

Application for Modification
Post – Repack Construction Permit
Engineering Exhibit

WUPX-TV – Richmond, Kentucky

Facility ID: 23128

Licensee "ION MEDIA LEXINGTON LICENSE, INC." is currently authorized to operate on Post-Repack DTV channel 25. The Antenna Structure Registration Number is 1063995 with a Latitude of 37° 54' 26.6" N+ and a Longitude of 083° 38' 01.1" W-.

The purpose of this application is to request authority to modify the construction permit (0000034400) to operate from Antenna Structure Registration Number 1044238 with a Latitude of 37° 47' 18.0" N+ and a Longitude of 084° 40' 49.0" W-. The HAAT is 354.1 m (AGL 327.7 m) with an AMSL of 615.7 m. An ERP of 465 kW will be utilized.

The station is filing this request to add additional antenna radials as well as correct the antenna rotation (+165°). Additional azimuth radials are:

- 215° - .204
- 225° - .240
- 235° - .319
- 68° - 1.0
- 292° - 1.0

Antenna System

A directional side mounted antenna will be utilized. It will be affixed to an existing guyed tower structure and will not increase the overall height of the structure. Any vertical component will not exceed the horizontal pattern in any direction. Elevation and Azimuth patterns are attached.

RF Hazard (Environmental)

Human Exposure measurements were calculated using the OET- 65 equation and the outcome is compliant with FCC 1.1310. Furthermore, the calculation is under 5% of the limit categorically excluding the application from further environmental evaluations.

Calculated Maximum	Calculated Exposure	Percent of Limit
mW/cm ²	mW/cm ²	
0.359	0.003653	1.02%

The station will coordinate with other(s) to comply with access, antenna and/or tower issues related to RF Exposure

Application for Modification
Post – Repack Construction Permit
Engineering Exhibit

Broadcast Facility

§73.616 Interference Caused

A calculation using *TVStudy* version 2.2.5 using an LMS database dated 2019-02-14 indicates that there is no excessive new interference created. This study used cell spacing of 2 km and a profile spacing of .2 km. The WUPX-TV baseline reference parameters were used. Also note that CP excludes station's baseline.

§73.622(f) Maximum ERP and Antenna Height

The application does not exceed the maximum ERP for the specified HAAT.

§73.622(i) DTV Allotments

The application does not change the DTV Table of Allotments.

§73.625 Coverage of Principal Community

The application's ERP will sufficiently cover Richmond, KY. RF coverage analysis attached.

§73.1030 Radio, Research and Receiving Locations

A calculation using *TVStudy* version 2.2.5 using an LMS database dated 2019-02-14 indicates that no excessive interference to any "protected" locations. As such, no coordination or notification is required.

§73.1650 International Agreements

The application's transmit location is 464.7 km from Canada. As such, no coordination or notification is required.

The application's transmit location is 1745.8 km from Mexico. As such, no coordination or notification is required.



AZIMUTH PATTERN

Type: Trasar

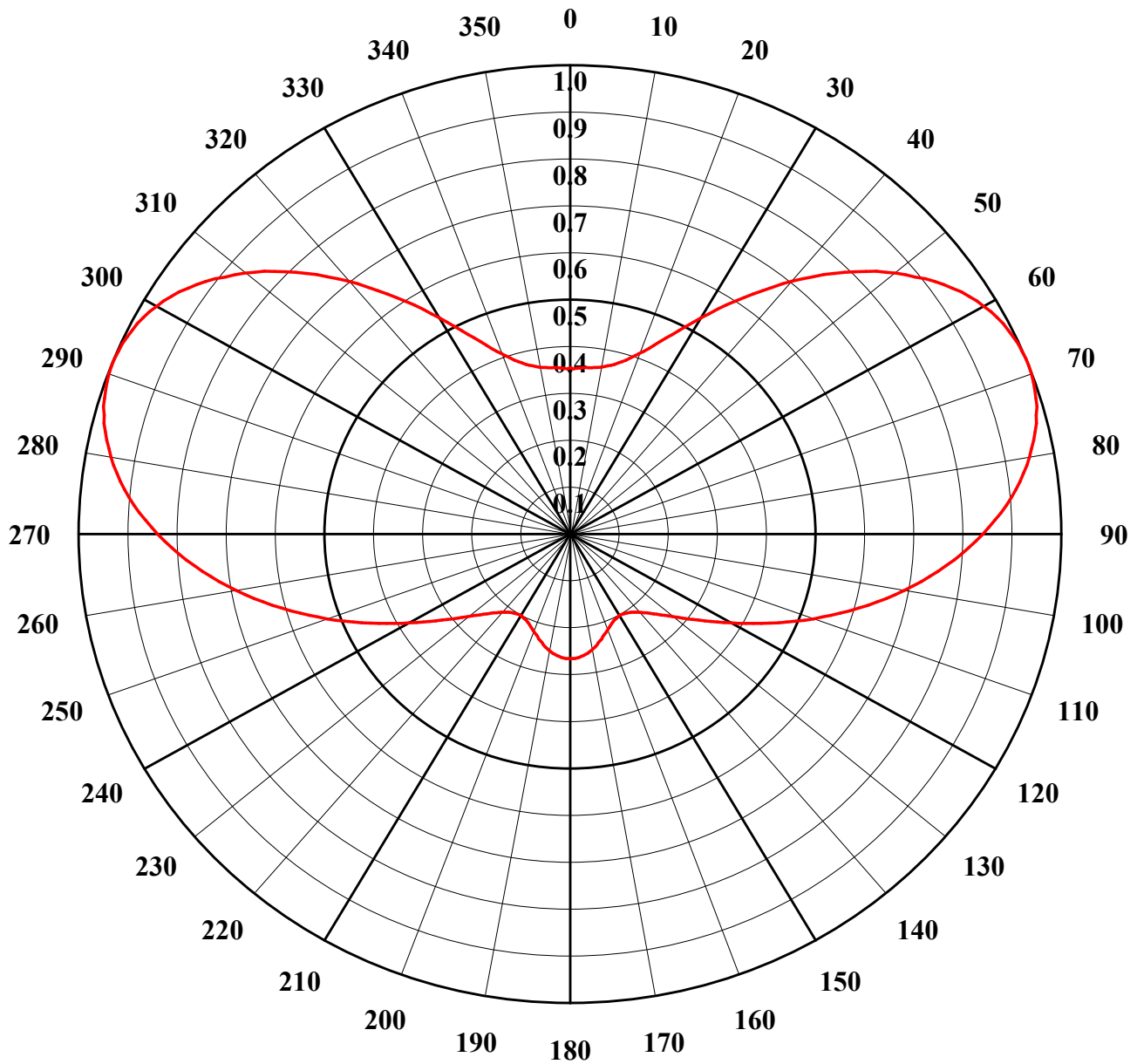
Directivity: Numeric 2.71 dBd 4.33

Peak(s) At: _____

Polarization: Horizontal

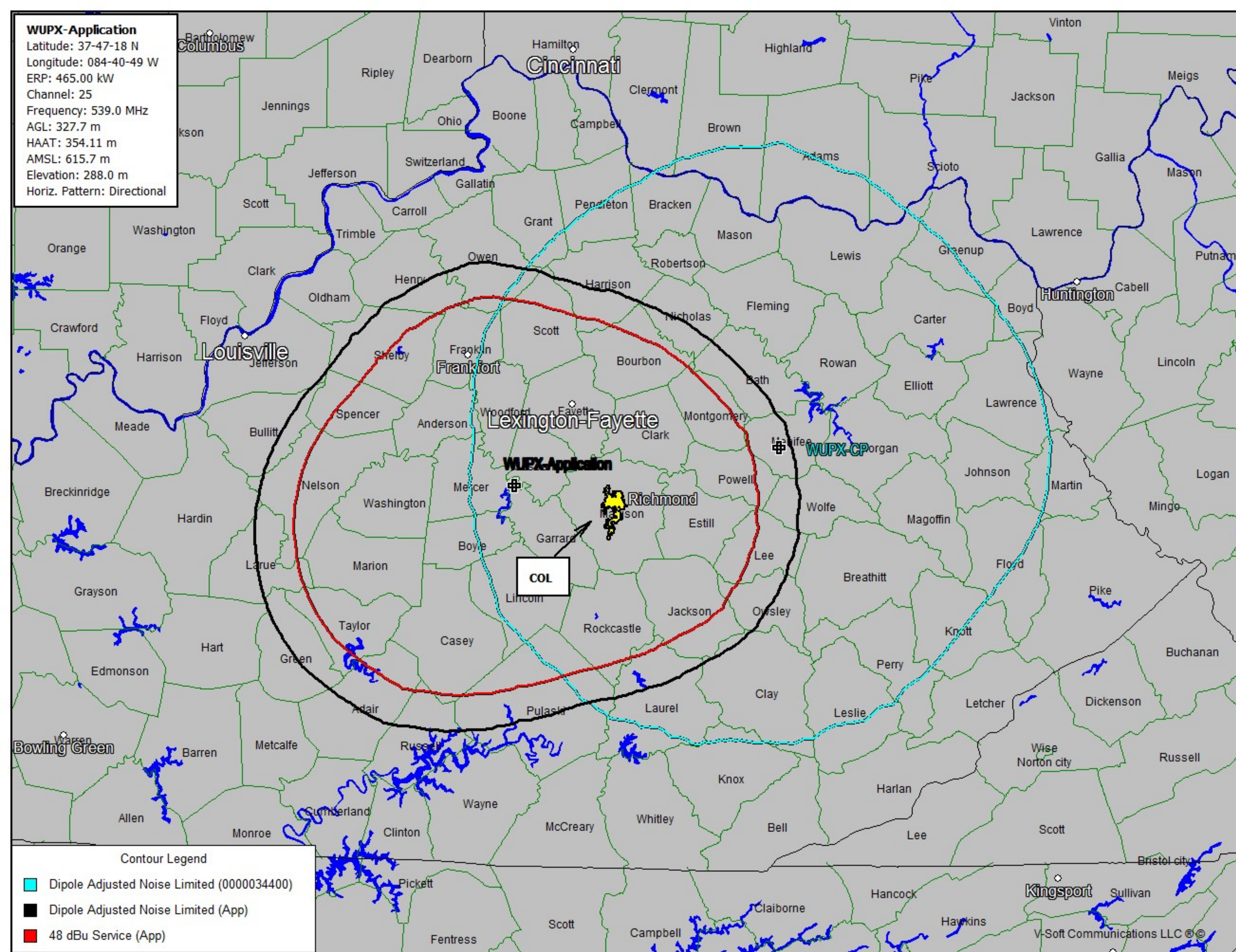
Channel: 25

Location: _____



WUPX-Application

Latitude: 37-47-18 N
Longitude: 084-40-49 W
ERP: 465.00 kW
Channel: 25
Frequency: 539.0 MHz
AGL: 327.7 m
HAAT: 354.11 m
AMSL: 615.7 m
Elevation: 288.0 m
Horiz. Pattern: Directional

**Contour Legend**

- Dipole Adjusted Noise Limited (0000034400)
- Dipole Adjusted Noise Limited (App)
- 48 dBu Service (App)