



**MOTOROLA**

**Date:** June 28, 2007

**Subject:** Request for additional information regarding FCC ID: IHDT56HN1

**Reference:**

Correspondence Reference Number: IHD7458  
Confirmation Number: 705220458-60  
Date of Original Email: June 11, 2007

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Questions and responses follow:

1. The FCC Rules require the use of a RBW of at least 1% of the emission bandwidth for occupied bandwidth and bandedge measurements, however, the WCDMA occupied bandwidth and bandedge measurements were performed with RBW = 30 kHz, which is too narrow. Please repeat these measurements for WCDMA operation (both bands) with an appropriate RBW and resubmit the results.

**Response:** Please refer to attached supplement to plots: "[Occupied Bandwidth Plots.pdf](#)".

2. The Operational Description lists Class 12 EDGE and GPRS, however, p.3/65 of the SAR report, as well as the SAR data tables, indicate that Class 10 mode was investigated. Is Class 12 mode available, at the same output power levels? If so, body SAR must be recalculated with the appropriate duty cycle. Please address.

**Response:** Yes, Class 12 is available, but as described in Section 6.2 (near bottom of page 9) of SAR report, the peak power is reduced by 4 dB in Class 12 mode, while Class 10 reflects 3 dB higher average power. The result is 1 dB loss in average power from Class 10 to Class 12. Thus, Class 10 provides worst case results for Class 12.

3. Please provide cal reports for the SAR dipoles used for system verification.

**Response:** Please refer to attached Certificate: "[Certification of 1800 Sys Per Check Targets \(1-May-07\).pdf](#)".

4. Please provide an Operational Description (technical description) of the Bluetooth transmitter. That which is included in the Operational Description doc only describes the interaction between the BT module and the rest of the phone.

**Response:** The transmitter is contained in a single chip Bluetooth compliant solution. The integrated radio transceiver operates in the 2.4 GHz band. Fractional-N frequency PLL generation technology is used to synthesize transmit and receive LO frequencies. The digital baseband inputs are applied to a proprietary modulator, driving a dual mixing scheme, which is applied to a programmable power amplifier circuit.

5. FYI: Bluetooth EDR mode bandedge plots with hopping enabled were made with RBW = 30 kHz. In the future, please be sure to use 100 kHz, as required by the FCC.