

## Environmental Effects

FM TRANSLATOR K210EL, Diamondville, WY, FID # 122019

Western Inspirational Broadcasters, Inc. ("WIBI") certifies that FM Translator K210EL 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 Telecom TFC1K (1 bay) Type 1 transmit antenna and is located at an existing communications site with other broadcast facilities nearby. The maximum K210EL contribution to the site is  $14.42 \mu\text{W}/\text{cm}^2$ , which occurs 2.0 meters from the base of the tower and is 7.21 % 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  $31.54 \mu\text{W}/\text{cm}^2$  (see table below) combined RF energy at 2 meters above ground level 2.0 meters from the base of the supporting tower, or, 15.8 % 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)
210	K210EL	23	23	10	TFC1K Type 1 SWR FM 10 HW Type	14.42	n/a	n/a
287	KDWY	16000	16000	19	2	17.12	200	198
24	K24GT-D	370	0	6	Scala SL-8	0.001	200	198
<b>TOTAL</b>						<b>31.541</b>		

\*microwatts/cm<sup>2</sup> at intersection with K210EL highest level

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

Based on this evaluation, the site radiates approximately 32% of the public (uncontrolled) exposure limit at 2 meters above ground level, 2 meters from the base of the tower, and therefore fully complies with the FCC's maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments.