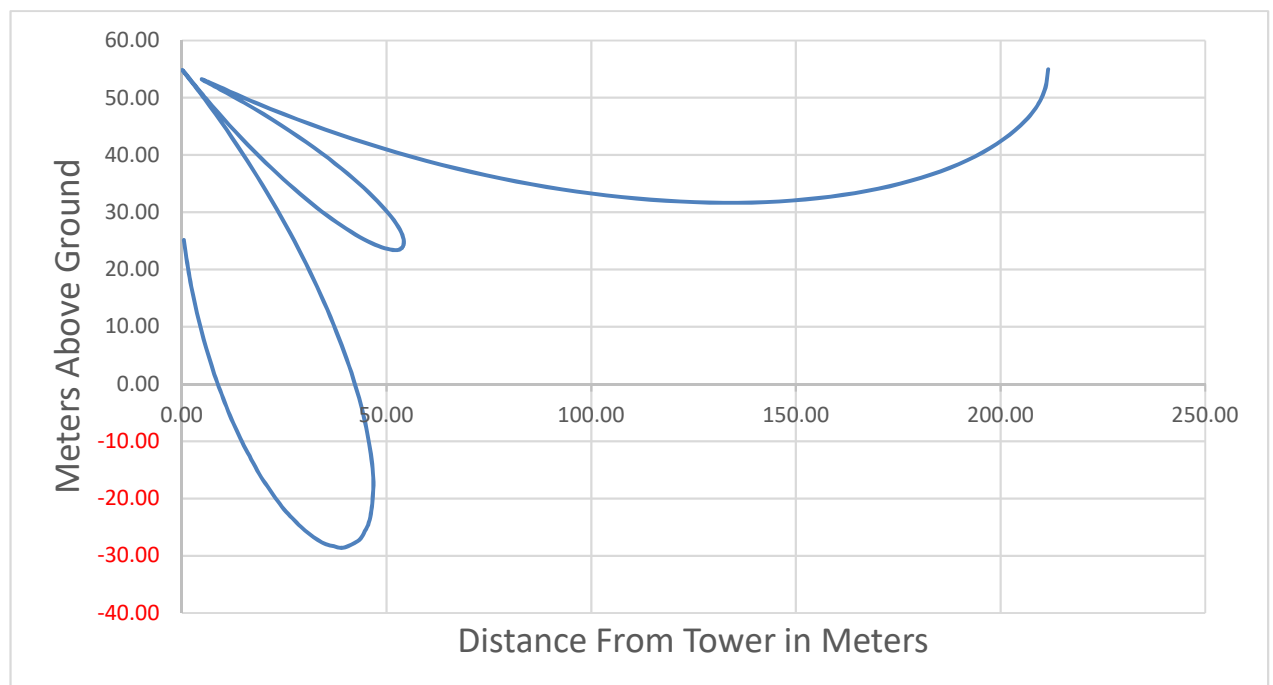


Third-Adjacent Channel Protection

The proposed facility is located within the 60 dBu contour of third-adjacent channel station KLAL (299C1, FCC ID 47880), Wrightsville, Arkansas which is protected in accordance with §74.1204(d) at a +40 dB level. The proposed antenna will be mounted 55 meters above ground on an existing tower.

KLAL is located 37.52 kilometers distant with a calculated field of 74.39 dBu at the proposed site based on an ERP of 100 KW and height above average terrain along a 165° radial from KLAL to the proposed site of 237 meters. The translator would require a field intensity of 114.39 dBu to cause interference to the KLAL signal. Using the free-space formula to calculate distance to the proposed 14.39 dBu using an ERP of 250 watts and applying the antenna vertical plane radiation pattern for the three-bay full-wave spaced antenna we arrive at a maximum ground intercept radius of 46.79 meters. This is entirely within the transmitter site boundary and there are no regularly occupied structures inside this radius as shown on the attached aerial photo.

Therefore, there is zero population inside this predicted interference contour and the proposed operation is in compliance with §74.1204(d).



46.97 Meter Radius from Tower in Orange
Site Boundary in Red



<u>Dep (°)</u>	<u>Er(%)</u>	<u>DTC</u>	<u>Slant</u>	<u>Clearance</u>	<u>Radius</u>	<u>Dep (°)</u>	<u>Er(%)</u>	<u>DTC</u>	<u>Slant</u>	<u>Clearance</u>	<u>Radius</u>
0°	100.0	211.62	-	54.96	211.62	45°	10.7	22.64	77.78	38.99	16.01
1°	99.6	210.77	3151.43	51.32	210.74	46°	14.2	30.05	76.46	33.38	20.87
2°	98.4	208.23	1575.95	47.73	208.10	47°	17.6	37.24	75.20	27.76	25.40
3°	96.3	203.79	1050.90	44.33	203.51	48°	20.8	44.02	74.01	22.29	29.45
4°	93.5	197.86	788.46	41.20	197.38	49°	23.8	50.36	72.88	16.99	33.04
5°	90.0	190.46	631.05	38.40	189.73	50°	26.7	56.50	71.80	11.72	36.32
6°	85.8	181.57	526.17	36.02	180.57	51°	29.3	62.00	70.77	6.81	39.02
7°	81.0	171.41	451.30	34.11	170.13	52°	31.8	67.29	69.80	1.97	41.43
8°	75.6	159.98	395.19	32.73	158.43	53°	34.0	71.95	68.87	-2.46	43.30
9°	69.8	147.71	351.58	31.89	145.89	54°	36.0	76.18	67.98	-6.63	44.78
10°	63.5	134.38	316.73	31.67	132.34	55°	37.7	79.78	67.14	-10.35	45.76
11°	56.9	120.41	288.25	32.02	118.20	56°	39.3	83.17	66.34	-13.95	46.51
12°	50.1	106.02	264.54	32.96	103.70	57°	40.6	85.92	65.58	-17.06	46.79
13°	43.2	91.42	244.50	34.44	89.08	58°	41.6	88.03	64.85	-19.66	46.65
14°	36.2	76.61	227.35	36.47	74.33	59°	42.5	89.94	64.16	-22.09	46.32
15°	29.2	61.79	212.50	39.01	59.69	60°	43.2	91.42	63.51	-24.17	45.71
16°	22.3	47.19	199.54	41.99	45.36	61°	43.6	92.27	62.88	-25.70	44.73
17°	15.6	33.01	188.12	45.35	31.57	62°	43.9	92.90	62.29	-27.03	43.61
18°	9.2	19.47	177.98	48.98	18.52	63°	43.9	92.90	61.73	-27.77	42.18
19°	3.2	6.77	168.94	52.80	6.40	64°	43.8	92.69	61.19	-28.31	40.63
20°	2.5	5.29	160.81	53.19	4.97	65°	43.6	92.27	60.69	-28.62	38.99
21°	7.7	16.29	153.47	49.16	15.21	66°	43.1	91.21	60.20	-28.32	37.10
22°	12.4	26.24	146.82	45.17	24.33	67°	42.6	90.15	59.75	-27.98	35.22
23°	16.6	35.13	140.76	41.27	32.34	68°	41.9	88.67	59.32	-27.21	33.22
24°	20.2	42.75	135.22	37.61	39.05	69°	41.1	86.97	58.91	-26.20	31.17
25°	23.2	49.10	130.14	34.25	44.50	70°	40.2	85.07	58.53	-24.94	29.10
26°	25.6	54.17	125.46	31.25	48.69	71°	39.2	82.95	58.17	-23.43	27.01
27°	27.5	58.19	121.15	28.58	51.85	72°	38.2	80.84	57.83	-21.88	24.98
28°	28.7	60.73	117.15	26.49	53.63	73°	37.0	78.30	57.51	-19.88	22.89
29°	29.3	62.00	113.45	24.94	54.23	74°	35.8	75.76	57.22	-17.82	20.88
30°	29.4	62.22	110.00	23.89	53.88	75°	34.6	73.22	56.94	-15.72	18.95
31°	29.0	61.37	106.79	23.39	52.60	76°	33.2	70.26	56.68	-13.17	17.00
32°	28.0	59.25	103.79	23.60	50.25	77°	31.9	67.51	56.45	-10.78	15.19
33°	26.6	56.29	100.98	24.34	47.21	78°	30.5	64.54	56.23	-8.13	13.42
34°	24.8	52.48	98.36	25.65	43.51	79°	29.1	61.58	56.03	-5.45	11.75
35°	22.5	47.61	95.89	27.69	39.00	80°	27.6	58.41	55.85	-2.52	10.14
36°	20.0	42.32	93.57	30.12	34.24	81°	26.2	55.44	55.69	0.24	8.67
37°	17.1	36.19	91.39	33.22	28.90	82°	24.7	52.27	55.54	3.24	7.27
38°	14.0	29.63	89.33	36.76	23.35	83°	23.2	49.10	55.41	6.27	5.98
39°	10.7	22.64	87.40	40.75	17.60	84°	21.7	45.92	55.30	9.33	4.80
40°	7.2	15.24	85.56	45.21	11.67	85°	20.2	42.75	55.21	12.42	3.73
41°	3.7	7.83	83.83	49.86	5.91	86°	18.7	39.57	55.13	15.52	2.76
42°	0.1	0.21	82.20	54.86	0.16	87°	17.2	36.40	55.08	18.65	1.90
43°	3.6	7.62	80.65	49.80	5.57	88°	15.6	33.01	55.03	22.01	1.15
44°	7.2	15.24	79.18	44.42	10.96	89°	14.1	29.84	55.01	25.17	0.52