

TECHNICAL STATEMENT  
W229CG CLEVELAND, OHIO 287D  
RADIO.COM, LLC  
FCC FORM 349  
MAY 2020

This Technical Statement is in support of an amendment to a minor change application FCC form 349, being filed on behalf of RADIO.COM, LLC in regards to the license of W229CG, BLFT-20170105AGL, for Cleveland, Ohio, facility ID 157726. In response to a complaint of possible interference from the licensee of 1st adjacent WNIR, this amendment changes channel from 260D to 287D and raises the ERP from 25 Watts to 180 Watts.

RADIO.COM, LLC respectfully requests this nonadjacent change in channel from 229D to 287D because of a higher than expected incoming interference from co-channel stations WQGR, 229A, and WQIO, 229B. Figure 1 shows in blue the 40 dB $\mu$  interference contour F(50,10) of both WQGR, from northeast, and WQIO, from southwest, and in red the 60 dB $\mu$  coverage contour F(50,50) of the currently licensed W229CG on 229D.

RADIO.COM, LLC is proposing to change channels from 229D to 287D. The site will remain the same, Effective Radiated Power will change to 180 Watts, and the antenna will be mounted at 14 meters Above Ground Level with a Center of Radiation at 292 meters Above Mean Sea Level.

Figure 2 shows a channel interference study conducted from the proposed site for the new translator. The only pertinent records for further study are:

- 1) WMJI Cleveland, Ohio 289B License

The proposed site is located within the protected contours of 2<sup>nd</sup> adjacent station WMJI Cleveland, Ohio on channel 258B. The predicted F(50-50) field strength of WMJI at the proposed transmitter site is 91.6 dB $\mu$ . Therefore, the predicted interfering signal contour F(50-10) generated by the proposed facility to WMJI is an additional 40 dB $\mu$  at

131.6 dBμ. The maximum distance to the 131.6 dBμ interference contour is 24.7 meters.

Figure 3 shows an aerial view of the transmitter site.

Figure 4 is a table for an ERP of 25 Watts showing the vertical clearance of the interfering contour based on the antenna relative field for various depression angles below horizontal for the antenna. The minimum vertical clearance is 6.9 meters, over 22.5 feet. All of the buildings within 24.7 meters distance from the transmitting antenna are single story floors. Therefore, the 2<sup>nd</sup> adjacent interference zone does not reach any population and the applicant, RADIO.COM, LLC, respectfully requests a waiver of C.F.R. 74.1204(d) of the Commission's rules based on the fact that there is no population within the area of predicted interference.

Because the transmitter site is not changing, there will be overlap between the 60 dBμ contours of the proposed facility and the current licensed facility.

This proposed facility will be a fill-in for WKDD-HD2, Munroe Falls, Ohio, facility ID No. 43863. Figure 5 shows that the 54 dBμ coverage area of the proposed facility lies within the 54 dBμ coverage area of WKDD.

This proposal meets Section 4 of the Working Arrangement for the Allotment and Assignment of FM Broadcasting Channels under the Agreement between the Government of Canada and the Government of the United States of America relating to the FM Broadcasting Service. Figure 6 shows that the proposed 34 dBμ interference contour F(50,10) does not cross the common border of Canada and the United States.

It was concluded that the proposed operation of a new translator in Cleveland, Ohio on 287D will not cause any harmful interference to any existing stations and will be in full compliance with the Commission's rules. Let it be noted that should any actual real world interference occur, the applicant acknowledges that it will promptly suspend operation of this translator in accordance with 47 C.F.R. § 74.1203.