

Non-Interference Compliance Study

Glory Communications, Inc.

W237BN (Facility ID: 138354)

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.

Callsign	State	City	Channel	ERP (kW)	Class	Status	Distance (km)	Clr (km)
W237BN*	SC	Columbia	264	0.25	D	CP	21.55	-48.61
WWDM	SC	Sumter	267	100	C	LIC	29.08	-44.38
WXBT	SC	West Columbia	261	5.9	A	LIC	7.34	-22.99
WSSL-FM	SC	Gray Court	263	100	C0	LIC	118.0	13.53

*CP being modified per this application.

The only stations that are of concern are WWDM and WXBT. WWDM is a third adjacent Class C that requires that a minimum of 40 dB separation exist between its service contour and W237BN's interference contour. WXBT is a third adjacent Class A that requires that a minimum of 40 dB separation exist between its service contour and W237BN's interference contour. The following pages demonstrate that W237BN, WWDM and WXBT are in compliance with these requirements.

Compliance with 47 C.F.R. §74.1204(d)

All Authorized second 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 W237BN.

Facility ID	Call Sign	Contour at Tower F(50,50)
58398	WWDM	81 dBu
13589	WXBT	84.2 dBu

Minimum protected contour signal level at W237BN's proposed tower site: **81 dBu**

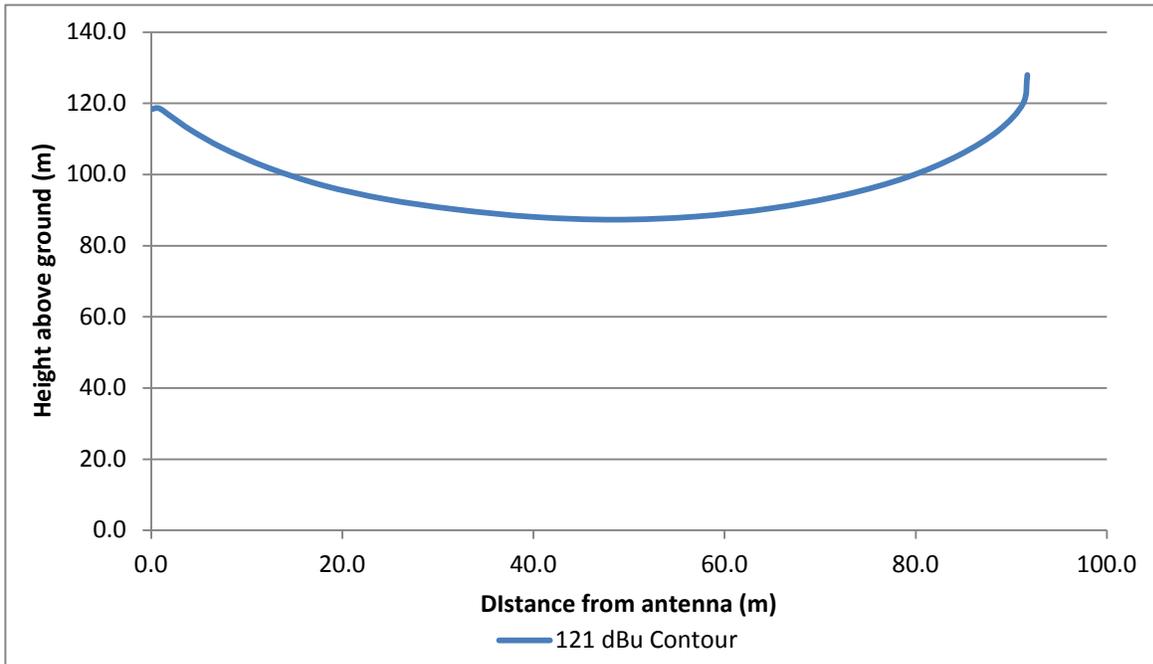
This study will use the minimum contour of 81 dBu to represent a worst-case potential interference level. At 40 dB above 81 dBu, the translator interference contour is 121 dBu. Calculation of distance at this power and signal level requires the use of the free-space calculation due to the distance being less than 1.5 km.

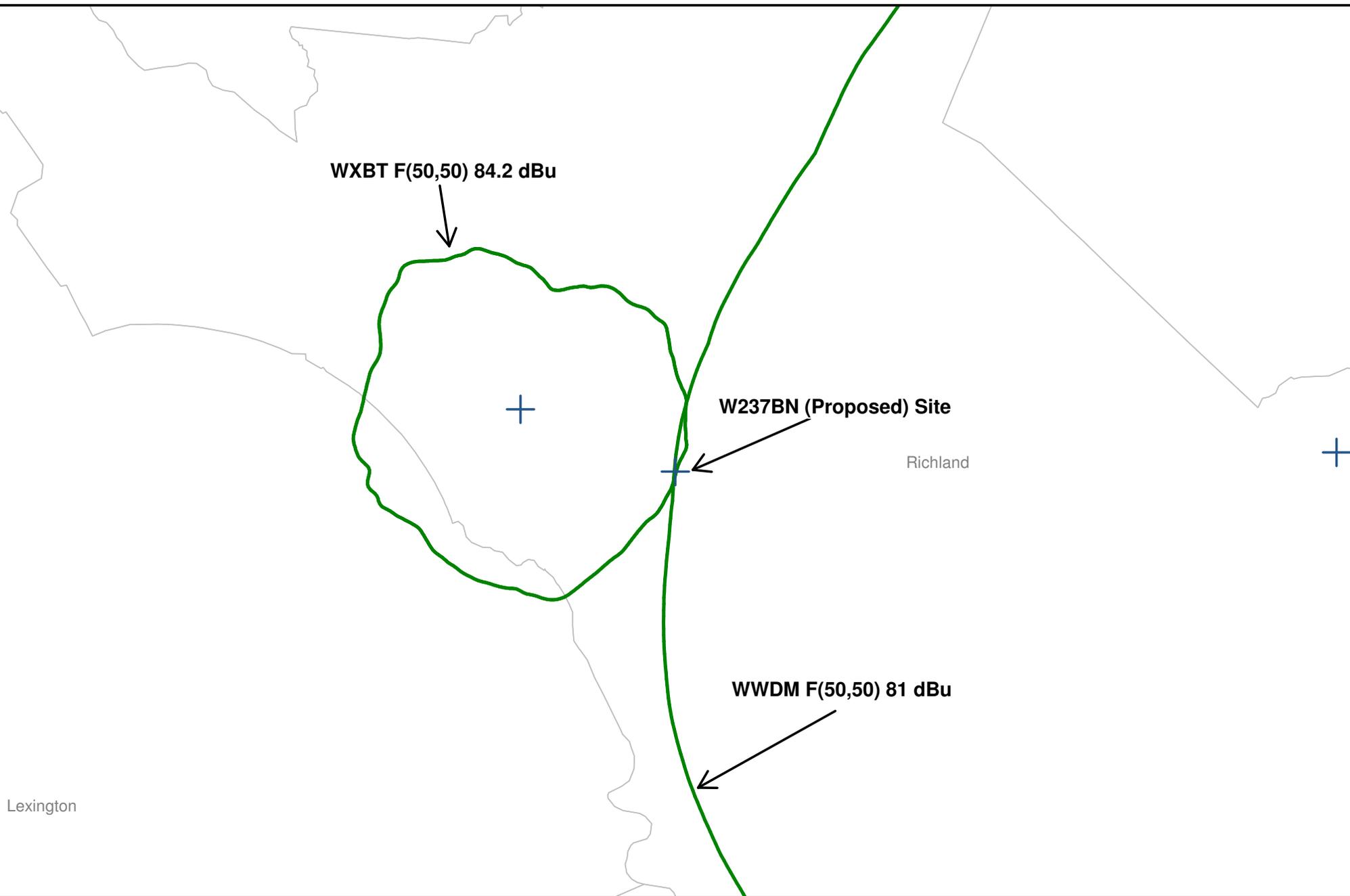
The following table uses the free space formula to calculate the worst-case height above ground level. At 121 dBu and 215 watts, the worst-case height is 87.3 meters. Therefore no interference is predicted to reach the ground.

§74.1204(d) Contour Protection Study W237BN vs. WWDM

Antenna: Nicom BKG 77 - Single Bay ERP (watts): 215
 Protected Contour at tower - F(50,50): 81 dBu RC-AGL (m): 128
 Interference Ratio: 40 dB Relative field at Azimuth: 1.000
 Interference Contour - F(50,10): 121 dBu ERP (watts) at Azimuth: 215

DEPRESSION ANGLE	RELATIVE FIELD	ERP (WATTS)	dBk	DISTANCE (m)		
				Contour	Horizontal	AGL
0	1.000	215.0	-6.68	91.7	91.7	128.0
5	0.999	214.6	-6.68	91.6	91.2	120.0
10	0.982	207.3	-6.83	90.0	88.7	112.4
15	0.954	195.7	-7.08	87.5	84.5	105.4
20	0.918	181.2	-7.42	84.2	79.1	99.2
25	0.872	163.5	-7.87	79.9	72.4	94.2
30	0.818	143.9	-8.42	75.0	64.9	90.5
35	0.758	123.5	-9.08	69.5	56.9	88.1
40	0.691	102.7	-9.89	63.3	48.5	87.3
45	0.616	81.6	-10.88	56.5	39.9	88.1
50	0.538	62.2	-12.06	49.3	31.7	90.2
55	0.465	46.5	-13.33	42.6	24.4	93.1
60	0.391	32.9	-14.83	35.8	17.9	97.0
65	0.313	21.1	-16.76	28.7	12.1	102.0
70	0.239	12.3	-19.11	21.9	7.5	107.4
75	0.176	6.7	-21.77	16.1	4.2	112.4
80	0.129	3.6	-24.46	11.8	2.1	116.4
85	0.103	2.3	-26.42	9.4	0.8	118.6
90	0.105	2.4	-26.25	9.6	0.0	118.4
WORST CASE HEIGHT AGL (m)						87.3





Protected Signal Levels at Proposed Tower Site

