

EXHIBIT #12

TRANSMITTER OUTPUT POWER

Northern Arizona University
K277AR
Cottonwood, Arizona
License to Cover
BNPFT-20030828ARM

CH 277D

0.01 kW V

Transmission line efficiency = 86.9% - 22 meters of Andrew 1/2" Heliax HJ4-50 Air line

Power Gain of Antenna = 5.0 – Scala CL-FM

ERP = 0.01 kW H & V

$TPO = ERP / (\text{efficiency} * \text{gain})$

$TPO = 0.01 / (0.869 * 5.0)$

TPO = 0.0023 kW