

Response to TCB Findings

Tune-up procedure must be provided as an exhibit for licensed transmitters. Please provide the document.

Per LOEA - The transceivers are configured in the factory and there are no tune-up requirements during the installation (this is a fixed frequency design)

DC voltages and currents in final RF amplifier stage must be specified per 2.1033(c)(8).

Per LOEA - There is no final RF amplifier stage in the Tx chain. A Gunn oscillator is the source of the Tx power and it runs off 9.6 volts and draws 200mA.

The power level difference between the 73.5 and 83.5 GHz fundamentals must be justified. Please clarify with your client as the filing does not seem to provide power ratings and means of adjusting power levels (if applicable) about the device. It is not clear if this difference is intentional.

Further examination of the calibration data of the mixer shows that there is a null within 100MHz of 83.5GHz. Our original mixer correction factor did not account for this null. The report has been updated with the new correction factor. Difficulties in making measurements at the high frequencies (alignment, reflections, etc) may also account for the readings of the 83.5GHz radio being less than that of the 73.5GHz version. Attached is an updated operational description, which indicates the maximum output of the device.

101.111(a)(2)(v), which calls 101.111(a)(2)(ii), requires a mask within the frequency range that is removed 50% to 250% of the authorized bandwidth from center frequency. Please justify/demonstrate how the device complies with the limit according to the mask formula provided in that section.

The report has been updated with the mask data. Because mixers were used, we were unable to provide a plot. No emissions were found.