



American Certification Body Inc.
6731 Whittier Ave, Suite C110, McLean, VA 22101, USA

August 11, 2015

FCC ID SRS-D80-EB

RE: ATCB017735

Thank you for your application. The following comments require your attention. Please note that further comments may arise in response to answers provided to the questions below.

1. Emissions Masks

Please verify the calculation of Emissions Mask J. From Part 90.210. There should be breakpoints at 2.5kHz, 6.25 kHz and 9.5 kHz in the mask. The test report indicates breakpoints at 2.5kHz and 12.5 kHz.

(j) *Emission Mask J.* For transmitters that are not equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power of the transmitter (P) as follows:

(1) On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 2.5 kHz, but no more than 6.25 kHz: At least $53 \log(f_d/2.5)$ dB;

(2) On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 6.25 kHz, but no more than 9.5 kHz: At least $103 \log(f_d/3.9)$ dB;

(3) On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 9.5 kHz: At least $157 \log(f_d/5.3)$ dB, or $50 + 10 \log(P)$ dB or 70 dB, whichever is the lesser attenuation.

Please verify that the correct masks were used for Plots 11-14.

2. EUT Photos

Please provide new photos of the EUT PCB. The photos should be legible enough to view component names and PCB traces.

3. Document: Port of Long Beach Vessel Tracking System

A document describing operation at 153.81 MHz was included in the application. Is this relevant to the planned operation? Is there a document that describes operation at the requested authorization (896.1-901.1 MHz)?

4. Spurious Emissions Test Data

Table 5 shows the test date for spurious emissions as 08/12/09. Please check if this is correct.

5. Necessary Bandwidth

Part 90.209 indicates an authorized bandwidth (maximum) of 13.6 kHz. Emissions designators indicate necessary bandwidths of 14kHz and 16kHz (Summary table, page 5: 16K0F1D & 14K0F1D). Please provide calculation of necessary bandwidth for these operating modes.

6. Label

Label indicates compliance with “part 15, 22 and 90.” Confirm/adjust for Part 22?

Label requires 15.19(a)(1) statement, which is for Part 15 devices that also are Licensed Part 90. Currently they list 15.19(a)(3) which is for all other devices under Part 15.

7. Tuneup Procedure

I could not locate a tuneup procedure in the application. How is power verified and set during production?

8. Contacts

The FCC listed contact and address do not match the Form 731. Though Raveon provides a letter stating the different addresses, neither match what is actually provided in the Form 731. They should correct to match the FCC database.

9. Manual

The manual does not appear to have the 15.21 statement, only the 15.105 Class B statement.AC mains conducted emissions

10. DC Voltages and Currents

Please provide information on the DC voltages and currents into the final RF stage.

11. User Instructions

It is suggested that the User Instructions make it clear that adjusting the output power may jeopardize the licenses and authority to use the radio.

Thank you,
Michael Violette
Application Review Engineer