

Test Date: 11 September 2004

File Name: [450 MHz Belt Clip SPK-MIC \(DAE442 Probe1377\) Ant Low 11-09-04.da4](#)

DUT: Tait SPK-MIC Antenna Low; Type: TPA-AA-204; Serial: Prototype

* Communication System: CW 450 MHz; Frequency: 400 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.893276$; mho/m, $\epsilon_r = 58.8125$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(7.1, 7.1, 7.1)

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

Channel 1 Test/Area Scan (81x161x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 51 V/m; Power Drift = -0.2 dB

Maximum value of SAR (interpolated) = 6.48 mW/g

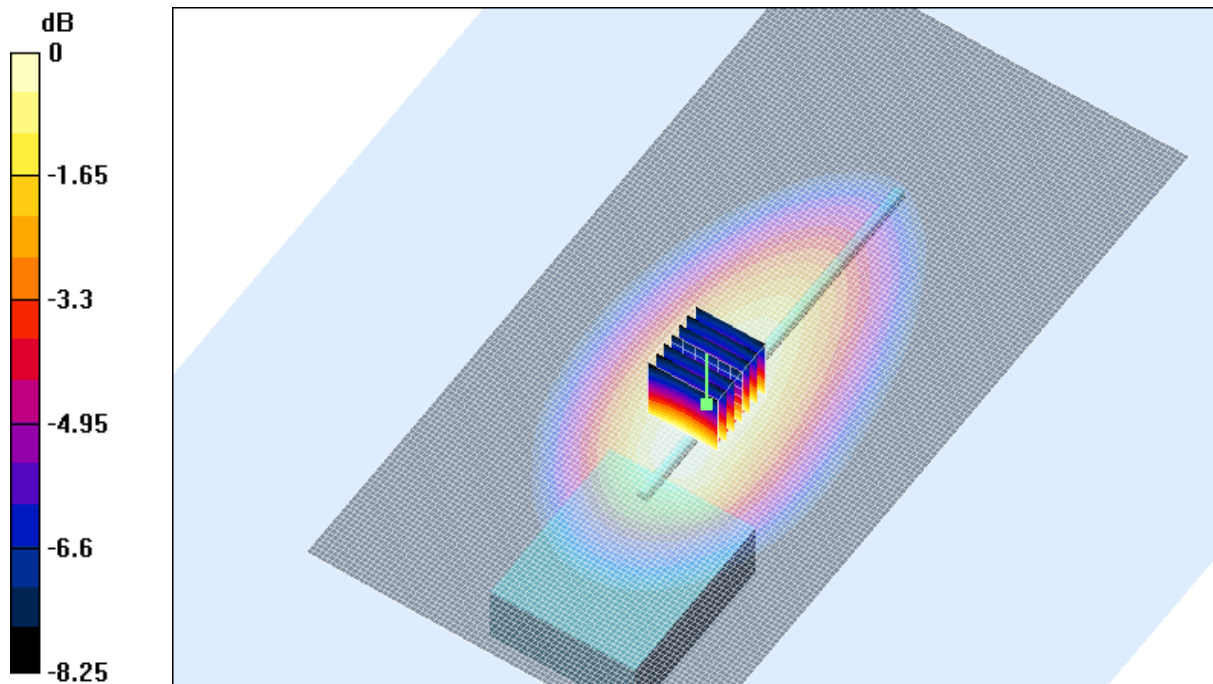
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 51 V/m; Power Drift = -0.2 dB

Maximum value of SAR (measured) = 6.45 mW/g

Peak SAR (extrapolated) = 9.46 W/kg

SAR(1 g) = 6.16 mW/g; SAR(10 g) = 4.38 mW/g



0 dB = 6.45mW/g

SAR MEASUREMENT PLOT 13

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.7 Degrees Celsius
47.0 %

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Test Date: 11 September 2004

File Name: [450 MHz Belt Clip SPK-MIC \(DAE442 Probe1377\) Ant Middle 11-09-04.da4](#)

DUT: Tait SPK-MIC Antenna Middle; Type: TPA-AA-204; Serial: Prototype

* Communication System: CW 450 MHz; Frequency: 435 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.919244$; mho/m, $\epsilon_r = 58.149$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(7.1, 7.1, 7.1)

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

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

Reference Value = 46.9 V/m; Power Drift = -0.3 dB

Maximum value of SAR (interpolated) = 5.35 mW/g

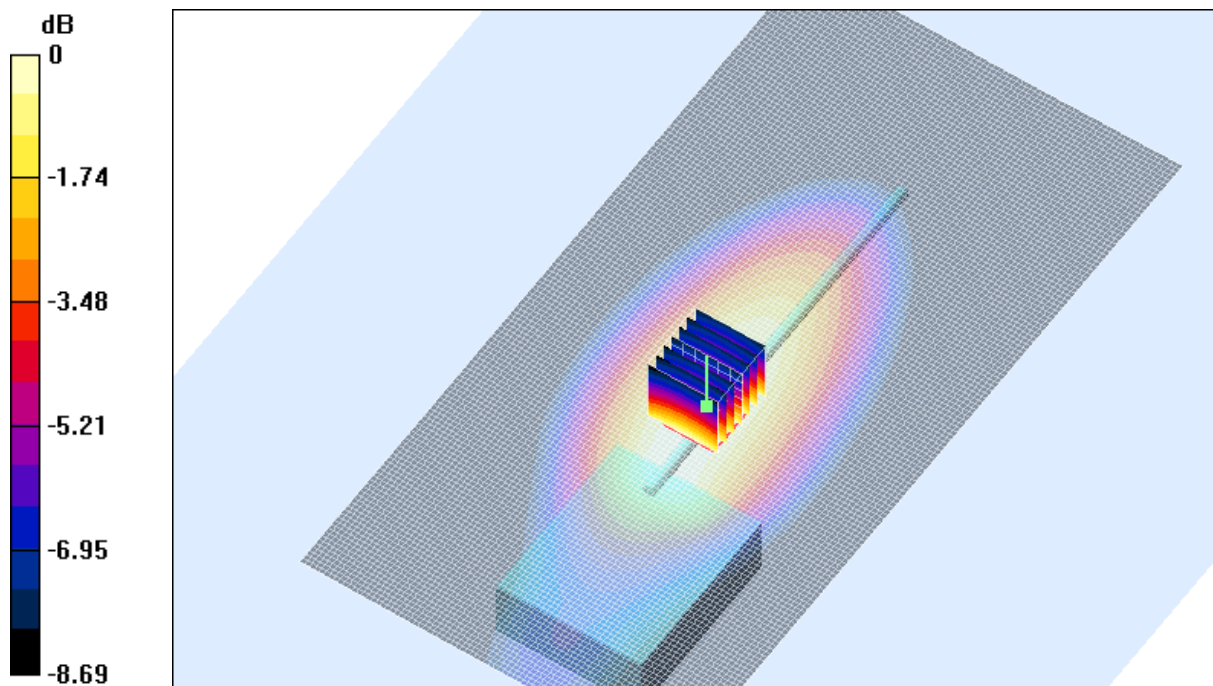
Channel 2 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 46.9 V/m; Power Drift = -0.3 dB

Maximum value of SAR (measured) = 5.25 mW/g

Peak SAR (extrapolated) = 7.83 W/kg

SAR(1 g) = 5.01 mW/g; SAR(10 g) = 3.52 mW/g



0 dB = 5.25mW/g

SAR MEASUREMENT PLOT 14

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.7 Degrees Celsius
47.0 %

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Test Date: 11 September 2004

File Name: [450 MHz Belt Clip SPK-MIC \(DAE442 Probe1377\) Ant High 11-09-04.da4](#)

DUT: Tait SPK-MIC Antenna High; Type: TPA-AA-204; Serial: Prototype

* Communication System: CW 450 MHz; Frequency: 470 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.954632$; mho/m, $\epsilon_r = 57.6794$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(7.1, 7.1, 7.1)

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

Channel 3 Test/Area Scan (81x151x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 57.6 V/m; Power Drift = -0.2 dB

Maximum value of SAR (interpolated) = 8.21 mW/g

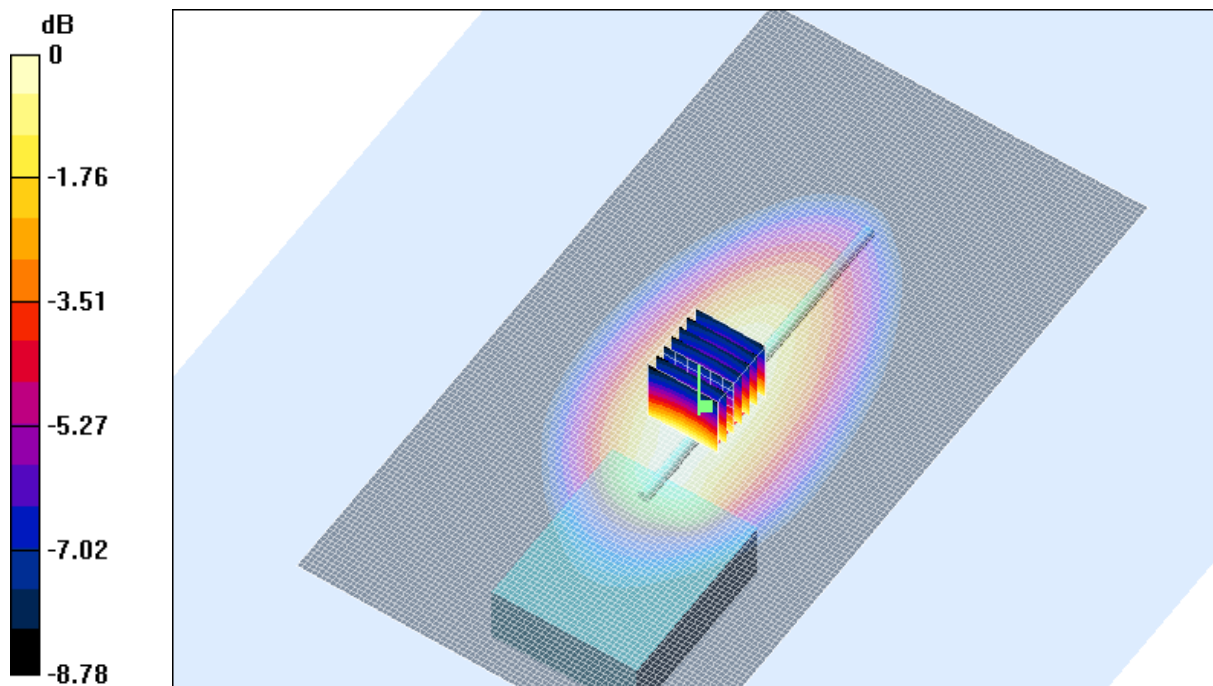
Channel 3 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.6 V/m; Power Drift = -0.2 dB

Maximum value of SAR (measured) = 8.12 mW/g

Peak SAR (extrapolated) = 12.1 W/kg

SAR(1 g) = 7.76 mW/g; SAR(10 g) = 5.43 mW/g



0 dB = 8.12mW/g

SAR MEASUREMENT PLOT 15

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.7 Degrees Celsius
47.0 %

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Test Date: 11 September 2004

File Name: [450 MHz Belt Clip SPK-MIC \(DAE442 Probe1377\) Ant Mini Low 11-09-04.da4](#)

DUT: Tait SPK-MIC Antenna Mini Low; Type: TPA-AA-204; Serial: Prototype

* Communication System: CW 450 MHz; Frequency: 400 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.893276$; mho/m, $\epsilon_r = 58.8125$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(7.1, 7.1, 7.1)

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

Channel 1 Test/Area Scan (81x131x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 72.1 V/m; Power Drift = -0.4 dB

Maximum value of SAR (interpolated) = 8.74 mW/g

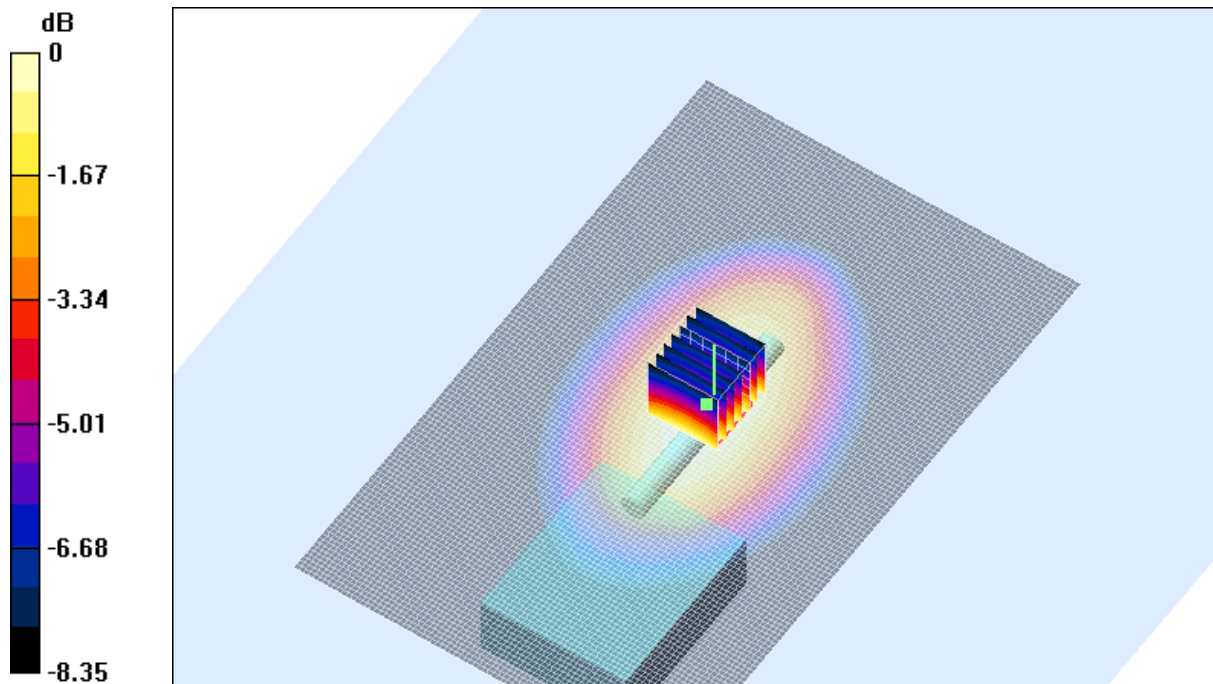
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 72.1 V/m; Power Drift = -0.4 dB

Maximum value of SAR (measured) = 8.58 mW/g

Peak SAR (extrapolated) = 12.7 W/kg

SAR(1 g) = 8.2 mW/g; SAR(10 g) = 5.81 mW/g



0 dB = 8.58mW/g

SAR MEASUREMENT PLOT 16

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.7 Degrees Celsius
47.0 %

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Test Date: 11 September 2004

File Name: [450 MHz Belt Clip SPK-MIC \(DAE442 Probe1377\) Ant Mini Middle 11-09-04.da4](#)

DUT: Tait SPK-MIC Antenna Mini Middle; Type: TPA-AA-204; Serial: Prototype

* Communication System: CW 450 MHz; Frequency: 435 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.919244$; mho/m, $\epsilon_r = 58.149$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(7.1, 7.1, 7.1)

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

Channel 2 Test/Area Scan (81x131x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 53 V/m; Power Drift = -0.3 dB

Maximum value of SAR (interpolated) = 4.17 mW/g

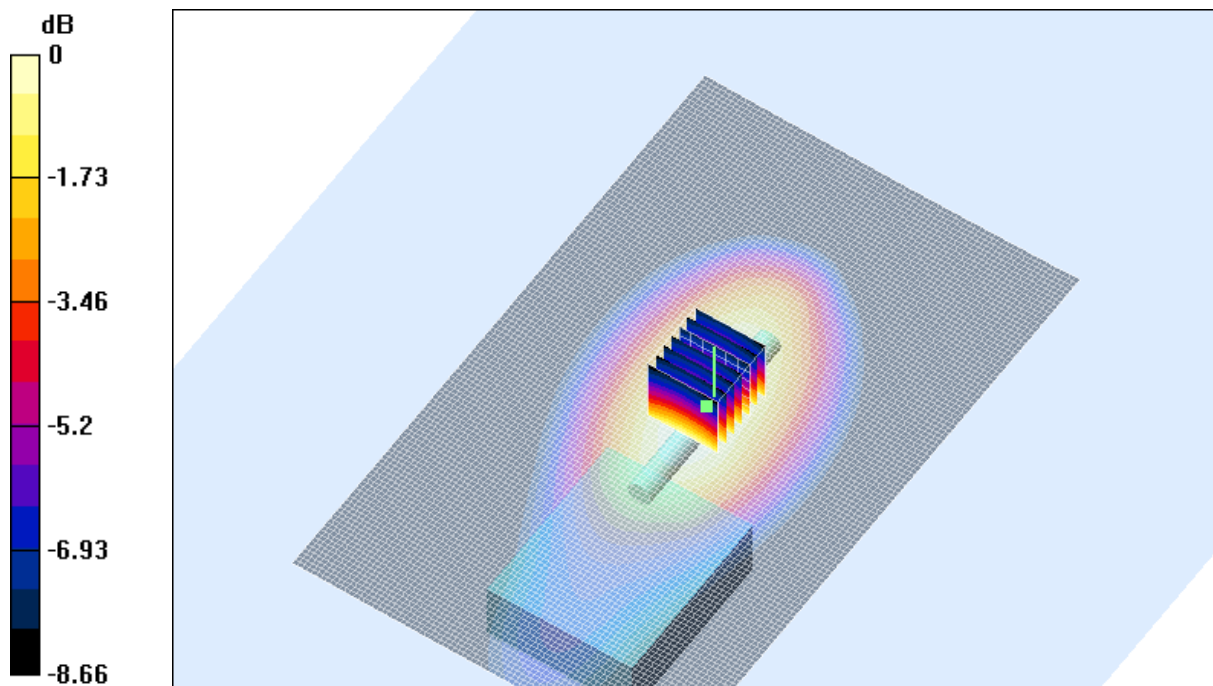
Channel 2 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53 V/m; Power Drift = -0.3 dB

Maximum value of SAR (measured) = 4.16 mW/g

Peak SAR (extrapolated) = 6.25 W/kg

SAR(1 g) = 3.97 mW/g; SAR(10 g) = 2.78 mW/g



0 dB = 4.16mW/g

SAR MEASUREMENT PLOT 17

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.7 Degrees Celsius
47.0 %

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Test Date: 11 September 2004

File Name: [450 MHz Belt Clip SPK-MIC \(DAE442 Probe1377\) Ant Mini High 11-09-04.da4](#)

DUT: Tait SPK-MIC Antenna Mini High; Type: TPA-AA-204; Serial: Prototype

* Communication System: CW 450 MHz; Frequency: 470 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.954632$; mho/m, $\epsilon_r = 57.6794$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(7.1, 7.1, 7.1)

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

Channel 3 Test/Area Scan (81x121x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 54 V/m; Power Drift = -0.3 dB

Maximum value of SAR (interpolated) = 4.72 mW/g

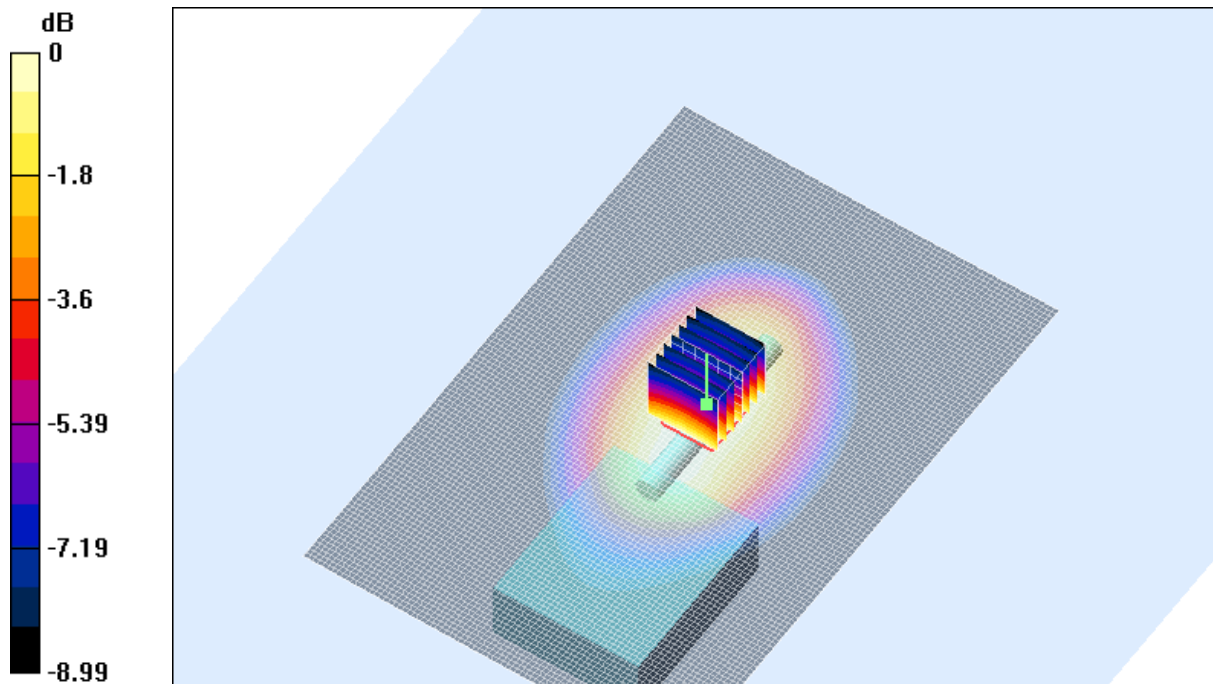
Channel 3 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54 V/m; Power Drift = -0.3 dB

Maximum value of SAR (measured) = 4.65 mW/g

Peak SAR (extrapolated) = 6.97 W/kg

SAR(1 g) = 4.43 mW/g; SAR(10 g) = 3.08 mW/g



0 dB = 4.65mW/g

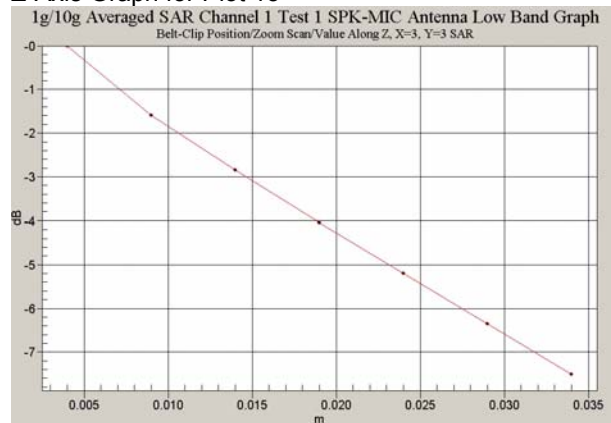
SAR MEASUREMENT PLOT 18

Ambient Temperature
Liquid Temperature
Humidity

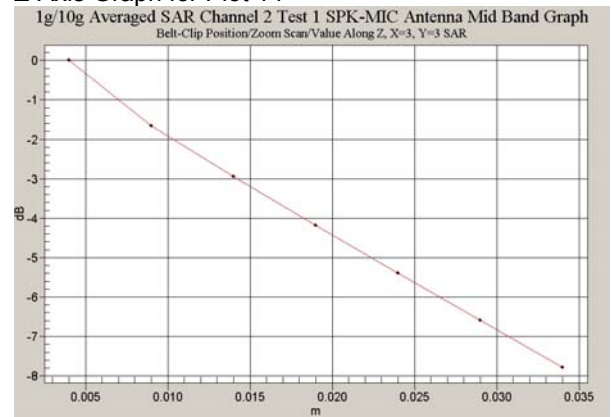
20.4 Degrees Celsius
19.7 Degrees Celsius
47.0 %

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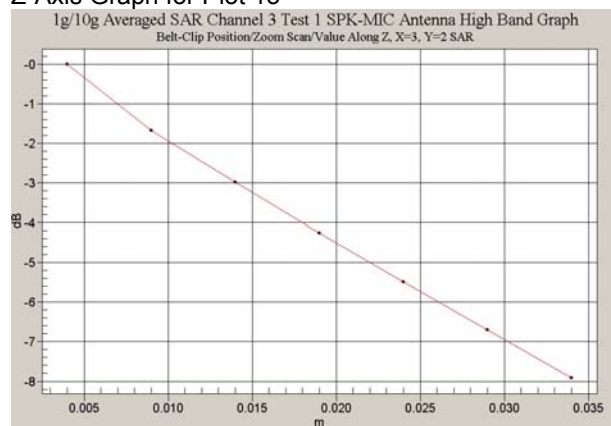
Z-Axis Graph for Plot 13



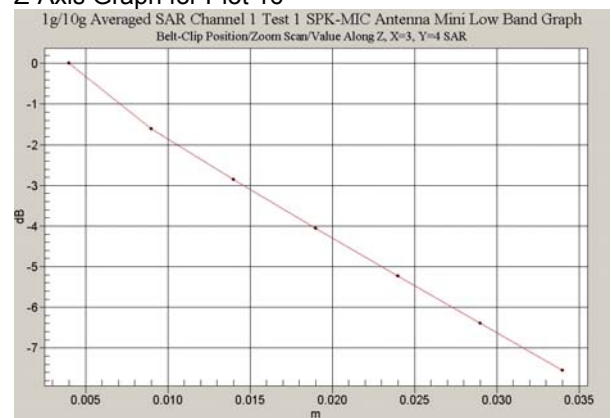
Z-Axis Graph for Plot 14



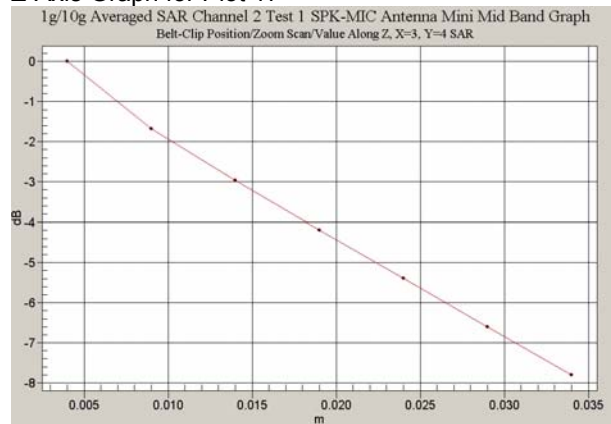
Z-Axis Graph for Plot 15



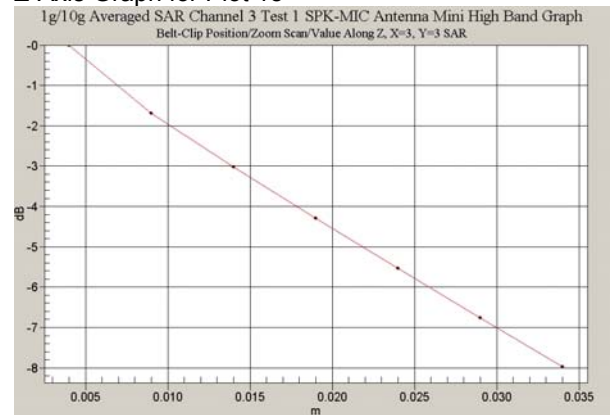
Z-Axis Graph for Plot 16



Z-Axis Graph for Plot 17



Z-Axis Graph for Plot 18



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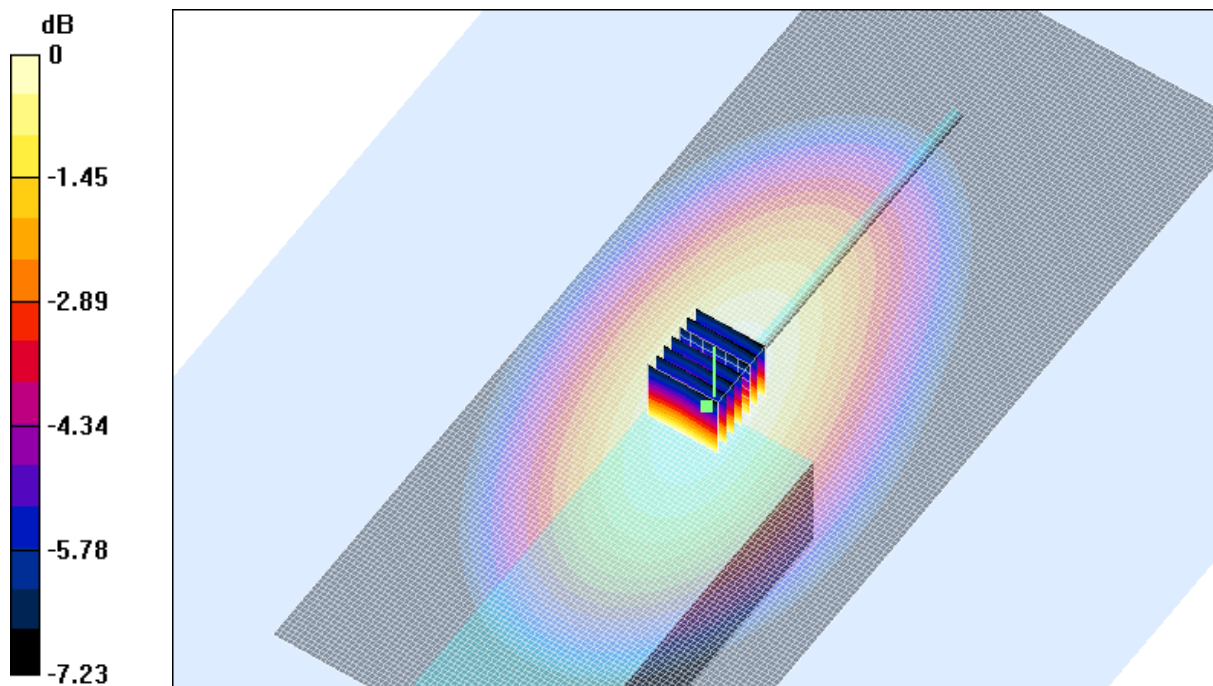
Test Date: 13 September 2004

File Name: [450 MHz Face \(DAE442 Probe1377\) Ant Low 13-09-04.da4](#)

DUT: Tait Transceiver Antenna Low; Type: TPAH5A; Serial: 21000006

* Communication System: CW 450 MHz; Frequency: 400 MHz; Duty Cycle: 1:1
 * Medium parameters used: $\sigma = 0.845405$; mho/m, $\epsilon_r = 44.7914$; $\rho = 1000 \text{ kg/m}^3$
 - Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(7, 7, 7)
 - 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 = 34.9 V/m; Power Drift = -0.2 dB
 Maximum value of SAR (interpolated) = 3.25 mW/g

Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 34.9 V/m; Power Drift = -0.2 dB
 Maximum value of SAR (measured) = 3.26 mW/g
 Peak SAR (extrapolated) = 4.64 W/kg
SAR(1 g) = 3.14 mW/g; SAR(10 g) = 2.33 mW/g



0 dB = 3.26mW/g

SAR MEASUREMENT PLOT 19

Ambient Temperature
 Liquid Temperature
 Humidity

22.0 Degrees Celsius
 20.0 Degrees Celsius
 45.0 %

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Test Date: 13 September 2004

File Name: [450 MHz Face \(DAE442 Probe1377\) Ant Middle 13-09-04.da4](#)

DUT: Tait Transceiver Antenna Middle; Type: TPAH5A; Serial: 21000006

- * Communication System: CW 450 MHz; Frequency: 435 MHz; Duty Cycle: 1:1
- * Medium parameters used: $\sigma = 0.875526$; mho/m, $\epsilon_r = 43.9883$; $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(7, 7, 7)
- 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 = 38.1 V/m; Power Drift = -0.5 dB

Maximum value of SAR (interpolated) = 2.99 mW/g

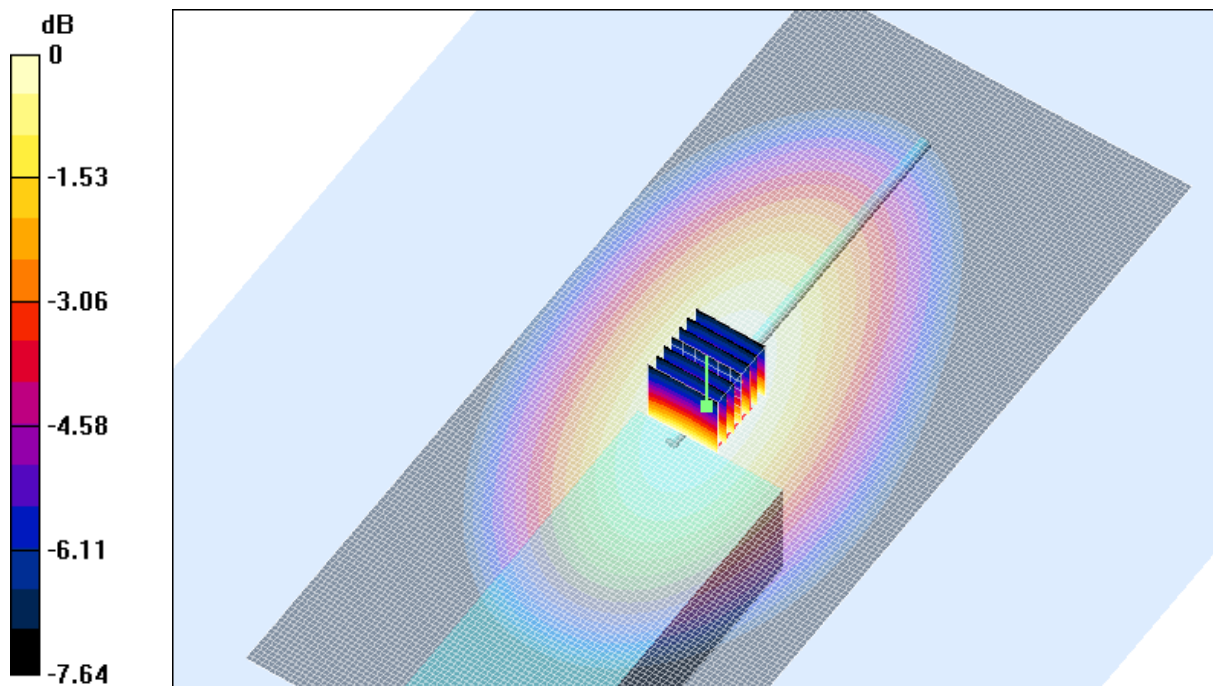
Channel 2 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 38.1 V/m; Power Drift = -0.5 dB

Maximum value of SAR (measured) = 2.91 mW/g

Peak SAR (extrapolated) = 4.21 W/kg

SAR(1 g) = 2.79 mW/g; SAR(10 g) = 2.04 mW/g



0 dB = 2.91mW/g

SAR MEASUREMENT PLOT 20

Ambient Temperature
Liquid Temperature
Humidity

22.0 Degrees Celsius
20.0 Degrees Celsius
45.0 %

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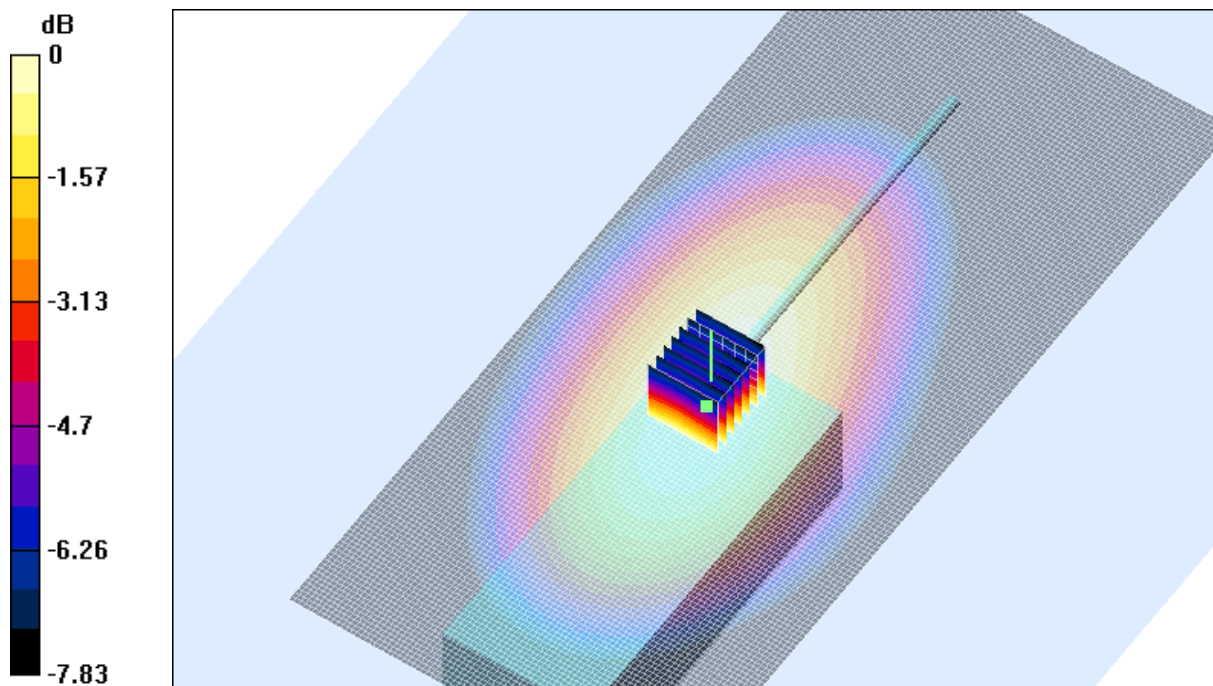
Test Date: 13 September 2004

File Name: [450 MHz Face \(DAE442 Probe1377\) Ant High 13-09-04.da4](#)

DUT: Tait Transceiver Antenna High; Type: TPAH5A; Serial: 21000006

* Communication System: CW 450 MHz; Frequency: 470 MHz; Duty Cycle: 1:1
* Medium parameters used: $\sigma = 0.908405$; mho/m, $\epsilon_r = 43.1595$; $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(7, 7, 7)
- 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 = 32 V/m; Power Drift = -0.4 dB
Maximum value of SAR (interpolated) = 3.74 mW/g

Channel 3 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 32 V/m; Power Drift = -0.4 dB
Maximum value of SAR (measured) = 3.63 mW/g
Peak SAR (extrapolated) = 5.28 W/kg
SAR(1 g) = 3.49 mW/g; SAR(10 g) = 2.56 mW/g



0 dB = 3.63mW/g

SAR MEASUREMENT PLOT 21

Ambient Temperature
Liquid Temperature
Humidity

22.0 Degrees Celsius
20.0 Degrees Celsius
45.0 %

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Test Date: 13 September 2004

File Name: [450 MHz Face \(DAE442 Probe1377\) Ant Mini Low 13-09-04.da4](#)

DUT: Tait Transceiver Antenna Mini Low; Type: TPAH5A; Serial: 21000006

- * Communication System: CW 450 MHz; Frequency: 400 MHz; Duty Cycle: 1:1
- * Medium parameters used: $\sigma = 0.845405$; mho/m, $\epsilon_r = 44.7914$; $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(7, 7, 7)
- 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 = 31 V/m; Power Drift = -0.1 dB

Maximum value of SAR (interpolated) = 1.96 mW/g

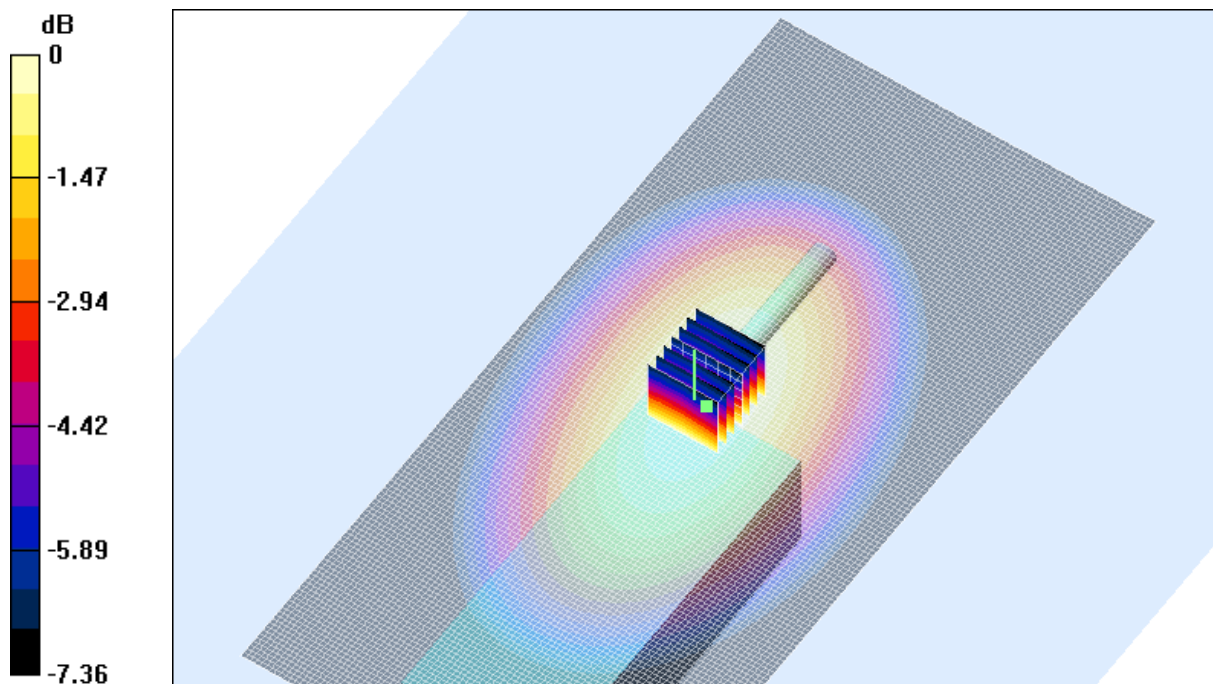
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 1.97 mW/g

Peak SAR (extrapolated) = 2.84 W/kg

SAR(1 g) = 1.9 mW/g; SAR(10 g) = 1.4 mW/g



0 dB = 1.97mW/g

SAR MEASUREMENT PLOT 22

Ambient Temperature
Liquid Temperature
Humidity

22.0 Degrees Celsius
20.0 Degrees Celsius
45.0 %

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Test Date: 13 September 2004

File Name: [450 MHz Face \(DAE442 Probe1377\) Ant Mini Middle 13-09-04.da4](#)

DUT: Tait Transceiver Antenna Mini Middle; Type: TPAH5A; Serial: 21000006

* Communication System: CW 450 MHz; Frequency: 435 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.875526$; mho/m, $\epsilon_r = 43.9883$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(7, 7, 7)

- 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 = 40.1 V/m; Power Drift = -0.5 dB

Maximum value of SAR (interpolated) = 2.98 mW/g

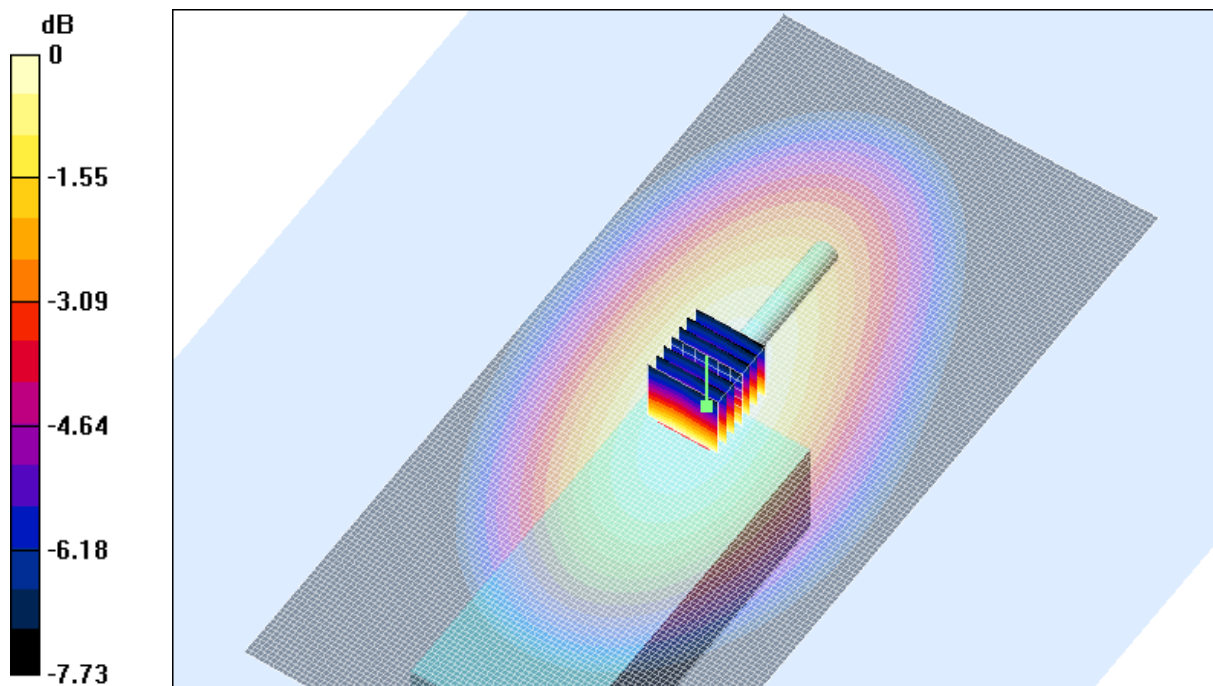
Channel 2 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 40.1 V/m; Power Drift = -0.5 dB

Maximum value of SAR (measured) = 2.93 mW/g

Peak SAR (extrapolated) = 4.25 W/kg

SAR(1 g) = 2.81 mW/g; SAR(10 g) = 2.05 mW/g



0 dB = 2.93mW/g

SAR MEASUREMENT PLOT 23

Ambient Temperature
Liquid Temperature
Humidity

22.0 Degrees Celsius
20.0 Degrees Celsius
45.0 %

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Test Date: 13 September 2004

File Name: [450 MHz Face \(DAE442 Probe1377\) Ant Mini High 13-09-04.da4](#)

DUT: Tait Transceiver Antenna Mini High; Type: TPAH5A; Serial: 21000006

- * Communication System: CW 450 MHz; Frequency: 470 MHz; Duty Cycle: 1:1
- * Medium parameters used: $\sigma = 0.908405$; mho/m, $\epsilon_r = 43.1595$; $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(7, 7, 7)
- 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 = 27.7 V/m; Power Drift = -0.4 dB

Maximum value of SAR (interpolated) = 2.25 mW/g

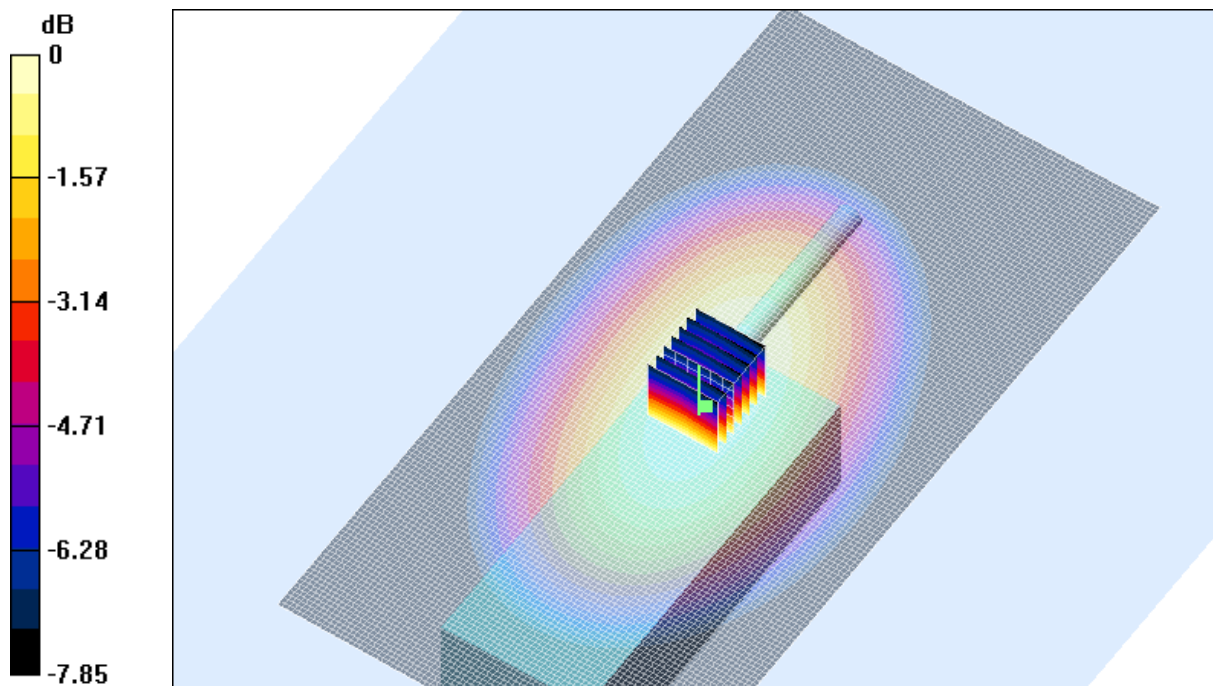
Channel 3 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.7 V/m; Power Drift = -0.4 dB

Maximum value of SAR (measured) = 2.22 mW/g

Peak SAR (extrapolated) = 3.17 W/kg

SAR(1 g) = 2.13 mW/g; SAR(10 g) = 1.55 mW/g



0 dB = 2.22mW/g

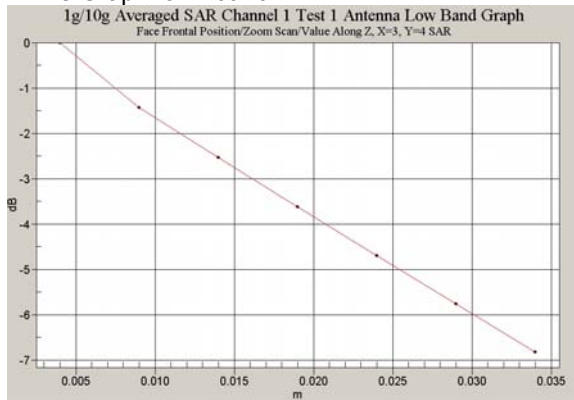
SAR MEASUREMENT PLOT 24

Ambient Temperature
Liquid Temperature
Humidity

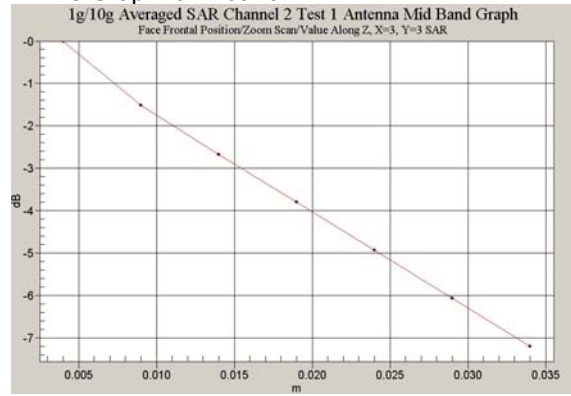
22.0 Degrees Celsius
20.0 Degrees Celsius
45.0 %

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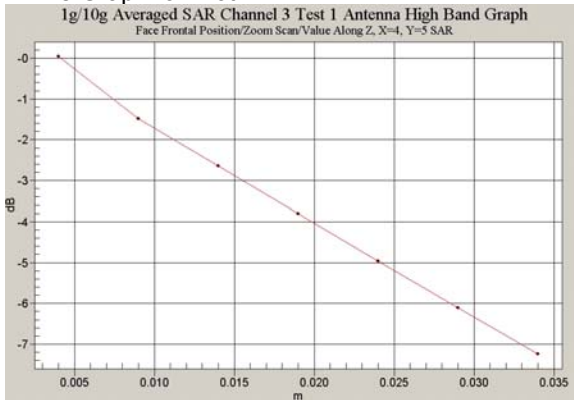
Z-Axis Graph for Plot 19



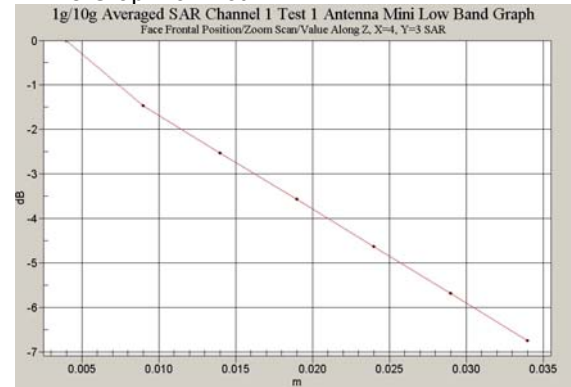
Z-Axis Graph for Plot 20



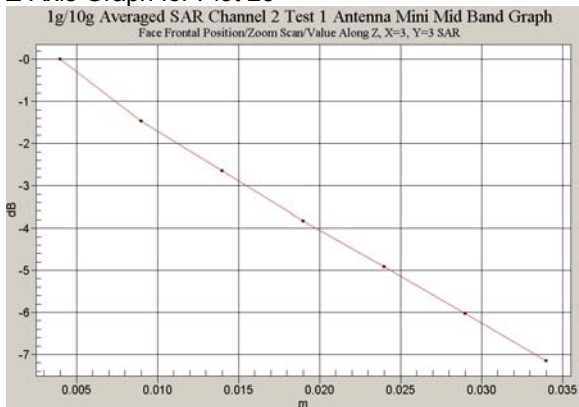
Z-Axis Graph for Plot 21



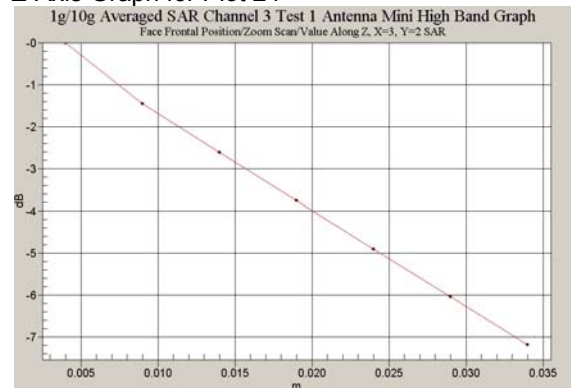
Z-Axis Graph for Plot 22



Z-Axis Graph for Plot 23



Z-Axis Graph for Plot 24



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