

To: Martin Perrine
Martin.Perrine@fcc.gov
FCC Application Processing Branch

From: Andrew Bachler,

Re: FCC ID IHDT56GW1

Applicant: Motorola Inc

Correspondence Reference Number: 31136

731 Confirmation Number: EA226143

For T-coil:

Response: Please refer to the Supplement to HAC Test report Submitted on July 10, 2006.

For HAC RF emission rating:

Response: Please refer to the Supplement to HAC Test report Submitted on July 10, 2006.

For SAR

17) Report is titled Class II permissive change.... Please explain this terminology in an original filing.

Response: The title of the original filing SAR test report contained a typographical error. The correction has been made to the updated SAR test report.

18) Please justify inclusion of both 15 mm and 25 mm gap data in body worn usage.

Response: The 15mm gap data corresponds to SAR measurements taken with the DUT in a voice call. The 25mm gap data corresponds to SAR measurements taken with the DUT in a GPRS Class 10 data connection. The 25mm gap used for data connections corresponds to the "Data Operation" information provided in the Safety and General Information section of the user manual (see exhibit 8A)..

19) Please check table 3 for rounding error. Reduction in SAR is not allowed for positive drift.

Response: There is a error in table 3 of the original filing SAR test report. Please see the updated SAR test report for a corrected table 3.

20) Report mentions class 10 capabilities. Class 10 can have 2 time slot operation. Please explain and update the report as necessary.

Response: The values in table 4 are results from GPRS Class 10 (2 timeslot) SAR measurements. The values in table 3 are results from GSM (1 timeslot) SAR measurements.

21) User of redefined target values should be handled with care. Please explain how this procedure was addressed in your uncertainty analysis and the overall results. It is expected that this procedure should lower relative uncertainty for validation.

Response: The transfer calibration value for 2450 MHz is used for daily system checks only. The text of IEEE 1528 specifically describes and allows this method: [section 8.2.1] "The system check is performed prior to compliance tests and the

result must always be within +/-10% of the target value corresponding to the test frequency, liquid and the source used. The target values are 1g or 10g averaged SARs measured by any system on which system validation has been performed using the system check test system in Figure 8.1". For system checks, the +/-10% tolerance is stated in the standard. System checks are performed daily. Measurement uncertainty, which is utilized during system validation [IEEE 1528, section 8.3], remains unchanged. System validation is performed at least annually. Note: Section 5 of the updated SAR test report has been updated to provide better clarity.

22) Please justify duty factor of 1:1 for BT.

Response: There were a couple of errors in Device description table of the original filing SAR test report. Please see the updated SAR test report for a corrected table.

23) Simple SAR summation may not apply for all cases of high power BT. Please justify or repeat with spatial grid summing. Please show locations of all antennas and overlapping SAR scans for worst case conditions.

Response: Summation of the measured SAR values to determine the final SAR value of the co-located transmitter was performed in accordance with the guidance provided in IEC 62209-2 (draft), please see the corresponding section of IEC 62209-2 below. This method provides the upper limit of the multitransmitter SAR. The maximum final SAR value was seen to have ~2dB of margin to the SAR limit and no further investigation was performed.

6.3.2.1 Alternative 1: Assessment by summation of separately assessed maximum SAR values

This procedure gives a fast method to determine the upper limit of the multi-band SAR.

Assess the maximum mass-averaged SAR at frequency 1 and 2 separately according to section 6.1, or according to IEC 62209-1.

Add the two maximum mass-averaged SAR values to obtain the multi-band SAR.

For EMC:

24) Please explain any differences in stated and measured power (page 8). Update as appropriate.

Response: The form 731 power output is incorrect. Updated values from page 8 of the EMC test report follow:

Measurement Results

GSM 850:	33.52 dBm (2.249 Watts) ERP
GSM 1900:	32.03 dBm (1.596 Watts) EIRP