

Sirius XM Radio Inc. 1500 Eckington Place NE Washington, DC 20002

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siriusxm.com

May 10, 2012

Timothy R. Johnson, Examining Engineer American Certification Body, Inc. 6731 Whittier Ave., C110 McLean, VA 22101

Re: Class II Permissive Change Application

FCC Identifier RS2SXI1

Dear Tim:

This application requests a Class II permissive change of the Sirius XM Lynx Portable Radio, FCC Identifier RS2SXI1, which the Commission originally certified on October 6, 2011, granting a Class II permissive change on December 16, 2011. The specific hardware changes in the device since the version covered by the Class II change are as follows:

- 1. Second source WiFi/BT Antenna.
- 2. Second source GPS Antenna.
- 3. Match change required for new WiFi/BT Antenna.
- 4. Match change required for new GPS Antenna.
- 5. Rev 07 PCB to accommodate changes.
- 6. Die change from supplier of IC, SENSOR MODULE.
- 7. Die change from supplier IC, moviNAND memory.
- 8. Second source ESD diode.

The FM circuitry was not changed on the board used in this model (Rev 07). Items 1-5 on this list are the only changes requiring the current application. The documentation submitted with the application, and specifically the "SAR Compliance Evaluation Report" from PCTest Engineering Laboratory, justifies that the application qualifies as a Class II permissive change.

The Part 15 grant for this device shows "output power" as the measured power of the device over which the end user has <u>no control</u>. This is different than the "rated power" of a device mentioned in Rule 2.1043, which normally applies to licensed transmitters over which the user is <u>allowed to exercise control</u>. Accordingly, the minor output power degradations for an unlicensed device should not require a new certification. In this regard, please be advised as follows:

- 1. The modified device will still be 15dBm <u>under</u> the FCC Part 15 limits.
- 2. The noted degradation in measured RF output power from the December 16, 2011 Class II permissive change is due to the software power level setting changes made to prevent

Murata WiFi module failures. Measurements were completed justifying this as a Class I permissive change in late December 2011. That test data, and related justification for the Class I change, has been uploaded to the ACB's review database for the instant Class II permissive change under the file name "FCC A_B PV(Board 05C) Froyo 60 to Froyo 74.pdf."

- The RF power in the WiFi component is controlled by software. Sirius XM reduced the power up to 3dB on some of the modes to prevent WiFi module failures per the WLINK module manufacturer Murata's recommendation. The power measured on the Rev 07 version of the radio is comparable to the power on the radio that the Commission previously approved.
- The Murata Module WiFi RF output power tolerance specification is +/- 2.5 dBm for the Texas Instrument WiFi component.
- The Murata Module BT RF output power tolerance specification is +2.5/-4.5 dBm for the Texas Instrument BT component.

Please contact me or Beejay Jolayemi promptly if you have further questions. Thank you for your assistance.

Very truly yours,

James S. Blitz

Vice President, Regulatory Counsel