

**APPLICATION FOR STATION LICENSE**  
**AND PROGRAM TEST AUTHORITY**  
**EAST CAROLINA RADIO, INC.**  
**WOBX-FM RADIO STATION**  
**CH 251C2 - 98.1 MHZ - 50.0 kW**  
**MANTEO, NORTH CAROLINA**  
**December 2014**

**EXHIBIT A**

**WOBX-FM Transmission System Calculations**

Effective Radiated Power: 50.0 Kilowatts (Horizontal/Vertical)

Antenna: Dielectric  
DCR C6 EP  
6 bay full wavelength spaced antenna

Power Gain: 3.2

Transmission Line: Andrew HJ8-50B  
(468 feet) 3 inch air dielectric  
86.1% Efficiency

Required Transmitter Power Output  
To Reach Effective Radiated Power: 18.15 Kilowatts (18,150 watts)

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Geographic Coordinates: North Latitude 35° 51' 54"  
West Longitude 75° 39' 00"

Antenna Center of Radiation: AMSL 137.0 meters  
HAAT 137.0 meters  
AGL 136.0 meters

ASRN: 1290758