

December 03, 2003 Supplement to SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56DC1)

Prepared by: Firass Badaruzzaman, Senior SAR Engineer Motorola Personal Communications Sector Product Safety Laboratory Libertyville, Illinois 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 IHDT56DC1). The requested information is addressed below in the same numbering sequence received.

1. Please submit the required z-axis plot for each measured frequency band - they were omitted in the SAR test report.

Please look at appendix 1 of this document for the z-axis plots.

2. Please provide photos of the new batteries

Photographs of all three batteries (top and side view) are provided below. :





3. Will these new batteries ever be sold separately? The SAR test report states that the PTT function has been disabled by software in this version of the EUT (and as a result was not tested), however, if the batteries will ever be sold separately, then they might be used with the original version that incorporates the PTT function. If this is the case, then the new batteries should also be tested in the PTT mode.

The SNN5723A battery is the same capacity as the SNN5705B but is provided by a different vendor. The SNN5722A battery is a completely different battery. It is a lower capacity battery than the SNN5723A and the SNN5705B. It is also smaller in height as seen from the above photographs. Since the original PTT data was taken with SNN5705B battery which is essentially the same as SNN5723A, new measurements have been taken on the original version unit that incorporates the PTT mode with the SNN5722A battery. Please look at below table:

			Push-To-Talk Mode (Flip Closed)				
		Conducted	Ant Fixed				
f (MHz)	Description	Output Power (dBm)	Measured (W/kg)	Drift (dB)	Extrapolated (W/kg)	Amb. Temp (°C)	Simulate Temp (°C)
Digital 800MHz	Channel 1013	25.04	0.322	-0.02	0.32	19.9	19
	Channel 384	25.05	0.29	-0.08	0.30	19.9	19
	Channel 777	24.90	0.28	-0.02	0.28	19.9	19
Digital 1900MHz	Channel 25	24.95	0.329	-0.11	0.34	19	19.2
	Channel 600	25.04	0.31	0.03	0.31	19	19.2
	Channel 1175	24.93	0.239	-0.40	0.26	19	19.2

Appendix 1

11/26/03

Dipole 900 MHz

900 MHz System Performance Check / Dipole Sn# 079 / Forward Power = 251mW / Acceptable Temp Range is 18-25°C Room Temp at time of measurement = 20 C Simulant Temp at time of measurement = 19.8 C

R5 TP-1132 Sugar SAM Expanded (Rev. 2)-9Jan03 Phantom; Section; Position: ; Frequency: 900 MHz

Probe: ET3DV6R - SN1501 - VALIDATION; ConvF(6.40,6.40,6.40); Crest factor: 1.0; 900 MHz VALIDATION: $\sigma = 0.98$ mho/m $\epsilon_r = 41.9 \ \rho = 1.00$ g/cm³

:,,0

Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0 Penetration depth: 11.5 (10.7, 12.6) [mm] Powerdrift: -0.03 dB



11/28/03

Dipole 900 MHz

900 MHz System Performance Check / Dipole Sn# 079 / Forward Power = 251mW / Acceptable Temp Range is $18-25^{\circ}$ C Room Temp at time of measurement = 19.0° C. Simulant Temp at time of measurement = 19.2° C

R5 TP-1132 Sugar SAM Expanded (Rev. 2)-9Jan03 Phantom; Section; Position: ; Frequency: 900 MHz

Probe: ET3DV6R - SN1501 - VALIDATION; ConvF(6.40,6.40,6.40); Crest factor: 1.0; 900 MHz VALIDATION: $\sigma = 0.98$ mho/m $\epsilon_r = 42.0 \ \rho = 1.00$ g/cm³

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Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0 Penetration depth: 11.5 (10.7, 12.6) [mm] Powerdrift: -0.04 dB



11/29/03

Dipole 1800 MHz

1800 MHz System Performance Check / Dipole Sn# 246TR / Forward Power = 246mW / Acceptable Temp Range is $18-25^{\circ}$ C Room Temp at time of measurement = 19.0° C. Simulant Temp at time of measurement = 18.9° C

R5: TP-1160 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Section; Position: ; Frequency: 1800 MHz

Probe: ET3DV6R - SN1501 - VALIDATION; ConvF(5.00,5.00,5.00); Crest factor: 1.0; 1800 MHz VALIDATION: $\sigma = 1.38$ mho/m $\epsilon_r = 38.8 \ \rho = 1.00$ g/cm³

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Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0 Penetration depth: 8.4 (8.0, 9.1) [mm] Powerdrift: 0.04 dB

