

**Technical Summary**  
**Request for Special Temporary Authority**  
**Engineering Exhibit**

**WXPX-TV – Bradenton, FL**

Facility ID: 6601

Licensee "ION MEDIA LICENSE COMPANY, LLC" is currently authorized to operate on Post-Repack DTV channel 29. The Antenna Structure Registration Number is 1057473 with a Latitude of 27-49-10.8 N+ and a Longitude of 82-15-38.0 W-.

The purpose of this application is to request special temporary authority from Antenna Structure Registration Number 1057473 with a Latitude of 27-49-10.8 N+ and a Longitude of 82-15-38.0 W-. The HAAT is 255.03m (AGL 252.38m) with an AMSL of 275.28m. An ERP of 225 kW will be utilized.

**Antenna System**

A directional side-mounted antenna will be utilized. It will be affixed to an existing guyed tower structure and will not increase the overall height of the structure. Elevation and Azimuth patterns are attached. Note that the antenna orientation should be rotated 270°. Furthermore, the proposed STA operation will not expand the station's noise limited contour.

**RF Hazard (Environmental)**

Human Exposure measurements were calculated using the OET- 65 equation and the outcome is compliant with FCC 1.1310. Furthermore, the calculation is under 5% of the limit categorically excluding the application from further environmental evaluations.

Calculated Maximum	Calculated Exposure	Percent of Limit
mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	
0.375	0.001699	0.45%

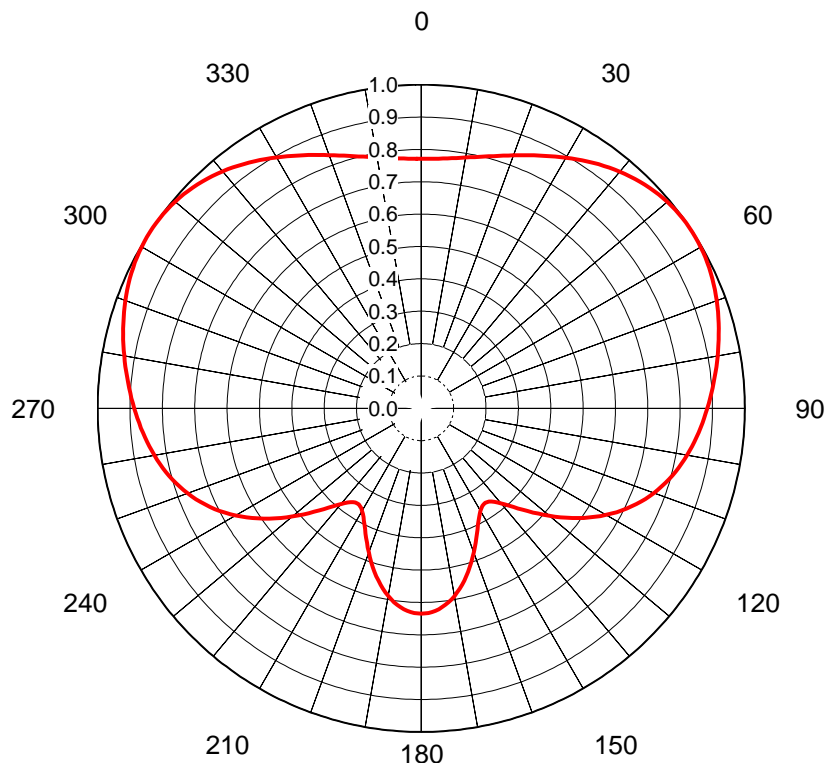
The station will coordinate with other(s) to comply with access, antenna and/or tower issues related to RF Exposure.

**Application for Modification**  
Post – Repack Construction Permit  
RF Hazard (Environmental)

**WXPX-TV – Bradenton, FL**

Facility ID: 6601

Compliance with RF Hazard (Environmental) is provided in the attached Engineering Exhibit.



## AZIMUTH PATTERN Horizontal Polarization

Proposal No.

Date **17-Sep-19**

Call Letters **WXPX**

Channel **29**

Frequency **563 MHz**

Antenna Type **TFU-8WB-R C160**

Gain **1.64 (2.16dB)**

Calculated

Pattern Number **WB-C160-29 Hpol**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.771	36	0.932	72	0.964	108	0.781	144	0.357	180	0.635	216	0.358	252	0.785	288	0.966	324	0.933
1	0.771	37	0.938	73	0.960	109	0.773	145	0.354	181	0.634	217	0.363	253	0.792	289	0.970	325	0.927
2	0.772	38	0.944	74	0.956	110	0.765	146	0.353	182	0.633	218	0.369	254	0.800	290	0.973	326	0.921
3	0.772	39	0.949	75	0.952	111	0.756	147	0.353	183	0.630	219	0.377	255	0.807	291	0.977	327	0.915
4	0.773	40	0.955	76	0.948	112	0.747	148	0.356	184	0.627	220	0.386	256	0.813	292	0.980	328	0.908
5	0.775	41	0.960	77	0.943	113	0.738	149	0.360	185	0.623	221	0.396	257	0.820	293	0.983	329	0.902
6	0.777	42	0.964	78	0.939	114	0.728	150	0.365	186	0.618	222	0.408	258	0.826	294	0.986	330	0.895
7	0.779	43	0.969	79	0.934	115	0.717	151	0.372	187	0.612	223	0.420	259	0.832	295	0.988	331	0.889
8	0.781	44	0.973	80	0.930	116	0.707	152	0.381	188	0.605	224	0.433	260	0.837	296	0.991	332	0.882
9	0.784	45	0.977	81	0.925	117	0.695	153	0.390	189	0.597	225	0.446	261	0.843	297	0.993	333	0.876
10	0.787	46	0.981	82	0.921	118	0.684	154	0.400	190	0.589	226	0.461	262	0.848	298	0.995	334	0.869
11	0.790	47	0.984	83	0.916	119	0.672	155	0.412	191	0.580	227	0.475	263	0.853	299	0.997	335	0.863
12	0.794	48	0.987	84	0.912	120	0.659	156	0.423	192	0.570	228	0.490	264	0.859	300	0.998	336	0.857
13	0.798	49	0.990	85	0.907	121	0.646	157	0.436	193	0.560	229	0.505	265	0.863	301	0.999	337	0.850
14	0.802	50	0.992	86	0.903	122	0.633	158	0.448	194	0.549	230	0.520	266	0.868	302	1.000	338	0.844
15	0.806	51	0.994	87	0.898	123	0.619	159	0.461	195	0.537	231	0.535	267	0.873	303	1.000	339	0.838
16	0.811	52	0.996	88	0.893	124	0.605	160	0.474	196	0.525	232	0.550	268	0.878	304	1.000	340	0.833
17	0.816	53	0.997	89	0.889	125	0.591	161	0.487	197	0.513	233	0.565	269	0.882	305	1.000	341	0.827
18	0.821	54	0.998	90	0.884	126	0.577	162	0.500	198	0.500	234	0.580	270	0.887	306	0.999	342	0.822
19	0.826	55	0.999	91	0.879	127	0.562	163	0.513	199	0.487	235	0.594	271	0.892	307	0.998	343	0.816
20	0.832	56	0.999	92	0.875	128	0.547	164	0.525	200	0.474	236	0.609	272	0.896	308	0.997	344	0.811
21	0.838	57	0.999	93	0.870	129	0.532	165	0.537	201	0.461	237	0.623	273	0.901	309	0.995	345	0.807
22	0.843	58	0.999	94	0.865	130	0.517	166	0.549	202	0.448	238	0.636	274	0.905	310	0.993	346	0.802
23	0.849	59	0.998	95	0.860	131	0.502	167	0.560	203	0.436	239	0.650	275	0.910	311	0.991	347	0.798
24	0.856	60	0.997	96	0.855	132	0.487	168	0.570	204	0.423	240	0.662	276	0.914	312	0.988	348	0.794
25	0.862	61	0.996	97	0.850	133	0.472	169	0.580	205	0.412	241	0.675	277	0.919	313	0.985	349	0.791
26	0.868	62	0.994	98	0.845	134	0.458	170	0.589	206	0.400	242	0.687	278	0.923	314	0.982	350	0.787
27	0.875	63	0.992	99	0.840	135	0.444	171	0.598	207	0.390	243	0.699	279	0.928	315	0.978	351	0.784
28	0.881	64	0.990	100	0.834	136	0.430	172	0.605	208	0.381	244	0.710	280	0.932	316	0.974	352	0.781
29	0.888	65	0.987	101	0.829	137	0.417	173	0.612	209	0.373	245	0.721	281	0.936	317	0.970	353	0.779
30	0.894	66	0.985	102	0.823	138	0.405	174	0.618	210	0.366	246	0.731	282	0.941	318	0.965	354	0.777
31	0.901	67	0.982	103	0.816	139	0.394	175	0.623	211	0.361	247	0.741	283	0.945	319	0.961	355	0.775
32	0.907	68	0.979	104	0.810	140	0.384	176	0.627	212	0.357	248	0.751	284	0.949	320	0.955	356	0.774
33	0.914	69	0.975	105	0.803	141	0.375	177	0.630	213	0.355	249	0.760	285	0.954	321	0.950	357	0.772
34	0.920	70	0.972	106	0.796	142	0.367	178	0.633	214	0.354	250	0.768	286	0.958	322	0.945	358	0.772
35	0.926	71	0.968	107	0.789	143	0.361	179	0.634	215	0.355	251	0.777	287	0.962	323	0.939	359	0.771

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## ELEVATION PATTERN

Proposal No.

Date **17-Sep-19**

Call Letters **WXPX**

Channel **29**

Frequency **563 MHz**

Antenna Type **TFU-8WB-R C160**

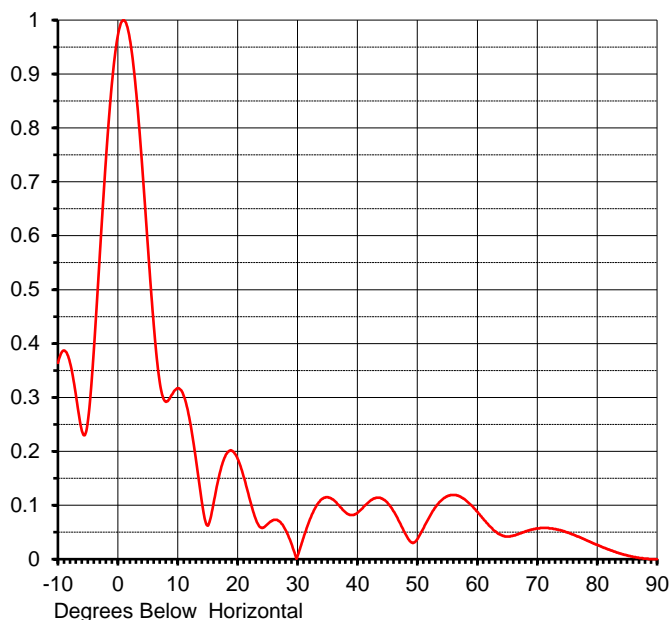
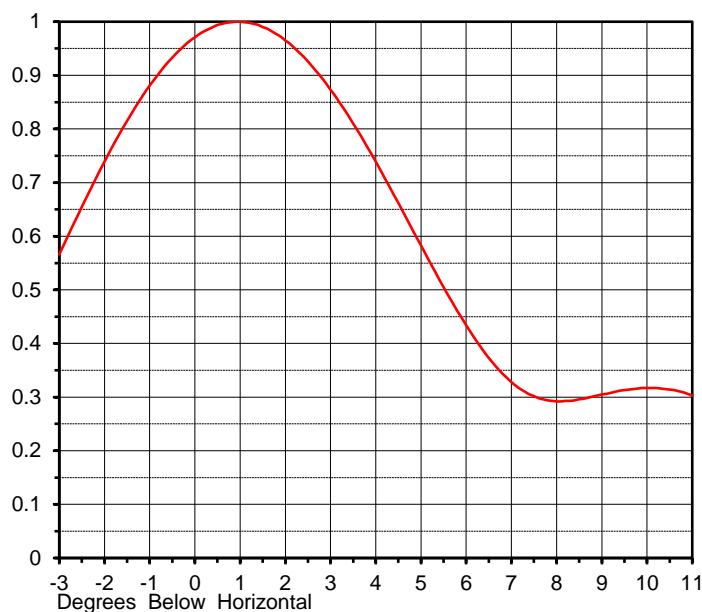
RMS Directivity at Main Lobe **8.0 ( 9.03 dB )**

RMS Directivity at Horizontal **7.5 ( 8.75 dB )**

**Calculated**

Beam Tilt **1.05 deg**

Pattern Number **08W080105-29**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.364	10.0	0.317	30.0	0.006	50.0	0.037	70.0	0.057
-9.0	0.387	11.0	0.303	31.0	0.040	51.0	0.057	71.0	0.058
-8.0	0.365	12.0	0.258	32.0	0.072	52.0	0.078	72.0	0.057
-7.0	0.305	13.0	0.188	33.0	0.096	53.0	0.096	73.0	0.056
-6.0	0.238	14.0	0.108	34.0	0.111	54.0	0.109	74.0	0.053
-5.0	0.256	15.0	0.062	35.0	0.115	55.0	0.117	75.0	0.050
-4.0	0.388	16.0	0.105	36.0	0.110	56.0	0.119	76.0	0.046
-3.0	0.566	17.0	0.159	37.0	0.099	57.0	0.117	77.0	0.041
-2.0	0.739	18.0	0.193	38.0	0.087	58.0	0.110	78.0	0.036
-1.0	0.881	19.0	0.201	39.0	0.082	59.0	0.100	79.0	0.031
0.0	0.971	20.0	0.186	40.0	0.086	60.0	0.088	80.0	0.027
1.0	1.000	21.0	0.153	41.0	0.097	61.0	0.075	81.0	0.022
2.0	0.965	22.0	0.112	42.0	0.107	62.0	0.062	82.0	0.018
3.0	0.873	23.0	0.075	43.0	0.113	63.0	0.052	83.0	0.014
4.0	0.739	24.0	0.058	44.0	0.113	64.0	0.045	84.0	0.010
5.0	0.583	25.0	0.065	45.0	0.105	65.0	0.042	85.0	0.007
6.0	0.434	26.0	0.073	46.0	0.089	66.0	0.044	86.0	0.004
7.0	0.328	27.0	0.070	47.0	0.069	67.0	0.047	87.0	0.002
8.0	0.292	28.0	0.054	48.0	0.047	68.0	0.051	88.0	0.001
9.0	0.305	29.0	0.028	49.0	0.031	69.0	0.055	89.0	0.000
								90.0	0.000

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**WXPX-Post STA**

Latitude: 27-49-10.80 N

Longitude: 082-15-38 W

ERP: 225.00 kW

Channel: 29

Frequency: 563.0 MHz

AGL: 252.38 m

HAAT: 255.03 m

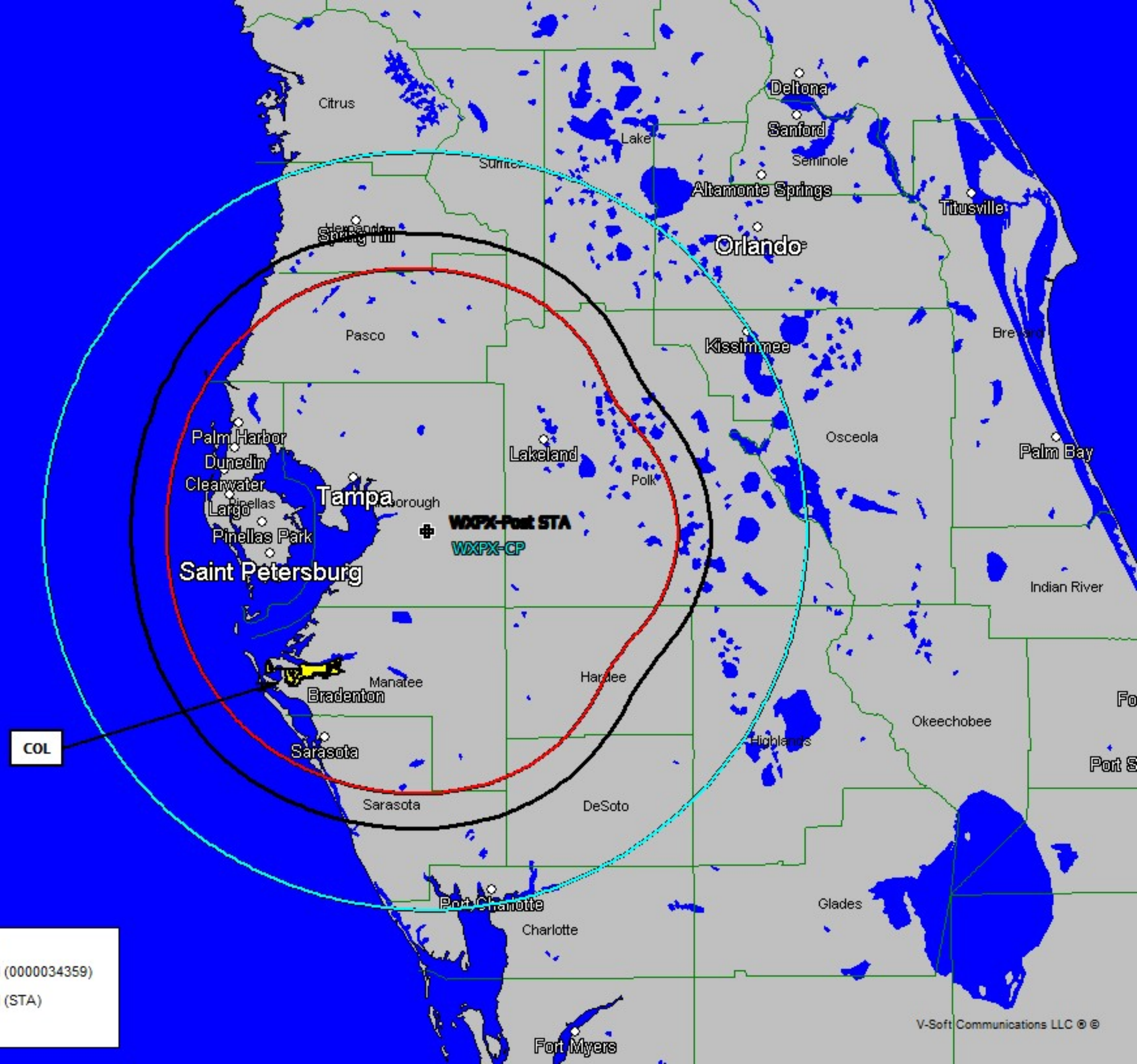
AMSL: 275.28 m

Horiz. Pattern: Directional

Vert. Pattern: Yes

Elec Tilt: 1.05

Prop Model: None

**Contour Legend**

Dipole Adjusted Noise Limited (0000034359)

Dipole Adjusted Noise Limited (STA)

48dBu Service (STA)