12.1 SAR TEST DATA SUMMARY

Ambient TEMPERATURE (°C) 23.5
Relative HUMIDITY (%) 56.0
Atmospheric PRESSURE (kPa) 98.0

Mixture Type: Muscle
Dielectric Constant: 51.7
Conductivity: 1.10

12.2 Measurement Results

FREQUENCY MHz	FREQUENCY Ch.	Modulation	POWER (dBm)	Separation Distance (cm)	Antenna Position	SAR (W/kg)
824.04	991	AMPS	27.0	2.0	Fixed	1.2800
836.49	383	AMPS	27.0	2.0	Fixed	1.3012
848.97	799	AMPS	27.0	2.0	Fixed	1.1468
836.49*	383	AMPS	27.0	Hand/Touch*	Fixed	1.8995*

ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population	Body 1.6 W/kg (mW/g) averaged over 1 gram	Hand* 4.0 W/kg (mW/g) averaged over 10 grams

NOTES:

1. Power Measured ☒ Conducted ☐ EIRP ☐ ERP
2. SAR Measurement System ☐ SPEAG ☒ IDX
3. SAR Configuration ☐ Head ☒ Body ☒ Hand

Randy Ortanez
President & Chief Engineer

Figure 9. SAR Test Setup

File : c:/idx3/SYSTEM/SARMEAS3/data/Normal/00040612_ZOOM.VLT
Start : 6-Apr-100 12:35:04 pm End : 6-Apr-100 12:46:59 pm

Radio Type : OWB1TM-0034-0001
Model Number : 1TM-0034-0001
Serial Number : 0001
Frequency : 836.49 MHz
Peak Trans. Pwr : 0.500 W
Start Trans. Pwr: 0.500 W
Antenna Type : Helical
Antenna Posn. : Out
Phantom Type : Body
Phantom Posn. : Abdomen
Scan Type : ZOOM/SAR
Probe Name : PCTEST
Field Type : E Field
Orientation : 0 Degrees

Mixture Type = Muscle
Mixture Dielectric Constant = 51.700
Mixture Conductivity = 1.100

Comment :
TELIRAN AMPS PCMCIA CARD
CHAN 0383 SAR 27.0 dBm CONDUCTED
BODY SAR (LAP MODE)

Robot : PCTEST

Probe Offset = 0.25 cm
Sensor Factor = 0.0108
Conversion Factor = 0.894

PCTEST Amplifier Channel Settings : 0.166 0.135 0.132

Max Location : X = 1.250, Y = 0.000, Z = 0.000 (cm) Value = 17.382

Measured Values (volts) =

1.723E-002	1.269E-002	1.065E-002	9.478E-003	8.555E-003	7.730E-003
6.822E-003	5.805E-003	4.727E-003	3.596E-003	2.755E-003	1.984E-003
1.478E-003	1.283E-003	1.332E-003	1.543E-003	1.738E-003	1.896E-003
1.693E-003	1.209E-003	7.580E-004			

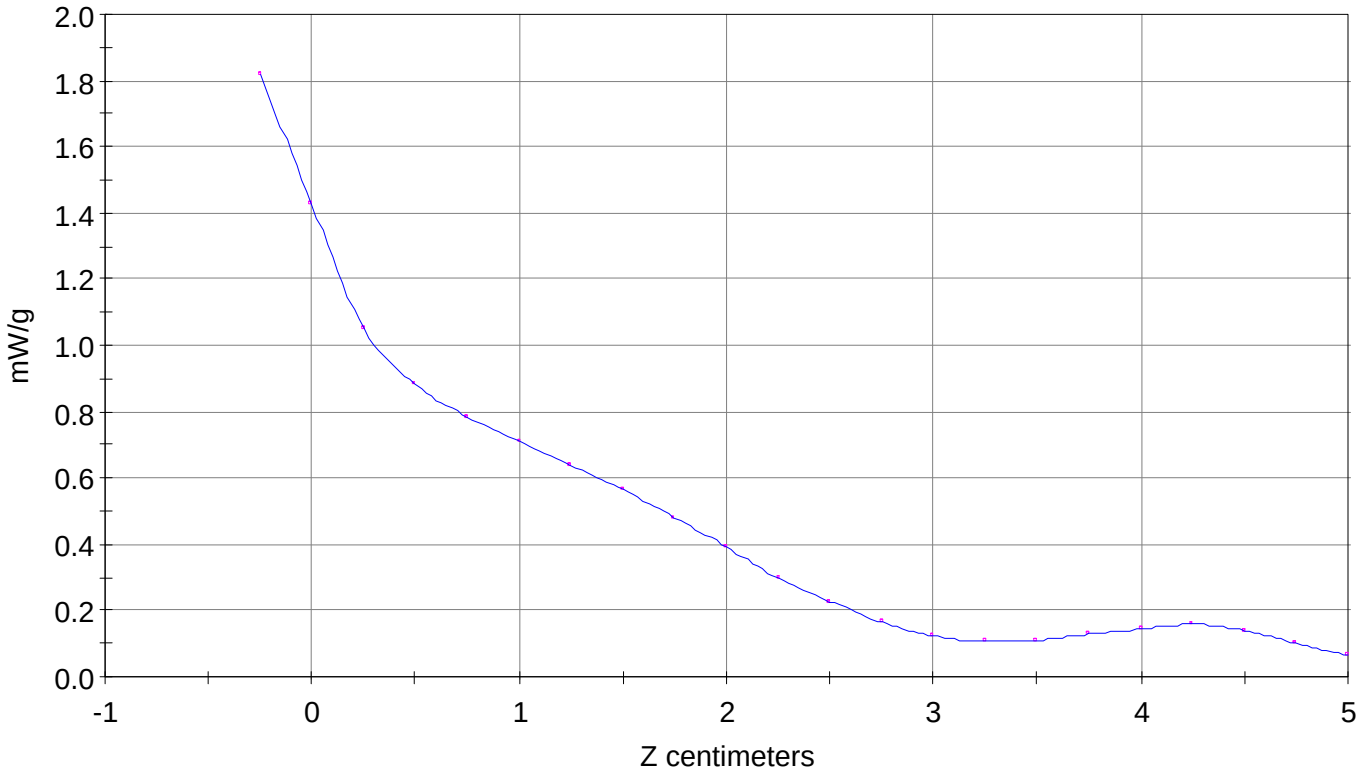
Calc. Voltage @ Surface (Vs) = 0.0220

Voltage @ 1.00 cm (Vt) = 0.0095

Ave. Voltage (Vs+Vt)/2 = 0.0157

Ave. SAR over 1 g (mW/g) = 1.3012

SAR Scan
File : 00040612_ZOOM
Start : 6-Apr-100 12:35:04 pm End : 6-Apr-100 12:46:59 pm
OWB1TM-0034-0001/1TM-0034-0001/0001;836.49MHz;W;Helical/Out;
Body/Abdomen;ZOOM/SAR;PCTEST/E Field/0 DegreesMuscle/51.700/1.100



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Start : 6-Apr-100 12:35:04 pm End : 6-Apr-100 12:46:59 pm
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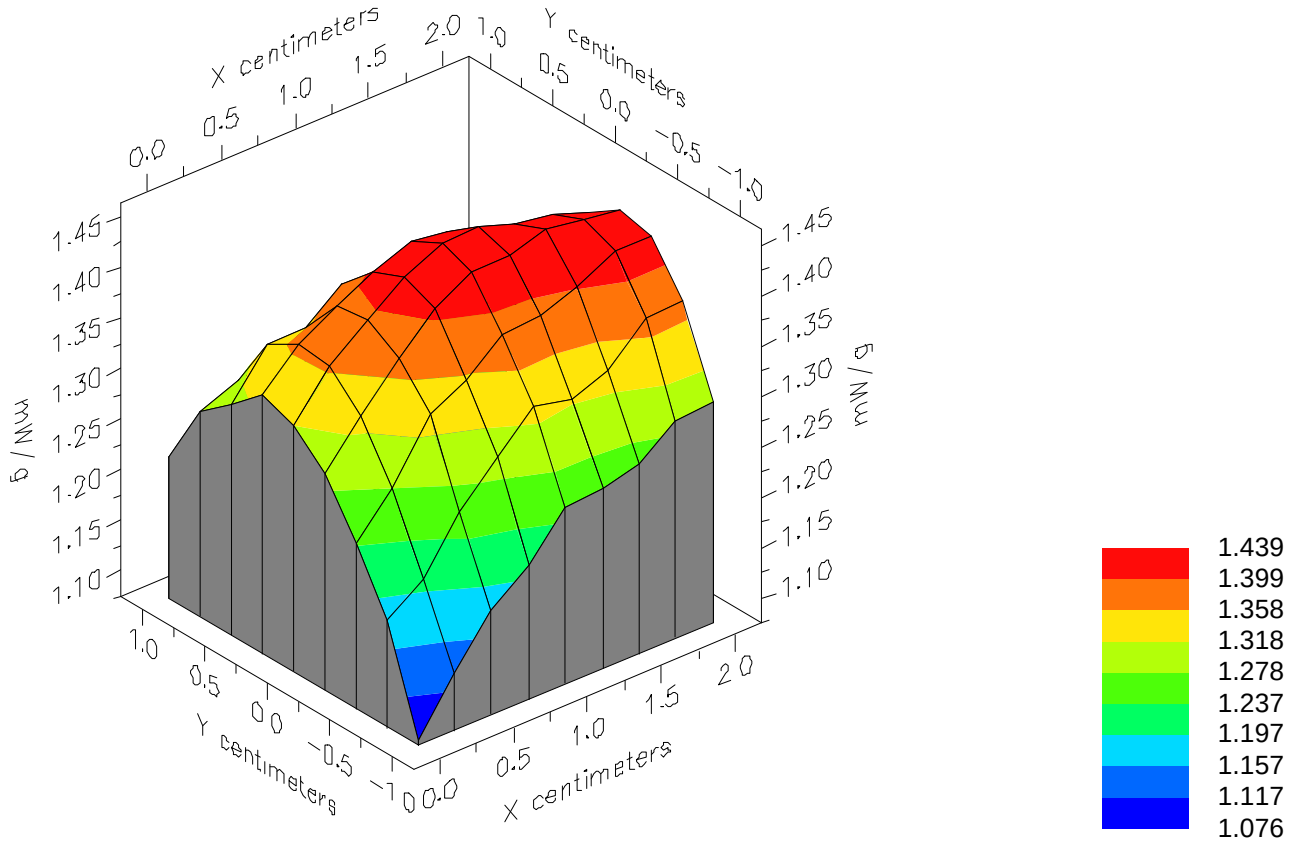
Body/Abdomen;ZOOM/SAR;PCTEST/E Field/0 DegreesMuscle/51.700/1.100



File : 00040612_ZOOM
Start : 6-Apr-100 12:35:04 pm End : 6-Apr-100 12:46:59 pm
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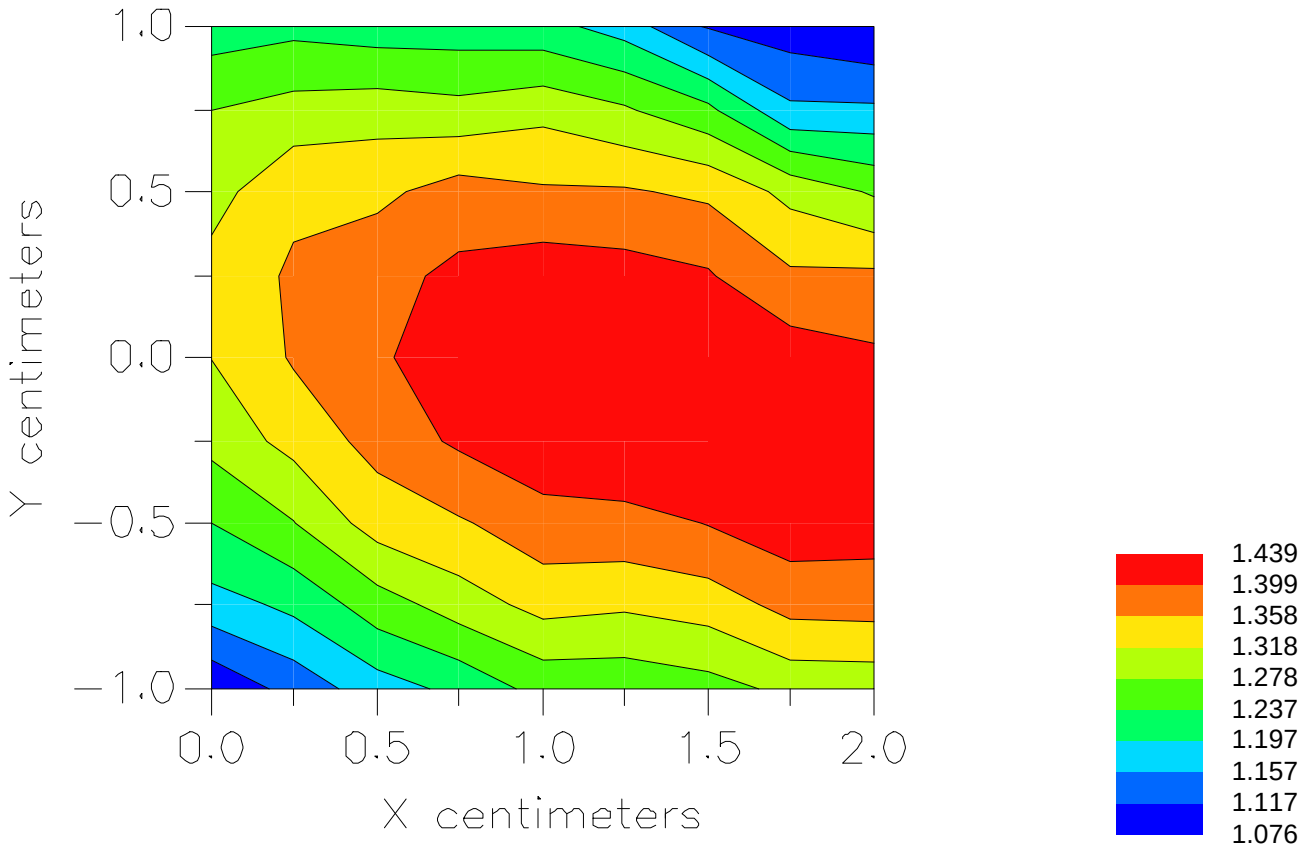
Body/Abdomen;ZOOM/SAR;PCTEST/E Field/0 DegreesMuscle/51.700/1.100



File : c:/idx3/SYSTEM/SARMEAS3/data/Normal/00040613_ZOOM.VLT
Start : 6-Apr-100 12:55:37 pm End : 6-Apr-100 01:07:49 pm

Radio Type : OWB1TM-0034-0001
Model Number : 1TM-0034-0001
Serial Number : 0001
Frequency : 824.04 MHz
Peak Trans. Pwr : 0.500 W
Start Trans. Pwr: 0.500 W
Antenna Type : Helical
Antenna Posn. : Out
Phantom Type : Body
Phantom Posn. : Abdomen
Scan Type : ZOOM/SAR
Probe Name : PCTEST
Field Type : E Field
Orientation : 0 Degrees

Mixture Type = Muscle
Mixture Dielectric Constant = 51.700
Mixture Conductivity = 1.100

Comment :
TELIRAN AMPS PCMCIA CARD
CHAN 0991 SAR 27.0 dBm CONDUCTED
BODY SAR (LAP MODE)

Robot : PCTEST

Probe Offset = 0.25 cm
Sensor Factor = 0.0108
Conversion Factor = 0.894

PCTEST Amplifier Channel Settings : 0.166 0.135 0.132

Max Location : X = 1.500, Y = -0.250, Z = 0.000 (cm) Value = 16.979

Measured Values (volts) =
1.695E-002 1.242E-002 1.054E-002 9.360E-003 8.400E-003 7.476E-003
6.654E-003 5.701E-003 4.657E-003 3.616E-003 2.711E-003 1.962E-003
1.462E-003 1.244E-003 1.262E-003 1.459E-003 1.661E-003 1.805E-003
1.708E-003 1.233E-003 7.882E-004

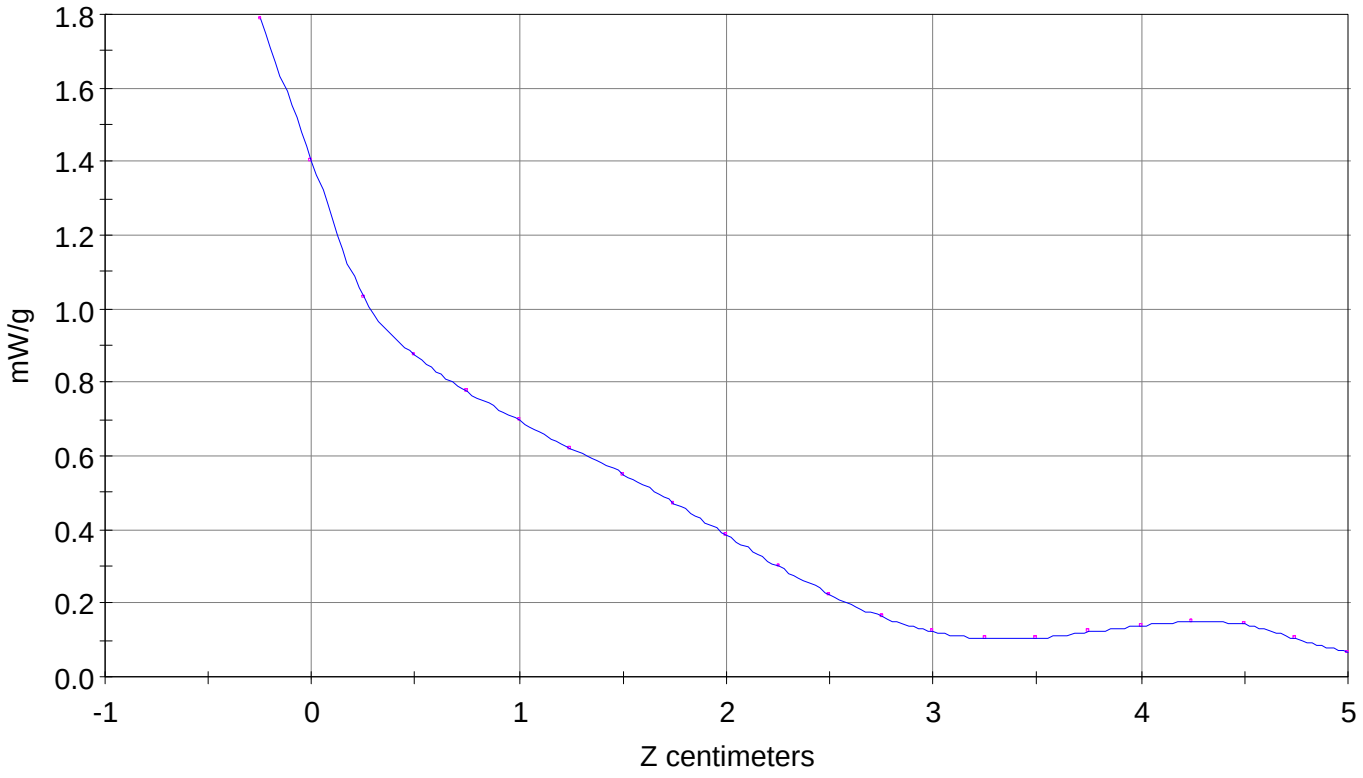
Calc. Voltage @ Surface (Vs) = 0.0216

Voltage @ 1.00 cm (Vt) = 0.0094

Ave. Voltage (Vs+Vt)/2 = 0.015

Ave. SAR over 1 g (mW/g) = 1.280

SAR Scan
File : 00040613_ZOOM
Start : 6-Apr-100 12:55:37 pm End : 6-Apr-100 01:07:49 pm
OWB1TM-0034-0001/1TM-0034-0001/0001;824.04MHz;W;Helical/Out;
Body/Abdomen;ZOOM/SAR;PCTEST/E Field/0 DegreesMuscle/51.700/1.100



File : c:/idx3/SYSTEM/SARMEAS3/data/Normal/00040614_ZOOM.VLT
Start : 6-Apr-100 01:13:39 pm End : 6-Apr-100 01:22:38 pm

Radio Type : OWB1TM-0034-0001
Model Number : 1TM-0034-0001
Serial Number : 0001
Frequency : 848.97 MHz
Peak Trans. Pwr : 0.500 W
Start Trans. Pwr: 0.500 W
Antenna Type : Helical
Antenna Posn. : Out
Phantom Type : Body
Phantom Posn. : Abdomen
Scan Type : ZOOM/SAR
Probe Name : PCTEST
Field Type : E Field
Orientation : 0 Degrees

Mixture Type = Muscle
Mixture Dielectric Constant = 51.700
Mixture Conductivity = 1.100

Comment :
TELIRAN AMPS PCMCIA CARD
CHAN 799 SAR 27.0 dBm CONDUCTED
BODY SAR (LAP MODE)

Robot : PCTEST

Probe Offset = 0.25 cm
Sensor Factor = 0.0108
Conversion Factor = 0.894

PCTEST Amplifier Channel Settings : 0.166 0.135 0.132

Max Location : X = 1.500, Y = 0.000, Z = 0.000 (cm) Value = 15.477

Measured Values (volts) =

1.510E-002	1.056E-002	9.050E-003	8.111E-003	7.376E-003	6.557E-003
5.797E-003	4.981E-003	3.926E-003	2.967E-003	2.279E-003	1.591E-003
1.187E-003	1.044E-003	1.108E-003	1.290E-003	1.489E-003	1.569E-003
1.398E-003	9.705E-004	5.972E-004			

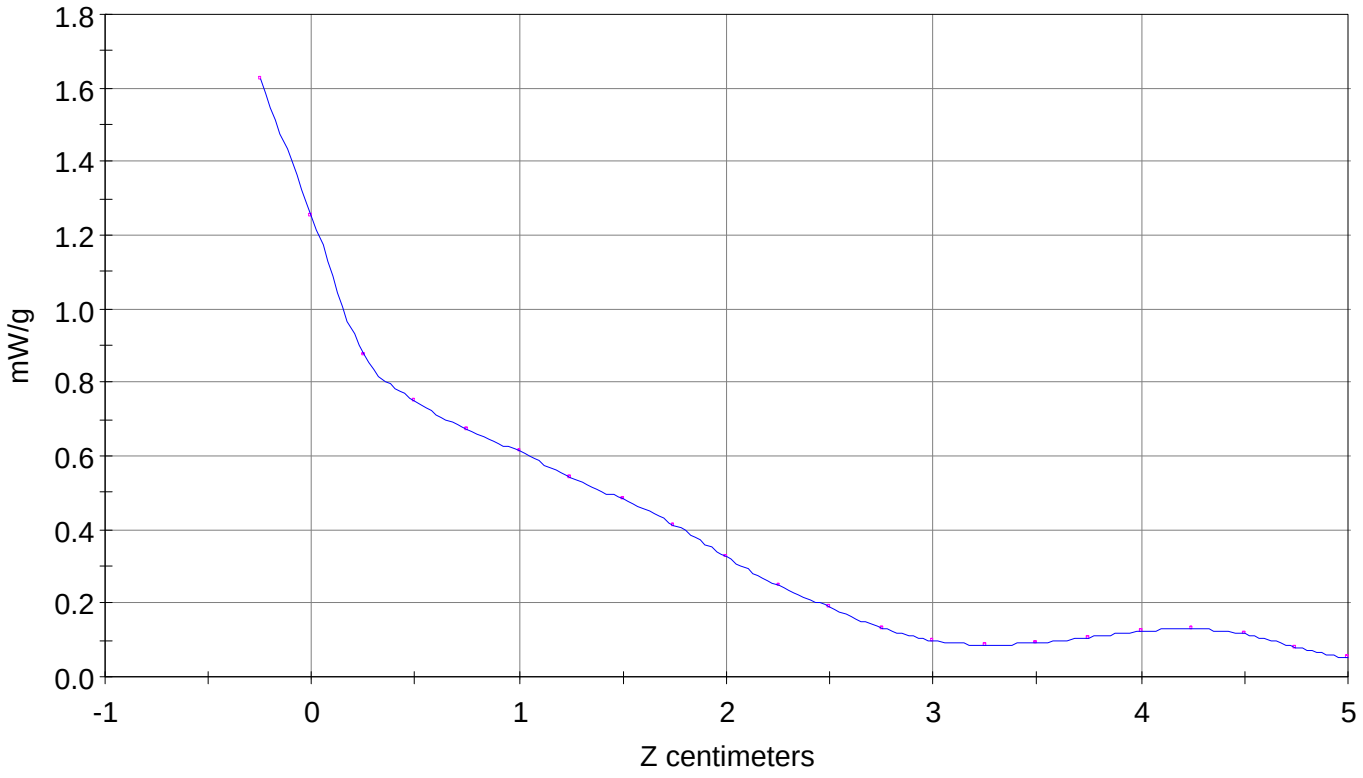
Calc. Voltage @ Surface (Vs) = 0.0196

Voltage @ 1.00 cm (Vt) = 0.0081

Ave. Voltage (Vs+Vt)/2 = 0.013[illegible]

Ave. SAR over 1 g (mW/g) = 1.146[illegible]

SAR Scan
File : 00040614_ZOOM
Start : 6-Apr-100 01:13:39 pm End : 6-Apr-100 01:22:38 pm
OWB1TM-0034-0001/1TM-0034-0001/0001;848.97MHz;W;Helical/Out;
Body/Abdomen;ZOOM/SAR;PCTEST/E Field/0 DegreesMuscle/51.700/1.100



File : c:/idx3/SYSTEM/SARMEAS3/data/Normal/00040610_SAR.VLT
Start : 6-Apr-100 11:44:17 am End : 6-Apr-100 11:50:51 am

Radio Type : OWB1TM-0034-0001
Model Number : 1TM-0034-0001
Serial Number : 0001
Frequency : 835 MHz
Peak Trans. Pwr : 0.500 W
Start Trans. Pwr: 0.500 W
Antenna Type : Helical
Antenna Posn. : Out
Phantom Type : Body
Phantom Posn. : Abdomen
Scan Type : ZOOM/SAR 10g
Probe Name : PCTEST
Field Type : E Field
Orientation : 0 Degrees

Mixture Type = Muscle
Mixture Dielectric Constant = 51.700
Mixture Conductivity = 1.100

Comment :
TELIRAN AMPS PCMCIA CARD
CHAN 0383 SAR 27.0 dBm CONDUCTED
HAND SAR

Robot : PCTEST

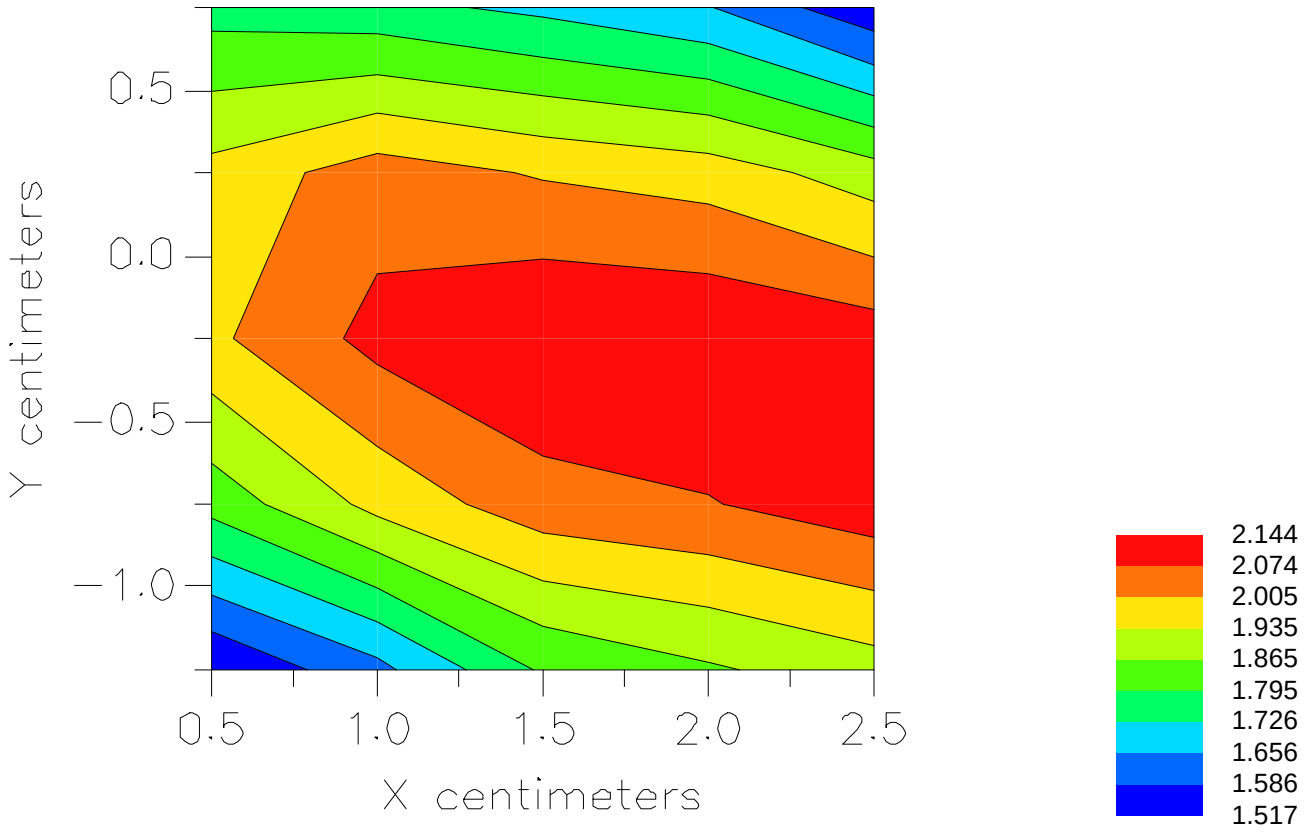
Probe Offset = 0.25 cm
Sensor Factor = 0.0108
Conversion Factor = 0.894

PCTEST Amplifier Channel Settings : 0.166 0.135 0.132

Max Location : X = 1.500, Y = -0.250, Z = 0.000 (cm) Value = 42.805

Ave. SAR over 10 g (mW/g) = 1.8995

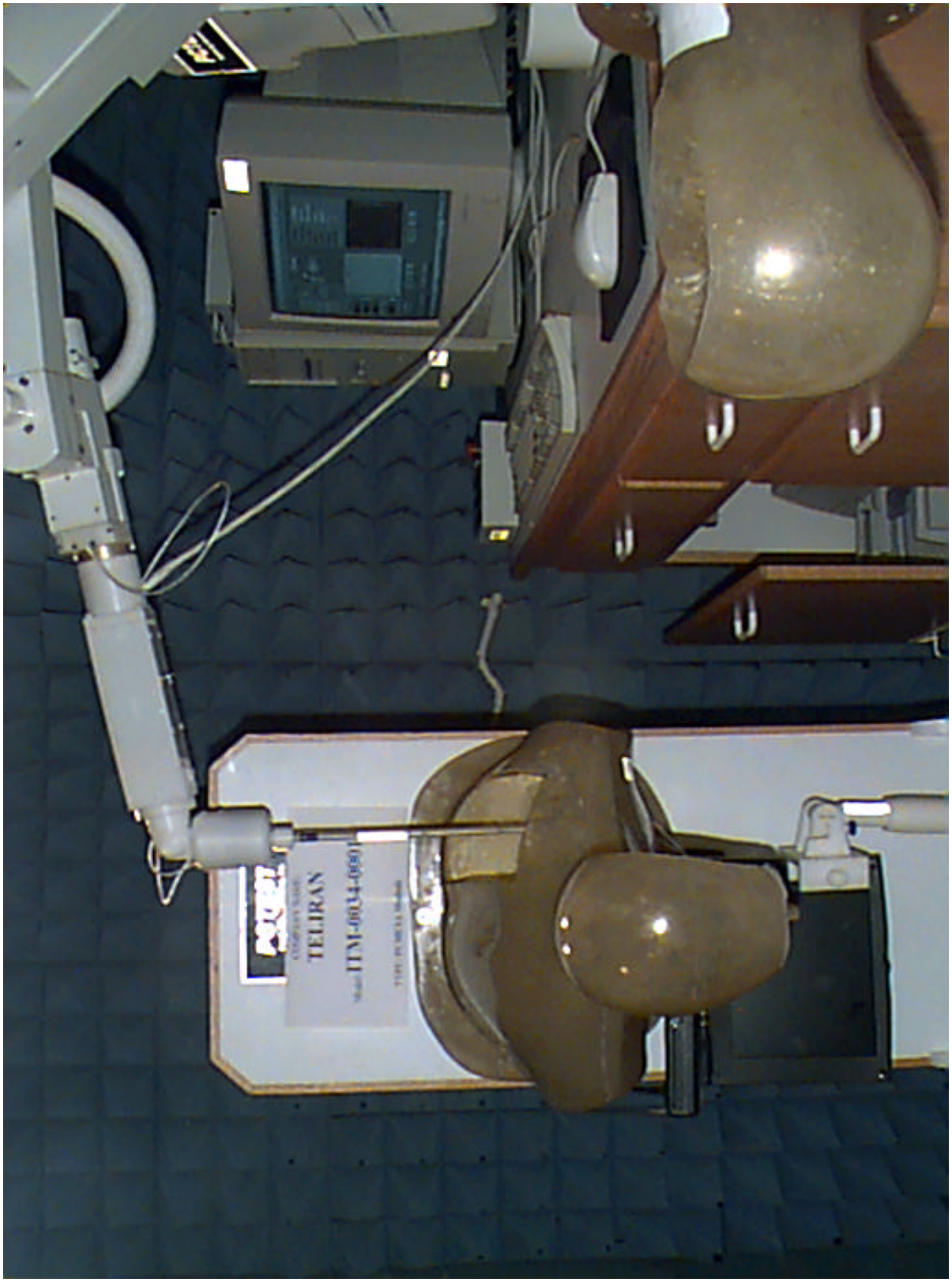
File : 00040610_SAR
Start : 6-Apr-100 11:44:17 am End : 6-Apr-100 11:50:51 am
OWB1TM-0034-0001/1TM-0034-0001/0001;835MHz;W;Helical/Out;
Body/Abdomen;ZOOM/SAR 10g;PCTEST/E Field/0 DegreesMuscle/51.700/1.100



Insert this side up
The Cellphone Inside This Card
Gives You: wireless•landline•phone
fax•modem•email•web•internet
anytime•anywhere•access•laptop
notebook•palmtop•pc card
GLOBE
com.plete PCcard
PC Card
Y centimeters
X centimeters

TELIRAN

PCTEST
TELIRAN
ITM-0034-0001


TELIRAN

PCTEST
COMPANY NAME
TELIRAN
Model ITM-0034-00
TYPE: PCMCIA Module

DELL
Latitude XPi