Appendix C

SAR System Validation Data

of

Product Name

Notebook Personal Computer

Model

V100

1 835 MHz System Validation Data

Report Date : 12-Feb-2006
Measurement Date : 12-Feb-2006

Product Data
Device Name : Dipole-835
Serial No. : Validation
Type : Dipole
Model : Standard
Frequency : 835.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 0 min(s)
Length : 161 mm
Width : 3.6 mm
Depth : 89.8 mm
Antenna Type : Internal
Power Drift-Start : 10.145 W/kg
Power Drift-Finish: 10.224 W/kg
Power Drift (%) : 0.774

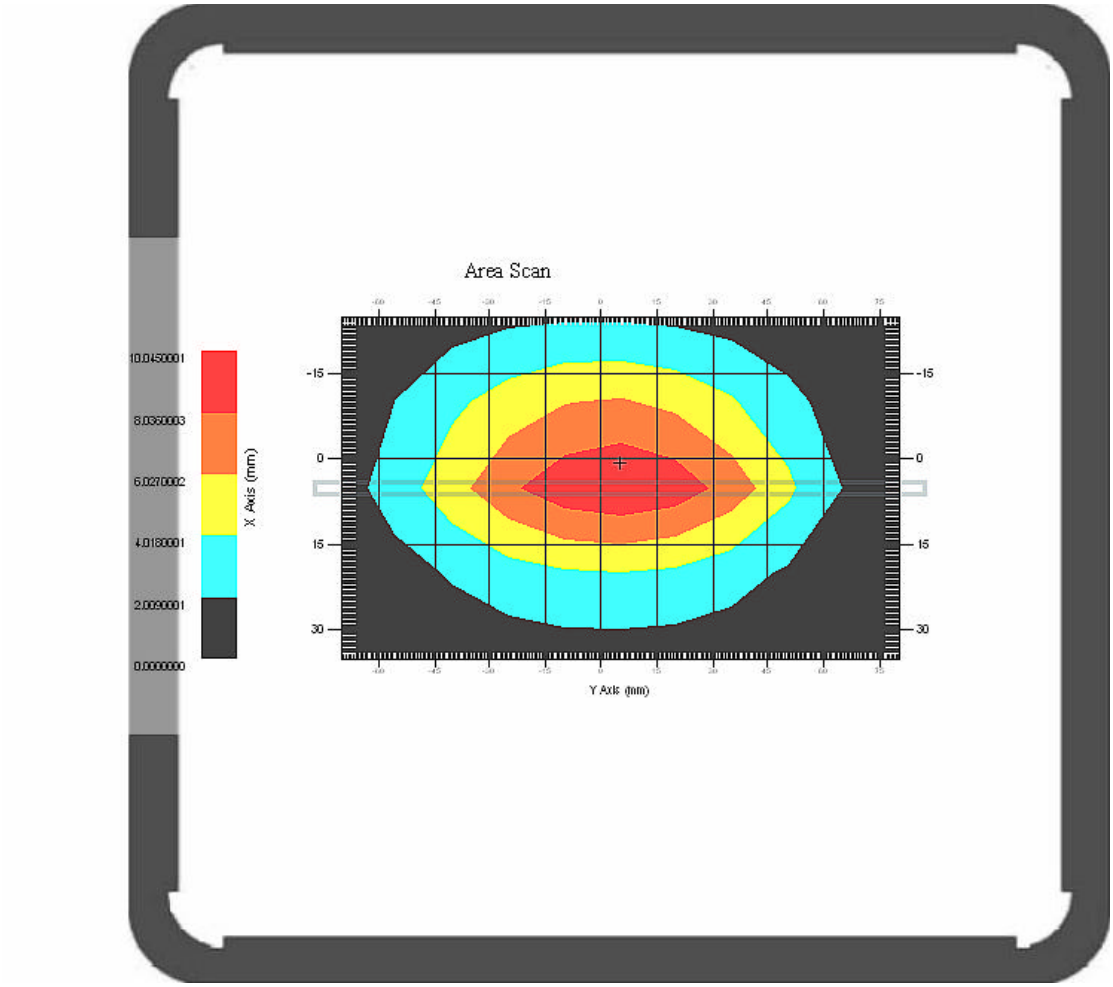
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Location : Center

Tissue Data
Type : HEAD
Serial No. : 835HEAD
Frequency : 835.00 MHz
Last Calib. Date : 12-Feb-2006
Temperature : 21.90 °C
Ambient Temp. : 22.00 °C
Humidity : 46.00 RH%
Epsilon : 41.97 F/m
Sigma : 0.87 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 22-Jun-2006
Frequency : 835.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 6.6
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

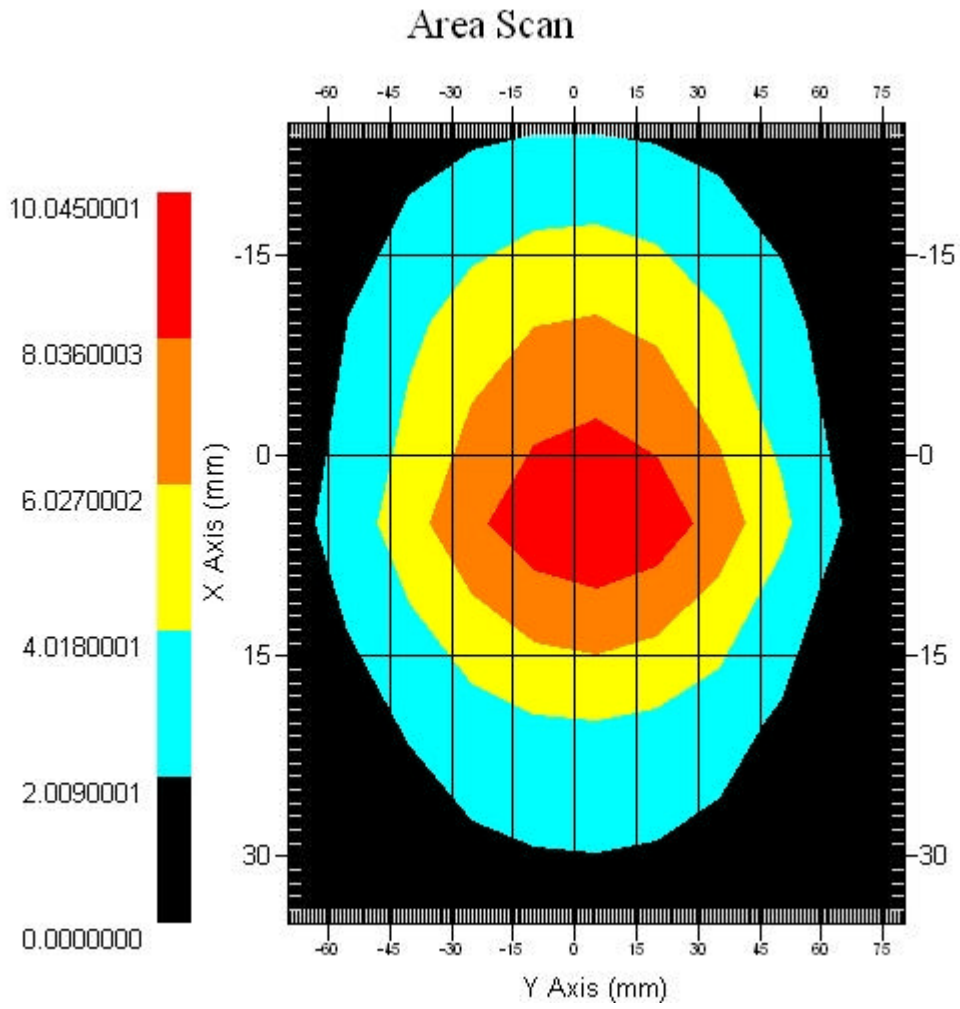
Measurement Data
Crest Factor : 1
Tissue Temp. : 21.90 °C
Ambient Temp. : 22.00 °C
Area Scan : 5x11x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

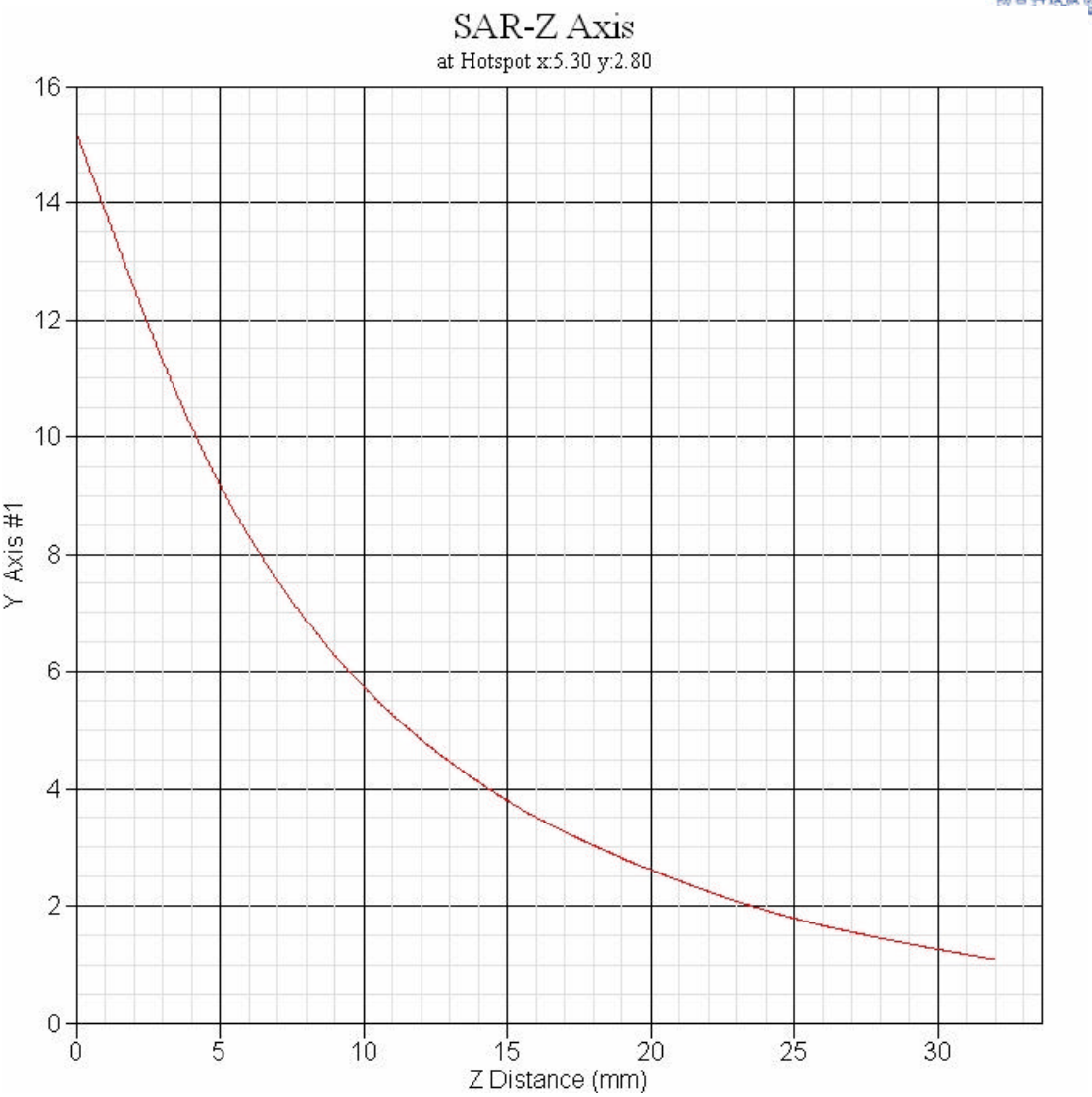
Channel : Mid - 835MHz



1 gram SAR value : 9.459 W/kg
10 gram SAR value : 6.101 W/kg
Area Scan Peak SAR : 10.045 W/kg
Zoom Scan Peak SAR : 15.291 W/kg

Area Scan Plot




SAR-Z Axis
at Hotspot x:5.30 y:2.80
Y Axis #1
Z Distance (mm)
0
2
4
6
8
10
12
14
16
0
5
10
15
20
25
30

2 1900 MHz System Validation Data

Report Date : 12-Feb-2006
Measurement Date : 12-Feb-2006

Product Data
Device Name : Dipole-1900
Serial No. : Validation
Type : Dipole
Model : Standard
Frequency : 1900.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 0 min(s)
Length : 68 mm
Width : 3.6 mm
Depth : 39.5 mm
Antenna Type : Internal
Power Drift-Start : 46.029 W/kg
Power Drift-Finish: 45.552 W/kg
Power Drift (%) : -1.037

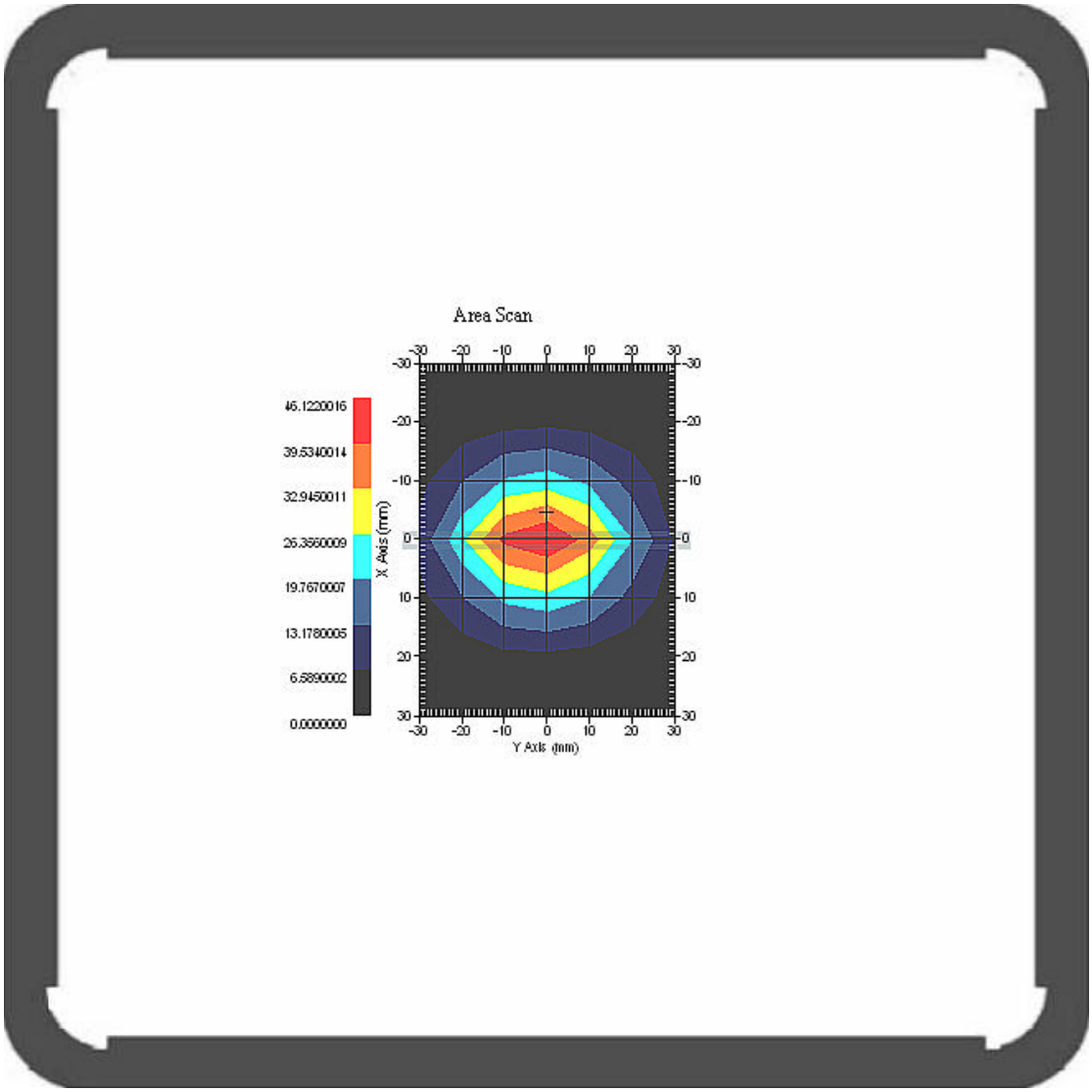
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Location : Center

Tissue Data
Type : HEAD
Serial No. : 1900HEAD
Frequency : 1900.00 MHz
Last Calib. Date : 12-Feb-2006
Temperature : 21.90 °C
Ambient Temp. : 22.00 °C
Humidity : 46.00 RH%
Epsilon : 41.29 F/m
Sigma : 1.42 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 22-Jun-2006
Frequency : 1900.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5.22
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

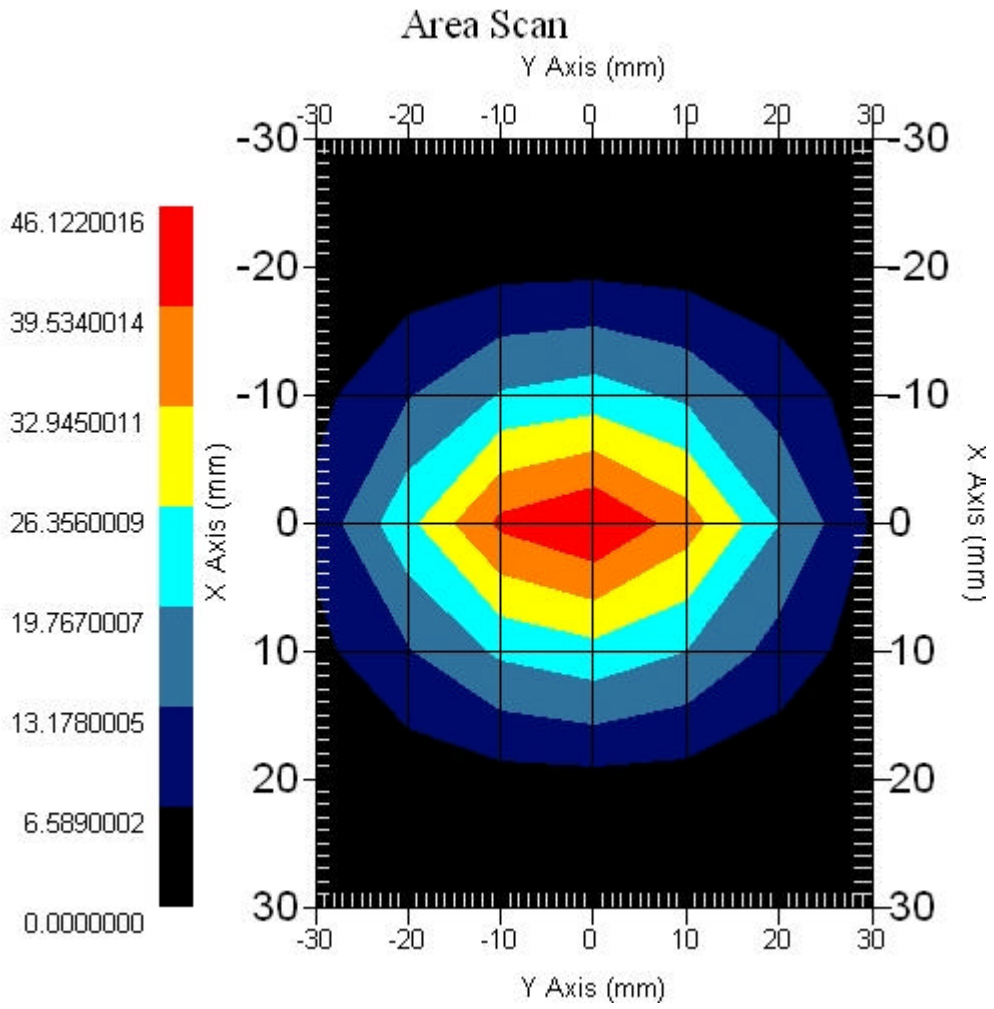
Measurement Data
Crest Factor : 1
Tissue Temp. : 21.90 °C
Ambient Temp. : 22.00 °C
Area Scan : 7x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

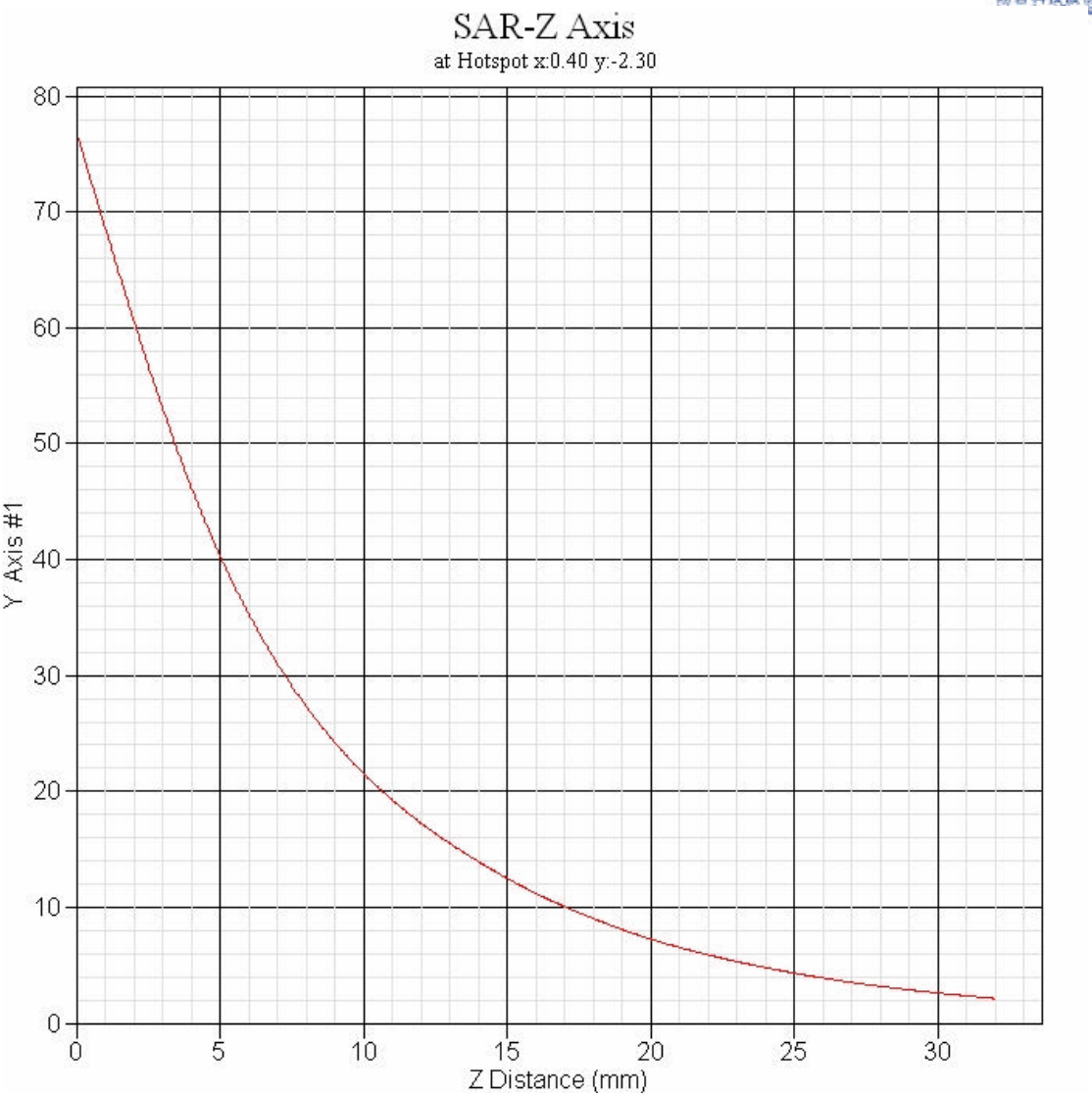
Channel : Mid - 1900MHz



1 gram SAR value : 39.881 W/kg
10 gram SAR value : 19.917 W/kg
Area Scan Peak SAR : 46.122 W/kg
Zoom Scan Peak SAR : 77.193 W/kg

Area Scan Plot

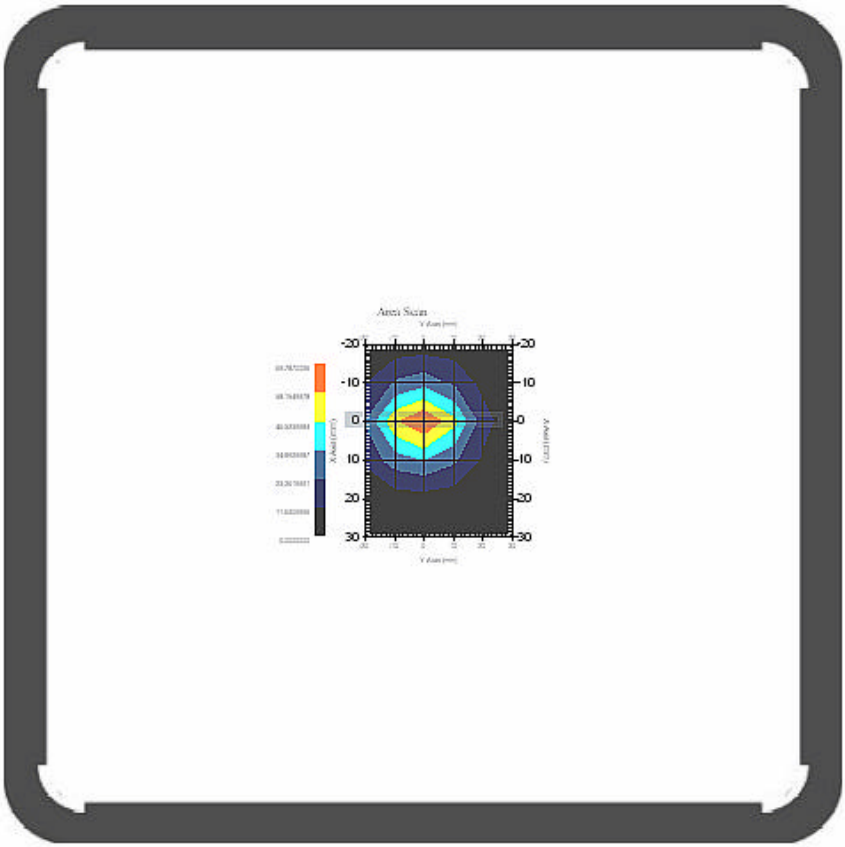



SAR-Z Axis
at Hotspot x:0.40 y:-2.30
Y Axis #1
Z Distance (mm)
0
10
20
30
40
50
60
70
80
0
5
10
15
20
25
30

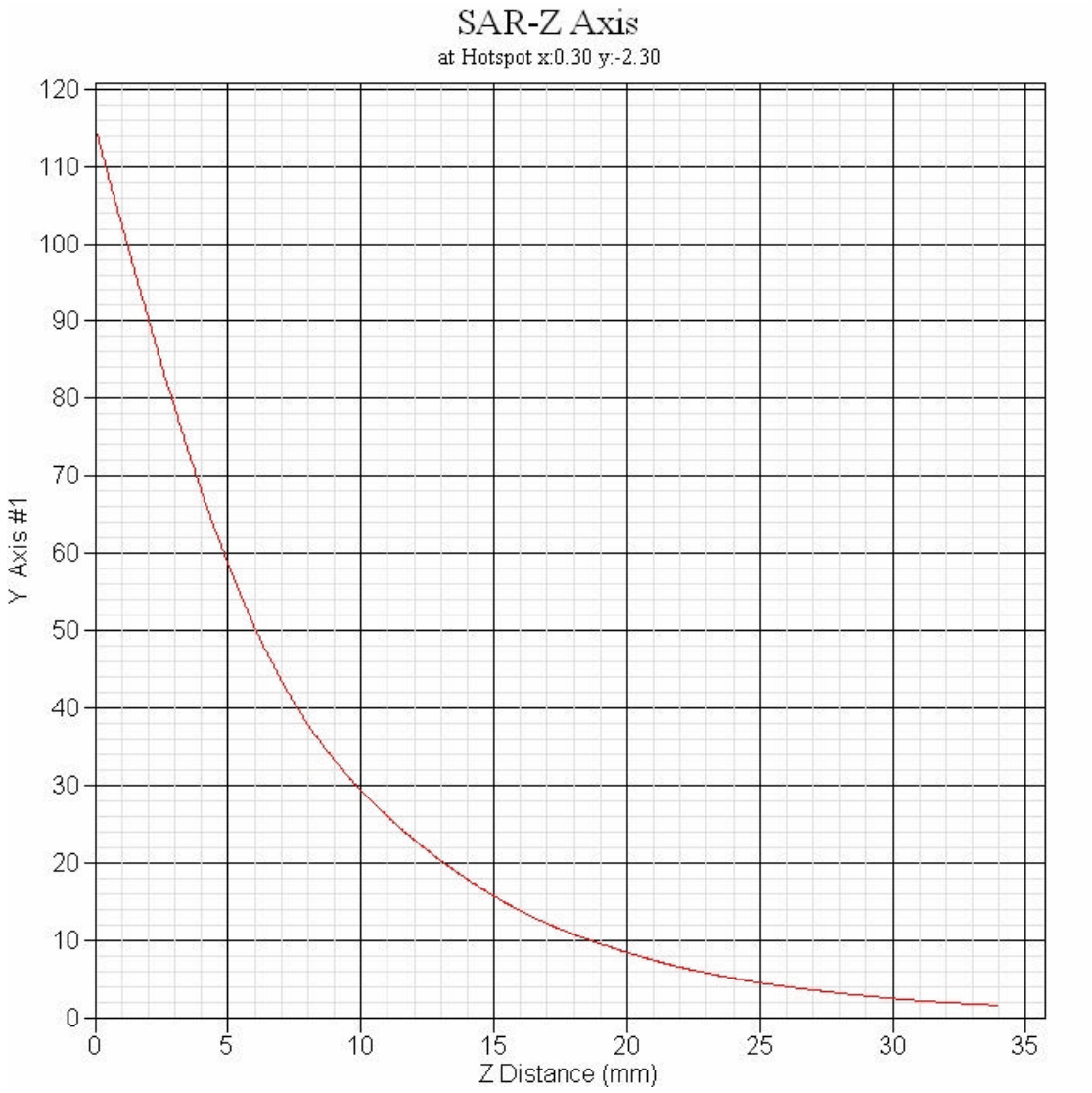
3 2450 MHz System Validation Data

```
Report Date       : 25-Jan-2007
Measurement Date  : 25-Jan-2007

Product Data
Device Name       : Dipole-2450
Serial No.        : Validation
Type              : Dipole
Model             : Standard
Frequency         : 2450.00 MHz
Max. Transmit Pwr : 1 W
Drift Time        : 0 min(s)
Length            : 51.5 mm
Width             : 3.6 mm
Depth             : 30.4 mm
Antenna Type      : Internal
Power Drift-Start : 69.128 W/kg
Power Drift-Finish: 67.707 W/kg
Power Drift (%)   : -2.314

Phantom Data
Name             : APREL-Uni
Type             : Uni-Phantom
Size (mm)        : 280 x 280 x 200
Location         : Center

Tissue Data
Type             : HEAD
Serial No.       : 2450HEAD
Frequency        : 2450.00 MHz
Last Calib. Date : 25-Jan-2007
Temperature      : 22.00 °C
Ambient Temp.    : 22.30 °C
Humidity         : 50.00 RH%
Epsilon          : 40.12 F/m
Sigma            : 1.73 S/m
Density          : 1000.00 kg/cu. m

Probe Data
Name             : E-field Probe
Model            : ALS-E-020
Type             : E-Field Triangle
Serial No.       : 266
Last Calib. Date : 22-Jun-2006
Frequency        : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.9
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
Tissue Temp.     : 22.00 °C
Ambient Temp.    : 22.30 °C
Area Scan        : 6x6x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan        : 5x5x11 : Measurement x=8mm, y=8mm, z=3mm
```

Channel : Mid - 2450MHz



1 gram SAR value : 53.697 W/kg
10 gram SAR value : 23.995 W/kg
Area Scan Peak SAR : 69.787 W/kg
Zoom Scan Peak SAR : 115.101 W/kg


SAR-Z Axis
at Hotspot x:0.30 y:-2.30
Y Axis #1
Z Distance (mm)
120
110
100
90
80
70
60
50
40
30
20
10
0
0
5
10
15
20
25
30
35

4 5200 MHz System Validation Data

Report Date : 29-Jan-2007
Measurement Date : 29-Jan-2007

Product Data
Device Name : Dipole-5200
Serial No. : 230-00802
Type : Dipole
Model : ALS-D-5200-S-2
Frequency : 5200.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 0 min(s)
Length : 23.4 mm
Width : 3.6 mm
Depth : 15.4 mm
Antenna Type : Internal
Power Drift-Start : 78.465 W/kg
Power Drift-Finish: 79.927 W/kg
Power Drift (%) : 1.863

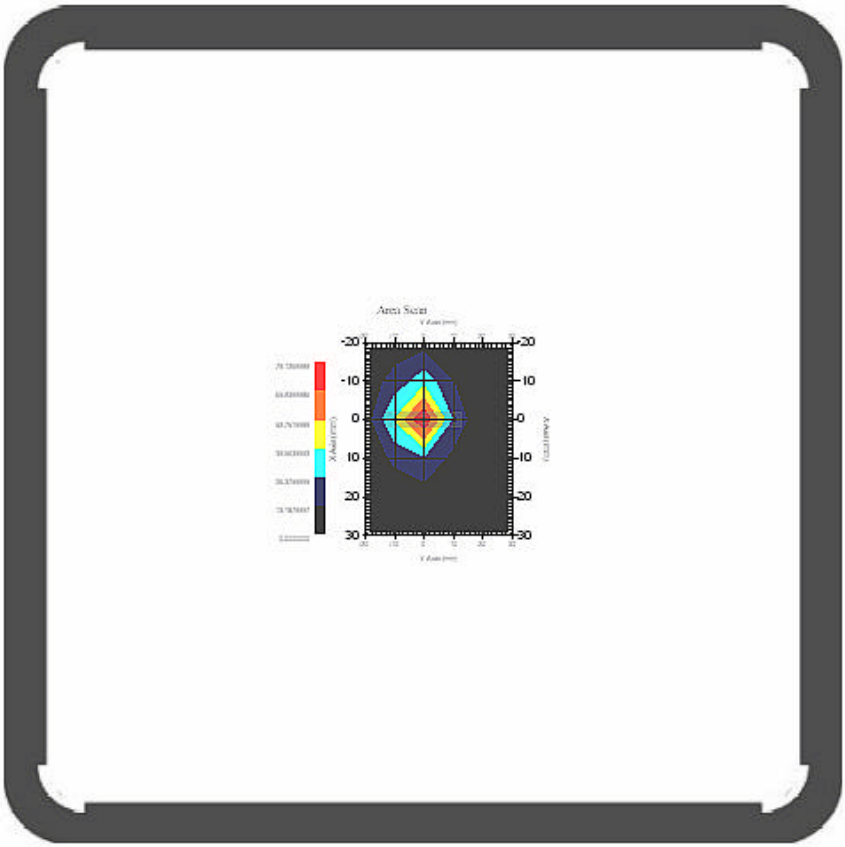
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Location : Center

Tissue Data
Type : HEAD
Serial No. : 5200-H-AU-18
Frequency : 5200.00 MHz
Last Calib. Date : 29-Jan-2007
Temperature : 22.30 °C
Ambient Temp. : 22.60 °C
Humidity : 50.00 RH%
Epsilon : 35.12 F/m
Sigma : 4.68 S/m
Density : 1000.00 kg/cu. m

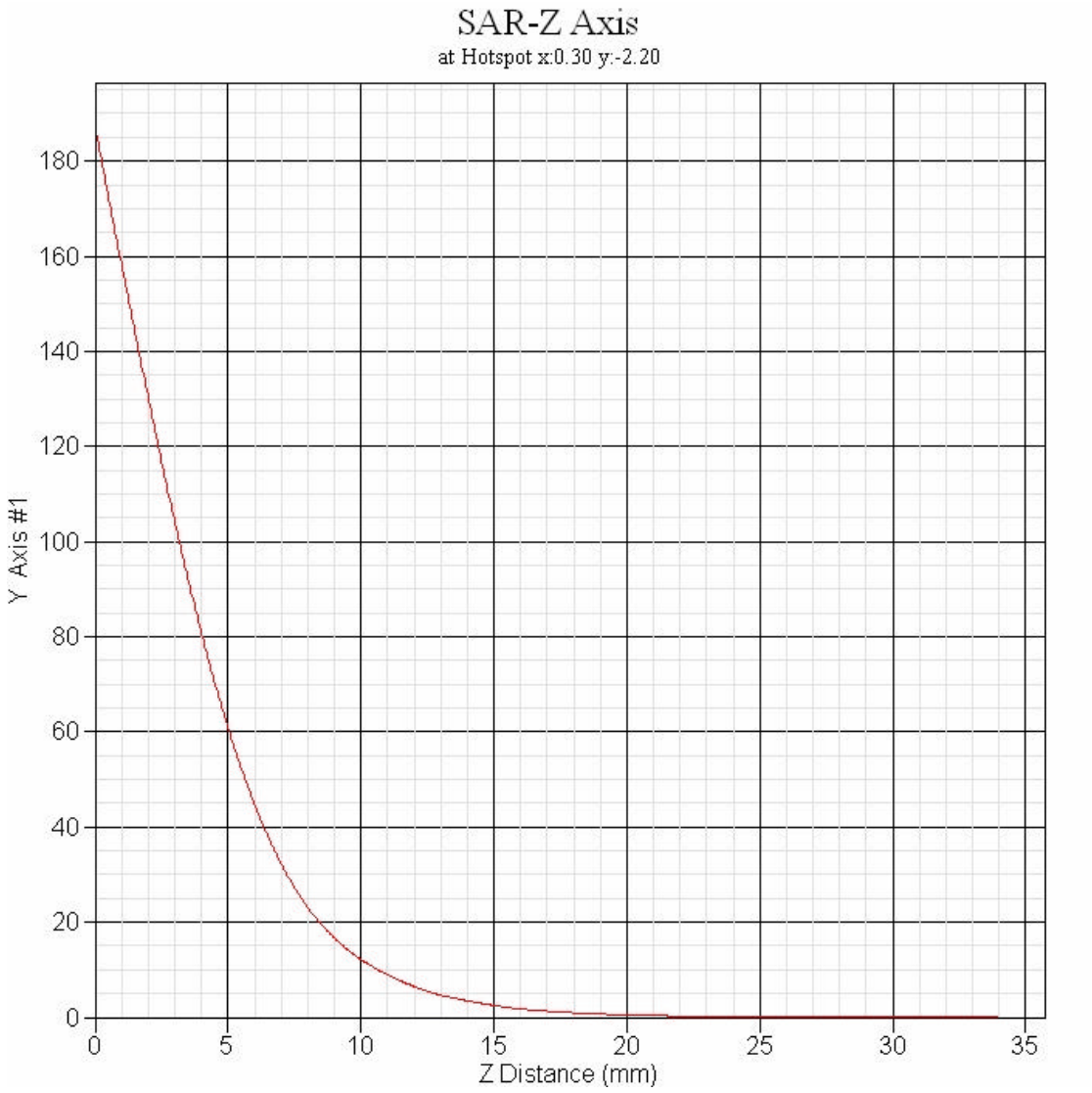
Probe Data
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 22-Jun-2006
Frequency : 5200.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 3.82
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Tissue Temp. : 22.30 °C
Ambient Temp. : 22.60 °C
Area Scan : 6x6x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x13 : Measurement x=4mm, y=4mm, z=2.5mm

Channel : Mid - 5200MHz



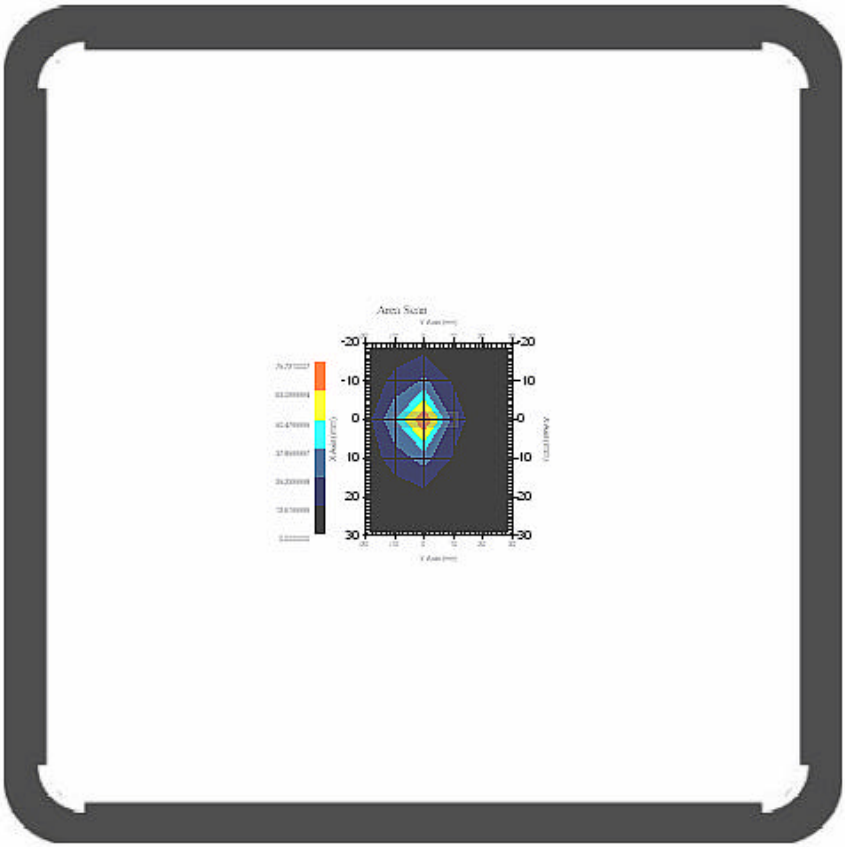
1 gram SAR value : 61.924 W/kg
10 gram SAR value : 18.927 W/kg
Area Scan Peak SAR : 79.127 W/kg
Zoom Scan Peak SAR : 187.154 W/kg


SAR-Z Axis
at Hotspot x:0.30 y:-2.20
Y Axis #1
Z Distance (mm)
0
20
40
60
80
100
120
140
160
180
0
5
10
15
20
25
30
35

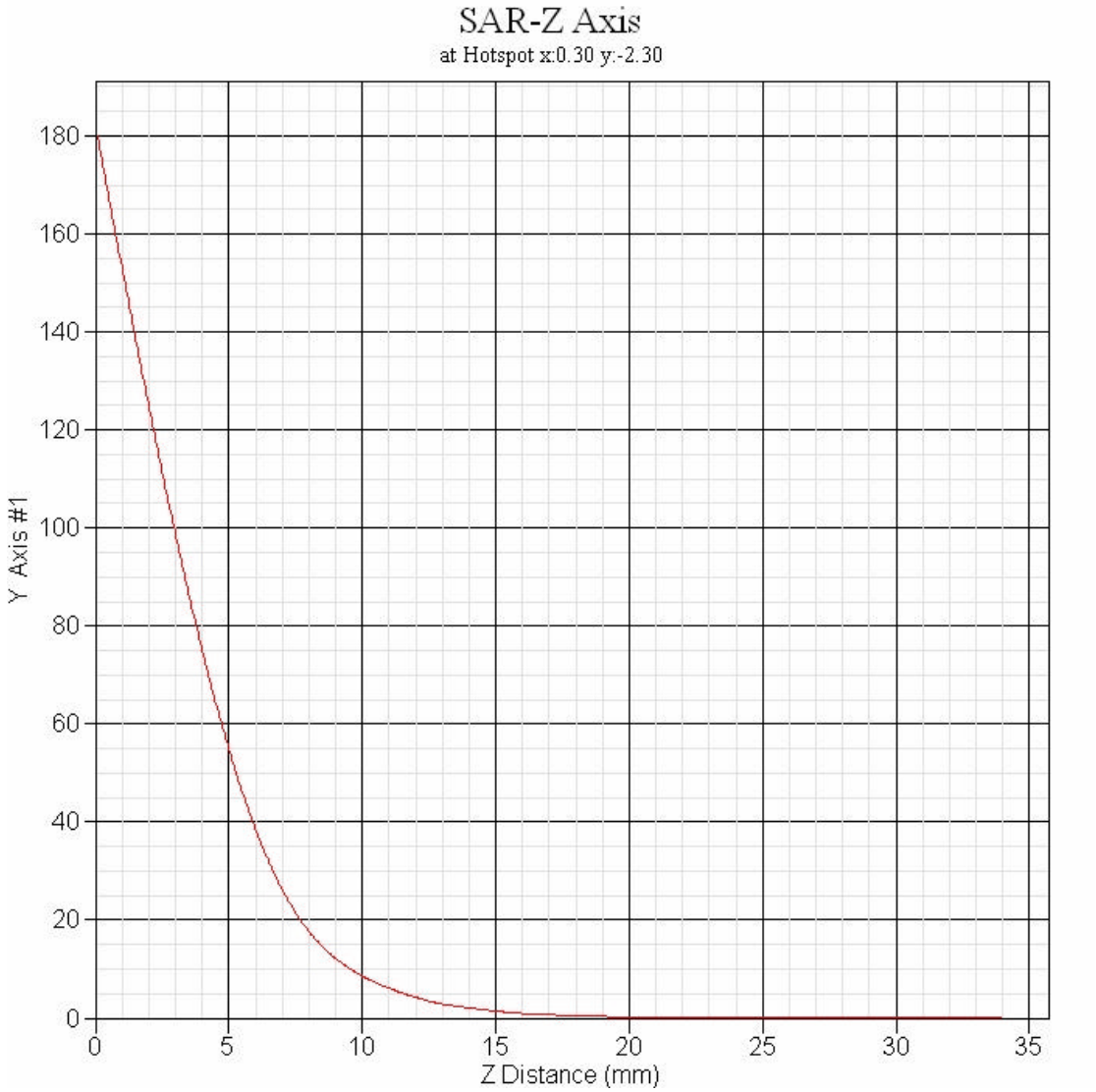
5 5800 MHz System Validation Data

```
Report Date       : 29-Jan-2007
Measurement Date  : 29-Jan-2007

Product Data
Device Name       : Dipole-5800
Serial No.        : 240-00852
Type              : Dipole
Model             : ALS-D-5800-S-2
Frequency         : 5800.00 MHz
Max. Transmit Pwr : 1 W
Drift Time        : 0 min(s)
Length            : 21.4 mm
Width             : 3.6 mm
Depth             : 89.8 mm
Antenna Type      : Internal
Power Drift-Start : 70.882 W/kg
Power Drift-Finish: 69.931 W/kg
Power Drift (%)   : -1.341

Phantom Data
Name             : APREL-Uni
Type             : Uni-Phantom
Size (mm)        : 280 x 280 x 200
Location         : Center

Tissue Data
Type             : HEAD
Serial No.       : 5800-H-AU-19
Frequency        : 5800.00 MHz
Last Calib. Date : 29-Jan-2007
Temperature      : 22.30 °C
Ambient Temp.    : 22.60 °C
Humidity         : 50.00 RH%
Epsilon          : 35.80 F/m
Sigma            : 5.43 S/m
Density          : 1000.00 kg/cu. m

Probe Data
Name             : E-field Probe
Model            : ALS-E-020
Type             : E-Field Triangle
Serial No.       : 266
Last Calib. Date : 22-Jun-2006
Frequency        : 5800.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 3.72
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
Tissue Temp.     : 22.30 °C
Ambient Temp.    : 22.60 °C
Area Scan        : 6x6x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan        : 9x9x13 : Measurement x=4mm, y=4mm, z=2.5mm
```

Channel : Mid - 5800MHz



1 gram SAR value : 57.710 W/kg
10 gram SAR value : 18.255 W/kg
Area Scan Peak SAR : 75.721 W/kg
Zoom Scan Peak SAR : 182.148 W/kg


SAR-Z Axis
at Hotspot x:0.30 y:-2.30
Y Axis #1
180
160
140
120
100
80
60
40
20
0
0
5
10
15
20
25
30
35
Z Distance (mm)