

APPENDIX B Plots Of The SAR Measurements

Plots of the measured SAR distributions inside the phantom are given in this Appendix for all tested configurations. The spatial peak SAR values were assessed with the procedure described in this report.

Table: 850 MHz SAR Plots

Test Position	Plot Number	Test Channel
Body Worn Back Position	1	128
	2	190
	3	251
Z-Axis Graphs	Z-Axis for Plots 1- 2	
Z-Axis Graphs	Z-Axis for Plots 3- 4	
Edge-On Position	4	190

Table: 1900 MHz SAR Plots

Test Position	Plot Number	Test Channel
Body Worn Back Position	5	512
	6	661
	7	810
Z-Axis Graphs	Z-Axis for Plots 5- 6	
Z-Axis Graphs	Z-Axis for Plots 7- 8	
Edge-On Position	8	661

Table: SAR Validation Plots

Date	Plot Number	Frequency
15 th June 2006	9	1800 MHz
16 th June 2006	10	900 MHz



Test Date: 16 June 2006

File Name: [Body Worn Back 850 MHz GPRS Class 10 \(DAE442 Probe1380\) 16-06-06.da4](#)

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

* Communication System: 850 MHz GPRS Class 10; Frequency: 824 MHz; Duty Cycle: 1:4.15

* Medium parameters used: $\sigma = 0.986078$ mho/m, $\epsilon_r = 52.824$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(5.99, 5.99, 5.99)

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

Channel 128 Test/Area Scan (81x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.12 mW/g

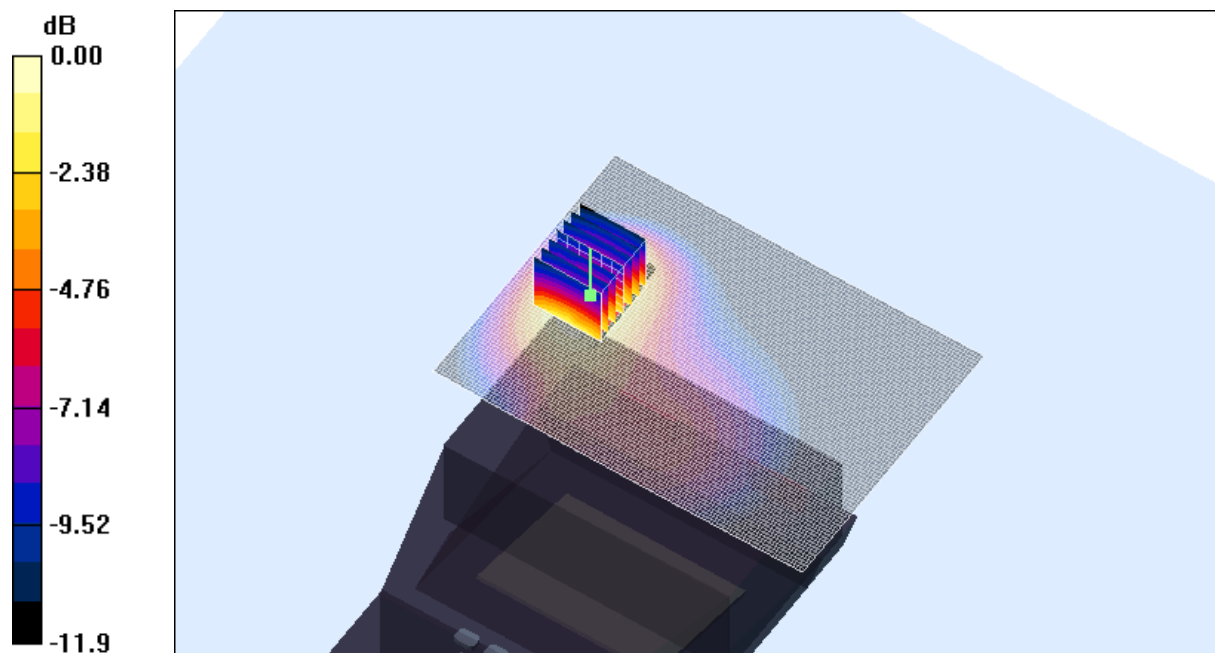
Channel 128 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 32.7 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 1.58 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.660 mW/g

Maximum value of SAR (measured) = 1.14 mW/g



Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.9 Degrees Celsius
43.0 %



Test Date: 16 June 2006

File Name: [Body Worn Back 850 MHz GPRS Class 10 \(DAE442 Probe1380\) 16-06-06.da4](#)

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

* Communication System: 850 MHz GPRS Class 10; Frequency: 836 MHz; Duty Cycle: 1:4.15

* Medium parameters used: $\sigma = 0.998318$ mho/m, $\epsilon_r = 52.74$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(5.99, 5.99, 5.99)

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

Channel 190 Test/Area Scan (81x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.18 mW/g

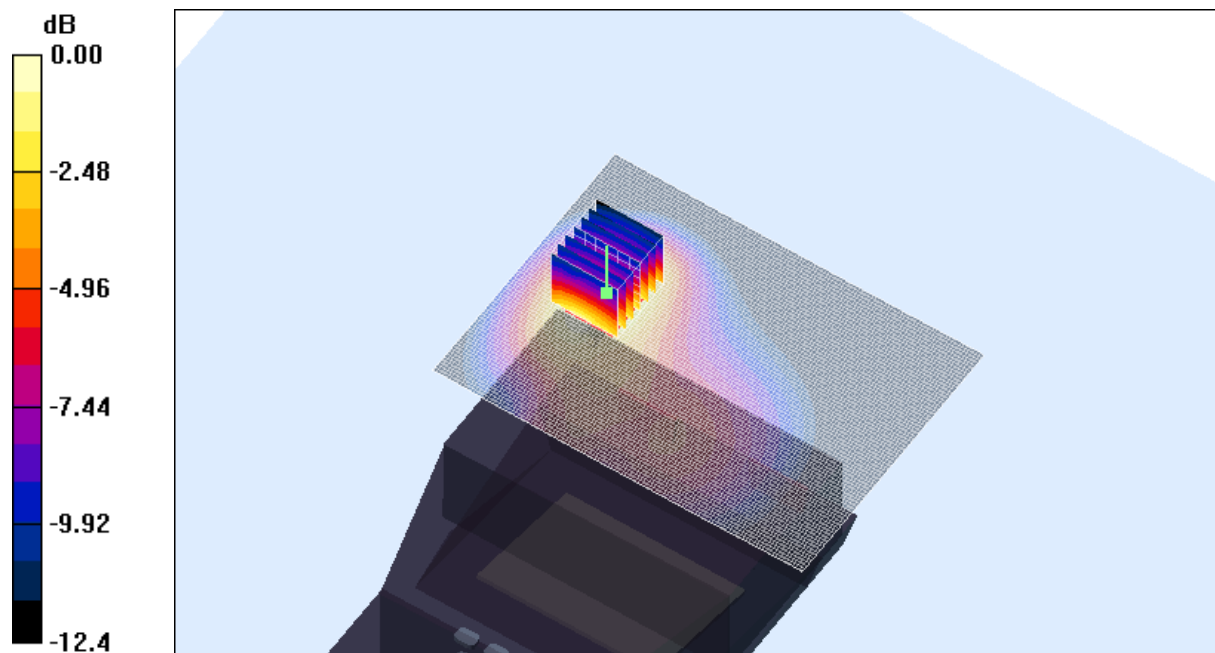
Channel 190 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.0 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.684 mW/g

Maximum value of SAR (measured) = 1.19 mW/g



0 dB = 1.19mW/g

SAR MEASUREMENT PLOT 2

Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.9 Degrees Celsius
43.0 %



Test Date: 16 June 2006

File Name: [Body Worn Back 850 MHz GPRS Class 10 \(DAE442 Probe1380\) 16-06-06.da4](#)

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

* Communication System: 850 MHz GPRS Class 10; Frequency: 849 MHz; Duty Cycle: 1:4.15

* Medium parameters used: $\sigma = 1.00985$ mho/m, $\epsilon_r = 52.5909$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(5.99, 5.99, 5.99)

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

Channel 251 Test/Area Scan (81x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.09 mW/g

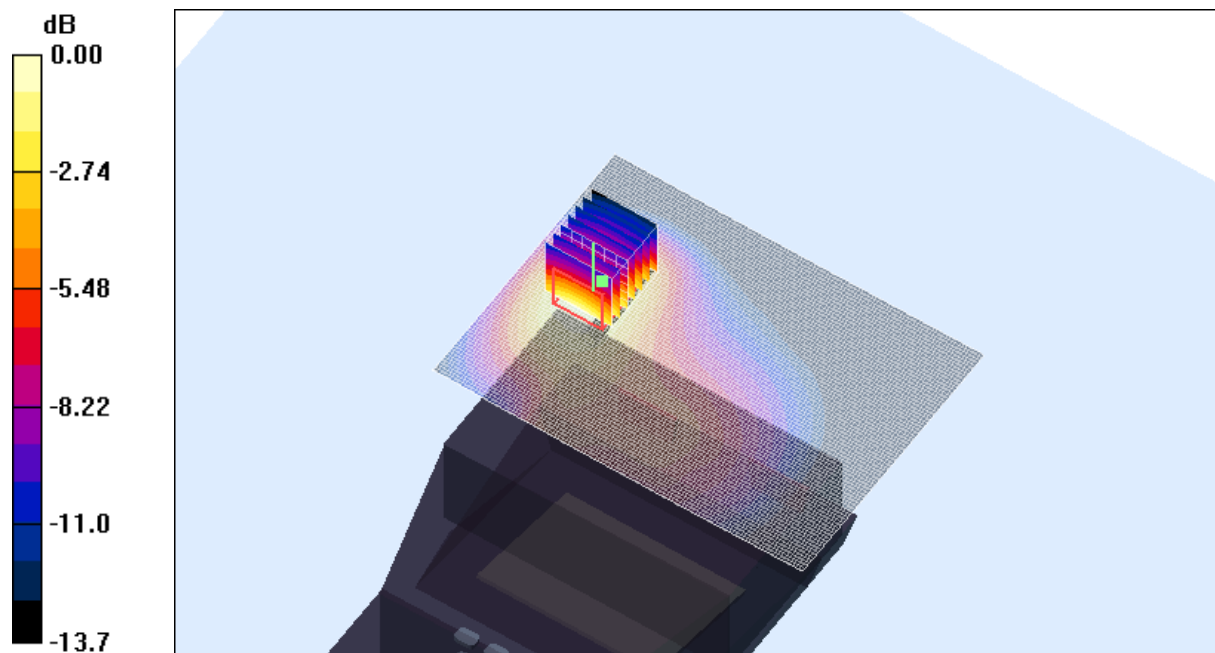
Channel 251 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 32.6 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 1.66 W/kg

SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.662 mW/g

Maximum value of SAR (measured) = 1.17 mW/g



0 dB = 1.17mW/g

SAR MEASUREMENT PLOT 3

Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.9 Degrees Celsius
43.0 %



Test Date: 16 June 2006

File Name: [Body Worn Edge On 850 MHz GPRS Class 10 \(DAE442 Probe1380\) 16-06-06.da4](#)

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

* Communication System: 850 MHz GPRS Class 10; Frequency: 836 MHz; Duty Cycle: 1:4.15

* Medium parameters used: $\sigma = 0.998318$ mho/m, $\epsilon_r = 52.74$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(5.99, 5.99, 5.99)

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

Channel 190 Test/Area Scan (101x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.180 mW/g

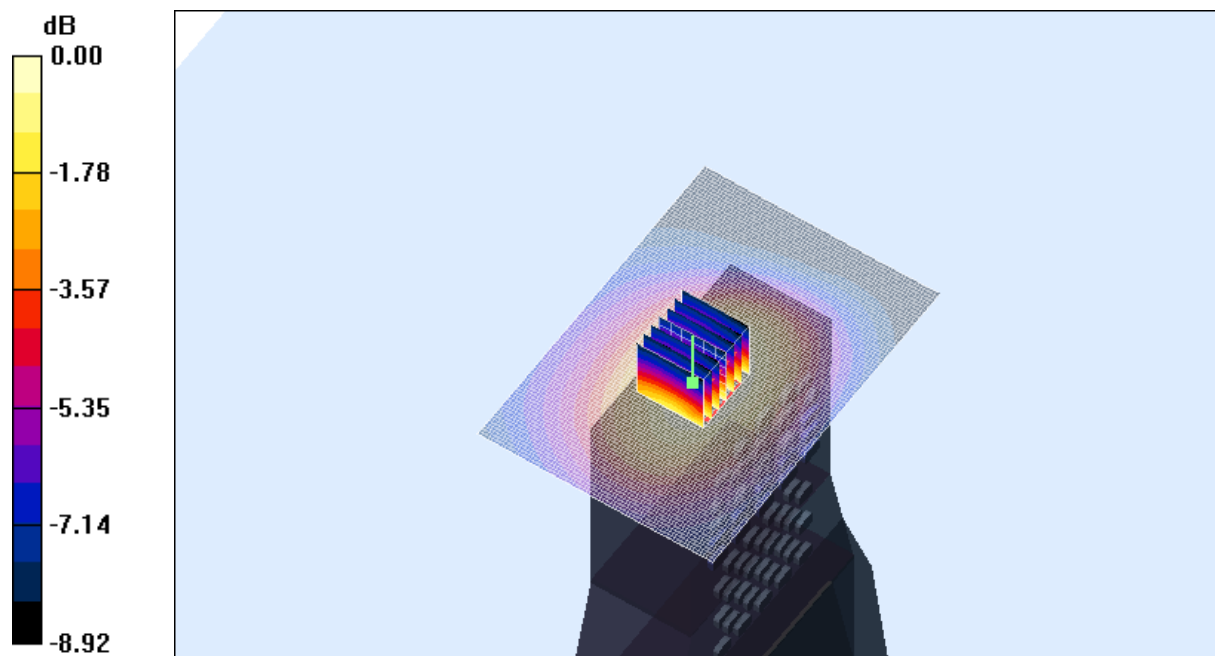
Channel 190 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.3 V/m; Power Drift = -0.064 dB

Peak SAR (extrapolated) = 0.238 W/kg

SAR(1 g) = 0.167 mW/g; SAR(10 g) = 0.117 mW/g

Maximum value of SAR (measured) = 0.177 mW/g



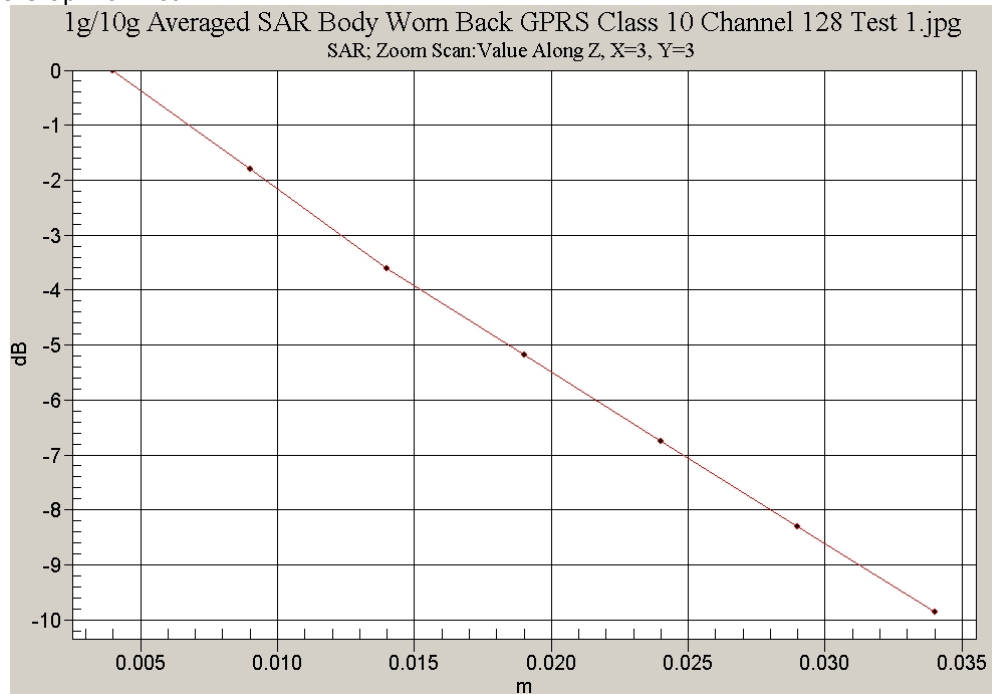
SAR MEASUREMENT PLOT 4

Ambient Temperature
Liquid Temperature
Humidity

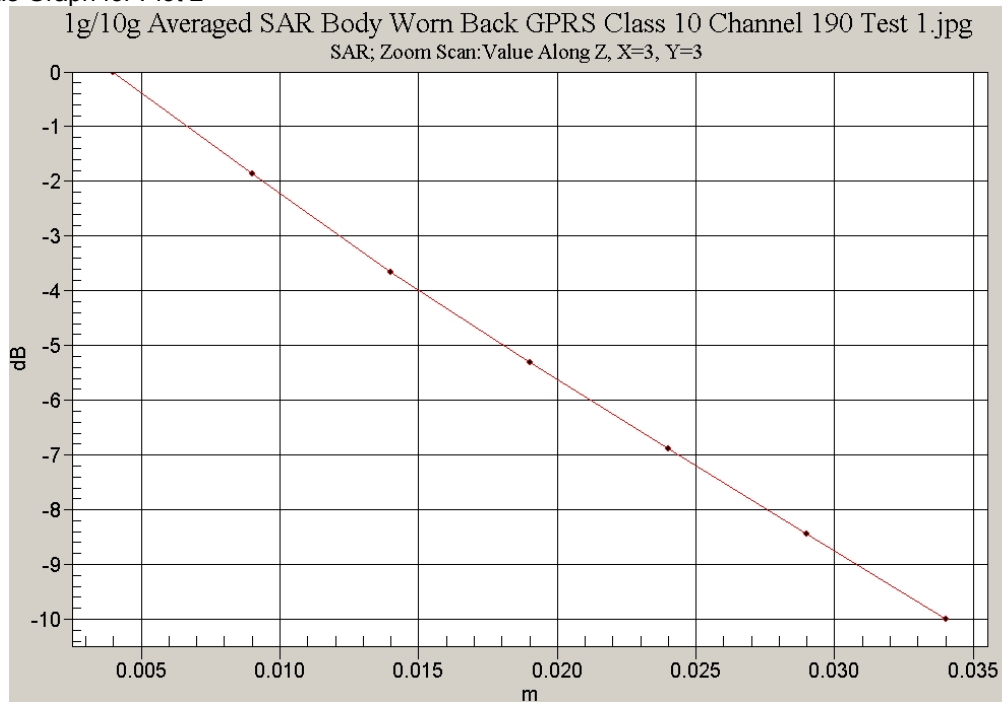
20.1 Degrees Celsius
19.9 Degrees Celsius
43.0 %



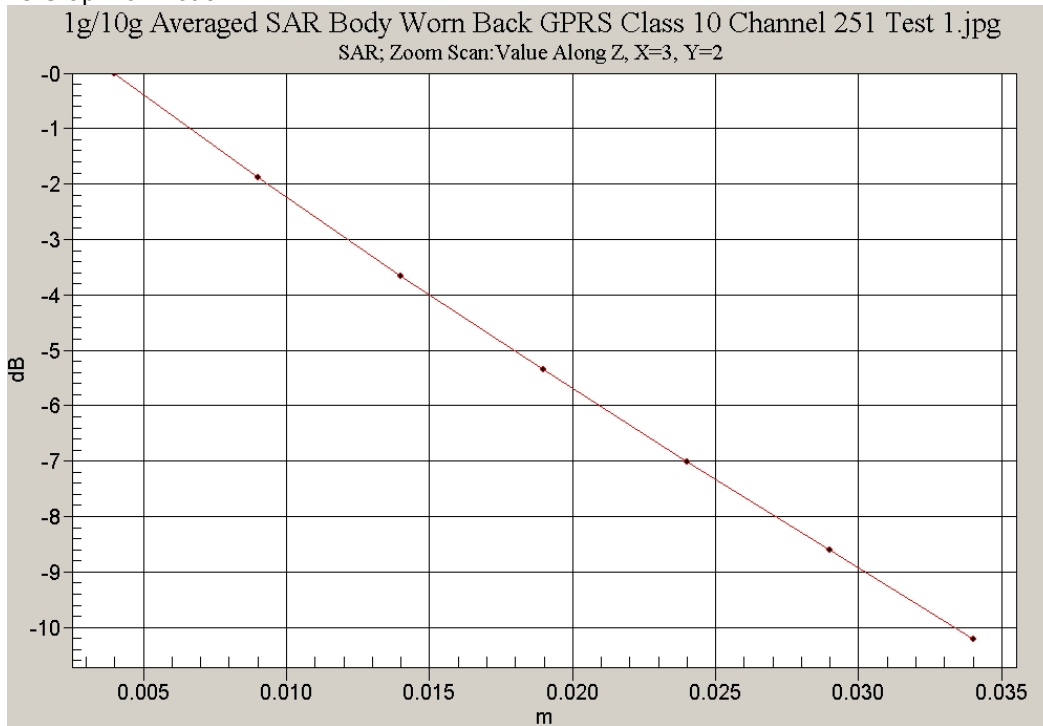
Z-Axis Graph for Plot 1



Z-Axis Graph for Plot 2



Z-Axis Graph for Plot 3



Z-Axis Graph for Plot 4

