

**Educational Media Foundation**  
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*Athens, OH*  
*W231CQ*

## **Transmitter Power Output Calculation**

The purpose of this modification to a licensed facility is to specify a change in the transmitter power output calculation only.

### Transmitter Power Output

AUTHORIZED ERP: 13 WATTS

NICOM BKG77-1 ANTENNA POWER GAIN: 0.47

195.3 FEET RFS CABLEWAVE LCF12-50 1/2 INCH FOAM COAX EFFICIENCY: 0.751

SHIVELY 2914-3 BAND PASS FILTER EFFICIENCY: 0.810

10 FEET BELDON JUMPER EFFICIENCY: 0.970

TPO: 46.8758 WATTS

CONFIRMATION:  $46.8758 \times 0.47 \times 0.751 \times 0.810 \times 0.970 = 12.9999$  WATTS

NOTE: TRANSMITTER POWER OUTPUT SHOWN AS .047KW DUE TO ROUNDING AND RESOLUTION OF THE FORM.