

APPLICATION FOR STATION LICENSE
UNITY BROADCASTING, INC.
WLCS (FM) RADIO STATION
CH 252A - 98.3 MHZ - 1.6 KW
NORTH MUSKEGON, MICHIGAN
February 2003

EXHIBIT A

WLCS Transmission System Calculations

Effective Radiated Power:

Horizontal	1.60 kilowatts
Vertical	1.60 kilowatts

Antennas:

Electronics Research, Inc. LPX-3AE
3bay full wavelength
1.5588

Horizontal gain

Transmission Line:
(471feet)

Andrew HJ7-50A
1 5/8 inch air dielectric
80.1% efficiency

Required Transmitter Power Output
To Reach Effective Radiated Power:

1.28 kilowatts

Facilities authorized:

Channel 252A - 98.3 MHz

Effective Radiated Power:

1.60 kilowatts (H/V)

Geographic Coordinates:

North Latitude	43° 18' 50"
West Longitude	86° 09' 17"

Antenna Center of Radiation:

Above Ground	141.0 meters
Above MSL	341.0 meters
HAAT	139.0 meters

FCC Tower Registration Number:

1231051