Applicant: Motorola Inc FCC ID: AZ489FT5846

Date: 2<sup>nd</sup>August 2006

Mr. Martin Perrine Authorization & Evaluation Division Federal Communications Commission Laboratory 7435 Oakland Mills Road Columbia, MD 21046

Re: Form 731 Confirmation Number: EA585607 with FCC ID: AZ489FT5846.

Dear Mr. Perrine,

Motorola Inc., 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322, herein submits its response to the 26 July 2006 request for information on FCC ID: AZ489FT5846, EA585607 via Correspondence Numbers 31215 and 31216.

Q AA. Regarding your answer to Question I (8, D), we did not find the CW tone data for ABM1 to show the correct adjustment for the P50 is used. Data only for the 1/3 octave at 1 kHz is needed. Also, we did not find the explanation for the adjustment in the updated test report. Please include.

## **Response:**

Given the limitations of the Vocoder implemented in this product, it was not possible to perform testing using a CW tone for both Vocoders. In the alternative, we used a P50 artificial voice input signal to perform the testing. Section 6.4 of the updated report details the how this adjustment factor, P50 wideband versus P50 narrowband (1/3 octave at 1 kHz) was determined.

Q BB. We could not locate the error plots previously mentioned showing that the probe meets the frequency progression of C63.19.

#### **Response:**

The updated report (Section 6.1 and Figures 6-1-1, 6-2-1, and 6-1-3) show the plots of the probes' frequency progression from 100 Hz through 10 kHz, as well as the amplitude linearity, demonstrating that the probes meet the  $\pm 0.5$  dB requirement of the standard.

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Q CC. Regarding your answer to question II please readdress. It appears that ABM2 plots and data still only go to 5 kHz rather than 10 kHz.

### **Response:**

The attached report has been updated to extend the ABM2 plots shown in Sections 9.2 and 9.4 out to 10 kHz.

Q DD. Regarding your answer to question III details of the compensation factor are not clear. Please retest at the worst case frequencies rather than develop a compensation factor.

# **Response:**

As noted in new Section 6.3 of the updated report (attached) test equipment limitations do not enable testing at all frequencies with both Vocoders to assess variations due to handset operating frequency, so supplementary testing in the axial orientation was performed using a R2660 Service Monitor to control the test frequency. This instrument only supports the 2:6 Vocoders. Data so obtained and statistical analysis of it provided therein demonstrates the RF frequency independence of both the ABM1 and ABM2 measurement, and hence the HAC signal quality T-category rating.

Q EE. Your ABM2 ambient noise plots in 8.0 and your measurement results of 9.2 mention HBI. Please confirm that the plots also includes the A weighting correction as well. In addition to the frequency responses please include the final ABM2 ambient noise values.

#### **Response:**

The plots did have A-weighted corrections applied, and the attached report has been updated to reflect this information in the plot titles.

Since I'll be traveling, if you have any questions concerning this report, please contact John Lewczak at 954-723-6272 (email: john.lewczak@motorola.com), or me at 954-723-5793.

Sincerely,

/s/Mike Ramnath (signed)

Manager, Regulatory Compliance

Email: Mike.Ramnath@Motorola.com