

Columbus, OH - WLWQ(FM) (FM Auxiliary)

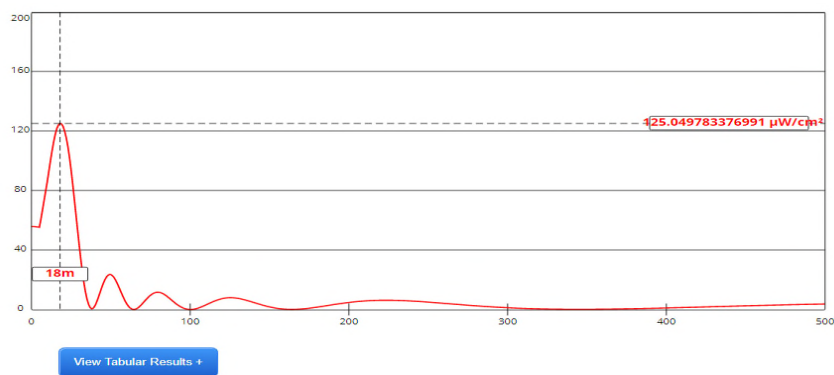
Compliance with Radiofrequency Radiation Guidelines

Explanation of Study. The proposed facility complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments as set forth under §1.1310 of the Commission's rules and the guidelines for RF radiation protection guidelines as set forth in OET Bulletin No. 65 (Edition 97-01), and the accompanying Supplement A, (Edition 97-01). The site is intended to house multiple transmitters.

Concerning FM contributions, the potential for human exposure to non-ionizing radiofrequency radiation has been evaluated with regard to §1.1310 utilizing the Commission's own *FM Model* web-based software application. The use and implementation of this FCC sanctioned software is a matter of record before the Commission. To ensure complete protection, each maximum FM contribution has been assumed without regard to any restricted access fencing distance. The maximum permissible uncontrolled limit for FM stations is 200 $\mu\text{W}/\text{cm}^2$. The maximum permissible controlled limit is 1000 $\mu\text{W}/\text{cm}^2$. Therefore, total site contributions of $\leq 200 \mu\text{W}/\text{cm}^2$ remain within the tolerances as allowed by §1.1310 and its governing OET Bulletin No. 65 (Edition 97-01) for the more restrictive of either two protections.

Summary of Stations. The proposed WLWQ(FM).aux - Columbus, OH auxiliary analog FM station (Facility ID: 11277) will operate on CH242B (96.3 MHz) with 46.0 kW ERP circular polarization (H&V). This facility will be diplexed into the existing WSNY(FM).aux - Columbus, OH auxiliary analog FM station (Facility ID: 22339) which will operate on CH234B (94.7 MHz) with 46.0 kW ERP circular polarization (H&V). The common antenna COR is mounted 60 meters above ground level (AGL). The common antenna has been identified as a six (6) bay, ERI Model SHPX-6AE "Opposed U" antenna. The elements will be spaced 1.0 wavelength (λ) apart. The antenna employs EPA Type 3 elements as defined by the Commission's own FM Model - Appendix B (issued March 31, 2016). Neither facility will operate with HD/IBOC facilities at this time. For purposes of this RF Compliance study, a common diplexed power of 92.0 kW ERP (H&V) has been assumed as one single contribution.

The results of the evaluation for each FM station have been shown at the end of this RF compliance discussion. To ensure complete protection, the maximum FM contribution has been assumed without regard to any restricted access fencing distance. In addition, the facility is, or will be, properly marked with signs. Entry is, or will be, restricted by means of fencing with locked doors or gates. Furthermore, coordination with other users of the site will be secured to reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.



Channel Selection	Channel 242 (96.3 MHz)	
Antenna Type +	EPA Type 3: Opposed U Dipole	
Height (m)	60	Distance (m)
ERP-H (W)	92000	ERP-V (W)
Num of Elements	6	Element Spacing (λ)
Num of Points	500	Apply