

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.

SAR TEST DATA SUMMARY

Ambient TEMPERATURE (°C): 22.5

Relative HUMIDITY (%): 62.8

Summary of worst case SAR reading

Left Head Position (with 50% duty cycle. Crest Factor=2)

Mode	Position	Ch	Freq [MHz]	Liquid Temp [°C]	Conducted Power [dBm]		Worst case SAR, averaged over 1g [mW/g]				
					Before	After	Set-up condition (applicable checked)			Measured	Limit
							Antenna	Cheek	Tilted		
DSSS	Head	L	2405	23.6	10.74	10.74	Fixed	X		0.0449	1.6
DSSS	Head	L	2405	23.8	10.74	10.74	Fixed		X	0.0862	1.6

Right Head Position (with 50% duty cycle. Crest Factor=2)

Mode	Position	Ch	Freq [MHz]	Liquid Temp [°C]	Conducted Power [dBm]		Worst case SAR, averaged over 1g [mW/g]				
					Before	After	Set-up condition (applicable checked)			Measured	Limit
							Antenna	Cheek	Tilted		
DSSS	Head	H	2475	23.2	11.23	11.23	Fixed	X		0.0569	1.6
DSSS	Head	H	2475	23.4	11.23	11.23	Fixed		X	0.0828	1.6

Body Position (with 50% duty cycle. Crest Factor=2)

Mode	Position	Ch	Freq [MHz]	Liquid Temp [°C]	Conducted Power [dBm]		Worst case SAR, averaged over 1g [mW/g]			
					Before	After	Set-up condition (applicable checked)		Measured	Limit
							Antenna	Separation dist (mm)		
DSSS	Muscle	H	2475	23.2	11.23	11.23	Fixed	15	0.0131	1.6

Measurement Results with 50% duty cycle. Crest Factor=2)

Liquid Measurement date: 11/29/01

By: Thu Chan

Simulant	Freq [MHz]	Parameters	Liquid Temp [°C]	Target Value	Measured Value	Deviation [%]	Limit [%]
Head	2450	ε	23.6	39.2	39.46	0.663	± 5
		σ	23.6	1.80	1.876	4.222	± 5

Liquid Measurement date: 11/30/01

By: Thu Chan

Simulant	Freq [MHz]	Parameters	Liquid Temp [°C]	Target Value	Measured Value	Deviation [%]	Limit [%]
Head	2450	ε	23.2	39.2	39.45	0.639	± 5
		σ	23.2	1.80	1.878	4.333	± 5
Body	2450	ε	23.2	52.7	51.52	-2.239	±5
		σ	23.2	1.95	2.02	3.590	±5

Left Head Position

Mode	Position	Ch	Freq [MHz]	Liquid Temp [°C]	Conducted Power [dBm]		Worst case SAR, averaged over 1g [mW/g]				
					Before	After	Set-up condition (applicable checked)			Measured	Limit
							Antenna	Cheek	Tilted		
DSSS	Head	H	2475	23.6	11.23	11.23	Fixed	X		0.0441	1.6
DSSS	Head	M	2439	23.6	10.73	10.73	Fixed	X		0.0215	1.6
DSSS	Head	L	2405	23.6	10.74	10.74	Fixed	X		0.0449	1.6
DSSS	Head	H	2475	23.8	11.23	11.23	Fixed		X	0.0713	1.6
DSSS	Head	M	2439	23.8	10.73	10.73	Fixed		X	0.0629	1.6
DSSS	Head	L	2405	23.8	10.74	10.74	Fixed		X	0.0862	1.6

Right Head Position

Mode	Position	Ch	Freq [MHz]	Liquid Temp [°C]	Conducted Power [dBm]		Worst case SAR, averaged over 1g [mW/g]				
					Before	After	Set-up condition (applicable checked)			Measured	Limit
							Antenna	Cheek	Tilted		
DSSS	Head	H	2475	23.2	11.23	11.23	Fixed	X		0.0569	1.6
DSSS	Head	M	2439	23.2	10.73	10.73	Fixed	X		0.0232	1.6
DSSS	Head	L	2405	23.2	10.74	10.74	Fixed	X		0.0237	1.6
DSSS	Head	H	2475	23.4	11.23	11.23	Fixed		X	0.0828	1.6
DSSS	Head	M	2439	23.4	10.73	10.73	Fixed		X	0.0691	1.6
DSSS	Head	L	2405	23.4	10.74	10.74	Fixed		X	0.0676	1.6

Body Position

Mode	Position	Ch	Freq [MHz]	Liquid Temp [°C]	Conducted Power [dBm]		Worst case SAR, averaged over 1g [mW/g]			
					Before	After	Set-up condition (applicable checked)		Measured	Limit
							Antenna	Separation dist (mm)		
DSSS	Muscle	H	2475	23.2	11.23	11.23	Fixed	15	0.0131	1.6
DSSS	Muscle	M	2439	23.2	10.73	10.73	Fixed	15	0.0049	1.6
DSSS	Muscle	L	2405	23.2	10.74	10.74	Fixed	15	0.0108	1.6

Sharp (M/N: UX-CL220) (Left Cheek, Low/CH-1/2450M, 50% Duty Cycle)

Generic Twin Phantom; Left Cheek Section

Frequency: 2450 MHz

Probe: ET3DV6 - SN1577; ConvF(4.90,4.90,4.90)

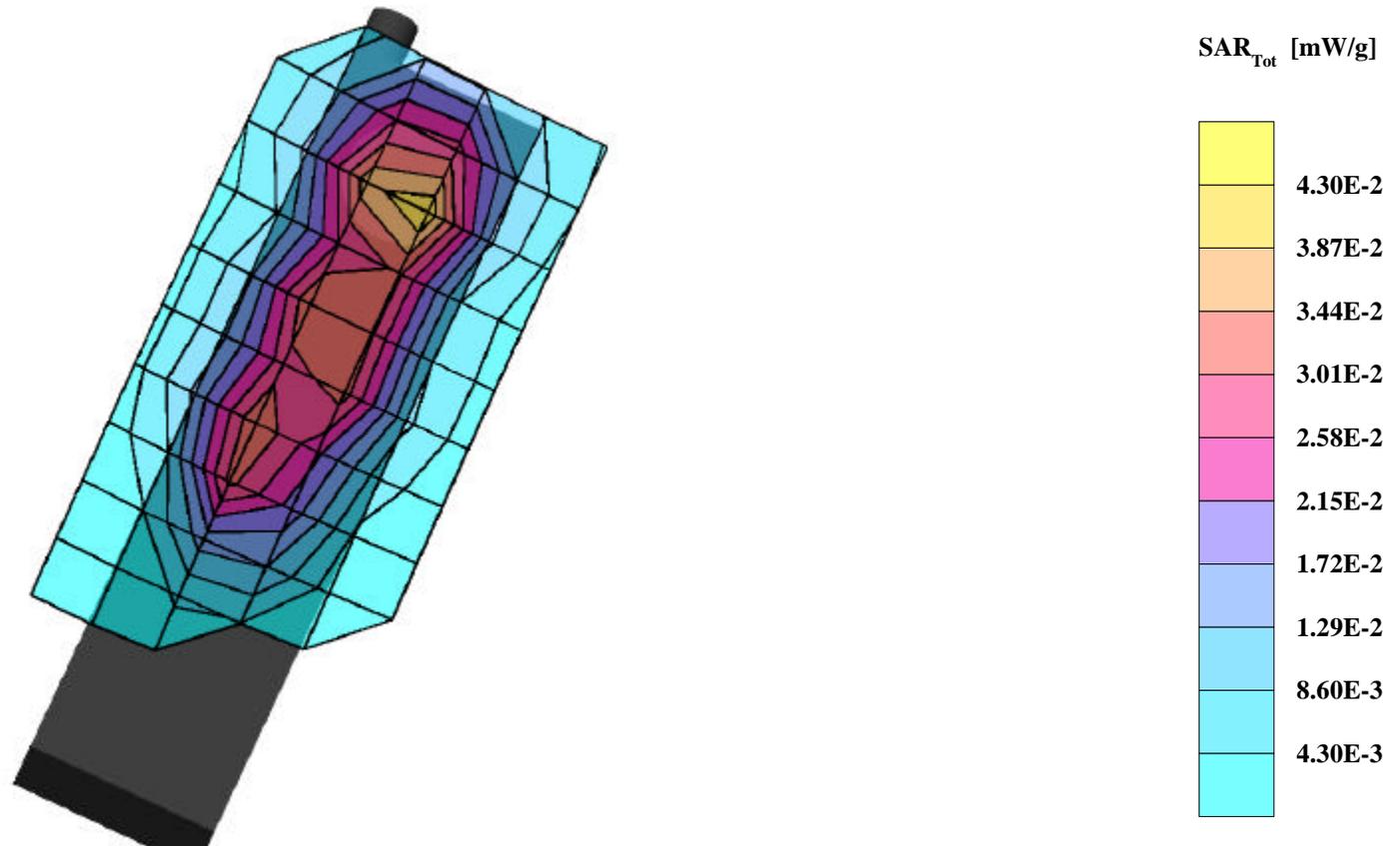
Crest factor: 2.0

Head 2450MHz: $s = 1.88$ mho/m $\epsilon_r = 39.5$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.0449 mW/g, SAR (10g): 0.0247 mW/g, (Worst-case extrapolation)

Powerdrift: 0.10 dB

Liquid Temperature: 23.6°C



Sharp (M/N: UX-CL220) (Left Cheek, Low/CH-1/2450M, 50% Duty Cycle)

Generic Twin Phantom; Section

Frequency: 2450 MHz

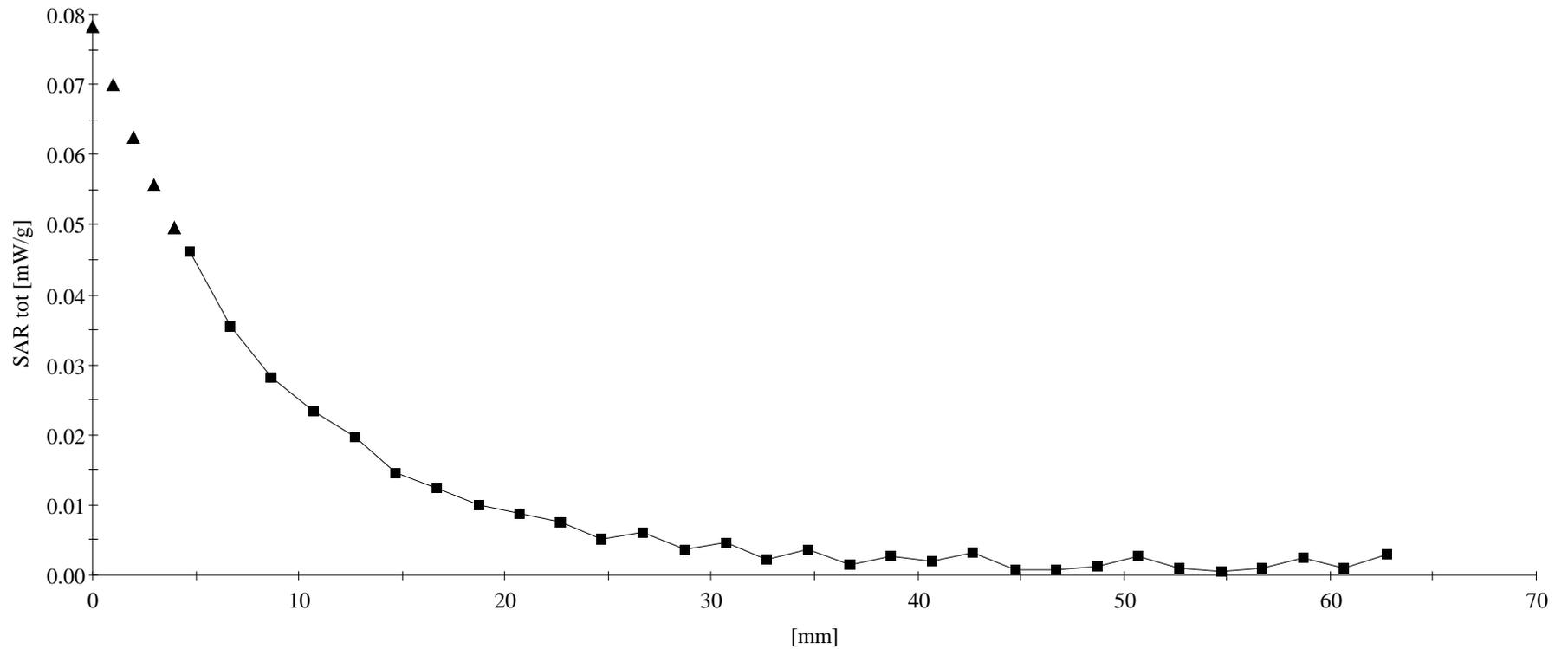
Probe: ET3DV6 - SN1577; ConvF(4.90,4.90,4.90)

Crest factor: 2.0

Head 2450MHz: $s = 1.88 \text{ mho/m}$ $\epsilon_r = 39.5$ $r = 1.00 \text{ g/cm}^3$

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Liquid Temperature: 23.6°C



Sharp (M/N: UX-CL220) (Left Tilt, Low/CH-1/2450M, 50% Duty Cycle)

Generic Twin Phantom; Left Hand Section

Frequency: 2450 MHz

Probe: ET3DV6 - SN1577; ConvF(4.90,4.90,4.90)

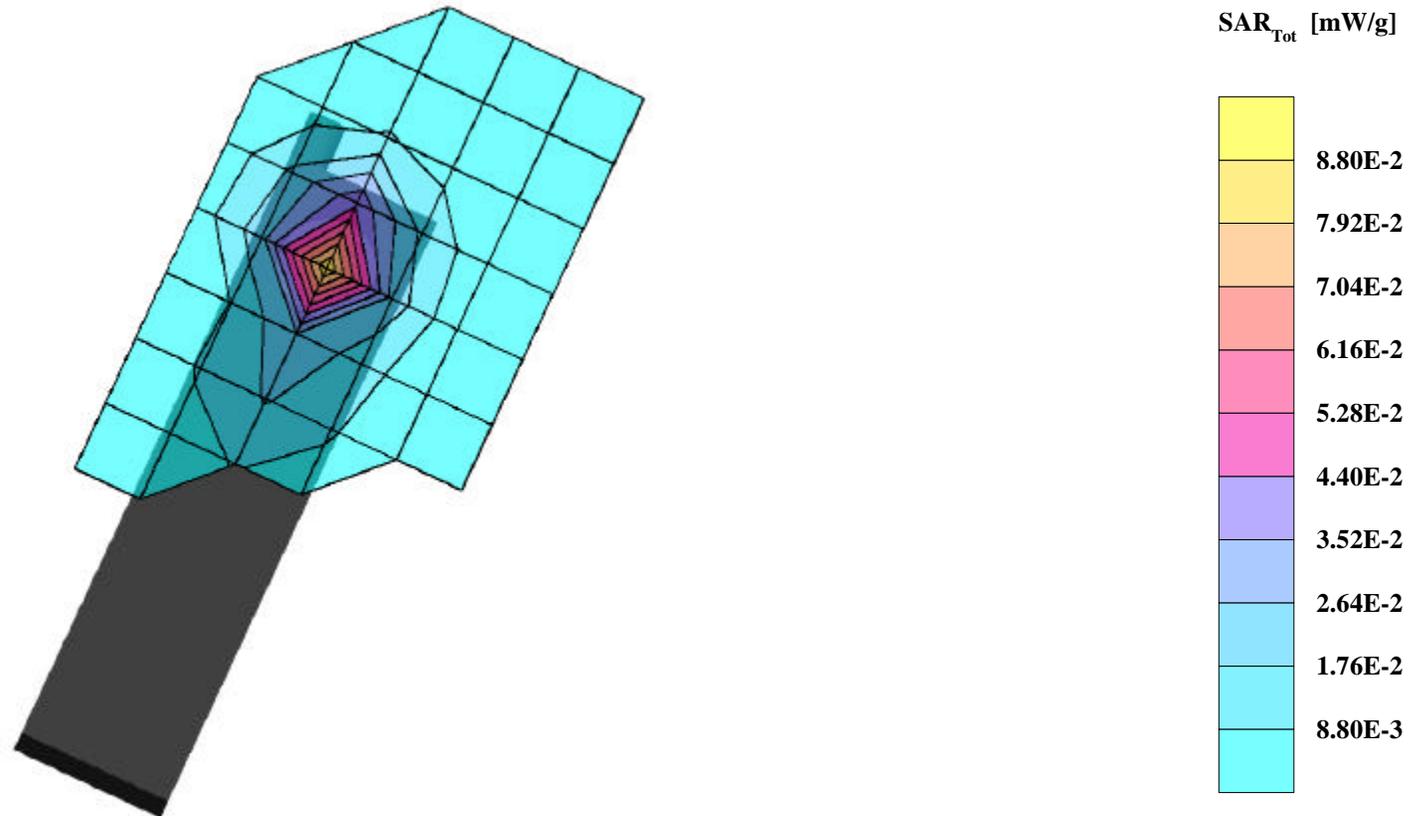
Crest factor: 2.0

Head 2450MHz: $s = 1.88$ mho/m $\epsilon_r = 39.5$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.0862 mW/g, SAR (10g): 0.0445 mW/g, (Worst-case extrapolation)

Powerdrift: 0.05 dB

Liquid Temperature: 23.8°C



Sharp (M/N: UX-CL220) (Left Tilt, Low/CH-1/2450M, 50% Duty Cycle)

Generic Twin Phantom; Section

Frequency: 2450 MHz

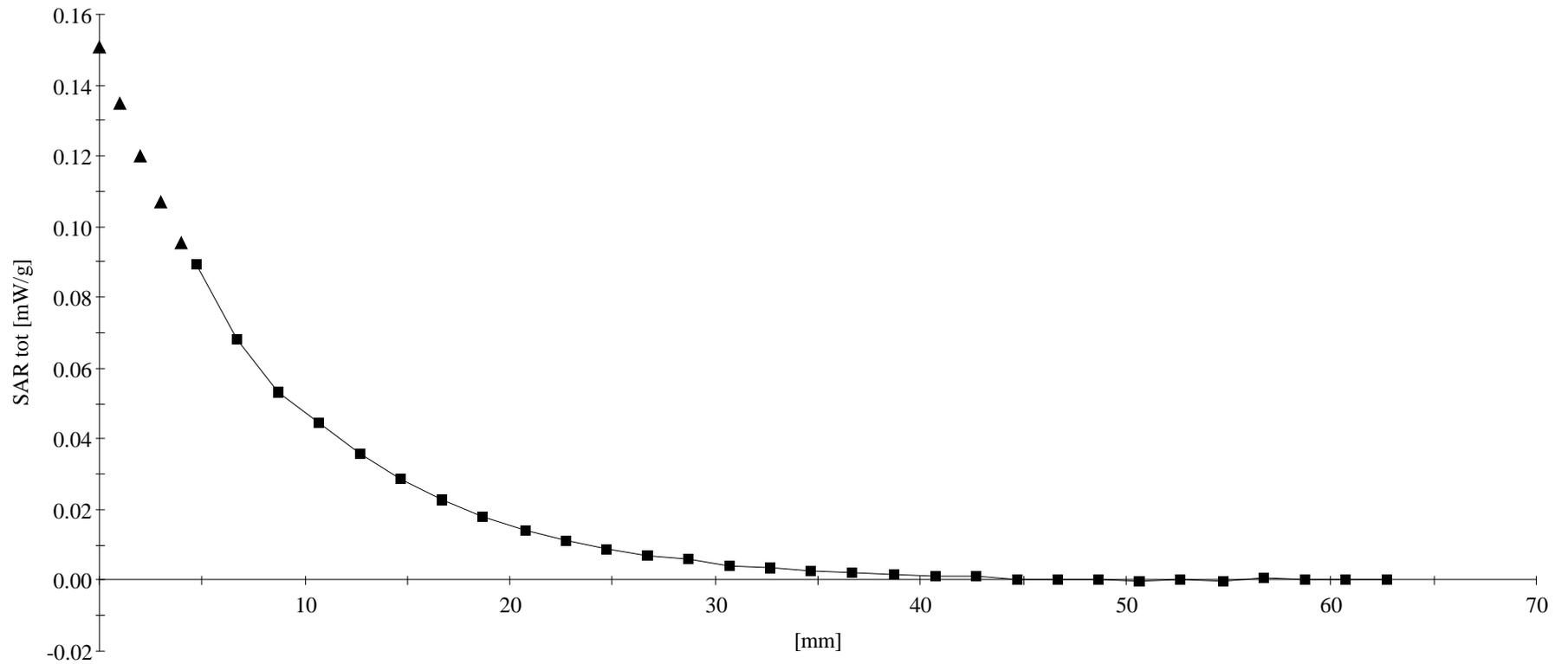
Probe: ET3DV6 - SN1577; ConvF(4.90,4.90,4.90)

Crest factor: 2.0

Head 2450MHz: $s = 1.88 \text{ mho/m}$ $\epsilon_r = 39.5$ $r = 1.00 \text{ g/cm}^3$

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Liquid Temperature: 23.8°C



11/30/01

Sharp (M/N: UX-CL220) (Right Cheek, High/CH-1/2475M, 50% Duty Cycle)

Generic Twin Phantom; Right Cheek Section

Frequency: 2450 MHz

Probe: ET3DV6 - SN1577; ConvF(4.90,4.90,4.90)

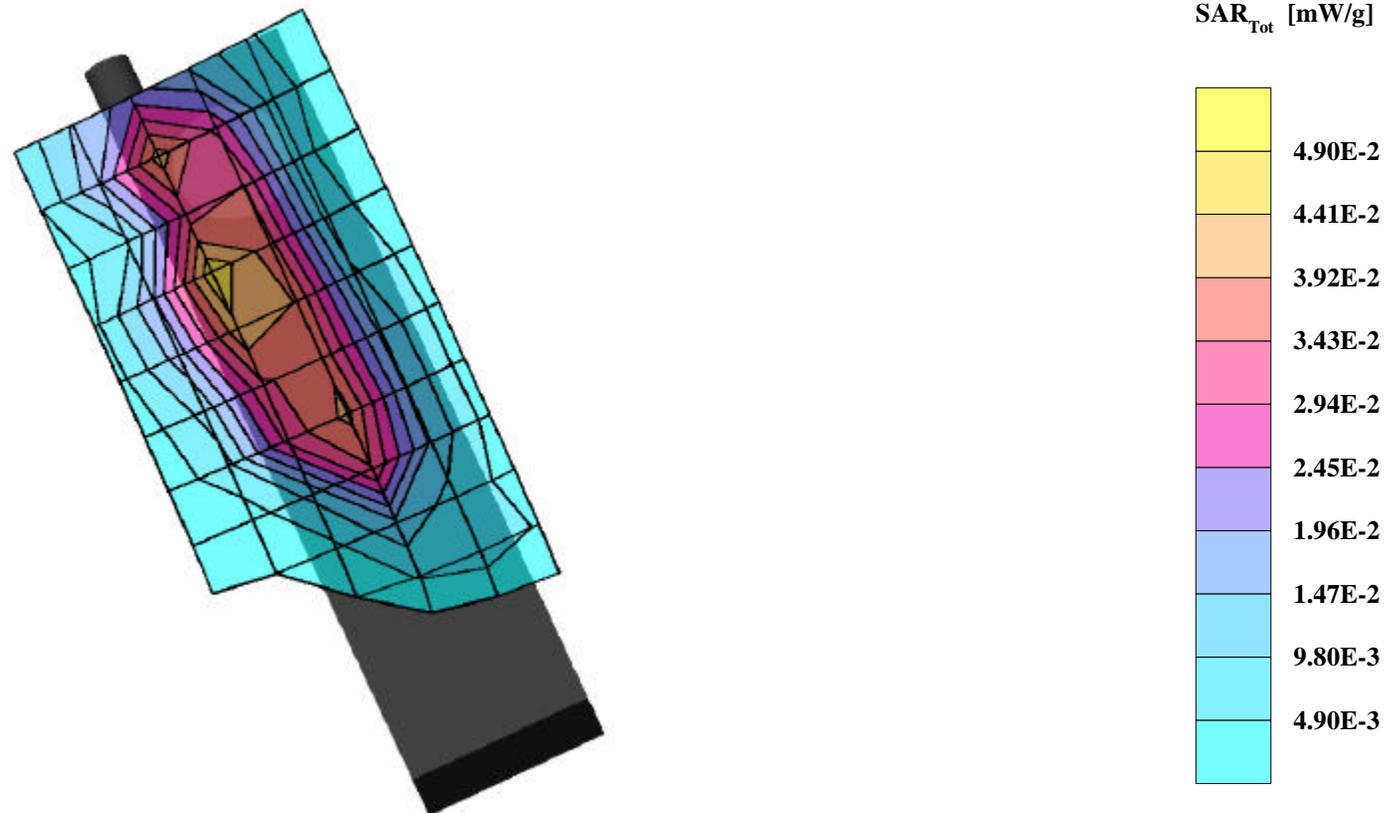
Crest factor: 2.0

Head 2450MHz: $s = 1.88$ mho/m $\epsilon_r = 39.5$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.0569 mW/g, SAR (10g): 0.0289 mW/g, (Worst-case extrapolation)

Powerdrift: 0.19 dB

Liquid Temperature: 23.2°C



Sharp (M/N: UX-CL220) (Right Cheek, High/CH-1/2475M, 50% Duty Cycle)

Generic Twin Phantom; Section

Frequency: 2450 MHz

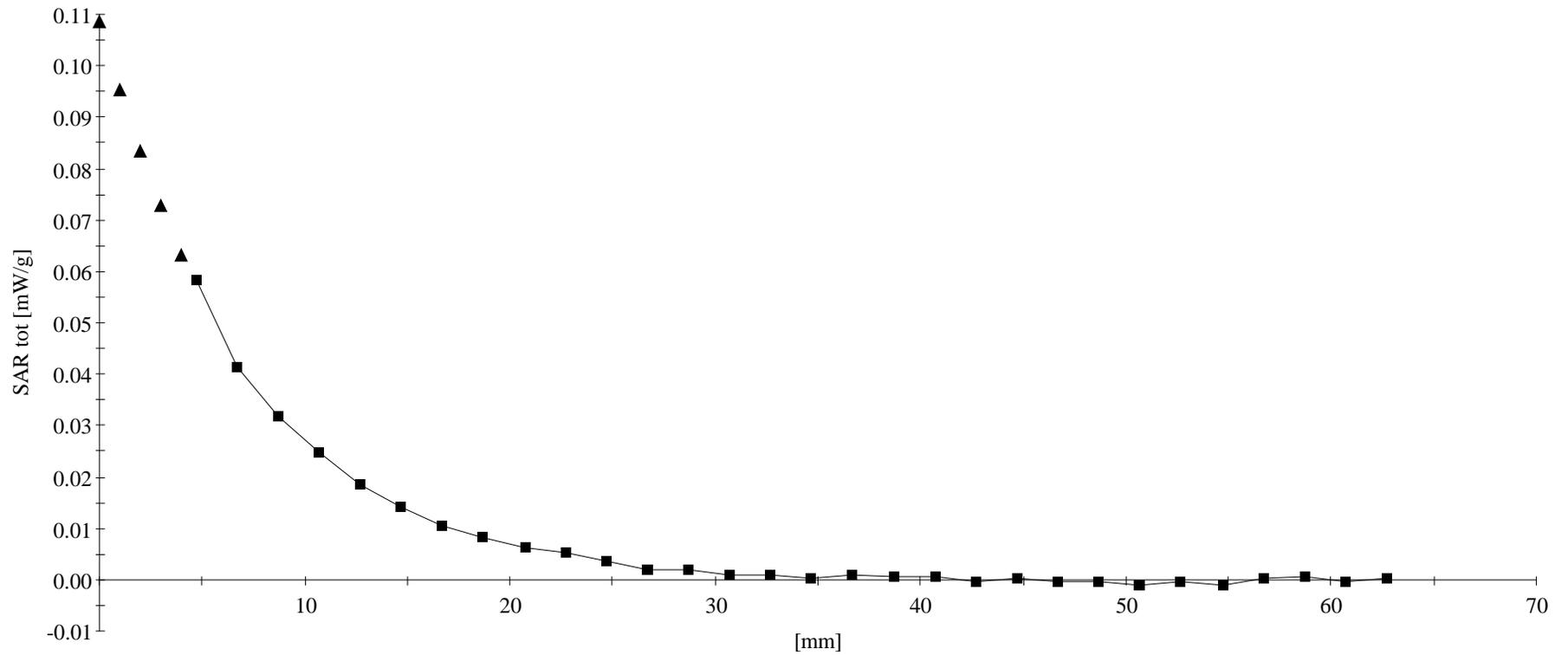
Probe: ET3DV6 - SN1577; ConvF(4.90,4.90,4.90)

Crest factor: 2.0

Head 2450MHz: $s = 1.88 \text{ mho/m}$ $\epsilon_r = 39.5$ $r = 1.00 \text{ g/cm}^3$

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Liquid Temperature: 23.2°C



11/30/01

Sharp (M/N: UX-CL220) (Right Cheek, High/CH-1/2475M, 50% Duty Cycle)

Generic Twin Phantom; Right Hand Section

Frequency: 2450 MHz

Probe: ET3DV6 - SN1577; ConvF(4.90,4.90,4.90)

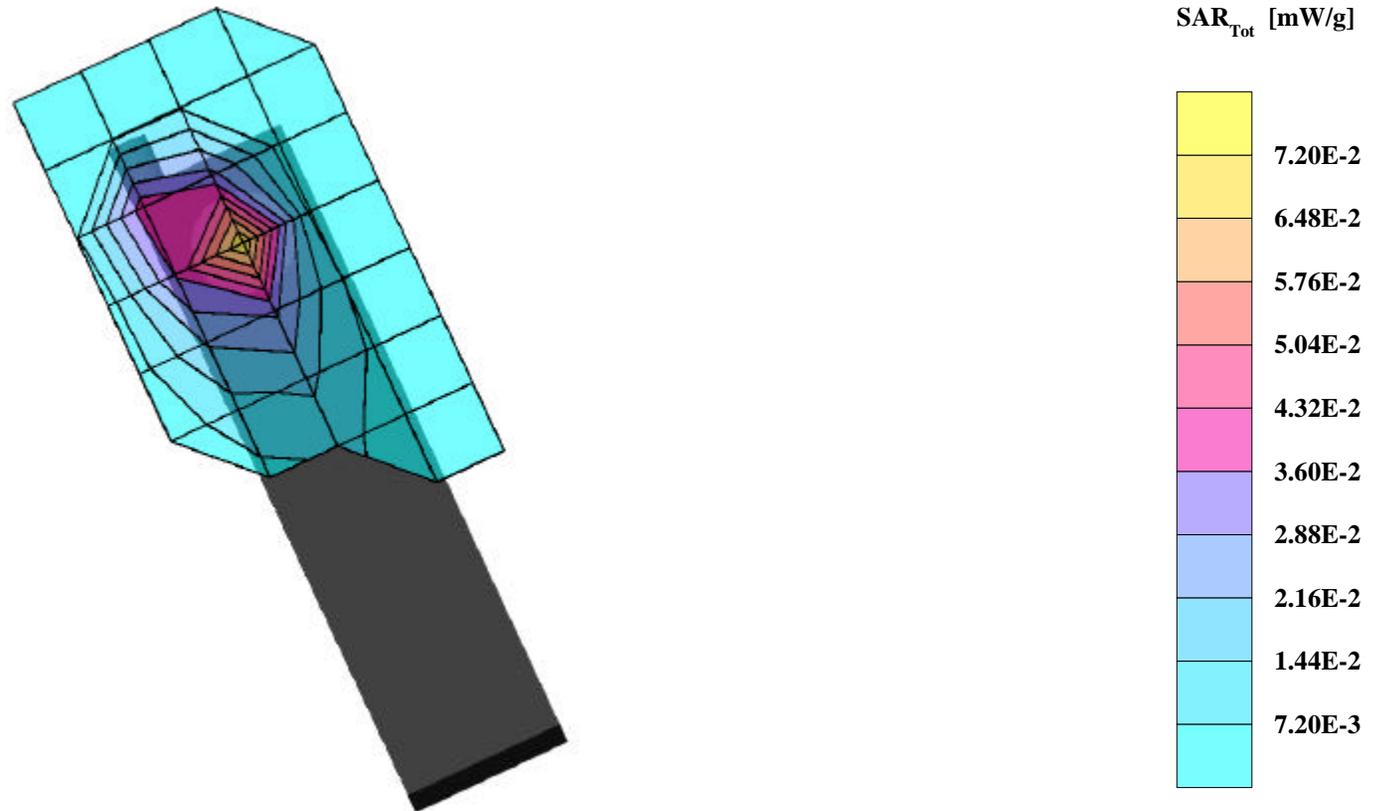
Crest factor: 2.0

Head 2450MHz: $s = 1.88$ mho/m $\epsilon_r = 39.5$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.0828 mW/g, SAR (10g): 0.0425 mW/g, (Worst-case extrapolation)

Powerdrift: -0.06 dB

Liquid Temperature: 23.4°C



Sharp (M/N: UX-CL220) (Right Cheek, High/CH-1/2475M, 50% Duty Cycle)

Generic Twin Phantom; Section

Frequency: 2450 MHz

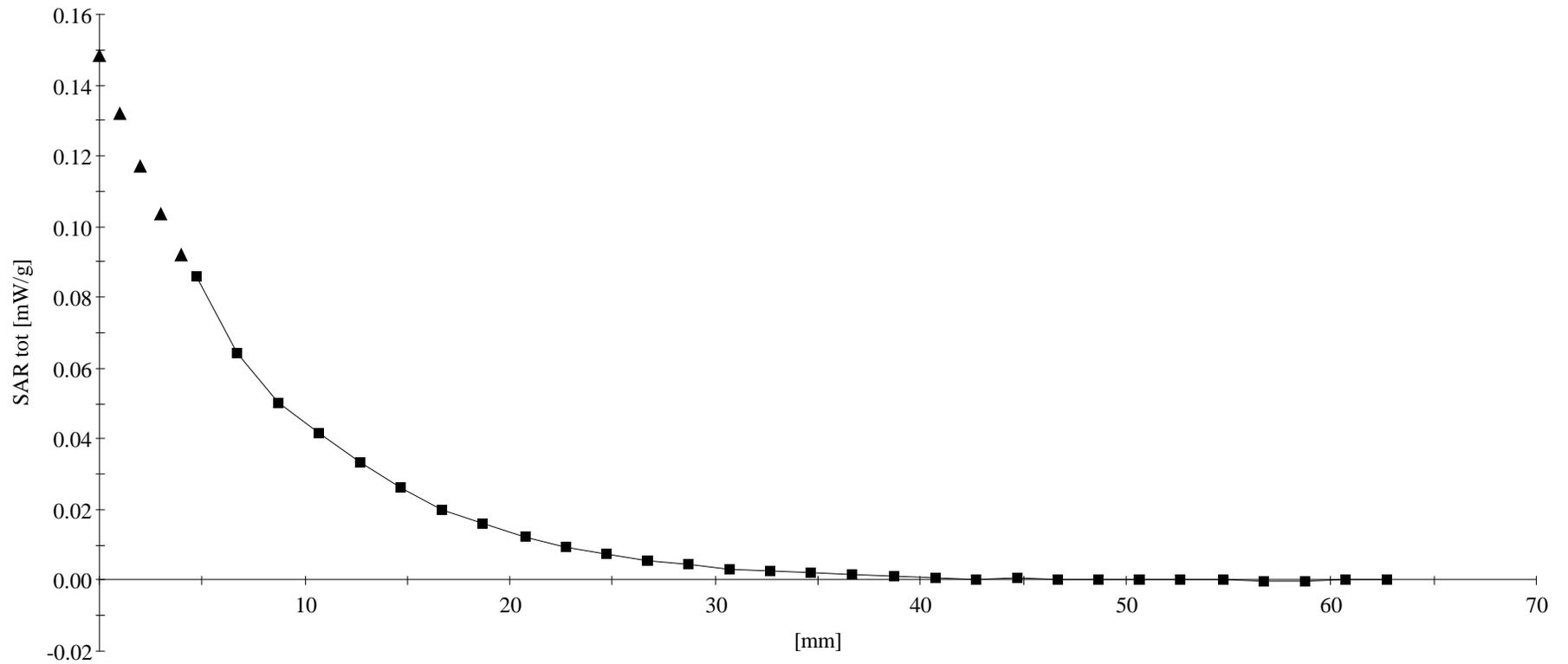
Probe: ET3DV6 - SN1577; ConvF(4.90,4.90,4.90)

Crest factor: 2.0

Head 2450MHz: $s = 1.88 \text{ mho/m}$ $\epsilon_r = 39.5$ $r = 1.00 \text{ g/cm}^3$

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Liquid Temperature: 23.4°C



Sharp (M/N: UX-CL220) (Body Configuration, 15mm Separation, High/CH-1/2475M, 50% Duty Cycle)

Generic Twin Phantom; Flat Section

Frequency: 2450 MHz

Probe: ET3DV6 - SN1577M; ConvF(4.40,4.40,4.40)

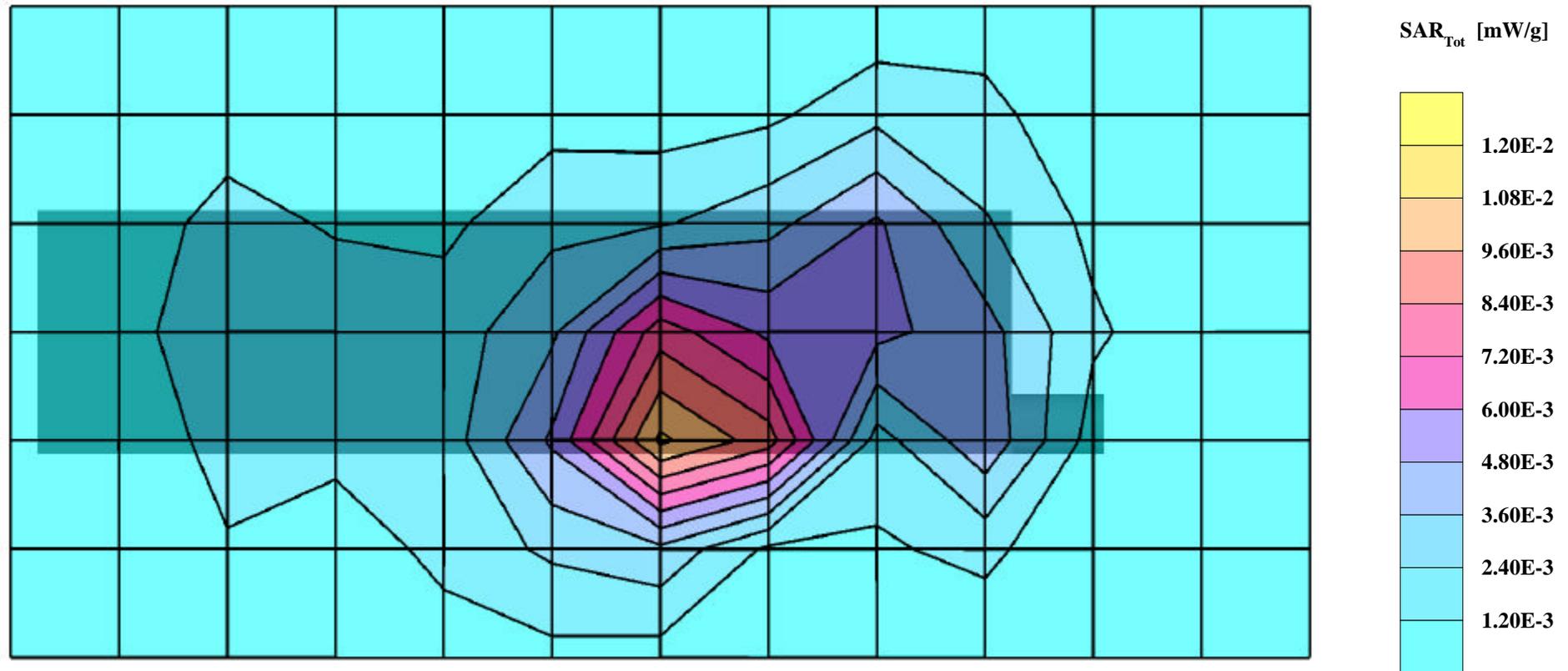
Crest factor: 2.0

Muscle 2450 MHz: $s = 2.02$ mho/m $\epsilon_r = 51.5$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.0131 mW/g, SAR (10g): 0.0066 mW/g, (Worst-case extrapolation)

Powerdrift: -0.12 dB

Liquid Temperature: 23.2°C



Sharp (M/N: UX-CL220) (Body Configuration, 15mm Separation, High/CH-1/2475M, 50% Duty Cycle)

Generic Twin Phantom; Section

Frequency: 2450 MHz

Probe: ET3DV6 - SN1577M; ConvF(4.40,4.40,4.40)

Crest factor: 2.0

Muscle 2450 MHz: $s = 2.02 \text{ mho/m}$ $\epsilon_r = 51.5$ $\rho = 1.00 \text{ g/cm}^3$

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Liquid Temperature: 23.2°C

