

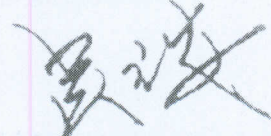
FCC SAR TEST REPORT

Report No.: FCC2012-8029SAR
Product: GSM Tracker
Model No.: PRIME AT PLT
Brand Name: PRIME
FCC ID: ZKQ-PLT
Applicant: Micron Electronics LLC
Address: 601 North Congress Ave Suite 439, Delray Beach, FL 33445
Issued by: Shenzhen Electronic Product Quality Testing Center
Lab Location: Electronic Testing Building, Shahe Road, Xili, Nanshan District, Shenzhen, 518055, P. R. China
Tel: 86 755 26627338 **Fax:** 86 755 26627238
Mail: manager@ccic-set.com **Website:** <http://www.ccic-set.com>



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Test Report

Product. : GSM Tracker
Model No. : PRIME AT PLT
Brand Name..... : PRIME
FCC ID..... : ZKQ-PLT
Applicant..... : Micron Electronics LLC
Applicant Address..... : 601 North Congress Ave Suite 439, Delray Beach, FL 33445
Manufacturer..... : Micron Electronics LLC
Manufacturer Address..... : 601 North Congress Ave Suite 439, Delray Beach, FL 33445
Rating..... : 5Vdc 2000mA(Charger) or 3.7V 3650mAh(Battery)
Test Standards..... : **47CFR § 2.1093-** Radiofrequency Radiation Exposure Evaluation: Portable Devices;
FCC OET Bulletin 65 (Edition 97-01), Supplement C (Edition 01-01): Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields;
ANSI C95.1-1999: IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz;
IEEE 1528-2003: Recommended Practice for **Determining** the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques.
Test Result..... : Pass
Tested by : Shuangwen Zhang Oct. 18. 2012
Signature, Date
Reviewed by..... : Zhu Di Oct 18. 2012
Signature, Date
Approved by..... :  Oct. 18. 2012
Signature, Date

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1. GENERAL CONDITIONS

1.1 This report only refers to the item that has undergone the test.

1.2 This report standalone dose not constitute or imply by its own an approval of the product by the certification Bodies or competent Authorities.

1.3 This document is only valid if complete; no partial reproduction can be made without written approval of Shenzhen Electronic Product Quality Testing Center

1.4 This report cannot be used partially or in full for publicity and/or promotional purposes without previous written approval of Shenzhen Electronic Product Quality Testing Center and the Accreditation Bodies, if it applies.

2. Administrative Date

2.1. Identification of the Responsible Testing Laboratory

Company Name: Shenzhen Electronic Product Quality Testing Center

Department: EMC Department

Address: Electronic Testing Building, Shahe Road, Nanshan District,
ShenZhen, P. R. China

Telephone: +86-755-26628676

Fax: +86-755-26627238

Responsible Test Lab Managers: Mr. Wu Li'an

2.2. Identification of the Responsible Testing Location(s)

Company Name: Shenzhen Electronic Product Quality Testing Center

Address: Electronic Testing Building, Shahe Road, Nanshan District,
Shenzhen, P. R. China

Organization Item

CCIC-SET Report No.: FCC2012-8029SAR

CCIC-SET Project Leader: Mr. Li Sixiong

**CCIC-SET Responsible
for accreditation scope:** Mr. Wu Li'an

Start of Testing: 2012-10-17

End of Testing: 2012-10-17

Identification of Applicant

Company Name: Micron Electronics LLC

Address: 601 North Congress Ave Suite 439, Delray Beach, FL 33445

2.3. Identification of Manufacture

Company Name: Micron Electronics LLC

Address: 601 North Congress Ave Suite 439, Delray Beach, FL 33445

Notes: This data is based on the information by the applicant.

3. Equipment Under Test (EUT)

3.1. Identification of the Equipment under Test

Sample Name:	GSM Tracker	
Type Name:	PRIME AT PLT	
Brand Name:	PRIME	
General description:	Test frequency	GSM 850MHz (Low/Mid/High Channel: 824.2MHz,836.6MHz,848.8MHz) GSM 1900MHz (Low/Mid/High Channel: 1850.2MHz,1880MHz,1909.8MHz)
	Development Stage	Identical Prototype
	Accessories	Power Supply
	Battery type	P21-1300
	Battery specification	1300mAh 3.7V
	Antenna type	IFA Antenna
	Operation mode	GPRS: Multislot Class10
	Modulation mode	GPRS/GSM Mode with GMSK Modulation
	Max. Power(EIRP)	33.39 dBm

NOTE:

- The EUT is a model of GSM Tracker operating in GSM 850MHz band and PCS 1900MHz band. Since the EUT does not support speech function, the tests were carried out only against body mounting measurement.
- The transmitter (Tx) frequency arrangement of the Cellular 850MHz band used by the EUT can be represented with the formula $F(n)=824.2+0.2*(n-128)$, $128 \leq n \leq 251$; the lowest, middle, highest channel numbers (ARFCHs) used and tested in this report are separately 128 (824.2MHz), 190 (836.6MHz) and 251 (848.8MHz).
- The transmitter (Tx) frequency arrangement of the PCS 1900MHz band used by the EUT can be represented with the formula $F(n)=1850.2+0.2*(n-512)$, $512 \leq n \leq 810$; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 512 (1850.2MHz), 661 (1880.0MHz) and 810 (1909.8MHz).
- Please refer to Appendix C for the photographs of the EUT. For a more detailed features description about the EUT, please refer to User's Manual.

4 Specific Absorption Rate (SAR)

4.1 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

4.2 SAR Definition

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

$$\text{SAR} = \frac{d}{dt} \left(\frac{dW}{dm} \right) = \frac{d}{dt} \left(\frac{dW}{\rho dv} \right)$$

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

SAR measurement can be either related to the temperature elevation in tissue by

$$\text{SAR} = C \frac{\delta T}{\delta t}$$

where C is the specific heat capacity, δT is the temperature rise and δt the exposure duration, or related to the electrical field in the tissue by

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

where σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the rms electrical field strength.

However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

5 OPERATIONAL CONDITIONS DURING TEST

5.1 Schematic Test Configuration

During SAR test, EUT was operating in Traffic Mode (Channel Allocated) at Normal Voltage Condition. A communication link is set up with a System Simulator (SS) by air link, and a call is established.

The Absolute Radio Frequency Channel Number (ARFCN) was allocated to 128, 190 and 251 respectively in the case of GSM 900 MHz, or to 512, 661 and 810 respectively in the case of PCS 1800 MHz. The EUT was commanded to operate at maximum transmitting power.

The EUT should use its internal transmitter. The antenna(s), battery and accessories shall be those specified by the manufacturer. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output. If a wireless link was used, the antenna connected to the output of the base station simulator shall be placed at least 50 cm away from the handset.

The signal transmitted by the simulator to the antenna feeding point should be lower than the output power level of the handset by at least 35 dB

5.2 SAR Measurement System

The SAR measurement system being used is the DASY4 system, the system is controlled remotely from a PC, which contains the software to control the robot and data acquisition equipment. The software also displays the data obtained from test scans.

In operation, the system first does an area (2D) scan at a fixed depth within the liquid from the inside wall of the phantom. When the maximum SAR point has been found, the system will then carry out a 3D scan centred at that point to determine volume averaged SAR level.

5.2.1 Tissue Dielectric Parameters for Head and Body Phantoms

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in P1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness Power drifts in a human head. Other head and body tissue parameters that have not been specified in P1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations described in Reference [12] and extrapolated according to the head parameters specified in P1528.

Table 1: Recommended Dielectric Performance of Tissue

Ingredients (% by weight)	Frequency (MHz)									
	450		835		915		1900		2450	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	38.56	51.16	41.45	52.4	41.05	56.0	54.9	40.4	62.7	73.2
Salt (Nacl)	3.95	1.49	1.45	1.4	1.35	0.76	0.18	0.5	0.5	0.04
Sugar	56.32	46.78	56.0	45.0	56.5	41.76	0.0	58.0	0.0	0.0
HEC	0.98	0.52	1.0	1.0	1.0	1.21	0.0	1.0	0.0	0.0
Bactericide	0.19	0.05	0.1	0.1	0.1	0.27	0.0	0.1	0.0	0.0
Triton x-100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.8	0.0
DGBE	0.0	0.0	0.0	0.0	0.0	0.0	44.92	0.0	0.0	26.7
Dielectric Constant	43.42	58.0	42.54	56.1	42.0	56.8	39.9	54.0	39.8	52.5
Conductivity (s/m)	0.85	0.83	0.91	0.95	1.0	1.07	1.42	1.45	1.88	1.78

Table 2 Recommended Tissue Dielectric Parameters

Frequency (MHz)	Head Tissue		Body Tissue	
	ϵ_r	$\sigma(S/m)$	ϵ_r	$\sigma(S/m)$
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800-2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00

5.2.2 Simulant liquids

For body-worn measurements, the EUT was tested against flat phantom representing the user body. The EUT was put on in the belt holder. Simulant liquids that are used for testing at frequencies of GSM 850MHz and GSM 1900MHz, which are made mainly of sugar, salt and water solutions may be left in the phantoms.

Table 3: Dielectric Performance of Body Tissue Simulating Liquid

Temperature: 23.2°C; Humidity: 54%; Time: 10:20~12:00;			
/	Frequency	Permittivity ϵ	Conductivity σ (S/m)
Target value	1900MHz	53.3	1.52
Validation value (October 17, 2012)	1900MHz	53.43	1.538
Target value	835 MHz	55.2	0.97
Validation value (October 17, 2012)	835 MHz	55.21	0.964

The depth of the body tissue was 15.1 cm as the following photo.

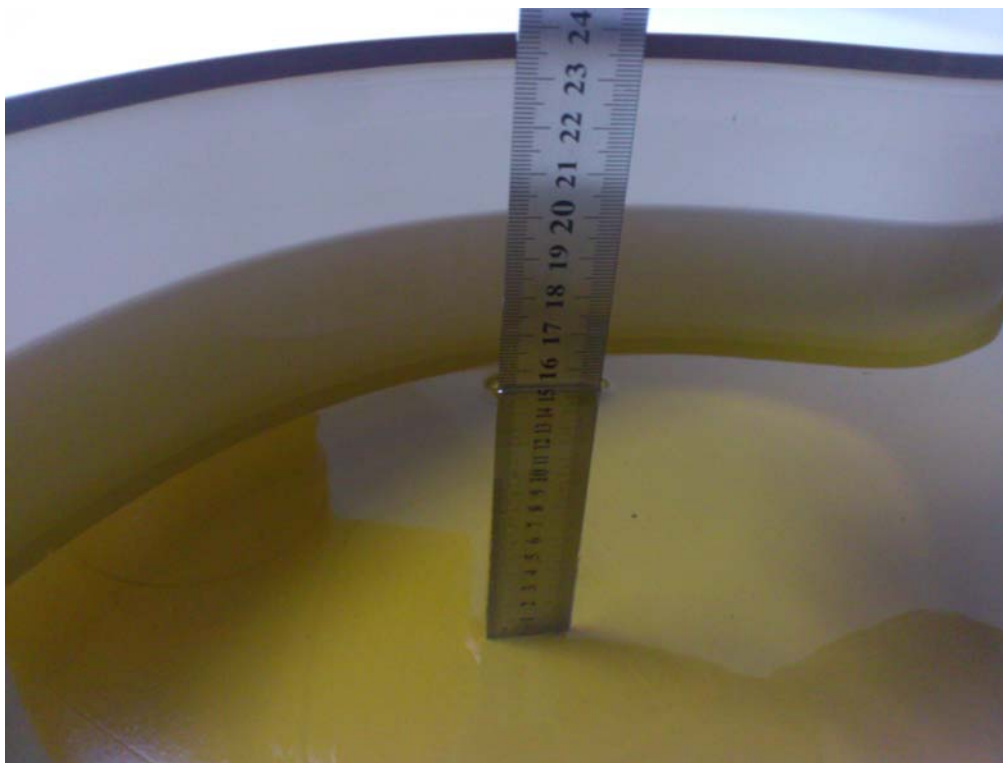


Fig. 1 Configuration of body tissue

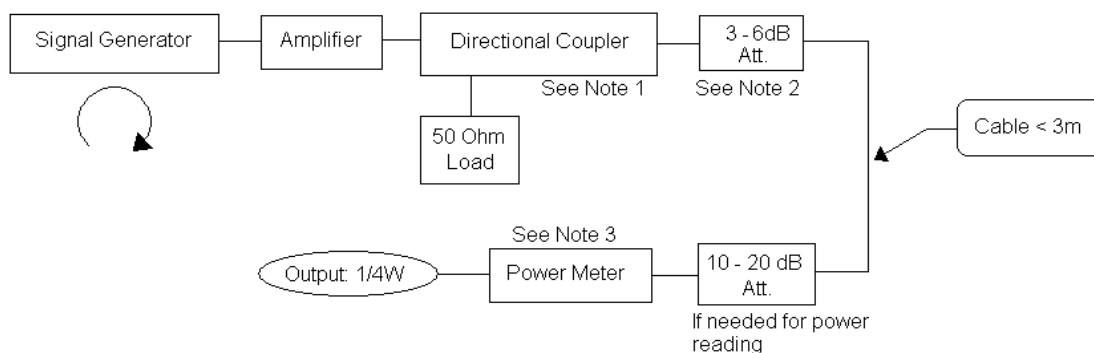
5.2.3 Equipments and results of validation testing

Important equipments :

Name	Type and specification
System Simulator	E5515C
DAE	DAE4
Reference dipole	ES3DV3

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of $\pm 10\%$. The validation results are tabulated below. And also the corresponding SAR plot is attached as well in the SAR plots files.

The following procedure, recommended for performing validation tests using box phantoms is based on the procedures described in the draft IEEE standard P1528. Setup according to the setup diagram below :



With the SG and Amp and with directional coupler in place, set up the source signal at the relevant frequency and use a power meter to measure the power at the end of the SMA cable that you intend to connect to the balanced dipole. Adjust the SG to make this, say, 0.25W (24 dBm). If this level is too high to read directly with the power meter sensor, insert a calibrated attenuator (e.g. 10 or 20 dB) and make a suitable correction to the power meter reading.

Note 1: In this method, the directional coupler is used for monitoring rather than setting the exact feed power level. If, however, the directional coupler is used for power measurement, you should check the frequency range and power rating of the coupler and measure the coupling factor (referred to output) at the test frequency using a VNA.

Note 2: Remember that the use of a 3dB attenuator (as shown in Figure 8.1 of P1528) means that you need an RF amplifier of 2 times greater power for the same feed power. The other issue is the cable length. You might get up to 1dB of loss per meter of cable, so the cable length after the coupler needs to be quite short.

Note 3: For the validation testing done using CW signals, most power meters are suitable. However, if you are measuring the output of a modulated signal from either a signal generator or a handset, you must ensure that the power meter correctly reads the modulated signals.

The measured 1-gram averaged SAR values of the device against the body is provided in Tables 4. The humidity and ambient temperature of test facility were 54% and 23.2°C respectively. The body phantom were full of the body tissue simulating liquid. The EUT was supplied with full-charged battery for each measurement.

The distance between the back of the EUT and the bottom of the flat phantom is 15 mm (taking into account of the IEEE 1528 and the place of the antenna).

For body-worn measurements, the EUT was tested at the lowest, middle and highest frequencies in the transmit band.

Table 4: Liquid Verification Results

Frequency	Duty cycle	Target value (1g)	Test value (1g)
835MHz (10:30, October 17, 2012)	1:1	9.9 W/kg	10.12 W/kg (Body)
1900MHz (10:44, October 17, 2012)	1:1	41.4 W/kg	39.56 W/kg (Body)

*Note: All SAR values are normalized to 1W forward power.

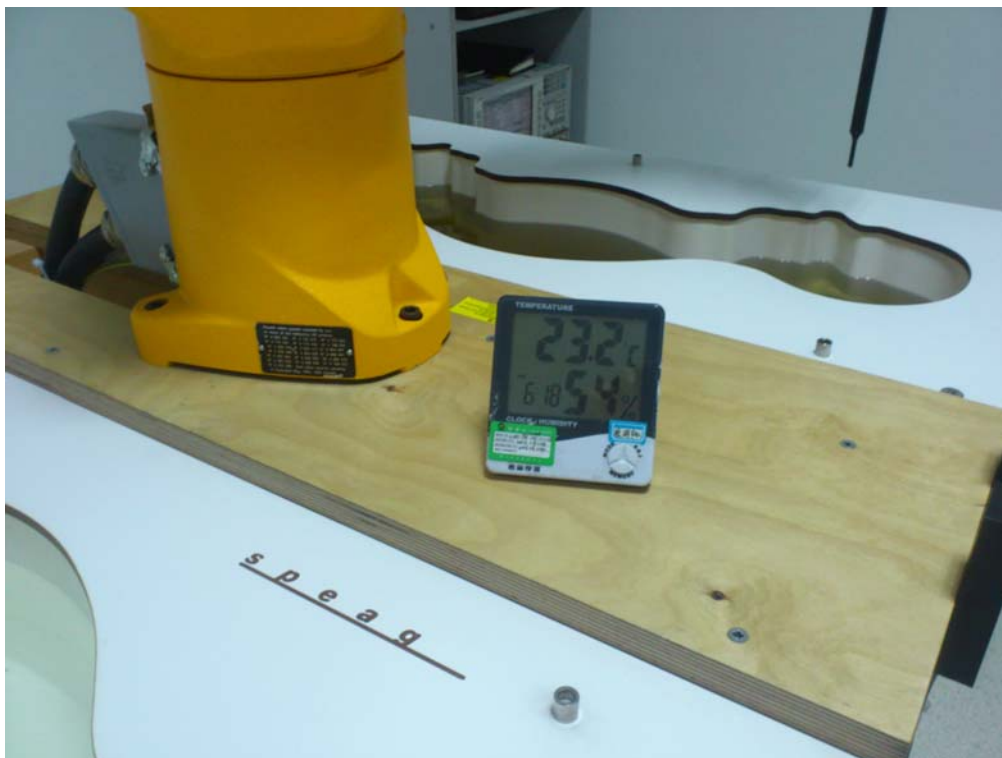


Fig. 2 Climate condition during system evaluation

5.2.4 SAR measurement procedure

The SAR test was carried out as follow:

Establish a call with the maximum output power with a base station simulator, the connection between the EUT and the base station simulator is established via air interface.

After an area scan has been done at a fixed distance of 8mm from the surface of the phantom on the source side, a 3D scan is set up around the location of the maximum spot SAR. First, a point within the scan area is visited by the probe and a SAR reading taken at the start of testing. At the end of testing, the probe is returned to the same point and a second reading is taken. Comparison between these start and end readings enables the power drift during measurement to be assessed.

Above is the scanning procedure flow chart and table from the IEEE p1528 standard. This is the procedure for which all compliant testing should be carried out to ensure that all variations of the device position and transmission behaviour are tested.

The EUT was tested under two position: face upward and back upward.

5.2.5 Transmitting antenna information

There are two antennas (GSM antenna and GPS antenna) inside the EUT, only the GSM antenna is the transmitting source, and it's a type of IFA antenna.

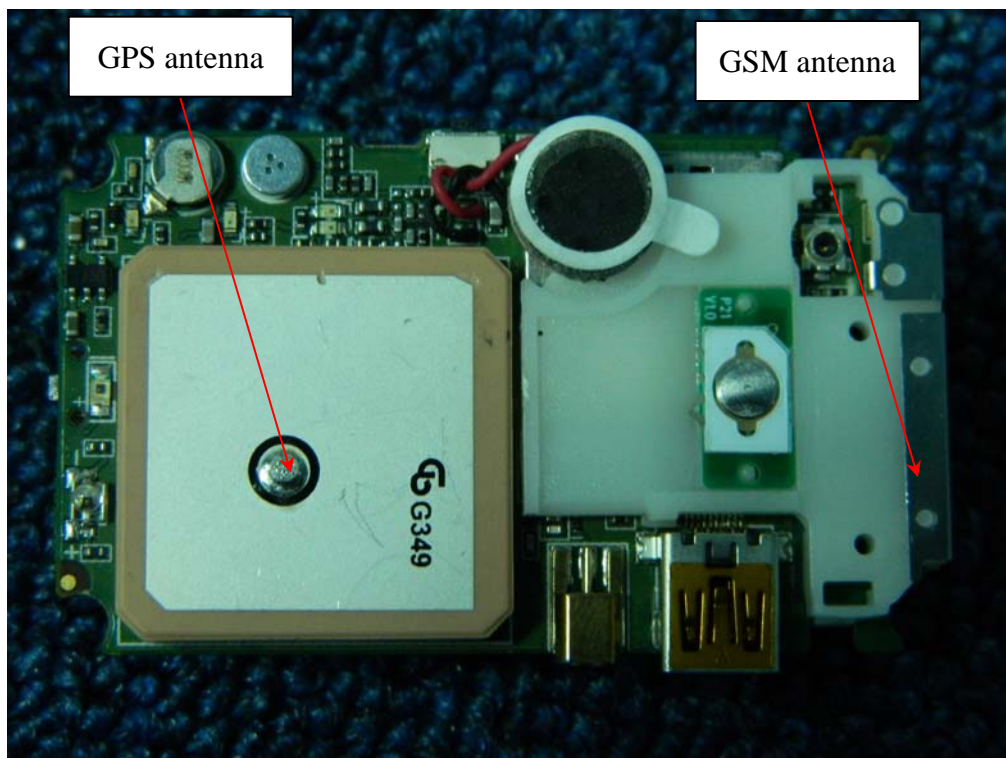


Fig. 3 Position of the antennas

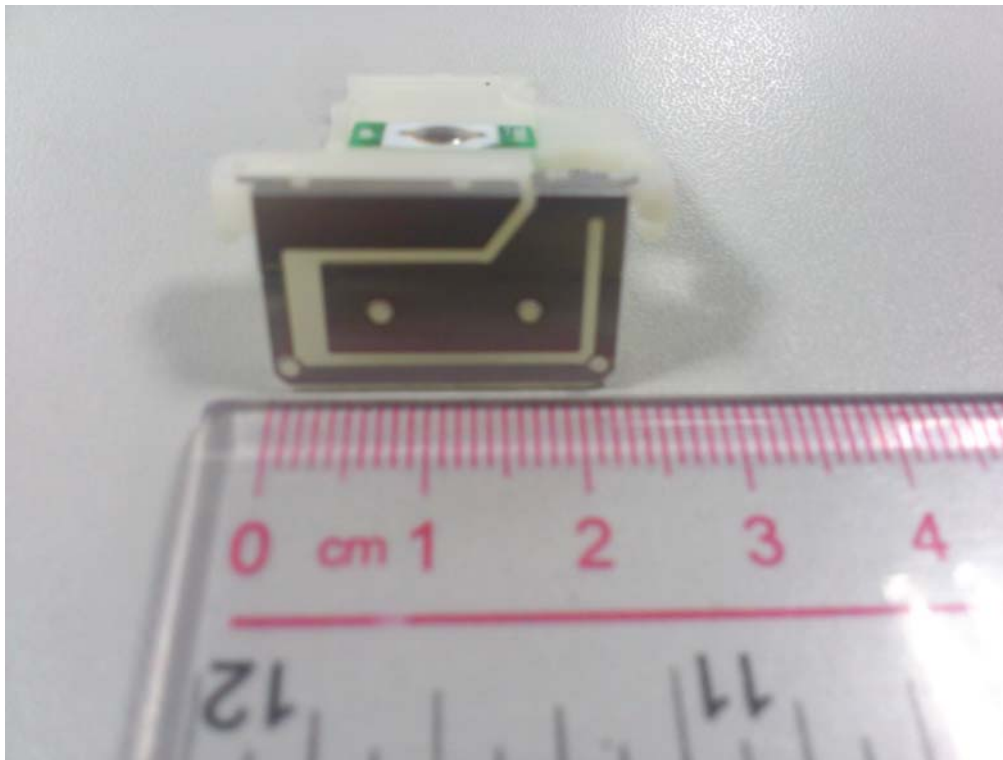


Fig. 4 Shape and size of the GSM antenna

6 CHARACTERISTICS OF THE TEST

6.1 Applicable Limit Regulations

47CFR § 2.1093- Radiofrequency Radiation Exposure Evaluation: Portable Devices;

FCC OET Bulletin 65 (Edition 97-01), Supplement C (Edition 01-01): Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields;

ANSI C95.1–1999: IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz;

It specifies the maximum exposure limit of **1.6 W/kg** as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

6.2 Applicable Measurement Standards

IEEE 1528–2003: Recommended Practice for **Determining** the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques.

It specifies the measurement method for demonstration of compliance with the SAR limits for such equipments.

7 LABORATORY ENVIRONMENT

Table 5: The Ambient Conditions during SAR Test

Temperature	Min. = 15 ° C, Max. = 30 ° C
Relative humidity	Min. = 30%, Max. = 70%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards.	
Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

8 TEST RESULTS

8.1 Summary of Measurement Results

The power level results listed in the following table 6 to table 11 referred to the RF report FCC2012-8029R.

Table 6: SAR Values (GSM 850 MHz Band), Measured against the body.

Temperature: 23.2°C, humidity: 54%.			
Limit of SAR (W/kg)	1.6 (1 g Average)		Duty cycle factor (dB)
Test Case (10:20~12:00, October 17, 2012)	Measurement Result (W/kg)		
	1g Average (W/kg)	Power level (dBm)	
Face upward, Bottom frequency	0.148	33.10	-9
Back upward, Bottom frequency	0.172		
Face upward, Mid frequency	0.156	33.04	-9
Back upward, Mid frequency	0.243		
Face upward, Top frequency	0.215	33.39	-9
Back upward, Top frequency	0.244		

Table 7: SAR Values (GSM 1900 MHz Band), Measured against the body.

Temperature: 23.2°C, humidity: 54%.			
Limit of SAR (W/kg)	1.6 (1 g Average)		Duty cycle factor (dB)
Test Case (10:20~12:00, October 17, 2012)	Measurement Result (W/kg)		
	1g Average (W/kg)	Power level (dBm)	
Face upward, Bottom frequency	0.496	29.32	-9
Back upward, Bottom frequency	0.598		
Face upward, Mid frequency	0.476	29.47	-9
Back upward, Mid frequency	0.604		
Face upward, Top frequency	0.413	28.87	-9
Back upward, Top frequency	0.598		

Table 8: SAR Values (GPRS 850 MHz Band, 1U4D), Measured against the body.

Temperature: 23.2°C, humidity: 54%.			
Limit of SAR (W/kg)	1.6 (1 g Average)		Duty cycle factor (dB)
Test Case (10:20~12:00, October 17, 2012)	Measurement Result (W/kg)		
	1g Average (W/kg)	Power level (dBm)	
Face upward, Bottom frequency	0.114	31.76	-9
Back upward, Bottom frequency	0.133		
Face upward, Mid frequency	0.137	31.63	-9
Back upward, Mid frequency	0.169		
Face upward, Top frequency	0.165	31.71	-9
Back upward, Top frequency	0.190		

Table 9: SAR Values (GPRS 1900 MHz Band, 1U4D), Measured against the body.

Temperature: 23.2°C, humidity: 54%.			
Limit of SAR (W/kg)	1.6 (1 g Average)		Duty cycle factor (dB)
Test Case (10:20~12:00, October 17, 2012)	Measurement Result (W/kg)		
	1g Average (W/kg)	Power level (dBm)	
Face upward, Bottom frequency	0.411	27.2	-9
Back upward, Bottom frequency	0.561		
Face upward, Mid frequency	0.409	27.08	-9
Back upward, Mid frequency	0.512		
Face upward, Top frequency	0.398	27.79	-9
Back upward, Top frequency	0.465		

Table 10: SAR Values (GPRS 850 MHz Band, 2U3D), Measured against the body.

Temperature: 23.2°C, humidity: 54%.			
Limit of SAR (W/kg)	1.6 (1 g Average)		Duty cycle factor (dB)
Test Case (10:20~12:00, October 17, 2012)	Measurement Result (W/kg)		
	1g Average (W/kg)	Power level (dBm)	
Face upward, Bottom frequency	0.129	31.99	-6
Back upward, Bottom frequency	0.167		
Face upward, Mid frequency	0.143	31.96	-6
Back upward, Mid frequency	0.188		
Face upward, Top frequency	0.220	32.20	-6
Back upward, Top frequency	0.246		

Table 11: SAR Values (GPRS 1900 MHz Band, 2U3D), Measured against the body.

Temperature: 23.2°C, humidity: 54%.			
Limit of SAR (W/kg)	1.6 (1 g Average)		Duty cycle factor (dB)
Test Case (10:20~12:00, October 17, 2012)	Measurement Result (W/kg)		
	1g Average (W/kg)	Power level (dBm)	
Face upward, Bottom frequency	0.404	27.54	-6
Back upward, Bottom frequency	0.589		
Face upward, Mid frequency	0.443	29.29	-6
Back upward, Mid frequency	0.540		
Face upward, Top frequency	0.388	28.97	-6
Back upward, Top frequency	0.566		

8.3 Conclusion

Localized Specific Absorption Rate (SAR) of this portable wireless device has been measured in all cases requested by the relevant standards cited in Clause 5.2 of this report. Maximum localized SAR is **below** exposure limits specified in the relevant standards.

9 Measurement Uncertainty

No.	Uncertainty Component	Type	Uncertainty Value (%)	Probability Distribution	k	ci	Standard Uncertainty (%) $u_i(\%)$	Degree of freedom V_{eff} or v_i
Measurement System								
1	—Probe Calibration	B	7	N	3	1	3.5	∞
2	—Axial isotropy	B	4.7	R	$\sqrt{3}$	0.5	4.3	∞
3	—Hemispherical Isotropy	B	9.4	R	$\sqrt{3}$	0.5	4.3	∞
4	—Boundary Effect	B	11.0	R	$\sqrt{3}$	1	6.4	∞
5	—Linearity	B	4.7	R	$\sqrt{3}$	1	2.7	∞
6	—System Detection Limits	B	1.0	R	$\sqrt{3}$	1	0.6	∞
7	—Readout Electronics	B	1.0	N	3	1	1.00	∞
8	—Response Time	B	0.00	R	$\sqrt{3}$	1	0.00	∞
9	—Integration Time	B	0.00	R	$\sqrt{3}$	1	0.00	∞
10	—RF Ambient Conditions	B	3.0	R	$\sqrt{3}$	1	1.73	∞
11	—Probe Position Mechanical tolerance	B	0.4	R	$\sqrt{3}$	1	0.2	∞
12	—Probe Position with respect to Phantom Shell	B	2.9	R	$\sqrt{3}$	1	1.7	∞
13	—Extrapolation, Interpolation and Integration Algorithms for Max. SAR evaluation	B	3.9	R	$\sqrt{3}$	1	2.3	∞

Uncertainties of the DUT								
14	— Position of the DUT	A	4.8	N	3	1	4.8	5
15	— Holder of the DUT	A	7.1	N	3	1	7.1	5
16	— Output Power Variation — SAR drift measurement	B	5.0	R	$\sqrt{3}$	1	2.9	∞
Phantom and Tissue Parameters								
17	— Phantom Uncertainty(shape and thickness tolerances)	B	1.0	R	$\sqrt{3}$	1	0.6	∞
18	— Liquid Conductivity Target — tolerance	B	5.0	R	$\sqrt{3}$	0.6	1.7	∞
19	— Liquid Conductivity — measurement Uncertainty)	B	0.23	N	3	1	0.23	9
20	— Liquid Permittivity Target tolerance	B	5.0	R	$\sqrt{3}$	0.6	1.7	∞
21	— Liquid Permittivity — measurement uncertainty	B	0.46	N	3	1	0.46	∞
Combined Standard Uncertainty				RSS			12.92	44.15
Expanded uncertainty (Confidence interval of 95 %)				K=2			25.84	

10 MAIN TEST INSTRUMENTS

No.	EQUIPMENT	TYPE	Series No.	Due Date
1	System Simulator	E5515C	GB 47200710	2013-06-11
2	DAE	DAE4	30288	2013-04-13
3	Reference dipole	ES3DV3	689	2013-04-12

ANNEX A

of

ShenZhen Electronic Product Quality Testing Center

CONFORMANCE TEST REPORT FOR

HUMAN EXPOSURE TO ELECTROMAGNETIC FIELDS

FCC2012-8029SAR

Micron Electronics LLC

GSM Tracker

Type Name: PRIME AT PLT

Hardware Version: V2.1

Software Version: V01B15T01

TEST LAYOUT

This Annex consists of 2 pages

Date of Report: 2012-10-17



Fig.1 SAR Test System Layout



Fig.2 Body Position (face upward)

ANNEX B

of

ShenZhen Electronic Product Quality Testing Center

CONFORMANCE TEST REPORT FOR

HUMAN EXPOSURE TO ELECTROMAGNETIC FIELDS

FCC2012-8029SAR

GSM Tracker

Type Name: PRIME AT PLT

Hardware Version: V2.1

Software Version: V01B15T01

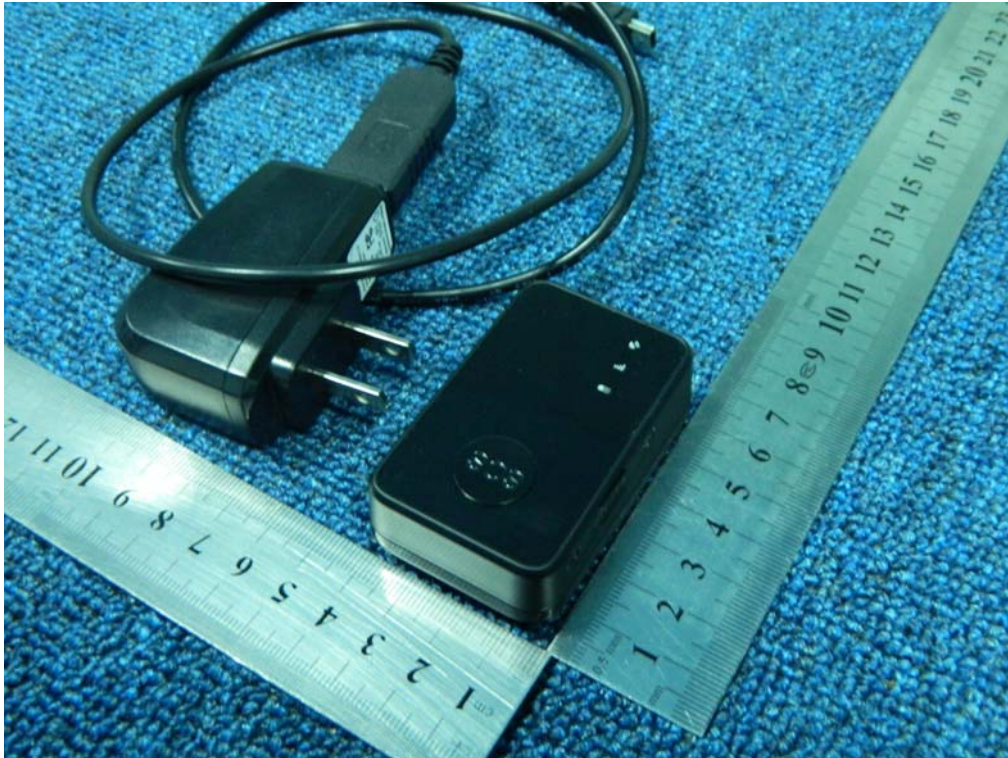
Sample Photographs

This Annex consists of 5 pages

Date of Report: 2012-10-17

1. Photograph of the Equipment under Test

1.1. Appearance



Appearance and size (obverse)

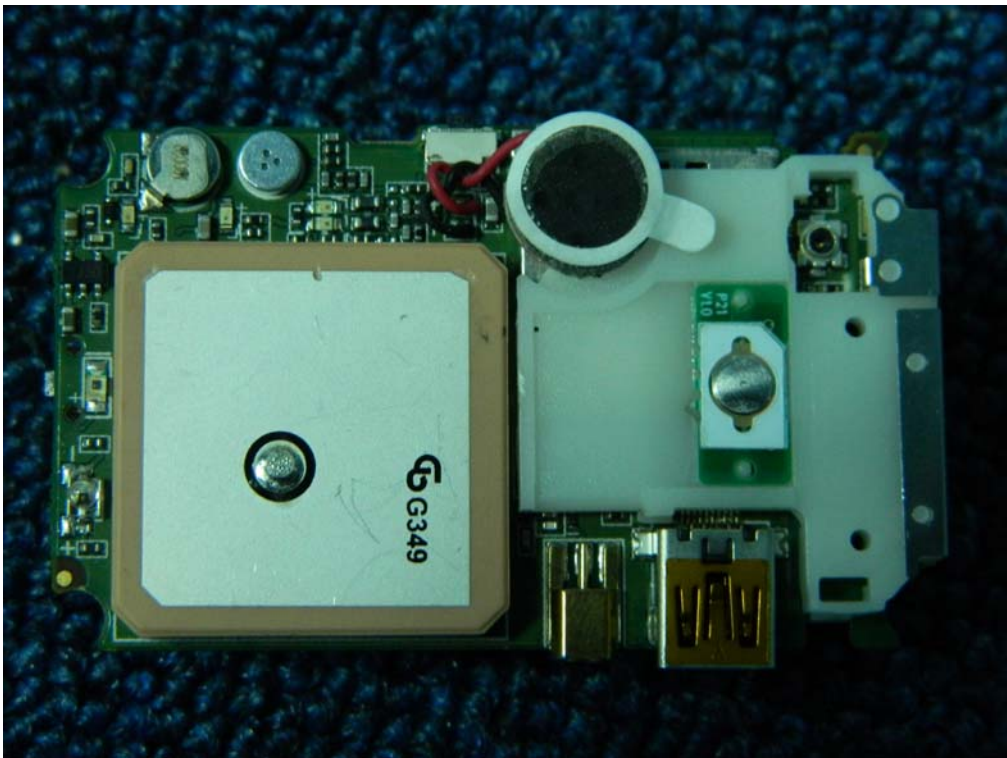


Appearance and size (reverse)



Appearance and ports (Side)

1.2 Inside



Mainboard (reverse)



Mainboard (obverse)

1.3 Battery



1.4 Adapter



ANNEX C

of

ShenZhen Electronic Product Quality Testing Center

CONFORMANCE TEST REPORT FOR

HUMAN EXPOSURE TO ELECTROMAGNETIC FIELDS

FCC2012-8029SAR

GSM Tracker

Type Name: PRIME AT PLT

Hardware Version: V2.1

Software Version: V01B15T01

System Performance Check Data

This Annex consists of 2 pages

Date of Report: 2012-10-17

System Performance Check (GSM850, Oct 17th, 2012)

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:xxx

Program Name: System Performance Check at 835 MHz

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835$ MHz; $\sigma = 0.943$ mho/m; $\epsilon_r = 54.87$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.88 mW/g

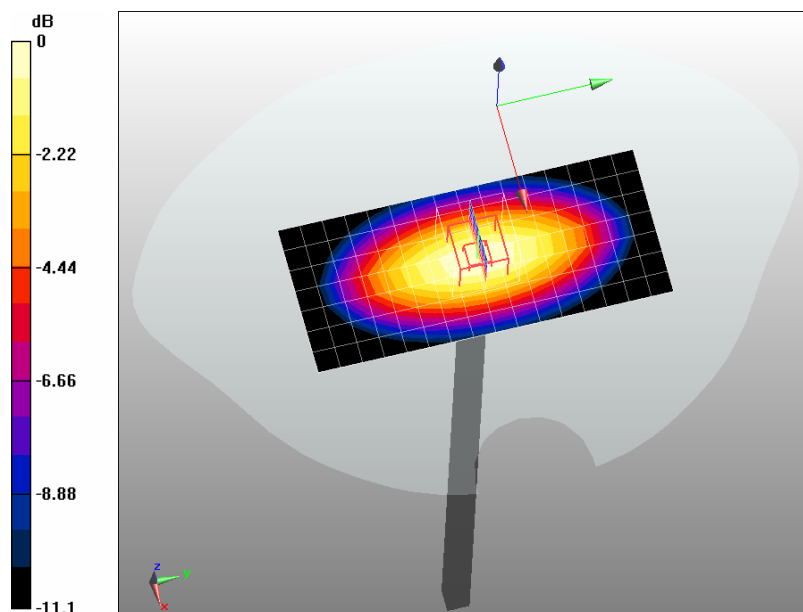
d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.3 V/m; Power Drift = -0.212 dB

Peak SAR (extrapolated) = 3.73 W/kg

SAR(1 g) = 2.53 mW/g; SAR(10 g) = 1.62 mW/g

Maximum value of SAR (measured) = 2.92 mW/g



0 dB = 2.92mW/g

System Performance Check (GSM1900, Oct 17th, 2012)

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:xxx

Program Name: System Performance Check at 1900 MHz

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.538$ mho/m; $\epsilon_r = 53.43$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1360; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

d=10mm, Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 10.8 mW/g

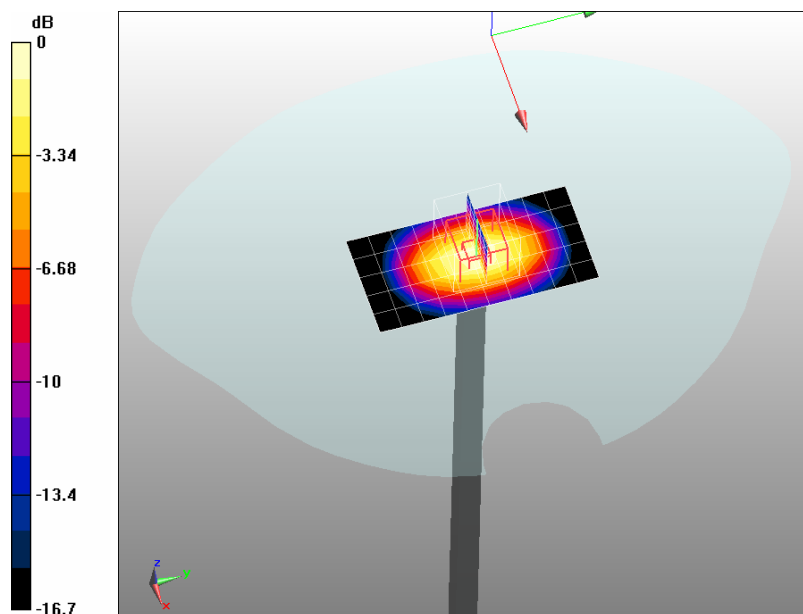
d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.0 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 18.7 W/kg

SAR(1 g) = 9.89 mW/g; SAR(10 g) = 5.12 mW/g

Maximum value of SAR (measured) = 11.0 mW/g



0 dB = 11.0mW/g

GSM 850 (Face upward, Bottom)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.962$ mho/m; $\epsilon_r = 55.26$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.165 mW/g

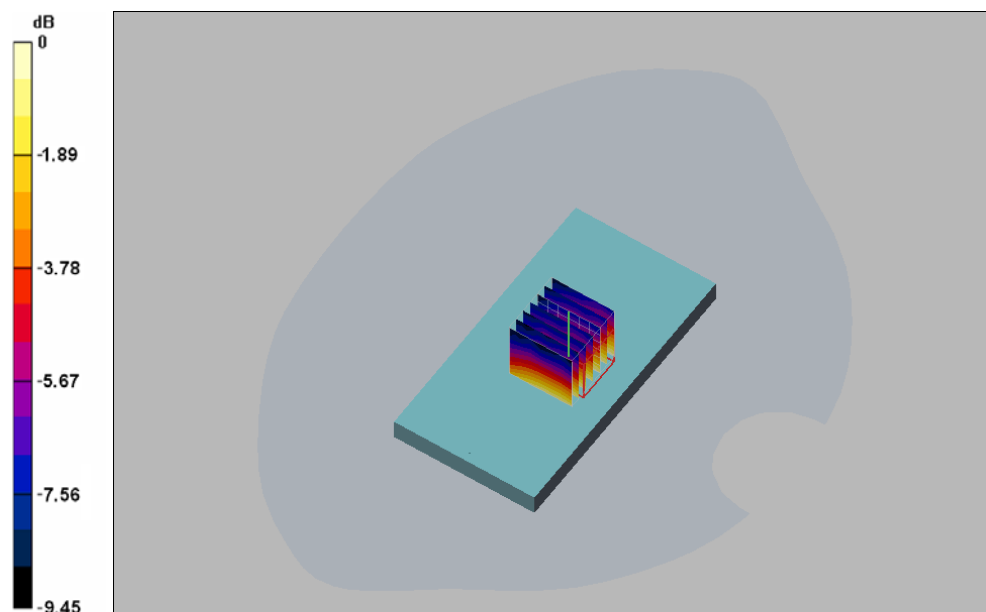
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.689 V/m; Power Drift = -0.056 dB

Peak SAR (extrapolated) = 0.176 mW/g

SAR(1 g) = 0.148mW/g; SAR(10 g) = 0.098 mW/g

Maximum value of SAR (measured) = 0.152 mW/g



0 dB = 0.152mW/g

GSM 850 (Back upward, Bottom)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.962$ mho/m; $\epsilon_r = 55.26$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.191 mW/g

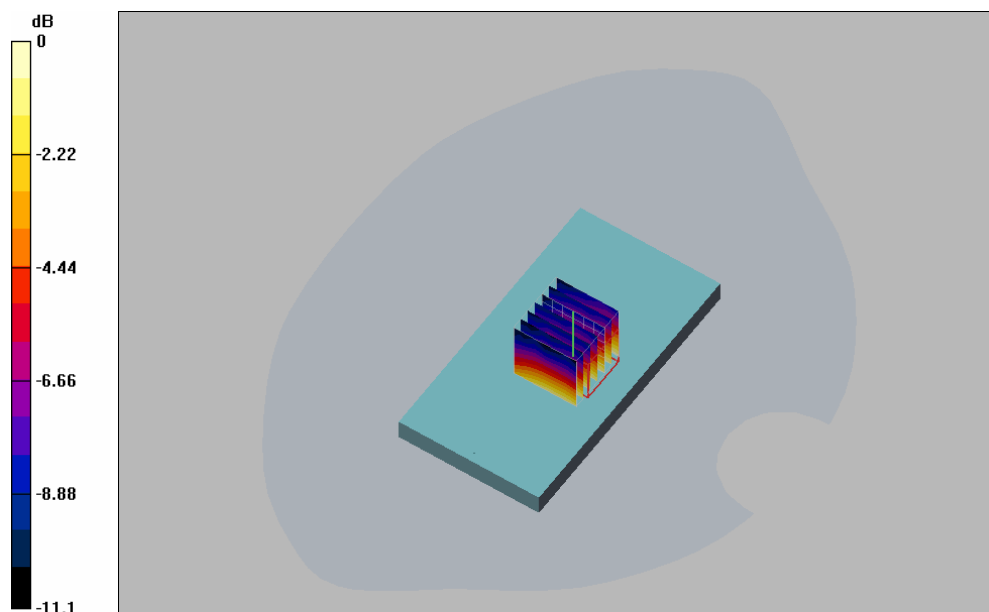
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.129 V/m; Power Drift = -0.206 dB

Peak SAR (extrapolated) = 0.201 mW/g

SAR(1 g) = 0.172mW/g; SAR(10 g) = 0.109 mW/g

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



0 dB = 0.183mW/g

GSM 850 (Face upward, Mid)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.965$ mho/m; $\epsilon_r = 55.19$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

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

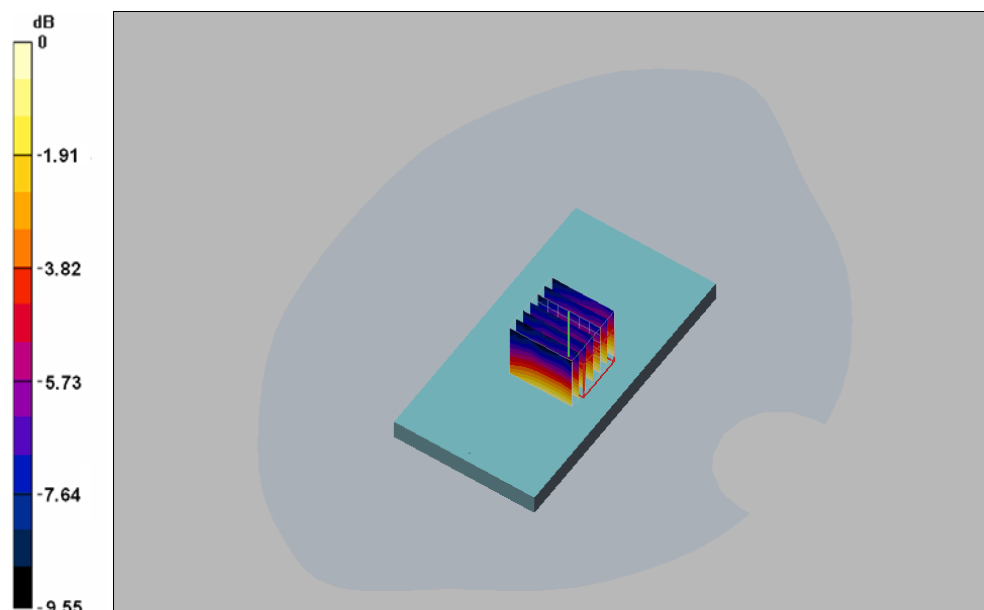
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.772 V/m; Power Drift = -0.037 dB

Peak SAR (extrapolated) = 0.196 mW/g

SAR(1 g) = 0.156mW/g; SAR(10 g) = 0.110 mW/g

Maximum value of SAR (measured) = 0.166 mW/g



0 dB = 0.166mW/g

GSM 850 (Back upward, Mid)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.965$ mho/m; $\epsilon_r = 55.19$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.285 mW/g

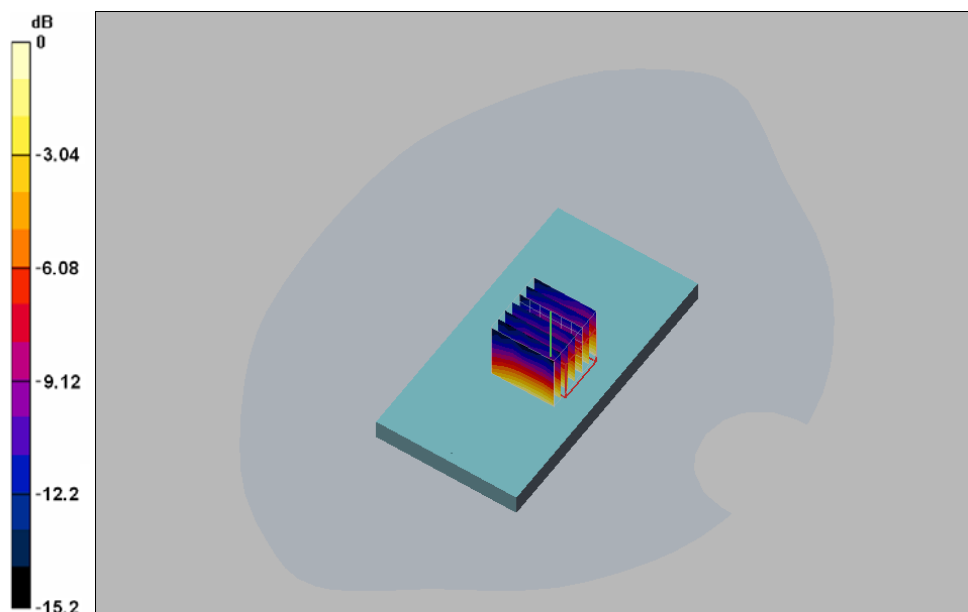
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.933 V/m; Power Drift = -0.102 dB

Peak SAR (extrapolated) = 0.303 mW/g

SAR(1 g) = 0.243mW/g; SAR(10 g) = 0.173 mW/g

Maximum value of SAR (measured) = 0.260 mW/g



0 dB = 0.260mW/g

GSM 850 (Face upward, Top)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.967$ mho/m; $\epsilon_r = 55.16$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

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

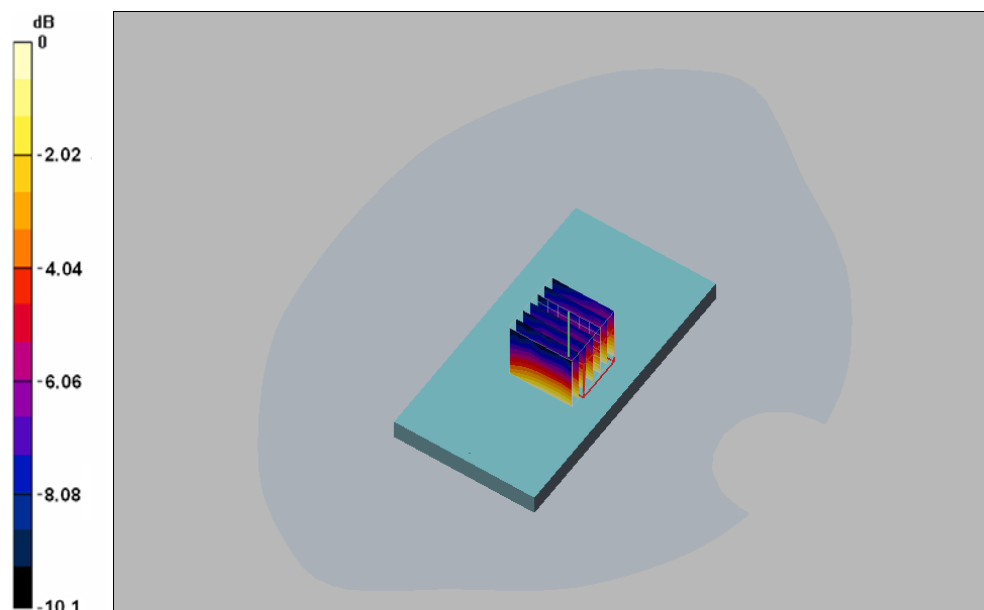
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.223 V/m; Power Drift = -0.054 dB

Peak SAR (extrapolated) = 0.285 mW/g

SAR(1 g) = 0.215W/g; SAR(10 g) = 0.151 mW/g

Maximum value of SAR (measured) = 0.236 mW/g



0 dB = 0.236mW/g

GSM 850 (Back upward, Top)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.967$ mho/m; $\epsilon_r = 55.16$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.284 mW/g

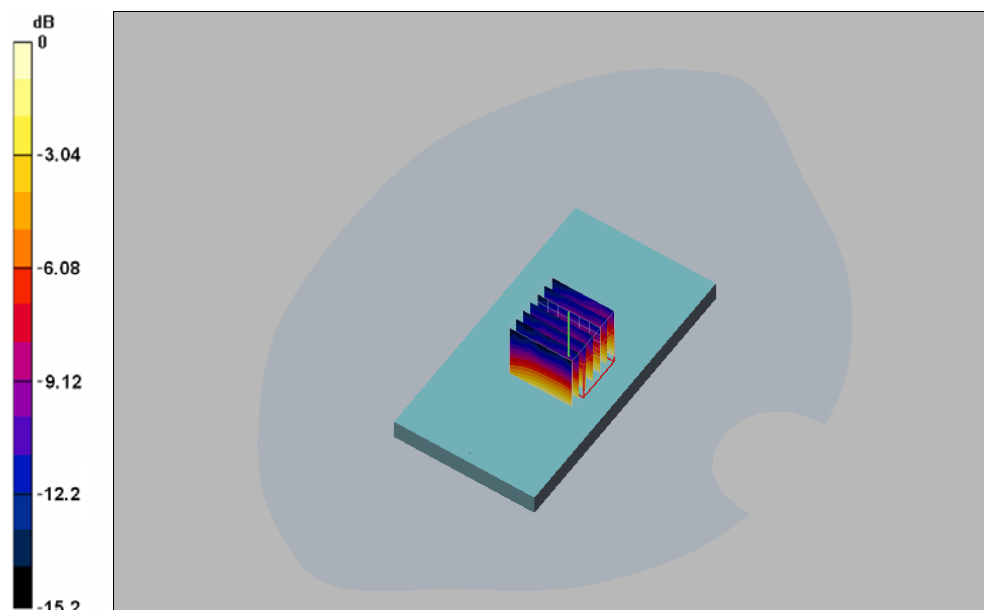
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.956 V/m; Power Drift = -0.121 dB

Peak SAR (extrapolated) = 0.309 mW/g

SAR(1 g) = 0.244mW/g; SAR(10 g) = 0.167 mW/g

Maximum value of SAR (measured) = 0.261 mW/g



0 dB = 0.261mW/g

GSM 1900 (Face upward, Bottom)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.533$ mho/m; $\epsilon_r = 53.49$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.520 mW/g

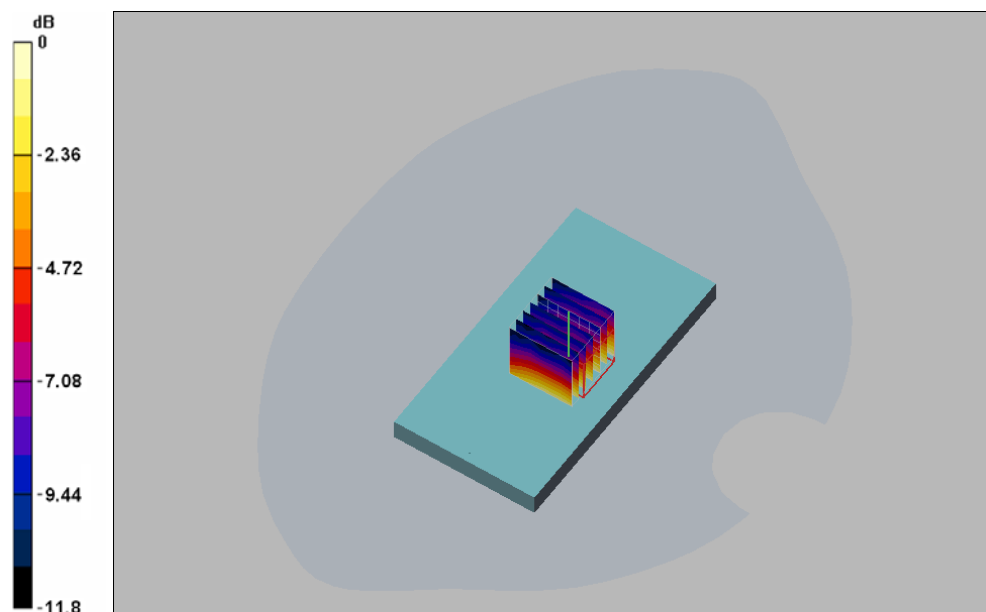
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.445 V/m; Power Drift = -0.054 dB

Peak SAR (extrapolated) = 0.528 mW/g

SAR(1 g) = 0.496W/g; SAR(10 g) = 0.308 mW/g

Maximum value of SAR (measured) = 0.512 mW/g



0 dB = 0.512mW/g

GSM 1900 (Back upward, Bottom)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GSM 1900; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.533$ mho/m; $\epsilon_r = 53.49$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.625 mW/g

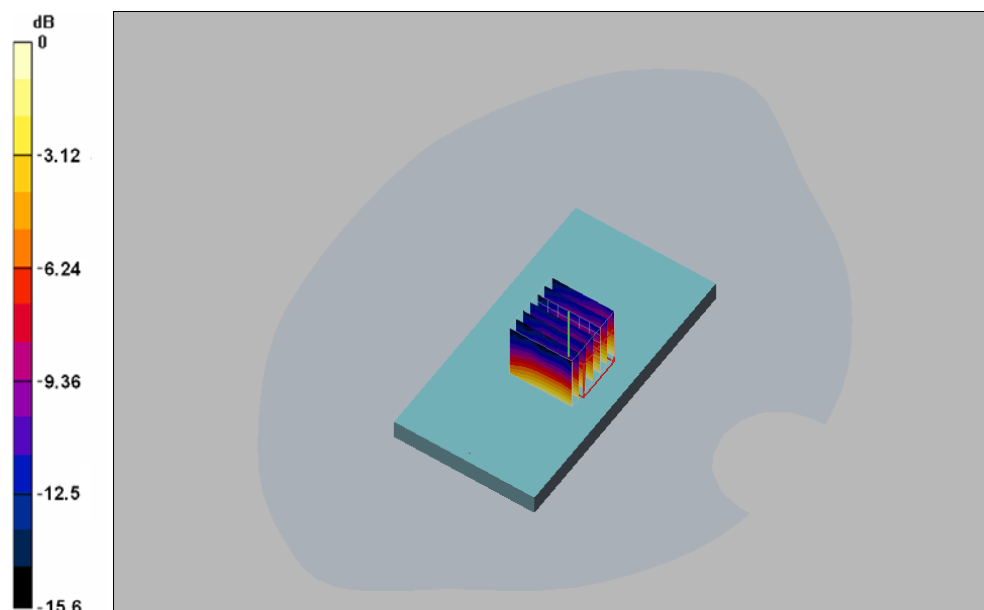
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.102 V/m; Power Drift = -0.097 dB

Peak SAR (extrapolated) = 0.639 mW/g

SAR(1 g) = 0.598mW/g; SAR(10 g) = 0.344 mW/g

Maximum value of SAR (measured) = 0.614 mW/g



0 dB = 0.614mW/g

GSM 1900 (Face upward, Mid)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880.0$ MHz; $\sigma = 1.536$ mho/m; $\epsilon_r = 53.45$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.520 mW/g

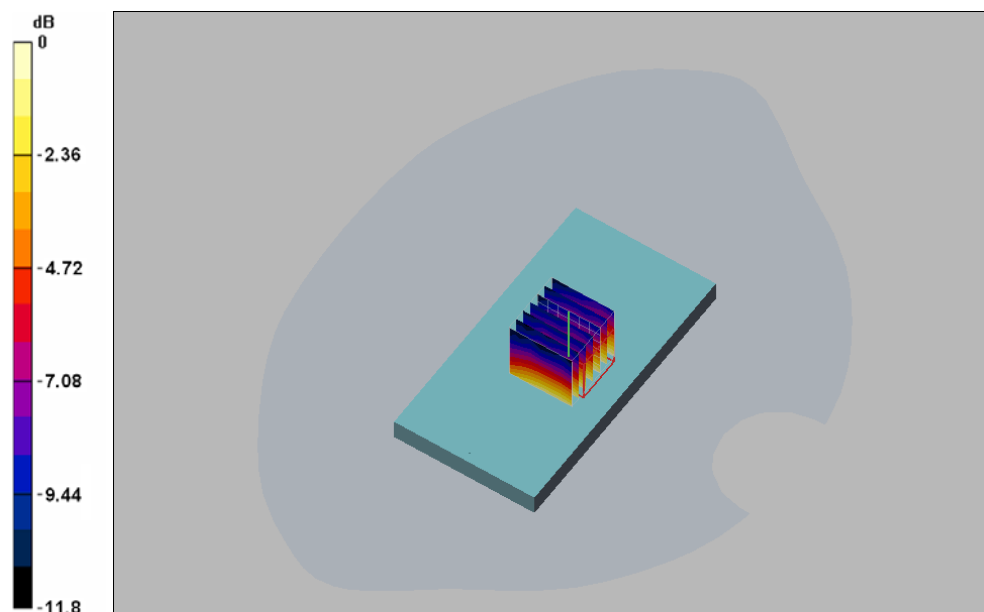
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.943 V/m; Power Drift = -0.052 dB

Peak SAR (extrapolated) = 0.512 mW/g

SAR(1 g) = 0.476W/g; SAR(10 g) = 0.299 mW/g

Maximum value of SAR (measured) = 0.498 mW/g



0 dB = 0.498mW/g

GSM 1900 (Back upward, Mid)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GSM 1900; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880.0$ MHz; $\sigma = 1.536$ mho/m; $\epsilon_r = 53.45$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.635 mW/g

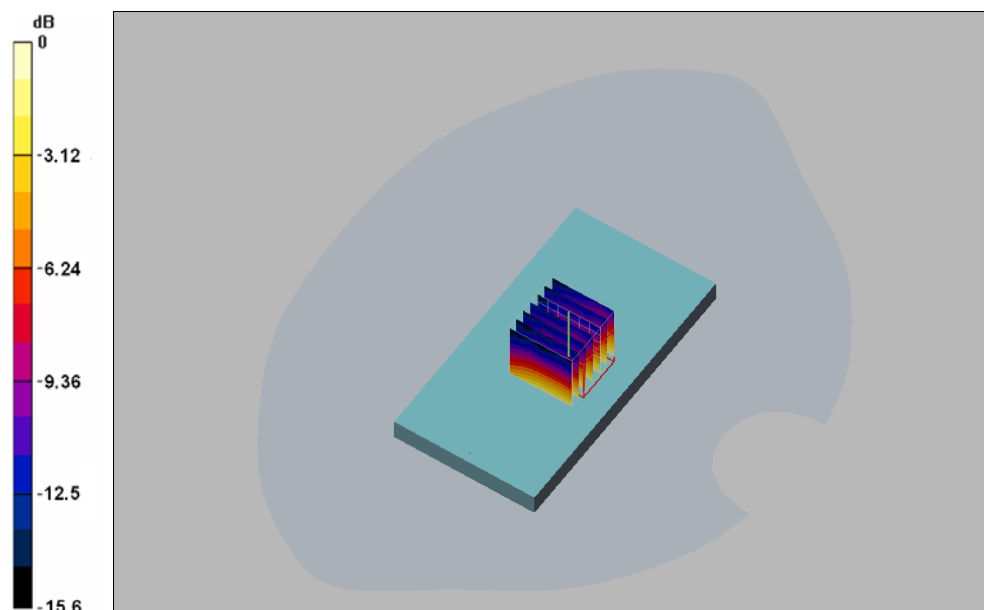
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.378 V/m; Power Drift = -0.103 dB

Peak SAR (extrapolated) = 0.651 mW/g

SAR(1 g) = 0.604mW/g; SAR(10 g) = 0.438 mW/g

Maximum value of SAR (measured) = 0.627 mW/g



0 dB = 0.614mW/g

GSM 1900 (Face upward, Top)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.540$ mho/m; $\epsilon_r = 53.42$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.482 mW/g

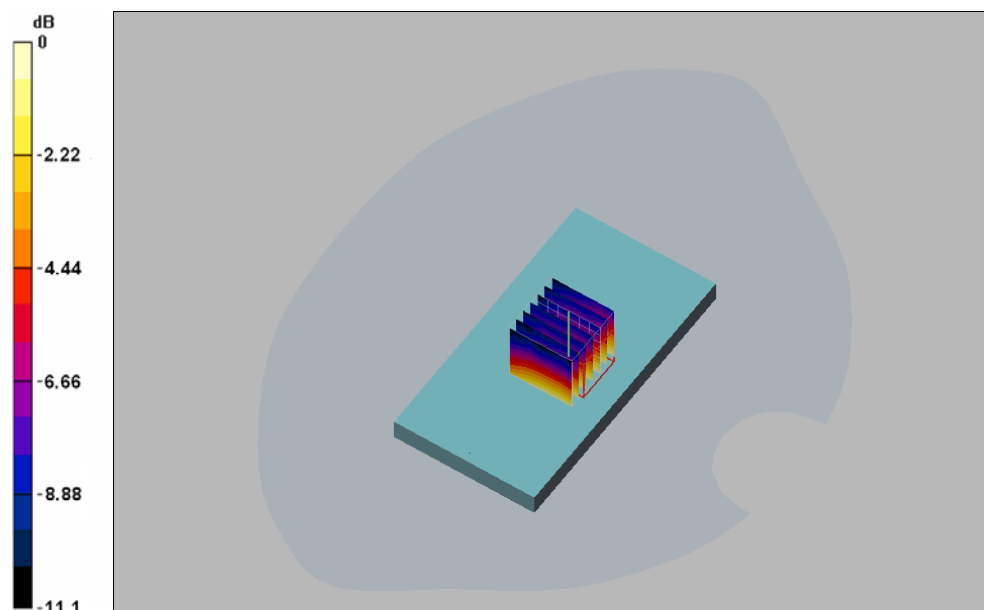
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.922 V/m; Power Drift = -0.073 dB

Peak SAR (extrapolated) = 0.512 mW/g

SAR(1 g) = 0.413W/g; SAR(10 g) = 0.243 mW/g

Maximum value of SAR (measured) = 0.442 mW/g



0 dB = 0.442mW/g

GSM 1900 (Back upward, Top)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GSM 1900; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.540$ mho/m; $\epsilon_r = 53.42$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.622 mW/g

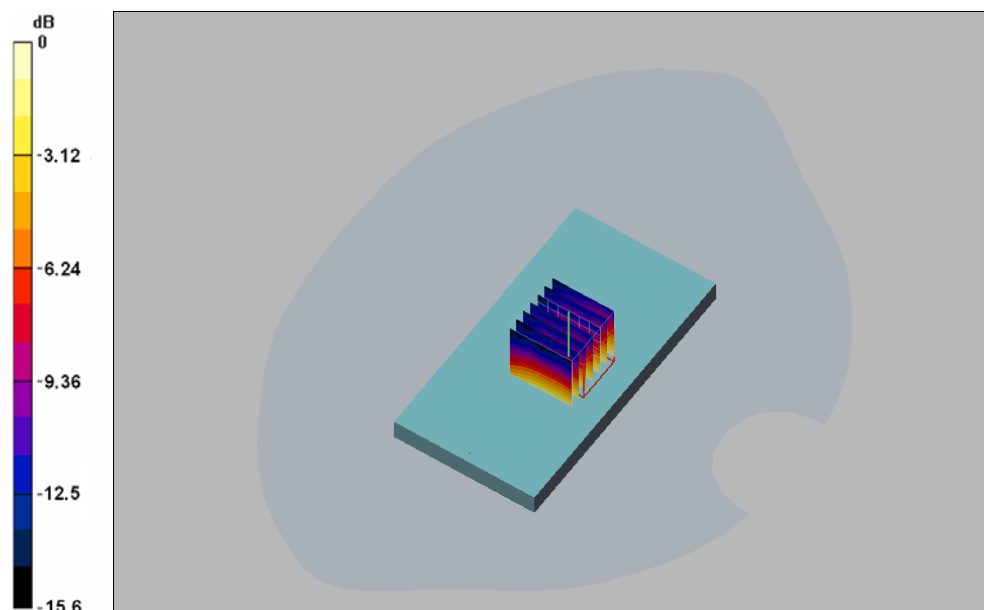
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.012 V/m; Power Drift = -0.092 dB

Peak SAR (extrapolated) = 0.639 mW/g

SAR(1 g) = 0.598mW/g; SAR(10 g) = 0.438 mW/g

Maximum value of SAR (measured) = 0.612 mW/g



0 dB = 0.612mW/g

GPRS 850 1U4D (Face upward, Bottom)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 850-1slot; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.962$ mho/m; $\epsilon_r = 55.26$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.129 mW/g

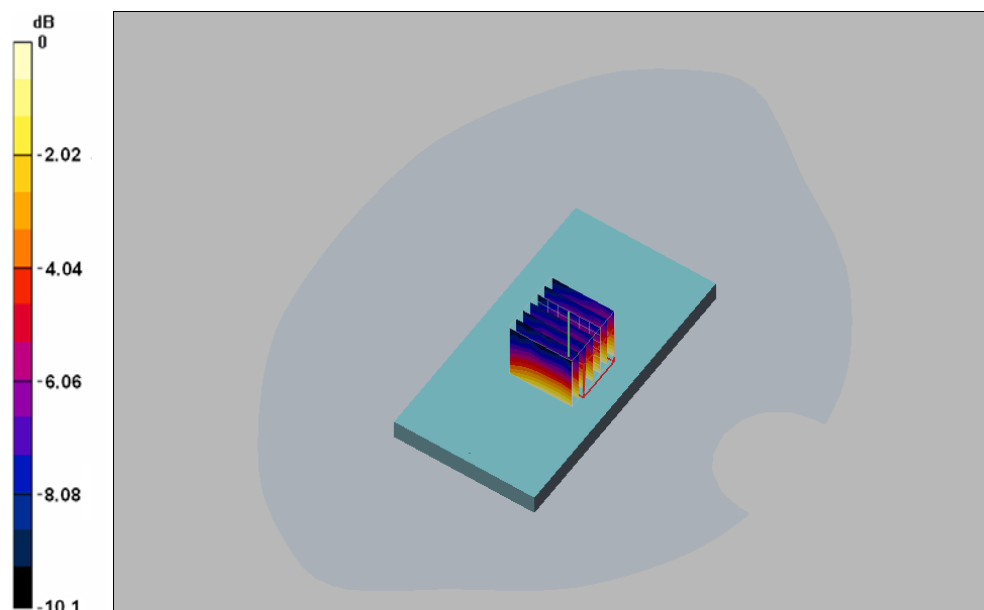
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.068 V/m; Power Drift = -0.043 dB

Peak SAR (extrapolated) = 0.136 mW/g

SAR(1 g) = 0.114mW/g; SAR(10 g) = 0.082 mW/g

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



0 dB = 0.122mW/g

GPRS 850 1U4D (Back upward, Bottom)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 850-1slot; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.962$ mho/m; $\epsilon_r = 55.26$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.152 mW/g

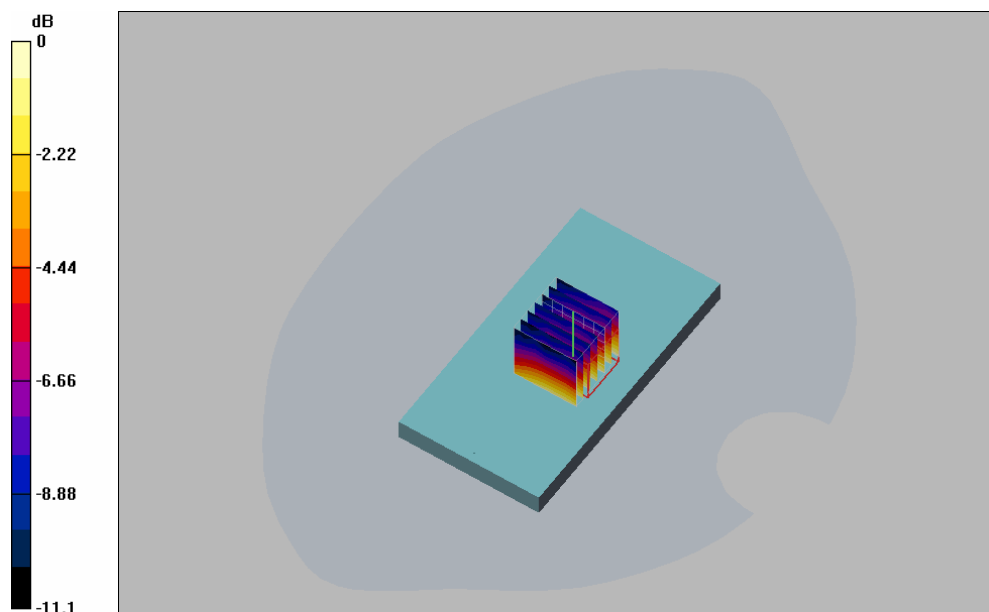
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.328 V/m; Power Drift = -0.134 dB

Peak SAR (extrapolated) = 0.172 mW/g

SAR(1 g) = 0.133mW/g; SAR(10 g) = 0.092 mW/g

Maximum value of SAR (measured) = 0.141 mW/g



0 dB = 0.141mW/g

GPRS 850 1U4D (Face upward, Mid)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 850-1slot; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.965$ mho/m; $\epsilon_r = 55.19$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.168 mW/g

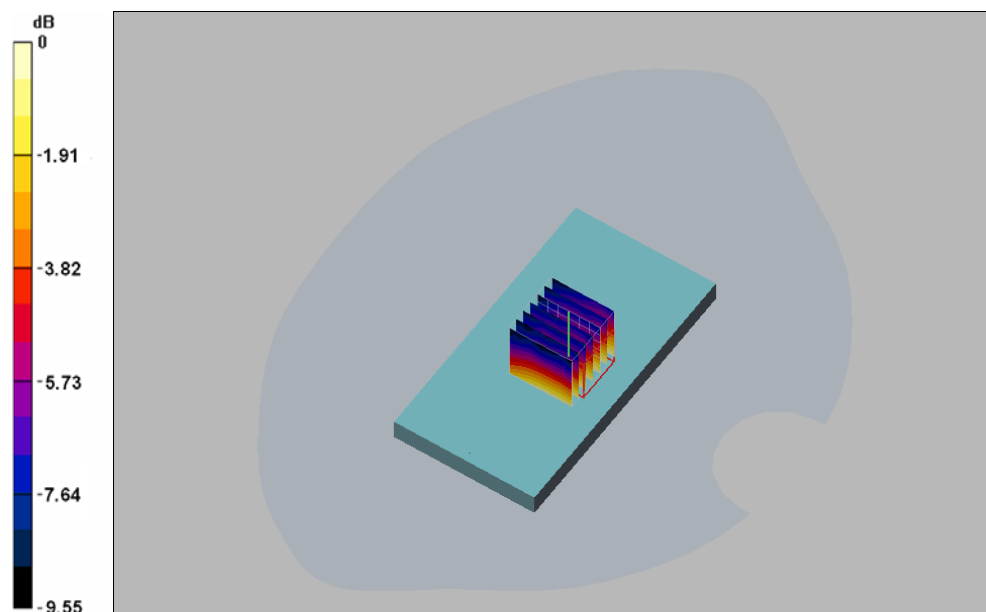
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.462 V/m; Power Drift = -0.033 dB

Peak SAR (extrapolated) = 0.176 mW/g

SAR(1 g) = 0.137mW/g; SAR(10 g) = 0.093 mW/g

Maximum value of SAR (measured) = 0.156 mW/g



0 dB = 0.156mW/g

GPRS 850 1U4D (Back upward, Mid)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 850-1slot; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.965$ mho/m; $\epsilon_r = 55.19$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.185 mW/g

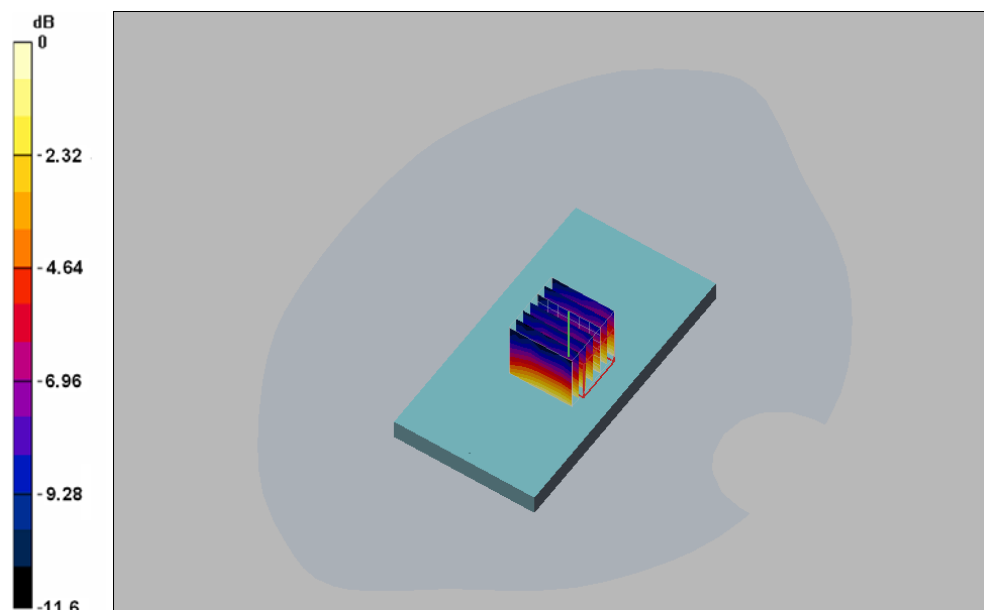
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.023 V/m; Power Drift = -0.082 dB

Peak SAR (extrapolated) = 0.196 mW/g

SAR(1 g) = 0.169mW/g; SAR(10 g) = 0.112 mW/g

Maximum value of SAR (measured) = 0.180 mW/g



0 dB = 0.180mW/g

GPRS 850 1U4D (Face upward, Top)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 850-1slot; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.967$ mho/m; $\epsilon_r = 55.16$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.179 mW/g

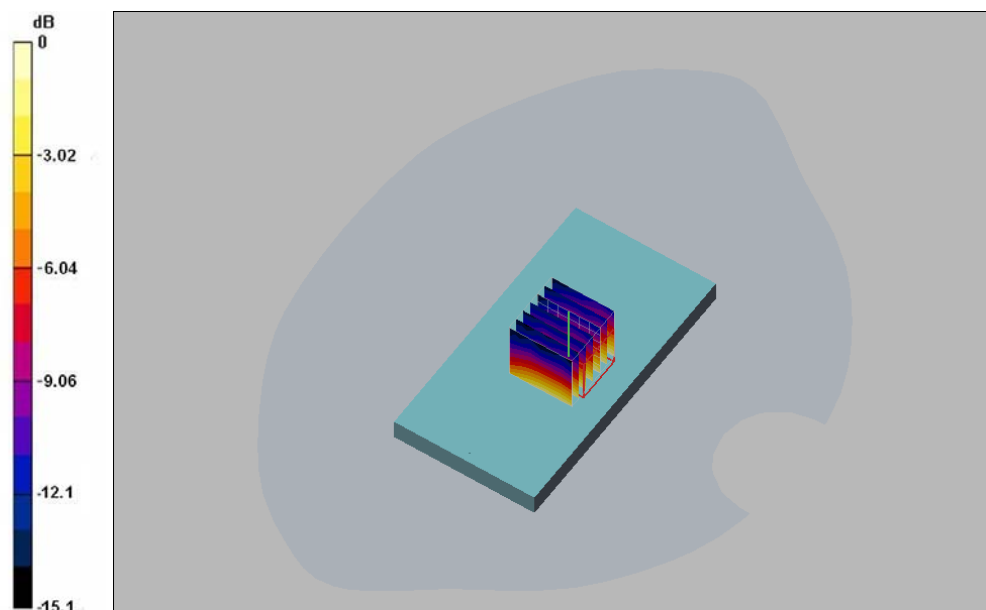
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.132 V/m; Power Drift = -0.044 dB

Peak SAR (extrapolated) = 0.195 mW/g

SAR(1 g) = 0.165W/g; SAR(10 g) = 0.108 mW/g

Maximum value of SAR (measured) = 0.172 mW/g



0 dB = 0.172mW/g

GPRS 850 1U4D (Back upward, Top)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 850-1slot; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.967$ mho/m; $\epsilon_r = 55.16$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

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

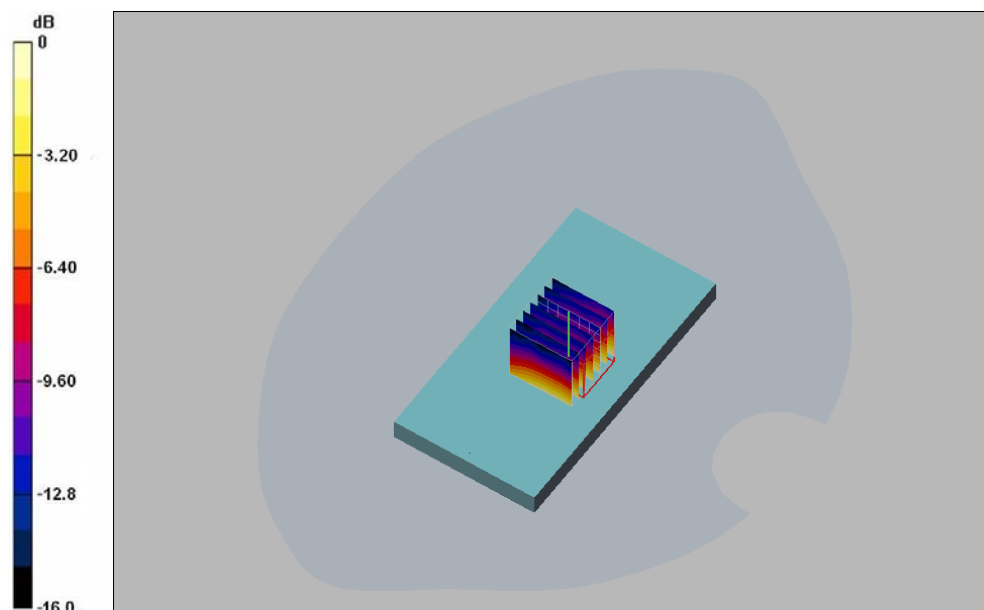
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.196 V/m; Power Drift = -0.091 dB

Peak SAR (extrapolated) = 0.238 mW/g

SAR(1 g) = 0.190mW/g; SAR(10 g) = 0.137 mW/g

Maximum value of SAR (measured) = 0.206 mW/g



0 dB = 0.206mW/g

GPRS 1900 1U4D (Face upward, Bottom)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 1900-1slot; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.533$ mho/m; $\epsilon_r = 53.49$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.426 mW/g

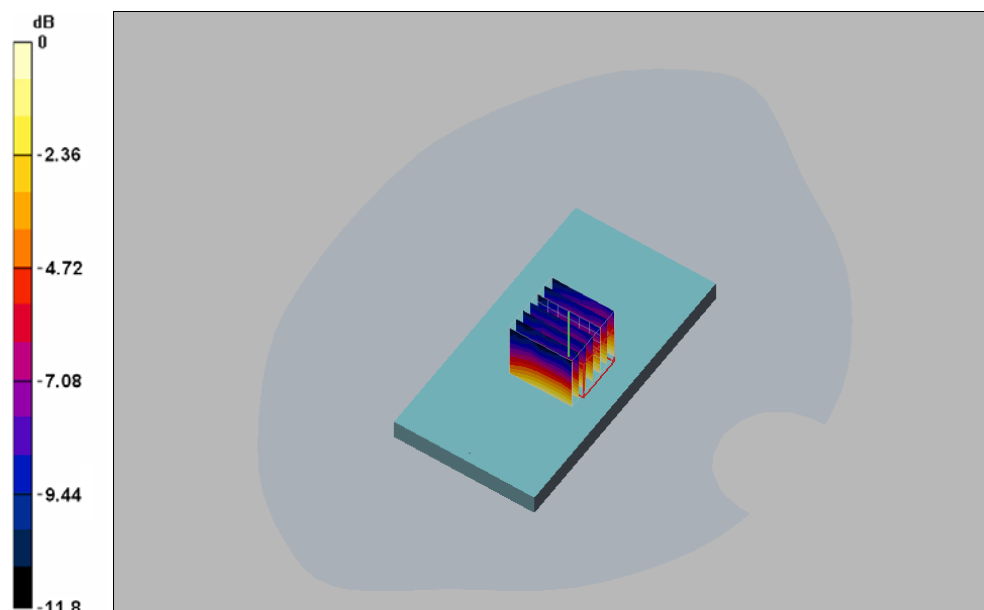
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.984 V/m; Power Drift = -0.065 dB

Peak SAR (extrapolated) = 0.432 mW/g

SAR(1 g) = 0.411W/g; SAR(10 g) = 0.292 mW/g

Maximum value of SAR (measured) = 0.419 mW/g



0 dB = 0.419mW/g

GPRS 1900 1U4D (Back upward, Bottom)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 1900-1slot; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.533$ mho/m; $\epsilon_r = 53.49$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.586 mW/g

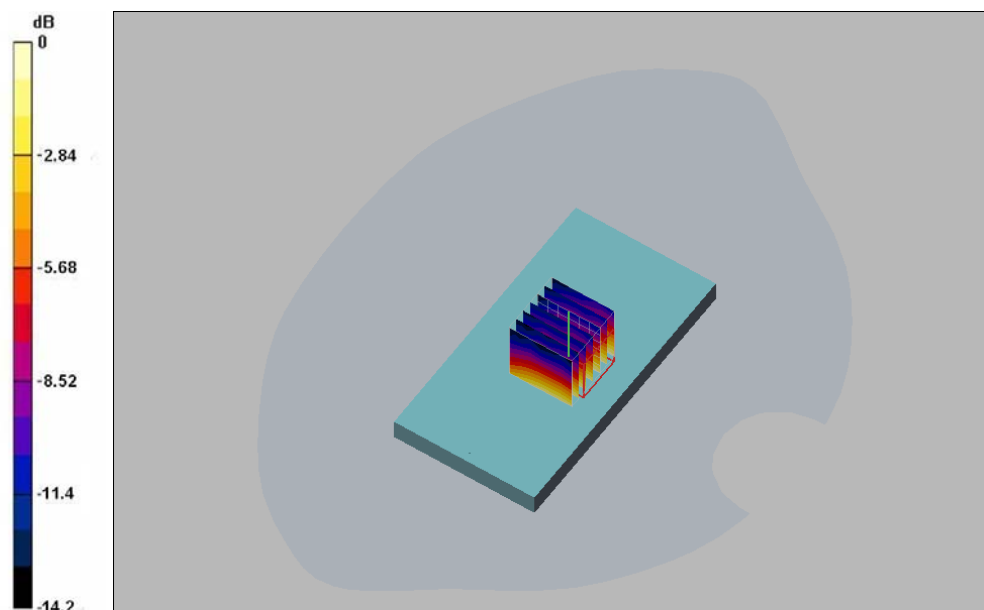
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.021 V/m; Power Drift = -0.069 dB

Peak SAR (extrapolated) = 0.603 mW/g

SAR(1 g) = 0.561mW/g; SAR(10 g) = 0.365 mW/g

Maximum value of SAR (measured) = 0.574 mW/g



0 dB = 0.574mW/g

GPRS 1900 1U4D (Face upward, Mid)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 1900-1slot; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880.0$ MHz; $\sigma = 1.536$ mho/m; $\epsilon_r = 53.45$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.432 mW/g

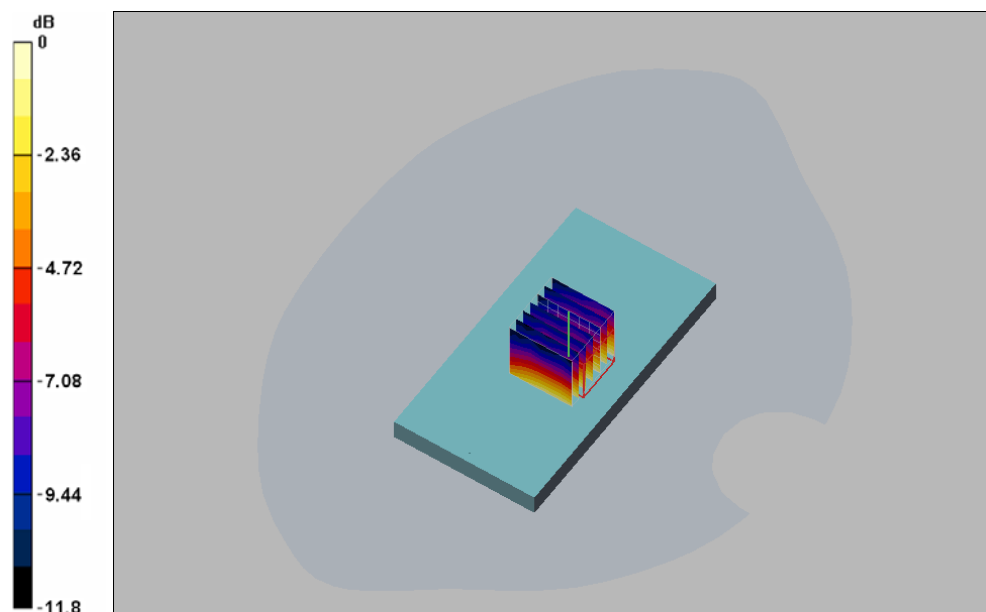
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.943 V/m; Power Drift = -0.052 dB

Peak SAR (extrapolated) = 0.451 mW/g

SAR(1 g) = 0.409W/g; SAR(10 g) = 0.278 mW/g

Maximum value of SAR (measured) = 0.418 mW/g



0 dB = 0.418mW/g

GPRS 1900 1U4D (Back upward, Mid)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 1900-1slot; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880.0$ MHz; $\sigma = 1.536$ mho/m; $\epsilon_r = 53.45$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.578 mW/g

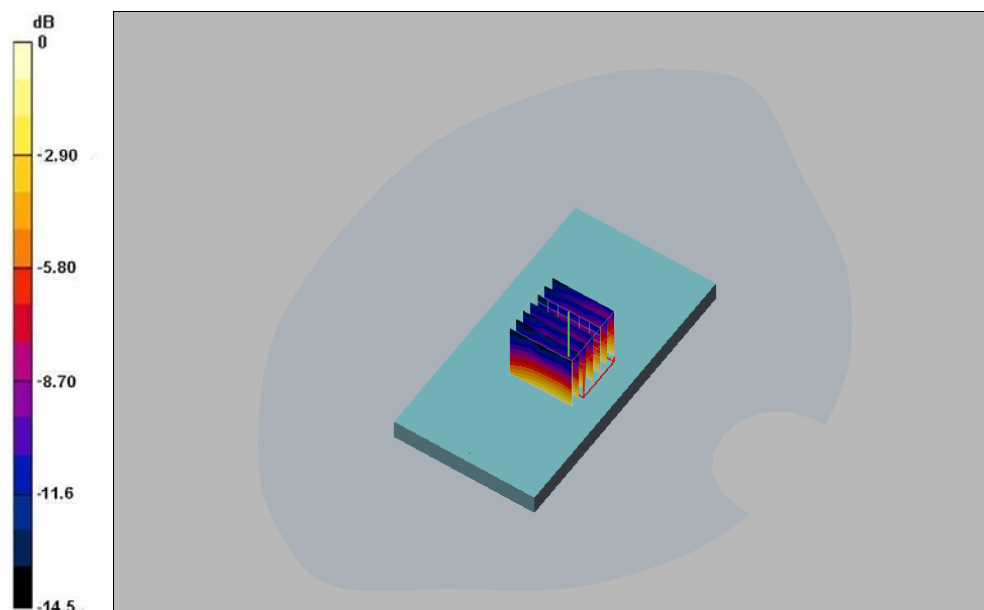
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.038 V/m; Power Drift = -0.093 dB

Peak SAR (extrapolated) = 0.643 mW/g

SAR(1 g) = 0.512mW/g; SAR(10 g) = 0.383 mW/g

Maximum value of SAR (measured) = 0.527 mW/g



0 dB = 0.527mW/g

GPRS 1900 1U4D (Face upward, Top)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 1900-1slot; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.540$ mho/m; $\epsilon_r = 53.42$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.488 mW/g

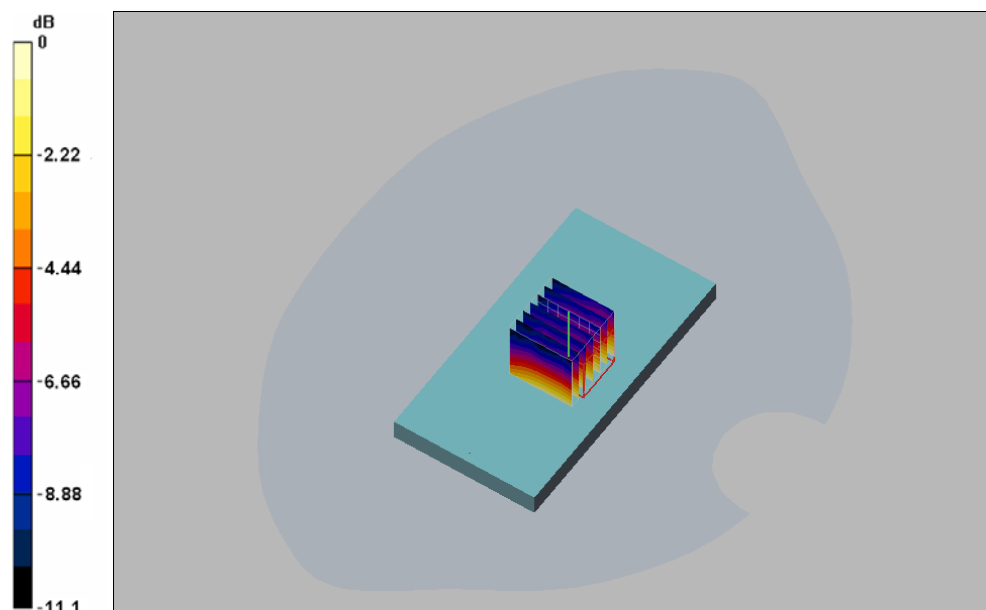
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.392 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 0.549 mW/g

SAR(1 g) = 0.398W/g; SAR(10 g) = 0.246 mW/g

Maximum value of SAR (measured) = 0.426 mW/g



0 dB = 0.426mW/g

GPRS 1900 1U4D (Back upward, Top)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 1900-1slot; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.540$ mho/m; $\epsilon_r = 53.42$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.498 mW/g

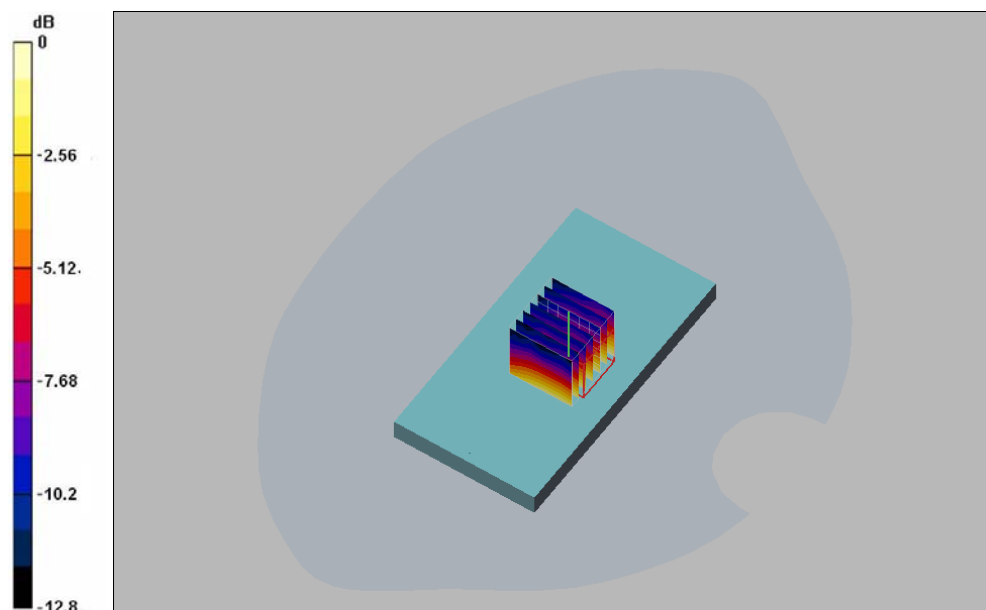
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.302 V/m; Power Drift = -0.062 dB

Peak SAR (extrapolated) = 0.514 mW/g

SAR(1 g) = 0.465mW/g; SAR(10 g) = 0.332 mW/g

Maximum value of SAR (measured) = 0.486 mW/g



0 dB = 0.486mW/g

GPRS 850 2U3D (Face upward, Bottom)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 850-2slots; Frequency: 824.2 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.962$ mho/m; $\epsilon_r = 55.26$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

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

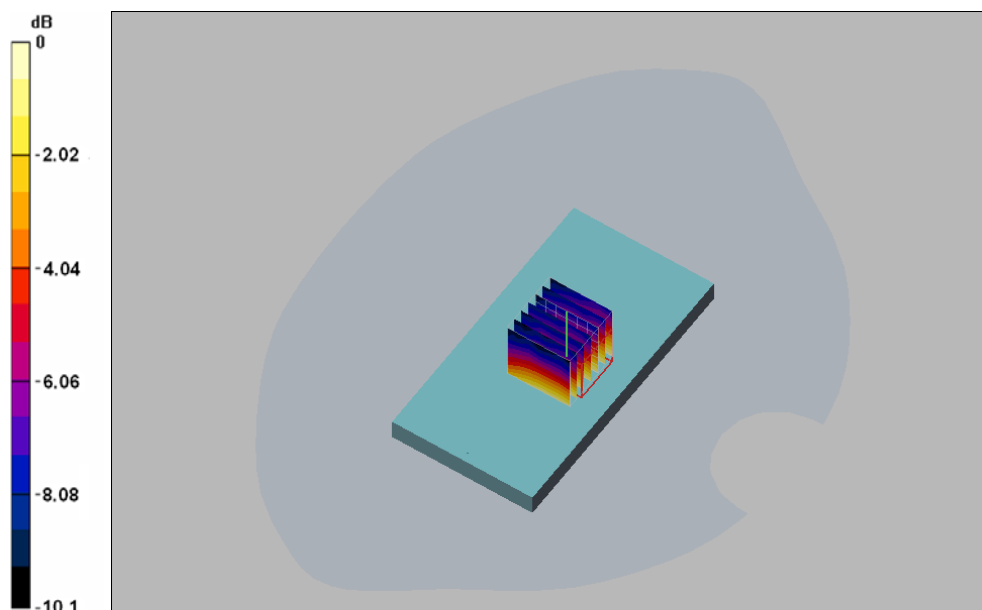
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.286 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 0.174 mW/g

SAR(1 g) = 0.129mW/g; SAR(10 g) = 0.092 mW/g

Maximum value of SAR (measured) = 0.142 mW/g



0 dB = 0.142mW/g

GPRS 850 2U3D (Back upward, Bottom)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 850-2slots; Frequency: 824.2 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.962$ mho/m; $\epsilon_r = 55.26$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.192 mW/g

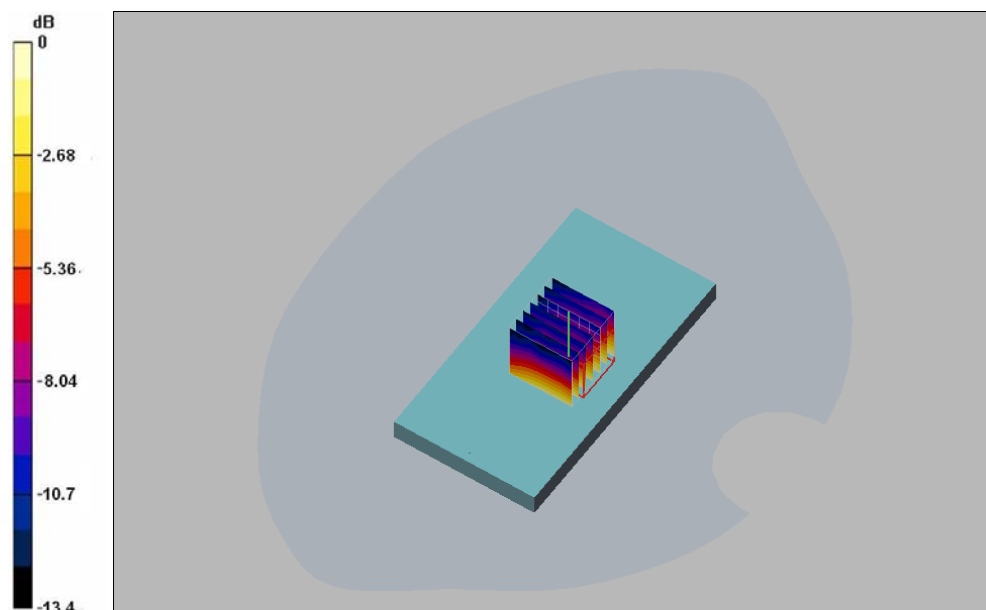
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.438 V/m; Power Drift = -0.064 dB

Peak SAR (extrapolated) = 0.207 mW/g

SAR(1 g) = 0.167mW/g; SAR(10 g) = 0.122 mW/g

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



0 dB = 0.184mW/g

GPRS 850 2U3D (Face upward, Mid)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 850-2slots; Frequency: 824.2 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.965$ mho/m; $\epsilon_r = 55.19$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.172 mW/g

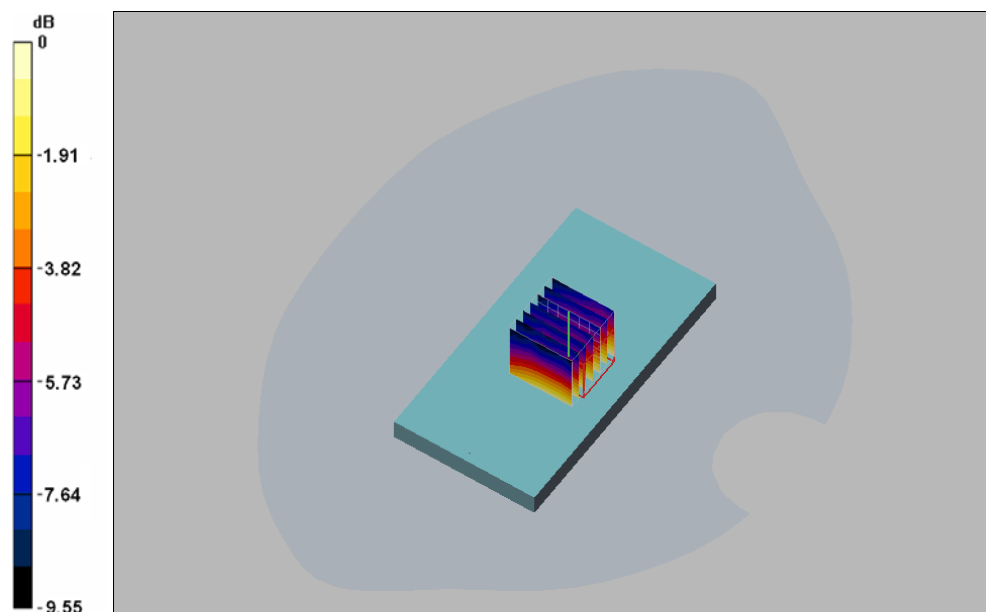
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.352 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 0.188 mW/g

SAR(1 g) = 0.143mW/g; SAR(10 g) = 0.102 mW/g

Maximum value of SAR (measured) = 0.156 mW/g



0 dB = 0.156mW/g

GPRS 850 2U3D (Back upward, Mid)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 850-2slots; Frequency: 824.2 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.965$ mho/m; $\epsilon_r = 55.19$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.215 mW/g

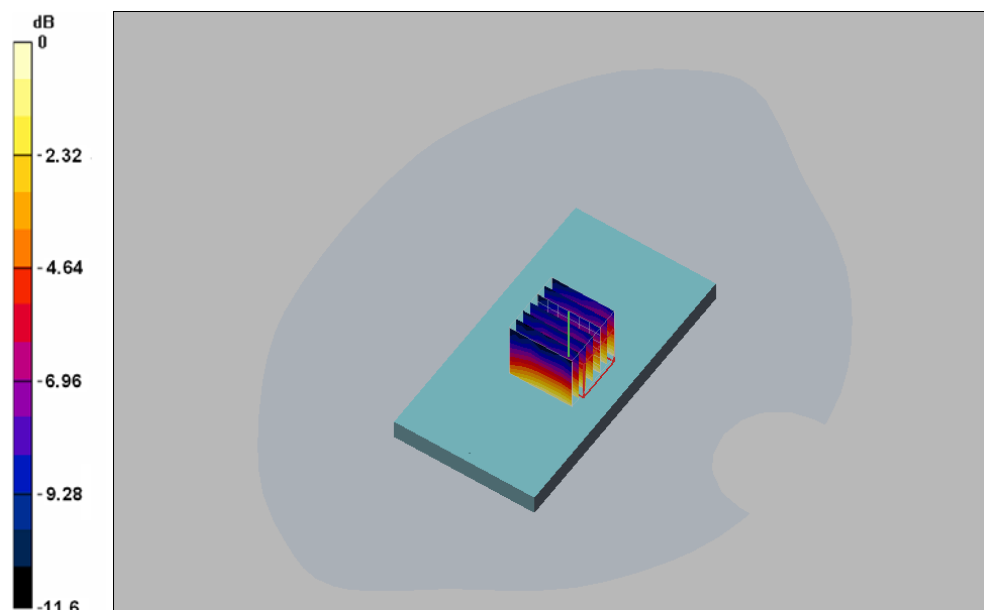
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.145 V/m; Power Drift = -0.052 dB

Peak SAR (extrapolated) = 0.236 mW/g

SAR(1 g) = 0.188mW/g; SAR(10 g) = 0.132 mW/g

Maximum value of SAR (measured) = 0.204 mW/g



0 dB = 0.204mW/g

GPRS 850 2U3D (Face upward, Top)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 850-2slots; Frequency: 824.2 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.967$ mho/m; $\epsilon_r = 55.16$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

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

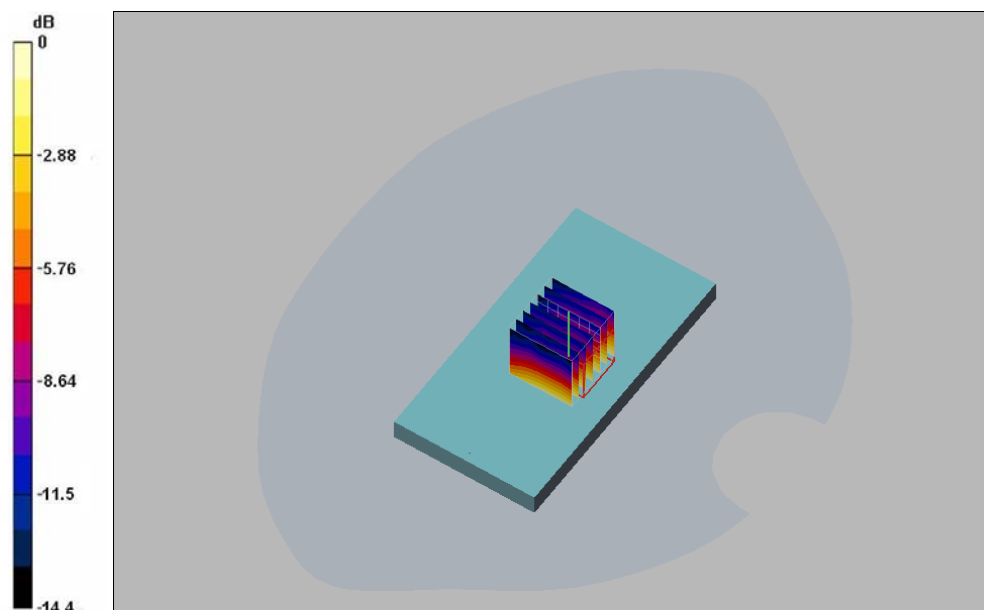
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.412 V/m; Power Drift = -0.044 dB

Peak SAR (extrapolated) = 0.292 mW/g

SAR(1 g) = 0.220W/g; SAR(10 g) = 0.143 mW/g

Maximum value of SAR (measured) = 0.237 mW/g



0 dB = 0.172mW/g

GPRS 850 2U3D (Back upward, Top)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 850-2slots; Frequency: 824.2 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.967$ mho/m; $\epsilon_r = 55.16$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.81, 5.81, 5.81); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

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

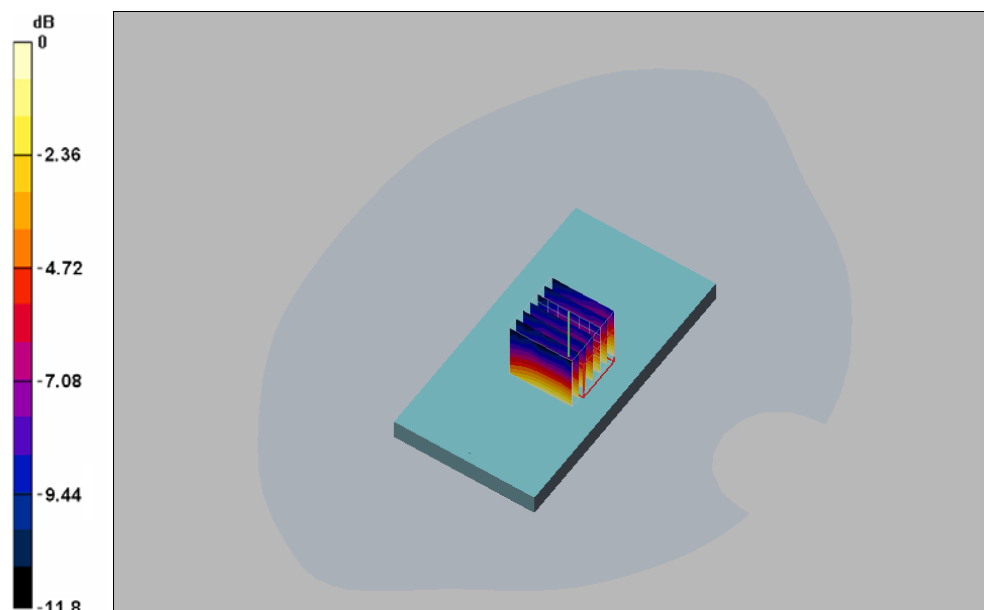
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.923 V/m; Power Drift = -0.046 dB

Peak SAR (extrapolated) = 0.293 mW/g

SAR(1 g) = 0.246W/g; SAR(10 g) = 0.194 mW/g

Maximum value of SAR (measured) = 0.258 mW/g



0 dB = 0.258mW/g

GPRS 1900 2U3D (Face upward, Bottom)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 1900-2slots; Frequency: 1850.2 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.533$ mho/m; $\epsilon_r = 53.49$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.476 mW/g

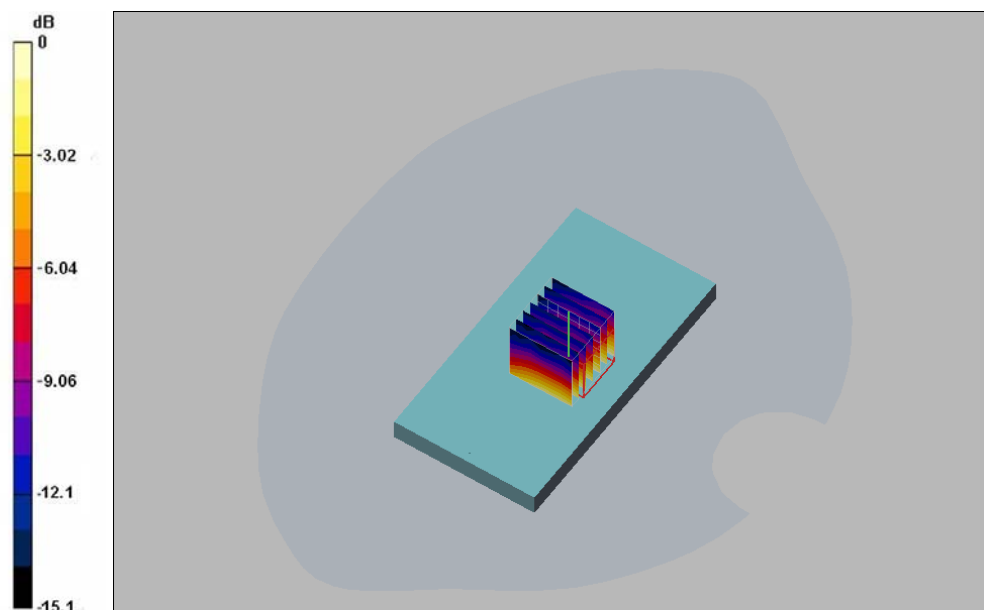
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.193 V/m; Power Drift = -0.066 dB

Peak SAR (extrapolated) = 0.516 mW/g

SAR(1 g) = 0.404W/g; SAR(10 g) = 0.293 mW/g

Maximum value of SAR (measured) = 0.428 mW/g



0 dB = 0.428mW/g

GPRS 1900 2U3D (Back upward, Bottom)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 1900-2slots; Frequency: 824.2 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.533$ mho/m; $\epsilon_r = 53.49$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.678 mW/g

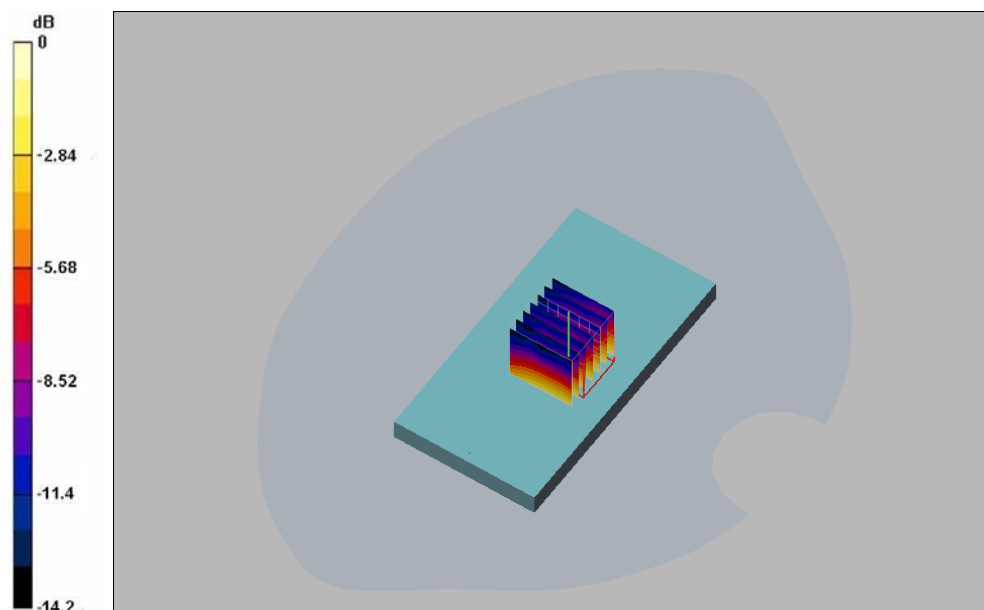
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.752 V/m; Power Drift = -0.064 dB

Peak SAR (extrapolated) = 0.712 mW/g

SAR(1 g) = 0.589mW/g; SAR(10 g) = 0.396 mW/g

Maximum value of SAR (measured) = 0.624 mW/g



0 dB = 0.624mW/g

GPRS 1900 2U3D (Face upward, Mid)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 1900-2slots; Frequency: 1850.2 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 1880.0$ MHz; $\sigma = 1.536$ mho/m; $\epsilon_r = 53.45$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.473 mW/g

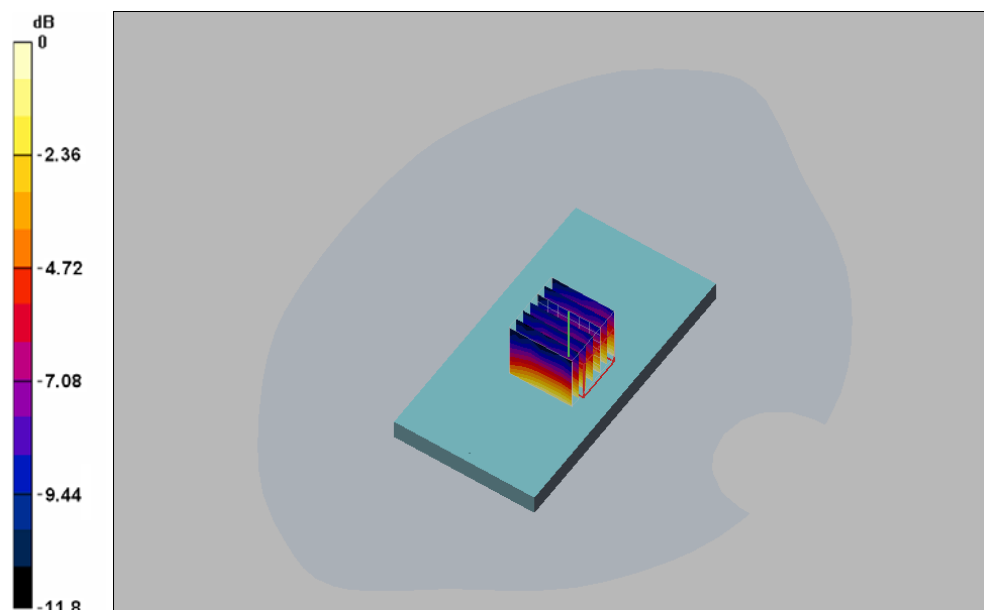
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.908 V/m; Power Drift = -0.002 dB

Peak SAR (extrapolated) = 0.495 mW/g

SAR(1 g) = 0.443W/g; SAR(10 g) = 0.282 mW/g

Maximum value of SAR (measured) = 0.458 mW/g



0 dB = 0.458mW/g

GPRS 1900 2U3D (Back upward, Mid)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 1900-2slots; Frequency: 824.2 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 1880.0$ MHz; $\sigma = 1.536$ mho/m; $\epsilon_r = 53.45$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.598 mW/g

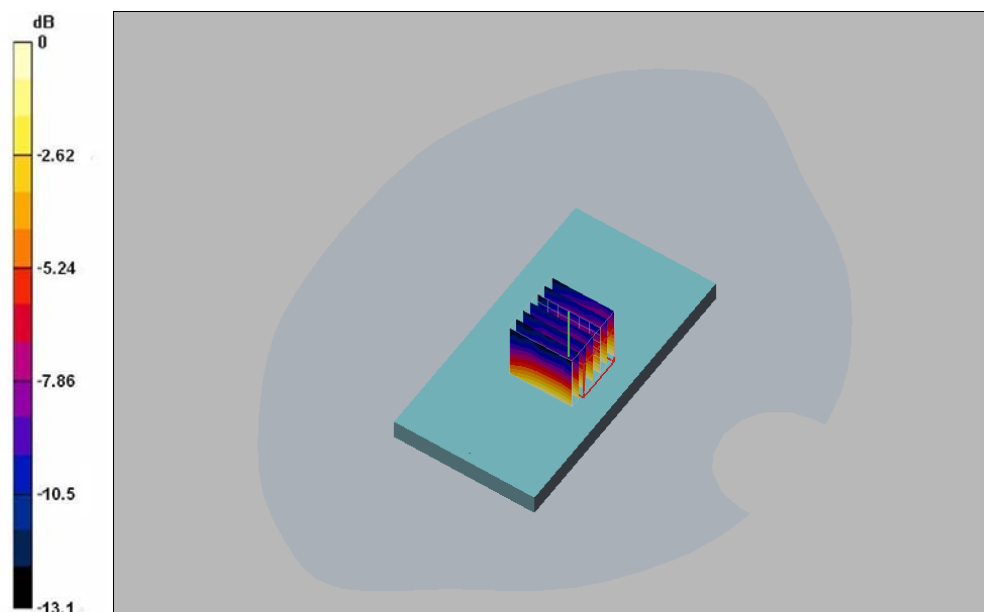
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.223 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 0.624 mW/g

SAR(1 g) = 0.540mW/g; SAR(10 g) = 0.383 mW/g

Maximum value of SAR (measured) = 0.562 mW/g



0 dB = 0.562mW/g

GPRS 1900 2U3D (Face upward, Top)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 1900-2slots; Frequency: 1850.2 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.540$ mho/m; $\epsilon_r = 53.42$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.428 mW/g

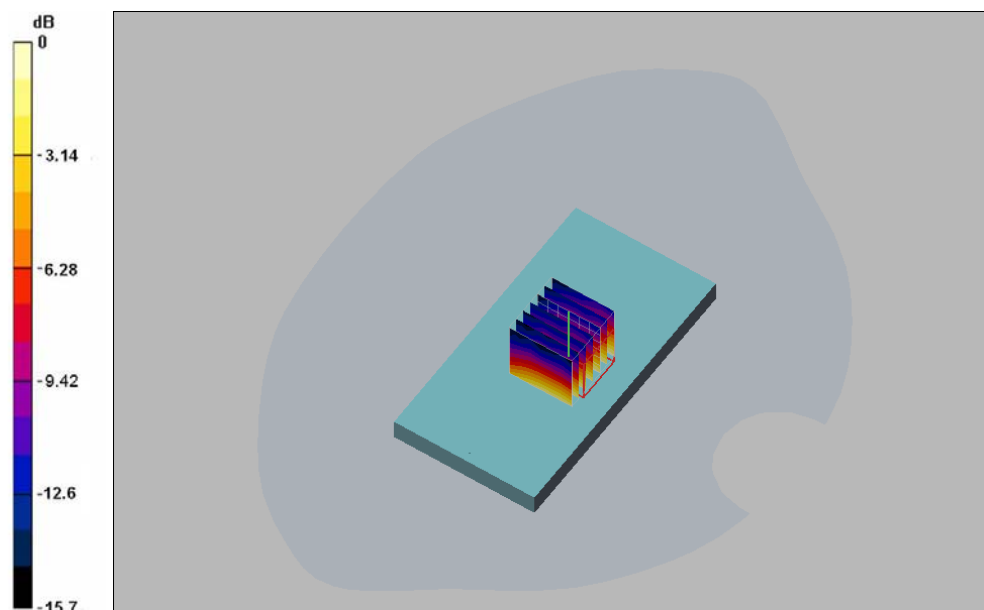
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.344 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.494 mW/g

SAR(1 g) = 0.388W/g; SAR(10 g) = 0.228 mW/g

Maximum value of SAR (measured) = 0.412 mW/g



0 dB = 0.412mW/g

GPRS 1900 2U3D (Back upward, Top)

DUT: SOS; Type: Sample; Serial: Not Specified

Communication System: GPRS 1900-2slots; Frequency: 824.2 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.540$ mho/m; $\epsilon_r = 53.42$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3028; ConvF(5.83, 5.83, 5.83); Calibrated: 4/12/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn689; Calibrated: 4/13/2012
- Phantom: SAM with TP1432; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 53; Post processing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.634 mW/g

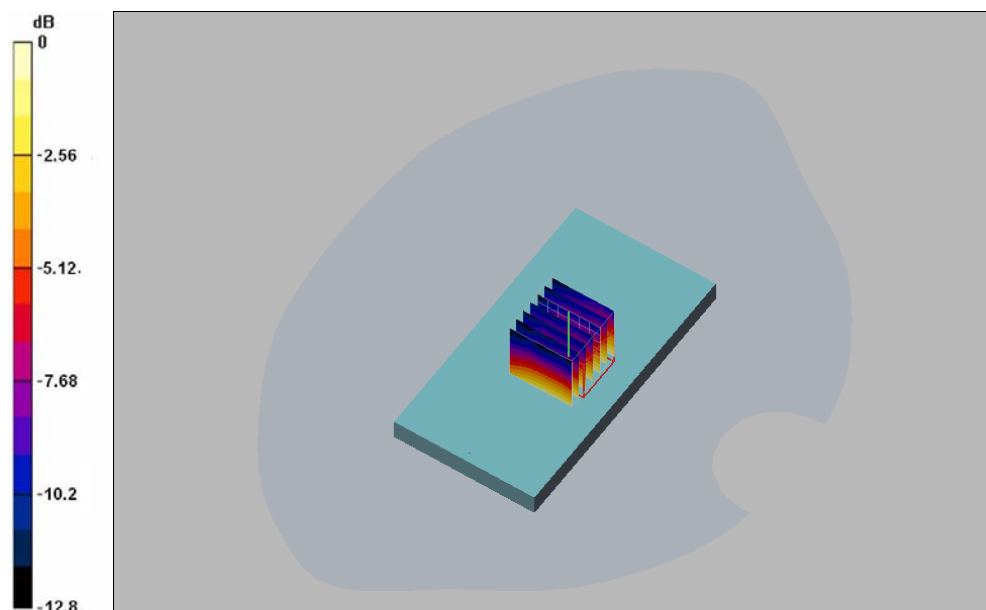
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.554 V/m; Power Drift = -0.065 dB

Peak SAR (extrapolated) = 0.687 mW/g

SAR(1 g) = 0.566mW/g; SAR(10 g) = 0.398 mW/g

Maximum value of SAR (measured) = 0.584 mW/g



0 dB = 0.584mW/g

ANNEX D

of

ShenZhen Electronic Product Quality Testing Center

CONFORMANCE TEST REPORT FOR

HUMAN EXPOSURE TO ELECTROMAGNETIC FIELDS

FCC2012-8029SAR

GSM Tracker

Type Name: PRIME AT PLT

Hardware Version: V2.1

Software Version: V01B15T01

Calibration Certificate of DAE and Probe

This Annex consists of 3 pages

Date of Report: 2012-10-17

工业和信息化部通信计量中心
Telecommunication Metrology Center of MIIT



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E-mail: Info@emcite.com Http://www.emcite.com

Client **Sunway (Auden)**Certificate No: **DAE4-689_Apr12****CALIBRATION CERTIFICATE**

Object: **DAE4 - SN: 689**

Calibration Procedure(s): **TMC-XZ-01-029**
Calibration procedure for the data acquisition electronics (DAE)

Calibration date: **April 13, 2012**

Condition of the calibrated item: **In Tolerance**

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22 ± 3) $^{\circ}\text{C}$ and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Multimeter 3458A	MY45041463	11-Nov-11 (TMC, No: DLsc2011-1115)	Nov-12
DC POWER SUPPLY 66321D	MY43001657	11-Nov-11 (TMC, No: JZ11-290)	Nov-12
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Calibrator Box	/	17-Jun-11 (TMC, in house check)	In house check Jun-12

	Name	Function	Signature
Calibrated by:	Lin Hao	SAR Test Engineer	
Reviewed by:	Qi Dianyuan	SAR Project Leader	
Approved by:	Lu Bingsong	Deputy Director of the laboratory	

Issued: April 13, 2012

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: DAE4-689_Apr12

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工业和信息化部通信计量中心
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Client **Sunway (Auden)**Certificate No: **ES3-3028_Apr12****CALIBRATION CERTIFICATE**Object **ES3DV3 - SN: 3028**Calibration Procedure(s)
TMC-XZ-01-028
Calibration procedure for dosimetric E-field probesCalibration date: **April 12, 2012**Condition of the calibrated item **In Tolerance**

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22 ± 3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	SN.	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRVD	102083	11-Sep-11 (TMC, No.JZ11-443)	Sep-12
Power sensor NRV-Z5	100542	11-Sep-11 (TMC, No. JZ11-443)	Sep-12
Reference Probe ES3DV3	SN 3149	6-Feb-12 (TMC, ES3-3149_Feb12)	Feb-13
DAE4	SN 771	20-Nov-11 (TMC, No.JZ11-653)	Nov-12
RF generator E4438C	MY49070393	12-Nov-11 (TMC, No.JZ11-394)	Nov-12
Network Analyzer E5071C	MY46110673	15-Feb-12 (TMC, No.JZ12-781)	Feb-13

	Name	Function	Signature
Calibrated by:	Lin Hao	SAR Test Engineer	
Reviewed by:	Qi Dianyuan	SAR Project Leader	
Approved by:	Lu Bingsong	Deputy Director of the laboratory	

Issued: April 12, 2012

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: ES3-3028_Apr12

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