8 - SAR TEST RESULTS

This page summarizes the results of the performed dosimetric evaluation. The plots with the corresponding SAR distributions, which reveal information about the location of the maximum SAR with respect to the device could be found in the following pages.

The worst case of the test result is 0.790mW/g, which is within the limit of 1.6mW/g.

8.1 SAR Body Worn Worst-Case Test Data

Ambient Temperature (ºC): 23.0
Relative Humidity (%): 49.3

Host Laptop	Position	Frequency (MHz)	Output Power (dBm)	Test Type	Antenna position	Liquid	Phantom	Measured (mW/g)	Limit (mW/g)	Plot #
DELL	Bottom of Laptop Flush with Phantom	835	25	Body Worn	Parallel to Laptop side, 8.72mm separation	Body	Body	0.790	1.6	1
	Bottom of Laptop Flush with Phantom	835	25		Perpendicular to Laptop side			0.322		2
	Bystander with 1.5cm Separation	835	25		/			0.0444		3
	Keyboard Facing Phantom	835	25		Perpendicular to Laptop side			0.0973		4
IBM	Bottom of Laptop Flush with Phantom	836	25		Parallel to Laptop side 8.21mm separation			0.450		5
	Bottom of Laptop Flush with Phantom	836	25		Perpendicular to Laptop side			0.250		6
	Bystander with 1.5cm Separation	836	25		/			0.0286		7
	Keyboard Facing Phantom	836	25		Perpendicular to Laptop side			0.0424		8
SONY	Bottom of Laptop Flush with Phantom	836	25		Parallel to Laptop side, 7.79mm separation			0.323		9
	Bottom of Laptop Flush with Phantom	836	25		Perpendicular to Laptop side			0.152		10
	Bystander with 1.5cm Separation	836	25		/			0.0241		11
	Keyboard Facing Phantom	836	25		Perpendicular to Laptop side			0.0406		12

8.2 Plots of Test Result

The plots of test result were attached as reference.

Mason Electronics, Model: MM-5100P (Botom of laptop flush with phantom, antenna parallel to laptop side, Ambient Temp = 23 Deg C, Liqiud Temp = 21 Deg C, 9/16/2003)

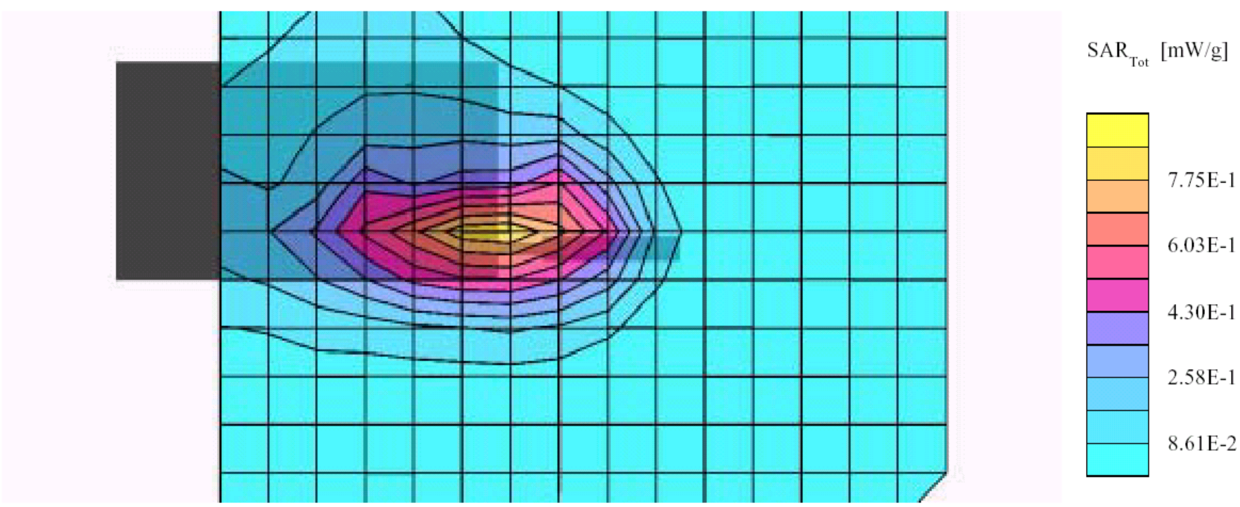
SAM Phantom; Flat Section; Position: (270°,270°); Frequency: 845 MHz

Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; (Body) 835 MHz: σ = 0.97 mho/m ε_r = 54.5 ρ = 1.31 g/cm³

Cube 5x5x7: SAR (1g): 0.790 mW/g, SAR (10g): 0.494 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

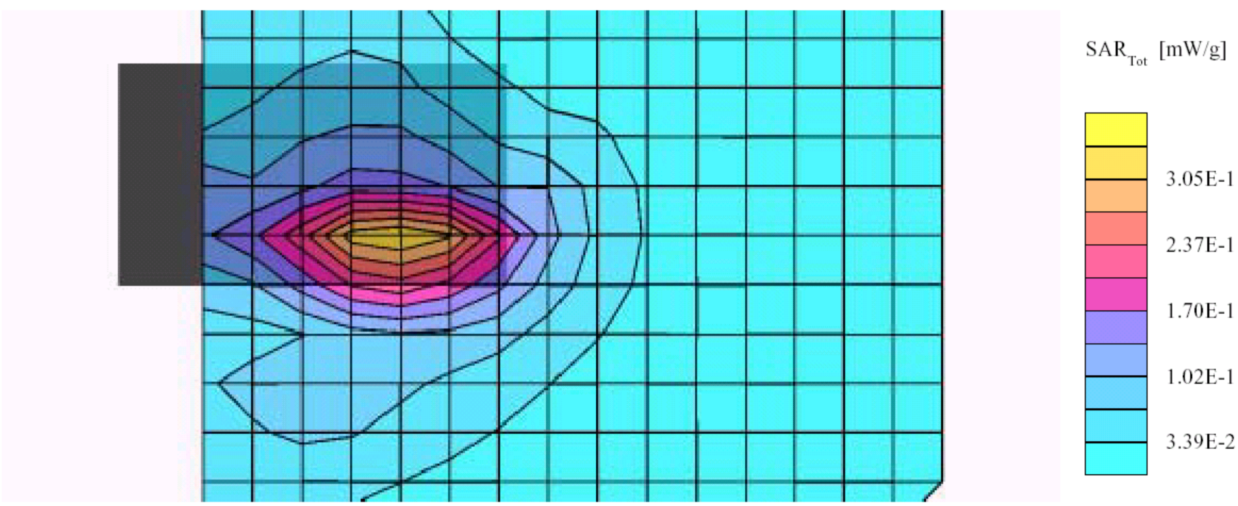
Powerdrift: 0.01 dB



Plot #1

Mason Electronics, Model: MM-5100P (Botom of laptop flush with phantom, antenna perpendicular to laptop side, Ambient Temp = 23 Deg C, Liqiud Temp = 21 Deg C, 9/16/2003)

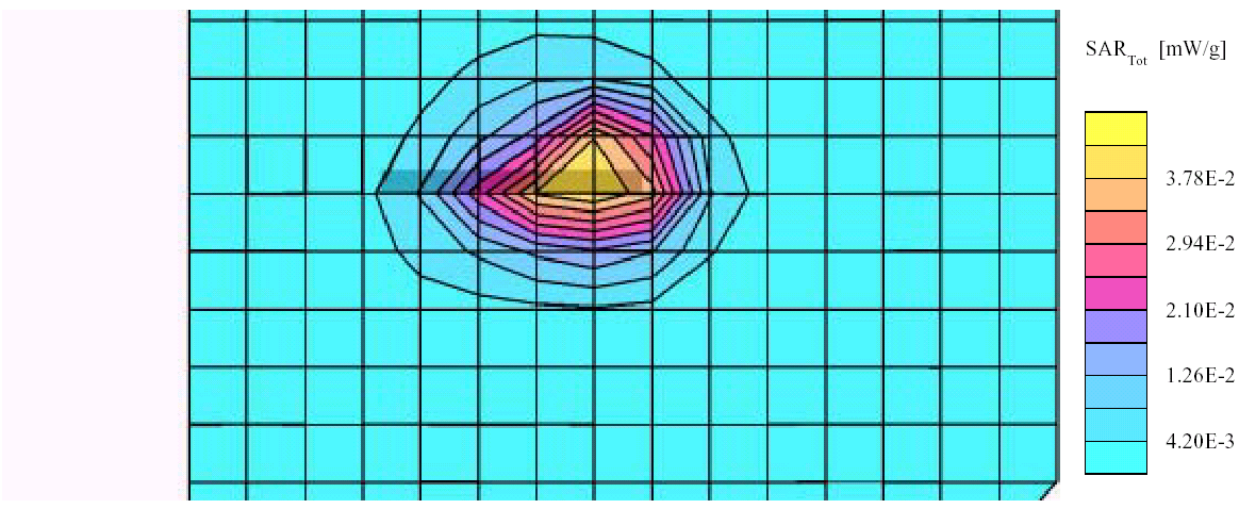
SAM Phantom; Flat Section; Position: (270°,270°); Frequency: 845 MHz
Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; (Body) 835 MHz: σ = 0.97 mho/m ε_r = 54.5 ρ = 1.31 g/cm³
Cube 5x5x7: SAR (1g): 0.322 mW/g, SAR (10g): 0.206 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0
Powerdrift: 0.02 dB



Plot #2

Mason Electronics, Model: MM-5100P (Bystander position with 1.5 cm separation distance, Ambient Temp = 23 Deg C, Liqiud Temp = 21 Deg C, 9/16/2003)

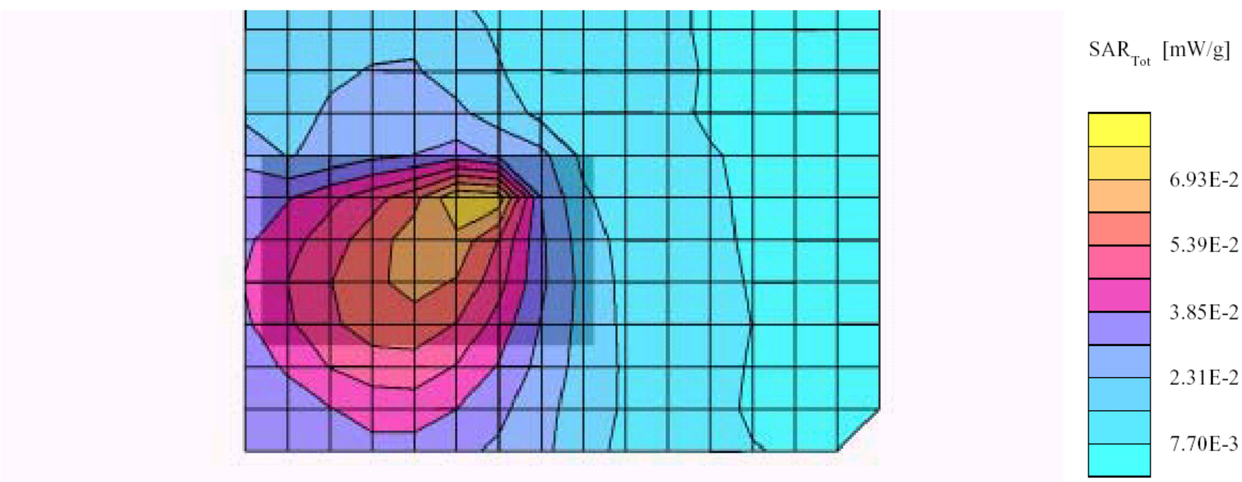
SAM Phantom; Flat Section; Position: (90°,180°); Frequency: 845 MHz
Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; (Body) 835 MHz: σ = 0.97 mho/m ε_r = 54.5 ρ = 1.31 g/cm³
Cube 5x5x7: SAR (1g): 0.0444 mW/g, SAR (10g): 0.0257 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0
Powerdrift: -0.04 dB



Plot #3

Mason Electronics, Model: MM-5100P (Keyboard facing with phantom, antenna perpendicular to laptop, Ambient Temp = 23 Deg C, Liqiud Temp = 21 Deg C, 9/16/2003)

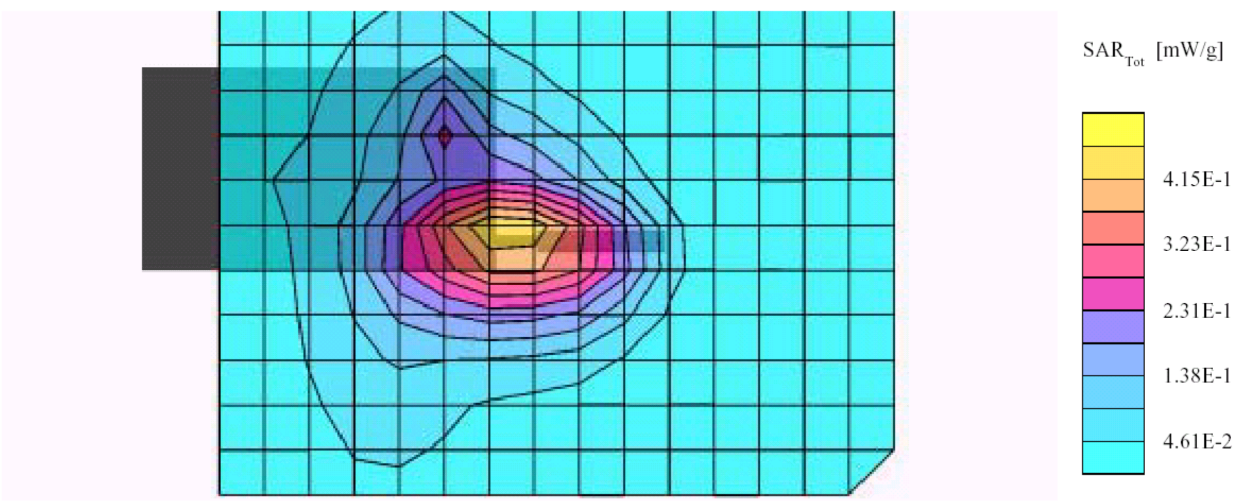
SAM Phantom; Flat Section; Position: (90°,180°); Frequency: 845 MHz
Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; (Body) 835 MHz: σ = 0.97 mho/m ε_r = 54.5 ρ = 1.31 g/cm³
Cube 5x5x7: SAR (1g): 0.0973 mW/g, SAR (10g): 0.0515 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0
Powerdrift: -0.04 dB



Plot #4

Mason Electronics, Model: MM-5100P (Botom of laptop flush with phantom, antenna parallel to laptop side, Ambient Temp = 23 Deg C, Liqiud Temp = 21 Deg C, 9/16/2003)

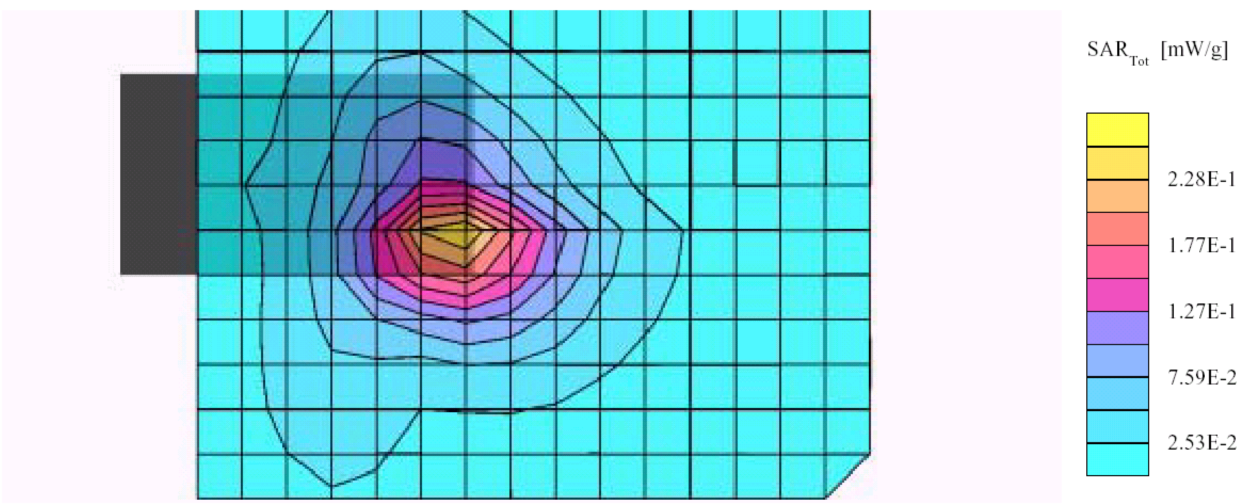
SAM Phantom; Flat Section; Position: (270°,270°); Frequency: 845 MHz
Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; (Body) 835 MHz: σ = 0.97 mho/m ε_r = 54.5 ρ = 1.31 g/cm³
Cube 5x5x7: SAR (1g): 0.450 mW/g, SAR (10g): 0.291 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0
Powerdrift: -0.05 dB



Plot #5

Mason Electronics, Model: MM-5100P (Botom of laptop flush with phantom, antenna perpendicular to laptop side, Ambient Temp = 23 Deg C, Liqiud Temp = 21 Deg C, 9/16/2003)

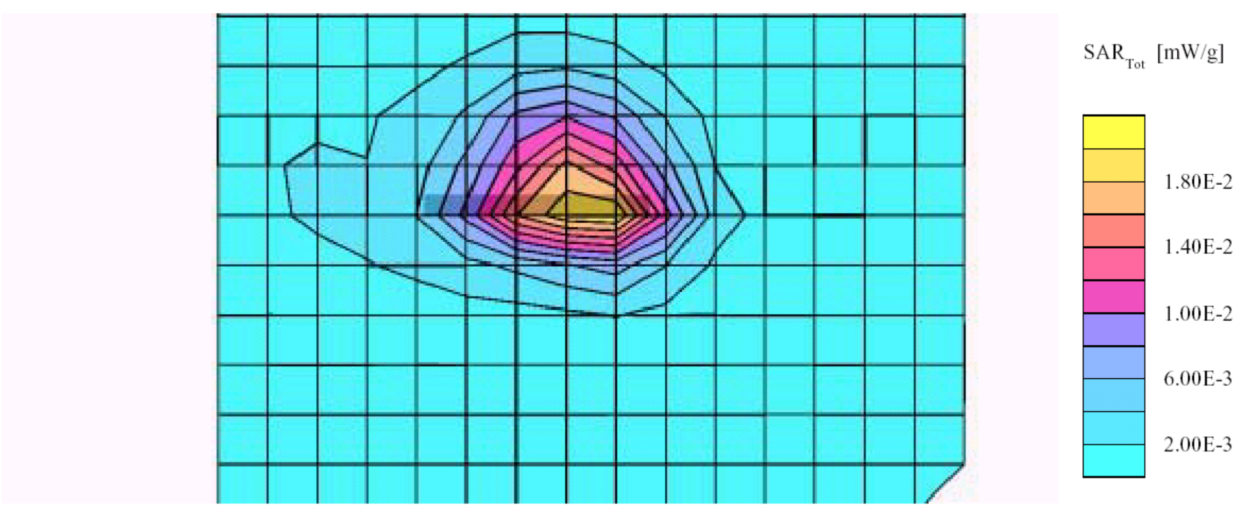
SAM Phantom; Flat Section; Position: (270°,270°); Frequency: 845 MHz
Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; (Body) 835 MHz: σ = 0.97 mho/m ε_r = 54.5 ρ = 1.31 g/cm³
Cube 5x5x7: SAR (1g): 0.250 mW/g, SAR (10g): 0.160 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0
Powerdrift: 0.00 dB



Plot #6

Mason Electronics, Model: MM-5100P (Bystander position with 1.5 cm separation distance, Ambient Temp = 23 Deg C, Liqiud Temp = 21 Deg C, 9/16/2003)

SAM Phantom; Flat Section; Position: (90°,180°); Frequency: 845 MHz
Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; (Body) 835 MHz: σ = 0.97 mho/m ε_r = 54.5 ρ = 1.31 g/cm³
Cube 5x5x7: SAR (1g): 0.0286 mW/g, SAR (10g): 0.0172 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0
Powerdrift: 0.01 dB



Plot #7