

**APPLICATION FOR STATION LICENSE**  
**CUMULUS LICENSING LLC**  
**WNFN RADIO STATION**  
**CH 294C3 - 106.7 MHZ - 2.95 KW (DA)**  
**MILLERSVILLE, TENNESSEE**  
**April 2008**

**EXHIBIT A**

**WNFN Transmission System Calculations**

Effective Radiated Power:

Horizontal

2.95 kilowatts

Vertical

2.95 kilowatts

Antenna:

Electronics Research, Inc

1093-2CP-DA

Horizontal gain

2 bay full wavelength spaced

1.466 (directional)

Transmission Line:

(1,065 feet)

Andrew HJ7-50A

1 5/8 inch air dielectric

59.2 % Efficiency

Required Transmitter Power Output  
To Reach Effective Radiated Power:

3.399 kilowatts

Facilities Authorized:

Channel 294C3 - 106.7 MHz

Effective Radiated Power:

2.95 kilowatts (H/V)

Geographic Coordinates:

North Latitude 36° 15' 50"

West Longitude 86° 47' 39"

Antenna Center of Radiation:

Above Ground 233.0 meters

Above MSL 476.0 meters

HAAT 294.0 meters

Antenna Structure Registration #:

1224078