RF Exposure Lab

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CERTIFICATE OF COMPLIANCE
SAR EVALUATION

Fluke Networks
6290 Seaway Boulevard
Everett, WA 98203

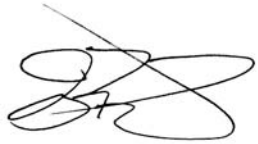
Dates of Test: Jan. 31 – Feb. 3, 2011
Test Report Number: SAR.20110201

FCC ID:	WA7-OPTIVIEW XG
IC Certificate:	6627C-OPTIVIEW XG
Model(s):	OPTIVIEW XG Family
Test Sample:	Engineering Unit Same as Production
Serial No.:	Eng 1
Equipment Type:	Wireless Tablet
Classification:	Portable Transmitter Next to Body
TX Frequency Range:	2412 – 2462 MHz, 5180 – 5240 MHz, 5260 – 5320 MHz, 5745 – 5805 MHz
Frequency Tolerance:	± 2.5 ppm
Maximum RF Output:	2450 MHz (b) – 12.83 dBm, 2450 MHz (g) – 11.96 dBm, 2450 (n20) – 11.81 dBm, 2450 MHz (n40) – 8.19 dBm, 5250 MHz (a) – 11.87 dBm, 5250 MHz (n20) – 10.86 dBm, 5250 MHz (n40) – 10.42 dBm, 5600 MHz (a) – 13.93 dBm, 5600 MHz (n20) – 10.13 dBm, 5600 MHz (n40) – 10.06 dBm, 5800 MHz (a) – 13.97 dBm, 5800 MHz (n20) – 13.35 dBm, 5800 MHz (n40) – 12.46 dBm Conducted
Signal Modulation:	DSSS, OFDM
Antenna Type (Length):	Internal
Application Type:	Certification
FCC Rule Parts:	Part 2, 15.247, Part 15.407
Industry Canada:	RSS-102

This wireless mobile and/or portable device has been shown to be compliant for localized specific absorption rate (SAR) for uncontrolled environment/general exposure limits specified in ANSI/IEEE Std. C95.1-1992 and had been tested in accordance with the measurement procedures specified in IEEE 1528-2003, OET Bulletin 65 Supp. C, RSS-102 and Safety Code 6 (See test report).

I attest to the accuracy of the data. All measurements were performed by myself or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

RF Exposure Lab, LLC certifies that no party to this application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 853(a).



Jay M. Moulton
Vice President

ACCREDITED
Certificate # 2387.01

Table of Contents

1. Introduction

This measurement report shows compliance of the Fluke Networks Model OPTIVIEW XG Family FCC ID: WA7-OPTIVIEW XG with FCC Part 2, 1093, ET Docket 93-62 Rules for mobile and portable devices and IC Certificate: 6627C-OPTIVIEW XG with RSS102 & Safety Code 6. The FCC have adopted the guidelines for evaluating the environmental effects of radio frequency radiation in ET Docket 93-62 on August 6, 1996 to protect the public and workers from the potential hazards of RF emissions due to FCC regulated portable devices. [1], [6]

The test procedures, as described in ANSI C95.1 – 1999 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz [2], ANSI C95.3 – 2002 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields [3], FCC OET Bulletin 65 Supp. C – 2001 [4], IEEE Std.1528 – 2003 Recommended Practice [5], and Industry Canada Safety Code 6 Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3kHz to 300 GHz were employed.

SAR Definition [5]

Specific Absorption Rate is defined as the time derivative (rate) of the incremental energy (*dW*) absorbed by (dissipated in) an incremental mass (*dm*) contained in a volume element (*dV*) of a given density (ρ).

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

SAR is expressed in units of watts per kilogram (W/kg). *SAR* can be related to the electric field at a point by

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

where:

σ = conductivity of the tissue (S/m)

ρ = mass density of the tissue (kg/m^3)

E = rms electric field strength (V/m)

2. SAR Measurement Setup

Robotic System

The measurements are conducted utilizing the ALSAS-10-U automated dosimetric assessment system. The ALSAS-10-U is designed and manufactured by Aprel Laboratories in Nepean, Ontario, Canada. The system utilizes a Robcomm 3 robot manufactured by ThermoCRS located in Michigan USA.

System Hardware

The system consists of a six axis articulated arm, controller for precise probe positioning (0.05 mm repeatability), a power supply, a teach pendent for teaching area scans, near field probe, an IBM Pentium 4™ 2.66 GHz PC with Windows XP Pro™, and custom software developed to enable communications between the robot controller software and the host operating system.

An amplifier is located on the articulated arm, which is isolated from the custom designed end effector and robot arm. The end effector provides the mechanical touch detection functionality and probe connection interface. The amplifier is functionally validated within the manufacturer's site and calibrated at NCL Calibration Laboratories. A Data Acquisition Card (DAC) is used to collect the signal as detected by the isotropic e-field probe. The DAC manufacturer calibrates the DAC to NIST standards. A formal validation is executed using all mechanical and electronic components to prove conformity of the measurement platform as a whole.

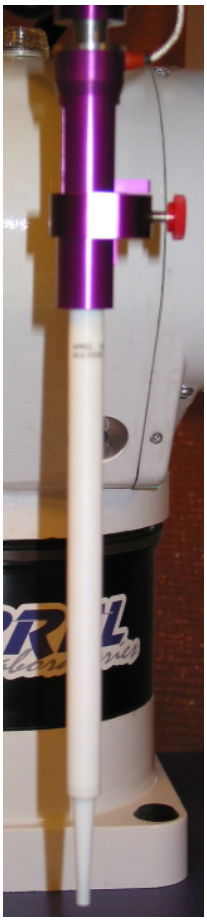
System Description

The ALSAS-10-U has been designed to measure devices within the compliance environment to meet all recognized standards. The system also conforms to standards, which are currently being developed by the scientific and manufacturing community.

The course scan resolution is defined by the operator and reflects the requirements of the standard to which the device is being tested. Precise measurements are made within the predefined course scan area and the values are logged.

The user predefines the sample rate for which the measurements are made so as to ensure that the full duty-cycle of a pulse modulation device is covered during the sample. The following algorithm is an example of the function used by the system for linearization of the output for the probe.

$$V_i = U_i + U_i^2 \bullet \frac{cf}{dcp_i}$$



The Aprel E-Field probe is evaluated to establish the diode compression point.

A complex algorithm is then used to calculate the values within the measured points down to a resolution of 1mm. The data from this process is then used to provide the co-ordinates from which the cube scan is created for the determination of the 1 g and 10 g averages.

Cube scan averaging consists of a number of complex algorithms, which are used to calculate the one, and ten gram averages. The basis for the cube scan process is centered on the location where the maximum measured SAR value was found. When a secondary peak value is found which is within 60% of the initial peak value, the system will report this back to the operator who can then assess the need for further analysis of both the peak values prior to the one and ten-gram cube scan averaging process. The algorithm consists of 3D cubic Spline, and Lagrange extrapolation to the surface, which form the matrix for calculating the measurement output for the one and ten gram average values. The resolution for the physical scan integral is user defined with a final calculated resolution down to 1mm.

In-depth analysis for the differential of the physical scanning resolution for the cube scan analysis has been carried out, to identify the optimum setting for the probe positioning steps, and this has been determined at 8mm increments on the X, & Y planes. The reduction of the physical step increment increased the time taken for analysis but did not provide a better uncertainty or return on measured values.

The final output from the system provides data for the area scan measurements, physical and splined (1mm resolution) cube scan with physical and calculated values (1mm resolution).

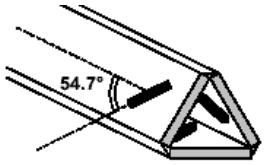
The overall uncertainty for the methodology and algorithms the ALSAS-10-U used during the SAR calculation was evaluated using the data from IEEE 1528 f3 algorithm:

$$f_3(x,y,z) = A\frac{a^2}{\frac{a^2}{4} + x'^2 + y'^2}\left(e^{-\frac{2z}{a}} + \frac{a^2}{2(a+2z)^2}\right)$$

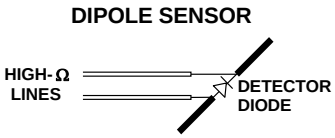
The probe used during the measurement process has been assessed to provide values for diode compression. These values are calculated during the probe calibration exercise and are used in the mathematical calculations for the assessment of SAR.

E-Field Probe

The E-field probe used by RF Exposure Lab, LLC, has been fully calibrated and assessed for isotropic, and boundary effect. The probe utilizes a triangular sensor arrangement as detailed in the diagram below right.



Δ-BEAM



The SAR is assessed with the probe which moves at a default height of 4mm from the center of the diode, which is mounted to the sensor, to the phantom surface (Z height). The diagram above right shows how the center of the sensor is defined with the location of the diode placed at the center of the dipole. The 4mm default in the Z axis is the optimum height for assessing SAR where the boundary effect is at its least, with the probe located closest to the phantom surface (boundary).

The manufacturer specified precision of the robot is ± 0.05 mm and the precision of the APREL bottom detection device is ± 0.1 mm. These precisions are calibrated and tested in the manufacturing process of the bottom detection device. A constant distance is maintained because the surface of the phantom is dynamically detected for each point. The surface detection algorithm corrects the position of the robot so that the probe rests on the surface of the phantom. The probe is then moved to the measurement location 2.44 mm above the phantom surface resulting in the probe center location to be at 4.0 mm above the phantom surface. Therefore, the probe sensor will be at 4.0 mm above the phantom surface ± 0.1 mm for each SAR location for frequencies below 3 GHz. The probe is moved to the measurement location 1.44 mm above the phantom surface resulting in the probe center location to be at 2.0 mm above the phantom surface. Therefore, the probe sensor will be at 2.0 mm above the phantom surface ± 0.1 mm for each SAR location for frequencies above 3 GHz.

The probe boundary effect compensation cannot be disabled in the ALSAS-10U testing system. The probe tip will always be at least half a probe tip diameter from the phantom surface. For frequencies up to 3 GHz, the probe diameter is 5 mm. With the sensor offset set at 1.54 mm (default setting), the sensor to phantom gap will be 4.0 mm which is greater than half the probe tip diameter. For frequencies greater than 3 GHz, the probe diameter is 3 mm. With the sensor offset set at 0.56 mm (default setting), the sensor to phantom gap will be 3.0 mm which is greater than half the probe tip diameter.

The separation of the first 2 measurement points in the zoom scan is specified in the test setup software. For frequencies below 3 GHz, the user must specify a zoom scan resolution of less than 6 mm in the z-axis to have the first two measurements within 1 cm of the surface. The z-axis is set to 4 mm as shown on each of the data sheets in Appendix B. For frequencies above 3 GHz, the user must specify a zoom scan resolution of less than 3 mm in the z-axis to have the first two measurements within 5 mm of the surface. The z-axis is set to 2 mm as shown on each of the data sheets in Appendix B.

The zoom scan volume for devices ≤3 GHz with a cube scan of 5x5x8 yields a volume of 32x32x28 mm^3. For devices >3 GHz and <4.5 GHz, the cube scan of 9x9x9 yields a volume of 32x32x24 mm^3. For devices ≥4.5 GHz, the cube scan of 7x7x12 yields a volume of 24x24x22 mm^3.

3. Robot Specifications

Specifications

Positioner:	ThermoCRS, Robot Model: Robocomm 3
Repeatability:	0.05 mm
No. of axis:	6

Data Acquisition Card (DAC) System

Cell Controller

Processor:	Pentium 4™
Clock Speed:	2.66 GHz
Operating System:	Windows XP Pro™

Data Converter

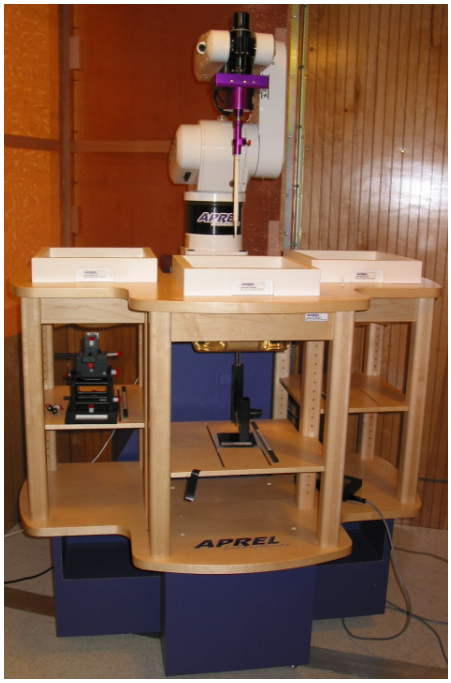
Features:	Signal Amplifier, End Effector, DAC
Software:	ALSAS 10-U Software

E-Field Probe

Model:	Various See Probe Calibration Sheet
Serial Number:	Various See Probe Calibration Sheet
Construction:	Triangular Core Touch Detection System
Frequency:	10MHz to 6GHz

Phantom

Phantom:	Uniphantom, Right Phantom, Left Phantom



4. Probe and Dipole Calibration

See Appendix D and E.

5. Phantom & Simulating Tissue Specifications

SAM Phantom

The Aprel system utilizes three separate phantoms. Each phantom for SAR assessment testing is a low loss dielectric shell, with shape and dimensions derived from the anthropomorphic data of the 90th percentile adult male head dimensions as tabulated by the US Army. The SAM phantom shell is bisected along the mid sagittai plane into right and left halves. The perimeter sidewalls of each phantom half is extended to allow filling with liquid to a depth of 15 cm that is sufficient to minimize reflections from the upper surface [5]. The Uni-Phantom is used to conduct body measurements and held to face measurements. The depth of the phantom allows for 15 cm of tissue material to be filled within the phantom. See photos in Appendix C.

Head & Body Simulating Mixture Characterization

The head and body mixtures consist of the material based on the table listed below. The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the desired tissue. Body tissue parameters that have not been specified in P1528 are derived from the issue dielectric parameters computed from the 4-Cole-Cole equations.

Table 5.1 Typical Composition of Ingredients for Tissue

Ingredients		Simulating Tissue			
		2450 MHz Body	5250 MHz Body	5600 MHz Body	5800 MHz Body
Mixing Percentage					
Water		73.20	70.00	76.50	76.50
Sugar		0.00	0.00	0.00	0.00
Salt		0.04	1.50	1.50	1.50
HEC		0.00	0.00	0.00	0.00
Bactericide		0.00	0.00	0.00	0.00
DGBE		26.70	28.50	22.00	22.00
Dielectric Constant	Target	52.70	48.96	48.47	48.25
Conductivity (S/m)	Target	1.95	5.35	5.77	5.96

Device Holder

In combination with the SAM phantom, the mounting device enables the rotation of the mounted transmitter in spherical coordinates whereby the rotation point is the ear opening. The devices can easily, accurately, and repeatably be positioned according to the FCC specifications. The device holder can be locked at different phantom locations (left head, right head, and uni-phantom).

Body Worn Configurations

Body-worn operating configurations are tested in a normal use configuration. Body dielectric parameters are used.

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

In order for users to be aware of the body-worn operating requirements for meeting RF exposure compliance, operating instructions and cautions statements are included in the user's manual.

6. ANSI/IEEE C95.1 – 1992 RF Exposure Limits [2]

Uncontrolled Environment

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

Controlled Environment

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Table 6.1 Human Exposure Limits

	UNCONTROLLED ENVIRONMENT General Population (W/kg) or (mW/g)	CONTROLLED ENVIROMENT Professional Population (W/kg) or (mW/g)
SPATIAL PEAK SAR[1] Head	1.60	8.00
SPATIAL AVERAGE SAR[2] Whole Body	0.08	0.40
SPATIAL PEAK SAR[3] Hands, Feet, Ankles, Wrists	4.00	20.00

[1] The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
[2] The Spatial Average value of the SAR averaged over the whole body.
[3] The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

7. Measurement Uncertainty

Exposure Assessment Measurement Uncertainty

Source of Uncertainty	Tolerance Value	Probability Distribution	Divisor	c_i^1 (1-g)	c_i^1 (10-g)	Standard Uncertainty (1-g) %	Standard Uncertainty (10-g) %	v_i
Measurement System								
Probe Calibration	3.5	normal	1	1	1	3.5	3.5	∞
Axial Isotropy	3.7	rectangular	√3	0.7	0.7	1.5	1.5	∞
Hemispherical Isotropy	10.9	rectangular	√3	0.7	0.7	4.4	4.4	∞
Boundary Effect	1.0	rectangular	√3	1	1	0.6	0.6	∞
Linearity	4.7	rectangular	√3	1	1	2.7	2.7	∞
Detection Limit	1.0	rectangular	√3	1	1	0.6	0.6	∞
Readout Electronics	1.0	normal	1	1	1	1.0	1.0	∞
Response Time	0.8	rectangular	√3	1	1	0.5	0.5	∞
Integration Time	1.7	rectangular	√3	1	1	1.0	1.0	∞
RF Ambient Condition	3.0	rectangular	√3	1	1	1.7	1.7	∞
Probe Positioner Mech. Restriction	0.4	rectangular	√3	1	1	0.2	0.2	∞
Probe Positioning with respect to Phantom Shell	2.9	rectangular	√3	1	1	1.7	1.7	∞
Extrapolation and Integration	3.7	rectangular	√3	1	1	2.1	2.1	∞
Test Sample Positioning	4.0	normal	1	1	1	4.0	4.0	7
Device Holder Uncertainty	2.0	normal	1	1	1	2.0	2.0	2
Drift of Output Power	4.2	rectangular	√3	1	1	2.4	2.4	∞
Phantom and Setup								
Phantom Uncertainty(shape & thickness tolerance)	3.4	rectangular	√3	1	1	2.0	2.0	∞
Liquid Conductivity(target)	5.0	rectangular	√3	0.7	0.5	2.0	1.4	∞
Liquid Conductivity(meas.)	0.5	normal	1	0.7	0.5	0.4	0.3	5
Liquid Permittivity(target)	5.0	rectangular	√3	0.6	0.5	1.7	1.4	∞
Liquid Permittivity(meas.)	1.0	normal	1	0.6	0.5	0.6	0.5	5
Combined Uncertainty		RSS				9.6	9.4	>500
Combined Uncertainty (coverage factor=2)		Normal(k=2)				19.1	18.8	>500

8. System Validation

Tissue Verification

Table 8.1 Measured Tissue Parameters

		2450 MHz Body		5250 MHz Body		5250 MHz Body	
Date(s)		Jan. 31, 2011		Feb. 1, 2011		Feb. 2, 2011	
Liquid Temperature (˚C)	20.0	Target	Measured	Target	Measured	Target	Measured
Dielectric Constant: ε		52.70	52.21	48.95	48.53	48.95	48.71
Conductivity: σ		1.95	1.96	5.36	5.41	5.36	5.42
		5600 MHz Body		5600 MHz Body		5785 MHz Body	
Date(s)		Feb. 2, 2011		Feb. 3, 2011		Feb. 3, 2011	
Liquid Temperature (˚C)	20.0	Target	Measured	Target	Measured	Target	Measured
Dielectric Constant: ε		48.47	48.57	48.47	48.35	48.22	48.12
Conductivity: σ		5.77	5.91	5.77	5.92	5.98	5.99

See Appendix A for data printout.

Test System Verification

Prior to assessment, the system is verified to the ±10% of the specifications at the test frequency by using the system kit. Power is normalized to 1 watt. (Graphic Plots Attached)

Table 8.2 System Dipole Validation Target & Measured

Date	Test Frequency	Head/ Body	Targeted SAR_{1g} (W/kg)	Measure SAR_{1g} (W/kg)	Deviation (%)
31-Jan-2011	2450 MHz	Body	51.50	50.24	- 2.45
01-Feb-2011	5250 MHz	Body	59.81	60.51	+ 1.34
02-Feb-2011	5250 MHz	Body	59.81	62.27	+ 4.11
02-Feb-2011	5600 MHz	Body	63.10	64.42	+ 2.09
03-Feb-2011	5600 MHz	Body	63.10	62.28	- 1.30
03-Feb-2011	5800 MHz	Body	61.36	60.08	- 2.09

See Appendix A for data plots.

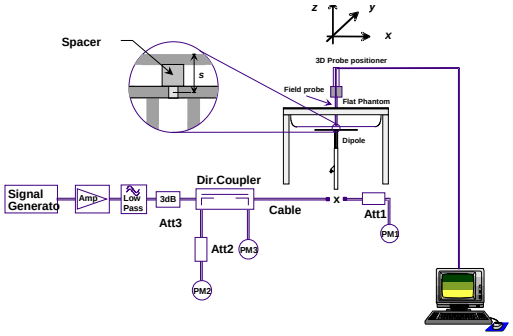


Figure 10.1 Dipole Validation Test Setup

9. SAR Test Data Summary

See Measurement Result Data Pages

See Appendix B for SAR Test Data Plots.
See Appendix C for SAR Test Setup Photos.

Procedures Used To Establish Test Signal

The device was either placed into simulated transmit mode using the manufacturer's test codes or the actual transmission is activated through a base station simulator or similar equipment. See data pages for actual procedure used in measurement.

Device Test Condition

In order to verify that the device was tested at full power, conducted output power measurements were performed before and after each SAR measurement to confirm the output power unless otherwise noted. If a conducted power deviation of more than 5% occurred, the test was repeated. The power drift of each test is measured at the start of the test and again at the end of the test. The drift percentage is calculated by the formula ((end/start)-1)*100 and rounded to three decimal places. The drift percentage is calculated into the resultant SAR value on the data sheet for each test.

The testing was conducted on the back face and each of the side which would bring the antenna within 5 cm of the body. All remaining sides were not tested as the distance would have been greater than the distance of the tested side resulting in an even lower SAR value than what had been measured. The device contains two WiFi modules. Each module is a 3x3 transmitter. Each of the antennas was tested a maximum power as a stand-alone antenna. The antennas for the two modules are located at each end of the device which keeps the closest antenna distance at greater than 20 cm. The antennas on each module has a minimum of 15 mm between antennas. Therefore, no simultaneous transmit testing was required.

802.11b				
Freq	Channel	Data Rate	Antenna	Power
2412	1	1	Chain 0	12.72
2437	6	1	Chain 0	12.83
2462	11	1	Chain 0	12.64
2412	1	1	Chain 1	12.65
2437	6	1	Chain 1	12.74
2462	11	1	Chain 1	12.60
2412	1	1	Chain 2	12.70
2437	6	1	Chain 2	12.82
2462	11	1	Chain 2	12.67

802.11g				
Freq	Channel	Data Rate	Antenna	Power
2412	1	6	Chain 0	11.84
2437	6	6	Chain 0	11.96
2462	11	6	Chain 0	11.87
2412	1	6	Chain 1	11.88
2437	6	6	Chain 1	11.94
2462	11	6	Chain 1	11.82
2412	1	6	Chain 2	11.81
2437	6	6	Chain 2	11.92
2462	11	6	Chain 2	11.87

802.11n 2.4 GHz 20 MHz Wide				
Freq	Channel	Data Rate	Antenna	Power
2412	1	6.5	Chain 0	11.72
2437	6	6.5	Chain 0	11.81
2462	11	6.5	Chain 0	11.76
2412	1	6.5	Chain 1	11.69
2437	6	6.5	Chain 1	11.72
2462	11	6.5	Chain 1	11.70
2412	1	6.5	Chain 2	11.66
2437	6	6.5	Chain 2	11.68
2462	11	6.5	Chain 2	11.64

802.11n 2.4 GHz 40 MHz Wide				
2437	6	13.5	Chain 0	8.13
2437	6	13.5	Chain 1	8.19
2437	6	13.5	Chain 2	8.14

802.11a 5.2 GHz				
Freq	Channel	Data Rate	Antenna	Power
5.18	36	6	Chain 0	11.67
5.20	40	6	Chain 0	11.79
5.22	44	6	Chain 0	11.76
5.24	48	6	Chain 0	11.84
5.26	52	6	Chain 0	11.81
5.28	56	6	Chain 0	11.73
5.30	60	6	Chain 0	11.69
5.32	64	6	Chain 0	11.72
5.18	36	6	Chain 1	11.70
5.20	40	6	Chain 1	11.72
5.22	44	6	Chain 1	11.76
5.24	48	6	Chain 1	11.85
5.26	52	6	Chain 1	11.87
5.28	56	6	Chain 1	11.71
5.30	60	6	Chain 1	11.76
5.32	64	6	Chain 1	11.73
5.18	36	6	Chain 2	11.67
5.20	40	6	Chain 2	11.71
5.22	44	6	Chain 2	11.78
5.24	48	6	Chain 2	11.86
5.26	52	6	Chain 2	11.84
5.28	56	6	Chain 2	11.79
5.30	60	6	Chain 2	11.71
5.32	64	6	Chain 2	11.76

802.11n 5.2 GHz 40 MHz Wide				
5.21	42	13.5	Chain 0	10.26
5.25	50	13.5	Chain 0	10.31
5.29	58	13.5	Chain 0	10.22
5.21	42	13.5	Chain 1	10.38
5.25	50	13.5	Chain 1	10.42
5.29	58	13.5	Chain 1	10.30
5.21	42	13.5	Chain 2	10.31
5.25	50	13.5	Chain 2	10.35
5.29	58	13.5	Chain 2	10.29

802.11n 5.2 GHz 20 MHz Wide				
Freq	Channel	Data Rate	Antenna	Power
5.18	36	6.5	Chain 0	10.72
5.20	40	6.5	Chain 0	10.78
5.22	44	6.5	Chain 0	10.70
5.24	48	6.5	Chain 0	10.82
5.26	52	6.5	Chain 0	10.80
5.28	56	6.5	Chain 0	10.74
5.30	60	6.5	Chain 0	10.68
5.32	64	6.5	Chain 0	10.73
5.18	36	6.5	Chain 1	10.72
5.20	40	6.5	Chain 1	10.75
5.22	44	6.5	Chain 1	10.78
5.24	48	6.5	Chain 1	10.81
5.26	52	6.5	Chain 1	10.86
5.28	56	6.5	Chain 1	10.70
5.30	60	6.5	Chain 1	10.74
5.32	64	6.5	Chain 1	10.75
5.18	36	6.5	Chain 2	10.68
5.20	40	6.5	Chain 2	10.70
5.22	44	6.5	Chain 2	10.74
5.24	48	6.5	Chain 2	10.81
5.26	52	6.5	Chain 2	10.85
5.28	56	6.5	Chain 2	10.80
5.30	60	6.5	Chain 2	10.72
5.32	64	6.5	Chain 2	10.77
802.11n 5.6 GHz 40 MHz Wide				
Freq	Channel	Data Rate	Antenna	Power
5.20	104	13.5	Chain 0	9.97
5.58	116	13.5	Chain 0	9.92
5.64	128	13.5	Chain 0	10.03
5.68	136	13.5	Chain 0	9.94
5.20	104	13.5	Chain 1	9.99
5.58	116	13.5	Chain 1	9.94
5.64	128	13.5	Chain 1	10.06
5.68	136	13.5	Chain 1	9.97
5.20	104	13.5	Chain 2	9.92
5.58	116	13.5	Chain 2	9.87
5.64	128	13.5	Chain 2	9.97
5.68	136	13.5	Chain 2	9.90

802.11a 5.6 GHz				
Freq	Channel	Data Rate	Antenna	Power
5.50	100	6	Chain 0	13.85
5.52	104	6	Chain 0	13.76
5.54	108	6	Chain 0	13.79
5.56	112	6	Chain 0	13.84
5.58	116	6	Chain 0	13.92
5.60	120	6	Chain 0	13.82
5.62	124	6	Chain 0	13.79
5.64	128	6	Chain 0	13.71
5.66	132	6	Chain 0	13.73
5.68	136	6	Chain 0	13.70
5.70	140	6	Chain 0	13.78
5.50	100	6	Chain 1	13.82
5.52	104	6	Chain 1	13.77
5.54	108	6	Chain 1	13.72
5.56	112	6	Chain 1	13.80
5.58	116	6	Chain 1	13.91
5.60	120	6	Chain 1	13.85
5.62	124	6	Chain 1	13.82
5.64	128	6	Chain 1	13.76
5.66	132	6	Chain 1	13.70
5.68	136	6	Chain 1	13.75
5.70	140	6	Chain 1	13.71
5.50	100	6	Chain 2	13.80
5.52	104	6	Chain 2	13.85
5.54	108	6	Chain 2	13.76
5.56	112	6	Chain 2	13.72
5.58	116	6	Chain 2	13.93
5.60	120	6	Chain 2	13.89
5.62	124	6	Chain 2	13.80
5.64	128	6	Chain 2	13.75
5.66	132	6	Chain 2	13.74
5.68	136	6	Chain 2	13.81
5.70	140	6	Chain 2	13.86
802.11n 5.8 GHz 40 MHz Wide				
Freq	Channel	Data Rate	Antenna	Power
5.76	152	13.5	Chain 0	12.29
5.80	160	13.5	Chain 0	12.34
5.76	152	13.5	Chain 1	12.21
5.80	160	13.5	Chain 1	12.24
5.76	152	13.5	Chain 2	12.28
5.80	160	13.5	Chain 2	12.19

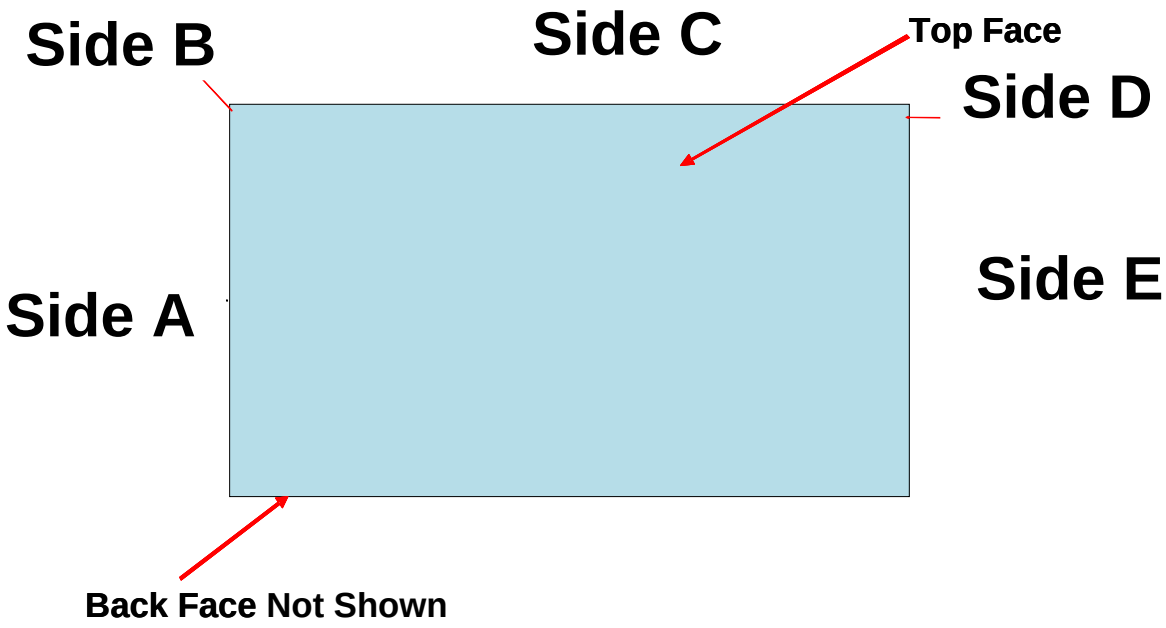
802.11a 5.8 GHz				
Freq	Channel	Data Rate	Antenna	Power
5.745	149	6	Chain 0	13.92
5.765	153	6	Chain 0	13.91
5.785	157	6	Chain 0	13.97
5.805	161	6	Chain 0	13.89
5.825	165	6	Chain 0	13.91
5.745	149	6	Chain 1	13.90
5.765	153	6	Chain 1	13.87
5.785	157	6	Chain 1	13.95
5.805	161	6	Chain 1	13.88
5.825	165	6	Chain 1	13.93
5.745	149	6	Chain 2	13.87
5.765	153	6	Chain 2	13.89
5.785	157	6	Chain 2	13.96
5.805	161	6	Chain 2	13.92
5.825	165	6	Chain 2	13.94

802.11n 5.8 GHz 20 MHz Wide				
Freq	Channel	Data Rate	Antenna	Power
5.745	149	6.5	Chain 0	13.24
5.765	153	6.5	Chain 0	13.22
5.785	157	6.5	Chain 0	13.35
5.805	161	6.5	Chain 0	13.29
5.825	165	6.5	Chain 0	13.21
5.745	149	6.5	Chain 1	13.26
5.765	153	6.5	Chain 1	13.21
5.785	157	6.5	Chain 1	13.33
5.805	161	6.5	Chain 1	13.27
5.825	165	6.5	Chain 1	13.25
5.745	149	6.5	Chain 2	13.19
5.765	153	6.5	Chain 2	13.21
5.785	157	6.5	Chain 2	13.31
5.805	161	6.5	Chain 2	13.26
5.825	165	6.5	Chain 2	13.24

802.11n 5.6 GHz 20 MHz Wide				
Freq	Channel	Data Rate	Antenna	Power
5.50	100	6.5	Chain 0	10.04
5.52	104	6.5	Chain 0	10.09
5.54	108	6.5	Chain 0	10.14
5.56	112	6.5	Chain 0	10.01
5.58	116	6.5	Chain 0	9.97
5.60	120	6.5	Chain 0	9.95
5.62	124	6.5	Chain 0	9.98
5.64	128	6.5	Chain 0	10.06
5.66	132	6.5	Chain 0	10.11
5.68	136	6.5	Chain 0	10.04
5.70	140	6.5	Chain 0	9.96
5.50	100	6.5	Chain 1	10.09
5.52	104	6.5	Chain 1	10.05
5.54	108	6.5	Chain 1	10.03
5.56	112	6.5	Chain 1	10.4
5.58	116	6.5	Chain 1	9.94
5.60	120	6.5	Chain 1	9.98
5.62	124	6.5	Chain 1	9.96
5.64	128	6.5	Chain 1	10.03
5.66	132	6.5	Chain 1	10.07
5.68	136	6.5	Chain 1	9.95
5.70	140	6.5	Chain 1	9.94
5.50	100	6.5	Chain 2	9.99
5.52	104	6.5	Chain 2	10.06
5.54	108	6.5	Chain 2	10.07
5.56	112	6.5	Chain 2	10.13
5.58	116	6.5	Chain 2	10.06
5.60	120	6.5	Chain 2	9.94
5.62	124	6.5	Chain 2	9.93
5.64	128	6.5	Chain 2	9.98
5.66	132	6.5	Chain 2	10.05
5.68	136	6.5	Chain 2	10.09
5.70	140	6.5	Chain 2	10.10

802.11n 5.8 GHz 40 MHz Wide				
Freq	Channel	Data Rate	Antenna	Power
5.76	152	13.5	Chain 0	12.32
5.80	160	13.5	Chain 0	12.46
5.76	152	13.5	Chain 1	12.35
5.80	160	13.5	Chain 1	12.42
5.76	152	13.5	Chain 2	12.31
5.80	160	13.5	Chain 2	12.40

10. SAR Identification Location



SAR Data Summary – 2450 MHz Body

MEASUREMENT RESULTS								
Gap	Module/ Antenna	Position	Frequency		Modulation	End Power	SAR (W/kg)	
			MHz	Ch.		(dBm)		
0 mm	Left/ Chain 2	Back Face	2437	6	DSSS	12.82	0.171	
		Side A	2437	6	DSSS	12.82	0.333	
		Side B	2437	6	DSSS	12.82	0.159	
		Side C	2437	6	DSSS	12.82	0.154	
	Left/ Chain 1	Back Face	2437	6	DSSS	12.74	0.255	
		Side A	2437	6	DSSS	12.74	0.626	
	Left/ Chain 0	Back Face	2437	6	DSSS	12.83	0.256	
		Side A	2437	6	DSSS	12.83	0.591	
	Right/ Chain 2	Back Face	2437	6	DSSS	12.82	0.371	
		Side E	2437	6	DSSS	12.82	0.313	
	Right/ Chain 0	Back Face	2437	6	DSSS	12.83	0.198	
		Side C	2437	6	DSSS	12.83	0.789	
		Side D	2437	6	DSSS	12.83	0.304	
		Side E	2437	6	DSSS	12.83	0.158	
	Right/ Chain 1	Back Face	2437	6	DSSS	12.74	0.174	
		Side E	2437	6	DSSS	12.74	0.350	
						Body **1.6 W/kg (mW/g)** averaged over 1 gram		

1. Battery is fully charged for all tests.
   Power Measured ☒Conducted ☐ERP ☐EIRP
2. SAR Measurement
   Phantom Configuration ☐Left Head ☒Uniphantom ☐Right Head
   SAR Configuration ☐Head ☒Body
3. Test Signal Call Mode ☒Test Code ☐Base Station Simulator
4. Test Configuration ☐With Belt Clip ☐Without Belt Clip ☒N/A
5. Tissue Depth is at least 15.0 cm

Jay M. Moulton
Vice President

Note: When the mid channel is 3 dB or more below the limit the remaining channels are not required to be tested per KDB 447498 section 1) e). See the photo in Appendix C for a pictorial of the setups, labeling of the sides tested and antenna locations.

SAR Data Summary – 5150 MHz Body

MEASUREMENT RESULTS								
Gap	Module/ Antenna	Position	Frequency		Modulation	End Power	SAR (W/kg)	
			MHz	Ch.		(dBm)		
0 mm	Left/ Chain 2	Back Face	5240	48	OFDM	11.86	0.230	
		Side A	5240	48	OFDM	11.86	0.545	
		Side B	5240	48	OFDM	11.86	0.444	
		Side C	5240	48	OFDM	11.86	0.451	
	Left/ Chain 1	Back Face	5240	48	OFDM	11.85	0.405	
		Side A	5240	48	OFDM	11.85	0.532	
	Left/ Chain 0	Back Face	5240	48	OFDM	11.84	0.503	
		Side A	5240	48	OFDM	11.84	0.561	
	Right/ Chain 2	Back Face	5240	48	OFDM	11.86	0.494	
		Side E	5240	48	OFDM	11.86	0.451	
	Right/ Chain 0	Back Face	5240	48	OFDM	11.84	0.463	
		Side C	5240	48	OFDM	11.84	0.451	
		Side D	5240	48	OFDM	11.84	0.463	
		Side E	5240	48	OFDM	11.84	0.450	
	Right/ Chain 1	Back Face	5240	48	OFDM	11.85	0.437	
		Side E	5240	48	OFDM	11.85	0.454	
						Body 1.6 W/kg (mW/g) averaged over 1 gram		

1. Battery is fully charged for all tests.
   Power Measured ☒Conducted ☐ERP ☐EIRP
2. SAR Measurement
   Phantom Configuration ☐Left Head ☒Uniphantom ☐Right Head
   SAR Configuration ☐Head ☒Body
3. Test Signal Call Mode ☒Test Code ☐Base Station Simulator
4. Test Configuration ☐With Belt Clip ☐Without Belt Clip ☒N/A
5. Tissue Depth is at least 15.0 cm

Jay M. Moulton
Vice President

Note: When the mid channel is 3 dB or more below the limit the remaining channels are not required to be tested per KDB 447498 section 1) e). See the photo in Appendix C for a pictorial of the setups, labeling of the sides tested and antenna locations.

SAR Data Summary – 5250 MHz Body

MEASUREMENT RESULTS							
Gap	Module/ Antenna	Position	Frequency		Modulation	End Power	SAR (W/kg)
			MHz	Ch.		(dBm)	
0 mm	Left/ Chain 2	Back Face	5260	52	OFDM	11.84	0.260
		Side A	5260	52	OFDM	11.84	0.539
		Side B	5260	52	OFDM	11.84	0.546
		Side C	5260	52	OFDM	11.84	0.538
	Left/ Chain 1	Back Face	5260	52	OFDM	11.87	0.351
		Side A	5260	52	OFDM	11.87	0.536
	Left/ Chain 0	Back Face	5260	52	OFDM	11.81	0.361
		Side A	5260	52	OFDM	11.81	0.598
	Right/ Chain 2	Back Face	5260	52	OFDM	11.84	0.498
		Side E	5260	52	OFDM	11.84	0.455
	Right/ Chain 0	Back Face	5260	52	OFDM	11.81	0.443
		Side C	5260	52	OFDM	11.81	0.472
		Side D	5260	52	OFDM	11.81	0.457
		Side E	5260	52	OFDM	11.81	0.468
	Right/ Chain 1	Back Face	5260	52	OFDM	11.87	0.452
		Side E	5260	52	OFDM	11.87	0.481
					Body 1.6 W/kg (mW/g) averaged over 1 gram		

1. Battery is fully charged for all tests.
   Power Measured ☒Conducted ☐ERP ☐EIRP
2. SAR Measurement
   Phantom Configuration ☐Left Head ☒Uniphantom ☐Right Head
   SAR Configuration ☐Head ☒Body
3. Test Signal Call Mode ☒Test Code ☐Base Station Simulator
4. Test Configuration ☐With Belt Clip ☐Without Belt Clip ☒N/A
5. Tissue Depth is at least 15.0 cm

Jay M. Moulton
Vice President

Note: When the mid channel is 3 dB or more below the limit the remaining channels are not required to be tested per KDB 447498 section 1) e). See the photo in Appendix C for a pictorial of the setups, labeling of the sides tested and antenna locations.

SAR Data Summary – 5600 MHz Body

MEASUREMENT RESULTS							
Gap	Module/ Antenna	Position	Frequency		Modulation	End Power	SAR (W/kg)
			MHz	Ch.		(dBm)	
0 mm	Left/ Chain 2	Back Face	5580	116	OFDM	13.93	0.626
		Side A	5580	116	OFDM	13.93	0.620
		Side B	5580	116	OFDM	13.93	0.602
		Side C	5580	116	OFDM	13.93	0.608
	Left/ Chain 1	Back Face	5580	116	OFDM	13.91	0.621
		Side A	5580	116	OFDM	13.91	0.608
	Left/ Chain 0	Back Face	5580	116	OFDM	13.92	0.556
		Side A	5580	116	OFDM	13.92	0.568
	Right/ Chain 2	Back Face	5580	116	OFDM	13.93	0.577
		Side E	5580	116	OFDM	13.93	0.622
	Right/ Chain 0	Back Face	5580	116	OFDM	13.92	0.560
		Side C	5580	116	OFDM	13.92	0.590
		Side D	5580	116	OFDM	13.92	0.555
		Side E	5580	116	OFDM	13.92	0.504
	Right/ Chain 1	Back Face	5580	116	OFDM	13.91	0.529
		Side E	5580	116	OFDM	13.91	0.546
					Body 1.6 W/kg (mW/g) averaged over 1 gram		

1. Battery is fully charged for all tests.
   Power Measured ☒Conducted ☐ERP ☐EIRP
2. SAR Measurement
   Phantom Configuration ☐Left Head ☒Uniphantom ☐Right Head
   SAR Configuration ☐Head ☒Body
3. Test Signal Call Mode ☒Test Code ☐Base Station Simulator
4. Test Configuration ☐With Belt Clip ☐Without Belt Clip ☒N/A
5. Tissue Depth is at least 15.0 cm

Jay M. Moulton
Vice President

Note: When the mid channel is 3 dB or more below the limit the remaining channels are not required to be tested per KDB 447498 section 1) e). See the photo in Appendix C for a pictorial of the setups, labeling of the sides tested and antenna locations.

SAR Data Summary – 5800 MHz Body

MEASUREMENT RESULTS							
Gap	Module/ Antenna	Position	Frequency		Modulation	End Power	SAR (W/kg)
			MHz	Ch.		(dBm)	
0 mm	Left/ Chain 2	Back Face	5785	157	OFDM	13.96	0.595
		Side A	5785	157	OFDM	13.96	0.608
		Side B	5785	157	OFDM	13.96	0.599
		Side C	5785	157	OFDM	13.96	0.590
	Left/ Chain 1	Back Face	5785	157	OFDM	13.95	0.584
		Side A	5785	157	OFDM	13.95	0.594
	Left/ Chain 0	Back Face	5785	157	OFDM	13.97	0.611
		Side A	5785	157	OFDM	13.97	0.611
	Right/ Chain 2	Back Face	5785	157	OFDM	13.96	0.587
		Side E	5785	157	OFDM	13.96	0.612
	Right/ Chain 0	Back Face	5785	157	OFDM	13.97	0.598
		Side C	5785	157	OFDM	13.97	0.613
		Side D	5785	157	OFDM	13.97	0.603
		Side E	5785	157	OFDM	13.97	0.596
	Right/ Chain 1	Back Face	5785	157	OFDM	13.95	0.608
		Side E	5785	157	OFDM	13.95	0.594
					Body 1.6 W/kg (mW/g) averaged over 1 gram		

1. Battery is fully charged for all tests.
   Power Measured ☒Conducted ☐ERP ☐EIRP
2. SAR Measurement
   Phantom Configuration ☐Left Head ☒Uniphantom ☐Right Head
   SAR Configuration ☐Head ☒Body
3. Test Signal Call Mode ☒Test Code ☐Base Station Simulator
4. Test Configuration ☐With Belt Clip ☐Without Belt Clip ☒N/A
5. Tissue Depth is at least 15.0 cm

Jay M. Moulton
Vice President

Note: When the mid channel is 3 dB or more below the limit the remaining channels are not required to be tested per KDB 447498 section 1) e). See the photo in Appendix C for a pictorial of the setups, labeling of the sides tested and antenna locations.

11. Test Equipment List

Table 11.1 Equipment Specifications

Type	Calibration Due Date	Serial Number
ThermoCRS Robot	N/A	RAF0338198
ThermoCRS Controller	N/A	RCF0338224
ThermoCRS Teach Pendant (Joystick)	N/A	STP0334405
IBM Computer, 2.66 MHz P4	N/A	8189D8U KCPR08N
Aprel E-Field Probe ALS-E020	09/22/2011	RFE-215
Aprel E-Field Probe ALS-E030	07/12/2011	E030-001
Aprel Dummy Probe	N/A	023
Aprel Left Phantom	N/A	RFE-267
Aprel Right Phantom	N/A	RFE-268
Aprel UniPhantom	N/A	RFE-273
Aprel Valid. Dipole ALS-D-450-S-2 – Head	01/12/2012	RFE-362
Aprel Valid. Dipole ALS-D-450-S-2 – Body	01/19/2012	RFE-362
Aprel Valid. Dipole ALS-D-835-S-2 – Head	01/14/2012	180-00561
Aprel Valid. Dipole ALS-D-835-S-2 – Body	11/16/2011	180-00561
Aprel Valid. Dipole ALS-D-900-S-2 – Head	01/12/2012	RFE-275
Aprel Valid. Dipole ALS-D-900-S-2 – Body	11/19/2011	RFE-275
Aprel Valid. Dipole ALS-D-1900-S-2 – Head	01/15/2012	210-00713
Aprel Valid. Dipole ALS-D-1900-S-2 – Body	11/16/2011	210-00713
Aprel Valid. Dipole ALS-D-2450-S-2 – Head	01/12/2012	RFE-278
Aprel Valid. Dipole ALS-D-2450-S-2 – Body	11/18/2011	RFE-278
Aprel Valid. Dipole RFE-D-2600-S-2 – Body	01/18/2012	RFE-121
Aprel Valid. Dipole RFE-D-BB-S-2 – Body	01/19/2012	235-00801
Agilent (HP) 437B Power Meter	03/24/2011	3125U08837
Agilent (HP) 8481B Power Sensor	03/24/2011	3318A05384
Advantest R3261A Spectrum Analyzer	03/24/2011	31720068
Agilent (HP) 8350B Signal Generator	04/19/2011	2749A10226
Agilent (HP) 83525A RF Plug-In	04/19/2011	2647A01172
Agilent (HP) 8753C Vector Network Analyzer	03/25/2011	3135A01724
Agilent (HP) 85047A S-Parameter Test Set	03/25/2011	2904A00595
Agilent (HP) E55125C Base Station Sim.	03/25/2012	MY48360364
Aprel Dielectric Probe Assembly	N/A	0011
Head Equivalent Matter (450 MHz)	N/A	N/A
Head Equivalent Matter (835 MHz)	N/A	N/A
Head Equivalent Matter (1900 MHz)	N/A	N/A
Head Equivalent Matter (2450 MHz)	N/A	N/A
Body Equivalent Matter (450 MHz)	N/A	N/A
Body Equivalent Matter (835 MHz)	N/A	N/A
Body Equivalent Matter (1900 MHz)	N/A	N/A
Body Equivalent Matter (2450 MHz)	N/A	N/A
Body Equivalent Matter (5200 MHz)	N/A	N/A
Body Equivalent Matter (5800 MHz)	N/A	N/A

12. Conclusion

The SAR measurement indicates that the EUT complies with the RF radiation exposure limits of the FCC. These measurements are taken to simulate the RF effects exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The tested device complies with the requirements in respect to all parameters subject to the test. The test results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body is a very complex phenomena that depends on the mass, shape, and size of the body; the orientation of the body with respect to the field vectors; and, the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because innumerable factors may interact to determine the specific biological outcome of an exposure to electromagnetic fields, any protection guide shall consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables.

13. References

[1] Federal Communications Commission, ET Docket 93-62, Guidelines for Evaluating the Environmental Effects of Radio Frequency Radiation, August 1996

[2] ANSI/IEEE C95.1 – 1992, American National Standard Safety Levels with respect to Human Exposure to Radio Frequency Electromagnetic Fields, 300kHz to 100GHz, New York: IEEE, 1992.

[3] ANSI/IEEE C95.3 – 1992, IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave, New York: IEEE, 1992.

[4] Federal Communications Commission, OET Bulletin 65 (Edition 97-01), Supplement C (Edition 01-01), Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields, June 2001.

[5] IEEE Standard 1528 – 2003, IEEE Recommended Practice for Determining the Peak-Spatial Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communication Devices: Measurement Techniques, October 2003.

[6] Industry Canada, RSS – 102e, Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands), March 2010.

[7] Health Canada, Safety Code 6, Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3kHz to 300 GHz, 2009.

Appendix A – System Validation Plots and Data

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**********************************************************
Test Result for UIM Dielectric Parameter
Mon 31/Jan/2011 09:00:27
Freq  Frequency(GHz)
FCC_eH      FCC Bulletin 65 Supplement C ( June 2001) Limits for Head Epsilon
FCC_sH      FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB      FCC Limits for Body Epsilon
FCC_sB      FCC Limits for Body Sigma
Test_e      Epsilon  of  UIM
Test_s      Sigma of UIM
**********************************************************
Freq        FCC_eB      FCC_sB      Test_e      Test_s
2.4200      52.74       1.92        52.29       1.92
2.4300      52.73       1.93        52.26       1.94
2.4400      52.71       1.94        52.24       1.95
2.4500      52.70       1.95        52.22       1.96
2.4600      52.69       1.96        52.20       1.97
2.4700      52.67       1.98        52.17       1.99
2.4800      52.66       1.99        52.15       2.01
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**********************************************************
Test Result for UIM Dielectric Parameter
Tue 01/Feb/2011 07:08:36
Freq  Frequency(GHz)
FCC_eH      FCC Bulletin 65 Supplement C ( June 2001) Limits for Head Epsilon
FCC_sH      FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB      FCC Limits for Body Epsilon
FCC_sB      FCC Limits for Body Sigma
Test_e      Epsilon  of  UIM
Test_s      Sigma of UIM
**********************************************************
Freq        FCC_eB      FCC_sB      Test_e      Test_s
5.2200      48.99       5.32        47.60       5.36
5.2300      48.97       5.33        47.57       5.37
5.2400      48.96       5.35        47.55       5.40
5.2500      48.95       5.36        48.53       5.41
5.2600      48.93       5.37        47.51       5.42
5.2700      48.92       5.38        47.49       5.44
5.2800      48.91       5.39        47.47       5.45
```

```
**********************************************************
Test Result for UIM Dielectric Parameter
Wed 02/Feb/2011 07:12:18
Freq  Frequency(GHz)
FCC_eH      FCC Bulletin 65 Supplement C ( June 2001) Limits for Head Epsilon
FCC_sH      FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB      FCC Limits for Body Epsilon
FCC_sB      FCC Limits for Body Sigma
Test_e      Epsilon  of  UIM
Test_s      Sigma of UIM
**********************************************************
```

Freq	FCC_eB	FCC_sB	Test_e	Test_s
5.2200	48.99	5.32	47.79	5.37
5.2300	48.97	5.33	47.75	5.39
5.2400	48.96	5.35	47.73	5.41
5.2500	48.95	5.36	48.71	5.42
5.2600	48.93	5.37	47.68	5.43
5.2700	48.92	5.38	47.66	5.44
5.2800	48.91	5.39	47.63	5.45

```
**********************************************************
Test Result for UIM Dielectric Parameter
Wed 02/Feb/2011 03:27:34
Freq  Frequency(GHz)
FCC_eH      FCC Bulletin 65 Supplement C ( June 2001) Limits for Head Epsilon
FCC_sH      FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB      FCC Limits for Body Epsilon
FCC_sB      FCC Limits for Body Sigma
Test_e      Epsilon  of  UIM
Test_s      Sigma of UIM
**********************************************************
```

Freq	FCC_eB	FCC_sB	Test_e	Test_s
5.5700	48.51	5.73	48.63	5.85
5.5800	48.50	5.74	48.61	5.87
5.5900	48.48	5.75	48.59	5.89
5.6000	48.47	5.77	48.57	5.91
5.6100	48.46	5.78	48.56	5.93
5.6200	48.44	5.79	48.54	5.95
5.6300	48.43	5.80	48.52	5.97

```
**********************************************************
Test Result for UIM Dielectric Parameter
Thu 03/Feb/2011 06:54:51
Freq  Frequency(GHz)
FCC_eH      FCC Bulletin 65 Supplement C ( June 2001) Limits for Head Epsilon
FCC_sH      FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB      FCC Limits for Body Epsilon
FCC_sB      FCC Limits for Body Sigma
Test_e      Epsilon  of  UIM
Test_s      Sigma of UIM
**********************************************************
Freq        FCC_eB      FCC_sB      Test_e      Test_s
5.5700            48.51 5.73  48.42 5.85
5.5800            48.50 5.74  48.40 5.87
5.5900            48.48 5.75  48.37 5.89
5.6000            48.47 5.77  48.35 5.92
5.6100            48.46 5.78  48.33 5.93
5.6200            48.44 5.79  48.31 5.95
5.6300            48.43 5.80  48.29 5.97



**********************************************************
Test Result for UIM Dielectric Parameter
Thu 03/Feb/2011 11:28:36
Freq  Frequency(GHz)
FCC_eH      FCC Bulletin 65 Supplement C ( June 2001) Limits for Head Epsilon
FCC_sH      FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB      FCC Limits for Body Epsilon
FCC_sB      FCC Limits for Body Sigma
Test_e      Epsilon  of  UIM
Test_s      Sigma of UIM
**********************************************************
Freq        FCC_eB      FCC_sB      Test_e      Test_s
5.7550      48.26       5.95        48.18       5.95
5.7650      48.25       5.96        48.16       5.96
5.7750      48.23       5.97        48.14       5.98
5.7850      48.22       5.98        48.12       5.99
5.7950      48.21       5.99        48.10       6.01
5.8050      48.19       6.01        48.07       6.02
5.8150      48.18       6.02        48.05       6.03
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 31-Jan-2011
Starting Time     : 31-Jan-2011  09:08:22 AM
End Time          : 31-Jan-2011  09:21:17 AM
Scanning Time     : 775 secs

Product Data
Device Name       : Validation
Serial No.        : 2450
Type              : Dipole
Model             : ALS-D-2450-S-2
Frequency         : 2450.00 MHz
Max. Transmit Pwr : 0.1 W
Drift Time        : 0 min(s)
Length            : 51.5 mm
Width             : 3.6 mm
Depth             : 30.4 mm
Antenna Type      : Internal
Orientation       : Touch
Power Drift-Start : 5.906 W/kg
Power Drift-Finish: 5.871 W/kg
Power Drift (%)   : -0.582

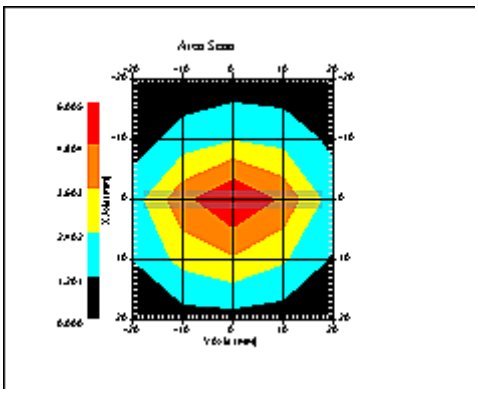
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 2450
Frequency         : 2450.00 MHz
Last Calib. Date  : 31-Jan-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 45.00 RH%
Epsilon           : 52.21 F/m
Sigma             : 1.96 S/m
Density           : 1000.00 kg/cu. m

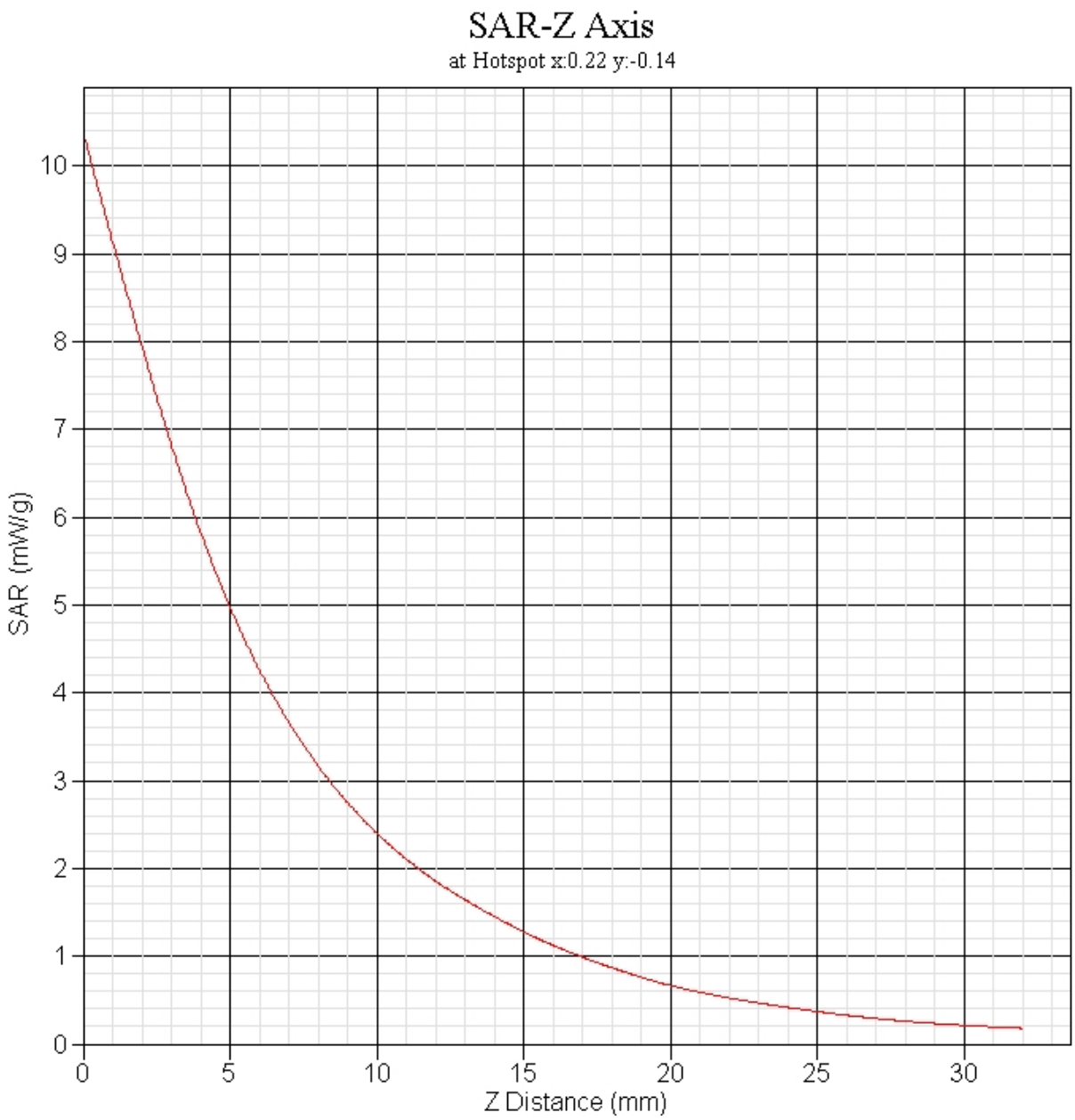
Probe Data
Name              : Probe 215 - RFEL
Model             : E020
Type              : E-Field Triangle
Serial No.        : 215
Last Calib. Date  : 22-Sep-2010
Frequency         : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.56 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 7:40:13 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Touch
Separation        : 10 mm
Channel           : Mid
```



```
1 gram SAR value    : 5.024 W/kg
10 gram SAR value   : 2.300 W/kg
Area Scan Peak SAR  : 6.005 W/kg
Zoom Scan Peak SAR  : 10.380 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 01-Feb-2011
Starting Time : 01-Feb-2011 07:14:38 AM
End Time : 01-Feb-2011 07:27:51 AM
Scanning Time : 793 secs

Product Data
Device Name : Validation
Serial No. : 5200
Type : Dipole
Model : ALS-D-BB-S-2
Frequency : 5200.00 MHz
Max. Transmit Pwr : 0.1 W
Drift Time : 0 min(s)
Length : 23.1 mm
Width : 3.6 mm
Depth : 20.7 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 8.608 W/kg
Power Drift-Finish: 8.639 W/kg
Power Drift (%) : 0.358

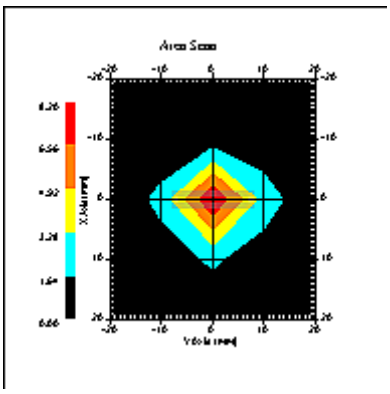
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 01-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.53 F/m
Sigma : 5.41 S/m
Density : 1000.00 kg/cu. m

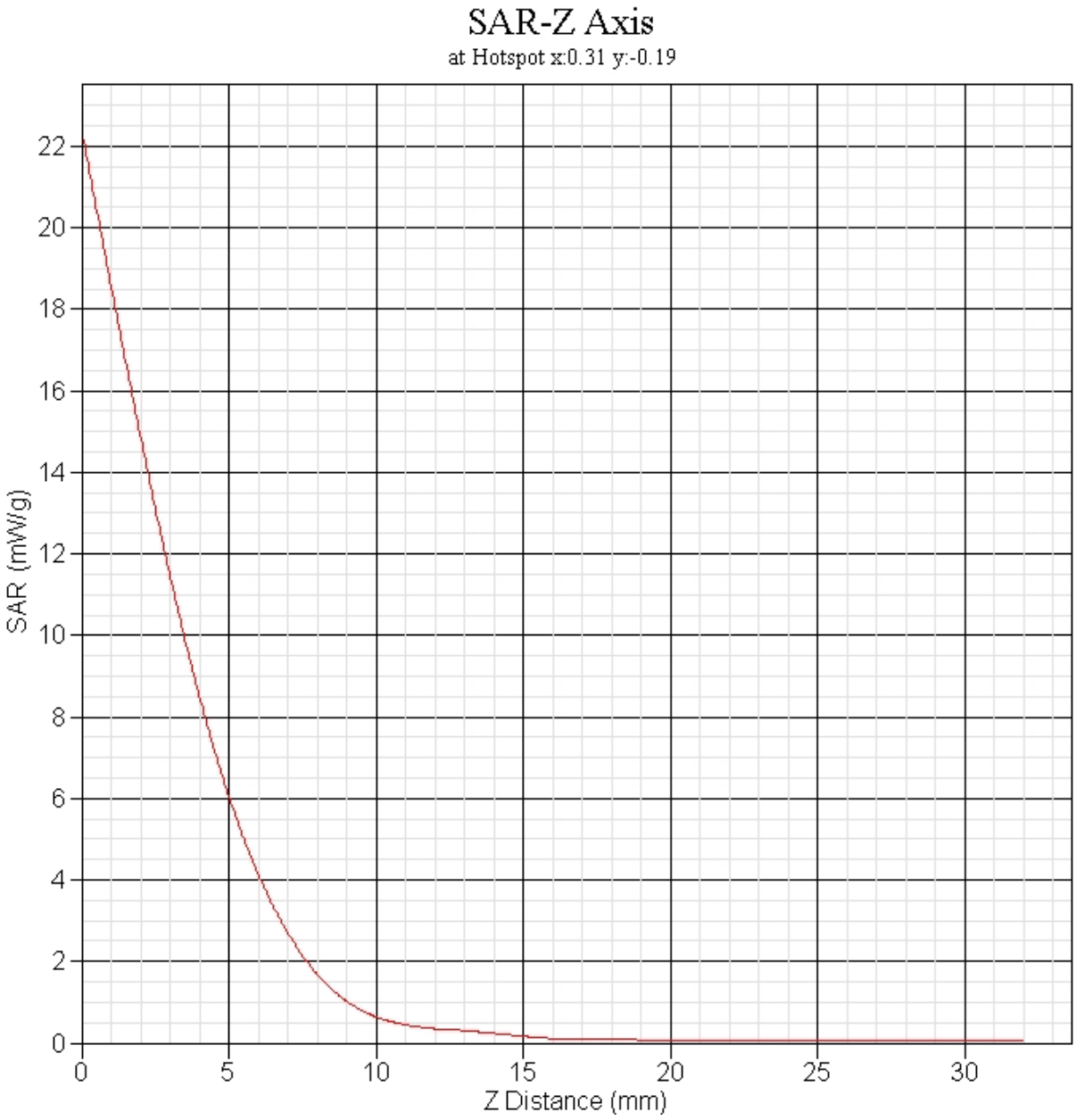
Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 0.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 9:00:47 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Touch
Separation        : 10 mm
Channel           : Mid
```



```
1 gram SAR value    : 6.051 W/kg
10 gram SAR value   : 1.949 W/kg
Area Scan Peak SAR  : 8.199 W/kg
Zoom Scan Peak SAR  : 22.418 W/kg
```



SAR Test Report

```
By Operator       : Jay
Measurement Date  : 02-Feb-2011
Starting Time     : 02-Feb-2011  07:19:43 AM
End Time          : 02-Feb-2011  07:32:59 AM
Scanning Time     : 796 secs

Product Data
Device Name       : Validation
Serial No.        : 5200
Type              : Dipole
Model             : ALS-D-BB-S-2
Frequency         : 5200.00 MHz
Max. Transmit Pwr : 0.1 W
Drift Time        : 0 min(s)
Length            : 23.1 mm
Width             : 3.6 mm
Depth             : 20.7 mm
Antenna Type      : Internal
Orientation       : Touch
Power Drift-Start : 8.662 W/kg
Power Drift-Finish: 8.729 W/kg
Power Drift (%)   : 0.776

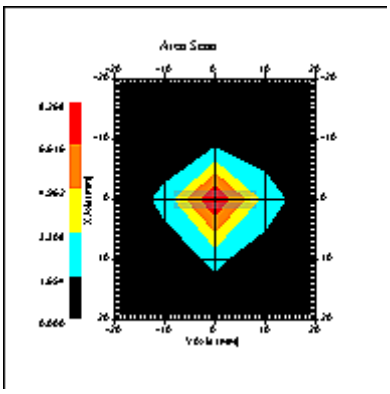
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5200
Frequency         : 5200.00 MHz
Last Calib. Date  : 02-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.71 F/m
Sigma             : 5.42 S/m
Density           : 1000.00 kg/cu. m

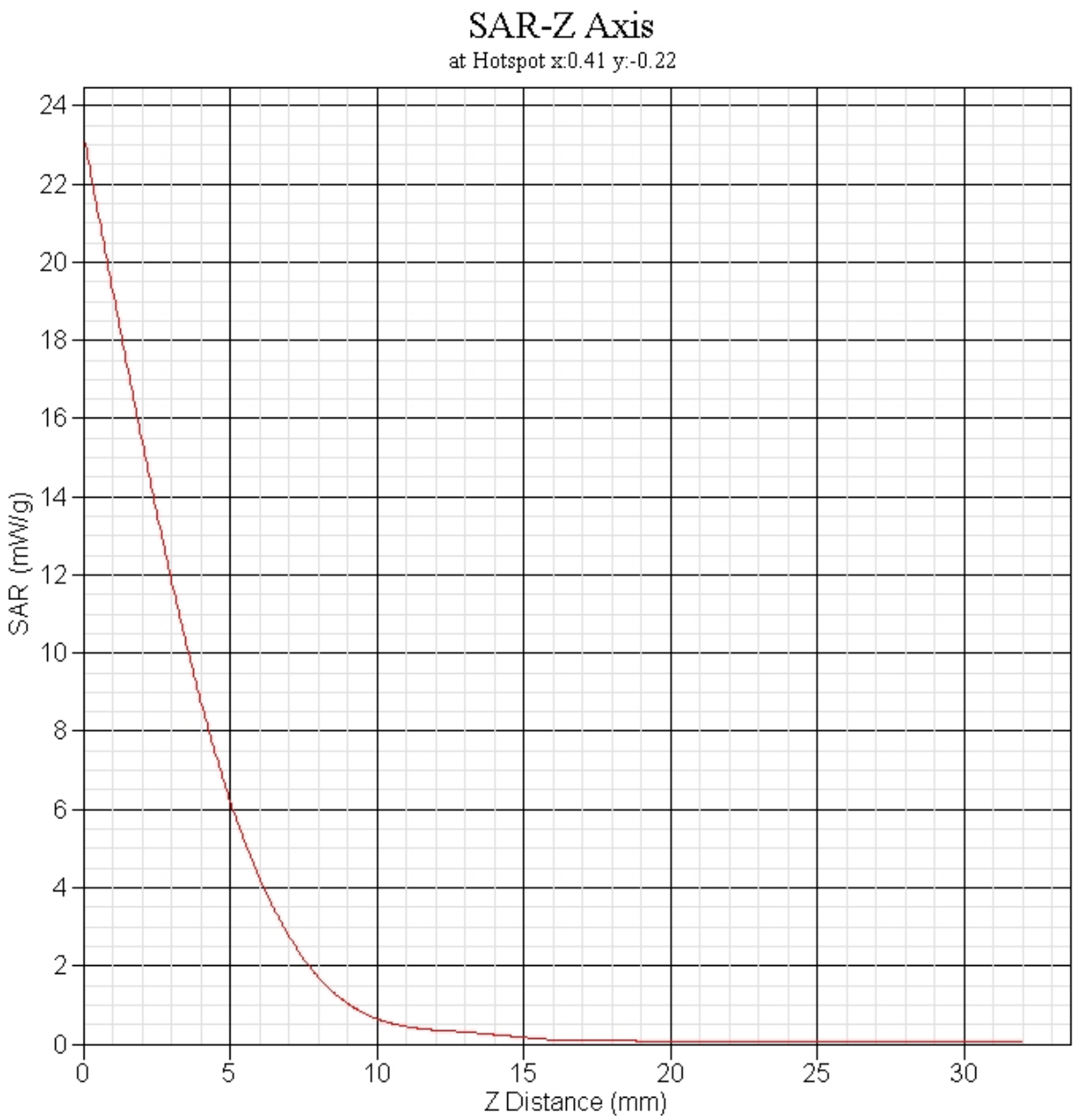
Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 0.56 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 9:00:47 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Touch
Separation        : 10 mm
Channel           : Mid
```



```
1 gram SAR value    : 6.227 W/kg
10 gram SAR value   : 1.983 W/kg
Area Scan Peak SAR  : 8.268 W/kg
Zoom Scan Peak SAR  : 23.318 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 03:37:38 PM
End Time : 02-Feb-2011 03:50:36 PM
Scanning Time : 778 secs

Product Data
Device Name : Validation
Serial No. : 5600
Type : Dipole
Model : ALS-D-BB-S-2
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.1 W
Drift Time : 0 min(s)
Length : 23.1 mm
Width : 3.6 mm
Depth : 20.7 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 8.510 W/kg
Power Drift-Finish: 8.512 W/kg
Power Drift (%) : 0.031

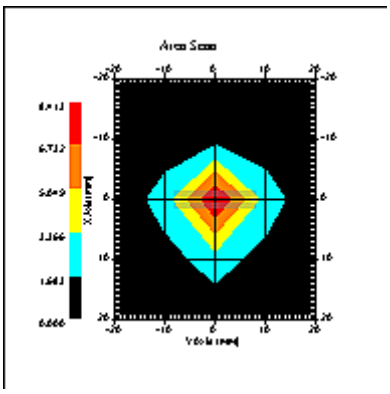
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.57 F/m
Sigma : 5.91 S/m
Density : 1000.00 kg/cu. m

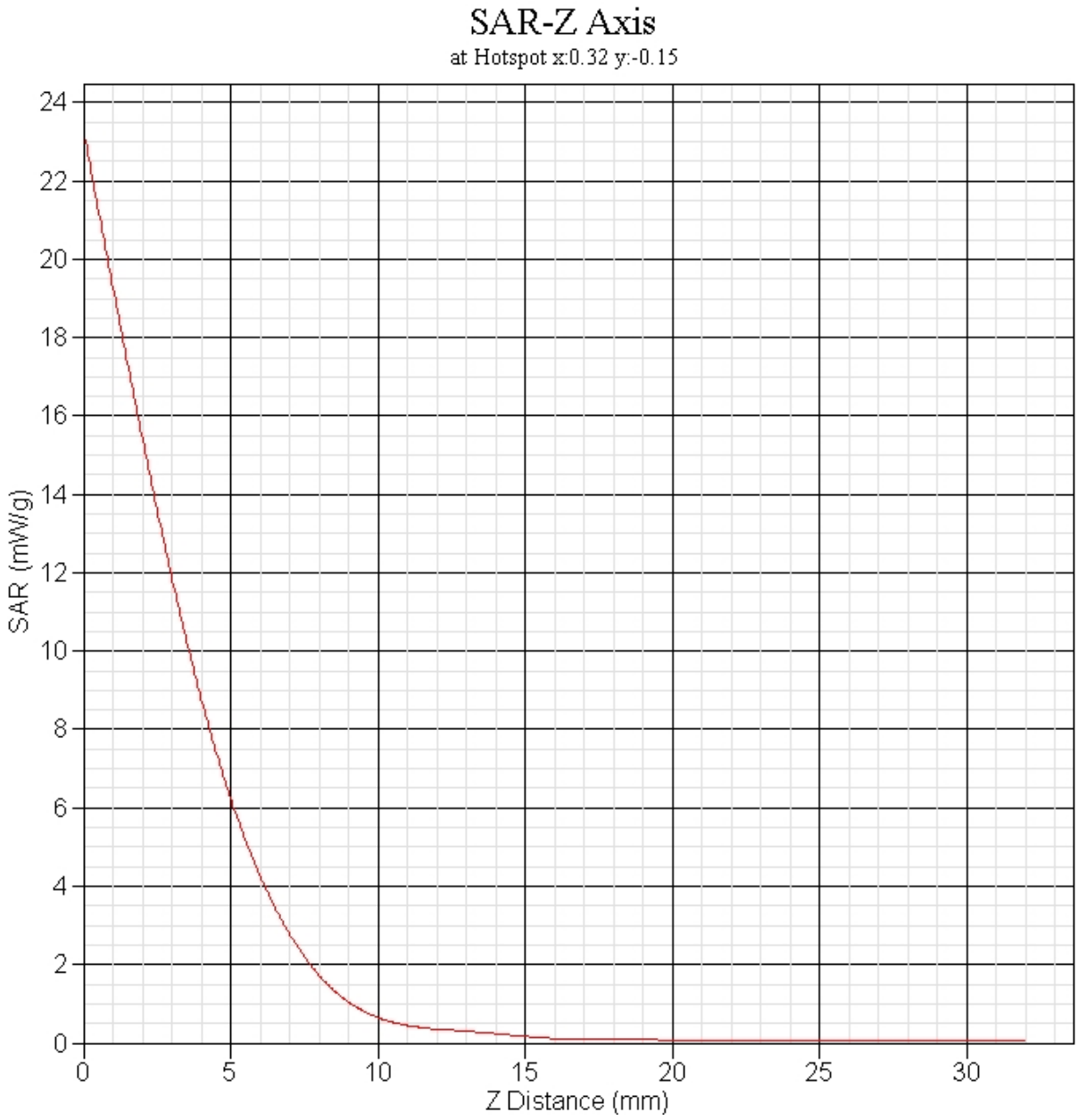
Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 0.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 8:54:57 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Touch
Separation        : 10 mm
Channel           : Mid
```



```
1 gram SAR value    : 6.442 W/kg
10 gram SAR value   : 2.037 W/kg
Area Scan Peak SAR  : 8.413 W/kg
Zoom Scan Peak SAR  : 23.318 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 03-Feb-2011
Starting Time : 03-Feb-2011 07:11:39 AM
End Time : 03-Feb-2011 07:24:27 AM
Scanning Time : 768 secs

Product Data
Device Name : Validation
Serial No. : 5600
Type : Dipole
Model : ALS-D-BB-S-2
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.1 W
Drift Time : 0 min(s)
Length : 23.1 mm
Width : 3.6 mm
Depth : 20.7 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 8.011 W/kg
Power Drift-Finish: 8.090 W/kg
Power Drift (%) : 0.984

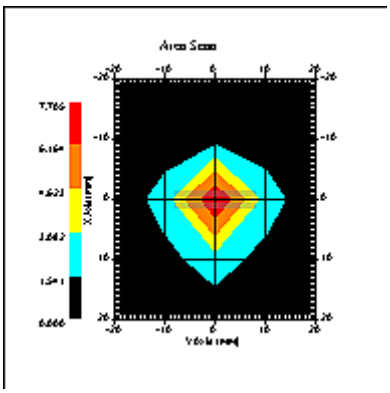
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 03-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.35 F/m
Sigma : 5.92 S/m
Density : 1000.00 kg/cu. m

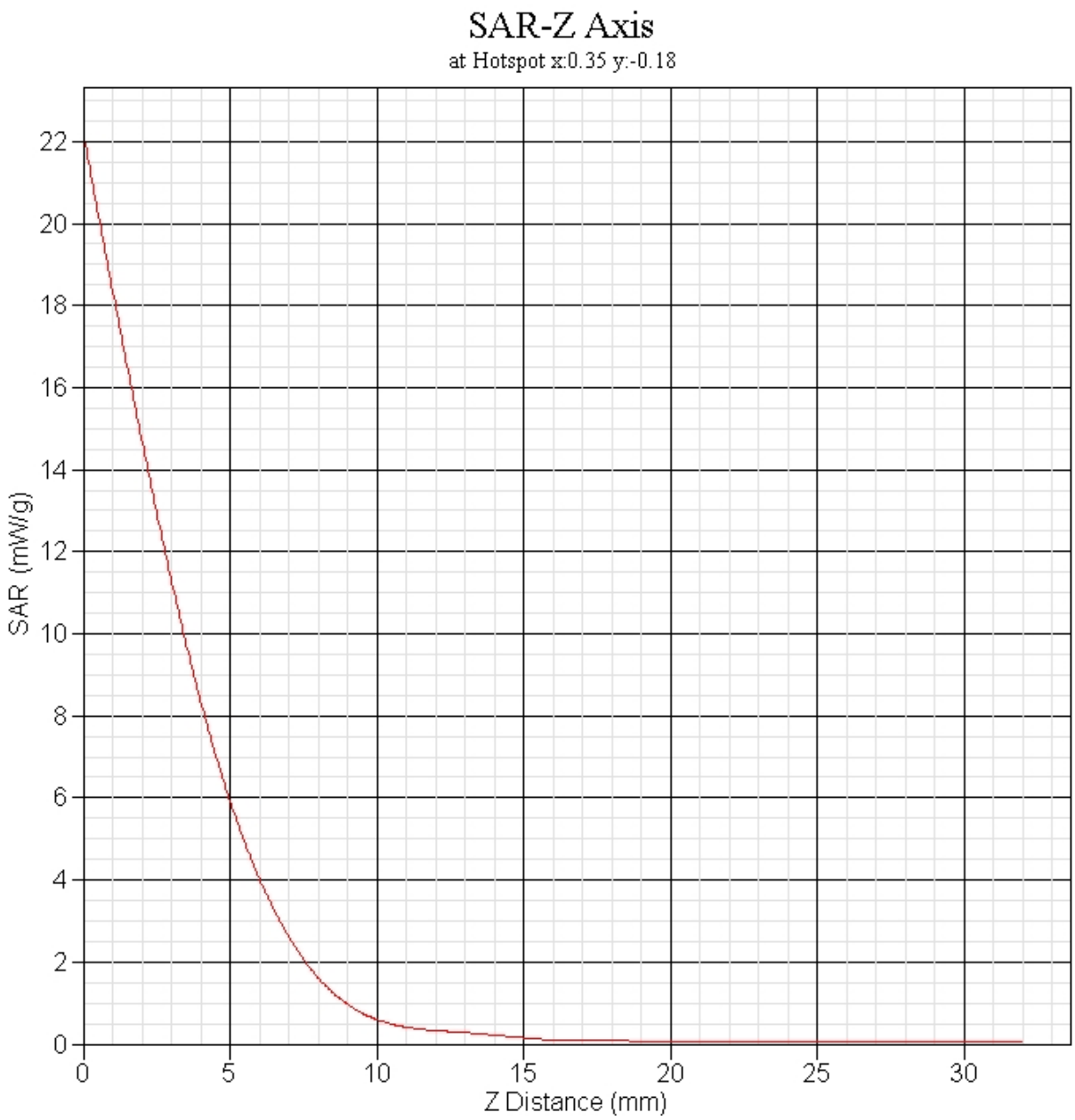
Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 0.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 8:54:57 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Touch
Separation        : 10 mm
Channel           : Mid
```



```
1 gram SAR value    : 6.228 W/kg
10 gram SAR value   : 2.156 W/kg
Area Scan Peak SAR  : 7.705 W/kg
Zoom Scan Peak SAR  : 22.217 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 03-Feb-2011
Starting Time : 03-Feb-2011 11:43:39 AM
End Time : 03-Feb-2011 11:56:30 AM
Scanning Time : 771 secs

Product Data
Device Name : Validation
Serial No. : 5800
Type : Dipole
Model : ALS-D-BB-S-2
Frequency : 5800.00 MHz
Max. Transmit Pwr : 0.1 W
Drift Time : 0 min(s)
Length : 23.1 mm
Width : 3.6 mm
Depth : 20.7 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 7.479 W/kg
Power Drift-Finish: 7.493 W/kg
Power Drift (%) : 0.189

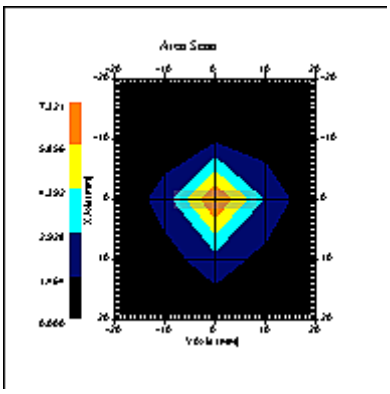
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5800
Frequency : 5800.00 MHz
Last Calib. Date : 03-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.12 F/m
Sigma : 5.99 S/m
Density : 1000.00 kg/cu. m

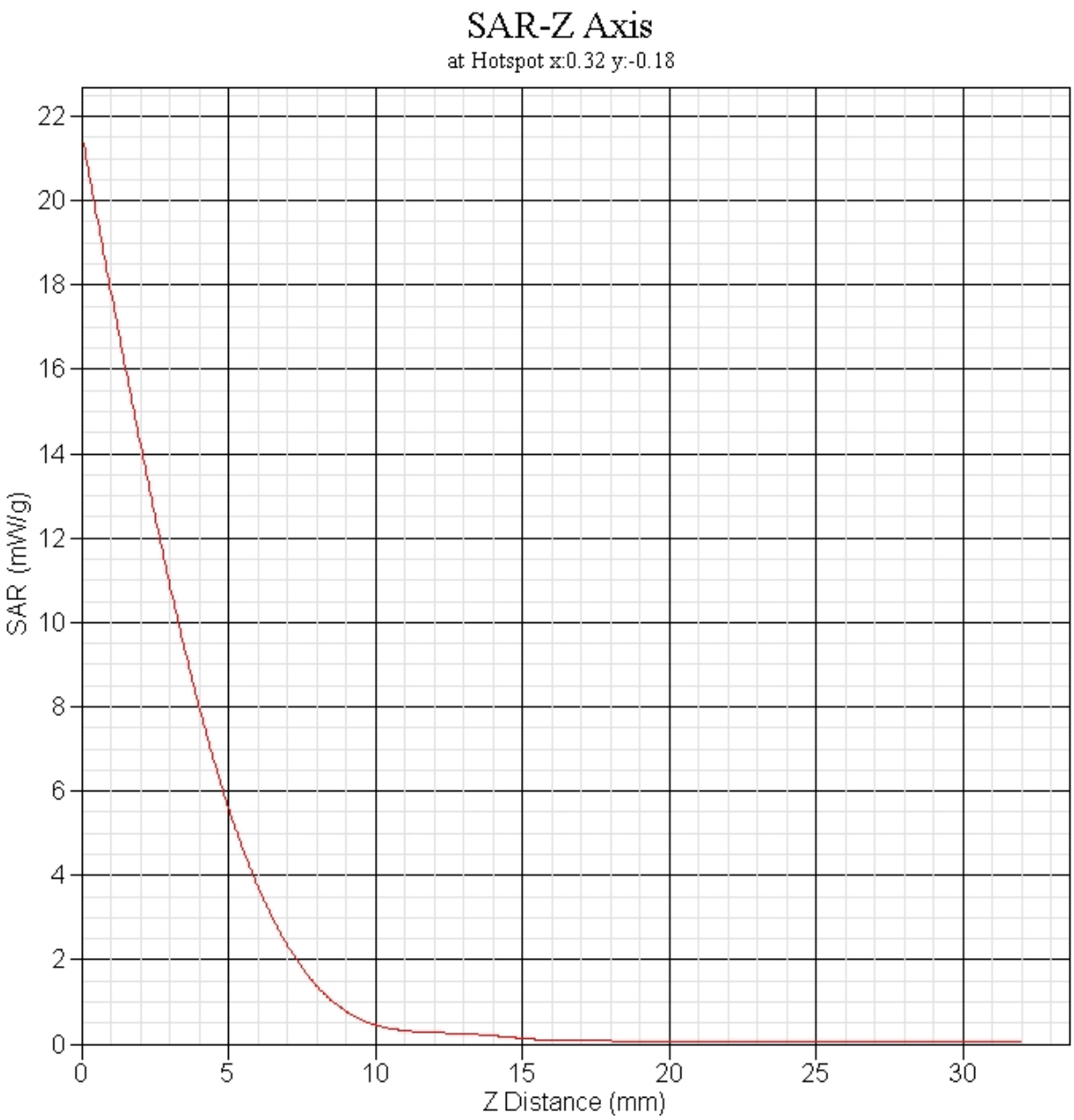
Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 0.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 4:10:18 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Touch
Separation        : 10 mm
Channel           : Mid
```



```
1 gram SAR value    : 6.008 W/kg
10 gram SAR value   : 1.997 W/kg
Area Scan Peak SAR  : 7.321 W/kg
Zoom Scan Peak SAR  : 21.617 W/kg
```



Appendix B – SAR Test Data Plots

Note: In all data sheets in Appendix B, the frequency noted in the 'Product Data' section is the frequency band which the device was transmitting. This frequency does not refer to the actual frequency and channel of the test. The channel is listed in the 'Other Data' section of the data sheet as Low, Mid or High. The actual test frequency is listed in Section 10 in each of the data summary sheets.

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 31-Jan-2011
Starting Time     : 31-Jan-2011  10:00:16 AM
End Time          : 31-Jan-2011  10:17:02 AM
Scanning Time     : 1006 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11b
Model             : OPTIVIEW XG Family
Frequency         : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Left Module Chain 2
Orientation       : Back Face
Power Drift-Start : 0.174 W/kg
Power Drift-Finish: 0.167 W/kg
Power Drift (%)   : -4.260

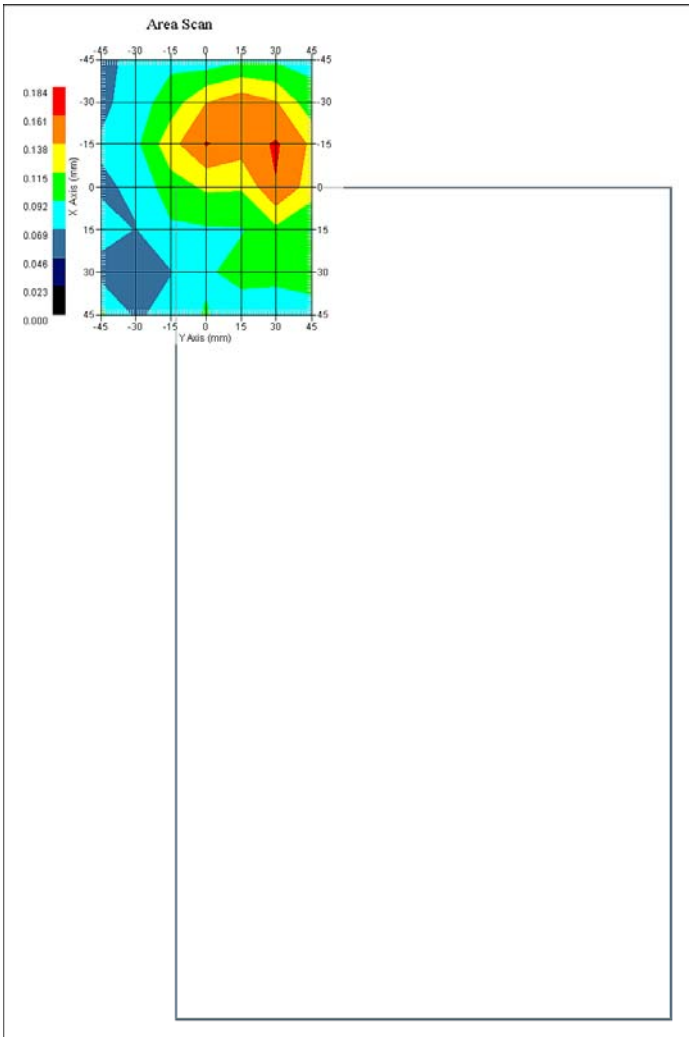
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 2450
Frequency         : 2450.00 MHz
Last Calib. Date  : 31-Jan-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 46.00 RH%
Epsilon           : 52.21 F/m
Sigma             : 1.96 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe 215 - RFEL
Model             : E020
Type              : E-Field Triangle
Serial No.        : 215
Last Calib. Date  : 22-Sep-2010
Frequency         : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.56 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 7:27:33 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.171 W/kg
10 gram SAR value   : 0.112 W/kg
Area Scan Peak SAR  : 0.164 W/kg
Zoom Scan Peak SAR  : 0.330 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Jan-2011
Starting Time : 31-Jan-2011 10:53:18 AM
End Time : 31-Jan-2011 11:10:03 AM
Scanning Time : 1005 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11b
Model : OPTIVIEW XG Family
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Left Module Chain 2
Orientation : Side A
Power Drift-Start : 0.110 W/kg
Power Drift-Finish: 0.108 W/kg
Power Drift (%) : -1.816

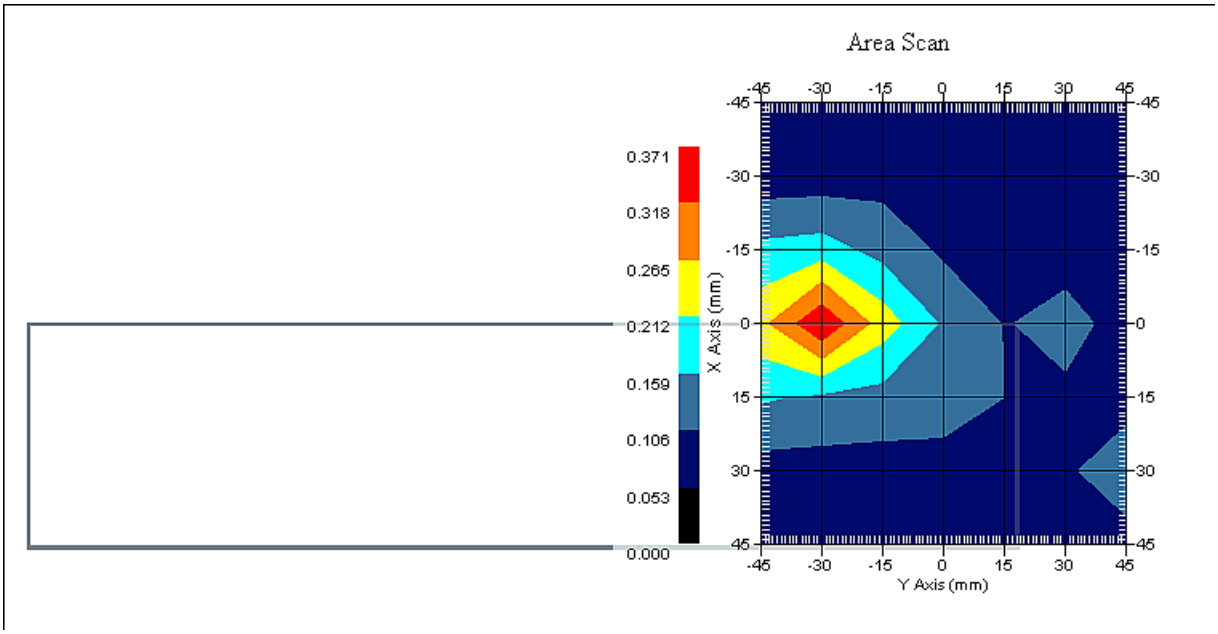
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 31-Jan-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.21 F/m
Sigma : 1.96 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 22-Sep-2010
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 10:53:13 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.333 W/kg
10 gram SAR value   : 0.193 W/kg
Area Scan Peak SAR  : 0.368 W/kg
Zoom Scan Peak SAR  : 0.560 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 31-Jan-2011
Starting Time     : 31-Jan-2011  11:13:32 AM
End Time          : 31-Jan-2011  11:30:02 AM
Scanning Time     : 990 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11b
Model             : OPTIVIEW XG Family
Frequency         : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 20 mm
Depth             : 400 mm
Antenna Type      : Left Module Chain 2
Orientation       : Side B
Power Drift-Start : 0.137 W/kg
Power Drift-Finish: 0.134 W/kg
Power Drift (%)   : -1.879

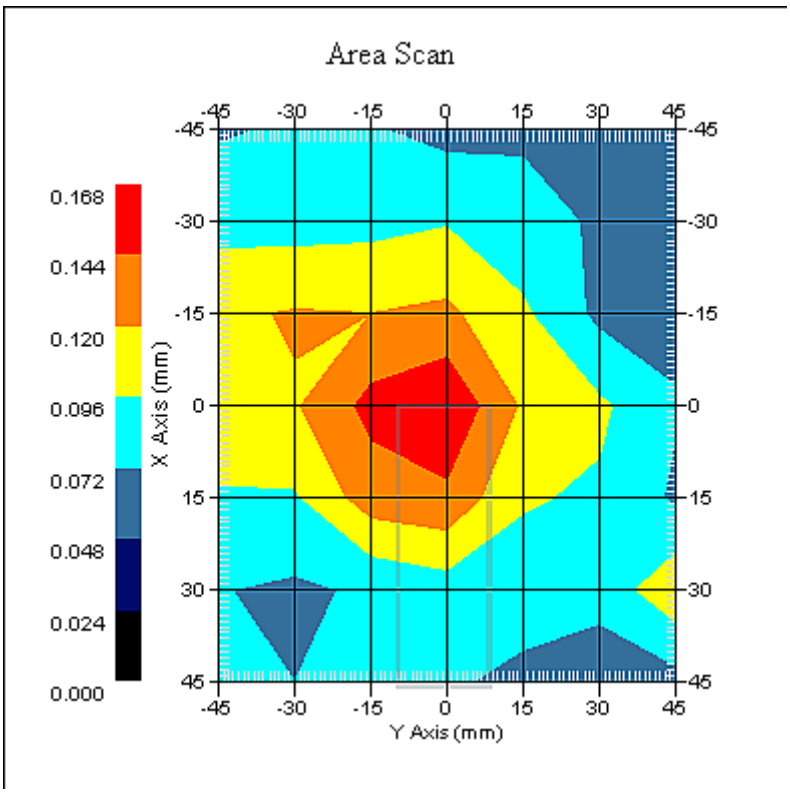
Phantom Data
Name            : APREL-Uni
Type            : Uni-Phantom
Size (mm)       : 280 x 280 x 200
Serial No.      : System Default
Location        : Center
Description     : Uni-Phantom

Tissue Data
Type            : BODY
Serial No.      : 2450
Frequency       : 2450.00 MHz
Last Calib. Date : 31-Jan-2011
Temperature     : 20.00 °C
Ambient Temp.   : 23.00 °C
Humidity        : 46.00 RH%
Epsilon         : 52.21 F/m
Sigma           : 1.96 S/m
Density         : 1000.00 kg/cu. m

Probe Data
Name            : Probe 215 - RFEL
Model           : E020
Type            : E-Field Triangle
Serial No.      : 215
Last Calib. Date : 22-Sep-2010
Frequency       : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset          : 1.56 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 10:53:13 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side B
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.159 W/kg
10 gram SAR value   : 0.113 W/kg
Area Scan Peak SAR  : 0.165 W/kg
Zoom Scan Peak SAR  : 0.170 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Jan-2011
Starting Time : 31-Jan-2011 11:33:55 AM
End Time : 31-Jan-2011 11:50:34 AM
Scanning Time : 999 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11b
Model : OPTIVIEW XG Family
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 400 mm
Depth : 240 mm
Antenna Type : Left Module Chain 2
Orientation : Side C
Power Drift-Start : 0.141 W/kg
Power Drift-Finish: 0.139 W/kg
Power Drift (%) : -2.014

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 31-Jan-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.21 F/m
Sigma : 1.96 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 22-Sep-2010
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor     : 1
Scan Type        : Complete
Tissue Temp.     : 20.00 °C
Ambient Temp.    : 23.00 °C
Set-up Date      : 31-Jan-2011
Set-up Time      : 10:53:13 AM
Area Scan        : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan        : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position     : Side C
Separation       : 0 mm
Channel          : Mid



1 gram SAR value   : 0.154 W/kg
10 gram SAR value  : 0.110 W/kg
Area Scan Peak SAR : 0.162 W/kg
Zoom Scan Peak SAR : 0.250 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Jan-2011
Starting Time : 31-Jan-2011 12:18:34 PM
End Time : 31-Jan-2011 12:35:22 PM
Scanning Time : 1008 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11b
Model : OPTIVIEW XG Family
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Left Module Chain 1
Orientation : Back Face
Power Drift-Start : 0.143 W/kg
Power Drift-Finish: 0.143 W/kg
Power Drift (%) : 0.676

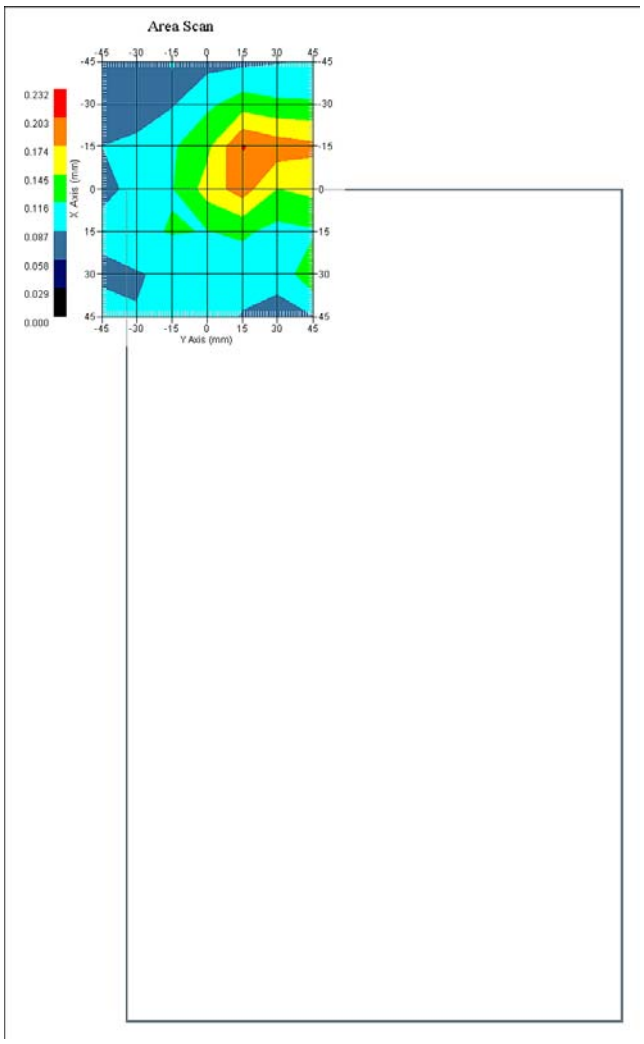
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 31-Jan-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.21 F/m
Sigma : 1.96 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 22-Sep-2010
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 12:18:21 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.255 W/kg
10 gram SAR value   : 0.143 W/kg
Area Scan Peak SAR  : 0.205 W/kg
Zoom Scan Peak SAR  : 0.630 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 31-Jan-2011
Starting Time     : 31-Jan-2011  12:57:17 PM
End Time          : 31-Jan-2011  01:13:43 PM
Scanning Time     : 986 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11b
Model             : OPTIVIEW XG Family
Frequency         : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 240 mm
Depth             : 400 mm
Antenna Type      : Left Module Chain 1
Orientation       : Side A
Power Drift-Start : 0.145 W/kg
Power Drift-Finish: 0.147 W/kg
Power Drift (%)   : 1.363

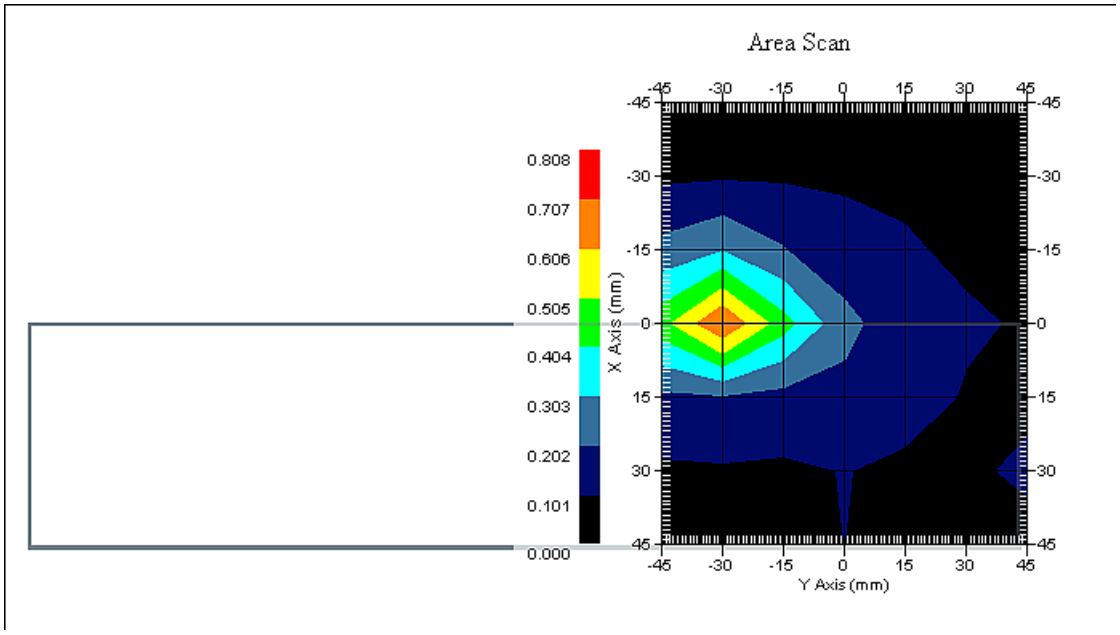
Phantom Data
Name            : APREL-Uni
Type            : Uni-Phantom
Size (mm)       : 280 x 280 x 200
Serial No.      : System Default
Location        : Center
Description     : Uni-Phantom

Tissue Data
Type            : BODY
Serial No.      : 2450
Frequency       : 2450.00 MHz
Last Calib. Date : 31-Jan-2011
Temperature     : 20.00 °C
Ambient Temp.   : 23.00 °C
Humidity        : 46.00 RH%
Epsilon         : 52.21 F/m
Sigma           : 1.96 S/m
Density         : 1000.00 kg/cu. m

Probe Data
Name            : Probe 215 - RFEL
Model           : E020
Type            : E-Field Triangle
Serial No.      : 215
Last Calib. Date : 22-Sep-2010
Frequency       : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset          : 1.56 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 12:18:21 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.626 W/kg
10 gram SAR value   : 0.324 W/kg
Area Scan Peak SAR  : 0.709 W/kg
Zoom Scan Peak SAR  : 1.211 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 31-Jan-2011
Starting Time     : 31-Jan-2011  02:22:43 PM
End Time          : 31-Jan-2011  02:39:15 PM
Scanning Time     : 992 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11b
Model             : OPTIVIEW XG Family
Frequency         : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Left Module Chain 0
Orientation       : Back Face
Power Drift-Start : 0.192 W/kg
Power Drift-Finish: 0.187 W/kg
Power Drift (%)   : -2.682

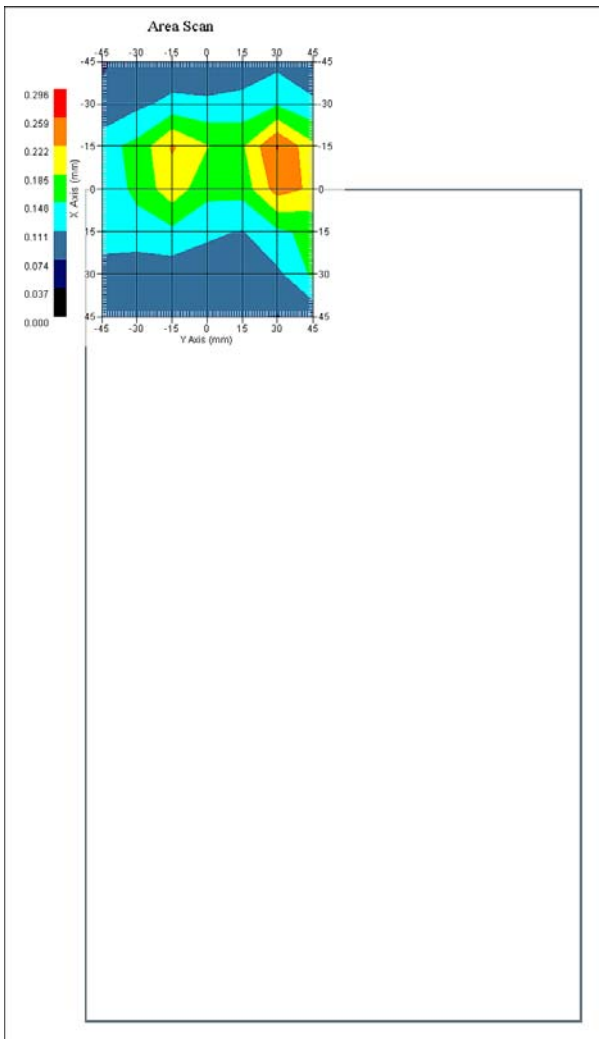
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 2450
Frequency         : 2450.00 MHz
Last Calib. Date  : 31-Jan-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 46.00 RH%
Epsilon           : 52.21 F/m
Sigma             : 1.96 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe 215 - RFEL
Model             : E020
Type              : E-Field Triangle
Serial No.        : 215
Last Calib. Date  : 22-Sep-2010
Frequency         : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.56 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 12:18:21 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.256 W/kg
10 gram SAR value   : 0.160 W/kg
Area Scan Peak SAR  : 0.262 W/kg
Zoom Scan Peak SAR  : 0.440 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Jan-2011
Starting Time : 31-Jan-2011 02:00:52 PM
End Time : 31-Jan-2011 02:17:27 PM
Scanning Time : 995 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11b
Model : OPTIVIEW XG Family
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Left Module Chain 0
Orientation : Side A
Power Drift-Start : 0.293 W/kg
Power Drift-Finish: 0.285 W/kg
Power Drift (%) : -2.777

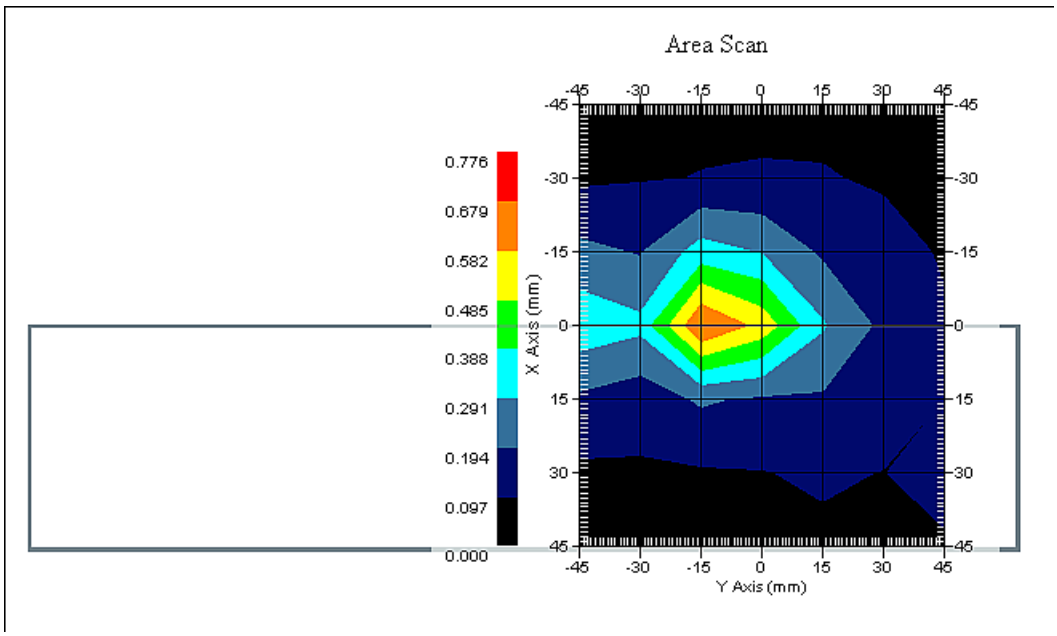
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 31-Jan-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.21 F/m
Sigma : 1.96 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 22-Sep-2010
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 12:18:21 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.591 W/kg
10 gram SAR value   : 0.312 W/kg
Area Scan Peak SAR  : 0.680 W/kg
Zoom Scan Peak SAR  : 1.100 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 31-Jan-2011
Starting Time     : 31-Jan-2011  03:50:35 PM
End Time          : 31-Jan-2011  04:07:22 PM
Scanning Time     : 1007 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11b
Model             : OPTIVIEW XG Family
Frequency         : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Right Module Chain 2
Orientation       : Back Face
Power Drift-Start : 0.154 W/kg
Power Drift-Finish: 0.153 W/kg
Power Drift (%)   : -0.643

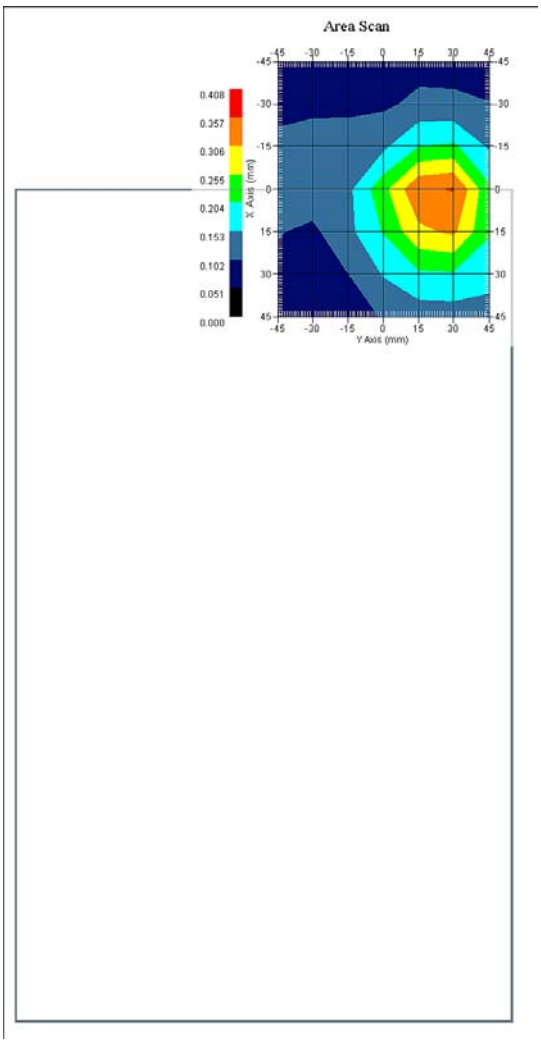
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 2450
Frequency         : 2450.00 MHz
Last Calib. Date  : 31-Jan-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 46.00 RH%
Epsilon           : 52.21 F/m
Sigma             : 1.96 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe 215 - RFEL
Model             : E020
Type              : E-Field Triangle
Serial No.        : 215
Last Calib. Date  : 22-Sep-2010
Frequency         : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.56 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 12:18:21 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.371 W/kg
10 gram SAR value   : 0.259 W/kg
Area Scan Peak SAR  : 0.360 W/kg
Zoom Scan Peak SAR  : 0.580 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 31-Jan-2011
Starting Time     : 31-Jan-2011  05:11:38 PM
End Time          : 31-Jan-2011  05:28:23 PM
Scanning Time     : 1005 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11b
Model             : OPTIVIEW XG Family
Frequency         : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 240 mm
Depth             : 400 mm
Antenna Type      : Right Module Chain 2
Orientation       : Side E
Power Drift-Start : 0.202 W/kg
Power Drift-Finish: 0.197 W/kg
Power Drift (%)   : -2.475

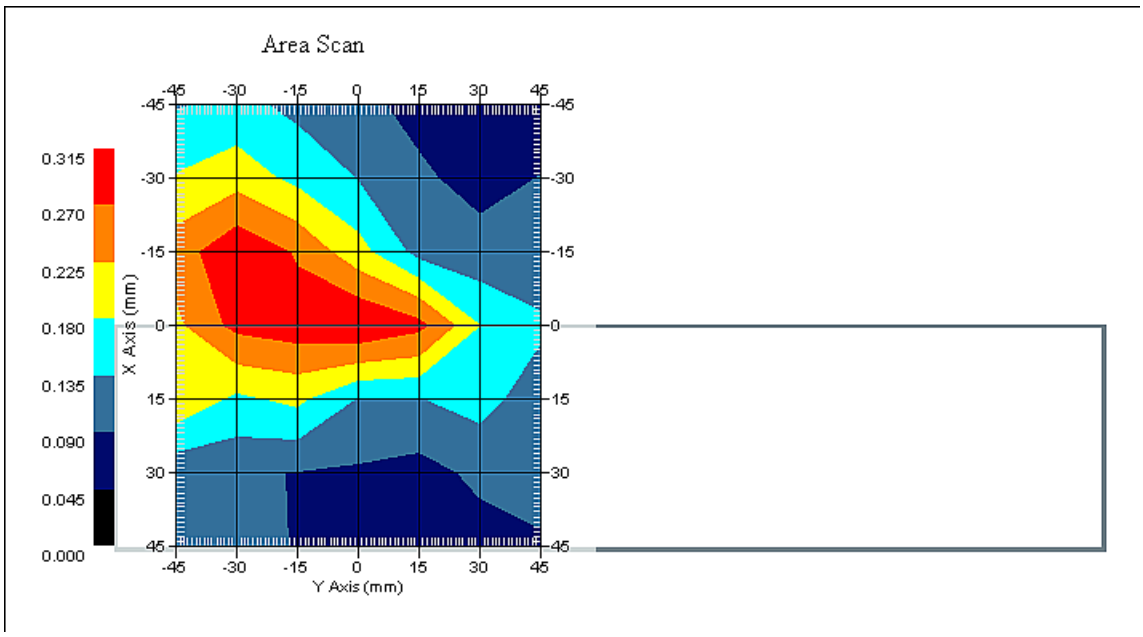
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 2450
Frequency         : 2450.00 MHz
Last Calib. Date  : 31-Jan-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 46.00 RH%
Epsilon           : 52.21 F/m
Sigma             : 1.96 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe 215 - RFEL
Model             : E020
Type              : E-Field Triangle
Serial No.        : 215
Last Calib. Date  : 22-Sep-2010
Frequency         : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.56 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 5:00:45 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.313 W/kg
10 gram SAR value   : 0.200 W/kg
Area Scan Peak SAR  : 0.312 W/kg
Zoom Scan Peak SAR  : 0.500 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Jan-2011
Starting Time : 31-Jan-2011 07:21:11 PM
End Time : 31-Jan-2011 07:37:44 PM
Scanning Time : 993 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11b
Model : OPTIVIEW XG Family
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Right Module Chain 0
Orientation : Back Face
Power Drift-Start : 0.189 W/kg
Power Drift-Finish: 0.186 W/kg
Power Drift (%) : -1.581

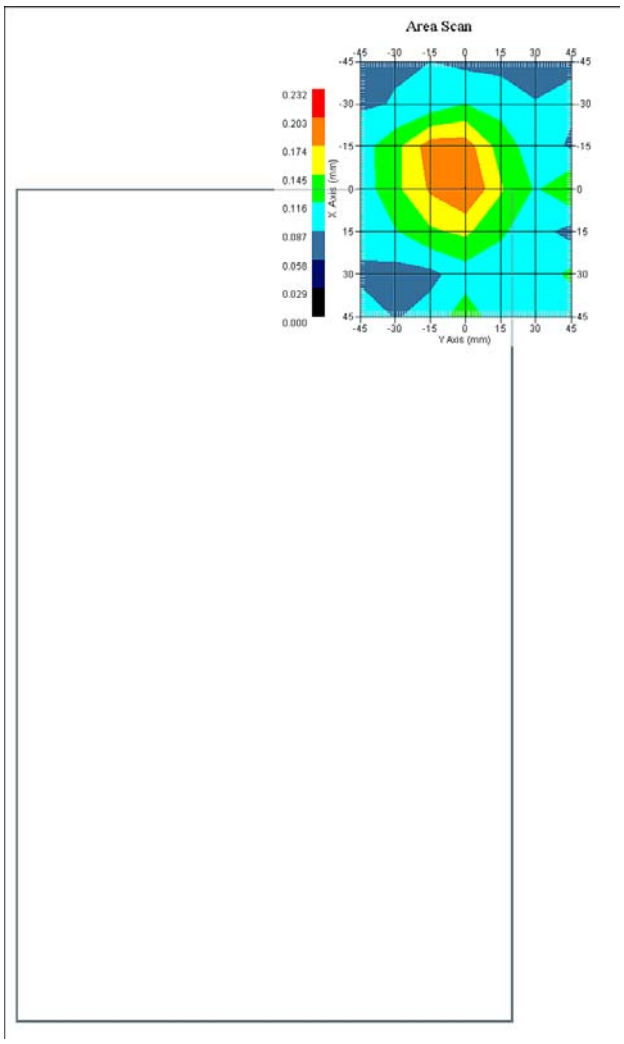
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 31-Jan-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.21 F/m
Sigma : 1.96 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 22-Sep-2010
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 5:00:45 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.198 W/kg
10 gram SAR value   : 0.143 W/kg
Area Scan Peak SAR  : 0.204 W/kg
Zoom Scan Peak SAR  : 0.270 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Jan-2011
Starting Time : 31-Jan-2011 07:41:12 PM
End Time : 31-Jan-2011 07:57:25 PM
Scanning Time : 973 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11b
Model : OPTIVIEW XG Family
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 400 mm
Depth : 240 mm
Antenna Type : Right Module Chain 0
Orientation : Side C
Power Drift-Start : 0.115 W/kg
Power Drift-Finish: 0.115 W/kg
Power Drift (%) : 0.497

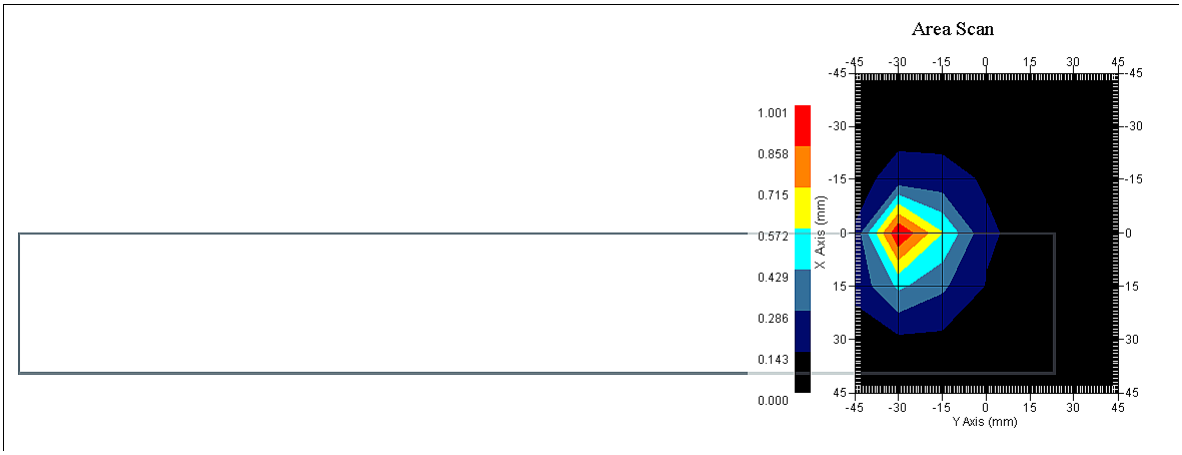
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 31-Jan-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.21 F/m
Sigma : 1.96 S/m
Density : 1000.00 kg/cu. m

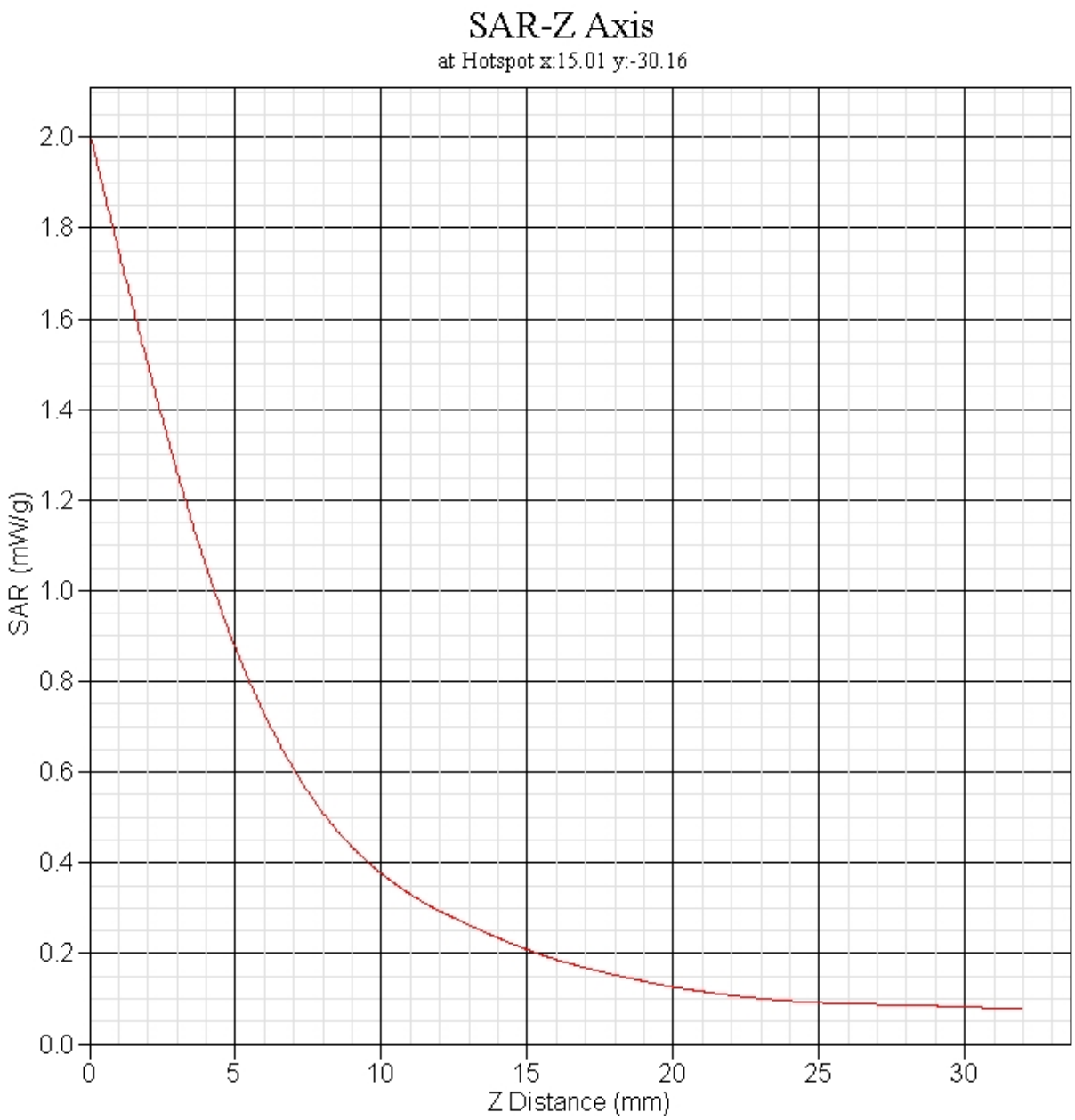
Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 22-Sep-2010
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 5:00:45 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side C
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.789 W/kg
10 gram SAR value   : 0.351 W/kg
Area Scan Peak SAR  : 1.001 W/kg
Zoom Scan Peak SAR  : 2.011 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 31-Jan-2011
Starting Time : 31-Jan-2011 08:53:14 PM
End Time : 31-Jan-2011 09:09:55 PM
Scanning Time : 1001 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11b
Model : OPTIVIEW XG Family
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 20 mm
Depth : 400 mm
Antenna Type : Right Module Chain 0
Orientation : Side D
Power Drift-Start : 0.188 W/kg
Power Drift-Finish: 0.188 W/kg
Power Drift (%) : -0.006

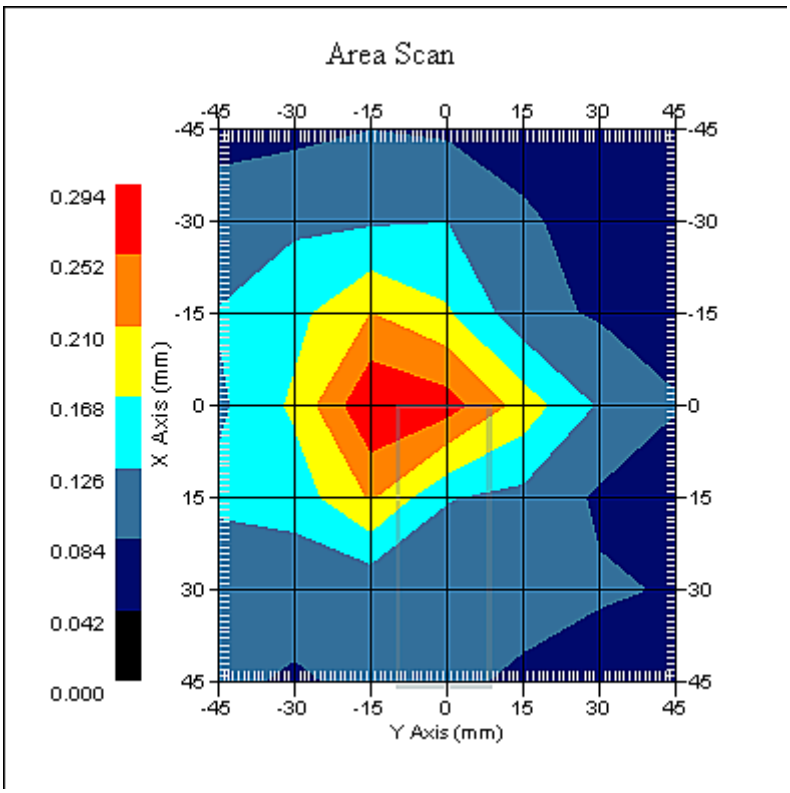
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 31-Jan-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.21 F/m
Sigma : 1.96 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 22-Sep-2010
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 8:53:06 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side D
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.304 W/kg
10 gram SAR value   : 0.184 W/kg
Area Scan Peak SAR  : 0.292 W/kg
Zoom Scan Peak SAR  : 0.470 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Jan-2011
Starting Time : 31-Jan-2011 08:14:35 PM
End Time : 31-Jan-2011 08:31:12 PM
Scanning Time : 997 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11b
Model : OPTIVIEW XG Family
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Right Module Chain 0
Orientation : Side E
Power Drift-Start : 0.174 W/kg
Power Drift-Finish: 0.171 W/kg
Power Drift (%) : -1.725

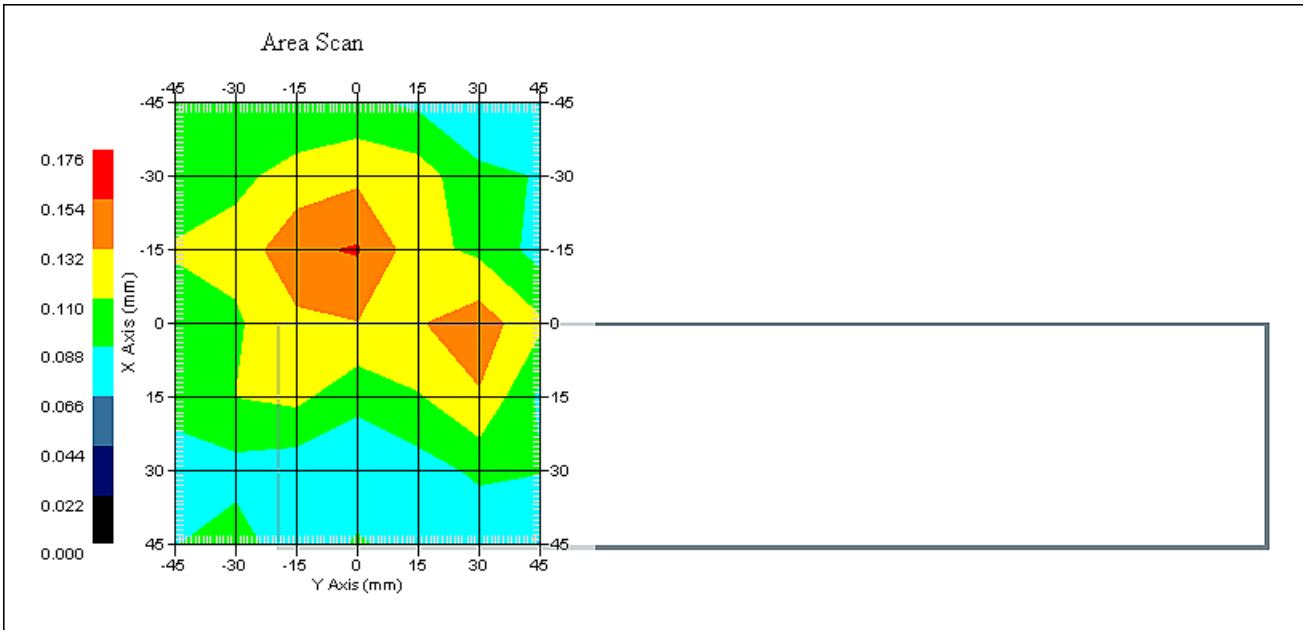
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 31-Jan-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.21 F/m
Sigma : 1.96 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 22-Sep-2010
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 5:00:45 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.158 W/kg
10 gram SAR value   : 0.107 W/kg
Area Scan Peak SAR  : 0.156 W/kg
Zoom Scan Peak SAR  : 0.250 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Jan-2011
Starting Time : 31-Jan-2011 06:11:54 PM
End Time : 31-Jan-2011 06:28:39 PM
Scanning Time : 1005 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11b
Model : OPTIVIEW XG Family
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Right Module Chain 1
Orientation : Back Face
Power Drift-Start : 0.162 W/kg
Power Drift-Finish: 0.167 W/kg
Power Drift (%) : 2.718

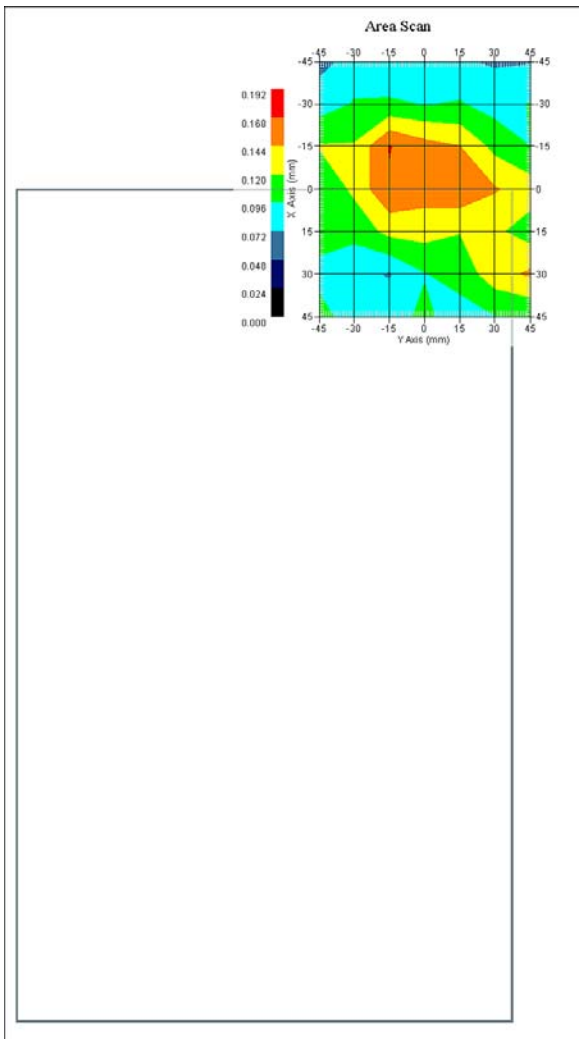
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 31-Jan-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.21 F/m
Sigma : 1.96 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 22-Sep-2010
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 5:00:45 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.174 W/kg
10 gram SAR value   : 0.121 W/kg
Area Scan Peak SAR  : 0.169 W/kg
Zoom Scan Peak SAR  : 0.250 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Jan-2011
Starting Time : 31-Jan-2011 05:34:19 PM
End Time : 31-Jan-2011 05:50:46 PM
Scanning Time : 987 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11b
Model : OPTIVIEW XG Family
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Right Module Chain 1
Orientation : Side E
Power Drift-Start : 0.190 W/kg
Power Drift-Finish: 0.189 W/kg
Power Drift (%) : -0.827

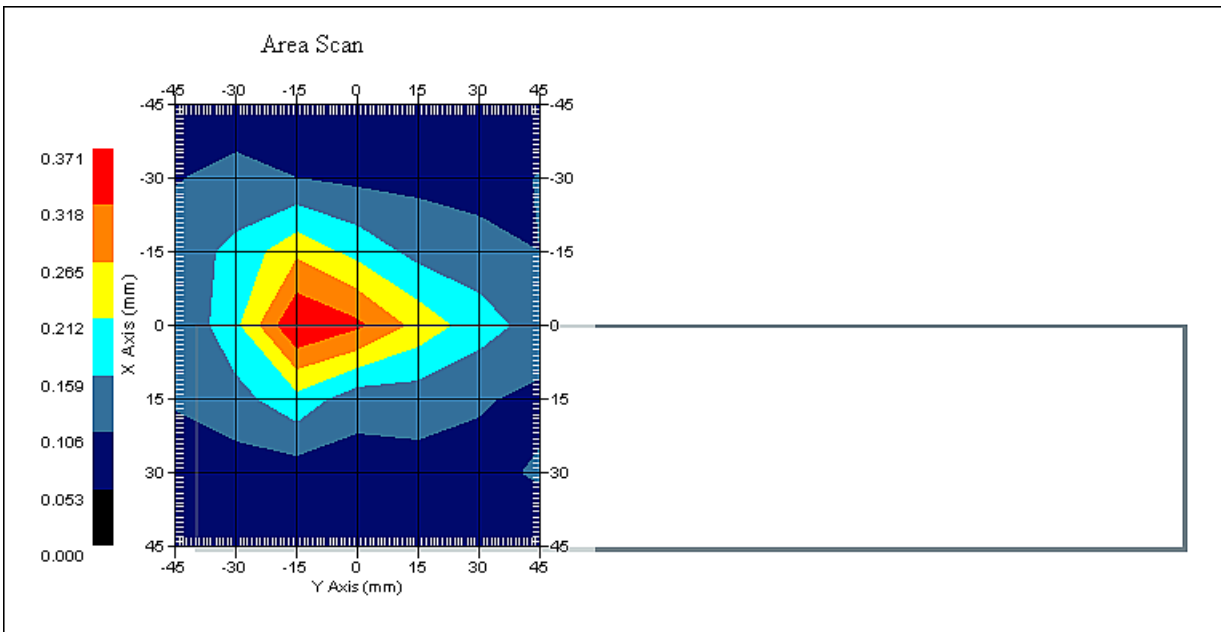
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 31-Jan-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.21 F/m
Sigma : 1.96 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 22-Sep-2010
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Jan-2011
Set-up Time       : 5:00:45 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.350 W/kg
10 gram SAR value   : 0.206 W/kg
Area Scan Peak SAR  : 0.371 W/kg
Zoom Scan Peak SAR  : 0.580 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 01-Feb-2011
Starting Time     : 01-Feb-2011  07:43:37 AM
End Time          : 01-Feb-2011  08:00:13 AM
Scanning Time     : 996 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Left Module Chain 2
Orientation       : Back Face
Power Drift-Start : 0.205 W/kg
Power Drift-Finish: 0.195 W/kg
Power Drift (%)   : -4.879

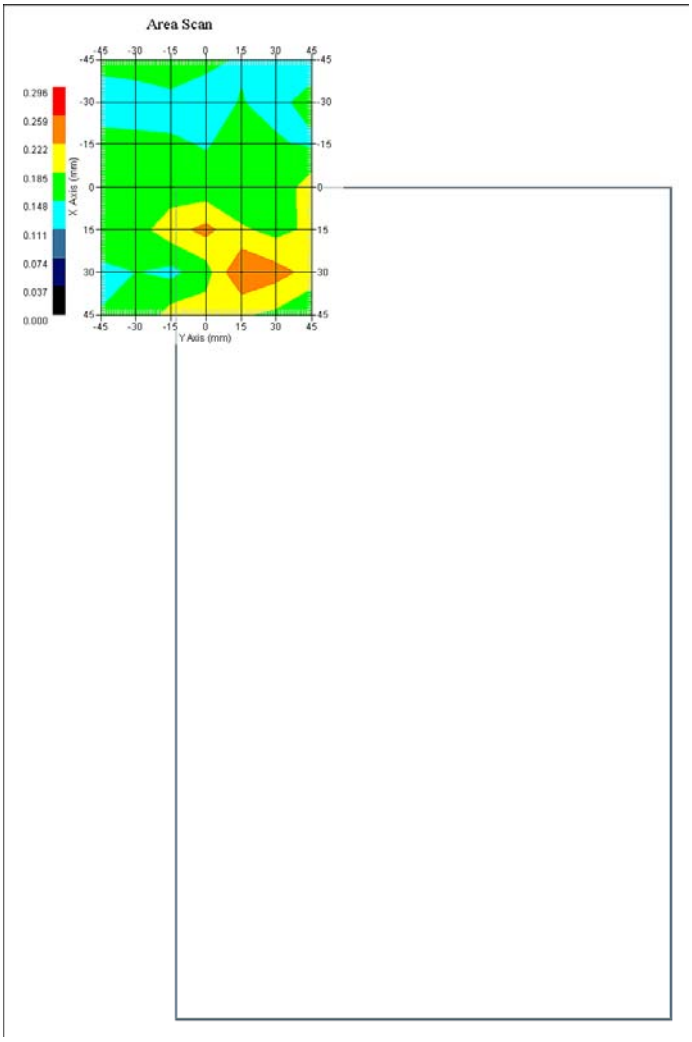
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5200
Frequency         : 5200.00 MHz
Last Calib. Date  : 01-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.53 F/m
Sigma             : 5.41 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 7:43:09 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.230 W/kg
10 gram SAR value   : 0.183 W/kg
Area Scan Peak SAR  : 0.261 W/kg
Zoom Scan Peak SAR  : 0.330 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 01-Feb-2011
Starting Time : 01-Feb-2011 12:20:22 PM
End Time : 01-Feb-2011 12:37:01 PM
Scanning Time : 999 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Left Module Chain 2
Orientation : Side A
Power Drift-Start : 0.317 W/kg
Power Drift-Finish: 0.318 W/kg
Power Drift (%) : 0.611

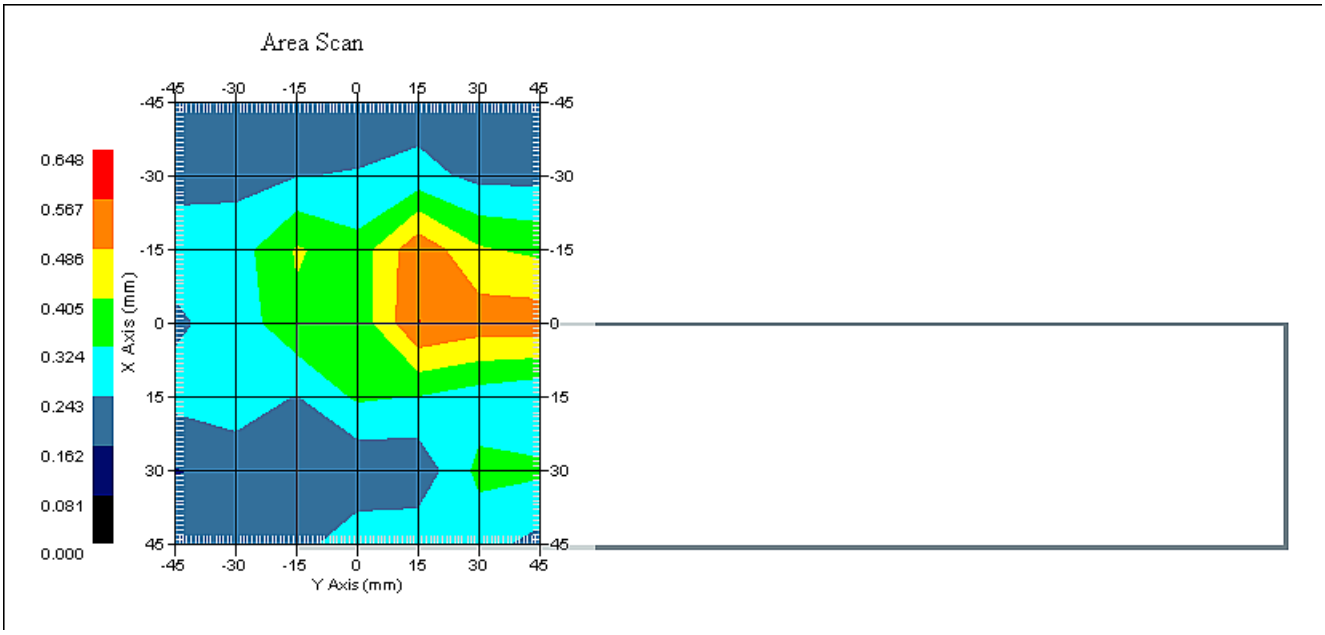
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 01-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.53 F/m
Sigma : 5.41 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 9:42:58 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.545 W/kg
10 gram SAR value   : 0.365 W/kg
Area Scan Peak SAR  : 0.569 W/kg
Zoom Scan Peak SAR  : 0.980 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 01-Feb-2011
Starting Time     : 01-Feb-2011  02:10:58 PM
End Time          : 01-Feb-2011  02:27:31 PM
Scanning Time     : 993 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 20 mm
Depth             : 400 mm
Antenna Type      : Left Module Chain 2
Orientation       : Side B
Power Drift-Start : 0.497 W/kg
Power Drift-Finish: 0.513 W/kg
Power Drift (%)   : 3.214

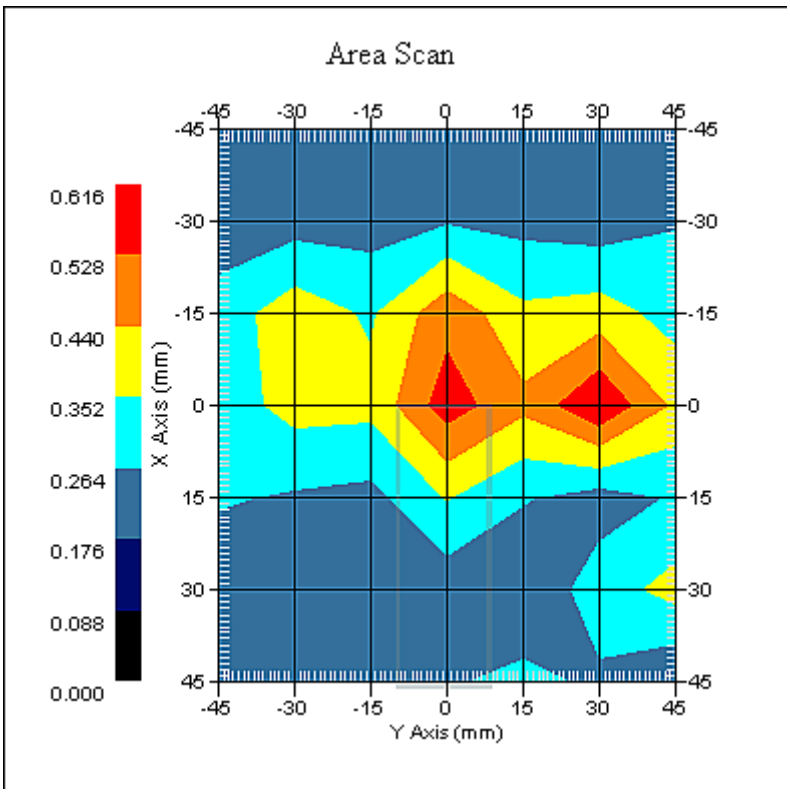
Phantom Data
Name            : APREL-Uni
Type            : Uni-Phantom
Size (mm)       : 280 x 280 x 200
Serial No.      : System Default
Location        : Center
Description     : Uni-Phantom

Tissue Data
Type            : BODY
Serial No.      : 5200
Frequency       : 5200.00 MHz
Last Calib. Date : 01-Feb-2011
Temperature     : 20.00 °C
Ambient Temp.   : 23.00 °C
Humidity        : 50.00 RH%
Epsilon         : 48.53 F/m
Sigma           : 5.41 S/m
Density         : 1000.00 kg/cu. m

Probe Data
Name            : Probe E030-001 - RFEL
Model           : E030
Type            : E-Field Triangle
Serial No.      : E030-001
Last Calib. Date : 12-Jul-2010
Frequency       : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset          : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 1:51:25 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side B
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.444 W/kg
10 gram SAR value   : 0.291 W/kg
Area Scan Peak SAR  : 0.613 W/kg
Zoom Scan Peak SAR  : 0.720 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 01-Feb-2011
Starting Time     : 01-Feb-2011  01:51:29 PM
End Time          : 01-Feb-2011  02:08:12 PM
Scanning Time     : 1003 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 400 mm
Depth             : 240 mm
Antenna Type      : Left Module Chain 2
Orientation       : Side C
Power Drift-Start : 0.582 W/kg
Power Drift-Finish: 0.568 W/kg
Power Drift (%)   : -2.408

Phantom Data
Name            : APREL-Uni
Type            : Uni-Phantom
Size (mm)       : 280 x 280 x 200
Serial No.      : System Default
Location        : Center
Description     : Uni-Phantom

Tissue Data
Type            : BODY
Serial No.      : 5200
Frequency       : 5200.00 MHz
Last Calib. Date : 01-Feb-2011
Temperature     : 20.00 °C
Ambient Temp.   : 23.00 °C
Humidity        : 50.00 RH%
Epsilon         : 48.53 F/m
Sigma           : 5.41 S/m
Density         : 1000.00 kg/cu. m

Probe Data
Name            : Probe E030-001 - RFEL
Model           : E030
Type            : E-Field Triangle
Serial No.      : E030-001
Last Calib. Date : 12-Jul-2010
Frequency       : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset          : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 1:51:25 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side C
Separation        : 0 mm
Channel           : Mid
```


```
1 gram SAR value    : 0.451 W/kg
10 gram SAR value   : 0.292 W/kg
Area Scan Peak SAR  : 0.599 W/kg
Zoom Scan Peak SAR  : 0.780 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 01-Feb-2011
Starting Time : 01-Feb-2011 07:19:18 PM
End Time : 01-Feb-2011 07:36:14 PM
Scanning Time : 1016 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Left Module Chain 1
Orientation : Back Face
Power Drift-Start : 0.343 W/kg
Power Drift-Finish: 0.356 W/kg
Power Drift (%) : 3.868

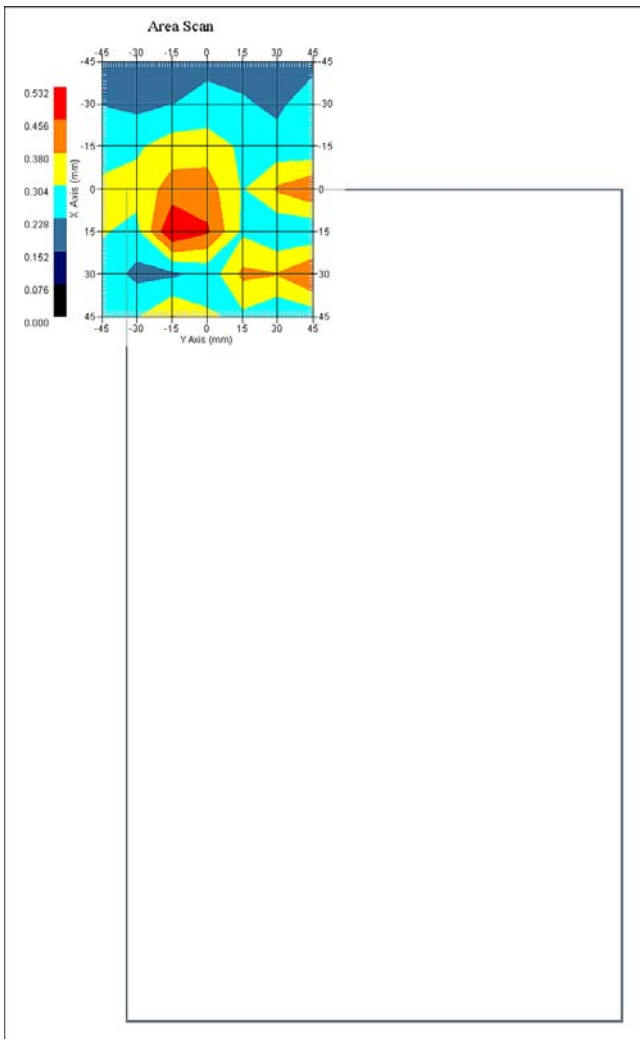
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 01-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.53 F/m
Sigma : 5.41 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 7:14:28 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.405 W/kg
10 gram SAR value   : 0.334 W/kg
Area Scan Peak SAR  : 0.531 W/kg
Zoom Scan Peak SAR  : 0.560 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 01-Feb-2011
Starting Time : 01-Feb-2011 07:40:03 PM
End Time : 01-Feb-2011 07:56:50 PM
Scanning Time : 1007 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Left Module Chain 1
Orientation : Side A
Power Drift-Start : 0.522 W/kg
Power Drift-Finish: 0.507 W/kg
Power Drift (%) : -2.870

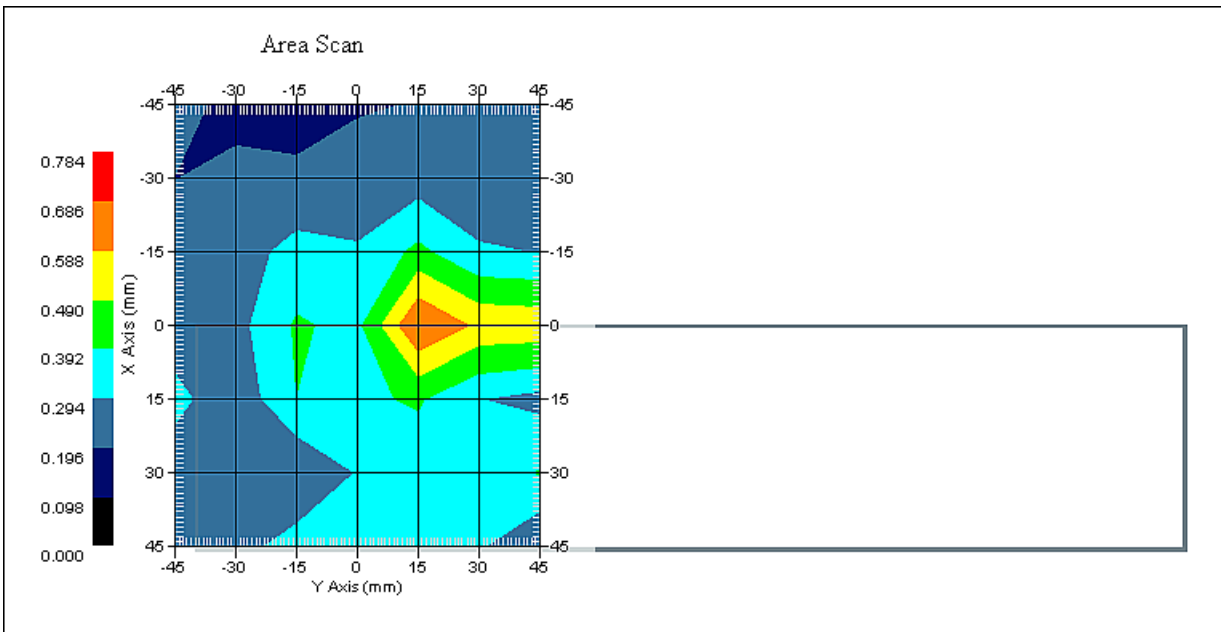
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 01-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.53 F/m
Sigma : 5.41 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 7:39:49 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.532 W/kg
10 gram SAR value   : 0.339 W/kg
Area Scan Peak SAR  : 0.687 W/kg
Zoom Scan Peak SAR  : 0.820 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 01-Feb-2011
Starting Time : 01-Feb-2011 09:30:48 PM
End Time : 01-Feb-2011 09:48:34 PM
Scanning Time : 1066 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Left Module Chain 0
Orientation : Back Face
Power Drift-Start : 0.362 W/kg
Power Drift-Finish: 0.366 W/kg
Power Drift (%) : 1.102

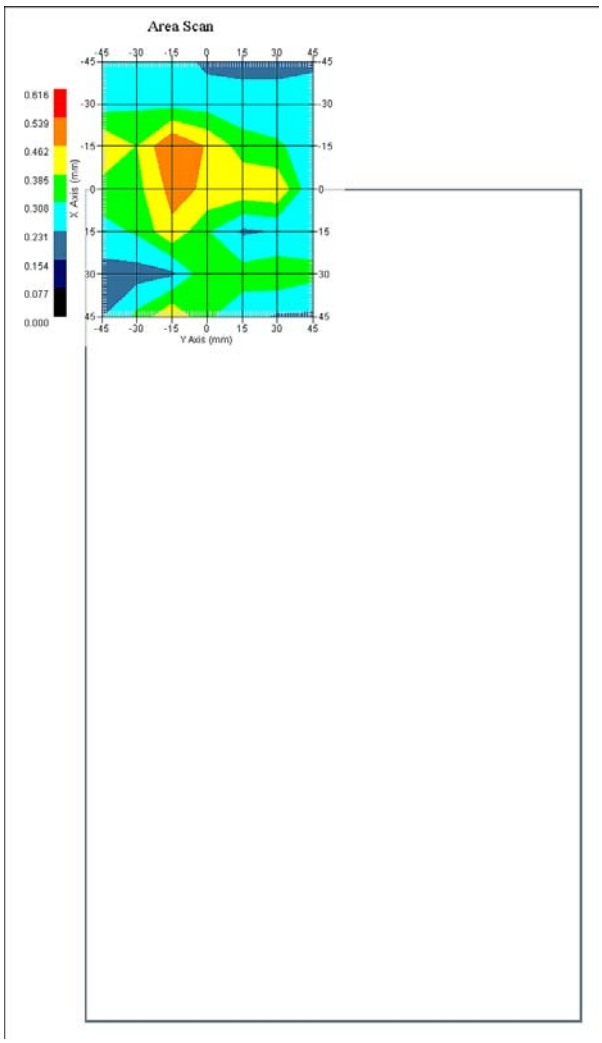
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 01-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.53 F/m
Sigma : 5.41 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 9:28:15 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.503 W/kg
10 gram SAR value   : 0.317 W/kg
Area Scan Peak SAR  : 0.542 W/kg
Zoom Scan Peak SAR  : 0.750 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 01-Feb-2011
Starting Time     : 01-Feb-2011  07:59:33 PM
End Time          : 01-Feb-2011  08:15:58 PM
Scanning Time     : 985 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 240 mm
Depth             : 400 mm
Antenna Type      : Left Module Chain 0
Orientation       : Side A
Power Drift-Start : 0.262 W/kg
Power Drift-Finish: 0.255 W/kg
Power Drift (%)   : -2.764

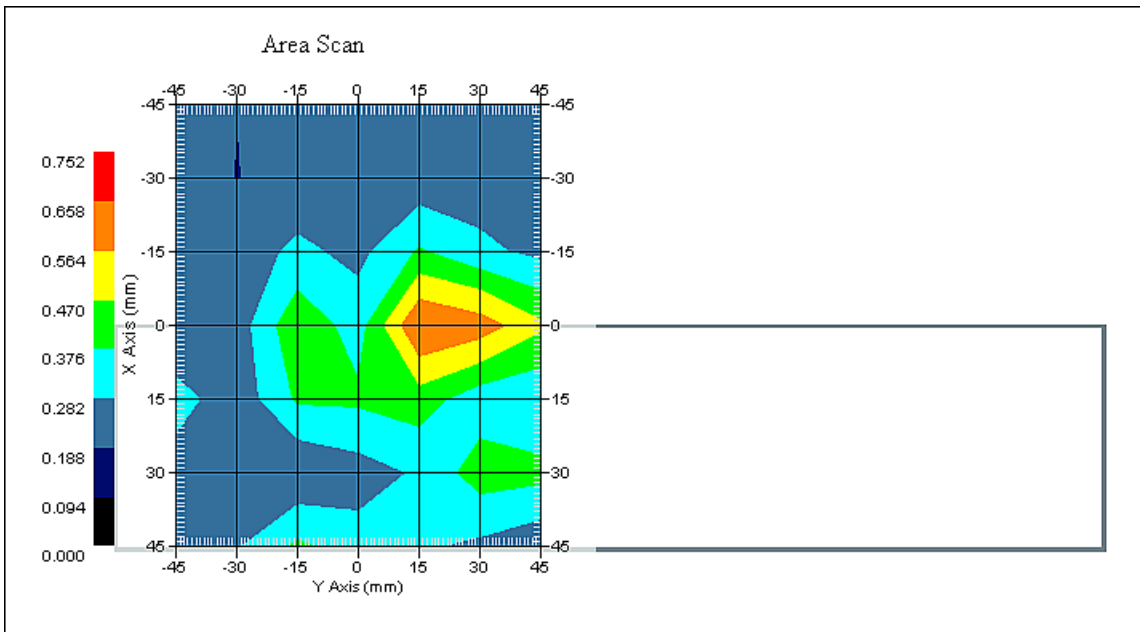
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5200
Frequency         : 5200.00 MHz
Last Calib. Date  : 01-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.53 F/m
Sigma             : 5.41 S/m
Density           : 1000.00 kg/cu. m

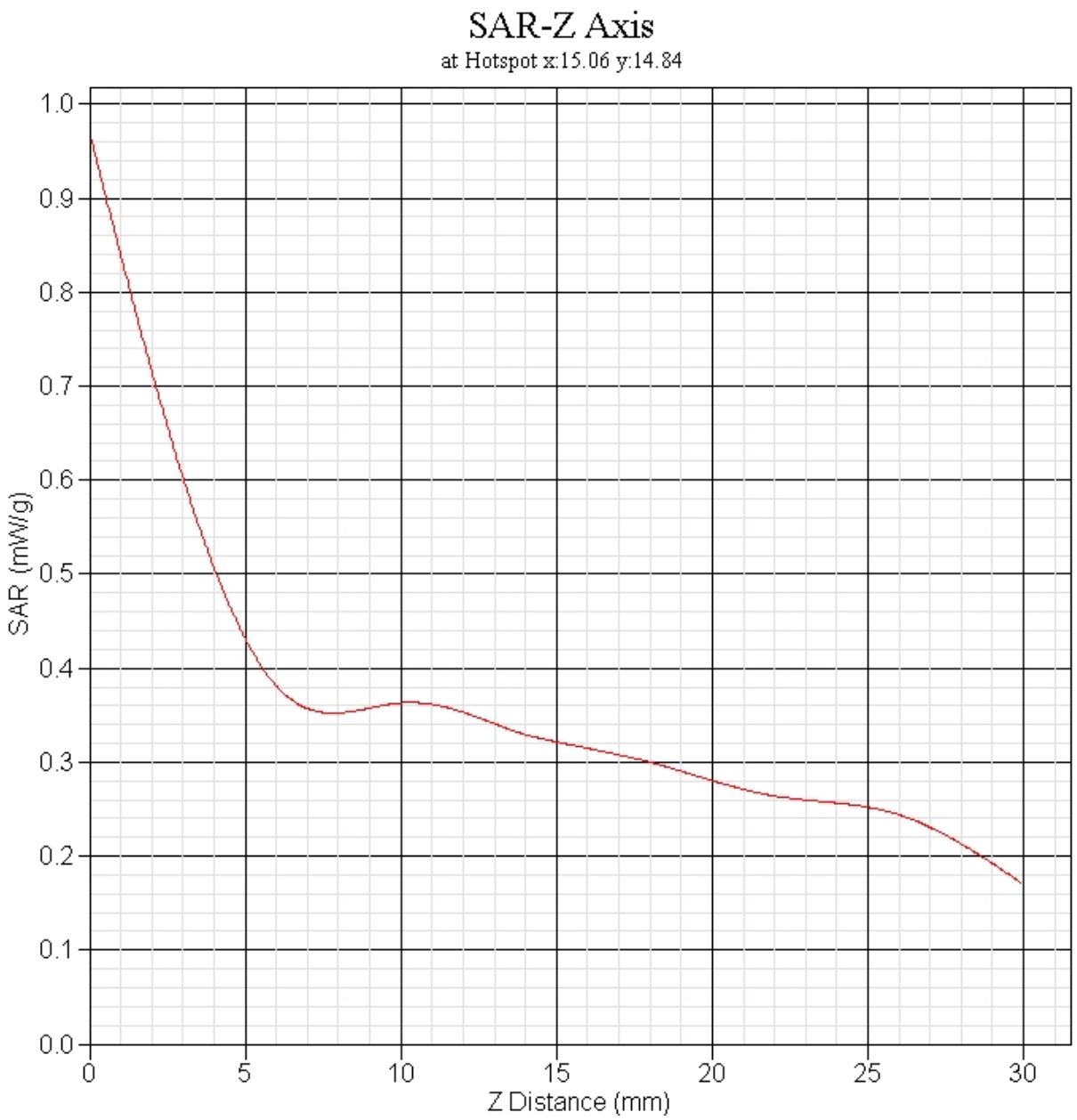
Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 7:39:49 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.561 W/kg
10 gram SAR value   : 0.366 W/kg
Area Scan Peak SAR  : 0.659 W/kg
Zoom Scan Peak SAR  : 0.970 W/kg
```



SAR Test Report

```
By Operator       : Jay
Measurement Date  : 02-Feb-2011
Starting Time     : 02-Feb-2011  07:47:04 AM
End Time          : 02-Feb-2011  08:04:18 AM
Scanning Time     : 1034 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Right Module Chain 2
Orientation       : Back Face
Power Drift-Start : 0.610 W/kg
Power Drift-Finish: 0.599 W/kg
Power Drift (%)   : -1.804

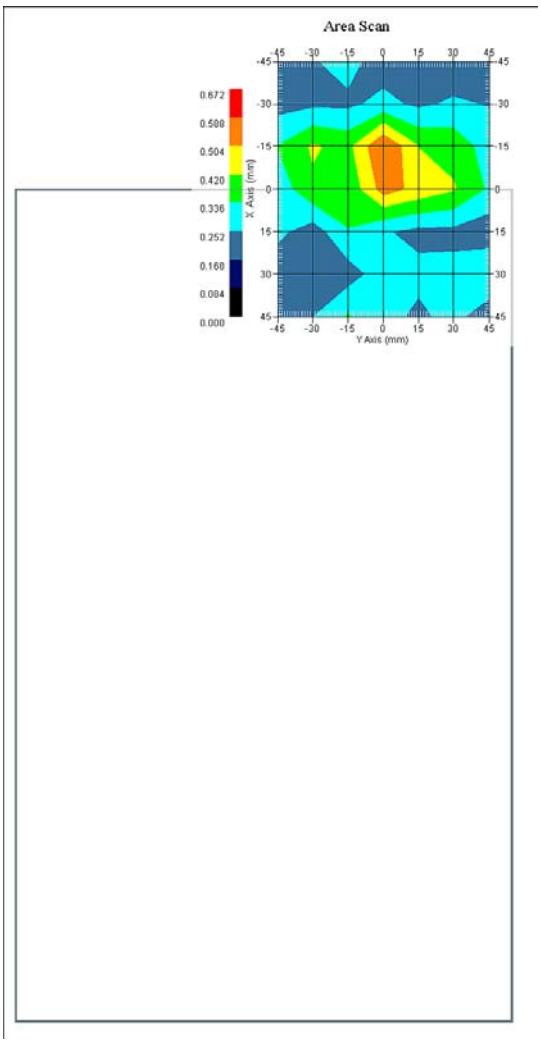
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5200
Frequency         : 5200.00 MHz
Last Calib. Date  : 02-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.71 F/m
Sigma             : 5.42 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 7:03:56 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.494 W/kg
10 gram SAR value   : 0.306 W/kg
Area Scan Peak SAR  : 0.589 W/kg
Zoom Scan Peak SAR  : 1.000 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 09:04:23 AM
End Time : 02-Feb-2011 09:21:41 AM
Scanning Time : 1038 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Right Module Chain 2
Orientation : Side E
Power Drift-Start : 0.599 W/kg
Power Drift-Finish: 0.581 W/kg
Power Drift (%) : -3.001

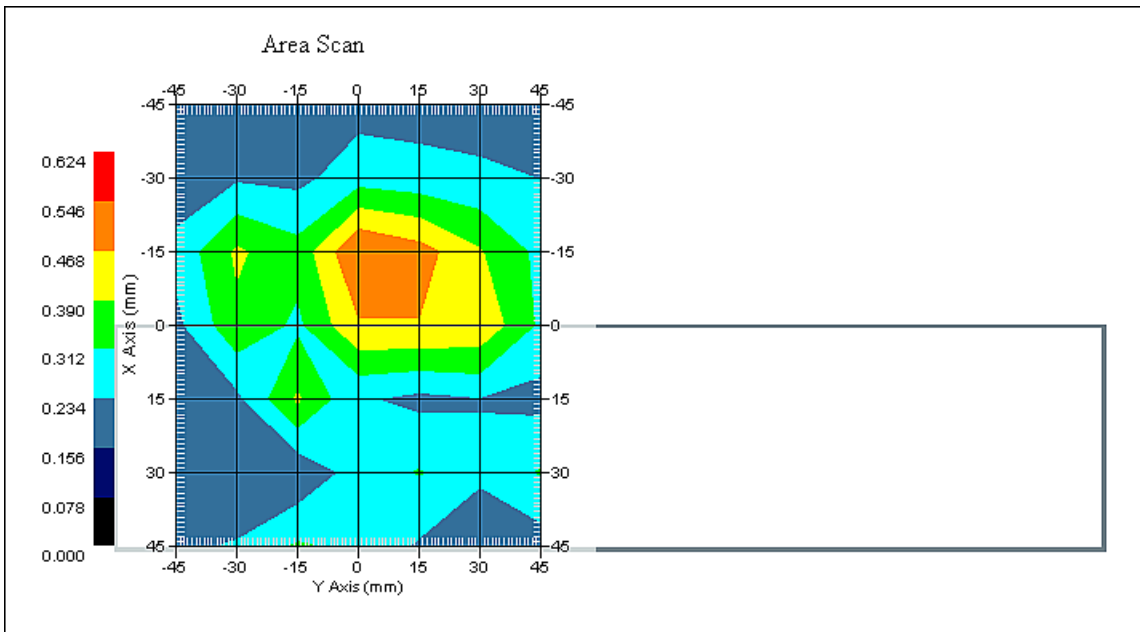
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.71 F/m
Sigma : 5.42 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 7:03:56 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.451 W/kg
10 gram SAR value   : 0.306 W/kg
Area Scan Peak SAR  : 0.547 W/kg
Zoom Scan Peak SAR  : 0.930 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 02-Feb-2011
Starting Time     : 02-Feb-2011  12:12:23 PM
End Time          : 02-Feb-2011  12:29:39 PM
Scanning Time     : 1036 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Right Module Chain 0
Orientation       : Back Face
Power Drift-Start : 0.556 W/kg
Power Drift-Finish: 0.546 W/kg
Power Drift (%)   : -1.893

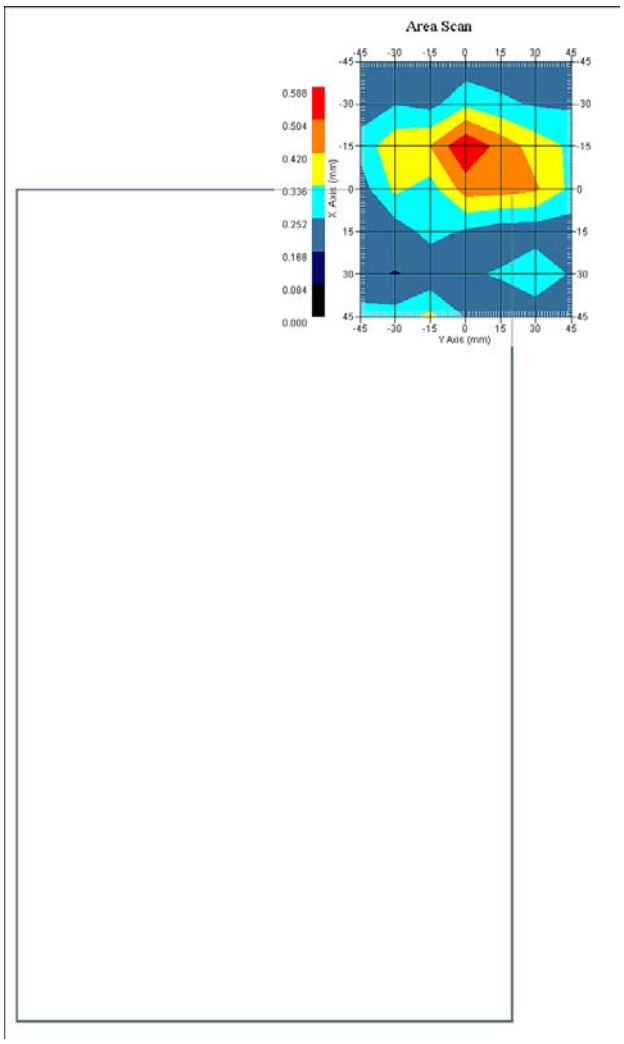
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5200
Frequency         : 5200.00 MHz
Last Calib. Date  : 02-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.71 F/m
Sigma             : 5.42 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 11:33:36 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.463 W/kg
10 gram SAR value   : 0.300 W/kg
Area Scan Peak SAR  : 0.585 W/kg
Zoom Scan Peak SAR  : 0.760 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 11:53:11 AM
End Time : 02-Feb-2011 12:10:25 PM
Scanning Time : 1034 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 400 mm
Depth : 240 mm
Antenna Type : Right Module Chain 0
Orientation : Side C
Power Drift-Start : 0.557 W/kg
Power Drift-Finish: 0.576 W/kg
Power Drift (%) : 3.255

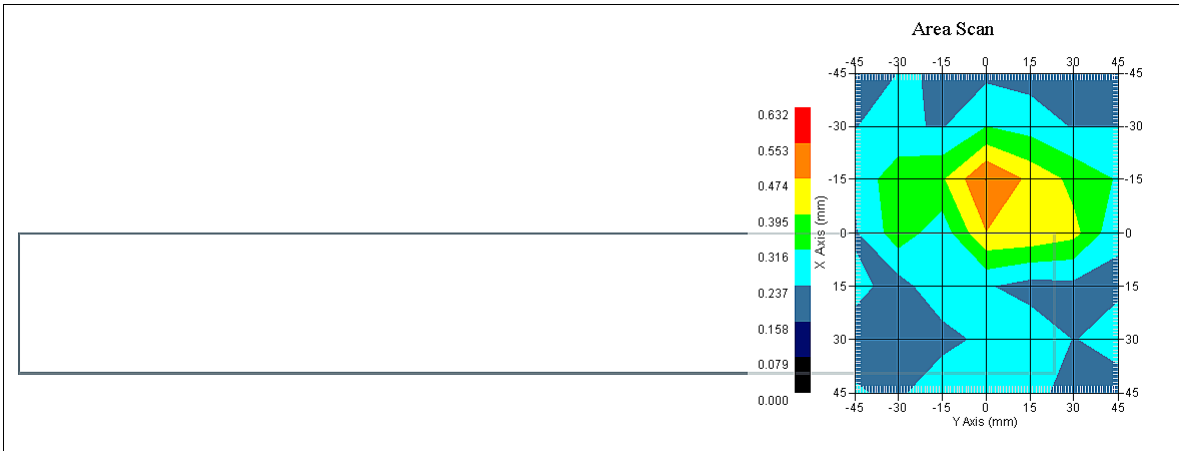
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.71 F/m
Sigma : 5.42 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 11:33:36 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side C
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.451 W/kg
10 gram SAR value   : 0.296 W/kg
Area Scan Peak SAR  : 0.556 W/kg
Zoom Scan Peak SAR  : 0.640 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 10:37:33 AM
End Time : 02-Feb-2011 10:55:00 AM
Scanning Time : 1047 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 20 mm
Depth : 400 mm
Antenna Type : Right Module Chain 0
Orientation : Side D
Power Drift-Start : 0.521 W/kg
Power Drift-Finish: 0.521 W/kg
Power Drift (%) : 0.228

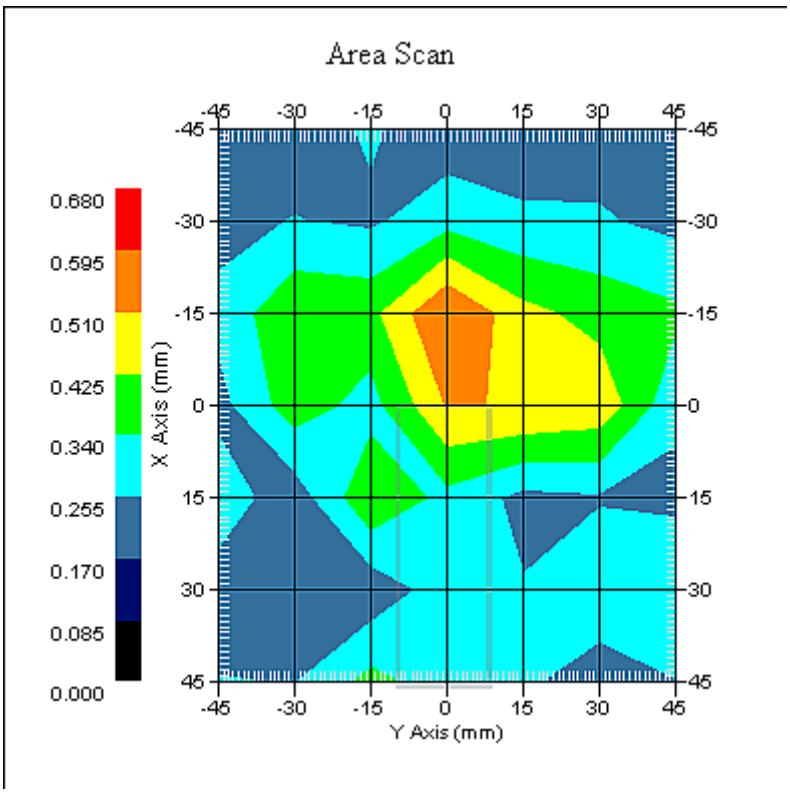
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.71 F/m
Sigma : 5.42 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 10:36:59 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side D
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.463 W/kg
10 gram SAR value   : 0.306 W/kg
Area Scan Peak SAR  : 0.597 W/kg
Zoom Scan Peak SAR  : 0.660 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 10:01:29 AM
End Time : 02-Feb-2011 10:18:47 AM
Scanning Time : 1038 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Right Module Chain 0
Orientation : Side E
Power Drift-Start : 0.539 W/kg
Power Drift-Finish: 0.517 W/kg
Power Drift (%) : -4.128

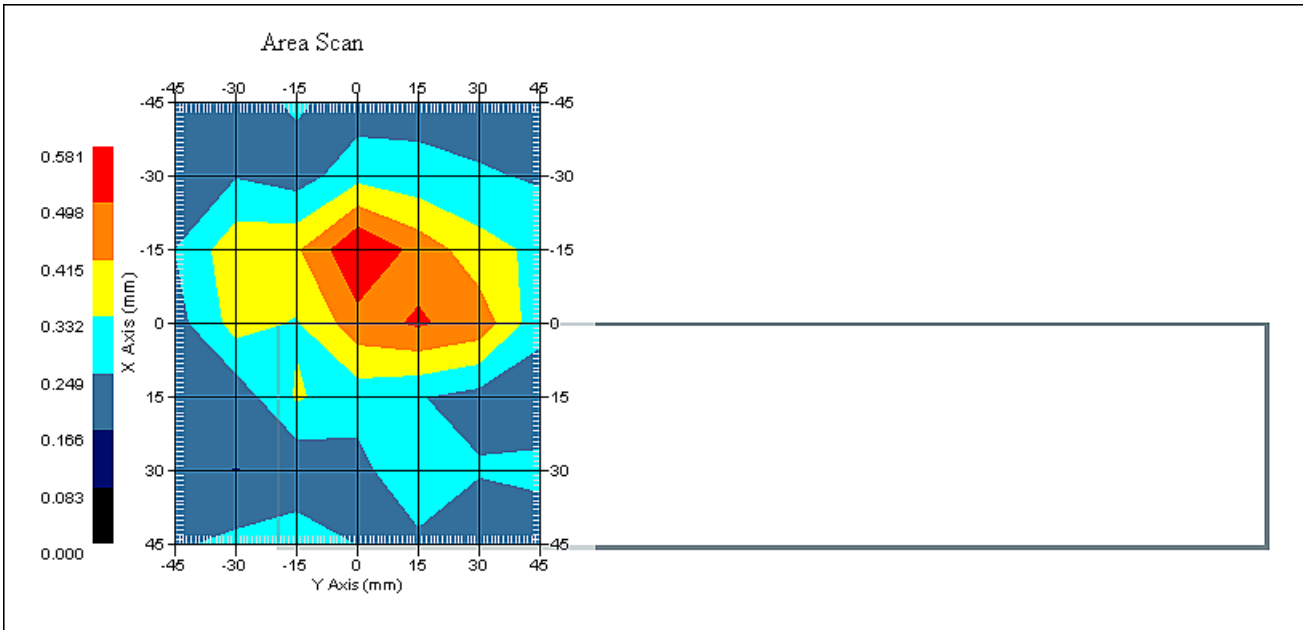
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.71 F/m
Sigma : 5.42 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 7:03:56 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.450 W/kg
10 gram SAR value   : 0.307 W/kg
Area Scan Peak SAR  : 0.580 W/kg
Zoom Scan Peak SAR  : 0.840 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 02:25:22 PM
End Time : 02-Feb-2011 02:42:39 PM
Scanning Time : 1037 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Right Module Chain 1
Orientation : Back Face
Power Drift-Start : 0.543 W/kg
Power Drift-Finish: 0.544 W/kg
Power Drift (%) : 0.147

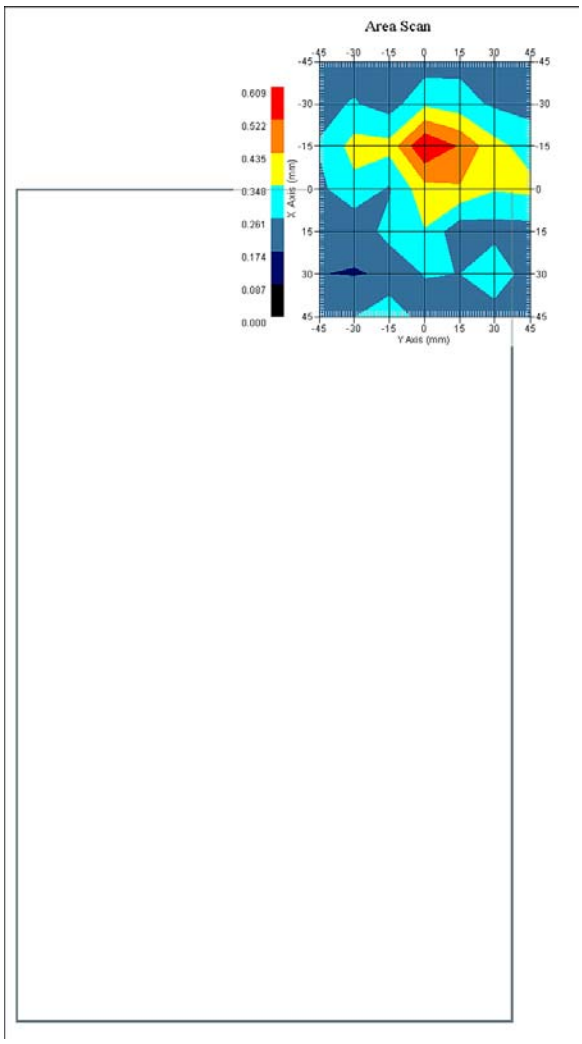
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.71 F/m
Sigma : 5.42 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 11:33:36 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.437 W/kg
10 gram SAR value   : 0.303 W/kg
Area Scan Peak SAR  : 0.606 W/kg
Zoom Scan Peak SAR  : 0.770 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 02-Feb-2011
Starting Time     : 02-Feb-2011  02:59:07 PM
End Time          : 02-Feb-2011  03:16:36 PM
Scanning Time     : 1049 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5150.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 240 mm
Depth             : 400 mm
Antenna Type      : Right Module Chain 1
Orientation       : Side E
Power Drift-Start : 0.517 W/kg
Power Drift-Finish: 0.535 W/kg
Power Drift (%)   : 3.488

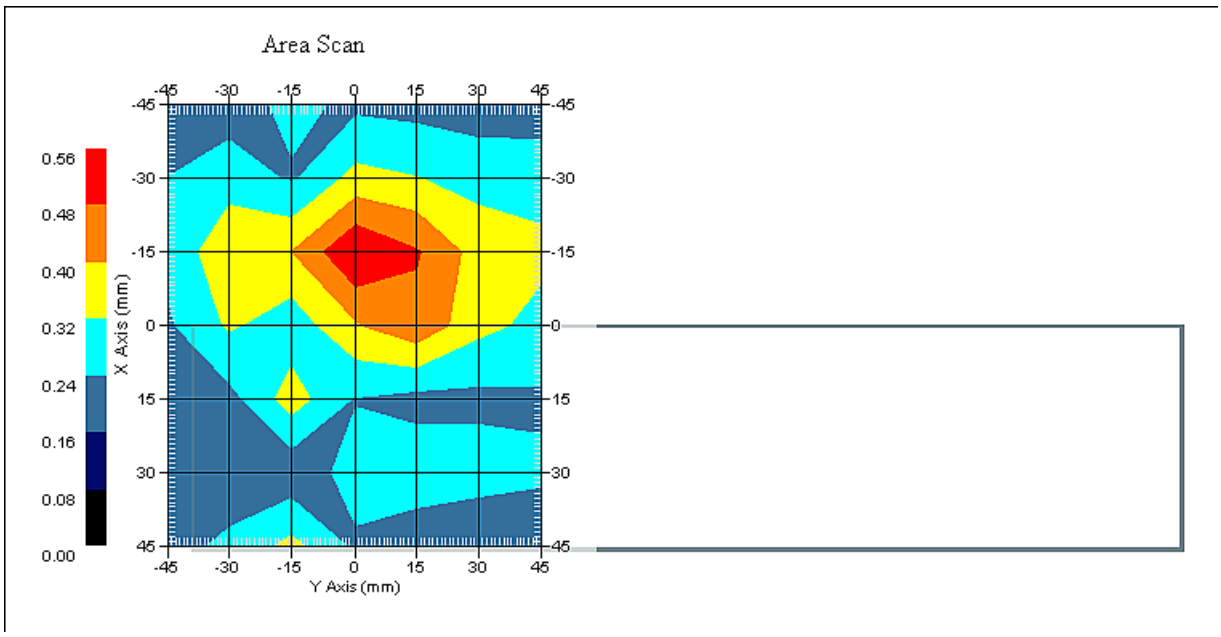
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5200
Frequency         : 5200.00 MHz
Last Calib. Date  : 02-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.71 F/m
Sigma             : 5.42 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 2:58:47 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.454 W/kg
10 gram SAR value   : 0.302 W/kg
Area Scan Peak SAR  : 0.559 W/kg
Zoom Scan Peak SAR  : 0.870 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 01-Feb-2011
Starting Time     : 01-Feb-2011  08:22:34 AM
End Time          : 01-Feb-2011  08:39:17 AM
Scanning Time     : 1003 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Left Module Chain 2
Orientation       : Back Face
Power Drift-Start : 0.235 W/kg
Power Drift-Finish: 0.230 W/kg
Power Drift (%)   : -2.120

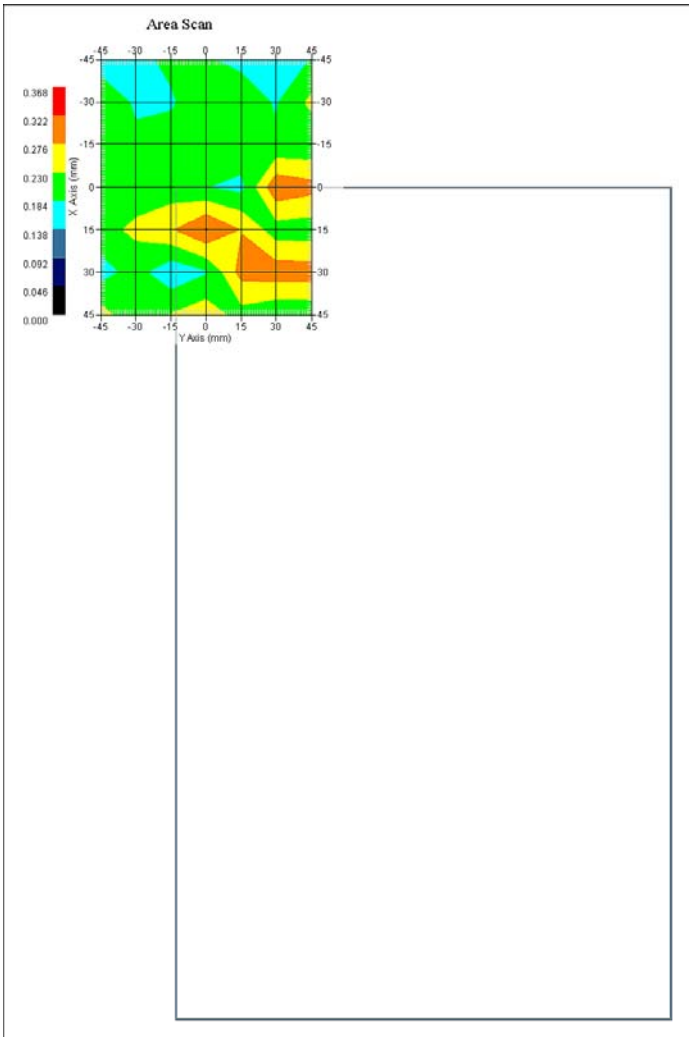
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5200
Frequency         : 5200.00 MHz
Last Calib. Date  : 01-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.53 F/m
Sigma             : 5.41 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 7:43:09 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.260 W/kg
10 gram SAR value   : 0.315 W/kg
Area Scan Peak SAR  : 0.325 W/kg
Zoom Scan Peak SAR  : 0.410 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 01-Feb-2011
Starting Time : 01-Feb-2011 04:20:11 PM
End Time : 01-Feb-2011 04:36:45 PM
Scanning Time : 994 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Left Module Chain 2
Orientation : Side A
Power Drift-Start : 0.593 W/kg
Power Drift-Finish: 0.616 W/kg
Power Drift (%) : 3.803

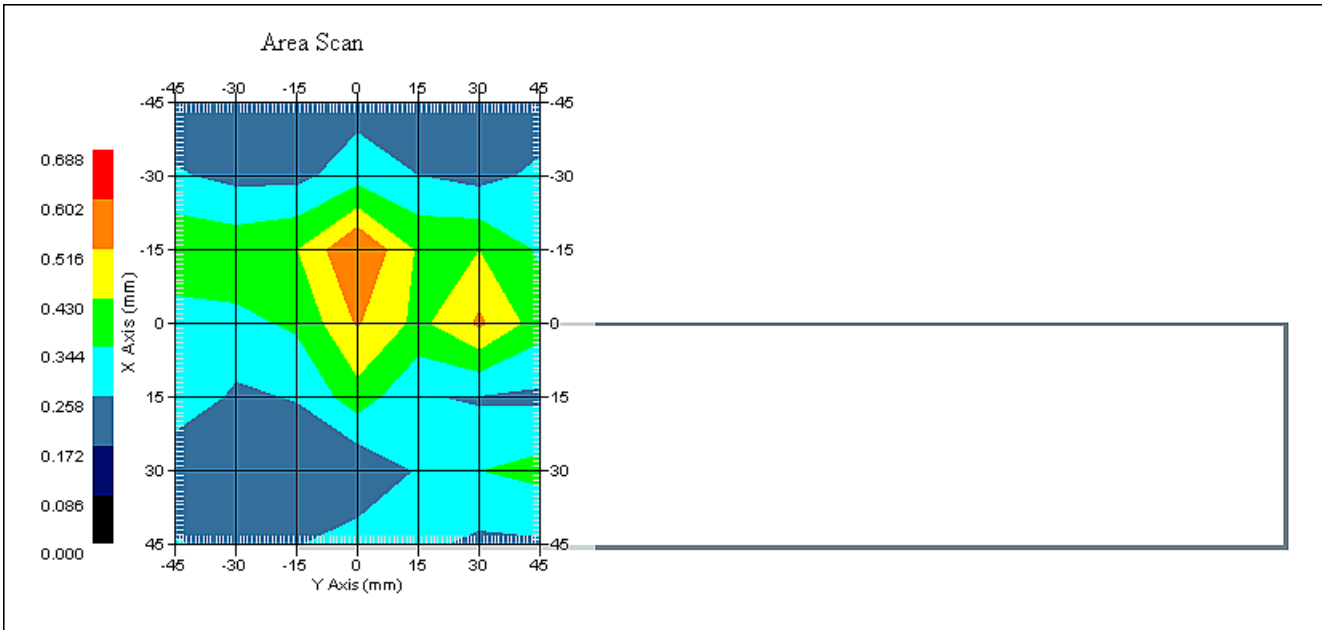
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 01-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.53 F/m
Sigma : 5.41 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 4:00:54 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.539 W/kg
10 gram SAR value   : 0.351 W/kg
Area Scan Peak SAR  : 0.603 W/kg
Zoom Scan Peak SAR  : 0.990 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 01-Feb-2011
Starting Time : 01-Feb-2011 03:36:30 PM
End Time : 01-Feb-2011 03:53:13 PM
Scanning Time : 1003 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 20 mm
Depth : 400 mm
Antenna Type : Left Module Chain 2
Orientation : Side B
Power Drift-Start : 0.589 W/kg
Power Drift-Finish: 0.607 W/kg
Power Drift (%) : 3.055

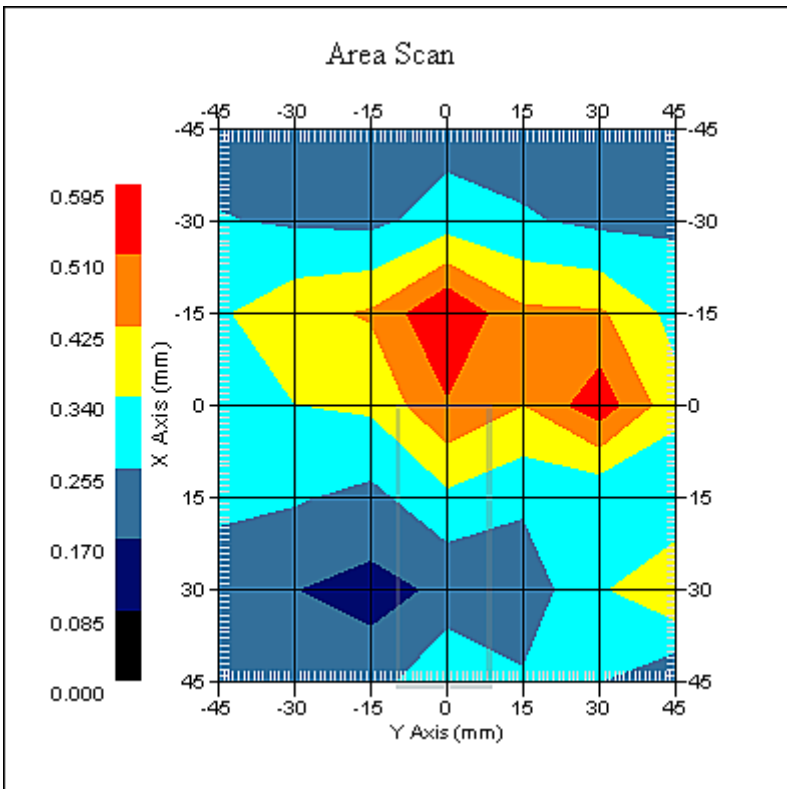
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 01-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.53 F/m
Sigma : 5.41 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 1:51:25 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side B
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.546 W/kg
10 gram SAR value   : 0.351 W/kg
Area Scan Peak SAR  : 0.592 W/kg
Zoom Scan Peak SAR  : 0.970 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 01-Feb-2011
Starting Time : 01-Feb-2011 04:00:58 PM
End Time : 01-Feb-2011 04:17:34 PM
Scanning Time : 996 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 400 mm
Depth : 240 mm
Antenna Type : Left Module Chain 2
Orientation : Side C
Power Drift-Start : 0.609 W/kg
Power Drift-Finish: 0.594 W/kg
Power Drift (%) : -2.468

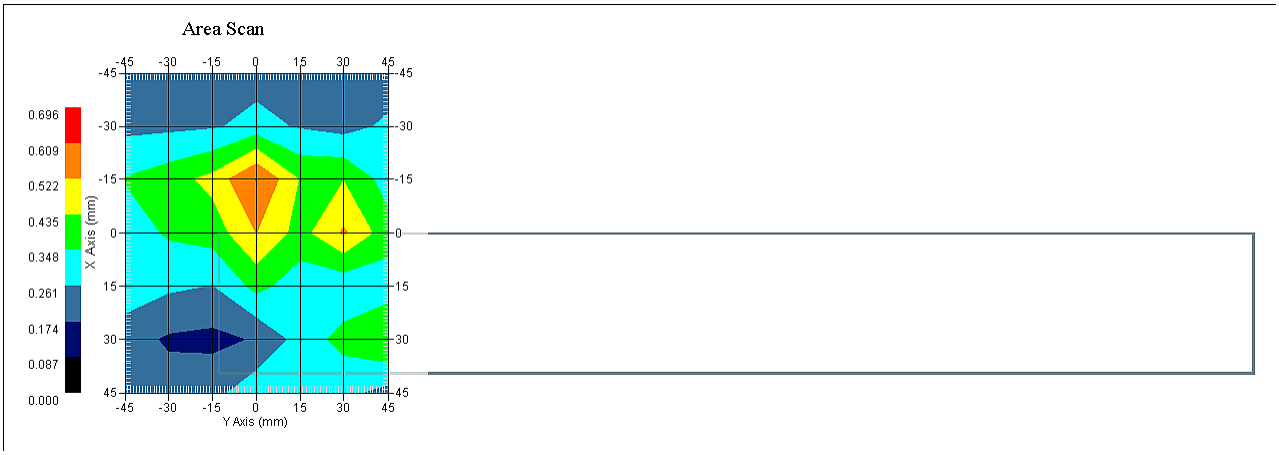
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 01-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.53 F/m
Sigma : 5.41 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 4:00:54 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side C
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.538 W/kg
10 gram SAR value   : 0.354 W/kg
Area Scan Peak SAR  : 0.612 W/kg
Zoom Scan Peak SAR  : 0.990 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 01-Feb-2011
Starting Time     : 01-Feb-2011  05:34:53 PM
End Time          : 01-Feb-2011  05:51:35 PM
Scanning Time     : 1002 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Left Module Chain 1
Orientation       : Back Face
Power Drift-Start : 0.393 W/kg
Power Drift-Finish: 0.387 W/kg
Power Drift (%)   : -1.525

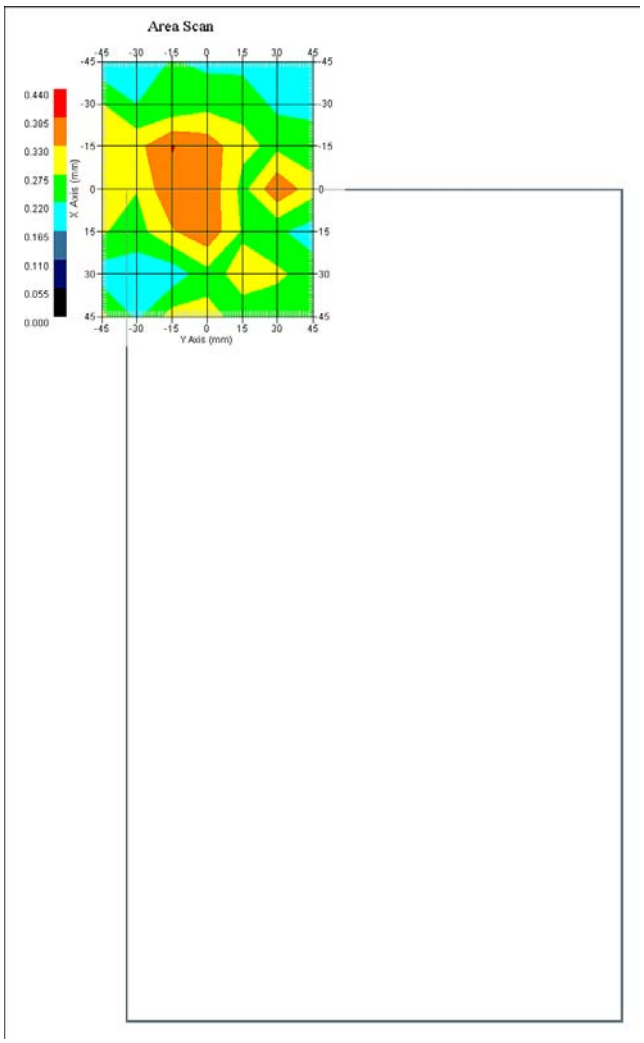
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5200
Frequency         : 5200.00 MHz
Last Calib. Date  : 01-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.53 F/m
Sigma             : 5.41 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 5:34:39 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.351 W/kg
10 gram SAR value   : 0.265 W/kg
Area Scan Peak SAR  : 0.387 W/kg
Zoom Scan Peak SAR  : 0.570 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 01-Feb-2011
Starting Time : 01-Feb-2011 05:14:17 PM
End Time : 01-Feb-2011 05:30:50 PM
Scanning Time : 993 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Left Module Chain 1
Orientation : Side A
Power Drift-Start : 0.583 W/kg
Power Drift-Finish: 0.602 W/kg
Power Drift (%) : 3.318

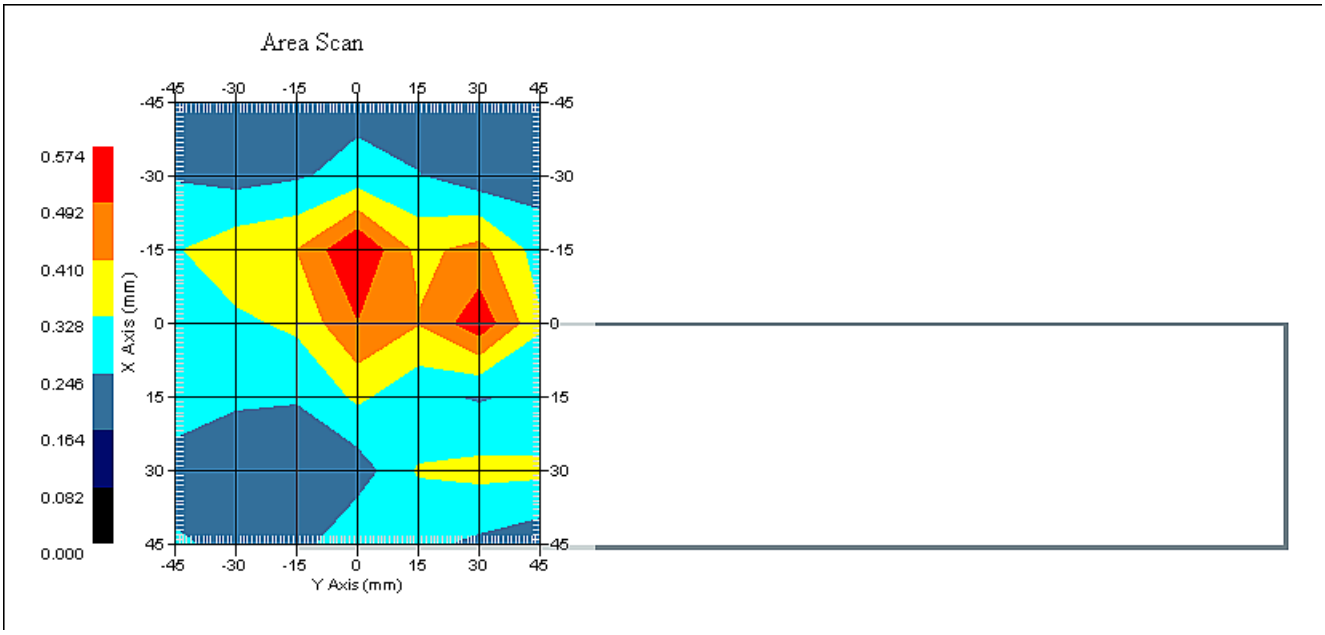
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 01-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.53 F/m
Sigma : 5.41 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 4:51:43 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.536 W/kg
10 gram SAR value   : 0.344 W/kg
Area Scan Peak SAR  : 0.574 W/kg
Zoom Scan Peak SAR  : 0.970 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 01-Feb-2011
Starting Time : 01-Feb-2011 08:36:49 PM
End Time : 01-Feb-2011 08:53:25 PM
Scanning Time : 996 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Left Module Chain 0
Orientation : Back Face
Power Drift-Start : 0.260 W/kg
Power Drift-Finish: 0.255 W/kg
Power Drift (%) : -1.923

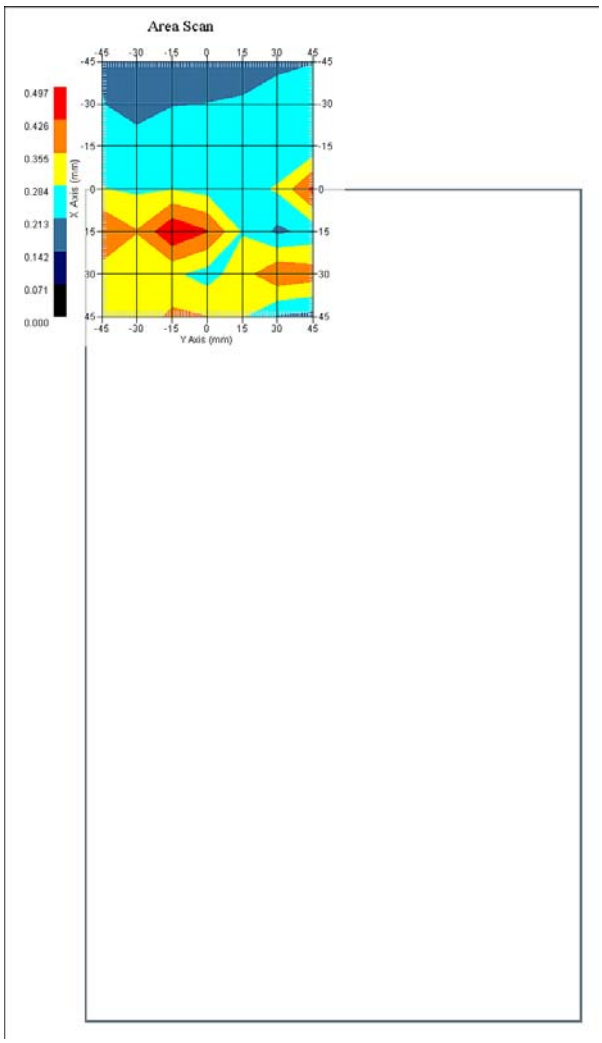
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 01-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.53 F/m
Sigma : 5.41 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 7:39:49 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.361 W/kg
10 gram SAR value   : 0.302 W/kg
Area Scan Peak SAR  : 0.494 W/kg
Zoom Scan Peak SAR  : 0.520 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 01-Feb-2011
Starting Time : 01-Feb-2011 08:17:36 PM
End Time : 01-Feb-2011 08:34:09 PM
Scanning Time : 993 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Left Module Chain 0
Orientation : Side A
Power Drift-Start : 0.268 W/kg
Power Drift-Finish: 0.264 W/kg
Power Drift (%) : -2.388

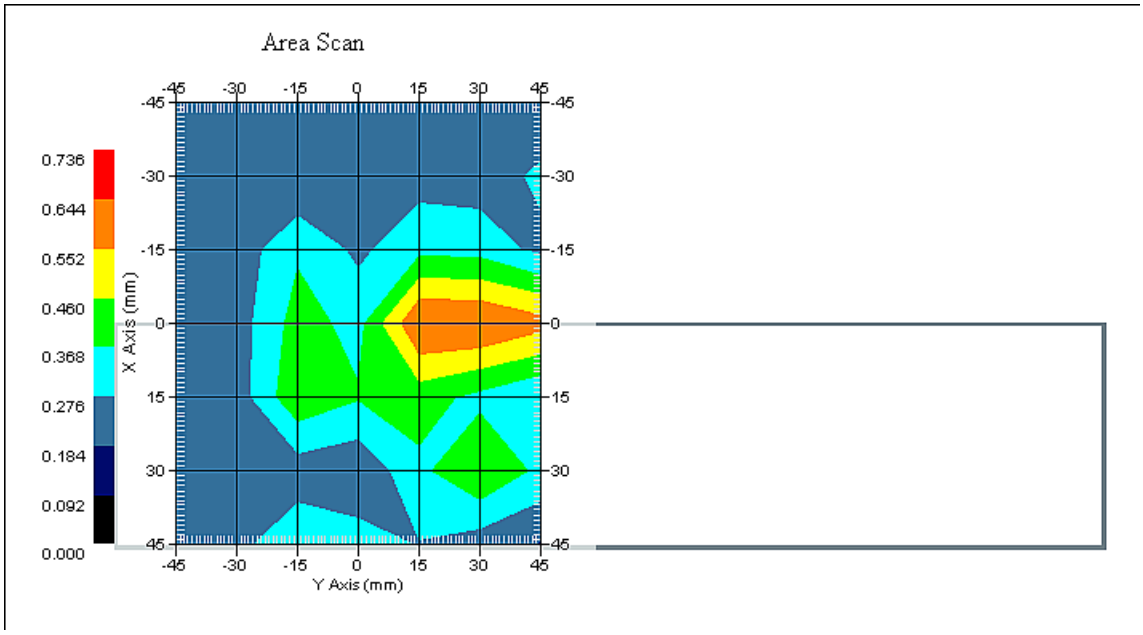
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 01-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.53 F/m
Sigma : 5.41 S/m
Density : 1000.00 kg/cu. m

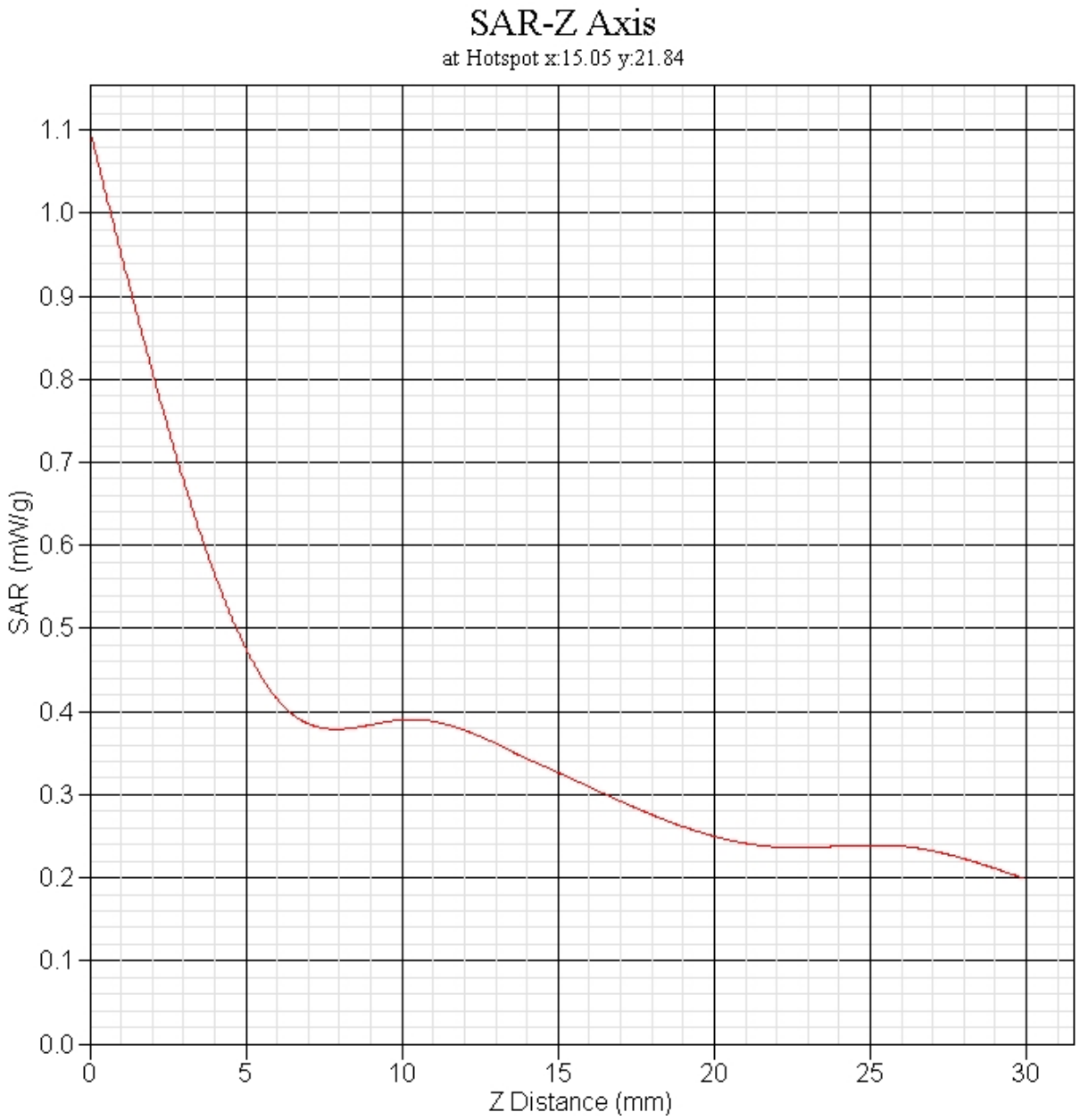
Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 01-Feb-2011
Set-up Time       : 7:39:49 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.598 W/kg
10 gram SAR value   : 0.368 W/kg
Area Scan Peak SAR  : 0.646 W/kg
Zoom Scan Peak SAR  : 1.100 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 08:06:24 AM
End Time : 02-Feb-2011 08:23:48 AM
Scanning Time : 1044 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Right Module Chain 2
Orientation : Back Face
Power Drift-Start : 0.619 W/kg
Power Drift-Finish: 0.591 W/kg
Power Drift (%) : -4.525

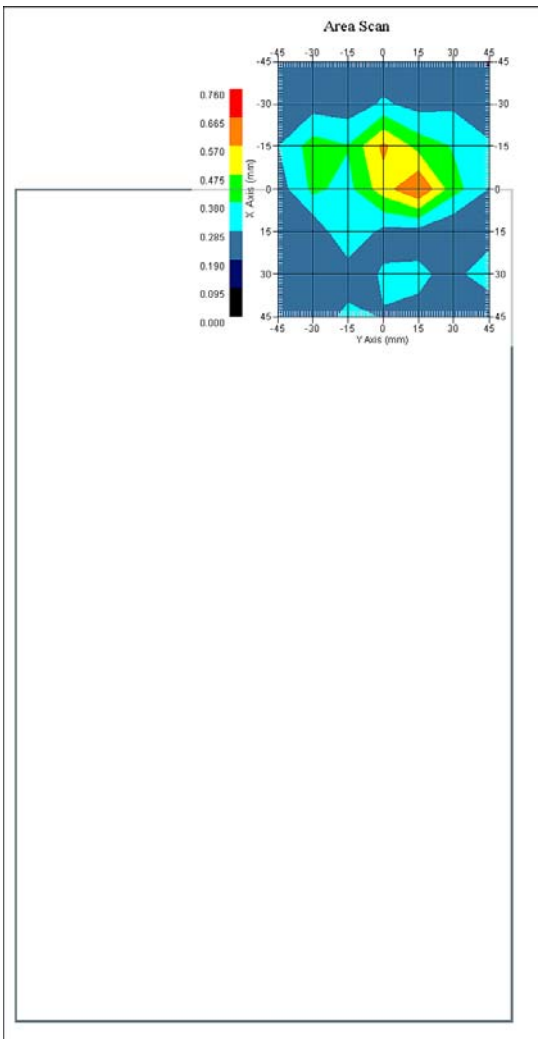
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.71 F/m
Sigma : 5.42 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 7:03:56 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.498 W/kg
10 gram SAR value   : 0.323 W/kg
Area Scan Peak SAR  : 0.668 W/kg
Zoom Scan Peak SAR  : 0.820 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 02-Feb-2011
Starting Time     : 02-Feb-2011  09:23:12 AM
End Time          : 02-Feb-2011  09:40:34 AM
Scanning Time     : 1042 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 240 mm
Depth             : 400 mm
Antenna Type      : Right Module Chain 2
Orientation       : Side E
Power Drift-Start : 0.584 W/kg
Power Drift-Finish: 0.563 W/kg
Power Drift (%)   : -3.590

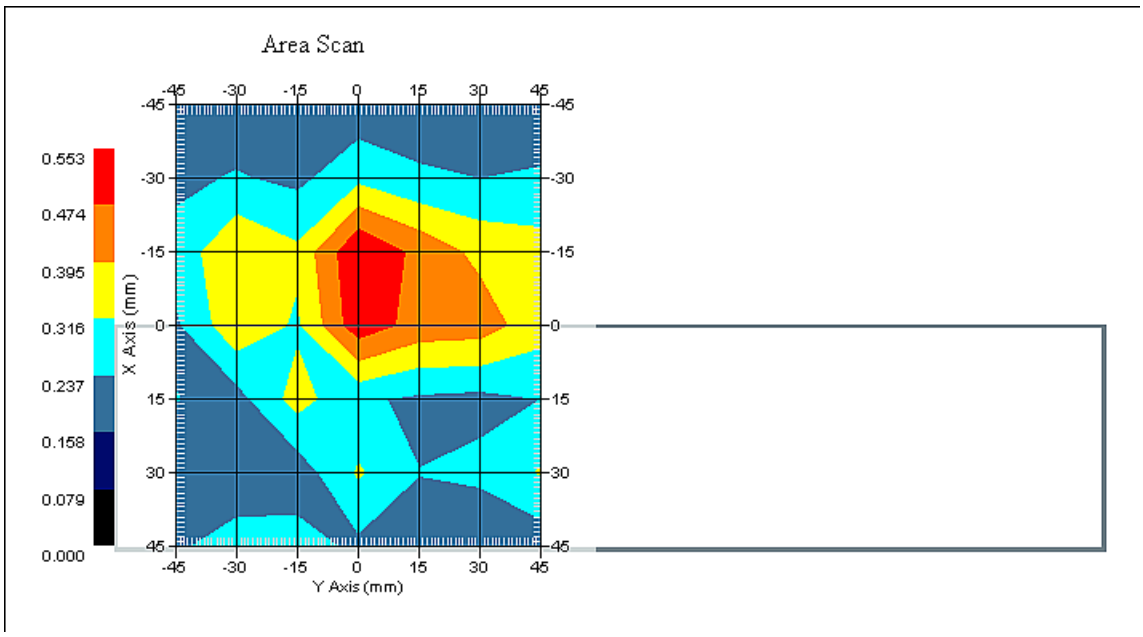
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5200
Frequency         : 5200.00 MHz
Last Calib. Date  : 02-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.71 F/m
Sigma             : 5.42 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 7:03:56 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.455 W/kg
10 gram SAR value   : 0.298 W/kg
Area Scan Peak SAR  : 0.553 W/kg
Zoom Scan Peak SAR  : 0.740 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 12:31:22 PM
End Time : 02-Feb-2011 12:48:42 PM
Scanning Time : 1040 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Right Module Chain 0
Orientation : Back Face
Power Drift-Start : 0.551 W/kg
Power Drift-Finish: 0.570 W/kg
Power Drift (%) : 3.444

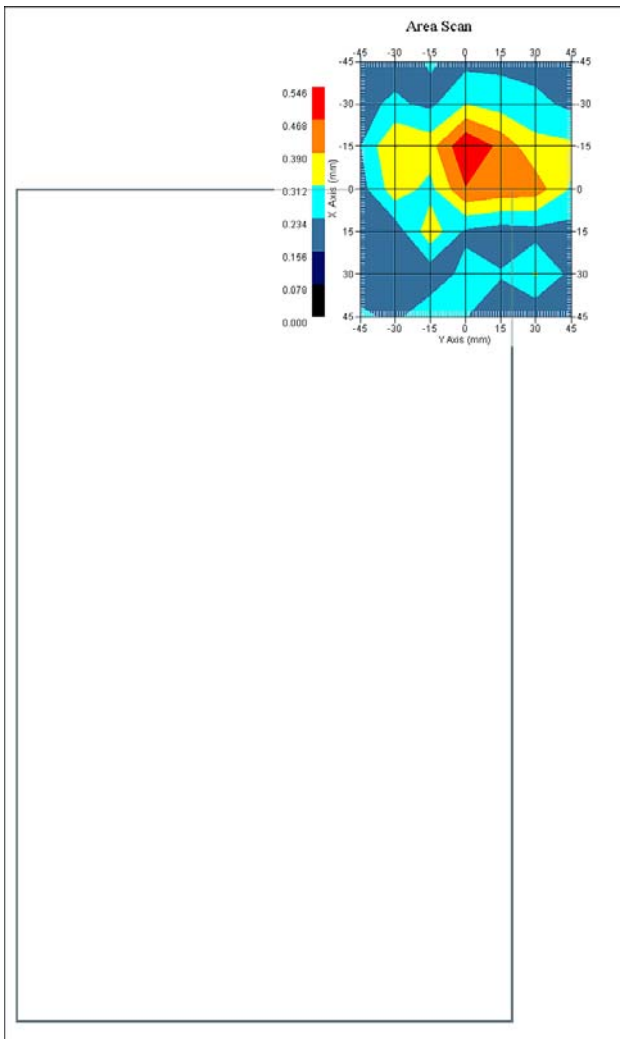
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.71 F/m
Sigma : 5.42 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 11:33:36 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.443 W/kg
10 gram SAR value   : 0.296 W/kg
Area Scan Peak SAR  : 0.543 W/kg
Zoom Scan Peak SAR  : 0.650 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 02-Feb-2011
Starting Time     : 02-Feb-2011  11:33:50 AM
End Time          : 02-Feb-2011  11:51:15 AM
Scanning Time     : 1045 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 400 mm
Depth             : 240 mm
Antenna Type      : Right Module Chain 0
Orientation       : Side C
Power Drift-Start : 0.527 W/kg
Power Drift-Finish: 0.541 W/kg
Power Drift (%)   : 2.656

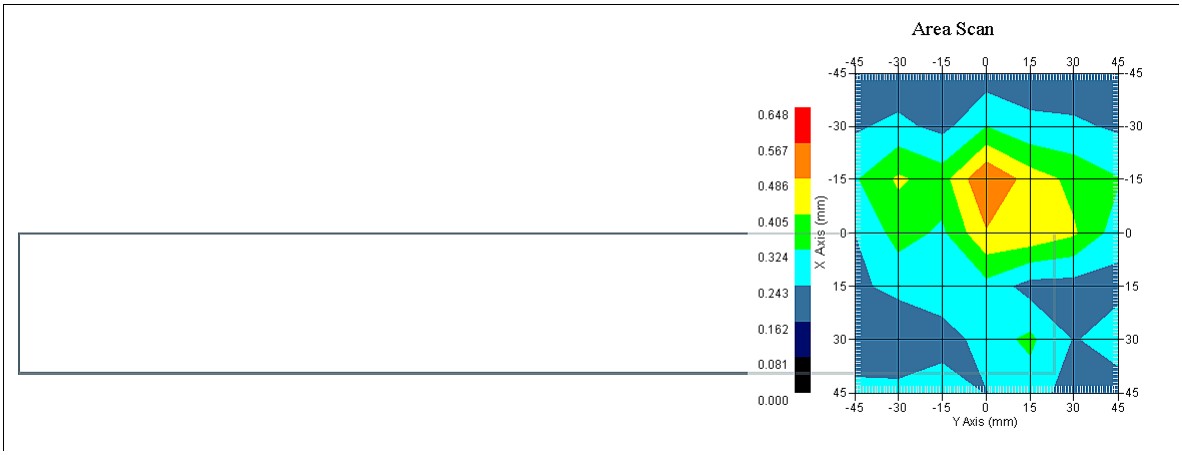
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5200
Frequency         : 5200.00 MHz
Last Calib. Date  : 02-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.71 F/m
Sigma             : 5.42 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 11:33:36 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side C
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.472 W/kg
10 gram SAR value   : 0.301 W/kg
Area Scan Peak SAR  : 0.568 W/kg
Zoom Scan Peak SAR  : 0.900 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 02-Feb-2011
Starting Time     : 02-Feb-2011  10:56:36 AM
End Time          : 02-Feb-2011  11:13:53 AM
Scanning Time     : 1037 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 20 mm
Depth             : 400 mm
Antenna Type      : Right Module Chain 0
Orientation       : Side D
Power Drift-Start : 0.566 W/kg
Power Drift-Finish: 0.569 W/kg
Power Drift (%)   : 0.496

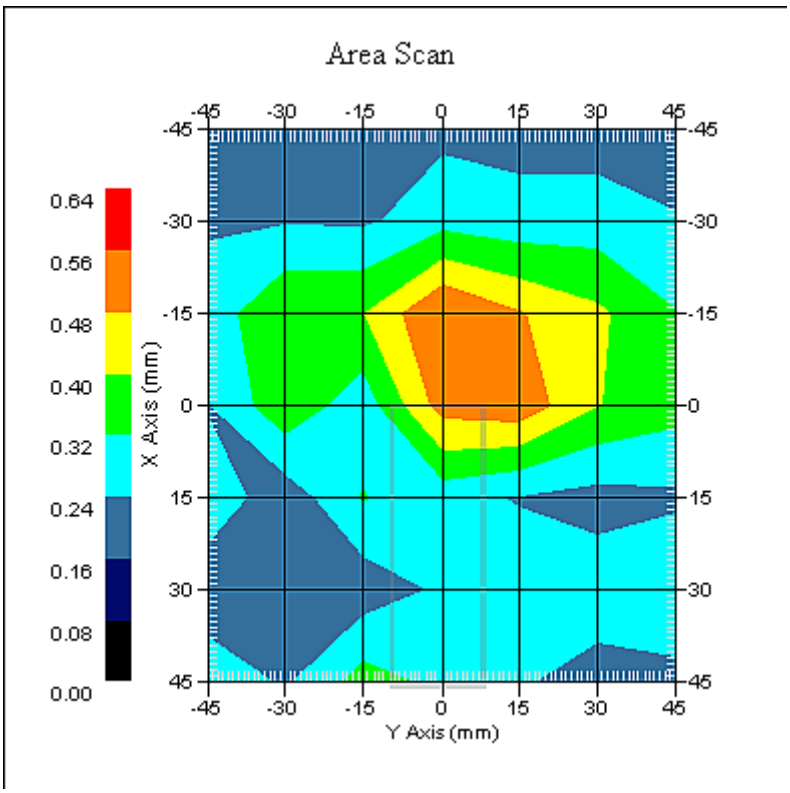
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5200
Frequency         : 5200.00 MHz
Last Calib. Date  : 02-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.71 F/m
Sigma             : 5.42 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 10:36:59 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side D
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.457 W/kg
10 gram SAR value   : 0.311 W/kg
Area Scan Peak SAR  : 0.562 W/kg
Zoom Scan Peak SAR  : 0.780 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 02-Feb-2011
Starting Time     : 02-Feb-2011  09:42:36 AM
End Time          : 02-Feb-2011  09:59:55 AM
Scanning Time     : 1039 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 240 mm
Depth             : 400 mm
Antenna Type      : Right Module Chain 0
Orientation       : Side E
Power Drift-Start : 0.552 W/kg
Power Drift-Finish: 0.547 W/kg
Power Drift (%)   : -0.906

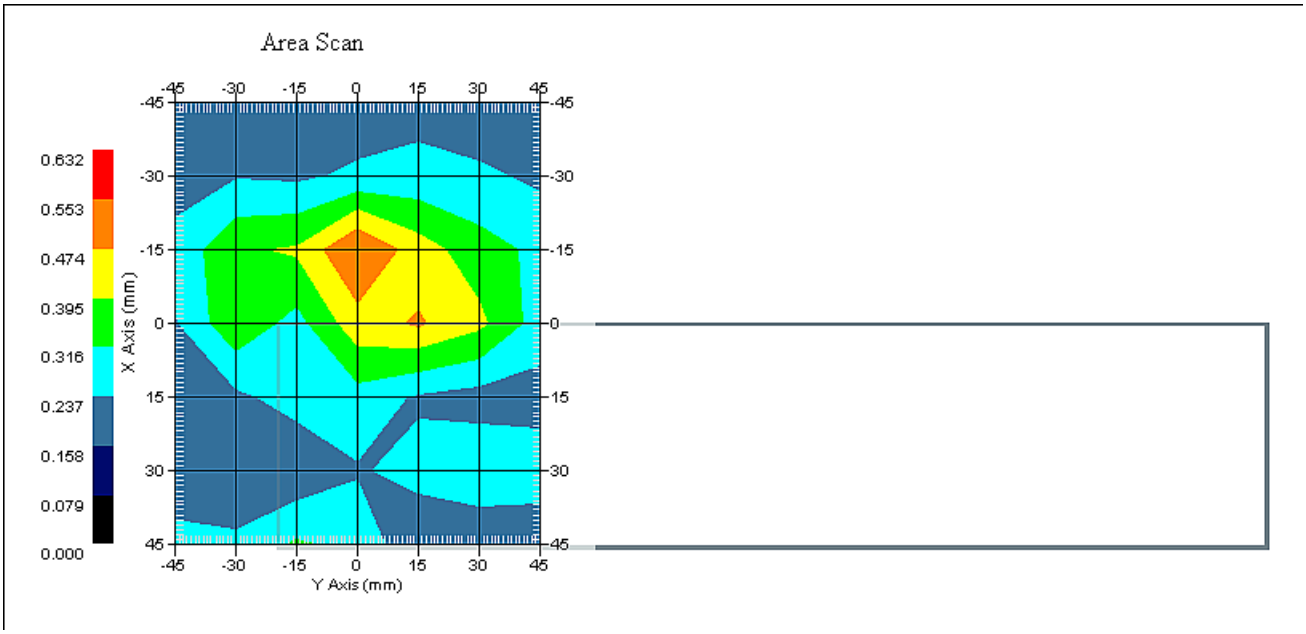
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5200
Frequency         : 5200.00 MHz
Last Calib. Date  : 02-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.71 F/m
Sigma             : 5.42 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 7:03:56 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.468 W/kg
10 gram SAR value   : 0.308 W/kg
Area Scan Peak SAR  : 0.556 W/kg
Zoom Scan Peak SAR  : 0.730 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 02:06:37 PM
End Time : 02-Feb-2011 02:23:49 PM
Scanning Time : 1032 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Right Module Chain 1
Orientation : Back Face
Power Drift-Start : 0.569 W/kg
Power Drift-Finish: 0.573 W/kg
Power Drift (%) : 0.706

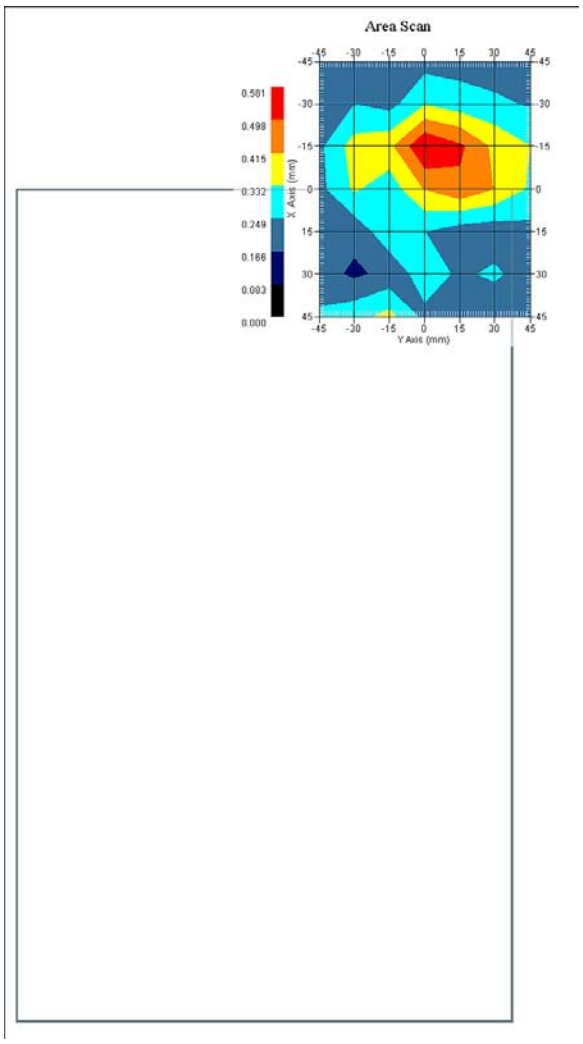
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.71 F/m
Sigma : 5.42 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 11:33:36 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.452 W/kg
10 gram SAR value   : 0.302 W/kg
Area Scan Peak SAR  : 0.581 W/kg
Zoom Scan Peak SAR  : 0.760 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 02-Feb-2011
Starting Time     : 02-Feb-2011  03:18:05 PM
End Time          : 02-Feb-2011  03:35:18 PM
Scanning Time     : 1033 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5250.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 240 mm
Depth             : 400 mm
Antenna Type      : Right Module Chain 1
Orientation       : Side E
Power Drift-Start : 0.552 W/kg
Power Drift-Finish: 0.545 W/kg
Power Drift (%)   : -1.243

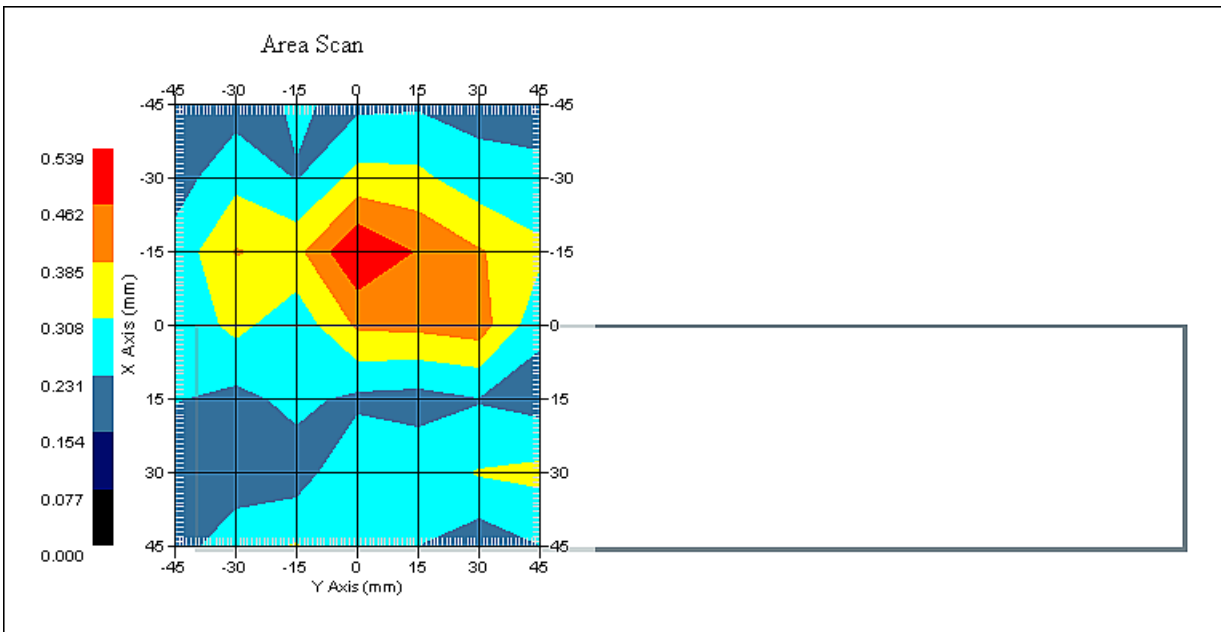
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5200
Frequency         : 5200.00 MHz
Last Calib. Date  : 02-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.71 F/m
Sigma             : 5.42 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 2:58:47 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.481 W/kg
10 gram SAR value   : 0.310 W/kg
Area Scan Peak SAR  : 0.538 W/kg
Zoom Scan Peak SAR  : 0.850 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 04:13:37 PM
End Time : 02-Feb-2011 04:30:52 PM
Scanning Time : 1035 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Left Module Chain 2
Orientation : Back Face
Power Drift-Start : 0.636 W/kg
Power Drift-Finish: 0.608 W/kg
Power Drift (%) : -4.416

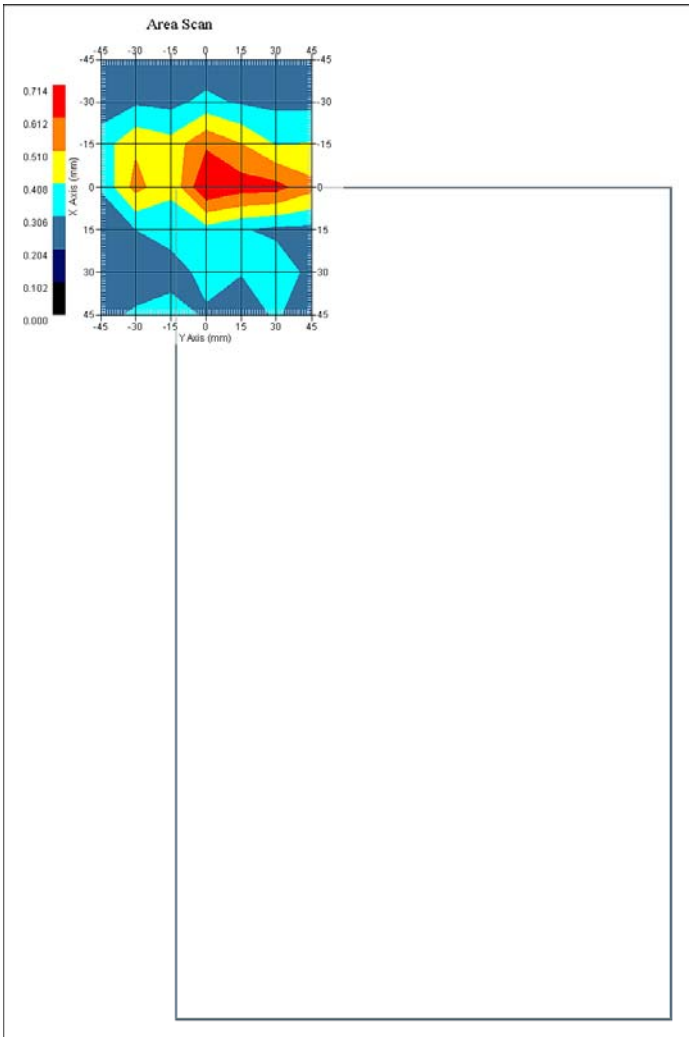
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.57 F/m
Sigma : 5.91 S/m
Density : 1000.00 kg/cu. m

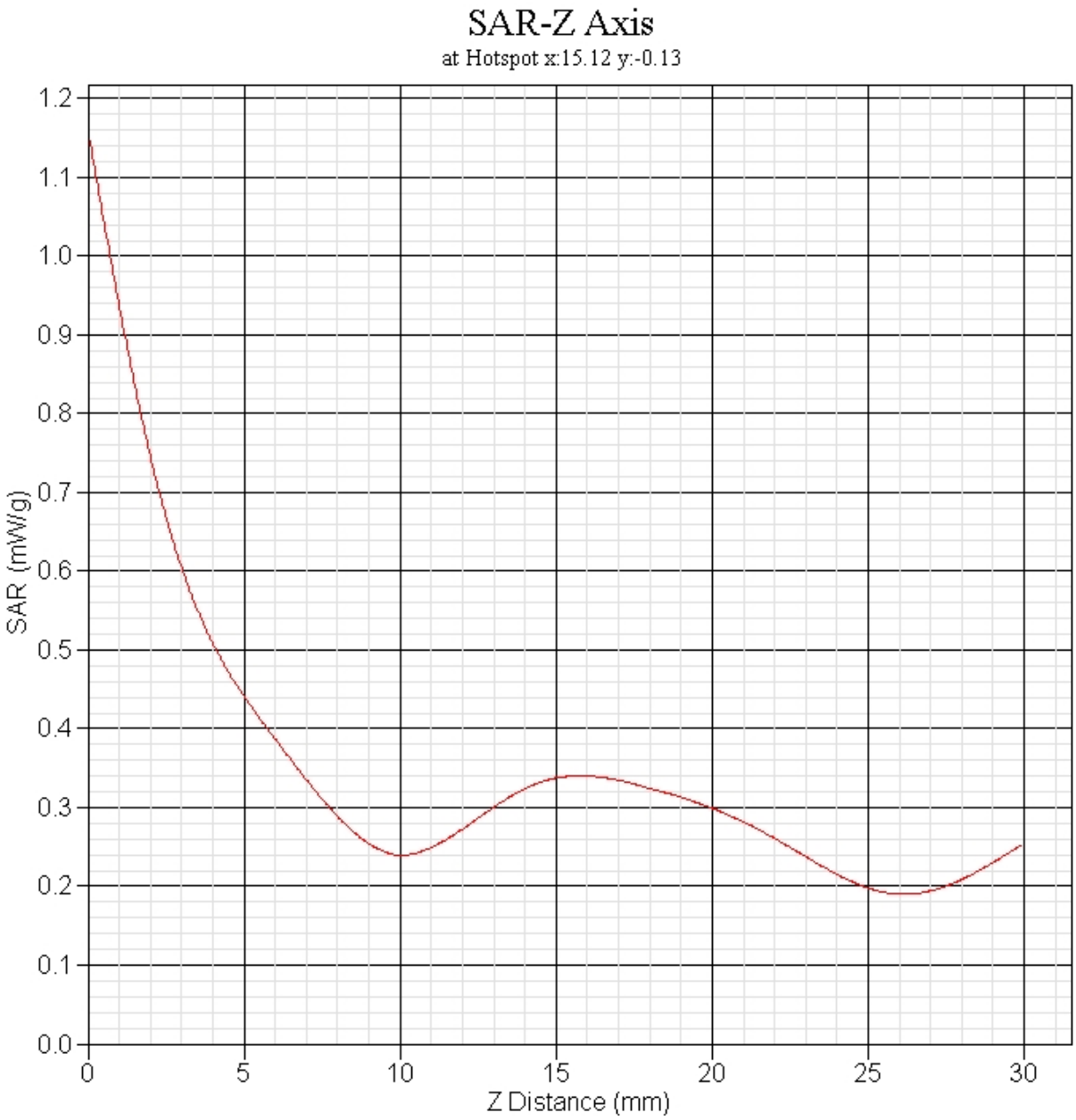
Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 3:39:46 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.626 W/kg
10 gram SAR value   : 0.419 W/kg
Area Scan Peak SAR  : 0.714 W/kg
Zoom Scan Peak SAR  : 1.160 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 04:32:51 PM
End Time : 02-Feb-2011 04:50:12 PM
Scanning Time : 1041 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Left Module Chain 2
Orientation : Side A
Power Drift-Start : 0.617 W/kg
Power Drift-Finish: 0.594 W/kg
Power Drift (%) : -3.762

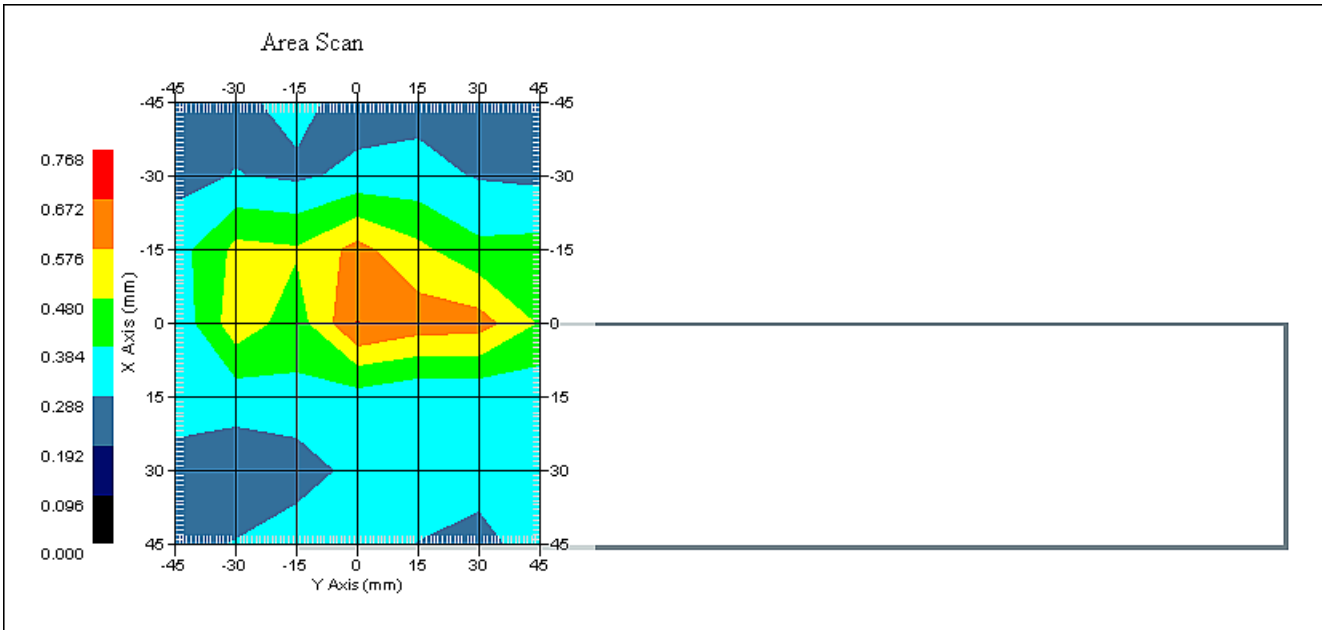
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.57 F/m
Sigma : 5.91 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 3:39:46 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.620 W/kg
10 gram SAR value   : 0.390 W/kg
Area Scan Peak SAR  : 0.675 W/kg
Zoom Scan Peak SAR  : 1.170 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 02-Feb-2011
Starting Time     : 02-Feb-2011  04:51:55 PM
End Time          : 02-Feb-2011  05:09:18 PM
Scanning Time     : 1043 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 20 mm
Depth             : 400 mm
Antenna Type      : Left Module Chain 2
Orientation       : Side B
Power Drift-Start : 0.624 W/kg
Power Drift-Finish: 0.603 W/kg
Power Drift (%)   : -3.408

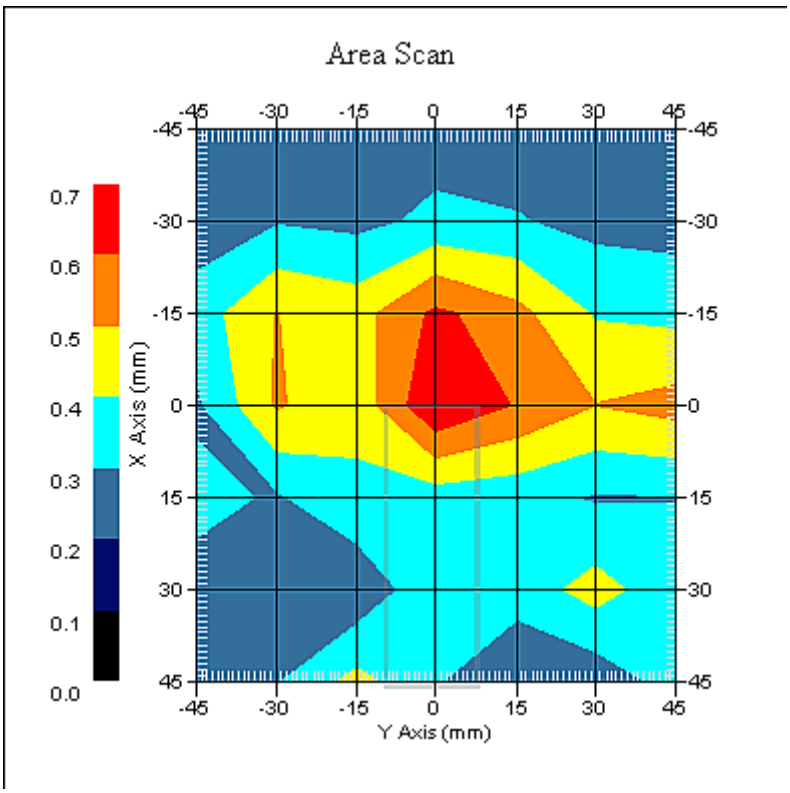
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5600
Frequency         : 5600.00 MHz
Last Calib. Date  : 02-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.57 F/m
Sigma             : 5.91 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 3:39:46 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side B
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.602 W/kg
10 gram SAR value   : 0.396 W/kg
Area Scan Peak SAR  : 0.698 W/kg
Zoom Scan Peak SAR  : 1.080 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 05:11:06 PM
End Time : 02-Feb-2011 05:28:20 PM
Scanning Time : 1034 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 400 mm
Depth : 240 mm
Antenna Type : Left Module Chain 2
Orientation : Side C
Power Drift-Start : 0.631 W/kg
Power Drift-Finish: 0.653 W/kg
Power Drift (%) : 3.447

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.57 F/m
Sigma : 5.91 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 3:39:46 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side C
Separation        : 0 mm
Channel           : Mid
```


```
1 gram SAR value    : 0.608 W/kg
10 gram SAR value   : 0.406 W/kg
Area Scan Peak SAR  : 0.663 W/kg
Zoom Scan Peak SAR  : 1.130 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 05:50:17 PM
End Time : 02-Feb-2011 06:07:43 PM
Scanning Time : 1046 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Left Module Chain 1
Orientation : Back Face
Power Drift-Start : 0.648 W/kg
Power Drift-Finish: 0.646 W/kg
Power Drift (%) : -0.296

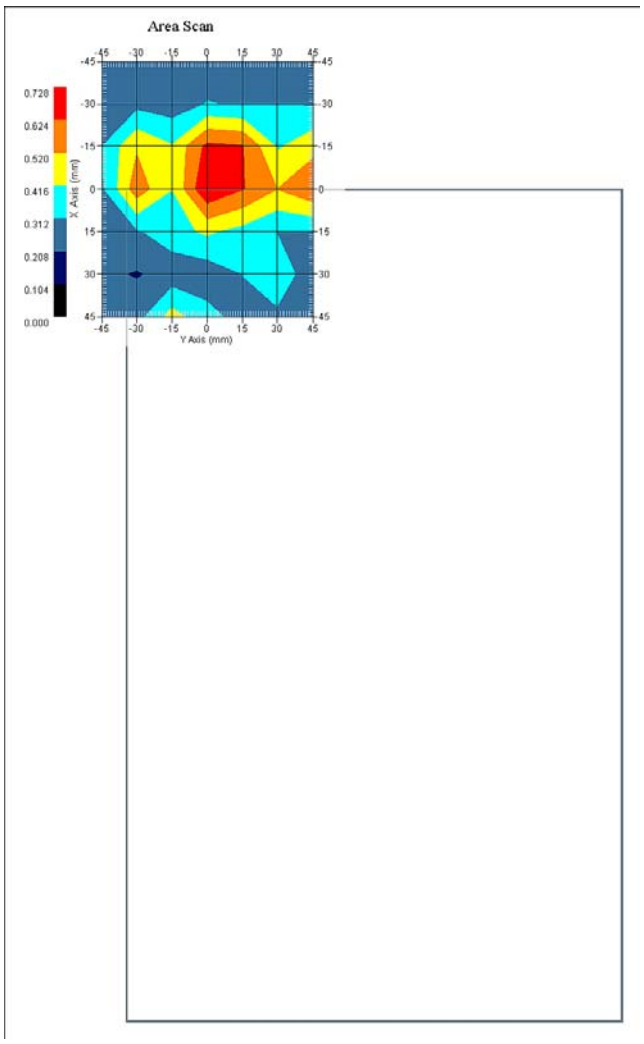
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.57 F/m
Sigma : 5.91 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 3:39:46 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.621 W/kg
10 gram SAR value   : 0.399 W/kg
Area Scan Peak SAR  : 0.726 W/kg
Zoom Scan Peak SAR  : 1.150 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 02-Feb-2011
Starting Time     : 02-Feb-2011  06:10:01 PM
End Time          : 02-Feb-2011  06:27:19 PM
Scanning Time     : 1038 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 200 mm
Depth             : 400 mm
Antenna Type      : Left Module Chain 1
Orientation       : Side A
Power Drift-Start : 0.652 W/kg
Power Drift-Finish: 0.623 W/kg
Power Drift (%)   : -4.526

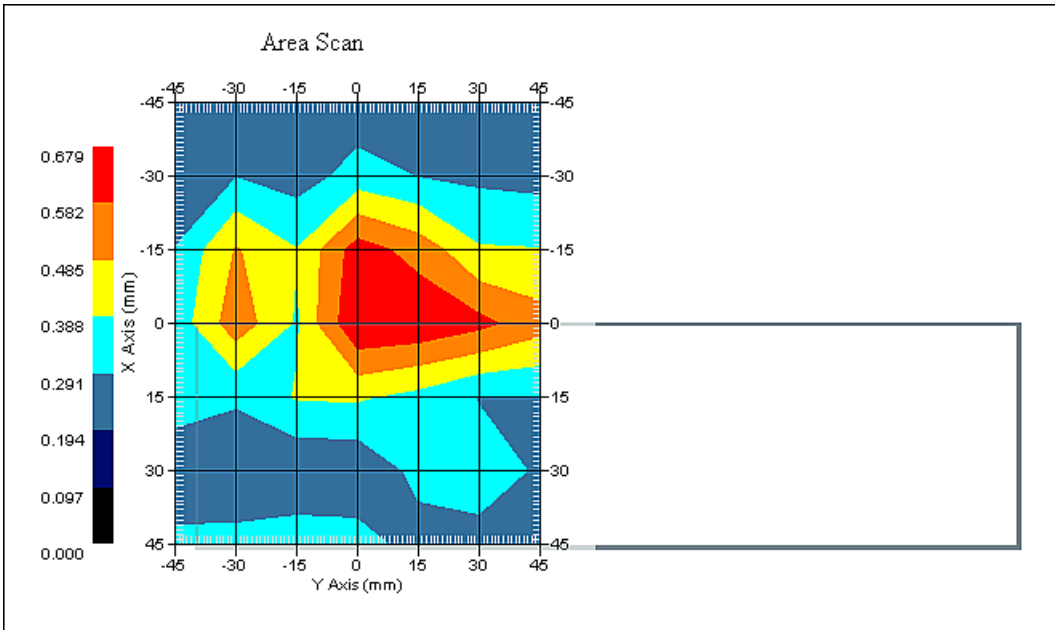
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5600
Frequency         : 5600.00 MHz
Last Calib. Date  : 02-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.57 F/m
Sigma             : 5.91 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 3:39:46 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.608 W/kg
10 gram SAR value   : 0.387 W/kg
Area Scan Peak SAR  : 0.679 W/kg
Zoom Scan Peak SAR  : 1.110 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 02-Feb-2011
Starting Time     : 02-Feb-2011  06:55:59 PM
End Time          : 02-Feb-2011  07:13:28 PM
Scanning Time     : 1049 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Left Module Chain 0
Orientation       : Back Face
Power Drift-Start : 0.572 W/kg
Power Drift-Finish: 0.595 W/kg
Power Drift (%)   : 4.028

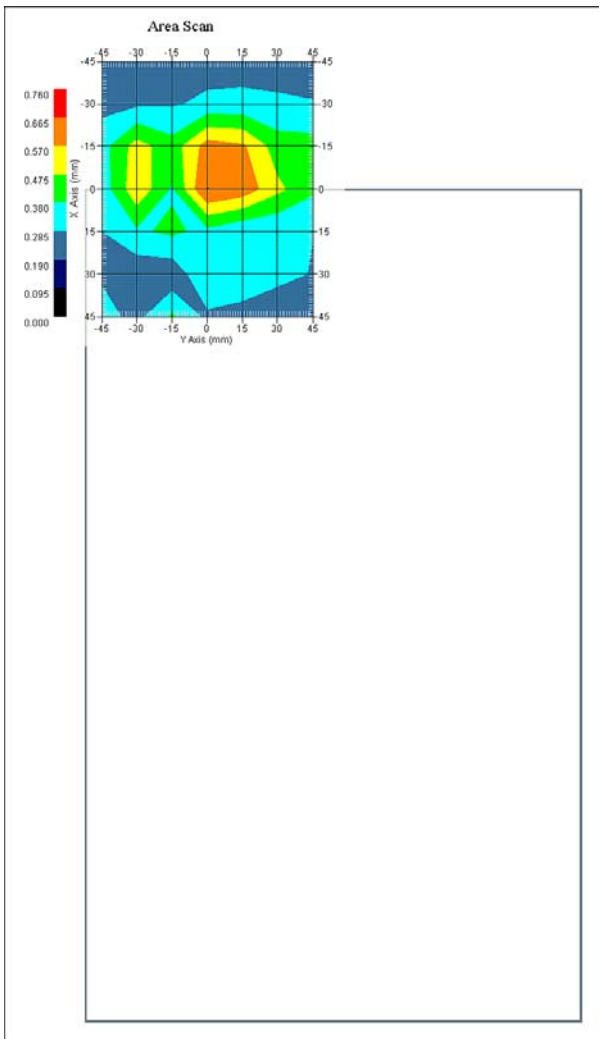
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5600
Frequency         : 5600.00 MHz
Last Calib. Date  : 02-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.57 F/m
Sigma             : 5.91 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 6:55:46 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.556 W/kg
10 gram SAR value   : 0.374 W/kg
Area Scan Peak SAR  : 0.667 W/kg
Zoom Scan Peak SAR  : 0.970 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 07:15:20 PM
End Time : 02-Feb-2011 07:32:36 PM
Scanning Time : 1036 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Left Module Chain 0
Orientation : Side A
Power Drift-Start : 0.640 W/kg
Power Drift-Finish: 0.621 W/kg
Power Drift (%) : -2.952

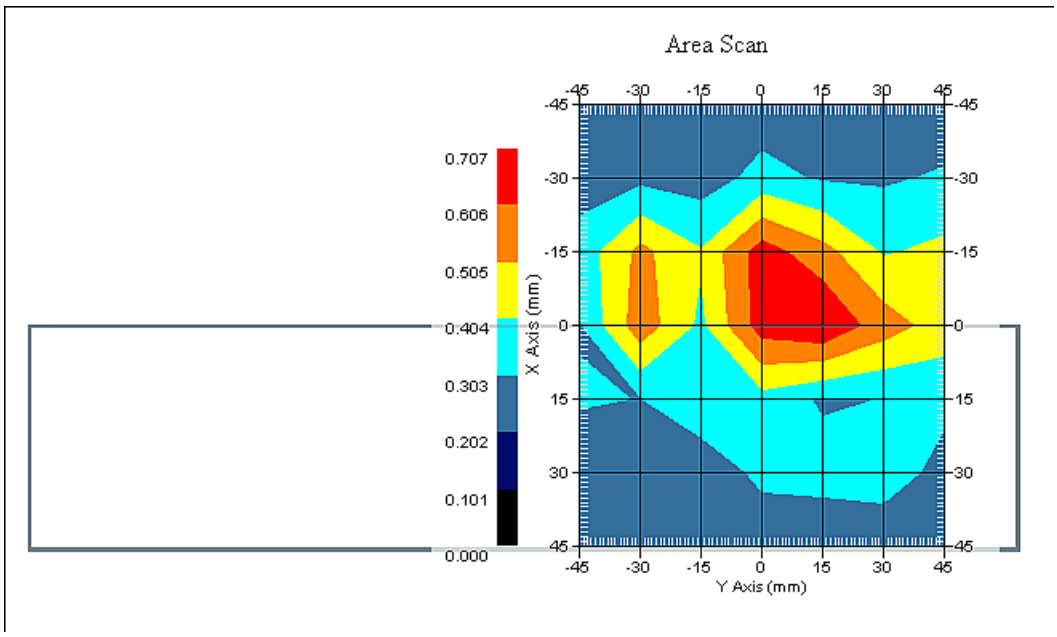
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.57 F/m
Sigma : 5.91 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 6:55:46 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.568 W/kg
10 gram SAR value   : 0.377 W/kg
Area Scan Peak SAR  : 0.705 W/kg
Zoom Scan Peak SAR  : 0.980 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 07:53:32 PM
End Time : 02-Feb-2011 08:11:00 PM
Scanning Time : 1048 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Right Module Chain 2
Orientation : Back Face
Power Drift-Start : 0.607 W/kg
Power Drift-Finish: 0.595 W/kg
Power Drift (%) : -1.998

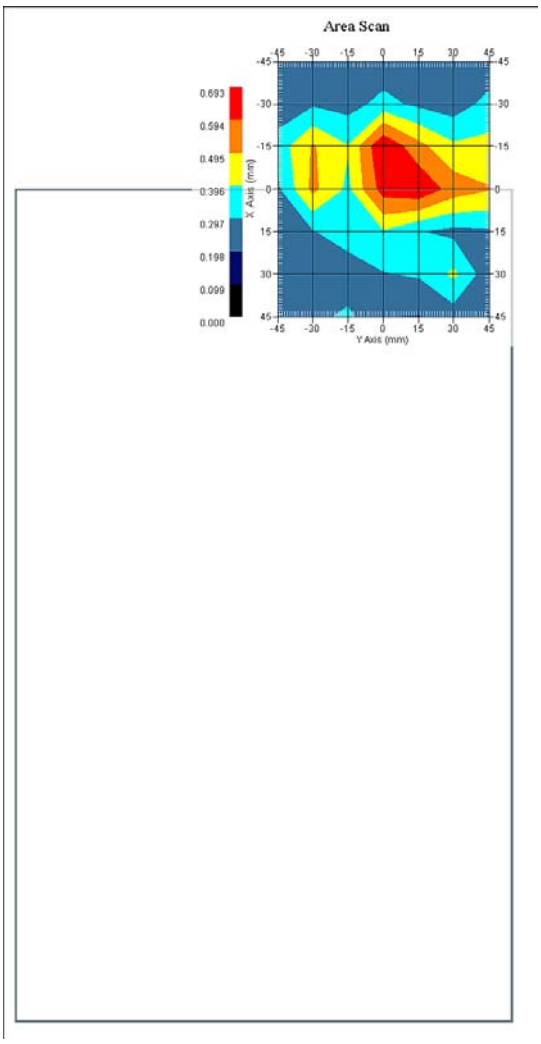
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.57 F/m
Sigma : 5.91 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 6:55:46 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.577 W/kg
10 gram SAR value   : 0.395 W/kg
Area Scan Peak SAR  : 0.692 W/kg
Zoom Scan Peak SAR  : 0.980 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 02-Feb-2011
Starting Time : 02-Feb-2011 08:12:48 PM
End Time : 02-Feb-2011 08:30:14 PM
Scanning Time : 1046 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Right Module Chain 2
Orientation : Side E
Power Drift-Start : 0.544 W/kg
Power Drift-Finish: 0.550 W/kg
Power Drift (%) : 1.106

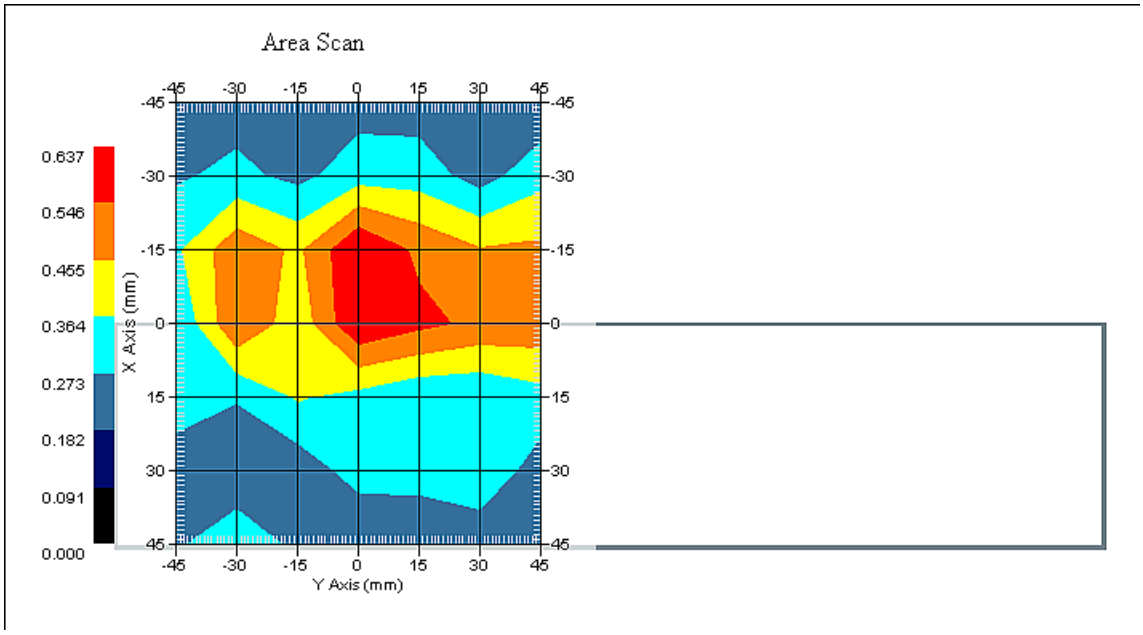
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 02-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.57 F/m
Sigma : 5.91 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 02-Feb-2011
Set-up Time       : 6:55:46 PM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.622 W/kg
10 gram SAR value   : 0.398 W/kg
Area Scan Peak SAR  : 0.637 W/kg
Zoom Scan Peak SAR  : 1.090 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 03-Feb-2011
Starting Time     : 03-Feb-2011  09:16:17 AM
End Time          : 03-Feb-2011  09:33:44 AM
Scanning Time     : 1047 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Right Module Chain 0
Orientation       : Back Face
Power Drift-Start : 0.621 W/kg
Power Drift-Finish: 0.605 W/kg
Power Drift (%)   : -2.581

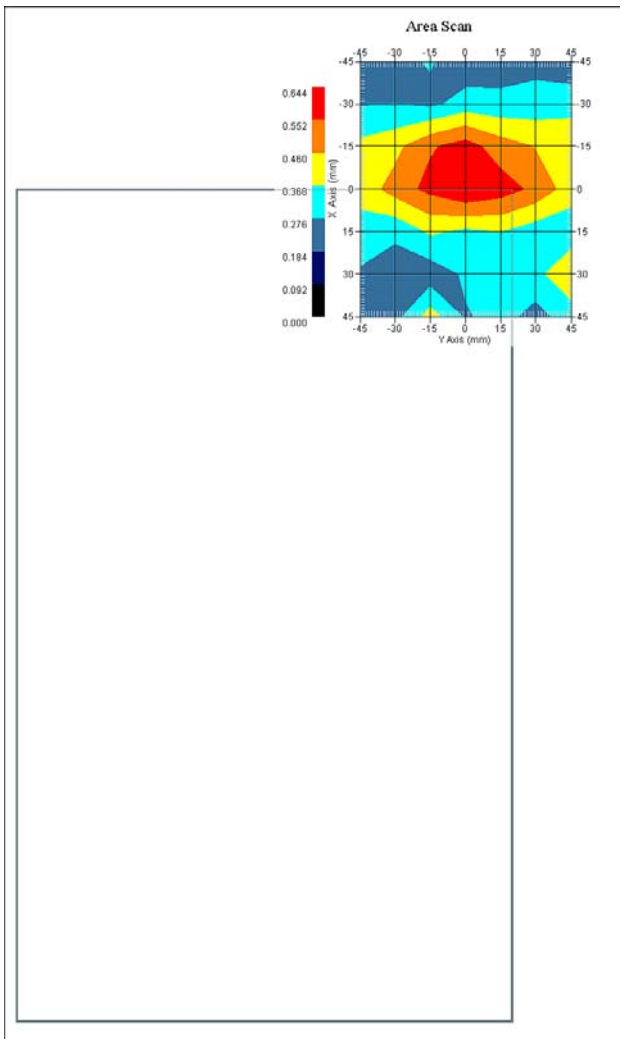
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5600
Frequency         : 5600.00 MHz
Last Calib. Date  : 03-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.35 F/m
Sigma             : 5.92 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 8:55:40 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.560 W/kg
10 gram SAR value   : 0.355 W/kg
Area Scan Peak SAR  : 0.643 W/kg
Zoom Scan Peak SAR  : 0.980 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 03-Feb-2011
Starting Time : 03-Feb-2011 09:35:42 AM
End Time : 03-Feb-2011 09:53:18 AM
Scanning Time : 1056 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 400 mm
Depth : 240 mm
Antenna Type : Right Module Chain 0
Orientation : Side C
Power Drift-Start : 0.615 W/kg
Power Drift-Finish: 0.593 W/kg
Power Drift (%) : -3.570

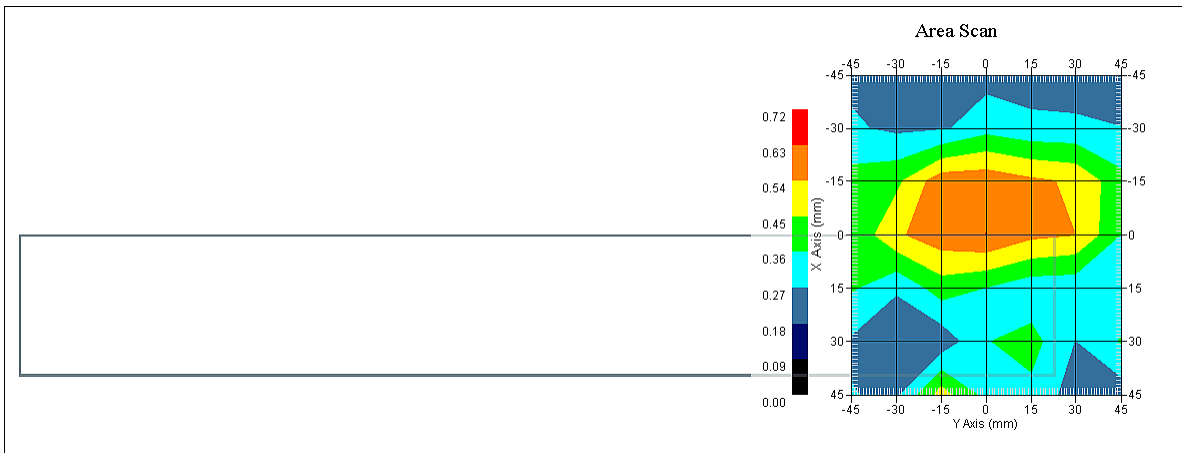
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 03-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.35 F/m
Sigma : 5.92 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 8:55:40 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side C
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.590 W/kg
10 gram SAR value   : 0.361 W/kg
Area Scan Peak SAR  : 0.631 W/kg
Zoom Scan Peak SAR  : 1.070 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 03-Feb-2011
Starting Time : 03-Feb-2011 09:55:27 AM
End Time : 03-Feb-2011 10:12:57 AM
Scanning Time : 1050 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 20 mm
Depth : 400 mm
Antenna Type : Right Module Chain 0
Orientation : Side D
Power Drift-Start : 0.596 W/kg
Power Drift-Finish: 0.609 W/kg
Power Drift (%) : 2.186

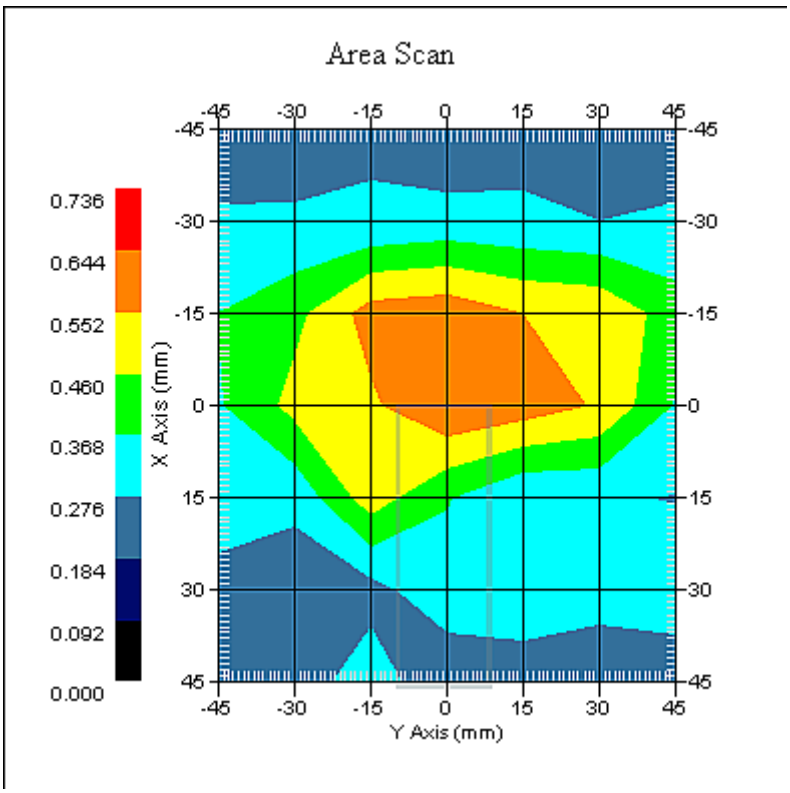
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 03-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.35 F/m
Sigma : 5.92 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 8:55:40 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side D
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.555 W/kg
10 gram SAR value   : 0.358 W/kg
Area Scan Peak SAR  : 0.645 W/kg
Zoom Scan Peak SAR  : 1.040 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 03-Feb-2011
Starting Time : 03-Feb-2011 10:14:44 AM
End Time : 03-Feb-2011 10:32:12 AM
Scanning Time : 1048 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Right Module Chain 0
Orientation : Side E
Power Drift-Start : 0.603 W/kg
Power Drift-Finish: 0.613 W/kg
Power Drift (%) : 1.682

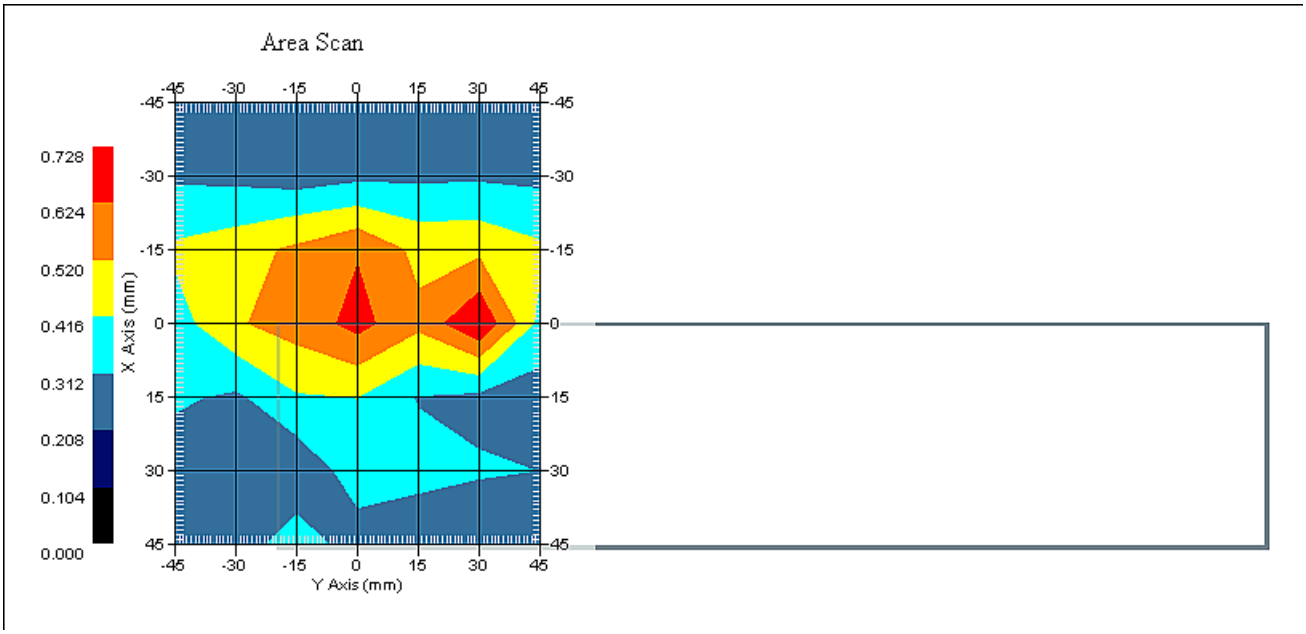
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 03-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.35 F/m
Sigma : 5.92 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 8:55:40 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.504 W/kg
10 gram SAR value   : 0.365 W/kg
Area Scan Peak SAR  : 0.725 W/kg
Zoom Scan Peak SAR  : 0.820 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 03-Feb-2011
Starting Time : 03-Feb-2011 10:53:10 AM
End Time : 03-Feb-2011 11:10:35 AM
Scanning Time : 1045 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Right Module Chain 1
Orientation : Back Face
Power Drift-Start : 0.638 W/kg
Power Drift-Finish: 0.614 W/kg
Power Drift (%) : -3.796

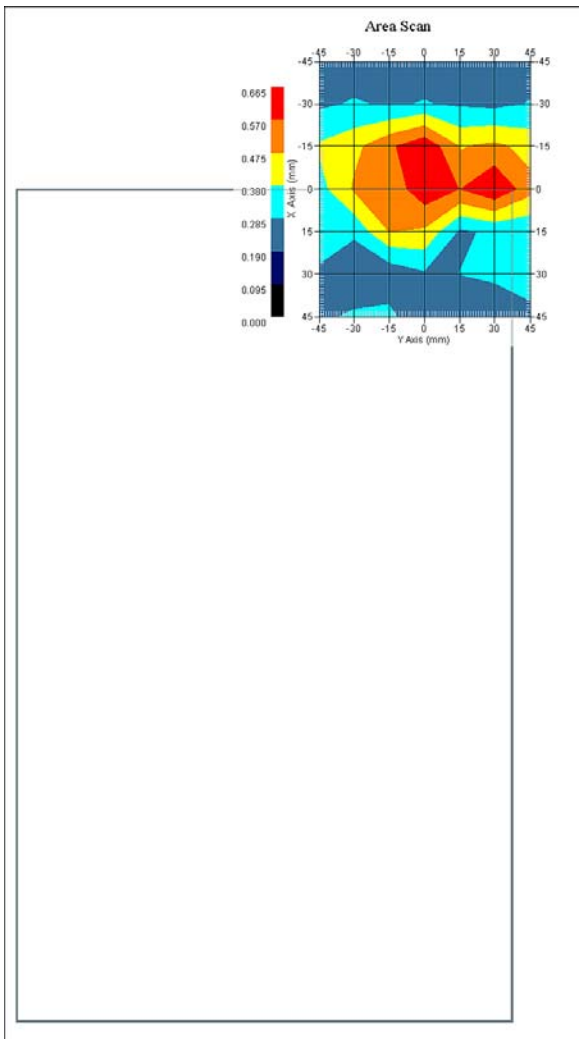
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 03-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.35 F/m
Sigma : 5.92 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 8:55:40 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.529 W/kg
10 gram SAR value   : 0.384 W/kg
Area Scan Peak SAR  : 0.663 W/kg
Zoom Scan Peak SAR  : 0.620 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 03-Feb-2011
Starting Time : 03-Feb-2011 11:12:26 AM
End Time : 03-Feb-2011 11:29:44 AM
Scanning Time : 1038 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.025 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Right Module Chain 1
Orientation : Side E
Power Drift-Start : 0.644 W/kg
Power Drift-Finish: 0.644 W/kg
Power Drift (%) : 0.215

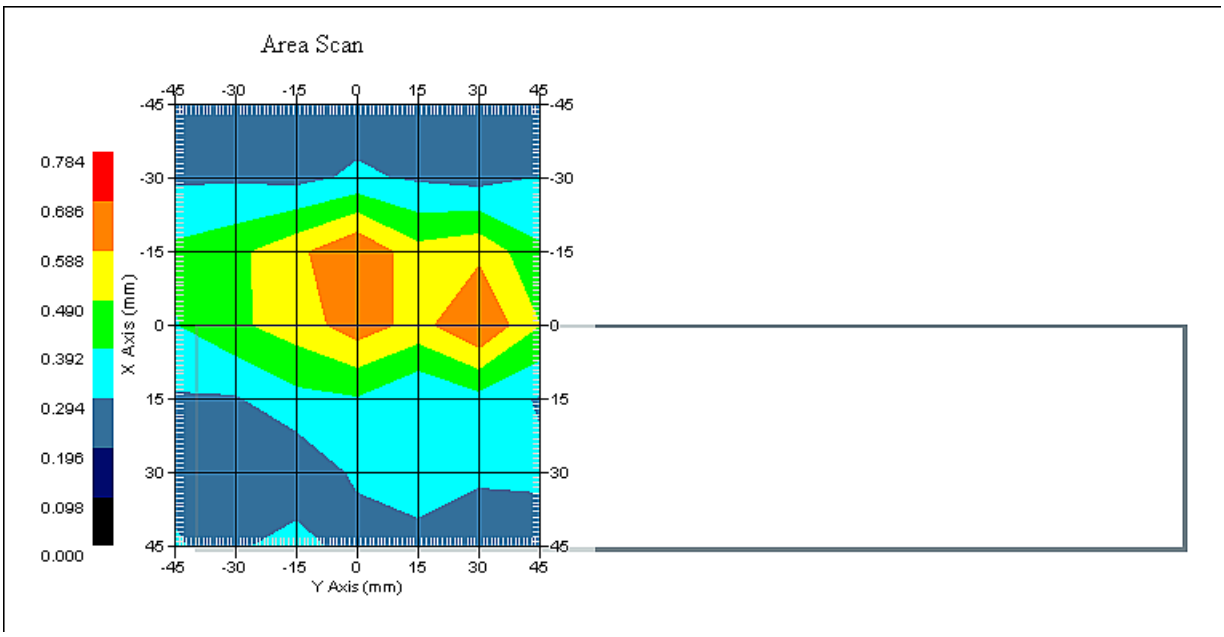
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 03-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.35 F/m
Sigma : 5.92 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 8:55:40 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.546 W/kg
10 gram SAR value   : 0.372 W/kg
Area Scan Peak SAR  : 0.689 W/kg
Zoom Scan Peak SAR  : 1.100 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 03-Feb-2011
Starting Time     : 03-Feb-2011  12:24:54 PM
End Time          : 03-Feb-2011  12:42:18 PM
Scanning Time     : 1044 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Left Module Chain 2
Orientation       : Back Face
Power Drift-Start : 0.747 W/kg
Power Drift-Finish: 0.764 W/kg
Power Drift (%)   : 2.270

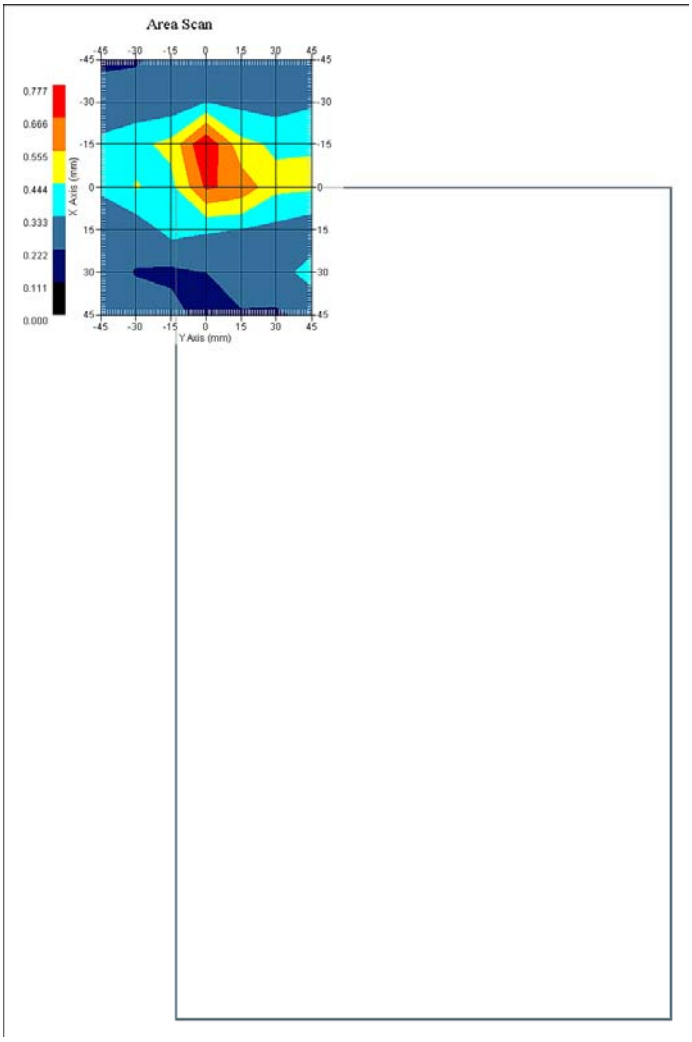
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5800
Frequency         : 5800.00 MHz
Last Calib. Date  : 03-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.12 F/m
Sigma             : 5.99 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.595 W/kg
10 gram SAR value   : 0.373 W/kg
Area Scan Peak SAR  : 0.775 W/kg
Zoom Scan Peak SAR  : 1.070 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 03-Feb-2011
Starting Time : 03-Feb-2011 12:45:06 PM
End Time : 03-Feb-2011 01:02:33 PM
Scanning Time : 1047 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Left Module Chain 2
Orientation : Side A
Power Drift-Start : 0.742 W/kg
Power Drift-Finish: 0.743 W/kg
Power Drift (%) : 0.125

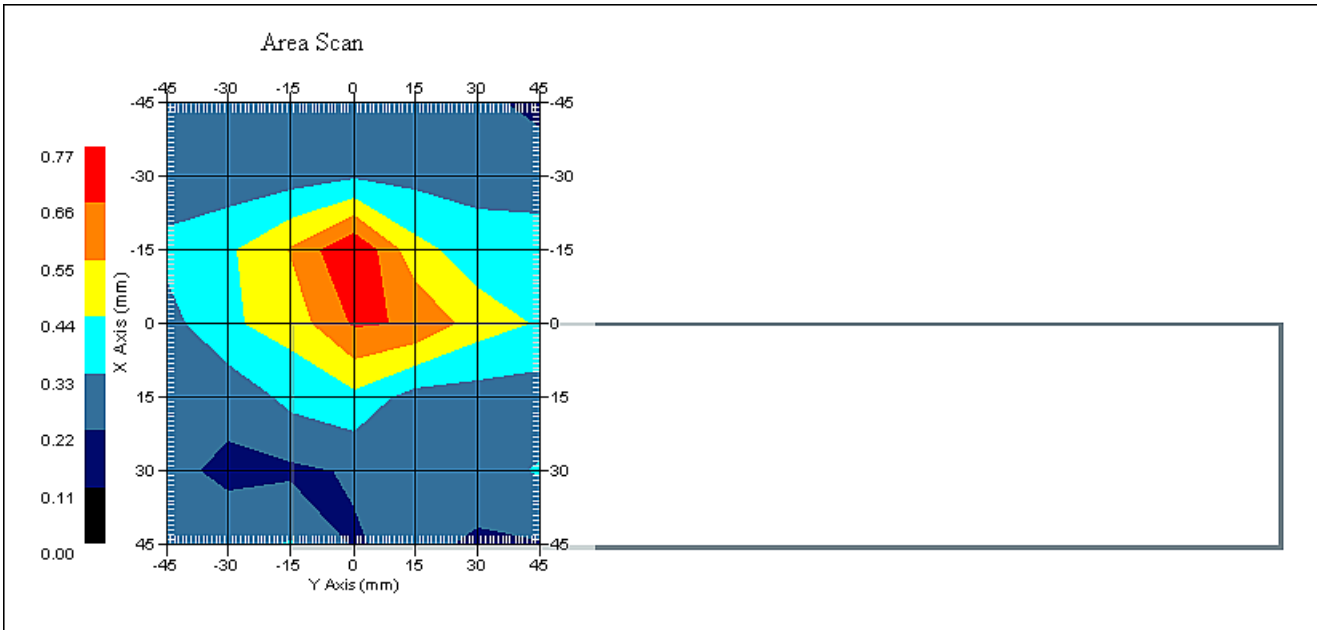
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5800
Frequency : 5800.00 MHz
Last Calib. Date : 03-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.12 F/m
Sigma : 5.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.608 W/kg
10 gram SAR value   : 0.377 W/kg
Area Scan Peak SAR  : 0.768 W/kg
Zoom Scan Peak SAR  : 1.150 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 03-Feb-2011
Starting Time : 03-Feb-2011 01:04:29 PM
End Time : 03-Feb-2011 01:21:56 PM
Scanning Time : 1047 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 20 mm
Depth : 400 mm
Antenna Type : Left Module Chain 2
Orientation : Side B
Power Drift-Start : 0.771 W/kg
Power Drift-Finish: 0.798 W/kg
Power Drift (%) : 3.519

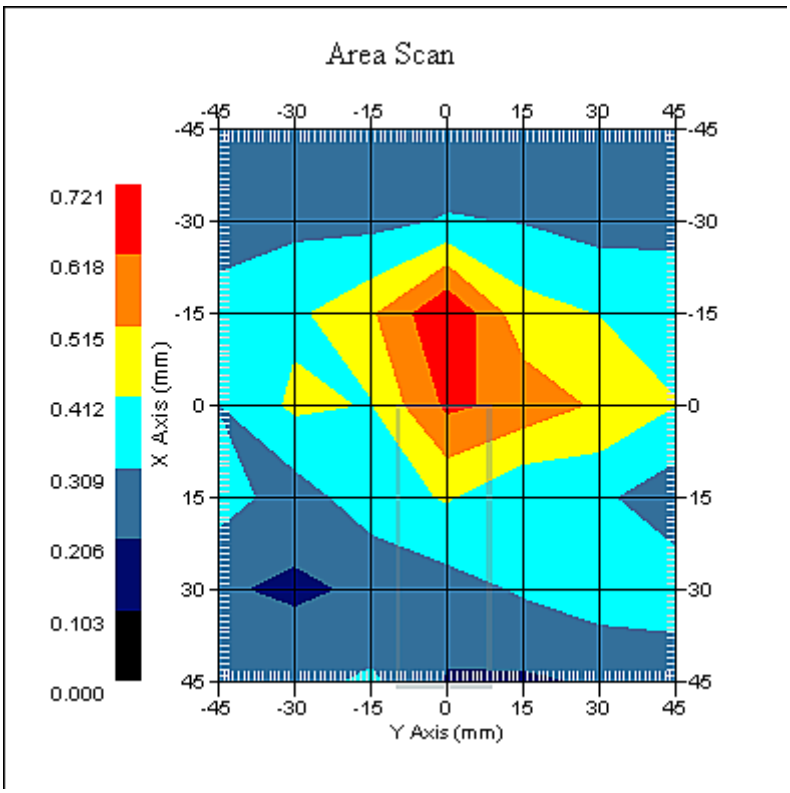
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5800
Frequency : 5800.00 MHz
Last Calib. Date : 03-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.12 F/m
Sigma : 5.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side B
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.599 W/kg
10 gram SAR value   : 0.382 W/kg
Area Scan Peak SAR : 0.721 W/kg
Zoom Scan Peak SAR : 1.160 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 03-Feb-2011
Starting Time     : 03-Feb-2011  01:23:40 PM
End Time          : 03-Feb-2011  01:41:01 PM
Scanning Time     : 1041 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 400 mm
Depth             : 240 mm
Antenna Type      : Left Module Chain 2
Orientation       : Side C
Power Drift-Start : 0.734 W/kg
Power Drift-Finish: 0.754 W/kg
Power Drift (%)   : 2.724

Phantom Data
Name            : APREL-Uni
Type            : Uni-Phantom
Size (mm)       : 280 x 280 x 200
Serial No.      : System Default
Location        : Center
Description     : Uni-Phantom

Tissue Data
Type            : BODY
Serial No.      : 5800
Frequency       : 5800.00 MHz
Last Calib. Date : 03-Feb-2011
Temperature     : 20.00 °C
Ambient Temp.   : 23.00 °C
Humidity        : 50.00 RH%
Epsilon         : 48.12 F/m
Sigma           : 5.99 S/m
Density         : 1000.00 kg/cu. m

Probe Data
Name            : Probe E030-001 - RFEL
Model           : E030
Type            : E-Field Triangle
Serial No.      : E030-001
Last Calib. Date : 12-Jul-2010
Frequency       : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset          : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side C
Separation        : 0 mm
Channel           : Mid
```


```
1 gram SAR value    : 0.590 W/kg
10 gram SAR value   : 0.364 W/kg
Area Scan Peak SAR  : 0.761 W/kg
Zoom Scan Peak SAR  : 0.910 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 03-Feb-2011
Starting Time     : 03-Feb-2011  02:01:49 PM
End Time          : 03-Feb-2011  02:19:18 PM
Scanning Time     : 1049 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Left Module Chain 1
Orientation       : Back Face
Power Drift-Start : 0.782 W/kg
Power Drift-Finish: 0.744 W/kg
Power Drift (%)   : -4.842

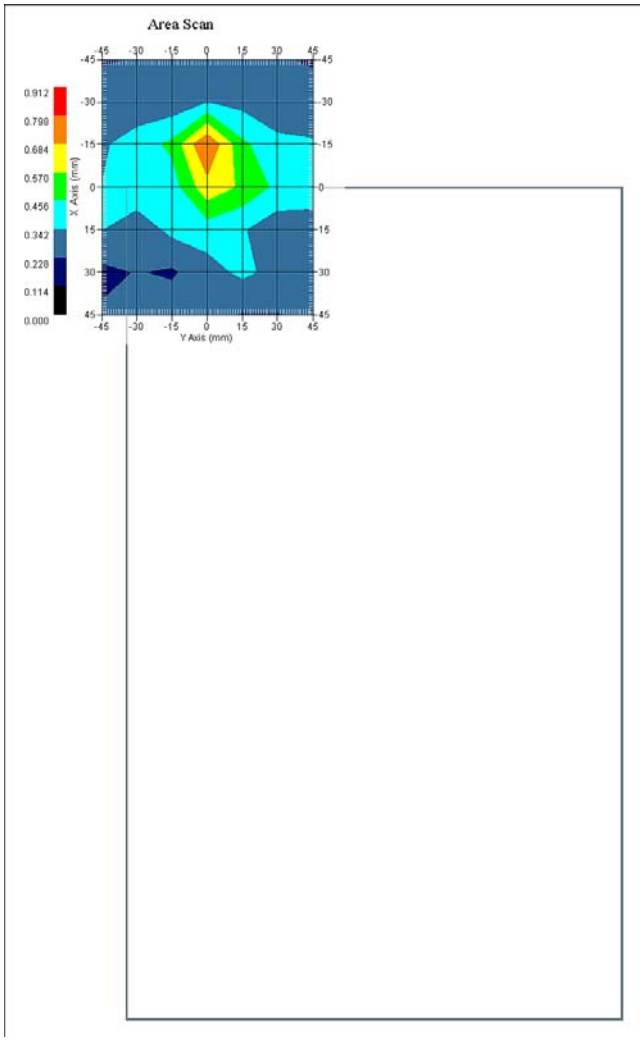
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5800
Frequency         : 5800.00 MHz
Last Calib. Date  : 03-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.12 F/m
Sigma             : 5.99 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.584 W/kg
10 gram SAR value   : 0.373 W/kg
Area Scan Peak SAR  : 0.800 W/kg
Zoom Scan Peak SAR  : 1.010 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 03-Feb-2011
Starting Time : 03-Feb-2011 02:21:48 PM
End Time : 03-Feb-2011 02:39:05 PM
Scanning Time : 1037 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Left Module Chain 1
Orientation : Side A
Power Drift-Start : 0.721 W/kg
Power Drift-Finish: 0.751 W/kg
Power Drift (%) : 4.075

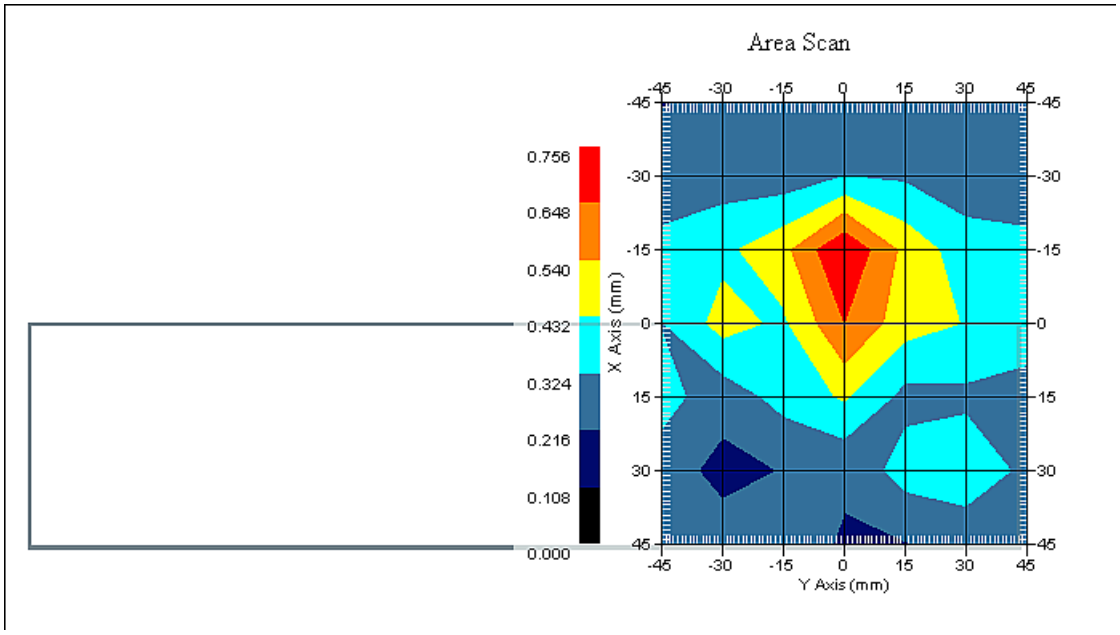
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5800
Frequency : 5800.00 MHz
Last Calib. Date : 03-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.12 F/m
Sigma : 5.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.594 W/kg
10 gram SAR value   : 0.379 W/kg
Area Scan Peak SAR  : 0.754 W/kg
Zoom Scan Peak SAR  : 1.050 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 03-Feb-2011
Starting Time     : 03-Feb-2011  02:59:34 PM
End Time          : 03-Feb-2011  03:16:45 PM
Scanning Time     : 1031 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Left Module Chain 0
Orientation       : Back Face
Power Drift-Start : 0.754 W/kg
Power Drift-Finish: 0.763 W/kg
Power Drift (%)   : 1.242

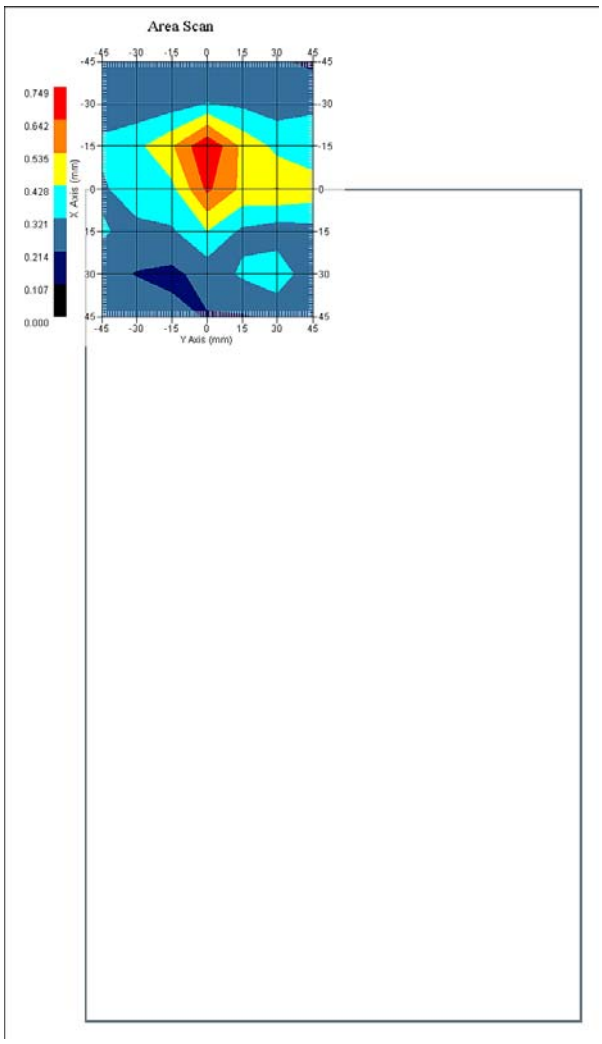
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5800
Frequency         : 5800.00 MHz
Last Calib. Date  : 03-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.12 F/m
Sigma             : 5.99 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.611 W/kg
10 gram SAR value   : 0.380 W/kg
Area Scan Peak SAR  : 0.747 W/kg
Zoom Scan Peak SAR  : 1.190 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 03-Feb-2011
Starting Time     : 03-Feb-2011  03:18:29 PM
End Time          : 03-Feb-2011  03:35:46 PM
Scanning Time     : 1037 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 240 mm
Depth             : 400 mm
Antenna Type      : Left Module Chain 0
Orientation       : Side A
Power Drift-Start : 0.697 W/kg
Power Drift-Finish: 0.716 W/kg
Power Drift (%)   : 2.726

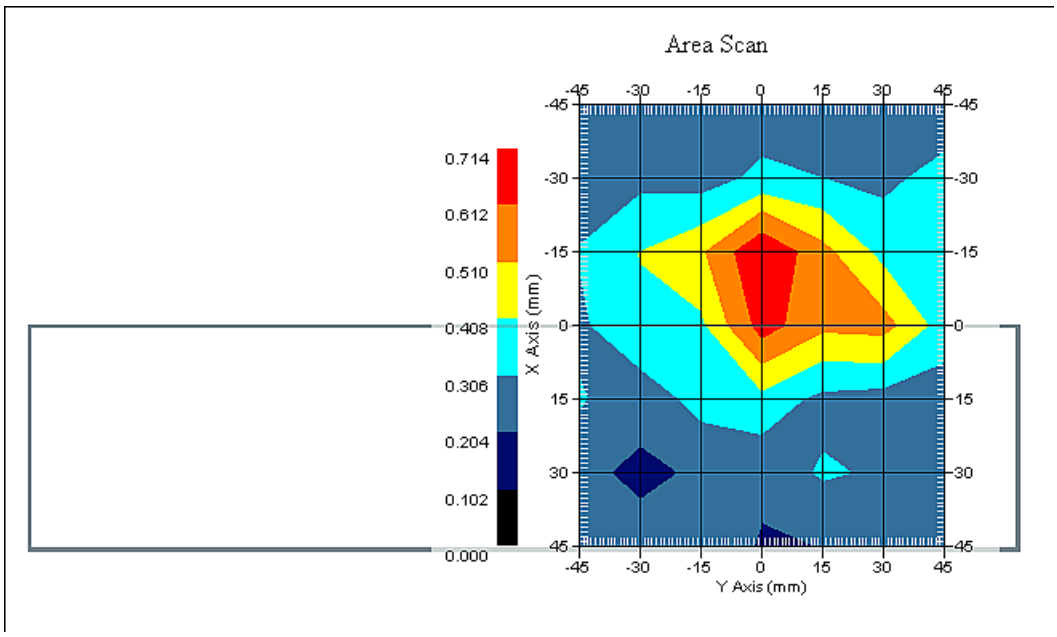
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5800
Frequency         : 5800.00 MHz
Last Calib. Date  : 03-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.12 F/m
Sigma             : 5.99 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.611 W/kg
10 gram SAR value   : 0.391 W/kg
Area Scan Peak SAR  : 0.712 W/kg
Zoom Scan Peak SAR  : 1.150 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 03-Feb-2011
Starting Time : 03-Feb-2011 03:56:39 PM
End Time : 03-Feb-2011 04:13:59 PM
Scanning Time : 1040 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 400 mm
Width : 240 mm
Depth : 56 mm
Antenna Type : Right Module Chain 2
Orientation : Back Face
Power Drift-Start : 0.725 W/kg
Power Drift-Finish: 0.752 W/kg
Power Drift (%) : 3.743

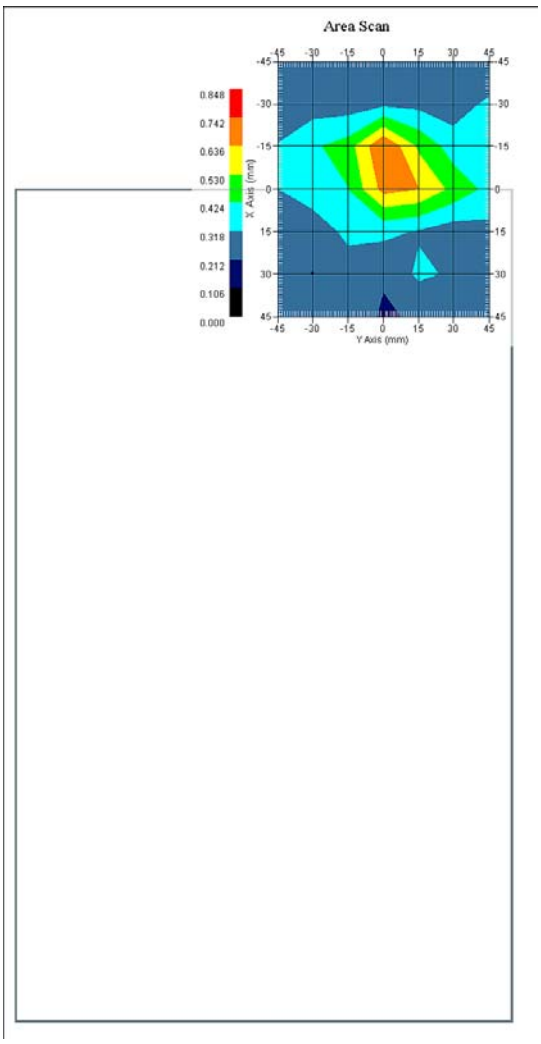
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5800
Frequency : 5800.00 MHz
Last Calib. Date : 03-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.12 F/m
Sigma : 5.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.587 W/kg
10 gram SAR value   : 0.370 W/kg
Area Scan Peak SAR  : 0.744 W/kg
Zoom Scan Peak SAR  : 1.020 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 03-Feb-2011
Starting Time : 03-Feb-2011 04:15:43 PM
End Time : 03-Feb-2011 04:33:06 PM
Scanning Time : 1043 secs

Product Data
Device Name : Fluke Networks
Serial No. : Eng 1
Mode : 802.11a
Model : OPTIVIEW XG Family
Frequency : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time : 0 min(s)
Length : 56 mm
Width : 240 mm
Depth : 400 mm
Antenna Type : Right Module Chain 2
Orientation : Side E
Power Drift-Start : 0.725 W/kg
Power Drift-Finish: 0.757 W/kg
Power Drift (%) : 4.392

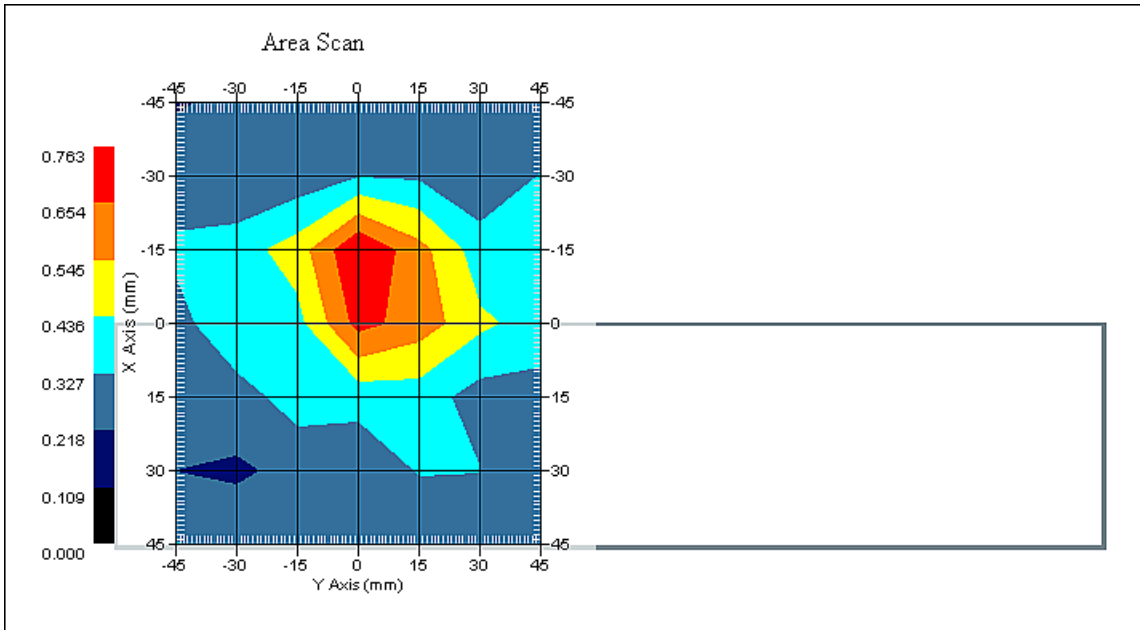
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5800
Frequency : 5800.00 MHz
Last Calib. Date : 03-Feb-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.12 F/m
Sigma : 5.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.06 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.612 W/kg
10 gram SAR value   : 0.383 W/kg
Area Scan Peak SAR  : 0.763 W/kg
Zoom Scan Peak SAR  : 1.080 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 03-Feb-2011
Starting Time     : 03-Feb-2011  04:53:47 PM
End Time          : 03-Feb-2011  05:11:06 PM
Scanning Time     : 1039 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Right Module chain 0
Orientation       : Back Face
Power Drift-Start : 0.739 W/kg
Power Drift-Finish: 0.758 W/kg
Power Drift (%)   : 2.570

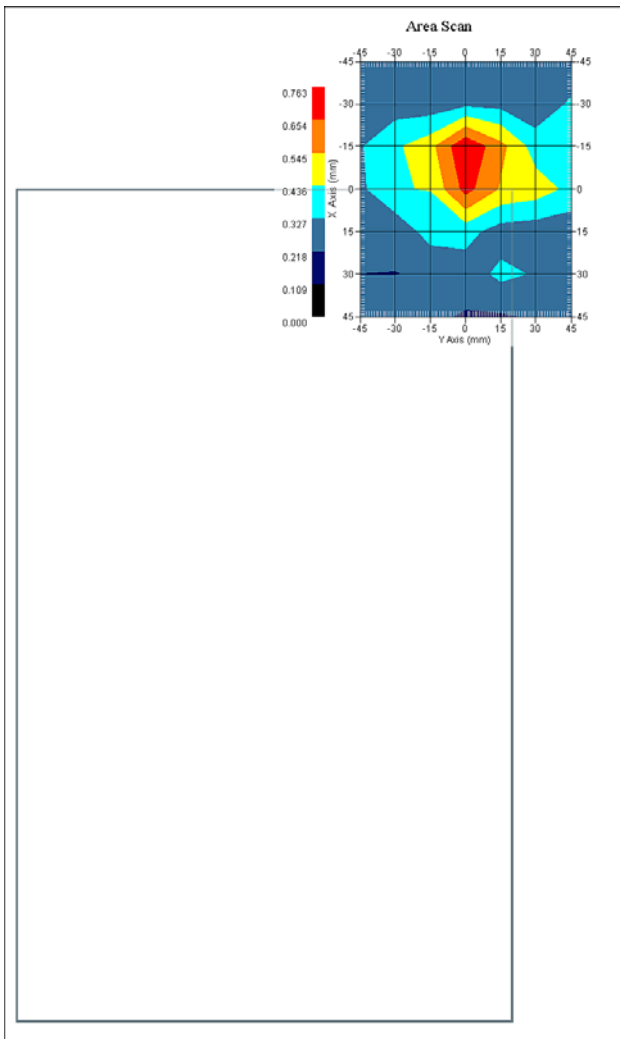
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5800
Frequency         : 5800.00 MHz
Last Calib. Date  : 03-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.12 F/m
Sigma             : 5.99 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.598 W/kg
10 gram SAR value   : 0.380 W/kg
Area Scan Peak SAR  : 0.760 W/kg
Zoom Scan Peak SAR  : 0.950 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 03-Feb-2011
Starting Time     : 03-Feb-2011  05:12:48 PM
End Time          : 03-Feb-2011  05:30:05 PM
Scanning Time     : 1037 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 400 mm
Depth             : 240 mm
Antenna Type      : Right Module Chain 0
Orientation       : Side C
Power Drift-Start : 0.755 W/kg
Power Drift-Finish: 0.790 W/kg
Power Drift (%)   : 4.580

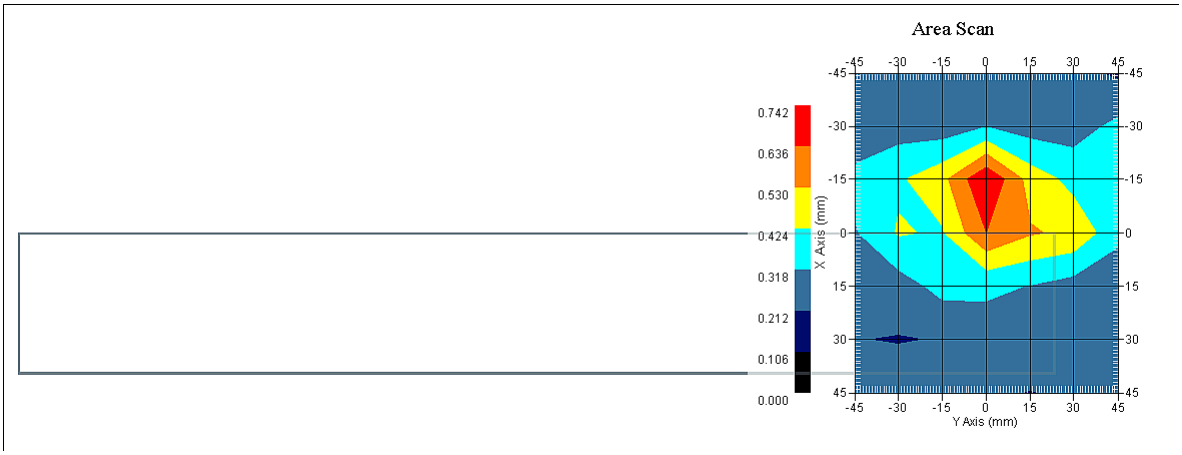
Phantom Data
Name            : APREL-Uni
Type            : Uni-Phantom
Size (mm)       : 280 x 280 x 200
Serial No.      : System Default
Location        : Center
Description     : Uni-Phantom

Tissue Data
Type            : BODY
Serial No.      : 5800
Frequency       : 5800.00 MHz
Last Calib. Date : 03-Feb-2011
Temperature     : 20.00 °C
Ambient Temp.   : 23.00 °C
Humidity        : 50.00 RH%
Epsilon         : 48.12 F/m
Sigma           : 5.99 S/m
Density         : 1000.00 kg/cu. m

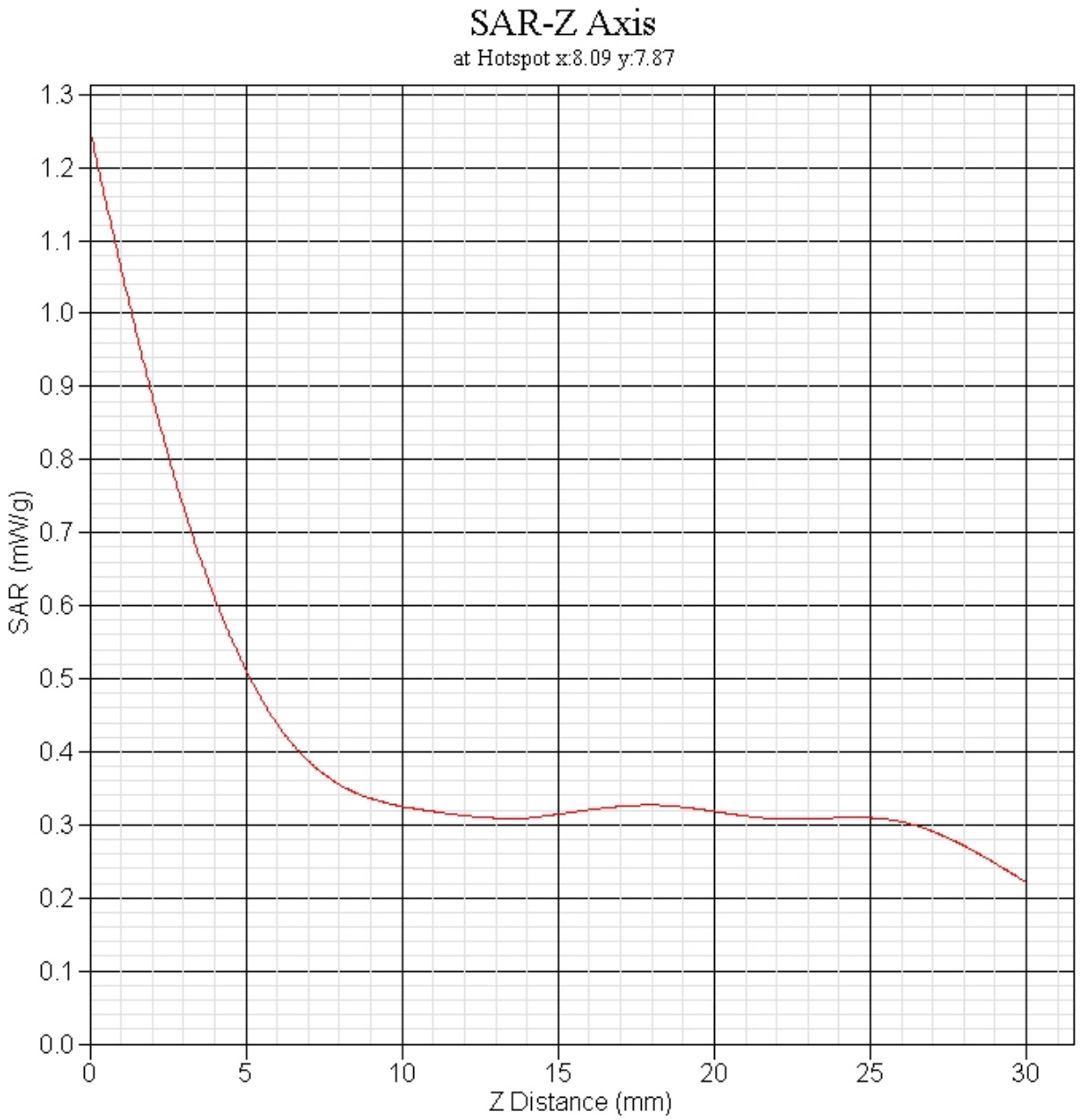
Probe Data
Name            : Probe E030-001 - RFEL
Model           : E030
Type            : E-Field Triangle
Serial No.      : E030-001
Last Calib. Date : 12-Jul-2010
Frequency       : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset          : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side C
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.613 W/kg
10 gram SAR value   : 0.397 W/kg
Area Scan Peak SAR  : 0.741 W/kg
Zoom Scan Peak SAR  : 1.251 W/kg
```



SAR Test Report

```
By Operator       : Jay
Measurement Date  : 03-Feb-2011
Starting Time     : 03-Feb-2011  05:32:18 PM
End Time          : 03-Feb-2011  05:49:42 PM
Scanning Time     : 1044 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 20 mm
Depth             : 400 mm
Antenna Type      : Right Module Chain 0
Orientation       : Side D
Power Drift-Start : 0.704 W/kg
Power Drift-Finish: 0.727 W/kg
Power Drift (%)   : 3.265

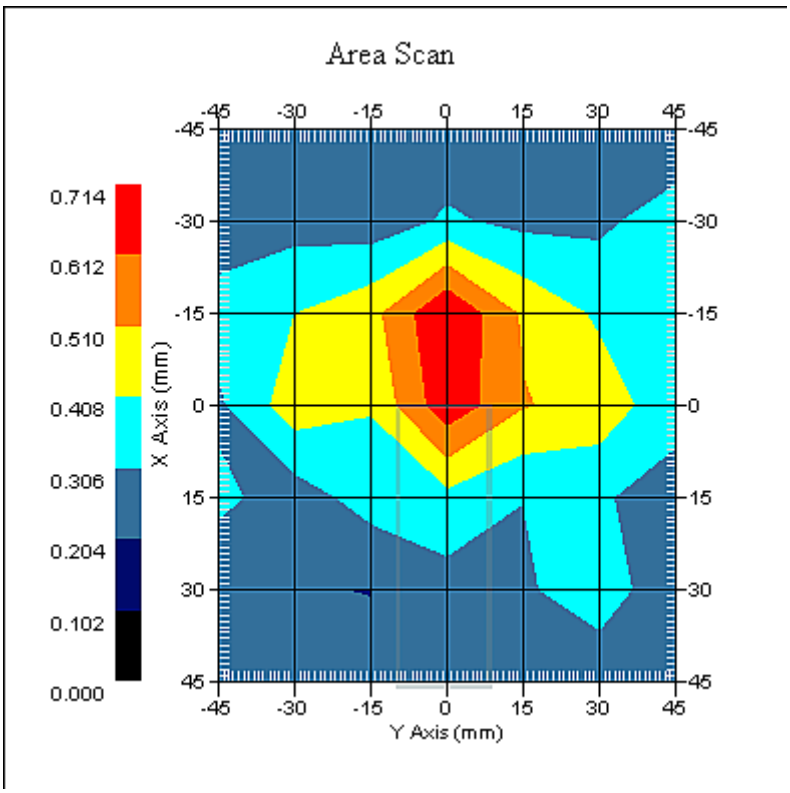
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5800
Frequency         : 5800.00 MHz
Last Calib. Date  : 03-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.12 F/m
Sigma             : 5.99 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side D
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.603 W/kg
10 gram SAR value   : 0.385 W/kg
Area Scan Peak SAR  : 0.711 W/kg
Zoom Scan Peak SAR  : 1.171 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 03-Feb-2011
Starting Time     : 03-Feb-2011  05:51:19 PM
End Time          : 03-Feb-2011  06:08:35 PM
Scanning Time     : 1036 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 240 mm
Depth             : 400 mm
Antenna Type      : Right Module Chain 0
Orientation       : Side E
Power Drift-Start : 0.782 W/kg
Power Drift-Finish: 0.774 W/kg
Power Drift (%)   : -1.015

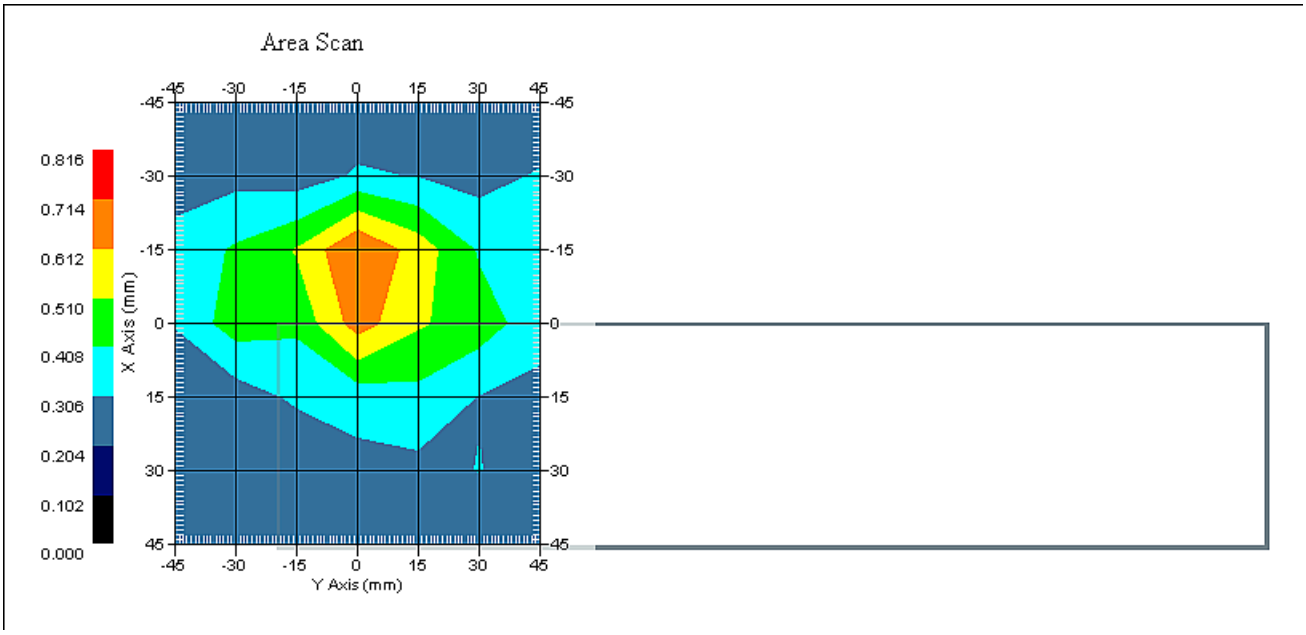
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5800
Frequency         : 5800.00 MHz
Last Calib. Date  : 03-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.12 F/m
Sigma             : 5.99 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.596 W/kg
10 gram SAR value   : 0.386 W/kg
Area Scan Peak SAR  : 0.716 W/kg
Zoom Scan Peak SAR  : 0.940 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 03-Feb-2011
Starting Time     : 03-Feb-2011  06:29:10 PM
End Time          : 03-Feb-2011  06:46:28 PM
Scanning Time     : 1038 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 400 mm
Width             : 240 mm
Depth             : 56 mm
Antenna Type      : Right Module Chain 1
Orientation       : Back Face
Power Drift-Start : 0.720 W/kg
Power Drift-Finish: 0.723 W/kg
Power Drift (%)   : 0.270

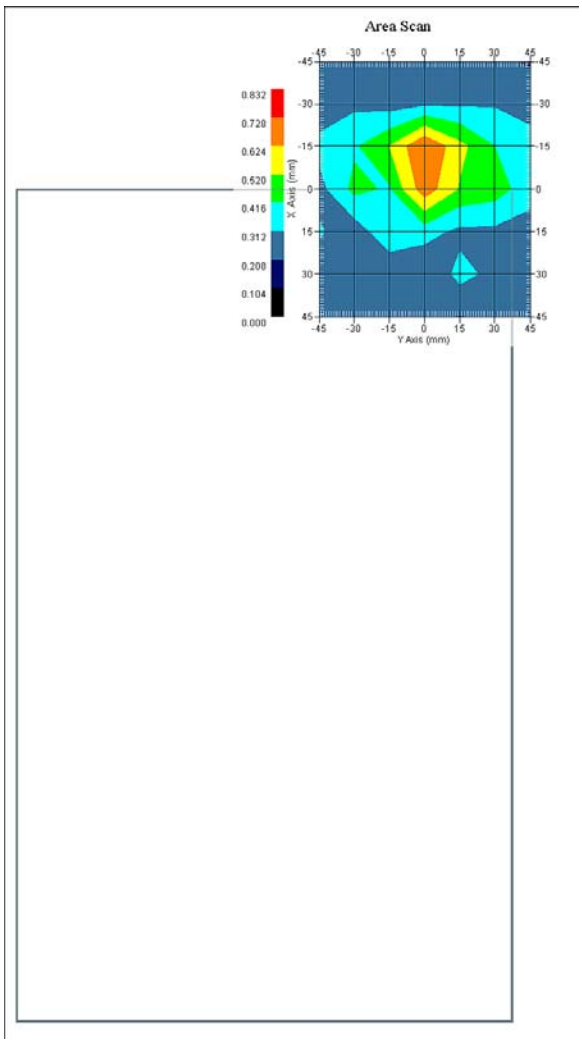
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5800
Frequency         : 5800.00 MHz
Last Calib. Date  : 03-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.12 F/m
Sigma             : 5.99 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Back Face
Separation        : 0 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.608 W/kg
10 gram SAR value   : 0.388 W/kg
Area Scan Peak SAR  : 0.729 W/kg
Zoom Scan Peak SAR  : 1.140 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 03-Feb-2011
Starting Time     : 03-Feb-2011  06:47:59 PM
End Time          : 03-Feb-2011  07:05:19 PM
Scanning Time     : 1040 secs

Product Data
Device Name       : Fluke Networks
Serial No.        : Eng 1
Mode              : 802.11a
Model             : OPTIVIEW XG Family
Frequency         : 5800.00 MHz
Max. Transmit Pwr : 0.02 W
Drift Time        : 0 min(s)
Length            : 56 mm
Width             : 240 mm
Depth             : 400 mm
Antenna Type      : Right Module Chain 1
Orientation       : Side E
Power Drift-Start : 0.741 W/kg
Power Drift-Finish: 0.746 W/kg
Power Drift (%)   : 0.385

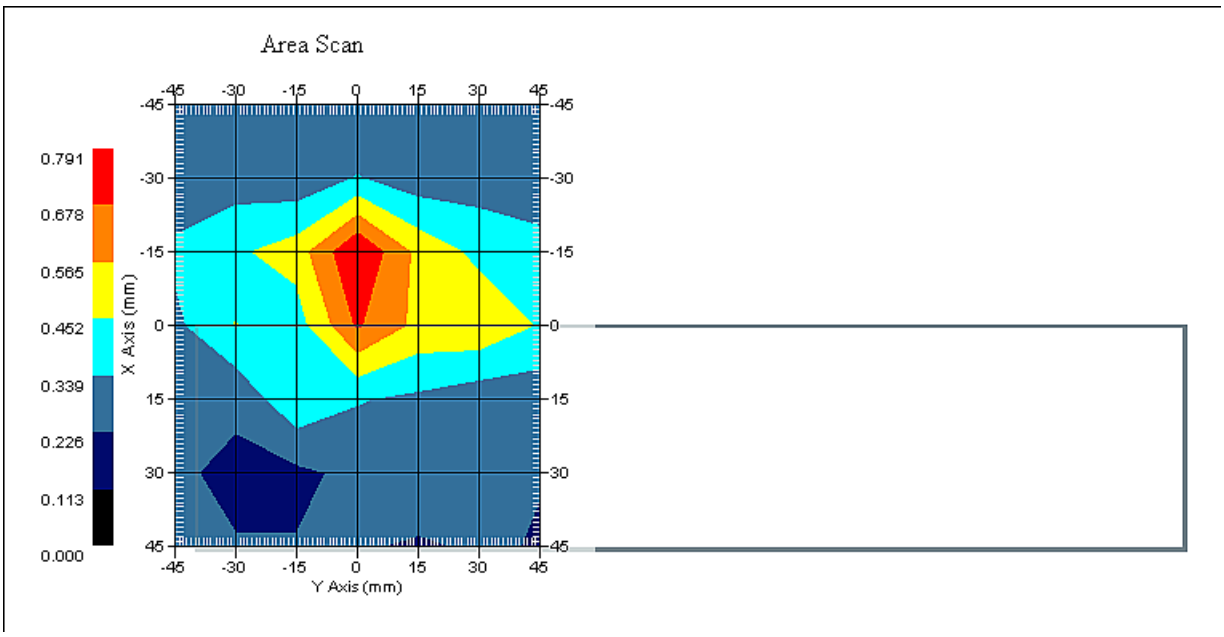
Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 5800
Frequency         : 5800.00 MHz
Last Calib. Date  : 03-Feb-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 50.00 RH%
Epsilon           : 48.12 F/m
Sigma             : 5.99 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe E030-001 - RFEL
Model             : E030
Type              : E-Field Triangle
Serial No.        : E030-001
Last Calib. Date  : 12-Jul-2010
Frequency         : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)^2
Compression Point: 95.00 mV
Offset            : 1.06 mm
```

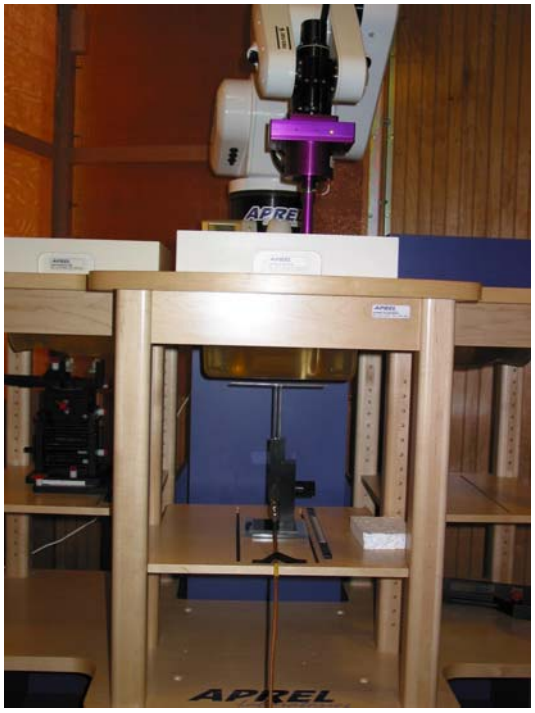
```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-Feb-2011
Set-up Time       : 11:33:34 AM
Area Scan         : 7x7x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 0 mm
Channel           : Mid
```

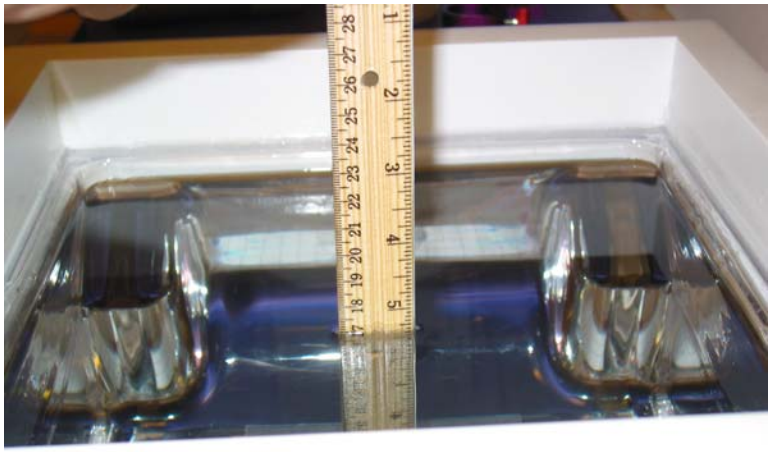



```
1 gram SAR value    : 0.594 W/kg
10 gram SAR value   : 0.391 W/kg
Area Scan Peak SAR  : 0.791 W/kg
Zoom Scan Peak SAR  : 1.110 W/kg
```

Appendix C – SAR Test Setup Photos



System Body Configuration

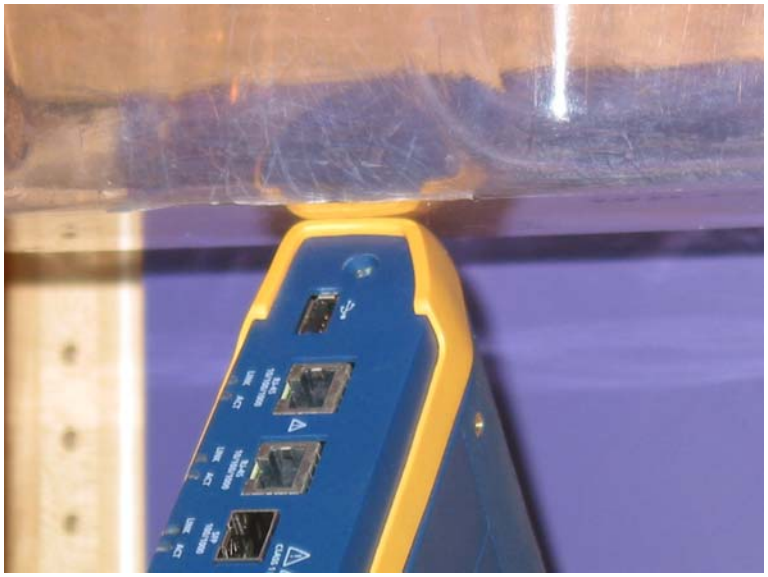


Body Tissue Depth

Test Positions

Back Face Test Position

Side ‘A’ Test Position



Side ‘B’ Test Position

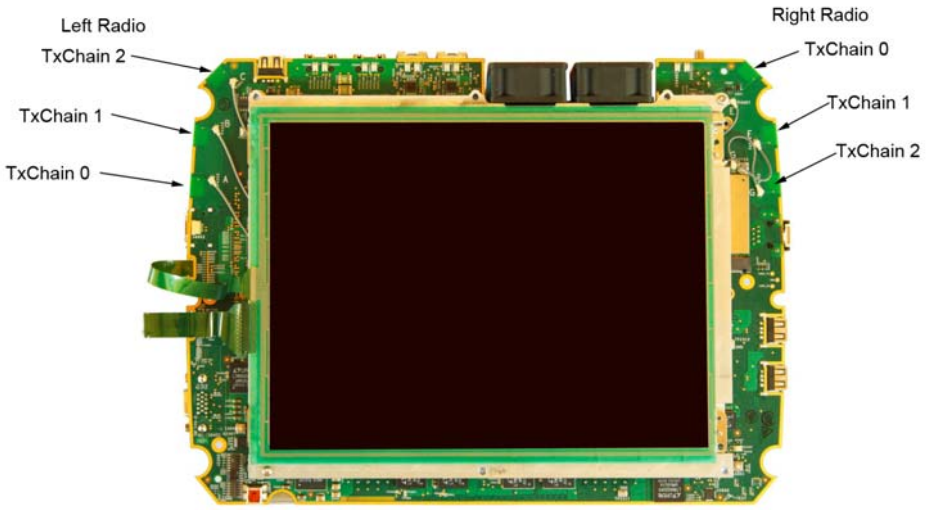
Side 'C' Test Position

Side 'D' Test Position

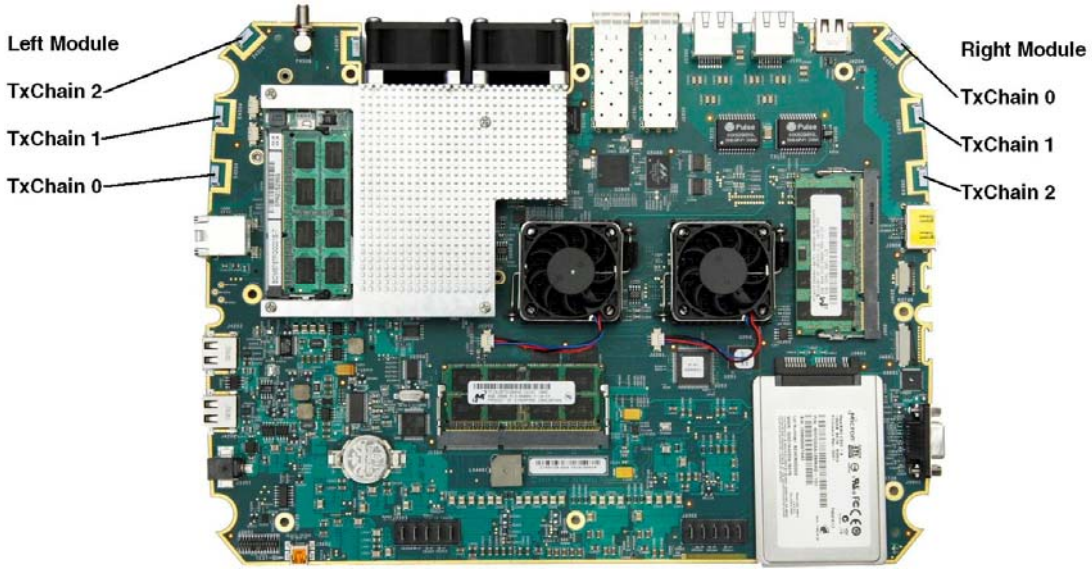
Side ‘E’ Test Position

Top Face of Device

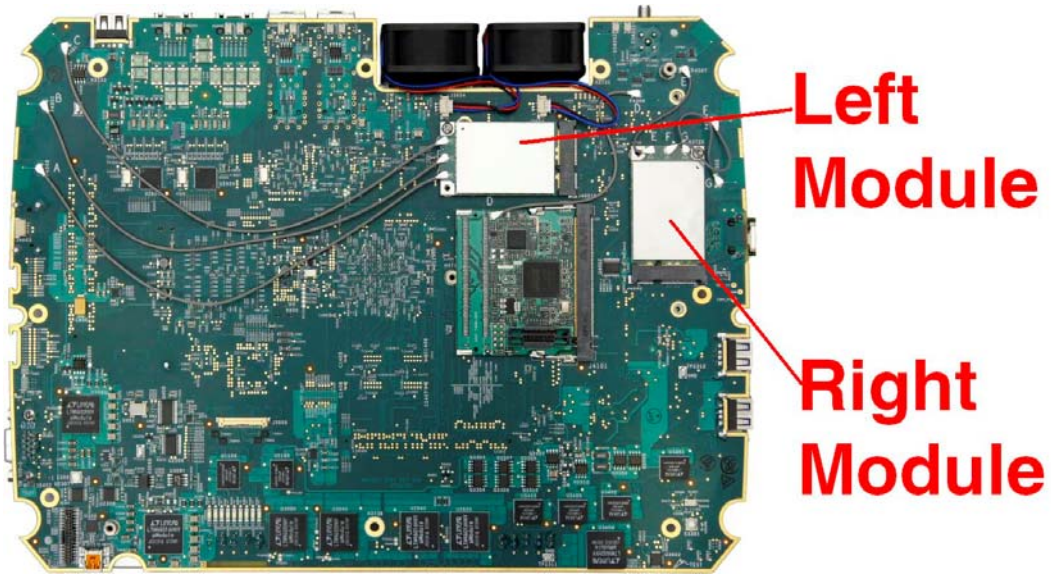
Back Face of Device



Antenna Location Top Face Side of PCB



Antenna Location Back Face Side of PCB



RF Modules Located On Top Face Side of PCB with LCD Screen Removed

Appendix D – Probe Calibration Data Sheets

NCL CALIBRATION LABORATORIES

Calibration File No.: CP-1164

Client.: RFEL

C E R T I F I C A T E OF C A L I B R A T I O N

It is certified that the equipment identified below has been calibrated in the **NCL CALIBRATION LABORATORIES** by qualified personnel following recognized procedures and using transfer standards traceable to NRC/NIST.

Equipment: Miniature Isotropic RF Probe 2450 MHz

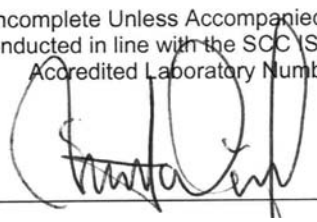
Manufacturer: APREL Laboratories
Model No.: E-020
Serial No.: 215

Body Calibration

Calibration Procedure: SSI/DRB-TP-D01-032-E020-V2
Project No: RFEL-E-020-Cal-5539

Calibrated: 22 September 2010
Released on: 27 September 2010

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary
This calibration has been conducted in line with the SCC ISO-IEC 17025 Scope of Accreditation
Accredited Laboratory Number 48

Released By: 

NCL CALIBRATION LABORATORIES

!7 Bentley Ave
NEPEAN, ONTARIO
CANADA K2E 6T7

Division of APREL Lab.
TEL: (613) 820-4988
FAX: (613) 820-4161

Introduction

This Calibration Report reproduces the results of the calibration performed in line with the SSI/DRB-TP-D01-032-E020-V2 E-Field Probe Calibration Procedure. The results contained within this report are for APREL E-Field Probe E-020 215.

References

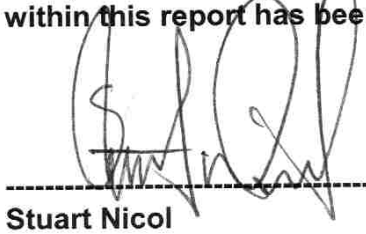
SSI/DRB-TP-D01-032-E020-V2 E-Field Probe Calibration Procedure
IEEE 1528 “Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques”
IEEE 1309 “IEEE Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9 KHz to 40 GHz” 2005
SSI-TP-011 Tissue Calibration Procedure
IEC 62209 “Human exposure to radio frequency fields from handheld and body-mounted wireless communication devices –Human models, instrumentation and procedures Part 1 & 2: Procedure to determine the Specific Absorption Rate (SAR) for handheld devices used in close proximity of the ear (frequency range of 200MHz to 3GHz)”

Conditions

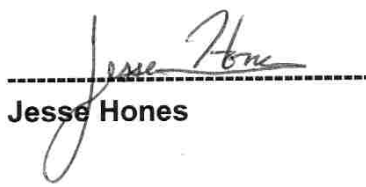
Probe 215 was a re-calibration.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 21 °C +/- 0.5°C

We the undersigned attest that to the best of our knowledge the calibration of this probe has been accurately conducted and that all information contained within this report has been reviewed for accuracy.



Stuart Nicol



Jesse Hones

Calibration Results Summary

Probe Type:	E-Field Probe E-020
Serial Number:	215
Frequency:	2450 MHz
Sensor Offset:	1.56 mm
Sensor Length:	2.5 mm
Tip Enclosure:	Ertalyte*
Tip Diameter:	**<**5 mm
Tip Length:	60 mm
Total Length:	290 mm

*Resistive to recommended tissue recipes per IEEE-1528

Sensitivity in Air

Channel X:	1.2 $\mu V/(V/m)^2$
Channel Y:	1.2 $\mu V/(V/m)^2$
Channel Z:	1.2 $\mu V/(V/m)^2$
Diode Compression Point:	95 mV

Sensitivity in Body Tissue Measured

Frequency: 2450 MHz

Epsilon: 53.0 (+/-5%) **Sigma:** 1.98 S/m (+/-5%)

ConvF

Channel X: 4.5

Channel Y: 4.5

Channel Z: 4.5

Tissue sensitivity values were calculated using the load impedance of the APREL Laboratories Daq-Paq.

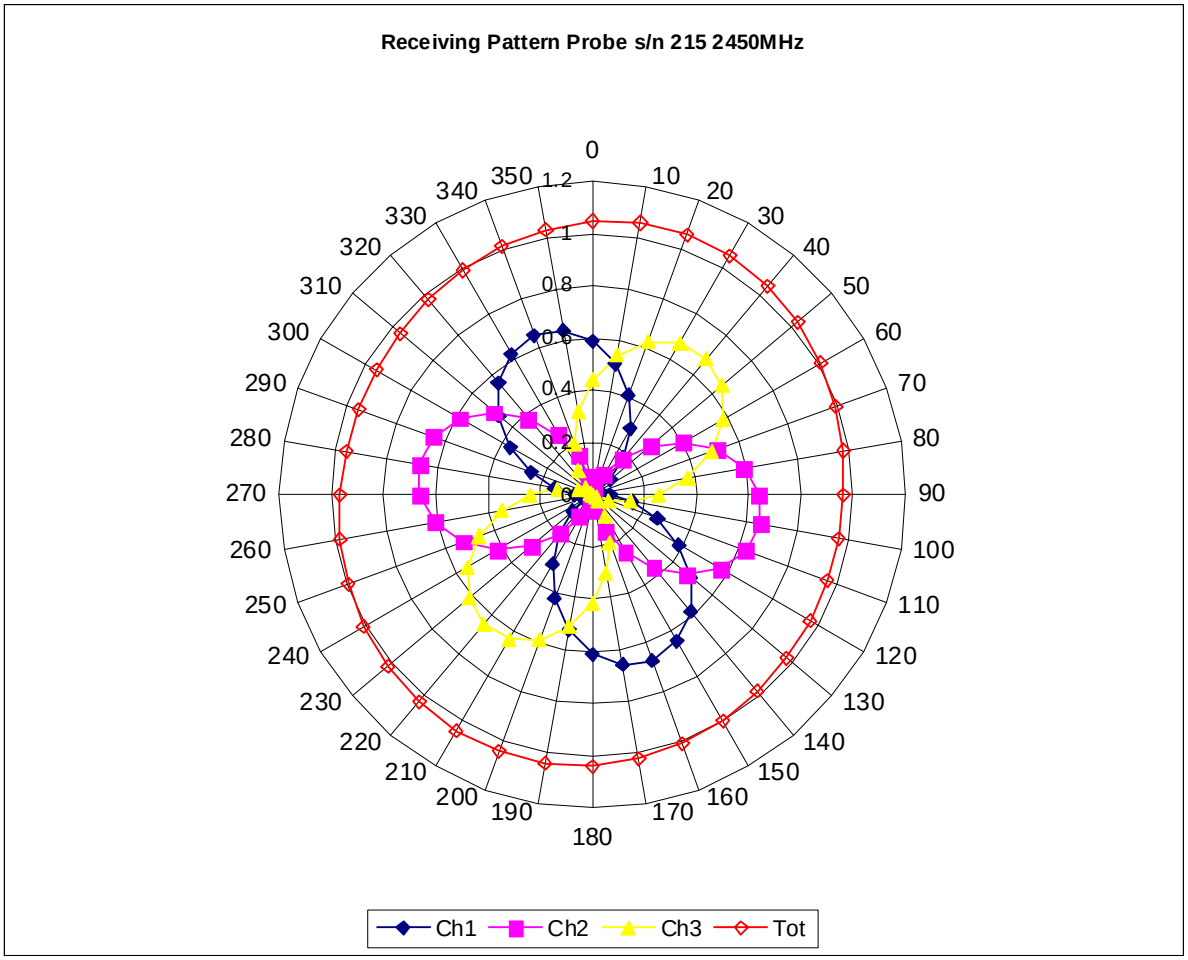
Boundary Effect:

Uncertainty resulting from the boundary effect is less than 2% for the distance between the tip of the probe and the tissue boundary, when less than 2.44mm.

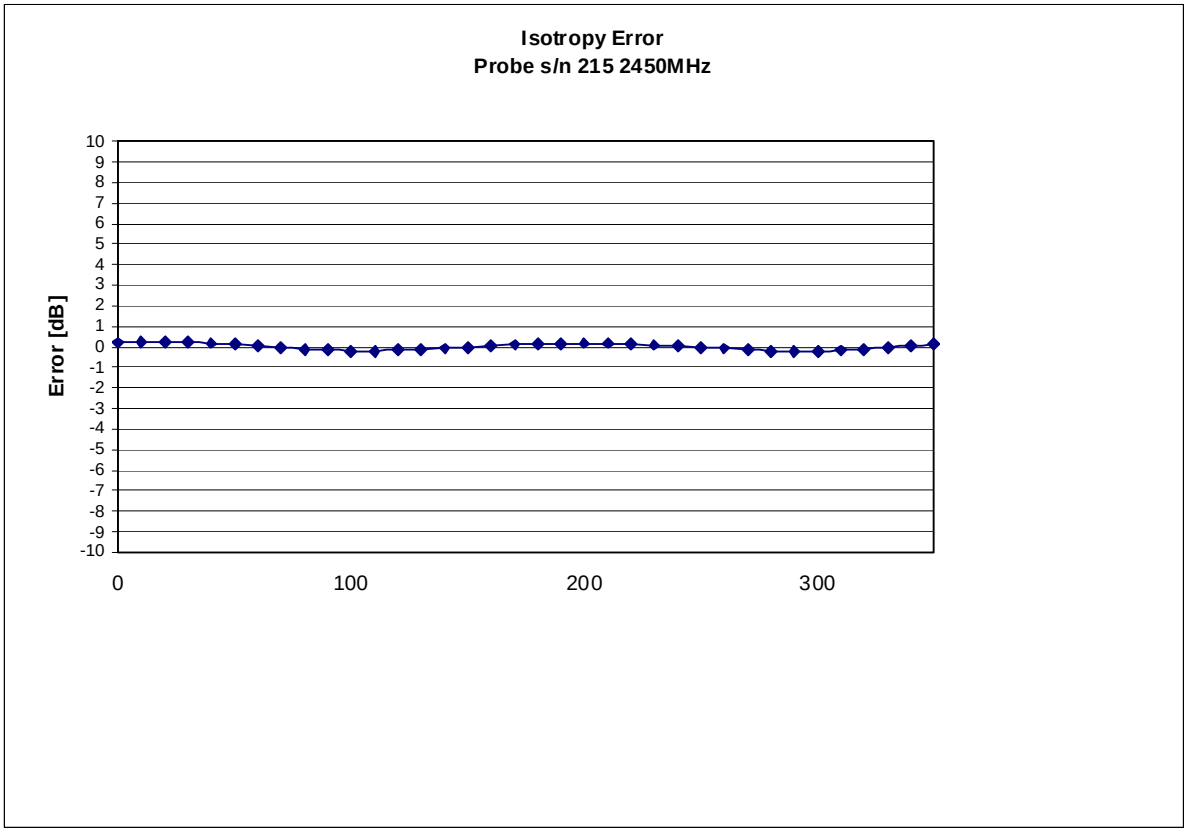
Spatial Resolution:

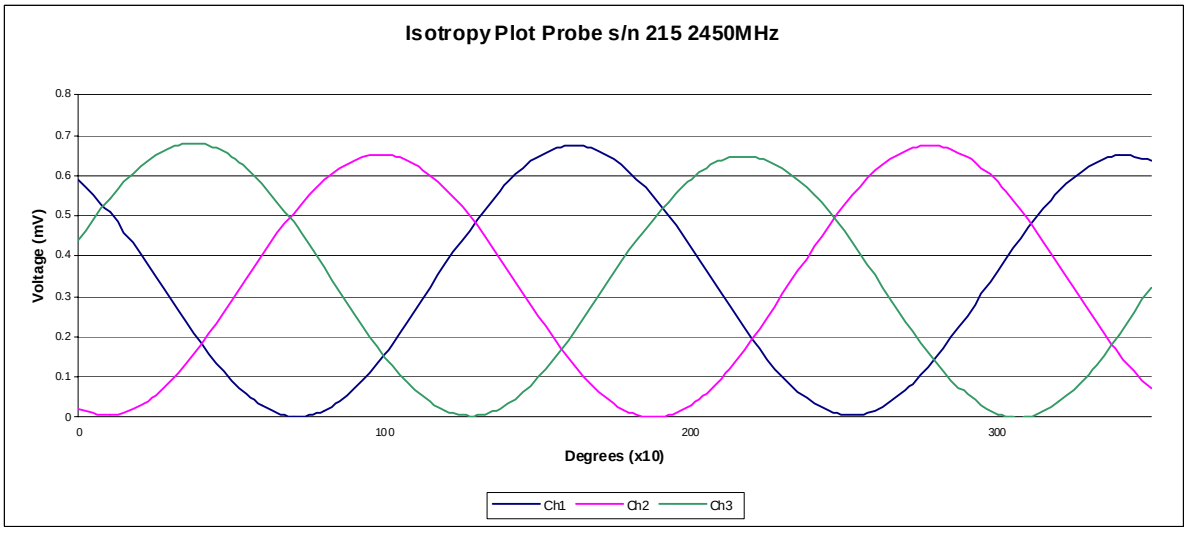
The measured probe tip diameter is 5 mm (+/- 0.01 mm) and therefore meets the requirements of SSI/DRB-TP-D01-032 for spatial resolution.

Receiving Pattern 2450 MHz (Air)



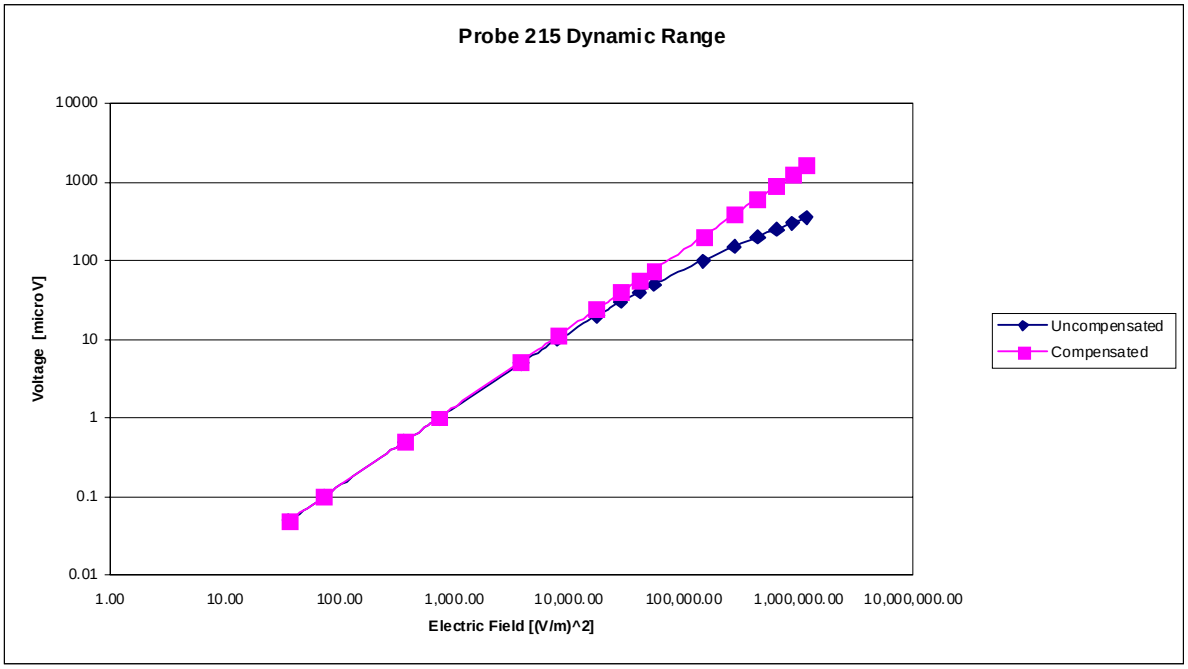
Isotropy Error 2450 MHz (Air)



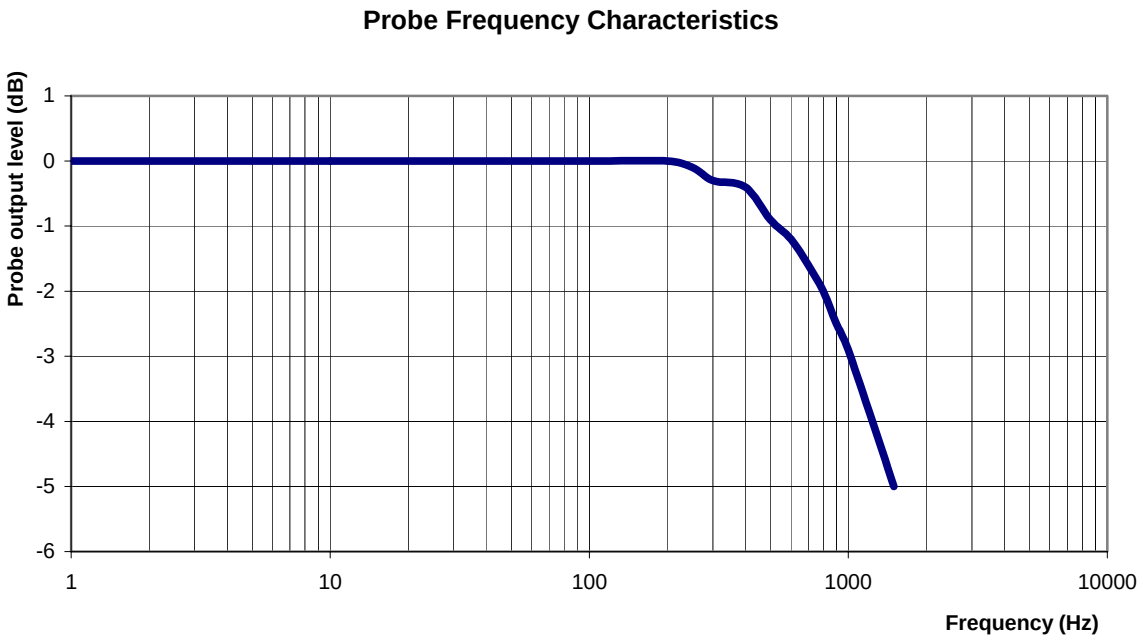


Isotropicity Tissue: 0.10 dB

Dynamic Range



Video Bandwidth



Video Bandwidth at 500 Hz 1 dB
Video Bandwidth at 1.02 KHz: 3 dB

Conversion Factor Uncertainty Assessment

Sensitivity in Body Tissue

Frequency:		2450 MHz	
Epsilon:	53.0 (+/-5%)	**Sigma:**	1.98 S/m (+/-5%)
ConvF			
Channel X:	4.5	7%(K=2)	
Channel Y:	4.5	7%(K=2)	
Channel Z:	4.5	7%(K=2)	

To minimize the uncertainty calculation all tissue sensitivity values were calculated using a load impedance of 5 MΩ.

Boundary Effect:

For a distance of 2.5mm the evaluated uncertainty (increase in the probe sensitivity) is less than 2%.

Test Equipment

The test equipment used during Probe Calibration, manufacturer, model number and, current calibration status are listed and located on the main APREL server R:\NCL\Calibration Equipment\Instrument List May 2010.

NCL CALIBRATION LABORATORIES

Calibration File No.: CP-1134

Client.: RFEL

C E R T I F I C A T E OF C A L I B R A T I O N

It is certified that the equipment identified below has been calibrated in the **NCL CALIBRATION LABORATORIES** by qualified personnel following recognized procedures and using transfer standards traceable to NRC/NIST.

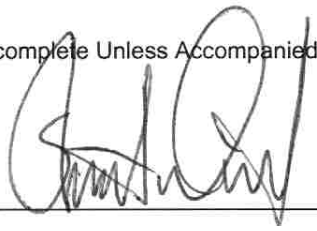
Equipment: Miniature Isotropic RF Probe 5200 MHz
BODY Calibration
Manufacturer: APREL Laboratories
Model No.: E-020
Serial No.: E030-001

Calibration Procedure: SSI/DRB-TP-D01-032-E020-V2
Project No: RFEB-ALSE030-cal-5453

Calibrated: 12^{h} July 2010
Released on: 14th July 2010

APREL Laboratories Certified Under Laboratory 48 of SCC

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary

Released By: 

NCL CALIBRATION LABORATORIES

51 SPECTRUM WAY
NEPEAN, ONTARIO
CANADA K2R 1E6

Division of APREL Lab.
TEL: (613) 820-4988
FAX: (613) 820-4161

Introduction

This Calibration Report reproduces the results of the calibration performed in line with the SSI/DRB-TP-D01-032-E020-V2 E-Field Probe Calibration Procedure. The results contained within this report are for APREL E-Field Probe E030-001.

References

SSI/DRB-TP-D01-032-E020-V2 E-Field Probe Calibration Procedure
IEEE 1528 “Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques”
SSI-TP-011 Tissue Calibration Procedure
IEC 62209 “Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures –Part 1 & 2: Procedure to determine the Specific Absorption Rate (SAR) for hand-held devices used in close proximity of the ear (frequency range of 300 MHz to 3 GHz)”
IEEE 1309 Draft Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9kHz to 40GHz

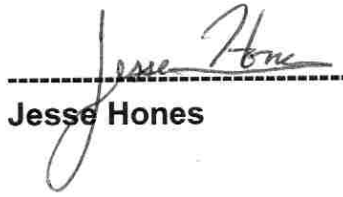
Conditions

Probe E030-001 is a re-calibration.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 21 °C +/- 0.5°C

We the undersigned attest that to the best of our knowledge the calibration of this probe has been accurately conducted and that all information contained within this report has been reviewed for accuracy.

Stuart Nicol



Jesse Hones

Calibration Results Summary

Probe Type:	E-Field Probe E-030
Serial Number:	E030-001
Frequency:	5200 MHz
Sensor Offset:	1.06 mm
Sensor Length:	2.5 mm
Tip Enclosure:	Composite*
Tip Diameter:	**<**2.5 mm
Tip Length:	55 mm
Total Length:	289 mm

*Resistive to recommended tissue recipes per IEEE-1528

Sensitivity in Air

Channel X:	1.2 $\mu V/(V/m)^2$
Channel Y:	1.2 $\mu V/(V/m)^2$
Channel Z:	1.2 $\mu V/(V/m)^2$
Diode Compression Point:	95 mV

Sensitivity in Body Tissue Measured

Frequency: 5200 MHz

Epsilon: 47.96 **Sigma:** 5.15 S/m

ConvF:

Channel X: 4.4

Channel Y: 4.4

Channel Z: 4.4

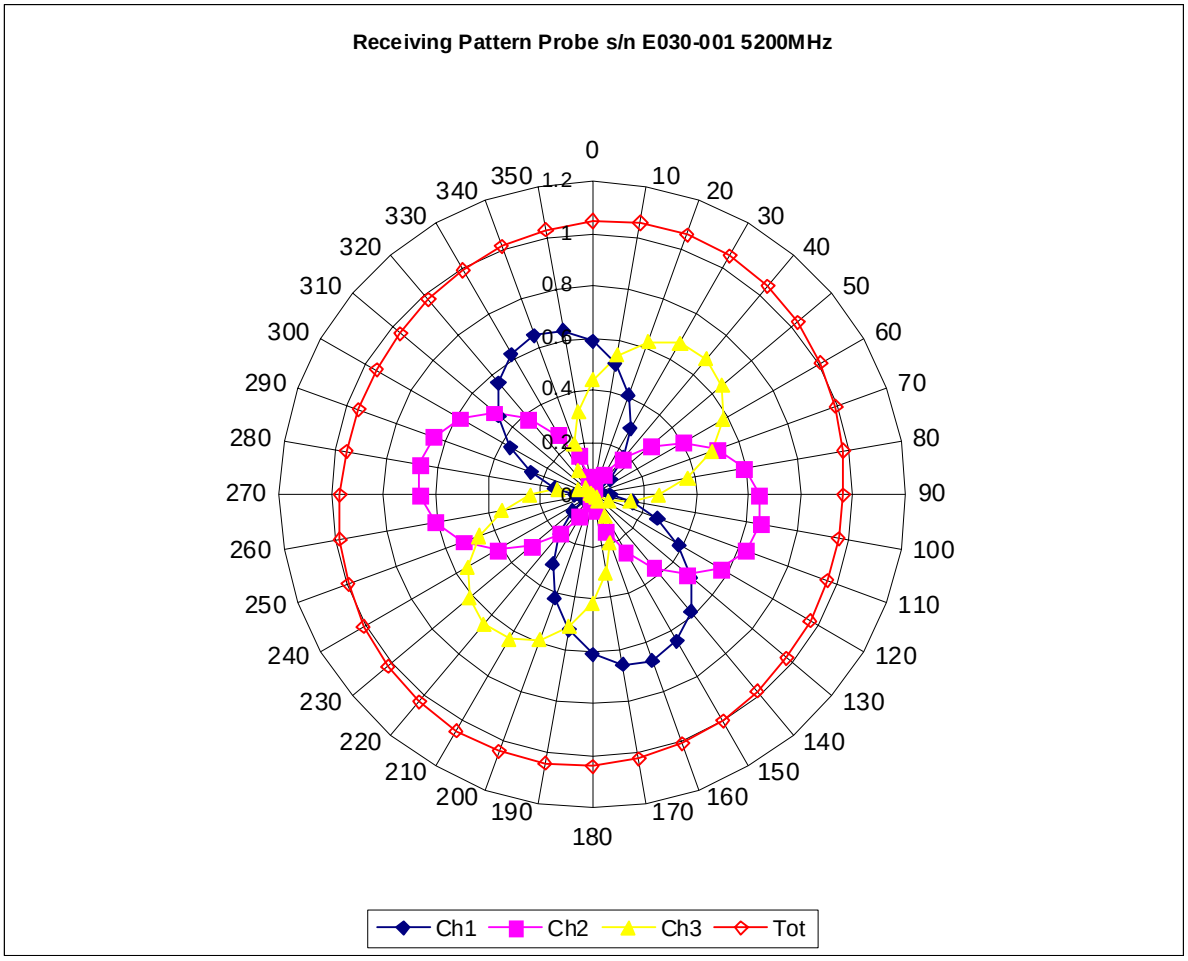
Boundary Effect:

Uncertainty resulting from the boundary effect is less than 2.1% for the distance between the tip of the probe and the tissue boundary, when less than 0.58mm.

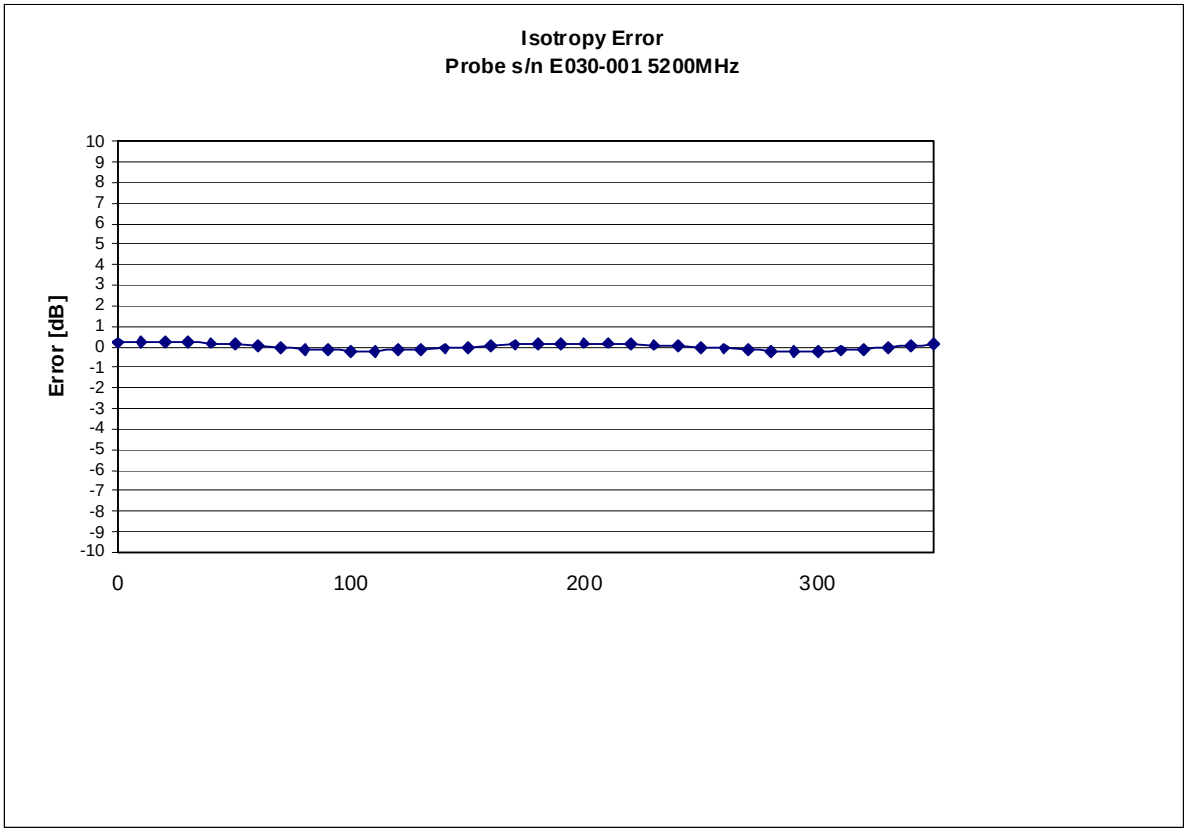
Spatial Resolution:

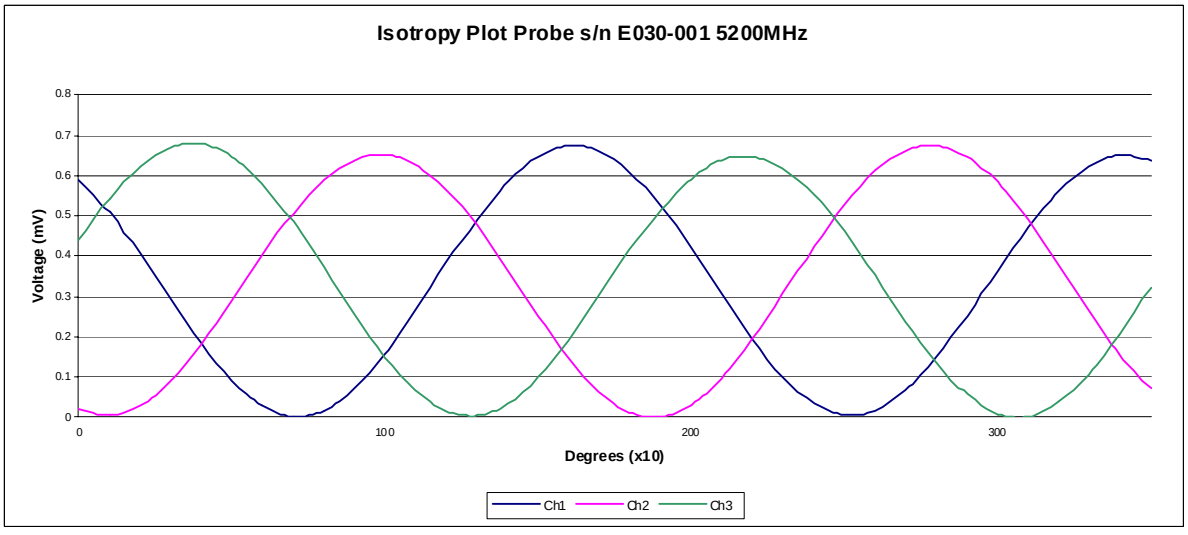
The measured probe tip diameter is 2.5mm (+/- 0.01 mm) and therefore meets the requirements of SSI/DRB-TP-D01-032 for spatial resolution.

Receiving Pattern 5200 MHz (Air)



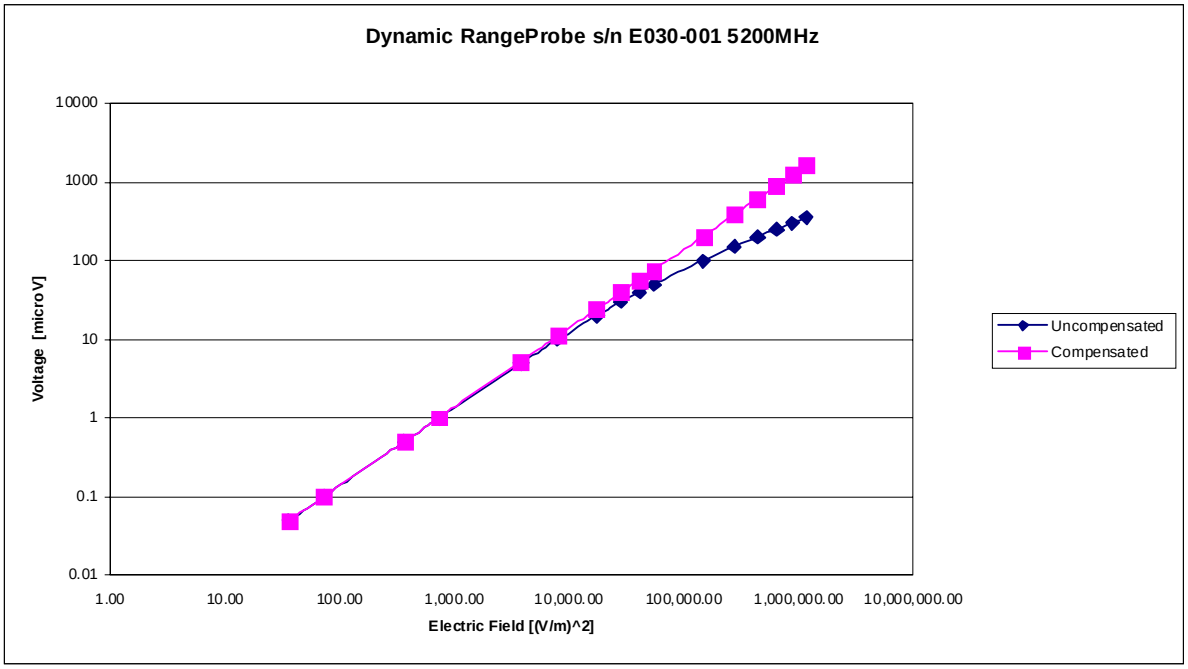
Isotropy Error 5200 MHz (Air)



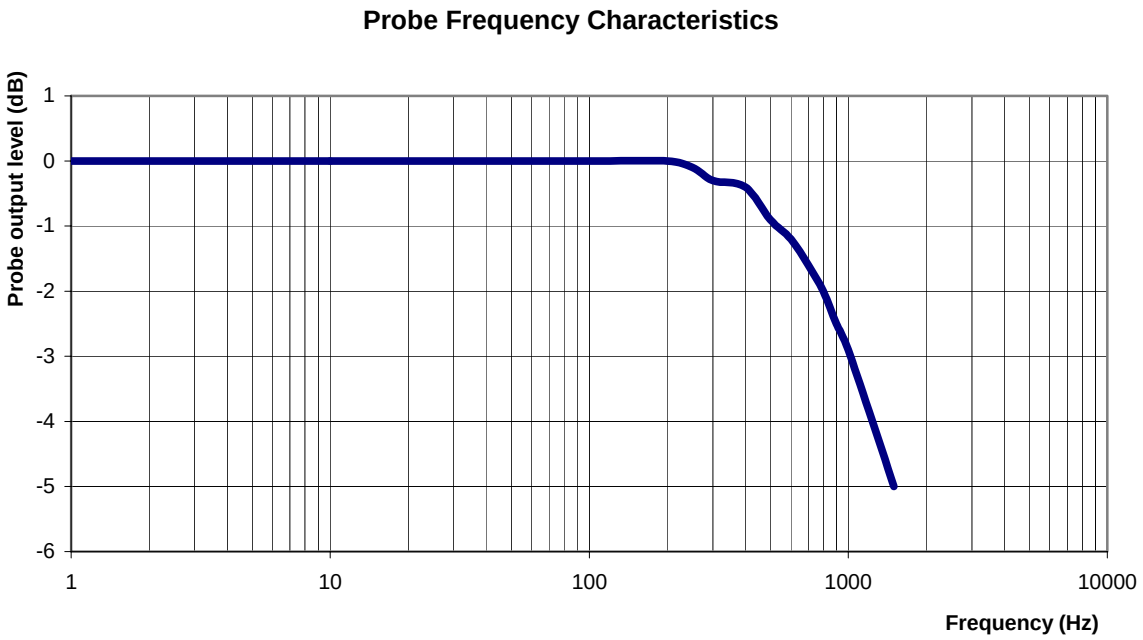


Isotropicity Tissue: 0.10 dB

Dynamic Range



Video Bandwidth



Video Bandwidth at 500 Hz 1 dB
Video Bandwidth at 1.02 KHz: 3 dB

Conversion Factor Uncertainty Assessment

Sensitivity in Body Tissue Measured

Frequency:		5200 MHz	
Epsilon:	47.96	**Sigma:**	5.15 S/m

ConvF

Channel X:	4.4	7%(K=2)
Channel Y:	4.4	7%(K=2)
Channel Z:	4.4	7%(K=2)

To minimize the uncertainty calculation all tissue sensitivity values were calculated using a load impedance of 5 MΩ.

Boundary Effect:

For a distance of 0.58mm the evaluated uncertainty (increase in the probe sensitivity) is less than 2.1%.

Test Equipment

The test equipment used during Probe Calibration, manufacturer, model number and, current calibration status are listed and located on the main APREL server R:\NCL\Calibration Equipment\Instrument List May 2009.

NCL CALIBRATION LABORATORIES

Calibration File No.: CP-1135

Client.: RFEL

C E R T I F I C A T E OF C A L I B R A T I O N

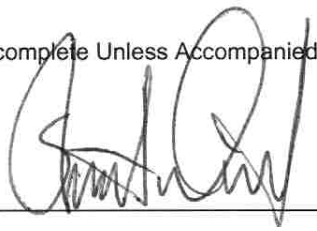
It is certified that the equipment identified below has been calibrated in the **NCL CALIBRATION LABORATORIES** by qualified personnel following recognized procedures and using transfer standards traceable to NRC/NIST.

Equipment: Miniature Isotropic RF Probe 5600 MHz
BODY Calibration
Manufacturer: APREL Laboratories
Model No.: E-020
Serial No.: E030-001

Calibration Procedure: SSI/DRB-TP-D01-032-E020-V2
Project No: RFEB-ALSE030-cal-5453

Calibrated: 12th July 2010
Released on: 14th July 2010

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary

Released By: 

NCL CALIBRATION LABORATORIES

51 SPECTRUM WAY
NEPEAN, ONTARIO
CANADA K2R 1E6

Division of APREL Lab.
TEL: (613) 820-4988
FAX: (613) 820-4161

Introduction

This Calibration Report reproduces the results of the calibration performed in line with the SSI/DRB-TP-D01-032-E020-V2 E-Field Probe Calibration Procedure. The results contained within this report are for APREL E-Field Probe E030-001.

References

SSI/DRB-TP-D01-032-E020-V2 E-Field Probe Calibration Procedure
IEEE 1528 “Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques”
SSI-TP-011 Tissue Calibration Procedure
IEC 62209 “Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures –Part 1 & 2: Procedure to determine the Specific Absorption Rate (SAR) for hand-held devices used in close proximity of the ear (frequency range of 300 MHz to 3 GHz)”
IEEE 1309 Draft Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9kHz to 40GHz

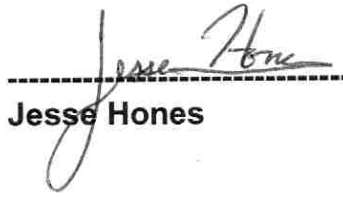
Conditions

Probe E030-001 was a new probe.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 21 °C +/- 0.5°C

We the undersigned attest that to the best of our knowledge the calibration of this probe has been accurately conducted and that all information contained within this report has been reviewed for accuracy.

Stuart Nicol



Jesse Hones

Calibration Results Summary

Probe Type:	E-Field Probe E-030
Serial Number:	E030-001
Frequency:	5600 MHz
Sensor Offset:	1.06 mm
Sensor Length:	2.5 mm
Tip Enclosure:	Composite*
Tip Diameter:	**<**2.5 mm
Tip Length:	55 mm
Total Length:	289 mm

*Resistive to recommended tissue recipes per IEEE-1528

Sensitivity in Air

Channel X:	1.2 $\mu V/(V/m)^2$
Channel Y:	1.2 $\mu V/(V/m)^2$
Channel Z:	1.2 $\mu V/(V/m)^2$
Diode Compression Point:	95 mV

Sensitivity in Body Tissue Measured

Frequency: 5600 MHz

Epsilon: 46.76 **Sigma:** 5.84 S/m

ConvF:

Channel X: 4.0

Channel Y: 4.0

Channel Z: 4.0

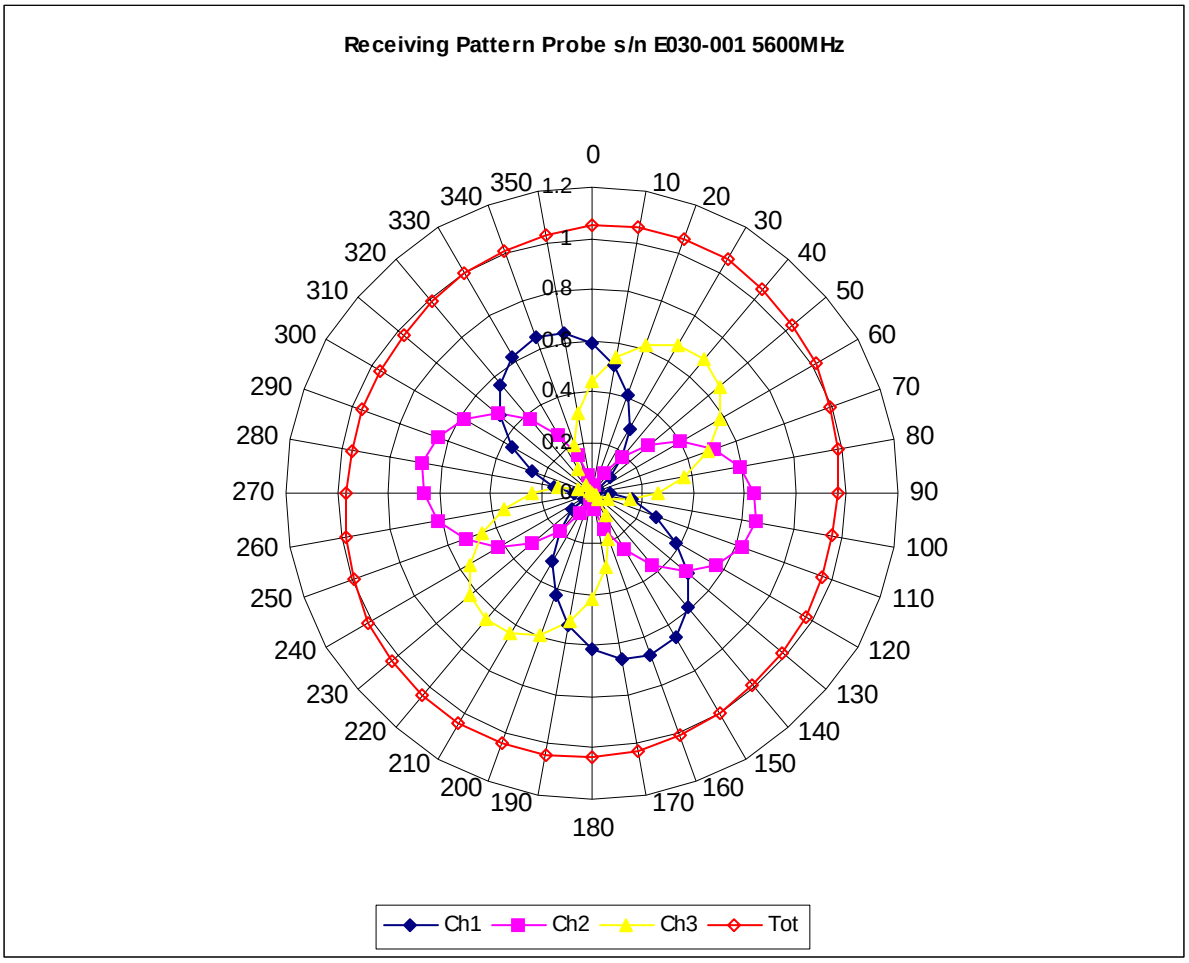
Boundary Effect:

Uncertainty resulting from the boundary effect is less than 2.1% for the distance between the tip of the probe and the tissue boundary, when less than 0.58mm.

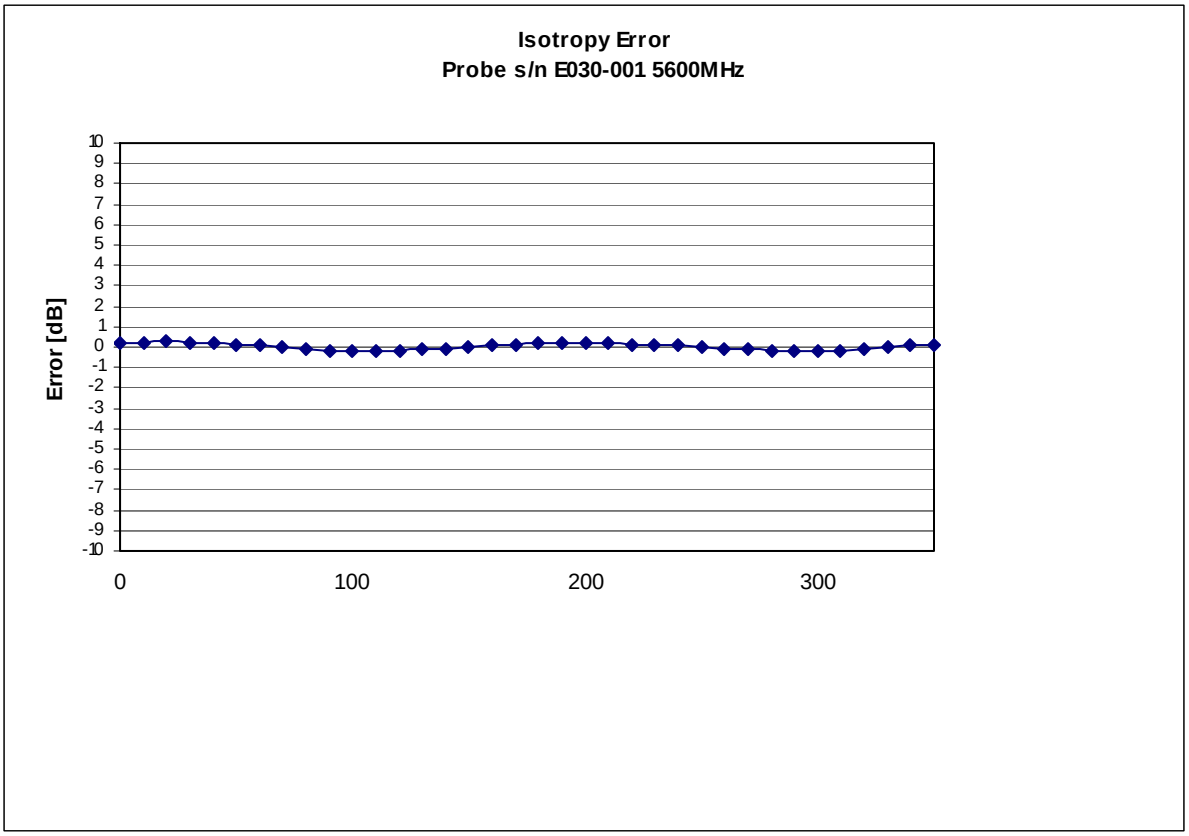
Spatial Resolution:

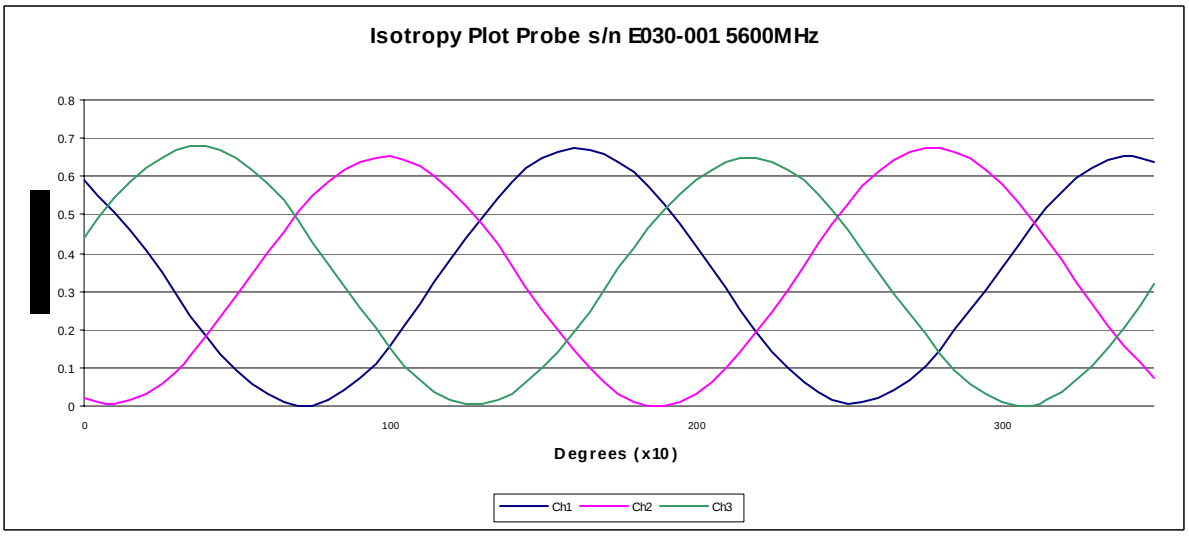
The measured probe tip diameter is 2.5mm (+/- 0.01 mm) and therefore meets the requirements of SSI/DRB-TP-D01-032 for spatial resolution.

Receiving Pattern 5600 MHz (Air)



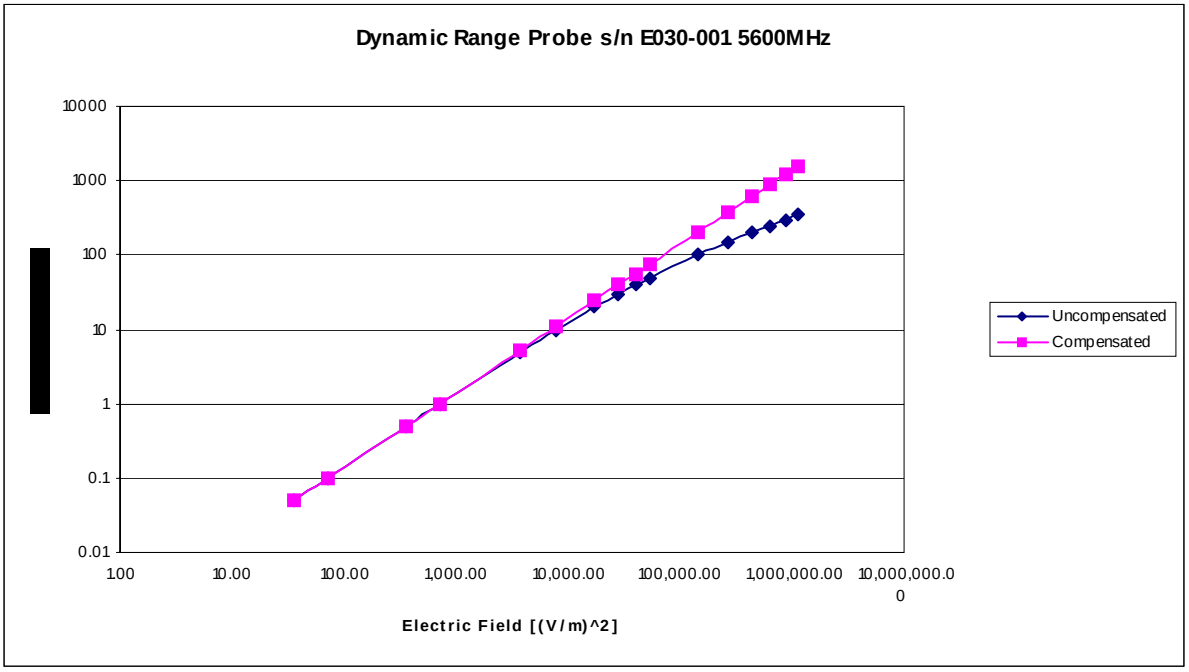
Isotropy Error 5600 MHz (Air)



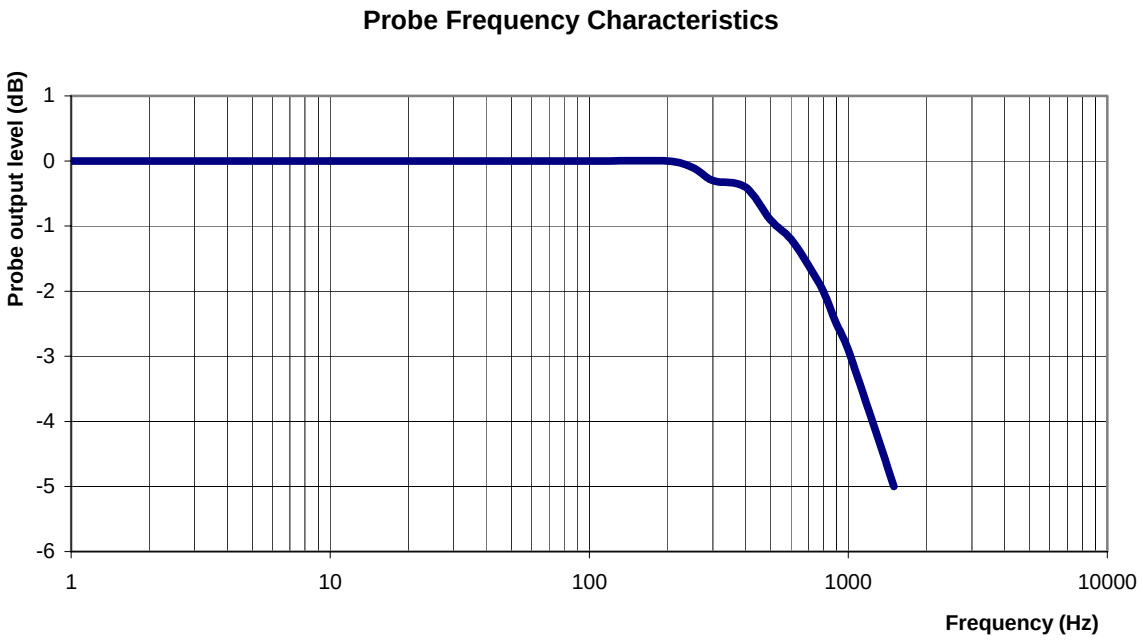


Isotropicity Tissue: 0.10 dB

Dynamic Range



Video Bandwidth



Video Bandwidth at 500 Hz 1 dB
Video Bandwidth at 1.02 KHz: 3 dB

Conversion Factor Uncertainty Assessment

Sensitivity in Body Tissue Measured

Frequency:		5600 MHz	
Epsilon:	46.76	**Sigma:**	5.84 S/m
ConvF			
Channel X:	4.0	7%(K=2)	
Channel Y:	4.0	7%(K=2)	
Channel Z:	4.0	7%(K=2)	

To minimize the uncertainty calculation all tissue sensitivity values were calculated using a load impedance of 5 MΩ.

Boundary Effect:

For a distance of 0.58mm the evaluated uncertainty (increase in the probe sensitivity) is less than 2.1%.

Test Equipment

The test equipment used during Probe Calibration, manufacturer, model number and, current calibration status are listed and located on the main APREL server R:\NCL\Calibration Equipment\Instrument List May 2009.

NCL CALIBRATION LABORATORIES

Calibration File No.: CP-1136

Client.: RFEL

C E R T I F I C A T E OF C A L I B R A T I O N

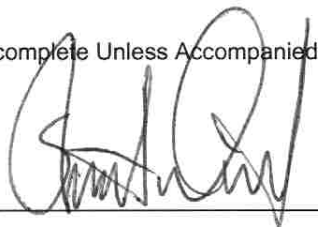
It is certified that the equipment identified below has been calibrated in the **NCL CALIBRATION LABORATORIES** by qualified personnel following recognized procedures and using transfer standards traceable to NRC/NIST.

Equipment: Miniature Isotropic RF Probe 5800 MHz
BODY Calibration
Manufacturer: APREL Laboratories
Model No.: E-020
Serial No.: E030-001

Calibration Procedure: SSI/DRB-TP-D01-032-E020-V2
Project No: RFEB-ALSE030-cal-5453

Calibrated: 12th July 2010
Released on: 14h July 2010

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary

Released By: 

NCL CALIBRATION LABORATORIES

51 SPECTRUM WAY
NEPEAN, ONTARIO
CANADA K2R 1E6

Division of APREL Lab.
TEL: (613) 820-4988
FAX: (613) 820-4161

Introduction

This Calibration Report reproduces the results of the calibration performed in line with the SSI/DRB-TP-D01-032-E020-V2 E-Field Probe Calibration Procedure. The results contained within this report are for APREL E-Field Probe E030-001.

References

SSI/DRB-TP-D01-032-E020-V2 E-Field Probe Calibration Procedure
IEEE 1528 “Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques”
SSI-TP-011 Tissue Calibration Procedure
IEC 62209 “Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures –Part 1 & 2: Procedure to determine the Specific Absorption Rate (SAR) for hand-held devices used in close proximity of the ear (frequency range of 300 MHz to 3 GHz)”
IEEE 1309 Draft Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9kHz to 40GHz

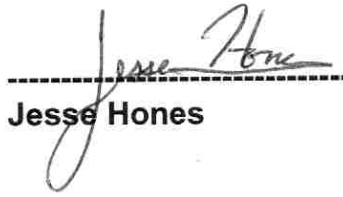
Conditions

Probe E030-001 was a new probe.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 21 °C +/- 0.5°C

We the undersigned attest that to the best of our knowledge the calibration of this probe has been accurately conducted and that all information contained within this report has been reviewed for accuracy.

Stuart Nicol



Jesse Hones

Calibration Results Summary

Probe Type:	E-Field Probe E-030
Serial Number:	E030-001
Frequency:	5800 MHz
Sensor Offset:	1.06 mm
Sensor Length:	2.5 mm
Tip Enclosure:	Composite*
Tip Diameter:	**<**2.5 mm
Tip Length:	55 mm
Total Length:	289 mm

*Resistive to recommended tissue recipes per IEEE-1528

Sensitivity in Air

Channel X:	1.2 $\mu V/(V/m)^2$
Channel Y:	1.2 $\mu V/(V/m)^2$
Channel Z:	1.2 $\mu V/(V/m)^2$
Diode Compression Point:	95 mV

Sensitivity in Body Tissue Measured

Frequency: 5800 MHz

Epsilon: 46.28 **Sigma:** 6.22 S/m

ConvF:

Channel X: 4.2

Channel Y: 4.2

Channel Z: 4.2

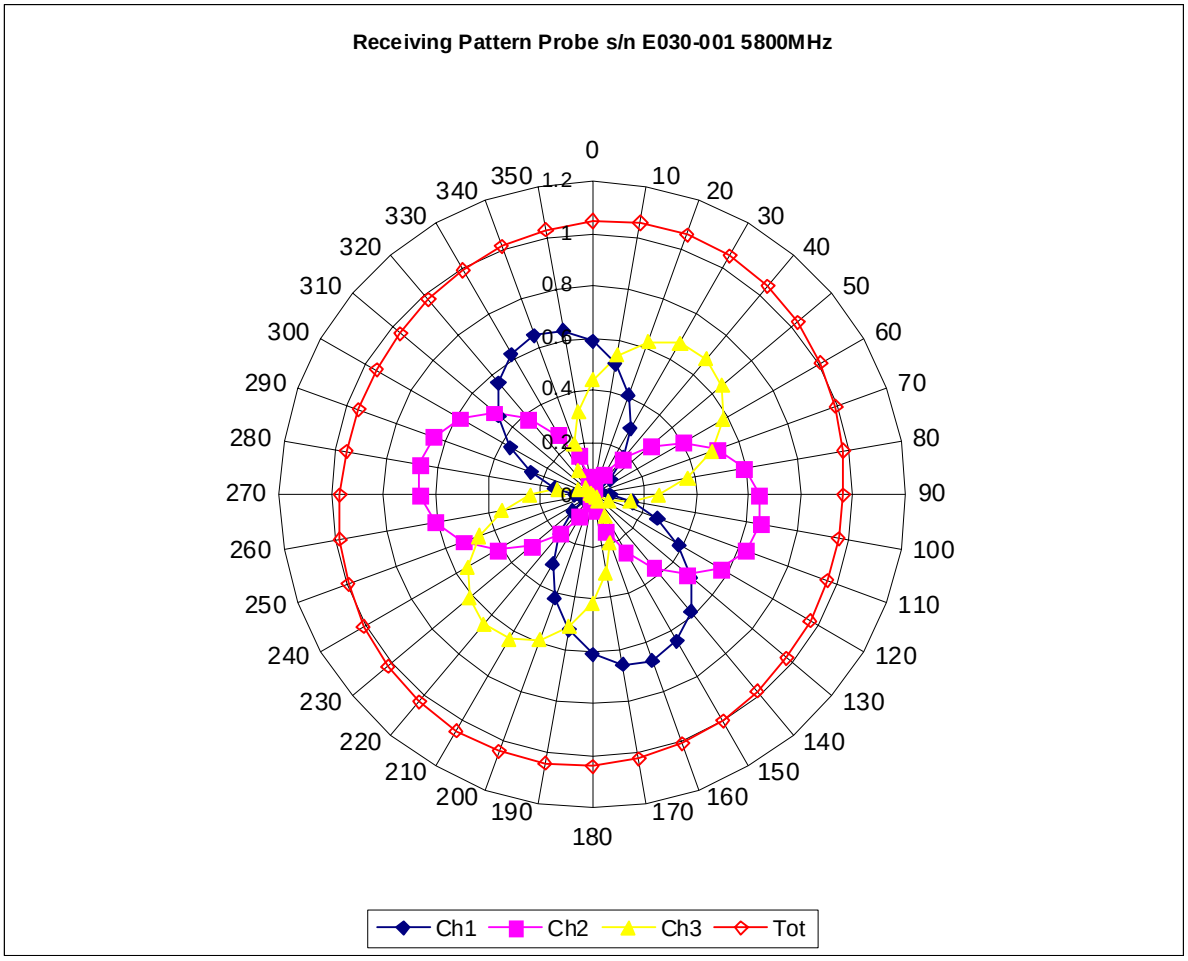
Boundary Effect:

Uncertainty resulting from the boundary effect is less than 2.1% for the distance between the tip of the probe and the tissue boundary, when less than 0.58mm.

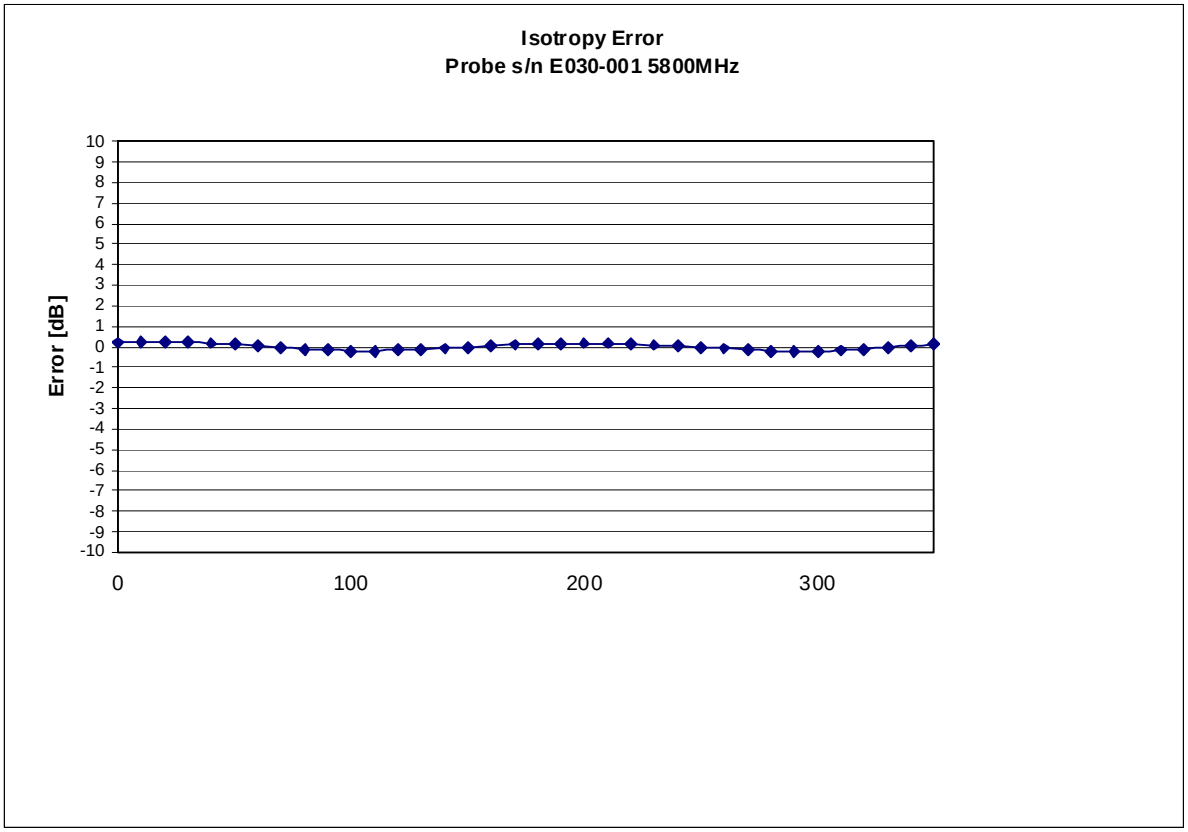
Spatial Resolution:

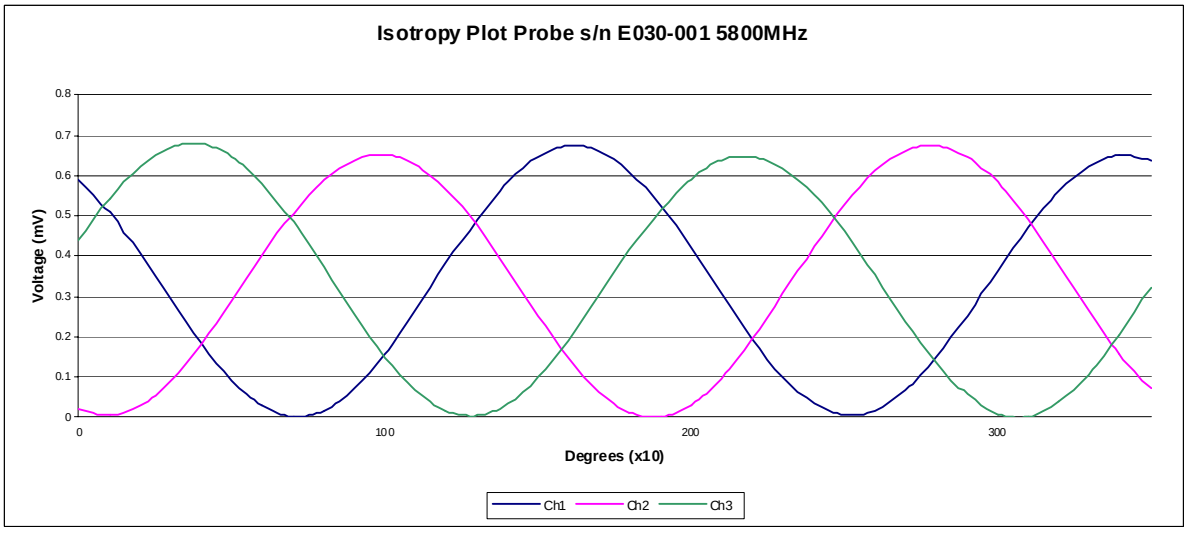
The measured probe tip diameter is 2.5mm (+/- 0.01 mm) and therefore meets the requirements of SSI/DRB-TP-D01-032 for spatial resolution.

Receiving Pattern 5800 MHz (Air)



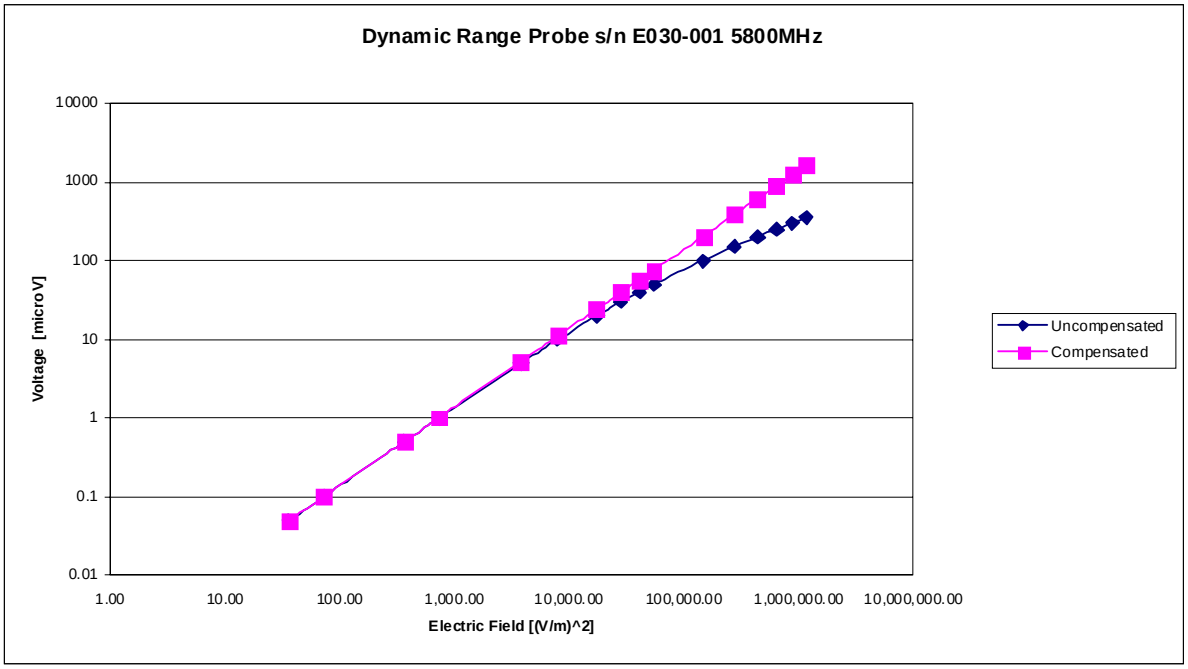
Isotropy Error 5800 MHz (Air)



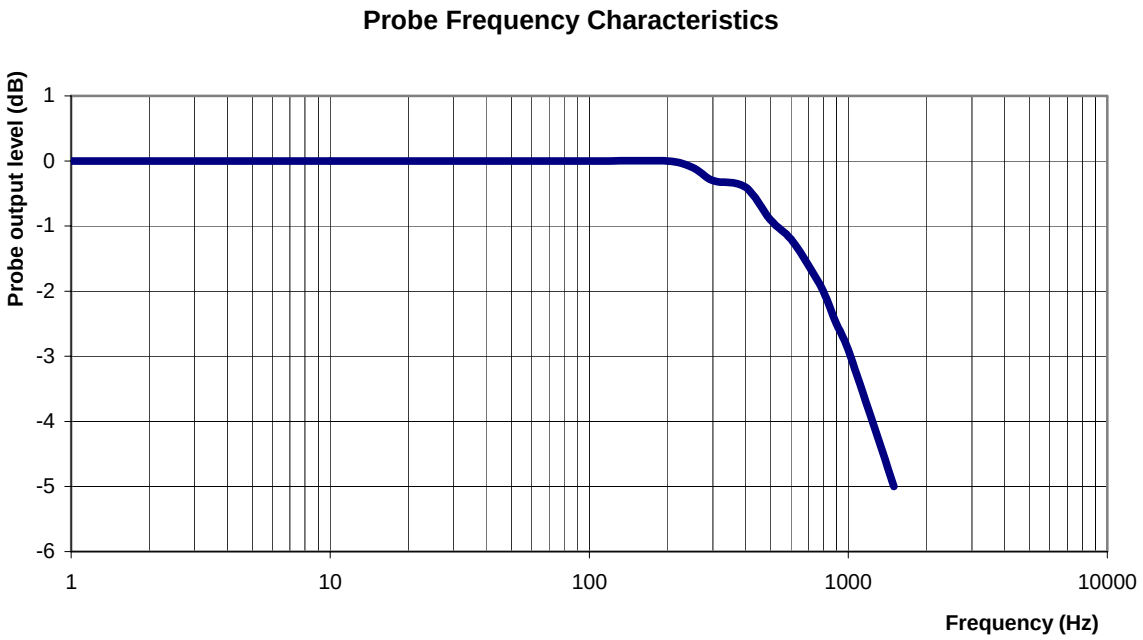


Isotropicity Tissue: 0.10 dB

Dynamic Range



Video Bandwidth



Video Bandwidth at 500 Hz 1 dB
Video Bandwidth at 1.02 KHz: 3 dB

Conversion Factor Uncertainty Assessment

Sensitivity in Body Tissue Measured

Frequency:		5800 MHz	
Epsilon:	46.28	**Sigma:**	6.22 S/m
ConvF			
Channel X:	4.2	7%(K=2)	
Channel Y:	4.2	7%(K=2)	
Channel Z:	4.2	7%(K=2)	

To minimize the uncertainty calculation all tissue sensitivity values were calculated using a load impedance of 5 MΩ.

Boundary Effect:

For a distance of 0.58mm the evaluated uncertainty (increase in the probe sensitivity) is less than 2.1%.

Test Equipment

The test equipment used during Probe Calibration, manufacturer, model number and, current calibration status are listed and located on the main APREL server R:\NCL\Calibration Equipment\Instrument List May 2009.

Appendix E – Dipole Calibration Data Sheets

NCL CALIBRATION LABORATORIES

Calibration File No: DC-1182
Project Number: RFEB-5552

C E R T I F I C A T E OF C A L I B R A T I O N

It is certified that the equipment identified below has been calibrated in the **NCL CALIBRATION LABORATORIES** by qualified personnel following recognized procedures and using transfer standards traceable to NRC/NIST.

Validation Dipole

Manufacturer: APREL Laboratories
Part number: ALS-D-2450-S-2
Frequency: 2450 MHz
Serial No: RFE-278

Customer: RFEL
Body Calibration

Calibrated: 18th November 2010
Released on: 19th November 2010

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary

Released By: _____

NCL CALIBRATION LABORATORIES
51 SPECTRUM WAY
NEPEAN, ONTARIO
CANADA K2R 1E6
Division of APREL Lab.
TEL: (613) 820-4988
FAX: (613) 820-4162

Conditions

Dipole RFE-278 was a new calibration.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 21 °C +/- 0.5°C

We the undersigned attest that to the best of our knowledge the calibration of this device has been accurately conducted and that all information contained within this report has been reviewed for accuracy.

We the undersigned attest that to the best of our knowledge the calibration of this device has been accurately conducted and that all information contained within this report has been reviewed for accuracy.

Stuart Nicol

C. Teodorian

Calibration Results Summary

The following results relate the Calibrated Dipole and should be used as a quick reference for the user.

Mechanical Dimensions

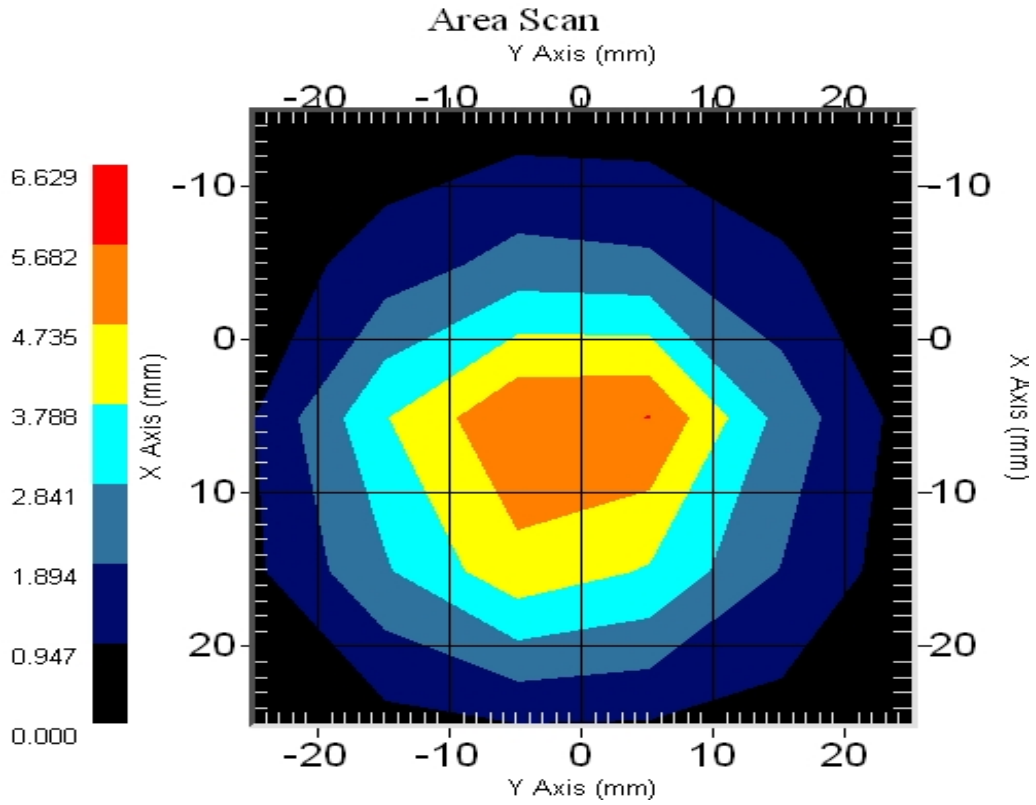
Length: 51.5 mm
Height: 30.4 mm

Electrical Specification

SWR: 1.249 U
Return Loss: -19.170 dB
Impedance: 42.223 Ω

System Validation Results @ 100mW

Frequency	1 Gram	10 Gram	Peak
2450 MHz	5.15	2.31	10.01



Introduction

This Calibration Report has been produced in line with the SSI Dipole Calibration Procedure SSI-TP-018-ALSAS. The results contained within this report are for Validation Dipole RFE-278. The calibration routine consisted of a three-step process. Step 1 was a mechanical verification of the dipole to ensure that it meets the mechanical specifications. Step 2 was an Electrical Calibration for the Validation Dipole, where the SWR, Impedance, and the Return loss were assessed. Step 3 involved a System Validation using the ALSAS-10U, along with APREL E-020 130 MHz to 26 GHz E-Field Probe Serial Number 226.

References

SSI-TP-018-ALSAS Dipole Calibration Procedure
SSI-TP-016 Tissue Calibration Procedure
IEEE 1528 “Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques”

Conditions

Dipole RFE-278 was a re-calibration.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 20 °C +/- 0.5°C

Dipole Calibration Results

Mechanical Verification

APREL Length	APREL Height	Measured Length	Measured Height
51.5 mm	30.4 mm	52.1 mm	31.0 mm

Tissue Validation

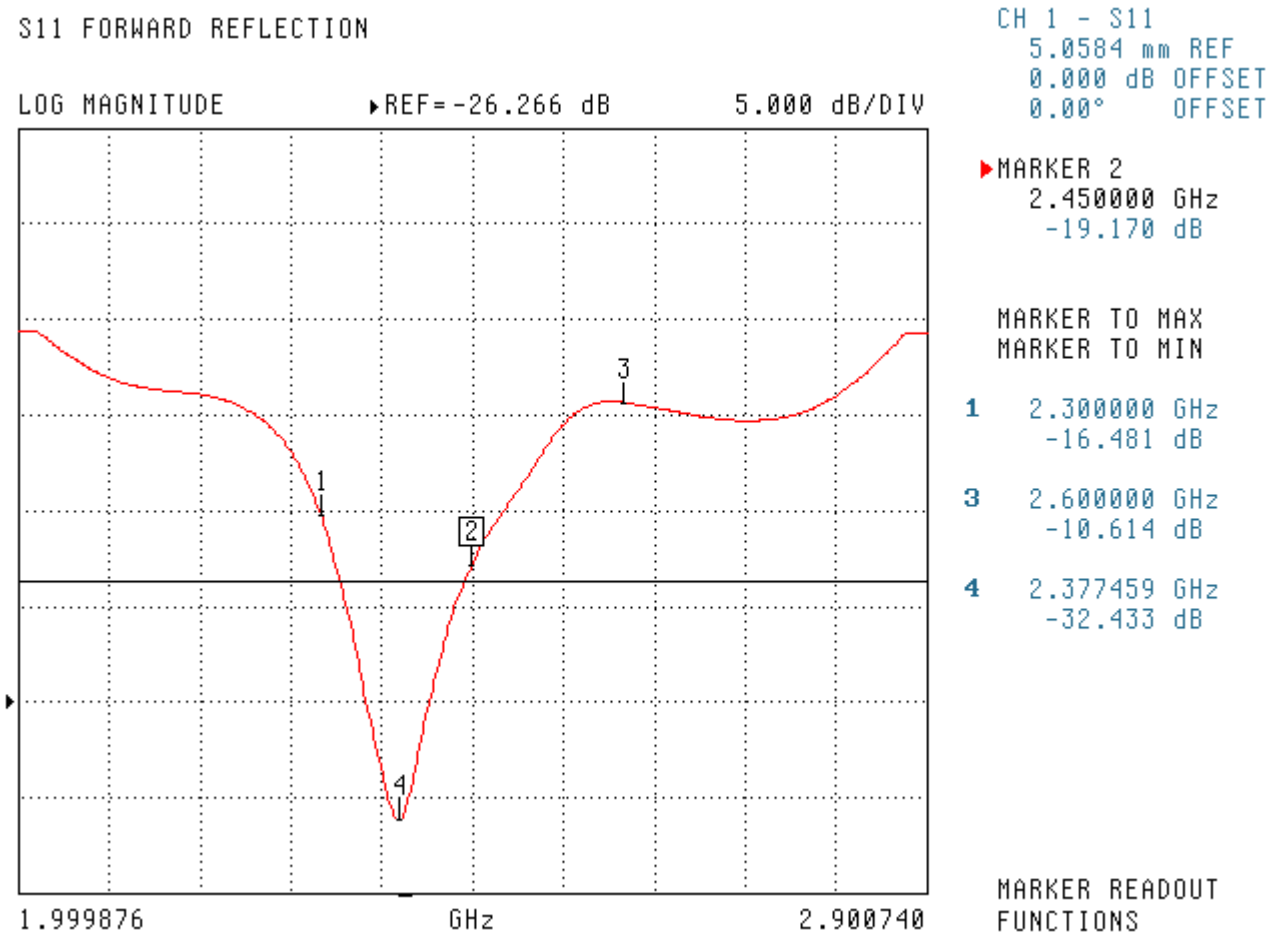
Body Tissue 2450 MHz	Measured
Dielectric constant, ε_r	52.0
Conductivity, σ [S/m]	1.92

Electrical Calibration

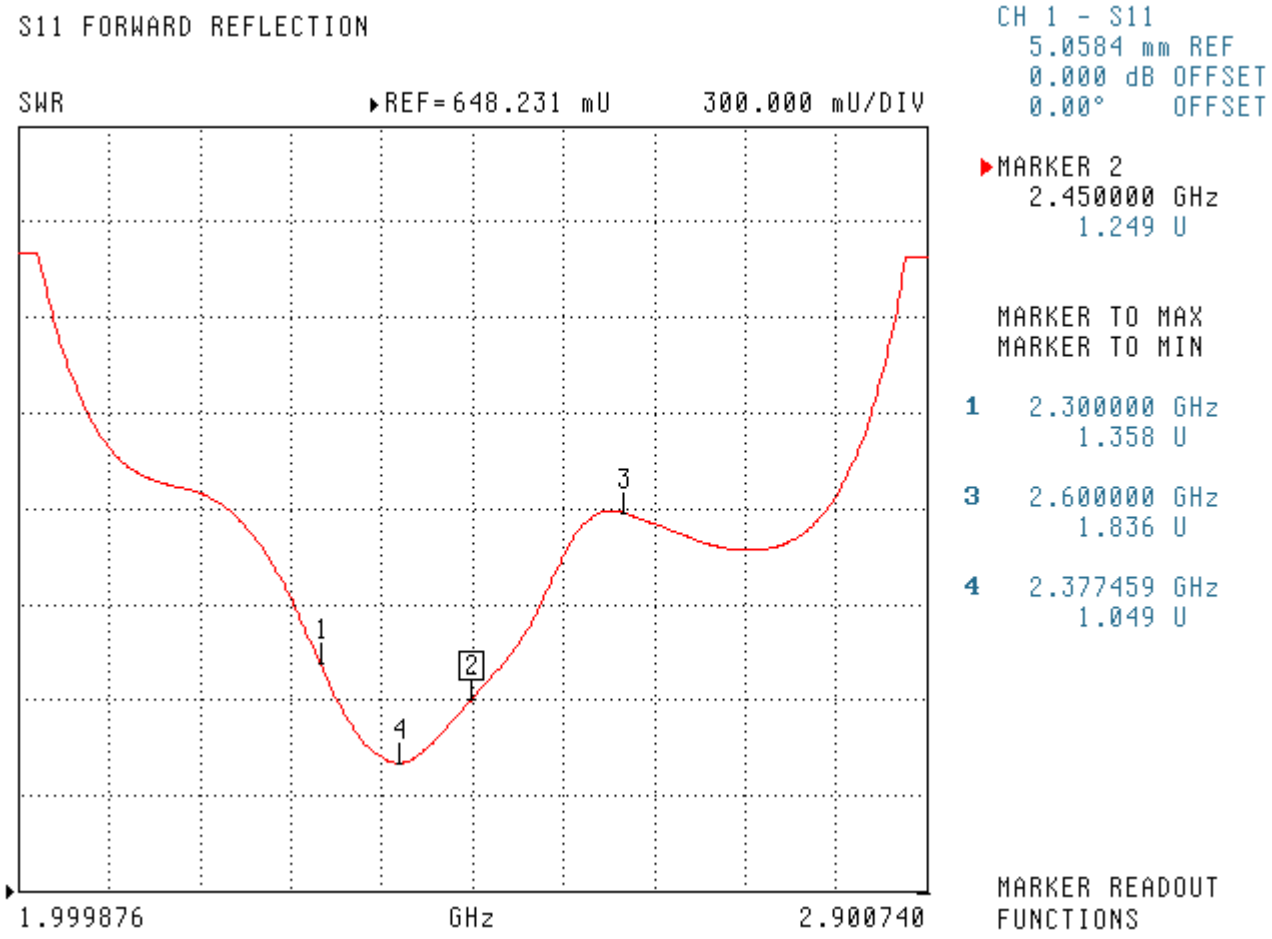
Test	Result
S11 R/L	-19.170 dB
SWR	1.249 U
Impedance	42.223 Ω

The Following Graphs are the results as displayed on the Vector Network Analyzer.

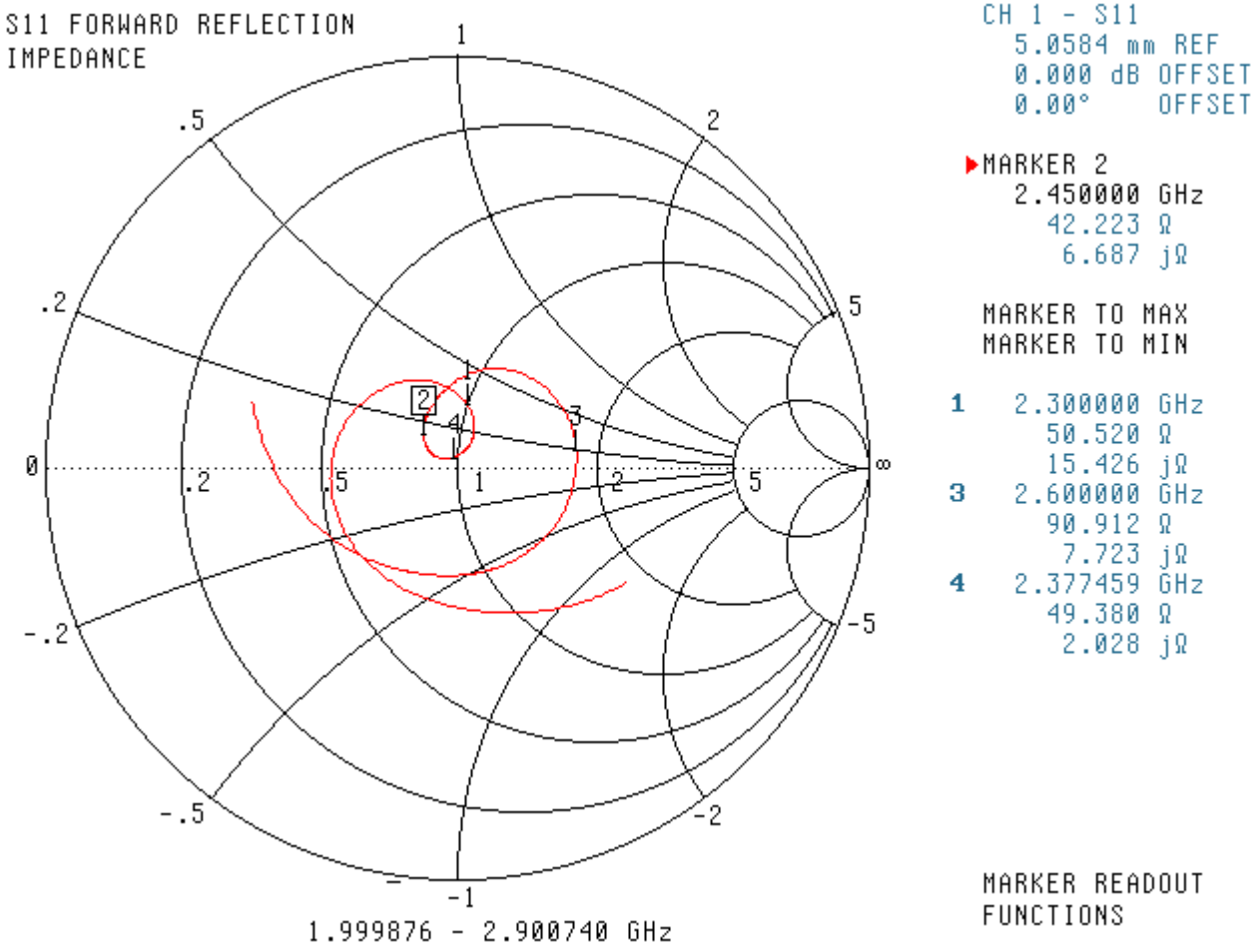
S11 Parameter Return Loss



SWR



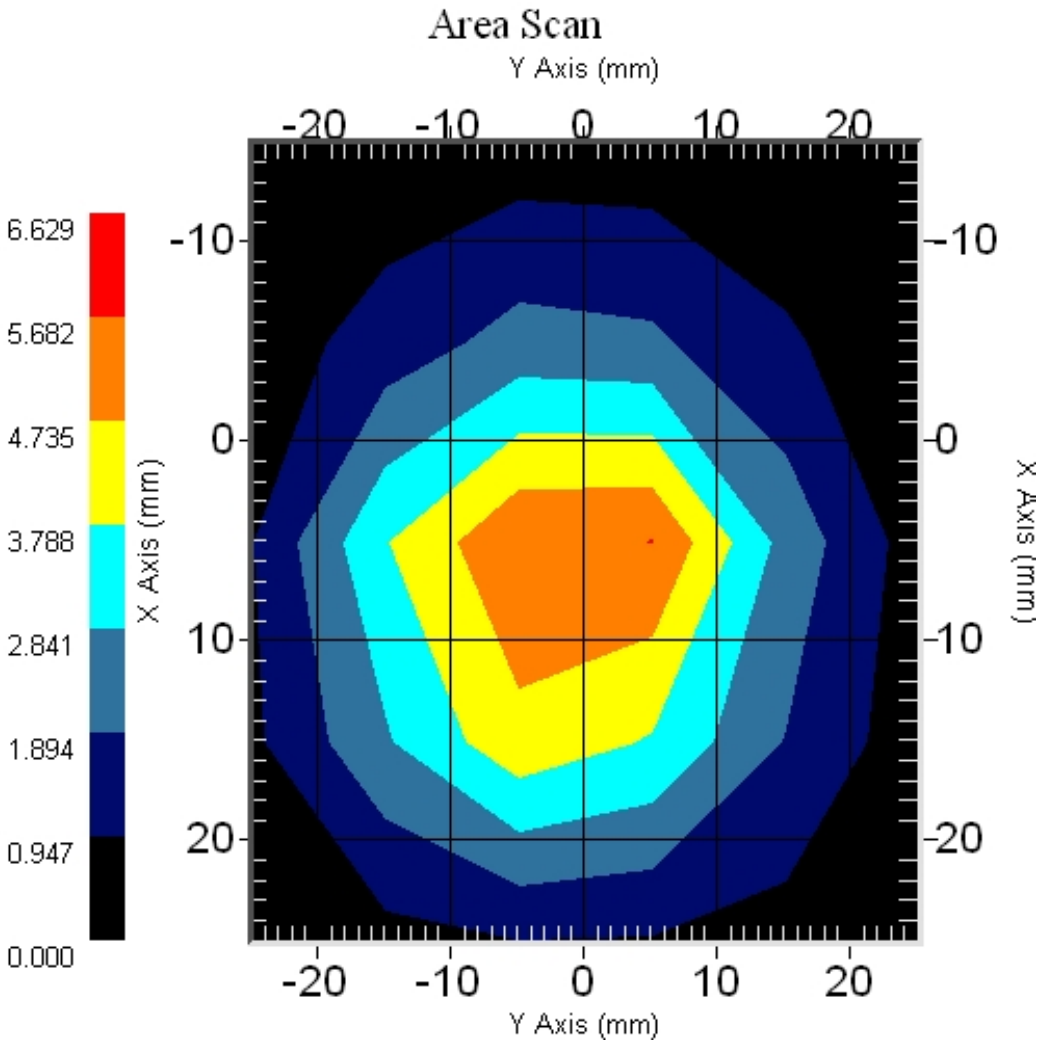
Smith Chart Dipole Impedance



System Validation Results Using the Electrically Calibrated Dipole

Results @ 100mW

Body Tissue Frequency	1 Gram	10 Gram	Peak Above Feed Point
2450 MHz	5.15	2.31	10.01



Test Equipment

The test equipment used during Probe Calibration, manufacturer, model number and, current calibration status are listed and located on the main APREL server R:\NCL\Calibration Equipment\Instrument List May 2010.

NCL CALIBRATION LABORATORIES

Calibration File No: DC-1191
Project Number: RFEB-5556

C E R T I F I C A T E OF C A L I B R A T I O N

It is certified that the equipment identified below has been calibrated in the **NCL CALIBRATION LABORATORIES** by qualified personnel following recognized procedures and using transfer standards traceable to NRC/NIST.

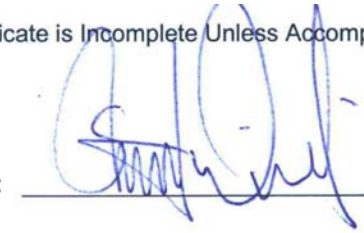
Validation Dipole

Manufacturer: APREL Laboratories
Part number: ALS-D-BB-S-2
Frequency: 5200-5800 MHz
Serial No: 235-00801

Customer: RFEL

Calibrated: 16th December 2010
Released on: 9th February 2011

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary

Released By: 

NCL CALIBRATION LABORATORIES

51 SPECTRUM WAY
NEPEAN, ONTARIO
CANADA K2R 1E6

Division of APREL Lab.
TEL: (613) 820-4988
FAX: (613) 820-4162

Conditions

Dipole 235-00801 was new and taken from stock prior to calibration.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 21 °C +/- 0.5°C

We the undersigned attest that to the best of our knowledge the calibration of this device has been accurately conducted and that all information contained within this report has been reviewed for accuracy.

Stuart Nicol

C. Teodorian

Calibration Results Summary

The following results relate the Calibrated Dipole and should be used as a quick reference for the user.

Mechanical Dimensions

Length: 23 mm
Height: 21 mm

Electrical Specification 5200MHz

SWR: 1.013 U
Return Loss: -44.267 dB
Impedance: 49.892 Ω

Electrical Specification 5600MHz

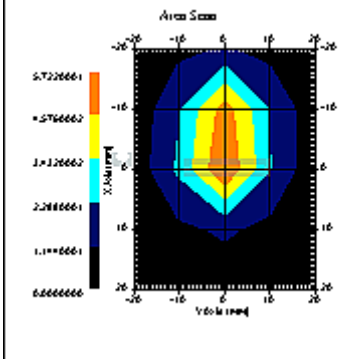
SWR: 1.006 U
Return Loss: -50.321 dB
Impedance: 50.247 Ω

Electrical Specification 5800MHz

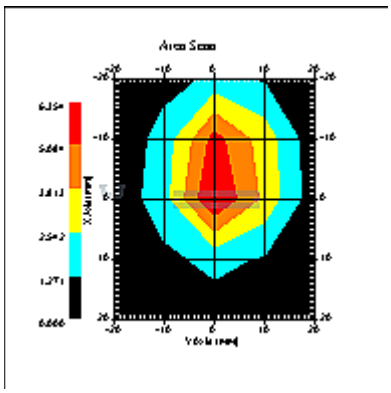
SWR: 1.021 U
Return Loss: -39.852 dB
Impedance: 49.261 Ω

System Validation Results

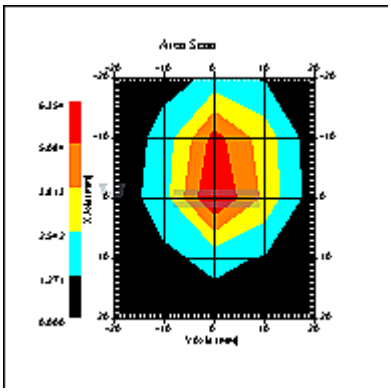
Frequency	1 Gram	10 Gram	Peak
5200 MHz	59.81	19.01	-
5600 MHz	63.10	20.60	-
5800 MHz	61.36	19.73	-



5200MHz



5600MHz



5800MHz

Introduction

This Calibration Report has been produced in line with the SSI Dipole Calibration Procedure SSI-TP-018-ALSAS. The results contained within this report are for Validation Dipole 235-00801. The calibration routine consisted of a three-step process. Step 1 was a mechanical verification of the dipole to ensure that it meets the mechanical specifications. Step 2 was an Electrical Calibration for the Validation Dipole, where the SWR, Impedance, and the Return loss were assessed. Step 3 involved a System Validation using the ALSAS-10U, along with APREL E-030 130 MHz to 26 GHz E-Field Probe Serial Number 215.

References

SSI-TP-018-ALSAS Dipole Calibration Procedure
SSI-TP-016 Tissue Calibration Procedure
IEEE 1528 “Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques”
IEC-62209 “Human exposure to radio frequency fields from hand-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 of the ear (frequency range of 300 MHz to 3 GHz)”
IEC-62209 “Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures”
Part 2 *Draft*: “Procedure to determine the Specific Absorption Rate (SAR) for hand-held devices used in close proximity of the ear (frequency range of 30 MHz to 6 GHz)”

Conditions

Dipole 235-00801 was a re-calibration.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 20 °C +/- 0.5°C

Dipole Calibration Results

Mechanical Verification

APREL Length	APREL Height	Measured Length	Measured Height
23 mm	21 mm	23 mm	21 mm

Tissue Validation

Body Tissue 5200 MHz	Measured
Dielectric constant, ε_r	48.40
Conductivity, σ [S/m]	5.12

Body Tissue 5600 MHz	Measured
Dielectric constant, ε_r	47.31
Conductivity, σ [S/m]	5.80

Body Tissue 5800 MHz	Measured
Dielectric constant, ε_r	46.72
Conductivity, σ [S/m]	6.18

Electrical Calibration

Electrical Specification 5200MHz

SWR: 1.013 U
Return Loss: -44.267 dB
Impedance: 49.892 Ω

Electrical Specification 5600MHz

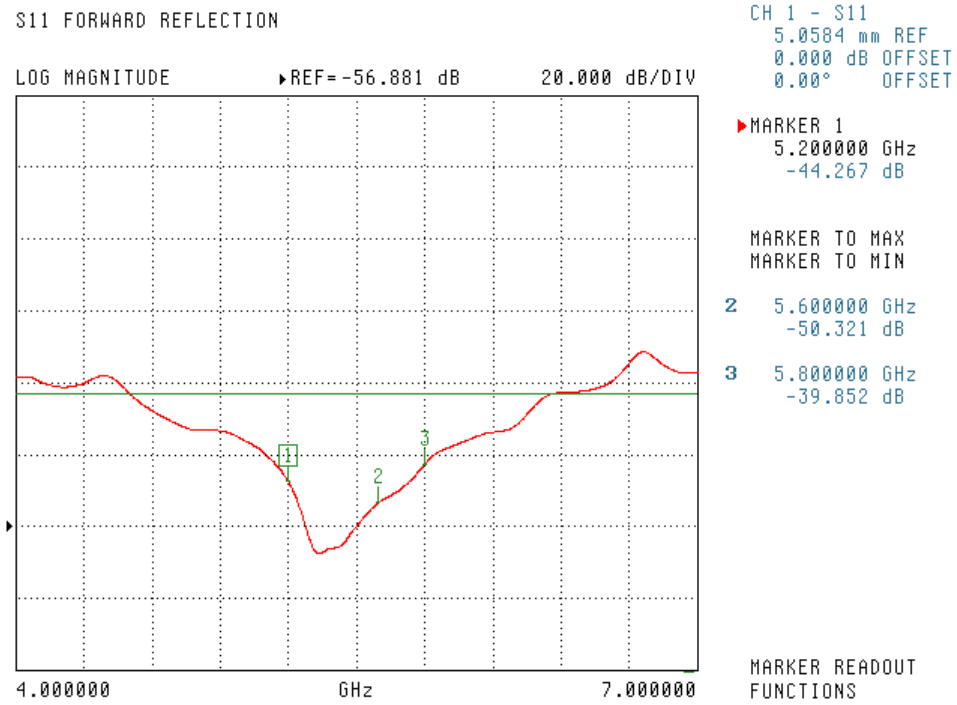
SWR: 1.006 U
Return Loss: -50.321 dB
Impedance: 50.247 Ω

Electrical Specification 5800MHz

SWR: 1.021 U
Return Loss: -39.852 dB
Impedance: 49.261 Ω

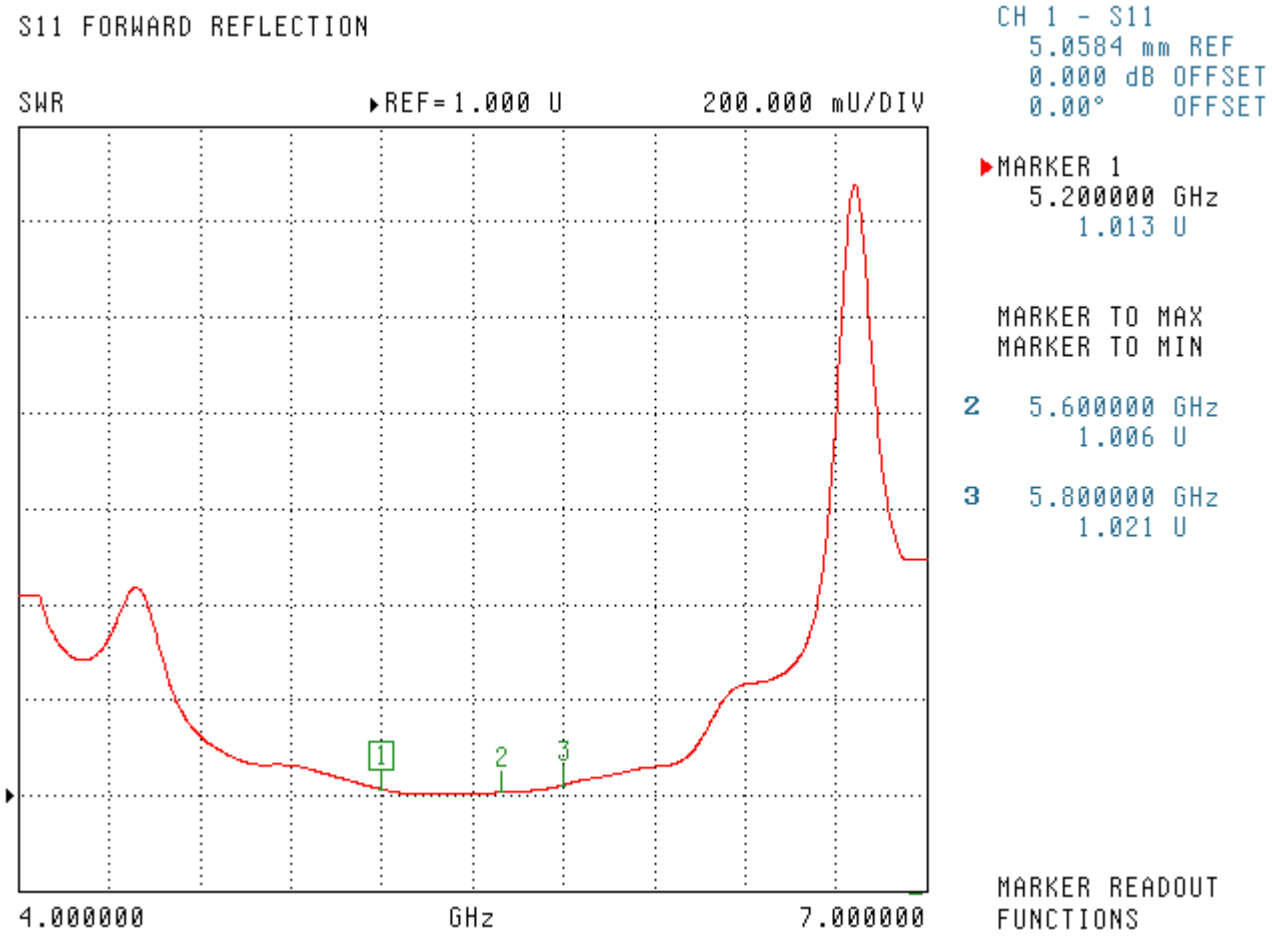
The Following Graphs are the results as displayed on the Vector Network Analyzer.

S11 Parameter Return Loss

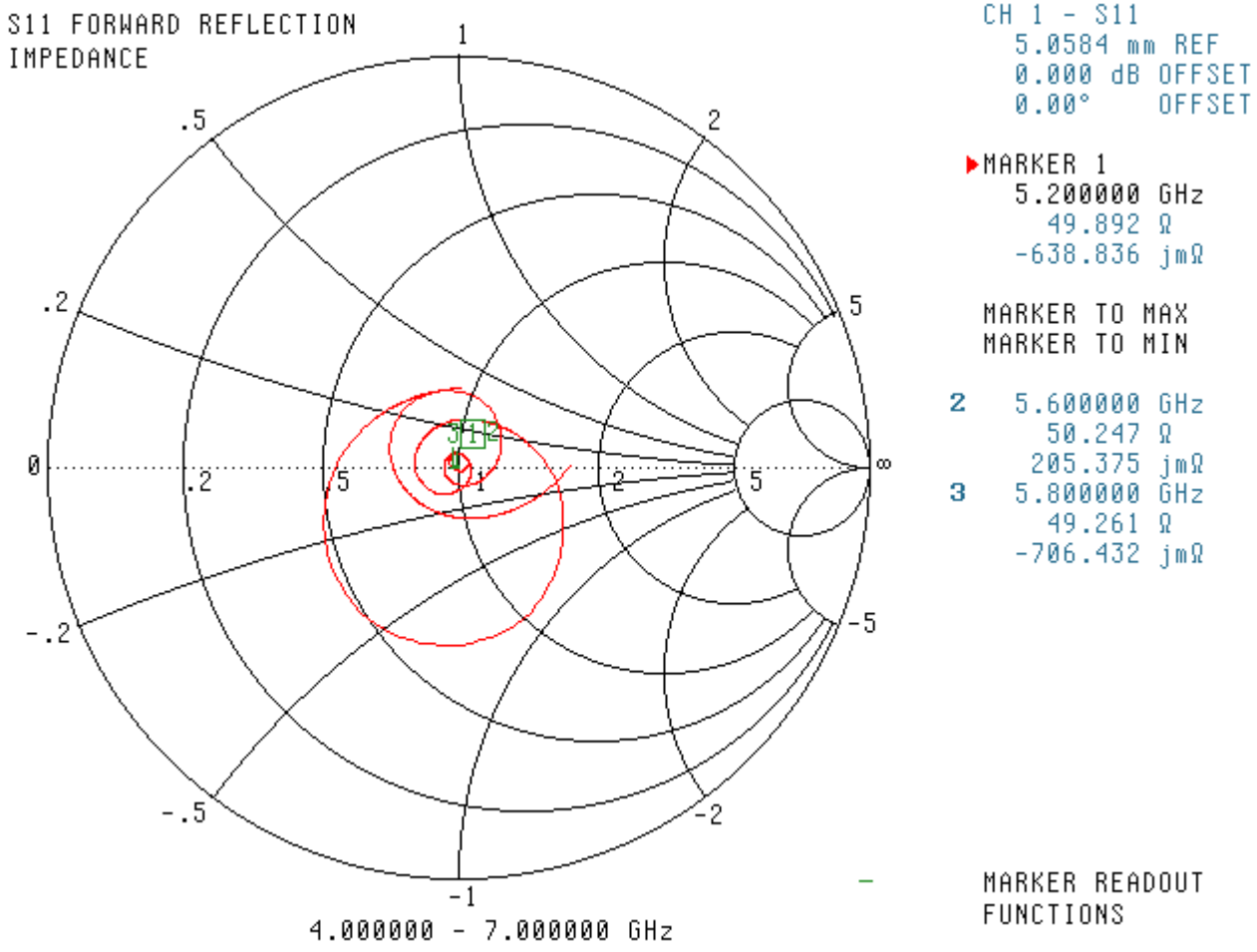


This page has been reviewed for content and attested to by signature within this document.

SWR

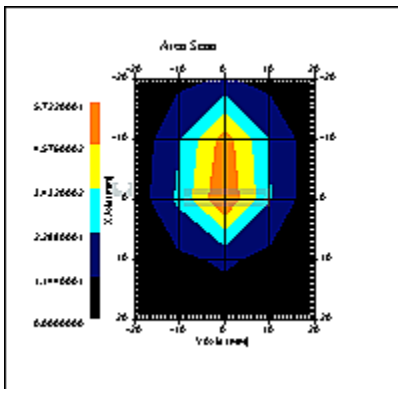


Smith Chart Dipole Impedance

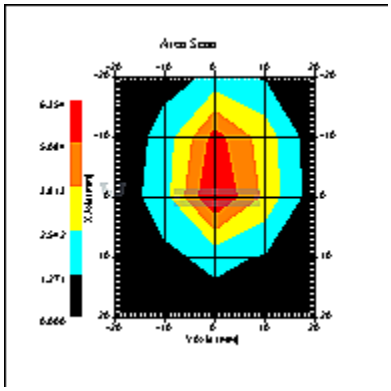


System Validation Results Using the Electrically Calibrated Dipole

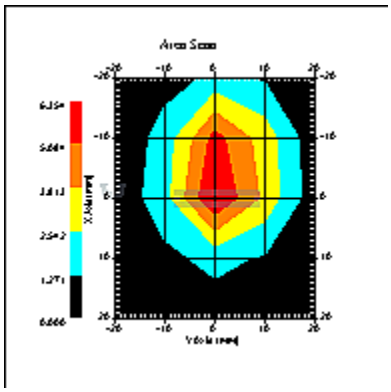
Frequency	1 Gram	10 Gram	Peak
5200 MHz	59.81	19.01	-
5600 MHz	63.10	20.60	-
5800 MHz	61.36	19.73	-



5200MHz



5600MHz



5800MHz

Test Equipment

The test equipment used during Probe Calibration, manufacturer, model number and, current calibration status are listed and located on the main APREL server R:\NCL\Calibration Equipment\Instrument List May 2010.

Appendix F – Phantom Calibration Data Sheets

NCL CALIBRATION LABORATORIES

Calibration File No.: RFE-273

CERTIFICATE OF CALIBRATION

It is certified that the equipment identified below has been calibrated in the **NCL CALIBRATION LABORATORIES** by qualified personnel following recognized procedures and using transfer standards traceable to National Standards.

Thickness of the UniPhantom is 2 mm ± 10%
Pinna thickness is 6 mm ± 10%

Resolution:	0.01 mm	Calibrated to:	0.0 mm
Stability:	OK	Accuracy:	< 0.1 mm

Calibrated By: Karen K. Feb 17/04.

NCL CALIBRATION LABORATORIES
51 SPECTRUM WAY
NEPEAN, ONTARIO
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