



4<sup>th</sup> September 2001

Mr. Andy Leimer, FCC Engineering Examiner  
Authorization & Evaluation Division  
Federal Communications Commission Laboratory  
7435 Oakland Mills Road  
Columbia, MD 21046

Re: Form 731 Confirmation Number: EA 101043 with FCC ID: AZ489FT4845.

Gentlemen;

Motorola Inc., 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322, herein submits its response to the 25<sup>th</sup> July 2001 request for information on FCC ID: AZ489FT4845, EA101043 via correspondence number 20052.

Q1. The explanation on SAR sensitivity due to tissue parameter deviations for using muscle to test for head SAR may be insufficient as discussed in the July 19, 2001 meeting at the FCC. Please retest the Head SAR using Head dielectric parameters as done in EA100436.

R1. Head SAR has been retested using Head dielectric parameters; the data is included in the revision A SAR report included as part of this response.

Q2. The response to the technical request provided 17 test for a total of 120 test combinations (Antennas, batteries, high/middle/low frequencies, and body-worn accessories). A sufficient amount of test data should be submitted to determine compliance as discussed in the July 19 meeting. The data submitted shows substantial SAR variations based on battery type, test frequency, and body-worn accessories. The additional data indicates that the Face tests were selected on the Body test results. However, the variances in Body data are sufficient to preclude selection of Head data points based on Body SAR results. Please submit additional data to account for the variations based on battery type, test frequency, and body-worn accessories as discussed on July 19. Be sure to submit sufficient data on high/middle/low frequencies for the test conditions. Include supporting information and photos on the accessories.

R2. Additional data is submitted as part of this response and is contained in the revision A SAR Report. At the abdomen and face each combination of antenna, battery, and body-worn accessory (abdomen only) was tested at low, mid, and high frequencies of the radio transmit band to the extent that those frequencies are valid for the particular antenna. Each antenna was also tested at its approximately specified center and band end frequencies using the combination of battery and body-worn accessory (abdomen only) that resulted in the highest SAR.

Supporting information, including photos and body spacing distances, is provided for the body-worn accessories.

FYI 1): The response to the technical request indicates that the training for occupational use is the responsibility of the agencies that use the product. In accordance with the Grant conditions (that were indicated as acceptable in the last response), it will be the Grantees responsibility to coordinate training with these agencies.

Re: FYI 1: Motorola accepts the proposed Grant conditions

FYI 2): Part 90 rules allow devices to operate at 20% above rated output. Such devices should be tested for SAR compliance at the 120% output level. SAR scaling based on output, as described in Supplement C, should not exceed 5% of the 120% level. Measured 4.6 Watts (conducted) X 120% X 105% = 5.8 Watts. The scaled value of 6.68 Watts in the EMC report does not comply with Part 90 requirements.

Re: FYI 2): Revision A of the SAR Report re-states the maximum power to be 5.2 watts and is defined to be the production final test station upper limit. In order to provide continuity of data and test conditions the additional data supplied herein is based on the radio aligned to nominal power. New product submissions into the FCC are based on test samples artificially aligned to the maximum power.

The RF Power Output (Conducted) reported in Exhibit 6, 3.1 was carried over, incorrectly, from a previous document template. The correct RF Power should read 1.0 Watts (minimum) to 4.6 Watts (maximum).

Please contact me at (954) 723-5793 if you require any additional information.

Regards,

**/s/ Mike Ramnath**

FCC Liaison

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