

Response to E06-000164-1

1. Please provide a copy of the FAA's determination regarding whether it objects to the application for equipment authorization.

Response: The FAA approval letter will be uploaded shortly.

2. Please submit an explanation of how the spurious radiated emissions were measured and a photo of the test setup for these measurements. Also at what test distance were they measured:

Response: Test setup photos have been uploaded. The Test Setup was typical per the DO-160D ENVIRONMENTAL CONDITIONS AND TEST PROCEDURES FOR AIRBORNE EQUIPMENT, reference Figure 21-7 requirement with the distance being 1 meter. Pages 43 through 52 in the 070-4764-001, SPECIFICATION, FEDERAL COMMUNICATIONS COMMISSION (FCC) ACCEPTANCE REPORT FOR TPL-100A MILACAS-FR, describe the Tests Procedures and results for spurious emissions testing.

3. Please provide the calibration dates of the test equipment used during testing.

Response: A file has been uploaded which has the Title page, with dates, and pages 28 through 31, that list the test equipment used during the testing activity, done to support the Quality Test Report for the TPL-100A.

4. Please provide a curve or other data showing how you comply with section 87.139/2.1047.

Response: Honeywell did perform the required testing. The Part 87.139 compliance data is contained in the FCC Report # 070-4764-001. I extracted the pages and highlighted the paragraphs that demonstrate compliance and this has been uploaded.

5. Please indicate what the minimum power level that can be outputted and is this variable controlled up to the maximum power level of each of the four transmitter outputs?

Response: The total output power is controlled in discrete steps.

For 1090 transmissions: Total power levels of 34, 40, 43, 45 or 54 dbm can be output.

For 1030 transmissions: Total power levels of 34, 40 or 43 dbm for FFS can be output, and the TCAS function can output these levels as well as a few more steps up to 54 dbm.

The power at each individual element is roughly 6 db below the total power level.

6. Please explain how you comply with sections 87.135 and 87.137.

Response: Section 87.137 Types of emission

Using Sec. 87.137(b), refers to part 2 of Chapter 1 --FEDERAL COMMUNICATIONS COMMISSION

Page 10 of the report provides the following designator information:

Emission Designator

10M0V1D (Mixed Pulse Amplitude Modulation (PAM) and Differential Phase Shift Keying

(DPSK) from Mode S Transponder)

10M0K1D (Mode C Transponders)

Sec. 87.135 Bandwidth of emission

As to Occupied Bandwidth, please see pages 34-36 of the Test Report.

Under the Test results paragraph it addresses the FCC requirement for Occupied Bandwidth.