



MOTOROLA

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Supplement to SAR Test Report for Motorola portable cellular phone (FCC ID IHDT5ZW1).

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1. Summary of FCC request for additional information

There was a request for additional information regarding relationship between the use of the product and the SAR test data submitted with the Report for Motorola's portable cellular phone (FCC ID IHDT5ZW1) dated February 23, 2000. The requested information may be summarized as follows:

The reported SAR for CDMA mode with antenna extended is 0.03 W/kg at 240 mW conducted output. At 80 mW, with antenna retracted, the SAR is 0.19 W/kg. The numbers do not seem to be consistent and also do not seem to follow those reported for AMPS mode (similar frequencies and same antenna configurations, extended and retracted); please clarify accordingly, with respect to the latest proposed conducted output levels or provide new supporting results.

2. Retest of CDMA mode SAR data

The phantom was filled with a liquid having relative dielectric constant equal to 47.2 and conductivity equal to 0.92 S/m. This mixture is a good dielectric equivalent of the human head. The composition of the liquid mixture is as follows: 43.75% water; 54.00% sugar; 1.15% salt, 1.00% HEC; and 0.1% bactericide. The data output of the two test conditions from the Dasy™ measurement system are included as appendix A.

800MHz CDMA Channel	Right Side Head Ant Ext	Conducted Power (Watts)
1023	0.31	0.24
384		0.23
779		0.24

800MHz CDMA Channel	Right Side Head Ant Ret	Conducted Power (Watts)
1023	0.49	0.08
384		0.08
779		0.08

Appendix A

The following pages are printouts from the Dasy™ measurement system of the data as indicated.

s/n EDD1B236

Ch#1023 / Pwr Step: 2 / Antenna Position: ret / Type of Modulation: CDMA

Betty Phantom; Right Head Section; Position: (80°,180°); Frequency: 824 MHz

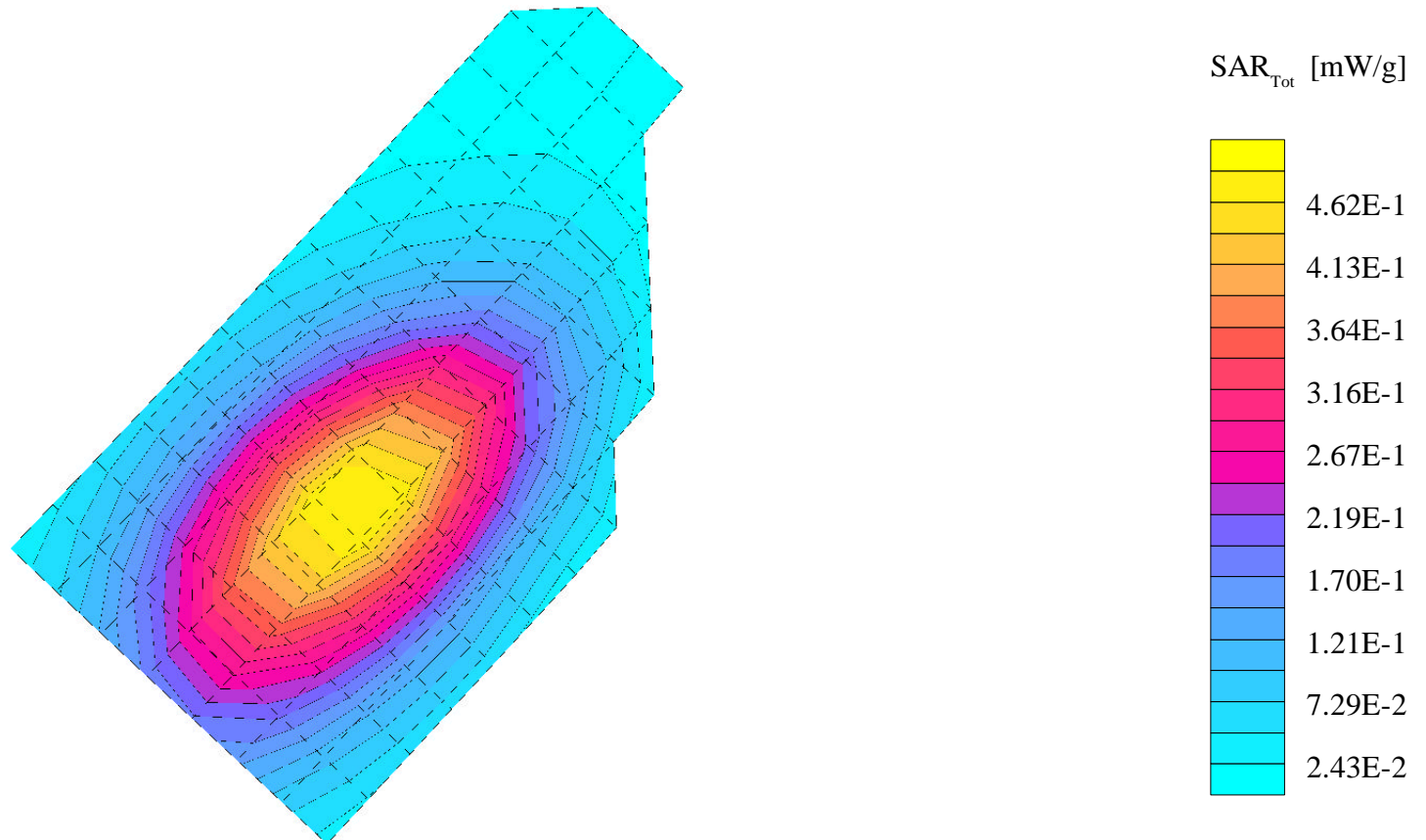
Probe: ET3DV6 - SN1502; ConvF(6.69,6.69,6.69); Crest factor: 1.0; Head 800 MHz: $\sigma = 0.92$ mho/m $\epsilon_r = 47.4$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.492 mW/g, SAR (10g): 0.337 mW/g, (Worst-case extrapolation)

Coarse: Dx = 10.0, Dy = 10.0, Dz = 1.0

Penetration depth: 16.4 (15.0, 18.1) [mm]

Powerdrift: -0.17 dB



s/n EDD1B346

Ch#1023 / Pwr Step: 2 / Antenna Position: Ext / Type of Modulation: CDMA

Betty Phantom; Right Head Section; Position: (80°,180°); Frequency: 824 MHz

Probe: ET3DV6 - SN1502; ConvF(6.69,6.69,6.69); Crest factor: 1.0; Head 800 MHz: $\sigma = 0.92$ mho/m $\epsilon_r = 47.2$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.307 mW/g, SAR (10g): 0.204 mW/g, (Worst-case extrapolation)

Coarse: Dx = 10.0, Dy = 10.0, Dz = 1.0

Penetration depth: 16.2 (15.2, 17.6) [mm]

Powerdrift: -0.26 dB

