

## **Engineering Statement**

### **In Support of an Application for a Construction Permit**

#### **WTWR, Luna Pier, MI Channel 252A**

#### **WTWR Longley-Rice Study Parameters**

Software Author and Version:	SoftWright, Version 4.1.586
Transmitter Latitude:	41:40:05.0N
Transmitter Longitude:	83:27:11.0W
Transmitter Center of Radiation:	315.5 meters AMSL (135.6 meters AGL)
Frequency:	98.3 MHz
Power (ERP)	3.40 kW
Antenna:	Directional
14 radials (358° to 11°, from 0.1 km to 40.0 km in 0.1 km increments)	
Terrain resolution: 3-arc second NGDC database	
Receiver Antenna:	9.14 meters
Mode of Variability:	11 (Individual Mode)
Confidence:	50%
Reliability:	50%
Polarization:	Vertical
Relative Permittivity:	15
Conductivity:	0.005 (S/m)
Climate:	5 (Continental Temperate)
Sea Level Refractivity:	0
Surface Refractivity:	300.90
Effective earth curvature:	1.333
Clutter Factor Used:	5 dB