August 13, 2004
Supplement to SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56ER1)

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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 IHDT56ER1). The requested information is addressed below in the same numbering sequence received.

1. The measured cellular GPRS SAR level exceeds that previously listed on the grant of authorization for Part 22 Body SAR, thus, this current grant will reflect the new value. Please submit the 850 MHz dipole validation test results.

Response: The 850Mhz body worn dielectric parameters and the 900Mhz dipole validation test results for 07/19/2004 were not included in the original test report. The data is submitted in the corrected tables below with the 850Mhz system accuracy verification scans attached in the supplement to Appendix 1:

Updated table for Page 4 of SAR Report

f (MHz)	Tissue type	Limits / Measured	Dielectric Parameters		
			e_r	s (S/m)	Temp (°C)
850	**Body**	**Measured, 07/19/04**	53.3	0.97	20.0
		Recommended Limits	55.2 ±5%	0.97 ±5%	18-25
1900	**Body**	**Measured, 07/12/2004**	53.3	1.59	19.0
		Measured, 07/16/2004	52.8	1.59	19.0
		Recommended Limits	53.3 ±5%	1.52 ±5%	18-25

Updated table for Page 5 of SAR Report

f (MHz)	Description	SAR (W/kg), 1gram	Dielectric Parameters		Ambient Temp (°C)	Tissue Temp (°C)
			e_r	s (S/m)		
900	**Measured, 07/19/04**	11.45	40.9	0.96	20.0	20.0
	Recommended Limits	11.6	41.5 ±5%	0.97 ±5%	18-25	18-25
1800	**Measured, 07/12/2004**	40.65	39.2	1.37	20.0	19.1
	Measured, 07/16/2004	39.95	39.4	1.37	20.0	19.3
	Recommended Limits	40.7	40.0 ±5%	1.4 ±5%	18-25	18-25

2. Please provide the 850 MHz SAR plot for #SYN8631A (the new highest Part 22 body SAR value).

Response: The requested 850Mhz SAR plot is attached in the supplement to Appendix 2.

3. Several items are listed as past their cal due date (p. 4). Please address.

Response: The table on page 4 of the original report contained typographical errors. Also, a listing of the 850Mhz equipment used was missing. The corrected table is attached here.

Description	Serial Number	Cal Due Date
DASY3 DAE V1	376	12/22/2004
	437	04/16/2005
E-Field Probe ET3DV6	1391	11/24/2004
	1398	02/16/2005
Dipole Validation Kit, D900V2	78	04/02/2005
S.A.M. Phantom used for 850MHz	TP-1106	
Dipole Validation Kit, D1800V2	251TR	04/02/2005
	273TR	04/02/2005
S.A.M. Phantom used for 1900MHz	TP-1159	
	TP-1235	

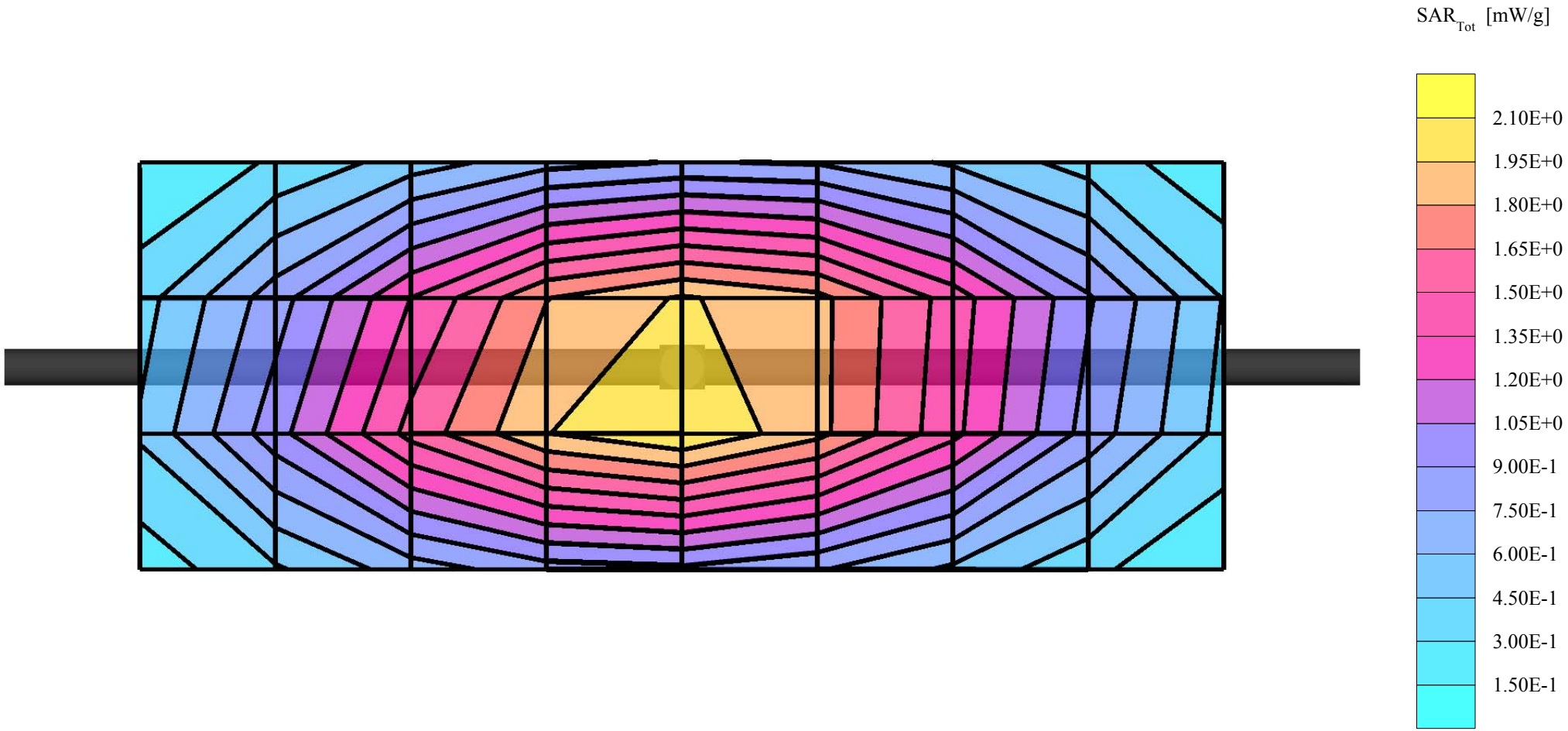
Supplement to Appendix 1

SAR distribution comparison for the system accuracy verification

07/19/04

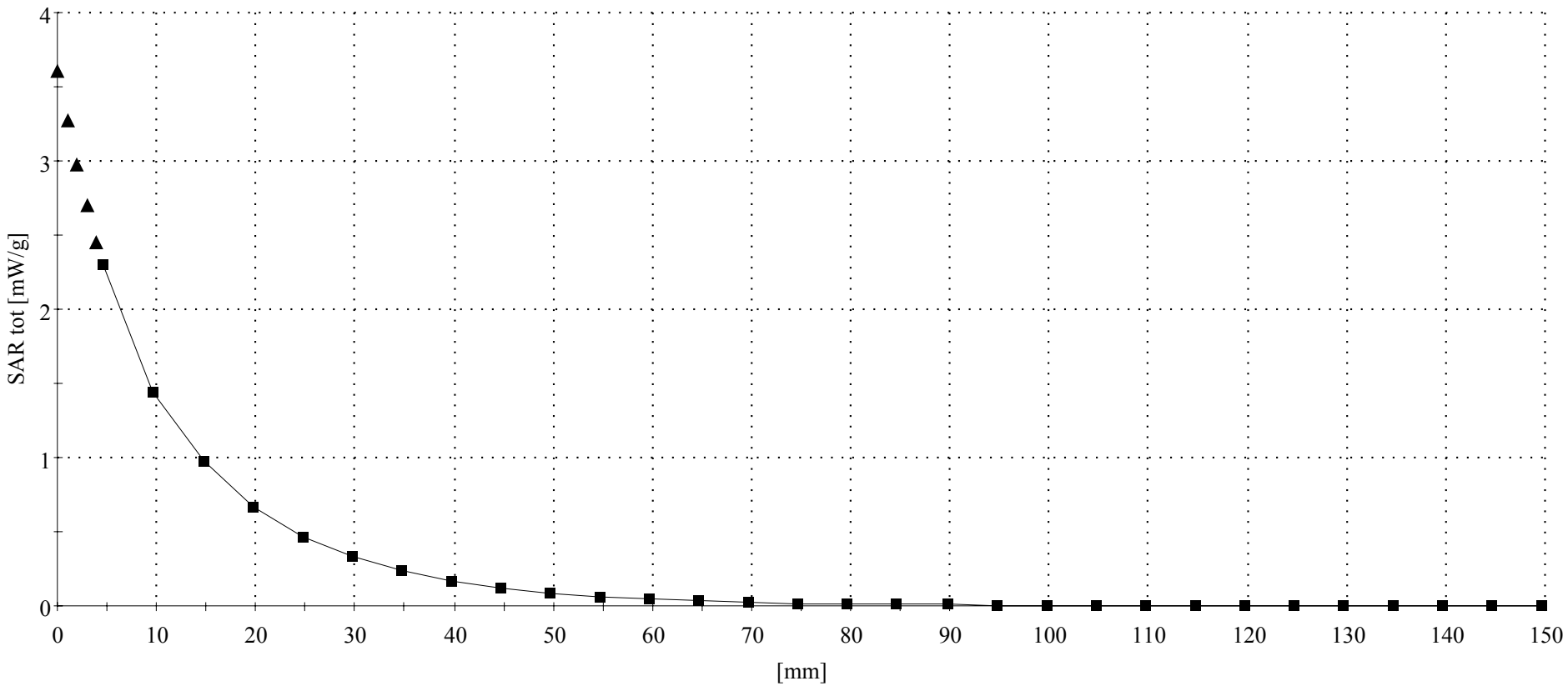
Dipole 900 MHz

900 MHz System Performance Check / Dipole Sn# 78
PM1 Power = 200mW
Sim.Temp@meas=20.0°C Sim.Temp@SPC = 20.0°C Room Temp @ SPC = 20°C
R# 2 TP-1106 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz
Probe: ET3DV6 - SN1391 - Validation.4; ConvF(6.50,6.50,6.50); Crest factor: 1.0; 900 MHz VALIDATION: $\sigma = 0.96$ mho/m $\varepsilon_r = 40.9$ $\rho = 1.00$ g/cm^3
Cubes (2): SAR (1g): 2.29 mW/g ± 0.03 dB, SAR (10g): 1.45 mW/g ± 0.03 dB, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 11.5 (10.6, 12.7) [mm]
Powerdrift: -0.04 dB



Dipole 900 MHz

900 MHz System Performance Check / Dipole Sn# 78
PM1 Power = 200mW
Sim.Temp@meas=20.0°C Sim.Temp@SPC = 20.0°C Room Temp @ SPC = 20°C
R# 2 TP-1106 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Section; Position: ; Frequency: 900 MHz
Probe: ET3DV6 - SN1391 - Validation.4; ConvF(6.50,6.50,6.50); Crest factor: 1.0; 900 MHz VALIDATION: σ = 0.96 mho/m ε_r = 40.9 ρ = 1.00 g/cm^3
: , ()
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0
Penetration depth: 11.5 (10.6, 12.8) [mm]



Supplement to Appendix 2

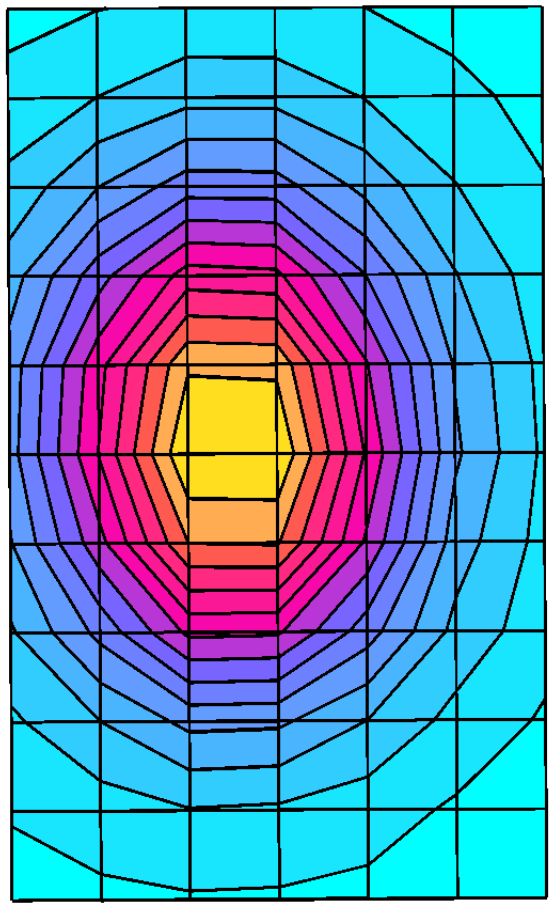
SAR distribution plots for Body Worn Configuration

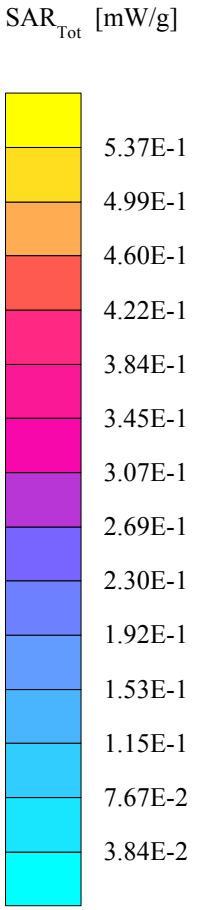
07/19/04 13:12

sn: 2293

Ch# 190 / Pwr Step: 5 Antenna Position: Fixed
Type of Modulation: GPRS Battery Model #: SNN4285A
Accessory Model #: VLV2203/SYN1072A V180 Inbox Half Leather Case w/ SYN8631A Wishbone

R2 Amy Twin Phantom Rev.3 Phantom; section 2 Section; Position: (0°,0°); Frequency: 837 MHz
Probe: ET3DV6 - SN1391 - FCC Body.2; ConvF(6.20,6.20,6.20); Crest factor: 4.0; 835 MHz Head & Body: σ = 0.97 mho/m ε_r = 53.3 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.561 mW/g, SAR (10g): 0.396 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 16.1 (14.7, 17.6) [mm]
Powerdrift: -0.06 dB





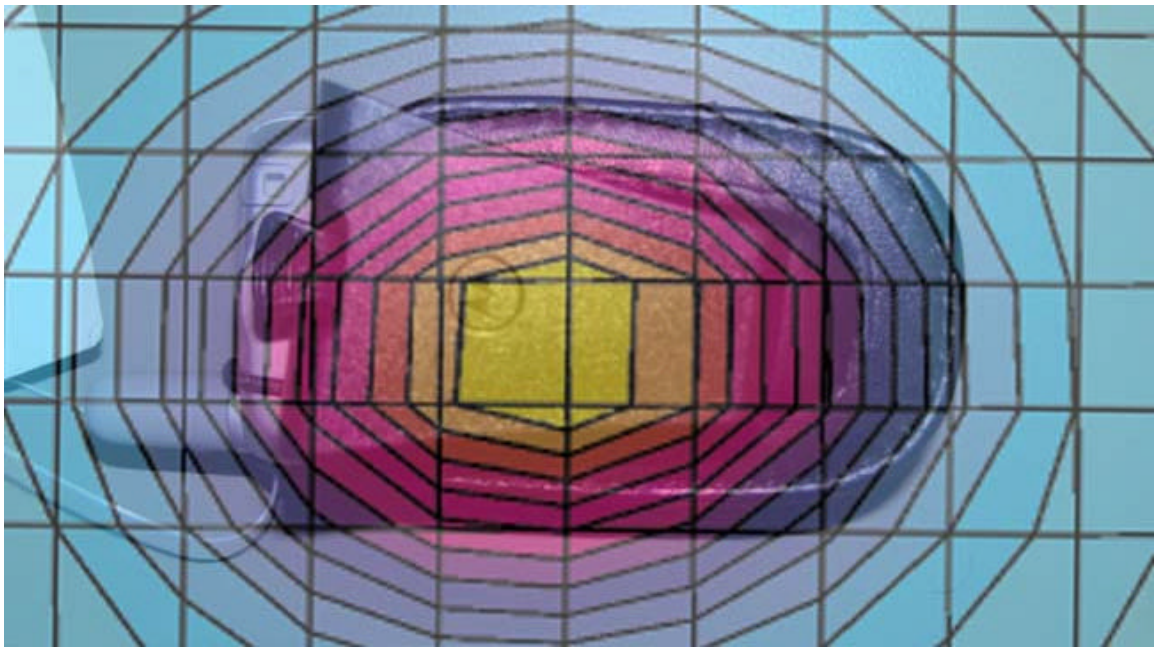


Figure 1.Typical 850MHz Body-Worn Contour Overlaid on Phone with Antenna Fixed

Supplement to Appendix 6

Photographs of the device under test

Figure 2. Back of Phone with SYN8631A Clip

Figure 3. Side of Phone with SYN8631A Clip