

Test Date: 21 April 2005

File Name: [Hand Held Back Side \(No Holster\) 1900 MHz GSM \(DAE442 Probe1377\) 21-04-05.da4](#)

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

\* Communication System: GSM-PCS (850 MHz, 1900MHz) FCC; Frequency: 1850 MHz; Duty Cycle: 1:8.3

\* Medium parameters used:  $\sigma = 1.56208$ ; mho/m,  $\epsilon_r = 53.0527$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(4.7, 4.7, 4.7)

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

**Channel 512 Test/Area Scan (181x71x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.571 mW/g

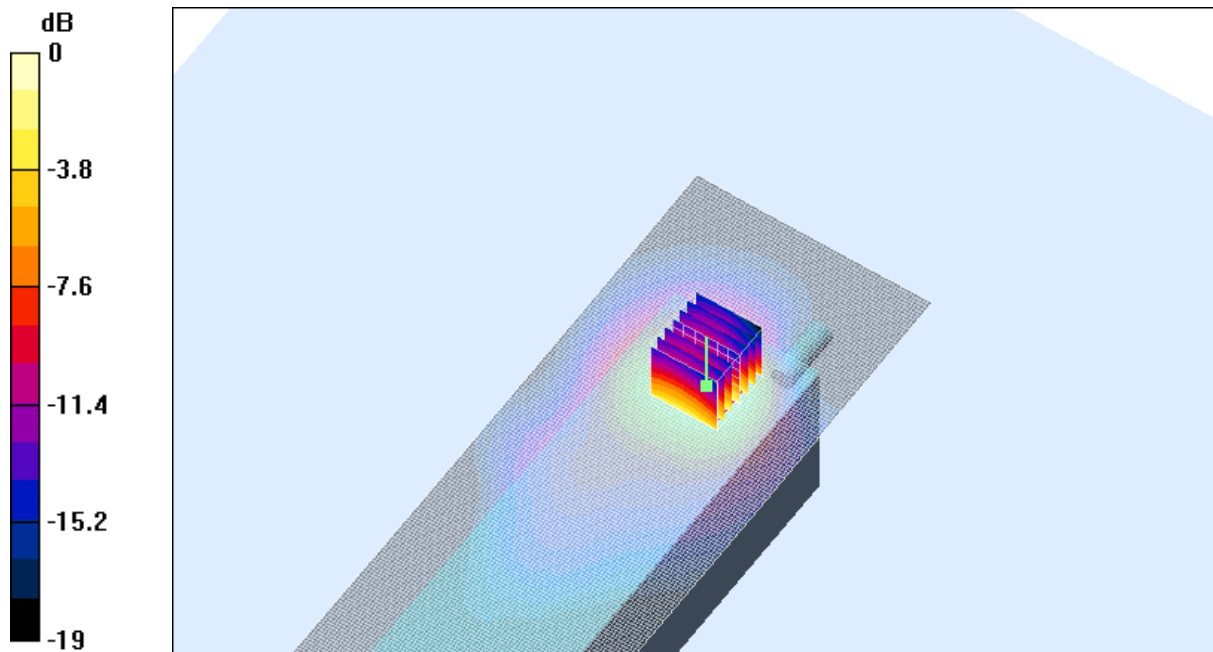
**Channel 512 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.3 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 1.07 W/kg

**SAR(1 g) = 0.518 mW/g; SAR(10 g) = 0.284 mW/g**

Maximum value of SAR (measured) = 0.552 mW/g



0 dB = 0.552mW/g

**SAR MEASUREMENT PLOT 6**

Ambient Temperature  
Liquid Temperature  
Humidity

20.7 Degrees Celsius  
20.0 Degrees Celsius  
45.0 %

Test Date: 21 April 2005

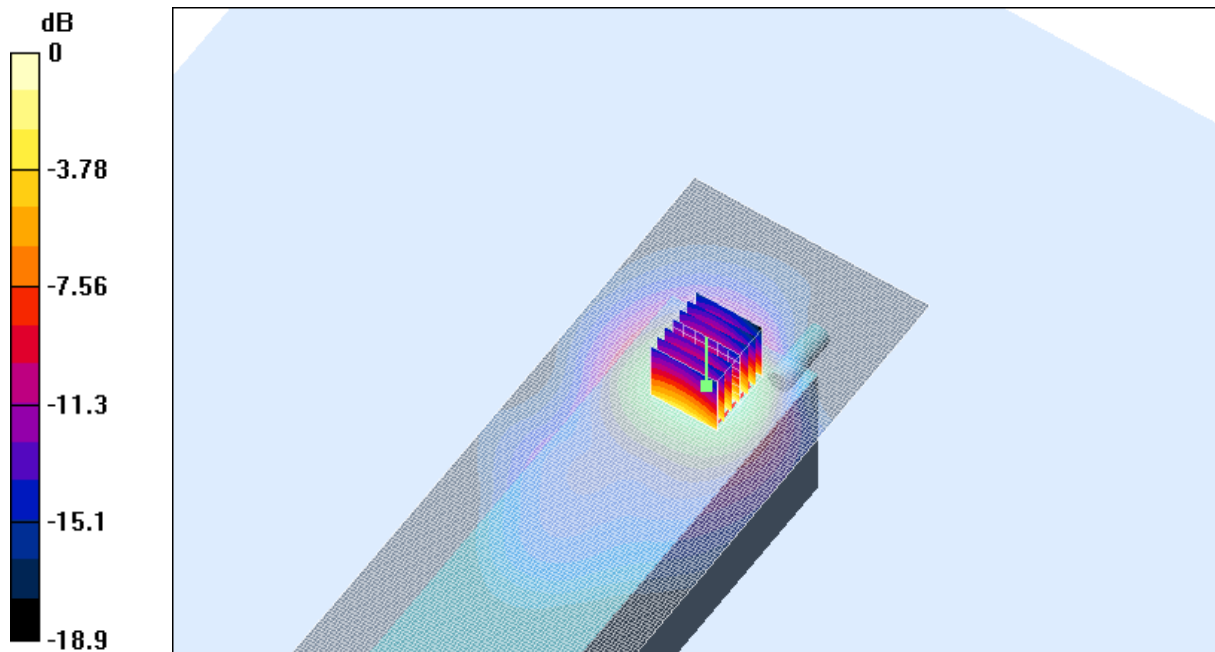
File Name: [Hand Held Back Side \(No Holster\) 1900 MHz GSM \(DAE442 Probe1377\) 21-04-05.da4](#)

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

- \* Communication System: GSM-PCS (850 MHz, 1900MHz) FCC; Frequency: 1880 MHz; Duty Cycle: 1:8.3
- \* Medium parameters used:  $\sigma = 1.57669$ ; mho/m,  $\epsilon_r = 52.9116$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(4.7, 4.7, 4.7)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 661 Test/Area Scan (181x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.720 mW/g

**Channel 661 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 11.4 V/m; Power Drift = 0.0 dB  
Peak SAR (extrapolated) = 1.36 W/kg  
**SAR(1 g) = 0.650 mW/g; SAR(10 g) = 0.355 mW/g**  
Maximum value of SAR (measured) = 0.689 mW/g



0 dB = 0.689mW/g

**SAR MEASUREMENT PLOT 7**

Ambient Temperature  
Liquid Temperature  
Humidity

20.7 Degrees Celsius  
20.0 Degrees Celsius  
45.0 %

Test Date: 21 April 2005

File Name: [Hand Held Back Side \(No Holster\) 1900 MHz GSM \(DAE442 Probe1377\) 21-04-05.da4](#)

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

\* Communication System: GSM-PCS (850 MHz, 1900MHz) FCC; Frequency: 1910 MHz; Duty Cycle: 1:8.3

\* Medium parameters used:  $\sigma = 1.59656$ ; mho/m,  $\epsilon_r = 52.8302$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(4.7, 4.7, 4.7)

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

**Channel 810 Test/Area Scan (181x71x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.847 mW/g

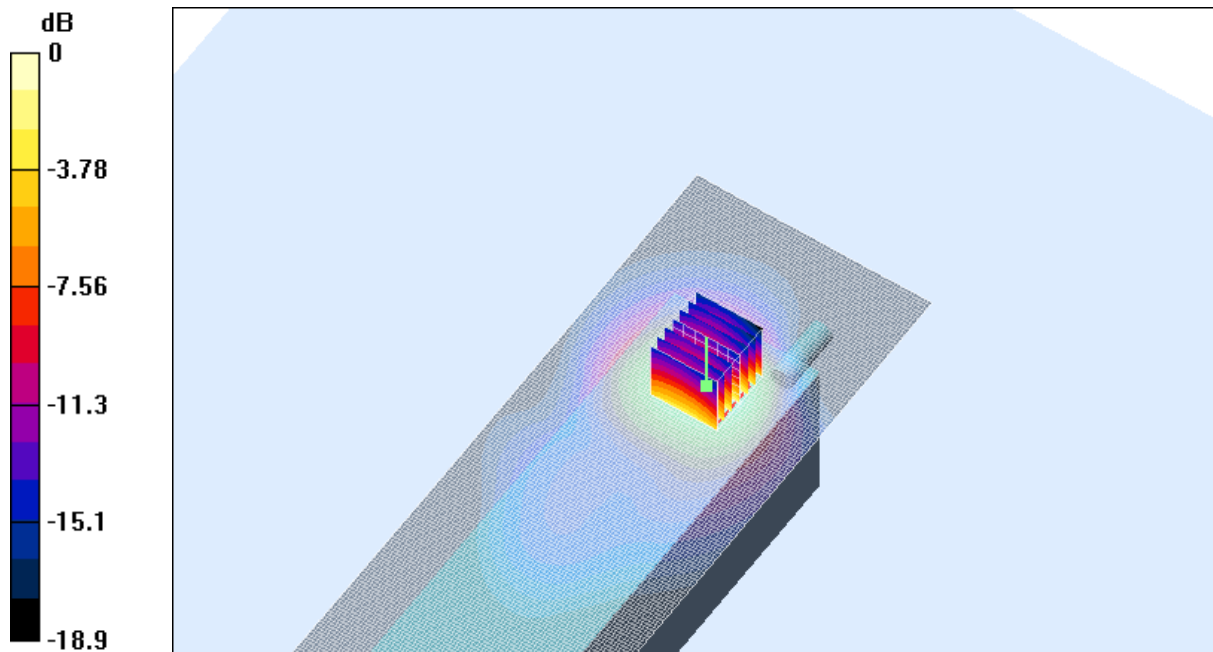
**Channel 810 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.8 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.64 W/kg

**SAR(1 g) = 0.761 mW/g; SAR(10 g) = 0.411 mW/g**

Maximum value of SAR (measured) = 0.807 mW/g



**SAR MEASUREMENT PLOT 8**

Ambient Temperature  
Liquid Temperature  
Humidity

20.7 Degrees Celsius  
20.0 Degrees Celsius  
45.0 %

Test Date: 21 April 2005

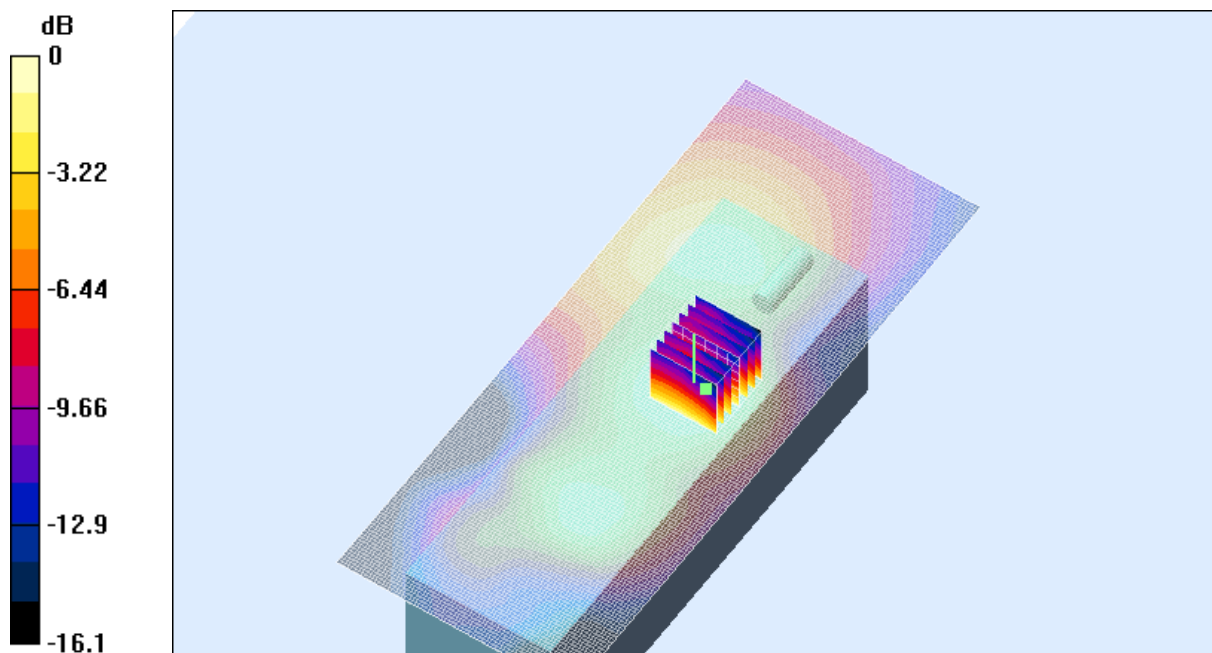
File Name: [Hand Held Front Side \(No Holster\) 1900 MHz GSM \(DAE442 Probe1377\) 21-04-05.da4](#)

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

- \* Communication System: GSM-PCS (850 MHz, 1900MHz) FCC; Frequency: 1880 MHz; Duty Cycle: 1:8.3
- \* Medium parameters used:  $\sigma = 1.57669$ ; mho/m,  $\epsilon_r = 52.9116$ ;  $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(4.7, 4.7, 4.7)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 661 Test/Area Scan (181x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.075 mW/g

**Channel 661 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 11.1 V/m; Power Drift = 0.008 dB  
Peak SAR (extrapolated) = 0.129 W/kg  
**SAR(1 g) = 0.068 mW/g; SAR(10 g) = 0.042 mW/g**  
Maximum value of SAR (measured) = 0.071 mW/g



0 dB = 0.071mW/g

**SAR MEASUREMENT PLOT 9**

Ambient Temperature  
Liquid Temperature  
Humidity

20.7 Degrees Celsius  
20.0 Degrees Celsius  
45.0 %

Test Date: 21 April 2005

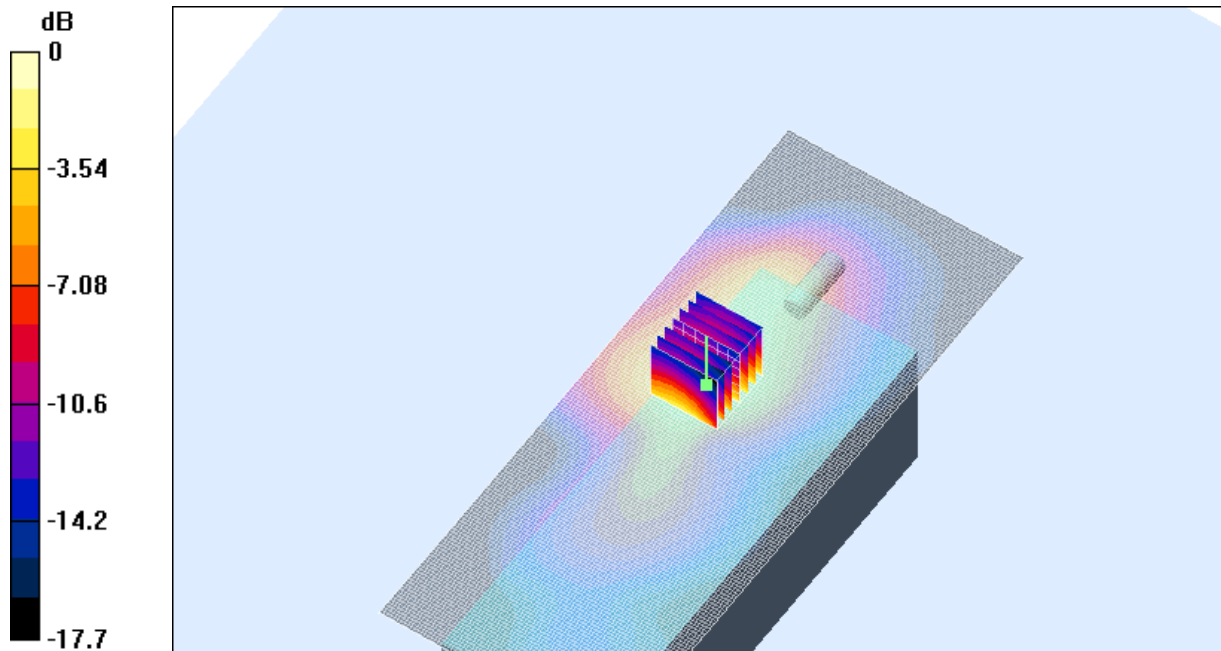
File Name: [Belt Clip 1900 MHz GSM \(DAE442 Probe1377\) 21-04-05.da4](#)

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

- \* Communication System: GSM-PCS (850 MHz, 1900MHz) FCC; Frequency: 1880 MHz; Duty Cycle: 1:8.3
- \* Medium parameters used:  $\sigma = 1.57669$ ; mho/m,  $\epsilon_r = 52.9116$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(4.7, 4.7, 4.7)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 661 Test/Area Scan (181x71x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.263 mW/g

**Channel 661 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 12.8 V/m; Power Drift = -0.3 dB  
 Peak SAR (extrapolated) = 0.507 W/kg  
**SAR(1 g) = 0.239 mW/g; SAR(10 g) = 0.135 mW/g**  
 Maximum value of SAR (measured) = 0.253 mW/g



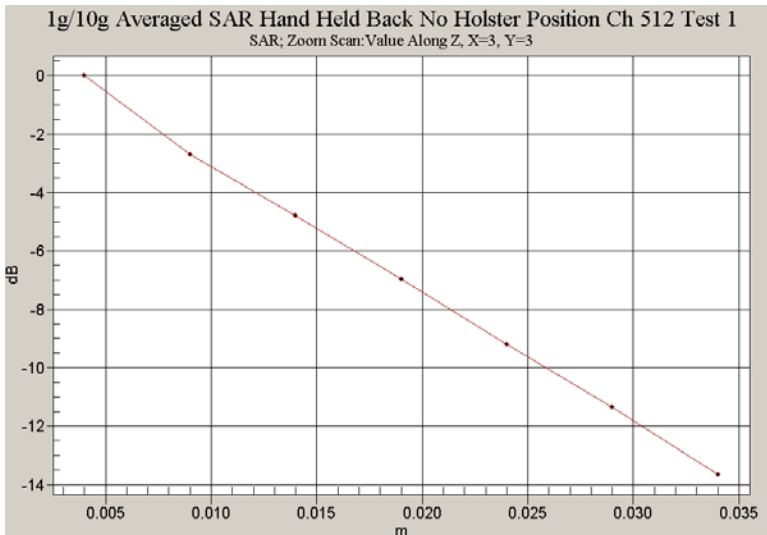
0 dB = 0.253mW/g

**SAR MEASUREMENT PLOT 10**

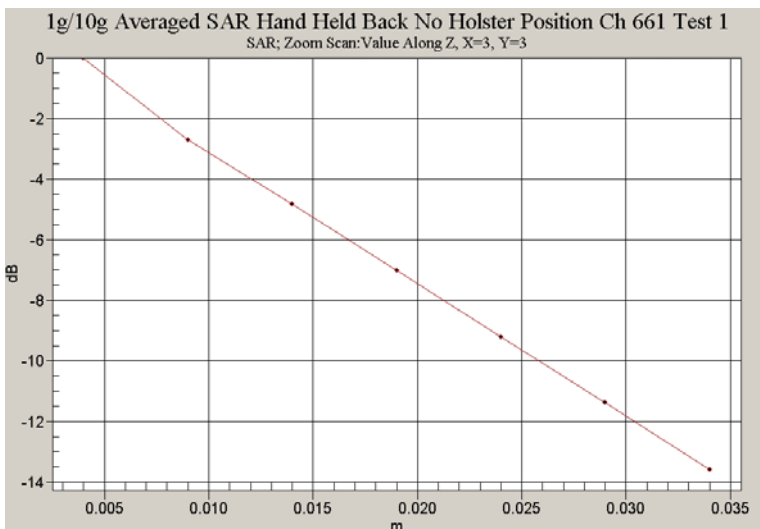
Ambient Temperature  
 Liquid Temperature  
 Humidity

20.7 Degrees Celsius  
 20.0 Degrees Celsius  
 45.0 %

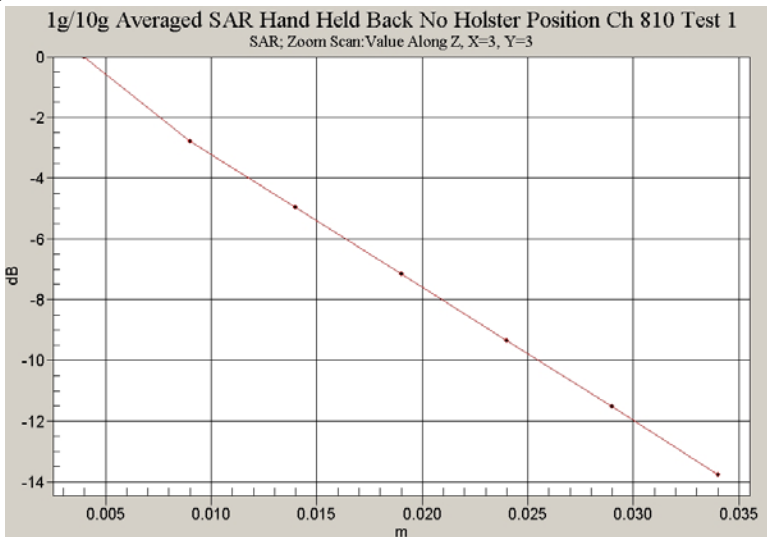
Z-Axis scan for Plot 6



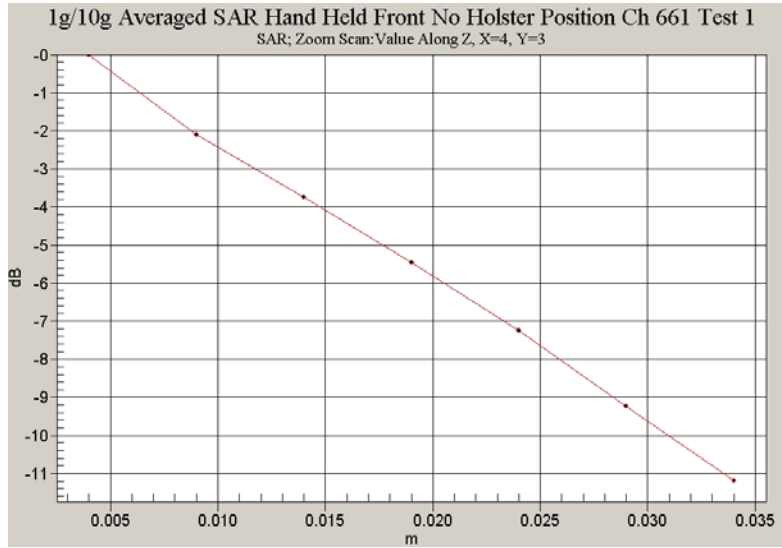
Z-Axis scan for Plot 7



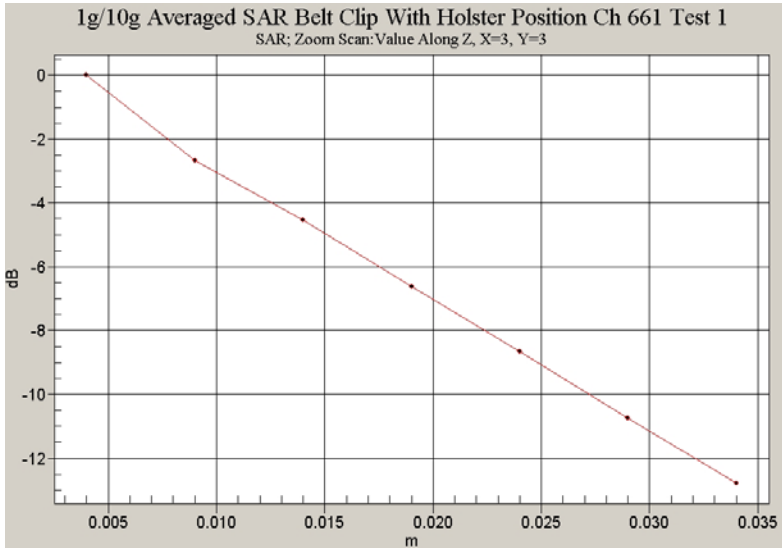
Z-Axis scan for Plot 8



Z-Axis scan for Plot 9



Z-Axis scan for Plot 10





Test Date: 20 April 2005

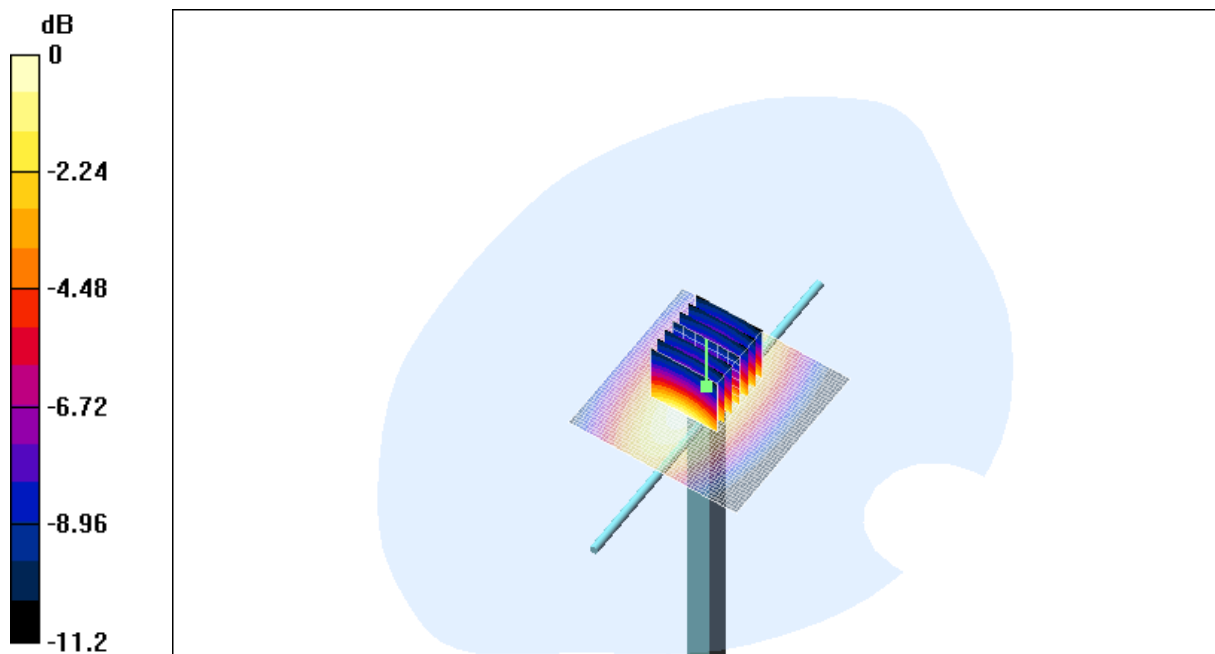
File Name: [Validation 900 MHz \( DAE442 Probe1377\) 20-04-05.da4](#)

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

- \* Communication System: CW 900 MHz; Frequency: 900 MHz; Duty Cycle: 1:1
- \* Medium parameters used:  $\sigma = 0.972785$ ; mho/m,  $\epsilon_r = 41.2214$ ;  $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; 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) = 2.91 mW/g

**Channel 1 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 57 V/m; Power Drift = 0.0 dB  
Peak SAR (extrapolated) = 4.12 W/kg  
**SAR(1 g) = 2.71 mW/g; SAR(10 g) = 1.73 mW/g**  
Maximum value of SAR (measured) = 2.93 mW/g



0 dB = 2.93mW/g

**SAR MEASUREMENT PLOT 11**

Ambient Temperature  
Liquid Temperature  
Humidity

21.5 Degrees Celsius  
20.8 Degrees Celsius  
46.0 %



Test Date: 21 April 2005

File Name: [Validation 1800 MHz \(DAE442 Probe1377\) 21-04-05.da4](#)

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

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

\* Medium parameters used:  $\sigma = 1.42877$ ; mho/m,  $\epsilon_r = 38.5974$ ;  $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(5.12, 5.12, 5.12)

- 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) = 11.7 mW/g

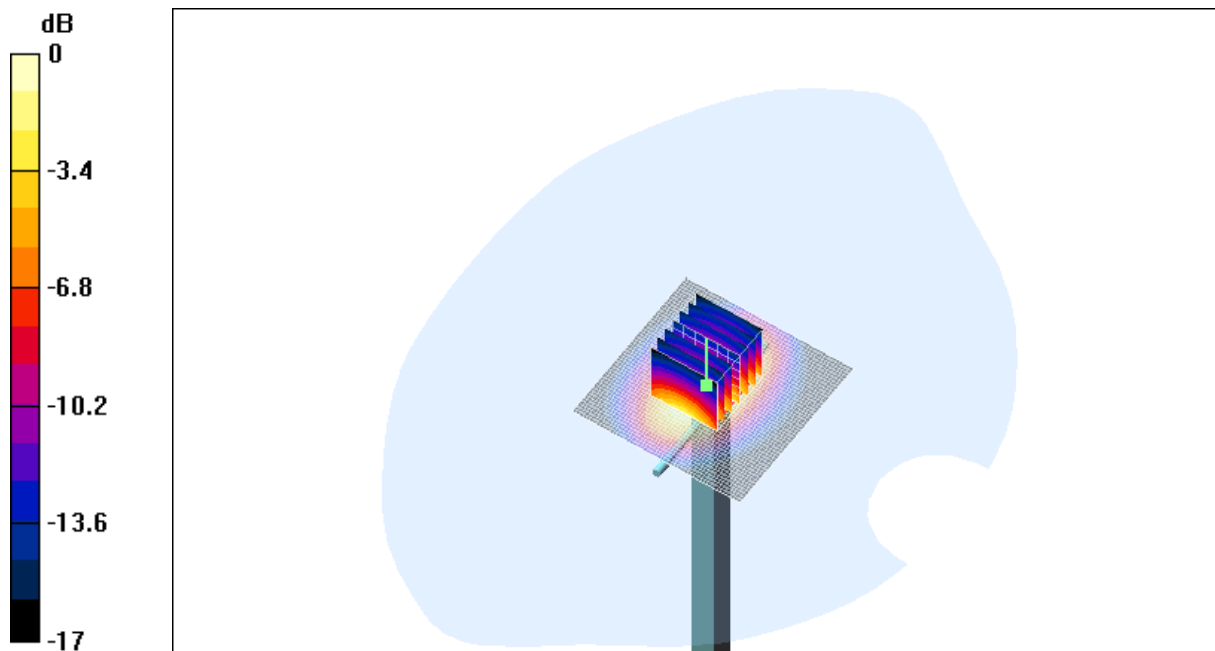
**Channel 1 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.2 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 16.1 W/kg

**SAR(1 g) = 9.25 mW/g; SAR(10 g) = 4.91 mW/g**

Maximum value of SAR (measured) = 10.5 mW/g



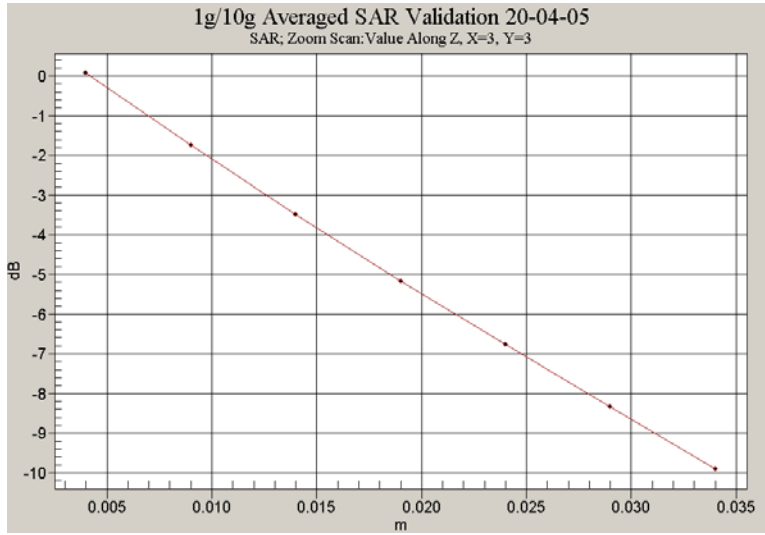
0 dB = 10.5mW/g

**SAR MEASUREMENT PLOT 12**

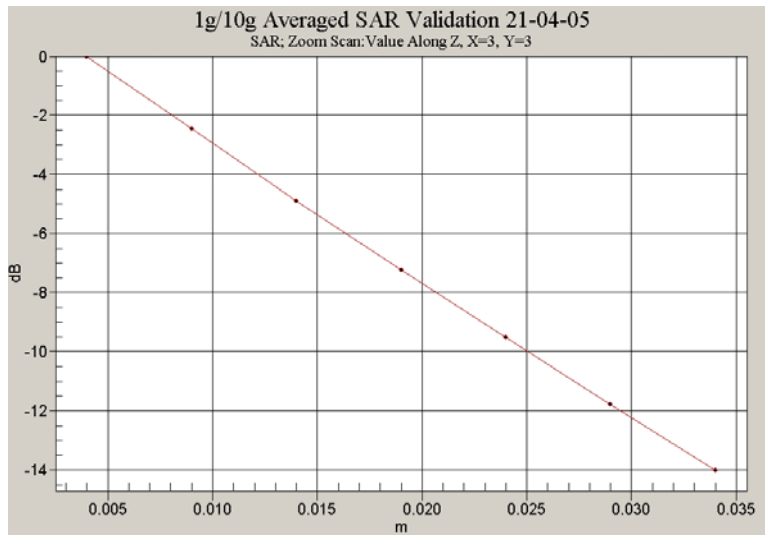
Ambient Temperature  
Liquid Temperature  
Humidity

20.7 Degrees Celsius  
20.0 Degrees Celsius  
45.0 %

Z-Axis scan for Plot 11



Z-Axis scan for Plot 12



## **APPENDIX C**

### **SAR TESTING EQUIPMENT CALIBRATION CERTIFICATE ATTACHMENTS**

#### **Calibration Certificate Attachments**

- |                                     |          |
|-------------------------------------|----------|
| 1. 900MHz Dipole Calibration Sheet  | 6 Pages  |
| 2. 1800MHz Dipole Calibration Sheet | 6 Pages  |
| 3. E-Field Probe Calibration Sheet  | 10 Pages |