

Test Date: 08 September 2004

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

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

* 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 (81x161x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 52.6 V/m; Power Drift = -0.4 dB

Maximum value of SAR (interpolated) = 5.93 mW/g

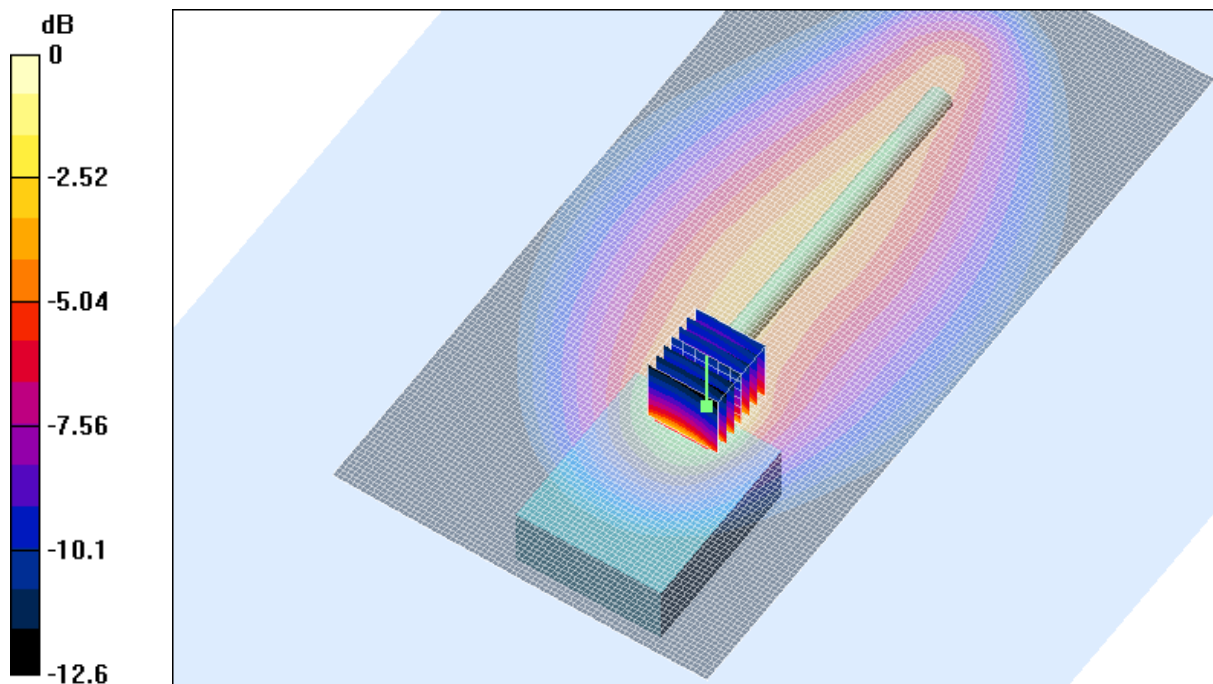
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.6 V/m; Power Drift = -0.4 dB

Maximum value of SAR (measured) = 7.9 mW/g

Peak SAR (extrapolated) = 36.4 W/kg

SAR(1 g) = 8.21 mW/g; SAR(10 g) = 3.77 mW/g



0 dB = 7.9mW/g

SAR MEASUREMENT PLOT 13

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.8 Degrees Celsius
44.0 %

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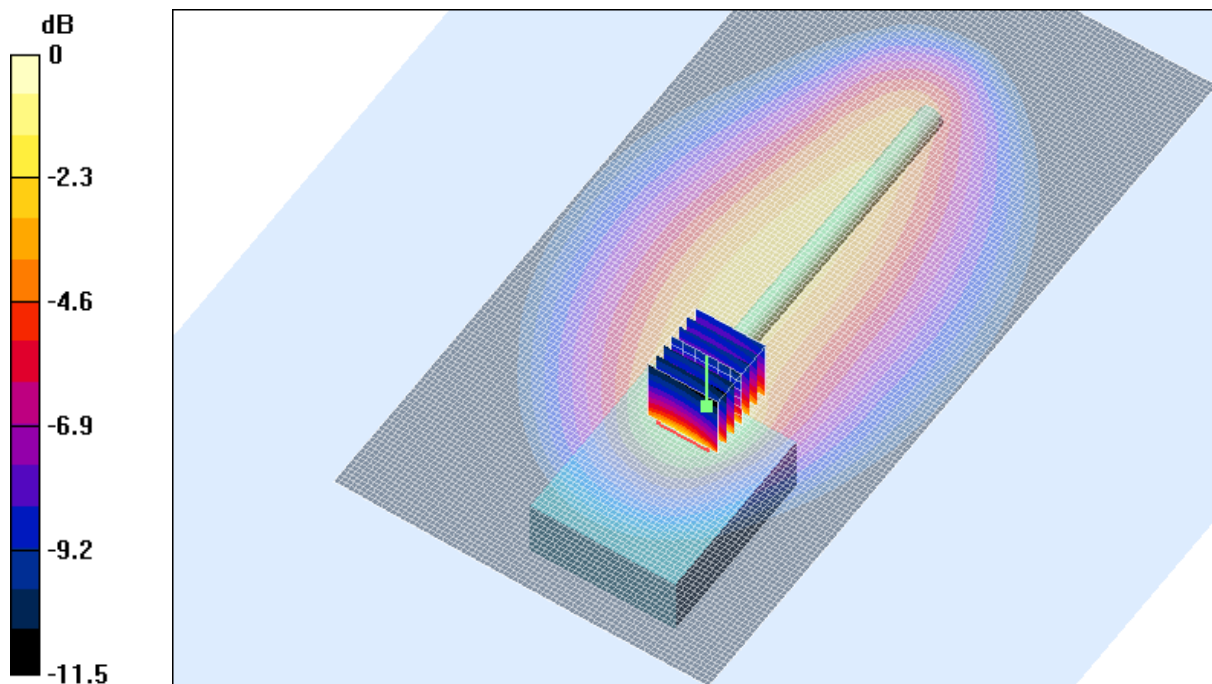
Test Date: 08 September 2004

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

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

* 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 (81x161x1): Measurement grid: dx=20mm, dy=20mm
Reference Value = 44.3 V/m; Power Drift = -0.2 dB
Maximum value of SAR (interpolated) = 3.4 mW/g

Channel 2 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 44.3 V/m; Power Drift = -0.2 dB
Maximum value of SAR (measured) = 4.38 mW/g
Peak SAR (extrapolated) = 15.6 W/kg
SAR(1 g) = 4.48 mW/g; SAR(10 g) = 2.26 mW/g



0 dB = 4.38mW/g

SAR MEASUREMENT PLOT 14

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 Belt Clip SPK-MIC \(DAE442 Probe1377\) Ant High 08-09-04.da4](#)

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

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

* Medium parameters used: $\sigma = 0.790598$; mho/m, $\epsilon_r = 60.9292$; $\rho = 1000$ 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 3 Test/Area Scan (81x151x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 38.1 V/m; Power Drift = -0.2 dB

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

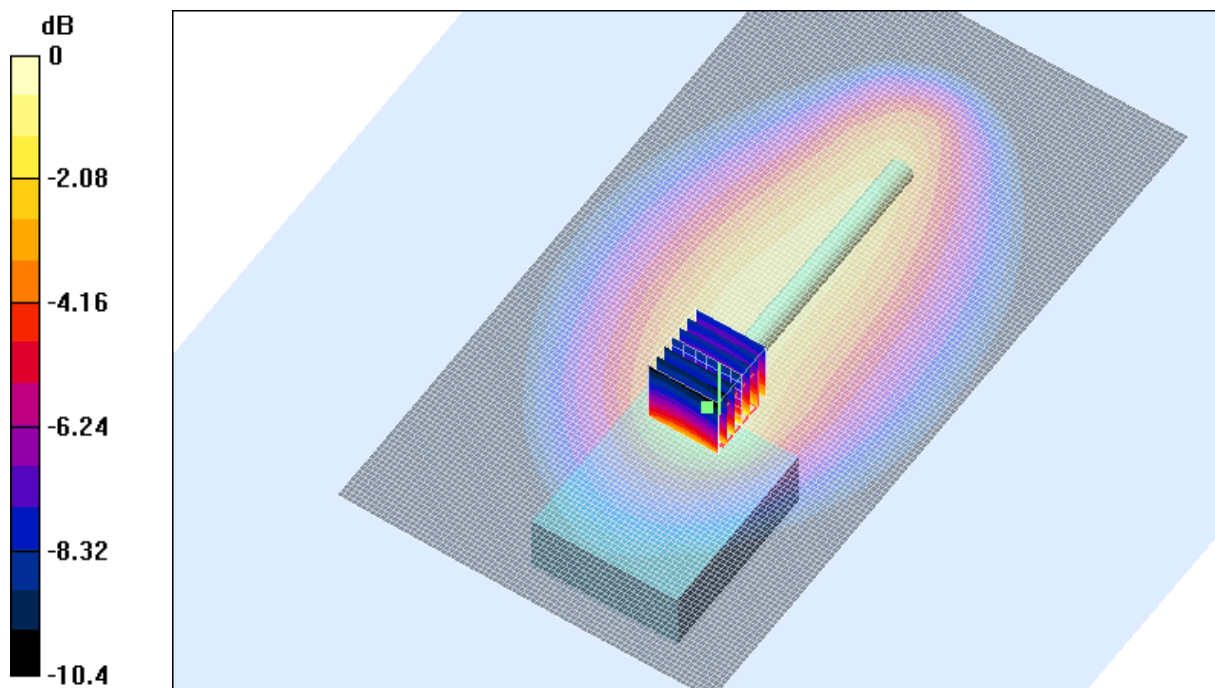
Channel 3 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 38.1 V/m; Power Drift = -0.2 dB

Maximum value of SAR (measured) = 2.74 mW/g

Peak SAR (extrapolated) = 7.51 W/kg

SAR(1 g) = 2.63 mW/g; SAR(10 g) = 1.49 mW/g



0 dB = 2.74mW/g

SAR MEASUREMENT PLOT 15

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 Belt Clip SPK-MIC \(DAE442 Probe1377\) Ant Mini Low 08-09-04.da4](#)

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

* 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 (81x131x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 49 V/m; Power Drift = -0.4 dB

Maximum value of SAR (interpolated) = 5.6 mW/g

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

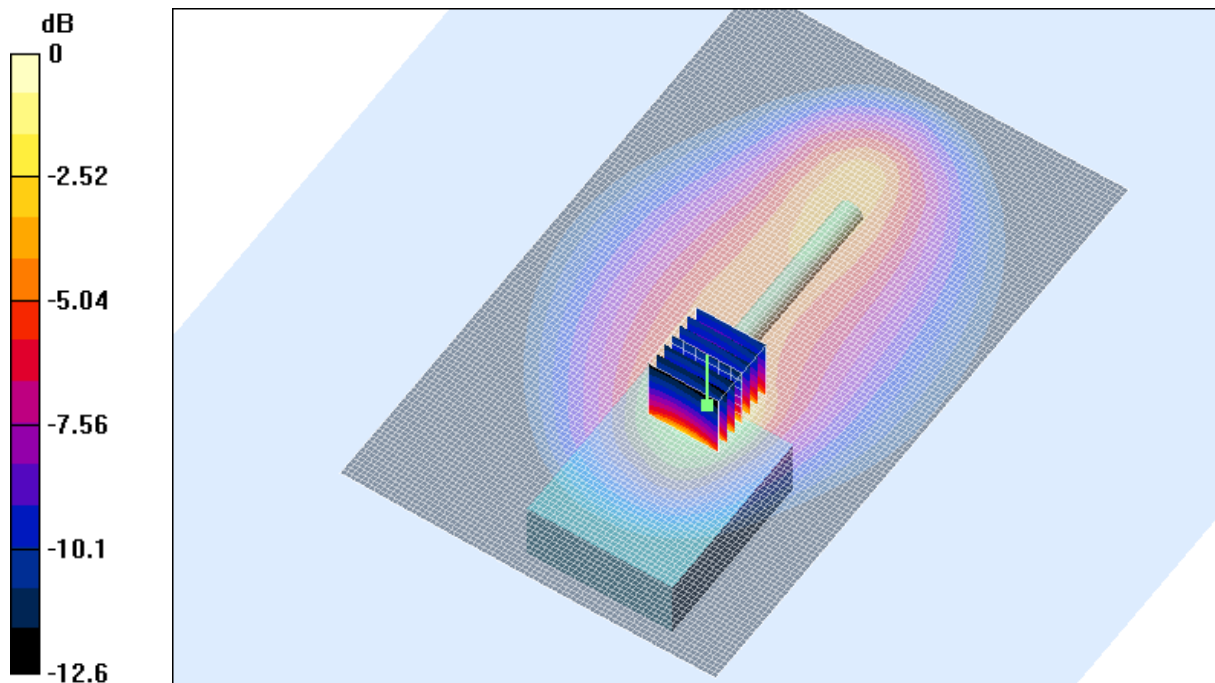
dz=5mm

Reference Value = 49 V/m; Power Drift = -0.4 dB

Maximum value of SAR (measured) = 7.54 mW/g

Peak SAR (extrapolated) = 33.1 W/kg

SAR(1 g) = 7.92 mW/g; SAR(10 g) = 3.67 mW/g



0 dB = 7.54mW/g

SAR MEASUREMENT PLOT 16

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 Belt Clip SPK-MIC \(DAE442 Probe1377\) Ant Mini Middle 08-09-04.da4](#)

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

* 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 (81x131x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 31.3 V/m; Power Drift = -0.4 dB

Maximum value of SAR (interpolated) = 1.9 mW/g

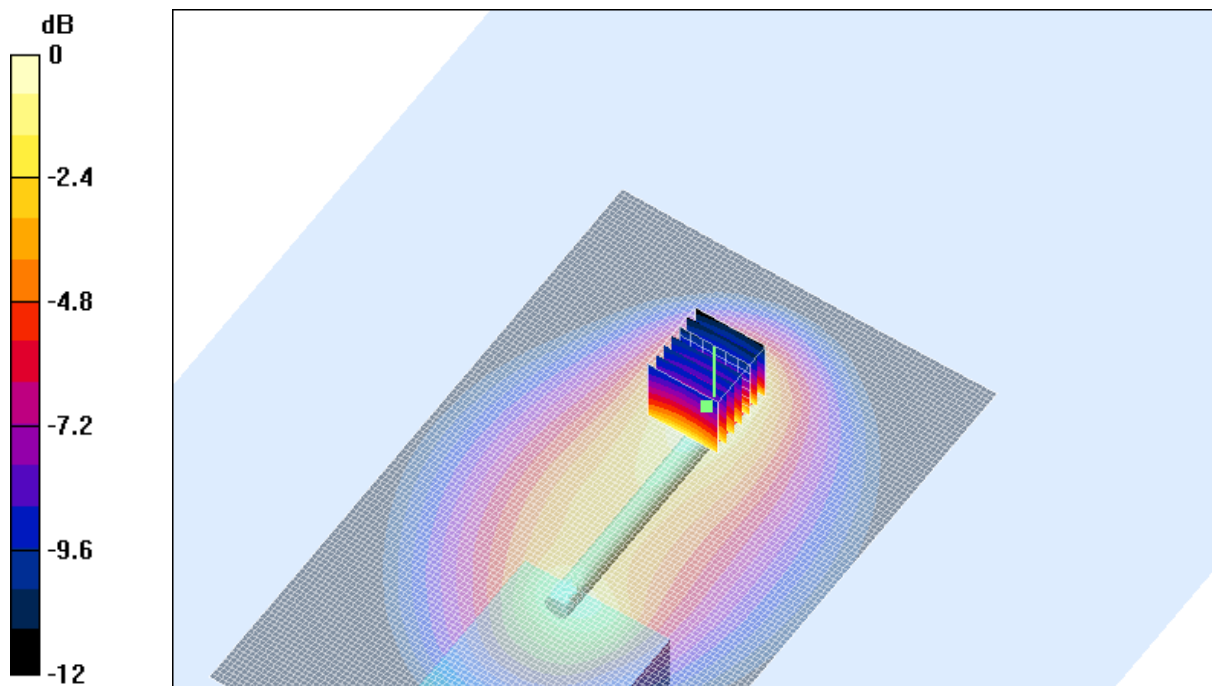
Channel 2 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.3 V/m; Power Drift = -0.4 dB

Maximum value of SAR (measured) = 1.94 mW/g

Peak SAR (extrapolated) = 5.77 W/kg

SAR(1 g) = 1.98 mW/g; SAR(10 g) = 1.11 mW/g



0 dB = 1.94mW/g

SAR MEASUREMENT PLOT 17

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.8 Degrees Celsius
44.0 %

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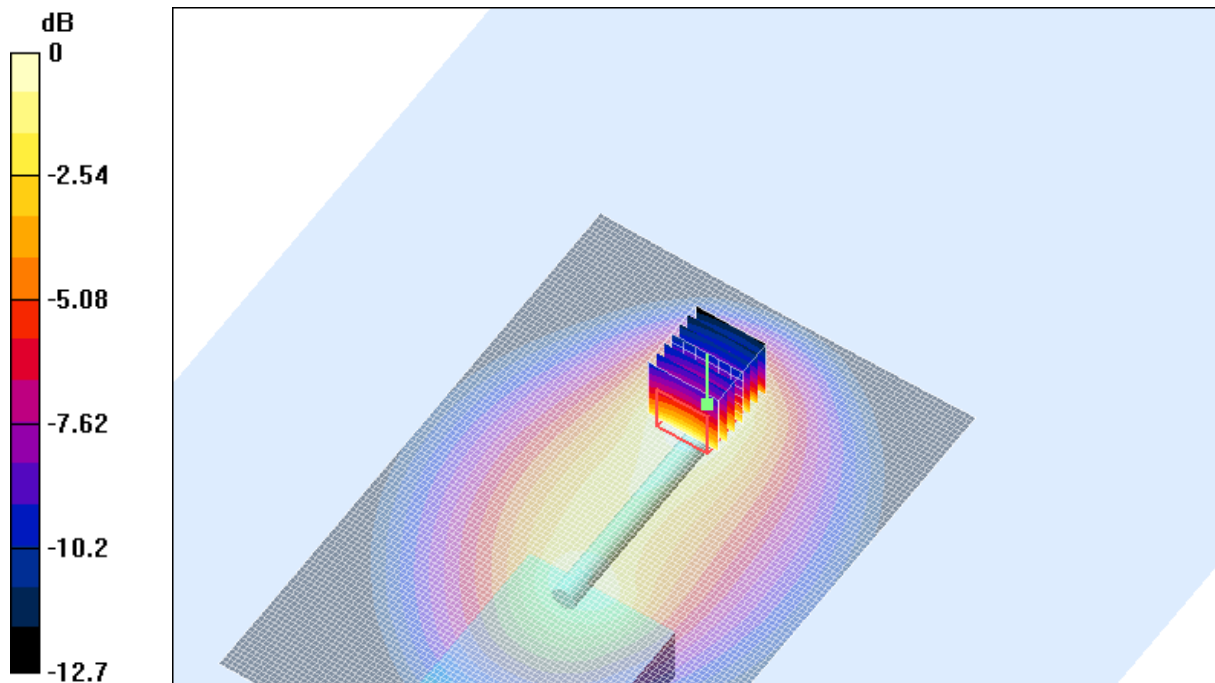
Test Date: 08 September 2004

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

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

* 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/Area Scan (81x121x1): Measurement grid: dx=20mm, dy=20mm
 Reference Value = 39.7 V/m; Power Drift = -0.9 dB
 Maximum value of SAR (interpolated) = 2.54 mW/g

Channel 3 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 39.7 V/m; Power Drift = -0.9 dB
 Maximum value of SAR (measured) = 2.47 mW/g
 Peak SAR (extrapolated) = 6.98 W/kg
SAR(1 g) = 2.51 mW/g; SAR(10 g) = 1.45 mW/g



0 dB = 2.47mW/g

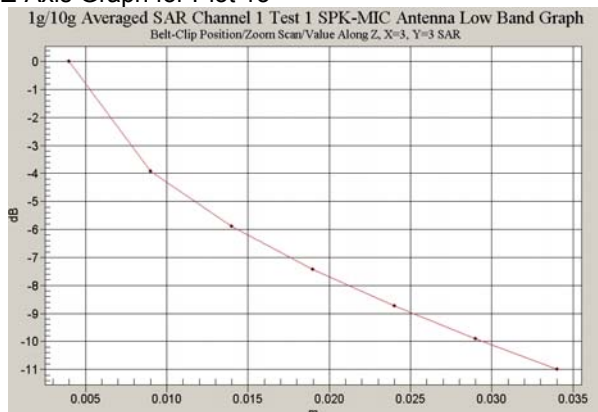
SAR MEASUREMENT PLOT 18

Ambient Temperature
 Liquid Temperature
 Humidity

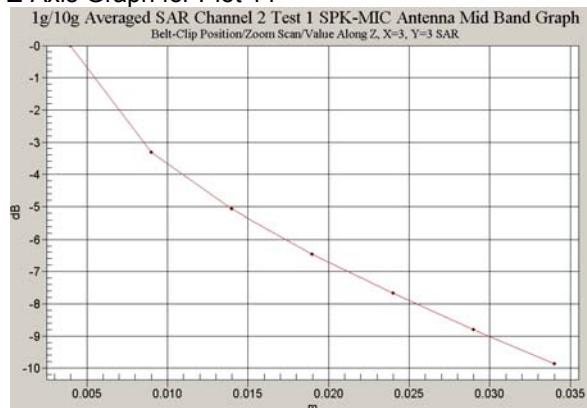
20.4 Degrees Celsius
 19.8 Degrees Celsius
 44.0 %

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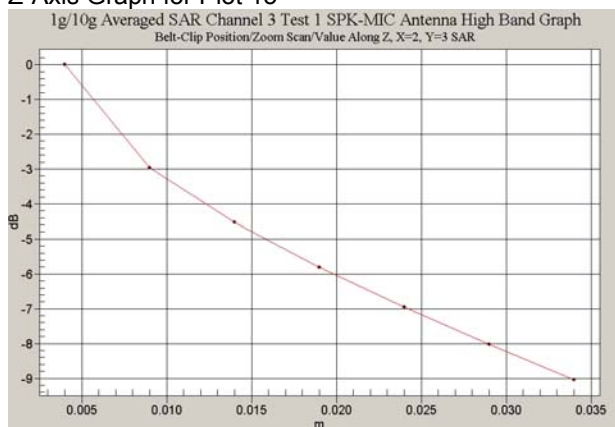
Z-Axis Graph for Plot 13



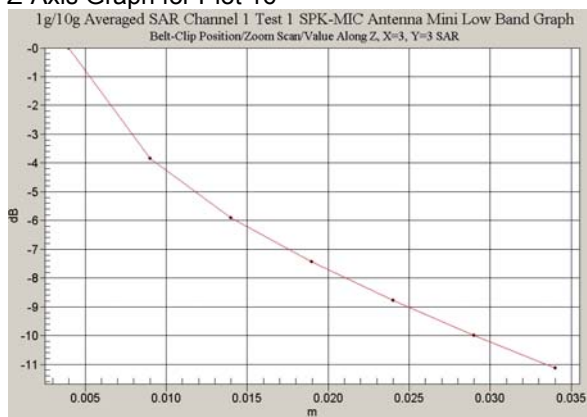
Z-Axis Graph for Plot 14



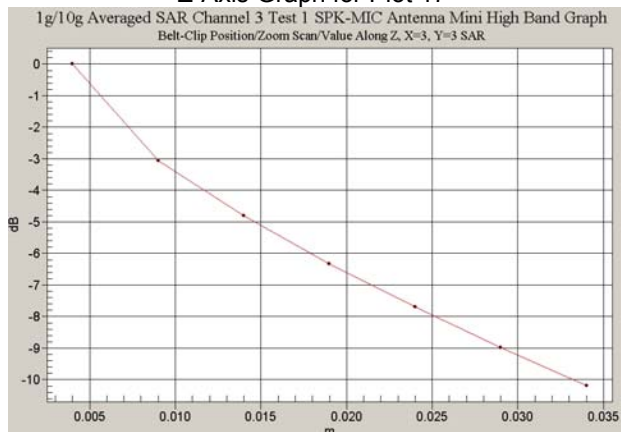
Z-Axis Graph for Plot 15



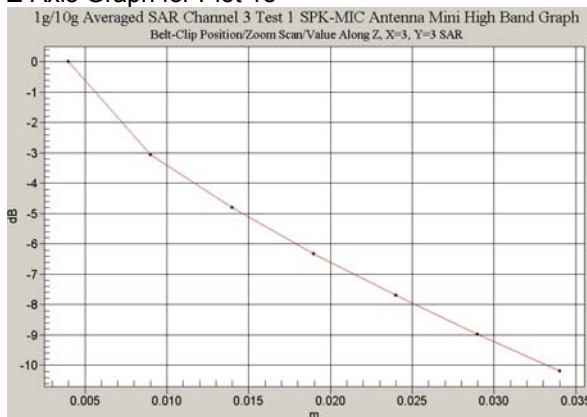
Z-Axis Graph for Plot 16



Z-Axis Graph for Plot 17



Z-Axis Graph for Plot 18



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Test Date: 09 September 2004

File Name: [150 MHz Face \(DAE442 Probe1377\) Ant Low 09-09-04.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: $\sigma = 0.746956$; mho/m, $\epsilon_r = 52.4147$; $\rho = 1000$ kg/m³
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.6, 8.6, 8.6)
- 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 = 36.8 V/m; Power Drift = -0.2 dB

Maximum value of SAR (interpolated) = 1.72 mW/g

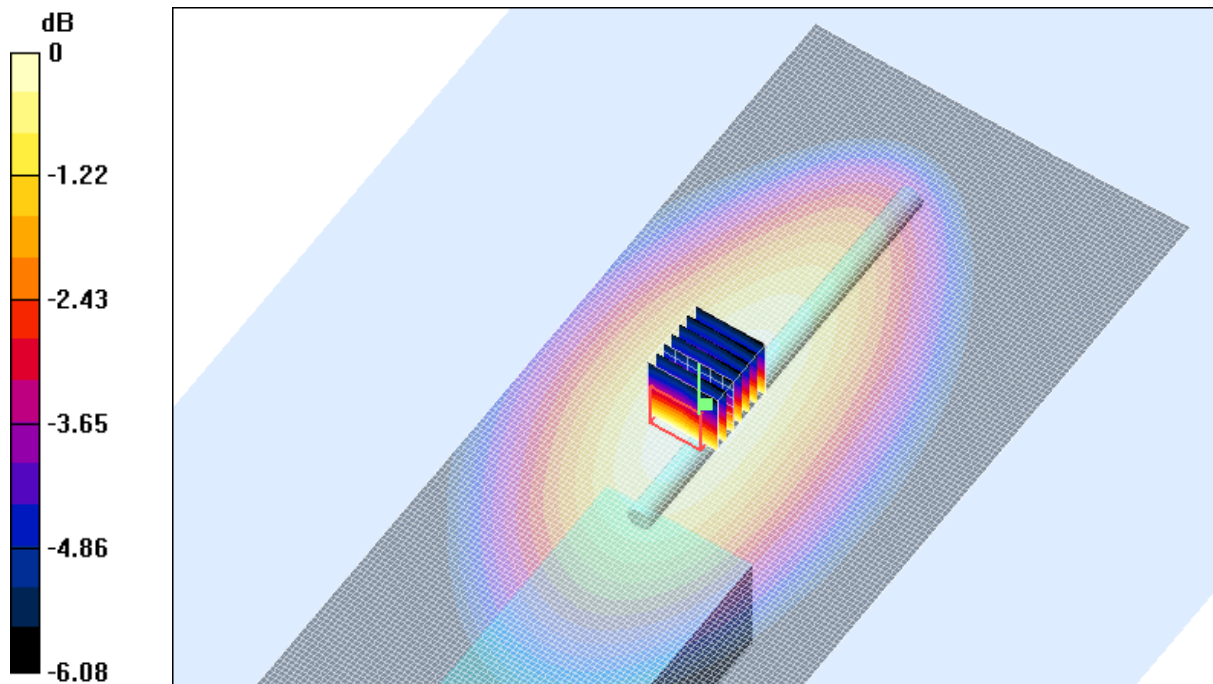
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 36.8 V/m; Power Drift = -0.2 dB

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

Peak SAR (extrapolated) = 2.54 W/kg

SAR(1 g) = 1.68 mW/g; SAR(10 g) = 1.29 mW/g



0 dB = 1.74mW/g

SAR MEASUREMENT PLOT 19

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.7 Degrees Celsius
44.0 %

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Test Date: 09 September 2004

File Name: [150 MHz Face \(DAE442 Probe1377\) Ant Middle 09-09-04.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: $\sigma = 0.765937$; mho/m, $\epsilon_r = 51.2406$; $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.6, 8.6, 8.6)
- 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 = 45.7 V/m; Power Drift = -0.5 dB

Maximum value of SAR (interpolated) = 2.89 mW/g

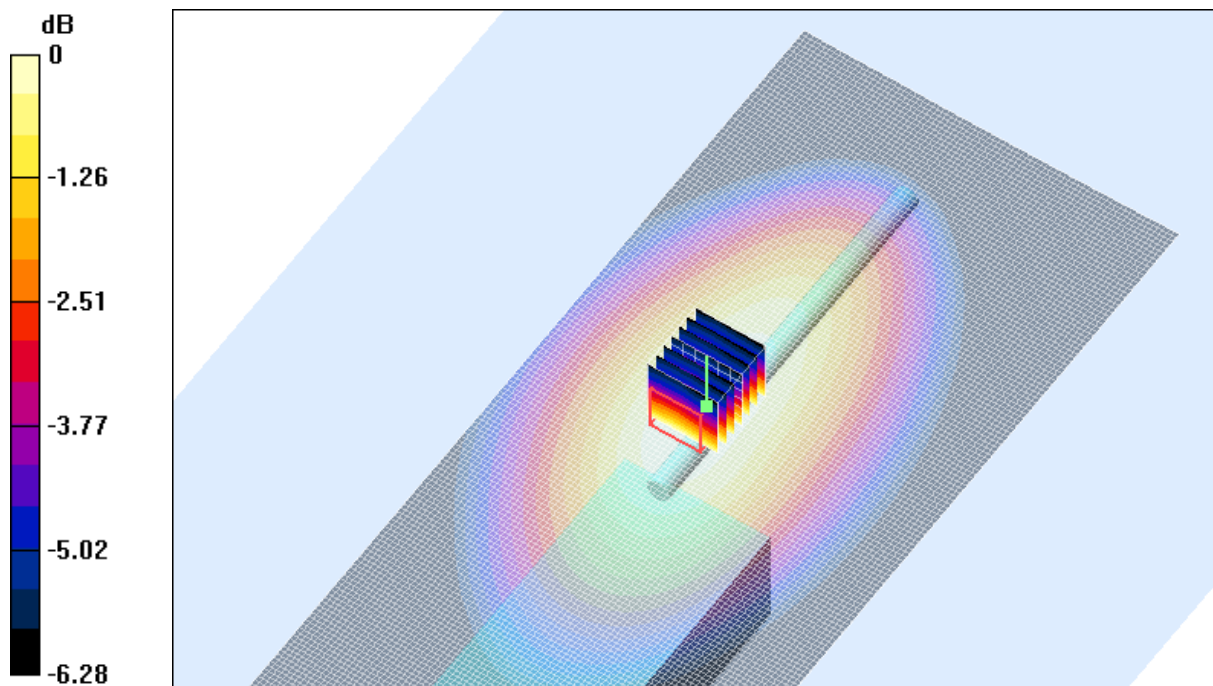
Channel 2 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 45.7 V/m; Power Drift = -0.5 dB

Maximum value of SAR (measured) = 2.88 mW/g

Peak SAR (extrapolated) = 4.22 W/kg

SAR(1 g) = 2.79 mW/g; SAR(10 g) = 2.11 mW/g



SAR MEASUREMENT PLOT 20

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.7 Degrees Celsius
44.0 %

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Test Date: 09 September 2004

File Name: [150 MHz Face \(DAE442 Probe1377\) Ant High 09-09-04.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: $\sigma = 0.780784$; mho/m, $\epsilon_r = 50.4498$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.6, 8.6, 8.6)

- 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 = 34.5 V/m; Power Drift = -0.2 dB

Maximum value of SAR (interpolated) = 1.51 mW/g

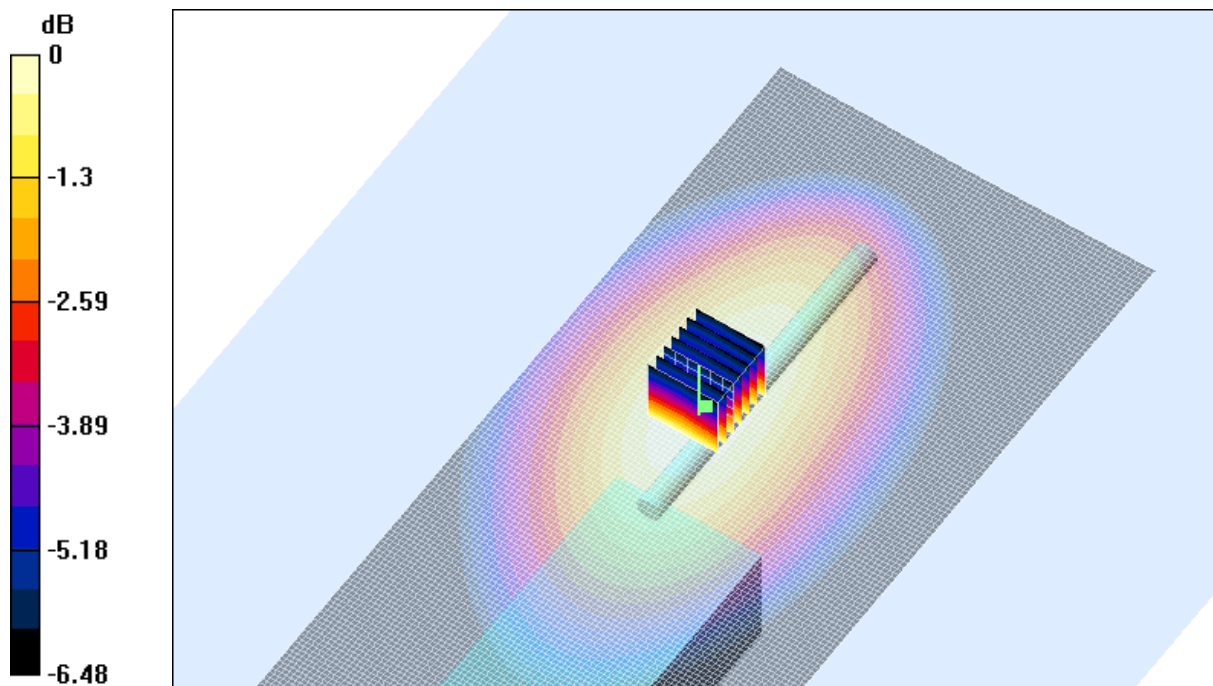
Channel 3 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.5 V/m; Power Drift = -0.2 dB

Maximum value of SAR (measured) = 1.53 mW/g

Peak SAR (extrapolated) = 2.25 W/kg

SAR(1 g) = 1.48 mW/g; SAR(10 g) = 1.11 mW/g



0 dB = 1.53mW/g

SAR MEASUREMENT PLOT 21

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.7 Degrees Celsius
44.0 %

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Test Date: 09 September 2004

File Name: [150 MHz Face \(DAE442 Probe1377\) Ant Mini Low 09-09-04.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: $\sigma = 0.746956$; mho/m, $\epsilon_r = 52.4147$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.6, 8.6, 8.6)

- 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 = 34.7 V/m; Power Drift = -0.1 dB

Maximum value of SAR (interpolated) = 1.36 mW/g

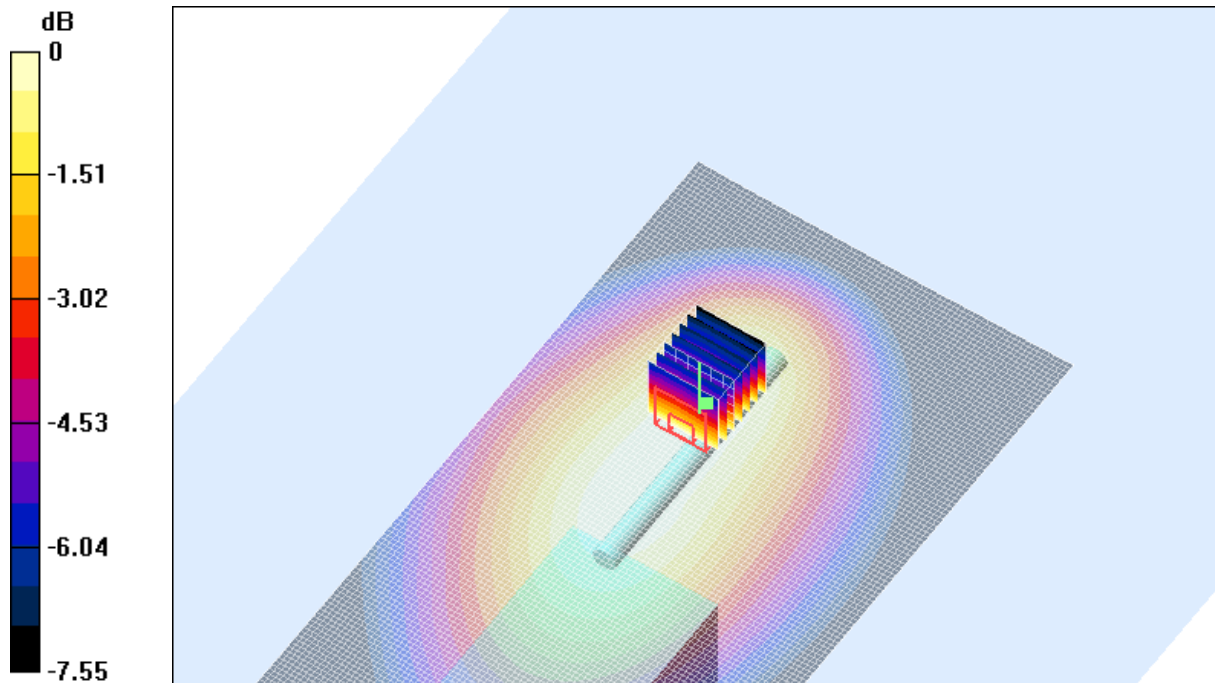
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.7 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 1.37 mW/g

Peak SAR (extrapolated) = 2.65 W/kg

SAR(1 g) = 1.33 mW/g; SAR(10 g) = 0.969 mW/g



0 dB = 1.37mW/g

SAR MEASUREMENT PLOT 22

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.7 Degrees Celsius
44.0 %

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Test Date: 09 September 2004

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

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

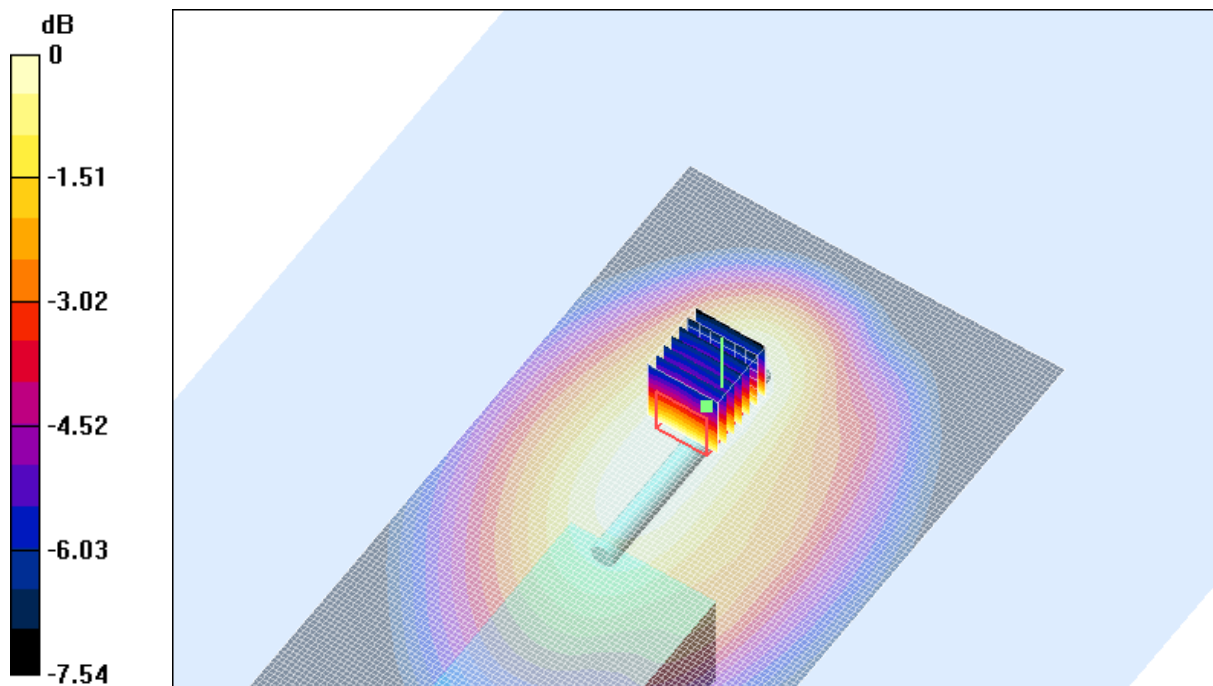
- * Communication System: CW 150 MHz; Frequency: 155 MHz; Duty Cycle: 1:1
- * Medium parameters used: $\sigma = 0.765937$; mho/m, $\epsilon_r = 51.2406$; $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.6, 8.6, 8.6)
- Phantom: Flat Phantom 9.1; Serial: P 9.1; Phantom section: Flat 2.2 Section

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

Reference Value = 35.2 V/m; Power Drift = -2 dB
 Maximum value of SAR (interpolated) = 0.921 mW/g

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

Reference Value = 35.2 V/m; Power Drift = -2 dB
 Maximum value of SAR (measured) = 0.918 mW/g
 Peak SAR (extrapolated) = 1.7 W/kg
SAR(1 g) = 0.894 mW/g; SAR(10 g) = 0.651 mW/g



0 dB = 0.918mW/g

SAR MEASUREMENT PLOT 23

Ambient Temperature
 Liquid Temperature
 Humidity

20.4 Degrees Celsius
 19.7 Degrees Celsius
 44.0 %

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Test Date: 09 September 2004

File Name: [150 MHz Face \(DAE442 Probe1377\) Ant Mini High 09-09-04.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: $\sigma = 0.780784$; mho/m, $\epsilon_r = 50.4498$; $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(8.6, 8.6, 8.6)
- 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 = 33.2 V/m; Power Drift = -0.4 dB

Maximum value of SAR (interpolated) = 1.18 mW/g

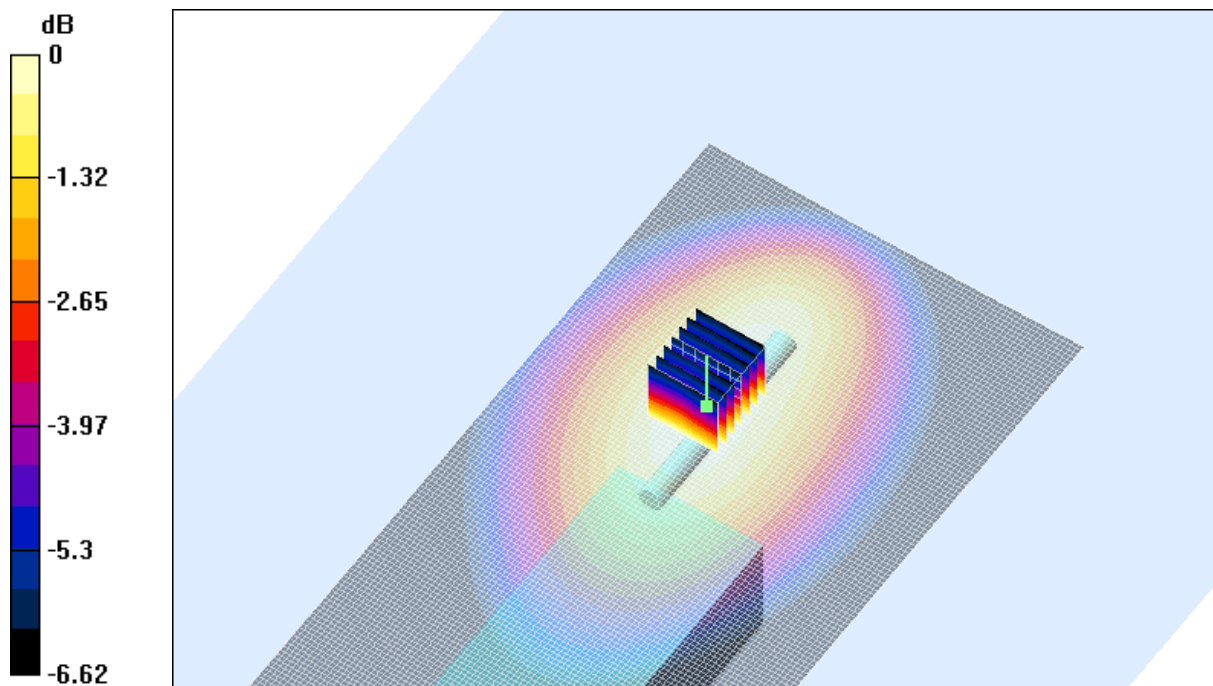
Channel 3 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.2 V/m; Power Drift = -0.4 dB

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

Peak SAR (extrapolated) = 1.74 W/kg

SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.862 mW/g



0 dB = 1.19mW/g

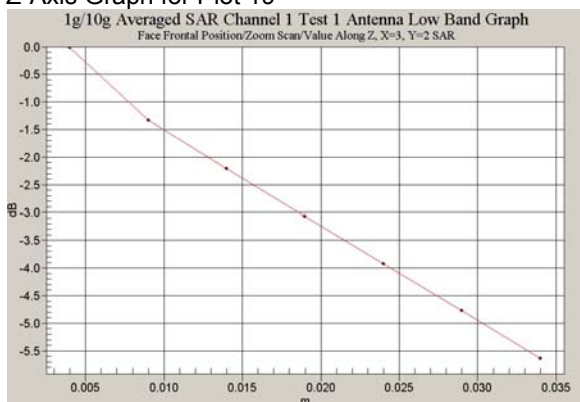
SAR MEASUREMENT PLOT 24

Ambient Temperature
Liquid Temperature
Humidity

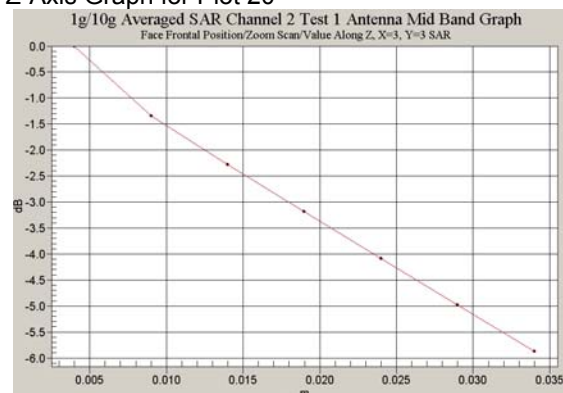
20.4 Degrees Celsius
19.7 Degrees Celsius
44.0 %

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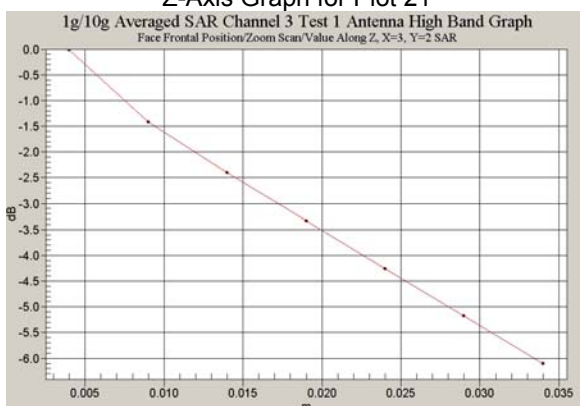
Z-Axis Graph for Plot 19



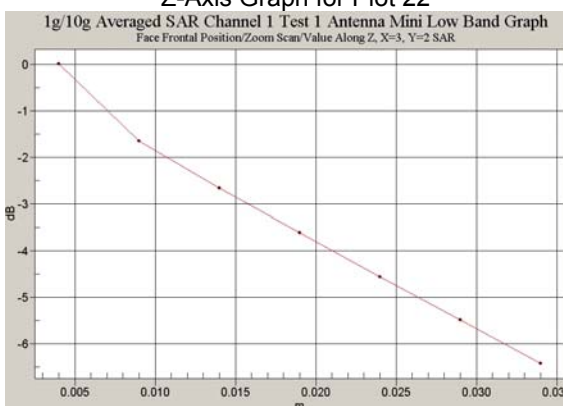
Z-Axis Graph for Plot 20



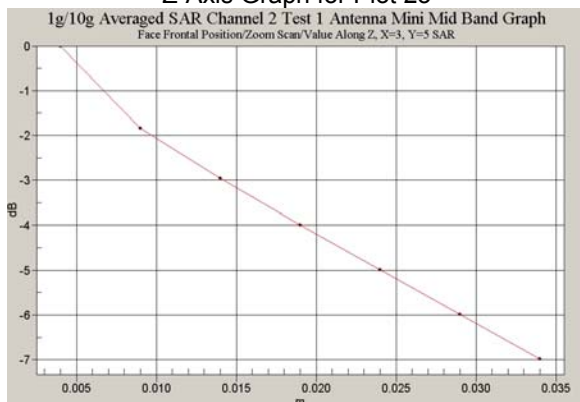
Z-Axis Graph for Plot 21



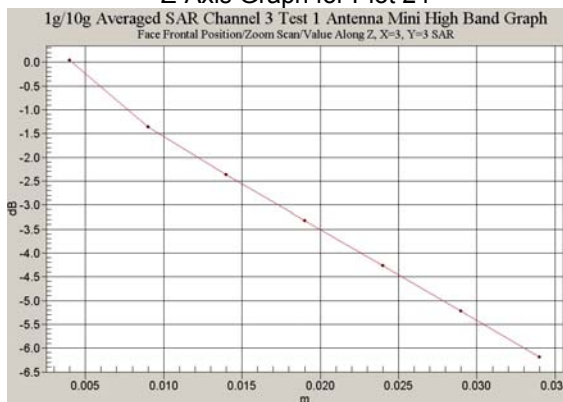
Z-Axis Graph for Plot 22



Z-Axis Graph for Plot 23



Z-Axis Graph for Plot 24



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