

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: SAR Measurement Plot Numbers Face Frontal positions TPAB12-K500A

Test Position	Plot No.	Test Channel
Face Frontal	1	1
Antenna	2	5
TPA-AN-023	3	7
Face Frontal	4	1
Antenna	5	5
TPA-AN-021	6	7
Speaker Microphone accessory TPA-AA-204		
Face Frontal	7	1
Antenna	8	5
TPA-AN-023	9	7
Face Frontal	10	1
Antenna	11	5
TPA-AN-021	12	7

Table: SAR Measurement Plot Numbers Belt Clip and Holster Worn positions TPAB12-K500A

Test Position	Plot No.	Test Channel
Belt Clip	13	1
Antenna	14	5
TPA-AN-023	15	7
Holster Ant. TPA-AN-023	16	5
Belt Clip	17	1
Antenna	18	5
TPA-AN-021	19	7
With Battery TPA-BA-204	20	7
With Battery TPA-BA-202	21	7
With Battery TPA-BA-201	22	7
Holster Ant. TPA-AN-021	23	5
Speaker Microphone accessory TPA-AA-204		
Belt Clip	24	1
Antenna	25	5
TPA-AN-023	26	7
Belt Clip	27	1
Antenna	28	5
TPA-AN-021	29	7



Table: SAR Measurement Plot Numbers Belt Clip position TPAB11-K500A

Test Position	Plot No.	Test Channel
Belt Clip	30	1
Antenna	31	5
TPA-AN-021	32	7

Table: Validation Plot Numbers

Date	Plot Number	Frequency
20 th Sept 05	33	900 MHz
21 st Sept 05	34	900 MHz
22 nd Sept 05	35	900 MHz
23 rd Sept 05	36	900 MHz
26 th Sept 05	37	900 MHz

Test Date: 23 September 2005

File Name: [TPAB12-K500A Ni-MH Battery \(TPA-BA-203\) 810 MHz Face Frontal \(DAE442 Probe1377\) 23-09-05.da4](#)

DUT: Tait 810 MHz Handheld Transceiver; Type: TPAB12-K500A, Antenna TPA-AN-023; Serial: 21001665

* Communication System: CW 810 MHz; Frequency: 762 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.885039$ mho/m, $\epsilon_r = 42.3557$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(6.25, 6.25, 6.25)

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

Channel 1 Test/Area Scan (51x191x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 3.39 mW/g

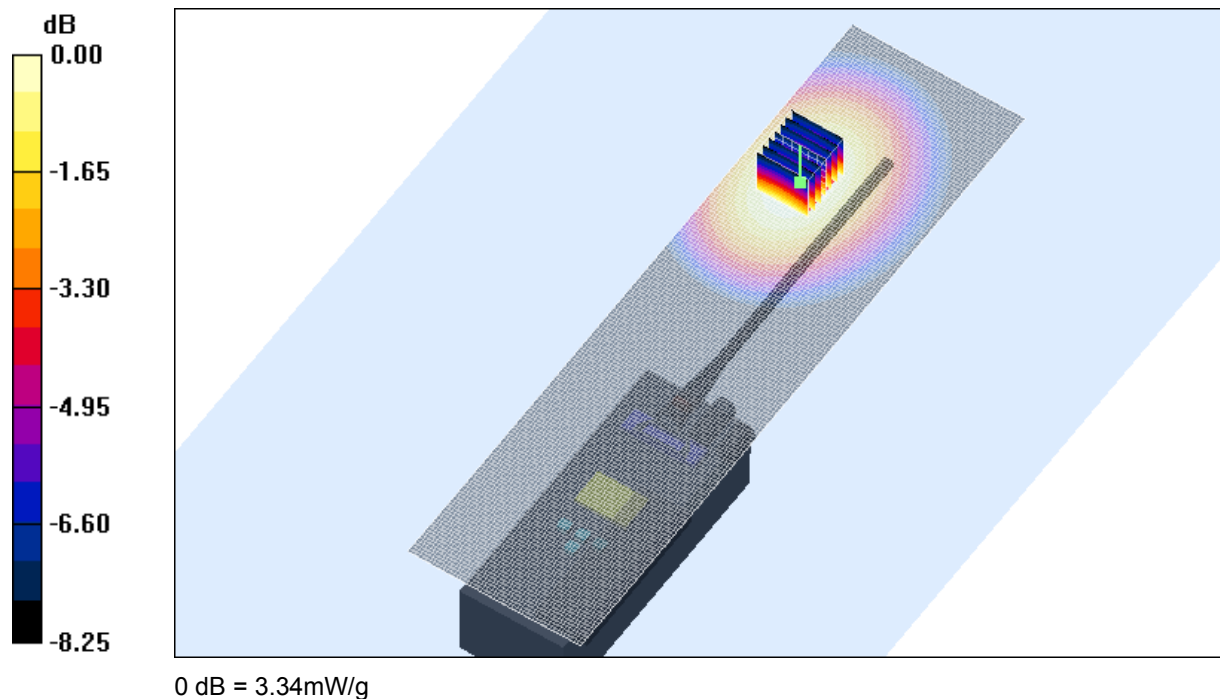
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 46.9 V/m; Power Drift = -0.392 dB

Peak SAR (extrapolated) = 4.67 W/kg

SAR(1 g) = 3.19 mW/g; SAR(10 g) = 2.29 mW/g

Maximum value of SAR (measured) = 3.34 mW/g



SAR MEASUREMENT PLOT 1

Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.5 Degrees Celsius
58.0 %

Test Date: 23 September 2005

File Name: [TPAB12-K500A Ni-MH Battery \(TPA-BA-203\) 810 MHz Face Frontal \(DAE442 Probe1377\) 23-09-05.da4](#)

DUT: Tait 810 MHz Handheld Transceiver; Type: TPAB12-K500A, Antenna TPA-AN-023; Serial: 21001665

* Communication System: CW 810 MHz; Frequency: 825 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.947336$ mho/m, $\epsilon_r = 41.5027$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(6.07, 6.07, 6.07)

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

Channel 5 Test/Area Scan (51x191x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 2.76 mW/g

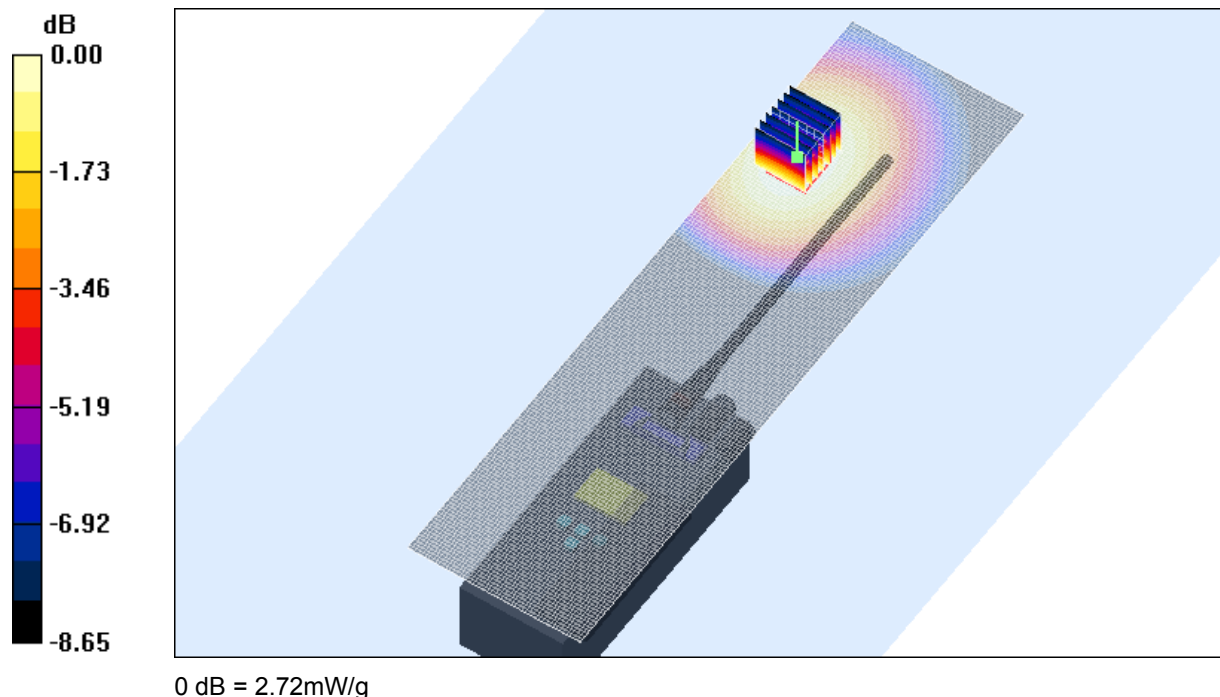
Channel 5 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.7 V/m; Power Drift = -0.244 dB

Peak SAR (extrapolated) = 3.82 W/kg

SAR(1 g) = 2.59 mW/g; SAR(10 g) = 1.84 mW/g

Maximum value of SAR (measured) = 2.72 mW/g



SAR MEASUREMENT PLOT 2

Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.5 Degrees Celsius
58.0 %



This document shall not be copied or reproduced, except in full without the written permission of the Technical Director, EMC Technologies Pty. Ltd.

Test Date: 23 September 2005

File Name: [TPAB12-K500A Ni-MH Battery \(TPA-BA-203\) 810 MHz Face Frontal \(DAE442 Probe1377\) 23-09-05.da4](#)

DUT: Tait 810 MHz Handheld Transceiver; Type: TPAB12-K500A, Antenna TPA-AN-023; Serial: 21001665

* Communication System: CW 810 MHz; Frequency: 870 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.98927$ mho/m, $\epsilon_r = 40.9706$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(6.07, 6.07, 6.07)

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

Channel 7 Test/Area Scan (51x191x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 2.47 mW/g

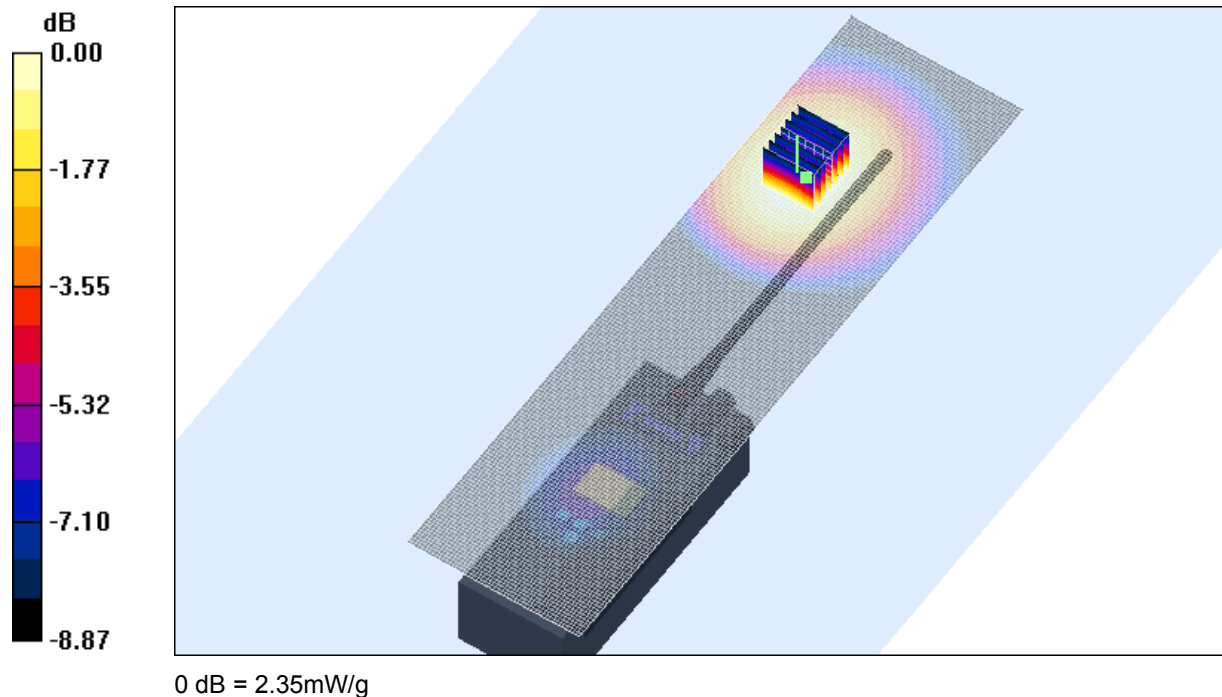
Channel 7 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.4 V/m; Power Drift = -0.023 dB

Peak SAR (extrapolated) = 2.91 W/kg

SAR(1 g) = 2.22 mW/g; SAR(10 g) = 1.6 mW/g

Maximum value of SAR (measured) = 2.35 mW/g



SAR MEASUREMENT PLOT 3

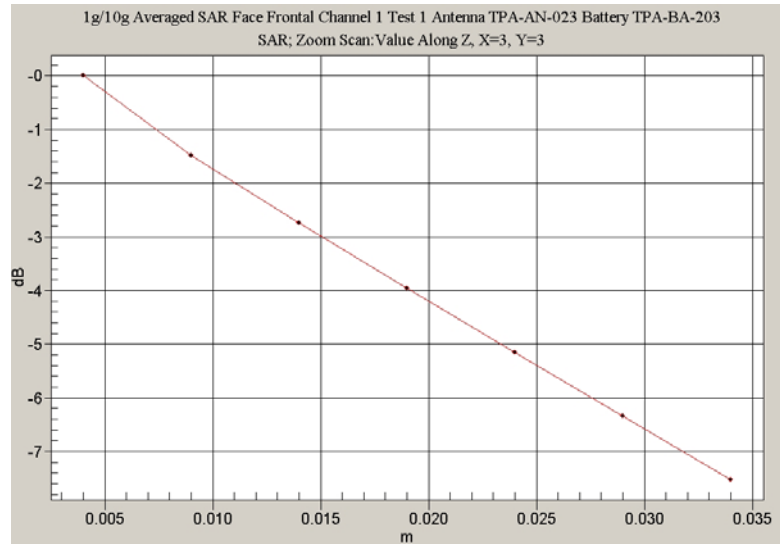
Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.5 Degrees Celsius
58.0 %

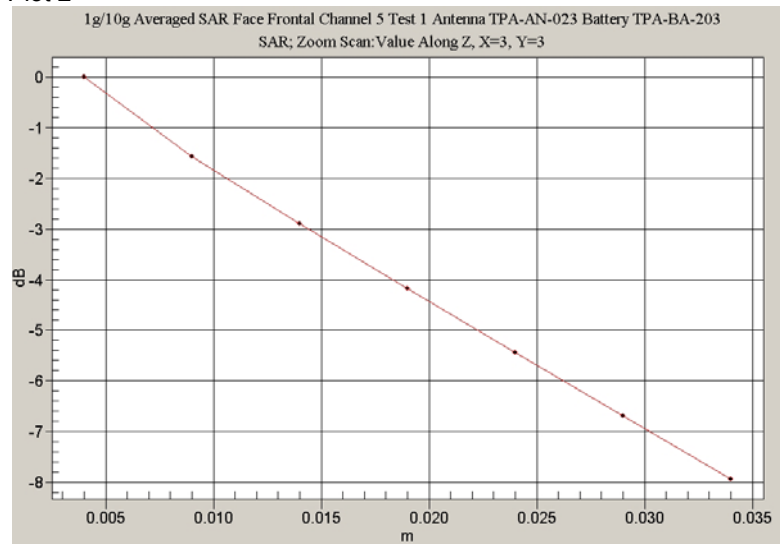


This document shall not be copied or reproduced, except in full without the written permission of the Technical Director , EMC Technologies Pty. Ltd.

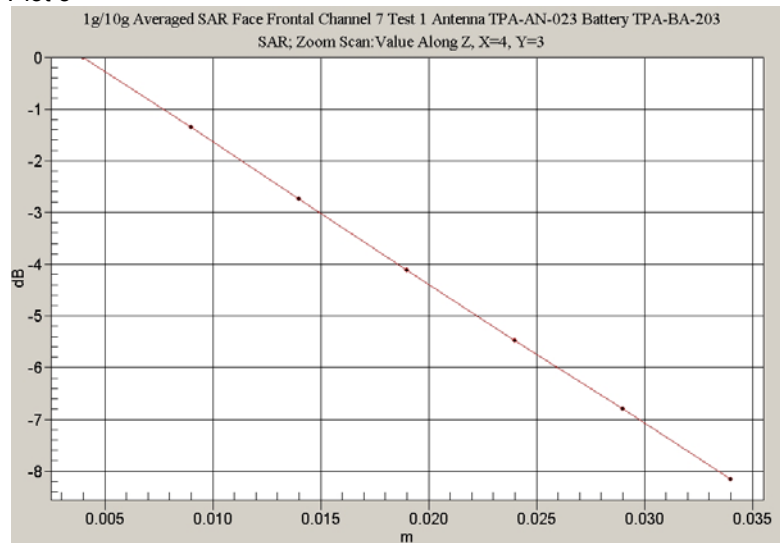
Z-Axis scan for Plot 1



Z-Axis scan for Plot 2



Z-Axis scan for Plot 3



Test Date: 23 September 2005

File Name: [TPAB12-K500A Ni-MH Battery \(TPA-BA-203\) 810 MHz Face Frontal Antenna MINI \(DAE442 Probe1377\) 23-09-05.da4](#)

DUT: Tait 810 MHz Handheld Transceiver; Type: TPAB12-K500A, Antenna TPA-AN-021; Serial: 21001665

* Communication System: CW 810 MHz; Frequency: 762 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.885039$ mho/m, $\epsilon_r = 42.3557$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(6.25, 6.25, 6.25)

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

Channel 1 Test/Area Scan (51x141x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 3.80 mW/g

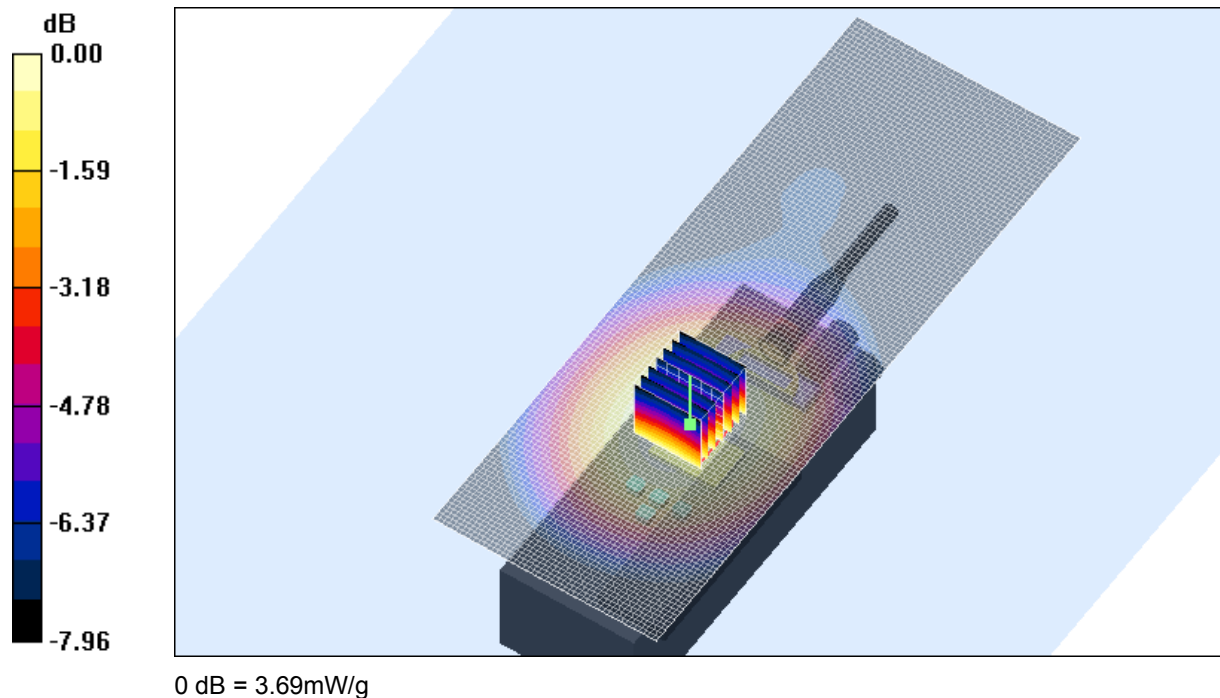
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.4 V/m; Power Drift = -0.214 dB

Peak SAR (extrapolated) = 5.11 W/kg

SAR(1 g) = 3.53 mW/g; SAR(10 g) = 2.58 mW/g

Maximum value of SAR (measured) = 3.69 mW/g



SAR MEASUREMENT PLOT 4

Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.5 Degrees Celsius
58.0 %

Test Date: 23 September 2005

File Name: [TPAB12-K500A Ni-MH Battery \(TPA-BA-203\) 810 MHz Face Frontal Antenna MINI \(DAE442 Probe1377\) 23-09-05.da4](#)

DUT: Tait 810 MHz Handheld Transceiver; Type: TPAB12-K500A, Antenna TPA-AN-021; Serial: 21001665

* Communication System: CW 810 MHz; Frequency: 825 MHz; Duty Cycle: 1:1

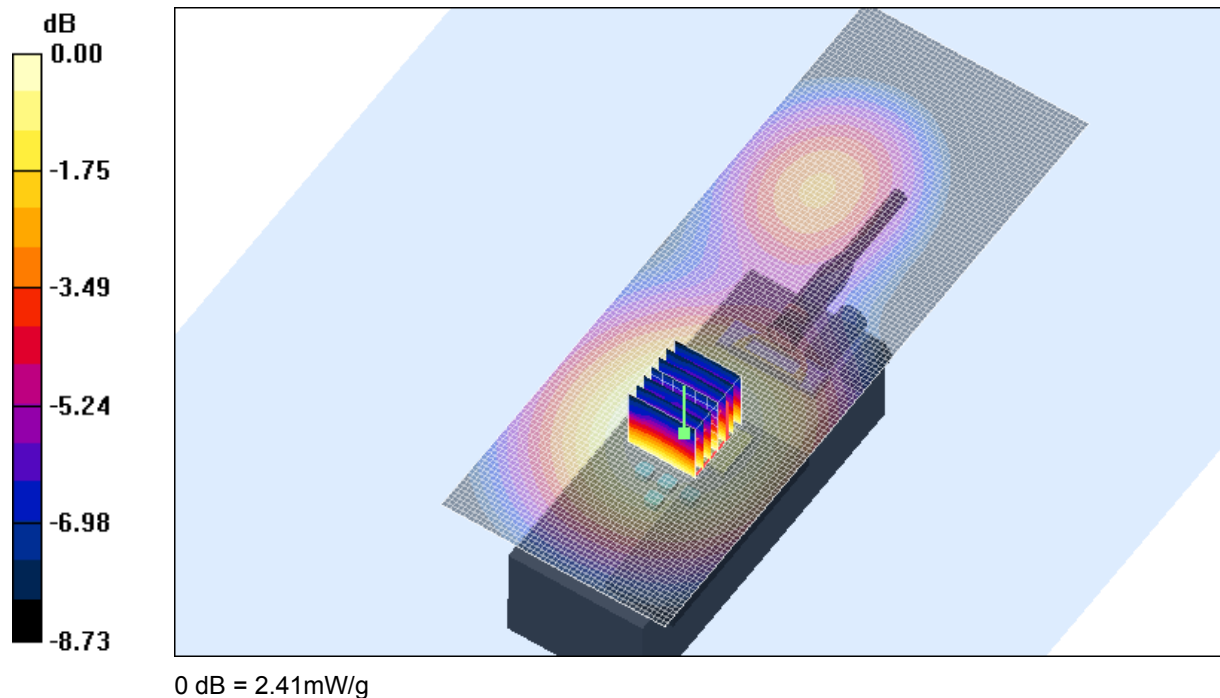
* Medium parameters used: $\sigma = 0.947336$ mho/m, $\epsilon_r = 41.5027$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(6.07, 6.07, 6.07)

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

Channel 5 Test/Area Scan (51x141x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 2.54 mW/g

Channel 5 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 36.8 V/m; Power Drift = -0.417 dB
Peak SAR (extrapolated) = 3.50 W/kg
SAR(1 g) = 2.3 mW/g; SAR(10 g) = 1.64 mW/g
Maximum value of SAR (measured) = 2.41 mW/g



SAR MEASUREMENT PLOT 5

Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.5 Degrees Celsius
58.0 %

Test Date: 23 September 2005

File Name: [TPAB12-K500A Ni-MH Battery \(TPA-BA-203\) 810 MHz Face Frontal Antenna MINI \(DAE442 Probe1377\) 23-09-05.da4](#)

DUT: Tait 810 MHz Handheld Transceiver; Type: TPAB12-K500A, Antenna TPA-AN-021; Serial: 21001665

* Communication System: CW 810 MHz; Frequency: 870 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 0.98927$ mho/m, $\epsilon_r = 40.9706$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(6.07, 6.07, 6.07)

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

Channel 7 Test/Area Scan (51x141x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 2.60 mW/g

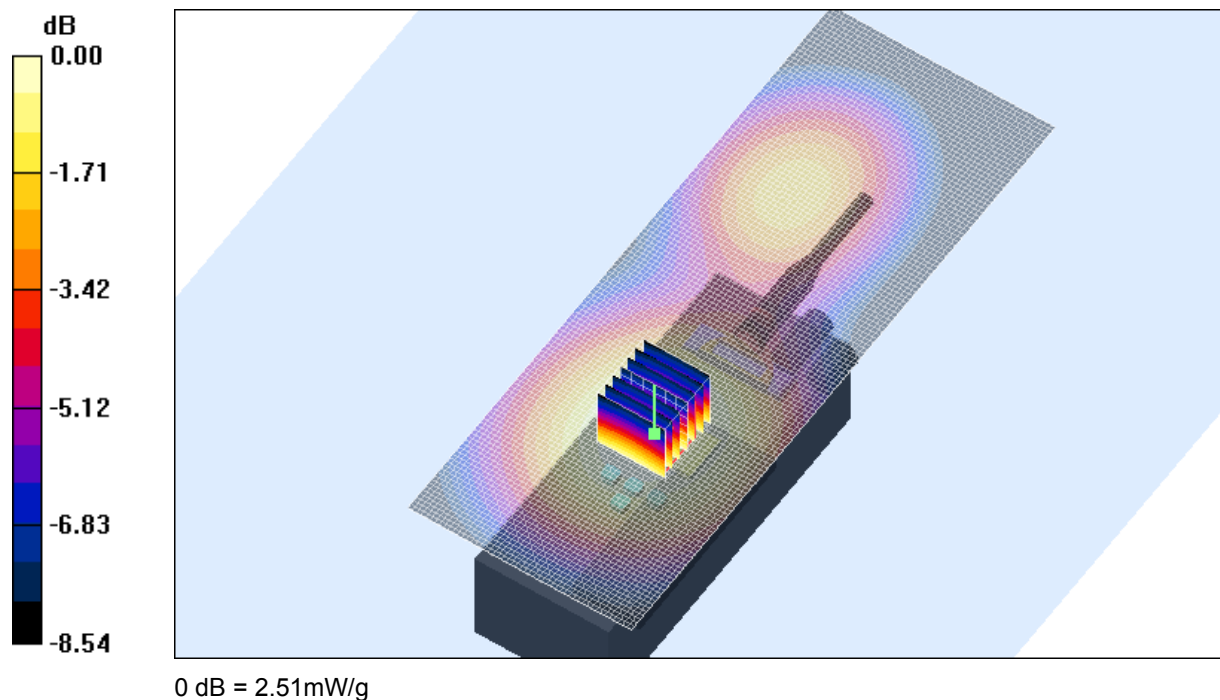
Channel 7 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 42.4 V/m; Power Drift = -0.411 dB

Peak SAR (extrapolated) = 3.09 W/kg

SAR(1 g) = 2.36 mW/g; SAR(10 g) = 1.73 mW/g

Maximum value of SAR (measured) = 2.51 mW/g

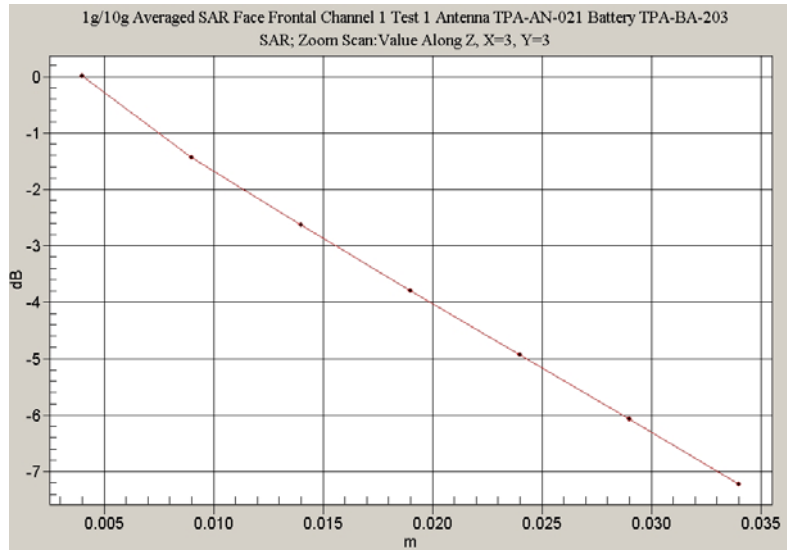


SAR MEASUREMENT PLOT 6

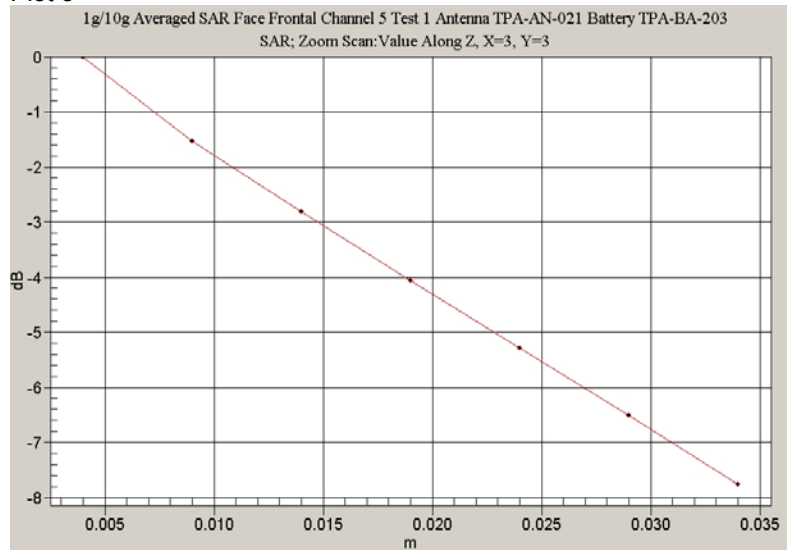
Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.5 Degrees Celsius
58.0 %

Z-Axis scan for Plot 4



Z-Axis scan for Plot 5



Z-Axis scan for Plot 6

