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Subject: FCC Equipment Authorization System

The following is in response to the comments made on the above referenced application.

1) What is the center frequency of the lowest channel of the device and the center frequency of the highest channel of the device? The requested frequency range should be modified accordingly.

The device under test is a repeater, translating the XM radio band into the 902-928 MHz ISM band, and does not necessarily operate on a "channel" basis. However, the highest and lowest intentionally radiated XM satellite signals are centered at 909.715 MHz, and 920.295 MHz, respectively, after translation from the XM radio band (LO is 1423.75 MHz).

Note that the DUT may unintentionally radiate any spurious emission falling into the XM radio band. Thus, it is possible that the DUT may transmit at any frequency between 902 and 928 MHz, and it seems appropriate that the DUT be listed to operate across the entire 902-928 MHz band, centered at 915 MHz.

2) Provide a Bandwidth plot of the device.

The bandwidth of the DUT emission is dependant on the input signal. The 6 dB bandwidth is 4.0 MHz for the simulated XM satellite signal(s) (see Fig. 6.5-6.6), and 5.2 MHz for the simulated XM terrestrial signal(s) (see Fig. 6.8).

Since it is not possible to predict all spurious emissions that may fall in the XM band and be translated to the ISM band, it is not straightforward to determine an operating bandwidth for the DUT.

3) Indicate how compliance of the bandedge requirements was met with the device operating on the lowest and highest channels.

Band edge radiated emissions were measured at the band edge, and demonstrated to comply with the field strength limits at those frequencies, as discussed in section 6.3 of the test report. These measurements were made for all required stimuli as agreed upon by the FCC in the test procedure included with this filing.

4) It appears that the field strength levels in the 902-928 MHz band were made only in the Vertical polarization. Was testing performed in the Horizontal polarization? If not, submit required data.

Horizontal and vertical measurements were made for all orientations of the DUT. Worst case emissions at the fundamental were obtained in the vertical polarization and are reported in the test report. Horizontal measurements were significantly lower, and thus not reported.