

TECHNICAL SUMMARY
REQUEST FOR SPECIAL TEMPORARY AUTHORITY (STA)
DTV STATION KDCU-DT
DERBY, KANSAS
CHANNEL 31 100 KW (ND) 345 m

1. The instant request is for Special Temporary Authority (STA) for KDCU-DT, Derby, Kansas, which is licensed (File No. BLCDDT-20090821AAM) for DTV operation on channel 31. The proposed KDCU-DT STA facility will operate on channel 31 with the ERP reduced to 100 kW using the current Dielectric model TFU-30GTH-R 04 nondirectional antenna. There will no change in the licensed RCAMSL of 765.6 meters. There will also be no change in the overall height of the existing supporting structure (ASRN 1217036).

2. The proposed STA been designed such that there will be no extension of the predicted noise-limited service contour of the STA facility beyond that of the licensed 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 345 meters above ground level. The total DTV ERP is 100 kW (horizontal polarization). A greater than expected vertical plane relative field value of 0.1 is presumed for the antenna's downward radiation (-60° to -90° elevation, see attached vertical plane relative field pattern). The calculated power density at a point 2 meters above ground level is 0.284 uW/cm² which is 0.074% of the FCC's recommended limit of 383.3 uW/cm² for channel 31 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, as this is a multi-user site, 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.

Date
Call Letters
Location
Customer
Antenna Type

12 May 2009
KDCU-DT
DERBY, KS
ENTRAVISION
TFU-30GTH-R 04

Channel **31**

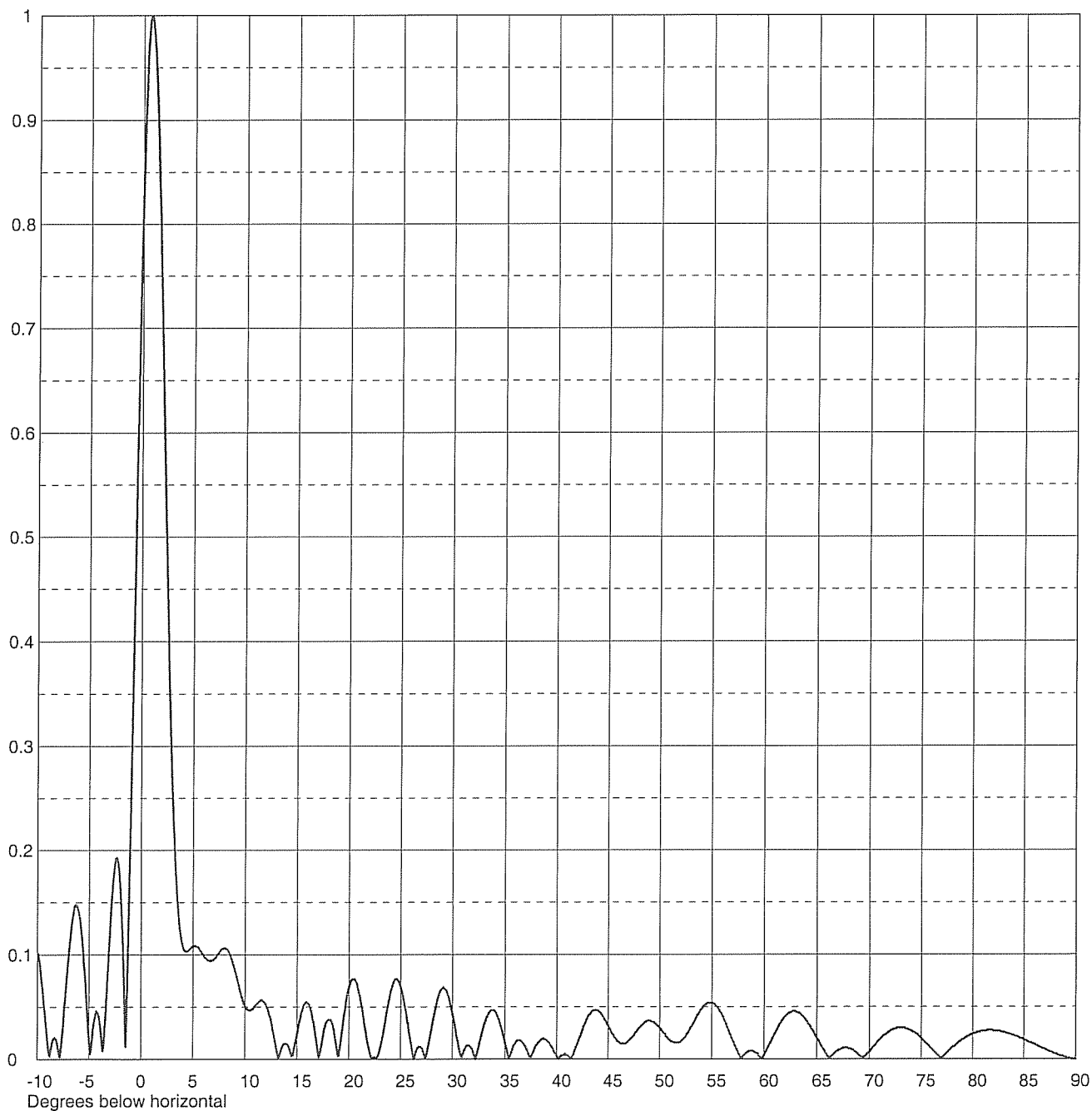
ELEVATION PATTERN

RMS Gain at Main Lobe
RMS Gain at Horizontal
Calculated / Measured

27.0 (14.31 dB)
18.7 (12.72 dB)
Calculated

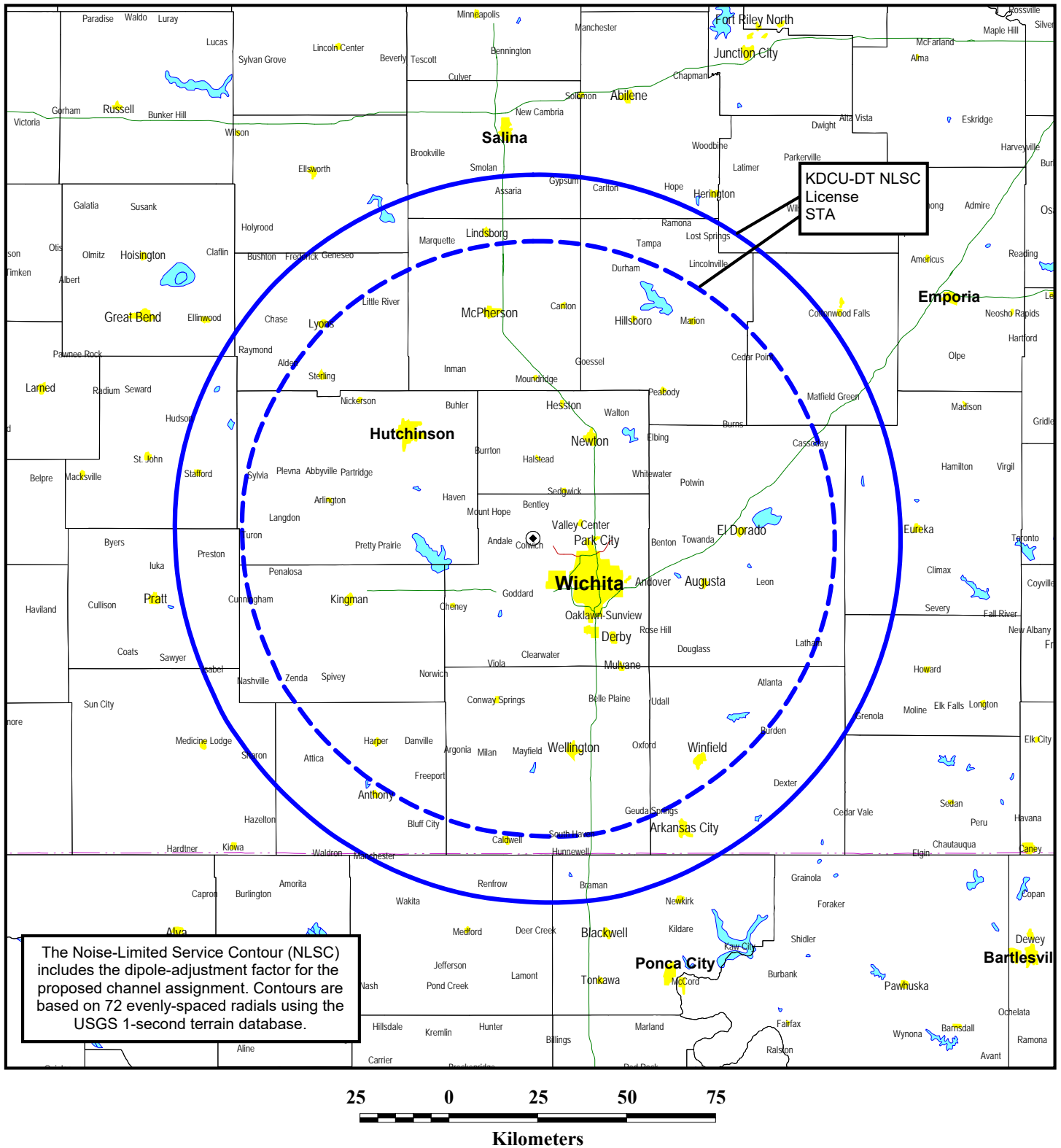
Beam Tilt
Frequency
Drawing #

0.75 Degrees
575.00 MHz
30G270075-90



Remarks:

Figure 1



FCC PREDICTED COVERAGE CONTOURS

STA OPERATION
DTV STATION KDCU-DT
DERBY, KANSAS
CH 31 100 KW (ND) 345 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida