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 nd February 2005 | 1640 MHz | | |
| 12 | 3 nd 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, $\varepsilon_r = 39.7331$; $\rho = 1000$ kg/m³
- 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

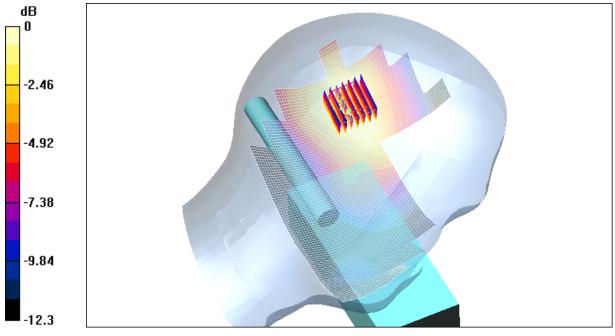
Channel 120 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm,

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 = 0.204 mW/g

SAR MEASUREMENT PLOT 1

Ambient Temperature Liquid Temperature Humidity 21.5 Degrees Celsius 20.8 Degrees Celsius 54.0 %



Report No.: M050129 Page 23 of 40

Test Date: 02 February 2005

File Name: <u>Touch Left 1600 MHz Extended Antenna (DAE442 Probe1380) 02-02-05.da4</u> **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: σ = 1.28259; mho/m, ε_r = 39.7331; ρ = 1000 kg/m³
- 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

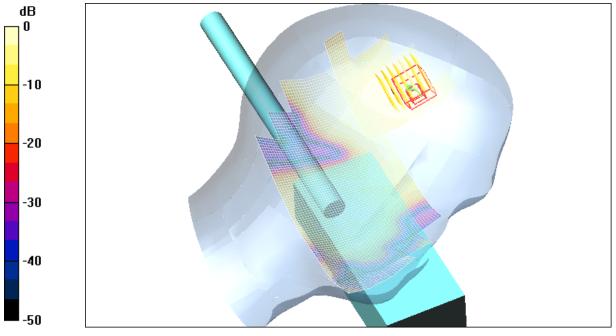
Channel 120 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm,

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 = 0.0062 mW/g

SAR MEASUREMENT PLOT 2

Ambient Temperature Liquid Temperature Humidity 21.5 Degrees Celsius 20.8 Degrees Celsius 54.0 %



Report No.: M050129 Page 24 of 40

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: σ = 1.28259; mho/m, ε_r = 39.7331; ρ = 1000 kg/m³
- 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

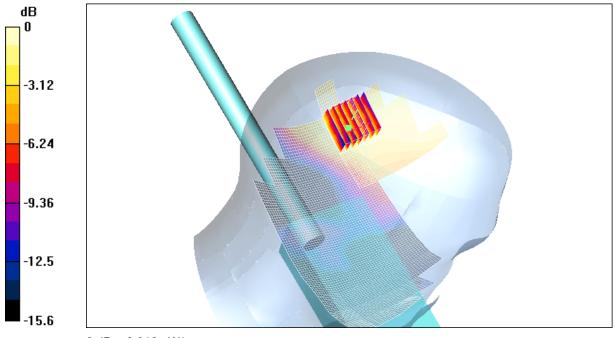
Channel 120 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm,

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 = 0.016 mW/g

SAR MEASUREMENT PLOT 3

Ambient Temperature Liquid Temperature Humidity 21.5 Degrees Celsius 20.8 Degrees Celsius 54.0 %



Report No.: M050129 Page 25 of 40

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: σ = 1.29395; mho/m, ϵ_r = 39.9261; ρ = 1000 kg/m³
- 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

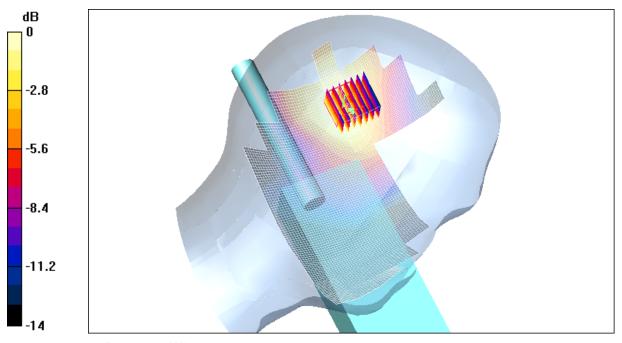
Channel 000 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm,

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 = 0.394 mW/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: σ = 1.29819; mho/m, ε_r = 39.9036; ρ = 1000 kg/m³
- 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

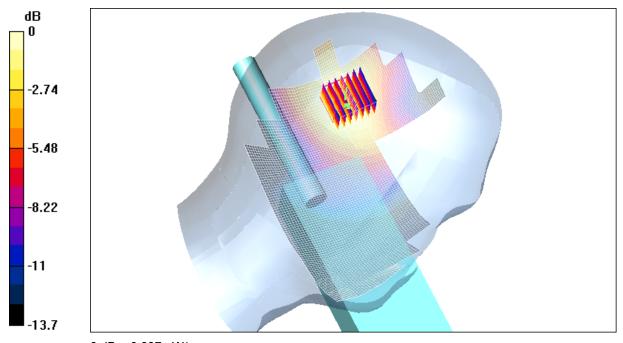
Channel 120 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm,

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 = 0.337 mW/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, $\varepsilon_r = 39.8498$; $\rho = 1000$ kg/m³
- 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

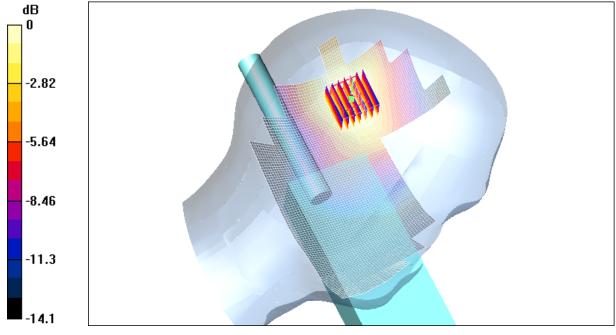
Channel 240 Test 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm,

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



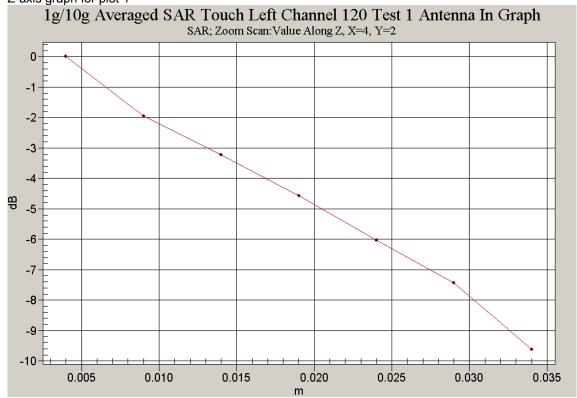
0 dB = 0.441 mW/g

SAR MEASUREMENT PLOT 6

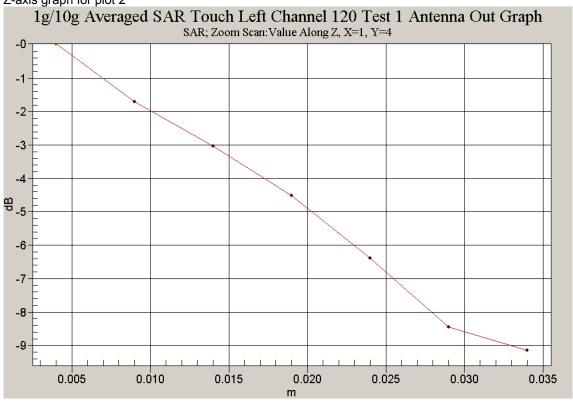
Ambient Temperature Liquid Temperature Humidity 20.9 Degrees Celsius 20.5 Degrees Celsius 59.0 %





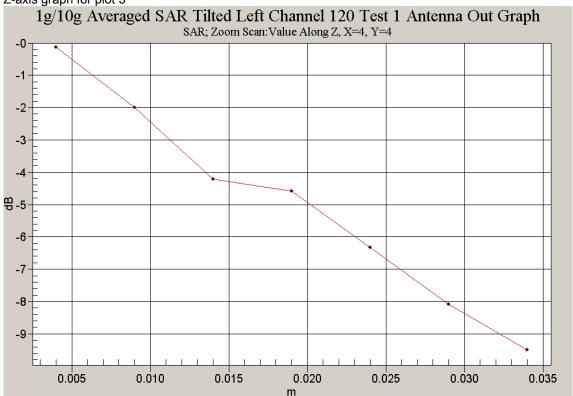


Z-axis graph for plot 2

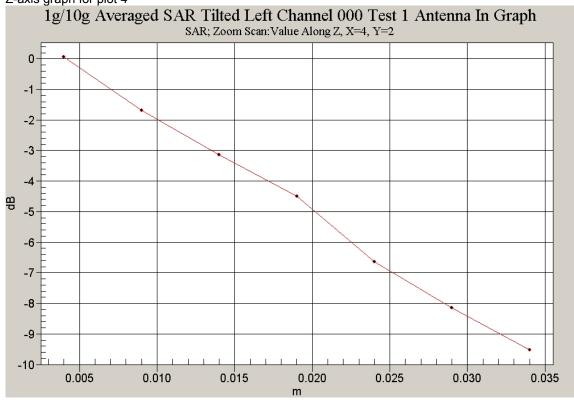




Z-axis graph for plot 3

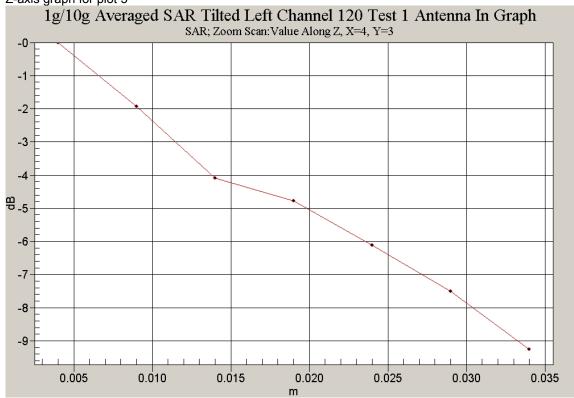












Z-axis graph for plot 6

