

**APPLICATION FOR STATION LICENSE**  
**REQUEST FOR FULL POWER PROGRAM TEST**  
**NOORDYK BROADCASTING, INC.**  
**WSHN-FM RADIO STATION**  
**CH 261A - 100.1 MHZ - 2.9 KW (DA)**  
**HOLTON, MICHIGAN**  
**November 2004**

**EXHIBIT A**

**WSHN-FM Transmission System Calculations**

Effective Radiated Power:	
Horizontal	2.9 kilowatts
Vertical	2.9 kilowatts
Antenna:	Electronics Research, Inc. LP-2E-DA-HW 2 bay half wavelength
Horizontal Gain	0.910
Transmission Line:	Andrew Corporation HJ7-50A
(530 feet)	1 5/8 inch air dielectric 76.0% Efficiency
Required Transmitter Power Output To Reach Effective Radiated Power:	4.193 kilowatts

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Facilities Authorized:	Channel 261A - 100.1 MHz
Effective Radiated Power:	2.9 kilowatts (H/V)
Geographic Coordinates:	North Latitude 43° 18' 50" West Longitude 86° 09' 17"
Antenna Center of Radiation:	Above Ground 146.0 meters Above MSL 346.0 meters HAAT 144.0 meters
Antenna Structure Registration #:	1231051