



Date: 5<sup>th</sup> September 2002

Mr. Tim Harrington and Mr. Andy Leimer  
Authorization & Evaluation Division  
Federal Communications Commission Laboratory  
7435 Oakland Mills Road  
Columbia, MD 21046

Re: Form 731 Confirmation Number: EA524079 with FCC ID: AZ499FT3081.

Gentlemen;

Motorola Inc., 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322, herein submits its response to your 5<sup>th</sup> September 2002 request for information on FCC ID: ABZ99FT3081, EA524079 via correspondence number 23850.

Q1) What is vehicle trunk height above ground, and distance from antenna to trunk edge?

R1) The vehicle trunk height above ground is 97cm. The distance from the antenna to the trunk edge is 26cm.

Q2) For MPE averaged over 1-2m not 0.2-2m, trunk external MPE exceeds general population 0.2mW/cm<sup>2</sup>. Please advise.

R2) The measurement results presented in the submitted report were performed according to IEEE Std. C95.1, 1999 Edition (pages 25-26), "the average of a series of 10 field strength measurements performed in a vertical line...". The external MPE results clearly demonstrates compliance to the general population specification limit of 0.2mW/cm<sup>2</sup>.

Q3) MPE reports says 1/4-wave is 0dB gain, 5/8-wave is 3dB gain - are those dBi or dBd?

R3) Both the quarter wave and 5/8 wave antenna gains are expressed in dBi.

Q4) Internal test plan mentions 40cm personnel width. What is width effect for external tests?

R4) The external test results reflect performance at the points of the projected area closest to the antenna. This methodology is judged to be a conservative approach since averaging results over the entire vertical cross section of the body is expected to produce lower results than a single vertical assessment at the closest position.

Q5) External uses 10 spatial points, internal uses 3; why the difference?

R5) The internal assessments were based on a whole-body average of a person sitting in a vehicle over the three significant body sections (head, chest, and lower trunk). The external assessments were based on an average of ten field strength measurements performed in a vertical line with uniform spacing starting at ground level up to a height of 2m per IEEE Std. C95.1, 1999 Edition (pages 25-26).

Sincerely,

/s/ Mike Ramnath

FCC Liaison

Email: [mike.ramnath@motorola.com](mailto:mike.ramnath@motorola.com)