SAR Measurement Report

For the compliance of Motorola Communications Devices with the American National Standard Institute, ANSI/IEEE C95.1, 1992. Standard for Safety level with respect to Human Exposure to Radiofrequency Electromagnetic Fields 3KHz to 300GHz.

Radio Type Fixed Wireless Terminal

Model # ST1052eA

Serial # 1e34GZB54V5

Transmitter Freq. (MHz) 836.52

Transmitter Power (Watts) .2 continuous pulse

Antenna Type Centerstyled

Battery Type AC adapter

Test Conditions full body; abdomen; muscle

Volume for Spatial Peak SAR Averaging (cm^3) 1

Spatial Peak Measured SAR Average (mW/g) .02

Transmitter Power Start .2 Transmitter Power End .2

Transmitter Peak Power 1

Equation for max expected SAR value:

(Peak Power/Power End) x measured SAR = max expected SAR mW/g

(1 / .2) x .02 = .1 mW/g

If push to talk 50% duty cycle:

max expected SAR/2 = time averaged SAR mW/g

N/A /2 = N/A mW/g

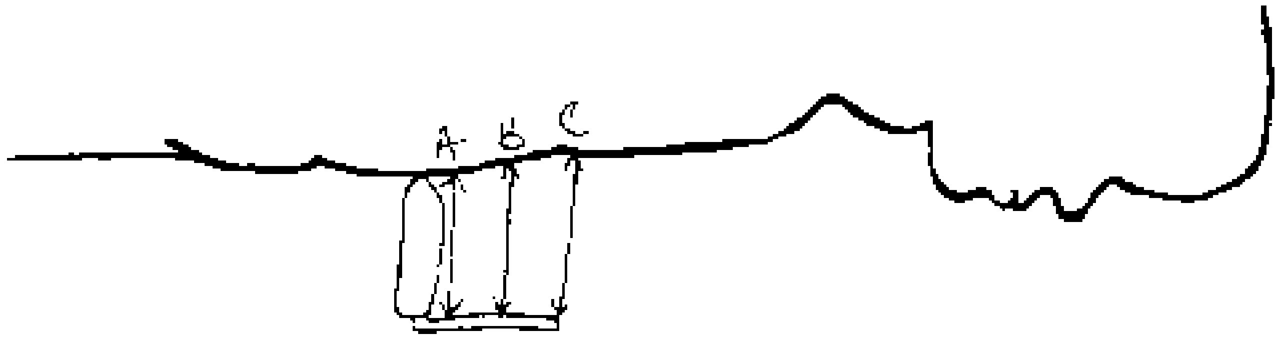
Observations: Unit distance of antenna to abdomen was far enough to graphically measuring the noise level

Performed By : Danny Zakharia Date : 3/16/99

Approved By : [signature] Date : 4/7/99

Form Revised: March 1998

IX?? Wireless Terminal
Model # ST1056A (?)
Serial # 634GZB5HY5



Unit front edge against abdomen as if sitting down; antenna at 90°

Distance of antenna to abdomen

A = 190mm

B = 200mm

C = 210mm

: 3.58

ice Type : Fixed Wireless Terminal (FWT)
del Number : ST1056A
rial Number : 634GZ854V5
quency : 836.52 MHz
CW Trans. Pwr : 0.200 W
rst Trans. Pwr: 0.200 W
tenna Type : Center Fed
tenna Posn. : Out
ntom Type : Body
ntom Posn. : Abdomen
n Type : ZOOM/SAR
ne Name : p041
ld Type : E Field
entation : 0 Degrees

ture Type = Muscle
ture Dielectric Constant = 54.600
ture Conductivity = 1.070

ment :
Unit front side against Abdomen; as if it were sitting on a table
Antenna at 90 degree angle

ot : MOBILE ROBOT

ce Offset = 0.29 mm
sor Factor = 0.0108
version Factor = 5.915

el Amplifier Channel Settings : 0.152 0.154 0.116

k Location : X = 0.250, Y = -3.500, Z = 0.000 (mm) Value = 0.359

asured Values (volts) =
2.782E-004 2.525E-004 2.413E-004 2.225E-004 1.773E-004 1.749E-004
1.208E-004 1.380E-004 7.220E-005 7.096E-005 6.534E-005

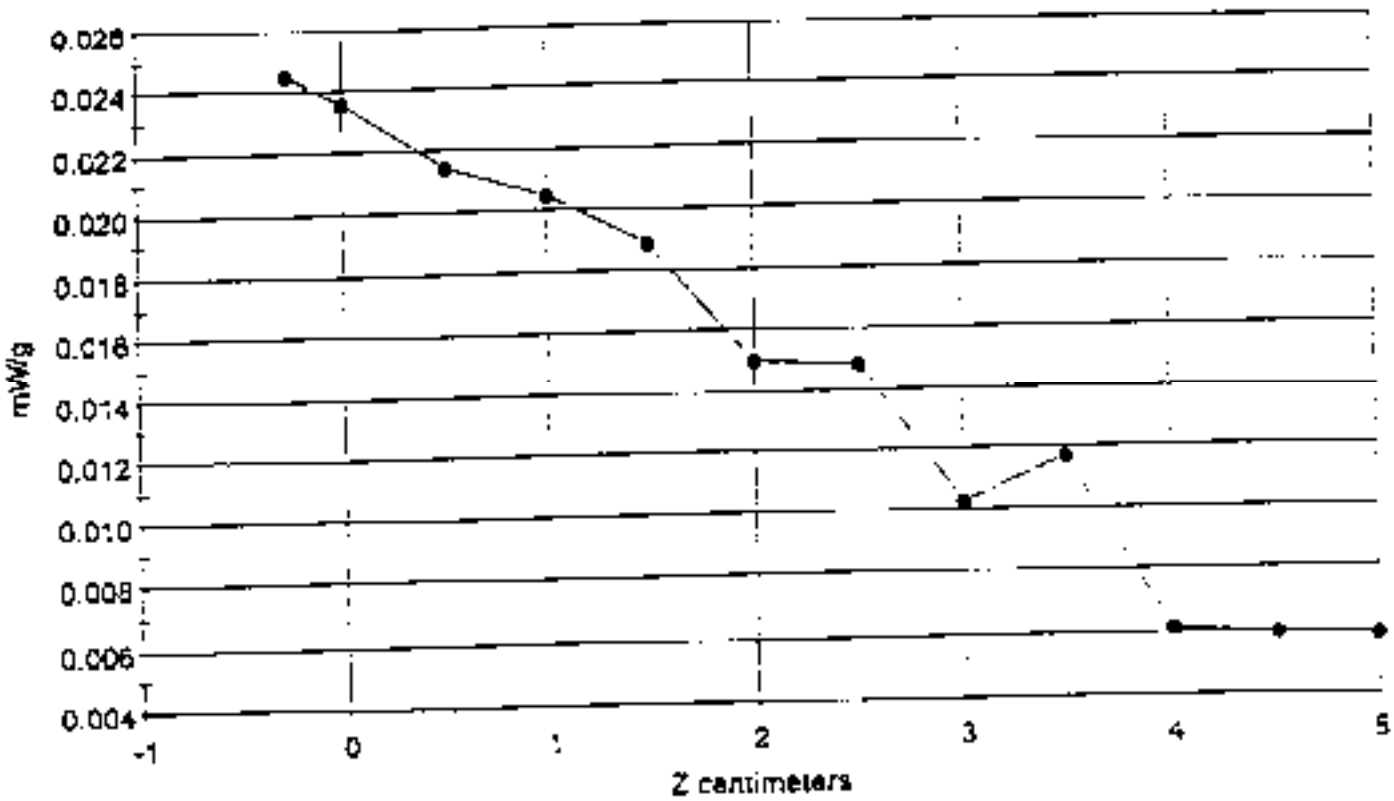
lc. Voltage @ Surface (Vs) = 0.0003

ltage @ 1.00 cm (Vt) = 0.0002

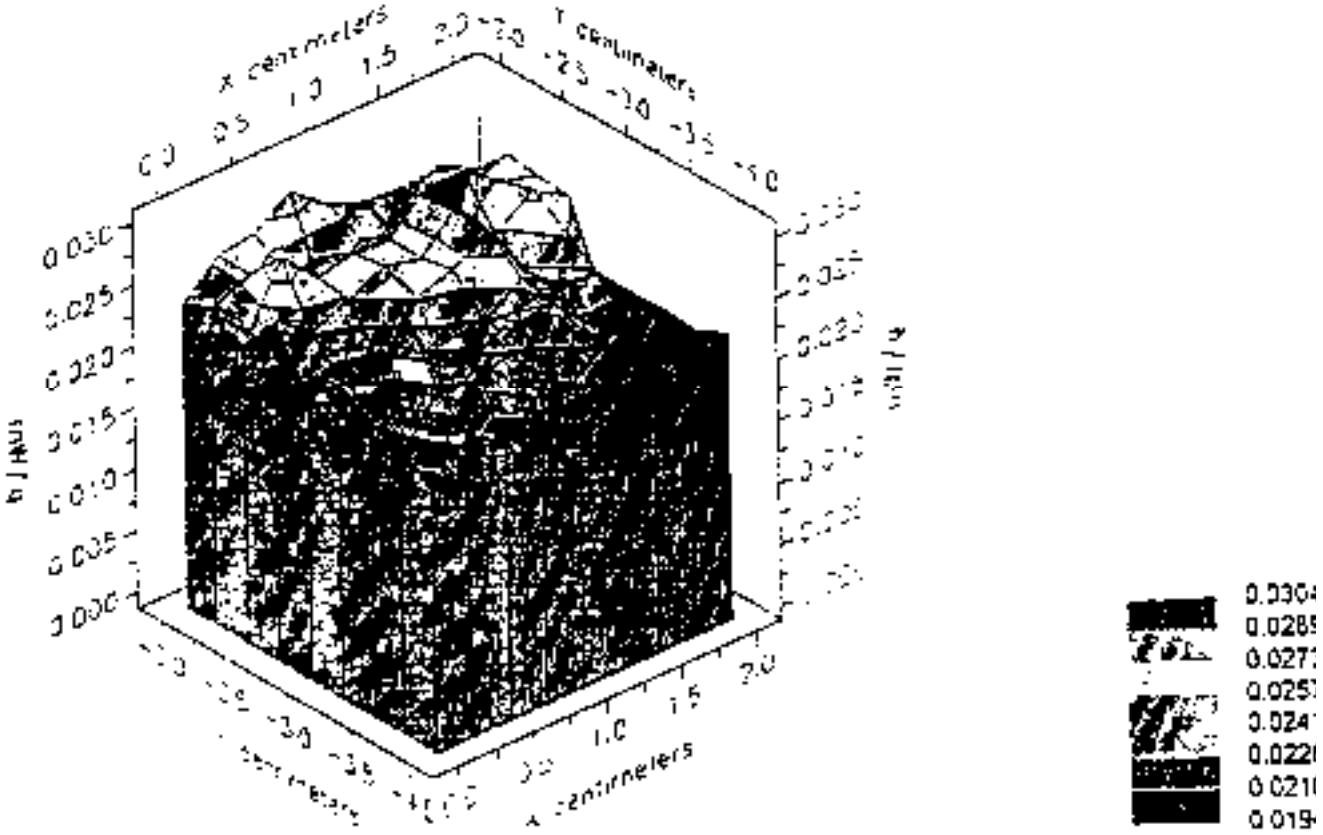
g. Voltage (Vs+Vt)/2 = 0.0003

e. SAR over 1 g (mW/g) = 0.0227

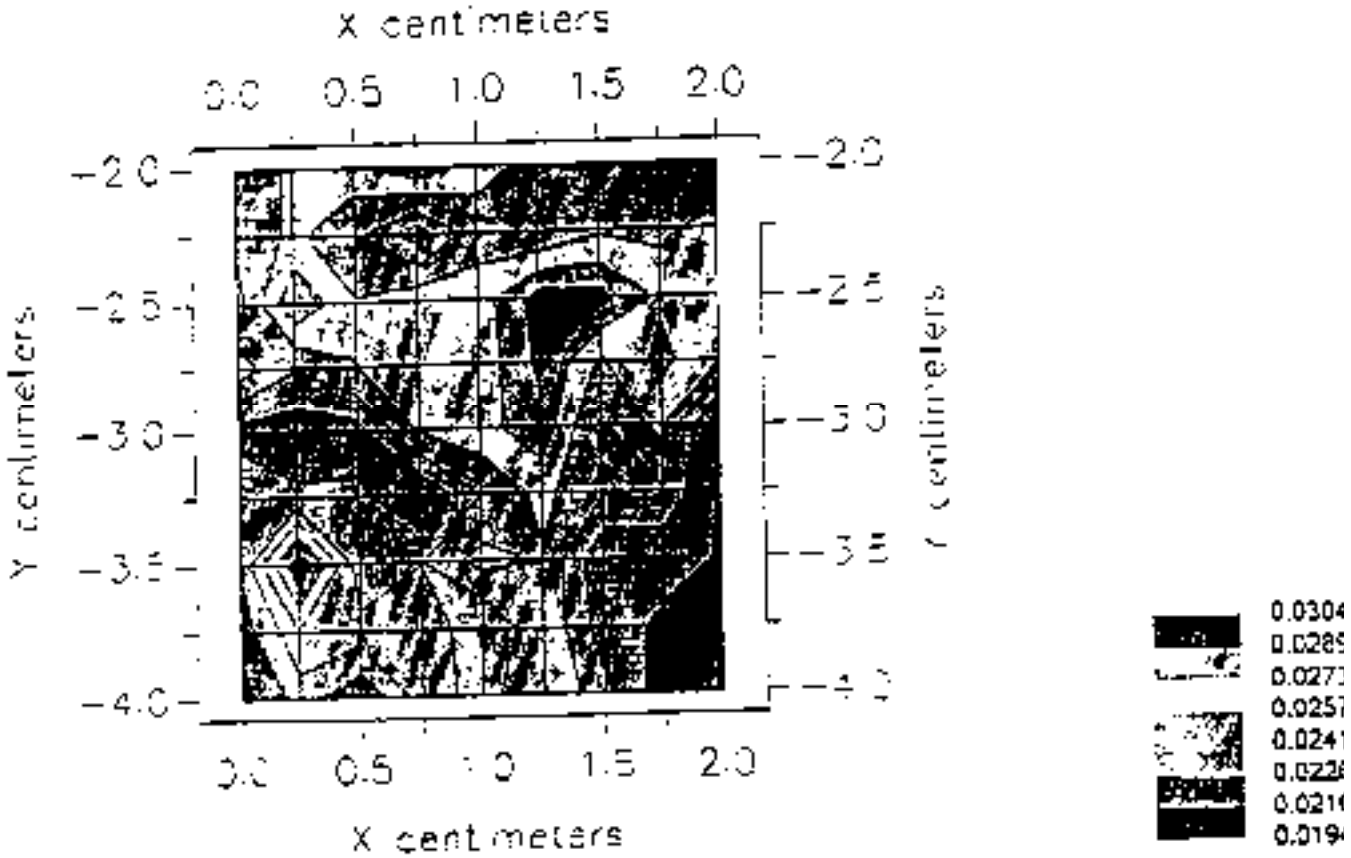
SAR Scan
File 99031603_ZOOM.VLT
Start : 16-Mar-99 10:21:36 am End : 16-Mar-99 10:33:28 am
Fixed Wireless Terminal (FWT)/ST1056A/ 634GZB54V5; 836.52MHz;W Center Fed/Out;
Body/Abdomen;ZOOM/SAR;p041/E Field/0 DegreesMuscle/54 600/1.070
3.58



File : 99031603_ZOOM.VLT
Start : 16-Mar-99 10:21:36 am End : 16-Mar-99 10:33:28 am
ixed Wireless Terminal (FWT)/ST1056A/ 834GZB54v5; 836.52MHz;W,Center Fed/Out;
Body/Abdomen;ZOOM/SAR,p041/E Field/0 DegreesMuscle/54.600/1.070
3.58



File : 99031603_ZOOM.VLT
Start : 16-Mar-99 10:21:36 am End : 16-Mar-99 10:33.28 am
xed Wireless Terminal (FWT)/ST1056A/ 634GZB54V5; 836.52MHz;W;Center Fed/Out;
Body/Abdomen;ZOOM/SAR;p041/E Field/0 DegreesMuscle/54.600/1.070
3.56



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Motorola Florida Research Laboratories

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For the compliance of Motorola Communications Devices with the American National Standard Institute, ANSI/IEEE C95.1, 1992. Standard for Safety level with respect to Human Exposure to Radiofrequency Electromagnetic Fields 3KHz to 300GHz.

Radio Type Fixed Wireless Terminal

Model # ST1056A

Serial # 634G7B54V5

Transmitter Freq. (MHz) 836.52

Transmitter Power (Watts) .2 continuous power

Antenna Type Center fed

Battery Type AC adapter

Test Conditions full body, abdomen; muscle

Volume for Spatial Peak SAR Averaging (cm³) 1

Spatial Peak Measured SAR Average (mW/g) 1.1

Transmitter Power Start .2 Transmitter Power End .2

Transmitter Peak Power 1

Equation for max expected SAR value:

(Peak Power/Power End) x measured SAR = max expected SAR mW/g

(1 / .2) x 1.1 = 5.5 mW/g

If push to talk 50% duty cycle:

max expected SAR/2 = time averaged SAR mW/g

N/A /2 = N/A mW/g

Observations: Antenna is 2.5cm from body

Performed By: [signature] Date: 3/23/99

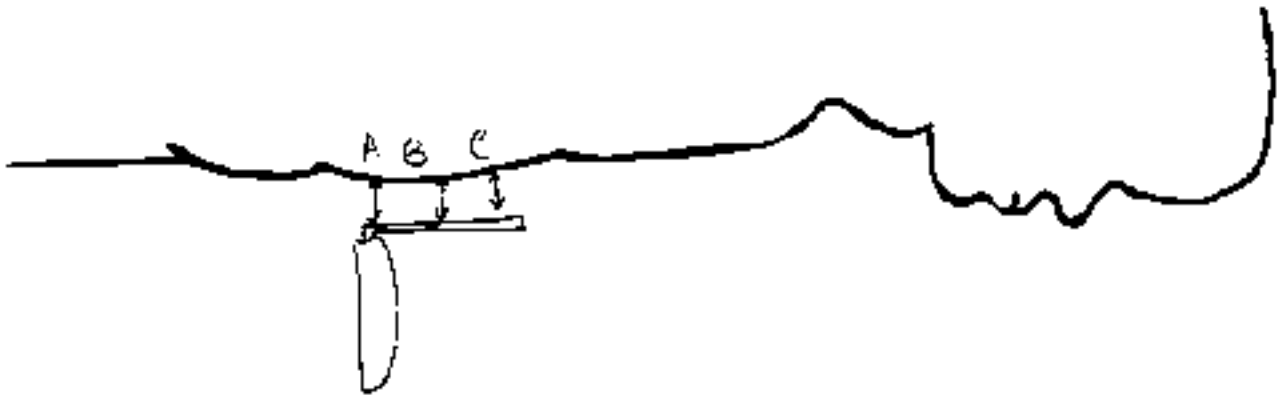
Approved By: [signature] Date: 4/7/99

Form Revised: March 1999

Red Wireless [illegible]

Model # STIC5loA (bme)

Serial # 634GZ854V5



Backside of unit w/antenna facing abdomen

Distances of antenna

A = 25 mm

B = 25 mm

C = 30 mm

: 3.58

o Type : Fixed Wireless Terminal (FWT)
l Number : 8T10018
al Number : 634DxW1045
uency : 836.52 MHz
Trans. Pwr : 0.200 W
c Trans. Pwr: 0.200 W
nna Type : Center Fed
nna Posn. : Out
com Type : Body
com Posn. : Abdomen
. Type : SAR
e Name : p041
d Type : E Field
ntation : 0 Degrees

ure Type = Muscle
ure Dielectric Constant = 54.820
ure Conductivity = 1.070

ment :
Unit back edge w/antenna facing abdomen
Antenna is 2.5 cm away

pe : MOBILE ROBOT

e Offset = 0.28 cm
ser Factor = 0.0108
version factor = 0.915

1 Amplifier Channel Settings : 0.192 0.154 0.116

Location : X = -11.500, Y = -0.500, Z = 0.000 (cm) Value = 14.629

surad Values (volts) =
.423E-002 1.028E-002 9.668E-003 8.112E-003 6.877E-003 5.875E-003
.103E-003 4.372E-003 3.692E-003 3.163E-003 2.747E-003 2.343E-003
.098E-005

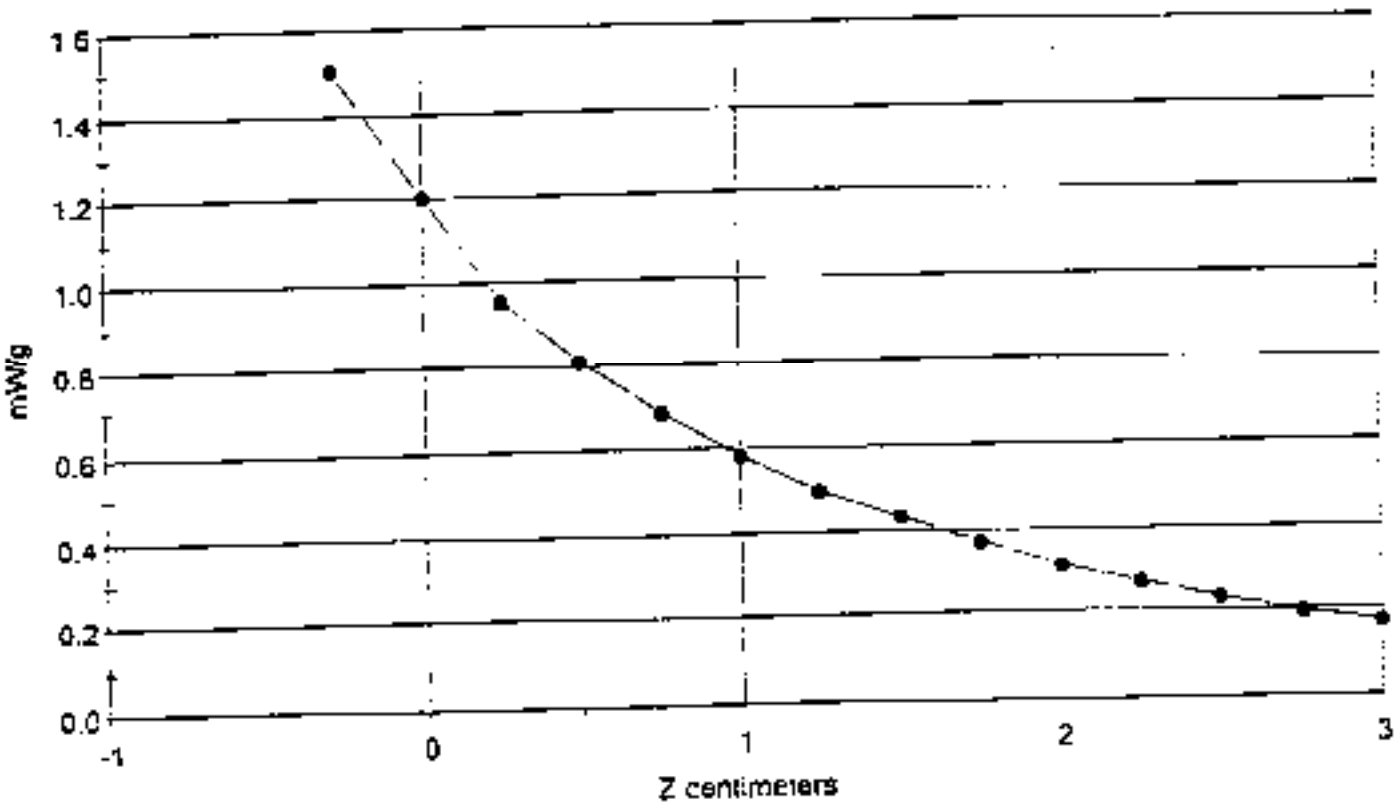
. Voltage @ Surface (Va) = 0.0178

tage @ 1.00 cm (Vc) = 0.0083

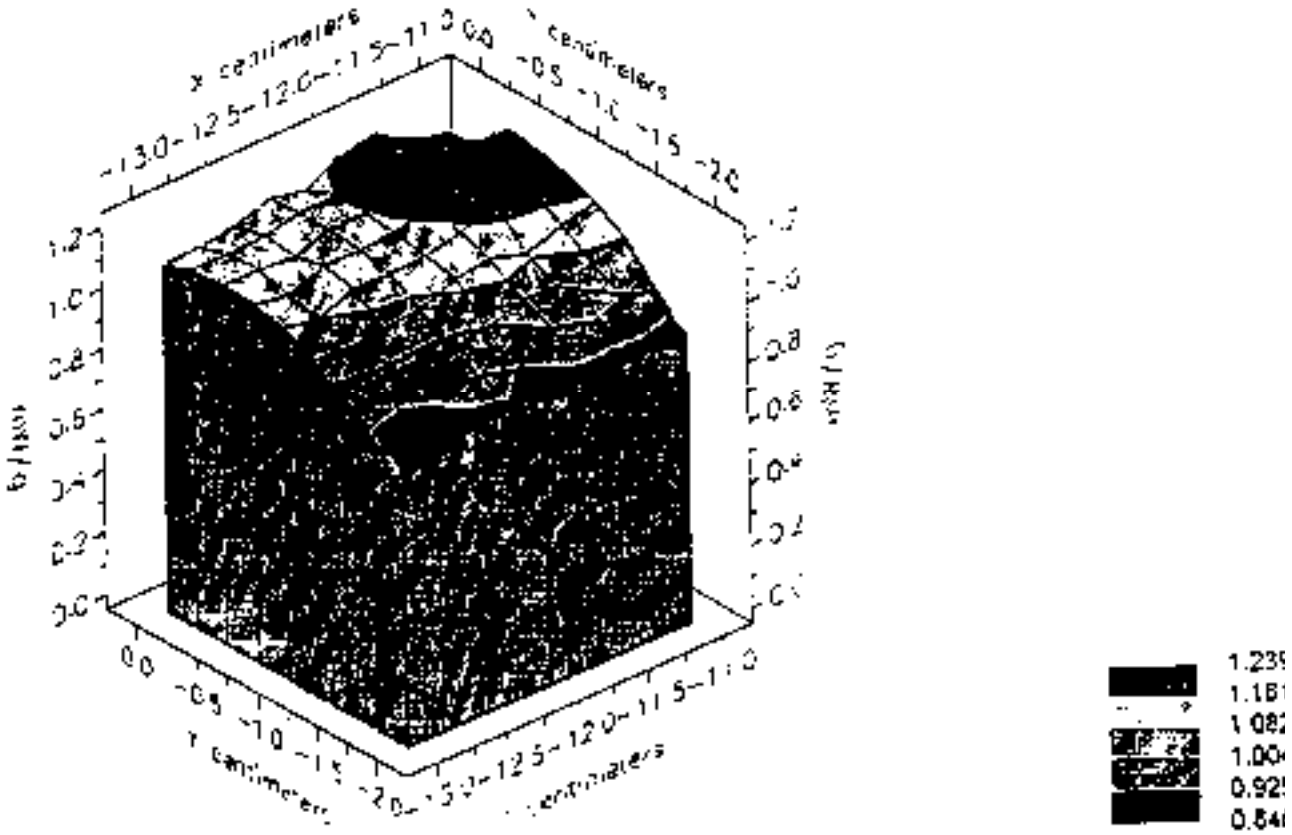
. Voltage (Va+Vc)/2 = 0.0130

. SAR over 1 g (mW/g) = 1.1040

SAR Scan
File : 99032306_ZOOM.VLT
Start : 23-Mar-99 02:14:02 pm End : 23-Mar-99 02:14:34 pm
Fixed Wireless Terminal (FWT)/ST1001B/634DXW1045;836.52MHz;W;Center Fed/Out;
Body/Abdomen;SAR;p041/E Field/0 DegreesMuscle/54 600/1 070
3.58



File : 99032305_ZOOM.VLT
Start : 23-Mar-99 01:57:35 pm End : 23-Mar-99 02:06:12 pm
Fixed Wireless Terminal (FWT)/ST1056A/834GZB54V5;836.52MHz;W:Center Fed/Out;
Body/Abdomen;ZOOM/SAR;p041/E Field/0 DegreesMuscle/54.600/1.070
3.58



File : 99032305_ZOOM.VLT
Start : 23-Mar-99 01:57:35 pm End : 23-Mar-99 02:06:12 pm
Fixed Wireless Terminal (FWT)/ST1056A/634GZB54V5;836.52MHz;W;Center Fed/Out;
Body/Abdomen;ZOOM/SAR.p041/E Field/0 DegreesMuscle/54.600/1.070
3.58