



Date: December 9, 2002

Subject: Request for additional information (FCC ID: IHDT56CD1)

Reference:

Correspondence Reference Number:	6092
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Summary of FCC request for additional information

There was a request for additional information regarding Motorola's SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56CD1). The requested information is addressed below in the same numbering sequence received.

1) Confirmation that identical serial numbers and power configuration was used in both EMC and SAR testing?

Response: To maximize correlation of critical values listed on the grants, the following reported parameters were based on the same unit (identical serial number):

- SAR values
- Conducted power
- Radiated power (EIRP)

Other EMC related characteristics (frequency stability, occupied bandwidth, conducted and radiated spurs) were based on units of identical power configurations.

2) Confirmation that power was measured for each SAR test scan. Reported values do not vary over testing as expected.

Response: The complete set of conducted output power measurements was measured prior to the complete set of SAR measurements being performed. For each SAR measurement, the SAR was be checked at a reference location immediately before and after each SAR measurement to verify device output and SAR drifts. These drifts were reported in the original filing.

3) Body SAR test data to confirm justification of use of 1800 MHZ probe CF at 1900 MHZ. Please test worst case configuration with probe calibrated in compliance with Supplement C.

Response: The calibration certificate for the probe utilized (Probe SN1513), page 2 of 8 shows that the conversion factor for 1800MHz & 1900MHz head is 5.0. This is the value that was used for testing in the original filing. Since simulated tissue targets are the same for both 1800 & 1900 MHz head and the conversion factor for both 1800 & 1900 MHz head is the same ('5.0' for Probe SN1513), it is also true for body worn that both 1800 & 1900 MHz share the same conversion factor ('4.6' for Probe SN1513) since they share the same simulated tissue targets. This is demonstrated in all newly calibrated probes from SPEAG. These new calibration sheets show that the 1800MHz & 1900MHz body do share the common conversion factor.

4) Additional head SAR test data. Please provide SAR for worst case tilt position with camera. Please repeat original SAR measurement without camera to establish consistency.

Response: The procedure used for determining the SAR compliance for the co-located transmitter followed that given in the TCB workshop "Other Considerations" slide and that given by Tim Harrington. Specifically, the DUT was tested with the dominant transmitter on and the other co-located transmitter off. The configuration (within each mode of transmission of the dominant transmitter) with the highest SAR was tested again with the co-located transmitter and the dominant transmitter both on.

5) SAR data for worst case body configuration with BT transmitting. Please repeat original SAR measurement without BT to establish consistency.

Response: Since the time of the original filing new body-worn accessories have been developed that hold the phone in closer proximity to the body. Use of these new accessories in the intended position result in a higher measured SAR value. A class II permissive change will be filed to update the SAR information on file. Please see that class II permissive change report for the requested information.

6) Confirmation that body-worn SAR with "back to phantom" is worst case compared with "face to phantom". Has this been verified with testing?

Response: This information was verified prior to the original filing. Since the time of the original filing new body-worn accessories have been developed that hold the phone in closer proximity to the body and dictate the positioning of the DUT. Use of these new accessories in the intended position result in a higher measured SAR value. A class II permissive change has been filed to update the SAR information on file.