

dward

From: webrobot@atcb.com
Sent: Thursday, February 20, 2003 2:31 AM
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Subject: MESSAGE attached to E5MDS-1710_ATCB000237 by uelrfiatcb

From: Mr. Tri Luu (uelrfiatcb)

Microwave Data Systems Inc. answer to question #1 about alignment is formal below:

The X710 Family of transceivers that are designed and manufactured by MDS have NO user adjustable parts for transmitter alignment. Only the receiver front end filters are adjustable. The Transmit deviation is hard coded in DSP software and locked to a peak deviation depending on the model that is programmed in at the time of manufacture. The DSP modulates the both the VCO and TCXO and uses 2 point modulation and this is calibrated in a auto test by computer when the radio is calibrated in the factory. There all kind of checksums and peak deviation limits that will never allow the DSP to over modulate the transmitter. If there is a hard failure in the field of the transmitter, the unit must be returned to the factory for repair and re-calibration. Thus this ensures the FCC mask limits for repairs. Our auto test is quite complex and under our ISO-2000 monitoring process.

Answer to question #2:

The necessary bandwidth on the emissions designator is obtained from calculation as per FCC's rule, unless there is no prescribed method. This calculated necessary bandwidth is not 26dB or 99% bandwidth. Therefore, it is not necessary to have direct correlation to the measured values.

Answer to question #3:

See revised Form 731 uploaded to ATCB electronic filing site.