

# Mike Johnson Broadcast Technology

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## Transmitter Power Output Calculations

Call Sign:	K264AA
Community:	Corvallis, OR
Date:	05/22/2014
Site description:	Vineyard Mountain
Frequency:	100.7MHz
Transmission line:	Andrew LDF4-50A
Length:	70ft
Loss:	0.48dB; 89.6% efficiency
Power dissipated in line:	0.60W
Other loss components	Bandpass Filter; Telewave TWPC-1005-2
Loss due to above:	1.1dB; 77.6% efficiency
Power dissipated in filter:	1.70W
Other loss components	6' Times Cable LMR-400 jumper with N connectors
Loss due to above:	0.12dB; 98.8% efficiency
Power dissipated in jumper:	0.16W
Total Losses	2.46W
Antenna:	Kathrein-Scala CLFM-RX/HRM
Bays:	1
Antenna power gain:	4.47
System ERP:	23.0W
Transmitter Output:	7.6W