



11th February 2005

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

Re: Form 731 Confirmation Number: EA472812 with FCC ID: AZ492FT4870

Dear Mr. Lyles,

Motorola Inc., 8000 West Sunrise Boulevard, Fort Lauderdale, Florida, herein submits its response to the 2nd February 2005 for information in Correspondence Number 28393.

QA) Regarding your answer to question 5 we are concerned that the consumer may be confused when the table and FCC power do not directly agree. Please update the user manual and or filing to make this point very clear to the user.

AA) Per our 3rd February 2005 conference call with Ray LaForge and Martin Perrine, Motorola has amended its Product Safety and RF Energy Exposure Booklet by adding this footnote: **"The maximum power shown on the FCC Grant may be higher than the rated power allowing for production variation,"** following the minimum lateral distance table on Page 5.

QB) Regarding reply to 7a, more accurately FCC has processed filings on a case-by-case basis as part of an ongoing rules waiver process, and standard procedures development may be carried out in coordination with IEEE/SCC34/SC2. For this filing we are requesting validations that cover all antennas used for SAR modeling. When antennas are substantially similar shared validations may be appropriate. Please readdress 7a.

AB) As agreed in the conference call, an additional representative gain antenna (HAE 6010A) was validated against the MPE measurements for both the passenger and bystander exposure conditions. The validations were carried out at mid-UHF band (425 MHz). The corresponding results, which further demonstrate conservatives of the simulation models, have been added to the revised version of the SAR report.

QC) Regarding your answer to question 7d please provide improved and more detailed plots to fully justify the provided explanation. Please include a two dimensional plot of the plane parallel to the ground at the point of highest SAR.

AC) As agreed, ten additional zoom-in contour plots of the field distributions around the bystander and the passenger were added in Figs. 3, 4, 5, 6, 7. These high-definition figures complement the SAR contour plots that were included in the previous version of the SAR report.

QD) Regarding your answer to question 7e we are requesting further demonstration that the lossless assumption made is valid. Please readdress. Additionally, we observed that two of the antennas in this filing are quite different from the third. Please readdress. Additionally, we note the existence of coils in the middle of some of the antennas. Please provide details of these coils and how they were modeled.

AD) A section was added to the SAR report (see Section 12(b) in the Appendix to the SAR report) showing the analytical trail that allows scaling up the radiated power in order to neglect the effect of the mismatch losses. This approach is valid for both the short and the long (coil loaded) antennas because they are both single port radiators. In XFDTD, the treatment of the lumped inductance along the gain antennas involves introducing a lumped reactive component with given reactance along the wire element describing the antenna. The reactance value was chosen so as to provide the nominal antenna gain. X-rays of the coils in gain antennas used in this filing are reported in the Appendix to the SAR report at point 2(a). As agreed, Motorola will undertake an investigation, separate from this application, to correlate antenna simulations and measurements on simply shaped ground planes, and when complete will provide this information to the FCC.

QE) Regarding your answer to question 7g please confirm that the tissue cells in the bent regions are contiguous and connected.

AE) A description was added in the Appendix to the SAR report at Section 4(b): "The model is a standing subject. By taking advantage of the XFDTD built-in ability to segment and rotate bodies, the full body model was cut at the hip and the knees and then the various body parts were translated and rotated in order to arrange them in a way so as to represent a passenger model. The passenger model was then defined as a single XFDTD element that could be inserted in the car model at different locations in the back seat." As agreed, Motorola will undertake an investigation, separate from this application, to analyze the potential effect of tissue discontinuity on SAR and when complete will provide this information to the FCC.

Motorola appreciates the opportunity to have clarified and resolved with the FCC staff the last series of questions related to this application. 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