Specific Absorption Rate (SAR) Test Report

for

ZyXEL Communications Corporation

on the

2.5GHz WiMAX PCMCIA card

Model Number: MAX-100

Test Report: EME-070469
Issue date: Oct. 31, 2007

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Testing Laboratory
0597

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Review Date: Nov. 01, 2007

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1.0 General information

The EUT is WiMax product with PCMCIA interface card; it was tested at the Intertek Testing Services facility in Hsinchu, Taiwan. The maximum output power declared by the ZyXEL.

EUT model MAX-100 was evaluated in accordance with the requirements for compliance testing defined in FCC OET Bulletin 65, Supplement C (Edition 01-01) and meet the SAR requirement, the phantom employed was the box phantom of 2mm thick in one wall. The total uncertainty for the evaluation of the spatial peak SAR values averaged over a cube of 1g tissue mass had been assessed for this system to be ±20.6%, the dosimetry assessment system INDEXSAR SARA2 was used.

In summary, the maximum spatial peak SAR value for the sample device averaged over 1g was found to be:

Phantom	Position (worst case)	SAR_{1g}, W/kg
2mm thick box phantom wall	EUT perpendicular to the phantom, 0 mm separation with host 1 Notebook PC at middle channel	0.851 W/kg

In conclusion, the tested Sample device was found to be in compliance with the requirements defined in OET Bulletin 65, Supplement C (Edition 01-01) for body configurations.

1.1 Client Information

Applicant: ZyXEL Communications Corporation
No. 6, Innovation Rd II, Science-Based Industrial Park,
Hsin-Chu, Taiwan

1.2 Equipment under test (EUT)

Product Descriptions:

Equipment	2.5GHz WiMAX PCMCIA card		
Trade Name	ZyXEL	**Model No:**	MAX-100
FCC ID	I88MAX100	**S/N No.**	Not Labeled
Category	Portable	**RF Exposure**	Uncontrolled Environment
Frequency Band	2500 – 2685 MHz (5M Hz) 2505 – 2685 MHz (10MHz)	**802.16e (BW)**	5MHz 10MHz

EUT Antenna Description			
Type	Dipole	**Configuration**	Fixed
Dimensions	57 mm length	**Gain**	2.0 dBi
Location	External		

Use of Product : 2.5GHz WiMAX PCMCIA card

Manufacturer: ZyXEL

Production is planned: [X] Yes, [ ] No

EUT receive date: May 21, 2007

EUT status: EUT was transmitting maximum power condition

Test start date: Oct. 29, 2007

Test end date: Oct. 29, 2007

1.3 Test plan reference

FCC Rule: Part 2.1093, FCC's OET Bulletin 65, Supplement C (Edition 01-01) and IEEE 1528

1.4 Modifications required for compliance

The EUT has not modifications during test.

1.5 Test configuration

Please refer to section 2.2 figure 2 ~ 19

1.5.1 Support equipment & EUT antenna position

Support Equipment				
Item #	**Equipment**	**Brand**	**Model No.**	**S/N**
1	Notebook	IBM	1860	L3WM796
2	Notebook	DELL	Latitude D610	FXWZK1S
3	Notebook	HP	HSTNN-I04C	CNU5240X14

Host (1): IBM

Host (2): DELL

Host (3): HP

1.5.2 Test Condition

During tests the worst-case data (max RF coupling) was determined with following conditions:

Usage	Operates with a portable computer	**Distance between antenna axis at the joint and the liquid surface:**	Laptop is touching the Phantom in bottom position, separating 0mm and perpendicular position, separating 0mm and 15mm.	
Simulating human Body	Body	**EUT Battery**	Device is powered from host computer through battery.	
E.I.R.P. (5MHz B.W).	**Channel**	**Frequency MHz**	**Before SAR Test (dBm)**	**After SAR Test (dBm)**
	Low Channel	2500	24.15	24.16
	Mid Channel	2590	24.28	24.29
	High Channel	2685	22.38	22.38
E.I.R.P. (10MHz B.W).	**Channel**	**Frequency MHz**	**Before SAR Test (dBm)**	**After SAR Test (dBm)**
	Low Channel	2505	24.13	24.14
	Mid Channel	2590	24.04	24.05
	High Channel	2685	22.20	22.21

The spatial peak SAR values were assessed for lowest, middle and highest operating channels, defined by the manufacturer.

The conducted output power was measured before and after the test using a wideband peak power meter.

The EUT was transmitted continuously during the test.

2.0 SAR Evaluation

The evaluation of the result analysis was based on software: SARA2 Version 2.41VPM (**V**irtual **P**robe **M**iniaturization).

2.1 SAR Limits

The following FCC limits for SAR apply to devices operate in General Population/Uncontrolled Exposure environment:

EXPOSURE (General Population/ Uncontrolled Exposure environment)	**SAR Limit level (W/kg)**
Average over the whole body	0.08
Spatial Peak (1g)	1.60
Spatial Peak for hands, wrists, feet and ankles (10g)	4.00

2.2 Configuration Photographs

SAR Measurement Test Setup

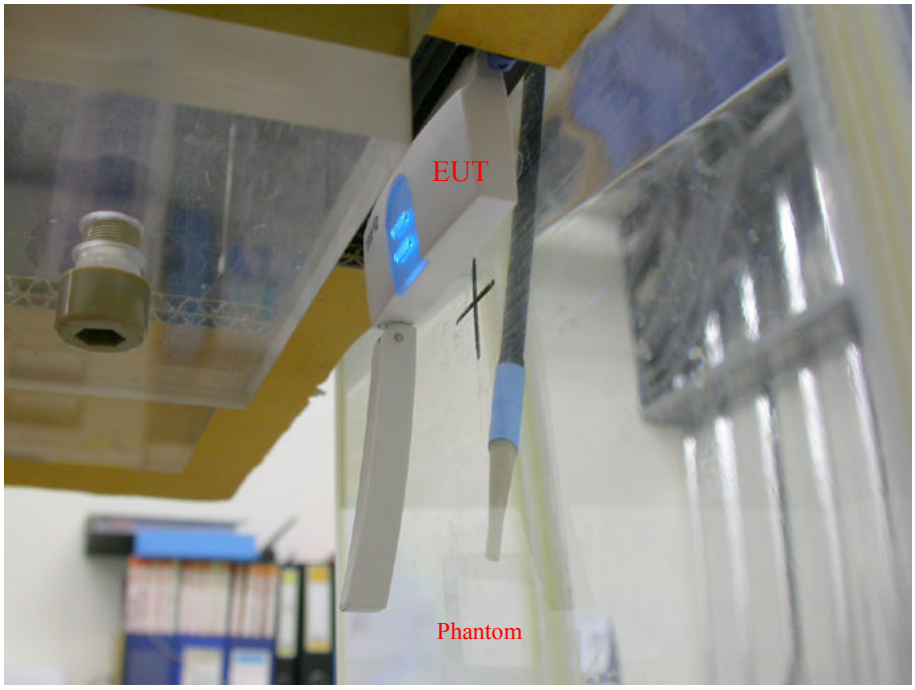
Figure 1: Test System

Test Equipment: IBM Notebook (Host 1)

SAR Measurement Test Setup

Figure 2: EUT bottom to phantom, 0 mm separation

Figure 3: EUT bottom to phantom, 0 mm separation-Zoom in



SAR Measurement Test Setup

Figure 4: EUT perpendicular to phantom, 0 mm separation

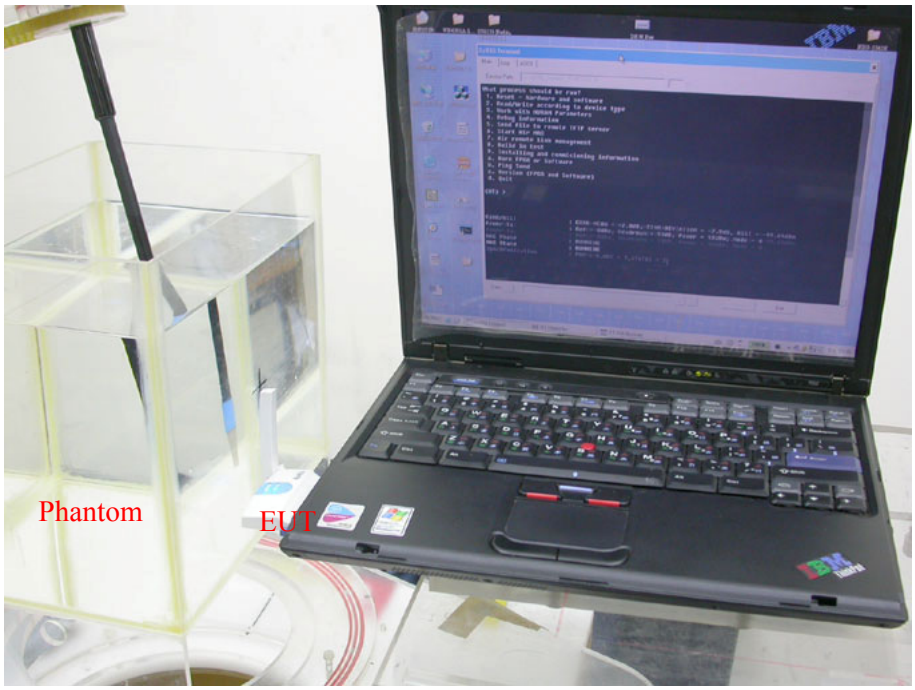


Figure 5: EUT perpendicular to phantom, 0 mm separation-Zoom in

SAR Measurement Test Setup

Figure 6: EUT perpendicular to phantom, 15 mm separation

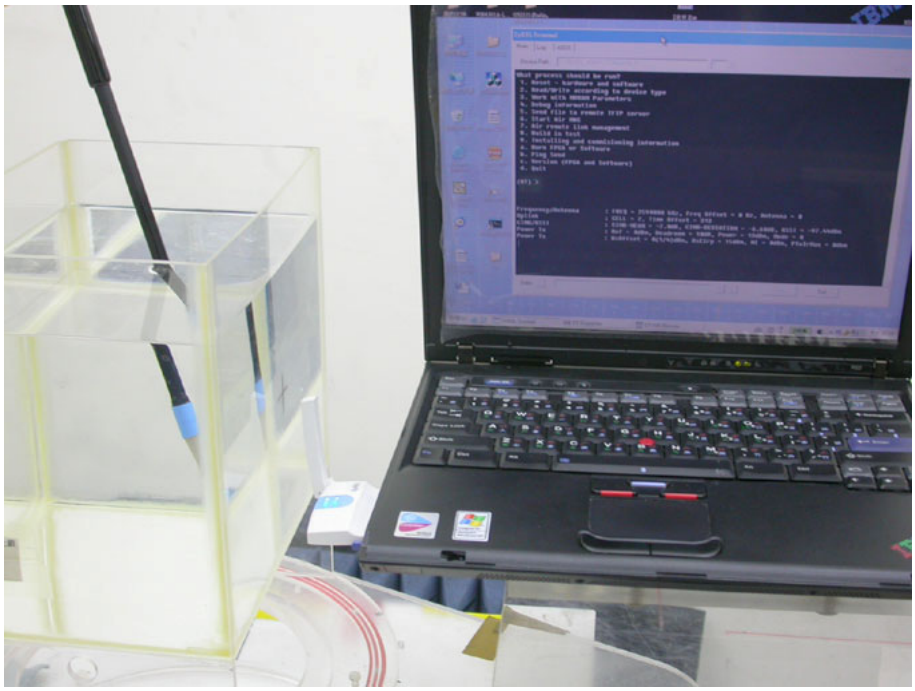


Figure 7: EUT perpendicular to phantom, 15 mm separation-Zoom in

Test Equipment: DELL Notebook (Host 2)

SAR Measurement Test Setup

Figure 8: EUT bottom to phantom, 0 mm separation

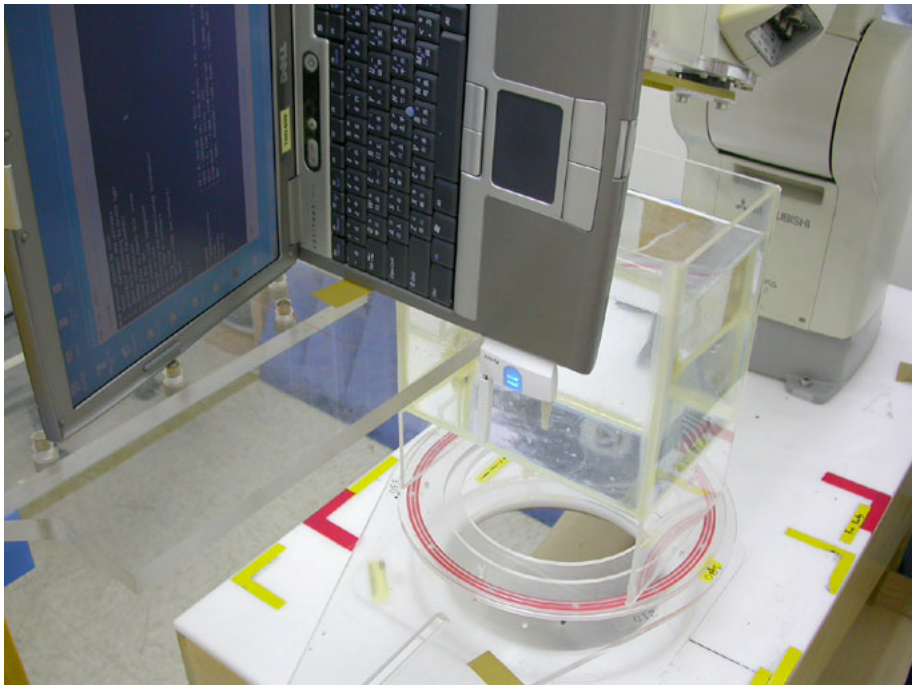
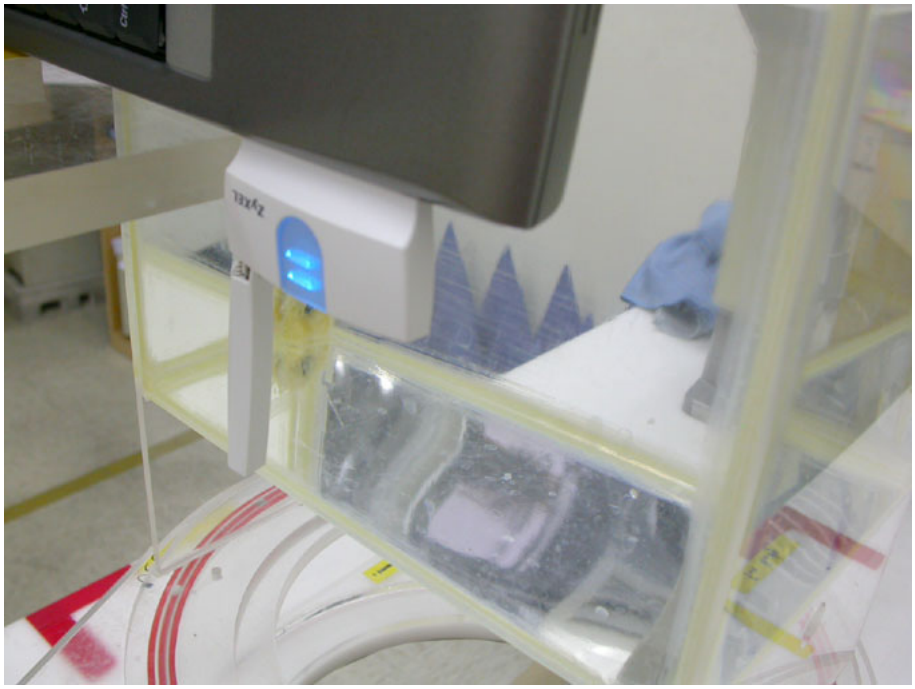


Figure 9: EUT botton to phantom, 0 mm separation-Zoom in



SAR Measurement Test Setup

Figure 10: EUT perpendicular to phantom, 0 mm separation

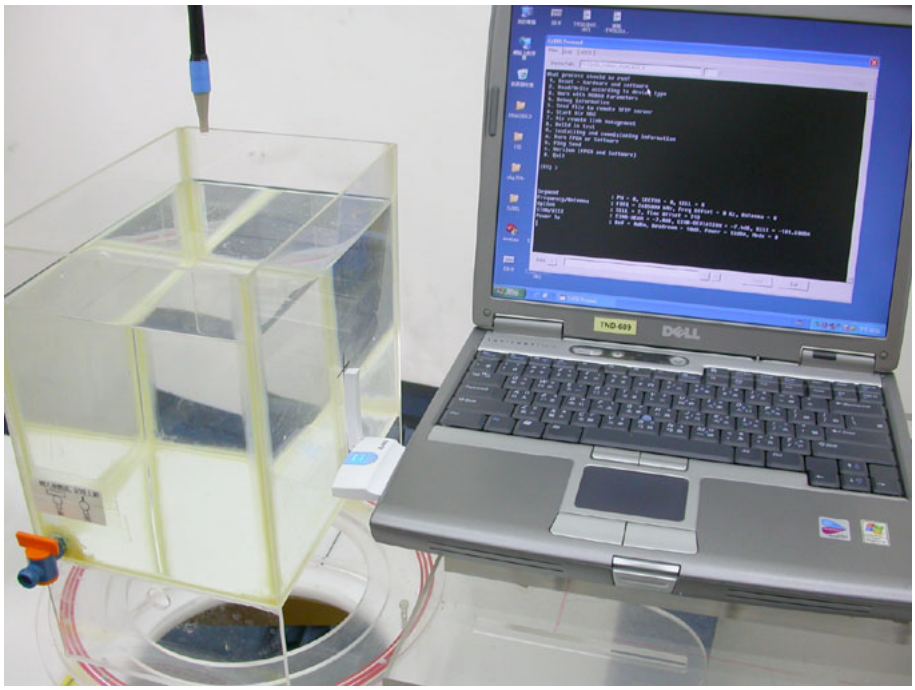


Figure 11: EUT perpendicular to phantom, 0 mm separation-Zoom in

SAR Measurement Test Setup

Figure 12: EUT perpendicular to phantom, 15 mm separation

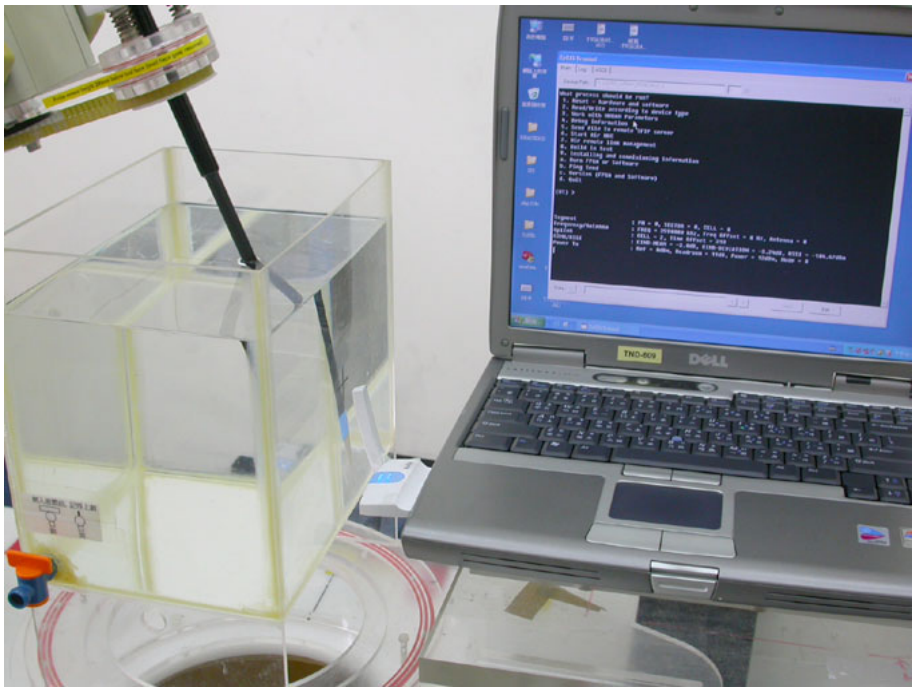


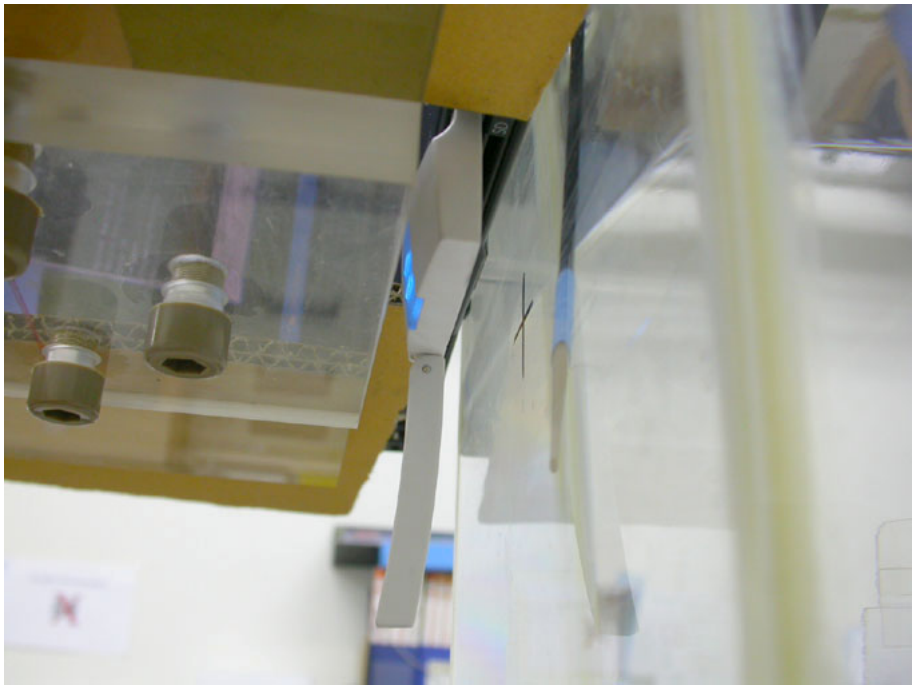
Figure 13: EUT perpendicular to phantom, 15 mm separation-Zoom in

Test Equipment: HP Notebook (Host 3)

SAR Measurement Test Setup

Figure 14: EUT bottom to phantom, 0 mm separation

Figure 15: EUT bottom to phantom, 0 mm separation-Zoom in



SAR Measurement Test Setup

Figure 16: EUT perpendicular to phantom, 0 mm separation

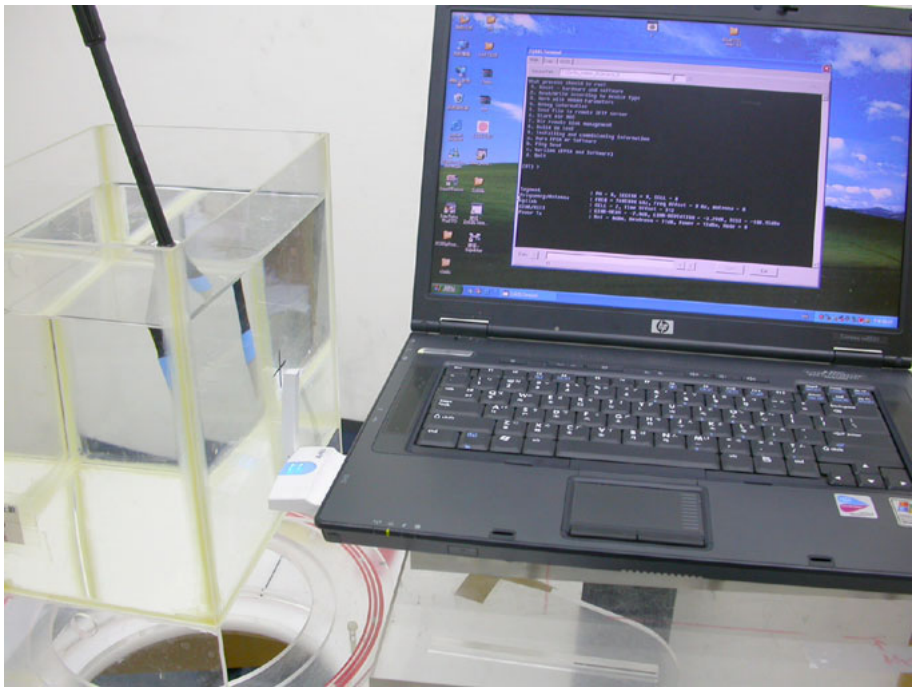


Figure 17: EUT perpendicular to phantom, 0 mm separation-Zoom in

SAR Measurement Test Setup

Figure 18: EUT perpendicular to phantom, 15 mm separation

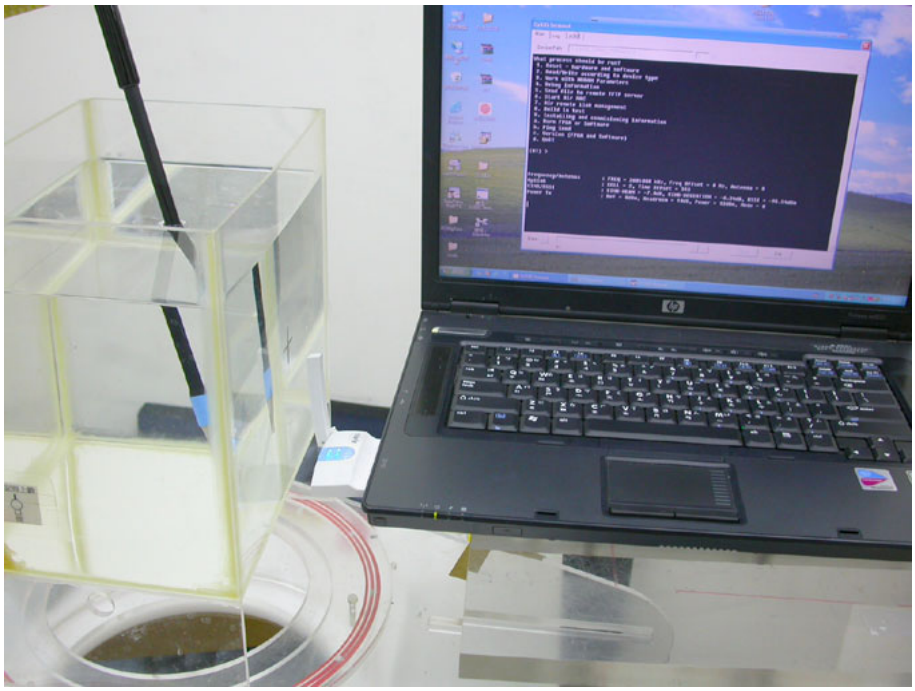


Figure 19: EUT perpendicular to phantom, 15 mm separation-Zoom in

2.3 SAR measurement system

Robot system specification

The SAR measurement system being used is the IndexSAR SARA2 system, which consists of a Mitsubishi RV-E2 6-axis robot arm and controller, IndexSAR probe and amplifier and SAM phantom Head Shape. The robot is used to articulate the probe to programmed positions inside the phantom head to obtain the SAR readings from the DUT.

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

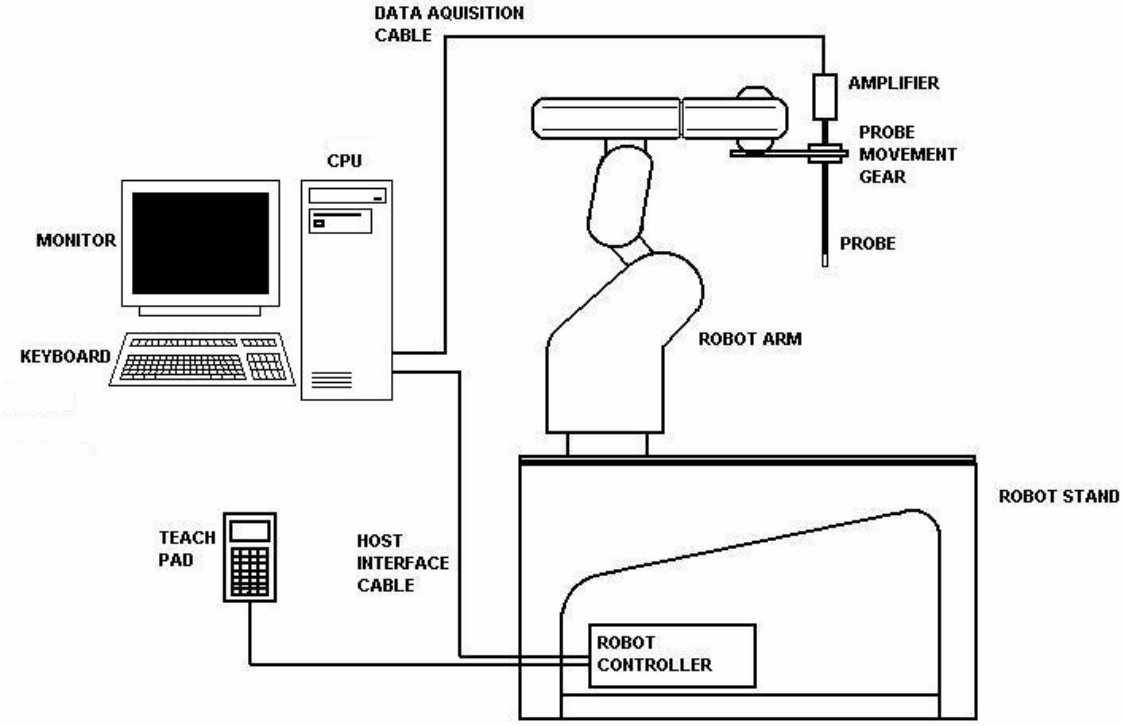


Figure 1: Schematic diagram of the SAR measurement system

The position and digitized shape of the phantom heads are made available to the software for accurate positioning of the probe and reduction of set-up time.

The SAM phantom heads are individually digitized using a Mitutoyo CMM machine to a precision of 0.02mm. The data is then converted into a shape format for the software, providing an accurate description of the phantom shell. In operation, the system first does an area (2D) scan at a fixed depth within the liquid from the inside wall of the phantom. When the maximum SAR point has been found, the system will then carry out a 3D scan central at that point to determine volume averaged SAR level.

The first 2 measurements points in a direction perpendicular to the surface of the phantom during the zoom scan and closest to the phantom surface, were only 3.5mm and the probe is kept at greater than half a diameter from the surface.

The probe presentation angle has a minor effect on SAR results at frequencies within the IEEE1528 range but that the effects become more marked with bigger probes and at higher frequencies. Indexsar have implemented a correction scheme based on the VPM theory.

Implications of this approach are that the +/- 30 degrees to the surface normal criterion does not obviate variations in probe sensitivity with probe presentation angle because the relevance angle is to the local field-gradient direction and not the surface normal. Effects are small at IEEE1528 frequencies and can be assessed or corrected using VPM dependent on frequency of testing.

Boundary effect compensation is a new opportunity that can be corrected for if appropriate measurements have been made during the waveguide probe calibrations. Indexsar have responded to this opportunity by modifying the waveguide measurements for probes calibrated now and by building a correction scheme into the software.

2.4 SAR measurement system validation

Prior to the assessment, the system was verified to the ±10% of the specifications by using the system validation equipments. The validation was performed at 2600 MHz on then bottom side of box phantom.

Procedures

The SAR evaluation was performed with the following procedures:

a. The SAR distribution was measured at the exposed side of the bottom of the box phantom and was measured at a distance of 15 mm for 300 ~ 1000 MHz and 10 mm for 1000 ~ 3000 MHz from the inner surface of the shell. The feed power was 1/5W.

b. The dimension for this cube is 32 mm x 32 mm x 34 mm was assessed by measuring 5 x 5 x 7 points. On the basis of this data set, the spatial peak SAR value was evaluated with the following procedure:

   i) The data at the surface were extrapolated, since the center of the dipoles is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measurement point is 5 mm. The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in Z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.

   ii) The maximum interpolated value was searched with a straightforward algorithm. Around this maximum, the SAR values averaged over the spatial volumes (1g or 10g) were computed using the 3-D spline interpolation algorithm. The 3-D spline is composed of three one-dimensional splines with the "Not a knot" condition (in x, y and z directions). The volume was integrated with the trapezoidal algorithm. 1000 points (10 x 10 x 10) were interpolated to calculate the average.

   iii) All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

The test scans procedure for system validation also applies to the general scan procedure except for the set-up position. For general scan, the EUT was placed at the side of phantom. For validation scan, the standard dipole antenna was placed at the bottom of phantom

2.4.1 System Validation result

System Validation (2600 MHz Body)		
Frequency MHz	**Operating Mode**	**Measured SAR_{1g} (W/kg)**
2600	CW	53.975

Please see the plot below:

Date:	2007/10/28	**Position:**	Bottom of phantom
Filename:	2600per. check071028.txt	**Phantom:**	HeadBox1-val..csv
Device Tested:	2600 validation	**Head Rotation:**	0
Antenna:	2.6GHz Dipole Antenna	**Test Frequency:**	2600 MHz
Shape File:	none.csv	**Power Level:**	23 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

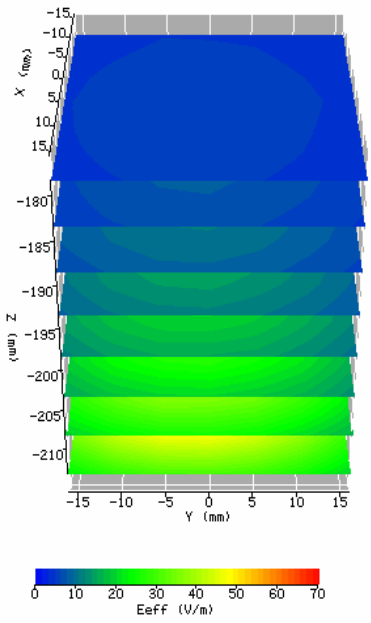
Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41

Crest Factor = 1



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.772	0.770

Change during Scan (%) -0.23

Max E-field (V/m): 61.09

Max SAR (W/kg)	**1g**	**10g**
	10.795	4.954

Location of Max (mm):	**X**	**Y**	**Z**
	1.3	-1.3	-221.3

Normalized to an input power of 1W
Averaged over 1 cm^3 (1g) of tissue
53.975 W/kg

2.4.2 System Performance Check result

System Validation (2600 MHz Body)		
Frequency MHz	**Operating Mode**	**Measured SAR_{1g} (W/kg)**
2600	CW	53.975

Please see the plot below:

Date:	2007/10/28	**Position:**	Bottom of phantom
Filename:	2600per. check071028.txt	**Phantom:**	HeadBox1-val..csv
Device Tested:	2600 validation	**Head Rotation:**	0
Antenna:	2.6GHz Dipole Antenna	**Test Frequency:**	2600 MHz
Shape File:	none.csv	**Power Level:**	23 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

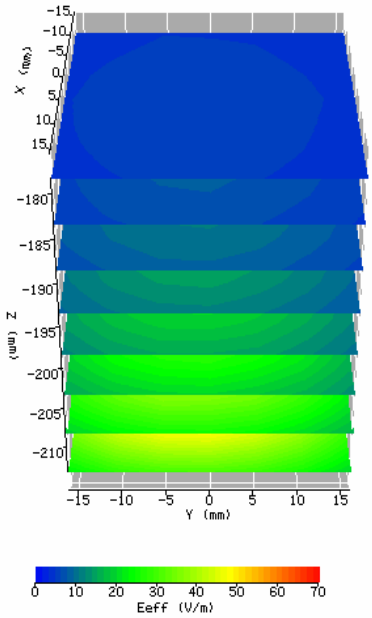
Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41

Crest Factor = 1



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.772	0.770

Change during Scan (%) -0.23

Max E-field (V/m): 61.09

Max SAR (W/kg)	**1g**	**10g**
	10.795	4.954

Location of Max (mm):	**X**	**Y**	**Z**
	1.3	-1.3	-221.3

Normalized to an input power of 1W
Averaged over 1 cm^3 (1g) of tissue
53.975 W/kg

2.5 Test Result

The results on the following page(s) were obtained when the device was tested in the condition described in this report. Detailed measurement data and plots, which reveal information about the location of the maximum SAR with respect to the device, are reported in Appendix A.

Measurement Results

Trade Name:	ZyXEL	**Model No.:**	MAX-100
Serial No.:	Not Labled	**Test Engineer:**	Kevin Chen
TEST CONDITIONS			
Ambient Temperature	23 °C	**Relative Humidity**	55 %
Test Signal Source	Tx mode	**Signal Bandwidth**	5MHz; 10MHz
Output Power Before SAR Test	See section 1.5.2	**Output Power After SAR Test**	See section 1.5.2
Test Duration	23 min. each scan	**Number of Battery Change**	Test with DC from Notebook PC

FOR IBM Notebook (Host 1)

Channel (MHz)	Operating Mode (B.W.)	Crest Factor	EUT Position Description	Distance (mm)	Measured SAR_{1g} (W/kg)	Plot Number
2500	5MHz	1	Perpendicular to Phantom	0	0.542	1
2590	5MHz	1	Perpendicular to Phantom	0	0.675	2
2685	5MHz	1	Perpendicular to Phantom	0	0.373	3
2505	10MHz	1	Perpendicular to Phantom	0	0.687	4
2590	10MHz	1	Perpendicular to Phantom	0	0.851	5
2685	10MHz	1	Perpendicular to Phantom	0	0.454	6
2500	5MHz	1	Perpendicular to Phantom	15	0.093	7
2590	5MHz	1	Perpendicular to Phantom	15	0.102	8
2685	5MHz	1	Perpendicular to Phantom	15	0.063	9
2505	10MHz	1	Perpendicular to Phantom	15	0.108	10
2590	10MHz	1	Perpendicular to Phantom	15	0.131	11
2685	10MHz	1	Perpendicular to Phantom	15	0.064	12
2500	5MHz	1	Bottom to Phantom	0	0.083	13
2590	5MHz	1	Bottom to Phantom	0	0.091	14
2685	5MHz	1	Bottom to Phantom	0	0.048	15
2505	10MHz	1	Bottom to Phantom	0	0.107	16
2590	10MHz	1	Bottom to Phantom	0	0.111	17
2685	10MHz	1	Bottom to Phantom	0	0.054	18

Note: 1. Distance from bottom of EUT to flat phantom is 9 mm.

FOR DELL Notebook (Host 2)

EUT Position						
Channel (MHz)	**Operating Mode (B.W.)**	**Crest Factor**	**Description**	**Distance (mm)**	**Measured SAR_{1g} (W/kg)**	**Plot Number**
2500	5MHz	1	Perpendicular to Phantom	0	0.513	19
2590	5MHz	1	Perpendicular to Phantom	0	0.636	20
2685	5MHz	1	Perpendicular to Phantom	0	0.327	21
2505	10MHz	1	Perpendicular to Phantom	0	0.624	22
2590	10MHz	1	Perpendicular to Phantom	0	0.749	23
2685	10MHz	1	Perpendicular to Phantom	0	0.385	24
2500	5MHz	1	Perpendicular to Phantom	15	0.073	25
2590	5MHz	1	Perpendicular to Phantom	15	0.133	26
2685	5MHz	1	Perpendicular to Phantom	15	0.064	27
2505	10MHz	1	Perpendicular to Phantom	15	0.103	28
2590	10MHz	1	Perpendicular to Phantom	15	0.125	29
2685	10MHz	1	Perpendicular to Phantom	15	0.049	30
2500	5MHz	1	Bottom to Phantom	0	0.047	31
2590	5MHz	1	Bottom to Phantom	0	0.047	32
2685	5MHz	1	Bottom to Phantom	0	0.022	33
2505	10MHz	1	Bottom to Phantom	0	0.053	34
2590	10MHz	1	Bottom to Phantom	0	0.053	35
2685	10MHz	1	Bottom to Phantom	0	0.029	36

Note: 1. Distance from bottom of EUT to flat phantom is 18 mm.

FOR HP Notebook (Host 3)

EUT Position						
Channel (MHz)	**Operating Mode (BW)**	**Crest Factor**	**Description**	**Distance (mm)**	**Measured SAR_{1g} (W/kg)**	**Plot Number**
2500	5MHz	1	Perpendicular to Phantom	0	0.478	37
2590	5MHz	1	Perpendicular to Phantom	0	0.602	38
2685	5MHz	1	Perpendicular to Phantom	0	0.313	39
2505	10MHz	1	Perpendicular to Phantom	0	0.578	40
2590	10MHz	1	Perpendicular to Phantom	0	0.751	41
2685	10MHz	1	Perpendicular to Phantom	0	0.382	42
2500	5MHz	1	Perpendicular to Phantom	15	0.090	43
2590	5MHz	1	Perpendicular to Phantom	15	0.108	44
2685	5MHz	1	Perpendicular to Phantom	15	0.055	45
2505	10MHz	1	Perpendicular to Phantom	15	0.110	46
2590	10MHz	1	Perpendicular to Phantom	15	0.125	47
2685	10MHz	1	Perpendicular to Phantom	15	0.054	48
2500	5MHz	1	Bottom to Phantom	0	0.062	49
2590	5MHz	1	Bottom to Phantom	0	0.065	50
2685	5MHz	1	Bottom to Phantom	0	0.036	51
2505	10MHz	1	Bottom to Phantom	0	0.077	52
2590	10MHz	1	Bottom to Phantom	0	0.084	53
2685	10MHz	1	Bottom to Phantom	0	0.043	54

Note: 1. Distance from bottom of EUT to flat phantom is 13 mm.

3.0 Test Equipment

3.1 Equipment List

The Specific Absorption Rate (SAR) tests were performed with the INDEXSAR SARA2 SYSTEM.

The following major equipment/components were used for the SAR evaluations:

SAR Measurement System			
EQUIPMENT	**SPECIFICATIONS**	Intertek ID No.	LAST CAL. DATE
Balanced Validation Dipole	**2600MHz**	EC381-5	12/2006
Controller	**Mitsubishi CR-E116**	EP320-1	N/A
Robot	**Mitsubishi RV-E2**	EP320-2	N/A
	Repeatability: ± 0.04mm; Number of Axes: 6		
E-Field Probe	**IXP-050 (S/N 0146)**	EC356	08/2007
	Frequency Range: 900MHz ~ 2600MHz Probe outer diameter: 5.2 mm; Length: 350 mm; Distance between the probe tip and the dipole center: 2.7 mm		
Data Acquisition	**SARA2**	N/A	N/A
	Processor: Pentium 4; Clock speed: 1.5GHz; OS: Windows XP; I/O: two RS232; Software: SARA2 Ver. 2.41VPM (**V**irtual **P**robe **M**inaturisation)		
Phantom	**2mm wall thickness box phantom**	N/A	N/A
	Shell Material: clear Perspex; Thickness: 2 ± 0.1 mm; Capacity: 152.5 x 225.5 x 200 (W x L x D) mm^3; Dielectric constant: less than 2.85 above 500MHz;		
Device holder	Material: clear Perspex; Dielectric constant: less than 2.85 above 500MHz	N/A	N/A
Simulated Tissue	**Mixture**	N/A	10/28/2007
	Please see section 3.2 for details		
Wideband Peak Power Meter/ Sensor	**Anritsu ML2487A with MA2491A power sensor**	EC396	10/19/2007
	Frequency Range: 100MHz~18GHz		
RF Power Meter	**Boonton 4231A with 51011-EMC power sensor**	EC359	03/22/2007
	Frequency Range: 0.03 to 8 GHz, <24dBm		
Vector Network Analyzer	**HP 8753B** **HP 85046A**	EC375	08/15/2007
	Frequency Range: 300k to 3GHz		
Signal Generator	**R&S SMR27**	EC354	08/16/2007
	Frequency Range: 10M to 27GHz, <120dBuV		

3.2 Tissue Simulating Liquid

The head and body tissue parameters should be used to test operating frequency band of transmitters. When a transmission band overlaps with one of the target frequencies, the tissue dielectric parameters of the tissue medium at the middle of a device transmission band should be within ±5% of the parameters specified at that target frequency.

3.2.1 Body Tissue Simulating Liquid for evaluation test

Body Ingredients Frequency (2.6 GHz)	
DGBE (Dilethylene Glycol Butyl Ether)	28.65%
Salt	0.05%
Water	71.3%

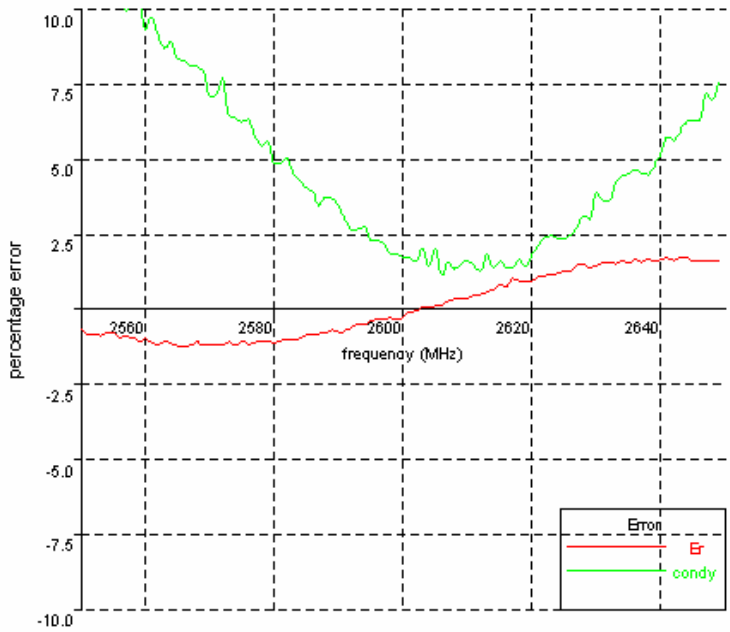
The dielectric parameters were verified prior to assessment using the HP 85046A dielectric probe kit and the HP 8753B network Analyzer. The dielectric parameters were:

Frequency (MHz)	**Temp. (℃)**	**ε_r / Relative Permittivity**			**σ / Conductivity (mho/m)**			**ρ *(kg/m^3)**
		measured	target	△(±5%)	measured	target	△(±5%)	
2600	24.0	52.2705	52.4	-0.25%	2.1774	2.15	1.27%	1000

** Worst-case assumption*

3.2.2 Body Liquid result

Date: 28 Oct. 2007	Temperature: 24.0 ℃	Type: 2600 MHz/ body (FCC)	Tested by: Kevin



3.3 E-Field Probe and 2600 Balanced Validation Dipole Antenna Calibration

Probe calibration factors and dipole antenna calibration are included in Appendix C.

4.0 Measurement Uncertainty

The uncertainty budget has been determined for the INDEXSAR SARA2 measurement system according to IEEE P1528 documents [3] and is given in the following table. The extended uncertainty (95% confidence level) was assessed to be 20.6 % for SAR measurement, and the extended uncertainty (95% confidence level) was assessed to be 20.2 % for system performance check.

Table 1 Exposure Assessment Uncertainty
Example of measurement uncertainty assessment SAR measurement

a	b			c	d	e		f	g	h	I
Uncertainty Component	Sec.	Tol. (+/-)			Prob. Dist.	Divisor (descrip)	Divisor (value)	c1 (1g)	c1 (10g)	Standard Uncertainty (%) 1g	Standard Uncertainty (%) 10g
		(dB)		(%)							
Measurement System											
Probe Calibration	E2.1			2.5	N	1 or k	1	1	1	2.50	2.50
Axial Isotropy	E2.2	0.25	5.93	5.93	R	√3	1.73	0	0	0.00	0.00
Hemispherical Isotropy	E2.2	0.45	10.92	10.92	R	√3	1.73	1	1	6.30	6.30
Boundary effect	E2.3		4	4.00	R	√3	1.73	1	1	2.31	2.31
Linearity	E2.4	0.04	0.93	0.93	R	√3	1.73	1	1	0.53	0.53
System Detection Limits	E2.5		1	1.00	R	√3	1.73	1	1	0.58	0.58
Readout Electronics	E2.6		1	1.00	N	1 or k	1.00	1	1	1.00	1.00
Response time	E2.7		0	0.00	R	√3	1.73	1	1	0.00	0.00
Integration time	E2.8		1.4	1.40	R	√3	1.73	1	1	0.81	0.81
RF Ambient Conditions	E6.1		3	3.00	R	√3	1.73	1	1	1.73	1.73
Probe Positioner Mechanical Tolerance	E6.2		0.6	0.60	R	√3	1.73	1	1	0.35	0.35
Probe Position wrt. Phantom Shell	E6.3		3	3.00	R	√3	1.73	1	1	1.73	1.73
SAR Evaluation Algorithms	E5		8	8.00	R	√3	1.73	1	1	4.62	4.62
Test Sample Related											
Test Sample Positioning	E4.2		2	2.00	N	1	1.00	1	1	2.00	2.00
Device Holder Uncertainty	E4.1		2	2.00	N	1	1.00	1	1	2.00	2.00
Output Power Variation	6.6.2		5	5.00	R	√3	1.73	1	1	2.89	2.89
Phantom and Tissue Parameters											
Phantom Uncertainty (shape and thickness)	E3.1		4	4.00	R	√3	1.73	1	1	2.31	2.31
Liquid conductivity (Deviation from target)	E3.2		5	5.00	R	√3	1.73	0.64	0.43	1.85	1.24
Liquid conductivity (measurement uncert.)	E3.3		1.1	1.10	N	1	1.00	0.64	0.43	0.70	0.47
Liquid permittivity (Deviation from target)	E3.2		5	5.00	R	√3	1.73	0.6	0.49	1.73	1.41
Liquid permittivity (measurement uncert.)	E3.3		1.1	1.10	N	1	1.00	0.6	0.49	0.66	0.54
Combined standard uncertainty					**RSS**					10.5	10.3
Expanded uncertainty	(95% Confidence Level)				k=2					**20.6**	**20.3**

Table 2 System Check (Verification)

Example of measurement uncertainty assessment for system performance check

a	b			c	d	e		f	g	h	l
Uncertainty Component	Sec.	Tol. (+/-)			Prob. Dist.	Divisor (descrip)	Divisor (value)	c1 (1g)	c1 (10g)	Standard Uncertainty (%) 1g	Standard Uncertainty (%) 10g
		(dB)		(%)							
Measurement System											
Probe Calibration	E2.1			2.5	N	1 or k	1	1	1	2.50	2.50
Axial Isotropy	E2.2	0.25	5.93	5.93	R	√3	1.73	0	0	0.00	0.00
Hemispherical Isotropy	E2.2	0.45	10.92	10.92	R	√3	1.73	1	1	6.30	6.30
Boundary effect	E2.3		4	4.00	R	√3	1.73	1	1	2.31	2.31
Linearity	E2.4	0.04	0.93	0.93	R	√3	1.73	1	1	0.53	0.53
System Detection Limits	E2.5		1	1.00	R	√3	1.73	1	1	0.58	0.58
Readout Electronics	E2.6		1	1.00	N	1 or k	1.00	1	1	1.00	1.00
Response time	E2.7		0	0.00	R	√3	1.73	1	1	0.00	0.00
Integration time	E2.8		1.4	1.40	R	√3	1.73	1	1	0.81	0.81
RF Ambient Conditions	E6.1		3	3.00	R	√3	1.73	1	1	1.73	1.73
Probe Positioner Mechanical Tolerance	E6.2		0.6	0.60	R	√3	1.73	1	1	0.35	0.35
Probe Position wrt. Phantom Shell	E6.3		3	3.00	R	√3	1.73	1	1	1.73	1.73
SAR Evaluation Algorithms	E5		8	8.00	R	√3	1.73	1	1	4.62	4.62
Dipole											
Dipole axis to liquid distance	8, E4.2		2	2.00	N	1	1.00	1	1	2.00	2.00
Input power and SAR drift measurement	8, 6.6.2		5	5.00	R	√3	1.73	1	1	2.89	2.89
Phantom and Tissue Parameters											
Phantom Uncertainty (thickness)	E3.1		4	4.00	R	√3	1.73	1	1	2.31	2.31
Liquid conductivity (Deviation from target)	E3.2		5	5.00	R	√3	1.73	0.64	0.43	1.85	1.24
Liquid conductivity (measurement uncert.)	E3.3		1.1	1.10	N	1	1.00	0.64	0.43	0.70	0.47
Liquid permittivity (Deviation from target)	E3.2		5	5.00	R	√3	1.73	0.6	0.49	1.73	1.41
Liquid permittivity (measurement uncert.)	E3.3		1.1	1.10	N	1	1.00	0.6	0.49	0.66	0.54
Combined standard uncertainty					**RSS**					10.3	10.1
Expanded uncertainty	(95% Confidence Level)				k=2					**20.2**	**19.9**

5.0 WARNING LABEL INFORMATION - USA

Please see user's manual.

6.0 REFERENCES

[1] ANSI, *ANSI/IEEE C95.1-1999: IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3kHz to 300 GHz*, The Institute of electrical and Electronics Engineers, Inc., New York, NY 10017, 1999

[2] Federal Communications Commission, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", Supplement C to OET Bulletin 65, Washington, D.C. 20554, 1997

[3] IEEE Standards Coordinating Committee 34, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", IEEE Std 1528™-2003

[4] Industry Canada, "Evaluation Procedure for Mobile and Portable Radio Transmitters with respect to Health Canada's Safety Code 6 for Exposure of Humans to Radio Frequency Fields", Radio Standards Specification RSS-102 Issue 1 (Provisional): September 1999.

[5] IEC 62209-1 Human exposure to radio frequency fields from gand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300MHz to 3GHz)

7.0 Document Revision Record

Revision/ Job Number	Writer Initials	Date	Change

APPENDIX A - SAR Evaluation Data

Power drift: Power drift is the measurement of power drift of the device over one complete SAR scan.

To assess the drift of the power of the device under test, a SAR measurement was made in the middle of the zoom scan volume at the start of the scan and a measurement at this point was then also made after the measurement scan. The difference between the two measurements should be less than 5%.

Plot #1 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_IBM_per0-2500-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2500 MHz (5M BW)
Shape File:	MAX-100_IBM-per.csv	**Power Level:**	24.15 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

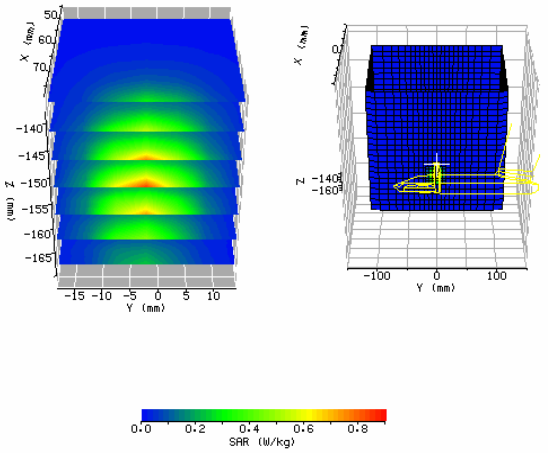
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.105	0.105

Change during Scan (%) -0.32

Max E-field (V/m): 19.48

Max SAR (W/kg)	**1g**	**10g**
	0.542	0.220

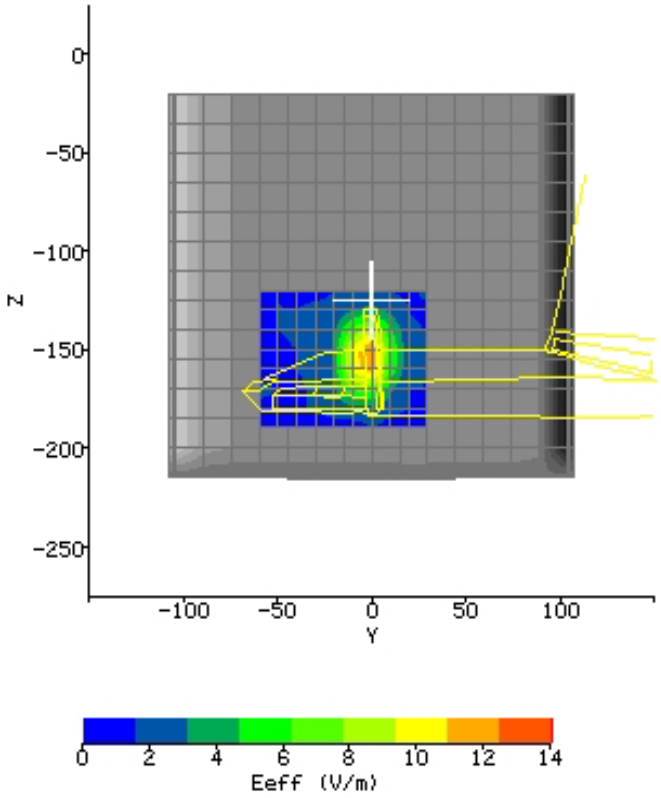
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-18.1	-153.1

Plot #1 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #2 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_IBM_per0-2590-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (5M BW)
Shape File:	MAX-100_IBM-per.csv	**Power Level:**	24.28 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

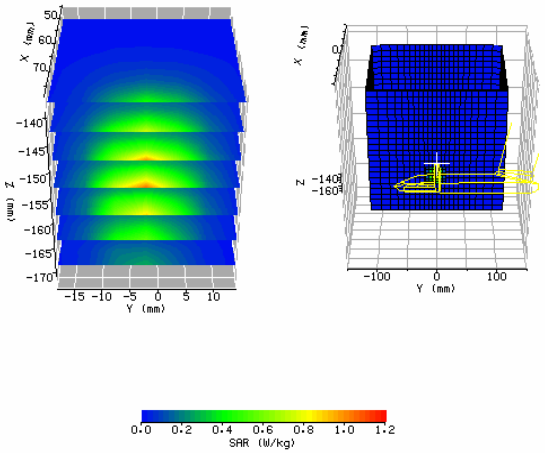
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.120	0.120

Change during Scan (%) -0.38

Max E-field (V/m): 21.75

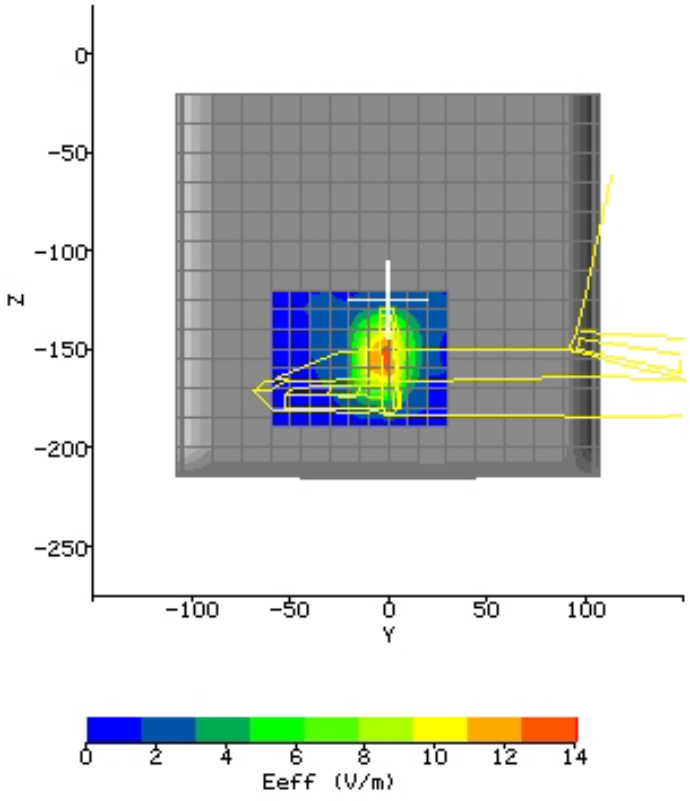
Max SAR (W/kg)	**1g**	**10g**
	0.675	0.271

Location of Max (mm):	**X**	**Y**	**Z**
	75.3	-18.0	-154.3

Plot #2 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-60.0	30.0	9.0
	Z	-190.0	-120.0	7.0



Plot #3 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_IBM_per0-2685-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (5M BW)
Shape File:	MAX-100_IBM-per.csv	**Power Level:**	22.38 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

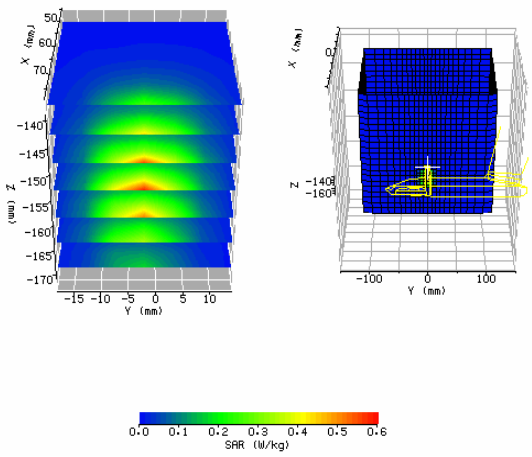
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.066	0.067

Change during Scan (%) -0.43

Max E-field (V/m): 16.22

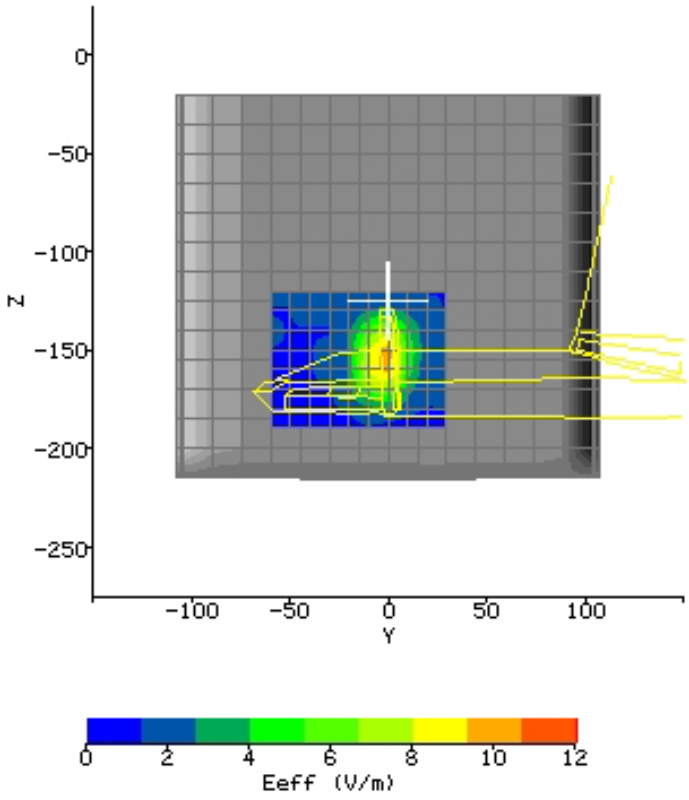
Max SAR (W/kg)	**1g**	**10g**
	0.373	0.154

Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-18.0	-154.1

Plot #3 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-60.0	30.0	9.0
	Z	-190.0	-120.0	7.0



Plot #4 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_IBM_per0-2505-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2505 MHz (10M BW)
Shape File:	MAX-100_IBM-per.csv	**Power Level:**	24.13 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

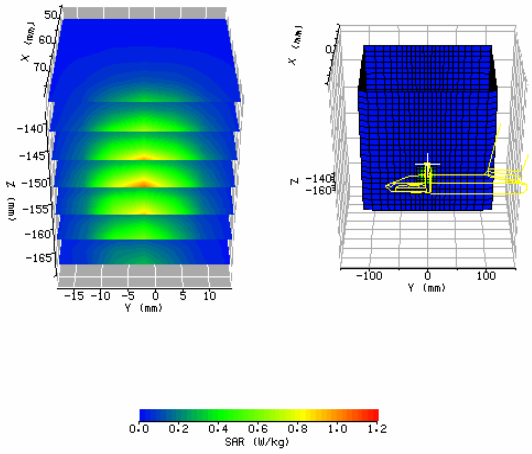
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.130	0.132

Change during Scan (%) 1.51

Max E-field (V/m): 21.97

Max SAR (W/kg)	**1g**	**10g**
	0.687	0.280

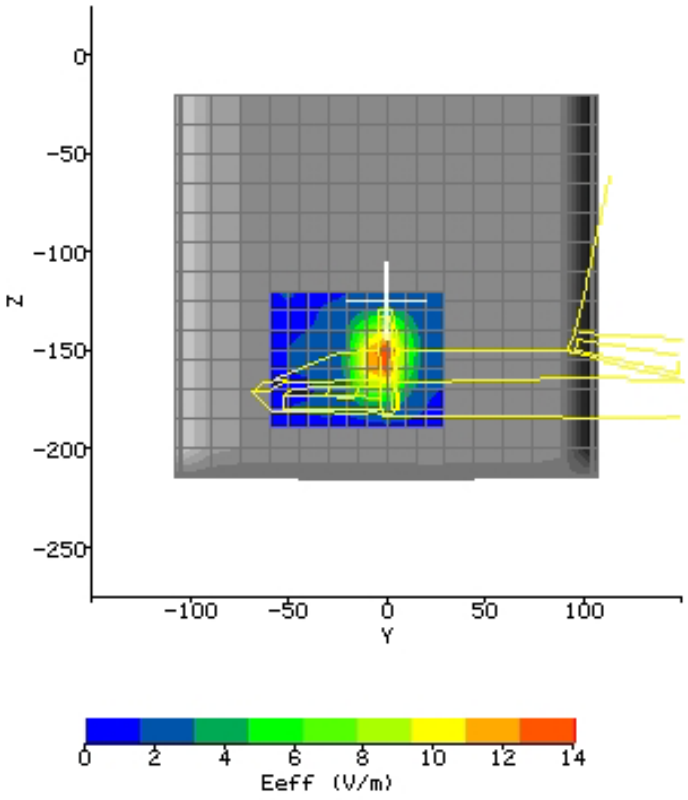
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-18.1	-153.2

Plot #4 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #5 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_IBM_per0-2590-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (10M BW)
Shape File:	MAX-100_IBM-per.csv	**Power Level:**	24.04 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

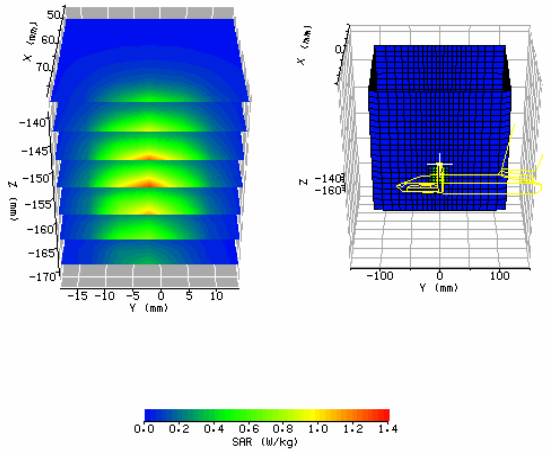
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

	Start Scan	End Scan
Spot SAR (W/kg):	0.146	0.147

Change during Scan (%) 0.18

Max E-field (V/m): 24.50

Max SAR (W/kg)	1g	10g
	0.851	0.343

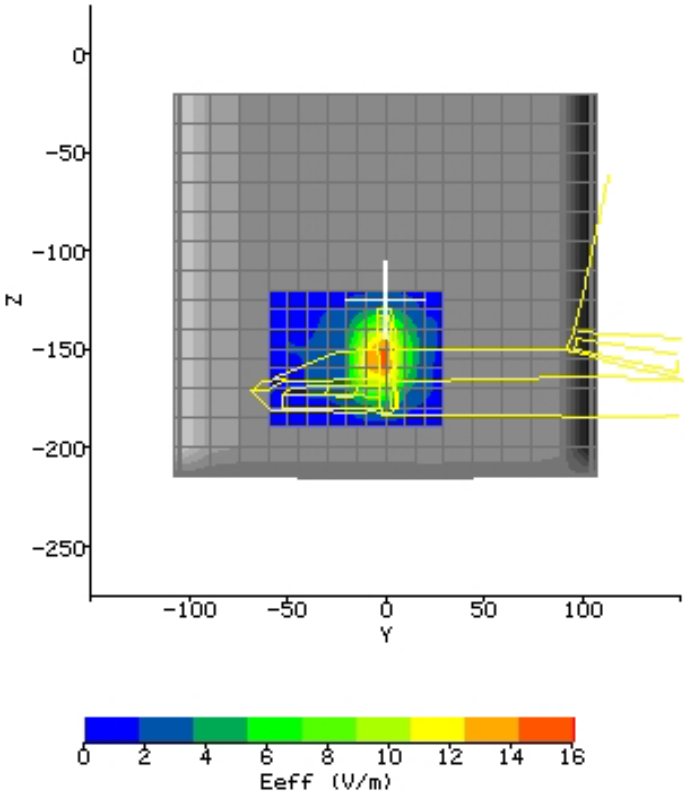
Location of Max (mm):	X	Y	Z
	78.3	-18.2	-154.0

Plot #5 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #6 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_IBM_per0-2685-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (10M BW)
Shape File:	MAX-100_IBM-per.csv	**Power Level:**	22.20 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

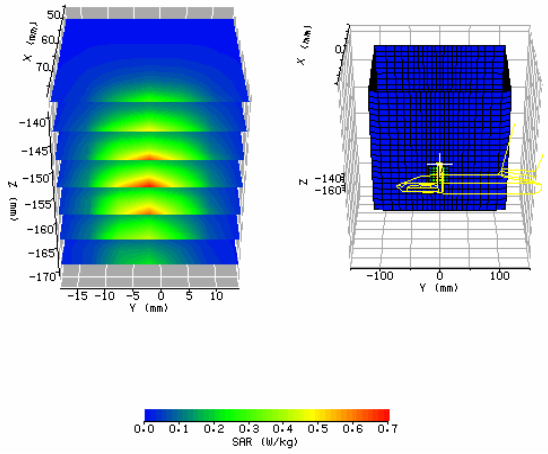
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.080	0.080

Change during Scan (%) -0.02

Max E-field (V/m): 17.82

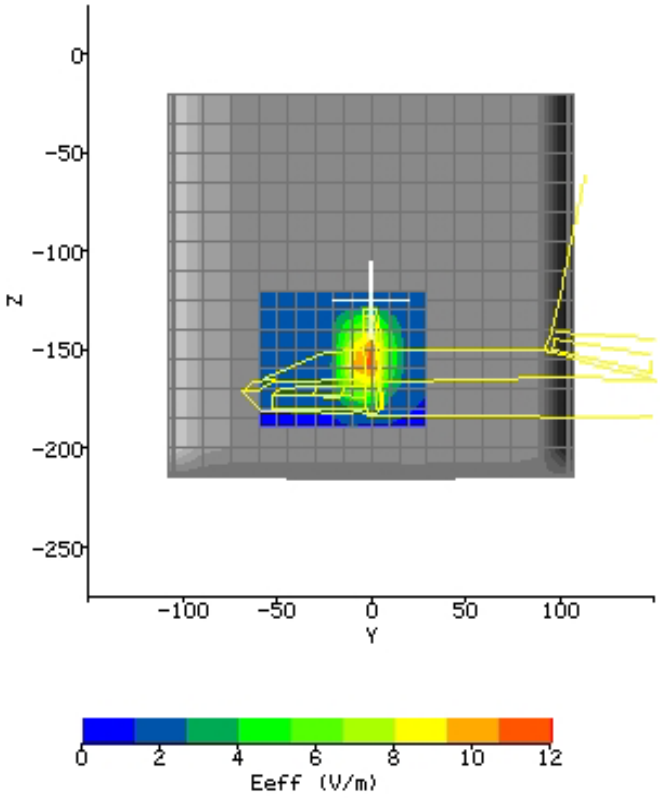
Max SAR (W/kg)	**1g**	**10g**
	0.454	0.183

Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-18.1	-155.1

Plot #6 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-60.0	30.0	9.0
	Z	-190.0	-120.0	7.0



Plot #7 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_IBM_per15-2500-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2500 MHz (5M BW)
Shape File:	MAX-100_IBM-per.csv	**Power Level:**	24.15 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

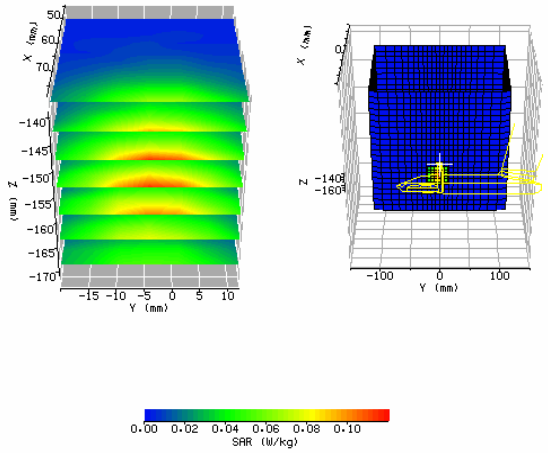
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.023	0.024

Change during Scan (%) 0.60

Max E-field (V/m): 7.21

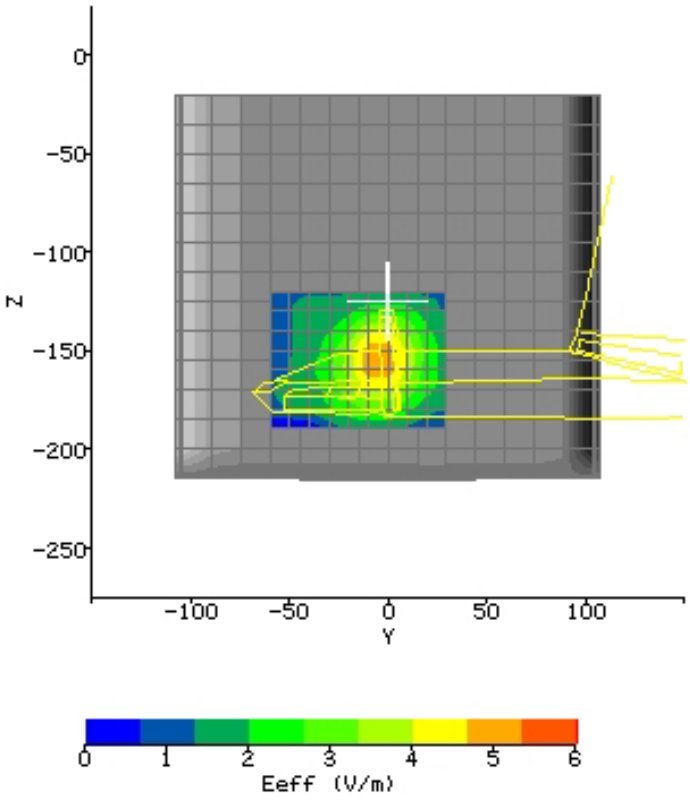
Max SAR (W/kg)	**1g**	**10g**
	0.093	0.047

Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-20.1	-153.1

Plot #7 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-60.0	30.0	9.0
	Z	-190.0	-120.0	7.0



Plot #8 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_IBM_per15-2590-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (5M BW)
Shape File:	MAX-100_IBM-per.csv	**Power Level:**	24.28 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

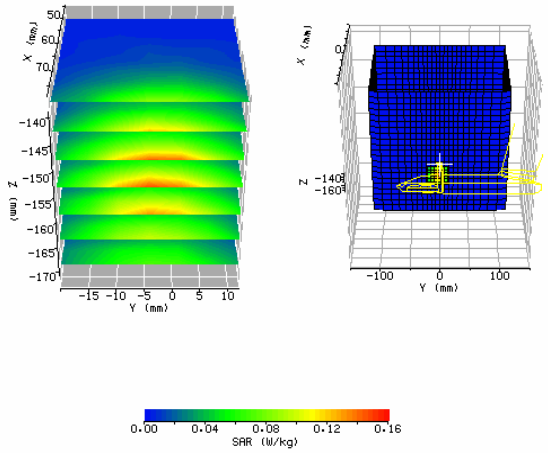
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.028	0.028

Change during Scan (%) 1.06

Max E-field (V/m): 8.11

Max SAR (W/kg)	**1g**	**10g**
	0.102	0.052

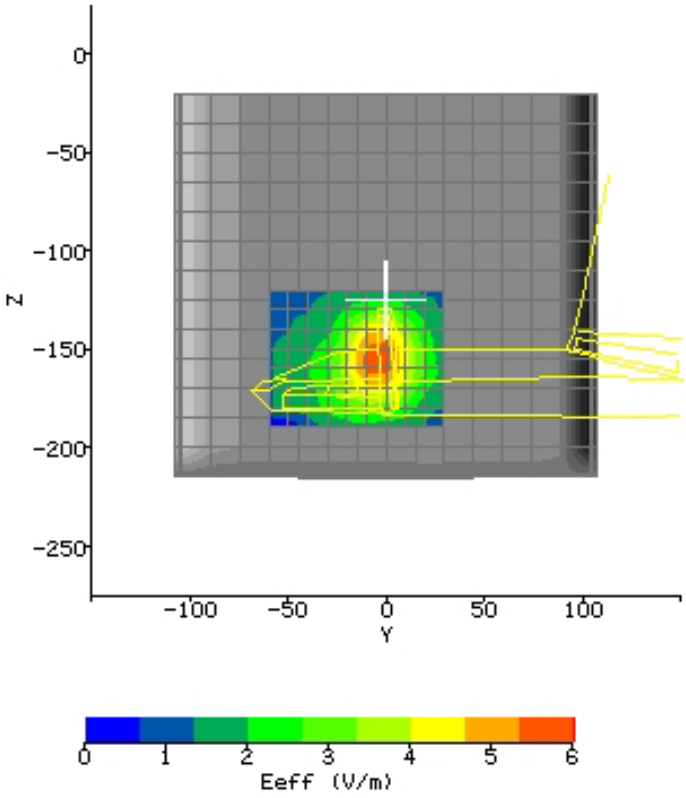
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-20.0	-153.1

Plot #8 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #9 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_IBM_per15-2685-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (5M BW)
Shape File:	MAX-100_IBM-per.csv	**Power Level:**	22.38 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

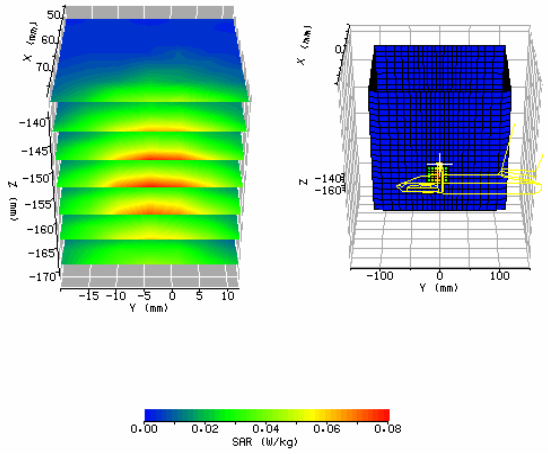
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.016	0.016

Change during Scan (%) 0.12

Max E-field (V/m): 5.96

Max SAR (W/kg)	**1g**	**10g**
	0.063	0.032

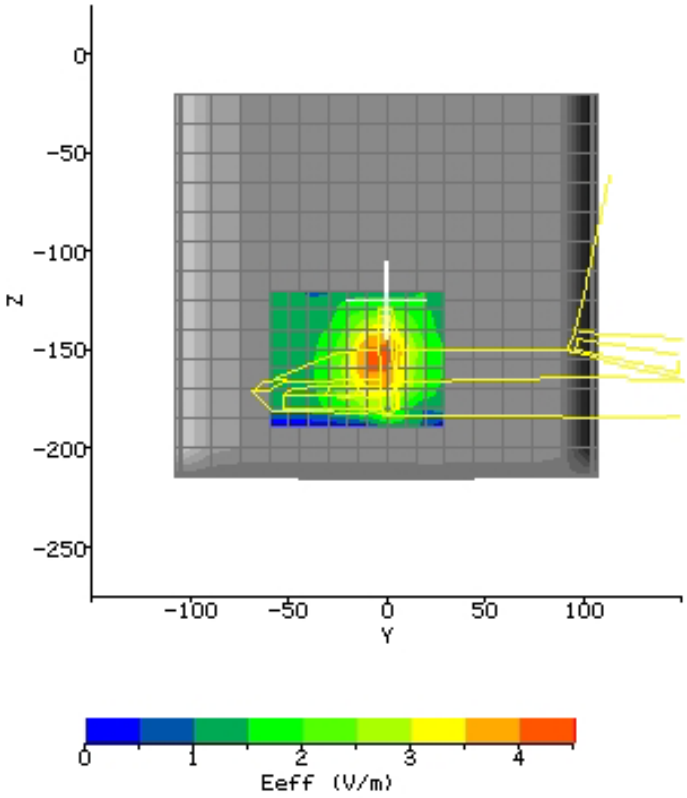
Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-20.1	-154.1

Plot #9 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #10 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_IBM_per15-2505-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2505 MHz (10M BW)
Shape File:	MAX-100_IBM-per.csv	**Power Level:**	24.13 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

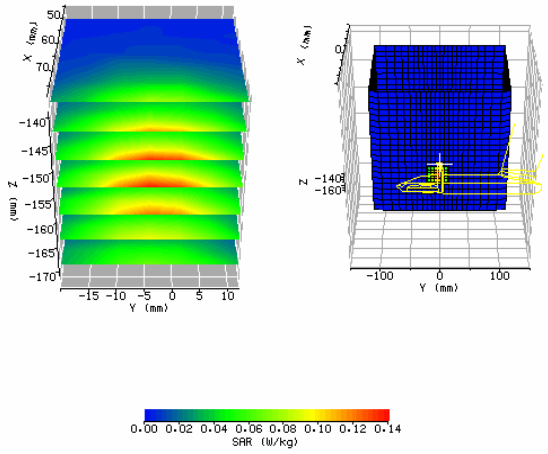
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.032	0.033

Change during Scan (%) 0.52

Max E-field (V/m): 7.89

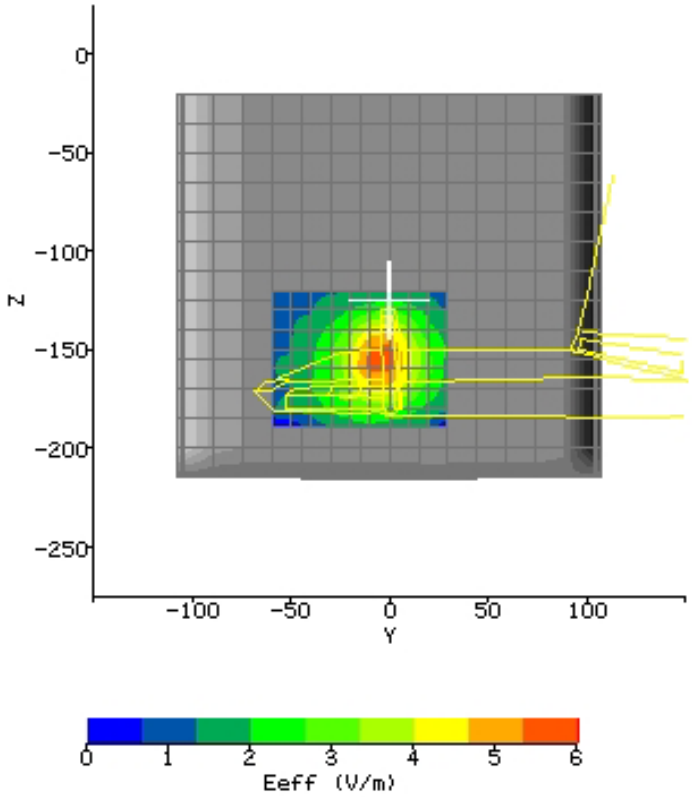
Max SAR (W/kg)	**1g**	**10g**
	0.108	0.057

Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-20.0	-153.3

Plot #10 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-60.0	30.0	9.0
	Z	-190.0	-120.0	7.0



Plot #11 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_IBM_per15-2590-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (10M BW)
Shape File:	MAX-100_IBM-per.csv	**Power Level:**	24.04 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

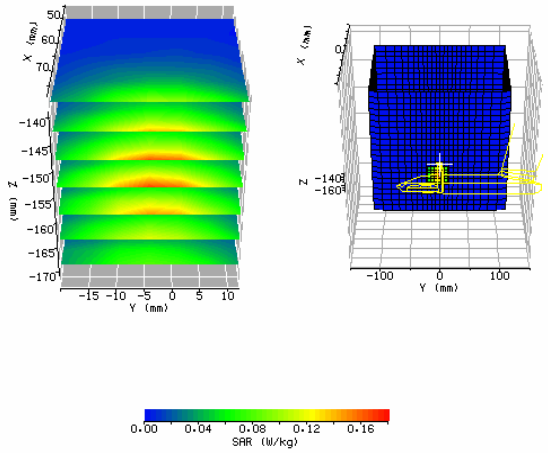
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.032	0.032

Change during Scan (%) 0.20

Max E-field (V/m): 8.71

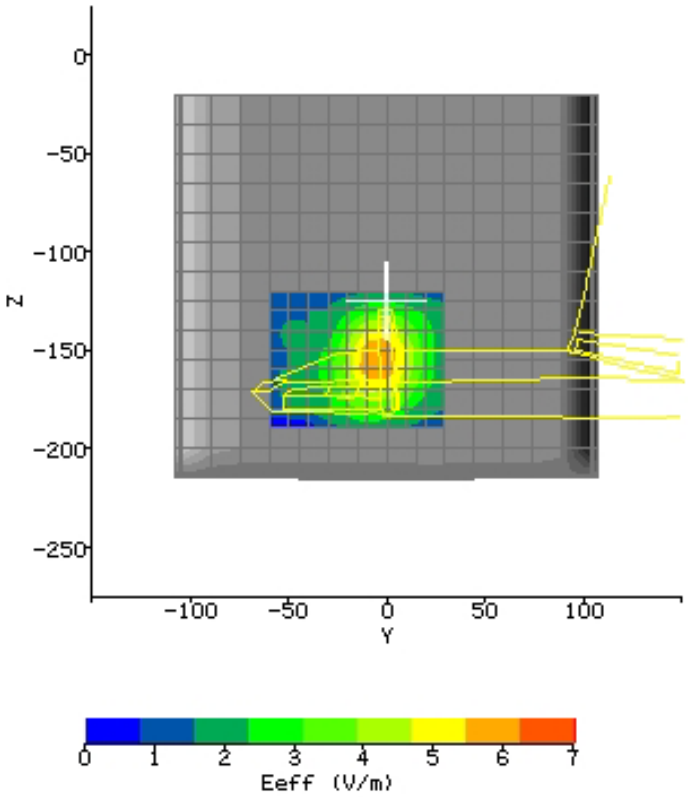
Max SAR (W/kg)	**1g**	**10g**
	0.131	0.070

Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-20.0	-153.1

Plot #11 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-60.0	30.0	9.0
	Z	-190.0	-120.0	7.0



Plot #12 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_IBM_per15-2685-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (10M BW)
Shape File:	MAX-100_IBM-per.csv	**Power Level:**	22.20 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

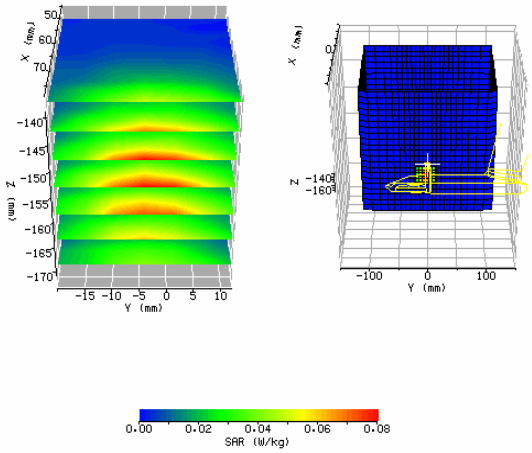
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.015	0.016

Change during Scan (%) 1.35

Max E-field (V/m): 6.04

Max SAR (W/kg)	**1g**	**10g**
	0.064	0.036

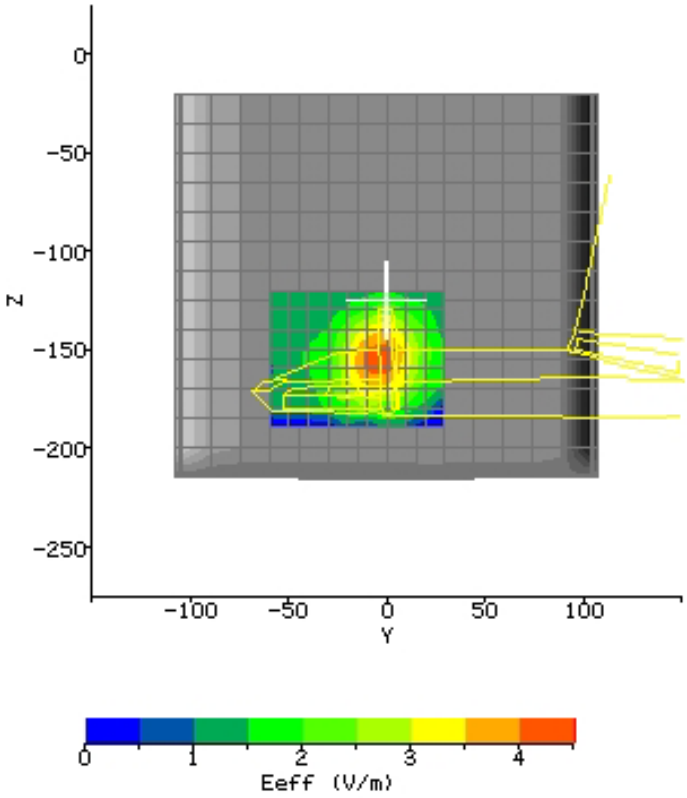
Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-20.0	-154.0

Plot #12 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #13 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_IBM_bot0-2500-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2500 MHz (5M BW)
Shape File:	MAX-100_IBM-bot.csv	**Power Level:**	24.15 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

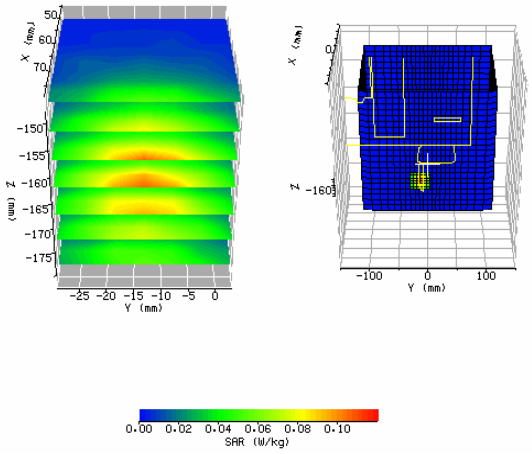
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.027	0.027

Change during Scan (%) 0

Max E-field (V/m): 6.90

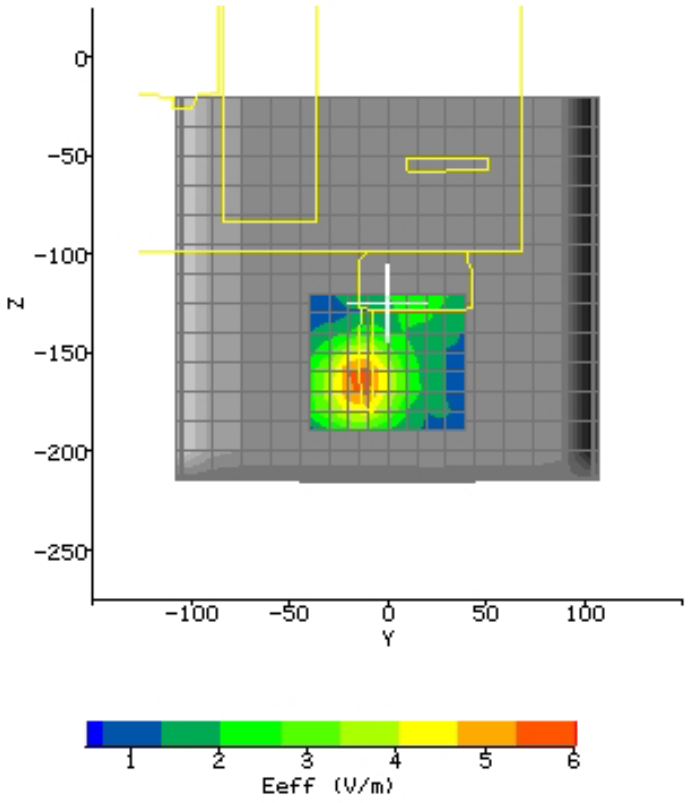
Max SAR (W/kg)	**1g**	**10g**
	0.083	0.043

Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-29.1	-163.1

Plot #13 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-40.0	40.0	8.0
	Z	-190.0	-120.0	7.0



Plot #14 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_IBM_bot0-2590-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (5M BW)
Shape File:	MAX-100_IBM-bot.csv	**Power Level:**	24.28 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

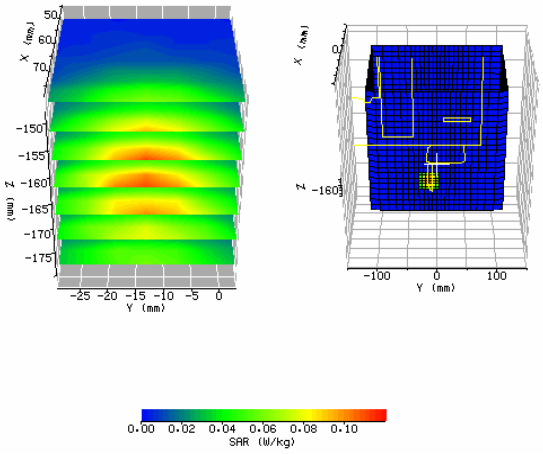
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.025	0.025

Change during Scan (%) 0.02

Max E-field (V/m): 7.08

Max SAR (W/kg)	**1g**	**10g**
	0.091	0.050

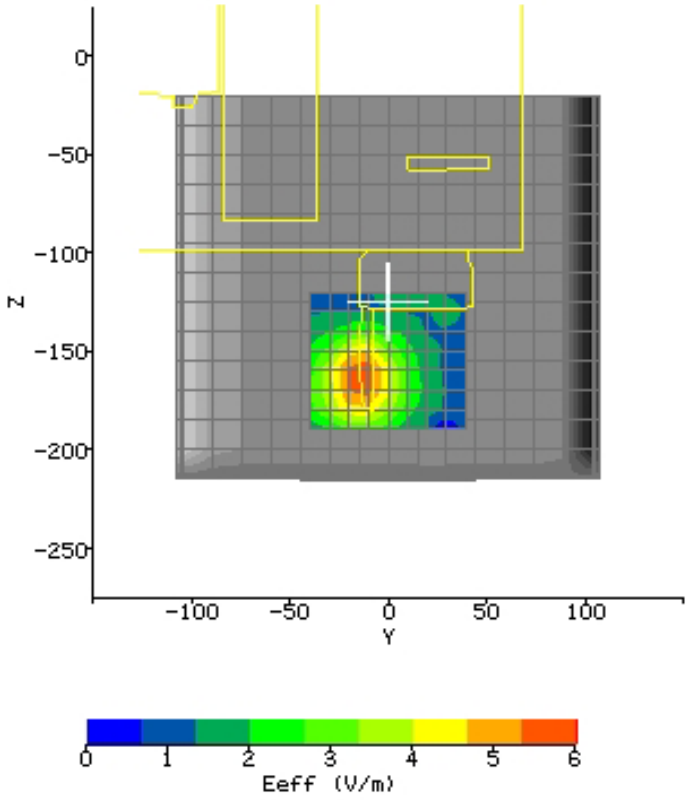
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-29.1	-162.1

Plot #14 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-40.0	40.0	8.0
Z	-190.0	-120.0	7.0



Plot #15 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_IBM_bot0-2685-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (5M BW)
Shape File:	MAX-100_IBM-bot.csv	**Power Level:**	22.38 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

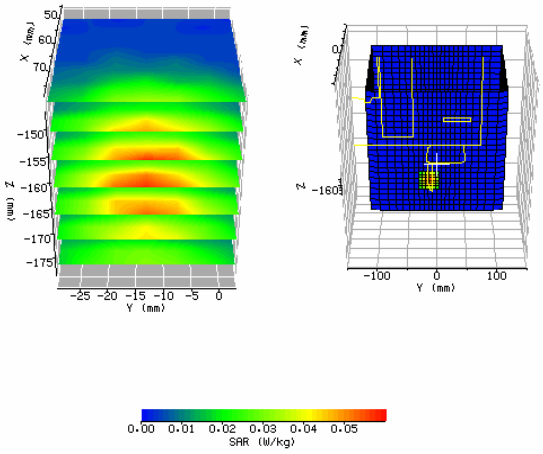
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.013	0.014

Change during Scan (%) 2.21

Max E-field (V/m): 5.10

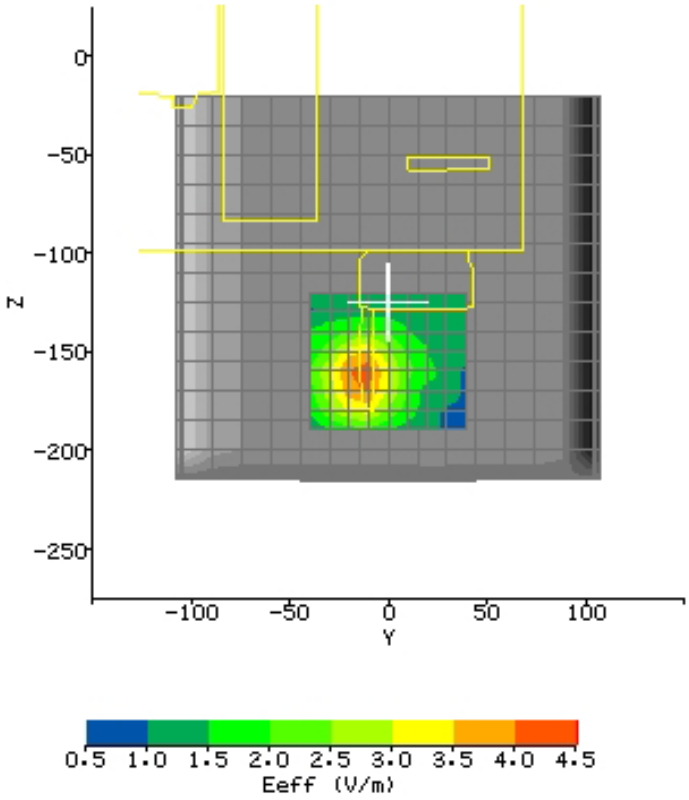
Max SAR (W/kg)	**1g**	**10g**
	0.048	0.026

Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-29.1	-161.1

Plot #15 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-40.0	40.0	8.0
	Z	-190.0	-120.0	7.0



Plot #16 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_IBM_bot0-2505-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2505 MHz (10M BW)
Shape File:	MAX-100_IBM-bot.csv	**Power Level:**	24.13 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

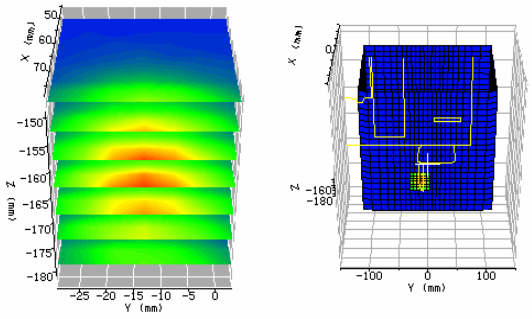
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.035	0.033

Change during Scan (%) -1.64

Max E-field (V/m): 7.71

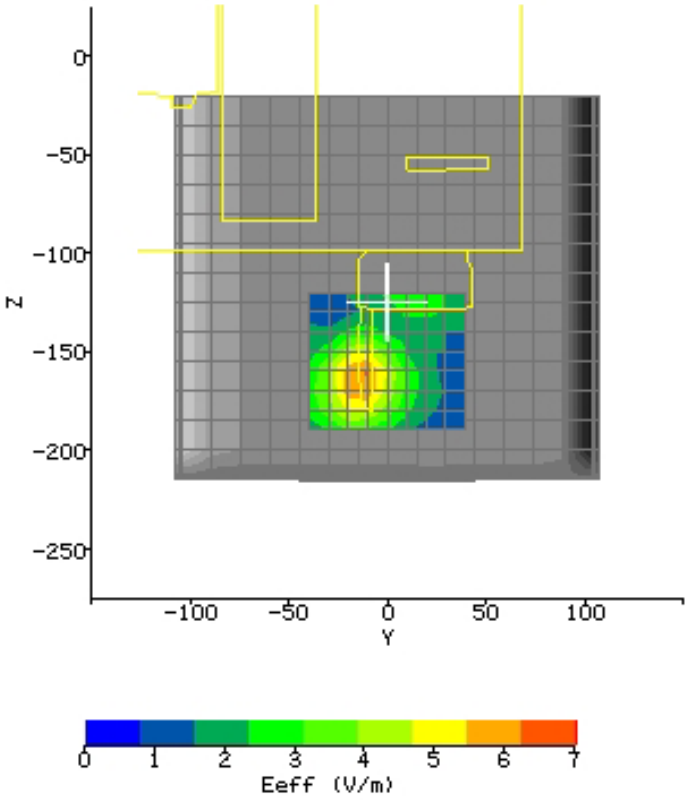
Max SAR (W/kg)	**1g**	**10g**
	0.107	0.056

Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-29.1	-163.0

Plot #16 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-40.0	40.0	8.0
	Z	-190.0	-120.0	7.0



Plot #17 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_IBM_bot0-2590-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (10M BW)
Shape File:	MAX-100_IBM-bot.csv	**Power Level:**	24.04 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

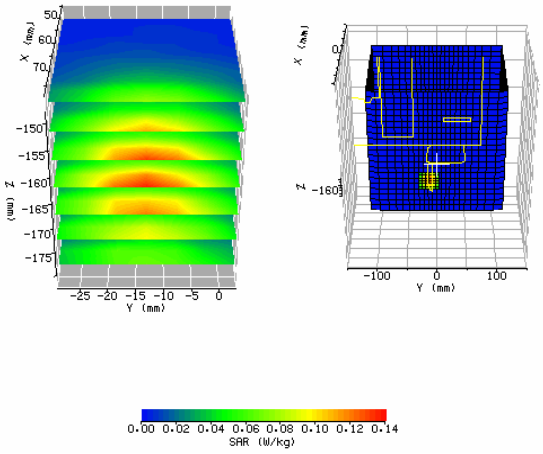
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.031	0.031

Change during Scan (%) 0

Max E-field (V/m): 7.86

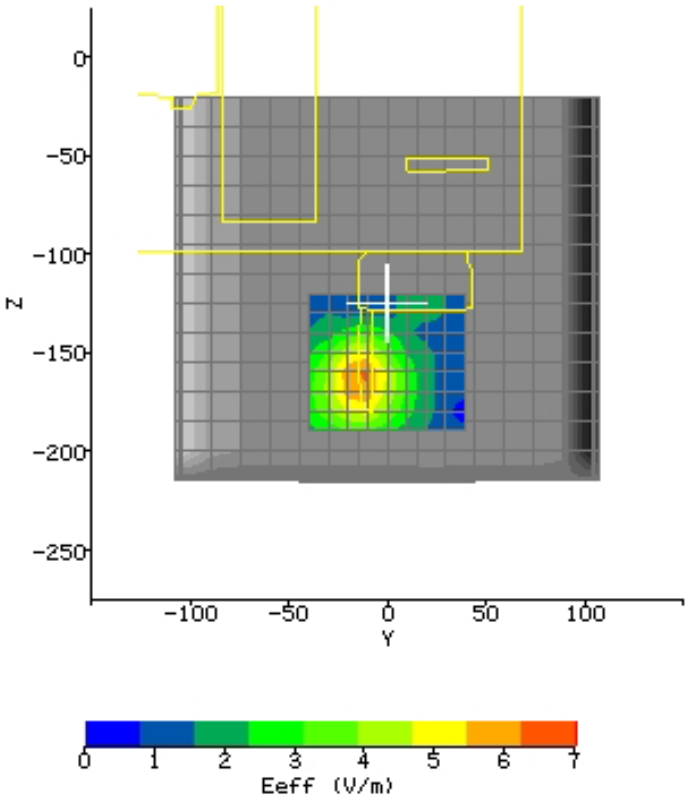
Max SAR (W/kg)	**1g**	**10g**
	0.111	0.057

Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-29.1	-162.1

Plot #17 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-40.0	40.0	8.0
	Z	-190.0	-120.0	7.0



Plot #18 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_IBM_bot0-2685-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (10M BW)
Shape File:	MAX-100_IBM-bot.csv	**Power Level:**	22.20 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

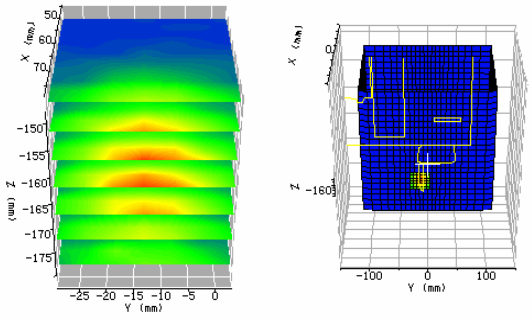
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.017	0.018

Change during Scan (%) 0.21

Max E-field (V/m): 5.45

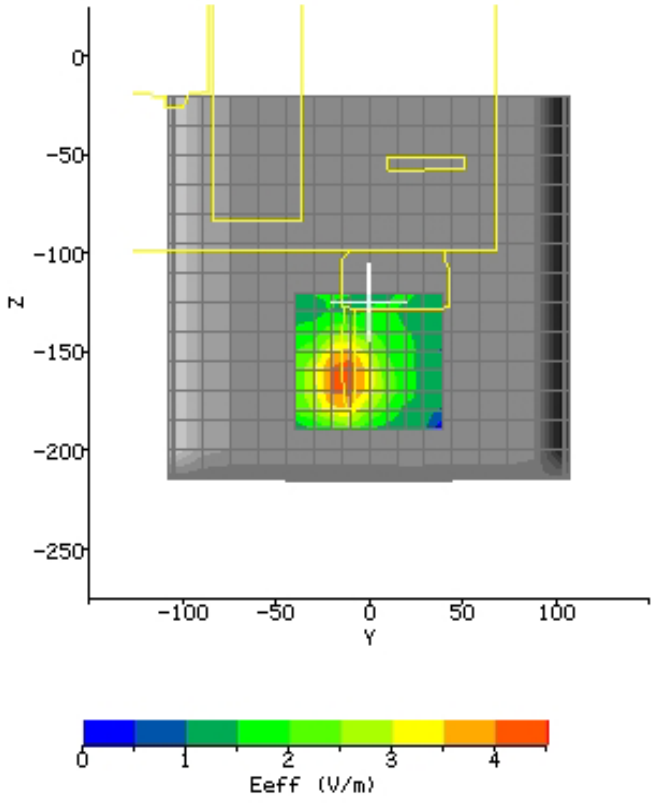
Max SAR (W/kg)	**1g**	**10g**
	0.054	0.028

Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-29.0	-162.2

Plot #18 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-40.0	40.0	8.0
	Z	-190.0	-120.0	7.0



Plot #19 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_per0-2500_5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2500 MHz (5M BW)
Shape File:	MAX-100_Dell-per.csv	**Power Level:**	24.15 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

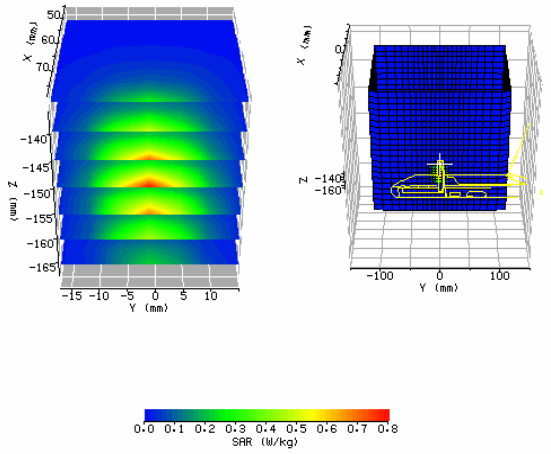
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.098	0.098

Change during Scan (%) 0.22

Max E-field (V/m): 19.00

Max SAR (W/kg)	**1g**	**10g**
	0.513	0.209

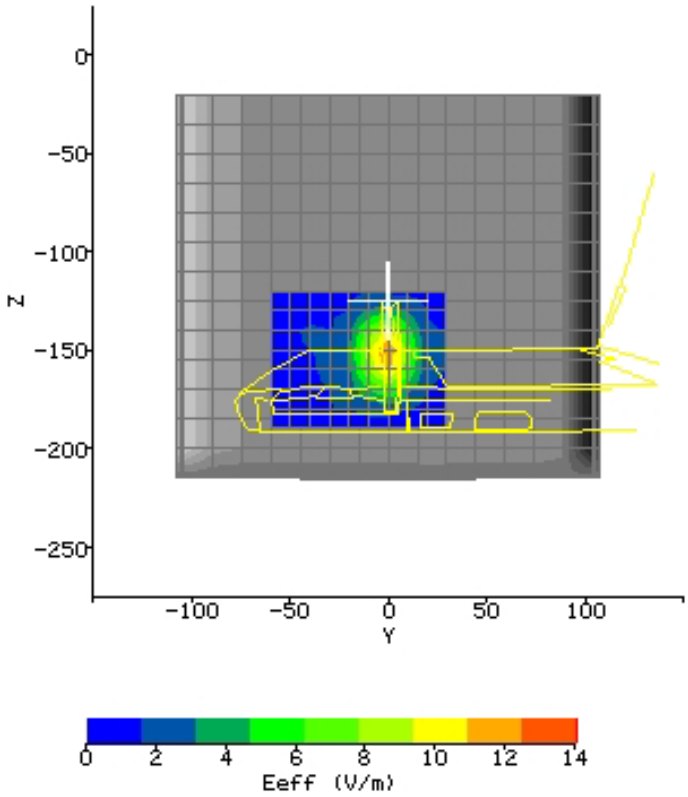
Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-17.1	-152.1

Plot #19 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #20 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_per0-2590_5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (5M BW)
Shape File:	MAX-100_Dell-per.csv	**Power Level:**	24.28 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

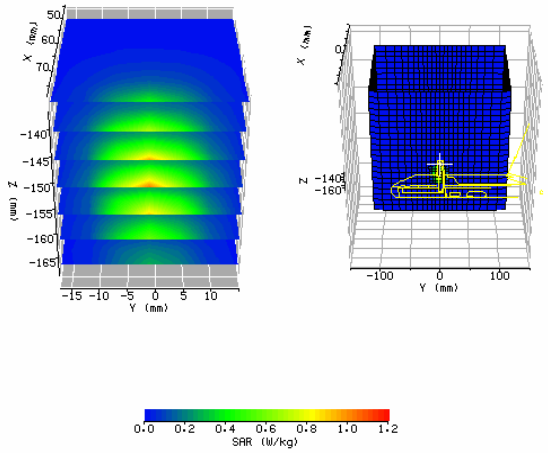
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.118	0.118

Change during Scan (%) 0

Max E-field (V/m): 21.57

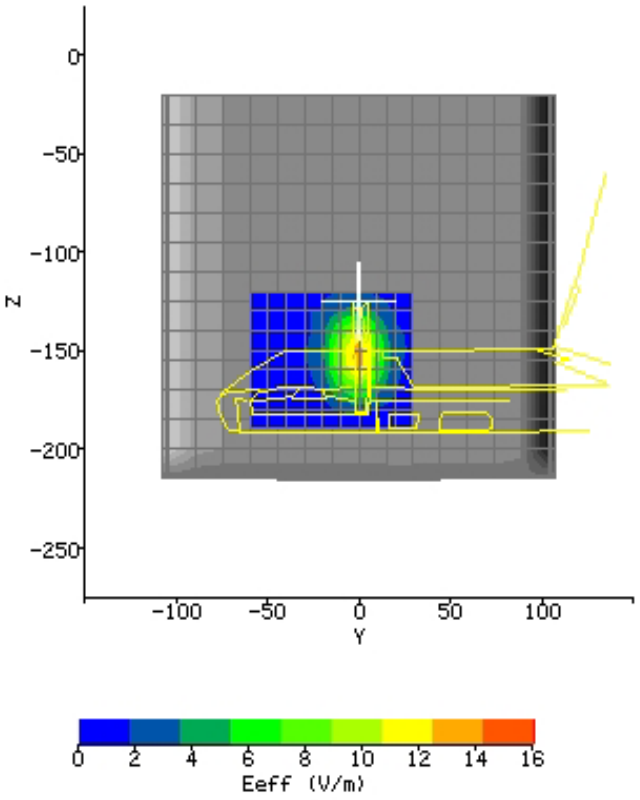
Max SAR (W/kg)	**1g**	**10g**
	0.636	0.253

Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-17.1	-152.1

Plot #20 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-60.0	30.0	9.0
	Z	-190.0	-120.0	7.0



Plot #21 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_per0-2685_5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (5M BW)
Shape File:	MAX-100_Dell-per.csv	**Power Level:**	22.38 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

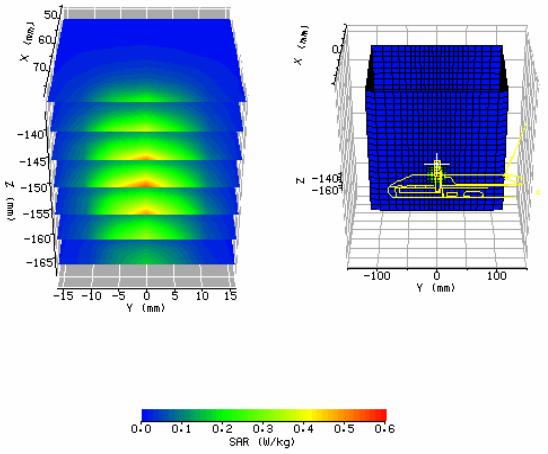
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.062	0.063

Change during Scan (%) 1.50

Max E-field (V/m): 15.45

Max SAR (W/kg)	**1g**	**10g**
	0.327	0.147

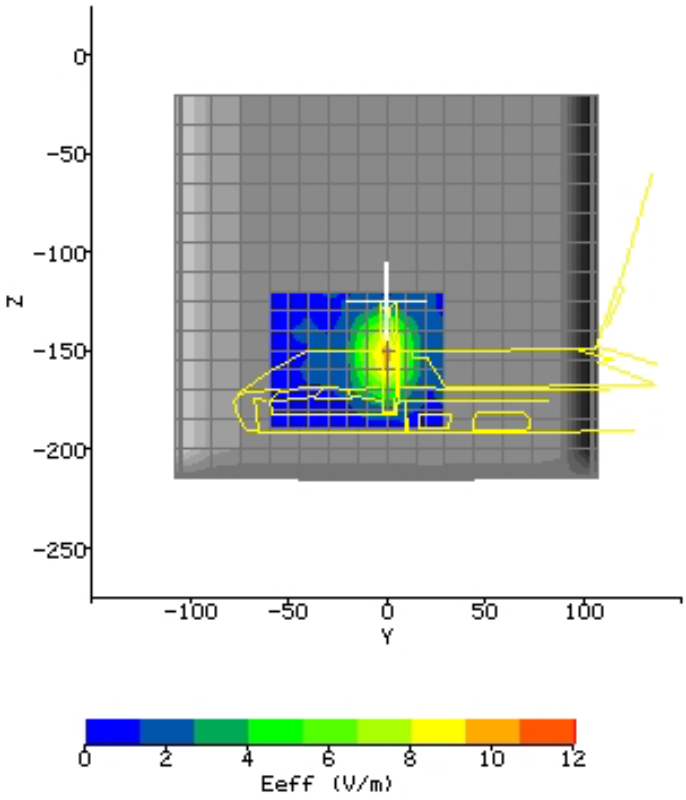
Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-16.0	-153.1

Plot #21 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #22 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_per0-2505_10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2505 MHz (10M BW)
Shape File:	MAX-100_Dell-per.csv	**Power Level:**	24.13 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

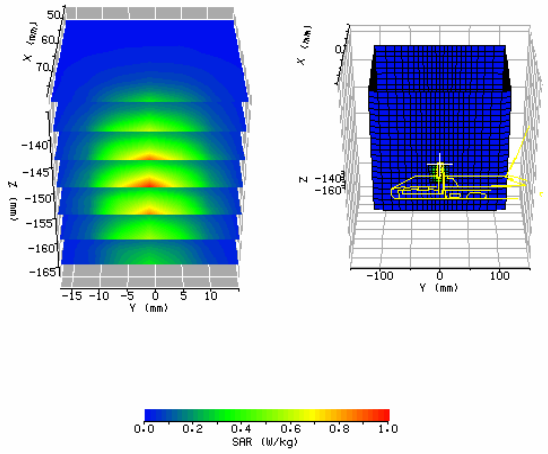
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.118	0.119

Change during Scan (%) 1.09

Max E-field (V/m): 21.04

Max SAR (W/kg)	**1g**	**10g**
	0.624	0.255

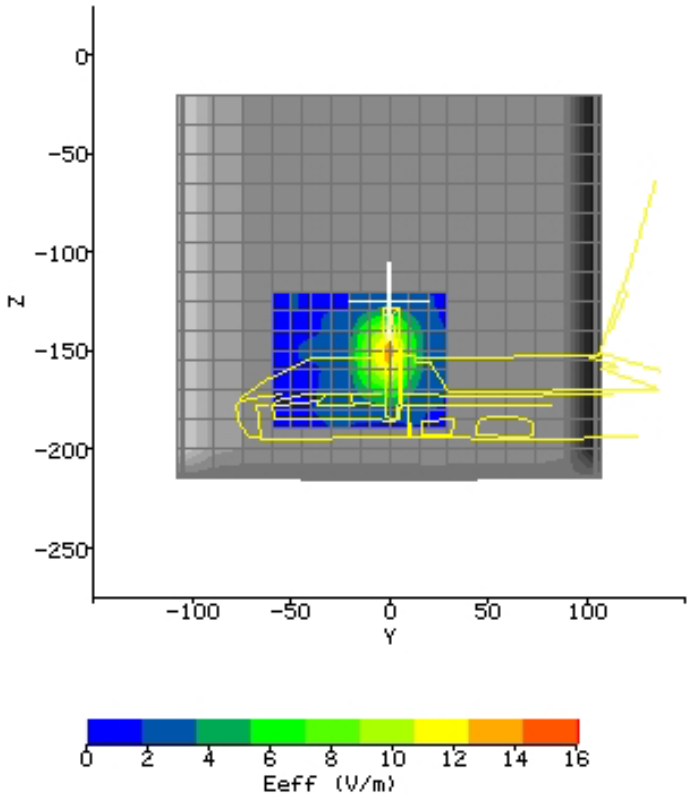
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-17.0	-151.1

Plot #22 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #23 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_per0-2590_10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (10M BW)
Shape File:	MAX-100_Dell-per.csv	**Power Level:**	24.04 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

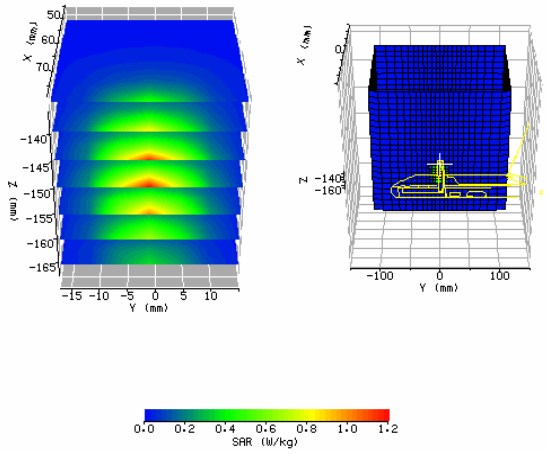
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.131	0.132

Change during Scan (%) 1.22

Max E-field (V/m): 23.05

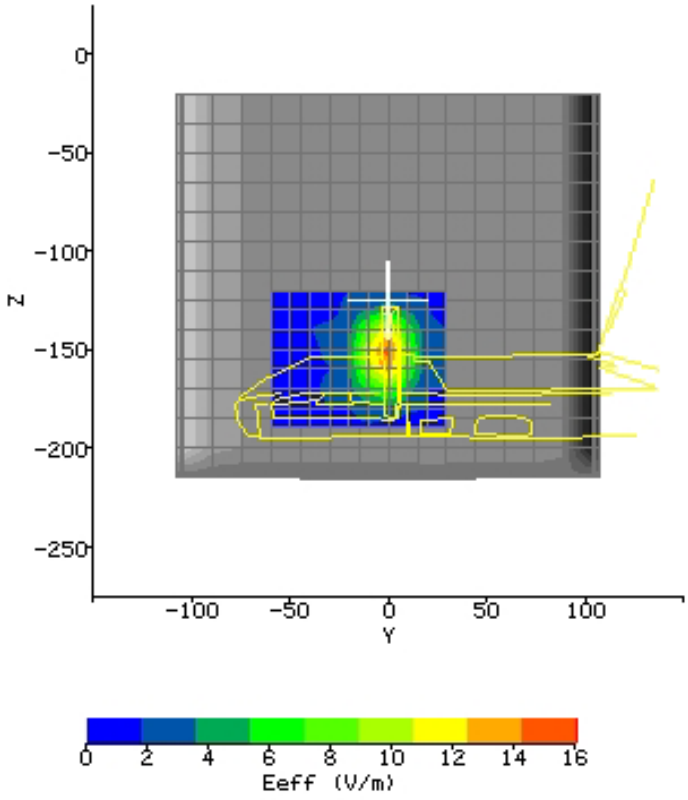
Max SAR (W/kg)	**1g**	**10g**
	0.749	0.302

Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-17.1	-151.0

Plot #23 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-60.0	30.0	9.0
	Z	-190.0	-120.0	7.0



Plot #24 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_per0-2685_10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (10M BW)
Shape File:	MAX-100_Dell-per.csv	**Power Level:**	22.20 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

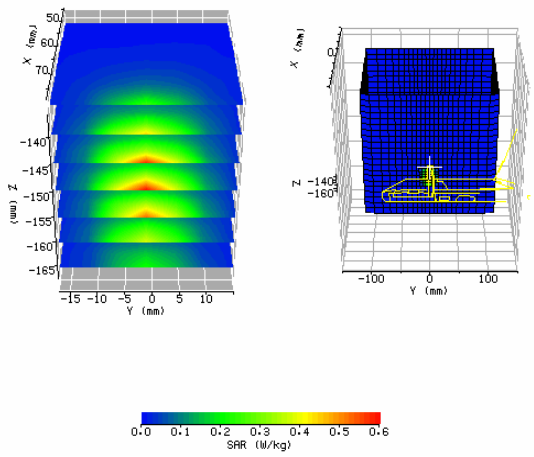
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.068	0.069

Change during Scan (%) 1.23

Max E-field (V/m): 16.45

Max SAR (W/kg)	**1g**	**10g**
	0.385	0.161

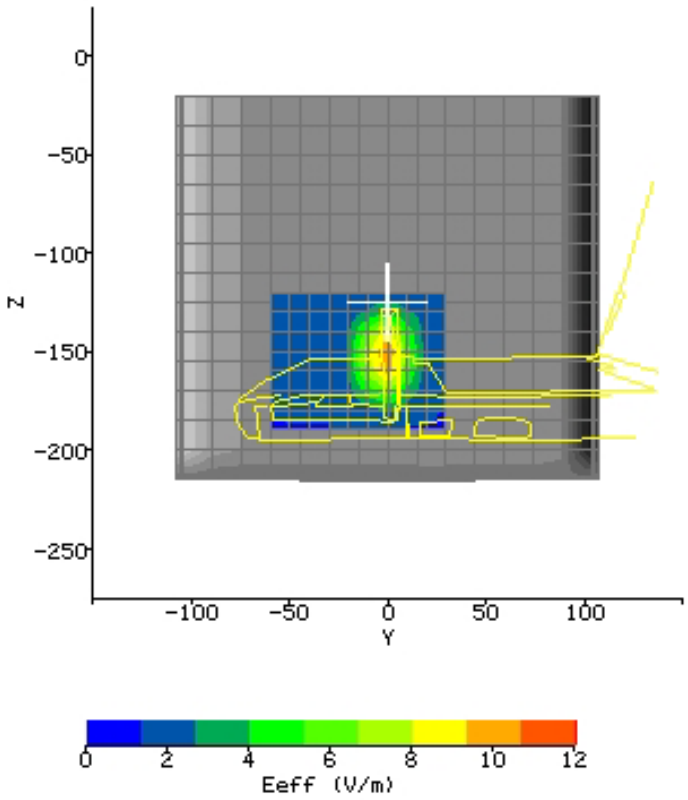
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-17.0	-151.2

Plot #24 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #25 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_per15-2500_5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2500 MHz (5M BW)
Shape File:	MAX-100_Dell-per.csv	**Power Level:**	24.15 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

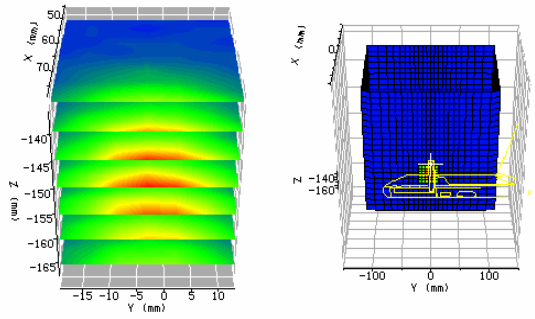
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.021	0.022

Change during Scan (%) 1.32

Max E-field (V/m): 6.70

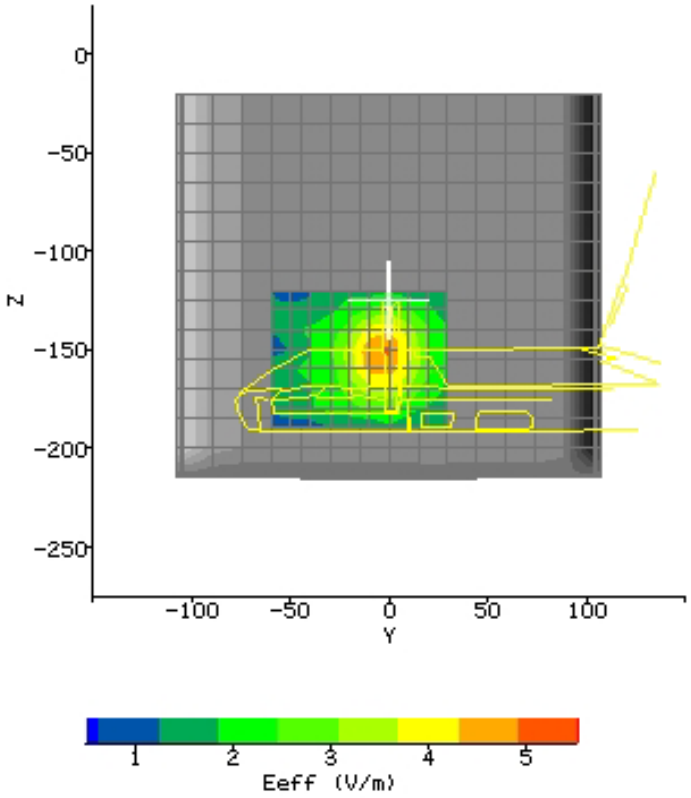
Max SAR (W/kg)	**1g**	**10g**
	0.073	0.037

Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-19.2	-151.1

Plot #25 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-60.0	30.0	9.0
	Z	-190.0	-120.0	7.0



Plot #26 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_per15-2590_5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (5M BW)
Shape File:	MAX-100_Dell-per.csv	**Power Level:**	24.28 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

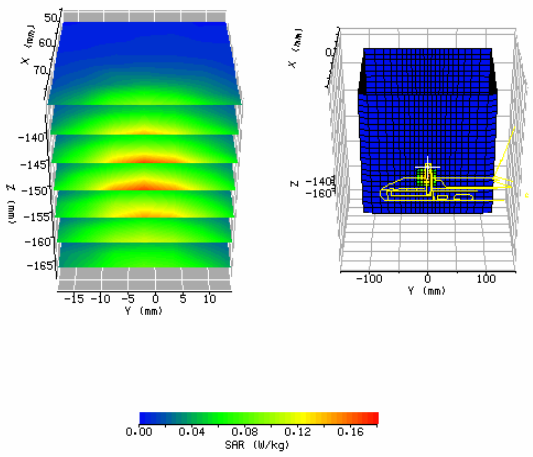
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.032	0.030

Change during Scan (%) -2.38

Max E-field (V/m): 8.75

Max SAR (W/kg)	**1g**	**10g**
	0.133	0.063

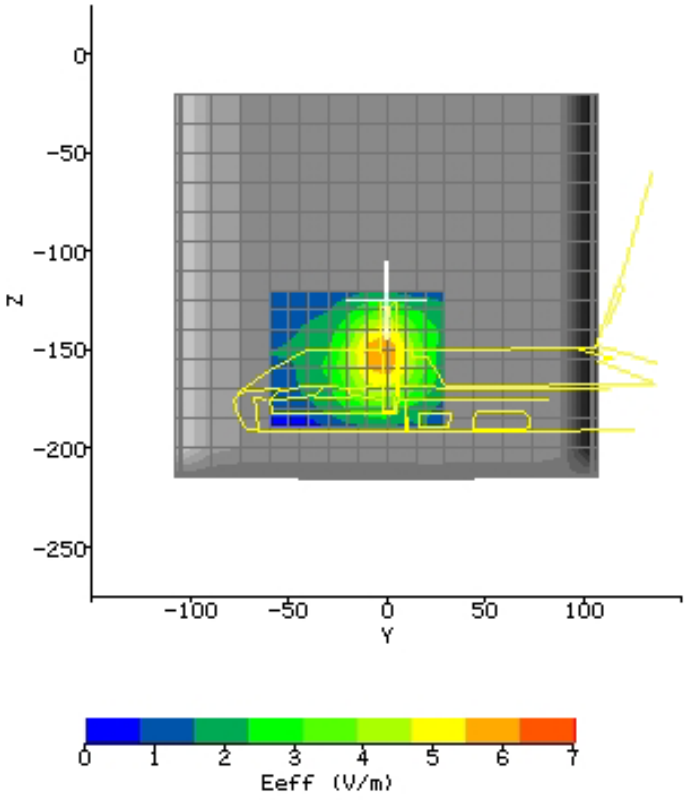
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-18.1	-151.0

Plot #26 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #27 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_per15-2685_5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (5M BW)
Shape File:	MAX-100_Dell-per.csv	**Power Level:**	22.38 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

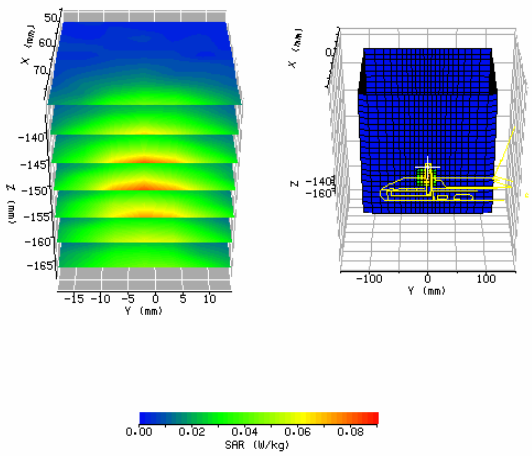
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.013	0.015

Change during Scan (%) 1.38

Max E-field (V/m): 6.11

Max SAR (W/kg)	**1g**	**10g**
	0.064	0.033

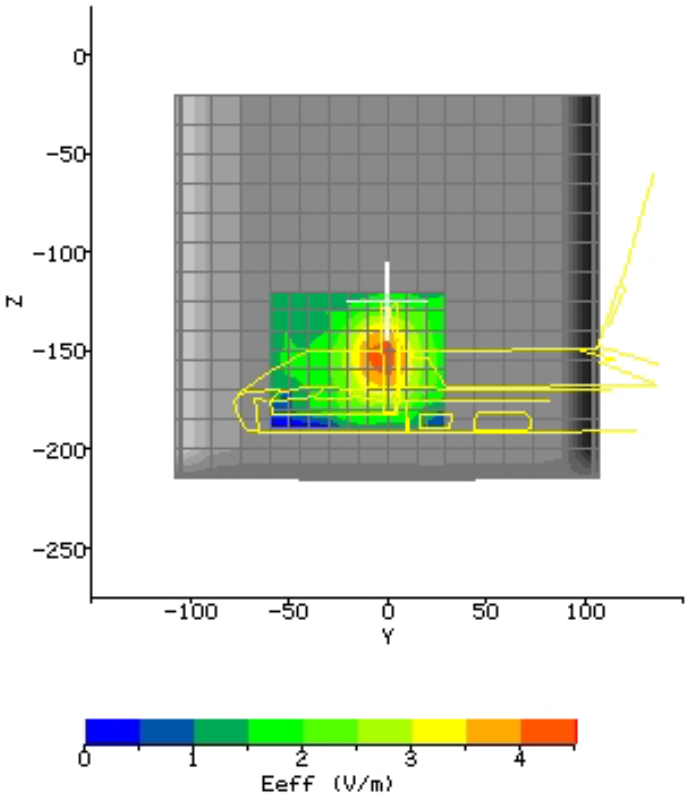
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-18.1	-152.0

Plot #27 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #28 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_per15-2505_10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2505 MHz (10M BW)
Shape File:	MAX-100_Dell-per.csv	**Power Level:**	24.13 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

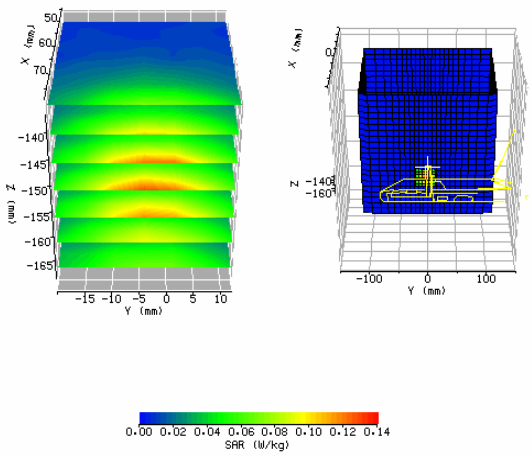
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.031	0.031

Change during Scan (%) 0.11

Max E-field (V/m): 7.68

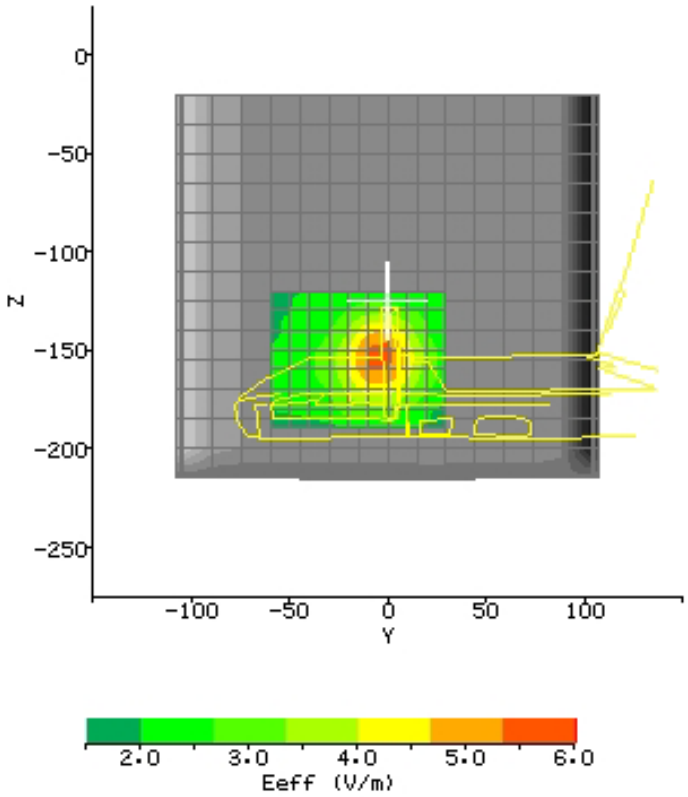
Max SAR (W/kg)	**1g**	**10g**
	0.103	0.058

Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-20.2	-152.0

Plot #28 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-60.0	30.0	9.0
	Z	-190.0	-120.0	7.0



Plot #29 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_per15-2590_10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (10M BW)
Shape File:	MAX-100_Dell-per.csv	**Power Level:**	24.04 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

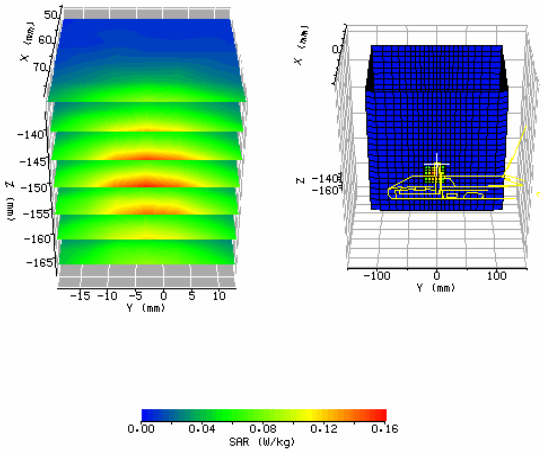
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.033	0.035

Change during Scan (%) 2.23

Max E-field (V/m): 8.43

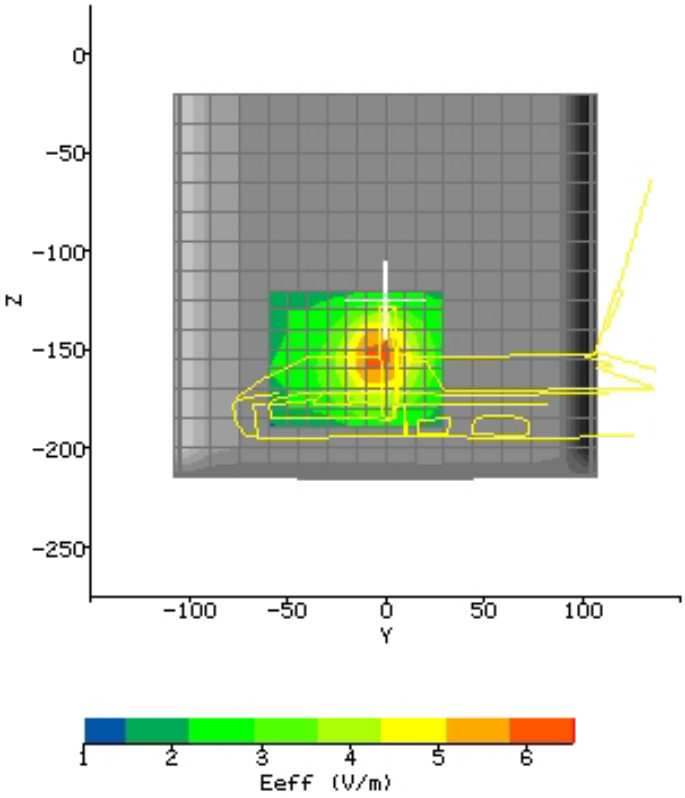
Max SAR (W/kg)	**1g**	**10g**
	0.125	0.063

Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-19.2	-152.1

Plot #29 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-60.0	30.0	9.0
	Z	-190.0	-120.0	7.0



Plot #30 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_per15-2685_10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (10M BW)
Shape File:	MAX-100_Dell-per.csv	**Power Level:**	22.20 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

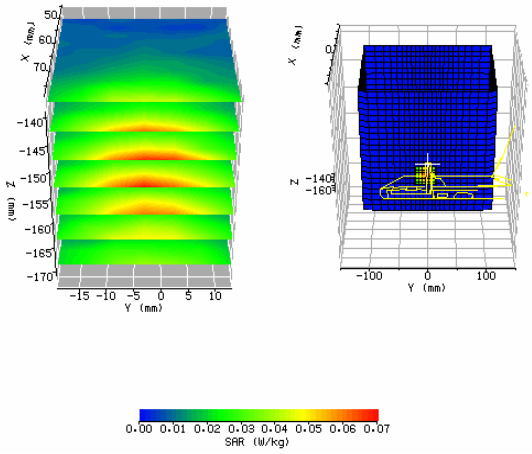
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.016	0.015

Change during Scan (%) -1.09

Max E-field (V/m): 5.58

Max SAR (W/kg)	**1g**	**10g**
	0.049	0.032

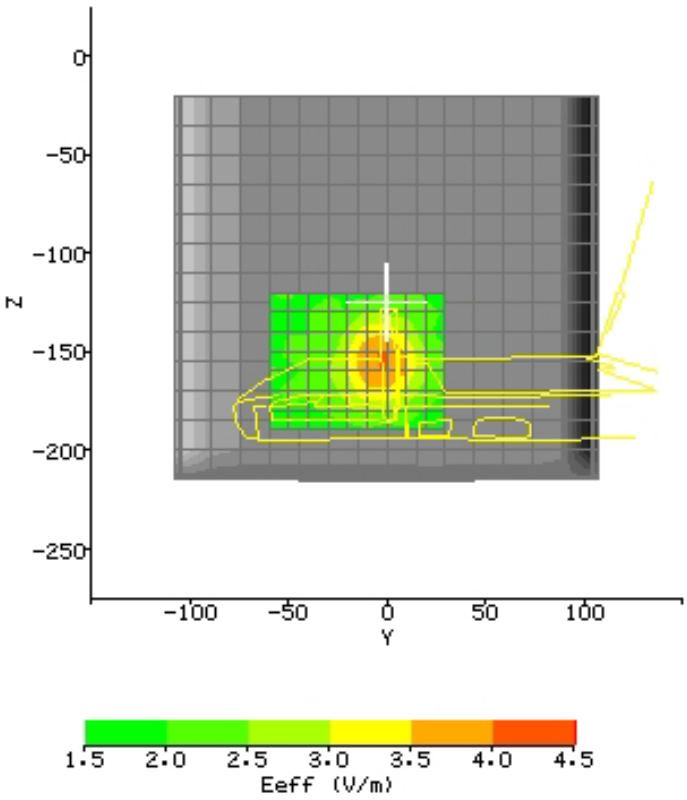
Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-19.0	-152.2

Plot #30 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #31 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_bot0-2500_5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2500 MHz (5M BW)
Shape File:	MAX-100_Dell-bot.csv	**Power Level:**	24.15 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

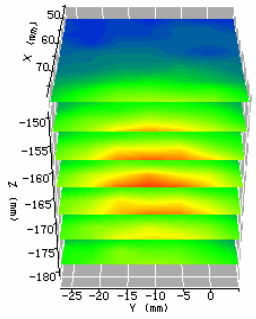
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

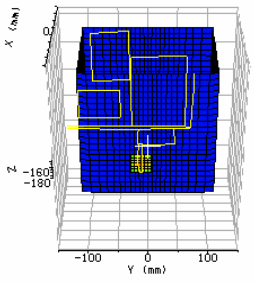
Amp Gain: 2

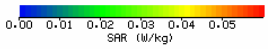
Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	55
Density (kg/m3):	1000
Software Version:	2.41VPM







ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.016	0.016

Change during Scan (%) 0

Max E-field (V/m): 5.13

Max SAR (W/kg)	**1g**	**10g**
	0.047	0.026

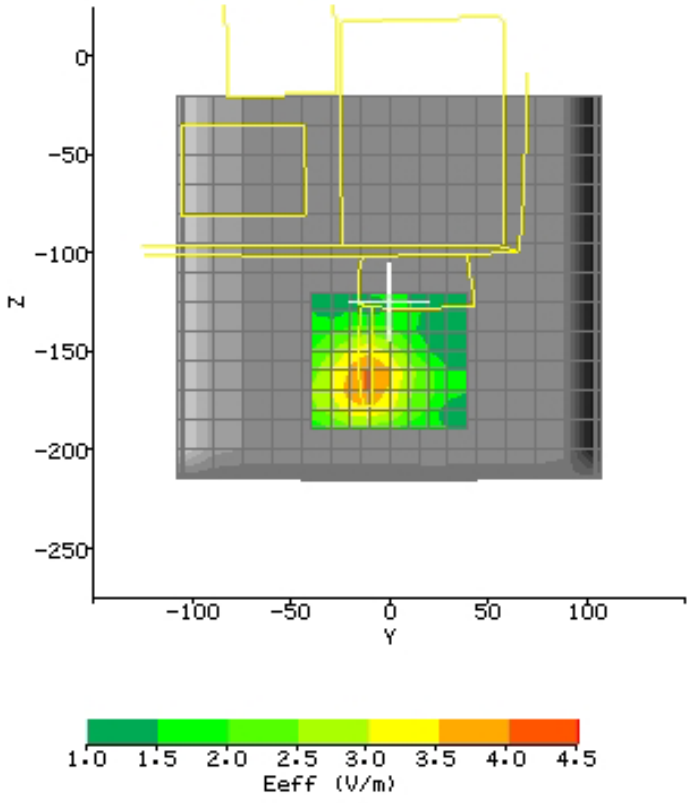
Location of Max (mm):	**X**	**Y**	**Z**
	77.6	-26.6	-164.5

Plot #31 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-40.0	40.0	8.0
Z	-190.0	-120.0	7.0



Plot #32 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_bot0-2590_5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (5M BW)
Shape File:	MAX-100_Dell-bot.csv	**Power Level:**	24.28 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

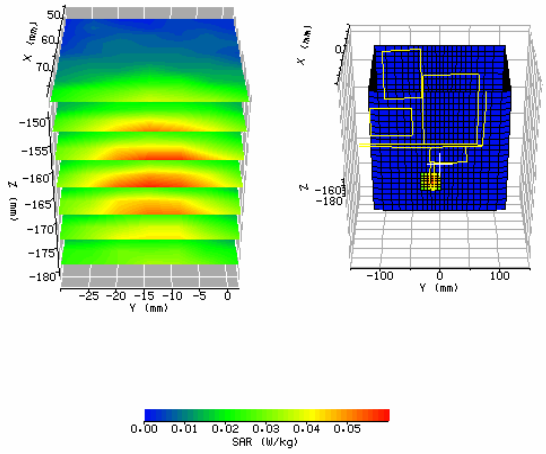
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.016	0.015

Change during Scan (%) -1.02

Max E-field (V/m): 5.14

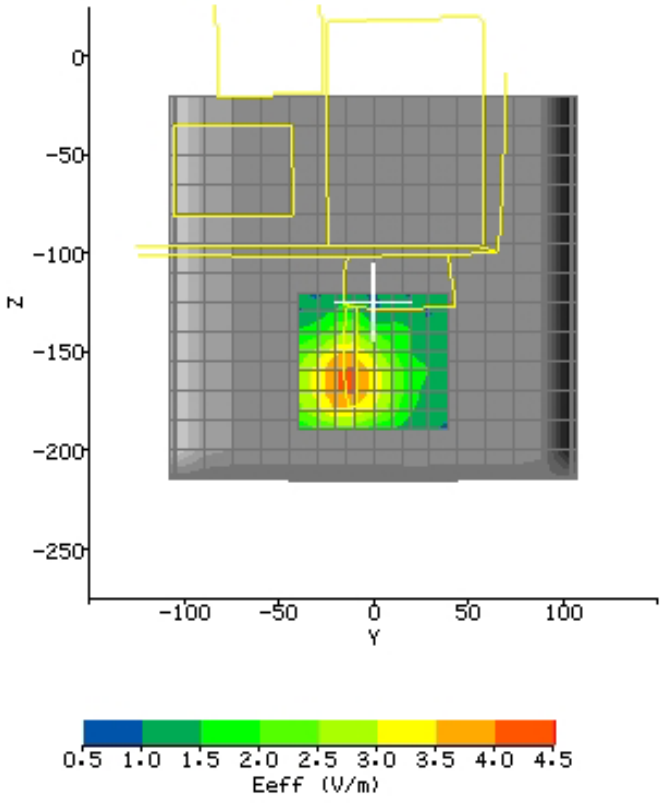
Max SAR (W/kg)	**1g**	**10g**
	0.047	0.025

Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-30.1	-163.5

Plot #32 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-40.0	40.0	8.0
	Z	-190.0	-120.0	7.0



Plot #33 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_bot0-2685_5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (5M BW)
Shape File:	MAX-100_Dell-bot.csv	**Power Level:**	22.38 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

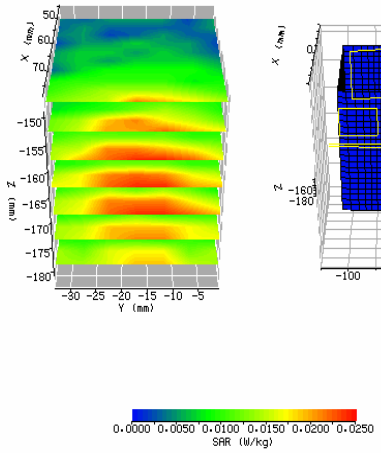
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.010	0.009

Change during Scan (%) -1.12

Max E-field (V/m): 3.33

Max SAR (W/kg)	**1g**	**10g**
	0.022	0.016

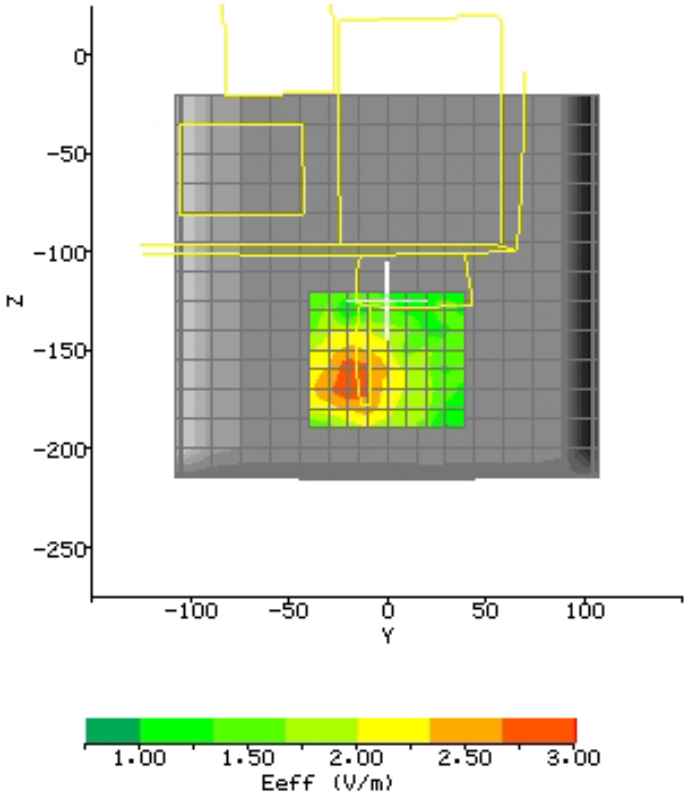
Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-33.0	-166.1

Plot #33 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-40.0	40.0	8.0
Z	-190.0	-120.0	7.0



Plot #34 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_bot0-2505_10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2505 MHz (10M BW)
Shape File:	MAX-100_Dell-bot.csv	**Power Level:**	24.13 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

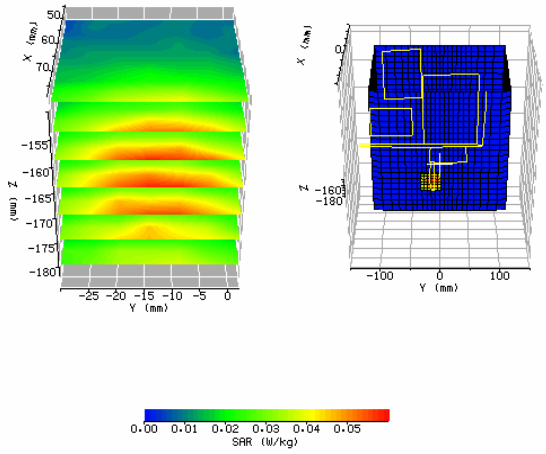
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	55
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.022	0.022

Change during Scan (%) -0.33

Max E-field (V/m): 5.16

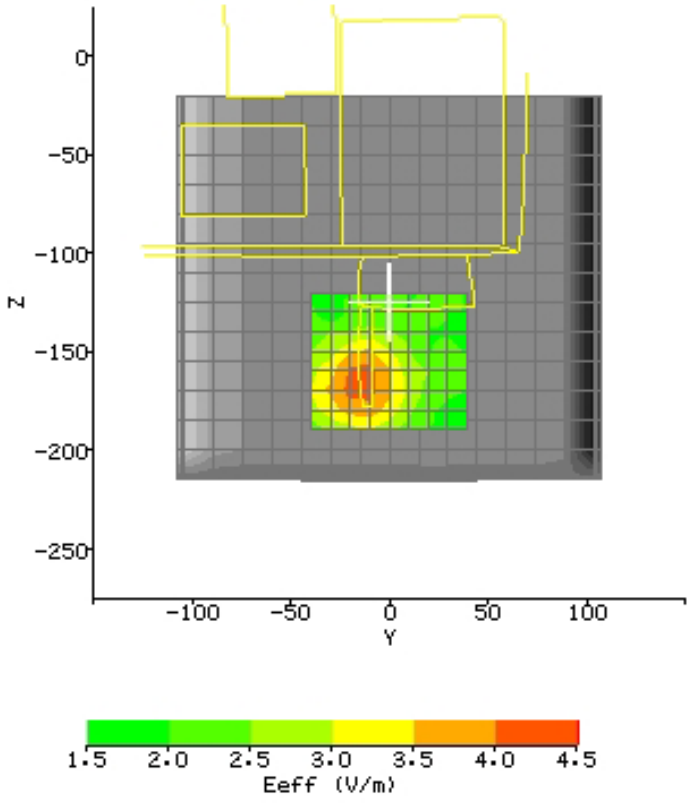
Max SAR (W/kg)	**1g**	**10g**
	0.053	0.034

Location of Max (mm):	**X**	**Y**	**Z**
	78.2	-29.7	-164.2

Plot #34 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-40.0	40.0	8.0
	Z	-190.0	-120.0	7.0



Plot #35 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_bot0-2590_10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (10M BW)
Shape File:	MAX-100_Dell-bot.csv	**Power Level:**	24.04 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

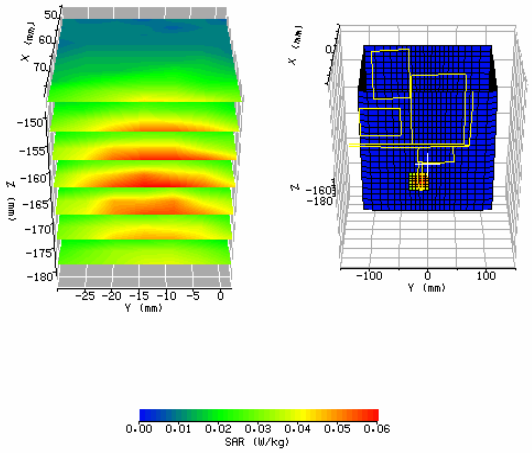
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.021	0.021

Change during Scan (%) 0.04

Max E-field (V/m): 5.24

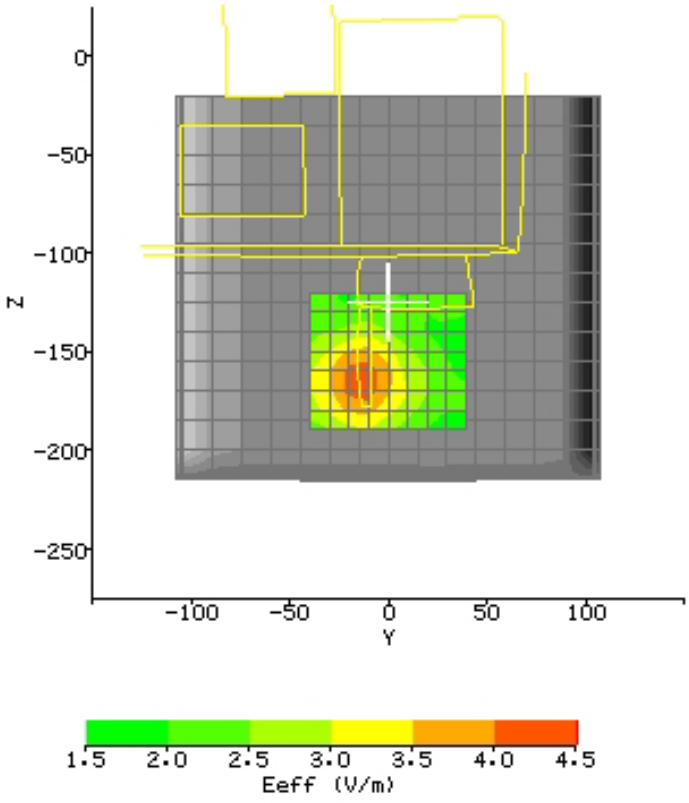
Max SAR (W/kg)	**1g**	**10g**
	0.053	0.028

Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-30.1	-164.4

Plot #35 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-40.0	40.0	8.0
	Z	-190.0	-120.0	7.0



Plot #36 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_bot0-2685_10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (10M BW)
Shape File:	MAX-100_Dell-bot.csv	**Power Level:**	22.20 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

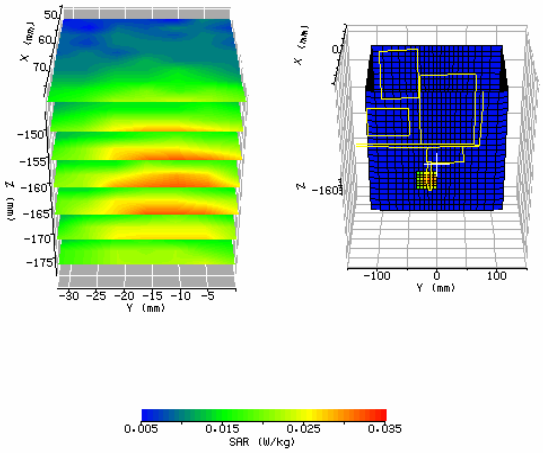
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.012	0.011

Change during Scan (%) -0.29

Max E-field (V/m): 3.85

Max SAR (W/kg)	**1g**	**10g**
	0.029	0.020

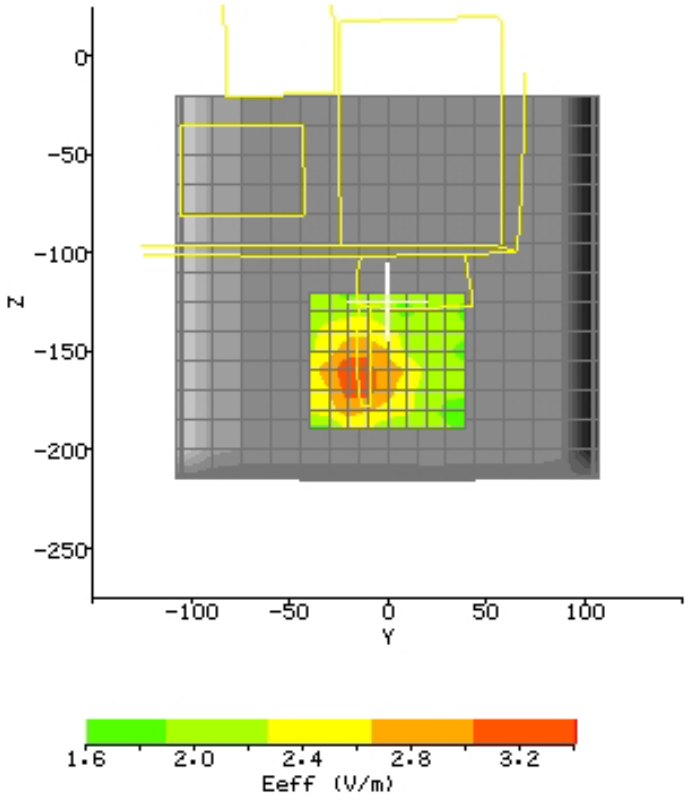
Location of Max (mm):	**X**	**Y**	**Z**
	78.2	-31.7	-163.2

Plot #36 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-40.0	40.0	8.0
Z	-190.0	-120.0	7.0



Plot #37 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_HP_per0-2500-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2500 MHz (5M BW)
Shape File:	MAX-100_HP-per.csv	**Power Level:**	24.15 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

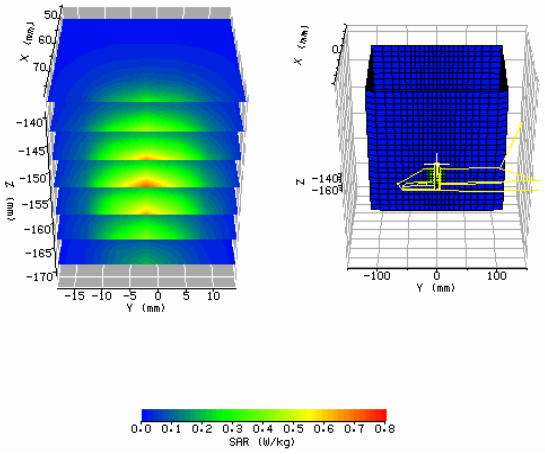
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.103	0.102

Change during Scan (%) -1.55

Max E-field (V/m): 18.15

Max SAR (W/kg)	**1g**	**10g**
	0.478	0.198

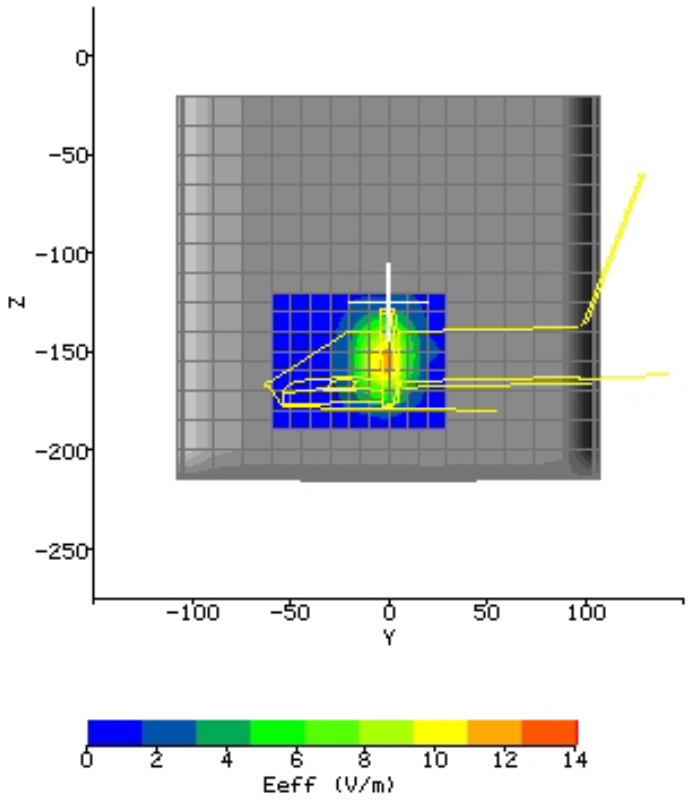
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-18.1	-155.1

Plot #37 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #38 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_HP_per0-2590-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (5M BW)
Shape File:	MAX-100_HP-per.csv	**Power Level:**	24.28 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

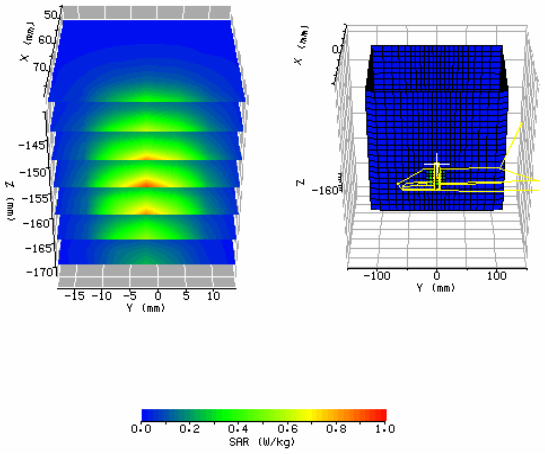
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.112	0.112

Change during Scan (%) 0.33

Max E-field (V/m): 20.60

Max SAR (W/kg)	**1g**	**10g**
	0.602	0.242

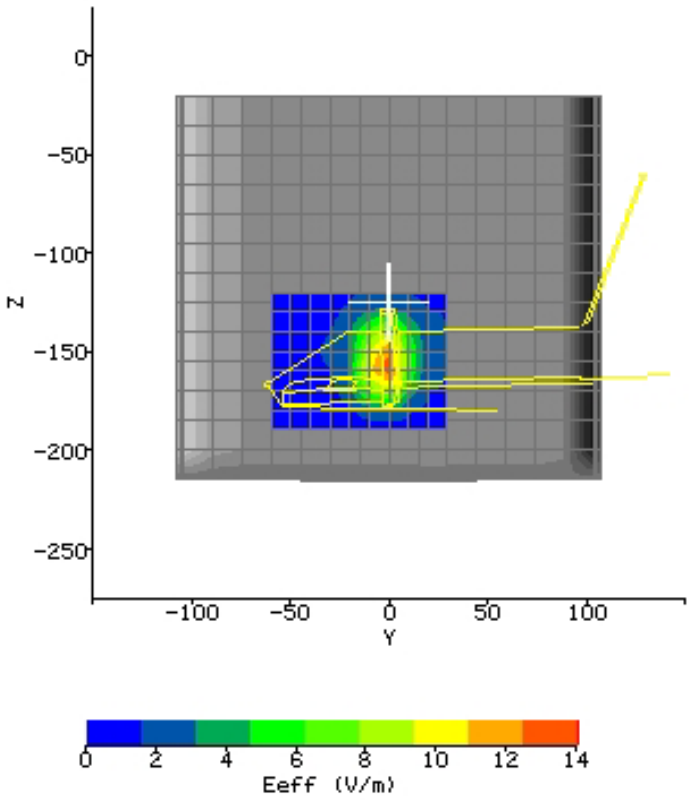
Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-18.1	-156.0

Plot #38 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #39 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_HP_per0-2685-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (5M BW)
Shape File:	MAX-100_HP-per.csv	**Power Level:**	22.38 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

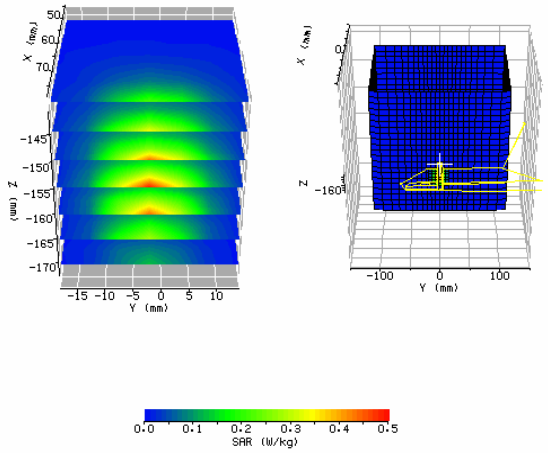
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.057	0.058

Change during Scan (%) 1.03

Max E-field (V/m): 15.20

Max SAR (W/kg)	**1g**	**10g**
	0.313	0.134

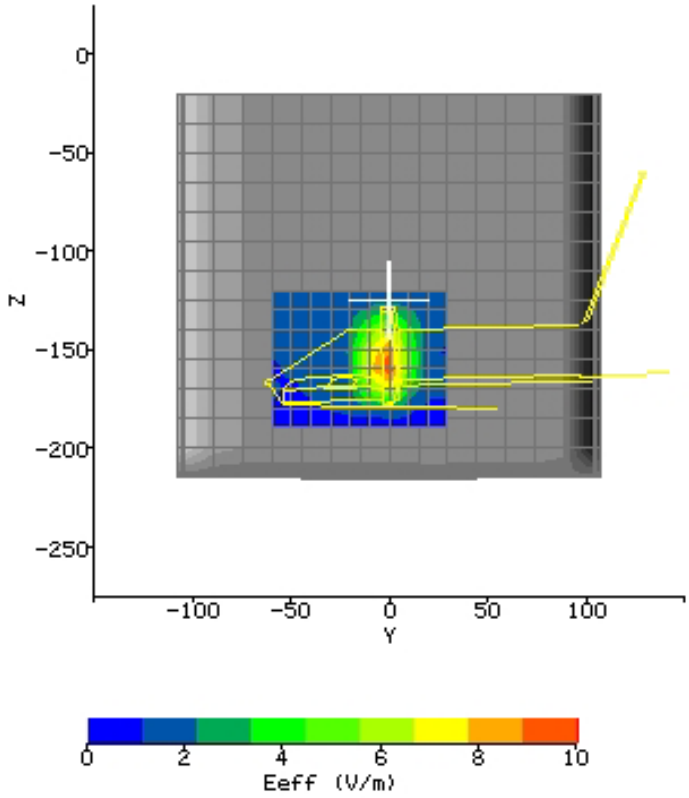
Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-18.1	-157.0

Plot #39 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #40 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_HP_per0-2505-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2505 MHz (10M BW)
Shape File:	MAX-100_HP-per.csv	**Power Level:**	24.13 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

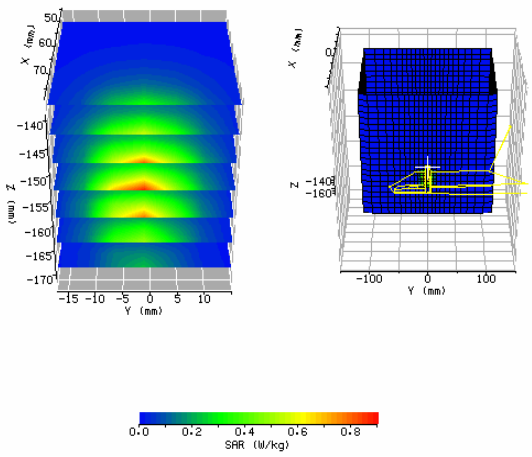
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.115	0.116

Change during Scan (%) 0.23

Max E-field (V/m): 20.02

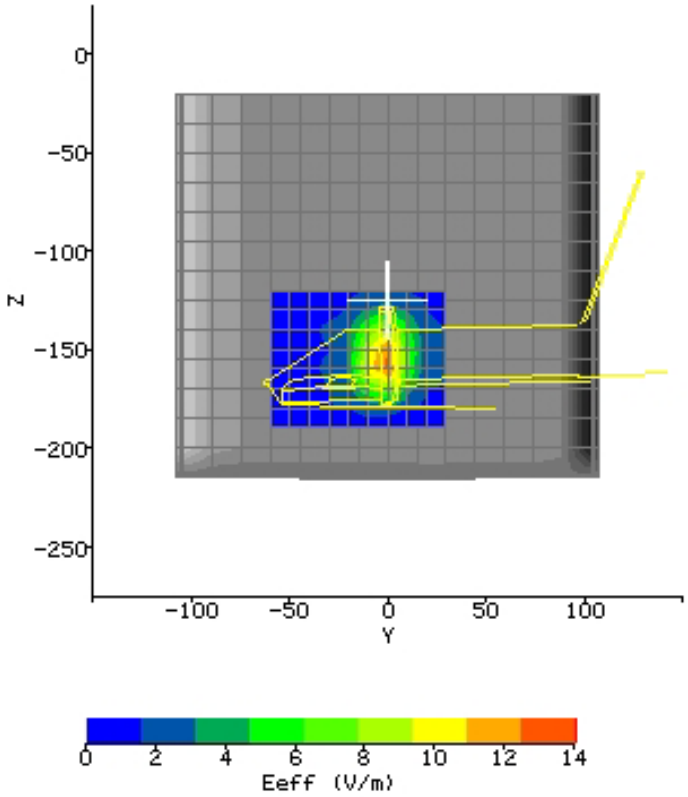
Max SAR (W/kg)	**1g**	**10g**
	0.578	0.237

Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-17.0	-155.1

Plot #40 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-60.0	30.0	9.0
	Z	-190.0	-120.0	7.0



Plot #41 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_HP_per0-2590-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (10M BW)
Shape File:	MAX-100_HP-per.csv	**Power Level:**	24.04 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

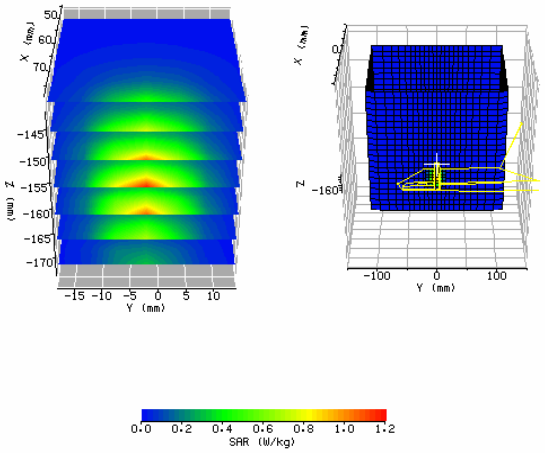
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.137	0.138

Change during Scan (%) 0.23

Max E-field (V/m): 23.10

Max SAR (W/kg)	**1g**	**10g**
	0.751	0.303

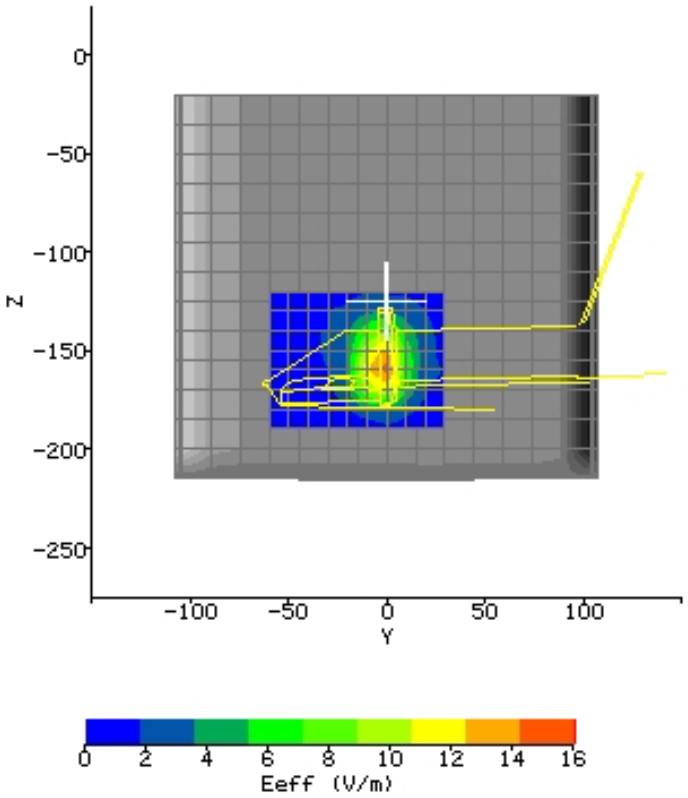
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-18.1	-158.1

Plot #41 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #42 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 0mm
Filename:	MAX-100_HP_per0-2685-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (10M BW)
Shape File:	MAX-100_HP-per.csv	**Power Level:**	22.20 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

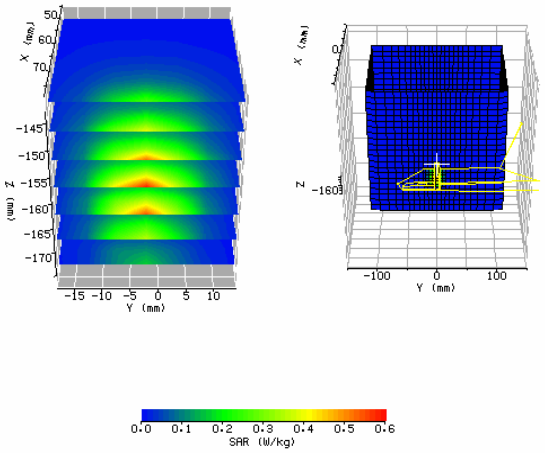
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.070	0.070

Change during Scan (%) 0.09

Max E-field (V/m): 16.30

Max SAR (W/kg)	**1g**	**10g**
	0.382	0.155

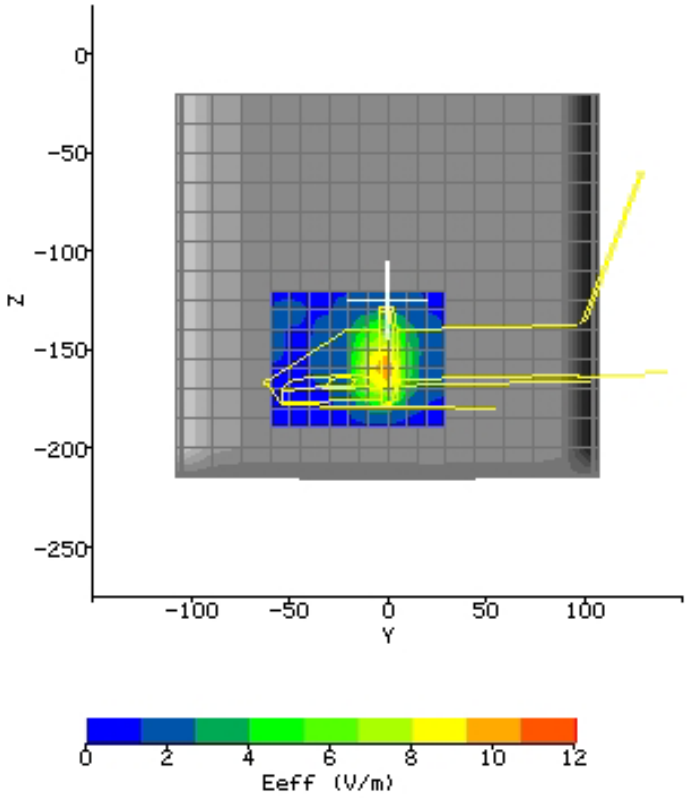
Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-18.1	-159.2

Plot #42 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #43 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_HP_per15-2500-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2500 MHz (5M BW)
Shape File:	MAX-100_HP-per.csv	**Power Level:**	24.15 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

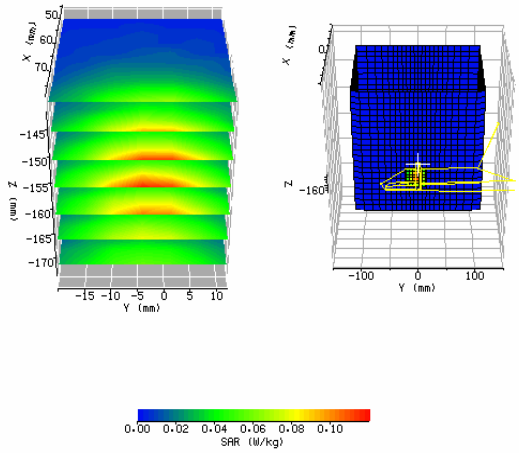
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.027	0.028

Change during Scan (%) 0.21

Max E-field (V/m): 7.25

Max SAR (W/kg)	**1g**	**10g**
	0.090	0.045

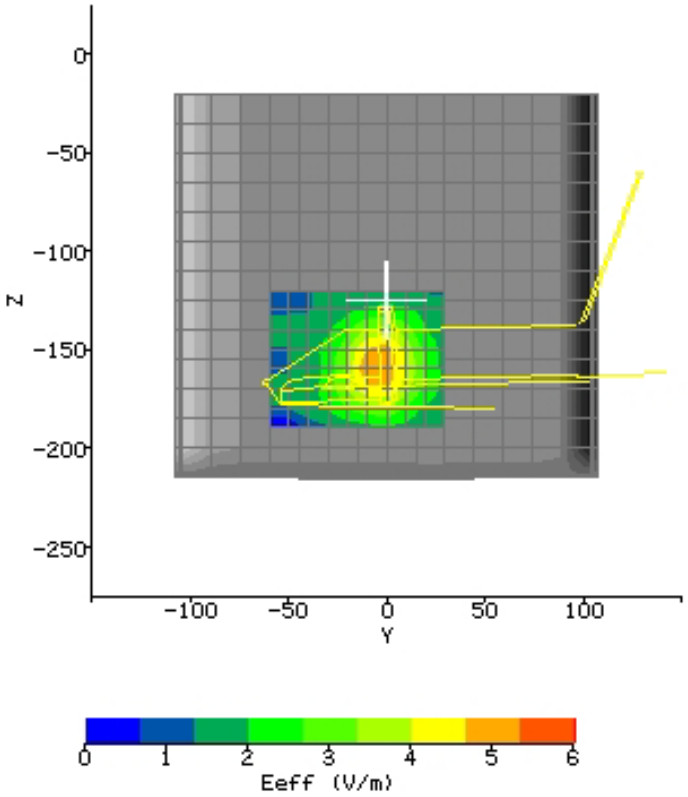
Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-20.0	-156.0

Plot #43 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #44 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_HP_per15-2590-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (5M BW)
Shape File:	MAX-100_HP-per.csv	**Power Level:**	24.28 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

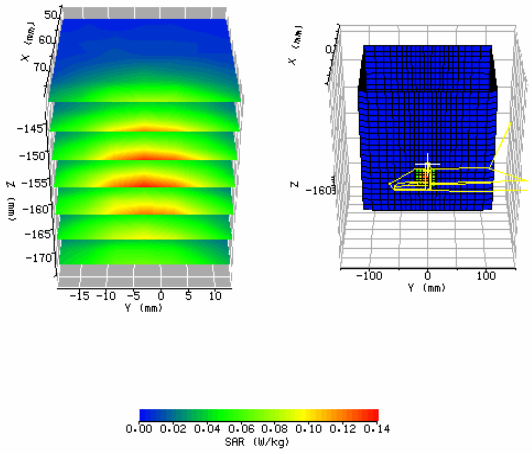
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.029	0.030

Change during Scan (%) 0.76

Max E-field (V/m): 7.89

Max SAR (W/kg)	**1g**	**10g**
	0.108	0.059

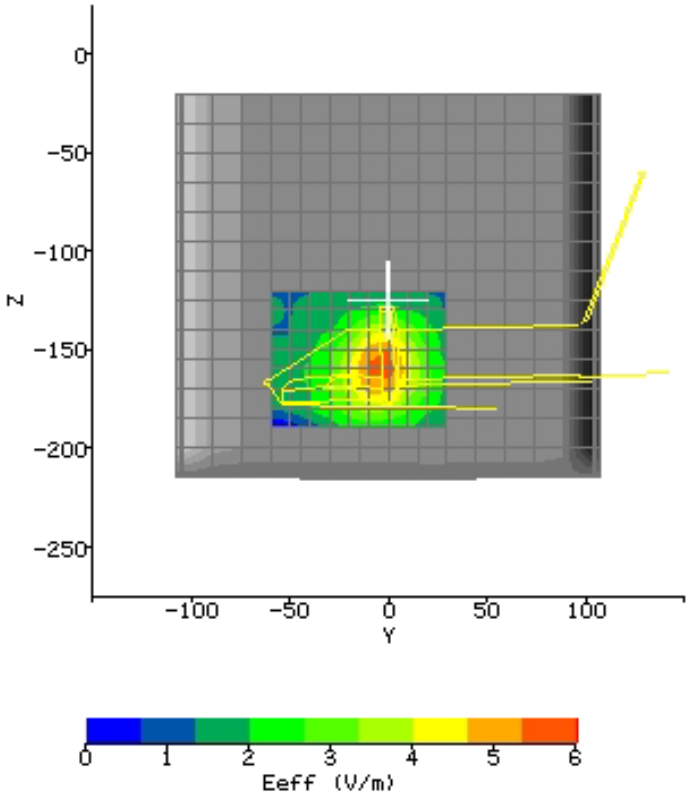
Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-19.0	-157.1

Plot #44 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #45 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_HP_per15-2685-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (5M BW)
Shape File:	MAX-100_HP-per.csv	**Power Level:**	22.38 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

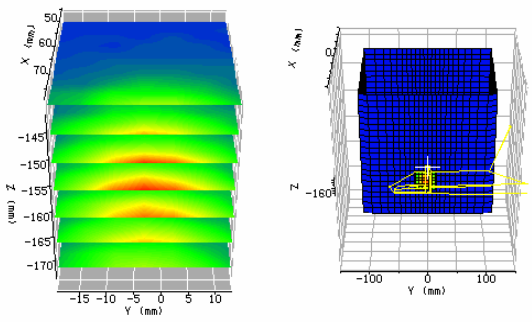
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.014	0.014

Change during Scan (%) 0

Max E-field (V/m): 5.54

Max SAR (W/kg)	**1g**	**10g**
	0.055	0.030

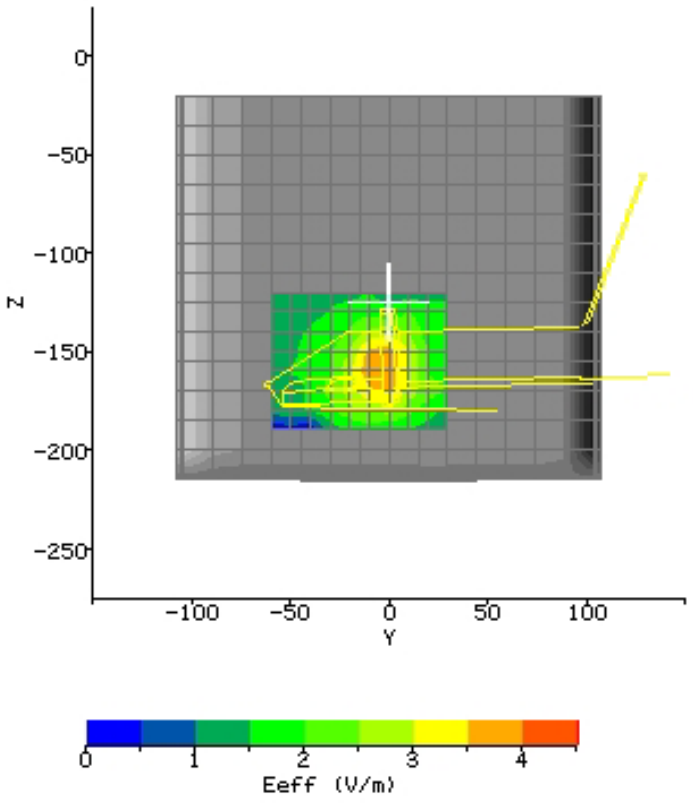
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-19.1	-157.0

Plot #45 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #46 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_HP_per15-2505-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2505 MHz (10M BW)
Shape File:	MAX-100_HP-per.csv	**Power Level:**	24.13 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

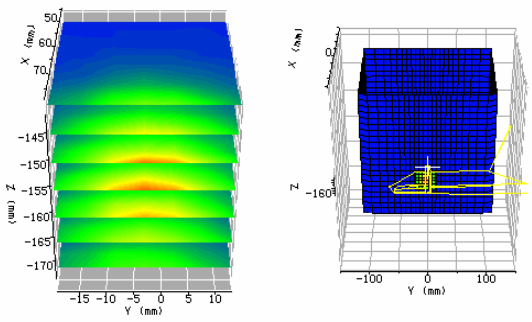
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.030	0.031

Change during Scan (%) 0.12

Max E-field (V/m): 8.00

Max SAR (W/kg)	**1g**	**10g**
	0.110	0.057

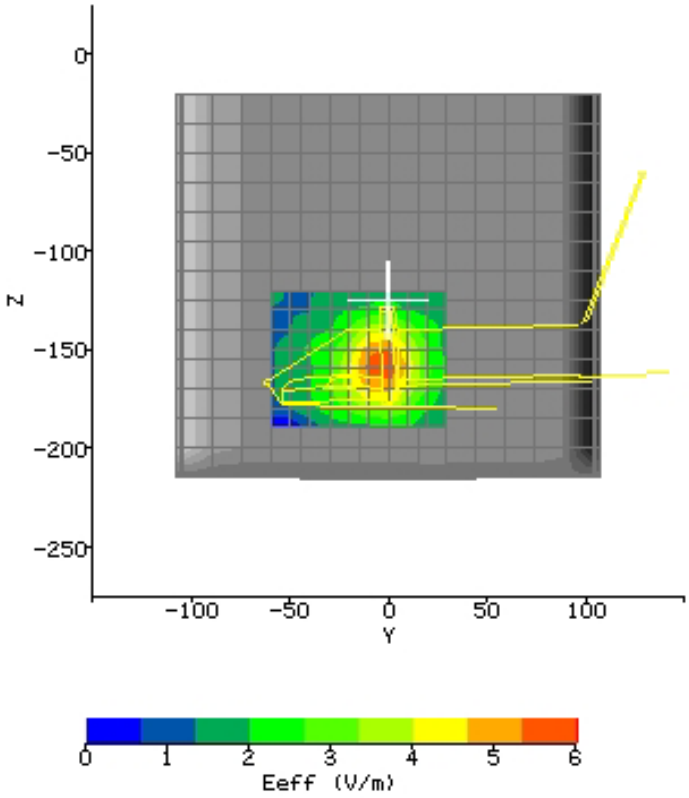
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-19.1	-157.2

Plot #46 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #47 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_HP_per15-2590-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (10M BW)
Shape File:	MAX-100_HP-per.csv	**Power Level:**	24.04 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

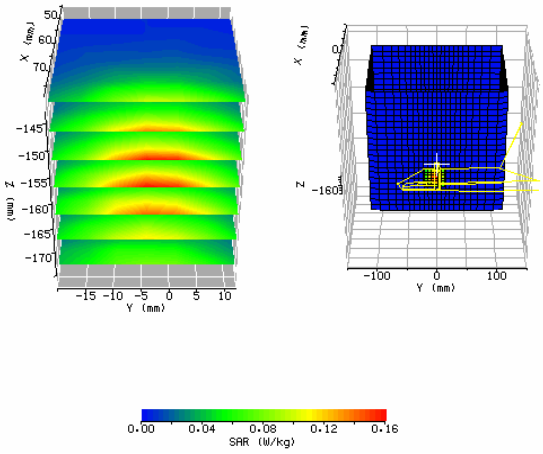
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.031	0.032

Change during Scan (%) 2.45

Max E-field (V/m): 8.55

Max SAR (W/kg)	**1g**	**10g**
	0.125	0.065

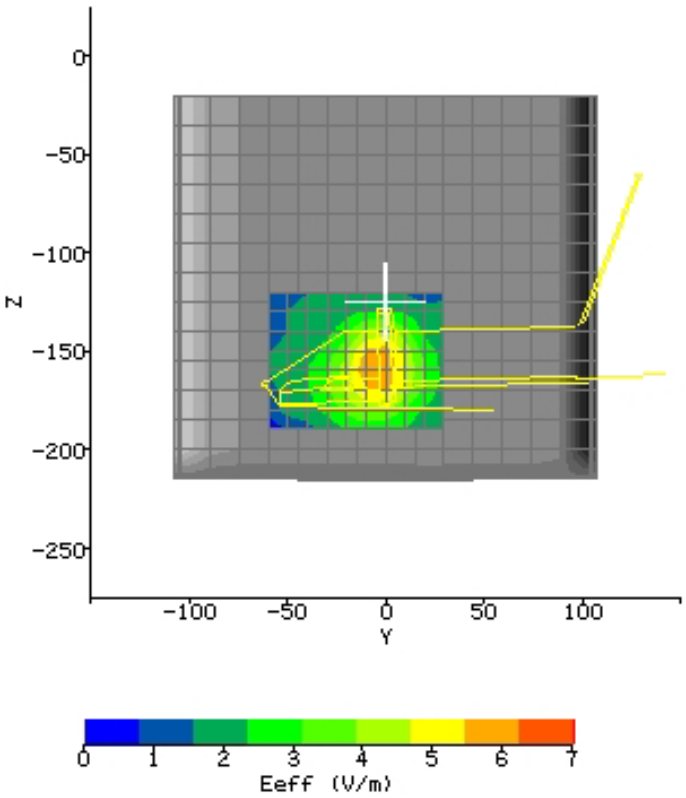
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-20.0	-157.2

Plot #47 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #48 (1/2)

Date:	2007/10/29	**Position:**	Perpendicular 15mm
Filename:	MAX-100_HP_per15-2685-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (10M BW)
Shape File:	MAX-100_HP-per.csv	**Power Level:**	22.20 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

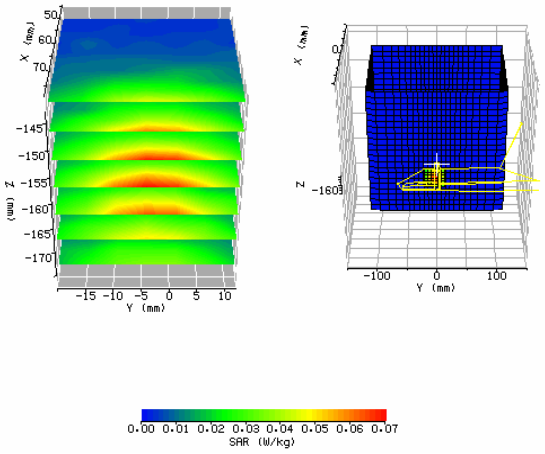
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.015	0.016

Change during Scan (%) 0.79

Max E-field (V/m): 5.65

Max SAR (W/kg)	**1g**	**10g**
	0.054	0.034

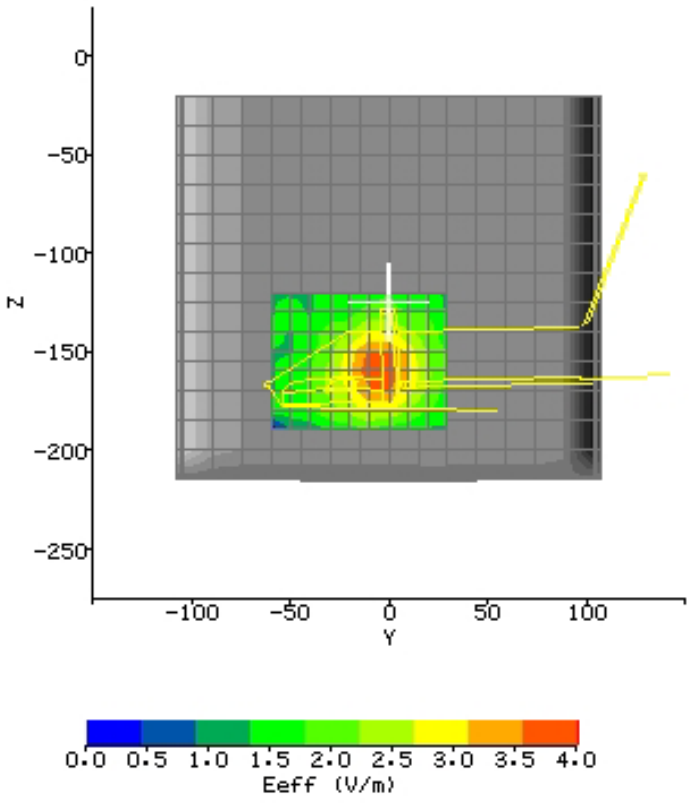
Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-20.0	-157.2

Plot #48 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-60.0	30.0	9.0
Z	-190.0	-120.0	7.0



Plot #49 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_HP_bot0-2500-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2500 MHz (5M BW)
Shape File:	MAX-100_HP-bot.csv	**Power Level:**	24.15 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

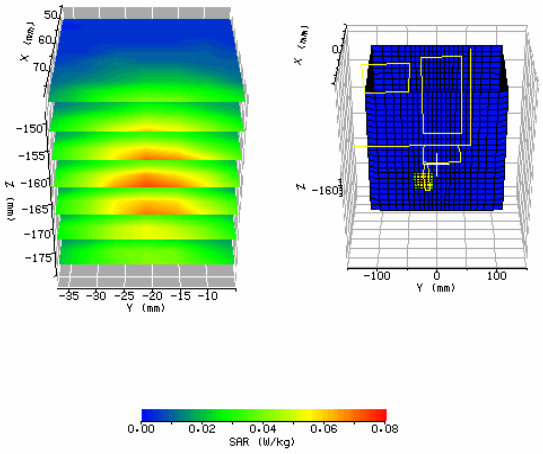
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.018	0.019

Change during Scan (%) 2.56

Max E-field (V/m): 5.84

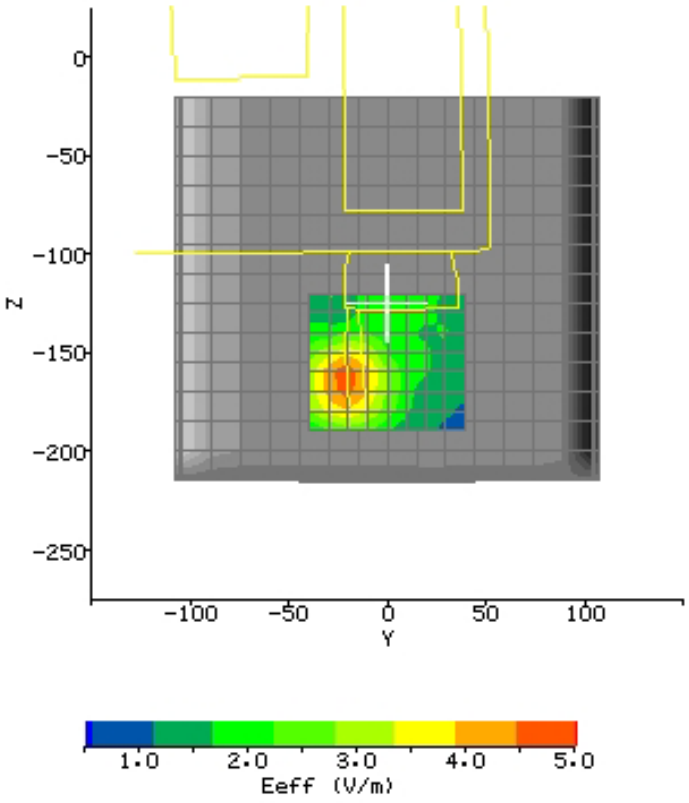
Max SAR (W/kg)	**1g**	**10g**
	0.062	0.036

Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-37.2	-164.0

Plot #49 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-40.0	40.0	8.0
	Z	-190.0	-120.0	7.0



Plot #50 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_HP_bot0-2590-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (5M BW)
Shape File:	MAX-100_HP-bot.csv	**Power Level:**	24.28 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

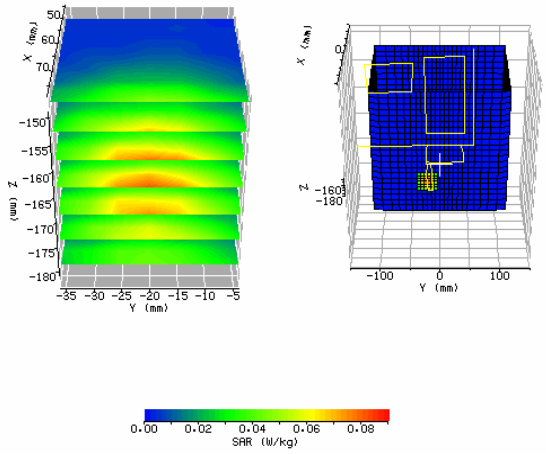
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.016	0.017

Change during Scan (%) 0.31

Max E-field (V/m): 6.10

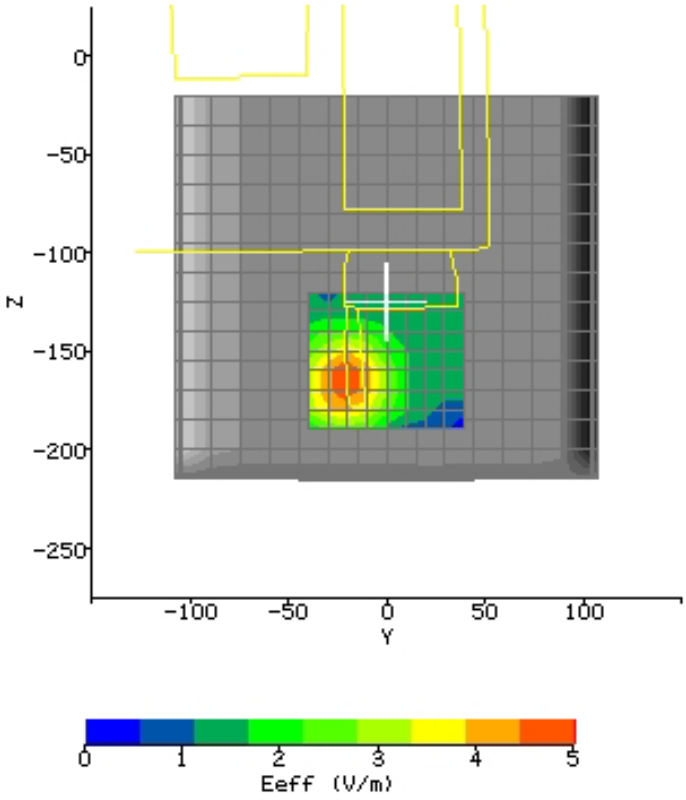
Max SAR (W/kg)	**1g**	**10g**
	0.065	0.033

Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-36.1	-164.0

Plot #50 (2/2)

AREA SCAN:

Scan Extent:		Min	Max	Steps
	Y	-40.0	40.0	8.0
	Z	-190.0	-120.0	7.0



Plot #51 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_HP_bot0-2685-5M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (5M BW)
Shape File:	MAX-100_HP-bot.csv	**Power Level:**	22.38 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

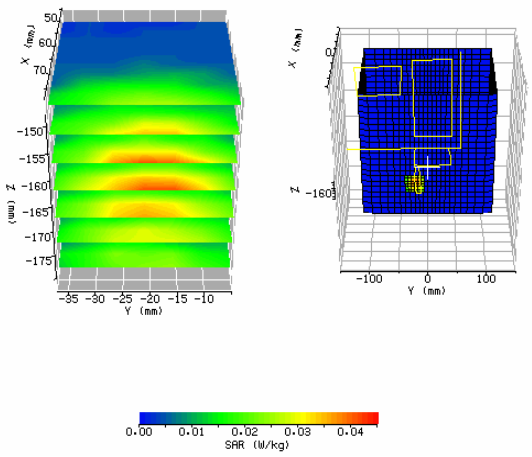
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.012	0.010

Change during Scan (%) -2.22

Max E-field (V/m): 4.36

Max SAR (W/kg)	**1g**	**10g**
	0.036	0.024

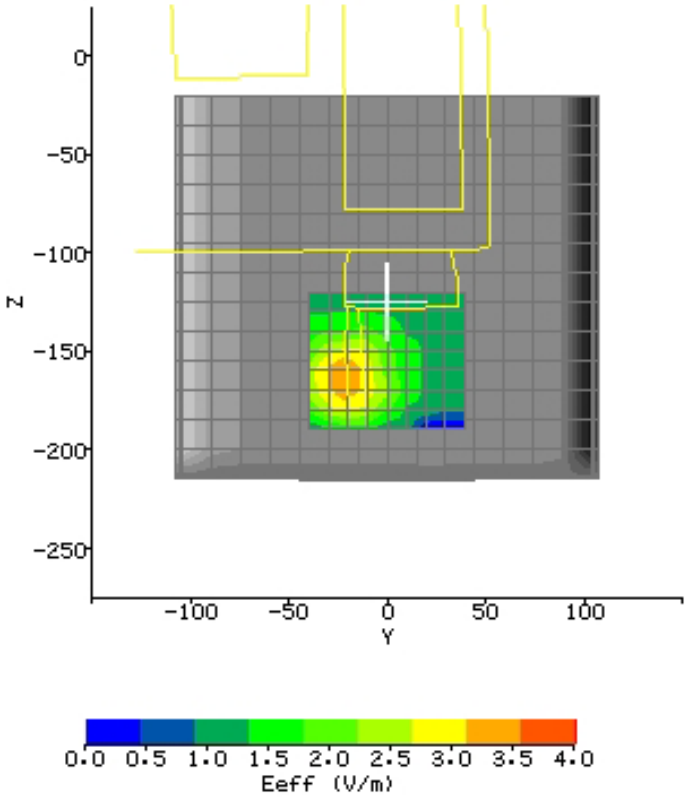
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-37.0	-162.1

Plot #51 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-40.0	40.0	8.0
Z	-190.0	-120.0	7.0



Plot #52 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_HP_bot0-2505-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Low_2505 MHz (10M BW)
Shape File:	MAX-100_HP-bot.csv	**Power Level:**	24.13 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

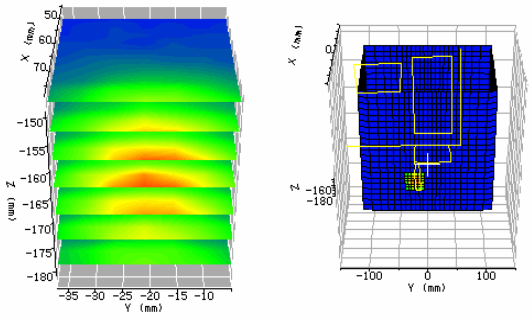
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

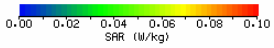
Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM





ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.025	0.023

Change during Scan (%) -3.11

Max E-field (V/m): 6.46

Max SAR (W/kg)	**1g**	**10g**
	0.077	0.043

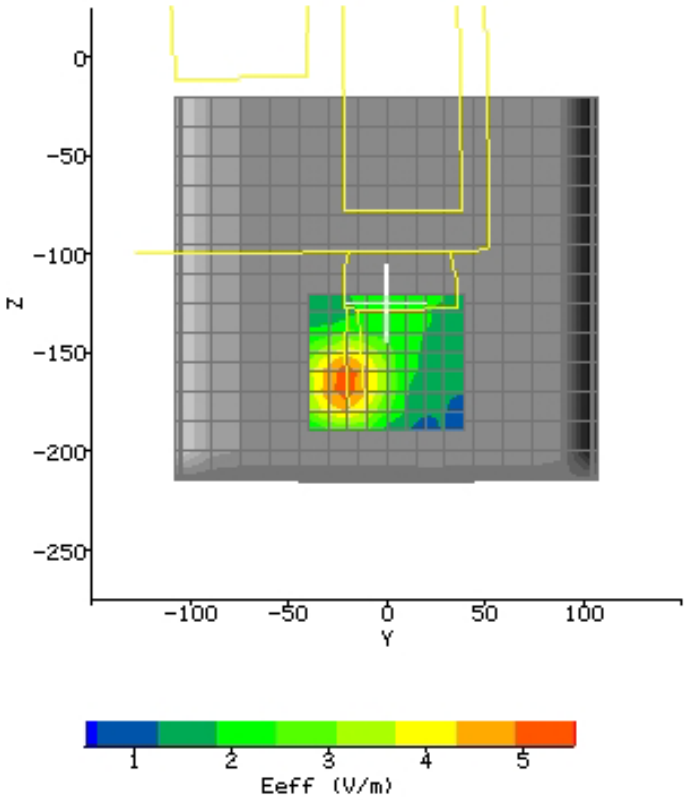
Location of Max (mm):	**X**	**Y**	**Z**
	78.1	-37.1	-164.1

Plot #52 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-40.0	40.0	8.0
Z	-190.0	-120.0	7.0



Plot #53 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_HP_bot0-2590-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	Mid_2590 MHz (10M BW)
Shape File:	MAX-100_HP-bot.csv	**Power Level:**	24.04 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

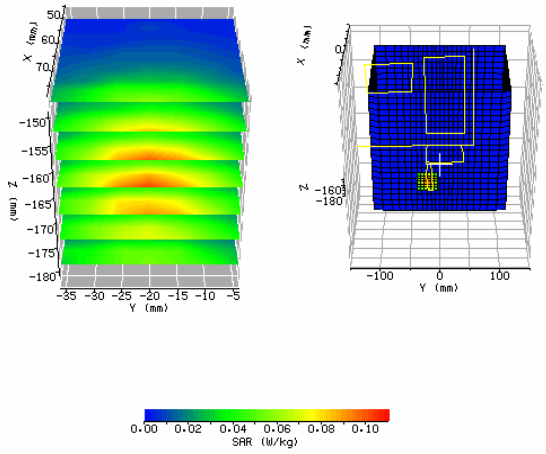
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	VPM2.41



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.024	0.025

Change during Scan (%) 0.98

Max E-field (V/m): 6.84

Max SAR (W/kg)	**1g**	**10g**
	0.084	0.047

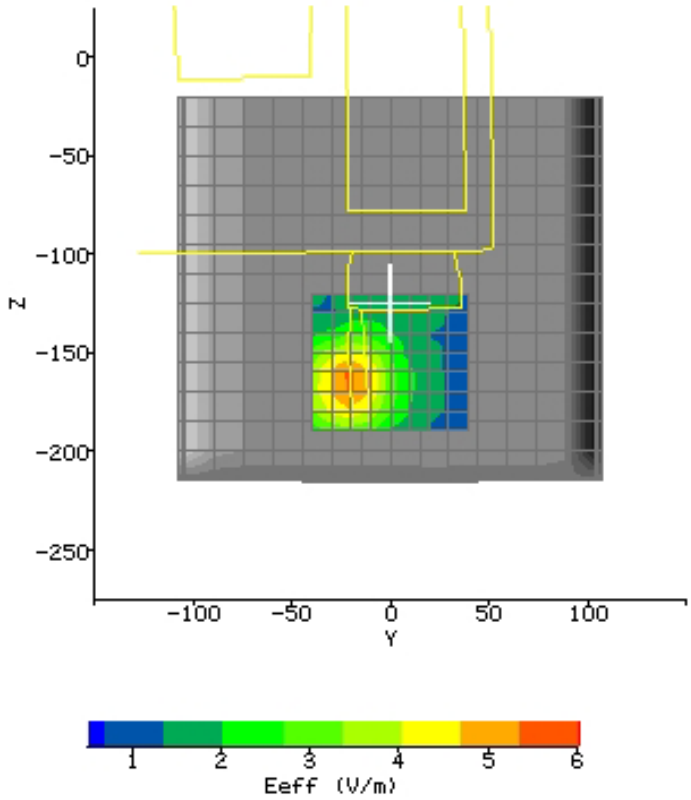
Location of Max (mm):	**X**	**Y**	**Z**
	78.0	-36.1	-164.1

Plot #53 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-40.0	40.0	8.0
Z	-190.0	-120.0	7.0



Plot #54 (1/2)

Date:	2007/10/29	**Position:**	Bottom 0mm
Filename:	MAX-100_HP_bot0-2685-10M.txt	**Phantom:**	HeadBox2-test.csv
Device Tested:	MAX-100	**Head Rotation:**	0
Antenna:	Dipole	**Test Frequency:**	High_2685 MHz (10M BW)
Shape File:	MAX-100_HP-bot.csv	**Power Level:**	22.20 dBm

Probe: 0146

Cal File: SN0146_2600_CW_BODY

Cal Factors:

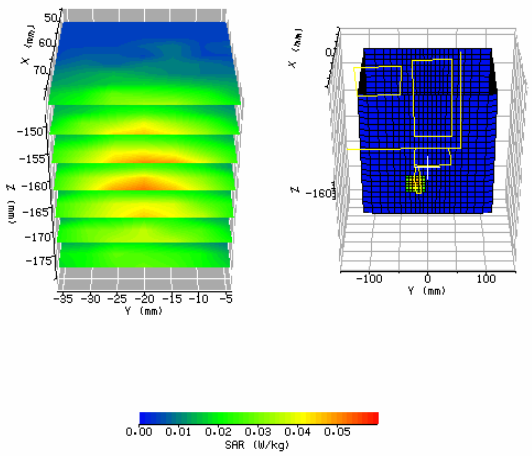
	X	Y	Z
Air	434	373	395
DCP	20	20	20
Lin	.563	.563	.563

Amp Gain: 2

Averaging: 1

Batteries Replaced: -

Liquid:	15.5cm
Type:	2600 MHz Body
Conductivity:	2.1774
Relative Permittivity:	52.2498
Liquid Temp (deg C):	23.5
Ambient Temp (deg C):	23.5
Ambient RH (%):	53
Density (kg/m3):	1000
Software Version:	2.41VPM



ZOOM SCAN RESULTS:

Spot SAR (W/kg):	**Start Scan**	**End Scan**
	0.014	0.012

Change during Scan (%) -1.25

Max E-field (V/m): 4.76

Max SAR (W/kg)	**1g**	**10g**
	0.043	0.025

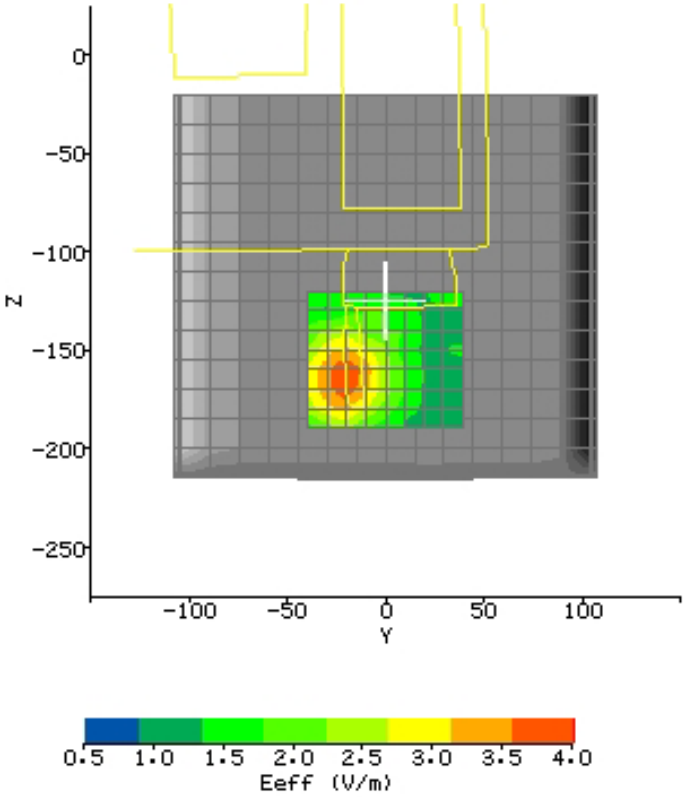
Location of Max (mm):	**X**	**Y**	**Z**
	78.2	-36.1	-162.1

Plot #54 (2/2)

AREA SCAN:

Scan Extent:

	Min	Max	Steps
Y	-40.0	40.0	8.0
Z	-190.0	-120.0	7.0



APPENDIX B - Photographs