

The Trustees of the University of Pennsylvania  
Application for FM Broadcast Station License to Cover  
Construction Permit BMPED-20130906AAS  
WXPB, Philadelphia, PA -- Facility ID 68229

Exhibit 7A – Transmitter Power Calculation

Transmit Antenna Gain		+2.0737 dB
ERI Model LPX-5E-HW		
7/8" Transmission Line	Eff 0.963	-0.1637 dB
14 meters Andrew HJ5-50		
1-5/8" Transmission Line	Eff 0.609	-2.1538 dB
341 meters Andrew HJ7-50A		
Overall Antenna System Gain		-0.2438 dB
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Transmitter Output Power	2.803 kW	+4.4763 dBk
Measured at Line Input		
(Rounds to 2.80 kW)		
Overall Antenna System Gain		-0.2438 dB
Effective Radiated Power		+4.2325 dBk

NOTES:

Antenna Gain based on manufacturer's published specifications.

Transmission Line Efficiency based on FCC Audio Division online calculator for  
Channel 203 (88.5 MHz)