

TRANSMITTER OUTPUT STATEMENT

THE BOARD OF EDUCATION OF SOUTHFIELD
APPLICATION TO COVER
CONSTRUCTION PERMIT BPED-20040608AAF
WSHJ-FM CHANNEL 202A - SOUTHFIELD, MICHIGAN

Background

The transmitter output power was calculated based on the required effective radiated power (ERP), antenna gain, transmission line and connector losses.

Transmitter Output Power

ERP	0.105 kW	-9.789 dBk
ERI Antenna Gain		
ERI FM100-2 Two Bay Antenna		
Antenna Gain = 0.897		-0.472 dB
“N” Type End Connectors		-0.100 dB
82.0 meters of transmission line		
Andrew LDF5-50A		
1.13 dB/100m @ 88.0 MHz		-0.926 dB
“N” Type End Connectors		-0.100 dB
1.0 meter Jumper Cable with “N”/”N” Connectors		
Andrew 201124		<u>-0.090 dB</u>
Transmitter output Power	0.155 kW	-8.101 dBk