RF Exposure Lab

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CERTIFICATE OF COMPLIANCE
SAR EVALUATION

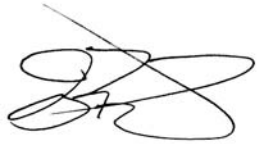
Intel Corporation		Dates of Test:	May 6-9, 2011
100 Center Point Circle, Suite 200		Test Report Number:	SAR.20110501
Columbia, SC 29210			Revision E

FCC ID:	PD962205ANH and PD962205ANHU
IC Certificate:	1000M-62205ANH and 1000M-62205ANHU
Model(s):	Intel® Centrino® Advanced-N 6205 (Model 62205ANHMW & 62205ANHU)
Test Sample:	Engineering Unit Same as Production
MAC Address:	001500632B54
Equipment Type:	Wireless Module
Classification:	Portable Transmitter Next to Body
TX Frequency Range:	2412 – 2462 MHz; 5180 – 5320 MHz; 5500 – 5700 MHz; 5745 – 5825 MHz
Frequency Tolerance:	± 2.5 ppm
Maximum RF Output:	2450 MHz (b) – 16.94 dB, 2450 MHz (g) – 15.88 dB, 2450 MHz (n20) – 15.53 dB, 2450 MHz (n40) – 12.38 dB, 5250 MHz (a) – 16.45 dB, 5250 MHz (n20) – 16.52 dB, 5250 MHz (n40) – 16.32 dB, 5600 MHz (a) – 16.47 dB, 5600 MHz (n20) – 16.43 dB, 5600 MHz (n40) – 16.51 dB, 5800 MHz (a) – 16.49 dB, 5800 MHz (n20) – 16.61 dB, 5800 MHz (n40) – 16.49 dB Conducted
Signal Modulation:	DSSS, OFDM
Antenna Type:	Shanghai Universe Communications Electron Co., Ltd., PIFA Antenna
Application Type:	Certification
FCC Rule Parts:	Part 2, 15C, 15E
KDB Test Methodology:	KDB 447498, KDB 248227, KDB 616217
Industry Canada:	RSS-102, Safety Code 6
Maximum SAR Value:	0.392 W/kg
Separation Distance:	12 mm

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, and OET Bulletin 65 Supp. C (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 Intel Corporation Model Intel® Centrino® Advanced-N 6205 (Model 62205ANHMW & 62205ANHU) FCC ID: PD962205ANH and PD962205ANHU with FCC Part 2, 1093, ET Docket 93-62 Rules for mobile and portable devices and IC Certificate: 1000M-62205ANH and 1000M-62205ANHU 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 module is sold under two different FCC/IC ID numbers. The ID's ending in "U" are intended to allow user install conditions and host systems must be provided with a BIOS locking feature that prevents installation of unauthorized device.

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.

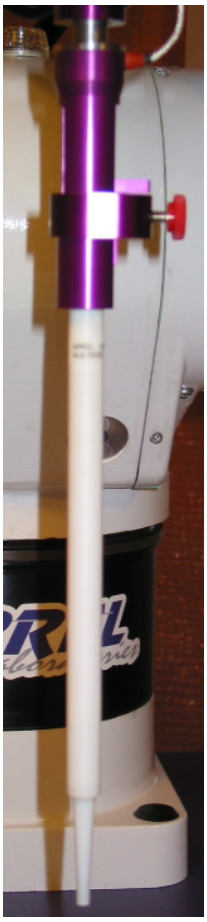
System Description

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).

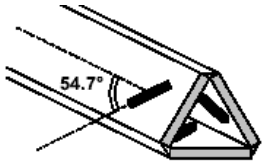
The overall uncertainty for the methodology and algorithms the ALSAS-10-U used during the SAR calculation was evaluated using the data from IEEE 1528 f3 algorithm:

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

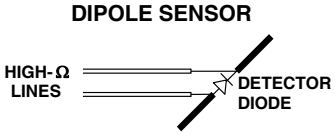
The probe used during the measurement process has been assessed to provide values for diode compression. These values are calculated during the probe calibration exercise and are used in the mathematical calculations for the assessment of SAR.

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

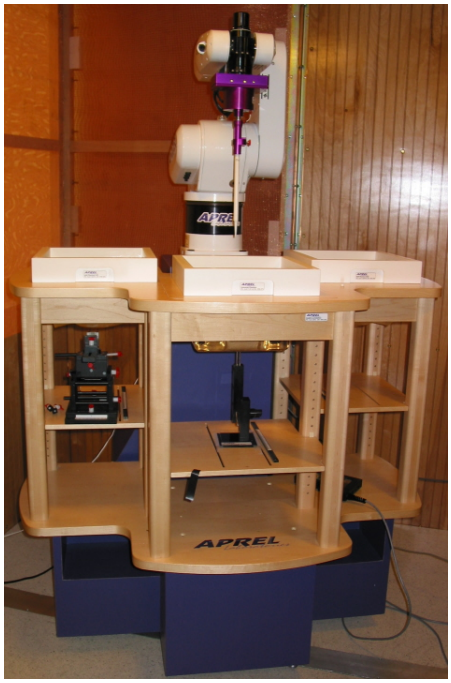
Features:	Signal Amplifier, End Effector, DAC
Software:	ALSAS 10-U Software

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 Muscle	5250 MHz Muscle	5600 MHz Muscle	5785 MHz Muscle
Mixing Percentage					
Water		73.20	58.85	59.00	59.00
Sugar		0.00	41.00	40.60	40.60
Salt		0.04	0.00	0.00	0.00
HEC		0.00	0.10	0.30	0.30
Bactericide		0.00	0.05	0.10	0.10
DGBE		26.70	0.00	0.00	0.00
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).

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 8.1 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	
Date(s)		May 9, 2011		May 6, 2011	
Liquid Temperature (˚C)	20.0	Target	Measured	Target	Measured
Dielectric Constant: ε		52.70	52.17	48.95	48.71
Conductivity: σ		1.95	1.98	5.36	5.42
		5600 MHz Body		5800 MHz Body	
Date(s)		May 7, 2011		May 7, 2011	
Liquid Temperature (˚C)	20.0	Target	Measured	Target	Measured
Dielectric Constant: ε		48.47	48.35	48.22	48.12
Conductivity: σ		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

	Test Frequency	Targeted SAR_{1g} (W/kg)	Measure SAR_{1g} (W/kg)	Tissue Used for Verification	Deviation (%)
09-May-2011	2450 MHz	51.50	53.24	Body	+ 3.38
06-May-2011	5250 MHz	59.81	62.27	Body	+ 4.11
07-May-2011	5600 MHz	63.10	62.28	Body	- 1.30
07-May-2011	5800 MHz	61.36	60.08	Body	- 2.09

See Appendix A for data plots.

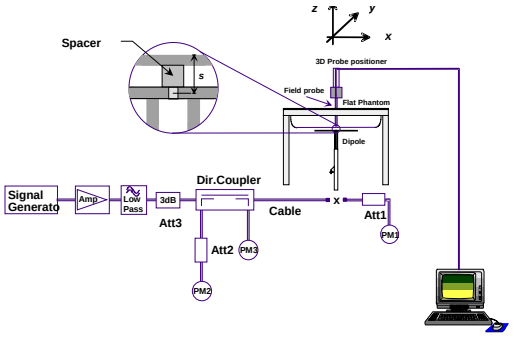


Figure 8.1 Dipole Validation Test Setup

Note: KDB 450824 was applied for probe calibration frequencies greater than or equal to 50 MHz of the DUT frequencies.

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 EUT was installed into a laptop computer. The laptop computer was used to configure the EUT to continuously transmit at a maximum output power on the channel specified in the test data.

The data rates used when evaluating the WiFi transmitter were the lowest data rates for each mode. The device was operating at its maximum output power at the lowest data rate for all measurements.

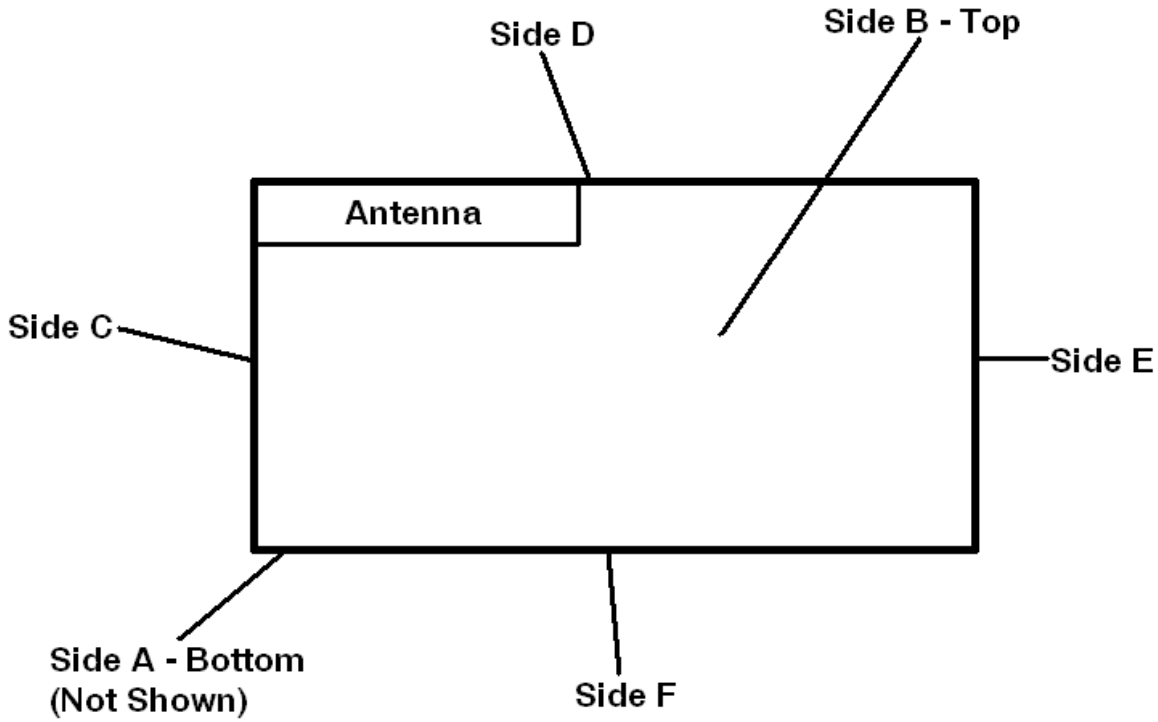
Bluetooth operation was not evaluated as the power level of the BT transmitter was less than $60/f_{GHz}$.

The PC was using the Intel test utility DRTU Version 1.2.12-0197 and the device driver was version 14.0.0.39.

The EUT antenna is a two-antenna PIFA antenna system – Shanghai Universe Communication Electron Co., Ltd. The antenna connects to the EUT via a non-standard antenna connector.

The antenna was tested on all six sides of the antenna device. During each test, the antenna was on a minimum of 10 cm of Styrofoam during the test. The coaxial cable from the module to the antenna was 500 mm in length. The laptop was set to be >10 cm from the antenna during the test. The following is a pictorial drawing of the locations.

SAR Location Diagram



802.11b				
Freq	Channel	Data Rate	Antenna	Power
2412	1	1	Chain A	16.75
2437	6	1	Chain A	16.92
2462	11	1	Chain A	16.83
2412	1	1	Chain B	16.71
2437	6	1	Chain B	16.94
2462	11	1	Chain B	16.80

802.11g				
Freq	Channel	Data Rate	Antenna	Power
2412	1	6	Chain A	12.96
2437	6	6	Chain A	15.88
2462	11	6	Chain A	13.14
2412	1	6	Chain B	12.91
2437	6	6	Chain B	15.84
2462	11	6	Chain B	13.11

2450 GHz n HT20				
Freq	Channel	Data Rate	Antenna	Power
2412	1	6	Chain A	12.07
2437	6	6	Chain A	15.53
2462	11	6	Chain A	11.66
2412	1	6	Chain B	12.04
2437	6	6	Chain B	15.49
2462	11	6	Chain B	11.63

2450 GHz n HT40				
Freq	Channel	Data Rate	Antenna	Power
2422	3	6	Chain A	9.32
2437	6	6	Chain A	12.36
2452	9	6	Chain A	8.79
2422	3	6	Chain B	9.27
2437	6	6	Chain B	12.38
2452	9	6	Chain B	8.75

802.11a 5.18-5.24 GHz				
Freq	Channel	Data Rate	Antenna	Power
5.18	36	6	Chain A	16.29
5.20	40	6	Chain A	16.21
5.22	44	6	Chain A	16.17
5.24	48	6	Chain A	15.99
5.18	36	6	Chain B	16.27
5.20	40	6	Chain B	16.19
5.22	44	6	Chain B	16.13
5.24	48	6	Chain B	16.01

802.11 n40 5.18-5.24 GHz				
Freq	Channel	Data Rate	Antenna	Power
5.19	38	6	Chain A	15.83
5.23	46	6	Chain A	16.32
5.19	38	6	Chain B	15.91
5.21	42	6	Chain B	16.25
5.23	46	6	Chain B	16.30

802.11 n20 5.24-5.32 GHz				
Freq	Channel	Data Rate	Antenna	Power
5.26	52	6	Chain A	16.41
5.28	56	6	Chain A	16.46
5.30	60	6	Chain A	16.52
5.32	64	6	Chain A	16.49
5.26	52	6	Chain B	16.37
5.28	56	6	Chain B	16.42
5.30	60	6	Chain B	16.48
5.32	64	6	Chain B	16.43

802.11 n20 5.18-5.24 GHz				
Freq	Channel	Data Rate	Antenna	Power
5.18	36	6	Chain A	15.98
5.20	40	6	Chain A	16.42
5.22	44	6	Chain A	16.31
5.24	48	6	Chain A	16.25
5.18	36	6	Chain B	15.97
5.20	40	6	Chain B	16.42
5.22	44	6	Chain B	16.33
5.24	48	6	Chain B	16.02

802.11a 5.24-5.32 GHz				
Freq	Channel	Data Rate	Antenna	Power
5.26	52	6	Chain A	16.45
5.28	56	6	Chain A	16.36
5.30	60	6	Chain A	16.27
5.32	64	6	Chain A	16.31
5.26	52	6	Chain B	16.40
5.28	56	6	Chain B	16.37
5.30	60	6	Chain B	16.22
5.32	64	6	Chain B	16.35

802.11 n40 5.24-5.32 GHz				
Freq	Channel	Data Rate	Antenna	Power
5.27	54	6	Chain A	16.01
5.31	62	6	Chain A	13.57
5.27	54	6	Chain B	16.00
5.29	58	6	Chain B	15.72
5.31	62	6	Chain B	13.77

802.11a 5.6 GHz						802.11 n20 5.6 GHz				
Freq	Channel	Data Rate	Antenna	Power		Freq	Channel	Data Rate	Antenna	Power
5.50	100	6	Chain A	16.45		5.50	100	6	Chain A	16.41
5.52	104	6	Chain A	16.42		5.52	104	6	Chain A	16.37
5.54	108	6	Chain A	16.39		5.54	108	6	Chain A	16.39
5.56	112	6	Chain A	16.42		5.56	112	6	Chain A	16.40
5.58	116	6	Chain A	16.47		5.58	116	6	Chain A	16.43
5.60	120	6	Chain A	16.45		5.60	120	6	Chain A	16.41
5.62	124	6	Chain A	16.43		5.62	124	6	Chain A	16.38
5.64	128	6	Chain A	16.37		5.64	128	6	Chain A	16.34
5.66	132	6	Chain A	16.35		5.66	132	6	Chain A	16.36
5.68	136	6	Chain A	16.31		5.68	136	6	Chain A	16.31
5.70	140	6	Chain A	16.33		5.70	140	6	Chain A	16.29
5.50	100	6	Chain B	16.40		5.50	100	6	Chain B	16.37
5.52	104	6	Chain B	16.44		5.52	104	6	Chain B	16.39
5.54	108	6	Chain B	16.36		5.54	108	6	Chain B	16.34
5.56	112	6	Chain B	16.41		5.56	112	6	Chain B	16.41
5.58	116	6	Chain B	16.45		5.58	116	6	Chain B	16.42
5.60	120	6	Chain B	16.40		5.60	120	6	Chain B	16.40
5.62	124	6	Chain B	16.44		5.62	124	6	Chain B	16.36
5.64	128	6	Chain B	16.39		5.64	128	6	Chain B	16.35
5.66	132	6	Chain B	16.36		5.66	132	6	Chain B	16.39
5.68	136	6	Chain B	16.30		5.68	136	6	Chain B	16.32
5.70	140	6	Chain B	16.31		5.70	140	6	Chain B	16.30

802.11 n40 5.6 GHz				
Freq	Channel	Data Rate	Antenna	Power
5.51	102	6	Chain A	15.53
5.53	106	6	Chain A	15.93
5.55	110	6	Chain A	16.51
5.57	114	6	Chain A	16.45
5.59	122	6	Chain A	16.39
5.61	126	6	Chain A	16.41
6.63	130	6	Chain A	16.48
5.67	134	6	Chain A	16.46
5.69	138	6	Chain A	16.43
5.51	102	6	Chain B	15.50
5.53	106	6	Chain B	15.95
5.55	110	6	Chain B	16.51
5.57	114	6	Chain B	16.42
5.59	122	6	Chain B	16.41
5.61	126	6	Chain B	16.45
6.63	130	6	Chain B	16.47
5.67	134	6	Chain B	16.41
5.69	138	6	Chain B	16.46

802.11a 5.8 GHz				
Freq	Channel	Data Rate	Antenna	Power
5.745	149	6	Chain A	16.43
5.765	153	6	Chain A	16.39
5.785	157	6	Chain A	16.49
5.805	161	6	Chain A	16.35
5.825	165	6	Chain A	16.27
5.745	149	6	Chain B	16.41
5.765	153	6	Chain B	16.37
5.785	157	6	Chain B	16.48
5.805	161	6	Chain B	16.36
5.825	165	6	Chain B	16.29

802.11 n20 5.8 GHz				
Freq	Channel	Data Rate	Antenna	Power
5.745	149	6	Chain A	16.48
5.765	153	6	Chain A	16.49
5.785	157	6	Chain A	16.61
5.805	161	6	Chain A	16.52
5.825	165	6	Chain A	16.49
5.745	149	6	Chain B	16.42
5.765	153	6	Chain B	16.46
5.785	157	6	Chain B	16.60
5.805	161	6	Chain B	16.55
5.825	165	6	Chain B	16.51

802.11 n40 5.8 GHz				
Freq	Channel	Data Rate	Antenna	Power
5.755	151	6	Chain A	16.42
5.775	155	6	Chain A	16.45
5.795	159	6	Chain A	16.49
5.815	163	6	Chain A	16.42
5.755	151	6	Chain B	16.40
5.795	159	6	Chain B	16.47

SAR Data Summary – 2450 MHz Body 802.11b

MEASUREMENT RESULTS							
Gap	Position	Frequency		Modulation	Antenna	End Power	SAR (W/kg)
		MHz	Ch.			(dBm)	
12 mm	Side A	2437	6	DSSS	Chain A	16.92	0.235
	Side B	2437	6	DSSS	Chain A	16.92	0.189
	Side C	2437	6	DSSS	Chain A	16.92	0.212
	Side D	2437	6	DSSS	Chain A	16.92	0.176
	Side E	2437	6	DSSS	Chain A	16.92	0.065
	Side F	2437	6	DSSS	Chain A	16.92	0.101
	Side A	2437	6	DSSS	Chain B	16.94	0.224
	Side B	2437	6	DSSS	Chain B	16.94	0.191
	Side C	2437	6	DSSS	Chain B	16.94	0.226
	Side D	2437	6	DSSS	Chain B	16.94	0.162
	Side E	2437	6	DSSS	Chain B	16.94	0.070
	Side F	2437	6	DSSS	Chain B	16.94	0.107

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: SAR Tested on the Highest output power channel. When the measured channel is 3 dB or more below the limit the remaining channels are not required to be tested per KDB 447498 section 1) e). SAR is not required for 802.11g/HT20/HT40 channels when the maximum average output power is less than ¼ dB higher than that measured in the 802.11b. The testing was conducted on all sides of the antenna. All testing was conducted per KDB 447498, 248227, 616217 and OET Bulletin 65. See the photo in Appendix C and diagram on page 14 for a pictorial of the setup and labeling of the test locations.

SAR Data Summary – 5150 MHz Body 802.11a

MEASUREMENT RESULTS							
Gap	Position	Frequency		Modulation	Antenna	End Power	SAR (W/kg)
		MHz	Ch.			(dBm)	
12 mm	Side A	5180	36	OFDM	Chain A	16.29	0.387
	Side B	5180	36	OFDM	Chain A	16.29	0.342
	Side C	5180	36	OFDM	Chain A	16.29	0.376
	Side D	5180	36	OFDM	Chain A	16.29	0.305
	Side E	5180	36	OFDM	Chain A	16.29	0.082
	Side F	5180	36	OFDM	Chain A	16.29	0.129
	Side A	5180	36	OFDM	Chain B	16.27	0.372
	Side B	5180	36	OFDM	Chain B	16.27	0.345
	Side C	5180	36	OFDM	Chain B	16.27	0.371
	Side D	5180	36	OFDM	Chain B	16.27	0.309
	Side E	5180	36	OFDM	Chain B	16.27	0.091
	Side F	5180	36	OFDM	Chain B	16.27	0.136
				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: SAR Tested on the Highest output power channel. When the measured channel is 3 dB or more below the limit the remaining channels are not required to be tested per KDB 447498 section 1) e). SAR is not required for 802.11 HT20/HT40 channels when the maximum average output power is less than ¼ dB higher than that measured in the 802.11b. The testing was conducted on all sides of the antenna. All testing was conducted per KDB 447498, 248227, 616217 and OET Bulletin 65. See the photo in Appendix C and diagram on page 14 for a pictorial of the setup and labeling of the test locations.

SAR Data Summary – 5250 MHz Body 802.11a

MEASUREMENT RESULTS							
Gap	Position	Frequency		Modulation	Antenna	End Power	SAR (W/kg)
		MHz	Ch.			(dBm)	
12 mm	Side A	5260	52	OFDM	Chain A	16.45	0.379
	Side B	5260	52	OFDM	Chain A	16.45	0.322
	Side C	5260	52	OFDM	Chain A	16.45	0.349
	Side D	5260	52	OFDM	Chain A	16.45	0.302
	Side E	5260	52	OFDM	Chain A	16.45	0.080
	Side F	5260	52	OFDM	Chain A	16.45	0.110
	Side A	5260	52	OFDM	Chain B	16.40	0.376
	Side B	5260	52	OFDM	Chain B	16.40	0.351
	Side C	5260	52	OFDM	Chain B	16.40	0.369
	Side D	5260	52	OFDM	Chain B	16.40	0.299
	Side E	5260	52	OFDM	Chain B	16.40	0.075
	Side F	5260	52	OFDM	Chain B	16.40	0.117
				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: SAR Tested on the Highest output power channel. When the measured channel is 3 dB or more below the limit the remaining channels are not required to be tested per KDB 447498 section 1) e). SAR is not required for 802.11 HT20/HT40 channels when the maximum average output power is less than ¼ dB higher than that measured in the 802.11b. The testing was conducted on all sides of the antenna. All testing was conducted per KDB 447498, 248227, 616217 and OET Bulletin 65. See the photo in Appendix C and diagram on page 14 for a pictorial of the setup and labeling of the test locations.

SAR Data Summary – 5600 MHz Body 802.11a

MEASUREMENT RESULTS							
Gap	**Position**	**Frequency**		**Modulation**	**Antenna**	**End Power**	**SAR (W/kg)**
		MHz	**Ch.**			**(dBm)**	
12 mm	Side A	5580	116	OFDM	Chain A	16.47	0.392
	Side B	5580	116	OFDM	Chain A	16.47	0.341
	Side C	5580	116	OFDM	Chain A	16.47	0.376
	Side D	5580	116	OFDM	Chain A	16.47	0.321
	Side E	5580	116	OFDM	Chain A	16.47	0.095
	Side F	5580	116	OFDM	Chain A	16.47	0.132
	Side A	5580	116	OFDM	Chain B	16.45	0.374
	Side B	5580	116	OFDM	Chain B	16.45	0.352
	Side C	5580	116	OFDM	Chain B	16.45	0.369
	Side D	5580	116	OFDM	Chain B	16.45	0.312
	Side E	5580	116	OFDM	Chain B	16.45	0.088
	Side F	5580	116	OFDM	Chain B	16.45	0.123
				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: SAR Tested on the Highest output power channel. When the measured channel is 3 dB or more below the limit the remaining channels are not required to be tested per KDB 447498 section 1) e). SAR is not required for 802.11 HT20/HT40 channels when the maximum average output power is less than ¼ dB higher than that measured in the 802.11b. The testing was conducted on all sides of the antenna. All testing was conducted per KDB 447498, 248227, 616217 and OET Bulletin 65. See the photo in Appendix C and diagram on page 14 for a pictorial of the setup and labeling of the test locations.

SAR Data Summary – 5800 MHz Body 802.11a

MEASUREMENT RESULTS							
Gap	Position	Frequency		Modulation	Antenna	End Power	SAR (W/kg)
		MHz	Ch.			(dBm)	
12 mm	Side A	5785	157	OFDM	Chain A	16.49	0.381
	Side B	5785	157	OFDM	Chain A	16.49	0.335
	Side C	5785	157	OFDM	Chain A	16.49	0.367
	Side D	5785	157	OFDM	Chain A	16.49	0.297
	Side E	5785	157	OFDM	Chain A	16.49	0.076
	Side F	5785	157	OFDM	Chain A	16.49	0.108
	Side A	5785	157	OFDM	Chain B	16.48	0.371
	Side B	5785	157	OFDM	Chain B	16.48	0.346
	Side C	5785	157	OFDM	Chain B	16.48	0.352
	Side D	5785	157	OFDM	Chain B	16.48	0.279
	Side E	5785	157	OFDM	Chain B	16.48	0.079
	Side F	5785	157	OFDM	Chain B	16.48	0.112

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: SAR Tested on the Highest output power channel. When the measured channel is 3 dB or more below the limit the remaining channels are not required to be tested per KDB 447498 section 1) e). SAR is not required for 802.11 HT20/HT40 channels when the maximum average output power is less than ¼ dB higher than that measured in the 802.11b. The testing was conducted on all sides of the antenna. All testing was conducted per KDB 447498, 248227, 616217 and OET Bulletin 65. See the photo in Appendix C and diagram on page 14 for a pictorial of the setup and labeling of the test locations.

10. Enhanced Energy Coupling

Worst-case test configuration	Band	Antenna-to-person distance (mm)		Peak SAR (W/kg)	Percent Change
Side A	2450 MHz	Initial	11	0.435	-----
		1	16	0.301	-30.8
		2	21	0.206	-52.6
Side B	2450 MHz	Initial	11	0.296	-----
		1	16	0.201	-32.1
		2	21	0.142	-52.0
Side C	2450 MHz	Initial	11	0.405	-----
		1	16	0.281	-30.6
		2	21	0.194	-52.1
Side D	2450 MHz	Initial	11	0.502	-----
		1	16	0.348	-30.7
		2	21	0.239	-52.4
Side E	2450 MHz	Initial	11	0.193	-----
		1	16	0.132	-31.6
		2	21	0.091	-52.8
Side F	2450 MHz	Initial	11	0.221	-----
		1	16	0.150	-32.1
		2	21	0.107	-51.6
Side A	5250 MHz	Initial	11	0.815	-----
		1	16	0.564	-30.8
		2	21	0.392	-51.9
Side B	5250 MHz	Initial	11	0.735	-----
		1	16	0.511	-30.5
		2	21	0.355	-51.7
Side C	5250 MHz	Initial	11	0.695	-----
		1	16	0.481	-30.8
		2	21	0.336	-51.7
Side D	5250 MHz	Initial	11	0.746	-----
		1	16	0.519	-30.4
		2	21	0.360	-51.7
Side E	5250 MHz	Initial	11	0.347	-----
		1	16	0.237	-31.7
		2	21	0.165	-52.4
Side F	5250 MHz	Initial	11	0.275	-----
		1	16	0.190	-30.9
		2	21	0.132	-52.0

Worst-case test configuration	Band	Antenna-to-person distance (mm)		Peak SAR (W/kg)	Percent Change
Side A	5600 MHz	Initial	11	1.008	-----
		1	16	0.700	-30.6
		2	21	0.486	-51.8
Side B	5600 MHz	Initial	11	0.925	-----
		1	16	0.642	-30.6
		2	21	0.445	-51.9
Side C	5600 MHz	Initial	11	0.990	-----
		1	16	0.687	-30.6
		2	21	0.479	-51.6
Side D	5600 MHz	Initial	11	0.805	-----
		1	16	0.559	-30.6
		2	21	0.387	-51.9
Side E	5600 MHz	Initial	11	0.426	-----
		1	16	0.292	-31.5
		2	21	0.201	-52.8
Side F	5600 MHz	Initial	11	0.558	-----
		1	16	0.384	-31.2
		2	21	0.267	-52.2
Side A	5800 MHz	Initial	11	1.094	-----
		1	16	0.759	-30.6
		2	21	0.530	-51.6
Side B	5800 MHz	Initial	11	0.964	-----
		1	16	0.664	-31.1
		2	21	0.463	-52.0
Side C	5800 MHz	Initial	11	0.968	-----
		1	16	0.671	-30.7
		2	21	0.468	-51.7
Side D	5800 MHz	Initial	11	0.796	-----
		1	16	0.552	-30.7
		2	21	0.381	-52.1
Side E	5800 MHz	Initial	11	0.426	-----
		1	16	0.290	-31.9
		2	21	0.201	-52.8
Side F	5800 MHz	Initial	11	0.552	-----
		1	16	0.381	-31.0
		2	21	0.264	-52.2

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	07/14/2011	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 Validation Dipole ALS-D-450-S-2 Head	01/12/2012	RFE-362
Aprel Validation Dipole ALS-D-450-S-2 Body	01/19/2012	RFE-362
Aprel Validation Dipole ALS-D-750-S-2 Head	01/14/2012	177-00501
Aprel Validation Dipole ALS-D-750-S-2 Body	11/15/2011	177-00501
Aprel Validation Dipole ALS-D-835-S-2 Head	01/14/2012	180-00561
Aprel Validation Dipole ALS-D-835-S-2 Body	11/16/2011	180-00561
Aprel Validation Dipole ALS-D-900-S-2 Head	01/12/2012	RFE-275
Aprel Validation Dipole ALS-D-900-S-2 Body	11/19/2011	RFE-275
Aprel Validation Dipole ALS-D-1900-S-2 Head	01/15/2012	210-00713
Aprel Validation Dipole ALS-D-1900-S-2 Body	11/16/2011	210-00713
Aprel Validation Dipole ALS-D-2450-S-2 Head	01/12/2012	RFE-278
Aprel Validation Dipole ALS-D-2450-S-2 Body	11/18/2011	RFE-278
Aprel Validation Dipole RFE-D-2600-S-2 Body	01/18/2012	RFE-121
Aprel Validation Dipole RFE-D-BB-S-2 Head	01/12/2012	235-00801
Aprel Validation Dipole RFE-D-BB-S-2 Body	02/09/2012	235-00801
Agilent (HP) 437B Power Meter	03/30/2012	3125U08837
Agilent (HP) 8481B Power Sensor	03/30/2012	3318A05384
Agilent N1911A Power Meter	03/30/2012	GB45100254
Agilent N1922A Power Sensor	03/30/2012	MY45240464
Advantest R3261A Spectrum Analyzer	03/30/2012	31720068
Agilent (HP) 8350B Signal Generator	03/31/2012	2749A10226
Agilent (HP) 83525A RF Plug-In	03/31/2012	2647A01172
Agilent (HP) 8753C Vector Network Analyzer	03/30/2012	3135A01724
Agilent (HP) 85047A S-Parameter Test Set	03/31/2012	2904A00595
Agilent (HP) 8960 Base Station Sim.	03/25/2012	MY48360364
R&S CMW500 Wideband Radio Comm. Box	08/14/2011	101383
Aprel Dielectric Probe Assembly	N/A	0011
Head Equivalent Matter (450 MHz)	N/A	N/A
Head Equivalent Matter (835/900 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 (750 MHz)	N/A	N/A
Body Equivalent Matter (835/900 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 (2600 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

```
**********************************************************
Test Result for UIM Dielectric Parameter
Mon 09/May/2011 06:53:25
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	52.23	1.94
2.4300	52.73	1.93	52.21	1.95
2.4400	52.71	1.94	52.19	1.97
2.4500	52.70	1.95	52.17	1.98
2.4600	52.69	1.96	52.15	1.99
2.4700	52.67	1.98	52.11	2.00
2.4800	52.66	1.99	52.09	2.02

```
**********************************************************
Test Result for UIM Dielectric Parameter
Fri 06/May/2011 06:01:41
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
Sat 07/May/2011 05:46:51
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
Sat 07/May/2011 11:15:42
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 : 09-May-2011
Starting Time : 09-May-2011 06:59:21 AM
End Time : 09-May-2011 07:12:20 AM
Scanning Time : 779 secs

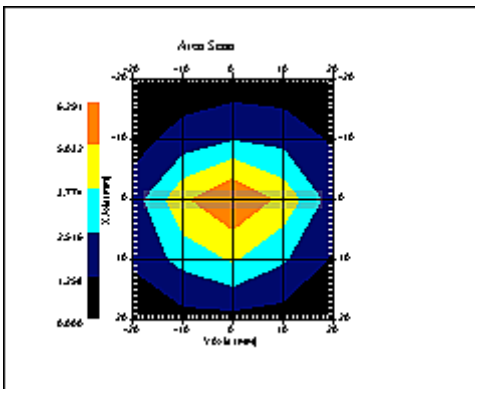
Product Data
Device Name : Validation
Serial No. : 2450
Type : Dipole
Model : ALS-D-2450-S-2
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.1 W
Drift Time : 0 min(s)
Length : 51.5 mm
Width : 3.6 mm
Depth : 30.4 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 6.280 W/kg
Power Drift-Finish: 6.193 W/kg
Power Drift (%) : -1.375

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

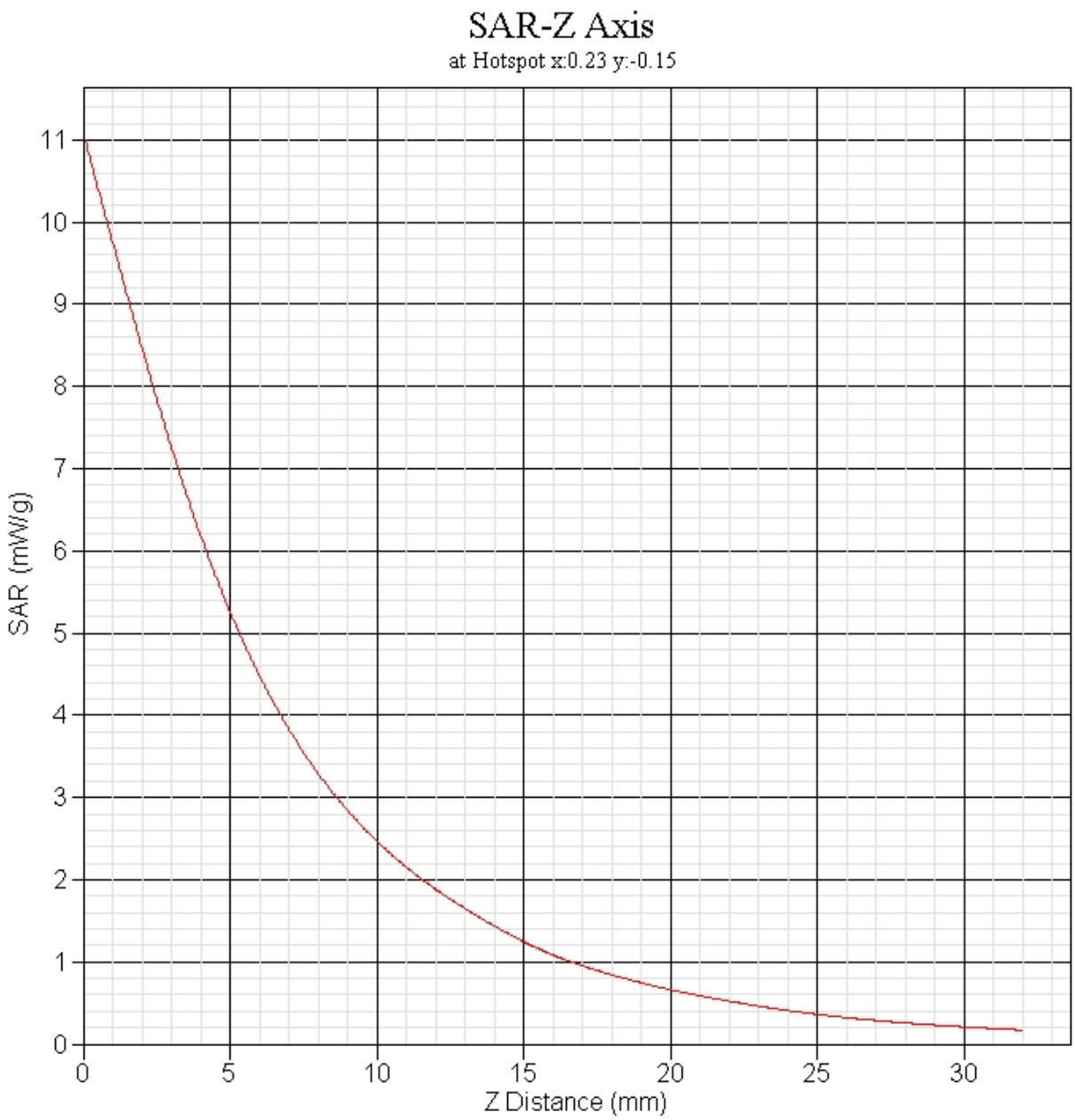
Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 09-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.17 F/m
Sigma : 1.98 S/m
Density : 1000.00 kg/cu. m

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       : 09-May-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    : 5.324 W/kg
10 gram SAR value   : 2.414 W/kg
Area Scan Peak SAR  : 6.291 W/kg
Zoom Scan Peak SAR  : 11.090 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 06:09:43 AM
End Time : 06-May-2011 06:32:59 AM
Scanning Time : 1396 secs

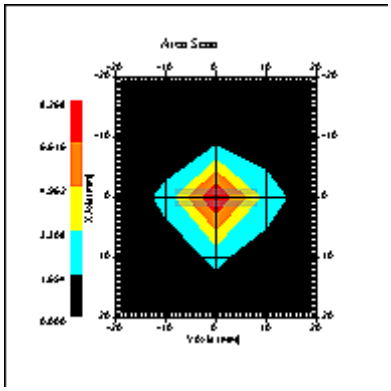
Product Data
Device Name : Validation
Serial No. : 5200
Type : Dipole
Model : ALS-D-BB-S-2
Frequency : 5200.00 MHz
Max. Transmit Pwr : 0.1 W
Drift Time : 0 min(s)
Length : 23.1 mm
Width : 3.6 mm
Depth : 20.7 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 8.662 W/kg
Power Drift-Finish: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

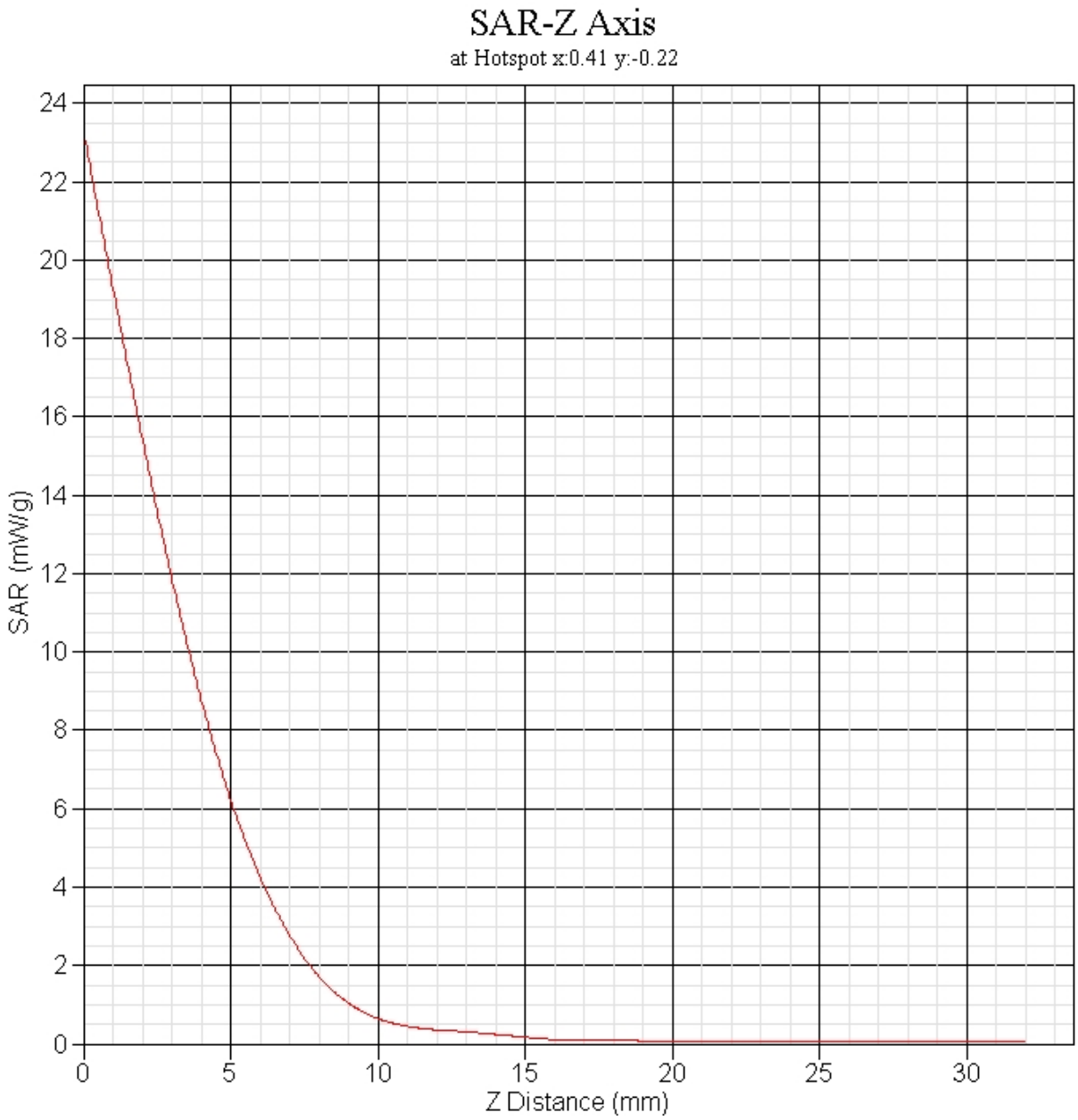
Tissue Data
Type : BODY
Serial No. : 5250
Frequency : 5250.00 MHz
Last Calib. Date : 06-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.71 F/m
Sigma : 5.42 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5250.00 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       : 06-May-2011
Set-up Time       : 9:00:47 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

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 : 07-May-2011
Starting Time : 07-May-2011 05:51:39 AM
End Time : 07-May-2011 06:14:27 AM
Scanning Time : 1368 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

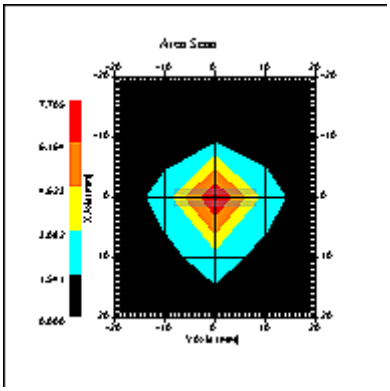
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5600
Frequency : 5600.00 MHz
Last Calib. Date : 07-May-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

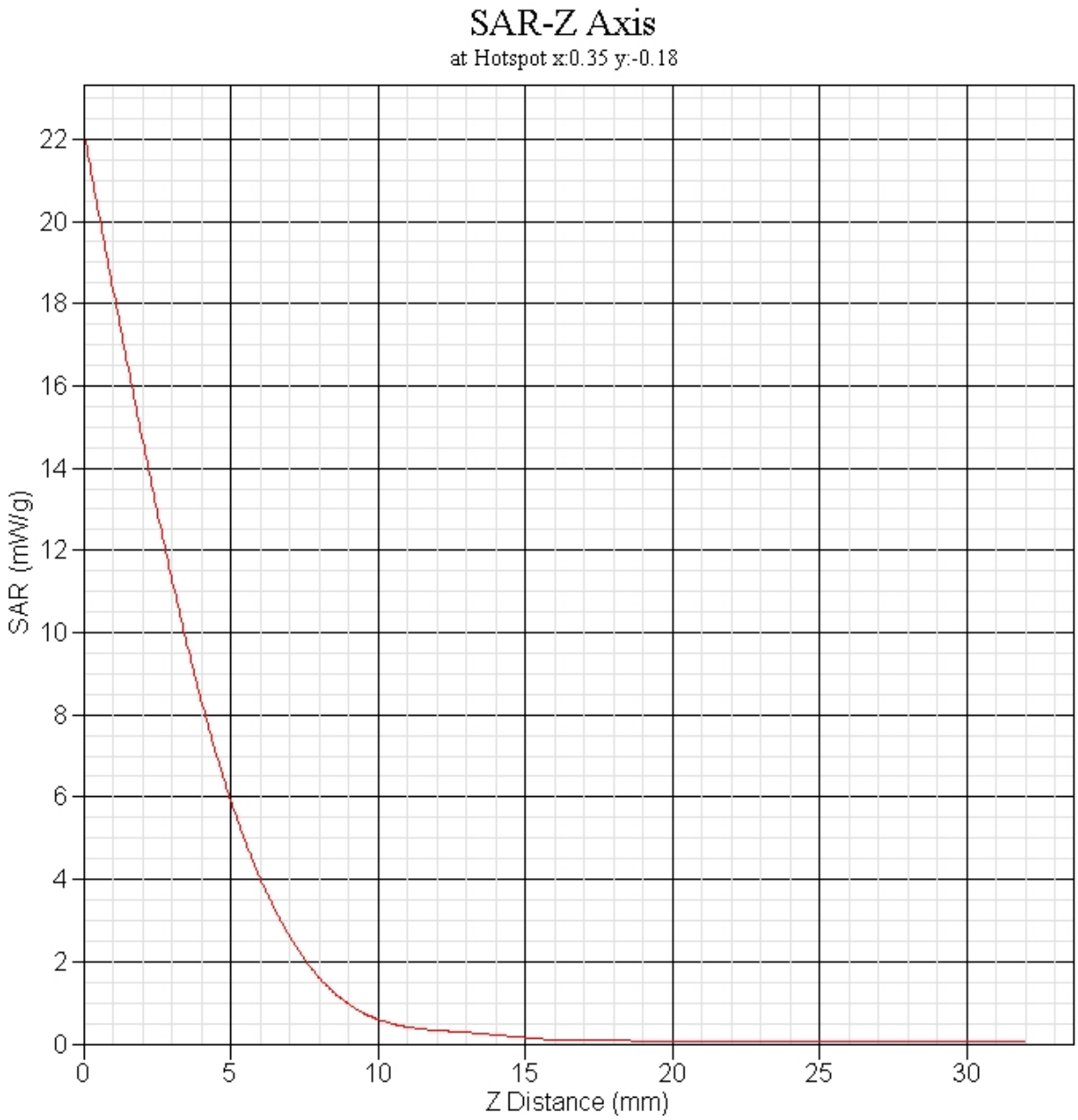
Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5600.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 0.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.00 °C
Ambient Temp. : 23.00 °C
Set-up Date : 07-May-2011
Set-up Time : 8:54:57 AM
Area Scan : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

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 : 07-May-2011
Starting Time : 07-May-2011 11:53:39 AM
End Time : 07-May-2011 12:16:30 PM
Scanning Time : 1371 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

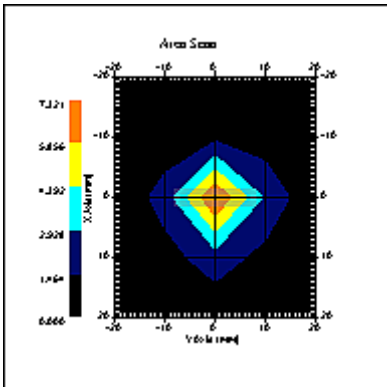
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5800
Frequency : 5800.00 MHz
Last Calib. Date : 07-May-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

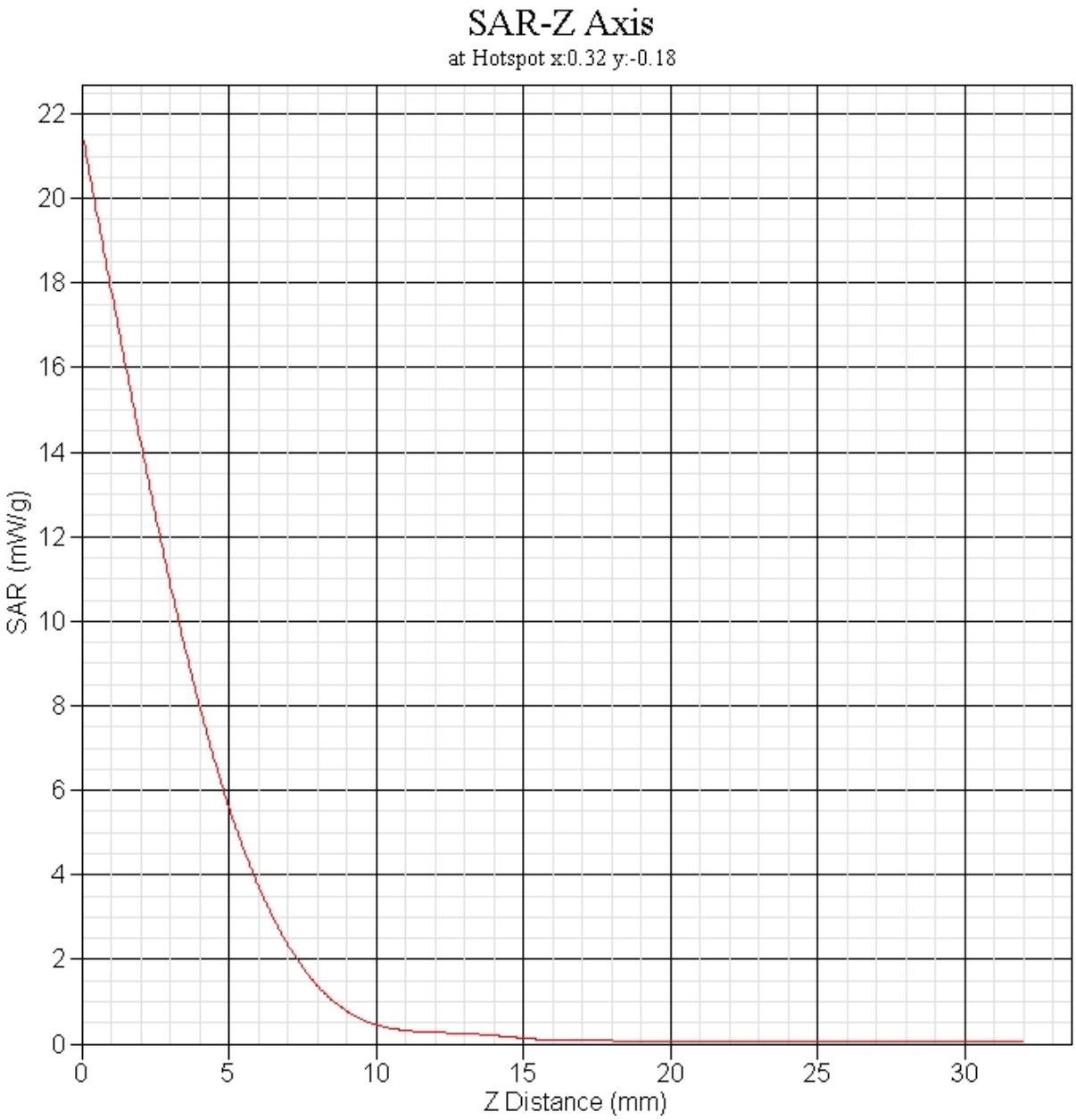
Probe Data
Name : Probe E030-001 - RFEL
Model : E030
Type : E-Field Triangle
Serial No. : E030-001
Last Calib. Date : 12-Jul-2010
Frequency : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.2
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 0.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.00 °C
Ambient Temp. : 23.00 °C
Set-up Date : 07-May-2011
Set-up Time : 4:10:18 PM
Area Scan : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

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 : 09-May-2011
Starting Time : 09-May-2011 07:22:58 AM
End Time : 09-May-2011 07:40:17 AM
Scanning Time : 1039 secs

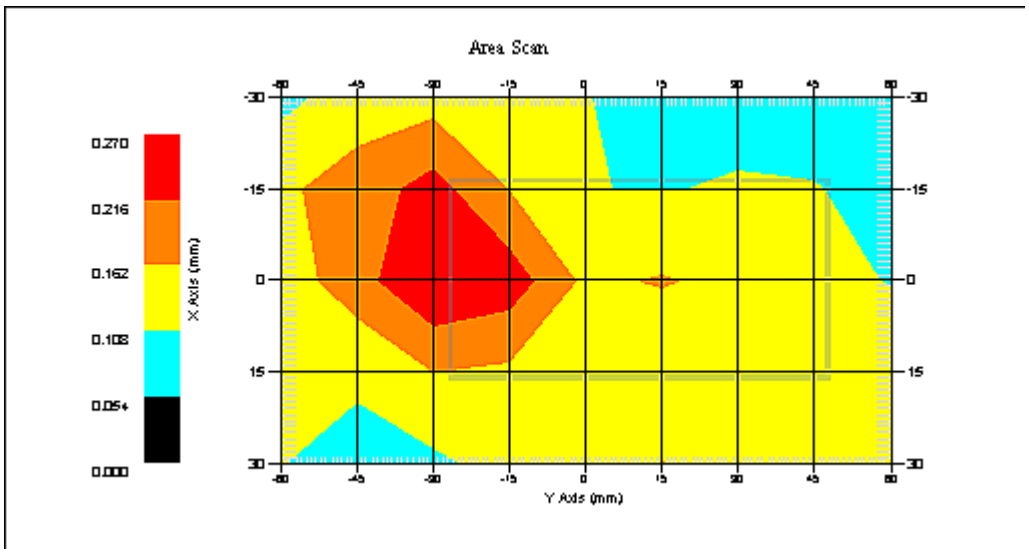
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11b
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.05 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain A
Orientation : Side A
Power Drift-Start : 0.110 W/kg
Power Drift-Finish: 0.111 W/kg
Power Drift (%) : 0.677

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

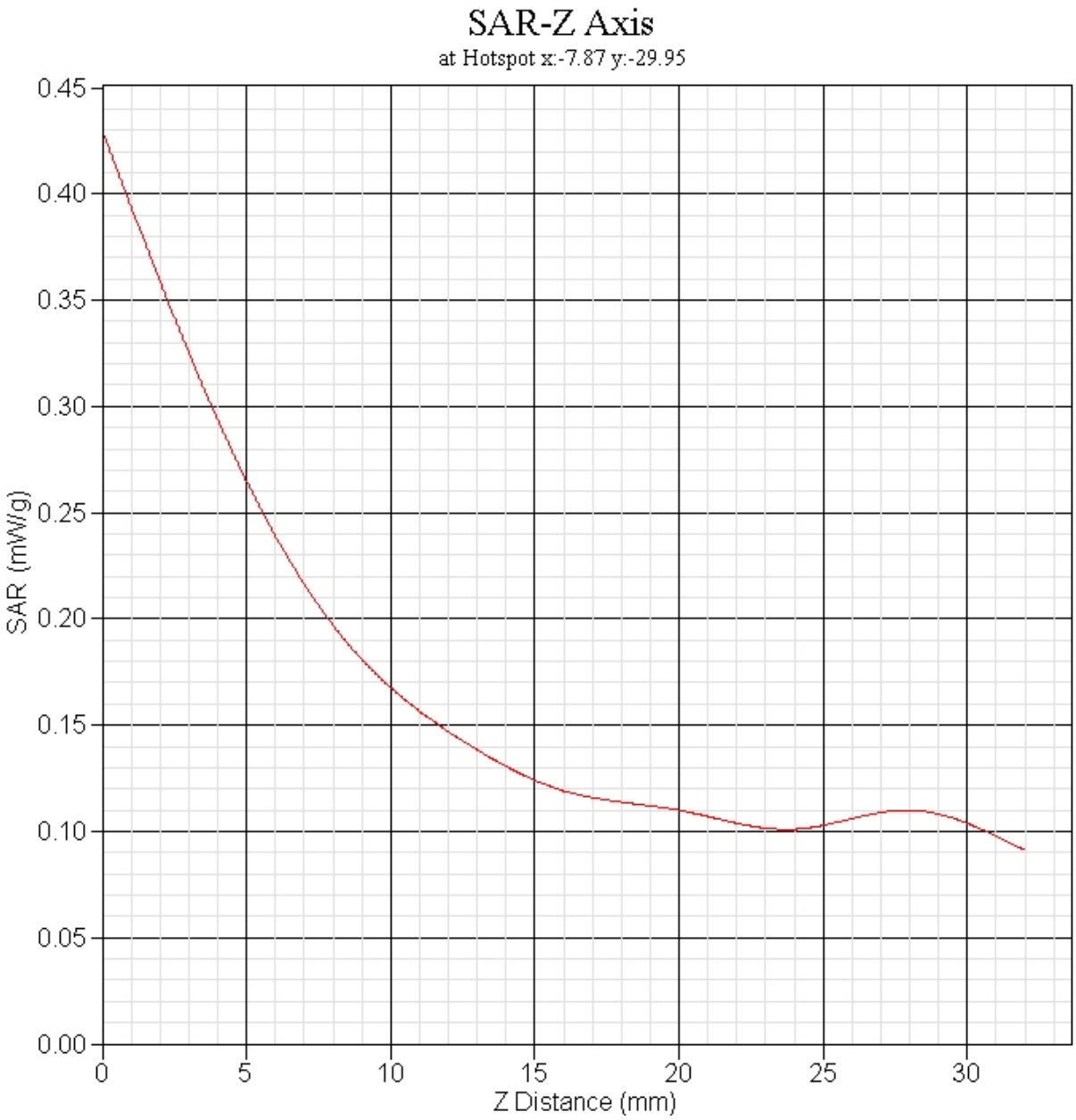
Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 09-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.17 F/m
Sigma : 1.98 S/m
Density : 1000.00 kg/cu. m

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       : 09-May-2011
Set-up Time       : 7:02:24 AM
Area Scan         : 5x9x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 12 mm
Channel           : Mid
```



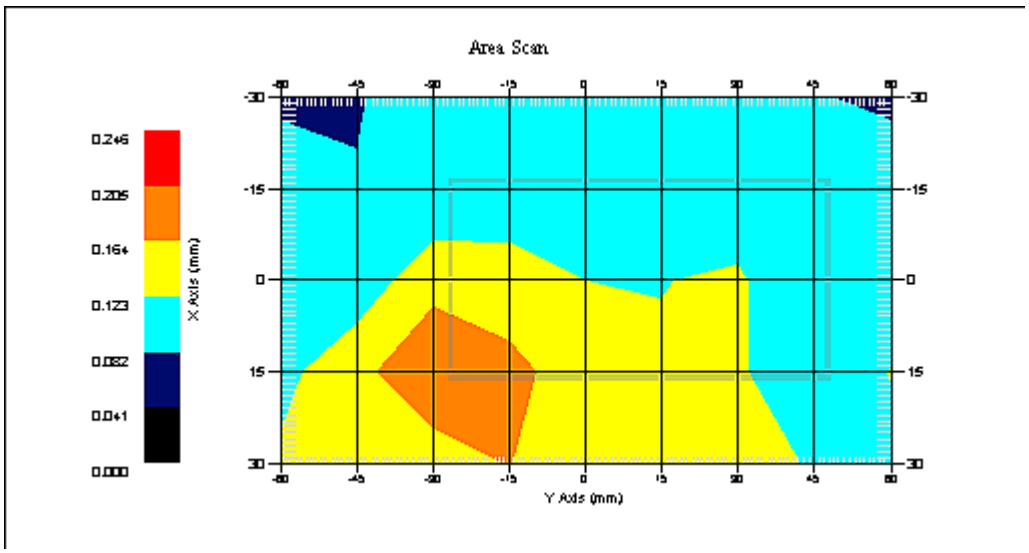

```
1 gram SAR value    : 0.235 W/kg
10 gram SAR value   : 0.180 W/kg
Area Scan Peak SAR  : 0.250 W/kg
Zoom Scan Peak SAR  : 0.427 W/kg
```



SAR Test Report

```
By Operator       : Jay
Measurement Date  : 09-May-2011
Starting Time     : 09-May-2011  07:45:32 AM
End Time          : 09-May-2011  08:02:36 AM
Scanning Time     : 1024 secs

Product Data
Device Name       : Intel Corporation
Serial No.        : Engineering Sample
Mode              : 802.11b
Model             : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency         : 2450.00 MHz
Max. Transmit Pwr : 0.05 W
Drift Time        : 0 min(s)
Length            : 40 mm
Width             : 75 mm
Depth             : 8 mm
Antenna Type      : Chain A
Orientation       : Side B
Power Drift-Start : 0.140 W/kg
Power Drift-Finish: 0.136 W/kg
Power Drift (%)   : -2.982

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  : 09-May-2011
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 46.00 RH%
Epsilon           : 52.17 F/m
Sigma             : 1.98 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       : 09-May-2011
Set-up Time       : 7:02:24 AM
Area Scan         : 5x9x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side B
Separation        : 12 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.189 W/kg
10 gram SAR value   : 0.117 W/kg
Area Scan Peak SAR  : 0.216 W/kg
Zoom Scan Peak SAR  : 0.290 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 09-May-2011
Starting Time : 09-May-2011 08:30:18 AM
End Time : 09-May-2011 08:44:32 AM
Scanning Time : 854 secs

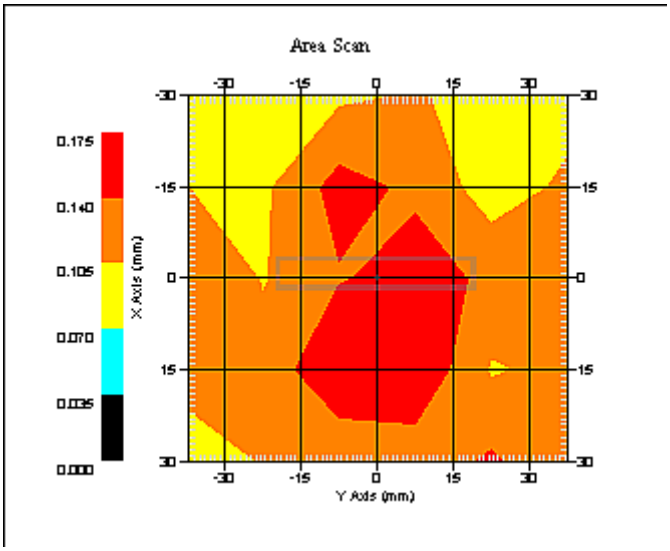
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11b
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.05 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 40 mm
Depth : 75 mm
Antenna Type : Chain A
Orientation : Side C
Power Drift-Start : 0.155 W/kg
Power Drift-Finish: 0.155 W/kg
Power Drift (%) : 0.374

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 : 09-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.17 F/m
Sigma : 1.98 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       : 09-May-2011
Set-up Time       : 7:02:24 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side C
Separation        : 12 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.212 W/kg
10 gram SAR value   : 0.132 W/kg
Area Scan Peak SAR  : 0.173 W/kg
Zoom Scan Peak SAR  : 0.410 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 09-May-2011
Starting Time : 09-May-2011 09:48:47 AM
End Time : 09-May-2011 10:02:53 AM
Scanning Time : 846 secs

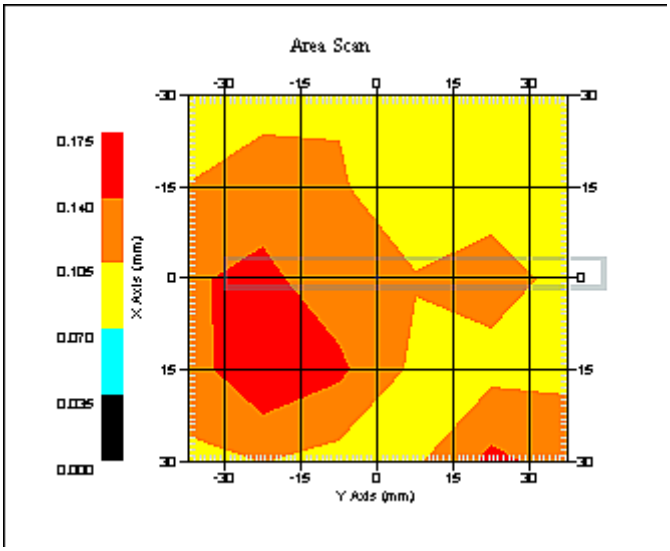
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11b
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.05 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 75 mm
Depth : 40 mm
Antenna Type : Chain A
Orientation : Side D
Power Drift-Start : 0.096 W/kg
Power Drift-Finish: 0.096 W/kg
Power Drift (%) : -0.397

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 : 09-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.17 F/m
Sigma : 1.98 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       : 09-May-2011
Set-up Time       : 7:02:24 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side D
Separation        : 12 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.176 W/kg
10 gram SAR value   : 0.109 W/kg
Area Scan Peak SAR  : 0.173 W/kg
Zoom Scan Peak SAR  : 0.500 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 09-May-2011
Starting Time : 09-May-2011 09:18:01 AM
End Time : 09-May-2011 09:32:04 AM
Scanning Time : 843 secs

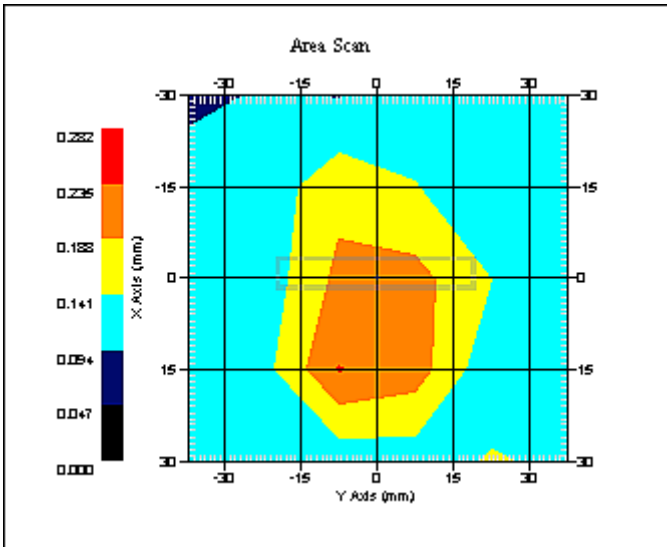
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11b
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.05 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 40 mm
Depth : 75 mm
Antenna Type : Chain A
Orientation : Side E
Power Drift-Start : 0.232 W/kg
Power Drift-Finish: 0.232 W/kg
Power Drift (%) : 0.126

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 : 09-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.17 F/m
Sigma : 1.98 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       : 09-May-2011
Set-up Time       : 7:02:24 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 12 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.065 W/kg
10 gram SAR value   : 0.061 W/kg
Area Scan Peak SAR  : 0.137 W/kg
Zoom Scan Peak SAR  : 0.190 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 09-May-2011
Starting Time : 09-May-2011 10:33:35 AM
End Time : 09-May-2011 10:47:44 AM
Scanning Time : 849 secs

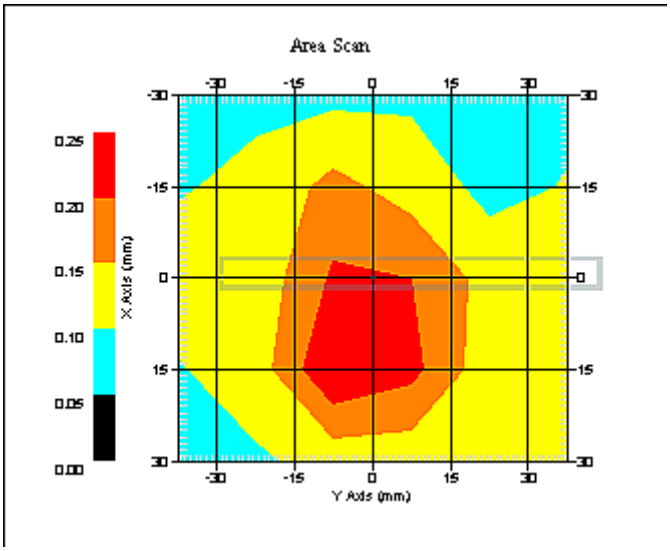
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11b
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.05 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 75 mm
Depth : 40 mm
Antenna Type : Chain A
Orientation : Side F
Power Drift-Start : 0.229 W/kg
Power Drift-Finish: 0.222 W/kg
Power Drift (%) : -3.211

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 : 09-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.17 F/m
Sigma : 1.98 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       : 09-May-2011
Set-up Time       : 7:02:24 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side F
Separation        : 12 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.101 W/kg
10 gram SAR value   : 0.086 W/kg
Area Scan Peak SAR  : 0.210 W/kg
Zoom Scan Peak SAR  : 0.220 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 09-May-2011
Starting Time : 09-May-2011 12:30:01 PM
End Time : 09-May-2011 12:47:00 PM
Scanning Time : 1019 secs

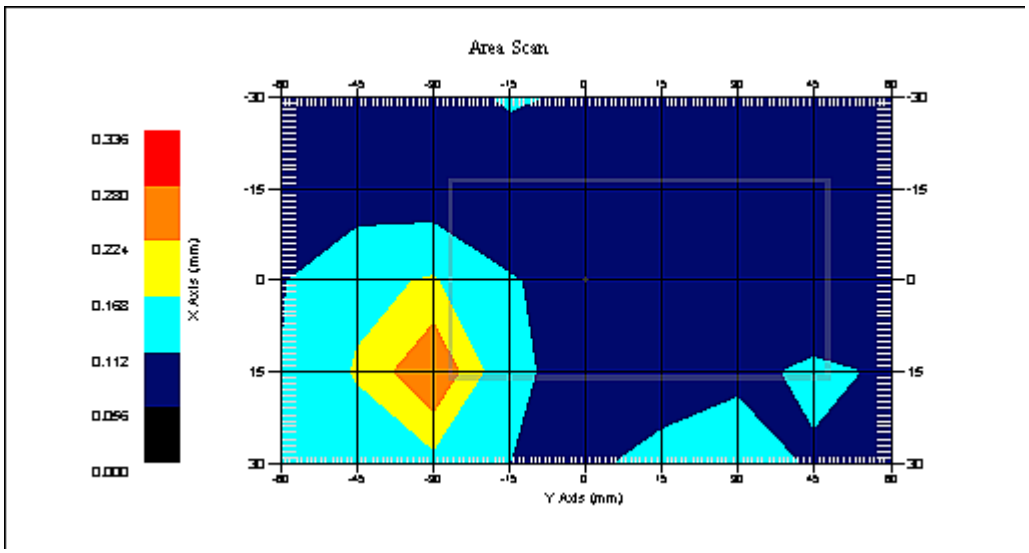
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11b
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.05 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain B
Orientation : Side A
Power Drift-Start : 0.086 W/kg
Power Drift-Finish: 0.086 W/kg
Power Drift (%) : -0.348

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 : 09-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.17 F/m
Sigma : 1.98 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       : 09-May-2011
Set-up Time       : 7:02:24 AM
Area Scan         : 5x9x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side A
Separation        : 12 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.224 W/kg
10 gram SAR value   : 0.129 W/kg
Area Scan Peak SAR  : 0.281 W/kg
Zoom Scan Peak SAR  : 0.500 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 09-May-2011
Starting Time : 09-May-2011 12:11:37 PM
End Time : 09-May-2011 12:28:39 PM
Scanning Time : 1022 secs

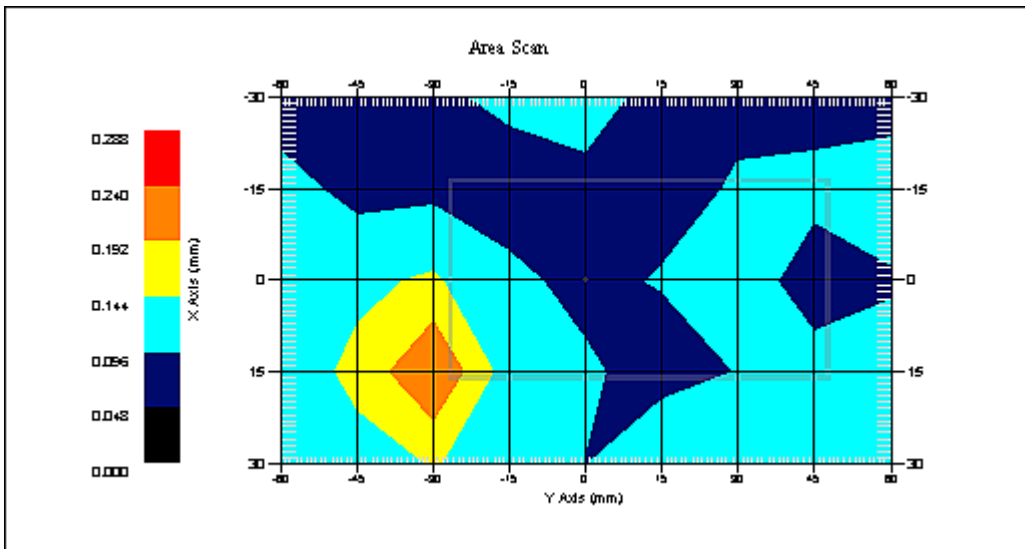
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11b
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.05 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain B
Orientation : Side B
Power Drift-Start : 0.080 W/kg
Power Drift-Finish: 0.080 W/kg
Power Drift (%) : 0.183

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 : 09-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.17 F/m
Sigma : 1.98 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       : 09-May-2011
Set-up Time       : 7:02:24 AM
Area Scan         : 5x9x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side B
Separation        : 12 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.191 W/kg
10 gram SAR value   : 0.101 W/kg
Area Scan Peak SAR : 0.211 W/kg
Zoom Scan Peak SAR : 0.410 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 09-May-2011
Starting Time : 09-May-2011 11:20:29 AM
End Time : 09-May-2011 11:34:35 AM
Scanning Time : 846 secs

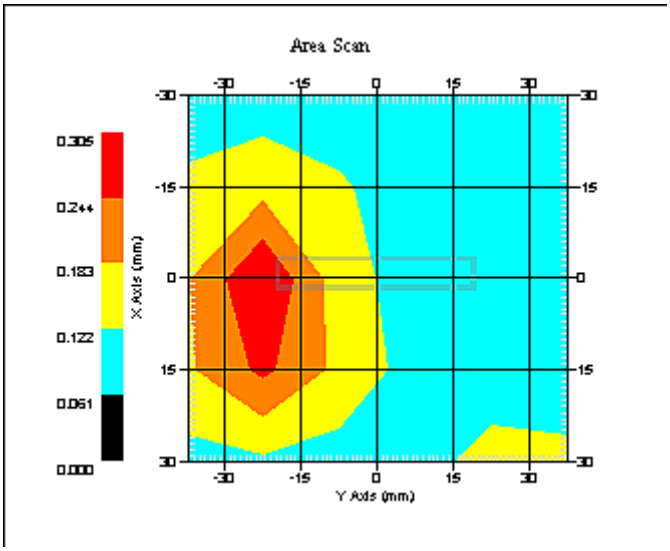
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11b
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.05 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 40 mm
Depth : 75 mm
Antenna Type : Chain B
Orientation : Side C
Power Drift-Start : 0.103 W/kg
Power Drift-Finish: 0.101 W/kg
Power Drift (%) : -2.092

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 : 09-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.17 F/m
Sigma : 1.98 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       : 09-May-2011
Set-up Time       : 7:02:24 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side C
Separation        : 12 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.226 W/kg
10 gram SAR value   : 0.129 W/kg
Area Scan Peak SAR  : 0.273 W/kg
Zoom Scan Peak SAR  : 0.630 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 09-May-2011
Starting Time : 09-May-2011 11:04:34 AM
End Time : 09-May-2011 11:18:37 AM
Scanning Time : 843 secs

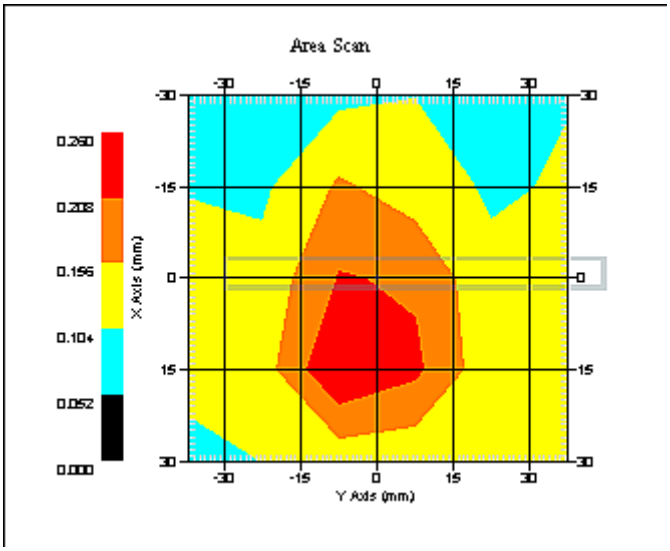
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11b
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.05 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 75 mm
Depth : 40 mm
Antenna Type : Chain B
Orientation : Side D
Power Drift-Start : 0.221 W/kg
Power Drift-Finish: 0.226 W/kg
Power Drift (%) : 2.020

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 : 09-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.17 F/m
Sigma : 1.98 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       : 09-May-2011
Set-up Time       : 7:02:24 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side D
Separation        : 12 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.162 W/kg
10 gram SAR value   : 0.105 W/kg
Area Scan Peak SAR  : 0.220 W/kg
Zoom Scan Peak SAR  : 0.450 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 09-May-2011
Starting Time : 09-May-2011 11:37:09 AM
End Time : 09-May-2011 11:51:23 AM
Scanning Time : 854 secs

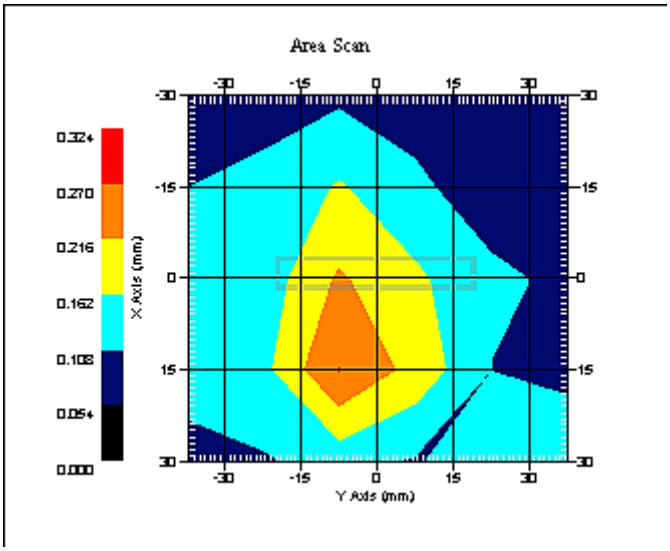
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11b
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.05 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 40 mm
Depth : 75 mm
Antenna Type : Chain B
Orientation : Side E
Power Drift-Start : 0.210 W/kg
Power Drift-Finish: 0.216 W/kg
Power Drift (%) : 3.015

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. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 09-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.17 F/m
Sigma : 1.98 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       : 09-May-2011
Set-up Time       : 7:02:24 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side E
Separation        : 12 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.070 W/kg
10 gram SAR value   : 0.065 W/kg
Area Scan Peak SAR  : 0.222 W/kg
Zoom Scan Peak SAR  : 0.230 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 09-May-2011
Starting Time : 09-May-2011 10:49:00 AM
End Time : 09-May-2011 11:03:12 AM
Scanning Time : 852 secs

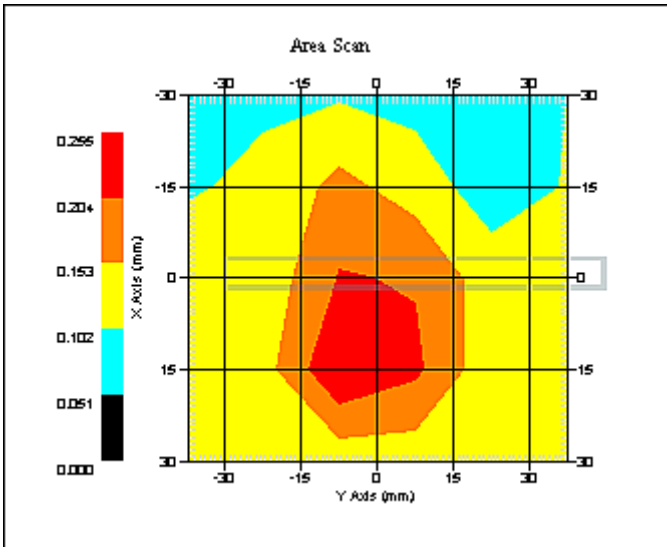
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11b
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.05 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 75 mm
Depth : 40 mm
Antenna Type : Chain B
Orientation : Side F
Power Drift-Start : 0.233 W/kg
Power Drift-Finish: 0.227 W/kg
Power Drift (%) : -2.597

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 : 09-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 46.00 RH%
Epsilon : 52.17 F/m
Sigma : 1.98 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       : 09-May-2011
Set-up Time       : 7:02:24 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Side F
Separation        : 12 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.107 W/kg
10 gram SAR value   : 0.096 W/kg
Area Scan Peak SAR  : 0.225 W/kg
Zoom Scan Peak SAR  : 0.260 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 06:35:43 AM
End Time : 06-May-2011 07:04:00 AM
Scanning Time : 1697 secs

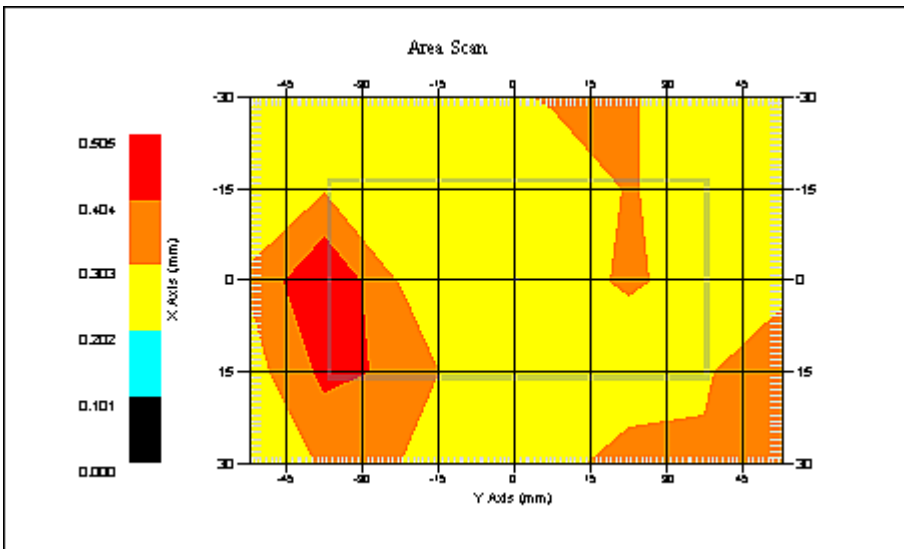
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain A
Orientation : Side A
Power Drift-Start : 0.242 W/kg
Power Drift-Finish: 0.242 W/kg
Power Drift (%) : 0.004

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

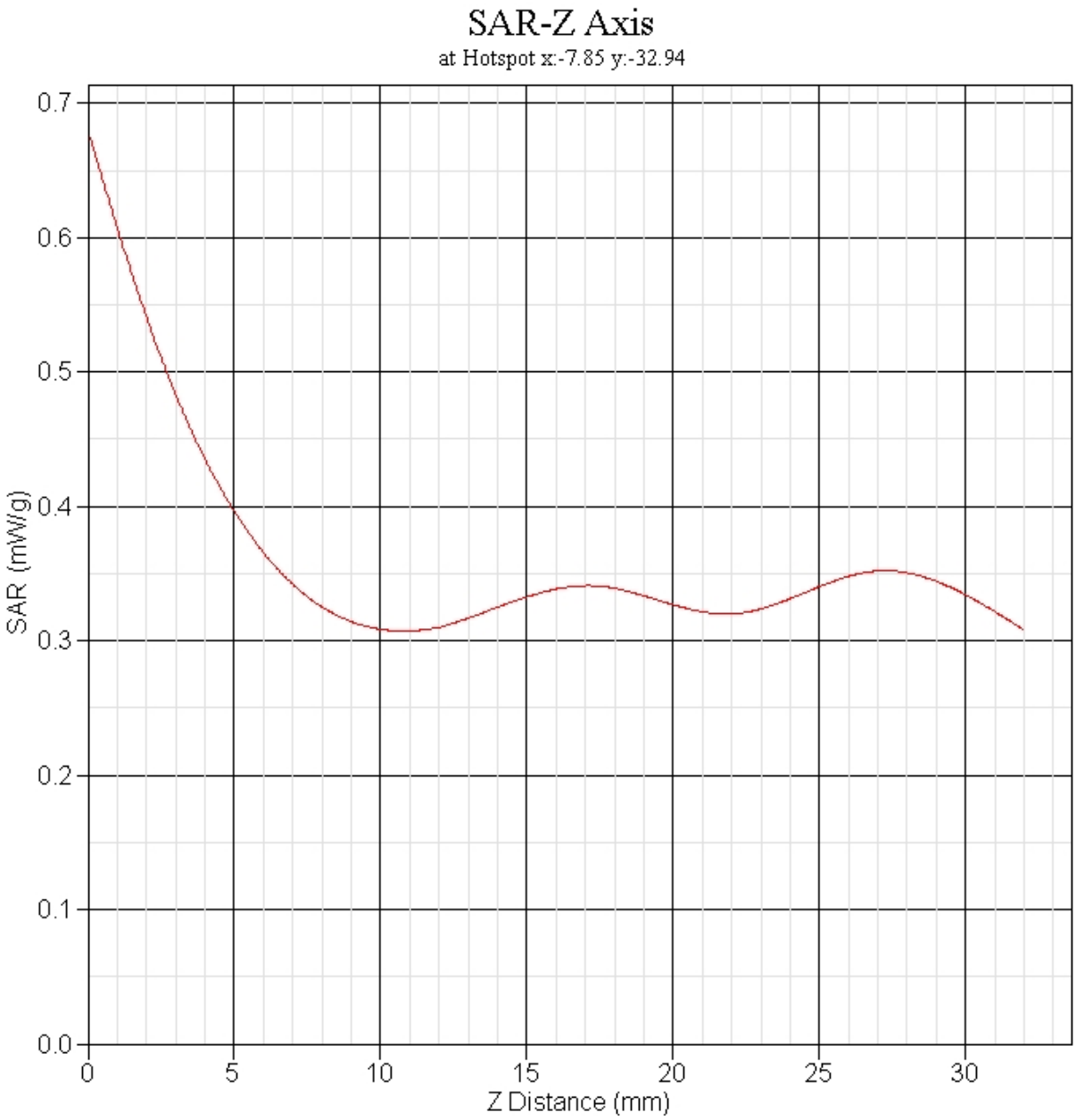
Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 06-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.71 F/m
Sigma : 5.42 S/m
Density : 1000.00 kg/cu. m

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       : 06-May-2011
Set-up Time       : 8:02:54 AM
Area Scan         : 5x8x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side A
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.387 W/kg
10 gram SAR value   : 0.291 W/kg
Area Scan Peak SAR  : 0.503 W/kg
Zoom Scan Peak SAR  : 0.680 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 08:10:18 AM
End Time : 06-May-2011 08:37:07 AM
Scanning Time : 1609 secs

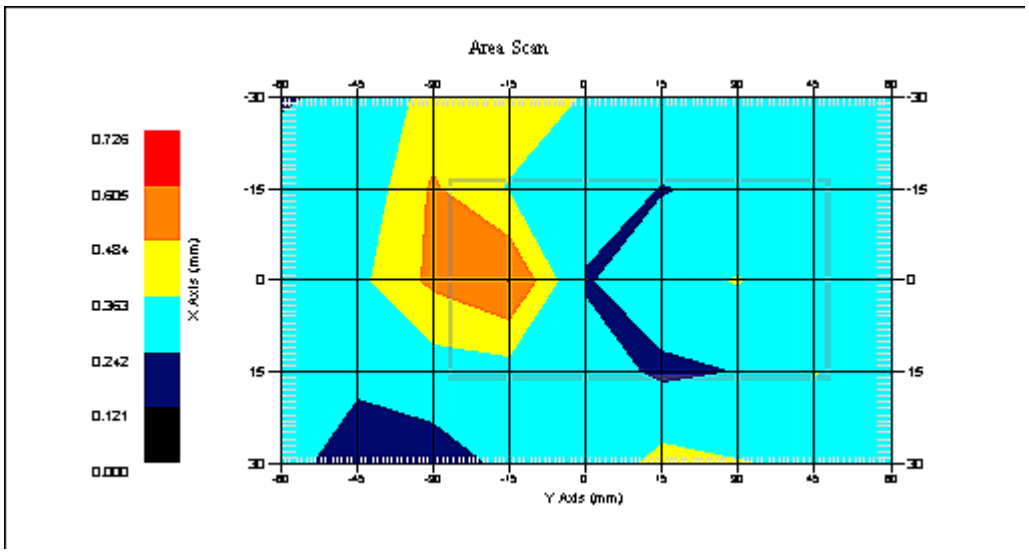
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain A
Orientation : Side B
Power Drift-Start : 0.227 W/kg
Power Drift-Finish: 0.238 W/kg
Power Drift (%) : 4.967

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:51:09 AM
Area Scan         : 5x9x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side B
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.342 W/kg
10 gram SAR value   : 0.204 W/kg
Area Scan Peak SAR  : 0.606 W/kg
Zoom Scan Peak SAR  : 0.791 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 08:39:25 AM
End Time : 06-May-2011 09:02:56 AM
Scanning Time : 1411 secs

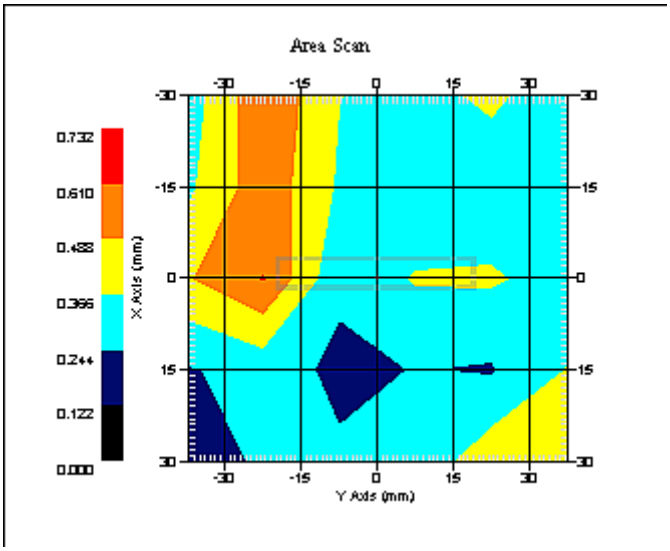
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 40 mm
Depth : 75 mm
Antenna Type : Chain A
Orientation : Side C
Power Drift-Start : 0.256 W/kg
Power Drift-Finish: 0.258 W/kg
Power Drift (%) : 0.787

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:51:09 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side C
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.376 W/kg
10 gram SAR value   : 0.203 W/kg
Area Scan Peak SAR  : 0.612 W/kg
Zoom Scan Peak SAR  : 0.741 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 10:27:45 AM
End Time : 06-May-2011 10:51:30 AM
Scanning Time : 1425 secs

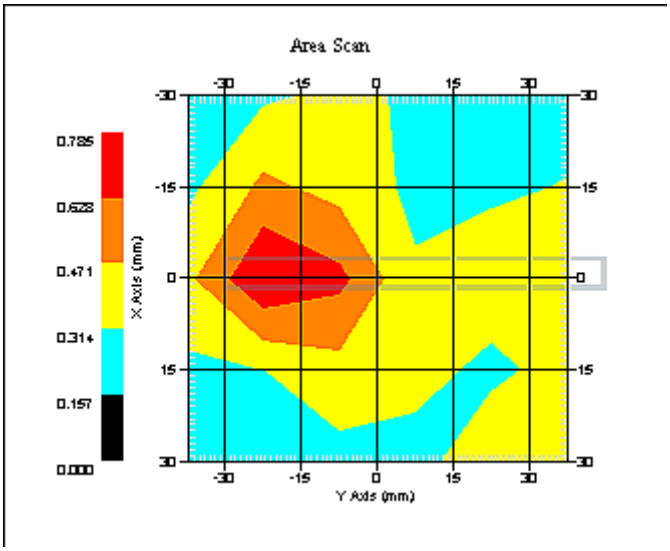
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 75 mm
Depth : 40 mm
Antenna Type : Chain A
Orientation : Side D
Power Drift-Start : 0.411 W/kg
Power Drift-Finish: 0.398 W/kg
Power Drift (%) : -3.164

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:51:09 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side D
Separation        : 12 mm
Channel           : Low
```

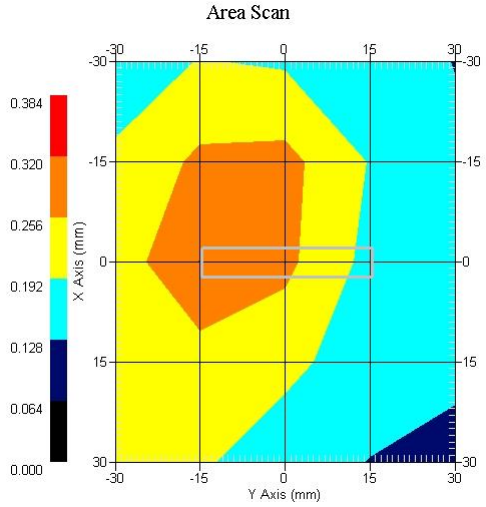



```
1 gram SAR value    : 0.305 W/kg
10 gram SAR value   : 0.187 W/kg
Area Scan Peak SAR  : 0.685 W/kg
Zoom Scan Peak SAR  : 0.711 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 06-May-2011
Starting Time     : 06-May-2011  09:58:24 AM
End Time          : 06-May-2011  10:22:06 AM
Scanning Time     : 1422 secs

Product Data
Device Name       : Intel Corporation
Serial No.        : Engineering Sample
Mode              : 802.11a
Model             : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency         : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time        : 0 min(s)
Length            : 8 mm
Width             : 40 mm
Depth             : 75 mm
Antenna Type      : Chain A
Orientation       : Side E
Power Drift-Start : 0.139 W/kg
Power Drift-Finish: 0.142 W/kg
Power Drift (%)   : 2.153

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  : 06-May-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       : 06-May-2011
Set-up Time       : 8:51:09 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side E
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.082 W/kg
10 gram SAR value   : 0.079 W/kg
Area Scan Peak SAR  : 0.335 W/kg
Zoom Scan Peak SAR  : 0.351 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 11:53:03 AM
End Time : 06-May-2011 12:21:25 PM
Scanning Time : 1702 secs

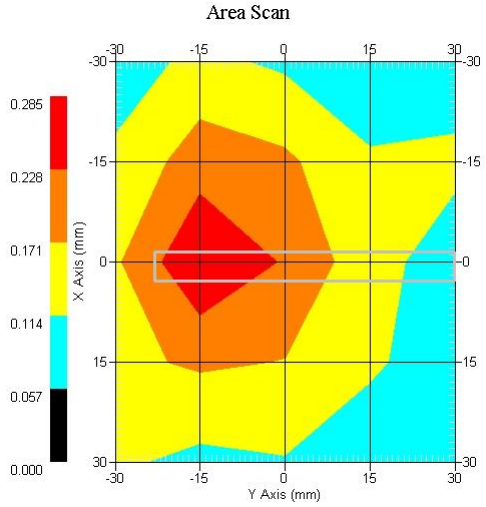
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain A
Orientation : Side F
Power Drift-Start : 0.219 W/kg
Power Drift-Finish: 0.224 W/kg
Power Drift (%) : 2.284

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:02:54 AM
Area Scan         : 5x8x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side F
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.129 W/kg
10 gram SAR value   : 0.102 W/kg
Area Scan Peak SAR  : 0.256 W/kg
Zoom Scan Peak SAR  : 0.420 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 04:13:51 PM
End Time : 06-May-2011 04:41:57 PM
Scanning Time : 1686 secs

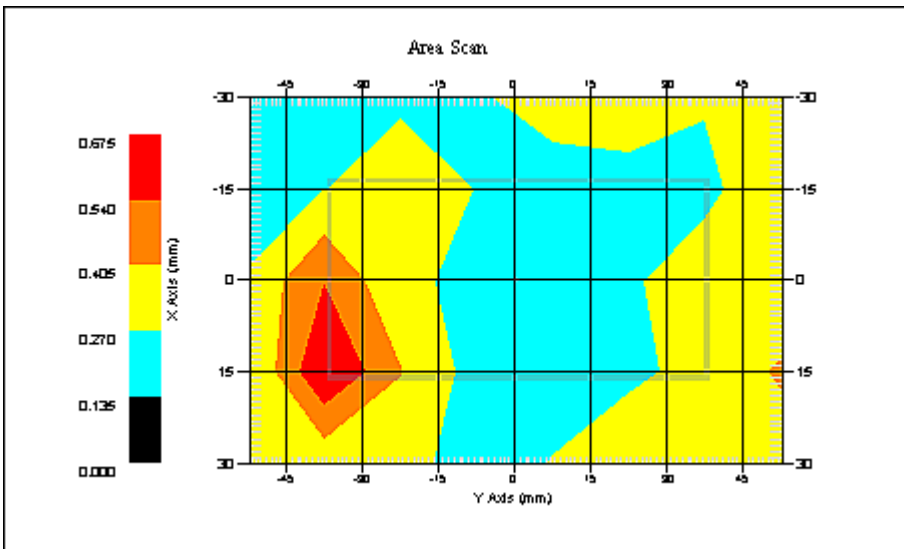
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain B
Orientation : Side A
Power Drift-Start : 0.234 W/kg
Power Drift-Finish: 0.229 W/kg
Power Drift (%) : -2.130

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:02:54 AM
Area Scan         : 5x8x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side A
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.372 W/kg
10 gram SAR value   : 0.249 W/kg
Area Scan Peak SAR  : 0.574 W/kg
Zoom Scan Peak SAR  : 0.750 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 05:47:17 PM
End Time : 06-May-2011 06:13:52 PM
Scanning Time : 1595 secs

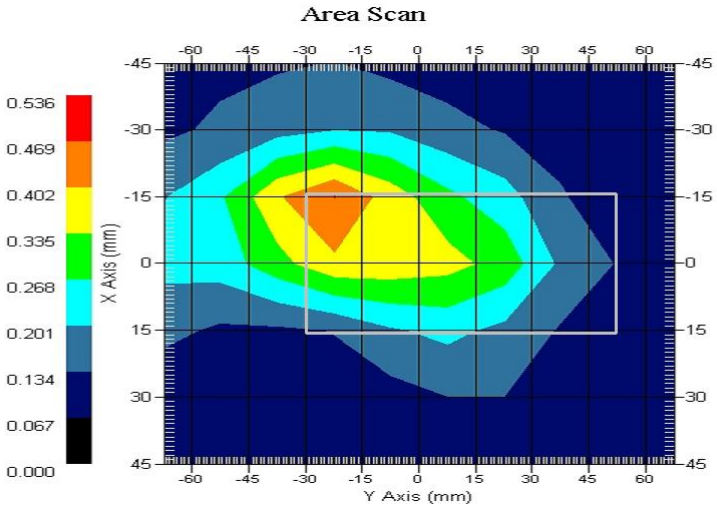
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain B
Orientation : Side B
Power Drift-Start : 0.226 W/kg
Power Drift-Finish: 0.218 W/kg
Power Drift (%) : -3.530

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 : 06-May-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       : 06-May-2011
Set-up Time       : 6:54:54 AM
Area Scan         : 5x9x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side B
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.345 W/kg
10 gram SAR value   : 0.219 W/kg
Area Scan Peak SAR : 0.518 W/kg
Zoom Scan Peak SAR : 0.732 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 02:23:30 PM
End Time : 06-May-2011 02:47:07 PM
Scanning Time : 1417 secs

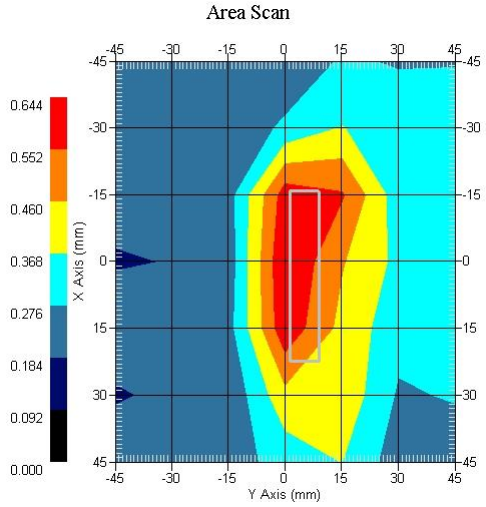
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 40 mm
Depth : 75 mm
Antenna Type : Chain B
Orientation : Side C
Power Drift-Start : 0.259 W/kg
Power Drift-Finish: 0.250 W/kg
Power Drift (%) : -3.726

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. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 06-May-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       : 06-May-2011
Set-up Time       : 8:51:09 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side C
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.371 W/kg
10 gram SAR value   : 0.198 W/kg
Area Scan Peak SAR  : 0.635 W/kg
Zoom Scan Peak SAR  : 0.751 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 01:54:46 PM
End Time : 06-May-2011 02:18:25 PM
Scanning Time : 1419 secs

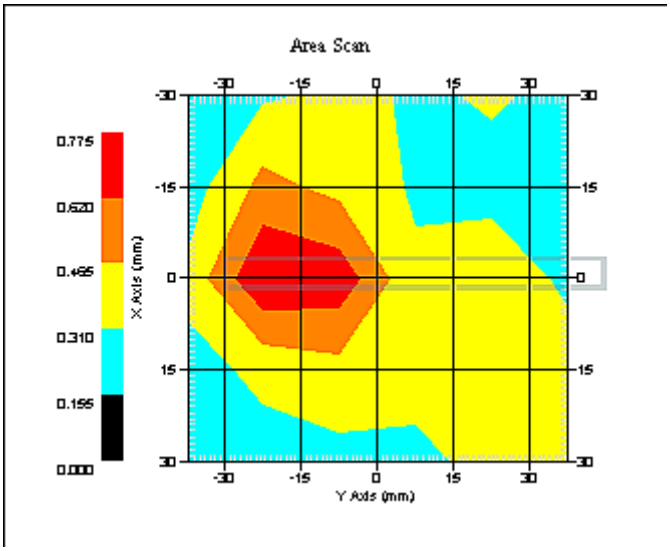
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 75 mm
Depth : 40 mm
Antenna Type : Chain B
Orientation : Side D
Power Drift-Start : 0.407 W/kg
Power Drift-Finish: 0.390 W/kg
Power Drift (%) : -4.152

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:51:09 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side D
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.309 W/kg
10 gram SAR value   : 0.184 W/kg
Area Scan Peak SAR  : 0.634 W/kg
Zoom Scan Peak SAR  : 0.701 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 03:46:32 PM
End Time : 06-May-2011 04:10:09 PM
Scanning Time : 1417 secs

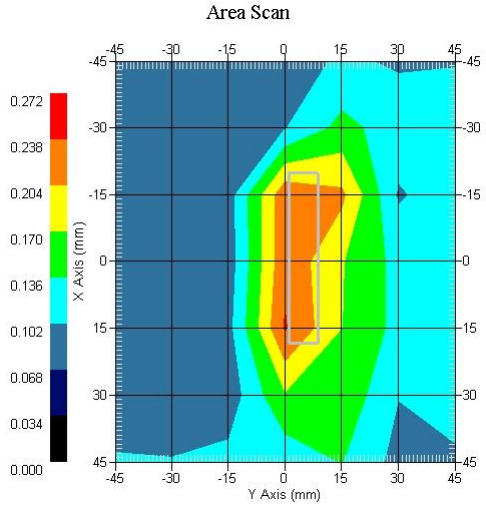
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 40 mm
Depth : 75 mm
Antenna Type : Chain B
Orientation : Side E
Power Drift-Start : 0.106 W/kg
Power Drift-Finish: 0.103 W/kg
Power Drift (%) : -2.837

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:51:09 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side E
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.091 W/kg
10 gram SAR value   : 0.085 W/kg
Area Scan Peak SAR  : 0.271 W/kg
Zoom Scan Peak SAR  : 0.451 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 12:24:35 PM
End Time : 06-May-2011 12:53:01 PM
Scanning Time : 1706 secs

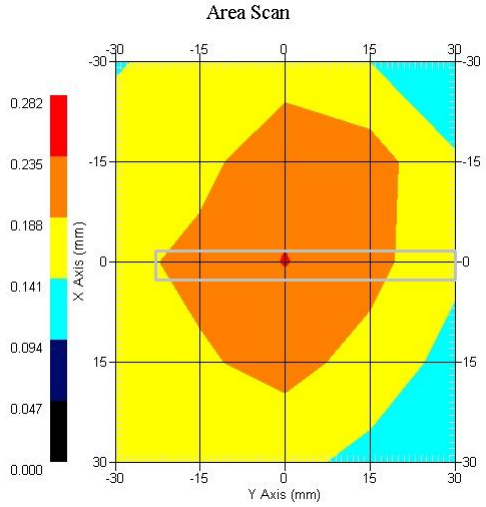
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain B
Orientation : Side F
Power Drift-Start : 0.235 W/kg
Power Drift-Finish: 0.235 W/kg
Power Drift (%) : -0.103

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:02:54 AM
Area Scan         : 5x8x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side F
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.136 W/kg
10 gram SAR value   : 0.097 W/kg
Area Scan Peak SAR  : 0.255 W/kg
Zoom Scan Peak SAR  : 0.310 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 04:44:12 PM
End Time : 06-May-2011 05:12:20 PM
Scanning Time : 1688 secs

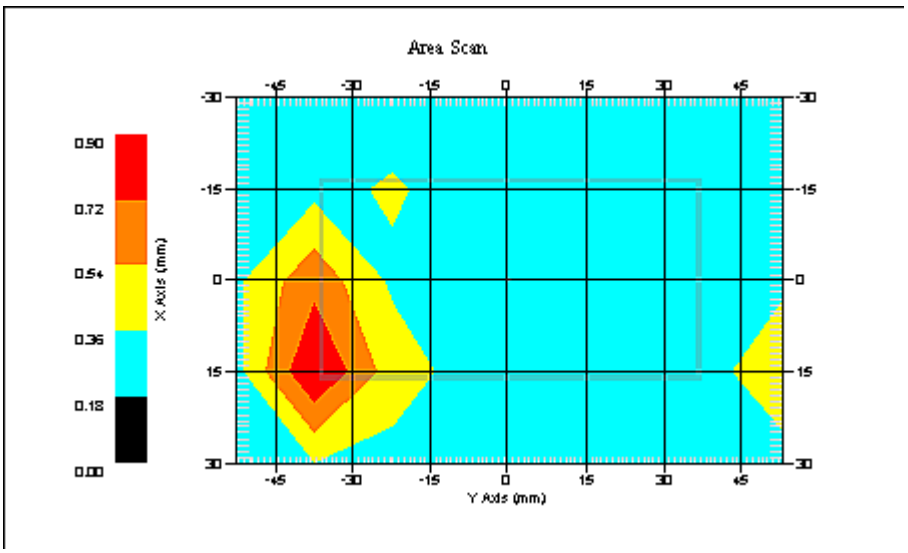
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain A
Orientation : Side A
Power Drift-Start : 0.247 W/kg
Power Drift-Finish: 0.248 W/kg
Power Drift (%) : 0.494

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

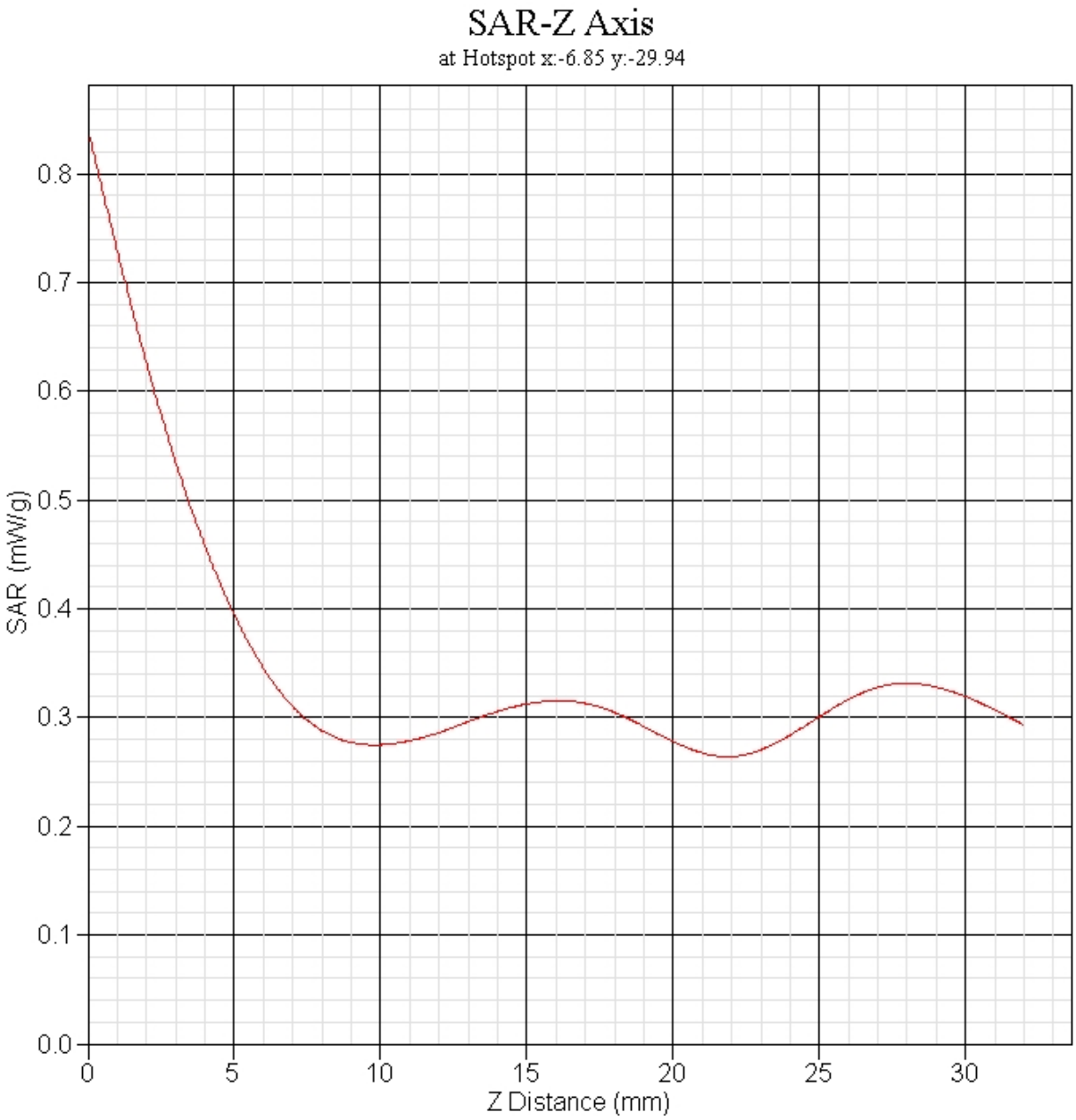
Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 06-May-2011
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 50.00 RH%
Epsilon : 48.71 F/m
Sigma : 5.42 S/m
Density : 1000.00 kg/cu. m

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       : 06-May-2011
Set-up Time       : 8:02:54 AM
Area Scan         : 5x8x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side A
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.376 W/kg
10 gram SAR value   : 0.187 W/kg
Area Scan Peak SAR  : 0.729 W/kg
Zoom Scan Peak SAR  : 0.818 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 07:38:56 AM
End Time : 06-May-2011 08:07:10 AM
Scanning Time : 1694 secs

Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain B
Orientation : Side B
Power Drift-Start : 0.222 W/kg
Power Drift-Finish: 0.227 W/kg
Power Drift (%) : 2.251

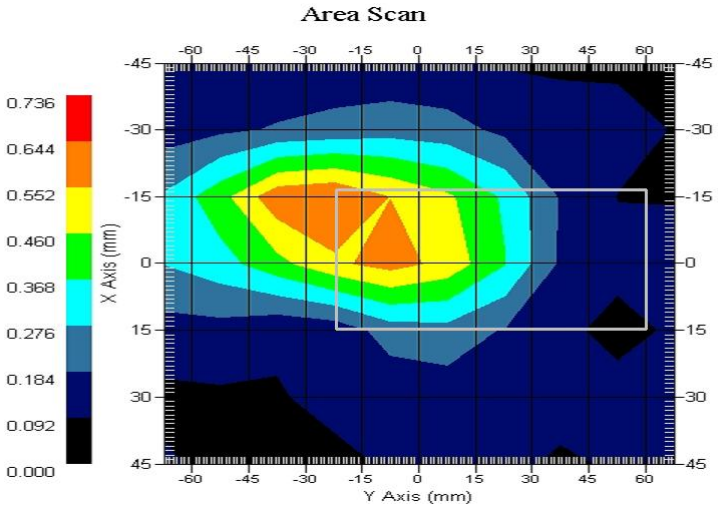
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 06-May-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 : 06-May-2011
Set-up Time : 8:02:54 AM
Area Scan : 5x8x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position : Side B
Separation : 12 mm
Channel : Low



1 gram SAR value : 0.322 W/kg
10 gram SAR value : 0.201 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 : 06-May-2011
Starting Time : 06-May-2011 09:05:51 AM
End Time : 06-May-2011 09:29:28 AM
Scanning Time : 1417 secs

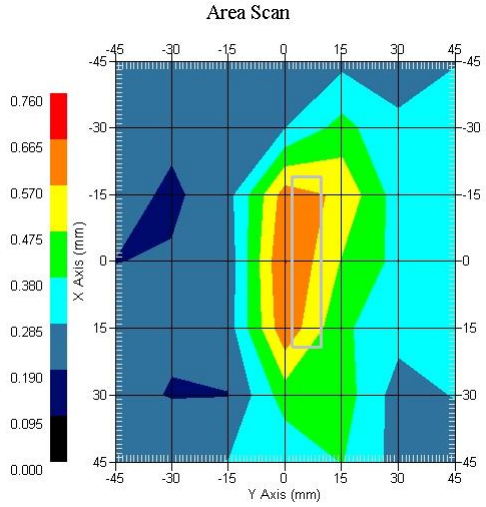
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 40 mm
Depth : 75 mm
Antenna Type : Chain B
Orientation : Side C
Power Drift-Start : 0.260 W/kg
Power Drift-Finish: 0.263 W/kg
Power Drift (%) : 1.399

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:51:09 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side C
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.349 W/kg
10 gram SAR value   : 0.208 W/kg
Area Scan Peak SAR  : 0.598 W/kg
Zoom Scan Peak SAR  : 0.691 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 10:55:32 AM
End Time : 06-May-2011 11:19:28 AM
Scanning Time : 1436 secs

Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 75 mm
Depth : 40 mm
Antenna Type : Chain B
Orientation : Side D
Power Drift-Start : 0.407 W/kg
Power Drift-Finish: 0.402 W/kg
Power Drift (%) : -1.186

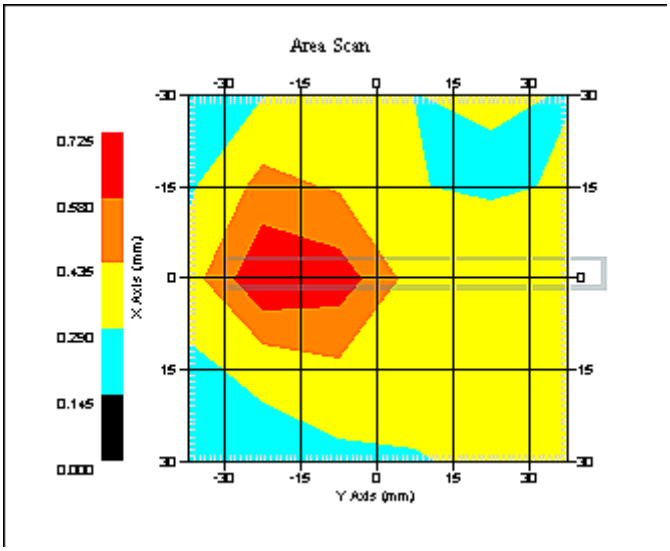
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 06-May-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 : 06-May-2011
Set-up Time : 8:51:09 AM
Area Scan : 5x6x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position : Side D
Separation : 12 mm
Channel : Low



1 gram SAR value : 0.302 W/kg
10 gram SAR value : 0.186 W/kg
Area Scan Peak SAR : 0.724 W/kg
Zoom Scan Peak SAR : 0.741 W/kg

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 09:31:43 AM
End Time : 06-May-2011 09:55:22 AM
Scanning Time : 1419 secs

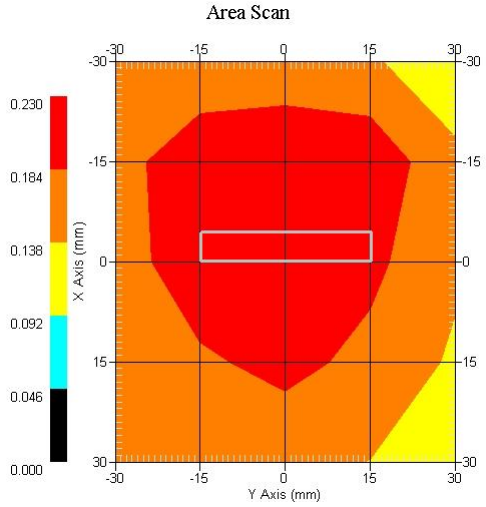
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 40 mm
Depth : 75 mm
Antenna Type : Chain B
Orientation : Side E
Power Drift-Start : 0.141 W/kg
Power Drift-Finish: 0.138 W/kg
Power Drift (%) : -2.123

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:51:09 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side E
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.080 W/kg
10 gram SAR value   : 0.076 W/kg
Area Scan Peak SAR  : 0.203 W/kg
Zoom Scan Peak SAR  : 0.351 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 11:23:01 AM
End Time : 06-May-2011 11:51:23 AM
Scanning Time : 1702 secs

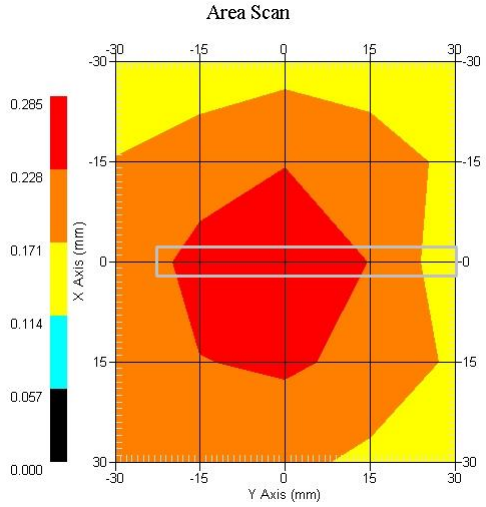
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain B
Orientation : Side F
Power Drift-Start : 0.211 W/kg
Power Drift-Finish: 0.203 W/kg
Power Drift (%) : -3.797

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:02:54 AM
Area Scan         : 5x8x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side F
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.110 W/kg
10 gram SAR value   : 0.091 W/kg
Area Scan Peak SAR : 0.250 W/kg
Zoom Scan Peak SAR : 0.270 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 07:07:44 AM
End Time : 06-May-2011 07:36:03 AM
Scanning Time : 1699 secs

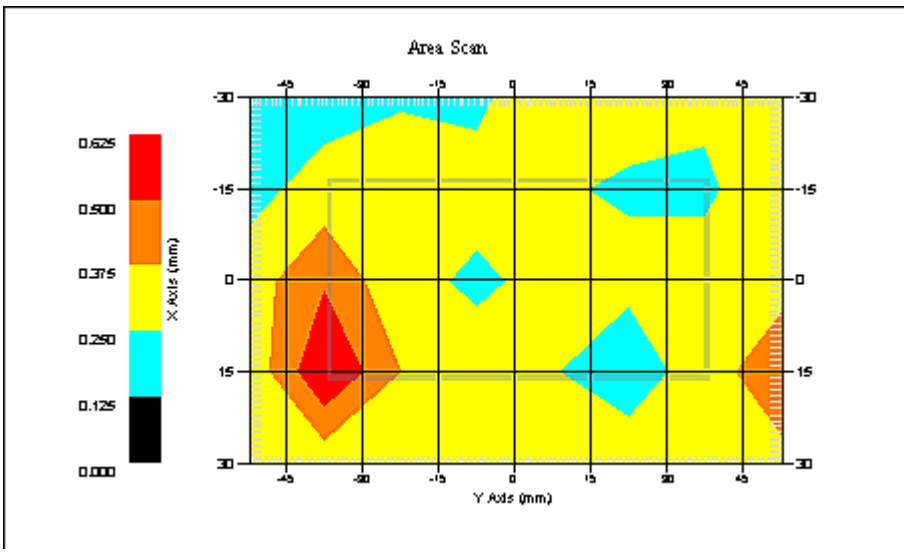
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain B
Orientation : Side A
Power Drift-Start : 0.232 W/kg
Power Drift-Finish: 0.226 W/kg
Power Drift (%) : -2.588

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:02:54 AM
Area Scan         : 5x8x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side A
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.379 W/kg
10 gram SAR value   : 0.251 W/kg
Area Scan Peak SAR  : 0.524 W/kg
Zoom Scan Peak SAR  : 0.700 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 07:38:56 AM
End Time : 06-May-2011 08:07:10 AM
Scanning Time : 1694 secs

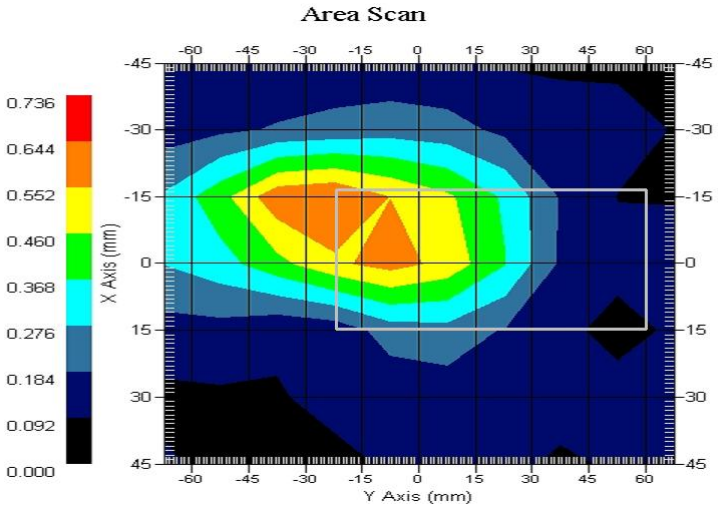
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain B
Orientation : Side B
Power Drift-Start : 0.222 W/kg
Power Drift-Finish: 0.227 W/kg
Power Drift (%) : 2.251

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:02:54 AM
Area Scan         : 5x8x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side B
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.322 W/kg
10 gram SAR value   : 0.201 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 : 06-May-2011
Starting Time : 06-May-2011 09:05:51 AM
End Time : 06-May-2011 09:29:28 AM
Scanning Time : 1417 secs

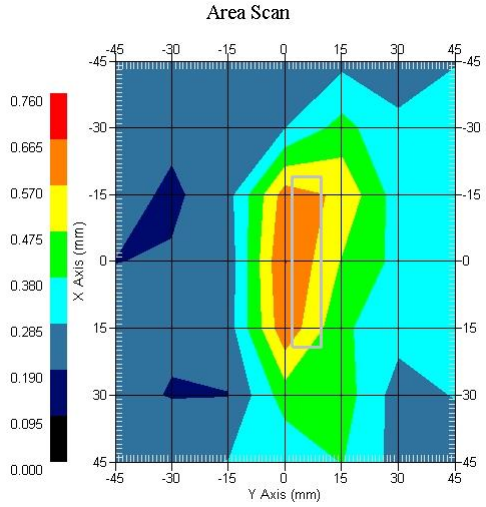
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 40 mm
Depth : 75 mm
Antenna Type : Chain B
Orientation : Side C
Power Drift-Start : 0.260 W/kg
Power Drift-Finish: 0.263 W/kg
Power Drift (%) : 1.399

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:51:09 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side C
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.349 W/kg
10 gram SAR value   : 0.208 W/kg
Area Scan Peak SAR  : 0.598 W/kg
Zoom Scan Peak SAR  : 0.691 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 10:55:32 AM
End Time : 06-May-2011 11:19:28 AM
Scanning Time : 1436 secs

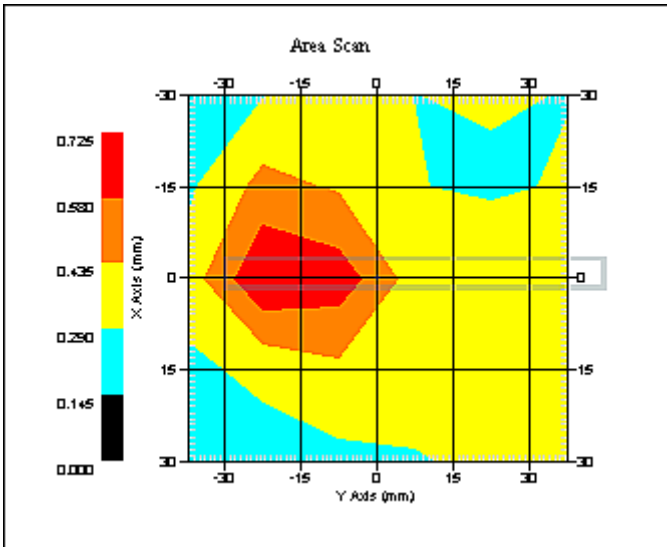
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 75 mm
Depth : 40 mm
Antenna Type : Chain B
Orientation : Side D
Power Drift-Start : 0.407 W/kg
Power Drift-Finish: 0.402 W/kg
Power Drift (%) : -1.186

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. : 5200
Frequency : 5200.00 MHz
Last Calib. Date : 06-May-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       : 06-May-2011
Set-up Time       : 8:51:09 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side D
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.302 W/kg
10 gram SAR value   : 0.186 W/kg
Area Scan Peak SAR  : 0.724 W/kg
Zoom Scan Peak SAR  : 0.741 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 09:31:43 AM
End Time : 06-May-2011 09:55:22 AM
Scanning Time : 1419 secs

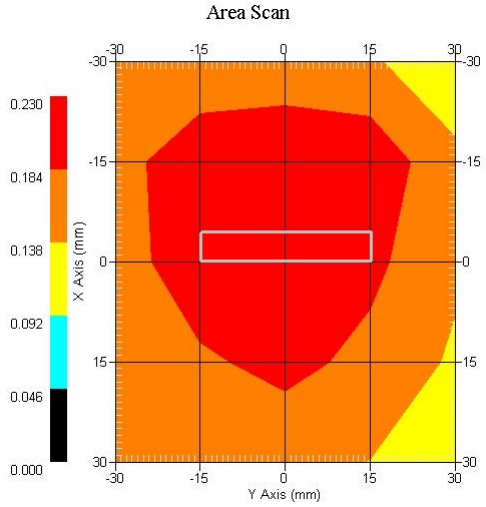
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 8 mm
Width : 40 mm
Depth : 75 mm
Antenna Type : Chain B
Orientation : Side E
Power Drift-Start : 0.141 W/kg
Power Drift-Finish: 0.138 W/kg
Power Drift (%) : -2.123

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:51:09 AM
Area Scan         : 5x6x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side E
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.080 W/kg
10 gram SAR value   : 0.076 W/kg
Area Scan Peak SAR  : 0.203 W/kg
Zoom Scan Peak SAR  : 0.351 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 06-May-2011
Starting Time : 06-May-2011 11:23:01 AM
End Time : 06-May-2011 11:51:23 AM
Scanning Time : 1702 secs

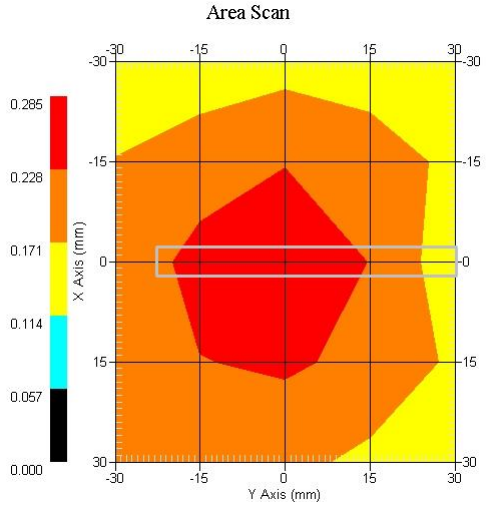
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain B
Orientation : Side F
Power Drift-Start : 0.211 W/kg
Power Drift-Finish: 0.203 W/kg
Power Drift (%) : -3.797

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 : 06-May-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       : 06-May-2011
Set-up Time       : 8:02:54 AM
Area Scan         : 5x8x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side F
Separation        : 12 mm
Channel           : Low
```




```
1 gram SAR value    : 0.110 W/kg
10 gram SAR value   : 0.091 W/kg
Area Scan Peak SAR : 0.250 W/kg
Zoom Scan Peak SAR : 0.270 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 07-May-2011
Starting Time : 07-May-2011 06:19:11 AM
End Time : 07-May-2011 06:46:13 AM
Scanning Time : 1622 secs

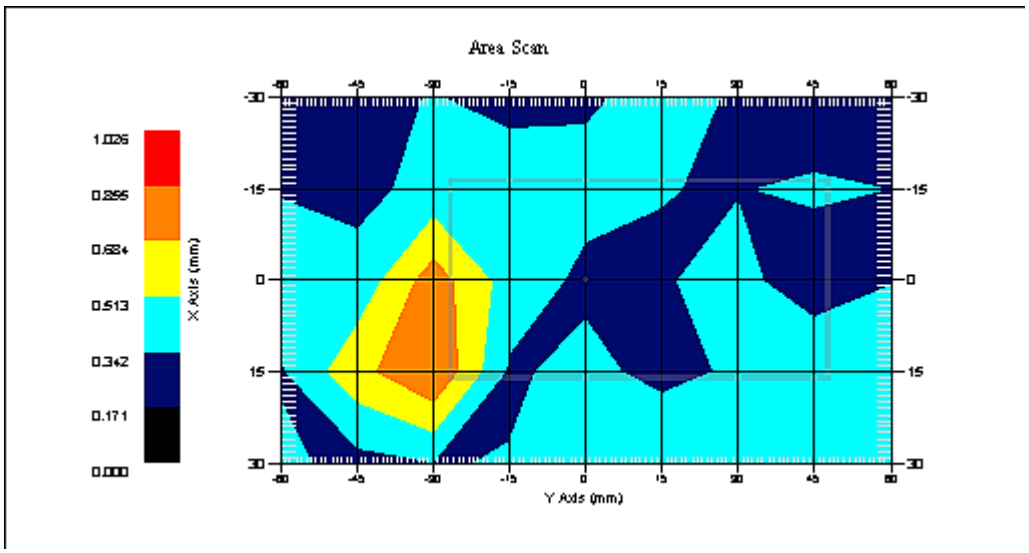
Product Data
Device Name : Intel Corporation
Serial No. : Engineering Sample
Mode : 802.11a
Model : Intel®Centrino®Advanced-N6205(Model 62205ANHMW&62205ANHU)
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.045 W
Drift Time : 0 min(s)
Length : 40 mm
Width : 75 mm
Depth : 8 mm
Antenna Type : Chain A
Orientation : Side A
Power Drift-Start : 0.293 W/kg
Power Drift-Finish: 0.303 W/kg
Power Drift (%) : 3.418

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 : 07-May-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       : 07-May-2011
Set-up Time       : 6:59:01 AM
Area Scan         : 5x9x1 : Measurement x=15mm, y=15mm, z=2mm
Zoom Scan         : 7x7x10 : Measurement x=4mm, y=4mm, z=2.5mm

Other Data
DUT Position      : Side A
Separation        : 12 mm
Channel           : Mid
```




```
1 gram SAR value    : 0.392 W/kg
10 gram SAR value   : 0.192 W/kg
Area Scan Peak SAR  : 0.756 W/kg
Zoom Scan Peak SAR  : 1.001 W/kg
```