

Non-Interference Compliance Study

Glory Communications, Inc.

W240AX (Facility ID: 5187)

This exhibit demonstrates compliance with all contour overlap and interference protection requirements and demonstrates full compliance with 47 C.F.R. §74.1204.

Applicant certifies that should any actual interference occur it will promptly cease operation in accordance with 47 C.F.R. §74.1203.

This study uses the NED 3 second terrain dataset.

Below is a listing of area stations whose contours are less than 25 km clear of the proposed translator on channel 242.

Callsign	State	City	Channel	ERP (kW)	Class	Status	Distance (km)	Clr (km)
W242CR*	SC	Columbia	242	0.14	D	LIC	5.52	-46.16
WLTY	SC	Cayce	244	9	C3	LIC	1.61	-33.37
W242CR*	SC	Columbia	240	0.25	D	Proposed	5.52	-15.49
W240AX**	SC	Columbia	240	0.25	D	LIC	4.82	-8.32
WKSP	SC	Aiken	242	17.5	C2	LIC	90.04	0.22

*Note that W242CR (Fac. ID: 138369) has simultaneously filed an application modifying W242CR's channel from 242 to channel 240 to eliminate the conflict with this instant application. Applicant requests that the two applications be treated as contingent applications and be coordinated in processing.

**Currently licensed facility for W240AX

The stations that are of concern are W242CR (Proposed Channel 240) and WLTY.

W242CR is a second adjacent Class D that requires that a minimum of 40 dB separation exist between its service contour and W240AX's interference contour. WLTY is a second adjacent Class C3 that requires that a minimum of 40 dB separation exist between its service contour and W240AX's interference contour. The following pages demonstrate that this application is in compliance with these requirements.

Compliance with 47 C.F.R. §74.1204(d)

All authorized second/third adjacent stations with which the proposed translator's contour overlaps their service contour are listed below. The table lists the minimum signal level of the primary station's service contour that reaches the proposed tower site for W240AX.

Facility ID	Call Sign	Contour at Tower F(50,50)
4667	WLTY	109.9 dBu
138369	W242CR (Proposed)	79.7 dBu

Minimum protected contour signal level at W240AX's proposed tower site: **79.7 dBu**

This study will use the minimum contour of 79.7 dBu to represent a worst-case potential interference level. At 40 dB above 79.7 dBu, the translator interference contour is 119.7 dBu. Calculation of distance at this power and signal level requires the use of the free-space calculation due to the distance being less than 1.5 km.

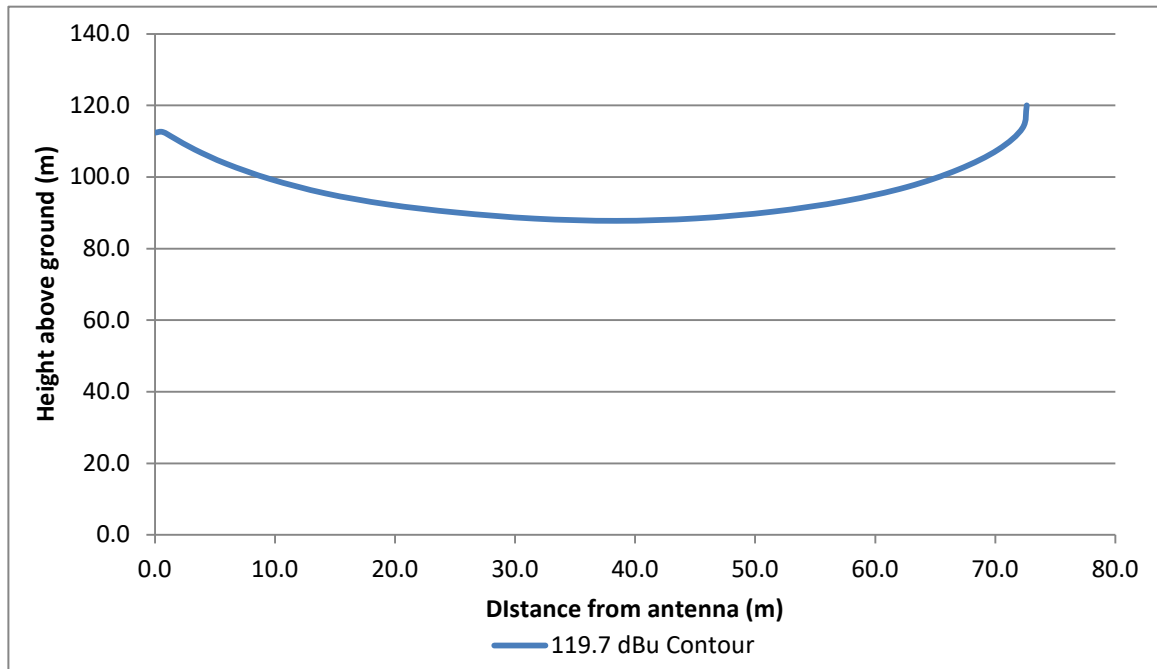
The following table uses the free space formula to calculate the worst-case height above ground level. At 119.7 dBu and 100 watts, the worst-case height is 87.7 meters.

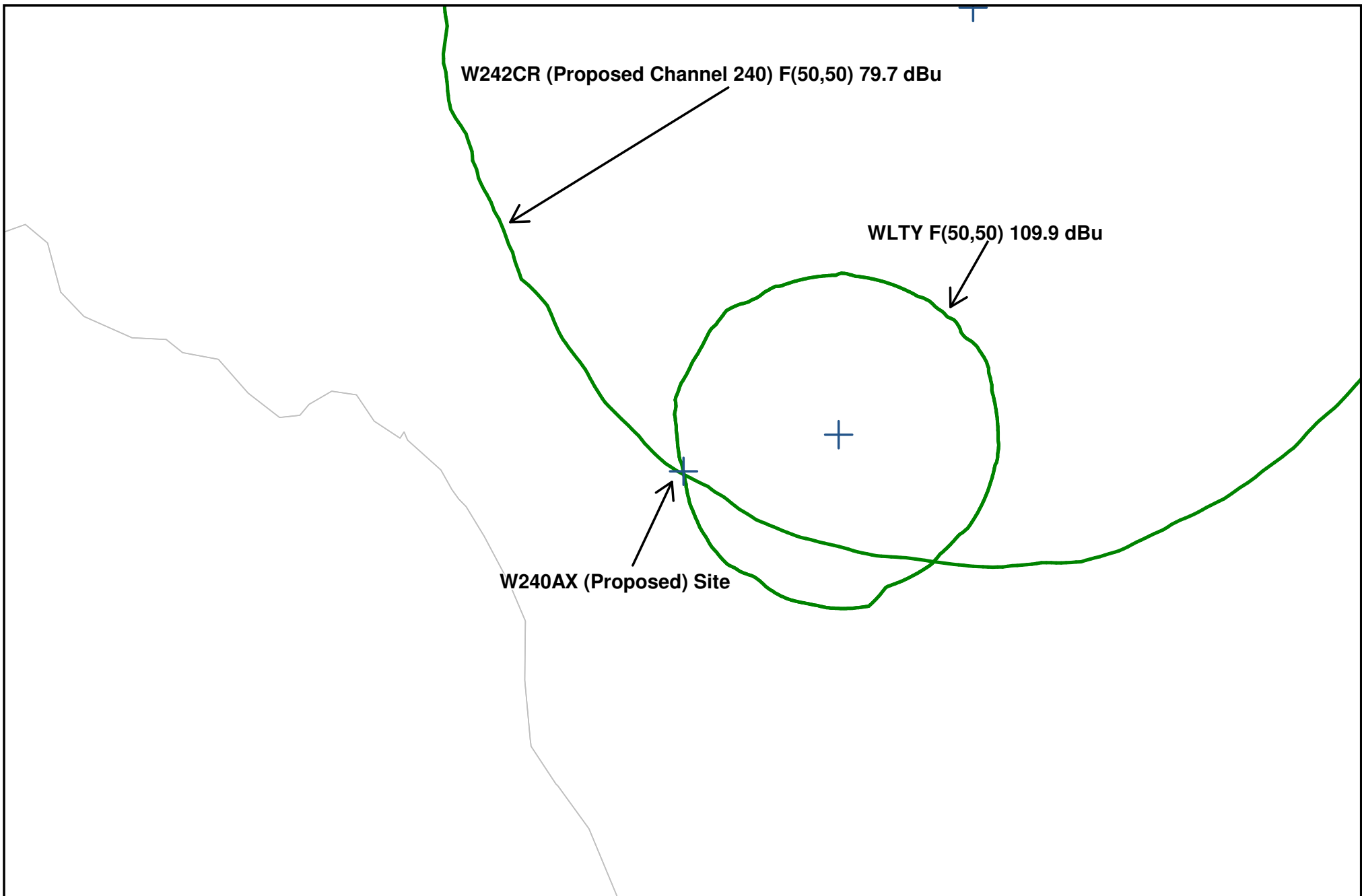
Therefore, no interference is predicted to reach the ground.

§74.1204(d) Contour Protection Study W240AX vs. W242CR

Antenna: Nicom BKG 77 - Single Bay ERP (watts): 100
Protected Contour at tower - F(50,50): 79.7 dBu RC-AGL (m): 120
Interference Ratio: 40 dB Relative field at Azimuth: 1.000
Interference Contour - F(50,10): 119.7 dBu ERP (watts) at Azimuth: 100

DEPRESSION ANGLE	RELATIVE FIELD	ERP (WATTS)	dBk	DISTANCE (m)		
				Contour	Horizontal	AGL
0	1.000	100.0	-10.00	72.6	72.6	120.0
5	0.999	99.8	-10.01	72.5	72.3	113.7
10	0.982	96.4	-10.16	71.3	70.2	107.6
15	0.954	91.0	-10.41	69.3	66.9	102.1
20	0.918	84.3	-10.74	66.7	62.6	97.2
25	0.872	76.0	-11.19	63.3	57.4	93.2
30	0.818	66.9	-11.74	59.4	51.4	90.3
35	0.758	57.5	-12.41	55.0	45.1	88.4
40	0.691	47.7	-13.21	50.2	38.4	87.7
45	0.616	37.9	-14.21	44.7	31.6	88.4
50	0.538	28.9	-15.38	39.1	25.1	90.1
55	0.465	21.6	-16.65	33.8	19.4	92.3
60	0.391	15.3	-18.16	28.4	14.2	95.4
65	0.313	9.8	-20.09	22.7	9.6	99.4
70	0.239	5.7	-22.43	17.4	5.9	103.7
75	0.176	3.1	-25.09	12.8	3.3	107.7
80	0.129	1.7	-27.79	9.4	1.6	110.8
85	0.103	1.1	-29.74	7.5	0.7	112.5
90	0.105	1.1	-29.58	7.6	0.0	112.4
WORST CASE HEIGHT AGL (m)						87.7





Protected Signal Levels at Proposed Tower Site