

APPLICATION FOR STATION LICENSE
LAWRENCE F. LOESCH
W28CJ LPTV STATION
CH 28 - 554-560 MHZ - 0.275 KW
MANTEO, NORTH CAROLINA
June 2012

EXHIBIT A

W28CJ-D LPTV Transmission System Calculations

Effective Radiated Power:	
Horizontal	0.275 kilowatt
Antenna:	RF Technologies Corporation Model - LP-1900-12-WB-28
Horizontal gain (maximum):	Power gain 20.4
Transmission Line:	Andrew Corporation - LDF5-50A
(80 feet)	7/8 foam dielectric 60.2% efficiency
Antenna filter :	Insertion loss 0.22 dB 95.060% efficiency ¹
Required Transmitter Power Output To Reach Effective Radiated Power:	0.0236 kilowatt (23.6 watts)
<hr/>	
Facilities Authorized:	Channel 28 - 554-560 MHz
Effective Radiated Power:	0.275 kilowatts (H)
Geographic Coordinates:	North Latitude 35° 51' 52" West Longitude 75° 39' 01"
Antenna Center of Radiation:	Above Ground 70.0 meters Above AMSL 71.2 meters
Antenna Structure Registration # :	1203259

1) The actual loss will be determined at installation and may result in a slight change of transmitter power output to maintain effective radiated power.