

SAR TEST REPORT

REPORT NO.: SA920106H01

MODEL NO.: CP-7920

RECEIVED: Feb. 08, 2003

TESTED: Feb. 11, 2003 & April 14, 2003

APPLICANT: AMBIT Microsystems Corporation.

ADDRESS: 5F-1, 5 Hsin-An Road Hsinchu, Science-

Based Industrial Park Taiwan, R.O.C.

ISSUED BY: Advance Data Technology Corporation

LAB LOCATION: 47 14th Lin, Chiapau Tsun, Linko, Taipei,

Taiwan, R.O.C.

This test report consists of 19 pages in total except Appendix. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by CNLA, NVLAP or any government agencies. The test results in the report only apply to the tested sample.



Table of Contents

1.	CERTIFICATION	3
2.	GENERAL INFORMATION	4
3.1	GENERAL DESCRIPTION OF EUT	4
3.2	GENERAL DESCRIPTION OF APPLIED STANDARDS	4
3.3	GENERAL INOFRMATION OF THE SAR SYSTEM	5
3.4	GENERAL DESCRIPTION OF THE PROBE SCAN RULE	7
4	DESCRIPTION OF TEST MODES AND CONFIGURATIONS	8
4.1	CHEEK POSITION	8
4.2	TILT POSITION	9
5.	TEST RESULTS	11
5.1	TEST PROCEDURES	11
5.2	MEASURED SAR RESULT	11
5.3	SAR LIMITS	13
5.4	EUT CONDUCTED POWER VARIATION	13
5.5	TISSUE	14
5.6	TEST EQUIPMENT FOR TISSUE PROPERTY	15
6.	SYSTEM VALIDATION	16
7.	MEASUREMENT UNCERTAINTIES	18
8.	INFORMATION ON THE TESTING LABORATORIES	19

APPENDIX A: TEST CONFIGURATIONS AND TEST DATA

APPENDIX B: ADT SAR MEASUREMENT SYSTEM

APPENDIX C: PHOTOGRAPHS OF SYSTEM VALIDATION

APPENDIX D: SYSTEM CERTIFICATE & CALIBRATION



1. CERTIFICATION

PRODUCT: Cisco Wireless IP Phone 7920

MODEL NO. : CP-7920

BRAND NAME: Cisco

APPLICANT: AMBIT Microsystems Corporation

STANDARDS: 47 CFR Part 2 (Section 2.1093), FCC OET Bulletin 65,

Supplement C (01-01), RSS-102

We, **Advance Data Technology Corporation**, hereby certify that one sample of the designation has been tested in our facility on 11th Feb. 2003 and 14th April 2003. The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate, and it was tested according to the standards listed above. This device was found to be in compliance with the Specific Absorption Rate (SAR) requirement specified in FCC part 2.1093 under General Population / Uncontrolled Exposure condition.

CHECKED BY : DATE : April 17, 2003

A/)/



2. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Cisco Wireless IP Phone 7920
MODEL NO.	CP-7920
POWER SUPPLY	5VDC powered by adapter
CLASSIFICATION	Portable device, production unit
MODULATION TYPE	BPSK, QPSK, CCK
RADIO TECHNOLOGY	DSSS
TRANSFER RATE	1/2/5.5/11Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
CONDUCTED OUTPUT POWER	75.5mW
ANTENNA TYPE	Dipole Antenna
PEAK SAR	0.541mW/g
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA
ACCESSORY	Holster, earphone

3.2 GENERAL DESCRIPTION OF APPLIED STANDARDS

According to the specifications of the manufacturer, this product must comply with the requirements of the following standards:

FCC 47 CFR Part 2 (2.1093) FCC OET Bulletin 65, Supplement C (01- 01) RSS-102

All tests have been performed and recorded as per the above standards.



3.3 GENERAL INOFRMATION OF THE SAR SYSTEM

DASY3 (software 3.1d) consists of high precision robtics system, probe alignment sensor, phantom, robot controller, controlled PC and near-field probe. The robot includes six axis that can move to the precision position of the DASY3 software defined. The DASY3 software can define the area which is detected by the probe. The robot is connected to controlled box. Controlled PC is connected to the controlled robot box. The DAE includes amplifier, signal multiplexing, AD converter, offset measurement, surface detection. It is connected to the Electro-optical coupler (ECO). The ECO performs the conversion form the optical into digital electric signal of the DAE and transfers data to the PC.

ET3DV6 ISOTROPIC E-FIELD PROBE

Construction Symmetrical design with triangular core.

Built-in optical fiber for surface detection system.

Built-in shielding against static charges.

PEEK enclosure material (resistant to organic solvents,

e.g., glycolether).

Calibration Basic Broad Band Calibration in air: 10-2500 MHz

Conversion Factors (CF) for HSL 900 and HSL 1800 CF-Calibration for other liquids and frequencies upon

request

Frequency 10 MHz to 3 GHz; Linearity: ± 0.2 dB (30 MHz to 3 GHz)

Directivity \pm 0.2 dB in HSL (rotation around probe axis)

± 0.4 dB in HSL (rotation normal to probe axis)

Dynamic Range 5 μ W/g to > 100 mW/g; Linearity: \pm 0.2 dB

Optical Surface Detection \pm 0.2 mm repeatability in air and clear liquids over diffuse

reflecting surfaces

Dimensions Overall length: 330 mm (Tip Length: 16 mm)

Tip diameter: 6.8 mm (Body diameter: 12 mm)
Distance from probe tip to dipole centers: 2.7 mm

Application General dosimetric measurements up to 3 GHz

Compliance tests of mobile phones

Fast automatic scanning in arbitrary phantoms (ET3DV6)



TWIN SAM V4.0

Construction The shell corresponds to the specifications of the Specific

Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528-200X, CENELEC 50361 and IEC 62209. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points with the

robot.

Shell Thickness 2 ± 0.2 mm

Filling Volume Approx. 25 liters

Dimensions Height: 810 mm; Length: 1000 mm; Width: 500 mm

SYSTEM VALIDATION KITS: D900V2 - D2450V2

Construction Symmetrical dipole with I/4 balun

Enables measurement of feedpoint impedance with NWA

Matched for use near flat phantoms filled with brain simulating

solutions

Includes distance holder and tripod adaptor

Calibration Calibrated SAR value for specified position and input power at the

flat phantom in brain simulating solutions

Frequency 900, 1800, 1900, 2450 MHz

Return Loss > 20 dB at specified validation position

Power Capability > 100 W (f < 1 GHz); > 40 W (f > 1 GHz)

Options Dipoles for other frequencies or solutions and other calibration

conditions upon request

Dimensions D900V2: dipole length: 149 mm; overall height: 83.3 mm

D1800V2: dipole length: 72 mm; overall height: 41.2 mm D1900V2: dipole length: 68 mm; overall height: 39.5 mm D2450V2: dipole length: 51.5 mm; overall height: 30.6 mm



3.4 GENERAL DESCRIPTION OF THE PROBE SCAN RULE

The maximum search is automatically performed after each coarse scan measurement. It is based on splines in two or three dimensions. The procedure can find the maximum for most SAR distributions even with relatively large grid spacing. After the coarse scan measurement, the probe is automatically moved to a position at the interpolated maximum. The following scan can directly use this position for reference, e.g., for a finer resolution grid or the cube evaluations.

The 1g peak evaluations are only available for the predefined cube 5x5x7 scans. The routines are verified and optimized for the grid dimensions used in these cube measurements. The measured volume of 32x32x30mm contains about 35g of tissue. The first procedure is an extrapolation (incl. boundary correction) to get the points between the lowest measured plane and the surface. The next step uses 3D interpolation to get all points within the measured volume in a 1mm grid (35000 points). In the last step, a 1g cube is placed numerically into the volume and its averaged SAR is calculated. This cube is the moved around until the highest averaged SAR is found. If the highest SAR is found at the edge of the measured volume, the system will issue a warning: higher SAR values might be found outside of the measured volume. In that case the cube measurement can be repeated, using the new interpolated maximum as the center.



4 DESCRIPTION OF TEST MODES AND CONFIGURATIONS

CARRIER MODULATION UNDER TEST	DSSS
CREST FACTOR	1.0
CHANNEL FREQUENCIES UNDER TEST AND ITS CONDUCTED OUTPUT POWER	73.60mW / Ch1: 2412MHz 75.50mW / Ch6: 2437MHz 68.54mW / Ch11: 2462MHz
ANTENNA CONFIGURATION	Dipole Antenna
EUT POWER SOURCE	Fully Charged Battery

Remark: Test position

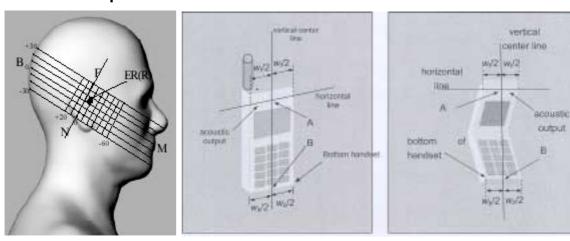


Figure 3.1 Figure 3.1a Figure 3.1b

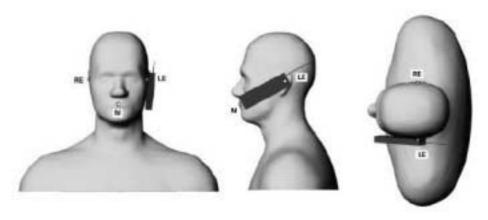
4.1 CHEEK POSITION

The head position in Figure 3.1, the ear reference points ERP are 15mm above entrance to ear canal along the B-M line. The line N-F (Neck-Front) is perpendicular to the B-M (Back Mouth) line. The handset device in Figure 3.1a and 3.1b,The vertical centerline pass through two points on the front side of handset; the midpoint of the width wt of the handset at the level of the acoustic output(point A) and the midpoint of the width Wb of the bottom of the handset (point B). The vertical centerline is perpendicular to the horizontal line and pass through the center of the acoustic output. The point A touches the ERP and the vertical centerline of the handset is parallel to the B-M line. While maintaining the point A contact with the ear(ERP), rotate the handset about the line NF until any point on handset is in contact with the cheek of the phantom

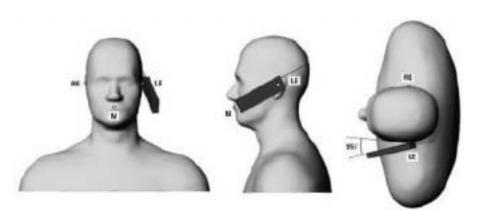


4.2 TILT POSITION

Adjusted the device in the cheek position. While maintaining A point of the handset contact in the ear, move the bottom of the handset away from the mouth by an angle of 15 degrees.



Cheek Position



Tilt Position



The following test configurations have been applied in this test report:

- **Mode 1:** The IP Phone is on the test configuration of right head cheek position.
- **Mode 2:** The IP Phone is on the test configuration of right head tilt position.
- **Mode 3:** The IP Phone is on the test configuration of left head cheek position.
- **Mode 4:** The IP Phone is on the test configuration of left head tilt position.
- **Mode 7:** Placing the IP Phone in the holster and the clip of the holster contact the bottom of the flat phantom. The battery of the IP Phone is in 8mm away from the phantom because of the holster.
- **Mode 8:** Placing the IP Phone and the clip of the holster contact the bottom of the flat phantom. The battery of the IP Phone is in 20cm away from the phantom.
- **Mode 9:** Plug the earphone in the earphone slot of the IP phone. Fix the wire of the earphone against the bottom of phantom. The battery of the IP phone is in 15mm away from the phantom.

NOTE: Please reference "APPENDIX A" for the photos of test configuration.



5. TEST RESULTS

5.1 TEST PROCEDURES

The SAR value was calculated via the 3D spline interpolation algorithm which has been implemented in the software of DASY3 SAR measurement system manufactured and calibrated by Schmid & Partner.

A coarse scan with 20mm x 20mm grid was performed for the highest spatial SAR location. A fine scan with 32mm x 32mm x 30mm volume was performed for SAR value averaged over 1g and 10g spatial volumes.

5.2 MEASURED SAR RESULT

ENVIRONMENTAL CONDICTION		Temperature : 21.5°C, Humidity : 45%RH				
TESTED BY		Bunn	Bunny Yao			
TEST D	DATE	02/11	02/11/2003			
TEST MODE	CHANN	EL	FREQUENCY (MHz)	MEASURED 1g SAR (W/kg)		
	1		2412	0.360		
1	6		2437	0.309		
	11		2462	0.329		
	1		2412	0.480		
2	6		2437	0.481		
	11		2462	0.446		
	1		2412	0.297		
3	6		2437	0.302		
	11		2462	0.277		
	1		2412	0.508		
4	6		2437	0.497		
	11		2462	0.541		



	NMENTAL NDICTION	I Amparatura 77° Humidity 50%RH	
TI	ESTED BY	Bunny Yao	
TE	EST DATE	04/14/2003	
TECT		MEACURED 4 ~ CAR	

TEST CHANNE		FREQUENCY (MHz)	MEASURED 1g SAR (W/kg)
	1	2412	0.203
7	6	2437	0.212
	11	2462	0.217
	1	2412	0.0703
8	6	2437	0.0761
	11	2462	0.0957
	1	2412	0.136
9	6	2437	0.155
	11	2462	0.164

NOTE:

- 1. Test configuration of each mode is described in section 3.
- 2. In this testing, the limit for General Population Spatial Peak averaged over 1g, **1.6 W/kg**, is applied.
- 3. Please see the Appendix for the photo of the test configuration and also the data.



5.3 SAR LIMITS

	SAF	R (W/kg)
HUMAN EXPOSURE	(General Population / Uncontrolled Exposure Environment)	(Occupational / controlled Exposure Environment)
Spatial Average (whole body)	0.08	0.4
Spatial Peak (averaged over 1 g)	1.6	8.0
Spatial Peak (hands/wrists/feet/ankles averaged over 10 g)	4.0	20.0

5.4 EUT CONDUCTED POWER VARIATION

The variation of the EUT conducted power measured before and after SAR testing should not over 5%. The test procedures for conducted power level is described in FCC rule part 2.1046.

The maximum variation in this testing is listed in the following table.

Conducted power tested on 11 th Feb. 2003						
Channel Frequency (MHz) Conducted Power (After) Variation (%)						
1	2412	73.6mW	74.8mW	1.6		
6	2437	75.5mW	76.2mW	0.9		
11	2462	68.5mW	69.3mW	1.1		

Conducted power tested on 14 th April. 2003						
Channel Frequency (MHz) Conducted Power (After) Variation (%)						
1	2412	73.5mW	73.7mW	0.27		
6	2437	75.4mW	75.7mW	0.39		
11 2462 68.7mW 69.0mW 0.43						



5.5 TISSUE

Tissue Components					
Ingredient Brain Muscle					
Water	55.20%	69.95%			
Glycol Monobutyl	44.80%	30.00%			
Salt	-	0.05%			

The tissue of 2450MHz for brain and body was well prepared according to the standard procedures. The required and measured dielectric parameters are listed in this table.

Tissue Prepared and Measured on 11 th Feb. 2003						
	Brain Muscle					
	Required Measured		Required	Measured		
Permitivity (ε_r)	39.2 ± 5%	38.85	52.7 ± 5%	NA		
Conductivity (σ) 1.8 ± 5% 1.8 1.95 ± 5% N				NA		



The measured parameters of the used tissue.

Tissue Prepared and Measured on 11 th Feb. 2003						
		Brain Musc				
	Value	Value Freq. (MHz) Value Freq. (MHz)				
Max Permitivity	38.99	2400	NA	NA		
Min. Permitivity	38.76	2500	NA	NA		
Max Conductivity	1.85	2500	NA	NA		
Min Conductivity	1.73	2400	NA	NA		

Tissue Prepared and Measured on 14 th April. 2003					
	Br	ain	Muscle		
	Required	Measured	Required	Measured	
Permitivity (\mathcal{E}_r)	39.2 ± 5%	NA	52.7 ± 5%	52.4	
Conductivity (σ)	1.8 ± 5%	NA	1.95 ± 5%	1.94	

The measured parameters of the used tissue.

Tissue Prepared and Measured on 14 th April. 2003					
	Brain Value Freq. (MHz)		Muscle		
			Value	Freq.(MHz)	
	NA	NA	52.5	2412	
Permitivity	NA	NA	52.43	2437	
	NA	NA	52.35	2462	
	NA	NA	1.9	2412	
Conductivity	NA	NA	1.92	2437	
	NA	NA	1.99	2462	

5.6 TEST EQUIPMENT FOR TISSUE PROPERTY

Item	Name	Provider	Type	Series No.	Calibrated Until
1	Network Analyzer	Agilent	8720ES	NA	May 6, 2003
2	Dielectric Probe	Agilent	85070C	NA	NA



6. SYSTEM VALIDATION

The system validation was performed in the flat phantom with equipment listed in the following table. Since the SAR value is calculated from the measured electric field, dielectric constant and conductivity of the body tissue, and the SAR is proportional to the square of the electric field. So, the SAR value will be also proportional to the RF power input to the system validation dipole under the same test environment. In our system validation test, 50mW RF input power was used instead of 250mW used by Schmid & Partner, then the measured SAR will be linearly extrapolated to that of 250mW RF power.

6.1 TEST EQUIPMENT

Item	Name	Provider	Туре	Series No.	Calibrated Until
1	SAM Phantom	S&P	QD000 P40 CA	PT-1150	NA
2	Validation Dipole	S&P	D2450V2	716	Sept. 25, 2004
3	Signal Generator	R&S	SMP04	10001	May 5, 2003
4	E-Field Probe	S&P	ET3DV6	1687	Sept. 27, 2003
5	DAE	S&P	DAE3 V1	510	April 10, 2004
6	Robot Positioner	Staubli Unimation	NA	NA	NA

6.2 VALIDATION RESULT

ENVIRONMENTAL ONDICTION	Temperature : 21.5°C, Humidity : 45%RH					
TESTED BY	Bunny Yao					
TEST DATE	02/11/2003					
2450MHz System Validation Test in Brain Tissue						
Required	Measured Deviation (%) Separation Distance					
14.30 (1g)	13.65 -4.76 1.0cm					
6.61 (10g)	6.30	-4.68	1.0cm			



ENVIRONMENTAL ONDICTION	Temperature : 22°C, Humidity : 50%RH				
TESTED BY	Bunny Yao				
TEST DATE	04/14/2003				
2450MHz System Validation Test in Muscle Tissue					
Required	Measured Deviation (%) Separation Distance				
12.9 (1g)	12.8	0.77	1.0cm		
6.26 (10g)	6.25	0.16	1.0cm		

NOTE: Please see Appendix for the photo of system validation test.



7. MEASUREMENT UNCERTAINTIES

	Uncertainty Value	Probability Distribution	Divisor	C i	Stantard Uncertainty
Test Sample Related					
Test Sample Positioning	±6%	Normal	1	1	±6%
Drift of Output Power	±5%	Rectangular	√3	1	±2.9%
Phantom and Setup					
Phantom Uncertainty	±0%	Rectangular	√3	1	±0%
Liquid Conductivity(target)	±5%	Rectangular	√3	0.5	±1.4%
Liqiuid Conductivity(meas)	±10%	Rectangular	√3	0.5	±2.9%
Liquid Permittivity(target)	±5%	Rectangular	√3	0.5	±1.4%
Liquid Permittivity(meas)	±5%	Rectangular	√3	0.5	±1.4%
RF Ambient Conditions	±3%	Rectangular	√3	1	±1.7%
System Check					
Calibration	± 2.6 %	normal	1	1	± 2.6 %
Axial isotropy	± 2.3 %	rectangular	√3	(1-cp) ^{1/2}	± 0.9 %
Hemispherical Isotropy	± 9.6 %	rectangular	√3	√ср	± 3.9 %
Spatial resolution	± 0.5 %	rectangular	√3	1	± 0.3 %
Boundary effect	± 4.0 %	rectangular	√3	1	± 6.4 %
Linearity	± 4.7 %	rectangular	√3	1	± 2.7 %
Detection Limit	± 2.0 %	rectangular	√3	1	± 1.2 %
Readout Electronics	± 1.0 %	normal	1	1	± 1.0 %
Mechanical Constrains of Robot	± 0.4 %	normal	1	1	± 0.4 %
Probe positioning	± 5.0 %	rectangular	√3	1	± 2.9 %
Extrapolation/Integration	± 3.9 %	rectangular	√3	1	± 2.3 %
Dipole/Liquid Distance	± 1.0 %	rectangular	√3	1	± 0.6 %
Dipole Input Power	± 4.7 %		1	1	± 4.7 %
Liquid conductivity (target)	± 5.0 %	rectangular	√3	0.6	± 1.7 %
Liquid conductivity (meas.)	± 10 %	rectangular	√3	0.6	± 3.5 %
Liquid permittivity (target)	± 5.0 %	rectangular	√3	0.6	± 1.7 %
Liquid permittivity (meas.)	± 5.0 %	rectangular	√3	0.6	± 1.7 %
RF Ambient condition	± 3.0 %	normal	1	1	± 1.7 %
Combined S			±12.4 %		
Expanded			±24.9 %		



8. INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025, Guide 25 or EN 45001:

USA FCC, NVLAP TUV Rheinland

Japan VCCI
New Zealand MoC
Norway NEMKO

R.O.C. BSMI, DGT, CNLA

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml.

If you have any comments, please feel free to contact us at the following:

Lin Kou EMC Lab:Hsin Chu EMC Lab:Tel: 886-2-26052180Tel: 886-35-935343Fax: 886-2-26052943Fax: 886-35-935342

Lin Kou Safety Lab: Lin Kou RF&Telecom Lab

Tel: 886-2-26093195 Tel: 886-3-3270910 Fax: 886-2-26093184 Fax: 886-3-3270892

Email: service@mail.adt.com.tw
Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.



APPENDIX A: TEST CONFIGURATIONS AND TEST DATA

A1: TEST CONFIGURATION

Mode 1 (Right) and Mode 3 (Left)

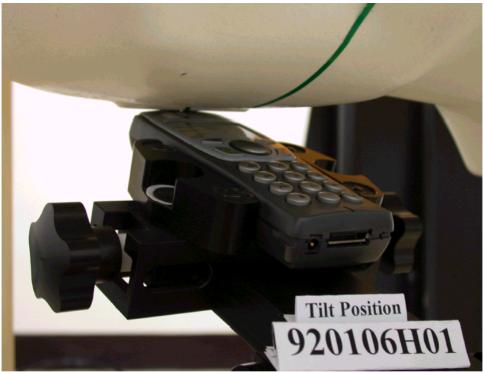






Mode 2 (Right) and Mode 4 (Left)







Mode 7





Mode 8





Mode 9





EUT Photo





A2: TEST DATA

02/11/03

Cisco Wireless IP Phone 7920 Mode 1 channel

Separation distance: 0mm (EUT to Phantom)

Air temperature : 21.5 degrees centigrade ; Liquid temperature : 21 degrees centigrade

SAM Phantom; Righ Hand Section; Position: (90°,301°);

Antenna type : Extended Antenna Test Position : Cheek Position Modulation type : DSSS

Probe: ET3DV6 - SN1687; ConvF(4.90,4.90,4.90); Crest factor: 1.0

Test Frequency: 2412 MHz

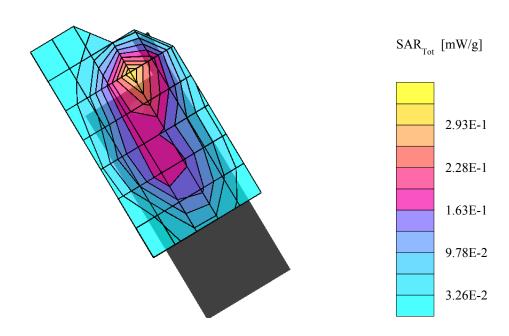
Test Channel: 01

Liquid parameters : Head 2412 MHz $\,\sigma$ = 1.75 mho/m ϵ_r = 39.0 ρ = 1.00 g/cm³

Coarse : Dx = 19.0, Dy = 14.0, Dz = 10.0

Cube 5x5x7: SAR (1g): 0.360 mW/g, SAR (10g): 0.172 mW/g * Max outside, (Worst-case extrapolation)

Powerdrift: 0.05 dB



Cisco Wireless IP Phone 7920 Mode 1 channel 6

Separation distance: 0mm (EUT to Phantom)

Air temperature : 21.5 degrees centigrade ; Liquid temperature : 21 degrees centigrade

SAM Phantom; Righ Hand Section; Position: (90°,301°);

Antenna type : Extended Antenna Test Position : Cheek Position Modulation type : DSSS

Probe: ET3DV6 - SN1687; ConvF(4.90,4.90,4.90); Crest factor: 1.0

Test Frequency: 2437 MHz

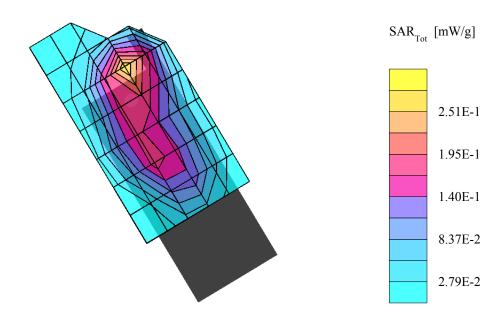
Test Channel: 06

Liquid parameters : Head 2437 MHz $\sigma = 1.79$ mho/m $\varepsilon_r = 38.9$ $\rho = 1.00$ g/cm³

Coarse : Dx = 19.0, Dy = 14.0, Dz = 10.0

Cube 5x5x7: SAR (1g): 0.309 mW/g, SAR (10g): 0.151 mW/g * Max outside, (Worst-case extrapolation)

Powerdrift: 0.05 dB



Cisco Wireless IP Phone 7920 Mode 1 channel 11

Separation distance: 0mm (EUT to Phantom)

Air temperature : 21.5 degrees centigrade ; Liquid temperature : 21 degrees centigrade

SAM Phantom; Righ Hand Section; Position: (90°,301°);

Antenna type : Extended Antenna Test Position : Cheek Position Modulation type : DSSS

Probe: ET3DV6 - SN1687; ConvF(4.90,4.90,4.90); Crest factor: 1.0

Test Frequency: 2462 MHz

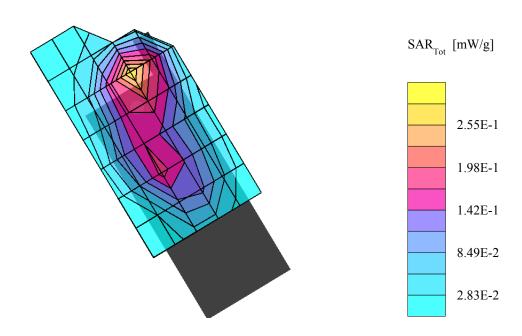
Test Channel: 11

Liquid parameters : Head 2462 MHz $\sigma = 1.82$ mho/m $\varepsilon_r = 38.8$ $\rho = 1.00$ g/cm³

Coarse : Dx = 19.0, Dy = 14.0, Dz = 10.0

Cube 5x5x7: SAR (1g): 0.329 mW/g, SAR (10g): 0.156 mW/g, (Worst-case extrapolation)

Powerdrift: -0.04 dB



Cisco Wireless IP Phone 7920 Mode 2 channel 01

Separation distance: 0mm (EUT to Phantom)

Air temperature : 21.5 degrees centigrade ; Liquid temperature : 21 degrees centigrade

SAM Phantom; Righ Hand Section; Position: (90°,301°);

Antenna type : Extended Antenna Test Position : Tilt Position Modulation type : DSSS

Probe: ET3DV6 - SN1687; ConvF(4.90,4.90,4.90); Crest factor: 1.0

Test Frequency: 2412 MHz

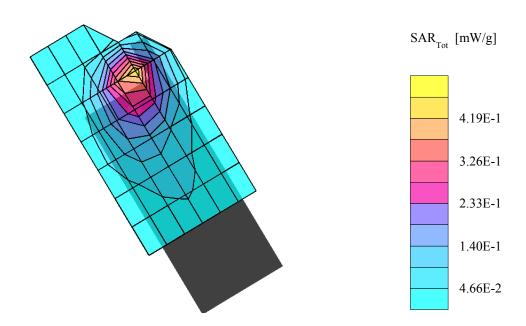
Test Channel: 01

Liquid parameters : Head 2412 MHz σ = 1.75 mho/m ϵ_r = 39.0 ρ = 1.00 g/cm³

Coarse : Dx = 19.0, Dy = 12.0, Dz = 10.0

Cube 5x5x7: SAR (1g): 0.480 mW/g, SAR (10g): 0.232 mW/g * Max outside, (Worst-case extrapolation)

Powerdrift: 0.03 dB



Cisco Wireless IP Phone 7920 Mode 2 channel 06

Separation distance : 0mm (EUT to Phantom)

Air temperature : 21.5 degrees centigrade ; Liquid temperature : 21 degrees centigrade

SAM Phantom; Righ Hand Section; Position: (90°,301°);

Antenna type : Extended Antenna Test Position : Tilt Position Modulation type : DSSS

Probe: ET3DV6 - SN1687; ConvF(4.90,4.90,4.90); Crest factor: 1.0

Test Frequency: 2437 MHz

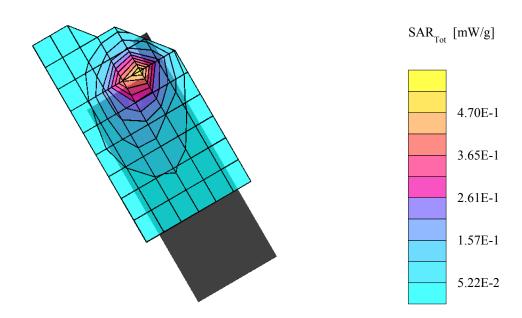
Test Channel: 06

Liquid parameters : Head 2437 MHz σ = 1.79 mho/m ϵ_r = 38.9 ρ = 1.00 g/cm³

Coarse : Dx = 15.0, Dy = 12.0, Dz = 10.0

Cube 5x5x7: SAR (1g): 0.481 mW/g, SAR (10g): 0.230 mW/g, (Worst-case extrapolation)

Powerdrift: 0.02 dB



Cisco Wireless IP Phone 7920 Mode 3 channel 01

Separation distance : 0mm (EUT to Phantom)

Air temperature : 21.5 degrees centigrade ; Liquid temperature : 21 degrees centigrade

SAM Phantom; Left Hand Section; Position: (90°,59°);

Antenna type : Extended Antenna Test Position : Cheek Position Modulation type : DSSS

Probe: ET3DV6 - SN1687; ConvF(4.90,4.90,4.90); Crest factor: 1.0

Test Frequency: 2412 MHz

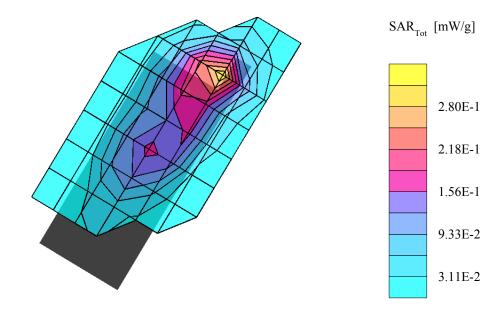
Test Channel: 1

Liquid parameters : Head 2412 MHz σ = 1.75 mho/m ϵ_r = 39.0 ρ = 1.00 g/cm³

Coarse : Dx = 20.0, Dy = 15.0, Dz = 10.0

Cube 5x5x7: SAR (1g): 0.297 mW/g, SAR (10g): 0.148 mW/g, (Worst-case extrapolation)

Powerdrift: 0.05 dB



02/11/03

Cisco Wireless IP Phone 7920 Mode 3 channel 01

Separation distance: 0mm (EUT to Phantom)

Air temperature : 21.5 degrees centigrade ; Liquid temperature : 21 degrees centigrade

SAM Phantom; Left Hand Section; Position: (90°,59°);

Antenna type : Extended Antenna Test Position : Cheek Position Modulation type : DSSS

Probe: ET3DV6 - SN1687; ConvF(4.90,4.90,4.90); Crest factor: 1.0

Test Frequency: 2412 MHz

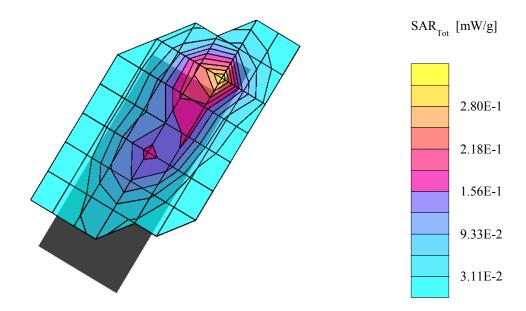
Test Channel: 1

Liquid parameters : Head 2412 MHz $\,\sigma$ = 1.75 mho/m ϵ_r = 39.0 ρ = 1.00 g/cm³

Coarse : Dx = 20.0, Dy = 15.0, Dz = 10.0

Cube 5x5x7: SAR (1g): 0.297 mW/g, SAR (10g): 0.148 mW/g, (Worst-case extrapolation)

Powerdrift: 0.05 dB



Cisco Wireless IP Phone 7920 Mode 3 channel 06

Separation distance: 0mm (EUT to Phantom)

Air temperature : 21.5 degrees centigrade ; Liquid temperature : 21 degrees centigrade

SAM Phantom; Left Hand Section; Position: (90°,59°);

Antenna type : Extended Antenna Test Position : Cheek Position Modulation type : DSSS

Probe: ET3DV6 - SN1687; ConvF(4.90,4.90,4.90); Crest factor: 1.0

Test Frequency: 2437 MHz

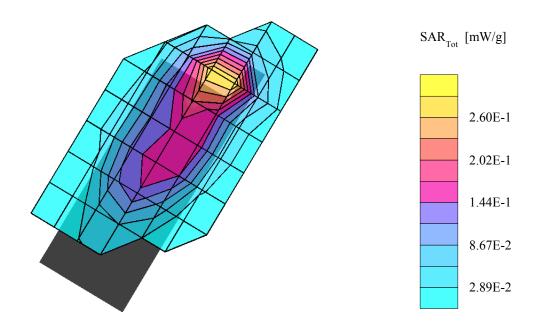
Test Channel: 06

Liquid parameters : Head 2437 MHz $\sigma = 1.79$ mho/m $\varepsilon_r = 38.9$ $\rho = 1.00$ g/cm³

Coarse : Dx = 20.0, Dy = 15.0, Dz = 10.0

Cube 5x5x7: SAR (1g): 0.302 mW/g, SAR (10g): 0.150 mW/g, (Worst-case extrapolation)

Powerdrift: 0.04 dB



Cisco Wireless IP Phone 7920 Mode 3 channel 11

Separation distance: 0mm (EUT to Phantom)

Air temperature : 21.5 degrees centigrade ; Liquid temperature : 21 degrees centigrade

SAM Phantom; Left Hand Section; Position: (90°,59°);

Antenna type : Extended Antenna Test Position : Cheek Position Modulation type : DSSS

Probe: ET3DV6 - SN1687; ConvF(4.90,4.90,4.90); Crest factor: 1.0

Test Frequency: 2462 MHz

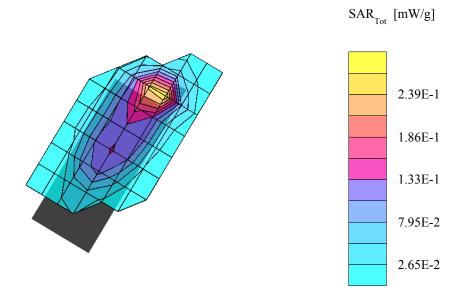
Test Channel: 11

Liquid parameters : Head 2462 MHz $\sigma = 1.82$ mho/m $\epsilon_r = 38.8$ $\rho = 1.00$ g/cm³

Coarse: Dx = 20.0, Dy = 15.0, Dz = 10.0

Cube 5x5x7: SAR (1g): 0.277 mW/g, SAR (10g): 0.138 mW/g, (Worst-case extrapolation)

Powerdrift: -0.07 dB



02/11/03

Cisco Wireless IP Phone 7920 Mode 4 channel 01

Separation distance : 0mm (EUT to Phantom)

Air temperature : 21.5 degrees centigrade ; Liquid temperature : 21 degrees centigrade

SAM Phantom; Left Hand Section; Position: (90°,59°);

Antenna type : Extended Antenna Test Position : Tilt Position Modulation type : DSSS

Probe: ET3DV6 - SN1687; ConvF(4.90,4.90,4.90); Crest factor: 1.0

Test Frequency: 2412 MHz

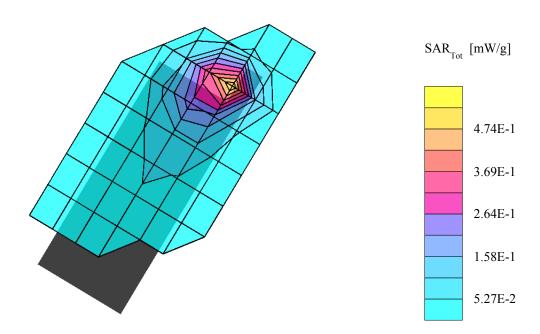
Test Channel: 01

Liquid parameters : Head 2412 MHz $\sigma = 1.75$ mho/m $\epsilon_r = 39.0$ $\rho = 1.00$ g/cm³

Coarse : Dx = 20.0, Dy = 15.0, Dz = 10.0

Cube 5x5x7: SAR (1g): 0.508 mW/g, SAR (10g): 0.240 mW/g, (Worst-case extrapolation)

Powerdrift: -0.01 dB



02/11/03

Cisco Wireless IP Phone 7920 Mode 4 channel 06

Separation distance : 0mm (EUT to Phantom)

Air temperature : 21.5 degrees centigrade ; Liquid temperature : 21 degrees centigrade

SAM Phantom; Left Hand Section; Position: (90°,59°);

Antenna type : Extended Antenna Test Position : Tilt Position Modulation type : DSSS

Probe: ET3DV6 - SN1687; ConvF(4.90,4.90,4.90); Crest factor: 1.0

Test Frequency: 2437 MHz

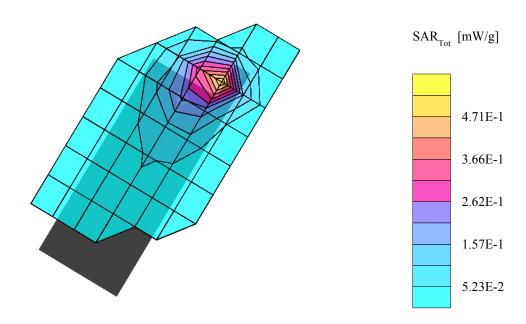
Test Channel: 6

Liquid parameters : Head 2437 MHz σ = 1.79 mho/m ϵ_r = 38.9 ρ = 1.00 g/cm³

Coarse : Dx = 20.0, Dy = 15.0, Dz = 10.0

Cube 5x5x7: SAR (1g): 0.497 mW/g, SAR (10g): 0.233 mW/g, (Worst-case extrapolation)

Powerdrift: 0.07 dB



Cisco Wireless IP Phone 7920 Mode 4 channel 11

Separation distance: 0mm (EUT to Phantom)

Air temperature : 21.5 degrees centigrade ; Liquid temperature : 21 degrees centigrade

SAM Phantom; Left Hand Section; Position: (90°,59°);

Antenna type : Extended Antenna Test Position : Tilt Position Modulation type : DSSS

Probe: ET3DV6 - SN1687; ConvF(4.90,4.90,4.90); Crest factor: 1.0

Test Frequency: 2462 MHz

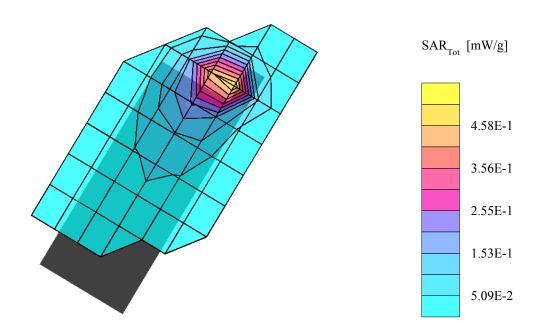
Test Channel: 11

Liquid parameters : Head 2462 MHz $\sigma = 1.82 \text{ mho/m } \epsilon_r = 38.8 \ \rho = 1.00 \text{ g/cm}^3$

Coarse : Dx = 20.0, Dy = 15.0, Dz = 10.0

Cube 5x5x7: SAR (1g): 0.541 mW/g, SAR (10g): 0.248 mW/g, (Worst-case extrapolation)

Powerdrift: 0.03 dB



Date/Time: 04/14/03 01:13:16

Test Laboratory: Advance Data Technology Corporation

CP7920 Mode 7 channel 01

DUT: Wireless IP Phone 7920 ; Type: CP7920

Communication System: 802.11b; Frequency: 2412 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 (σ = 1.9 mho/m, ε_r = 52.5, ρ = 1000 kg/m³); Liquid level : 151mm

Phantom section: Flat Section; Separation distance: 8mm(The bottom of the Phone with the holster is facing to the flat Phantom)

Antenna type: Extended Antenna; Air tempreature: 22.8 degrees; Liquid temperature: 22 degrees

DASY4 Configuration:

- Probe: ET3DV6 SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

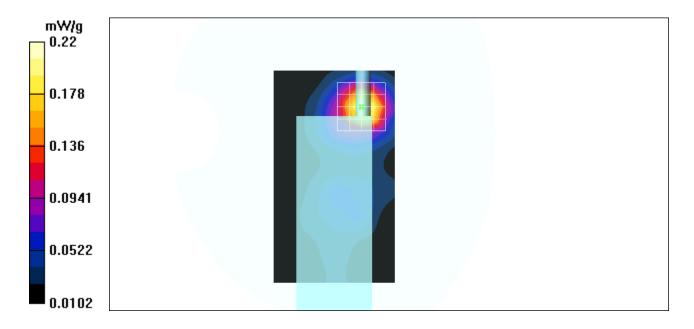
System testing procedure/Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.71 V/m

Peak SAR = 0.33 W/kg

SAR(1 g) = 0.203 mW/g; SAR(10 g) = 0.111 mW/g

Power Drift = -0.3 dB



Date/Time: 04/14/03 01:09:26

Test Laboratory: Advance Data Technology Corporation

CP7920 Mode 7 channel 06

DUT: Wireless IP Phone 7920 ; Type: CP7920

Communication System: 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1; Modulation type: DSSS Medium: MSL2450 (σ = 1.92 mho/m, ϵ_r = 52.43, ρ = 1000 kg/m³); Liquid level: 151mm Phantom section: Flat Section; Separation distance: 8mm(The bottom of the Phone with the holster is facing to the flat Phantom)

Antenna type: Extended Antenna; Air tempreature: 22.8 degrees; Liquid temperature: 22 degrees

DASY4 Configuration:

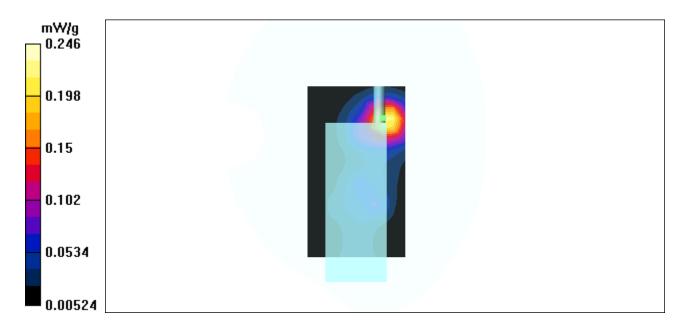
- Probe: ET3DV6 SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

System testing procedure/Area Scan (4x7x1): Measurement grid: dx=20mm, dy=20mm **System testing procedure/Zoon Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.52 V/m Peak SAR = 0.339 W/kg

SAR(1 g) = 0.212 mW/g; SAR(10 g) = 0.116 mW/g

Power Drift = -0.3 dB



Date/Time: 04/14/03 02:46:12

Test Laboratory: Advance Data Technology Corporation

CP7920 Mode 7 channel 11

DUT: Wireless IP Phone 7920; Type: CP7920

Communication System: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.99 \text{ mho/m}$, $\varepsilon_r = 52.35$, $\rho = 1000 \text{ kg/m}^3$); Liquid level: 151mm

Phantom section: Flat Section; Separation distance: 20mm(The bottom of the Phone with the holster is facing to the flat Phantom)

Antenna type: Extended Antenna; Air tempreature: 22.8 degrees; Liquid temperature: 22 degrees

DASY4 Configuration:

- Probe: ET3DV6 SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

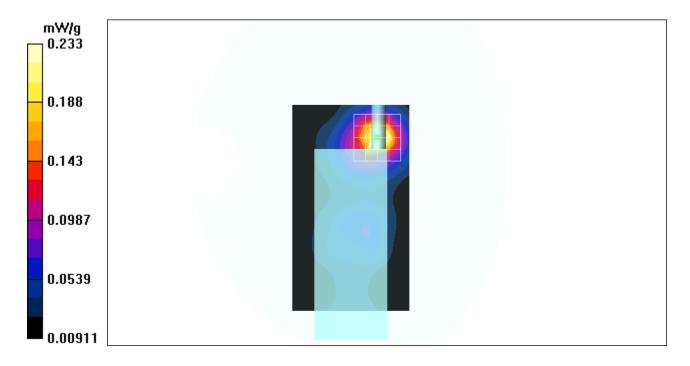
System testing procedure/Area Scan (4x7x1): Measurement grid: dx=20mm, dy=20mm System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.65 V/m

Peak SAR = 0.351 W/kg

SAR(1 g) = 0.217 mW/g; SAR(10 g) = 0.115 mW/g

Power Drift = -0.2 dB



Date/Time: 04/14/03 03:16:42

Test Laboratory: Advance Data Technology Corporation

CP7920 Mode 8 channel 01

DUT: Wireless IP Phone 7920 ; Type: CP7920

Communication System: 802.11b; Frequency: 2412 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.9 \text{ mho/m}$, $\varepsilon_r = 52.5$, $\rho = 1000 \text{ kg/m}^3$); Liquid level: 151mm

Phantom section: Flat Section; Separation distance: 20mm(The bottom of the Phone with the holster is facing to the flat Phantom)

Antenna type: Extended Antenna; Air tempreature: 22.8 degrees; Liquid temperature: 22 degrees

DASY4 Configuration:

- Probe: ET3DV6 SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

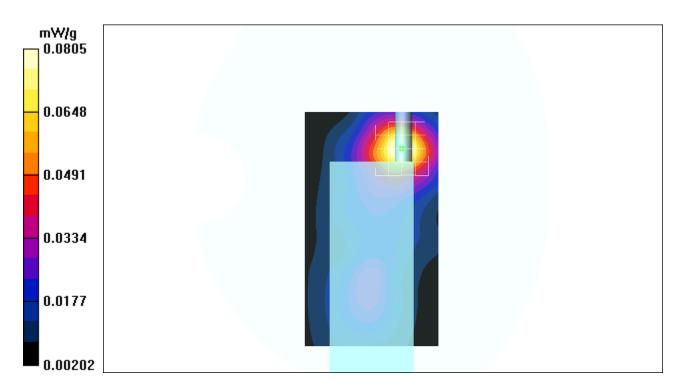
System testing procedure/Area Scan (4x7x1): Measurement grid: dx=20mm, dy=20mm System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.05 V/m

Peak SAR = 0.111 W/kg

SAR(1 g) = 0.0703 mW/g; SAR(10 g) = 0.0397 mW/g

Power Drift = -0.07 dB



Date/Time: 04/14/03 01:43:16

Test Laboratory: Advance Data Technology Corporation

CP7920 Mode 8 channel 06

DUT: Wireless IP Phone 7920 ; Type: CP7920

Communication System: 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.92 \text{ mho/m}$, $\varepsilon_r = 52.43$, $\rho = 1000 \text{ kg/m}^3$); Liquid level: 151mm

Phantom section: Flat Section; Separation distance: 20mm(The bottom of the Phone with the holster is facing to the flat Phantom)

Antenna type: Extended Antenna; Air tempreature: 22.8 degrees; Liquid temperature: 22 degrees

DASY4 Configuration:

- Probe: ET3DV6 SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

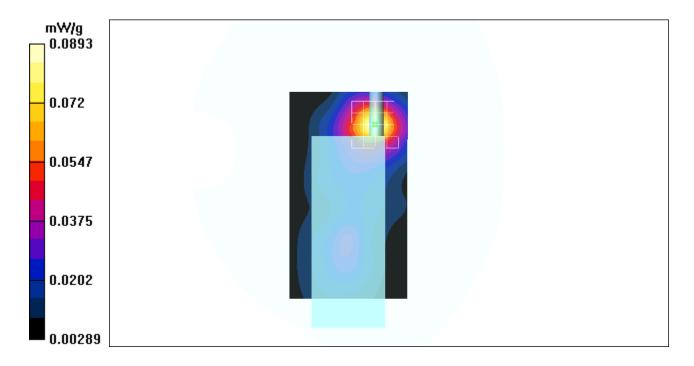
System testing procedure/Area Scan (4x7x1): Measurement grid: dx=20mm, dy=20mm System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.33 V/m

Peak SAR = 0.122 W/kg

SAR(1 g) = 0.0761 mW/g; SAR(10 g) = 0.0429 mW/g

Power Drift = -0.2 dB



Date/Time: 04/14/03 02:17:34

Test Laboratory: Advance Data Technology Corporation

CP7920 Mode 8 channel 11

DUT: Wireless IP Phone 7920 ; Type: CP7920

Communication System: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.99 \text{ mho/m}$, $\varepsilon_r = 52.35$, $\rho = 1000 \text{ kg/m}^3$); Liquid level: 151mm

Phantom section: Flat Section; Separation distance: 20mm(The bottom of the Phone with the holster is facing to the flat Phantom)

Antenna type: Extended Antenna; Air tempreature: 22.8 degrees; Liquid temperature: 22 degrees

DASY4 Configuration:

- Probe: ET3DV6 SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

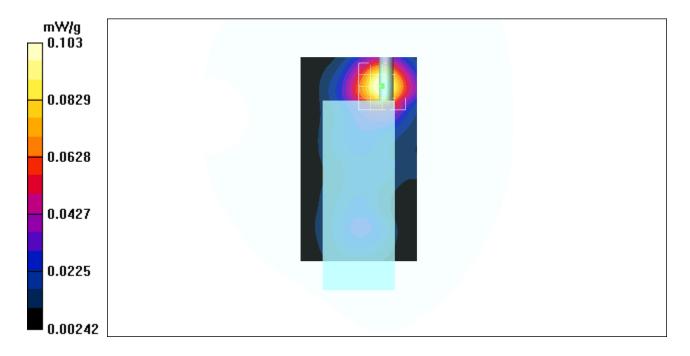
System testing procedure/Area Scan (4x7x1): Measurement grid: dx=20mm, dy=20mm System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.26 V/m

Peak SAR = 0.149 W/kg

SAR(1 g) = 0.0957 mW/g; SAR(10 g) = 0.052 mW/g

Power Drift = -0.3 dB



Date/Time: 04/14/03 00:25:06

Test Laboratory: Advance Data Technology Corporation

CP7920 Mode 9 channel 01

DUT: Wireless IP Phone 7920; Type: CP7920

Communication System: 802.11b; Frequency: 2412 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 (σ = 1.9 mho/m, ϵ_r = 52.5, ρ = 1000 kg/m³); Liquid level : 151mm

Phantom section: Flat Section; Separation distance: 15mm(The bottom of the Phone with the earphone is facing to the flat Phantom)

Antenna type: Extended Antenna; Air tempreature: 22.8 degrees; Liquid temperature: 22 degrees

DASY4 Configuration:

- Probe: ET3DV6 SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

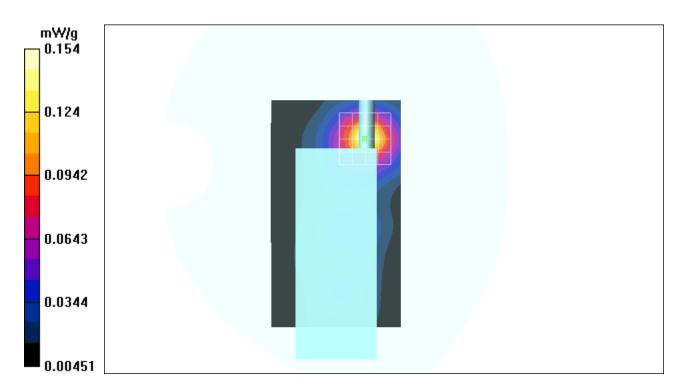
System testing procedure/Area Scan (4x7x1): Measurement grid: dx=20mm, dy=20mm System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.27 V/m

Peak SAR = 0.233 W/kg

SAR(1 g) = 0.136 mW/g; SAR(10 g) = 0.0739 mW/g

Power Drift = 0.2 dB



Date/Time: 04/14/03 00:39:20

Test Laboratory: Advance Data Technology Corporation

CP7920 Mode 9 channel 06

DUT: Wireless IP Phone 7920 ; Type: CP7920

Communication System: 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 (σ = 1.92 mho/m, ε_r = 52.43, ρ = 1000 kg/m³); Liquid level : 151mm

Phantom section: Flat Section; Separation distance: 20mm(The bottom of the Phone with the holster is facing to the flat Phantom)

Antenna type: Extended Antenna; Air tempreature: 22.8 degrees; Liquid temperature: 22 degrees

DASY4 Configuration:

- Probe: ET3DV6 SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

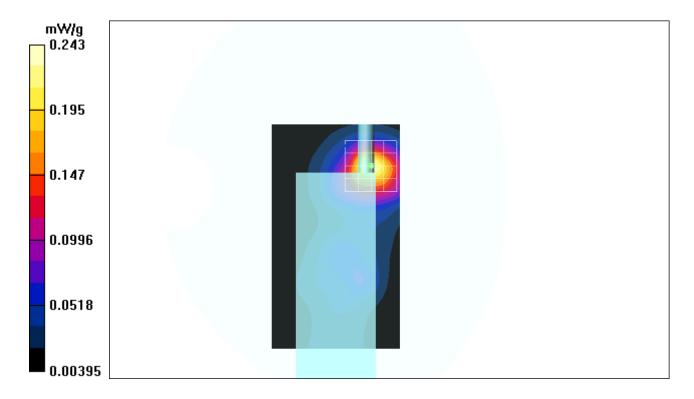
System testing procedure/Area Scan (41x71x1): Measurement grid: dx=20mm, dy=20mm System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.49 V/m

Peak SAR = 0.243 W/kg

SAR(1 g) = 0.155 mW/g; SAR(10 g) = 0.810 mW/g

Power Drift = 0.06 dB



Date/Time: 04/14/03 03:06:32

Test Laboratory: Advance Data Technology Corporation

CP7920 Mode 9 channel 11

DUT: Wireless IP Phone 7920 ; Type: CP7920

Communication System: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.99 \text{ mho/m}$, $\varepsilon_r = 52.35$, $\rho = 1000 \text{ kg/m}^3$); Liquid level: 151mm

Phantom section: Flat Section; Separation distance: 20mm(The bottom of the Phone with the holster is facing to the flat Phantom)

Antenna type: Extended Antenna; Air tempreature: 22.8 degrees; Liquid temperature: 22 degrees

DASY4 Configuration:

- Probe: ET3DV6 SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

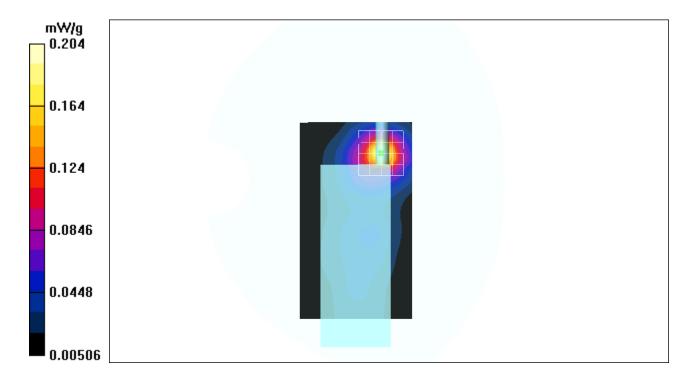
System testing procedure/Area Scan (4x7x1): Measurement grid: dx=20mm, dy=20mm System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.8 V/m

Peak SAR = 0.264 W/kg

SAR(1 g) = 0.164 mW/g; SAR(10 g) = 0.0894 mW/g

Power Drift = -0.04 dB



A3: VALIDATION TEST DATA

02/11/03

Validation Dipole D2450V2 SN:716,d=10mm

SAM; Flat

Air temperature: 21.5 degrees centigrade; Liquid temperature: 21.0 degrees centigrade

Probe: ET3DV6 - SN1687; ConvF(4.90,4.90,4.90); Crest factor: 1.0

Liquid parameters : Head 2450 MHz σ = 1.80 mho/m ϵ_r = 38.9 ρ = 1.00 g/cm³

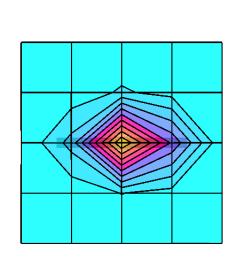
Modulation type: CW

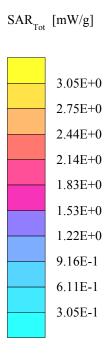
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Cubes (2): Peak: 5.57 $\text{mW/g} \pm 0.05 \text{ dB}$, SAR (1g): 2.73 $\text{mW/g} \pm 0.05 \text{ dB}$, SAR (10g): 1.26 $\text{mW/g} \pm 0.05 \text{ dB}$, (Worst-case extrapolation)

Penetration depth: 6.7 (6.5, 7.3) [mm]

Powerdrift: -0.02 dB





Date/Time: 04/14/03 03:22:44

Test Laboratory: Advance Data Technology Corporation

System Validation Check-MSL2450MHz 2003-04-14

DUT: Dipole 2450 MHz; Type: D2450V2

Communication System: CW ; Frequency: 2450 MHz; Duty Cycle: 1:1; Modulation type: CW Medium: MSL2450 (σ = 1.94 mho/m, ϵ_r = 52.4, ρ = 1000 kg/m³) ; Liquid level : 153mm

Phantom section: Flat Section; Separation distance: 10mm(The feetpoint of the dipole to the Phantom)

Air tempreature : 23 degrees ; Liquid temperature : 22.2 degrees

DASY4 Configuration:

- Probe: ET3DV6 SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

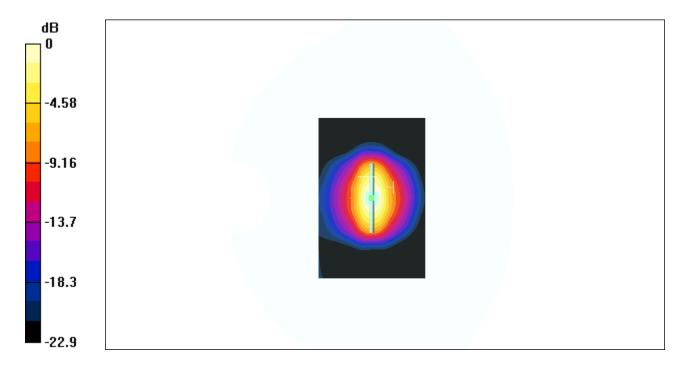
System Validation procedure/Area Scan (4x6x1): Measurement grid: dx=20mm, dy=20mm System Validation procedure/Zoon Scan (5 X 5 X 7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 39.6 V/m

Peak SAR = 4.02 W/kg

SAR(1 g) = 2.36 mW/g; SAR(10 g) = 1.15 mW/g

Power Drift = -0.2 dB



02/11/03

Cisco Wireless IP Phone 7920 Mode 4 channel 11

Separation distance: 0mm (EUT to Phantom)

Air temperature : 21.5 degrees centigrade ; Liquid temperature : 21 degrees centigrade

SAM Phantom; Section; Position: ; Antenna type: Extended Antenna Test Position: Tilt Position Modulation type: DSSS

Probe: ET3DV6 - SN1687; ConvF(4.90,4.90,4.90); Crest factor: 1.0

Test Frequency: 2462 MHz

Test Channel: 11

Liquid parameters : Head 2462 MHz σ = 1.82 mho/m ϵ_r = 38.8 ρ = 1.00 g/cm³

Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 2.0

:,()

Powerdrift: 0.03 dB

