

Okmulgee K270BK Translator Power Output Computation

Feedline loss:

$$\begin{array}{rcl} & 12' \text{ RG-214} & = -0.244 \text{ dB} \\ & 306' \text{ of LDF5-50A } 7/8'' \text{ Heliax} & = -1.12 \text{ dB} \\ & 7' \text{ of LDF4-50A } 1/2'' \text{ Heliax} & = -0.05 \text{ dB} \\ & \text{Polyphaser surge protector \& 8 connectors} & = -0.1 \text{ dB} \\ & \text{-----} & \\ & \text{Total feedline losses} & = -1.514 \text{ dB (70.6 \% efficiency)} \end{array}$$

Dielectric DCR-L antenna Power Gain: (0.46)

Antenna Power Gain X feedline efficiency = 0.32476

TPO = 140 Watts / 0.32476 = 431 watts