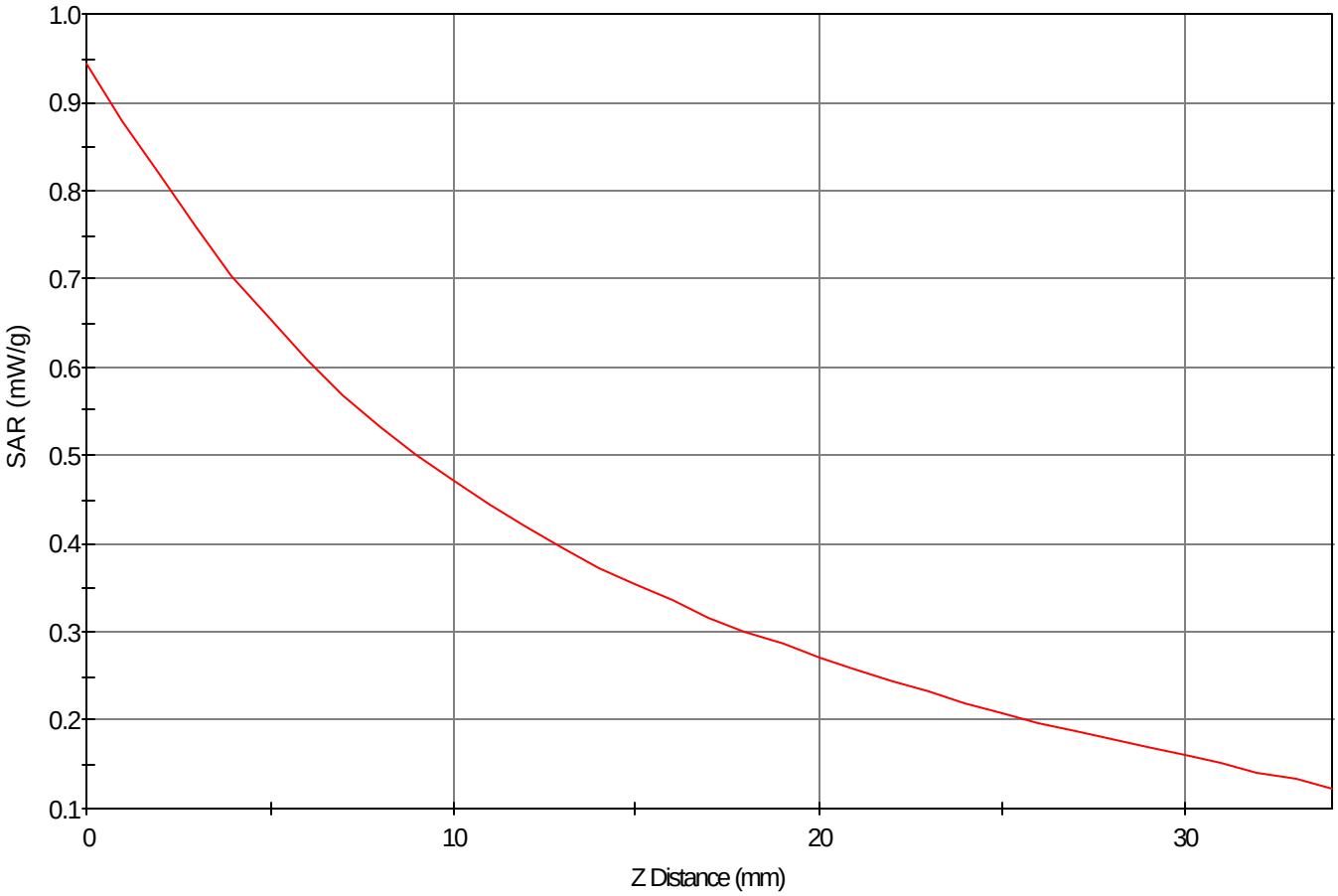
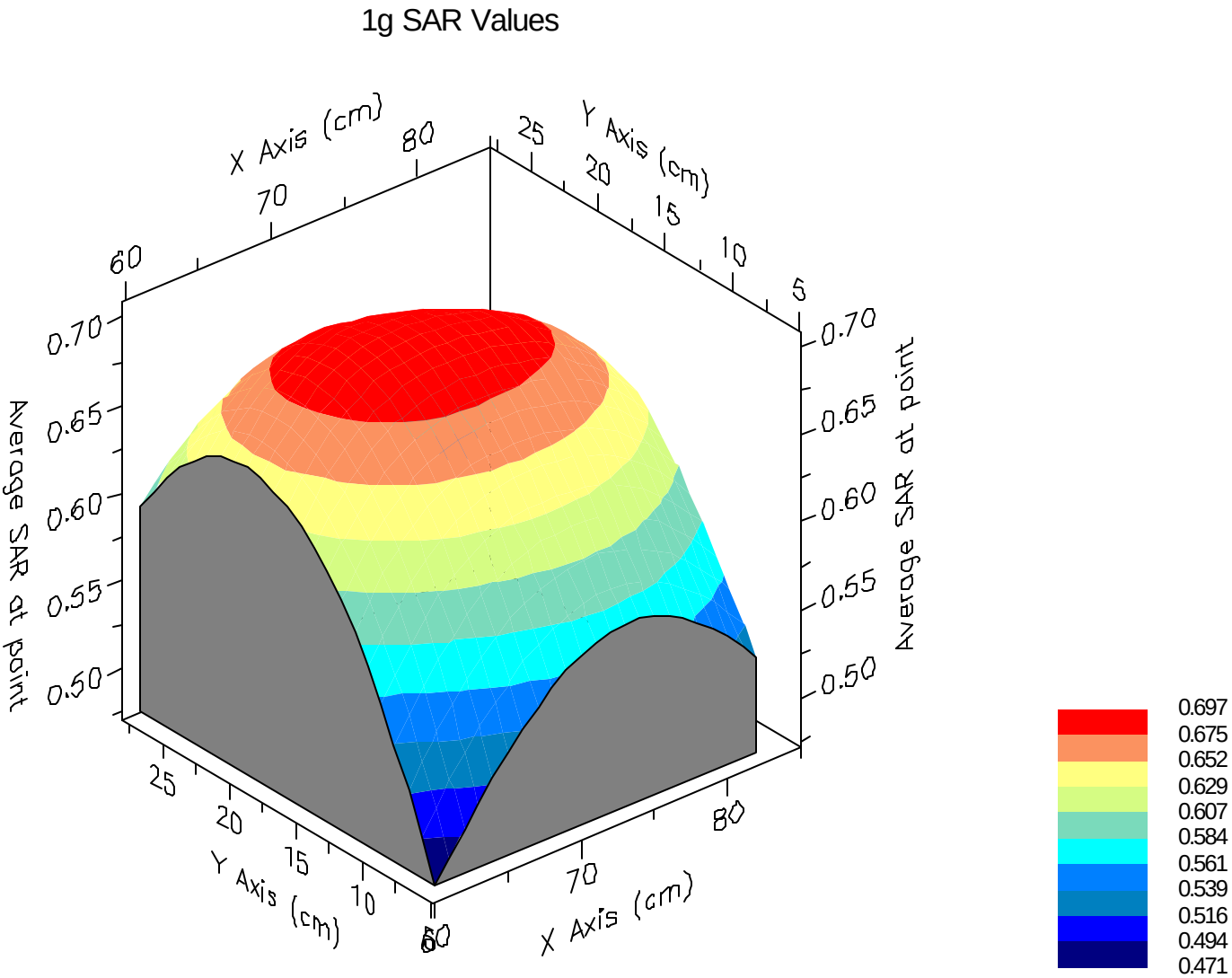
SAR Data Report 02070813

```
  Start        :  8-Jul-02 11:06:25 am
  End          :  8-Jul-02 11:12:43 am
  Code Version : 4.08
  Robot Version: 4.08

Product Data:
  Type             : SAMSUNG
  Model Number     : SCH-A220
  Serial Number    : 1
  Frequency        : 824.70 MHz
  Transmit Pwr     : 0.280 W
  Antenna Type     : Helical
  Antenna Posn.    : Out

Measurement Data:
  Phantom Name        : SAM-R
  Phantom Type        : Right Ear
  Tissue Type         : Brain
  Tissue Dielectric   : 42.200
  Tissue Conductivity : 0.930
  Tissue Density      : 1.000
  Robot Name          : CRS

Probe Data:
  Probe Name              : PCT002
  Probe Type              : E Fld Triangle
  Frequency               : 835 MHz
  Tissue Type             : Brain
  Calibrated Dielectric   : 40.700
  Calibrated Conductivity :  0.890
  Calibrated Density      :  1.000
  Probe Offset            :  2.400 mm
  Conversion Factor       :  5.800
  Probe Sensitivity :  3.597   3.474   3.049   mV/(mW/cm^2)
  Amplifier Gains   :  20.00   20.00   20.00

Sample:
  Rate:         6000 Samples/Sec
  Count:        100 Samples
  NIDAQ Gain:   5

Comments:
  CDMA Mode CH-1013
  Cheek
  CF=1; Amb. Temp= 22.5 'C; Liq. Temp=22.1 'C



Area Scan - Max Peak SAR Value at x=72.0 y=17.0 = 0.69 W/kg

Zoom Scan - Max Peak SAR Value at x=65.0 y=22.0 z=0.0 = 0.94 W/kg

Max 1g SAR at x=70.0 y=19.0 z=0.0 = 0.70 W/kg

Max 10g SAR at x=72.0 y=18.0 z=0.0 = 0.49 W/kg
```

SAR - Z Axis
at Hotspot x:65.0 y:22.0

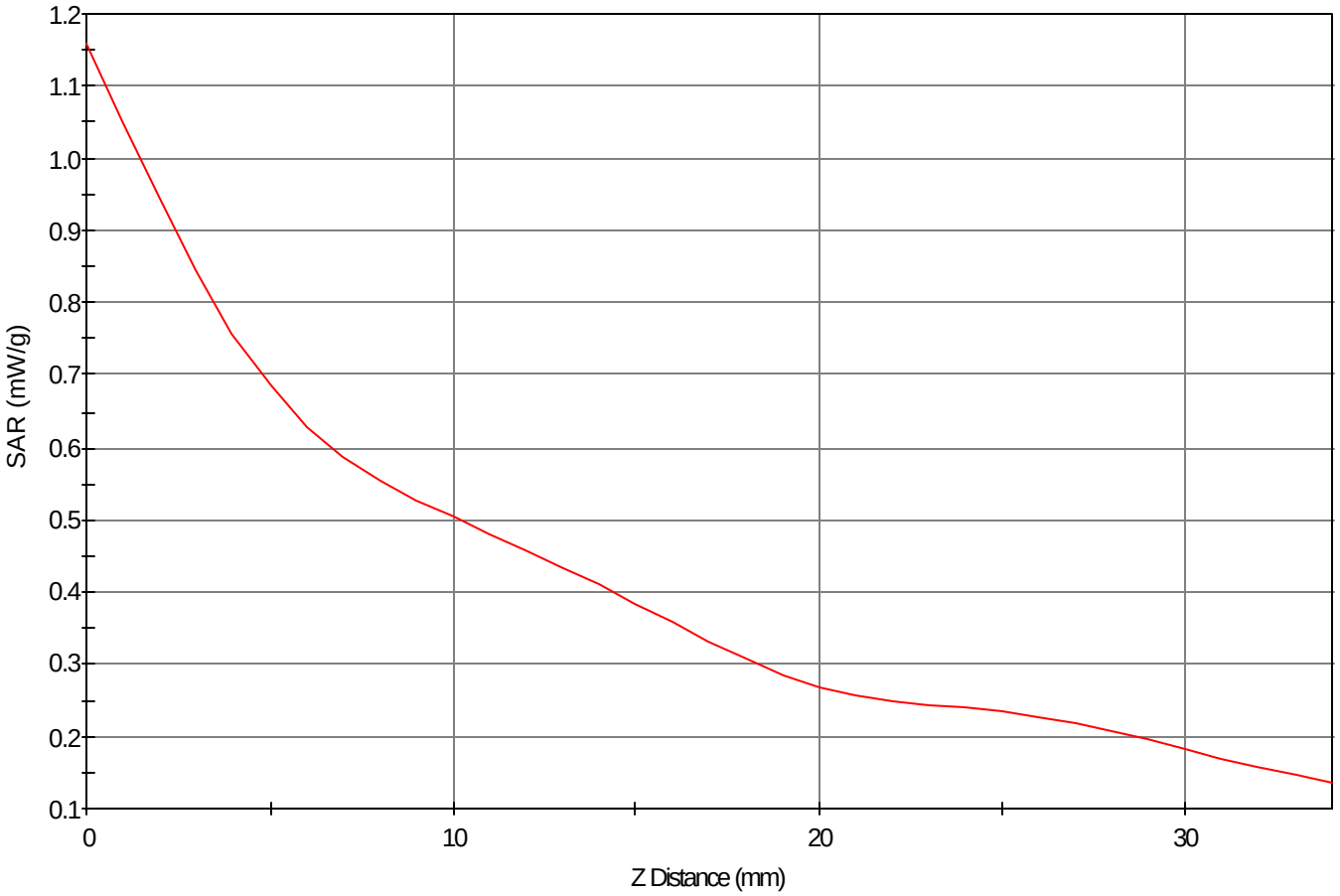



1g SAR Values
X Axis (cm)
60
70
80
Y Axis (cm)
5
10
15
20
25
Average SAR at point
0.50
0.55
0.60
0.65
0.70
0.697
0.675
0.652
0.629
0.607
0.584
0.561
0.539
0.516
0.494
0.471

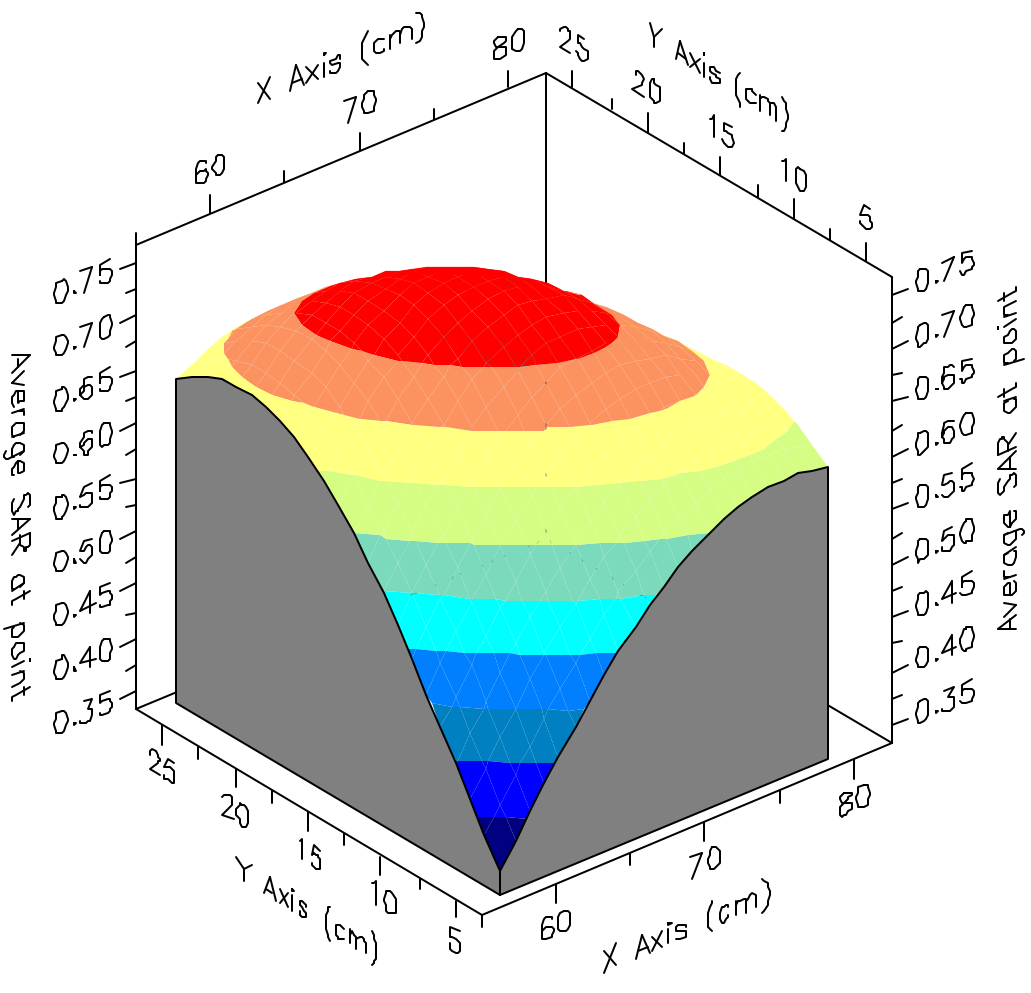
SAR Data Report 02070918

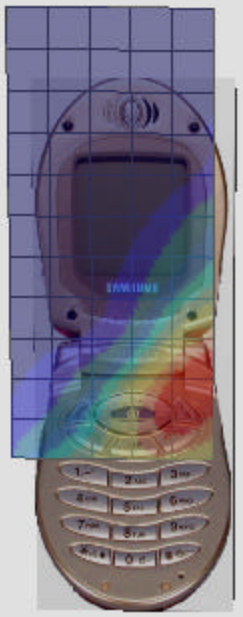
```
  Start        :  9-Jul-02 02:33:06 pm
  End          :  9-Jul-02 02:44:34 pm
  Code Version : 4.08
  Robot Version: 4.08

Product Data:
  Type             : SAMSUNG
  Model Number     : SCH-A220
  Serial Number    : 1
  Frequency        : 848.31 MHz
  Transmit Pwr     : 0.280 W
  Antenna Type     : Helical
  Antenna Posn.    : Out

Measurement Data:
  Phantom Name        : SAM-L
  Phantom Type        : Left Ear
  Tissue Type         : Brain
  Tissue Dielectric   : 42.200
  Tissue Conductivity : 0.930
  Tissue Density      : 1.000
  Robot Name          : CRS

Probe Data:
  Probe Name              : PCT002
  Probe Type              : E Fld Triangle
  Frequency               : 835 MHz
  Tissue Type             : Brain
  Calibrated Dielectric   : 40.700
  Calibrated Conductivity :  0.890
  Calibrated Density      :  1.000
  Probe Offset            :  2.400 mm
  Conversion Factor       :  5.800
  Probe Sensitivity :  3.597   3.474   3.049   mV/(mW/cm^2)
  Amplifier Gains   :  20.00   20.00   20.00

Sample:
  Rate:         6000 Samples/Sec
  Count:        100 Samples
  NIDAQ Gain:   5

Comments:
  CDMA Mode CH-777
  Cheek
  CF=1; Amb. Temp= 22.4 'C; Liq. Temp=22.1 'C



Area Scan - Max Peak SAR Value at x=68.0 y=15.0 = 0.70 W/kg

Zoom Scan - Max Peak SAR Value at x=67.0 y=15.0 z=0.0 = 1.16 W/kg

Max 1g SAR at x=67.0 y=17.0 z=0.0 = 0.75 W/kg

Max 10g SAR at x=69.0 y=16.0 z=0.0 = 0.49 W/kg
```

SAR - Z Axis
at Hotspot x:67.0 y:15.0



1g SAR Values

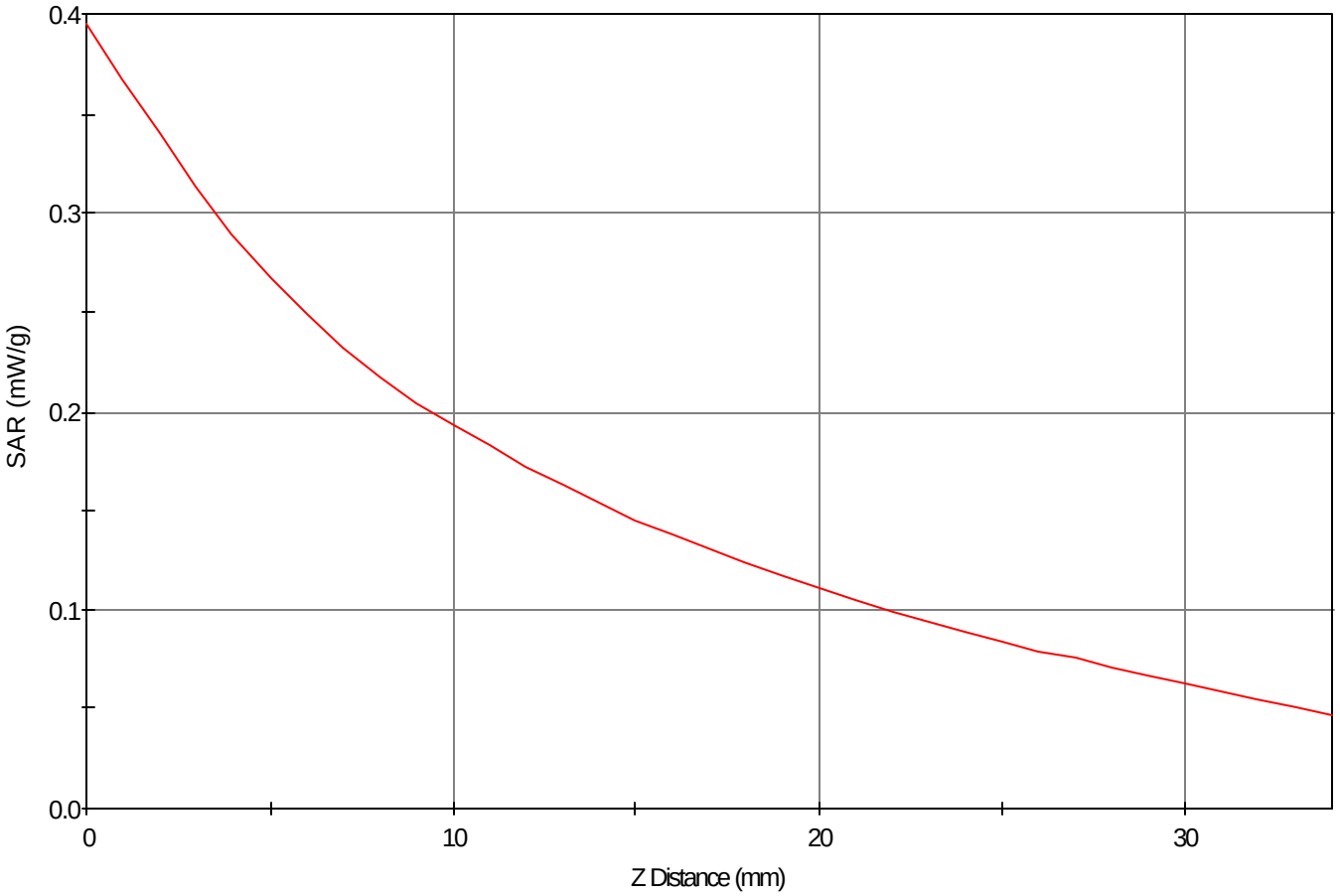




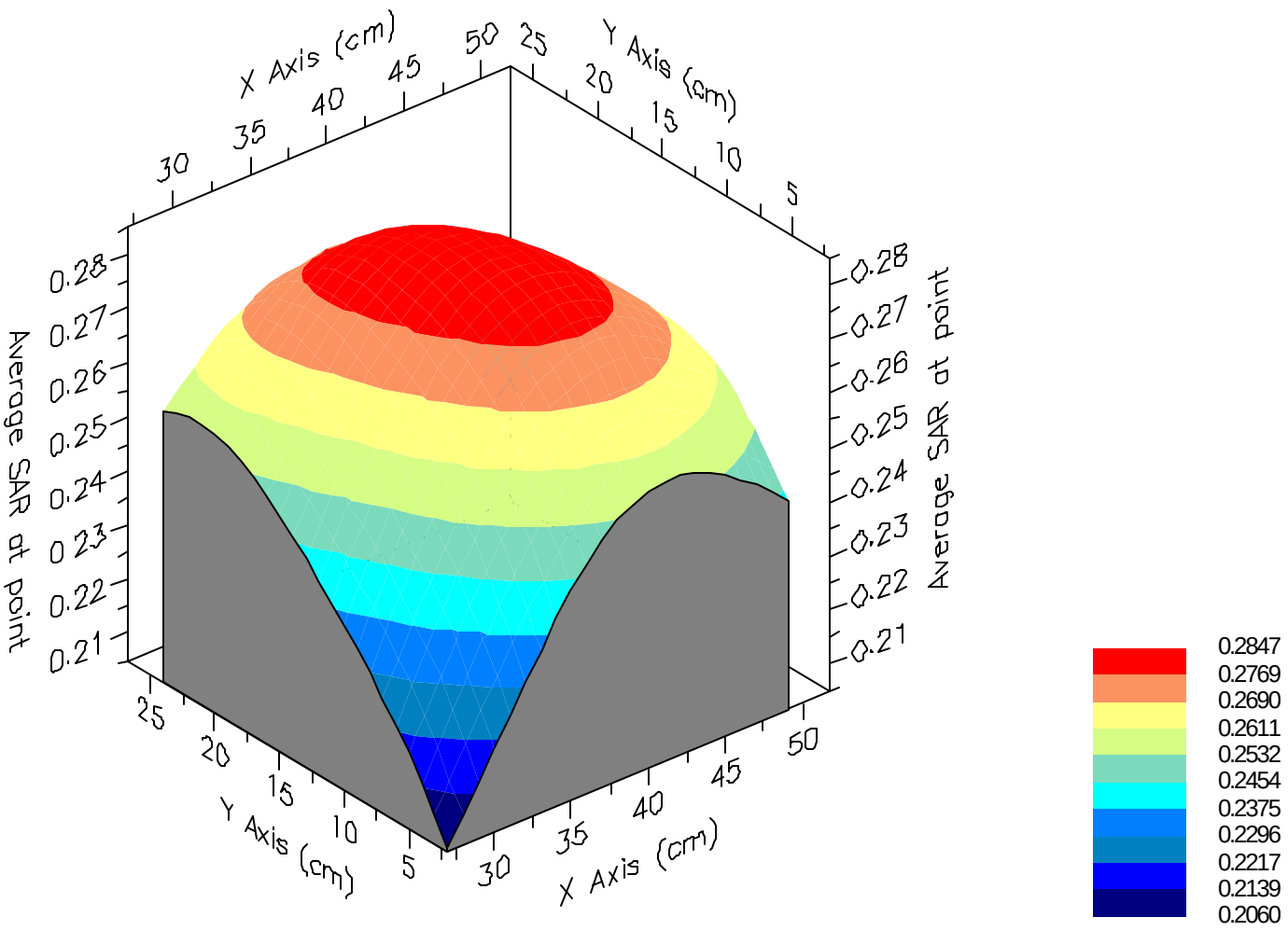
SAR Data Report 02070921

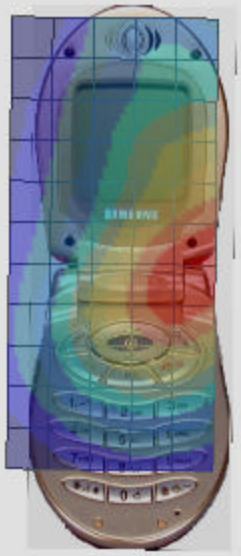
```
  Start        :  9-Jul-02 03:07:59 pm
  End          :  9-Jul-02 03:14:31 pm
  Code Version : 4.08
  Robot Version: 4.08

Product Data:
  Type             : SAMSUNG
  Model Number     : SCH-A220
  Serial Number    : 1
  Frequency        : 848.31 MHz
  Transmit Pwr     : 0.280 W
  Antenna Type     : Helical
  Antenna Posn.    : Out

Measurement Data:
  Phantom Name        : SAM-L
  Phantom Type        : Left Ear
  Tissue Type         : Brain
  Tissue Dielectric   : 42.200
  Tissue Conductivity : 0.930
  Tissue Density      : 1.000
  Robot Name          : CRS

Probe Data:
  Probe Name              : PCT002
  Probe Type              : E Fld Triangle
  Frequency               : 835 MHz
  Tissue Type             : Brain
  Calibrated Dielectric   : 40.700
  Calibrated Conductivity :  0.890
  Calibrated Density      :  1.000
  Probe Offset            :  2.400 mm
  Conversion Factor       :  5.800
  Probe Sensitivity :  3.597   3.474   3.049   mV/(mW/cm^2)
  Amplifier Gains   :  20.00   20.00   20.00

Sample:
  Rate:         6000 Samples/Sec
  Count:        100 Samples
  NIDAQ Gain:   5

Comments:
  CDMA Mode CH-777
  Tilt
  CF=1; Amb. Temp= 22.4 'C; Liq. Temp=22.1 'C



Area Scan - Max Peak SAR Value at x=38.0 y=13.0 = 0.27 W/kg

Zoom Scan - Max Peak SAR Value at x=38.0 y=18.0 z=0.0 = 0.40 W/kg

Max 1g SAR at x=39.0 y=15.0 z=0.0 = 0.28 W/kg

Max 10g SAR at x=38.0 y=15.0 z=0.0 = 0.20 W/kg
```

SAR - Z Axis
at Hotspot x:38.0 y:18.0



1g SAR Values

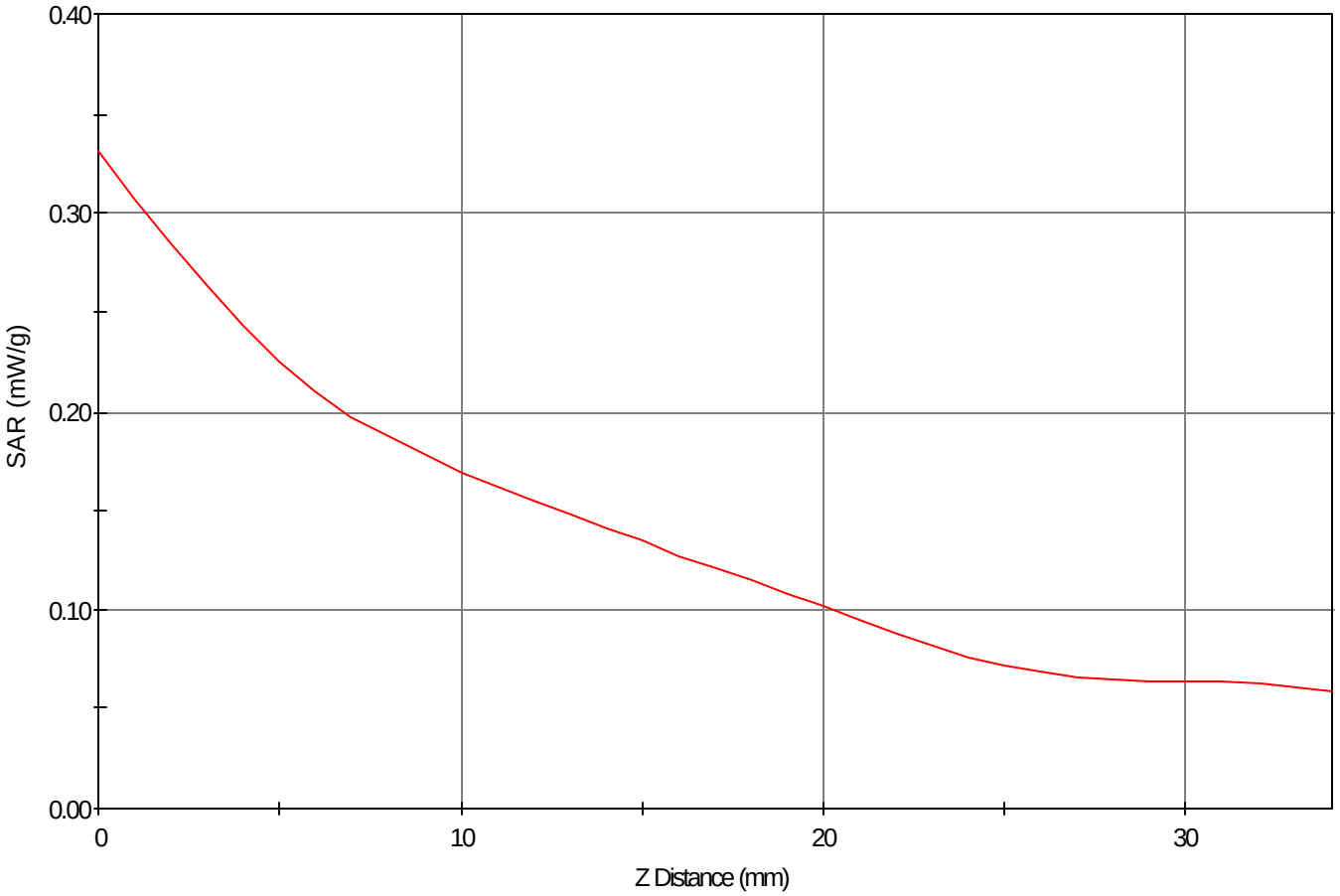




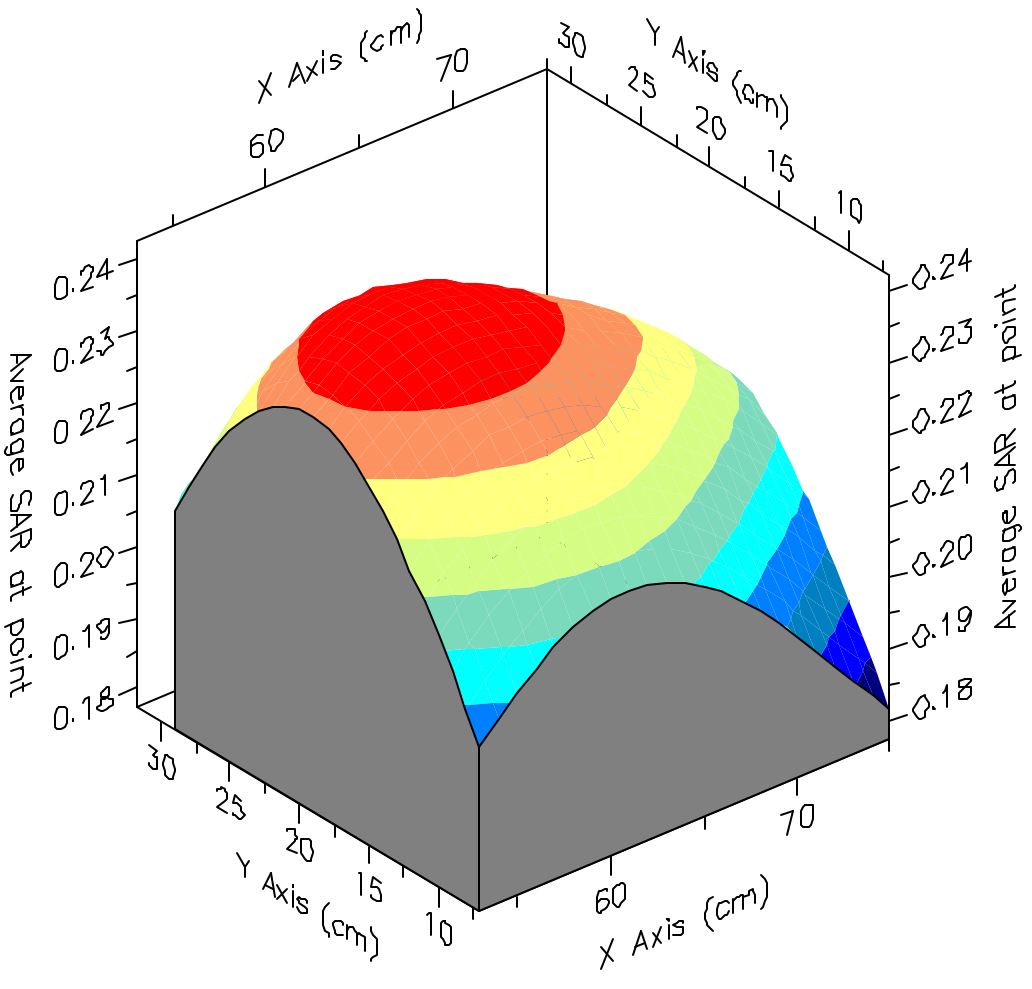
SAR Data Report 02070807

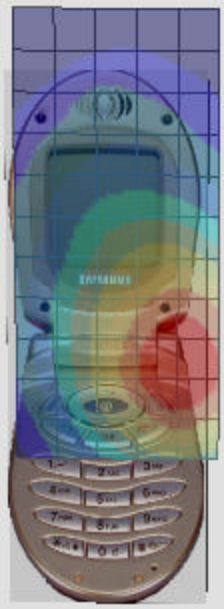
```
  Start        :  8-Jul-02 10:29:15 am
  End          :  8-Jul-02 10:35:29 am
  Code Version : 4.08
  Robot Version: 4.08

Product Data:
  Type             : SAMSUNG
  Model Number     : SCH-A220
  Serial Number    : 1
  Frequency        : 824.70 MHz
  Transmit Pwr     : 0.280 W
  Antenna Type     : Helical
  Antenna Posn.    : Out

Measurement Data:
  Phantom Name        : SAM-R
  Phantom Type        : Right Ear
  Tissue Type         : Brain
  Tissue Dielectric   : 42.200
  Tissue Conductivity : 0.930
  Tissue Density      : 1.000
  Robot Name          : CRS

Probe Data:
  Probe Name              : PCT002
  Probe Type              : E Fld Triangle
  Frequency               : 835 MHz
  Tissue Type             : Brain
  Calibrated Dielectric   : 40.700
  Calibrated Conductivity :  0.890
  Calibrated Density      :  1.000
  Probe Offset            :  2.400 mm
  Conversion Factor       :  5.800
  Probe Sensitivity :  3.597   3.474   3.049   mV/(mW/cm^2)
  Amplifier Gains   :  20.00   20.00   20.00

Sample:
  Rate:         6000 Samples/Sec
  Count:        100 Samples
  NIDAQ Gain:   5

Comments:
  CDMA Mode CH-1013
  Tilt
  CF=1; Amb. Temp= 22.5 'C; Liq. Temp=22.1 'C



Area Scan - Max Peak SAR Value at x=64.0 y=18.0 = 0.24 W/kg

Zoom Scan - Max Peak SAR Value at x=56.0 y=22.0 z=0.0 = 0.33 W/kg

Max 1g SAR at x=59.0 y=20.0 z=0.0 = 0.24 W/kg

Max 10g SAR at x=62.0 y=19.0 z=0.0 = 0.17 W/kg
```

SAR - Z Axis
at Hotspot x:56.0 y:22.0



1g SAR Values

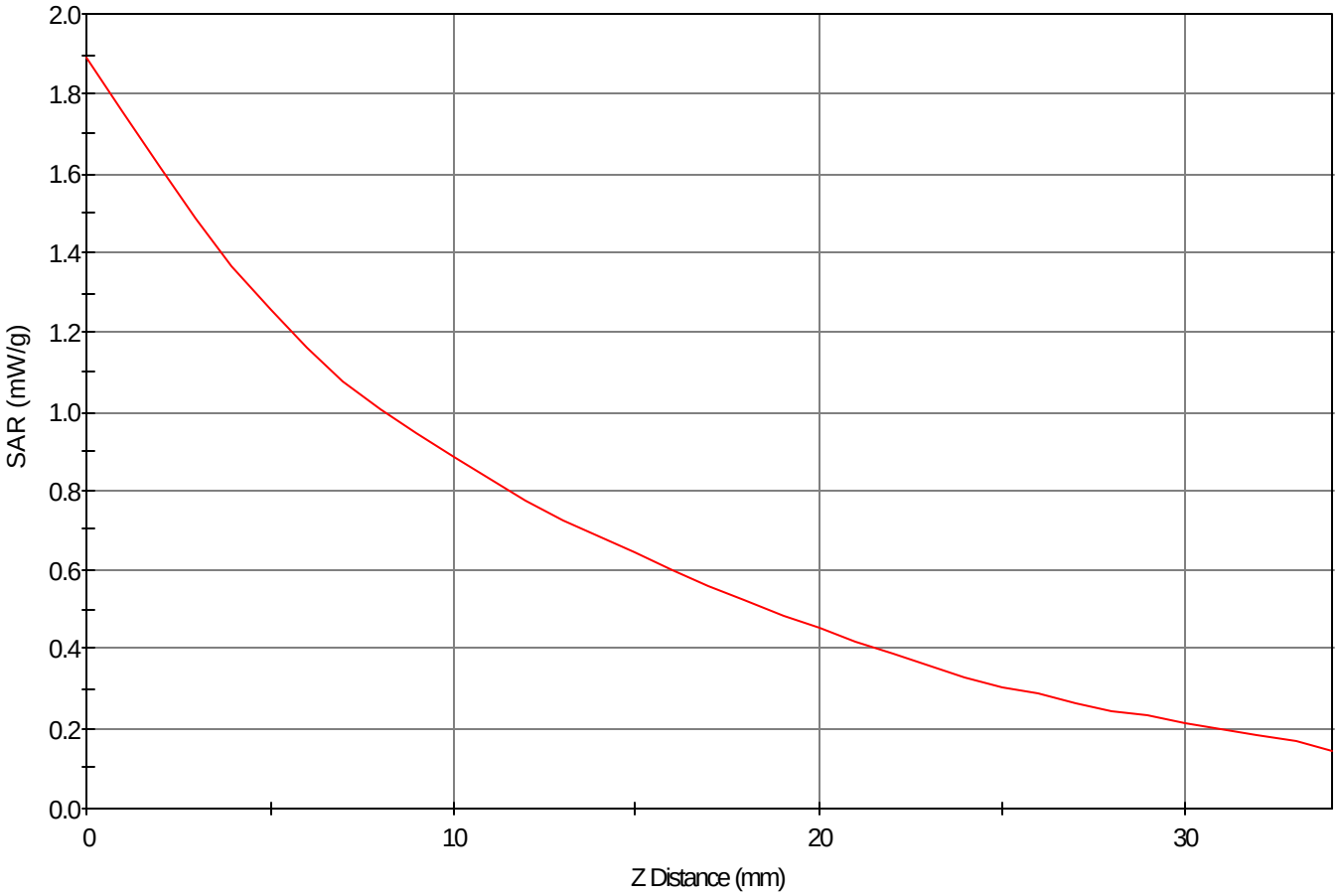




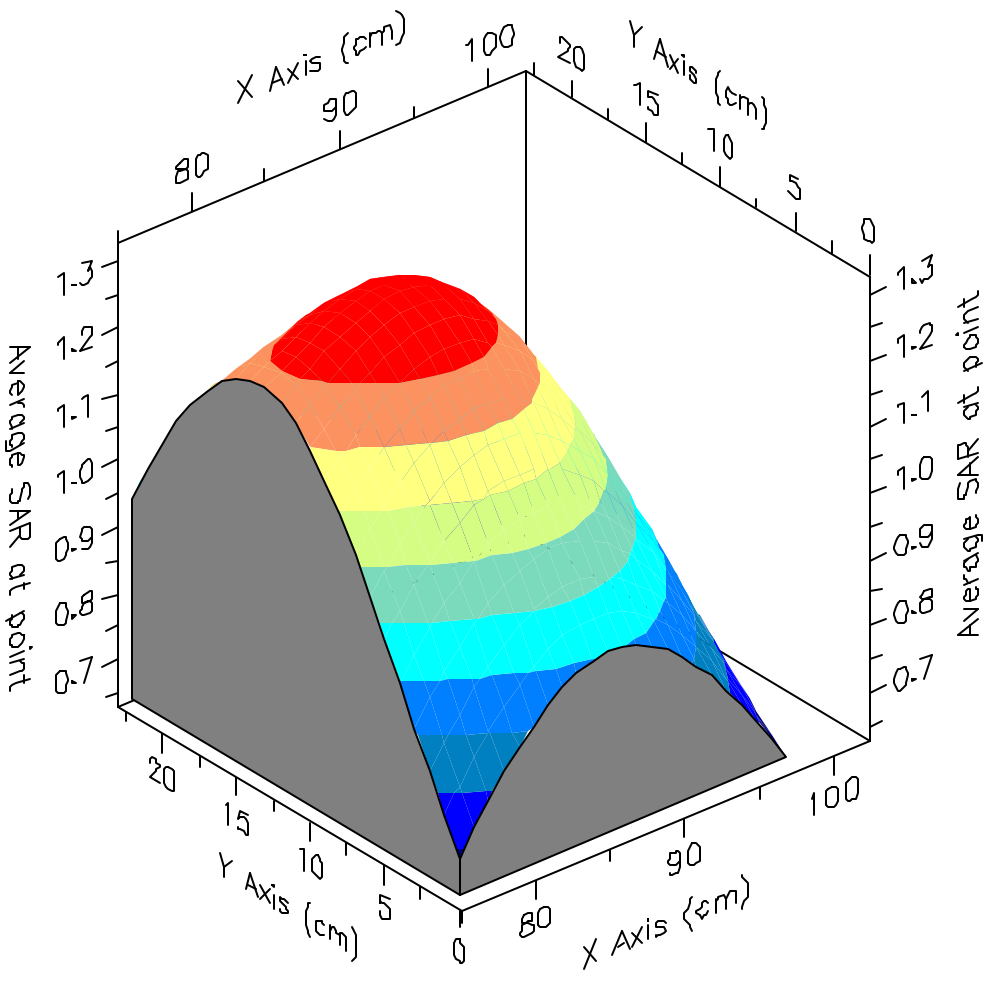
SAR Data Report 02070819

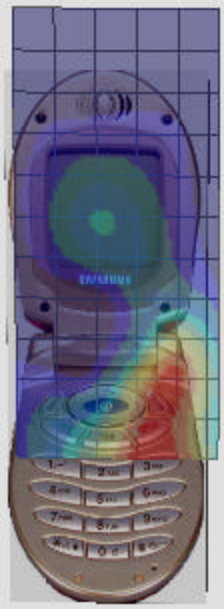
```
  Start        :  8-Jul-02 01:23:06 pm
  End          :  8-Jul-02 01:30:54 pm
  Code Version : 4.08
  Robot Version: 4.08

Product Data:
  Type             : SAMSUNG
  Model Number     : SCH-A220
  Serial Number    : 1
  Frequency        : 1851.25 MHz
  Transmit Pwr     : 0.280 W
  Antenna Type     : Helical
  Antenna Posn.    : In

Measurement Data:
  Phantom Name        : SAM-R
  Phantom Type        : Right Ear
  Tissue Type         : Brain
  Tissue Dielectric   : 40.890
  Tissue Conductivity : 1.410
  Tissue Density      : 1.000
  Robot Name          : CRS

Probe Data:
  Probe Name              : PCT002
  Probe Type              : E Fld Triangle
  Frequency               : 1900 MHz
  Tissue Type             : Brain
  Calibrated Dielectric   : 40.200
  Calibrated Conductivity :  1.410
  Calibrated Density      :  1.000
  Probe Offset            :  2.400 mm
  Conversion Factor       :  4.700
  Probe Sensitivity :  3.000   2.995   2.653   mV/(mW/cm^2)
  Amplifier Gains   :  20.00   20.00   20.00

Sample:
  Rate:         6000 Samples/Sec
  Count:        100 Samples
  NIDAQ Gain:   5

Comments:
  PCS Mode CH-0025
  Cheek
  CF=1; Amb. Temp= 22.5 'C; Liq. Temp=22.1 'C



Area Scan - Max Peak SAR Value at x=87.0 y=12.0 = 1.25 W/kg

Zoom Scan - Max Peak SAR Value at x=84.0 y=14.0 z=0.0 = 1.89 W/kg

Max 1g SAR at x=84.0 y=13.0 z=0.0 = 1.30 W/kg

Max 10g SAR at x=82.0 y=13.0 z=0.0 = 0.82 W/kg
```

SAR - Z Axis
at Hotspot x:84.0 y:14.0



1g SAR Values

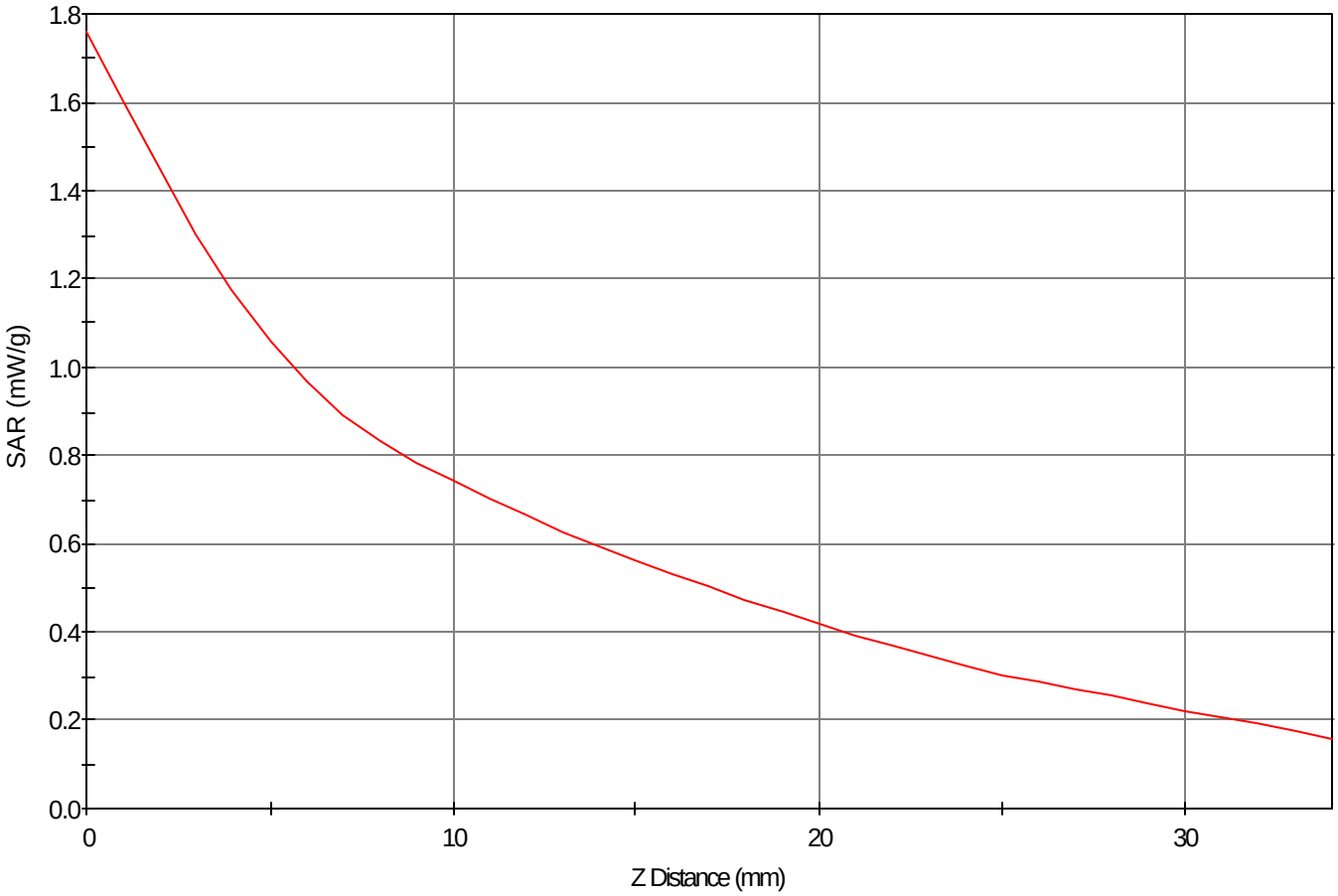




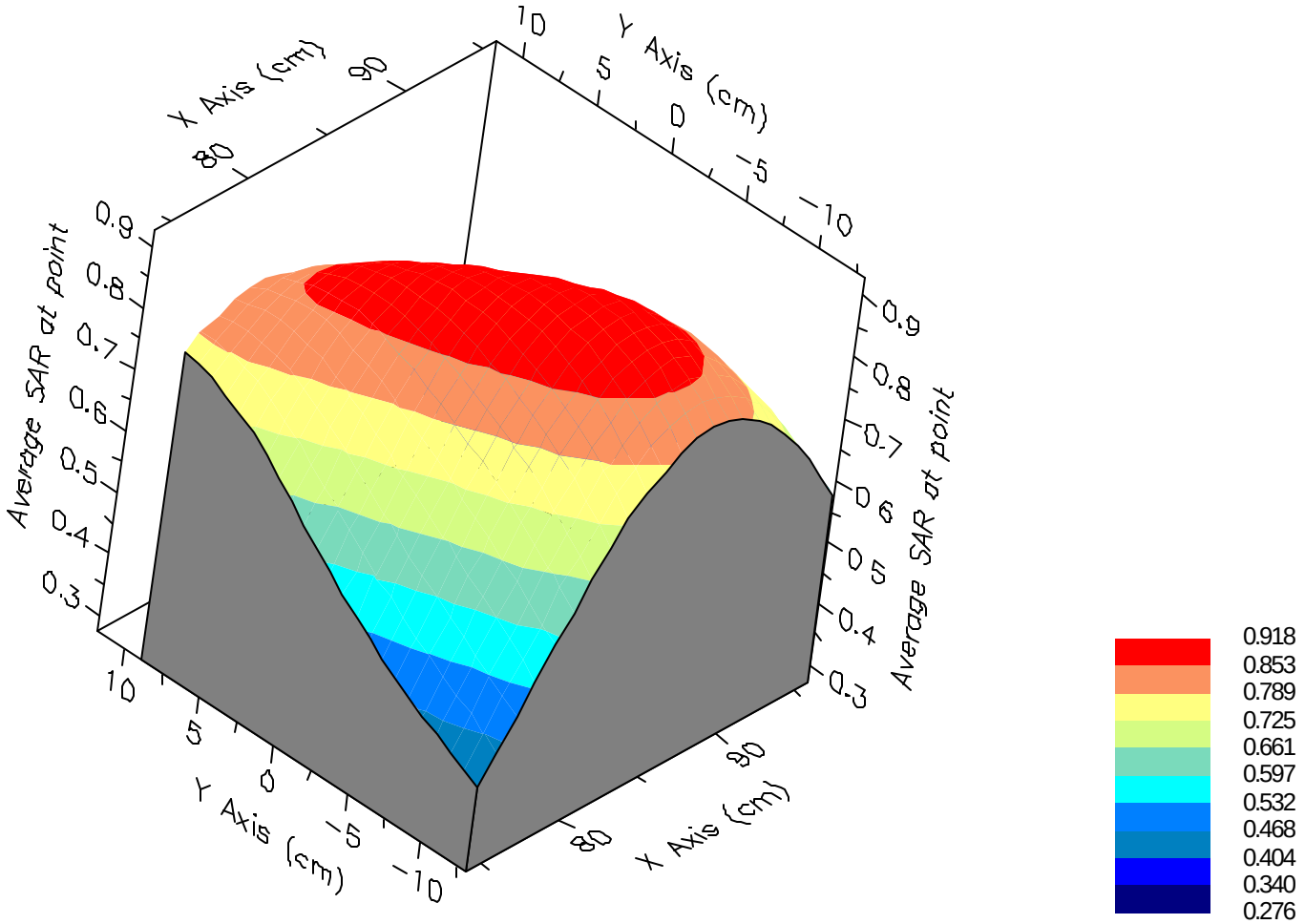
SAR Data Report 02070904

```
  Start        :  9-Jul-02 10:22:27 am
  End          :  9-Jul-02 10:33:42 am
  Code Version : 4.08
  Robot Version: 4.08

Product Data:
  Type             : SAMSUNG
  Model Number     : SCH-A220
  Serial Number    : 1
  Frequency        : 1851.25 MHz
  Transmit Pwr     : 0.280 W
  Antenna Type     : Helical
  Antenna Posn.    : In

Measurement Data:
  Phantom Name        : SAM-L
  Phantom Type        : Left Ear
  Tissue Type         : Brain
  Tissue Dielectric   : 40.890
  Tissue Conductivity : 1.410
  Tissue Density      : 1.000
  Robot Name          : CRS

Probe Data:
  Probe Name              : PCT002
  Probe Type              : E Fld Triangle
  Frequency               : 1900 MHz
  Tissue Type             : Brain
  Calibrated Dielectric   : 40.200
  Calibrated Conductivity :  1.410
  Calibrated Density      :  1.000
  Probe Offset            :  2.400 mm
  Conversion Factor       :  4.700
  Probe Sensitivity :  3.000   2.995   2.653   mV/(mW/cm^2)
  Amplifier Gains   :  20.00   20.00   20.00

Sample:
  Rate:         6000 Samples/Sec
  Count:        100 Samples
  NIDAQ Gain:   5

Comments:
  PCS Mode CH-0025
  Cheek
  CF=1; Amb. Temp= 22.4 'C; Liq. Temp=22.1 'C



Area Scan - Max Peak SAR Value at x=85.0 y=-2.0 = 1.18 W/kg

Zoom Scan - Max Peak SAR Value at x=69.0 y=14.0 z=0.0 = 1.76 W/kg

Max 1g SAR at x=82.0 y=5.0 z=0.0 = 1.22 W/kg

Max 10g SAR at x=83.0 y=0.0 z=0.0 = 0.80 W/kg
```

SAR - Z Axis
at Hotspot x:69.0 y:14.0



1g SAR Values

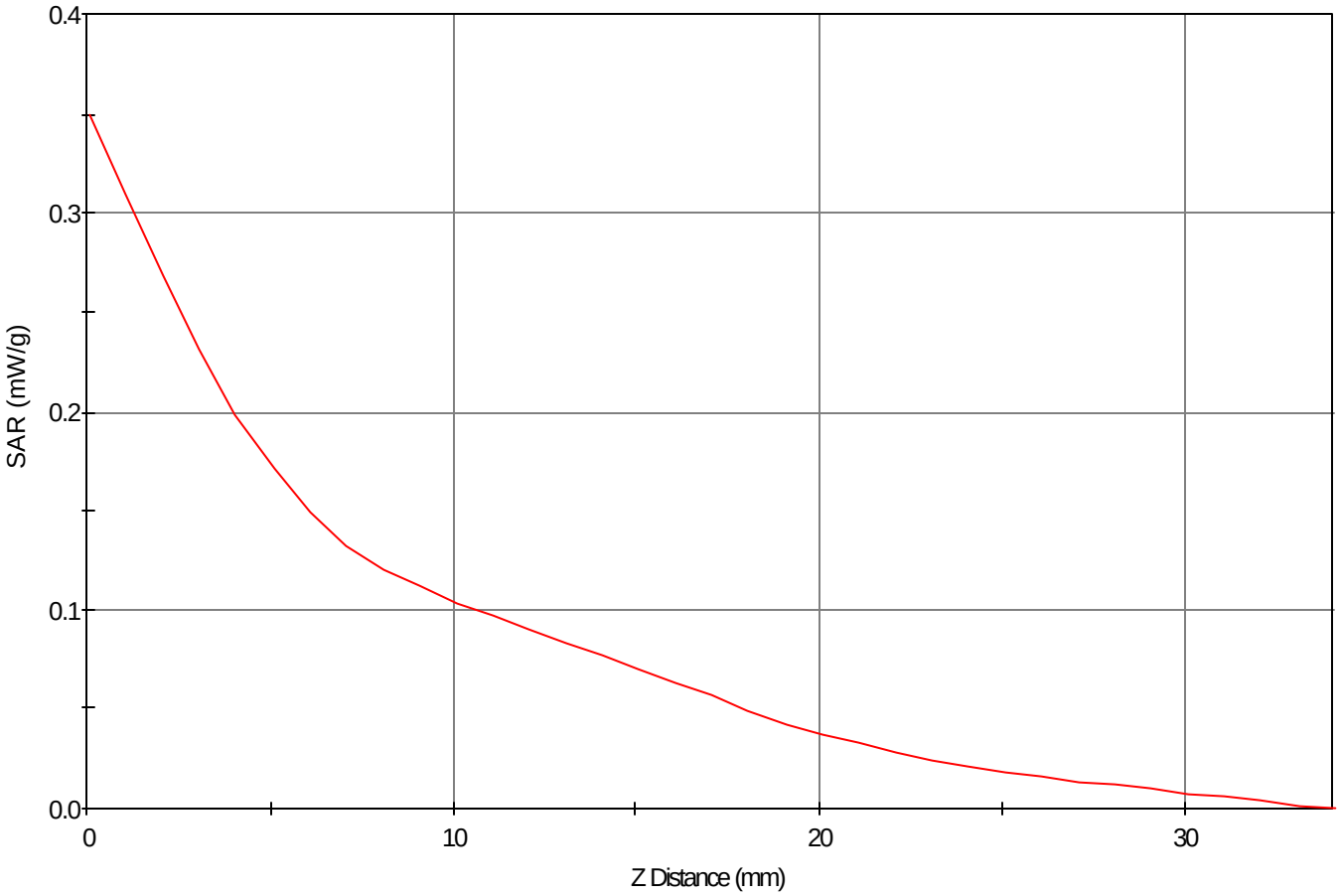



SAMSUNG

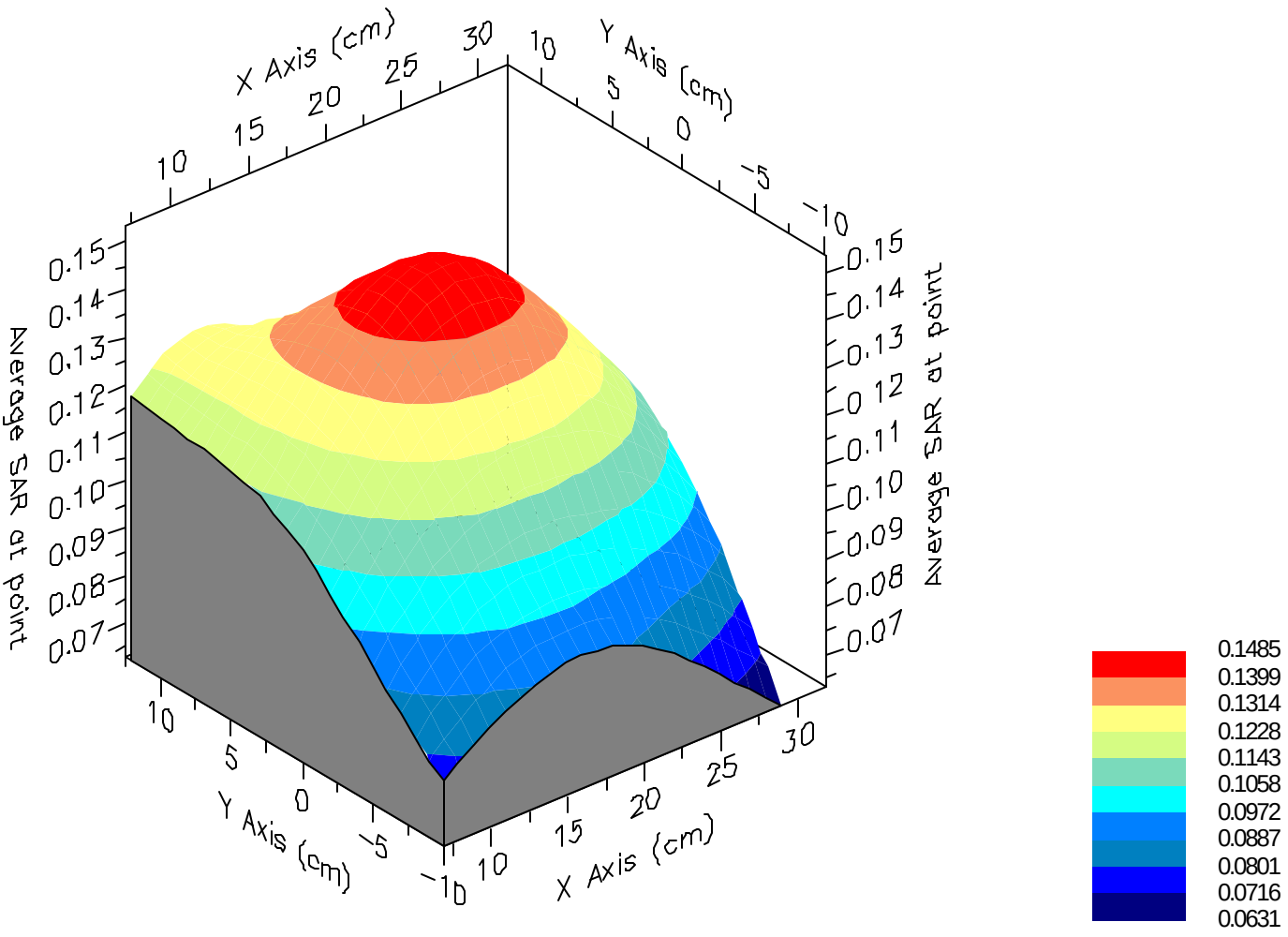
SAR Data Report 02070823

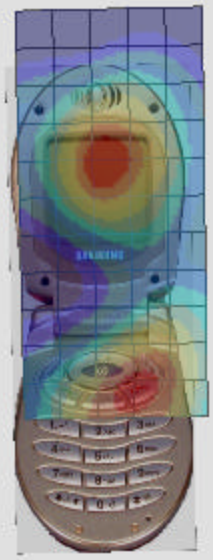
```
  Start        :  8-Jul-02 02:04:32 pm
  End          :  8-Jul-02 02:10:43 pm
  Code Version : 4.08
  Robot Version: 4.08

Product Data:
  Type             : SAMSUNG
  Model Number     : SCH-A220
  Serial Number    : 1
  Frequency        : 1851.25 MHz
  Transmit Pwr     : 0.280 W
  Antenna Type     : Helical
  Antenna Posn.    : In

Measurement Data:
  Phantom Name        : SAM-R
  Phantom Type        : Right Ear
  Tissue Type         : Brain
  Tissue Dielectric   : 40.890
  Tissue Conductivity : 1.410
  Tissue Density      : 1.000
  Robot Name          : CRS

Probe Data:
  Probe Name              : PCT002
  Probe Type              : E Fld Triangle
  Frequency               : 1900 MHz
  Tissue Type             : Brain
  Calibrated Dielectric   : 40.200
  Calibrated Conductivity :  1.410
  Calibrated Density      :  1.000
  Probe Offset            :  2.400 mm
  Conversion Factor       :  4.700
  Probe Sensitivity :  3.000   2.995   2.653   mV/(mW/cm^2)
  Amplifier Gains   :  20.00   20.00   20.00

Sample:
  Rate:         6000 Samples/Sec
  Count:        100 Samples
  NIDAQ Gain:   5

Comments:
  PCS Mode CH-25
  Tilt
  CF=1; Amb. Temp= 22.5 'C; Liq. Temp=22.1 'C



Area Scan - Max Peak SAR Value at x=18.0 y=1.0 = 0.13 W/kg

Zoom Scan - Max Peak SAR Value at x=9.0 y=17.0 z=0.0 = 0.35 W/kg

Max 1g SAR at x=18.0 y=3.0 z=0.0 = 0.15 W/kg

Max 10g SAR at x=18.0 y=5.0 z=0.0 = 0.08 W/kg
```

SAR - Z Axis
at Hotspot x:9.0 y:17.0



1g SAR Values

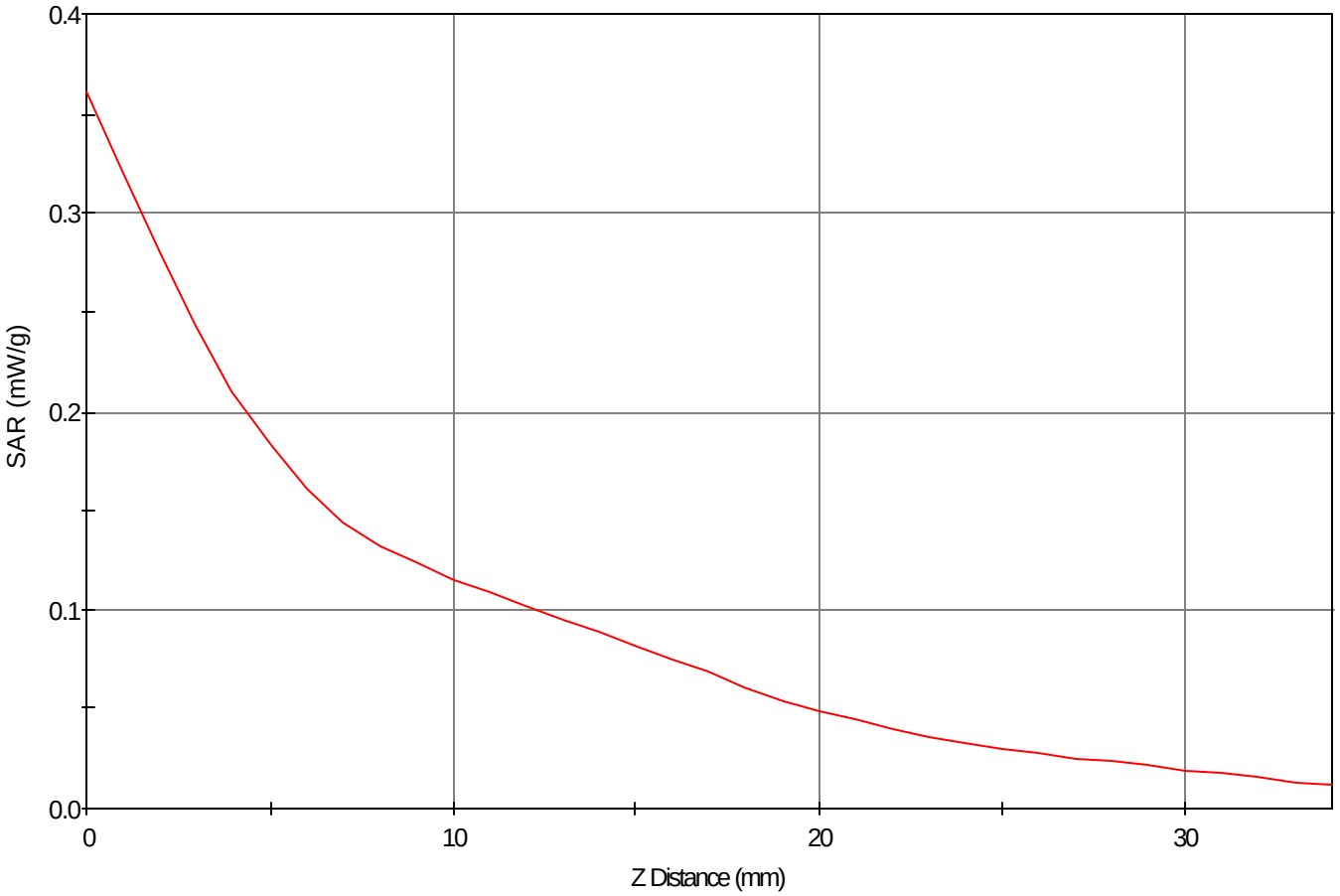




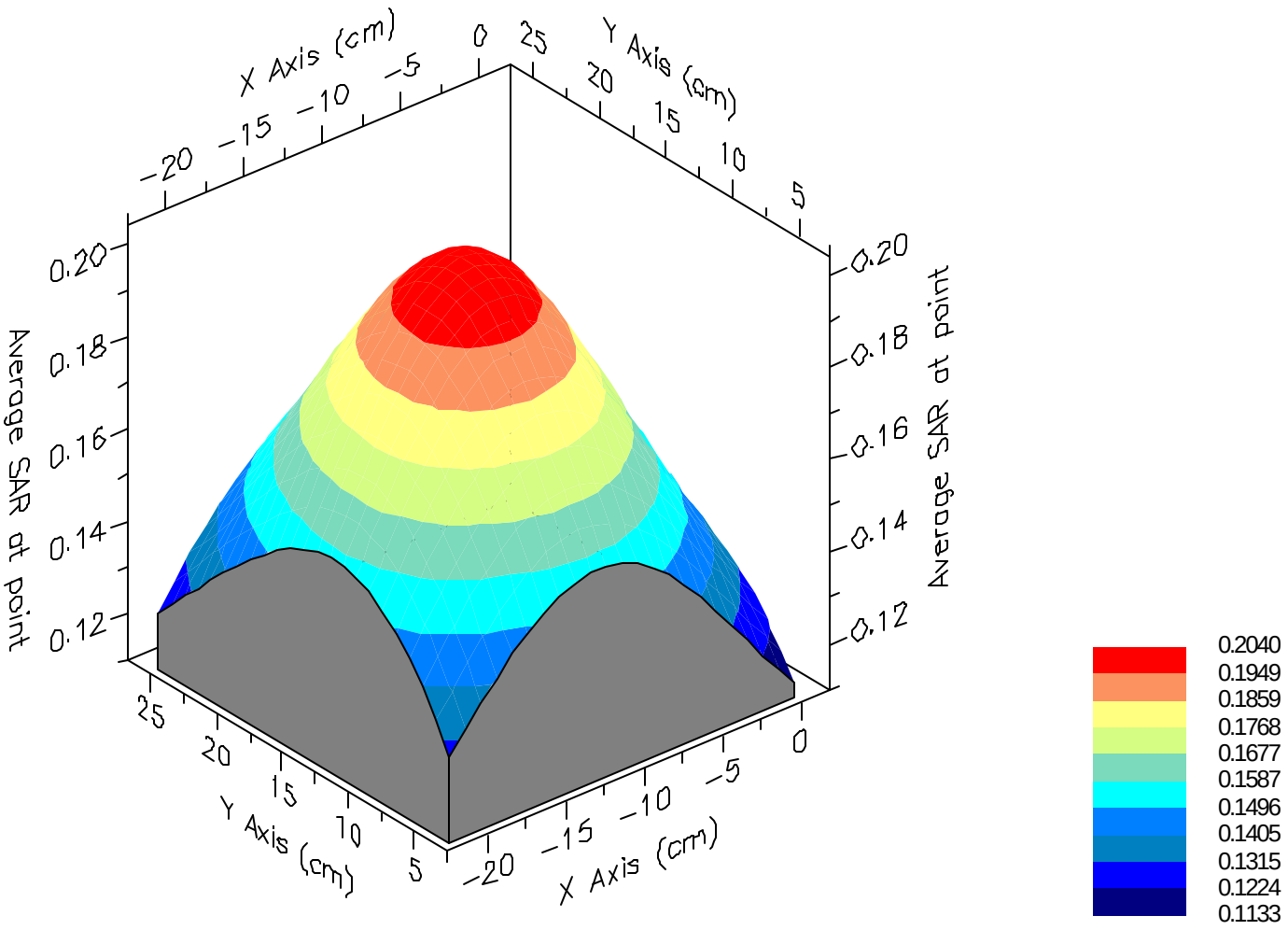
SAR Data Report 02070912

```
  Start        :  9-Jul-02 12:35:58 pm
  End          :  9-Jul-02 12:42:42 pm
  Code Version : 4.08
  Robot Version: 4.08

Product Data:
  Type             : SAMSUNG
  Model Number     : SCH-A220
  Serial Number    : 1
  Frequency        : 1851.25 MHz
  Transmit Pwr     : 0.280 W
  Antenna Type     : Helical
  Antenna Posn.    : Out

Measurement Data:
  Phantom Name        : SAM-L
  Phantom Type        : Left Ear
  Tissue Type         : Brain
  Tissue Dielectric   : 40.890
  Tissue Conductivity : 1.410
  Tissue Density      : 1.000
  Robot Name          : CRS

Probe Data:
  Probe Name              : PCT002
  Probe Type              : E Fld Triangle
  Frequency               : 1900 MHz
  Tissue Type             : Brain
  Calibrated Dielectric   : 40.200
  Calibrated Conductivity :  1.410
  Calibrated Density      :  1.000
  Probe Offset            :  2.400 mm
  Conversion Factor       :  4.700
  Probe Sensitivity :  3.000   2.995   2.653   mV/(mW/cm^2)
  Amplifier Gains   :  20.00   20.00   20.00

Sample:
  Rate:         6000 Samples/Sec
  Count:        100 Samples
  NIDAQ Gain:   5

Comments:
  PCS Mode CH-25
  Tilt
  CF=1; Amb. Temp= 22.4 'C; Liq. Temp=22.1 'C



Area Scan - Max Peak SAR Value at x=-11.0 y=14.0 = 0.20 W/kg

Zoom Scan - Max Peak SAR Value at x=-13.0 y=13.0 z=0.0 = 0.36 W/kg

Max 1g SAR at x=-12.0 y=14.0 z=0.0 = 0.20 W/kg

Max 10g SAR at x=-11.0 y=15.0 z=0.0 = 0.12 W/kg
```

SAR - Z Axis
at Hotspot x:-13.0 y:13.0



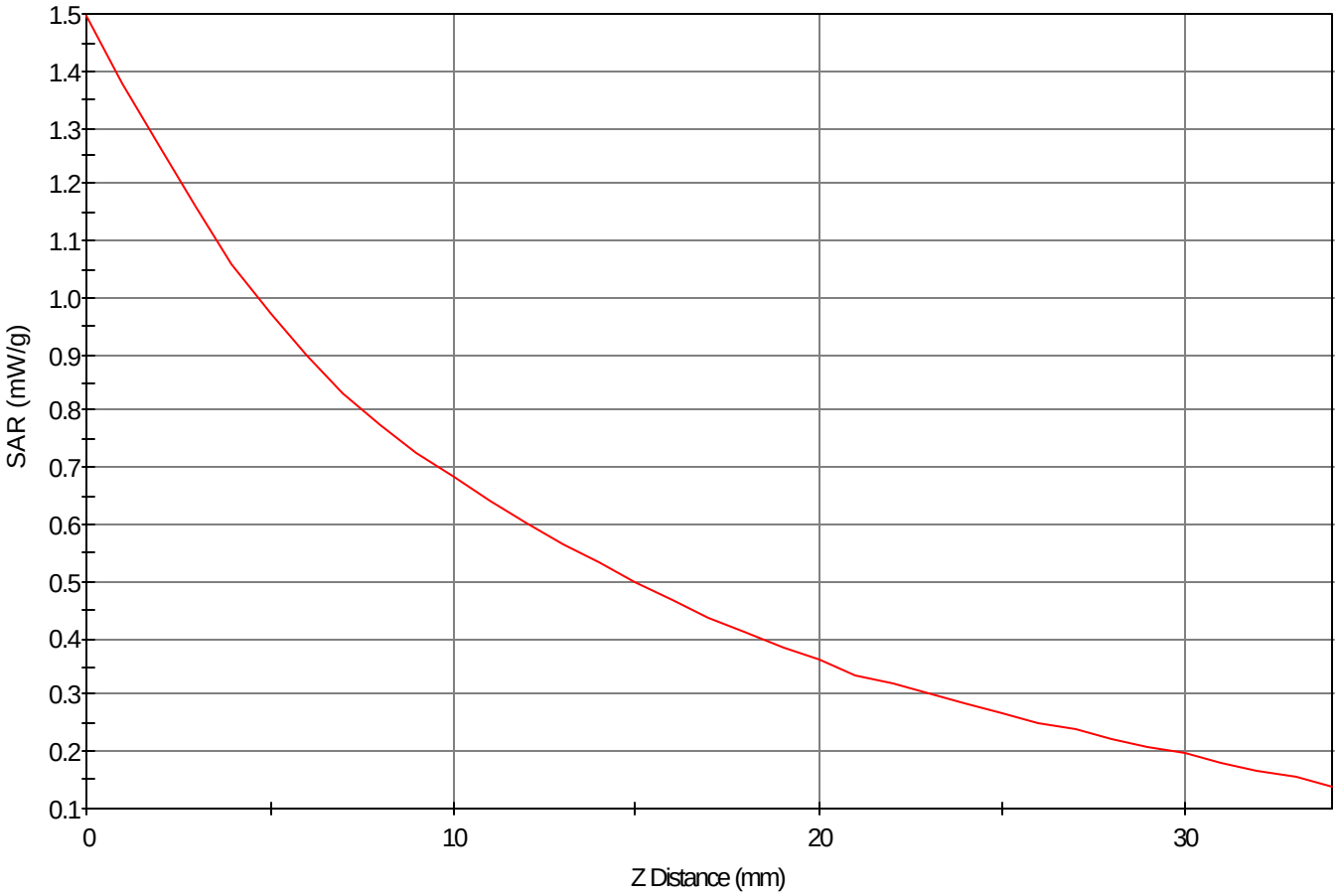
1g SAR Values

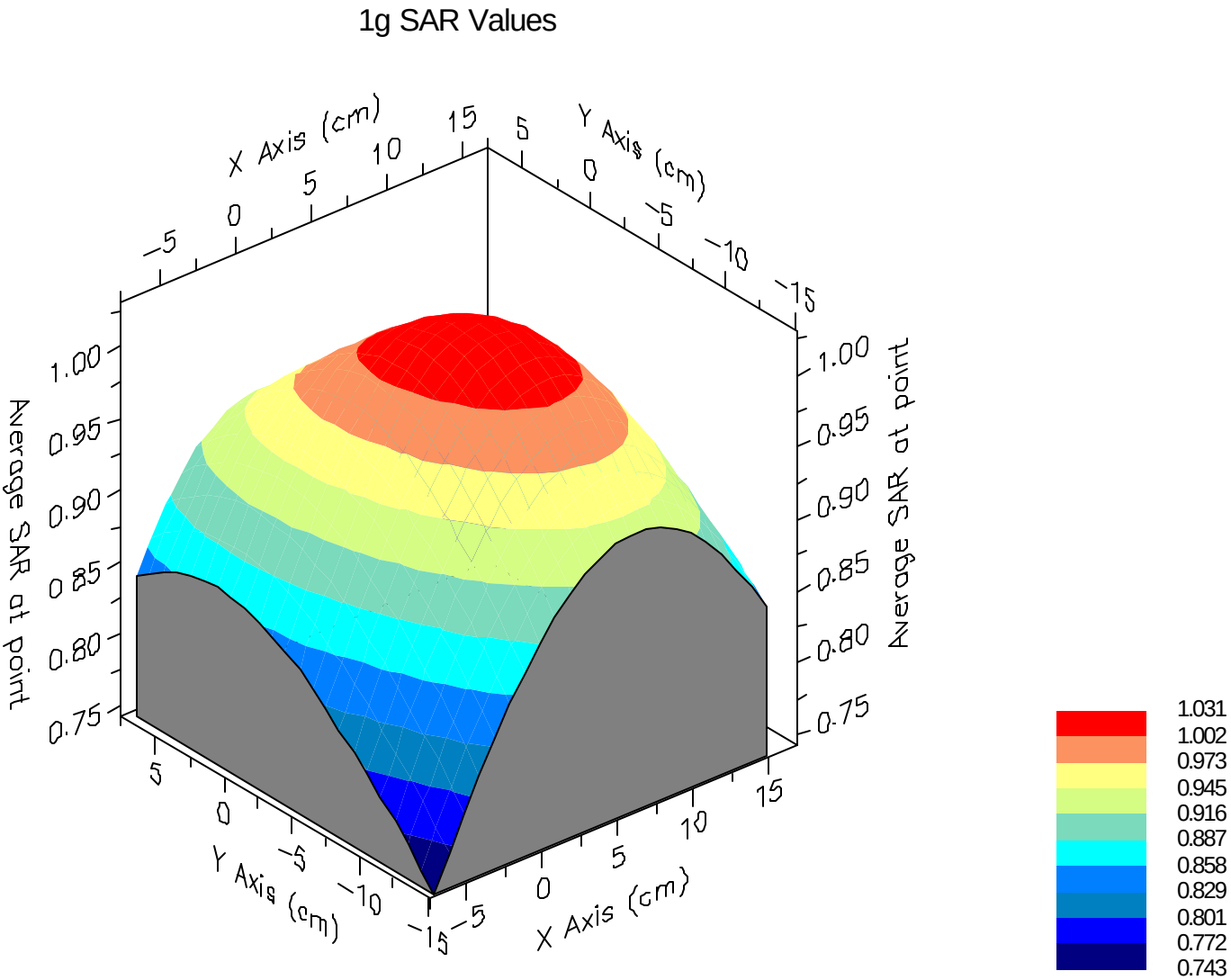


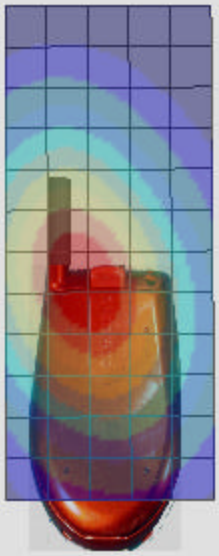
SAR Data Report 02070837

```
  Start        :  8-Jul-02 05:17:22 pm
  End          :  8-Jul-02 05:23:29 pm
  Code Version : 4.08
  Robot Version: 4.08

Product Data:
  Type             : SAMSUNG
  Model Number     : SCH-A220
  Serial Number    : 1
  Frequency        : 824.70 MHz
  Transmit Pwr     : 0.280 W
  Antenna Type     : Helical
  Antenna Posn.    : Out

Measurement Data:
  Phantom Name        : SAM-FLAT
  Phantom Type        : Uniphantom
  Tissue Type         : Muscle
  Tissue Dielectric   : 53.900
  Tissue Conductivity : 0.980
  Tissue Density      : 1.000
  Robot Name          : CRS

Probe Data:
  Probe Name              : PCT002
  Probe Type              : E Fld Triangle
  Frequency               : 835 MHz
  Tissue Type             : Muscle
  Calibrated Dielectric   : 55.700
  Calibrated Conductivity :  0.990
  Calibrated Density      :  1.000
  Probe Offset            :  2.400 mm
  Conversion Factor       :  4.900
  Probe Sensitivity :  3.597   3.474   3.049   mV/(mW/cm^2)
  Amplifier Gains   :  20.00   20.00   20.00

Sample:
  Rate:         6000 Samples/Sec
  Count:        100 Samples
  NIDAQ Gain:   5

Comments:
  CDMA Mode CH-1013
  Body - SLIM
  CF=1; Amb. Temp= 22.5 'C; Liq. Temp=22.1 'C



Area Scan - Max Peak SAR Value at x=4.0 y=-4.0 = 0.99 W/kg

Zoom Scan - Max Peak SAR Value at x=5.0 y=-6.0 z=0.0 = 1.49 W/kg

Max 1g SAR at x=5.0 y=-5.0 z=0.0 = 1.03 W/kg

Max 10g SAR at x=5.0 y=-5.0 z=0.0 = 0.69 W/kg
```

SAR - Z Axis
at Hotspot x:5.0 y:-6.0



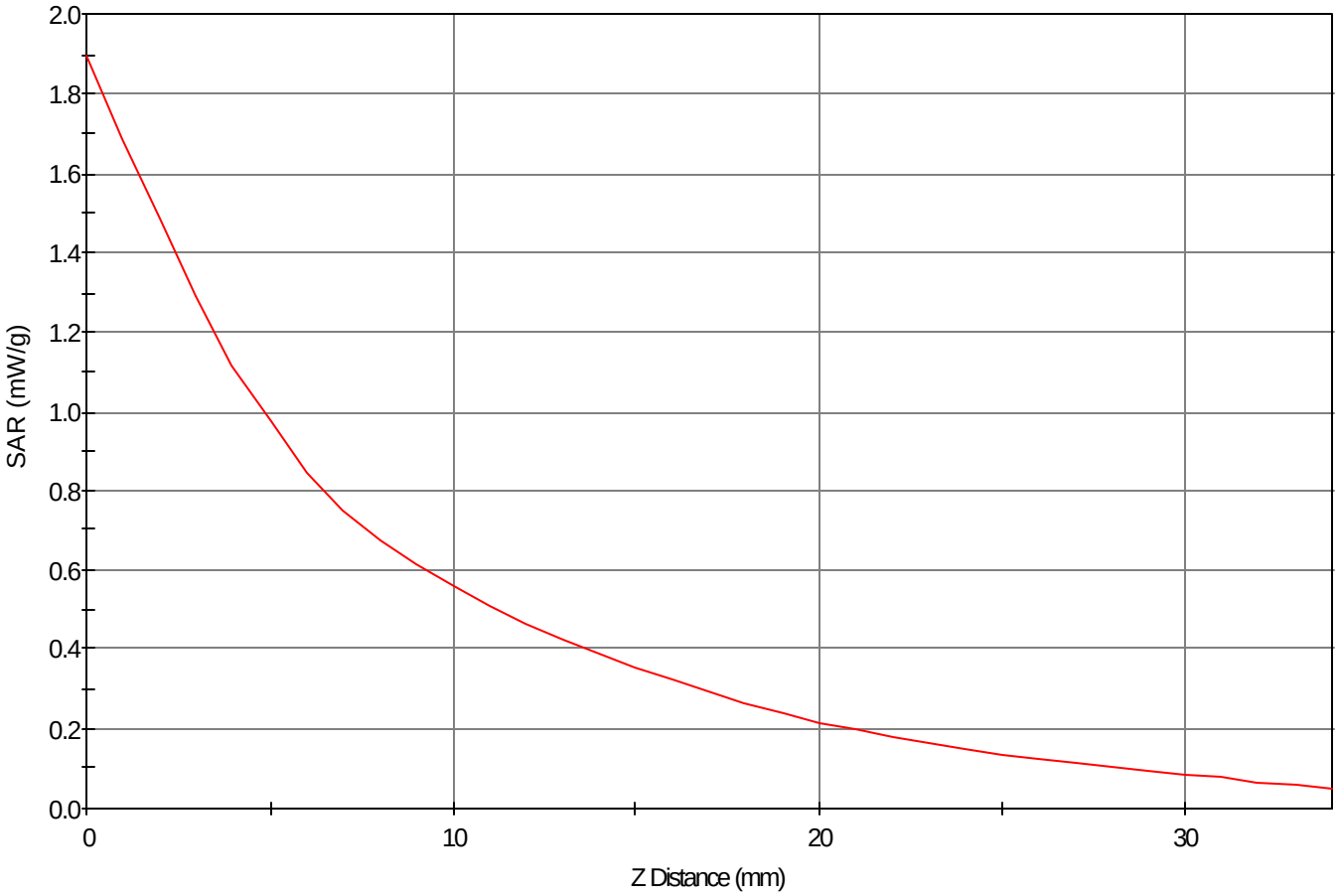

1g SAR Values
X Axis (cm)
Y Axis (cm)
Average SAR at point
1.00
0.95
0.90
0.85
0.80
0.75
1.031
1.002
0.973
0.945
0.916
0.887
0.858
0.829
0.801
0.772
0.743



SAR Data Report 02070927

```
  Start        :  9-Jul-02 04:18:21 pm
  End          :  9-Jul-02 04:24:15 pm
  Code Version : 4.08
  Robot Version: 4.08

Product Data:
  Type             : SAMSUNG
  Model Number     : SCH-A220
  Serial Number    : 1
  Frequency        : 1908.75 MHz
  Transmit Pwr     : 0.280 W
  Antenna Type     : Helical
  Antenna Posn.    : Out

Measurement Data:
  Phantom Name        : SAM-FLAT
  Phantom Type        : Uniphantom
  Tissue Type         : Muscle
  Tissue Dielectric   : 53.900
  Tissue Conductivity : 1.540
  Tissue Density      : 1.000
  Robot Name          : CRS

Probe Data:
  Probe Name              : PCT002
  Probe Type              : E Fld Triangle
  Frequency               : 1900 MHz
  Tissue Type             : Muscle
  Calibrated Dielectric   : 53.900
  Calibrated Conductivity :  1.480
  Calibrated Density      :  1.000
  Probe Offset            :  2.400 mm
  Conversion Factor       :  4.500
  Probe Sensitivity :  3.000   2.995   2.653   mV/(mW/cm^2)
  Amplifier Gains   :  20.00   20.00   20.00

Sample:
  Rate:         6000 Samples/Sec
  Count:        100 Samples
  NIDAQ Gain:   5

Comments:
  PCS Mode CH-1175
  Body
  CF=1; Amb. Temp= 22.4 'C; Liq. Temp=22.1 'C



Area Scan - Max Peak SAR Value at x=-1.0 y=25.0 = 0.97 W/kg

Zoom Scan - Max Peak SAR Value at x=0.0 y=24.0 z=0.0 = 1.90 W/kg

Max 1g SAR at x=0.0 y=25.0 z=0.0 = 1.10 W/kg

Max 10g SAR at x=-1.0 y=26.0 z=0.0 = 0.61 W/kg
```

SAR - Z Axis
at Hotspot x:0.0 y:24.0



1g SAR Values