



MOTOROLA

14th September 2007

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

Re: Form 731 Confirmation Number: EA503194 with FCC ID: AZ492FT1629

Dear Mr. Lyles;

Motorola Inc., 8000 West Sunrise Boulevard, Fort Lauderdale, Florida, herein submits its response to the 10th September request for information in Correspondence Number 33729.

Q1) User manual, op desc etc mention antenna options for 37-50 MHz, different from frequency range requested for this filing - please explain and/or revise

R1) The user manual is used for more than one radio. The antennas applicable for this filing were tested while those antennas that do not match this filing's frequency range were not tested for this application.

Q2) If not in filing already, please submit specs / spec-sheets for antennas

R2) The antenna specs (freq. range, electrical length and gain) are listed on the front cover of the report.

Additional antenna information is as follows;

<u>Antenna</u>	<u>Test Freq.</u>	<u>Physical Length</u>
RAB4002ARB	29.7MHz	135.2cm
RAB4002ARB	32.0MHz	116.0cm
RAB4002ARB	35.1MHz	96.0cm
RAB4003ARB	36.5MHz	126.0cm

Q3) MPE report mentions 0.074 A/m as a limit, which appears to be incorrect - please explain and/or revise where appropriate

R3) Section 3.0 lists the A/m MPE limits for frequency range 29.7-37.0MHz. These limits were derived from OET Bulletin 65 as follows;

Frequency range 1.34-30MHz use $2.19/\text{freq}(\text{MHz}) \Rightarrow 2.19/29.7\text{MHz} = 0.0737\text{A/m}$
Frequency range 30-300MHz use 0.073A/m

Therefore the MPE limit range used for frequencies 29.7-37.0MHz is 0.073-0.074A/m

Q4) MPE report at several places appears to indicate that measurements were done using only an H-field probe and with a plane-wave-equivalent power density assumption to convert to E-field, which conversion is generally applicable and allowed for far-field plane-wave situations only. For the near-field conditions herein, please revise MPE report to include actual results tested using both E-field and H-field probes.

R)4 Both E and H fields were measured separately and are presented in summary tables 1 & 2 on page 7 and in appendix D Detailed MPE Data (tables 1-10, E field and tables 11-20, H field).

Q5) MPE report mentions E-field probe model 8722B and includes corresponding calib. certificate, however other parts of report appear to indicate that only H-field tests were done, such that E-field probe appears not applicable - please explain and/or revise where appropriate

R5) E-field data is presented in summary table 1 on pg 7 and in appendix D (tables 1-10).

Q6) MPE probe calib. certs show client "Lockheed Martin" - please explain whether correct certs were provided and used for this Motorola lab test, or revise filing if appropriate

R6) Motorola's outsourced calibration lab uses Lockheed Martin as an alternate calibration source. Lockheed Martin submitted the equipment to Liberty Labs for Calibration. The calibration sheets are correct.

Q7) MPE report at 6.1.1 has the following two apparently inconsistent statements, and which may not be consistent with Appdx A - please explain and/or revise where appropriate:

"at the test distance of 150cm from the vehicle's body"

"at the rear of the vehicle while maintaining a twenty (20) centimeter separation distance between the probe sensor and vehicle body"

R7) The 150cm test distance is the distance from the vehicle's body to the bystander.

The 20cm distance stated ensures that the probe sensor and vehicle body are not closer than 20cm as recommended in IEEE C95.3 2002. This 20cm separation distance is to improve measurement accuracy. Obviously for this filing the 150cm distance would imply that the 20cm distance was met.

This section of the report template is under review for improved clarification.

Q8) User manual mentions roof-mount antenna, however MPE report appears to include only trunk-mount data - please explain and/or revise where appropriate

R8) The user manual states the following; "Antennas should be installed in the center area of the roof or trunk lid taking into account exposure conditions of the backseat passengers and according to the specific instructions and restrictions in the Radio Installation Manual along with the requirements of the antenna supplier."

The Radio Installation Manual, section 2.4.1, clearly states the mounting restrictions for this radio model is in the center of the trunk.

Q9) MPE report Appdx D includes "Highest Reading" for some "Meas. Distance" - if not in filing already, please explain applicable range of distances and as relative to Appdx A figure

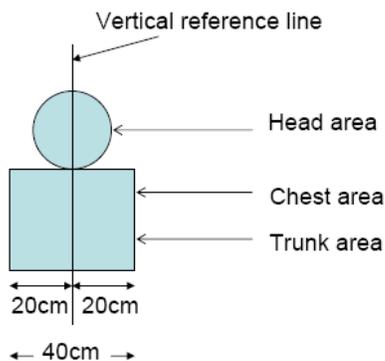
R9) The tables to which you refer to are for passengers inside the automobile, front seat and backseat. The closest distance from the antenna to the passenger (head) in the back seat is 85cm, which is illustrated in appendix A. The distance to the passenger in the center of front seat (head) is 148cm. The front seat distance was not provided in appendix A.

Appendix A of the report template is under review for improved clarification.

Q10) Further to preceding question, please explain and/or show in a revised Appdx A figure the 40 cm by ?? cm plane (or typical planes) used to represent passenger exposures

R10) As stated in 6.2.2; after the highest level is found at the head area, two additional areas (chest and trunk) were scanned vertically below the head area and 40cm wide.

The diagram below is being considered for future filings.



Please contact me at (954) 723-5793 if I can be of further assistance.

Sincerely,
/s/ Mike Ramnath (signed)
Manager, Regulatory Compliance
Email: Mike.Ramnath@motorola.com