

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

1. Test Position	2. Plot No.	4. Test Freq (MHz)
Belt Clip	1	440.075
	2	458.075
	3	476.075
Belt Clip with Holster	4	440.075
	5	458.075
	6	476.075
Face Frontal	7	458.075
Belt Clip SPK-MIC	8	458.075
	9	476.075
	10	494.075
Face Frontal SPK-MIC	11	458.075

Table: Prescans SAR Scan Plot Numbers

1. Test Position	2. Plot No.	3. Test Ch
Face Frontal	12	0
		1
		2
		3
		4
Face Frontal SPK-MIC	13	0
		1
		2
		3
		4
Body Worn Back Belt Clip	14	0
		1
		2
		3
		4
Body Worn Back Belt Clip SPK-MIK	15	0
		1
		2
		3
		4

Table: Validation Plot Numbers

Date	Plot Number	Frequency
12 th November 2012	16	450 MHz
13 th November 2012	17	450 MHz



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Test Date: 13 November 2012

File Name: M121040 450 MHz Belt Clip 13-11-12.da52:0

DUT: SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK

* Communication System: CW; Frequency: 440.075 MHz; Duty Cycle: 1:1

* Medium parameters used: $f = 440 \text{ MHz}$; $\sigma = 0.923 \text{ mho/m}$; $\epsilon_r = 56.831$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7.41, 7.41, 7.41); Calibrated: 12/12/2011

- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 0 Test/Area Scan (81x231x1): Interpolated grid:

$dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 8.72 W/kg

Configuration/Channel 0 Test/Zoom Scan (7x8x7)/Cube 0: Measurement

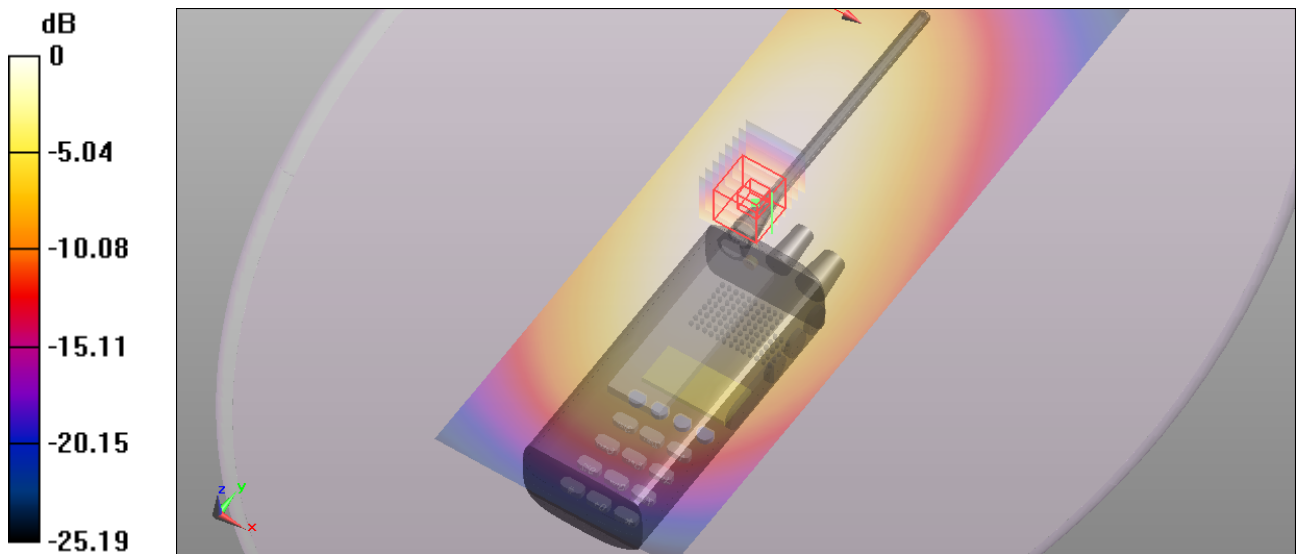
grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 82.871 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 12.172 mW/g

SAR(1 g) = 8.27 mW/g; SAR(10 g) = 6.01 mW/g

Maximum value of SAR (measured) = 9.45 W/kg



0 dB = 8.72 W/kg = 18.81 dB W/kg

SAR MEASUREMENT PLOT 1

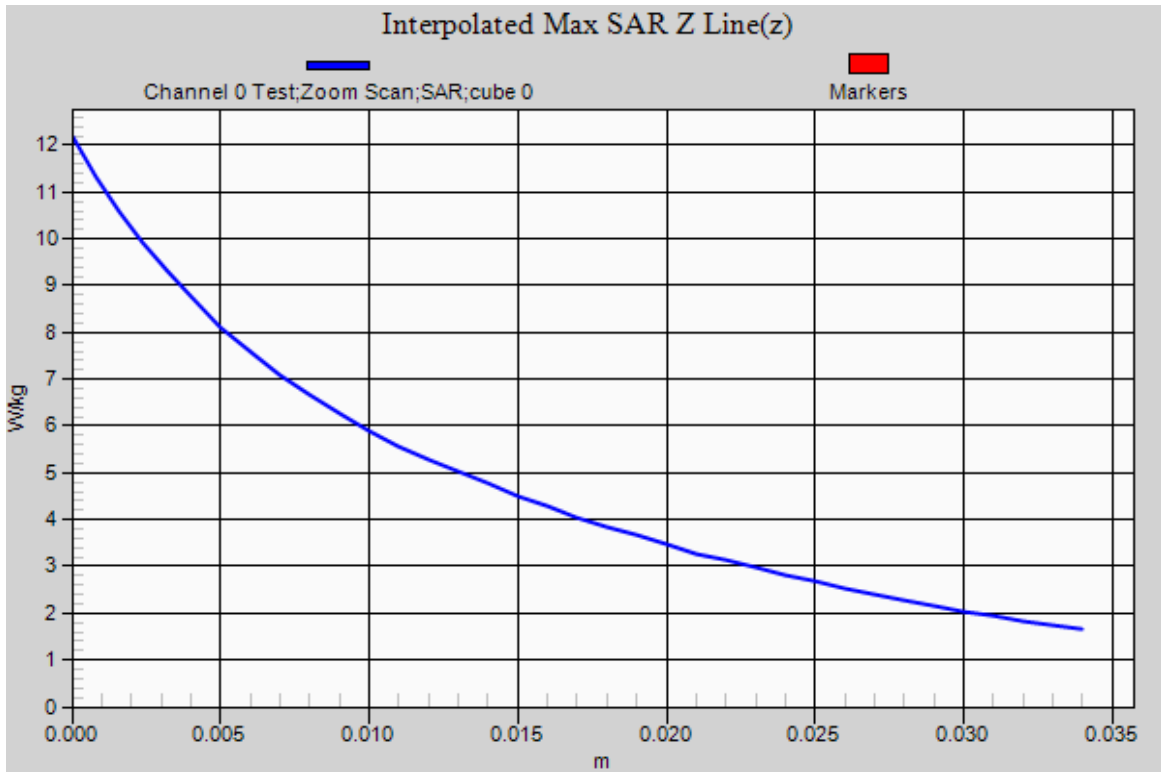
Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.8 Degrees Celsius
44.0%



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Test Date: 13 November 2012

File Name: M121040 450 MHz Belt Clip 13-11-12.da52:0

DUT: SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK

* Communication System: CW; Frequency: 458.075 MHz; Duty Cycle: 1:1

* Medium parameters used: $f = 458 \text{ MHz}$; $\sigma = 0.937 \text{ mho/m}$; $\epsilon_r = 56.324$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7.41, 7.41, 7.41); Calibrated: 12/12/2011

- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 1 Test/Area Scan (81x231x1): Interpolated grid:

$dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 9.60 W/kg

Configuration/Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement

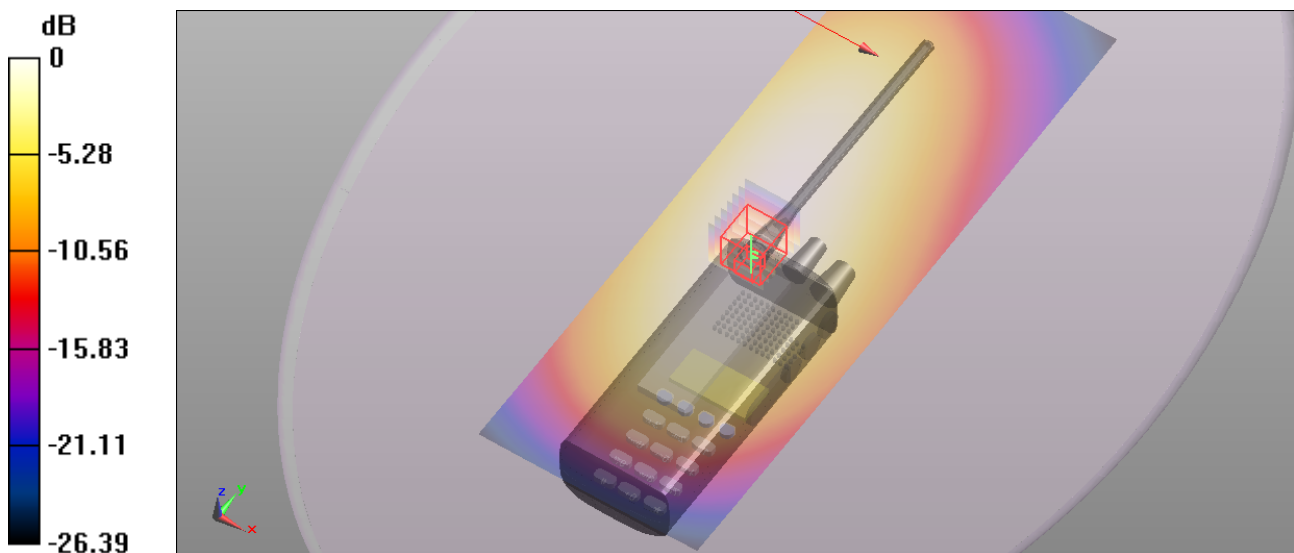
grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 84.696 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 13.604 mW/g

SAR(1 g) = 9.09 mW/g; SAR(10 g) = 6.58 mW/g

Maximum value of SAR (measured) = 9.53 W/kg



0 dB = 9.60 W/kg = 19.65 dB W/kg

SAR MEASUREMENT PLOT 2

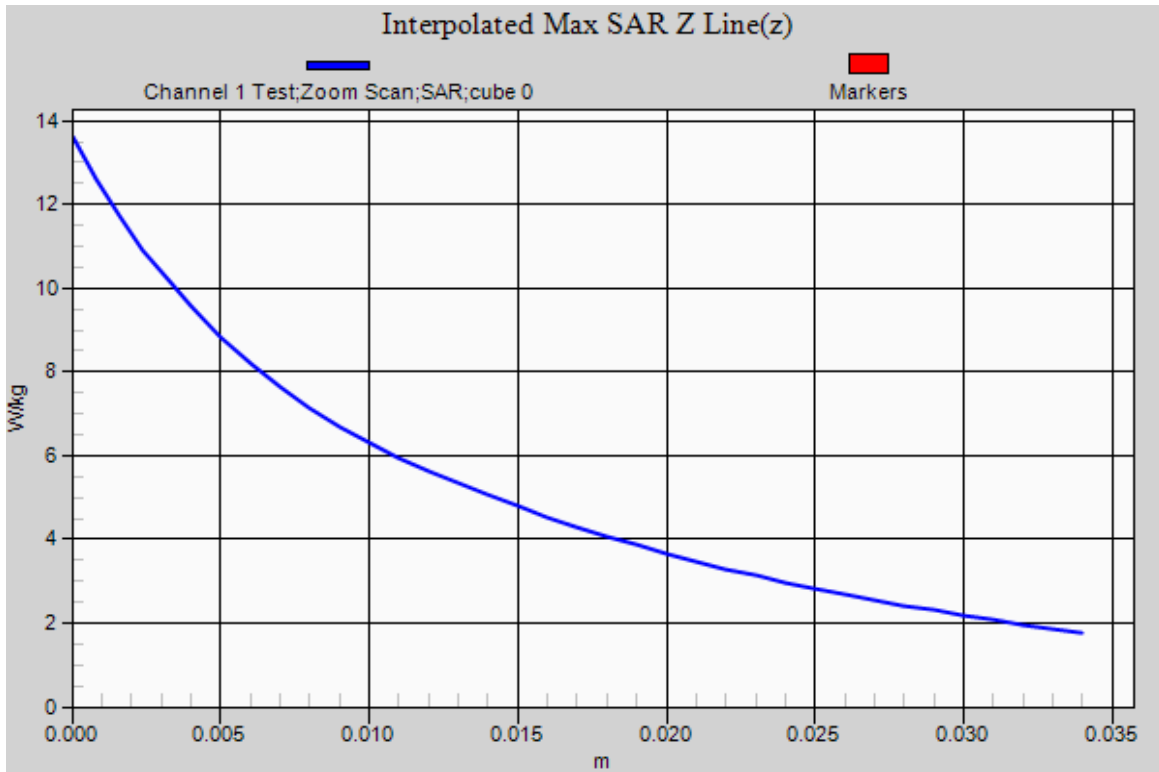
Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.8 Degrees Celsius
44.0%



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Test Date: 13 November 2012

File Name: M121040 450 MHz Belt Clip 13-11-12.da52:0

DUT: SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK

* Communication System: CW; Frequency: 476.075 MHz; Duty Cycle: 1:1

* Medium parameters used: $f = 476 \text{ MHz}$; $\sigma = 0.958 \text{ mho/m}$; $\epsilon_r = 56.084$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7.41, 7.41, 7.41); Calibrated: 12/12/2011

- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 2 Test/Area Scan (81x231x1): Interpolated grid:

$dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 7.18 W/kg

Configuration/Channel 2 Test/Zoom Scan (7x7x7)/Cube 0: Measurement

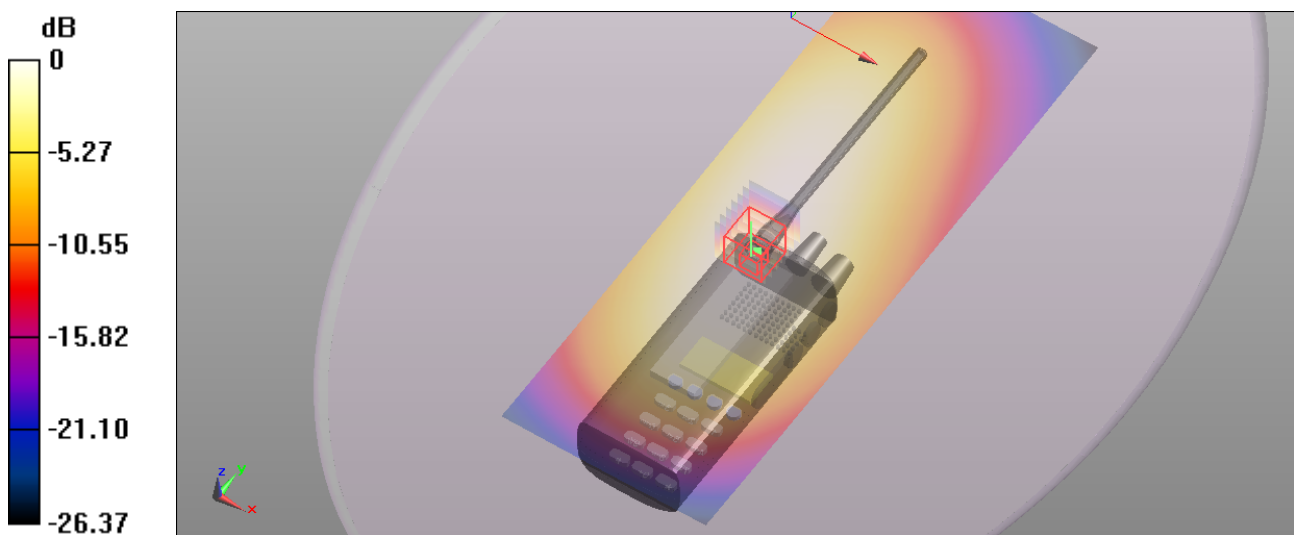
grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 71.568 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 10.374 mW/g

SAR(1 g) = 6.97 mW/g; SAR(10 g) = 5.01 mW/g

Maximum value of SAR (measured) = 7.32 W/kg



0 dB = 7.18 W/kg = 17.12 dB W/kg

SAR MEASUREMENT PLOT 3

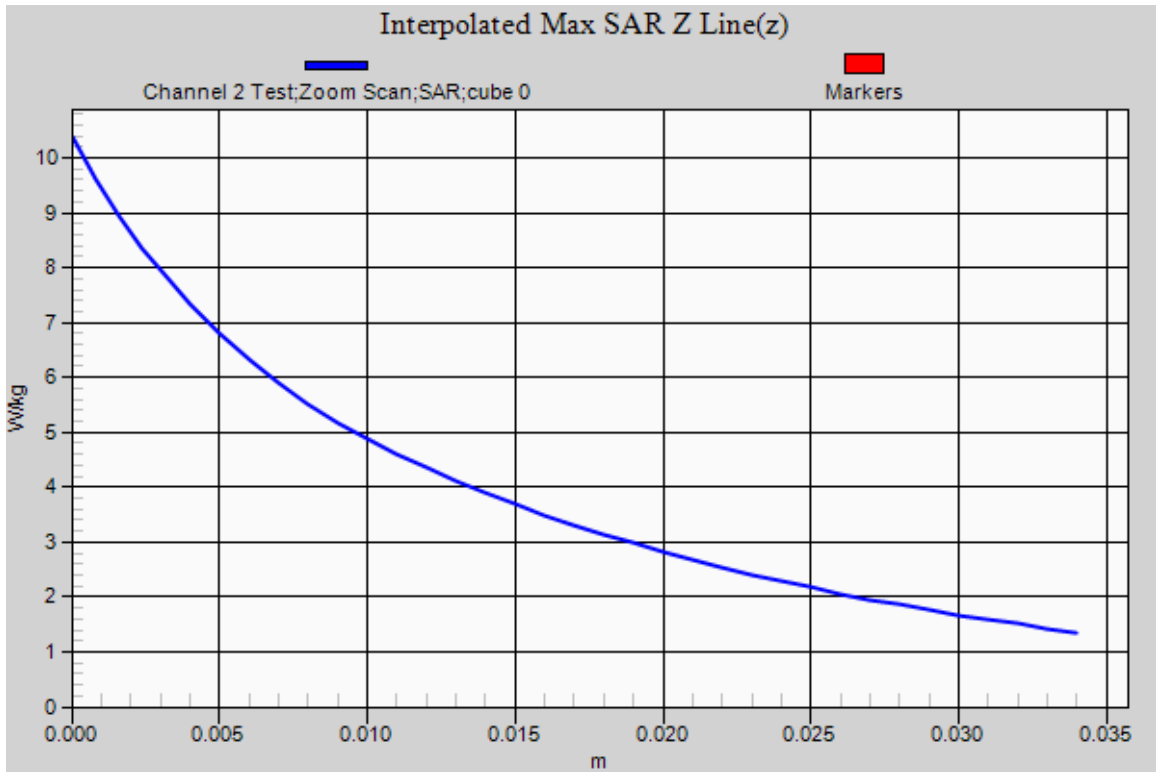
Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.8 Degrees Celsius
44.0%



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Test Date: 15 November 2012

File Name: M121040 450 MHz Belt Clip Holster 13-11-12.da52:0

DUT: SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK

* Communication System: CW; Frequency: 440.075 MHz; Duty Cycle: 1:1

* Medium parameters used: $f = 440 \text{ MHz}$; $\sigma = 0.923 \text{ mho/m}$; $\epsilon_r = 56.831$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7.41, 7.41, 7.41); Calibrated: 12/12/2011

- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 0 Test/Area Scan (81x231x1): Interpolated grid:

$dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 8.60 W/kg

Configuration/Channel 0 Test/Zoom Scan (7x8x7)/Cube 0: Measurement

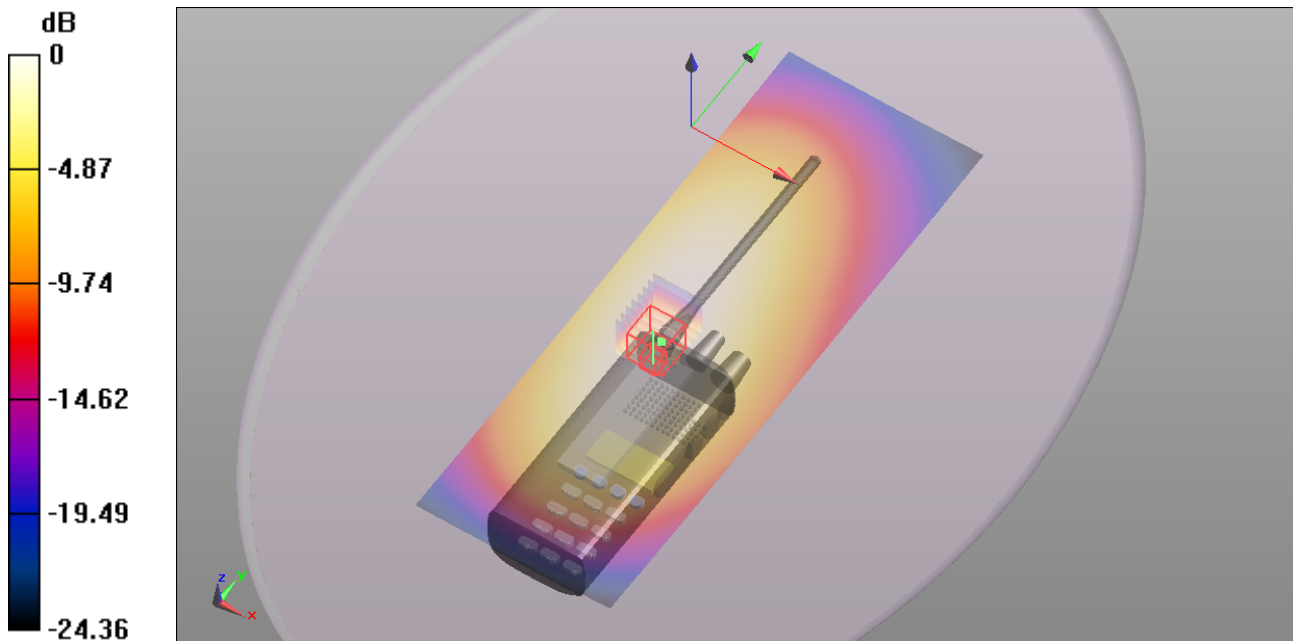
grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 75.063 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 12.355 mW/g

SAR(1 g) = 8.37 mW/g; SAR(10 g) = 6.08 mW/g

Maximum value of SAR (measured) = 8.82 W/kg



0 dB = 8.60 W/kg = 18.69 dB W/kg

SAR MEASUREMENT PLOT 4

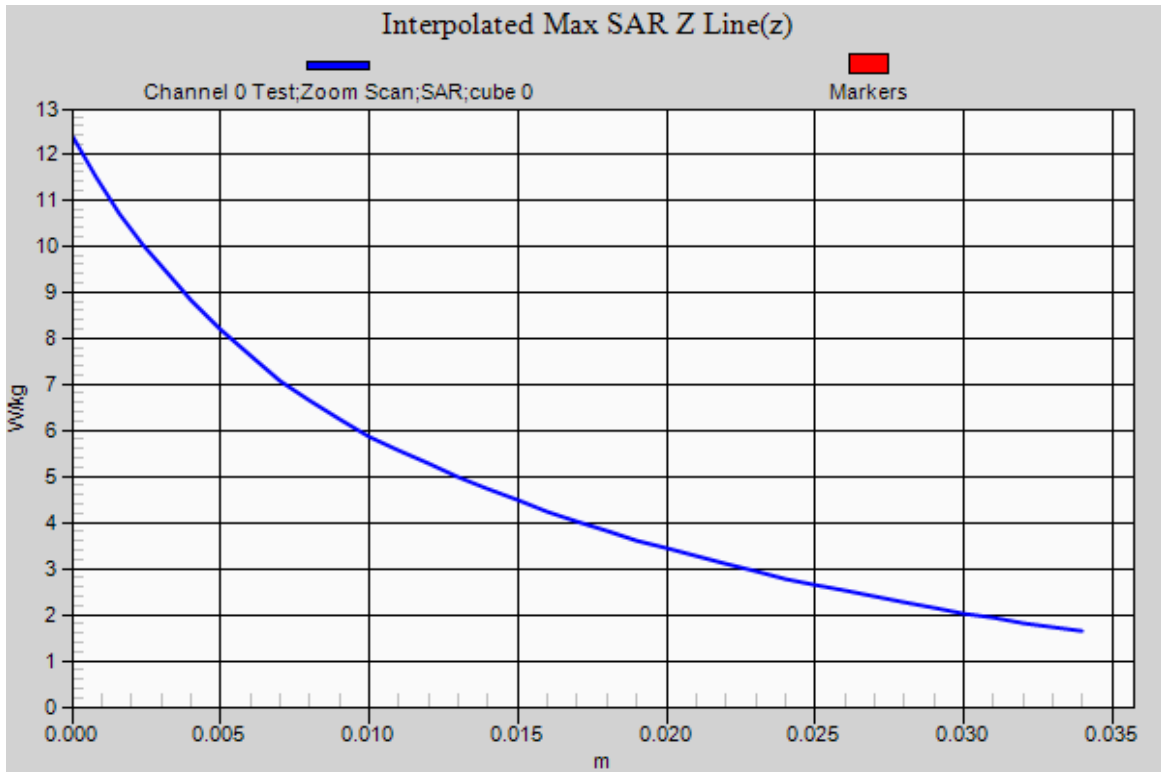
Ambient Temperature
Liquid Temperature
Humidity

21.1 Degrees Celsius
20.9 Degrees Celsius
43.0%



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Test Date: 13 November 2012

File Name: M121040 450 MHz Belt Clip Holster 13-11-12.da52:0

DUT: SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK

* Communication System: CW; Frequency: 458.075 MHz; Duty Cycle: 1:1

* Medium parameters used: $f = 458 \text{ MHz}$; $\sigma = 0.937 \text{ mho/m}$; $\epsilon_r = 56.324$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7.41, 7.41, 7.41); Calibrated: 12/12/2011

- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 1 Test/Area Scan (81x231x1): Interpolated grid:

$dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 9.43 W/kg

Configuration/Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement

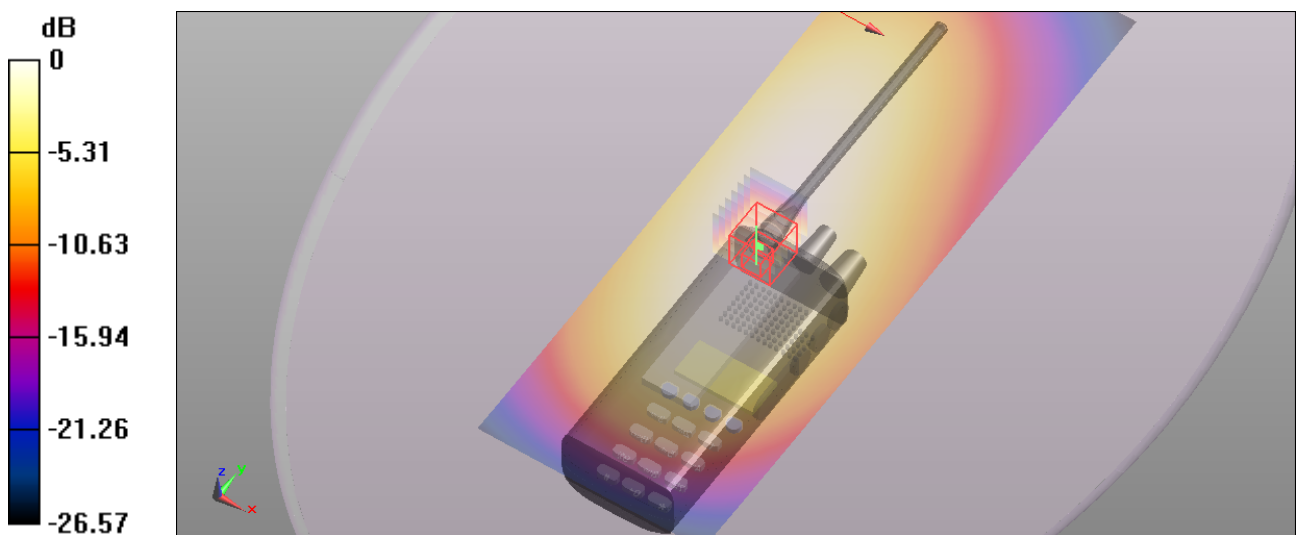
grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 74.392 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 13.106 mW/g

SAR(1 g) = 8.85 mW/g; SAR(10 g) = 6.37 mW/g

Maximum value of SAR (measured) = 9.38 W/kg



0 dB = 9.43 W/kg = 19.49 dB W/kg

SAR MEASUREMENT PLOT 5

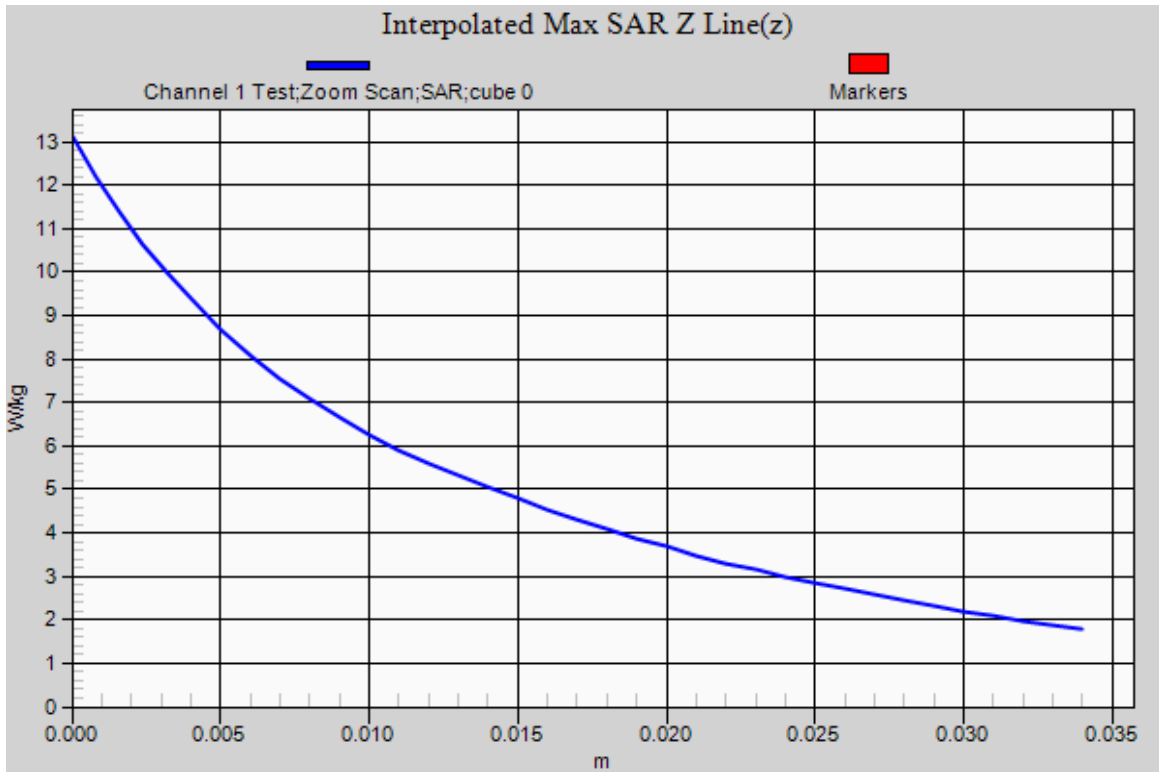
Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.8 Degrees Celsius
44.0%



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Test Date: 13 November 2012

File Name: M121040 450 MHz Belt Clip Holster 13-11-12.da52:0

DUT: SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK

* Communication System: CW; Frequency: 476.075 MHz; Duty Cycle: 1:1

* Medium parameters used: $f = 476 \text{ MHz}$; $\sigma = 0.958 \text{ mho/m}$; $\epsilon_r = 56.084$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7.41, 7.41, 7.41); Calibrated: 12/12/2011

- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 2 Test/Area Scan (81x231x1): Interpolated grid:

$dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 7.62 W/kg

Configuration/Channel 2 Test/Zoom Scan (7x7x7)/Cube 0: Measurement

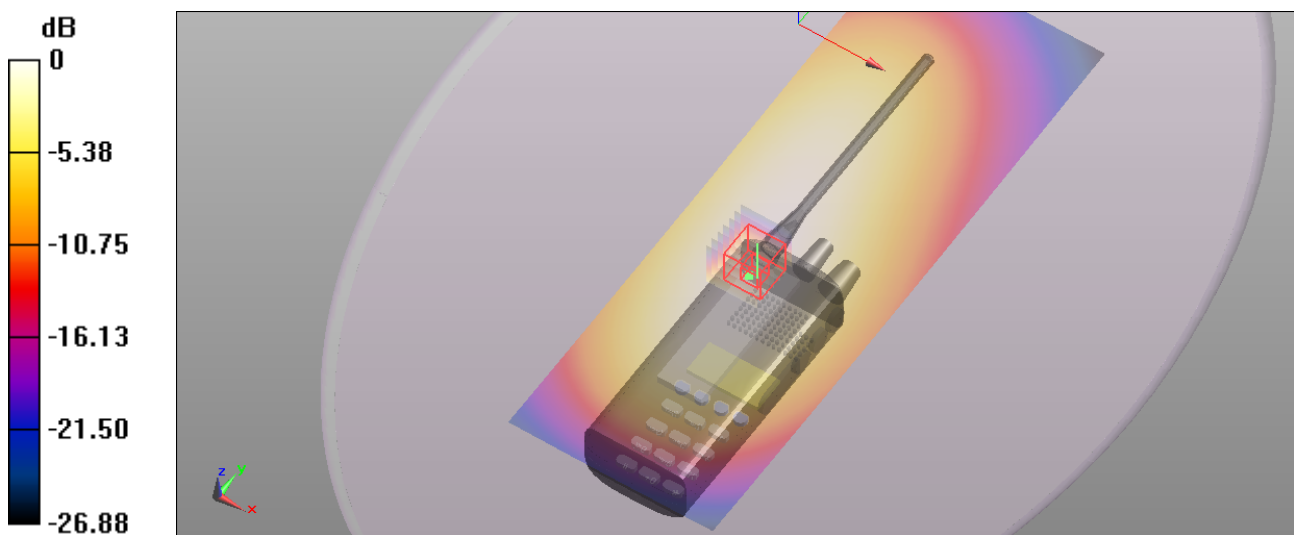
grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 68.328 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 10.721 mW/g

SAR(1 g) = 7.22 mW/g; SAR(10 g) = 5.17 mW/g

Maximum value of SAR (measured) = 7.55 W/kg



0 dB = 7.62 W/kg = 17.64 dB W/kg

SAR MEASUREMENT PLOT 6

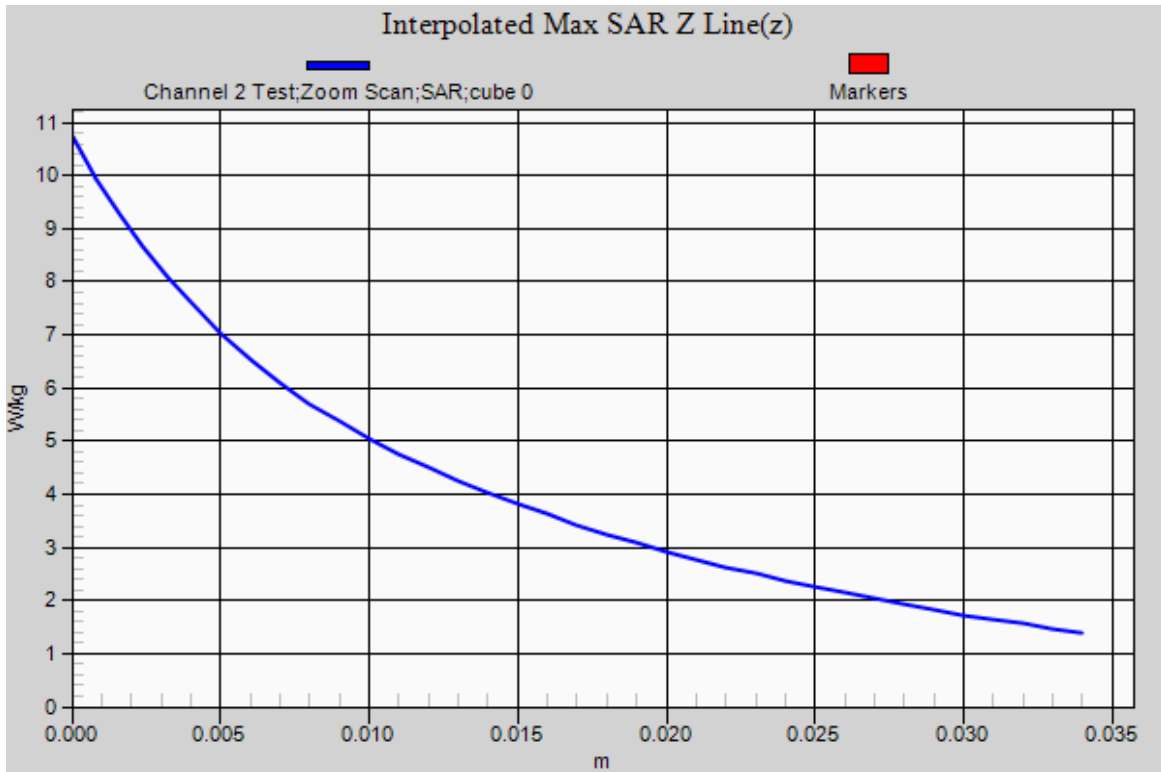
Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.8 Degrees Celsius
44.0%



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Test Date: 12 November 2012

File Name: M121040 450 MHz Face Frontal 12-11-12.da52:0

DUT: SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK

* Communication System: CW; Frequency: 458.075 MHz; Duty Cycle: 1:1

* Medium parameters used: $f = 458 \text{ MHz}$; $\sigma = 0.862 \text{ mho/m}$; $\epsilon_r = 42.292$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7, 7, 7); Calibrated: 12/12/2011

- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 1 Test/Area Scan (81x231x1): Interpolated grid:

$dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 6.57 W/kg

Configuration/Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement

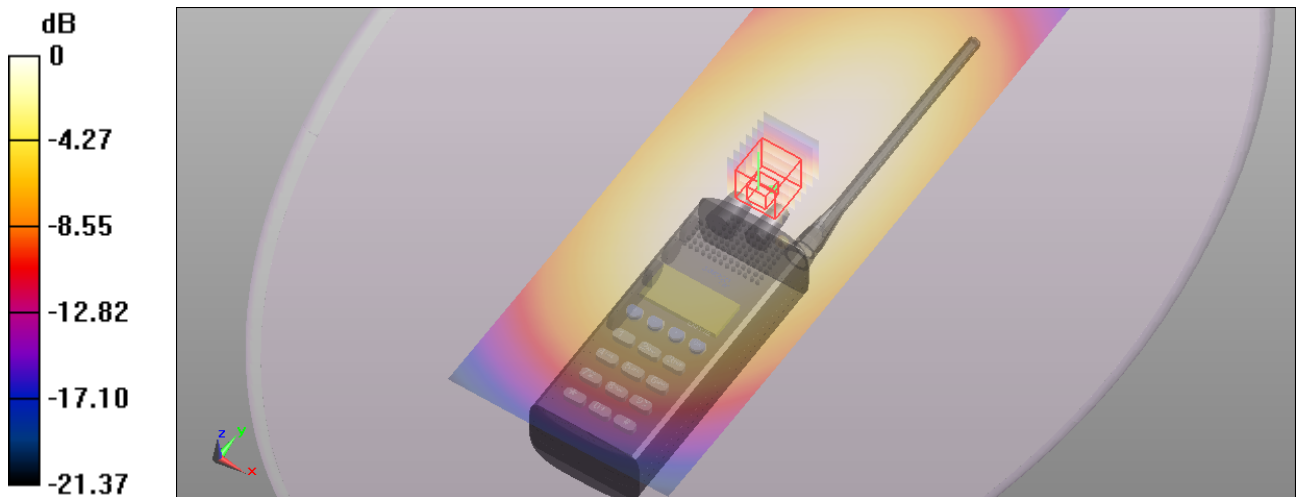
grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 75.716 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 8.444 mW/g

SAR(1 g) = 6.11 mW/g; SAR(10 g) = 4.54 mW/g

Maximum value of SAR (measured) = 6.40 W/kg



0 dB = 6.57 W/kg = 16.35 dB W/kg

SAR MEASUREMENT PLOT 7

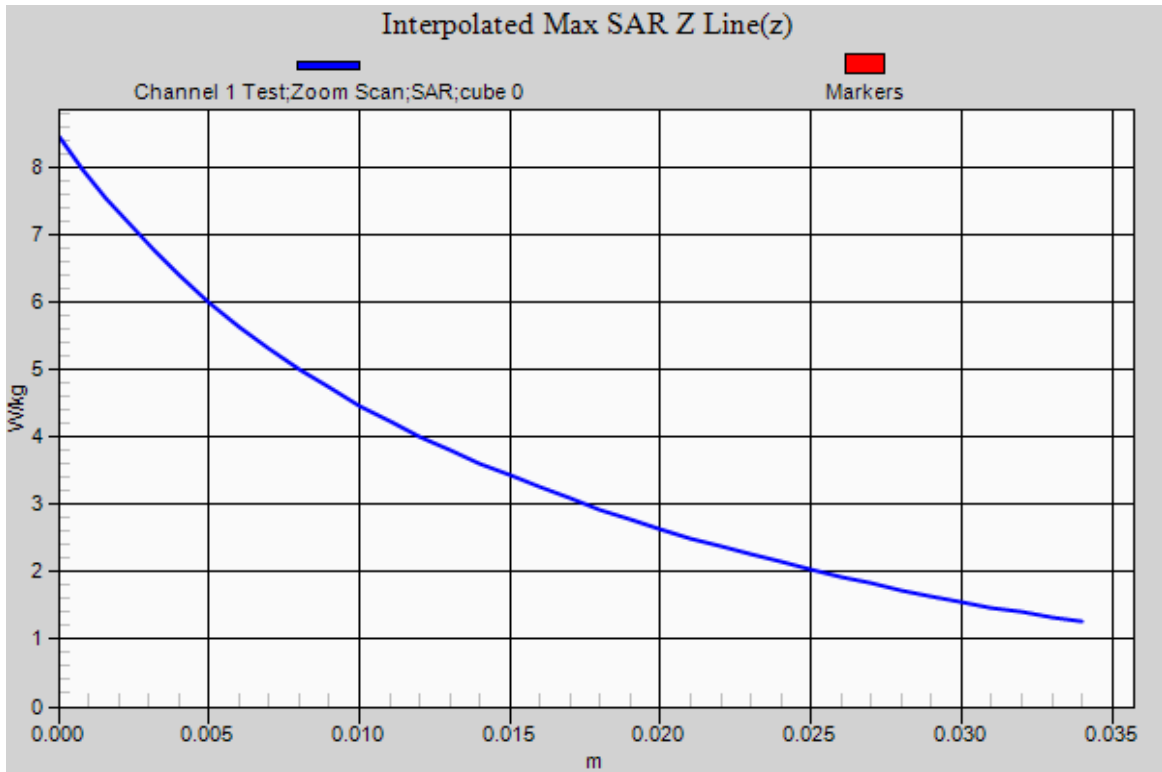
Ambient Temperature
Liquid Temperature
Humidity

19.8 Degrees Celsius
19.4 Degrees Celsius
45.0%



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Test Date: 13 November 2012

File Name: M121040 450 MHz Belt Clip Spk-Mic 13-11-12.da52:0

DUT: **SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK**

* Communication System: CW; Frequency: 458.075 MHz; Duty Cycle: 1:1

* Medium parameters used: $f = 458 \text{ MHz}$; $\sigma = 0.937 \text{ mho/m}$; $\epsilon_r = 56.324$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7.41, 7.41, 7.41); Calibrated: 12/12/2011

- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 1 Test/Area Scan (81x181x1): Interpolated grid:

$dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 8.62 W/kg

Configuration/Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement

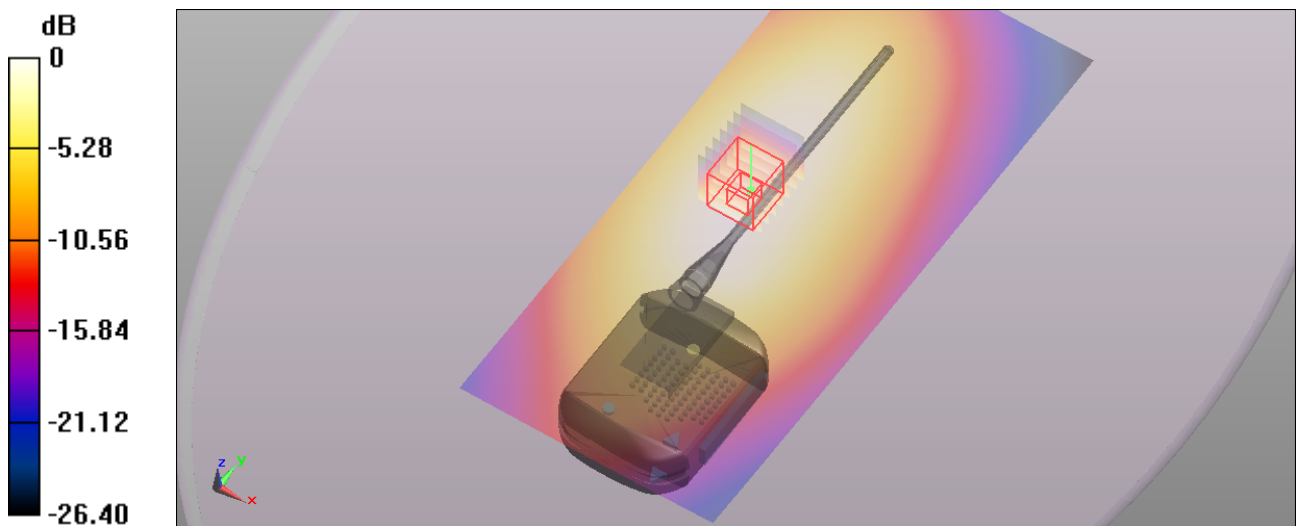
grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 74.986 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 12.779 mW/g

SAR(1 g) = 8.3 mW/g; SAR(10 g) = 5.74 mW/g

Maximum value of SAR (measured) = 8.73 W/kg



0 dB = 8.62 W/kg = 18.71 dB W/kg

SAR MEASUREMENT PLOT 8

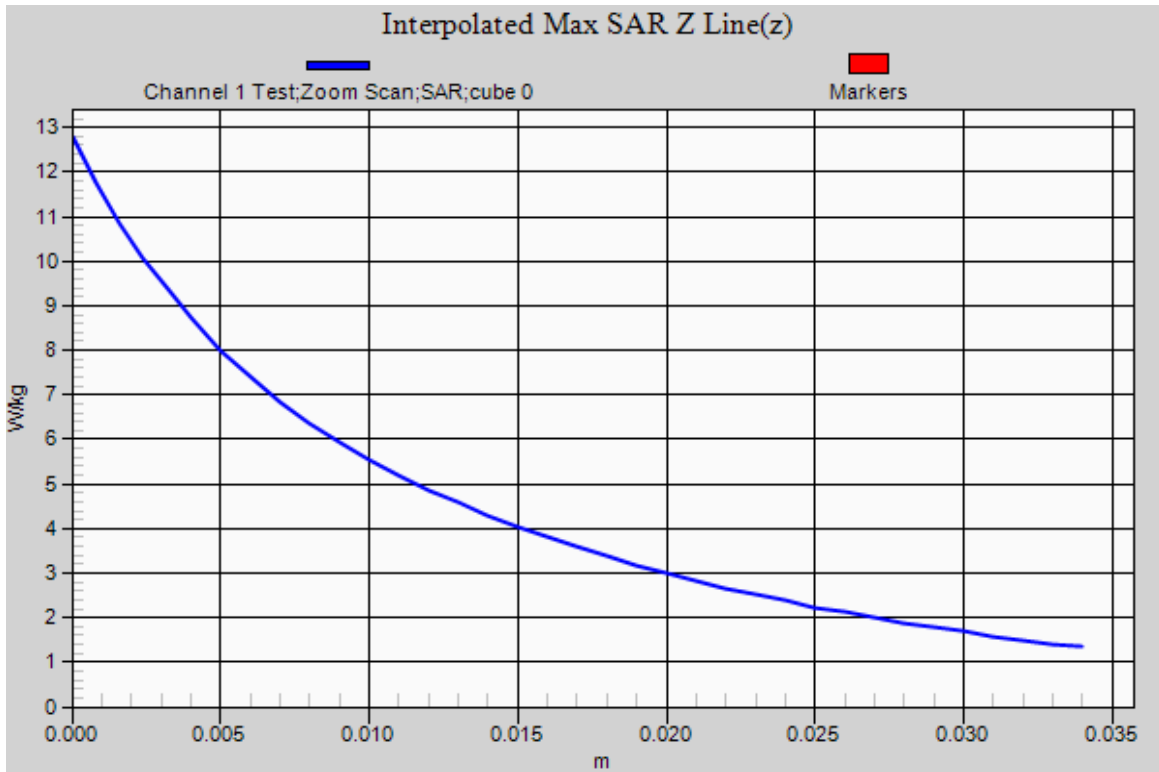
Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.8 Degrees Celsius
44.0%



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Test Date: 13 November 2012

File Name: M121040 450 MHz Belt Clip Spk-Mic 13-11-12.da52:0

DUT: **SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK**

* Communication System: CW; Frequency: 476.075 MHz; Duty Cycle: 1:1

* Medium parameters used: $f = 476 \text{ MHz}$; $\sigma = 0.958 \text{ mho/m}$; $\epsilon_r = 56.084$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7.41, 7.41, 7.41); Calibrated: 12/12/2011

- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 2 Test/Area Scan (81x181x1): Interpolated grid:

$dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 8.46 W/kg

Configuration/Channel 2 Test/Zoom Scan (7x7x7)/Cube 0: Measurement

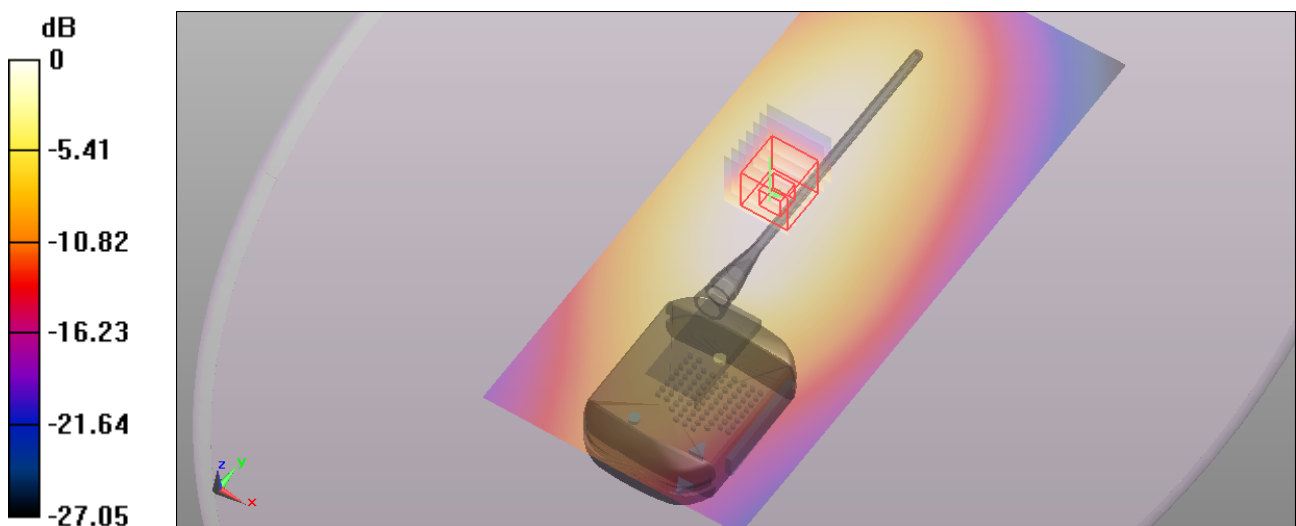
grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 75.018 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 12.423 mW/g

SAR(1 g) = 8.01 mW/g; SAR(10 g) = 5.53 mW/g

Maximum value of SAR (measured) = 8.49 W/kg



0 dB = 8.46 W/kg = 18.55 dB W/kg

SAR MEASUREMENT PLOT 9

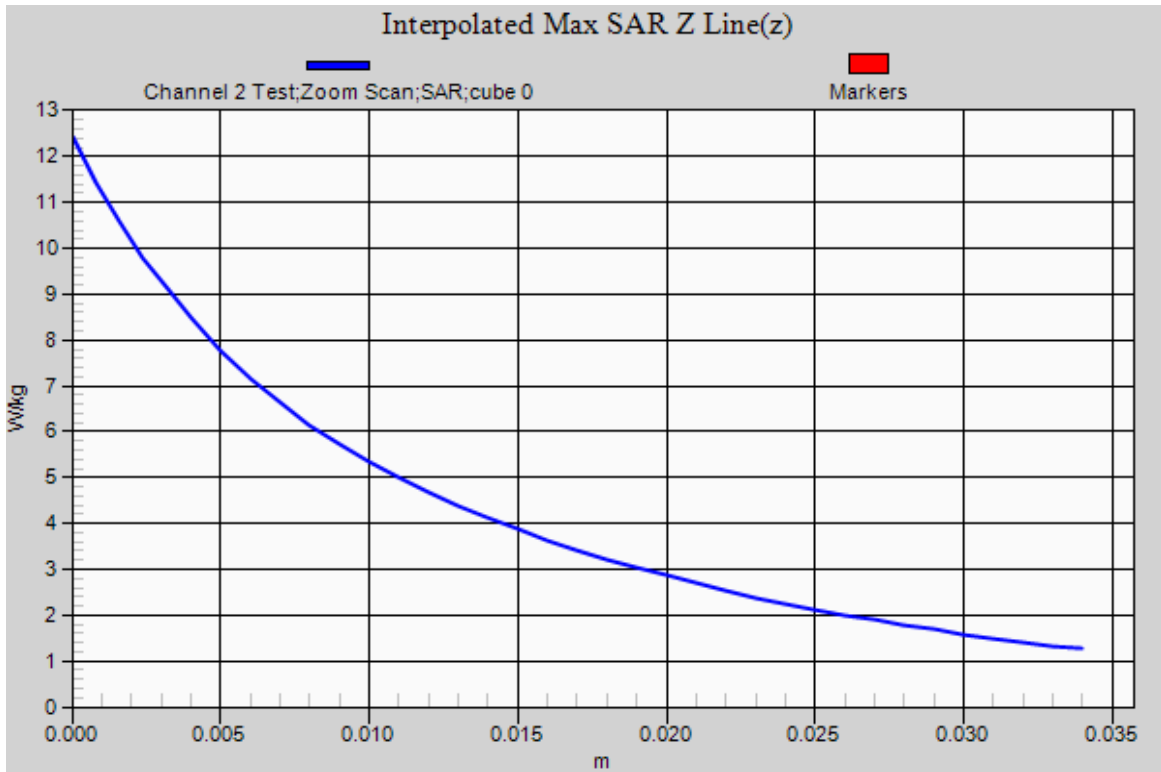
Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.8 Degrees Celsius
44.0%



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Test Date: 13 November 2012

File Name: M121040 450 MHz Belt Clip Spk-Mic 13-11-12.da52:0

DUT: SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK

* Communication System: CW; Frequency: 494.075 MHz; Duty Cycle: 1:1

* Medium parameters used: $f = 494 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 55.73$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7.41, 7.41, 7.41); Calibrated: 12/12/2011

- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 3 Test/Area Scan (81x181x1): Interpolated grid:

$dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 8.34 W/kg

Configuration/Channel 3 Test/Zoom Scan (7x7x7)/Cube 0: Measurement

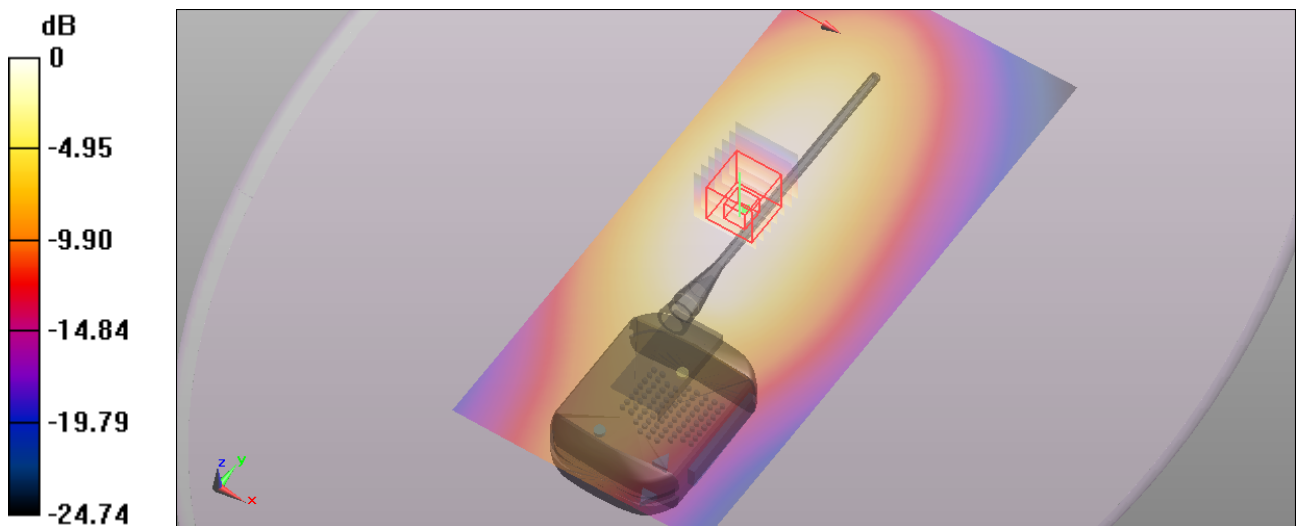
grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 75.840 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 12.442 mW/g

SAR(1 g) = 8.09 mW/g; SAR(10 g) = 5.57 mW/g

Maximum value of SAR (measured) = 8.53 W/kg



0 dB = 8.34 W/kg = 18.42 dB W/kg

SAR MEASUREMENT PLOT 10

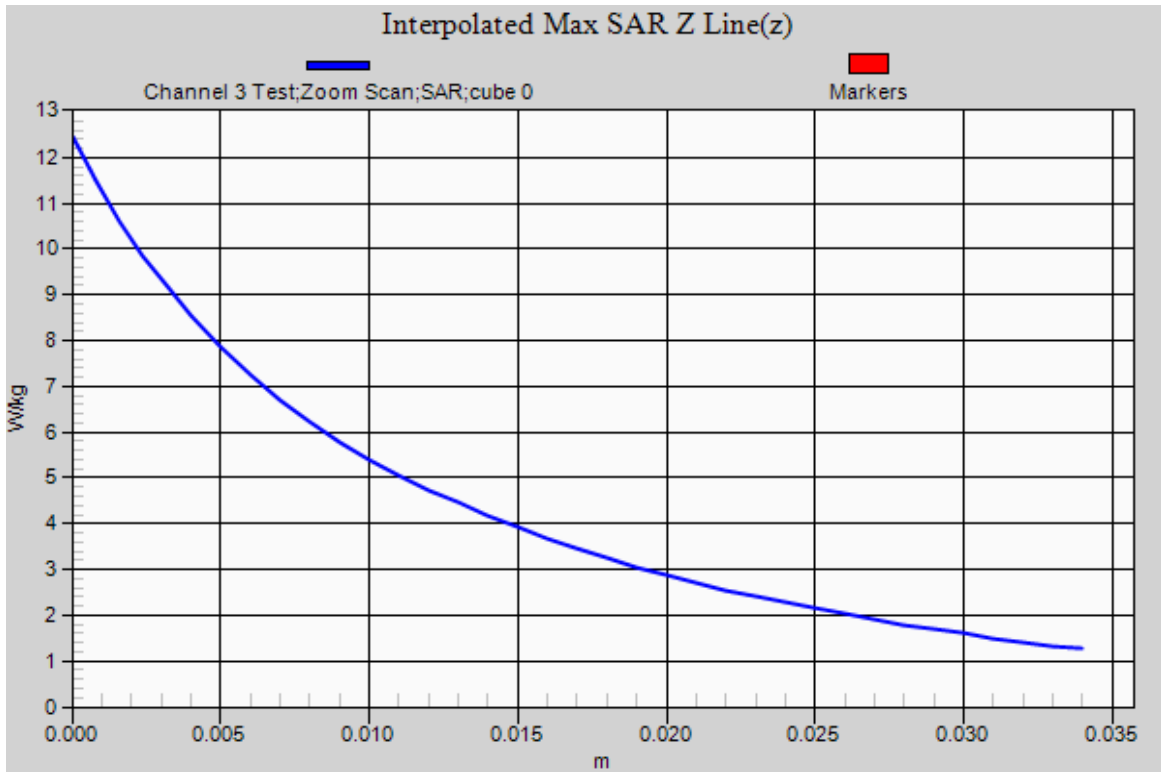
Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.8 Degrees Celsius
44.0%



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Test Date: 12 November 2012

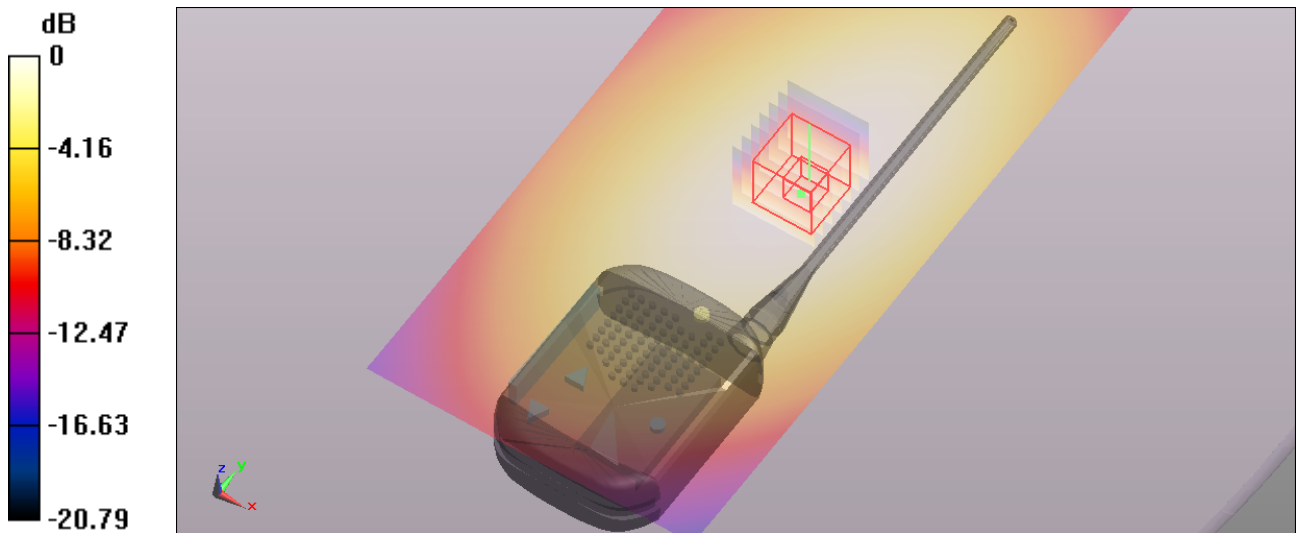
File Name: M121040 450 MHz Face Frontal Spk-Mic 12-11-12.da52:0

DUT: SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK

- * Communication System: CW; Frequency: 458.075 MHz; Duty Cycle: 1:1
- * Medium parameters used: $f = 458 \text{ MHz}$; $\sigma = 0.862 \text{ mho/m}$; $\epsilon_r = 42.292$; $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7, 7, 7); Calibrated: 12/12/2011
- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 1 Test/Area Scan (81x181x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
 Maximum value of SAR (interpolated) = 3.32 W/kg

Configuration/Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement
 grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 45.169 V/m; Power Drift = -0.20 dB
 Peak SAR (extrapolated) = 4.461 mW/g
SAR(1 g) = 3.14 mW/g; SAR(10 g) = 2.29 mW/g
 Maximum value of SAR (measured) = 3.31 W/kg



0 dB = 3.32 W/kg = 10.42 dB W/kg

SAR MEASUREMENT PLOT 11

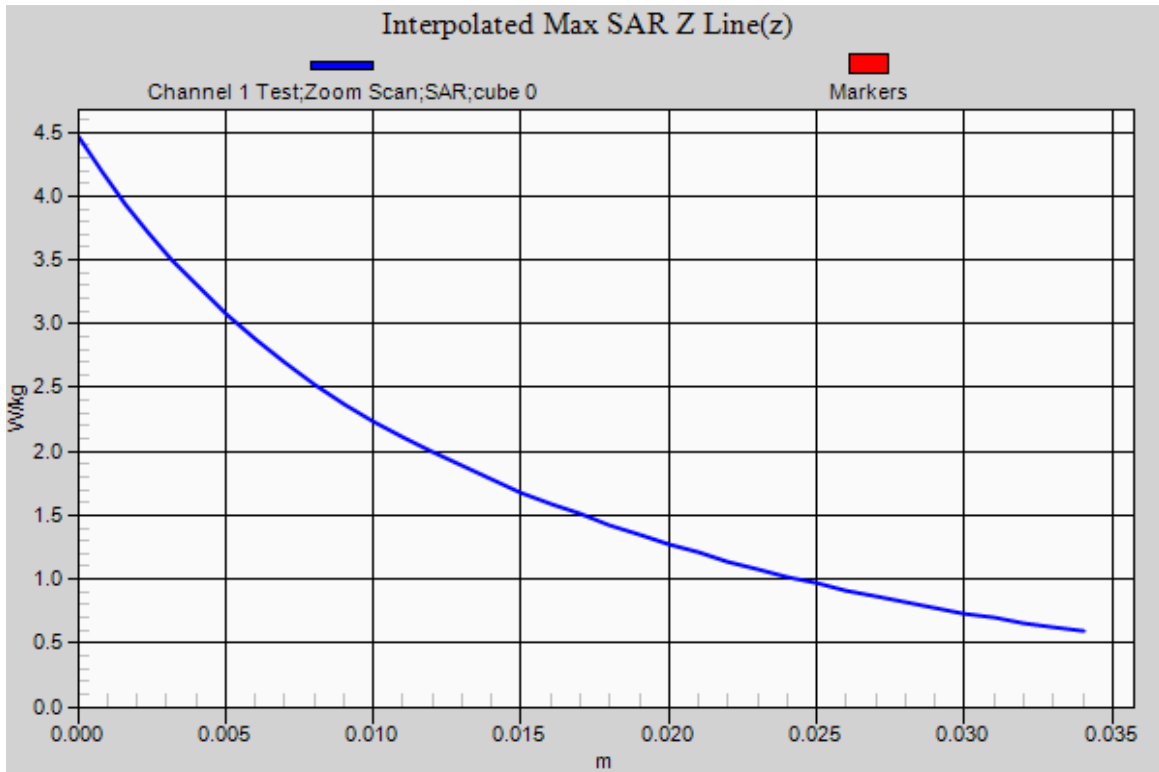
Ambient Temperature
 Liquid Temperature
 Humidity

19.8 Degrees Celsius
 19.4 Degrees Celsius
 45.0%



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Test Date: 12 November 2012

File Name: M121040 450 MHz Face Frontal Prescan 12-11-12.da52:0

DUT: SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK

* Communication System: CW; Frequency: 440.075 MHz, Frequency: 458.075 MHz, Frequency: 476.075 MHz, Frequency: 494.075 MHz, Frequency: 511.975 MHz; Duty Cycle: 1:1
 * Medium parameters used: f = 440 MHz; $\sigma = 0.847$ mho/m; $\epsilon_r = 42.655$; $\rho = 1000$ kg/m³, Medium parameters used: f = 458 MHz; $\sigma = 0.862$ mho/m; $\epsilon_r = 42.292$; $\rho = 1000$ kg/m³, Medium parameters used: f = 476 MHz; $\sigma = 0.878$ mho/m; $\epsilon_r = 41.926$; $\rho = 1000$ kg/m³, Medium parameters used: f = 494 MHz; $\sigma = 0.893$ mho/m; $\epsilon_r = 41.677$; $\rho = 1000$ kg/m³, Medium parameters used: f = 512 MHz; $\sigma = 0.906$ mho/m; $\epsilon_r = 41.384$; $\rho = 1000$ kg/m³
 - Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7, 7, 7); Calibrated: 12/12/2011
 - Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

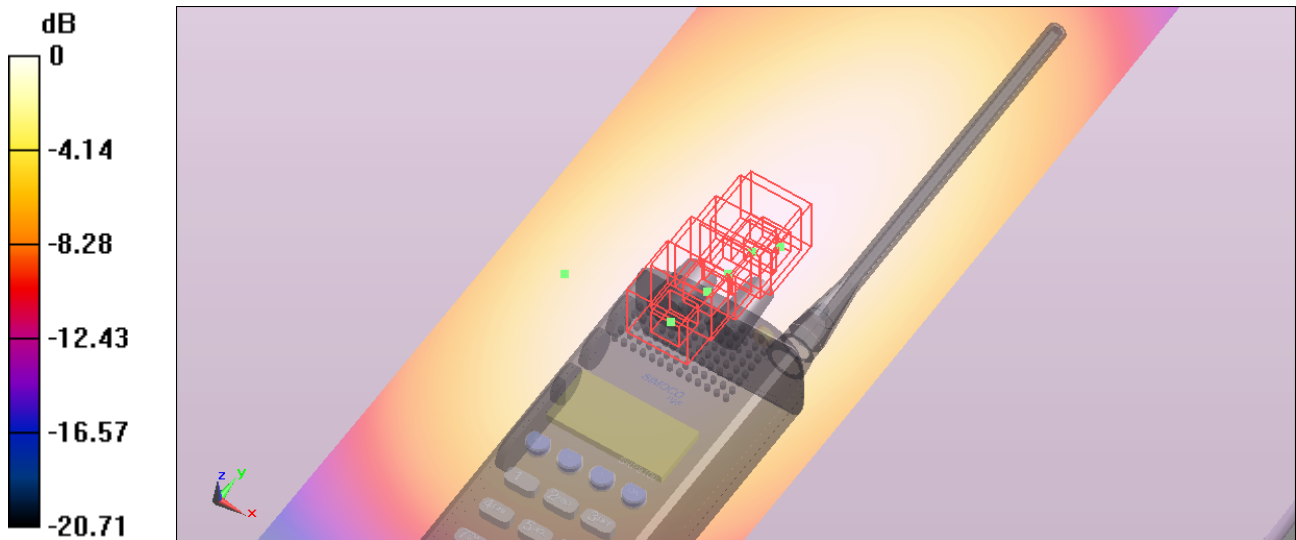
Configuration/Channel 0 Test/Area Scan (81x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Fast SAR: SAR(1 g) = 5.77 mW/g; SAR(10 g) = 4.31 mW/g
 Maximum value of SAR (interpolated) = 6.05 W/kg

Configuration/Channel 1 Test/Area Scan (81x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Fast SAR: SAR(1 g) = 6.35 mW/g; SAR(10 g) = 4.73 mW/g
 Maximum value of SAR (interpolated) = 6.67 W/kg

Configuration/Channel 2 Test/Area Scan (81x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Fast SAR: SAR(1 g) = 4.63 mW/g; SAR(10 g) = 3.44 mW/g
 Maximum value of SAR (interpolated) = 4.85 W/kg

Configuration/Channel 3 Test/Area Scan (81x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Fast SAR: SAR(1 g) = 3.12 mW/g; SAR(10 g) = 2.33 mW/g
 Maximum value of SAR (interpolated) = 3.27 W/kg

Configuration/Channel 4 Test/Area Scan (81x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Fast SAR: SAR(1 g) = 2.37 mW/g; SAR(10 g) = 1.76 mW/g
 Maximum value of SAR (interpolated) = 2.50 W/kg



0 dB = 6.05 W/kg = 15.64 dB W/kg

SAR MEASUREMENT PLOT 12

Ambient Temperature
 Liquid Temperature
 Humidity

19.8 Degrees Celsius
 19.4 Degrees Celsius
 45.0%



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Test Date: 12 November 2012

File Name: M121040 450 MHz Face Frontal Spk-Mic Prescan 12-11-12.da52:0

DUT: **SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK**

* Communication System: CW; Frequency: 458.075 MHz, Frequency: 476.075 MHz, Frequency: 494.075 MHz, Frequency: 511.975 MHz; Duty Cycle: 1:1

* Medium parameters used: f = 458 MHz; $\sigma = 0.862$ mho/m; $\epsilon_r = 42.292$; $\rho = 1000$ kg/m³, Medium parameters used: f = 476 MHz; $\sigma = 0.878$ mho/m; $\epsilon_r = 41.926$; $\rho = 1000$ kg/m³, Medium parameters used: f = 494 MHz; $\sigma = 0.893$ mho/m; $\epsilon_r = 41.677$; $\rho = 1000$ kg/m³, Medium parameters used: f = 512 MHz; $\sigma = 0.906$ mho/m; $\epsilon_r = 41.384$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7, 7, 7); Calibrated: 12/12/2011

- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 0 Test/Area Scan (81x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1 g) = 3 mW/g; SAR(10 g) = 2.22 mW/g

Maximum value of SAR (interpolated) = 3.15 W/kg

Configuration/Channel 1 Test/Area Scan (81x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1 g) = 3.32 mW/g; SAR(10 g) = 2.46 mW/g

Maximum value of SAR (interpolated) = 3.48 W/kg

Configuration/Channel 2 Test/Area Scan (81x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1 g) = 2.86 mW/g; SAR(10 g) = 2.12 mW/g

Maximum value of SAR (interpolated) = 3.00 W/kg

Configuration/Channel 3 Test/Area Scan (81x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

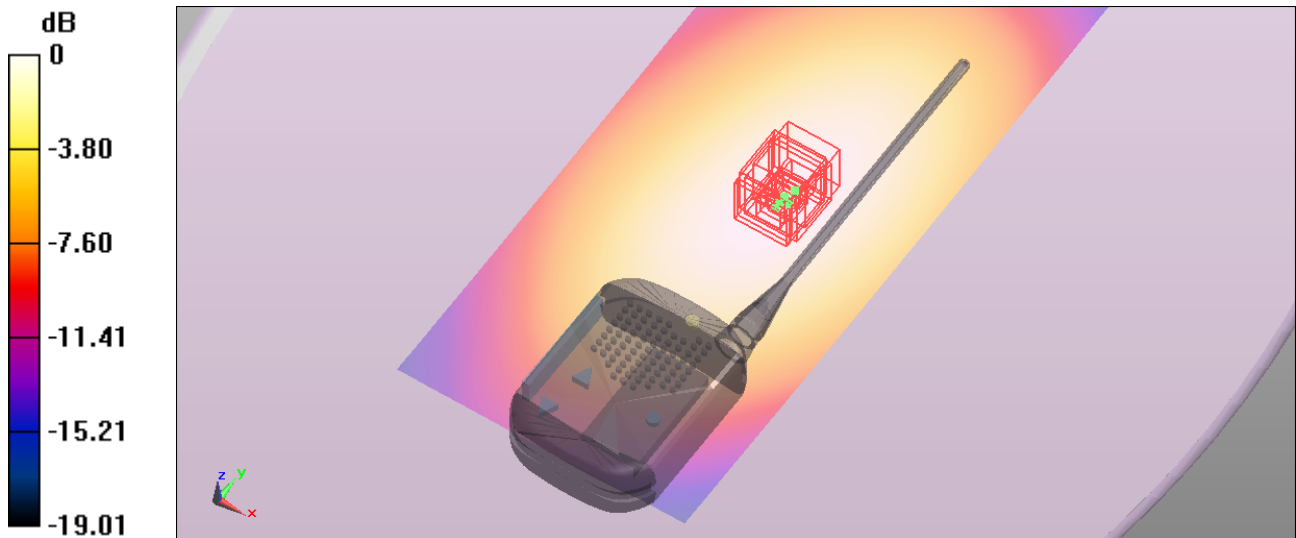
Fast SAR: SAR(1 g) = 2.17 mW/g; SAR(10 g) = 1.6 mW/g

Maximum value of SAR (interpolated) = 2.28 W/kg

Configuration/Channel 4 Test/Area Scan (81x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1 g) = 2.5 mW/g; SAR(10 g) = 1.85 mW/g

Maximum value of SAR (interpolated) = 2.63 W/kg



0 dB = 3.15 W/kg = 9.97 dB W/kg

SAR MEASUREMENT PLOT 13

Ambient Temperature
Liquid Temperature
Humidity

19.8 Degrees Celsius
19.4 Degrees Celsius
45.0%



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Test Date: 13 November 2012

File Name: M121040 450 MHz Belt Clip Prescan 13-11-12.da52:0

DUT: SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK

* Communication System: CW; Frequency: 440.075 MHz, Frequency: 458.075 MHz, Frequency: 476.075 MHz, Frequency: 494.075 MHz, Frequency: 511.975 MHz; Duty Cycle: 1:1

* Medium parameters used: f = 440 MHz; $\sigma = 0.923$ mho/m; $\epsilon_r = 56.831$; $\rho = 1000$ kg/m³, Medium parameters used: f = 458 MHz; $\sigma = 0.937$ mho/m; $\epsilon_r = 56.324$; $\rho = 1000$ kg/m³, Medium parameters used: f = 476 MHz; $\sigma = 0.958$ mho/m; $\epsilon_r = 56.084$; $\rho = 1000$ kg/m³, Medium parameters used: f = 494 MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 55.73$; $\rho = 1000$ kg/m³, Medium parameters used: f = 512 MHz; $\sigma = 0.985$ mho/m; $\epsilon_r = 55.422$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7.41, 7.41, 7.41); Calibrated: 12/12/2011

- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 0 Test/Area Scan (81x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1 g) = 8.22 mW/g; SAR(10 g) = 6.09 mW/g

Maximum value of SAR (interpolated) = 8.68 W/kg

Configuration/Channel 1 Test/Area Scan (81x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1 g) = 8.87 mW/g; SAR(10 g) = 6.52 mW/g

Maximum value of SAR (interpolated) = 9.38 W/kg

Configuration/Channel 2 Test/Area Scan (81x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1 g) = 6.64 mW/g; SAR(10 g) = 4.87 mW/g

Maximum value of SAR (interpolated) = 7.01 W/kg

Configuration/Channel 3 Test/Area Scan (81x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

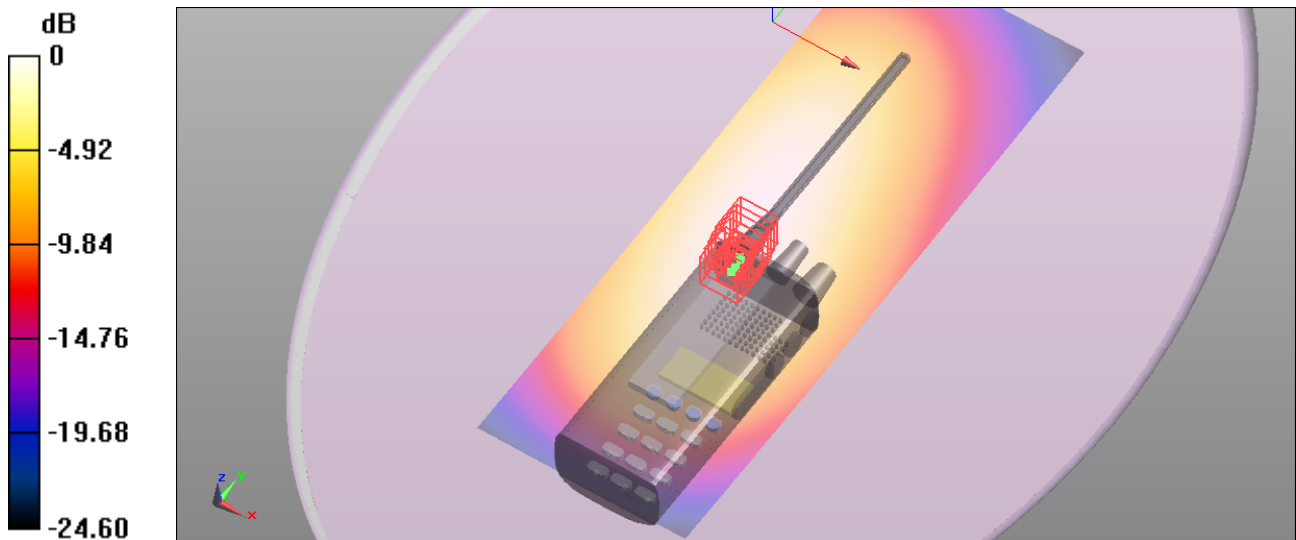
Fast SAR: SAR(1 g) = 4.94 mW/g; SAR(10 g) = 3.62 mW/g

Maximum value of SAR (interpolated) = 5.21 W/kg

Configuration/Channel 4 Test/Area Scan (81x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1 g) = 3.71 mW/g; SAR(10 g) = 2.72 mW/g

Maximum value of SAR (interpolated) = 3.91 W/kg



0 dB = 8.68 W/kg = 18.77 dB W/kg

SAR MEASUREMENT PLOT 14

Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.8 Degrees Celsius
44.0%



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Test Date: 13 November 2012

File Name: M121040 450 MHz Belt Clip Spk-Mic Prescan 13-11-12.da52:0

DUT: SIMOCO PTT RF SPK/MIC; Type: SRP9180 UW; Serial: FT9HX1228DDBK

* Communication System: CW; Frequency: 440.075 MHz, Frequency: 458.075 MHz, Frequency: 476.075 MHz, Frequency: 494.075 MHz, Frequency: 511.975 MHz; Duty Cycle: 1:1

* Medium parameters used: f = 440 MHz; $\sigma = 0.923$ mho/m; $\epsilon_r = 56.831$; $\rho = 1000$ kg/m³, Medium parameters used: f = 458 MHz; $\sigma = 0.937$ mho/m; $\epsilon_r = 56.324$; $\rho = 1000$ kg/m³, Medium parameters used: f = 476 MHz; $\sigma = 0.958$ mho/m; $\epsilon_r = 56.084$; $\rho = 1000$ kg/m³, Medium parameters used: f = 494 MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 55.73$; $\rho = 1000$ kg/m³, Medium parameters used: f = 512 MHz; $\sigma = 0.985$ mho/m; $\epsilon_r = 55.422$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7.41, 7.41, 7.41); Calibrated: 12/12/2011

- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 0 Test/Area Scan (81x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1 g) = 7.33 mW/g; SAR(10 g) = 5.34 mW/g

Maximum value of SAR (interpolated) = 7.76 W/kg

Configuration/Channel 1 Test/Area Scan (81x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1 g) = 8.25 mW/g; SAR(10 g) = 5.99 mW/g

Maximum value of SAR (interpolated) = 8.74 W/kg

Configuration/Channel 2 Test/Area Scan (81x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1 g) = 8.48 mW/g; SAR(10 g) = 6.15 mW/g

Maximum value of SAR (interpolated) = 8.98 W/kg

Configuration/Channel 3 Test/Area Scan (81x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

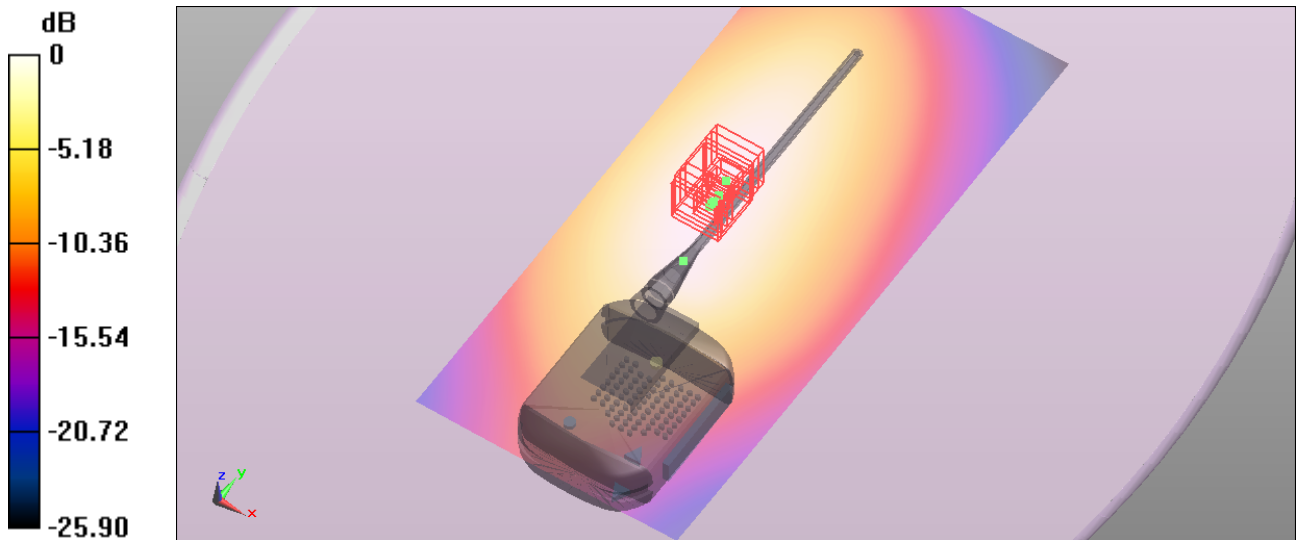
Fast SAR: SAR(1 g) = 7.84 mW/g; SAR(10 g) = 5.68 mW/g

Maximum value of SAR (interpolated) = 8.30 W/kg

Configuration/Channel 4 Test/Area Scan (81x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1 g) = 7.95 mW/g; SAR(10 g) = 5.75 mW/g

Maximum value of SAR (interpolated) = 8.41 W/kg



0 dB = 7.76 W/kg = 17.80 dB W/kg

SAR MEASUREMENT PLOT 15

Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.8 Degrees Celsius
44.0%



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Test Date: 12 November 2012

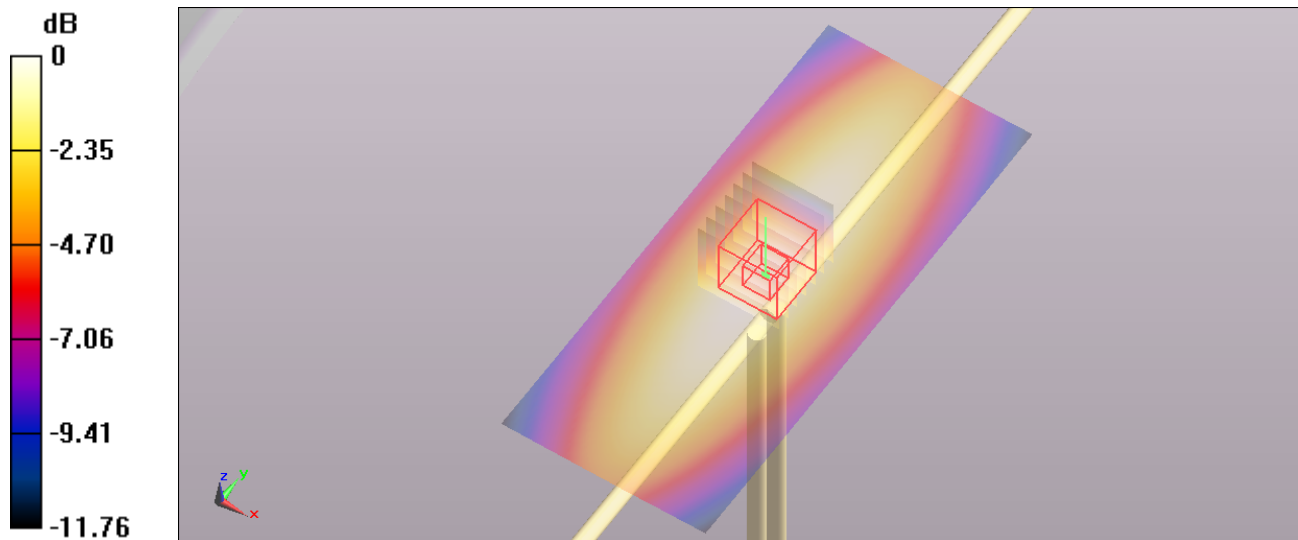
File Name: System Check 450 MHz Head 12-11-12.da52:0

DUT: Dipole 450 MHz; Type: D450V3; Serial: 1074

- * Communication System: CW 450 MHz; Frequency: 450 MHz; Duty Cycle: 1:1
- * Medium parameters used: $f = 450$ MHz; $\sigma = 0.858$ mho/m; $\epsilon_r = 42.498$; $\rho = 1000$ kg/m³
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7, 7, 7); Calibrated: 12/12/2011
- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 1Test/Area Scan (51x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Maximum value of SAR (interpolated) = 2.12 W/kg

Configuration/Channel 1Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 51.360 V/m; Power Drift = -0.07 dB
 Peak SAR (extrapolated) = 3.207 mW/g
SAR(1 g) = 2 mW/g; SAR(10 g) = 1.32 mW/g
 Maximum value of SAR (measured) = 2.14 W/kg



0 dB = 2.12 W/kg = 6.53 dB W/kg

SAR MEASUREMENT PLOT 16

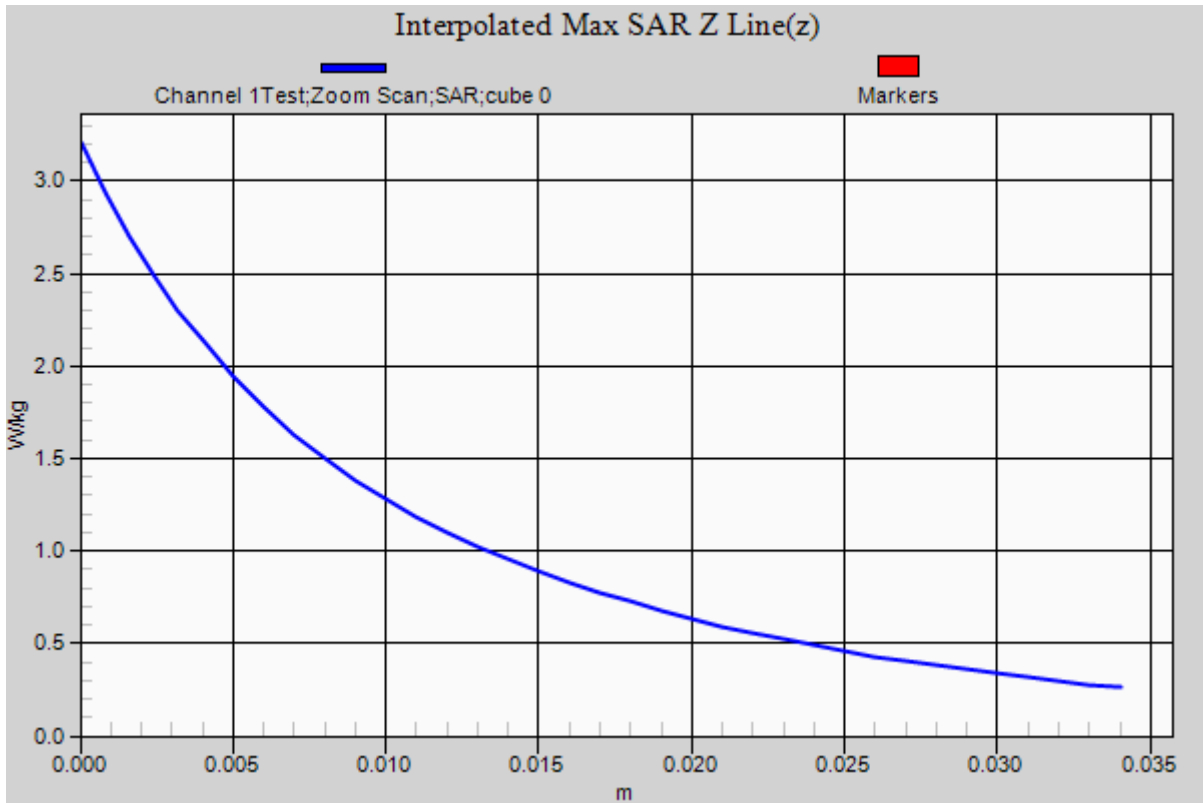
Ambient Temperature
 Liquid Temperature
 Humidity

19.8 Degrees Celsius
 19.4 Degrees Celsius
 45.0%



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Test Date: 13 November 2012

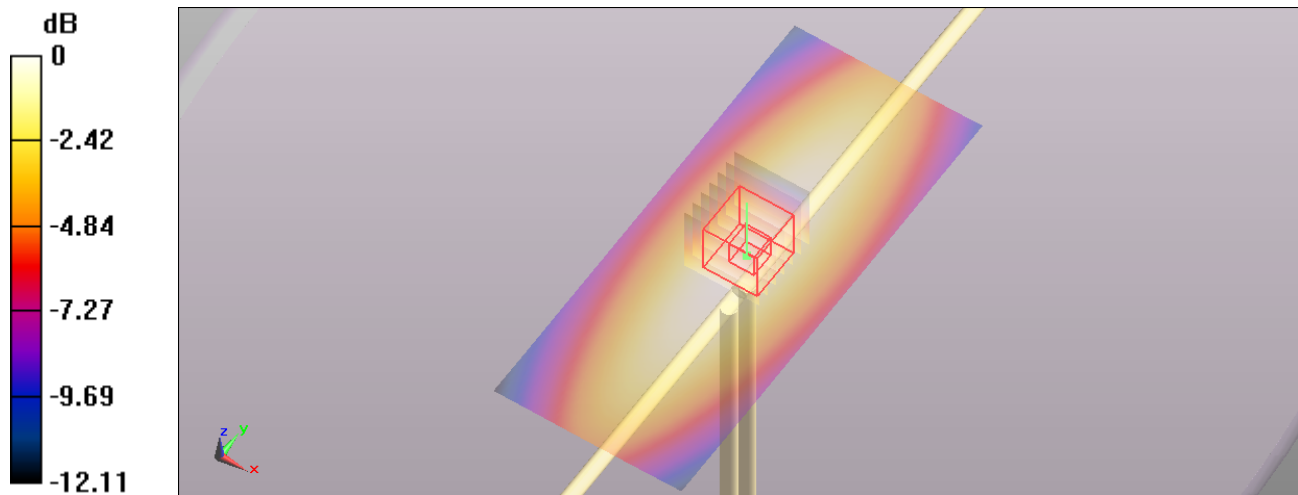
File Name: System Check 450 MHz Head 13-11-12.da52:0

DUT: Dipole 450 MHz; Type: D450V3; Serial: 1074

- * Communication System: CW 450 MHz; Frequency: 450 MHz; Duty Cycle: 1:1
- * Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.869 \text{ mho/m}$; $\epsilon_r = 42.873$; $\rho = 1000 \text{ kg/m}^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(7, 7, 7); Calibrated: 12/12/2011
- Phantom: ELI 4.0; Serial: 1101; Phantom section: Flat Section

Configuration/Channel 1Test/Area Scan (51x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Maximum value of SAR (interpolated) = 2.10 W/kg

Configuration/Channel 1Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 51.039 V/m; Power Drift = -0.13 dB
 Peak SAR (extrapolated) = 3.180 mW/g
SAR(1 g) = 2 mW/g; SAR(10 g) = 1.32 mW/g
 Maximum value of SAR (measured) = 2.14 W/kg



0 dB = 2.10 W/kg = 6.44 dB W/kg

SAR MEASUREMENT PLOT 17

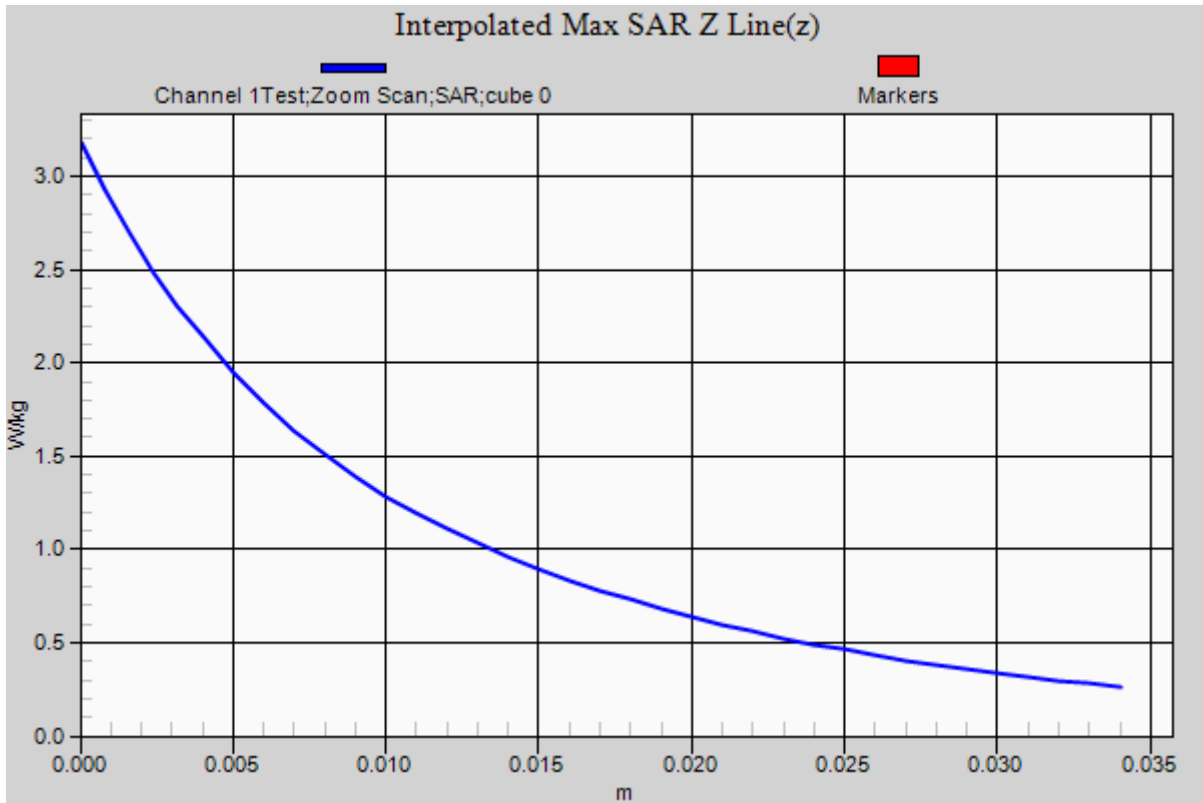
Ambient Temperature
 Liquid Temperature
 Humidity

20.1 Degrees Celsius
19.8 Degrees Celsius
44.0%



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