



TEST REPORT FROM RFI GLOBAL SERVICES LTD

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Test Report Serial No:
RFI/SAR2/RP76288JD01A

Supersedes Test Report Serial No:
RFI/SAR1/RP76288JD01A

This Test Report Is Issued Under The Authority Of Scott D'Adamo, Group Service Manager Global Approvals:		
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Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

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Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Table of Contents

1. Customer Information	4
2. Equipment Under Test (EUT).....	5
3. Test Specification, Methods and Procedures	8
4. Deviations from the Test Specification	9
5. Operation and Configuration of the EUT during Testing	10
6. Summary of Test Results.....	12
7. Measurements, Examinations and Derived Results.....	13
8. Measurement Uncertainty.....	22
Appendix 1. Test Equipment Used.....	24
Appendix 2. Measurement Methods	27
Appendix 3. SAR Distribution Scans	29
Appendix 4. Photographs	137
Appendix 5. Validation of System	156
Appendix 6. Simulated Tissues.....	166
Appendix 7. DASY4 System Details.....	167

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

1. Customer Information

Company Name:	IP Wireless (UK) Ltd.
Address:	Unit 7 Greenways Business Park Bellinger Close Chippenham Wiltshire SN15 1BN

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

2. Equipment Under Test (EUT)

The following information (with the exception of the date of receipt) has been supplied by the customer:

2.1. Identification of Equipment Under Test (EUT)

Description:	USB Dongle
Brand Name:	IP Wireless (UK) Ltd.
Model Name or Number:	ADT
Serial Number:	ADWA928000816 (PCB Serial Number)
IMEI Number:	Not Applicable
Hardware Version Number:	Version 1
Software Version Number:	5.6.3
Hardware Revision of GSM Module:	Not Applicable
Software Revision of GSM Module:	Not Applicable
FCC ID Number:	PKTUSBSTKADT
Country of Manufacture:	None Stated
Date of Receipt:	03 November 2009

2.2. Description of EUT

The Equipment Under Test is a USB Dongle Stick Modem with TDCDMA 2.5GHz band support.

2.3. Modifications Incorporated in the EUT

There were no modifications incorporated in the EUT.

2.4. Accessories

The following accessories were supplied with the EUT during testing:

Description:	USB Cable
Brand Name:	None Stated on cable
Model Name or Number:	None Stated on cable
Serial Number:	Not Applicable
Cable Length and Type:	~132.5mm USB Cable
Country of Manufacture:	None Sated
Connected to Port	USB Port on Laptop to USB Connection on Dongle

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Support Equipment

The following support equipment was used to exercise the EUT during testing:

Description:	Laptop PC with Horizontal USB port
Brand Name:	Toshiba
Model Name or Number:	PSAAPE-00H00KEN
Serial Number:	67 0709710
Cable Length and Type:	Not Applicable
Connected to Port:	USB

Description:	Laptop PC with Vertical USB port
Brand Name:	Dell
Model Name or Number:	Latitude D620
Serial Number:	None Stated
Cable Length and Type:	Not Applicable
Connected to Port:	USB

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

2.5. Additional Information Related to Testing

Equipment Category	2.5 GHz TDCDMA		
Type of Unit	Portable Transceiver		
Intended Operating Environment:	Within the TDCDMA Emergency Services Coverage		
Transmitter Maximum Output Power Characteristics:	Low Chip Rate: 2.5GHz TDCDMA	24 dBm	
	High Chip Rate: 2.5GHz TDCDMA	24 dBm	
Transmitter Frequency Range:	Low Chip Rate: 2.5GHz TDCDMA	(2498 to 2688) MHz	
	High Chip Rate: 2.5GHz TDCDMA	(2501 to 2685) MHz	
Transmitter Frequency Allocation of EUT When Under Test:	Channel Number	Channel Description	Frequency (MHz)
	12494	Low	2498.8
	12965	Middle	2593
	13436	High	2687.2
	12507	Low	2501.4
	12965	Middle	2593
	13420	High	2684.6
Modulation(s):	QPSK, 16QAM, 64QAM: 100 Hz		
Modulation Scheme (Crest Factor):	QPSK, 16QAM, 64QAM, (6 Uplink Time slots, 9 Downlink Time Slot): 2.5		
Antenna Type:	Internal		
Antenna Length:	Unknown		
Number of Antenna Positions:	1		
Power Supply Requirement:	USB connector powered		
Battery Type(s):	None		

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

3. Test Specification, Methods and Procedures

3.1. Test Specification

Reference:	OET Bulletin 65 Supplement C: (2001-01)
Title:	Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
Purpose of Test:	To determine whether the equipment met the basic restrictions as defined in OET Bulletin 65 Supplement C: (2001-01) using the SAR averaging method as described in the test specification above.

3.2. Methods and Procedures Reference Documentation

The methods and procedures used were as detailed in:

Federal Communications Commission, "Evaluating compliance with FCC Guidelines for human exposure to radio frequency electromagnetic fields", OET Bulletin 65 Supplement C, FCC, Washington, D.C, 20554, 2001.

Thomas Schmid, Oliver Egger and Neils Kuster, "Automated E-field scanning system for dosimetric assessments", IEEE Transaction on microwave theory and techniques, Vol. 44, pp. 105-113, January 1996.

Neils Kuster, Ralph Kastle and Thomas Schmid, "Dosimetric evaluation of mobile communications equipment with know precision", IEICE Transactions of communications, Vol. E80-B, No.5, pp. 645-652, May 1997.

KDB 447498 D01 Mobile Portable RF Exposure v04

KDB 447498 D02 SAR Procedures for Dongle Xmtr v02

KDB 450824 D01 SAR Prob Cal and Ver Meas v01r01

KDB 450824 D02 Dipole SAR Validation Verification V01

3.3. Definition of Measurement Equipment

The measurement equipment used complied with the requirements of the standards referenced in the methods & procedures section above. Appendix 1 contains a list of the test equipment used.

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

4. Deviations from the Test Specification

Test was performed as per "FCC KDB 447498 D01 Mobile Portable RF Exposure v04", "FCC KDB 447498 D02 SAR Procedures for Dongle Xmtr v02" and according to the body-worn procedures in consideration with FCC KDB 450824 D01 and 450824 D02.

Prior to commencement of SAR testing the FCC was contacted to request permission to test the USB dongle using TDCDMA technology with a 40% duty cycle. The following tracking number KDB 451086 reference was assigned.

All edges of the USB dongle were evaluated including the 'top or tip' of the dongle as the antenna is located at the upper section of the dongle.

The conducted average output power was measured with and without the USB (length >12") cable attached to the EUT. The measured result showed no change to the conducted output power.

SAR measurement was also performed for the highest SAR vertical orientation using a USB cable >12" vs direct connection on a suitable host (Dell Latitude D620). The measured average SAR levels for both combinations were identical. The Peak SAR levels for the direct link and cable were 1.41W/kg and 1.39W/kg respectively.

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

5. Operation and Configuration of the EUT during Testing

5.1. Operating Modes

The EUT was tested in the following operating mode(s) unless otherwise stated:

- TDCDMA Data allocated mode using test harness Software with 6 Uplink and 9 Downlink and duty cycle of 40%.
 - Commercial test equipment is not available to support TD-CDMA user devices. The IPWireless USB Stick modem is compliant at the physical layer but not 100% compliant in the MAC layer due to additional enhancements to optimise the use of shared channels. Therefore to support the required testing, a support application known as “test harness” was used to configure the device into representative operating configurations. This is an open ended configuration that does not require the device to communicate with a network or simulator. This software allows the device to be controlled over the USB interface and the software allows access and control over the internal operation of the modem.
 - The test harness software does not setup up a loopback and is completely stand-alone in operation; the software uses pre-configured test scripts to configure the device under test into the required test configurations.
-

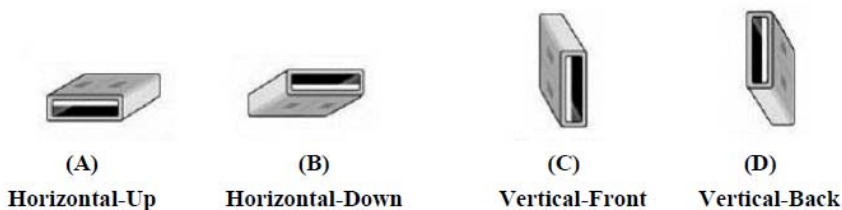
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

5.2. Configuration and Peripherals

The EUT was tested in the following configuration(s) unless otherwise stated:

- SAR measurements were performed using a duty cycle of 40% and maximum average power of 24 dBm. All modulation types (QPSK, 16QAM and 64QAM) were evaluated on both Low and High chip rate.
- All orientations (Horizontal-Down, Horizontal-Up, Vertical-Front, Vertical-Back and Top or Tip) were evaluated in the low, middle and high channels for Low chip rate (CH: 12494, CH: 12965 & CH 13436) and High chip rate (CH: 12507, CH: 12965 & CH: 13420). The 'top or tip' of the dongle was evaluated as the antenna is located at the upper section of the dongle.
- All measurements were performed at 5mm separation from the 'SAM' phantom flat section.
- Below are the configuration covered as per KDB 47498 D02 SAR Procedures for Dongle Xmtr v02. Appendix 4 shows the EUT setup in these configurations.



Note: These are USB connector orientations on laptop computers; USB dongles have the reverse configuration for plugging into the corresponding laptop computers.

USB Connector Orientations Implemented on Laptop Computers

Body Configuration

- The EUT was placed in a normal operating position where the centre of EUT was aligned with the centre reference point on the flat section of the 'SAM' phantom.
- With the EUT touching the phantom at an imaginary centre line. The EUT was aligned with a marked plane (X and Y axis) consisting of two lines.
- For the touch-safe position the EUT was gradually moved towards the flat section of the 'SAM' phantom until any point of the EUT touched the phantom.
- For position(s) greater than 0mm separation the EUT was positioned as per the touch-safe position, and then the vertical height was decreased/adjusted as required.
- SAR measurements were evaluated at maximum power and the unit was operated for an appropriate period prior to the evaluation in order to minimise the drift.
- The device was keyed to operate continuously in the transmit mode for the duration of the test.
- The location of the maximum spatial SAR distribution (hot spot) was determined relative to the handset and its antenna.
- The EUT was transmitting at full power throughout the duration of the test powered by a fully charged battery.

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

6. Summary of Test Results

Test Name	Specification Reference	Result
Specific Absorption Rate-TD-CDMA Low Chip Rate QPSK Body Configuration 1g	OET Bulletin 65 Supplement C: (2001-01)	Complied
Specific Absorption Rate-TD-CDMA Low Chip Rate 16QAM Body Configuration 1g	OET Bulletin 65 Supplement C: (2001-01)	Complied
Specific Absorption Rate-TD-CDMA Low Chip Rate 64QAM Body Configuration 1g	OET Bulletin 65 Supplement C: (2001-01)	Complied
Specific Absorption Rate-TD-CDMA High Chip Rate QPSK Body Configuration 1g	OET Bulletin 65 Supplement C: (2001-01)	Complied
Specific Absorption Rate-TD-CDMA High Chip Rate 16QAM Body Configuration 1g	OET Bulletin 65 Supplement C: (2001-01)	Complied
Specific Absorption Rate-TD-CDMA High Chip Rate 64QAM Body Configuration 1g	OET Bulletin 65 Supplement C: (2001-01)	Complied

6.1. Location of Tests

All the measurements described in this report were performed at the premises of RFI Global Services Ltd, Pavilion A, Ashwood Park, Ashwood Way, Basingstoke, Hampshire, RG23 8BG United Kingdom.

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

7. Measurements, Examinations and Derived Results

7.1. General Comments

This section contains test results only.

Measurement uncertainties are evaluated in accordance with current best practice. Our reported expanded uncertainties are based on standard uncertainties, which are multiplied by an appropriate coverage factor to provide a statistical confidence level of approximately 95%. Please refer to section 8 for details of measurement uncertainties.

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

7.2. Test Results**7.2.1. Specific Absorption Rate – TD-CDMA Low Chip Rate QPSK Body Configuration 1g****Test Summary:**

Tissue Volume:	1g
Maximum Level (W/kg):	1.500

Environmental Conditions:

Temperature Variation in Lab (°C):	24.0 to 24.0
Temperature Variation in Liquid (°C):	24.0 to 24.0

Results:

EUT Position	Phantom Configuration	Channel Number	Level (W/kg)	Limit (W/kg)	Margin (W/kg)	Note(s)	Result
Horizontal-Down	Flat (SAM)	12494	1.500	1.600	0.100	1, 2	Complied
Horizontal-Down	Flat (SAM)	12965	1.120	1.600	0.480	1, 2	Complied
Horizontal-Down	Flat (SAM)	13436	0.889	1.600	0.711	1, 2	Complied
Vertical-Front	Flat (SAM)	12494	1.140	1.600	0.460	1, 2	Complied
Vertical-Front	Flat (SAM)	12965	0.968	1.600	0.632	1, 2	Complied
Vertical-Front	Flat (SAM)	13436	0.682	1.600	0.918	1, 2	Complied
Vertical-Back	Flat (SAM)	12494	0.528	1.600	1.072	1, 2	Complied
Vertical-Back	Flat (SAM)	12965	0.431	1.600	1.169	1, 2	Complied
Vertical-Back	Flat (SAM)	13436	0.454	1.600	1.146	1, 2	Complied
Top or Tip	Flat (SAM)	12494	0.521	1.600	1.079	1, 2	Complied
Top or Tip	Flat (SAM)	12965	0.326	1.600	1.274	1, 2	Complied
Top or Tip	Flat (SAM)	13436	0.220	1.600	1.380	1, 2	Complied
Horizontal-Up	Flat (SAM)	12494	0.728	1.600	0.872	1, 2	Complied
Horizontal-Up	Flat (SAM)	12965	0.569	1.600	1.031	1, 2	Complied
Horizontal-Up	Flat (SAM)	13436	0.381	1.600	1.219	1, 2	Complied

Note(s):

- SAR measurements were performed with the EUT at a separation distance of 5mm from the 'SAM' phantom flat section.
- 6 uplink timeslots QPSK.

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

7.2.2. Specific Absorption Rate - TD-CDMA Low Chip Rate 16QAM Body Configuration 1g**Test Summary:**

Tissue Volume:	1g
Maximum Level (W/kg):	1.490

Environmental Conditions:

Temperature Variation in Lab (°C):	24.0 to 24.0
Temperature Variation in Liquid (°C):	24.0 to 24.0

Results:

EUT Position	Phantom Configuration	Channel Number	Level (W/kg)	Limit (W/kg)	Margin (W/kg)	Note(s)	Result
Horizontal-Down	Flat (SAM)	12494	1.490	1.600	0.110	1, 2	Complied
Horizontal-Down	Flat (SAM)	12965	1.110	1.600	0.490	1, 2	Complied
Horizontal-Down	Flat (SAM)	13436	0.818	1.600	0.782	1, 2	Complied
Vertical-Front	Flat (SAM)	12494	1.040	1.600	0.560	1, 2	Complied
Vertical-Front	Flat (SAM)	12965	1.040	1.600	0.560	1, 2	Complied
Vertical-Front	Flat (SAM)	13436	0.533	1.600	1.067	1, 2	Complied
Vertical-Back	Flat (SAM)	12494	0.539	1.600	1.061	1, 2	Complied
Vertical-Back	Flat (SAM)	12965	0.407	1.600	1.193	1, 2	Complied
Vertical-Back	Flat (SAM)	13436	0.362	1.600	1.238	1, 2	Complied
Top or Tip	Flat (SAM)	12494	0.471	1.600	1.129	1, 2	Complied
Top or Tip	Flat (SAM)	12965	0.279	1.600	1.321	1, 2	Complied
Top or Tip	Flat (SAM)	13436	0.173	1.600	1.427	1, 2	Complied
Horizontal-Up	Flat (SAM)	12494	0.735	1.600	0.865	1, 2	Complied
Horizontal-Up	Flat (SAM)	12965	0.599	1.600	1.001	1, 2	Complied
Horizontal-Up	Flat (SAM)	13436	0.394	1.600	1.206	1, 2	Complied

Note(s):

- SAR measurements were performed with the EUT at a separation distance of 5mm from the 'SAM' phantom flat section.
- 6 uplink timeslots 16QAM.

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

7.2.3. Specific Absorption Rate - TD-CDMA Low Chip Rate 64QAM Body Configuration 1g**Test Summary:**

Tissue Volume:	1g
Maximum Level (W/kg):	1.360

Environmental Conditions:

Temperature Variation in Lab (°C):	24.0 to 24.0
Temperature Variation in Liquid (°C):	24.0 to 24.0

Results:

EUT Position	Phantom Configuration	Channel Number	Level (W/kg)	Limit (W/kg)	Margin (W/kg)	Note(s)	Result
Horizontal-Down	Flat (SAM)	12494	1.360	1.600	0.240	1, 2	Complied
Horizontal-Down	Flat (SAM)	12965	0.992	1.600	0.608	1, 2	Complied
Horizontal-Down	Flat (SAM)	13436	0.733	1.600	0.867	1, 2	Complied
Vertical-Front	Flat (SAM)	12494	1.040	1.600	0.560	1, 2	Complied
Vertical-Front	Flat (SAM)	12965	0.867	1.600	0.733	1, 2	Complied
Vertical-Front	Flat (SAM)	13436	0.516	1.600	1.084	1, 2	Complied
Vertical-Back	Flat (SAM)	12494	0.522	1.600	1.078	1, 2	Complied
Vertical-Back	Flat (SAM)	12965	0.363	1.600	1.237	1, 2	Complied
Vertical-Back	Flat (SAM)	13436	0.310	1.600	1.290	1, 2	Complied
Top or Tip	Flat (SAM)	12494	0.512	1.600	1.088	1, 2	Complied
Top or Tip	Flat (SAM)	12965	0.337	1.600	1.263	1, 2	Complied
Top or Tip	Flat (SAM)	13436	0.197	1.600	1.403	1, 2	Complied
Horizontal-Up	Flat (SAM)	12494	0.655	1.600	0.945	1, 2	Complied
Horizontal-Up	Flat (SAM)	12965	0.395	1.600	1.205	1, 2	Complied
Horizontal-Up	Flat (SAM)	13436	0.252	1.600	1.348	1, 2	Complied

Note(s):

- SAR measurements were performed with the EUT at a separation distance of 5mm from the 'SAM' phantom flat section.
- 6 uplink timeslots 64QAM.

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

7.2.4. Specific Absorption Rate - TD-CDMA Body High Chip Rate QPSK Configuration 1g**Test Summary:**

Tissue Volume:	1g
Maximum Level (W/kg):	1.470

Environmental Conditions:

Temperature Variation in Lab (°C):	24.0 to 24.0
Temperature Variation in Liquid (°C):	24.0 to 24.0

Results:

EUT Position	Phantom Configuration	Channel Number	Level (W/kg)	Limit (W/kg)	Margin (W/kg)	Note(s)	Result
Horizontal-Down	Flat (SAM)	12507	1.470	1.600	0.130	1, 2	Complied
Horizontal-Down	Flat (SAM)	12965	1.120	1.600	0.480	1, 2	Complied
Horizontal-Down	Flat (SAM)	13420	0.711	1.600	0.889	1, 2	Complied
Vertical-Front	Flat (SAM)	12507	1.340	1.600	0.260	1, 2	Complied
Vertical-Front	Flat (SAM)	12965	1.110	1.600	0.490	1, 2	Complied
Vertical-Front	Flat (SAM)	13420	0.727	1.600	0.873	1, 2	Complied
Vertical-Back	Flat (SAM)	12507	0.482	1.600	1.118	1, 2	Complied
Vertical-Back	Flat (SAM)	12965	0.436	1.600	1.164	1, 2	Complied
Vertical-Back	Flat (SAM)	13420	0.340	1.600	1.260	1, 2	Complied
Top or Tip	Flat (SAM)	12507	0.511	1.600	1.089	1, 2	Complied
Top or Tip	Flat (SAM)	12965	0.336	1.600	1.264	1, 2	Complied
Top or Tip	Flat (SAM)	13420	0.181	1.600	1.419	1, 2	Complied
Horizontal-Up	Flat (SAM)	12507	0.895	1.600	0.705	1, 2	Complied
Horizontal-Up	Flat (SAM)	12965	0.695	1.600	0.905	1, 2	Complied
Horizontal-Up	Flat (SAM)	13420	0.338	1.600	1.262	1, 2	Complied
Vertical-Front	Flat (SAM)	12507	1.230	1.600	0.370	1, 2, 3	Complied
Vertical-Front	Flat (SAM)	12507	1.230	1.600	0.370	1, 2, 4	Complied

Note(s):

- SAR measurements were performed with the EUT at a separation distance of 5mm from the 'SAM' phantom flat section.
- 6 uplink timeslots QPSK.
- Comparative measurement using the highest SAR vertical orientation on a Dell Latitude D620 laptop with Vertical USB port – Direct connection.
- Comparative measurement using the highest SAR vertical orientation on a Dell Latitude D620 laptop with Vertical USB port – USB Cable connection.

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

7.2.5. Specific Absorption Rate - TD-CDMA Body High Chip Rate 16QAM Configuration 1g**Test Summary:**

Tissue Volume:	1g
Maximum Level (W/kg):	1.470

Environmental Conditions:

Temperature Variation in Lab (°C):	24.0 to 24.0
Temperature Variation in Liquid (°C):	24.0 to 24.0

Results:

EUT Position	Phantom Configuration	Channel Number	Level (W/kg)	Limit (W/kg)	Margin (W/kg)	Note(s)	Result
Horizontal-Down	Flat (SAM)	12507	1.470	1.600	0.130	1, 2	Complied
Horizontal-Down	Flat (SAM)	12965	1.010	1.600	0.590	1, 2	Complied
Horizontal-Down	Flat (SAM)	13420	0.589	1.600	1.011	1, 2	Complied
Vertical-Front	Flat (SAM)	12507	1.090	1.600	0.510	1, 2	Complied
Vertical-Front	Flat (SAM)	12965	0.940	1.600	0.660	1, 2	Complied
Vertical-Front	Flat (SAM)	13420	0.560	1.600	1.040	1, 2	Complied
Vertical-Back	Flat (SAM)	12507	0.425	1.600	1.175	1, 2	Complied
Vertical-Back	Flat (SAM)	12965	0.364	1.600	1.236	1, 2	Complied
Vertical-Back	Flat (SAM)	13420	0.217	1.600	1.383	1, 2	Complied
Top or Tip	Flat (SAM)	12507	0.465	1.600	1.135	1, 2	Complied
Top or Tip	Flat (SAM)	12965	0.280	1.600	1.320	1, 2	Complied
Top or Tip	Flat (SAM)	13420	0.147	1.600	1.453	1, 2	Complied
Horizontal-Up	Flat (SAM)	12507	0.784	1.600	0.816	1, 2	Complied
Horizontal-Up	Flat (SAM)	12965	0.502	1.600	1.098	1, 2	Complied
Horizontal-Up	Flat (SAM)	13420	0.306	1.600	1.294	1, 2	Complied

Note(s):

- SAR measurements were performed with the EUT at a separation distance of 5mm from the 'SAM' phantom flat section.
- 6 uplink timeslots 16QAM.

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

7.2.6. Specific Absorption Rate - TD-CDMA Body High Chip Rate 64QAM Configuration 1g**Test Summary:**

Tissue Volume:	1g
Maximum Level (W/kg):	1.410

Environmental Conditions:

Temperature Variation in Lab (°C):	24.0 to 24.0
Temperature Variation in Liquid (°C):	24.0 to 24.0

Results:

EUT Position	Phantom Configuration	Channel Number	Level (W/kg)	Limit (W/kg)	Margin (W/kg)	Note(s)	Result
Horizontal-Down	Flat (SAM)	12507	1.410	1.600	0.190	1, 2	Complied
Horizontal-Down	Flat (SAM)	12965	1.040	1.600	0.560	1, 2	Complied
Horizontal-Down	Flat (SAM)	13420	0.652	1.600	0.948	1, 2	Complied
Vertical-Front	Flat (SAM)	12507	0.954	1.600	0.646	1, 2	Complied
Vertical-Front	Flat (SAM)	12965	0.900	1.600	0.700	1, 2	Complied
Vertical-Front	Flat (SAM)	13420	0.462	1.600	1.138	1, 2	Complied
Vertical-Back	Flat (SAM)	12507	0.435	1.600	1.165	1, 2	Complied
Vertical-Back	Flat (SAM)	12965	0.373	1.600	1.227	1, 2	Complied
Vertical-Back	Flat (SAM)	13420	0.352	1.600	1.248	1, 2	Complied
Top or Tip	Flat (SAM)	12507	0.496	1.600	1.104	1, 2	Complied
Top or Tip	Flat (SAM)	12965	0.283	1.600	1.317	1, 2	Complied
Top or Tip	Flat (SAM)	13420	0.142	1.600	1.458	1, 2	Complied
Horizontal-Up	Flat (SAM)	12507	0.851	1.600	0.749	1, 2	Complied
Horizontal-Up	Flat (SAM)	12965	0.572	1.600	1.028	1, 2	Complied
Horizontal-Up	Flat (SAM)	13420	0.308	1.600	1.292	1, 2	Complied

Note(s):

- SAR measurements were performed with the EUT at a separation distance of 5mm from the 'SAM' phantom flat section.
- 6 uplink timeslots 64QAM

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

7.2.7. Conducted Average Power Measurement**Low Chip Rate:****Results: QPSK**

Channel Number	Frequency (MHz)	Tx Conducted Average Power (dBm)
12494	2498.8	24.2
12965	2593.0	23.7
13436	2687.2	23.0

Results: 16QAM

Channel	Frequency (MHz)	Tx Conducted Average Power (dBm)
12494	2498.8	24.3
12965	2593.0	23.6
13436	2687.2	22.9

Results: 64QAM

Channel	Frequency (MHz)	Tx Conducted Average Power (dBm)
12494	2498.8	24.3
12965	2593.0	23.6
13436	2687.2	22.9

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Conducted Average Power Measurement (Continued)**High Chip Rate:****Results: QPSK**

Channel	Frequency (MHz)	Tx Conducted Average Power (dBm)
12507	2501.4	24.5
12965	2593.0	23.8
13420	2684.6	23.2

Results: 16QAM

Channel	Frequency (MHz)	Tx Conducted Average Power (dBm)
12507	2501.4	24.5
12965	2593.0	23.7
13420	2684.6	23.0

Results: 64QAM

Channel	Frequency (MHz)	Tx Conducted Average Power (dBm)
12507	2501.4	24.5
12965	2593.0	23.7
13420	2684.6	23.0

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

8. Measurement Uncertainty

No measurement or test can ever be perfect and the imperfections give rise to error of measurement in the results. Consequently, the result of a measurement is only an approximation to the value of the measurand (the specific quantity subject to measurement) and is only complete when accompanied by a statement of the uncertainty of the approximation.

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

The uncertainty of the result may need to be taken into account when interpreting the measurement results.

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor, such that a confidence level of approximately 95% is maintained. For the purposes of this document “approximately” is interpreted as meaning “effectively” or “for most practical purposes”.

Test Name	Confidence Level	Calculated Uncertainty
Specific Absorption Rate- 2450 MHz Body Configuration 1g	95%	19.33%

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty, the published guidance of the appropriate accreditation body is followed.

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Measurement Uncertainty (Continued)**8.1. Specific Absorption Rate Uncertainty at 2400 MHz Body 1g, calculated in accordance with IEC 62209-1 & IEEE 1528**

Type	Source of uncertainty	+ Value	- Value	Probability Distribution	Divisor	C _i (10g)	Standard Uncertainty		v _i or v _{eff}
							+ u (%)	- u (%)	
B	Probe calibration	11.800	11.800	normal (k=2)	2.0000	1.0000	5.900	5.900	∞
B	Axial Isotropy	0.500	0.500	normal (k=2)	2.0000	1.0000	0.250	0.250	∞
B	Hemispherical Isotropy	2.600	2.600	normal (k=2)	2.0000	1.0000	1.300	1.300	∞
B	Spatial Resolution	0.500	0.500	Rectangular	1.7321	1.0000	0.289	0.289	∞
B	Boundary Effect	0.769	0.769	Rectangular	1.7321	1.0000	0.444	0.444	∞
B	Linearity	0.600	0.600	Rectangular	1.7321	1.0000	0.346	0.346	∞
B	Detection Limits	0.200	0.200	Rectangular	1.7321	1.0000	0.115	0.115	∞
B	Readout Electronics	0.560	0.560	normal (k=2)	2.0000	1.0000	0.280	0.280	∞
B	Response Time	0.000	0.000	Rectangular	1.7321	1.0000	0.000	0.000	∞
B	Integration Time	0.000	0.000	Rectangular	1.7321	1.0000	0.000	0.000	∞
B	RF Ambient conditions	3.000	3.000	Rectangular	1.7321	1.0000	1.732	1.732	∞
B	Probe Positioner Mechanical Restrictions	4.000	4.000	Rectangular	1.7321	1.0000	2.309	2.309	∞
B	Probe Positioning with regard to Phantom Shell	2.850	2.850	Rectangular	1.7321	1.0000	1.645	1.645	∞
B	Extrapolation and integration/ Maximum SAR evaluation	5.080	5.080	Rectangular	1.7321	1.0000	2.933	2.933	∞
A	Test Sample Positioning	2.920	2.920	normal (k=1)	1.0000	1.0000	2.920	2.920	10
A	Device Holder uncertainty	0.154	0.154	normal (k=1)	1.0000	1.0000	0.154	0.154	10
B	Phantom Uncertainty	4.000	4.000	Rectangular	1.7321	1.0000	2.309	2.309	∞
B	Drift of output power	5.000	5.000	Rectangular	1.7321	1.0000	2.887	2.887	∞
B	Liquid Conductivity (target value)	5.000	5.000	Rectangular	1.7321	0.6400	1.848	1.848	∞
A	Liquid Conductivity (measured value)	3.930	3.930	normal (k=1)	1.0000	0.6400	2.515	2.515	5
B	Liquid Permittivity (target value)	5.000	5.000	Rectangular	1.7321	0.6000	1.732	1.732	∞
A	Liquid Permittivity (measured value)	3.940	3.940	normal (k=1)	1.0000	0.6000	2.364	2.364	5
	Combined standard uncertainty			t-distribution			9.86	9.86	>400
	Expanded uncertainty			k = 1.96			19.33	19.33	>400

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Appendix 1. Test Equipment Used

RFI No.	Instrument	Manufacturer	Type No.	Serial No.	Date Last Calibrated	Cal. Interval (Months)
A034	Narda 20W Termination	Narda	374BNM	8706	Calibrated as part of system	-
A1094	Digital Camera	Sony	MVC – FD81	125805	-	-
A1097	SMA Directional Coupler	MiDISCO	MDC6223-30	None	Calibrated as part of system	-
A1137	3dB Attenuator	Narda	779	04690	Calibrated as part of system	-
A1174	Dielectric Probe Kit	Agilent Technologies	85070C	Us99360072	Calibrated before use	-
A1328	Handset Positioner	Schmid & Partner Engineering AG	Modification	SD 000 H01 DA	-	-
A1182	Handset Positioner	Schmid & Partner Engineering AG	V3.0	None	-	-
A1234	Data Acquisition Electronics	Schmid & Partner Engineering AG	DAE3	450	30 April 2009	12
A1378	Probe	Schmid & Partner Engineering AG	EX3 DV3	3508	26 June 2009	12
A1378	Probe	Schmid & Partner Engineering AG	EX3 DV3	3508	16 Jan 2009	12
A1566	SAM Phantom	Schmid & Partner Engineering AG	SAM a	002	Calibrated before use	-
A1322	2450 MHz Dipole Kit	Schmid & Partner Engineering AG	D2450V2	725	08 Jan 2009	24
A1497	Amplifier	Mini-Circuits	zh1-42w (sma)	e020105	Calibrated as part of system	-
A215	20 dB Attenuator	Narda	766-20	9402	Calibrated as part of system	-
A1531	Antenna	AARONIA AG	7025	02458	-	-
C1144	Cable	Rosenberger MICRO-COAX	FA147AF00 1503030	41842-1	Calibrated as part of system	-
C1145	Cable	Rosenberger MICRO-COAX	FA147AF00 3003030	41843-1	Calibrated as part of system	-
C1146	Cable	Rosenberger MICRO-COAX	FA147AF03 0003030	41752-1	Calibrated as part of system	-
C1092	Cable	RS Components	293-334	1087200-3 3402	Internal Calibration	-
G0528	Robot Power	Schmid & Partner	DASY	None	Calibrated	-

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

RFI No.	Instrument	Manufacturer	Type No.	Serial No.	Date Last Calibrated	Cal. Interval (Months)
	Supply	Engineering AG			before use	
G087	PSU	Thurlby Thandar	CPX200	100701	Calibrated before use	-
M1015	Network Analyser	Agilent Technologies	8753ES	US39172406	15 Sept 2009	12
M1047	Robot Arm	Staubli	RX908 L	F00/SD89A1/A/01	Calibrated before use	-
M1159	Signal Generator	Agilent Technologies	E8241A	US42110332	Internal Checked 05 August 2009	4
M1071	Spectrum Analyzer	Agilent	HP8590E	3647U00514	(Monitoring use only)	-
M1044	Diode Power Sensor	Rohde & Schwarz	NRV-Z1	893350/019	19 May 2009	12
M265	Diode Power Sensor	Rohde & Schwarz	NRV-Z1	893350/017	19 May 2009	12
M263	Dual Channel Power Meter	Rohde & Schwarz	NRVD	826558/004	20 May 2009	12
S256	SAR Lab	RFI	Site 56	N/A	Calibrated before use	-

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

A.1.1. Calibration Certificates

This section contains the calibration certificates and data for the Probe(s) and Dipole(s) used, which are not included in the total number of pages for this report.



Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Client **RFI**

Certificate No: **EX3-3508_Jun09**

CALIBRATION CERTIFICATE

Object **EX3DV3 - SN:3508**

Calibration procedure(s) **QA CAL-01.v6, QA CAL-12.v5 and QA CAL-23.v3
Calibration procedure for dosimetric E-field probes**

Calibration date: **June 26, 2009**

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	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	1-Apr-09 (No. 217-01030)	Apr-10
Power sensor E4412A	MY41495277	1-Apr-09 (No. 217-01030)	Apr-10
Power sensor E4412A	MY41498087	1-Apr-09 (No. 217-01030)	Apr-10
Reference 3 dB Attenuator	SN: S5054 (3c)	31-Mar-09 (No. 217-01026)	Mar-10
Reference 20 dB Attenuator	SN: S5086 (20b)	31-Mar-09 (No. 217-01028)	Mar-10
Reference 30 dB Attenuator	SN: S5129 (30b)	31-Mar-09 (No. 217-01027)	Mar-10
Reference Probe ES3DV2	SN: 3013	2-Jan-09 (No. ES3-3013_Jan09)	Jan-10
DAE4	SN: 660	9-Sep-08 (No. DAE4-660_Sep08)	Sep-09
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-08)	In house check: Oct-09

Calibrated by:	Name Jeton Kastrati	Function Laboratory Technician	Signature
Approved by:	Name Katja Pokovic	Technical Manager	

Issued: June 26, 2009

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



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The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,y,z}
DCP	diode compression point
Polarization φ	φ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}**: Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not effect the E²-field uncertainty inside TSL (see below *ConvF*).
- NORM(f)_{x,y,z}** = NORM_{x,y,z} * *frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- DCP_{x,y,z}**: DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,y,z} * *ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.

Probe EX3DV3

SN:3508

Manufactured:	December 19, 2003
Last calibrated:	June 24, 2008
Recalibrated:	June 26, 2009

Calibrated for DASYS Systems

(Note: non-compatible with DASYS2 system!)

DASY - Parameters of Probe: EX3DV3 SN:3508

Sensitivity in Free Space^A

NormX	0.76 ± 10.1%	$\mu\text{V}/(\text{V}/\text{m})^2$
NormY	0.63 ± 10.1%	$\mu\text{V}/(\text{V}/\text{m})^2$
NormZ	0.66 ± 10.1%	$\mu\text{V}/(\text{V}/\text{m})^2$

Diode Compression^B

DCP X	95 mV
DCP Y	97 mV
DCP Z	94 mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 8.

Boundary Effect

TSL **900 MHz** **Typical SAR gradient: 5 % per mm**

Sensor Center to Phantom Surface Distance		2.0 mm	3.0 mm
SAR _{be} [%]	Without Correction Algorithm	7.8	4.6
SAR _{be} [%]	With Correction Algorithm	0.5	0.3

TSL **1750 MHz** **Typical SAR gradient: 10 % per mm**

Sensor Center to Phantom Surface Distance		2.0 mm	3.0 mm
SAR _{be} [%]	Without Correction Algorithm	5.8	2.7
SAR _{be} [%]	With Correction Algorithm	0.7	0.5

Sensor Offset

Probe Tip to Sensor Center **1.0 mm**

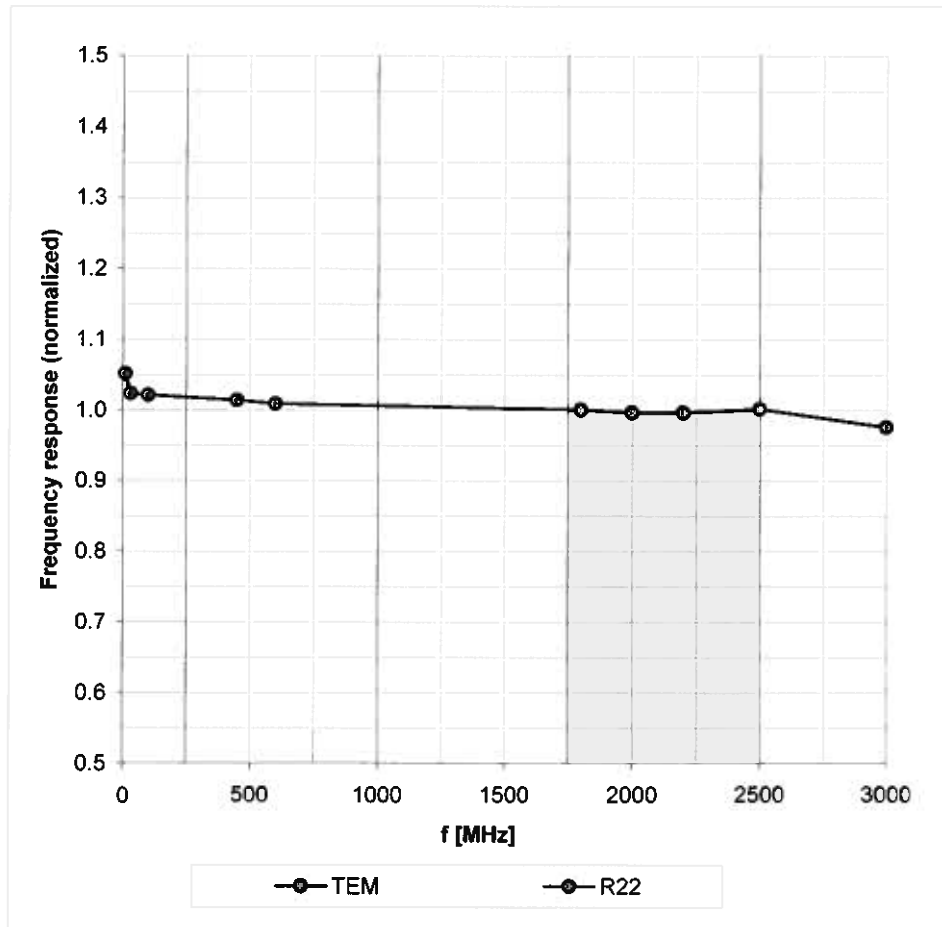
The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

^A The uncertainties of NormX,Y,Z do not affect the E²-field uncertainty inside TSL (see Page 8).

^B Numerical linearization parameter: uncertainty not required.

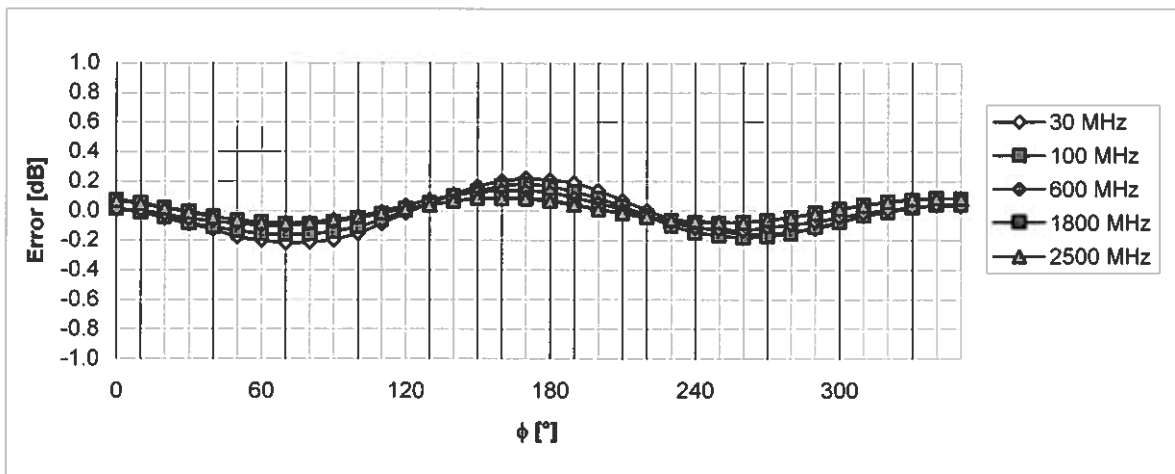
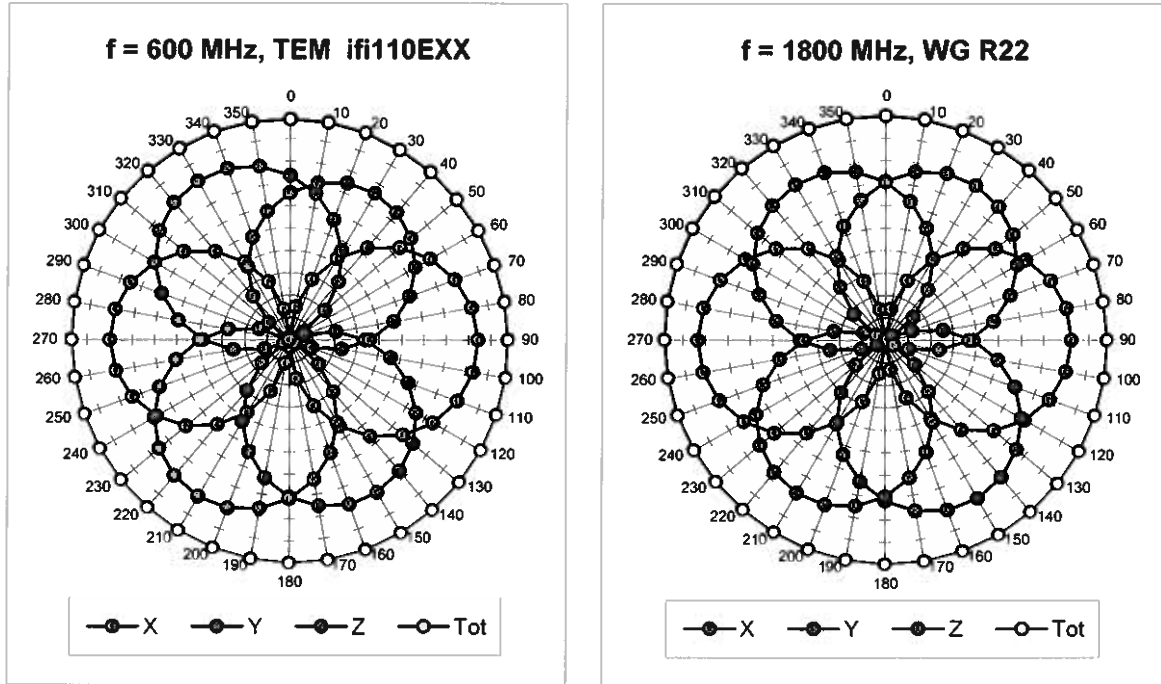
Frequency Response of E-Field

(TEM-Cell:ifi110 EXX, Waveguide: R22)



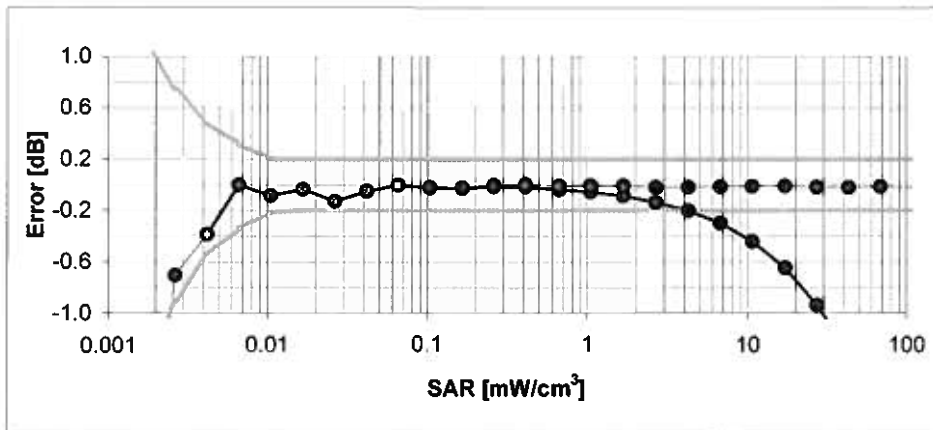
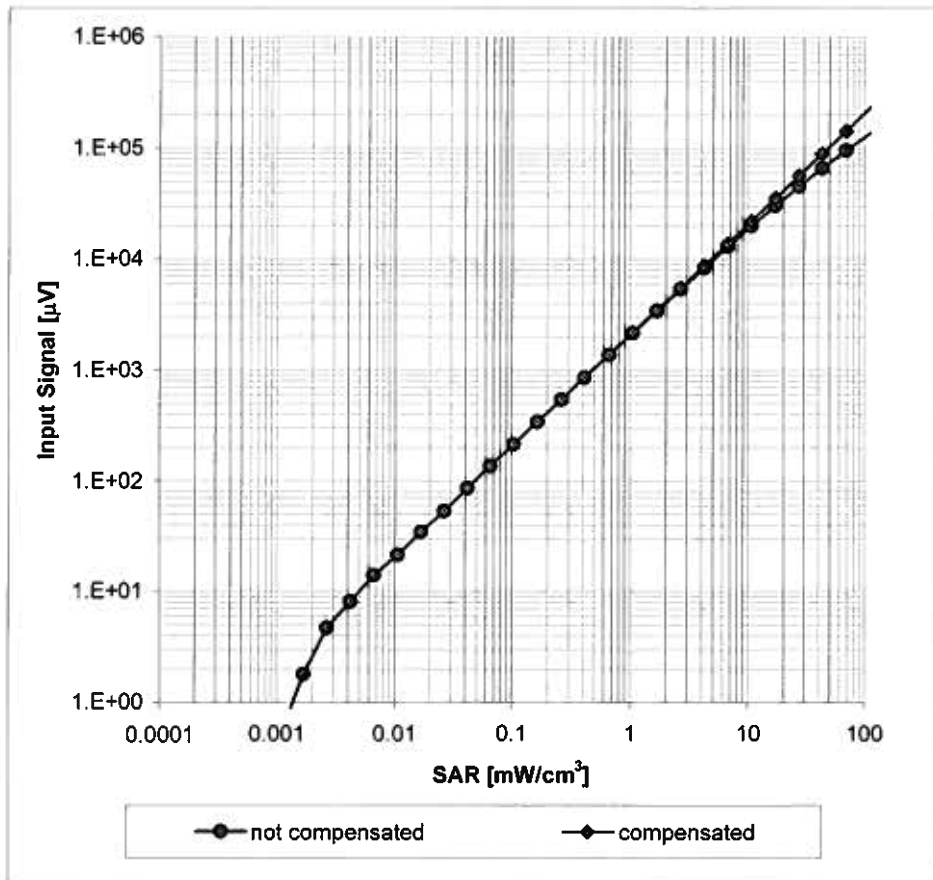
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

Receiving Pattern (ϕ), $\vartheta = 0^\circ$



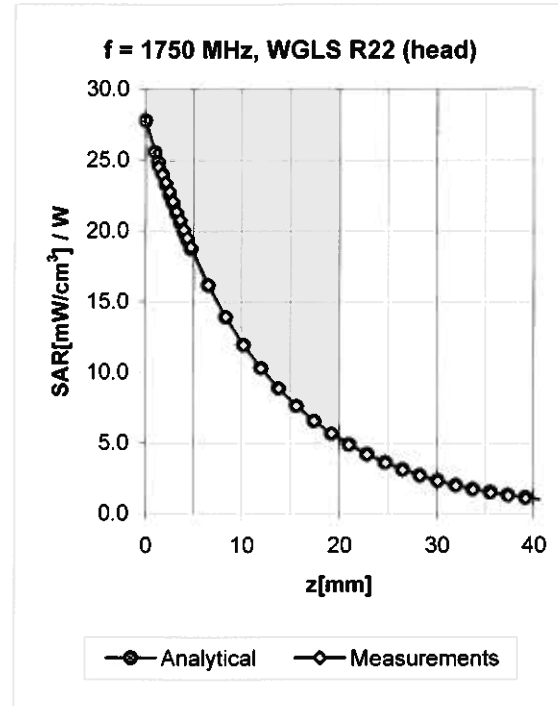
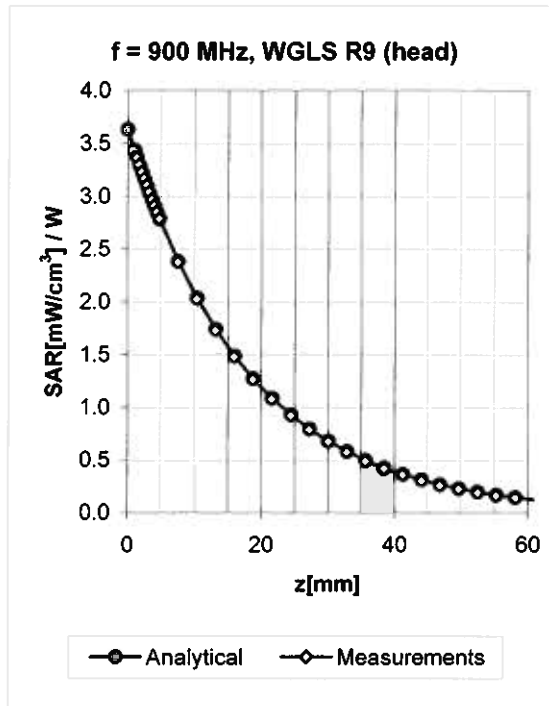
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ ($k=2$)

Dynamic Range $f(\text{SAR}_{\text{head}})$ (Waveguide R22, $f = 1800 \text{ MHz}$)



Uncertainty of Linearity Assessment: $\pm 0.6\%$ ($k=2$)

Conversion Factor Assessment

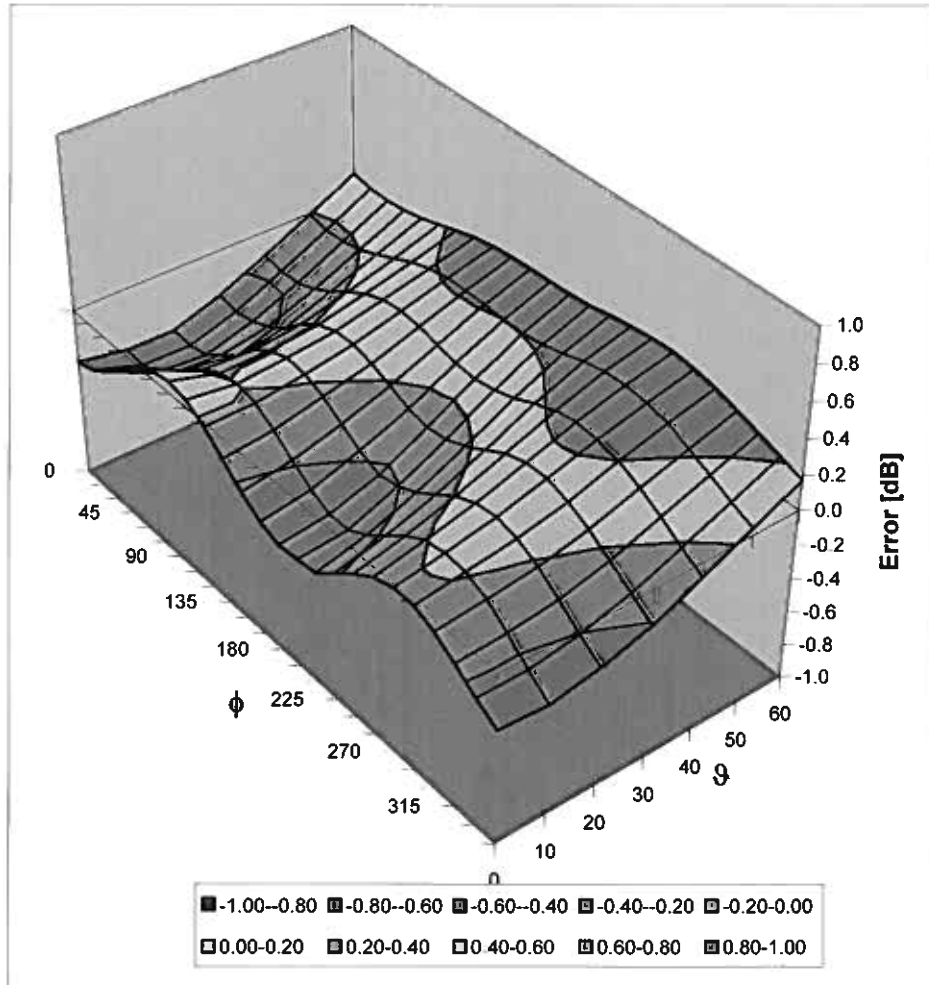


f [MHz]	Validity [MHz] ^c	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
450	± 50 / ± 100	Head	43.5 ± 5%	0.87 ± 5%	0.23	1.00	10.49 ± 13.3% (k=2)
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.48	0.72	9.76 ± 11.0% (k=2)
1750	± 50 / ± 100	Head	40.1 ± 5%	1.37 ± 5%	0.57	0.63	8.82 ± 11.0% (k=2)
1900	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.53	0.65	8.58 ± 11.0% (k=2)
2150	± 50 / ± 101	Head	39.7 ± 5%	1.53 ± 5%	0.36	0.69	8.33 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.36	0.75	7.77 ± 11.0% (k=2)
450	± 50 / ± 100	Body	56.7 ± 5%	0.94 ± 5%	0.30	0.51	11.32 ± 13.3% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.45	0.75	9.99 ± 11.0% (k=2)
1750	± 50 / ± 100	Body	53.4 ± 5%	1.49 ± 5%	0.55	0.63	8.59 ± 11.0% (k=2)
1900	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.48	0.68	8.23 ± 11.0% (k=2)
2150	± 50 / ± 100	Body	53.0 ± 5%	1.75 ± 5%	0.30	0.92	8.27 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.25	1.02	8.06 ± 11.0% (k=2)

^c The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

Deviation from Isotropy in HSL

Error (ϕ, ϑ), $f = 900$ MHz



Uncertainty of Spherical Isotropy Assessment: $\pm 2.6\%$ ($k=2$)

A1378

**Calibration Laboratory of
Schmid & Partner
Engineering AG**
Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Client **RFI**

Certificate No: **EX3-3508_Jan09**

CALIBRATION CERTIFICATE

Object **EX3DV3 - SN:3508**

Calibration procedure(s) **QA CAL-01 v6, QA CAL-14 v3 and QA CAL-23 v3
Calibration procedure for dosimetric E field probes**

Calibration date: **January 16, 2009 (Additional Conversion Factors)**

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	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	1-Apr-08 (No. 217-00788)	Apr-09
Power sensor E4412A	MY41495277	1-Apr-08 (No. 217-00788)	Apr-09
Power sensor E4412A	MY41498087	1-Apr-08 (No. 217-00788)	Apr-09
Reference 3 dB Attenuator	SN: S5054 (3c)	1-Jul-08 (No. 217-00865)	Jul-09
Reference 20 dB Attenuator	SN: S5086 (20b)	31-Mar-08 (No. 217-00787)	Apr-09
Reference 30 dB Attenuator	SN: S5129 (30b)	1-Jul-08 (No. 217-00866)	Jul-09
Reference Probe ES3DV2	SN: 3013	2-Jan-09 (No. ES3-3013_Jan09)	Jan-10
DAE4	SN: 660	9-Sep-08 (No. DAE4-660_Sep08)	Sep-09
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-08)	In house check: Oct-09

	Name	Function	Signature
Calibrated by:	Kata Pokovic	Technical Manager	
Approved by:	Niels Kuster	Quality Manager	

Issued: January 17, 2009

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Accreditation No.: **SCS 108**

Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,y,z}
DCP	diode compression point
Polarization ϕ	ϕ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}**: Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not effect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(f)_{x,y,z}** = NORM_{x,y,z} * frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP_{x,y,z}**: DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,y,z} * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.

Probe EX3DV3

SN:3508

Additional Conversion Factors

Manufactured:	December 19, 2003
Last calibrated:	June 24, 2008
Recalibrated:	January 16, 2009

Calibrated for DASYS Systems

(Note: non-compatible with DASYS2 system!)

DASY - Parameters of Probe: EX3DV3 SN:3508

Sensitivity in Free Space^A

Diode Compression^B

NormX	0.77 ± 10.1%	$\mu V/(V/m)^2$	DCP X	94 mV
NormY	0.64 ± 10.1%	$\mu V/(V/m)^2$	DCP Y	93 mV
NormZ	0.61 ± 10.1%	$\mu V/(V/m)^2$	DCP Z	92 mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 5.

Boundary Effect

TSL 5200 MHz Typical SAR gradient: 25 % per mm

Sensor Center to Phantom Surface Distance		2.0 mm	3.0 mm
SAR _{be} [%]	Without Correction Algorithm	19.0	9.3
SAR _{be} [%]	With Correction Algorithm	0.9	0.6

TSL 5800 MHz Typical SAR gradient: 30 % per mm

Sensor Center to Phantom Surface Distance		2.0 mm	3.0 mm
SAR _{be} [%]	Without Correction Algorithm	16.1	7.6
SAR _{be} [%]	With Correction Algorithm	0.8	0.6

Sensor Offset

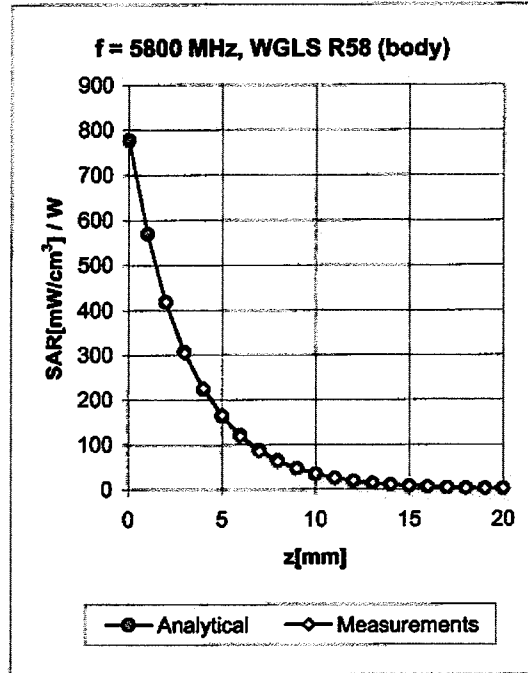
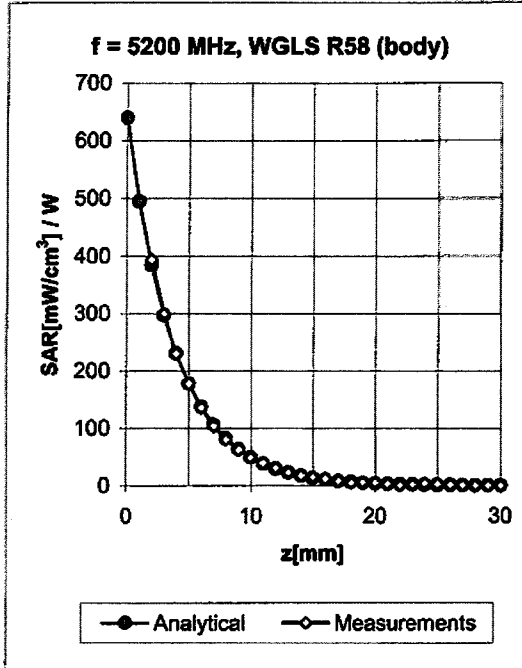
Probe Tip to Sensor Center **1.0 mm**

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

^A The uncertainties of NormX,Y,Z do not affect the E²-field uncertainty inside TSL (see Page 6).

^B Numerical linearization parameter: uncertainty not required.

Conversion Factor Assessment



f [MHz]	Validity [MHz] ^c	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
2600	± 50 / ± 100	Body	52.5 ± 5%	2.16 ± 5%	0.27	1.15	7.73 ± 11.0% (k=2)
3700	± 50 / ± 100	Body	51.0 ± 5%	3.55 ± 5%	0.32	1.30	6.78 ± 13.1% (k=2)
5200	± 50 / ± 100	Body	49.0 ± 5%	5.30 ± 5%	0.45	1.70	4.47 ± 13.1% (k=2)
5500	± 50 / ± 100	Body	48.6 ± 5%	5.65 ± 5%	0.45	1.70	3.97 ± 13.1% (k=2)
5800	± 50 / ± 100	Body	48.2 ± 5%	6.00 ± 5%	0.45	1.70	3.95 ± 13.1% (k=2)

^c The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

A1322

**Calibration Laboratory of
Schmid & Partner
Engineering AG**
Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
S Service suisse d'étalonnage
C Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Client **RFI**

Certificate No: **D2450V2-725_Jan09**

CALIBRATION CERTIFICATE

Object **D2450V2 - SN: 725**

Calibration procedure(s) **QA CAL-05.v7
Calibration procedure for dipole validation kits**

Calibration date: **January 08, 2009**

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	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter EPM-442A	GB37480704	08-Oct-08 (No. 217-00898)	Oct-09
Power sensor HP 8481A	US37292783	08-Oct-08 (No. 217-00898)	Oct-09
Reference 20 dB Attenuator	SN: S5086 (20g)	01-Jul-08 (No. 217-00864)	Jul-09
Type-N mismatch combination	SN: 5047.2 / 06327	01-Jul-08 (No. 217-00867)	Jul-09
Reference Probe ES3DV2	SN: 3025	28-Apr-08 (No. ES3-3025_Apr08)	Apr-09
DAE4	SN: 601	14-Mar-08 (No. DAE4-601_Mar08)	Mar-09
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (in house check Oct-07)	In house check: Oct-09
RF generator R&S SMT-06	100005	4-Aug-99 (in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-08)	In house check: Oct-09

	Name	Function	Signature
Calibrated by:	Jeton Kasirati	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: January 12, 2009

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



Accredited by the Swiss Accreditation Service (SAS)
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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) Federal Communications Commission Office of Engineering & Technology (FCC OET), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions", Supplement C (Edition 01-01) to Bulletin 65

Additional Documentation:

- d) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V5.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V5.0	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2450 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	38.3 ± 6 %	1.83 mho/m ± 6 %
Head TSL temperature during test	(21.5 ± 0.2) °C	---	---

SAR result with Head TSL

SAR averaged over 1 cm³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.2 mW / g
SAR normalized	normalized to 1W	52.8 mW / g
SAR for nominal Head TSL parameters ¹	normalized to 1W	52.1 mW / g ± 17.0 % (k=2)

SAR averaged over 10 cm³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.12 mW / g
SAR normalized	normalized to 1W	24.5 mW / g
SAR for nominal Head TSL parameters ¹	normalized to 1W	24.3 mW / g ± 16.5 % (k=2)

¹ Correction to nominal TSL parameters according to d), chapter "SAR Sensitivities"

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.7	1.95 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	53.8 ± 6 %	2.01 mho/m ± 6 %
Body TSL temperature during test	(21.0 ± 0.2) °C	—	—

SAR result with Body TSL

SAR averaged over 1 cm³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	13.2 mW / g
SAR normalized	normalized to 1W	52.8 mW / g
SAR for nominal Body TSL parameters ²	normalized to 1W	52.2 mW /g ± 17.0 % (k=2)

SAR averaged over 10 cm³ (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.19 mW / g
SAR normalized	normalized to 1W	24.8 mW / g
SAR for nominal Body TSL parameters ²	normalized to 1W	24.7 mW /g ± 16.5 % (k=2)

² Correction to nominal TSL parameters according to d), chapter "SAR Sensitivities"

Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	54.4 Ω + 5.3 j Ω
Return Loss	- 23.7 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	49.0 Ω + 6.7 j Ω
Return Loss	- 23.4 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.153 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	October 16, 2002

DASY5 Validation Report for Head TSL

Date/Time: 08.01.2009 10:04:18

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN725

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: HSL U10 BB

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.83$ mho/m; $\epsilon_r = 38.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC)

DASY5 Configuration:

- Probe: ES3DV2 - SN3025; ConvF(4.4, 4.4, 4.4); Calibrated: 28.04.2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 14.03.2008
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- Measurement SW: DASY5, V5.0 Build 120; SEMCAD X Version 13.4 Build 45

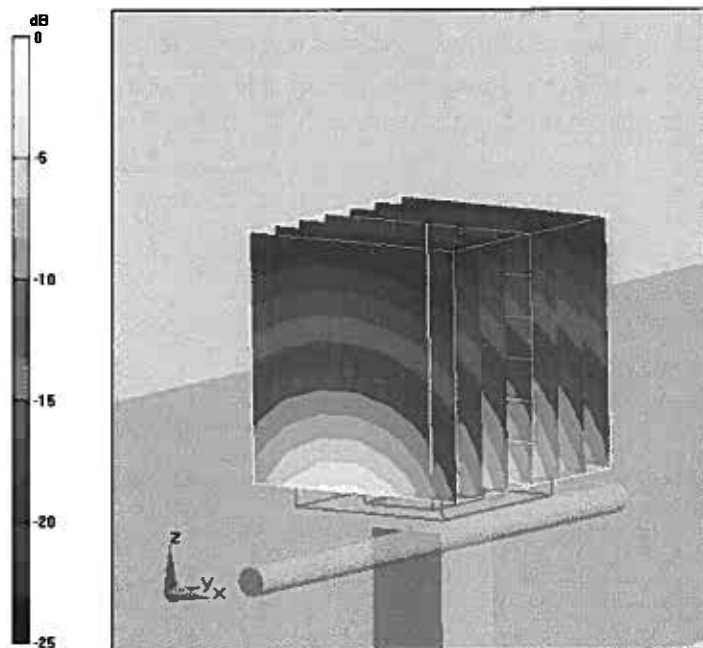
Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 95.8 V/m; Power Drift = 0.035 dB

Peak SAR (extrapolated) = 27.7 W/kg

SAR(1 g) = 13.2 mW/g; SAR(10 g) = 6.12 mW/g

Maximum value of SAR (measured) = 15.9 mW/g



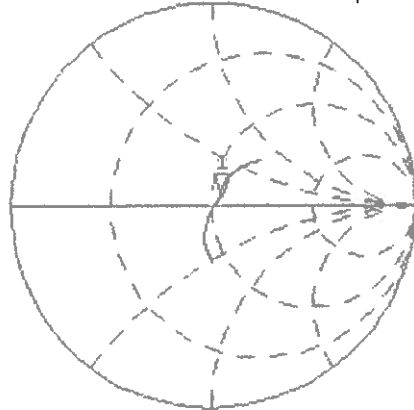
0 dB = 15.9mW/g

Impedance Measurement Plot for Head TSL

8 Jan 2009 09:18:44

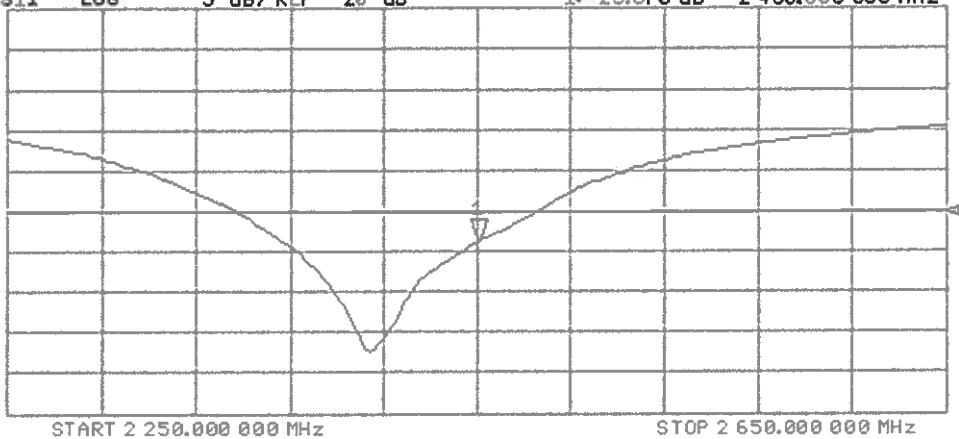
CH1 S11 1 U FS 1: 54.352 Ω 5.2852 Ω 343.33 μ H 2 450.000 000 MHz

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16



CH2 S11 LOG 5 dB/REF -20 dB 1: -23.670 dB 2 450.000 000 MHz

Cor
Avg
16



DASY5 Validation Report for Body TSL

Date/Time: 08.01.2009 12:28:21

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:725

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: MSL U10 BB

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 53.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC)

DASY5 Configuration:

- Probe: ES3DV2 - SN3025; ConvF(4.07, 4.07, 4.07); Calibrated: 28.04.2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 14.03.2008
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- Measurement SW: DASY5, V5.0 Build 120; SEMCAD X Version 13.4 Build 45

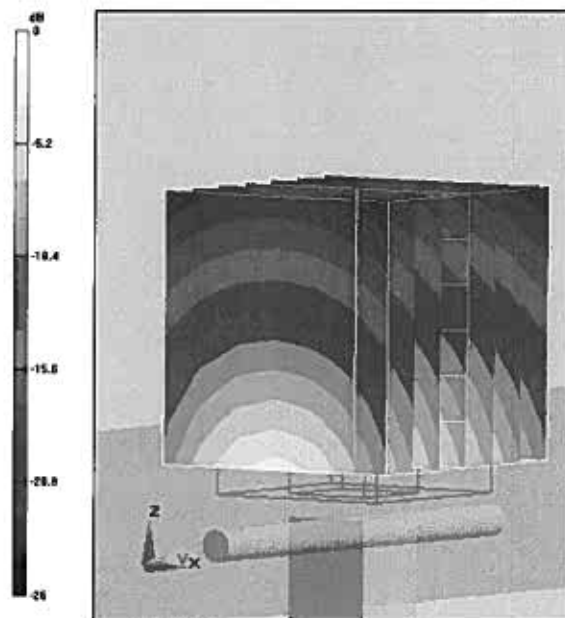
Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 93.1 V/m; Power Drift = 0.00372 dB

Peak SAR (extrapolated) = 26.6 W/kg

SAR(1 g) = 13.2 mW/g; SAR(10 g) = 6.19 mW/g

Maximum value of SAR (measured) = 16.5 mW/g



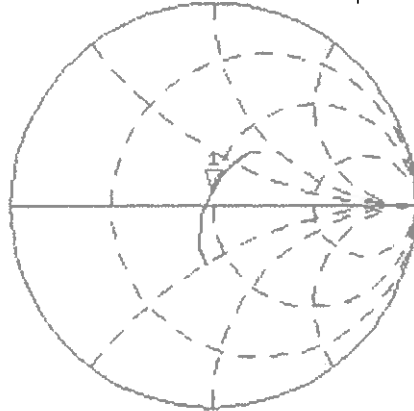
0 dB = 16.5mW/g

Impedance Measurement Plot for Body TSL

8 Jan 2009 09:24:58

CHI S11 1 U FS 1: 49.033 Ω 6.6719 Ω 433.41 pF 2 450.000 000 MHz

*
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Avg
16

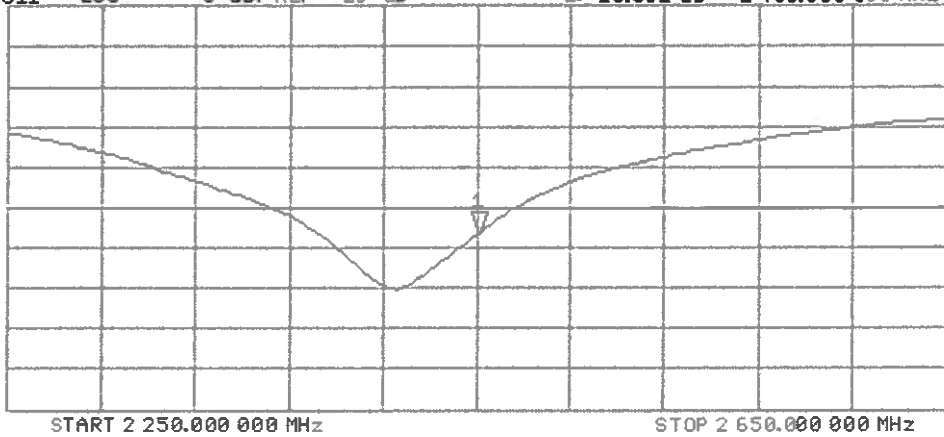
↑

CH2 S11 LOG 5 dB/REF -20 dB 1: -23.362 dB 2 450.000 000 MHz

Cor

Avg
16

↑



Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Appendix 2. Measurement Methods

A.2.1. Evaluation Procedure

The Specific Absorption Rate (SAR) evaluation was performed in the following manner:

- a) (i) The evaluation was performed in an applicable area of the phantom depending on the type of device being tested. For devices worn about the ear during normal operation, both the left and right ear positions were evaluated at the centre frequency of the band at maximum power. The side, which produced the greatest SAR, determined which side of the phantom would be used for the entire evaluation. The positioning of the head worn device relative to the phantom was dictated by the test specification identified in section 3.1 of this report.

(ii) For body worn devices or devices which can be operated within 20 cm of the body, the flat section of the SAM phantom was used where the size of the device(s) is normal. For bigger devices and base station the 2mm Oval phantom is used for evaluation. The type of device being evaluated dictated the distance of the EUT to the outer surface of the phantom flat section.
 - b) The SAR was determined by a pre-defined procedure within the DASY4 software. The exposed region of the phantom was scanned near the inner surface with a grid spacing of 20mm x 20mm or appropriate resolution.
 - c) A 7x7x7 matrix was performed around the greatest spatial SAR distribution found during the area scan of the applicable exposed region. SAR values were then calculated using a 3-D spline interpolation algorithm and averaged over spatial volumes of 1 and 10 grams.
 - d) If the EUT had any appreciable drift over the course of the evaluation, then the EUT was re-evaluated. Any unusual anomalies over the course of the test also warranted a re-evaluation.
-

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

A.2.2. Specific Absorption Rate (SAR) Measurements to OET Bulletin 65 Supplement C: (2001-01)

Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields

SAR measurements were performed in accordance with Appendix D of the standard FCC OET Bulletin 65 Supplement C: 2001, against appropriate limits for each measurement position in accordance with the standard.

The test was performed in a shielded enclosure with the temperature controlled to remain between +18.0°C and +25.0°C. The tissue equivalent material fluid temperature was controlled to give a maximum variation of $\pm 2.0^\circ\text{C}$

Prior to any SAR measurements on the EUT, system validation and material dielectric property measurements were conducted. In the absence of a detailed procedure within the specification, system validation and material dielectric property measurements were performed in accordance with Appendix C and Appendix D of FCC OET Bulletin 65 Supplement C: 2001.

Following the successful system validation and material dielectric property measurements, a SAR versus time sweep shall be performed within 10 mm of the phantom inner surface. If the EUT power output is stable after three minutes then the measurement probe will perform a coarse surface level scan at each test position in order to ascertain the location of the maximum local SAR level. Once this area had been established, a 7x7x7 cube of 343 points (5 mm spacing in each axis $\approx 27\text{g}$) will be centred at the area of concern. Extrapolation and interpolation will then be carried out on the 27g of tissue and the highest averaged SAR over a 10g cube determined.

Once the maximum interpolated SAR measurement is complete; the coarse scan is visually assessed to check for secondary peaks within 50% of the maximum SAR level. If there are any further SAR measurements required, extra 7x7x7 cubes shall be centred on each of these extra local SAR maxima.

At the end of each position test case a second time sweep shall be performed to check whether the EUT has remained stable throughout the test.

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Appendix 3. SAR Distribution Scans

This appendix contains SAR distribution scans which are not included in the total number of pages for this report.

Scan Reference Number	Title
SCN/76288JD01/001	Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12494 6 Time Slots
SCN/76288JD01/002	Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12965 6 Time Slots
SCN/76288JD01/003	Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH13436 6 Time Slots
SCN/76288JD01/004	Vertical-Front of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12494 6 Time Slots
SCN/76288JD01/005	Vertical-Front of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12965 6 Time Slots
SCN/76288JD01/006	Vertical-Front of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH13436 6 Time Slots
SCN/76288JD01/007	Vertical-Back of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12494 6 Time Slots
SCN/76288JD01/008	Vertical-Back of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12965 6 Time Slots
SCN/76288JD01/009	Vertical-Back of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH13436 6 Time Slots
SCN/76288JD01/010	Top of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12494 6 Time Slots
SCN/76288JD01/011	Top of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12965 6 Time Slots
SCN/76288JD01/012	Top of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH13436 6 Time Slots
SCN/76288JD01/013	Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12494 6 Time Slots
SCN/76288JD01/014	Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12965 6 Time Slots
SCN/76288JD01/015	Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH13436 6 Time Slots
SCN/76288JD01/016	Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12507 6 Time Slots
SCN/76288JD01/017	Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12965 6 Time Slots
SCN/76288JD01/018	Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH13420 6 Time Slots
SCN/76288JD01/019	Vertical-Front of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12507 6 Time Slots
SCN/76288JD01/020	Vertical-Front of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12965 6 Time Slots

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/76288JD01/021	Vertical-Front of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH13420 6 Time Slots
SCN/76288JD01/022	Vertical-Back of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12507 6 Time Slots
SCN/76288JD01/023	Vertical-Back of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12965 6 Time Slots
SCN/76288JD01/024	Vertical-Back of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH13420 6 Time Slots
SCN/76288JD01/025	Top of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12507 6 Time Slots
SCN/76288JD01/026	Top of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12965 6 Time Slots
SCN/76288JD01/027	Top of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH13420 6 Time Slots
SCN/76288JD01/028	Horizontal-Up of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12507 6 Time Slots
SCN/76288JD01/029	Horizontal-Up of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12965 6 Time Slots
SCN/76288JD01/030	Horizontal-Up of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH13420 6 Time Slots
SCN/76288JD01/031	Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12494 6 Time Slots
SCN/76288JD01/032	Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12965 6 Time Slots
SCN/76288JD01/033	Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH13436 6 Time Slots
SCN/76288JD01/034	Vertical - Front of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12494 6 Time Slots
SCN/76288JD01/035	Vertical - Front of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12965 6 Time Slots
SCN/76288JD01/036	Vertical - Front of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH13436 6 Time Slots
SCN/76288JD01/037	Vertical - Back of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12494 6 Time Slots
SCN/76288JD01/038	Vertical - Back of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12965 6 Time Slots
SCN/76288JD01/039	Vertical - Back of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH13436 6 Time Slots
SCN/76288JD01/040	Top of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12494 6 Time Slots
SCN/76288JD01/041	Top of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12965 6 Time Slots
SCN/76288JD01/042	Top of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH13436 6 Time Slots
SCN/76288JD01/043	Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12494 6 Time Slots
SCN/76288JD01/044	Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12965 6 Time Slots

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/76288JD01/045	Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH13436 6 Time Slots
SCN/76288JD01/046	Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH12507 6 Time Slots
SCN/76288JD01/047	Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH12965 6 Time Slots
SCN/76288JD01/048	Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH13420 6 Time Slots
SCN/76288JD01/049	Vertical-Front of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH12507 6 Time Slots
SCN/76288JD01/050	Vertical-Front of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH12965 6 Time Slots
SCN/76288JD01/051	Vertical-Front of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH13420 6 Time Slots
SCN/76288JD01/052	Vertical-Back of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH12507 6 Time Slots
SCN/76288JD01/053	Vertical-Back of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH12965 6 Time Slots
SCN/76288JD01/054	Vertical-Back of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH13420 6 Time Slots
SCN/76288JD01/055	Top of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH12507 6 Time Slots
SCN/76288JD01/056	Top of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH12965 6 Time Slots
SCN/76288JD01/057	Top of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH13420 6 Time Slots
SCN/76288JD01/058	Horizontal - Up of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH12507 6 Time Slots
SCN/76288JD01/059	Horizontal - Up of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH12965 6 Time Slots
SCN/76288JD01/060	Horizontal - Up of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH13420 6 Time Slots
SCN/76288JD01/061	Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH12494 6 Time Slots
SCN/76288JD01/062	Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH12965 6 Time Slots
SCN/76288JD01/063	Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH13436 6 Time Slots
SCN/76288JD01/064	Vertical - Front of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH13436 6 Time Slots
SCN/76288JD01/065	Vertical - Front of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH12965 6 Time Slots
SCN/76288JD01/066	Vertical - Front of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH12494 6 Time Slots
SCN/76288JD01/067	Vertical - Back of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH12494 6 Time Slots

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/76288JD01/068	Vertical - Back of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH12965 6 Time Slots
SCN/76288JD01/069	Vertical - Back of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH13436 6 Time Slots
SCN/76288JD01/070	Top of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH12494 6 Time Slots
SCN/76288JD01/071	Top of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH12965 6 Time Slots
SCN/76288JD01/072	Top of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH13436 6 Time Slots
SCN/76288JD01/073	Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH12494 6 Time Slots
SCN/76288JD01/074	Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH12965 6 Time Slots
SCN/76288JD01/075	Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps 16QAM CH13436 6 Time Slots
SCN/76288JD01/076	Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH12507 6 Time Slots
SCN/76288JD01/077	Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH12965 6 Time Slots
SCN/76288JD01/078	Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH13420 6 Time Slots
SCN/76288JD01/079	Vertical-Front of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH12507 6 Time Slots
SCN/76288JD01/080	Vertical-Front of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH12965 6 Time Slots
SCN/76288JD01/081	Vertical-Front of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH13420 6 Time Slots
SCN/76288JD01/082	Vertical-Back of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH12507 6 Time Slots
SCN/76288JD01/083	Vertical-Back of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH12965 6 Time Slots
SCN/76288JD01/084	Vertical-Back of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH13420 6 Time Slots
SCN/76288JD01/085	Top of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH12507 6 Time Slots
SCN/76288JD01/086	Top of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH12965 6 Time Slots
SCN/76288JD01/087	Top of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH13436 6 Time Slots
SCN/76288JD01/088	Horizontal - Up of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH12507 6 Time Slots
SCN/76288JD01/089	Horizontal - Up of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH12965 6 Time Slots
SCN/76288JD01/090	Horizontal - Up of EUT Facing Phantom TD-CDMA 7.68 Mcps 16QAM CH13420 6 Time Slots
SCN/76288JD01/091	Vertical-Front of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH12507 6 Time Slots Direct Connection

Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/76288JD01/092	Vertical-Front of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH12507 6 Time Slots Using Cable
SCN/76288JD01/093	System Performance Check 2450MHz Body 03 11 09
SCN/76288JD01/094	System Performance Check 2450MHz Body 04 11 09
SCN/76288JD01/095	System Performance Check 2450MHz Body 05 11 09
SCN/76288JD01/096	System Performance Check 2450MHz Body 06 11 09
SCN/76288JD01/097	System Performance Check 2450MHz Body 07 11 09
SCN/76288JD01/098	System Performance Check 2450MHz Body 08 11 09
SCN/76288JD01/099	System Performance Check 2450MHz Body 14 11 09
SCN/76288JD01/100	System Performance Check 2450MHz Body 15 11 09
SCN/76288JD01/101	System Performance Check 2450MHz Body 16 11 09
SCN/76288JD01/102	System Performance Check 2450MHz Body 15 01 10

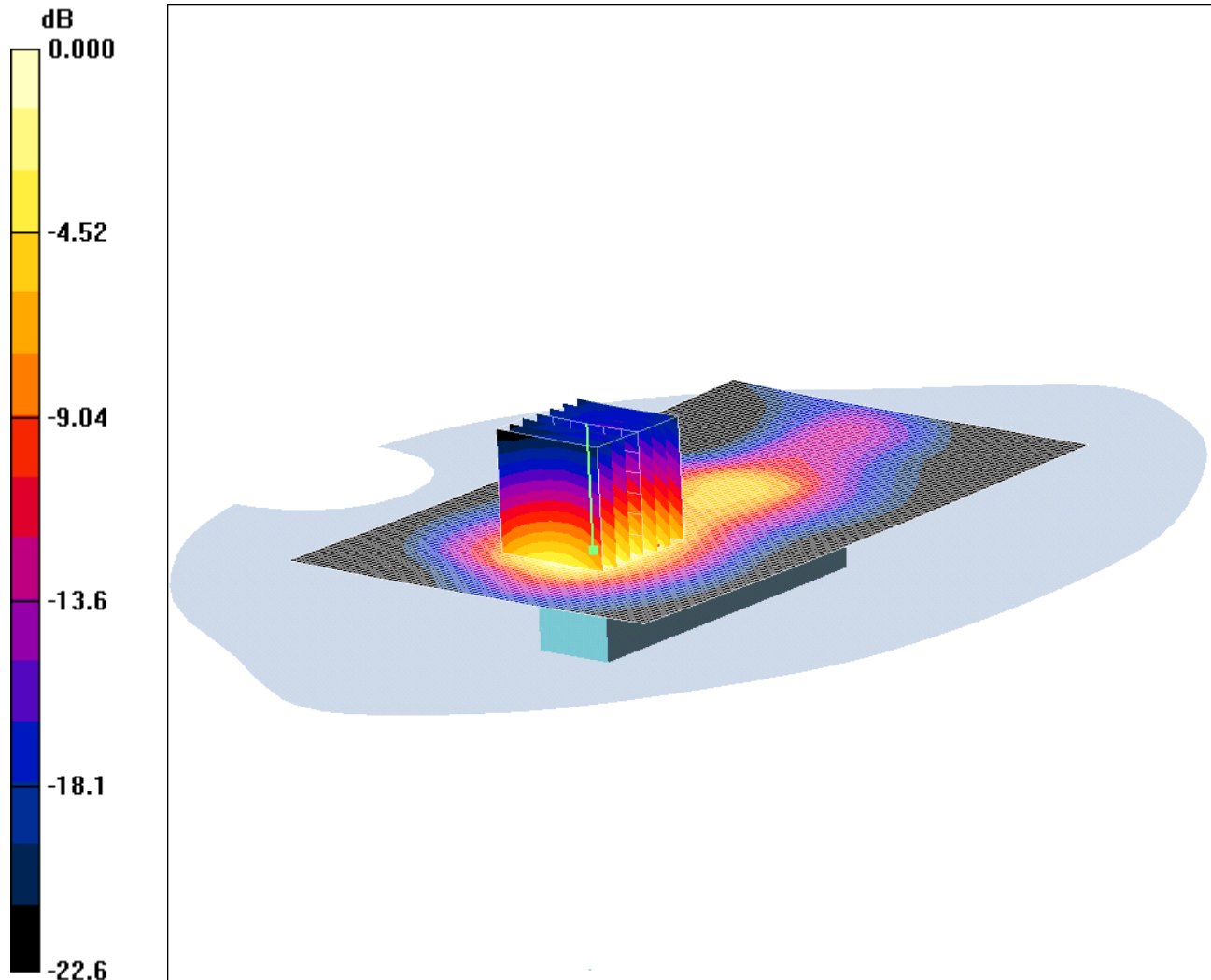
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 03/11/2009

SCN/76288JD01/001 - Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12494 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 1.66mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2498.8 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2498.8$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 50.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Down of EUT Facing Phantom - Middle/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.88 mW/g

Horizontal Down of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.6 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 3.05 W/kg

SAR(1 g) = 1.5 mW/g; SAR(10 g) = 0.734 mW/g

Maximum value of SAR (measured) = 1.66 mW/g

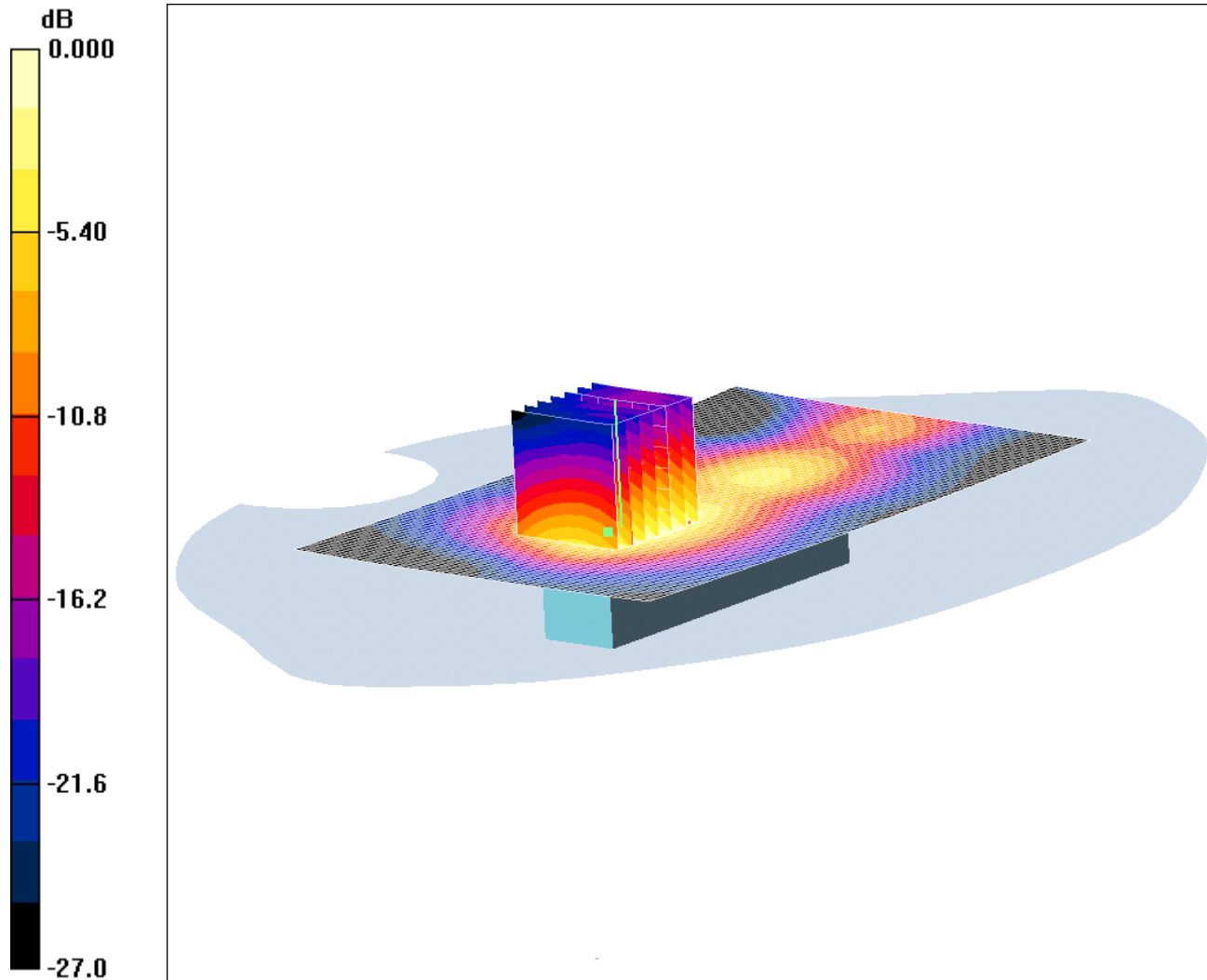
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 03/11/2009

SCN/76288JD01/002 - Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 1.23mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.11$ mho/m; $\epsilon_r = 50.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Down of EUT Facing Phantom - Middle/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.43 mW/g

Horizontal Down of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.4 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 2.29 W/kg

SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.553 mW/g

Maximum value of SAR (measured) = 1.23 mW/g

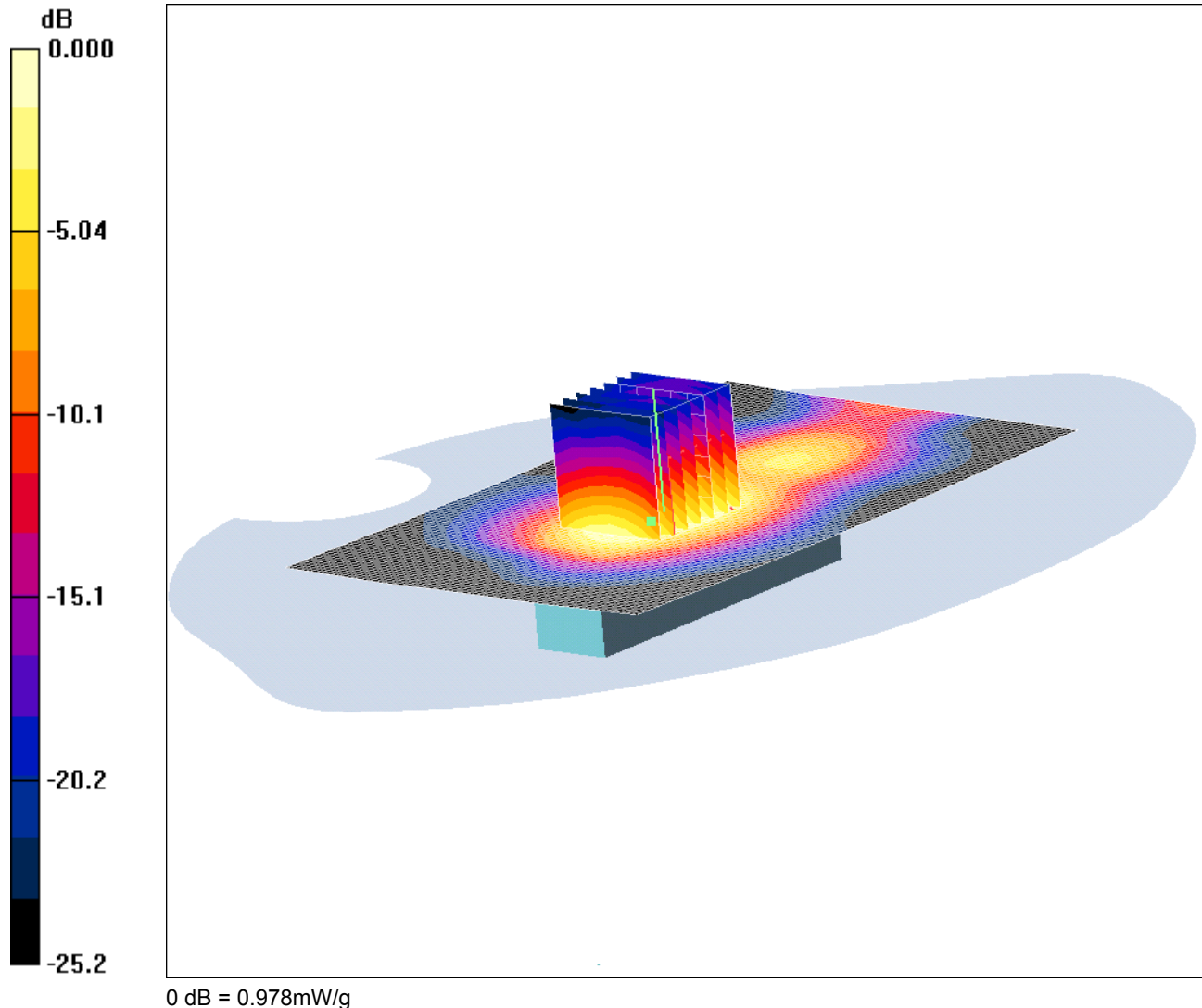
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 03/11/2009

SCN/76288JD01/003 - Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH13436 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2687.2 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2687.2$ MHz; $\sigma = 2.23$ mho/m; $\epsilon_r = 49.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Down of EUT Facing Phantom - High/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.07 mW/g

Horizontal Down of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.8 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 1.71 W/kg

SAR(1 g) = 0.889 mW/g; SAR(10 g) = 0.442 mW/g

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

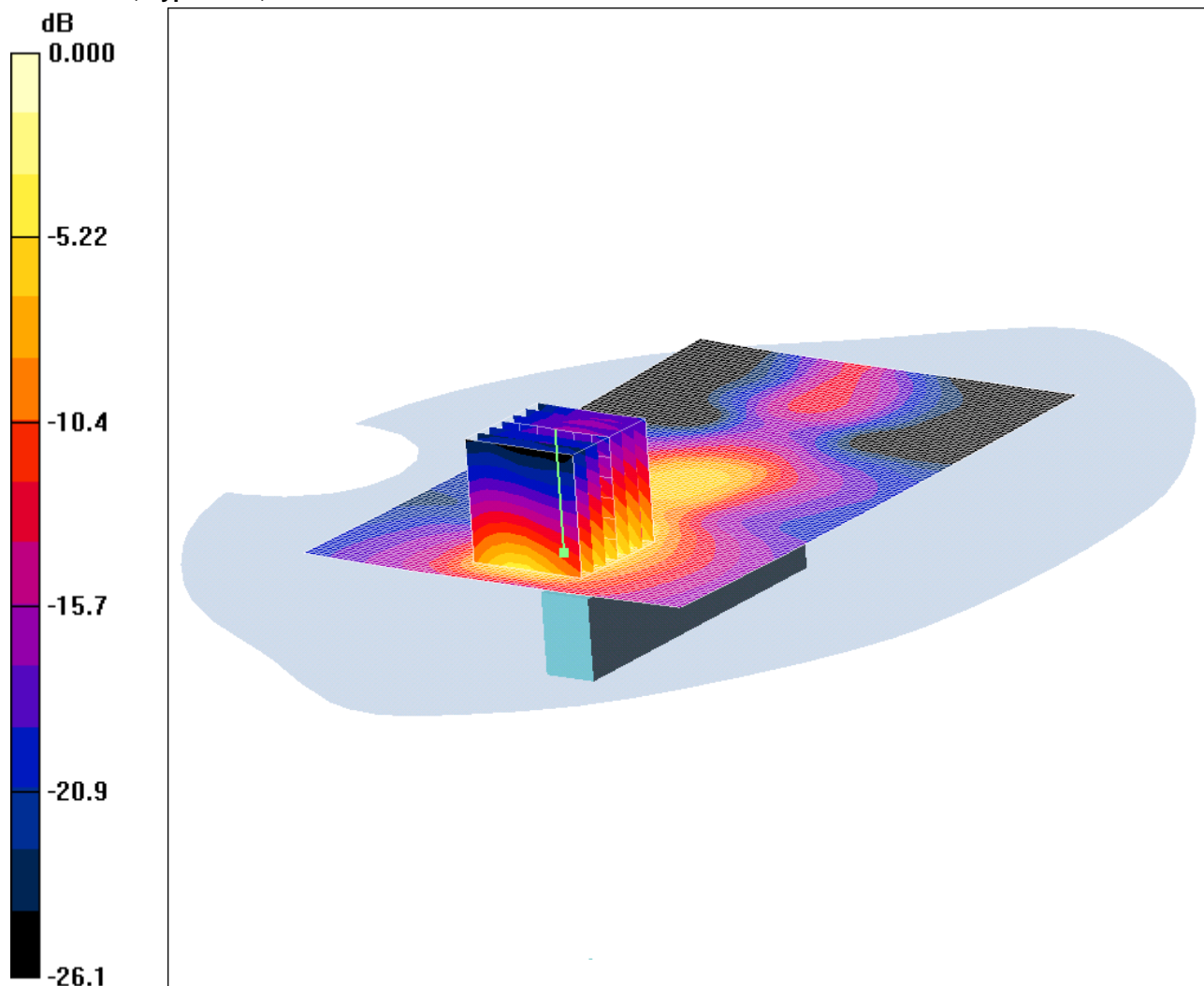
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 03/11/2009

SCN/76288JD01/004 - Vertical-Front of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12494 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2498.8 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2498.8$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 50.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Front of EUT Facing Phantom - Low/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.20 mW/g

Vertical Front of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.9 V/m; Power Drift = -0.001 dB

Peak SAR (extrapolated) = 2.43 W/kg

SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.515 mW/g

Maximum value of SAR (measured) = 1.31 mW/g

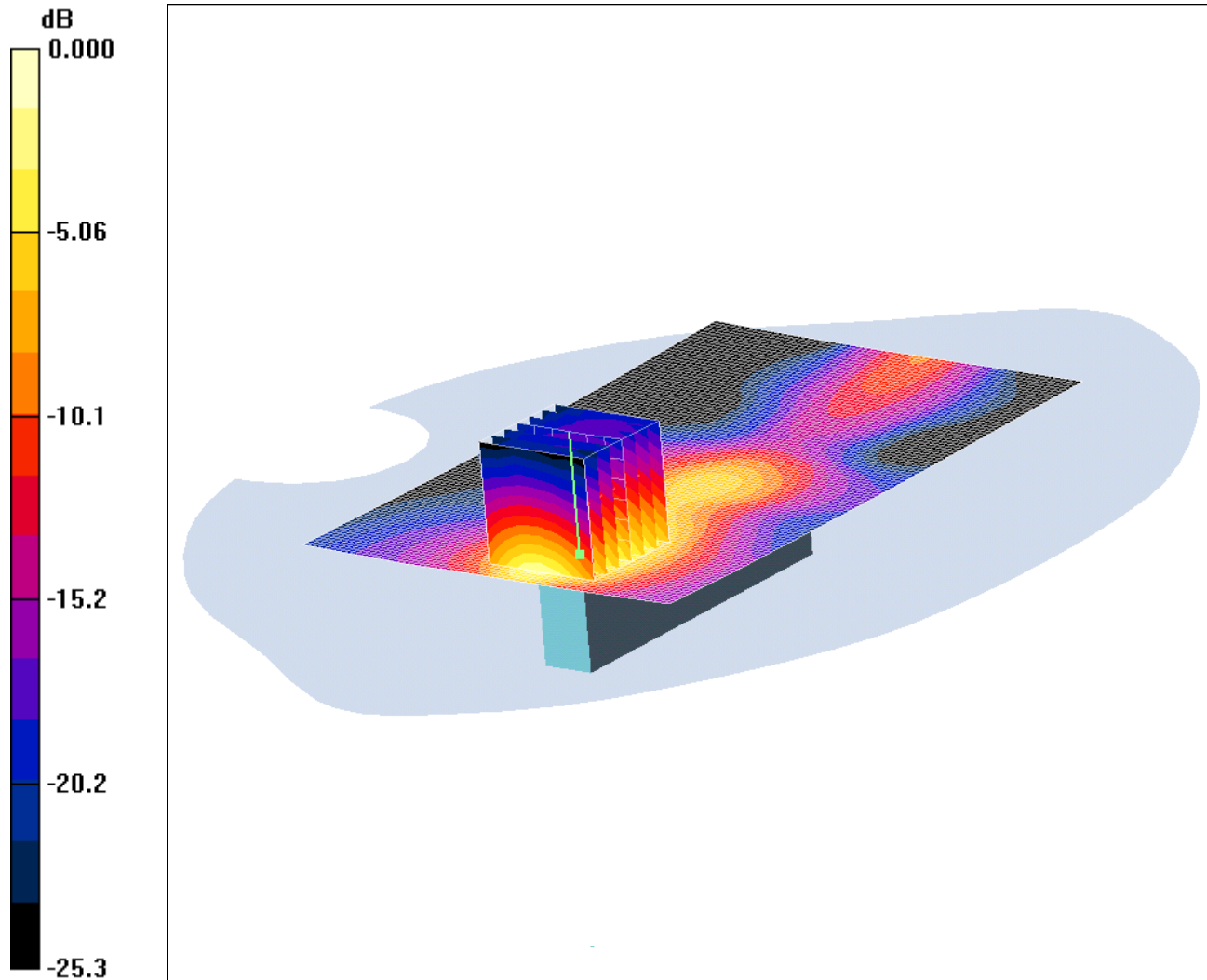
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 03/11/2009

SCN/76288JD01/005 - Vertical-Front of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 1.10mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.11$ mho/m; $\epsilon_r = 50.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Front of EUT Facing Phantom - Middle/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.20 mW/g

Vertical Front of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.9 V/m; Power Drift = 0.115 dB

Peak SAR (extrapolated) = 2.02 W/kg

SAR(1 g) = 0.968 mW/g; SAR(10 g) = 0.445 mW/g

Maximum value of SAR (measured) = 1.10 mW/g

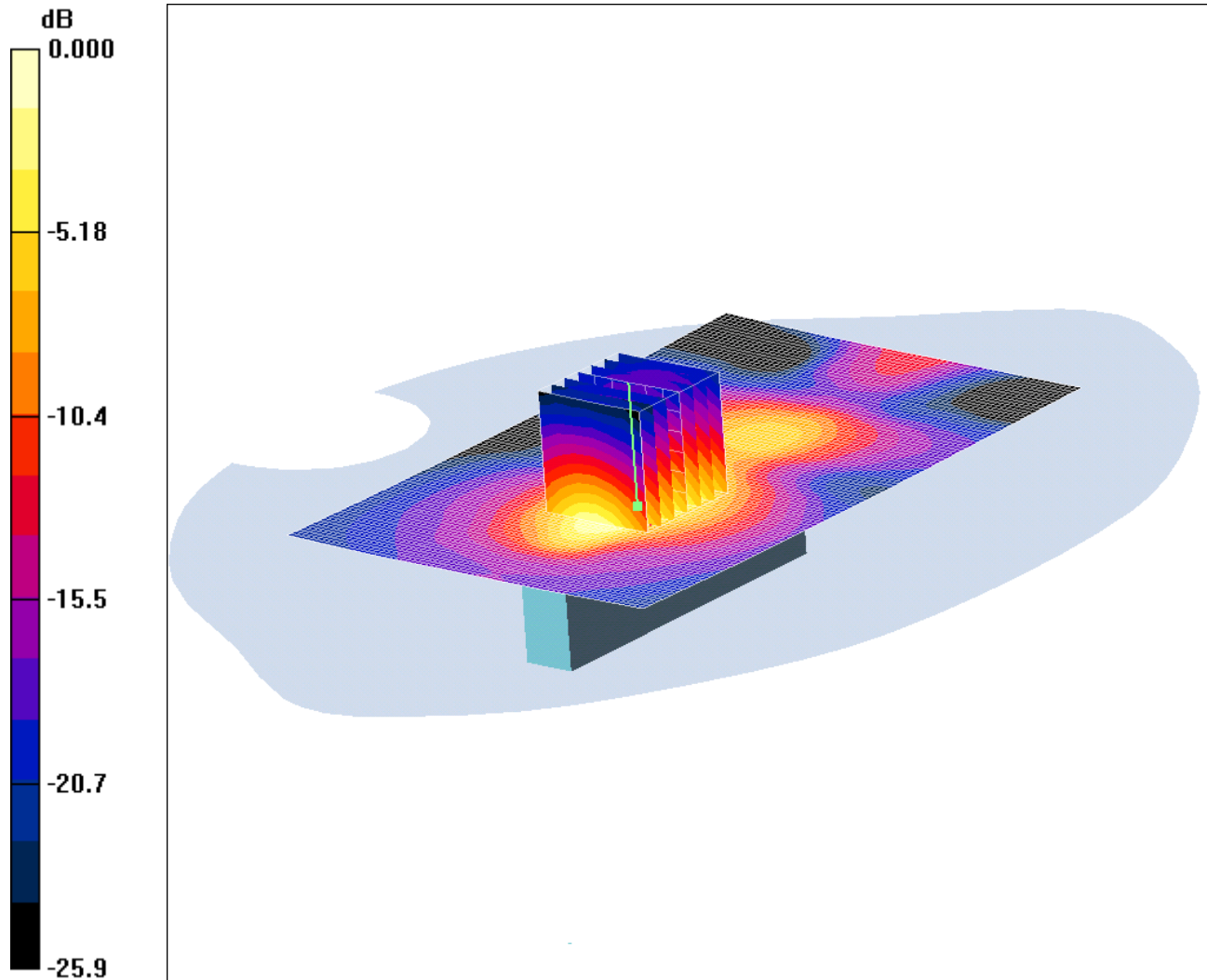
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 03/11/2009

SCN/76288JD01/006 - Vertical-Front of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH13436 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.776mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2687.2 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2687.2$ MHz; $\sigma = 2.23$ mho/m; $\epsilon_r = 49.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Front of EUT Facing Phantom - High/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.818 mW/g

Vertical Front of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.9 V/m; Power Drift = 0.017 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.682 mW/g; SAR(10 g) = 0.307 mW/g

Maximum value of SAR (measured) = 0.776 mW/g

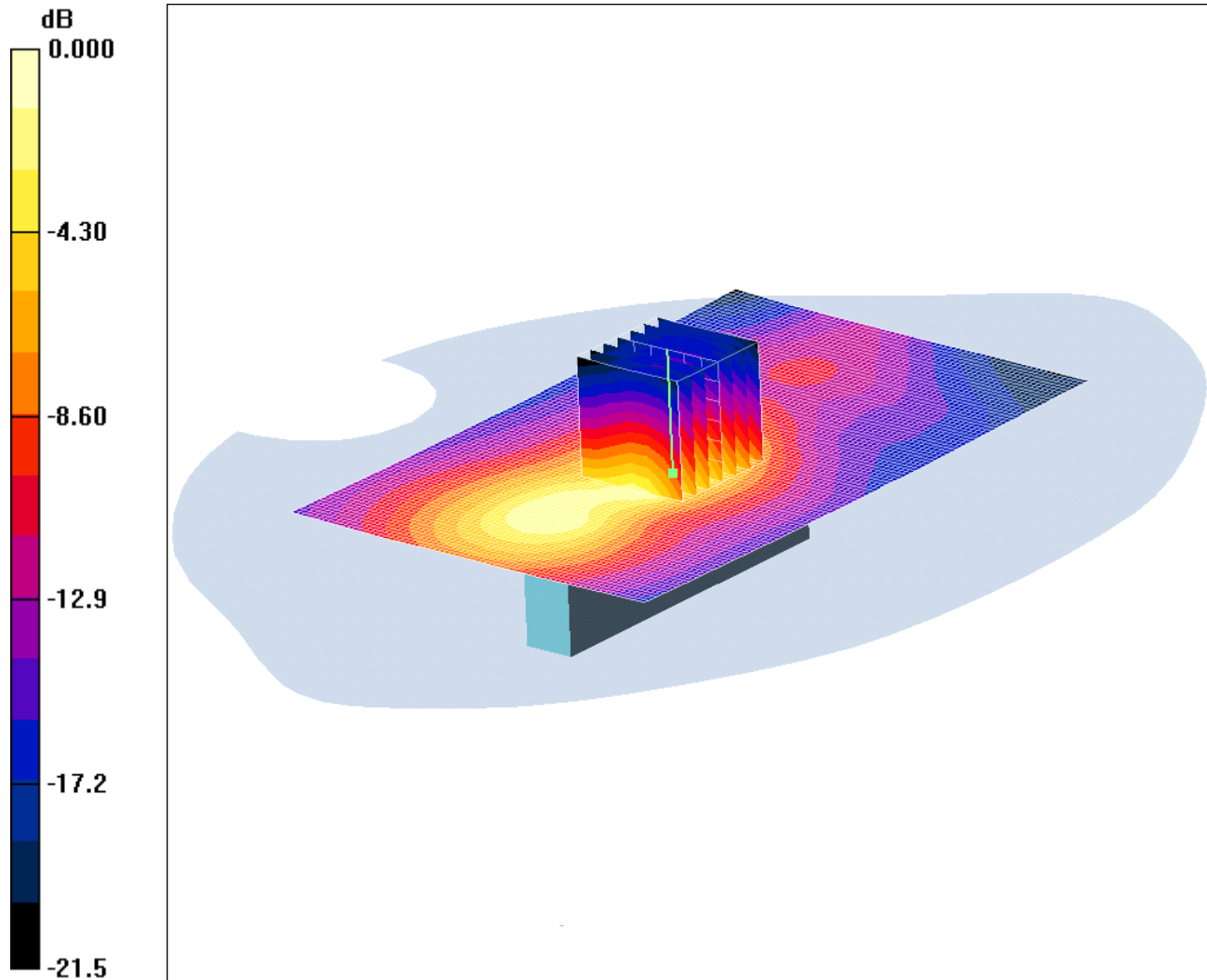
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 03/11/2009

SCN/76288JD01/007 - Vertical-Back of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12494 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2498.8 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2498.8$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 50.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Back of EUT Facing Phantom - Low/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.563 mW/g

Vertical Back of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.6 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.528 mW/g; SAR(10 g) = 0.251 mW/g

Maximum value of SAR (measured) = 0.605 mW/g

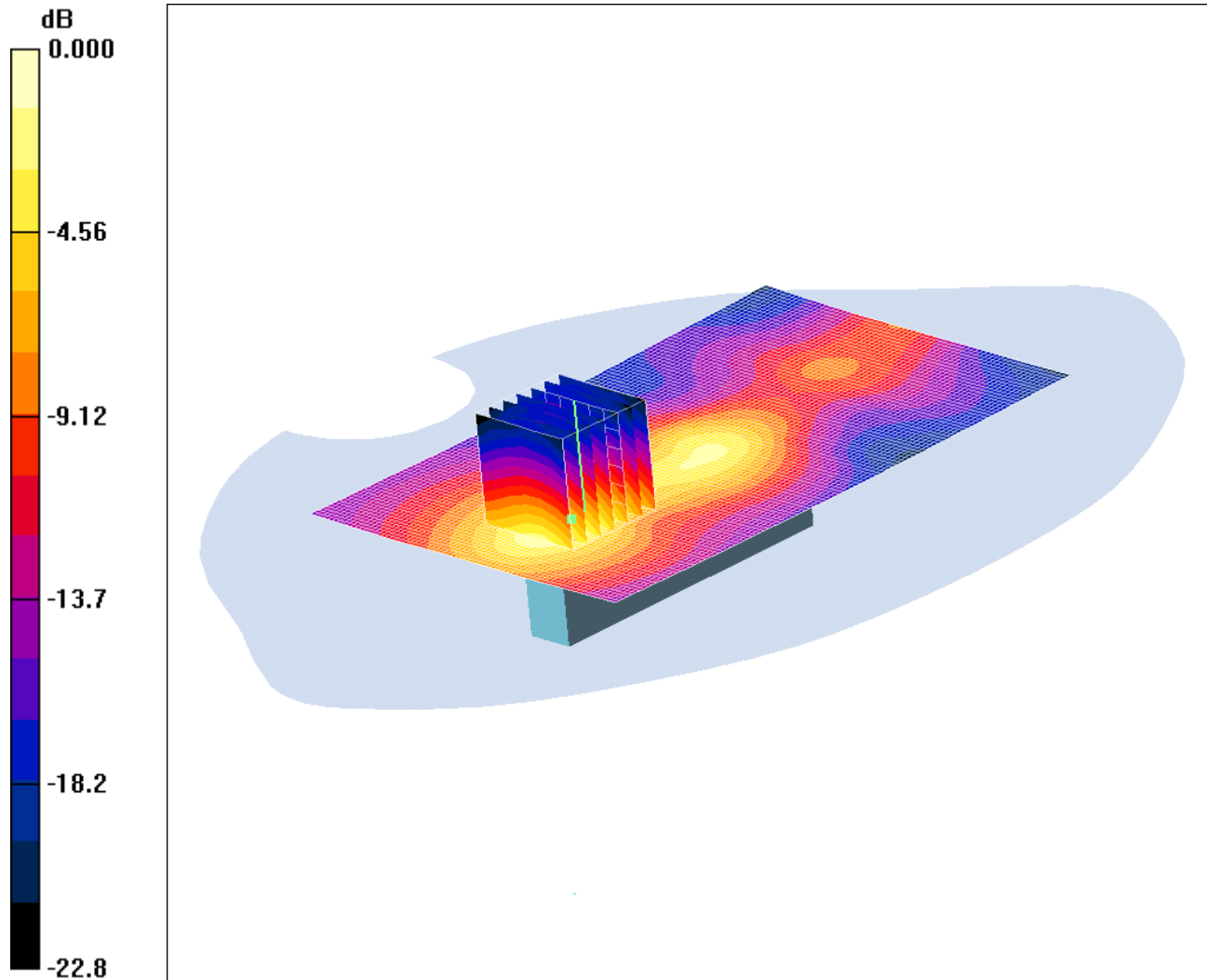
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 03/11/2009

SCN/76288JD01/008 - Vertical-Back of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.487mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.11$ mho/m; $\epsilon_r = 50.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Back of EUT Facing Phantom - Middle/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.459 mW/g

Vertical Back of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.58 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 0.916 W/kg

SAR(1 g) = 0.431 mW/g; SAR(10 g) = 0.205 mW/g

Maximum value of SAR (measured) = 0.487 mW/g

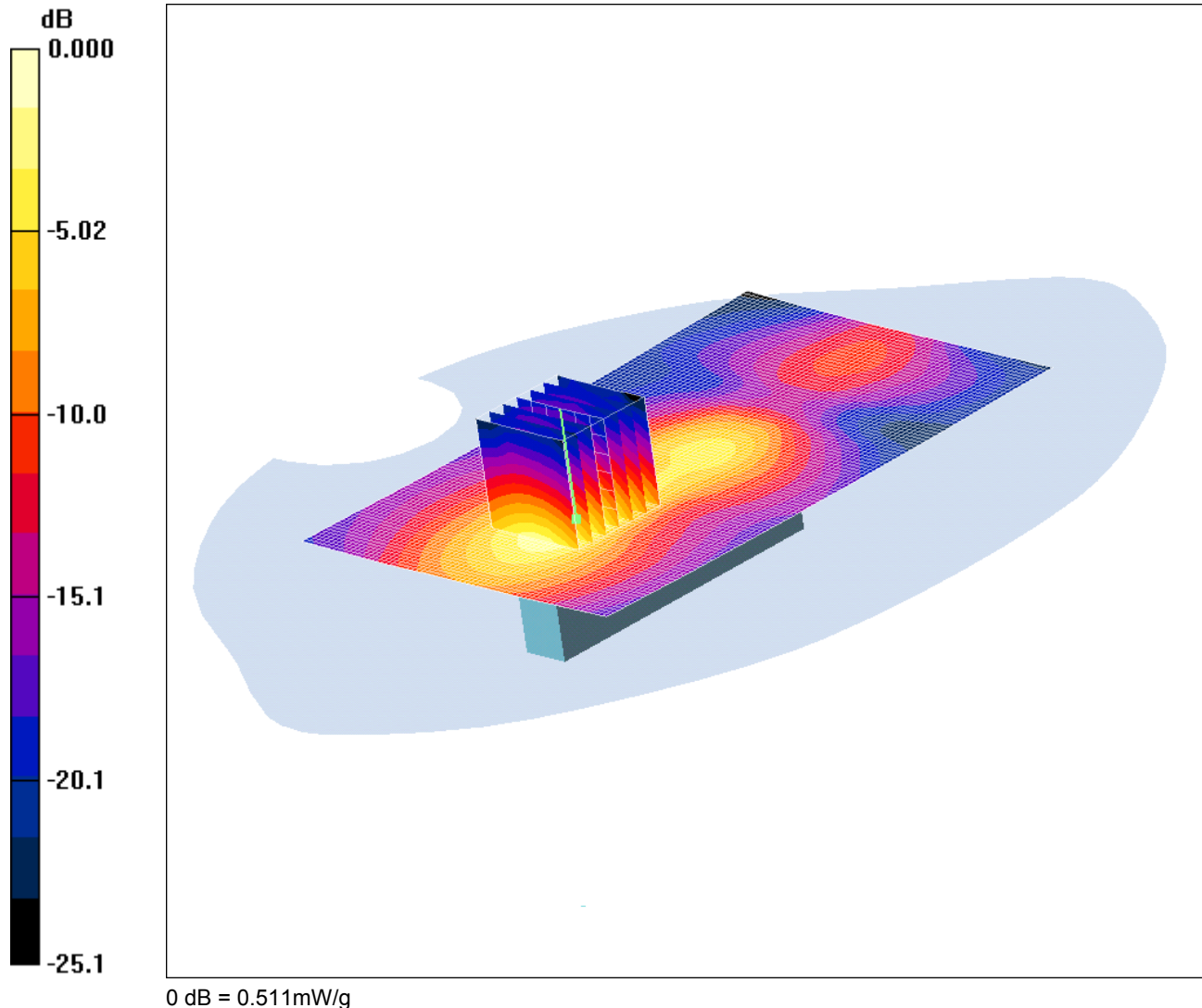
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 03/11/2009

SCN/76288JD01/009 - Vertical-Back of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH13436 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2687.2 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2687.2$ MHz; $\sigma = 2.23$ mho/m; $\epsilon_r = 49.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Back of EUT Facing Phantom - High/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.467 mW/g

Vertical Back of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.55 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 0.988 W/kg

SAR(1 g) = 0.454 mW/g; SAR(10 g) = 0.207 mW/g

Maximum value of SAR (measured) = 0.511 mW/g

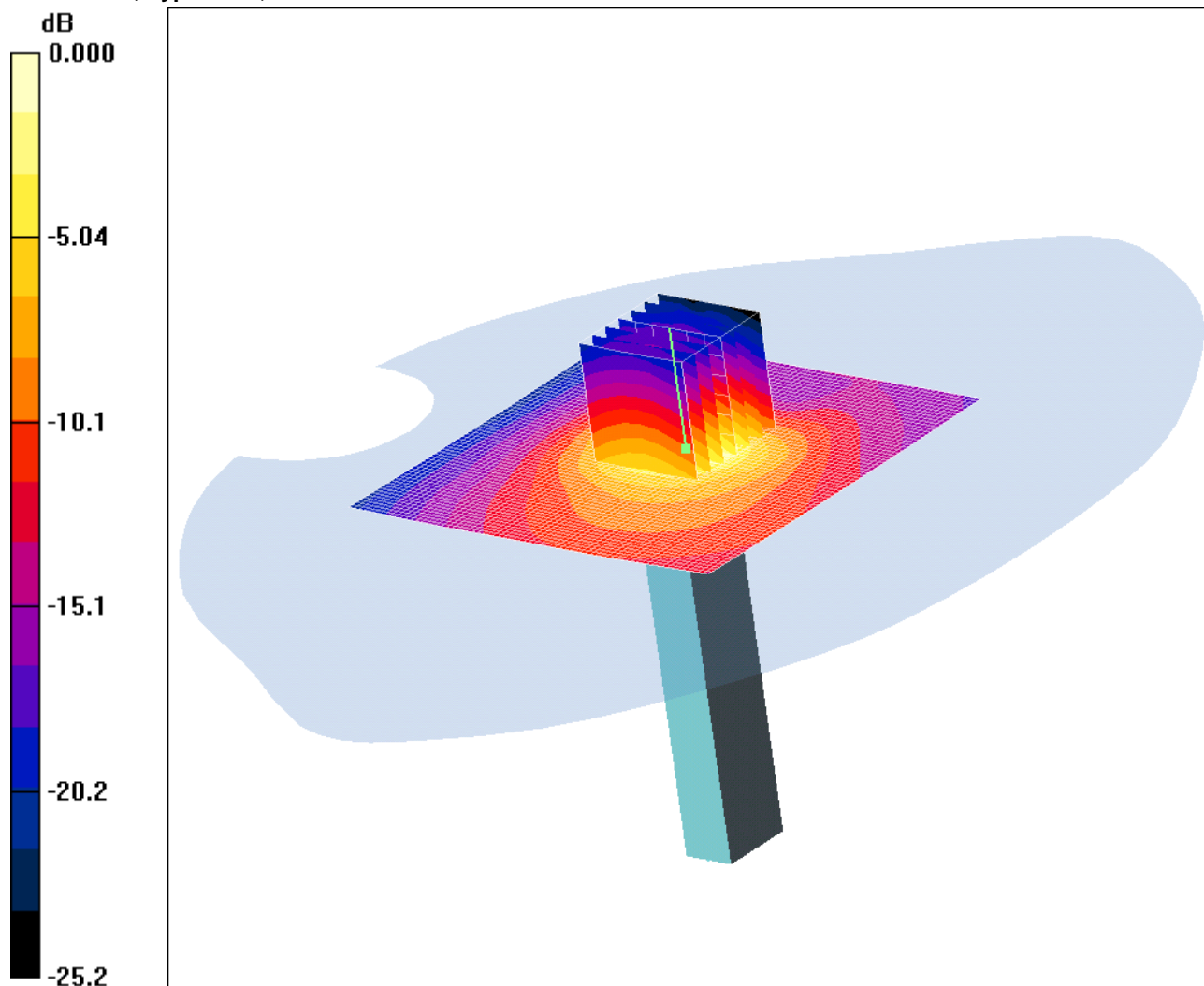
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 04/11/2009

SCN/76288JD01/010 - Top of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12494 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.605mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2498.8 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2498.8$ MHz; $\sigma = 1.96$ mho/m; $\epsilon_r = 50.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Top of EUT Facing Phantom - Low/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.587 mW/g

Top of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.3 V/m; Power Drift = 0.353 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.521 mW/g; SAR(10 g) = 0.232 mW/g

Maximum value of SAR (measured) = 0.605 mW/g

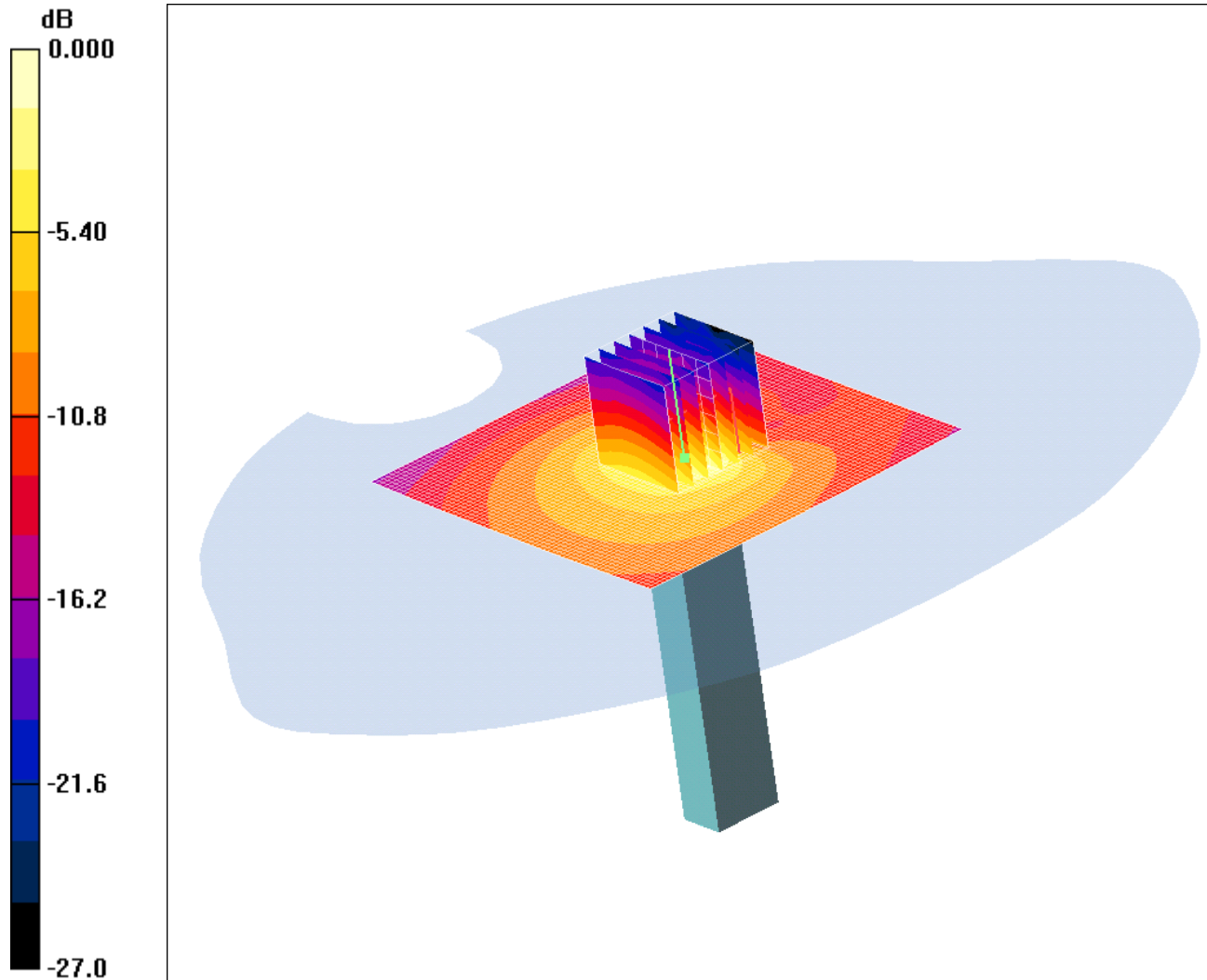
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 04/11/2009

SCN/76288JD01/011 - Top of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.09$ mho/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Top of EUT Facing Phantom - Middle/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.383 mW/g

Top of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.3 V/m; Power Drift = -0.063 dB

Peak SAR (extrapolated) = 0.705 W/kg

SAR(1 g) = 0.326 mW/g; SAR(10 g) = 0.146 mW/g

Maximum value of SAR (measured) = 0.375 mW/g

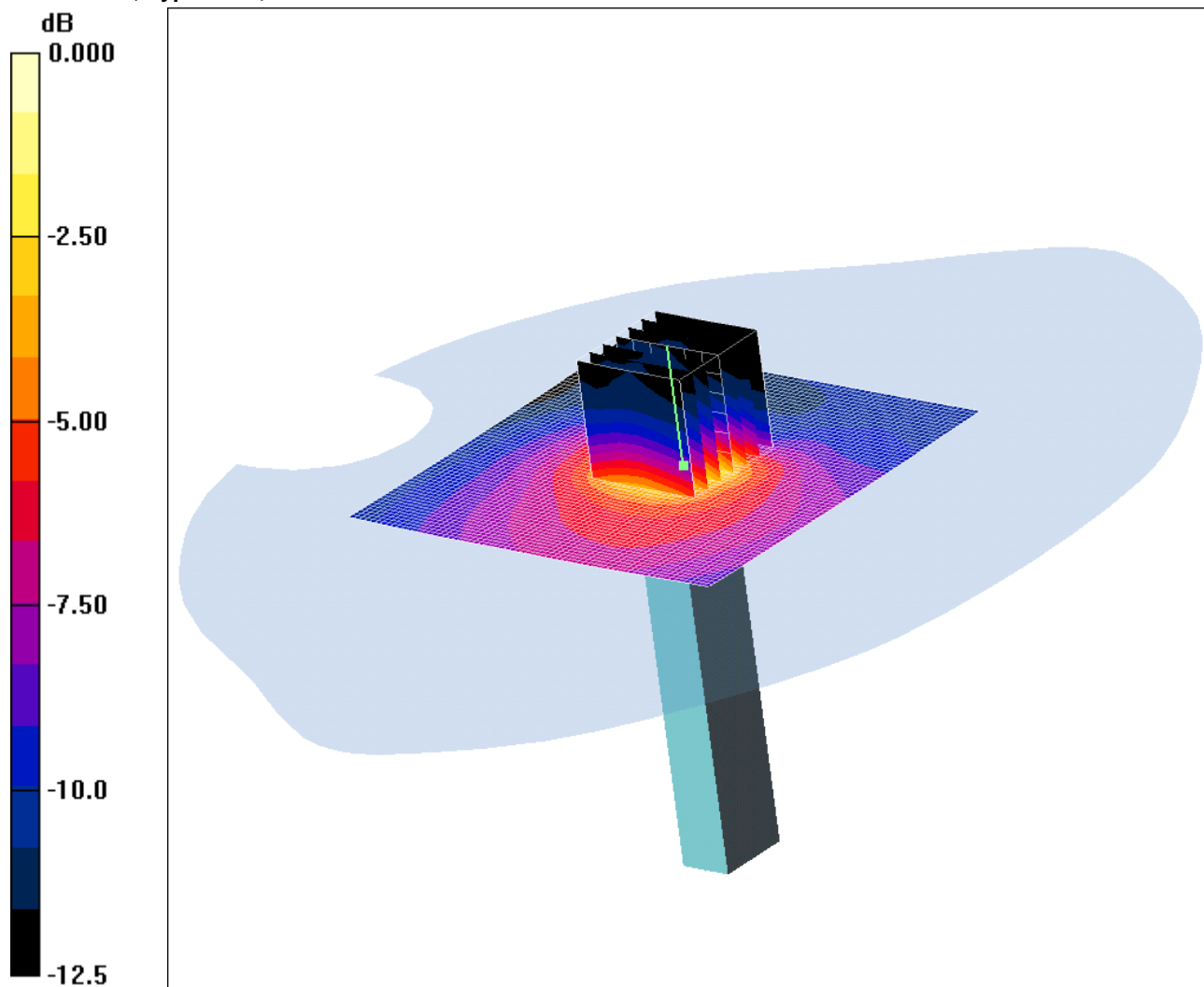
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 04/11/2009

SCN/76288JD01/012 - Top of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH13436 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.247mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2687.2 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2687.2$ MHz; $\sigma = 2.21$ mho/m; $\epsilon_r = 49.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Top of EUT Facing Phantom - High/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.253 mW/g

Top of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.71 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 0.471 W/kg

SAR(1 g) = 0.220 mW/g; SAR(10 g) = 0.105 mW/g

Maximum value of SAR (measured) = 0.247 mW/g

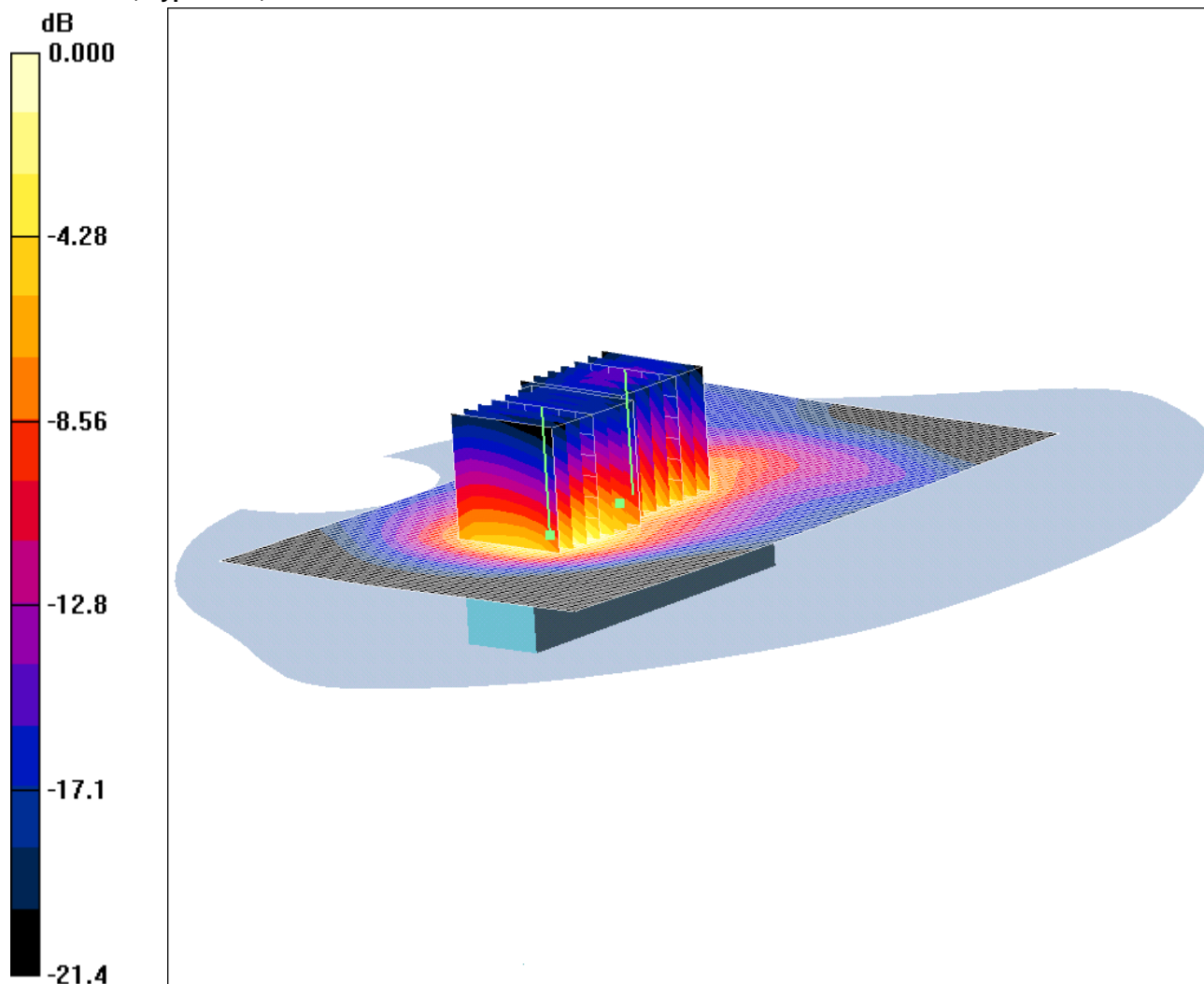
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 04/11/2009

SCN/76288JD01/013 - Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH12494 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.795mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2498.8 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2498.8$ MHz; $\sigma = 1.96$ mho/m; $\epsilon_r = 50.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Up of EUT Facing Phantom - Low/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.901 mW/g

Horizontal Up of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.34 V/m; Power Drift = -0.185 dB; Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.728 mW/g; SAR(10 g) = 0.354 mW/g; Maximum value of SAR (measured) = 0.814 mW/g**Horizontal Up of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.34 V/m; Power Drift = -0.185 dB; Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.701 mW/g; SAR(10 g) = 0.339 mW/g; Maximum value of SAR (measured) = 0.795 mW/g

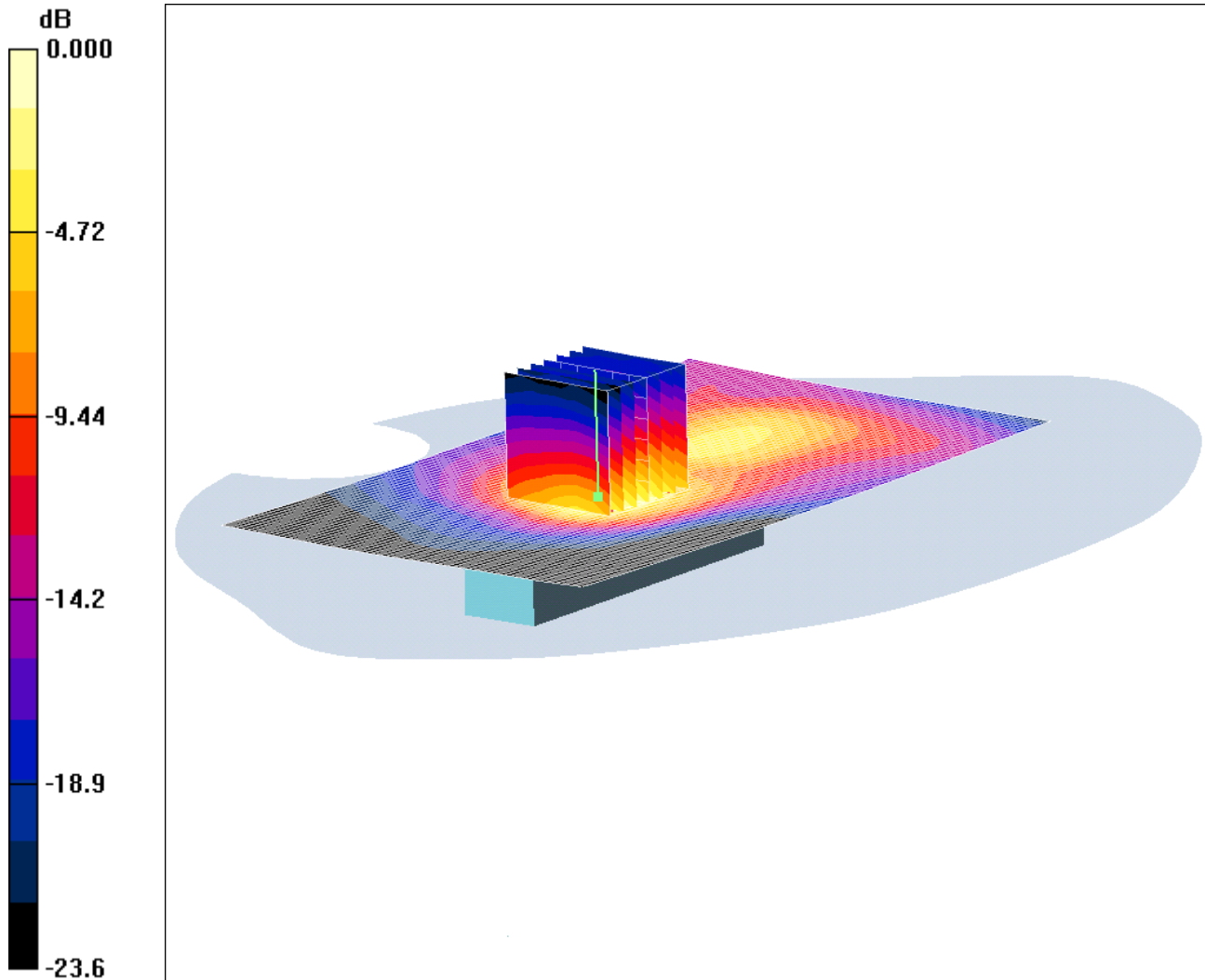
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 04/11/2009

SCN/76288JD01/014 - Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH112965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.635mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.09$ mho/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Up of EUT Facing Phantom - Middle/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.683 mW/g

Horizontal Up of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.6 V/m; Power Drift = -0.201 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.569 mW/g; SAR(10 g) = 0.269 mW/g

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

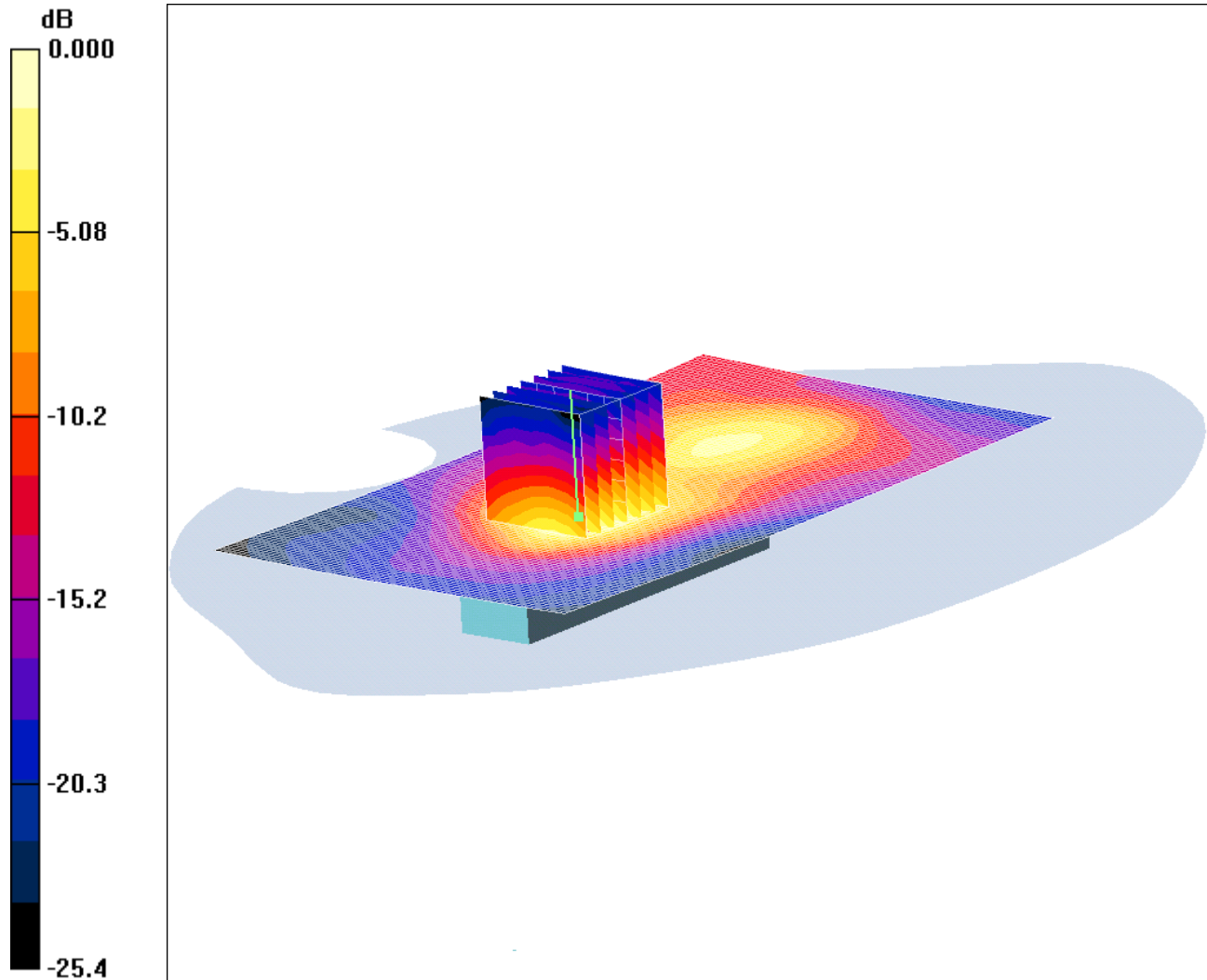
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 04/11/2009

SCN/76288JD01/015 - Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps QPSK CH113436 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2687.2 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2687.2$ MHz; $\sigma = 2.21$ mho/m; $\epsilon_r = 49.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Up of EUT Facing Phantom - Middle/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

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

Horizontal Up of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.51 V/m; Power Drift = -0.139 dB

Peak SAR (extrapolated) = 0.769 W/kg

SAR(1 g) = 0.381 mW/g; SAR(10 g) = 0.186 mW/g

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

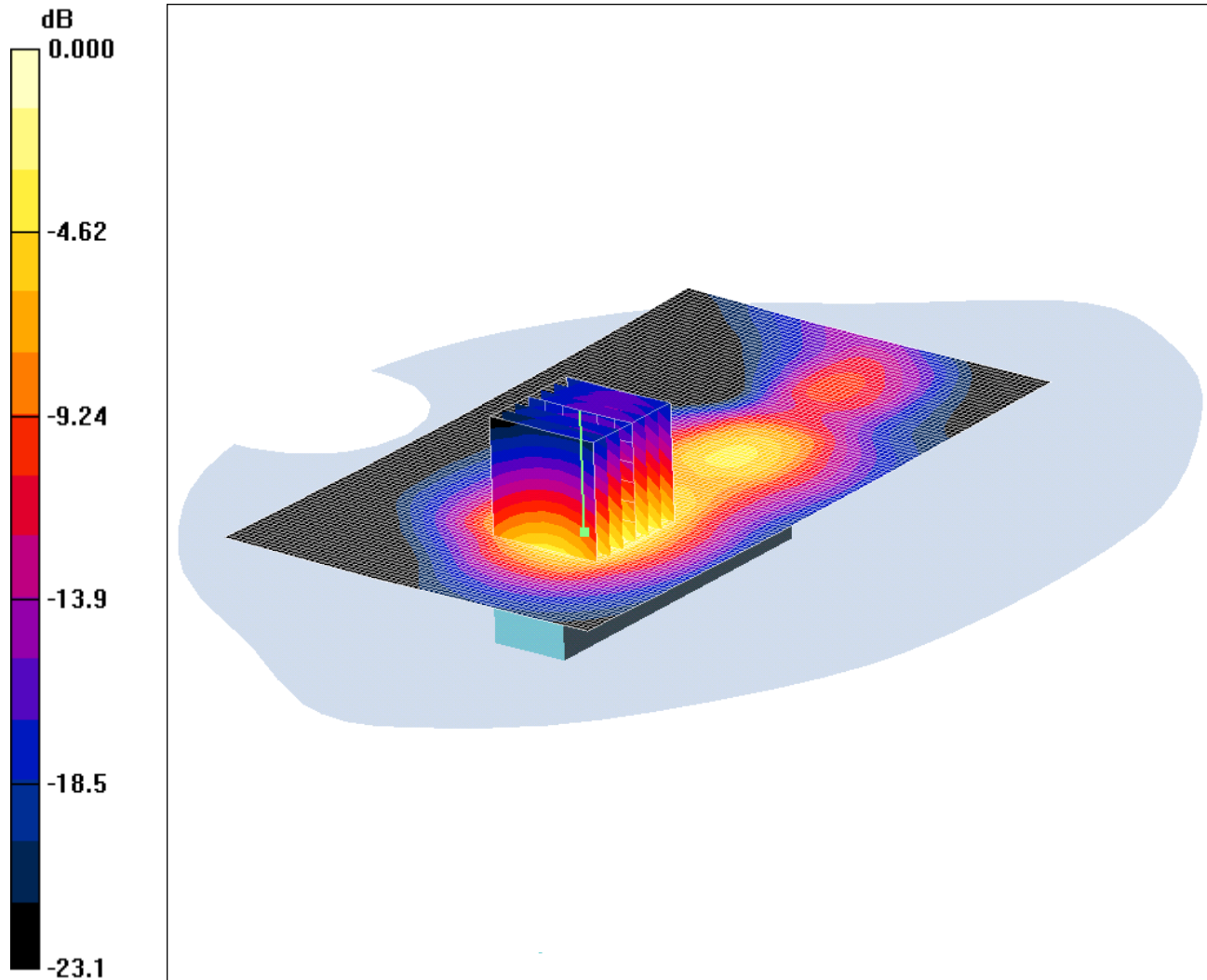
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 04/11/2009

SCN/76288JD01/016 - Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12507 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2501.4 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2501.4$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 50.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Down of EUT Facing Phantom - Low/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.89 mW/g

Horizontal Down of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.2 V/m; Power Drift = -0.218 dB

Peak SAR (extrapolated) = 2.89 W/kg

SAR(1 g) = 1.47 mW/g; SAR(10 g) = 0.738 mW/g

Maximum value of SAR (measured) = 1.64 mW/g

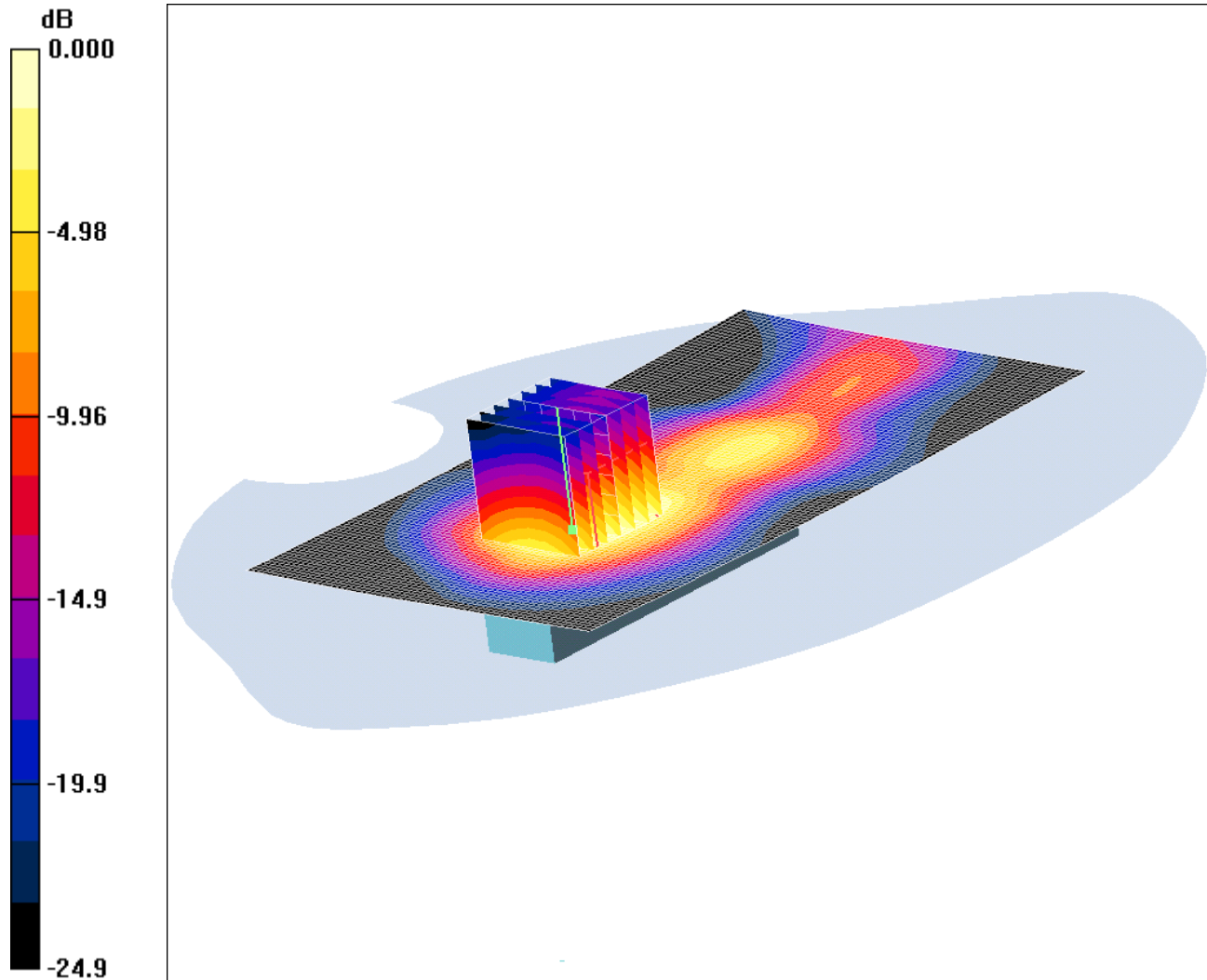
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 04/11/2009

SCN/76288JD01/017 - Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 1.22mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.09$ mho/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Down of EUT Facing Phantom - Low/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.34 mW/g

Horizontal Down of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.1 V/m; Power Drift = -0.133 dB

Peak SAR (extrapolated) = 2.15 W/kg

SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.573 mW/g

Maximum value of SAR (measured) = 1.22 mW/g

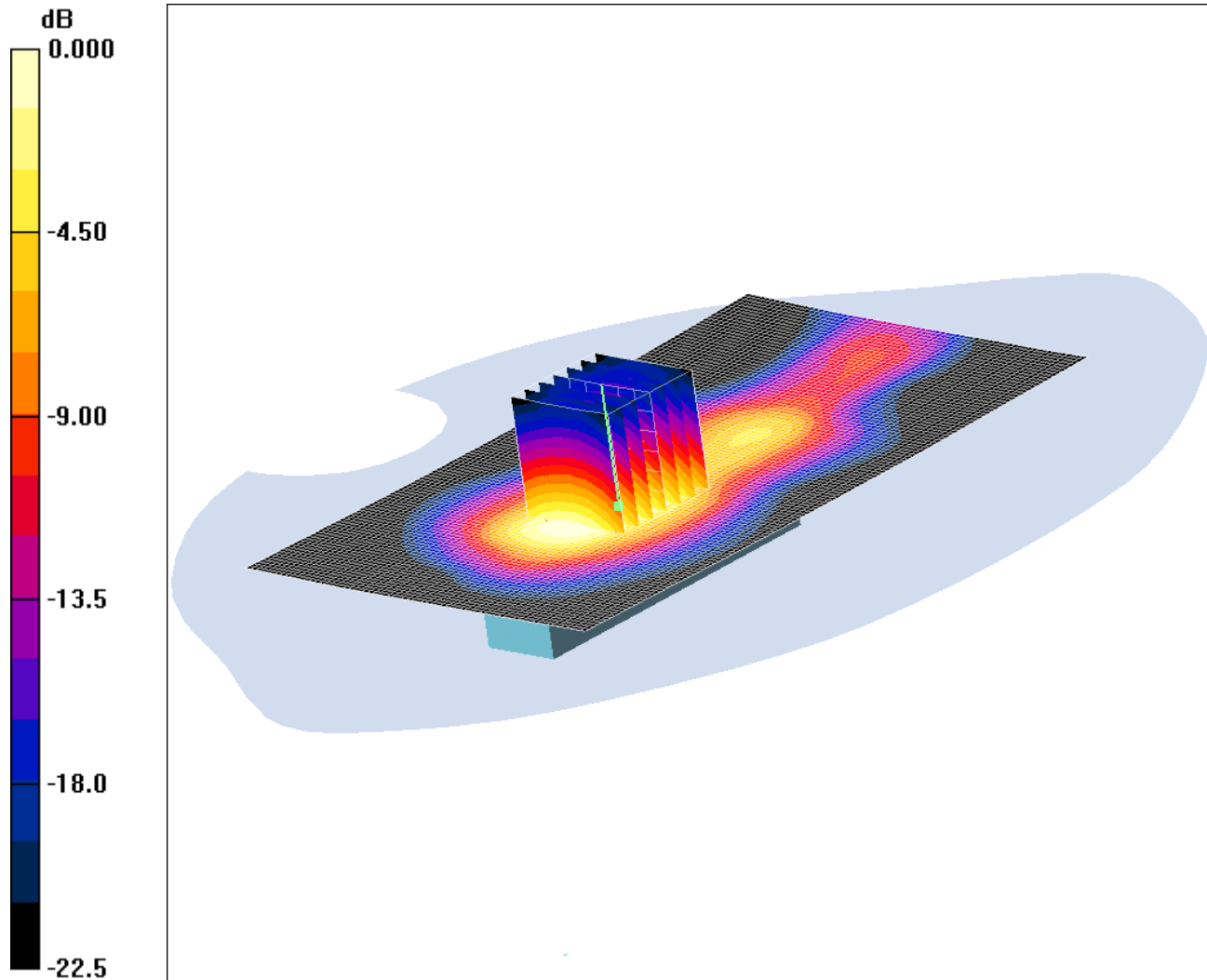
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 04/11/2009

SCN/76288JD01/018 - Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH13420 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.796mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2684.6 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2684.6$ MHz; $\sigma = 2.21$ mho/m; $\epsilon_r = 49.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Down of EUT Facing Phantom - High/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.849 mW/g

Horizontal Down of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.3 V/m; Power Drift = -0.052 dB

Peak SAR (extrapolated) = 1.33 W/kg

SAR(1 g) = 0.711 mW/g; SAR(10 g) = 0.361 mW/g

Maximum value of SAR (measured) = 0.796 mW/g

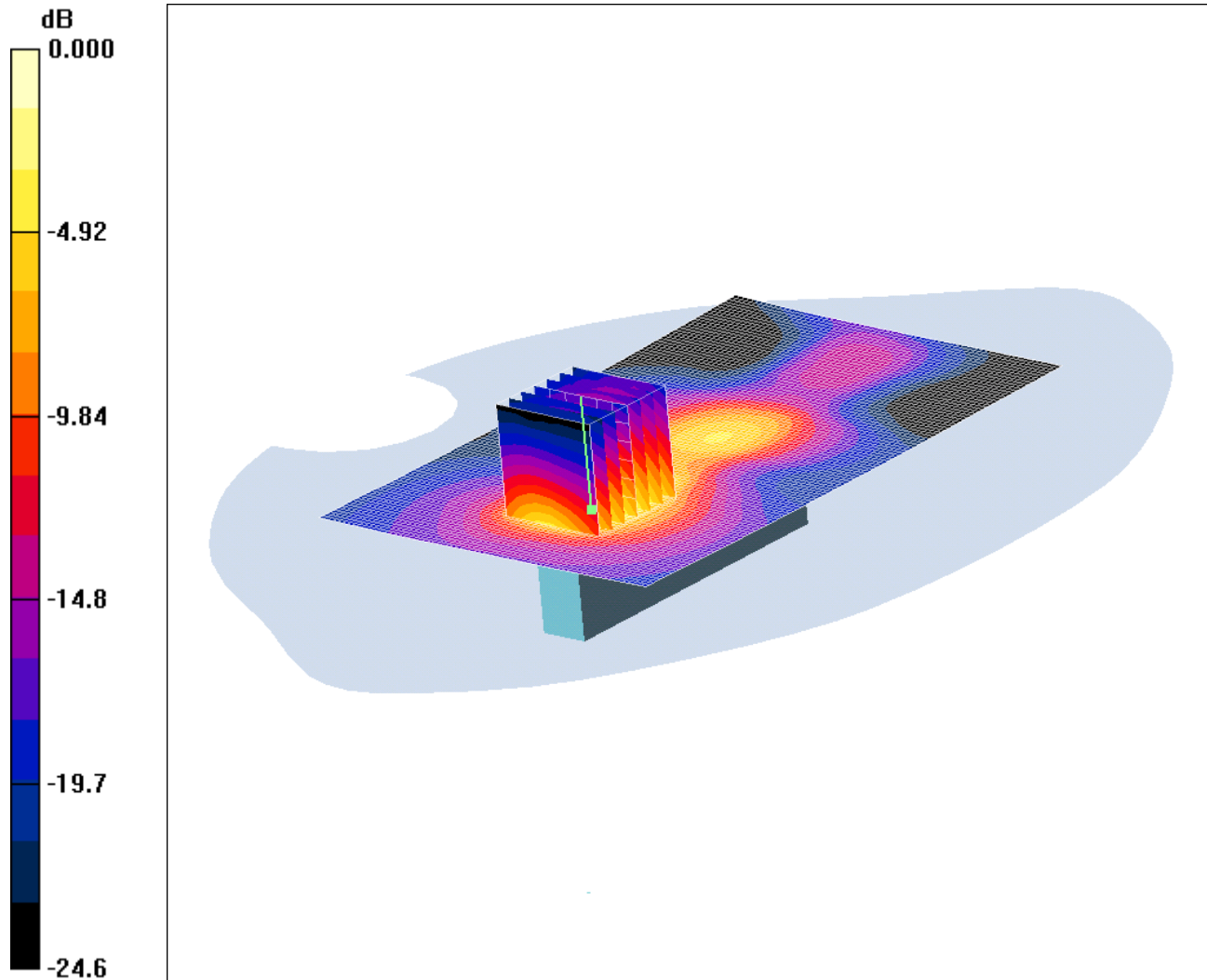
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 05/11/2009

SCN/76288JD01/019 - Vertical-Front of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12507 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 1.53mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2501.4 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2501.4$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 50.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Front of EUT Facing Phantom - Low/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.64 mW/g

Vertical Front of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.3 V/m; Power Drift = -0.117 dB

Peak SAR (extrapolated) = 2.78 W/kg

SAR(1 g) = 1.34 mW/g; SAR(10 g) = 0.609 mW/g

Maximum value of SAR (measured) = 1.53 mW/g

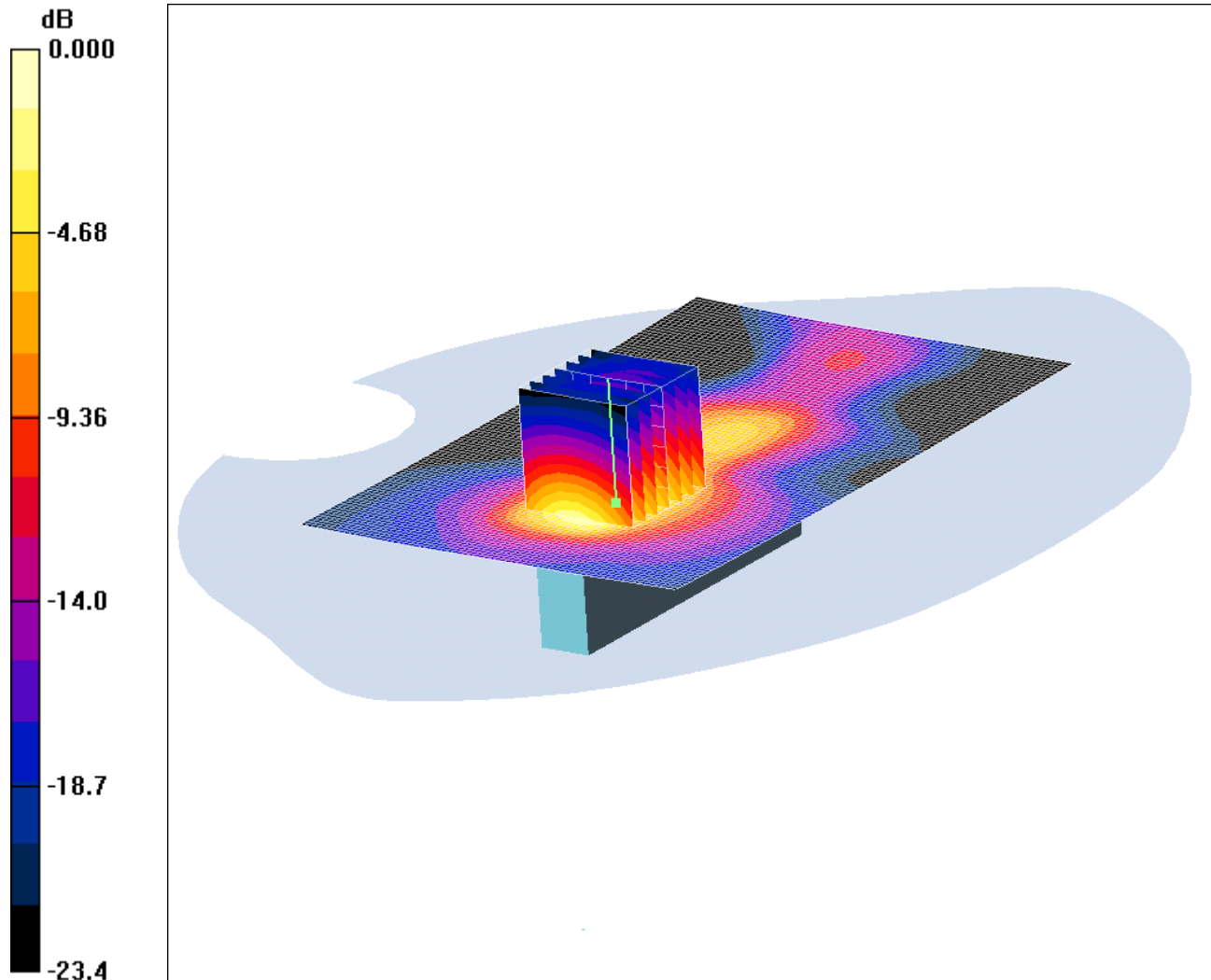
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 05/11/2009

SCN/76288JD01/020 - Vertical-Front of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 1.28mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.09$ mho/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Front of EUT Facing Phantom - Low/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.21 mW/g

Vertical Front of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.1 V/m; Power Drift = -0.204 dB

Peak SAR (extrapolated) = 2.26 W/kg

SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.508 mW/g

Maximum value of SAR (measured) = 1.28 mW/g

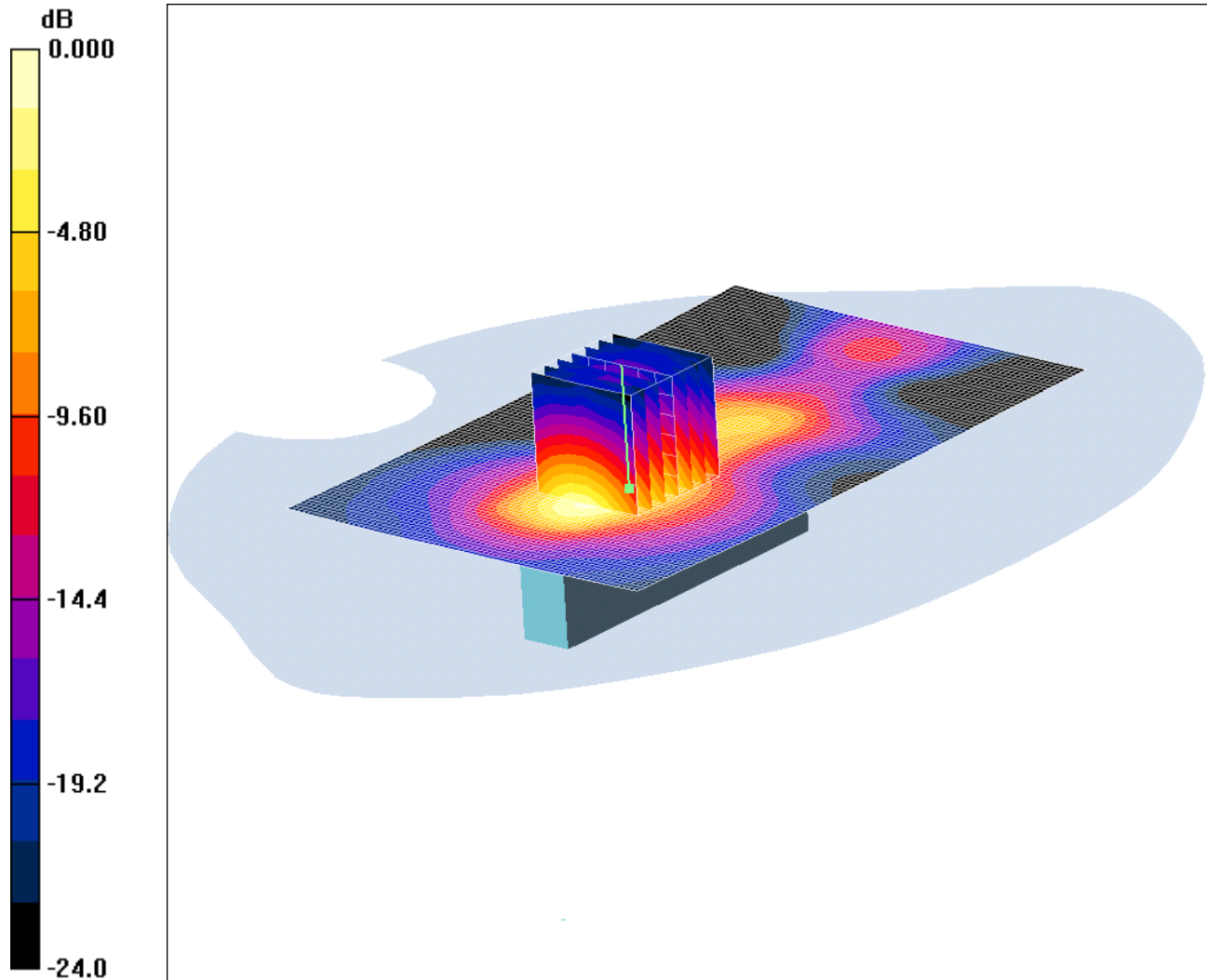
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 05/11/2009

SCN/76288JD01/021 - Vertical-Front of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH13420 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.830mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2684.6 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2684.6$ MHz; $\sigma = 2.21$ mho/m; $\epsilon_r = 49.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Front of EUT Facing Phantom - High/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.830 mW/g

Vertical Front of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.0 V/m; Power Drift = -0.149 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 0.727 mW/g; SAR(10 g) = 0.328 mW/g

Maximum value of SAR (measured) = 0.830 mW/g

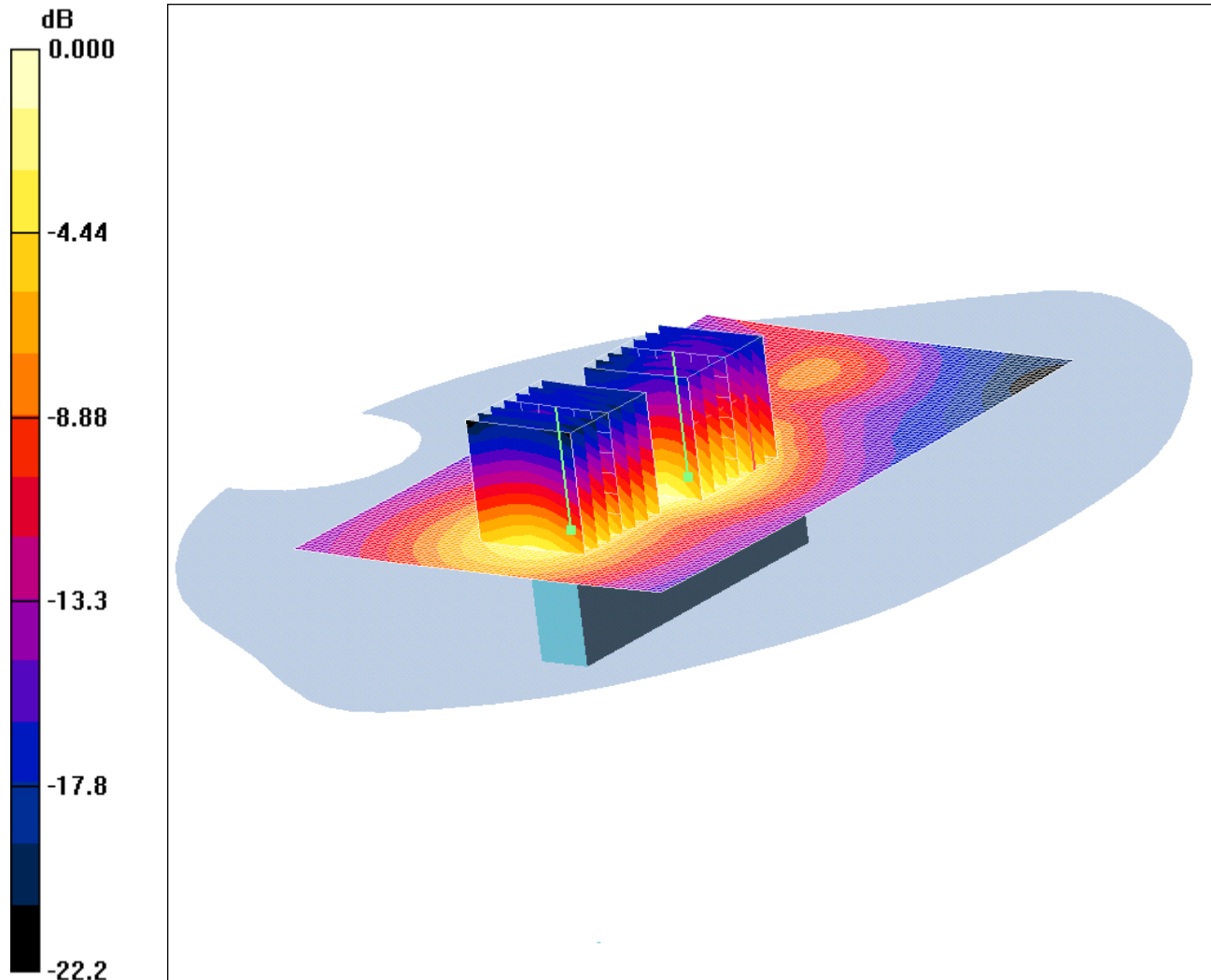
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 05/11/2009

SCN/76288JD01/022 - Vertical-Back of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12507 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.542mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2501.4 MHz; Duty Cycle: 1:2.5
 Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2501.4$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 50.5$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Back of EUT Facing Phantom - Low/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.538 mW/g

Vertical Back of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.8 V/m; Power Drift = 0.096 dB

Peak SAR (extrapolated) = 0.936 W/kg

SAR(1 g) = 0.482 mW/g; SAR(10 g) = 0.238 mW/g

Maximum value of SAR (measured) = 0.534 mW/g

Vertical Back of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.8 V/m; Power Drift = 0.096 dB; Peak SAR (extrapolated) = 0.952 W/kg

SAR(1 g) = 0.478 mW/g; SAR(10 g) = 0.236 mW/g; Maximum value of SAR (measured) = 0.542 mW/g

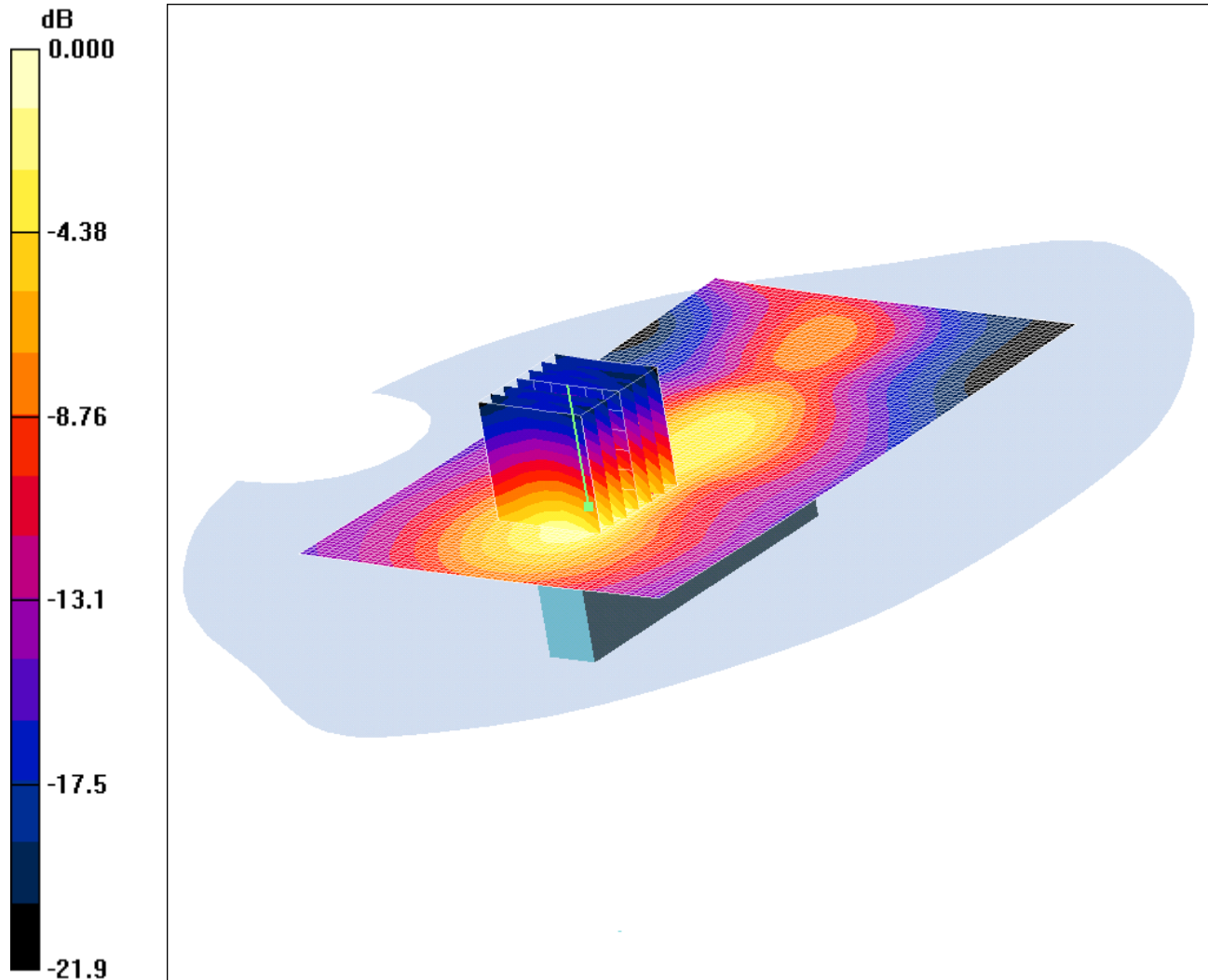
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 05/11/2009

SCN/76288JD01/023 - Vertical-Back of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.489mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.09$ mho/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Back of EUT Facing Phantom - Middle/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.433 mW/g

Vertical Back of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.94 V/m; Power Drift = 0.082 dB

Peak SAR (extrapolated) = 0.905 W/kg

SAR(1 g) = 0.436 mW/g; SAR(10 g) = 0.210 mW/g

Maximum value of SAR (measured) = 0.489 mW/g

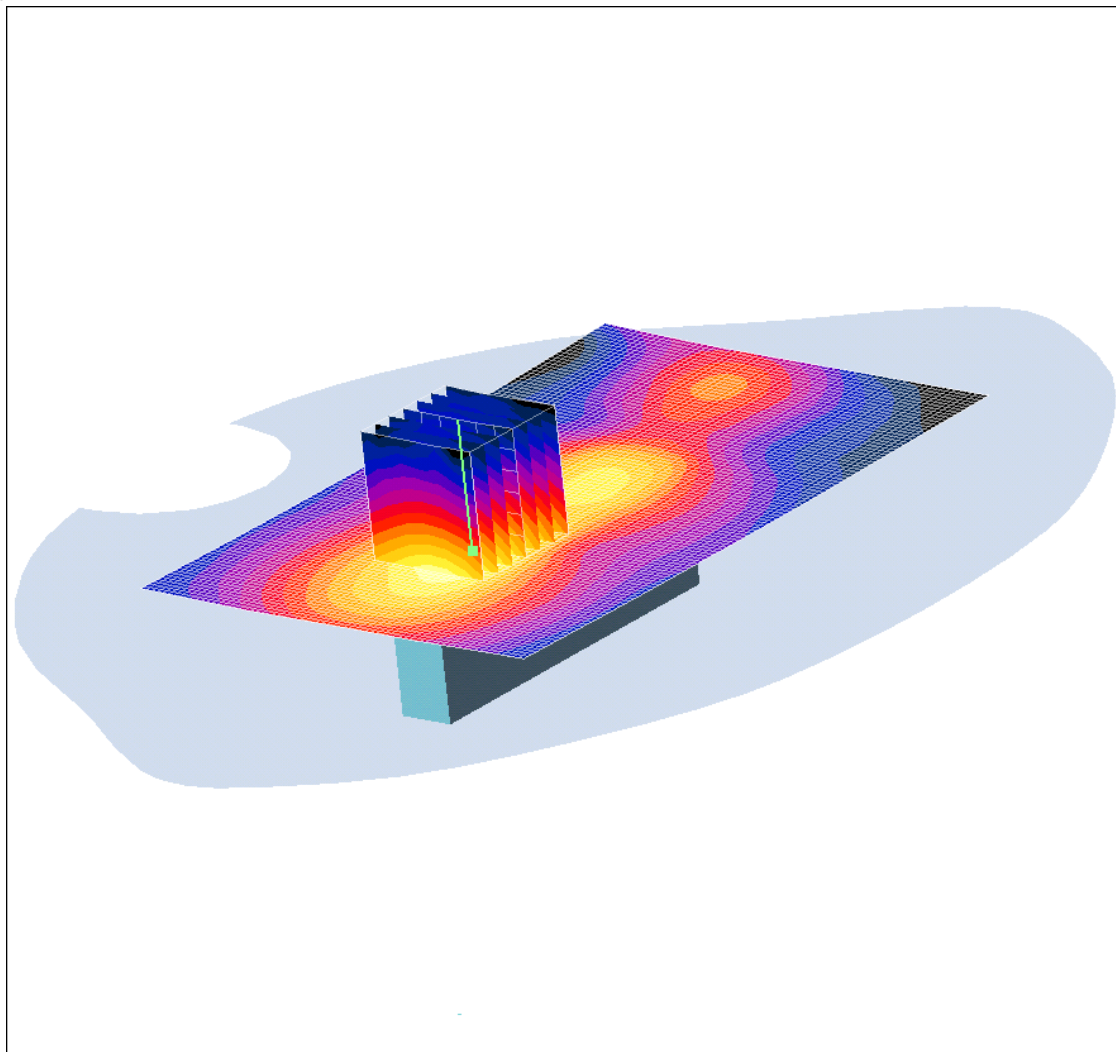
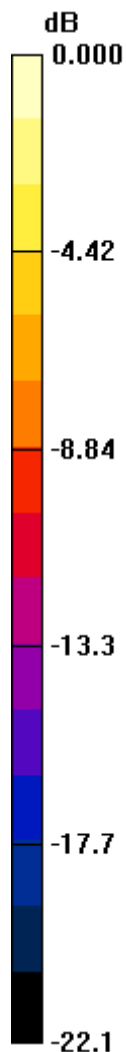
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 05/11/2009

SCN/76288JD01/024 - Vertical-Back of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH13420 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.386mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2684.6 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2684.6$ MHz; $\sigma = 2.21$ mho/m; $\epsilon_r = 49.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Back of EUT Facing Phantom - High/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.345 mW/g

Vertical Back of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.97 V/m; Power Drift = -0.002 dB

Peak SAR (extrapolated) = 0.716 W/kg

SAR(1 g) = 0.340 mW/g; SAR(10 g) = 0.159 mW/g

Maximum value of SAR (measured) = 0.386 mW/g

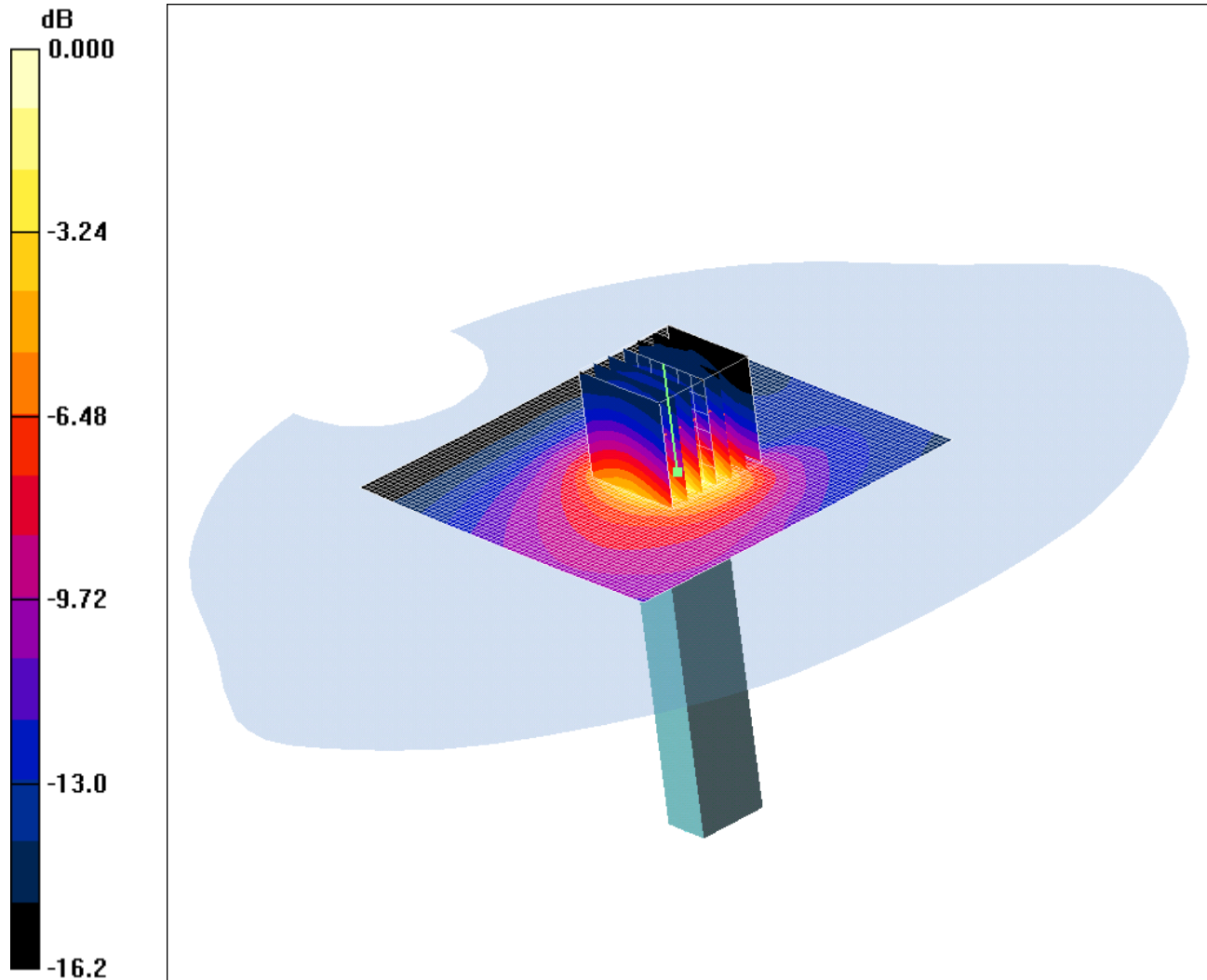
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 05/11/2009

SCN/76288JD01/025 - Top of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12507 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.579mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2501.4 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2501.4$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 50.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Top of EUT Facing Phantom - Low/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm

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

Top of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.7 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.511 mW/g; SAR(10 g) = 0.234 mW/g

Maximum value of SAR (measured) = 0.579 mW/g

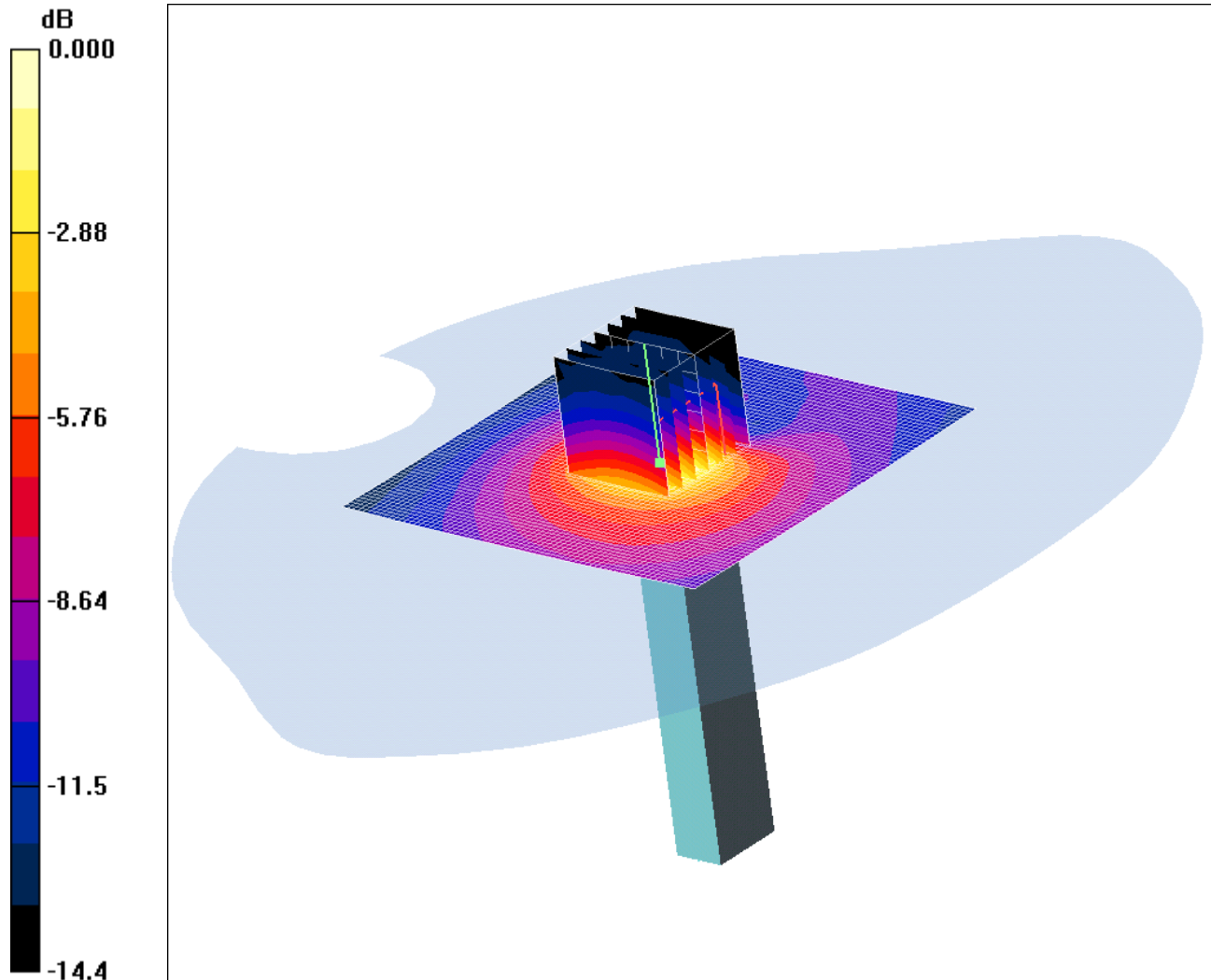
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 05/11/2009

SCN/76288JD01/026 - Top of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.377mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.09$ mho/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Top of EUT Facing Phantom - Middle/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.371 mW/g

Top of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.4 V/m; Power Drift = -0.077 dB

Peak SAR (extrapolated) = 0.705 W/kg

SAR(1 g) = 0.336 mW/g; SAR(10 g) = 0.157 mW/g

Maximum value of SAR (measured) = 0.377 mW/g

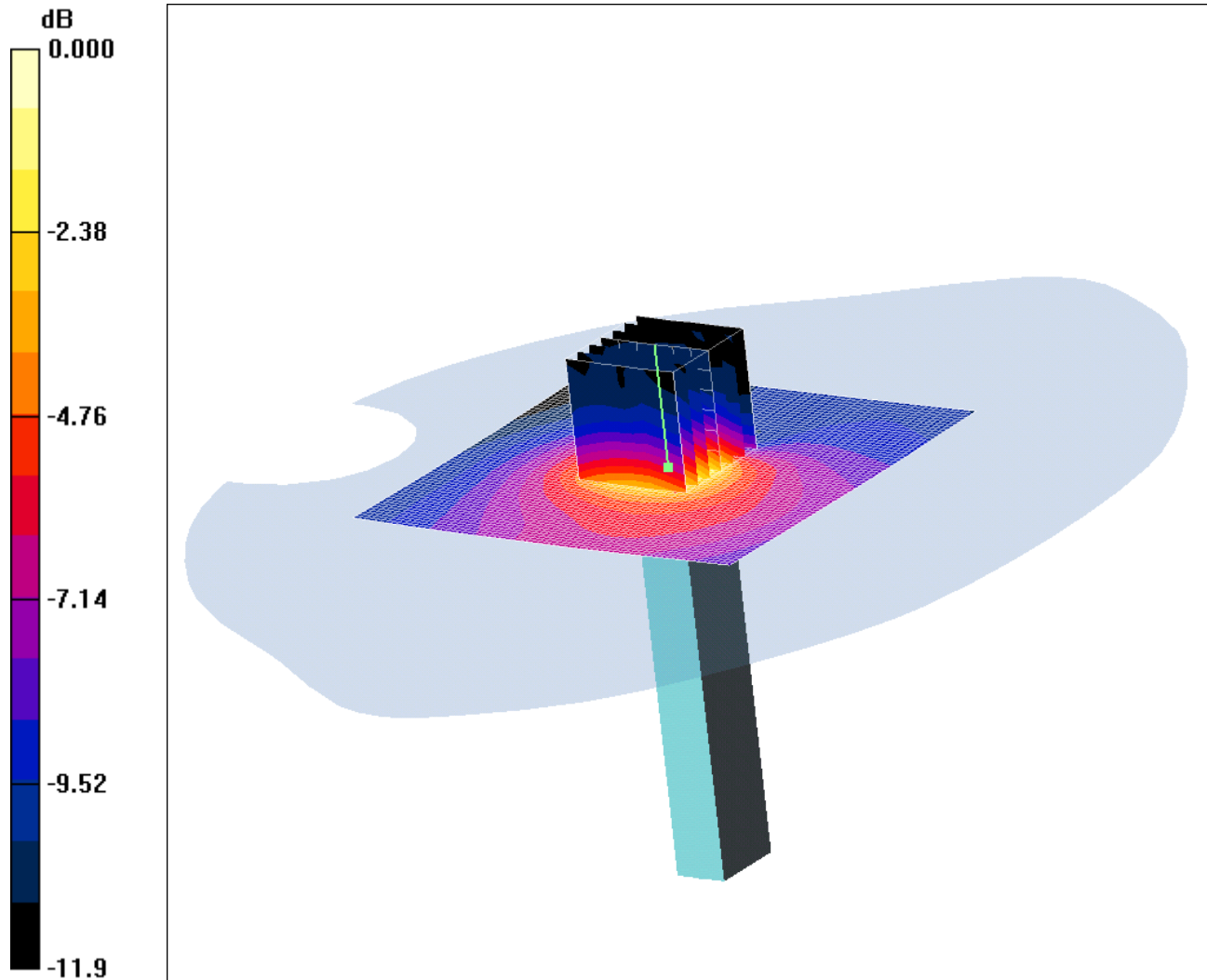
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 05/11/2009

SCN/76288JD01/027 - Top of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH13420 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.202mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2684.6 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2684.6$ MHz; $\sigma = 2.21$ mho/m; $\epsilon_r = 49.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Top of EUT Facing Phantom - High/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.201 mW/g

Top of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.42 V/m; Power Drift = -0.148 dB

Peak SAR (extrapolated) = 0.383 W/kg

SAR(1 g) = 0.181 mW/g; SAR(10 g) = 0.087 mW/g

Maximum value of SAR (measured) = 0.202 mW/g

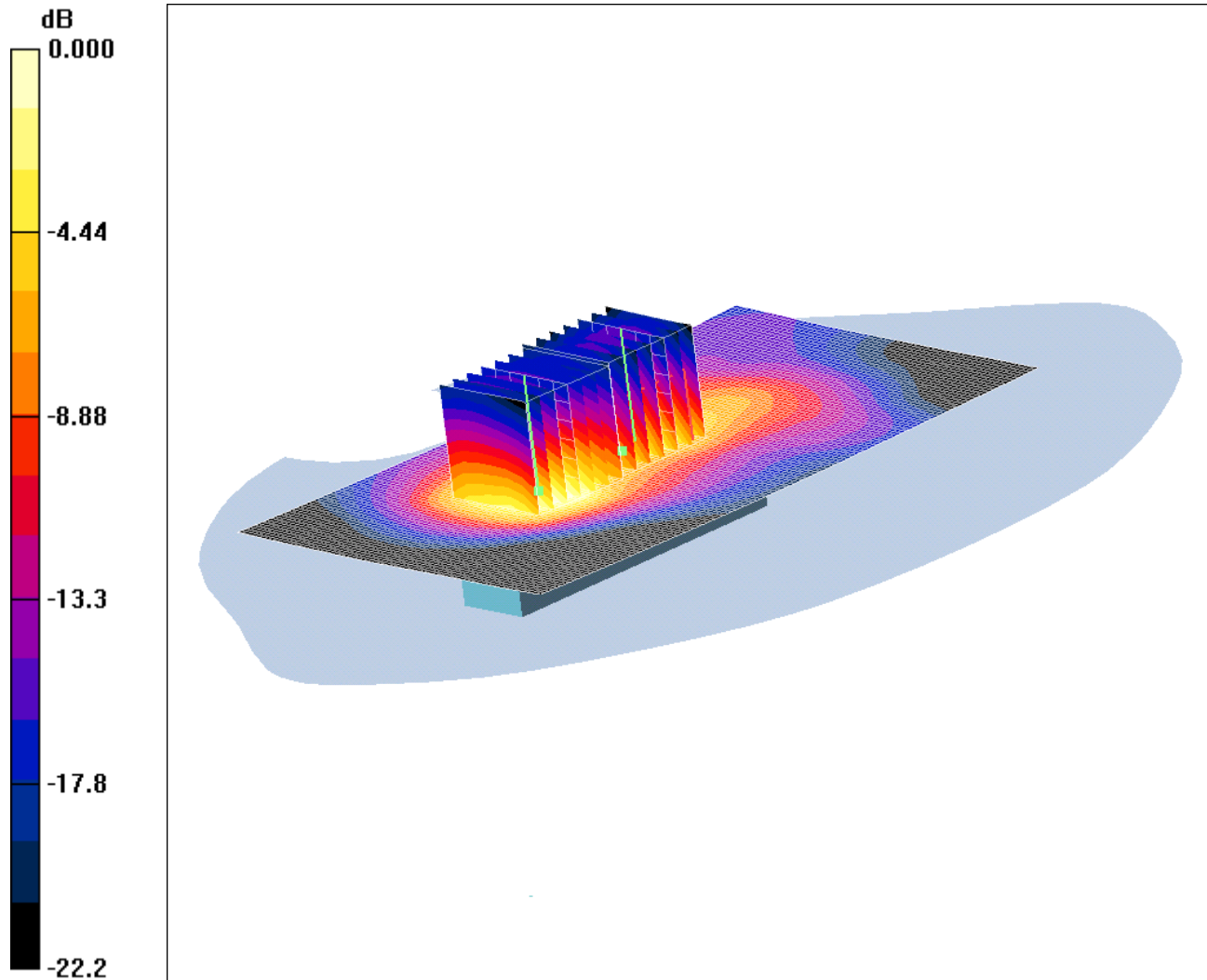
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 05/11/2009

SCN/76288JD01/028 - Horizontal-Up of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12507 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.773mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2501.4 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2501.4$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 50.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Up of EUT Facing Phantom - Low/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.932 mW/g

Horizontal Up of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.53 V/m; Power Drift = 0.222 dB

Peak SAR (extrapolated) = 1.87 W/kg

SAR(1 g) = 0.895 mW/g; SAR(10 g) = 0.422 mW/g

Maximum value of SAR (measured) = 0.988 mW/g

Horizontal Up of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.53 V/m; Power Drift = 0.222 dB; Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.675 mW/g; SAR(10 g) = 0.316 mW/g; Maximum value of SAR (measured) = 0.773 mW/g

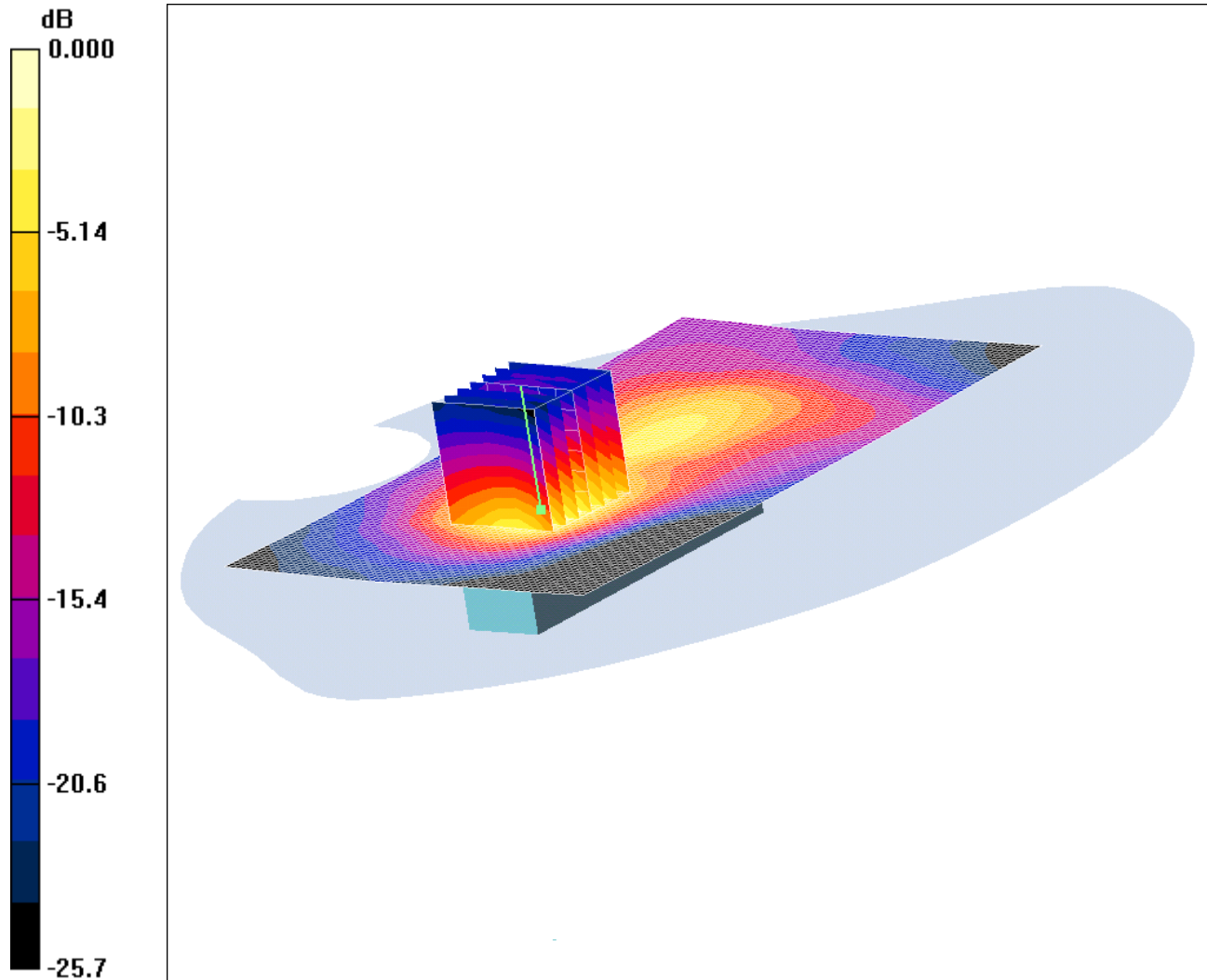
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 05/11/2009

SCN/76288JD01/029 - Horizontal-Up of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:2.5
 Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.09$ mho/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Up of EUT Facing Phantom - Middle/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.769 mW/g

Horizontal Up of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.29 V/m; Power Drift = 0.056 dB

Peak SAR (extrapolated) = 1.49 W/kg

SAR(1 g) = 0.695 mW/g; SAR(10 g) = 0.319 mW/g

Maximum value of SAR (measured) = 0.782 mW/g

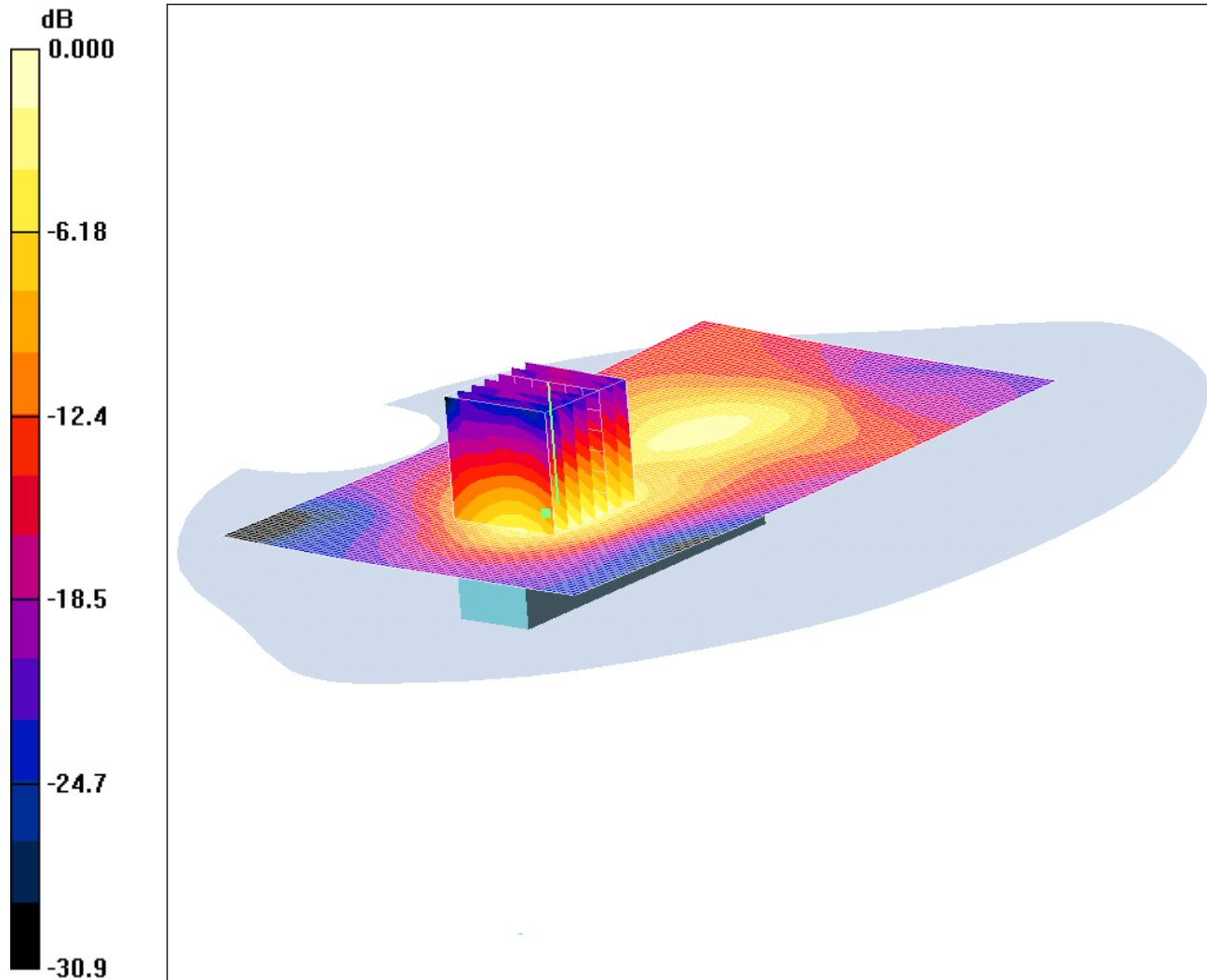
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 05/11/2009

SCN/76288JD01/030 - Horizontal-Up of EUT Facing Phantom TD-CDMA 7.68 Mcps QPSK CH13420 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.372mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2684.6 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2684.6$ MHz; $\sigma = 2.21$ mho/m; $\epsilon_r = 49.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Up of EUT Facing Phantom - High/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.410 mW/g

Horizontal Up of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.34 V/m; Power Drift = 0.081 dB

Peak SAR (extrapolated) = 0.726 W/kg

SAR(1 g) = 0.338 mW/g; SAR(10 g) = 0.160 mW/g

Maximum value of SAR (measured) = 0.372 mW/g

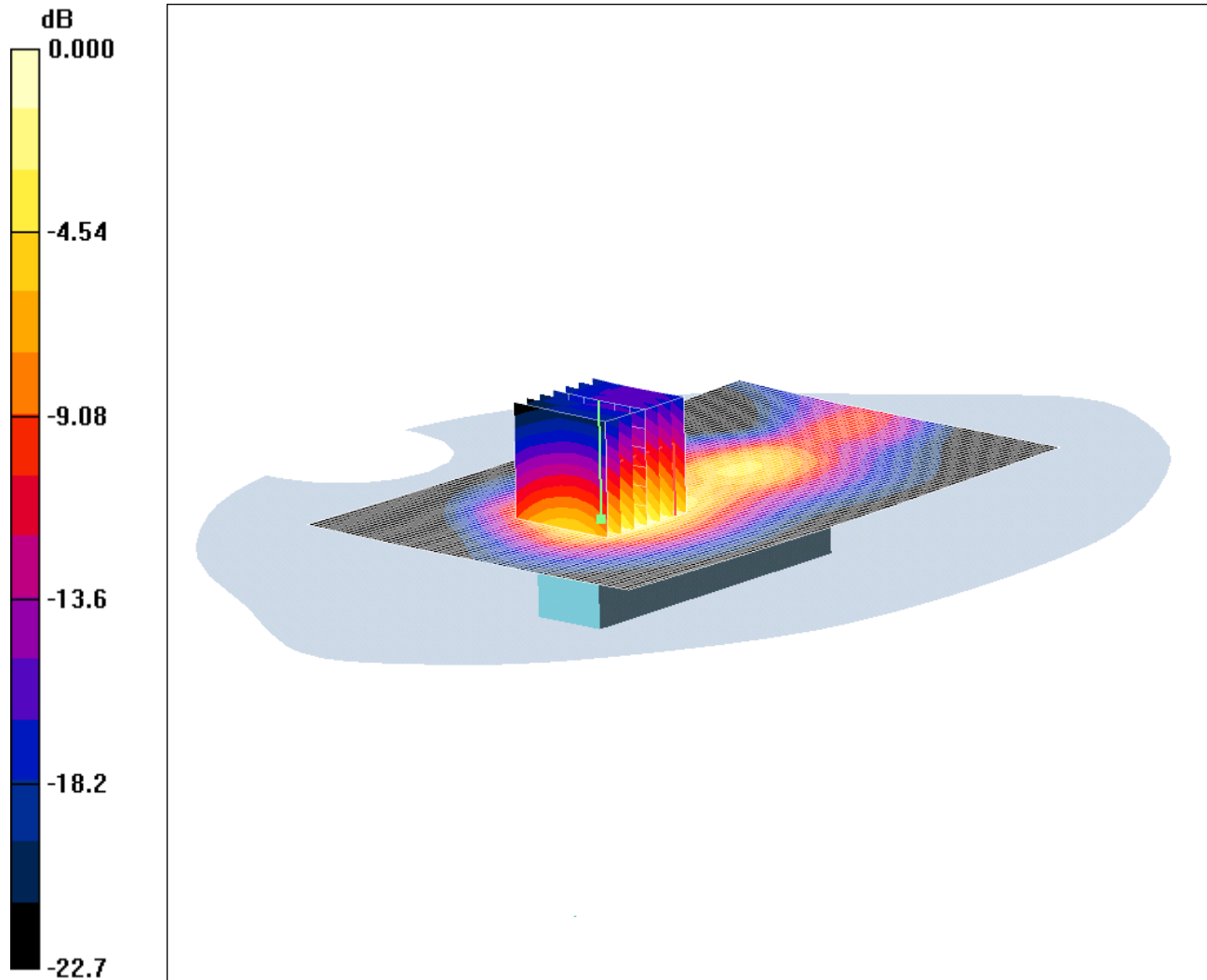
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 06/11/2009

SCN/76288JD01/031 - Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12494 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 1.51mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2498.8 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2498.8$ MHz; $\sigma = 1.94$ mho/m; $\epsilon_r = 50.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Down of EUT Facing Phantom - Low/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.79 mW/g

Horizontal Down of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.5 V/m; Power Drift = -0.145 dB

Peak SAR (extrapolated) = 2.62 W/kg

SAR(1 g) = 1.36 mW/g; SAR(10 g) = 0.685 mW/g

Maximum value of SAR (measured) = 1.51 mW/g

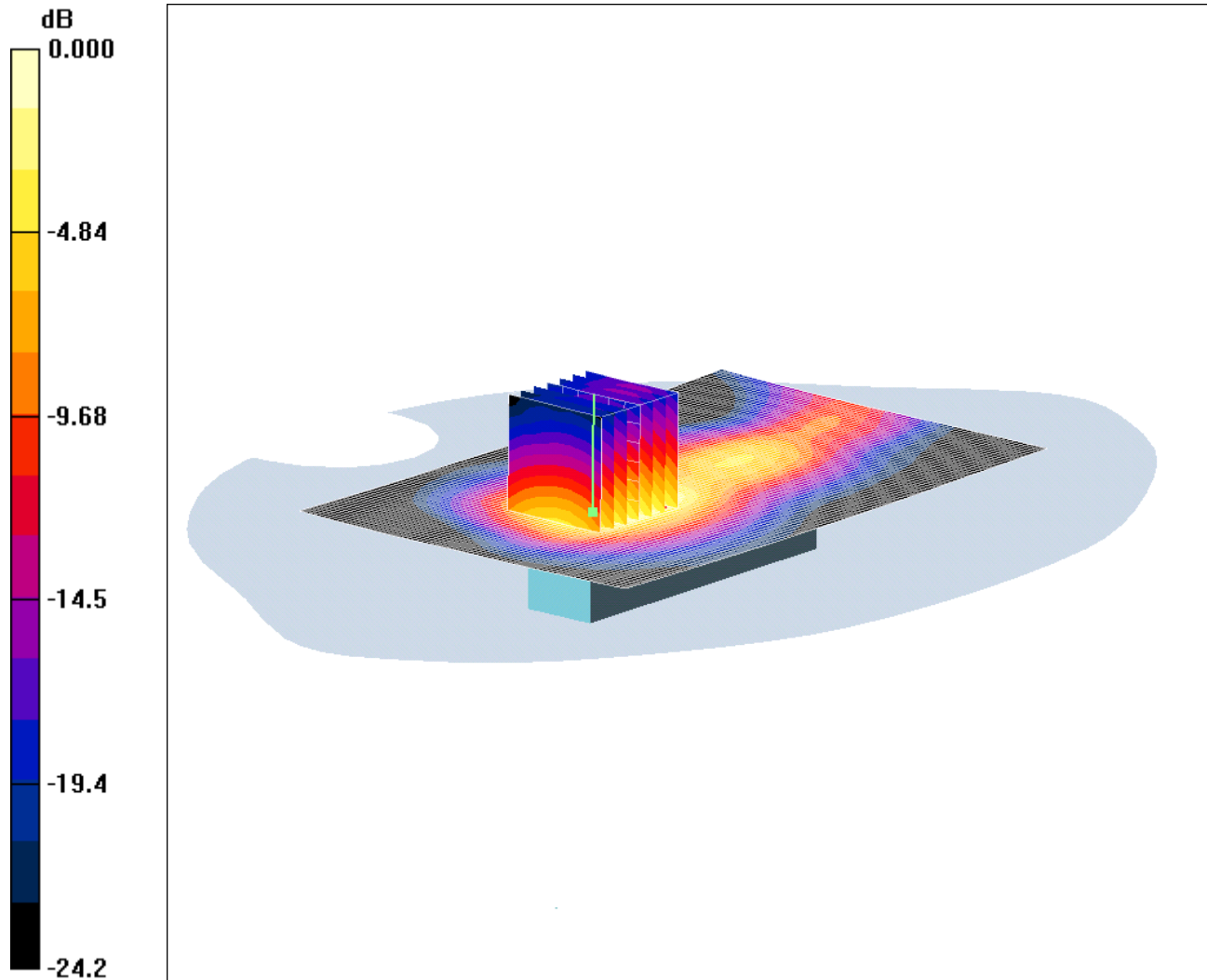
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 06/11/2009

SCN/76288JD01/032 - Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 1.10mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.07$ mho/m; $\epsilon_r = 50.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Down of EUT Facing Phantom - Middle/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.27 mW/g

Horizontal Down of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.1 V/m; Power Drift = -0.261 dB

Peak SAR (extrapolated) = 1.94 W/kg

SAR(1 g) = 0.992 mW/g; SAR(10 g) = 0.506 mW/g

Maximum value of SAR (measured) = 1.10 mW/g

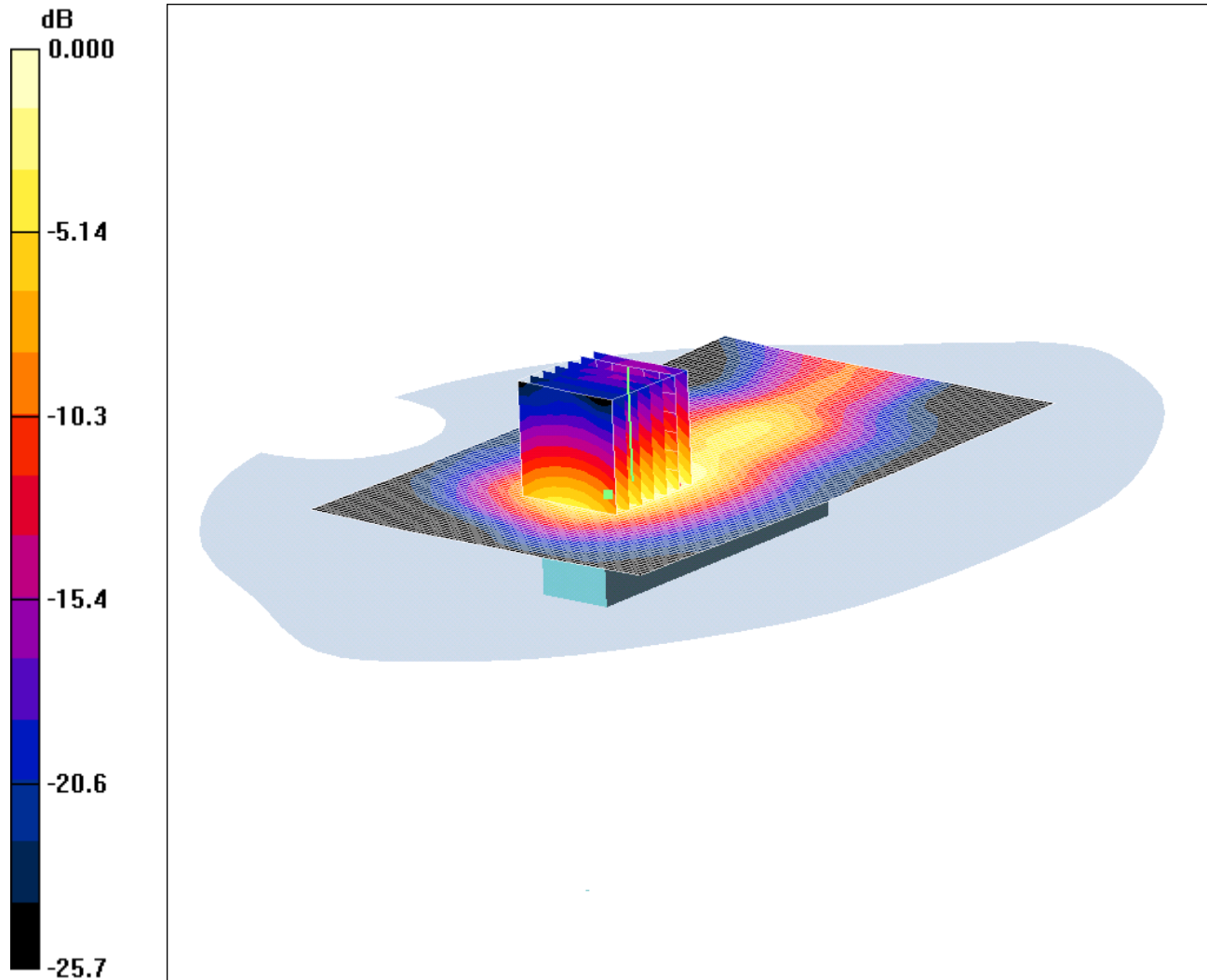
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 06/11/2009

SCN/76288JD01/033 - Horizontal - Down of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH13436 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.805mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2687.2 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2687.2$ MHz; $\sigma = 2.19$ mho/m; $\epsilon_r = 50$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Down of EUT Facing Phantom - High/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.948 mW/g

Horizontal Down of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.0 V/m; Power Drift = 0.027 dB

Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 0.733 mW/g; SAR(10 g) = 0.377 mW/g

Maximum value of SAR (measured) = 0.805 mW/g

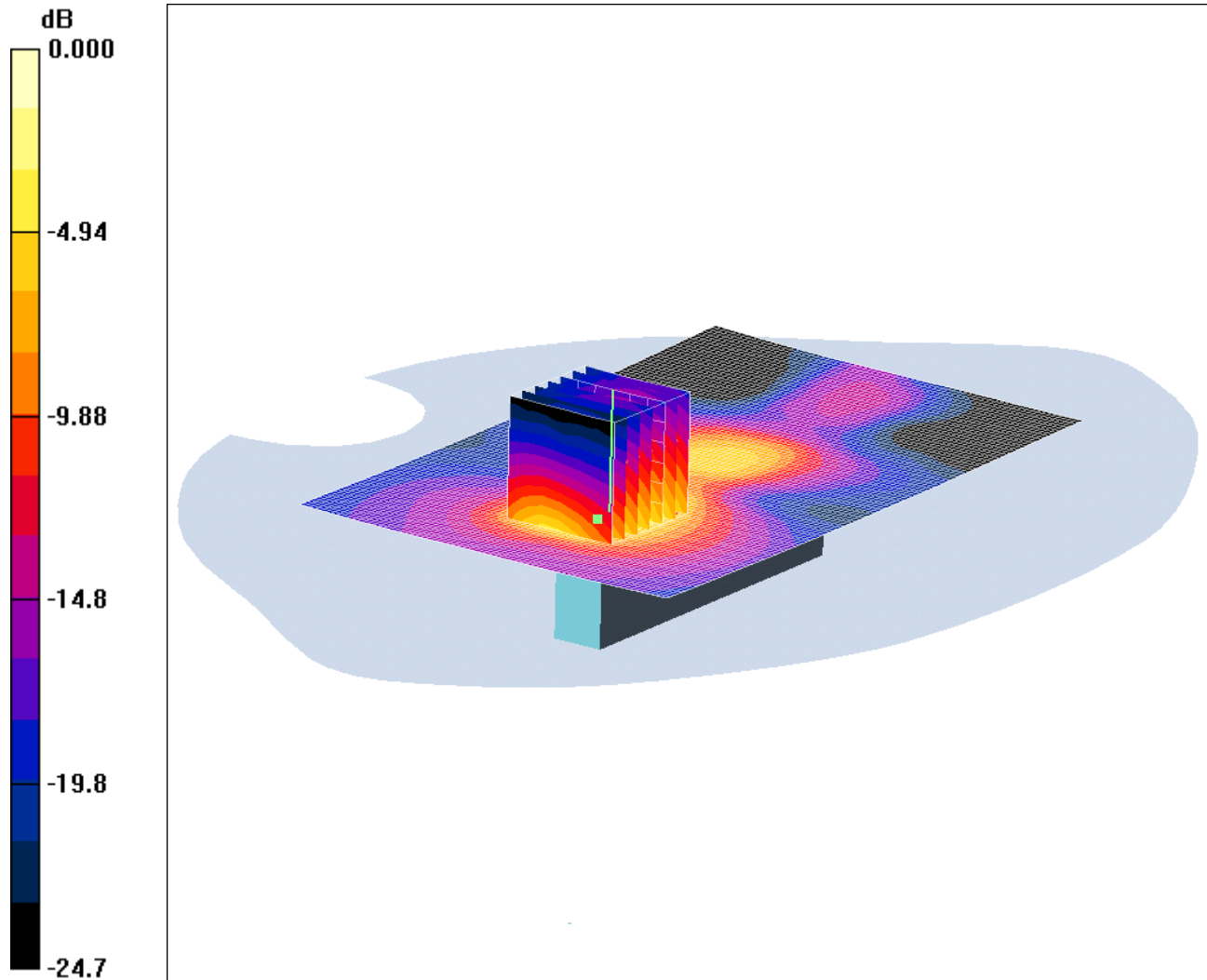
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 06/11/2009

SCN/76288JD01/034 - Vertical - Front of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12494 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 1.21mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2498.8 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2498.8$ MHz; $\sigma = 1.94$ mho/m; $\epsilon_r = 50.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Front of EUT Facing Phantom - Low/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.20 mW/g

Vertical Front of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.8 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 2.13 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.476 mW/g

Maximum value of SAR (measured) = 1.21 mW/g

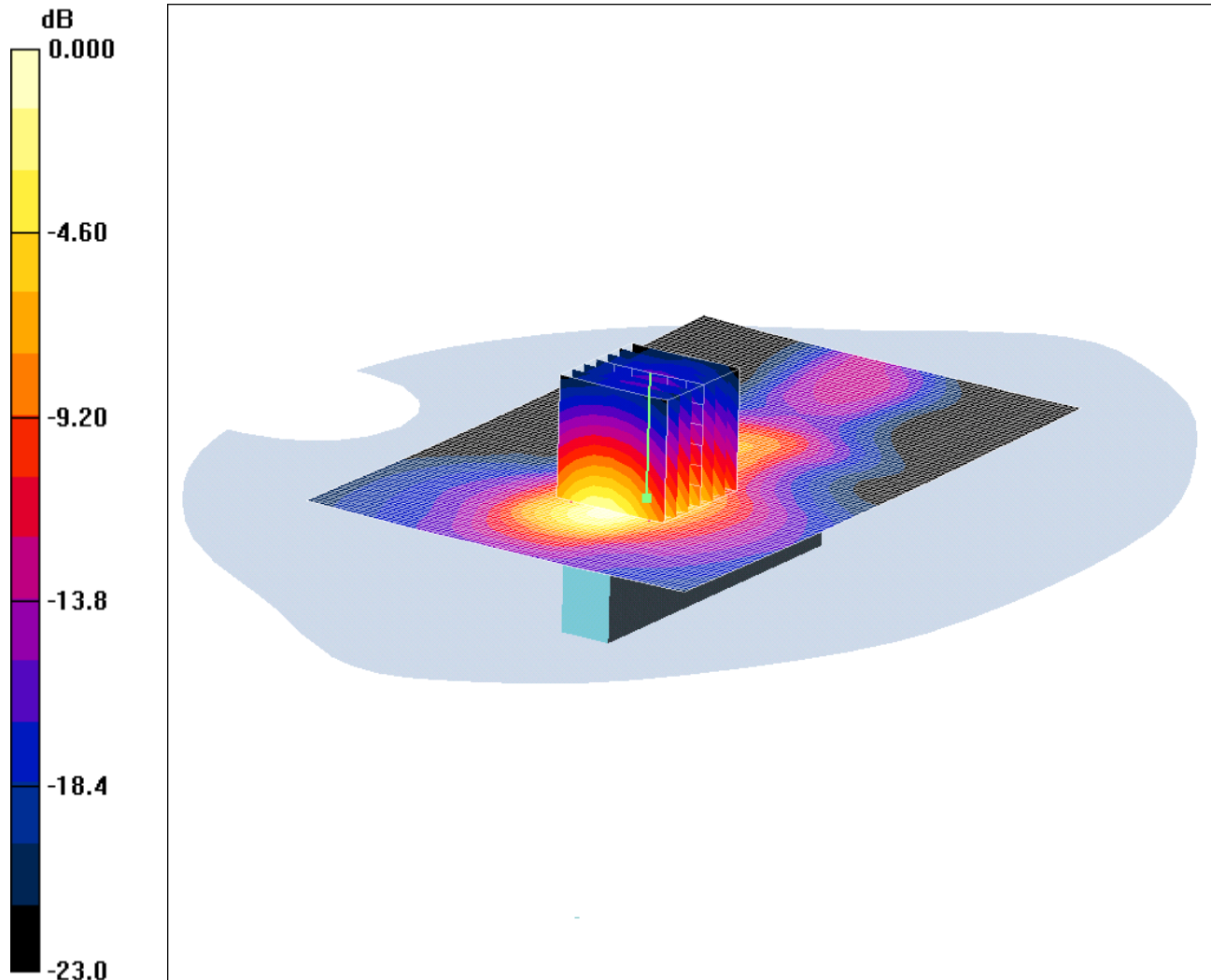
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 06/11/2009

SCN/76288JD01/035 - Vertical - Front of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.07$ mho/m; $\epsilon_r = 50.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Front of EUT Facing Phantom - High/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.968 mW/g

Vertical Front of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.7 V/m; Power Drift = 0.077 dB

Peak SAR (extrapolated) = 1.79 W/kg

SAR(1 g) = 0.867 mW/g; SAR(10 g) = 0.392 mW/g

Maximum value of SAR (measured) = 0.989 mW/g

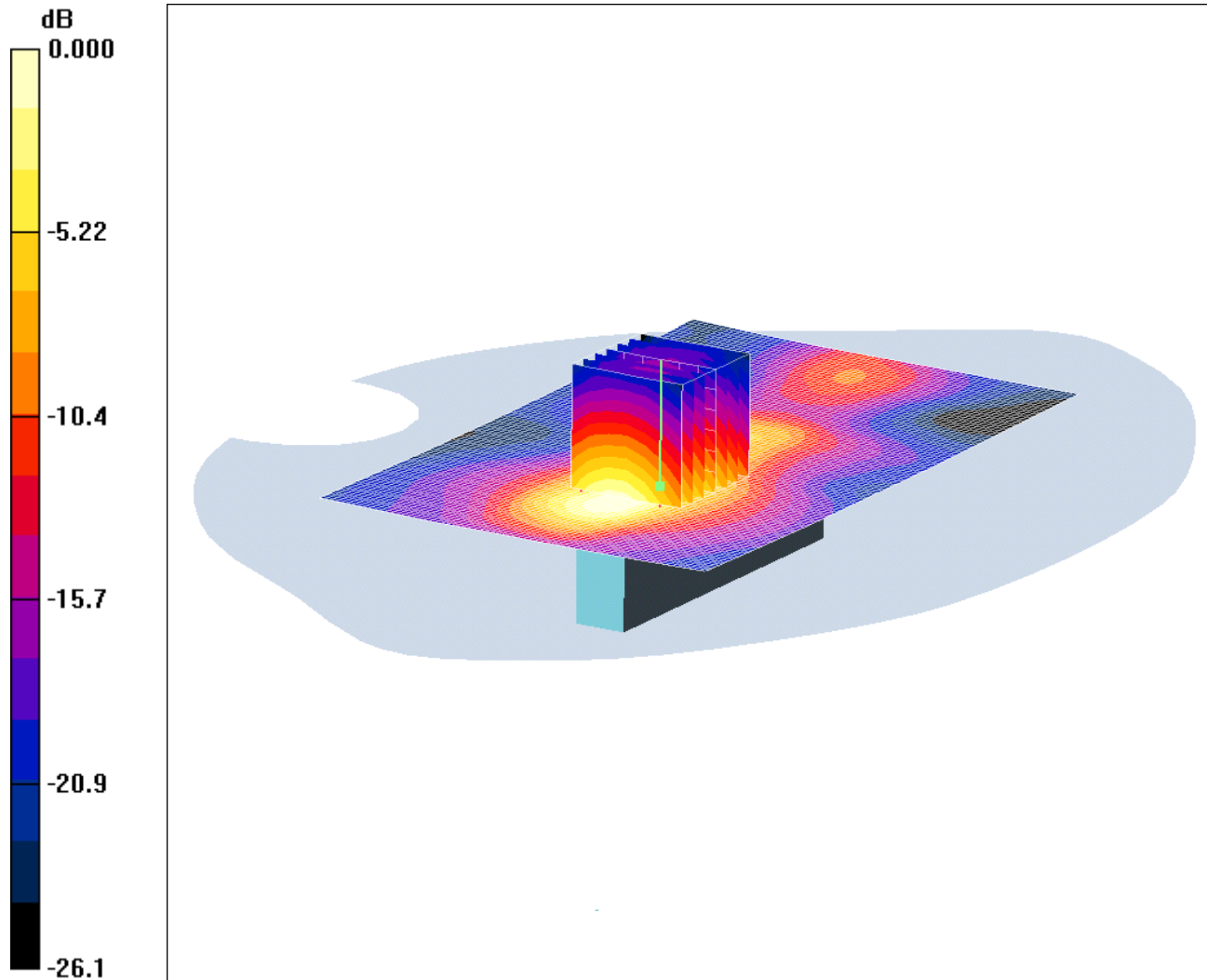
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 06/11/2009

SCN/76288JD01/036 - Vertical - Front of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH13436 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2687.2 MHz; Duty Cycle: 1:2.5
 Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2687.2$ MHz; $\sigma = 2.19$ mho/m; $\epsilon_r = 50$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Front of EUT Facing Phantom - High/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.592 mW/g

Vertical Front of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.1 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.516 mW/g; SAR(10 g) = 0.236 mW/g

Maximum value of SAR (measured) = 0.582 mW/g

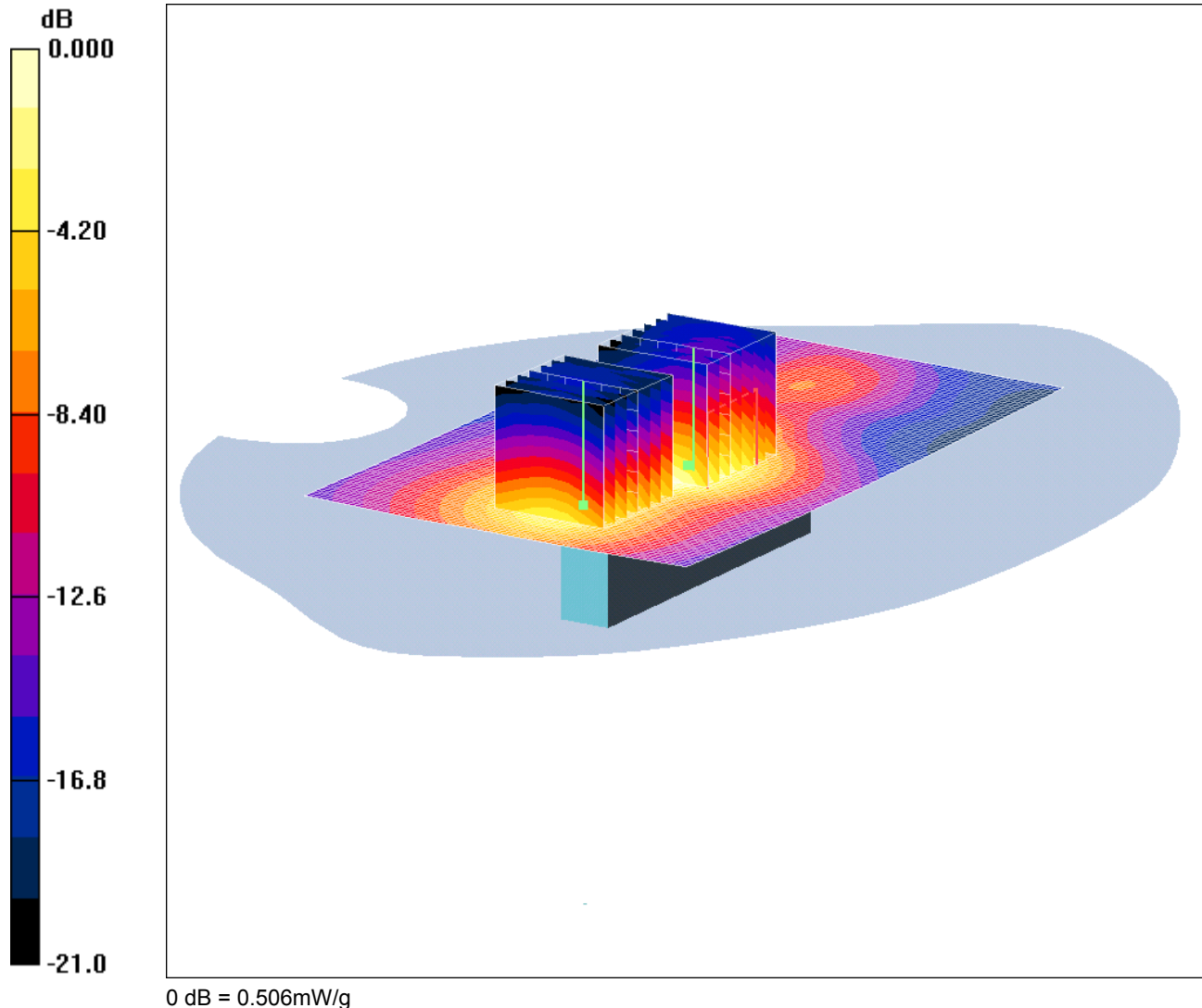
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 06/11/2009

SCN/76288JD01/037 - Vertical - Back of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12494 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2498.8 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2498.8$ MHz; $\sigma = 1.94$ mho/m; $\epsilon_r = 50.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Back of EUT Facing Phantom - Low/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.566 mW/g

Vertical Back of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.0 V/m; Power Drift = 0.099 dB; Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.522 mW/g; SAR(10 g) = 0.251 mW/g; Maximum value of SAR (measured) = 0.587 mW/g**Vertical Back of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.0 V/m; Power Drift = 0.099 dB; Peak SAR (extrapolated) = 0.879 W/kg

SAR(1 g) = 0.442 mW/g; SAR(10 g) = 0.216 mW/g; Maximum value of SAR (measured) = 0.506 mW/g

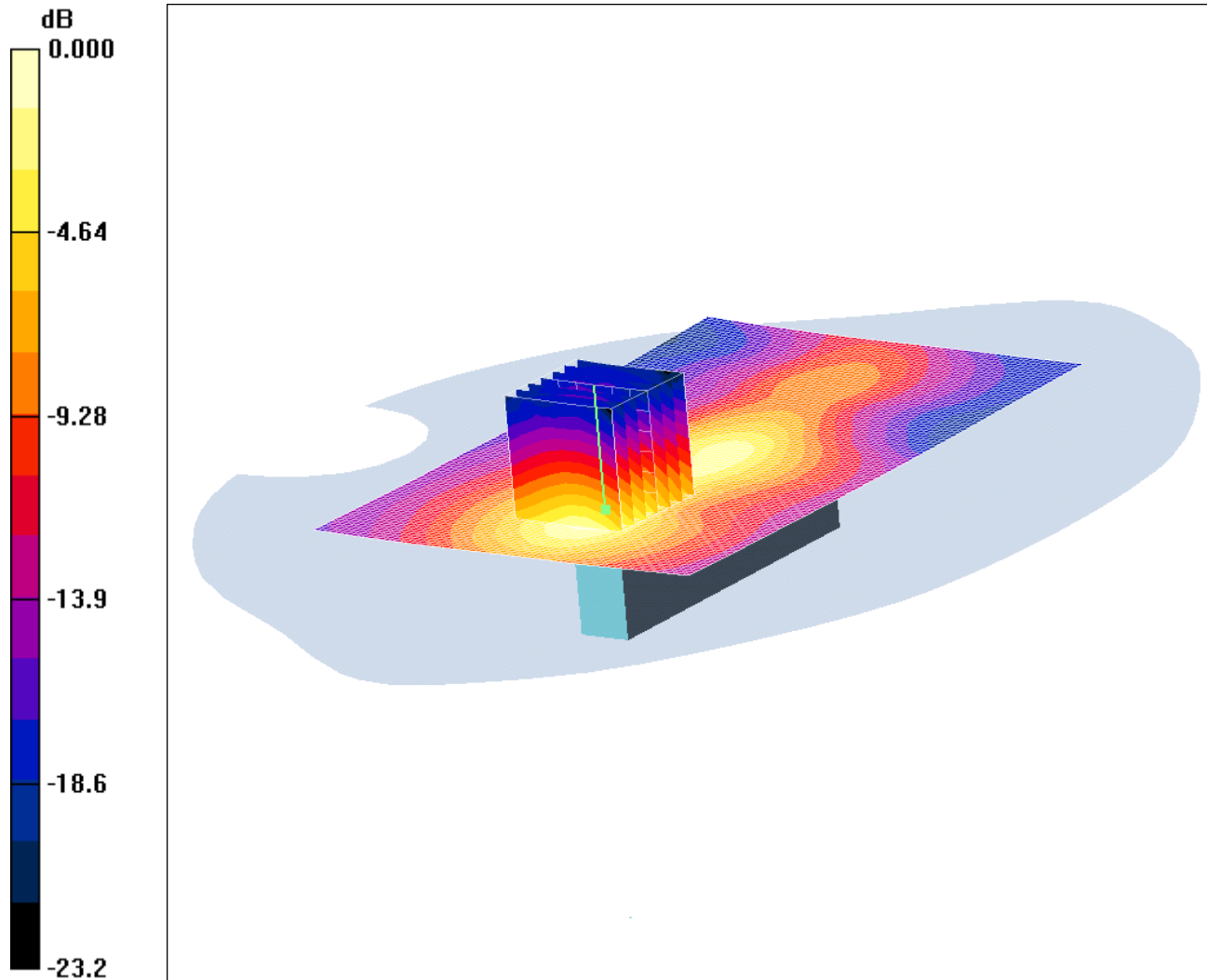
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 06/11/2009

SCN/76288JD01/038 - Vertical - Back of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.408mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.07$ mho/m; $\epsilon_r = 50.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Back of EUT Facing Phantom - Middle/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.385 mW/g

Vertical Back of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.81 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 0.750 W/kg

SAR(1 g) = 0.363 mW/g; SAR(10 g) = 0.177 mW/g

Maximum value of SAR (measured) = 0.408 mW/g

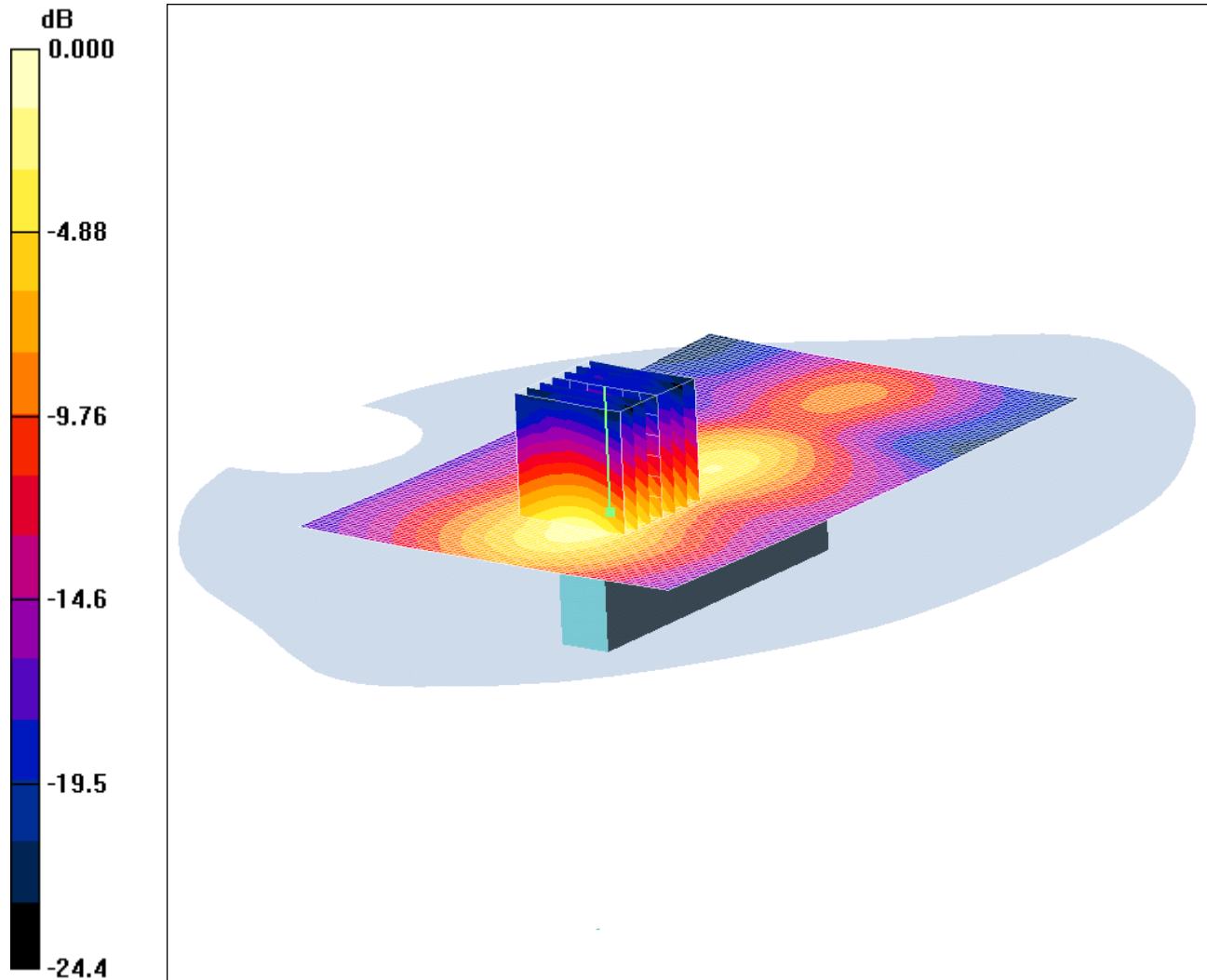
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 06/11/2009

SCN/76288JD01/039 - Vertical - Back of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH13436 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2687.2 MHz; Duty Cycle: 1:2.5
 Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2687.2$ MHz; $\sigma = 2.19$ mho/m; $\epsilon_r = 50$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 30/04/2009
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Vertical Back of EUT Facing Phantom - High/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.327 mW/g

Vertical Back of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.23 V/m; Power Drift = 0.038 dB

Peak SAR (extrapolated) = 0.655 W/kg

SAR(1 g) = 0.310 mW/g; SAR(10 g) = 0.144 mW/g

Maximum value of SAR (measured) = 0.349 mW/g

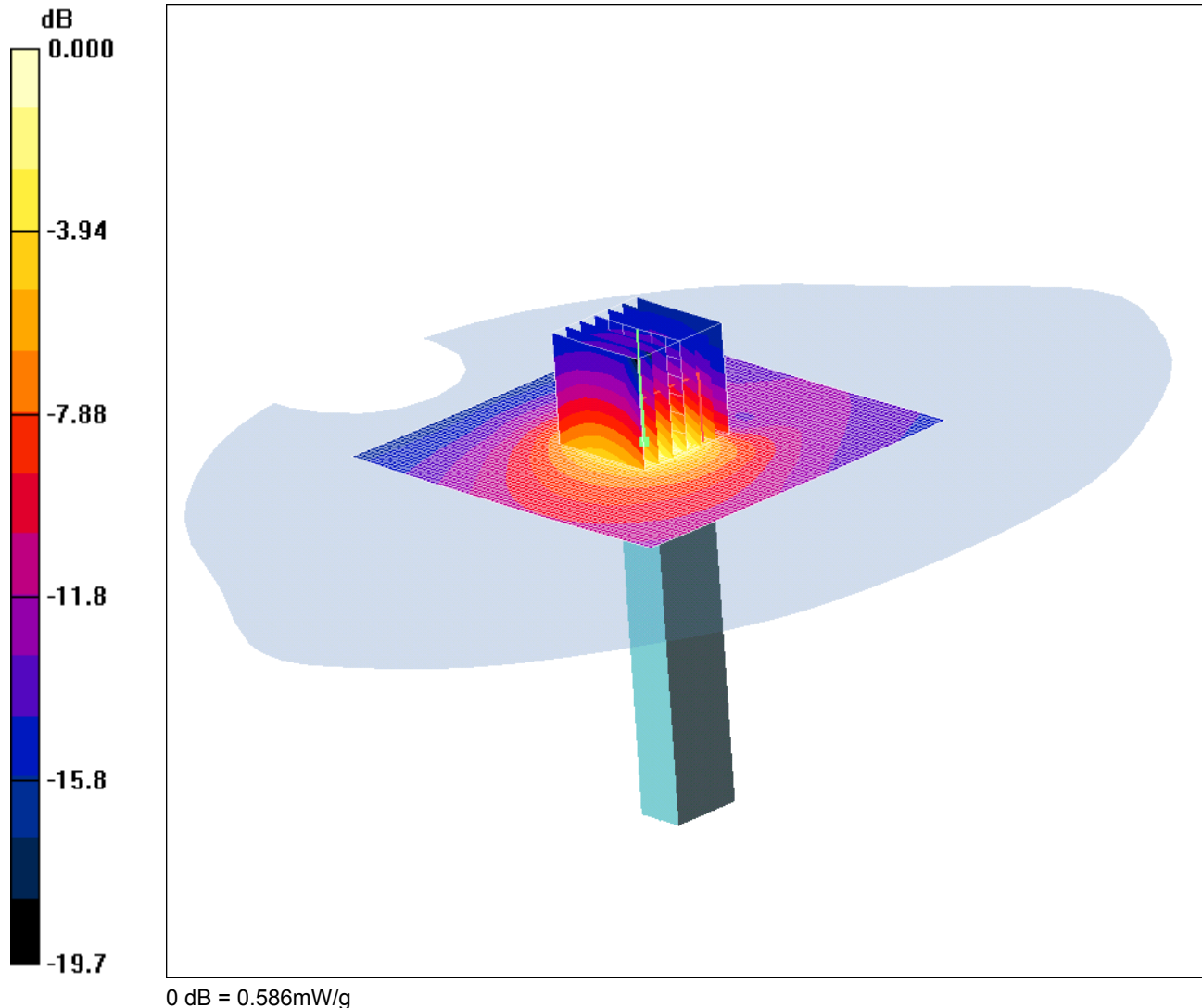
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 07/11/2009

SCN/76288JD01/040 - Top of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12494 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2498.8 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2498.8$ MHz; $\sigma = 1.94$ mho/m; $\epsilon_r = 50.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Top of EUT Facing Phantom - Low/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.553 mW/g

Top of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.8 V/m; Power Drift = 0.091 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.512 mW/g; SAR(10 g) = 0.235 mW/g

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

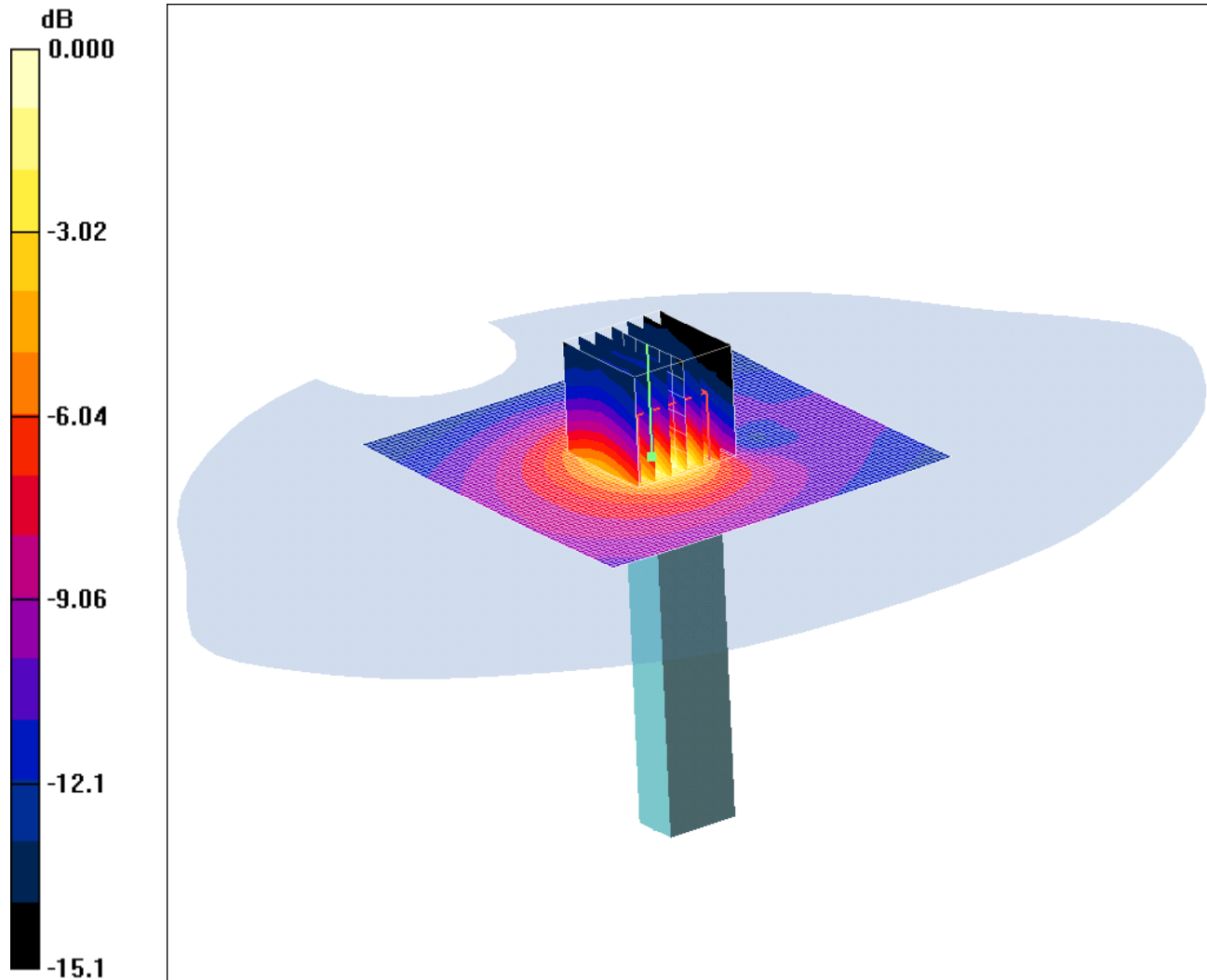
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 07/11/2009

SCN/76288JD01/041 - Top of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.386mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.07$ mho/m; $\epsilon_r = 50.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Top of EUT Facing Phantom - Middle/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.339 mW/g

Top of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.4 V/m; Power Drift = 0.249 dB

Peak SAR (extrapolated) = 0.693 W/kg

SAR(1 g) = 0.337 mW/g; SAR(10 g) = 0.157 mW/g

Maximum value of SAR (measured) = 0.386 mW/g

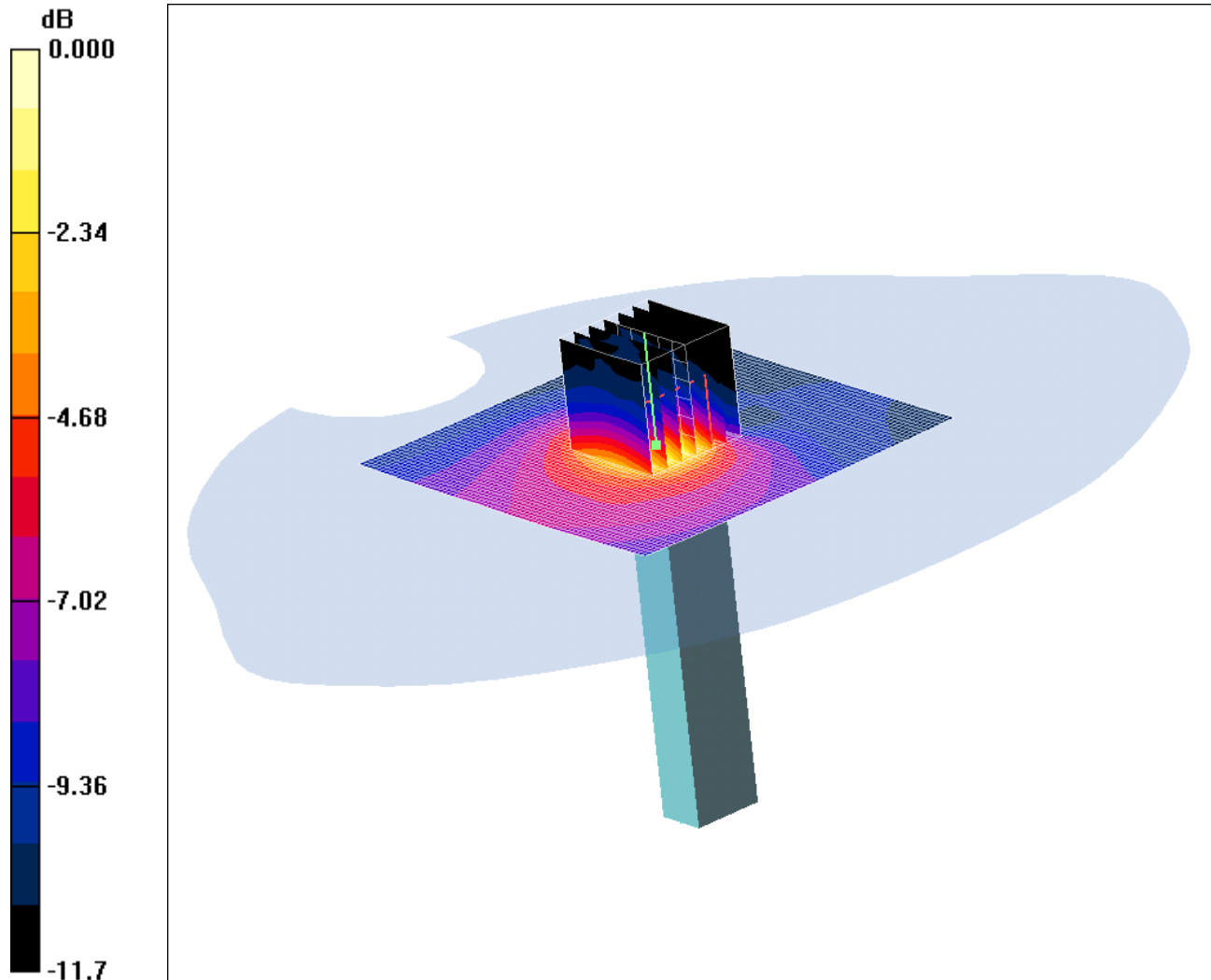
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 06/11/2009

SCN/76288JD01/042 - Top of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH13436 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.220mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2687.2 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2687.2$ MHz; $\sigma = 2.19$ mho/m; $\epsilon_r = 50$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Top of EUT Facing Phantom - High/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.207 mW/g

Top of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.85 V/m; Power Drift = 0.194 dB

Peak SAR (extrapolated) = 0.415 W/kg

SAR(1 g) = 0.197 mW/g; SAR(10 g) = 0.095 mW/g

Maximum value of SAR (measured) = 0.220 mW/g

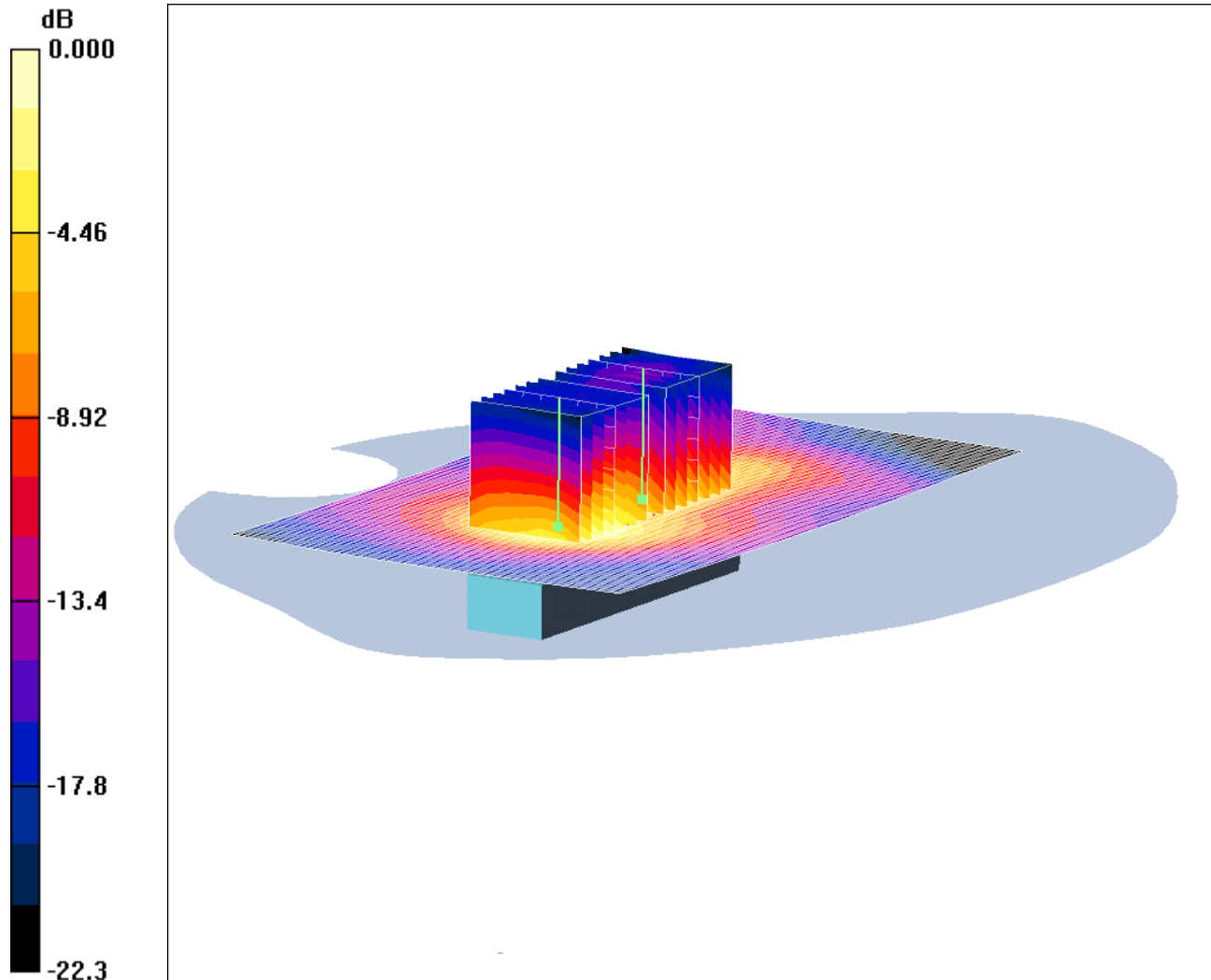
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 07/11/2009

SCN/76288JD01/043 - Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12494 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.672mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2498.8 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2498.8$ MHz; $\sigma = 1.94$ mho/m; $\epsilon_r = 50.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Up of EUT Facing Phantom - Low/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.754 mW/g

Horizontal Up of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.7 V/m; Power Drift = -0.005 dB

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 0.655 mW/g; SAR(10 g) = 0.324 mW/g

Maximum value of SAR (measured) = 0.736 mW/g

Horizontal Up of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.7 V/m; Power Drift = -0.005 dB; Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.589 mW/g; SAR(10 g) = 0.284 mW/g; Maximum value of SAR (measured) = 0.672 mW/g

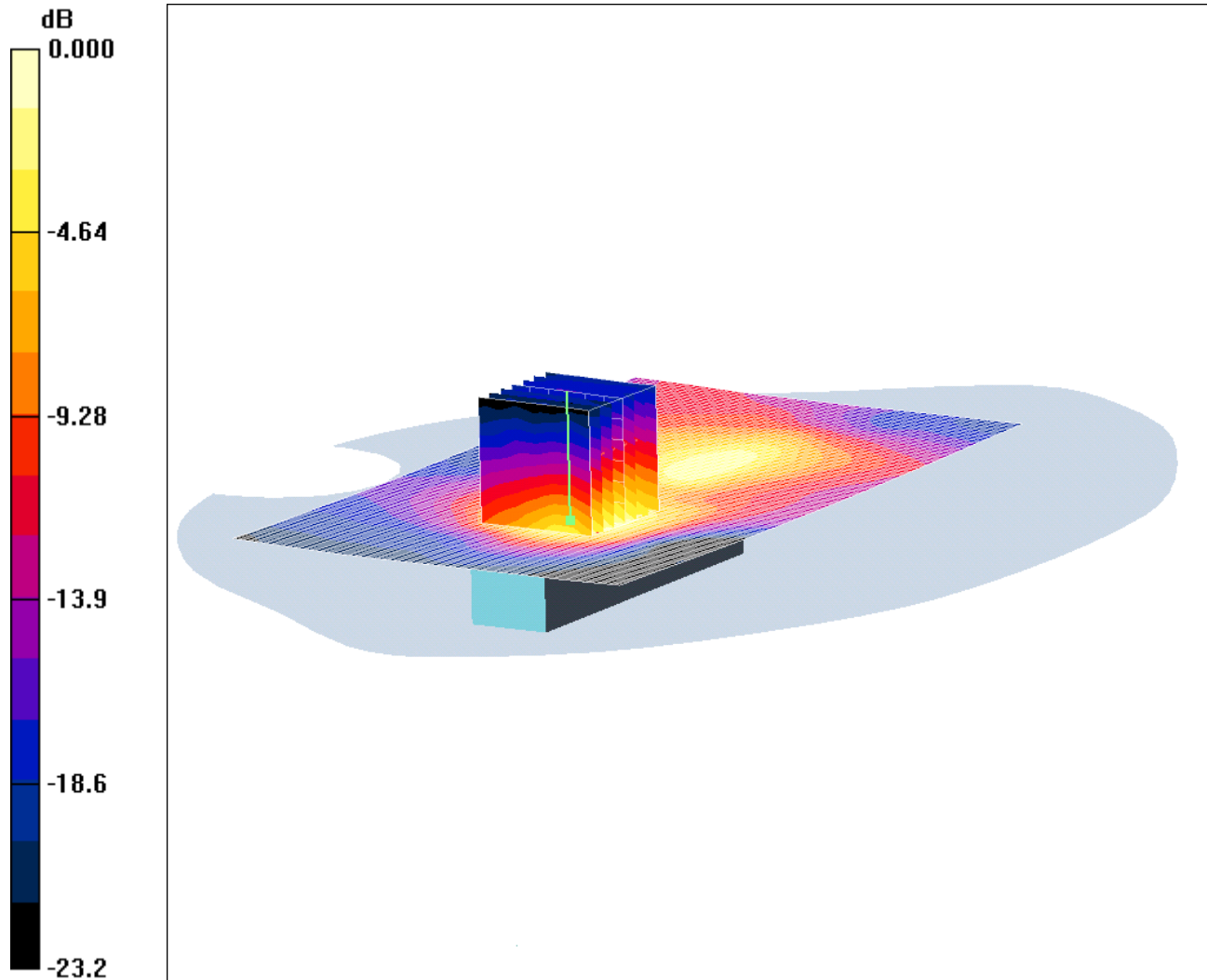
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 07/11/2009

SCN/76288JD01/044 - Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.436mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.07$ mho/m; $\epsilon_r = 50.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Up of EUT Facing Phantom - Middle/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.454 mW/g

Horizontal Up of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.02 V/m; Power Drift = 0.186 dB

Peak SAR (extrapolated) = 0.803 W/kg

SAR(1 g) = 0.395 mW/g; SAR(10 g) = 0.190 mW/g

Maximum value of SAR (measured) = 0.436 mW/g

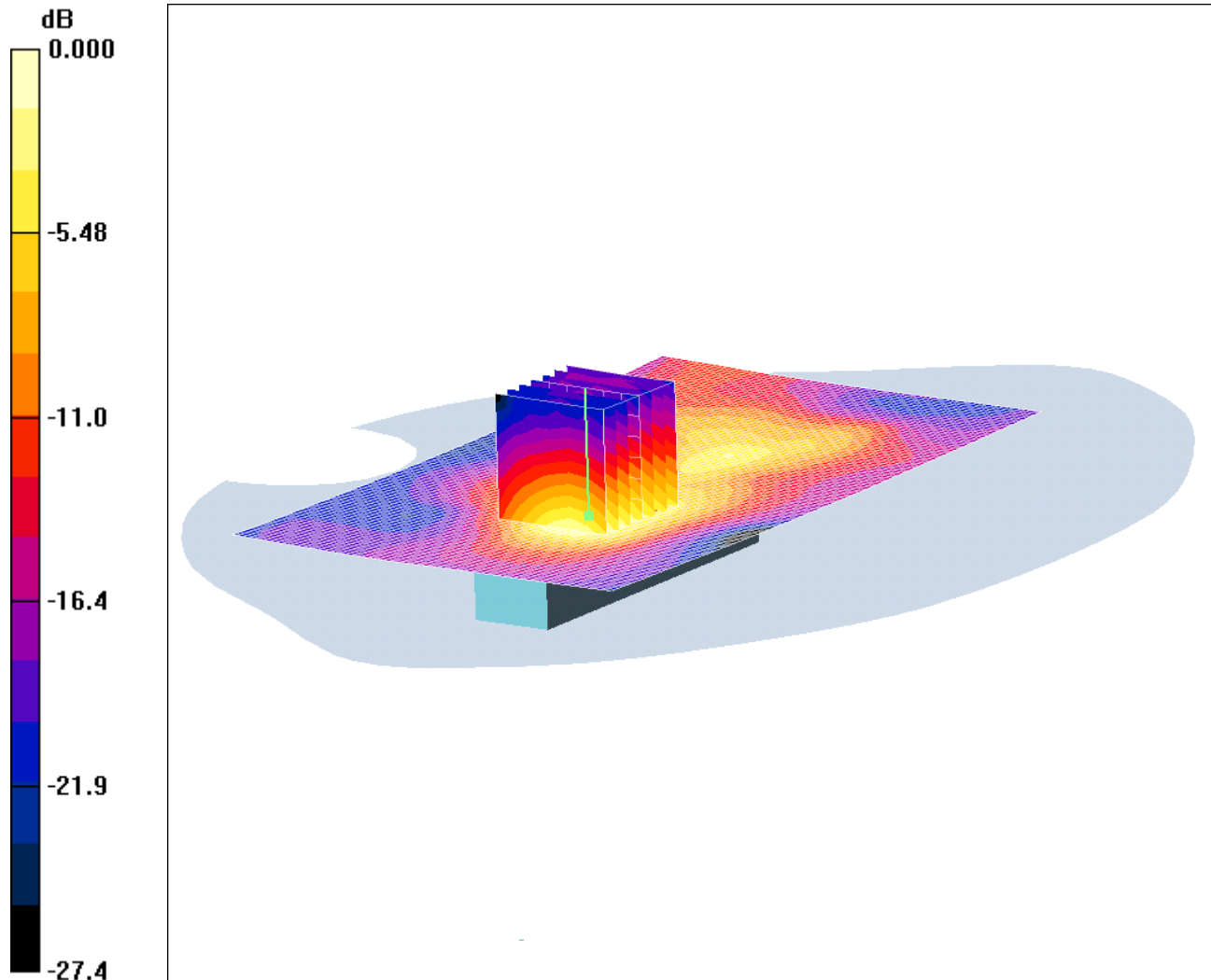
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 07/11/2009

SCN/76288JD01/045 - Horizontal - Up of EUT Facing Phantom TD-CDMA 3.84 Mcps 64QAM CH13436 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 0.284mW/g

Communication System: TDCDMA - 3.84 Mcps / 5MHz Channel; Frequency: 2687.2 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2687.2$ MHz; $\sigma = 2.19$ mho/m; $\epsilon_r = 50$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Up of EUT Facing Phantom - High/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.277 mW/g

Horizontal Up of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.63 V/m; Power Drift = -0.071 dB

Peak SAR (extrapolated) = 0.528 W/kg

SAR(1 g) = 0.252 mW/g; SAR(10 g) = 0.121 mW/g

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

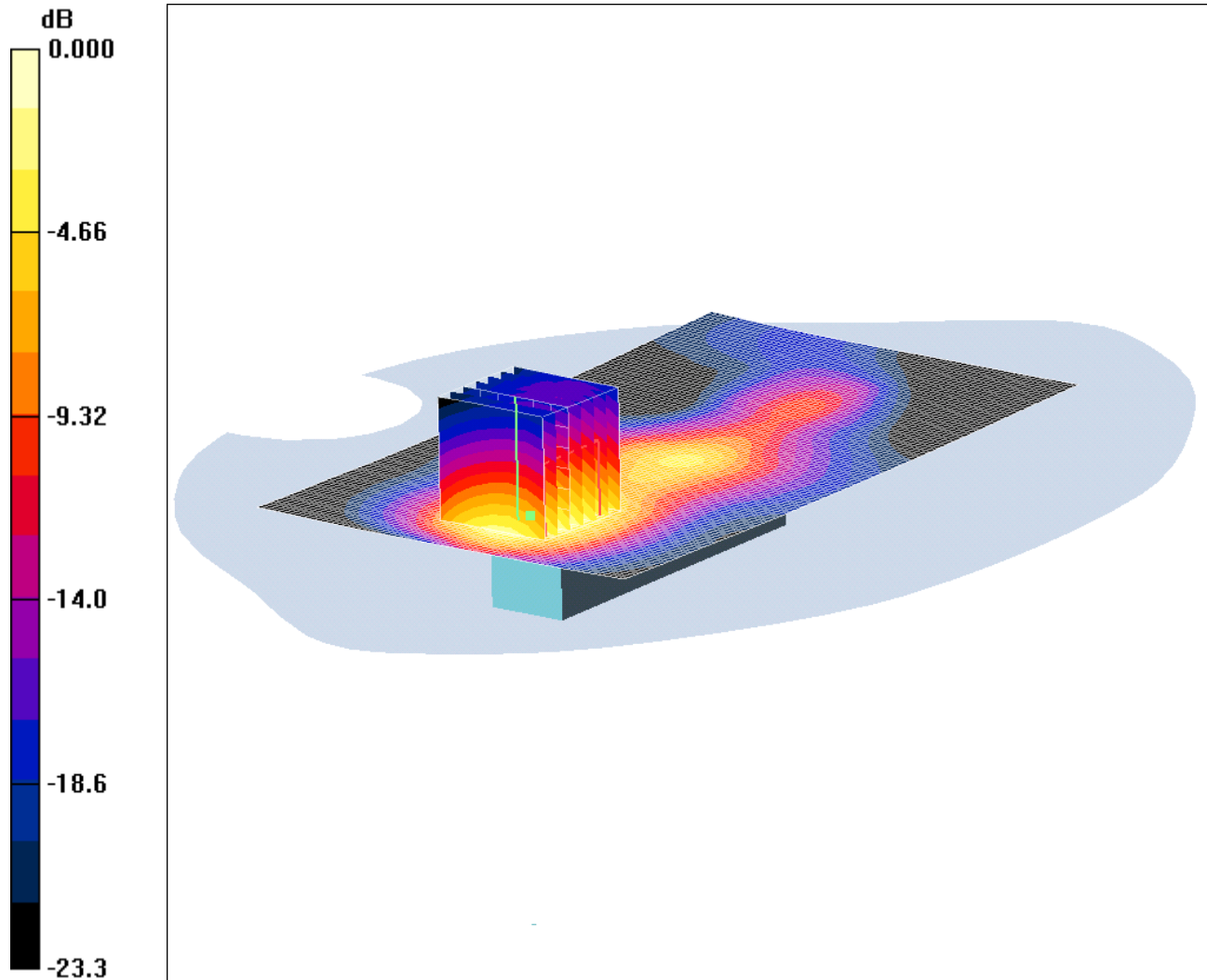
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 07/11/2009

SCN/76288JD01/046 - Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH12507 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 1.56mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2501.4 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2501.4$ MHz; $\sigma = 1.94$ mho/m; $\epsilon_r = 50.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508; ConvF(8.06, 8.06, 8.06); Calibrated: 26/06/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Down of EUT Facing Phantom - Low/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.62 mW/g

Horizontal Down of EUT Facing Phantom - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.6 V/m; Power Drift = 0.128 dB

Peak SAR (extrapolated) = 2.78 W/kg

SAR(1 g) = 1.41 mW/g; SAR(10 g) = 0.701 mW/g

Maximum value of SAR (measured) = 1.56 mW/g

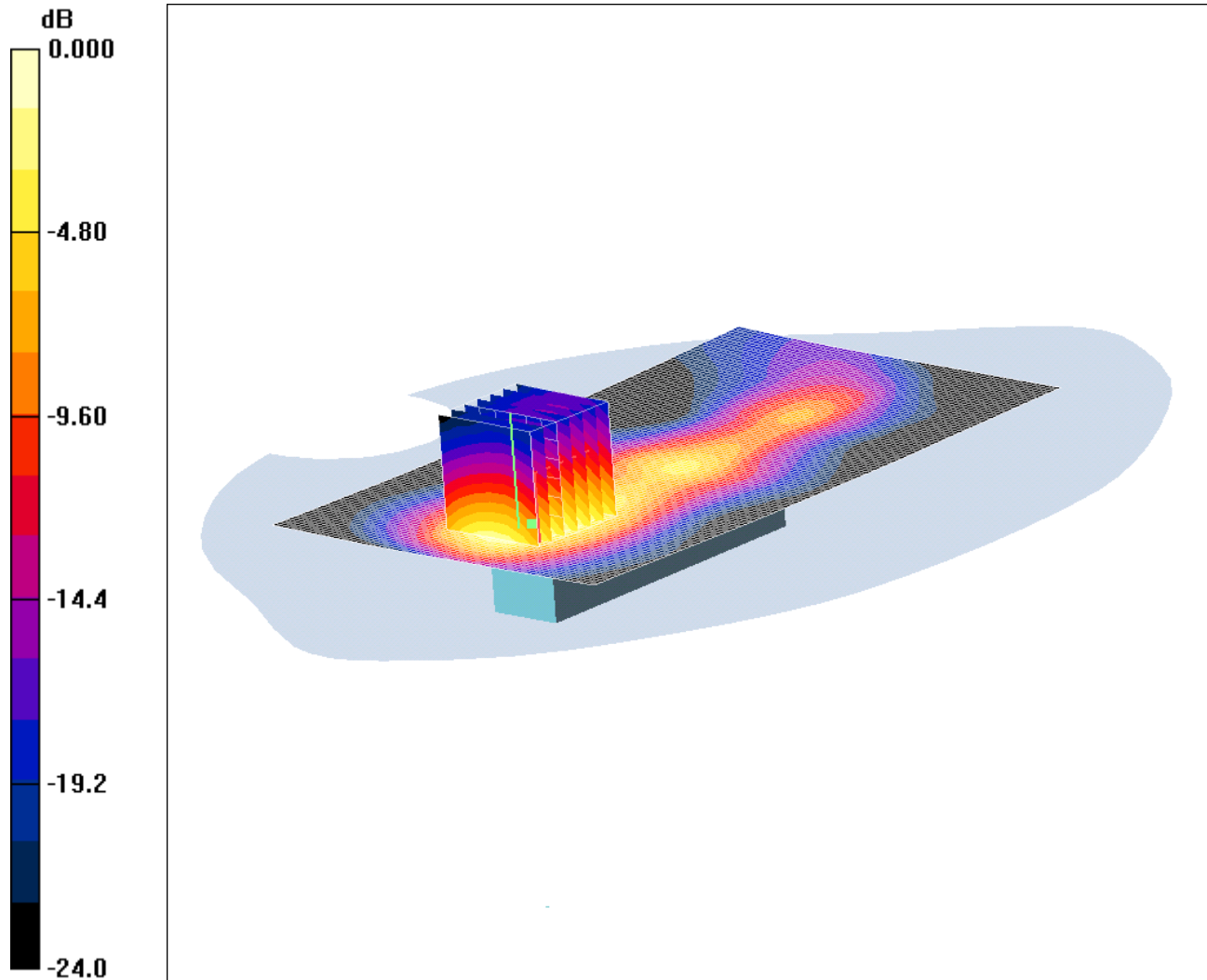
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 07/11/2009

SCN/76288JD01/047- Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH12965 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



0 dB = 1.16mW/g

Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2593 MHz; Duty Cycle: 1:2.5

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.07$ mho/m; $\epsilon_r = 50.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 30/04/2009

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Down of EUT Facing Phantom - Middle/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.32 mW/g

Horizontal Down of EUT Facing Phantom - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.4 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 2.08 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.525 mW/g

Maximum value of SAR (measured) = 1.16 mW/g

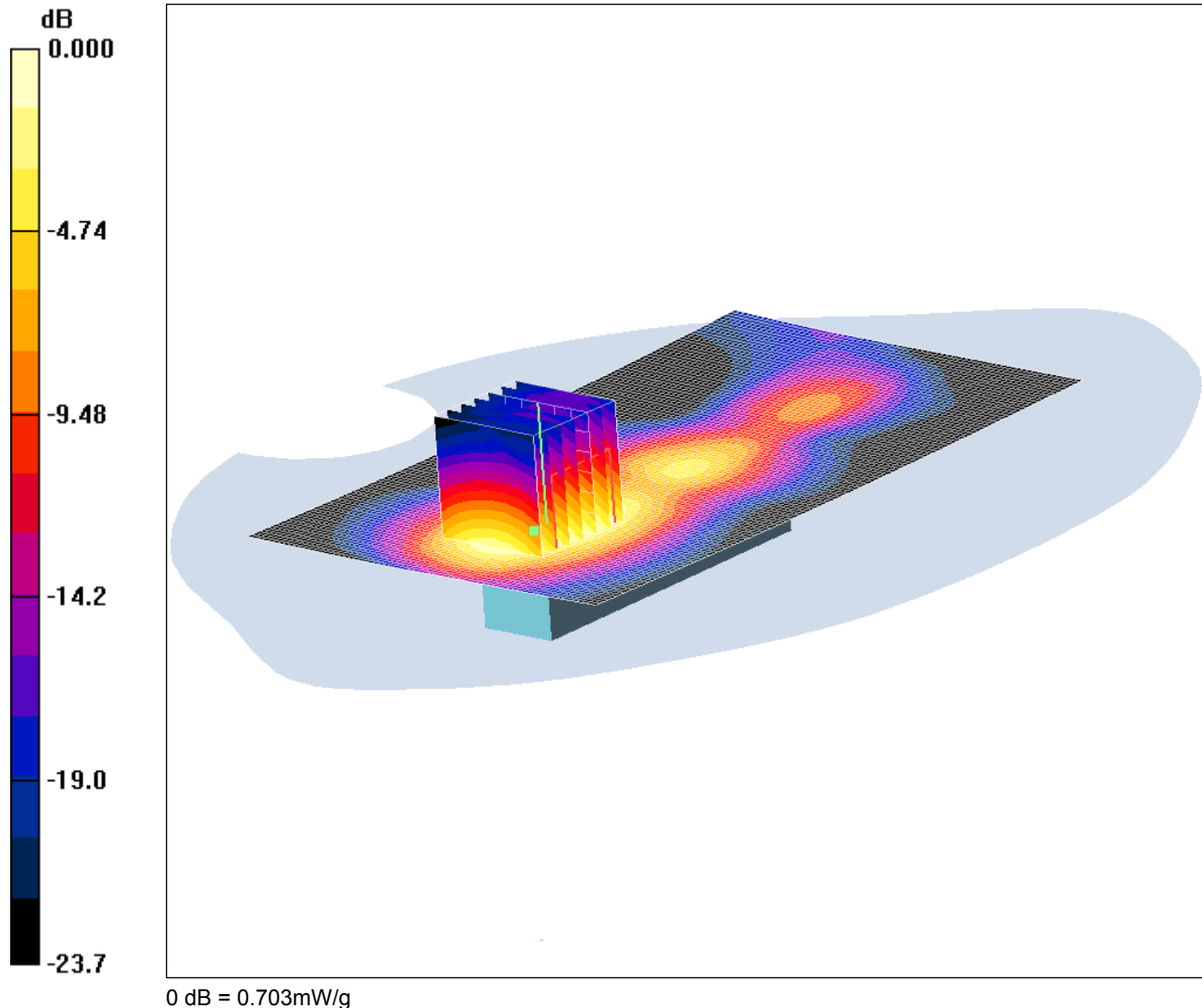
Test of: ADT USB Dongle

To: OET Bulletin 65 Supplement C: (2001-01)

Date 07/11/2009

SCN/76288JD01/048 - Horizontal - Down of EUT Facing Phantom TD-CDMA 7.68 Mcps 64QAM CH13420 6 Time Slots

DUT: IPWireless; Type: ADT; Serial: ADWA928000816



Communication System: TDCDMA - 7.68 Mcps / 10MHz Channel; Frequency: 2684.6 MHz; Duty Cycle: 1:2.5
 Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2684.6$ MHz; $\sigma = 2.19$ mho/m; $\epsilon_r = 50$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3508add; ConvF(7.73, 7.73, 7.73); Calibrated: 16/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 30/04/2009
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Horizontal Down of EUT Facing Phantom - High/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.810 mW/g

Horizontal Down of EUT Facing Phantom - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.7 V/m; Power Drift = 0.043 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.652 mW/g; SAR(10 g) = 0.338 mW/g

Maximum value of SAR (measured) = 0.703 mW/g