P: 715-835-1313

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December 30, 2021

On December 28, 2021 measurements were performed on W14ER-D (WECX-LD) at the transmitter/antenna location. The authorized Channel 14 (470-476 MHz) is first-adjacent to Land-Mobile operations in the adjacent spectrum (460-470 MHz). Construction of the W14ER-D (WECX-LD) Channel 14 facility incorporates transmitter filtering (ERI UF-5000-83-16 16-Pole Sharp-Tune Filter System) that provides substantial additional suppression of Out-of-Band Emissions to minimize the likelihood of interference to Land-Mobile facilities in the adjacent spectrum. The transmitter was operated at full authorized output power and the filters were allowed to reach operating temperature before any tests were performed.

All the measurements were performed using a Tektronix 2712 spectrum analyzer. The frequencies monitored and measured were between 458 MHz and 478 Mhz.

A condition of the construction permit is:

During equipment tests, authorized by Section 73.1610 of the Commissions Rules, the permittee shall take adequate measures to identify and substantially eliminate objectionable interference which may be caused to existing land mobile radio facilities in the 460 to 470 MHz band. Documentation that objectionable interference will not be caused to existing land mobile radio facilities shall be submitted along with the request for Program Test Authority. Program tests shall not be commenced under Section 73.1620(a) of the Commissions Rules and may only be started after specific authority is granted by the Commission. An application for a license must be filed within 10 days after the start of program tests.

In order to satisfy this condition the frequencies between 460 and 470 Mhz were monitored for in excess of 45 minutes to see any existing users. The TV transmitter was then turned on and no spurious signals were observed that should cause interference to any existing land mobile radio facilities. A photo of the measured output on the spectrum analyzer is included in this report.

It is my opinion that the W14ER-D (WECX-LD) transmit facility meets the special conditions detailed on the Broadcast Station Construction Permit.

**Todd Zschernitz** 

Chief Engineer, WEAU 13 News

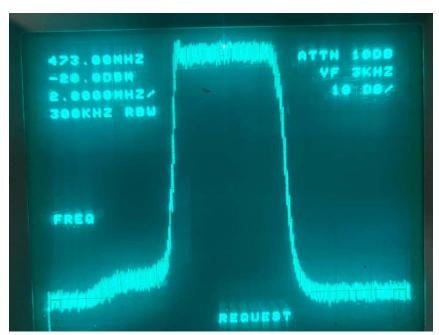
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## Spectrum Analyzer Photos December 28, 2021 W14ER-D (WECX-LD)



Spectrum from Over-the-air antenna



Output of the mask filter sample port