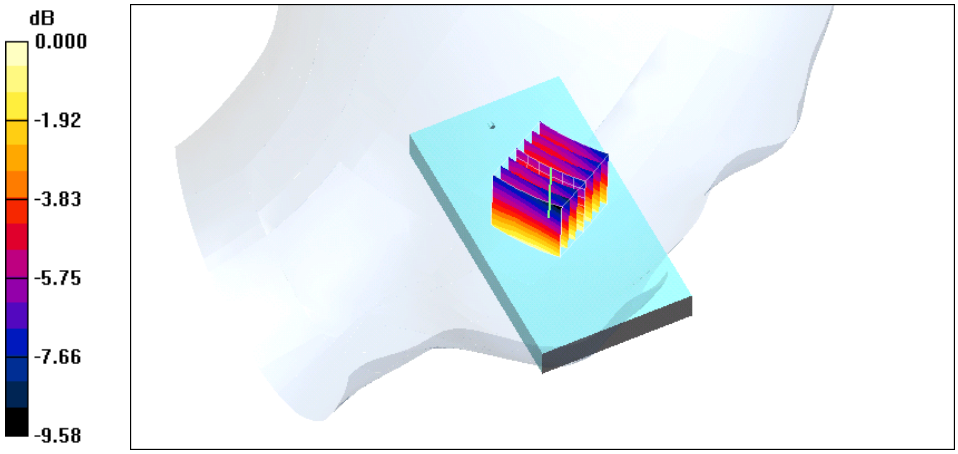
WCDMA B5 (Head)

Left Side	Cheek	**826.4 MHz**

Communication System: UMTS 835; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.888 mho/m; ε_r = 41.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.8 V/m; Power Drift = -0.029 dB
Peak SAR (extrapolated) = 0.939 W/kg
SAR(1 g) = 0.780 mW/g; SAR(10 g) = 0.600 mW/g
Maximum value of SAR (measured) = 0.821 mW/g



0 dB =0.821mW/g

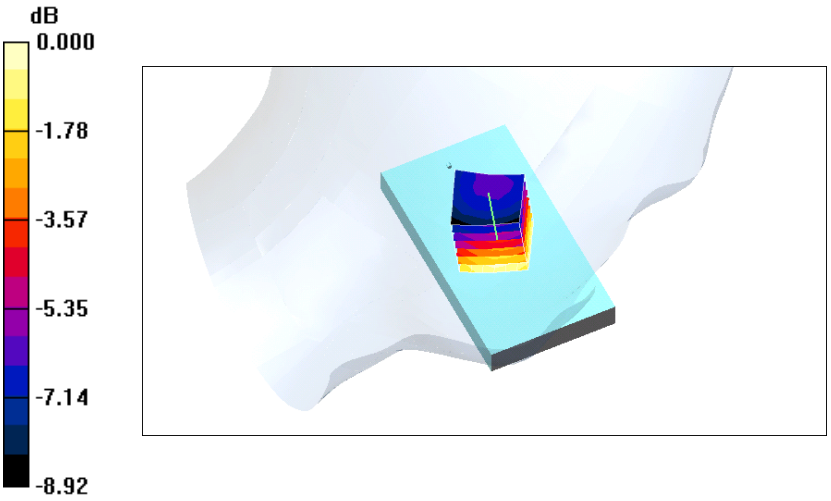
Left Side	Cheek	**836.5 MHz**

Communication System: UMTS 835; Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.897 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.2 V/m; Power Drift = -0.179 dB
Peak SAR (extrapolated) = 1.14 W/kg
SAR(1 g) = 0.947 mW/g; SAR(10 g) = 0.715 mW/g
Maximum value of SAR (measured) = 0.998 mW/g



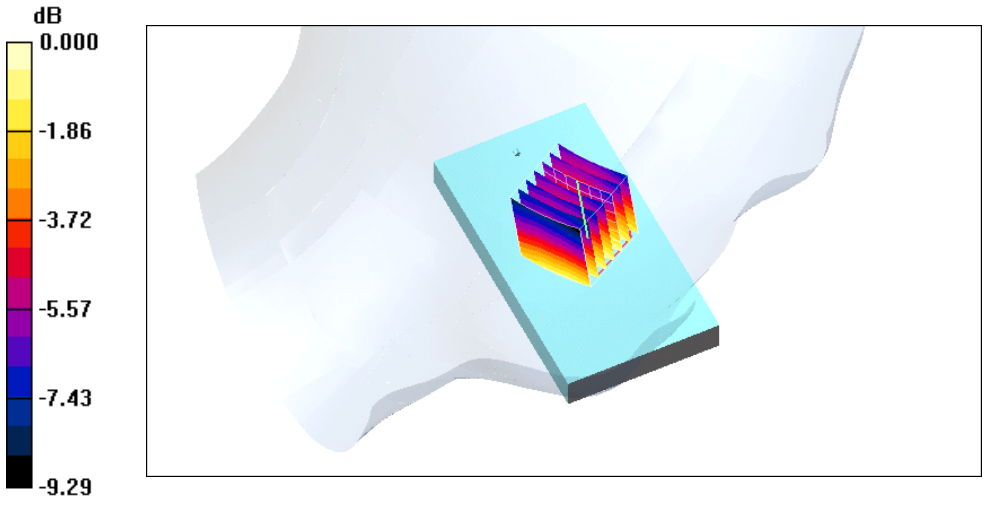
0 dB =0.998mW/g

Left Side	Cheek	**846.6 MHz**

Communication System: UMTS 835; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.905 mho/m; ε_r = 41.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.9 V/m; Power Drift = -0.054 dB
Peak SAR (extrapolated) = 1.02 W/kg
SAR(1 g) = 0.832 mW/g; SAR(10 g) = 0.624 mW/g
Maximum value of SAR (measured) = 0.875 mW/g



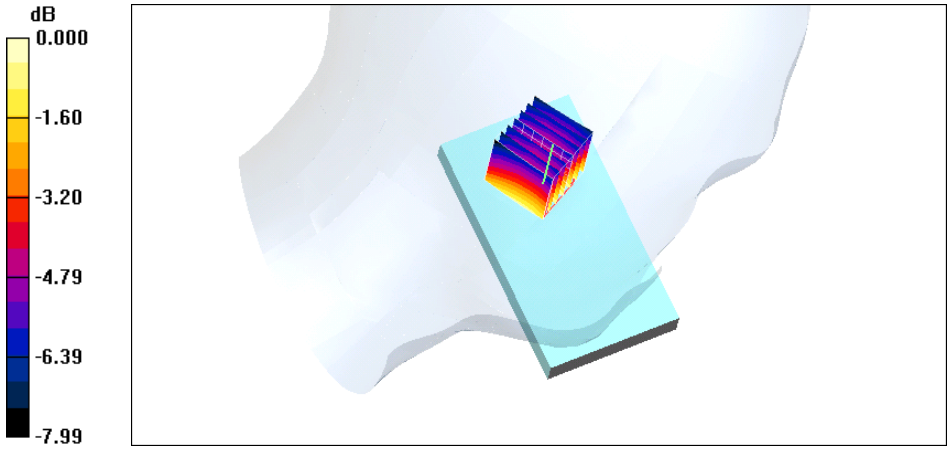
0 dB =0.875mW/g

Left Side	Tilt	**826.4 MHz**

Communication System: UMTS 835; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.888 mho/m; ε_r = 41.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.8 V/m; Power Drift = -0.121 dB
Peak SAR (extrapolated) = 0.615 W/kg
SAR(1 g) = 0.499 mW/g; SAR(10 g) = 0.377 mW/g
Maximum value of SAR (measured) = 0.526 mW/g



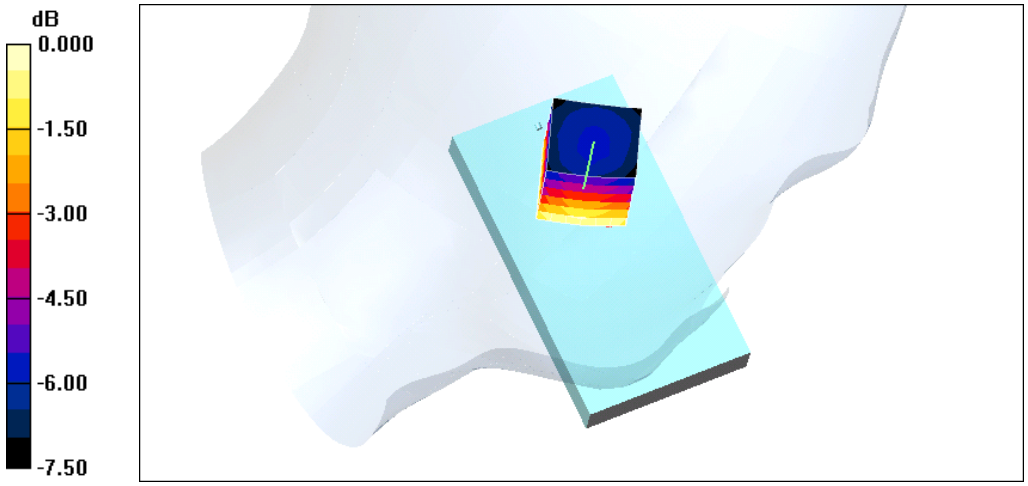
0 dB =0.526mW/g

Left Side	Tilt	**836.5 MHz**

Communication System: UMTS 835; Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.897 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.3 V/m; Power Drift = -0.176 dB
Peak SAR (extrapolated) = 0.664 W/kg
SAR(1 g) = 0.546 mW/g; SAR(10 g) = 0.418 mW/g
Maximum value of SAR (measured) = 0.574 mW/g



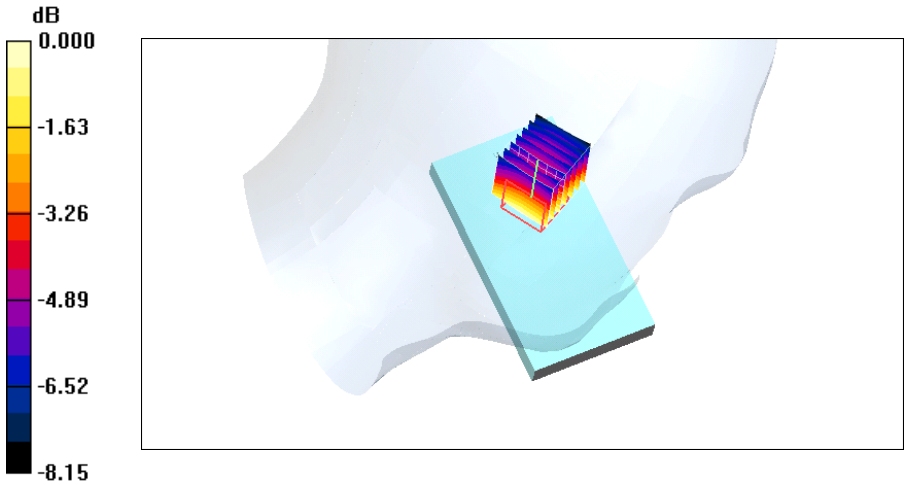
0 dB =0.574mW/g

Left Side	Tilt	**846.6MHz**

Communication System: UMTS 835; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.905 mho/m; ε_r = 41.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.0 V/m; Power Drift = -0.067 dB
Peak SAR (extrapolated) = 0.590 W/kg
SAR(1 g) = 0.481 mW/g; SAR(10 g) = 0.367 mW/g
Maximum value of SAR (measured) = 0.508 mW/g



0 dB =0.508mW/g

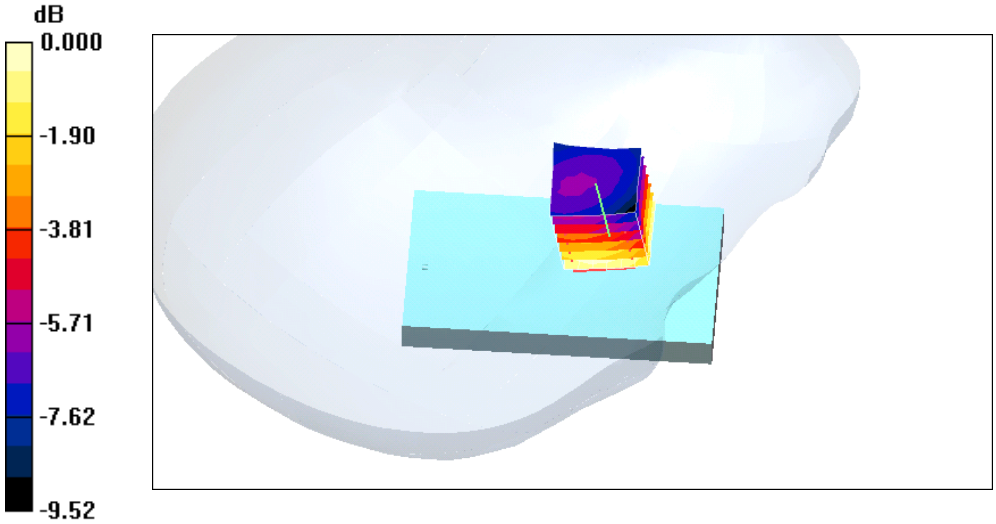
Right Side	Cheek	**836.5 MHz**

Communication System: UMTS 835; Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.897 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.1 V/m; Power Drift = -0.125 dB
Peak SAR (extrapolated) = 1.11 W/kg
SAR(1 g) = 0.904 mW/g; SAR(10 g) = 0.683 mW/g
Maximum value of SAR (measured) = 0.958 mW/g



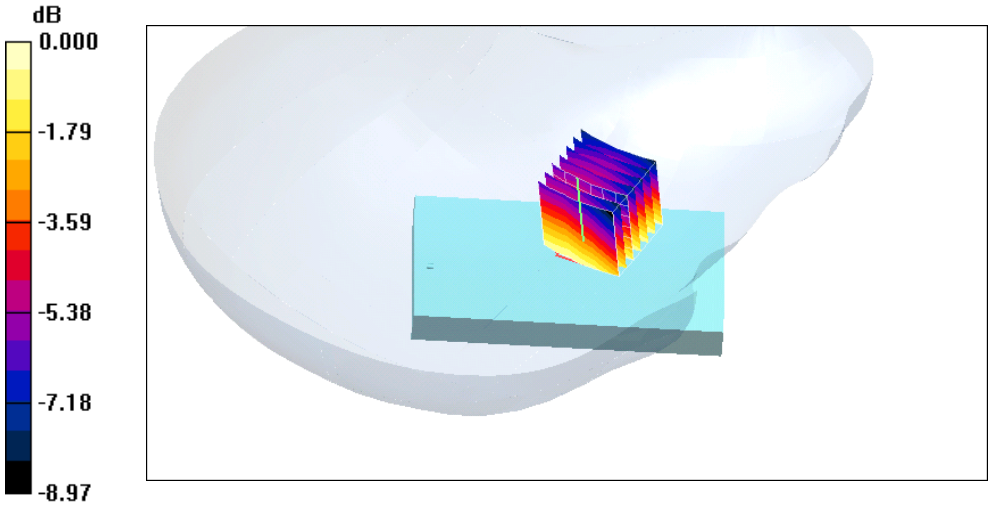
0 dB = 0.958mW/g

Right Side	Cheek	826.4MHz

Communication System: UMTS 835; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.888 mho/m; ε_r = 41.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.8 V/m; Power Drift = -0.094 dB
Peak SAR (extrapolated) = 0.993 W/kg
SAR(1 g) = 0.822 mW/g; SAR(10 g) = 0.626 mW/g
Maximum value of SAR (measured) = 0.858 mW/g



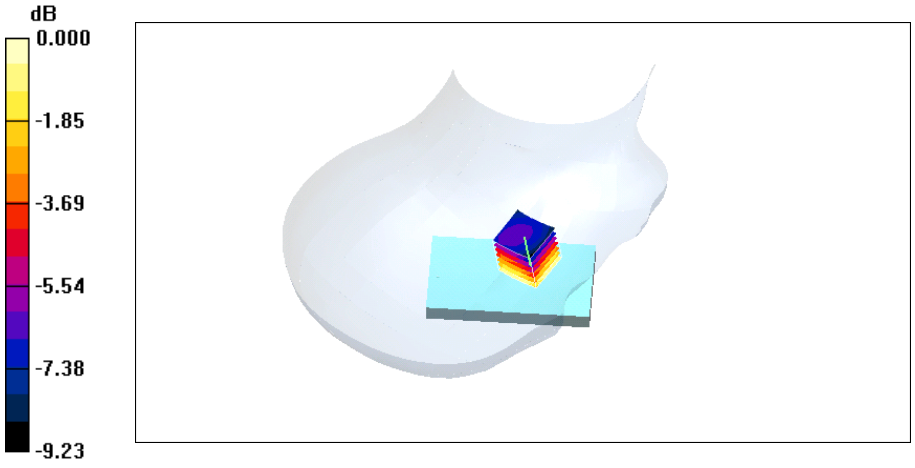
0 dB =0.858mW/g

Right Side	Cheek	**846.6 MHz**

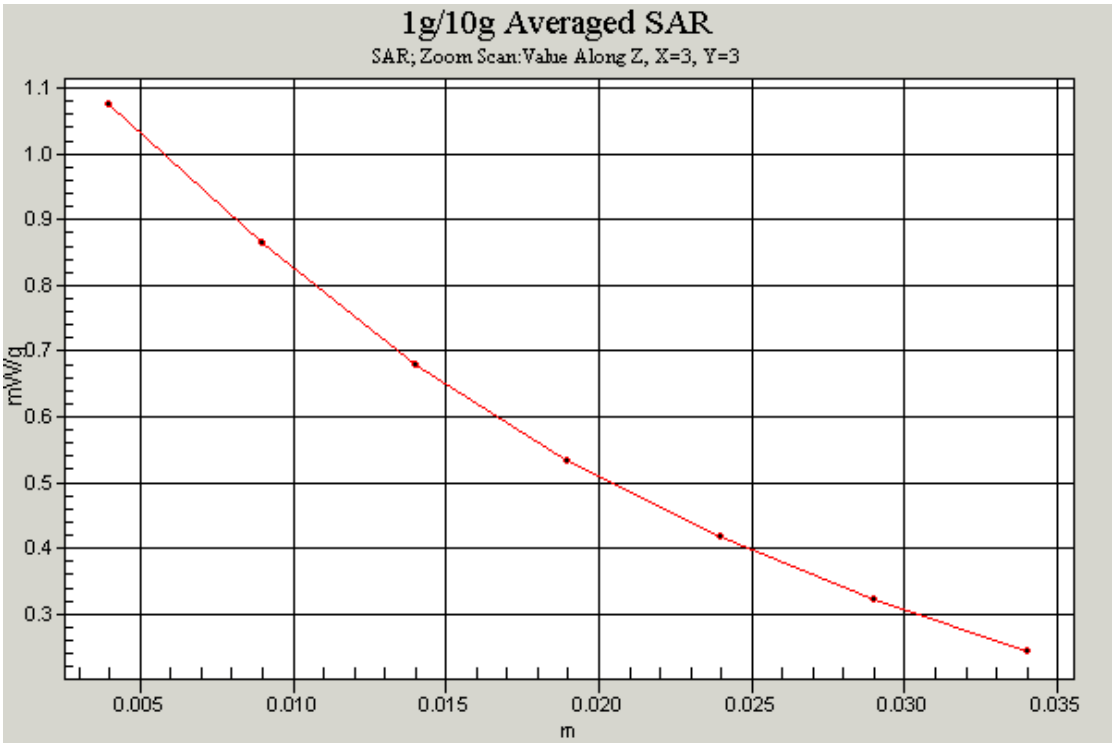
Communication System: UMTS 835; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.905 mho/m; ε_r = 41.7; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.0 V/m; Power Drift = -0.102 dB
Peak SAR (extrapolated) = 1.24 W/kg
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.760 mW/g
Maximum value of SAR (measured) = 1.07 mW/g



0 dB = 1.07mW/g



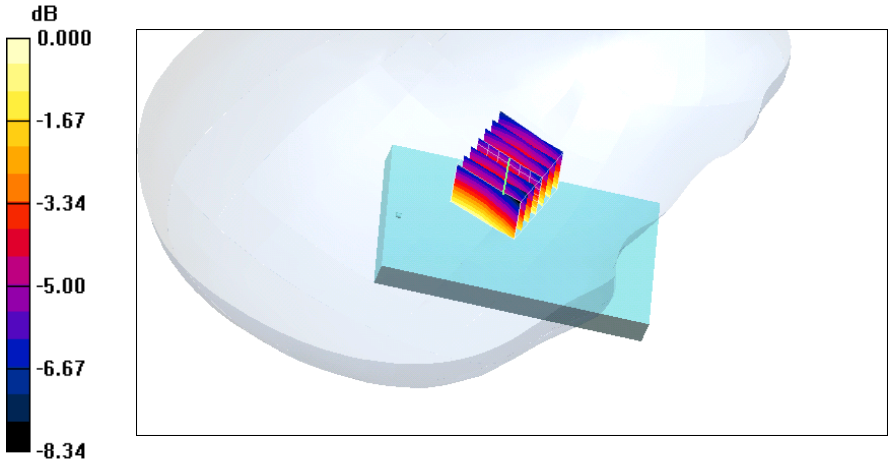
Z-Scan at power reference point (850 MHz CH4123)

Right Side	Tilt	826.4 MHz

Communication System: UMTS 835; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.888 mho/m; ε_r = 41.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.4 V/m; Power Drift = -0.074 dB
Peak SAR (extrapolated) = 0.619 W/kg
SAR(1 g) = 0.493 mW/g; SAR(10 g) = 0.375 mW/g
Maximum value of SAR (measured) = 0.516 mW/g



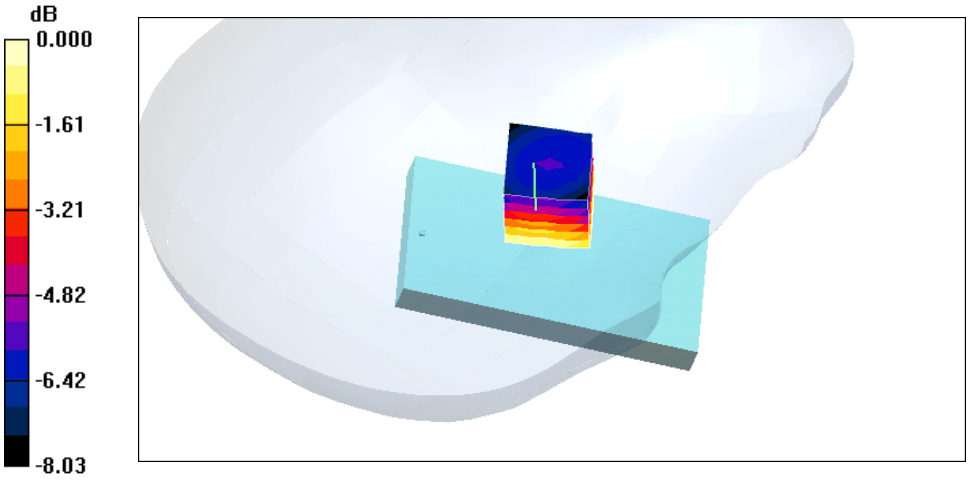
0 dB =0.516 mW/g

Right Side	Tilt	836.5 MHz

Communication System: UMTS 835; Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.897 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.8 V/m; Power Drift = -0.092 dB
Peak SAR (extrapolated) = 0.619 W/kg
SAR(1 g) = 0.504 mW/g; SAR(10 g) = 0.387 mW/g
Maximum value of SAR (measured) = 0.528 mW/g



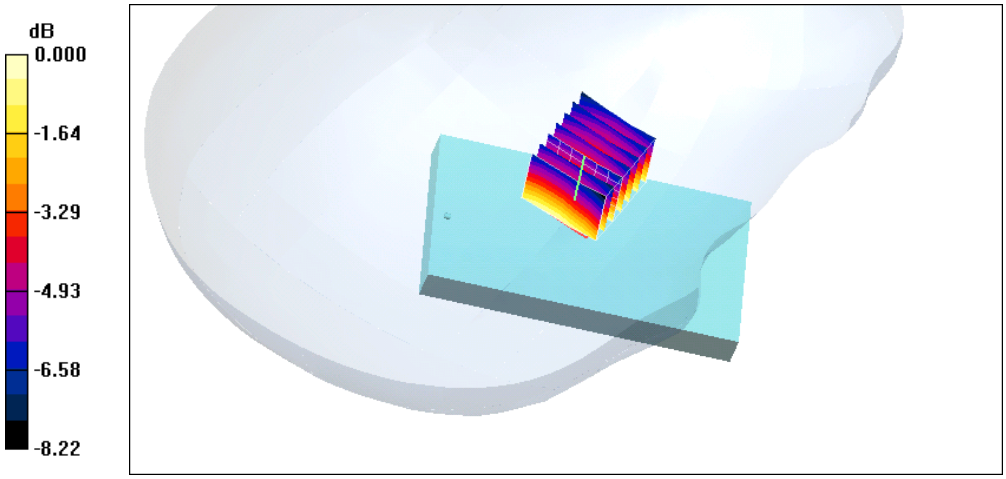
0 dB = 0.528mW/g

Right Side	Tilt	846.6MHz

Communication System: UMTS 835; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.905 mho/m; ε_r = 41.7; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(7.88, 8.3, 8.05); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.7 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 0.643 W/kg
SAR(1 g) = 0.526 mW/g; SAR(10 g) = 0.402 mW/g
Maximum value of SAR (measured) = 0.553 mW/g



0 dB = 0.533 mW/g

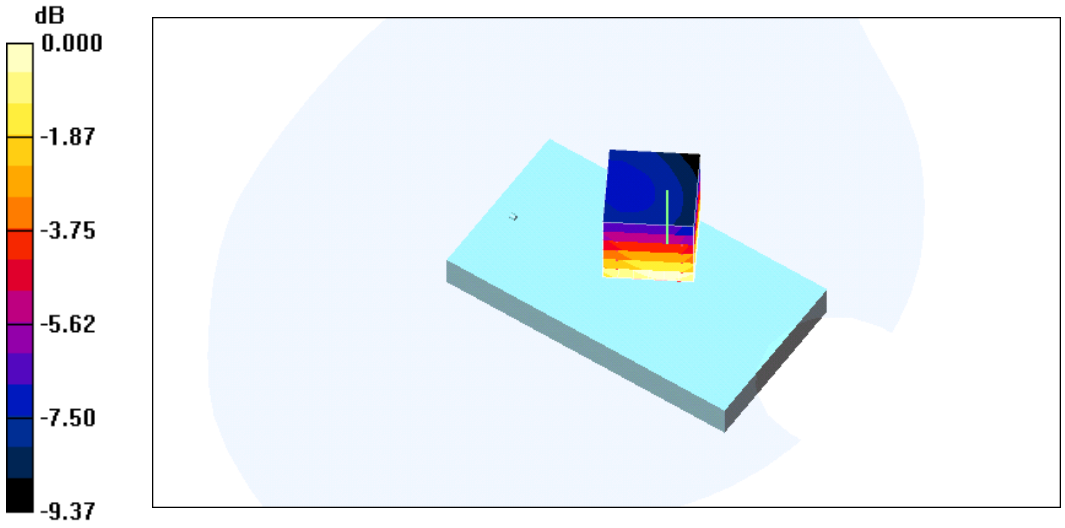
WCDMA B5 with headset (Flat)

FLAT	Towards ground	**826.4 MHz**

Communication System: UMTS 835; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.952 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(6.78, 7.02, 6.8); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

towards ground-low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.2 V/m; Power Drift = 0.054 dB
Peak SAR (extrapolated) = 0.513 W/kg
SAR(1 g) = 0.396 mW/g; SAR(10 g) = 0.291 mW/g
Maximum value of SAR (measured) = 0.419 mW/g



0 dB =0.419mW/g

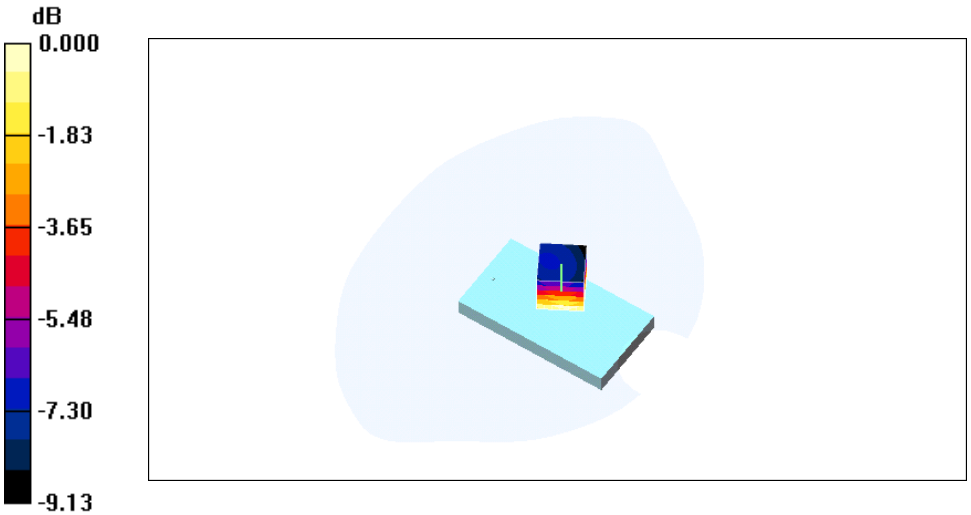
FLAT	Towards ground	836.5 MHz

Communication System: UMTS 835; Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.96 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

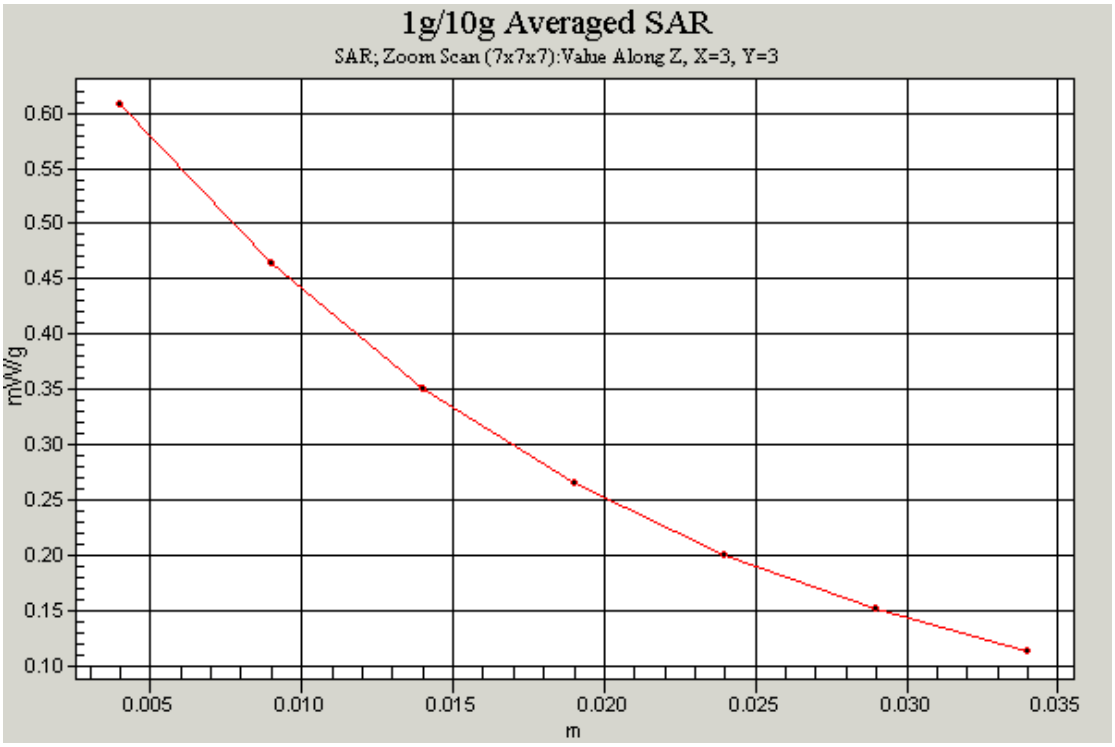
DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(6.78, 7.02, 6.8); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards ground - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.6 V/m; Power Drift = -0.096 dB
Peak SAR (extrapolated) = 0.737 W/kg
SAR(1 g) = 0.575 mW/g; SAR(10 g) = 0.423 mW/g
Maximum value of SAR (measured) = 0.607 mW/g



0 dB = 0.607mW/g



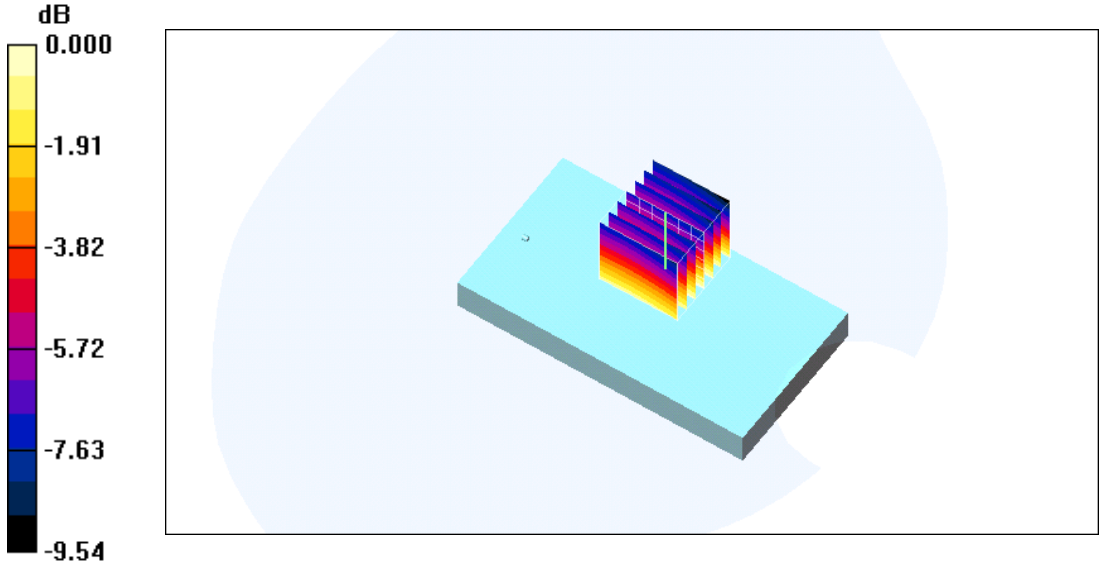
Z-Scan at power reference point (850 MHz CH4138)

FLAT	Towards ground	**846.6 MHz**

Communication System: UMTS 835; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.968 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(6.78, 7.02, 6.8); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

towards ground -high/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.1 V/m; Power Drift = 0.111 dB
Peak SAR (extrapolated) = 0.442 W/kg
SAR(1 g) = 0.341 mW/g; SAR(10 g) = 0.250 mW/g
Maximum value of SAR (measured) = 0.359 mW/g



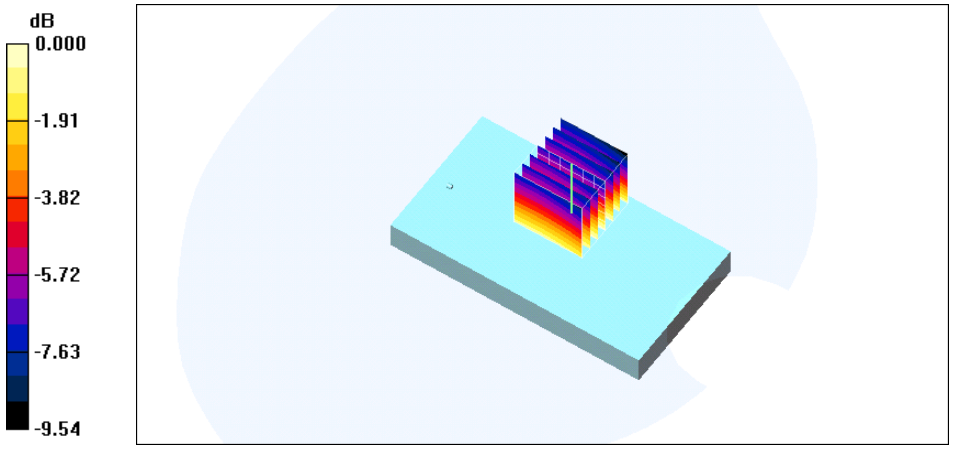
0 dB =0.359 mW/g

FLAT	Towards phantom	836.5 MHz

Communication System: UMTS 835; Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.96 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(6.78, 7.02, 6.8); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/19/2011
- Phantom: SAM 1560; Type: SAM; Serial: 1560
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

towards phantom-mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.4 V/m; Power Drift = -0.014 dB
Peak SAR (extrapolated) = 0.642 W/kg
SAR(1 g) = 0.507 mW/g; SAR(10 g) = 0.379 mW/g
Maximum value of SAR (measured) = 0.532 mW/g



0 dB =0.532mW/g

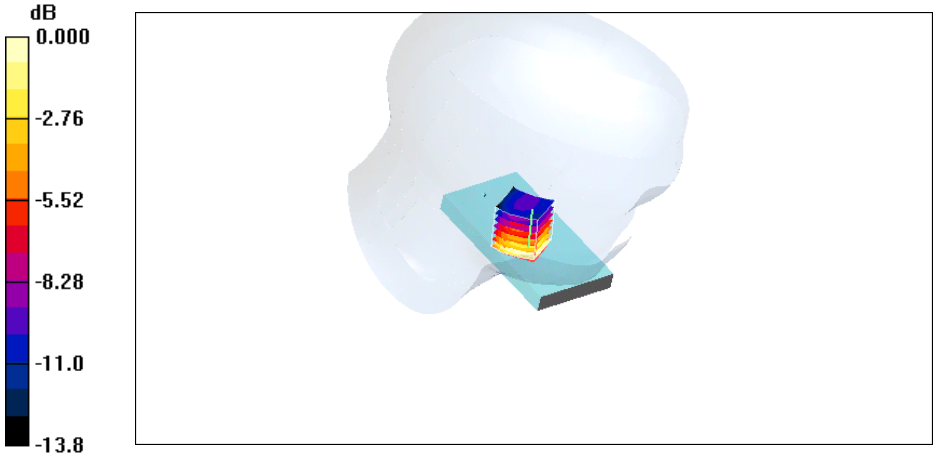
WCDMA B2 (Head)

Left Side	Cheek	**1852.4 MHz**

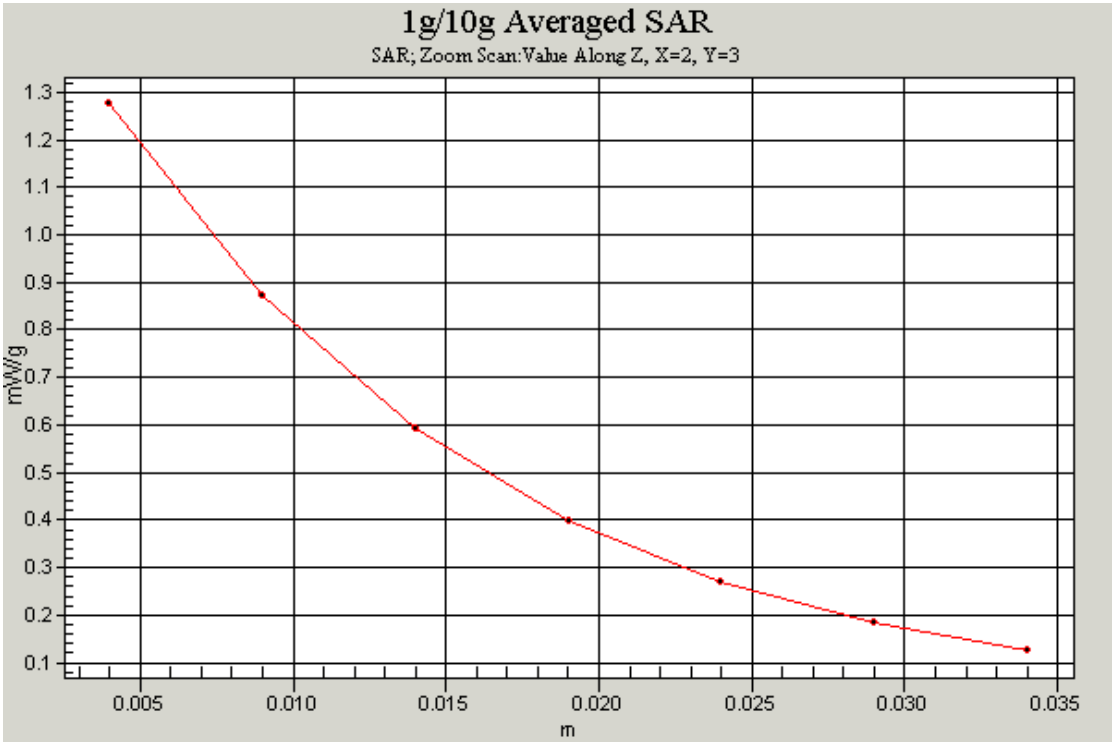
Communication System: wcdma II; Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.41 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.6 V/m; Power Drift = -0.150 dB
Peak SAR (extrapolated) = 1.72 W/kg
SAR(1 g) = 1.19 mW/g; SAR(10 g) = 0.773 mW/g
Maximum value of SAR (measured) = 1.27 mW/g



0 dB = 1.27mW/g



Z-Scan at power reference point (1900 MHz CH9262)

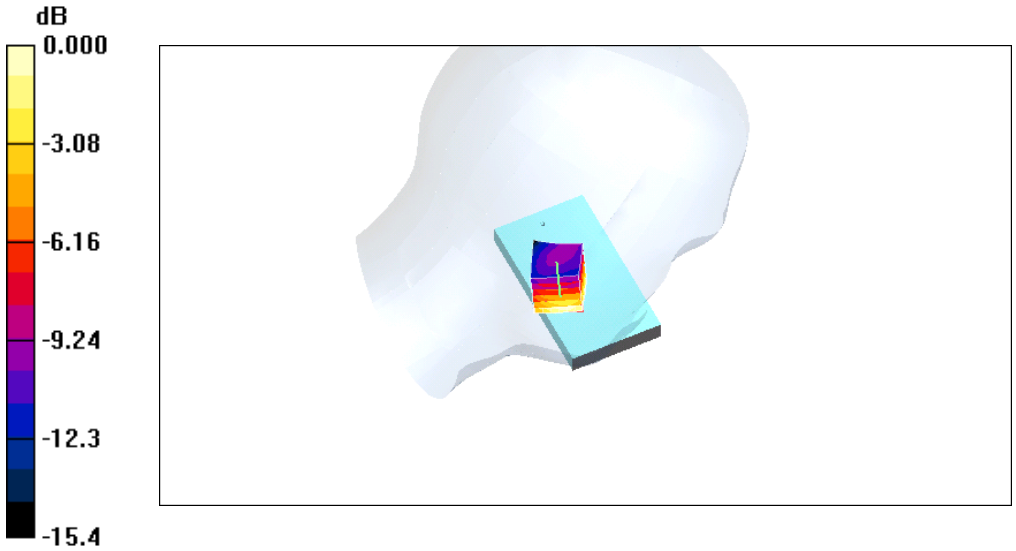
Left Side	Cheek	**1880 MHz**

Communication System: wcdma II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section

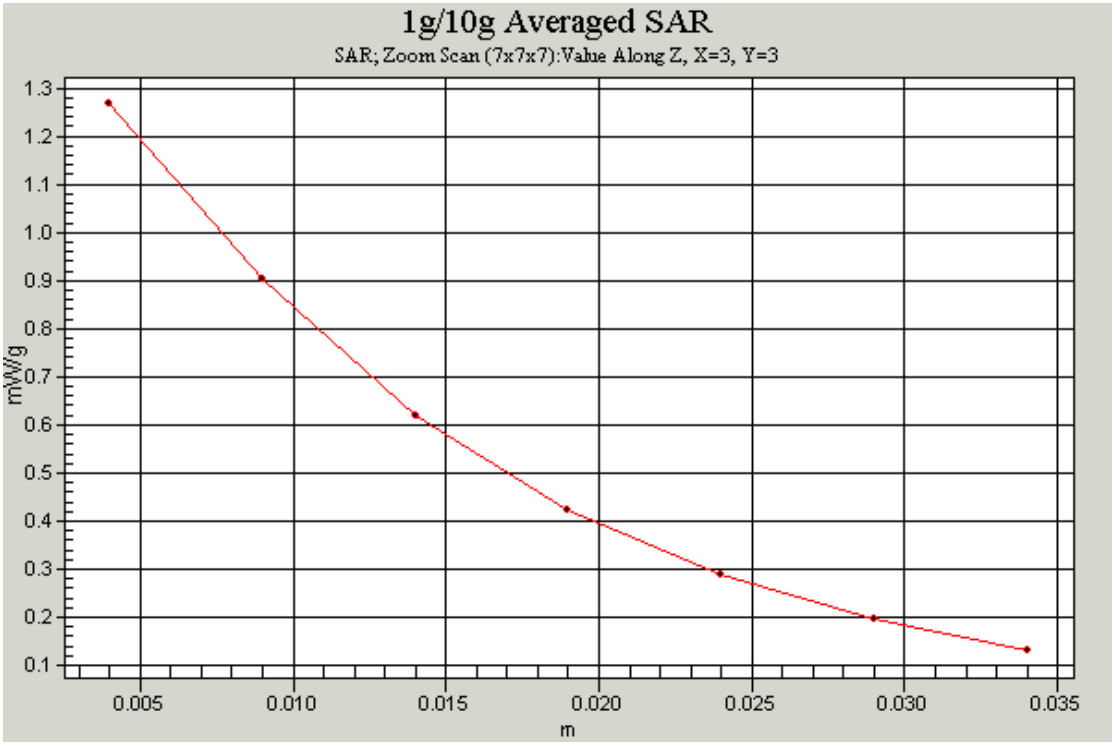
DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.5 V/m; Power Drift = -0.213 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 1.19 mW/g; SAR(10 g) = 0.768 mW/g
Maximum value of SAR (measured) = 1.27 mW/g



0 dB =1.27mW/g



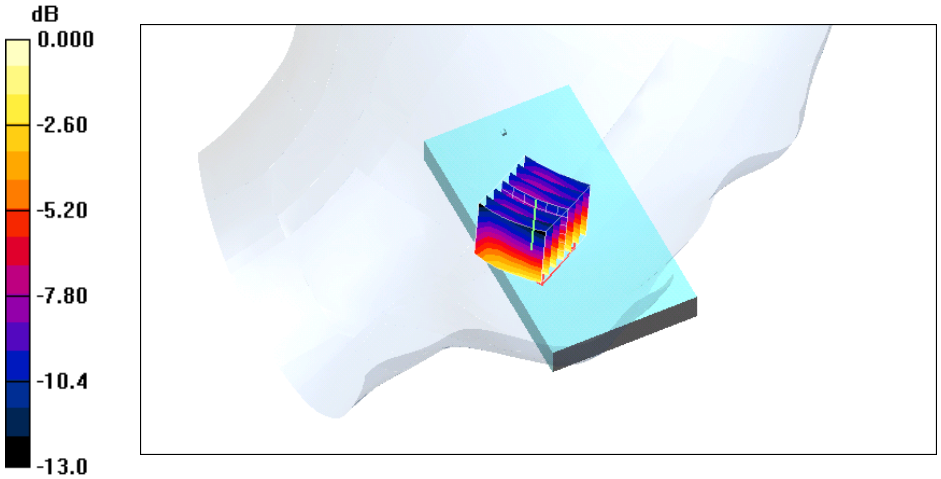
Z-Scan at power reference point (1900 MHz CH9400)

Left Side	Cheek	**1907.6 MHz**

Communication System: wcdma II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1907.6 MHz; σ = 1.46 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.0 V/m; Power Drift = -0.092 dB
Peak SAR (extrapolated) = 1.48 W/kg
SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.660 mW/g
Maximum value of SAR (measured) = 1.13 mW/g



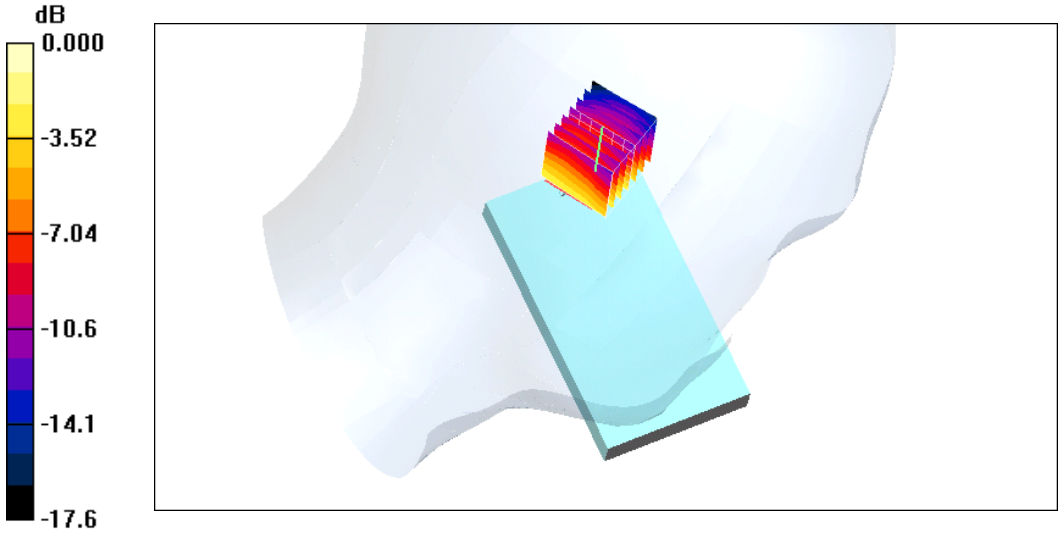
0 dB =1.13mW/g

Left Side	Tilt	**1852.4 MHz**

Communication System: wcdma II; Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.41 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.1 V/m; Power Drift = 0.051 dB
Peak SAR (extrapolated) = 0.766 W/kg
SAR(1 g) = 0.512 mW/g; SAR(10 g) = 0.312 mW/g
Maximum value of SAR (measured) = 0.560 mW/g



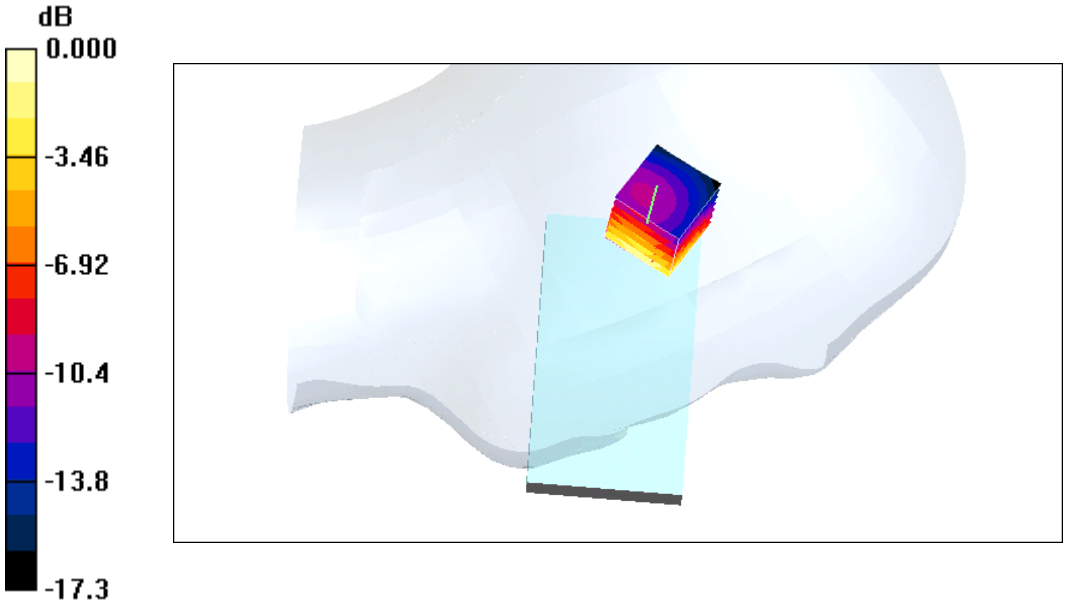
0 dB =0.560mW/g

Left Side	Tilt	**1880 MHz**

Communication System: wcdma II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.0 V/m; Power Drift = 0.062 dB
Peak SAR (extrapolated) = 0.798 W/kg
SAR(1 g) = 0.528 mW/g; SAR(10 g) = 0.319 mW/g
Maximum value of SAR (measured) = 0.581 mW/g



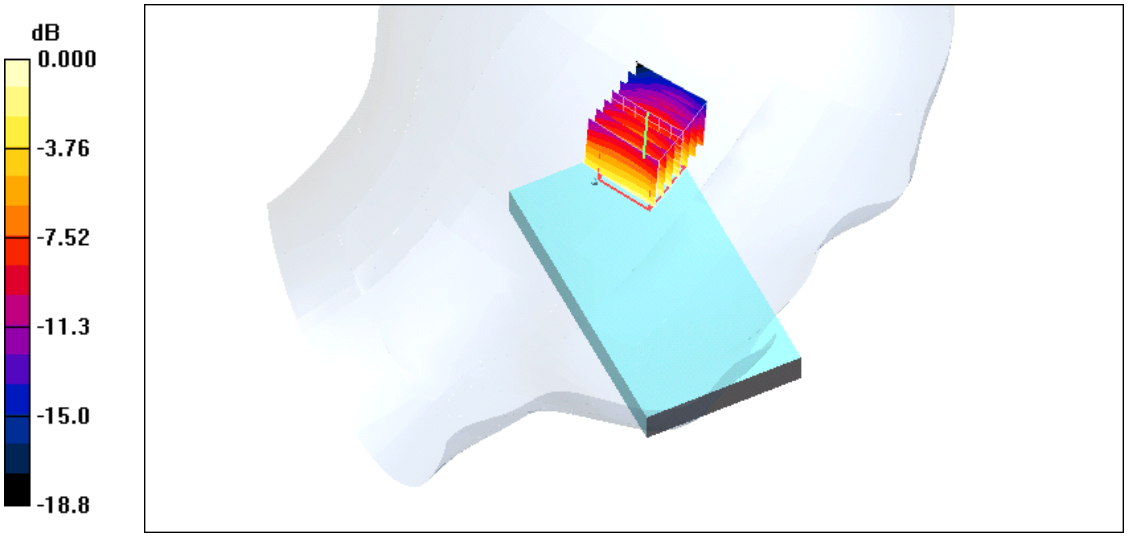
0 dB =0.581mW/g

Left Side	Tilt	**1907.6 MHz**

Communication System: wcdma II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1907.6 MHz; σ = 1.46 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.1 V/m; Power Drift = -0.045 dB
Peak SAR (extrapolated) = 0.800 W/kg
SAR(1 g) = 0.542 mW/g; SAR(10 g) = 0.333 mW/g
Maximum value of SAR (measured) = 0.593 mW/g



0 dB =0.593mW/g

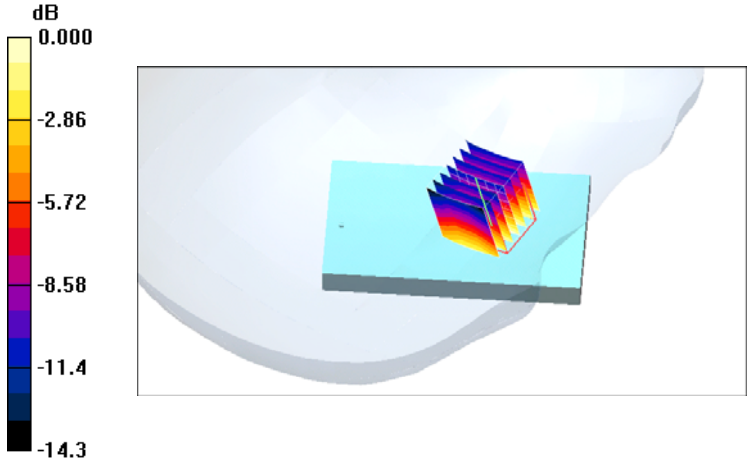
Right Side	Cheek	**1852.4MHz**

Communication System: wcdma II; Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.41 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Low /Zoom Scan (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.0 V/m; Power Drift = -0.006 dB
Peak SAR (extrapolated) = 1.64 W/kg
SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.697 mW/g
Maximum value of SAR (measured) = 1.18 mW/g



0 dB = 1.18mW/g

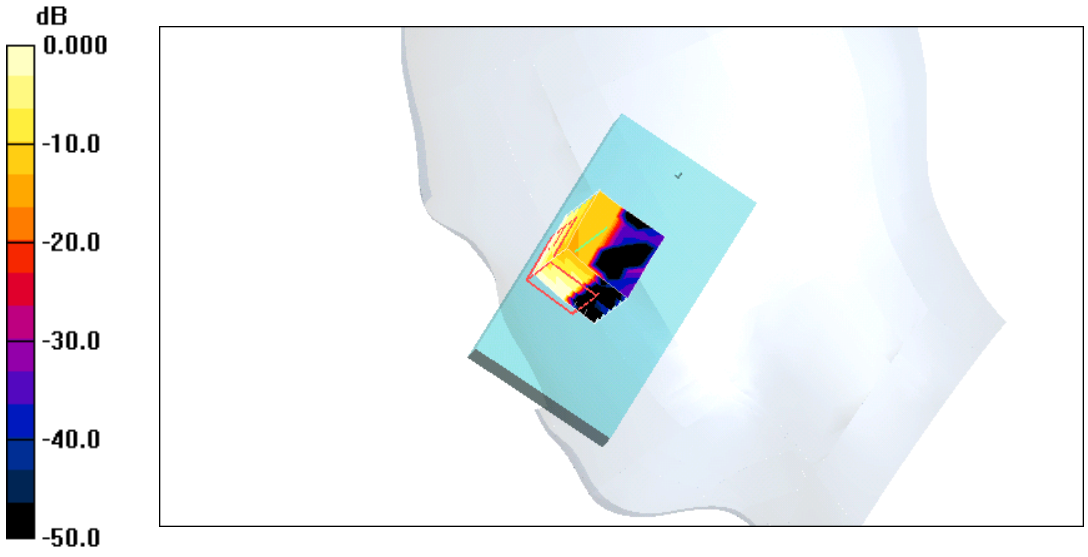
Right Side	Cheek	1880MHz

Communication System: wcdma II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - Middle /Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.9 V/m; Power Drift = -0.206 dB
Peak SAR (extrapolated) = 4.04 W/kg
SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.412 mW/g
Maximum value of SAR (measured) = 1.22 mW/g



0 dB = 1.22mW/g

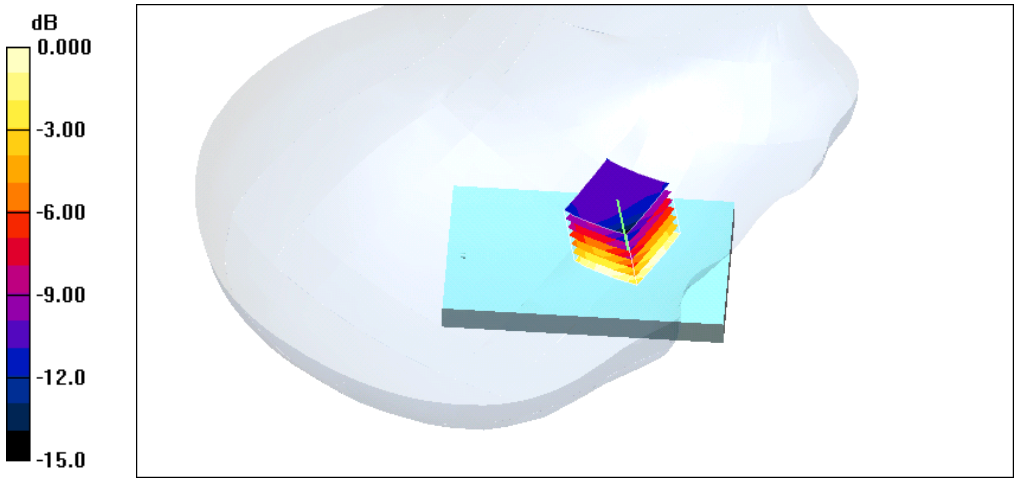
Right Side	Cheek	**1907.6 MHz**

Communication System: wcdma II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1907.6 MHz; σ = 1.46 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - High /Zoom Scan (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.5 V/m; Power Drift = -0.084 dB
Peak SAR (extrapolated) = 1.33 W/kg
SAR(1 g) = 0.915 mW/g; SAR(10 g) = 0.598 mW/g
Maximum value of SAR (measured) = 0.977 mW/g



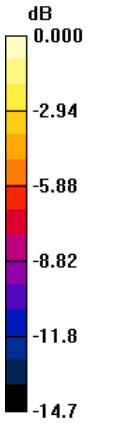
0 dB = 0.977mW/g

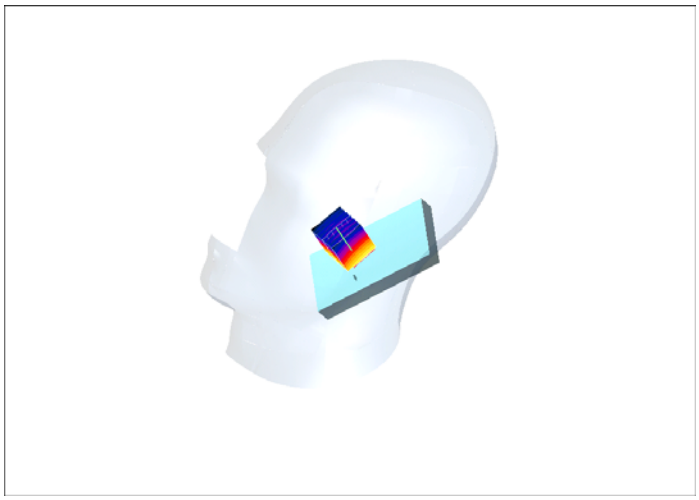
Right Side	Tilt	**1852.4MHz**

Communication System: wcdma II; Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.41 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.9 V/m; Power Drift = 0.006 dB
Peak SAR (extrapolated) = 0.589 W/kg
SAR(1 g) = 0.382 mW/g; SAR(10 g) = 0.244 mW/g
Maximum value of SAR (measured) = 0.424 mW/g





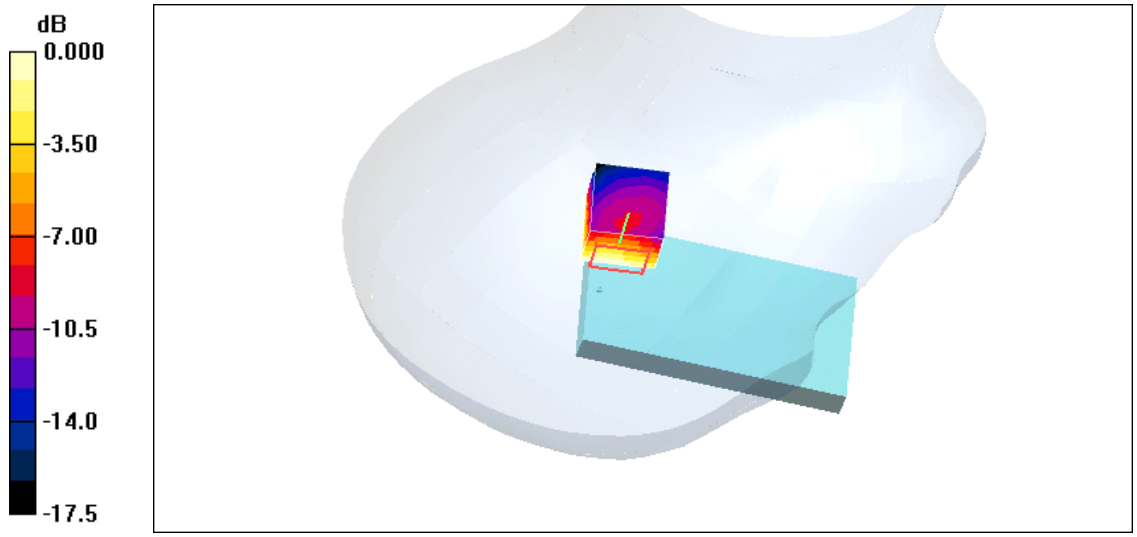
0 dB =0.424mW/g

Right Side	Tilt	**1880 MHz**

Communication System: wcdma II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.8 V/m; Power Drift = 0.022 dB
Peak SAR (extrapolated) = 0.503 W/kg
SAR(1 g) = 0.348 mW/g; SAR(10 g) = 0.223 mW/g
Maximum value of SAR (measured) = 0.377 mW/g



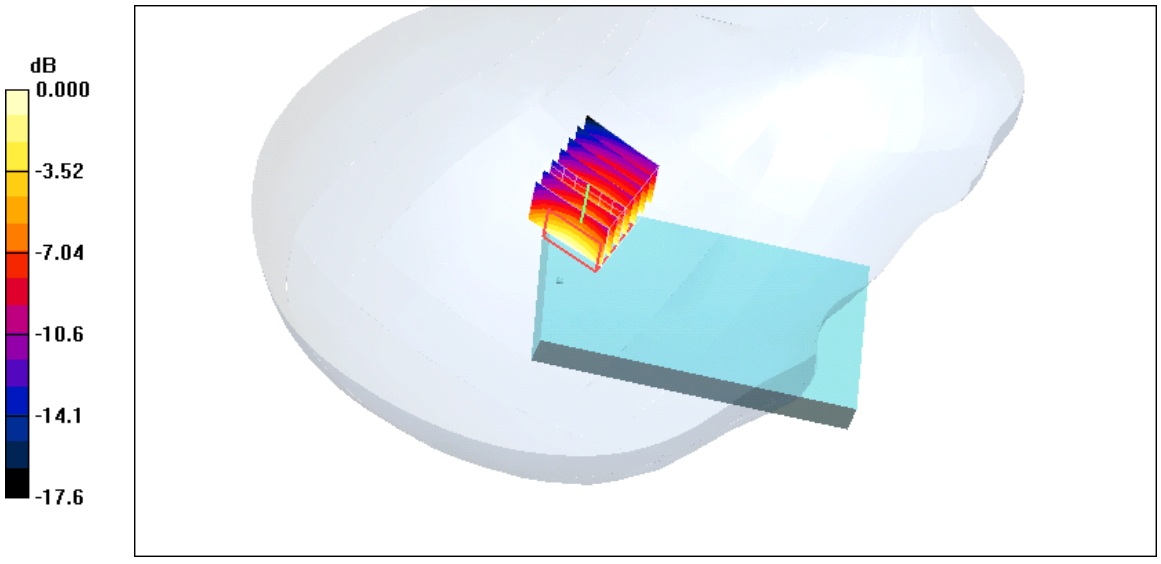
0 dB =0.377mW/g

Right Side	Tilt	1907.6 MHz

Communication System: wcdma II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1907.6 MHz; σ = 1.46 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.95, 5.22, 5.06); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

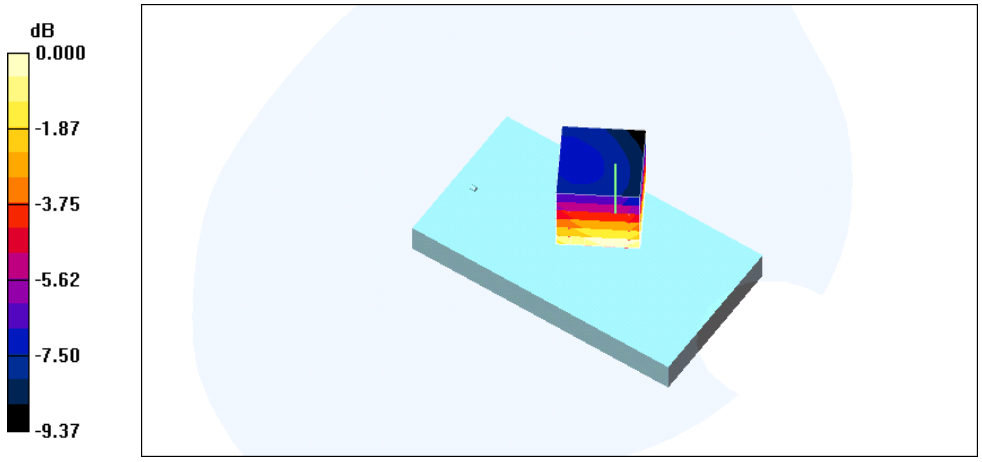
Tilt position - High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.9 V/m; Power Drift = 0.028 dB
Peak SAR (extrapolated) = 0.393 W/kg
SAR(1 g) = 0.272 mW/g; SAR(10 g) = 0.175 mW/g
Maximum value of SAR (measured) = 0.298 mW/g



0 dB = 0.298 mW/g

WCDMA B2 with headset (Flat)

FLAT	Towards ground	**1852.4 MHz**



0 dB =0.419mW/g

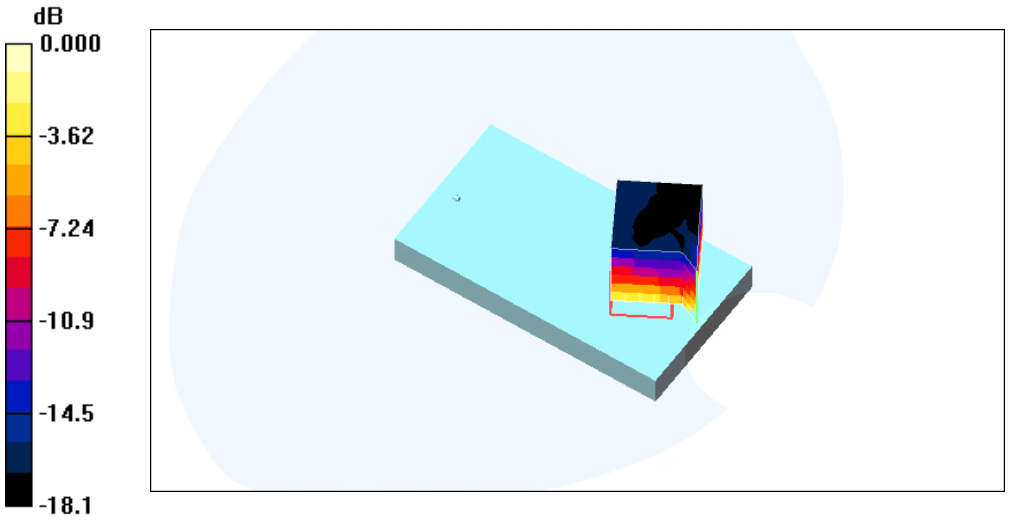
FLAT	Towards ground	1880 MHz

Communication System: wcdma II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

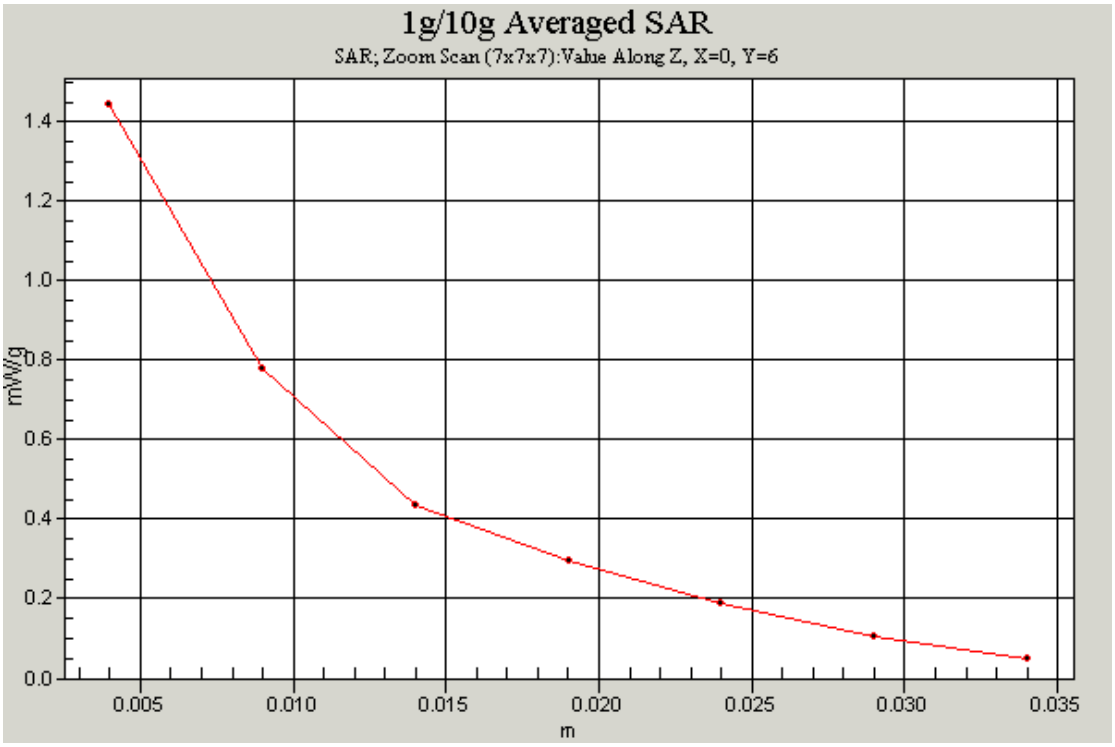
DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.53, 4.79, 4.63); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards ground - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.38 V/m; Power Drift = 0.055 dB
Peak SAR (extrapolated) = 2.29 W/kg
SAR(1 g) = 0.664 mW/g; SAR(10 g) = 0.416 mW/g
Maximum value of SAR (measured) = 1.44 mW/g



0 dB =1.44mW/g



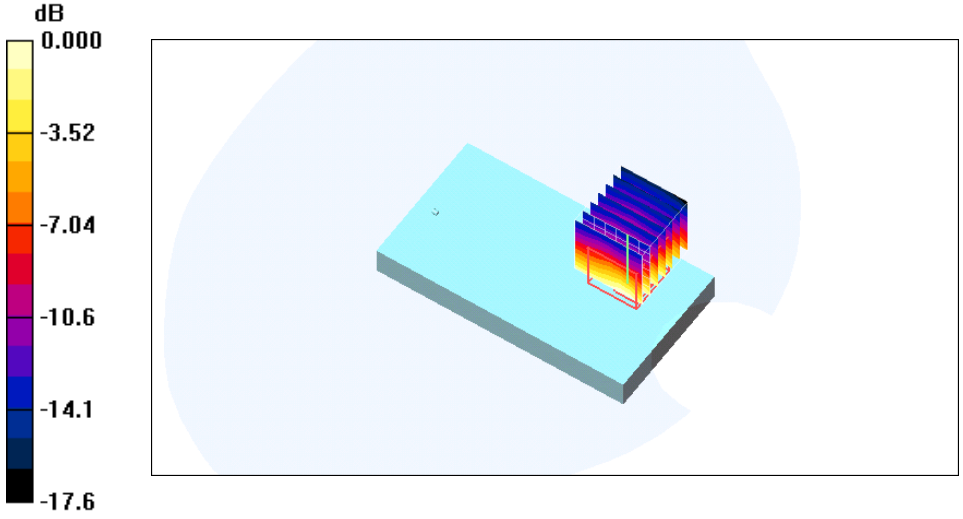
Z-Scan at power reference point (1900 MHz CH9400)

FLAT	Towards ground	**1907.6 MHz**

Communication System: wcdma II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1907.6 MHz; σ = 1.59 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.53, 4.79, 4.63); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

towards ground -high/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.9 V/m; Power Drift = -0.165 dB
Peak SAR (extrapolated) = 0.793 W/kg
SAR(1 g) = 0.495 mW/g; SAR(10 g) = 0.288 mW/g
Maximum value of SAR (measured) = 0.541 mW/g



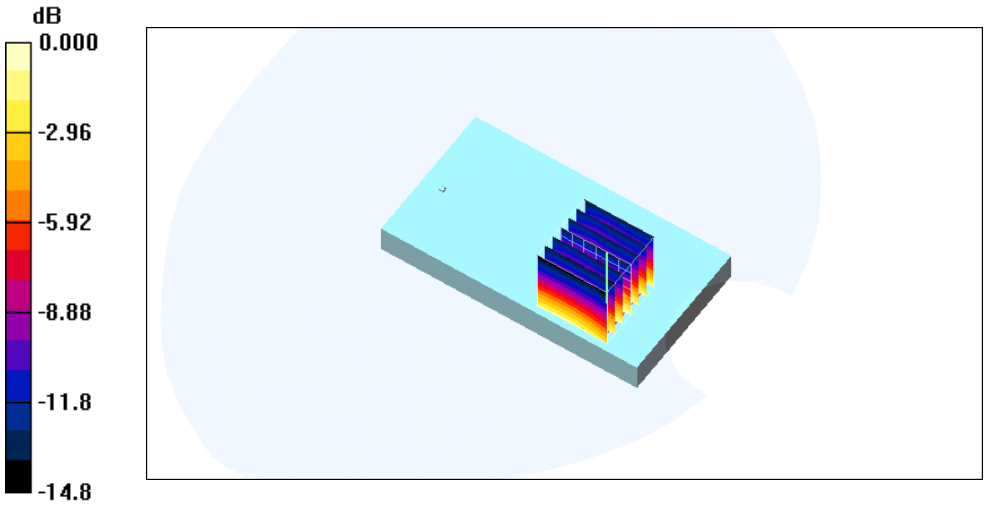
0 dB =0.541 mW/g

FLAT	Towards phantom	1880 MHz

Communication System: wcdma II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.53, 4.79, 4.63); Calibrated: 6/22/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

towards plantom-mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.68 V/m; Power Drift = 0.135 dB
Peak SAR (extrapolated) = 0.865 W/kg
SAR(1 g) = 0.558 mW/g; SAR(10 g) = 0.345 mW/g
Maximum value of SAR (measured) = 0.609 mW/g



0 dB =0.609mW/g

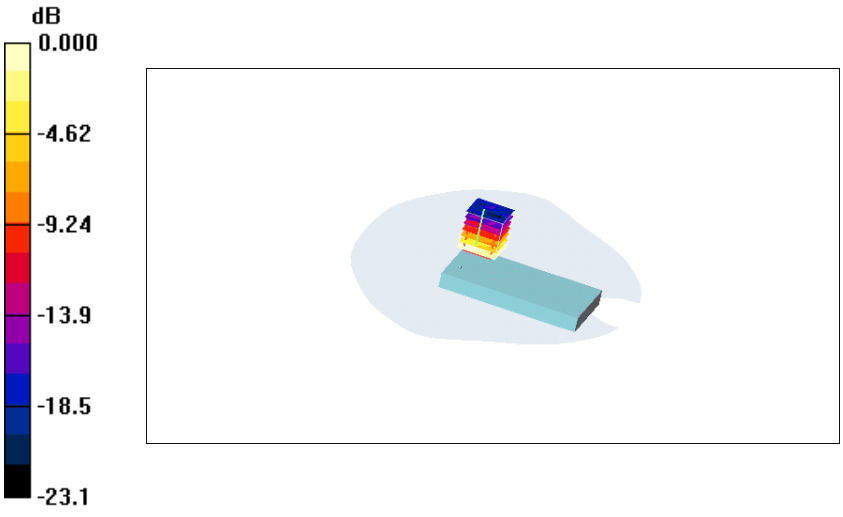
Wifi

FLAT	Towards ground	2437MHz

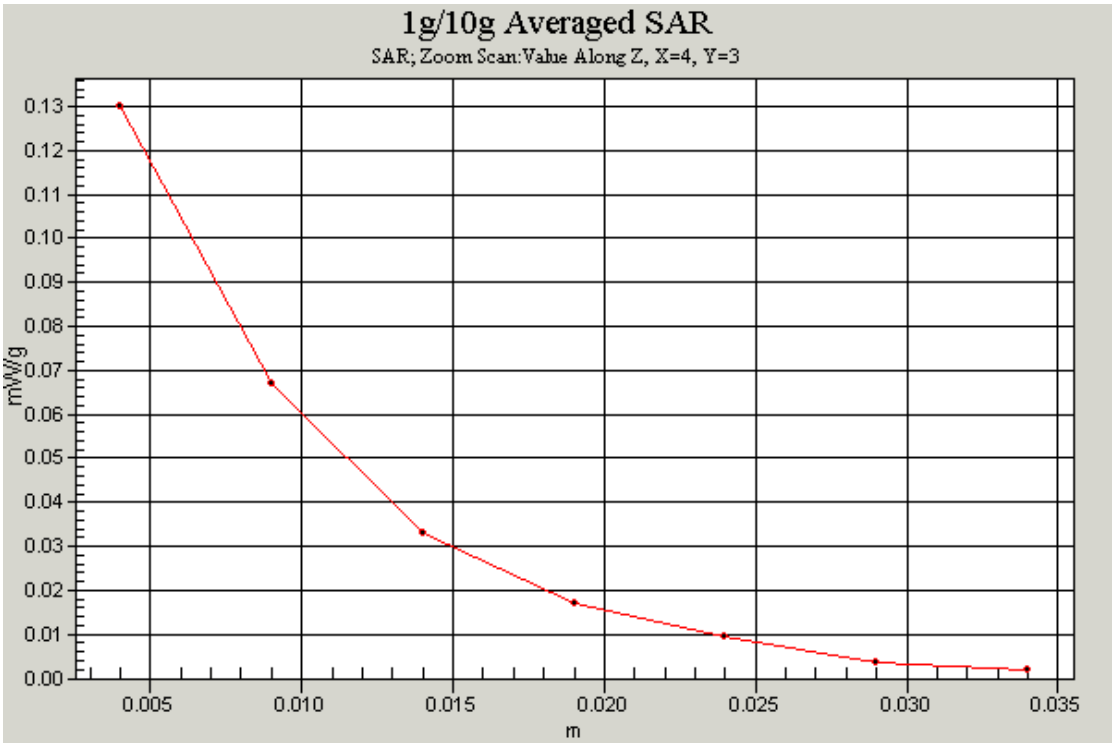
Communication System: Wifi 2450; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.94 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.58, 4.859, 4.673); Calibrated: 6/23/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards ground - High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.11 V/m; Power Drift = -0.187 dB
Peak SAR (extrapolated) = 0.234 W/kg
SAR(1 g) = 0.120 mW/g; SAR(10 g) = 0.063 mW/g
Maximum value of SAR (measured) = 0.130 mW/g



0 dB =0.130mW/g



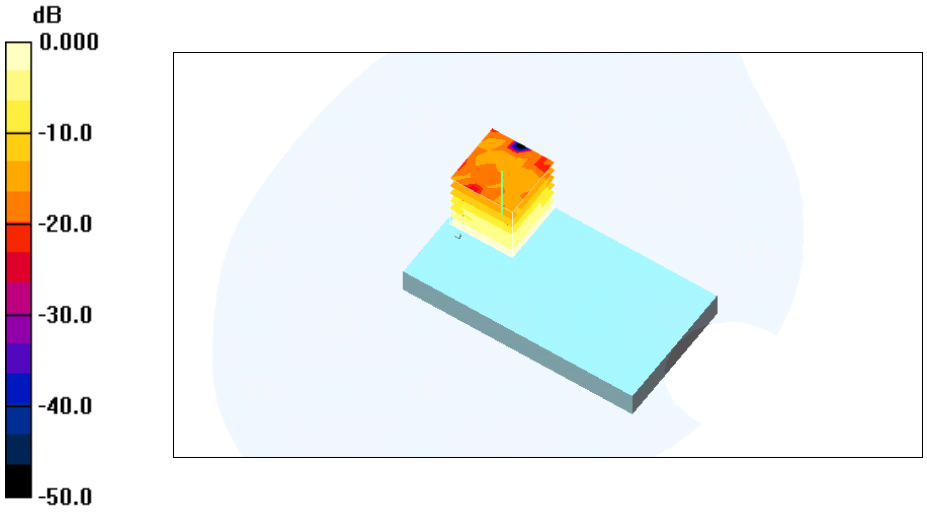
Z-Scan at power reference point (2400 MHz CH11)

FLAT	Towards phantom	2437MHz

Communication System: Wifi 2450; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.94 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3128; ConvF(4.58, 4.859, 4.673); Calibrated: 6/23/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Towards plantom - High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.94 V/m; Power Drift = 0.085 dB
Peak SAR (extrapolated) = 0.098 W/kg
SAR(1 g) = 0.055 mW/g; SAR(10 g) = 0.032 mW/g
Maximum value of SAR (measured) = 0.059 mW/g



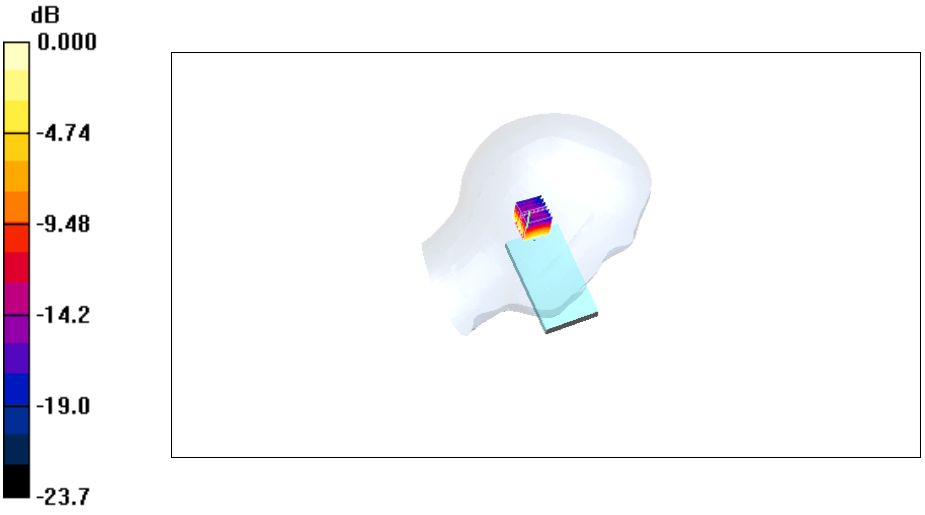
0 dB =0.059mW/g

Left Side	Tilt	2437MHz

Communication System: Wifi 2450; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.88 mho/m; ε_r = 37.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: SN3128-HSL2450; ConvF(3.308, 3.487, 3.402); Calibrated: 4/21/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.8 V/m; Power Drift = 0.052 dB
Peak SAR (extrapolated) = 0.664 W/kg
SAR(1 g) = 0.348 mW/g; SAR(10 g) = 0.185 mW/g
Maximum value of SAR (measured) = 0.379 mW/g



0 dB =0.379mW/g

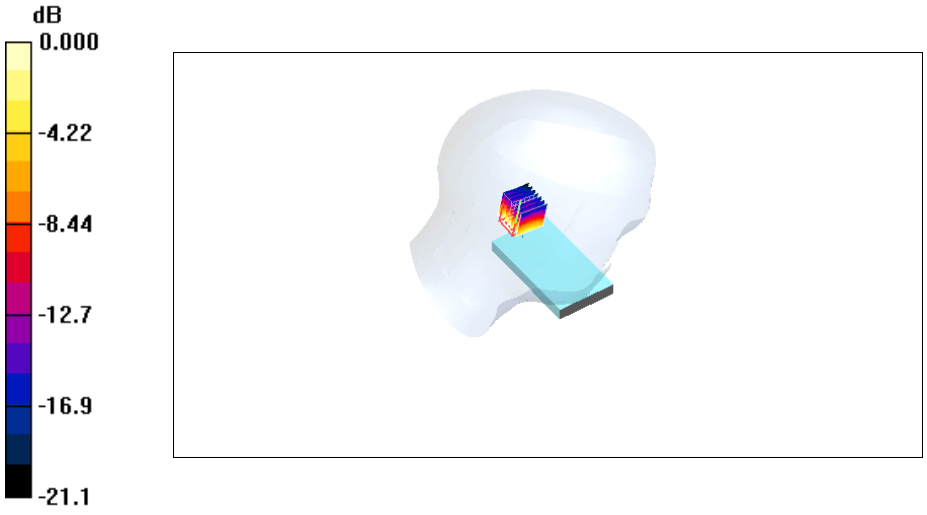
Left Side	Cheek	2437MHz

Communication System: Wifi 2450; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.88 mho/m; ε_r = 37.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: SN3128-HSL2450; ConvF(3.308, 3.487, 3.402); Calibrated: 4/21/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.5 V/m; Power Drift = 0.013 dB
Peak SAR (extrapolated) = 0.659 W/kg
SAR(1 g) = 0.345 mW/g; SAR(10 g) = 0.186 mW/g
Maximum value of SAR (measured) = 0.377 mW/g



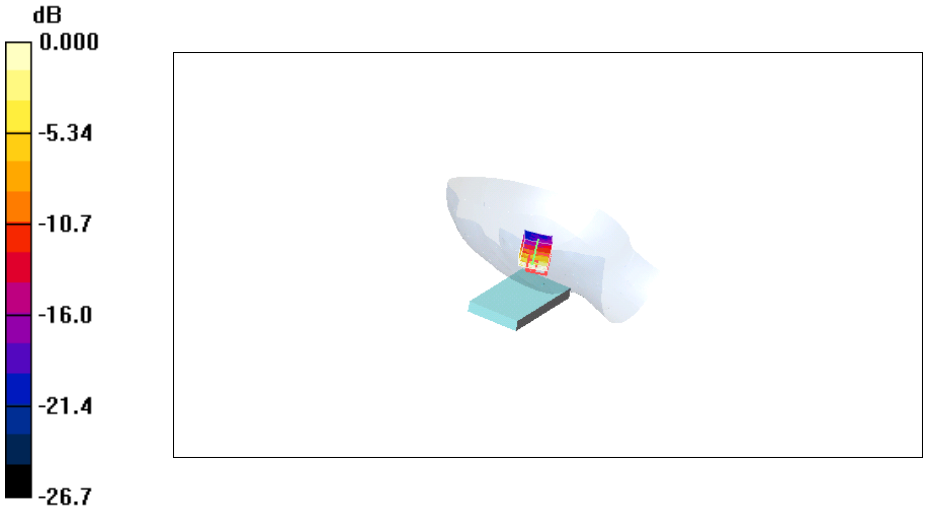
0 dB =0.377mW/g

Right Side	Tilt	2437MHz

Communication System: Wifi 2450; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.88 mho/m; ε_r = 37.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: SN3128-HSL2450; ConvF(3.308, 3.487, 3.402); Calibrated: 4/21/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt position - High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.7 V/m; Power Drift = -0.056 dB
Peak SAR (extrapolated) = 0.663 W/kg
SAR(1 g) = 0.317 mW/g; SAR(10 g) = 0.165 mW/g
Maximum value of SAR (measured) = 0.346 mW/g



0 dB =0.346mW/g

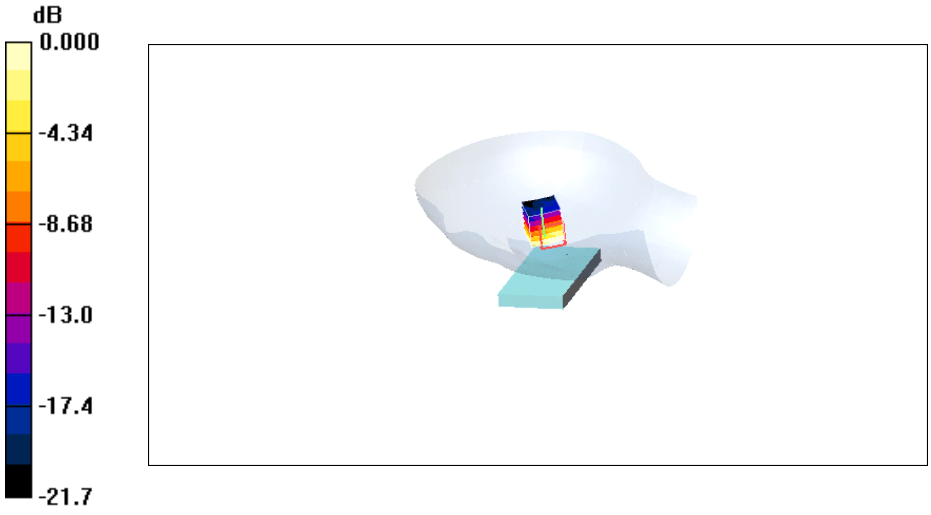
Right Side	Cheek	2437MHz

Communication System: Wifi 2450; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.88 mho/m; ε_r = 37.8; ρ = 1000 kg/m^3
Phantom section: Right Section

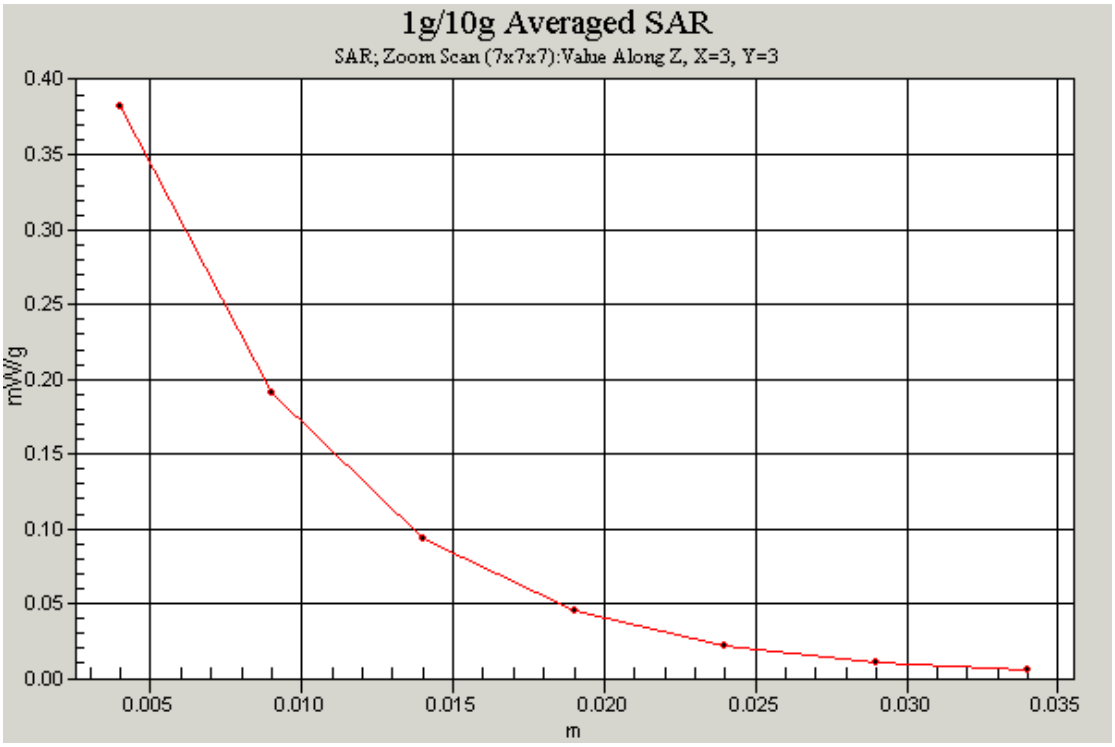
DASY4 Configuration:
- Probe: SN3128-HSL2450; ConvF(3.308, 3.487, 3.402); Calibrated: 4/21/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE - SN720; Calibrated: 1/26/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.9 V/m; Power Drift = -0.011 dB
Peak SAR (extrapolated) = 0.727 W/kg
SAR(1 g) = 0.350 mW/g; SAR(10 g) = 0.191 mW/g
Maximum value of SAR (measured) = 0.383 mW/g



0 dB =0.383mW/g



Z-Scan at power reference point (2400 MHz CH11)