

***REQUEST FOR
SPECIAL TEMPORARY AUTHORITY***

DIGITAL TELEVISION STATION WTVP
PEORIA, ILLINOIS
CHANNEL 35
FACILITY ID: 28311

ILLINOIS VALLEY PUBLIC TELECOMM CORP

JULY 2019

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

The following engineering statement and attached exhibits have been prepared for **Illinois Valley Public Telecomm Corp** ("Illinois Valley"), licensee of digital television station WTVP at Peoria, Illinois, and are in support of their request for Special Temporary Authority. This request is being filed to ensure a smooth transition from channel 46, the current channel of operation, to channel 35, the channel assigned for the post-repack environment.

Illinois Valley is currently licensed to operate WTVP on television channel 46 with a maximum effective radiated power of 190 kW at a center of radiation of 216 meters above average terrain, 403 meters above mean sea level, utilizing an elliptically polarized non-directional antenna.¹ In the post-repack environment, WTVP would operate on television channel 35 with a maximum effective radiated power of 155 kW at a center of radiation of 213.8 meters above average terrain, 402.3 meters above mean sea level, also utilizing an elliptically polarized non-directional antenna.² A separate construction permit for auxiliary operation on channel 46 under LMS File No. 0000028578 was also granted by the Commission.

The original plans for repack operation called for WTVP to change to the channel 46 auxiliary antenna system, while the main top mounted antenna and associated transmission line were replaced in preparation for the changeover to channel 35. In order to ensure that Illinois Valley meets its obligation to vacate channel 46 on time, Illinois Valley plans to commence operation on channel 35 utilizing the interim technical parameters specified under this STA

¹ See FCC File No. BLEDT-20040105ACV.

² See LMS File No. 0000028050.

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request. Operation under the requested special temporary authority will continue until the antenna and transmission line change has occurred at the site.

The proposed STA facility would operate on television channel 35 with a maximum effective radiated power of 132 kW at a center of radiation of 140.7 meters above average terrain, 329.2 meters above mean sea level, utilizing an elliptically polarized directional antenna. Data for the proposed directional antenna is attached to this engineering statement.

Exhibit E-1 is a comparison between the proposed special temporary authority 41 dBu F(50,90) service contour and the authorized CP 41 dBu F(50,90) service contour. Additionally, this map also illustrates the 48 dBu F(50,90) service contour for the proposed STA technical parameters. As this map demonstrates, the 41 dBu contour for the proposed special temporary authority would fully reside within the 41 dBu service contour based on the authorized technical parameters. Additionally, the 48 dBu service contour would fully encompass Peoria, Illinois, the community of license.

A grant of the proposed special temporary authority request would serve the public interest. This grant will allow WTVP to remain on the air providing service to the residents of central Illinois during the transition period. Additionally, WTVP will be able to vacate channel 46 by its assigned time also serving the public interest, by freeing spectrum to be utilized for wireless communications. It is respectfully requested that the initial term of this special temporary authority extend for no fewer than 180 days.

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The proposed technical parameters would not constitute a significant environmental impact, and is exempt from environmental processing. The proposed antenna would be side mounted to an existing tower that is registered with the Commission. The addition of this antenna to the tower would not increase the environmental impact already present from the tower. Additionally, the proposed facility would not constitute a radiofrequency radiation exposure hazard to persons in the vicinity.

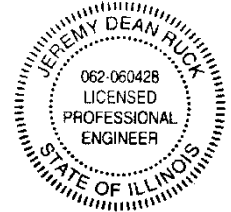
Using the equations in *Appendix A* of OET Bulletin 65, and a conservative estimate of the downward radiation at a relative field of 0.3, the calculated power density at two meters above ground level is 46.1 $\mu\text{W}/\text{cm}^2$ considering the horizontal and vertical polarization components. This value is less than the upper limit permissible under the general population condition of the Commission's safety standard. Illinois Valley certifies that it will coordinate with all other users of the site to ensure that workers and other personnel are not exposed to levels of radiofrequency radiation in excess of applicable safety standards. Coordination activities will include, but are not necessarily limited to, a reduction in transmitter power or cessation of operation.

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The preceding statement has been prepared by me, or under my direction, and is true and accurate to the best of my belief and knowledge.



Above signature is digitized copy of actual signature
License Expires November 30, 2019

Jeremy D. Ruck, PE
July 2, 2019

JEREMY RUCK & ASSOCIATES, INC.

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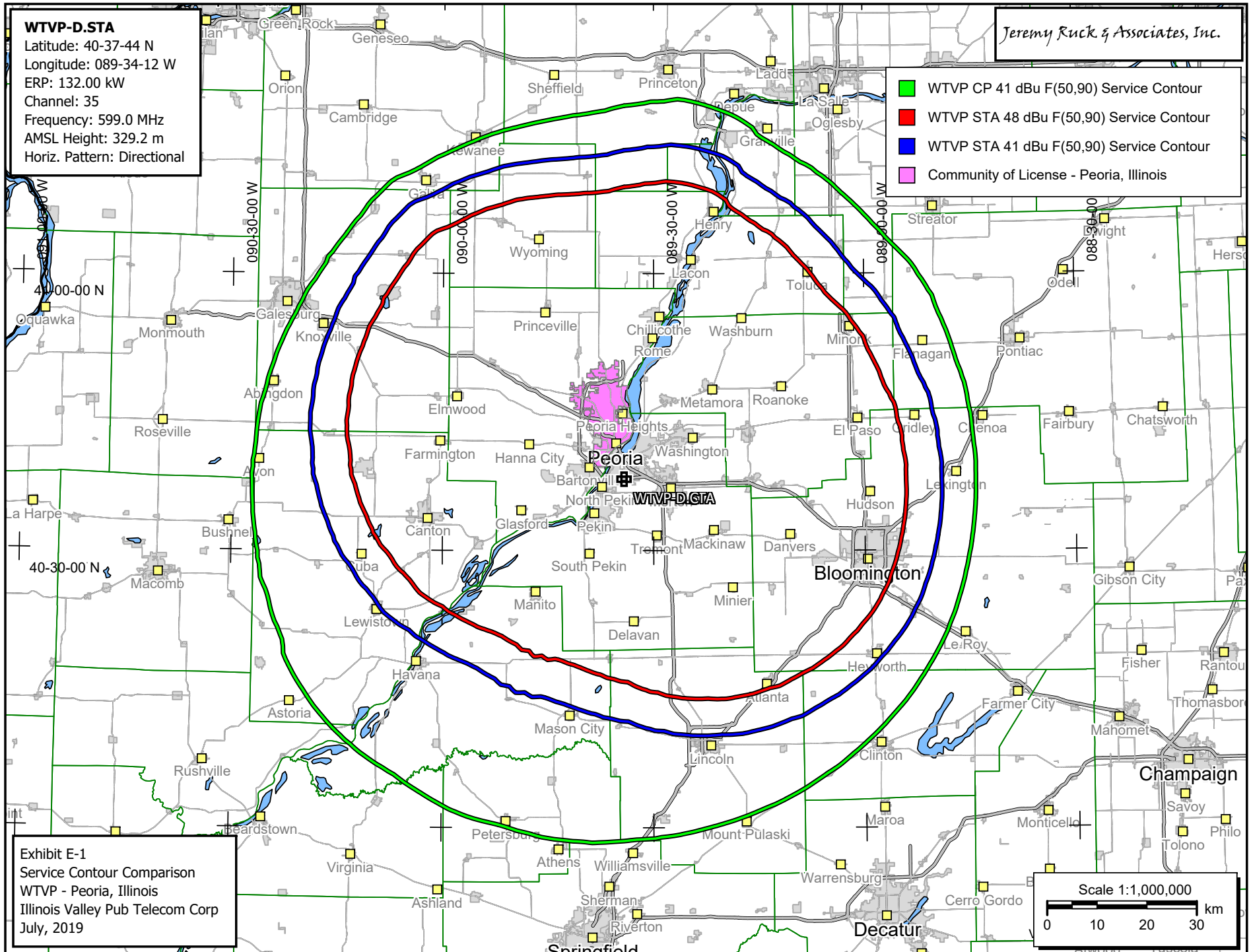
7.2.2019

WTVP-D.STA

Latitude: 40-37-44 N
Longitude: 089-34-12 W
ERP: 132.00 kW
Channel: 35
Frequency: 599.0 MHz
AMSL Height: 329.2 m
Horiz. Pattern: Directional

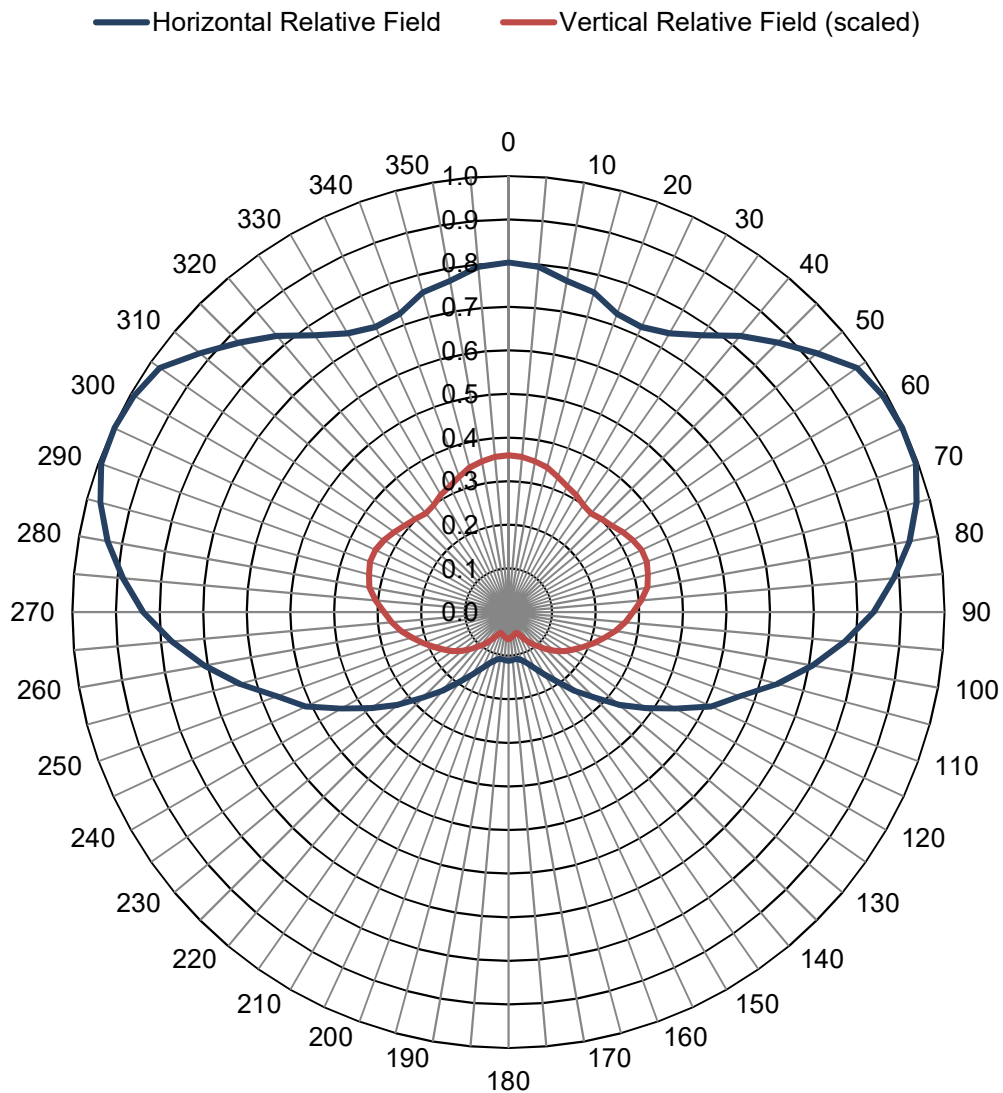
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- WTVP CP 41 dBu F(50,90) Service Contour
- WTVP STA 48 dBu F(50,90) Service Contour
- WTVP STA 41 dBu F(50,90) Service Contour
- Community of License - Peoria, Illinois



Composite Azimuth Patterns

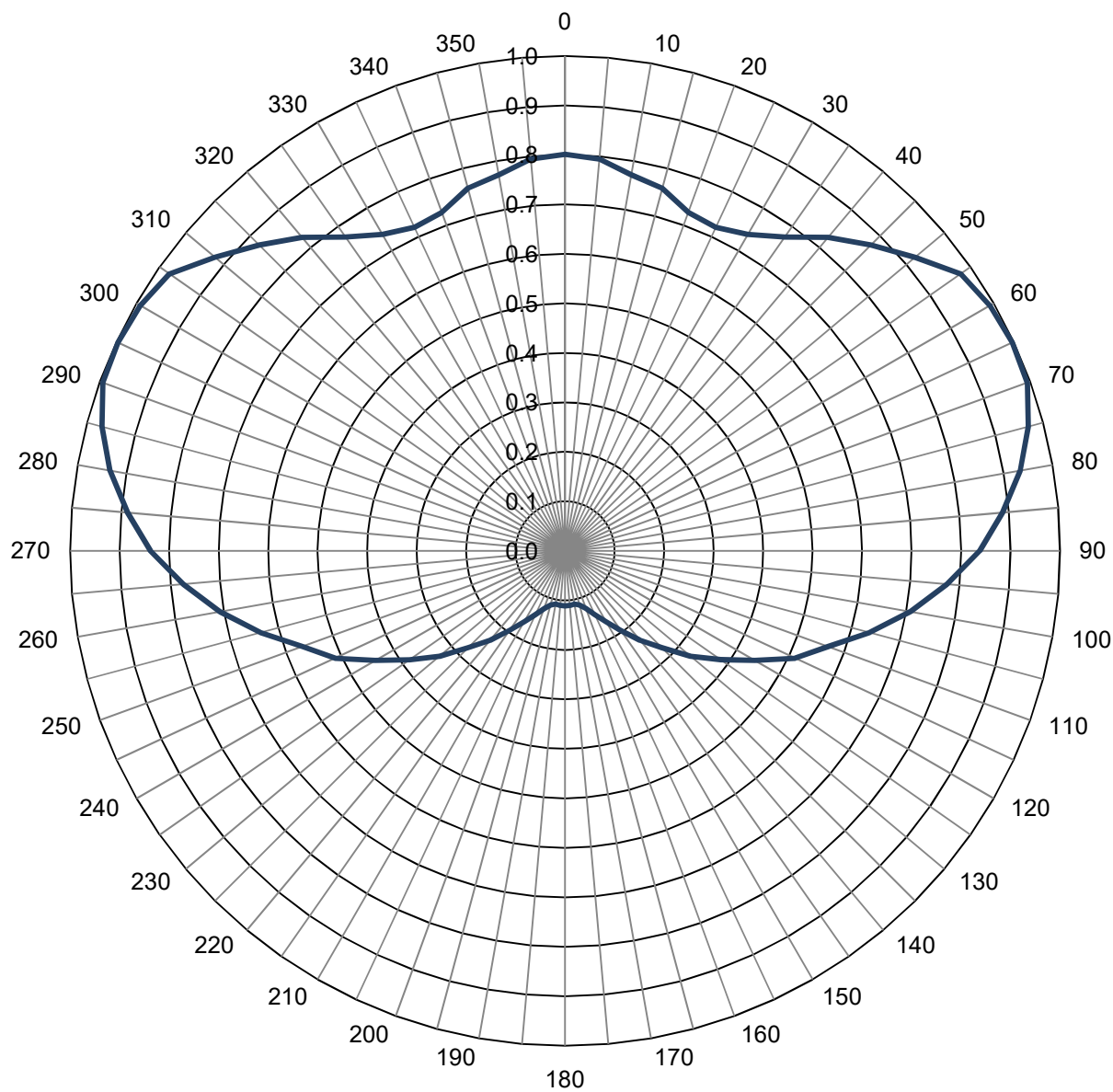
Type:	i230WC-H-35		Polarization:	Elliptical
Directivity (H-Pol):	2.18 numeric	(3.39 dB)	Frequency:	35 (ATSC)
Directivity (V-Pol):	2.01 numeric	(3.03 dB)	Location:	United States
Percent Horizontal:	87.63%		NOTE: Pattern shape and directivity may vary with channel and mounting	
Percent Vertical:	12.37%			
Power Ratio:	14.11%			
ERP V/H Ratio:	13.00%			



Azimuth Pattern

Type:	i230WC-H-35	Polarization:	Horizontal
Directivity:	2.18 numeric (3.39 dB)	Frequency:	35 (ATSC)
Peak(s) at:		Location:	United States
		NOTE: Pattern shape and directivity may vary with channel and mounting configuration.	

Relative Field

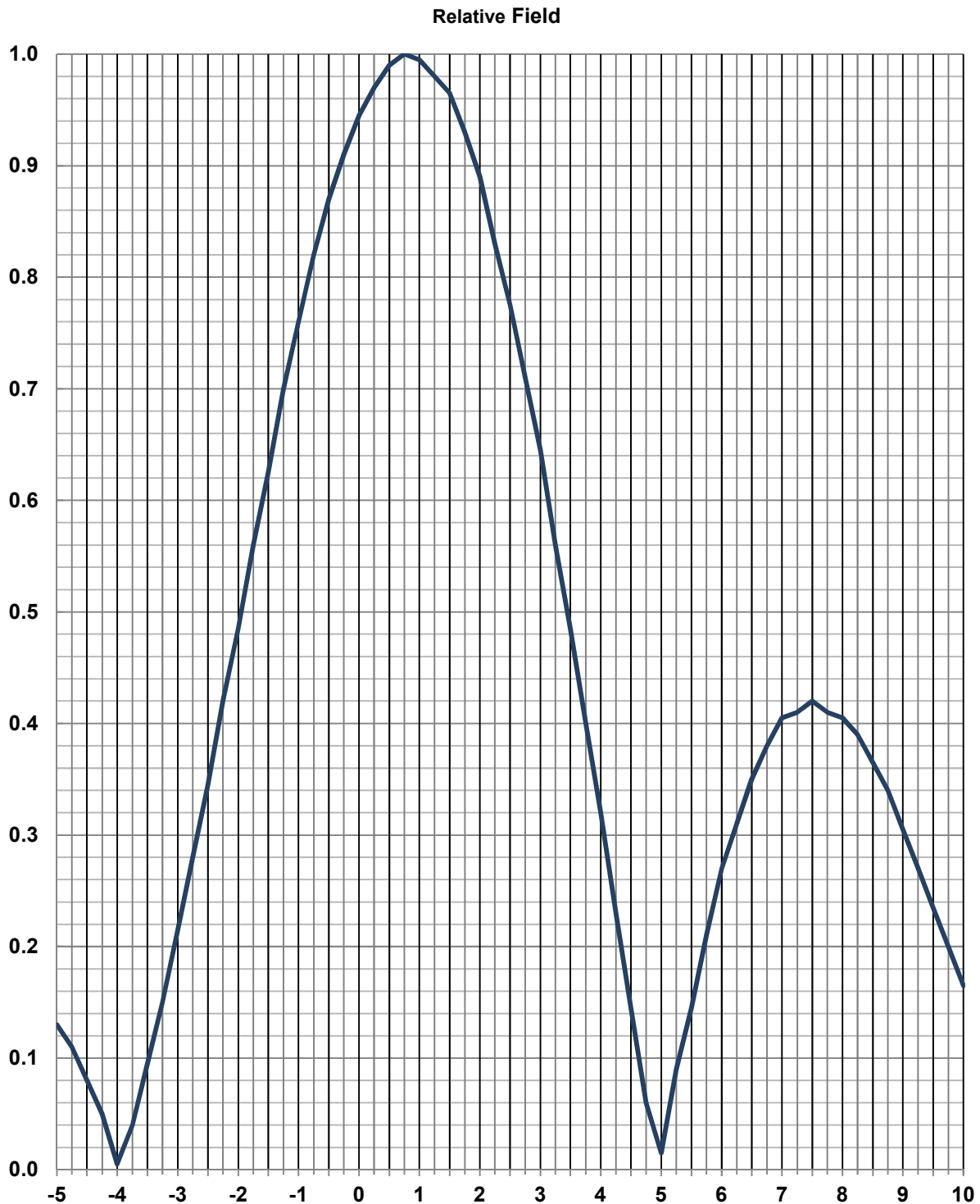


Tabulated Data for Azimuth PatternType: i230WC-H-35

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
0	0.801	-1.92	100	0.708	-3.00	200	0.124	-18.14	300	0.992	-0.07
2	0.797	-1.97	102	0.675	-3.42	202	0.130	-17.75	302	0.981	-0.17
4	0.794	-2.00	104	0.655	-3.68	204	0.136	-17.35	304	0.977	-0.20
6	0.789	-2.06	106	0.623	-4.12	206	0.145	-16.79	306	0.974	-0.23
8	0.784	-2.12	108	0.601	-4.43	208	0.150	-16.48	308	0.941	-0.53
10	0.771	-2.26	110	0.565	-4.96	210	0.165	-15.64	310	0.923	-0.70
12	0.763	-2.36	112	0.540	-5.35	212	0.177	-15.05	312	0.914	-0.78
14	0.763	-2.36	114	0.519	-5.69	214	0.192	-14.32	314	0.889	-1.02
16	0.750	-2.50	116	0.498	-6.05	216	0.200	-14.00	316	0.867	-1.24
18	0.733	-2.70	118	0.465	-6.66	218	0.221	-13.12	318	0.845	-1.47
20	0.728	-2.76	120	0.443	-7.08	220	0.236	-12.56	320	0.827	-1.65
22	0.722	-2.83	122	0.420	-7.53	222	0.254	-11.91	322	0.798	-1.97
24	0.720	-2.85	124	0.394	-8.09	224	0.270	-11.38	324	0.780	-2.16
26	0.724	-2.81	126	0.372	-8.59	226	0.287	-10.85	326	0.765	-2.33
28	0.728	-2.76	128	0.353	-9.04	228	0.304	-10.34	328	0.750	-2.50
30	0.738	-2.64	130	0.331	-9.61	230	0.331	-9.61	330	0.738	-2.64
32	0.750	-2.50	132	0.304	-10.34	232	0.353	-9.04	332	0.728	-2.76
34	0.765	-2.33	134	0.287	-10.85	234	0.372	-8.59	334	0.724	-2.81
36	0.780	-2.16	136	0.270	-11.38	236	0.394	-8.09	336	0.720	-2.85
38	0.798	-1.97	138	0.254	-11.91	238	0.420	-7.53	338	0.722	-2.83
40	0.827	-1.65	140	0.236	-12.56	240	0.443	-7.08	340	0.728	-2.76
42	0.845	-1.47	142	0.221	-13.12	242	0.465	-6.66	342	0.733	-2.70
44	0.867	-1.24	144	0.200	-14.00	244	0.498	-6.05	344	0.750	-2.50
46	0.889	-1.02	146	0.192	-14.32	246	0.519	-5.69	346	0.763	-2.36
48	0.914	-0.78	148	0.177	-15.05	248	0.540	-5.35	348	0.763	-2.36
50	0.923	-0.70	150	0.165	-15.64	250	0.565	-4.96	350	0.771	-2.26
52	0.941	-0.53	152	0.150	-16.48	252	0.601	-4.43	352	0.784	-2.12
54	0.974	-0.23	154	0.145	-16.79	254	0.623	-4.12	354	0.789	-2.06
56	0.977	-0.20	156	0.136	-17.35	256	0.655	-3.68	356	0.794	-2.00
58	0.981	-0.17	158	0.130	-17.75	258	0.675	-3.42	358	0.797	-1.97
60	0.992	-0.07	160	0.124	-18.14	260	0.708	-3.00	360	0.801	-1.92
62	0.994	-0.05	162	0.120	-18.45	262	0.726	-2.78			
64	1.000	0.00	164	0.115	-18.81	264	0.760	-2.39			
66	0.999	-0.01	166	0.111	-19.07	266	0.782	-2.14			
68	0.995	-0.04	168	0.110	-19.19	268	0.814	-1.79			
70	0.994	-0.05	170	0.109	-19.26	270	0.838	-1.54			
72	0.983	-0.15	172	0.108	-19.31	272	0.855	-1.36			
74	0.972	-0.25	174	0.107	-19.41	274	0.881	-1.10			
76	0.963	-0.33	176	0.111	-19.13	276	0.903	-0.88			
78	0.950	-0.45	178	0.105	-19.55	278	0.913	-0.79			
80	0.934	-0.60	180	0.112	-19.05	280	0.934	-0.60			
82	0.913	-0.79	182	0.105	-19.55	282	0.950	-0.45			
84	0.903	-0.88	184	0.111	-19.13	284	0.963	-0.33			
86	0.881	-1.10	186	0.107	-19.41	286	0.972	-0.25			
88	0.855	-1.36	188	0.108	-19.31	288	0.983	-0.15			
90	0.838	-1.54	190	0.109	-19.26	290	0.994	-0.05			
92	0.814	-1.79	192	0.110	-19.19	292	0.995	-0.04			
94	0.782	-2.14	194	0.111	-19.07	294	0.999	-0.01			
96	0.760	-2.39	196	0.115	-18.81	296	1.000	0.00			
98	0.726	-2.78	198	0.120	-18.45	298	0.994	-0.05			

Elevation Pattern

Type:	i230WC-16-35	Polarization:	Horizontal
Directivity:		Frequency:	35 (ATSC)
Main Lobe:	11.09 numeric (10.45 dB)	Location:	United States
Horizontal:	9.18 numeric (9.63 dB)	Beam Tilt:	1.00 degrees



Tabulated Data for Elevation Pattern**Type:** i230WC-16-35

-5 to 10 degrees in 0.25 degree increments.

10 to 90 degrees in 0.50 degree increments.

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-10.00	0.120	-18.42	2.25	0.890	-1.01	19.00	0.070	-23.10	43.50	0.140	-17.08	68.00	0.040	-27.96
-9.75	0.115	-18.79	2.50	0.830	-1.62	19.50	0.040	-27.96	44.00	0.100	-20.00	68.50	0.050	-26.02
-9.50	0.110	-19.17	2.75	0.775	-2.21	20.00	0.020	-33.98	44.50	0.070	-23.10	69.00	0.050	-26.02
-9.25	0.100	-20.00	3.00	0.710	-2.97	20.50	0.050	-26.02	45.00	0.030	-30.46	69.50	0.050	-26.02
-9.00	0.090	-20.92	3.25	0.645	-3.81	21.00	0.080	-21.94	45.50	0.000	---	70.00	0.060	-24.44
-8.75	0.085	-21.41	3.50	0.560	-5.04	21.50	0.090	-20.92	46.00	0.030	-30.46	70.50	0.060	-24.44
-8.50	0.080	-21.94	3.75	0.485	-6.29	22.00	0.100	-20.00	46.50	0.050	-26.02	71.00	0.060	-24.44
-8.25	0.065	-23.74	4.00	0.400	-7.96	22.50	0.080	-21.94	47.00	0.070	-23.10	71.50	0.060	-24.44
-8.00	0.060	-24.44	4.25	0.320	-9.90	23.00	0.060	-24.44	47.50	0.080	-21.94	72.00	0.060	-24.44
-7.75	0.070	-23.10	4.50	0.230	-12.77	23.50	0.020	-33.98	48.00	0.090	-20.92	72.50	0.070	-23.10
-7.50	0.080	-21.94	4.75	0.145	-16.77	24.00	0.030	-30.46	48.50	0.100	-20.00	73.00	0.070	-23.10
-7.25	0.090	-20.92	5.00	0.060	-24.44	24.50	0.080	-21.94	49.00	0.110	-19.17	73.50	0.070	-23.10
-7.00	0.100	-20.00	5.25	0.015	-36.48	25.00	0.140	-17.08	49.50	0.110	-19.17	74.00	0.070	-23.10
-6.75	0.120	-18.42	5.50	0.090	-20.92	25.50	0.200	-13.98	50.00	0.100	-20.00	74.50	0.070	-23.10
-6.50	0.140	-17.08	5.75	0.145	-16.77	26.00	0.250	-12.04	50.50	0.100	-20.00	75.00	0.070	-23.10
-6.25	0.150	-16.48	6.00	0.210	-13.56	26.50	0.290	-10.75	51.00	0.090	-20.92	75.50	0.070	-23.10
-6.00	0.160	-15.92	6.25	0.270	-11.37	27.00	0.320	-9.90	51.50	0.090	-20.92	76.00	0.070	-23.10
-5.75	0.160	-15.92	6.50	0.310	-10.17	27.50	0.340	-9.37	52.00	0.080	-21.94	76.50	0.070	-23.10
-5.50	0.160	-15.92	6.75	0.350	-9.12	28.00	0.340	-9.37	52.50	0.070	-23.10	77.00	0.070	-23.10
-5.25	0.160	-15.92	7.00	0.380	-8.40	28.50	0.330	-9.63	53.00	0.070	-23.10	77.50	0.070	-23.10
-5.00	0.150	-16.48	7.25	0.405	-7.85	29.00	0.310	-10.17	53.50	0.060	-24.44	78.00	0.060	-24.44
-4.75	0.130	-17.72	7.50	0.410	-7.74	29.50	0.280	-11.06	54.00	0.050	-26.02	78.50	0.060	-24.44
-4.50	0.110	-19.17	7.75	0.420	-7.54	30.00	0.240	-12.40	54.50	0.050	-26.02	79.00	0.060	-24.44
-4.25	0.080	-21.94	8.00	0.410	-7.74	30.50	0.200	-13.98	55.00	0.040	-27.96	79.50	0.060	-24.44
-4.00	0.050	-26.02	8.25	0.405	-7.85	31.00	0.160	-15.92	55.50	0.040	-27.96	80.00	0.060	-24.44
-3.75	0.005	-46.02	8.50	0.390	-8.18	31.50	0.120	-18.42	56.00	0.030	-30.46	80.50	0.060	-24.44
-3.50	0.040	-27.96	8.75	0.365	-8.75	32.00	0.080	-21.94	56.50	0.030	-30.46	81.00	0.050	-26.02
-3.25	0.095	-20.45	9.00	0.340	-9.37	32.50	0.050	-26.02	57.00	0.020	-33.98	81.50	0.050	-26.02
-3.00	0.150	-16.48	9.25	0.305	-10.31	33.00	0.030	-30.46	57.50	0.020	-33.98	82.00	0.050	-26.02
-2.75	0.215	-13.35	9.50	0.270	-11.37	33.50	0.010	-40.00	58.00	0.010	-40.00	82.50	0.050	-26.02
-2.50	0.280	-11.06	9.75	0.235	-12.58	34.00	0.000	---	58.50	0.010	-40.00	83.00	0.050	-26.02
-2.25	0.345	-9.24	10.00	0.200	-13.98	34.50	0.020	-33.98	59.00	0.010	-40.00	83.50	0.050	-26.02
-2.00	0.420	-7.54	10.50	0.130	-17.72	35.00	0.040	-27.96	59.50	0.000	---	84.00	0.050	-26.02
-1.75	0.485	-6.29	11.00	0.070	-23.10	35.50	0.070	-23.10	60.00	0.000	---	84.50	0.050	-26.02
-1.50	0.560	-5.04	11.50	0.060	-24.44	36.00	0.100	-20.00	60.50	0.000	---	85.00	0.040	-27.96
-1.25	0.625	-4.08	12.00	0.050	-26.02	36.50	0.140	-17.08	61.00	0.000	---	85.50	0.040	-27.96
-1.00	0.700	-3.10	12.50	0.070	-23.10	37.00	0.180	-14.89	61.50	0.000	---	86.00	0.040	-27.96
-0.75	0.760	-2.38	13.00	0.070	-23.10	37.50	0.210	-13.56	62.00	0.000	---	86.50	0.040	-27.96
-0.50	0.820	-1.72	13.50	0.050	-26.02	38.00	0.240	-12.40	62.50	0.010	-40.00	87.00	0.040	-27.96
-0.25	0.870	-1.21	14.00	0.020	-33.98	38.50	0.260	-11.70	63.00	0.010	-40.00	87.50	0.040	-27.96
0.00	0.910	-0.82	14.50	0.020	-33.98	39.00	0.280	-11.06	63.50	0.010	-40.00	88.00	0.040	-27.96
0.25	0.945	-0.49	15.00	0.060	-24.44	39.50	0.290	-10.75	64.00	0.010	-40.00	88.50	0.040	-27.96
0.50	0.970	-0.26	15.50	0.100	-20.00	40.00	0.300	-10.46	64.50	0.010	-40.00	89.00	0.040	-27.96
0.75	0.990	-0.09	16.00	0.130	-17.72	40.50	0.290	-10.75	65.00	0.020	-33.98	89.50	0.040	-27.96
1.00	1.000	0.00	16.50	0.150	-16.48	41.00	0.280	-11.06	65.50	0.020	-33.98	90.00	0.040	-27.96
1.25	0.995	-0.04	17.00	0.160	-15.92	41.50	0.260	-11.70	66.00	0.020	-33.98			
1.50	0.980	-0.18	17.50	0.150	-16.48	42.00	0.230	-12.77	66.50	0.030	-30.46			
1.75	0.965	-0.31	18.00	0.140	-17.08	42.50	0.200	-13.98	67.00	0.030	-30.46			
2.00	0.930	-0.63	18.50	0.110	-19.17	43.00	0.170	-15.39	67.50	0.040	-27.96			

Azimuth Pattern**Type:** i230WC-V-35**Directivity:** 2.01 numeric (3.03 dB)**Peak(s) at:****Polarization:**

Vertical

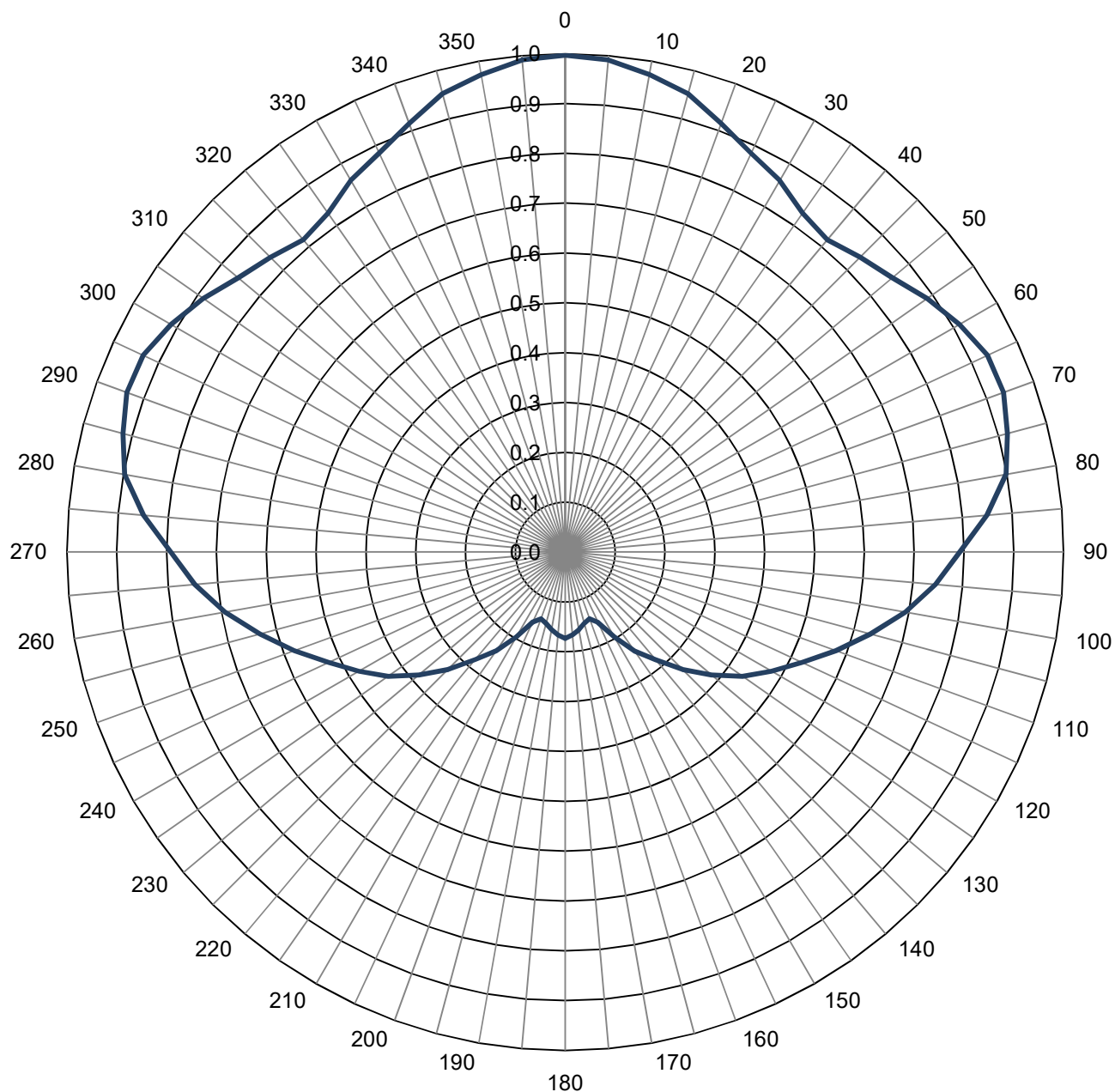
Frequency:

35 (ATSC)

Location:

United States

NOTE: Pattern shape and directivity may vary with channel and mounting configuration.

Relative Field

Tabulated Data for Azimuth Pattern

Type: i230WC-V-35

Angle	Field	dB
0	0.997	-0.03
2	0.997	-0.02
4	0.997	-0.02
6	0.988	-0.10
8	0.984	-0.14
10	0.973	-0.24
12	0.965	-0.31
14	0.955	-0.40
16	0.941	-0.53
18	0.935	-0.59
20	0.915	-0.77
22	0.910	-0.82
24	0.894	-0.98
26	0.878	-1.13
28	0.868	-1.23
30	0.861	-1.30
32	0.851	-1.40
34	0.839	-1.52
36	0.828	-1.64
38	0.831	-1.61
40	0.818	-1.74
42	0.823	-1.69
44	0.836	-1.55
46	0.839	-1.53
48	0.849	-1.42
50	0.857	-1.34
52	0.871	-1.20
54	0.886	-1.06
56	0.890	-1.01
58	0.908	-0.84
60	0.913	-0.79
62	0.925	-0.68
64	0.932	-0.61
66	0.939	-0.55
68	0.939	-0.55
70	0.936	-0.57
72	0.929	-0.64
74	0.930	-0.63
76	0.915	-0.77
78	0.903	-0.89
80	0.898	-0.94
82	0.873	-1.18
84	0.861	-1.30
86	0.838	-1.54
88	0.825	-1.67
90	0.792	-2.03
92	0.771	-2.26
94	0.753	-2.46
96	0.739	-2.62
98	0.705	-3.03

Angle	Field	dB
100	0.693	-3.19
102	0.661	-3.60
104	0.647	-3.78
106	0.619	-4.17
108	0.602	-4.41
110	0.579	-4.75
112	0.559	-5.05
114	0.536	-5.41
116	0.515	-5.77
118	0.495	-6.10
120	0.477	-6.42
122	0.457	-6.81
124	0.444	-7.05
126	0.421	-7.51
128	0.398	-8.00
130	0.383	-8.34
132	0.366	-8.74
134	0.345	-9.23
136	0.324	-9.79
138	0.308	-10.24
140	0.282	-11.01
142	0.269	-11.40
144	0.246	-12.17
146	0.231	-12.72
148	0.206	-13.72
150	0.197	-14.13
152	0.179	-14.93
154	0.159	-15.98
156	0.151	-16.45
158	0.145	-16.79
160	0.142	-16.95
162	0.140	-17.05
164	0.146	-16.73
166	0.151	-16.42
168	0.157	-16.10
170	0.158	-16.04
172	0.161	-15.86
174	0.168	-15.50
176	0.168	-15.48
178	0.167	-15.56
180	0.174	-15.21
182	0.167	-15.56
184	0.168	-15.48
186	0.168	-15.50
188	0.161	-15.86
190	0.158	-16.04
192	0.157	-16.10
194	0.151	-16.42
196	0.146	-16.73
198	0.140	-17.05

Angle	Field	dB
200	0.142	-16.95
202	0.145	-16.79
204	0.151	-16.45
206	0.159	-15.98
208	0.179	-14.93
210	0.197	-14.13
212	0.206	-13.72
214	0.231	-12.72
216	0.246	-12.17
218	0.269	-11.40
220	0.282	-11.01
222	0.308	-10.24
224	0.324	-9.79
226	0.345	-9.23
228	0.366	-8.74
230	0.383	-8.34
232	0.398	-8.00
234	0.421	-7.51
236	0.444	-7.05
238	0.457	-6.81
240	0.477	-6.42
242	0.495	-6.10
244	0.515	-5.77
246	0.536	-5.41
248	0.559	-5.05
250	0.579	-4.75
252	0.602	-4.41
254	0.619	-4.17
256	0.647	-3.78
258	0.661	-3.60
260	0.693	-3.19
262	0.705	-3.03
264	0.739	-2.62
266	0.753	-2.46
268	0.771	-2.26
270	0.792	-2.03
272	0.825	-1.67
274	0.838	-1.54
276	0.861	-1.30
278	0.873	-1.18
280	0.898	-0.94
282	0.903	-0.89
284	0.915	-0.77
286	0.930	-0.63
288	0.929	-0.64
290	0.936	-0.57
292	0.939	-0.55
294	0.939	-0.55
296	0.932	-0.61
298	0.925	-0.68

Angle	Field	dB
300	0.913	-0.79
302	0.908	-0.84
304	0.890	-1.01
306	0.886	-1.06
308	0.871	-1.20
310	0.857	-1.34
312	0.849	-1.42
314	0.839	-1.53
316	0.836	-1.55
318	0.823	-1.69
320	0.818	-1.74
322	0.831	-1.61
324	0.828	-1.64
326	0.839	-1.52
328	0.851	-1.40
330	0.861	-1.30
332	0.868	-1.23
334	0.878	-1.13
336	0.894	-0.98
338	0.910	-0.82
340	0.915	-0.77
342	0.935	-0.59
344	0.941	-0.53
346	0.955	-0.40
348	0.965	-0.31
350	0.973	-0.24
352	0.984	-0.14
354	0.988	-0.10
356	0.997	-0.02
358	0.997	-0.02
360	0.997	-0.03

Elevation Pattern

Type: i230WC-16-35

Polarization: Vertical

Directivity:

Frequency: 35 (ATSC)

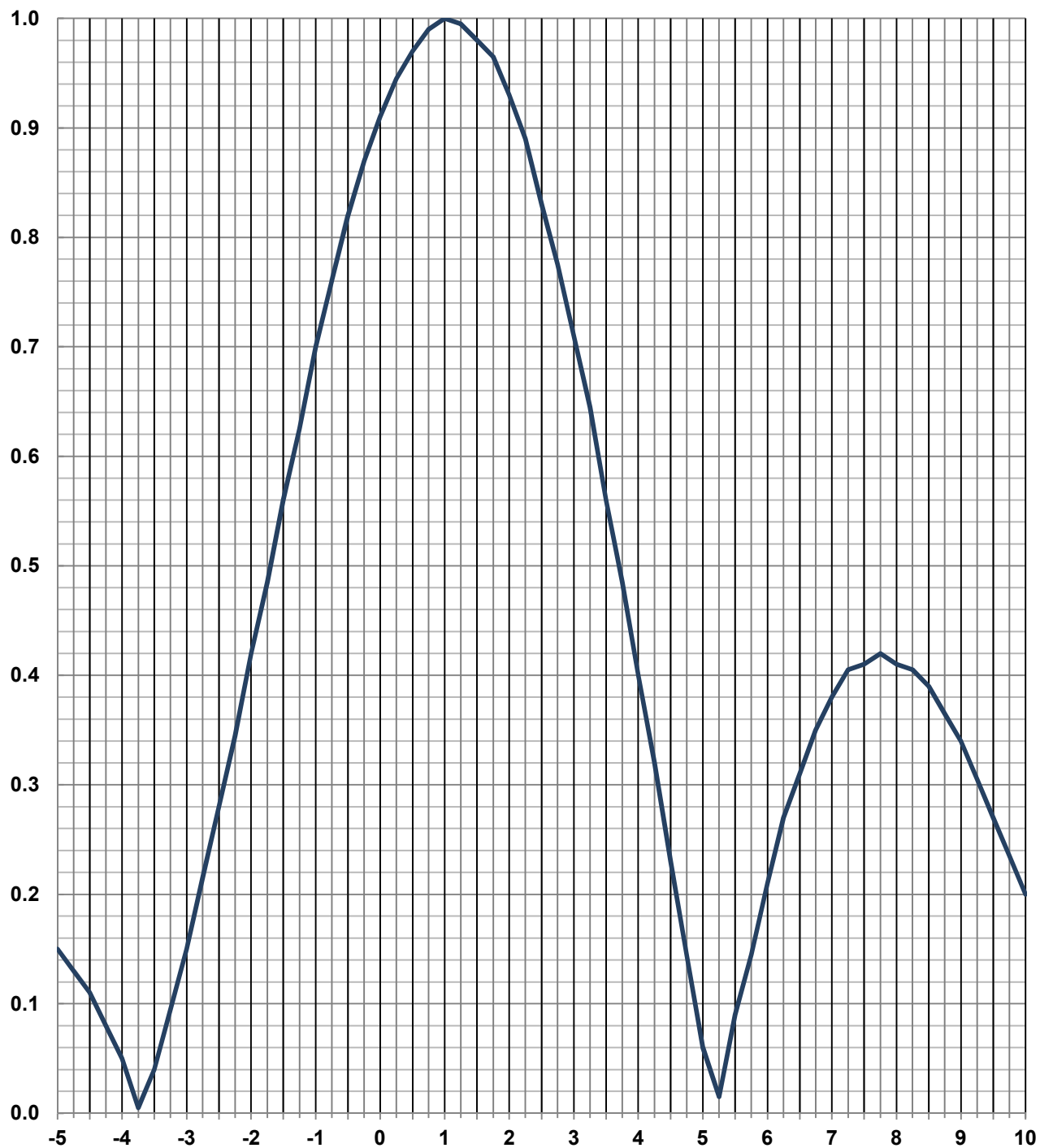
Main Lobe: 11.09 numeric (10.45 dB)

Location: United States

Horizontal: 9.18 numeric (9.63 dB)

Beam Tilt: 1.00 degrees

Relative Field



Tabulated Data for Elevation PatternType: i230WC-16-35

-5 to 10 degrees in 0.25 degree increments.

10 to 90 degrees in 0.50 degree increments.

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-10.00	0.120	-18.42	2.25	0.890	-1.01	19.00	0.070	-23.10	43.50	0.140	-17.08	68.00	0.040	-27.96
-9.75	0.115	-18.79	2.50	0.830	-1.62	19.50	0.040	-27.96	44.00	0.100	-20.00	68.50	0.050	-26.02
-9.50	0.110	-19.17	2.75	0.775	-2.21	20.00	0.020	-33.98	44.50	0.070	-23.10	69.00	0.050	-26.02
-9.25	0.100	-20.00	3.00	0.710	-2.97	20.50	0.050	-26.02	45.00	0.030	-30.46	69.50	0.050	-26.02
-9.00	0.090	-20.92	3.25	0.645	-3.81	21.00	0.080	-21.94	45.50	0.000	---	70.00	0.060	-24.44
-8.75	0.085	-21.41	3.50	0.560	-5.04	21.50	0.090	-20.92	46.00	0.030	-30.46	70.50	0.060	-24.44
-8.50	0.080	-21.94	3.75	0.485	-6.29	22.00	0.100	-20.00	46.50	0.050	-26.02	71.00	0.060	-24.44
-8.25	0.065	-23.74	4.00	0.400	-7.96	22.50	0.080	-21.94	47.00	0.070	-23.10	71.50	0.060	-24.44
-8.00	0.060	-24.44	4.25	0.320	-9.90	23.00	0.060	-24.44	47.50	0.080	-21.94	72.00	0.060	-24.44
-7.75	0.070	-23.10	4.50	0.230	-12.77	23.50	0.020	-33.98	48.00	0.090	-20.92	72.50	0.070	-23.10
-7.50	0.080	-21.94	4.75	0.145	-16.77	24.00	0.030	-30.46	48.50	0.100	-20.00	73.00	0.070	-23.10
-7.25	0.090	-20.92	5.00	0.060	-24.44	24.50	0.080	-21.94	49.00	0.110	-19.17	73.50	0.070	-23.10
-7.00	0.100	-20.00	5.25	0.015	-36.48	25.00	0.140	-17.08	49.50	0.110	-19.17	74.00	0.070	-23.10
-6.75	0.120	-18.42	5.50	0.090	-20.92	25.50	0.200	-13.98	50.00	0.100	-20.00	74.50	0.070	-23.10
-6.50	0.140	-17.08	5.75	0.145	-16.77	26.00	0.250	-12.04	50.50	0.100	-20.00	75.00	0.070	-23.10
-6.25	0.150	-16.48	6.00	0.210	-13.56	26.50	0.290	-10.75	51.00	0.090	-20.92	75.50	0.070	-23.10
-6.00	0.160	-15.92	6.25	0.270	-11.37	27.00	0.320	-9.90	51.50	0.090	-20.92	76.00	0.070	-23.10
-5.75	0.160	-15.92	6.50	0.310	-10.17	27.50	0.340	-9.37	52.00	0.080	-21.94	76.50	0.070	-23.10
-5.50	0.160	-15.92	6.75	0.350	-9.12	28.00	0.340	-9.37	52.50	0.070	-23.10	77.00	0.070	-23.10
-5.25	0.160	-15.92	7.00	0.380	-8.40	28.50	0.330	-9.63	53.00	0.070	-23.10	77.50	0.070	-23.10
-5.00	0.150	-16.48	7.25	0.405	-7.85	29.00	0.310	-10.17	53.50	0.060	-24.44	78.00	0.060	-24.44
-4.75	0.130	-17.72	7.50	0.410	-7.74	29.50	0.280	-11.06	54.00	0.050	-26.02	78.50	0.060	-24.44
-4.50	0.110	-19.17	7.75	0.420	-7.54	30.00	0.240	-12.40	54.50	0.050	-26.02	79.00	0.060	-24.44
-4.25	0.080	-21.94	8.00	0.410	-7.74	30.50	0.200	-13.98	55.00	0.040	-27.96	79.50	0.060	-24.44
-4.00	0.050	-26.02	8.25	0.405	-7.85	31.00	0.160	-15.92	55.50	0.040	-27.96	80.00	0.060	-24.44
-3.75	0.005	-46.02	8.50	0.390	-8.18	31.50	0.120	-18.42	56.00	0.030	-30.46	80.50	0.060	-24.44
-3.50	0.040	-27.96	8.75	0.365	-8.75	32.00	0.080	-21.94	56.50	0.030	-30.46	81.00	0.050	-26.02
-3.25	0.095	-20.45	9.00	0.340	-9.37	32.50	0.050	-26.02	57.00	0.020	-33.98	81.50	0.050	-26.02
-3.00	0.150	-16.48	9.25	0.305	-10.31	33.00	0.030	-30.46	57.50	0.020	-33.98	82.00	0.050	-26.02
-2.75	0.215	-13.35	9.50	0.270	-11.37	33.50	0.010	-40.00	58.00	0.010	-40.00	82.50	0.050	-26.02
-2.50	0.280	-11.06	9.75	0.235	-12.58	34.00	0.000	---	58.50	0.010	-40.00	83.00	0.050	-26.02
-2.25	0.345	-9.24	10.00	0.200	-13.98	34.50	0.020	-33.98	59.00	0.010	-40.00	83.50	0.050	-26.02
-2.00	0.420	-7.54	10.50	0.130	-17.72	35.00	0.040	-27.96	59.50	0.000	---	84.00	0.050	-26.02
-1.75	0.485	-6.29	11.00	0.070	-23.10	35.50	0.070	-23.10	60.00	0.000	---	84.50	0.050	-26.02
-1.50	0.560	-5.04	11.50	0.060	-24.44	36.00	0.100	-20.00	60.50	0.000	---	85.00	0.040	-27.96
-1.25	0.625	-4.08	12.00	0.050	-26.02	36.50	0.140	-17.08	61.00	0.000	---	85.50	0.040	-27.96
-1.00	0.700	-3.10	12.50	0.070	-23.10	37.00	0.180	-14.89	61.50	0.000	---	86.00	0.040	-27.96
-0.75	0.760	-2.38	13.00	0.070	-23.10	37.50	0.210	-13.56	62.00	0.000	---	86.50	0.040	-27.96
-0.50	0.820	-1.72	13.50	0.050	-26.02	38.00	0.240	-12.40	62.50	0.010	-40.00	87.00	0.040	-27.96
-0.25	0.870	-1.21	14.00	0.020	-33.98	38.50	0.260	-11.70	63.00	0.010	-40.00	87.50	0.040	-27.96
0.00	0.910	-0.82	14.50	0.020	-33.98	39.00	0.280	-11.06	63.50	0.010	-40.00	88.00	0.040	-27.96
0.25	0.945	-0.49	15.00	0.060	-24.44	39.50	0.290	-10.75	64.00	0.010	-40.00	88.50	0.040	-27.96
0.50	0.970	-0.26	15.50	0.100	-20.00	40.00	0.300	-10.46	64.50	0.010	-40.00	89.00	0.040	-27.96
0.75	0.990	-0.09	16.00	0.130	-17.72	40.50	0.290	-10.75	65.00	0.020	-33.98	89.50	0.040	-27.96
1.00	1.000	0.00	16.50	0.150	-16.48	41.00	0.280	-11.06	65.50	0.020	-33.98	90.00	0.040	-27.96
1.25	0.995	-0.04	17.00	0.160	-15.92	41.50	0.260	-11.70	66.00	0.020	-33.98			
1.50	0.980	-0.18	17.50	0.150	-16.48	42.00	0.230	-12.77	66.50	0.030	-30.46			
1.75	0.965	-0.31	18.00	0.140	-17.08	42.50	0.200	-13.98	67.00	0.030	-30.46			
2.00	0.930	-0.63	18.50	0.110	-19.17	43.00	0.170	-15.39	67.50	0.040	-27.96			