



November 6, 2003
Supplement to SAR Test Report for Motorola portable cellular phone (FCC ID: IHDT56DN1)

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Summary of FCC request for additional information

There was a request for additional information regarding Motorola's SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56DN1). The requested information is addressed below in the same numbering sequence received.

1. Please provide tissue parameters and validation test results for SAR tests performed on 10/22/03 and 10/31/03.

RESPONSE: The table for the additional validation test tissue parameters and test results is shown below.

<i>f</i> (MHz)	Description	SAR (W/kg), 1gram	Dielectric Parameters		Ambient Temp (°C)	Tissue Temp (°C)
			ϵ_r	σ (S/m)		
835	Measured, 22-Oct-03	9.7	41.6	0.90	20	19.6
	Measured, 31-Oct-03	10.2	42.5	0.92	20	19.8
	Recommended Limits	10.1	41.5 ±5%	0.90 ±5%	18-25	18-25
1800	Measured, 31-Oct-03	40.5	39.4	1.37	20	19.8
	Recommended Limits	39.7	40.0 ±5%	1.4 ±5%	18-25	18-25

Please see Appendix 1 for additional validation test SAR plots.

2. Please justify SAR testing the EUT in CDMA and PCS modes only for PTT operation (i.e., not testing AMPS for PTT).

RESPONSE: The PTT mode is only available as an option in the CDMA modes. The PTT mode does not work in AMPS. SAR testing was performed in PTT mode for both CDMA800 and CDMA1900.

Appendix 1:
Additional SAR Plots

Dipole 835 MHz

835MHz System Performance Check / Dipole Sn# 425TR

Forward Power = 253mW Reflected Power = -27.90dB

Room Temp at time of measurement = 20 Simulant Temp at time of measurement = 19.6

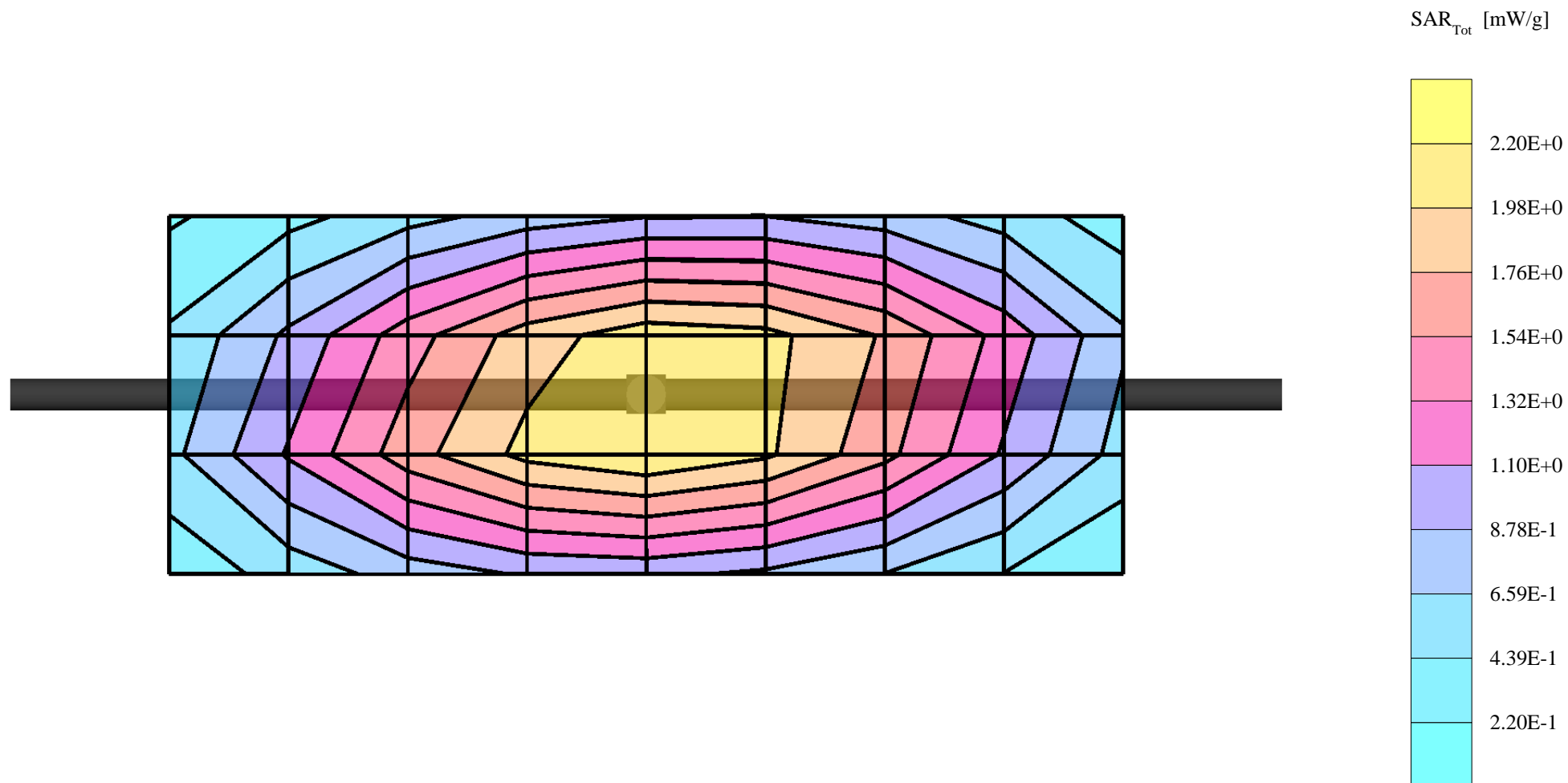
R1 TP-1005 SAM Expanded Sugar (Rev. 2)-9Jan03; Flat

Probe: ET3DV6R - SN1506 - Validation.3; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz VALIDATION: $\sigma = 0.90$ mho/m $\epsilon_r = 41.6$ $\rho = 1.00$ g/cm³

Cubes (2): Peak: 3.87 mW/g ± 0.06 dB, SAR (1g): 2.46 mW/g ± 0.06 dB, SAR (10g): 1.58 mW/g ± 0.06 dB, (Worst-case extrapolation)

Penetration depth: 12.0 (11.0, 13.4) [mm]

Powerdrift: -0.06 dB



Dipole 835 MHz

835MHz System Performance Check / Dipole Sn# 425TR

Forward Power = 253mW Reflected Power = -27.90dB

Room Temp at time of measurement = 20 Simulant Temp at time of measurement = 19.6

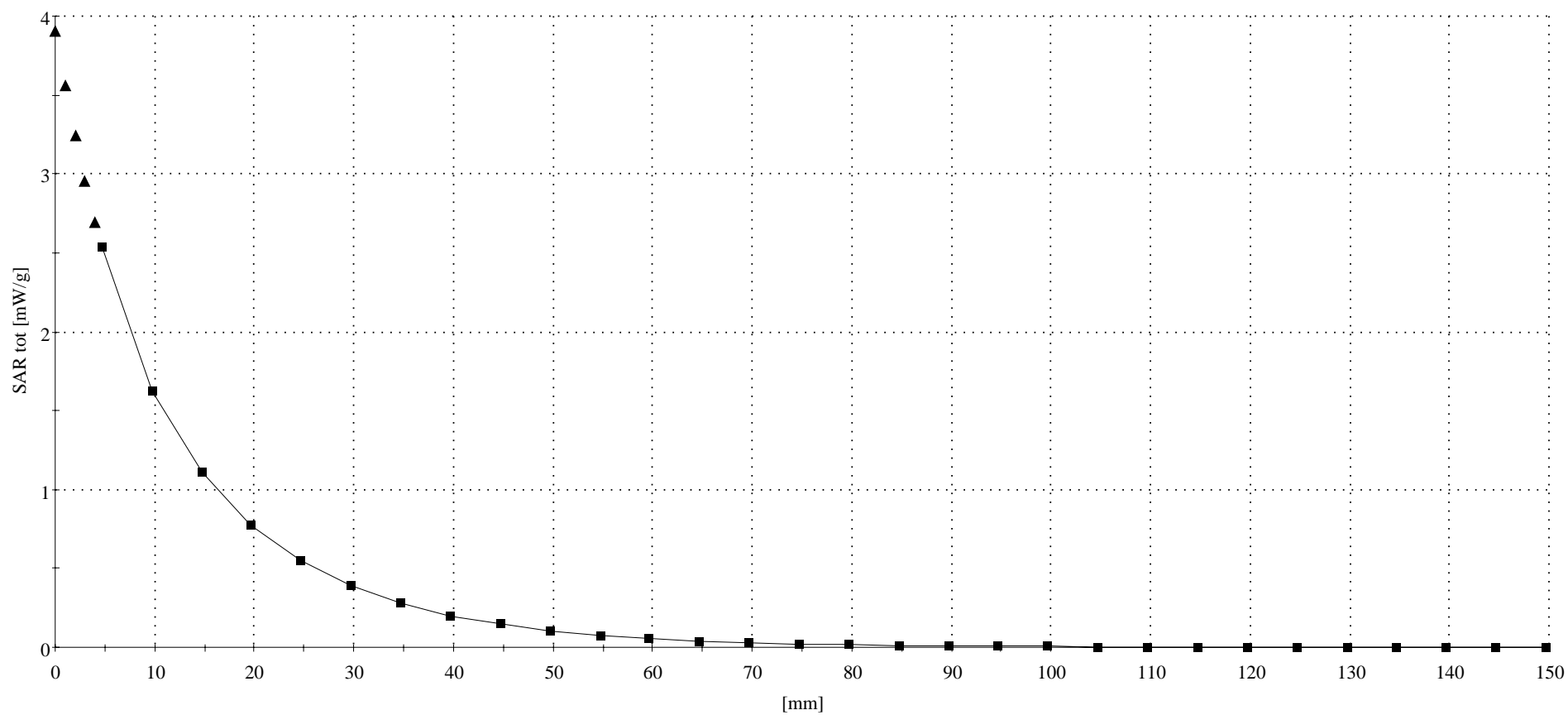
R1 TP-1005 SAM Expanded Sugar (Rev. 2)-9Jan03 Phantom; Section; Position: ; Frequency: 835 MHz

Probe: ET3DV6R - SN1506 - Validation.3; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz VALIDATION: $\sigma = 0.90$ mho/m $\epsilon_r = 41.6$ $\rho = 1.00$ g/cm³

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Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0

Penetration depth: 12.0 (11.0, 13.3) [mm]



Dipole 835 MHz

835 MHz System Performance Check / Dipole Sn# 425TR

Forward Power =254mW Reflected Power =-26.5dB

Room Temp at time of measurement =20 Simulant Temp at time of measurement = 19.8

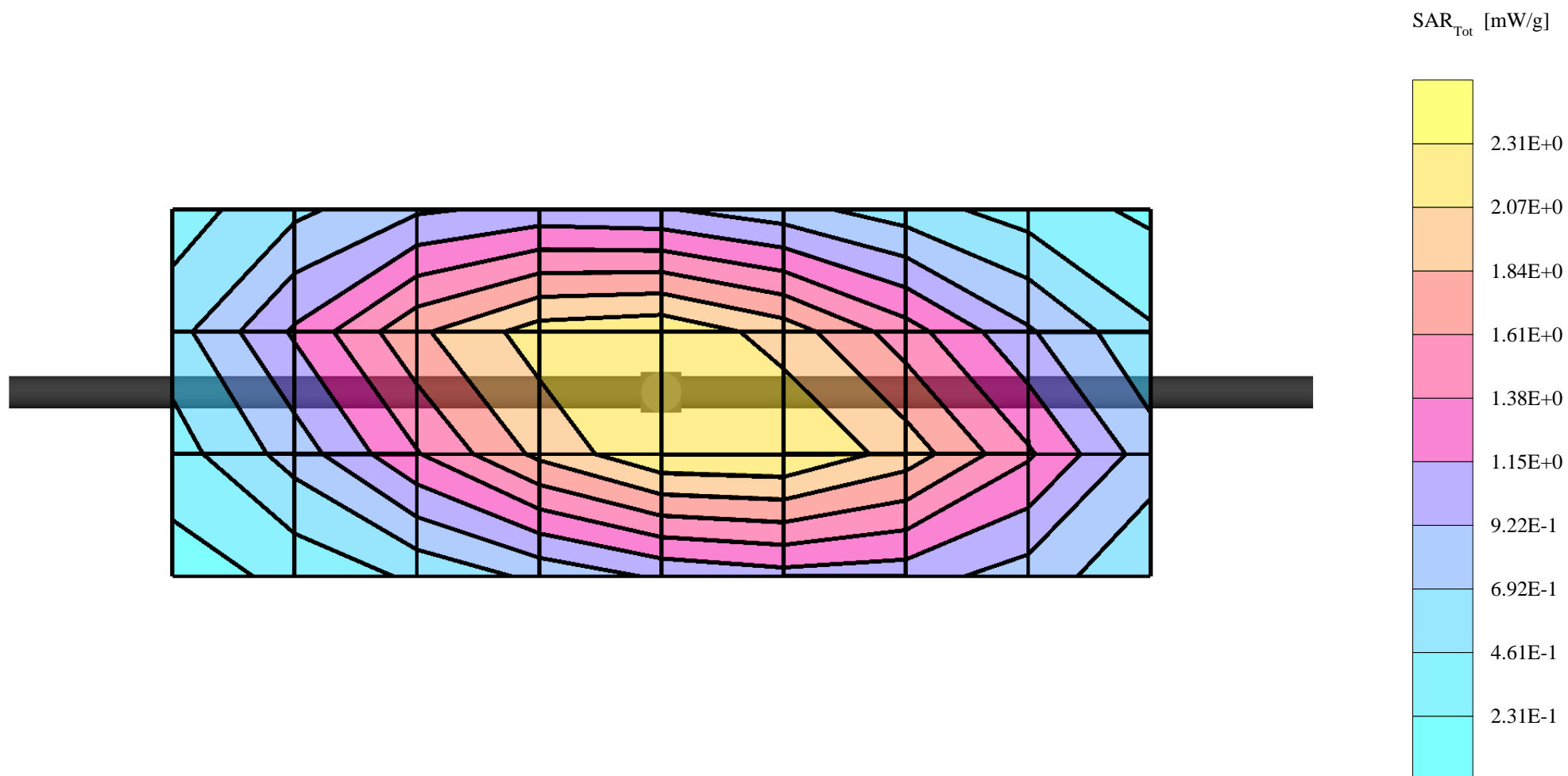
R1 TP-1005 SAM Expanded Sugar (Rev. 2)-9Jan03; Flat

Probe: ET3DV6R - SN1506 - Validation.3; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz VALIDATION: $\sigma = 0.92$ mho/m $\epsilon_r = 42.5$ $\rho = 1.00$ g/cm³

Cubes (2): Peak: 4.06 mW/g ± 0.04 dB, SAR (1g): 2.59 mW/g ± 0.04 dB, SAR (10g): 1.66 mW/g ± 0.05 dB, (Worst-case extrapolation)

Penetration depth: 11.9 (10.9, 13.3) [mm]

Powerdrift: -0.00 dB



Dipole 835 MHz

835 MHz System Performance Check / Dipole Sn# 425TR

Forward Power =254mW Reflected Power =-26.5dB

Room Temp at time of measurement =20 Simulant Temp at time of measurement = 19.8

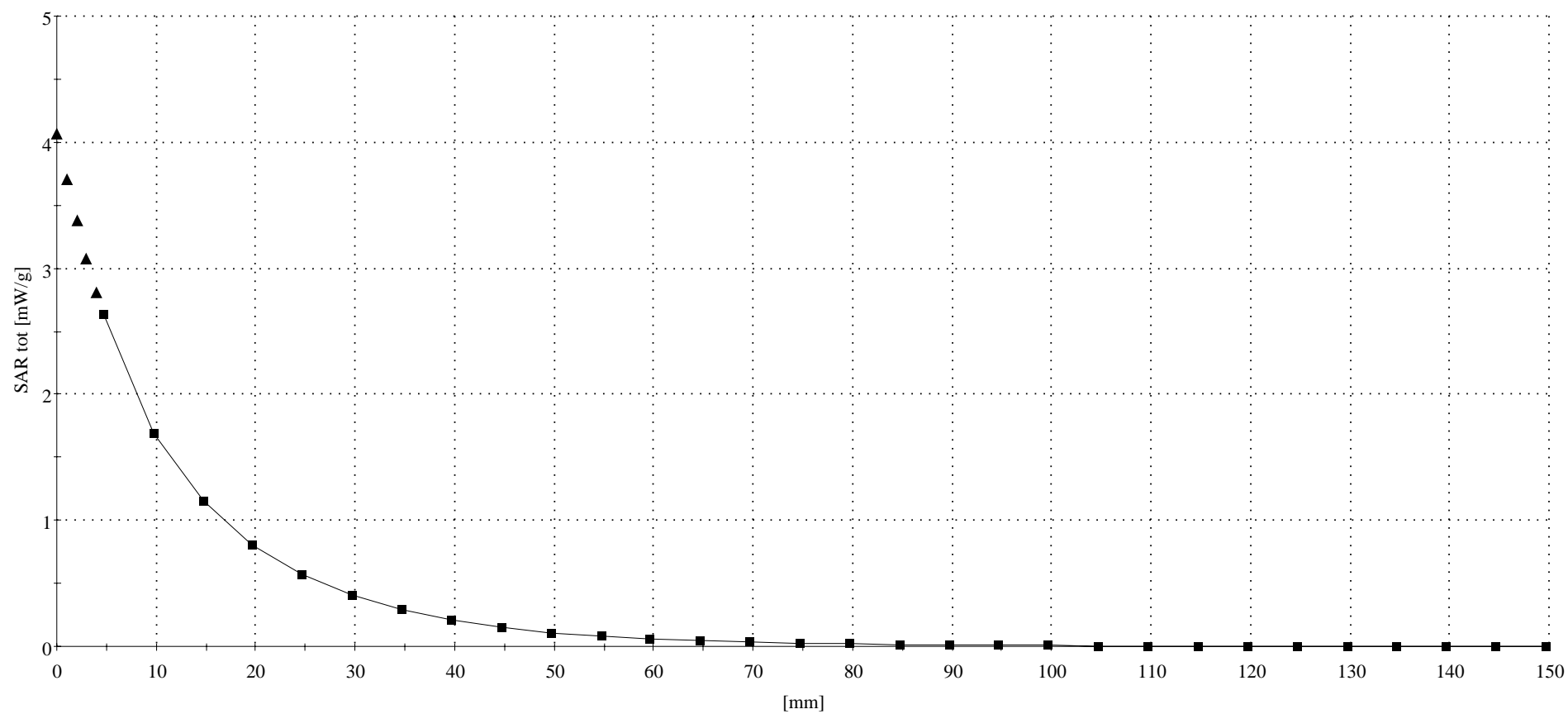
R1 TP-1005 SAM Expanded Sugar (Rev. 2)-9Jan03 Phantom; Section; Position: ; Frequency: 835 MHz

Probe: ET3DV6R - SN1506 - Validation.3; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz VALIDATION: $\sigma = 0.92$ mho/m $\epsilon_r = 42.5$ $\rho = 1.00$ g/cm³

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Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0

Penetration depth: 12.0 (11.1, 13.3) [mm]



Dipole 1800 MHz

1800 MHz System Performance Check / Dipole Sn# 250tr

Forward Power = 252mW Reflected Power = -22.7dB

Room Temp at time of measurement = 20 Simulant Temp at time of measurement = 19.8

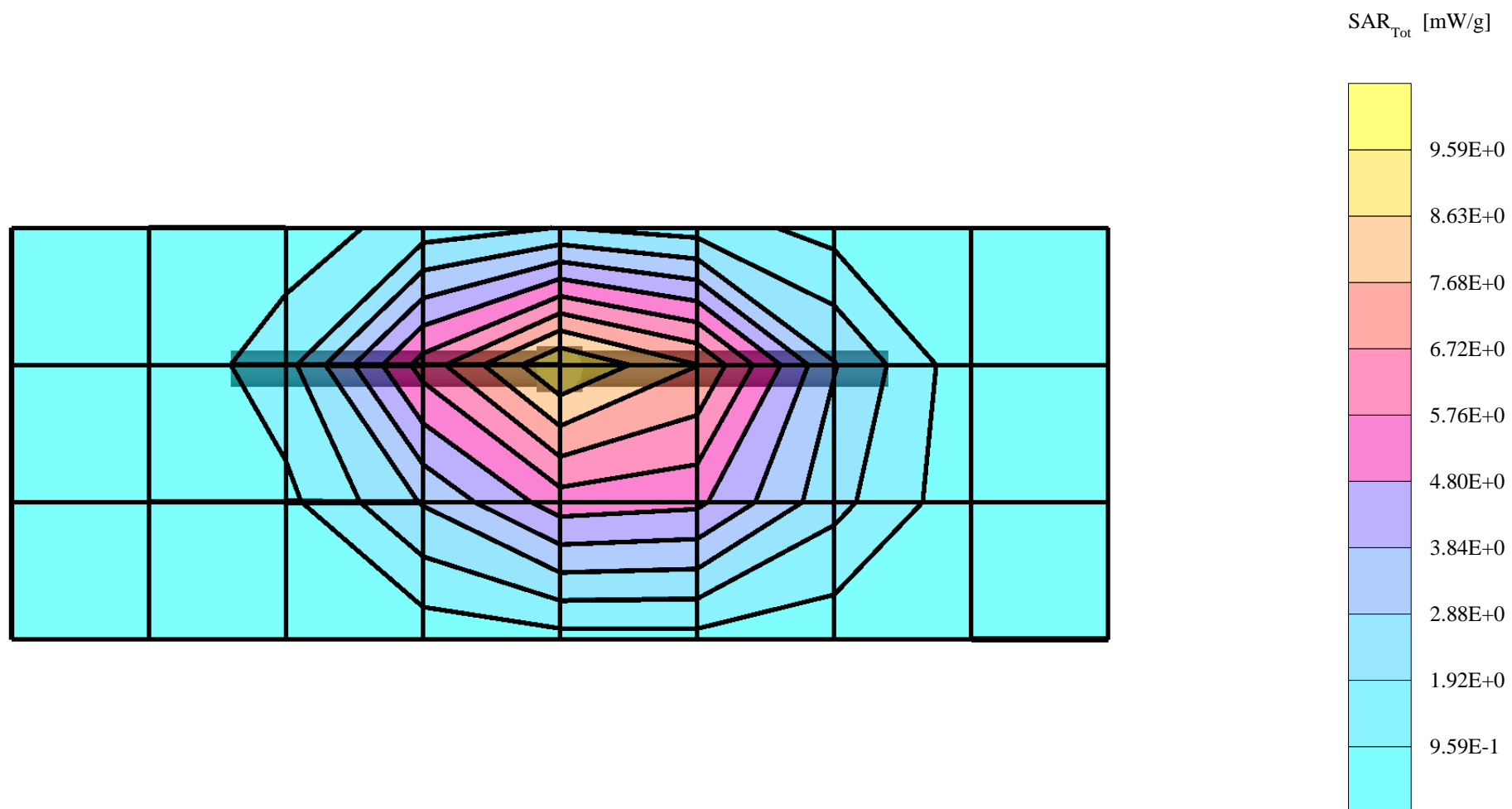
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03; Flat

Probe: ET3DV6R - SN1506 - Validation.3; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1800 MHz VALIDATION: $\sigma = 1.37$ mho/m $\epsilon_r = 39.4$ $\rho = 1.00$ g/cm³

Cubes (2): Peak: 18.6 mW/g ± 0.10 dB, SAR (1g): 10.2 mW/g ± 0.07 dB, SAR (10g): 5.35 mW/g ± 0.05 dB, (Worst-case extrapolation)

Penetration depth: 8.6 (8.3, 9.4) [mm]

Powerdrift: 0.14 dB



Dipole 1800 MHz

1800 MHz System Performance Check / Dipole Sn# 250tr

Forward Power =252mW Reflected Power = -22.7dB

Room Temp at time of measurement = 20 Simulant Temp at time of measurement = 19.8

R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Section; Position: ; Frequency: 1800 MHz

Probe: ET3DV6R - SN1506 - Validation.3; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1800 MHz VALIDATION: $\sigma = 1.37$ mho/m $\epsilon_r = 39.4$ $\rho = 1.00$ g/cm³

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Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0

Penetration depth: 8.3 (7.9, 9.1) [mm]

