

Environmental Effects

FM TRANSLATOR K257DP, FID # 71838

Western Inspirational Broadcasters, Inc. ("WIBI") certifies that FM Translator K257DP complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments.

WIBI used the V-Soft RFHAZ4 software program, to determine compliance for this site.

The facility employs a 2 bay Scala FMV (1 wavelength spacing) Type 1 transmit antenna and is located at an existing communications site with other broadcast facilities nearby. The maximum K257DP contribution to the site is $13.48 \mu\text{W}/\text{cm}^2$, which occurs 5.0 meters from the base of the tower and is 6.74 % of the worst-case uncontrolled (public) exposure limit of $200 \mu\text{W}/\text{cm}^2$.

Combined with relevant RF generated by nearby FM & TV broadcast facilities, this site results in a total of $46.229 \mu\text{W}/\text{cm}^2$ (see table below) combined RF energy at 5.0 meters from the base of the supporting tower, or, 23.11 % of the "public" exposure limit. Signs warning of the presence of RF electromagnetic fields are posted.

CHANNEL	CALLS	H POWER (watts)	V POWER (watts)	HAG (meters)	EPA Antenna**	RFR* (V-Soft RFHAZ4)	Proximity (meters)	Intersect Distance (m)
257	K257DP	0	140	5	Vert. Dipole 2 bay	13.48	n/a	n/a
282	KFZE	4000	4000	13	Shively 6813-4 Type 1	9.08	22	17
215	KUWX	450	450	12	Shively 6812-2 Type 1	2.91	100	95
210	KWCN	75	75	6	Nicom BKG-77 Type 2	0.57	100	95
266	KPIN	4000	4000	11.4	Shively 6812B 4 bay w/0.9 spacing Type 1	19.2	100	95
39	KTRY-LP	250	0	12	Scala SL-8	0.029	100	95
45	KWVF-LP	5170	0	15	Scala SL-8	0.96	100	95
TOTAL						46.229		

*microwatts/cm² at intersection with K257DP highest level

** one (1) wavelength spacing, unless noted)