

# **SECOND ADJACENT CHANNEL WAIVER REQUEST**

## **Apopka, FL**

**(WPKA-LP 99.3 MHz)**

**Applicant requests a waiver for a proposed site that qualifies for a second adjacent waiver as specified in Section 73.807(e) of the Commission's Rules.**

**Station WMMO (Facility ID # 23444) Orlando, FL operates on channel 255 and is located 12.5 km from the proposed LPFM site. WMMO operates at 44 kW ERP at 159 meters HAAT in the direction of the LPFM tower. WMMO places a 87.1 dBu F(50,50) service contour at the proposed LPFM site.**

**Using the U/D method, the proposed LPFM station is predicted to produce an undesired interference overlap in respect to WMMO to the proposed LPFM station's 127.1 dBu interference contour ("overlap zone"). The proposed LPFM facility will operate from an antenna height of 28.5 meters above ground level which places it at 40 meters HAAT.**

### **Undesired-to-Desired Ratio Method**

**WMMO f(50,50) signal: 87.1 dBu**

**Second-adjacent protection: + 40 dB**

**Interference-zone boundary: 127.1 dBu**

**Distance to 127.1 dBu: 28.5 m (HAAT = 40 m, ERP <= 0.0571 kW)**

**At 57 watts ERP, the interference zone produces a worst-case circle radius of 23 meters from the center of radiation which is shown on the following map. There is no predicted interference zone on the ground. There are no occupied structures nor major roadways within 23 meters of the radiation center, thus no population will be subject to interference from the proposed station according to the undesired-to-desired ratio method.**

## **Interference Zone map (Aerial View)**



**The buildings in the above image represent City Of Apopka Equipment Sheds and are unoccupied. The height of these equipment buildings are approximately 3.0 meters to the roofline.**

**Assuming an ERP of 57 watts, the interfering 127.1 dBu interference contour extends a distance of 23 meters. Given the LPFM antenna is 28.5 meters AGL, the interference contour will still be at least 5.5 m AGL.**

**Therefore, based on the information presented, the proposed LPFM Station will not create any interference to existing or potential listeners of Second Adjacent Station WMMO.**