

Table 1

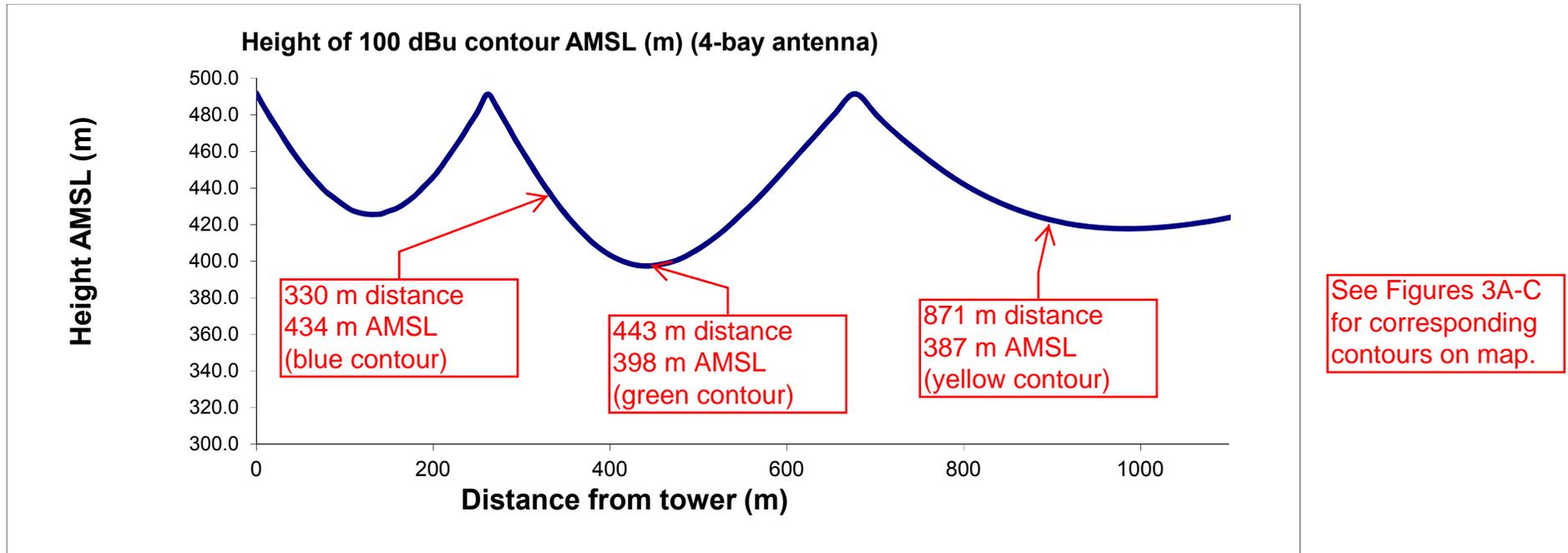
W259CN - MINOR CHANGE TO LICENSED FACILITY: Proposed Channel 278

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	
278	D	W259CN	FX	CP MOD	CLEMSON	SC	US	GEORGIA-CAROLINA RADIOCAST	23.3	226.1	89.1	-65.8	(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	
280	A	WTOB-FM	FM	LIC	EASLEY	SC	US	TBLC GREENVILLE STATIONS, LLC	25.3	88.3	26.4	-1.1	60.0 (see NOTE)
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)



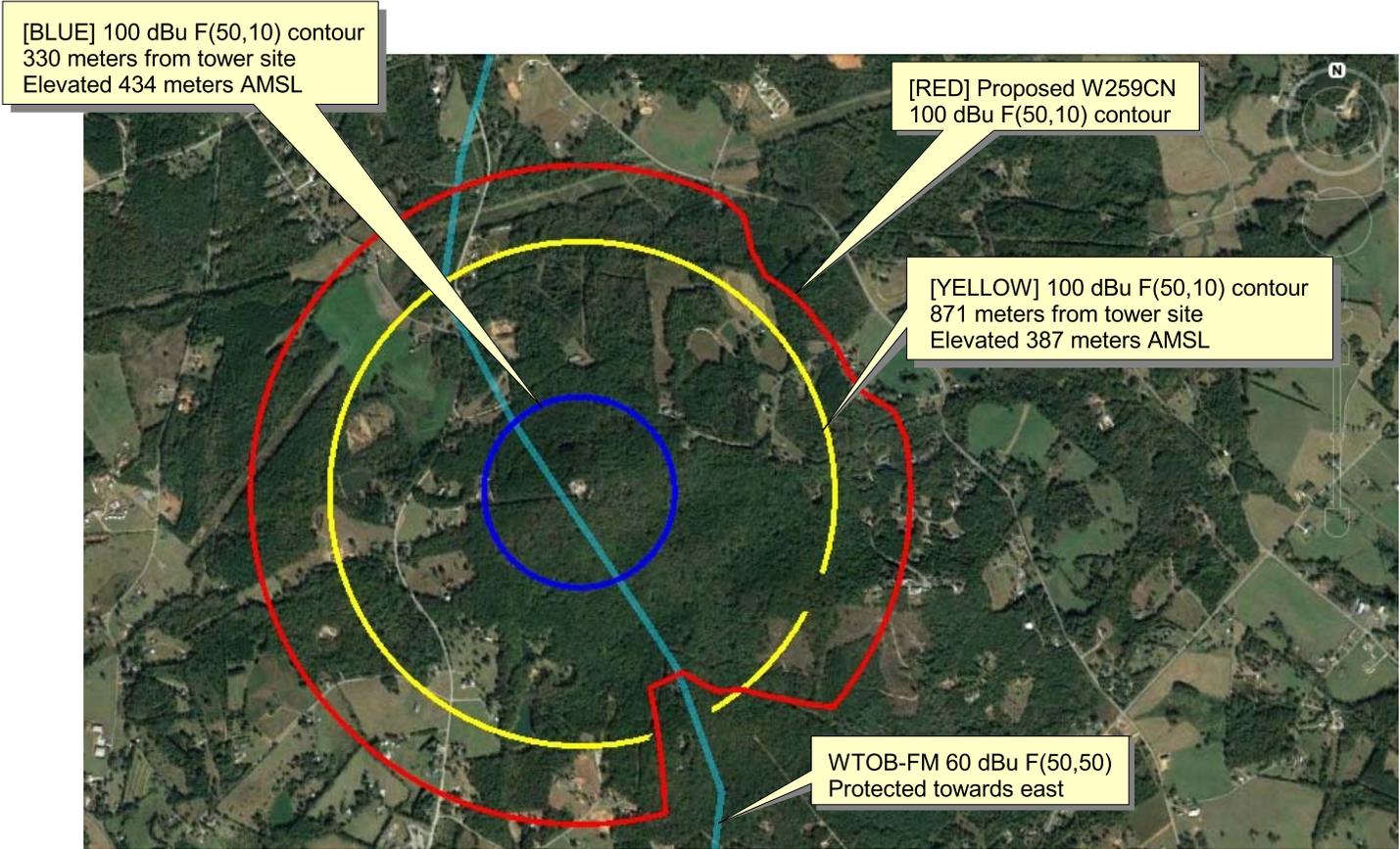


Figure 3 - with respect to 2nd adjacent WTOB-FM

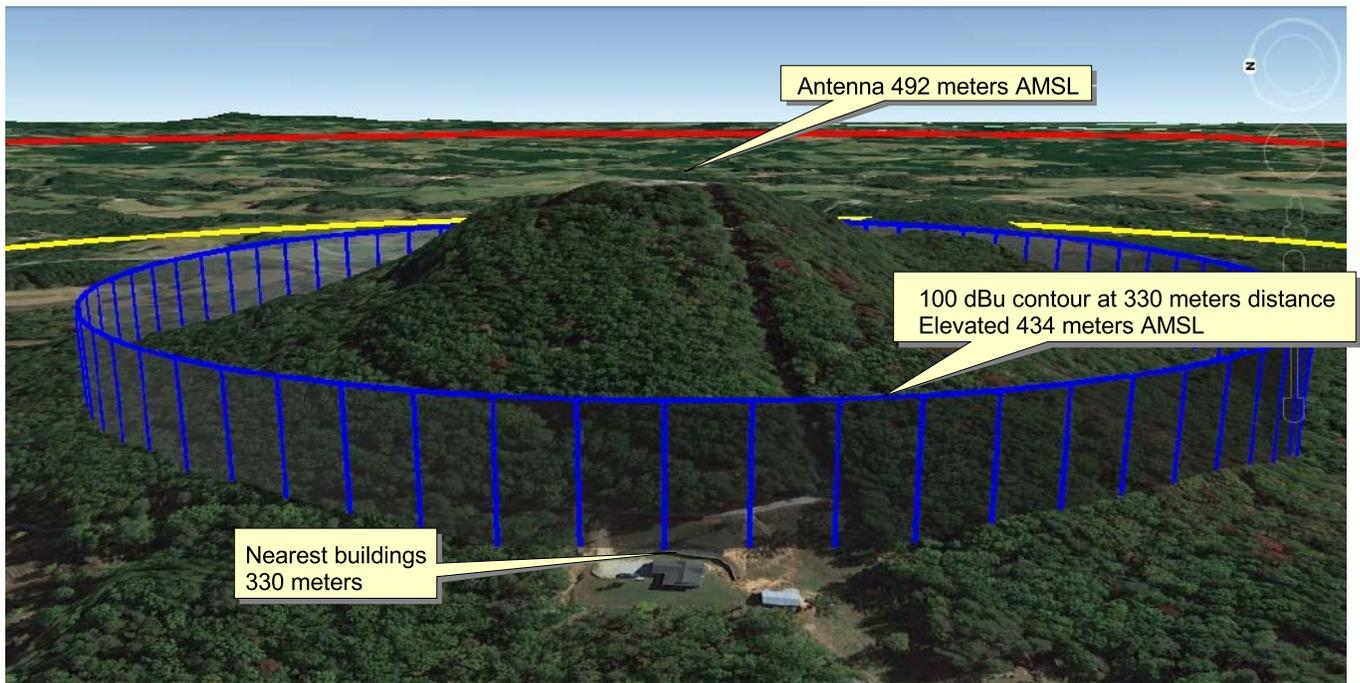


Figure 3A - with respect to 2nd adjacent WTOB-FM

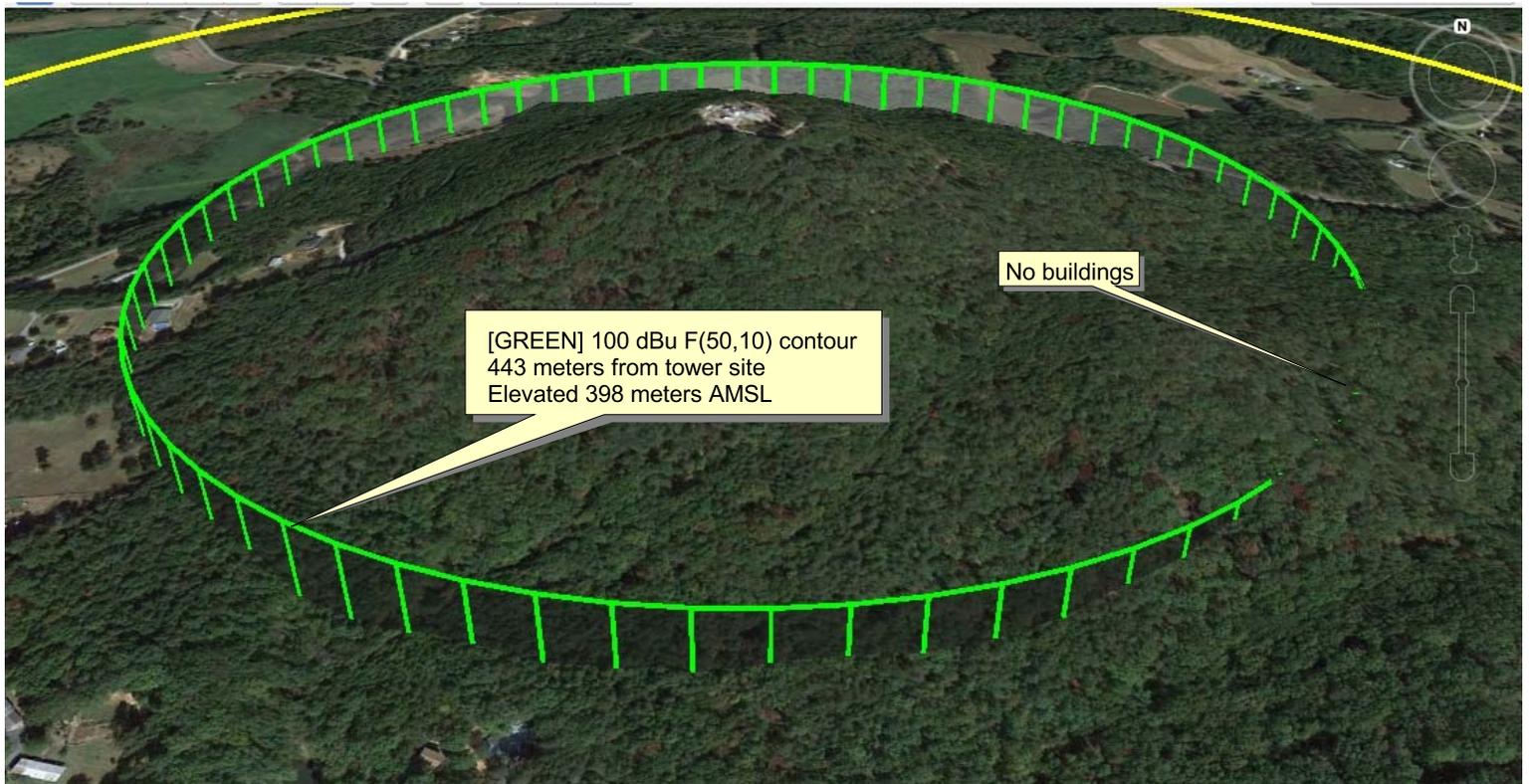


Figure 3B - with respect to 2nd adjacent WTOB-FM

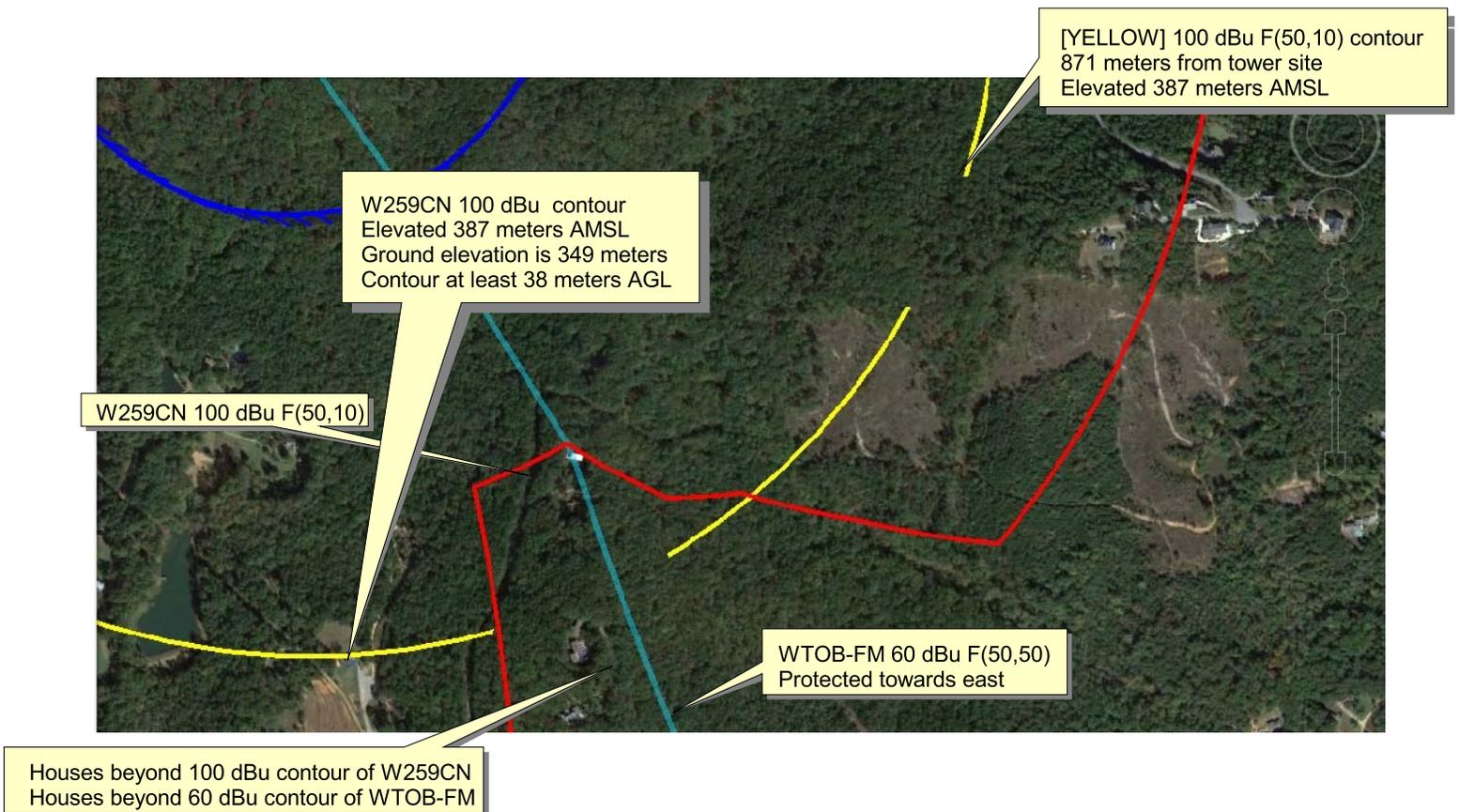
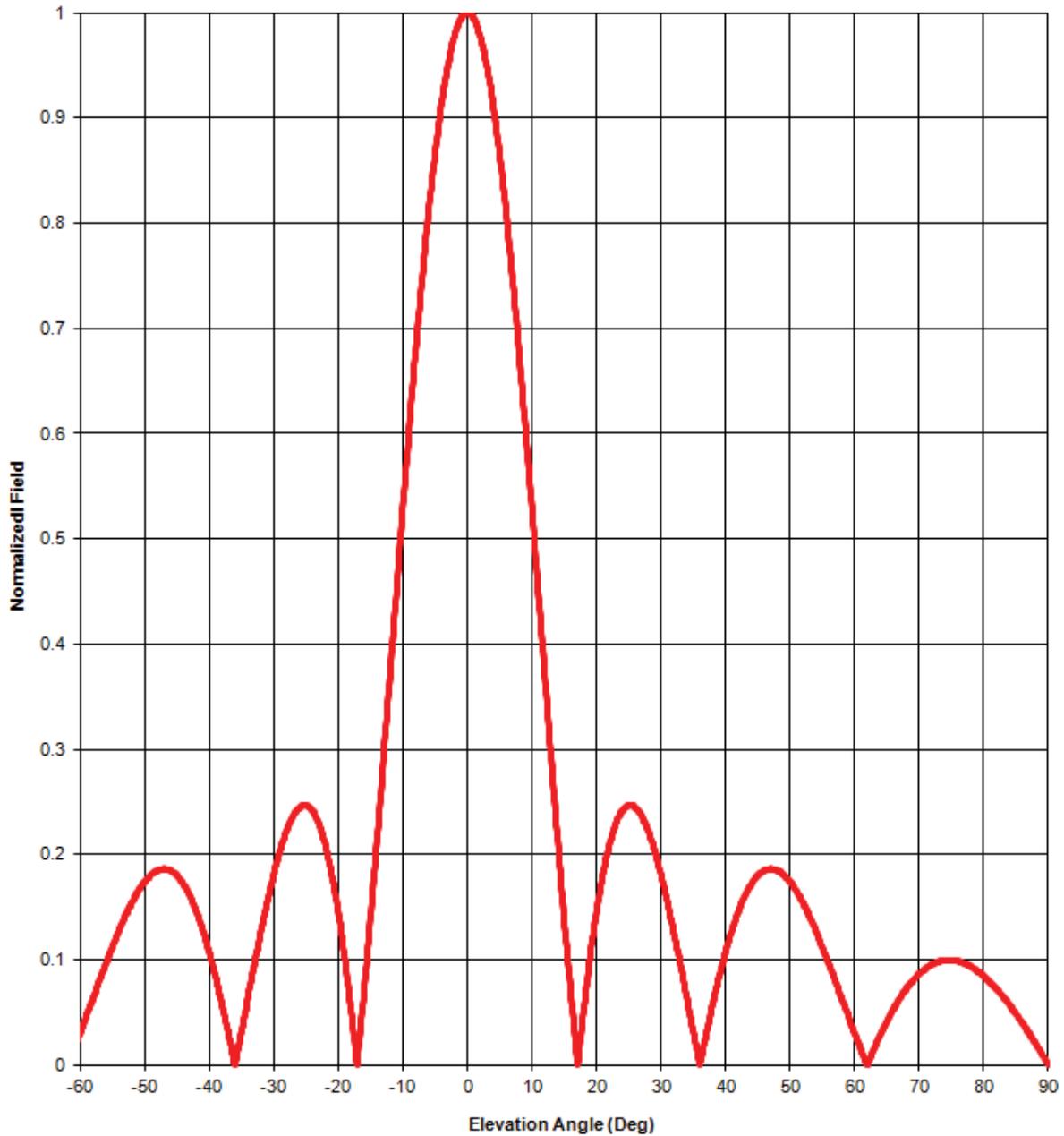


Figure 3C - with respect to 2nd adjacent WTOB-FM

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)

A Division of Howell Laboratories, Inc., P. O. Box 389, Bridgton, Maine 04009 USA

(207) 647-3327

1-888-SHIVELY

Fax: (207)647-8273

An Employee-Owned Company

www.shively.com

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Degrees	Rel. Field
1	0.994
2	0.978
3	0.951
4	0.913
5	0.866
6	0.811
7	0.748
8	0.680
9	0.606
10	0.529
11	0.450
12	0.370
13	0.291
14	0.214
15	0.140
16	0.070
17	0.006
18	0.051

Degrees	Rel. Field
19	0.102
20	0.146
21	0.181
22	0.209
23	0.229
24	0.242
25	0.247
26	0.245
27	0.237
28	0.223
29	0.204
30	0.181
31	0.155
32	0.126
33	0.096
34	0.064
35	0.032
36	0.001

Degrees	Rel. Field
37	0.029
38	0.057
39	0.084
40	0.108
41	0.128
42	0.146
43	0.161
44	0.172
45	0.180
46	0.185
47	0.186
48	0.185
49	0.181
50	0.174
51	0.165
52	0.154
53	0.142
54	0.127

Degrees	Rel. Field
55	0.112
56	0.096
57	0.080
58	0.063
59	0.047
60	0.030
61	0.014
62	0.001
63	0.016
64	0.029
65	0.042
66	0.053
67	0.064
68	0.073
69	0.080
70	0.087
71	0.092
72	0.096

Degrees	Rel. Field
73	0.098
74	0.100
75	0.100
76	0.099
77	0.097
78	0.093
79	0.089
80	0.084
81	0.079
82	0.072
83	0.065
84	0.057
85	0.049
86	0.040
87	0.030
88	0.021
89	0.011
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	4.6%	25.1	22.8%	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")