

RF Appendix 1

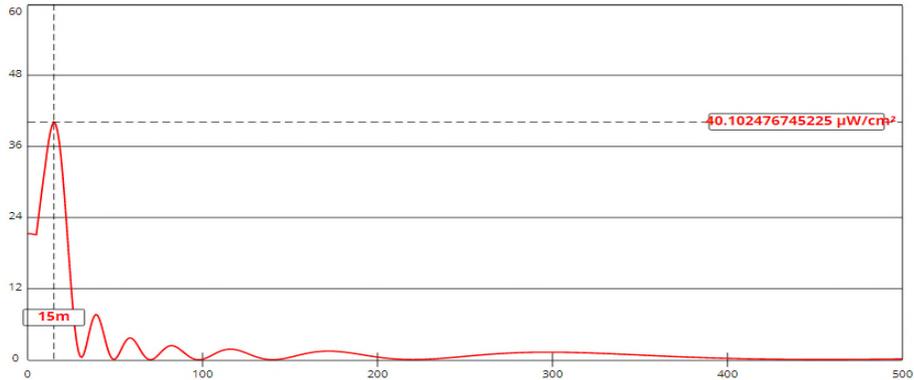
Compliance with Radiofrequency Radiation Guidelines

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 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 this single transmitter, therefore 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.

The maximum permissible uncontrolled limit $200 \mu\text{W}/\text{cm}^2$. The maximum permissible controlled limit is $1000 \mu\text{W}/\text{cm}^2$. Therefore, single 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.

The proposed WJOU(FM).P - Huntsville, AL analog FM station (Facility ID: 49943) will operate on CH211C2 (90.1 MHz) with 33.0 kW ERP circular polarization (H&V). The proposed operation will broadcast from an antenna COR mounted 58.8 meters above ground level (AGL). The facility will broadcast from an eight (8) bay, Electronics Research Inc. (ERI) Model LPX-8C antenna employing EPA Type 3 "Crossed U Dipole" elements as defined by the Commission's own FM Model - Appendix B (issued March 31, 2016). The antenna elements will be spaced 1.0 wavelength (λ) apart. This facility will not operate with HD/IBOC facilities at this time.

The results of the evaluation for the 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.



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Channel Selection	Channel 211 (90.1 MHz) ▾		
Antenna Type +	EPA Type 3: Opposed U Dipole ▾		
Height (m)	58.8	Distance (m)	500
ERP-H (W)	33000	ERP-V (W)	33000
Num of Elements	8	Element Spacing (λ)	1
Num of Points	500	Apply	