



**MOTOROLA**

**Date:** July 9, 2009

**Subject:** Request for additional information regarding FCC ID: IHDP56KM1

**Reference:**

Correspondence Reference Number: IHD90779  
Confirmation Number: 906230779-81  
Date of Original Email: July 6, 2009

**Prepared by:**

Andrew Bachler, Principal Staff Engineer  
Motorola Mobile Device Business  
Libertyville, Illinois 60048

Questions and responses follow:

1. EUT and the associated setup are not discernable in the Test Setup Photographs. Please submit an additional photograph with a closer photograph taken with the test setup.

**Response:** [Please refer to the revised EMC test setup photos submitted online.](#)

2. Operational Description Exhibit 12 indicates Engineering sample availability for AWS Band in "P3" and also in Users Manual page 8. Please clarify that AWS is not available for this specific application.

**Response:** [AWS is not available for this application. Please refer to the revised Operational Description submitted online.](#)

3. Please include more detailed Block Diagram including clock/oscillator values.

**Response:** [Please refer to the revised Block Diagrams submitted online.](#)

4. Please indicate antenna locations and/or feed points on the EUT. Please also indicate which ports are applicable for the installer to connect for final host configurations.

**Response:** [As described in the user's manual \(Product Overview section\), the EUT has two antenna ports. The "main" antenna accommodates both transmit and receive functions. The AUX \(DIV\) is for diversity receive only. The hardware installation section describes antenna feedline connections.](#)

- 5 Confidentiality Request Letter (Exhibit 13) some schematic component labels indicate WLAN operations, but the MPE, operational description and test reports do not indicate the WLAN operation present. Please clarify.

**Response:** [WLAN operation is not supported in this device. Please refer to the revised Exhibit 13 submitted online.](#)

- 6 Please confirm if provided Exhibit 8 will be under short term confidentiality. The document appears to be "Motorola Confidential Proprietary - Disclosed under NDA". Please note, that as is, the document will be public after the short term confidentiality period.

**Response:** [Motorola confirms request for short term confidentiality of the User's manual \(exhibit 8\), and understands that the exhibit will be available for public viewing upon termination of the STC period.](#)

- 7 On Page 29 of the Users Manual (2nd last sentence), please clarify that it is the antenna positions that cannot be closer than 20 cm from the body, or else they will require SAR compliance testing for the completed product. The text states "position" but it needs to be clarified to specifically state the antenna positions.

**Response:** [Please refer to the revised user's manual submitted online.](#)

- 8 On Page 30 of the Safety page of the Users Manual, it indicates 'when placing or receiving a phone call, hold your mobile device just like you would a landline phone. If you wear the mobile device on your body... 2.5 centimeters...etc' Please update the Users Manual statement for the appropriate 20 cm mobile operations, for this filing.

**Response:** [Please refer to the revised user's manual submitted online.](#)

- 9 Please provide 835 and 1900 MHz calculations used for the results mentioned in the Exhibit 11 MPE calculations.

**Response:**  
[The calculations for the MPE were derived from:](#)

$$S = \text{enhancement factor} * [ (\text{maximum time averaged power output}) * (\text{net antenna gain}) ] / [ 4 * \text{Pi} * (\text{distance})^2 ]$$

[Where:](#)

["maximum time averaged power output" = peak power \\* duty cycle%](#)

["net antenna gain" = \(antenna gain - the line loss\) expressed in linear format](#)

["enhancement factor" = to account for ground reflections is 2.56](#)

["distance" = distance from antenna \(20 cm in our case\)](#)

So, for 835 MHz:

$$S = 2.56 * [ 315 \text{ mW} * 10^{(4.2/10)} ] / [ 4 * 3.1415 * 20^2 ] = 0.422 \text{ mW} / \text{cm}^2$$

For 1900 MHz:

$$S = 2.56 * [ 266 \text{ mW} * 10^{(8.6/10)} ] / [ 4 * 3.1415 * 20^2 ] = 0.981 \text{ mW} / \text{cm}^2$$

- 10 Exhibit 6 indicates an EMC Analyzer that was due for calibration almost 2 months prior to completion of tests. Please confirm if testing using this equipment was done prior to the calibration due date; or please provide substituted EMC analyzer or actual analyzer used for the testing #23118-2.

**Response:** Please refer to the revised Exhibit 6 submitted online.

- 11 According to Page 7 of Exhibit 6, it appears that MPR was not implemented according to 3GPP. Please clarify and/or update.

**Response:** Please refer to MPR response attached.