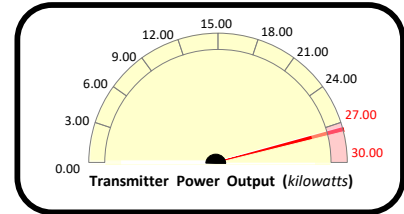


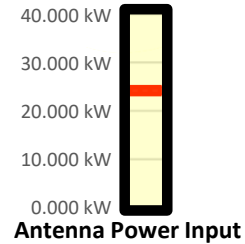
# Transmitter Power Output Worksheet

**Call letters:** WNOR(FM) .C (Auxiliary)  
**City of License:** Norfolk, VA  
**Channel:** CH254B (98.7 MHz)  
**File No:** LMS-0000098371  
**Facility ID:** 67080  
**Applicant:** Tidewater Communications, LLC



**Effective Radiated Power (ERP):** 50.000 kW

**Antenna Make:** Electronics Research Inc. (ERI)  
**Antenna Model:** SHPX-4AC  
**No of Elements:** Four (4)  
**Antenna COR AGL:** 123.4 meters AGL  
**Antenna COR AMSL:** 126.1 meters AGL  
**Max Input Power:** 39.000 kW  
**Power Gain:** 2.133  
**Antenna Gain:** 3.290 dBd  
**Calculated Antenna Input Power:** 23.441 kW  
**Transmitter Rated Power:** 30.000 kW  
**Transmitter Make/Model:** BE-30



**Power Gain to Antenna gain (dBd) Conversion:**  
 $=\text{Log}[\text{power gain}] * 10$

## Inventory of System / Insertion Losses

Explanation	Component Make/Model		Length	Loss
Main Feedline (3" Air)	Andrew HJ8-50B	(0.141 dB/100 ft)	347 ft	-0.489 dBd
Jumper to antenna (3" Rigid)	3 1/8" Myat Rigid	(0.093 dB/100 ft)	6 ft	-0.006 dBd
Jumper to Transmitter (3" Rigid)	3 1/8" Myat Rigid	(0.093 dB/100 ft)	63 ft	-0.059 dBd
3 Inch End Connector(s)	Generic (9@0.01 dB each)		n/a	-0.090 dBd
3 1/8 Inch Elbow(s)	Myat Part No. 301-025 (3@0.02 dB each)		n/a	-0.060 dBd

**TOTAL SYSTEM GAIN/LOSS:** 2.59 dBd  
**CALCULATED TRANSMITTER POWER OUTPUT:** 27.563 kW  
 $(1 / [10^{(2.59/10)} / \text{ERP}])$