

## 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 14: 1600 MHz SAR Plots**

Plot Number	Position	Antenna	Channel Number
1	Touch Left	Retracted	120
2	Touch Left	Extended	120
3	Tilted Left	Extended	120
4	Tilted Left	Retracted	000
5	Tilted Left	Retracted	120
6	Tilted Left	Retracted	240
Z-axis Graphs for plots 1 to 6			
7	Touch Right	Retracted	120
8	Touch Right	Extended	120
9	Tilted Right	Retracted	120
10	Tilted Right	Extended	120
Z-axis Graphs for plots 7 to 10			

**Table 15: SAR Validation Plots**

Plot Number	Date	Frequency
11	2 <sup>nd</sup> February 2005	1640 MHz
12	3 <sup>rd</sup> February 2005	1640 MHz
Z-axis Graphs for plots 11 to 12		



Test Date: 02 February 2005

File Name: [Touch Left 1600 MHz \(DAE442 Probe1380\) 02-02-05.da4](#)

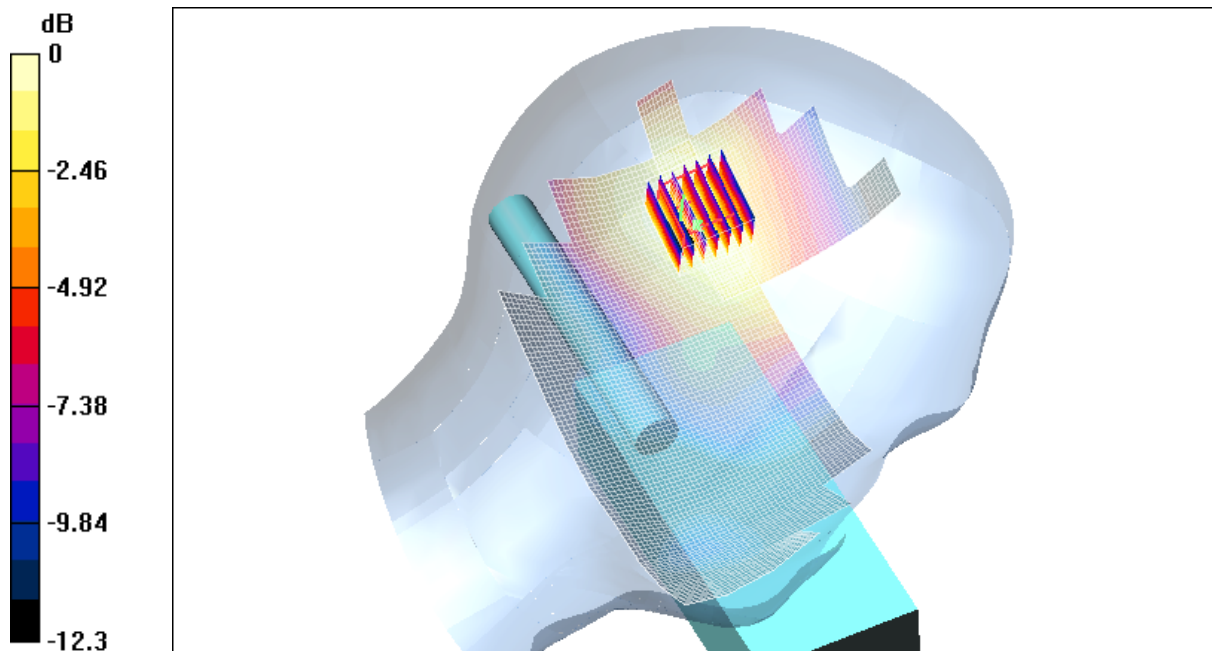
DUT: Iridium Satellite Phone; Type: SUG0088ML L5 03575; Serial: C7032-GR-514

- \* Communication System: 1600 MHz Satellite ; Frequency: 1618.25 MHz; Duty Cycle: 1:9.2
- \* Medium parameters used:  $\sigma = 1.28259$ ; mho/m,  $\epsilon_r = 39.7331$ ;  $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(5.3, 5.3, 5.3)
- Phantom: SAM 22; Serial: 1260; Phantom section: Left Section

**Channel 120 Test/Area Scan (121x51x1):** Measurement grid: dx=20mm, dy=20mm  
 Maximum value of SAR (interpolated) = 0.169 mW/g

**Channel 120 Test/Area Scan 2 (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.175 mW/g

**Channel 120 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 20.9 V/m; Power Drift = -0.2 dB  
 Peak SAR (extrapolated) = 0.359 W/kg  
**SAR(1 g) = 0.191 mW/g; SAR(10 g) = 0.123 mW/g**  
 Maximum value of SAR (measured) = 0.204 mW/g



0 dB = 0.204mW/g

**SAR MEASUREMENT PLOT 1**

Ambient Temperature  
 Liquid Temperature  
 Humidity

21.5 Degrees Celsius  
 20.8 Degrees Celsius  
 54.0 %



Test Date: 02 February 2005

File Name: [Touch Left 1600 MHz Extended Antenna \(DAE442 Probe1380\) 02-02-05.da4](#)

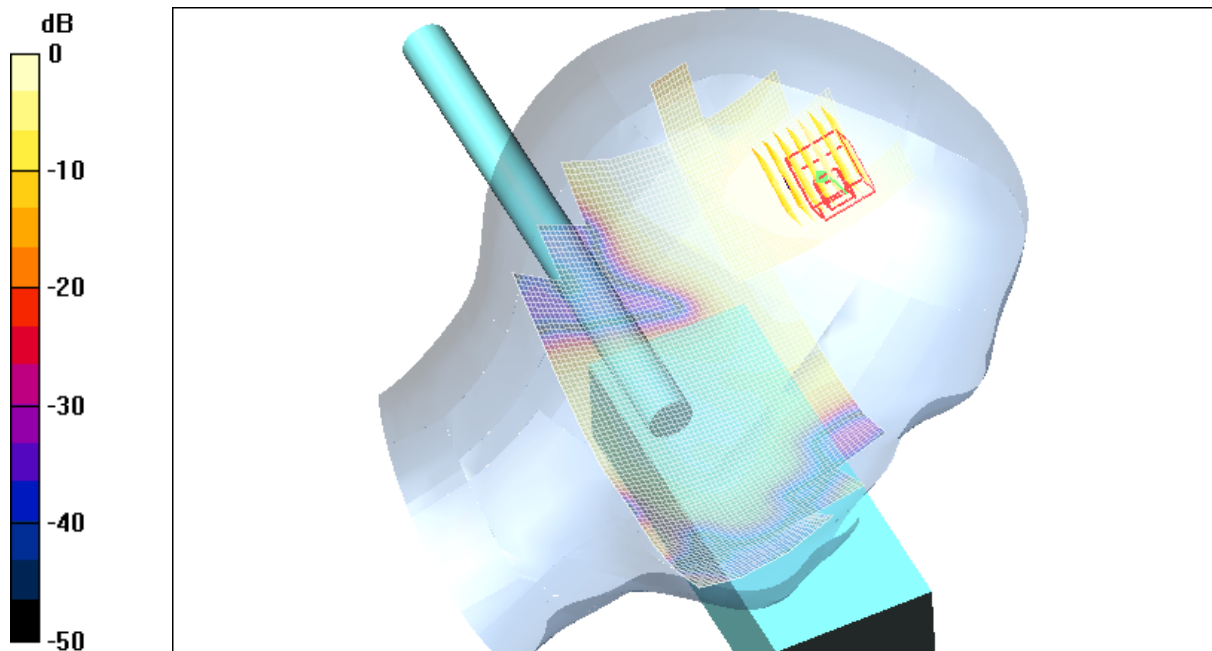
DUT: Iridium Satellite Phone; Type: SUG0088MBR 9505A; Serial: C7032-GR-514

- \* Communication System: 1600 MHz Satellite ; Frequency: 1618.25 MHz; Duty Cycle: 1:9.2
- \* Medium parameters used:  $\sigma = 1.28259$ ; mho/m,  $\epsilon_r = 39.7331$ ;  $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(5.3, 5.3, 5.3)
- Phantom: SAM 22; Serial: 1260; Phantom section: Left Section

**Channel 120 Test/Area Scan (121x51x1):** Measurement grid: dx=20mm, dy=20mm  
 Maximum value of SAR (interpolated) = 0.010 mW/g

**Channel 120 Test/Area Scan 2 (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.00602 mW/g

**Channel 120 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 5.35 V/m; Power Drift = 0.0 dB  
 Peak SAR (extrapolated) = 0.010 W/kg  
**SAR(1 g) = 0.00562 mW/g; SAR(10 g) = 0.0036 mW/g**  
 Maximum value of SAR (measured) = 0.0062 mW/g



0 dB = 0.0062mW/g

**SAR MEASUREMENT PLOT 2**

Ambient Temperature  
 Liquid Temperature  
 Humidity

21.5 Degrees Celsius  
 20.8 Degrees Celsius  
 54.0 %



Test Date: 02 February 2005

File Name: [Tilted Left 1600 MHz Extended Antenna \(DAE442 Probe1380\) 02-02-05.da4](#)

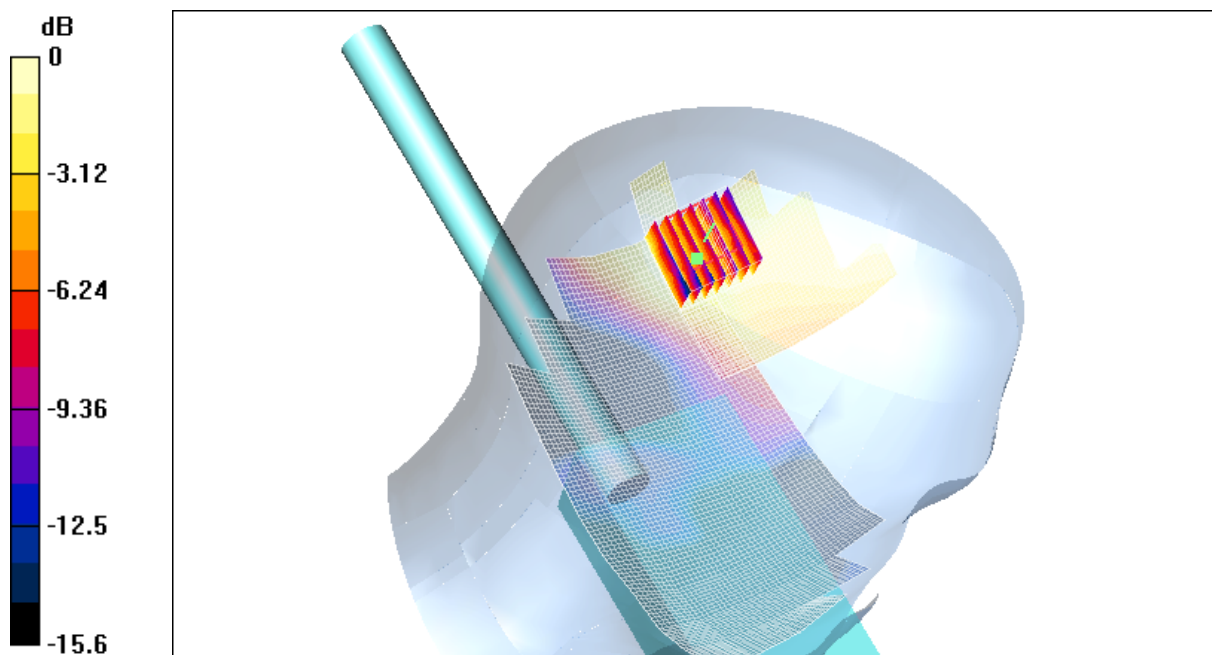
DUT: Iridium Satellite Phone; Type: SUG0088MBR 9505A; Serial: C7032-GR-514

- \* Communication System: 1600 MHz Satellite ; Frequency: 1618.25 MHz; Duty Cycle: 1:9.2
- \* Medium parameters used:  $\sigma = 1.28259$ ;  $\rho/m$ ,  $\epsilon_r = 39.7331$ ;  $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(5.3, 5.3, 5.3)
- Phantom: SAM 22; Serial: 1260; Phantom section: Left Section

**Channel 120 Test/Area Scan (121x51x1):** Measurement grid: dx=20mm, dy=20mm  
 Maximum value of SAR (interpolated) = 0.014 mW/g

**Channel 120 Test/Area Scan 2 (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.015 mW/g

**Channel 120 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 7.61 V/m; Power Drift = -0.1 dB  
 Peak SAR (extrapolated) = 0.026 W/kg  
**SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.00909 mW/g**  
 Maximum value of SAR (measured) = 0.016 mW/g



0 dB = 0.016mW/g

**SAR MEASUREMENT PLOT 3**

Ambient Temperature  
 Liquid Temperature  
 Humidity

21.5 Degrees Celsius  
 20.8 Degrees Celsius  
 54.0 %



**Test Date:** 03 February 2005

**File Name:** [Tilted Left 1600 MHz \(DAE442 Probe1380\) 03-02-05.da4](#)

**DUT:** Iridium Satellite Phone; **Type:** SUG0088ML L5 03575; **Serial:** C7032-GR-514

\* Communication System: 1600 MHz Satellite ; Frequency: 1610 MHz; Duty Cycle: 1:9.2

\* Medium parameters used:  $\sigma = 1.29395$ ; mho/m,  $\epsilon_r = 39.9261$ ;  $\rho = 1000$  kg/m<sup>3</sup>

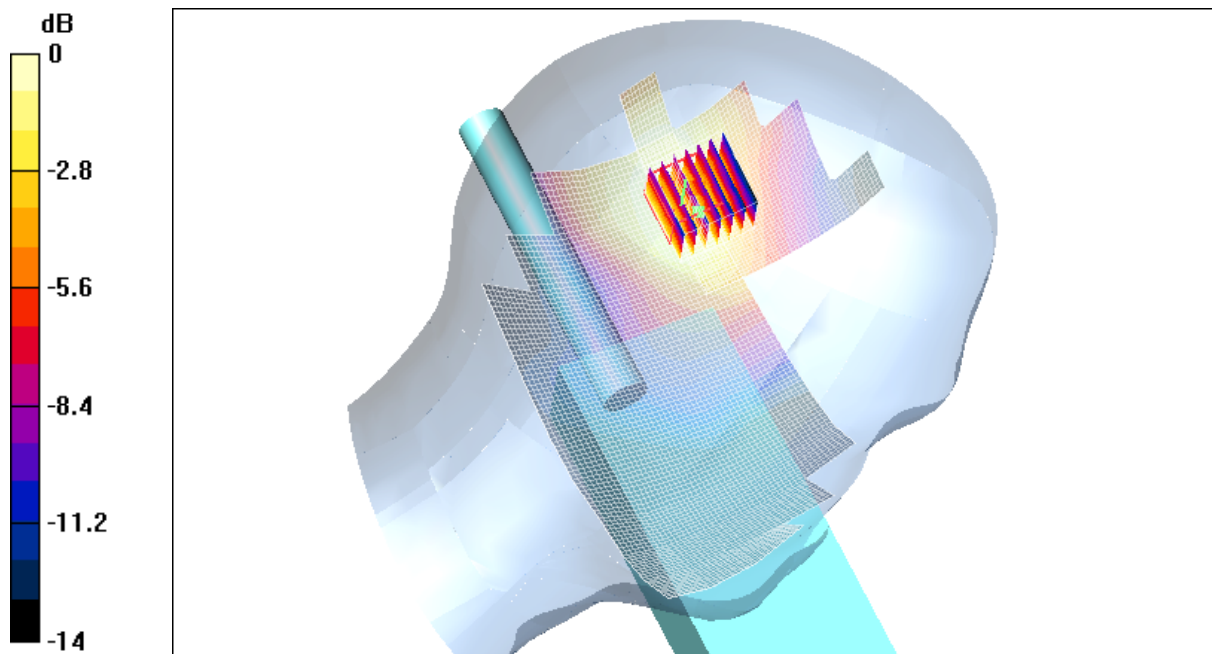
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(5.3, 5.3, 5.3)

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

**Channel 000 Test/Area Scan (121x51x1):** Measurement grid: dx=20mm, dy=20mm  
Maximum value of SAR (interpolated) = 0.382 mW/g

**Channel 000 Test/Area Scan 2 (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.380 mW/g

**Channel 000 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 32.5 V/m; Power Drift = -0.3 dB  
Peak SAR (extrapolated) = 0.652 W/kg  
**SAR(1 g) = 0.366 mW/g; SAR(10 g) = 0.232 mW/g**  
Maximum value of SAR (measured) = 0.394 mW/g



0 dB = 0.394mW/g

**SAR MEASUREMENT PLOT 4**

**Ambient Temperature**  
**Liquid Temperature**  
**Humidity**

**20.9 Degrees Celsius**  
**20.5 Degrees Celsius**  
**59.0 %**



Test Date: 03 February 2005

File Name: [Tilted Left 1600 MHz \(DAE442 Probe1380\) 03-02-05.da4](#)

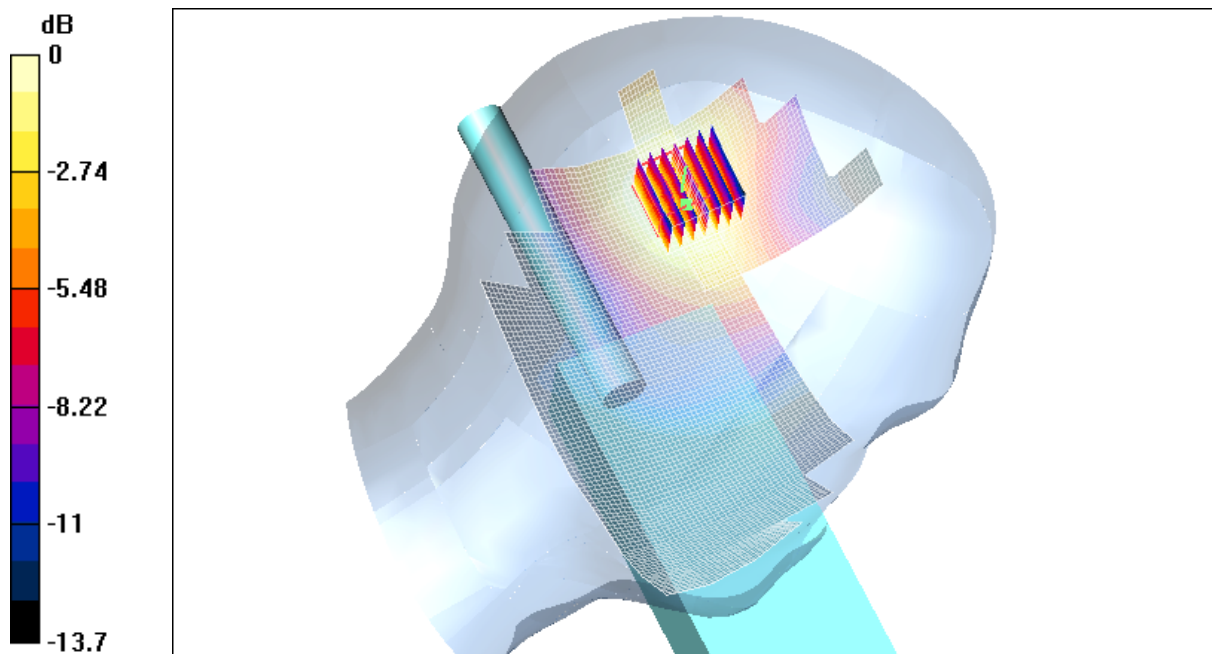
DUT: Iridium Satellite Phone; Type: SUG0088ML L5 03575; Serial: C7032-GR-514

- \* Communication System: 1600 MHz Satellite ; Frequency: 1618.25 MHz; Duty Cycle: 1:9.2
- \* Medium parameters used:  $\sigma = 1.29819$ ; mho/m,  $\epsilon_r = 39.9036$ ;  $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(5.3, 5.3, 5.3)
- Phantom: SAM 22; Serial: 1260; Phantom section: Left Section

**Channel 120 Test/Area Scan (121x51x1):** Measurement grid: dx=20mm, dy=20mm  
 Maximum value of SAR (interpolated) = 0.305 mW/g

**Channel 120 Test/Area Scan 2 (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.319 mW/g

**Channel 120 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 26.2 V/m; Power Drift = -0.3 dB  
 Peak SAR (extrapolated) = 0.587 W/kg  
**SAR(1 g) = 0.305 mW/g; SAR(10 g) = 0.196 mW/g**  
 Maximum value of SAR (measured) = 0.337 mW/g



0 dB = 0.337mW/g

**SAR MEASUREMENT PLOT 5**

Ambient Temperature  
 Liquid Temperature  
 Humidity

**20.9 Degrees Celsius**  
**20.5 Degrees Celsius**  
**59.0 %**





Test Date: 03 February 2005

File Name: [Tilted Left 1600 MHz \(DAE442 Probe1380\) 03-02-05.da4](#)

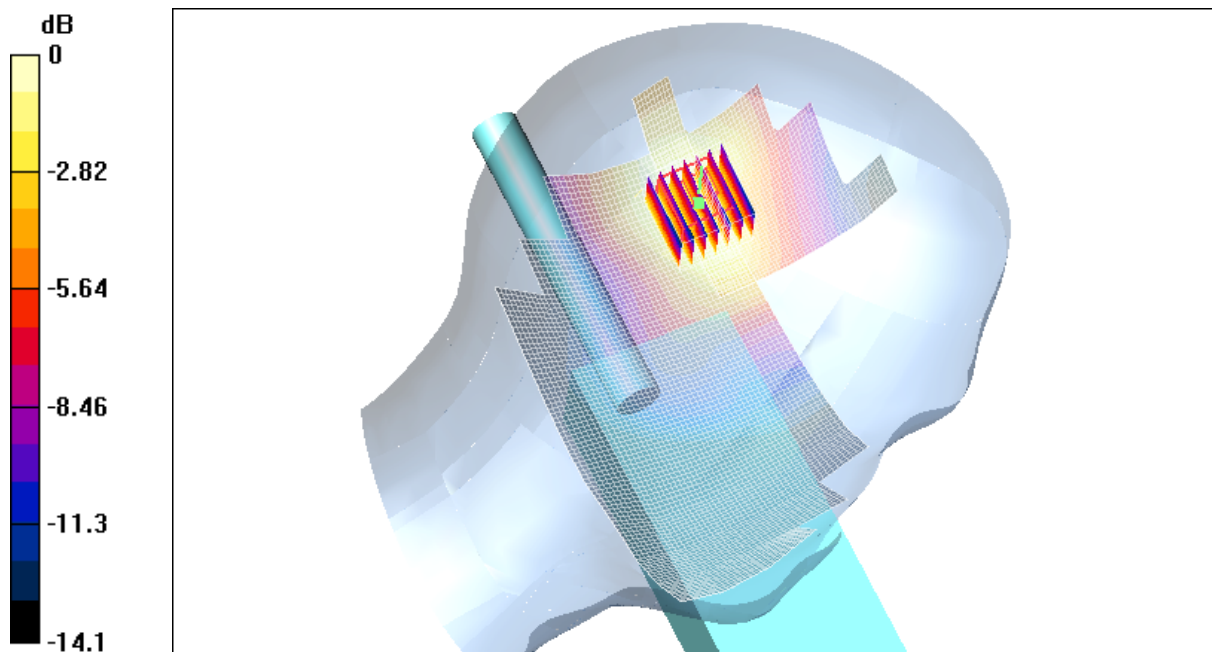
DUT: Iridium Satellite Phone; Type: SUG0088ML L5 03575; Serial: C7032-GR-514

- \* Communication System: 1600 MHz Satellite ; Frequency: 1626.5 MHz; Duty Cycle: 1:9.2
- \* Medium parameters used:  $\sigma = 1.30592$ ; mho/m,  $\epsilon_r = 39.8498$ ;  $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(5.3, 5.3, 5.3)
- Phantom: SAM 22; Serial: 1260; Phantom section: Left Section

**Channel 240 Test 3/Area Scan (121x51x1):** Measurement grid: dx=20mm, dy=20mm  
Maximum value of SAR (interpolated) = 0.424 mW/g

**Channel 240 Test 3/Area Scan 2 (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.440 mW/g

**Channel 240 Test 3/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 32.1 V/m; Power Drift = 0.4 dB  
Peak SAR (extrapolated) = 0.833 W/kg  
**SAR(1 g) = 0.403 mW/g; SAR(10 g) = 0.262 mW/g**  
Maximum value of SAR (measured) = 0.441 mW/g



0 dB = 0.441mW/g

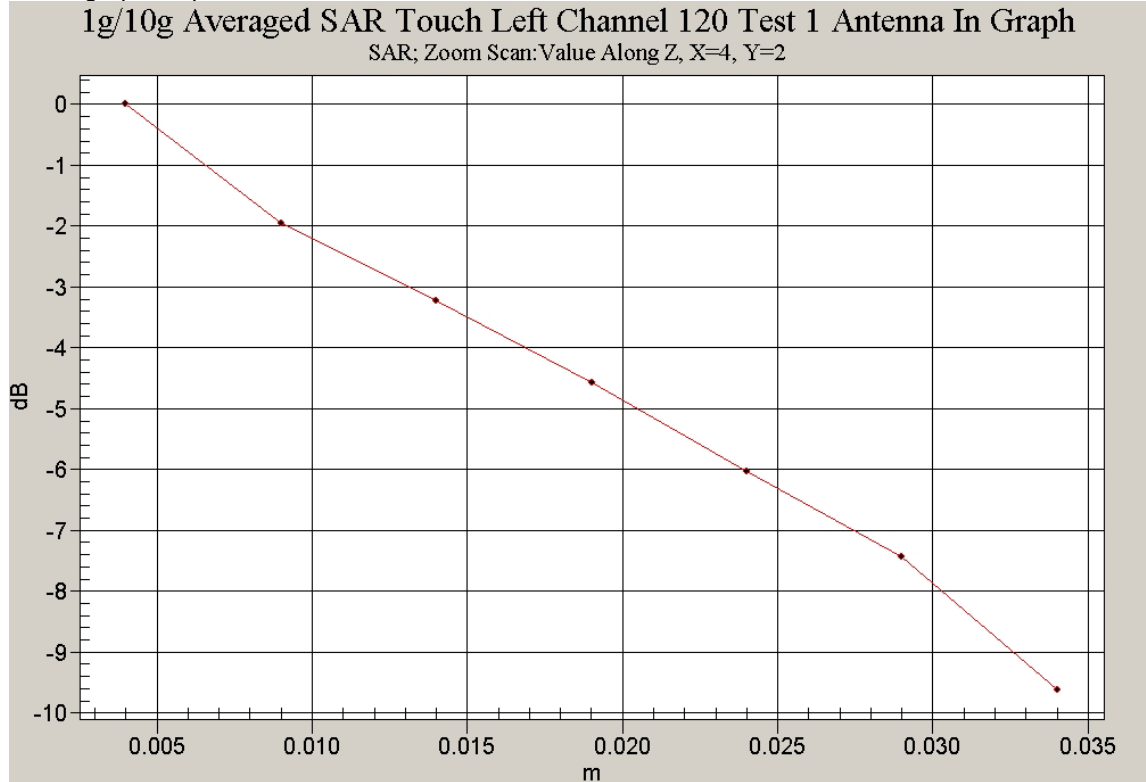
**SAR MEASUREMENT PLOT 6**

Ambient Temperature  
Liquid Temperature  
Humidity

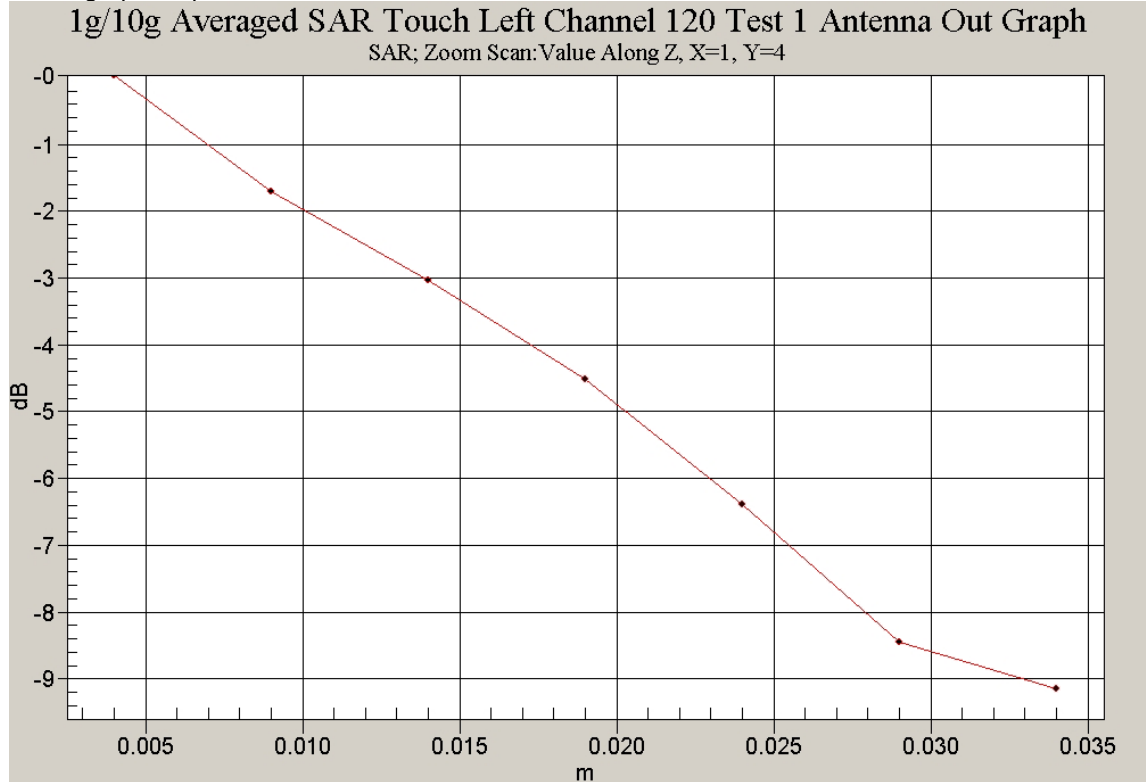
**20.9 Degrees Celsius**  
**20.5 Degrees Celsius**  
**59.0 %**



Z-axis graph for plot 1

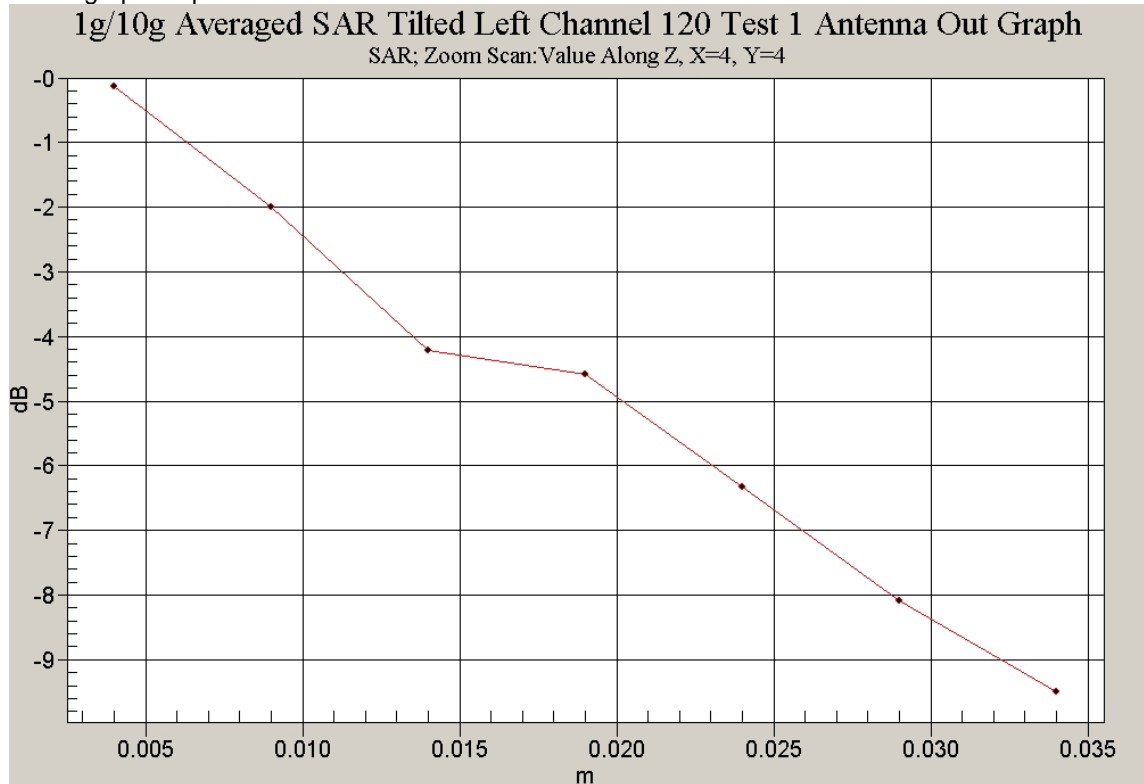


Z-axis graph for plot 2

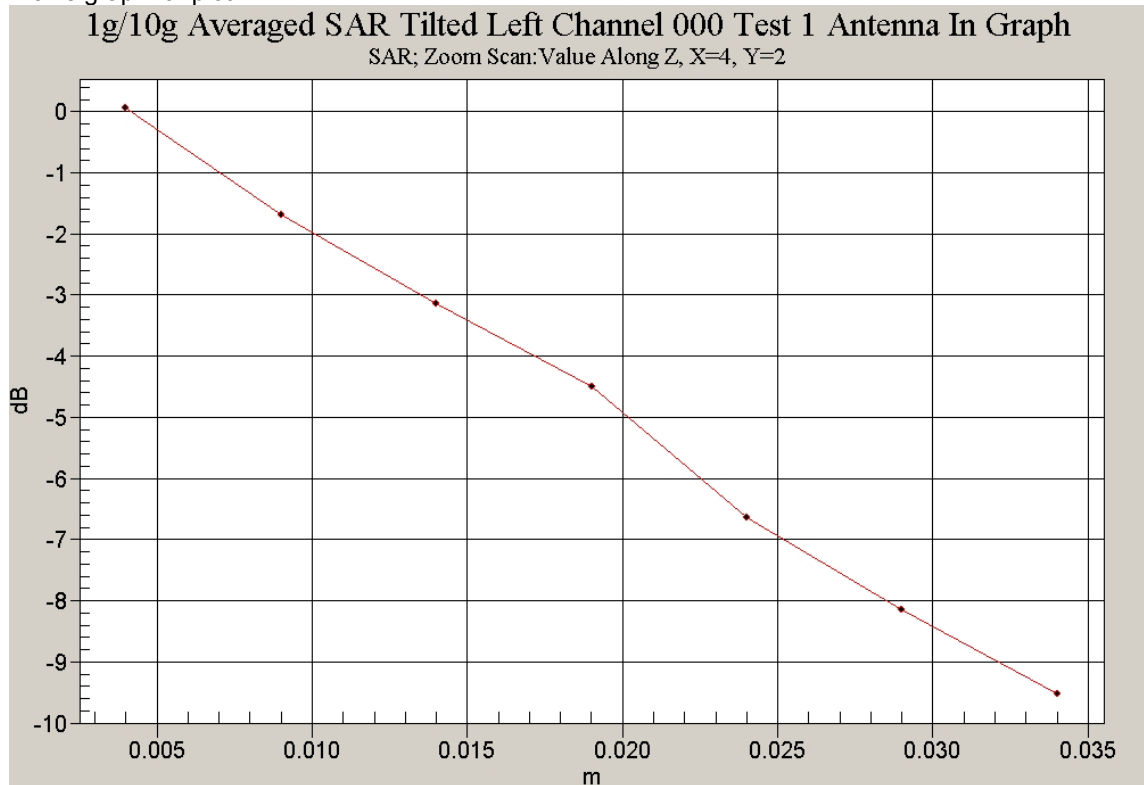




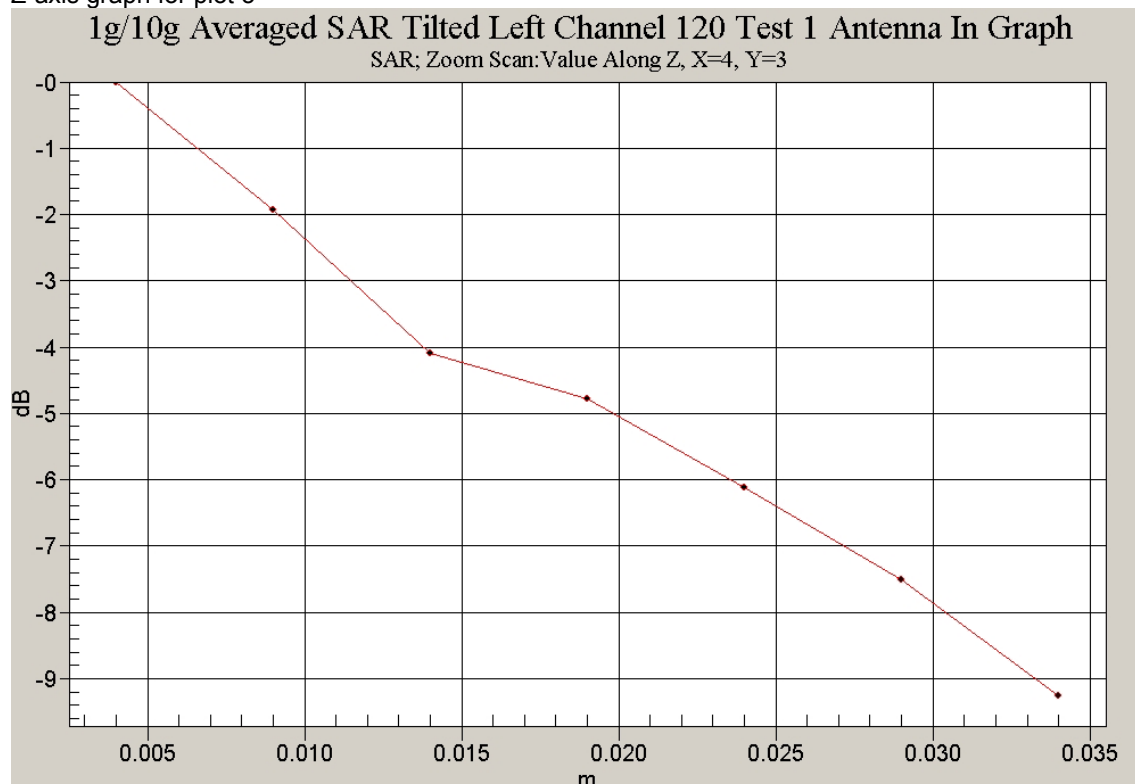
Z-axis graph for plot 3



Z-axis graph for plot 4



Z-axis graph for plot 5



Z-axis graph for plot 6

