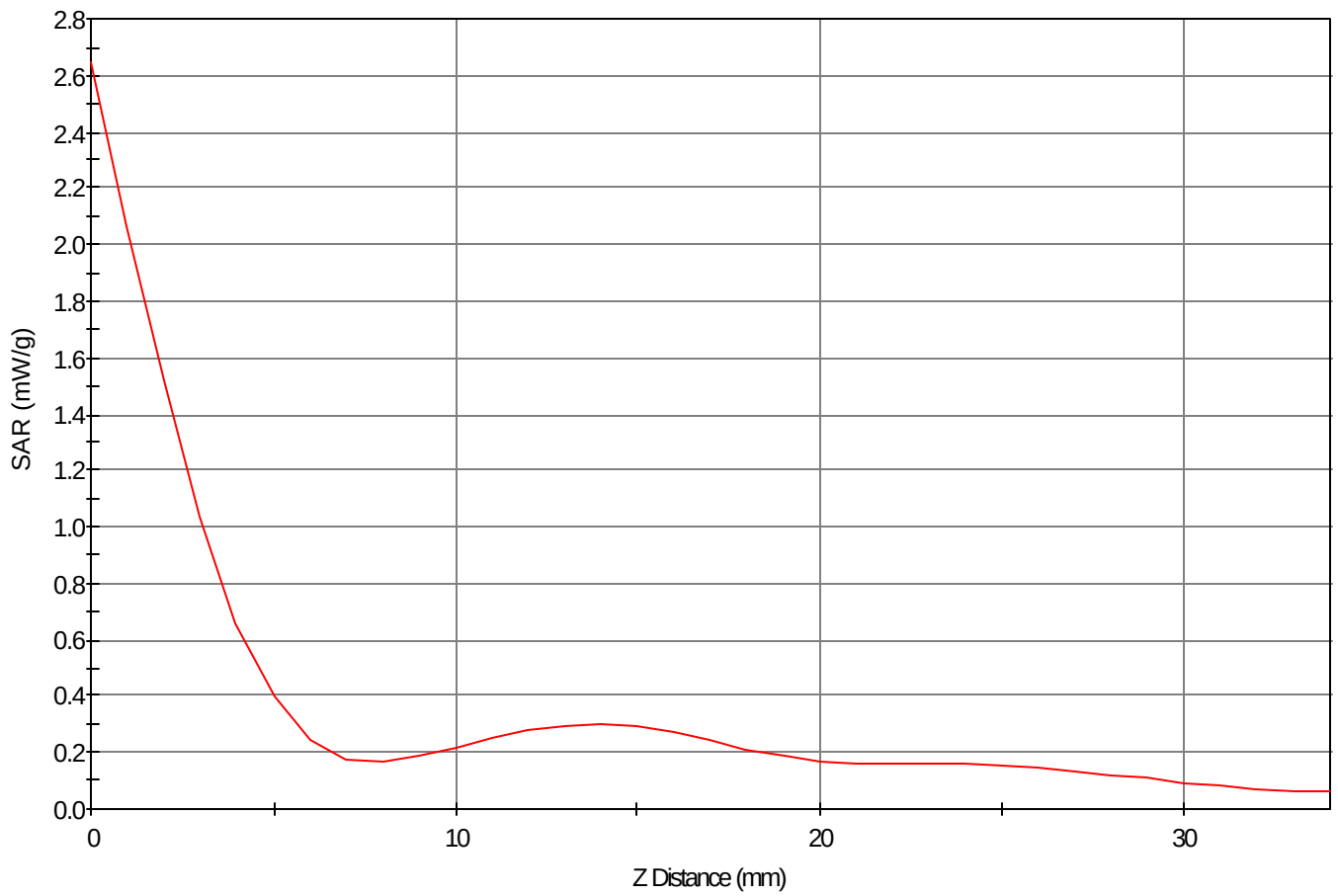
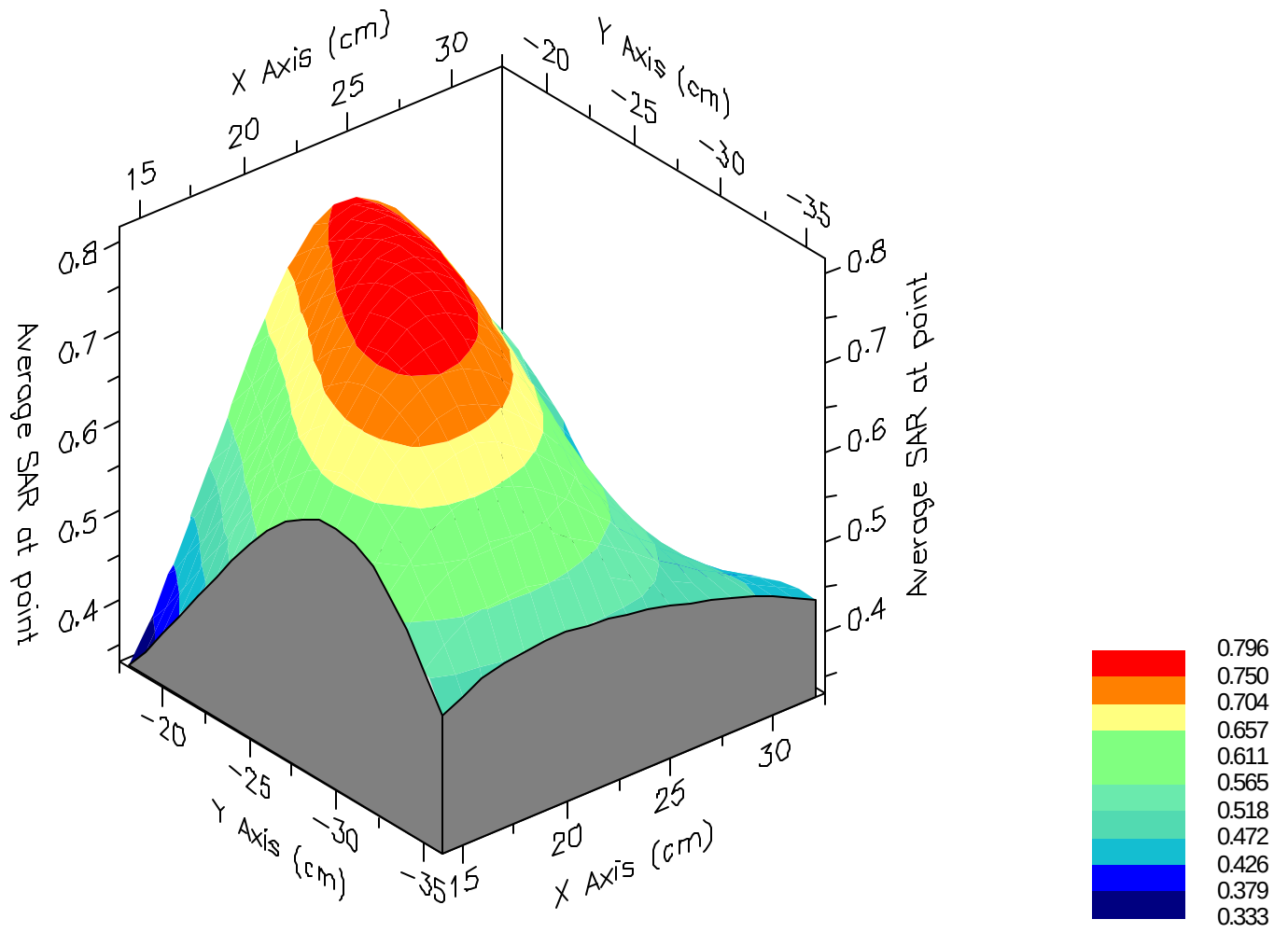
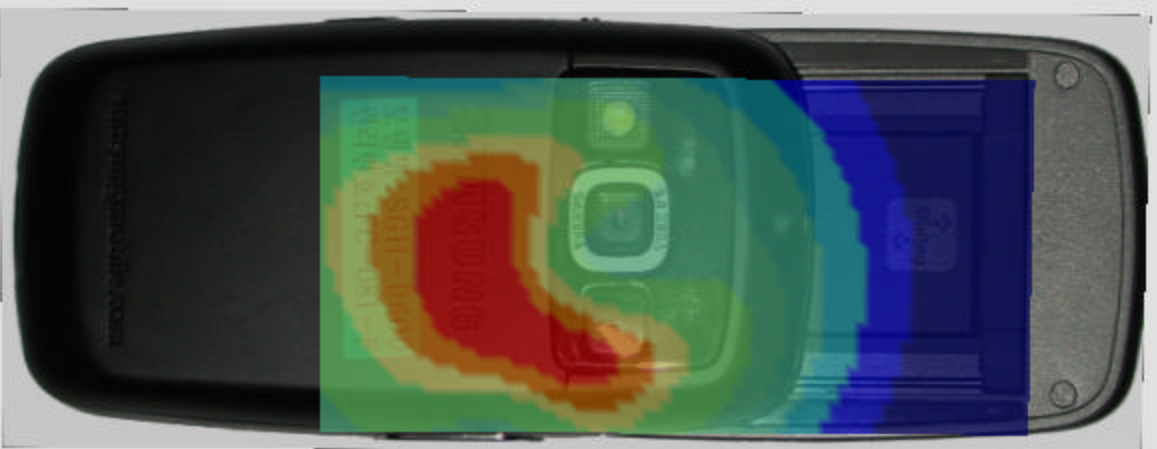


SAR - Z Axis
at Hotspot x:21.0 y:-26.0



1g SAR Values





SAR Data Report 05062239

Start : 22-Jun-05 02:56:06 pm
End : 22-Jun-05 03:01:29 pm
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : Samsung Dual-Band GSM Phone
Model Number : SGH-D600
Serial Number : FC-081-B
Frequency : 848.8 MHz
Transmit Pwr : 2 W
Antenna Type : Helical
Antenna Posn. : Internal

Measurement Data:

Phantom Name : SAM FLAT
Phantom Type : Uniphantom
Tissue Type : Muscle
Tissue Dielectric : 53.020
Tissue Conductivity : 0.990
Tissue Density : 1.000
Robot Name : CRS

Probe Data:

Probe Name : PCT005
Probe Type : E Fld Triangle
Frequency : 835 MHz
Tissue Type : Muscle
Calibrated Dielectric : 53.660
Calibrated Conductivity : 0.980
Calibrated Density : 1.000
Probe Offset : 1.600 mm
Conversion Factor : 5.850
Probe Sensitivity : 3.807 3.736 3.821 mV/(mW/cm^2)
Amplifier Gains : 20.00 20.00 20.00

Sample:

Rate: 6000 Samples/Sec
Count: 1000 Samples
NIDAQ Gain: 5

Comments:

GPRS Mode Ch. 251
Body (Slide Out w/ 1.5cm spacing & BlueTooth On)
CF=4; Amb. Temp= 22.5 'C; Liq. Temp=21.3 'C

Power Drop Test:

Reading @ start = 0.375
Reading @ End = 0.383
Power at End = 102.1%

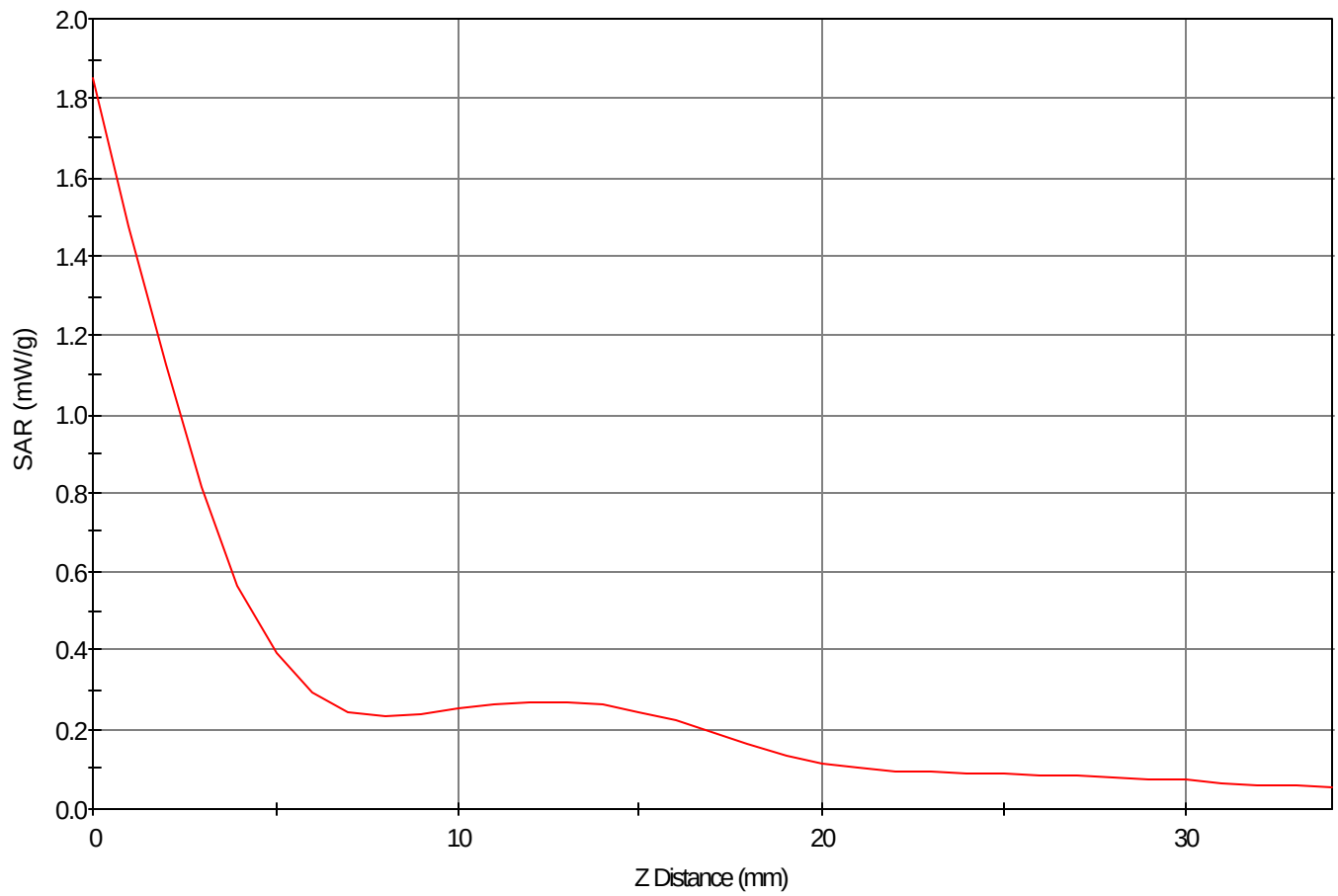
Area Scan - Max Peak SAR Value at x=19.0 y=-17.0 = 0.67 W/kg

Zoom Scan - Max Peak SAR Value at x=26.0 y=-31.0 z=0.0 = 1.85 W/kg

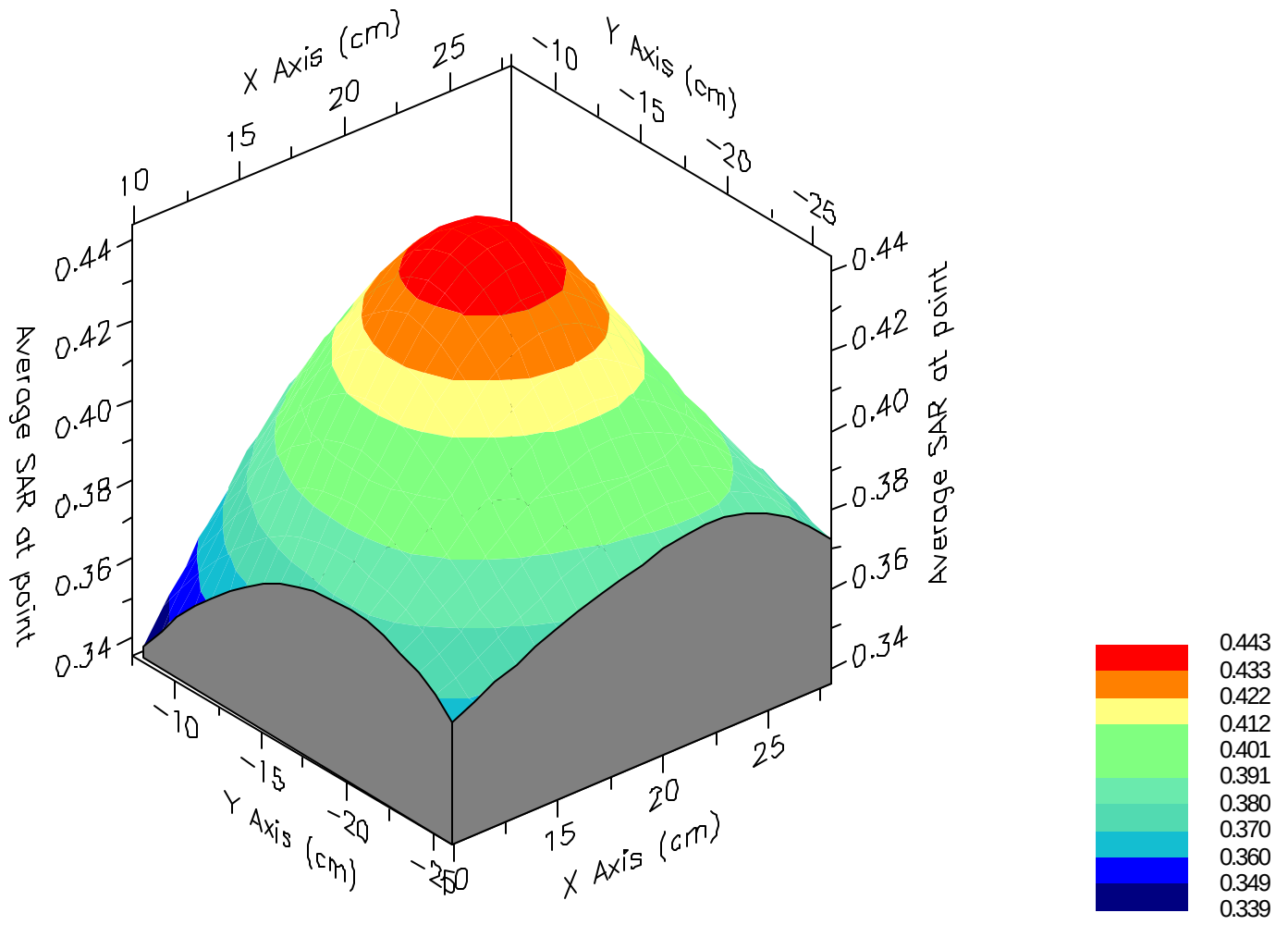
Max 1g SAR at x=20.0 y=-16.0 z=0.0 = 0.68 W/kg

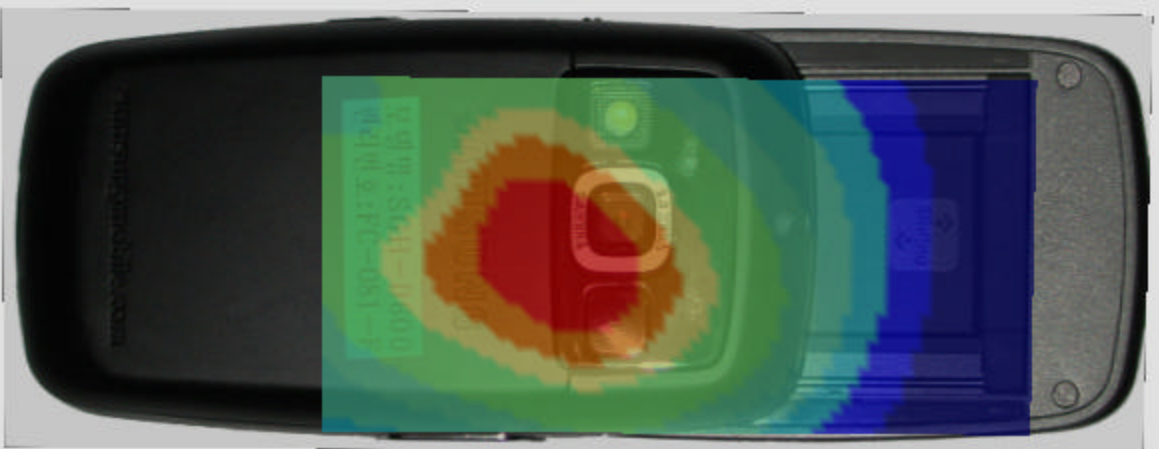
Max 10g SAR at x=20.0 y=-17.0 z=0.0 = 0.38 W/kg

SAR - Z Axis
at Hotspot x:26.0 y:-31.0



1g SAR Values





SAR Data Report 05062008

Start : 20-Jun-05 11:45:56 am
End : 20-Jun-05 11:50:57 am
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : Samsung Dual-Band GSM Phone
Model Number : SGH-D600
Serial Number : FC-081-B
Frequency : 1880 MHz
Transmit Pwr : 1 W
Antenna Type : Helical
Antenna Posn. : Internal

Measurement Data:

Phantom Name : SAM-RIGHT
Phantom Type : Right Ear
Tissue Type : Brain
Tissue Dielectric : 38.590
Tissue Conductivity : 1.460
Tissue Density : 1.000
Robot Name : CRS

Probe Data:

Probe Name : PCT005
Probe Type : E Fld Triangle
Frequency : 1900 MHz
Tissue Type : Brain
Calibrated Dielectric : 39.020
Calibrated Conductivity : 1.370
Calibrated Density : 1.000
Probe Offset : 1.600 mm
Conversion Factor : 5.400
Probe Sensitivity : 5.115 4.969 4.453 mV/(mW/cm^2)
Amplifier Gains : 20.00 20.00 20.00

Sample:

Rate: 6000 Samples/Sec
Count: 1000 Samples
NIDAQ Gain: 5

Comments:

GSM Mode Ch. 661
Right Cheek (Slide In)
CF=8; Amb. Temp= 22.5 'C; Liq. Temp=21.3 'C

Power Drop Test:

Reading @ start = 0.182
Reading @ End = 0.180
Power at End = 98.8%

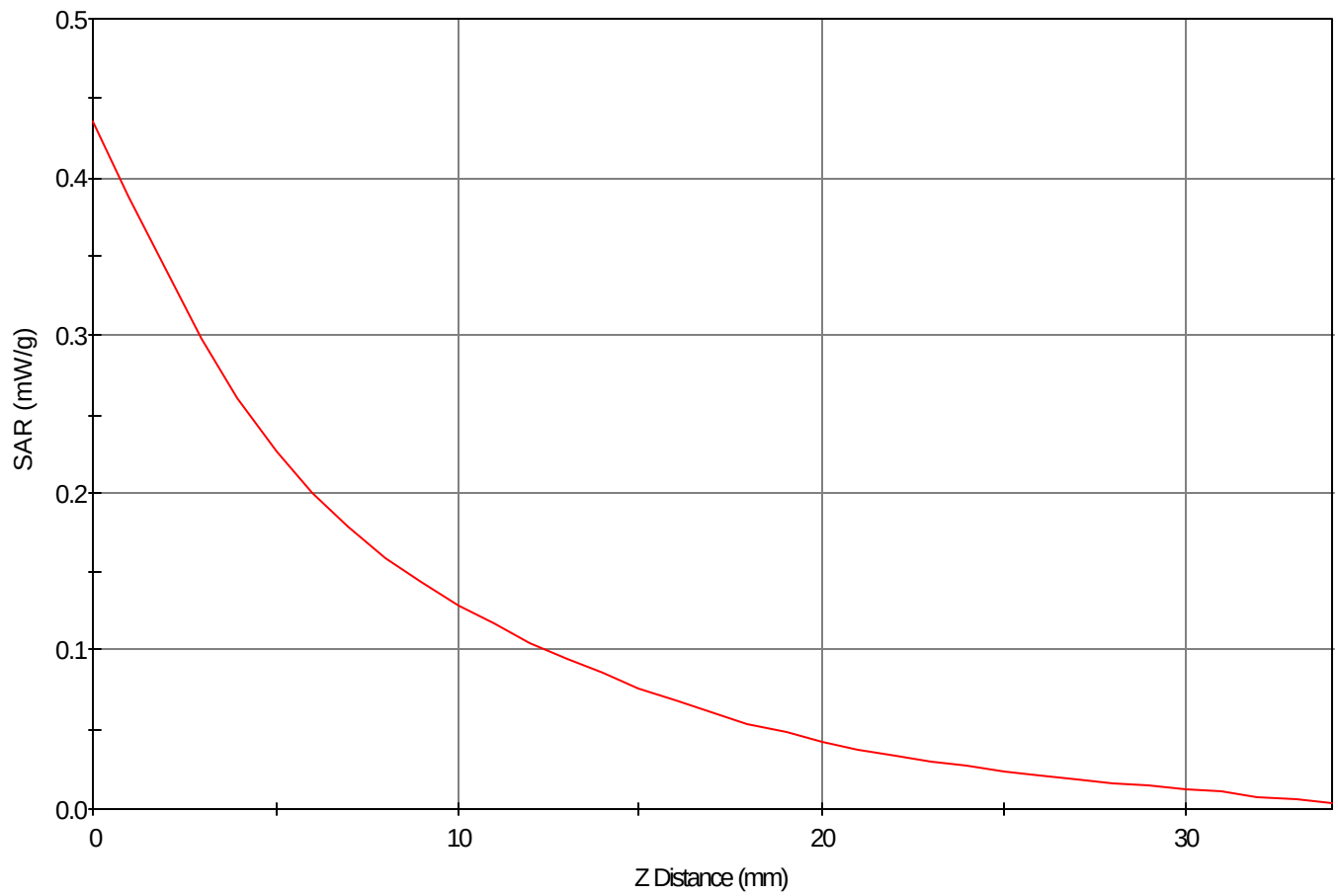
Area Scan - Max Peak SAR Value at x=6.0 y=-12.0 = 0.27 W/kg

Zoom Scan - Max Peak SAR Value at x=4.0 y=-20.0 z=0.0 = 0.44 W/kg

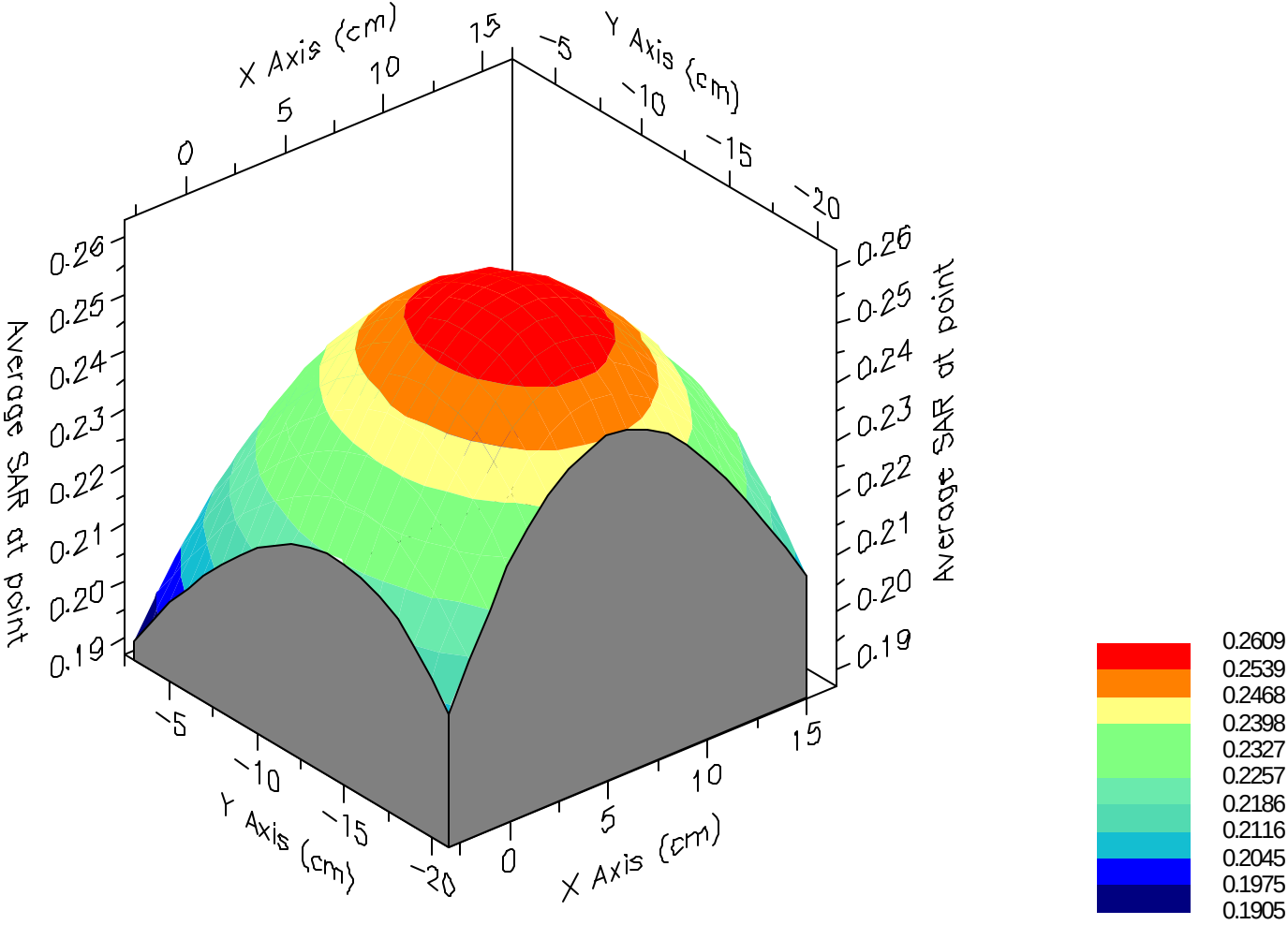
Max 1g SAR at x=5.0 y=-15.0 z=0.0 = 0.26 W/kg

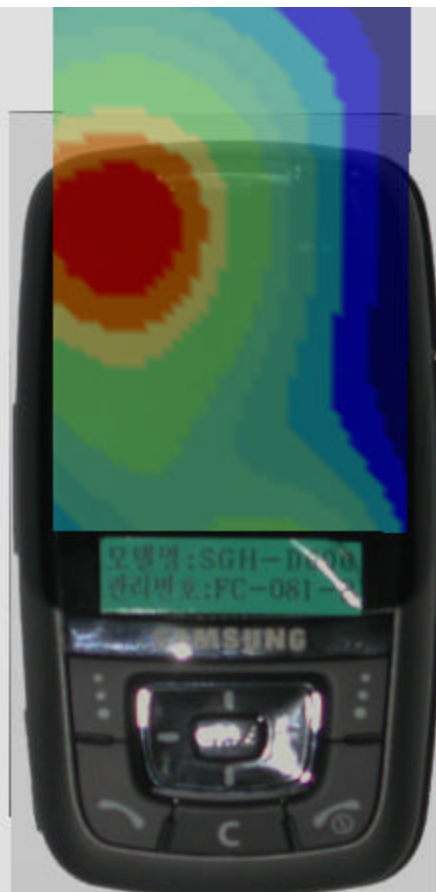
Max 10g SAR at x=7.0 y=-13.0 z=0.0 = 0.15 W/kg

SAR - Z Axis
at Hotspot x:4.0 y:-20.0



1g SAR Values





SAR Data Report 05062011

Start : 20-Jun-05 12:12:23 pm
End : 20-Jun-05 12:18:03 pm
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : Samsung Dual-Band GSM Phone
Model Number : SGH-D600
Serial Number : FC-081-B
Frequency : 1850.2 MHz
Transmit Pwr : 1 W
Antenna Type : Helical
Antenna Posn. : Internal

Measurement Data:

Phantom Name : SAM-RIGHT
Phantom Type : Right Ear
Tissue Type : Brain
Tissue Dielectric : 38.590
Tissue Conductivity : 1.460
Tissue Density : 1.000
Robot Name : CRS

Probe Data:

Probe Name : PCT005
Probe Type : E Fld Triangle
Frequency : 1900 MHz
Tissue Type : Brain
Calibrated Dielectric : 39.020
Calibrated Conductivity : 1.370
Calibrated Density : 1.000
Probe Offset : 1.600 mm
Conversion Factor : 5.400
Probe Sensitivity : 5.115 4.969 4.453 mV/(mW/cm^2)
Amplifier Gains : 20.00 20.00 20.00

Sample:

Rate: 6000 Samples/Sec
Count: 1000 Samples
NIDAQ Gain: 5

Comments:

GSM Mode Ch. 512
Right Cheek (Slide Out)
CF=8; Amb. Temp= 22.5 'C; Liq. Temp=21.3 'C

Power Drop Test:

Reading @ start = 0.095
Reading @ End = 0.097
Power at End = 102.9%

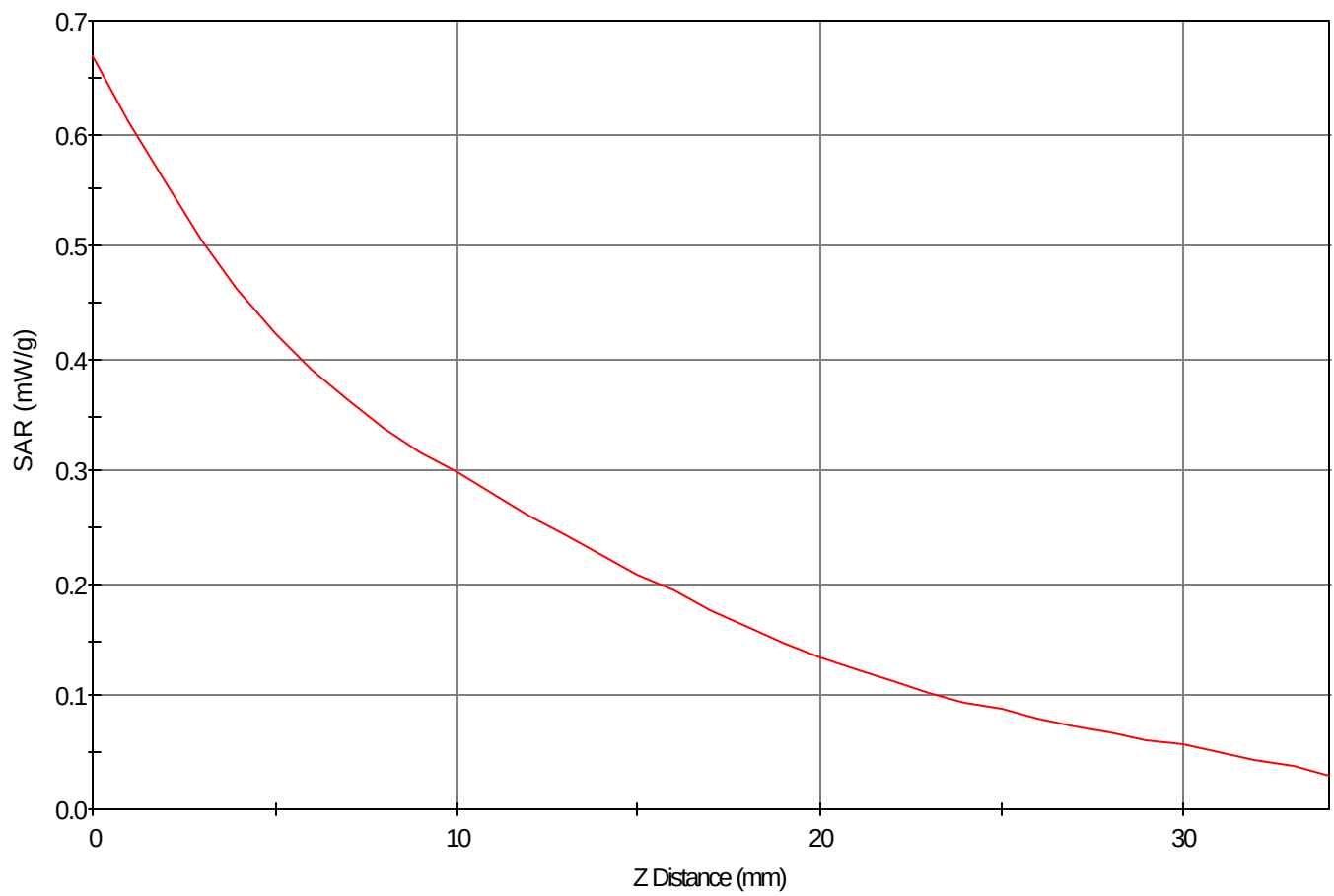
Area Scan - Max Peak SAR Value at x=44.0 y=-1.0 = 0.47 W/kg

Zoom Scan - Max Peak SAR Value at x=41.0 y=-1.0 z=0.0 = 0.67 W/kg

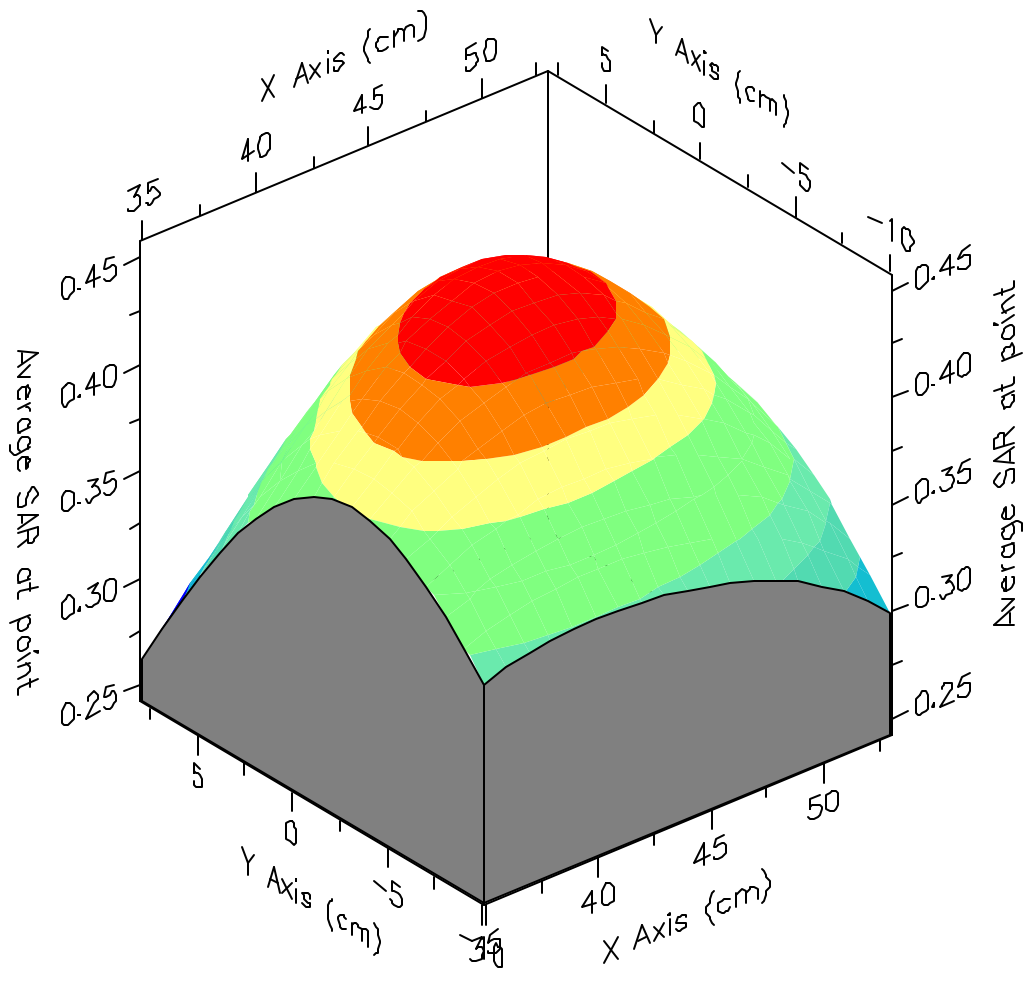
Max 1g SAR at x=44.0 y=0.0 z=0.0 = 0.45 W/kg

Max 10g SAR at x=43.0 y=-2.0 z=0.0 = 0.26 W/kg

SAR - Z Axis
at Hotspot x:41.0 y:-1.0



1g SAR Values





SAR Data Report 05062014

Start : 20-Jun-05 01:32:57 pm
End : 20-Jun-05 01:38:38 pm
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : Samsung Dual-Band GSM Phone
Model Number : SGH-D600
Serial Number : FC-081-B
Frequency : 1850.2 MHz
Transmit Pwr : 1 W
Antenna Type : Helical
Antenna Posn. : Internal

Measurement Data:

Phantom Name : SAM-RIGHT
Phantom Type : Right Ear
Tissue Type : Brain
Tissue Dielectric : 38.590
Tissue Conductivity : 1.460
Tissue Density : 1.000
Robot Name : CRS

Probe Data:

Probe Name : PCT005
Probe Type : E Fld Triangle
Frequency : 1900 MHz
Tissue Type : Brain
Calibrated Dielectric : 39.020
Calibrated Conductivity : 1.370
Calibrated Density : 1.000
Probe Offset : 1.600 mm
Conversion Factor : 5.400
Probe Sensitivity : 5.115 4.969 4.453 mV/(mW/cm^2)
Amplifier Gains : 20.00 20.00 20.00

Sample:

Rate: 6000 Samples/Sec
Count: 1000 Samples
NIDAQ Gain: 5

Comments:

GSM Mode Ch. 512
Right Cheek (Slide Out w/ BlueTooth On)
CF=8; Amb. Temp= 22.5 'C; Liq. Temp=21.3 'C

Power Drop Test:

Reading @ start = 0.075
Reading @ End = 0.076
Power at End = 100.7%

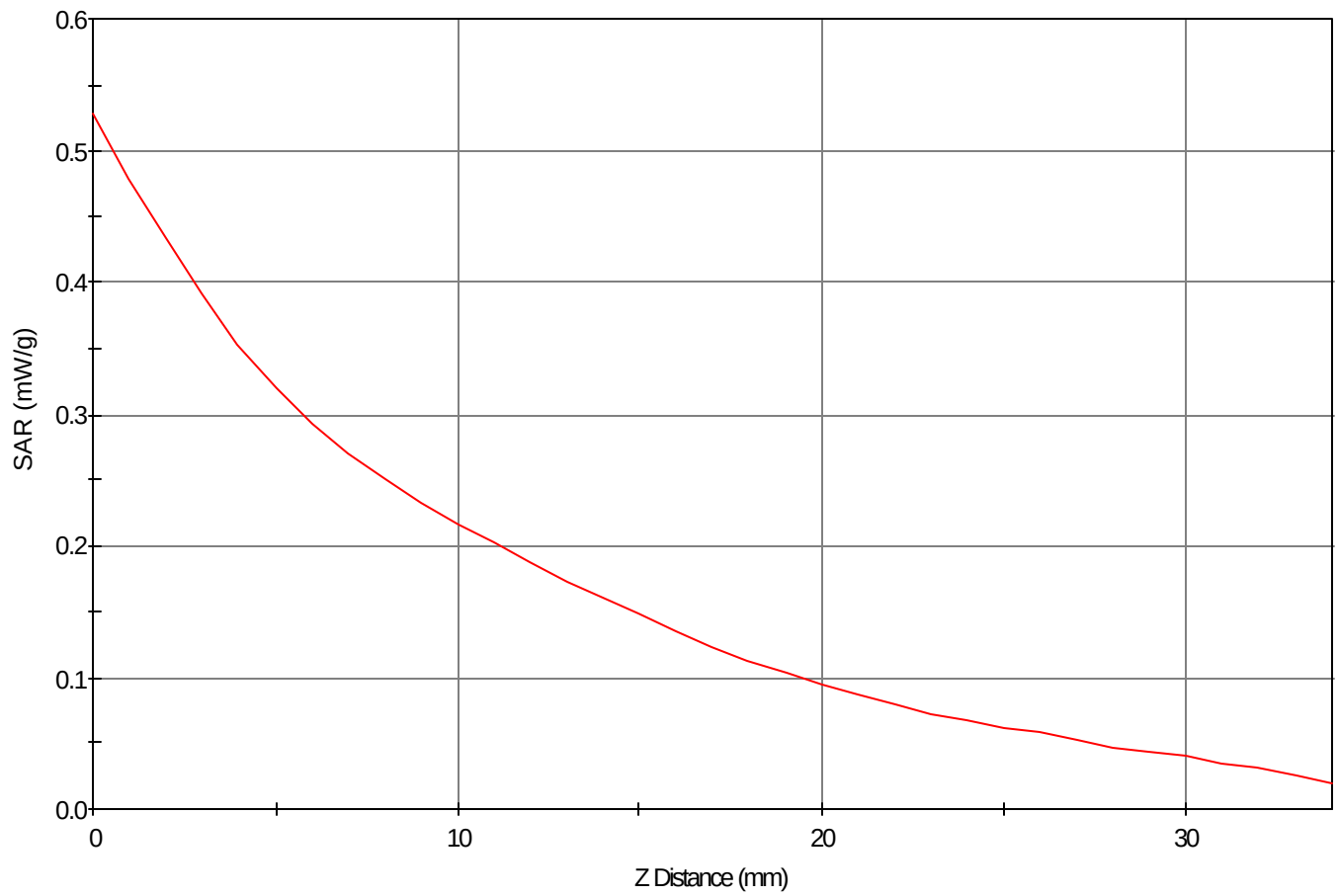
Area Scan - Max Peak SAR Value at x=44.0 y=-1.0 = 0.40 W/kg

Zoom Scan - Max Peak SAR Value at x=49.0 y=4.0 z=0.0 = 0.53 W/kg

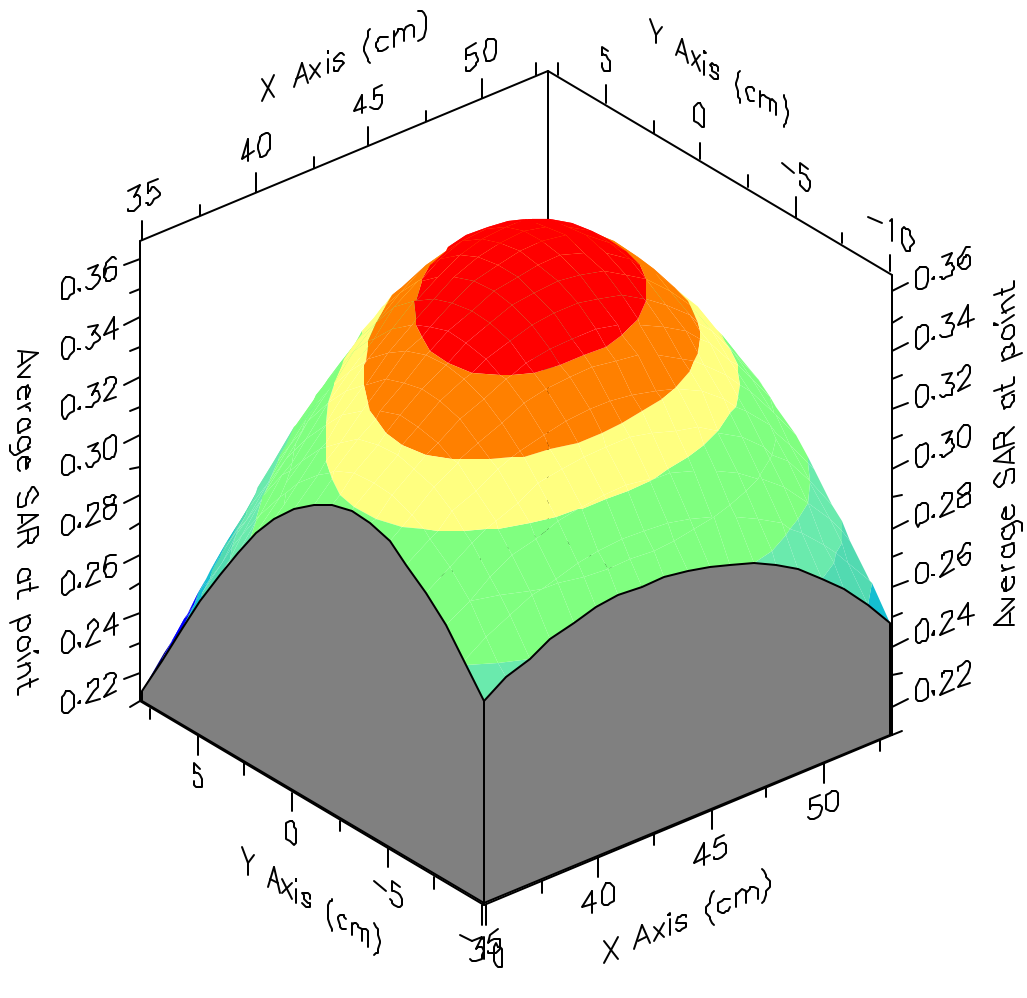
Max 1g SAR at x=45.0 y=0.0 z=0.0 = 0.36 W/kg

Max 10g SAR at x=44.0 y=-1.0 z=0.0 = 0.22 W/kg

SAR - Z Axis
at Hotspot x:49.0 y:4.0



1g SAR Values





SAR Data Report 05062016

Start : 20-Jun-05 01:45:50 pm
End : 20-Jun-05 01:50:57 pm
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : Samsung Dual-Band GSM Phone
Model Number : SGH-D600
Serial Number : FC-081-B
Frequency : 1850.2 MHz
Transmit Pwr : 1 W
Antenna Type : Helical
Antenna Posn. : Internal

Measurement Data:

Phantom Name : SAM-RIGHT
Phantom Type : Right Ear
Tissue Type : Brain
Tissue Dielectric : 38.590
Tissue Conductivity : 1.460
Tissue Density : 1.000
Robot Name : CRS

Probe Data:

Probe Name : PCT005
Probe Type : E Fld Triangle
Frequency : 1900 MHz
Tissue Type : Brain
Calibrated Dielectric : 39.020
Calibrated Conductivity : 1.370
Calibrated Density : 1.000
Probe Offset : 1.600 mm
Conversion Factor : 5.400
Probe Sensitivity : 5.115 4.969 4.453 mV/(mW/cm^2)
Amplifier Gains : 20.00 20.00 20.00

Sample:

Rate: 6000 Samples/Sec
Count: 1000 Samples
NIDAQ Gain: 5

Comments:

GSM Mode Ch. 512
Right Tilt (Slide In)
CF=8; Amb. Temp= 22.5 'C; Liq. Temp=21.3 'C

Power Drop Test:

Reading @ start = 0.180
Reading @ End = 0.177
Power at End = 98.4%

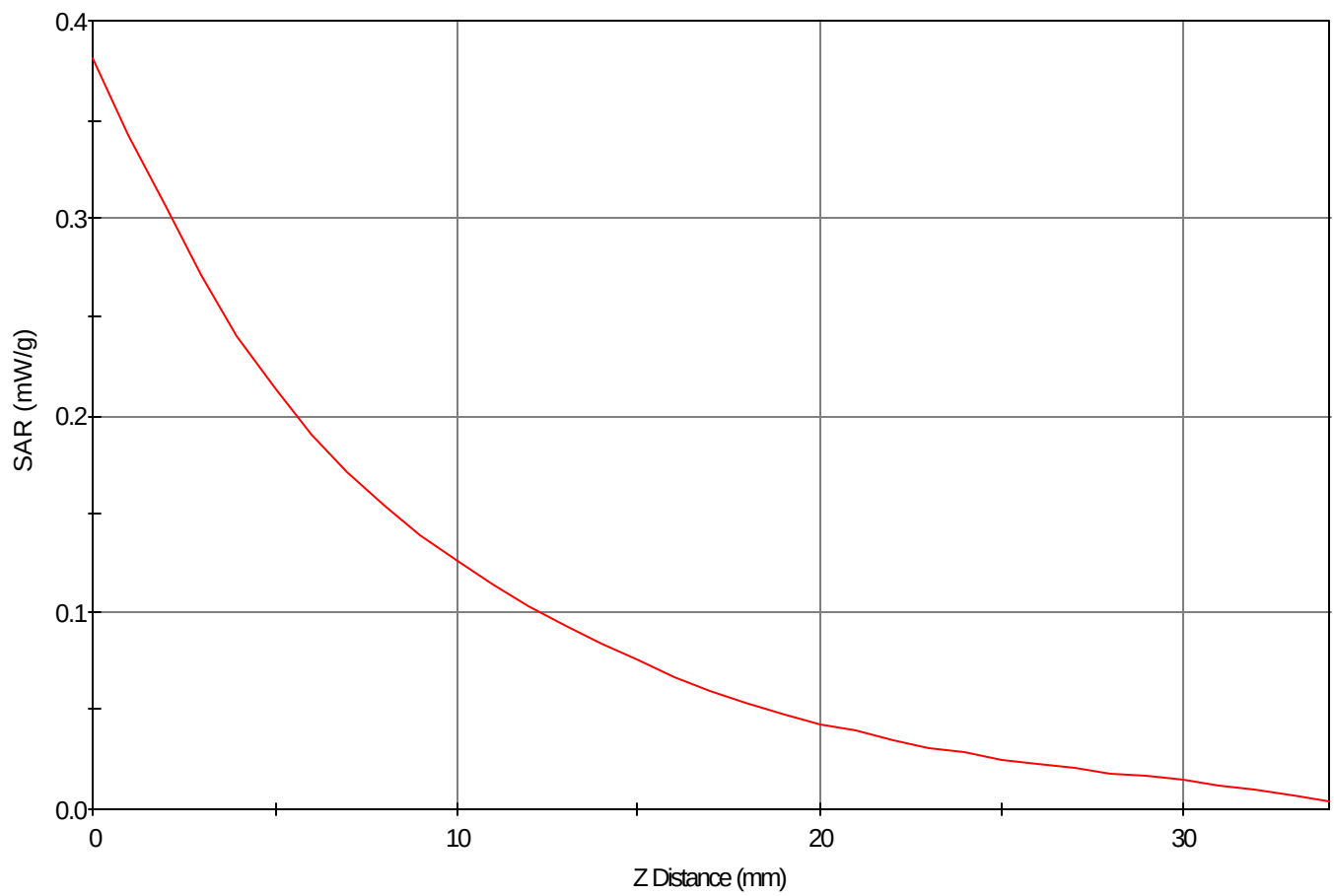
Area Scan - Max Peak SAR Value at x=4.0 y=-12.0 = 0.25 W/kg

Zoom Scan - Max Peak SAR Value at x=3.0 y=-18.0 z=0.0 = 0.38 W/kg

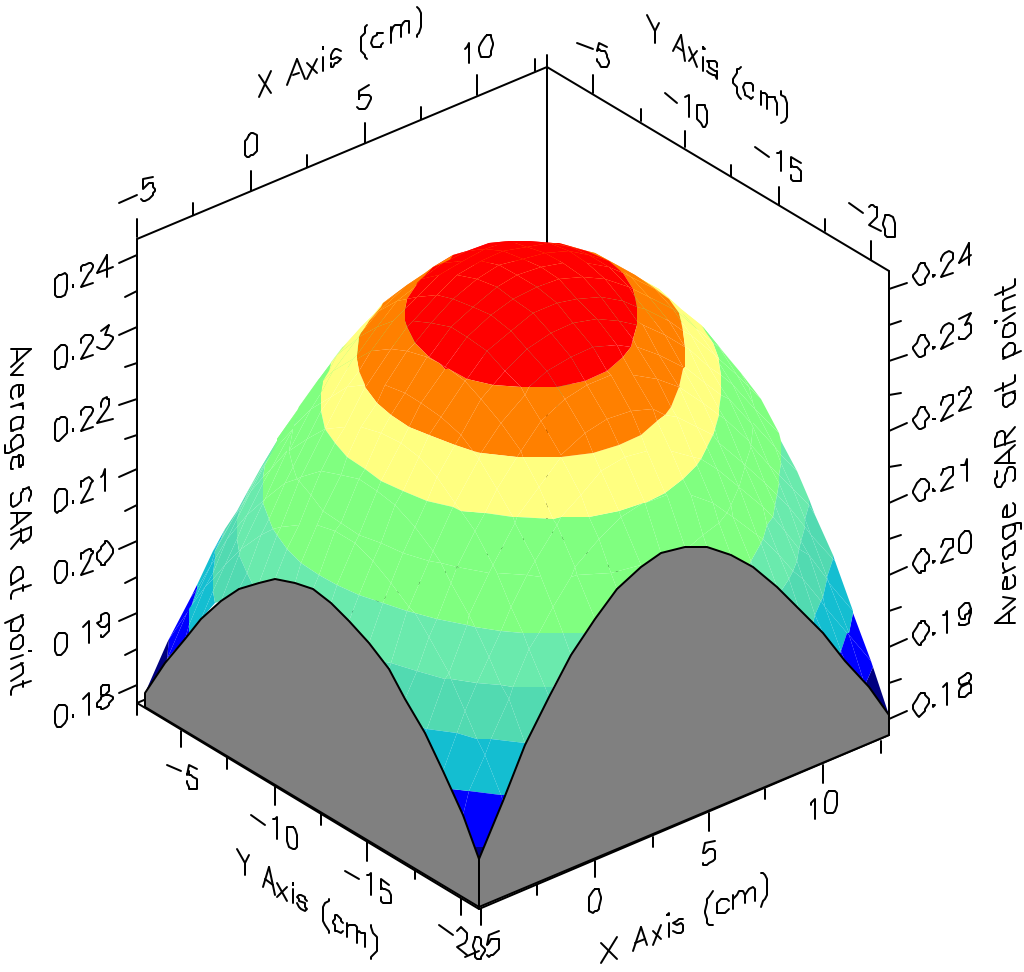
Max 1g SAR at x=4.0 y=-12.0 z=0.0 = 0.24 W/kg

Max 10g SAR at x=6.0 y=-11.0 z=0.0 = 0.14 W/kg

SAR - Z Axis
at Hotspot x:3.0 y:-18.0



1g SAR Values





SAR Data Report 05062019

Start : 20-Jun-05 02:11:02 pm
End : 20-Jun-05 02:16:44 pm
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : Samsung Dual-Band GSM Phone
Model Number : SGH-D600
Serial Number : FC-081-B
Frequency : 1850.2 MHz
Transmit Pwr : 1 W
Antenna Type : Helical
Antenna Posn. : Internal

Measurement Data:

Phantom Name : SAM-RIGHT
Phantom Type : Right Ear
Tissue Type : Brain
Tissue Dielectric : 38.590
Tissue Conductivity : 1.460
Tissue Density : 1.000
Robot Name : CRS

Probe Data:

Probe Name : PCT005
Probe Type : E Fld Triangle
Frequency : 1900 MHz
Tissue Type : Brain
Calibrated Dielectric : 39.020
Calibrated Conductivity : 1.370
Calibrated Density : 1.000
Probe Offset : 1.600 mm
Conversion Factor : 5.400
Probe Sensitivity : 5.115 4.969 4.453 mV/(mW/cm^2)
Amplifier Gains : 20.00 20.00 20.00

Sample:

Rate: 6000 Samples/Sec
Count: 1000 Samples
NIDAQ Gain: 5

Comments:

GSM Mode Ch. 512
Right Tilt (Slide Out)
CF=8; Amb. Temp= 22.5 'C; Liq. Temp=21.3 'C

Power Drop Test:

Reading @ start = 0.072
Reading @ End = 0.074
Power at End = 103.1%

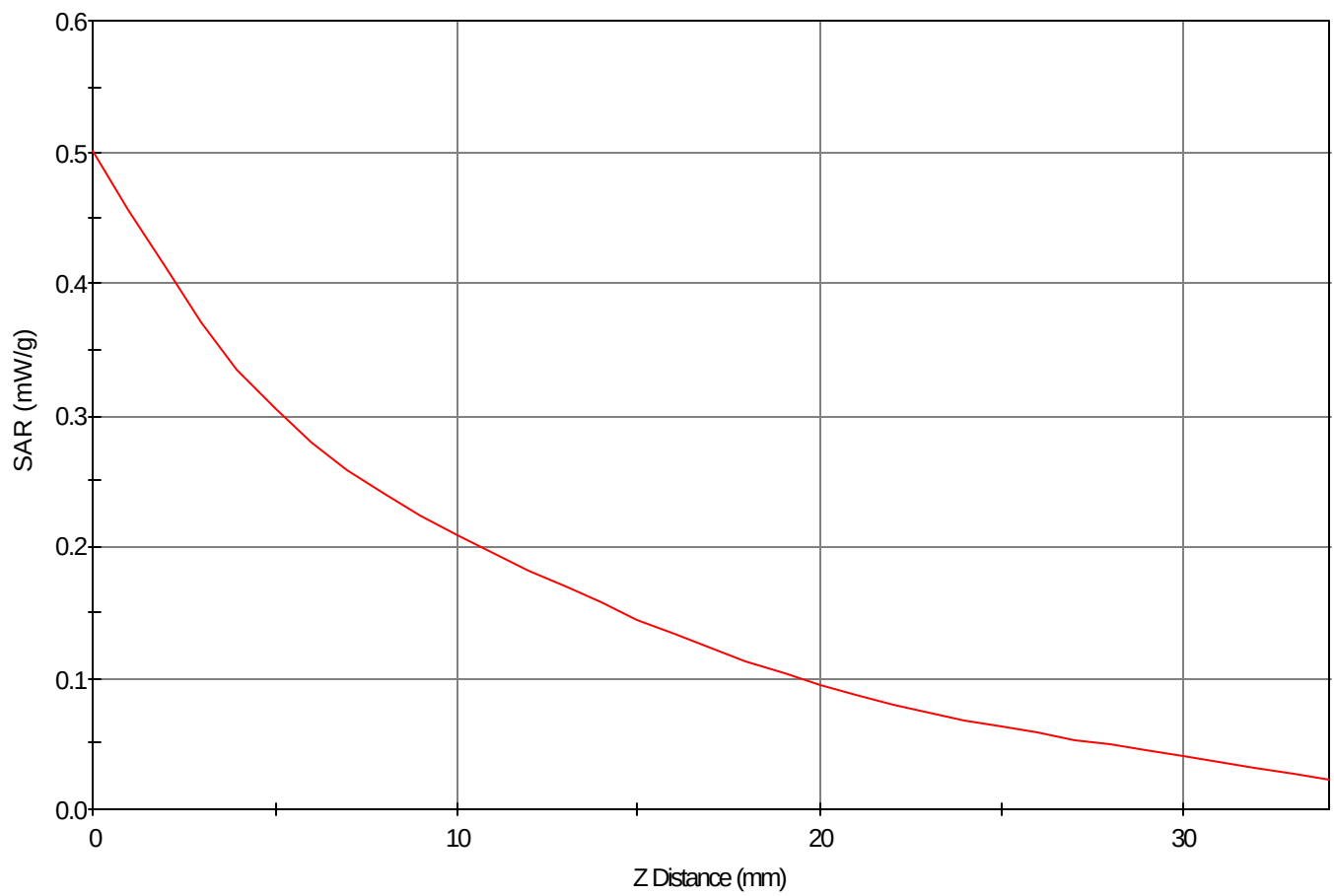
Area Scan - Max Peak SAR Value at x=42.0 y=-4.0 = 0.34 W/kg

Zoom Scan - Max Peak SAR Value at x=43.0 y=-4.0 z=0.0 = 0.50 W/kg

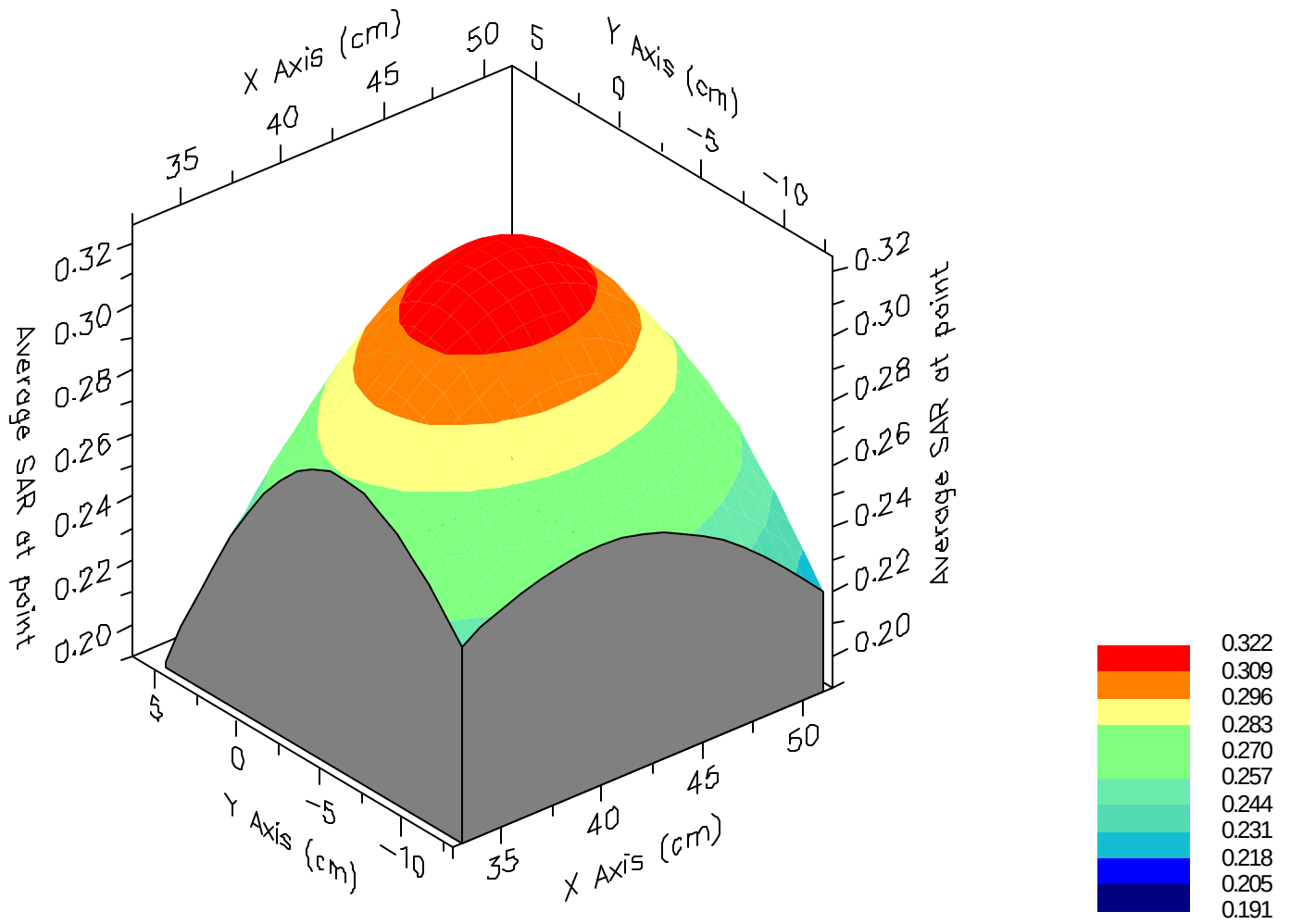
Max 1g SAR at x=42.0 y=-4.0 z=0.0 = 0.32 W/kg

Max 10g SAR at x=41.0 y=-5.0 z=0.0 = 0.19 W/kg

SAR - Z Axis
at Hotspot x:43.0 y:-4.0



1g SAR Values





SAR Data Report 05062023

Start : 20-Jun-05 04:04:50 pm
End : 20-Jun-05 04:09:43 pm
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : Samsung Dual-Band GSM Phone
Model Number : SGH-D600
Serial Number : FC-081-B
Frequency : 1850.2 MHz
Transmit Pwr : 1 W
Antenna Type : Helical
Antenna Posn. : Internal

Measurement Data:

Phantom Name : SAM-LEFT
Phantom Type : Left Ear
Tissue Type : Brain
Tissue Dielectric : 38.590
Tissue Conductivity : 1.460
Tissue Density : 1.000
Robot Name : CRS

Probe Data:

Probe Name : PCT005
Probe Type : E Fld Triangle
Frequency : 1900 MHz
Tissue Type : Brain
Calibrated Dielectric : 39.020
Calibrated Conductivity : 1.370
Calibrated Density : 1.000
Probe Offset : 1.600 mm
Conversion Factor : 5.400
Probe Sensitivity : 5.115 4.969 4.453 mV/(mW/cm^2)
Amplifier Gains : 20.00 20.00 20.00

Sample:

Rate: 6000 Samples/Sec
Count: 1000 Samples
NIDAQ Gain: 5

Comments:

GSM Mode Ch. 512
Left Cheek (Slide In)
CF=8; Amb. Temp= 22.5 'C; Liq. Temp=21.3 'C

Power Drop Test:

Reading @ start = 0.165
Reading @ End = 0.157
Power at End = 95.2%

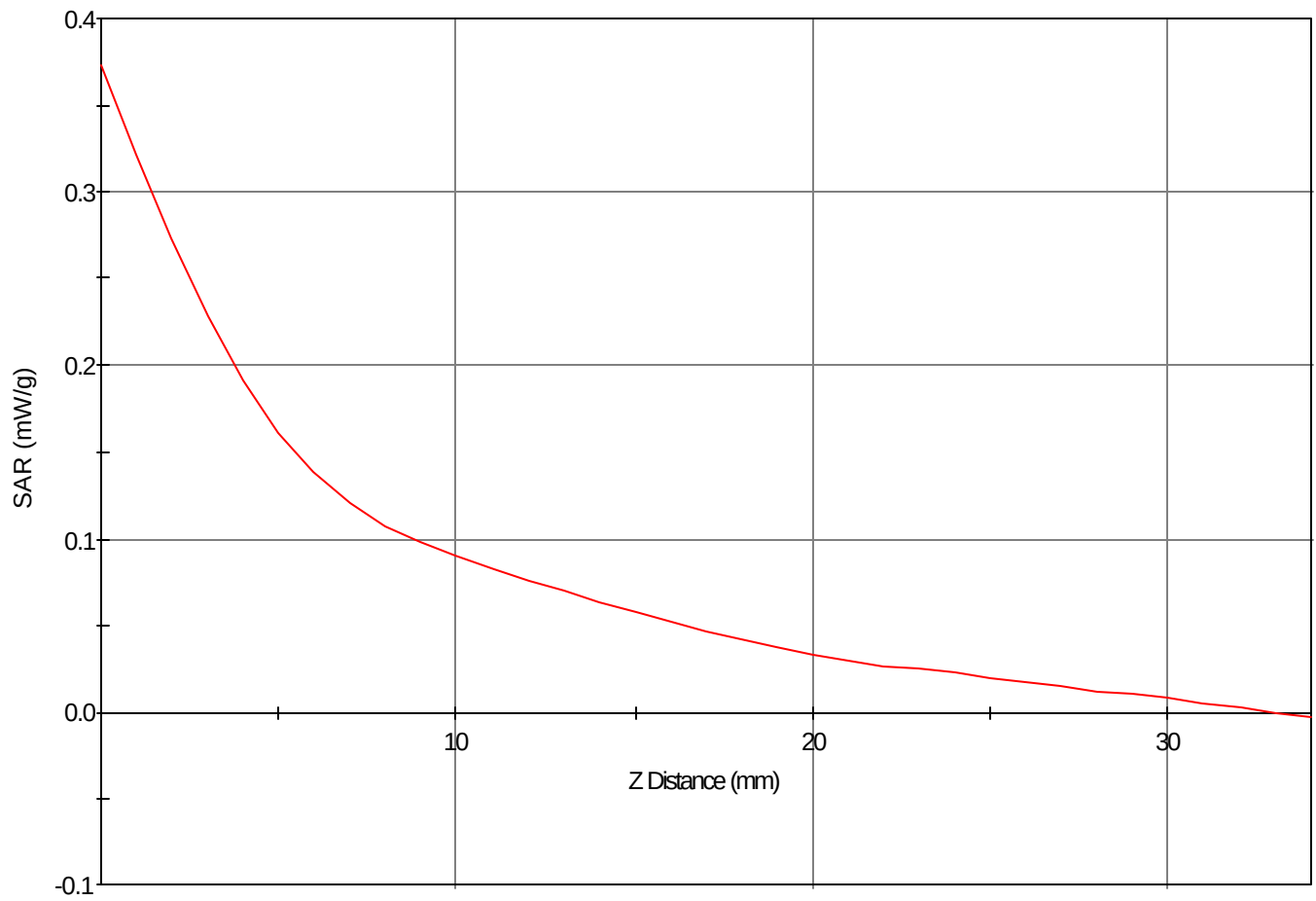
Area Scan - Max Peak SAR Value at x=14.0 y=3.0 = 0.20 W/kg

Zoom Scan - Max Peak SAR Value at x=7.0 y=-1.0 z=0.0 = 0.37 W/kg

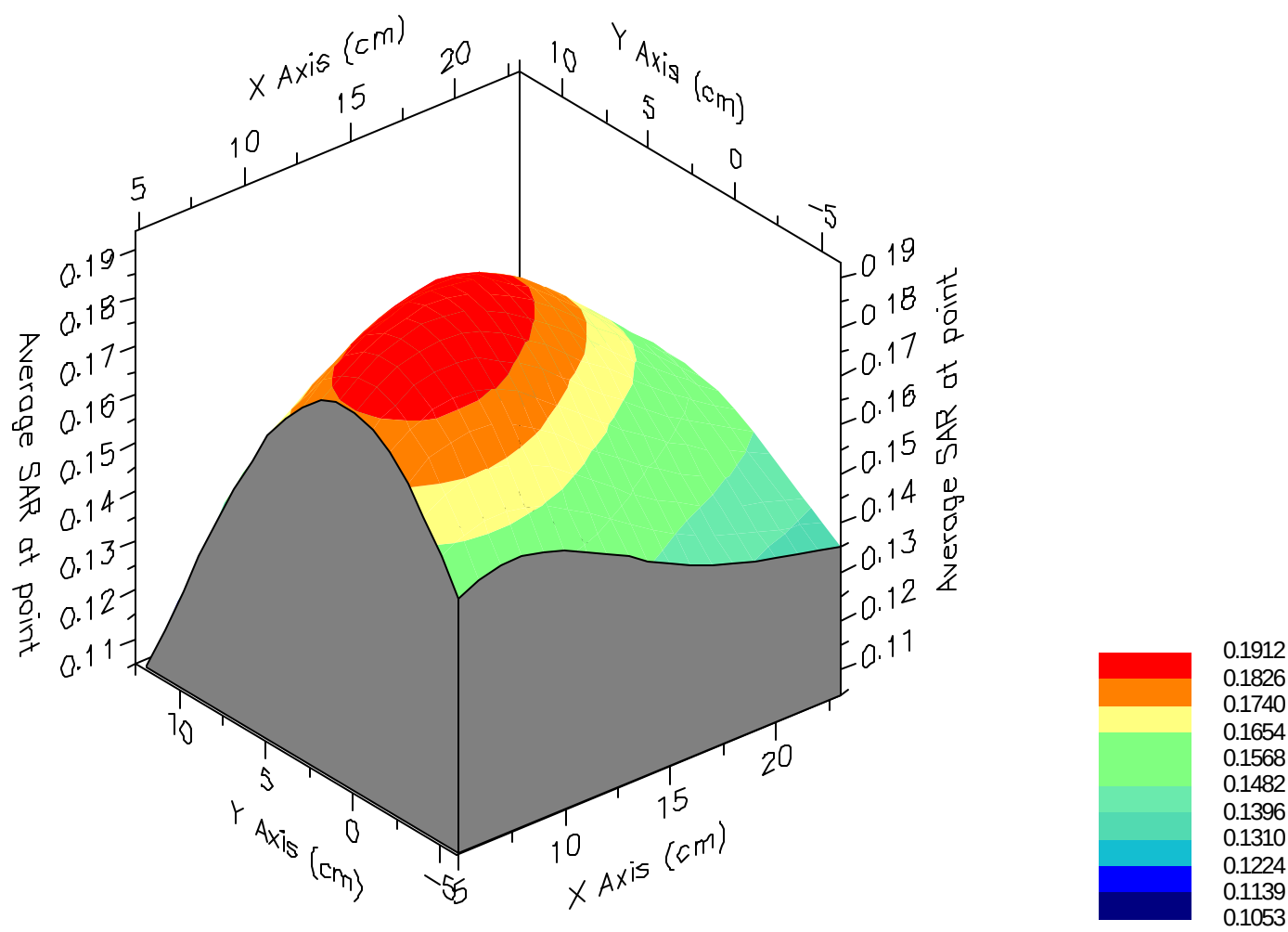
Max 1g SAR at x=9.0 y=1.0 z=0.0 = 0.19 W/kg

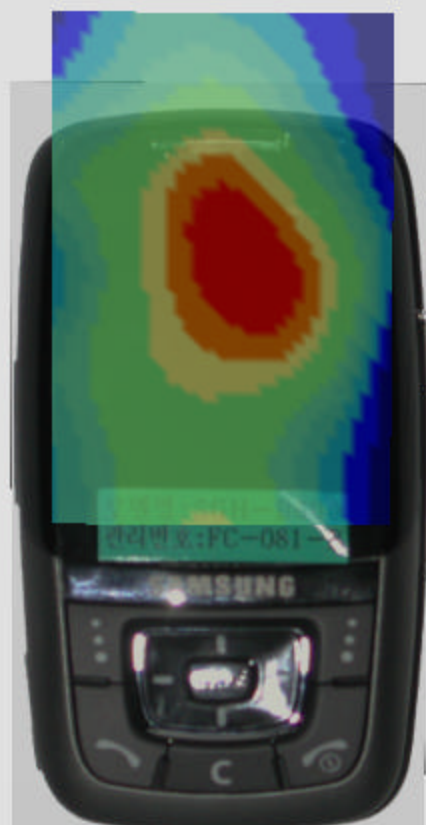
Max 10g SAR at x=14.0 y=1.0 z=0.0 = 0.10 W/kg

SAR - Z Axis
at Hotspot x:7.0 y:-1.0



1g SAR Values





SAR Data Report 05062027

Start : 20-Jun-05 04:52:28 pm
End : 20-Jun-05 04:57:31 pm
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : Samsung Dual-Band GSM Phone
Model Number : SGH-D600
Serial Number : FC-081-B
Frequency : 1850.2 MHz
Transmit Pwr : 1 W
Antenna Type : Helical
Antenna Posn. : Internal

Measurement Data:

Phantom Name : SAM-LEFT
Phantom Type : Left Ear
Tissue Type : Brain
Tissue Dielectric : 38.590
Tissue Conductivity : 1.460
Tissue Density : 1.000
Robot Name : CRS

Probe Data:

Probe Name : PCT005
Probe Type : E Fld Triangle
Frequency : 1900 MHz
Tissue Type : Brain
Calibrated Dielectric : 39.020
Calibrated Conductivity : 1.370
Calibrated Density : 1.000
Probe Offset : 1.600 mm
Conversion Factor : 5.400
Probe Sensitivity : 5.115 4.969 4.453 mV/(mW/cm^2)
Amplifier Gains : 20.00 20.00 20.00

Sample:

Rate: 6000 Samples/Sec
Count: 1000 Samples
NIDAQ Gain: 5

Comments:

GSM Mode Ch. 512
Left Cheek (Slide Out)
CF=8; Amb. Temp= 22.5 'C; Liq. Temp=21.3 'C

Power Drop Test:

Reading @ start = 0.071
Reading @ End = 0.074
Power at End = 95.9%

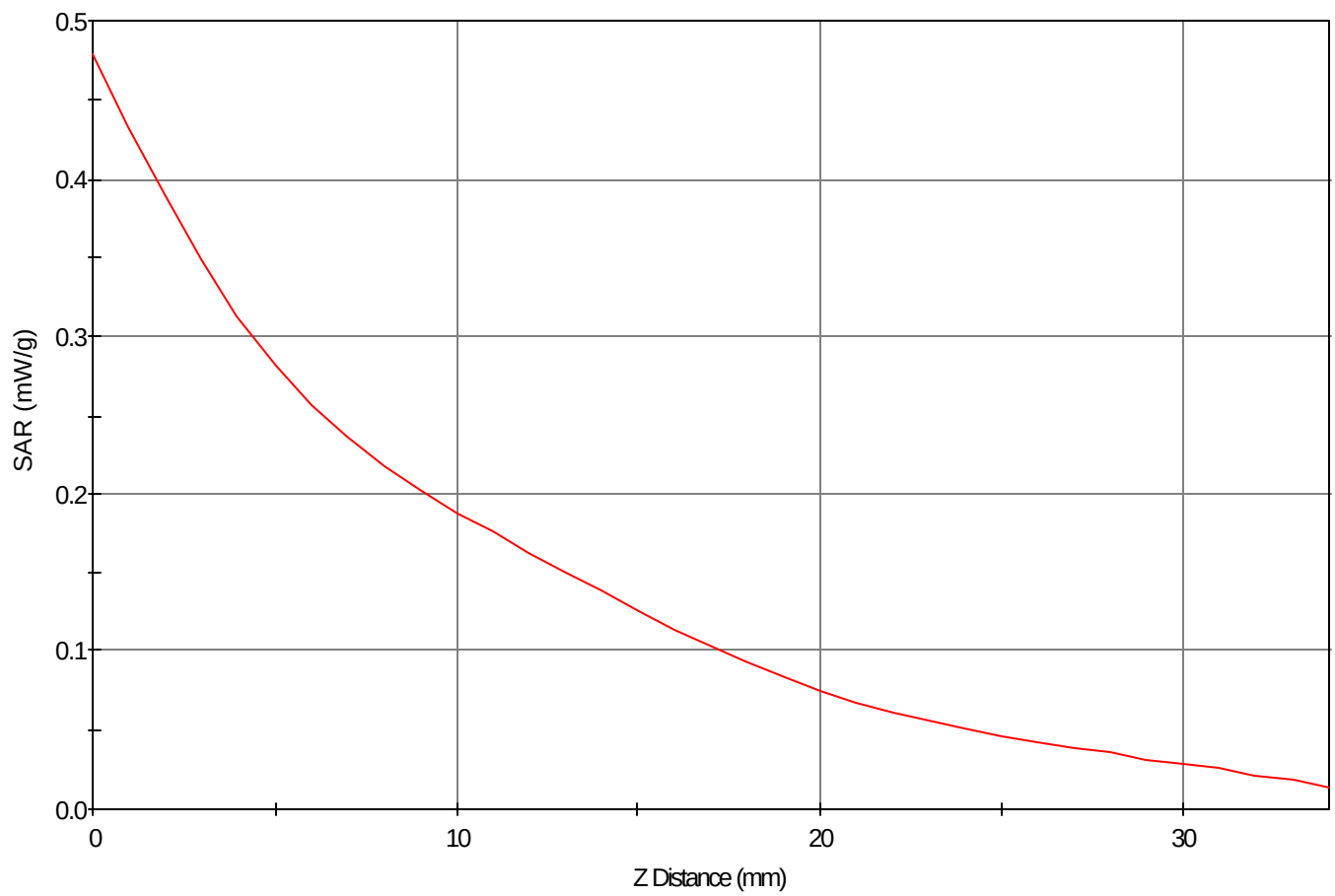
Area Scan - Max Peak SAR Value at x=47.0 y=-3.0 = 0.33 W/kg

Zoom Scan - Max Peak SAR Value at x=47.0 y=1.0 z=0.0 = 0.48 W/kg

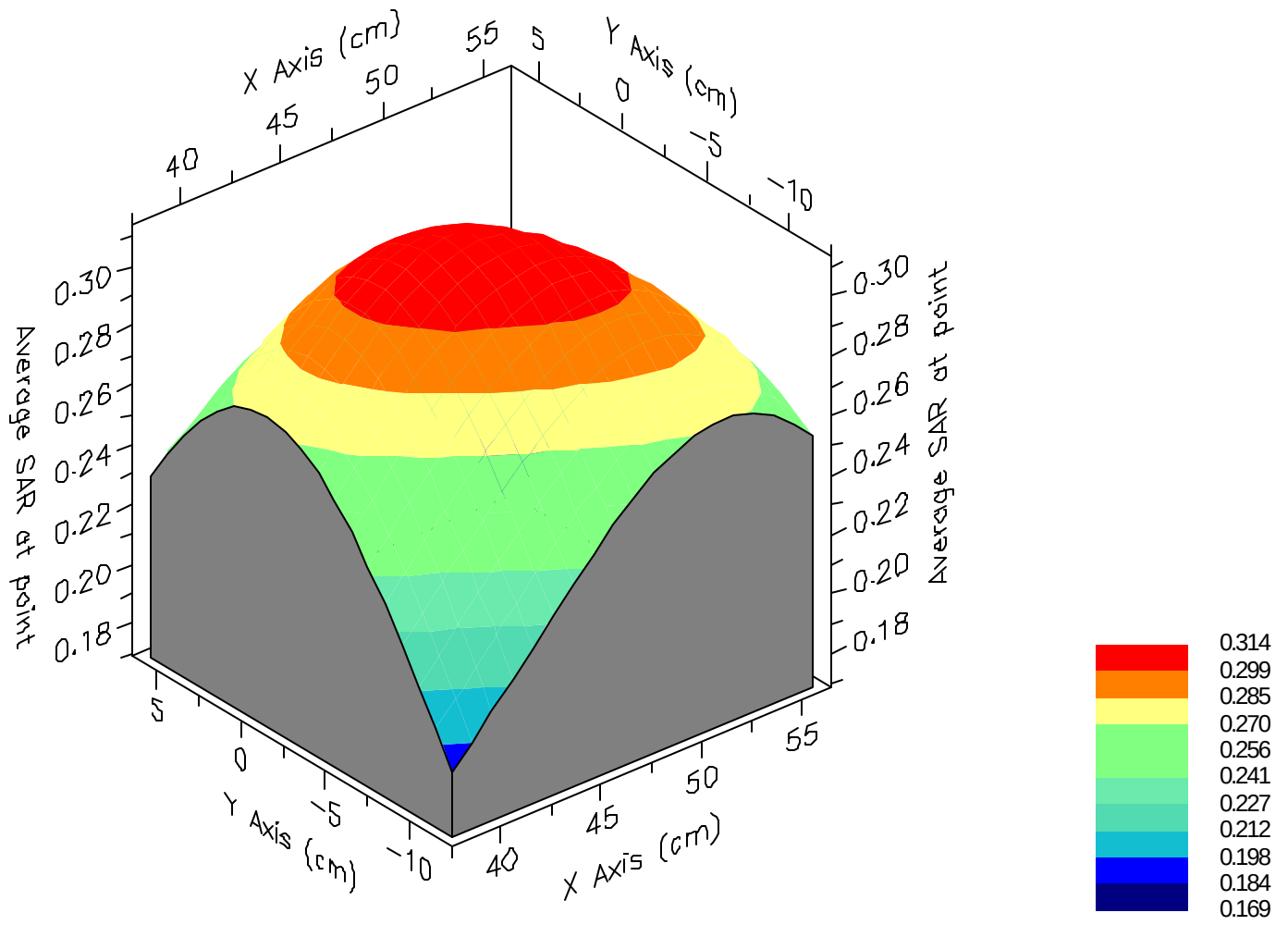
Max 1g SAR at x=47.0 y=-2.0 z=0.0 = 0.31 W/kg

Max 10g SAR at x=46.0 y=-4.0 z=0.0 = 0.18 W/kg

SAR - Z Axis
at Hotspot x:47.0 y:1.0



1g SAR Values





SAR Data Report 05062030

Start : 20-Jun-05 05:21:37 pm
End : 20-Jun-05 05:26:43 pm
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : Samsung Dual-Band GSM Phone
Model Number : SGH-D600
Serial Number : FC-081-B
Frequency : 1850.2 MHz
Transmit Pwr : 1 W
Antenna Type : Helical
Antenna Posn. : Internal

Measurement Data:

Phantom Name : SAM-LEFT
Phantom Type : Left Ear
Tissue Type : Brain
Tissue Dielectric : 38.590
Tissue Conductivity : 1.460
Tissue Density : 1.000
Robot Name : CRS

Probe Data:

Probe Name : PCT005
Probe Type : E Fld Triangle
Frequency : 1900 MHz
Tissue Type : Brain
Calibrated Dielectric : 39.020
Calibrated Conductivity : 1.370
Calibrated Density : 1.000
Probe Offset : 1.600 mm
Conversion Factor : 5.400
Probe Sensitivity : 5.115 4.969 4.453 mV/(mW/cm^2)
Amplifier Gains : 20.00 20.00 20.00

Sample:

Rate: 6000 Samples/Sec
Count: 1000 Samples
NIDAQ Gain: 5

Comments:

GSM Mode Ch. 512
Left Cheek (Slide Out w/ BlueTooth On)
CF=8; Amb. Temp= 22.5 'C; Liq. Temp=21.3 'C

Power Drop Test:

Reading @ start = 0.074
Reading @ End = 0.072
Power at End = 97.4%

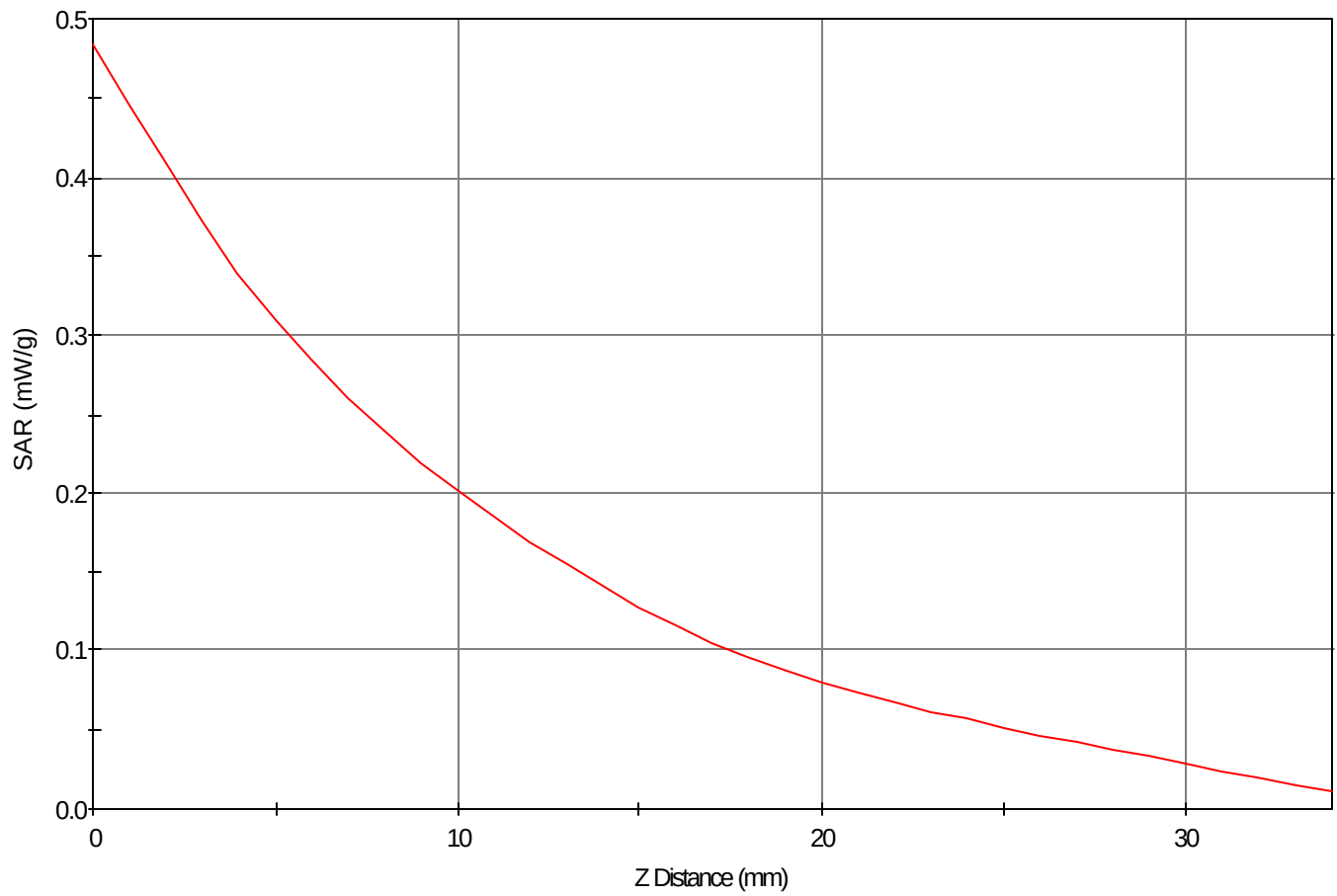
Area Scan - Max Peak SAR Value at x=46.0 y=-3.0 = 0.35 W/kg

Zoom Scan - Max Peak SAR Value at x=52.0 y=-4.0 z=0.0 = 0.48 W/kg

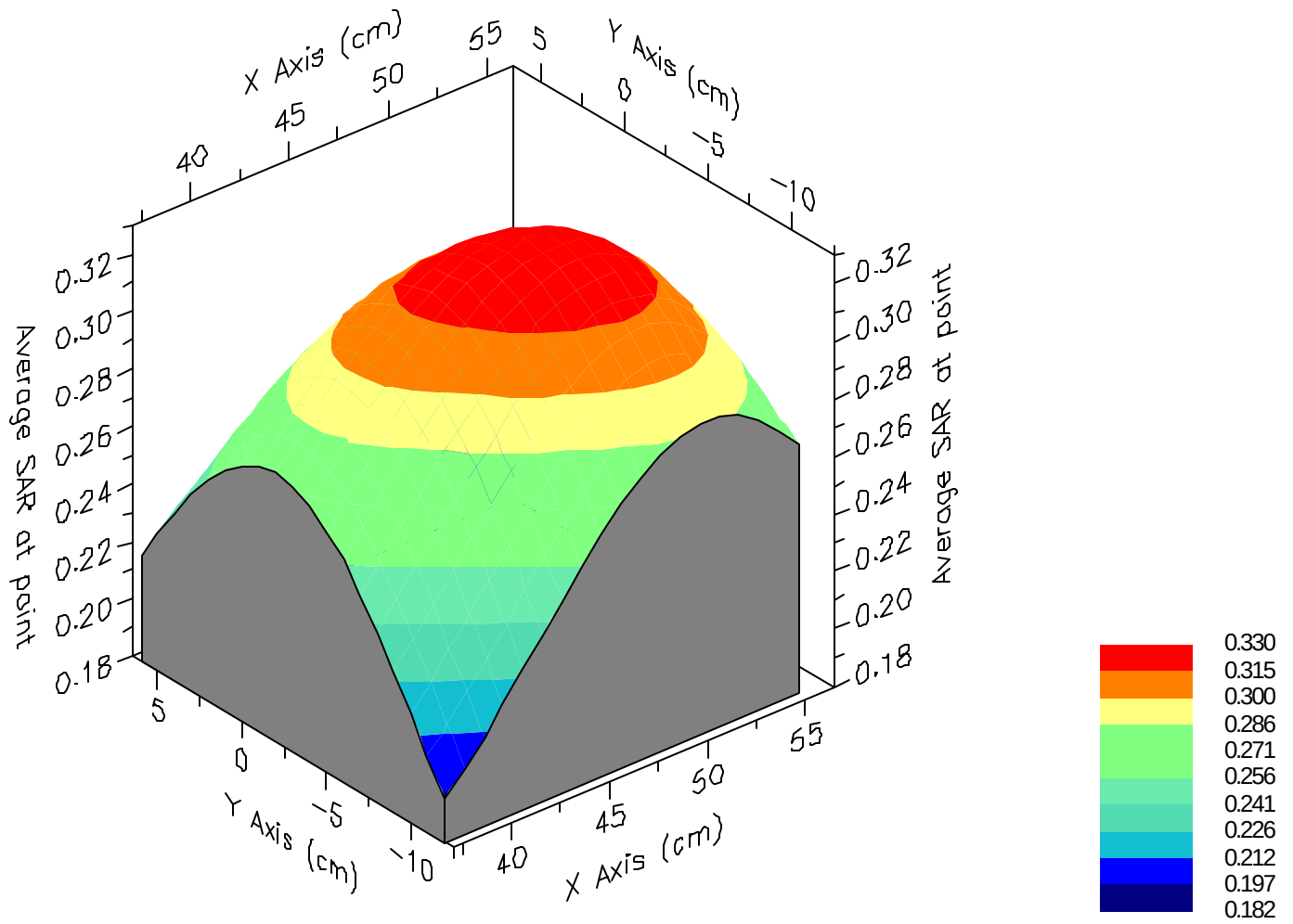
Max 1g SAR at x=48.0 y=-4.0 z=0.0 = 0.33 W/kg

Max 10g SAR at x=46.0 y=-4.0 z=0.0 = 0.19 W/kg

SAR - Z Axis
at Hotspot x:52.0 y:-4.0



1g SAR Values





SAR Data Report 05062235

Start : 22-Jun-05 02:06:41 pm
End : 22-Jun-05 02:12:00 pm
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : Samsung Dual-Band GSM Phone
Model Number : SGH-D600
Serial Number : FC-081-B
Frequency : 1850.2 MHz
Transmit Pwr : 1 W
Antenna Type : Helical
Antenna Posn. : Internal

Measurement Data:

Phantom Name : SAM FLAT
Phantom Type : Uniphantom
Tissue Type : Muscle
Tissue Dielectric : 52.380
Tissue Conductivity : 1.580
Tissue Density : 1.000
Robot Name : CRS

Probe Data:

Probe Name : PCT005
Probe Type : E Fld Triangle
Frequency : 1900 MHz
Tissue Type : Muscle
Calibrated Dielectric : 51.810
Calibrated Conductivity : 1.580
Calibrated Density : 1.000
Probe Offset : 1.600 mm
Conversion Factor : 5.500
Probe Sensitivity : 5.115 4.969 4.453 mV/(mW/cm^2)
Amplifier Gains : 20.00 20.00 20.00

Sample:

Rate: 6000 Samples/Sec
Count: 1000 Samples
NIDAQ Gain: 5

Comments:

GPRS Mode Ch. 512
Body (Slide In w/ 1.5cm spacing)
CF=4; Amb. Temp= 22.5 'C; Liq. Temp=21.3 'C

Power Drop Test:

Reading @ start = 0.513
Reading @ End = 0.510
Power at End = 99.4%

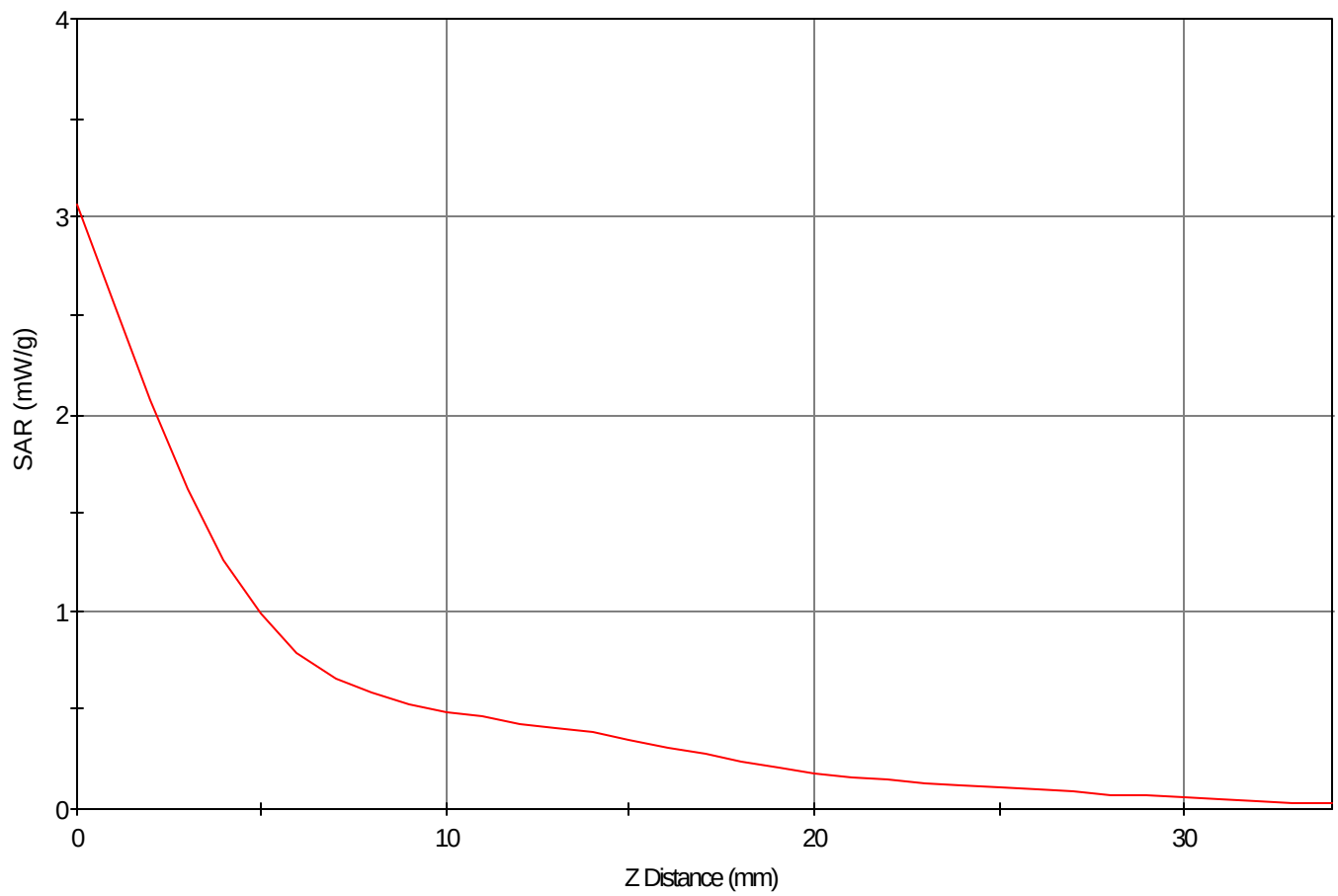
Area Scan - Max Peak SAR Value at x=18.0 y=10.0 = 1.24 W/kg

Zoom Scan - Max Peak SAR Value at x=11.0 y=12.0 z=0.0 = 3.06 W/kg

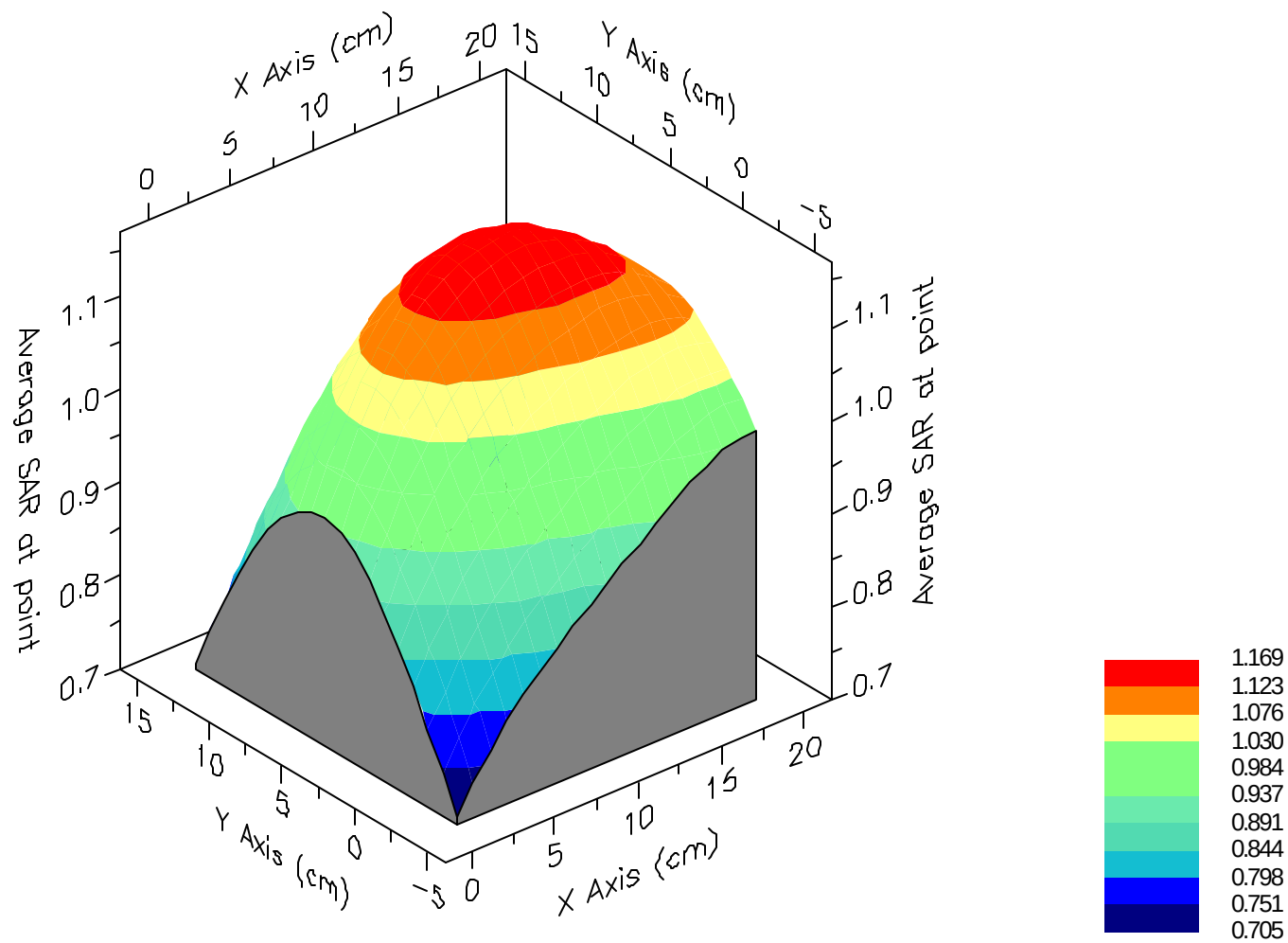
Max 1g SAR at x=15.0 y=11.0 z=0.0 = 1.34 W/kg

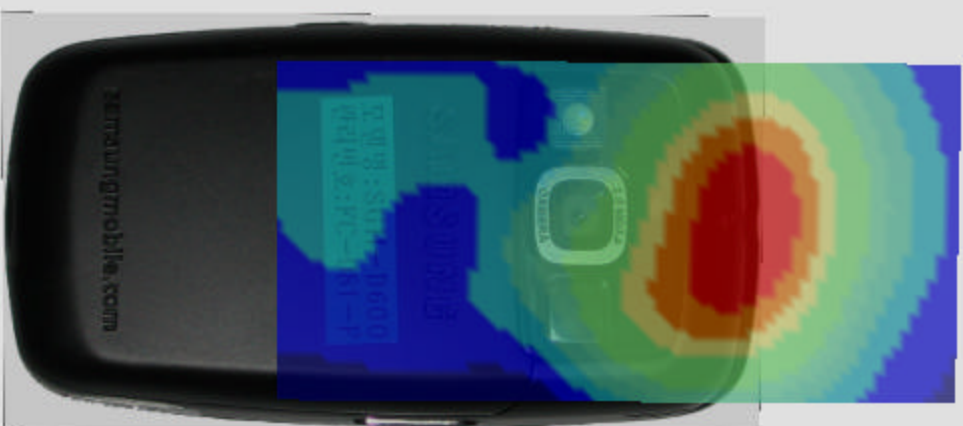
Max 10g SAR at x=18.0 y=10.0 z=0.0 = 0.70 W/kg

SAR - Z Axis
at Hotspot x:11.0 y:12.0



1g SAR Values





SAR Data Report 05062228

Start : 22-Jun-05 01:08:31 pm
End : 22-Jun-05 01:13:57 pm
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : Samsung Dual-Band GSM Phone
Model Number : SGH-D600
Serial Number : FC-081-B
Frequency : 1850.2 MHz
Transmit Pwr : 1 W
Antenna Type : Helical
Antenna Posn. : Internal

Measurement Data:

Phantom Name : SAM FLAT
Phantom Type : Uniphantom
Tissue Type : Muscle
Tissue Dielectric : 52.380
Tissue Conductivity : 1.580
Tissue Density : 1.000
Robot Name : CRS

Probe Data:

Probe Name : PCT005
Probe Type : E Fld Triangle
Frequency : 1900 MHz
Tissue Type : Muscle
Calibrated Dielectric : 51.810
Calibrated Conductivity : 1.580
Calibrated Density : 1.000
Probe Offset : 1.600 mm
Conversion Factor : 5.500
Probe Sensitivity : 5.115 4.969 4.453 mV/(mW/cm^2)
Amplifier Gains : 20.00 20.00 20.00

Sample:

Rate: 6000 Samples/Sec
Count: 1000 Samples
NIDAQ Gain: 5

Comments:

GPRS Mode Ch. 512
Body (Slide Out w/ 1.5cm spacing)
CF=4; Amb. Temp= 22.5 'C; Liq. Temp=21.3 'C

Power Drop Test:

Reading @ start = 0.787
Reading @ End = 0.779
Power at End = 99.1%

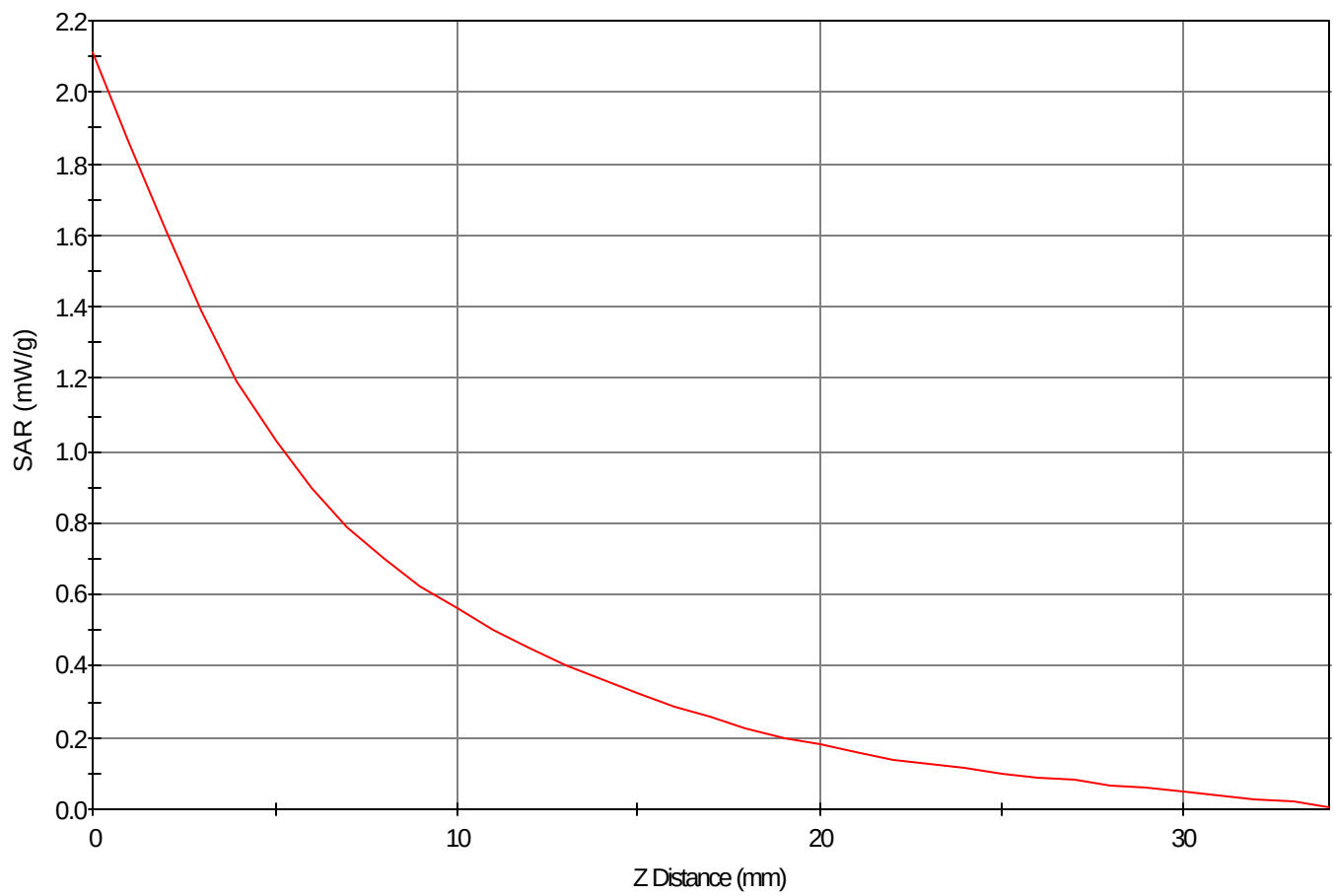
Area Scan - Max Peak SAR Value at x=10.0 y=5.0 = 1.21 W/kg

Zoom Scan - Max Peak SAR Value at x=8.0 y=5.0 z=0.0 = 2.11 W/kg

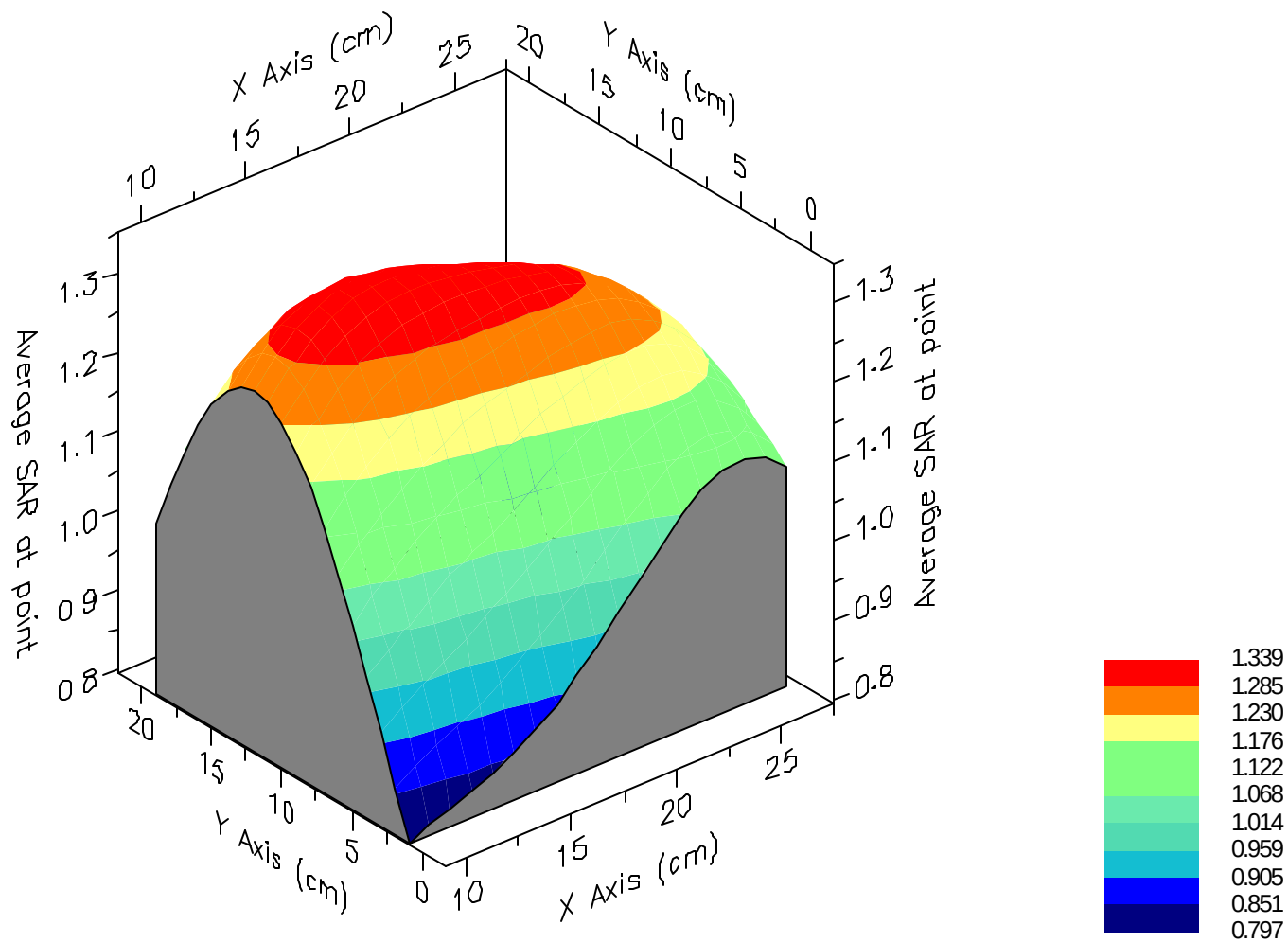
Max 1g SAR at x=12.0 y=5.0 z=0.0 = 1.17 W/kg

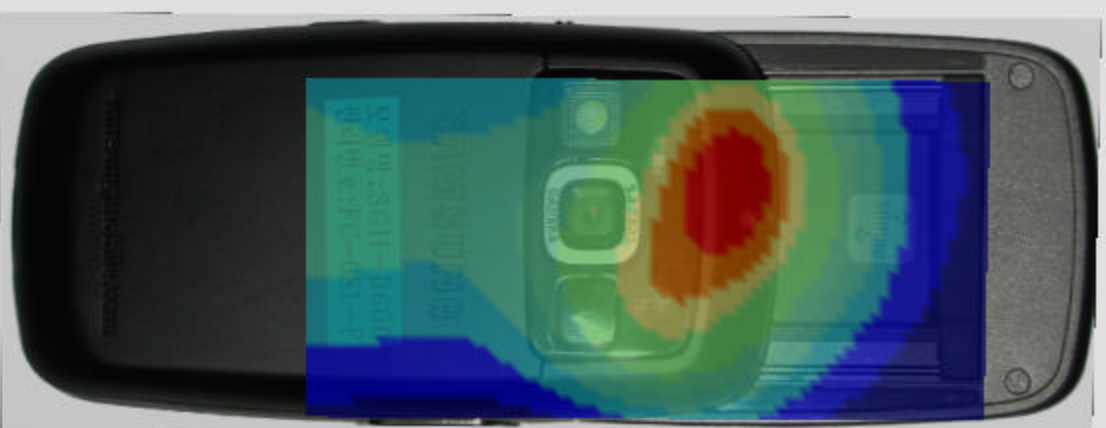
Max 10g SAR at x=13.0 y=3.0 z=0.0 = 0.61 W/kg

SAR - Z Axis
at Hotspot x:8.0 y:5.0



1g SAR Values





SAR Data Report 05062236

Start : 22-Jun-05 02:21:52 pm
End : 22-Jun-05 02:27:15 pm
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : Samsung Dual-Band GSM Phone
Model Number : SGH-D600
Serial Number : FC-081-B
Frequency : 1850.2 MHz
Transmit Pwr : 1 W
Antenna Type : Helical
Antenna Posn. : Internal

Measurement Data:

Phantom Name : SAM FLAT
Phantom Type : Uniphantom
Tissue Type : Muscle
Tissue Dielectric : 52.380
Tissue Conductivity : 1.580
Tissue Density : 1.000
Robot Name : CRS

Probe Data:

Probe Name : PCT005
Probe Type : E Fld Triangle
Frequency : 1900 MHz
Tissue Type : Muscle
Calibrated Dielectric : 51.810
Calibrated Conductivity : 1.580
Calibrated Density : 1.000
Probe Offset : 1.600 mm
Conversion Factor : 5.500
Probe Sensitivity : 5.115 4.969 4.453 mV/(mW/cm^2)
Amplifier Gains : 20.00 20.00 20.00

Sample:

Rate: 6000 Samples/Sec
Count: 1000 Samples
NIDAQ Gain: 5

Comments:

GPRS Mode Ch. 512
Body (Slide In w/ 1.5cm spacing & BlueTooth On)
CF=4; Amb. Temp= 22.5 'C; Liq. Temp=21.3 'C

Power Drop Test:

Reading @ start = 0.691
Reading @ End = 0.674
Power at End = 97.5%

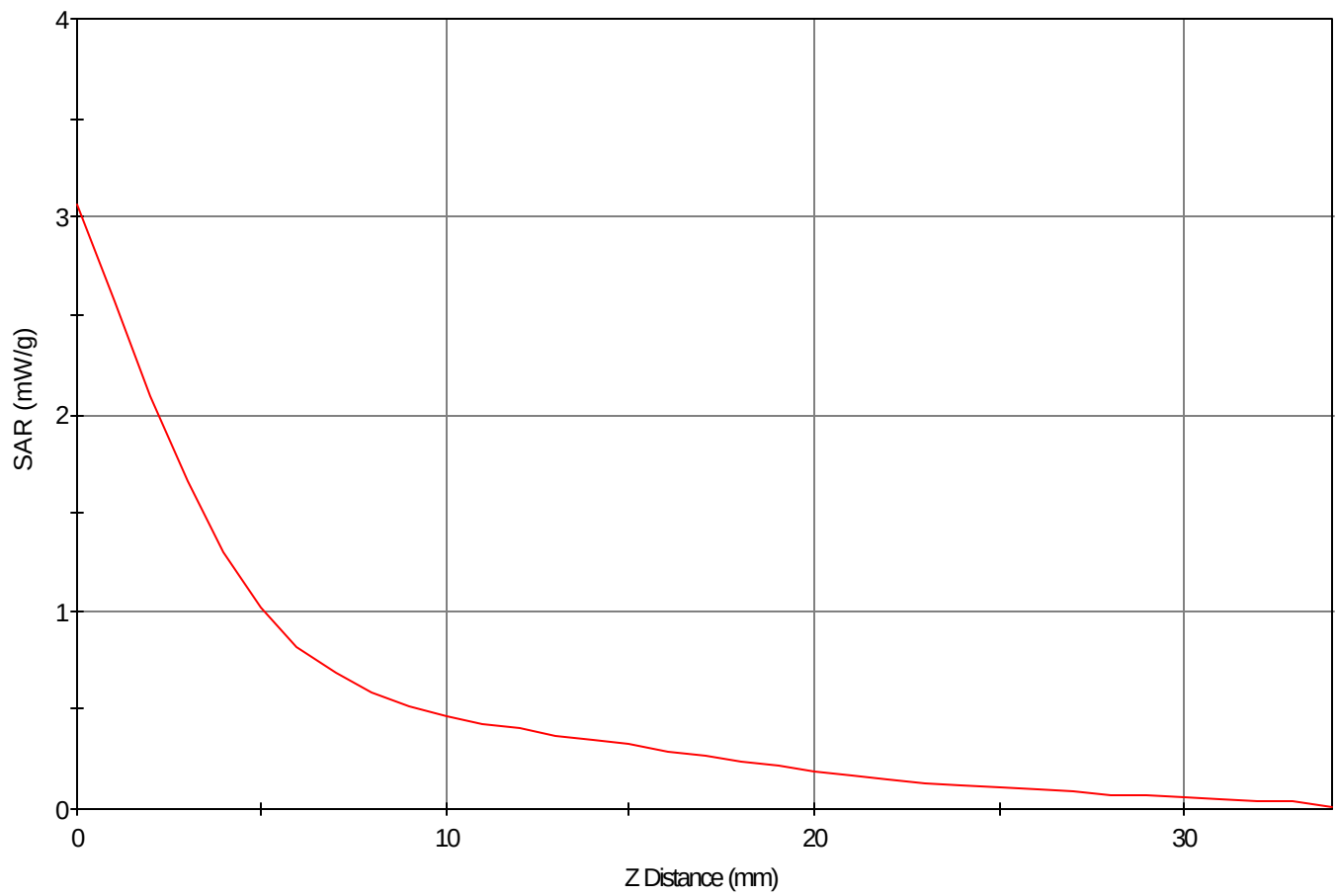
Area Scan - Max Peak SAR Value at x=11.0 y=10.0 = 1.33 W/kg

Zoom Scan - Max Peak SAR Value at x=7.0 y=9.0 z=0.0 = 3.06 W/kg

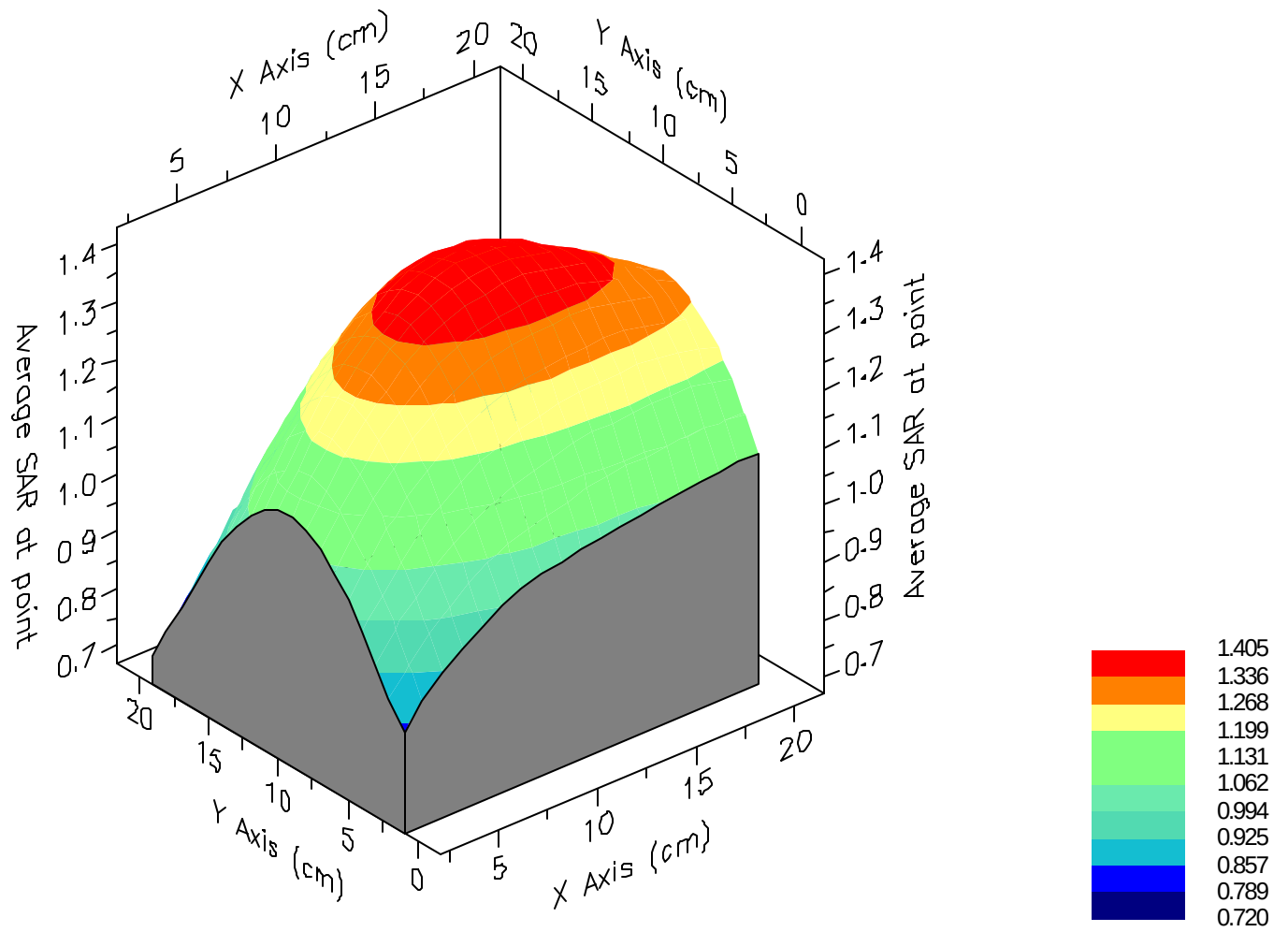
Max 1g SAR at x=12.0 y=10.0 z=0.0 = 1.40 W/kg

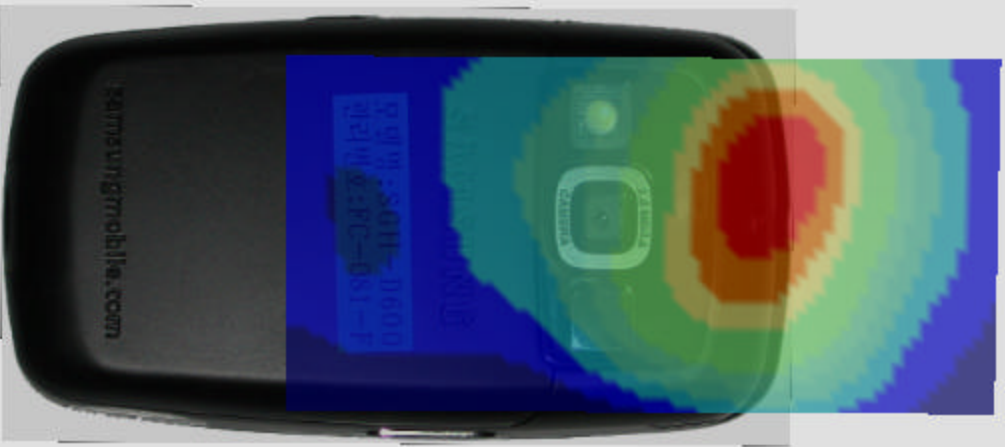
Max 10g SAR at x=14.0 y=9.0 z=0.0 = 0.71 W/kg

SAR - Z Axis
at Hotspot x:7.0 y:9.0



1g SAR Values





APPENDIX B: DIPOLE VALIDATION

SAR Data Report 05062004

Start : 20-Jun-05 09:13:16 am
End : 20-Jun-05 09:18:10 am
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : Verification
Model Number : E-020
Serial Number : PCT005
Frequency : 835 MHz
Transmit Pwr : 0.16 W
Antenna Type : Dipole
Antenna Posn. : Verification

Measurement Data:

Phantom Name : FLATPHANTOM
Phantom Type : Uniphantom
Tissue Type : Brain
Tissue Dielectric : 42.880
Tissue Conductivity : 0.900
Tissue Density : 1.000
Robot Name : CRS

Probe Data:

Probe Name : PCT005
Probe Type : E Fld Triangle
Frequency : 835 MHz
Tissue Type : Brain
Calibrated Dielectric : 40.810
Calibrated Conductivity : 0.870
Calibrated Density : 1.000
Probe Offset : 1.600 mm
Conversion Factor : 5.500
Probe Sensitivity : 3.807 3.736 3.821 mV/(mW/cm²)
Amplifier Gains : 20.00 20.00 20.00

Sample:

Rate: 6000 Samples/Sec
Count: 1000 Samples
NIDAQ Gain: 5

Comments:

835MHz Verification

CF=1; Amb. Temp= 22.5 'C; Liq. Temp=21.3 'C

Power Drop Test:

Reading @ start = 2.554
Reading @ End = 2.636
Power at End = 103.2%

Area Scan - Max Peak SAR Value at x=-1.0 y=1.0 = 1.62 W/kg

Zoom Scan - Max Peak SAR Value at x=-7.0 y=1.0 z=0.0 = 2.82 W/kg

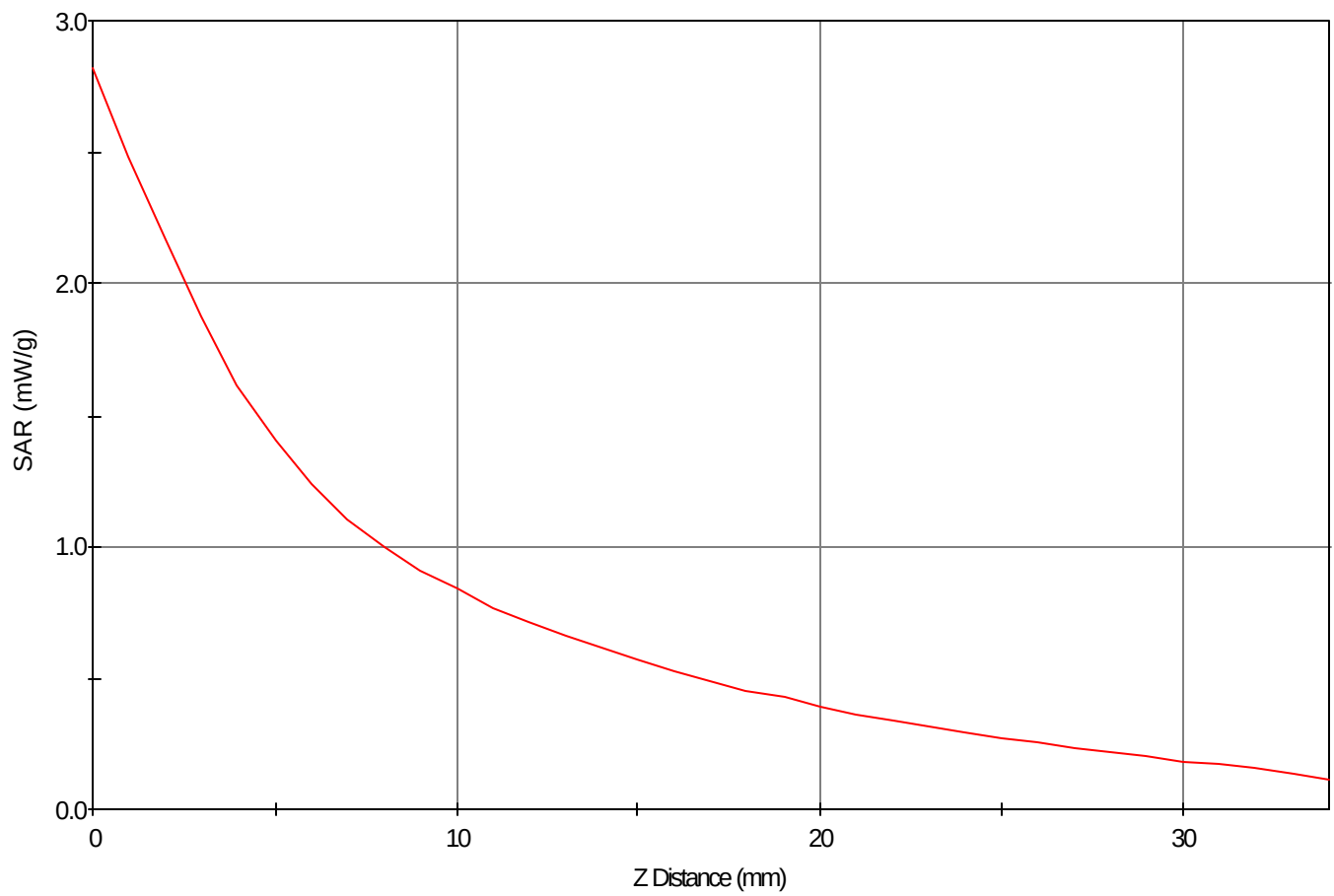
Max 1g SAR at x=0.0 y=2.0 z=0.0 = 1.61 W/kg

Max 10g SAR at x=0.0 y=2.0 z=0.0 = 0.95 W/kg

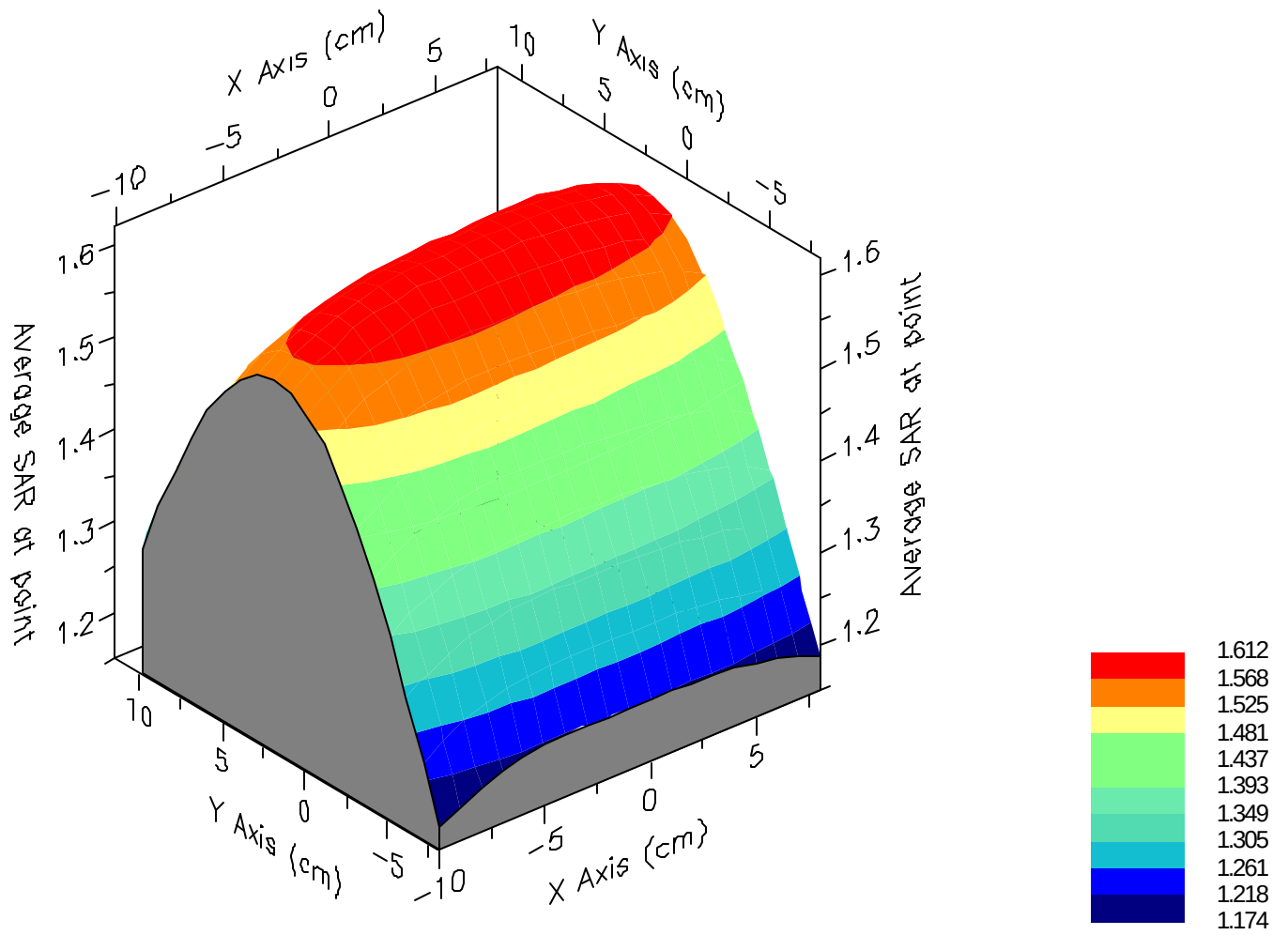
Validation Results at 0.16 W:

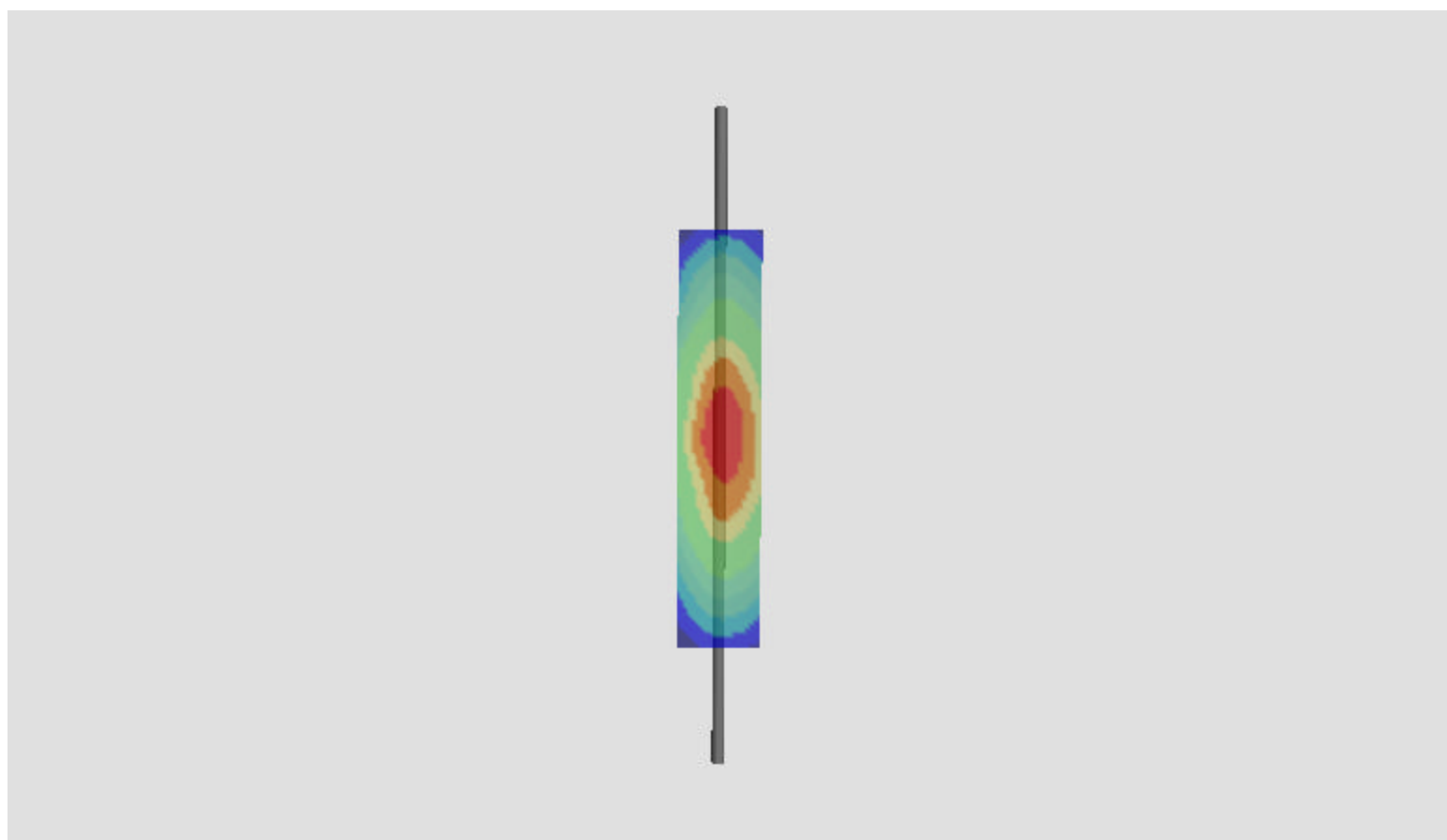
Peak Nominal = 2.3, Error: 24.93 %
1g Nominal = 1.5, Error: 6.08 %
10g Nominal = 1.0, Error: -3.75 %

SAR - Z Axis
at Hotspot x:-7.0 y:1.0



1g SAR Values





SAR Data Report 05062006

Start : 20-Jun-05 10:10:07 am
End : 20-Jun-05 10:14:41 am
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : Verification
Model Number : E-020
Serial Number : PCT005
Frequency : 1900 MHz
Transmit Pwr : 0.040 W
Antenna Type : Dipole
Antenna Posn. : Verification

Measurement Data:

Phantom Name : FLATPHANTOM
Phantom Type : Uniphantom
Tissue Type : Brain
Tissue Dielectric : 38.590
Tissue Conductivity : 1.460
Tissue Density : 1.000
Robot Name : CRS

Probe Data:

Probe Name : PCT005
Probe Type : E Fld Triangle
Frequency : 1900 MHz
Tissue Type : Brain
Calibrated Dielectric : 39.020
Calibrated Conductivity : 1.370
Calibrated Density : 1.000
Probe Offset : 1.600 mm
Conversion Factor : 5.400
Probe Sensitivity : 5.115 4.969 4.453 mV/(mW/cm^2)
Amplifier Gains : 20.00 20.00 20.00

Sample:

Rate: 6000 Samples/Sec
Count: 1000 Samples
NIDAQ Gain: 5

Comments:

1900MHz Verification

CF=1; Amb. Temp= 22.5 'C; Liq. Temp=21.3 'C

Power Drop Test:

Reading @ start = 1.543
Reading @ End = 1.584
Power at End = 102.6%

Area Scan - Max Peak SAR Value at x=0.0 y=0.0 = 1.60 W/kg

Zoom Scan - Max Peak SAR Value at x=-2.0 y=0.0 z=0.0 = 3.03 W/kg

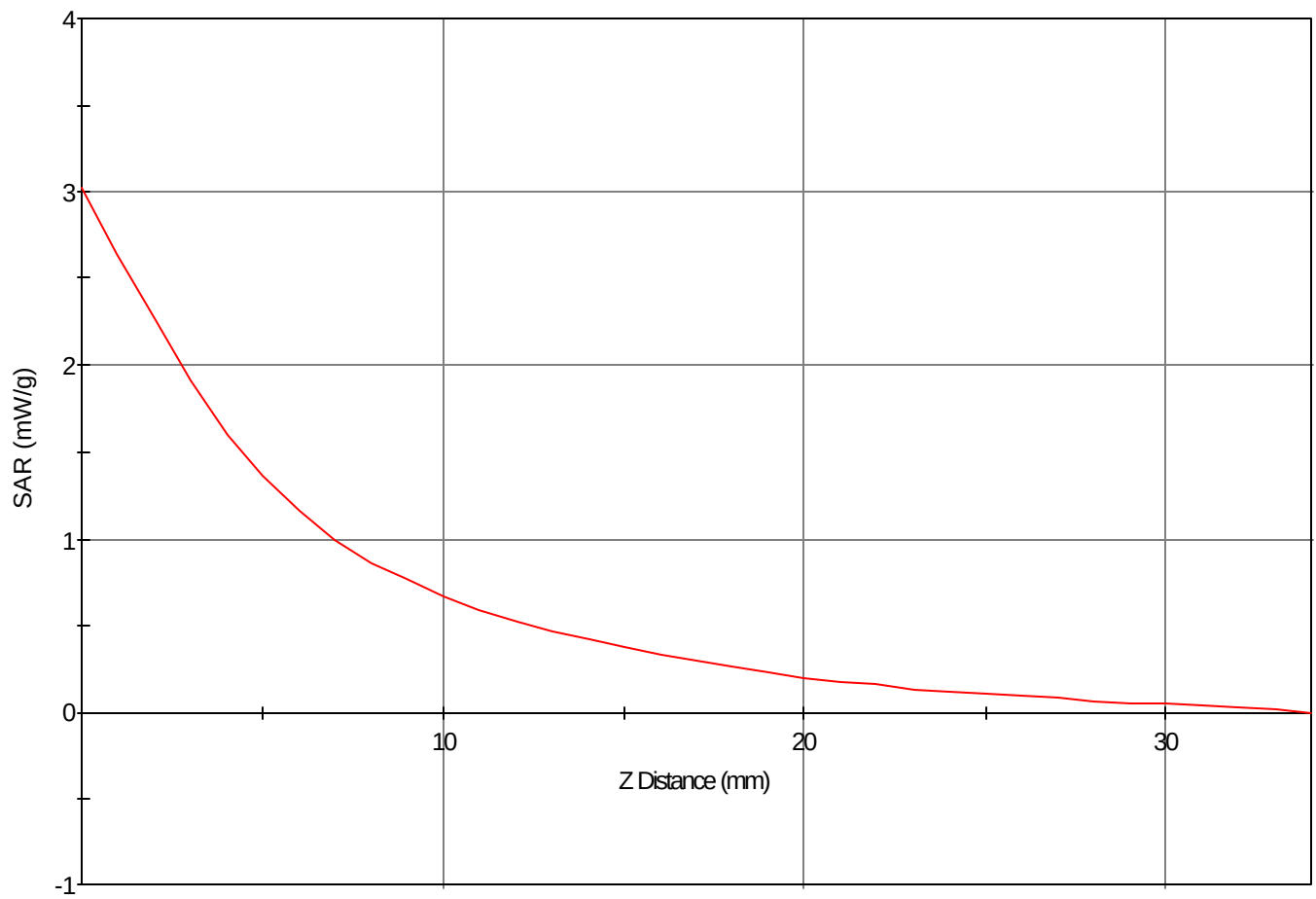
Max 1g SAR at x=0.0 y=0.0 z=0.0 = 1.58 W/kg

Max 10g SAR at x=0.0 y=0.0 z=0.0 = 0.77 W/kg

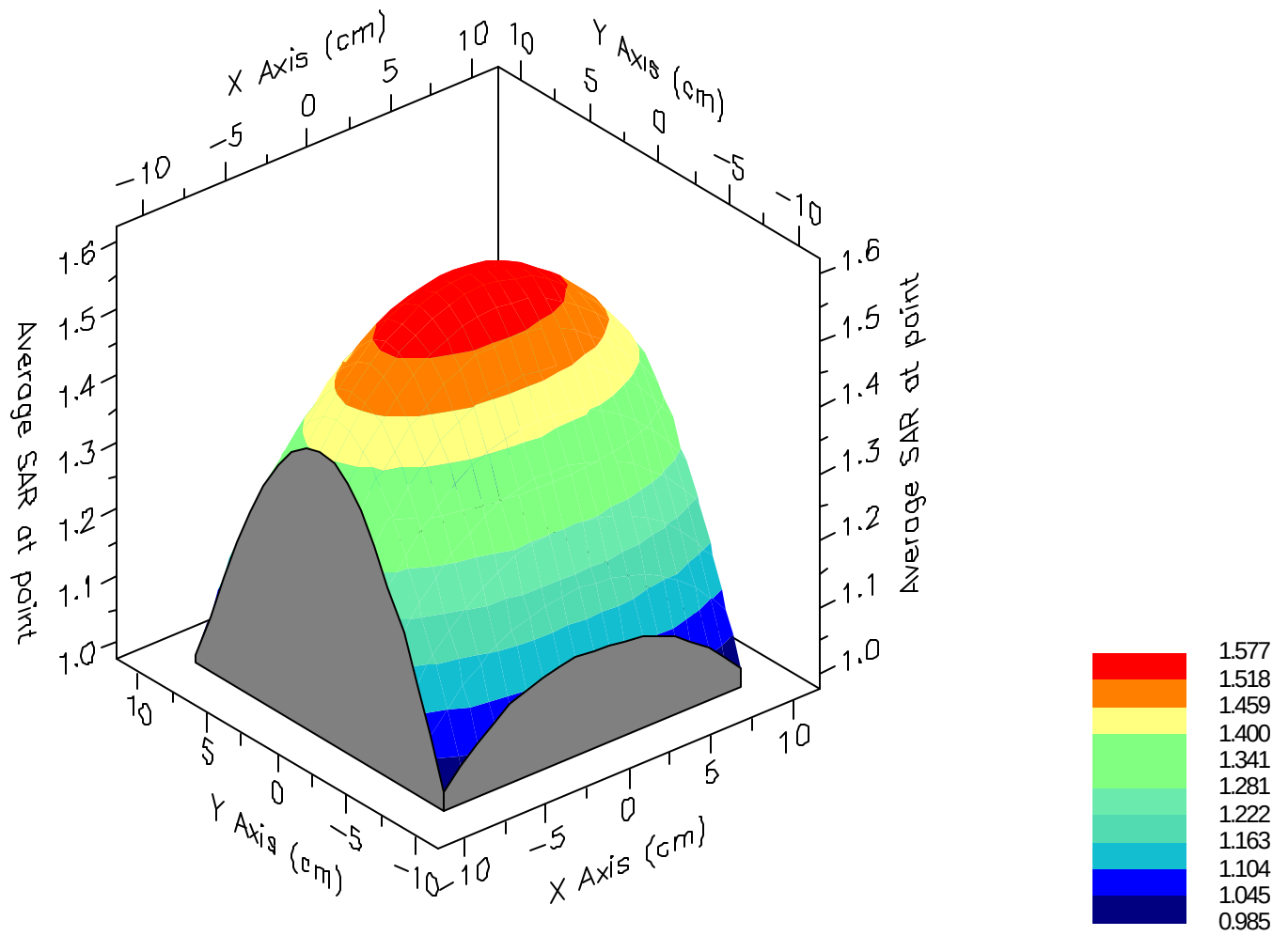
Validation Results at 0.04 W:

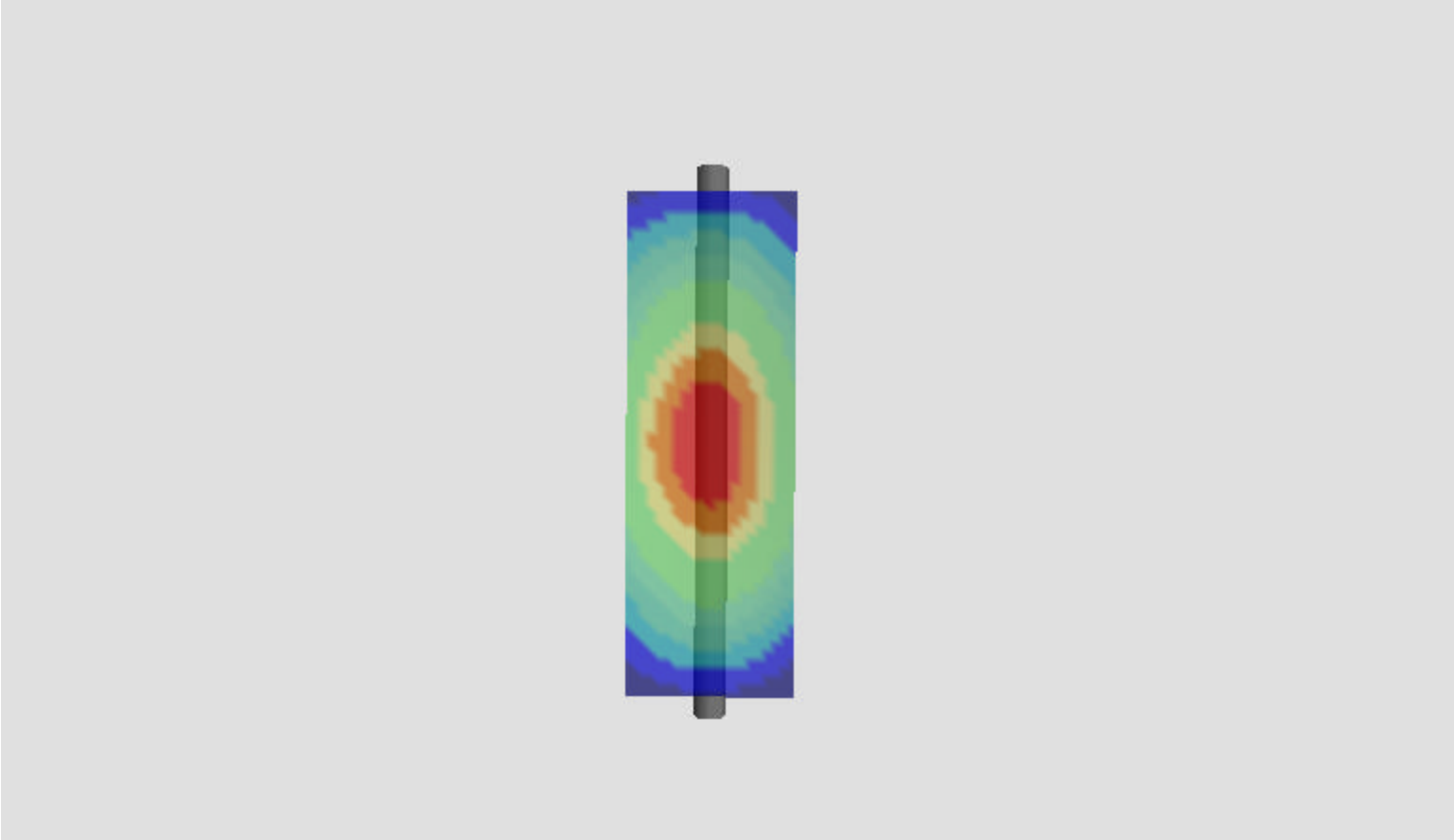
Peak Nominal = 2.9, Error: 5.20 %
1g Nominal = 1.6, Error: -0.67 %
10g Nominal = 0.8, Error: -5.53 %

SAR - Z Axis
at Hotspot x:-2.0 y:0.0

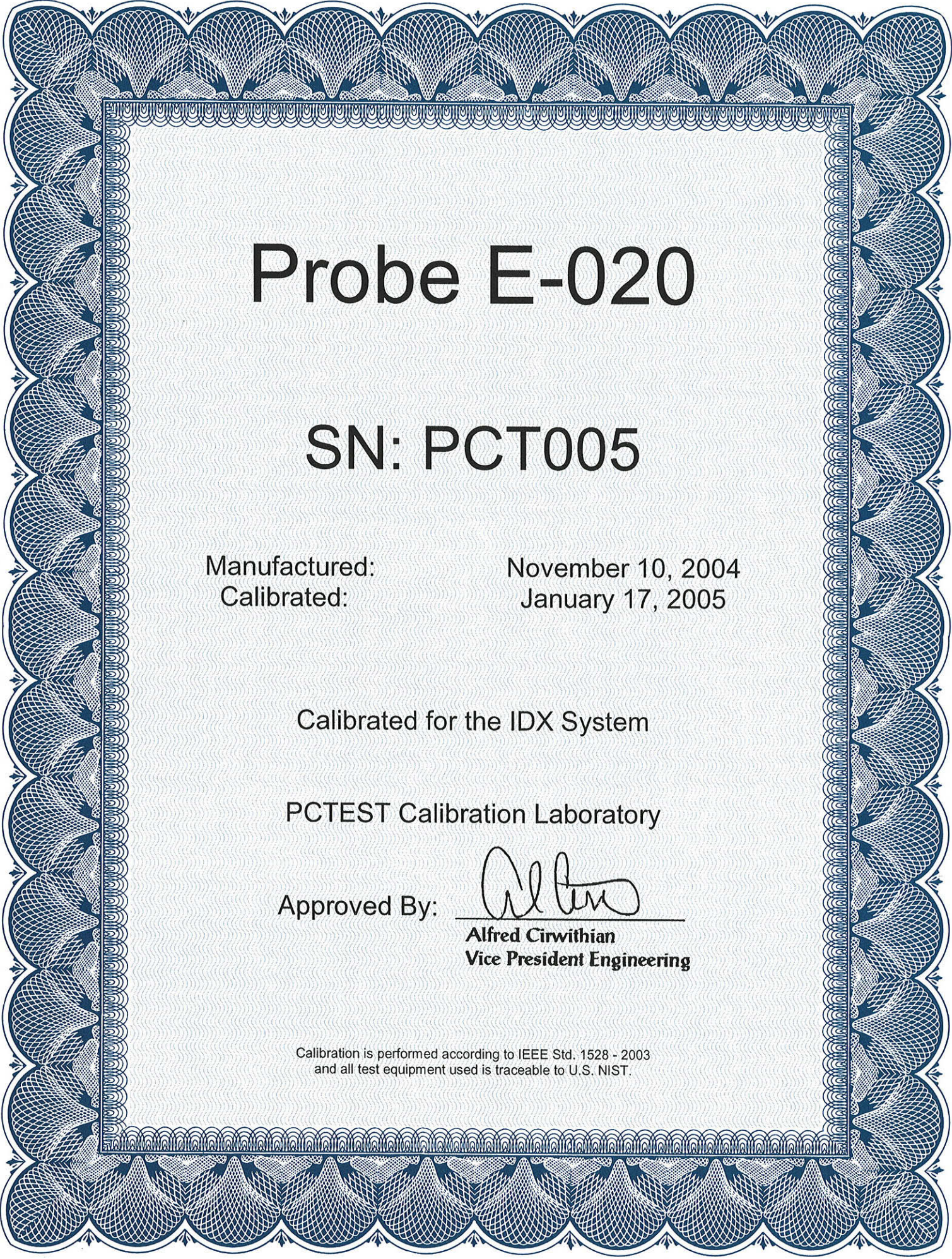


1g SAR Values





APPENDIX C: PROBE CALIBRATION



Probe E-020

SN: PCT005

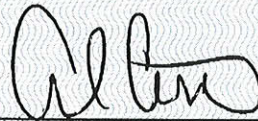
Manufactured:
Calibrated:

November 10, 2004
January 17, 2005

Calibrated for the IDX System

PCTEST Calibration Laboratory

Approved By:



Alfred Cirwithian
Vice President Engineering

Calibration is performed according to IEEE Std. 1528 - 2003
and all test equipment used is traceable to U.S. NIST.

PCTEST Calibration Laboratory

6660-B Dobbin Road
Columbia, Maryland 21045 USA

Calibration Summary

Model: E-020

S/N: PCT005

Tissue Type	Frequency (MHz)	Dielectric Constant ϵ_r	Conductivity (S/m) σ	Conversion Factor $\gamma_x, \gamma_y, \gamma_z$
Brain	450	44.41	0.88	8.8
Brain	835	40.81	0.87	5.5
Brain	1900	39.02	1.37	5.4
Brain	2100	41.11	1.39	5.25
Muscle	450	57.70	0.96	9.24
Muscle	835	53.66	0.98	5.85
Muscle	1900	51.81	1.58	5.5
Muscle	2450	52.23	1.53	5.3

Frequency (MHz)	Isotropy	
	%	dB
450	1.23	0.05
835	2.12	0.09
1900	6.61	0.28
2450	7.61	0.32

Boundary Effect < 2%, 2.5 mm from probe tip to phantom

Diode Compression Point: 120 mV

Environmental Conditions:

Temperature: 22.6 °C

Relative Humidity: 41%

Barometer: 101.2 kPa

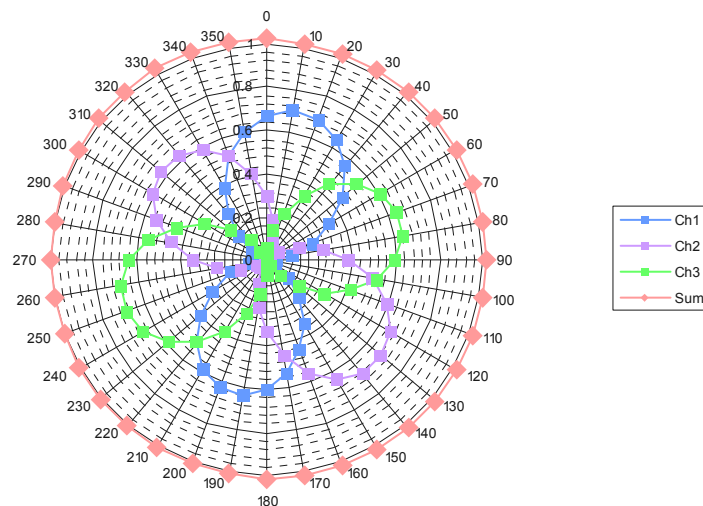
----- .

This probe was calibrated under the IEEE Std 1309-1966, *IEEE Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas*, from 9 kHz to 40 GHz.

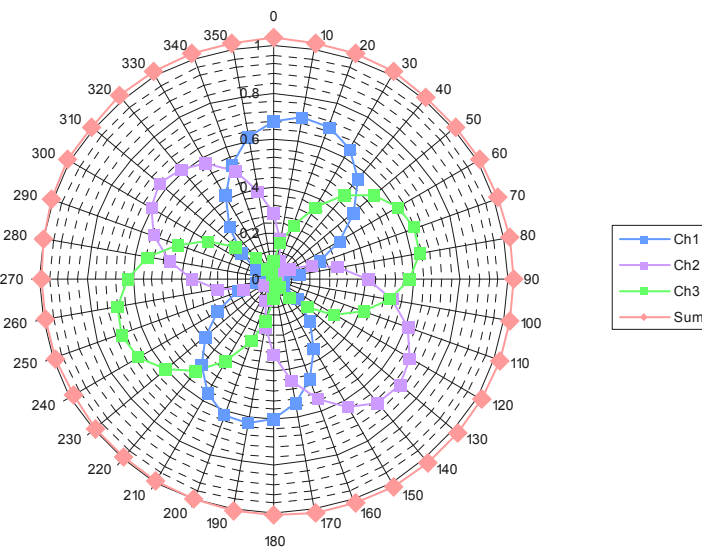
PCTEST Calibration Laboratory

6660-B Dobbin Road
Columbia, Maryland 21045 USA

450 MHz Calibration (PCT005)



835 MHz Calibration (PCT005)

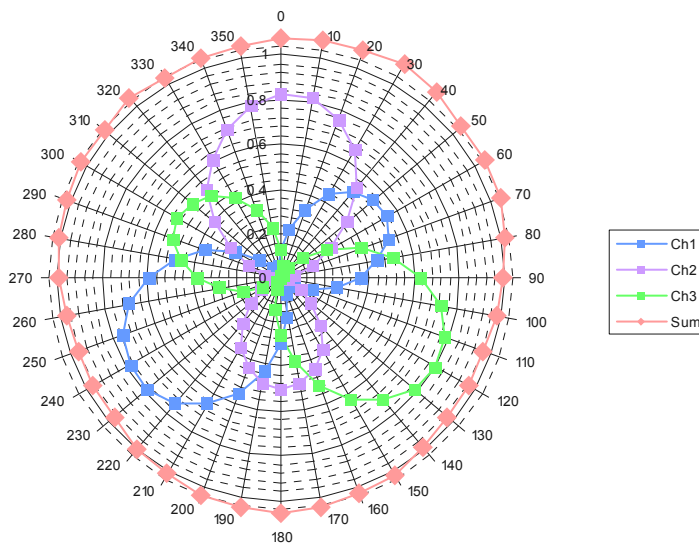


PCTEST Calibration Laboratory

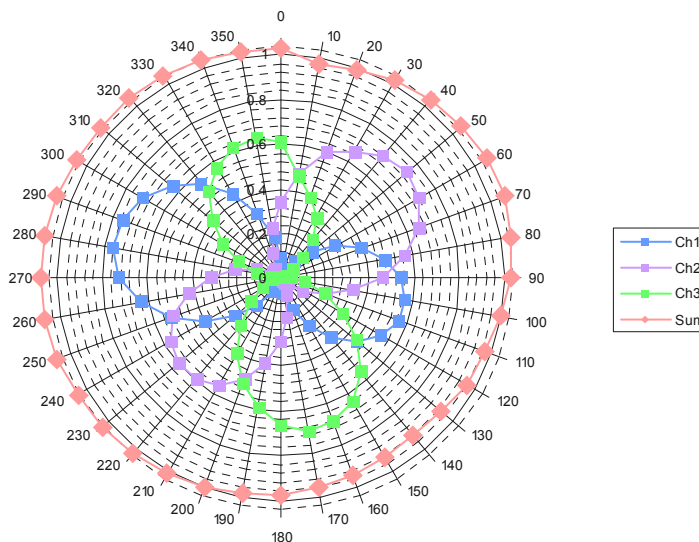
6660-B Dobbin Road

Columbia, Maryland 21045 USA

1900 MHz Calibration (PCT005)

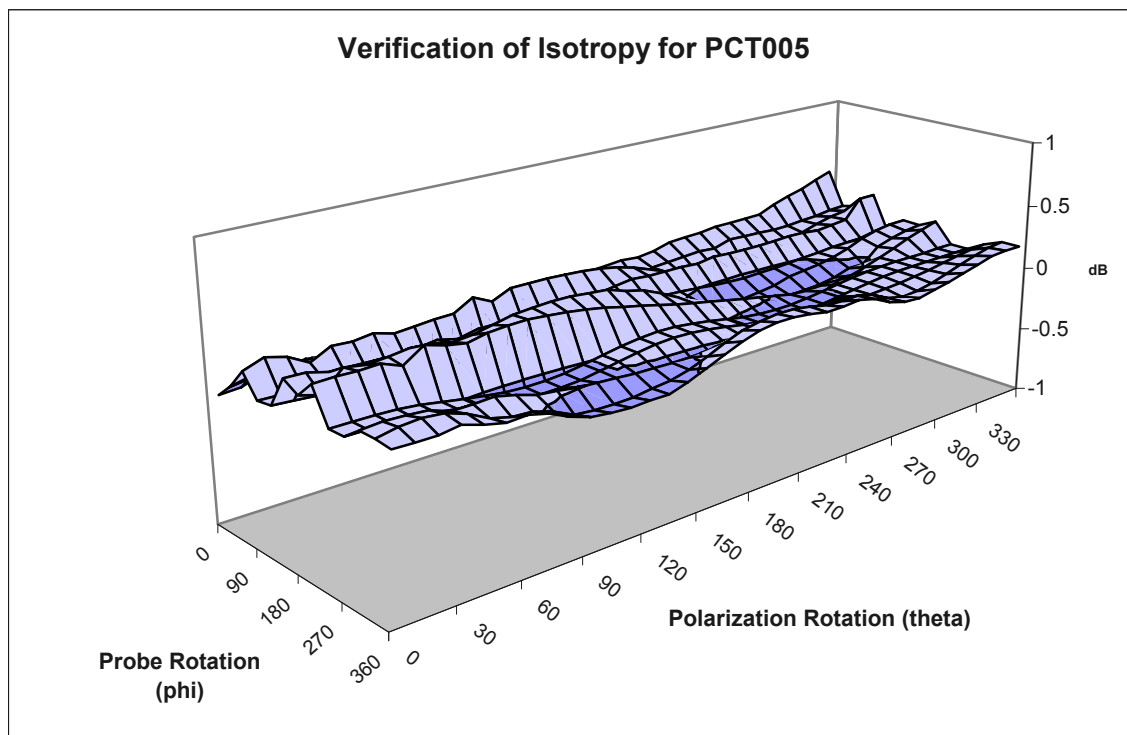


2450 MHz Calibration (PCT005)



PCTEST Calibration Laboratory

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Columbia, Maryland 21045 USA

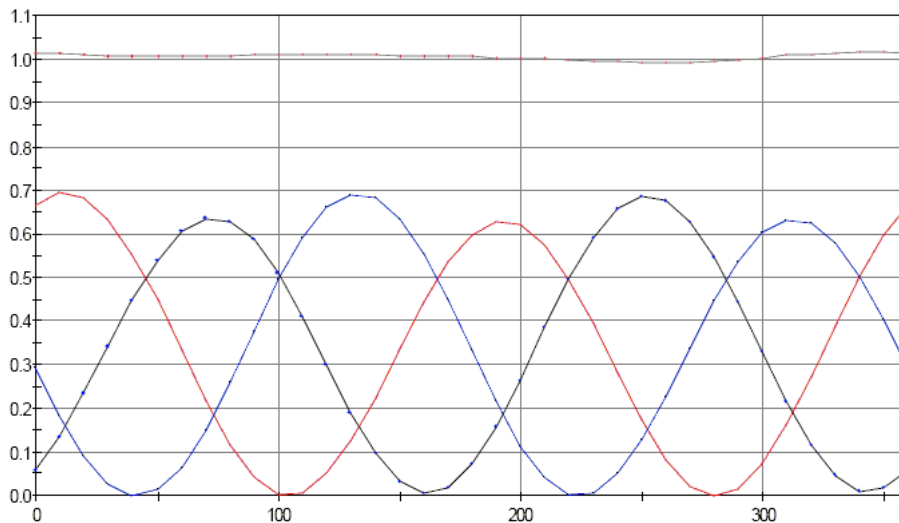


PCTEST Calibration Laboratory

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Columbia, Maryland 21045 USA

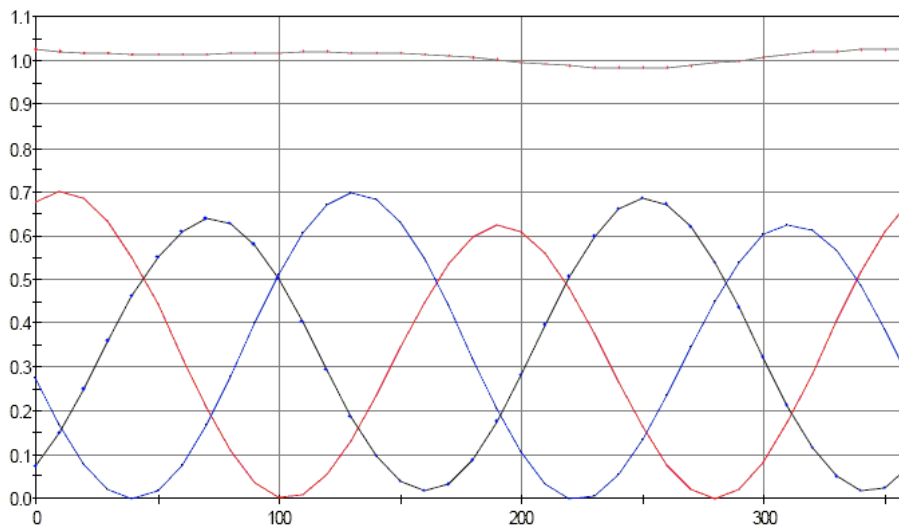
TEM Calibration Plot
Date: 13-Jan-05 04:03:28 pm
Probe Name: PCT005
Frequency: 450

Sensitivity: Ch1: 3.320 Ch2: 3.289 Ch3: 3.267 mV/(mW/cm²)
Isotropy: 1.23% 0.05 db Min=0.993 Max=1.019



TEM Calibration Plot
Date: 13-Jan-05 03:41:45 pm
Probe Name: PCT005
Frequency: 835

Sensitivity: Ch1: 3.807 Ch2: 3.736 Ch3: 3.821 mV/(mW/cm²)
Isotropy: 2.12% 0.09 db Min=0.985 Max=1.028



PCTEST Calibration Laboratory

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Columbia, Maryland 21045 USA

TEM Calibration Plot

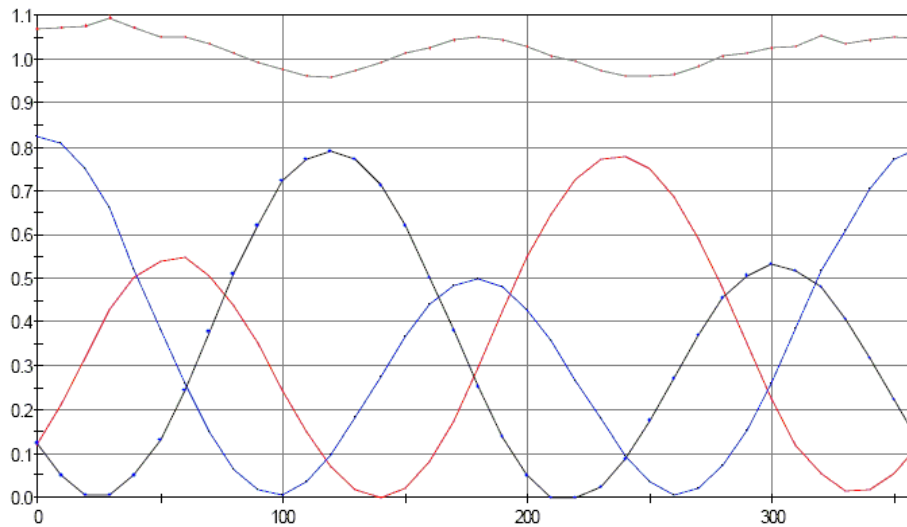
Date: 14-Jan-05 11:08:15 am

Probe Name: PCT005

Frequency: 1900

Sensitivity: Ch1: 5.115 Ch2: 4.969 Ch3: 4.453 mV/(mW/cm²)

Isotropy: 6.79% 0.29 db Min=0.961 Max=1.097



TEM Calibration Plot

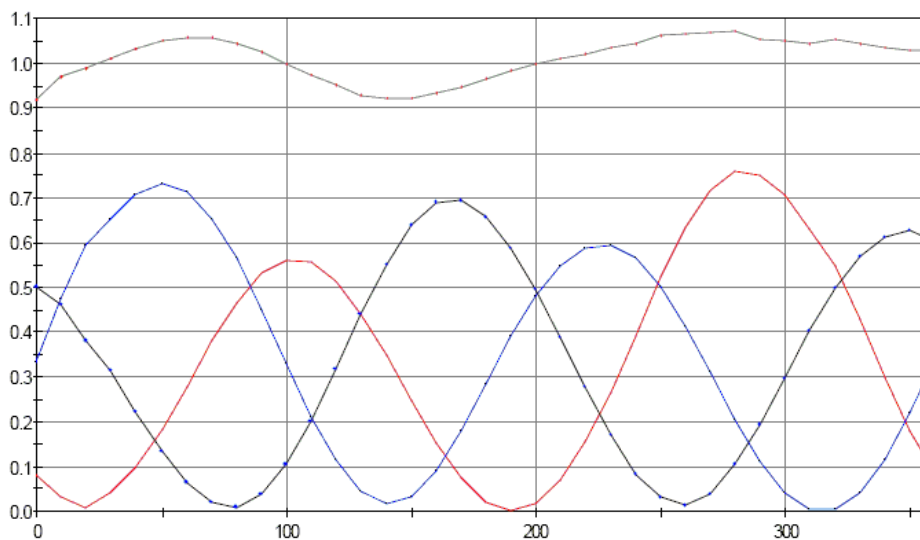
Date: 14-Jan-05 11:38:38 am

Probe Name: PCT005

Frequency: 2450

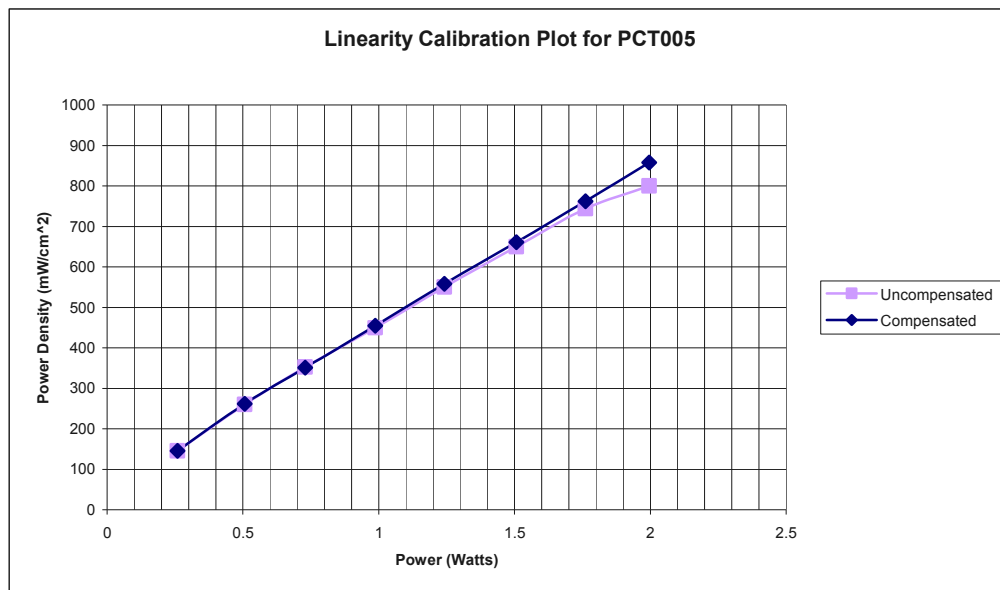
Sensitivity: Ch1: 5.496 Ch2: 4.887 Ch3: 5.267 mV/(mW/cm²)

Isotropy: 7.61% 0.32 db Min=0.921 Max=1.074



PCTEST Calibration Laboratory

6660-B Dobbin Road
Columbia, Maryland 21045 USA



Probe Physical Characteristics

Serial Number: PCT005
Model: E-020

Sensor Offset: 1.56 mm
Sensor Length: 2.5 mm
Tip Enclosure: Ertalyte
Tip Diameter: 5 mm
Tip Length: 60 mm
Total Length: 290 mm

PCTEST Calibration Laboratory

6660-B Dobbin Road
Columbia, Maryland 21045 USA

Test Equipment

The test equipment used during the probe calibration are listed as follows:

EQUIPMENT SPECIFICATIONS		
Type	Calibration Due	Asset Number/ Serial Number
CRS Robot F3	February 2005	RAF0134133
CRS C500C Motion Controller	February 2005	RCB0003303
CRS Teach Pendant (Joystick)	February 2005	STP0132231
DELL Computer, Pentium 4 1.6 GHz, Windows 2000™	February 2005	4PJZ111
Flat SAM Phantom (P-SAM-FLAT)	February 2005	94X-097
IDX Robot End Effector (EE-103-C)	February 2005	07111223
IDX Probe Amplifier	February 2005	07111113
Validation Dipole D835V2	October 2005	PCT441
Validation Dipole D1900V2	February 2005	PCT512
Validation Dipole D2450V2	October 2005	PCT641
HP-778D Dual-Directional Coupler (0.1 ~ 2.0 GHz)	November 2005	PCT664
MicroCircuits Directional Coupler (4.0 ~ 8.0 GHz)	November 2005	PE2204-6
Amplifier Research 5S1G4 Power Amp	January 2005	PCT540
IFI T184-10 Power Amplifier (4.0 ~ 18.0 GHz)	December 2005	5957
HP-8241A (250kHz ~ 20 GHz) Signal Generator	December 2005	88934
HP-8753E (30kHz ~ 6GHz) Network Analyzer	January 2006	PCT552
Rohde & Schwarz Power Meter NRVS 1020.1809.02	January 2006	835360/079
Rohde & Schwarz Power Sensor NRV-Z53 858.0500.02	April 2005	846076/007
HP85070B Dielectric Probe Kit	January 2005	PCT501
IFI CC110EXX TEM Cell (DC to 2000 MHz)	January 2006	PCT498
EMCO 3115 Horn Antenna (2.0 ~ 18.0 GHz)	August 2005	PCT496
Guildline 5150 Precision Dual-Thermometer	November 2005	66145