



November 10, 1999

Supplement to SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56ZM1).

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1. 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 IHDT56ZM1) dated August 23, 1999. The requested information may be summarized as follows:

- a) In section 8 of the SAR report, TDMA right side SAR is 0.53 w/kg in the supplied table and 0.729 w/kg in the data.
- b) The question is raised as to what the SAR is for the 1900 MHz body worn case.
- c) There is a question about the top scale shown for the plots of the right side head channel 384 analog and digital modes. The top scale shown on these plots is lower than the actual indicated SAR values.

2. Clarification of TDMA mode right side SAR values.

The SAR value of 0.53 in the supplied table is in error. The correct SAR value for this test condition is as shown in the plot as 0.729 w/kg.

3. Body worn SAR data for the 1900 MHz band.

The following table shows the SAR values found for the 1900 MHz body worn configuration. The highest SAR found was 0.36 W/kg. A full data set output of the test condition with the highest SAR values from the Dasy™ measurement system is included as appendix A.

TDMA 1900	Belt Clip
Channel	SAR
1	0.359
1000	0.235
1999	0.113

4. Discussion of top scale for included plots.

This is an artifact of the DASY system. The "individual plot and associated descriptions" reflect on the maximum found during the "coarse" scan. The evaluation is done during the "cube" scan and the resulting SAR number may be higher than the peak found in the "coarse" scan (especially if the coarse scan has a large distance between grid points). So it is possible to get an SAR of 1.45 W/kg on the evaluation and only a 0.85 W/kg found as a peak on the coarse scan. The resulting page would have a legend of only 0.85W/kg and show a SAR of 1.45W/kg. Included as appendix B are sample cube scan plots for right side head channel 384 analog and digital modes. These plots show the top scale to be the peak SAR used in the evaluation of the 1g average.

Appendix A. Included Data

11/08/99

Breeze Mod 2.5 w/ Belt Clip SWF0376A SN:FC80212B Ch 1

Belt Clip Ch 1 / Pwr02/JL
SN:FC80212B

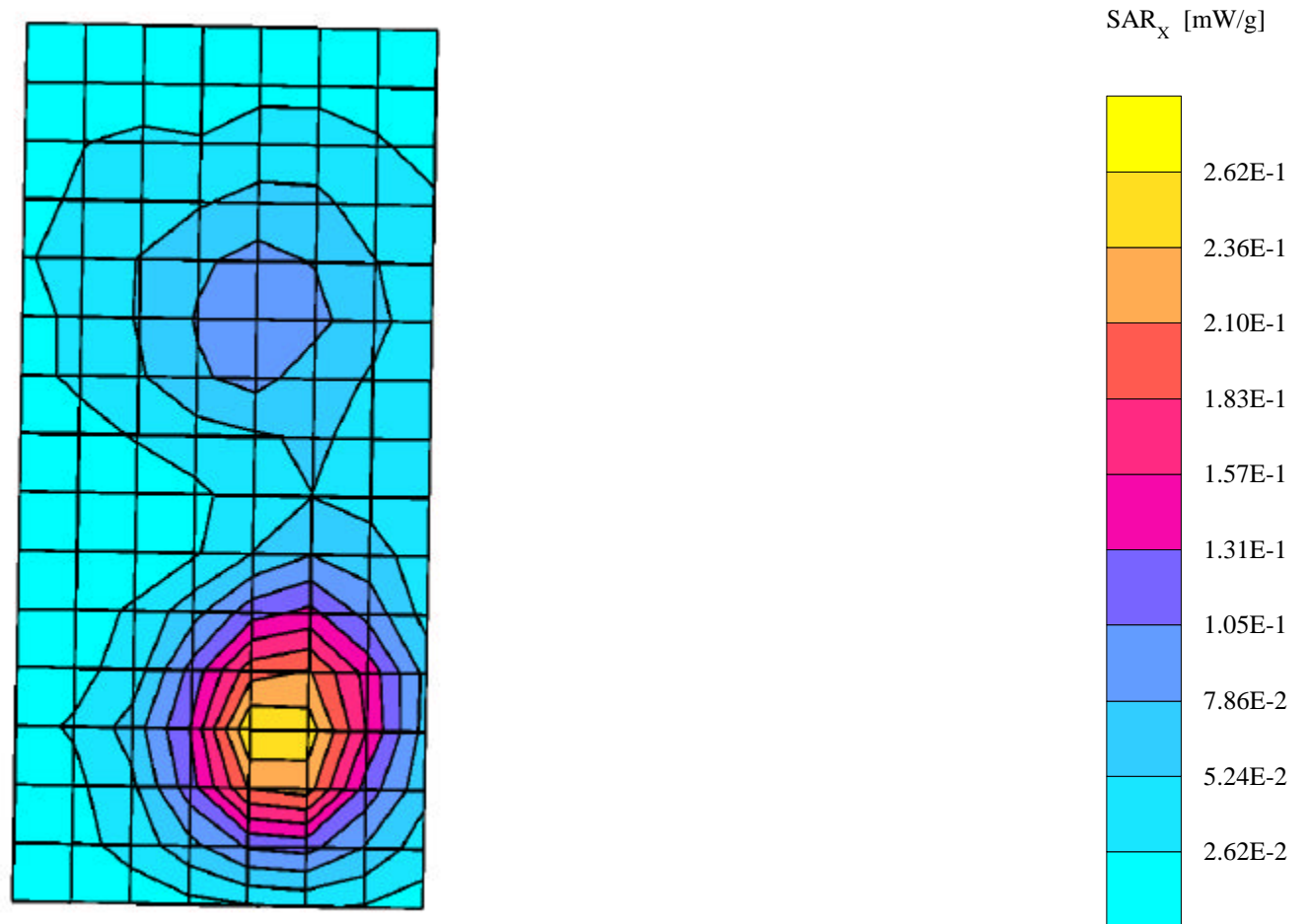
New Flat Phantom; Full Section; Position: (80°,220°); Frequency: 1850 MHz

Probe: ET3DV6 - SN1376; ConvF(5.68,5.68,5.68); Crest factor: 3.0; Muscle 1900 MHz: $\sigma = 1.88$ mho/m $\epsilon_r = 49.0$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.359 mW/g, SAR (10g): 0.223 mW/g, (Worst-case extrapolation)

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

Powerdrift: -0.87 dB



Appendix B: Included Cube Scan Plots

08/18/99

S/N FC80212B

Ch 384 / Pwr 2/ JK

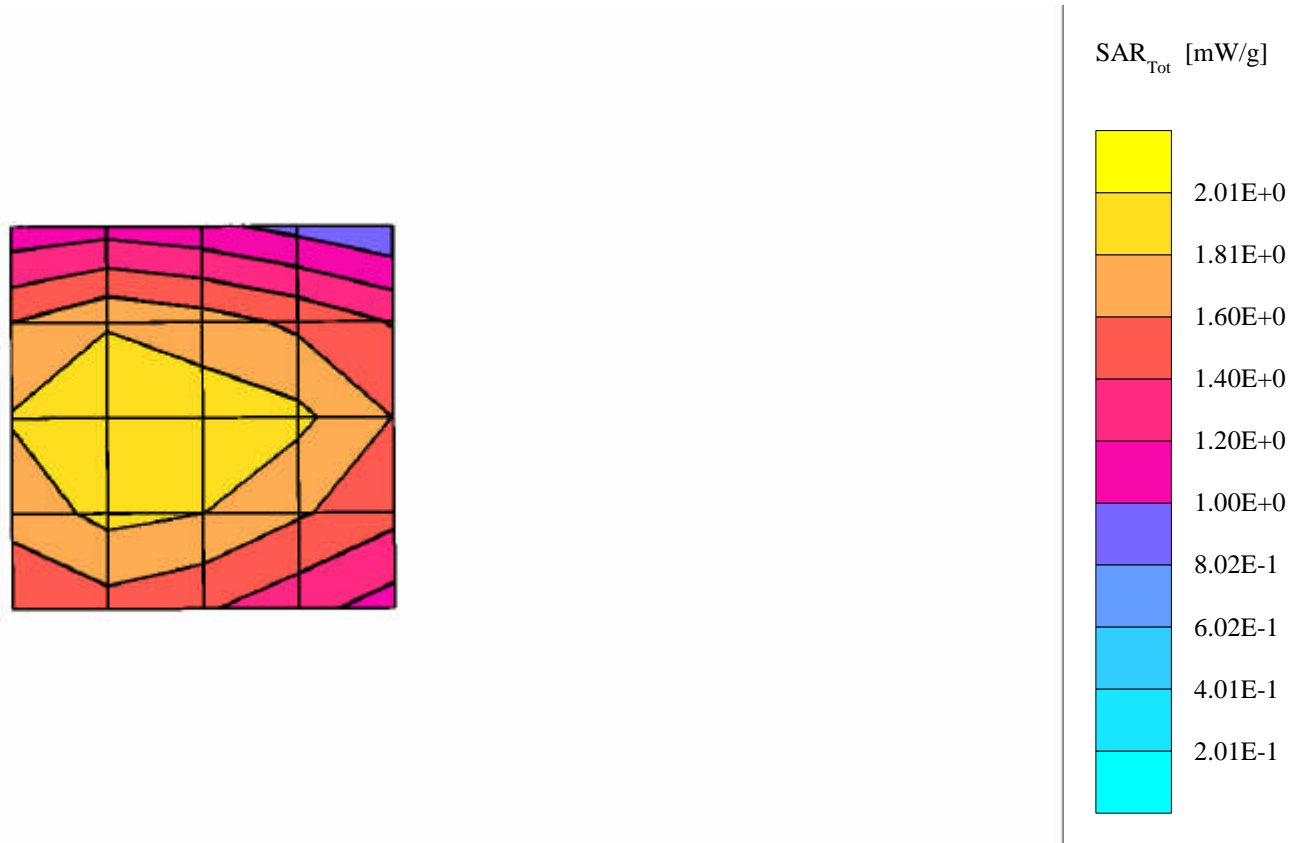
TILT RIGHT Phantom; Section; Position: ; Frequency: 837 MHz

Probe: ET3DV6 - SN1375; ConvF(6.59,6.59,6.59); Crest factor: 1.0; Brain 800Mhz: $\sigma = 0.90$ mho/m $\epsilon_r = 43.0$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 1.45 [mW/g], SAR (10g): 1.03 [mW/g], (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

Powerdrift: -0.06 dB



08/18/99

S/N FC80212B

Ch 384 / Pwr 2/ JK

TILT RIGHT Phantom; Section; Position: ; Frequency: 837 MHz

Probe: ET3DV6 - SN1375; ConvF(6.59,6.59,6.59); Crest factor: 3.0; Brain 800Mhz: $\sigma = 0.90$ mho/m $\epsilon_r = 43.0$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.729 [mW/g], SAR (10g): 0.525 [mW/g], (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

Powerdrift: 0.07 dB

