

KENU FM  
Transmitter Power Output Calculations  
Monday, August 29, 2011

Installation of the KENU FM transmission system requires calculations of the Transmitter Output Power (TPO) required to achieve an Effective Radiated Power (ERP) of 0.240 kW circular polarization.

Effective Radiated Power	(ERP)	0.240kW	-6.2 dBk
Shively Antenna model 6810 Shively specifications	(gain)	0.46	+3.4 dB
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		0.525 kW	-2.8 dBk
Andrew transmission line LDF5-50 75 ft @ 88.5 MHz 0.346 dB/100ft	(loss)		+0.3 dB
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Transmitter Power output - kW		0.562 kW	-2.5 dBk

Director of Engineering  
Jeffrey P. Burmeister