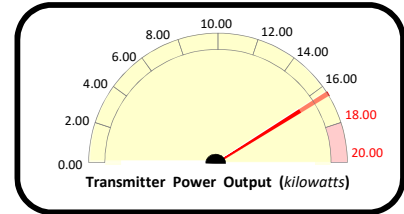


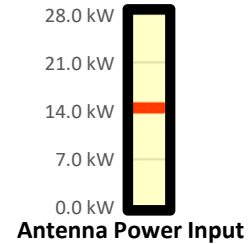
# Transmitter Power Output Worksheet

**Call letters:** WSNY(FM) Auxiliary (Lic Modification)  
**City of License:** Columbus, OH  
**Channel:** CH234B (94.7 MHz)  
**File No:** BXLH-20071218AAB  
**Facility ID:** 22339  
**Applicant:** Franklin Communications Inc.



**Effective Radiated Power (ERP):** 46.000 kW

**Antenna Make:** Electronics Research Inc. (ERI)  
**Antenna Model:** SHPX-6AE  
**No of Elements:** Six (6)  
**Antenna COR AGL:** 60 meters AGL  
**Antenna COR AMSL:** 327 meters AMSL  
**Max Input Power:** 28.0 kW  
**Power Gain:** 3.303  
**Antenna Gain:** 5.189 dBd  
**Calculated Antenna Input Power:** 13.927 kW  
**Transmitter Rated Power:** 20.000 kW



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

## Inventory of System / Insertion Losses

| Explanation                  | Component Make/Model                    | Length | Loss       |
|------------------------------|---|--------|------------|
| Typical End Connector/Flange | Generic (1@0.02 dB each)                | n/a    | -0.020 dBd |
| Main Feedline (3" Air)       | Heliacx HJ8-50B (0.141 dB/100 ft)       | 247 ft | -0.348 dBd |
| Typical End Connector/Flange | Generic (1@0.02 dB each)                | n/a    | -0.020 dBd |
| Combiner                     | Jampro Model RCCS-322-1.3H              | n/a    | -0.250 dBd |
| Typical End Connector/Flange | Generic (1@0.02 dB each)                | n/a    | -0.020 dBd |
| 3 1/8 Inch Elbow             | Myat Part No. 301-025(or equivalent)    | n/a    | -0.020 dBd |
| 3" Hardline Segment          | 3 1/8" EIA Rigid Line (0.091 dB/100 ft) | 4 ft   | -0.004 dBd |
| 3 1/8 Inch Elbow             | Myat Part No. 301-025(or equivalent)    | n/a    | -0.020 dBd |
| Typical End Connector/Flange | Generic (1@0.02 dB each)                | n/a    | -0.020 dBd |
|                              |   |        |            |
|                              |   |        |            |
|                              |   |        |            |
|                              |   |        |            |

**TOTAL SYSTEM GAIN/LOSS:** 4.47 dBd  
**CALCULATED TRANSMITTER POWER OUTPUT:** 16.445 kW  
 $(1 / [10^{(4.47/10)}] \text{ ERP})$