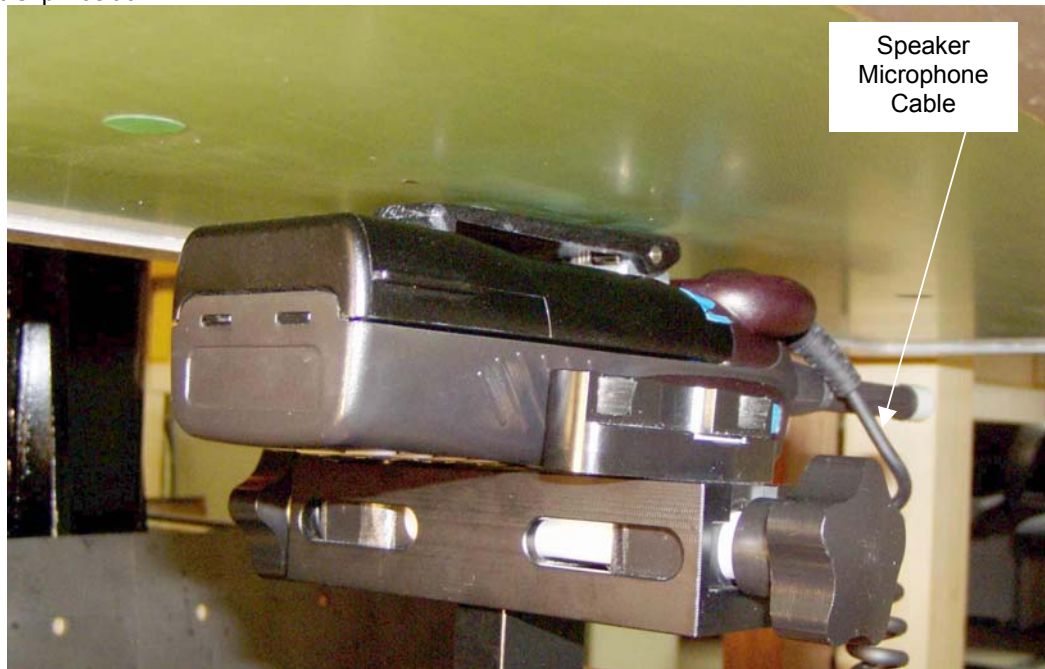


APPENDIX A4 TEST SET UP PHOTOGRAPHS

Belt Clip Position



Belt Clip Position



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: SAR Measurement Plot Numbers – Belt-Clip Position

Plot 1	Belt-Clip Position – Ant Low - CH#1
Plot 2	Belt-Clip Position – Ant Mid - CH#2
Plot 3	Belt-Clip Position – Ant High - CH#3
Plot 4	Belt-Clip Position – Ant Mini Low - CH#1
Plot 5	Belt-Clip Position – Ant Mini Mid - CH#2
Plot 6	Belt-Clip Position – Ant Mini High - CH#3
Z-Axis Graphs for Plots 1 to 6	
Plot 7	Belt-Clip Pouch Position – Ant Low - CH#1
Plot 8	Belt-Clip Pouch Position – Ant Mid - CH#2
Plot 9	Belt-Clip Pouch Position – Ant Low - CH#3
Plot 10	Belt-Clip Pouch Position – Ant Mini Low – CH#1
Plot 11	Belt-Clip Pouch Position – Ant Mini Mid - CH#2
Plot 12	Belt-Clip Pouch Position – Ant Mini High - CH#3
Z-Axis Graphs for Plots 7 to 12	
Plot 13	Belt-Clip SKR-MIC Position – Ant Low - CH#1
Plot 14	Belt-Clip SKR-MIC Position – Ant Mid - CH#2
Plot 15	Belt-Clip SKR-MIC Position – Ant High - CH#3
Plot 16	Belt-Clip SKR-MIC Position – Ant Mini Low - CH#1
Plot 17	Belt-Clip SKR-MIC Position – Ant Mini Mid - CH#2
Plot 18	Belt-Clip SKR-MIC Position – Ant Mini High - CH#3
Z-Axis Graphs for Plots 13 to 18	

Table 18: SAR Measurement Plot Numbers – Face Position

Plot 19	Face Position – Ant Low - CH#1
Plot 20	Face Position – Ant Mid - CH#2
Plot 21	Face Position – Ant High - CH#3
Plot 22	Face Position – Ant Mini Low - CH#1
Plot 23	Face Position – Ant Mini Mid - CH#2
Plot 24	Face Position – Ant Mini High - CH#3
Z-Axis Graphs for Plots 19 to 24	
Plot 25	Face SKR-MIC Position – Ant Low - CH#1
Plot 26	Face SKR-MIC Position – Ant Mid - CH#2
Plot 27	Face SKR-MIC Position – Ant High - CH#3
Plot 28	Face SKR-MIC Position – Ant Mini Low - CH#1
Plot 29	Face SKR-MIC Position – Ant Mini Mid - CH#2
Plot 30	Face SKR-MIC Position – Ant Mini High - CH#3
Z-Axis Graphs for Plots 25 to 30	

Table 19: 300MHz Validation Plot Numbers

Plot 31	Validation 300MHz 7 th Sept 2004
Plot 32	Validation 300MHz 8 th Sept 2004
Plot 33	Validation 300MHz 9 th Sept 2004
Z-Axis Graphs for Plots 31 to 33	

Test Date: 07 September 2004

File Name: [150 MHz Belt Clip \(DAE442 Probe1377\) Ant Low 07-09-04.da4](#)

DUT: Tait Transceiver Antenna Low; Type: TPAB1A; Serial: 21000005

* Communication System: CW 150 MHz; Frequency: 136 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.767968$; mho/m, $\epsilon_r = 62.1133$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.1, 8.1, 8.1)

- Phantom: Flat Phantom 9.1; Serial: P 9.1; Phantom section: Flat 2.2 Section

Channel 1 Test/Area Scan (81x191x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 39.3 V/m; Power Drift = -0.1 dB

Maximum value of SAR (interpolated) = 3.02 mW/g

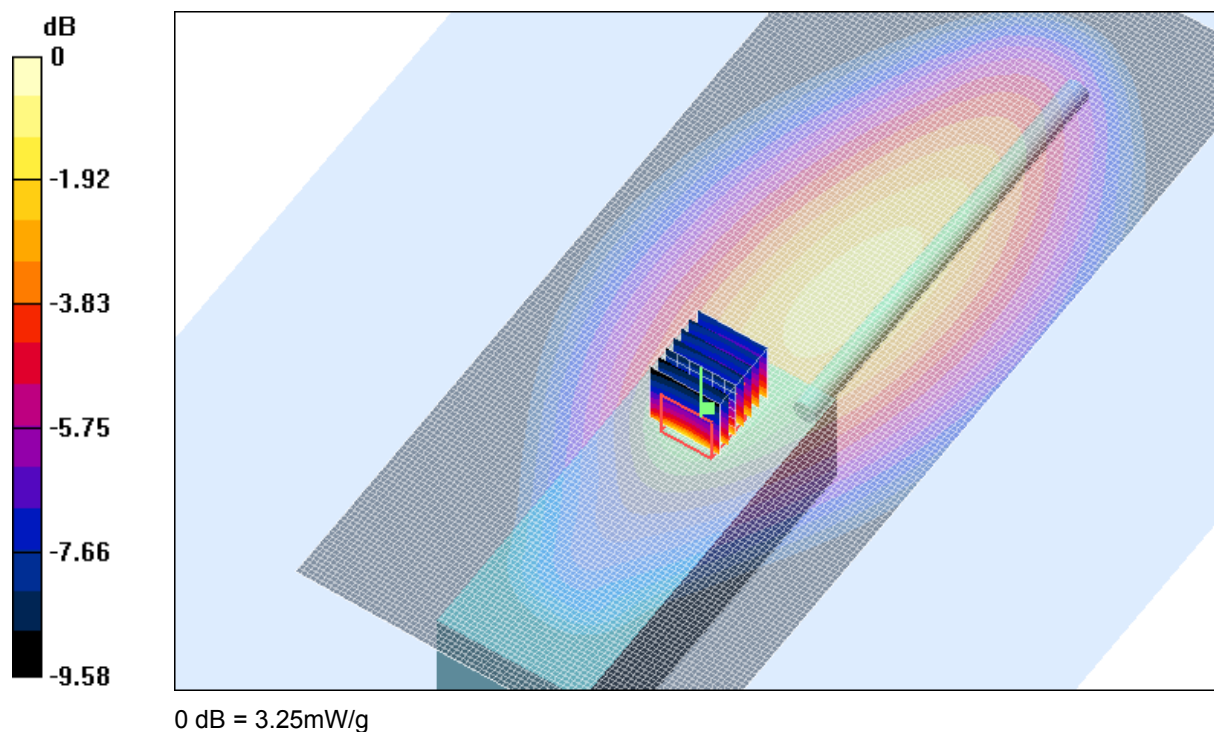
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 39.3 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 3.25 mW/g

Peak SAR (extrapolated) = 11.2 W/kg

SAR(1 g) = 3.15 mW/g; SAR(10 g) = 1.69 mW/g



SAR MEASUREMENT PLOT 1

Ambient Temperature
Liquid Temperature
Humidity

21.0 Degrees Celsius
20.5 Degrees Celsius
42.0 %

Test Date: 07 September 2004

File Name: [150 MHz Belt Clip \(DAE442 Probe1377\) Ant Middle 07-09-04.da4](#)

DUT: Tait Transceiver Antenna Middle; Type: TPAB1A; Serial: 21000005

* Communication System: CW 150 MHz; Frequency: 155 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.782679$; mho/m, $\epsilon_r = 61.3938$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.1, 8.1, 8.1)

- Phantom: Flat Phantom 9.1; Serial: P 9.1; Phantom section: Flat 2.2 Section

Channel 2 Test/Area Scan (81x181x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 42.6 V/m; Power Drift = -0.4 dB

Maximum value of SAR (interpolated) = 2.77 mW/g

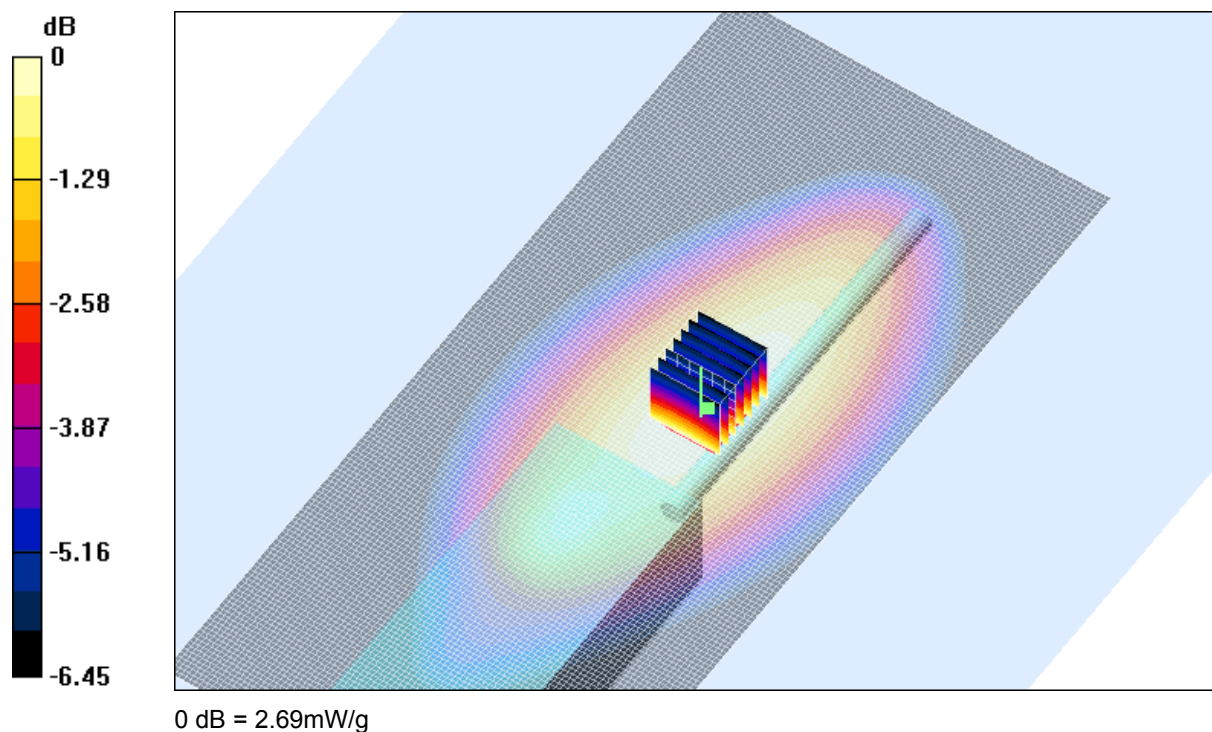
Channel 2 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 42.6 V/m; Power Drift = -0.4 dB

Maximum value of SAR (measured) = 2.69 mW/g

Peak SAR (extrapolated) = 3.97 W/kg

SAR(1 g) = 2.61 mW/g; SAR(10 g) = 1.95 mW/g



SAR MEASUREMENT PLOT 2

Ambient Temperature
Liquid Temperature
Humidity

21.0 Degrees Celsius
20.5 Degrees Celsius
42.0 %

Test Date: 07 September 2004

File Name: [150 MHz Belt Clip \(DAE442 Probe1377\) Ant High 07-09-04.da4](#)

DUT: Tait Transceiver Antenna High; Type: TPAB1A; Serial: 21000005

* Communication System: CW 150 MHz; Frequency: 174 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.7944$; mho/m, $\epsilon_r = 60.7701$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.1, 8.1, 8.1)

- Phantom: Flat Phantom 9.1; Serial: P 9.1; Phantom section: Flat 2.2 Section

Channel 3 Test/Area Scan (81x181x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 35.8 V/m; Power Drift = -0.4 dB

Maximum value of SAR (interpolated) = 1.82 mW/g

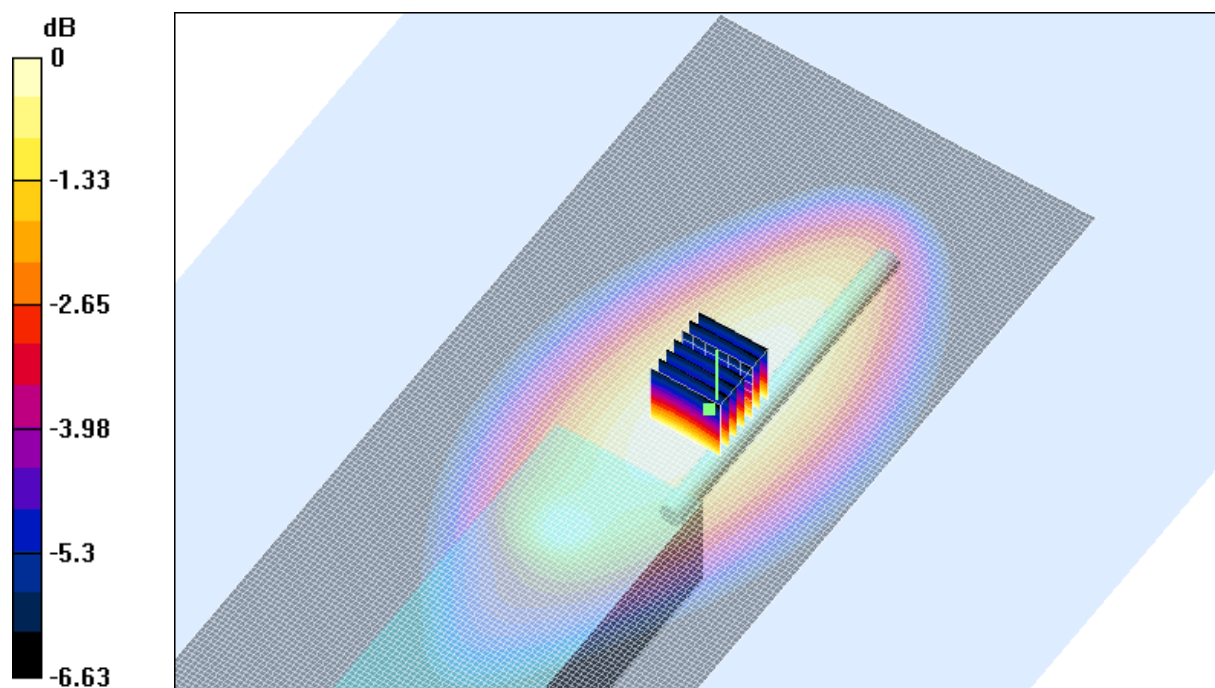
Channel 3 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.8 V/m; Power Drift = -0.4 dB

Maximum value of SAR (measured) = 1.75 mW/g

Peak SAR (extrapolated) = 2.58 W/kg

SAR(1 g) = 1.69 mW/g; SAR(10 g) = 1.26 mW/g



0 dB = 1.75mW/g

SAR MEASUREMENT PLOT 3

Ambient Temperature
Liquid Temperature
Humidity

21.0 Degrees Celsius
20.5 Degrees Celsius
42.0 %

Test Date: 07 September 2004

File Name: [150 MHz Belt Clip \(DAE442 Probe1377\) Ant Mini Low 07-09-04.da4](#)

DUT: Tait Transceiver Antenna Mini Low; Type: TPAB1A; Serial: 21000005

* Communication System: CW 150 MHz; Frequency: 136 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.767968$; mho/m, $\epsilon_r = 62.1133$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.1, 8.1, 8.1)

- Phantom: Flat Phantom 9.1; Serial: P 9.1; Phantom section: Flat 2.2 Section

Channel 1 Test/Area Scan (81x171x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 42.3 V/m; Power Drift = -0.2 dB

Maximum value of SAR (interpolated) = 2.16 mW/g

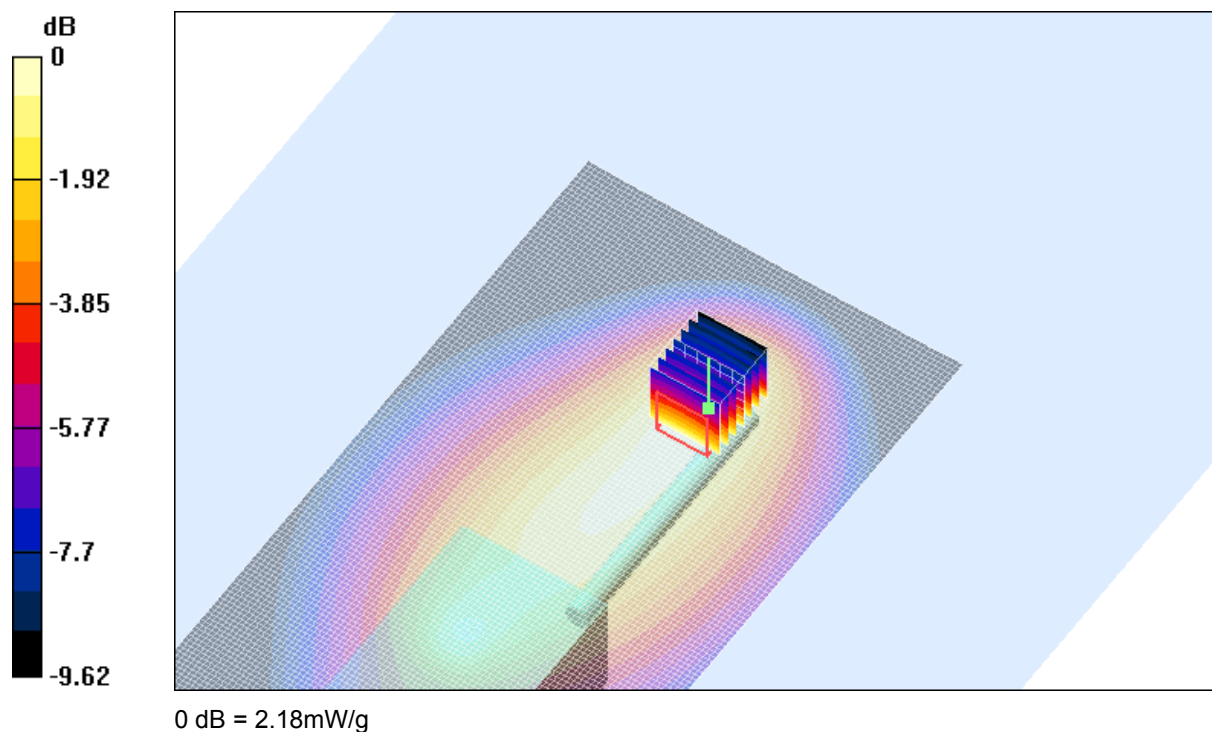
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 42.3 V/m; Power Drift = -0.2 dB

Maximum value of SAR (measured) = 2.18 mW/g

Peak SAR (extrapolated) = 5.16 W/kg

SAR(1 g) = 2.16 mW/g; SAR(10 g) = 1.43 mW/g



SAR MEASUREMENT PLOT 4

Ambient Temperature
Liquid Temperature
Humidity

21.0 Degrees Celsius
20.5 Degrees Celsius
42.0 %

Test Date: 07 September 2004

File Name: [150 MHz Belt Clip \(DAE442 Probe1377\) Ant Mini Middle 07-09-04.da4](#)

DUT: Tait Transceiver Antenna Mini Middle; Type: TPAB1A; Serial: 21000005

* Communication System: CW 150 MHz; Frequency: 155 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.782679$; mho/m, $\epsilon_r = 61.3938$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.1, 8.1, 8.1)

- Phantom: Flat Phantom 9.1; Serial: P 9.1; Phantom section: Flat 2.2 Section

Channel 2 Test/Area Scan (81x171x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 44.1 V/m; Power Drift = -1 dB

Maximum value of SAR (interpolated) = 1.59 mW/g

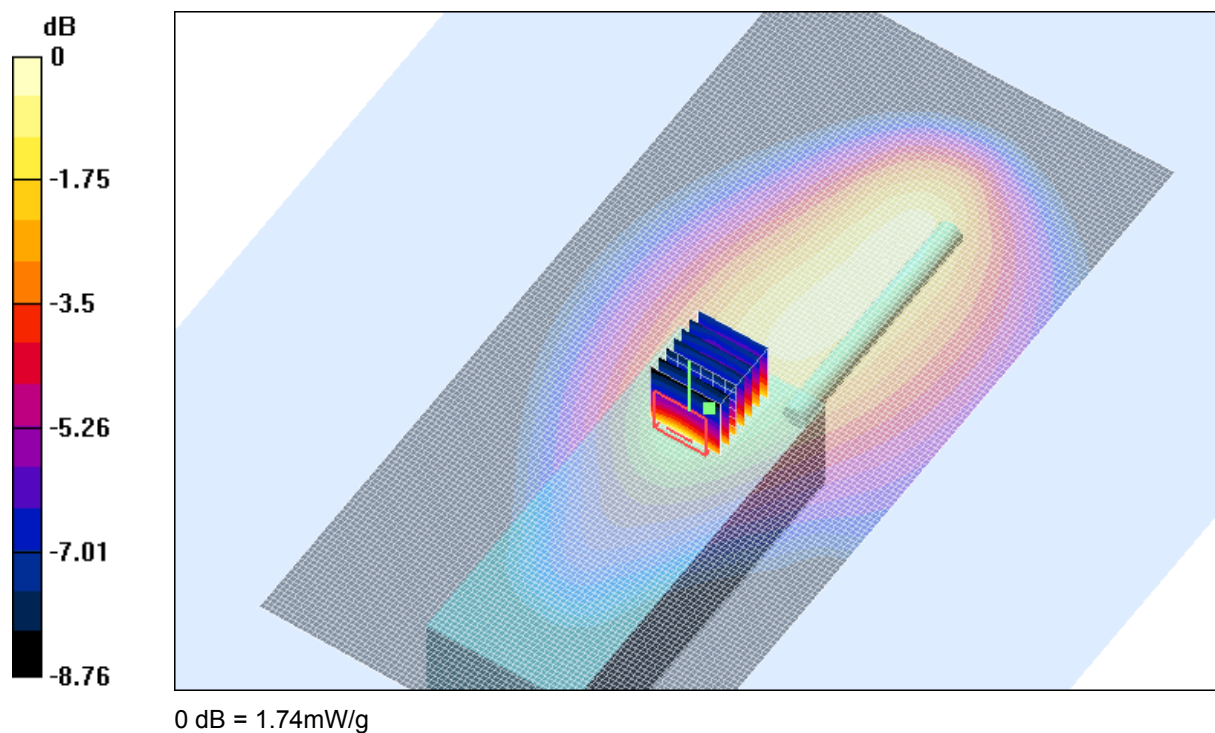
Channel 2 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 44.1 V/m; Power Drift = -1 dB

Maximum value of SAR (measured) = 1.74 mW/g

Peak SAR (extrapolated) = 5.25 W/kg

SAR(1 g) = 1.75 mW/g; SAR(10 g) = 0.993 mW/g



SAR MEASUREMENT PLOT 5

Ambient Temperature
Liquid Temperature
Humidity

21.0 Degrees Celsius
20.5 Degrees Celsius
42.0 %

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Test Date: 07 September 2004

File Name: [150 MHz Belt Clip \(DAE442 Probe1377\) Ant Mini High 07-09-04.da4](#)

DUT: Tait Transceiver Antenna Mini High; Type: TPAB1A; Serial: 21000005

* Communication System: CW 150 MHz; Frequency: 174 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.7944$; mho/m, $\epsilon_r = 60.7701$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.1, 8.1, 8.1)

- Phantom: Flat Phantom 9.1; Serial: P 9.1; Phantom section: Flat 2.2 Section

Channel 3 Test/Area Scan (81x161x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 35.4 V/m; Power Drift = -0.5 dB

Maximum value of SAR (interpolated) = 1.49 mW/g

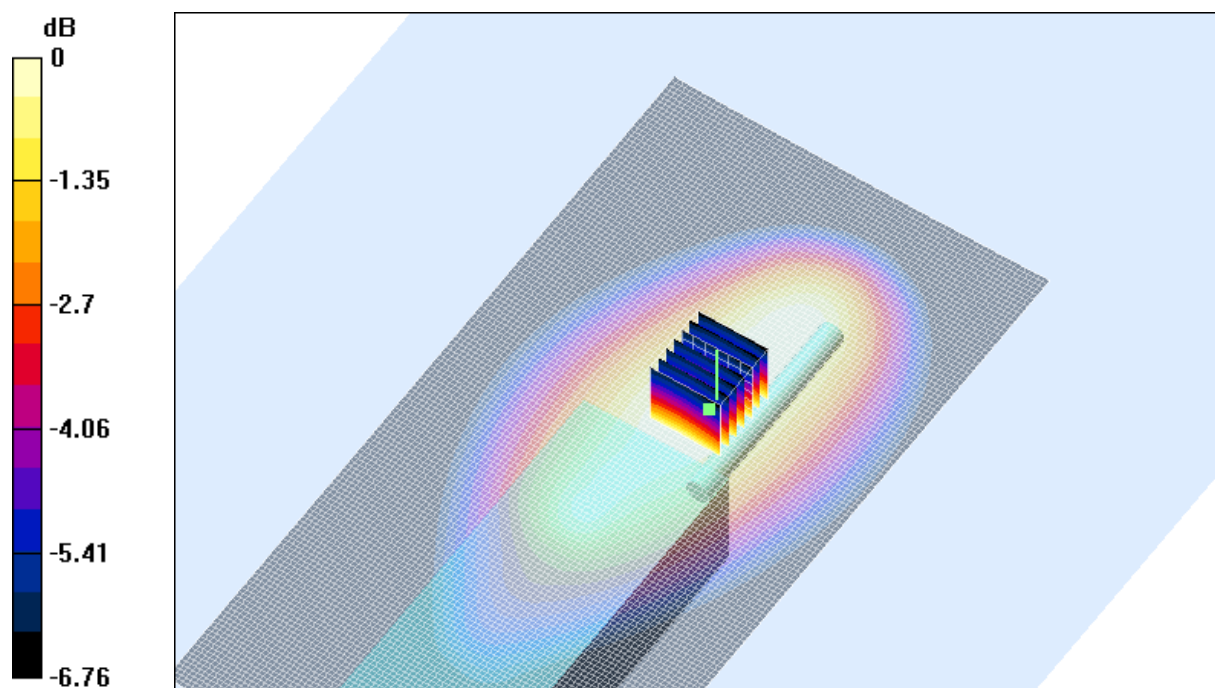
Channel 3 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.4 V/m; Power Drift = -0.5 dB

Maximum value of SAR (measured) = 1.45 mW/g

Peak SAR (extrapolated) = 2.15 W/kg

SAR(1 g) = 1.4 mW/g; SAR(10 g) = 1.04 mW/g



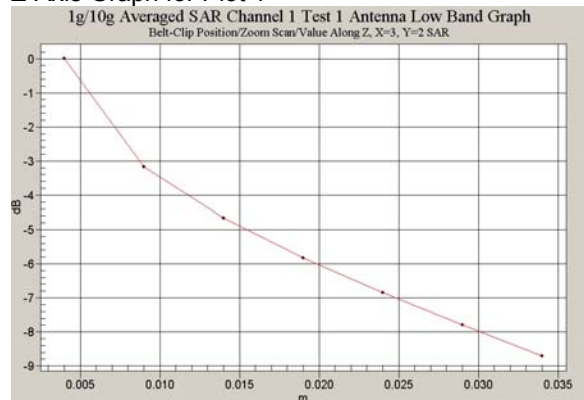
0 dB = 1.45mW/g

SAR MEASUREMENT PLOT 6

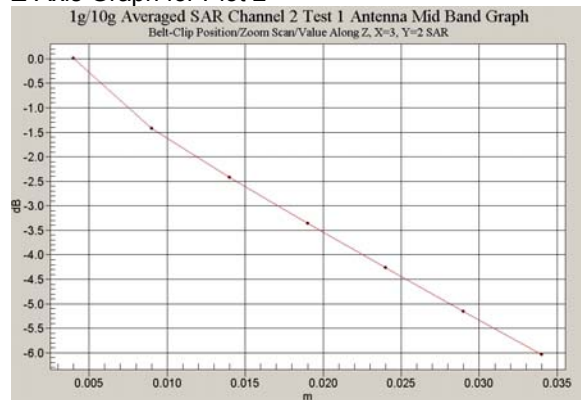
Ambient Temperature
Liquid Temperature
Humidity

21.0 Degrees Celsius
20.5 Degrees Celsius
42.0 %

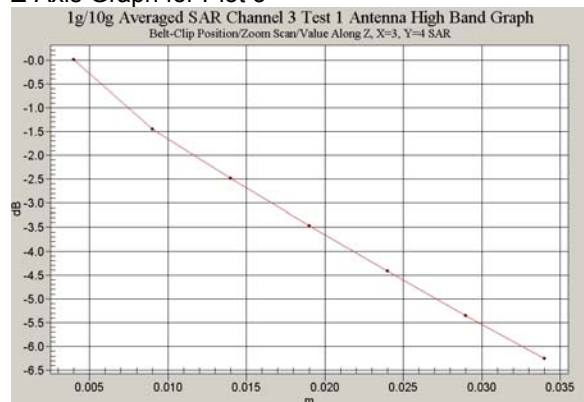
Z-Axis Graph for Plot 1



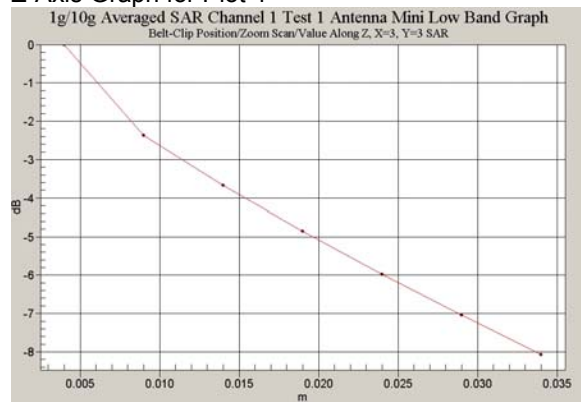
Z-Axis Graph for Plot 2



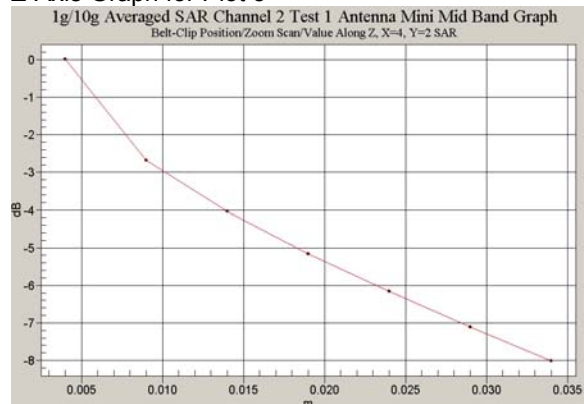
Z-Axis Graph for Plot 3



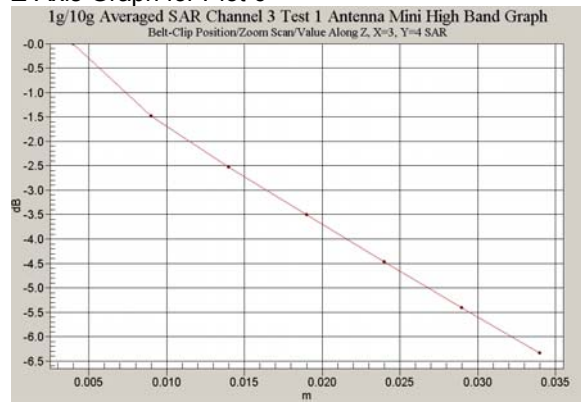
Z-Axis Graph for Plot 4



Z-Axis Graph for Plot 5



Z-Axis Graph for Plot 6



Test Date: 08 September 2004

File Name: [150 MHz Pouch \(DAE442 Probe1377\) Ant Low 08-09-04.da4](#)

DUT: Tait Transceiver Antenna Low; Type: TPAB1A; Serial: 21000005

* Communication System: CW 150 MHz; Frequency: 136 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.764814$; mho/m, $\epsilon_r = 62.025$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.1, 8.1, 8.1)

- Phantom: Flat Phantom 9.1; Serial: P 9.1; Phantom section: Flat 2.2 Section

Channel 1 Test 2/Area Scan (81x191x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 28.9 V/m; Power Drift = -0.1 dB

Maximum value of SAR (interpolated) = 1.06 mW/g

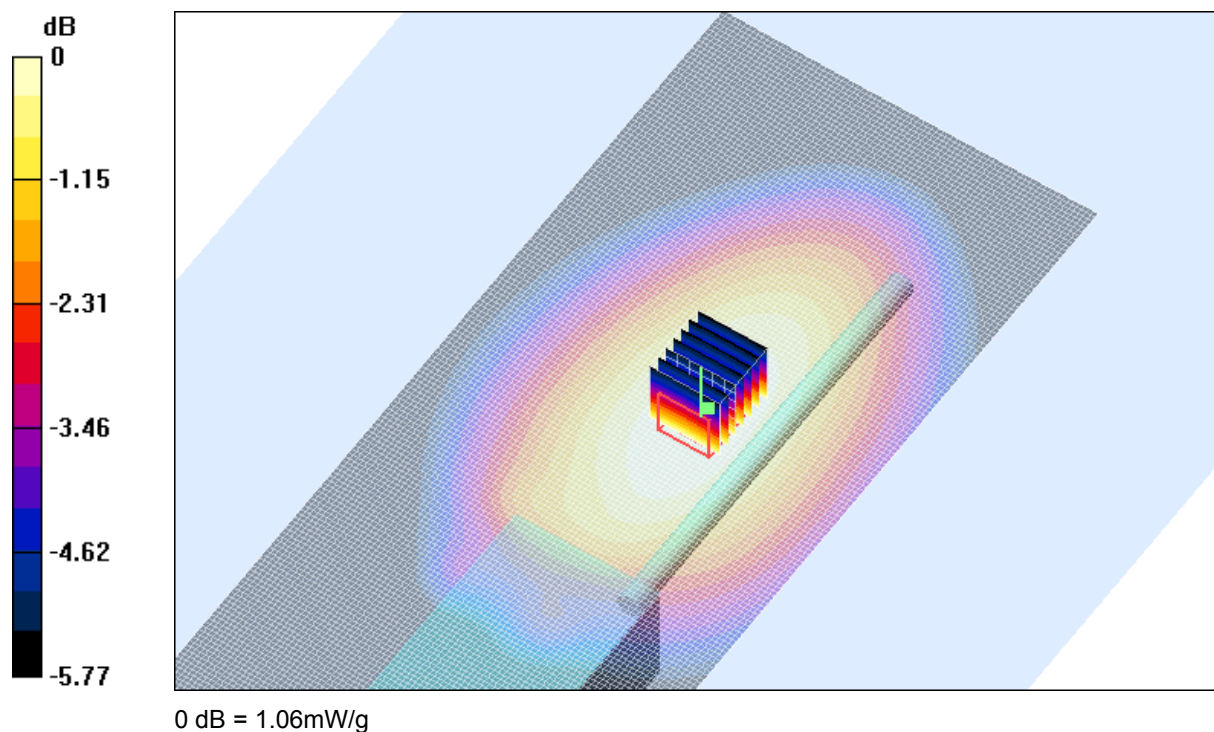
Channel 1 Test 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.9 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 1.06 mW/g

Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.790 mW/g



SAR MEASUREMENT PLOT 7

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.8 Degrees Celsius
44.0 %

Test Date: 08 September 2004

File Name: [150 MHz Pouch \(DAE442 Probe1377\) Ant Middle 08-09-04.da4](#)

DUT: Tait Transceiver Antenna Middle; Type: TPAB1A; Serial: 21000005

* Communication System: CW 150 MHz; Frequency: 155 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.779489$; mho/m, $\epsilon_r = 61.3659$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.1, 8.1, 8.1)

- Phantom: Flat Phantom 9.1; Serial: P 9.1; Phantom section: Flat 2.2 Section

Channel 2 Test/Area Scan (81x181x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 23.5 V/m; Power Drift = -0.4 dB

Maximum value of SAR (interpolated) = 1.21 mW/g

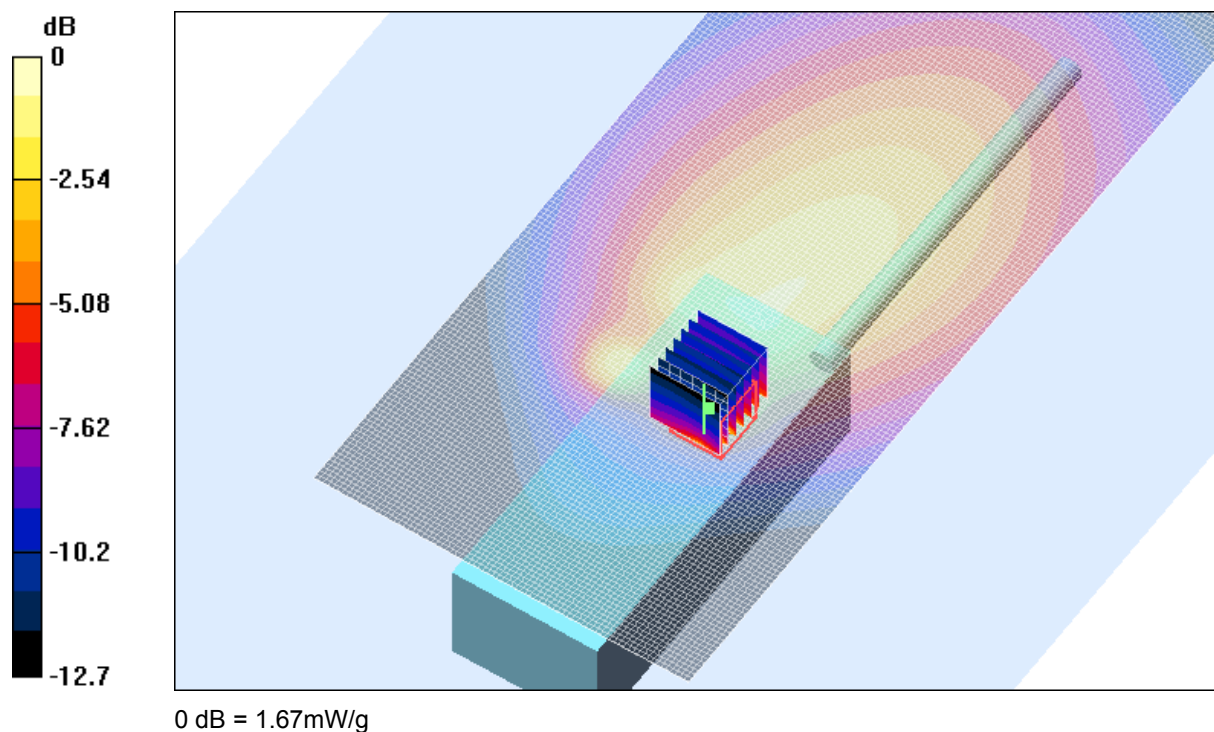
Channel 2 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.5 V/m; Power Drift = -0.4 dB

Maximum value of SAR (measured) = 1.67 mW/g

Peak SAR (extrapolated) = 37.1 W/kg

SAR(1 g) = 1.84 mW/g; SAR(10 g) = 0.585 mW/g



SAR MEASUREMENT PLOT 8

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.8 Degrees Celsius
44.0 %

Test Date: 07 September 2004

File Name: [150 MHz Pouch \(DAE442 Probe1377\) Ant High 07-09-04.da4](#)

DUT: Tait Transceiver Antenna High; Type: TPAB1A; Serial: 21000005

* Communication System: CW 150 MHz; Frequency: 174 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.7944$; mho/m, $\epsilon_r = 60.7701$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.1, 8.1, 8.1)

- Phantom: Flat Phantom 9.1; Serial: P 9.1; Phantom section: Flat 2.2 Section

Channel 3 Test/Area Scan (81x181x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 27.4 V/m; Power Drift = -0.3 dB

Maximum value of SAR (interpolated) = 1.19 mW/g

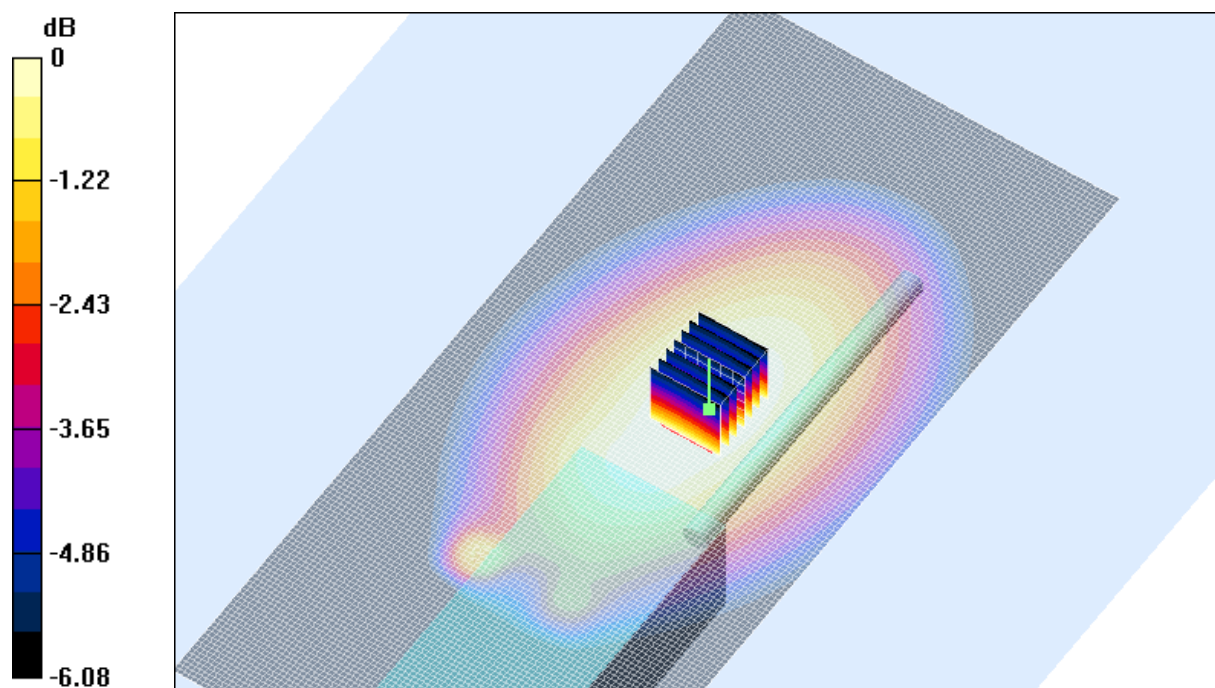
Channel 3 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.4 V/m; Power Drift = -0.3 dB

Maximum value of SAR (measured) = 1.17 mW/g

Peak SAR (extrapolated) = 1.68 W/kg

SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.863 mW/g



0 dB = 1.17mW/g

SAR MEASUREMENT PLOT 9

Ambient Temperature
Liquid Temperature
Humidity

21.0 Degrees Celsius
20.5 Degrees Celsius
42.0 %

Test Date: 08 September 2004

File Name: [150 MHz Pouch \(DAE442 Probe1377\) Ant Mini Low 08-09-04.da4](#)

DUT: Tait Transceiver Antenna Mini Low; Type: TPAB1A; Serial: 21000005

* Communication System: CW 150 MHz; Frequency: 136 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.764814$; mho/m, $\epsilon_r = 62.025$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.1, 8.1, 8.1)

- Phantom: Flat Phantom 9.1; Serial: P 9.1; Phantom section: Flat 2.2 Section

Channel 1 Test/Area Scan (81x171x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 27.5 V/m; Power Drift = -0.2 dB

Maximum value of SAR (interpolated) = 0.850 mW/g

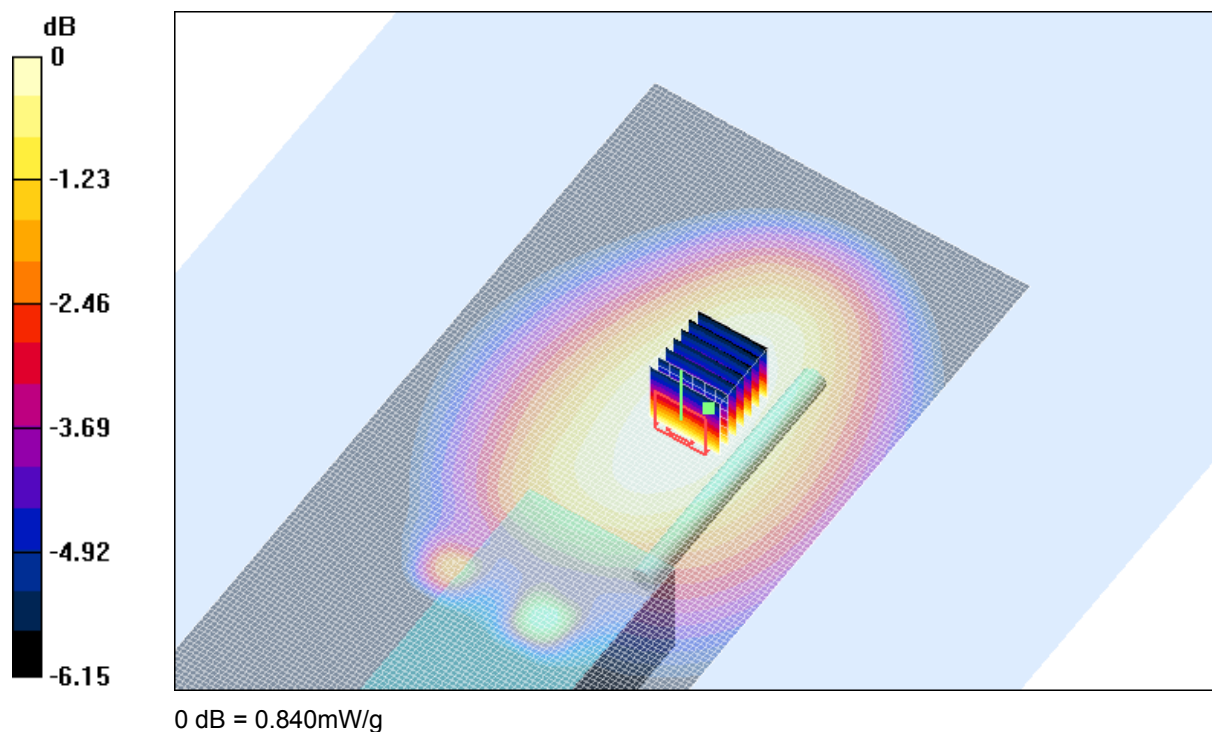
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.5 V/m; Power Drift = -0.2 dB

Maximum value of SAR (measured) = 0.840 mW/g

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.817 mW/g; SAR(10 g) = 0.625 mW/g



SAR MEASUREMENT PLOT 10

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.8 Degrees Celsius
44.0 %

Test Date: 08 September 2004

File Name: [150 MHz Pouch \(DAE442 Probe1377\) Ant Mini Middle 08-09-04.da4](#)

DUT: Tait Transceiver Antenna Mini Middle; Type: TPAB1A; Serial: 21000005

* Communication System: CW 150 MHz; Frequency: 155 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.779489$; mho/m, $\epsilon_r = 61.3659$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.1, 8.1, 8.1)

- Phantom: Flat Phantom 9.1; Serial: P 9.1; Phantom section: Flat 2.2 Section

Channel 2 Test/Area Scan (81x171x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 19.3 V/m; Power Drift = -1 dB

Maximum value of SAR (interpolated) = 0.548 mW/g

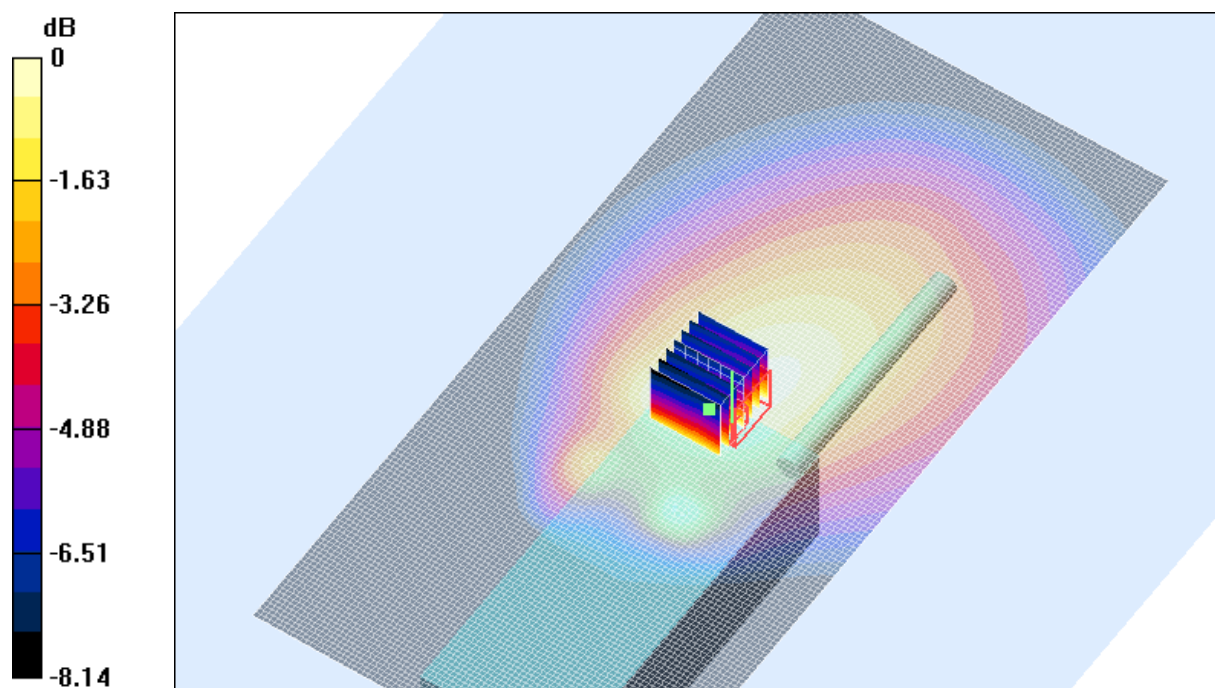
Channel 2 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.3 V/m; Power Drift = -1 dB

Maximum value of SAR (measured) = 0.580 mW/g

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.562 mW/g; SAR(10 g) = 0.379 mW/g



0 dB = 0.580mW/g

SAR MEASUREMENT PLOT 11

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.8 Degrees Celsius
44.0 %

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Test Date: 08 September 2004

File Name: [150 MHz Pouch \(DAE442 Probe1377\) Ant Mini High 08-09-04.da4](#)

DUT: Tait Transceiver Antenna Mini High; Type: TPAB1A; Serial: 21000005

* Communication System: CW 150 MHz; Frequency: 174 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.790598$; mho/m, $\epsilon_r = 60.9292$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.1, 8.1, 8.1)

- Phantom: Flat Phantom 9.1; Serial: P 9.1; Phantom section: Flat 2.2 Section

Channel 3 Test 2/Area Scan (81x161x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 27.8 V/m; Power Drift = -0.9 dB

Maximum value of SAR (interpolated) = 0.953 mW/g

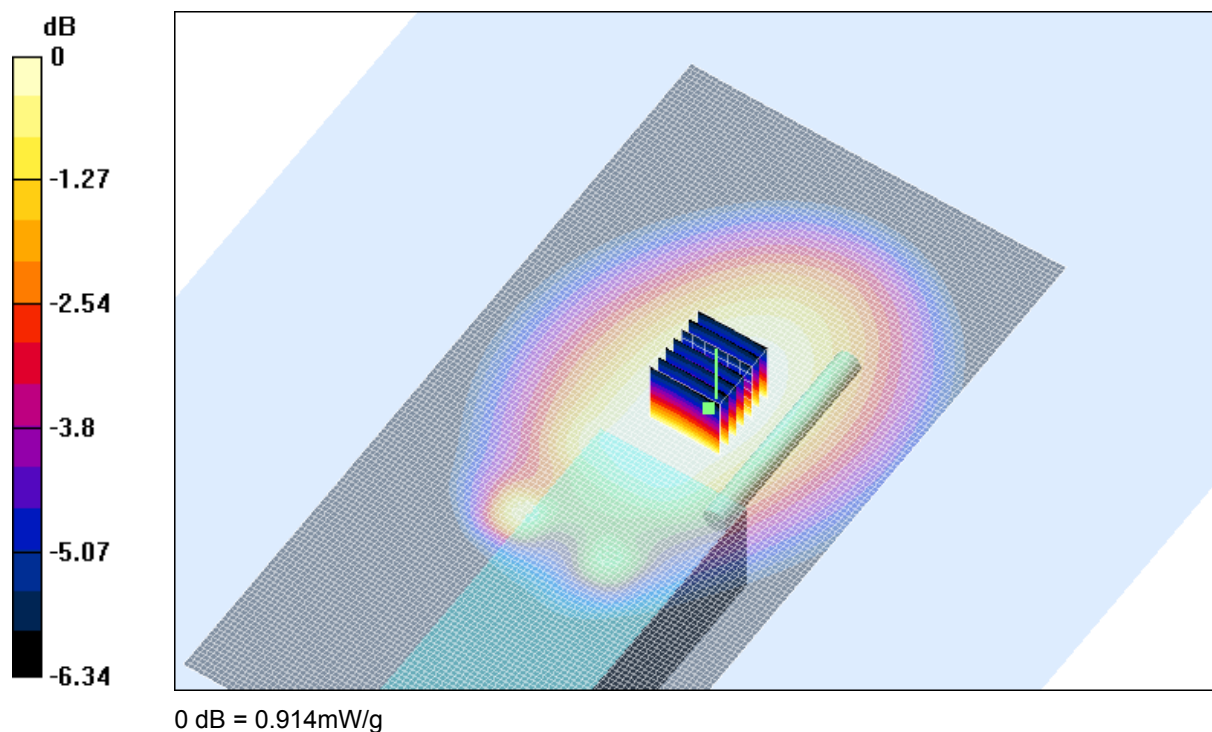
Channel 3 Test 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.8 V/m; Power Drift = -0.9 dB

Maximum value of SAR (measured) = 0.914 mW/g

Peak SAR (extrapolated) = 1.33 W/kg

SAR(1 g) = 0.885 mW/g; SAR(10 g) = 0.671 mW/g

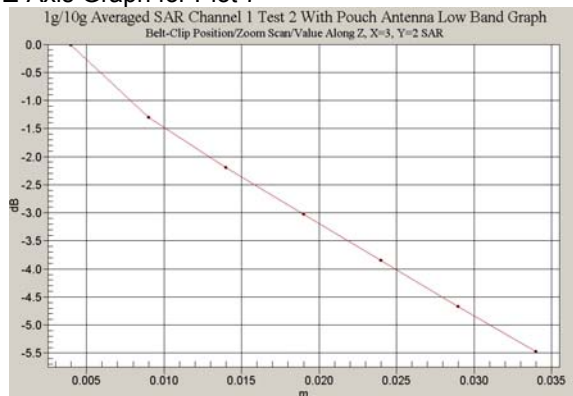


SAR MEASUREMENT PLOT 12

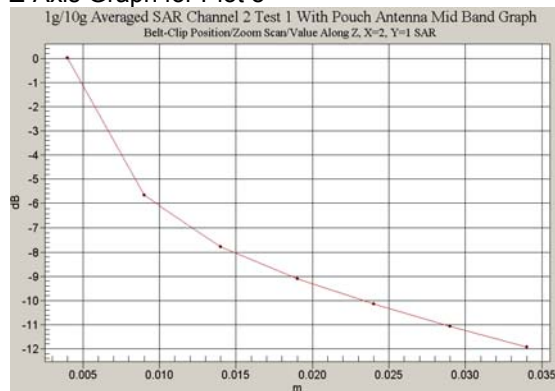
Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.8 Degrees Celsius
44.0 %

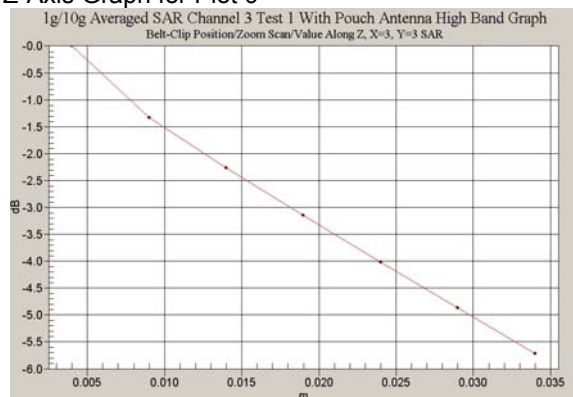
Z-Axis Graph for Plot 7



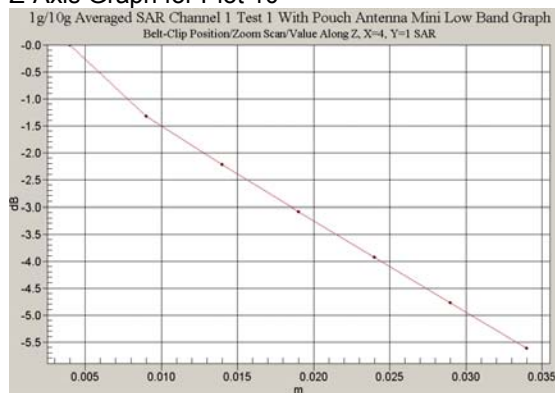
Z-Axis Graph for Plot 8



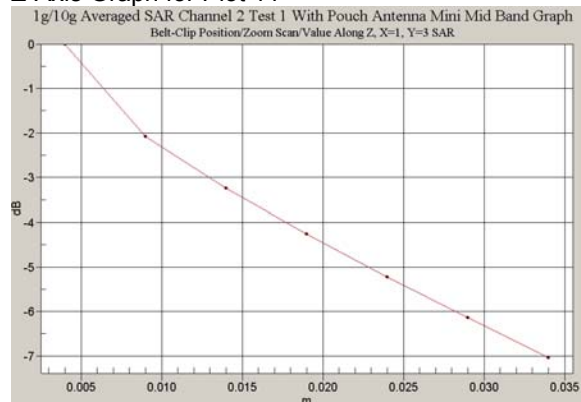
Z-Axis Graph for Plot 9



Z-Axis Graph for Plot 10



Z-Axis Graph for Plot 11



Z-Axis Graph for Plot 12

