

Transmitter Power Output Worksheet

Call letters: WLFX (FM) .C
City of License: Berea, KY
Channel: CH294C3 (106.7 MHz)
File No: BPH-20160523ABP
Facility ID: 4809
Applicant: Wallingford Communications, LLC

Effective Radiated Power (ERP): 14.500 kW

Antenna Make: Propagation Systems, Inc. (PSI)
Antenna Model: PSIFMR-4C-R-DA
No of Elements: Four (4)
Antenna COR AGL: 119 meters AGL
Antenna COR AMSL: 409 meters AMSL
Max Input Power: 9.00 kW

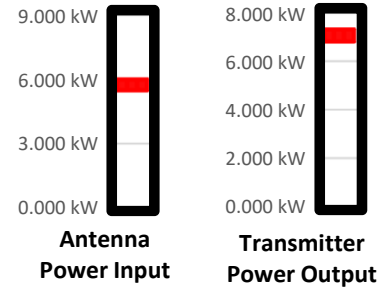
Power Gain: 2.64

Antenna Gain: 4.216 dBd

Calculated Antenna Input Power: 5.492 kW

Transmitter Rated Power: 7.500 kW

Transmitter Make/Model: Nautel NV 7.5LT



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

Inventory of System / Insertion Losses

Explanation	Component Make/Model	Length	Loss
1 5/8" End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
1 5/8" Jumper to Antenna	Cablewave HCA158-50J (0.200 dB/100 ft)	7 ft	-0.014 dBd
1 5/8" End Coupler(s)	Generic (2@0.02 dB each)	n/a	-0.040 dBd
1 5/8" Air Feedline	Cablewave HCA158-50J (0.200 dB/100 ft)	422 ft	-0.844 dBd
1 5/8" End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: 3.28 dBd
CALCULATED TRANSMITTER POWER OUTPUT: 6.817 kW
 $(1 / [10^{(3.28/10)}] / \text{ERP})$