

Table 1

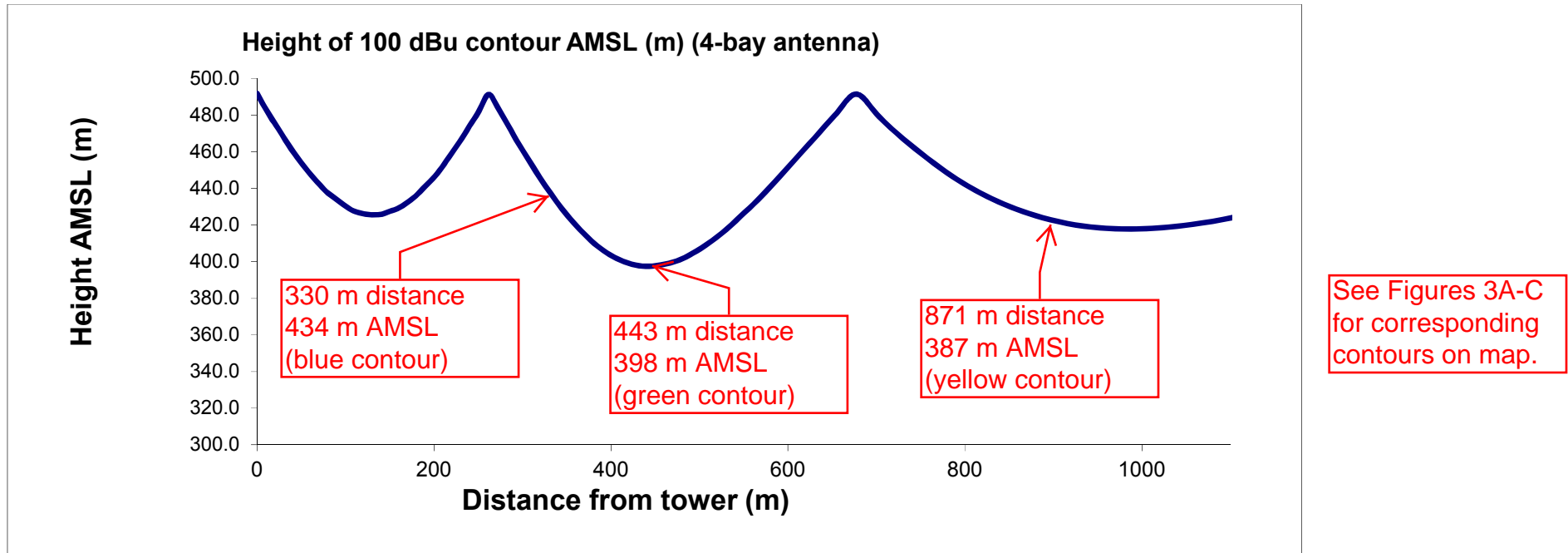
## W259CN - MINOR CHANGE TO LICENSED FACILITY: Proposed Channel 278

## Channel Study

Chan	Class	Call Letters	Type	Status	City	State	Country	Owner	Distance (km)	Bearing TO (deg)	Req. Dist. (km)	Clearance (km)	Field Strength (dBu)
225	D	W225AZ	FX	LIC	GREENVILLE	SC	US	TOWER ABOVE MEDIA LLC	37.8	71.3	0.0	37.8	
275	D	W275BJ	FX	LIC	GREENVILLE	SC	US	CARON BROADCASTING, INC.	37.8	71.2	27.3	10.5	
275	D	W275BU	FX	LIC	WAYNESVILLE	NC	US	WESTERN NORTH CAROLINA PUB	75.1	338.6	27.3	47.8	
276	A	WHQA	FM	LIC	HONEA PATH	SC	US	THE POWER FOUNDATION	51.2	152.0	28.7	22.6	
277	D	W277CU	FX	LIC	HIGHLANDS	NC	US	WESTERN NORTH CAROLINA PUB	44.2	301.4	40.6	3.6	
277	A	WRTH	FM	LIC	GREER	SC	US	CARON BROADCASTING, INC.	63.5	72.9	53.5	10.1	
<b>278</b>	<b>D</b>	<b>W259CN</b>	<b>FX</b>	<b>CP MOD</b>	<b>CLEMSON</b>	<b>SC</b>	<b>US</b>	<b>GEORGIA-CAROLINA RADIOCAST</b>	<b>23.3</b>	<b>226.1</b>	<b>89.1</b>	<b>-65.8</b>	(applicant)
278	C3	WZSN	FM	LIC	GREENWOOD	SC	US	BROOMFIELD BROADCASTING, INC.	93.0	143.0	92.7	0.3	
278	D	W278BE	FX	LIC	UNION	SC	US	UNION-CAROLINA BROADCASTING	106.1	92.7	68.4	37.7	
278	C	WIMZ-FM	FM	LIC	KNOXVILLE	TN	US	MIDWEST COMMUNICATIONS, INC	166.9	330.3	146.2	20.8	
279	D	W279AI	FX	LIC	HENDERSONVILLE	NC	US	RADIO TRAINING NETWORK, INC.	58.9	25.9	31.5	27.4	
279	C3	WXKT	FM	LIC	MAYSVILLE	GA	US	COX RADIO, INC.	93.4	237.4	70.3	23.0	
<b>280</b>	<b>A</b>	<b>WTOB-FM</b>	<b>FM</b>	<b>LIC</b>	<b>EASLEY</b>	<b>SC</b>	<b>US</b>	<b>TBLC GREENVILLE STATIONS, LLC</b>	<b>25.3</b>	<b>88.3</b>	<b>26.4</b>	<b>-1.1</b>	<b>60.0 (see NOTE)</b>
281	D	W281BS	FX	LIC	HARTWELL	GA	US	BRYAN HICKS & BRUCE HICKS, PA	55.0	196.8	13.2	41.8	
281	A	WNCC	FM	LIC	FRANKLIN	NC	US	SUTTON RADIOCASTING CORPOR	73.3	318.8	24.5	48.8	

## NOTE:

(No interference CAUSED to WTOB-FM) 2nd adjacent WTOB-FM has a field strength of 60.0 dBu F(50,50) at the proposed site. Therefore the proposed translator's interfering contour is the 100.0 dBu F(50,10) contour. At 250 watts ERP, the proposed translator's 100.0 dBu F(50,10) extends 1,109 meters (worst case) horizontally from the antenna. However, using a four bay SHIVELY 6812B antenna mounted at 10 meters AGL (492 m AMSL, 202 m AMSL ), the antenna's vertical elevation pattern is such that the interfering contour does not reach any occupied structures or population. Therefore this proposal is compliant with the allowance of Rule 74.1204(d). (See Figures 2-3 below)



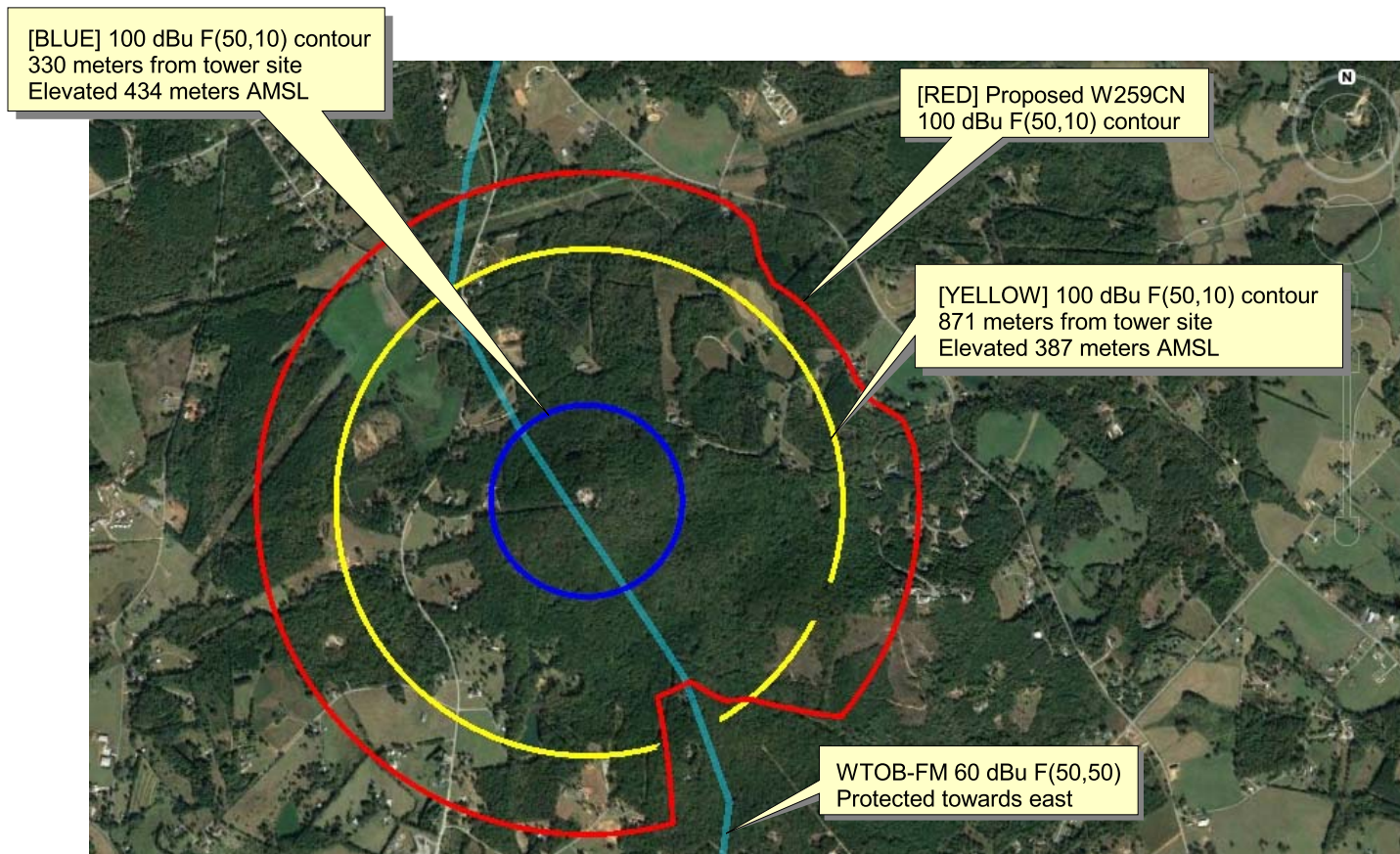


Figure 3 - with respect to 2nd adjacent WTOB-FM

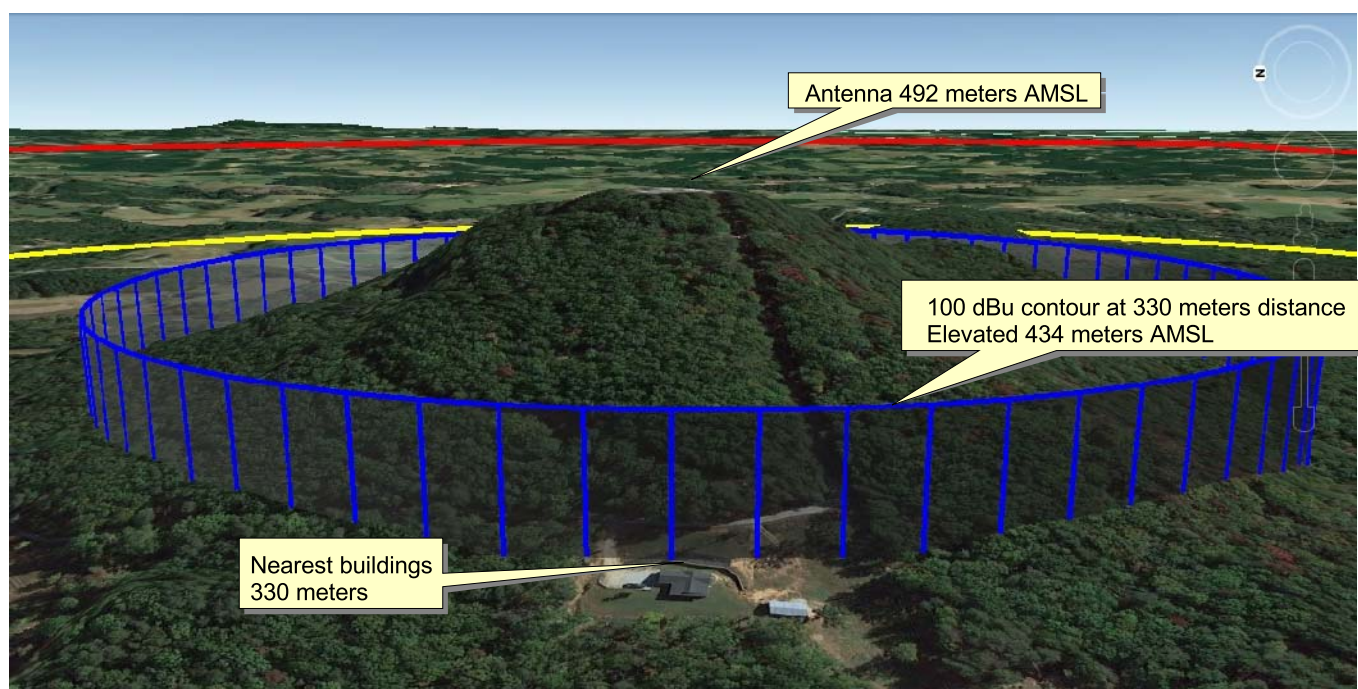


Figure 3A - with respect to 2nd adjacent WTOB-FM



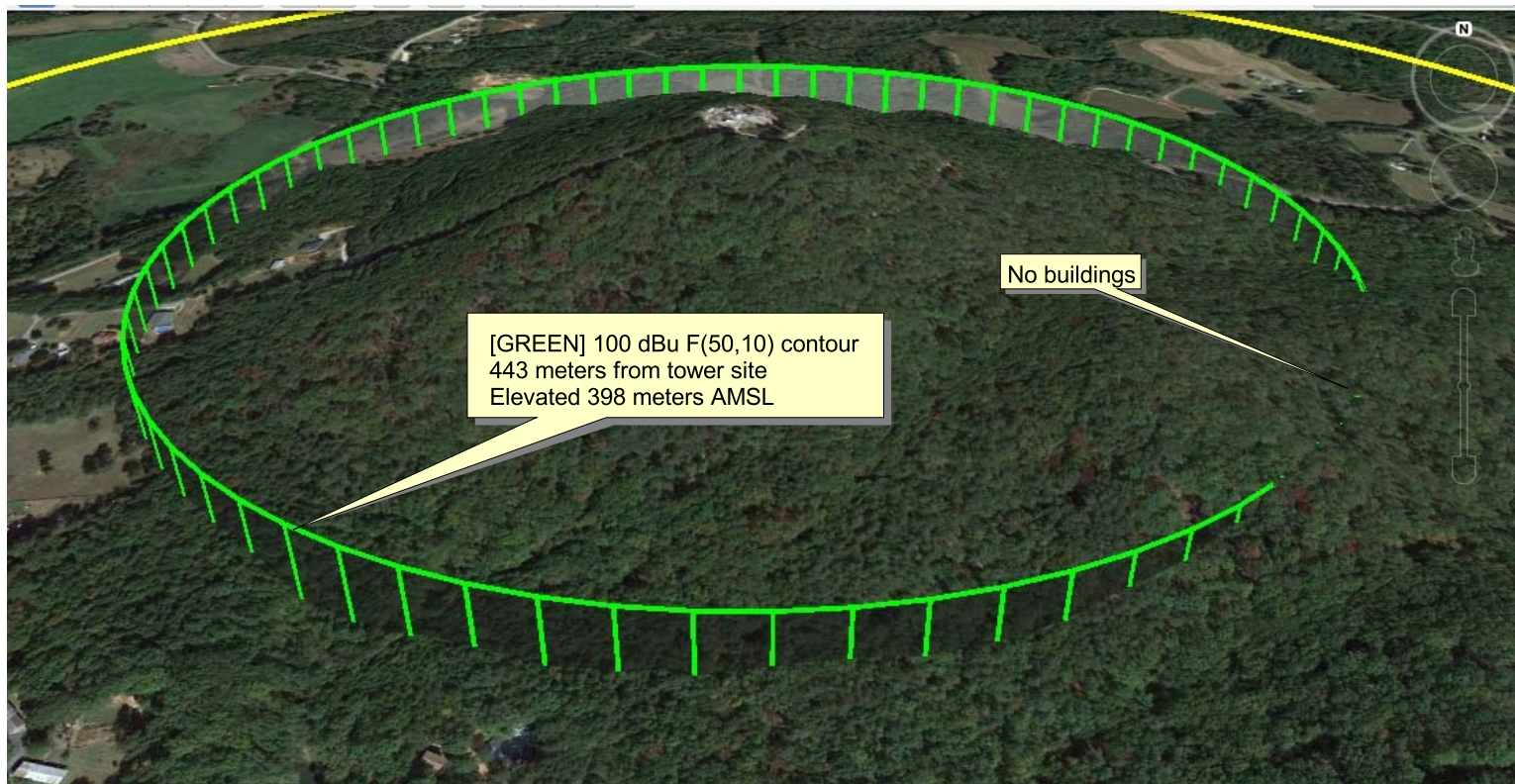


Figure 3B - with respect to 2nd adjacent WTOB-FM

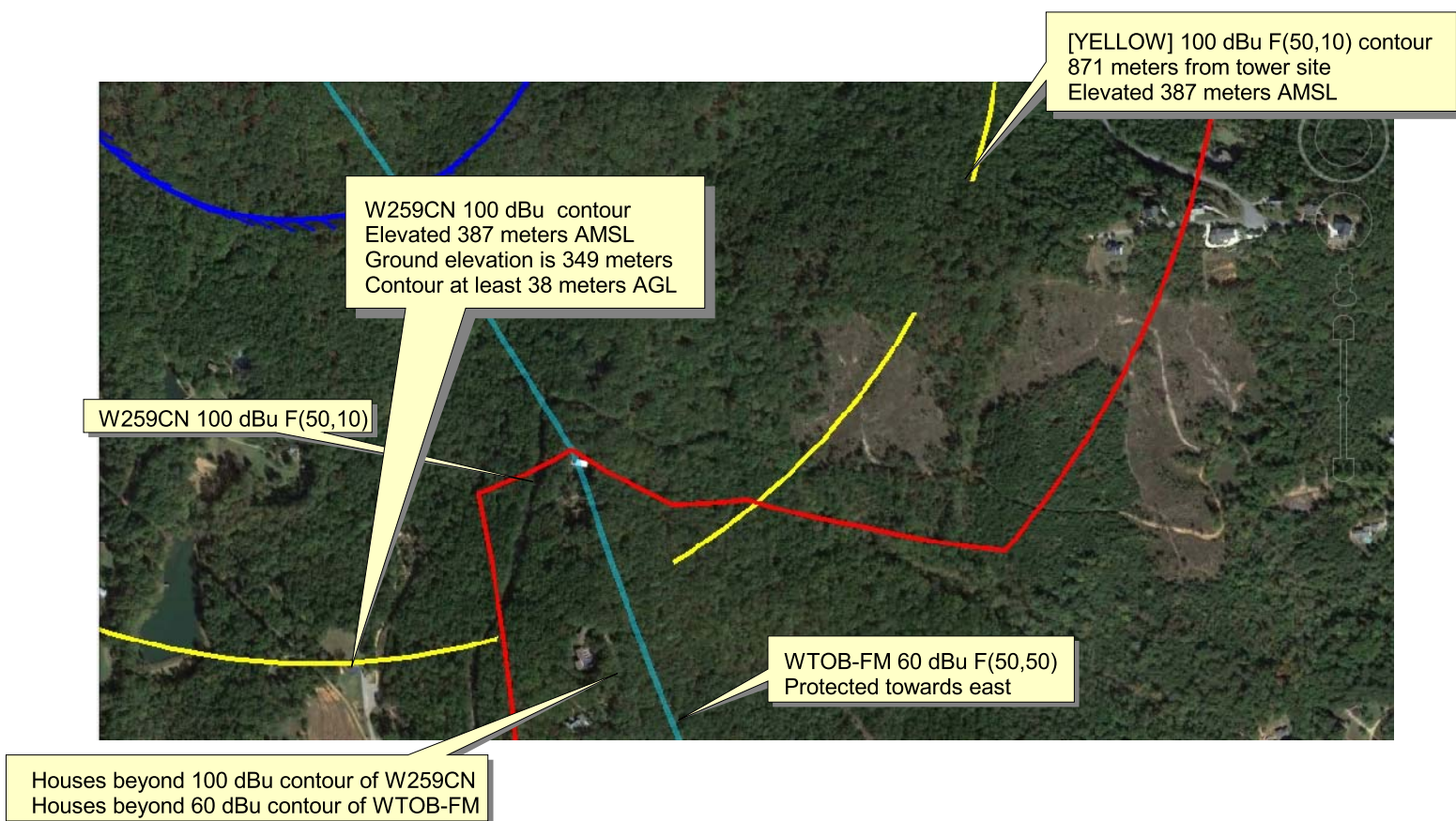
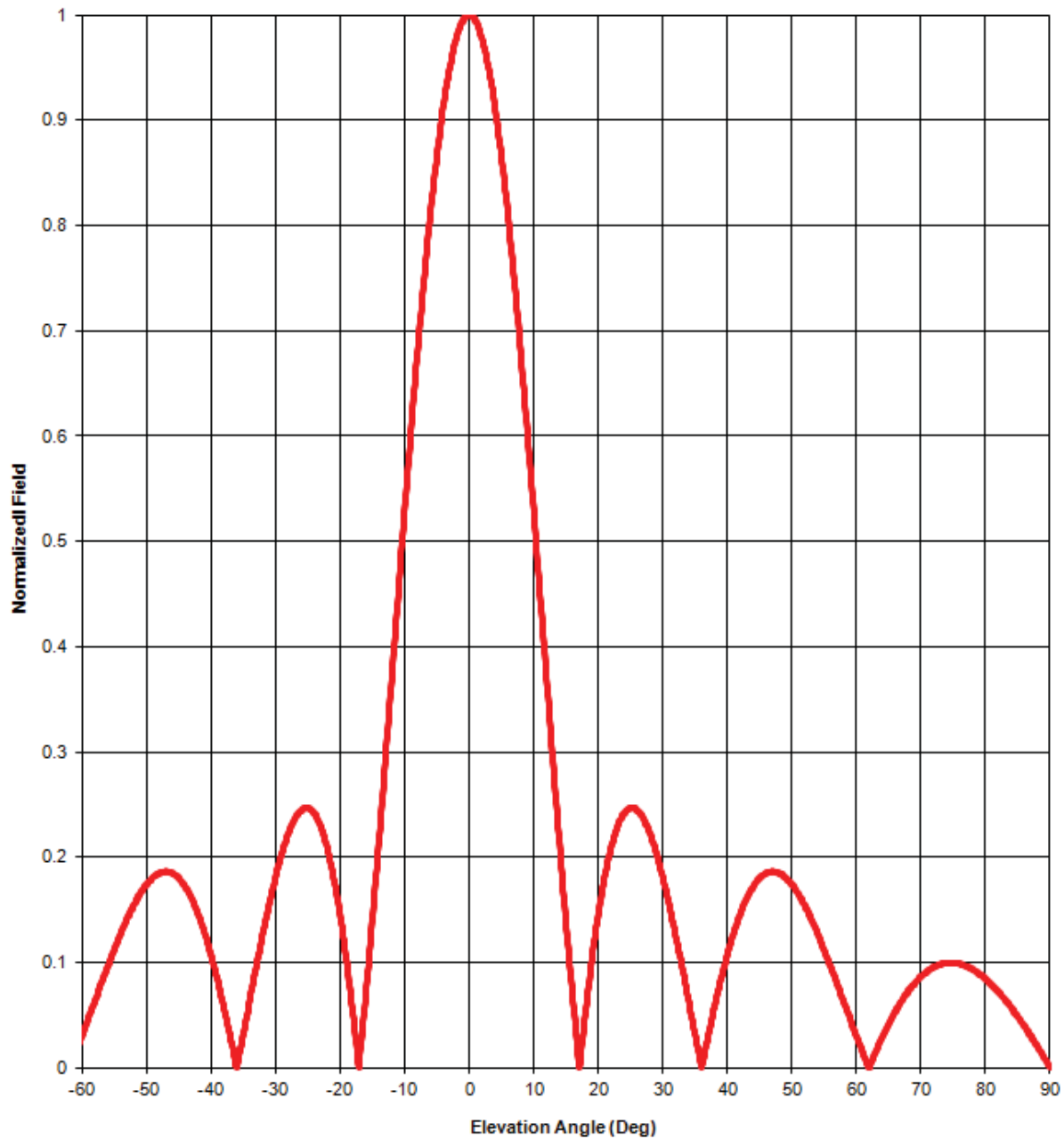


Figure 3C - with respect to 2nd adjacent WTOB-FM

## Elevation pattern



Antenna model: 6812b, 4-bay full-wave-spaced

Test frequency: 98.1 MHz

Gain (maximum):

Power	dB
2.09	3.19 dB

Document No. 6812b 4-bay fw (130701)

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Degrees	Rel. Field	Degrees	Rel. Field	Degrees	Rel. Field	Degrees	Rel. Field	Degrees	Rel. Field
1	0.994	19	0.102	37	0.029	55	0.112	73	0.098
2	0.978	20	0.146	38	0.057	56	0.096	74	0.100
3	0.951	21	0.181	39	0.084	57	0.080	75	0.100
4	0.913	22	0.209	40	0.108	58	0.063	76	0.099
5	0.866	23	0.229	41	0.128	59	0.047	77	0.097
6	0.811	24	0.242	42	0.146	60	0.030	78	0.093
7	0.748	25	0.247	43	0.161	61	0.014	79	0.089
8	0.680	26	0.245	44	0.172	62	0.001	80	0.084
9	0.606	27	0.237	45	0.180	63	0.016	81	0.079
10	0.529	28	0.223	46	0.185	64	0.029	82	0.072
11	0.450	29	0.204	47	0.186	65	0.042	83	0.065
12	0.370	30	0.181	48	0.185	66	0.053	84	0.057
13	0.291	31	0.155	49	0.181	67	0.064	85	0.049
14	0.214	32	0.126	50	0.174	68	0.073	86	0.040
15	0.140	33	0.096	51	0.165	69	0.080	87	0.030
16	0.070	34	0.064	52	0.154	70	0.087	88	0.021
17	0.006	35	0.032	53	0.142	71	0.092	89	0.011
18	0.051	36	0.001	54	0.127	72	0.096	90	0.000

## Elevation Pattern Tabulation

Antenna model: 6812b, 4-bay full-wave-spaced

Relative Field at 0° Depression = 1.000

## Radiofrequency Electromagnetic Exposure Analysis

Source	Height AGL(m)	Antenna type	Bays	Horizontal ERP (kw)	Vertical ERP (kw)	Power Density $\mu\text{W}/\text{cm}^2$ at 2 meters AGL				
						within 10 meters distance	% controlled environment limit (1000 $\mu\text{W}/\text{cm}^2$ )	Max. PD	% uncontrolled environment limit (200 $\mu\text{W}/\text{cm}^2$ )	Distance to maximum PD (m)
W259CN (proposed)	10.0	SHI-6812B4	4	0.25	0.25	19.20	1.920%	19.20	9.60%	3.6
WZVZ-LP	10.0	Dipole (EPA)	2	0.002	0.002	1.30	0.130%	1.30	0.65%	2.2
W236CD	22.0	Dipole (EPA)	1	0.25	0.25	25.1000	2.510%	25.10	12.55%	5.4
						25.10	<b>4.6%</b>	25.1	<b>22.8%</b>	5.4

The proposed facility is excluded from environmental processing under 47. C.F.R. Section 1.1306 (i.e., The facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments).

Calculations made using FCC FMModel

\* In the absence of specific antenna data, EPA dipole parameters are used with the FMModel ("worst case")