

PERDOMO MEDIA GROUP (PMG)

25 Woodman St. Providence, RI. 02907. Tel 401-338-2642

Transmitter Power Output

W222AL 92.3 mHz

08-09-2021

Transmitter Power Output: 137 Watts

The PSI FML-4 antenna has a power gain 2.35 (3.71 dB)

The 308.4 ft. Andrew 7/8 foam cable ANDAVA5-50 has a loss of 1.071

The Approx 6 feet of LMR-400 Cable Assembly Loss .1 db

The total transmission line system has a total loss of 1.171 db for an overall line
Power efficiency of 78.101 percent.

Gain 2.35
Line Eff. .78
ERP 250W

$$2.35 \times .78 = 1.83 \quad 250 / 1.83 = \underline{136.61 \text{ TPO}}$$

TPO = 137 watts



BW Broadcast Transmitter TX300 V3

W222AL Transmitter Power Output
Calculation Diagram
Drawn by Quilvio Perdomo
Perdomo Media Group (PMG)
August 06, 2021

PSI FML-4 Low Power
Slant V FM Directional
Antenna for 92.3 MHz
Circular polarization,
7/8" EIA input
gain 2.35 (3.71 dB)

Andrew ANDAVA5-50
Andrew 7/8 Foam Cable
94 meters (308.4 ft)
P. Efficiency 78.101%
Volt Efficiency 88.389
Loss 1.071

Approx 6 feet
LMR-400
Cable Assembly
Loss .1 dB
Per Times Microwave
On-Line Calculator