DAT-PL-162/04-01

TESTING
No. L0570

TEST REPORT

REPORT NUMBER: B15X50034-FCC-SAR_Rev1

ON

Type of Equipment:	Ilium X100 Smart Phone
Type of Designation:	Ilium X100
Manufacturer:	Shenzhen fortuneship technology., LTD

ACCORDING TO

FCC Part 2.1093: Radiofrequency radiation exposure evaluation: portable devices, Oct-1-2013
IEEE Std 1528™-2013: IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques

China Telecommunication Technology Labs.

Month date, year
Apr 15, 2015

Signature

He Guili
Director

FCC ID:	ZC4X100
Report Date:	2015-04-15

Test Firm Name:	China Telecommunication Technology Labs
Registration Number:	840587

Statement

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Part 2.1093. The sample tested was found to comply with the requirements defined in the applied rules.

Table of Contents

1. General Information

1.1 Notes

All reported tests were carried out on a sample equipment to demonstrate compliance with the requirements of FCC CFR 47 Part 2.1093.

The test results of this test report relate exclusively to the item(s) tested as specified in section 2.

The following deviations from, additions to, or exclusions from the test specifications have been made. See Annex C.

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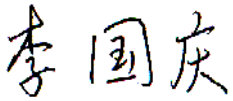
Position: Engineer

Department: Department of EMC test

Signature: 

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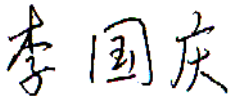
Signature: 

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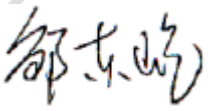
Signature: 

1.3 Testing Laboratory information

1.3.1 Location

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1.3.2 Details of accreditation status

Accredited by:	China National Accreditation Service for Conformity Assessment (CNAS)
Lab number:	DA7130
DAR Registration number:	DAT-PL-162/04-01
Accredited by:	CNAS (China National Accreditation Service for Conformity Assessment)
Registration number:	CNAS L0570
Standard:	ISO/IEC 17025:2005

1.3.3 Test location, where different from section 1.3.1

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1.4 Details of applicant or manufacturer

1.4.1 Applicant

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Address:	6thFloor,KingsonBuilding,NewEnerg Innovation Industrial Park,No.1Chuangsheng Road,NanshanDistrict,Shenzhen,P.R.China

2 Test Item

2.1 General Information

Manufacturer:	Shenzhen fortuneship technology., LTD
Name:	Ilium X100 Smart Phone
Model Number:	Ilium X100
Serial Number:	--
Production Status:	Product
Receipt date of test item:	2015-01-14

2.2 Outline of EUT

EUT is a Digital Mobile Phone, supporting GSM/GPRS/EGPRS 850/1900 bands and WCDMA/HSDPA/HSUPA FDD II/V bands. For GPRS, the multi class is 12 (maximum 4 up timeslots) and for EGPRS, it is 12 (maximum 4 up timeslots)

2.3 Modifications Incorporated in EUT

The EUT has not been modified from what is described by the brand name and unique type identification stated above.

2.4 Equipment configuration list:

Item	Generic Description	Manufacturer	Type	Serial No.	Remarks
A	handset	Shenzhen fortuneship technology., LTD	Ilium X100	--	None
B	battery	--	BL-230	20140900151	None

Cables:

Item	Cable Type	Manufacturer	Length	Shield	Quantity	Remarks
1	DC cable on Adapter	--	--	--	--	None

2.5 Other Information

Version of hardware and software:

HW Version: FS001-MB-V0.2

SW Version: ILIUM_X100_TELCEL_SW_01_32X4_BT_FM_WIFI_GPS_ACC_PLS_1SIM_20150210_2105

2.6 References

ANSI C95.1-2006:IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

IEEE Std 1528-2013:IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices:

Measurement Techniques

IEEE1528a-2005 Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head From Wireless Communications Devices: Measurement Techniques.

KDB248227D01 SAR measurement for 802.11abg v01r02 SAR measurement procedures for 802.112abg transmitters.

KDB447498 D01General RF Exposure Guidance v05r02 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

KDB 447498 D03 Supplement C Cross-Reference v01OET Bulletin 65, Supplement C Cross-Reference

KDB865664 D01 SAR Measurement Requirements for 100 MHz to 6 GHzv01r03SAR Measurement Requirements for 100 MHz to 6 GHz.

KDB865664 D02 RF Exposure Reporting v01r01RF Exposure Compliance Reporting and Documentation Considerations.

KDB941225 D01SAR Procedures v033G SAR Measurement Procedures

KDB941225 D06 hotspot Mode v02SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities.

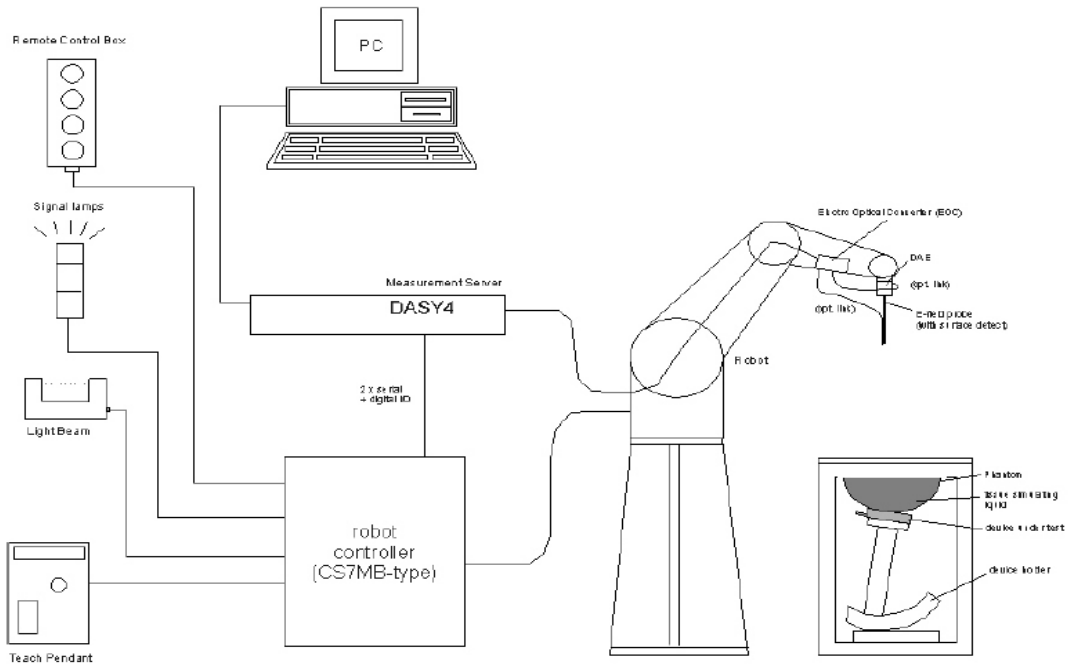
KDB648474 D04 Handset SAR v01r02SAR Evaluation Considerations for Wireless Handsets

3 Measurement Systems

3.1 SAR Measurement Systems Setup

All measurements were performed using the automated near-field scanning system, DASY5, from Schmid & Partner Engineering AG (SPEAG). The system is based on a high precision industrial robot 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 containing the power supply, robot controller, teach pendant (Joystick) and remote control, is used to drive the robot motors. The PC consists of the Micron Pentium III 800 MHz computer with Windows 2000 system and SAR Measurement Software DASY5, 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) performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc., which is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical signal to digital electric signal of the DAE and transfers data to the PC plug-in card.



Demonstration of measurement system setup

The DAE4 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 logicunit. 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.

3.2 E-field Probe

3.2.1 E-field Probe Description

The SAR measurements were conducted with the dosimetric probe ES3DV3 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe has been calibrated according to the standard procedure with an accuracy of better than ±10%. The spherical isotropy was evaluated and found to be better than ± 0.25dB.

Items	Specification
Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection System Built-in shielding against static charges PEEK enclosure material(resistant to organic solvents, e.g., glycol)
Calibration	In air from 10 MHz to 2.5 GHz In brain and muscle simulating tissue at frequencies of 450MHz, 900MHz and 1.8GHz (accuracy±8%) Calibration for other liquids and frequencies upon request
Frequency	l 0 MHz to > 6 GHz; Linearity: ±0.2 dB (30 MHz to 3 GHz)
Directivity	±0.2 dB in brain tissue (rotation around probe axis) ±0.4 dB in brain tissue (rotation normal probe axis)
Dynamic Range	5u W/g to > 100mW/g; Linearity: ±0.2dB
Surface Detection	±0.2 mm repeatability in air and clear liquids over diffuse reflecting surface
Dimensions	Overall length: 330mm Tip length: 16mm Body diameter: 12mm Tip diameter: 6.8mm Distance from probe tip to dipole centers: 2.7mm
Application	General dosimetry up to 3GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms

3.2.2 E-field Probe Calibration

The Annex C is the copy of the calibration certificate of the used probes.

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better

than± 10%. The spherical isotropy was evaluated and found to be better than ± 0.25dB. The sensitivity parameters (Norm X, Norm Y, Norm Z), the diode compression parameter (DCP) and the conversion factor (Conv F) of the probe are tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies bellow 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The free-space E-field measured in the medium correlates to temperature increase in a dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR = C\frac{\Delta T}{\Delta t}$$

Where: Δt = Exposure time (30 seconds),
C = Heat capacity of tissue (brain or muscle),
ΔT = Temperature increase due to RF exposure.
Or

$$SAR = \frac{|E|^2 \sigma}{\rho}$$

Where:
σ = Simulated tissue conductivity,
ρ = Tissue density (kg/m^3).

3.3 Phantom

The Generic Twin Phantom is constructed of a fiberglass shell integrated in a wooden table. The shape of the shell is based on data from an anatomical study designed to determine the maximum exposure in at least 90% of all users. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents the evaporation of the liquid. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot.

Specifications:
Shell Thickness: 2±0.1mm
Filling Volume: Approx. 20 liters
Dimensions: 810 x l000 x 500 mm (H x L x W)
Liquid depth when testing: at least 150 mm

3.4 Device Holder

In combination with the Generic Twin Phantom V3.0, the Mounting Device (POM) enables the rotation of the mounted transmitter in spherical coordinates whereby the rotation points is the ear opening. The devices can be easily, accurately, and repeat ably positioned according to the FCC and CENELEC specifications. The device holder can be locked at different phantom locations (left head, right head, flat phantom etc).

4 Test Results

4.1 Operational Condition

Specifications IEEE Std 1528™-2013
Date of Tests 2015-03-10~2015-03-15
Operation Mode TX at the highest output peak power level
Method of measurement : IEEE Std 1528™-2013

4.2 Test Equipment Used

ITEM	TYPE	S/N	CALIBRATION DATE	DUE DATE
probe	EX3DV4	3844	2014-05-19	2015-05-18
DAE	DAE4	1329	2014-04-17	2015-04-16
D835V2	dipole	4d135	2014-05-26	2015-05-25
D1900V2	dipole	5d135	2014-05-23	2015-05-22
D2450V2	dipole	886	2014-05-29	2015-05-28
Power Meter	N1914A	MY50001660	2015-03-06	2016-03-05
Radio Communication Analyzer	CMU200	112012	2015-03-06	2016-03-05
Signal Generator	N5181A	MY50143363	2015-03-06	2016-03-05
Power Sensor	E8481H	MY51020011	2015-03-06	2016-03-05
Power Amplifier	ZHL	QA1202003	NA	NA
Attenuator	8491A	MY39267989	NA	NA
Probe kit	85070E	3G-S-00139	NA	NA
Network Analyzer	E5071C	US39175666	2015-03-06	2016-03-05

4.3 Applicable Limit Regulations

Item	Limit Level
Local Specific Absorption Rate (SAR) (1g)	1.6W/kg

4.4 Test Results

The EUT complies.
Note:
All measurements are traceable to national standards.

4.5 Test Setup and Procedures

4.5.1 Test distance

The distance between EUT and flat phantom is 10 mm for body modes.

4.5.2 Duty Factor and Crest Factor

For GPRS the multi time slot is class 12 with maximum 4 up time slots and for EGPRS it is class 12 with maximum 4 up time slots. For 1 up time slots, the crest factor used is 8.3, for 2 up time slots, it is 4.15, and for 4 up time slots, it is 2.
For HSDPA/HSUPA, the crest factor is 1.

4.5.3 General body mode measurement procedures

Generally, for body mode, the evaluation was performed according to the following procedure:
Step 1: The SAR value at a fixed location above the center point flat phantom was measured and was used as a reference value for assessing the power drift.
Step 2: The SAR distribution at the exposed side of the body was measured at a distance of 4 mm from the inner surface of the shell. The area covered the entire dimension of the EUT and the horizontal grid spacing was 10 mm x 10 mm. Based on these data, the area of the maximum absorption was determined by interpolation.
Step 3: Around this point, a volume of 30 mm x 30 mm x 30 mm was assessed by measuring 7 x 7 x 7 points. On this basis of this data set, the spatial peak SAR value was evaluated with the following procedure:
a. The data at the surface were extrapolated, since the center of the dipoles is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.2mm. The extrapolation was based on the least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.
b. The maximum interpolated value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1g or 10g) were computed using the3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the "Not a knot"-condition (in x ~ y and z-directions). The volume was integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average.
c. All neighboring volumes were evaluated until no neighboring volume with a higher average e-value was found.
Step 4: Re-measurement the SAR value at the same location as in Step 1. If the value changed by more than 5%, the evaluation should be repeated.

4.6 Test Environment and Liquid Information

4.6.1 Test Environment

Date:	Liquid Temperature (℃)	Ambient Temperature (℃)	Ambient Humidity (%)
	18~~25	18~~25	30~~70
2015-03-10	22.5	22.1	47.9
2015-03-11	22.5	22.3	49.3
2015-03-12	22.5	22.1	50.1

2015-03-13	22.5	22.2	51.3
2015-03-14	22.5	22.5	49.7
2015-03-15	22.5	22.6	51.0

4.6.2 Liquid Recipes

INGREDIENTS	TISSUE TYPE					
	HSL850	MSL850	HSL1900	MSL1900	HSL2450	MSL2450
Water	40.29	50.75	55.242	69.91	58.79	72.60
DGBE	0	0	44.452	29.96	41.15	27.22
Sugar	57.90	48.21	0	0	0	0
Salt	1.38	0.94	0.306	0.13	0.06	0.18
Cellulose	0.25	0	0	0	0	0
Preventol	0.18	0.10	0	0	0	0

4.6.3 Liquid Parameters

Table4.6.3.1: Targets for tissue simulating liquid

Frequency (MHz)	Liquid Type	Conductivity (σ)	± 5% Range	Permittivity (ε)	± 5% Range
835	Head	0.90	0.86～0.95	41.5	39.4～43.6
835	Body	0.97	0.92～1.02	55.2	52.4～58.0
1900	Head	1.40	1.33～1.47	40.0	38.0～42.0
1900	Body	1.52	1.44～1.60	53.3	50.6～56.0
2450	Head	1.80	1.71～1.89	39.2	37.2～41.2
2450	Body	1.95	1.85～2.05	52.7	50.1～55.3

Table 4.6.3.2:Dielectric Performance of Tissue Simulating Liquid

Measurement Value						
Type	Frequency	Permittivity ε	Drift (%)	Conductivity σ	Drift (%)	Test Date
Head	835 MHz	42.356	+2.06%	0.916	+1.78%	2015-03-10
Body	835 MHz	53.950	-2.26%	0.965	-0.52%	2015-03-11
Head	1900 MHz	39.761	-0.60%	1.384	-1.14%	2015-03-12
Body	1900 MHz	53.715	+0.78%	1.499	-1.38%	2015-03-13
Head	2450 MHz	37.393	-4.61%	1.872	+4.00%	2015-03-14
Body	2450 MHz	52.910	+0.40%	1.956	+0.31%	2015-03-15

4.7 System Validation Check

Validation Method:

The setup of system validation check or performance check is demonstrated as figure 5. The

amplifier, low pass filter and attenuators are optional. The dipole shall be positioned and centered below the phantom, paralleling to the longest side of the phantom. A low loss and low dielectric constant spacer on the dipole may be used to guarantee the correct distance between the dipole top surface and the phantom bottom surface.

The separation d, which is defined as the distance from the liquid bottom surface to the dipole's central axis at location of the feed-point, should be as following: for 835 MHz dipole, d = 15 mm, and for 1900 MHz dipole, d = 10 mm, and this can be obtained using two different size spacer. The dipole arms shall be parallel to the flat phantom surface.

First the power meter PM1 is connected to the cable and it measures the forward power at the location of the dipole connector (X). The signal generator is adjusted for the desired forward power at the dipole connector (taking into account the (Att1) value) and the power meter PM2 is read at that level. Then after connecting the cable to the dipole, the signal generator is readjusted for the same reading at the power meter PM2.

The system validation check procedures are the same as all measurement procedures used for compliance tests. A complete 1 g averaged SAR measurement is performed using the flat part of the phantom. The reference dipole input power is adjusted to produce a 1 g averaged SAR value falling in the range of 0.4 – 10 mW/g. The 1 g averaged SAR is measured at 835 MHz and 1900 MHz using corresponding dipole respectively. Then the results are normalized to 1 W forward input power and compared with the reference SAR values.

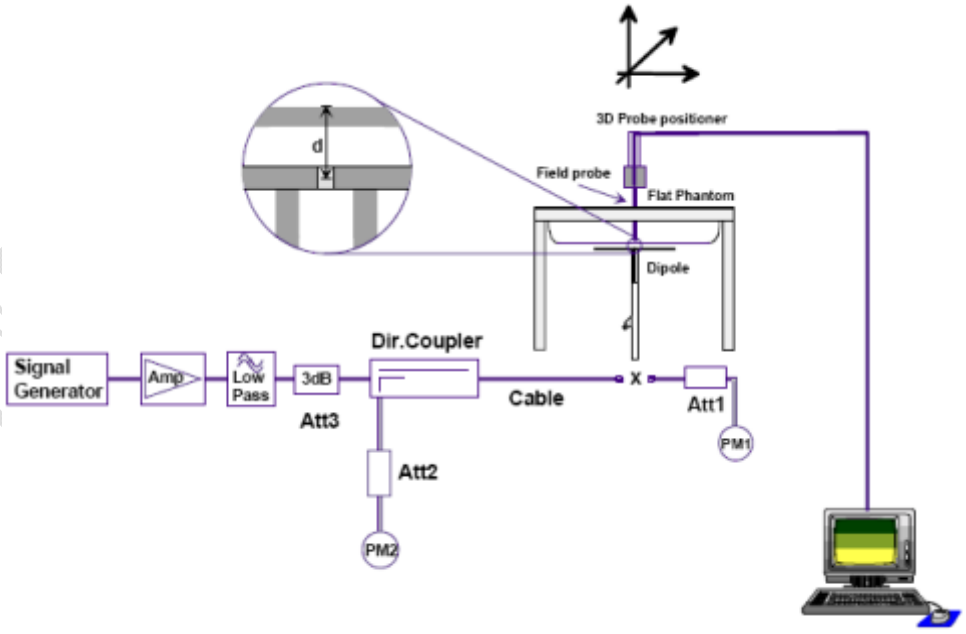


Figure 5Illustration of system validation test setup

Table 4.7.1：System Verification of Head

Verification Results				
Input power level: 250mW				
Frequency	**Target value (W/kg)**	**Measured value (W/kg)**	**Deviation**	**Test date**

	10 g Average	1 g Average	10 g Average	1 g Average	10 g Average	1 g Average	
835 MHz	1.52	2.28	1.61	2.47	+5.92%	+8.33%	2015-03-10
1900 MHz	5.09	9.78	5.32	10.0	+4.52%	+2.25%	2015-03-12
2450 MHz	6.41	13.5	6.47	14.2	+0.94%	+5.19%	2015-03-14

Table 4.7.2：System Verification of Body

Verification Results							
Input power level: 250mW							
Frequency	**Target value (W/kg)**		**Measured value (W/kg)**		**Deviation**		**Test date**
	10 g Average	**1 g Average**	**10 g Average**	**1 g Average**	**10 g Average**	**1 g Average**	
835 MHz	1.57	2.36	1.60	2.41	+1.91%	+2.12%	2015-03-11
1900 MHz	5.34	10.1	5.30	9.80	-0.75%	-2.97%	2015-03-13
2450 MHz	5.89	12.3	6.11	12.9	+3.74%	+4.88%	2015-03-15

4.8 Maximum Output Power Measurement

According to FCC OET 65c, maximum output power shall be measured before and after each SAR test. The test setup and method are described as following.

Test setup

The output power measurement test setup is demonstrated as figure 6.

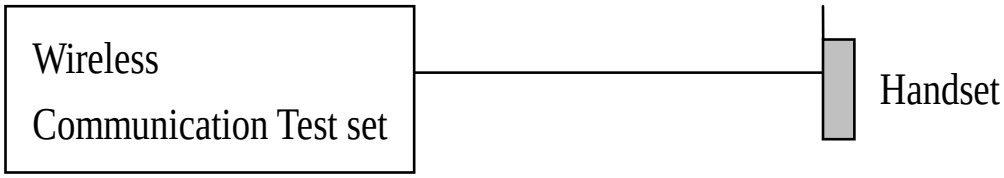


Figure 6 Demonstration of power measurement

Note: For GSM850/EGSM900, the PCL=5, and for DCS1800/PCS1900, PCL=0. For GPRS, the coding scheme used is CS4, and for EGPRS, it is MCS1, i.e. GMSK modulation is used for EGPRS.

GSM modes:

Note: For GSM, GPRS and EGPRS, only the modes with the maximum time average power values, complete set of tests are performed. For GSM+BT (Earphone, Hand free) need to be tested respectively, the test mode is the worst case of GSM modes.

If there is no GSM (voice mode), then for GPRS/EGPRS, only the modes with the maximum time average power values are needed to be tested, which for GPRS, the complete tests are performed using the maximum power configurations, and for EGPRS, its maximum power configurations with position from the worst-case of GPRS are tested.

WCDMA modes:

Note: For WCDMA 12.2 kbps RMC mode, complete tests are performed. For 12.2 kbps AMR + 3.4 kbps SRB mode and all HSDPA and HSUPA modes, only if the peak power values are bigger than the RMC mode values plus 0.25 dB, then the modes shall be tested using the worst case of RMC mode. The power measurement method refers to 3GPP TS34.121. The test parameters configurations are as following table:

Release 5 HSDPA:

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs}	CM (dB)
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15	15/15	64	12/15	24/15	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

Release 6 HSUPA:

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs}	β_{ec}	β_{ed}	β_{ed} (SF)	β_{ed} (codes)	CM (dB)	MPR (dB)	AG Index	E-TFCI
1	11/15	15/15	64	11/15	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1}:47/15 β_{ed2}:47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	15/15	64	15/15	30/15	24/15	134/15	4	1	1.0	0.0	21	81

4.8.1 Manufacturing tolerance

Table 4.8.1.1: GSM Speech

GSM 835			
Channel	Channel 251	Channel 190	Channel 128
Maximum Target Value (dBm)	31.0±1	31.0±1	31.0±1
PCS 1900			
Channel	Channel 810	Channel 661	Channel 512
Maximum Target Value (dBm)	29.0±1	29.0±1	29.0±1

Table 4.8.1.2: GPRS/E-GPRS

GSM 850 GPRS				
Channel		251	190	128
1 Tx slots	Maximum Target Value (dBm)	31.0±1	31.0±1	31.0±1
2 Tx slots	Maximum Target Value (dBm)	29.0±1	29.0±1	29.0±1
3 Tx slots	Maximum Target Value (dBm)	27.0±1	27.0±1	27.0±1
4 Tx slots	Maximum Target Value (dBm)	25.0±1	25.0±1	25.0±1
GSM 850 E-GPRS（GSMK）				
Channel		251	190	128
1 Tx slots	Maximum Target Value (dBm)	31.0±1	31.0±1	31.0±1

2 Tx slots	Maximum Target Value (dBm)	29.0±1	29.0±1	29.0±1
3 Tx slots	Maximum Target Value (dBm)	27.0±1	27.0±1	27.0±1
4 Tx slots	Maximum Target Value (dBm)	25.0±1	25.0±1	25.0±1
GSM 850 E-GPRS（8PSK）				
Channel		251	190	128
1 Tx slots	Maximum Target Value (dBm)	28.0±1	28.0±1	28.0±1
2 Tx slots	Maximum Target Value (dBm)	27.0±1	27.0±1	27.0±1
3 Tx slots	Maximum Target Value (dBm)	25.0±1	25.0±1	25.0±1
4 Tx slots	Maximum Target Value (dBm)	23.0±1	23.0±1	23.0±1
GSM 1900 GPRS				
Channel		810	661	512
1 Tx slots	Maximum Target Value (dBm)	29.0±1	29.0±1	29.0±1
2 Tx slots	Maximum Target Value (dBm)	27.0±1	27.0±1	27.0±1
3 Tx slots	Maximum Target Value (dBm)	25.0±1	25.0±1	25.0±1
4 Tx slots	Maximum Target Value (dBm)	23.0±1	23.0±1	23.0±1
GSM 1900 E-GPRS（GSMK）				
Channel		810	661	512
1 Tx slots	Maximum Target Value (dBm)	29.0±1	29.0±1	29.0±1
2 Tx slots	Maximum Target Value (dBm)	27.0±1	27.0±1	27.0±1
3 Tx slots	Maximum Target Value (dBm)	25.0±1	25.0±1	25.0±1
4 Tx slots	Maximum Target Value (dBm)	23.0±1	23.0±1	23.0±1
GSM 1900 E-GPRS（8PSK）				
Channel		810	661	512
1 Tx slots	Maximum Target Value (dBm)	27.0±1	27.0±1	27.0±1
2 Tx slots	Maximum Target Value (dBm)	25.0±1	25.0±1	25.0±1
3 Tx slots	Maximum Target	24.0±1	24.0±1	24.0±1

	Value (dBm)			
4 Tx slots	Maximum Target Value (dBm)	23.0±1	23.0±1	23.0±1

Table 4.8.1.3:WCDMA

WCDMA Band V			
Channel	Channel 4132	Channel 4182	Channel 4233
Maximum Target Value (dBm)	21.0±1	21.0±1	21.0±1
WCDMA Band II			
Channel	Channel 9262	Channel 9400	Channel 9538
Maximum Target Value (dBm)	21.0±1	21.0±1	21.0±1

Table 4.8.1.4: HSDPA(QPSK)

WCDMA Band V				
Channel		4132	4182	4233
1	Maximum Target Value (dBm)	21.0±1	21.0±1	21.0±1
2	Maximum Target Value (dBm)	21.0±1	21.0±1	21.0±1
3	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1
4	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1
WCDMA Band II				
Channel		9262	9400	9538
1	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1
2	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1
3	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1
4	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1

Table 4.8.1.5: HSUPA（QPSK/16QAM）

WCDMA Band V				
Channel		4132	4182	4233
1	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1
2	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1
3	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1
4	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1
5	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1
WCDMA Band II				
Channel		9262	9400	9538
1	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1
2	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1
3	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1
4	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1
5	Maximum Target Value (dBm)	19.0±1	19.0±1	19.0±1

Table 4.8.1.6: WiFi

WiFi 802.11b			
Channel	Channel 1	Channel 6	Channel 11
Maximum Target Value (dBm)	17.0±1	17.0±1	17.0±1
WiFi 802.11g			
Channel	Channel 1	Channel 6	Channel 11
Maximum Target Value (dBm)	15.0±1	15.0±1	15.0±1
WiFi 802.11n			
Channel	Channel 1	Channel 6	Channel 11
Maximum Target Value (dBm)	15.0±1	15.0±1	15.0±1

Table 4.8.1.7: Bluetooth

Bluetooth				
Channel		Channel 0	Channel 39	Channel 78
GFSK	Maximum Target Value (dBm)	7.0±2	7.0±2	7.0±2
π/4 DQPSK	Maximum Target Value (dBm)	8.0±1	8.0±1	8.0±1
8DPSK	Maximum Target Value (dBm)	8.0±1	8.0±1	8.0±1

4.8.2 Power Measurement result

Table 4.8.2.1: The conducted power measurement results for GSM850/1900

Frequency	Conducted Power (dBm)		
GSM835	Channel 251(848.8MHz)	Channel 190(836.6MHz)	Channel 128(824.2MHz)
	31.1	31.0	30.8
GSM1900	Channel 810(1909.8MHz)	Channel 661(1880MHz)	Channel 512(1850.2MHz)
	28.7	28.8	**29.0**

Table 4.8.2.2: The conducted power measurement results for GPRS/E-GPRS

GSM 835 MHz							
GPRS (GMSK)	**251**	**190**	**128**	**Calculation**	**251**	**190**	**128**
1Txslot	31.1	31.0	30.8	-9.03dB	22.07	21.97	21.77
2Txslots	**29.0**	**28.8**	**28.6**	-6.02dB	**22.98**	**22.78**	**22.58**
3Txslots	26.6	26.5	26.3	-4.26dB	22.34	22.24	22.04
4Txslots	24.4	24.3	24.1	-3.01dB	21.39	21.29	21.09

E-GPRS (GMSK)	251	190	128	Calculation	251	190	128
1Txslot	31.1	31.0	30.8	-9.03dB	22.07	21.97	21.77
2Txslots	**29.0**	**28.9**	**28.6**	-6.02dB	**22.98**	**22.88**	**22.58**
3Txslots	26.6	26.5	26.3	-4.26dB	22.34	22.24	22.04
4Txslots	24.4	24.3	24.1	-3.01dB	21.39	21.29	21.09
E-GPRS (8PSK)	**251**	**190**	**128**	**Calculation**	**251**	**190**	**128**
1Txslot	28.4	28.3	28.3	-9.03dB	19.37	19.27	19.27
2Txslots	**26.4**	**26.3**	**26.2**	-6.02dB	**20.38**	**20.28**	**20.18**
3Txslots	24.3	24.2	24.2	-4.26dB	20.04	19.94	19.94
4Txslots	22.9	22.8	22.7	-3.01dB	19.89	19.79	19.69
GSM 1900 MHz							
GPRS (GMSK)	**810**	**661**	**512**	**Calculation**	**810**	**661**	**512**
1Txslot	28.8	29.0	29.2	-9.03dB	19.77	19.97	20.17
2Txslots	**26.5**	**26.7**	**26.8**	-6.02dB	**20.48**	**20.68**	**20.78**
3Txslots	24.3	24.6	24.7	-4.26dB	20.04	20.34	20.44
4Txslots	22.3	22.5	22.6	-3.01dB	19.29	19.49	19.59
E-GPRS (GMSK)	**810**	**661**	**512**	**Calculation**	**810**	**661**	**512**
1Txslot	28.7	29.0	29.1	-9.03dB	19.67	19.97	20.07
2Txslots	**26.5**	**26.7**	**26.8**	-6.02dB	**20.48**	**20.68**	**20.78**
3Txslots	24.3	24.5	24.6	-4.26dB	20.04	20.24	20.34
4Txslots	22.3	22.5	22.6	-3.01dB	19.29	19.49	19.59
E-GPRS (8PSK)	**810**	**661**	**512**	**Calculation**	**810**	**661**	**512**
1Txslot	26.6	26.5	26.7	-9.03dB	17.57	17.47	17.67
2Txslots	**25.3**	**25.4**	**25.6**	-6.02dB	**19.28**	**19.38**	**19.58**
3Txslots	23.3	23.3	23.4	-4.26dB	19.04	19.04	19.14
4Txslots	22.1	22.2	22.2	-3.01dB	19.09	19.19	19.19

NOTES:

1) Division Factors

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

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

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

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

4TX-slots = 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 GPRS/E-GPRS 2Timeslots for GSM850 and GSM1900.

Table 4.8.2.3: The conducted power for WCDMA

WCDMA Band V Result (dBm)				
Mode	ARFCN	Channel 4132 (826.4MHz)	Channel 4182 (836.4MHz)	Channel 4233 (846.6MHz)
WCDMA	RMC	**21.61**	21.53	21.38
HSDPA (QPSK)	1	21.38	21.43	21.13
	2	21.01	21.01	20.79
	3	19.32	19.32	19.19
	4	19.18	19.05	19.05
HSUPA (QPSK)	1	19.50	19.52	19.37
	2	19.51	19.56	19.27
	3	19.43	19.49	19.20
	4	19.51	19.53	19.35
	5	19.53	19.58	19.27
HSUPA (16QAM)	1	19.54	19.44	19.27
	2	19.45	19.45	19.30
	3	19.41	19.41	19.11
	4	19.42	19.37	19.24
	5	19.39	19.38	19.19
WCDMA Band II Result (dBm)				
Mode	ARFCN	Channel 9262 (1852.4MHz)	Channel 9400 (1880MHz)	Channel 9538 (1907.6MHz)
WCDMA	RMC	**21.02**	20.94	20.73
HSDPA (QPSK)	1	19.45	19.76	19.32
	2	19.28	19.58	19.26
	3	18.95	19.22	18.89
	4	18.71	19.03	18.79
HSUPA (QPSK)	1	18.72	18.94	18.64
	2	18.62	18.96	18.59
	3	18.68	18.91	18.59
	4	18.58	18.95	18.80
	5	18.73	19.05	18.66
HSUPA (16QAM)	1	18.63	18.77	18.57
	2	18.57	18.89	18.53
	3	18.66	18.91	18.49
	4	18.62	18.92	18.47
	5	18.59	18.89	18.51

Note: HSDPA/HSUPA body SAR are not required, because maximum average output power of each RF channel with HSDPA/HSUPA active is not 1/4 dB higher than that measured without HSDPA/HSUPA and the maximum SAR for WCDMA850 and WCDMA1900 are not above 75% of the SAR limit.

Table 4.8.2.4: The conducted power for Bluetooth

GFSK			
Channel	Ch0 (2402 MHz)	Ch39 (2441MHz)	CH78 (2480MHz)
Conducted Output Power (dBm)	6.22	6.29	8.01
π/4 DQPSK			
Channel	Ch0 (2402 MHz)	Ch39 (2441MHz)	CH78 (2480MHz)
Conducted Output Power (dBm)	7.68	7.65	**8.09**
8DPSK			
Channel	Ch0 (2402 MHz)	Ch39 (2441MHz)	CH78 (2480MHz)
Conducted Output Power (dBm)	8.07	8.06	8.06

Note:BT standalone SAR are not required, because maximum average output power is less than 10mW.

When the standalone SAR test exclusion is applied to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to the following to determine simultaneous transmission SAR test exclusion:

(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] • [√f(GHz)/x] W/kg for test separation distances ≤ 50 mm;
where x = 7.5 for 1-g SAR, and x = 18.75 for 10-g SAR.

SAR head value of BT is 0.064W/Kg. SAR body value of BT is 0.032W/Kg.

Table 4.8.2.5: The average conducted power for Wi-Fi

Wi-Fi Results (dBm)								
802.11b（dBm）								
Channel\data rate	1Mbps		2Mbps		5.5Mbps		11Mbps	
1	17.25		17.17		17.56		17.43	
6	17.43		17.57		17.58		17.64	
11	17.54		17.52		17.63		17.62	
802.11g（dBm）								
Channel\data rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
1	14.75	14.58	14.56	14.53	14.47	14.27	14.52	14.14
6	14.84	15.12	14.90	14.88	14.91	14.84	14.91	14.92
11	14.88	15.11	14.69	14.50	14.56	14.47	14.45	14.55
20MHz 802.11n（dBm）								
Channel\data rate	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
1	14.60	14.71	14.43	14.54	14.49	14.30	14.33	14.48
6	14.94	14.90	14.95	14.96	14.99	14.85	14.82	14.70
11	14.43	14.52	14.60	14.65	14.78	14.59	14.72	14.74

Note:SAR is not required for 802.11g/n channels if the output power is less than 0.25dB higher than that measured on the corresponding 802.11b 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 “802.11b, 11Mbps, channel 6”.

4.9 Test Data

4.9.1 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Ilium X100 are as follows (with expanded uncertainty 21.7%)

Table 4.9.1.1: Max. Reported SAR (1g)

Band	Position/Distance	Reported SAR 1g(W/Kg)
GSM 850	Head/0mm	0.652
	Body/10mm	0.985
GSM 1900	Head/0mm	0.732
	Body/10mm	0.988
WCDMA850	Head/0mm	0.710
	Body/10mm	0.931
WCDMA 1900	Head/0mm	0.966
	Body/10mm	1.026
Wi-Fi	Head/0mm	0.198
	Body/10mm	0.121

The SAR values found for the Mobile Phone are below the maximum recommended levels of 1.6 W/Kg as averaged over any 1g tissue according to the ANSI C95.1-2006.

The maximum reported SAR value is obtained at the case of **(Table 4.9.1.1)**, and the values are: **1.026 W/kg (1g)**.

Table 4.9.1.2: SAR Measurement Variability for Head Value (1g)

Frequency		Mode	Side	Test Position	Original SAR (W/kg)	First Repeated SAR (W/kg)	Reported SAR(1g) (W/kg)	The Ratio
MHz	Ch.							
1852.4	9262	WCDMA Band II	Right	Touch	0.820	0.823	0.897	1.01
1907.6	9538	WCDMA Band II	Right	Touch	0.840	0.840	0.966	1.00
1880	9400	WCDMA Band II	Right	Touch	0.800	0.794	0.888	1.01

Table 4.9.1.3: SAR Measurement Variability for Body Value (1g)

Frequency		Mode	Test Position	Original SAR (W/kg)	First Repeated SAR (W/kg)	Reported SAR(1g)(W/kg)	The Ratio
MHz	Ch.						
1852.4	9262	WCDMA Band II	Ground	0.909	0.898	0.991	1.01
1907.6	9538	WCDMA Band II	Ground	0.889	0.883	1.022	1.02
1880	9400	WCDMA Band II	Ground	0.922	0.924	1.026	1.01

NOTE:

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2)

through 4) do not apply.

2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.

3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

The sample has three antennas. One is main antenna for GSM/WCDMA, and the other two is for WiFi/BT and GPS. So simultaneous transmission is GSM/WCDMA and WiFi/BT.

Table 4.9.1.4: Simultaneous SAR (1g)

Simultaneous Transmission SAR(W/Kg)									
Test Position			**GSM 850**	**GSM 1900**	**WCDMA V**	**WCDMA II**	**WIFI**	**BT note**	**SUM**
Head	Left	Cheek	0.603	0.514	0.492	**0.786**	**0.198**	0.064	0.984
		Tilt 15°	0.442	0.465	0.350	**0.668**	**0.093**	0.064	0.761
	Right	Cheek	0.652	0.732	0.710	**0.966**	**0.158**	0.064	1.124
		Tilt 15°	0.566	0.391	0.350	**0.592**	**0.073**	0.064	0.665
Body	Ground Side		0.985	0.988	0.931	**1.026**	**0.100**	0.032	**1.126**
	Phantom Side		0.606	**0.726**	0.495	0.687	**0.057**	0.032	0.783
	Left Side		**0.636**	0.156	0.435	0.277	0.024	**0.032**	0.668
	Right Side		**0.600**	0.339	0.485	0.432	**0.086**	0.032	0.686
	Top Side		N/A	N/A	N/A	N/A	0.013	**0.032**	N/A
	Bottom Side		0.126	0.455	0.079	**0.560**	**0.121**	0.032	0.681

According to the above table, the maximum sum of reported SAR values for WCDMA Band II and Wi-Fi is **1.126 W/kg (1g)**. The detail for simultaneous transmission consideration is described in chapter 4.9.2.

4.9.2 Measured Results

Table 4.9.2.1: SAR Values(GSM 835 MHz Band - Head)

Frequency		Side	Test Position	Maximum allowed Power (dBm)	Measured average power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.								
Original									
848.8	251	Left	Touch	32.0	31.1	1.23	0.490	0.603	-0.11
848.8	251	Left	Tilt	32.0	31.1	1.23	0.359	0.442	0.03
848.8	251	Right	Touch	32.0	31.1	1.23	0.514	0.632	-0.15
848.8	251	Right	Tilt	32.0	31.1	1.23	0.460	0.566	-0.11
836.6	190	Right	Touch	32.0	31.0	1.26	0.501	0.631	-0.18
824.2	128	Right	Touch	32.0	30.8	1.32	0.494	0.652	-0.14

Table 4.9.2.2: SAR Values(GSM 835 MHz Band - Body)

Frequency		Mode (number of timeslots)	Test Position	Maximum allowed Power (dBm)	Measured average power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.								
Original									
848.8	251	GPRS (2)	Ground	30.0	29.0	1.26	0.700	0.882	-0.06
848.8	251	GPRS (2)	Phantom	30.0	29.0	1.26	0.481	0.606	0.11
848.8	251	GPRS (2)	Left	30.0	29.0	1.26	0.505	0.636	0.01
848.8	251	GPRS (2)	Right	30.0	29.0	1.26	0.476	0.600	0.07
848.8	251	GPRS (2)	Bottom	30.0	29.0	1.26	0.100	0.126	-0.12
836.6	190	GPRS (2)	Ground	30.0	28.8	1.32	0.707	0.933	0.04
824.2	128	GPRS (2)	Ground	30.0	28.6	1.38	0.710	0.980	-0.13
848.8	251	E-GPRS（2）	Ground	30.0	29.0	1.26	0.706	0.890	-0.19
Add the other channel SAR test									
836.6	190	E-GPRS（2）	Ground	30.0	28.9	1.29	0.709	0.915	0.13
824.2	128	E-GPRS（2）	Ground	30.0	28.6	1.38	0.714	0.985	0.03

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 4.9.2.3: SAR Values(GSM 1900 MHz Band - Head)

Frequency		Side	Test Position	Maximum allowed Power (dBm)	Measured average power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.								
Original									
1850.2	512	Left	Touch	30.0	29.0	1.26	0.408	0.514	-0.13
1850.2	512	Left	Tilt	30.0	29.0	1.26	0.369	0.465	-0.04
1850.2	512	Right	Touch	30.0	29.0	1.26	0.550	0.693	-0.11
1850.2	512	Right	Tilt	30.0	29.0	1.26	0.310	0.391	-0.06
1909.8	810	Right	Touch	30.0	28.7	1.35	0.542	0.732	0.02
1880	661	Right	Touch	30.0	28.8	1.32	0.554	0.731	0.03

Table 4.9.2.4: SAR Values(GSM 1900 MHz Band - Body)

Frequency		Mode (number of timeslots)	Test Position	Maximum allowed Power (dBm)	Measured average power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.								
Original									
1850.2	512	GPRS (2)	Ground	28.0	26.8	1.32	0.705	0.931	0.05
1850.2	512	GPRS (2)	Phantom	28.0	26.8	1.32	0.550	0.726	-0.13
1850.2	512	GPRS (2)	Left	28.0	26.8	1.32	0.118	0.156	-0.15
1850.2	512	GPRS (2)	Right	28.0	26.8	1.32	0.257	0.339	-0.04
1850.2	512	GPRS (2)	Bottom	28.0	26.8	1.32	0.345	0.455	-0.03
1909.8	810	GPRS (2)	Ground	28.0	26.5	1.41	0.696	0.981	0.03
1880	661	GPRS (2)	Ground	28.0	26.7	1.35	0.717	0.968	0.03
1850.2	512	E-GPRS（2）	Ground	28.0	26.8	1.32	0.705	0.931	0.08
Add the other channel SAR test									
1909.8	810	E-GPRS（2）	Ground	28.0	26.5	1.41	0.701	0.988	-0.01
1880	661	E-GPRS（2）	Ground	28.0	26.7	1.35	0.720	0.972	-0.11

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 4.9.2.5: SAR Values(WCDMA850 MHz Band - Head)

Frequency		Side	Test Position	Maximum allowed Power (dBm)	Measured average power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.								
Original									
826.4	4132	Left	Touch	22.0	21.02	1.25	0.394	0.492	-0.14
826.4	4132	Left	Tilt	22.0	21.02	1.25	0.280	0.350	-0.17
826.4	4132	Right	Touch	22.0	21.02	1.25	0.433	0.541	-0.18
826.4	4132	Right	Tilt	22.0	21.02	1.25	0.280	0.350	-0.17
846.6	4233	Right	Touch	22.0	20.63	1.37	0.518	0.710	-0.14
836.4	4182	Right	Touch	22.0	20.94	1.28	0.454	0.581	-0.12

Table 4.9.2.6: SAR Values(WCDMA850 MHz Band - Body)

Frequency		Test Position	Maximum allowed Power (dBm)	Measured average power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.							
Original								
826.4	4132	Ground	22.0	21.02	1.25	0.744	0.930	0.07
826.4	4132	Phantom	22.0	21.02	1.25	0.396	0.495	-0.08
826.4	4132	Left	22.0	21.02	1.25	0.348	0.435	-0.06
826.4	4132	Right	22.0	21.02	1.25	0.388	0.485	-0.01
826.4	4132	Bottom	22.0	21.02	1.25	0.063	0.079	-0.01
846.6	4233	Ground	22.0	20.63	1.37	0.674	0.923	-0.01
836.4	4182	Ground	22.0	20.94	1.28	0.730	0.931	-0.09

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 4.9.2.7: SAR Values(WCDMA1900 MHz Band - Head)

Frequency		Side	Test Position	Maximum allowed Power (dBm)	Measured average power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.								
Original									
1852.4	9262	Left	Touch	22.0	21.61	1.09	0.721	0.786	0.16
1852.4	9262	Left	Tilt	22.0	21.61	1.09	0.613	0.668	0.04
1852.4	9262	Right	Touch	22.0	21.61	1.09	0.820	0.894	-0.14
1852.4	9262	Right	Tilt	22.0	21.61	1.09	0.543	0.592	-0.01
1907.6	9538	Right	Touch	22.0	21.38	1.15	0.840	0.966	0.06
1880	9400	Right	Touch	22.0	21.53	1.11	0.800	0.888	-0.17
First Repeated SAR test									
1852.4	9262	Right	Touch	22.0	21.61	1.09	0.823	0.897	0.14
1907.6	9538	Right	Touch	22.0	21.38	1.15	0.840	0.966	0.01
1880	9400	Right	Touch	22.0	21.53	1.11	0.794	0.881	-0.08

Table 4.9.2.8: SAR Values(WCDMA1900 MHz Band - Body)

Frequency		Test Position	Maximum allowed Power (dBm)	Measured average power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.							
Original								
1852.4	9262	Ground	22.0	21.61	1.09	0.909	0.991	-0.18
1852.4	9262	Phantom	22.0	21.61	1.09	0.630	0.687	-0.08
1852.4	9262	Left	22.0	21.61	1.09	0.254	0.277	0.02
1852.4	9262	Right	22.0	21.61	1.09	0.396	0.432	0.03
1852.4	9262	Bottom	22.0	21.61	1.09	0.514	0.560	-0.13
1907.6	9538	Ground	22.0	21.38	1.15	0.889	1.022	-0.11
1880	9400	Ground	22.0	21.53	1.11	0.922	1.023	-0.20
First Repeated SAR test								
1852.4	9262	Ground	22.0	21.61	1.09	0.898	0.979	-0.04
1907.6	9538	Ground	22.0	21.38	1.15	0.883	1.015	-0.06
1880	9400	Ground	22.0	21.53	1.11	0.924	1.026	-0.11

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 4.9.2.9: SAR Values(Wi-Fi 802.11b - Head)

Frequency		Side	Test Position	Maximum allowed Power (dBm)	Measured average power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.								
Original									
2437	6	Left	Touch	18.0	17.64	1.09	0.182	0.198	-0.18
2437	6	Left	Tilt	18.0	17.64	1.09	0.085	0.093	0.16
2437	6	Right	Touch	18.0	17.64	1.09	0.145	0.158	0.10
2437	6	Right	Tilt	18.0	17.64	1.09	0.067	0.073	-0.09

Table 4.9.2.10: SAR Values(Wi-Fi 802.11b - Body)

Frequency		Test Position	Maximum allowed Power (dBm)	Measured average power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.							
Original								
2437	6	Ground	18.0	17.64	1.09	0.092	0.100	-0.12
2437	6	Phantom	18.0	17.64	1.09	0.052	0.057	0.03
2437	6	Left	18.0	17.64	1.09	0.022	0.024	-0.15
2437	6	Right	18.0	17.64	1.09	0.079	0.086	-0.07
2437	6	Bottom	18.0	17.64	1.09	0.012	0.013	-0.13
2437	6	Top	18.0	17.64	1.09	0.111	0.121	0.09

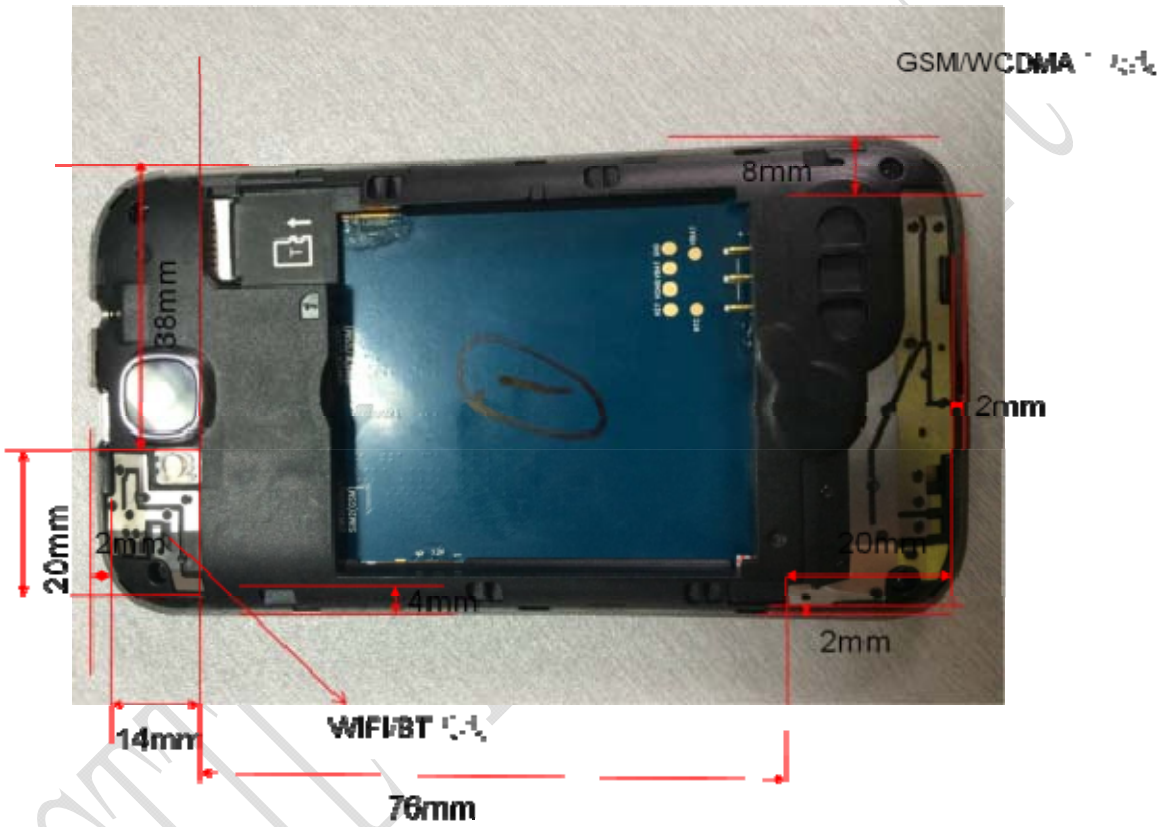
Note: The distance between the EUT and the phantom bottom is 10mm;

4.9.3 Simultaneous Transmission Consideration

4.9.3.1 Introduction

The following procedures adopted from "FCC SAR Considerations for Cell Phones with Multiple Transmitters" are applicable to handsets with built-in unlicensed transmitters such as 802.11 a/b/g and Bluetooth devices which may simultaneously transmit with the licensed transmitter.

4.9.3.2 Transmit Antenna Separation Distances



Picture 4.9.3.2.1 Antenna Locations

4.9.3.3 Standalone SAR Test Exclusion Considerations

Standalone 1-g head or bodySAR evaluation by measurement or numerical simulation is not required when thecorresponding SAR Exclusion Threshold condition, listed below, is satisfied.

The 1-g SAR test exclusion threshold for 100 MHz to 6 GHz at test separation distances≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

According to the KDB447498 appendix A, the SAR test exclusion threshold for 2450MHz at 5mm test separation distances is 10mW.

$$\frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} * \sqrt{\text{Frequency (GHz)}} \leqslant 3.0$$

Based on the above equation, Bluetooth SAR was not required:
Evaluation=1.22＜3.0

4.10 Measurement uncertainty

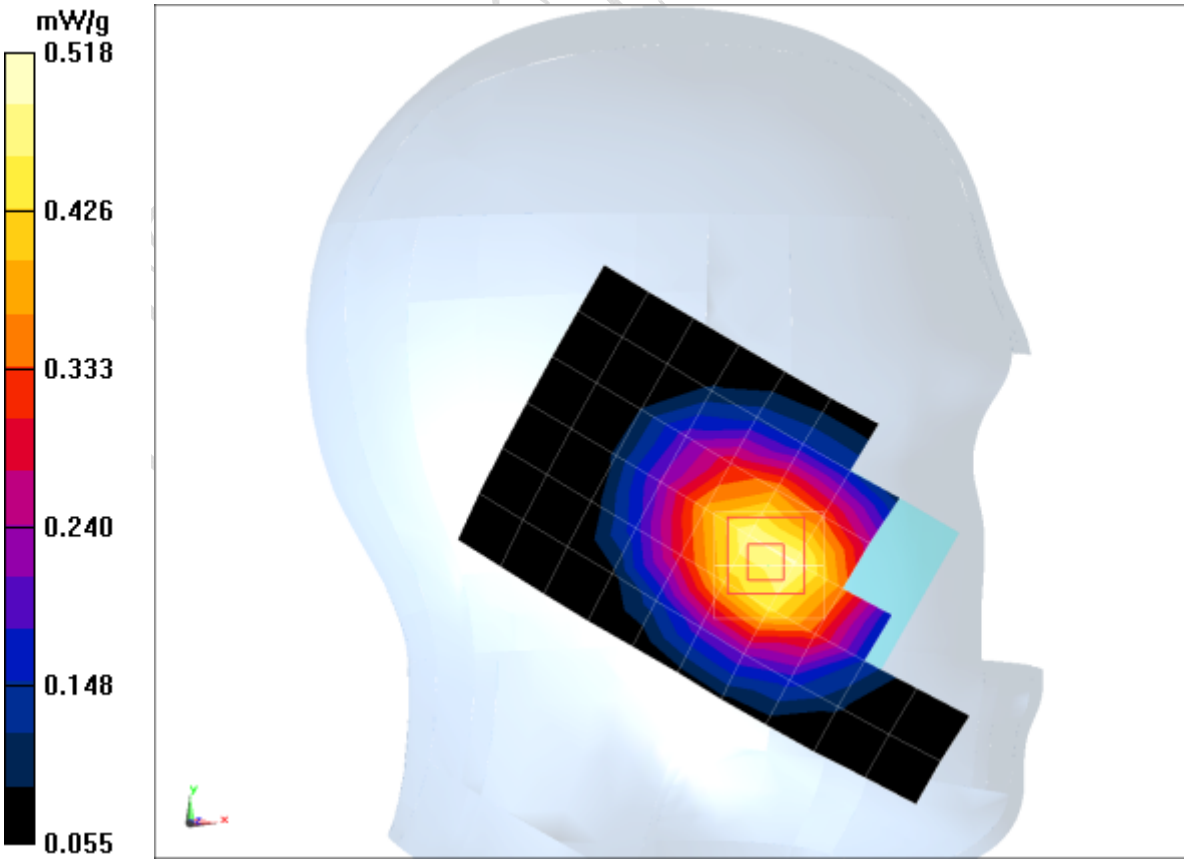
ERROR SOURCE	Uncertainty value (%)	Probability distribution	Divisor	C_i (1g)	Standard Uncertainty (%)
Measurement equipment					
Probe calibration	5.9	Normal	1	1	5.9
Probe axial isotropy	4.7	Rectangular	$\sqrt{3}$	0.7	1.9
Probe hemispherical isotropy	9.6	Rectangular	$\sqrt{3}$	0.7	3.9
Probe linearity	4.7	Rectangular	$\sqrt{3}$	1	2.7
Detection limits	0.25	Rectangular	$\sqrt{3}$	1	0.6
Boundary effect	0.8	Rectangular	$\sqrt{3}$	1	0.6
Measurement device	0.3	Normal	1	1	0.3
Response time	0.0	Normal	1	1	0
Noise	0.0	Normal	1	1	0
Integration time	1.7	Normal	1	1	2.6
Mechanical constraints					
Scanning system	1.5	Rectangular	$\sqrt{3}$	1	0.2
Positioning of the probe	2.9	Normal	1	1	2.9
Phantom shell	4.0	Rectangular	$\sqrt{3}$	1	2.3
Positioning of the dipole	2.0	Normal	1	1	2.0
Positioning of the phone	2.9	Normal	1	1	2.9
Device holder disturbance	3.6	Normal	1	1	3.6
Physical parameters					
Liquid conductivity (deviation from target)	5.0	Rectangular	$\sqrt{3}$	0.5	1.4
Liquid conductivity (measurement error)	4.3	Rectangular	$\sqrt{3}$	0.5	1.2
Liquid permittivity (deviation from target)	5.0	Rectangular	$\sqrt{3}$	0.5	1.4
Liquid permittivity (measurement error)	4.3	Rectangular	$\sqrt{3}$	0.5	1.2
Drifts in output power of the phone, probe, temperature and humidity	5.0	Rectangular	$\sqrt{3}$	1	2.9
Environment disturbance	3.0	Rectangular	$\sqrt{3}$	1	1.7
Post-processing					
SAR interpolation and extrapolation	0.6	Rectangular	$\sqrt{3}$	1	0.6
Maximum SAR evaluation	1.0	Rectangular	$\sqrt{3}$		0.6
Combined standard uncertainty	$u_c = \sqrt{\sum_{i=1}^{m} c_i^2 \cdot u_i^2}$ =11.08%				

Expanded uncertainty （confidence interval of 95%）	Normal $u_e = 1.96 u_c$=21.7%

Annex A Graphical Measurement Results

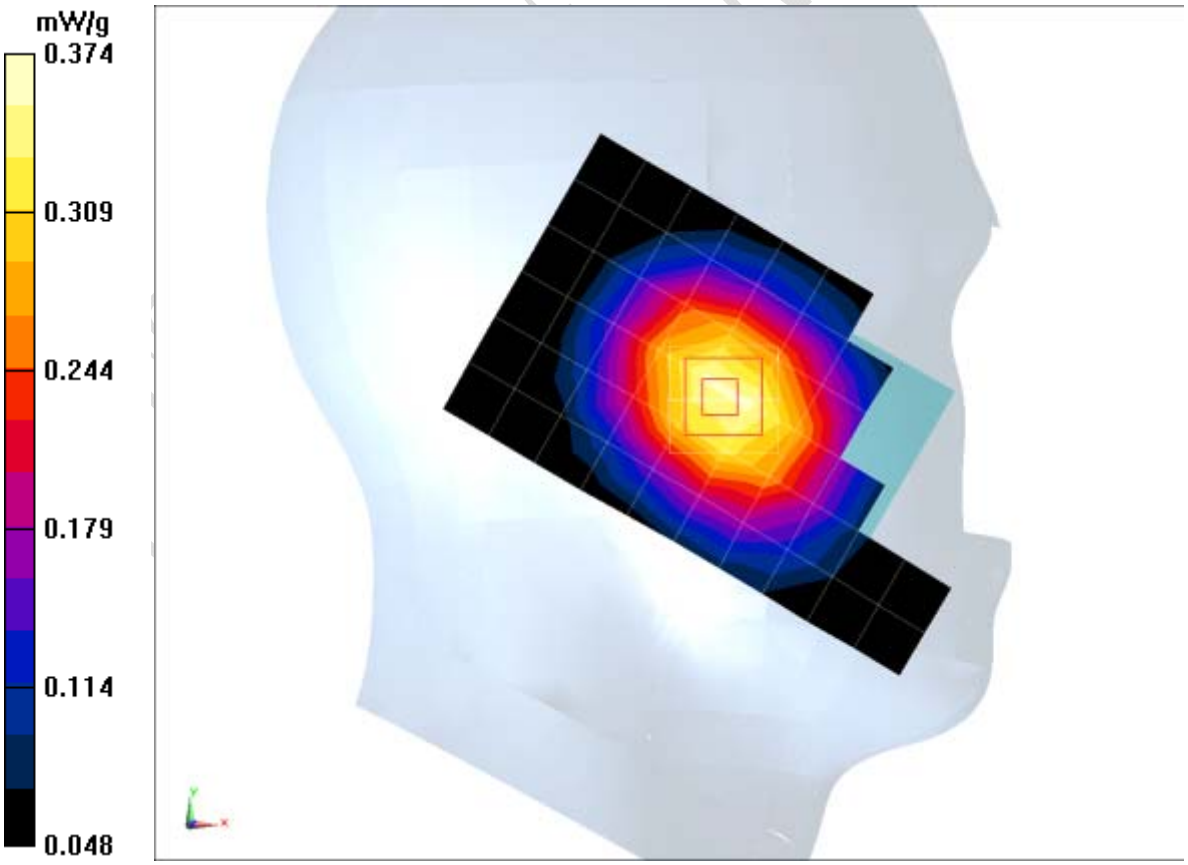
GSM850 Left Cheek High

Date/Time: 03/10/2015
Electronics: DAE4 Sn1329
Medium: Head 850MHz
Medium parameters used: f = 849 MHz; σ = 0.929 mho/m;εr = 42.198; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 850MHz; Frequency: 848.8 MHz; Duty Cycle: 1:8.3
Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)
High Cheek Left GSM850MHz/Area Scan (11x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.492 mW/g
High Cheek Left GSM850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.923 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.6000 mW/g
SAR(1 g) = 0.490 mW/g; SAR(10 g) = 0.363 mW/g
Maximum value of SAR (measured) = 0.518 mW/g



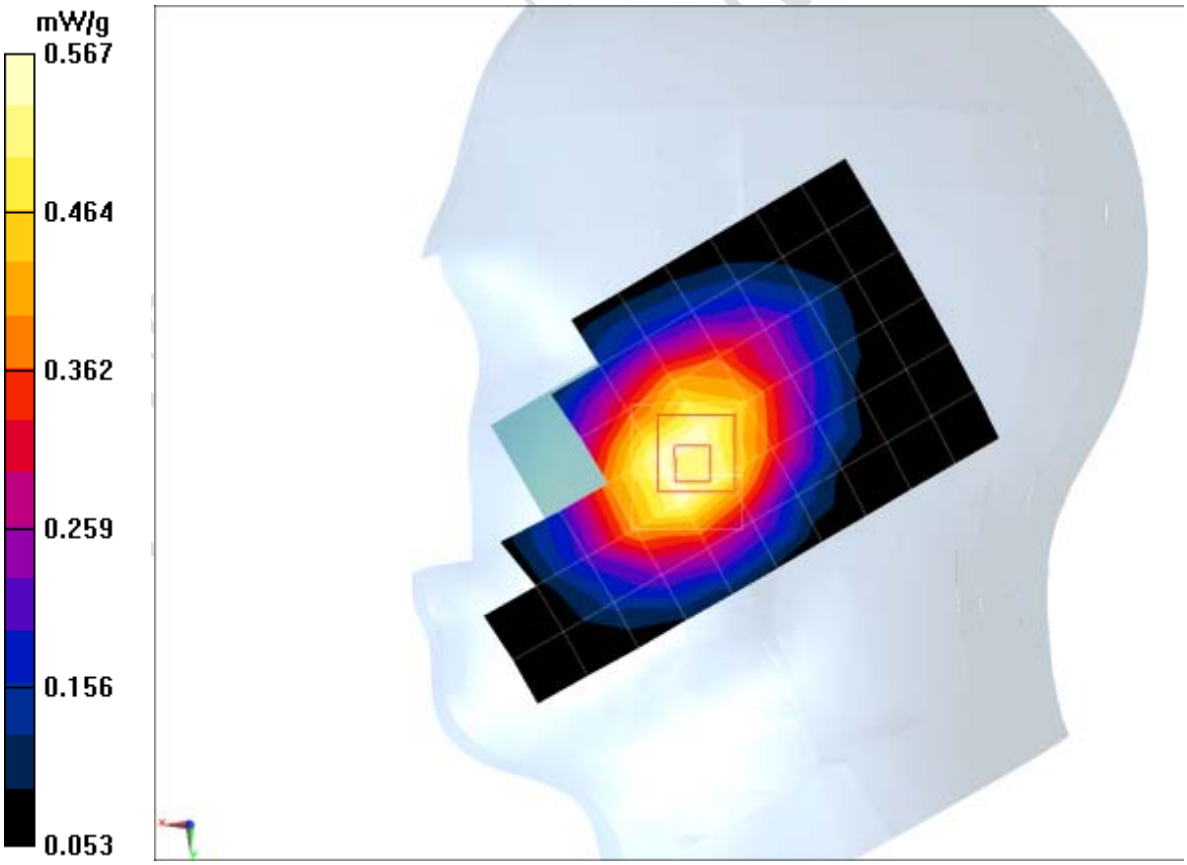
GSM850 Left Tilt High

Date/Time: 03/10/2015
Electronics: DAE4 Sn1329
Medium: Head 850MHz
Medium parameters used: f = 849 MHz; σ = 0.929 mho/m;εr = 42.198; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 850MHz; Frequency: 848.8 MHz; Duty Cycle: 1:8.3
Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)
High Tilt Left GSM850MHz/Area Scan (11x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.360 mW/g
High Tilt Left GSM850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.605 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.4360 mW/g
SAR(1 g) = 0.359 mW/g; SAR(10 g) = 0.271 mW/g
Maximum value of SAR (measured) = 0.374 mW/g



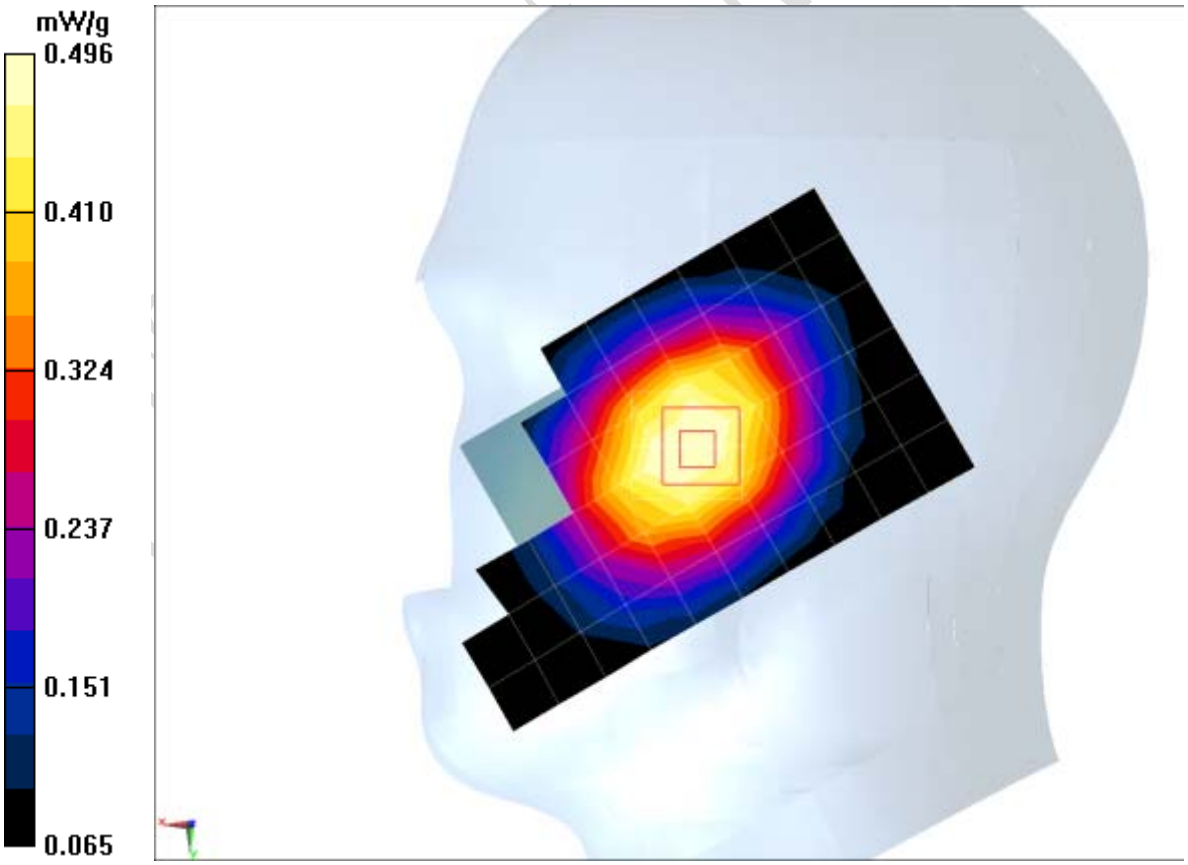
GSM850 Right Cheek High

Date/Time: 03/10/2015
Electronics: DAE4 Sn1329
Medium: Head 850MHz
Medium parameters used: f = 849 MHz; σ = 0.929 mho/m;εr = 42.198; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 850MHz; Frequency: 848.8 MHz; Duty Cycle: 1:8.3
Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)
High Cheek Right GSM850MHz/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.546 mW/g
High Cheek Right GSM850MHz/Zoom Scan (7x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.388 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.6440 mW/g
SAR(1 g) = 0.514 mW/g; SAR(10 g) = 0.381 mW/g
Maximum value of SAR (measured) = 0.567 mW/g



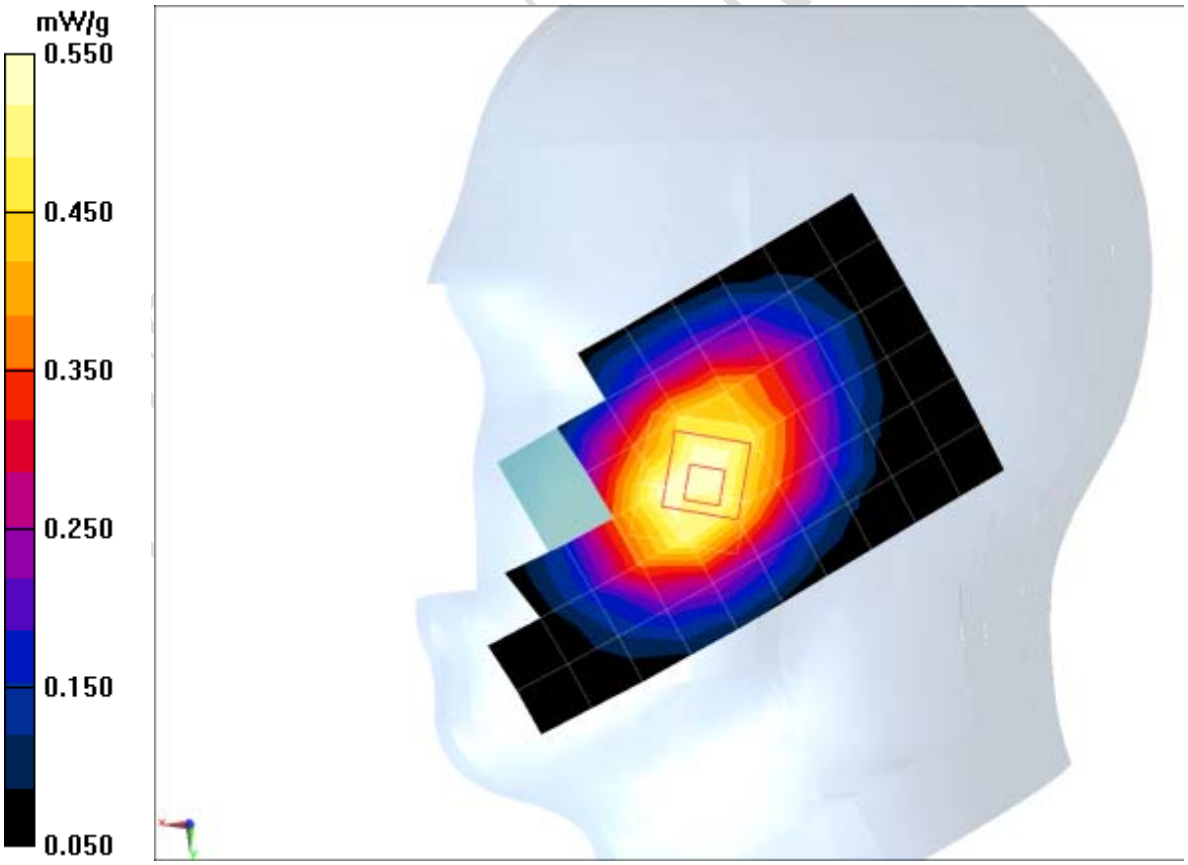
GSM850 Right Tilt High

Date/Time: 03/10/2015
Electronics: DAE4 Sn1329
Medium: Head 850MHz
Medium parameters used: f = 849 MHz; σ = 0.929 mho/m;εr = 42.198; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 850MHz; Frequency: 848.8 MHz; Duty Cycle: 1:8.3
Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)
High Tilt Right GSM850MHz/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.519 mW/g
High Tilt Right GSM850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.962 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.5410 mW/g
SAR(1 g) = 0.460 mW/g; SAR(10 g) = 0.356 mW/g
Maximum value of SAR (measured) = 0.496 mW/g



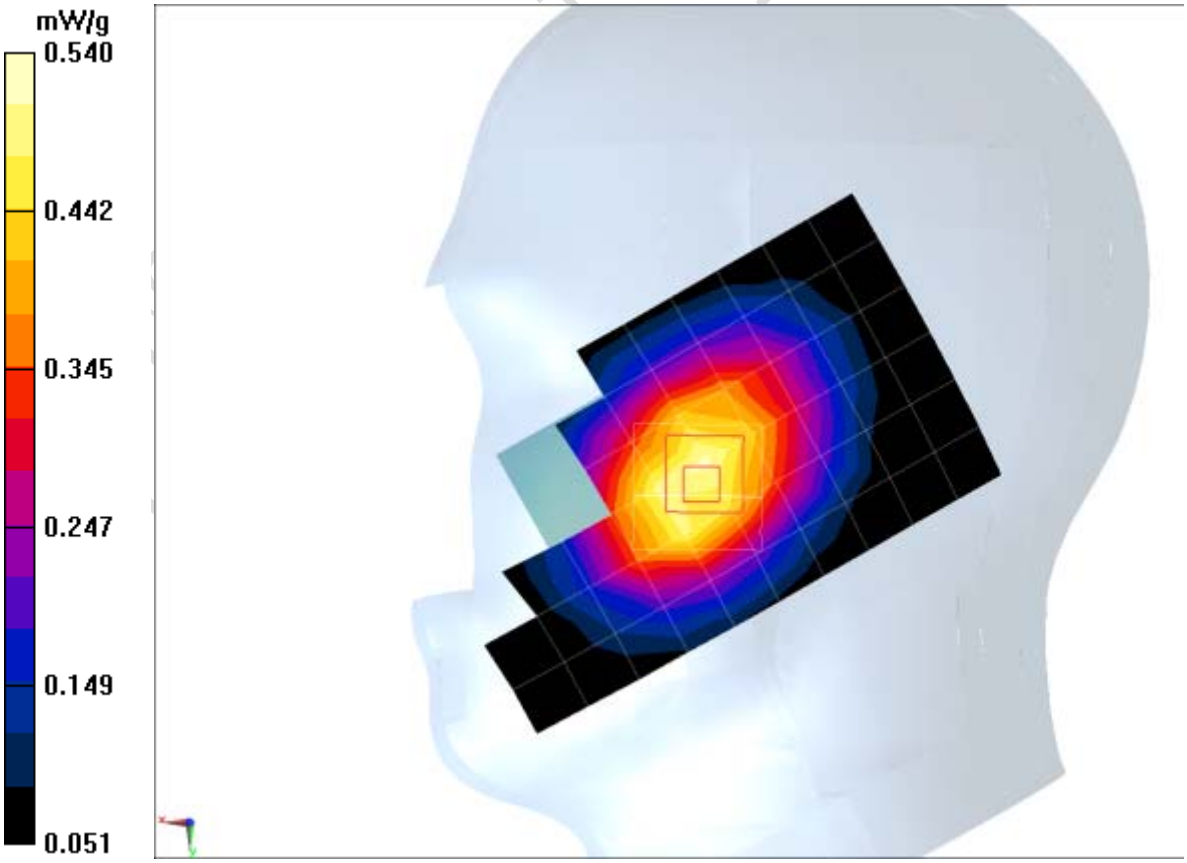
GSM850 Right Cheek Middle

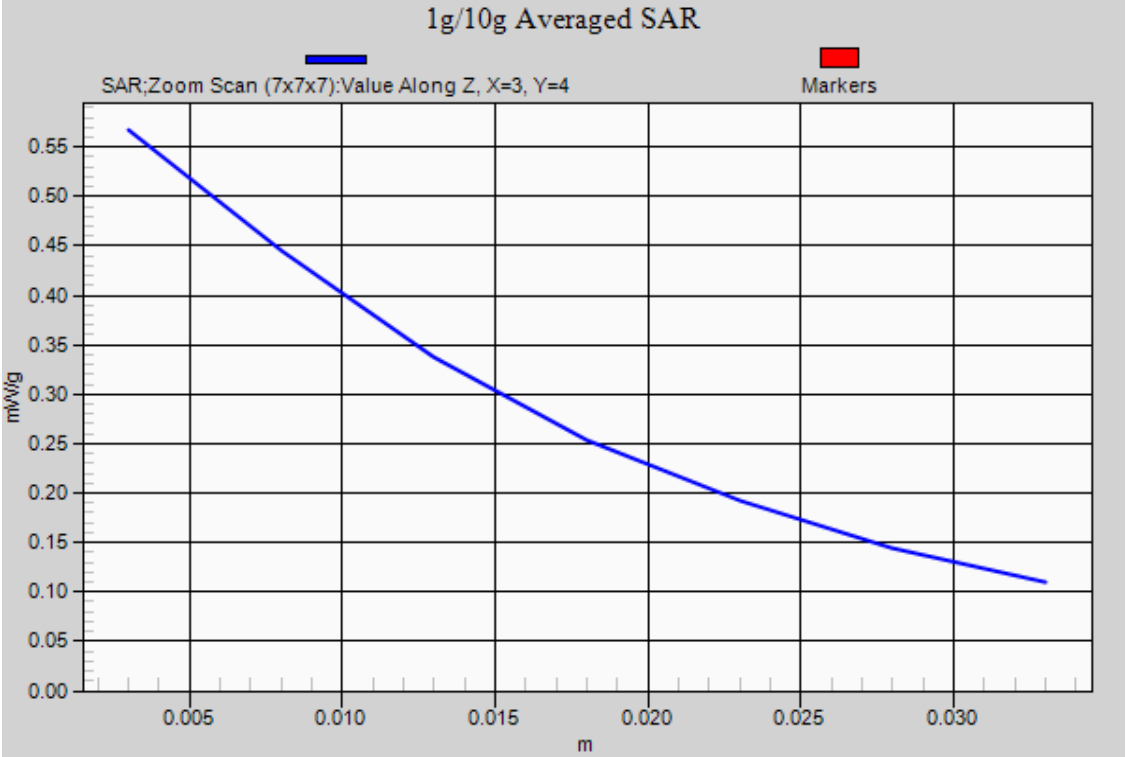
Date/Time: 03/10/2015
Electronics: DAE4 Sn1329
Medium: Head 850MHz
Medium parameters used: f = 837 MHz; σ = 0.918 mho/m;εr = 42.326; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 850MHz; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)
Middle Cheek Right GSM850MHz/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.570 mW/g
Middle Cheek Right GSM850MHz/Zoom Scan (7x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.587 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.6250 mW/g
SAR(1 g) = 0.501 mW/g; SAR(10 g) = 0.373 mW/g
Maximum value of SAR (measured) = 0.550 mW/g



GSM850 Right Cheek Low

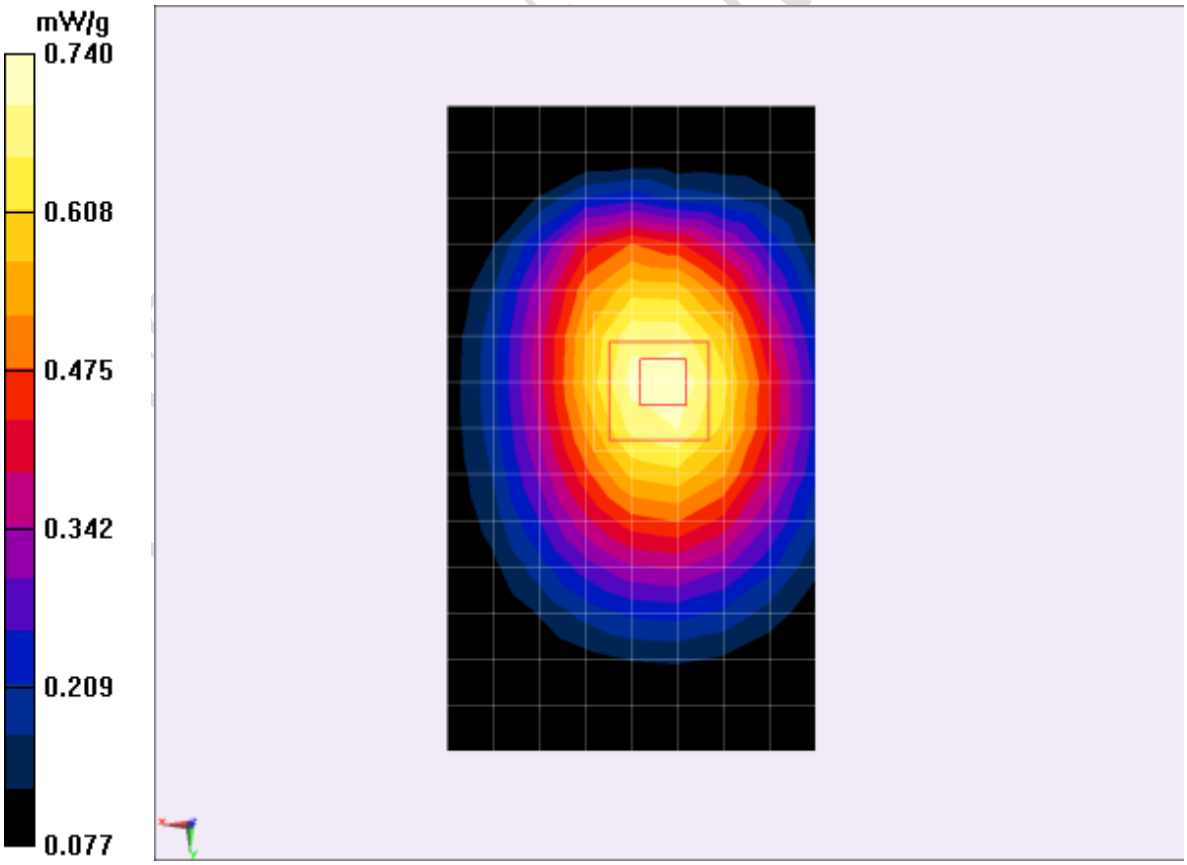
Date/Time: 03/10/2015
Electronics: DAE4 Sn1329
Medium: Head 850MHz
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.907 mho/m;εr = 42.465; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 850MHz; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)
Low Cheek Right GSM850MHz/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.520 mW/g
Low Cheek Right GSM850MHz/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.157 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.6170 mW/g
SAR(1 g) = 0.494 mW/g; SAR(10 g) = 0.367 mW/g
Maximum value of SAR (measured) = 0.540 mW/g




1g/10g Averaged SAR
SAR;Zoom Scan (7x7x7):Value Along Z, X=3, Y=4
Markers
mW/g
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0.005
0.010
0.015
0.020
0.025
0.030
m

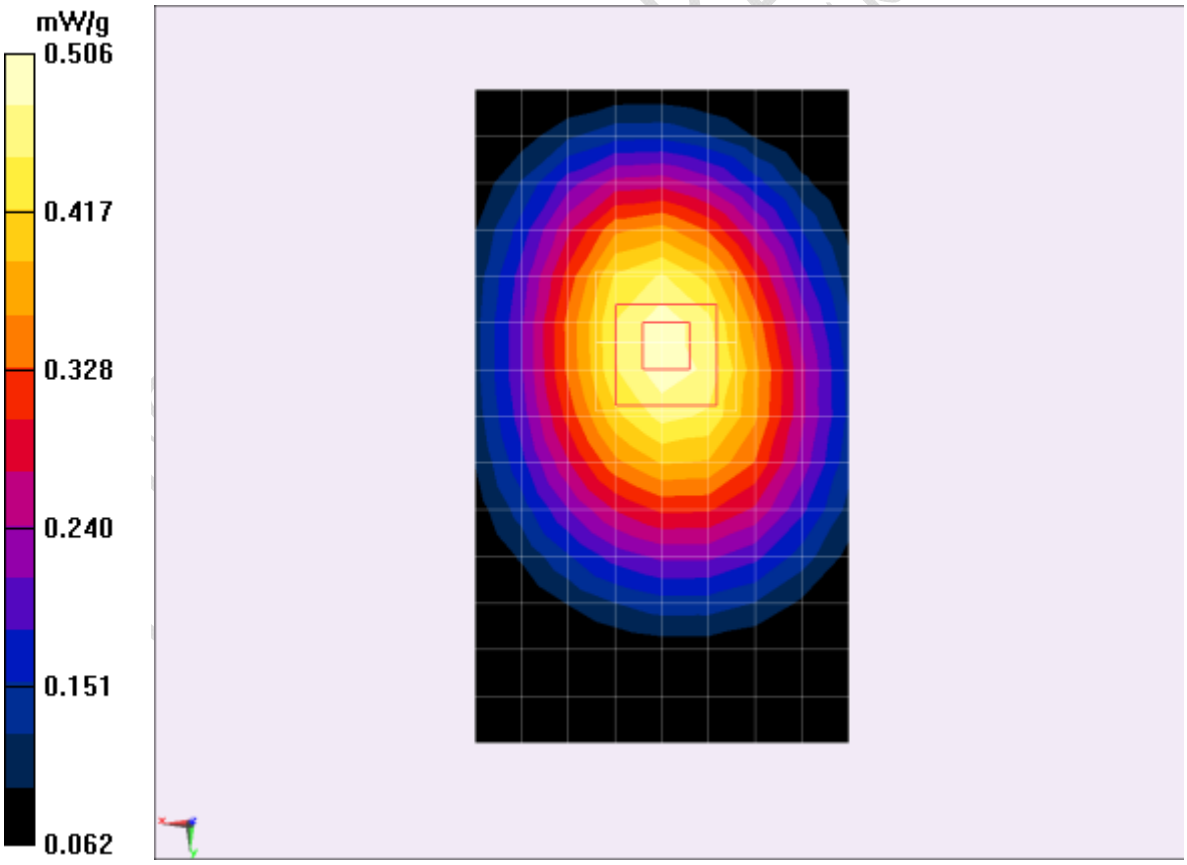
GSM850 Body Toward Ground GPRS 2TS High

Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used: f = 849 MHz; σ = 0.981 mho/m;εr = 53.825; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 835MHz GPRS 2TS; Frequency: 848.8 MHz; Duty Cycle: 1:4.5
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
High Toward Ground GPRS 2TS 850MHz/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.733 mW/g
High Toward Ground GPRS 2TS 850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.620 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.8950 mW/g
SAR(1 g) = 0.700 mW/g; SAR(10 g) = 0.515 mW/g
Maximum value of SAR (measured) = 0.740 mW/g



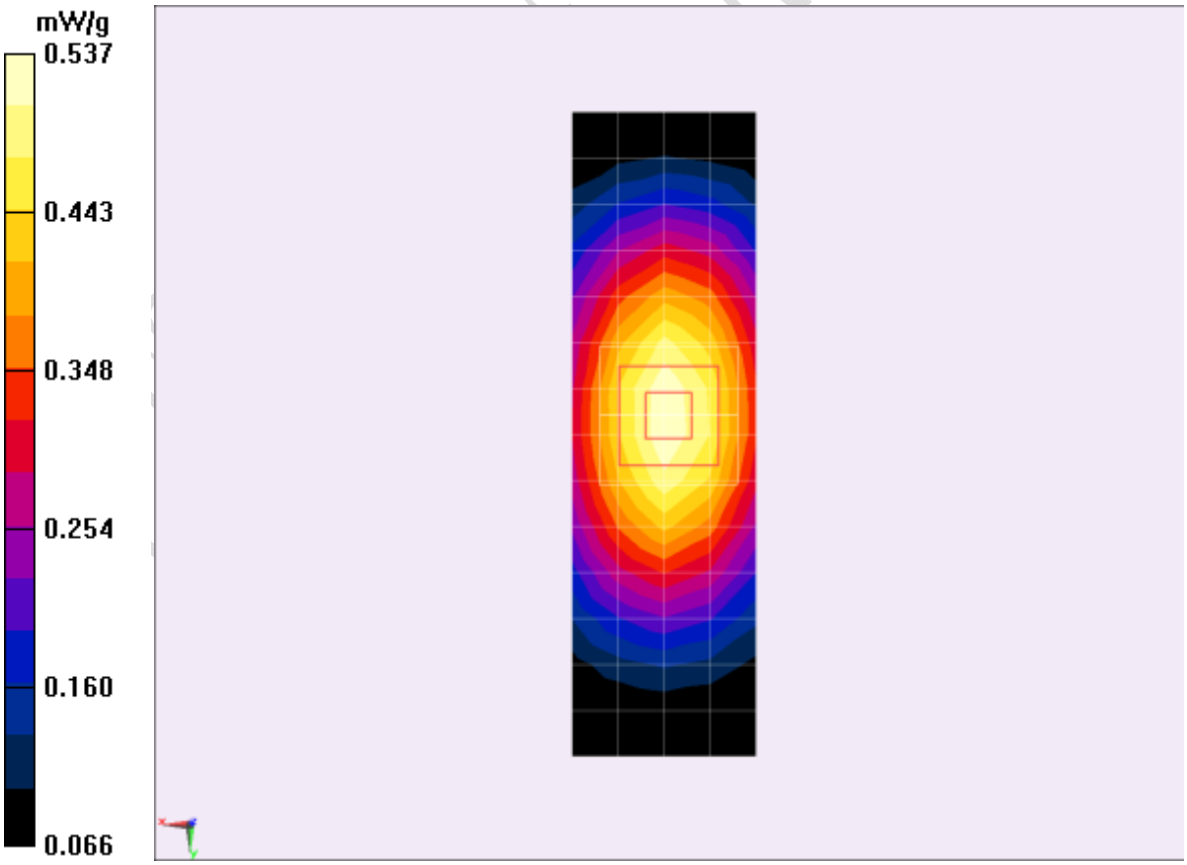
GSM850 Body Toward Phantom GPRS 2TS High

Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used: f = 849 MHz; σ = 0.981 mho/m;εr = 53.825; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 835MHz GPRS 2TS; Frequency: 848.8 MHz; Duty Cycle: 1:4.5
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
High Toward Phantom GPRS 2TS 850MHz/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.497 mW/g
High Toward Phantom GPRS 2TS 850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.607 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.6060 mW/g
SAR(1 g) = 0.481 mW/g; SAR(10 g) = 0.359 mW/g
Maximum value of SAR (measured) = 0.506 mW/g



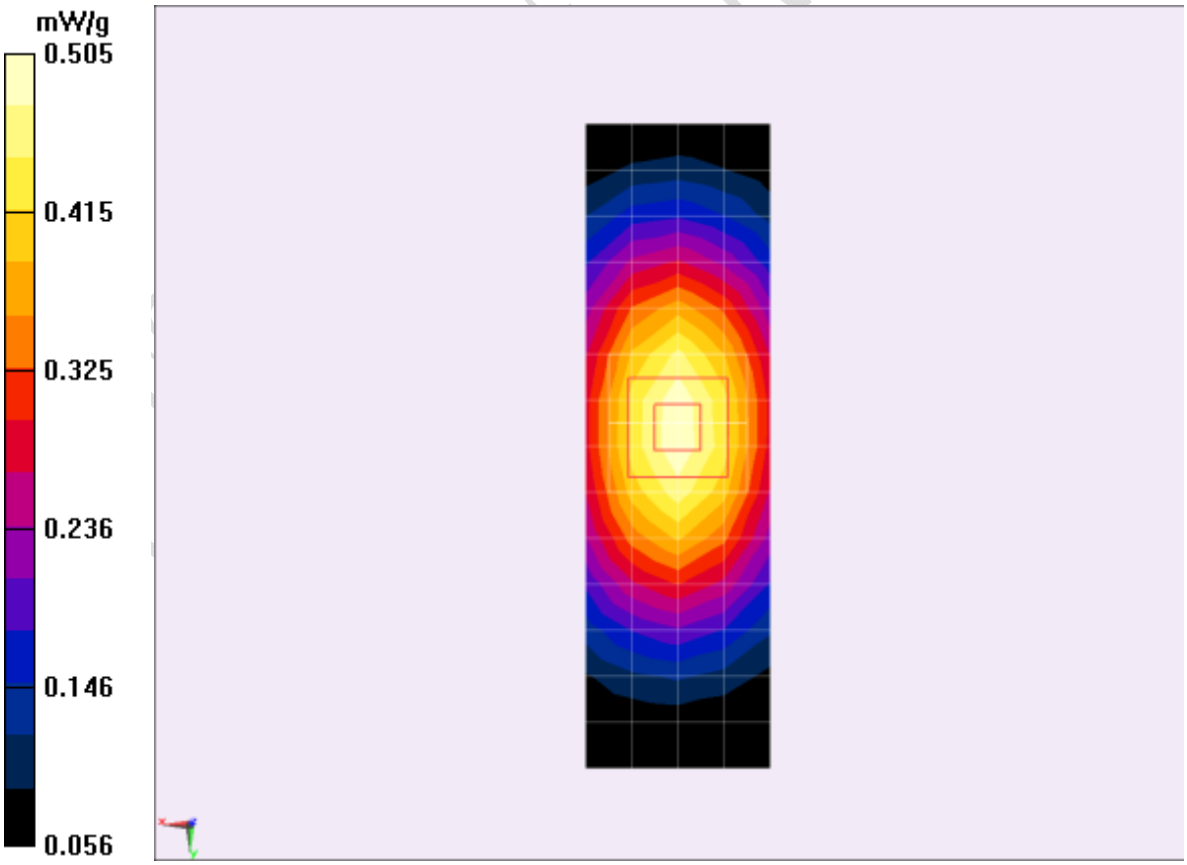
GSM850 Body left GPRS 2TS High

Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used: f = 849 MHz; σ = 0.981 mho/m;εr = 53.825; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 835MHz GPRS 2TS; Frequency: 848.8 MHz; Duty Cycle: 1:4.5
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
High Left GPRS 2TS 850MHz/Area Scan (5x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.535 mW/g
High Left GPRS 2TS 850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.468 V/m; Power Drift = 0.0098 dB
Peak SAR (extrapolated) = 0.6920 mW/g
SAR(1 g) = 0.505 mW/g; SAR(10 g) = 0.353 mW/g
Maximum value of SAR (measured) = 0.537 mW/g



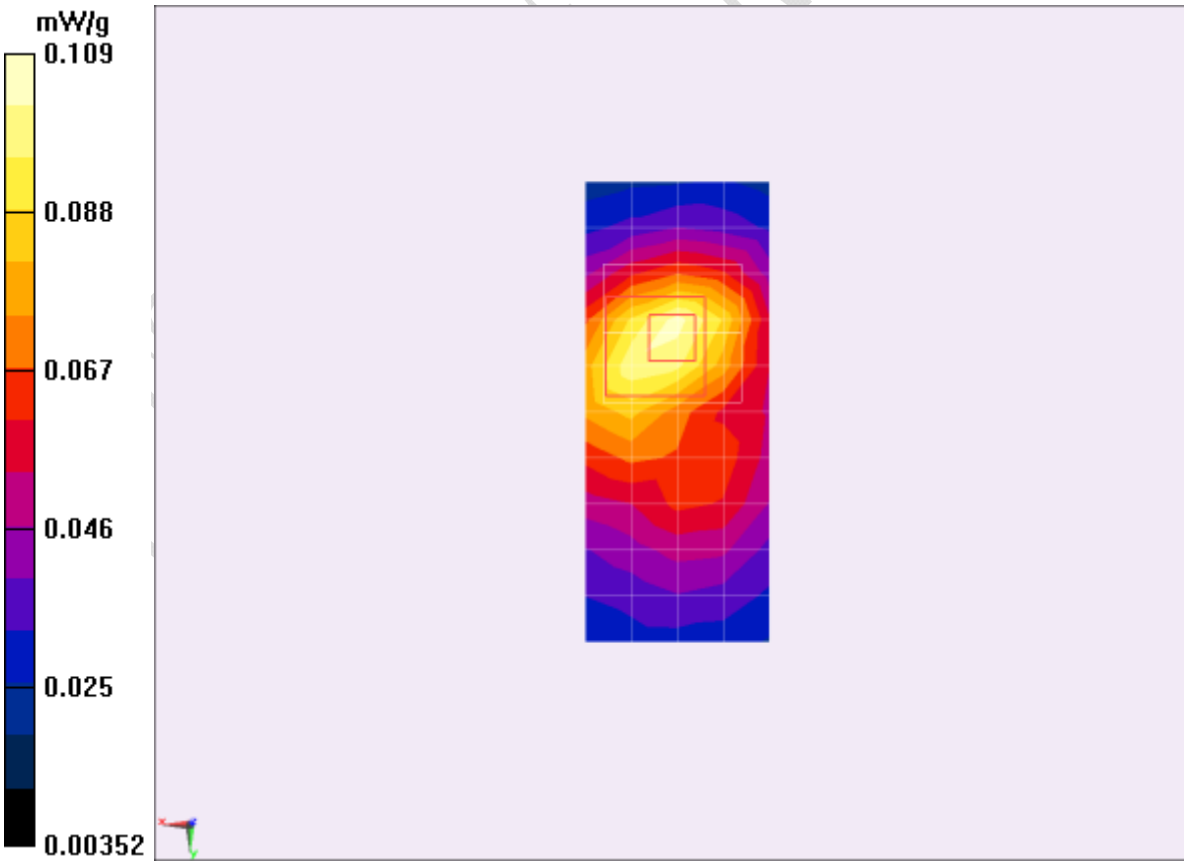
GSM850 Body Right GPRS 2TS High

Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used: f = 849 MHz; σ = 0.981 mho/m;εr = 53.825; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 835MHz GPRS 2TS; Frequency: 848.8 MHz; Duty Cycle: 1:4.5
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
High Right GPRS 2TS 850MHz/Area Scan (5x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.500 mW/g
High Right GPRS 2TS 850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.725 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.6550 mW/g
SAR(1 g) = 0.476 mW/g; SAR(10 g) = 0.333 mW/g
Maximum value of SAR (measured) = 0.505 mW/g



GSM850 Body Bottom GPRS 2TS High

Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used: f = 849 MHz; σ = 0.981 mho/m;εr = 53.825; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 835MHz GPRS 2TS; Frequency: 848.8 MHz; Duty Cycle: 1:4.5
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
High Bottom GPRS 4TS 850MHz/Area Scan (5x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.106 mW/g
High Bottom GPRS 4TS 850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.570 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.1620 mW/g
SAR(1 g) = 0.100 mW/g; SAR(10 g) = 0.062 mW/g
Maximum value of SAR (measured) = 0.109 mW/g



GSM850 Body Toward Ground GPRS 2TS Middle

Date/Time: 03/11/2015

Electronics: DAE4 Sn1329

Medium: Body 850MHz

Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.967 mho/m;εr = 53.934; ρ = 1000 kg/m3

Ambient Temperature:22.5°C Liquid Temperature:22.5°C

Communication System: GSM 835MHz GPRS 2TS; Frequency: 836.6 MHz; Duty Cycle: 1:4.5

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Middle Toward Ground GPRS 2TS 850MHz/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.797 mW/g

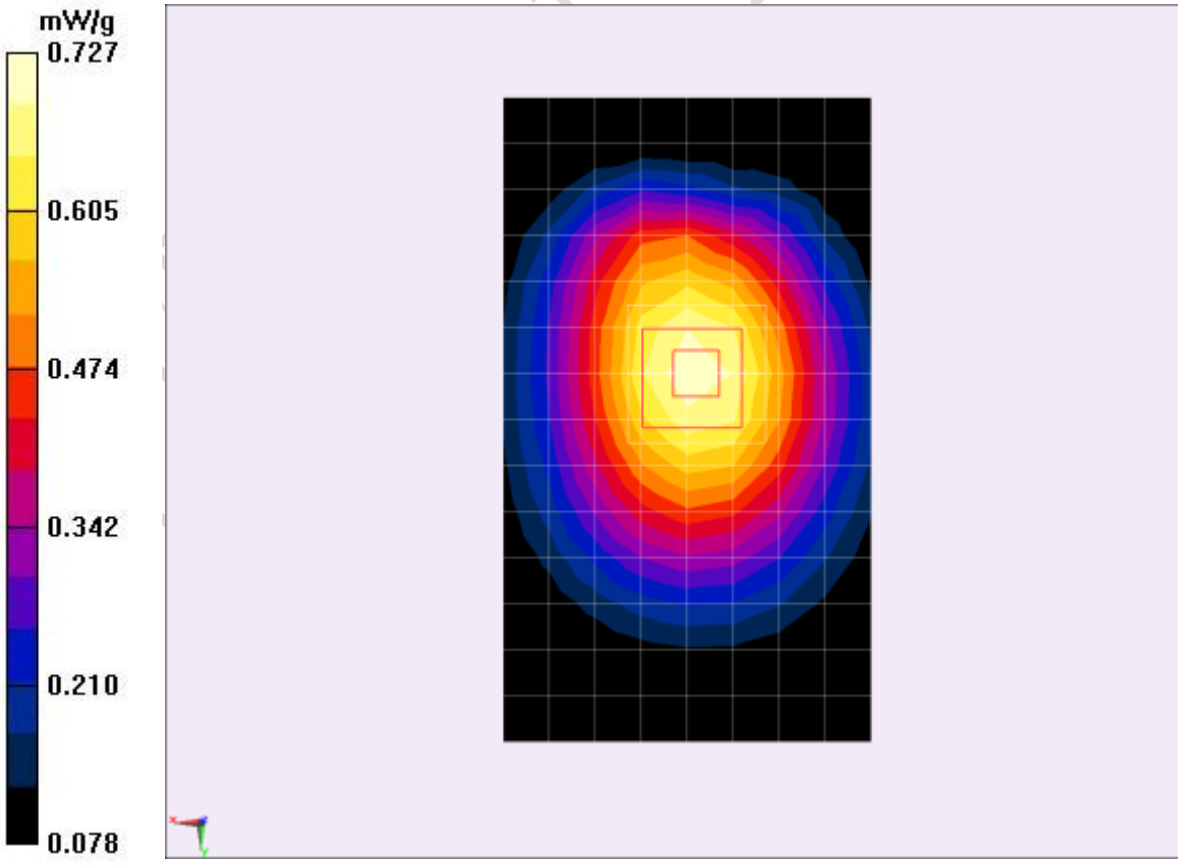
Middle Toward Ground GPRS 2TS 850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.410 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.8220 mW/g

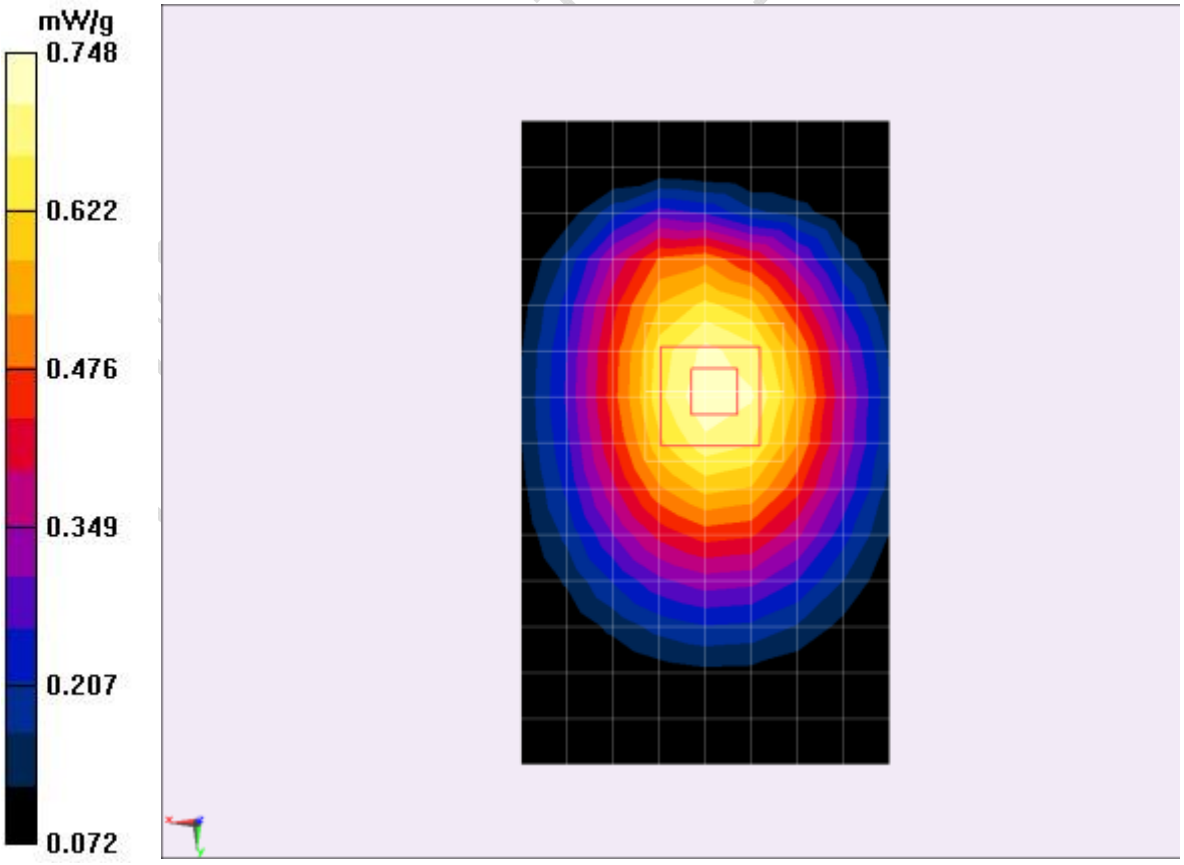
SAR(1 g) = 0.707 mW/g; SAR(10 g) = 0.521 mW/g

Maximum value of SAR (measured) = 0.727 mW/g



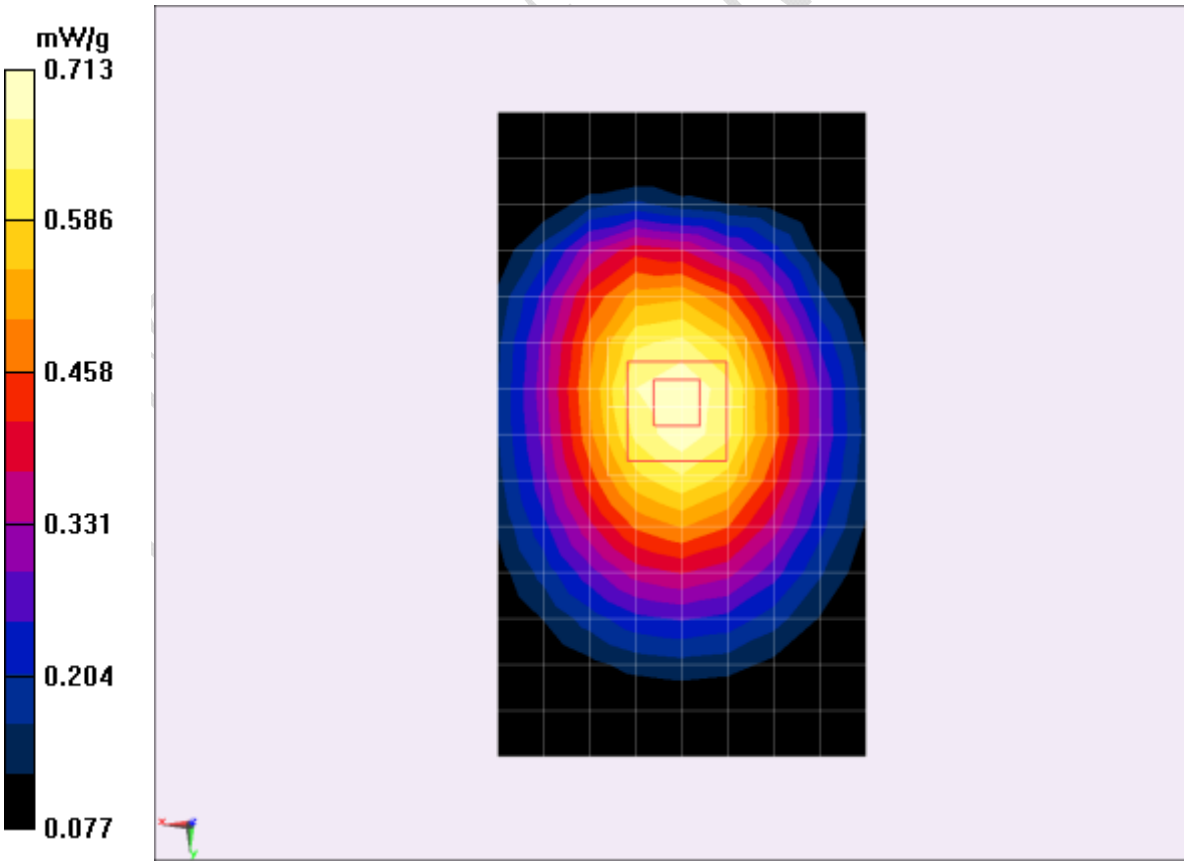
GSM850 Body Toward Ground GPRS 2TS Low

Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.955 mho/m;εr = 54.052; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 835MHz GPRS 2TS; Frequency: 824.2 MHz; Duty Cycle: 1:4.5
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
Low Toward Ground GPRS 2TS 850MHz/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.808 mW/g
Low Toward Ground GPRS 2TS 850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.253 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.8330 mW/g
SAR(1 g) = 0.710 mW/g; SAR(10 g) = 0.523 mW/g
Maximum value of SAR (measured) = 0.748 mW/g



GSM850 Body Toward Ground E-GPRS 2TS High

Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used: f = 849 MHz; σ = 0.981 mho/m;εr = 53.825; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 850MHz E-GPRS 2TS; Frequency: 848.8 MHz; Duty Cycle: 1:4.5
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
High Toward Ground E-GPRS 2TS 850MHz/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.812 mW/g
High Toward Ground E-GPRS 2TS 850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 29.931 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 0.8210 mW/g
SAR(1 g) = 0.706 mW/g; SAR(10 g) = 0.518 mW/g
Maximum value of SAR (measured) = 0.713 mW/g



Add the other channel SAR test

GSM850 Body Toward Ground E-GPRS 2TS Middle

Date/Time: 03/11/2015

Electronics: DAE4 Sn1329

Medium: Body 850MHz

Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.967 mho/m;εr = 53.934; ρ = 1000 kg/m3

Ambient Temperature:22.5°C Liquid Temperature:22.5°C

Communication System: GSM 850MHz E-GPRS 2TS; Frequency: 836.6 MHz; Duty Cycle: 1:4.5

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Middle Toward Ground E-GPRS 2TS 850MHz/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.812 mW/g

Middle Toward Ground E-GPRS 2TS 850MHz/Zoom Scan (7x7x7)/Cube 0:

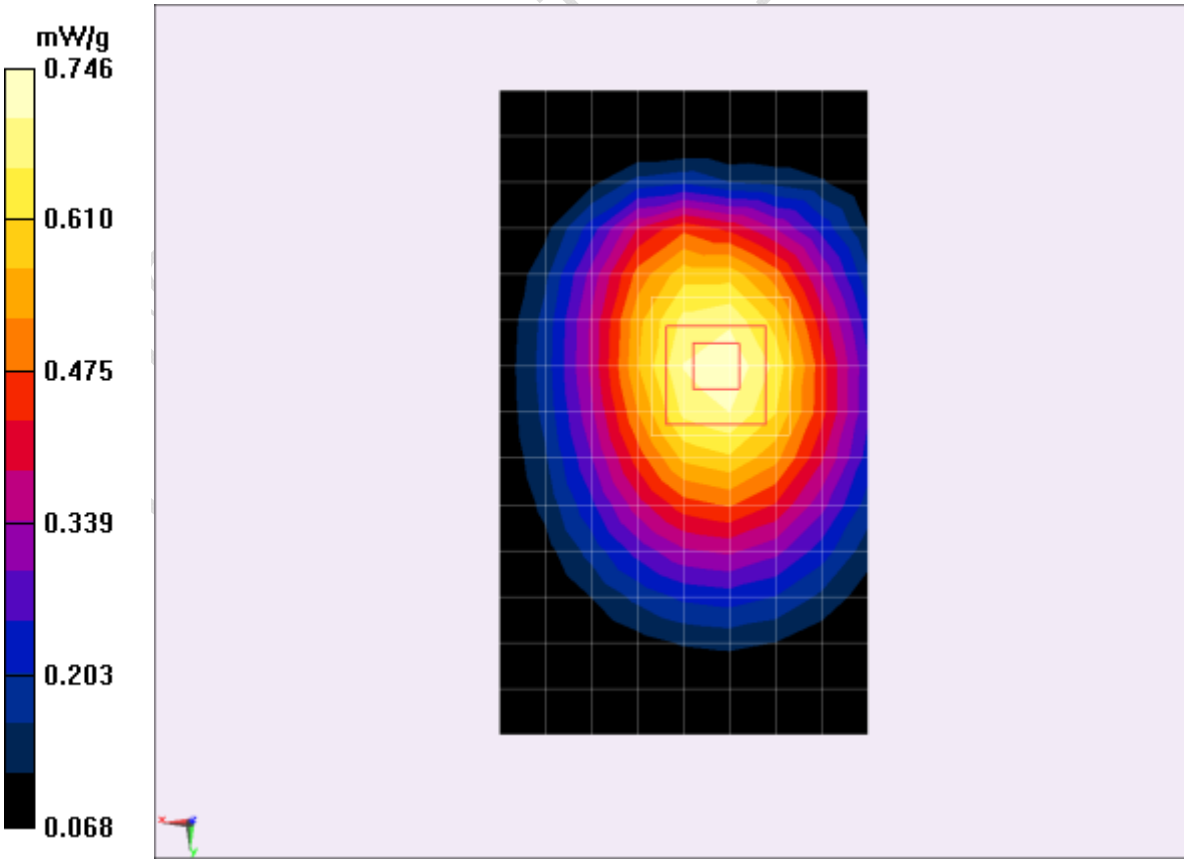
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.653 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.8240 mW/g

SAR(1 g) = 0.709 mW/g; SAR(10 g) = 0.519 mW/g

Maximum value of SAR (measured) = 0.746 mW/g



GSM850 Body Toward Ground E-GPRS 2TS Low

Date/Time: 03/11/2015

Electronics: DAE4 Sn1329

Medium: Body 850MHz

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.955 mho/m;εr = 54.052; ρ = 1000 kg/m3

Ambient Temperature:22.5°C Liquid Temperature:22.5°C

Communication System: GSM 850MHz E-GPRS 2TS; Frequency: 824.2 MHz; Duty Cycle: 1:4.5

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Low Toward Ground E-GPRS 2TS 850MHz/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.807 mW/g

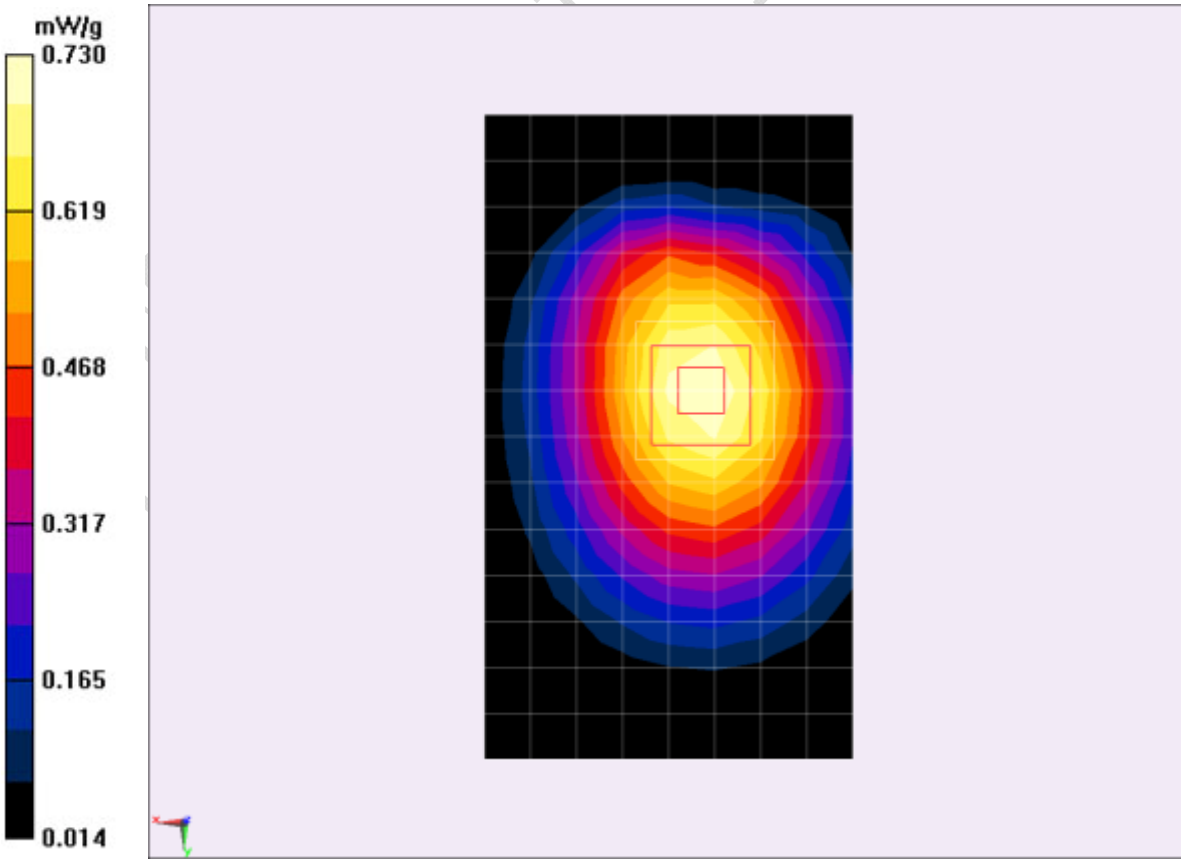
Low Toward Ground E-GPRS 2TS 850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

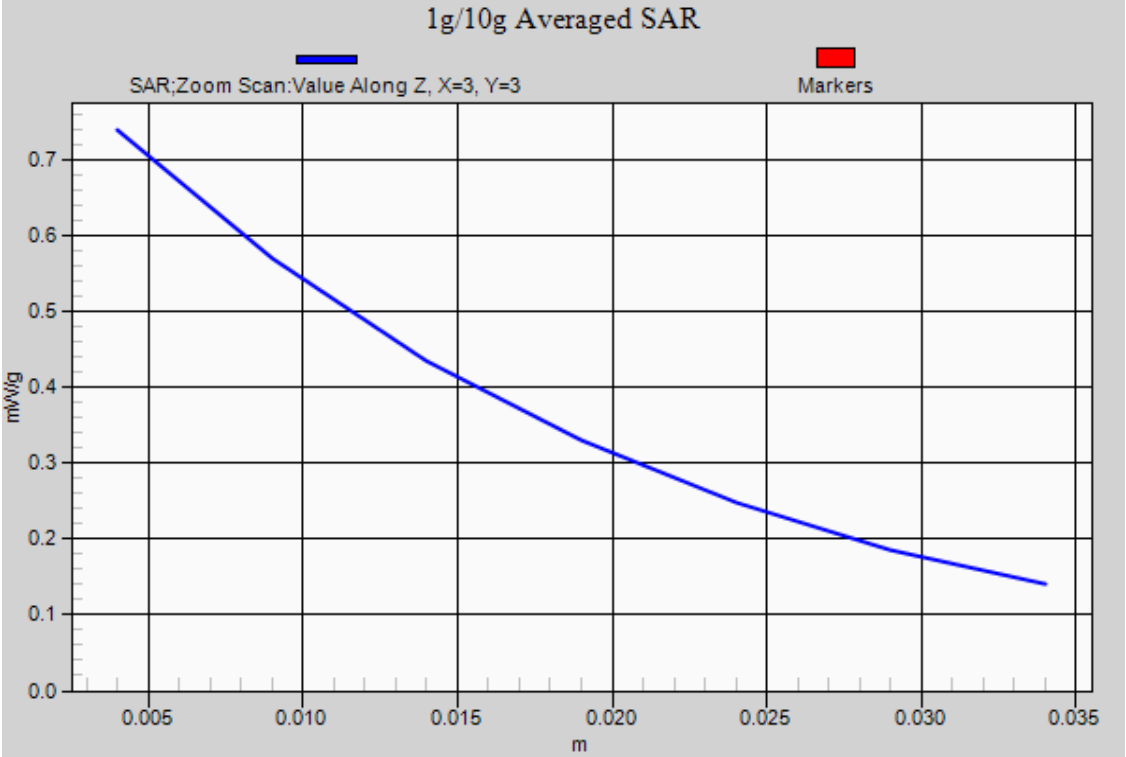
Reference Value = 31.339 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.8190 mW/g

SAR(1 g) = 0.714 mW/g; SAR(10 g) = 0.523 mW/g

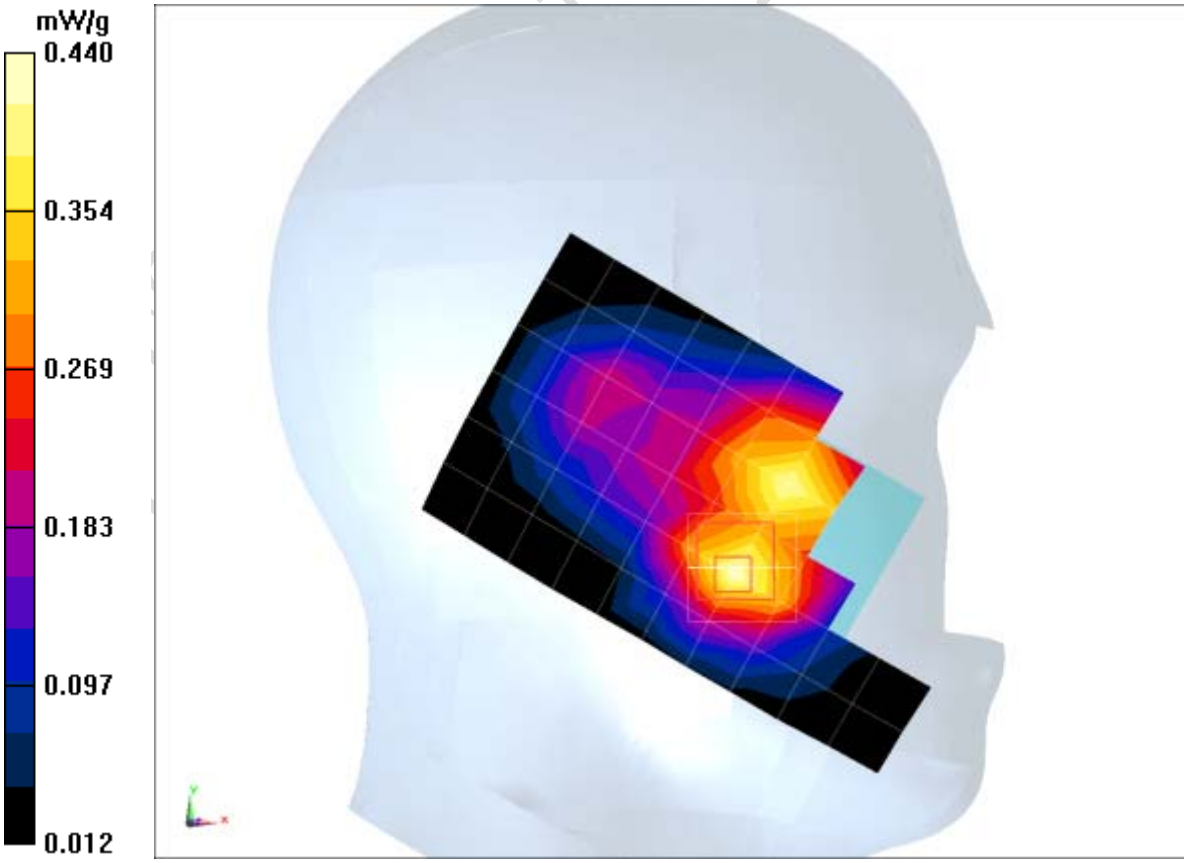
Maximum value of SAR (measured) = 0.730 mW/g





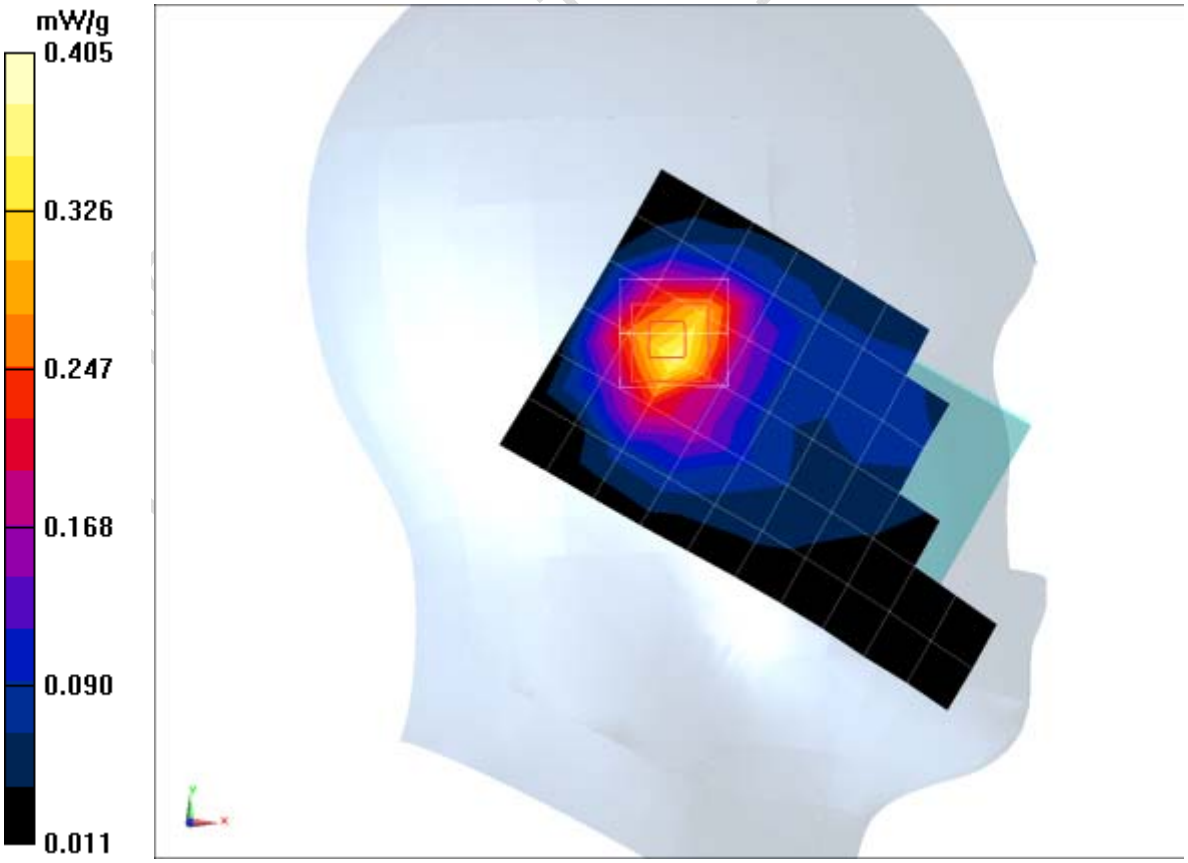
GSM1900 Left Cheek Low

Date/Time: 03/12/2015
Electronics: DAE4 Sn1329
Medium: Head 1900MHz
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.333 mho/m;εr = 39.947; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 1900MHz; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)
Low Cheek Left GSM1900MHz/Area Scan (11x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.435 mW/g
Low Cheek Left GSM1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.456 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.5960 mW/g
SAR(1 g) = 0.408 mW/g; SAR(10 g) = 0.260 mW/g
Maximum value of SAR (measured) = 0.440 mW/g



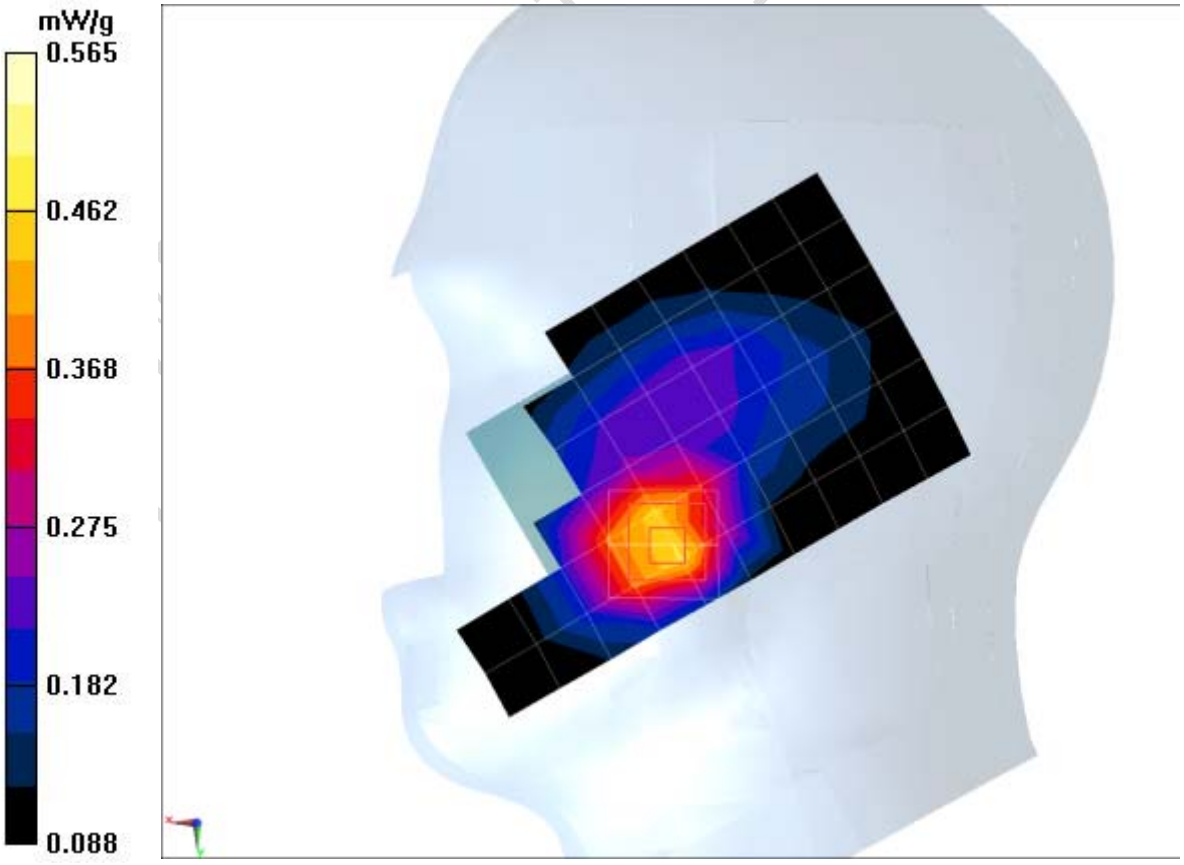
GSM1900 Left Tilt Low

Date/Time: 03/12/2015
Electronics: DAE4 Sn1329
Medium: Head 1900MHz
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.333 mho/m;εr = 39.947; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 1900MHz; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)
Low Tilt Left GSM1900MHz/Area Scan (11x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.369 mW/g
Low Tilt Left GSM1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.764 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.5450 mW/g
SAR(1 g) = 0.369 mW/g; SAR(10 g) = 0.224 mW/g
Maximum value of SAR (measured) = 0.405 mW/g



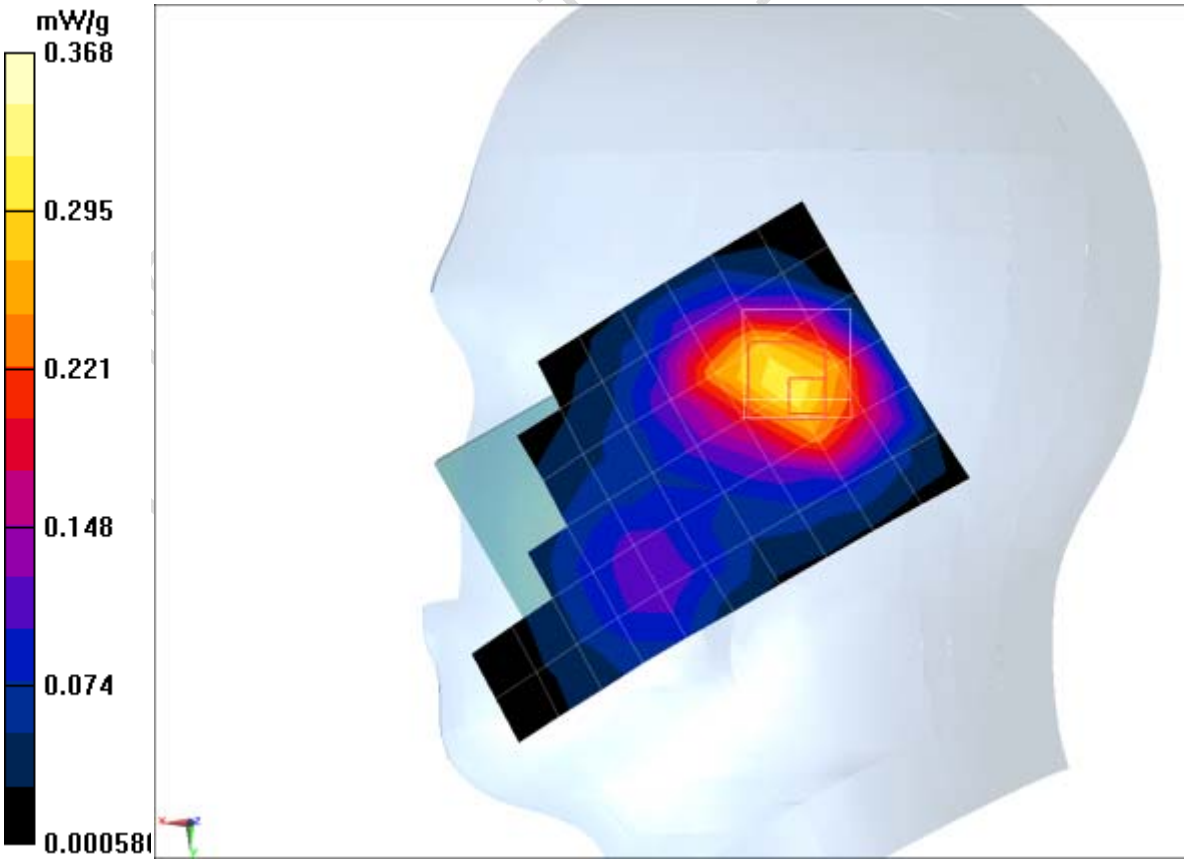
GSM1900 Right Cheek Low

Date/Time: 03/12/2015
Electronics: DAE4 Sn1329
Medium: Head 1900MHz
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.333 mho/m;εr = 39.947; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 1900MHz; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)
Low Cheek Right GSM1900MHz/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.590 mW/g
Low Cheek Right GSM1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.505 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.6750 mW/g
SAR(1 g) = 0.550 mW/g; SAR(10 g) = 0.357 mW/g
Maximum value of SAR (measured) = 0.565 mW/g



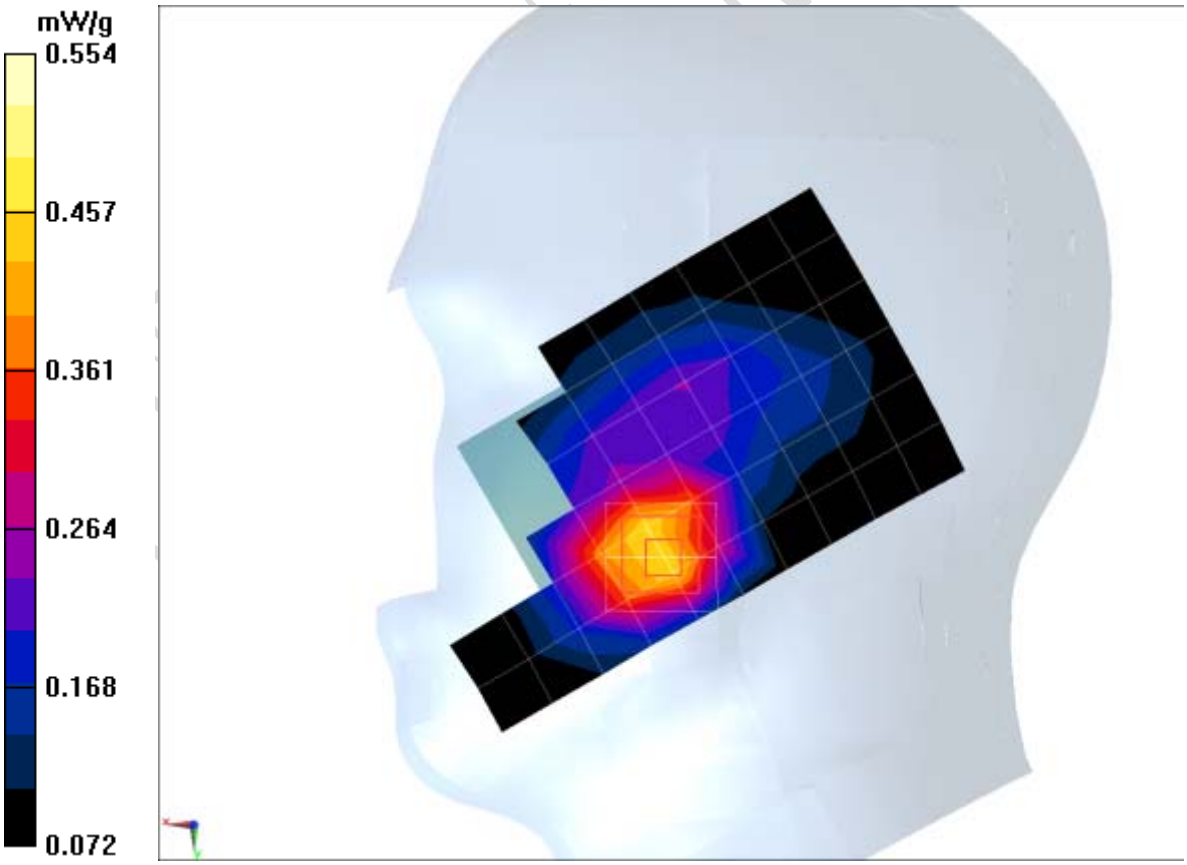
GSM1900 Right Tilt Low

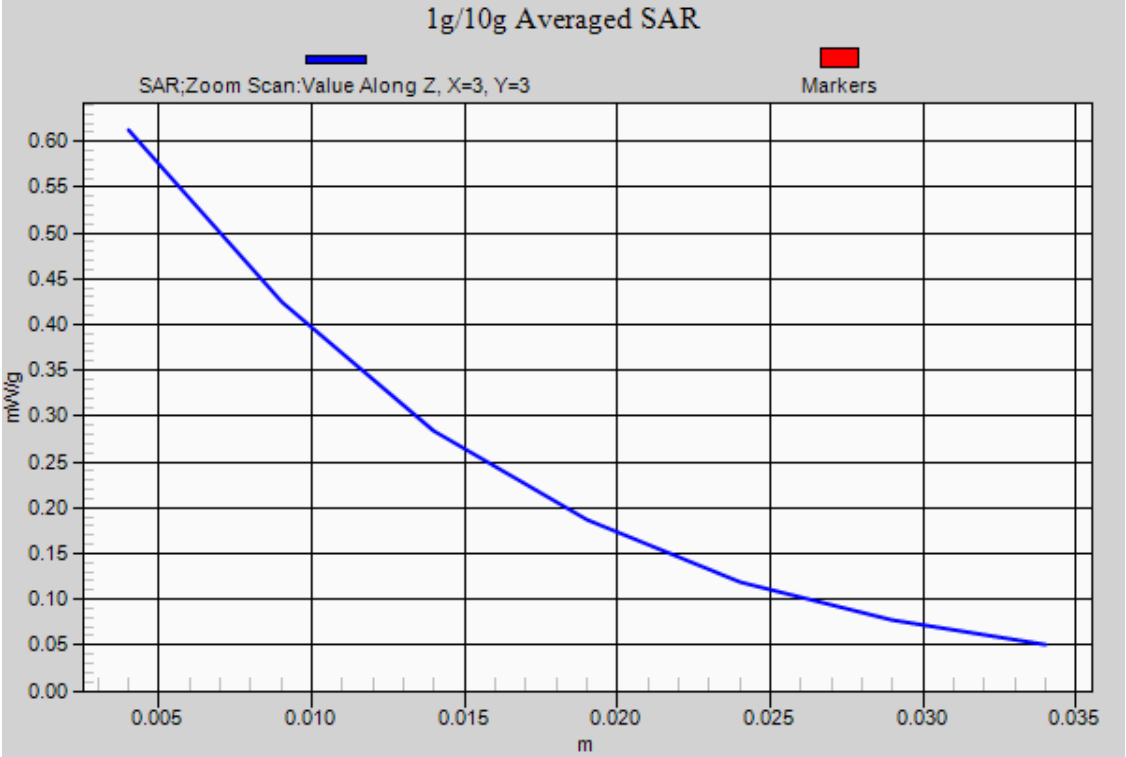
Date/Time: 03/12/2015
Electronics: DAE4 Sn1329
Medium: Head 1900MHz
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.333 mho/m;εr = 39.947; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 1900MHz; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)
Low Tilt Right GSM1900MHz/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.325 mW/g
Low Tilt Right GSM1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.666 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.4610 mW/g
SAR(1 g) = 0.310 mW/g; SAR(10 g) = 0.191 mW/g
Maximum value of SAR (measured) = 0.368 mW/g



GSM1900 Right Cheek High

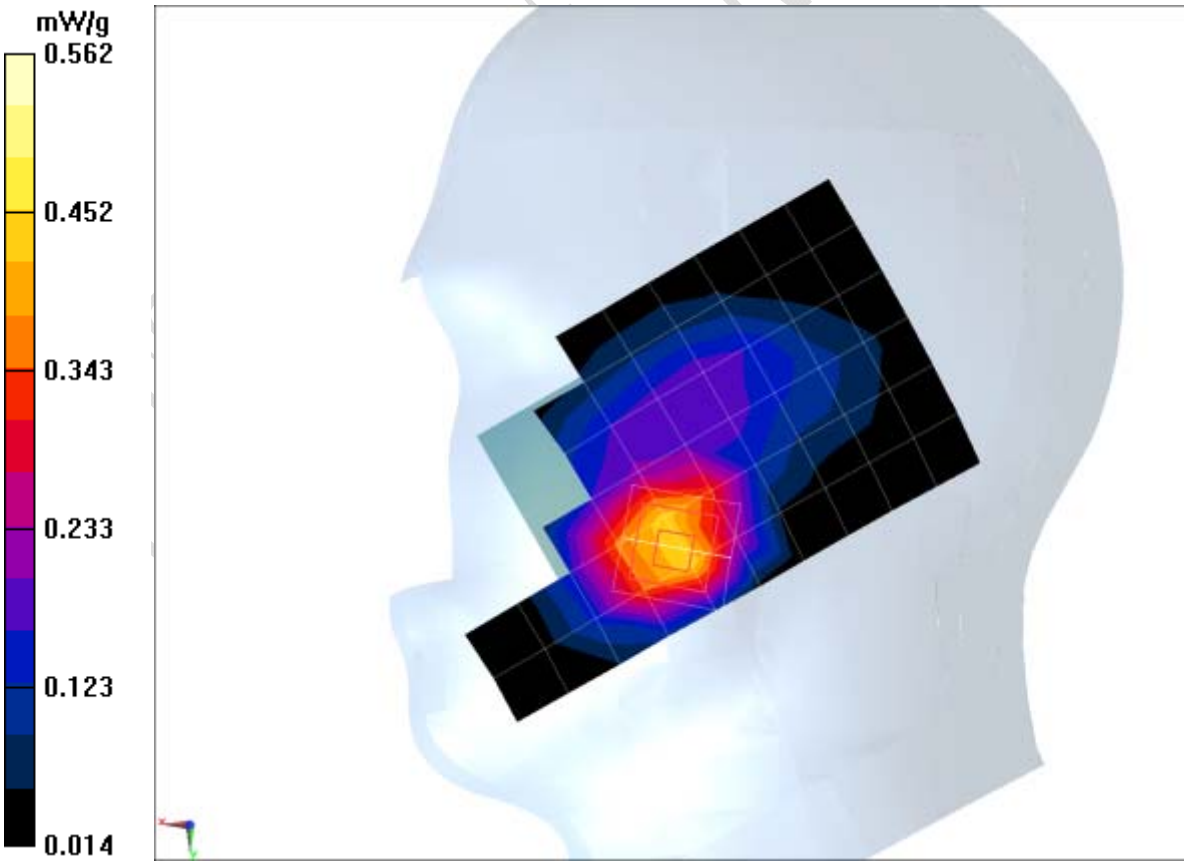
Date/Time: 03/12/2015
Electronics: DAE4 Sn1329
Medium: Head 1900MHz
Medium parameters used: f = 1910 MHz; σ = 1.396 mho/m;εr = 39.721; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 1900MHz; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3
Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)
High Cheek Right GSM1900MHz/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.624 mW/g
High Cheek Right GSM1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.421 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.6870 mW/g
SAR(1 g) = 0.542 mW/g; SAR(10 g) = 0.357 mW/g
Maximum value of SAR (measured) = 0.554 mW/g




1g/10g Averaged SAR
SAR;Zoom Scan:Value Along Z, X=3, Y=3
Markers
mW/g
0.60
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

GSM1900 Right Cheek Middle

Date/Time: 03/12/2015
Electronics: DAE4 Sn1329
Medium: Head 1900MHz
Medium parameters used: f = 1880 MHz; σ = 1.361 mho/m;εr = 39.844; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM 1900MHz; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)
Middle Cheek Right GSM1900MHz/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.631 mW/g
Middle Cheek Right GSM1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.548 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.7180 mW/g
SAR(1 g) = 0.554 mW/g; SAR(10 g) = 0.367 mW/g
Maximum value of SAR (measured) = 0.562 mW/g



GSM1900 Body Toward Ground GPRS 2TS Low

Date/Time: 03/13/2015

Electronics: DAE4 Sn1329

Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; ó = 1.448 mho/m;år = 53.933; ñ = 1000 kg/m3

Ambient Temperature:22.5°C Liquid Temperature:22.5°C

Communication System: GSM1900MHz GPRS 2TS; Frequency: 1850.2 MHz; Duty Cycle: 1:4.5

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Toward Ground GPRS 2TS 1900MHz/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.820 mW/g

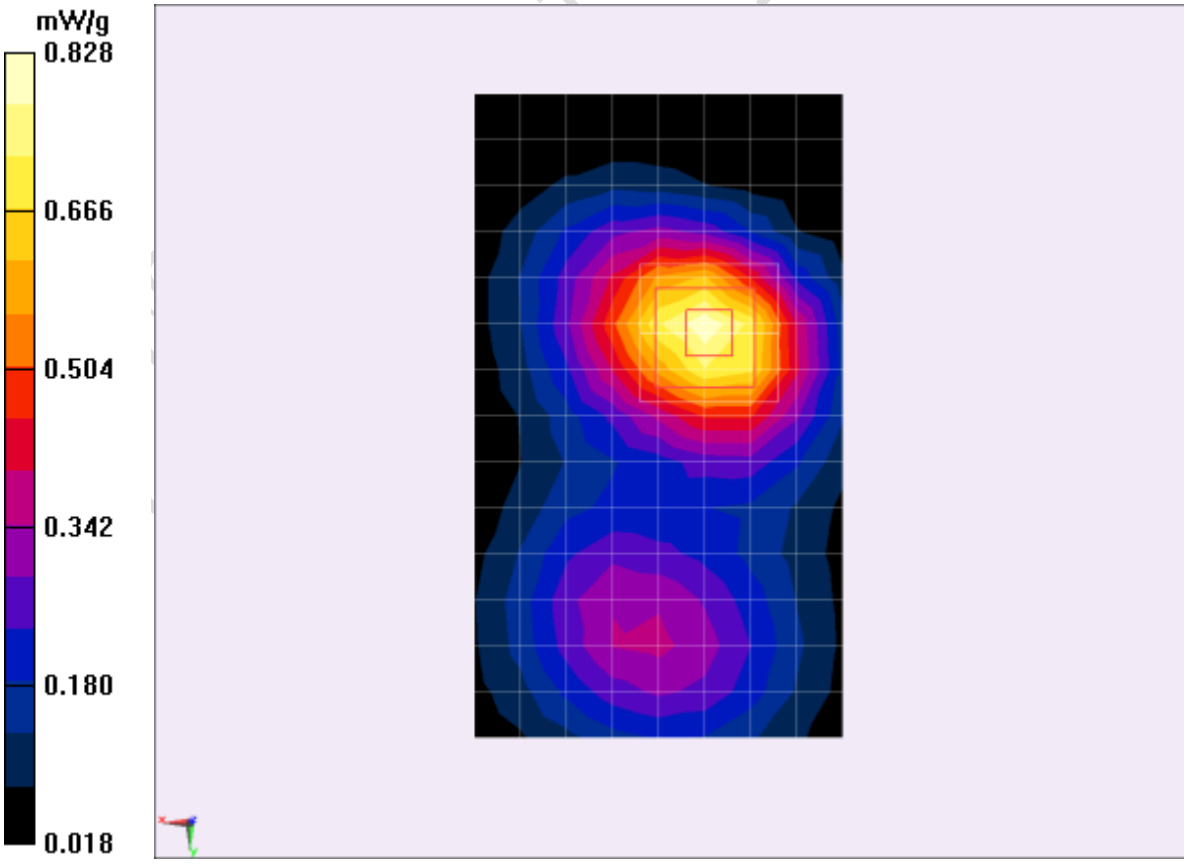
Low Toward Ground GPRS 2TS 1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.039 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.0380 mW/g

SAR(1 g) = 0.705 mW/g; SAR(10 g) = 0.436 mW/g

Maximum value of SAR (measured) = 0.828 mW/g



GSM1900 Body Toward Phantom GPRS 2TS Low

Date/Time: 03/13/2015

Electronics: DAE4 Sn1329

Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; ó = 1.448 mho/m;år = 53.933; ñ = 1000 kg/m3

Ambient Temperature:22.5°C Liquid Temperature:22.5°C

Communication System: GSM1900MHz GPRS 2TS; Frequency: 1850.2 MHz; Duty Cycle: 1:4.5

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Toward Phantom GPRS 2TS 1900MHz/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.597 mW/g

Low Toward Phantom GPRS 2TS 1900MHz/Zoom Scan (7x7x7)/Cube 0:

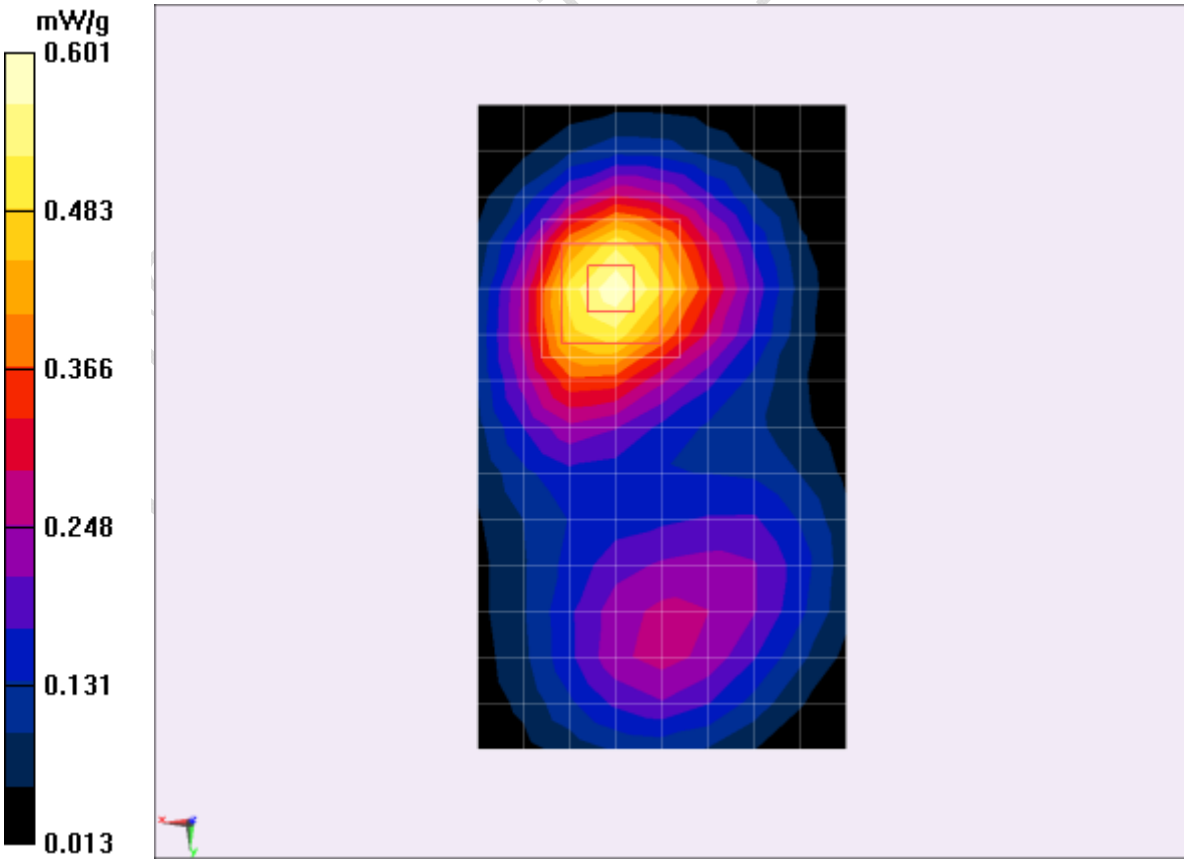
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.758 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.8070 mW/g

SAR(1 g) = 0.550 mW/g; SAR(10 g) = 0.345 mW/g

Maximum value of SAR (measured) = 0.601 mW/g



GSM1900 Body Left GPRS 2TS Low

Date/Time: 03/13/2015

Electronics: DAE4 Sn1329

Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; ó = 1.448 mho/m;år = 53.933; ñ = 1000 kg/m3

Ambient Temperature:22.5°C Liquid Temperature:22.5°C

Communication System: GSM1900MHz GPRS 2TS; Frequency: 1850.2 MHz; Duty Cycle: 1:4.5

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Left GPRS 2TS 1900MHz/Area Scan (5x15x1): Measurement grid: dx=10mm, dy=10mm

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

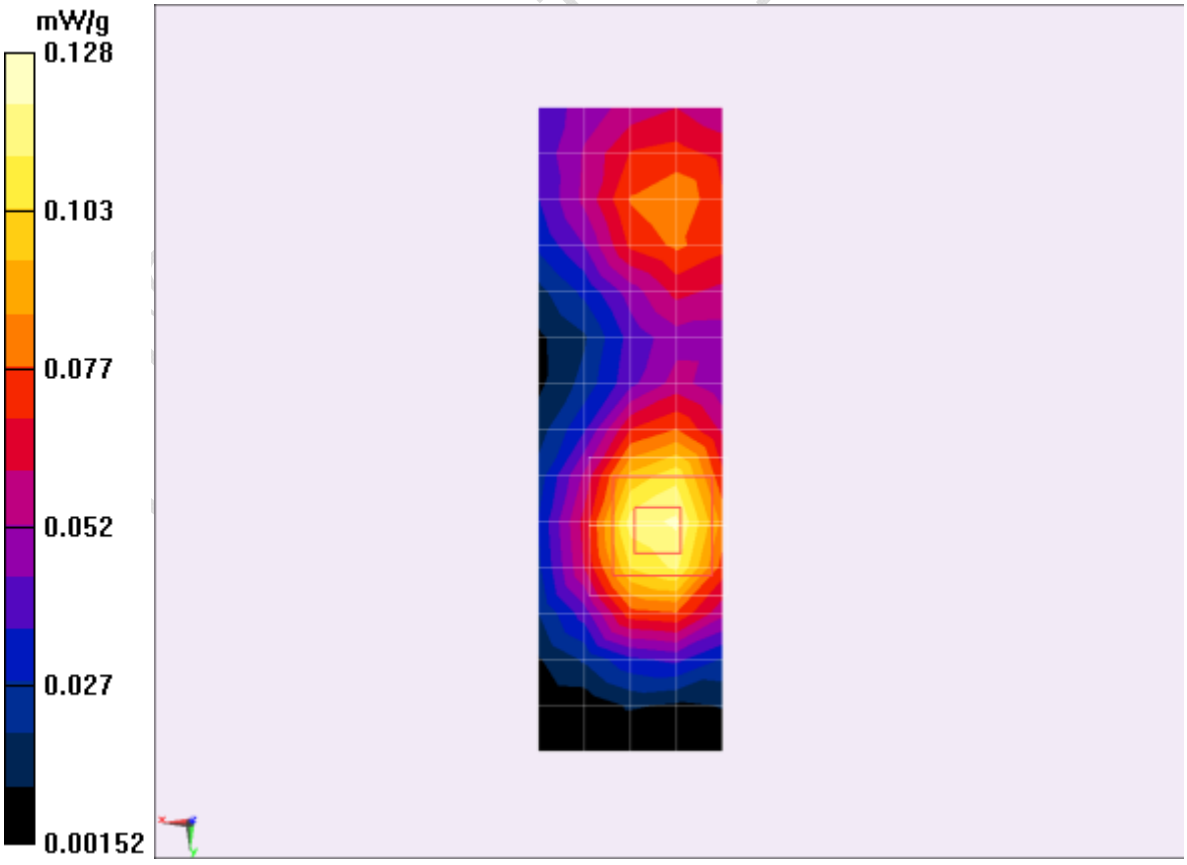
Low Left GPRS 2TS 1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.996 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.1770 mW/g

SAR(1 g) = 0.118 mW/g; SAR(10 g) = 0.072 mW/g

Maximum value of SAR (measured) = 0.128 mW/g



GSM1900 Body Right GPRS 2TS Low

Date/Time: 03/13/2015

Electronics: DAE4 Sn1329

Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; ó = 1.448 mho/m;år = 53.933; ñ = 1000 kg/m3

Ambient Temperature:22.5°C Liquid Temperature:22.5°C

Communication System: GSM1900MHz GPRS 2TS; Frequency: 1850.2 MHz; Duty Cycle: 1:4.5

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Right GPRS 2TS 1900MHz/Area Scan (5x15x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.266 mW/g

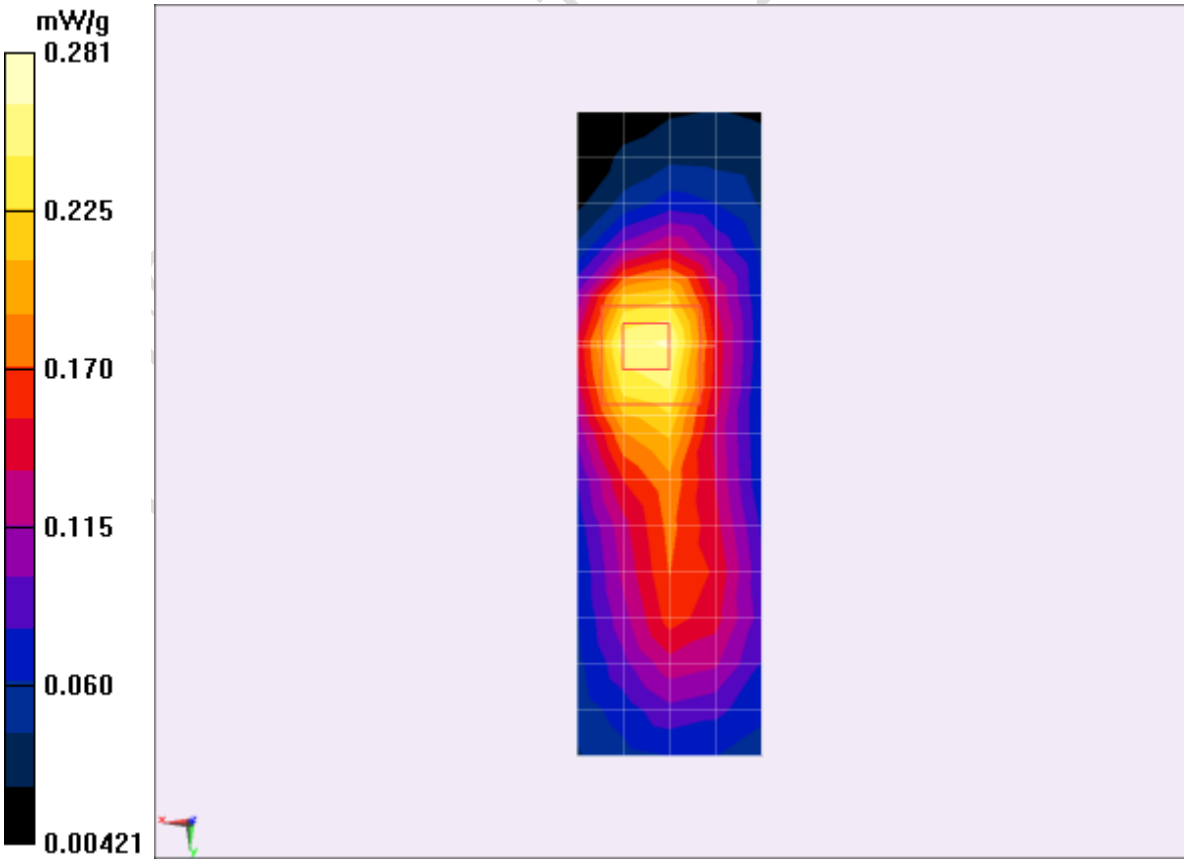
Low Right GPRS 2TS 1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.160 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.3880 mW/g

SAR(1 g) = 0.257 mW/g; SAR(10 g) = 0.155 mW/g

Maximum value of SAR (measured) = 0.281 mW/g



GSM1900 Body Bottom GPRS 2TS Low

Date/Time: 03/13/2015

Electronics: DAE4 Sn1329

Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; ó = 1.448 mho/m;år = 53.933; ñ = 1000 kg/m3

Ambient Temperature:22.5°C Liquid Temperature:22.5°C

Communication System: GSM1900MHz GPRS 2TS; Frequency: 1850.2 MHz; Duty Cycle: 1:4.5

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Bottom GPRS 4TS 1900MHz/Area Scan (5x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.364 mW/g

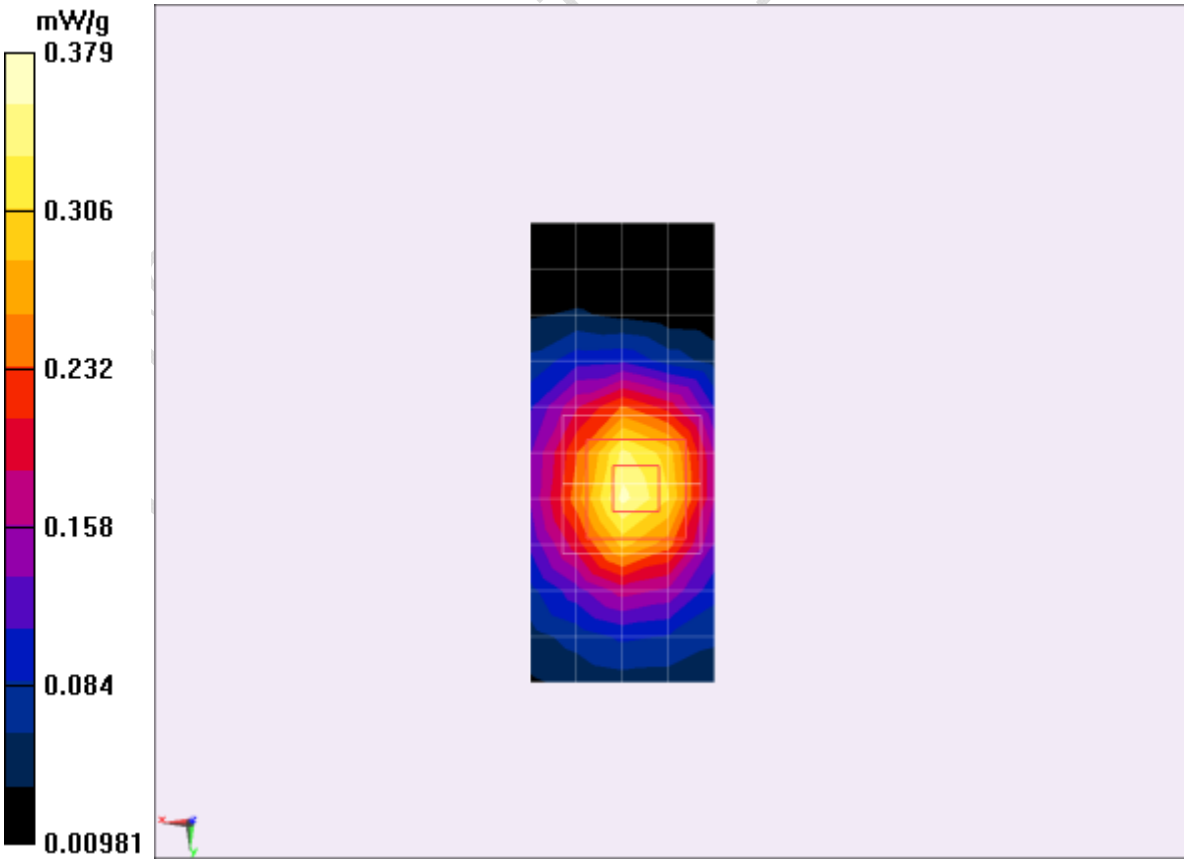
Low Bottom GPRS 4TS 1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.574 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.5110 mW/g

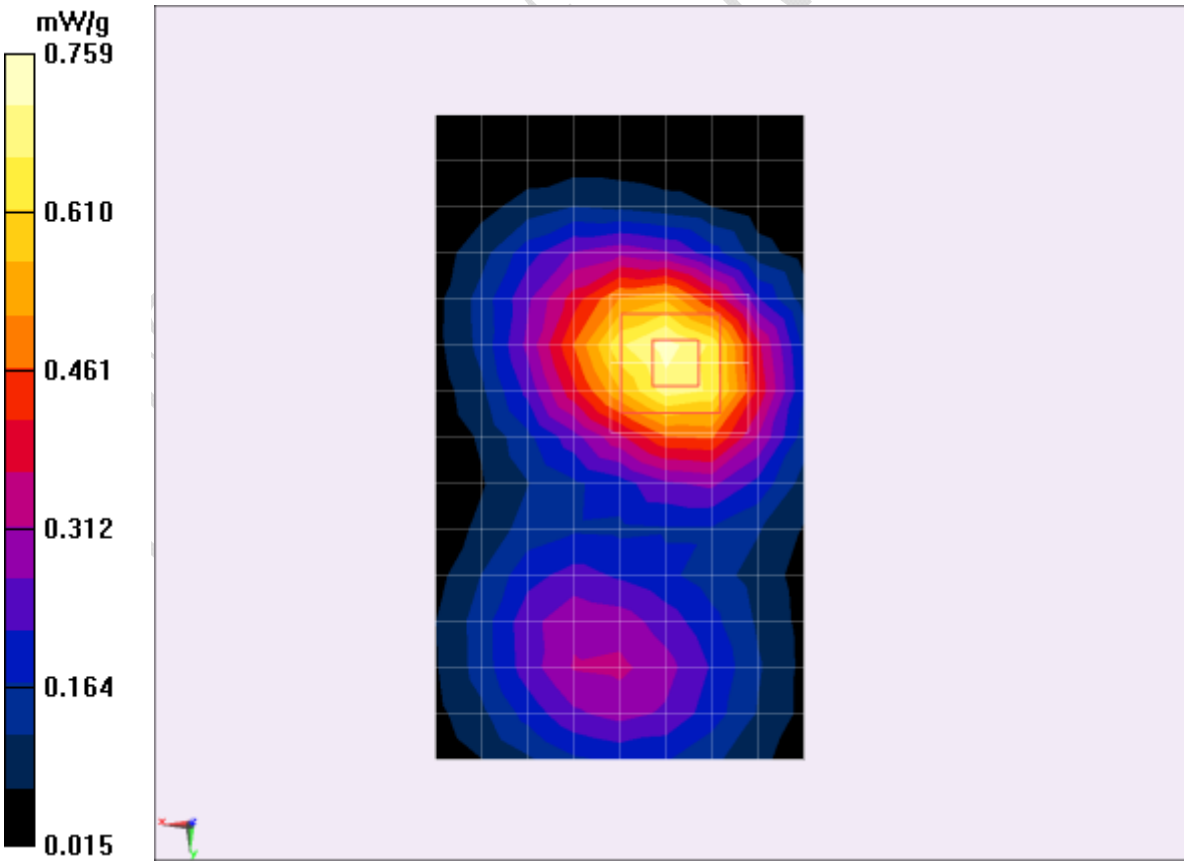
SAR(1 g) = 0.345 mW/g; SAR(10 g) = 0.208 mW/g

Maximum value of SAR (measured) = 0.379 mW/g



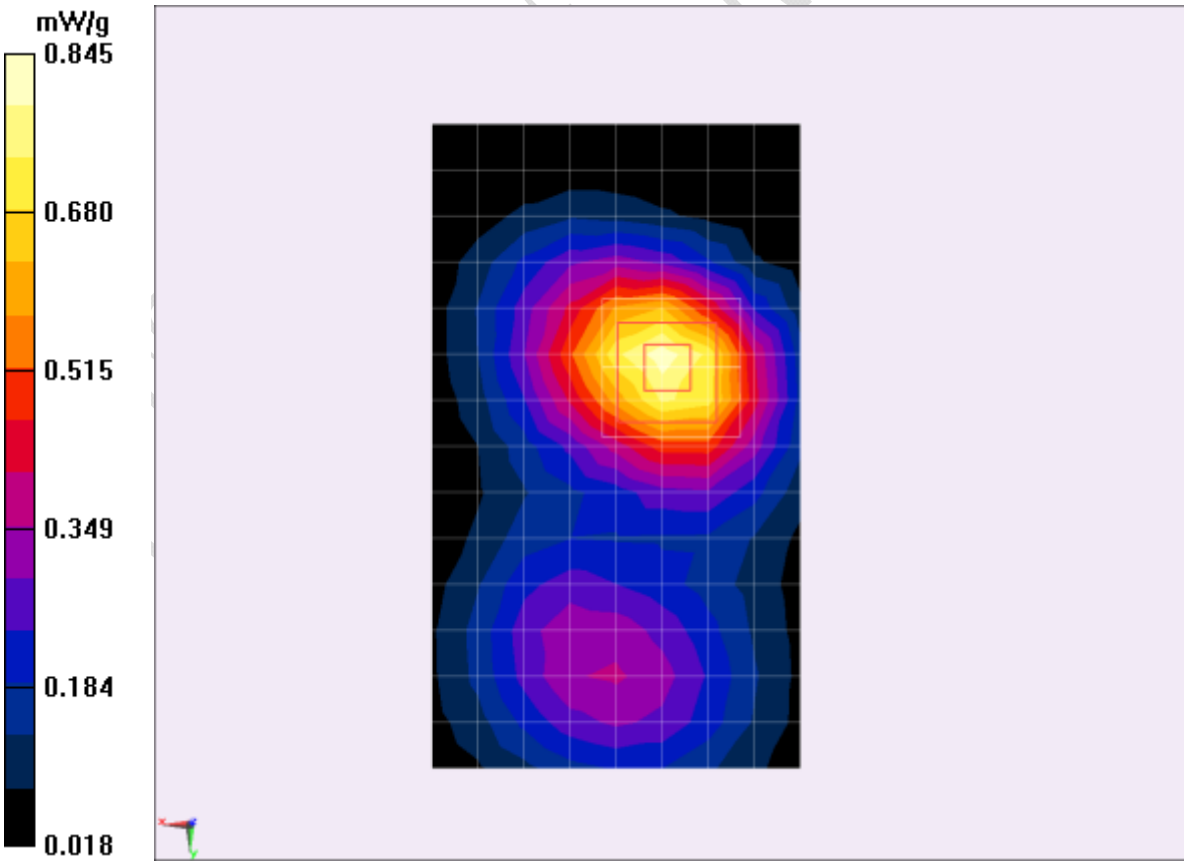
GSM1900 Body Toward Ground GPRS 2TS High

Date/Time: 03/13/2015
Electronics: DAE4 Sn1329
Medium: Body 1900MHz
Medium parameters used: f = 1910 MHz; ó = 1.513 mho/m;år = 53.642; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM1900MHz GPRS 2TS; Frequency: 1909.8 MHz; Duty Cycle: 1:4.5
Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)
High Toward Ground GPRS 2TS 1900MHz/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.736 mW/g
High Toward Ground GPRS 2TS 1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.432 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.9450 mW/g
SAR(1 g) = 0.696 mW/g; SAR(10 g) = 0.430 mW/g
Maximum value of SAR (measured) = 0.759 mW/g



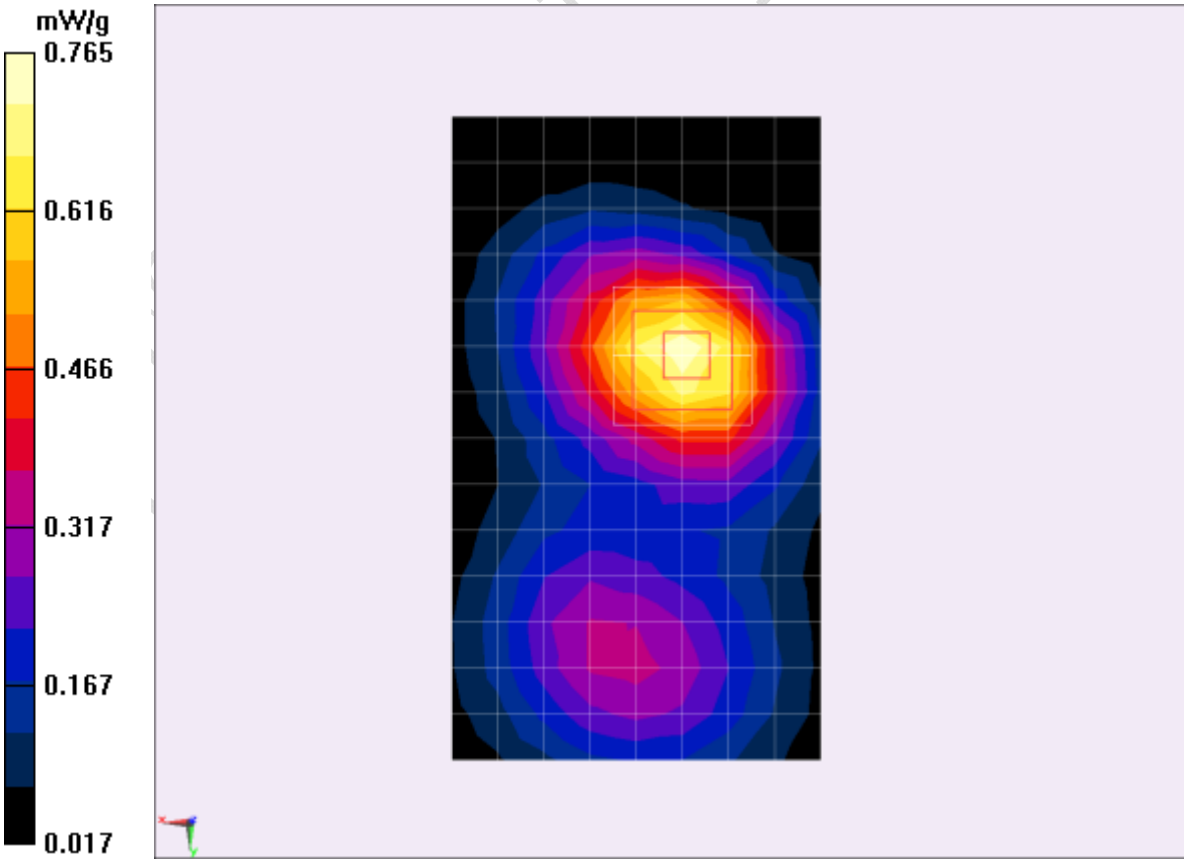
GSM1900 Body Toward Ground GPRS 2TS Middle

Date/Time: 03/13/2015
Electronics: DAE4 Sn1329
Medium: Body 1900MHz
Medium parameters used: f = 1880 MHz; ó = 1.475 mho/m;år = 53.878; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM1900MHz GPRS 2TS; Frequency: 1880 MHz; Duty Cycle: 1:4.5
Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)
Middle Toward Ground GPRS 2TS 1900MHz/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.828 mW/g
Middle Toward Ground GPRS 2TS 1900MHz/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.180 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.0560 mW/g
SAR(1 g) = 0.717 mW/g; SAR(10 g) = 0.443 mW/g
Maximum value of SAR (measured) = 0.845 mW/g



GSM1900 Body Toward Ground E-GPRS 2TS Low

Date/Time: 03/13/2015
Electronics: DAE4 Sn1329
Medium: Body 1900MHz
Medium parameters used (interpolated): f = 1850.2 MHz; ó = 1.448 mho/m;år = 53.933; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM1900MHz E-GPRS 2TS; Frequency: 1850.2 MHz; Duty Cycle: 1:4.5
Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)
Low Toward Ground E-GPRS 2TS 1900MHz/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.767 mW/g
Low Toward Ground E-GPRS 2TS 1900MHz/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.403 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.0440 mW/g
SAR(1 g) = 0.705 mW/g; SAR(10 g) = 0.437 mW/g
Maximum value of SAR (measured) = 0.765 mW/g



Add the other channel SAR test

GSM1900 Body Toward Ground E-GPRS 2TS High

Date/Time: 03/13/2015

Electronics: DAE4 Sn1329

Medium: Body 1900MHz

Medium parameters used: f = 1910 MHz; ó = 1.513 mho/m;år = 53.642; ñ = 1000 kg/m3

Ambient Temperature:22.5°C Liquid Temperature:22.5°C

Communication System: GSM1900MHz E-GPRS 2TS; Frequency: 1909.8 MHz; Duty Cycle: 1:4.5

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

High Toward Ground E-GPRS 2TS 1900MHz/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.756 mW/g

High Toward Ground E-GPRS 2TS 1900MHz/Zoom Scan (7x7x7)/Cube 0:

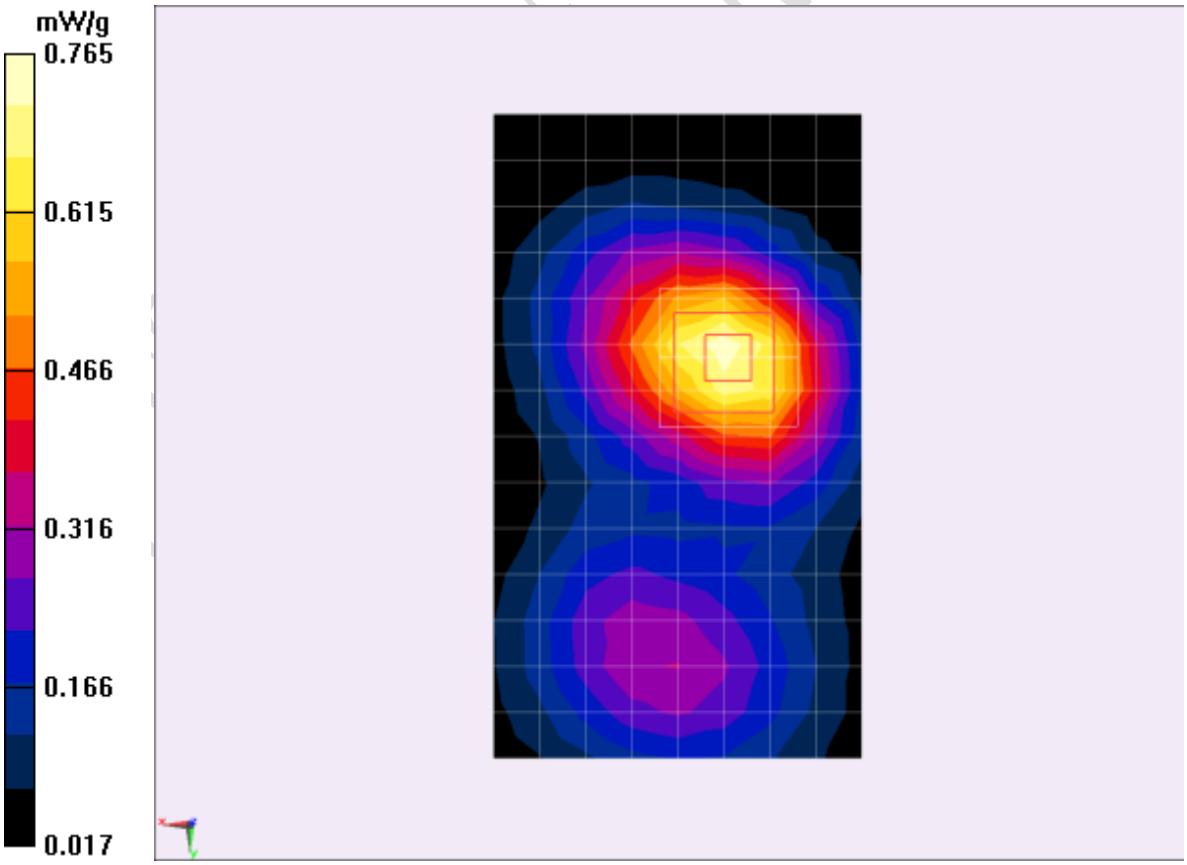
Measurement grid: dx=5mm, dy=5mm, dz=5mm

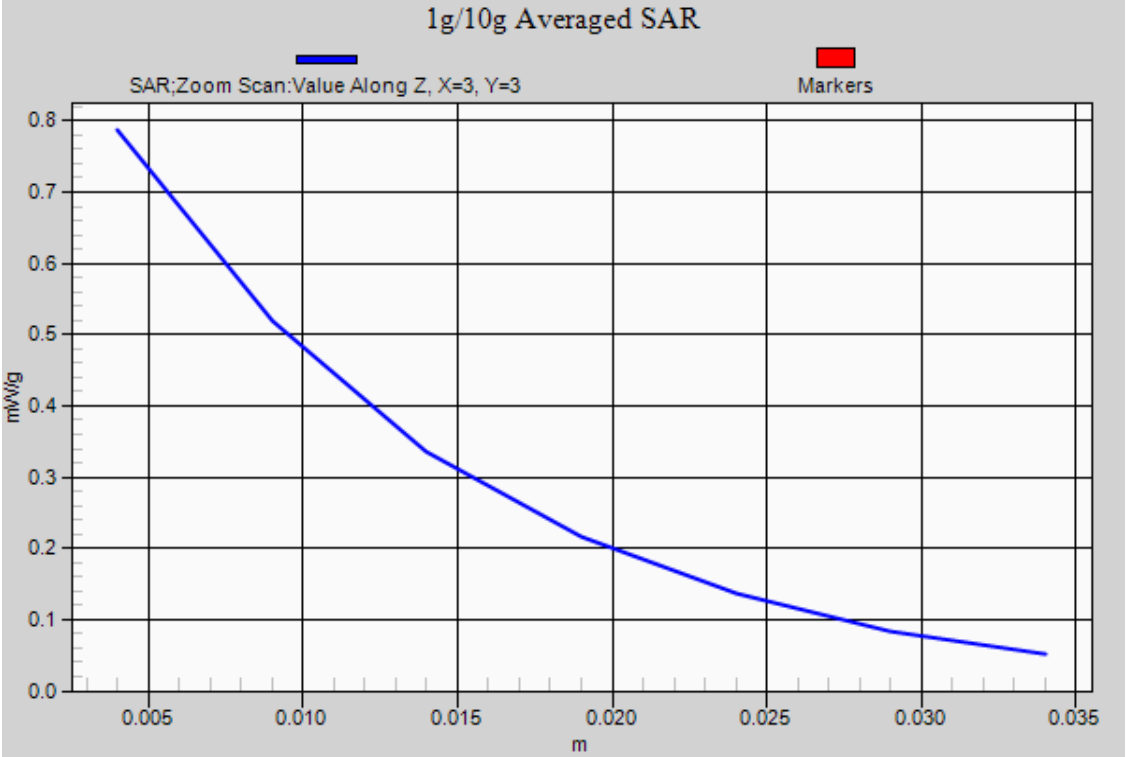
Reference Value = 15.479 V/m; Power Drift = -0.0092 dB

Peak SAR (extrapolated) = 1.0480 mW/g

SAR(1 g) = 0.701 mW/g; SAR(10 g) = 0.432 mW/g

Maximum value of SAR (measured) = 0.765 mW/g



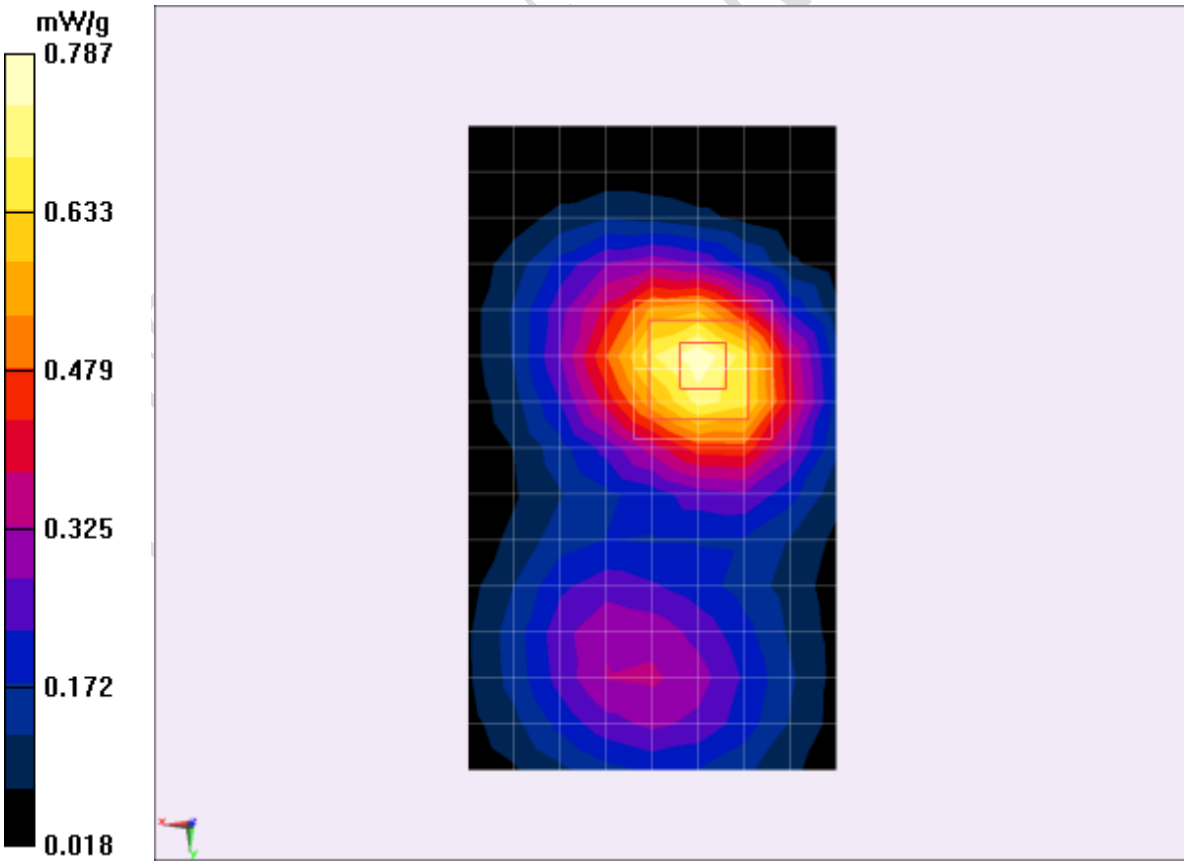

1g/10g Averaged SAR
SAR;Zoom Scan:Value Along Z, X=3, Y=3
Markers
mW/g
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

GSM1900 Body Toward Ground E-GPRS 2TS Middle

Date/Time: 03/13/2015
Electronics: DAE4 Sn1329
Medium: Body 1900MHz
Medium parameters used: f = 1880 MHz; ó = 1.475 mho/m;år = 53.878; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: GSM1900MHz E-GPRS 2TS; Frequency: 1880 MHz; Duty Cycle: 1:4.5
Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

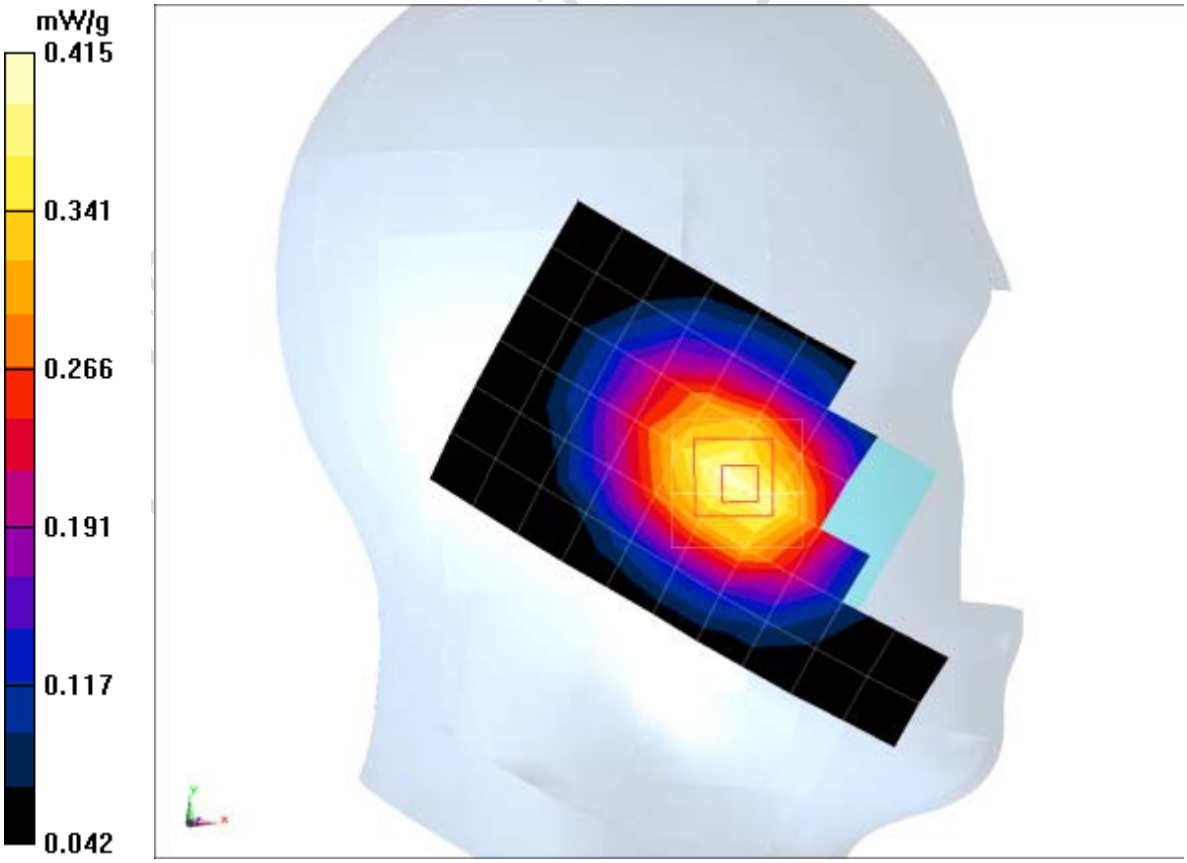
Middle Toward Ground E-GPRS 2TS 1900MHz/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.781 mW/g

Middle Toward Ground E-GPRS 2TS 1900MHz/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.955 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.0790 mW/g
SAR(1 g) = 0.720 mW/g; SAR(10 g) = 0.445 mW/g
Maximum value of SAR (measured) = 0.787 mW/g



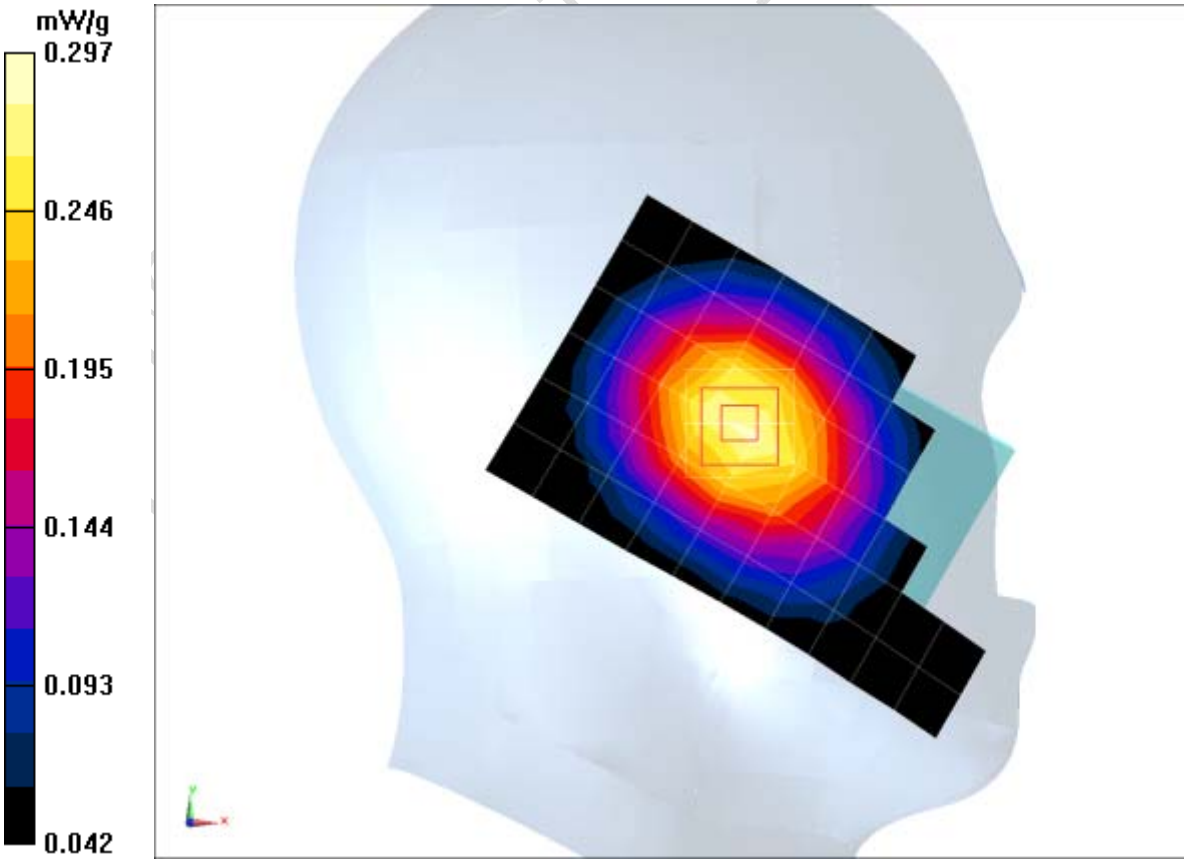
WCDMA Band V Left Cheek Low

Date/Time: 03/10/2015
Electronics: DAE4 Sn1329
Medium: Head 850MHz
Medium parameters used (interpolated): f = 826.4 MHz; ó = 0.909 mho/m;år = 42.443; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)
Low Cheek Left WCDMA Band V/Area Scan (11x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.407 mW/g
Low Cheek Left WCDMA Band V/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.001 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.4800 mW/g
SAR(1 g) = 0.394 mW/g; SAR(10 g) = 0.296 mW/g
Maximum value of SAR (measured) = 0.415 mW/g



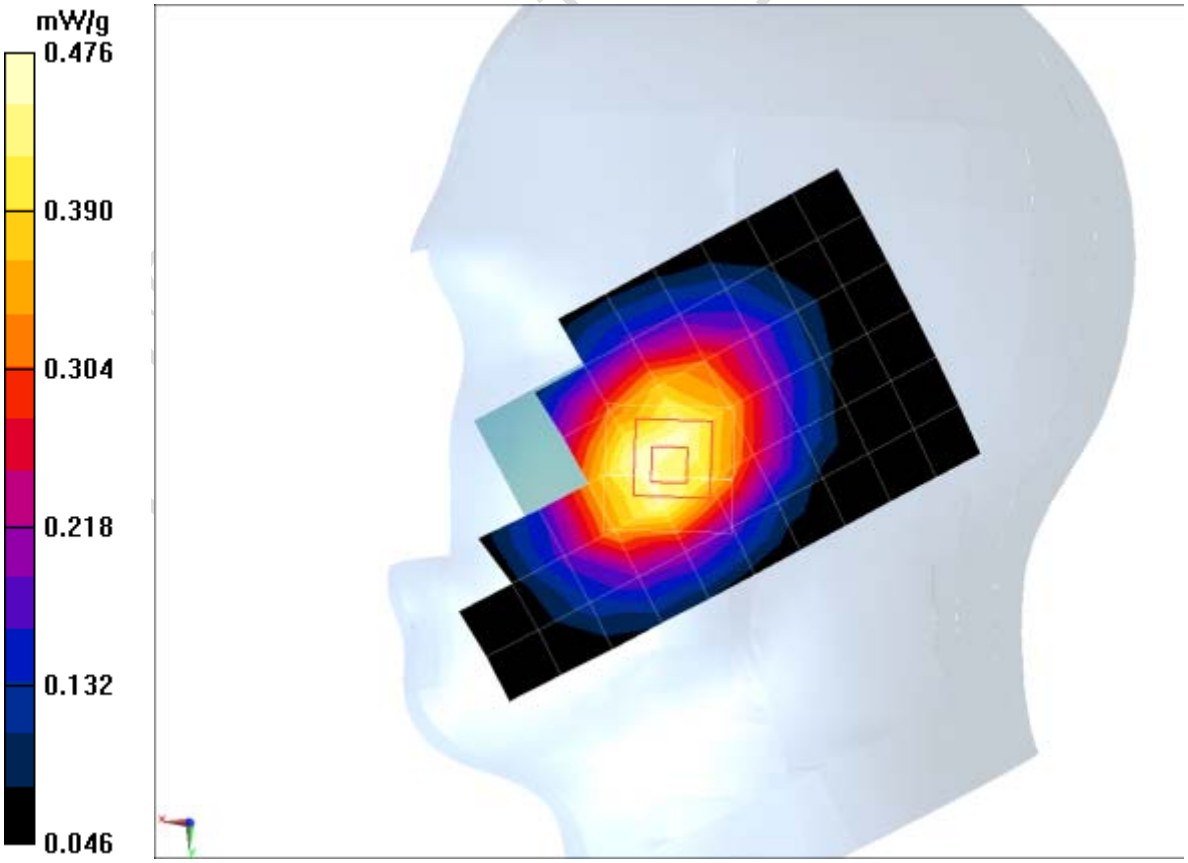
WCDMA Band V Left Tilt Low

Date/Time: 03/10/2015
Electronics: DAE4 Sn1329
Medium: Head 850MHz
Medium parameters used (interpolated): f = 826.4 MHz; ó = 0.909 mho/m;år = 42.443; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)
Low Tilt Left WCDMA Band V/Area Scan (11x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.288 mW/g
Low Tilt Left WCDMA Band V/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.946 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.3450 mW/g
SAR(1 g) = 0.280 mW/g; SAR(10 g) = 0.211 mW/g
Maximum value of SAR (measured) = 0.297 mW/g



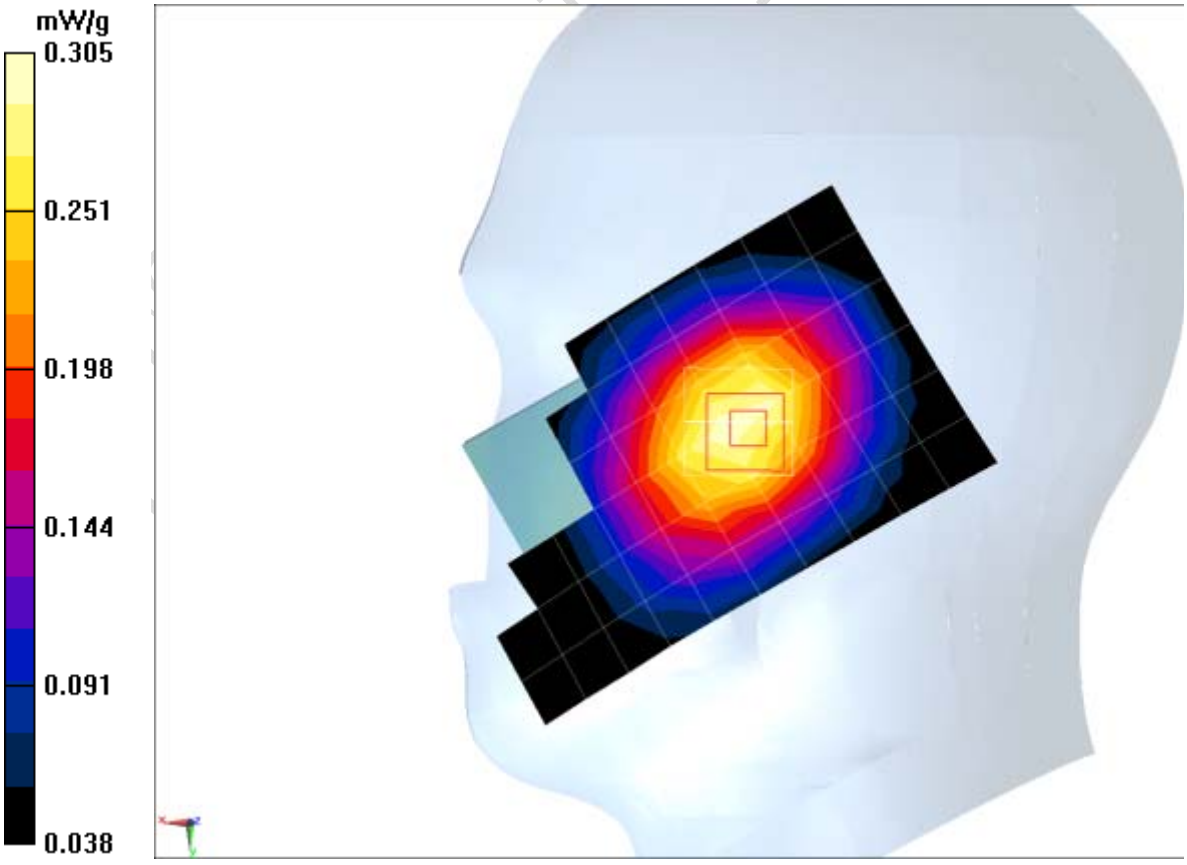
WCDMA Band V Right Cheek Low

Date/Time: 03/10/2015
Electronics: DAE4 Sn1329
Medium: Head 850MHz
Medium parameters used (interpolated): f = 826.4 MHz; ó = 0.909 mho/m;år = 42.443; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)
Low Cheek Right WCDMA Band V/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.468 mW/g
Low Cheek Right WCDMA Band V/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.898 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.5510 mW/g
SAR(1 g) = 0.433 mW/g; SAR(10 g) = 0.320 mW/g
Maximum value of SAR (measured) = 0.476 mW/g



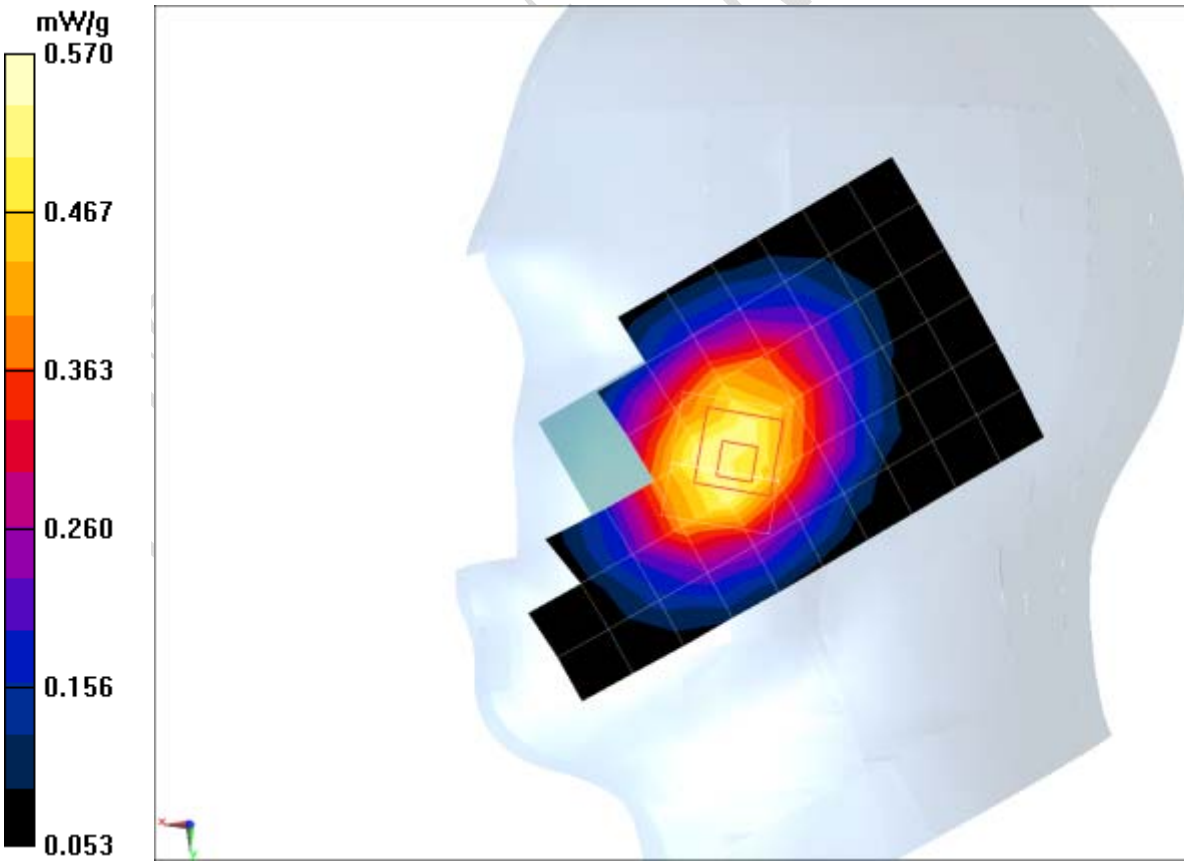
WCDMA Band V Right Tilt Low

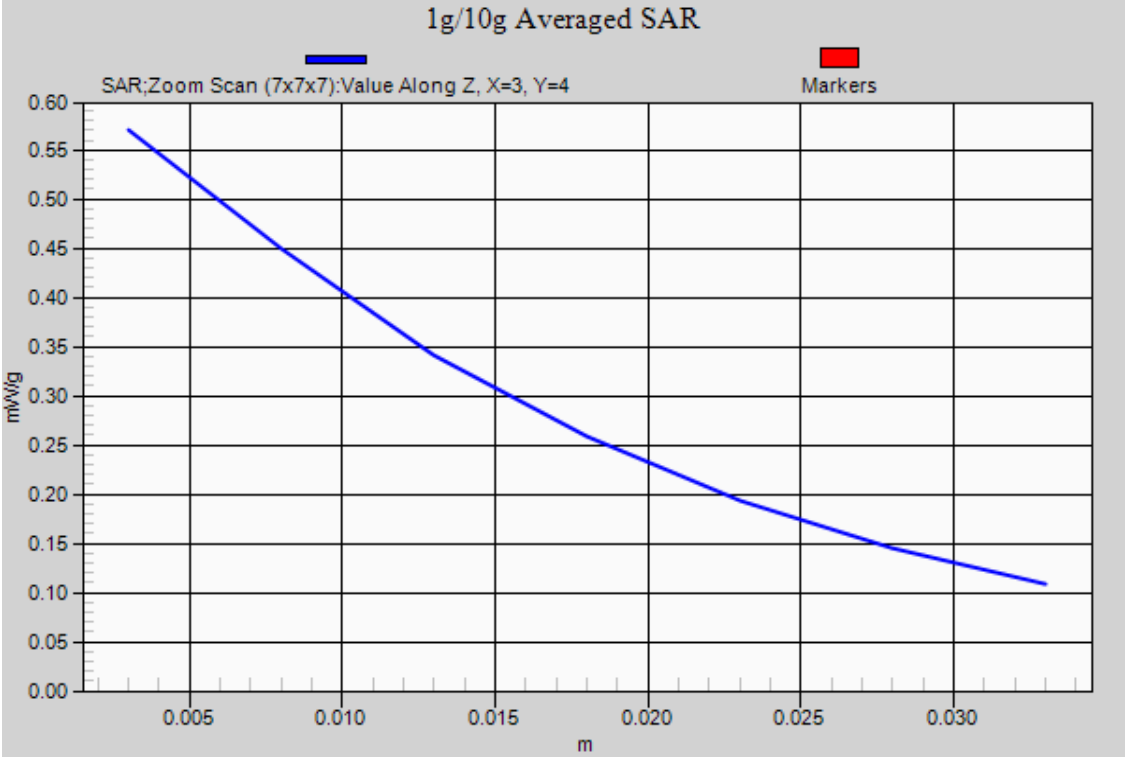
Date/Time: 03/10/2015
Electronics: DAE4 Sn1329
Medium: Head 850MHz
Medium parameters used (interpolated): f = 826.4 MHz; ó = 0.909 mho/m;år = 42.443; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)
Low Tilt Right WCDMA Band V/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.305 mW/g
Low Tilt Right WCDMA Band V/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.544 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.3440 mW/g
SAR(1 g) = 0.280 mW/g; SAR(10 g) = 0.212 mW/g
Maximum value of SAR (measured) = 0.305mW/g



WCDMA Band V Right Cheek High

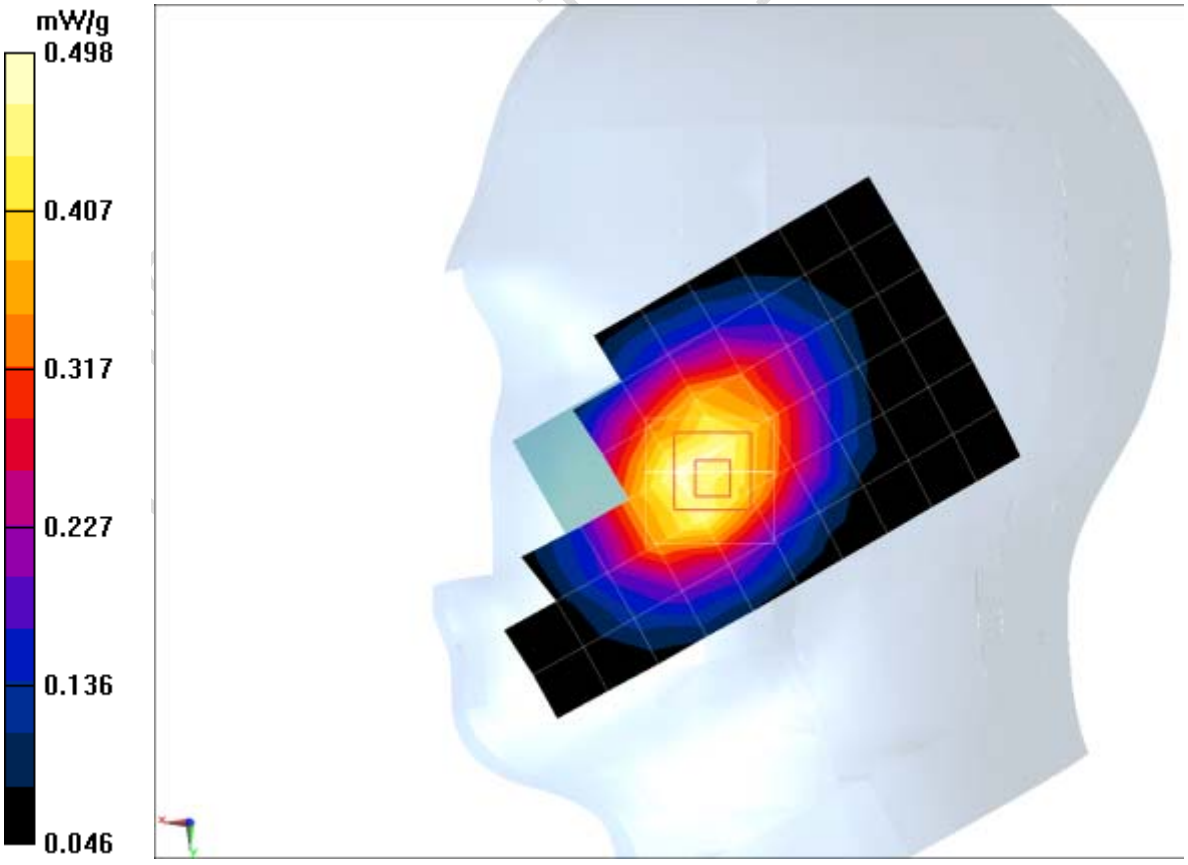
Date/Time: 03/10/2015
Electronics: DAE4 Sn1329
Medium: Head 850MHz
Medium parameters used: f = 847 MHz; ó = 0.927 mho/m;år = 42.22; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)
High Cheek Right WCDMA Band V/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.537 mW/g
High Cheek Right WCDMA Band V/Zoom Scan (7x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.048 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.6580 mW/g
SAR(1 g) = 0.518 mW/g; SAR(10 g) = 0.384 mW/g
Maximum value of SAR (measured) = 0.570 mW/g





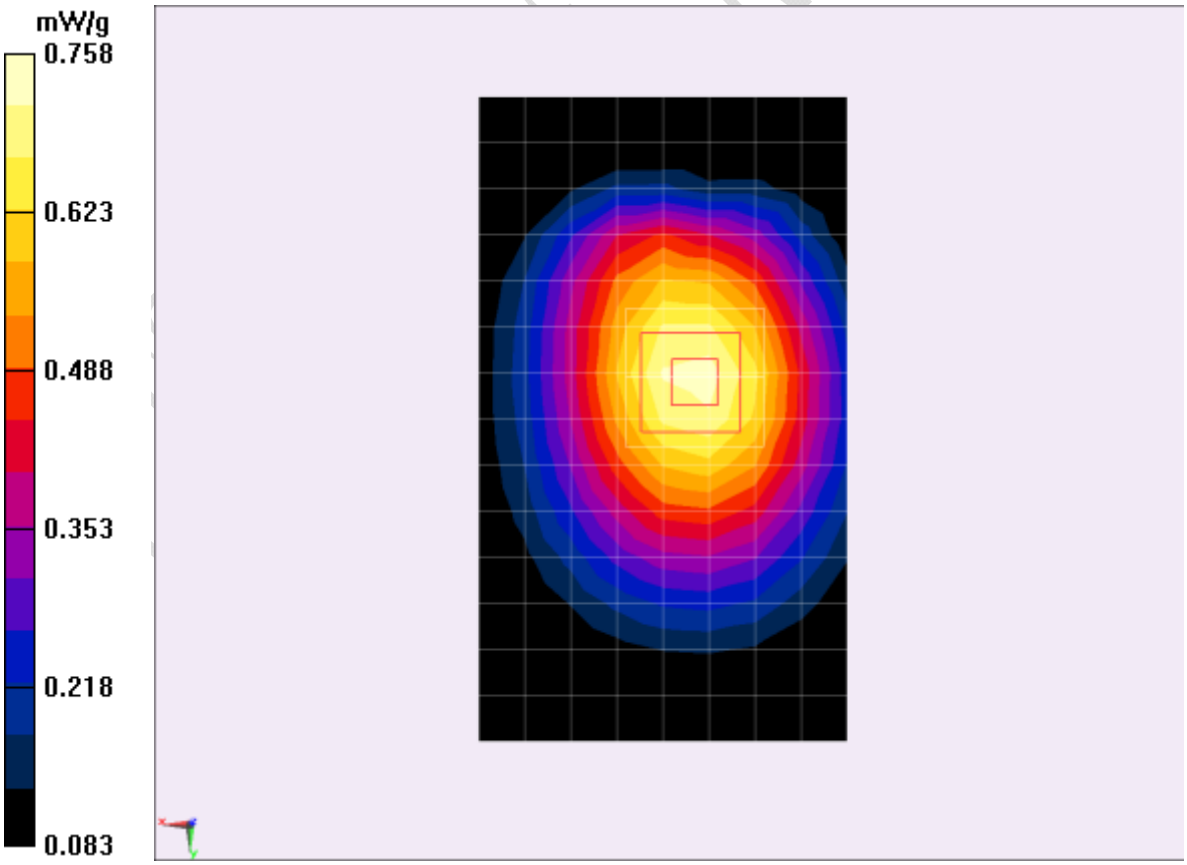
WCDMA Band V Right Cheek Middle

Date/Time: 03/10/2015
Electronics: DAE4 Sn1329
Medium: Head 850MHz
Medium parameters used (interpolated): f = 836.4 MHz; ó = 0.917 mho/m;år = 42.33; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)
Middle Cheek Right WCDMA Band V/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.481 mW/g
Middle Cheek Right WCDMA Band V/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.422 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.5700 mW/g
SAR(1 g) = 0.454 mW/g; SAR(10 g) = 0.334 mW/g
Maximum value of SAR (measured) = 0.498 mW/g



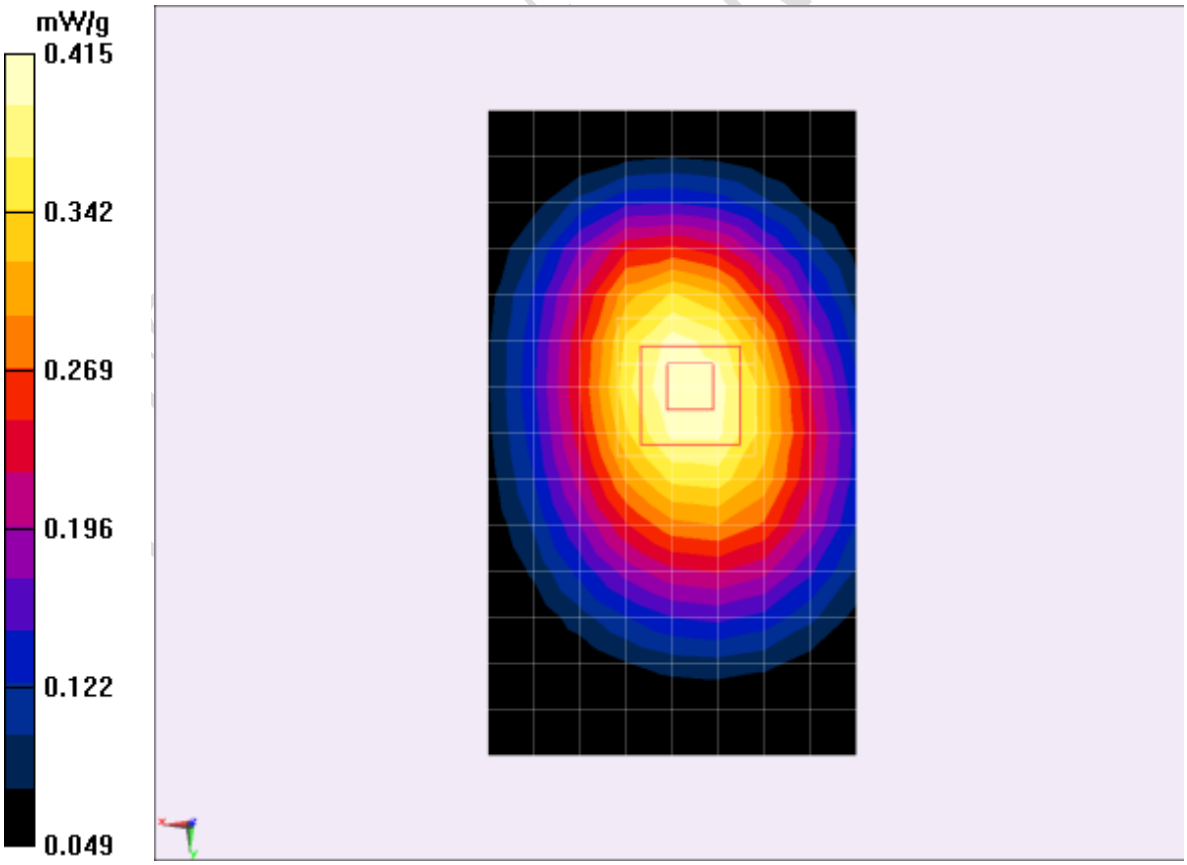
WCDMA Band V Body Toward Ground Low

Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used: f = 826.5 MHz; ó = 0.957 mho/m;år = 54.03; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
Low Toward Ground WCDMA Band V/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.781 mW/g
Low Toward Ground WCDMA Band V/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 28.447 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.8210 mW/g
SAR(1 g) = 0.744 mW/g; SAR(10 g) = 0.538 mW/g
Maximum value of SAR (measured) = 0.758 mW/g



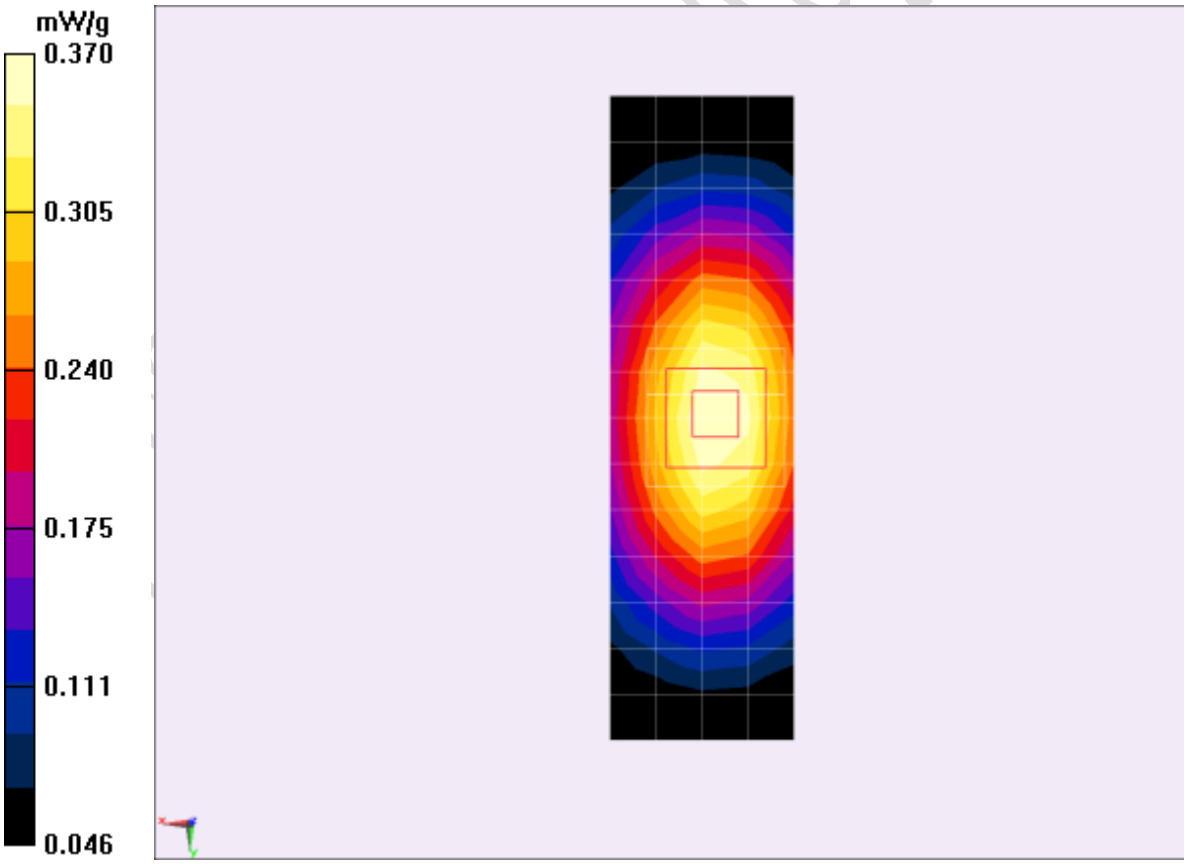
WCDMA Band V Body Toward Phantom Low

Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used: f = 826.5 MHz; ó = 0.957 mho/m;år = 54.03; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
Low Toward Phantom WCDMA Band V/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.414 mW/g
Low Toward Phantom WCDMA Band V/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.525 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.5000 mW/g
SAR(1 g) = 0.396 mW/g; SAR(10 g) = 0.295 mW/g
Maximum value of SAR (measured) = 0.415 mW/g



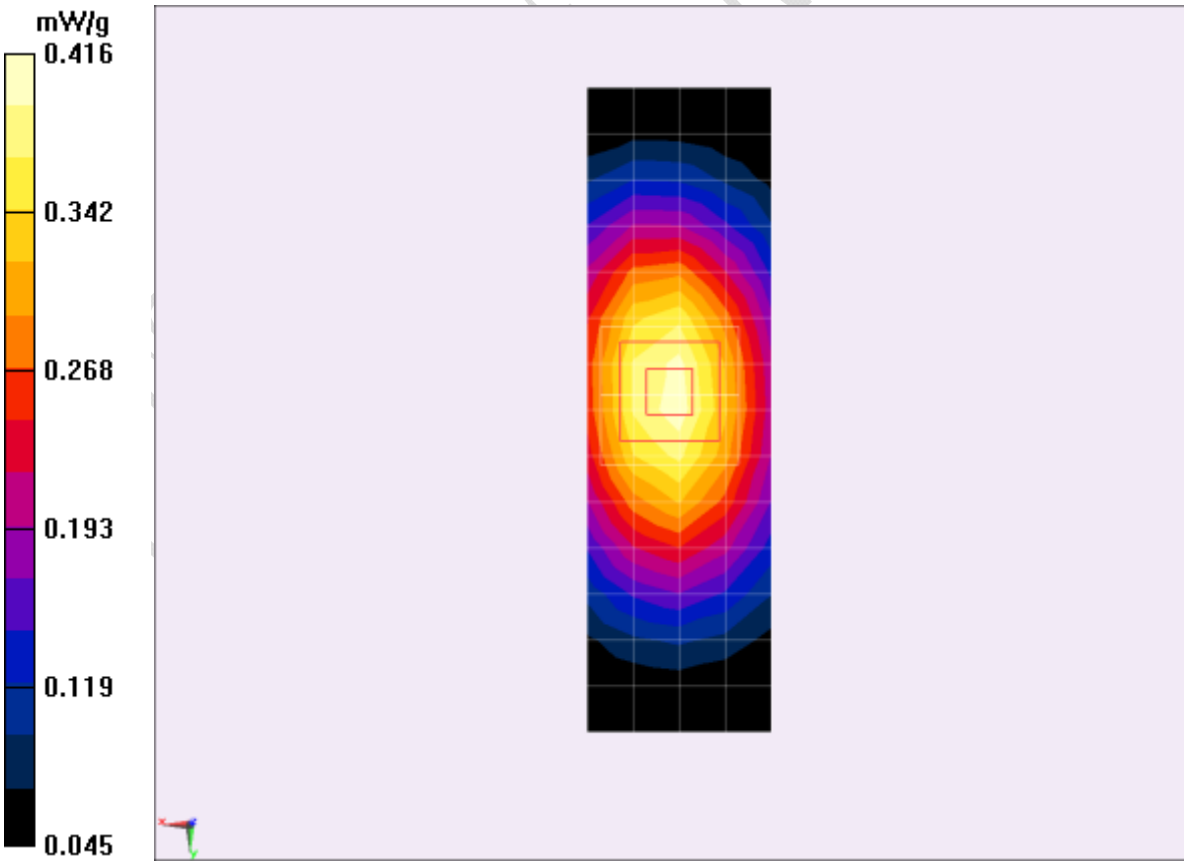
WCDMA Band V Body Left Low

Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used: f = 826.5 MHz; ó = 0.957 mho/m;år = 54.03; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
Low Left WCDMA Band V/Area Scan (5x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.375 mW/g
Low Left WCDMA Band V/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.849 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.4760 mW/g
SAR(1 g) = 0.348 mW/g; SAR(10 g) = 0.245 mW/g
Maximum value of SAR (measured) = 0.370 mW/g



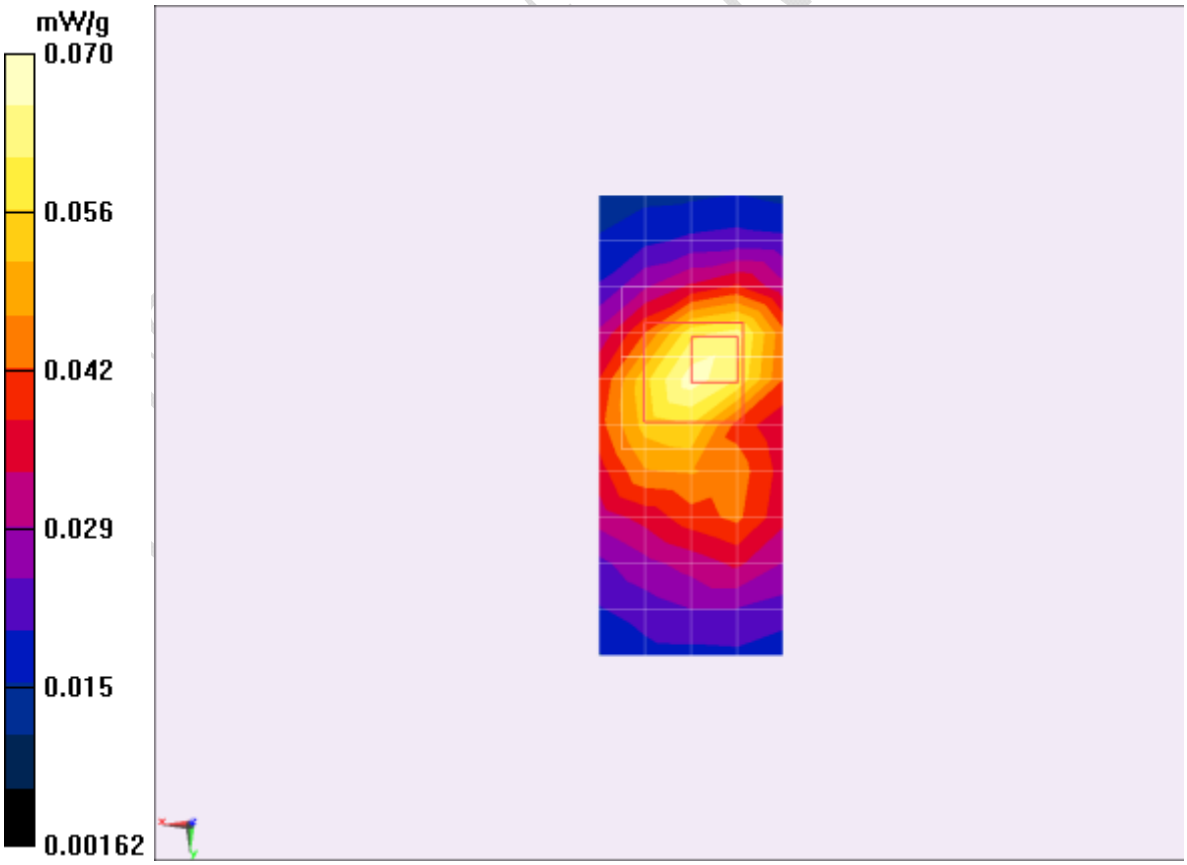
WCDMA Band V Body Right Low

Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used: f = 826.5 MHz; ó = 0.957 mho/m;år = 54.03; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
Low Right WCDMA Band V/Area Scan (5x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.408 mW/g
Low Right WCDMA Band V/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.708 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.5380 mW/g
SAR(1 g) = 0.388 mW/g; SAR(10 g) = 0.269 mW/g
Maximum value of SAR (measured) = 0.416 mW/g



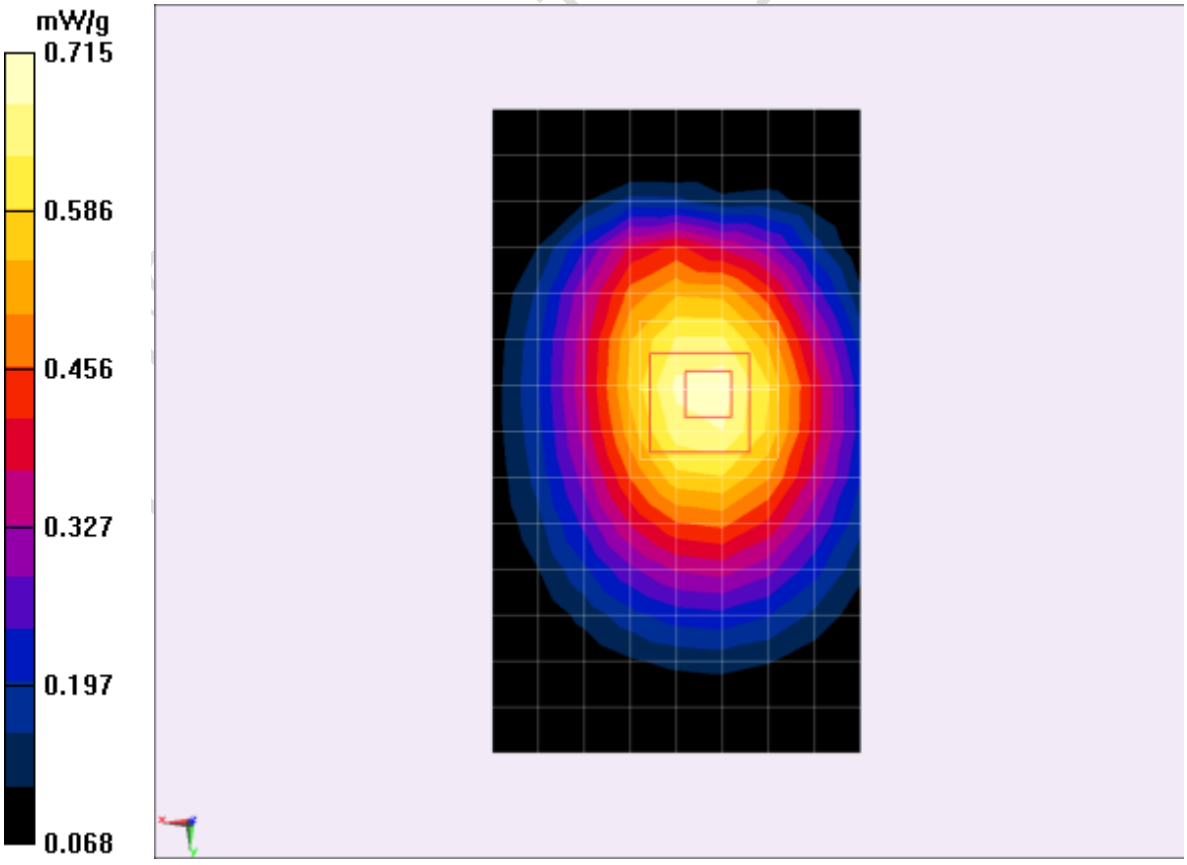
WCDMA Band V Body Bottom Low

Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used: f = 826.5 MHz; ó = 0.957 mho/m;år = 54.03; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
Low Bottom WCDMA Band V/Area Scan (5x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.068 mW/g
Low Bottom WCDMA Band V/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.517 V/m; Power Drift = -0.005 dB
Peak SAR (extrapolated) = 0.1060 mW/g
SAR(1 g) = 0.063 mW/g; SAR(10 g) = 0.038 mW/g
Maximum value of SAR (measured) = 0.070 mW/g



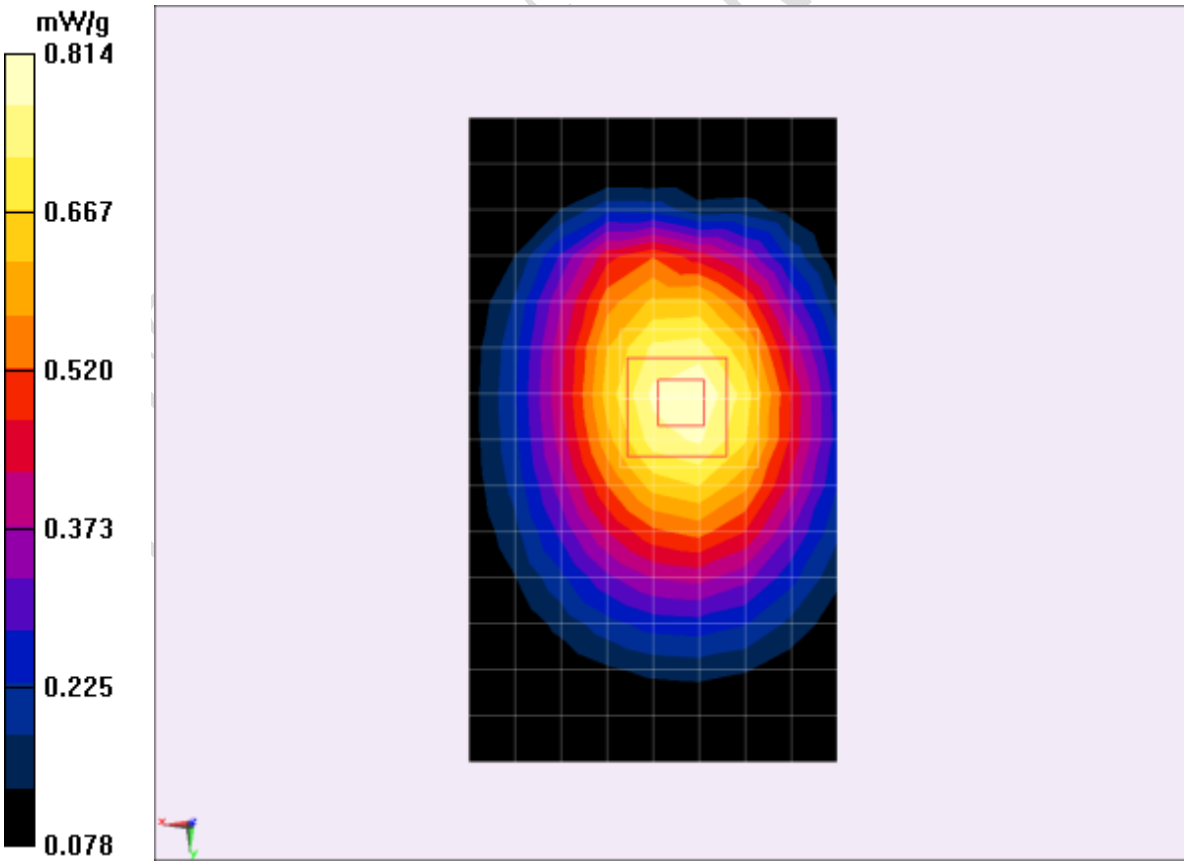
WCDMA Band V Body Toward Ground High

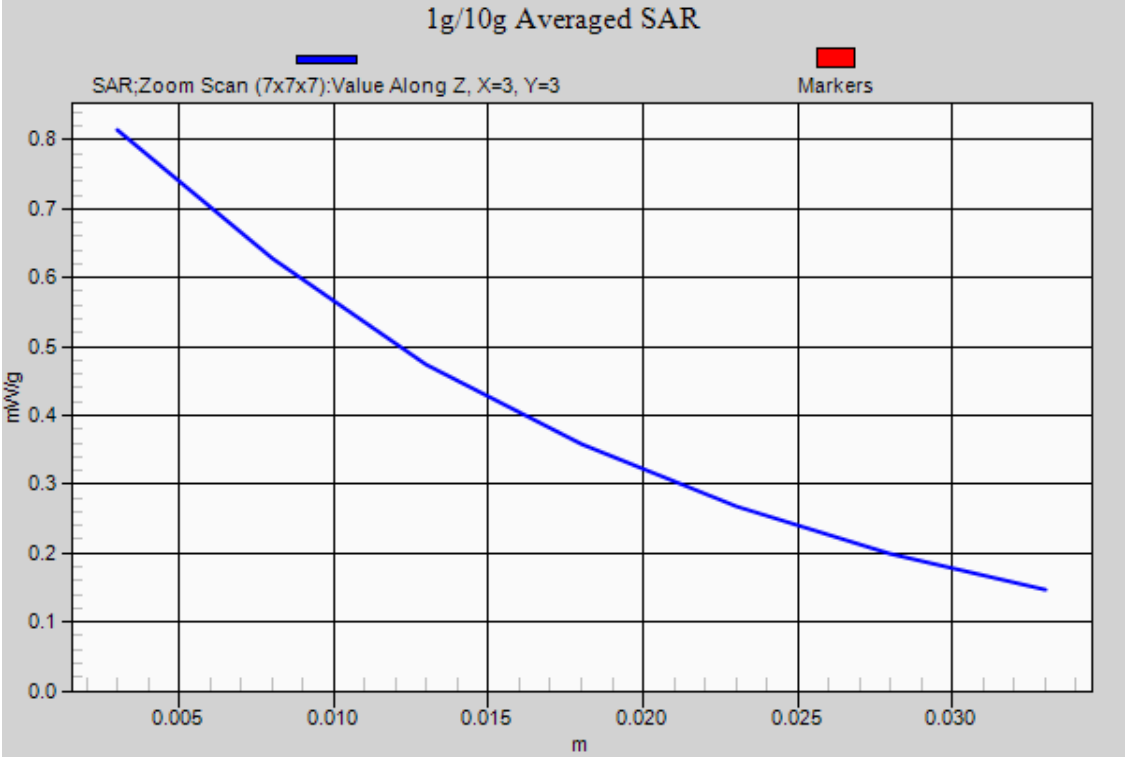
Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used (interpolated): f = 846.6 MHz; ó = 0.978 mho/m;år = 53.847; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
High Toward Ground WCDMA Band V/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.701 mW/g
High Toward Ground WCDMA Band V/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.098 V/m; Power Drift = -0.0075 dB
Peak SAR (extrapolated) = 0.8690 mW/g
SAR(1 g) = 0.674 mW/g; SAR(10 g) = 0.491 mW/g
Maximum value of SAR (measured) = 0.715 mW/g



WCDMA Band V Body Toward Ground Middle

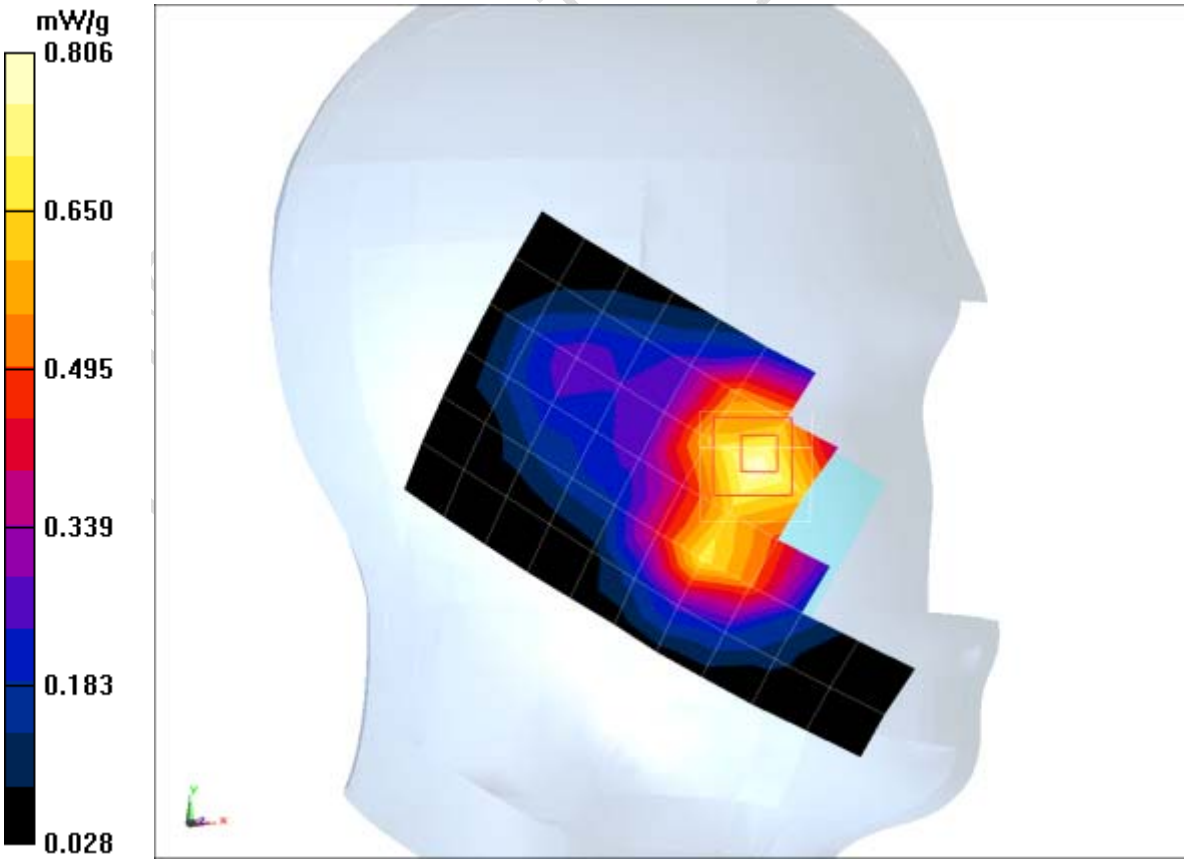
Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used: f = 836.5 MHz; ó = 0.967 mho/m;år = 53.935; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
Middle Toward Ground WCDMA Band V/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.813 mW/g
Middle Toward Ground WCDMA Band V/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 28.187 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.9440 mW/g
SAR(1 g) = 0.730 mW/g; SAR(10 g) = 0.534 mW/g
Maximum value of SAR (measured) = 0.814 mW/g




1g/10g Averaged SAR
SAR;Zoom Scan (7x7x7):Value Along Z, X=3, Y=3
Markers
mW/g
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.005
0.010
0.015
0.020
0.025
0.030
m

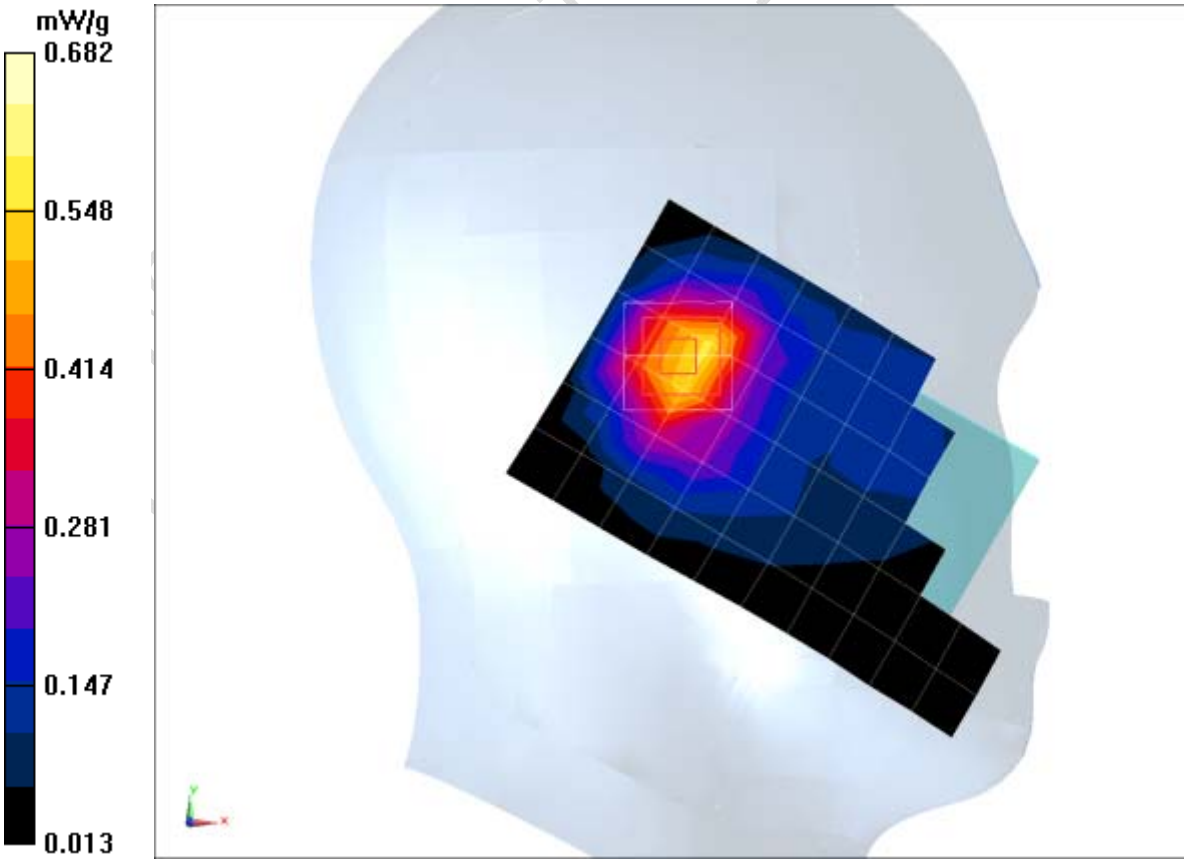
WCDMA Band II Left Cheek Low

Date/Time: 03/12/2015
Electronics: DAE4 Sn1329
Medium: Head 1900MHz
Medium parameters used (interpolated): f = 1852.4 MHz; ó = 1.335 mho/m;år = 39.94; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)
Low Cheek Left WCDMA Band II/Area Scan (11x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.807 mW/g
Low Cheek Left WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.709 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 1.0180 mW/g
SAR(1 g) = 0.721 mW/g; SAR(10 g) = 0.491 mW/g
Maximum value of SAR (measured) = 0.806 mW/g



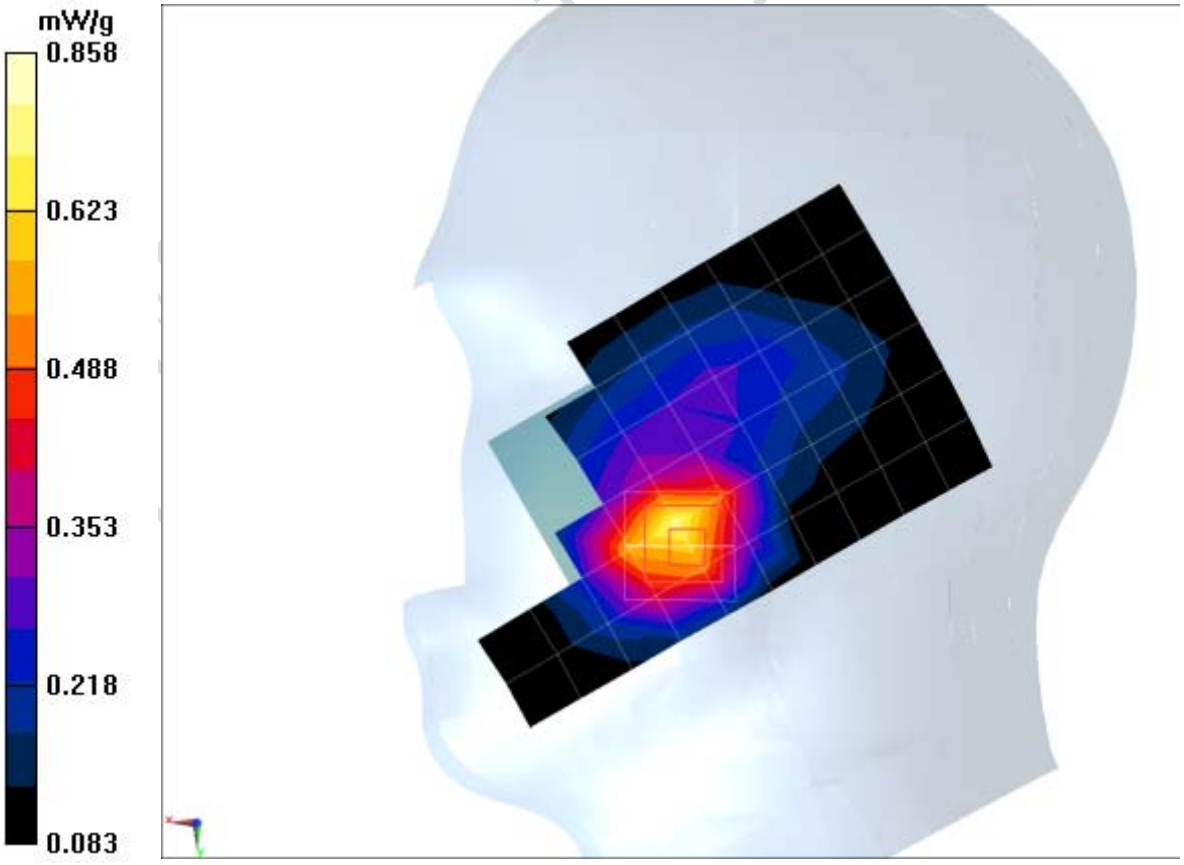
WCDMA Band II Left Tilt Low

Date/Time: 03/12/2015
Electronics: DAE4 Sn1329
Medium: Head 1900MHz
Medium parameters used (interpolated): f = 1852.4 MHz; ó = 1.335 mho/m;år = 39.94; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)
Low Tilt Left WCDMA Band II/Area Scan (11x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.568 mW/g
Low Tilt Left WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.667 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.7350 mW/g
SAR(1 g) = 0.613 mW/g; SAR(10 g) = 0.371 mW/g
Maximum value of SAR (measured) = 0.682 mW/g



WCDMA Band II Right Cheek Low

Date/Time: 03/12/2015
Electronics: DAE4 Sn1329
Medium: Head 1900MHz
Medium parameters used (interpolated): f = 1852.4 MHz; ó = 1.335 mho/m;år = 39.94; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)
Low Cheek Right WCDMA Band II/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.890 mW/g
Low Cheek Right WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.093 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.9210 mW/g
SAR(1 g) = 0.820 mW/g; SAR(10 g) = 0.572 mW/g
Maximum value of SAR (measured) = 0.858 mW/g



WCDMA Band II Right Tilt Low

Date/Time: 03/12/2015

Electronics: DAE4 Sn1329

Medium: Head 1900MHz

Medium parameters used (interpolated): f = 1852.4 MHz; ó = 1.335 mho/m;år = 39.94; ñ = 1000 kg/m3

Ambient Temperature:22.5°C Liquid Temperature:22.5°C

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

Low Tilt Right WCDMA Band II/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.596 mW/g

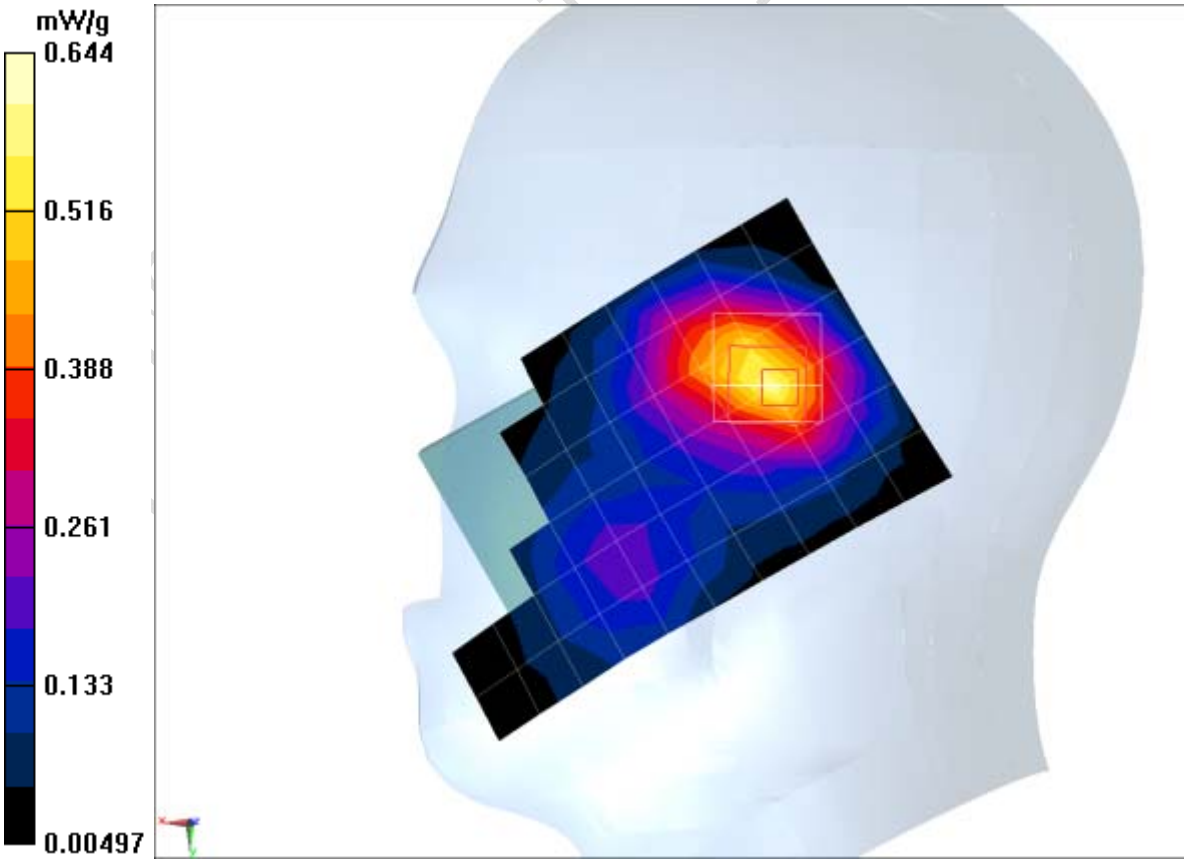
Low Tilt Right WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.779 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.8090 mW/g

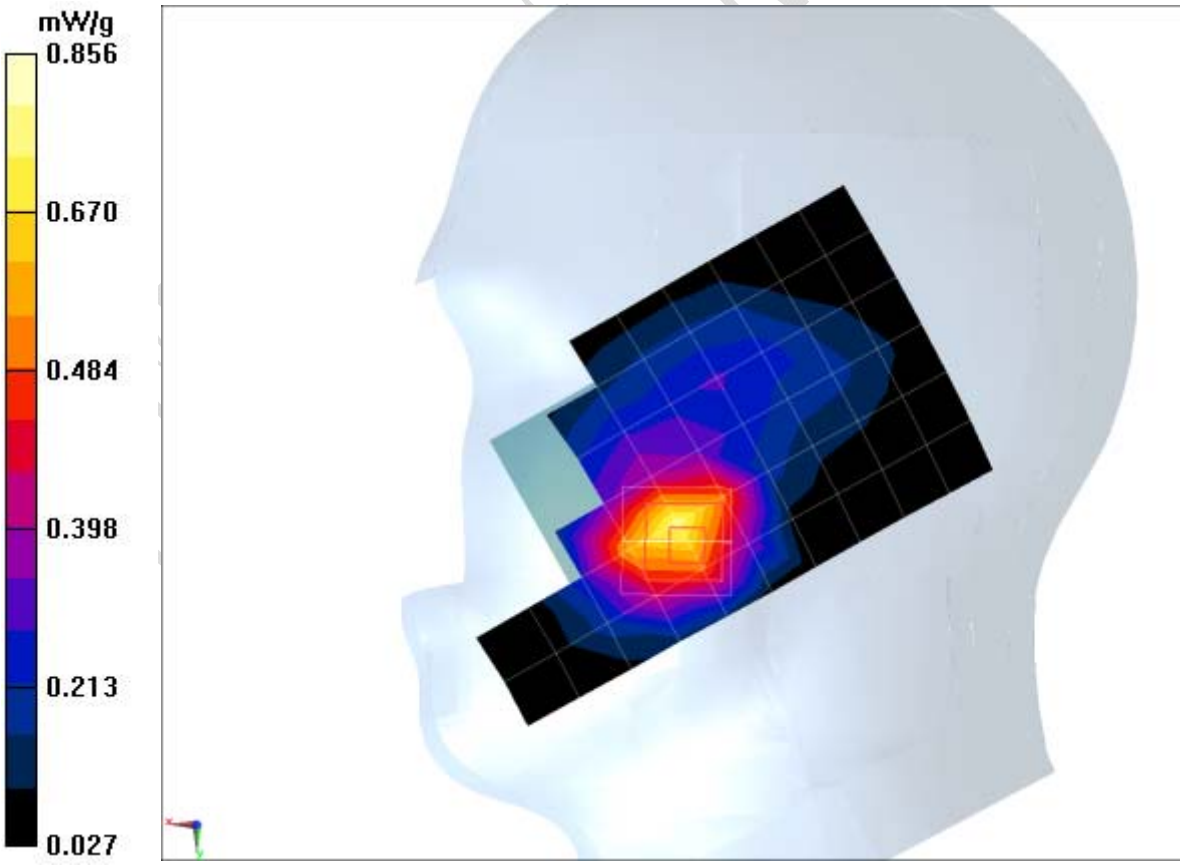
SAR(1 g) = 0.543 mW/g; SAR(10 g) = 0.340 mW/g

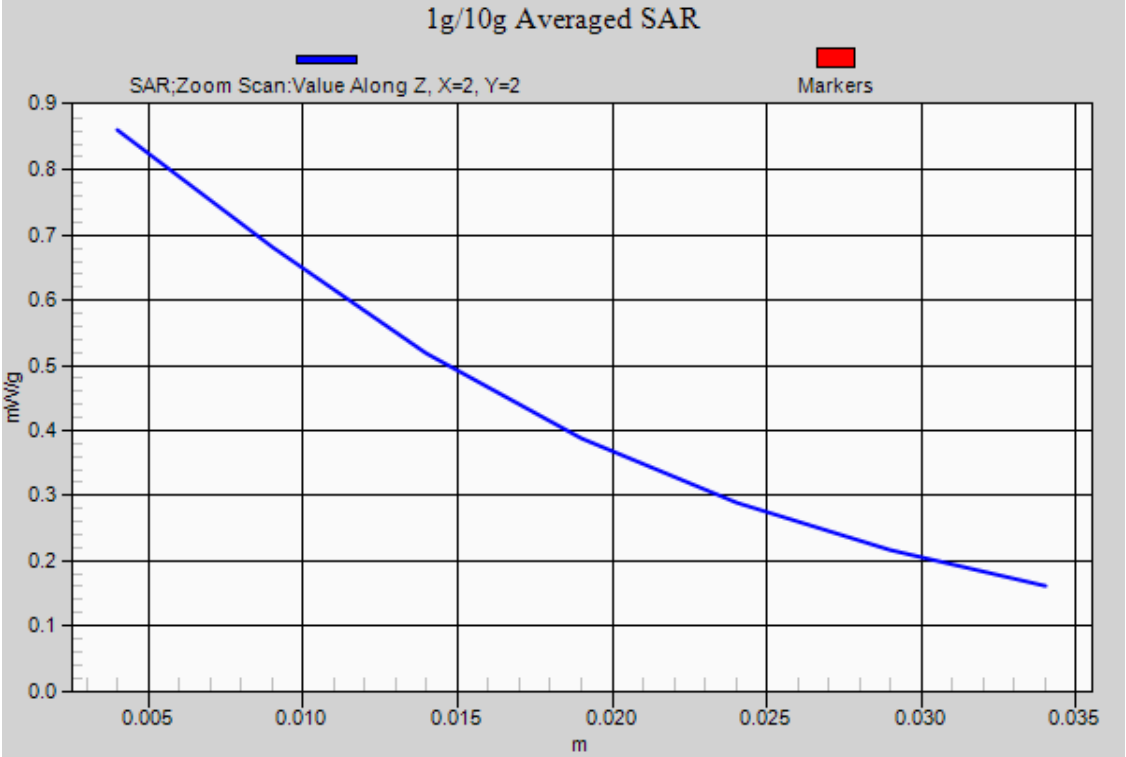
Maximum value of SAR (measured) = 0.644 mW/g



WCDMA Band II Right Cheek High

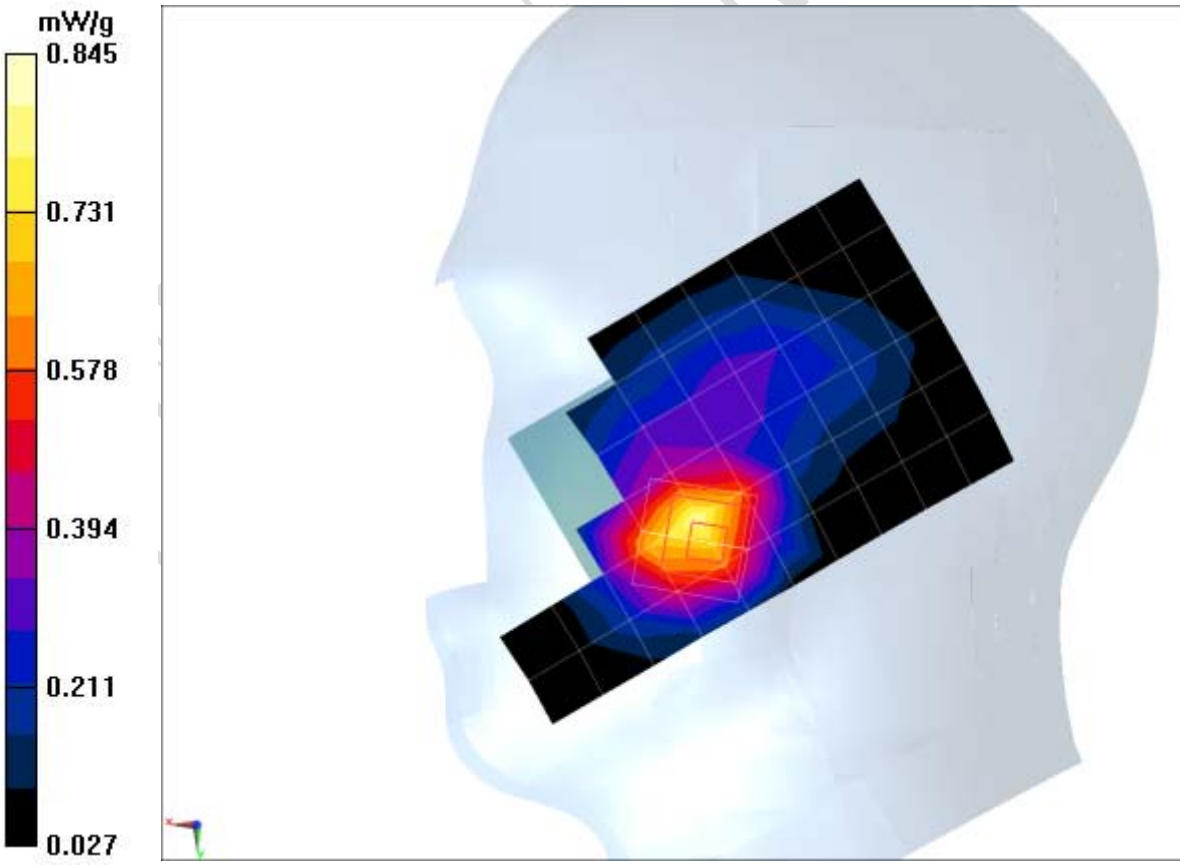
Date/Time: 03/12/2015
Electronics: DAE4 Sn1329
Medium: Head 1900MHz
Medium parameters used: f = 1908 MHz; ó = 1.394 mho/m;år = 39.731; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)
High Cheek Right WCDMA Band II/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.908 mW/g
High Cheek Right WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.174 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.9420 mW/g
SAR(1 g) = 0.840 mW/g; SAR(10 g) = 0.576 mW/g
Maximum value of SAR (measured) = 0.856 mW/g




1g/10g Averaged SAR
SAR;Zoom Scan:Value Along Z, X=2, Y=2
Markers
mW/g
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

WCDMA Band II Right Cheek Middle

Date/Time: 03/12/2015
Electronics: DAE4 Sn1329
Medium: Head 1900MHz
Medium parameters used: f = 1880 MHz; ó = 1.361 mho/m;år = 39.844; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)
Middle Cheek Right WCDMA Band II/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.886 mW/g
Middle Cheek Right WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.243 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.9090 mW/g
SAR(1 g) = 0.800 mW/g; SAR(10 g) = 0.567 mW/g
Maximum value of SAR (measured) = 0.845 mW/g



First Repeated SAR test

WCDMA Band II Right Cheek Low 2

Date/Time: 03/12/2015

Electronics: DAE4 Sn1329

Medium: Head 1900MHz

Medium parameters used (interpolated): f = 1852.4 MHz; ó = 1.335 mho/m;år = 39.94; ñ = 1000 kg/m3

Ambient Temperature:22.5°C Liquid Temperature:22.5°C

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

Low Cheek Right WCDMA Band II 2/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.916 mW/g

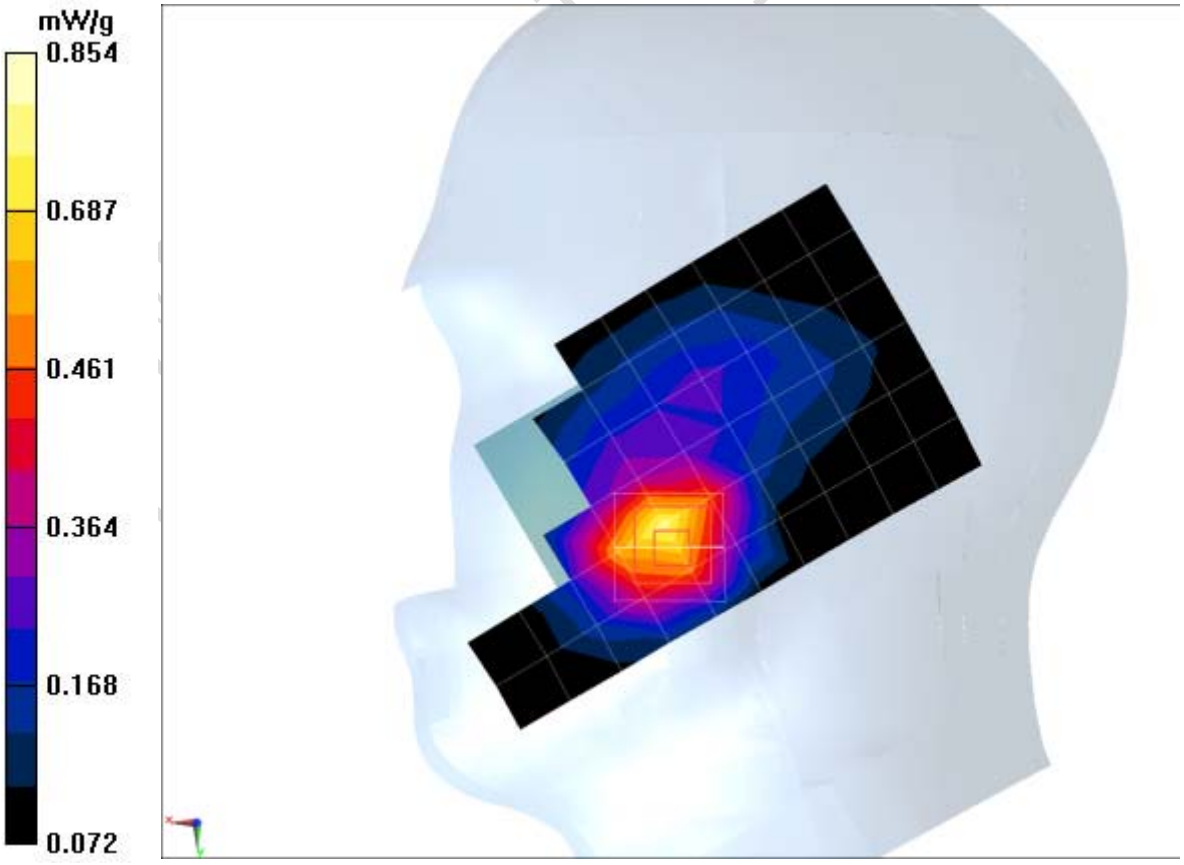
Low Cheek Right WCDMA Band II 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.689 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.9330 mW/g

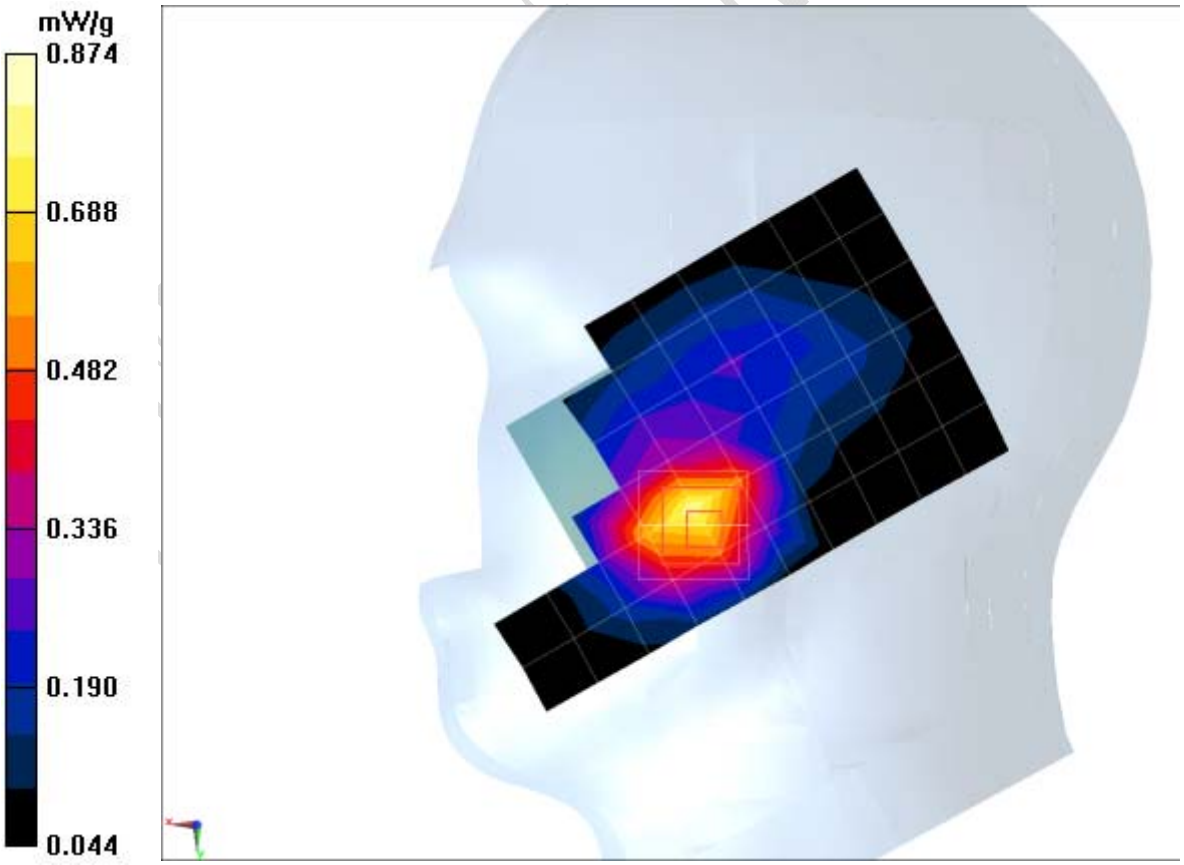
SAR(1 g) = 0.823 mW/g; SAR(10 g) = 0.572 mW/g

Maximum value of SAR (measured) = 0.854 mW/g



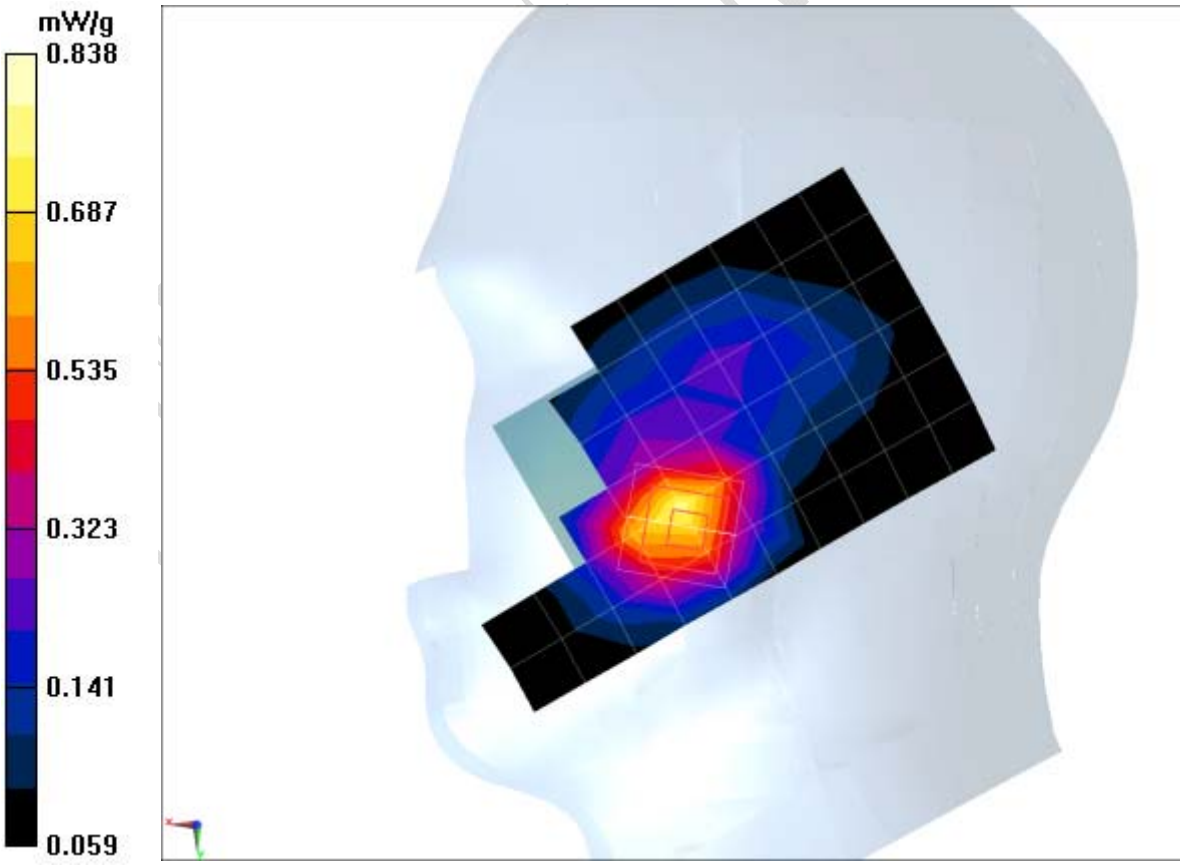
WCDMA Band II Right Cheek High 2

Date/Time: 03/12/2015
Electronics: DAE4 Sn1329
Medium: Head 1900MHz
Medium parameters used: f = 1908 MHz; ó = 1.394 mho/m;år = 39.731; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)
High Cheek Right WCDMA Band II 2/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.947 mW/g
High Cheek Right WCDMA Band II 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.215 V/m; Power Drift = 0.0015 dB
Peak SAR (extrapolated) = 0.9950 mW/g
SAR(1 g) = 0.840 mW/g; SAR(10 g) = 0.575 mW/g
Maximum value of SAR (measured) = 0.874 mW/g



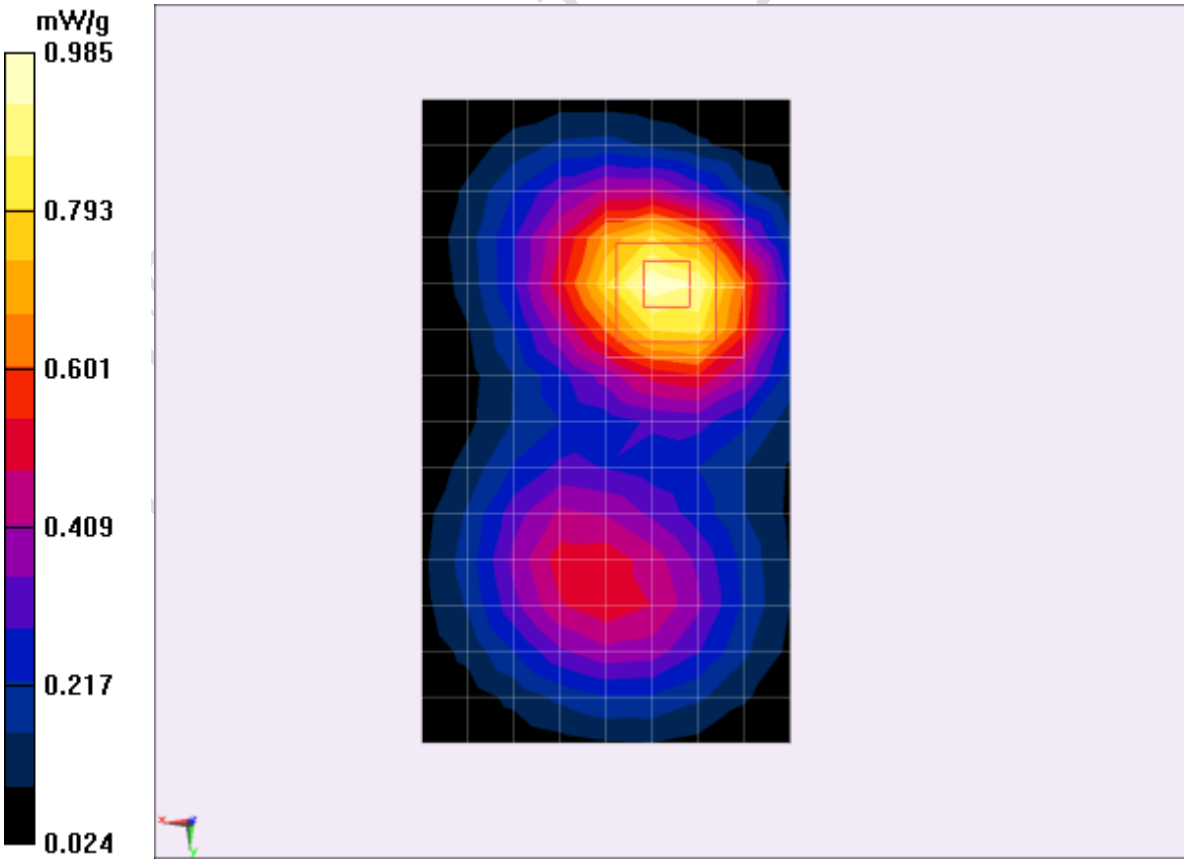
WCDMA Band II Right Cheek Middle 2

Date/Time: 03/12/2015
Electronics: DAE4 Sn1329
Medium: Head 1900MHz
Medium parameters used: f = 1880 MHz; ó = 1.361 mho/m;år = 39.844; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)
Middle Cheek Right WCDMA Band II 2/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.910 mW/g
Middle Cheek Right WCDMA Band II 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.811 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.9360 mW/g
SAR(1 g) = 0.794 mW/g; SAR(10 g) = 0.562 mW/g
Maximum value of SAR (measured) = 0.838 mW/g



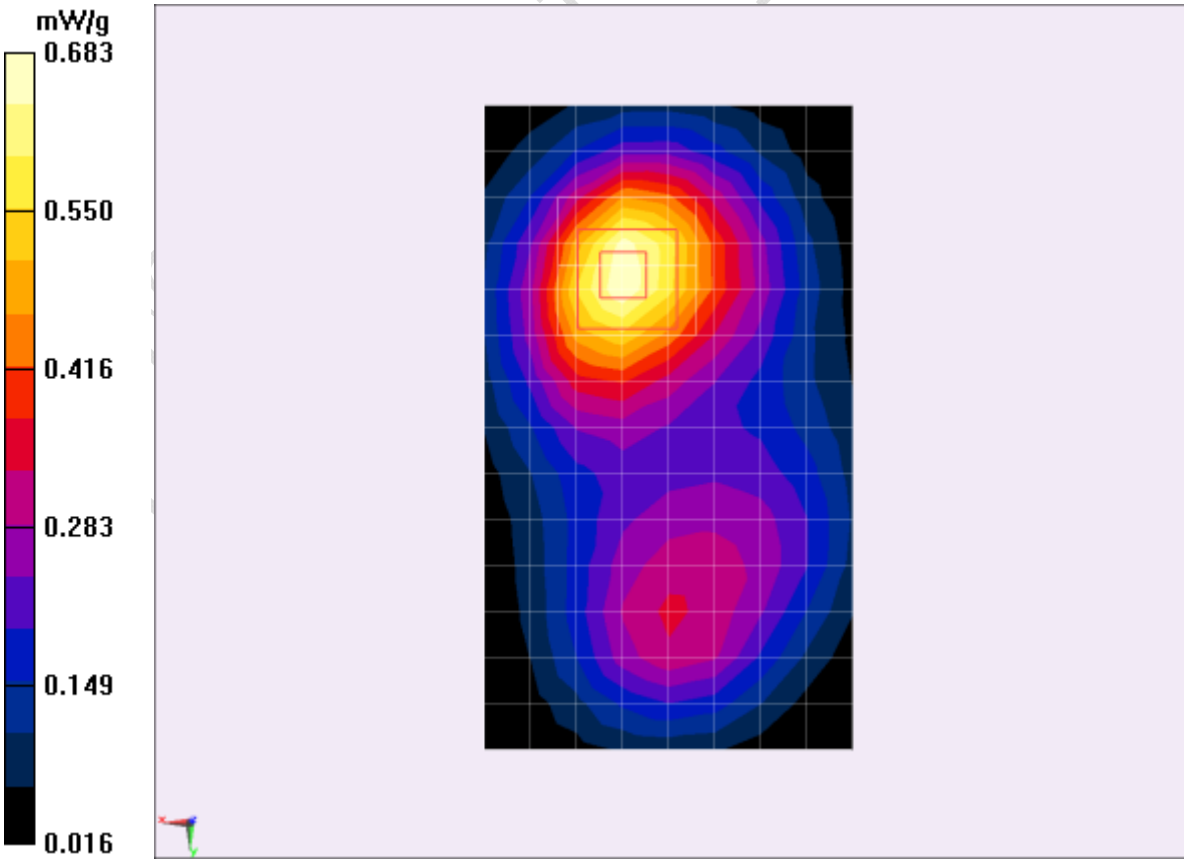
WCDMA Band II Body Toward Ground Low

Date/Time: 03/13/2015
Electronics: DAE4 Sn1329
Medium: Body 1900MHz
Medium parameters used (interpolated): f = 1852.4 MHz; ó = 1.45 mho/m;år = 53.942; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)
Low Toward Ground WCDMA Band II/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.976 mW/g
Low Toward Ground WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.770 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 1.3420 mW/g
SAR(1 g) = 0.909 mW/g; SAR(10 g) = 0.568 mW/g
Maximum value of SAR (measured) = 0.985 mW/g



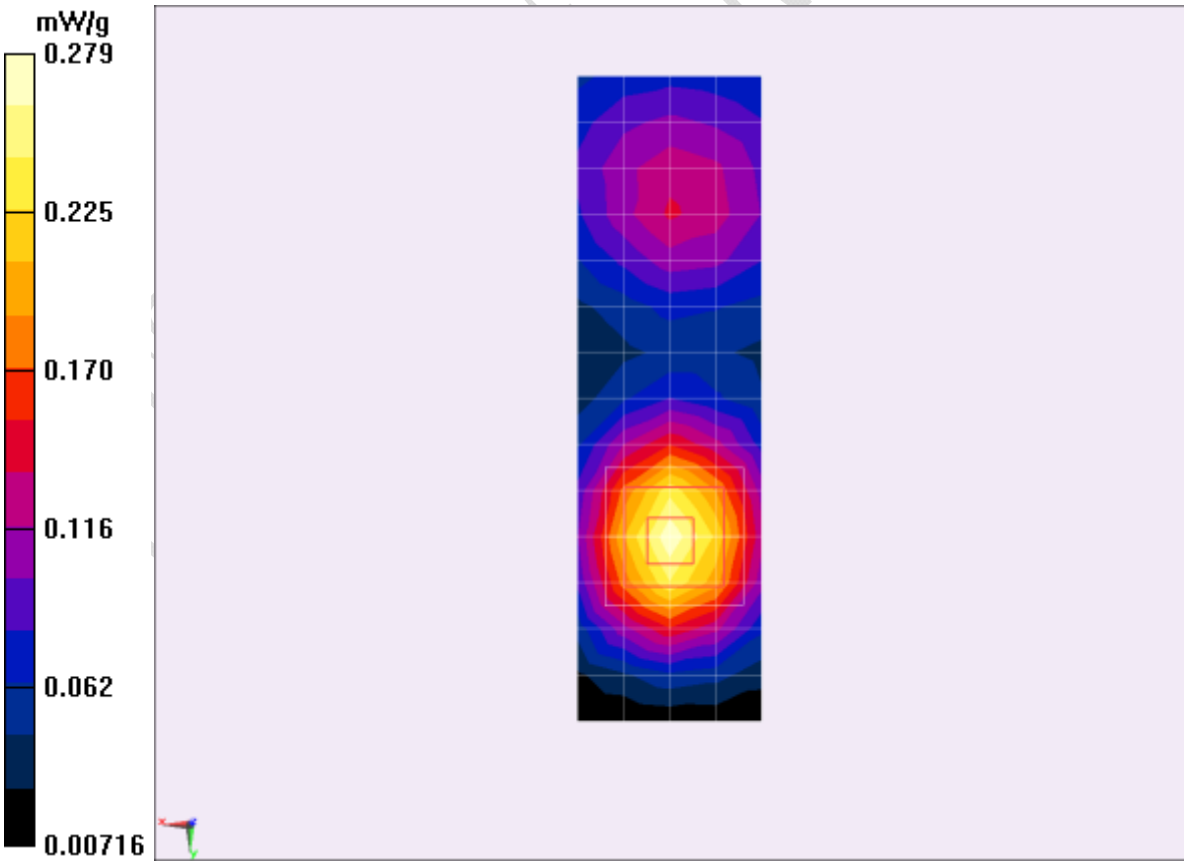
WCDMA Band II Body Toward Phantom Low

Date/Time: 03/13/2015
Electronics: DAE4 Sn1329
Medium: Body 1900MHz
Medium parameters used (interpolated): f = 1852.4 MHz; ó = 1.45 mho/m;år = 53.942; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)
Low Toward Phantom WCDMA Band II/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.682 mW/g
Low Toward Phantom WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.241 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.9210 mW/g
SAR(1 g) = 0.630 mW/g; SAR(10 g) = 0.397 mW/g
Maximum value of SAR (measured) = 0.683 mW/g



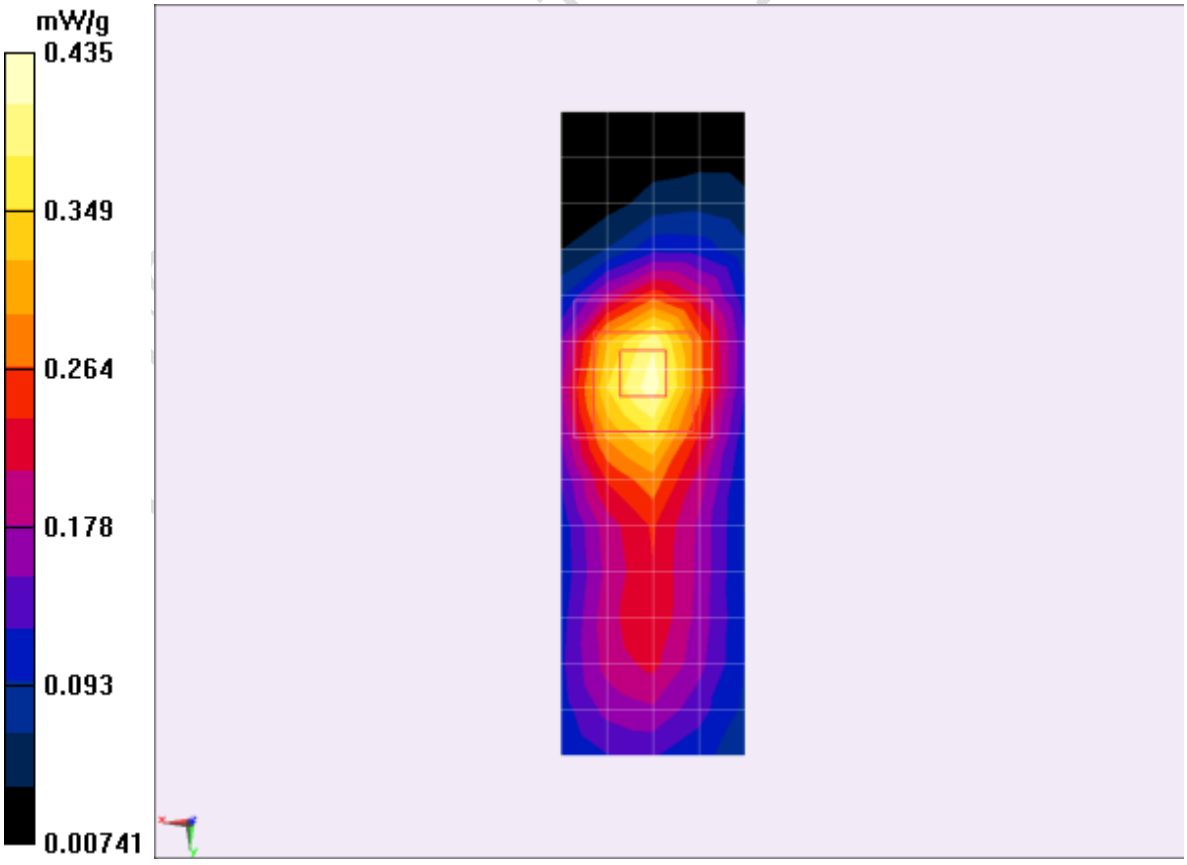
WCDMA Band II Body Left Low

Date/Time: 03/13/2015
Electronics: DAE4 Sn1329
Medium: Body 1900MHz
Medium parameters used (interpolated): f = 1852.4 MHz; ó = 1.45 mho/m;år = 53.942; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)
Low Left WCDMA Band II/Area Scan (5x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.276 mW/g
Low Left WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.540 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.3790 mW/g
SAR(1 g) = 0.254 mW/g; SAR(10 g) = 0.156 mW/g
Maximum value of SAR (measured) = 0.279 mW/g



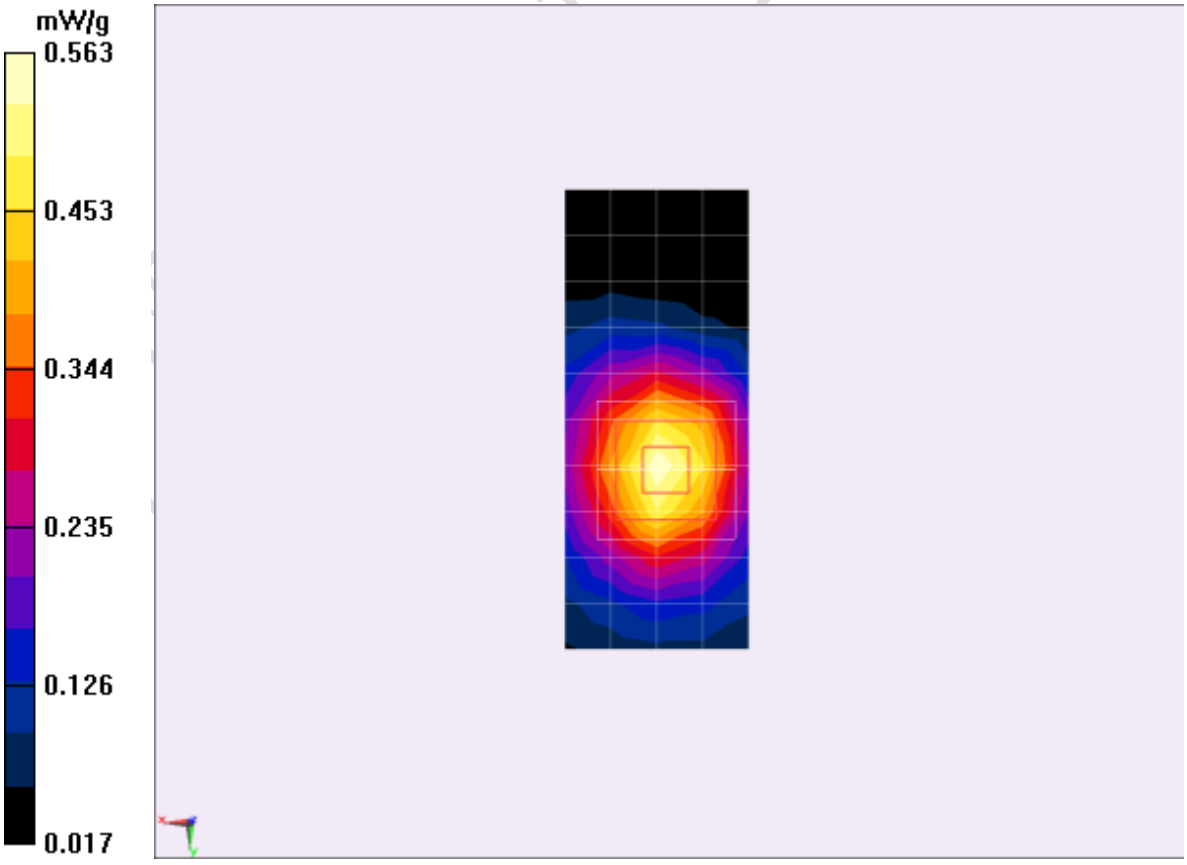
WCDMA Band II Body Right Low

Date/Time: 03/13/2015
Electronics: DAE4 Sn1329
Medium: Body 1900MHz
Medium parameters used (interpolated): f = 1852.4 MHz; ó = 1.45 mho/m;år = 53.942; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)
Low Right WCDMA Band II/Area Scan (5x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.427 mW/g
Low Right WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.836 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.5930 mW/g
SAR(1 g) = 0.396 mW/g; SAR(10 g) = 0.240 mW/g
Maximum value of SAR (measured) = 0.435 mW/g



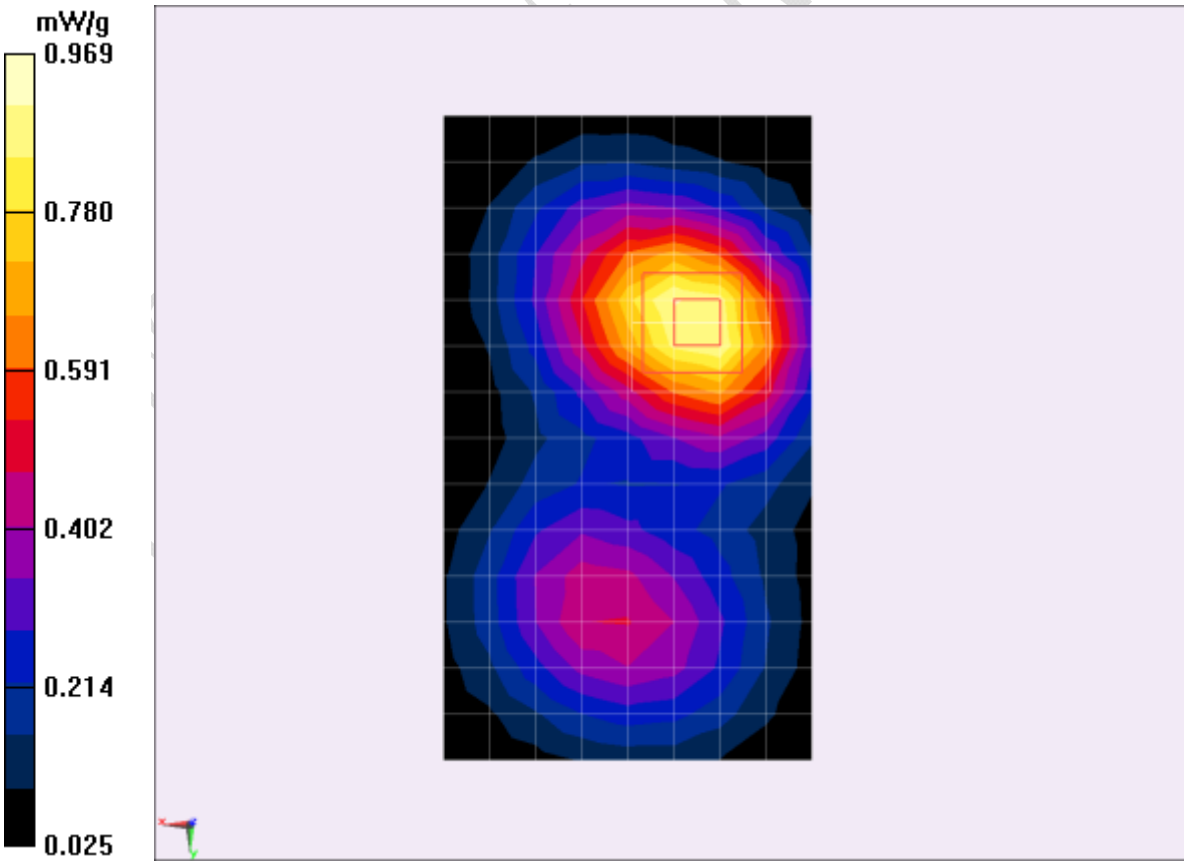
WCDMA Band II Body Bottom Low

Date/Time: 03/13/2015
Electronics: DAE4 Sn1329
Medium: Body 1900MHz
Medium parameters used (interpolated): f = 1852.4 MHz; ó = 1.45 mho/m;år = 53.942; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)
Low Bottom WCDMA Band II/Area Scan (5x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.560 mW/g
Low Bottom WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.424 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.7520 mW/g
SAR(1 g) = 0.514 mW/g; SAR(10 g) = 0.312 mW/g
Maximum value of SAR (measured) = 0.563 mW/g



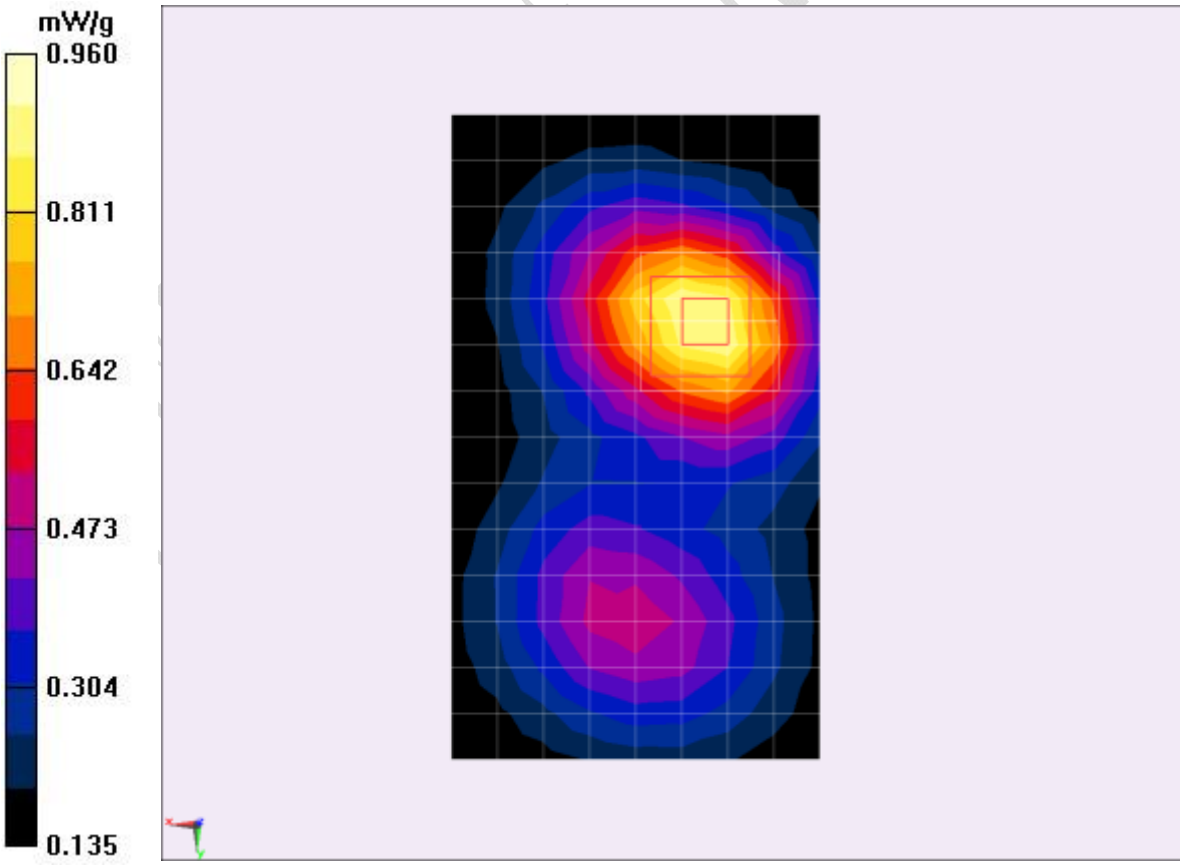
WCDMA Band II Body Toward Ground High

Date/Time: 03/13/2015
Electronics: DAE4 Sn1329
Medium: Body 1900MHz
Medium parameters used: f = 1908 MHz; ó = 1.511 mho/m;år = 53.655; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)
High Toward Ground WCDMA Band II/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.914 mW/g
High Toward Ground WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.939 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.3120 mW/g
SAR(1 g) = 0.889 mW/g; SAR(10 g) = 0.556 mW/g
Maximum value of SAR (measured) = 0.969 mW/g



WCDMA Band II Body Toward Ground Middle

Date/Time: 03/13/2015
Electronics: DAE4 Sn1329
Medium: Body 1900MHz
Medium parameters used: f = 1880 MHz; ó = 1.475 mho/m;år = 53.878; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)
Middle Toward Ground WCDMA Band II/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.040 mW/g
Middle Toward Ground WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.194 V/m; Power Drift = -0.20 dB
Peak SAR (extrapolated) = 1.3740 mW/g
SAR(1 g) = 0.922 mW/g; SAR(10 g) = 0.591 mW/g
Maximum value of SAR (measured) = 0.960 mW/g



First Repeated SAR test

WCDMA Band II Body Toward Ground Low 2

Date/Time: 03/13/2015

Electronics: DAE4 Sn1329

Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1852.4 MHz; ó = 1.45 mho/m;år = 53.942; ñ = 1000 kg/m3

Ambient Temperature:22.5°C Liquid Temperature:22.5°C

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Toward Ground WCDMA Band II 2/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.978 mW/g

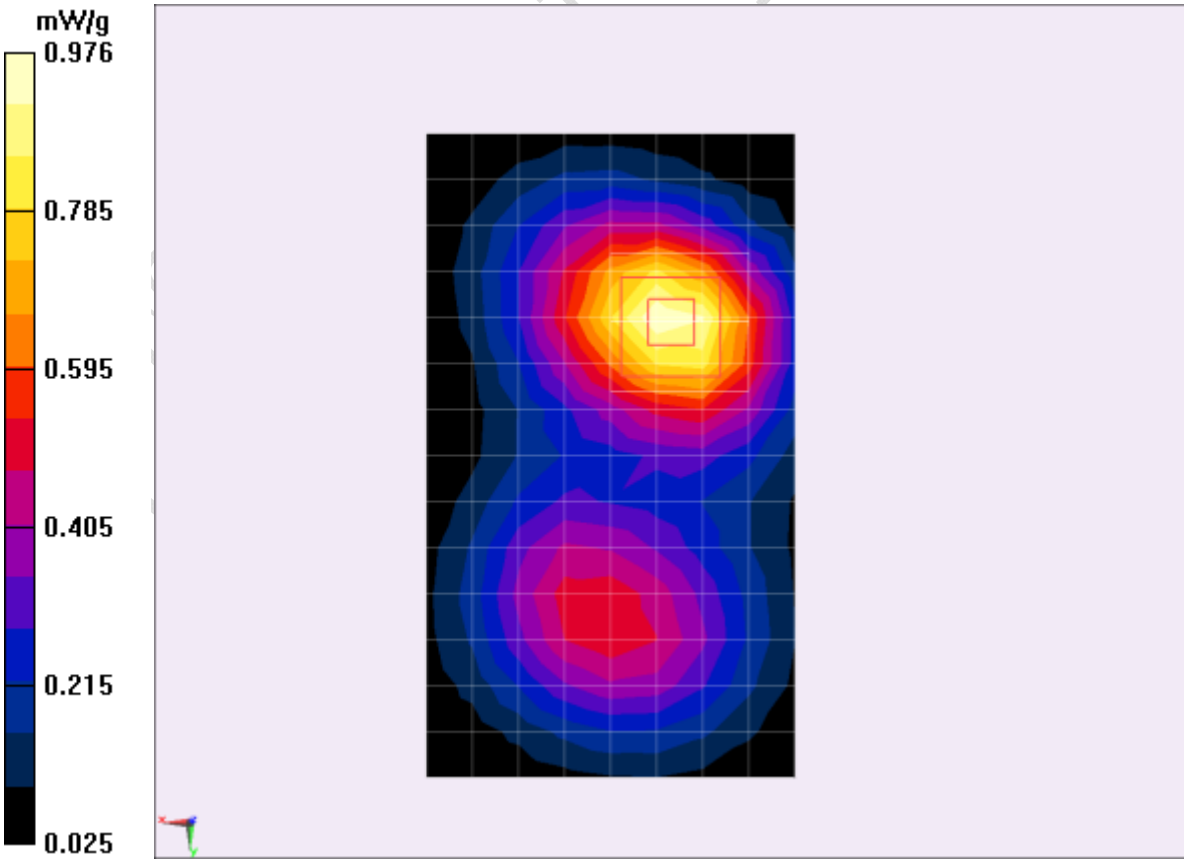
Low Toward Ground WCDMA Band II 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.496 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.3020 mW/g

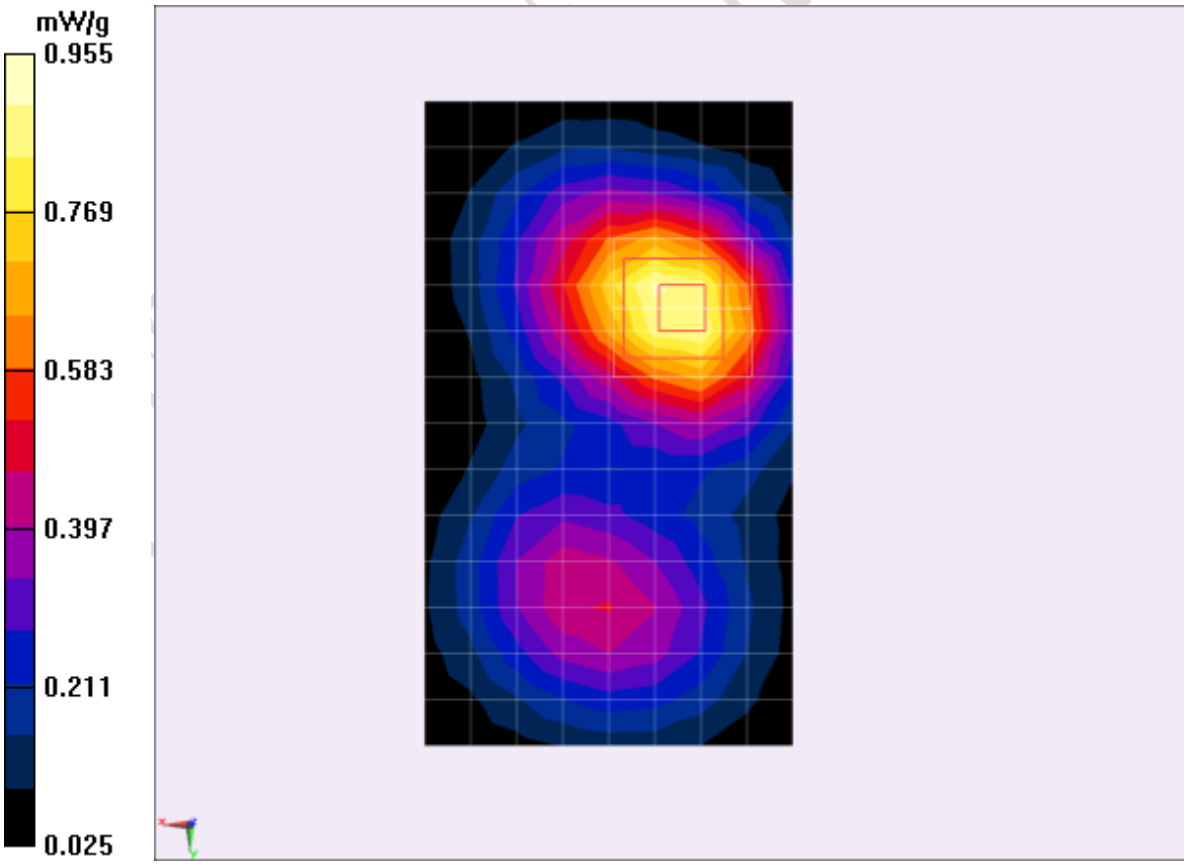
SAR(1 g) = 0.898 mW/g; SAR(10 g) = 0.566 mW/g

Maximum value of SAR (measured) = 0.976 mW/g



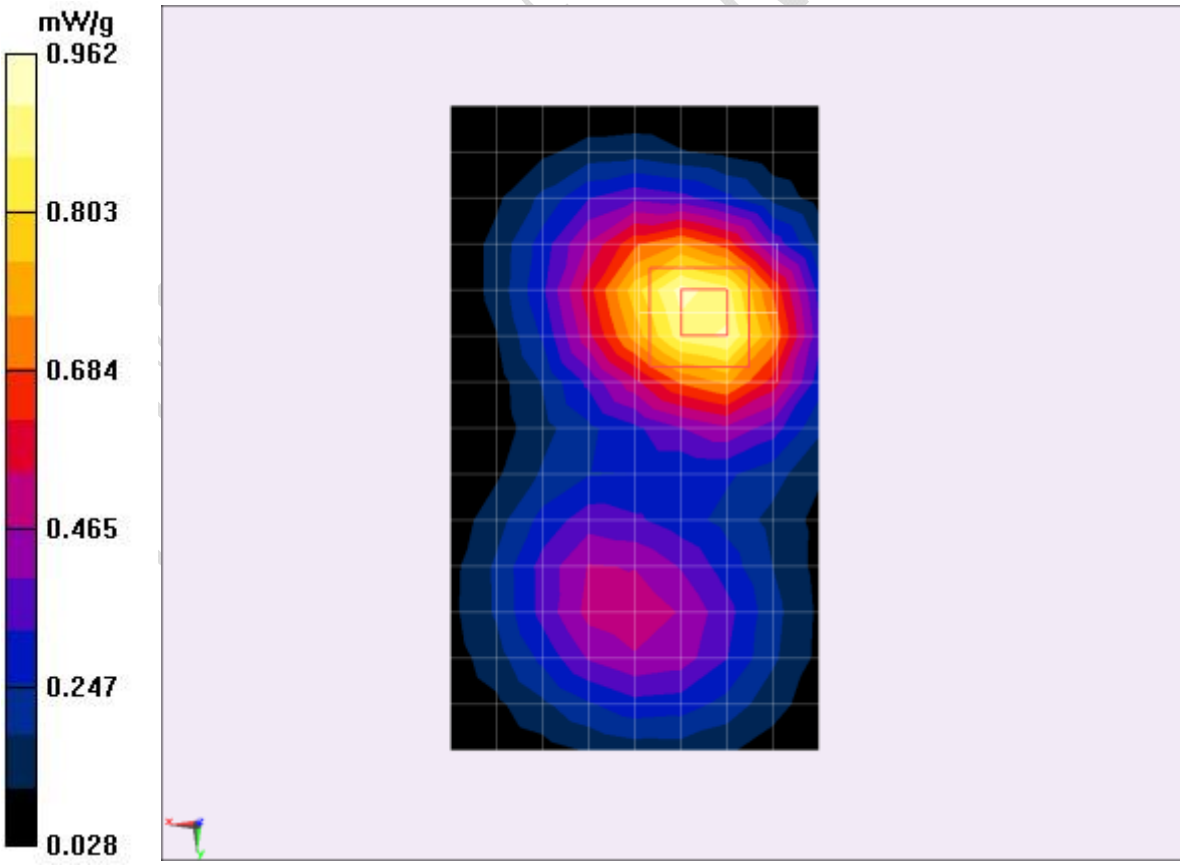
WCDMA Band II Body Toward Ground High 2

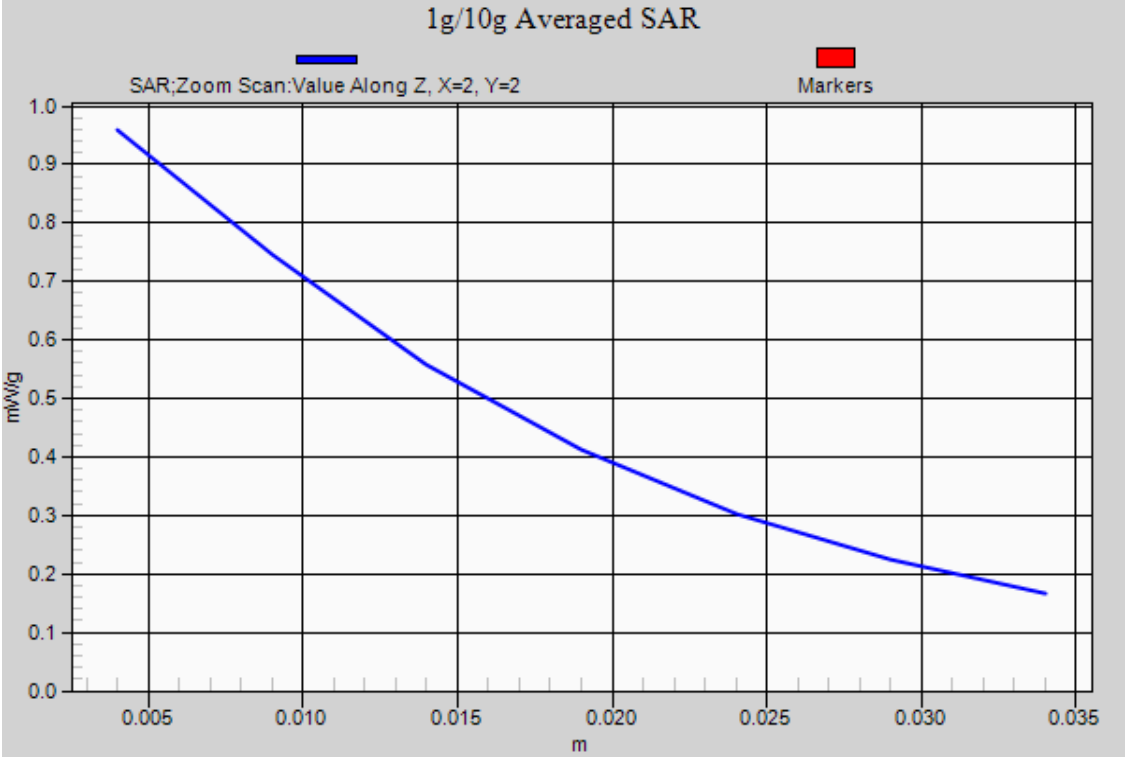
Date/Time: 03/13/2015
Electronics: DAE4 Sn1329
Medium: Body 1900MHz
Medium parameters used: f = 1908 MHz; ó = 1.511 mho/m;år = 53.655; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)
High Toward Ground WCDMA Band II 2/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.908 mW/g
High Toward Ground WCDMA Band II 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.265 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.2940 mW/g
SAR(1 g) = 0.883 mW/g; SAR(10 g) = 0.553 mW/g
Maximum value of SAR (measured) = 0.955 mW/g



WCDMA Band II Body Toward Ground Middle 2

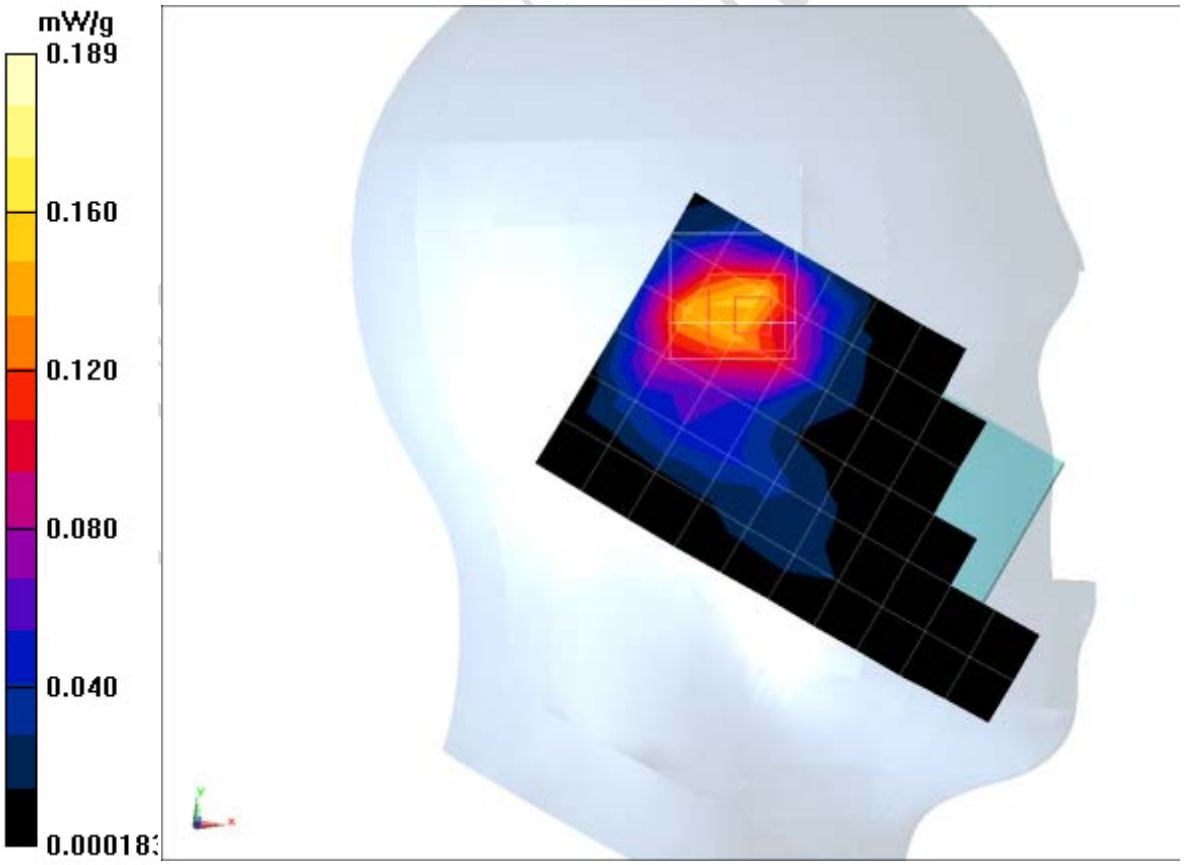
Date/Time: 03/13/2015
Electronics: DAE4 Sn1329
Medium: Body 1900MHz
Medium parameters used: f = 1880 MHz; ó = 1.475 mho/m;år = 53.878; ñ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)
Middle Toward Ground WCDMA Band II 2/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.979 mW/g
Middle Toward Ground WCDMA Band II 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.034 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.3070 mW/g
SAR(1 g) = 0.924 mW/g; SAR(10 g) = 0.592 mW/g
Maximum value of SAR (measured) = 0.962 mW/g

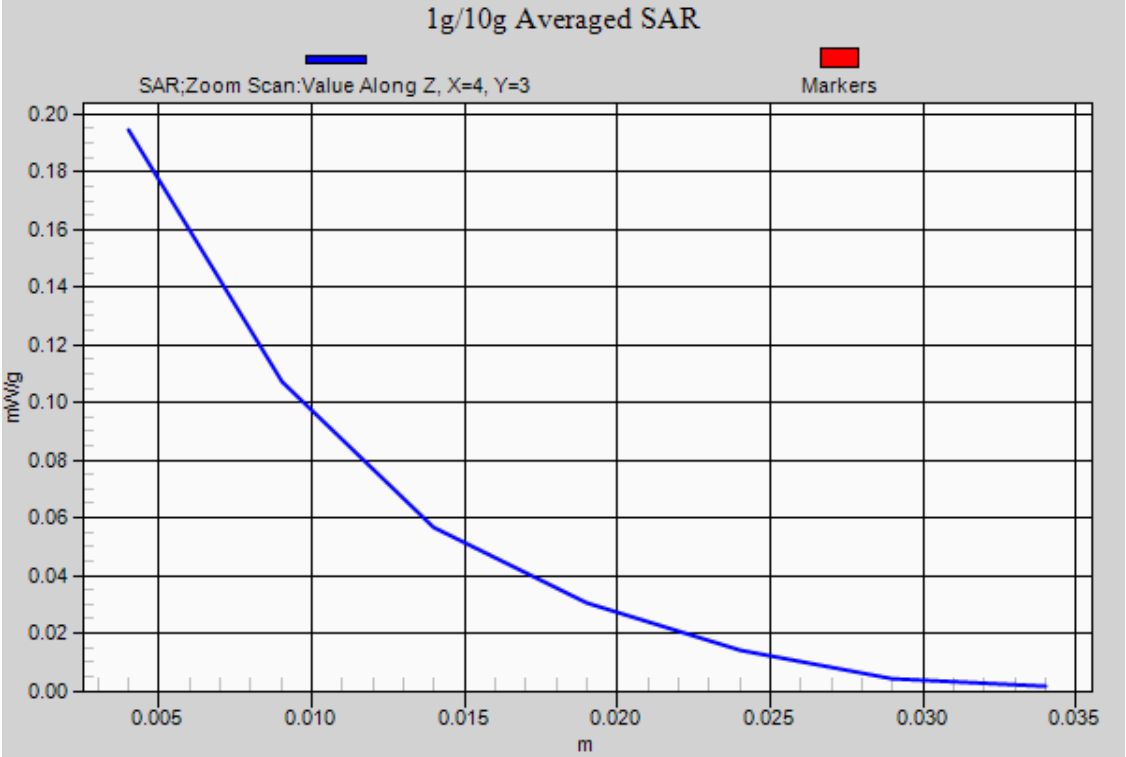



1g/10g Averaged SAR
SAR;Zoom Scan:Value Along Z, X=2, Y=2
Markers
mW/g
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

Wi-Fi 802.11b Left Cheek Middle

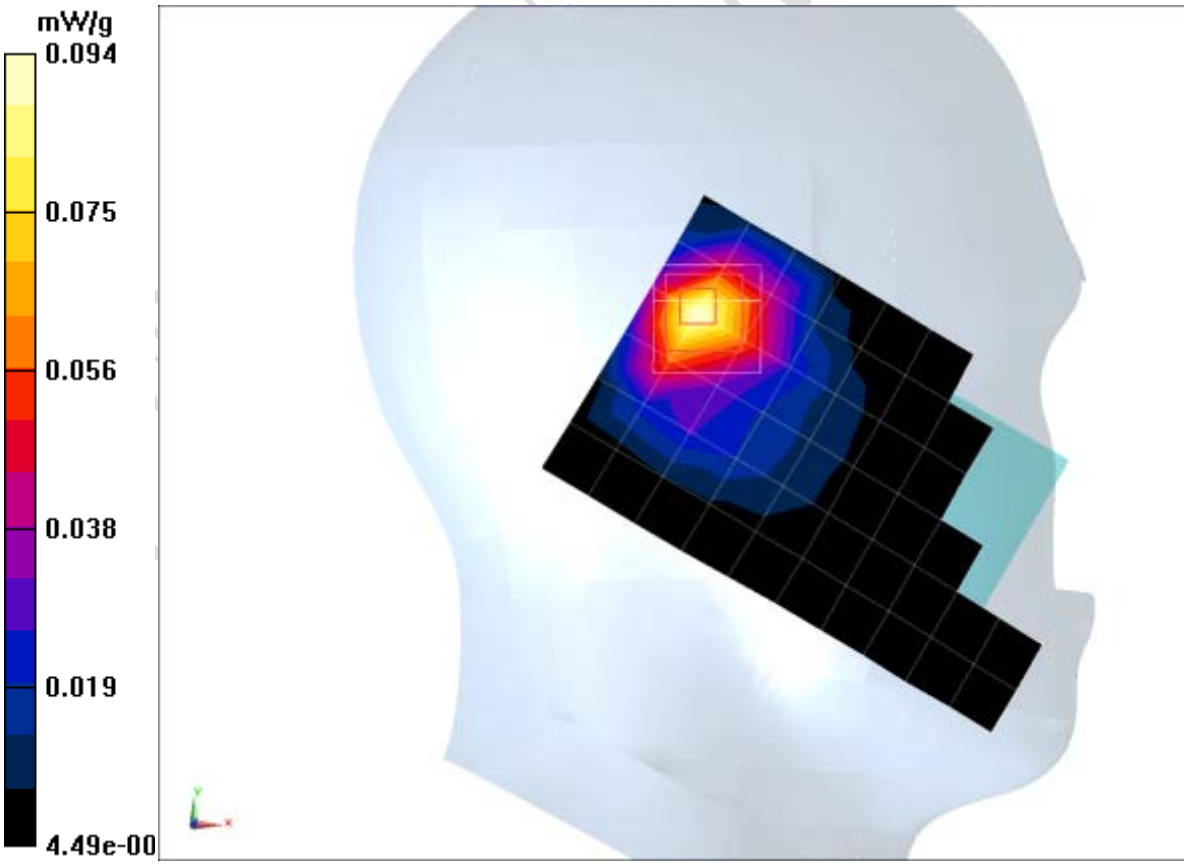
Date/Time: 03/14/2015
Electronics: DAE4 Sn1329
Medium: Head 2450MHz
Medium parameters used: f = 2437 MHz; σ = 1.859 mho/m;εr = 37.423; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: Wi-Fi; Frequency: 2437 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.79, 7.79, 7.79)
Middle Cheek Left Wi-Fi 802.11b/Area Scan (11x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.185 mW/g
Middle Cheek Left Wi-Fi 802.11b/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.243 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.3070 mW/g
SAR(1 g) = 0.182 mW/g; SAR(10 g) = 0.103 mW/g
Maximum value of SAR (measured) = 0.189 mW/g




1g/10g Averaged SAR
SAR;Zoom Scan:Value Along Z, X=4, Y=3
Markers
mW/g
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

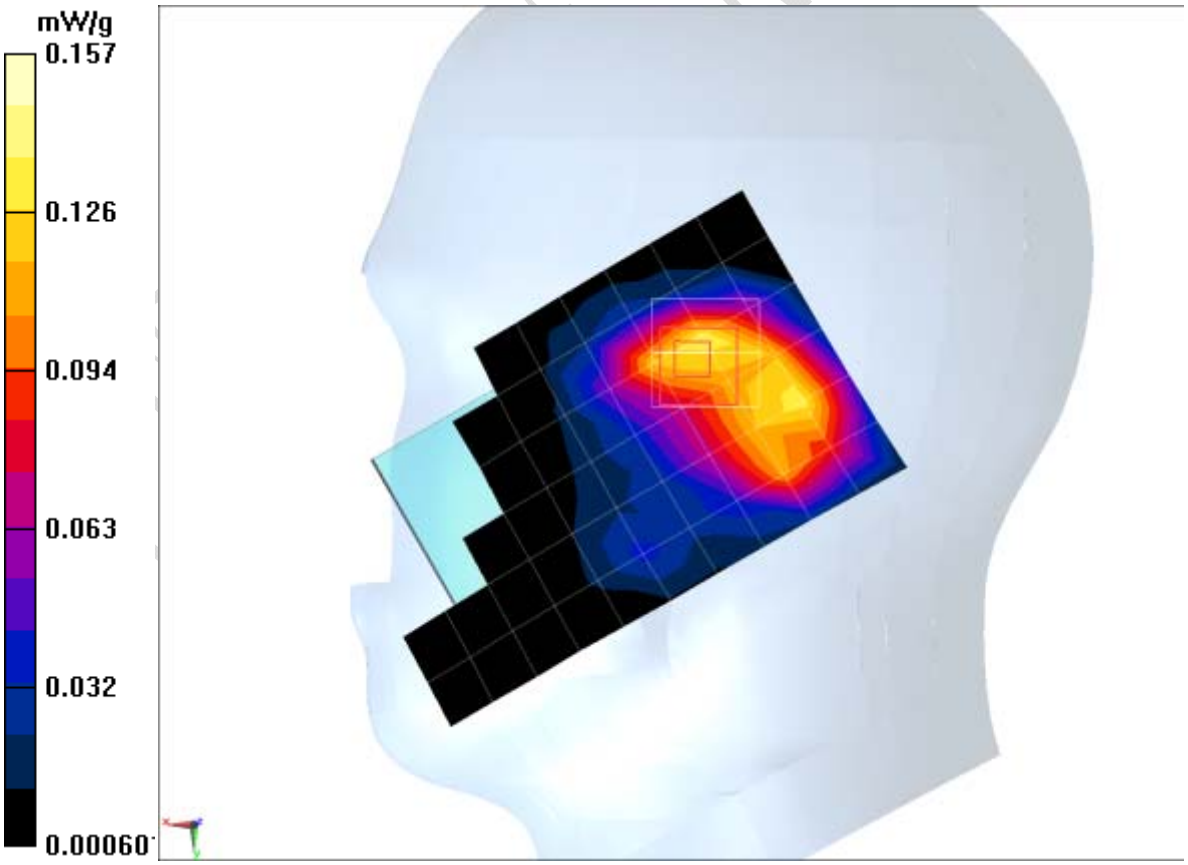
Wi-Fi 802.11b Left Tilt Middle

Date/Time: 03/14/2015
Electronics: DAE4 Sn1329
Medium: Head 2450MHz
Medium parameters used: f = 2437 MHz; σ = 1.859 mho/m;εr = 37.423; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: Wi-Fi; Frequency: 2437 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.79, 7.79, 7.79)
Middle Tilt Left Wi-Fi 802.11b/Area Scan (11x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.083 mW/g
Middle Tilt Left Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.705 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.1380 mW/g
SAR(1 g) = 0.085 mW/g; SAR(10 g) = 0.046 mW/g
Maximum value of SAR (measured) = 0.094 mW/g



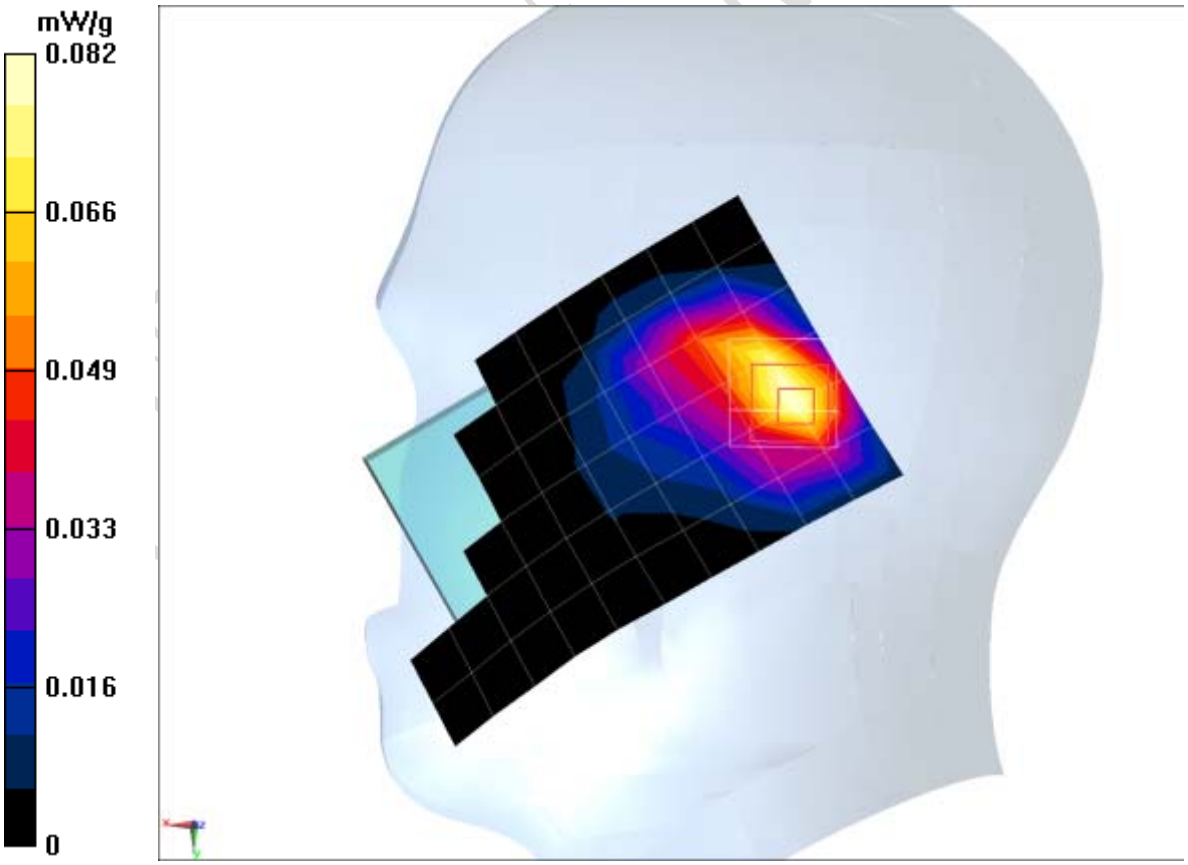
Wi-Fi 802.11b Right Cheek Middle

Date/Time: 03/14/2015
Electronics: DAE4 Sn1329
Medium: Head 2450MHz
Medium parameters used: f = 2437 MHz; σ = 1.859 mho/m;εr = 37.423; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: Wi-Fi; Frequency: 2437 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.79, 7.79, 7.79)
Middle Cheek Right Wi-Fi 802.11b/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.148 mW/g
Middle Cheek Right Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.084 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.2440 mW/g
SAR(1 g) = 0.145 mW/g; SAR(10 g) = 0.082 mW/g
Maximum value of SAR (measured) = 0.157 mW/g



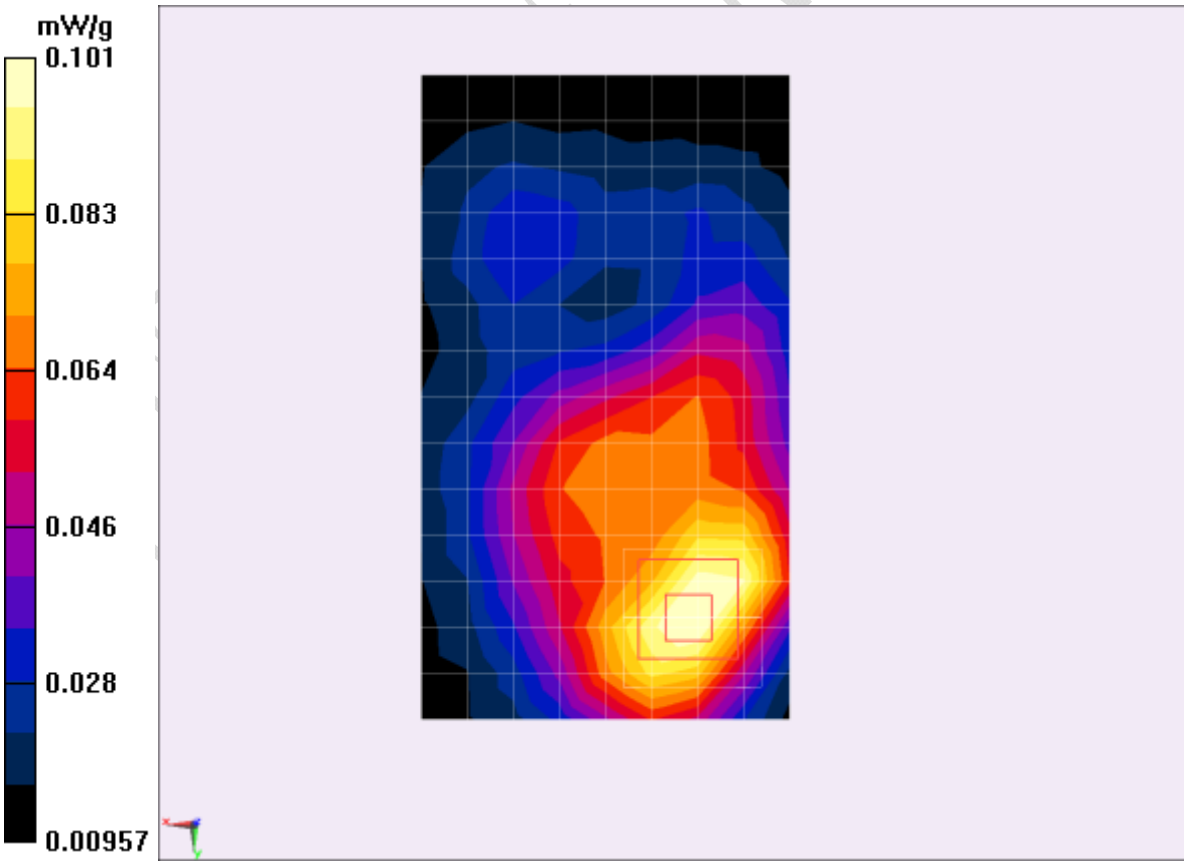
Wi-Fi 802.11b Right Tilt Middle

Date/Time: 03/14/2015
Electronics: DAE4 Sn1329
Medium: Head 2450MHz
Medium parameters used: f = 2437 MHz; σ = 1.859 mho/m;εr = 37.423; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: Wi-Fi; Frequency: 2437 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.79, 7.79, 7.79)
Middle Tilt Right Wi-Fi 802.11b/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.076 mW/g
Middle Tilt Right Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.815 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.1110 mW/g
SAR(1 g) = 0.067 mW/g; SAR(10 g) = 0.037 mW/g
Maximum value of SAR (measured) = 0.082 mW/g



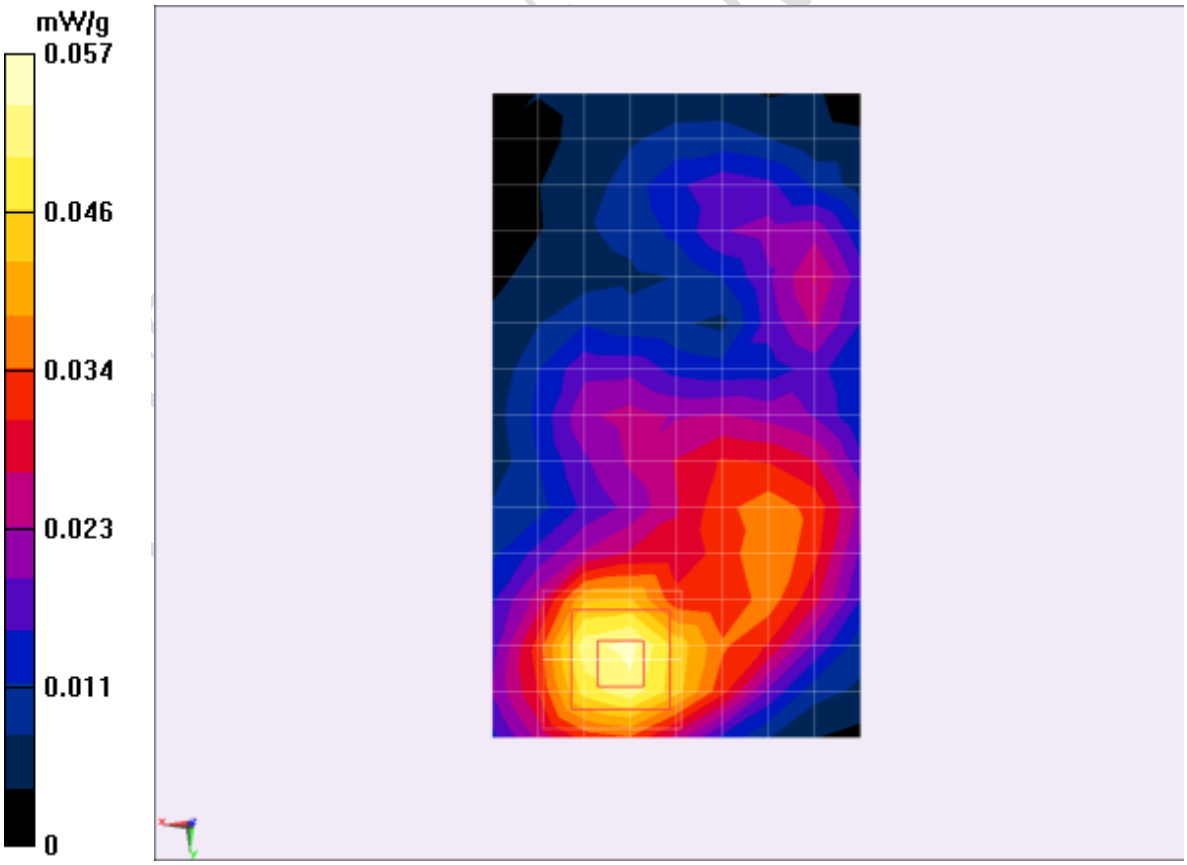
Wi-Fi 802.11b Body Toward Ground Middle

Date/Time: 03/15/2015
Electronics: DAE4 Sn1329
Medium: Body 2450MHz
Medium parameters used: f = 2437 MHz; σ = 1.939 mho/m;εr = 52.962; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: Wi-Fi; Frequency: 2437 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.64, 7.64, 7.64)
Middle Toward Ground Wi-Fi 802.11b/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.104 mW/g
Middle Toward Ground Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.549 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.1250 mW/g
SAR(1 g) = 0.092 mW/g; SAR(10 g) = 0.067 mW/g
Maximum value of SAR (measured) = 0.101 mW/g



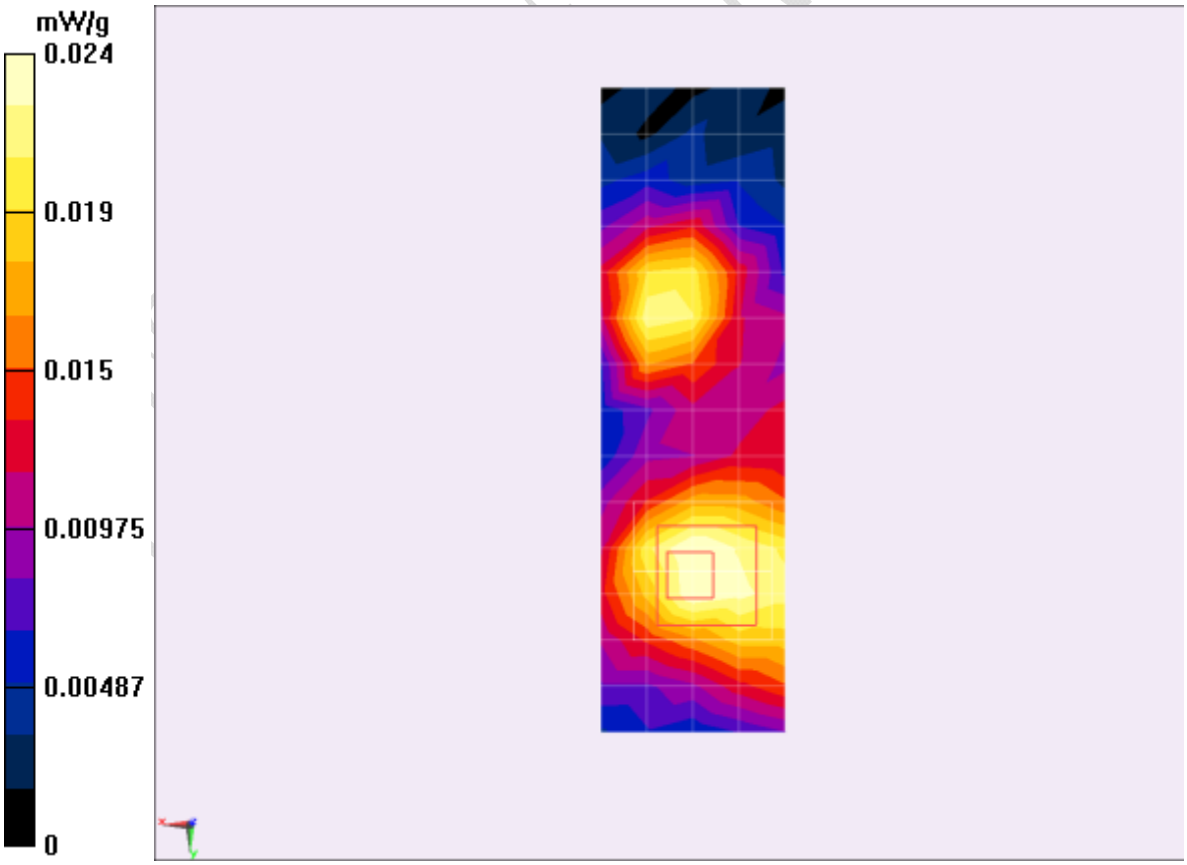
Wi-Fi 802.11b Body Toward Phantom Middle

Date/Time: 03/15/2015
Electronics: DAE4 Sn1329
Medium: Body 2450MHz
Medium parameters used: f = 2437 MHz; σ = 1.939 mho/m;εr = 52.962; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: Wi-Fi; Frequency: 2437 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.64, 7.64, 7.64)
Middle Toward Phantom Wi-Fi 802.11b/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.055 mW/g
Middle Toward Phantom Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.441 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.0880 mW/g
SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.029 mW/g
Maximum value of SAR (measured) = 0.057 mW/g



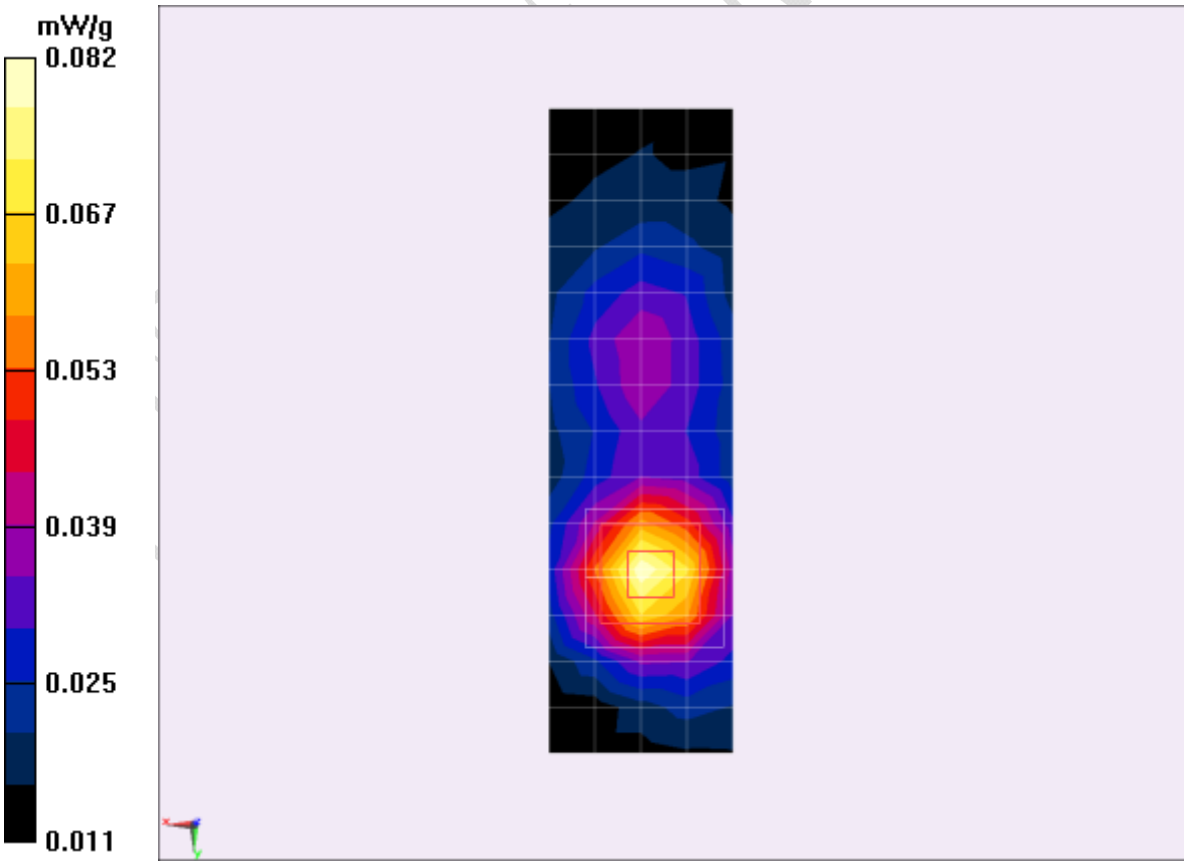
Wi-Fi 802.11b Body Left Middle

Date/Time: 03/15/2015
Electronics: DAE4 Sn1329
Medium: Body 2450MHz
Medium parameters used: f = 2437 MHz; σ = 1.939 mho/m;εr = 52.962; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: Wi-Fi; Frequency: 2437 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.64, 7.64, 7.64)
Middle Left Wi-Fi 802.11b/Area Scan (5x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.025 mW/g
Middle Left Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.271 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.0510 mW/g
SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.011 mW/g
Maximum value of SAR (measured) = 0.024 mW/g



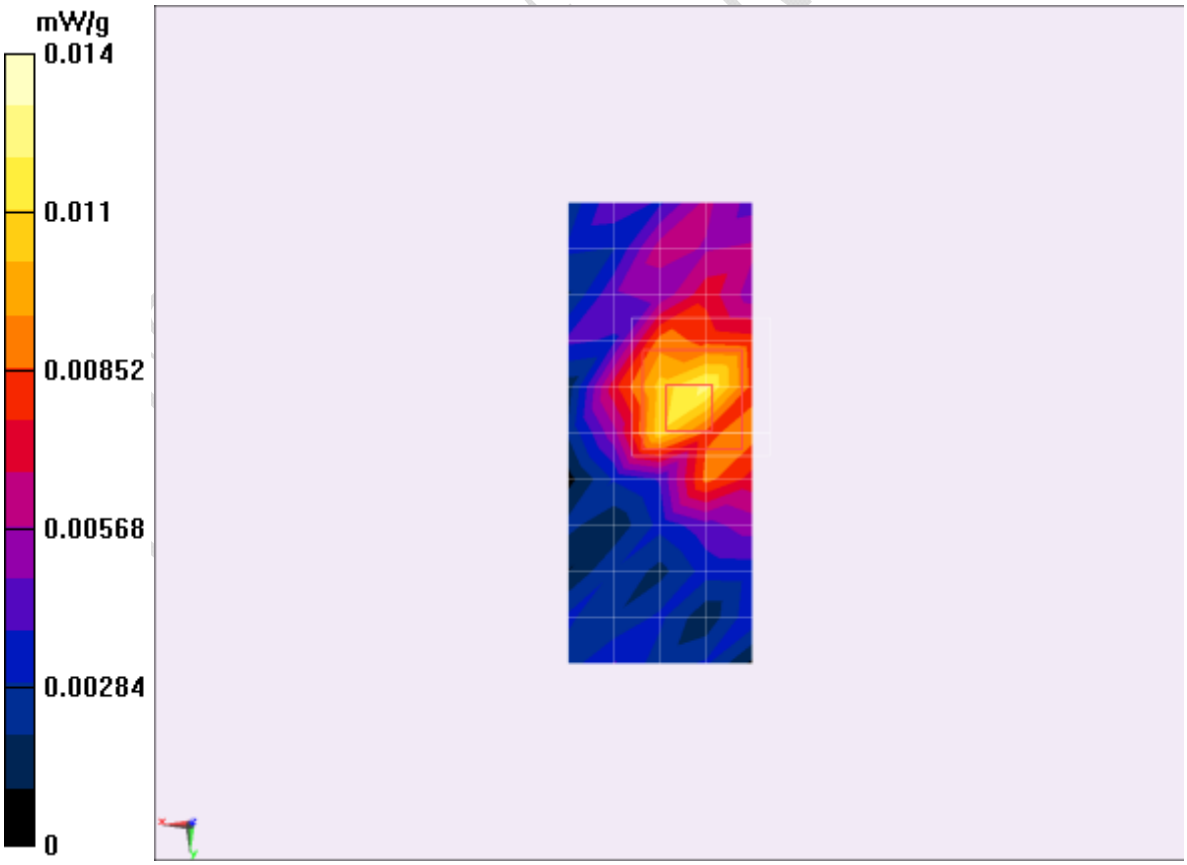
Wi-Fi 802.11b Body Right Middle

Date/Time: 03/15/2015
Electronics: DAE4 Sn1329
Medium: Body 2450MHz
Medium parameters used: f = 2437 MHz; σ = 1.939 mho/m;εr = 52.962; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: Wi-Fi; Frequency: 2437 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.64, 7.64, 7.64)
Middle Right Wi-Fi 802.11b/Area Scan (5x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.909 mW/g
Middle Right Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.021 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.1430 mW/g
SAR(1 g) = 0.079 mW/g; SAR(10 g) = 0.044 mW/g
Maximum value of SAR (measured) = 0.082 mW/g



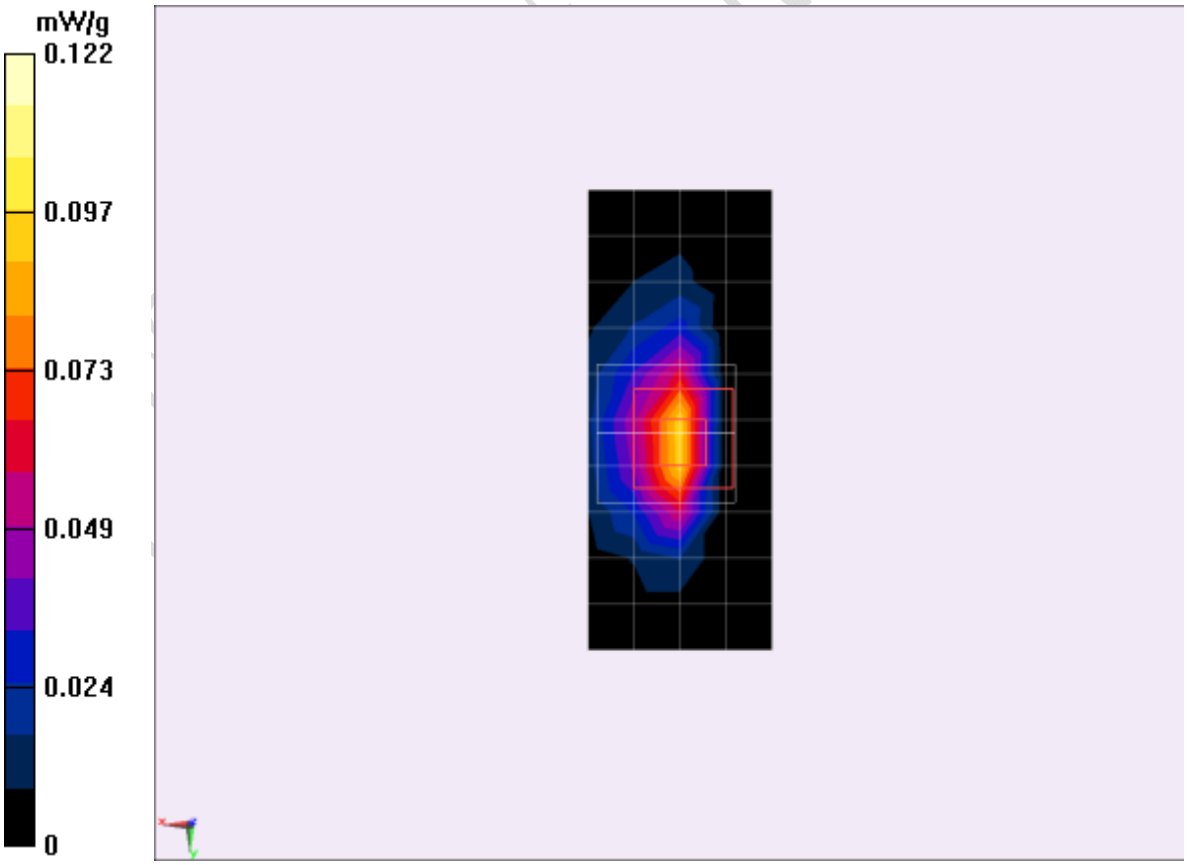
Wi-Fi 802.11b Body Bottom Middle

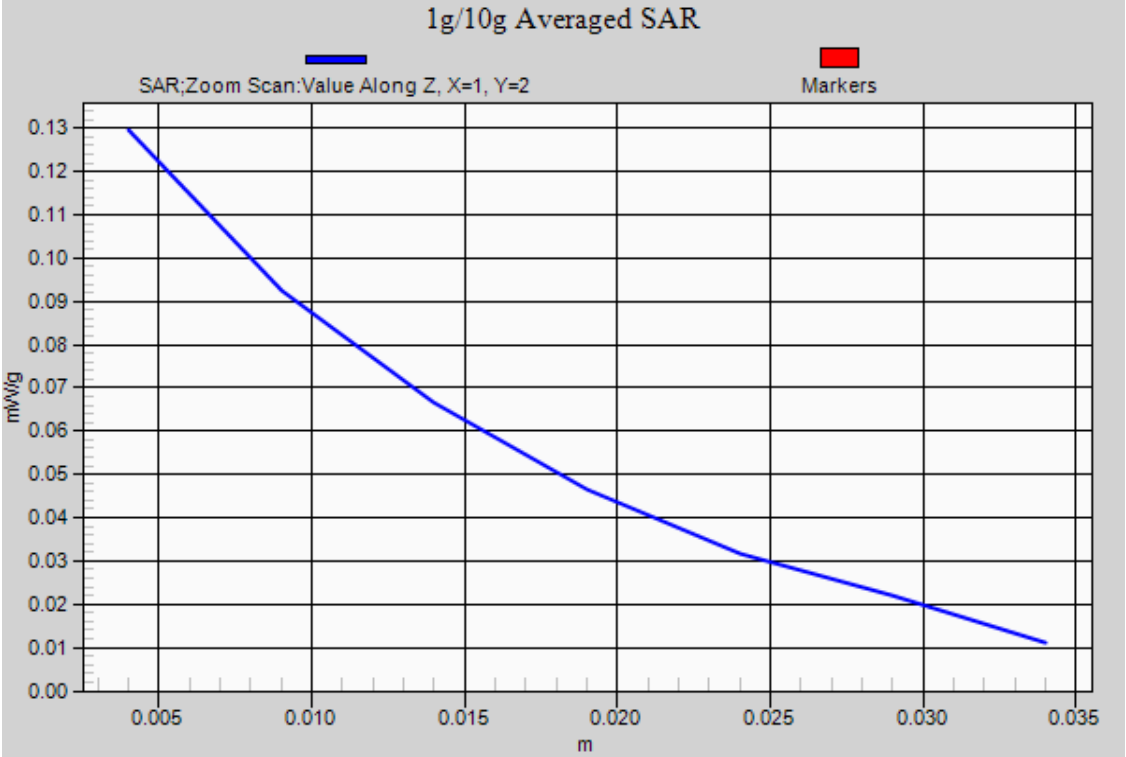
Date/Time: 03/15/2015
Electronics: DAE4 Sn1329
Medium: Body 2450MHz
Medium parameters used: f = 2437 MHz; σ = 1.939 mho/m;εr = 52.962; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: Wi-Fi; Frequency: 2437 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.64, 7.64, 7.64)
Middle Bottom Wi-Fi 802.11b/Area Scan (5x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.013 mW/g
Middle Bottom Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.102 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.0300 mW/g
SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.0053 mW/g
Maximum value of SAR (measured) = 0.014 mW/g



Wi-Fi 802.11b Body Top Middle

Date/Time: 03/15/2015
Electronics: DAE4 Sn1329
Medium: Body 2450MHz
Medium parameters used: f = 2437 MHz; σ = 1.939 mho/m;εr = 52.962; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: Wi-Fi; Frequency: 2437 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.64, 7.64, 7.64)
Middle Top Wi-Fi 802.11b/Area Scan (5x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.124 mW/g
Middle Top Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.747 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.1950 mW/g
SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.061 mW/g
Maximum value of SAR (measured) = 0.122 mW/g

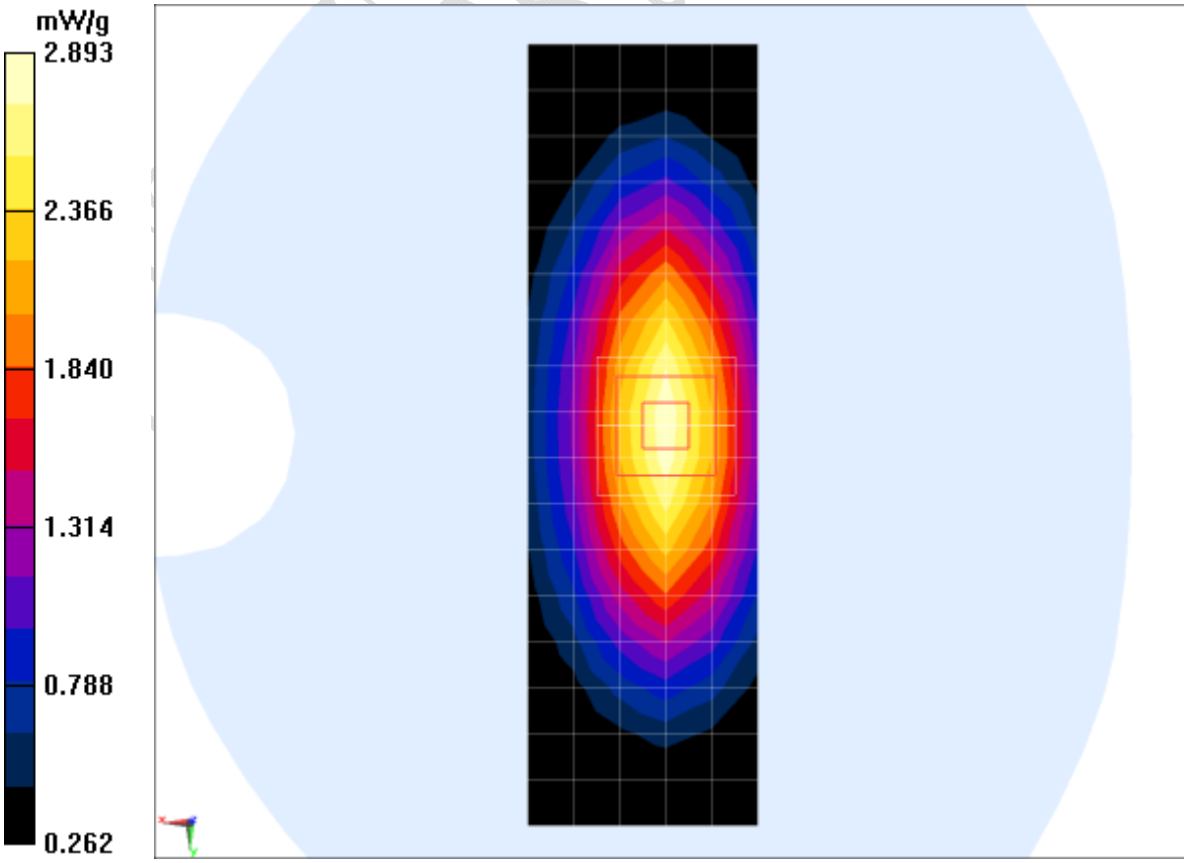



1g/10g Averaged SAR
SAR;Zoom Scan:Value Along Z, X=1, Y=2
Markers
mW/g
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

Annex B System Performance Check Graphical Results

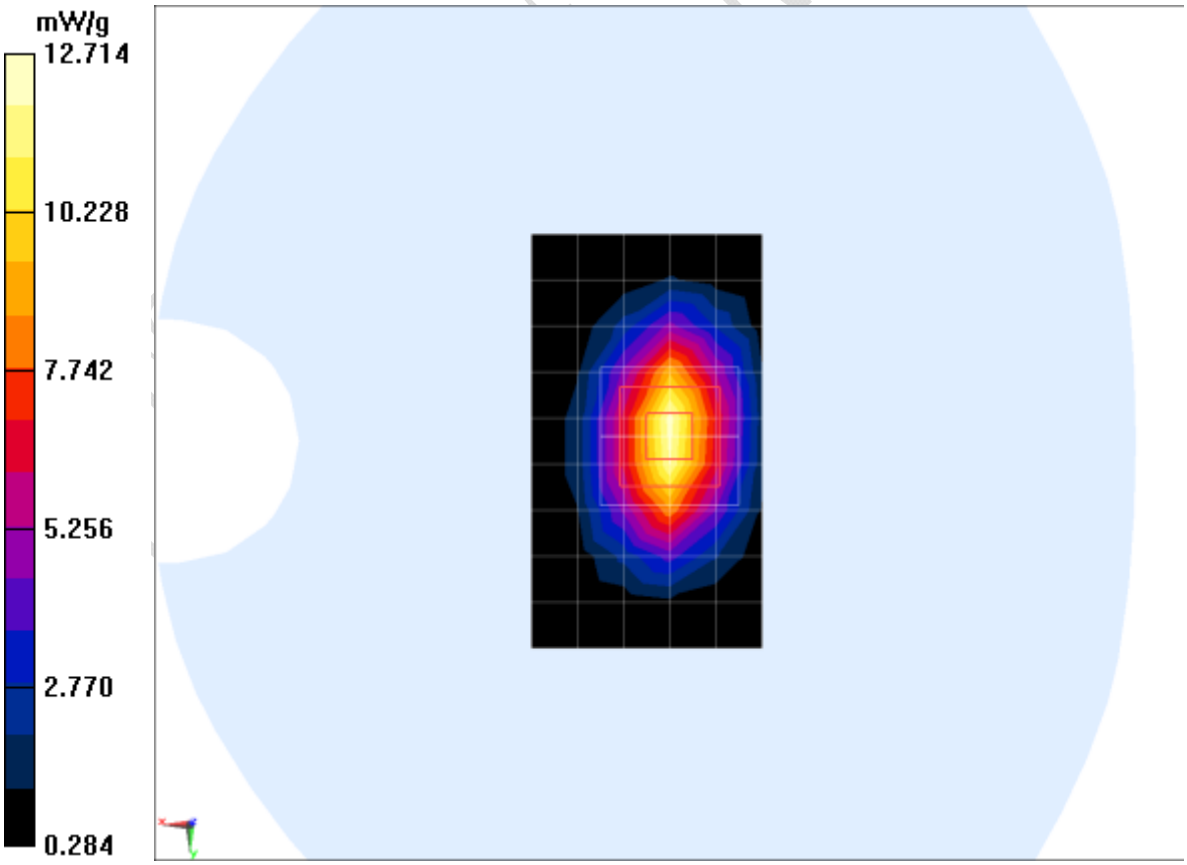
Head 835MHz

Date/Time: 03/10/2015
Electronics: DAE4 Sn1329
Medium: Head 850MHz
Medium parameters used: f = 835 MHz; σ = 0.916 mho/m;εr = 42.346; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)
System Performance Check 835MHz Head/Area Scan (6x18x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.880 mW/g
System Performance Check 835MHz Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.599 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 3.6300 mW/g
SAR(1 g) = 2.47 mW/g; SAR(10 g) = 1.62 mW/g
Maximum value of SAR (measured) = 2.893 mW/g



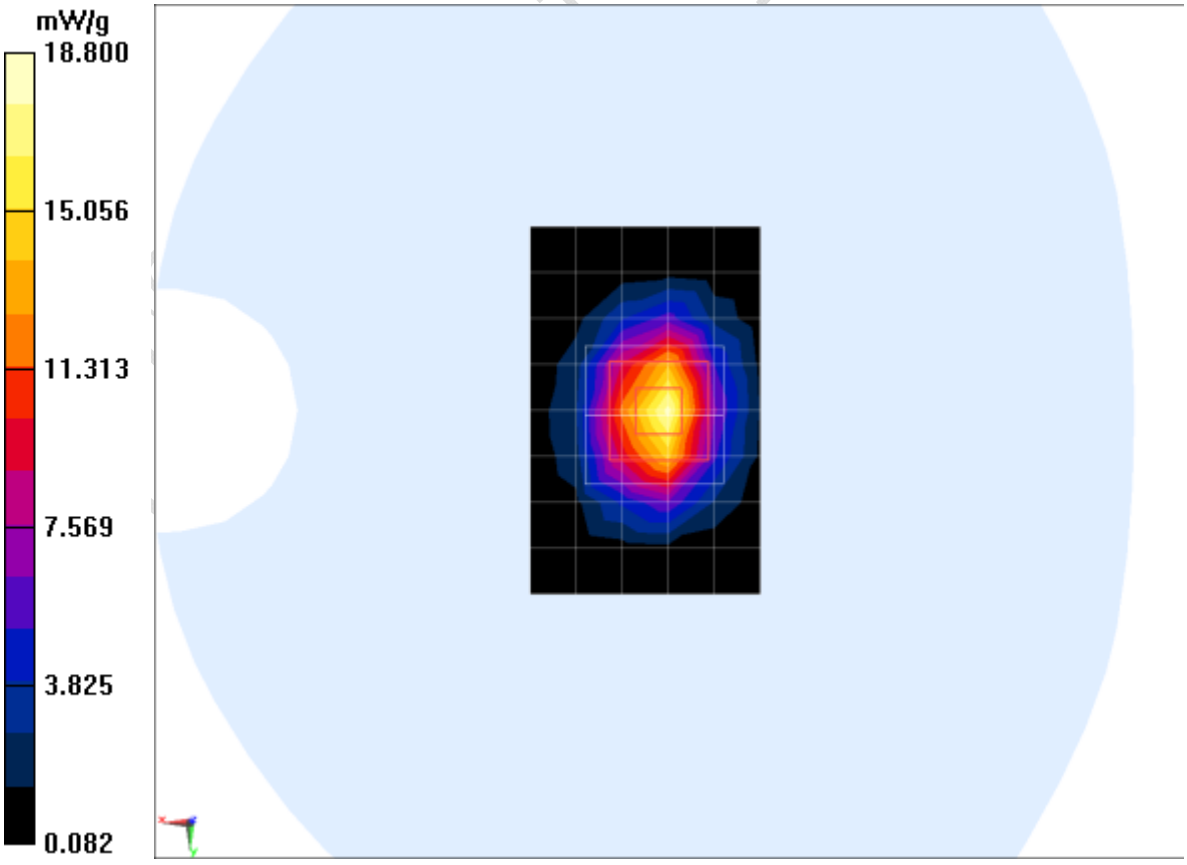
Head 1900MHz

Date/Time: 03/12/2015
Electronics: DAE4 Sn1329
Medium: Head 1900MHz
Medium parameters used: f = 1900 MHz; σ = 1.384 mho/m;εr = 39.761; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)
System Performance Check 1900MHz Head 2/Area Scan (6x10x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 12.313 mW/g
System Performance Check 1900MHz Head 2/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 88.716 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 17.5630 mW/g
SAR(1 g) = 10 mW/g; SAR(10 g) = 5.32 mW/g
Maximum value of SAR (measured) = 12.714 mW/g



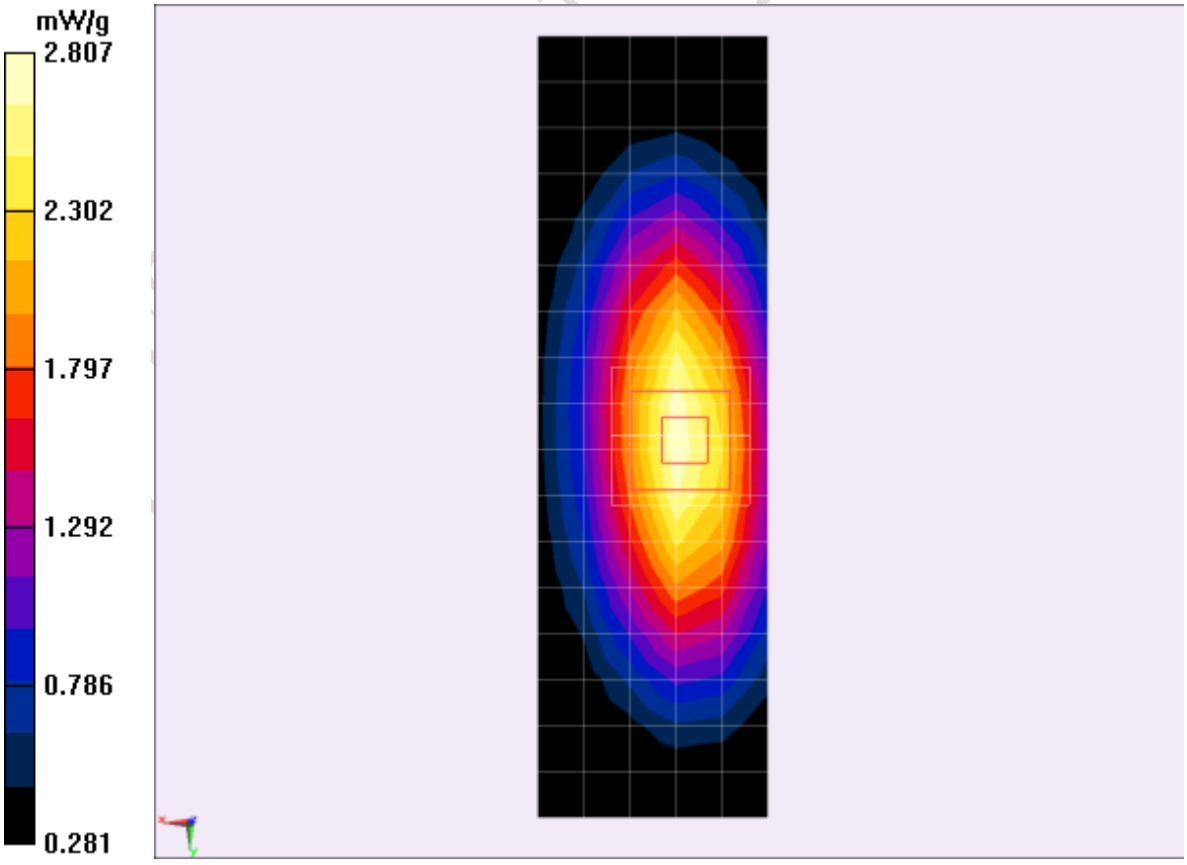
Head 2450MHz

Date/Time: 03/14/2015
Electronics: DAE4 Sn1329
Medium: Head 2450MHz
Medium parameters used: f = 2450 MHz; σ = 1.872 mho/m;εr = 37.393; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.79, 7.79, 7.79)
System Performance Check 2450MHz Head/Area Scan (6x9x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 18.109 mW/g
System Performance Check 2450MHz Head/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 97.891 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 30.3510 mW/g
SAR(1 g) = 14.2 mW/g; SAR(10 g) = 6.47 mW/g
Maximum value of SAR (measured) = 18.800 mW/g



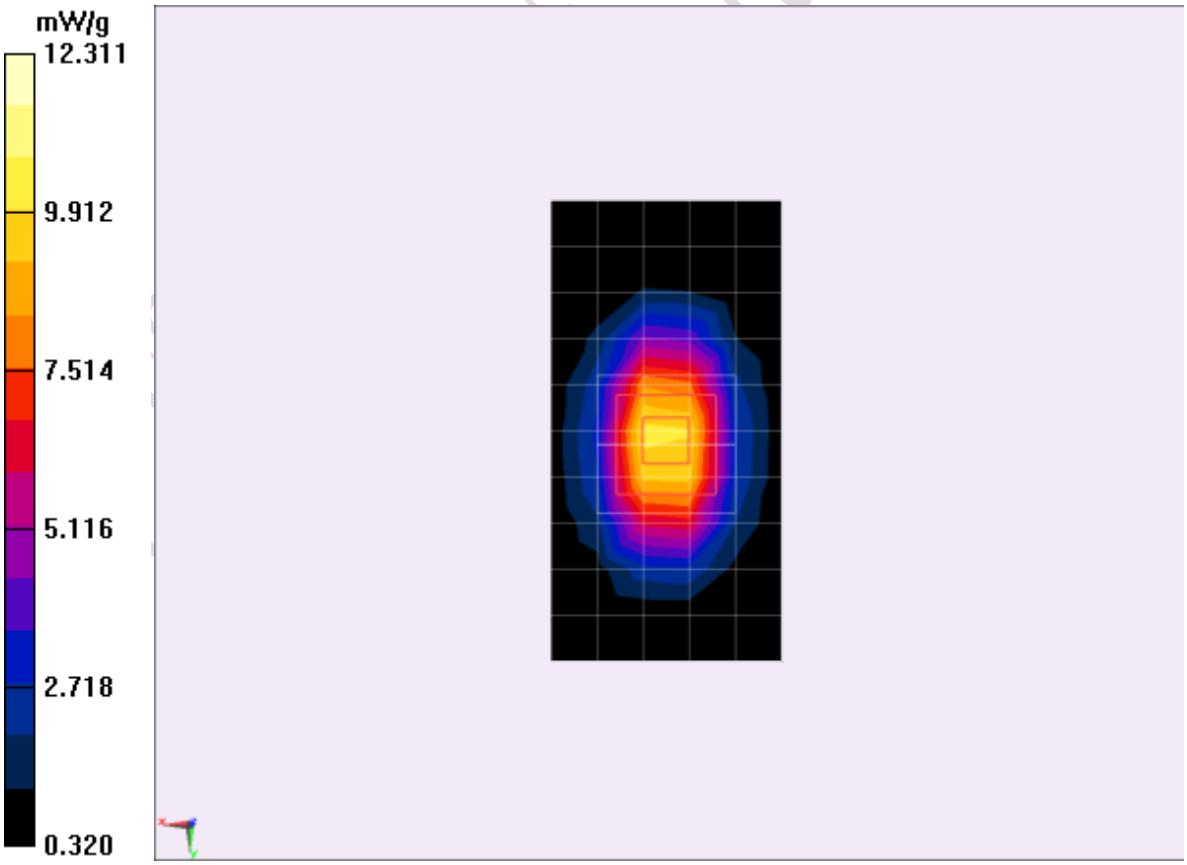
Body 835MHz

Date/Time: 03/11/2015
Electronics: DAE4 Sn1329
Medium: Body 850MHz
Medium parameters used: f = 835 MHz; σ = 0.965 mho/m;εr = 53.95; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)
System Performance Check 835MHz Head/Area Scan (6x18x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.793 mW/g
System Performance Check 835MHz Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.841 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 3.5060 mW/g
SAR(1 g) = 2.41 mW/g; SAR(10 g) = 1.6 mW/g
Maximum value of SAR (measured) = 2.807 mW/g



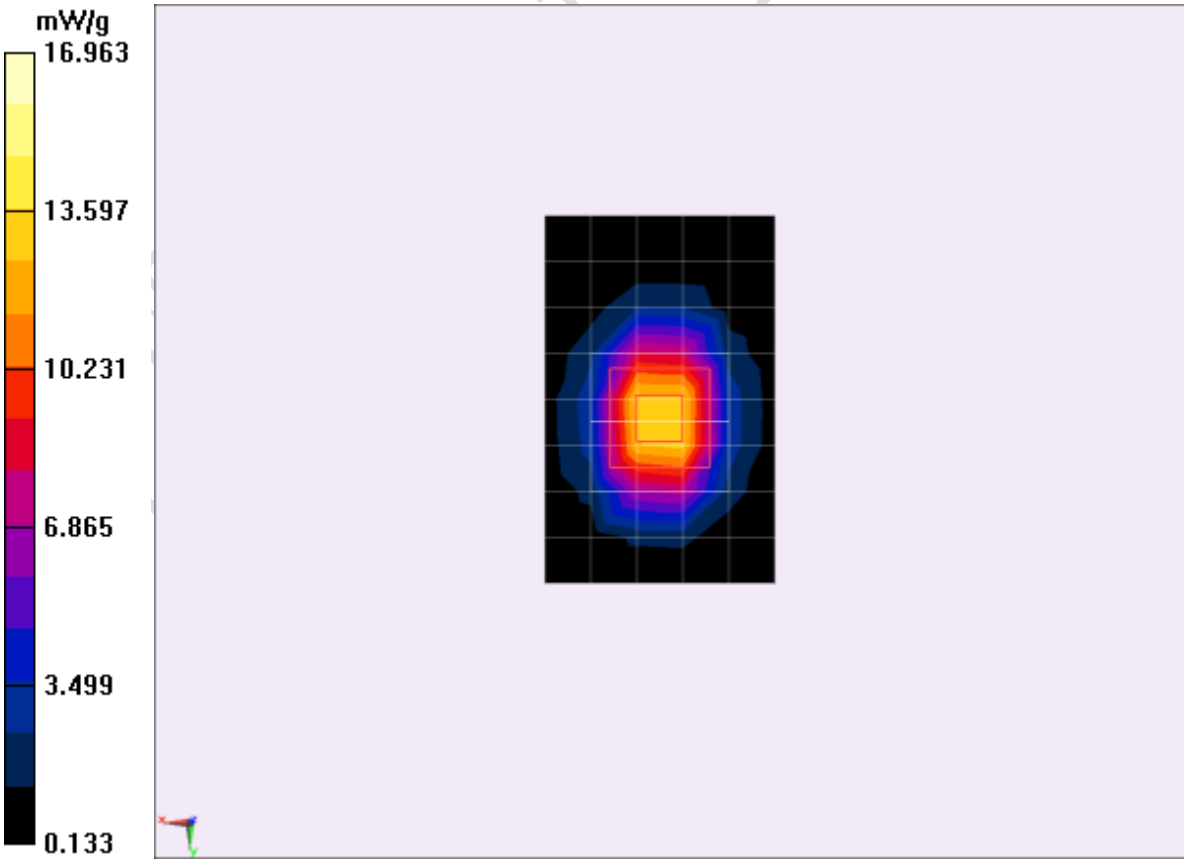
Body 1900MHz

Date/Time: 03/13/2015
Electronics: DAE4 Sn1329
Medium: Body 1900MHz
Medium parameters used: f = 1900 MHz; σ = 1.499 mho/m;εr = 53.715; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)
System Performance Check 1900MHz Body/Area Scan (6x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 10.270 mW/g
System Performance Check 1900MHz Body/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 93.060 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 16.2450mW/g
SAR(1 g) = 9.8 mW/g; SAR(10 g) = 5.3 mW/g
Maximum value of SAR (measured) = 12.311 mW/g



Body 2450MHz

Date/Time: 03/15/2015
Electronics: DAE4 Sn1329
Medium: Body 2450MHz
Medium parameters used: f = 2450 MHz; σ = 1.956 mho/m;εr = 52.91; ρ = 1000 kg/m3
Ambient Temperature:22.5°C Liquid Temperature:22.5°C
Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3844ConvF(7.64, 7.64, 7.64)
System Performance Check 2450MHz Body/Area Scan (6x9x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 13.104 mW/g
System Performance Check 2450MHz Body/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 91.734 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 25.0940mW/g
SAR(1 g) = 12.9 mW/g; SAR(10 g) = 6.11 mW/g
Maximum value of SAR (measured) = 16.963 mW/g



Annex C Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

Annex D EUT Test Setup Photos

See the Pic1~Pic10 in the document "Ilium X100-Test setup photos".

Annex E External Photos

See the document "Ilium X100-External Photos".

Annex F Internal Photos

See the document "Ilium X100-Internal Photos".

Annex H Calibration Certificates

See the documents "Ilium X100_DAE Calibration Certificate", "Ilium X100_Dipole Calibration Certificate" and "Ilium X100_Probe Calibration Certificate".

The End of this Report