Clearance to WYOO (FM) License and Application

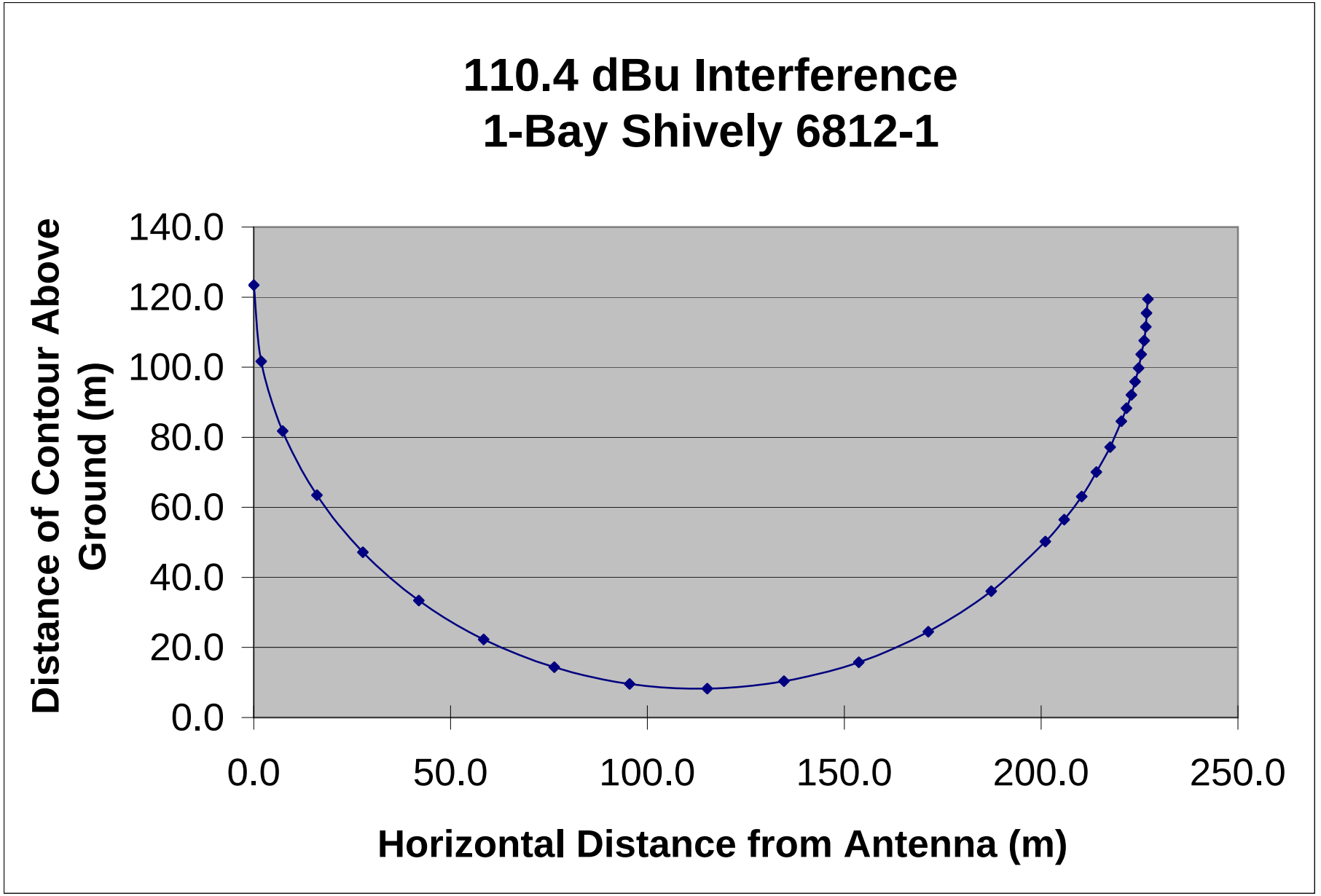
This instant translator application clears all allocation constraints of Section 74.1204. On first glance, it appears that interference is created to third-adjacent channel station WYOO (FM) (License and Application) Springfield, FL. However, Section 74.1204(d) instructs us:

> ***"In addition, an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable."***

Co-located WYOO (FM) (License) places 169.2 dBu over the proposed translator site. Adding the 40 dBu U/D radio to the 169.2 dBu signal produces an interfering contour of 209.2 dBu. This interfering contour extends a distance of less than 1 meter from the antenna, which is 123.4 meters above the ground. Therefore, the interfering contour does not reach the ground and cannot be received by any listener.

WYOO (FM) (Application) places 70.4 dBu over the proposed translator site. Adding the 40 dBu U/D radio to the 70.4 dBu signal produces an interfering contour of 110.4 dBu. This interfering contour extends a distance of 228.1 meters in the main lobe of the signal. The antenna that is being proposed is a 1-bay Shively 6812-1 antenna with a center of radiation of 123.4 meters above ground. This antenna significantly focuses the 110.4 dBu interfering contour over the heads of any nearby resident. Please see the drawing that follows. The closest the interfering contour comes to the ground is 8.2 meters. This is occurs at a distance of 115.2 meters from the tower and is generated by the 45 degree azimuth of the antenna. Therefore, the interfering contour cannot be received by any listener.

In conclusion, based on the foregoing explanation showing that no persons will receive interference, it is thought this application is in compliance will Section 74.1204 using Section 74.1204(d).


110.4 dBu Interference
1-Bay Shively 6812-1
Distance of Contour Above Ground (m)
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
0.0
50.0
100.0
150.0
200.0
250.0
Horizontal Distance from Antenna (m)