

TECHNICAL SUMMARY
REQUEST FOR SPECIAL TEMPORARY AUTHORITY (STA)
DTV STATION WVLR
TAZEWELL, TENNESSEE
CHANNEL 36 28 KW (MAX-DA) 406 m

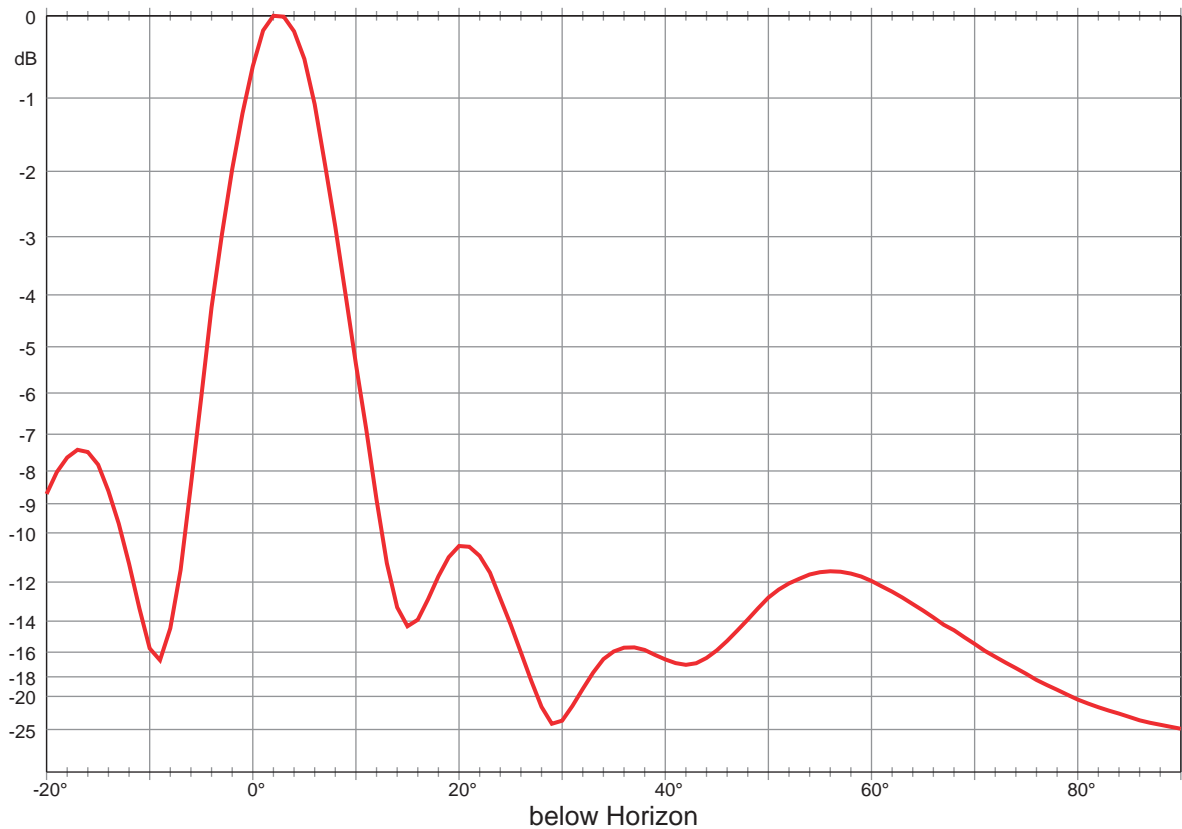
1. The instant request is for Special Temporary Authority (STA) for WVLR, Tazewell, Tennessee, which is authorized (CP, LMS File No. 0000025318) for post-transition DTV operation on channel 36. The WVLR STA facility will operate on post-transition channel 36 at reduced ERP (28 kW) with a temporary directional antenna side-mounted at a height of 61 meters above ground level on the existing/authorized tower. There will be no change in the overall structure height of the existing tower (ASRN 1220006).

2. The proposed STA antenna system has been designed such that there will be no extension of the predicted noise-limited service contour of the STA facility beyond that of the main facility (see Figure 1 attached).

3. RFR Compliance: The proposed facilities were evaluated in terms of potential radiofrequency radiation (RFR) exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna will be located 61 meters above ground level. The total DTV ERP is 28 kW (horizontal polarization). A conservative vertical plane relative field value of 0.25 (-12 dB) is presumed (for angles below 60 degrees downward, see attached antenna data). The calculated power density at a point 2 meters above ground level is 16.8 uW/cm^2 which is 4.2% of the FCC's recommended limit of 403.3 uW/cm^2 for channel 36 for an uncontrolled environment. Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

Access to the transmitting site is restricted and appropriately marked with RFR warning signs. Furthermore, a formal RFR protection protocol is in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measure will be taken to assure worker safety with respect to RFR exposure. Such measures include limiting the exposure time, wearing protective clothing, reducing power to an acceptable level or termination of transmitter output power all together until workers leave the restricted area.

Elevation Pattern (cartesian-linear)



Antenna, Order No. 75010402

Number of Bays: 1

Frequency: 605 MHz

Elevation Directivity: 6.29 dBd

Directivity: 9.88 dBd

Downtilt: 2°

Compensation: 0 %

No.	Vert. Distance [mm]	Power	Phase [°]
1	0	1	0