

## TECHNICAL REPORT

### W275BZ Modification - Port Orange, FL

#### Non-adjacent channel change from channel 275 (102.9 MHz) to Channel 249 (97.7 MHz)

This technical report is submitted in support of a minor modifications to W275BZ at Port Orange, FL, FCC Facility I.D. 142468. A non-adjacent move to channel 249D and change in directional antenna is requested, in accordance with CFR §74.1233(a)(1). The non-adjacent move is required because the current 102.9 facility receives severe interference to its 60 dBu service area (52.9%) as demonstrated in exhibit E2. The proposed 97.7 60 dBu does not receive any co-channel or 1<sup>st</sup> adjacent channel interference.

The translator will continue to serve as a fill-in facility to rebroadcast WPOZ(FM) 202C at Orlando, FL (FCC Facility I.D. 9876).

#### **Non-adjacent channel move per §74.1233(a)(1) analysis:**

A non-adjacent channel change to 230D (93.9 MHz) is requested in accordance with CFR §74.1233(a)(1) as modified in *FCC 19-40, May 9, 2019*. In that Report and Order, the Commission explained that:

*6. For these reasons, we modify section 74.1233(a)(1) of the Commission's rules (Rules) to define an FM translator's change to any available same-band FM channel as a minor change, upon a showing of actual or **predicted interference** to or from any other broadcast station (emphasis added).*

Exhibits E-1 and E-2 show the current incoming interference to W275BZ from the co-channel application of WEZI(FM) 275C at Jacksonville, FL to 52.9% of its 60 dBu contour area and 40.2% population. The proposed channel 249D facility will eliminate

the incoming interference. Therefore, a modification to channel 249D is requested in accordance with the modified rules. Interference calculations were performed using the V-Soft Probe 5 FM interference feature, 1 second (30 meter) FCC terrain and the FCC Method -20 dB co-channel U/D ratio.

### **Allocation Analysis:**

An overlap study in exhibit E-3 shows the proposed facility complies with §74.1204 with the exception of second adjacent channel WNUE-FM 251C2 at Deltona, FL. Using the vertical elevation pattern of the PSI FML two bay, 0.75 wavelength spaced antenna (exhibit E-4), the +40 110.0 F(50-10) dBu contour within the protected contour (exhibit E-5) lowest point = 9.1 meters above the site elevation, which will not reach any population, buildings or major roads (exhibit E-6). Therefore, a waiver of Section 74.1204 is requested in accordance with *Living Way Ministries, Inc.* (FCC 08-242).

The proposed W275BZ 230D 60 F(50-50) dBu contour overlaps the current facility and is within the primary WPOZ(FM) 60 dBu contour (exhibit E-7).

### **Antenna System:**

The W275BZ modification to 230D will be located on the existing 89.3 meter tower, ASR#1003611, at coordinates:

**29 08 13.4N 081 04 40.5W NAD 83**

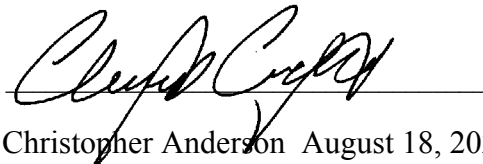
A PSI FML two bay, 0.75 wavelength spaced, directional antenna (exhibit E-8) will be mounted at a COR AGL of 87.0 meters, 95.2 meters AMSL, 87.9 meter HAAT (exhibit E-9) and operate at 0.250 kW ERP.

**RF Exposure Calculation:**

The RF contribution was calculated using FMModel (exhibit E-10). The RF is calculated to be  $0.133 \mu\text{W}/\text{cm}^2$  at a distance of 34.4 meters from the base of the tower, which is below 5% of the  $200 \mu\text{W}/\text{cm}^2$  maximum permissible for general population exposure, allowing exclusion from consideration.

**Conclusion:**

It is concluded that the W275BZ modification to 249D complies with all Commission rules and policies.

A handwritten signature in black ink, appearing to read 'Christopher Anderson', is written over a horizontal line.

Christopher Anderson August 18, 2023  
andersce@bham.rr.com  
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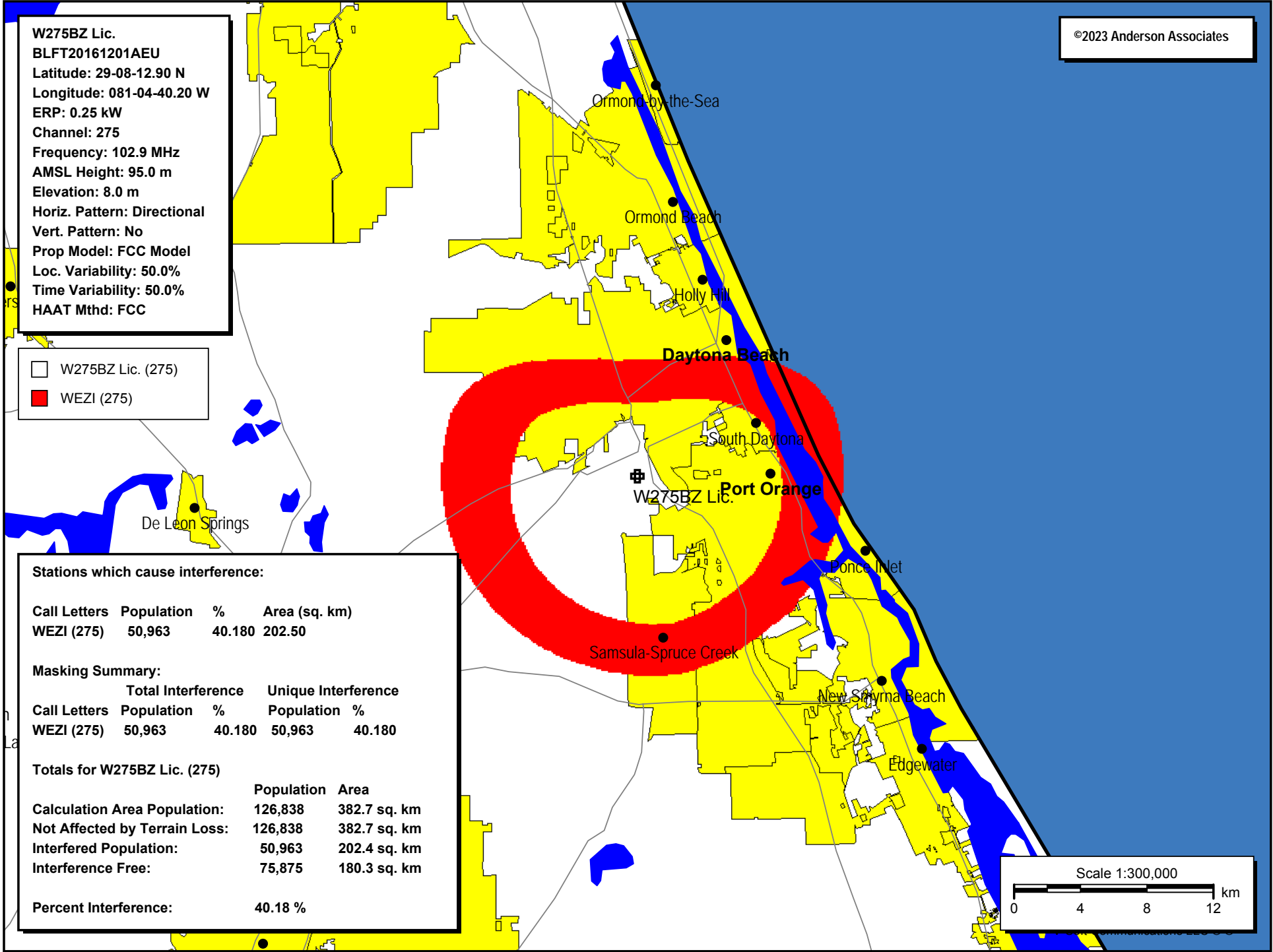
# E-1 W275BZ Lic. Overlap Study

REFERENCE		CH# 275D - 102.9 MHz, Pwr= 0.25 kW DA, HAAT= 0.0 M, COR= 95 M						DISPLAY DATES			
29 08 12.90 N.		Average Protected F(50-50)= 7.09 km						DATA 08-16-23			
81 04 40.20 W.		Standard Directional						SEARCH 08-16-23			
CH CITY	CALL	TYPE STATE	ANT AZI ---	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*	
275C Jacksonville	WEZI	LIC _CN FL	339.8 159.5	135.12 BMLH20130124AAQ	30 16 34.90 81 33 52.30	100.000 309	172.5 315	72.8 Cox Radio, LLC	-46.2*	36.7	
275D Port Orange	W275BZ	LIC DCN FL	0.0 0.0	0.00 BLFT20161201AEU	29 08 12.90 81 04 40.20	0.250	95	---Reference---	Central Florida Educationa		
277A Holly Hill	WVYB	LIC _CN FL	2.6 182.6	11.09 BLH20101007AAD	29 14 11.90 81 04 21.20	6.000 90	2.6 93	26.2 Southern Stone Communicati	1.5	-15.5*	
272D New Smyrna Beach	W272DH	LIC _CN FL	144.6 324.6	17.42 BLFT20161215ACC	29 00 33.00 80 58 26.20	0.055	0.5 68	6.9 Richard L. Van Zandt	4.8	9.4	
274C2 Rockledge	WHKR	LIC ZCN FL	161.3 341.4	92.35 BLH20021015ACD	28 21 00.00 80 46 28.20	50.000 132	73.9 134	48.4 Cumulus Licensing LLC	6.5	25.9	
276C2 Windermere	WFYY	LIC ZCN FL	218.2 37.9	81.56 BLH20090317ACS	28 33 33.00 81 35 38.30	22.000 227	62.5 259	42.3 Jvc Media Of Florida, LLC	7.2	20.6	
274D Deltona	W274AY	LIC _CN FL	216.6 36.5	33.93 BLFT20050729BDE	28 53 30.00 81 17 08.20	0.250 23	10.1 33	7.1 Cornerstone Broadcasting C	12.0	9.6	
222C Orlando	WWKA	LIC _CN FL	177.9 357.9	62.99 BLH20011221AAP	28 34 08.00 81 03 15.20	100.000 454	44.9 463	12.6 Cox Radio, LLC	28.5R	34.5M	
278D Eatonville	W278CN	LIC _CN FL	208.8 28.7	53.63 0000208611	28 42 50.10 81 20 34.40	0.196	1.0 148	14.3 Manuel Arroyo	40.8	38.3	
274L1 Umatilla	WUFR-LP	LIC _CN FL	248.1 67.8	62.09 BLL20080612AAR	28 55 36.90 81 40 11.20	0.080 33	58	41.7 Communication Arts Center,		38.8	
278D Palm Coast	W278BP	LIC _CN FL	344.6 164.5	47.51 BLFT20170329ABQ	29 32 55.90 81 12 30.20	0.054	0.5 72	7.1 Central Florida Educationa	38.9	40.0	

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Terrain database is FCC 30 meter , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
In & Out distances between contours are shown at closest points. Reference zone= East Zone, Co to 3rd adjacent.  
All separation margins (if shown) include rounding.  
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
"\*\*\*"affixed to 'IN' or 'OUT' values = site inside restricted contour.  
« = Station meets FCC minimum distance spacing for its class.

E-2 W275BZ Lic. Interference Plot



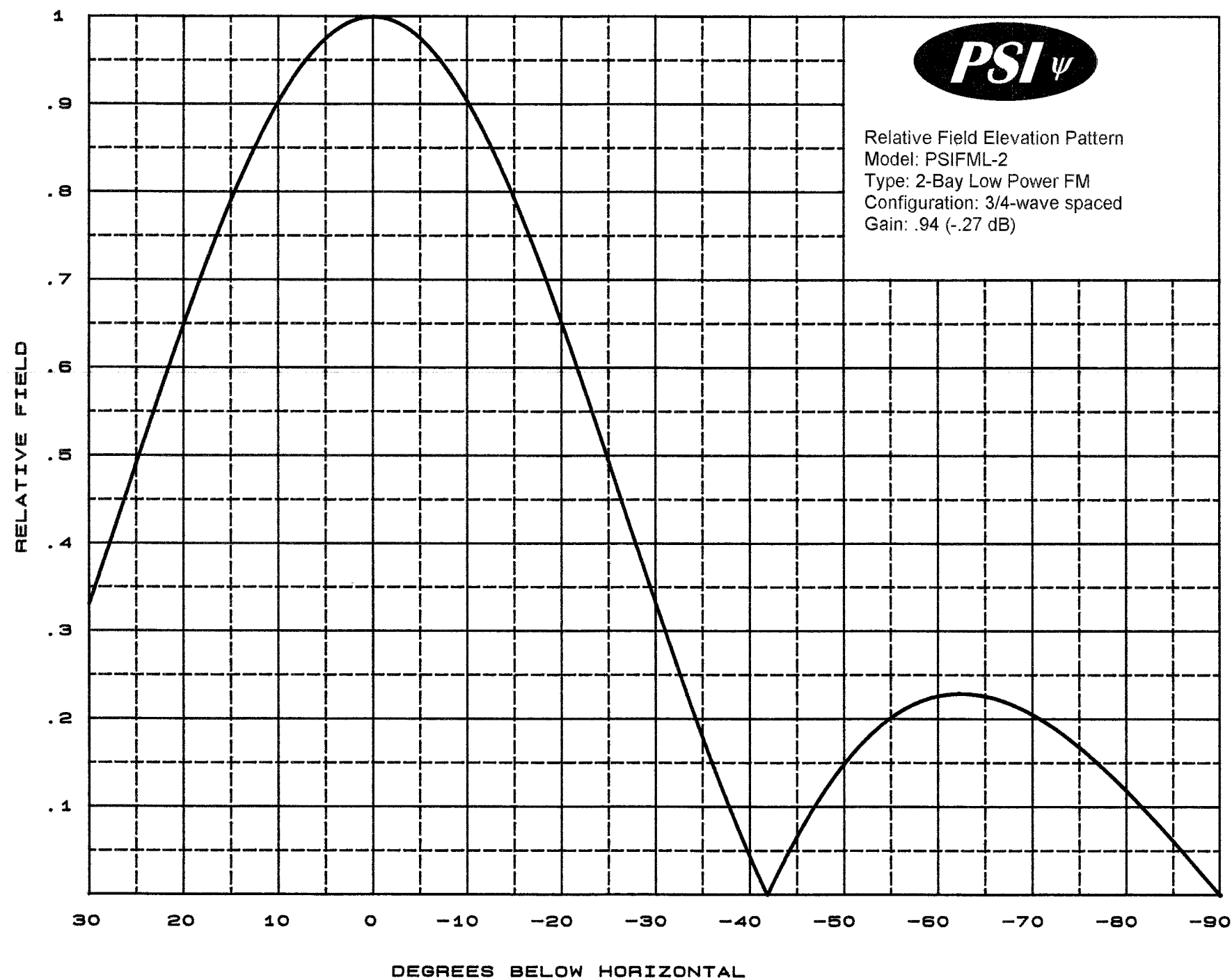
# E-3 W275BZ Mod. 249D Overlap Study

REFERENCE 29 08 13.40 N. 81 04 40.50 W.		CH# 249D - 97.7 MHz, Pwr= 0.25 kW DA, HAAT= 87.9 M, COR= 95.2 M Average Protected F(50-50)= 12.09 km Standard Directional								DISPLAY DATES DATA 08-16-23 SEARCH 08-17-23	
CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*	
251C2 Deltona	WNUE-FM	LIC NCN FL	178.1 358.1	31.62 0000154597	28 51 10.00 81 04 02.20	50.000 145	5.8 151	51.0 Radio Training Network, Inc	13.8	-20.5*(1)	
249L1 Astor	WMCW-LP	LIC _CN FL	274.8 94.6	45.56 BLL20141125ANW	29 10 13.90 81 32 44.20	0.100 26	33	15.5 Astor Community Radio, Inc	0.5		
247D Daytona Beach	W247AL	LIC _CN FL	27.7 207.8	11.08 BLFT19990222TM	29 13 30.90 81 01 29.10	0.120 42	0.8 45	6.5 Cornerstone Broadcasting C	2.0	4.1	
248C0 Winter Haven	WPCV	LIC _CN FL	202.4 22.2	121.43 BLH19890908KA	28 07 36.10 81 33 02.30	100.000 310	107.1 340	73.8 Hall Communications, Inc.	2.5	30.4	
248C0 Winter Haven	WPCV	APP DCN FL	202.4 22.2	121.43 0000217922	28 07 36.10 81 33 02.30	100.000 310	107.1 340	73.8 Hall Communications, Inc.	2.5	30.4	
247D Deland	W247AK	LIC _CN FL	239.9 59.8	24.65 BLFT19980918TD	29 01 31.90 81 17 50.20	0.100 41	0.7 52	6.3 Cornerstone Broadcasting C	12.2	17.2	
249D Palm Coast	W249CH	LIC _CN FL	346.2 166.2	47.81 BLFT20091002AAI	29 33 16.90 81 11 44.20	0.080 48	21.9 52	6.6 Bible Broadcasting Network	18.1	17.5	

Terrain database is FCC 30 meter, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM  
In & Out distances between contours are shown at closest points. Reference zone= East Zone, Co to 3rd adjacent.  
All separation margins (if shown) include rounding.  
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
"\*"affixed to 'IN' or 'OUT' values = site inside restricted contour.

- (1) The +40 110.0 F(50-10) dBu contour within the WNUE-FM 251C2 second-adjacent protected contour (exhibit E-5) lowest point = 9.1 meters above the site elevation, which will not reach any population, buildings or major roads (exhibit E-6).

E-4 W275BZ Mod. 249D Antenna Vertical Elevation Pattern and Tabulation





# **Propagation Systems Inc.**

Elevation Pattern Tabulation

Antenna: PSIFML-2 Special

Bay spacing: 3/4 wave

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-90.0	0.001	-60.000	-50.0	0.149	-16.513	-10.0	0.903	-0.883
-89.0	0.012	-38.221	-49.0	0.135	-17.364	-9.0	0.921	-0.713
-88.0	0.025	-32.201	-48.0	0.120	-18.405	-8.0	0.937	-0.561
-87.0	0.037	-28.679	-47.0	0.104	-19.677	-7.0	0.952	-0.429
-86.0	0.049	-26.207	-46.0	0.086	-21.289	-6.0	0.964	-0.315
-85.0	0.061	-24.285	-45.0	0.068	-23.404	-5.0	0.975	-0.219
-84.0	0.073	-22.748	-44.0	0.048	-26.425	-4.0	0.984	-0.139
-83.0	0.085	-21.443	-43.0	0.027	-31.481	-3.0	0.991	-0.079
-82.0	0.096	-20.349	-42.0	0.005	-46.848	-2.0	0.996	-0.036
-81.0	0.107	-19.378	-41.0	0.018	-34.664	-1.0	0.999	-0.009
-80.0	0.118	-18.538	-40.0	0.043	-27.417	0.0	1.000	0.000
-79.0	0.129	-17.792	-39.0	0.068	-23.365	1.0	0.999	-0.009
-78.0	0.139	-17.125	-38.0	0.094	-20.529	2.0	0.996	-0.036
-77.0	0.149	-16.522	-37.0	0.121	-18.329	3.0	0.991	-0.079
-76.0	0.159	-15.984	-36.0	0.149	-16.531	4.0	0.984	-0.139
-75.0	0.168	-15.508	-35.0	0.178	-14.998	5.0	0.975	-0.219
-74.0	0.176	-15.072	-34.0	0.207	-13.669	6.0	0.964	-0.315
-73.0	0.184	-14.685	-33.0	0.237	-12.489	7.0	0.952	-0.429
-72.0	0.192	-14.335	-32.0	0.268	-11.431	8.0	0.937	-0.561
-71.0	0.199	-14.026	-31.0	0.299	-10.475	9.0	0.921	-0.713
-70.0	0.205	-13.752	-30.0	0.331	-9.602	10.0	0.903	-0.882
-69.0	0.211	-13.518	-29.0	0.363	-8.801	11.0	0.884	-1.072
-68.0	0.216	-13.315	-28.0	0.395	-8.061	12.0	0.863	-1.279
-67.0	0.220	-13.146	-27.0	0.428	-7.377	13.0	0.841	-1.508
-66.0	0.224	-13.009	-26.0	0.460	-6.742	14.0	0.817	-1.757
-65.0	0.226	-12.904	-25.0	0.493	-6.151	15.0	0.792	-2.029
-64.0	0.228	-12.834	-24.0	0.525	-5.599	16.0	0.765	-2.322
-63.0	0.229	-12.800	-23.0	0.557	-5.083	17.0	0.738	-2.639
-62.0	0.229	-12.794	-22.0	0.589	-4.603	18.0	0.710	-2.979
-61.0	0.228	-12.829	-21.0	0.620	-4.154	19.0	0.680	-3.344
-60.0	0.227	-12.898	-20.0	0.650	-3.736	20.0	0.650	-3.736
-59.0	0.224	-13.009	-19.0	0.680	-3.344	21.0	0.620	-4.154
-58.0	0.220	-13.158	-18.0	0.710	-2.979	22.0	0.589	-4.603
-57.0	0.215	-13.351	-17.0	0.738	-2.639	23.0	0.557	-5.083
-56.0	0.209	-13.600	-16.0	0.765	-2.323	24.0	0.525	-5.599
-55.0	0.202	-13.894	-15.0	0.792	-2.029	25.0	0.493	-6.151
-54.0	0.194	-14.260	-14.0	0.817	-1.759	26.0	0.460	-6.742
-53.0	0.184	-14.685	-13.0	0.840	-1.510	27.0	0.428	-7.377
-52.0	0.174	-15.192	-12.0	0.863	-1.281	28.0	0.395	-8.061
-51.0	0.162	-15.795	-11.0	0.884	-1.072	29.0	0.363	-8.801
						30.0	0.331	-9.602

file: FML 2-bay elevation tabulation

revision: A

Date: 1/28/08



E-5 W275BZ Mod. 249D +40 F(50-10) dBu Tabulation Within WNUE-FM 251C2

W275BZ Port Orange, FL, Showing Protection to WNUE-FM, Channel: 251

Geographic Coordinates: N. 29 08 13.40 W. 81 04 40.50

74.1204(d) Study - Using FCC 30 meter Terrain Database

Translator or LPFM Maximum Licensed ERP = 0.25 kW, Channel: 249

Translator or LPFM Antenna Height AG = 87 meters

W275BZ Antenna Model = PSI FML-2-075

Protected Station's Contour = 70.00482 dBu

Translator's or LPFM's full Interference contour 110.00482

Review Azimuth = 180 Degrees True

Horizontal Relative Field at Review Azimuth = 1.000

Translator/LPFM ERP on the horizontal at Review Azimuth = 0.25 kW

Distance between stations = 31.6 km

Protected Station= WNUE-FM, 50 kW, 151 M meters COR AMSL

Depression Angle From Degree(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.000	1.0	0.2500	350.5331	350.5331	087.000
01.00	0.998	1.0	0.2490	349.8320	349.7787	080.895
02.00	0.996	1.0	0.2480	349.1309	348.9183	074.816
03.00	0.991	1.0	0.2455	347.3783	346.9022	068.820
04.00	0.984	1.0	0.2421	344.9246	344.0843	062.939
05.00	0.975	1.0	0.2377	341.7698	340.4692	057.213
06.00	0.964	1.0	0.2323	337.9139	336.0628	051.678
07.00	0.952	1.0	0.2266	333.7075	331.2201	046.331
08.00	0.937	1.0	0.2195	328.4495	325.2530	041.289
09.00	0.921	1.0	0.2121	322.8410	318.8663	036.497
10.00	0.903	1.0	0.2039	316.5314	311.7225	032.035
11.00	0.884	1.0	0.1954	309.8712	304.1780	027.874
12.00	0.863	1.0	0.1862	302.5100	295.8995	024.105
13.00	0.840	1.0	0.1764	294.4478	286.9011	020.764
14.00	0.817	1.0	0.1669	286.3855	277.8786	017.717
15.00	0.792	1.0	0.1568	277.6222	268.1624	015.146
16.00	0.765	1.0	0.1463	268.1578	257.7698	013.086
17.00	0.738	1.0	0.1362	258.6934	247.3897	011.365
18.00	0.710	1.0	0.1260	248.8785	236.6975	010.092
19.00	0.680	1.0	0.1156	238.3625	225.3762	009.397
20.00	0.650	1.0	0.1056	227.8465	214.1057	009.072(1)
21.00	0.620	1.0	0.0961	217.3305	202.8955	009.116
22.00	0.589	1.0	0.0867	206.4640	191.4301	009.657
23.00	0.557	1.0	0.0776	195.2469	179.7257	010.711
24.00	0.525	1.0	0.0689	184.0299	168.1196	012.148
25.00	0.493	1.0	0.0608	172.8128	156.6216	013.966
26.00	0.460	1.0	0.0529	161.2452	144.9262	016.315
27.00	0.428	1.0	0.0458	150.0282	133.6761	018.889
28.00	0.395	1.0	0.0390	138.4606	122.2534	021.997
29.00	0.363	1.0	0.0329	127.2435	111.2897	025.311

Depression Angle From Degree(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
30.00	0.331	1.0	0.0274	116.0264	100.4819	028.987
31.00	0.299	1.0	0.0224	104.8094	089.8392	033.019
32.00	0.268	1.0	0.0180	093.9429	079.6681	037.218
33.00	0.237	1.0	0.0140	083.0763	069.6737	041.753
34.00	0.207	1.0	0.0107	072.5603	060.1553	046.425
35.00	0.178	1.0	0.0079	062.3949	051.1109	051.212
36.00	0.149	1.0	0.0056	052.2294	042.2545	056.300
37.00	0.121	1.0	0.0037	042.4145	033.8737	061.474
38.00	0.094	1.0	0.0022	032.9501	025.9650	066.714
39.00	0.068	1.0	0.0012	023.8363	018.5242	071.999
40.00	0.043	1.0	0.0005	015.0729	011.5465	077.311
41.00	0.018	1.0	0.0001	006.3096	004.7619	082.861
42.00	0.005	1.0	0.0000	001.7527	001.3025	085.827
43.00	0.027	1.0	0.0002	009.4644	006.9218	080.545
44.00	0.048	1.0	0.0006	016.8256	012.1033	075.312
45.00	0.068	1.0	0.0012	023.8363	016.8548	070.145
46.00	0.086	1.0	0.0018	030.1458	020.9411	065.315
47.00	0.104	1.0	0.0027	036.4554	024.8626	060.338
48.00	0.120	1.0	0.0036	042.0640	028.1463	055.740
49.00	0.135	1.0	0.0046	047.3220	031.0460	051.286
50.00	0.149	1.0	0.0056	052.2294	033.5724	046.990
51.00	0.162	1.0	0.0066	056.7864	035.7368	042.869
52.00	0.174	1.0	0.0076	060.9928	037.5509	038.937
53.00	0.184	1.0	0.0085	064.4981	038.8159	035.490
54.00	0.194	1.0	0.0094	068.0034	039.9714	031.984
55.00	0.202	1.0	0.0102	070.8077	040.6136	028.998
56.00	0.209	1.0	0.0109	073.2614	040.9673	026.264
57.00	0.215	1.0	0.0116	075.3646	041.0465	023.794
58.00	0.220	1.0	0.0121	077.1173	040.8659	021.601
59.00	0.224	1.0	0.0125	078.5194	040.4405	019.696
60.00	0.227	1.0	0.0129	079.5710	039.7855	018.089
61.00	0.228	1.0	0.0130	079.9215	038.7467	017.099
62.00	0.229	1.0	0.0131	080.2721	037.6855	016.124
63.00	0.229	1.0	0.0131	080.2721	036.4428	015.477
64.00	0.228	1.0	0.0130	079.9215	035.0353	015.167
65.00	0.226	1.0	0.0128	079.2205	033.4800	015.202
66.00	0.224	1.0	0.0125	078.5194	031.9367	015.269
67.00	0.220	1.0	0.0121	077.1173	030.1321	016.013
68.00	0.216	1.0	0.0117	075.7151	028.3634	016.798
69.00	0.211	1.0	0.0111	073.9625	026.5058	017.950
70.00	0.205	1.0	0.0105	071.8593	024.5773	019.474
71.00	0.199	1.0	0.0099	069.7561	022.7104	021.044
72.00	0.192	1.0	0.0092	067.3024	020.7976	022.992
73.00	0.184	1.0	0.0085	064.4981	018.8574	025.320
74.00	0.176	1.0	0.0077	061.6938	017.0051	027.696
75.00	0.168	1.0	0.0071	058.8896	015.2417	030.117
76.00	0.159	1.0	0.0063	055.7348	013.4835	032.921
77.00	0.149	1.0	0.0056	052.2294	011.7491	036.109
78.00	0.139	1.0	0.0048	048.7241	010.1303	039.341

Depression Angle From Degree(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
79.00	0.129	1.0	0.0042	045.2188	008.6281	042.612
80.00	0.118	1.0	0.0035	041.3629	007.1826	046.265
81.00	0.107	1.0	0.0029	037.5070	005.8674	049.955
82.00	0.096	1.0	0.0023	033.6512	004.6833	053.676
83.00	0.085	1.0	0.0018	029.7953	003.6311	057.427
84.00	0.073	1.0	0.0013	025.5889	002.6748	061.551
85.00	0.061	1.0	0.0009	021.3825	001.8636	065.699
86.00	0.049	1.0	0.0006	017.1761	001.1981	069.866
87.00	0.037	1.0	0.0003	012.9697	000.6788	074.048
88.00	0.025	1.0	0.0002	008.7633	000.3058	078.242
89.00	0.012	1.0	0.0000	004.2064	000.0734	082.794
90.00	0.001	1.0	0.0000	000.3505	000.0000	086.649

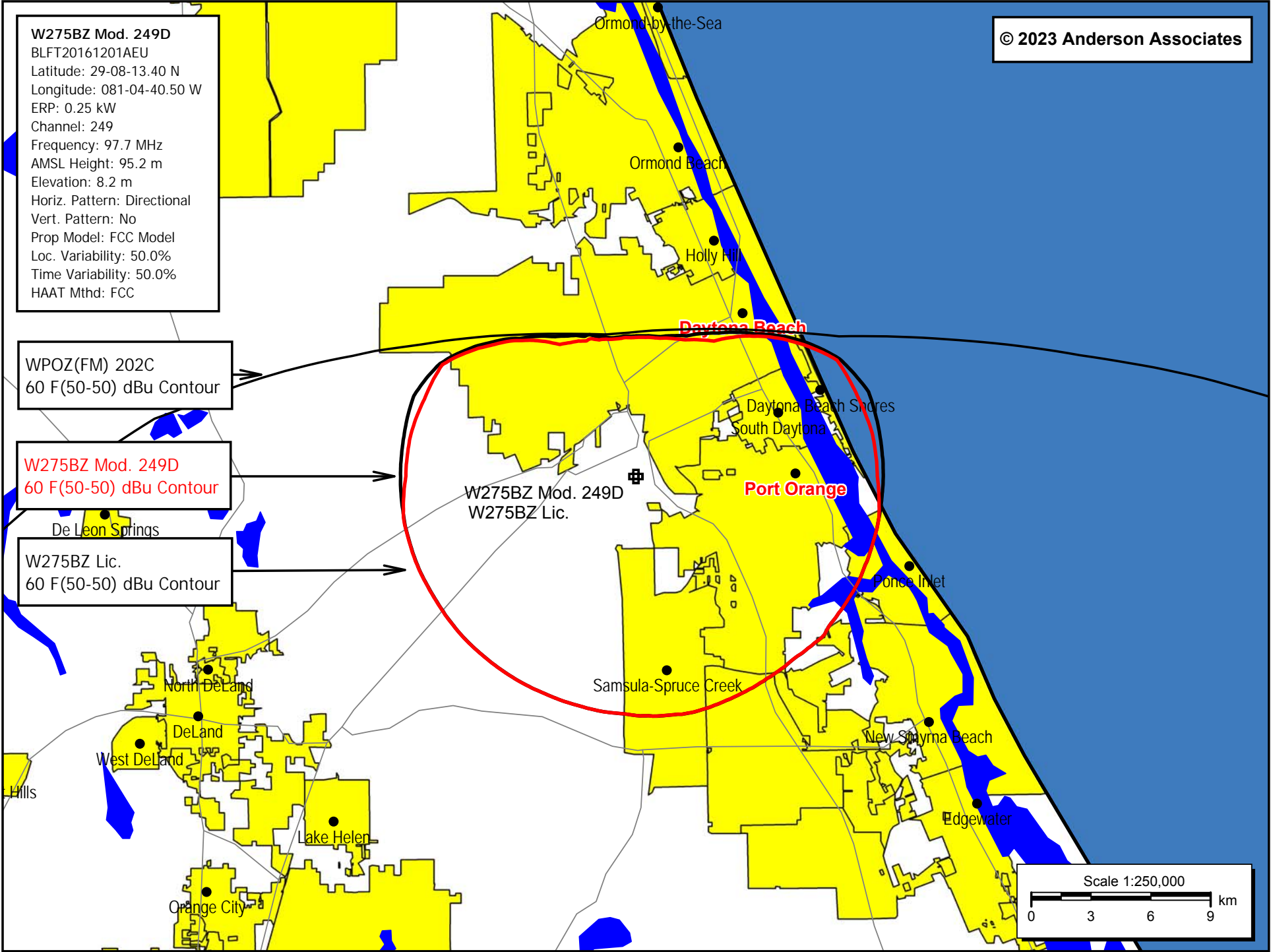
(1) The +40 100.0 F(50-10) dBu contour within the WNUE-FM 251C2 second-adjacent protected contour lowest point = 9.1 meters above the site elevation.





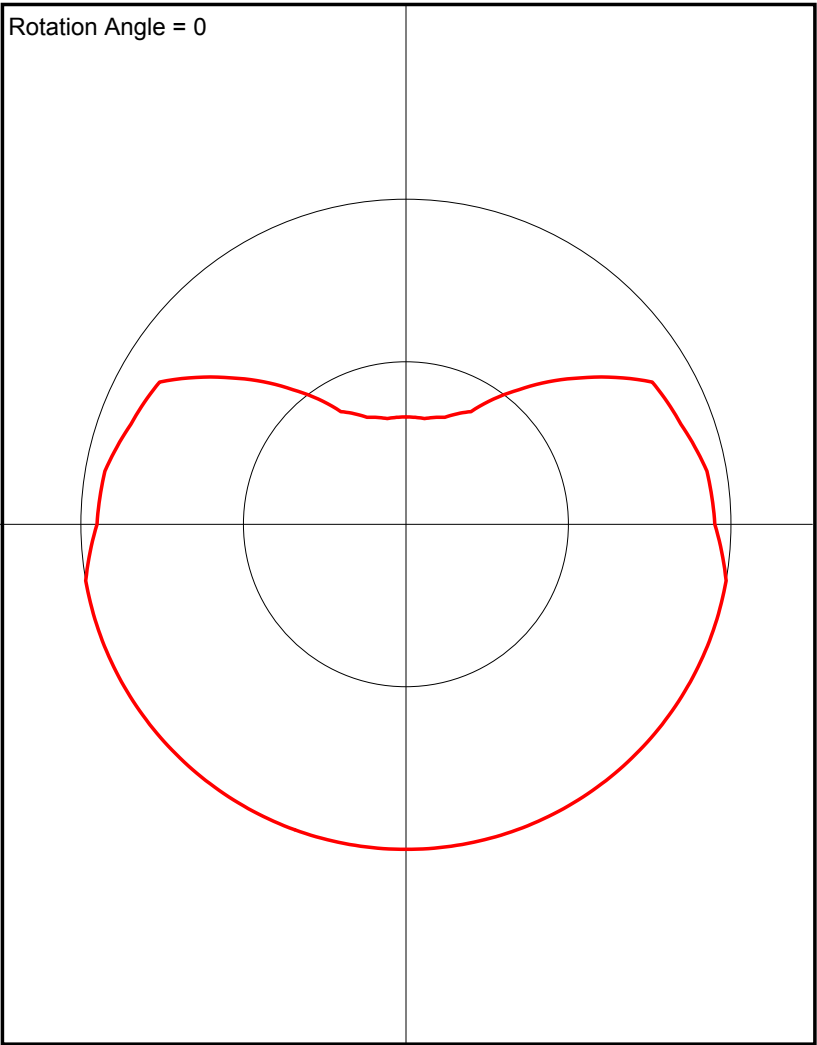


E-7 W275BZ Mod. 249D 60 F(50-50) dBu Contour Plot



E-8 W275BZ Mod. 249D Directional Antenna Pattern

Azimuth (deg)	Relative Field
0.0	0.33
10.0	0.33
20.0	0.35
30.0	0.4
40.0	0.54
50.0	0.7
60.0	0.875
70.0	0.9
80.0	0.94
90.0	0.95
100.0	1.0
110.0	1.0
120.0	1.0
130.0	1.0
140.0	1.0
150.0	1.0
160.0	1.0
170.0	1.0
180.0	1.0
190.0	1.0
200.0	1.0
210.0	1.0
220.0	1.0
230.0	1.0
240.0	1.0
250.0	1.0
260.0	1.0
270.0	0.95
280.0	0.94
290.0	0.9
300.0	0.875
310.0	0.7
320.0	0.54
330.0	0.4
340.0	0.35
350.0	0.33



# E-9 W275BZ Mod. 249D HAAT Calculation

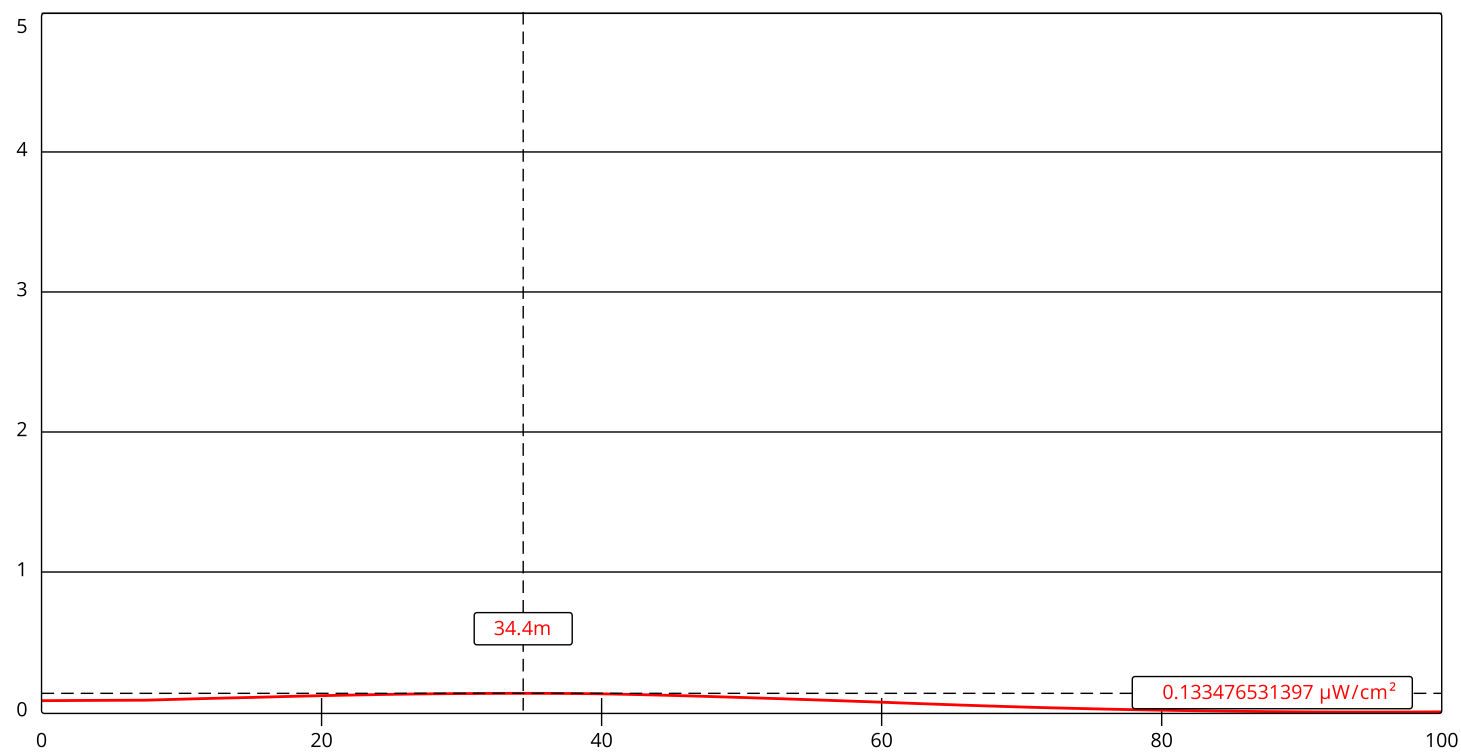
N. Lat. = 290813.4 W. Lng. = 810440.5  
HAAT and Distance to Contour,  
3-16 km, 51 pts Method - FCC 30 Meter

Azi.	AV EL	HAAT	ERP kW	60-F(50-50)
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000	7.4	87.8	0.0272	6.96
030	3.5	91.7	0.0400	7.82
060	2.4	92.8	0.1914	11.64
090	2.6	92.6	0.2256	12.10
120	4.1	91.1	0.2500	12.30
150	7.2	88.0	0.2500	12.10
180	8.9	86.3	0.2500	11.99
210	11.3	83.9	0.2500	11.83
240	11.6	83.6	0.2500	11.81
270	11.4	83.8	0.2256	11.54
300	9.7	85.5	0.1914	11.20
330	7.8	87.4	0.0400	7.62

Ave El= 7.34 M HAAT= 87.86 M AMSL= 95.2

E-10 W275BZ Mod. 249D RF Calculation



Channel Selection	Channel 249 (97.7 MHz) ▾		
Antenna Type +	EPA Type 2: Opposed V Dipole ▾		
Height (m)	87	Distance (m)	100
ERP-H (W)	250	ERP-V (W)	250
Num of Elements	2	λ	0.75
Num of Points	500		



**Registration 1003611****Registration Detail**

Reg Number	1003611	Status	Constructed
File Number	A1035596	Constructed	01/16/1998
EMI	Yes	Dismantled	
NEPA	No		

**Antenna Structure**

Structure Type

**Location** (in NAD83 Coordinates)

Lat/Long	29-08-13.4 N 081-04-40.5 W	Address	1842 TOMOKA FARMS RD (002702 / Daytona Beach)
City, State	DAYTONA BEACH , FL		
Zip	32124	County	VOLUSIA
Center of AM Array		Position of Tower in Array	

**Heights (meters)**

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
8.2	89.3
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
97.5	88.3

**Painting and Lighting Specifications**

FAA Chapters 4, 8, 12

Paint and Light in Accordance with FAA Circular Number 70/7460-1K

**FAA Notification**

FAA Study	2003-ASO-4378-OE	FAA Issue Date	01/14/2004
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**Owner & Contact Information**

FRN	0011498342	Owner Entity Type	Limited Liability Company
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**Owner**

American Towers LLC  
 Attention To: FAA/FCC Regulatory Team  
 10 Presidential Way  
 Woburn , MA 01801

P: (781)926-4500  
 F:  
 E: faa-fcc@americantower.com

**Contact**

Attention To: FAA/FCC Regulatory Team  
 10 Presidential Way  
 Woburn , MA 01801

P: (781)926-4500  
 F:  
 E: faa-fcc@americantower.com

**Last Action Status**

Status	Constructed	Received	06/16/2016
Purpose	Admin Update	Entered	06/16/2016
Mode	Interactive		

**Related Applications**

06/16/2016      A1035596 - Admin Update (AU)