



MOTOROLA

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Supplement to SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56BJ2).

Prepared by:

Steven Hauswirth, Senior Staff Engineer

Motorola Personal Communications Sector Product Safety Laboratory

Harvard, Illinois

Summary of request for additional information

There was a request for additional information regarding Motorola's SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56BJ2). The requested information is addressed below in the same numbering sequence received.

1) Please provide a statement justifying why only one channel was tested in PCS mode - Head SAR. Please note that FCC/OET Bulletin 65 Supp. C recommend three channels to be tested. Alternatively, please provide SAR data for all three channels in PCS mode - Head SAR.

Motorola followed the directions in FCC/OET Bulletin 65 Supp. C in **Appendix D: SAR Measurement Procedures**, section titled "*Devices Operating Next To A Person's Ear*". These directions state "The device should be tested on the left and right side of the head phantom in the "Cheek/Touch" and "Ear/Tilt" positions. When applicable, each configuration should be tested with the antenna in its fully extended and fully retracted positions. These test configurations should be tested at the high, middle and low frequency channels of each operating mode; for example, AMPS, CDMA, and TDMA. If the SAR measured at the middle channel for each test configuration (left, right, Cheek/Touch, Tile/Ear, extended and retracted) is at least 2.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s)."

Since 2.0 dB lower than the SAR limit equates to a measured SAR of below 1.0 W/kg and the highest measured SAR in the PCS mode was 0.97 W/kg, measuring the low and high channels within the PCS mode were not required.

2) Please provide a measurement uncertainty budget that meets the IEEE draft 1528 or the FCC/OET Bulletin 65 Supp. C (2001). Please state when these values will be available.

Per item #13 of the *OET 65 Supplement C EAB Part 22/24 SAR Review Reminder Sheet 01/2002* handed out during the February, 2002 TCB council meeting, the tabulated total measurement uncertainty is nominal until the IEEE Std 1528 is completed. Much of the required information is just starting to be supplied by the equipment manufacturer. Other items are based on results of studies currently underway. These studies are expected to be completed within the next two months. The total measurement uncertainty of +/-12% (K=1) was stated in section 3.1 on page 3 of the original filing.

3) Please provide the conversion factors used for PCS mode (1900 MHz) head and body. The SAR plots contains different conversion factors than the calibration documents for Probe S/N: 1391. Please clarify.

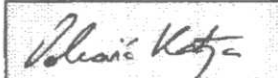
The SAR plots contain three conversion factors for Probe S/N: 1391. They have 6.40 for 800MHz head with this shown in the "Additional Conversion Factors" for probe 1391 (please see attached). They also have 5.43 for 1800-1900MHz head with this shown on the 3rd page of the "Calibration Certificate" for probe 1391. The value is located under the heading of "Head 1700-1910MHz". The last is 5.00 for the 1800-1900MHz body with this shown in the "Additional Conversion Factors" for probe 1391 (please see attached). Please do not confuse the 1950MHz head and body tissue conversion factors shown in the "Additional Conversion Factors" for probe 1391 with the values used. The conversion factors for 1950MHz are intended to be used for products that have UMTS modulation (3G).

Additional Conversion Factors for Dosimetric E-Field Probe

Type:	ET3DV6
Serial Number:	1391
Place of Assessment:	Zurich
Date of Assessment:	November 14, 2001
Probe Calibration Date:	October 25, 2001

Schmid & Partner Engineering AG hereby certifies that conversion factor(s) of this probe have been evaluated on the date indicated above. The assessment was performed using the FDTD numerical code SEMCAD of Schmid & Partner Engineering AG. Since the evaluation is coupled with measured conversion factors, it has to be recalculated yearly, i.e., following the re-calibration schedule of the probe. The uncertainty of the numerical assessment is based on the extrapolation from measured value at 900 MHz or at 1800 MHz.

Assessed by:



Dosimetric E-Field Probe ET3DV6 SN:1391
 Conversion factor (\pm standard deviation)

835 MHz	ConvF	6.4 \pm 8%	$\epsilon_r = 41.5$ $\sigma = 0.90$ mho/m (head tissue)
1950 MHz	ConvF	5.2 \pm 8%	$\epsilon_r = 40.0$ $\sigma = 1.40$ mho/m (head tissue)
835 MHz	ConvF	6.2 \pm 8%	$\epsilon_r = 55.2$ $\sigma = 0.97$ mho/m (body tissue)
900 MHz	ConvF	6.1 \pm 8%	$\epsilon_r = 55.0$ $\sigma = 1.05$ mho/m (body tissue)
1800 MHz	ConvF	5.0 \pm 8%	$\epsilon_r = 53.3$ $\sigma = 1.52$ mho/m (body tissue)
1950 MHz	ConvF	4.7 \pm 8%	$\epsilon_r = 53.3$ $\sigma = 1.52$ mho/m (body tissue)