

KBMG 106.3 (FM1) Bountiful Booster power output calculations

This exhibit was prepared to demonstrate the TPO (transmitter power output) utilized to achieve the authorized effective radiated power of 1.2 KW

Table of gains & losses

The antenna system is a directional Jampro panel antenna model JCPD 4H/3V-1S with a power gain of 5.25 dB or 7.2 dB antenna gain being fed by 100 ft of Andrew 2 ¼ Heliac model HJ12-50 air dielectric with losses of .142 dB per 100 ft. It is connected to a Jampro filter/combiner model RCCC.8 with losses of .8 dB that will accommodate the addition of other future stations to be combined into one common antenna. The system feeder uses Andrew LDF4-50A into the filter system with a loss of .137 dB.

To make the necessary ERP the transmitter output will be:

Tx output 297 watts – total losses of 1.08 dB + antenna gain of 7.2 = 1.2 KW watts ERP.