

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	Page
1	Touch Right	Retracted	120	22
2	Touch Right	Extended	120	23
3	Tilted Right	Extended	120	24
4	Tilted Right	Retracted	000	25
5	Tilted Right	Retracted	120	26
6	Tilted Right	Retracted	240	27
7	Touch Left	Retracted	120	28
8	Touch Left	Extended	120	29
9	Tilted Left	Retracted	120	30
10	Tilted Left	Extended	120	31

Table 15: SAR Validation Plots

Plot Number	Date	Frequency	Page
11	24 th September	1640 MHz	32



Test Date: 24 September 2004

File Name: [Touch Right 1600 MHz \(DAE359 Probe1380\) 24-09-04.da4](#)

DUT: Iridium Satellite Phone; Type: SUG0088MBR 9505A; Serial: 600026

* Communication System: 1600 MHz Satellite; Frequency: 1618.25 MHz; Duty Cycle: 1:9.2

* Medium parameters used: $\sigma = 1.2656$; mho/m, $\epsilon_r = 38.5475$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1380; ConvF(5.3, 5.3, 5.3)

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

Channel 120 Test/Area Scan (121x51x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 9.19 V/m; Power Drift = -0.5 dB

Maximum value of SAR (interpolated) = 0.256 mW/g

Channel 120 Test/Area Scan 2 (51x51x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 9.19 V/m; Power Drift = -0.5 dB

Maximum value of SAR (interpolated) = 0.264 mW/g

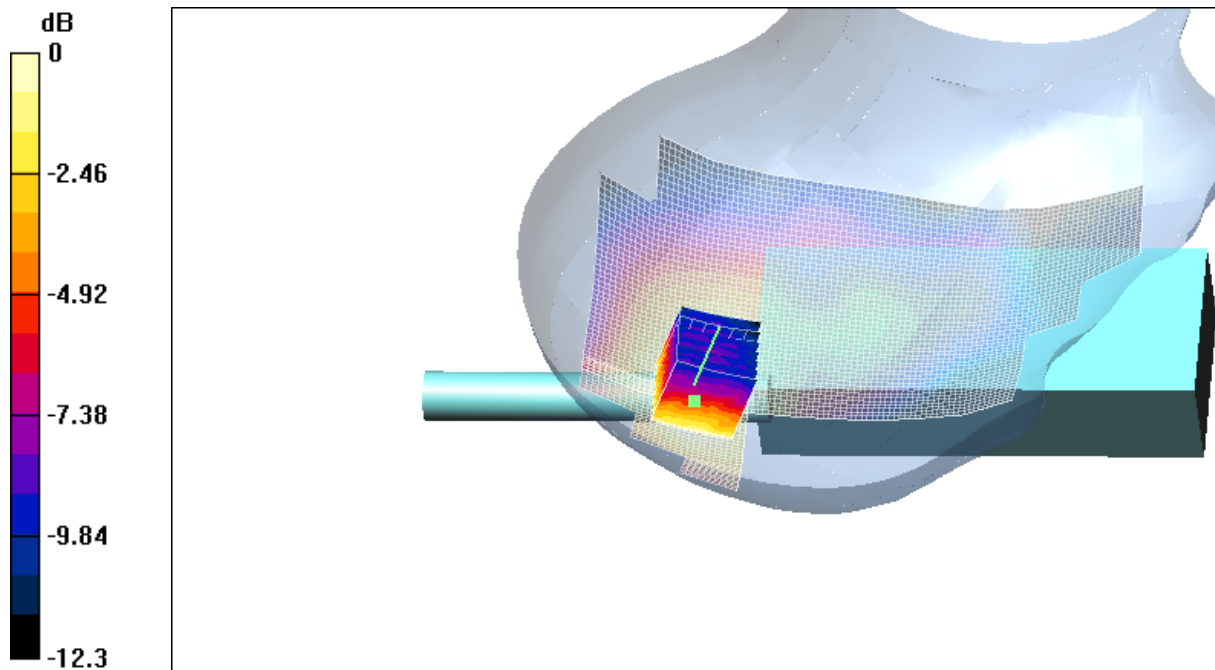
Channel 120 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.19 V/m; Power Drift = -0.5 dB

Maximum value of SAR (measured) = 0.248 mW/g

Peak SAR (extrapolated) = 0.429 W/kg

SAR(1 g) = 0.223 mW/g; SAR(10 g) = 0.151 mW/g



SAR MEASUREMENT PLOT 1

Ambient Temperature: 20.5 Degrees Celsius
Liquid Temperature: 20.0 Degrees Celsius
Humidity: 48.0 %



Test Date: 24 September 2004

File Name: [Touch Right 1600 MHz Extended Antenna \(DAE359 Probe1380\) 24-09-04.da4](#)

DUT: Iridium Satellite Phone; Type: SUG0088MBR 9505A; Serial: 600026

* Communication System: 1600 MHz Satellite; Frequency: 1618.25 MHz; Duty Cycle: 1:9.2

* Medium parameters used: $\sigma = 1.2656$; mho/m, $\epsilon_r = 38.5475$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1380; ConvF(5.3, 5.3, 5.3)

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

Channel 120 Test/Area Scan (121x51x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 2.77 V/m; Power Drift = -0.5 dB

Maximum value of SAR (interpolated) = 0.011 mW/g

Channel 120 Test/Area Scan 2 (61x61x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 2.77 V/m; Power Drift = -0.5 dB

Maximum value of SAR (interpolated) = 0.013 mW/g

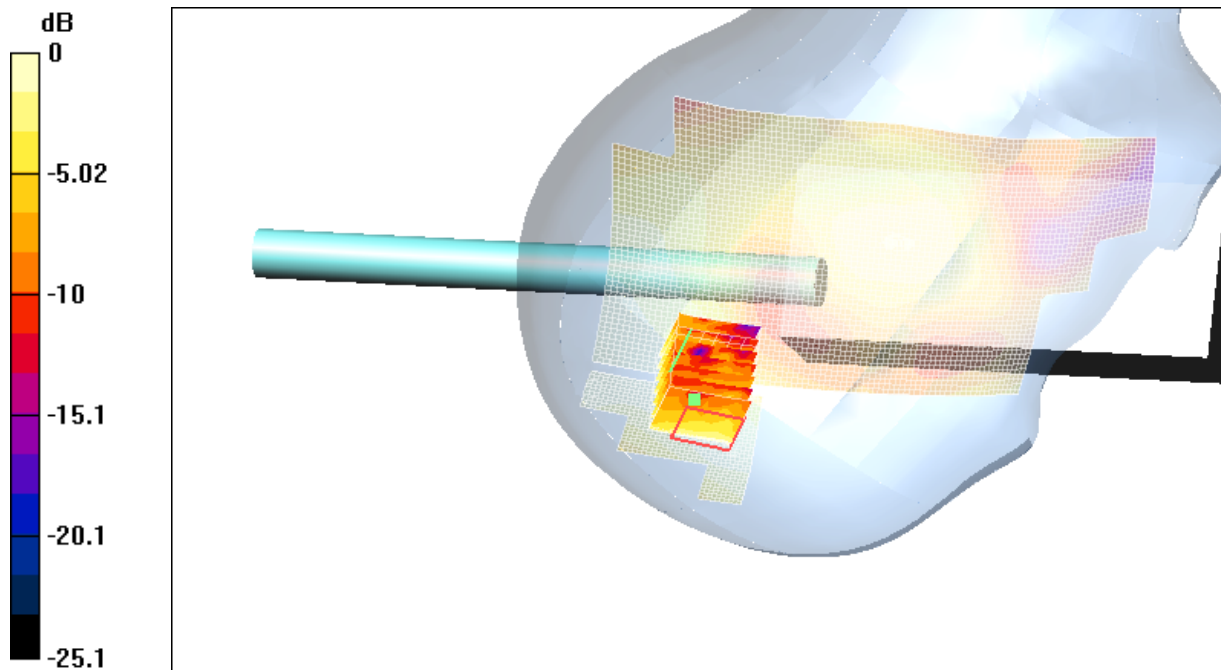
Channel 120 Test/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.77 V/m; Power Drift = -0.5 dB

Maximum value of SAR (measured) = 0.012 mW/g

Peak SAR (extrapolated) = 0.018 W/kg

SAR(1 g) = 0.00968 mW/g; SAR(10 g) = 0.0061 mW/g



0 dB = 0.012mW/g

SAR MEASUREMENT PLOT 2

Ambient Temperature: 20.5 Degrees Celsius
Liquid Temperature: 20.0 Degrees Celsius
Humidity: 48.0 %



Test Date: 24 September 2004

File Name: [Tilted Right 1600 MHz Extended Antenna \(DAE359 Probe1380\) 24-09-04.da4](#)

DUT: Iridium Satellite Phone; Type: SUG0088MBR 9505A; Serial: 600026

* Communication System: 1600 MHz Satellite; Frequency: 1618.25 MHz; Duty Cycle: 1:9.2

* Medium parameters used: $\sigma = 1.2656$; mho/m, $\epsilon_r = 38.5475$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1380; ConvF(5.3, 5.3, 5.3)

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

Channel 120 Test/Area Scan (121x51x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 3.3 V/m; Power Drift = 0.1 dB

Maximum value of SAR (interpolated) = 0.016 mW/g

Channel 120 Test/Area Scan 2 (61x61x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 3.3 V/m; Power Drift = 0.1 dB

Maximum value of SAR (interpolated) = 0.017 mW/g

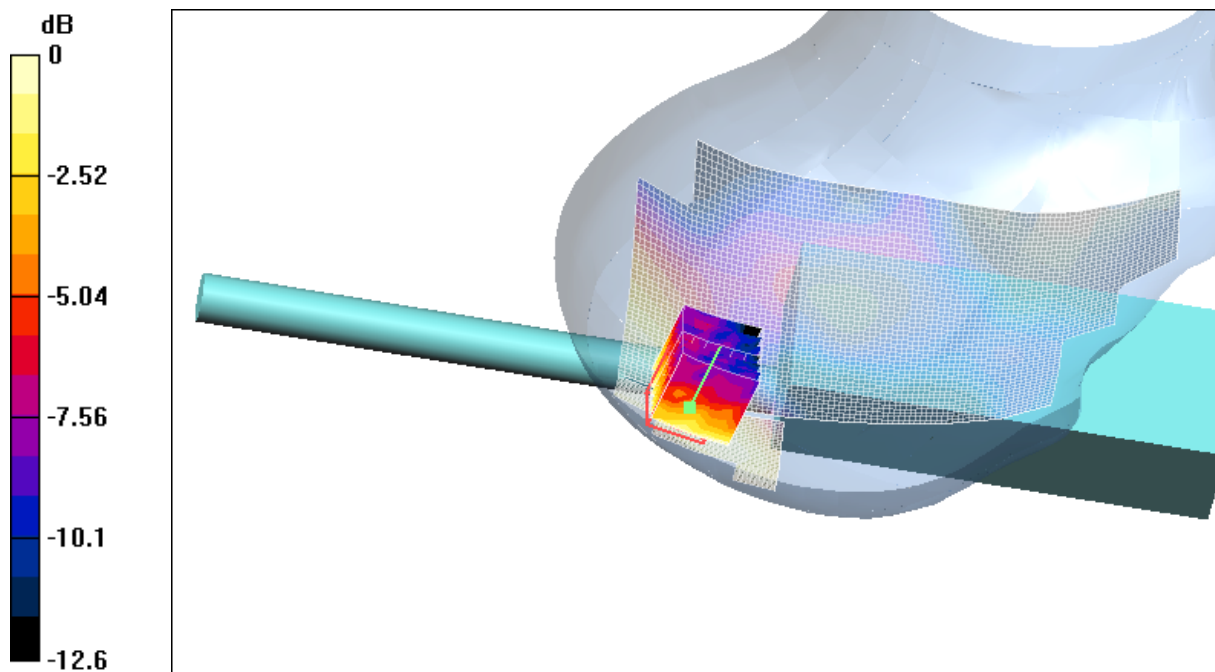
Channel 120 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.3 V/m; Power Drift = 0.1 dB

Maximum value of SAR (measured) = 0.016 mW/g

Peak SAR (extrapolated) = 0.030 W/kg

SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.00962 mW/g



SAR MEASUREMENT PLOT 3

Ambient Temperature: 20.5 deg Celsius
Liquid Temperature: 20.0 Degrees Celsius
Humidity: 48.0 %



Test Date: 24 September 2004

File Name: [Tilted Right 1600 MHz \(DAE359 Probe1380\) 24-09-04.da4](#)

DUT: Iridium Satellite Phone; Type: SUG0088MBR 9505A; Serial: 600026

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

* Medium parameters used: $\sigma = 1.25417$; mho/m, $\epsilon_r = 38.5808$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1380; ConvF(5.3, 5.3, 5.3)

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

Channel 000 Test/Area Scan (121x51x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 11.9 V/m; Power Drift = -0.3 dB

Maximum value of SAR (interpolated) = 0.250 mW/g

Channel 000 Test/Area Scan 2 (51x51x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 11.9 V/m; Power Drift = -0.3 dB

Maximum value of SAR (interpolated) = 0.421 mW/g

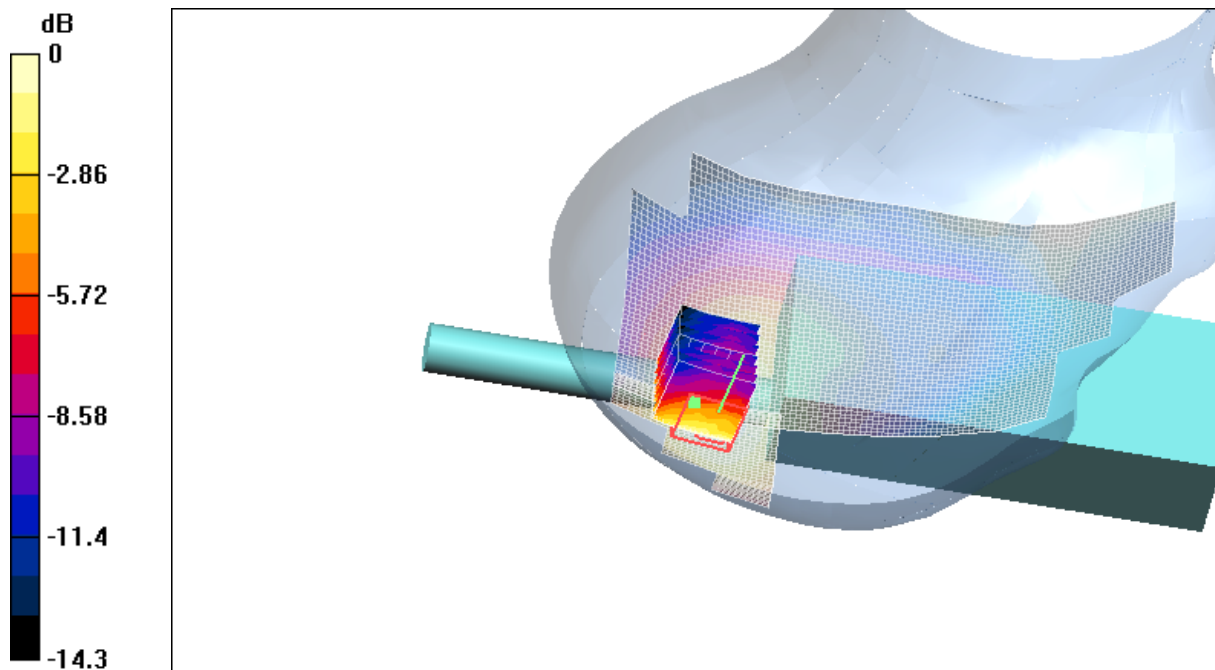
Channel 000 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.9 V/m; Power Drift = -0.3 dB

Maximum value of SAR (measured) = 0.353 mW/g

Peak SAR (extrapolated) = 0.727 W/kg

SAR(1 g) = 0.326 mW/g; SAR(10 g) = 0.199 mW/g



0 dB = 0.353mW/g

SAR MEASUREMENT PLOT 4

Ambient Temperature: 20.5 Degrees Celsius
Liquid Temperature: 20.0 Degrees Celsius
Humidity: 48.0 %



Test Date: 24 September 2004

File Name: [Tilted Right 1600 MHz \(DAE359 Probe1380\) 24-09-04.da4](#)

DUT: Iridium Satellite Phone; Type: SUG0088MBR 9505A; Serial: 600026

* Communication System: 1600 MHz Satellite; Frequency: 1618.25 MHz; Duty Cycle: 1:9.2

* Medium parameters used: $\sigma = 1.2656$; mho/m, $\epsilon_r = 38.5475$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1380; ConvF(5.3, 5.3, 5.3)

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

Channel 120 Test/Area Scan (121x51x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 13.2 V/m; Power Drift = -0.4 dB

Maximum value of SAR (interpolated) = 0.300 mW/g

Channel 120 Test/Area Scan 2 (51x51x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 13.2 V/m; Power Drift = -0.4 dB

Maximum value of SAR (interpolated) = 0.464 mW/g

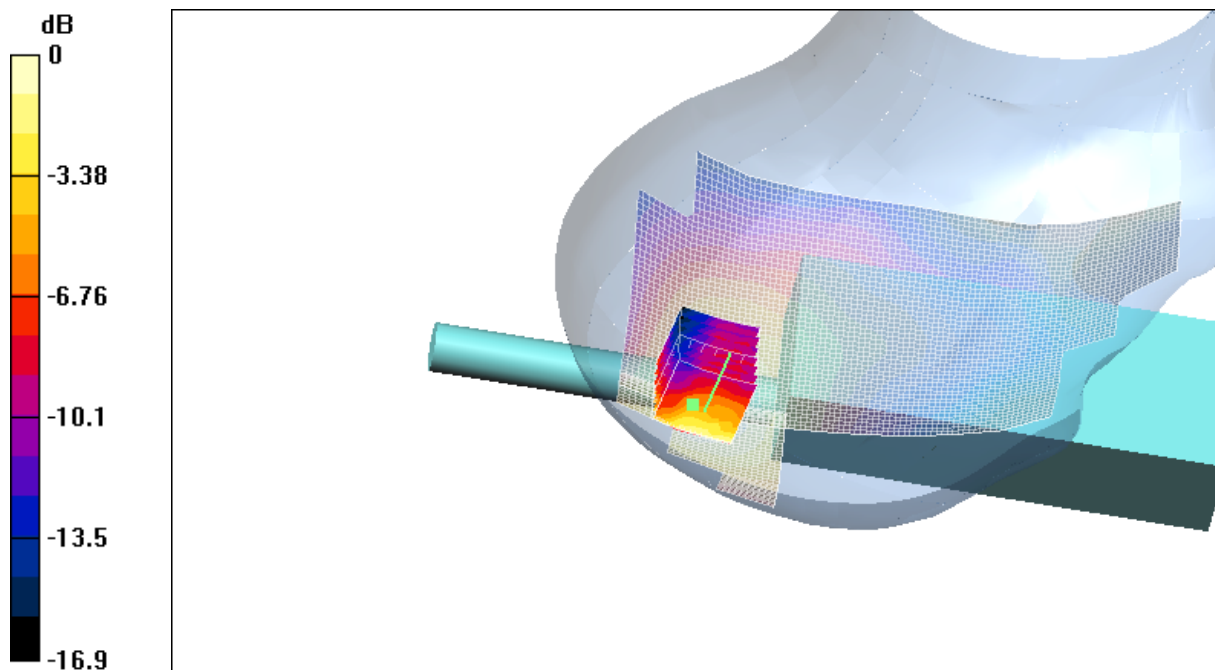
Channel 120 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.2 V/m; Power Drift = -0.4 dB

Maximum value of SAR (measured) = 0.389 mW/g

Peak SAR (extrapolated) = 0.702 W/kg

SAR(1 g) = 0.357 mW/g; SAR(10 g) = 0.219 mW/g



0 dB = 0.389mW/g

SAR MEASUREMENT PLOT 5

Ambient Temperature: 20.5 Degrees Celsius
Liquid Temperature: 20.0 Degrees Celsius
Humidity: 48.0 %



Test Date: 24 September 2004

File Name: [Tilted Right 1600 MHz \(DAE359 Probe1380\) 24-09-04.da4](#)

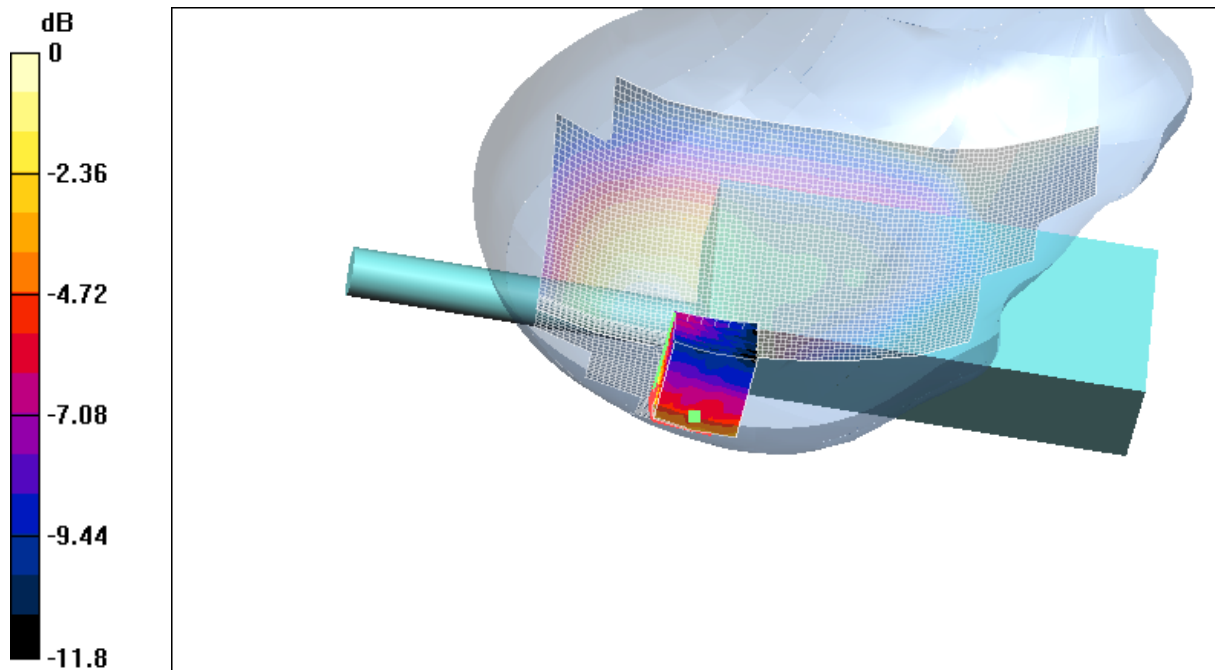
DUT: Iridium Satellite Phone; Type: SUG0088MBR 9505A; Serial: 600026

* Communication System: 1600 MHz Satellite; Frequency: 1626.5 MHz; Duty Cycle: 1:9.2
 * Medium parameters used: $\sigma = 1.27277$; mho/m, $\epsilon_r = 38.513$; $\rho = 1000 \text{ kg/m}^3$
 - Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1380; ConvF(5.3, 5.3, 5.3)
 - Phantom: SAM 22; Serial: 1260; Phantom section: Right Section
Channel 240 Test/Area Scan (121x51x1): Measurement grid: dx=20mm, dy=20mm
 Reference Value = 8.87 V/m; Power Drift = -0.2 dB
 Maximum value of SAR (interpolated) = 0.311 mW/g

Channel 240 Test/Area Scan 2 (51x51x1): Measurement grid: dx=20mm, dy=20mm
 Reference Value = 8.87 V/m; Power Drift = -0.2 dB
 Maximum value of SAR (interpolated) = 0.141 mW/g

Channel 240 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 8.87 V/m; Power Drift = -0.2 dB
 Maximum value of SAR (measured) = 0.213 mW/g
 Peak SAR (extrapolated) = 0.369 W/kg

SAR(1 g) = 0.177 mW/g; SAR(10 g) = 0.117 mW/g



0 dB = 0.213mW/g

SAR MEASUREMENT PLOT 6

Ambient Temperature: 20.5 Degrees Celsius
Liquid Temperature: 20.0 Degrees Celsius
Humidity: 48.0 %



Test Date: 24 September 2004

File Name: [Touch Left 1600 MHz \(DAE359 Probe1380\) 24-09-04.da4](#)

DUT: Iridium Satellite Phone; Type: SUG0088MBR 9505A; Serial: 600026

* Communication System: 1600 MHz Satellite; Frequency: 1618.25 MHz; Duty Cycle: 1:9.2

* Medium parameters used: $\sigma = 1.2656$; mho/m, $\epsilon_r = 38.5475$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn359; 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

Reference Value = 5.8 V/m; Power Drift = 0.1 dB

Maximum value of SAR (interpolated) = 0.138 mW/g

Channel 120 Test/Area Scan 2 (51x51x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 5.8 V/m; Power Drift = 0.1 dB

Maximum value of SAR (interpolated) = 0.193 mW/g

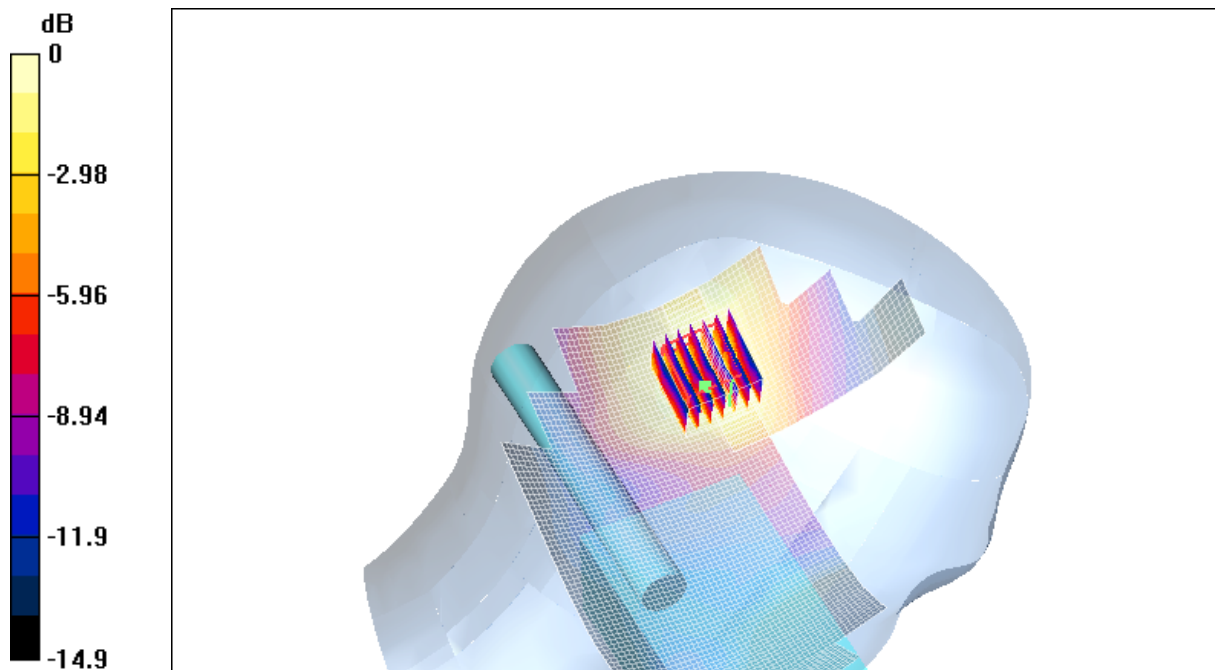
Channel 120 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.8 V/m; Power Drift = 0.1 dB

Maximum value of SAR (measured) = 0.202 mW/g

Peak SAR (extrapolated) = 0.402 W/kg

SAR(1 g) = 0.123 mW/g; SAR(10 g) = 0.072 mW/g



0 dB = 0.202mW/g

SAR MEASUREMENT PLOT 7

Ambient Temperature:	20.5 Degrees Celsius
Liquid Temperature:	20.0 Degrees Celsius
Humidity:	48.0 %



Test Date: 24 September 2004

File Name: [Touch Left 1600 MHz Extended Antenna \(DAE359 Probe1380\) 24-09-04.da4](#)

DUT: Iridium Satellite Phone; Type: SUG0088MBR 9505A; Serial: 600026

* Communication System: 1600 MHz Satellite; Frequency: 1618.25 MHz; Duty Cycle: 1:9.2

* Medium parameters used: $\sigma = 1.2656$; mho/m, $\epsilon_r = 38.5475$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn359; 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

Reference Value = 1.28 V/m; Power Drift = -0.4 dB

Maximum value of SAR (interpolated) = 0.016 mW/g

Channel 120 Test/Area Scan 2 (61x61x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 1.28 V/m; Power Drift = -0.8 dB

Maximum value of SAR (interpolated) = 0.021 mW/g

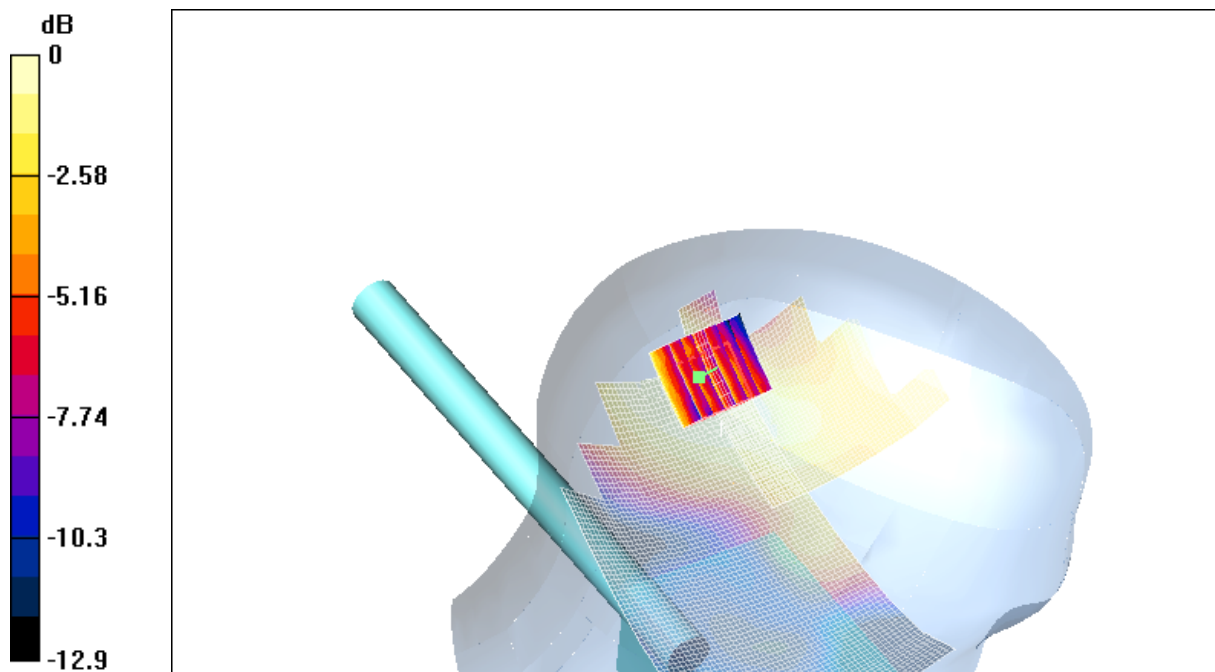
Channel 120 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.28 V/m; Power Drift = -0.4 dB

Maximum value of SAR (measured) = 0.019 mW/g

Peak SAR (extrapolated) = 0.034 W/kg

SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.011 mW/g



SAR MEASUREMENT PLOT 8

Ambient Temperature: 20.5 Degrees Celsius
Liquid Temperature: 20.0 Degrees Celsius
Humidity: 48.0 %



Test Date: 24 September 2004

File Name: [Tilted Left 1600 MHz \(DAE359 Probe1380\) 24-09-04.da4](#)

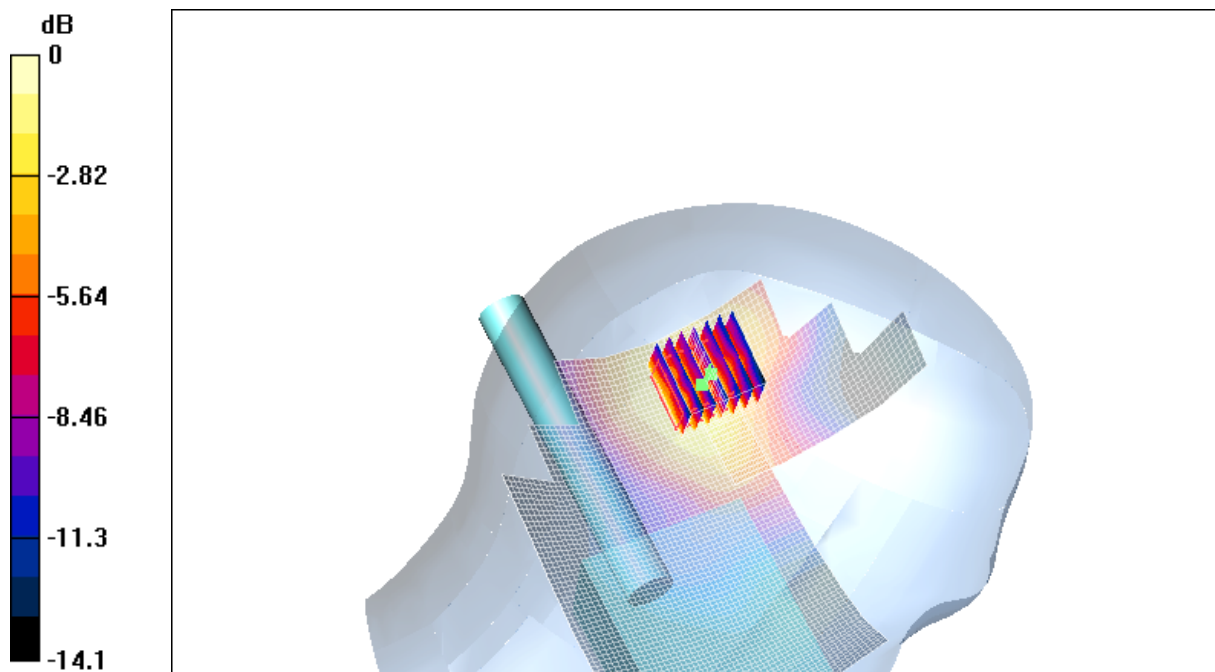
DUT: Iridium Satellite Phone; Type: SUG0088MBR 9505A; Serial: 600026

* Communication System: 1600 MHz Satellite; Frequency: 1618.25 MHz; Duty Cycle: 1:9.2
 * Medium parameters used: $\sigma = 1.2656$; mho/m, $\epsilon_r = 38.5475$; $\rho = 1000 \text{ kg/m}^3$
 - Electronics: DAE3 Sn359; 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
 Reference Value = 5 V/m; Power Drift = 0.5 dB
 Maximum value of SAR (interpolated) = 0.118 mW/g

Channel 120 Test/Area Scan 2 (51x51x1): Measurement grid: dx=20mm, dy=20mm
 Reference Value = 5 V/m; Power Drift = 0.5 dB
 Maximum value of SAR (interpolated) = 0.138 mW/g

Channel 120 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 5 V/m; Power Drift = 0.5 dB
 Maximum value of SAR (measured) = 0.202 mW/g
 Peak SAR (extrapolated) = 0.418 W/kg

SAR(1 g) = 0.154 mW/g; SAR(10 g) = 0.091 mW/g



0 dB = 0.202mW/g

SAR MEASUREMENT PLOT 9

Ambient Temperature: 20.5 Degrees Celsius
Liquid Temperature: 20.0 Degrees Celsius
Humidity: 48.0 %



Test Date: 24 September 2004

File Name: [Tilted Left 1600 MHz Extended Antenna \(DAE359 Probe1380\) 24-09-04.da4](#)

DUT: Iridium Satellite Phone; Type: SUG0088MBR 9505A; Serial: 600026

* Communication System: 1600 MHz Satellite; Frequency: 1618.25 MHz; Duty Cycle: 1:9.2

* Medium parameters used: $\sigma = 1.2656$; mho/m, $\epsilon_r = 38.5475$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn359; 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

Reference Value = 3.93 V/m; Power Drift = 0.3 dB

Maximum value of SAR (interpolated) = 0.026 mW/g

Channel 120 Test/Area Scan 2 (51x51x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 3.93 V/m; Power Drift = 0.3 dB

Maximum value of SAR (interpolated) = 0.032 mW/g

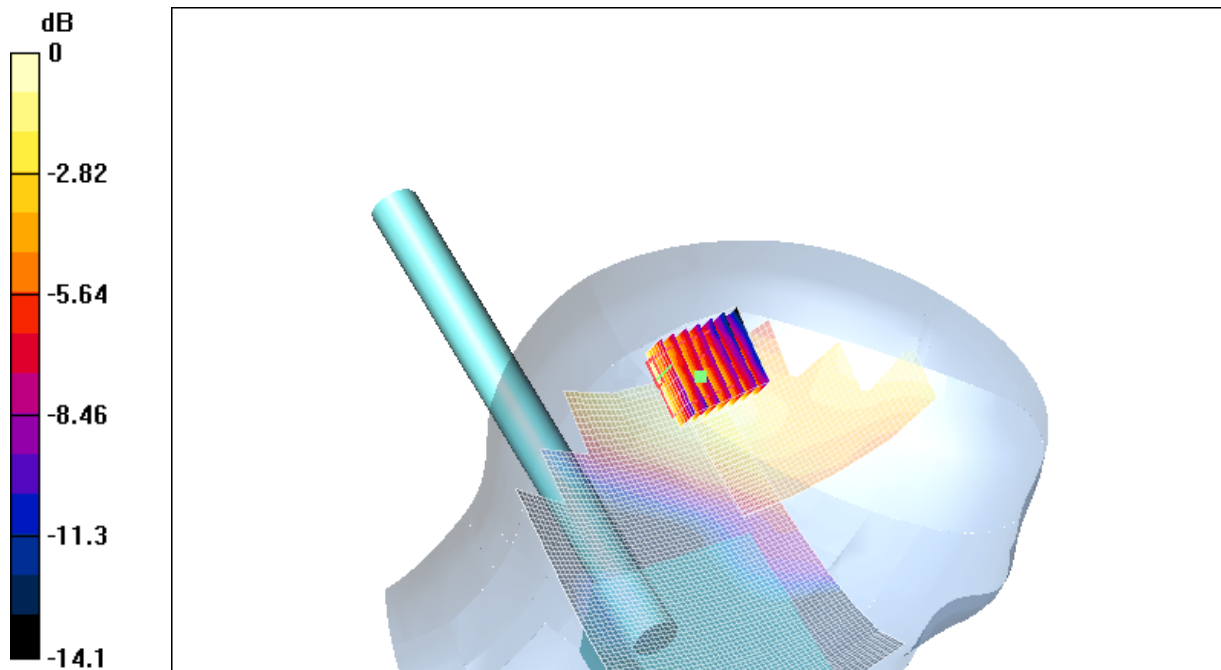
Channel 120 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.93 V/m; Power Drift = 0.3 dB

Maximum value of SAR (measured) = 0.032 mW/g

Peak SAR (extrapolated) = 0.051 W/kg

SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.019 mW/g



0 dB = 0.032mW/g

SAR MEASUREMENT PLOT 10

Ambient Temperature: 20.5 Degrees Celsius
Liquid Temperature: 20.0 Degrees Celsius
Humidity: 48.0 %



Test Date: 24 September 2004

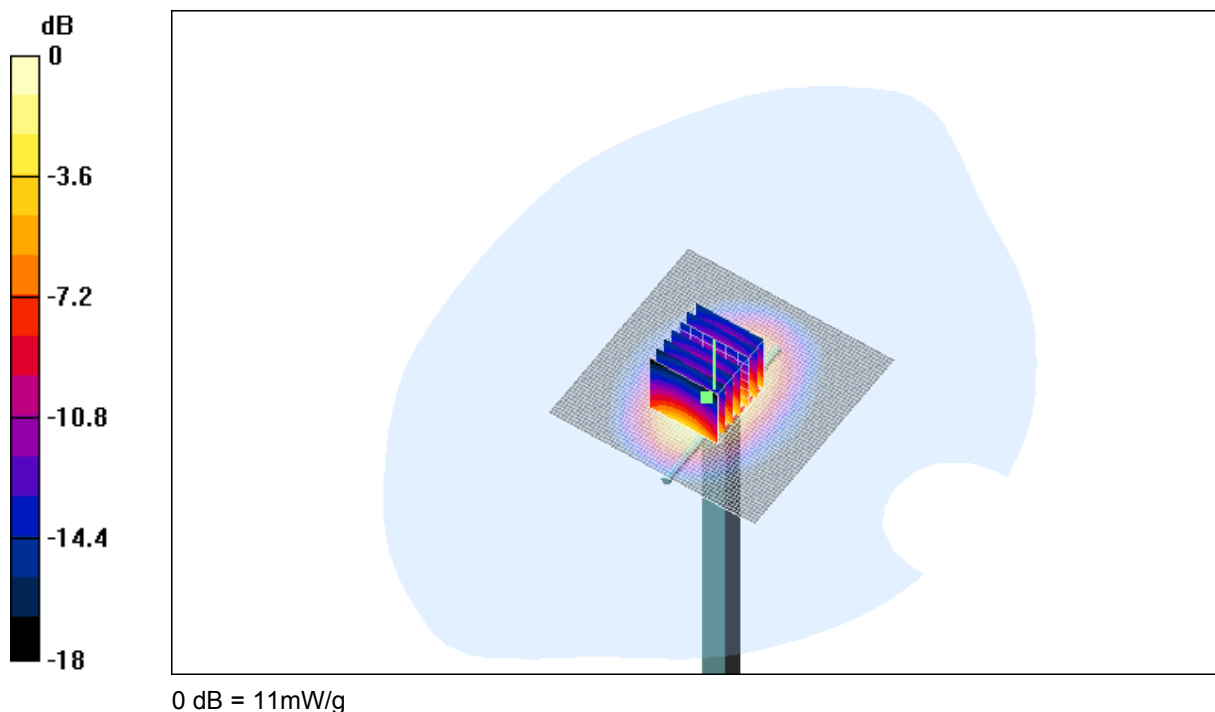
File Name: [Validation 1640 MHz \(DAE359 Probe1380\) 24-09-04.da4](#)

DUT: Dipole 1640 MHz; Type: DV1640V2; Serial: 314

* Communication System: CW 1640 MHz; Frequency: 1640 MHz; Duty Cycle: 1:1
 * Medium parameters used: $\sigma = 1.27781$; mho/m, $\epsilon_r = 38.4456$; $\rho = 1000 \text{ kg/m}^3$
 - Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1380; ConvF(5.3, 5.3, 5.3)
 - Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section
Channel 1 Test/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
 Reference Value = 91.7 V/m; Power Drift = -0.0 dB
 Maximum value of SAR (interpolated) = 11.4 mW/g

Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 91.7 V/m; Power Drift = -0.0 dB
 Maximum value of SAR (measured) = 11 mW/g
 Peak SAR (extrapolated) = 22.2 W/kg

SAR(1 g) = 8.89 mW/g; SAR(10 g) = 4.39 mW/g



SAR MEASUREMENT PLOT 11

Ambient Temperature: 20.5 Degrees Celsius
Liquid Temperature: 20.0 Degrees Celsius
Humidity: 48.0 %



APPENDIX C

SAR TESTING EQUIPMENT CALIBRATION CERTIFICATE ATTACHMENTS

Calibration Certificate Attachments

- | | |
|--|---------|
| 1. 1600MHz E-Field Probe Calibration Sheet | 3 Pages |
| 2. 1610MHz Dipole Calibration Sheet | 6 Pages |

