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## **Transmitter Power Output Determination**

K285BG FM Translator of KKEQ Radio  
Grand Forks, North Dakota  
June 5, 2006

This document details how licensed TPO (Transmitter Power Output) was determined.

Transmitter Power Output (TPO)	<b>424 Watts</b> (0.424 KW)
Telewave TWPC1005-2 Band Pass Filter	70.8% Efficiency
12 Feet of Belden RG-213 cable	94.9% Efficiency
220 feet of Cablewave FLC158-50 1-5/8" cable	88.8% Efficiency
Antenna Input Power	253 Watts
Shively 6812 Circular Polarized Antenna	0.99 Gain
Effective Radiated Power	<b>250 Watts</b> (0.25 KW) Vertical and Horizontal