TEST REPORT

1. Applicant

Name : Datalogic ADC s.r.l

Address : Via S. Vitalino, 13 – Calderara di Reno – 40012 (Bologna) - ITALY

2. Products

Name : Mobile Computer

Model : LYNX

Manufacturer : POINT MOBILE CO.,LTD

3. Test Standard : FCC 47 CFR § 2.1093

4. Test Method : IEEE 1528, OET Bulletin 65, Supplement C(July 2001)

5. Test Results : Positive

6. Date of Application : June 29, 2012

7. Date of Issue : September 21, 2012

Tested by

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Telecommunication Center
Senior Engineer

Approved by

Jeong-min Kim
Telecommunication Center
Manager

Korea Testing Laboratory

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1. GENERAL INFORMATIONS

1.1. Applicant (Client)

Name	Datalogic ADC s.r.l.
Address	Via S. Vitalino, 13 – Calderara di Reno – 40012 (Bologna) - ITALY
Contact Person	Ruggero Cacioppo
Telephone No.	+39 051 314 73 93
E-mail address	Ruggero.cacioppo@datalogic.com
Manufacturer	POINT MOBILE CO.,LTD
Manufacturer Address	B-9F, Kabul great valley, 60-5, Gasan-dong, Geumcheon-gu, Seoul, Korea

1.2. Feature of Equipment (EUT)

FCC ID & Model Number	FCC ID : U4G0070, Model Name : LYNX	
IC Number & Model Number	IC Number : 3862E-0070, Model Number : LYNX H2N0WI-1Q1-MEN0	
Series Model Description	LYNX H2N0LD-1N1-MEN0	Bluetooth, WiFi, Reader 1D, Numeric, Camera, GSM, UMTS, GPS
	LYNX H2N0WI-1N1-MEN0	Bluetooth, WiFi, Reader 2D, Numeric, Camera, GSM, UMTS, GPS
	LYNX H2N0LD-1Q1-MEN0	Bluetooth, WiFi, Reader 1D, QWERTY, Camera, GSM, UMTS, GPS
	LYNX H2N0WI-1Q1-MEN0	Bluetooth, WiFi, Reader 2D, QWERTY, Camera, GSM, UMTS, GPS
Test Sample	**Bluetooth, WiFi, Reader 2D, QWERTY, Camera, GSM, UMTS, GPS**	
Unlicensed RF Features	v2.1+EDR, 802.11b/g/n	
Licensed RF Features	GSM/GPRS/EDGE850 & 1900	
	WCDMA850, 1900	
Antenna Type	Internal Antenna	
Scan engine	1D laser / 2D imager	
Keypad and buttons	Numeric (32 keys) / Qwerty (51 keys)	
AC/DC Adapter	Input : 100 -240 V 50/60 Hz 0.4 A, Output : DC 5.0 V, 1800 mA,	
Battery	Li-ion, 3.7 V, 1800 mAh (3600mAh optional)	
Maximum 1g SAR	**GSM850 Head : 0.231 mW/g, GSM850 Body : 0.231 mW/g**	
	GSM1900 Head :0.230 mW/g, GSM1900 Body : 0.213 mW/g	
	WCDMA850 Head : 0.243 mW/g, WCDMA850 Body : 0.275 mW/g	
	WCDMA1900 Head : 0.393 mW/g, WCDMA1900 Body : 0.348 mW/g	
	WiFi Head : 0.194 mW/g, WiFi Body : 0.134 mW/g	

1.3. Testing Laboratory

Testing Place	Korea Testing Labortory (KTL) 723, Haean-ro, Sangnok-gu, Ansan-si, Gyeonggi-do, KOREA (426-910)
FCC registration number	408324
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Other Comments	-

2. SAR DEFINITION

Specific Absortion Rate (SAR) is defined as the time derivative (rate) of the incremental energy (dU) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density(p). It is also defined as the rate of RF energy absortion per unit mass at a point in an absorbing body. (see Figure.1)

$$SAR = \frac{d}{dt}\left(\frac{dU}{dm}\right) = \frac{d}{dt}\left(\frac{dU}{pdv}\right)$$

Figure 1. SAR Mathematical Equation

SAR is expressed in units of Watts per Kilogram (W/kg).

$$SAR = \sigma E^2 / p$$

Where :

σ = conductivity of the tissue-simulant material (S/m)
p = mass density of the tissue-simulant material (kg/m^3)
E = Total RMS electric field strength (V/m)

Note: The primary factors that control rate or energy absortion were found to be the wavelength of the incident field in realtions to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflectinf surfaces, and whether conductive contact is made by the organism with a ground plane.[4]

3. DESCRIPTION OF SAR MEASUREMENT SYSTEM

3.1. SAR Measurement System

These measurements are performed using the DASY4 automated dosimetric assessment system. It is made by Schmid & Partner Engineering AG (SPEAG) in Zurich, Switzerland and consists of high precision robotics system (Staubli), robot controller, measurement server, Measurement computer, near-field probe, probe alignment sensor, and the SAM twin phantom containing the brain equivalent material. The robot is a six-axis industrial robot performing precise movements to position the probe to the location (points) of maximum electromagnetic field (EMF) (see Fig.2).

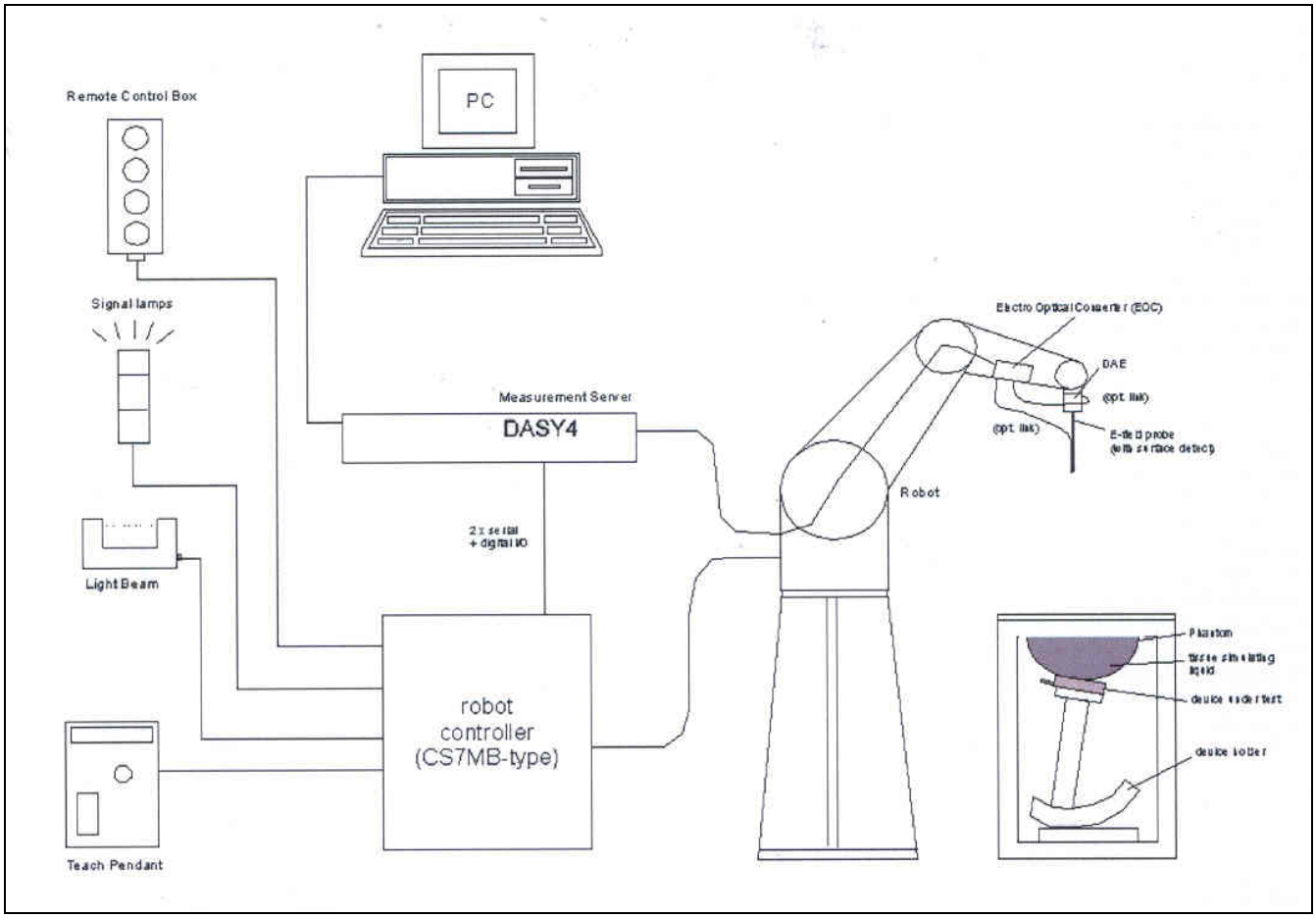


Figure 2. SAR Measurement System

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 logic unit. Transmission to the PC-card is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines. The mechanical probe mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe collision detection. The robot uses its own controller with a built in VME-bus computer. The system is described in detail in [5].

3.2. E-Field Probe Type and Performance

The SAR measurements were conducted with the dosimetric probe designed in the classical triangular configuration [5] and optimised for dosimetric evaluation. The probe has been is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical mortifier line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches a maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY4 software reads the reflection during a software approach and looks for the maximum using a 2nd order fitting. The approach is stopped at reaching the maximum.

Figure 3. Probe and DAE

Probe Specifications

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection System Built-in shielding against static charges
Calibration	In air from 10 MHz to 2.5 GHz In brain and muscle simulating tissue at Frequencies of 450 MHz, 900 MHz and 1.8 GHz (accuracy 8%)
Frequency	10 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 Linearity	5 uW/g to > 100 mW/g; 0.2 dB
Surface Detection	0.2 mm repeatability in air and clear liquids Over diffuse reflecting surfaces.
Dimensions	Overall length: 337 mm Tip length: 10 mm Body diameter: 10 mm Tip diameter: 4 mm Distance from probe tip to dipole centers: 2.7 mm
Application	General dissymmetry up to 3 GHz Compliance tests of mobile phones/ Fast automatic scanning in arbitrary phantoms

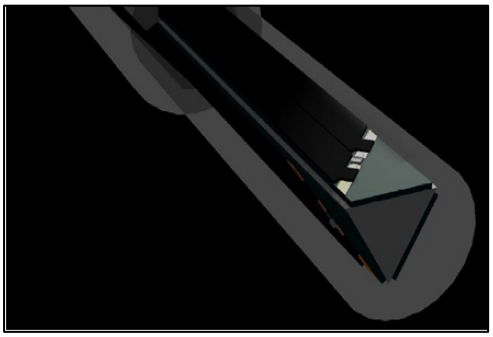


Figure 4. E-Field Probe

3.3. Probe Calibration Process (Dosimetric Assessment Procedure)

Each probe is calibrated according to a dosimetric assessment procedure described [6] with an accuracy better than +/- 10%. The spherical isotropy was evaluated with the procedure described in [7] and found to be better than +/- 0.25dB. The sensitivity parameters (NornX, NornY, NornZ), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe is 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 waveguide 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 measured free space E-field in the medium correlates to temperature rise 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.

SAR is proportional to $\Delta T/\Delta t$, the initial rate of tissue heating, before thermal diffusion takes place. Now it's possible to quantify the electric field in the simulated tissue by equating the thermally derived SAR to the E- field;

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

where:

σ = simulated tissue conductivity,

ρ = Tissue density (1.25 g/cm^3 for brain tissue)

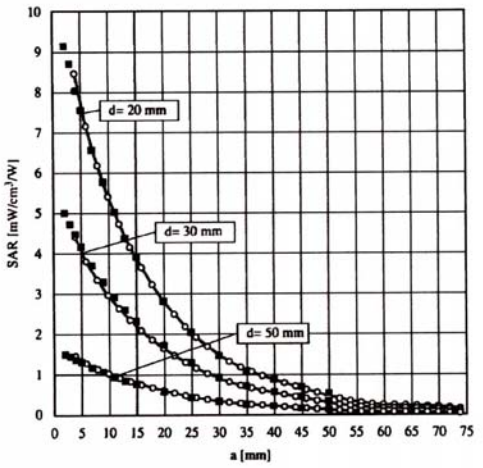


Figure B.1. E-Field and Temperature measurements at 900MHz[5]

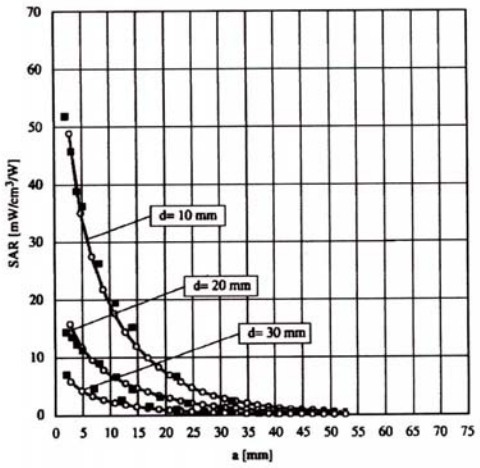


Figure B.2. E -field and temperature measurements at 1.8GHz[5]

3.4. Data Acquisition Electronics

The data acquisition electronics (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 logic unit. The input impedance of the DAE4 box is 200 Mohm; the inputs are symmetrical and floating. Common mode rejection is above 80dB.Transmission to the PC-card is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock.

The mechanical probe-mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

3.5. Phantom Properties

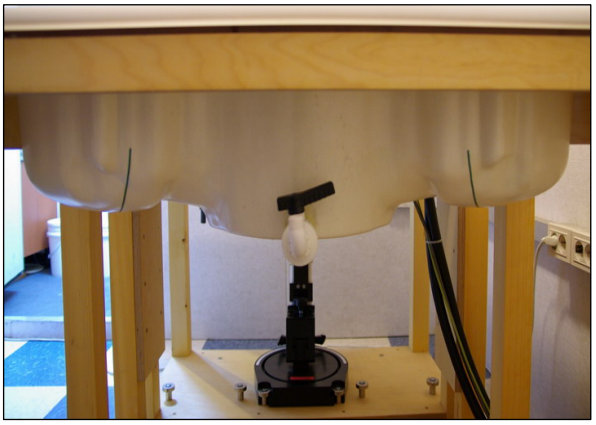


Figure 5. SAM twin phantom

The SAM 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 [9][10]. 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.

Phantom Properties	Requirement for specific EUT	Measured
Depth of Phantom	> 150 mm	200 mm
Width of flat section	> 10 cm (Twice EUT Width)	20 cm
Length of flat section	> 26 cm (Twice EUT Length)	30 cm
Thickness of flat section	2 mm ± 0.2 mm	2.08 ~ 2.20 mm

Table 1. Flat Section Properties of SAM Twin Phantom

3.6. Device Holder for DASY4

In combination with the SAM Phantom V4.0, 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 repeatable positioned according to the FCC CENELEC specifications. The device holder can be locked at different phantom locations(left head, right head, flat phantom).

Note: A simulating human hand is not used due to the complex anatomical and geometrical structure of the hand that may produced infinite number of configurations [10]. To produce the Worst-case condition (the hand absorbs antenna output power), the hand is omitted during the tests.

Figure 6. Device Holder

3.7. Brain & Muscle Simulating Mixture Characteristic

The brain and muscle mixtures consist of a viscous gel using hydroxethylcellulose (HEC) gelling agent and saline solution (see Table 2). Preservation with bacteriacide is added and visual inspection is made to make sure air bubbles are not trapped during the mixing process. The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the desired tissue. The mixture characterizations used for the brain and muscle tissue simulating liquids are according to the data by C. Gabriel and G. Hartsgrove [11].

Ingredients	835MHz Brain	835MHz Muscle	1900MHz Brain	1900MHz Muscle	2450 MHz Brain	2450 MHz Muscle
Water	40.29%	50.75%	55.24%	70.23%	55.0%	68.64%
Sugar	57.90%	48.21%	-	-	-	-
Salt	1.38%	0.94%	0.31%	0.29%	-	-
DGBE	-	-	44.45%	29.47%	45.0%	31.36%
Bacteriacide	0.18%	0.10%	-	-	-	-
HEC	0.24%	-	-	-	-	-

Table 2 : Composition of Tissue Equivalent Matter

4.SYSTEM VERIFICATION

4.1. Tissue Verification

The dielectric parameters of the brain and muscle simulating liquid were measured prior to SAR assessment using the HP85070D dielectric probe kit and Agilent 8753D Network Analyzer. The actual dielectric parameters are shown in the following table.

Freq. [MHz]	Liquid	Date	Liquid Temp [℃]	Parameters	Target Value	Measured Value	Dev. (%)	Limit (%)
835	Head	2012.07.12	22.1	εr	41.5	41.8	+0.7	± 5
				σ	0.90	0.90	+0.0	± 5
	Body	2012.07.12	22.0	εr	55.2	54.7	-1.0	± 5
				σ	0.97	0.96	-1.0	± 5
1900	Head	2012.07.16	22.3	εr	40.0	39.3	-2.7	± 5
				σ	1.40	1.37	-2.2	± 5
	Body	2012.07.16	22.2	εr	53.3	51.9	-2.7	± 5
				σ	1.52	1.55	+2.0	± 5
2450	Head	2012.09.20	22.1	εr	39.2	39.3	+0.3	± 5
				σ	1.80	1.81	+0.6	± 5
	Body	2012.07.04	21.9	εr	52.7	52.6	-0.2	± 5
				σ	1.95	1.99	+2.1	± 5

Table 3 : Measured Simulating Liquid Dielectric Values

The humidity and dielectric/ambient temperatures are recorded during the assessment of the tissue material dielectric parameters. The difference between the ambient temperature of the liquid during the dielectric measurement and the temperature during tests was less than |2|°C.

4.2. System Validation

Figure 7. Validation setup

Prior to the SAR assessment, the system validation kit was used to verify that the DASY4 was operating within its specifications. The validation dipoles are highly symmetric and matched at the centre frequency for the specified liquid and distance to the phantom. The accurate distance between the liquid surface and the dipole centre is achieved with a distance holder that snaps onto the dipole.
System validation is performed by feeding a known power level into a reference dipole, set at a know distance from the phantom.
The measured SAR is compared to the theoretically derived level. The reference SAR values are derived using a reference dipole and flat phantom suitable. The forward power into the reference dipole for each SAR validation was adjusted to 250 mW.

These reference SAR values are normalized to 1 W. The measured 1g(10g) SAR should be within 10 % of the expected target reference values shown in table 4 below.

Frequency (MHz) /Head or Body	System Validation Kit	Date	Targeted SAR10g (mW/g)	Measured SAR 10 g (mW/g)	Deviation (%)
835 Head	D835V2 S/N:481	2012.07.12	9.5	9.48	-0.2
835 Body	D835V2 S/N:481	2012.07.12	9.5	10.16	+6.9
1900 Head	D1900V2 S/N:5d038	2012.07.16	39.7	37.8	-4.8
1900 Body	D1900V2 S/N:5d038	2012.07.16	39.7	39.72	+0.1
2450 Head	D2450V2 S/N: 746	2012.09.20	52.4	54.0	+3.1
2450 Body	D2450V2 S/N: 746	2012.07.04	52.4	56.8	+8.4

Table 4 : Deviation from Reference Validation Values

4.3. Justification for Extended SAR Dipole Calibrations

According to maintaining return loss and impedance requirements per extended calibrations in KDB 450824, usage of SAR dipole calibrated less than 2 years ago but more than 1 year ago was confirmed.

KDB 450824 requirements

a) return loss : < -20 dB, within 20% of prior calibration
b) impedance : within 5Ω from prior calibration.

D835V2 S/N:481					
Head/Body	**Date of Measurement**	**Return Loss (dB)**	**Δ%**	**Impedance (Ω)**	**ΔΩ**
Head	**04/15/2011**	-26.0	-	51.3	-
	07/12/2012	-25.2	-3.1	51.1	-0.2
Body	**04/15/2011**	-23.1	-	46.9	-
	07/12/2012	22.6	-2.2	45.2	-1.7

D1900V2 S/N:5d038					
Head/Body	**Date of Measurement**	**Return Loss (dB)**	**Δ%**	**Impedance (Ω)**	**ΔΩ**
Head	**11/25/2010**	-23.5	-	52.9	-
	07/16/2012	-22.2	-6.6	51.5	-1.4
Body	**04/19/2011**	-22.2	-	48.3	-
	07/12/2012	-22.0	-0.2	45.9	-2.4

5.SAR MEASUREMENT PROCEDURE USING DASY4

The SAR evaluation was performed with the SPEAG DASY4 system. A summary of the procedure follows ;

a) A measurement of the SAR value at a fixed location is used as a reference value for assessing the power drop of the EUT. The SAR at this point is measured at the start of the test and then again at the end of the test.

b) The SAR distribution at the exposed side of the phantom is measured at a distance of 3.9 mm from the inner surface of the shell. The area covers the entire dimension of the EUT and the horizontal grid spacing is 15 mm x 15 mm(or 20mm x 20mm). The actual Area Scan has dimensions surrounding the test device. Based on this data, the area of the maximum absorption is determined by Spline interpolation.

c) Around this point, a volume is assessed by measuring 5 x 5 x 7 (7 x 7 x 7) points. On the basis of this data set, the spatial peak SAR value is evaluated with the following procedure;

(i) The data at the surface are extrapolated, since the centre 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 1.2 mm. The extrapolation is based on a least square algorithm[13]. A polynomial of the fourth order is calculated through the points in z-axes. This polynomial is then used to evaluate the points between the surface and the probe tip.

(ii) The maximum interpolated value is searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g and 10 g) are computed using the 3D-Spline interpolation algorithm. The 3D-Spline is composed of three one-dimensional splines with the “Not a knot”- condition (in x, y and z-direction)[13][14]. The volume is integrated with the trapezoidal-algorithm. One thousand points (10 x 10 x 10) are interpolated to calculate the averages.

(iii) All neighbouring volumes are evaluated until no neighbouring volume with a higher average value is found.

(iv) The SAR value at the same location as in Step (a) is again measured (If the value changed by more than 5%, the evaluation is repeated.)

6. DESCRIPTION OF TEST POSITION

SAR measurements were performed in the “cheek” and “tilted” positions on left and right sides of the phantom according to IEEE 1528. Both were measured in the head section of the SAM Twin Phantom.

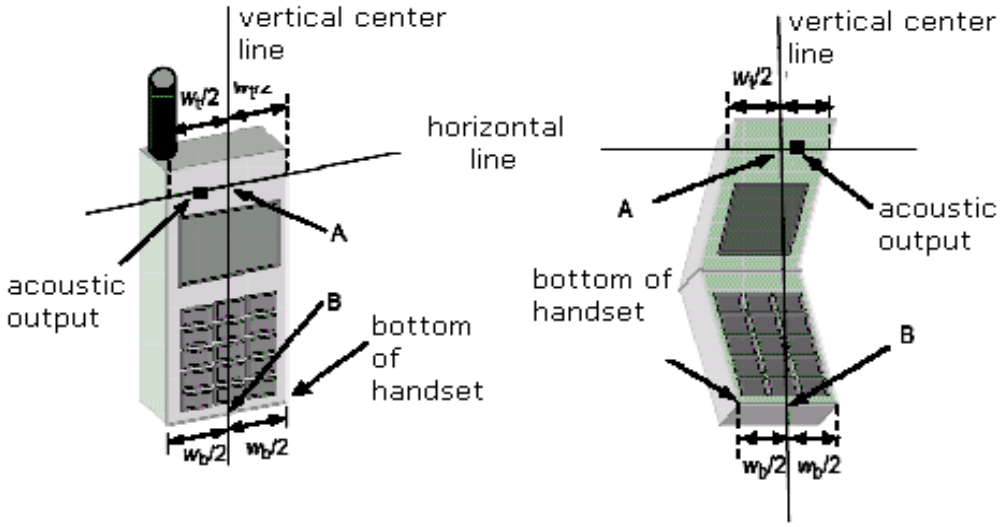


Figure 8. Handset vertical and horizontal reference line

6.1. Cheek Position

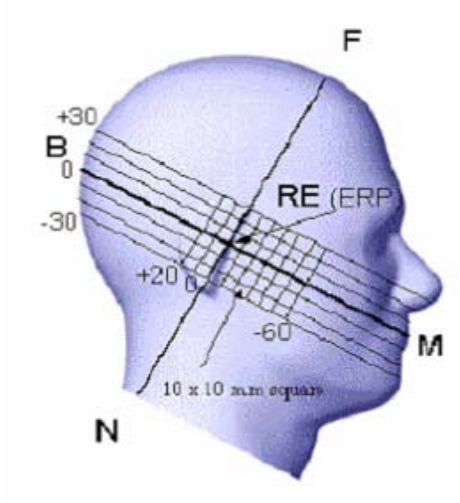


Figure 9. Side view of SAM phantom

The device was positioned with the vertical center line of the body of the device and the horizontal line crossing the center (see Figure 8) of the ear piece in a plane parallel to the sagittal plane of the phantom(see Figure 9). While maintaining the device in this plane, it was aligned the vertical center line with the reference plane containing the three ear and mouth reference points(M, RE and LE) and aligned the center of the ear piece with the line RE-LE. Then device was translated towards the phantom with the ear piece aligned with the line LE-RE until it touched the ear. While maintaining the device in the reference plane and maintaining the device contact with the ear, the bottom of the device was moved until any point on the front side is in contact with the cheek of the phantom.(see Figure 10)

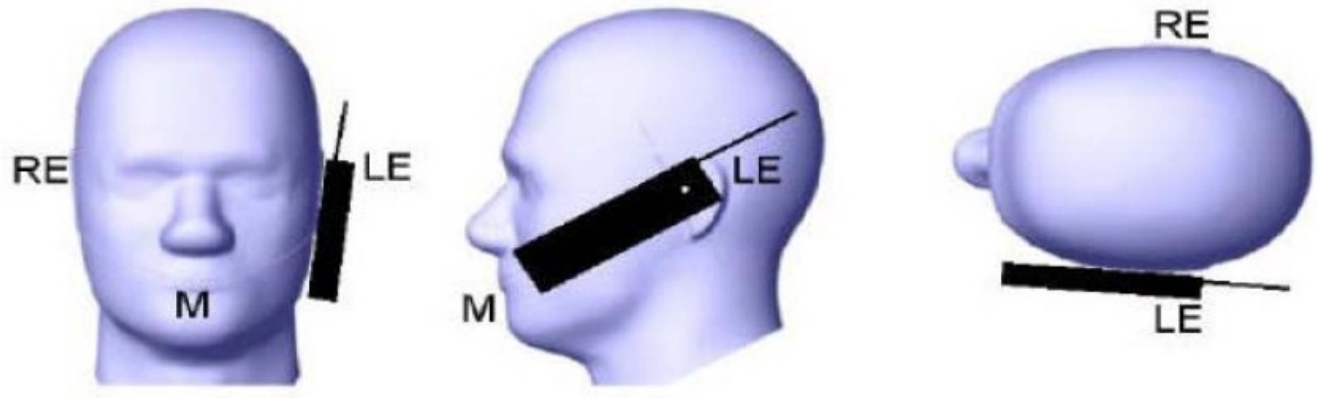


Figure 10. Cheek/Touch Position

6.2. Tilt Position

The device was positioned in the “Cheek” position. While maintaining the device in the reference plane described above cheek position and pivoting against the ear, device was moved outward away from the mouth by an angle of 15 degrees. (see Figure 11)

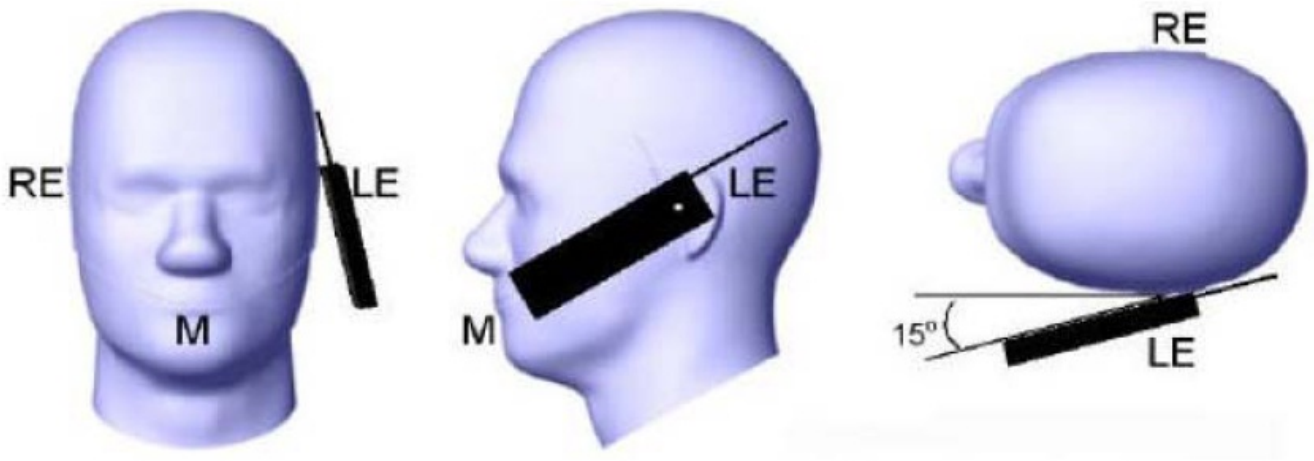


Figure 11. Ear/Tilt Position

Body-worn operating configurations are tested without the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration.

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with the device with each accessory. If multiple accessories share an identical metallic component(i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

6.3. Body Holster/ Belt Clip Configurations

Body-worn accessories may not always be supplied or available as options for some devices intended to be authorized for body-worn use. In this case, a test configuration with a separation distance between the device and the flat phantom is used. Test position spacing was documented.

Transmitters that are designed to operate in front of a person's face, as the push-to-talk configurations, are test for SAR compliance with the front of the device positioned to face the flat phantom in brain fluid. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessories, including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.

In all cases SAR measurements are performed to investigate the worst-case positioning. Worst-case positioning is then documented and used to perform Body SAR testing.

7.MEASUREMENT UNCERTAINTY

The uncertainty analysis is based on the template listed in the IEEE 1528 for both EUT SAR tests. The measurement uncertainty of a specific device is evaluated independently and the total uncertainty for both evaluations (95 % confidence level) must be less than 25 %.

Uncertainty Component	Uncertainty value (%)	Probabillity Distribution	Divisor	Ci	Ci ^ 2	Standard Uncertainty(%)	Standard Uncertainty^2	(Standard Uncertainty^2) x ci^2	vi
Measurement System									
Probe Calibration (k=1)	5.90	Normal	1	1	1	5.90	34.81	34.81	∞
Axial Isotropy	4.70	Rectengular	√3	0.7	0.49	2.71	7.34	3.60	∞
Hemispherical Isotropy	9.60	Rectengular	√3	0.7	0.49	5.54	30.69	15.04	∞
Linearity	4.70	Rectengular	√3	1	1	2.71	7.34	7.34	∞
System Detection Limits	1.00	Rectengular	√3	1	1	0.58	0.34	0.34	∞
Boundary Effect	1.00	Rectengular	√3	1	1	0.58	0.34	0.34	∞
Response Time	0.80	Rectengular	√3	1	1	0.46	0.21	0.21	∞
RF Ambient conditions	3.00	Rectengular	√3	1	1	1.73	3.00	3.00	∞
Readout Electronics	0.30	Normal	1	1	1	0.30	0.09	0.09	∞
Integration time	2.60	Rectengular	√3	1	1	1.50	2.25	2.25	∞
Probe positioner	0.40	Rectengular	√3	1	1	0.23	0.05	0.05	∞
Probe positioning	2.90	Rectengular	√3	1	1	1.67	2.79	2.79	∞
Max. SAR evaluation	1.00	Rectengular	√3	1	1	0.58	0.34	0.34	∞
Test Sample Related							**Sub total**	**70.20**	
Device Positioning	1.59	Normal	1	1	1	1.59	2.53	2.53	9
Device Holder Uncertainty	3.60	Normal	1	1	1	3.60	12.96	12.96	∞
Power Drift	5.00	Rectengular	√3	1	1	2.89	8.35	8.35	∞
Phantom and setup							**Sub total**	**23.84**	
Phantom Uncertainty	4.00	Rectengular	√3	1	1	2.31	5.33	5.33	∞
Liquid Conductivity - target value	5.00	Rectengular	√3	0.5	0.25	2.89	8.33	2.08	∞
Liquid Conductivity - Measurement value	2.50	Normal	1	0.5	0.25	2.50	6.25	1.56	∞
Liquid Permittivity - target value	5.00	Rectengular	√3	0.5	0.25	2.89	8.33	2.08	∞
Liquid Pemiittivity - Measurement value	2.50	Normal	1	0.5	0.25	2.50	6.25	1.56	∞
							Sub total	**12.63**	
Cornbined standard Uncertainty (%)							± 10.33	106.67	-
Expanded Uncertainty	(95% CONFIDENCE LEVEL,K=2)							± 20.66	

Table 5. Uncertainty Budget of DASY4

8.FCC RF Exposure Limits

HUMAN EXPOSURE	UNCONTROLLED ENVIRONMENT General Population (W/Kg) or (mW/g)	CONTROLLED ENVIRONMENT Occupational (W/Kg) or (mW/g)
SPATIAL PEAK SAR (Brain)	1.60	8.00
SPATIAL AVERAGE SAR (Whole Body)	0.08	0.40
SPATIAL PEAK SAR (Hand / Feet / Ankle / Wrist)	4.00	20.00

Table. 6 Safety Limits for Partial Body Exposure

NOTE :

* The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e.as a result of employment or occupation).

9.RF CONDUCTED POWERS

9.1. GSM/GPRS/EDGE Conducted output powers

Band	Mode	Multi Slot	Conducted Powers (dBm)		
			128	190	251
GSM850	GSM	1 slot	32.85	32.91	32.92
	GPRS	1 slot	32.84	32.37	32.83
		2 slot	29.65	29.65	29.49
	EDGE	1 slot	26.95	26.96	26.90
		2 slots	23.66	23.70	23.62

Band	Mode	Multi Slot	Conducted Powers (dBm)		
			512	661	810
GSM1900	GSM	1 slot	29.62	29.41	29.04
	GPRS	1 slot	29.64	29.43	29.07
		2 slot	25.87	25.77	25.73
	EDGE	1 slot	24.78	24.72	24.70
		2 slots	21.95	21.87	21.85

9.2. WCDMA/HSPA Conducted output powers

Band	Mode	3GPP 34.121 Subtest	Conducted Powers (dBm)		
			9262	9400	9538
WCDMA850	WCDMA	12.2 kbps RMC	23.75	23.82	23.32
		12.2 kbps AMR	23.52	23.84	23.31
	HSDPA	Subtest 1	23.62	23.81	23.79
		Subtest 2	23.35	23.51	23.48
		Subtest 3	22.98	23.15	23.13
		Subtest 4	23.02	23.11	23.10
	HSUPA	Subtest 1	22.03	22.02	22.31
		Subtest 2	22.15	22.31	22.28
		Subtest 3	22.21	22.29	22.14
		Subtest 4	22.13	22.22	22.16
		Subtest 5	22.76	22.87	22.74

Band	Mode	3GPP 34.121 Subtest	Conducted Powers (dBm)		
			4132	4175	4233
WCDMA1900	WCDMA	12.2 kbps RMC	23.18	23.30	23.25
		12.2 kbps AMR	23.15	23.28	23.05
	HSDPA	Subtest 1	22.89	22.96	22.88
		Subtest 2	22.55	22.60	22.64
		Subtest 3	21.91	21.98	22.13
		Subtest 4	21.76	21.96	22.07
	HSUPA	Subtest 1	22.00	22.11	21.76
		Subtest 2	21.43	21.62	21.56
		Subtest 3	21.53	21.63	22.36
		Subtest 4	21.32	21.67	21.66
		Subtest 5	22.04	22.21	21.76

9.3. 802.11b/g/n Conducted output powers

WiFi mode	Worst Power Data Rate [Mbps]	Conducted Powers (dBm)		
		2412MHz	2437MHz	2462MHz
802.11b	1	11.68	11.84	11.55
	2	11.90	12.12	12.19
	5.5	13.67	13.56	13.47
	11	14.62	15.24	14.58
802.11g	6	11.45	12.29	11.75
	9	11.82	13.12	11.22
	12	14.93	14.63	14.91
	18	12.29	12.98	11.77
	24	12.08	12.32	11.87
	36	12.05	12.27	11.53
	48	11.8	11.37	11.07
	54	12.35	12.39	12.30
802.11n	MCS0	11.36	11.95	11.28
	MCS1	12.48	12.88	11.89
	MCS2	11.72	12.05	11.21
	MCS3	11.45	11.83	11.36
	MCS4	11.54	12.13	11.44
	MCS5	11.79	12.22	11.93
	MCS6	11.36	12.72	11.58
	MCS7	11.57	11.58	11.23

For 2.4GHz, Per KDB publication 447498 4) b) procedures testing was required if the maximum average output power in mW was greater than 60/f (GHz). So 802.11n mode and Bluetooth mode were not investigated since the average output powers were not greater than 60/f threshold.

10.FCC MULTI-TX & ANTENNA SAR CONSIDERATIONS

10.1. Introduction

The following procedures adopted from "FCC SAR Considerations for Cell Phones with Multiple Transmitters" from February 2008 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.

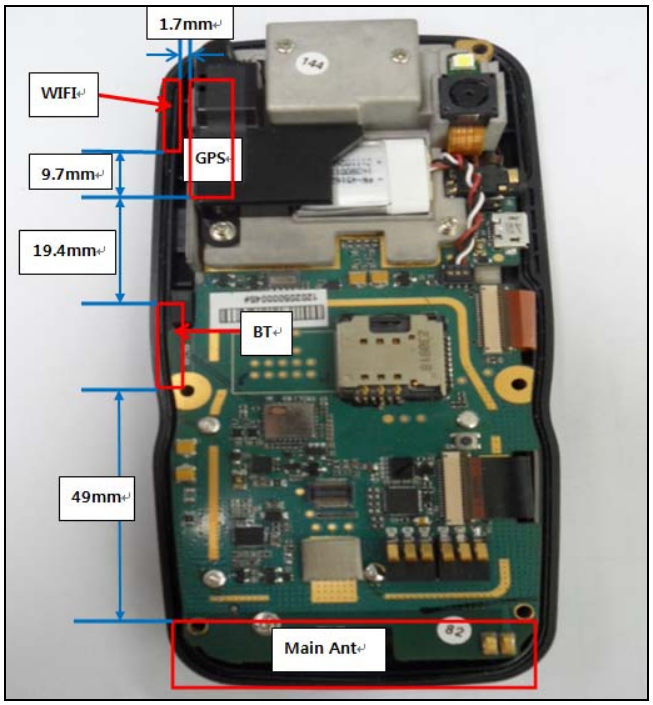
10.2. Output Power Thresholds for Unlicensed Transmitters

	2.45	5.15 – 5.35	5.47 – 5.85	GHz
P_{Ref}	12	6	5	mW
Device output power should be rounded to the nearest mW to compare with values specified in this table.				

10.3. Summary of SAR Evaluation Requirement for a Cell Phone with Multi-Transmitters

	Individual Transmitter	Simultaneous Transmission
Licensed Transmitters	**Routine evaluation required**	**SAR not required:** **Unlicensed only** o when stand-alone 1-g SAR is not required and antenna is > 5 cm from other antennas **Licensed & Unlicensed** o when the sum of the 1-g SAR is <1.6 W/kg for all simultaneous transmitting antennas o when SAR to antenna separation ratio of simultaneous transmitting antenna pair is < 0.3 **SAR required:** **Licensed & Unlicensed** antenna pairs with SAR to antenna separation ratio ≥ 0.3; test is only required for the configuration that results in the highest SAR in standalone configuration for each wireless mode and exposure condition Note: simultaneous transmission exposure conditions for head and body can be different for different style phones; therefore, different test requirements may apply
Unlicensed Transmitters	**When there is no simultaneous transmission** – o output < 60/f: SAR not required o output ≥ 60/f: stand-alone SAR required **When there is simultaneous transmission** – **Stand-alone SAR not required when** O output ≤ 2.P_{Ref} and antenna is > 5.0 cm from other antennas o output ≤ P_{Ref} and antenna is > 2.5 cm from other antennas, each either output power output ≤ P_{Ref} or 1-g SAR < 1.2 W/Kg **Otherwise stand-alone SAR is required** **When stand-alone SAR is required** o test SAR on highest output channel for each wireless mode and exposure condition o if SAR for highest output channel is > 50% of SAR limit, evaluate all channels according to normal procedures	

10.4. DISTANCES OF TRANSMITTERS Ant. & SIMULTANEOUS Tx CONSIDERATIONS



1. There is no simultaneous transmission between Cellular (PCS) & 802.11b/g/n of EUT.
2. The BT RF conducted output power is 1.33 mW.
3. Based on the output power and antenna separation distance, a stand-alone SAR of BT and a simultaneous SAR Evaluations are not required.

11.SAR MEASUREMENT RESULTS

11.1. GSM850 HEAD SAR Measurement Results

・Date of Test: July 12, 2012
・Liquid Temperature (C) : 22.1
・Ambient Temperature (C): 22.0
・Humidity (%): 46

Mode	Device Position	Antenna	Frequency		Power		SAR 1g (mW/g)
			MHz	CH	Ref. [V/m]	Drift [dB]	
GSM850	LEFT CHEEK TOUCH	Internal Antenna	836.6	190	5.49	+0.040	0.197
	LEFT EAR TILT	Internal Antenna	836.6	190	6.44	-0.047	0.111
GSM850	RIGHT CHEEK TOUCH	Internal Antenna	836.6	190	5.23	+0.168	**0.231**
	RIGHT EAR TILT	Internal Antenna	836.6	190	6.46	+0.065	0.119

1. The test data reported are the worst-case SAR value with the position set in a typical configuration
2. All modes of operation were investigated and the worst-case are reported.
3. Justification for reduced test configurations: per FCC/OET Supplement C (July,2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).
4. Battery was fully charged for all readings.
5. Test Signal Call mode: CMU200
6. Power reference Values are recorded at the beginning and end of each measurement.
7. Depth of simulation Tissue is 15.0 cm ± 0.2 cm

11.2. GSM850 BODY SAR Measurement Results

・Date of Test: July 12, 2012
・Liquid Temperature (C) : 22.0
・Ambient Temperature (C): 22.0
・Humidity (%): 46

Mode	Device Position	Distance	Multi-Slot	Frequency		Power		SAR 1g (mW/g)
				MHz	CH	Ref. [V/m]	Drift [dB]	
GSM850	Front Facing Phantom	15mm	1 slot	836.6	190	11.7	-0.040	0.217
	Rear Facing Phantom	15mm	1 slot	836.6	190	12.2	-0.069	**0.231**
GPRS850	Rear Facing Phantom	15mm	1 slot	836.6	190	12.0	-0.077	0.220
GPRS850	Rear Facing Phantom	15mm	2 slots	836.6	190	12.1	-0.175	0.225
EDGE850	Rear Facing Phantom	15mm	2 slots	836.6	190	6.12	-0.080	0.057

1. The test data reported are the worst-case SAR value with the position set in a typical configuration
2. All modes of operation were investigated and the worst-case are reported.
3. Justification for reduced test configurations: per FCC/OET Supplement C (July,2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).
4. Battery was fully charged for all readings.
5. Test Signal Call mode: CMU200
6. Power reference Values are recorded at the beginning and end of each measurement.
7. Depth of simulation Tissue is 15.0 cm ± 0.2 cm

11.3. GSM1900 HEAD SAR Measurement Results

・Date of Test: July 16, 2012
・Liquid Temperature (C) : 22.3
・Ambient Temperature (C): 22.0
・Humidity (%): 46

Mode	Device Position	Antenna	Frequency		Power		SAR 1g (mW/g)
			MHz	CH	Ref. [V/m]	Drift [dB]	
GSM1900	LEFT CHEEK TOUCH	Internal Antenna	1880	661	7.15	0.024	**0.230**
	LEFT EAR TILT	Internal Antenna	1880	661	8.59	-0.102	0.092
GSM1900	RIGHT CHEEK TOUCH	Internal Antenna	1880	661	7.32	-0.100	0.158
	RIGHT EAR TILT	Internal Antenna	1880	661	8.58	-0.009	0.096

1. The test data reported are the worst-case SAR value with the position set in a typical configuration
2. All modes of operation were investigated and the worst-case are reported.
3. Justification for reduced test configurations: per FCC/OET Supplement C (July,2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).
4. Battery was fully charged for all readings.
5. Test Signal Call mode: CMU200
6. Power reference Values are recorded at the beginning and end of each measurement.
7. Depth of simulation Tissue is 15.0 cm ± 0.2 cm

11.4. GSM1900 BODY SAR Measurement Results

・Date of Test: July 16, 2012
・Liquid Temperature (C) : 22.2
・Ambient Temperature (C): 22.0
・Humidity (%): 46

Mode	Device Position	Distance	Multi-Slot	Frequency		Power		SAR 1g (mW/g)
				MHz	CH	Ref. [V/m]	Drift [dB]	
GSM1900	Front Facing Phantom	15mm	1 slot	1880	661	4.49	0.064	0.173
	Rear Facing Phantom	15mm	1 slot	1880	661	6.45	0.022	**0.216**
GPRS1900	Rear Facing Phantom	15mm	1 slot	1880	661	6.21	0.005	0.204
GPRS1900	Rear Facing Phantom	15mm	2 slots	1880	661	6.07	-0.021	0.191
EDGE1900	Rear Facing Phantom	15mm	2 slots	1880	661	3.78	0.111	0.096

1. The test data reported are the worst-case SAR value with the position set in a typical configuration
2. All modes of operation were investigated and the worst-case are reported.
3. Justification for reduced test configurations: per FCC/OET Supplement C (July,2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).
4. Battery was fully charged for all readings.
5. Test Signal Call mode: CMU200
6. Power reference Values are recorded at the beginning and end of each measurement.
7. Depth of simulation Tissue is 15.0 cm ± 0.2 cm

11.5. WCDMA850 HEAD SAR Measurement Results

・Date of Test: July 16, 2012
・Liquid Temperature (C) : 22.3
・Ambient Temperature (C): 22.0
・Humidity (%): 46

Mode	Device Position	Antenna	Frequency		Power		SAR 1g (mW/g)
			MHz	CH	Ref. [V/m]	Drift [dB]	
WCDMA 850	LEFT CHEEK TOUCH	Internal Antenna	835	4175	5.68	-0.158	0.215
	LEFT EAR TILT	Internal Antenna	835	4175	6.78	0.054	0.131
WCDMA 850	RIGHT CHEEK TOUCH	Internal Antenna	835	4175	5.79	-0.109	**0.243**
	RIGHT EAR TILT	Internal Antenna	835	4175	6.14	-0.030	0.119

1. The test data reported are the worst-case SAR value with the position set in a typical configuration
2. All modes of operation were investigated and the worst-case are reported.
3. Justification for reduced test configurations: per FCC/OET Supplement C (July,2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).
4. Battery was fully charged for all readings.
5. Test Signal Call mode: CMU200
6. Power reference Values are recorded at the beginning and end of each measurement.
7. Depth of simulation Tissue is 15.0 cm ± 0.2 cm

11.6. WCDMA850 BODY SAR Measurement Results

・Date of Test: July 16, 2012
・Liquid Temperature (C) : 22.2
・Ambient Temperature (C): 22.0
・Humidity (%): 46

Mode	Device Position	Distance	Frequency		Power		SAR 1g (mW/g)
			MHz	CH	Ref. [V/m]	Drift [dB]	
WCDMA 850	Front Facing Phantom	15mm	835	4175	11.8	-0.030	0.243
	Rear Facing Phantom	15mm	835	4175	12.7	-0.164	**0.275**

1. The test data reported are the worst-case SAR value with the position set in a typical configuration
2. All modes of operation were investigated and the worst-case are reported.
3. Justification for reduced test configurations: per FCC/OET Supplement C (July,2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).
4. Battery was fully charged for all readings.
5. Test Signal Call mode: CMU200
6. Power reference Values are recorded at the beginning and end of each measurement.
7. Depth of simulation Tissue is 15.0 cm ± 0.2 cm

11.7. WCDMA1900 HEAD SAR Measurement Results

・Date of Test: July 16, 2012
・Liquid Temperature (C) : 22.3
・Ambient Temperature (C): 22.0
・Humidity (%): 46

Mode	Device Position	Antenna	Frequency		Power		SAR 1g (mW/g)
			MHz	CH	Ref. [V/m]	Drift [dB]	
WCDMA 1900	LEFT CHEEK TOUCH	Internal Antenna	1880	9400	9.47	-0.138	**0.393**
	LEFT EAR TILT	Internal Antenna	1880	9400	11.3	-0.078	0.158
WCDMA 1900	RIGHT CHEEK TOUCH	Internal Antenna	1880	9400	9.33	-0.013	0.232
	RIGHT EAR TILT	Internal Antenna	1880	9400	11.6	0.030	0.174

1. The test data reported are the worst-case SAR value with the position set in a typical configuration
2. All modes of operation were investigated and the worst-case are reported.
3. Justification for reduced test configurations: per FCC/OET Supplement C (July,2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).
4. Battery was fully charged for all readings.
5. Test Signal Call mode: CMU200
6. Power reference Values are recorded at the beginning and end of each measurement.
7. Depth of simulation Tissue is 15.0 cm ± 0.2 cm

11.8. WCDMA1900 BODY SAR Measurement Results

・Date of Test: July 16, 2012
・Liquid Temperature (C) : 22.2
・Ambient Temperature (C): 22.0
・Humidity (%): 46

Mode	Device Position	Distance	Frequency		Power		SAR 1g (mW/g)
			MHz	CH	Ref. [V/m]	Drift [dB]	
WCDMA1900	Front Facing Phantom	15mm	1880	661	6.97	-0.103	0.302
	Rear Facing Phantom	15mm	1880	661	7.59	-0.129	**0.348**

1. The test data reported are the worst-case SAR value with the position set in a typical configuration
2. All modes of operation were investigated and the worst-case are reported.
3. Justification for reduced test configurations: per FCC/OET Supplement C (July,2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).
4. Battery was fully charged for all readings.
5. Test Signal Call mode: CMU200
6. Power reference Values are recorded at the beginning and end of each measurement.
7. Depth of simulation Tissue is 15.0 cm ± 0.2 cm

11.9. WiFi Head SAR Measurement Results

・Date of Test: September 20, 2012
・Liquid Temperature (C) : 22.1
・Ambient Temperature (C): 22.0
・Humidity (%): 45

Mode	Device facing phantom	Distance to phantom	Frequency		Power		SAR 1g (mW/g)
			MHz	CH	Ref. [V/m]	Drift [dB]	
802.11b	LEFT CHEEK TOUCH	Internal Antenna	2437	6	8.69	0.055	0.134
	LEFT EAR TILT	Internal Antenna	2437	6	9.50	-0.008	0.165
	RIGHT CHEEK TOUCH	Internal Antenna	2437	6	8.44	0.024	0.145
	RIGHT EAR TILT	Internal Antenna	2437	6	10.3	-0.081	**0.194**
802.11g	LEFT CHEEK TOUCH	Internal Antenna	2437	6	4.43	0.083	0.035
	LEFT EAR TILT	Internal Antenna	2437	6	5.09	0.066	0.045
	RIGHT CHEEK TOUCH	Internal Antenna	2437	6	4.57	-0.017	0.041
	RIGHT EAR TILT	Internal Antenna	2437	6	5.27	0.128	0.053

NOTES:

1. The test data reported are the worst-case SAR value with the position set in a typical configuration
2. All modes of operation were investigated and the worst-case are reported.
3. Justification for reduced test configurations: per FCC/OET Supplement C (July,2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).
4. Battery was fully charged for all readings.
5. Test Signal Call mode: WiFi test mode tool in the EUT.
6. Power reference Values are recorded at the beginning and end of each measurement.
7. Depth of simulation Tissue is 15.0 cm ± 0.2 cm

11.10. WiFi Body SAR Measurement Results

・Date of Test: July 4, 2012

・Liquid Temperature (C) : 21.9

・Ambient Temperature (C): 22.0

・Humidity (%): 43

Mode	Device facing phantom	Distance to phantom	Frequency		Power		SAR 1g (mW/g)
			MHz	CH	Ref. [V/m]	Drift [dB]	
802.11b	Front	15mm	2437	6	4.38	+0.102	0.062
	Rear	15mm	2437	6	7.61	-0.088	**0.134**
802.11g	Front	15mm	2437	6	3.06	+0.032	0.030
	Rear	15mm	2437	6	4.73	+0.046	0.055

NOTES:

1. The test data reported are the worst-case SAR value with the position set in a typical configuration
2. All modes of operation were investigated and the worst-case are reported.
3. Justification for reduced test configurations: per FCC/OET Supplement C (July,2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).
4. Battery was fully charged for all readings.
5. Test Signal Call mode: WiFi test mode tool in the EUT.
6. Power reference Values are recorded at the beginning and end of each measurement.
7. Depth of simulation Tissue is 15.0 cm ± 0.2 cm

12.CONCLUSION

The SAR evaluation indicates that LYNX complies with the RF radiation exposure limits of the FCC/IC
These measurements were taken to simulate the RF effects of RF exposure under worst-case conditions.
Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

13.EQUIPMENT LIST AND CALIBRATION DETAILS

Equipment Type	Manufacturer	Model Number	Serial Number	Calibration Due	Used For this Test
Robot - Six Axes	Staubli	RX60	N/A	N/A	☒
Robot Remote Control	SPEAG	CS7MB	F03/5U96A1 /C/01	N/A	☒
SAM Twin Phantom	SPEAG	TP1276	QD000P40CA	N/A	☒
Flat Phantom V4.4	SPEAG	QD000P44BA, BB	1001, higher	N/A	☐
Data Acquisition Electronics	SPEAG	DAE4	559	2013.01.23	☒
Probe E-Field	SPEAG	ES3DV2	3020	2013.01.26	☒
Antenna Dipole 835 MHz	SPEAG	D835V2	481	2013.03.15	☒
Antenna Dipole 900 MHz	SPEAG	D900V2	194	2013.11.18	☐
Antenna Dipole 1800 MHz	SPEAG	D1800V2	2d066	2014.01.26	☐
Antenna Dipole 1900 MHz	SPEAG	D1900V2	5d038	2013.04.19	☒
Antenna Dipole 1950 MHz	SPEAG	D1950V2	1027	2014.01.24	☐
Antenna Dipole 2450 MHz	SPEAG	D2450V2	746	2014.01.24	☒
High power RF Amplifier	EMPOWER	2057-BBS3Q5KCK	1002D/C0321	2013.02.15	☒
Digital Communication Tester	R&S	CMU200	110019	2013.01.31	☒
Signal Generator	Agilent	8648C	3629U00868	2013.02.07	☒
RF Power Meter Dual	Hewlett Packard	E4419A	GB37170495	2013.02.08	☒
RF Power Sensor 0.01 - 18 GHz	Hewlett Packard	8481A	US37299851	2013.02.16	☒
RF Power Sensor 0.01 - 18 GHz	Hewlett Packard	8481A	3318A92872	2013.02.16	☒
S-Parameter Network Analyzer	Agilent	8753D	3410A07251	2013.03.13	☒
Dual Directional Coupler	Hewlett Packard	778D	1144AO4576	2013.02.13	☐
Directional Coupler	Agilent	773D	MY28390213	2013.02.13	☒
Bluetooth Test Set	Anritsu	MT8852B	6K00006994	2013.01.28	☐

APPENDIX A. SAR PLOTS

- Test Laboratory: KTL

- D835V2: HEAD 835MHz Validation

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

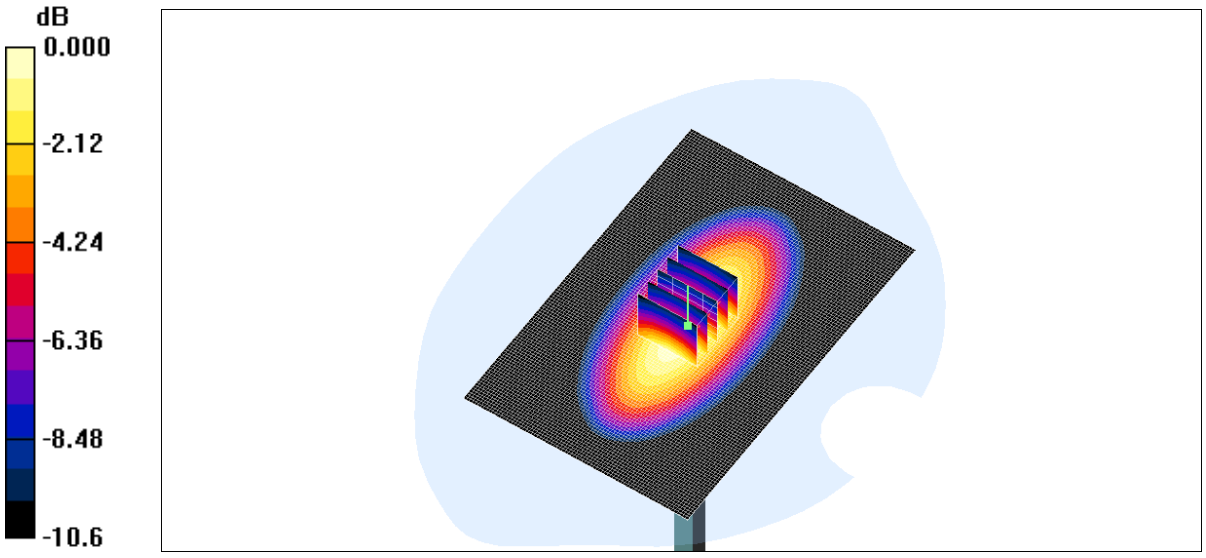
Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL835 Medium parameters used: f = 835 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.21, 6.21, 6.21); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.56 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 53.9 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 3.49 W/kg
SAR(1 g) = 2.37 mW/g; SAR(10 g) = 1.56 mW/g
Maximum value of SAR (measured) = 2.56 mW/g



0 dB = 2.56mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: GSM850 LEFT CHEEK THUCH _190CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: HSL835 Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.901 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

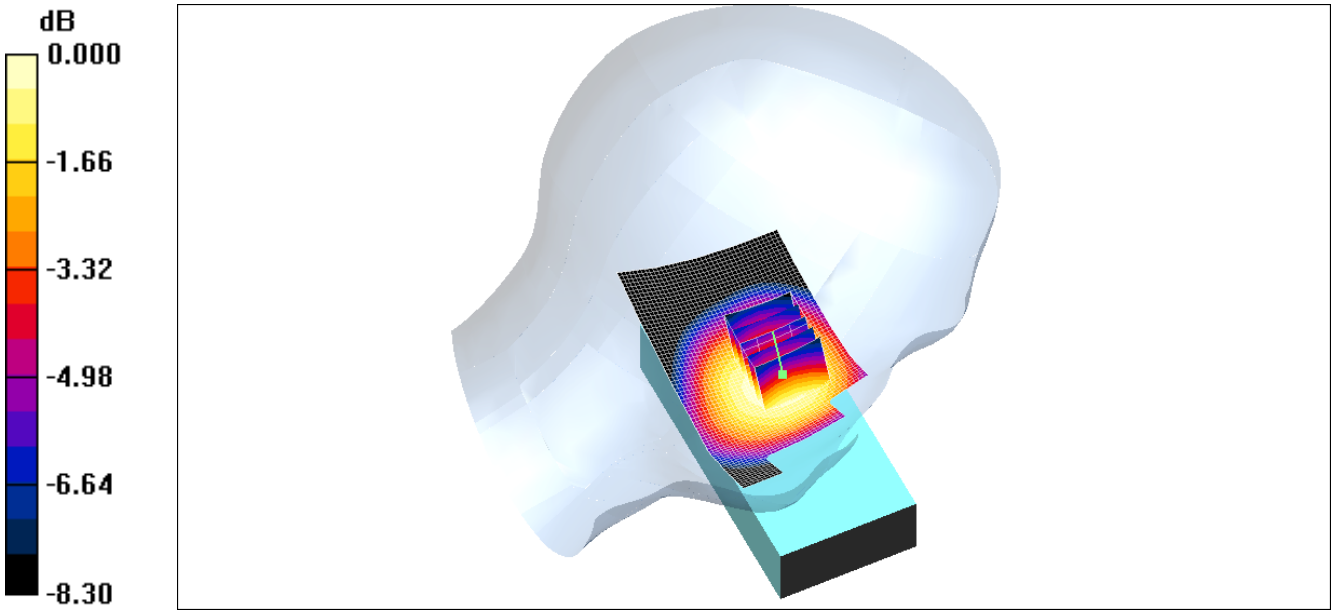
DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.21, 6.21, 6.21); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.208 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.49 V/m; Power Drift = 0.040 dB
Peak SAR (extrapolated) = 0.234 W/kg
SAR(1 g) = 0.197 mW/g; SAR(10 g) = 0.155 mW/g

Maximum value of SAR (measured) = 0.205 mW/g



0 dB = 0.205mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: GSM850 LEFT EAR TILT _190CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: HSL835 Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.901 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

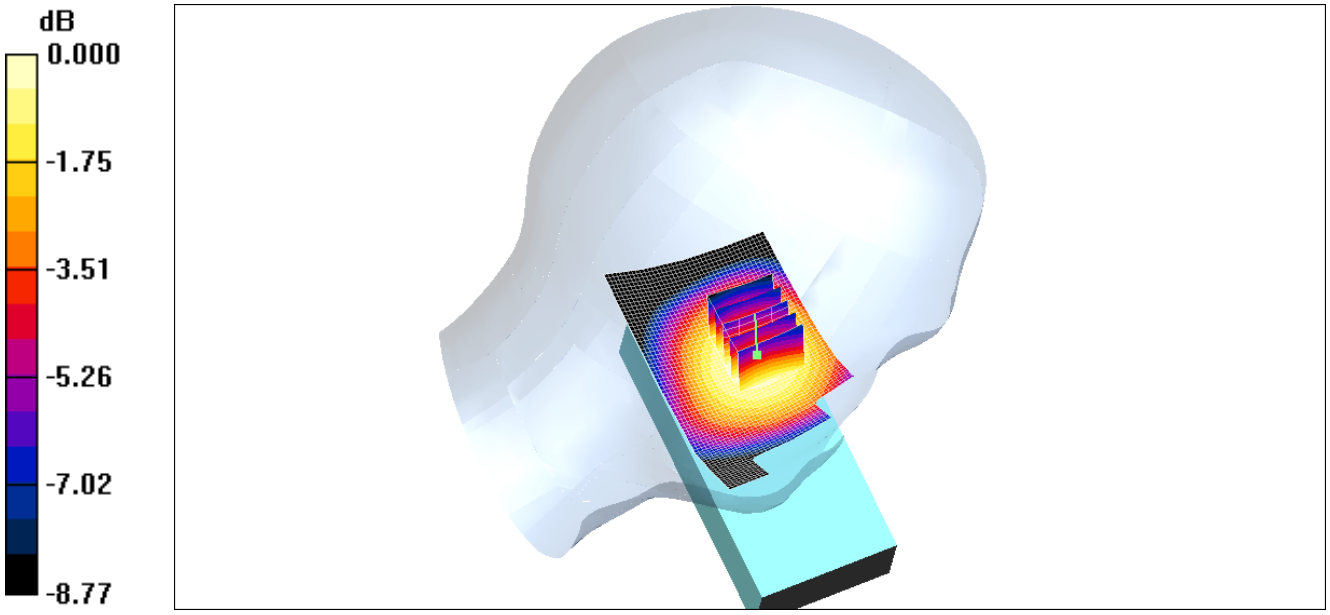
DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.21, 6.21, 6.21); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.117 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.44 V/m; Power Drift = -0.047 dB
Peak SAR (extrapolated) = 0.137 W/kg
SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.085 mW/g

Maximum value of SAR (measured) = 0.115 mW/g



0 dB = 0.115mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: GSM850 RIGHT CHEEK TOUCH _190CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: HSL900E Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

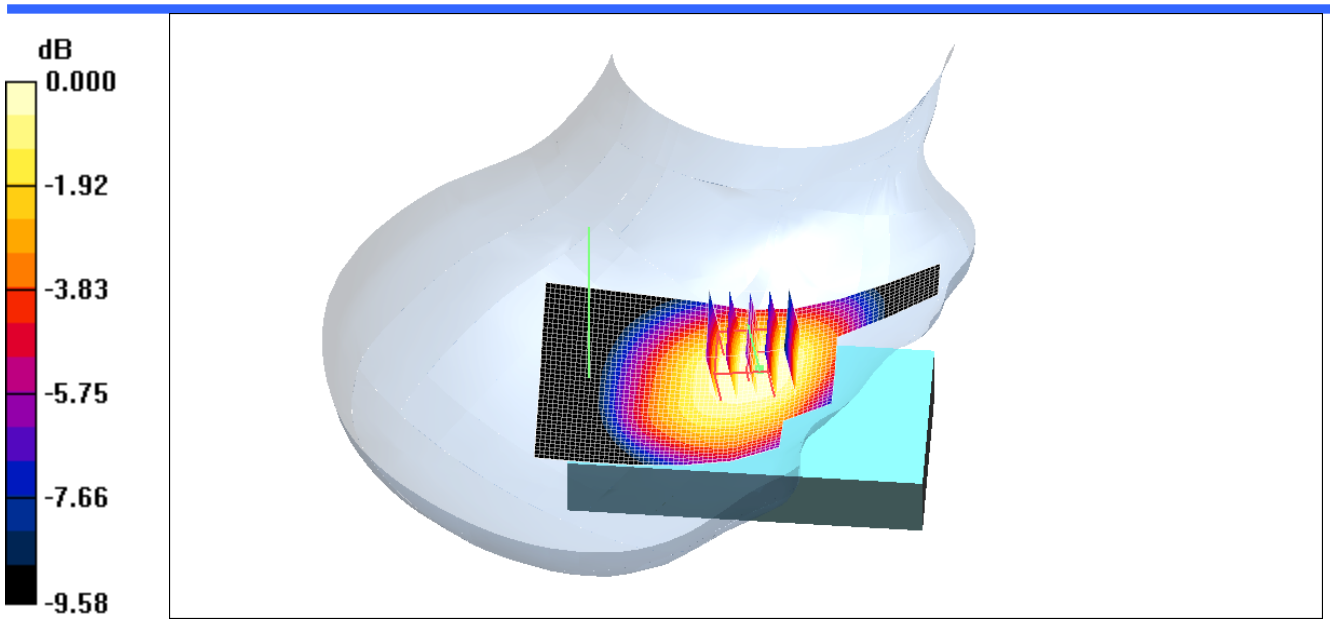
DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.21, 6.21, 6.21); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

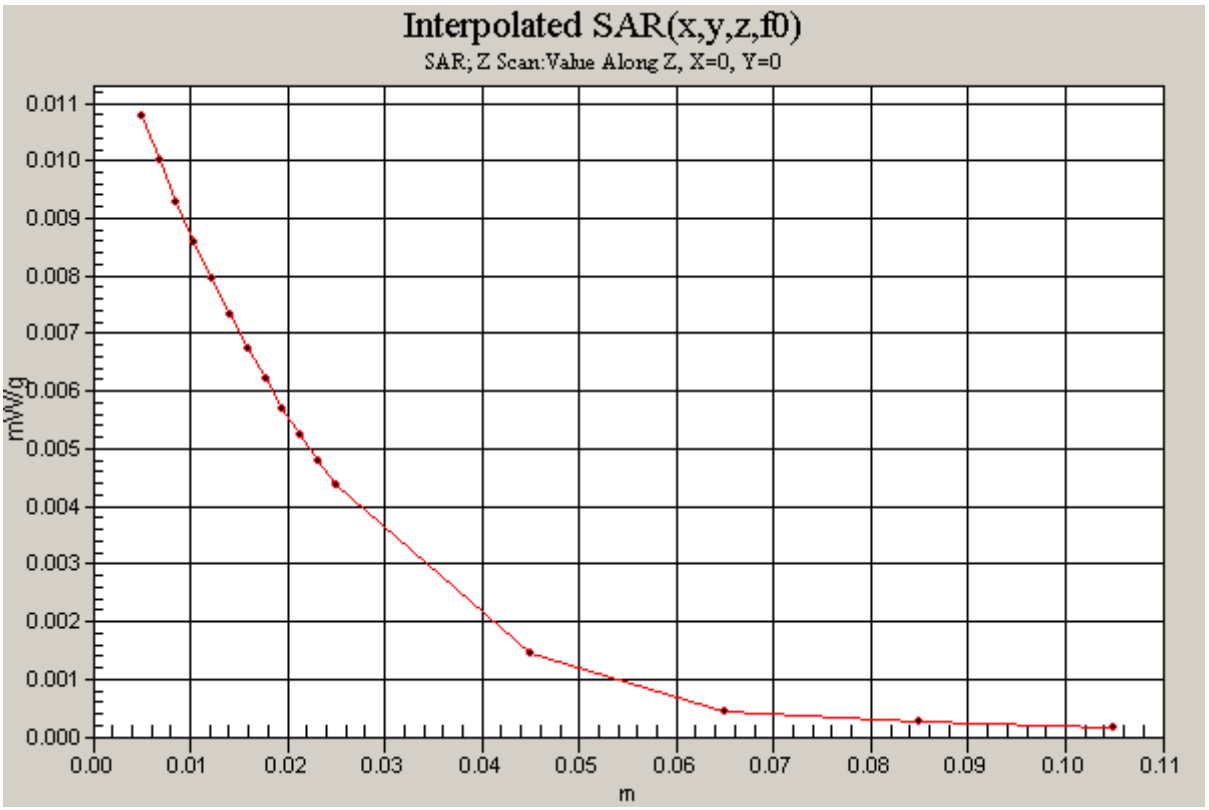
Area Scan (41x81x1): Measurement grid: dx=20mm, dy=20mm.
Maximum value of SAR (interpolated) = 0.254 mW/g

Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm
Maximum value of SAR (interpolated) = 0.011 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.23 V/m; Power Drift = 0.168 dB
Peak SAR (extrapolated) = 0.291 W/kg
SAR(1 g) = 0.231 mW/g; SAR(10 g) = 0.178 mW/g
Maximum value of SAR (measured) = 0.241 mW/g


dB
0.000
-1.92
-3.83
-5.75
-7.66
-9.58

0 dB = 0.241mW/g


Interpolated SAR(x,y,z,f0)
SAR; Z Scan:Value Along Z, X=0, Y=0
mW/g
0.011
0.010
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0.000
0.00
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.10
0.11
m

- Test Laboratory: KTL

- Model: LYNX

- Position: GSM850 RIGHT EAR TILT _190CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: HSL900E Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

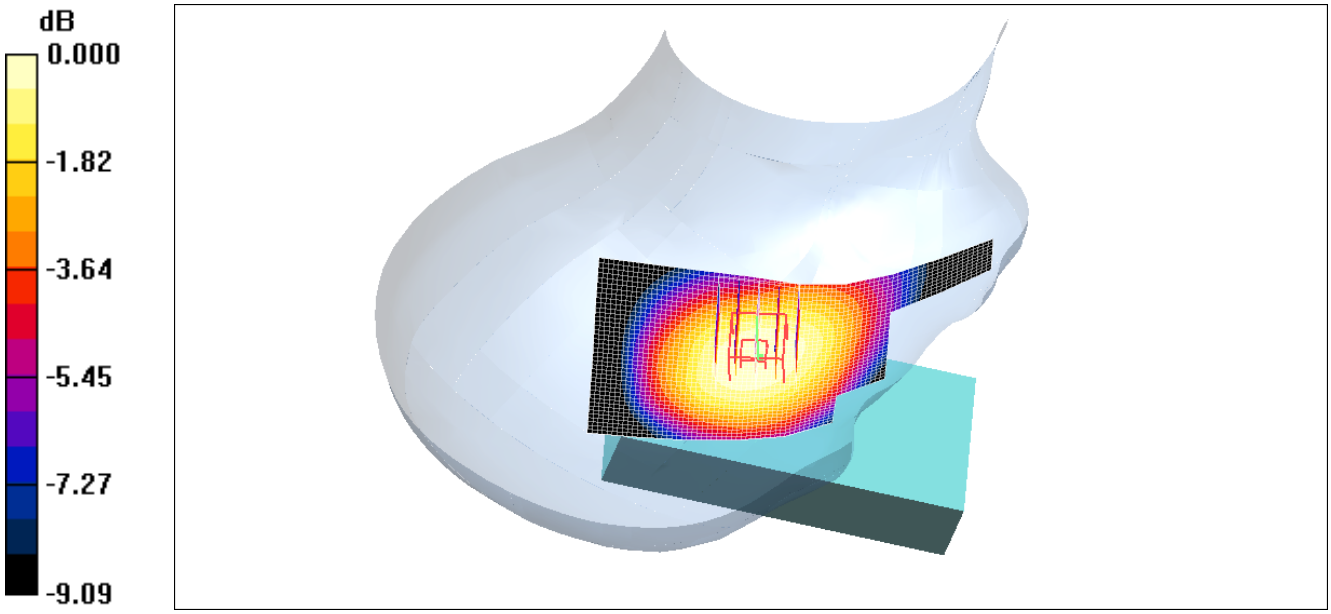
DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.21, 6.21, 6.21); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.127 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.46 V/m; Power Drift = 0.065 dB
Peak SAR (extrapolated) = 0.144 W/kg
SAR(1 g) = 0.119 mW/g; SAR(10 g) = 0.091 mW/g

Maximum value of SAR (measured) = 0.124 mW/g



0 dB = 0.124mW/g

- Test Laboratory: KTL

- D835V2: Body 835MHz Validation

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.0 ℃, Ambient Temperature: 22.0 ℃

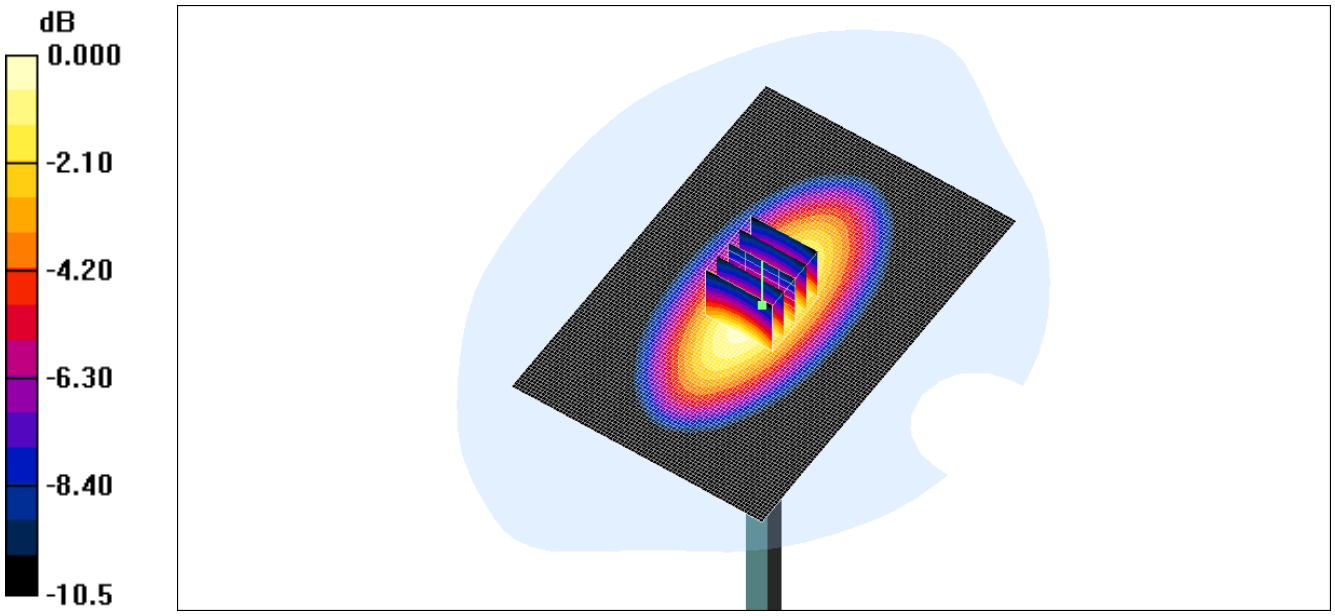
Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: MSL835 Medium parameters used: f = 835 MHz; σ = 0.96 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.18, 6.18, 6.18); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.74 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 54.1 V/m; Power Drift = -0.032 dB
Peak SAR (extrapolated) = 3.73 W/kg
SAR(1 g) = 2.54 mW/g; SAR(10 g) = 1.66 mW/g
Maximum value of SAR (measured) = 2.75 mW/g



0 dB = 2.75mW/g

- Test Laboratory: KTL
- Model: LYNX
- Position: GSM850 BODY FRONT Facing phantom _190CH
- Test Date: July 12, 2012
- Measured Liquid Temperature: 22.0 ℃, Ambient Temperature: 22.0 ℃

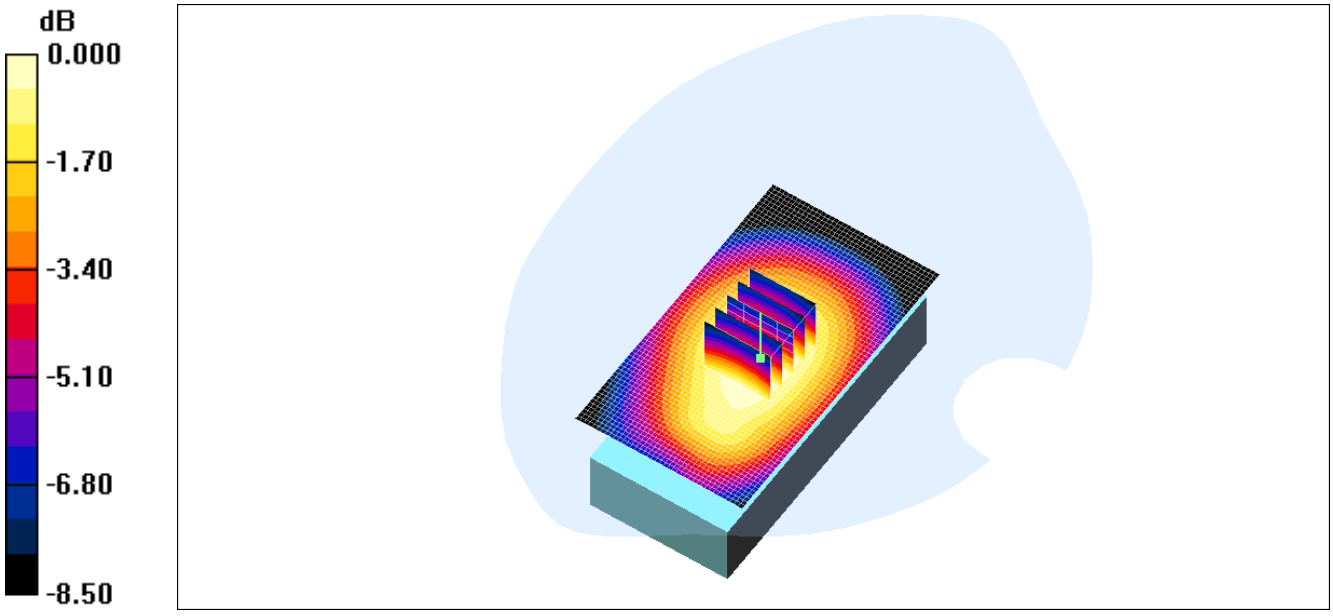
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: HSL835 Medium parameters used: f = 836.6 MHz; σ = 0.96 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.18, 6.18, 6.18); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.225 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.7 V/m; Power Drift = -0.040 dB
Peak SAR (extrapolated) = 0.274 W/kg
SAR(1 g) = 0.217 mW/g; SAR(10 g) = 0.162 mW/g
Maximum value of SAR (measured) = 0.228 mW/g



0 dB = 0.228mW/g

- Test Laboratory: KTL
- Model: LYNX
- Position: GSM850 BODY REAR Facing phantom _190CH
- Test Date: July 12, 2012
- Measured Liquid Temperature: 22.0 ℃, Ambient Temperature: 22.0 ℃

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: HSL835 Medium parameters used: f = 836.6 MHz; σ = 0.96 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

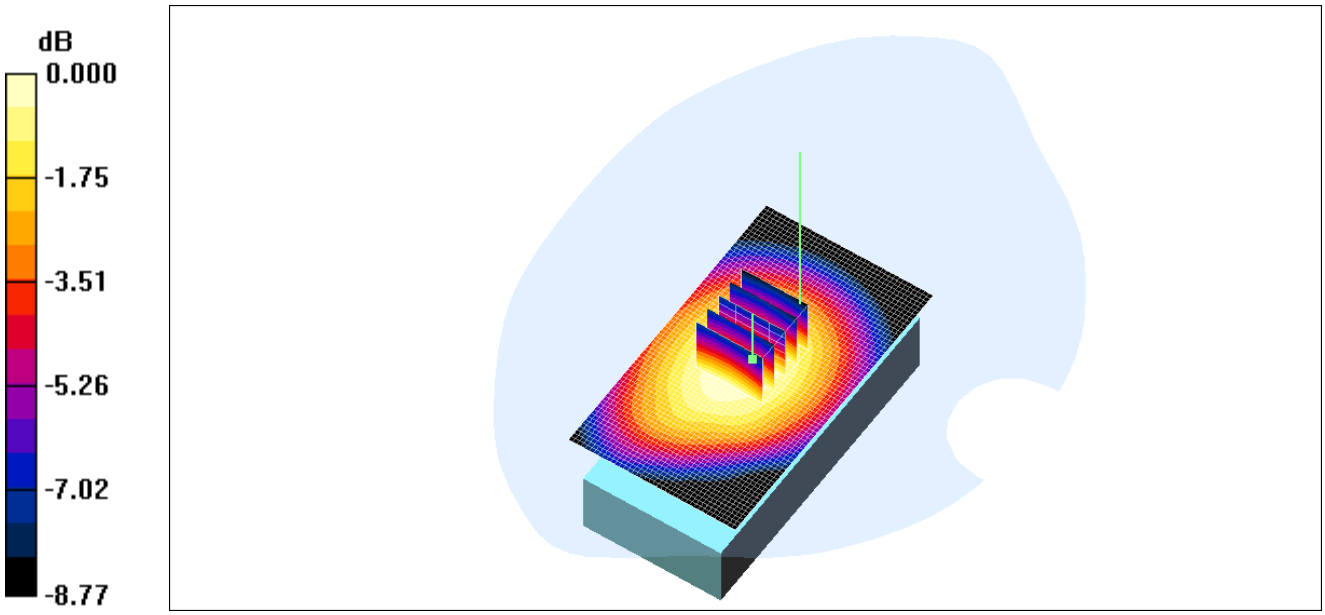
DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.18, 6.18, 6.18); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

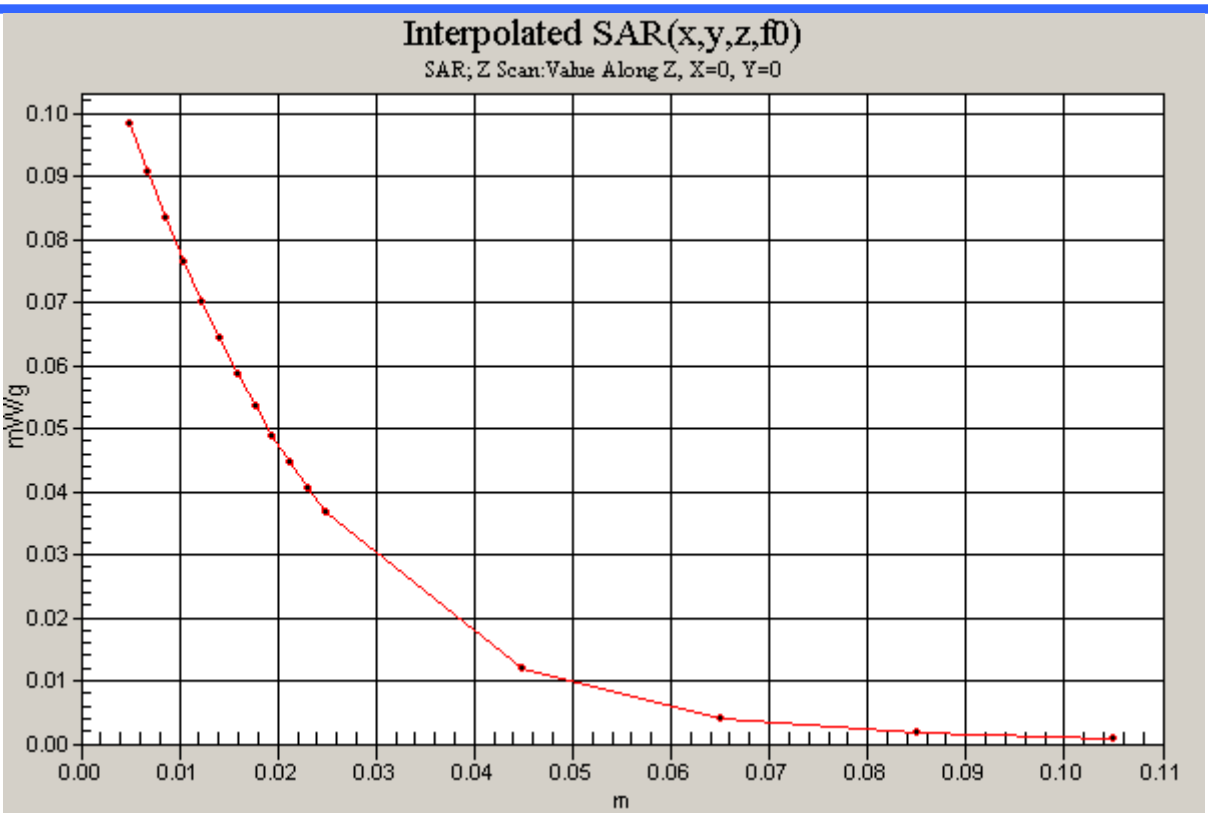
Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.244 mW/g

Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm
Maximum value of SAR (interpolated) = 0.098 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.2 V/m; Power Drift = -0.069 dB
Peak SAR (extrapolated) = 0.294 W/kg
SAR(1 g) = 0.231 mW/g; SAR(10 g) = 0.171 mW/g
Maximum value of SAR (measured) = 0.243 mW/g



0 dB = 0.243mW/g



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http:://www.ktl.re.kr
Tel: +82-31-500-0133
Fax: +82-31-500-0149

- Test Laboratory: KTL

- Model: LYNX

- Position: GPRS850 1SLOT- BODY REAR Facing phantom _190CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.0 ℃, Ambient Temperature: 22.0 ℃

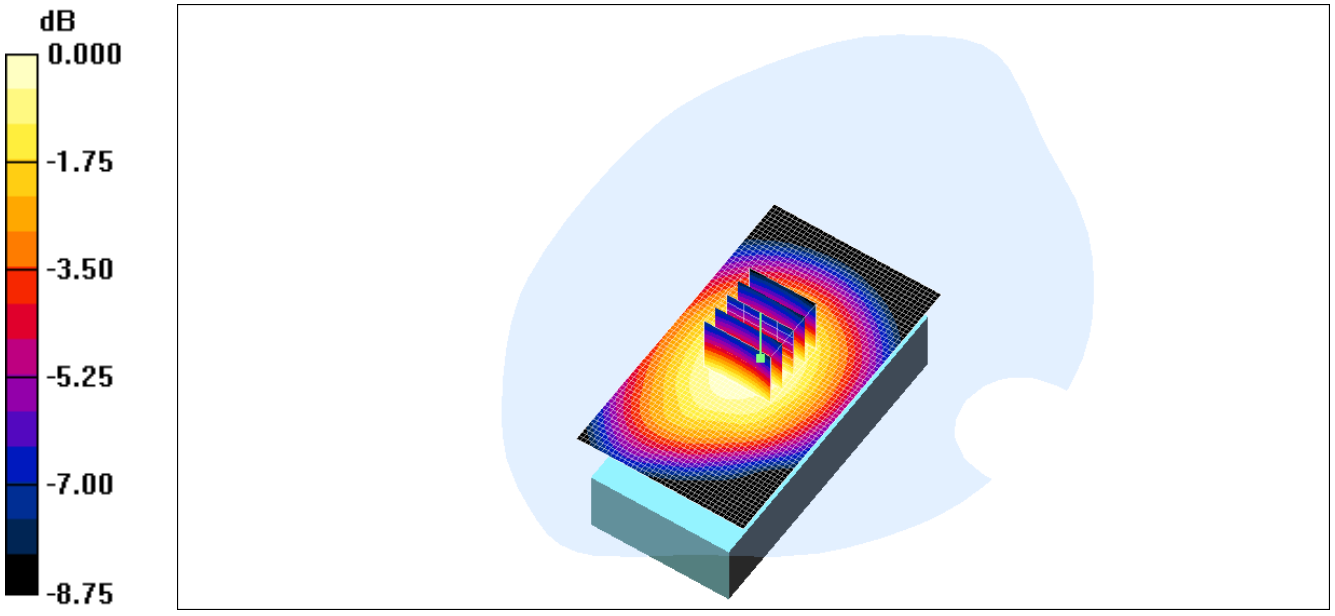
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: HSL835 Medium parameters used: f = 836.6 MHz; σ = 0.96 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.18, 6.18, 6.18); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.234 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.0 V/m; Power Drift = -0.077 dB
Peak SAR (extrapolated) = 0.284 W/kg
SAR(1 g) = 0.220 mW/g; SAR(10 g) = 0.162 mW/g
Maximum value of SAR (measured) = 0.232 mW/g



0 dB = 0.232mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: GPRS850 2SLOTS- BODY REAR Facing phantom _190CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.0 ℃, Ambient Temperature: 22.0 ℃

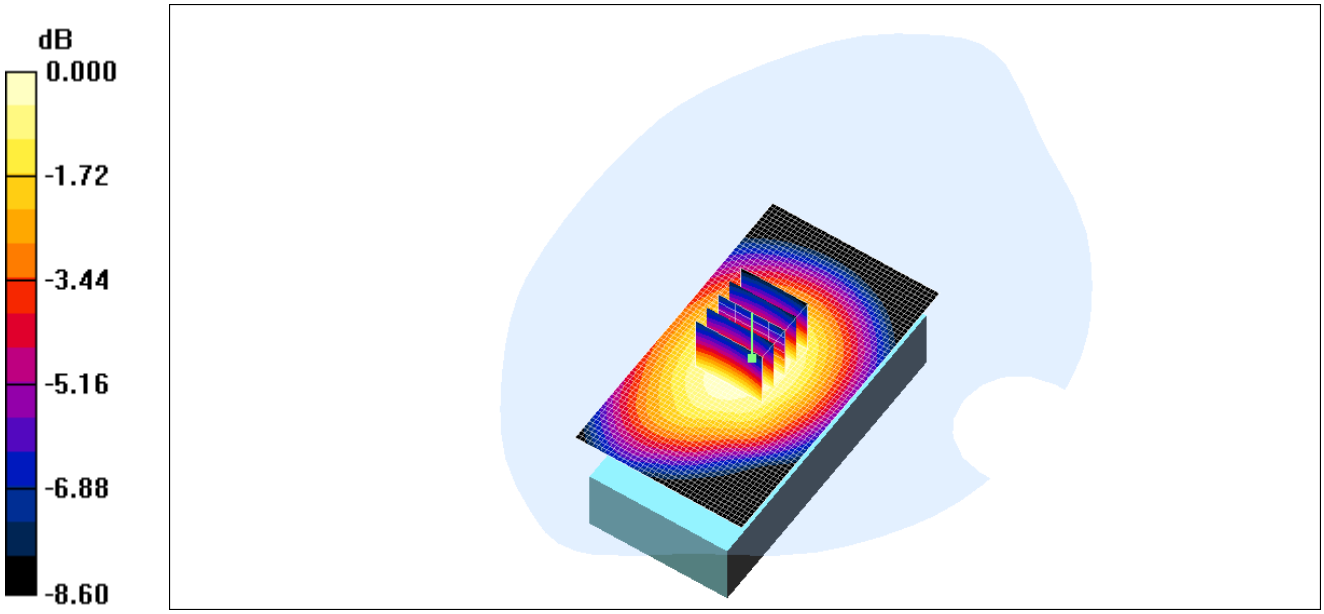
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:4.15
Medium: HSL835 Medium parameters used: f = 836.6 MHz; σ = 0.96 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.18, 6.18, 6.18); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.239 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.1 V/m; Power Drift = -0.175 dB
Peak SAR (extrapolated) = 0.288 W/kg
SAR(1 g) = 0.225 mW/g; SAR(10 g) = 0.166 mW/g
Maximum value of SAR (measured) = 0.237 mW/g



0 dB = 0.237mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: EGPRS850 2SLOTS- BODY REAR Facing phantom _190CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.0 ℃, Ambient Temperature: 22.0 ℃

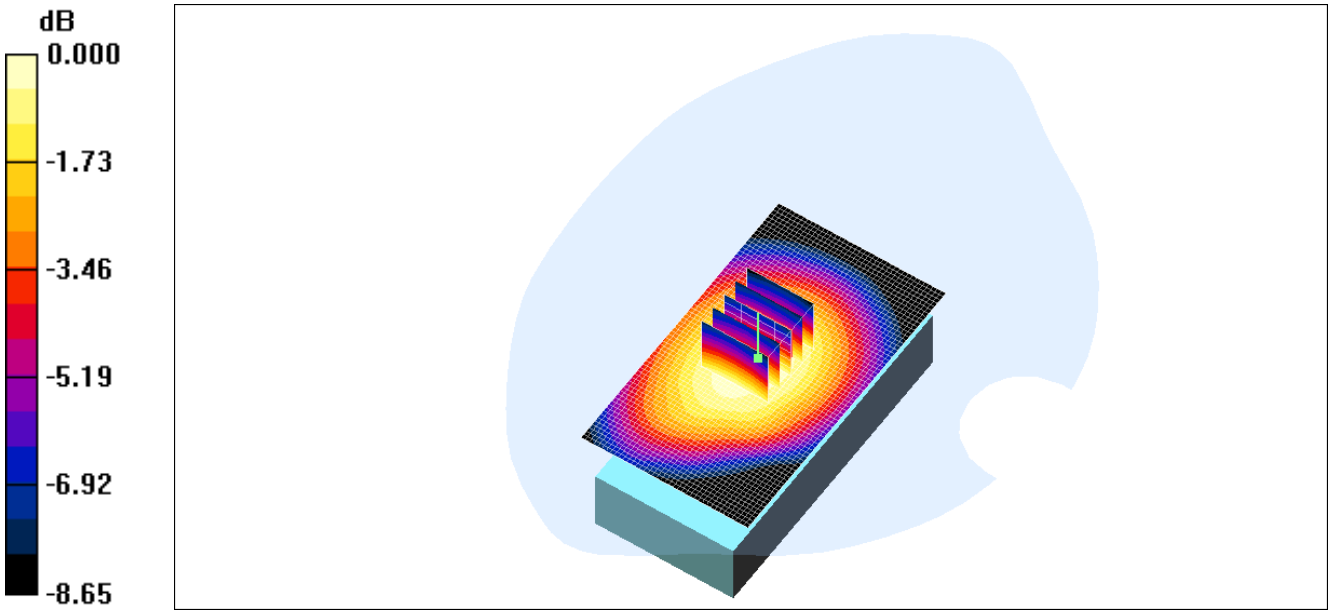
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:4.15
Medium: HSL835 Medium parameters used: f = 836.6 MHz; σ = 0.96 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.18, 6.18, 6.18); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.060 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.12 V/m; Power Drift = -0.080 dB
Peak SAR (extrapolated) = 0.073 W/kg
SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.042 mW/g
Maximum value of SAR (measured) = 0.060 mW/g



0 dB = 0.060mW/g

- Test Laboratory: KTL

- D1900V2: HEAD 1900MHz Validation

- Test Date: July 16, 2012

- Measured Liquid Temperature: 22.3 ℃, Ambient Temperature: 22.0 ℃

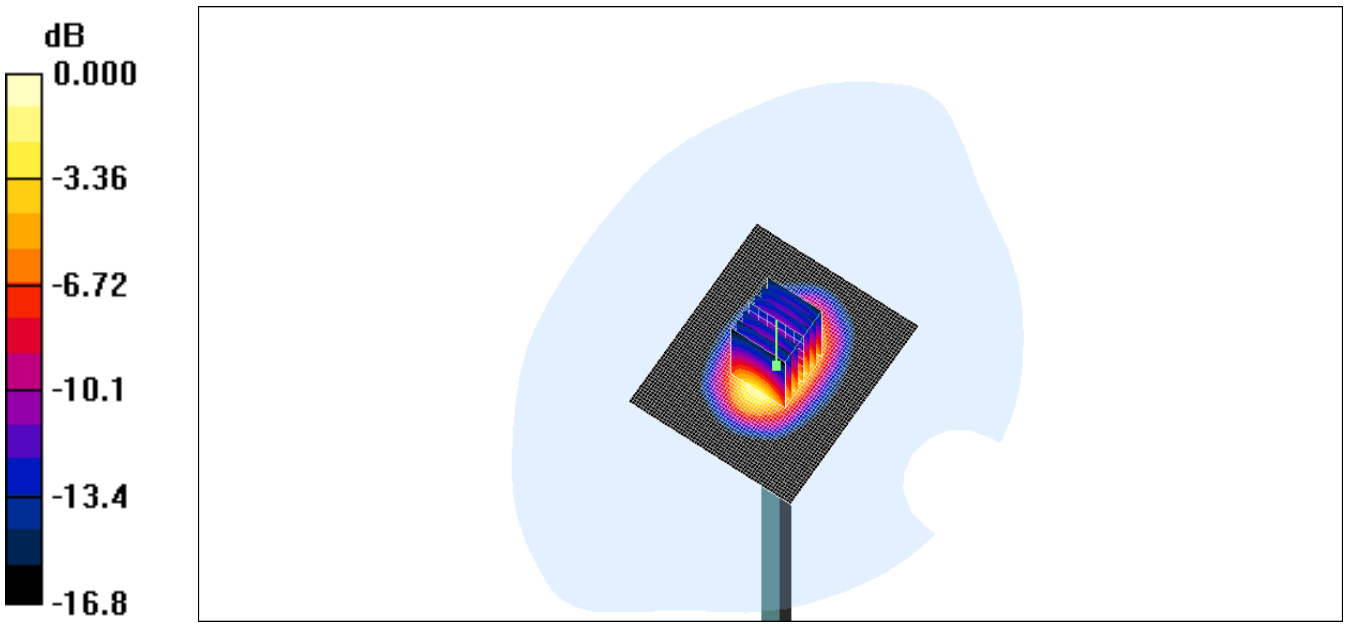
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL1900 Medium parameters used: f = 1900 MHz; σ = 1.37 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(5, 5, 5); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 12.7 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 93.1 V/m; Power Drift = -0.074 dB
Peak SAR (extrapolated) = 17.2 W/kg
SAR(1 g) = 9.45 mW/g; SAR(10 g) = 5 mW/g
Maximum value of SAR (measured) = 10.6 mW/g



0 dB = 10.6mW/g

- Test Laboratory: KTL
- Model: LYNX
- Position: GSM1900 LEFT CHEEK THUCH _661CH
- Test Date: July 16, 2012
- Measured Liquid Temperature: 22.3 ℃, Ambient Temperature: 22.0 ℃

Communication System: DCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: HSL1900 Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

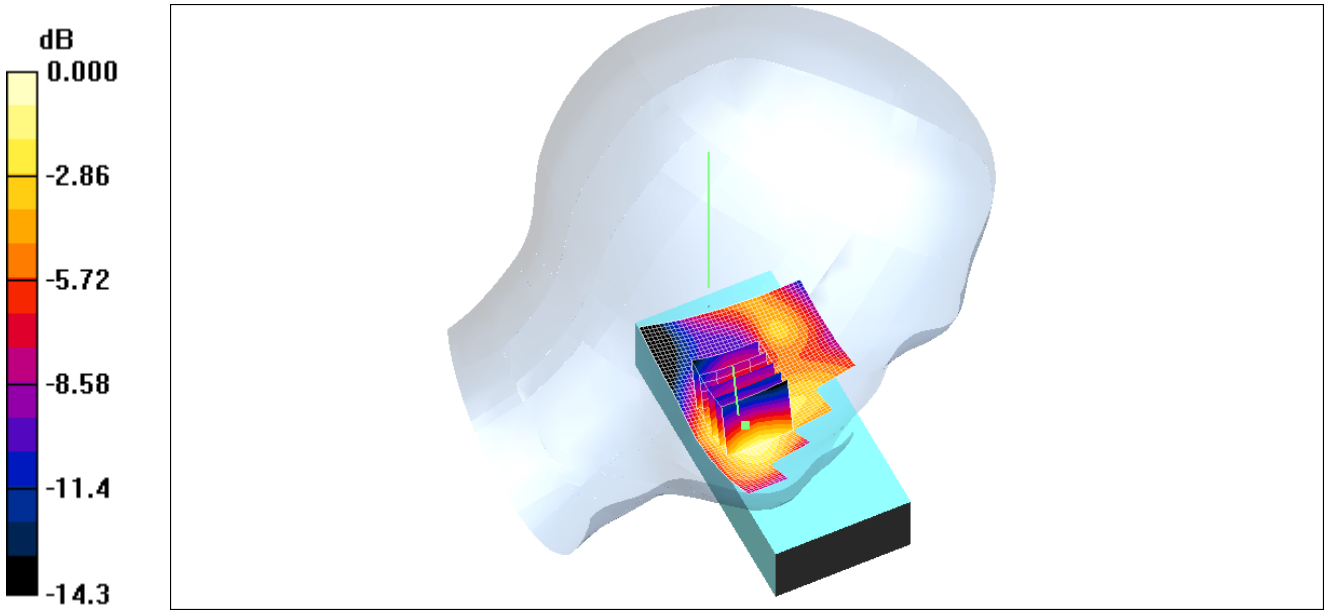
DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(5, 5, 5); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

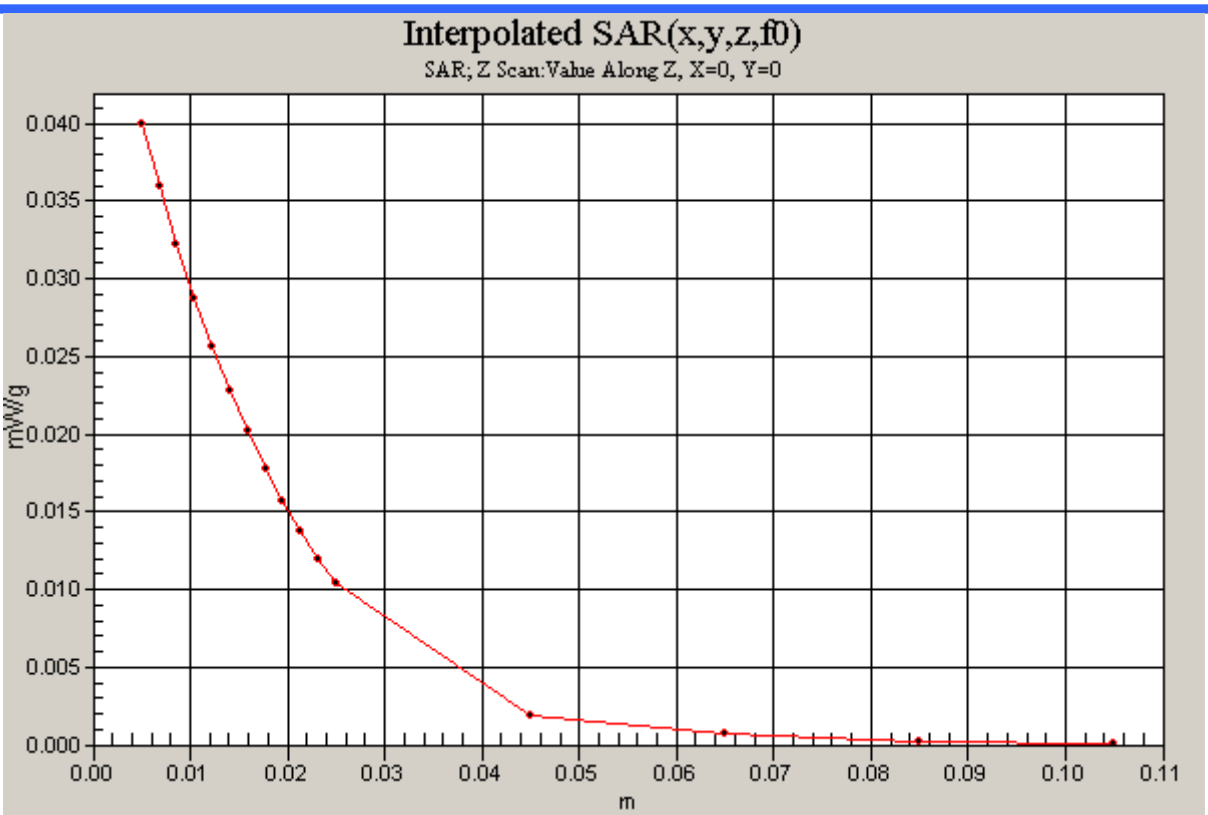
Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.266 mW/g

Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm
Maximum value of SAR (interpolated) = 0.040 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.15 V/m; Power Drift = 0.024 dB
Peak SAR (extrapolated) = 0.340 W/kg
SAR(1 g) = 0.230 mW/g; SAR(10 g) = 0.149 mW/g
Maximum value of SAR (measured) = 0.247 mW/g



0 dB = 0.247mW/g



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http:://www.ktl.re.kr
Tel: +82-31-500-0133
Fax: +82-31-500-0149

- Test Laboratory: KTL

- Model: LYNX

- Position: GSM1900 LEFT EAR TILT _661CH

- Test Date: July 16, 2012

- Measured Liquid Temperature: 22.3 ℃, Ambient Temperature: 22.0 ℃

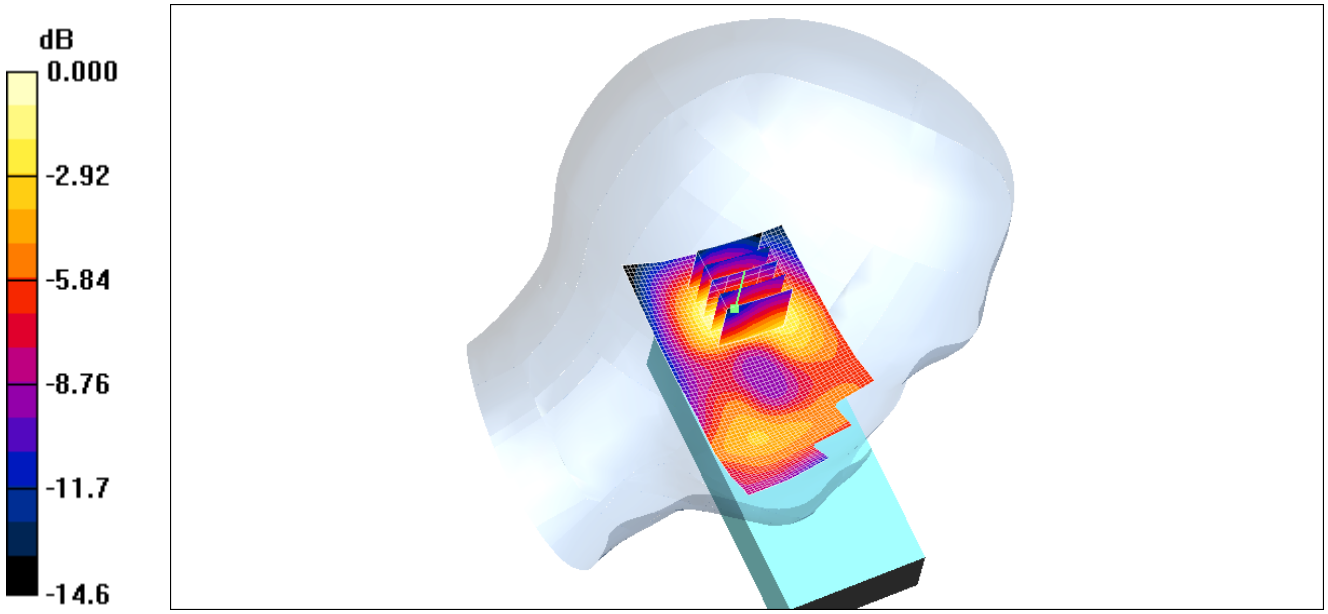
Communication System: DCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: HSL1900 Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(5, 5, 5); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.097 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.59 V/m; Power Drift = -0.102 dB
Peak SAR (extrapolated) = 0.142 W/kg
SAR(1 g) = 0.092 mW/g; SAR(10 g) = 0.056 mW/g
Maximum value of SAR (measured) = 0.100 mW/g



0 dB = 0.100mW/g

- Test Laboratory: KTL
- Model: LYNX
- Position: GSM1900 RIGHT CHEEK TOUCH _661CH
- Test Date: July 26, 2012
- Measured Liquid Temperature: 22.3 ℃, Ambient Temperature: 22.0 ℃

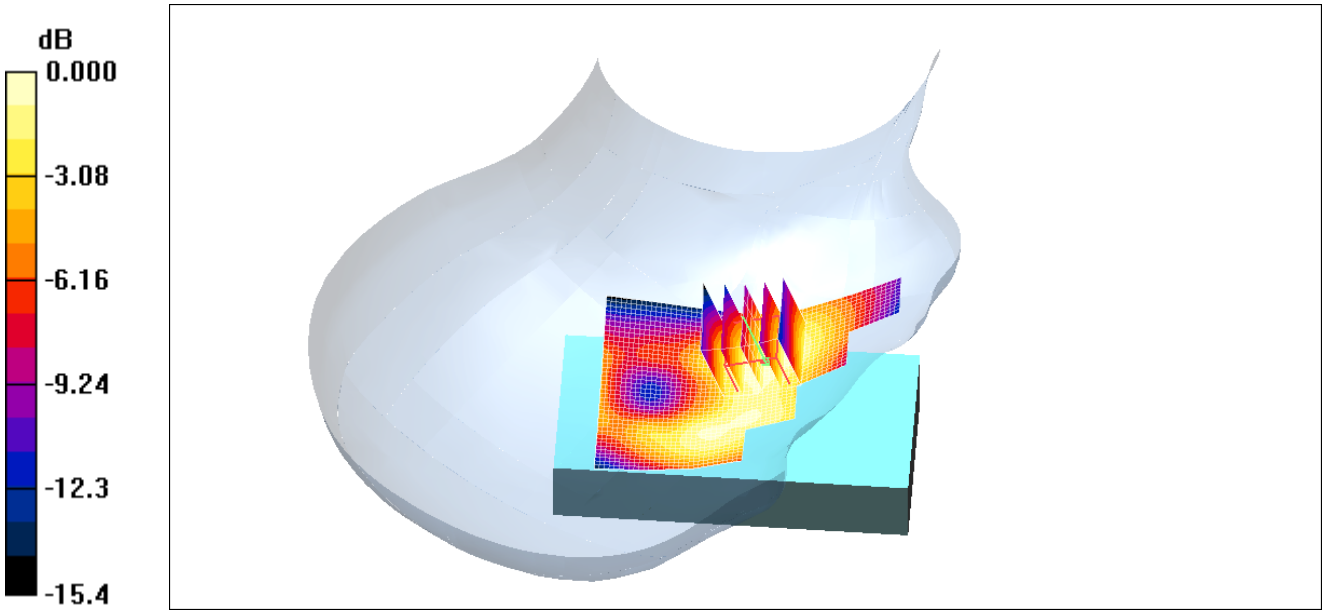
Communication System: DCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: HSL1900 Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(5, 5, 5); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.185 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.32 V/m; Power Drift = -0.100 dB
Peak SAR (extrapolated) = 0.225 W/kg
SAR(1 g) = 0.158 mW/g; SAR(10 g) = 0.105 mW/g
Maximum value of SAR (measured) = 0.169 mW/g



0dB = 0.169 mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: GSM1900 RIGHT EAR TILT _661CH

- Test Date: July 26, 2012

- Measured Liquid Temperature: 22.3 ℃, Ambient Temperature: 22.0 ℃

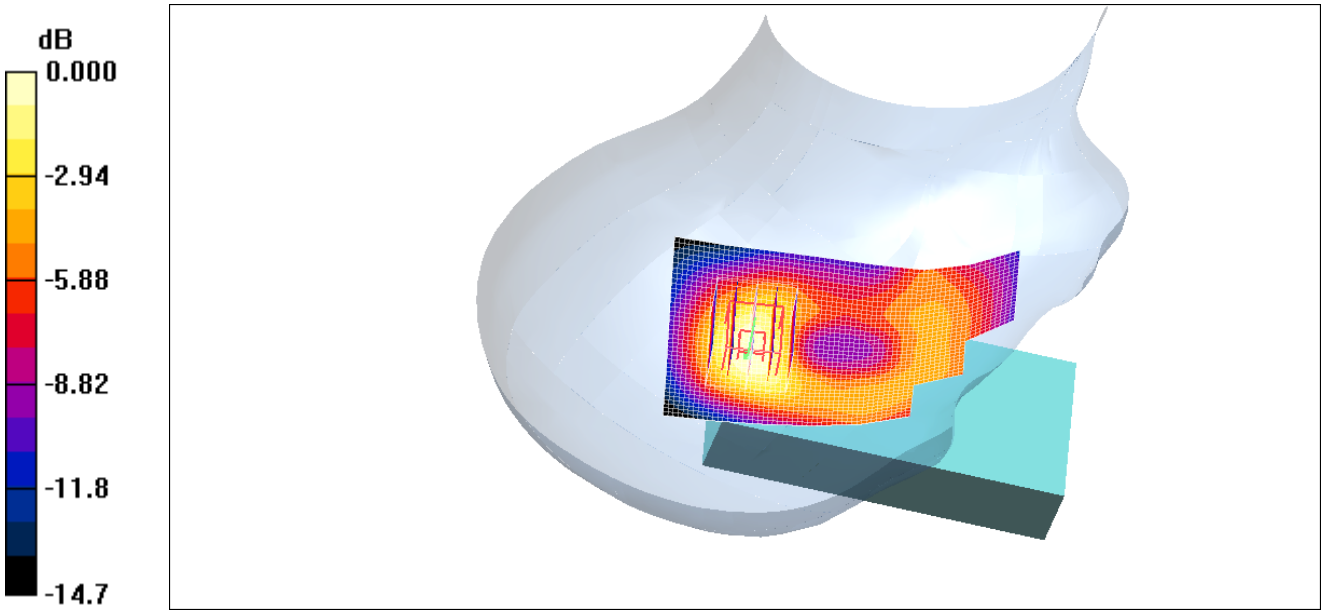
Communication System: DCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: HSL1900 Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(5, 5, 5); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.103 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.58 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 0.151 W/kg
SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.058 mW/g
Maximum value of SAR (measured) = 0.104 mW/g



0 dB = 0.104mW/g

- Test Laboratory: KTL

- D1900V2: Body 1900MHz Validation

- Test Date: July 16, 2012

- Measured Liquid Temperature: 22.2 ℃, Ambient Temperature: 22.0 ℃

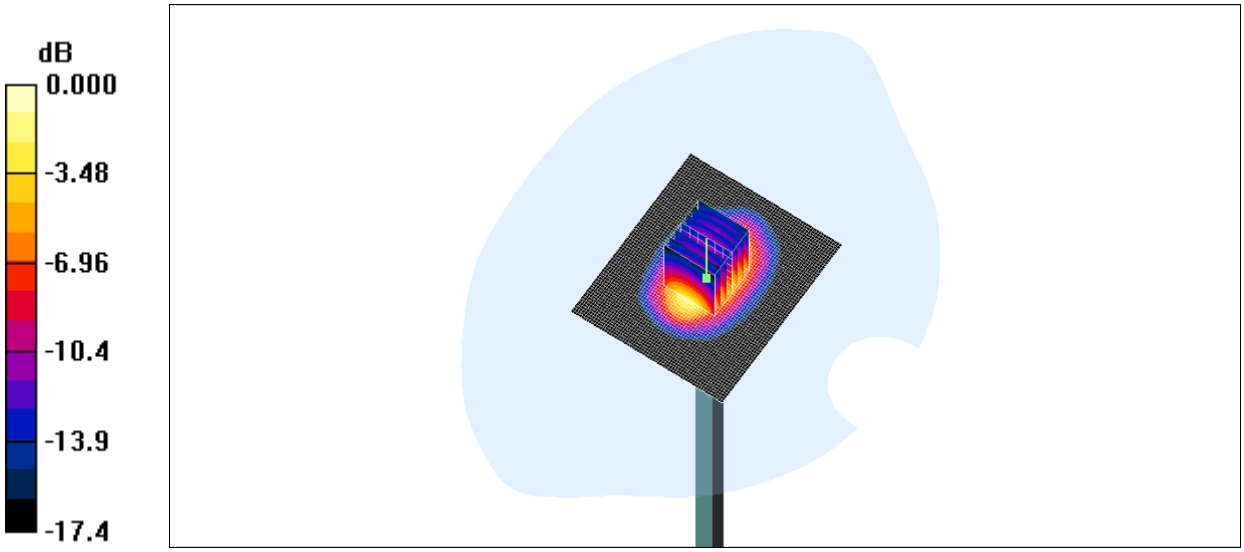
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: MSL1900 Medium parameters used: f = 1900 MHz; σ = 1.55 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.44, 4.44, 4.44); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 12.1 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 87.8 V/m; Power Drift = 0.063 dB
Peak SAR (extrapolated) = 17.4 W/kg
SAR(1 g) = 9.93 mW/g; SAR(10 g) = 5.18 mW/g
Maximum value of SAR (measured) = 11.2 mW/g



0 dB = 11.2mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: GSM1900 BODY FRONT Facing Phantom _661CH

- Test Date: July 16, 2012

- Measured Liquid Temperature: 22.2 ℃, Ambient Temperature: 22.0 ℃

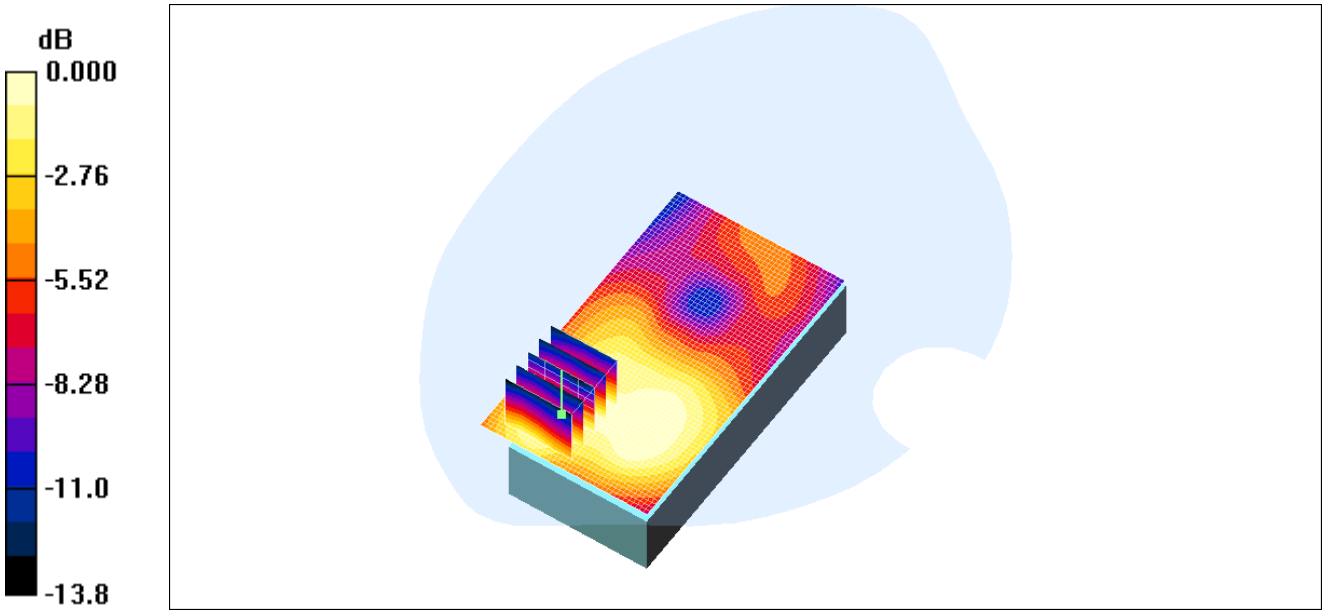
Communication System: DCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.56 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.44, 4.44, 4.44); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.205 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.49 V/m; Power Drift = 0.064 dB
Peak SAR (extrapolated) = 0.277 W/kg
SAR(1 g) = 0.173 mW/g; SAR(10 g) = 0.104 mW/g
Maximum value of SAR (measured) = 0.181 mW/g



0 dB = 0.181mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: GSM1900 BODY REAR Facing Phantom _661CH

- Test Date: July 16, 2012

- Measured Liquid Temperature: 22.2 ℃, Ambient Temperature: 22.0 ℃

Communication System: DCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.56 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

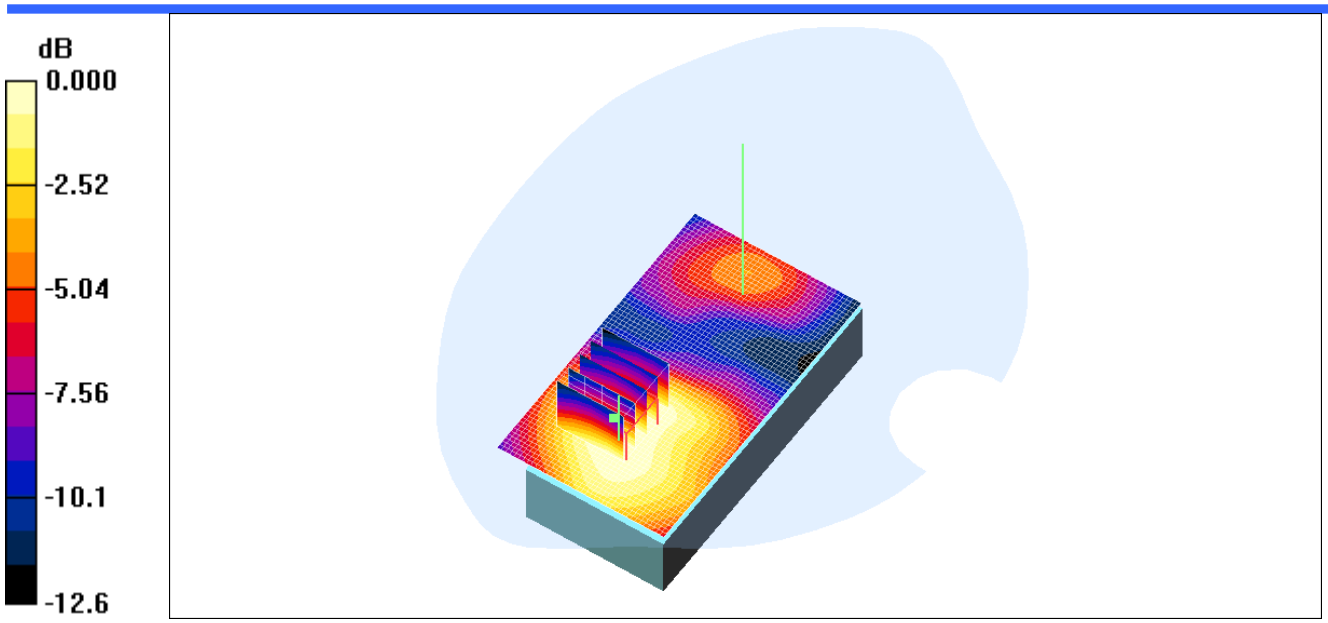
- Probe: ES3DV2 - SN3020; ConvF(4.44, 4.44, 4.44); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.235 mW/g

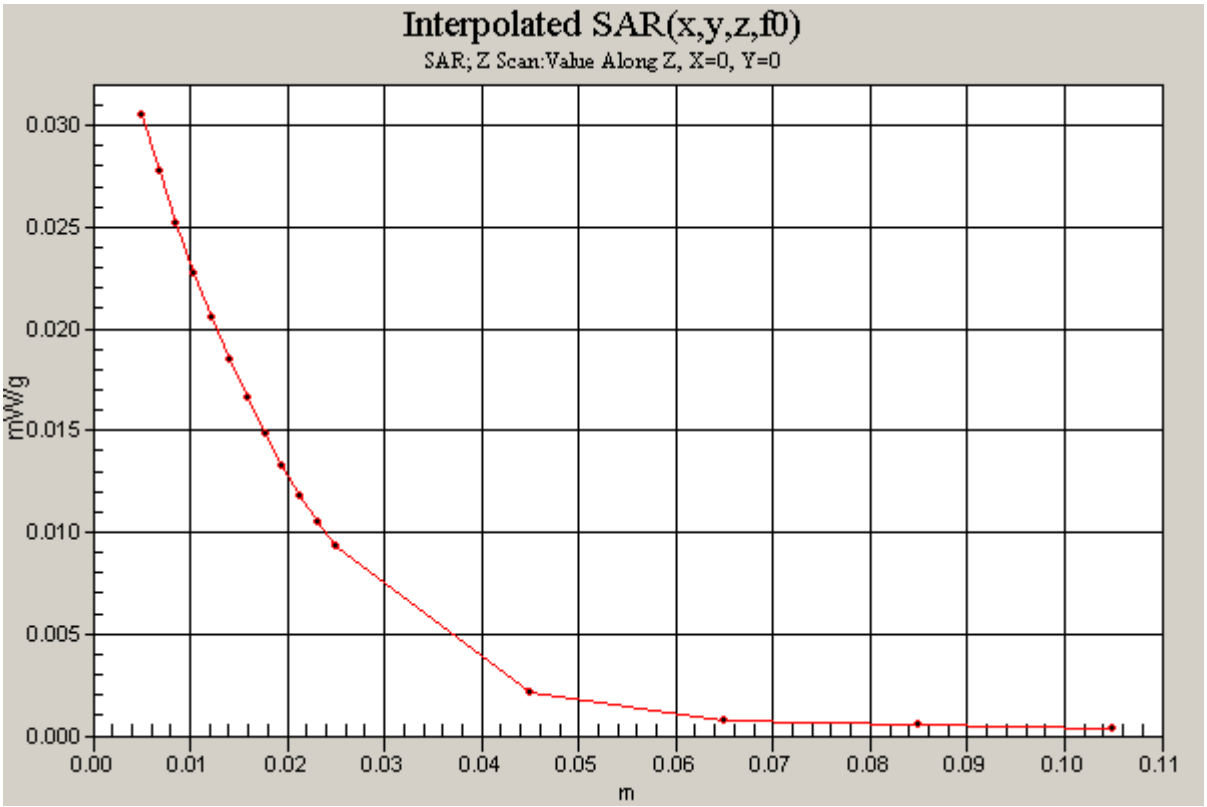
Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm
Maximum value of SAR (interpolated) = 0.031 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.45 V/m; Power Drift = 0.022 dB
Peak SAR (extrapolated) = 0.303 W/kg
SAR(1 g) = 0.216 mW/g; SAR(10 g) = 0.146 mW/g

Maximum value of SAR (measured) = 0.229 mW/g


dB
0.000
-2.52
-5.04
-7.56
-10.1
-12.6

0 dB = 0.229mW/g


Interpolated SAR(x,y,z,f0)
SAR; Z Scan:Value Along Z, X=0, Y=0
mW/g
0.030
0.025
0.020
0.015
0.010
0.005
0.000
0.00
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.10
0.11
m

- Test Laboratory: KTL

- Model: LYNX

- Position: GPRS1900 1SLOT- BODY REAR Facing Phantom _661CH

- Test Date: July 16, 2012

- Measured Liquid Temperature: 22.2 ℃, Ambient Temperature: 22.0 ℃

Communication System: DCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.56 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

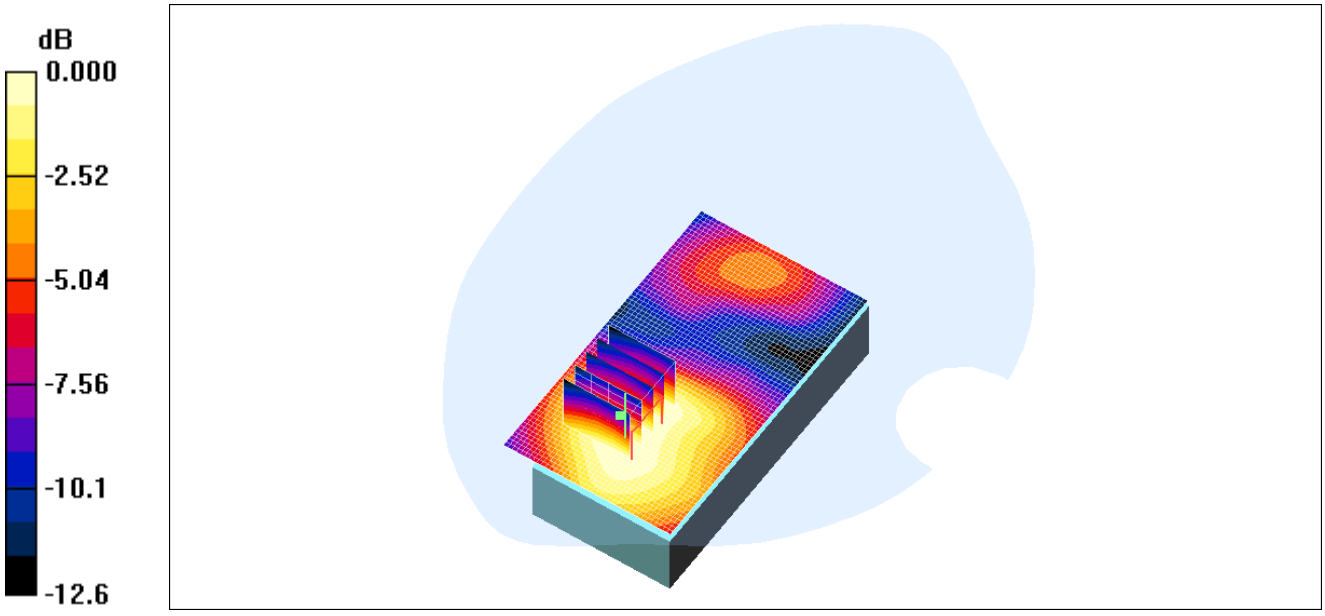
DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.44, 4.44, 4.44); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.224 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.21 V/m; Power Drift = 0.005 dB
Peak SAR (extrapolated) = 0.287 W/kg
SAR(1 g) = 0.204 mW/g; SAR(10 g) = 0.138 mW/g

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



0 dB = 0.217mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: GPRS1900 2SLOTS- BODY REAR Facing Phantom _661CH

- Test Date: July 16, 2012

- Measured Liquid Temperature: 22.2 ℃, Ambient Temperature: 22.0 ℃

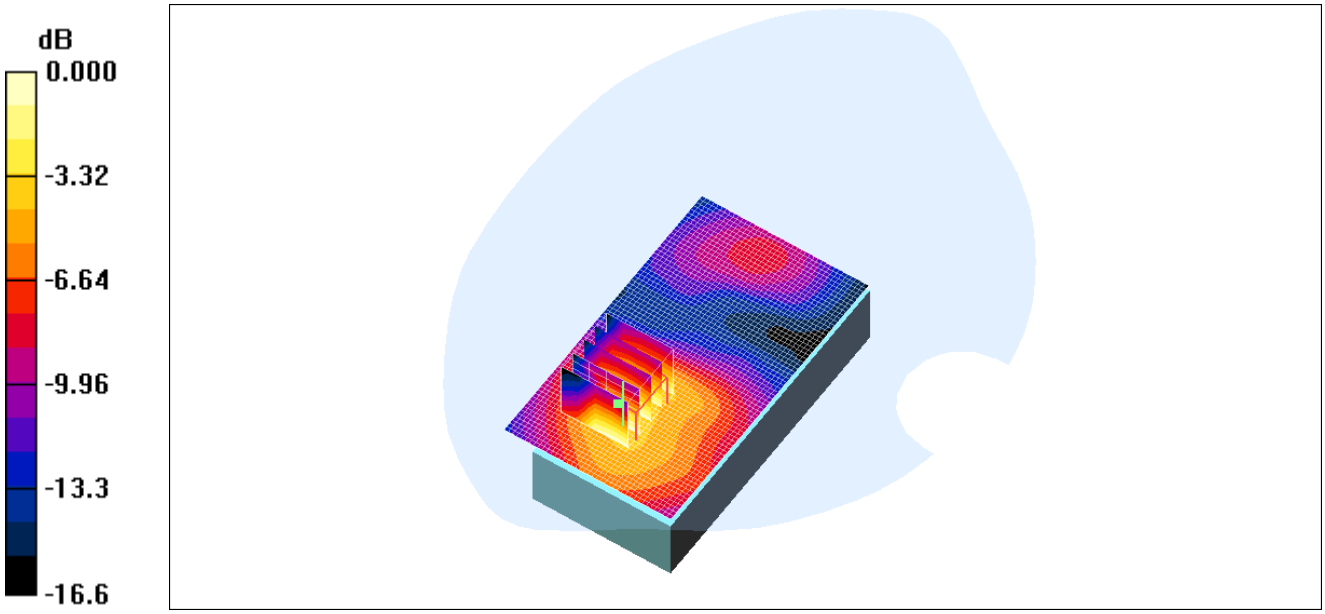
Communication System: DCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:4.15
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.56 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.44, 4.44, 4.44); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.208 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.07 V/m; Power Drift = -0.021 dB
Peak SAR (extrapolated) = 0.267 W/kg
SAR(1 g) = 0.191 mW/g; SAR(10 g) = 0.129 mW/g
Maximum value of SAR (measured) = 0.202 mW/g



0 dB = 0.202mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: EGPRS1900 2SLOTS- BODY REAR Facing Phantom _661CH

- Test Date: July 16, 2012

- Measured Liquid Temperature: 22.2 ℃, Ambient Temperature: 22.0 ℃

Communication System: DCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:4.15
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.56 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

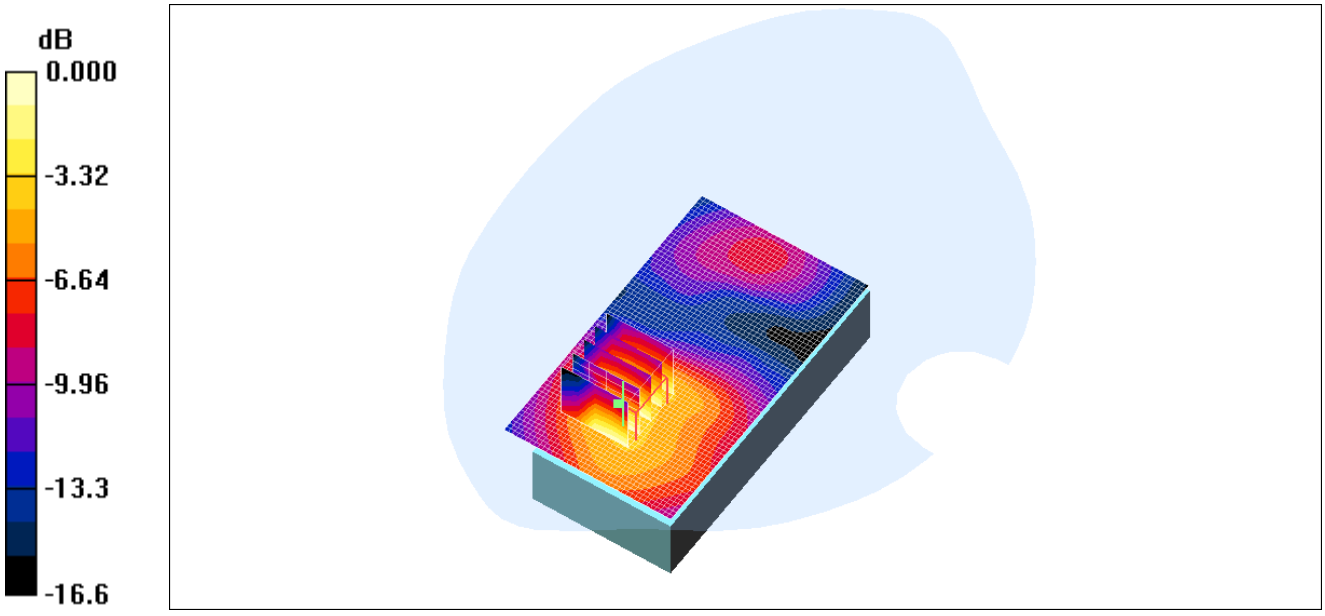
DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.44, 4.44, 4.44); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.084 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.78 V/m; Power Drift = 0.111 dB
Peak SAR (extrapolated) = 0.159 W/kg
SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.032 mW/g

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



0 dB = 0.104mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WCDMA850 LEFT CHEEK TOUCH _4175CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

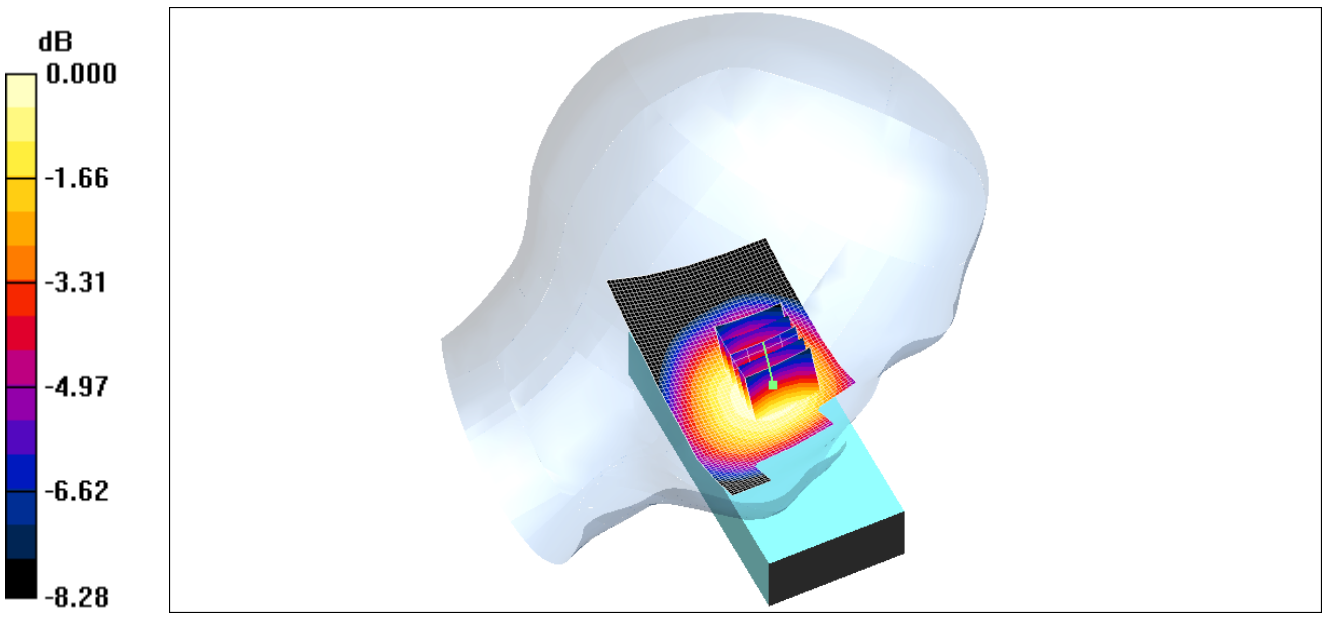
Communication System: WCDMA BAND5; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: WCDMA BAND5 Medium parameters used: f = 835 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.21, 6.21, 6.21); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.229 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.68 V/m; Power Drift = -0.158 dB
Peak SAR (extrapolated) = 0.254 W/kg
SAR(1 g) = 0.215 mW/g; SAR(10 g) = 0.169 mW/g
Maximum value of SAR (measured) = 0.225 mW/g



0 dB = 0.225mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WCDMA850 LEFT EAR TILT _4175CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

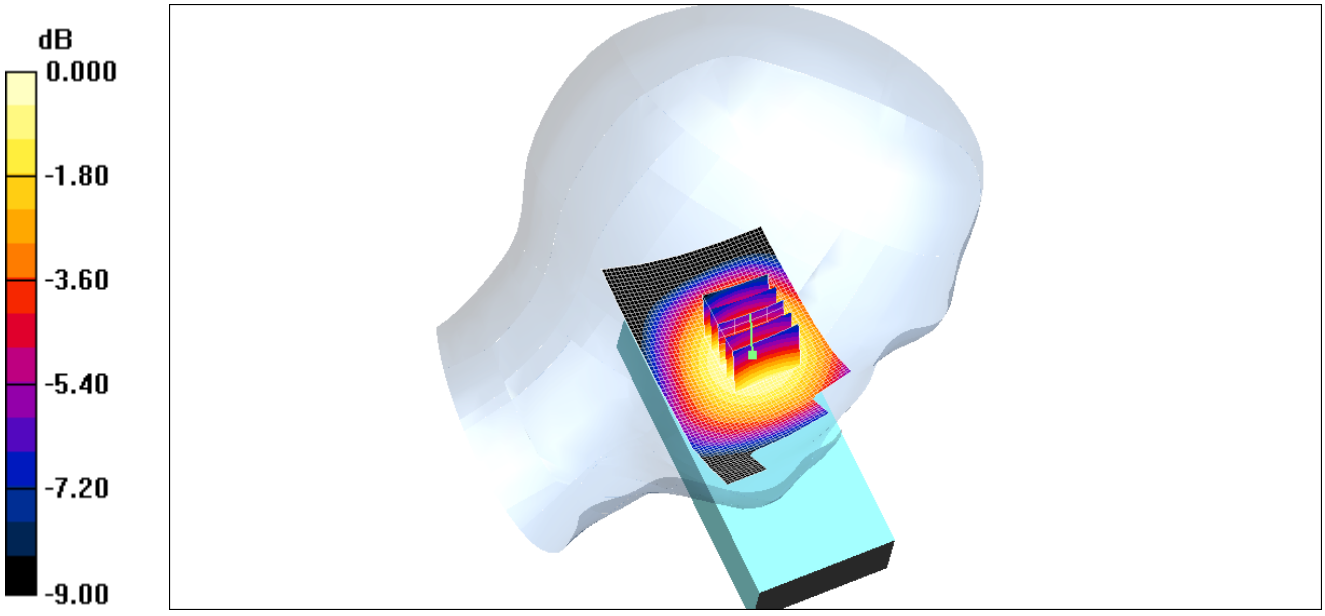
Communication System: WCDMA BAND5; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: WCDMA BAND5 Medium parameters used: f = 835 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.21, 6.21, 6.21); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.138 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.78 V/m; Power Drift = 0.054 dB
Peak SAR (extrapolated) = 0.160 W/kg
SAR(1 g) = 0.131 mW/g; SAR(10 g) = 0.100 mW/g
Maximum value of SAR (measured) = 0.137 mW/g



0 dB = 0.137mW/g

- Test Laboratory: KTL
- Model: LYNX
- Position: WCDMA850 RIGHT CHEEK TOUCH _4175CH
- Test Date: July 12, 2012
- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

Communication System: WCDMA BAND5; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: WCDMA BAND5 Medium parameters used: f = 835 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

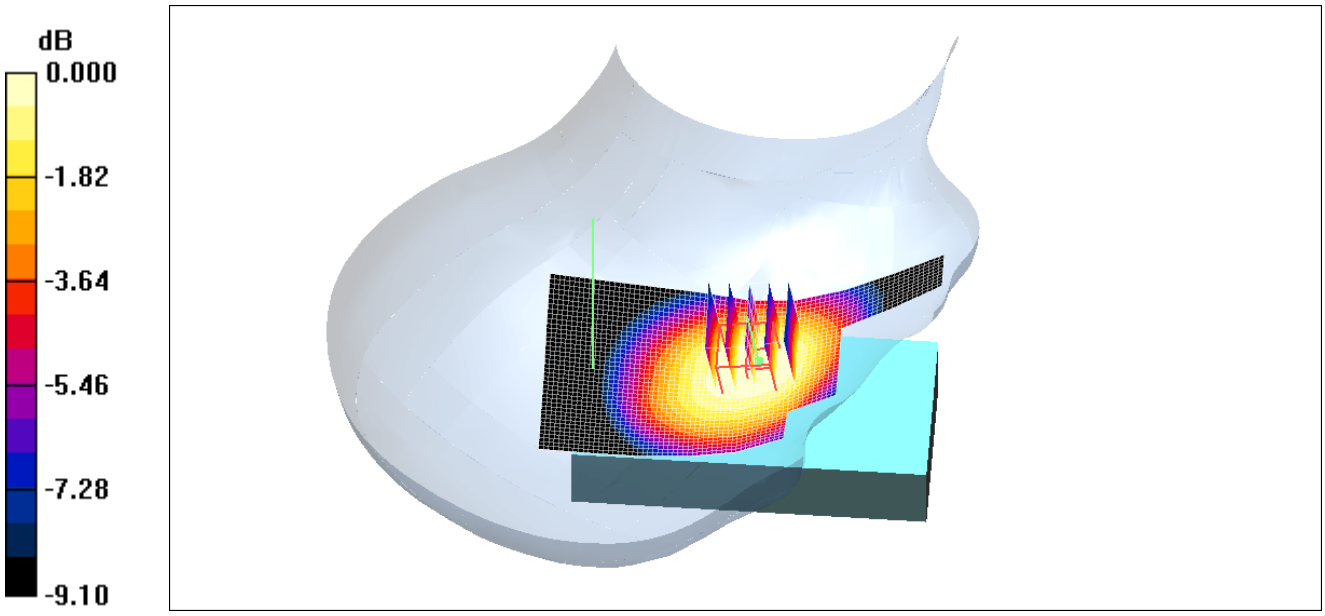
DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.21, 6.21, 6.21); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

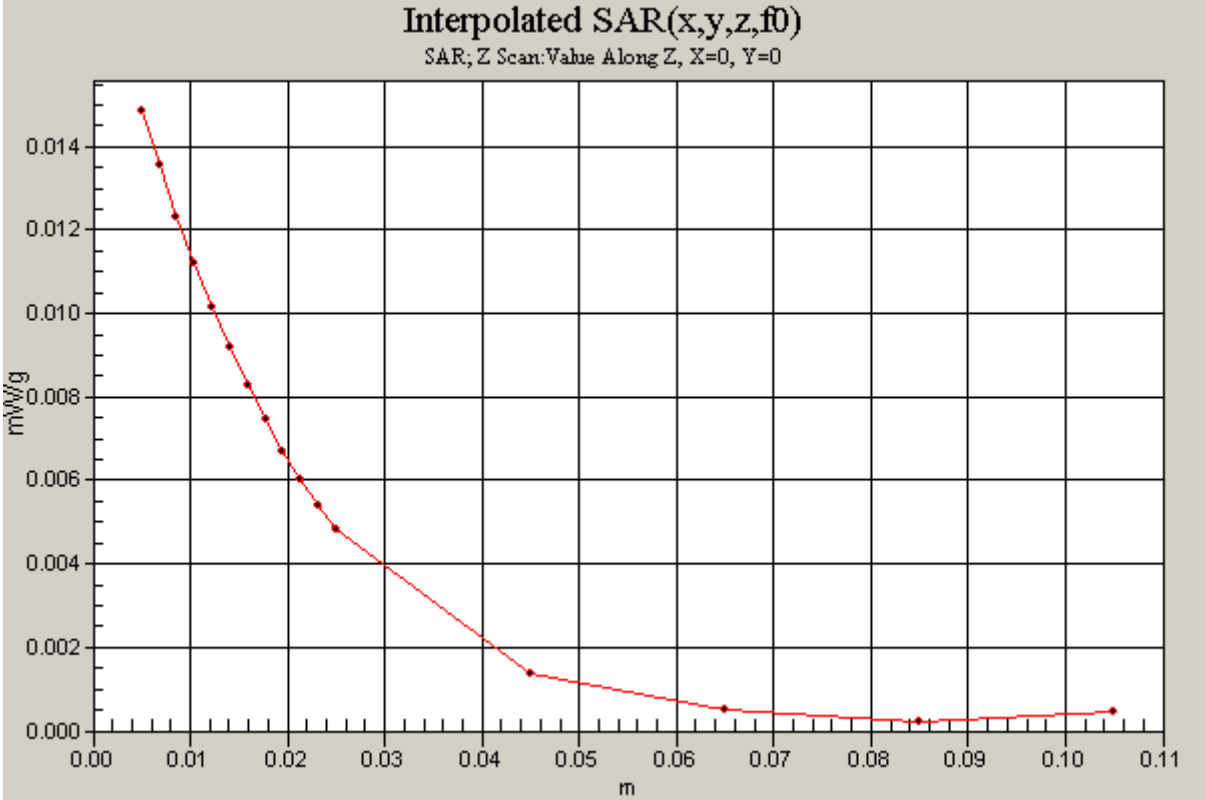
Area Scan (41x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.267 mW/g

Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm
Maximum value of SAR (interpolated) = 0.015 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.79 V/m; Power Drift = -0.109 dB
Peak SAR (extrapolated) = 0.303 W/kg
SAR(1 g) = 0.243 mW/g; SAR(10 g) = 0.188 mW/g
Maximum value of SAR (measured) = 0.253 mW/g



0 dB = 0.253mW/g


Interpolated SAR(x,y,z,f0)
SAR; Z Scan:Value Along Z, X=0, Y=0
mW/g
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
0.00
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.10
0.11
m

- Test Laboratory: KTL
- Model: LYNX
- Position: WCDMA850 RIGHT EAR TILT _4175CH
- Test Date: July 12, 2012
- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

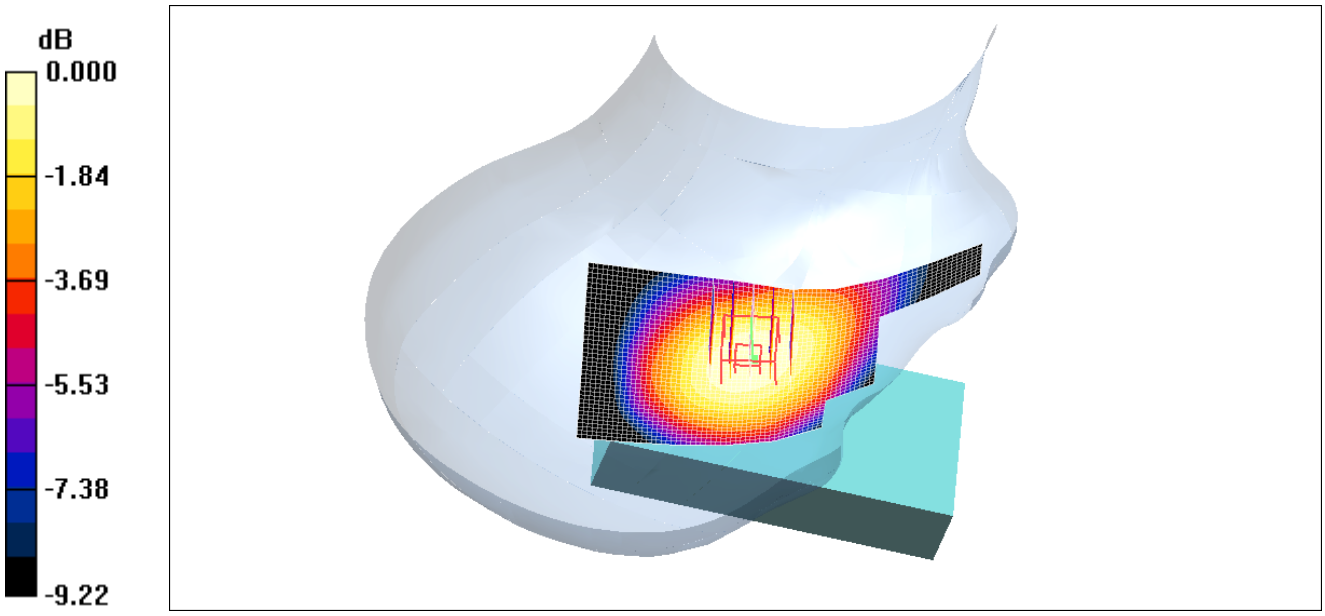
Communication System: WCDMA BAND5; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: WCDMA BAND5 Medium parameters used: f = 835 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.21, 6.21, 6.21); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Right Ear tilt/Area Scan (41x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.127 mW/g

Right Ear tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.14 V/m; Power Drift = -0.030 dB
Peak SAR (extrapolated) = 0.147 W/kg
SAR(1 g) = 0.119 mW/g; SAR(10 g) = 0.091 mW/g
Maximum value of SAR (measured) = 0.125 mW/g



0 dB = 0.125mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WCDMA850 BODY FRONT Facing Phantom _4175CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

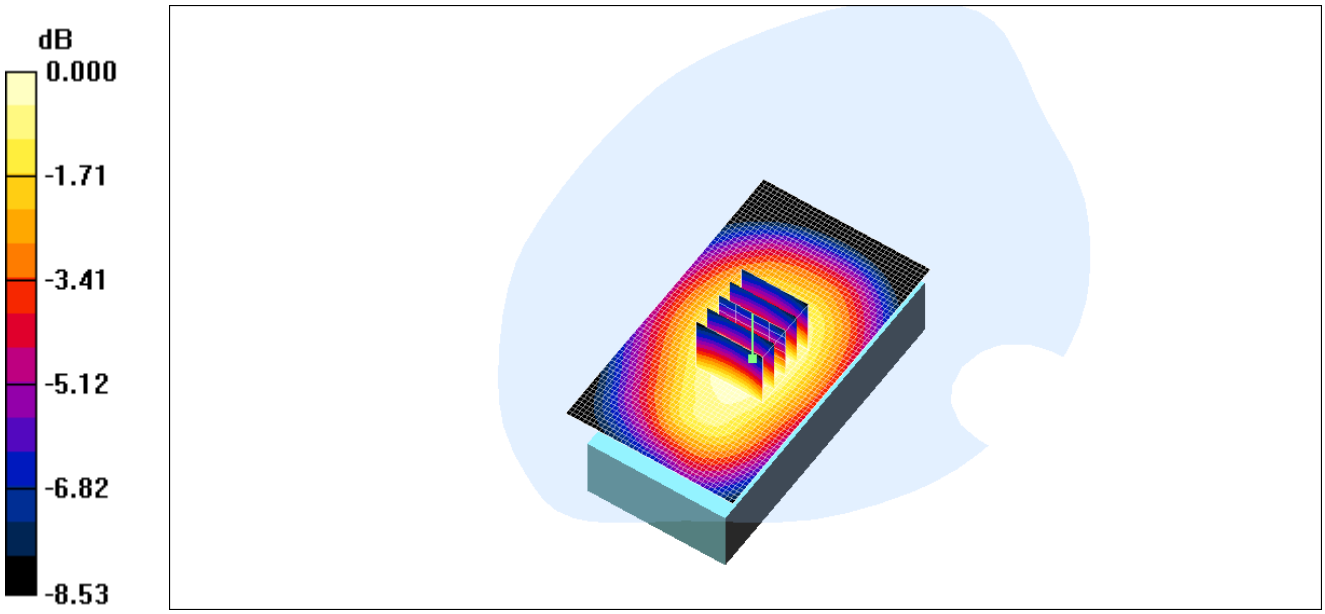
Communication System: WCDMA BAND5; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: MSL835 Medium parameters used: f = 835 MHz; σ = 0.96 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.18, 6.18, 6.18); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.258 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.8 V/m; Power Drift = -0.030 dB
Peak SAR (extrapolated) = 0.306 W/kg
SAR(1 g) = 0.243 mW/g; SAR(10 g) = 0.181 mW/g
Maximum value of SAR (measured) = 0.257 mW/g



0 dB = 0.257mW/g

- Test Laboratory: KTL
- Model: LYNX
- Position: WCDMA850 BODY REAR Facing Phantom _4175CH
- Test Date: July 12, 2012
- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

Communication System: WCDMA BAND5; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: MSL835 Medium parameters used: f = 835 MHz; σ = 0.96 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

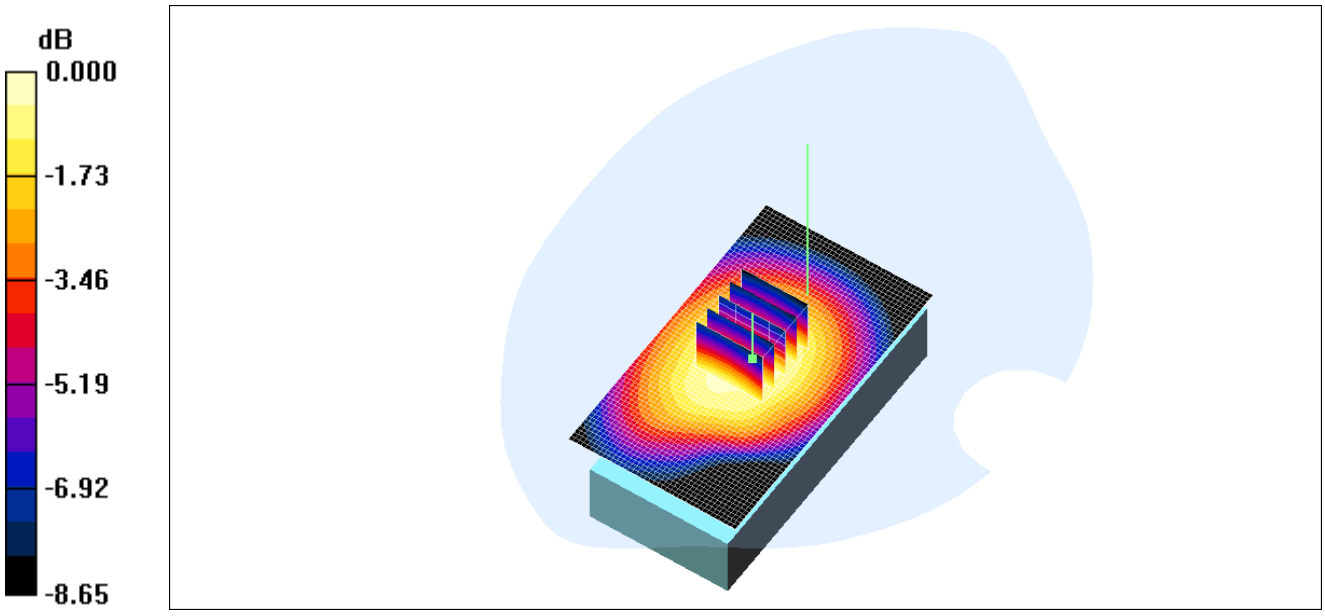
DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.18, 6.18, 6.18); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

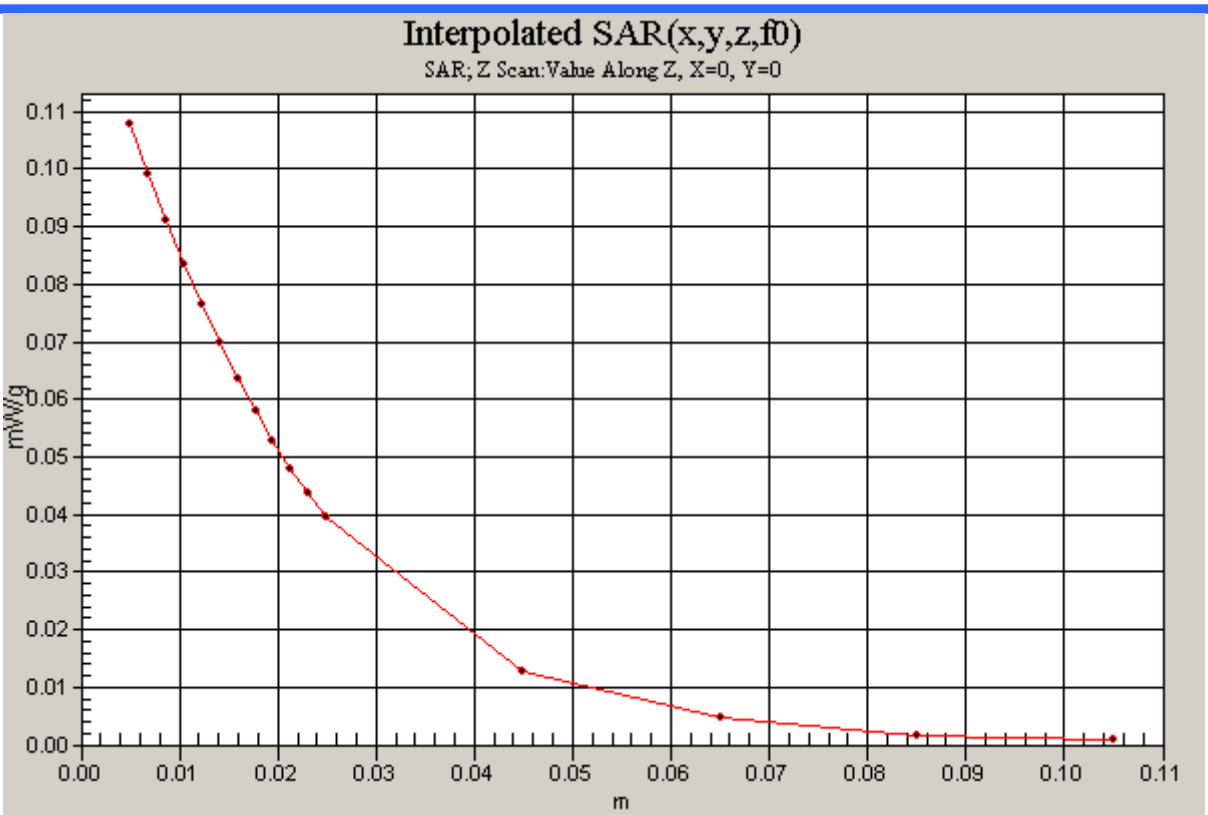
Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.287 mW/g

Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm
Maximum value of SAR (interpolated) = 0.108 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.7 V/m; Power Drift = -0.164 dB
Peak SAR (extrapolated) = 0.353 W/kg
SAR(1 g) = 0.275 mW/g; SAR(10 g) = 0.201 mW/g
Maximum value of SAR (measured) = 0.291 mW/g



0 dB = 0.291mW/g


Interpolated SAR(x,y,z,f0)
SAR; Z Scan:Value Along Z, X=0, Y=0
mW/g
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0.00
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.10
0.11
m

- Test Laboratory: KTL

- Model: LYNX

- Position: WCDMA1900 LEFT CHEEK TOUCH _9400CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.3 ℃, Ambient Temperature: 22.0 ℃

Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: HSL1900 Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

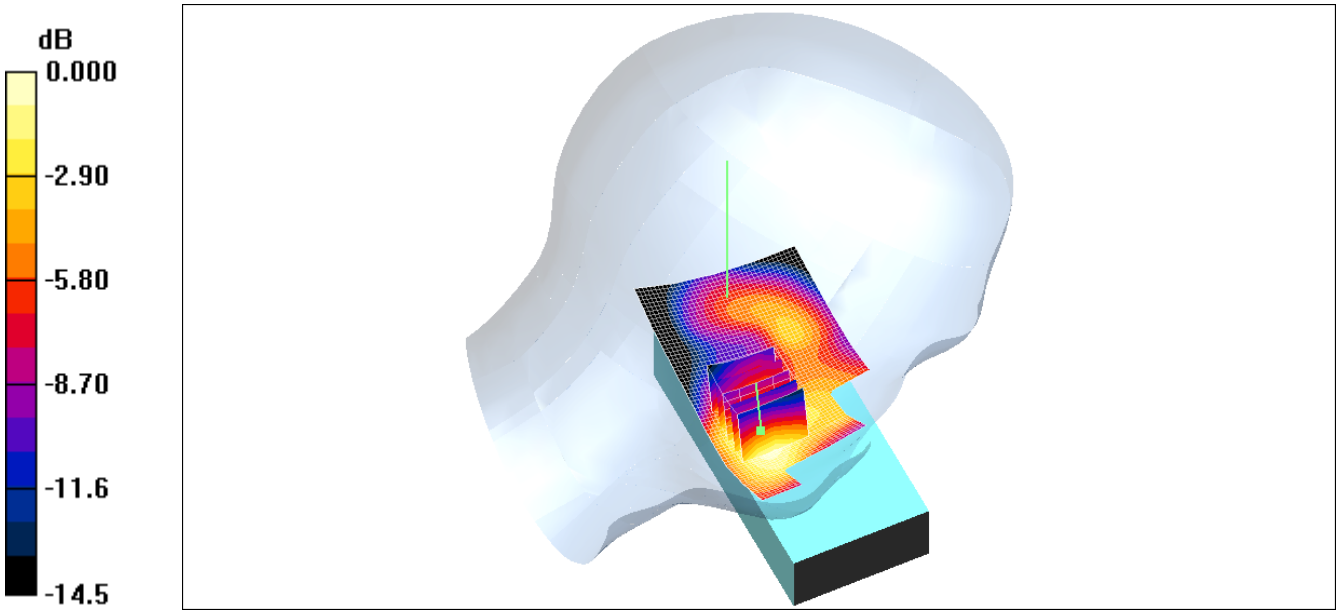
DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(5, 5, 5); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

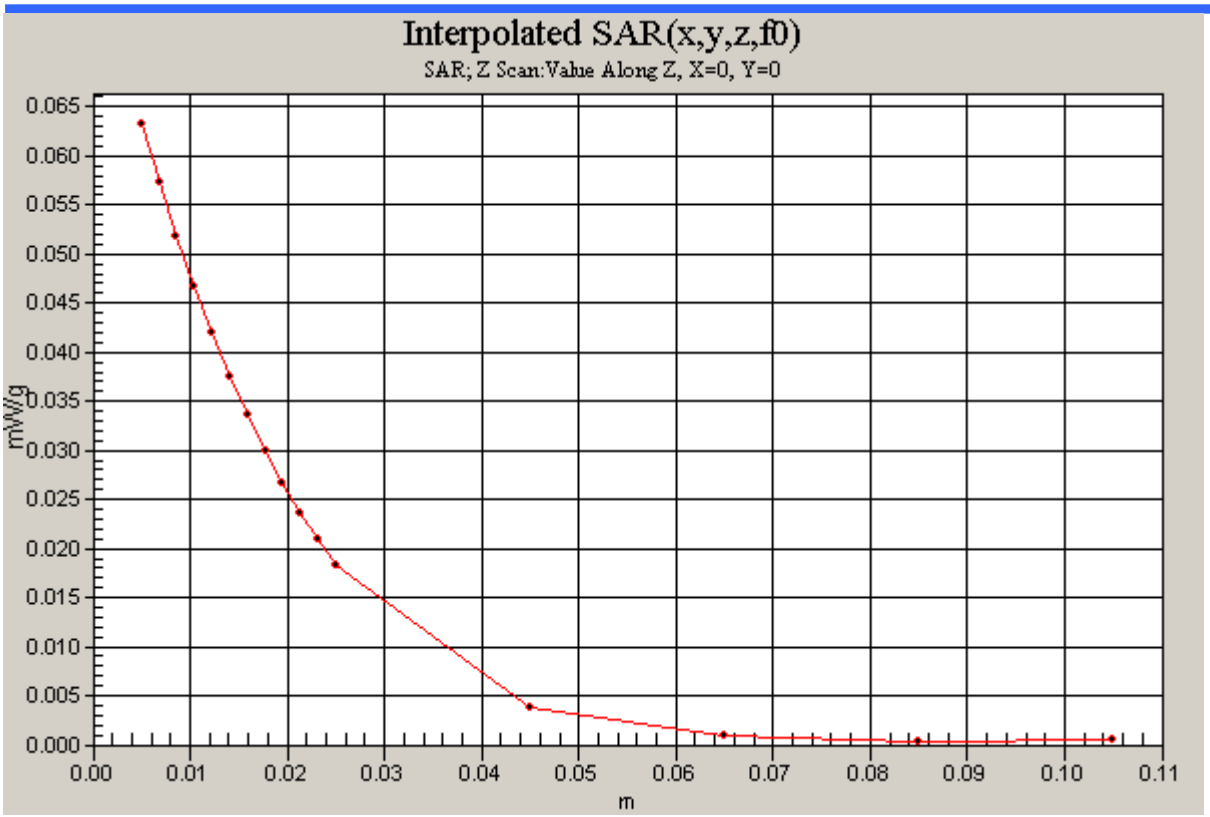
Area Scan (41x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.475 mW/g

Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm
Maximum value of SAR (interpolated) = 0.063 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.47 V/m; Power Drift = -0.138 dB
Peak SAR (extrapolated) = 0.585 W/kg
SAR(1 g) = 0.393 mW/g; SAR(10 g) = 0.260 mW/g
Maximum value of SAR (measured) = 0.427 mW/g



0 dB = 0.427mW/g



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- Test Laboratory: KTL

- Model: LYNX

- Position: WCDMA1900 LEFT EAR TILT _9400CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.3 ℃, Ambient Temperature: 22.0 ℃

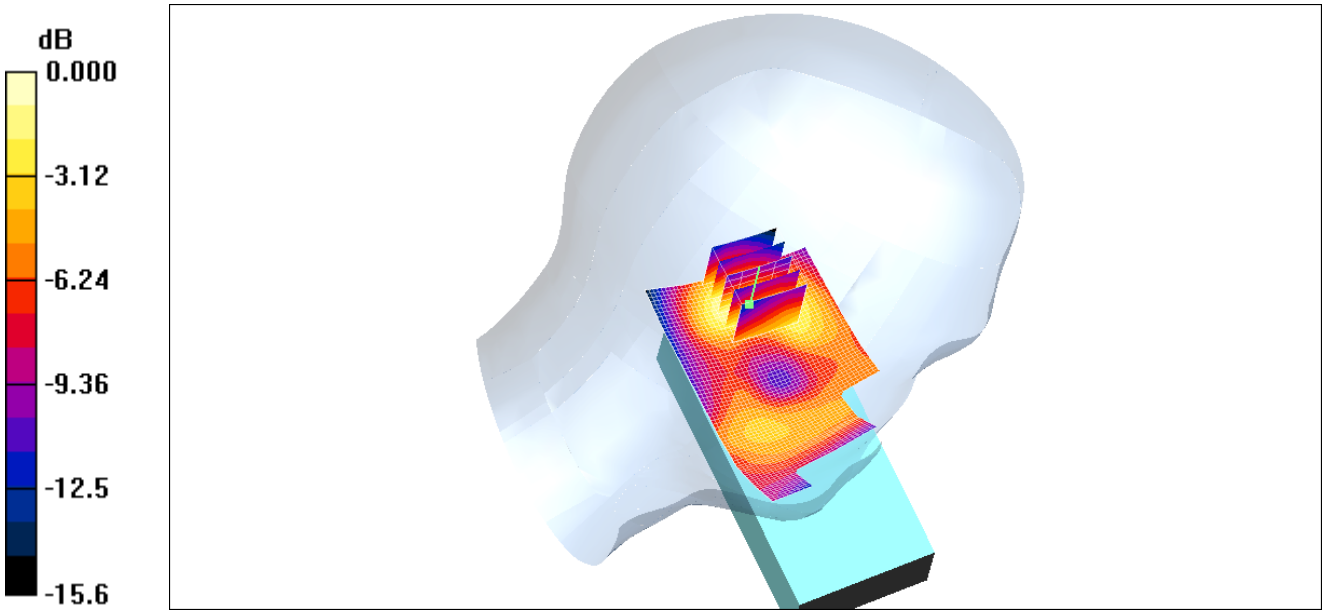
Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: HSL1900 Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(5, 5, 5); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.168 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.3 V/m; Power Drift = -0.078 dB
Peak SAR (extrapolated) = 0.245 W/kg
SAR(1 g) = 0.158 mW/g; SAR(10 g) = 0.097 mW/g
Maximum value of SAR (measured) = 0.174 mW/g



0 dB = 0.174mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WCDMA1900 RIGHT CHEEK TOUCH _9400CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.3 ℃, Ambient Temperature: 22.0 ℃

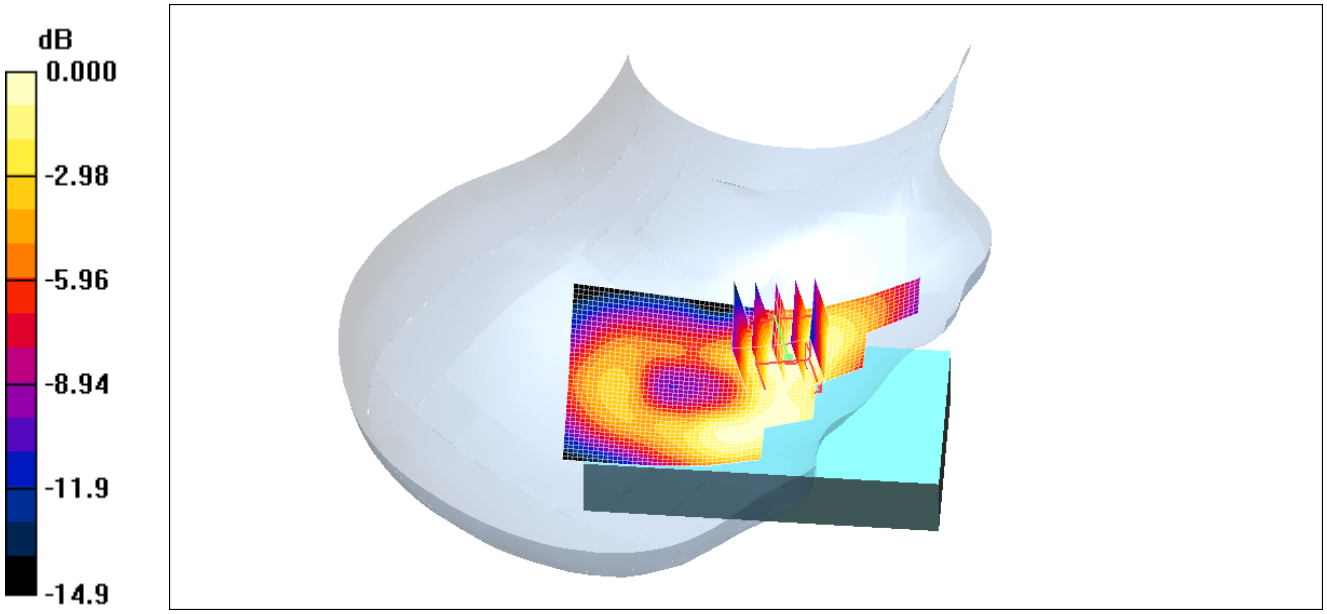
Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: HSL1900 Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(5, 5, 5); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.261 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.33 V/m; Power Drift = -0.013 dB
Peak SAR (extrapolated) = 0.326 W/kg
SAR(1 g) = 0.232 mW/g; SAR(10 g) = 0.155 mW/g
Maximum value of SAR (measured) = 0.245 mW/g



0 dB = 0.245mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WCDMA1900 RIGHT EAR TILT _9400CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.3 ℃, Ambient Temperature: 22.0 ℃

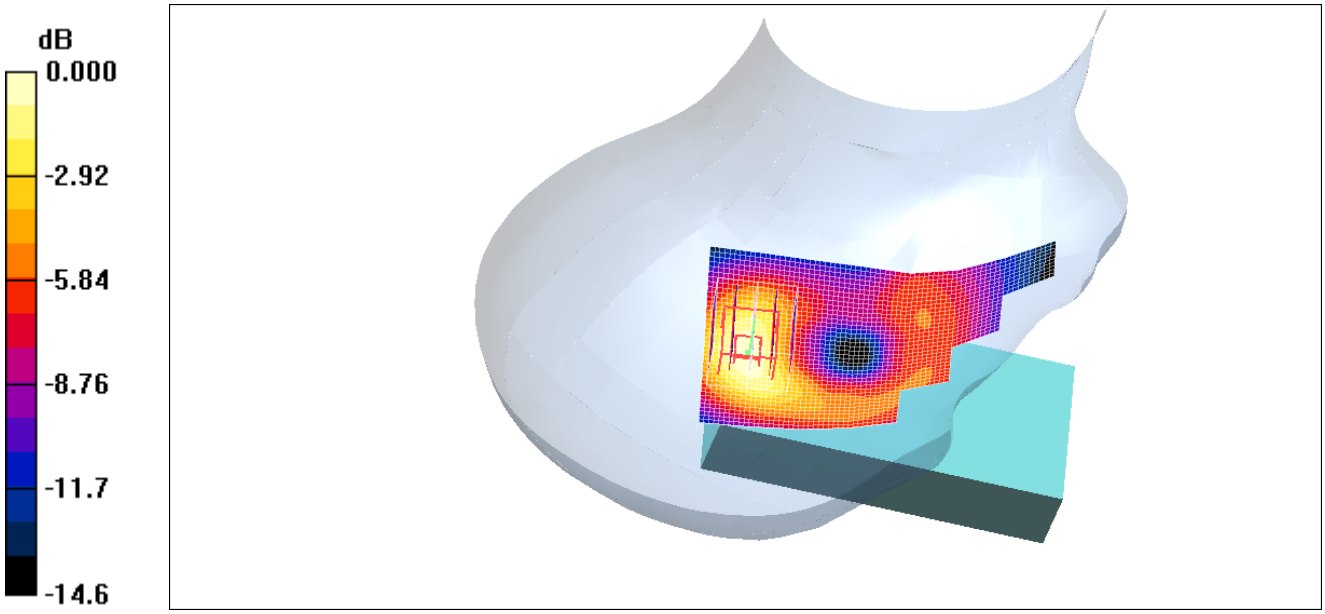
Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: HSL1900 Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(5, 5, 5); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.185 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.6 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 0.278 W/kg
SAR(1 g) = 0.174 mW/g; SAR(10 g) = 0.105 mW/g
Maximum value of SAR (measured) = 0.193 mW/g



0 dB = 0.193mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WCDMA1900 BODY FRONT Facing Phantom _9400CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.2 ℃, Ambient Temperature: 22.0 ℃

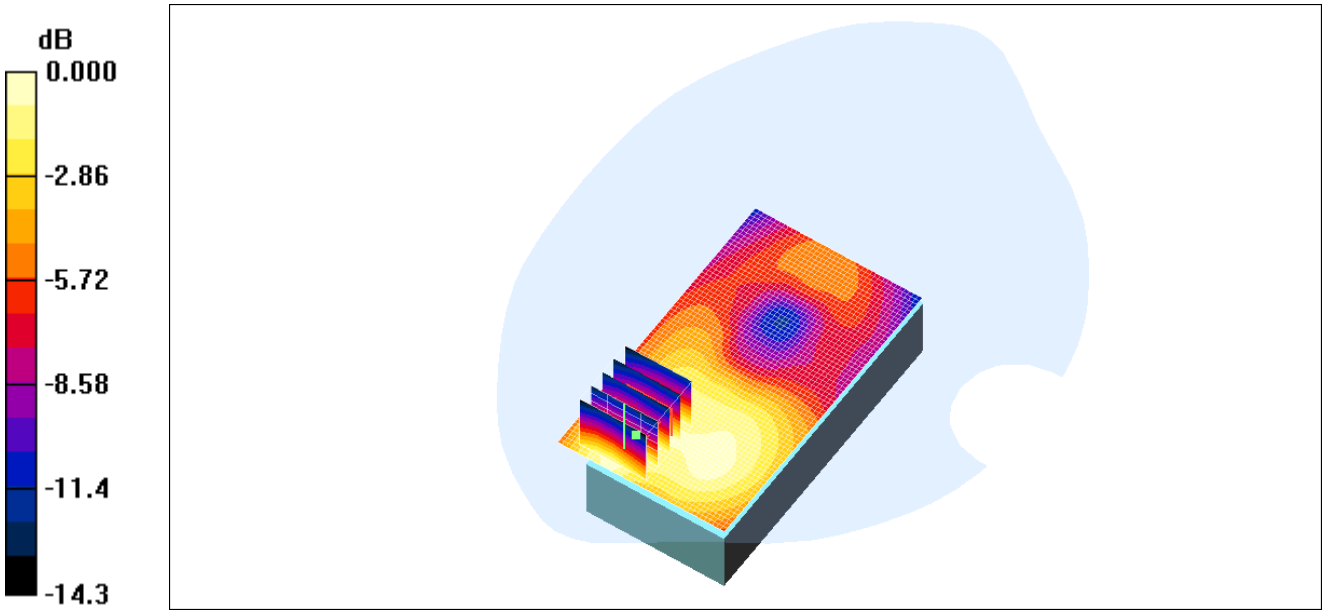
Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.56 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.44, 4.44, 4.44); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.341 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.97 V/m; Power Drift = -0.103 dB
Peak SAR (extrapolated) = 0.476 W/kg
SAR(1 g) = 0.302 mW/g; SAR(10 g) = 0.183 mW/g
Maximum value of SAR (measured) = 0.330 mW/g



0 dB = 0.330mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WCDMA1900 BODY REAR Facing Phantom _9400CH

- Test Date: July 12, 2012

- Measured Liquid Temperature: 22.2 ℃, Ambient Temperature: 22.0 ℃

Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.56 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

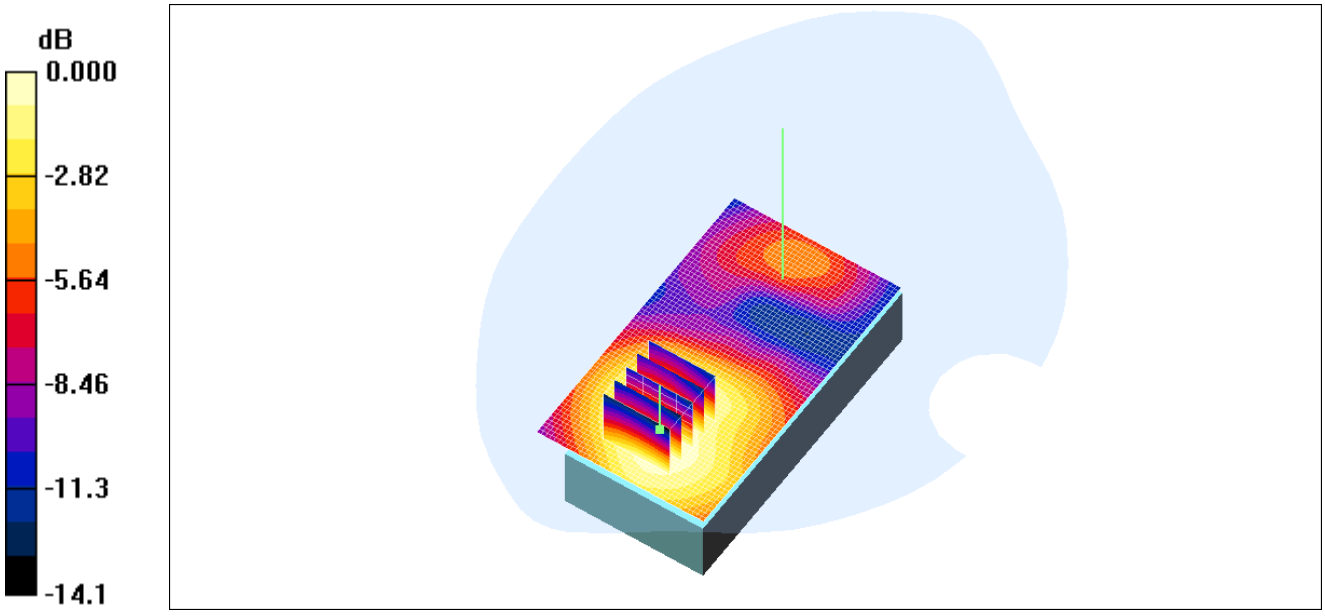
DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.44, 4.44, 4.44); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

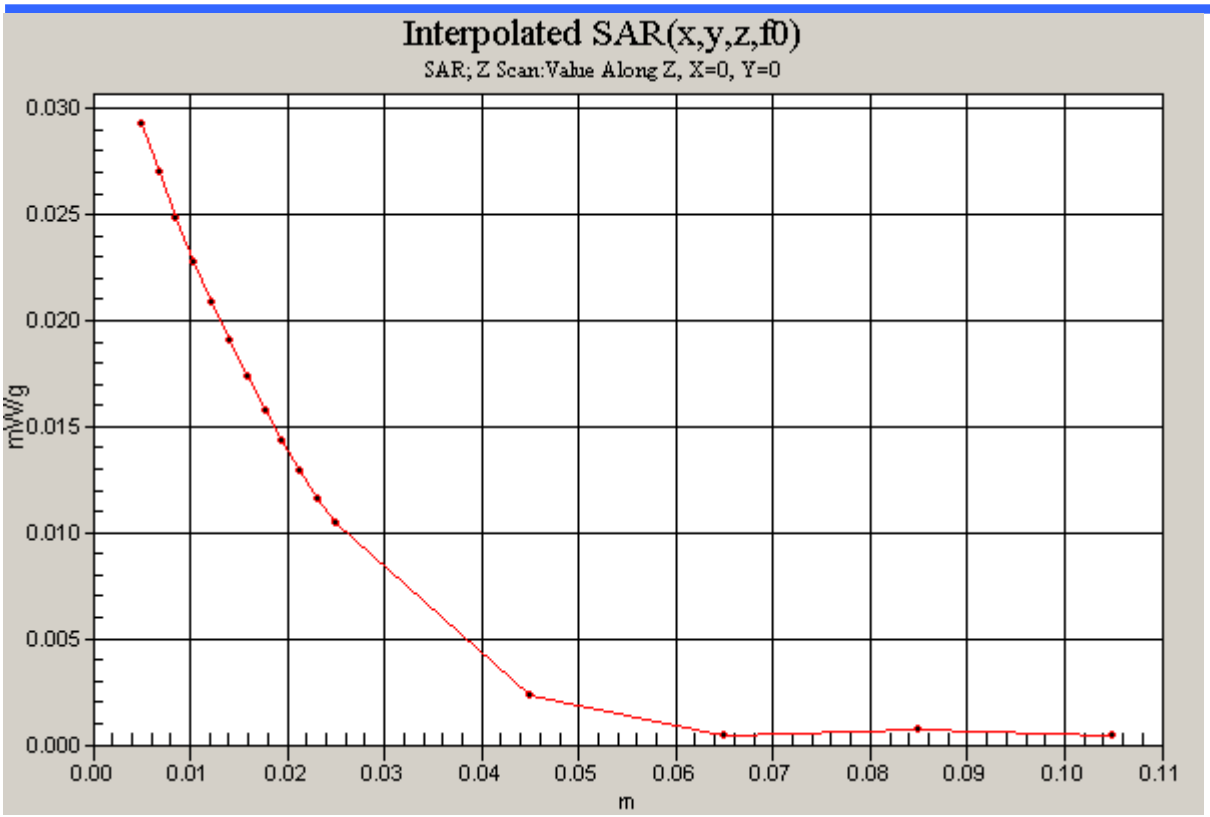
Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.383 mW/g

Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm
Maximum value of SAR (interpolated) = 0.029 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.59 V/m; Power Drift = -0.129 dB
Peak SAR (extrapolated) = 0.503 W/kg
SAR(1 g) = 0.348 mW/g; SAR(10 g) = 0.231 mW/g
Maximum value of SAR (measured) = 0.367 mW/g



0 dB = 0.367mW/g



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- Test Laboratory: KTL

- D2450V2: HEAD 2450MHz Validation

- Test Date: September 20, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

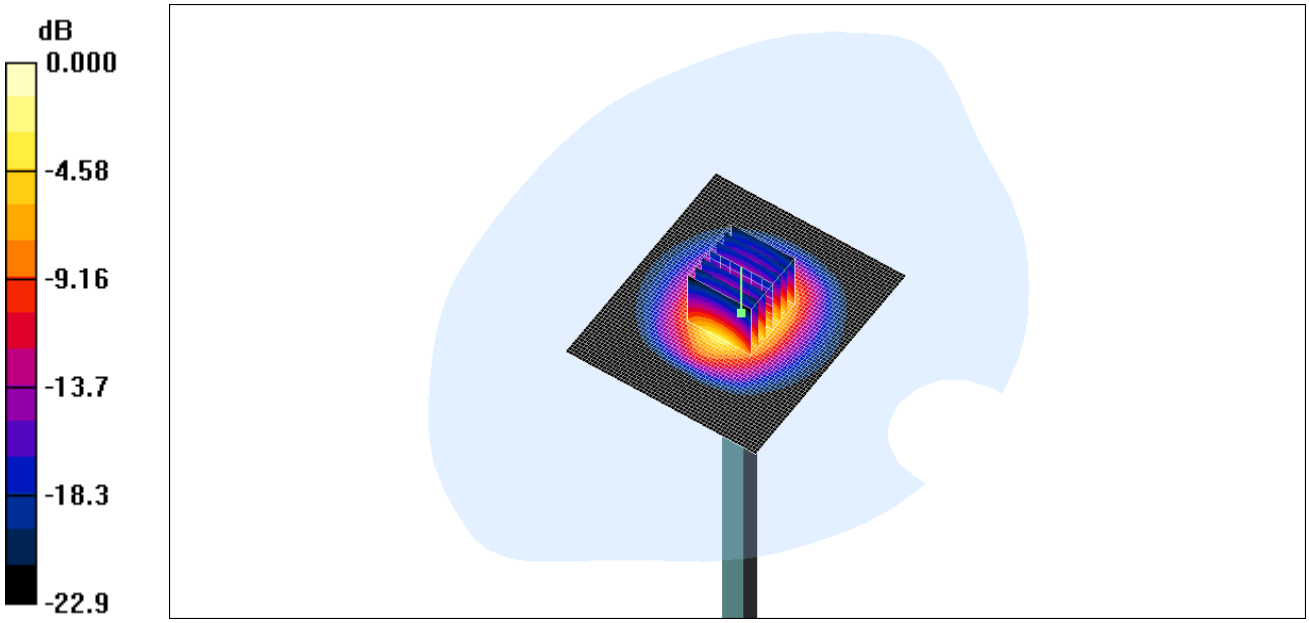
Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2450 MHz; σ = 1.79 mho/m; ε_r = 39.1; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.22, 4.22, 4.22); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 16.9 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 93.2 V/m; Power Drift = 0.013 dB
Peak SAR (extrapolated) = 29.0 W/kg
SAR(1 g) = 13.5 mW/g; SAR(10 g) = 6.13 mW/g
Maximum value of SAR (measured) = 15.2 mW/g



0 dB = 15.2mW/g

- Test Laboratory: KTL
- Model: LYNX
- Position: WiFi 802.11b_2437MHz Left Cheek Touch
- Test Date: September 20, 2012
- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

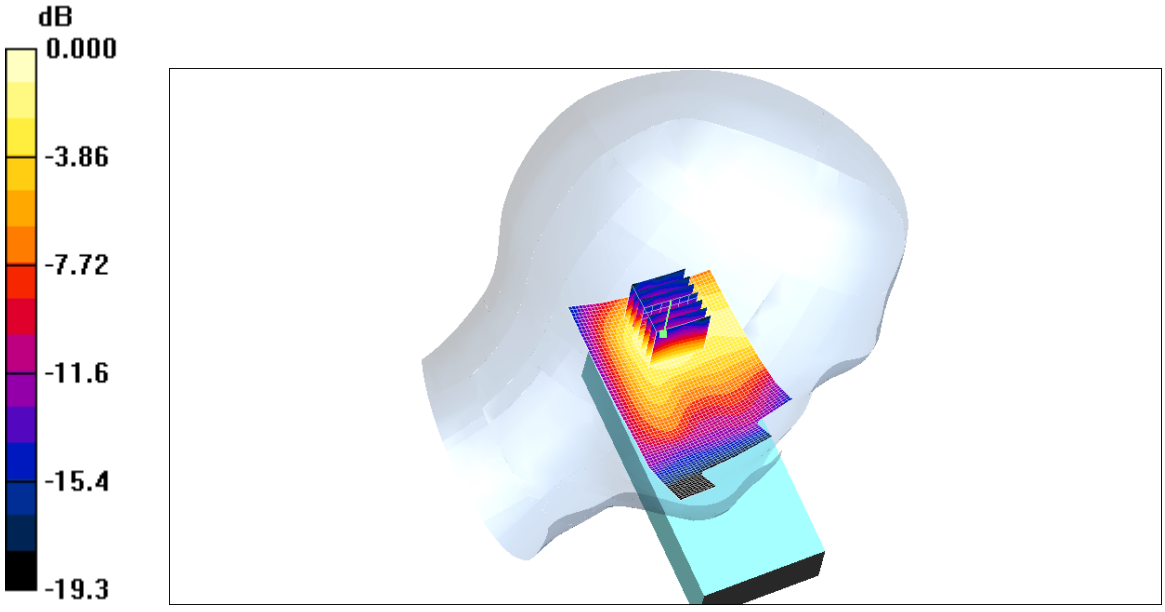
Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2437 MHz; σ = 1.81 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.22, 4.22, 4.22); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.143 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.69 V/m; Power Drift = 0.055 dB
Peak SAR (extrapolated) = 0.248 W/kg
SAR(1 g) = 0.134 mW/g; SAR(10 g) = 0.073 mW/g
Maximum value of SAR (measured) = 0.145 mW/g



0dB = 0.145 mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WiFi 802.11b_2437MHz Left Ear Tilt

- Test Date: September 20, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

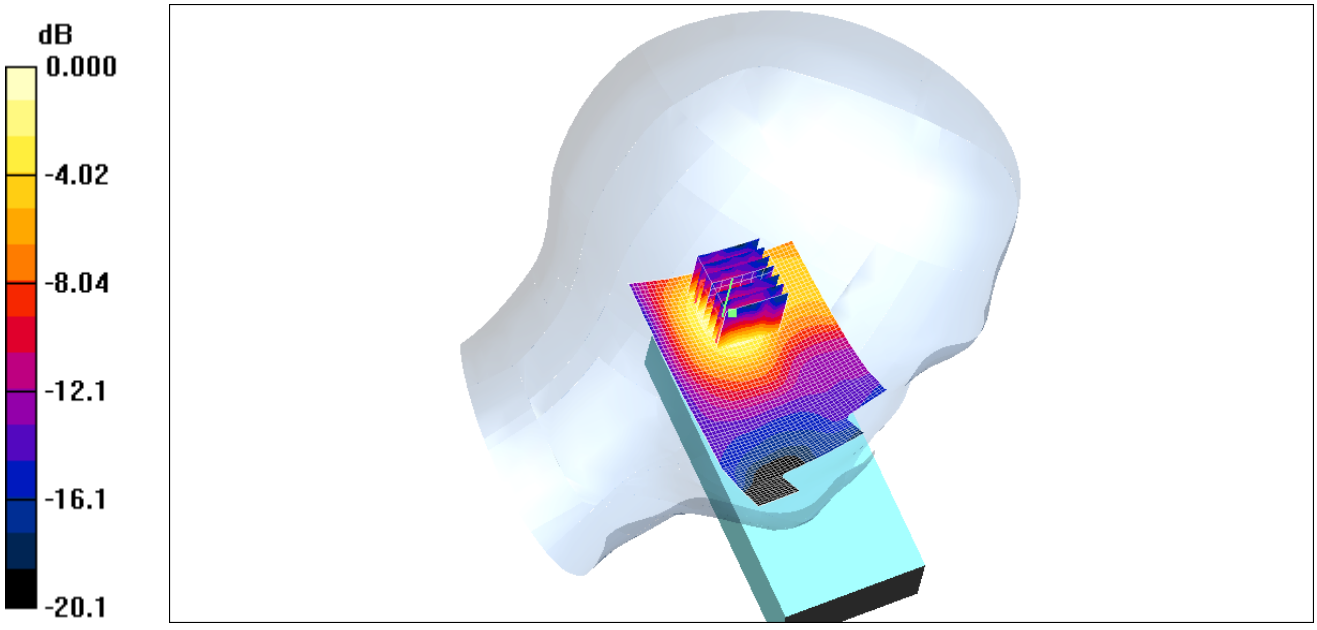
Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2437 MHz; σ = 1.81 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.22, 4.22, 4.22); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.171 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.50 V/m; Power Drift = -0.008 dB
Peak SAR (extrapolated) = 0.307 W/kg
SAR(1 g) = 0.165 mW/g; SAR(10 g) = 0.087 mW/g
Maximum value of SAR (measured) = 0.180 mW/g



0dB = 0.180 mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WiFi 802.11b_2437MHz Right Cheek Touch

- Test Date: September 20, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

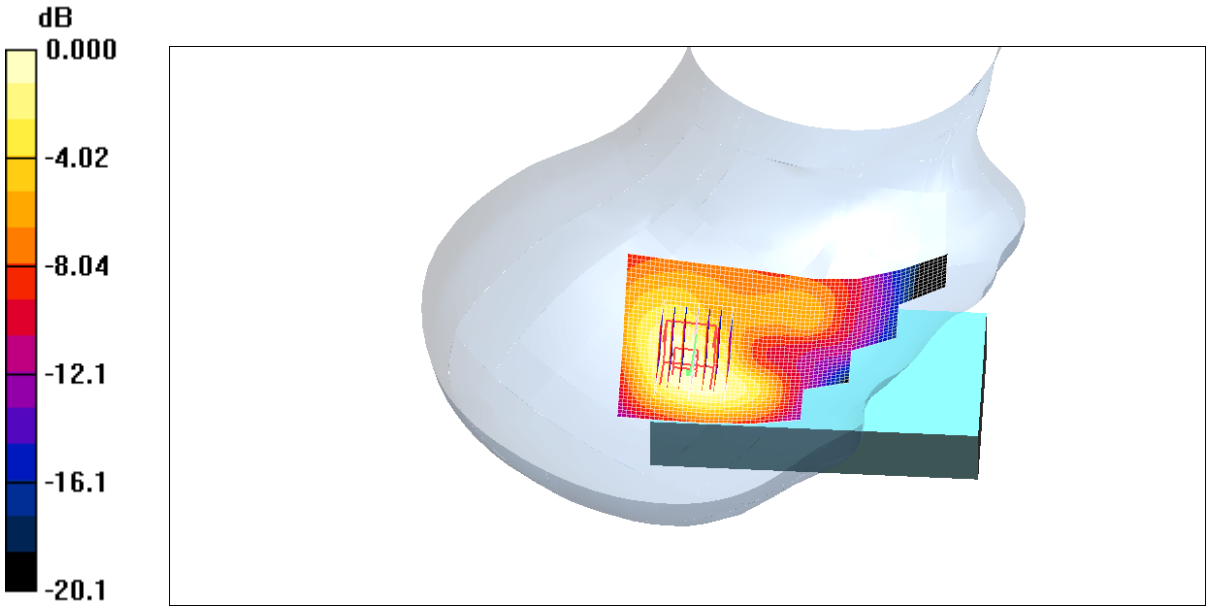
Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2437 MHz; σ = 1.81 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.22, 4.22, 4.22); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.165 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.44 V/m; Power Drift = 0.024 dB
Peak SAR (extrapolated) = 0.265 W/kg
SAR(1 g) = 0.145 mW/g; SAR(10 g) = 0.082 mW/g
Maximum value of SAR (measured) = 0.157 mW/g



0dB = 0.157 mW/g

- Test Laboratory: KTL
- Model: LYNX
- Position: WiFi 802.11b_2437MHz Right Ear Tilt
- Test Date: September 20, 2012
- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2437 MHz; σ = 1.81 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

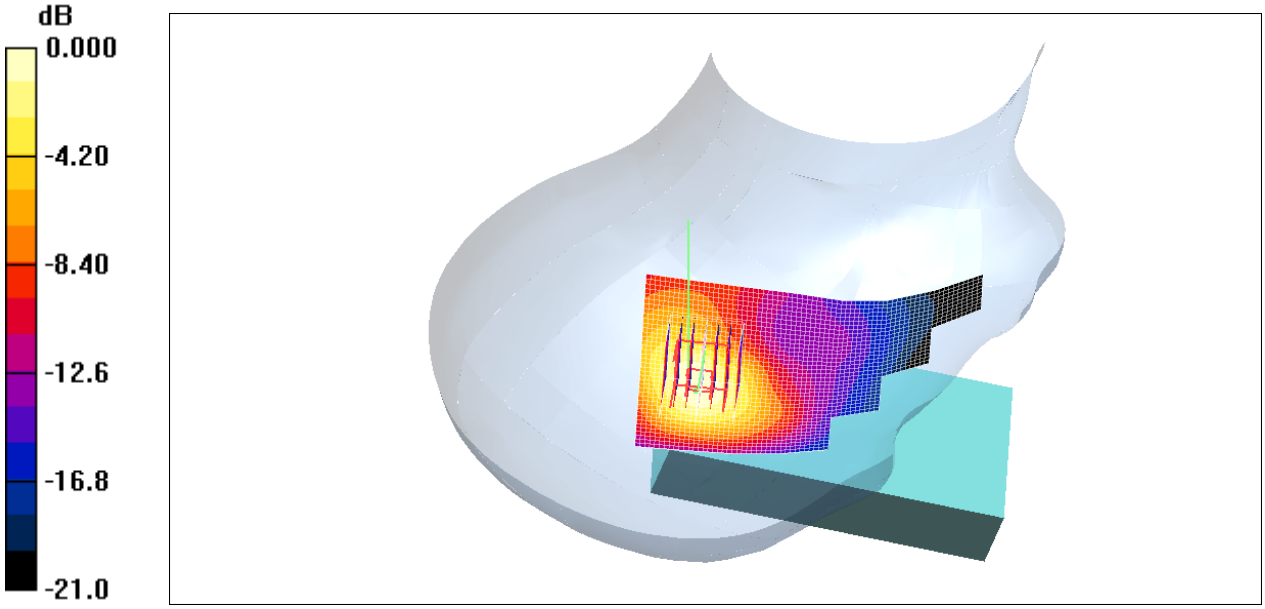
DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.22, 4.22, 4.22); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.206 mW/g

Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm
Maximum value of SAR (interpolated) = 0.045 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.3 V/m; Power Drift = -0.081 dB
Peak SAR (extrapolated) = 0.359 W/kg
SAR(1 g) = 0.194 mW/g; SAR(10 g) = 0.101 mW/g
Maximum value of SAR (measured) = 0.215 mW/g



0dB = 0.215 mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WiFi 802.11g_2437MHz Left Cheek Touch

- Test Date: September 20, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

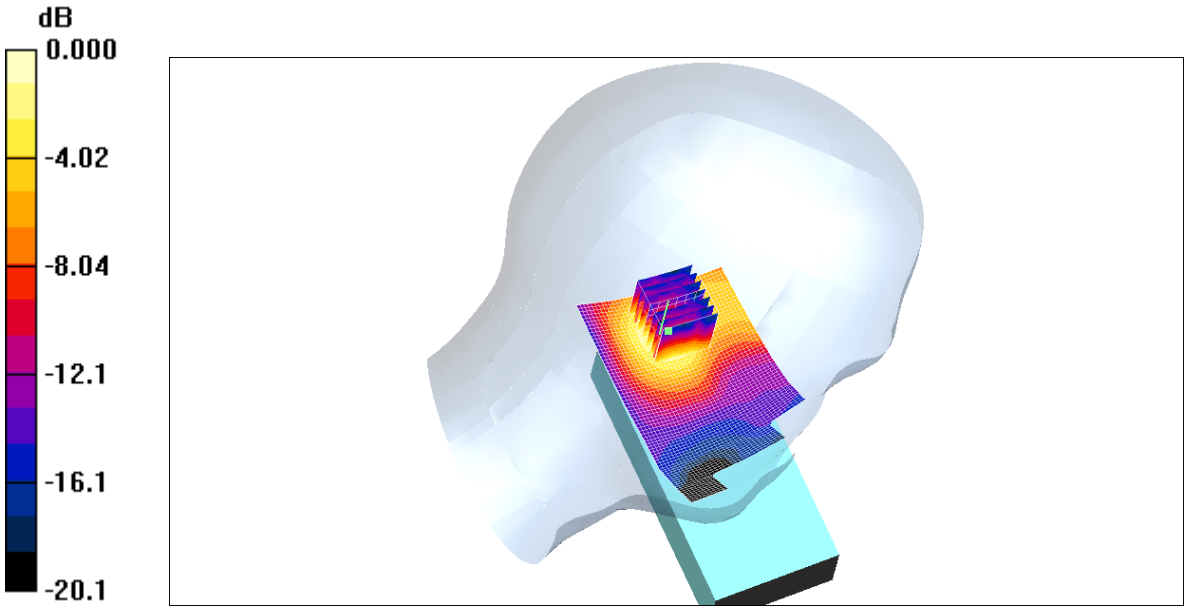
Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2437 MHz; σ = 1.81 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.22, 4.22, 4.22); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.037 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.43 V/m; Power Drift = 0.083 dB
Peak SAR (extrapolated) = 0.068 W/kg
SAR(1 g) = 0.035 mW/g; SAR(10 g) = 0.019 mW/g
Maximum value of SAR (measured) = 0.038 mW/g



0dB = 0.038 mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WiFi 802.11g_2437MHz Left Ear Tilt

- Test Date: September 20, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

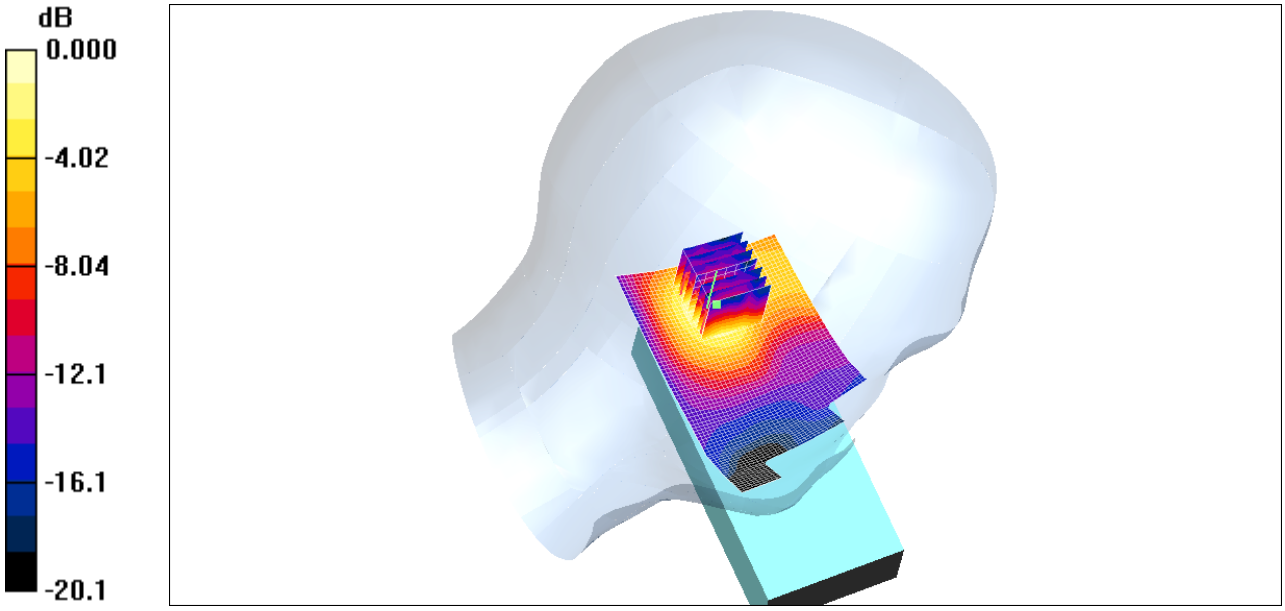
Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2437 MHz; σ = 1.81 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.22, 4.22, 4.22); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.047 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.09 V/m; Power Drift = 0.066 dB
Peak SAR (extrapolated) = 0.083 W/kg
SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.023 mW/g
Maximum value of SAR (measured) = 0.049 mW/g



0dB = 0.049 mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WiFi 802.11g_2437MHz Right Cheek Touch

- Test Date: September 20, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

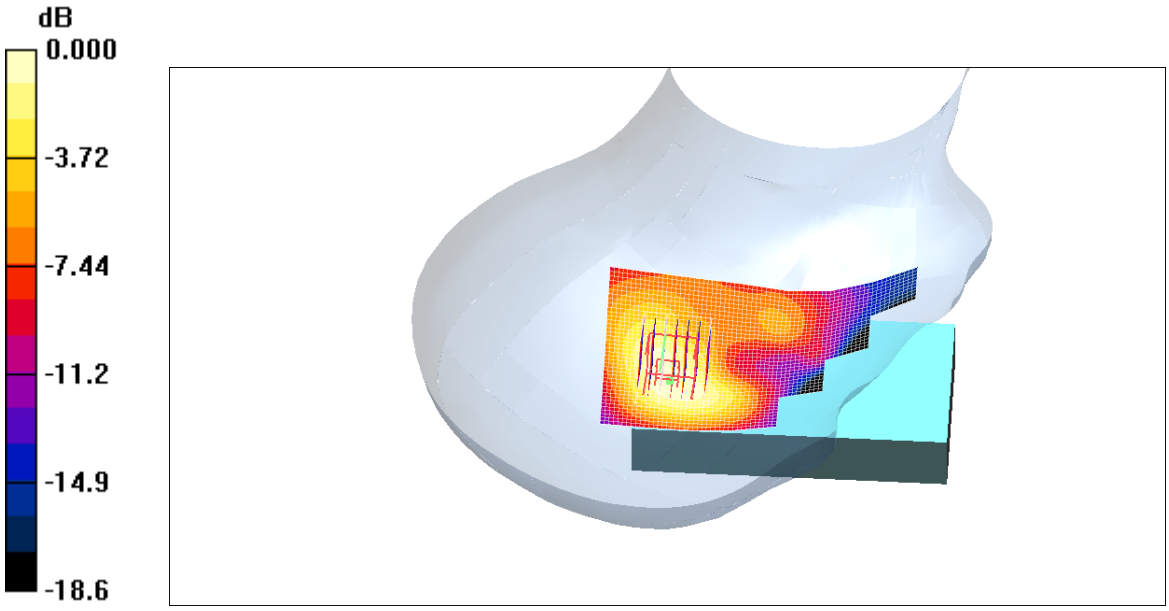
Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2437 MHz; σ = 1.81 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.22, 4.22, 4.22); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.045 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.57 V/m; Power Drift = -0.017 dB
Peak SAR (extrapolated) = 0.073 W/kg
SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.023 mW/g
Maximum value of SAR (measured) = 0.044 mW/g



0dB = 0.044 mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WiFi 802.11g_2437MHz Right Ear Tilt

- Test Date: September 20, 2012

- Measured Liquid Temperature: 22.1 ℃, Ambient Temperature: 22.0 ℃

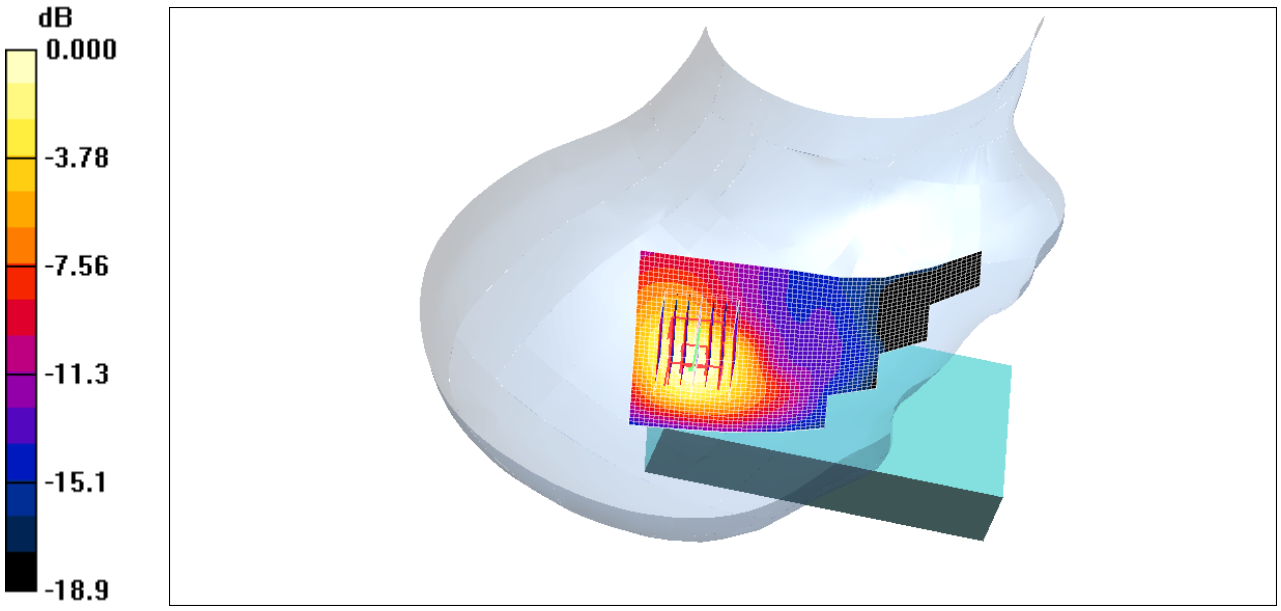
Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2437 MHz; σ = 1.81 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.22, 4.22, 4.22); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.054 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.27 V/m; Power Drift = 0.128 dB
Peak SAR (extrapolated) = 0.100 W/kg
SAR(1 g) = 0.053 mW/g; SAR(10 g) = 0.028 mW/g
Maximum value of SAR (measured) = 0.059 mW/g



0dB = 0.059 mW/g

- Test Laboratory: KTL

- D2450V2: BODY 2450MHz Validation

- Test Date: July 4, 2012

- Measured Liquid Temperature: 21.9 ℃, Ambient Temperature: 22.0 ℃

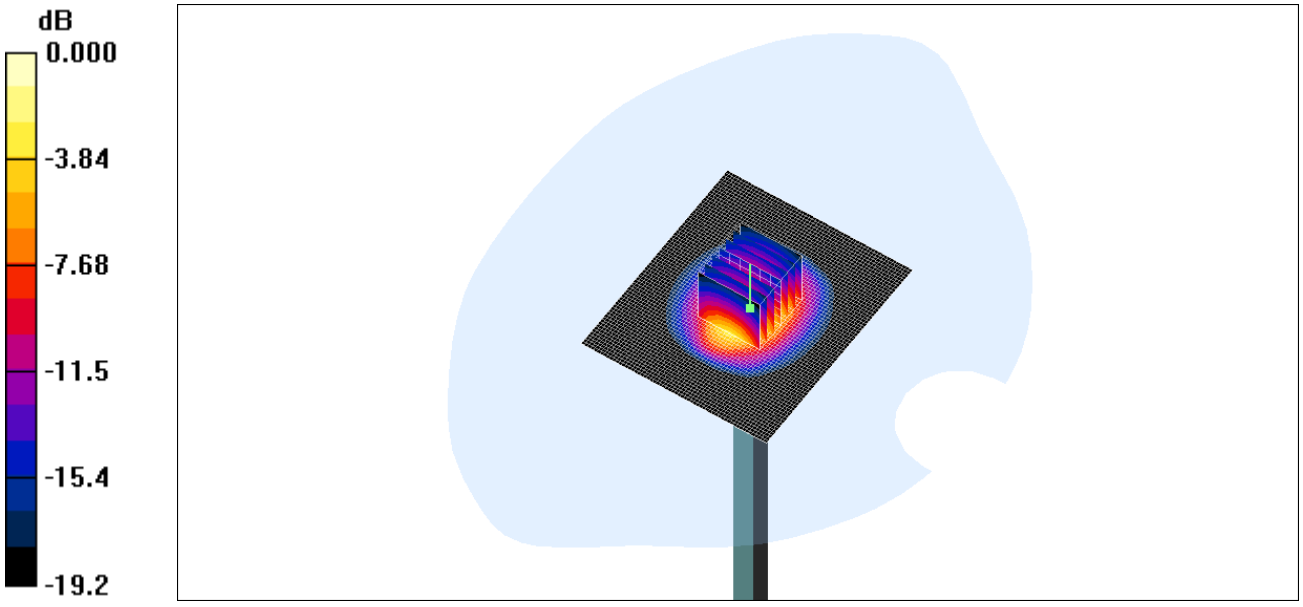
Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: 2450D Medium parameters used: f = 2450 MHz; σ = 1.99 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(3.95, 3.95, 3.95); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 18.1 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 91.3 V/m; Power Drift = -0.085 dB
Peak SAR (extrapolated) = 27.7 W/kg
SAR(1 g) = 14.2 mW/g; SAR(10 g) = 6.87 mW/g
Maximum value of SAR (measured) = 16.3 mW/g



0 dB = 16.3mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WiFi 802.11b_2437MHz BODY FRONT Facing phantom

- Test Date: July 4, 2012

- Measured Liquid Temperature: 21.9 ℃, Ambient Temperature: 22.0 ℃

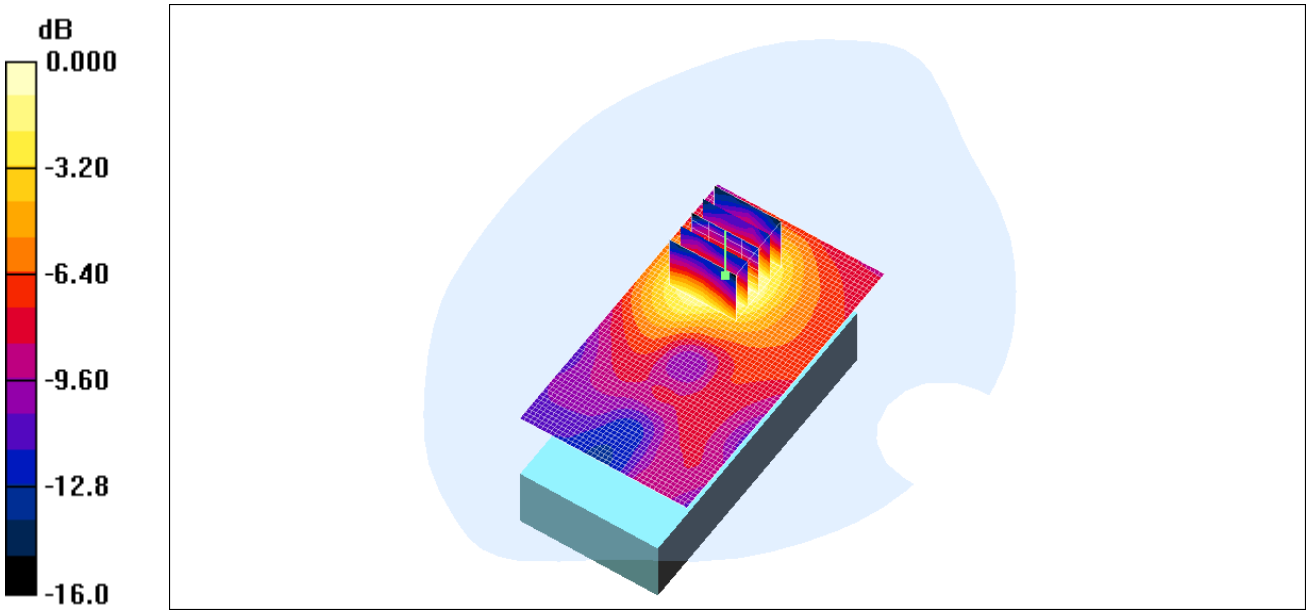
Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: 2450D Medium parameters used: f = 2437 MHz; σ = 1.95 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(3.95, 3.95, 3.95); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.068 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.38 V/m; Power Drift = 0.102 dB
Peak SAR (extrapolated) = 0.102 W/kg
SAR(1 g) = 0.062 mW/g; SAR(10 g) = 0.037 mW/g
Maximum value of SAR (measured) = 0.066 mW/g



0 dB = 0.066mW/g

- Test Laboratory: KTL

- Model: LYNX

- Position: WiFi 802.11b_2437MHz BODY REAR Facing phantom

- Test Date: July 4, 2012

- Measured Liquid Temperature: 21.9 ℃, Ambient Temperature: 22.0 ℃

Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: 2450D Medium parameters used: f = 2437 MHz; σ = 1.95 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

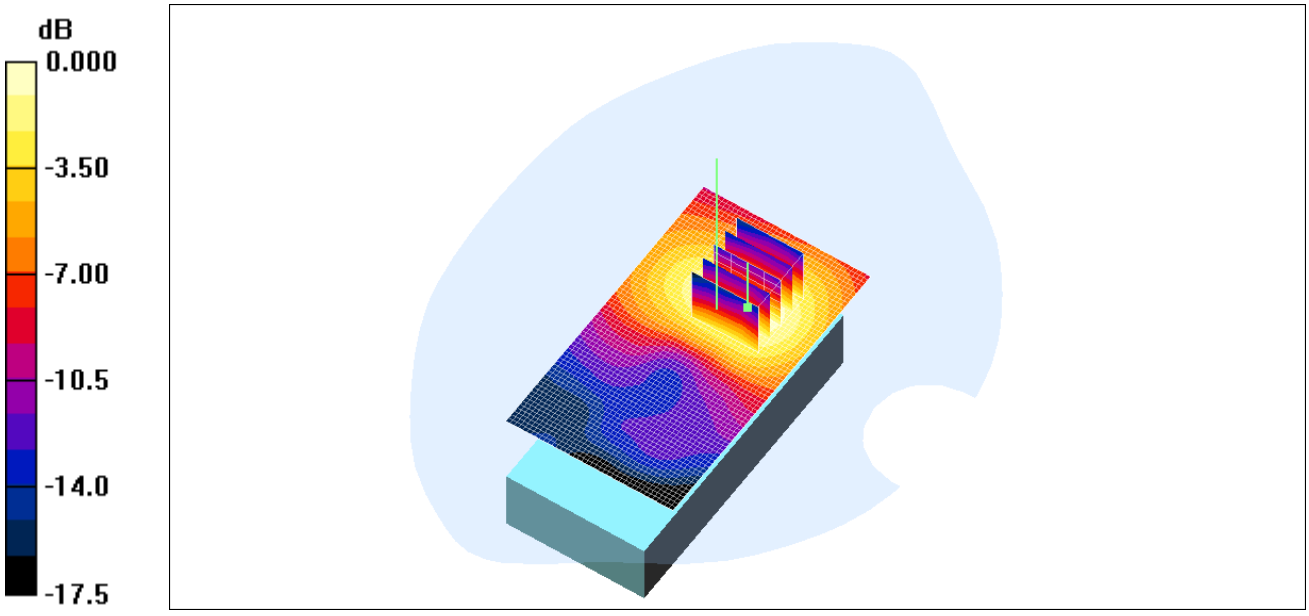
DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(3.95, 3.95, 3.95); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

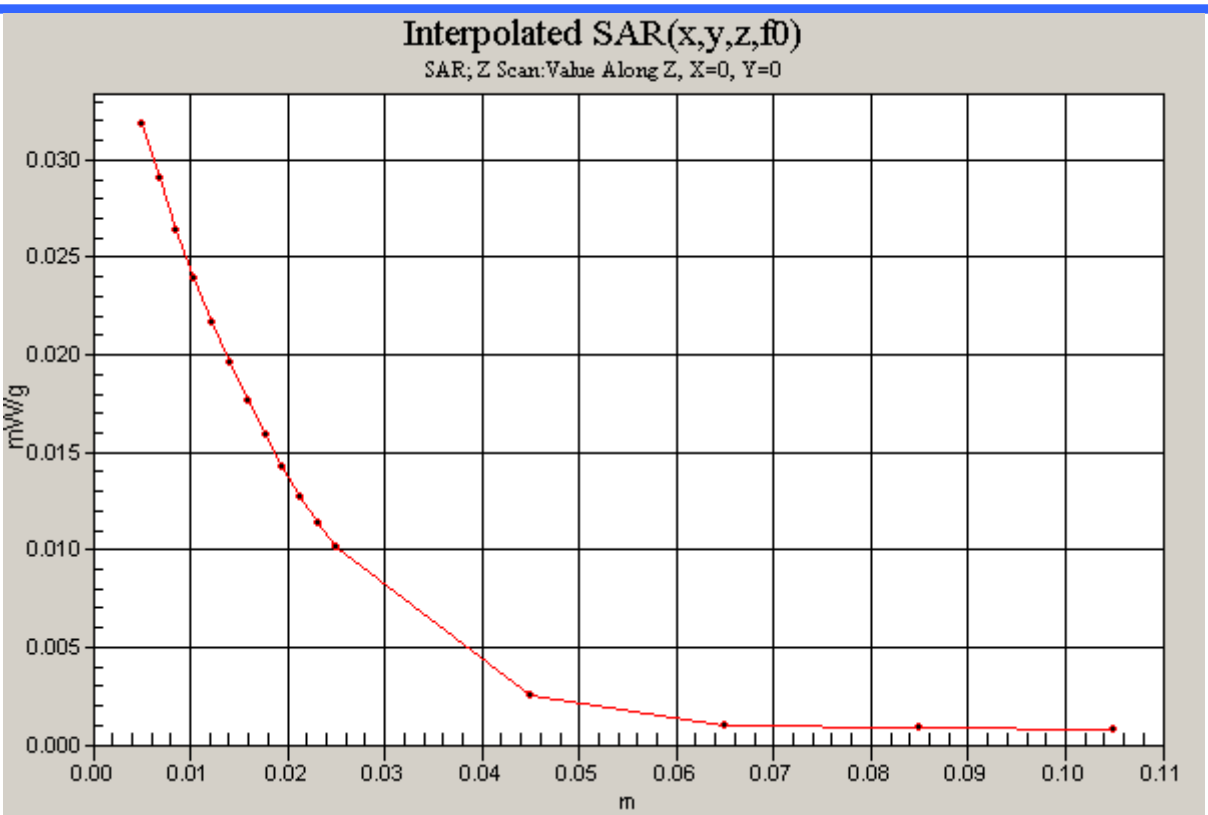
Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.150 mW/g

Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm
Maximum value of SAR (interpolated) = 0.032 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.61 V/m; Power Drift = -0.088 dB
Peak SAR (extrapolated) = 0.218 W/kg
SAR(1 g) = 0.134 mW/g; SAR(10 g) = 0.081 mW/g
Maximum value of SAR (measured) = 0.145 mW/g



0 dB = 0.145mW/g


Interpolated SAR(x,y,z,f0)
SAR; Z Scan:Value Along Z, X=0, Y=0
mW/g
0.030
0.025
0.020
0.015
0.010
0.005
0.000
0.00
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.10
0.11
m

Test Laboratory: KTL

- Model: LYNX

- Position: WiFi 802.11g_2437MHz BODY FRONT Facing phantom

- Test Date: July 4, 2012

- Measured Liquid Temperature: 21.9 ℃, Ambient Temperature: 22.0 ℃

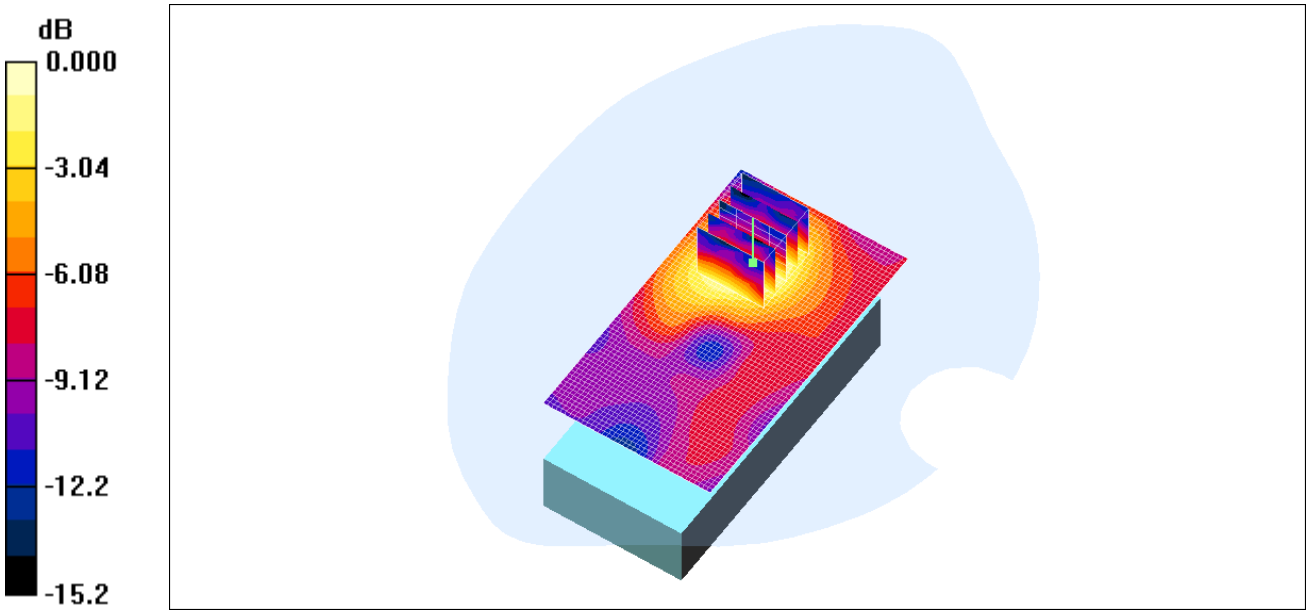
Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: 2450D Medium parameters used: f = 2437 MHz; σ = 1.95 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(3.95, 3.95, 3.95); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.034 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.06 V/m; Power Drift = 0.032 dB
Peak SAR (extrapolated) = 0.048 W/kg
SAR(1 g) = 0.030 mW/g; SAR(10 g) = 0.018 mW/g
Maximum value of SAR (measured) = 0.032 mW/g



0 dB = 0.032mW/g

Test Laboratory: KTL

- Model: LYNX

- Position: WiFi 802.11g_2437MHz BODY REAR Facing phantom

- Test Date: July 4, 2012

- Measured Liquid Temperature: 21.9 ℃, Ambient Temperature: 22.0 ℃

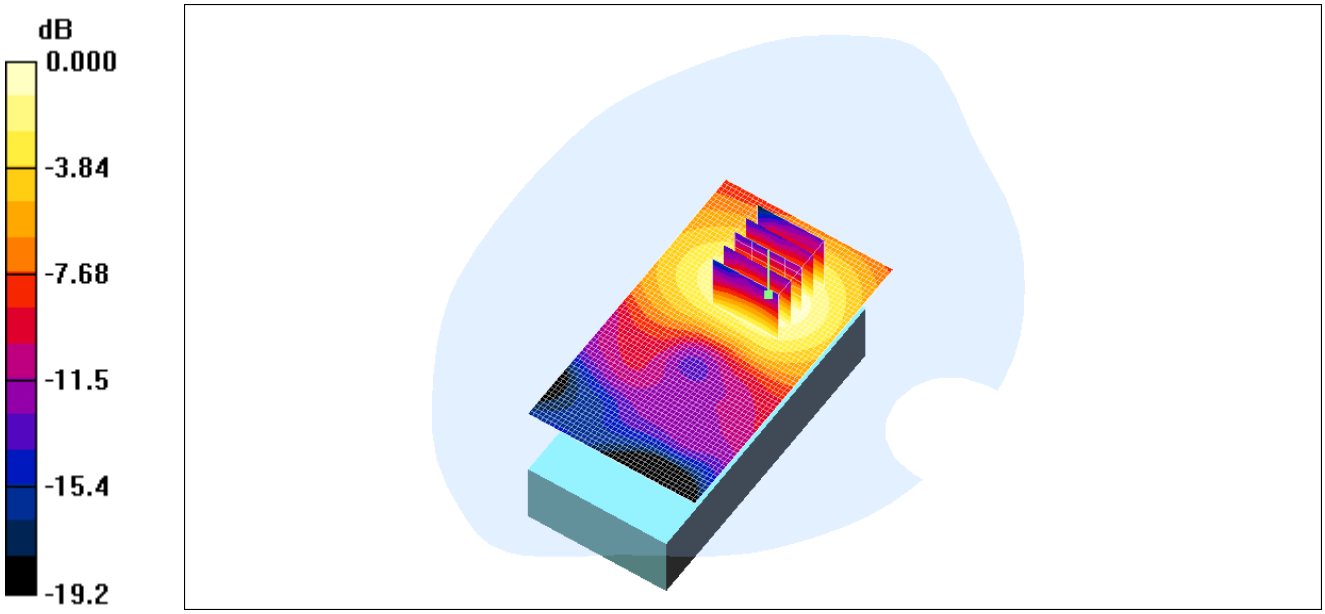
Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: 2450D Medium parameters used: f = 2437 MHz; σ = 1.95 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3020; ConvF(3.95, 3.95, 3.95); Calibrated: 2012-01-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2012-01-23
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.060 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.73 V/m; Power Drift = 0.046 dB
Peak SAR (extrapolated) = 0.091 W/kg
SAR(1 g) = 0.055 mW/g; SAR(10 g) = 0.033 mW/g
Maximum value of SAR (measured) = 0.059 mW/g



0 dB = 0.059mW/g