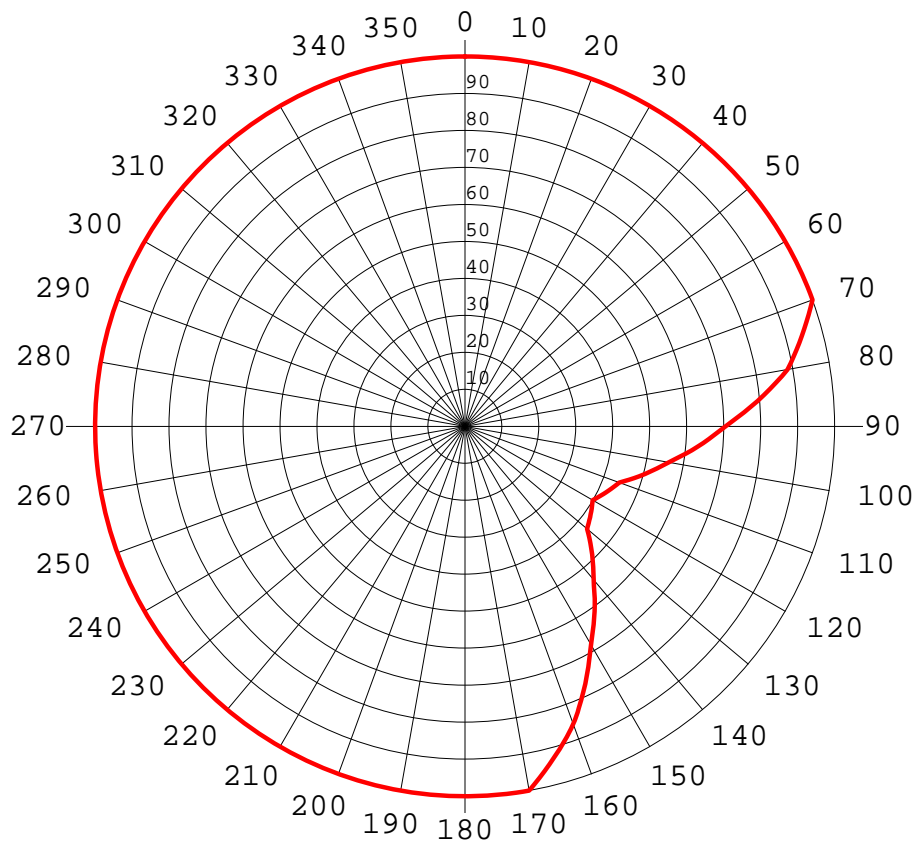


Proposed Directional Antenna Pattern - WLUZ

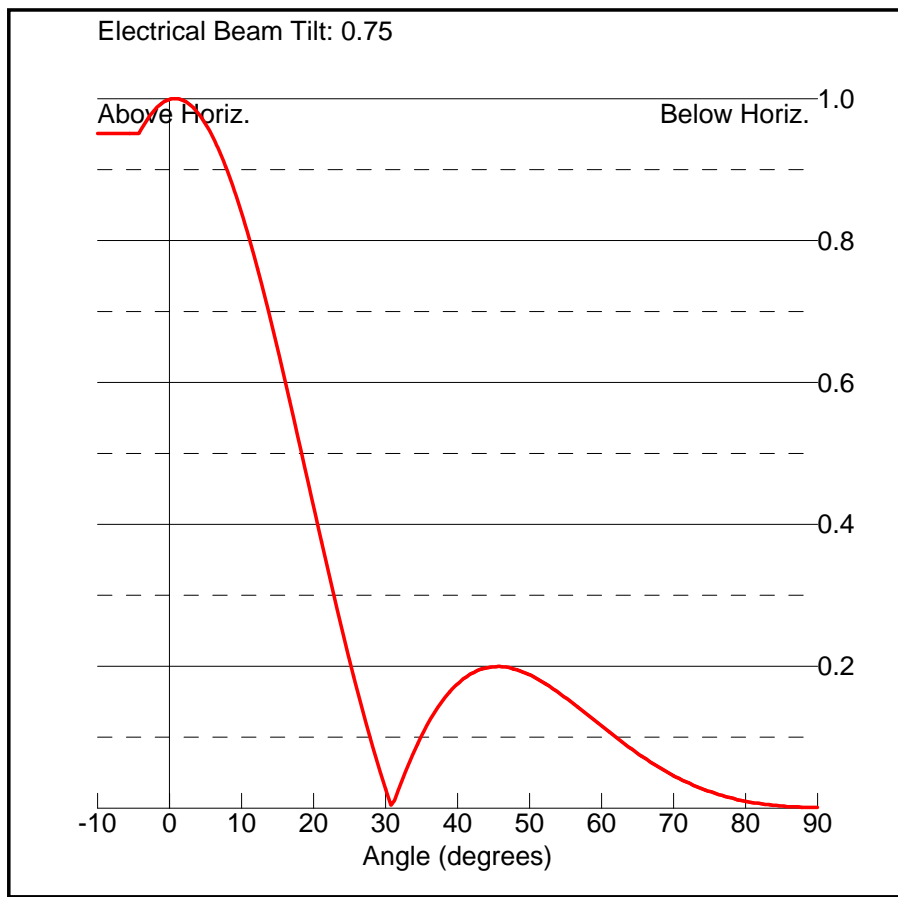


Azi	Rel	dBk	kW	dB	Azi	Rel	dBk	kW	dB
0	1.000	6.72	4.70	0.00	180	1.000	6.72	4.70	0.00
10	1.000	6.72	4.70	0.00	190	1.000	6.72	4.70	0.00
20	1.000	6.72	4.70	0.00	200	1.000	6.72	4.70	0.00
30	1.000	6.72	4.70	0.00	210	1.000	6.72	4.70	0.00
40	1.000	6.72	4.70	0.00	220	1.000	6.72	4.70	0.00
50	1.000	6.72	4.70	0.00	230	1.000	6.72	4.70	0.00
60	1.000	6.72	4.70	0.00	240	1.000	6.72	4.70	0.00
70	1.000	6.72	4.70	0.00	250	1.000	6.72	4.70	0.00
80	0.886	5.67	3.69	-1.05	260	1.000	6.72	4.70	0.00
90	0.704	3.67	2.33	-3.05	270	1.000	6.72	4.70	0.00
100	0.559	1.67	1.47	-5.05	280	1.000	6.72	4.70	0.00
110	0.444	-0.33	0.93	-7.05	290	1.000	6.72	4.70	0.00
120	0.399	-1.26	0.75	-7.98	300	1.000	6.72	4.70	0.00
130	0.431	-0.59	0.87	-7.31	310	1.000	6.72	4.70	0.00
140	0.541	1.38	1.38	-5.34	320	1.000	6.72	4.70	0.00
150	0.681	3.38	2.18	-3.34	330	1.000	6.72	4.70	0.00
160	0.857	5.38	3.45	-1.34	340	1.000	6.72	4.70	0.00
170	1.000	6.72	4.70	0.00	350	1.000	6.72	4.70	0.00

Rotation Angle = 0

ERI SHPX-4H Vertical Elevation Pattern

Angle (deg)	Relative Field
-4.25	0.951
-4.0	0.956
-3.75	0.96
-3.5	0.964
-3.25	0.968
-3.0	0.972
-2.75	0.976
-2.5	0.979
-2.25	0.982
-2.0	0.985
-1.75	0.988
-1.5	0.99
-1.25	0.992
-1.0	0.994
-0.75	0.996
-0.5	0.997
-0.25	0.998
0.0	0.999
0.25	1.0
0.5	1.0
0.75	1.0
1.0	1.0
1.25	1.0
1.5	0.999
1.75	0.998
2.0	0.997
2.25	0.996
2.5	0.994
2.75	0.992
3.0	0.99
3.25	0.988
3.5	0.985
3.75	0.982
4.0	0.979
4.25	0.976
4.5	0.972
4.75	0.968
5.0	0.964
5.25	0.96
5.5	0.956
5.75	0.951
6.0	0.946
6.25	0.941
6.5	0.935
6.75	0.93
7.0	0.924
7.25	0.918
7.5	0.912



7.75	0.905
8.0	0.899
8.25	0.892
8.5	0.885
8.75	0.878
9.0	0.87
9.25	0.863
9.5	0.855
9.75	0.847
10.0	0.839
10.25	0.831
10.5	0.822
10.75	0.814
11.25	0.796
11.75	0.778
12.25	0.759
12.75	0.74
13.25	0.72
13.75	0.7
14.25	0.679
14.75	0.658
15.25	0.637

15.75	0.615	41.75	0.189
16.25	0.593	42.25	0.191
16.75	0.571	42.75	0.194
17.25	0.549	43.25	0.196
17.75	0.526	43.75	0.197
18.25	0.504	44.25	0.198
18.75	0.481	44.75	0.199
19.25	0.459	45.25	0.199
19.75	0.436	45.75	0.2
20.25	0.414	46.25	0.199
20.75	0.391	46.75	0.199
21.25	0.369	47.25	0.198
21.75	0.347	47.75	0.196
22.25	0.325	48.25	0.195
22.75	0.303	48.75	0.193
23.25	0.281	49.25	0.191
23.75	0.26	49.75	0.189
24.25	0.239	50.25	0.187
24.75	0.218	50.75	0.184
25.25	0.198	51.25	0.181
25.75	0.178	51.75	0.178
26.25	0.159	52.25	0.175
26.75	0.14	52.75	0.172
27.25	0.121	53.25	0.168
27.75	0.103	53.75	0.165
28.25	0.085	54.25	0.161
28.75	0.068	54.75	0.157
29.25	0.051	55.25	0.154
29.75	0.035	55.75	0.15
30.25	0.019	56.25	0.146
30.75	0.004	56.75	0.142
31.25	0.011	57.25	0.138
31.75	0.025	57.75	0.134
32.25	0.038	58.25	0.13
32.75	0.051	58.75	0.126
33.25	0.063	59.25	0.122
33.75	0.075	59.75	0.118
34.25	0.086	60.25	0.114
34.75	0.097	60.75	0.11
35.25	0.107	61.25	0.106
35.75	0.117	61.75	0.102
36.25	0.126	62.25	0.098
36.75	0.134	62.75	0.094
37.25	0.142	63.25	0.09
37.75	0.149	63.75	0.086
38.25	0.156	64.25	0.083
38.75	0.162	64.75	0.079
39.25	0.168	65.25	0.075
39.75	0.173	65.75	0.072
40.25	0.177	66.25	0.069
40.75	0.182	66.75	0.065
41.25	0.185	67.25	0.062

Directional Antenna

The proposed custom directional antenna pattern meets the Commission's rules in that the radio frequency emission does not change more than two dB for each ten degrees of azimuthal variation. Also, the maximum pattern attenuation in the deepest null is less than 15 dB. The pattern shown is a composite of the maximum field values in the horizontal and vertical planes.

The proposed antenna will be mounted on the side of a tower using mountings that have been specified by the antenna manufacturer in accordance with the instructions provided by the manufacturer. The antenna will not be mounted on the top of a tower that includes a top mounted platform larger than the nominal cross-sectional area of the tower in the horizontal plane. No other antennas of any type will be mounted at the same tower level as the directional antenna nor within the horizontal or vertical distance specified by the manufacturer as being necessary to maintain proper directional operation. The antenna will be designed and tested by a major manufacturer of broadcast antennas known to the Commission. The pattern will be achieved through traditional methods including power-splitting, resonators and phasing.