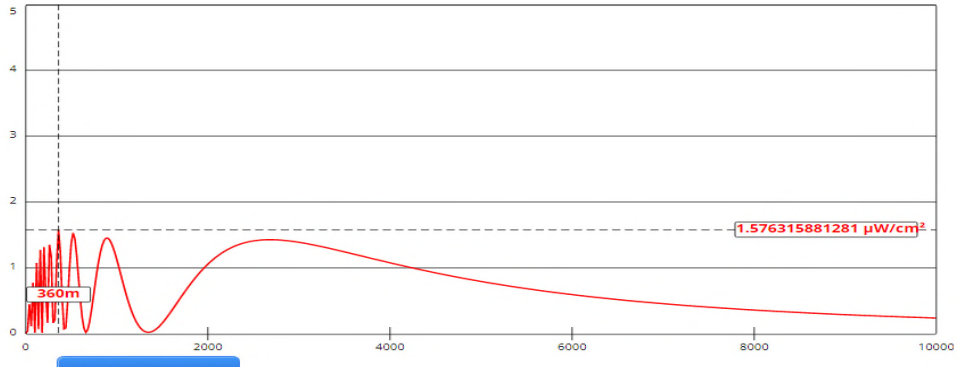
Compliance with Radiofrequency Radiation Guidelines

The facility complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments as set forth under §1.1307(b)(3) 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 multiple transmitters, therefore the potential for human exposure to non-ionizing radiofrequency radiation has been evaluated with regard to the §1.1307(b)(3) "five percent (5%) contribution rule" 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.

With regard to the "five percent (5%) contribution rule", §1.1307(b)(3), five percent (5%) of the maximum permissible 200 µW/cm² uncontrolled limit yields a threshold value of 10 µW/cm². Five percent (5%) of the maximum permissible 1000 µW/cm² controlled limit yields a threshold value of 50 µW/cm². Therefore, single contributions of ≤10 µW/cm² remain within the tolerances as allowed by §1.1307(b)(3) and its governing OET Bulletin No. 65 (Edition 97-01) for the more restrictive of either two protections.

Four facilities are quadplexed into a common antenna. The authorized KMOR(FM).C - Gering, NE analog FM station (Facility ID: 67473) operates on CH227C0 (93.3 MHz) with 100.0 kW ERP circular polarization (H&V). The authorized KNEB-FM.C - Scottsbluff, NE analog FM station (Facility ID: 51462) operates on CH231C1 (94.1 MHz) with 75.0 kW ERP circular polarization (H&V). The licensed KOZY-FM.L - Bridgeport, NE analog FM station (Facility ID: 81766) operates on CH267C0 (101.3 MHz) with 100.0 kW ERP circular polarization (H&V). The authorized KHYY(FM).C - Minatare, NE analog FM station (Facility ID: 164136) operates on CH297C0 (107.3 MHz) with 100.0 kW ERP circular polarization (H&V). *For purposes of this RF Compliance Study, a sum power of 375.0 kW ERP circular polarization (H&V) has been assumed as one single contribution.* The quadplexed primary antenna COR will be mounted 137 meters above ground level (AGL). The facility will employ a new common twenty (20) bay, Jampro model JCPB-20H-.5RFR antenna employing EPA Type 2 "Opposed V Dipole" elements as defined by the Commission's own FM Model - Appendix B (issued March 31, 2016). The elements are spaced 0.5 wavelength (λ) apart. None of the stations will 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.



View Tabular Results +

Channel Selection	Channel 227 (93.3 MHz)		
Antenna Type +	EPA Type 2: Opposed V Dipole		
Height (m)	137	Distance (m)	10000
ERP-H (W)	375000	ERP-V (W)	375000
Num of Elements	20	λ	0.5
Num of Points	500	Apply	

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