

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

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|---|---|
| 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 |