



**MOTOROLA**

**Date:** October 13, 2004

**Subject:** Request for additional information regarding FCC ID: IHDT56EW1 (Portable Cellular/PCS GSM transceiver)

**Reference:**

Application Received:	09/30/2004
Correspondence Reference Number:	241012A.IHD
Confirmation Number:	TC4331
Date of Original Email:	10/12/2004

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**Questions and responses follow:**

1. Please verify that the following is a typo: pg. 3 of the EMC report lists Bluetooth.

**Response:** Yes, the reference to Bluetooth is an error. The transceiver does not contain Bluetooth.

2. Please verify that the following is a typo: pg. 7 of the EMC report lists the max EIRP in GSM 850 as 31.72 dBm instead of 31.78 dBm.

**Response:** Yes, incorrect values are listed; please refer to the following correction:

Max EIRP in GSM 850 is 31.78 dBm (**max ERP is 29.68 dBm**).

3. Please insert the head and body SAR values on pgs. 86 - 87 of the user's manual.

**Response:** Please refer to the following two pages.

4. The User's Manual does not contain a statement regarding the requirements for RFX compliance with respect to body-worn configurations. Please verify that this statement will be included prior to marketing.

**Response:** Yes, the required statements are now contained in a supplement which contains important legal and safety information. Please refer to exhibit 8A.

# ***Specific Absorption Rate Data***

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## ***This model wireless phone meets the government's requirements for exposure to radio waves.***

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government and by the Canadian regulatory authorities. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age or health.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC and by the Canadian regulatory authorities is 1.6 W/kg.<sup>1</sup> Tests for SAR are conducted using standard operating positions accepted by the FCC and by Industry Canada with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station, the lower the power output.

Before a phone model is available for sale to the public in the U.S. and Canada, it must be tested and certified to the FCC and Industry Canada that it does not exceed the limit established by each government for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) reported to the FCC and available for review by Industry Canada. The highest SAR value for this model phone when tested for use at the ear is 1.17 W/kg, and when worn on the body, as

described in this user guide, is 0.42 W/kg. (Body-worn measurements differ among phone models, depending upon available accessories and regulatory requirements).<sup>2</sup>

While there may be differences between the SAR levels of various phones and at various positions, they all meet the governmental requirements for safe exposure. Please note that improvements to this product model could cause differences in the SAR value for later products; in all cases, products are designed to be within the guidelines.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications & Internet Association (CTIA) Web site:

<http://www.phonefacts.net>

or the Canadian Wireless Telecommunications Association (CWTA) Web site:

<http://www.cwta.ca>

1. In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.
2. The SAR information includes the Motorola testing protocol, assessment procedure, and measurement uncertainty range for this product.