



January 12, 2000
Supplement to SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56ZZ1).

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There was a request for additional information regarding Motorola's SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56ZZ1) dated December 17, 1999. The requested information and responses are included below:

1. 3 Belt-clip/holsters Evaluations

"Uploaded manual appears to describe 3 belt-clip/holsters offered as accessories. SAR report contains data for a "normal" and a "slim" holster. Earlier proposed body-worn RF exposure statement seems to indicate a specific holster will be supplied for the phone. Please clarify the number of available holsters, revise the manual information accordingly and make appropriate revisions to previously proposed body-worn statement (also see previous correspondence)."

Only the two test belt-clip/holster devices previously tested are available. The manual has been revised to reflect this.

2. Clarification of AMPS mode highest SAR values.

"Section 8 of SAR report describes highest SAR for AMPS mode is 0.61 W/kg and was found on the right side of the head. This disagrees with the data in the report, highest SAR is 0.54 on the left side, please clarify."

The SAR value of 0.61 w/kg in the Section 8 of the original SAR report is in error. The correct SAR value is as shown in the table of data as 0.54 w/kg.

3. Tissue Dielectric Parameters used for Hand Exposure Evaluation

"The tissue dielectric parameters used for hand exposure evaluation in the PCS band (section 9 of SAR report) should be included in the report, please provide parameters."

The liquid used for all the hand exposure evaluations was a liquid having relative dielectric constant equal to 44 and conductivity equal to 0.83 S/m at 800MHz and relative dielectric constant equal to 41 and conductivity equal to 1.86 S/m at 1900MHz. The composition of the liquid mixture is as follows: 42.5% water; 55.6.0% sugar; 0.8% salt, 1% HEC; and 0.1% bactericide

4. Requested Recipe for the Muscle Tissue Materials

"The recipe for the muscle tissue materials (cellular & PCS) should be provided in the report, please submit parameters."

The 800MHz phantom was filled with a liquid having relative dielectric constant equal to 54 and conductivity equal to 1.2 S/m. The composition of the liquid mixture is as follows: 52.5% water; 45.0% sugar; 1.3% salt, 1% HEC; and 0.2% bactericide. The

1900MHz phantom was filled with a liquid having relative dielectric constant equal to 40.7 and conductivity equal to 1.83 S/m. The composition of the liquid mixture is as follows: 45.9% water; 53.0% sugar; 0% salt, 1% HEC; and 0.1% bactericide.

5. Peak SAR location in Body-worn Condition

“Please identify the peak SAR location with respect to the phone, its antenna and the holster/belt-clip for the body-worn SAR data included in the SAR report, need this for worst case AMPS mode only.”

The peak SAR location for the tests shown in the original SAR report are near the antenna.

“Also, verify if the body-worn SAR was tested with the device parallel to the phantom. Normal body-worn operating configurations typically allow the lower edge of the device to hang down and touching the body. This may affect body-worn SAR results if tested differently (depending on differences in spacing between the two configurations and peak SAR location, concerned about PCS band only).”

The body worn tests were conducted with the case of the phone parallel to the flat phantom, as shown in Figure 9 of the original report. This position is the normal position for this phone and belt clip combination when body-worn.