

APPLICATION FOR STATION LICENSE
NANTUCKET PUBLIC RADIO, INC.
W230AW FM TRANSLATOR
CH 230D - 93.9 MHZ - 0.25 KW
HYANNIS, MASSACHUSETTS
September 2014

EXHIBIT A

W230AW Transmission System Calculations

Effective Radiated Power:	0.25 Kilowatt (Horizontal/Vertical)
Antenna:	Shively 6810
Power Gain	0.896
Transmission Line:	Andrew HJ5-50
(179 feet)	7/8 inch air dielectric 85.3 % Efficiency
(23 feet)	Andrew LDF4-50A 1/2 inch foam dielectric 94.8% Efficiency
Additional Loss	Connector
(5)	0.1 dB each 0.5 dB total 89.2% Efficiency
Required Transmitter Power Output To Reach Effective Radiated Power:	0.390 Kilowatt (390 watts)

Facilities Authorized:	Channel 230D - 93.9 MHz
Effective Radiated Power:	0.25 Kilowatt (Horizontal/Vertical)
Geographic Coordinates:	North Latitude 41° 39' 24" West Longitude 70° 29' 53"
Antenna Center of Radiation:	Above Ground 49.0 meters Above MSL 82.0 meters
Antenna Structure Registration #:	1234487