

Calvary Chapel of Twin Falls, Inc.
RF COMPLIANCE
OCTOBER 2012
KVIR BULLHEAD CITY, ARIZONA
BLED-20110511AFU

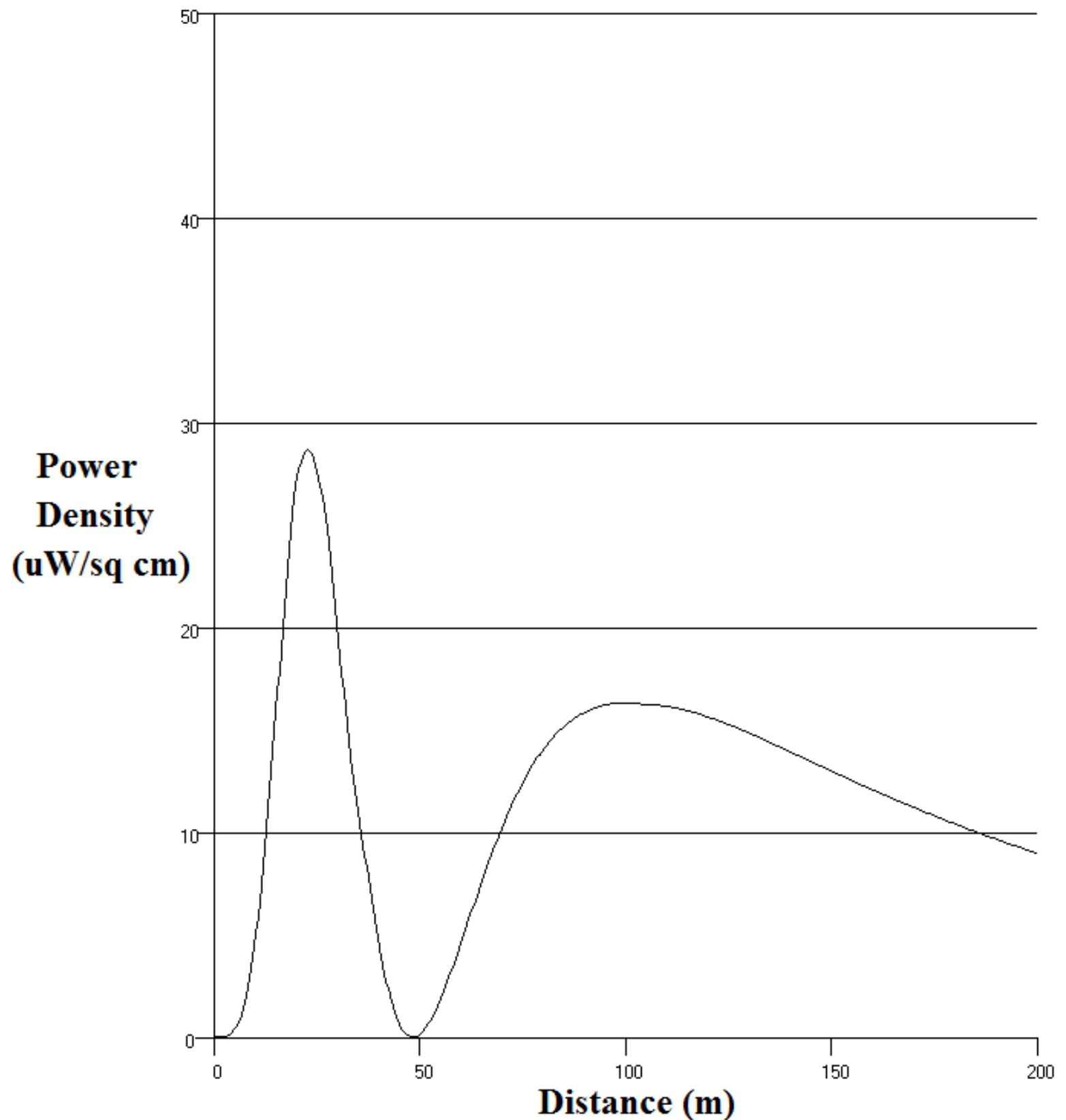
KVIR will operate on FM Channel 210C1 with a maximum effected radiated power of 14kW with the same PSI, 4 Array, Vertically Polarized, Directional Antenna System located at 30 meters AGL. The only other RF source located within the specified 315 meters or .315 km (47 C.F.R. Section 1.1307) of the tower are K292EU and KVAL, both located on the same tower at higher elevations AGL. Emissions report and radiation exposure below. FMMODEL Graphs are also attached to this exhibit.

Appendix C of OST Bulletin No. 65 (second edition) specifies the maximum radiation in the 30 MHz to 300 MHz region should be limited to 1000 $\mu\text{W}/\text{cm}^2$ for occupational/controlled exposure and 200 $\mu\text{W}/\text{cm}^2$ for general population/uncontrolled exposure. The instant application was evaluated with a modified version of the Commission's own FMMODEL program, acquired from the FCC Office of Engineering and Technology Internet site. The pattern data was taken from the same FMMODEL. The antenna specs used were close resemblances of the antennas used and represents the worst case scenario.

	Emissions	Percent Occupational	Percent General
KVIR 14kW	28.6635 $\mu\text{W}/\text{cm}^2$ @22.8m	2.9	14.3
KVAL .1 kW	.654 $\mu\text{W}/\text{cm}^2$ @54m	0.1	0.3
K292EU .01	2.02 $\mu\text{W}/\text{cm}^2$ @68m	0.202	1.01
Totals (Rounded)		3.2%	15.6%

The tower is located on Spirit Mountain, Christmas Tree Pass on BLM Land. There is a locked gate within a mile of the site and the only access is to obtain a key from the BLM. The tower and equipment building are fully fenced, with a locked gate as well. There is no general public access to this site. However, all appropriate steps to insure that workers, who climb this tower will not be exposed to levels of non ionizing radiation, will be taken. These steps include a reduction in power or cessation of operation, as appropriate, when work becomes necessary on the tower in the area where the power density levels are in excess of the permitted level for controlled exposure.

Power Density vs Distance



Modified from FMMODEL, a program written by the FCC Office of Engineering and Technology

Distance(m): Antenna Type:

KVIR

Horizontal ERP(kW):

Number of Elements:

28.6635 $\mu\text{W}/\text{sq cm}$

Vertical ERP(kW):

Element Spacing:

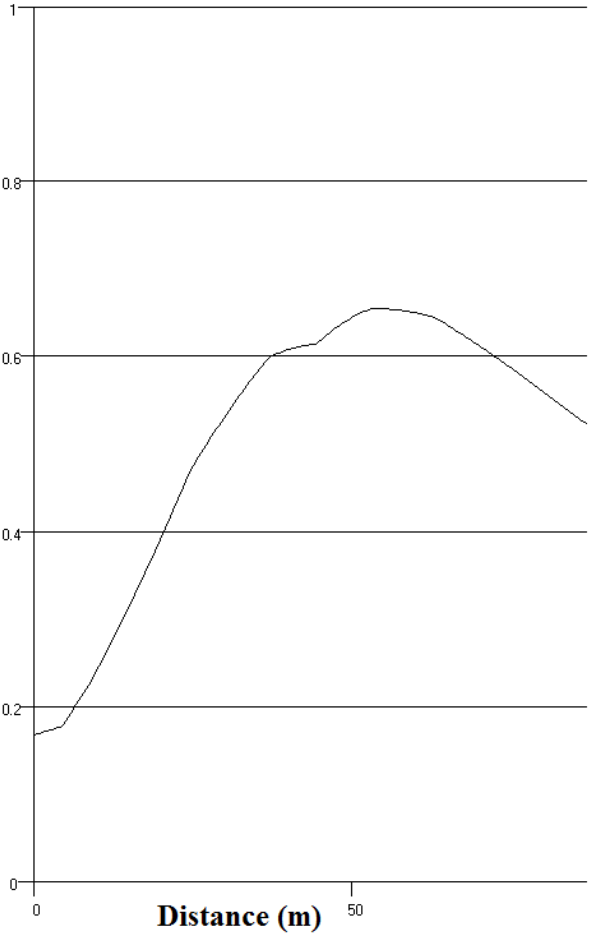
at 22.8 Meters

Antenna Height (m):

2.9% of Occupational Limit 14.3% of General Limit

Power Density vs Distance

Power
Density
(uW/sq cm)



Modified from FMMODEL, a program written by the FCC Office of Engineering and Technology

Distance(m):	<input type="text" value="200"/>	Antenna Type:	<input type="text" value="Jampro 'Double V' (EPA)"/>	KVAL
Horizontal ERP(kW):	<input type="text" value=".1"/>	Number of Elements:	<input type="text" value="1"/>	0.654391 uW/sq cm
Vertical ERP(kW):	<input type="text" value=".1"/>	Element Spacing:	<input type="text" value="1"/>	at 54.4 Meters
Antenna Height (m):	<input type="text" value="55"/>	0.1% of Occupational Limit 0.3% of General Limit		