# 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: 2450 MHz SAR Plots**

| Test Position | Plot Number | Test Channel |
|---|---|---|
| Tilted Left | 1 | 6 |
| Touch Left | 2 | 6 |
| | | |
| Tilted Right | 3 | 6 |
| Touch Right | 4 | 6 |
| | | |
| Body Worn Position Back | 5 | 6 |
| Body Worn Position Front | 6 | 6 |
| Body Worn Belt Clip 14mm Spacing | 7 | 6 |
| Body Worn Belt Clip 16mm Spacing | 8 | 6 |

**Table: SAR Validation Plots**

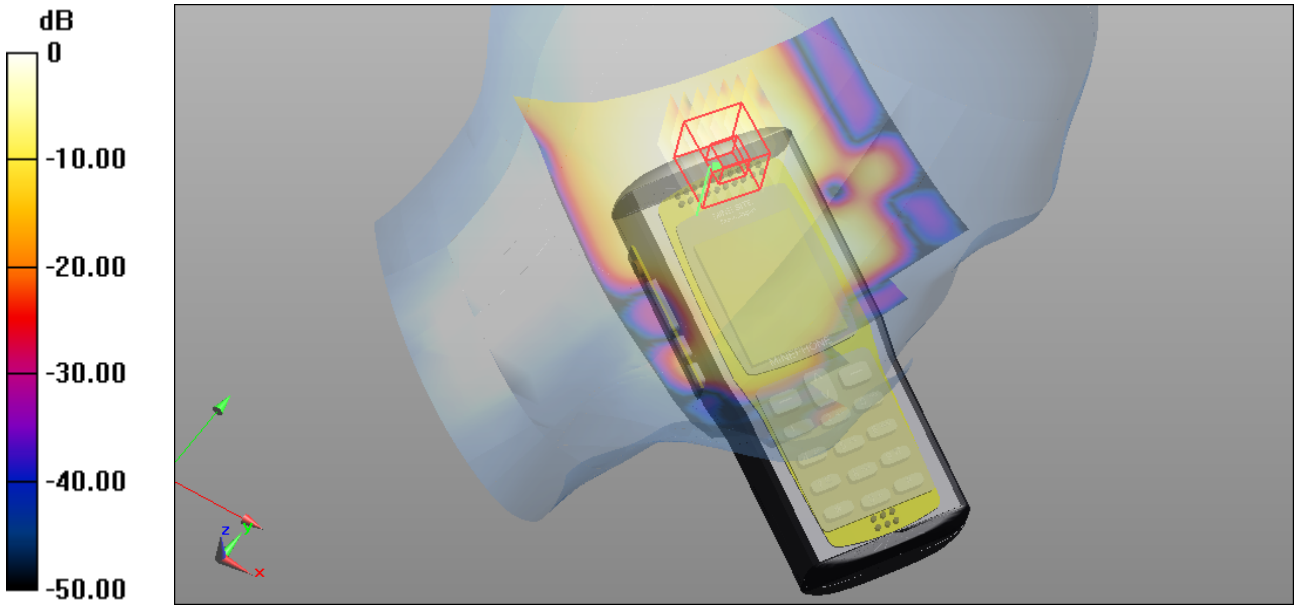
| Date | Plot Number | Frequency |
|---|---|---|
| 23rd July 2012 | 9 | 2450 MHz |

Test Date: 23 July 2012
File Name: M120604 Tilted Left 2450 MHz WLAN (DSSS) 23-06-12.da52:0
**DUT: Mine Site WLAN Phone; Type: MP70; Serial: M120222086**

* Communication System: DSSS 2450 MHz 1Mbs; Frequency: 2437 MHz; Duty Cycle: 1:1.53886
* Medium parameters used: f = 2436 MHz; $\sigma$ = 1.756 mho/m; $\varepsilon_r$ = 37.993; $\rho$ = 1000 kg/m$^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.35, 4.35, 4.35); Calibrated: 12/12/2011
- Phantom: SAM 22; Serial: 1260; Phantom section: Left Section

## Configuration/Channel 6 Test/Area Scan (141x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.0188 mW/g

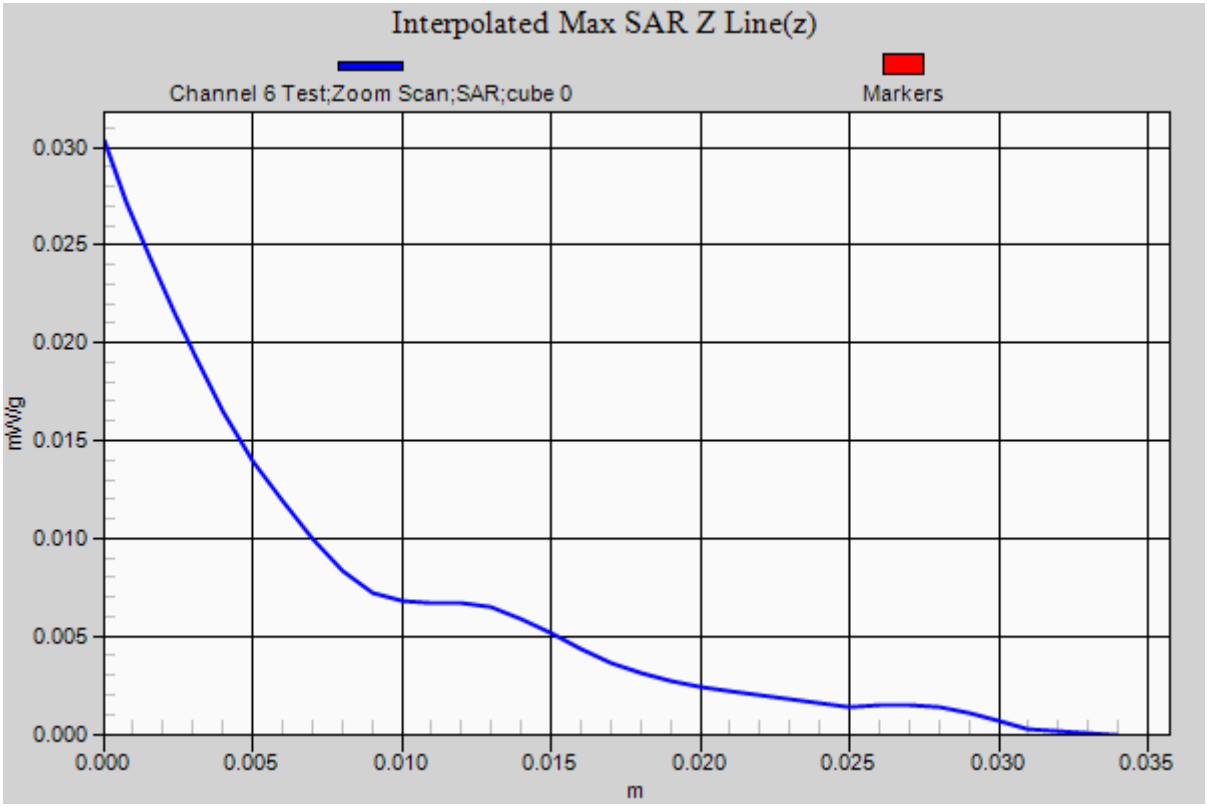
## Configuration/Channel 6 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.260 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.030 mW/g
**SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.00868 mW/g**
Maximum value of SAR (measured) = 0.0171 mW/g




0 dB = 0.0188 mW/g = -34.52 dB mW/g

SAR MEASUREMENT PLOT 1

| | |
|---|---|
| **Ambient Temperature** | **20.4 Degrees Celsius** |
| **Liquid Temperature** | **20.1 Degrees Celsius** |
| **Humidity** | **41.0%** |

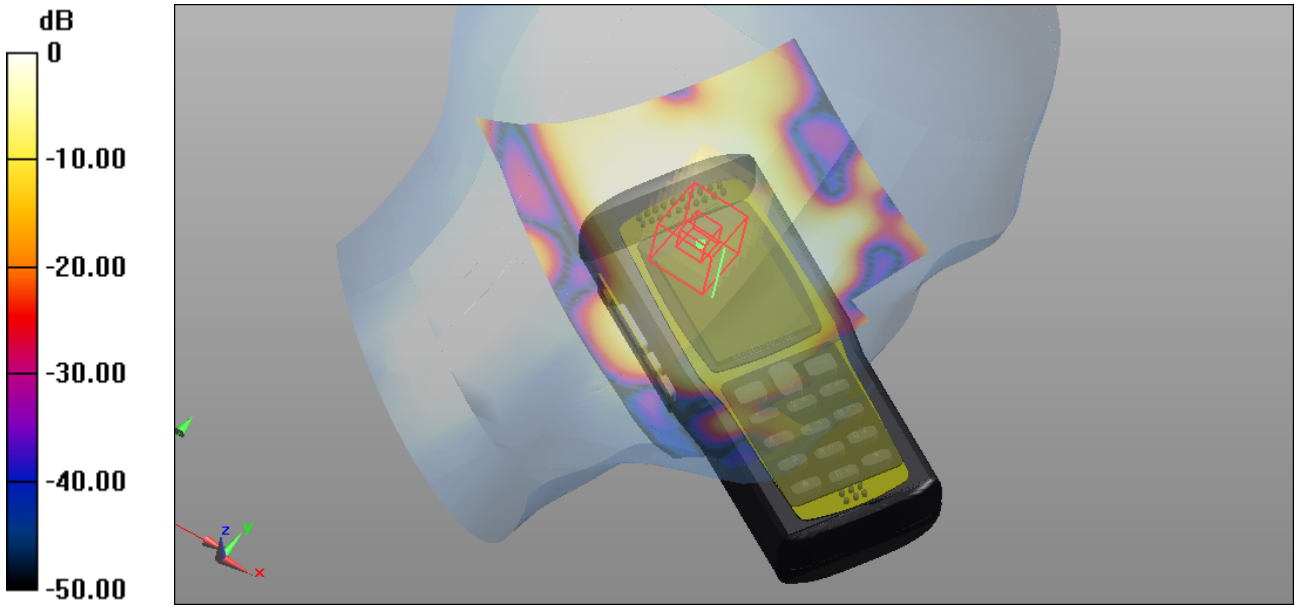


Test Date: 23 July 2012
File Name: M120604 Touch Left 2450 MHz WLAN (DSSS) 23-06-12.da52:0
**DUT: Mine Site WLAN Phone; Type: MP70; Serial: M120222086**

* Communication System: DSSS 2450 MHz 1Mbs; Frequency: 2437 MHz; Duty Cycle: 1:1.53886
* Medium parameters used: f = 2436 MHz; $\sigma$ = 1.756 mho/m; $\varepsilon_r$ = 37.993; $\rho$ = 1000 kg/m$^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.35, 4.35, 4.35); Calibrated: 12/12/2011
- Phantom: SAM 22; Serial: 1260; Phantom section: Left Section

## Configuration/Channel 6 Test/Area Scan (141x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.0157 mW/g

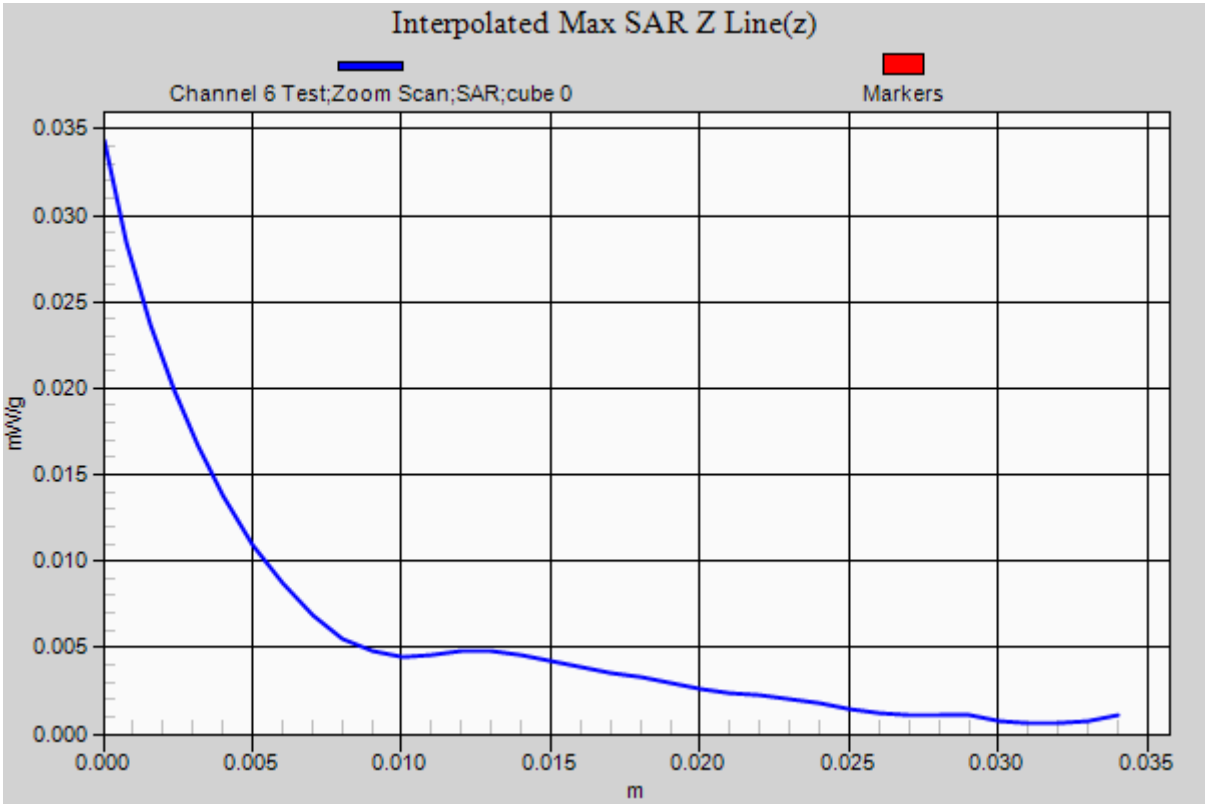
## Configuration/Channel 6 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.676 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.034 mW/g
**SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.00828 mW/g**
Maximum value of SAR (measured) = 0.0158 mW/g




0 dB = 0.0157 mW/g = -36.08 dB mW/g

SAR MEASUREMENT PLOT 2

| | |
|---|---|
| **Ambient Temperature** | **20.4 Degrees Celsius** |
| **Liquid Temperature** | **20.1 Degrees Celsius** |
| **Humidity** | **41.0%** |



Test Date: 23 July 2012

File Name: M120604 Tilted Right 2450 MHz WLAN (DSSS) 23-06-12.da52:0

**DUT: Mine Site WLAN Phone; Type: MP70; Serial: M120222086**

* Communication System: DSSS 2450 MHz 1Mbs; Frequency: 2437 MHz; Duty Cycle: 1:1.53886
* Medium parameters used: f = 2436 MHz; $\sigma$ = 1.756 mho/m; $\varepsilon_r$ = 37.993; $\rho$ = 1000 kg/m$^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.35, 4.35, 4.35); Calibrated: 12/12/2011
- Phantom: SAM 22; Serial: 1260; Phantom section: Right Section

## Configuration/Channel 6 Test/Area Scan (141x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0166 mW/g

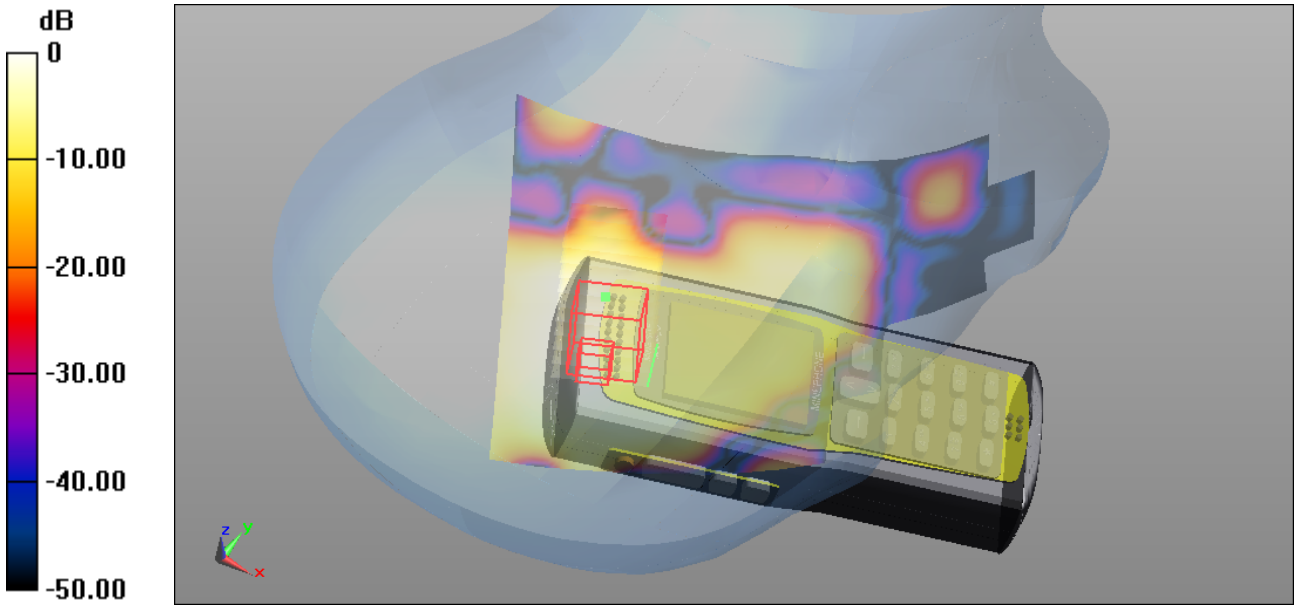
## Configuration/Channel 6 Test/Zoom Scan (7x10x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.165 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.058 mW/g

**SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.00864 mW/g**

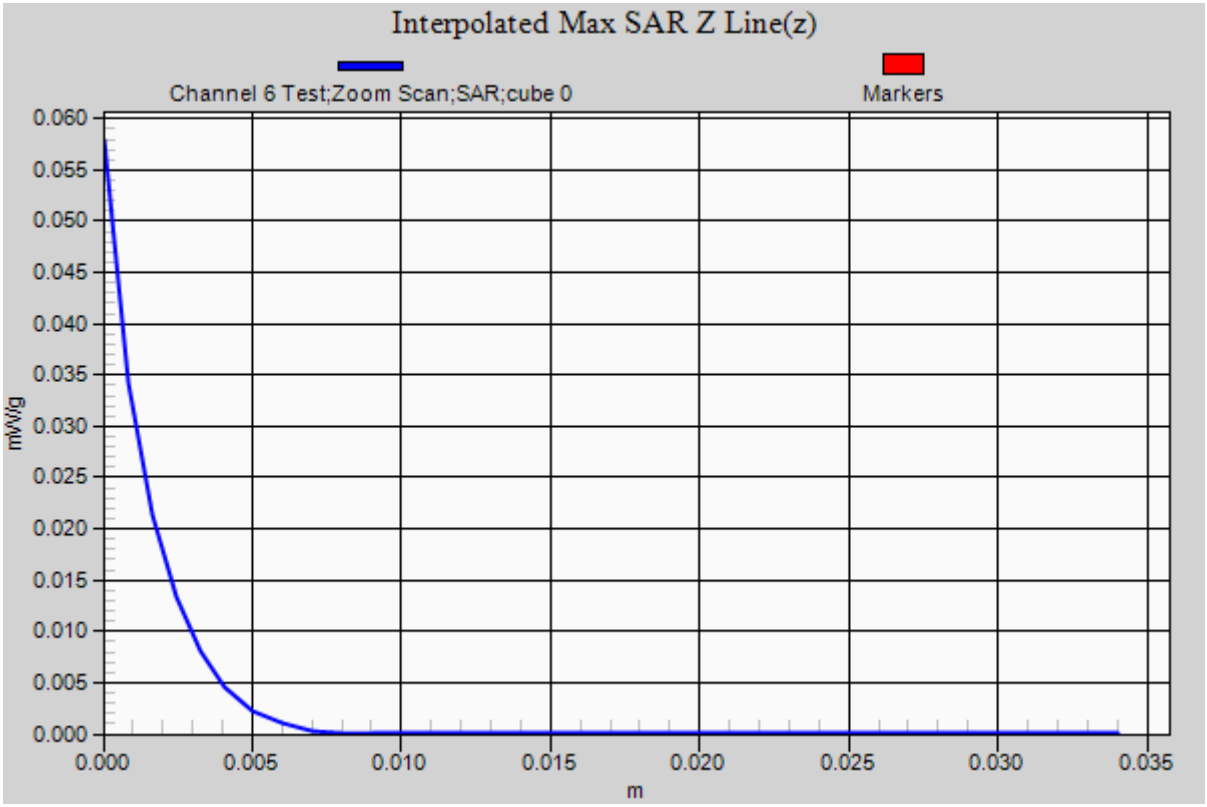
Maximum value of SAR (measured) = 0.0166 mW/g




0 dB = 0.0166 mW/g = -35.60 dB mW/g

SAR MEASUREMENT PLOT 3

| | |
|---|---|
| **Ambient Temperature** | **20.4 Degrees Celsius** |
| **Liquid Temperature** | **20.1 Degrees Celsius** |
| **Humidity** | **41.0%** |



Test Date: 23 July 2012

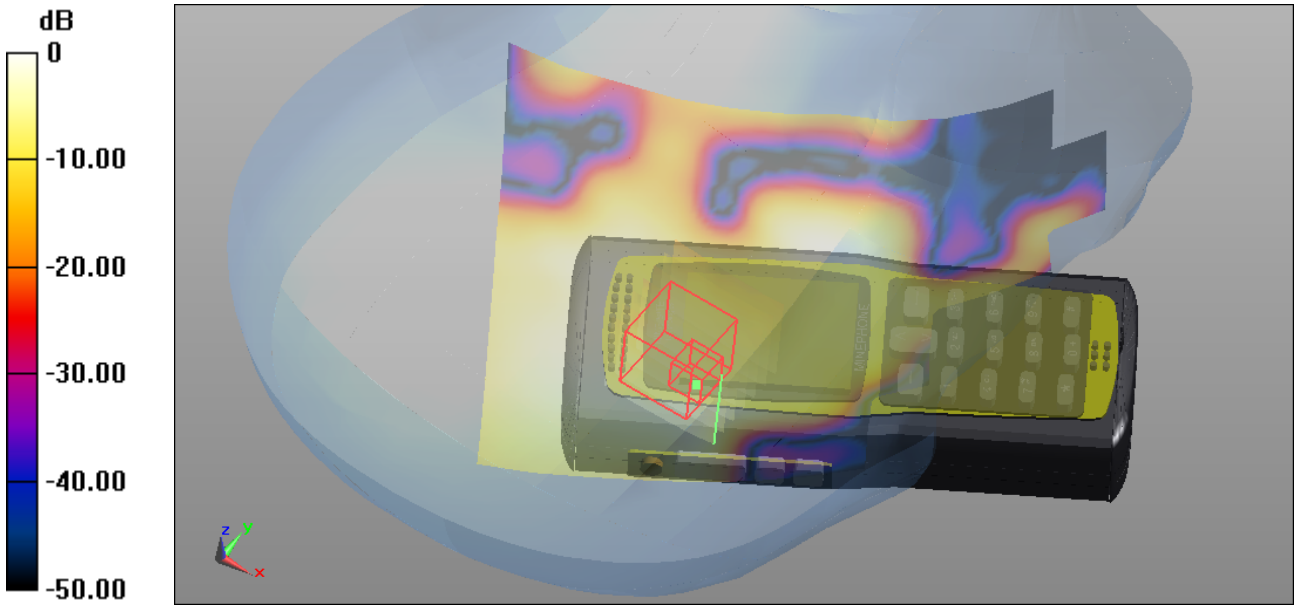
File Name: M120604 Touch Right 2450 MHz WLAN (DSSS) 23-06-12.da52:0

**DUT: Mine Site WLAN Phone; Type: MP70; Serial: M120222086**

* Communication System: DSSS 2450 MHz 1Mbs; Frequency: 2437 MHz; Duty Cycle: 1:1.53886
* Medium parameters used: f = 2436 MHz; $\sigma$ = 1.756 mho/m; $\varepsilon_r$ = 37.993; $\rho$ = 1000 kg/m$^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.35, 4.35, 4.35); Calibrated: 12/12/2011
- Phantom: SAM 22; Serial: 1260; Phantom section: Right Section

**Configuration/Channel 6 Test/Area Scan (141x81x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.0190 mW/g

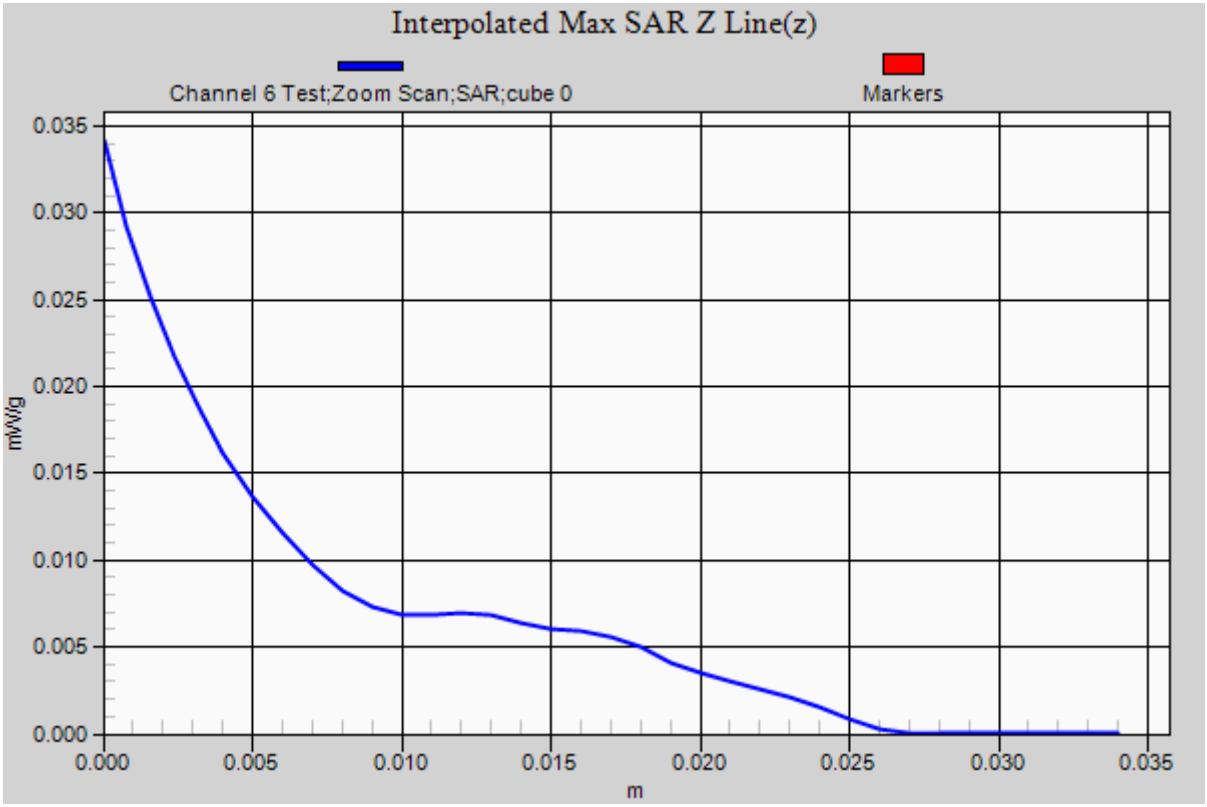
**Configuration/Channel 6 Test/Zoom Scan (8x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.984 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.034 mW/g
**SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00885 mW/g**
Maximum value of SAR (measured) = 0.0170 mW/g




0 dB = 0.0190 mW/g = -34.42 dB mW/g

SAR MEASUREMENT PLOT 4

| | |
|---|---|
| **Ambient Temperature** | **20.4 Degrees Celsius** |
| **Liquid Temperature** | **20.1 Degrees Celsius** |
| **Humidity** | **41.0%** |



Test Date: 23 July 2012

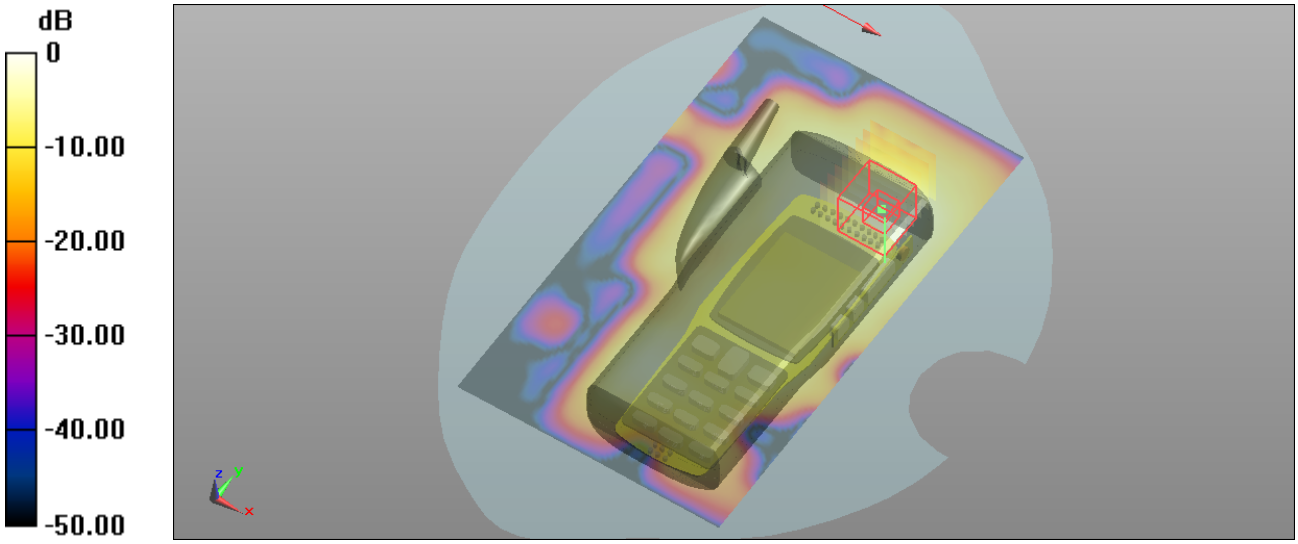
File Name: M120604 Body Worn Back 0mm Spacing 2450 MHz WLAN (DSSS) 23-06-12.da52:0

**DUT: Mine Site WLAN Phone; Type: MP70; Serial: M120222086**

* Communication System: DSSS 2450 MHz 1Mbs; Frequency: 2437 MHz; Duty Cycle: 1:1.53886
* Medium parameters used: f = 2436 MHz; $\sigma$ = 1.911 mho/m; $\varepsilon_r$ = 51.892; $\rho$ = 1000 kg/m$^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.15, 4.15, 4.15); Calibrated: 12/12/2011
- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section

**Configuration/Channel 6 Test/Area Scan (141x81x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.0519 mW/g

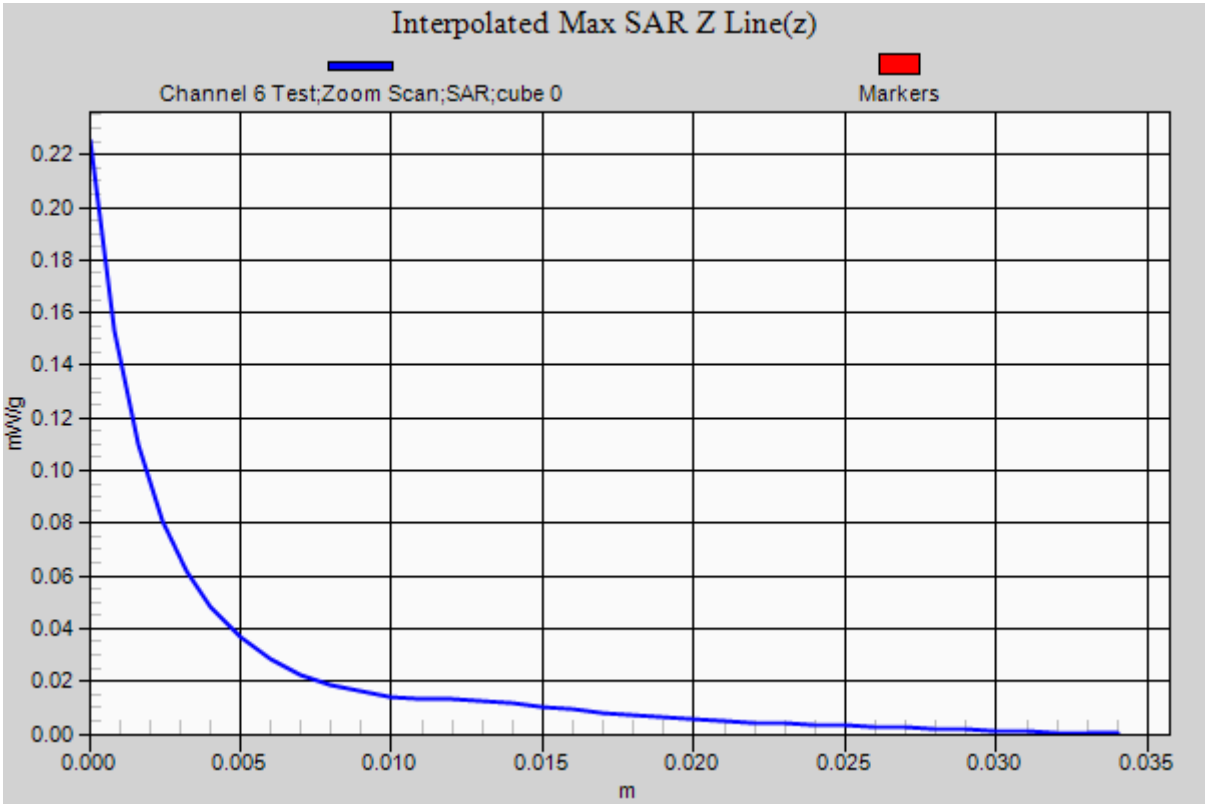
**Configuration/Channel 6 Test/Zoom Scan (7x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.341 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 0.225 mW/g
**SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.027 mW/g**
Maximum value of SAR (measured) = 0.0577 mW/g




0 dB = 0.0519 mW/g = -25.70 dB mW/g

SAR MEASUREMENT PLOT 5

| | |
|---|---|
| **Ambient Temperature** | **20.4 Degrees Celsius** |
| **Liquid Temperature** | **20.1 Degrees Celsius** |
| **Humidity** | **41.0%** |



Test Date: 23 July 2012

File Name: M120604 Body Worn Front 0mm Spacing 2450 MHz WLAN (DSSS) 23-06-12.da52:0

**DUT: Mine Site WLAN Phone; Type: MP70; Serial: M120222086**

* Communication System: DSSS 2450 MHz 1Mbs; Frequency: 2437 MHz; Duty Cycle: 1:1.53886
* Medium parameters used: f = 2436 MHz; $\sigma$ = 1.911 mho/m; $\varepsilon_r$ = 51.892; $\rho$ = 1000 kg/m$^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.15, 4.15, 4.15); Calibrated: 12/12/2011
- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section

## Configuration/Channel 6 Test/Area Scan (141x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0189 mW/g

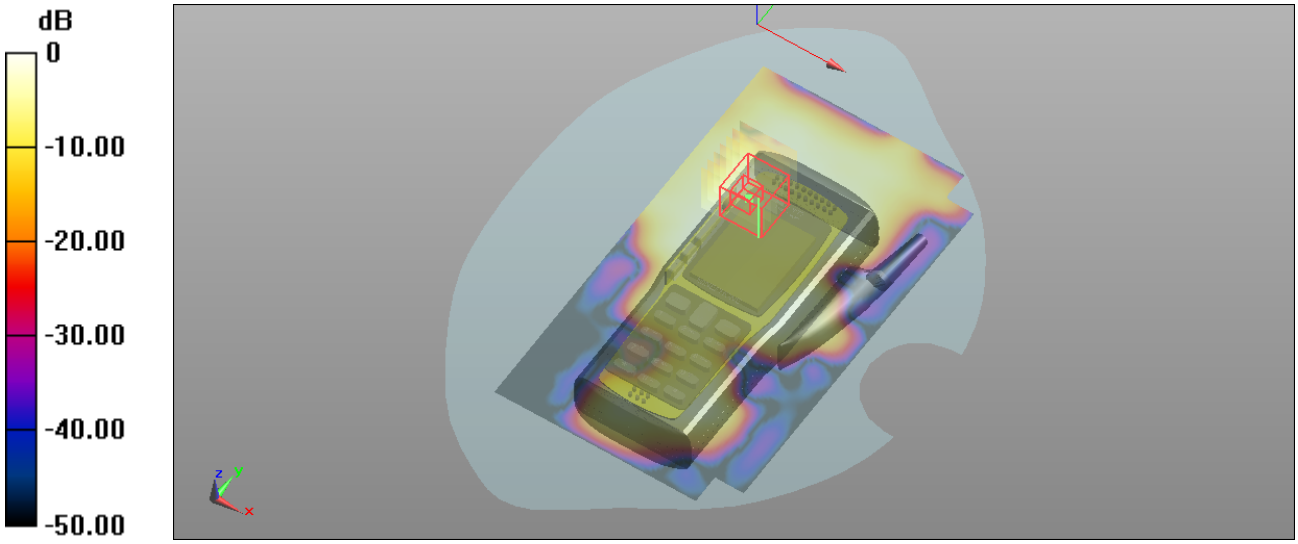
## Configuration/Channel 6 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.990 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.049 mW/g

**SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.00926 mW/g**

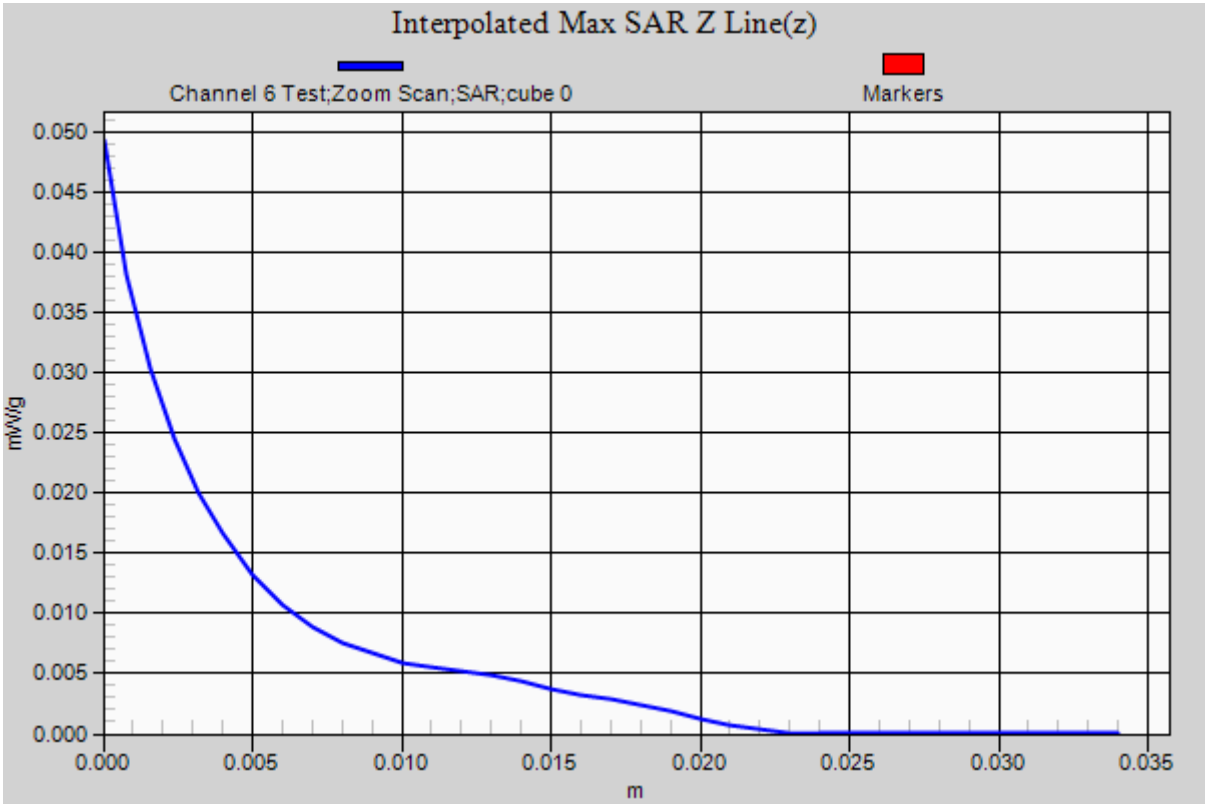
Maximum value of SAR (measured) = 0.0184 mW/g




0 dB = 0.0189 mW/g = -34.47 dB mW/g

SAR MEASUREMENT PLOT 6

| | |
|---|---|
| **Ambient Temperature** | **20.4 Degrees Celsius** |
| **Liquid Temperature** | **20.1 Degrees Celsius** |
| **Humidity** | **41.0%** |



Test Date: 23 July 2012

File Name: M120604 Belt Clip 14mm Spacing 2450 MHz WLAN (DSSS) 23-06-12.da52:0

**DUT: Mine Site WLAN Phone; Type: MP70; Serial: M120222086**

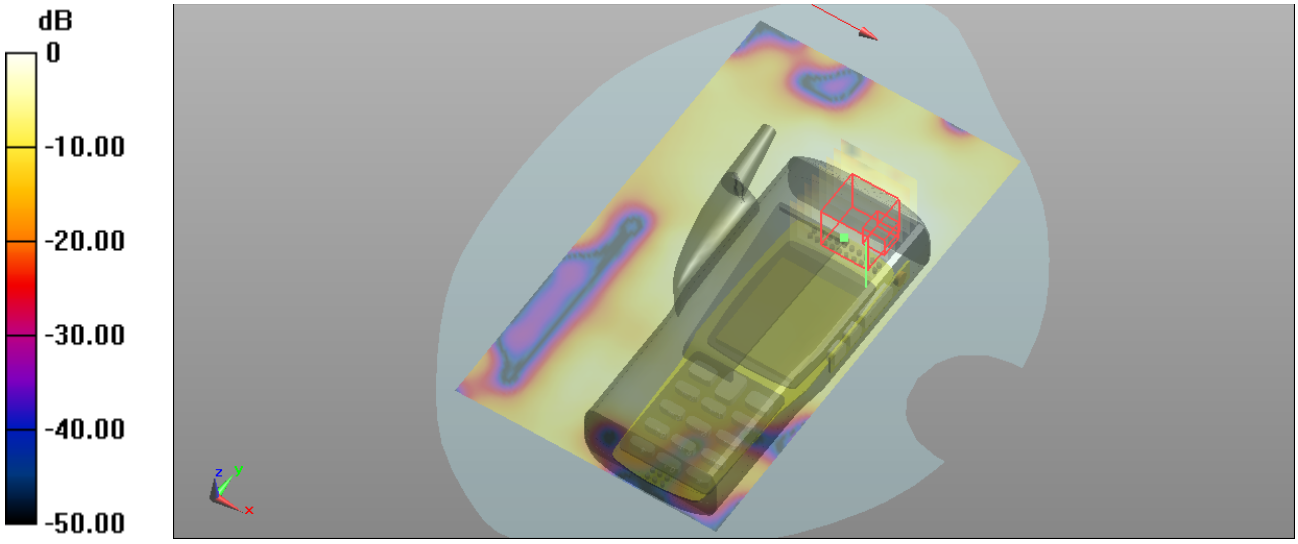
* Communication System: DSSS 2450 MHz 1Mbs; Frequency: 2437 MHz; Duty Cycle: 1:1.53886
* Medium parameters used: f = 2436 MHz; $\sigma$ = 1.911 mho/m; $\varepsilon_r$ = 51.892; $\rho$ = 1000 kg/m$^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.15, 4.15, 4.15); Calibrated: 12/12/2011
- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section

## Configuration/Channel 6 Test/Area Scan (141x81x1): Measurement grid:

dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.0159 mW/g

## Configuration/Channel 6 Test/Zoom Scan (8x8x7)/Cube 0: Measurement

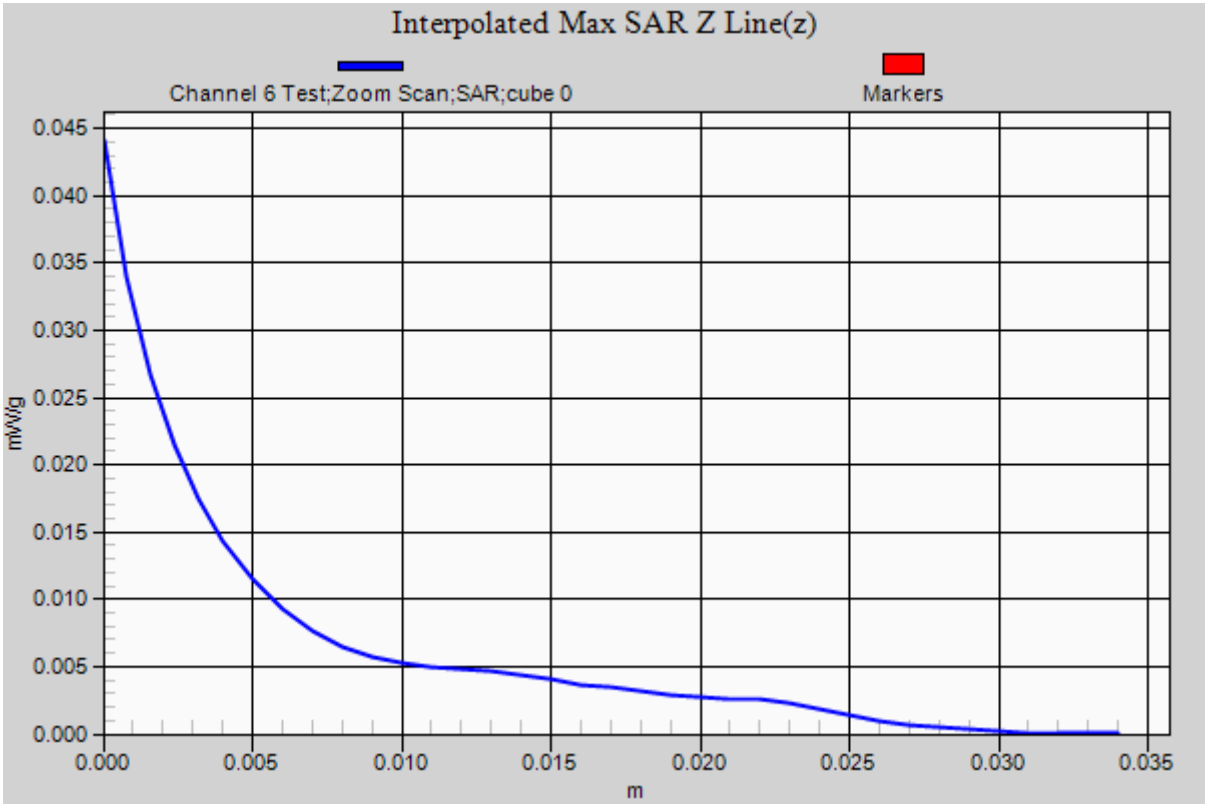
grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.962 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.044 mW/g
**SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.00816 mW/g**
Maximum value of SAR (measured) = 0.0161 mW/g




0 dB = 0.0159 mW/g = -35.97 dB mW/g

SAR MEASUREMENT PLOT 7

| | |
|---|---|
| **Ambient Temperature** | **20.4 Degrees Celsius** |
| **Liquid Temperature** | **20.1 Degrees Celsius** |
| **Humidity** | **41.0%** |



Test Date: 23 July 2012

File Name: M120604 Belt Clip 16mm Spacing 2450 MHz WLAN (DSSS) 23-06-12.da52:0

**DUT: Mine Site WLAN Phone; Type: MP70; Serial: M120222086**

* Communication System: DSSS 2450 MHz 1Mbs; Frequency: 2437 MHz; Duty Cycle: 1:1.53886
* Medium parameters used: f = 2436 MHz; $\sigma$ = 1.911 mho/m; $\varepsilon_r$ = 51.892; $\rho$ = 1000 kg/m$^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.15, 4.15, 4.15); Calibrated: 12/12/2011
- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section

## Configuration/Channel 6 Test/Area Scan (141x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0273 mW/g

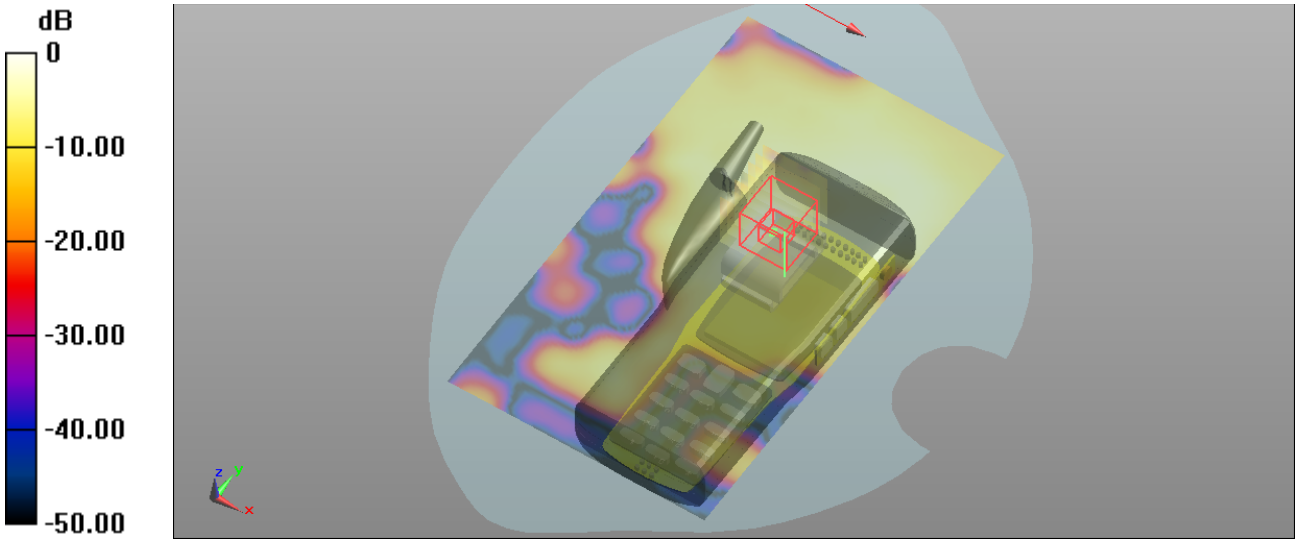
## Configuration/Channel 6 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.031 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.052 mW/g

**SAR(1 g) = 0.021 mW/g; SAR(10 g) = 0.011 mW/g**

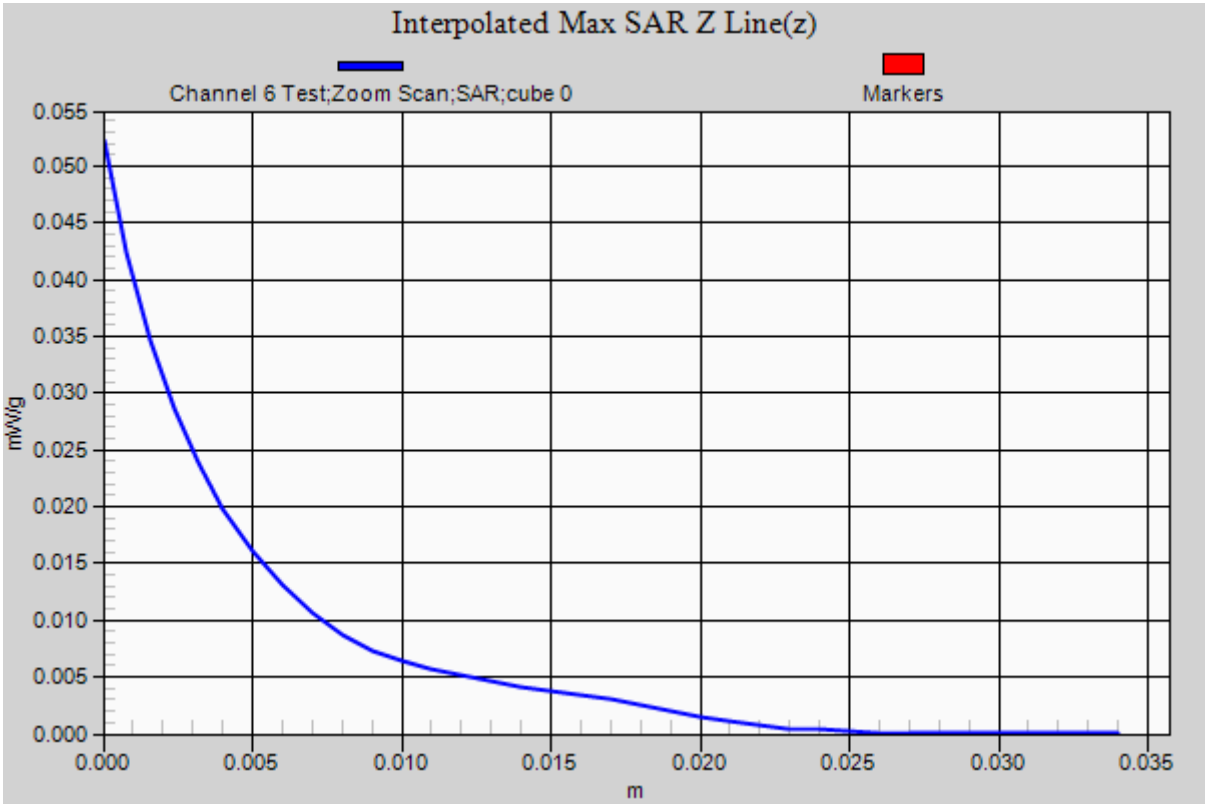
Maximum value of SAR (measured) = 0.0241 mW/g




0 dB = 0.0273 mW/g = -31.28 dB mW/g

SAR MEASUREMENT PLOT 8

| | |
|---|---|
| **Ambient Temperature** | **20.4 Degrees Celsius** |
| **Liquid Temperature** | **20.1 Degrees Celsius** |
| **Humidity** | **41.0%** |

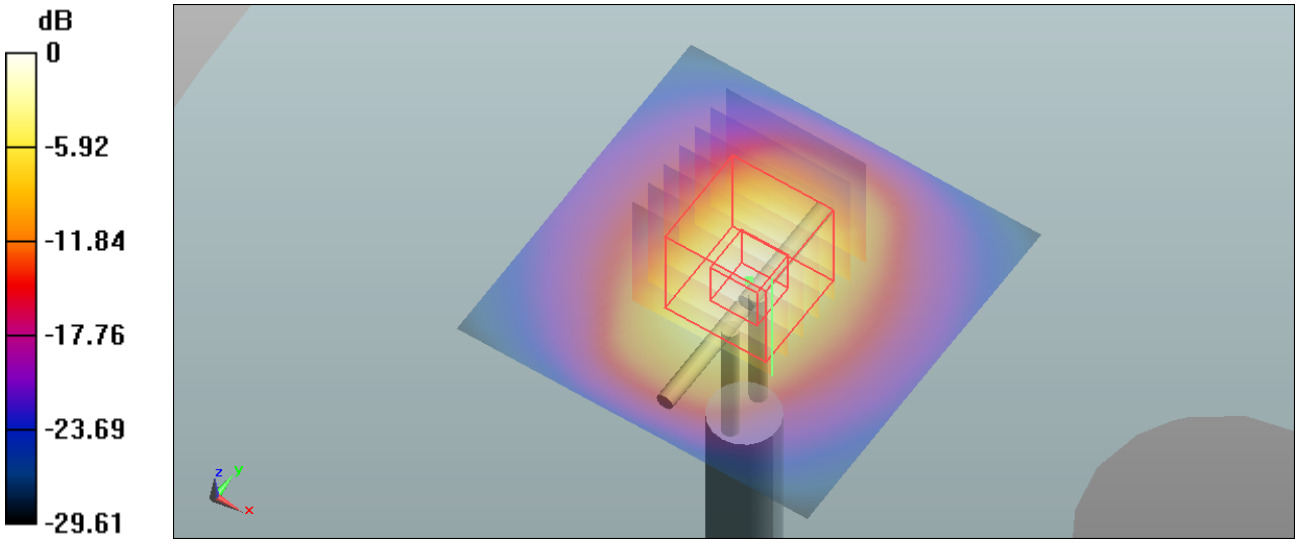


Test Date: 23 July 2012
File Name: System Check 2450 MHz 23-07-12.da52:0
**DUT: Dipole 2450 MHz; Type: DV2450V2; Serial: 724**

* Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
* Medium parameters used: f = 2450 MHz; $\sigma$ = 1.939 mho/m; $\varepsilon_r$ = 51.816; $\rho$ = 1000 kg/m$^3$
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.15, 4.15, 4.15); Calibrated: 12/12/2011
- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section

## Configuration/Channel 1 Test/Area Scan (51x51x1): Measurement grid:
dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 23.3 mW/g

## Configuration/Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement
grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.359 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 36.685 mW/g
**SAR(1 g) = 15.5 mW/g; SAR(10 g) = 7.19 mW/g**
Maximum value of SAR (measured) = 17.2 mW/g




0 dB = 23.3 mW/g = 27.35 dB mW/g

SAR MEASUREMENT PLOT 9

| | |
|---|---|
| **Ambient Temperature** | **20.4 Degrees Celsius** |
| **Liquid Temperature** | **20.1 Degrees Celsius** |
| **Humidity** | **41.0%** |