

EXHIBIT A. SAR DATA SUMMARY

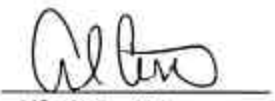
Mixture Type: 835MHz Muscle

A.1 MEASUREMENT RESULTS (Body SAR)

FREQUENCY		Modulation	POWER [†]		Test Position	Notebooks	Separation Distance (cm) [‡]	Antenna Position	SAR (W/kg)
MHz	Ch.		Conducted	Battery					
710.96	19	OFDM	24 dBm	Standard	Laptop	IBM ThinkPad R30 Series	1.10 cm	Fixed	0.13
715.05	101	OFDM	24 dBm	Standard	Laptop	IBM ThinkPad R30 Series	1.10 cm	Fixed	0.17
710.96	19	OFDM	24 dBm	Standard	Laptop	Panasonic CF-73	1.30 cm	Fixed	0.11
715.05	101	OFDM	24 dBm	Standard	Laptop	Panasonic CF-73	1.30 cm	Fixed	0.15
710.96	19	OFDM	24 dBm	Standard	Laptop	Gateway SOLO 5300	1.00 cm	Fixed	0.56
715.05	101	OFDM	24 dBm	Standard	Laptop	Gateway SOLO 5300	1.00 cm	Fixed	0.66
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						Muscle 1.6 W/kg (mW/g) averaged over 1 gram			

NOTES:

- The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].
- All modes of operation were investigated, and worst-case results are reported.
- Battery is fully charged for all readings. *Standard Batteries are the only options.*
 *Power Measured ☒ Conducted ☐ ERP ☐ EIRP
 See Test Plots for Power Class Reference
- SAR Measurement System ☐ DASY3 ☒ IDX
 Phantom Configuration ☐ Left Head ☒ Flat Phantom ☐ Right Head
- SAR Configuration ☐ Head ☒ Body ☐ Hand
- Test Signal Call Mode ☐ Manu. Test Codes ☒ Base Station Simulator
- **Test Configuration ☐ With Belt Clip ☒ Without Belt Clip
- Tissue parameters and temperatures are listed on the SAR plots.
- Both sides of the phone were tested and the worst-case side is reported.
- Liquid tissue depth is 15.1 cm. $\pm$ 0.1



Alfred Cirwithian
Vice President Engineering

PCTEST SAR TEST REPORT	 FCC CERTIFICATION			Reviewed by: Quality Manager
SAR Filename: 0502250144-R2	Test Dates: June 21, 2005	Phone Type: PCMCIA Wireless Network Card	FCC ID: QZX99171001	

APPENDIX A: SAR TEST DATA

SAR Data Report 05062103

Start : 21-Jun-05 10:39:35 am
End : 21-Jun-05 10:45:58 am
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : OFDM Flarion Card
Model Number : QZX99171001
Serial Number : 870010
Frequency : 710.96 MHz
Antenna Type : Helical
Antenna Posn. : Fixed

Measurement Data:

Phantom Name : FLATPHANTOM
Phantom Type : Uniphantom
Tissue Type : Muscle
Tissue Dielectric : 53.250
Tissue Conductivity : 0.980
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:

OFDM Ch. 19 w/ Gateway Notebook
Body (0.95cm)
CF=1; Amb. Temp= 22.7 'C; Liq. Temp=21.8 'C

Power Drop Test:

Reading @ start = 0.780
Reading @ End = 0.746
Power at End = 95.7%

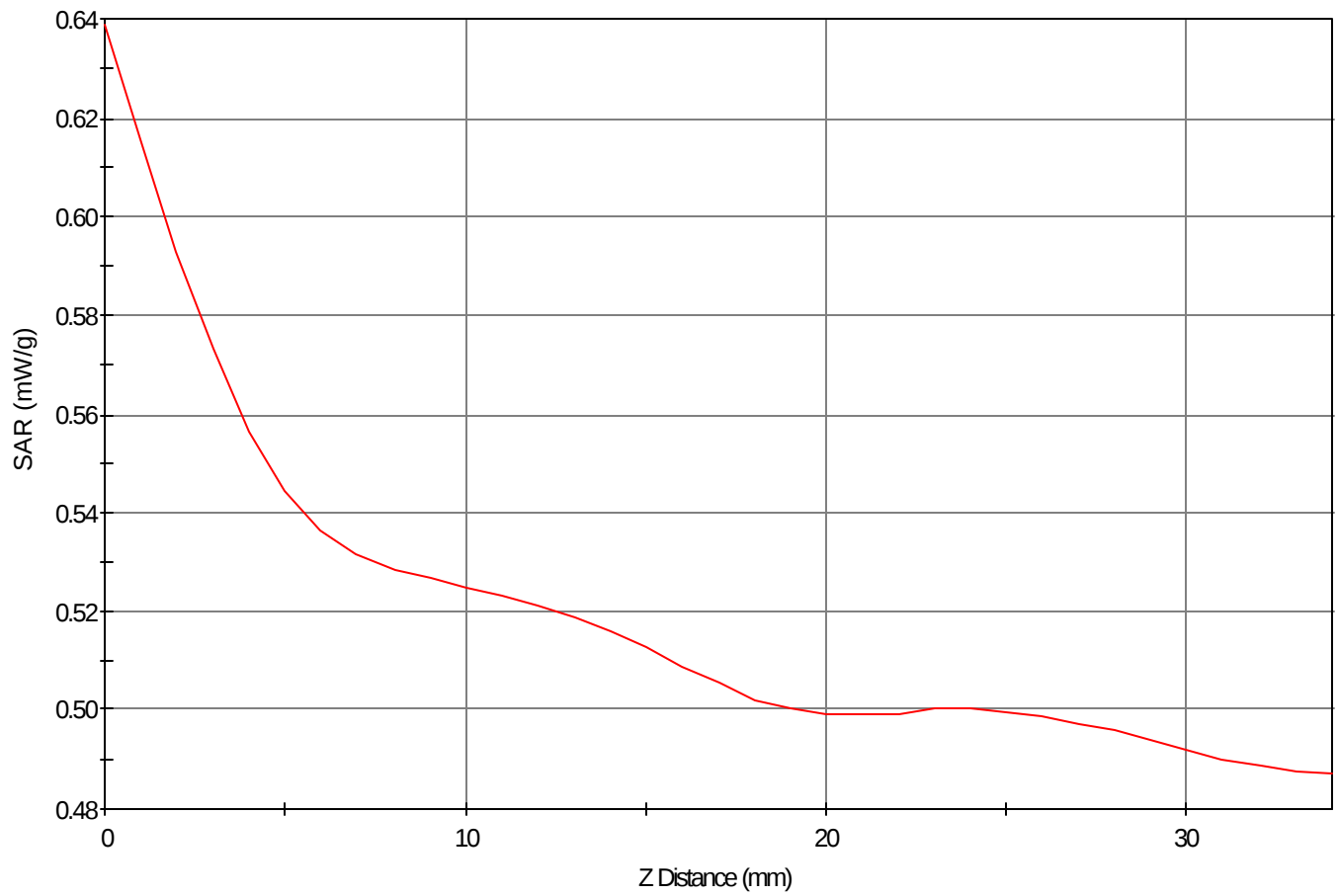
Area Scan - Max Peak SAR Value at x=49.0 y=-22.0 = 0.58 W/kg

Zoom Scan - Max Peak SAR Value at x=53.0 y=-19.0 z=0.0 = 0.64 W/kg

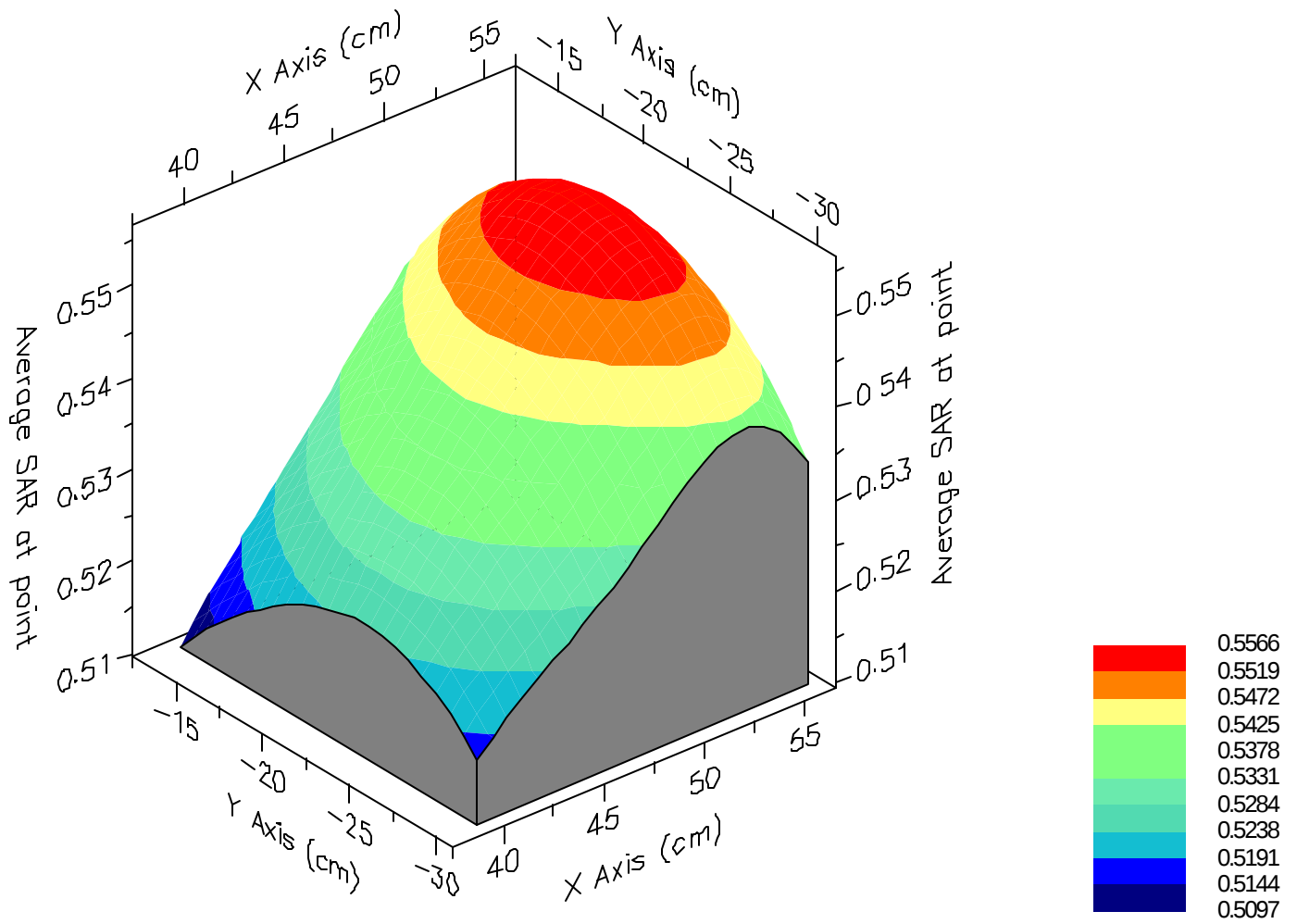
Max 1g SAR at x=55.0 y=-22.0 z=0.0 = 0.56 W/kg

Max 10g SAR at x=49.0 y=-25.0 z=0.0 = 0.53 W/kg

SAR - Z Axis
at Hotspot x:53.0 y:-19.0



1g SAR Values





SAR Data Report 05062105

Start : 21-Jun-05 10:49:47 am
End : 21-Jun-05 10:55:28 am
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : OFDM Flarion Card
Model Number : QZX99171001
Serial Number : 870010
Frequency : 715.05 MHz
Transmit Pwr : 0.251 W
Antenna Type : Helical
Antenna Posn. : Fixed

Measurement Data:

Phantom Name : FLATPHANTOM
Phantom Type : Uniphantom
Tissue Type : Muscle
Tissue Dielectric : 53.250
Tissue Conductivity : 0.980
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:

OFDM Ch. 101 w/ Gateway Notebook
Body (0.95cm)
CF=1; Amb. Temp= 22.7 'C; Liq. Temp=21.8 'C

Power Drop Test:

Reading @ start = 0.788
Reading @ End = 0.790
Power at End = 100.2%

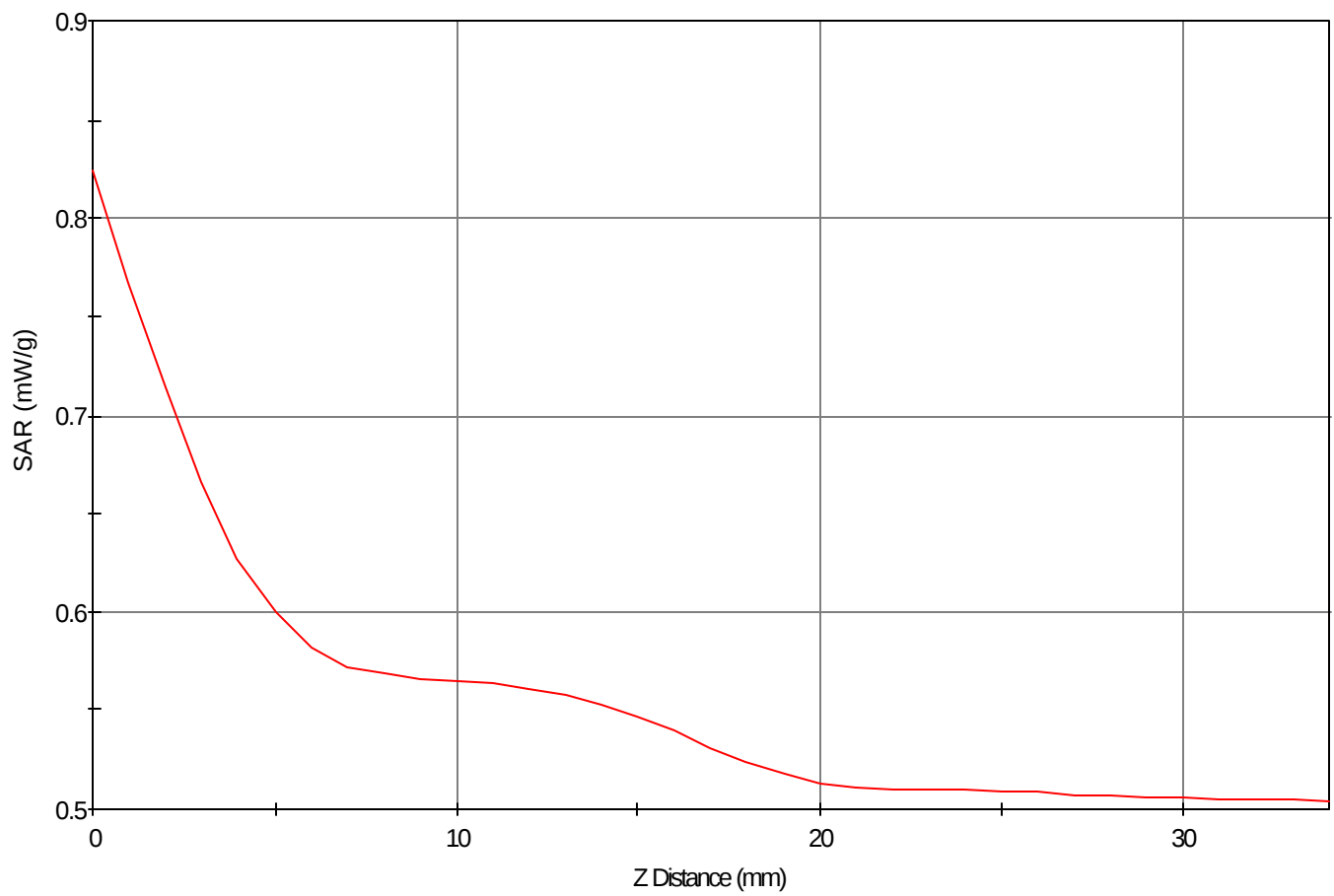
Area Scan - Max Peak SAR Value at x=47.0 y=-11.0 = 0.66 W/kg

Zoom Scan - Max Peak SAR Value at x=46.0 y=-4.0 z=0.0 = 0.82 W/kg

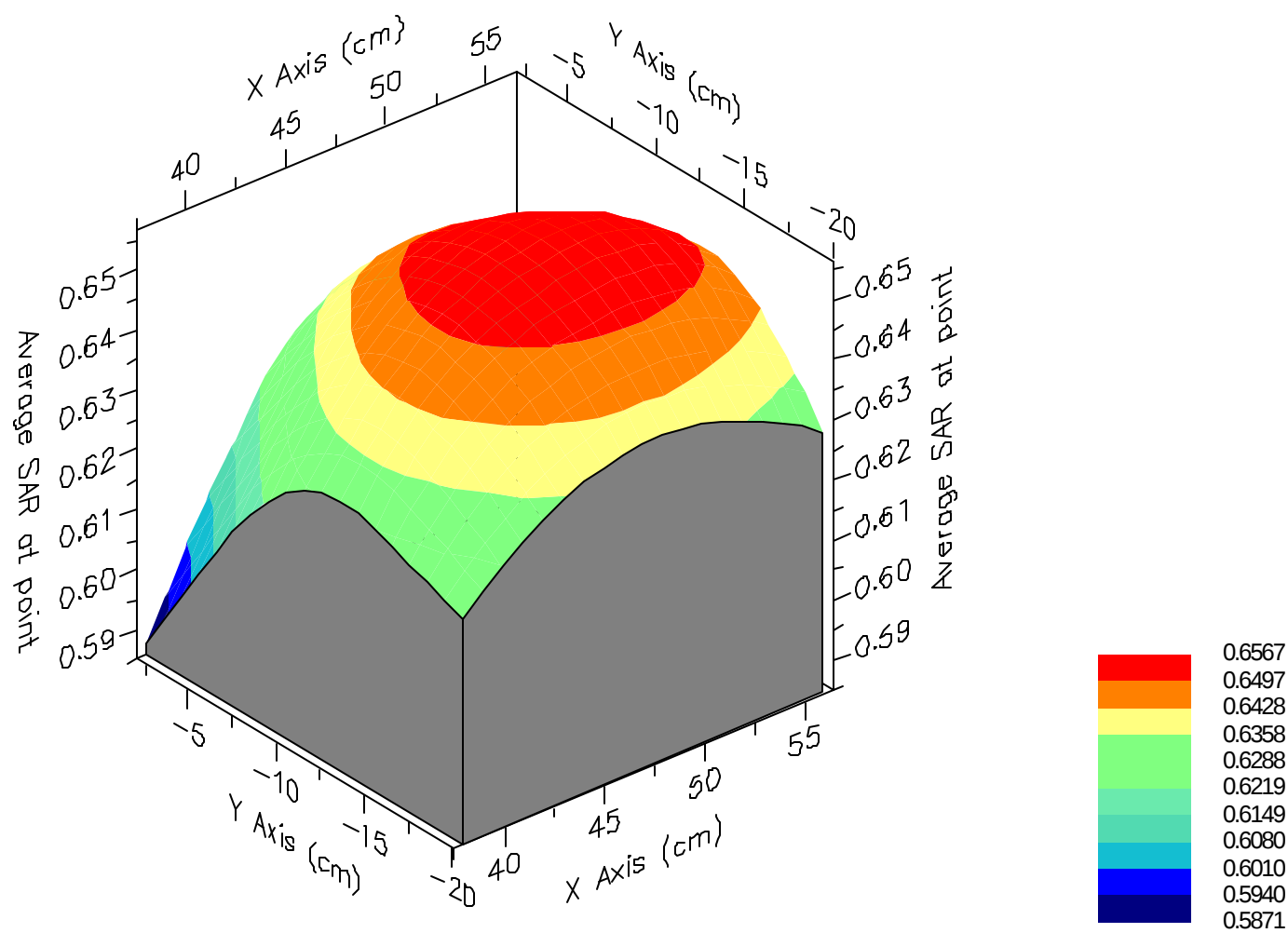
Max 1g SAR at x=50.0 y=-12.0 z=0.0 = 0.66 W/kg

Max 10g SAR at x=50.0 y=-13.0 z=0.0 = 0.59 W/kg

SAR - Z Axis
at Hotspot x:46.0 y:-4.0



1g SAR Values





SAR Data Report 05062106

Start : 21-Jun-05 11:44:04 am
End : 21-Jun-05 11:49:22 am
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : OFDM Flarion Card
Model Number : QZX99171001
Serial Number : 870010
Frequency : 710.96 MHz
Transmit Pwr : 0.251 W
Antenna Type : Helical
Antenna Posn. : Fixed

Measurement Data:

Phantom Name : FLATPHANTOM
Phantom Type : Uniphantom
Tissue Type : Muscle
Tissue Dielectric : 53.250
Tissue Conductivity : 0.980
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:

OFDM Ch. 19 w/ CF-73 Notebook
Body (1.5cm)
CF=1; Amb. Temp= 22.7 'C; Liq. Temp=21.8 'C

Power Drop Test:

Reading @ start = 0.087
Reading @ End = 0.091
Power at End = 104.7%

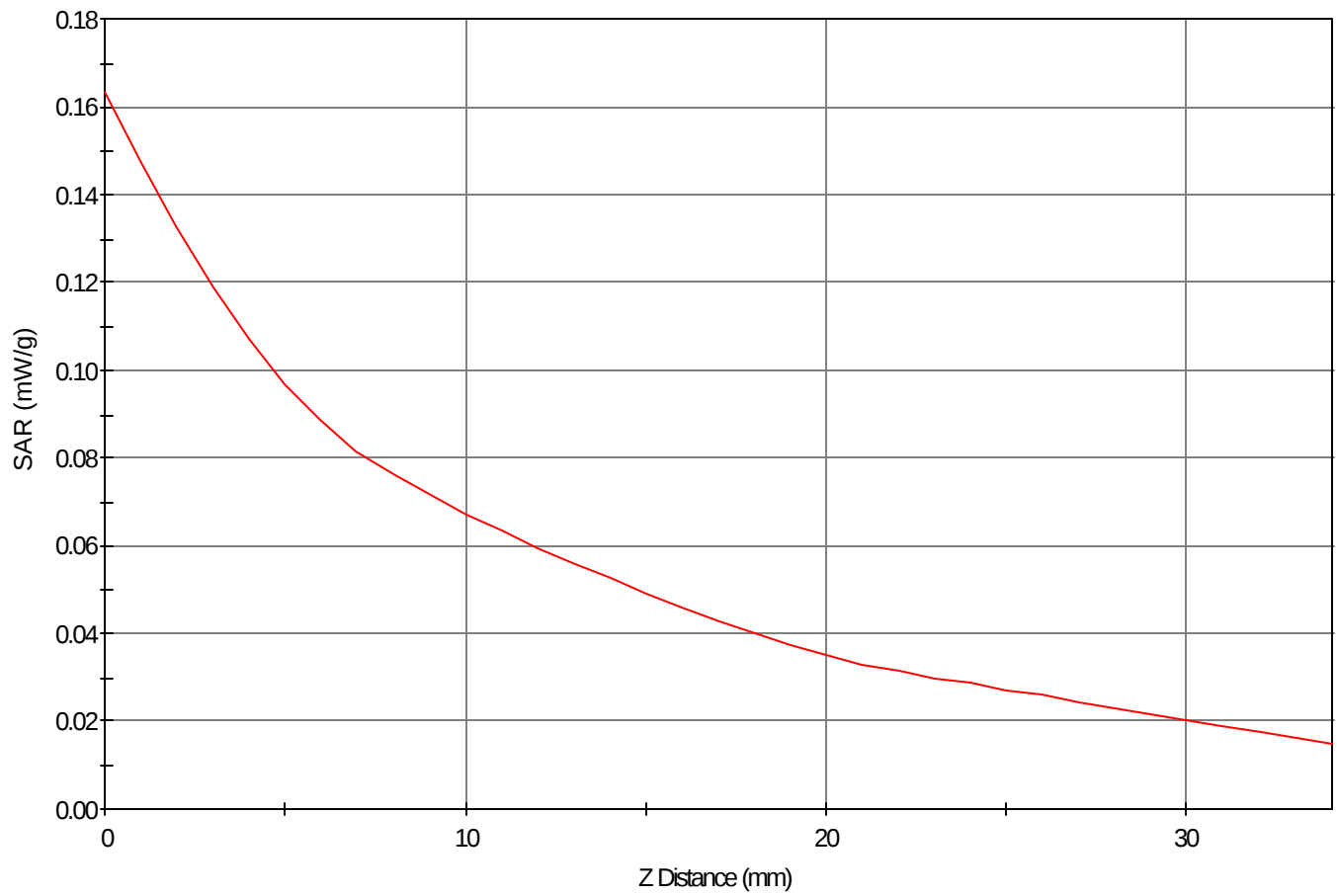
Area Scan - Max Peak SAR Value at x=28.0 y=26.0 = 0.11 W/kg

Zoom Scan - Max Peak SAR Value at x=28.0 y=32.0 z=0.0 = 0.16 W/kg

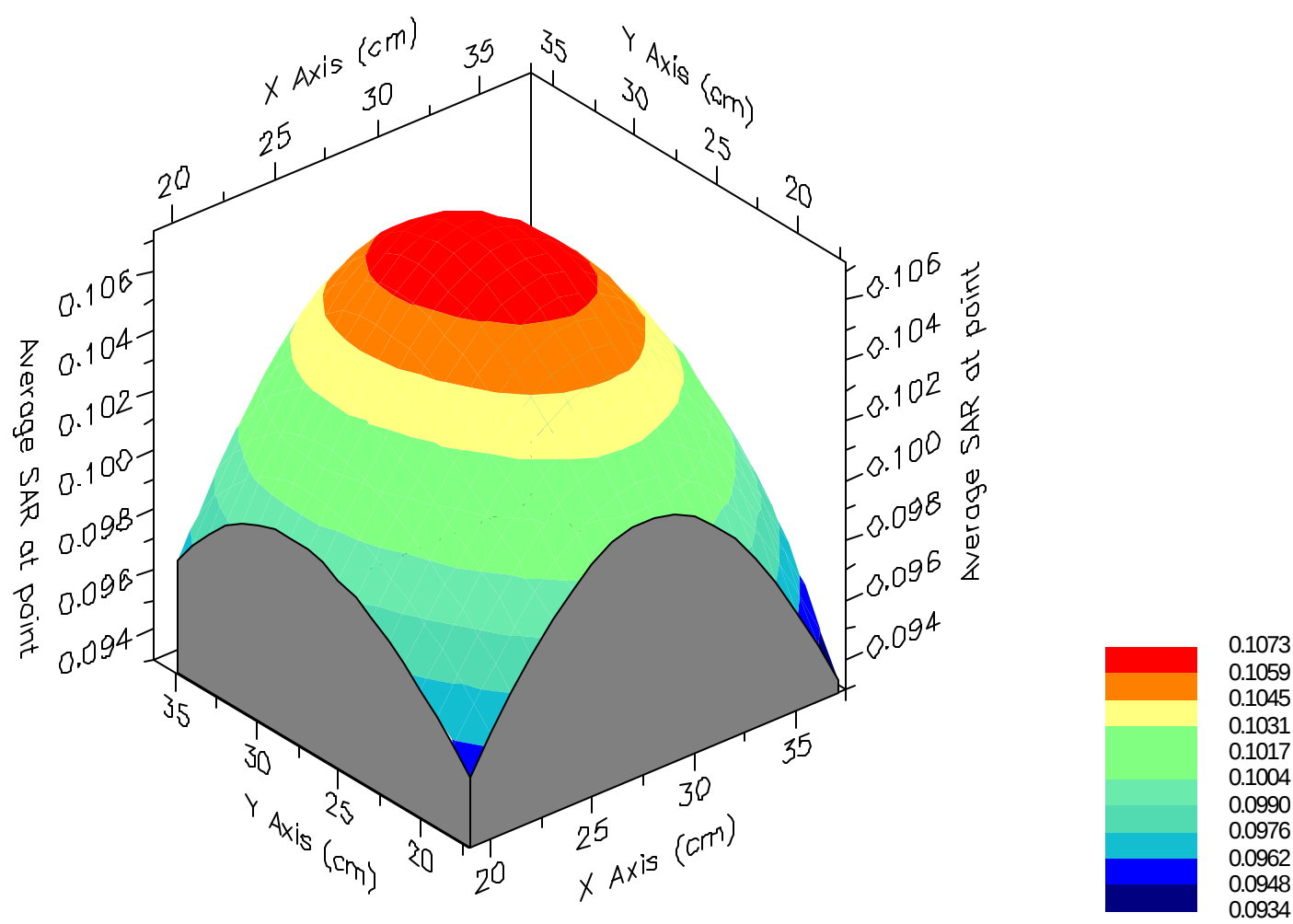
Max 1g SAR at x=29.0 y=29.0 z=0.0 = 0.11 W/kg

Max 10g SAR at x=27.0 y=27.0 z=0.0 = 0.07 W/kg

SAR - Z Axis
at Hotspot x:28.0 y:32.0



1g SAR Values





SAR Data Report 05062108

Start : 21-Jun-05 11:52:02 am
End : 21-Jun-05 11:57:21 am
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : OFDM Flarion Card
Model Number : QZX99171001
Serial Number : 870010
Frequency : 715.05 MHz
Transmit Pwr : 0.251 W
Antenna Type : Helical
Antenna Posn. : Fixed

Measurement Data:

Phantom Name : FLATPHANTOM
Phantom Type : Uniphantom
Tissue Type : Muscle
Tissue Dielectric : 53.250
Tissue Conductivity : 0.980
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:

OFDM Ch. 101 w/ CF-73 Notebook
Body (1.5cm)
CF=1; Amb. Temp= 22.7 'C; Liq. Temp=21.8 'C

Power Drop Test:

Reading @ start = 0.140
Reading @ End = 0.142
Power at End = 101.3%

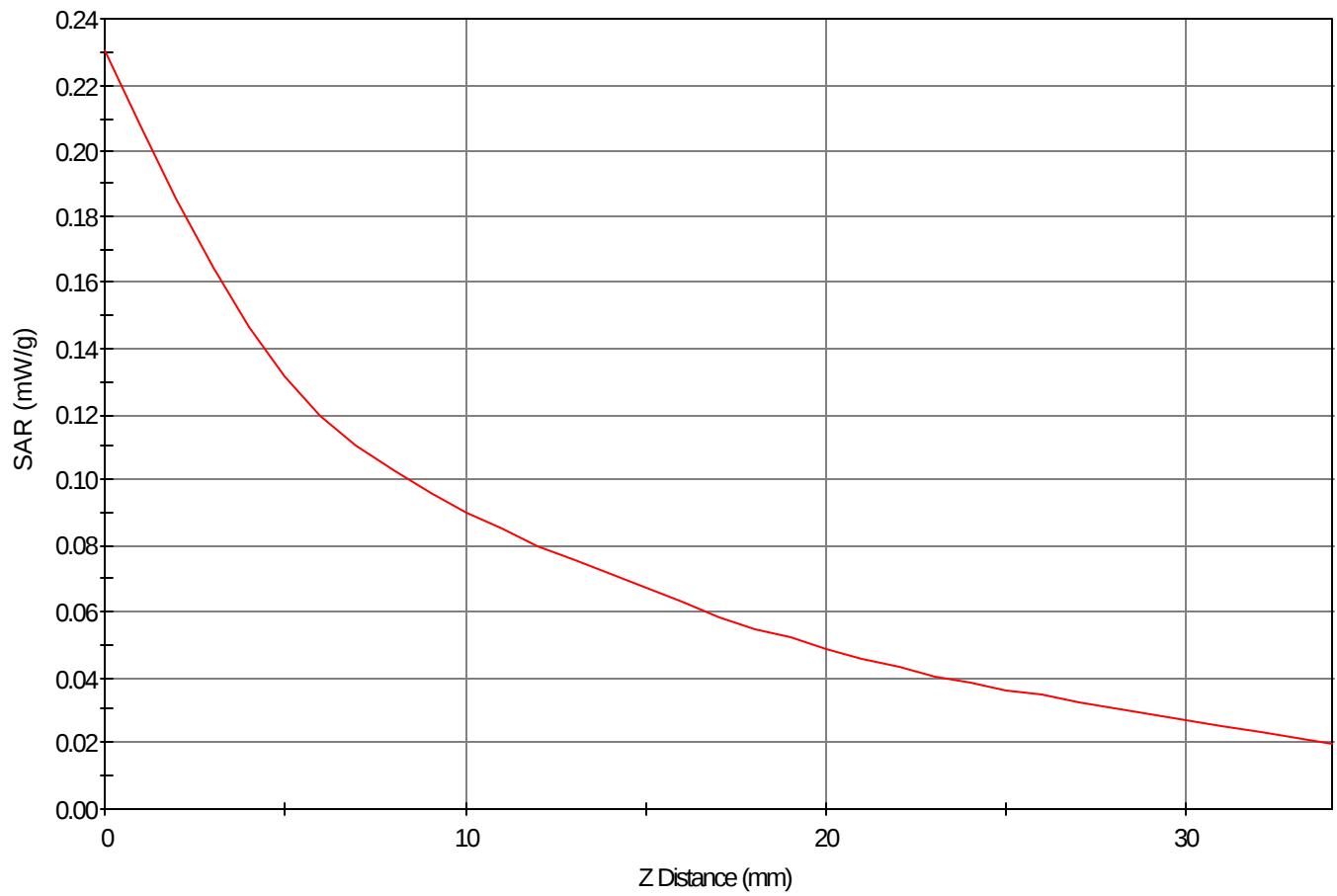
Area Scan - Max Peak SAR Value at x=25.0 y=24.0 = 0.14 W/kg

Zoom Scan - Max Peak SAR Value at x=29.0 y=24.0 z=0.0 = 0.23 W/kg

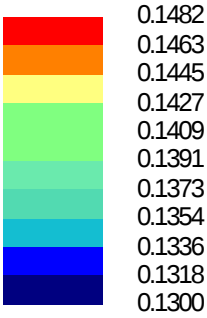
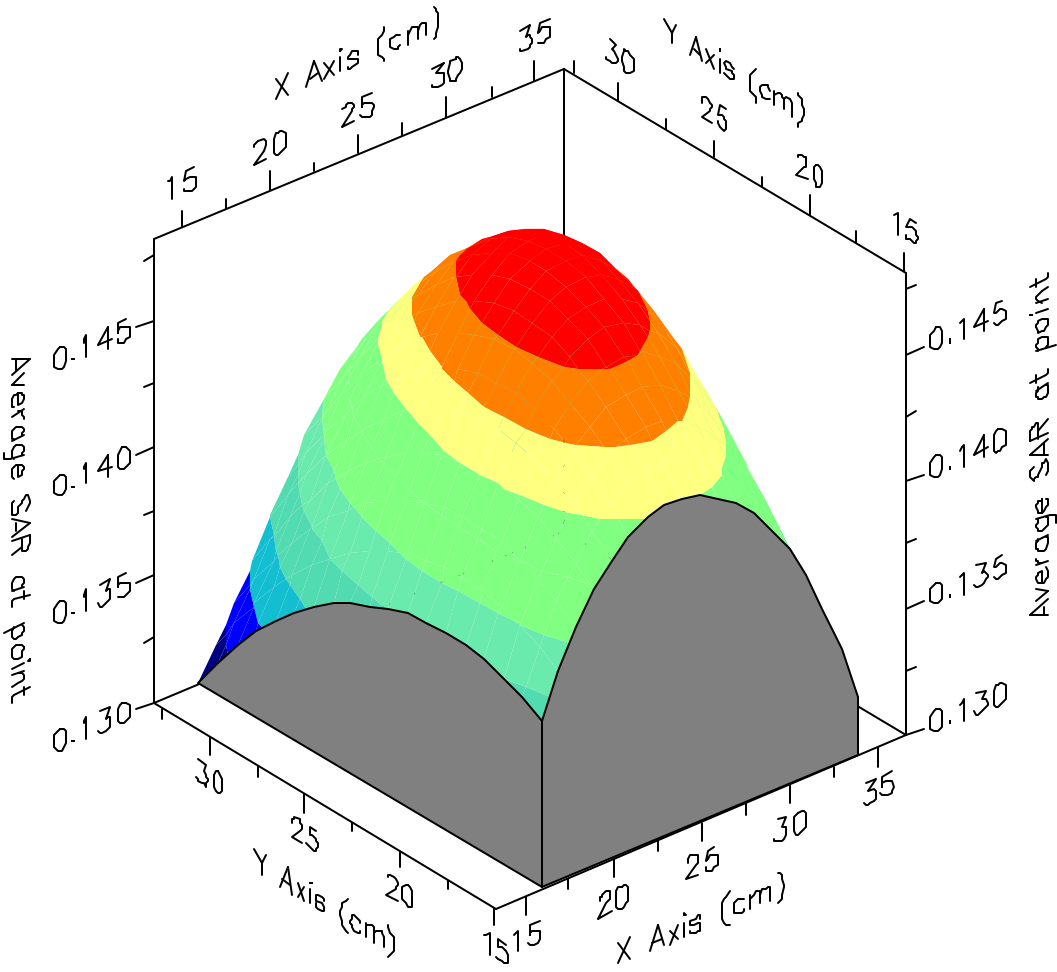
Max 1g SAR at x=26.0 y=24.0 z=0.0 = 0.15 W/kg

Max 10g SAR at x=24.0 y=22.0 z=0.0 = 0.10 W/kg

SAR - Z Axis
at Hotspot x:29.0 y:24.0



1g SAR Values





SAR Data Report 05062111

Start : 21-Jun-05 12:42:24 pm
End : 21-Jun-05 12:47:49 pm
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : OFDM Flarion Card
Model Number : QZX99171001
Serial Number : 870010
Frequency : 710.96 MHz
Transmit Pwr : 0.251 W
Antenna Type : Helical
Antenna Posn. : Fixed

Measurement Data:

Phantom Name : FLATPHANTOM
Phantom Type : Uniphantom
Tissue Type : Muscle
Tissue Dielectric : 53.250
Tissue Conductivity : 0.980
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:

OFDM Ch. 19 w/ IBM Notebook
Body (1.1cm)
CF=1; Amb. Temp= 22.7 'C; Liq. Temp=21.8 'C

Power Drop Test:

Reading @ start = 0.152
Reading @ End = 0.164
Power at End = 108.4%

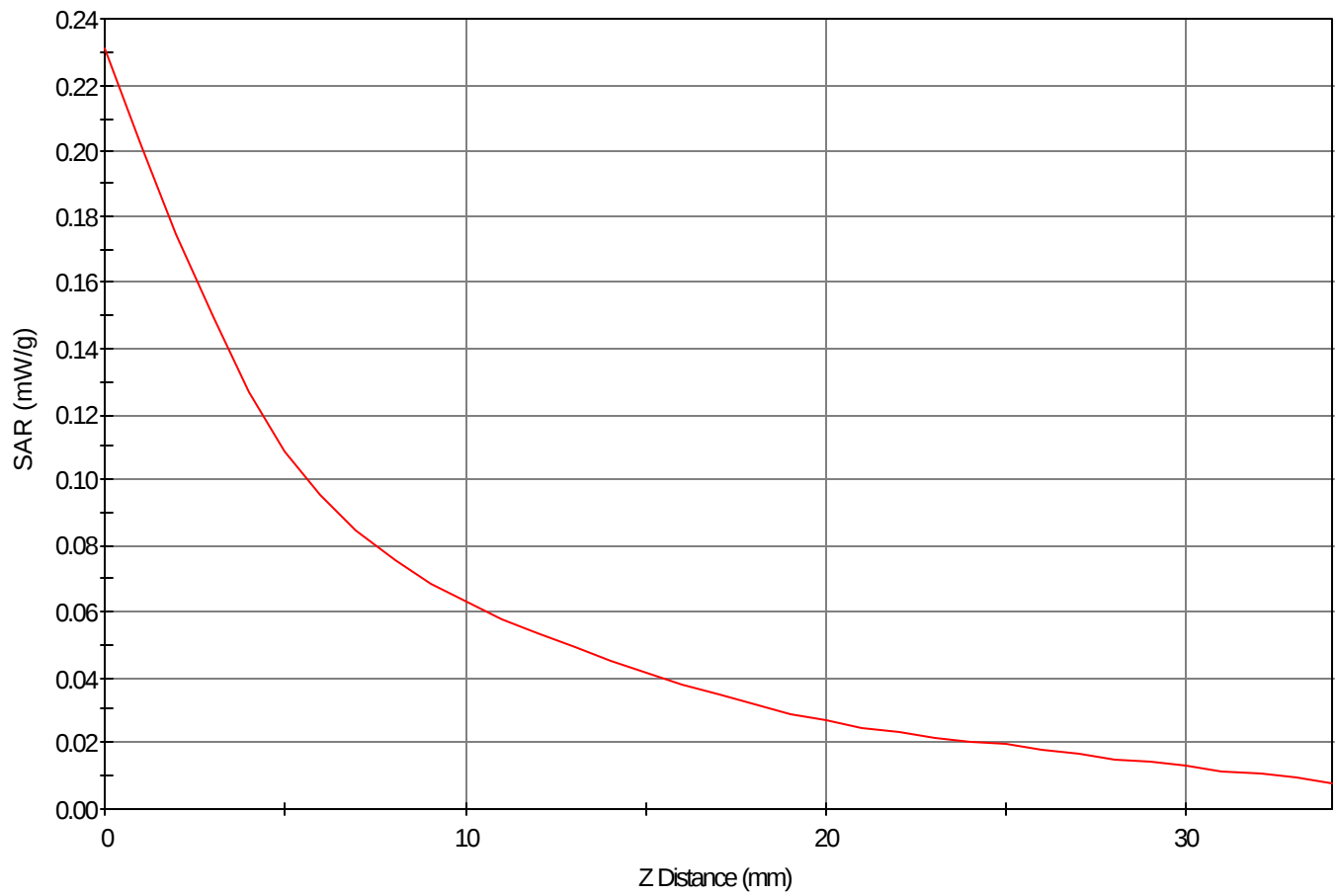
Area Scan - Max Peak SAR Value at x=8.0 y=10.0 = 0.12 W/kg

Zoom Scan - Max Peak SAR Value at x=6.0 y=11.0 z=0.0 = 0.23 W/kg

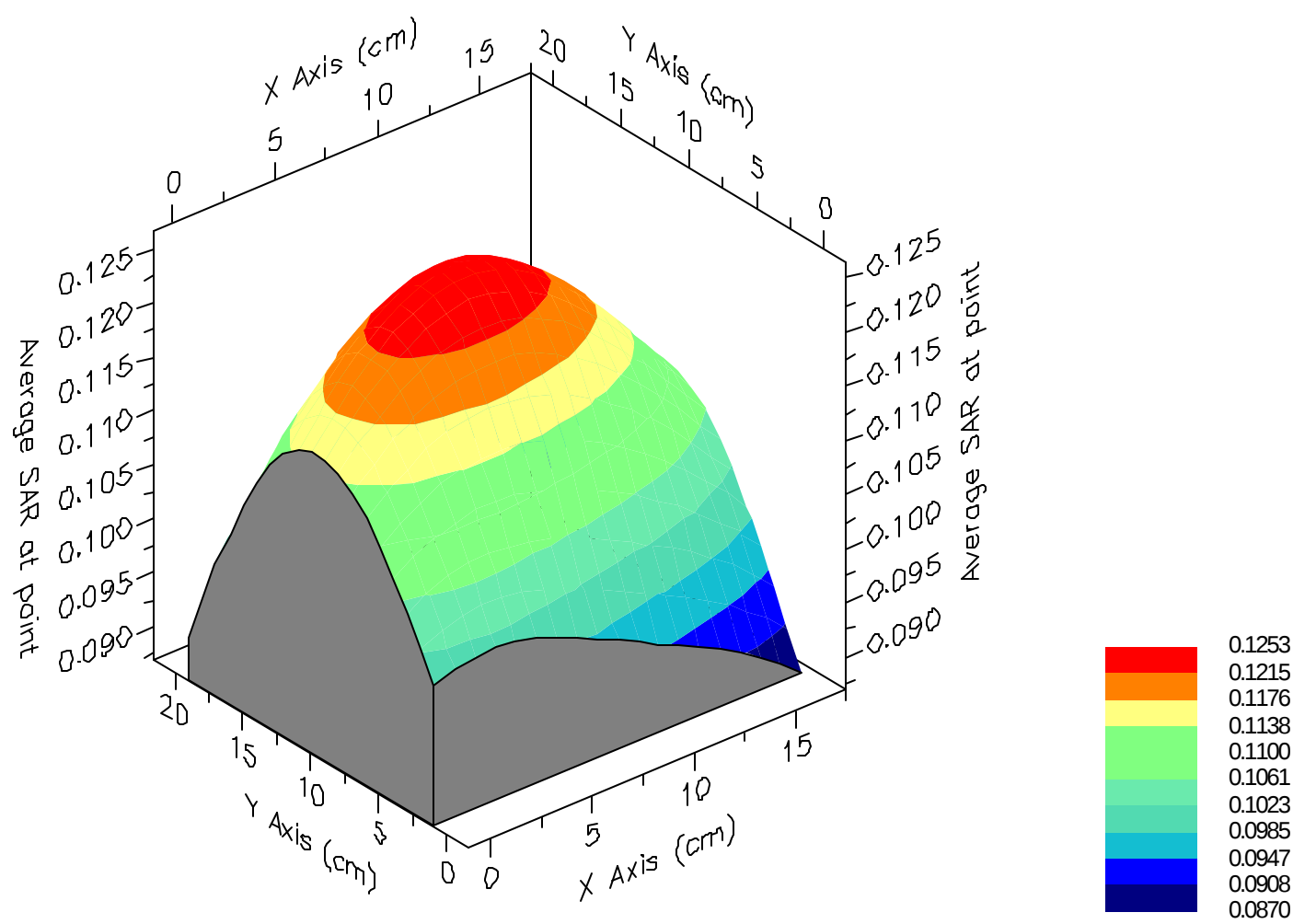
Max 1g SAR at x=7.0 y=11.0 z=0.0 = 0.13 W/kg

Max 10g SAR at x=7.0 y=9.0 z=0.0 = 0.07 W/kg

SAR - Z Axis
at Hotspot x:6.0 y:11.0



1g SAR Values





SAR Data Report 05062112

Start : 21-Jun-05 12:58:01 pm
End : 21-Jun-05 01:03:36 pm
Code Version : 4.08
Robot Version: 4.08

Product Data:

Type : OFDM Flarion Card
Model Number : QZX99171001
Serial Number : 870010
Frequency : 715.05 MHz
Transmit Pwr : 0.251 W
Antenna Type : Helical
Antenna Posn. : Fixed

Measurement Data:

Phantom Name : FLATPHANTOM
Phantom Type : Uniphantom
Tissue Type : Muscle
Tissue Dielectric : 53.250
Tissue Conductivity : 0.980
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:

OFDM Ch. 101 w/ IBM Notebook
Body (1.1cm)
CF=1; Amb. Temp= 22.7 'C; Liq. Temp=21.8 'C

Power Drop Test:

Reading @ start = 0.167
Reading @ End = 0.180
Power at End = 107.6%

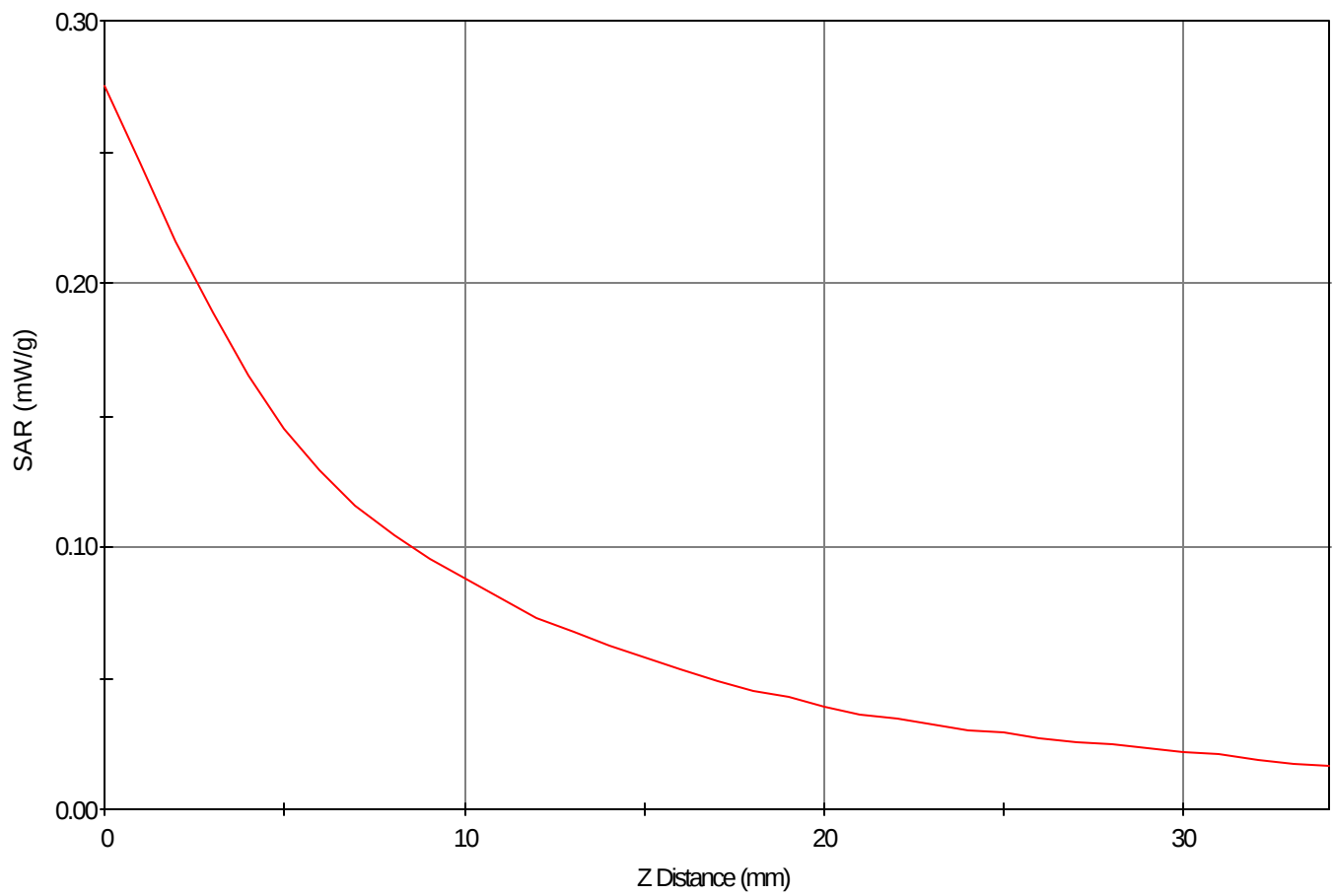
Area Scan - Max Peak SAR Value at x=16.0 y=10.0 = 0.17 W/kg

Zoom Scan - Max Peak SAR Value at x=16.0 y=14.0 z=0.0 = 0.28 W/kg

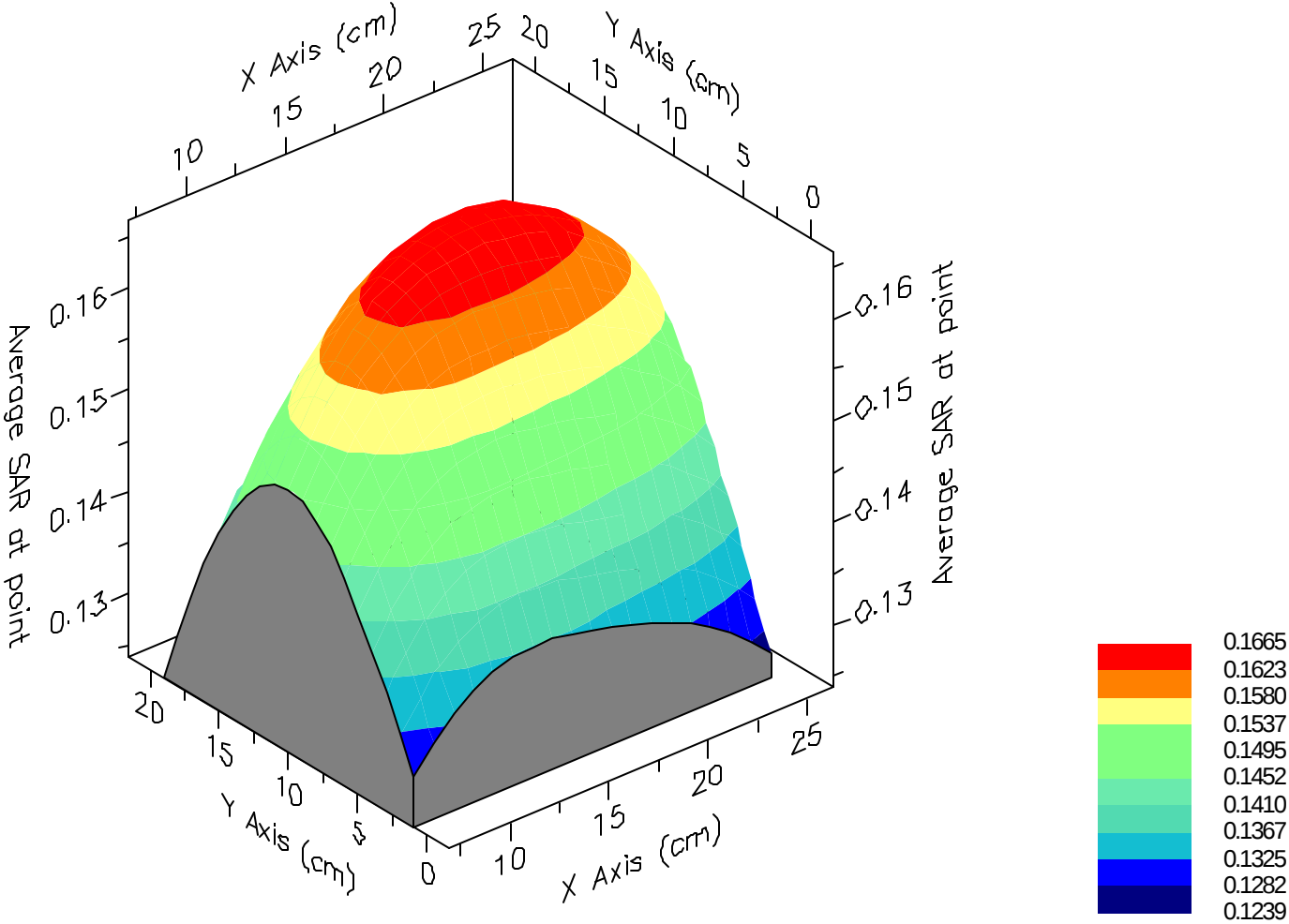
Max 1g SAR at x=17.0 y=12.0 z=0.0 = 0.17 W/kg

Max 10g SAR at x=18.0 y=10.0 z=0.0 = 0.10 W/kg

SAR - Z Axis
at Hotspot x:16.0 y:14.0



1g SAR Values





APPENDIX B: DIPOLE VALIDATION

SAR Data Report 05062102

Start : 21-Jun-05 9:40:08 am
End : 21-Jun-05 9:45:02 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 : 0.160 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/cm^2)
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= 22.7 'C; Liq. Temp=21.8 'C

Power Drop Test:

Reading @ start = 2.408
Reading @ End = 2.438
Power at End = 101.2%

Area Scan - Max Peak SAR Value at x=-1.0 y=-3.0 = 1.54 W/kg

Zoom Scan - Max Peak SAR Value at x=4.0 y=-4.0 z=0.0 = 2.81 W/kg

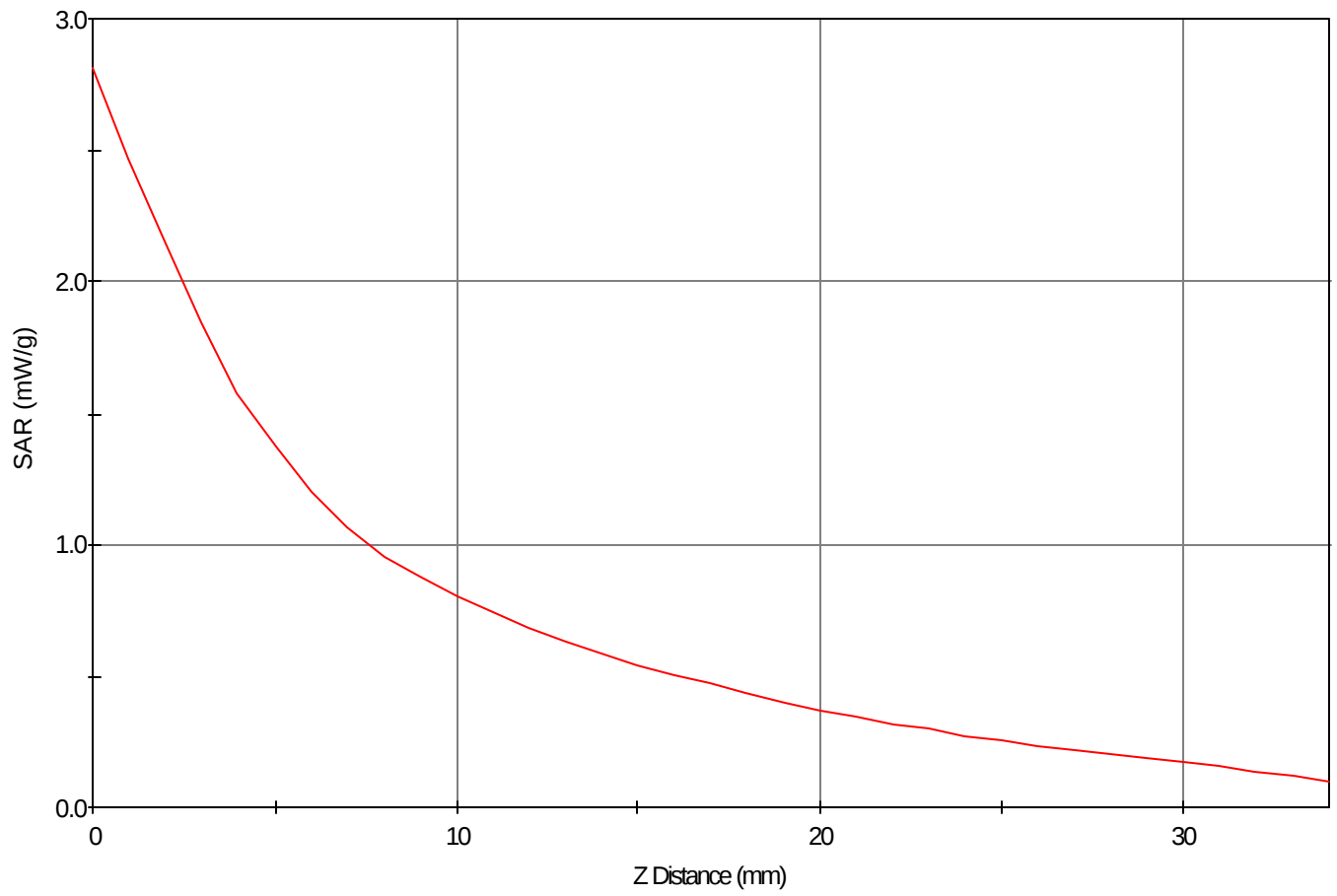
Max 1g SAR at x=2.0 y=-4.0 z=0.0 = 1.58 W/kg

Max 10g SAR at x=0.0 y=-3.0 z=0.0 = 0.92 W/kg

Validation Results at 0.16 W:

Peak Nominal = 2.3, Error: 24.44 %
1g Nominal = 1.5, Error: 3.76 %
10g Nominal = 1.0, Error: -7.60 %

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



1g SAR Values

