



Date: January 26, 2004

Subject: Request for additional information regarding FCC ID: IHDT6EA1 (Portable GSM transceiver).

Reference:

Applicant Received: 01/13/2004
Correspondence Reference Number: 240123A.IHD
Confirmation Number: TC4011
Date of Original Email: 01/23/2004

Prepared by:

Andrew Bachler, Principal Staff Engineer
Motorola Personal Communications Sector
Libertyville, Illinois

Questions and response follow:

In regards to your recent TCB application referenced above, we kindly request that you provide the following additional information.

1. It is stated, on page 9 of the SAR report, that the supplied leather pouch covers the data connector, so body-worn SAR in GPRS mode was tested with a separation distance of 2.5cm. Can the EUT be used in voice mode, with a headset, while in the leather pouch? If so, body-worn SAR should be tested with the EUT in the pouch, as it is likely that the pouch does not provide the 2.5cm spacing used. Although fewer timeslots are used in voice mode, a smaller separation distance still may yield SAR values greater than those reported, which could then affect the maximum SAR level reported on the grant of certification. If this is the case, please provide body-worn SAR data with the EUT in the pouch.

Response: Table 3 on page 9 of the original SAR report is the body worn data, in voice mode, with the phone in the pouch. Table 4 is the body worn GPRS data without the pouch.

In addition, we noticed that the channel numbers in both tables 3 and 4 are incorrectly labeled. (The correct channels were used in the tests.). Please refer to the attached replacement page 9.

2. FYI: (a) on p.5 of the EMC report, the Agilent Power Meter is listed as past its cal due date, (b) in the future, please specify the detector function used to measure spurious radiated and conducted emissions.

Response: The reported power meter calibration data was in error. Please refer to the following:

Table with 5 columns: Manufacturer, Description, Model, Serial #, Calibration Due. Rows include Agilent Power Meter (4418B) and Agilent Power Sensor (E4412A).

was tested. The cellular phone was tested with a headset connected to the device for all body-worn SAR measurements.

There is one Body-Worn Accessory available for this phone:

Leather Pouch CHYN4602A

The following probe conversion factors were used on the E-Field probe(s) used for the body worn measurements:

Description	Serial Number	f (MHz)	Conversion Factor	Cal Cert pg #
E-Field Probe ET3DV6	SN1522	835		
		1900	3.10	8 of 10

f (MHz)	Description	Conducted Output Power (dBm)	Body Worn			
			Measured (W/kg)	Drift (dB)	Extrapolated (W/kg)	Simulate Temp (°C)
			Digital 1900MHz	Channel 512	30.16	
	Channel 661	30.10	0.028	0.15	0.03	19.20
	Channel 810	30.10				

Table 3: SAR measurement results for the portable cellular telephone FCC ID IHDT6EA1 at highest possible output power. Measured against the body.

Body worn testing was also performed by keeping the device at a 1 inch separation from the body in GPRS class 10 mode. This is because the leather pouch cannot support GPRS class 10 function (the data connector on the phone is covered by the pouch).

The following probe conversion factors were used on the E-Field probe(s) used for the body worn GPRS class 10 measurements:

Description	Serial Number	f (MHz)	Conversion Factor	Cal Cert pg #
E-Field Probe ET3DV6	SN3037	835		
		1900	4.7	8 of 10

f (MHz)	Description	Conducted Output Power (dBm)	GPRS Class 10 Data mode in Body Worn Configuration							
			25mm Separation from Front of Phone				25mm Separation from Back of Phone			
			Measured (W/kg)	Drift (dB)	Extrapolated (W/kg)	Simulate Temp (°C)	Measured (W/kg)	Drift (dB)	Extrapolated (W/kg)	Simulate Temp (°C)
Digital 1900MHz	Channel 512	30.16								
	Channel 661	30.10	0.014	-0.34	0.02	19	0.058	0.27	0.60	19
	Channel 810	30.10								

Table 4: SAR measurement results for the portable cellular telephone FCC ID IHDT6EA1 at highest possible output power. Measured against the body in GPRS class 10 mode.