



Date: 7th December 2001

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

Re: Form 731 Confirmation Number: EA102585 with FCC ID: AZ489FT5811.

Dear Mr. Lyles;

Motorola Inc., 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322, herein submits its response to the 30th November 2001 request for information in Correspondence Number 21389.

R1) Attached are new Figures 6-25, 6-26 and 6-27 which are spectrograms like those in Exhibits 6-5 through 6-10. In these new spectrograms the occupied bandwidth marker lines are shown rather than the emission mask limit lines. These spectrograms are time-synchronized (with the transmission burst) measurements for operation at the requested 1:6, 2:6 and 81:120 TDM duty cycles, respectively.

At the bottom of each figure the analyzer display shows the bandwidth between the markers. The occupied bandwidths so measured are 17, 498, 17, 455 and 17, 451 respectively and confirm that the emission do not exceed the bandwidth represented by the emission designator.

R2.) The reported duty cycle of 67.5% represents signals that pulse between 0% and 100% power levels. With this signaling characteristic it is a valid approach to calculate crest factor using the formula $C.F. = 1/D.C.$ This method of calculating crest factor does not contradict the statement made on page 46 of 66 in the DASY3 user manual because therein SPEAG is referring to signal levels that pulse between 50% and 100%. An email from Neils Kuster of SPEAG included herein confirms the validity of the reported crest factor of 1.5.

“Your approach was correct, i.e., a crest factor of 1.5 is ok. Problems occur if the pulses have different amplitudes. In these cases, the linearization becomes more complicated. I hope this clarifies the statement in the manual”.

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

Regards,
/s/ Mike Ramnath
FCC Liaison
Email: mike.ramnath@motorola.com

Attachments:
Figure 6-25
Figure 6-26
Figure 6-27

