

Test Date: 15 June 2006

File Name: [Body Worn Back 1900 MHz GPRS Class 10 \(DAE442 Probe1380\) 15-06-06.da4](#)

DUT: Duncan Technologies GPRS Handheld Transmitter; Type: AutoCite X3CIW; Serial: 75503

* Communication System: 1900 MHz GPRS Class 10; Frequency: 1850.2 MHz; Duty Cycle: 1:4.15

* Medium parameters used: $\sigma = 1.52259$ mho/m, $\epsilon_r = 50.9552$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.33, 4.33, 4.33)

- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 512 Test/Area Scan (81x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.268 mW/g

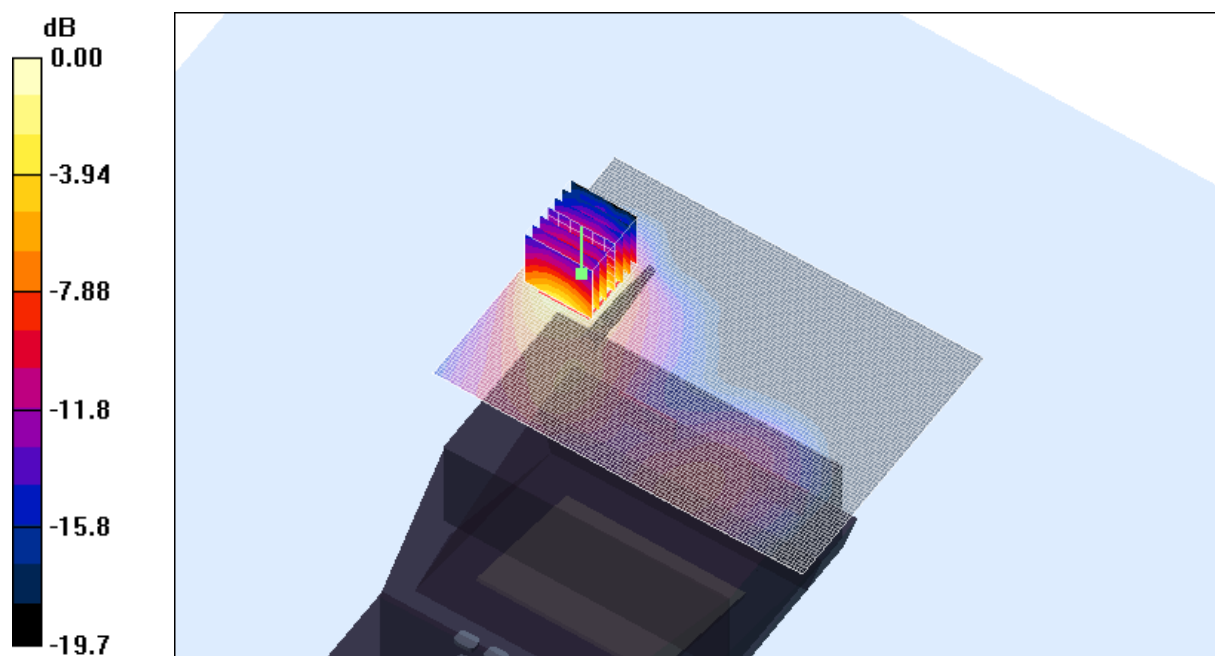
Channel 512 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.13 V/m; Power Drift = -0.176 dB

Peak SAR (extrapolated) = 0.384 W/kg

SAR(1 g) = 0.216 mW/g; SAR(10 g) = 0.112 mW/g

Maximum value of SAR (measured) = 0.246 mW/g



Ambient Temperature
Liquid Temperature
Humidity

20.0 Degrees Celsius
19.8 Degrees Celsius
37.0 %



Test Date: 15 June 2006

File Name: [Body Worn Back 1900 MHz GPRS Class 10 \(DAE442 Probe1380\) 15-06-06.da4](#)

DUT: Duncan Technologies GPRS Handheld Transmitter; Type: AutoCite X3CIW; Serial: 75503

* Communication System: 1900 MHz GPRS Class 10; Frequency: 1880 MHz; Duty Cycle: 1:4.15

* Medium parameters used: $\sigma = 1.54543$ mho/m, $\epsilon_r = 50.8278$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.33, 4.33, 4.33)

- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 661 Test/Area Scan (81x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.302 mW/g

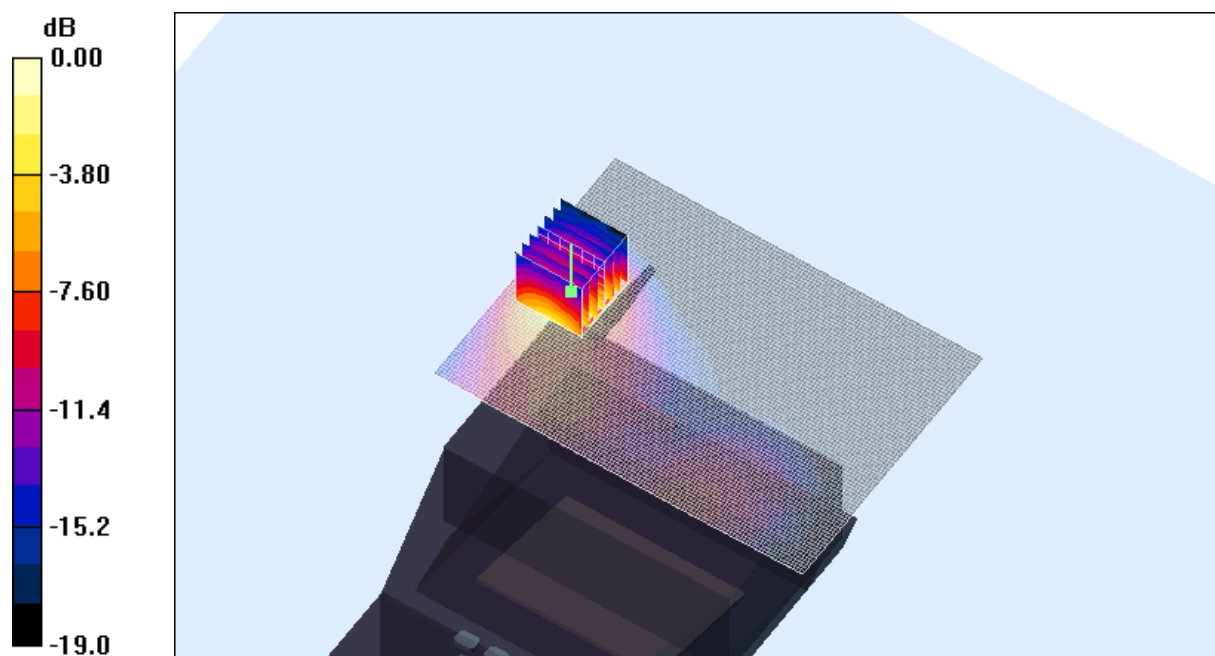
Channel 661 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.53 V/m; Power Drift = 0.057 dB

Peak SAR (extrapolated) = 0.468 W/kg

SAR(1 g) = 0.261 mW/g; SAR(10 g) = 0.135 mW/g

Maximum value of SAR (measured) = 0.301 mW/g



0 dB = 0.301mW/g

SAR MEASUREMENT PLOT 6

Ambient Temperature
Liquid Temperature
Humidity

20.0 Degrees Celsius
19.8 Degrees Celsius
37.0 %



Test Date: 15 June 2006

File Name: [Body Worn Back 1900 MHz GPRS Class 10 \(DAE442 Probe1380\) 15-06-06.da4](#)

DUT: Duncan Technologies GPRS Handheld Transmitter; Type: AutoCite X3CIW; Serial: 75503

* Communication System: 1900 MHz GPRS Class 10; Frequency: 1909.8 MHz; Duty Cycle: 1:4.15

* Medium parameters used: $\sigma = 1.56617$ mho/m, $\epsilon_r = 50.7109$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.33, 4.33, 4.33)

- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 810 Test/Area Scan (81x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.273 mW/g

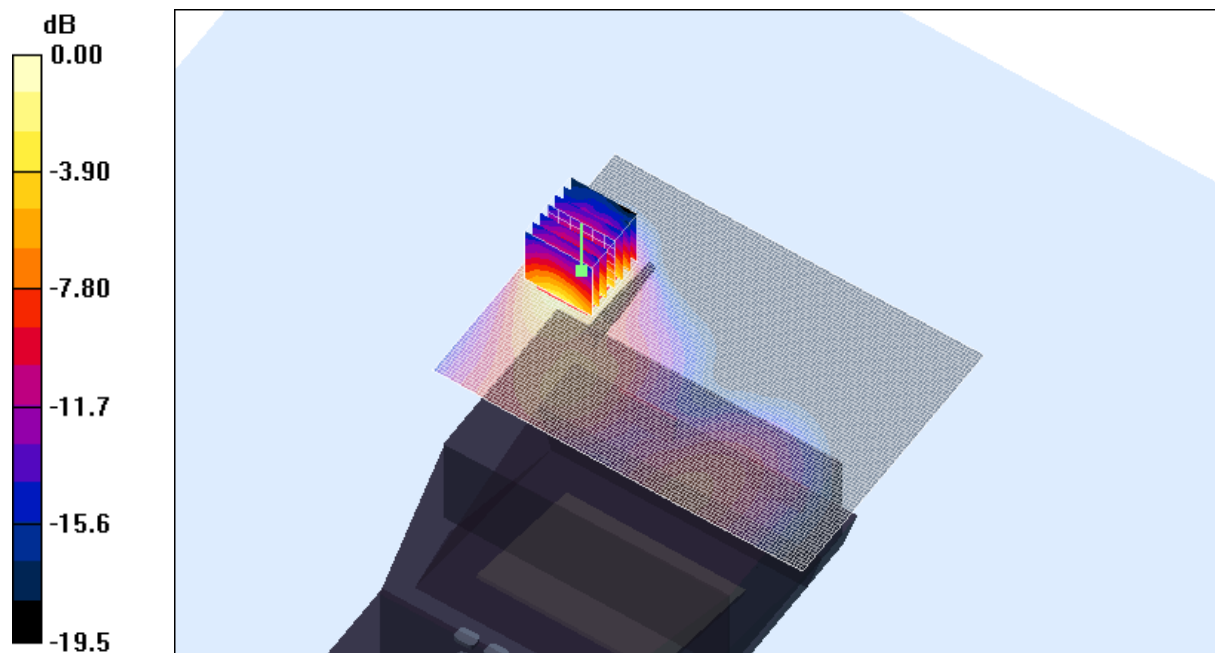
Channel 810 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.41 V/m; Power Drift = 0.208 dB

Peak SAR (extrapolated) = 0.433 W/kg

SAR(1 g) = 0.223 mW/g; SAR(10 g) = 0.114 mW/g

Maximum value of SAR (measured) = 0.253 mW/g



SAR MEASUREMENT PLOT 7

Ambient Temperature
Liquid Temperature
Humidity

20.0 Degrees Celsius
19.8 Degrees Celsius
37.0 %



Test Date: 15 June 2006

File Name: [Body Worn Edge On 1900 MHz GPRS Class 10 \(DAE442 Probe1380\) 15-06-06.da4](#)

DUT: Duncan Technologies GPRS Handheld Transmitter; Type: AutoCite X3CIW; Serial: 75503

* Communication System: 1900 MHz GPRS Class 10; Frequency: 1880 MHz; Duty Cycle: 1:4.15

* Medium parameters used: $\sigma = 1.54543$ mho/m, $\epsilon_r = 50.8278$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.33, 4.33, 4.33)

- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 661 Test/Area Scan (101x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.011 mW/g

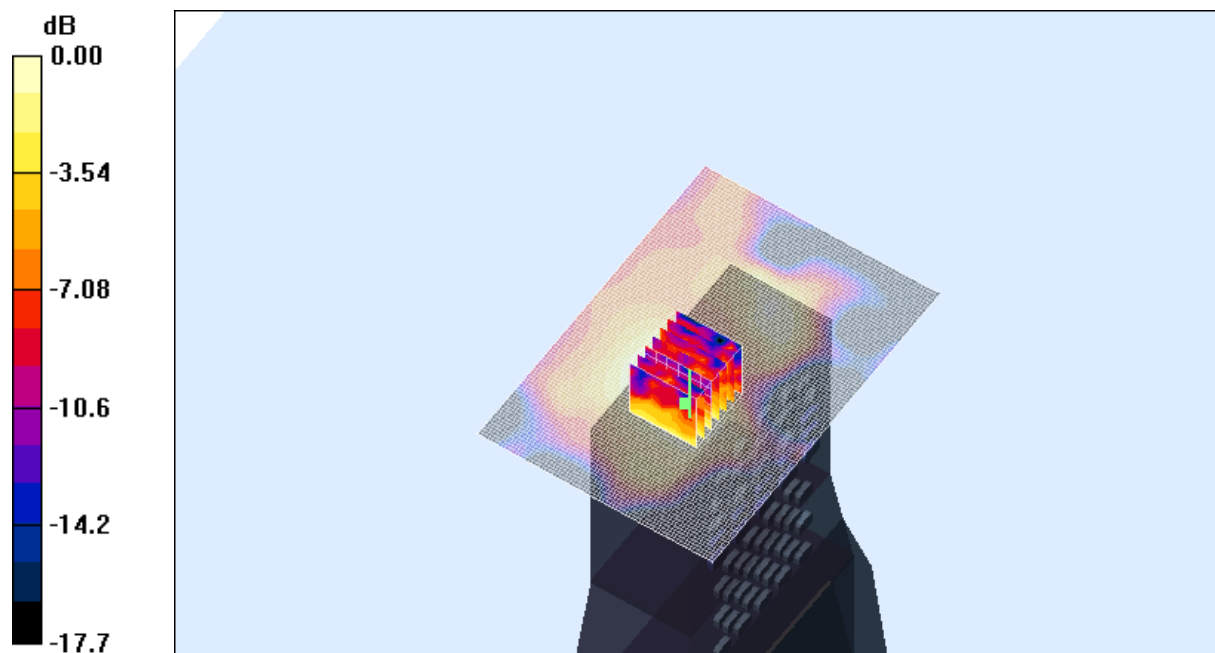
Channel 661 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.99 V/m; Power Drift = -0.218 dB

Peak SAR (extrapolated) = 0.015 W/kg

SAR(1 g) = 0.00974 mW/g; SAR(10 g) = 0.00585 mW/g

Maximum value of SAR (measured) = 0.011 mW/g



0 dB = 0.011mW/g

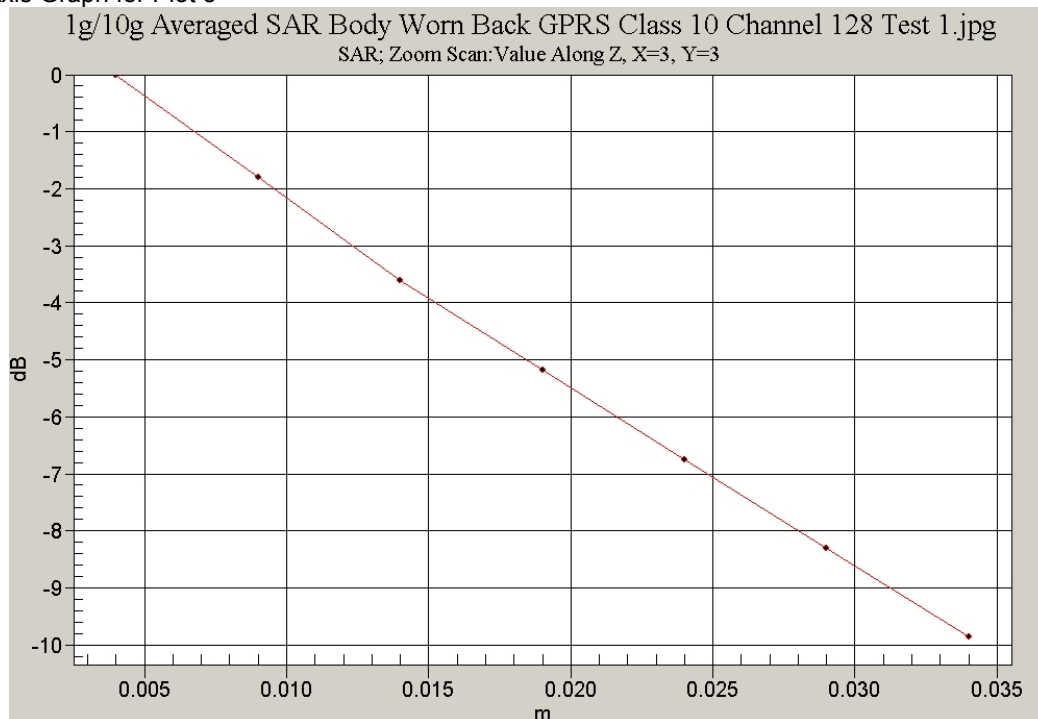
SAR MEASUREMENT PLOT 8

Ambient Temperature
Liquid Temperature
Humidity

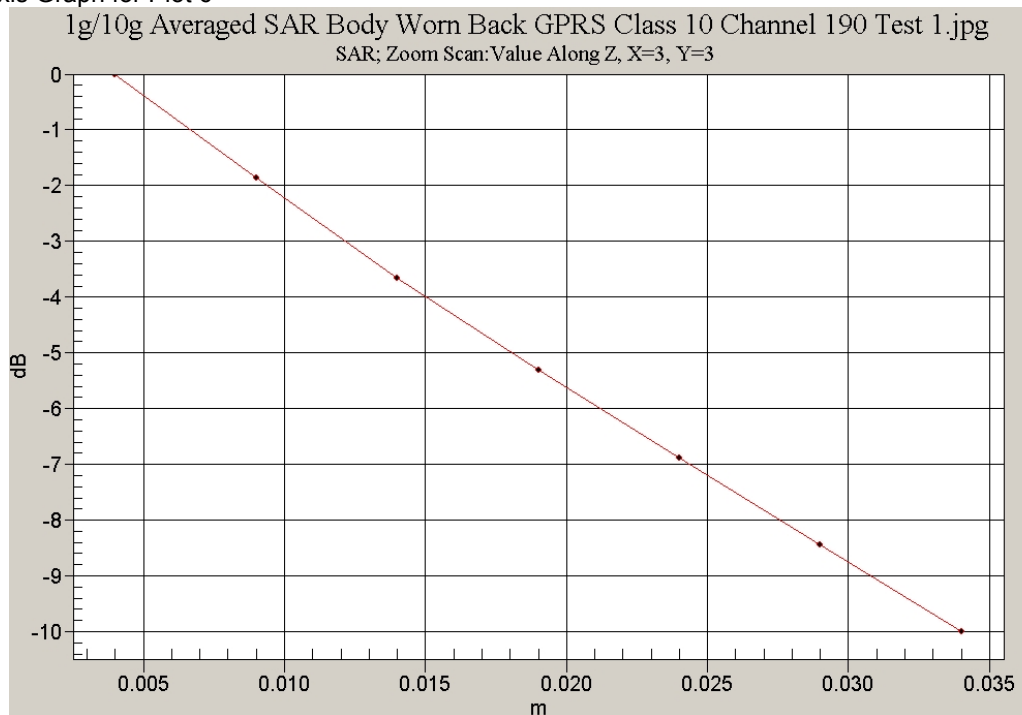
20.0 Degrees Celsius
19.8 Degrees Celsius
37.0 %



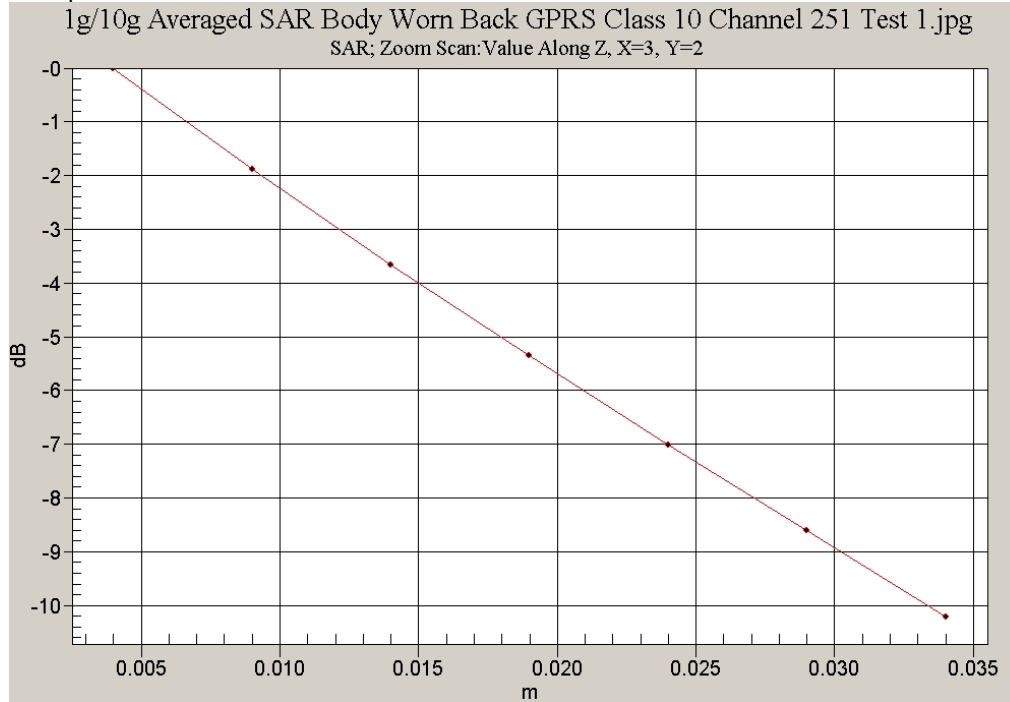
Z-Axis Graph for Plot 5



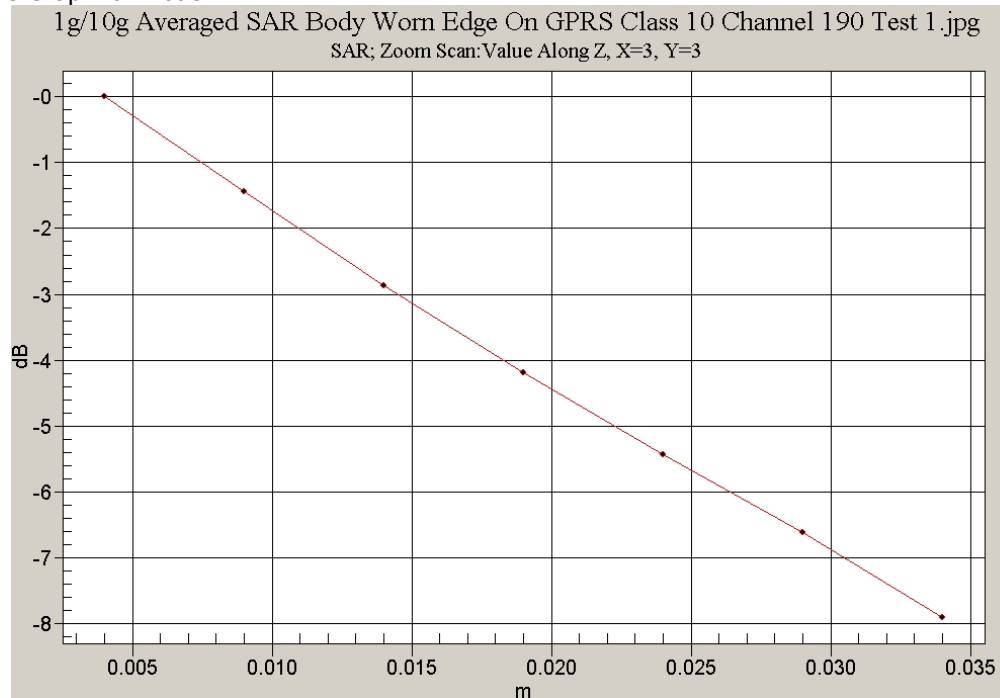
Z-Axis Graph for Plot 6



Z-Axis Graph for Plot 7



Z-Axis Graph for Plot 8



Test Date: 15 June 2006

File Name: [Validation 1800 MHz \(DAE442 Probe1380\) 15-06-06.da4](#)

DUT: Dipole 1800 MHz; Type: DV1800V2; Serial: 242

* Communication System: CW 1800 MHz; Frequency: 1800 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 1.41408$ mho/m, $\epsilon_r = 38.5239$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(5.02, 5.02, 5.02)

- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section

Channel 1 Test/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 12.4 mW/g

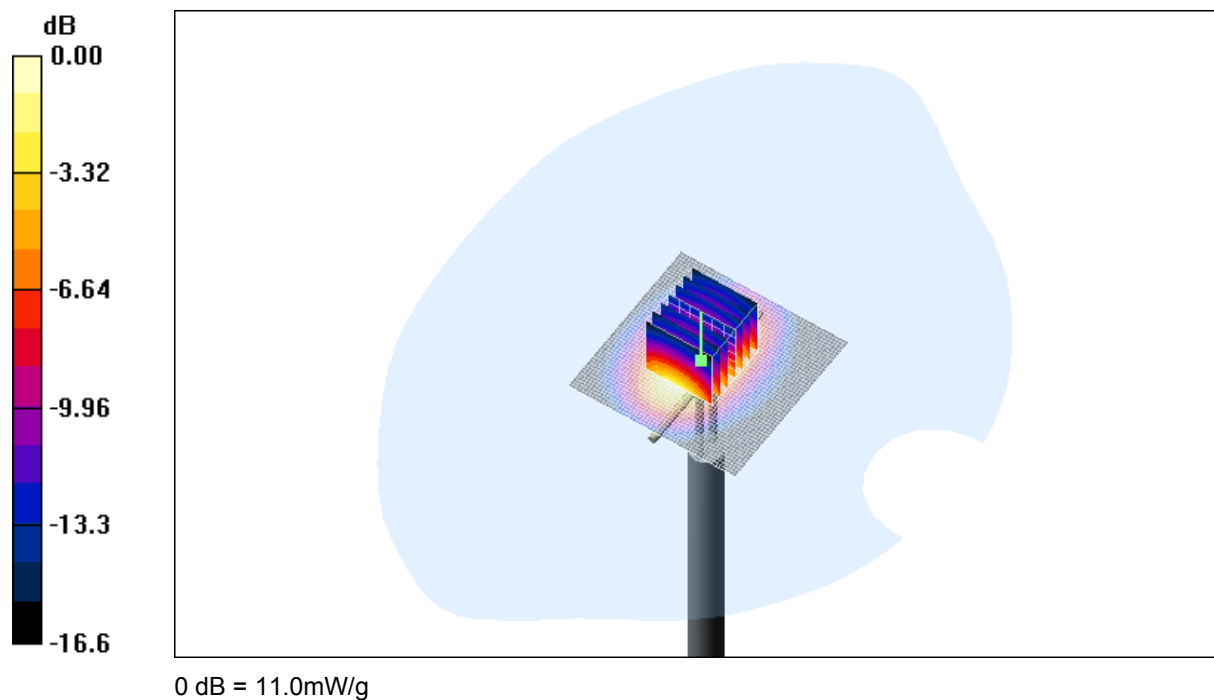
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 93.6 V/m; Power Drift = -0.019 dB

Peak SAR (extrapolated) = 17.2 W/kg

SAR(1 g) = 9.81 mW/g; SAR(10 g) = 5.23 mW/g

Maximum value of SAR (measured) = 11.0 mW/g



SAR MEASUREMENT PLOT 9

Ambient Temperature
Liquid Temperature
Humidity

20.0 Degrees Celsius
19.8 Degrees Celsius
37.0 %



Test Date: 16 June 2006

File Name: [Validation 900 MHz \(DAE442 Probe1380\) 16-06-06.da4](#)

DUT: Dipole 900 MHz; Type: DV900; Serial: 047

* Communication System: CW 900 MHz; Frequency: 900 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.989027$ mho/m, $\epsilon_r = 40.1705$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(6.07, 6.07, 6.07)

- Phantom: SAM 12; Serial: 1060; Phantom section: Flat Section

Channel 1 Test/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 3.12 mW/g

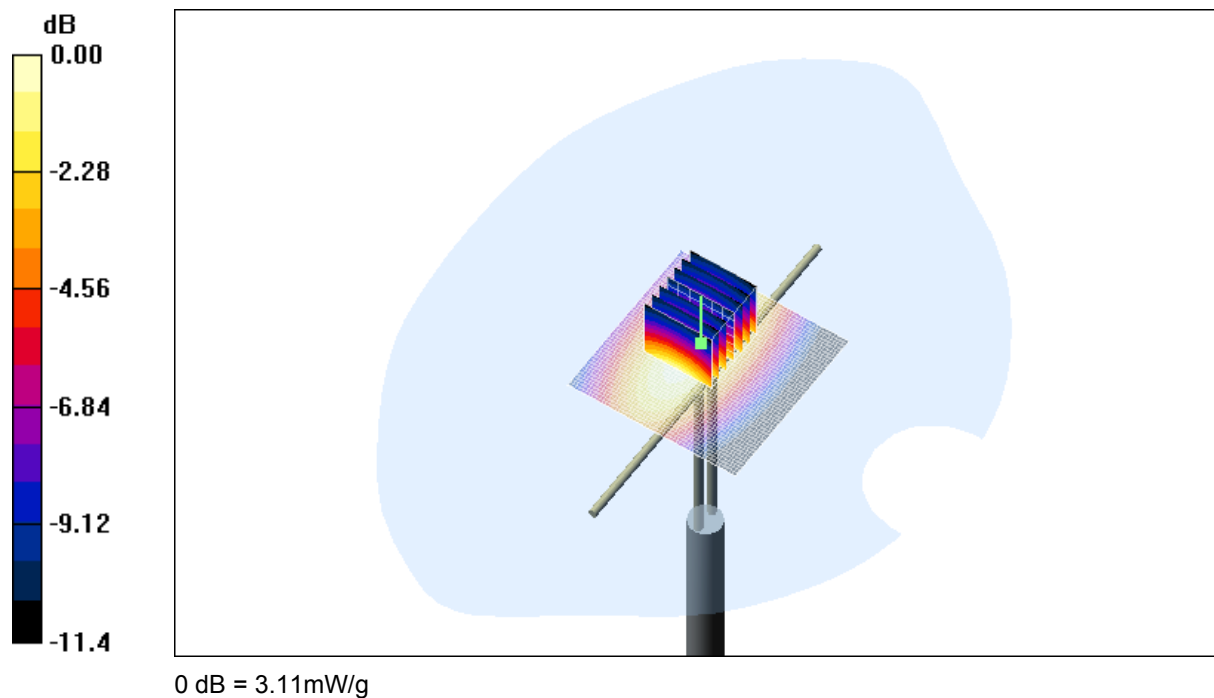
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.2 V/m; Power Drift = 0.064 dB

Peak SAR (extrapolated) = 4.47 W/kg

SAR(1 g) = 2.88 mW/g; SAR(10 g) = 1.83 mW/g

Maximum value of SAR (measured) = 3.11 mW/g



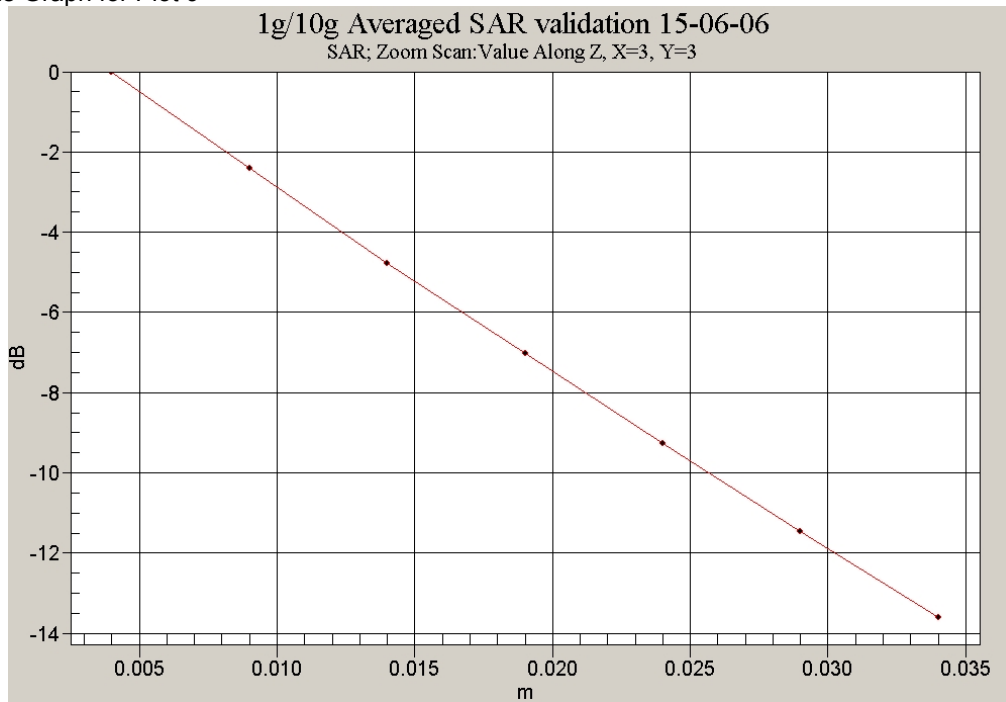
SAR MEASUREMENT PLOT 10

Ambient Temperature
Liquid Temperature
Humidity

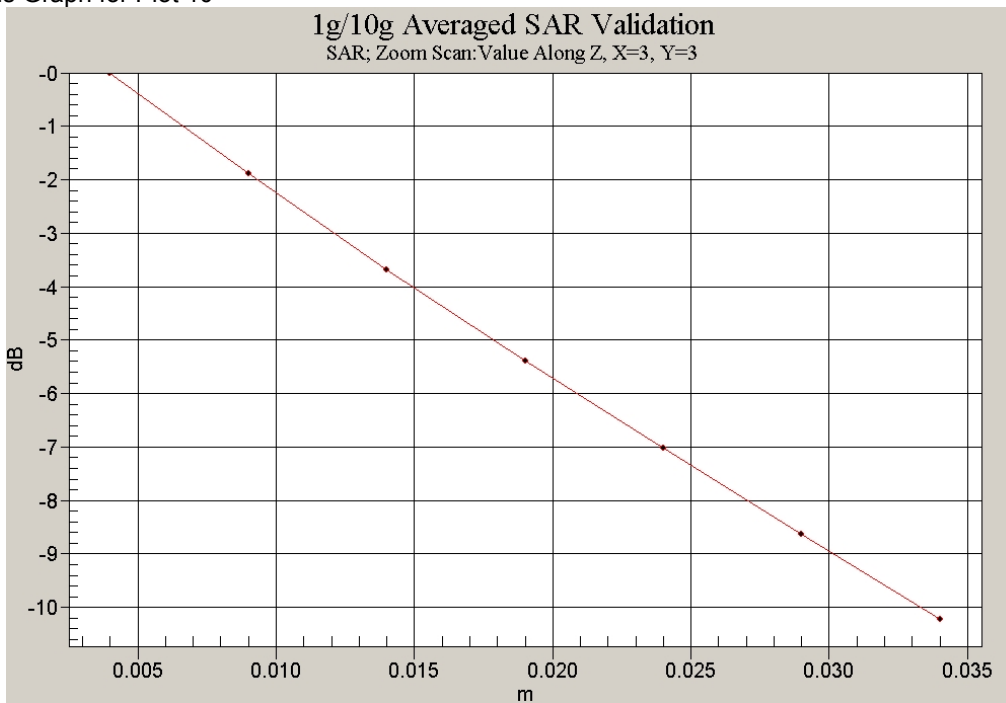
20.1 Degrees Celsius
19.9 Degrees Celsius
43.0 %



Z-Axis Graph for Plot 9



Z-Axis Graph for Plot 10



APPENDIX C

SAR TESTING EQUIPMENT CALIBRATION CERTIFICATE ATTACHMENTS

Calibration Certificate Attachments

1. 1380 E-Field Probe Calibration Sheet	9 Pages
2. 900MHz Dipole Calibration Sheet	6 Pages
3. 1800MHz Dipole Calibration Sheet	5 Pages

