

## **K15FT-D Application for CP for Minor Modification**

**October 6, 2023**

### Engineering Exhibit

The purpose of this application is to request a construction permit to modify the license (file number BLDTT-20091211AEV) for K15FT-D, Roswell, NM, Facility ID 32312, licensed to NBC Telemundo License LLC.

This application updates the antenna information to include the manufacturer's azimuth and elevation pattern data and make minor corrections to the antenna location, center of radiation, and tower height. This application proposes increasing the effective radiated power from 2.5 kW to 3.855 kW.

A TVStudy 2.2.5 analysis using the default 1 km cell size and 1 km terrain profile point spacing with the facility proposed in this application operating in compliance with the simple emission mask with an effective radiated power (ERP) of 3.855 kW at 1191.4 meters AMSL with the azimuth and elevation antenna patterns tabulation provided in the application showed no new interference created to any authorized constructed or not constructed facility or application in the LMS database dated October 9, 2023.

As shown on the attached map, Roswell, NM, the community of license is within the service area contour of the proposed facility.

### Antenna System

The proposed facility will use a top mounted Kathrein (formerly Scala) SL-8 directional antenna with horizontal polarization and 1.75 degrees of electrical beam tilt with the main beam axis of symmetry oriented at 240 degrees. The proposed horizontally polarized ERP is 3.855 kW.

This application uses the antenna pattern data, both azimuth and elevation, provided by Kathrein on the application and in the separate exhibit "K15FT-D Antenna Pattern Data". The question "Does the proposed antenna propose elevation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?" is checked "Yes" solely to allow uploading antenna elevation pattern data.

### Environmental Statement

The requested facility will use an existing tower. The tower height will not be increased. No new tower construction is required.

RF power density from the facility was calculated using the procedures in FCC Office of Engineering and Technology Bulletin 65. The maximum power density from the proposed facility at the site at ground level, allowing for 2 meter person height and 4.3 meters of building height, is calculated to be less than 0.00383 mW/cm<sup>2</sup> or 1.2% of the FCC maximum permissible exposure level of 0.319 mW/cm<sup>2</sup> at 479 MHz for an uncontrolled environment at any location around the site. At full power the RF power density from the proposed facility is calculated to be below occupational exposure levels in the main beam of the antenna at distances greater than 9.5 meters from the antenna and below uncontrolled environment (public) exposure levels at distances greater than 21.1 meters from the antenna.

The licensee and contractors working on the tower and an adjacent tower are required to follow appropriate safety measures. K15FT-D will cooperate with other users at the site to protect worker from excessive RF exposure and reduce power or cease operations as necessary. .

**K15FT-D Application for CP for Minor Modification (continued)**

**October 10, 2023**

Broadcast Facility

*Compliance with Section 73.709*

The channel assigned to K15FT-D is not allocated for land-mobile operation in this market.

*Compliance with Section 74.793(e), Section 74.793(f), Section 74.793(g), Section 74.793(f), and Section 74.793(h)*

A TVStudy 2.2.5 analysis using 1 km cell size and 1 km terrain profile point spacing and the facility proposed in this application showed no new interference to any authorized or applied for full power or Class A facility or to any authorized or applied for LPTV or TV translator facility in the FCC LMS database dated October 9, 2023 . A copy of the tvixcheck.txt file from TVStudy is attached to the application.

