

## 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 17: 850 MHz SAR Plots**

Test Position	Plot Number	Test Channel
Hand Held Back Side Position	1	128
	2	190
	3	251
Hand Held Front Side Position	4	190
Belt-Clip – with holster	5	190
<b>Z-Axis Scans for plots 1 to 5</b>		

**Table 18: 1900 MHz SAR Plots**

Test Position	Plot Number	Test Channel
Hand Held Back Side Position	6	512
	7	661
	8	810
Hand Held Front Side Position	9	661
Belt-Clip – with holster	10	661
<b>Z-Axis Scans for plots 6 to 10</b>		

**Table 19: SAR Validation Plots**

Plot Number	Date	Frequency
Plot 11	Validation 20-April-2004	850MHz
Plot 12	Validation 21-April-2004	1900MHz

**Z-Axis Scans for plots 6 to 10**

Test Date: 20 April 2005

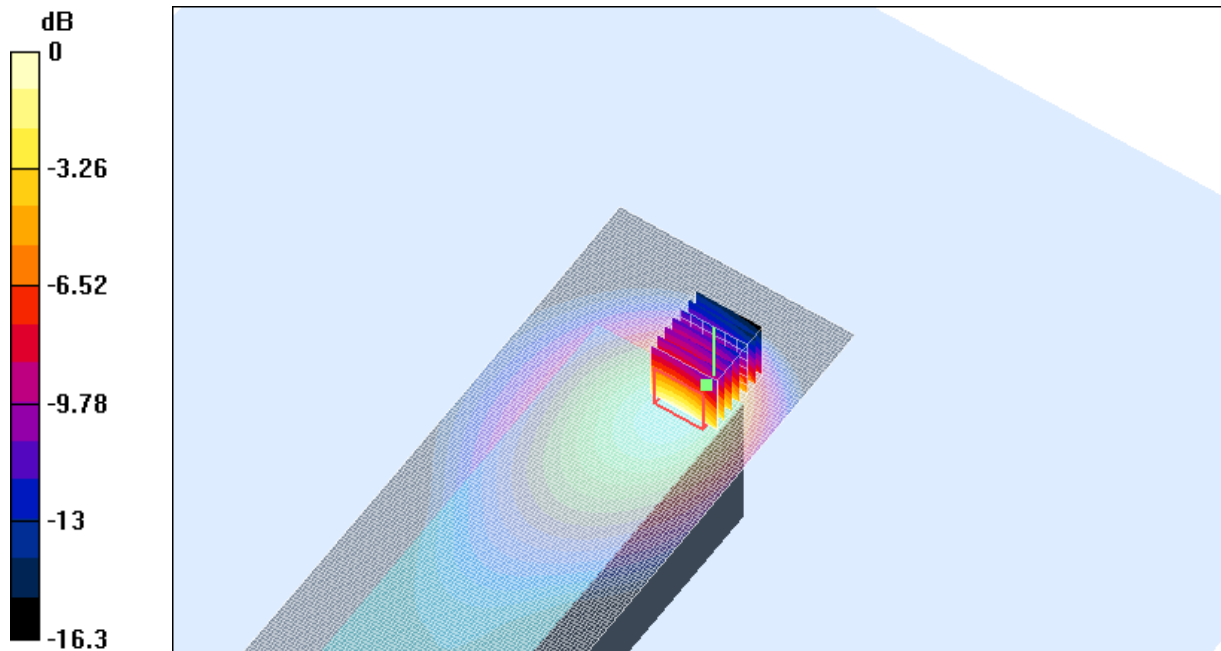
File Name: [Hand Held Back Side \(No Holster\) 850 MHz GSM \(DAE442 Probe1377\) 20-04-05.da4](#)

DUT: GSM Portable EFTPOS Terminal; Type: KT-78 -205; Serial: A0000002

- \* Communication System: GSM-PCS (850 MHz, 1900MHz) FCC; Frequency: 824 MHz; Duty Cycle: 1:8.3
- \* Medium parameters used:  $\sigma = 0.97068$ ; mho/m,  $\epsilon_r = 53.3332$ ;  $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(5.9, 5.9, 5.9)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 128 Test 2/Area Scan (181x71x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.566 mW/g

**Channel 128 Test 2/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 17.5 V/m; Power Drift = -0.0 dB  
 Peak SAR (extrapolated) = 1.4 W/kg  
**SAR(1 g) = 0.471 mW/g; SAR(10 g) = 0.277 mW/g**  
 Maximum value of SAR (measured) = 0.510 mW/g



**SAR MEASUREMENT PLOT 1**

Ambient Temperature  
 Liquid Temperature  
 Humidity

21.5 Degrees Celsius  
 20.8 Degrees Celsius  
 46.0 %

Test Date: 20 April 2005

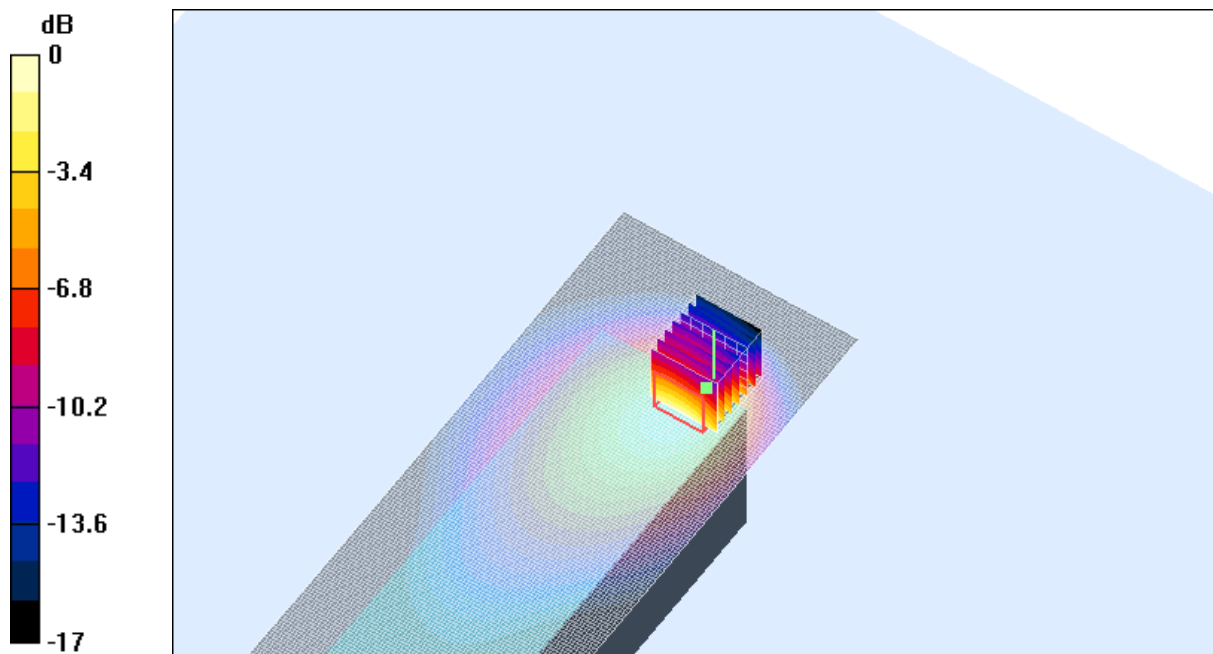
File Name: [Hand Held Back Side \(No Holster\) 850 MHz GSM \(DAE442 Probe1377\) 20-04-05.da4](#)

DUT: GSM Portable EFTPOS Terminal; Type: KT-78 -205; Serial: A0000002

- \* Communication System: GSM-PCS (850 MHz, 1900MHz) FCC; Frequency: 836 MHz; Duty Cycle: 1:8.3
- \* Medium parameters used:  $f = 836 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 53.2$ ;  $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(5.9, 5.9, 5.9)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 190 Test/Area Scan (181x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.526 mW/g

**Channel 190 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 17.4 V/m; Power Drift = -0.1 dB  
Peak SAR (extrapolated) = 1.38 W/kg  
**SAR(1 g) = 0.453 mW/g; SAR(10 g) = 0.256 mW/g**  
Maximum value of SAR (measured) = 0.488 mW/g



0 dB = 0.488mW/g

**SAR MEASUREMENT PLOT 2**

Ambient Temperature  
Liquid Temperature  
Humidity

21.5 Degrees Celsius  
20.8 Degrees Celsius  
46.0 %

Test Date: 20 April 2005

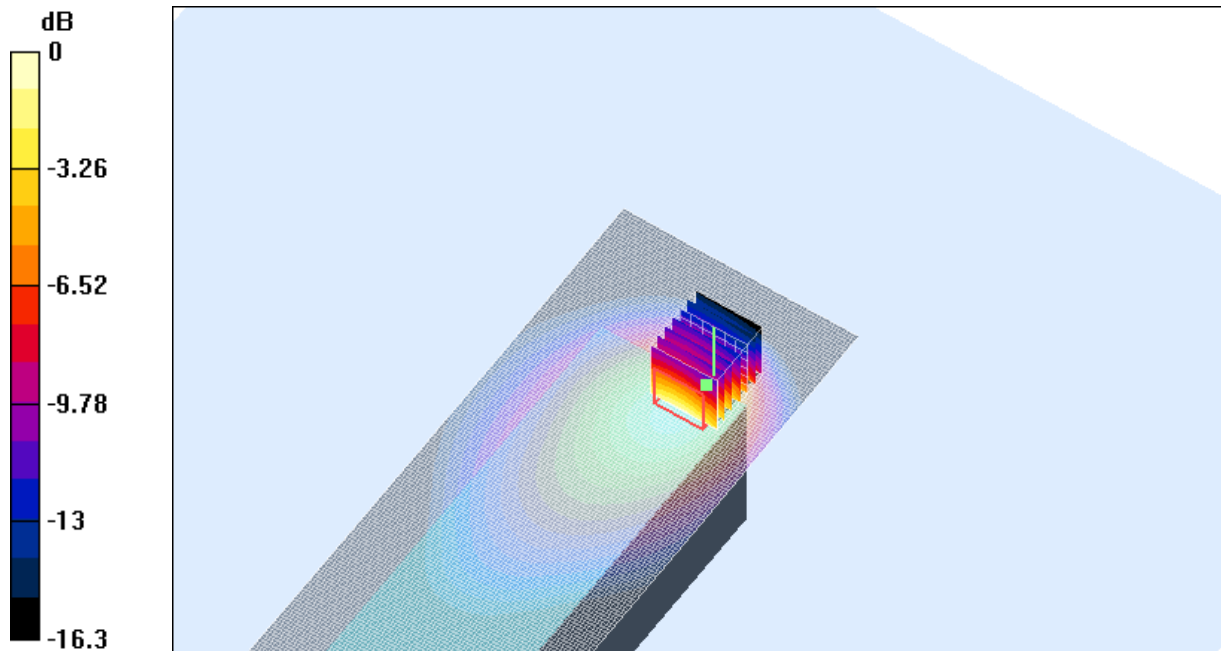
File Name: [Hand Held Back Side \(No Holster\) 850 MHz GSM \(DAE442 Probe1377\) 20-04-05.da4](#)

DUT: GSM Portable EFTPOS Terminal; Type: KT-78 -205; Serial: A0000002

- \* Communication System: GSM-PCS (850 MHz, 1900MHz) FCC; Frequency: 849 MHz; Duty Cycle: 1:8.3
- \* Medium parameters used (interpolated):  $f = 849$  MHz;  $\sigma = 0.996$  mho/m;  $\epsilon_r = 53$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(5.9, 5.9, 5.9)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 251 Test/Area Scan (181x71x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.482 mW/g

**Channel 251 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 16.1 V/m; Power Drift = 0.0 dB  
 Peak SAR (extrapolated) = 1.26 W/kg  
**SAR(1 g) = 0.416 mW/g; SAR(10 g) = 0.232 mW/g**  
 Maximum value of SAR (measured) = 0.451 mW/g



0 dB = 0.451mW/g

**SAR MEASUREMENT PLOT 3**

Ambient Temperature  
 Liquid Temperature  
 Humidity

21.5 Degrees Celsius  
 20.8 Degrees Celsius  
 46.0 %

Test Date: 20 April 2005

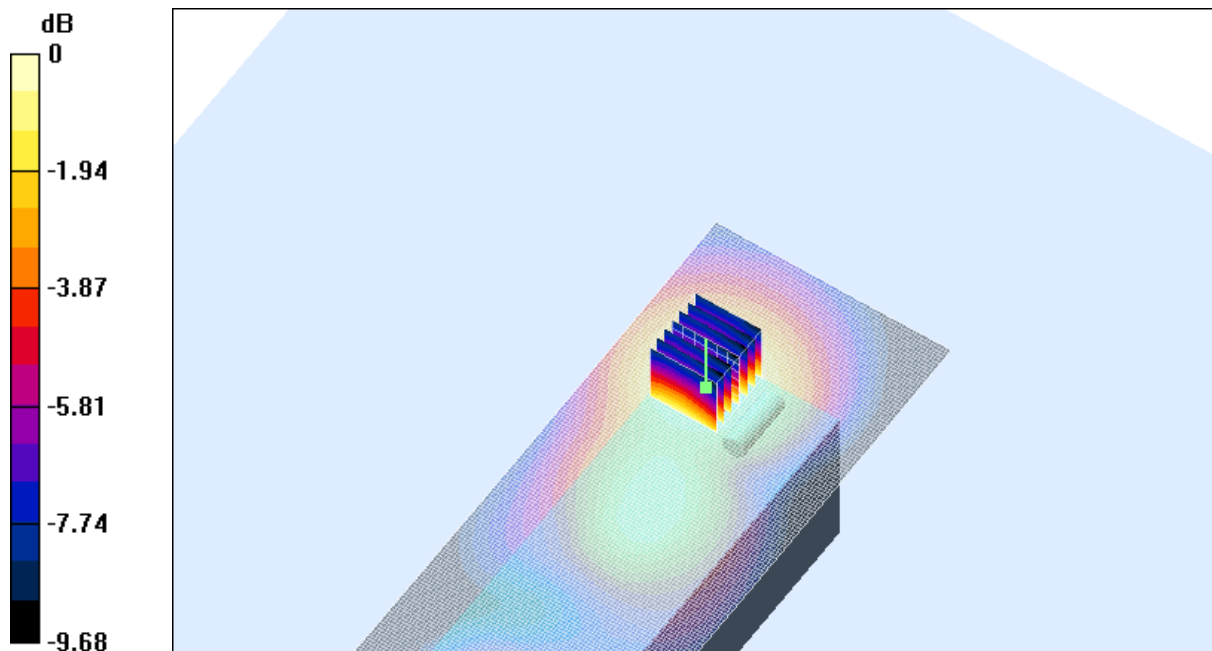
File Name: [Hand Held Front Side \(No Holster\) 850 MHz GSM \(DAE442 Probe1377\) 20-04-05.da4](#)

DUT: GSM Portable EFTPOS Terminal; Type: K-78 -205; Serial: A00000002

- \* Communication System: GSM-PCS (850 MHz, 1900MHz) FCC; Frequency: 836 MHz; Duty Cycle: 1:8.3
- \* Medium parameters used: f = 836 MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(5.9, 5.9, 5.9)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 190 Test/Area Scan (181x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.065 mW/g

**Channel 190 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 14.3 V/m; Power Drift = -0.1 dB  
Peak SAR (extrapolated) = 0.095 W/kg  
**SAR(1 g) = 0.062 mW/g; SAR(10 g) = 0.043 mW/g**  
Maximum value of SAR (measured) = 0.065 mW/g



0 dB = 0.065mW/g

**SAR MEASUREMENT PLOT 4**

Ambient Temperature  
Liquid Temperature  
Humidity

21.5 Degrees Celsius  
20.8 Degrees Celsius  
46.0 %

Test Date: 20 April 2005

File Name: [Belt Clip 850 MHz GSM \(DAE442 Probe1377\) 20-04-05.da4](#)

DUT: GSM Portable EFTPOS Terminal; Type: KT-78 -205; Serial: A00000002

\* Communication System: GSM-PCS (850 MHz, 1900MHz) FCC; Frequency: 836 MHz; Duty Cycle: 1:8.3

\* Medium parameters used:  $f = 836 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 53.2$ ;  $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(5.9, 5.9, 5.9)

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

**Channel 190 Test/Area Scan (181x71x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.201 mW/g

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

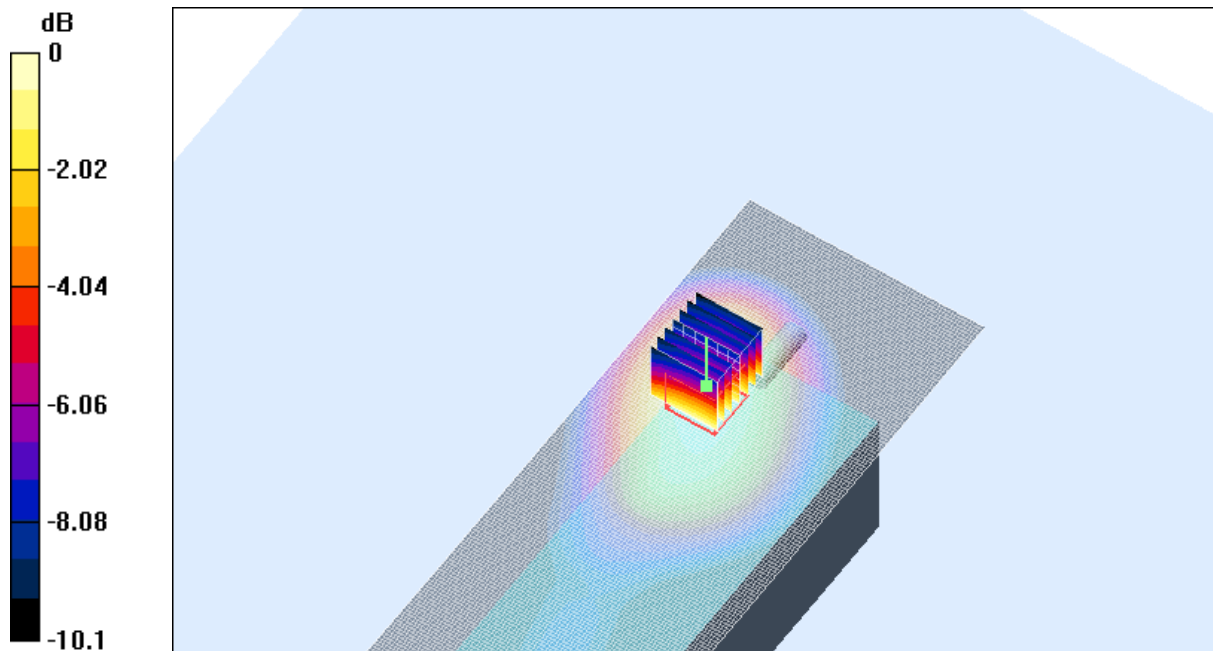
dz=5mm

Reference Value = 18.7 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 0.291 W/kg

**SAR(1 g) = 0.187 mW/g; SAR(10 g) = 0.129 mW/g**

Maximum value of SAR (measured) = 0.198 mW/g

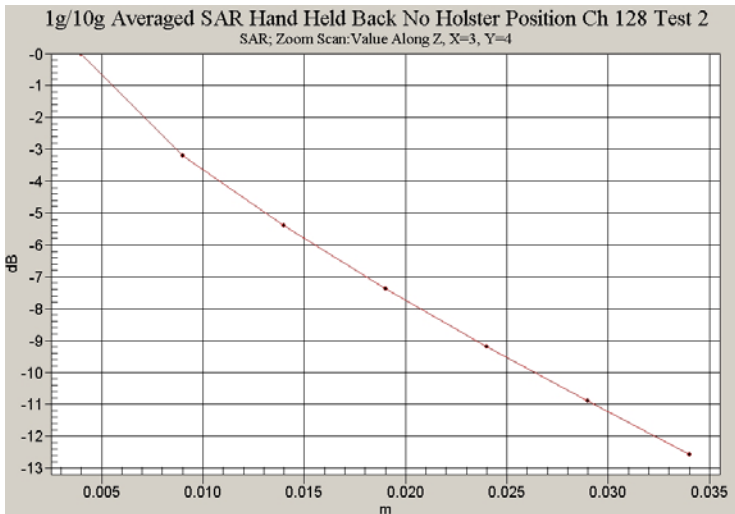


**SAR MEASUREMENT PLOT 5**

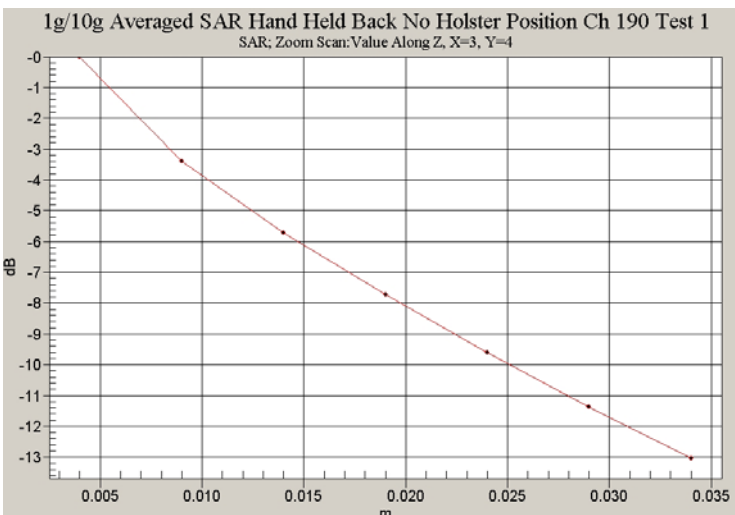
Ambient Temperature  
Liquid Temperature  
Humidity

21.5 Degrees Celsius  
20.8 Degrees Celsius  
46.0 %

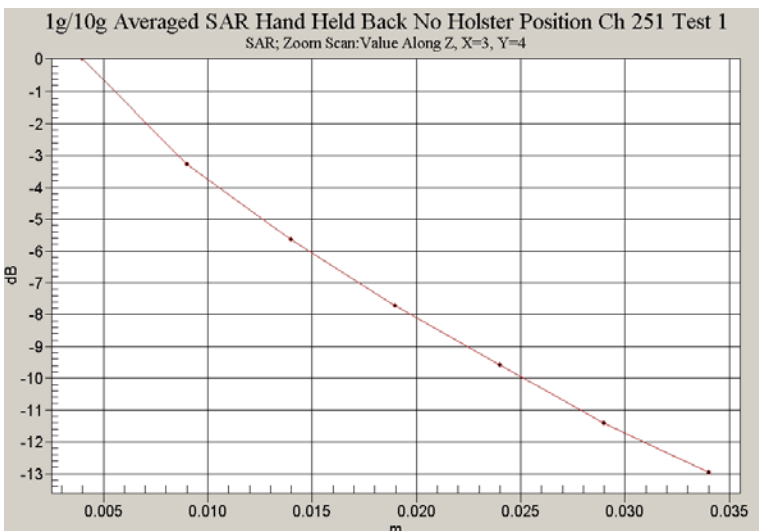
Z-Axis scan for Plot 1



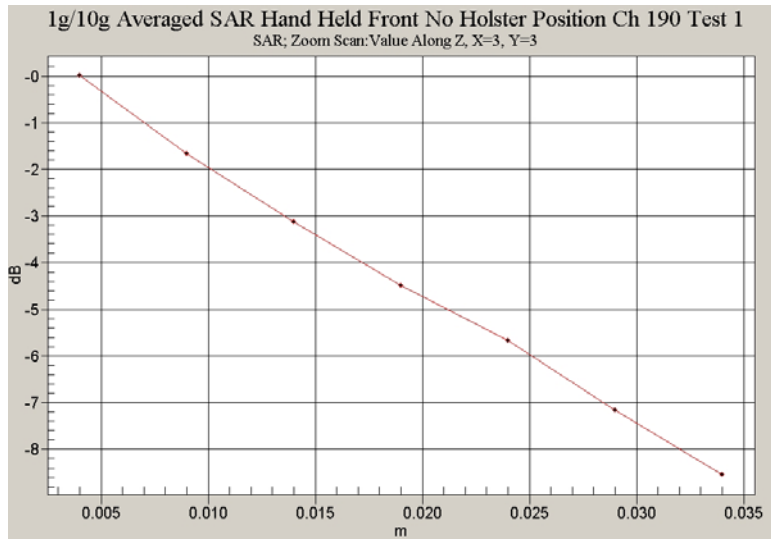
Z-Axis scan for Plot 2



Z-Axis scan for Plot 3



Z-Axis scan for Plot 4



Z-Axis scan for Plot 5

