Explanation Regarding Request for Special Temporary Authority

West Central Ohio Broadcasting Company, Inc. ("West Central"), licensee of WFND-LP, Findlay, Ohio, hereby requests Special Temporary Authority ("STA") to operate at variance from its licensed parameters using a temporary antenna pending FCC action on its underlying displacement application, FCC File No. 0000029918.

WFND-LP has been silent since May 18, 2017 due to transmitter failure. The station's transmitter manufacturer was not able to provide technical support, so West Central purchased a new transmitter.

On April 28, 2018, as West Central commenced efforts to install the new transmitter, it was learned that something in the RF chain (antenna and transmission line) was defective. A tower crew arrived to assist to determine the cause of the defect. After multiple and time-consuming RF measurements, it was determined that the licensed Dielectric antenna had been damaged by lightning.

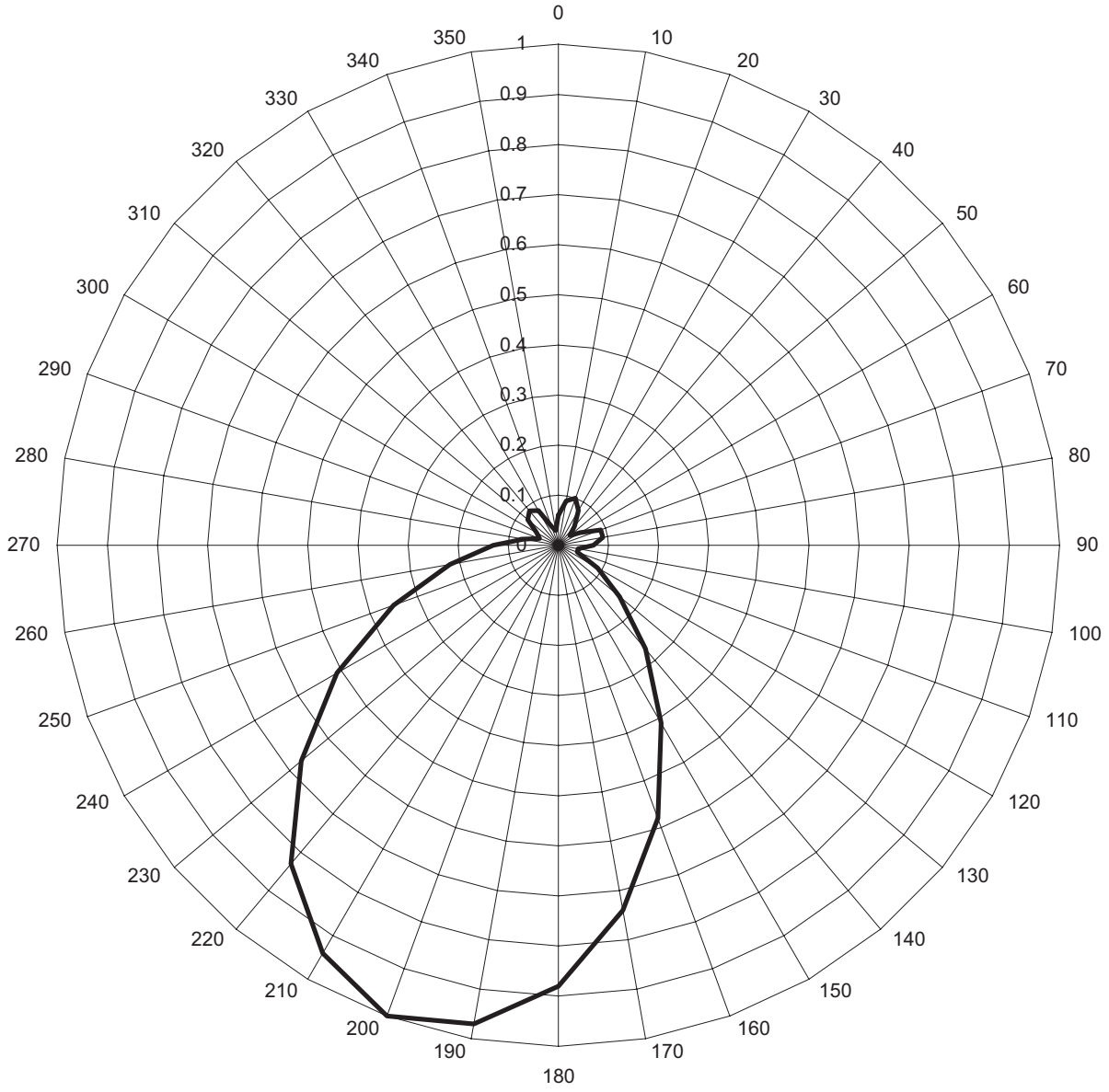
In order to get the station back on the air, a temporary antenna from ERI was installed. West Central had requested an antenna that matched the pattern of its licensed antenna. However, after the temporary antenna was installed, West Central determined that its antenna pattern is narrower and currently, the main lobe is oriented at one of the maximum lobes of the licensed pattern. See Attachment 1. The antenna specifications as received from ERI are as show in Attachment 2. WFND-LP resumed operation on April 30, with 15 kW, but with a more narrow coverage area.

As noted above, Because WFND-LD's operation on Channel 22 will be displaced in September 2018, West Central has filed an application for displacement in the current window (FCC File No. 0000029918) to operate on Channel 19. West Central plans to move to Channel 19 as soon as it knows that it will have access to the channel.

Although no adverse technical effects are expected as a result of the operation, WFND-LP will take measures to resolve any problems that may occur as a result of the station's operation and will endeavor to avoid producing interference to existing facilities in the area.

ATTACHMENT 1

TEMPORARY ANTENNA



COHEN, DIPPELL AND EVERIST, P.C. Consulting Engineers Washington, D.C.

ATTACHMENT 2

Preliminary Specification for
ETU Series 0 Mounted
UHF Horizontally Polarized
Panel Television Antenna

WFND RFChannel 22

Gates Air, Dayton, OH

May 01, 2018

Antenna Model:
ETU1U1-HTP1C-22

Specification Number
20180427-865

Electronics Research, Inc. 7777 Gardner Road Chandler IN 47610-9219 USA
+1 812 925-6000 (tel) +1 812 925-4030 (fax)

Preliminary Specification for ETU Series 0 Mounted UHF Horizontally Polarized Panel Television Antenna

Electrical Characteristics:

Channel:		22	
Frequency:		518 MHz to 524 MHz	
Service:		ATSC	
Azimuth Pattern Number:	Horizontal Polarization	ETUP1C-H	
Elevation Pattern Number:	Horizontal Polarization	ETU-1U1-H	
Azimuth Directivity:	Horizontal Polarization	5.60	(7.48 dB)
Elevation Directivity:	Horizontal Polarization	2.86	(4.57 dBd)
Peak Power Gain:	Horizontal Polarization	16.03	(12.05 dBd)
Gain at Horizontal:	Horizontal Polarization	16.03	(12.05 dBd)
Vertical/Horizontal Ratio:		0.00	
Electrical Beam Tilt:		0.00 Degrees	
Input Power Required:		0.94 kW	-(0.29 dBk)
RF Input:		1-5/8-inch EIA, 50 Ω, flanged male	
Input Power Rating (maximum):		12 kW Average Power, 8VSB	
Antenna VSWR (maximum):		1.20 (Over UHF Band)	

Preliminary Specification for ETU Series 0 Mounted UHF Horizontally Polarized Panel Television Antenna

Antenna Mechanical Characteristics:

(*Tower interface supplied by others)

Mounting Configuration:		0 Mounted	
Height of Antenna:		4.3 feet	(1.3 meters)
Height of Center of Radiation (B):		2.2 feet	(0.7 meters)
Overall Height (Includes two 3.5 ft lightning spurs) (A):		7.8 feet	(2.4 meters)
Deicing:		Unpressurized element radome	
Radome Element (HxWxD):		45.3" x 17.7" x 8.1" (1150mm x 450mm x 205mm)	
Radome Color:		Gray	
Climbing Device:		Not Applicable	
Calculated Weight[1]:	No Ice	35.3 lb	16.0 kg
	1/2" (13 mm) ice	TBD	
Effective Projected Area (EPA-ft^2)[1 2]:			
	No Ice	TBD	
	1/2" (13 mm) ice	TBD	
Effective Moment Arm[1 2]:	No Ice	TBD	
	1/2" (13 mm) ice	TBD	

MOUNTING FLANGE BOLT Pattern: Quantity (20), 1.38 inch holes for 1.25 inch bolts, spaced on a 32.38 inch square bolt pattern.

This antenna is designed to be supported by a structure that can resist the antenna base reactions and which provides a support that is rigid in the three translational and three rotational degrees of freedom.

1) Please note, the listed weights and effective wind areas are based on the PRELIMINARY design of the antenna. Final As-Built values for the antenna are typically within +/-10% of the Preliminary design values, and will be provided in the technical manual that accompanies the antenna. Specified loads include the antenna, lightning spurs, and beacon only. Custom mounting brackets/adapters and/or antenna input section are NOT included.

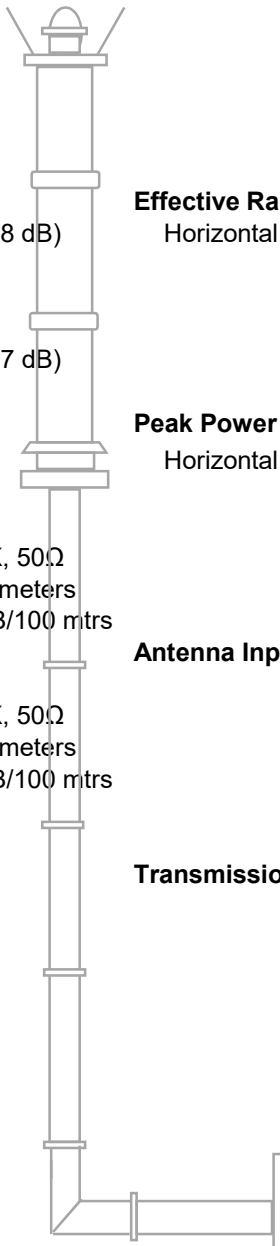
2) Preliminary antenna design based on a wind speed of 90 miles per hour (MPH) with no ice and 30 MPH with 0.75-inches of design radial ice (2.1-inches of factored ice at antenna, tiz) with a height above ground level (HAGL) of 996 feet per ANSI/TIA-222-G. Structure Class II, Exposure Category C and Topographic Category I. Weight and wind area values include four lightning spurs and a standard beacon.

3) The mounting flange specified is the standard ERI mounting flange used for this antenna configuration. In those instances where an existing top mounted antenna is being replaced, the antenna supplied will be designed with a mounting flange to match that of the existing antenna bolt pattern unless electrical and/or mechanical requirements for the new antenna preclude the matching flange. Customer shall be responsible for supplying existing flange bolt pattern details when requesting a custom matching flange on the new antenna.

NOTE: The purchaser or their representative shall be required to contact the tower owner, state and/or local building officials for specific design requirements and suitable parameters for a particular structure. Any variation from the parameters shown above must be communicated to ERI for comprehensive assessment.

Broadcast Antenna System
Power Analysis

WFND **RF Channel: 22**
Gates Air
Dayton, OH
ETU1U1-HTP1C-22



Antenna Parameters

Azimuth Directivity:
Horizontal: 5.60 (7.48 dB)

Elevation Directivity:
Horizontal: 2.86 (4.57 dB)

Transmission Line

Vertical Run:
Type: 1-5/8-Inch HJ7-50A Air HELIAX, 50Ω
Length: 200 feet 61.0 meters
Attenuation: 0.488 dB/100 feet 1.600 dB/100 mtrs

Horizontal Run:
Type: 1-5/8-Inch HJ7-50A Air HELIAX, 50Ω
Length: 50 feet 15.2 meters
Attenuation: 0.488 dB/100 feet 1.600 dB/100 mtrs

Total Losses: 1.219 dB

Line Efficiency: 75.53%

Effective Radiated Power:
Horizontal: 15.00 kW (11.76 dBk)

Peak Power Gain:
Horizontal: 16.03 numeric (12.05 dBd)

Antenna Input Power:
0.94 kW -(0.29 dBk)

Transmission Line Losses:
-0.30 kW (1.219 dB)

Transmitter Power Output:
1.24 kW
(0.93 dBk)

Typical Mounting Configuration Shown. Actual Configuration May Vary.

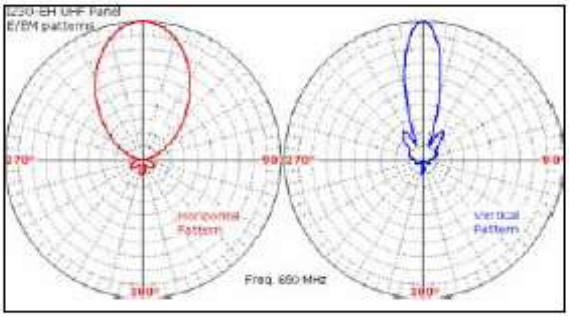
iTECH IRTE®

I230EH-UHF Panel

HORIZONTAL Polarization 4 Dipoles Panel

Technical data

Product Code	A241600 A258700 1-5/8" Flange version
ELECTRICAL CHARACTERISTICS	
Frequency Band	470-860 MHz
Polarization	Horizontal
Gain	11.6 dBd (@ 650 MHz)
F/B Ratio	20 dB
V.S.W.R.	1.1 (1.08 Typical)
HPBW E Plane (deg.)	80 (@ 650 MHz)
HPBW H Plane (deg.)	22 (@ 650 MHz)
Max Input Power	2.5 KW (@ 650 MHz) 5 KW 1-5/8" Version (@ 650 MHz)
Voltage Breakdown	10 KV
All metal parts are ground connected	



MECHANICAL CHARACTERISTICS	
Input Flanges Nr /Size	EIA 7/8" (EIA 1-5/8" HP version)
Dimensions (HxWxP)	1050 x 450 x 190 mm
Weight/Mass	157 N / 16 Kg
Wind load (wind=150 Kph)	Frontal 650 N Lateral 300 N
Max Wind	200 Kph
Operating temperature	-50°C to +60°C
Pressurization	100 KPa (1 Atm)
Mounting	-Tower face -Ø 60 to 160 mm Pole Brackets -Custom Mast

MATERIALS	
Stainless Steel AISI 304	
Inner lines / dipoles	Silver plated Brass/copper
Radome	Grey Standard Fiberglass Other colours on request

RoHS COMPLIANT

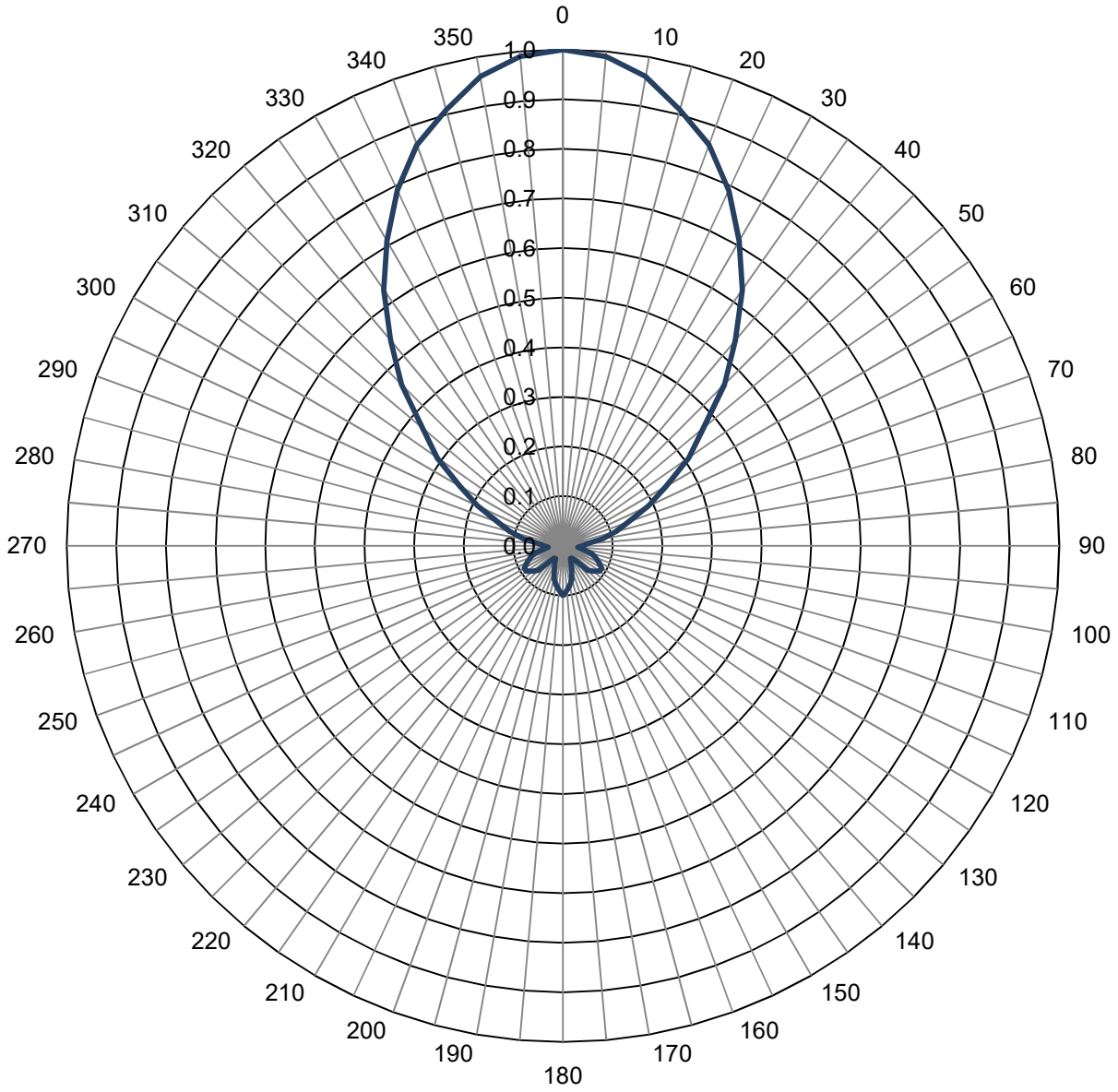
Specifications are subject to change without notice.

Azimuth Pattern

Type:	ETUP1C-H	**Polarization:**	Horizontal
Directivity:	5.60 numeric (7.48 dB)	**Frequency:**	22 (ATSC)
Peak(s) at:		**Location:**	Dayton, OH

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

Relative Field



Tabulated Data for Azimuth Pattern

Type: ETUP1C-H

Angle	Field	dB
0	1.000	0.00
2	1.000	0.00
4	0.990	-0.09
6	0.980	-0.18
8	0.970	-0.26
10	0.960	-0.35
12	0.940	-0.54
14	0.920	-0.72
16	0.900	-0.92
18	0.880	-1.11
20	0.860	-1.31
22	0.830	-1.62
24	0.800	-1.94
26	0.770	-2.27
28	0.740	-2.62
30	0.710	-2.97
32	0.670	-3.48
34	0.630	-4.01
36	0.610	-4.29
38	0.580	-4.73
40	0.540	-5.35
42	0.510	-5.85
44	0.470	-6.56
46	0.440	-7.13
48	0.410	-7.74
50	0.370	-8.64
52	0.350	-9.12
54	0.320	-9.90
56	0.300	-10.46
58	0.270	-11.37
60	0.240	-12.40
62	0.220	-13.15
64	0.200	-13.98
66	0.180	-14.89
68	0.160	-15.92
70	0.140	-17.08
72	0.130	-17.72
74	0.120	-18.42
76	0.100	-20.00
78	0.090	-20.92
80	0.080	-21.94
82	0.070	-23.10
84	0.060	-24.44
86	0.050	-26.02
88	0.040	-27.96
90	0.040	-27.96
92	0.040	-27.96
94	0.030	-30.46
96	0.040	-27.96
98	0.040	-27.96
100	0.040	-27.96
102	0.050	-26.02
104	0.060	-24.44
106	0.060	-24.44
108	0.070	-23.10
110	0.070	-23.10
112	0.080	-21.94
114	0.080	-21.94
116	0.090	-20.92
118	0.090	-20.92
120	0.090	-20.92
122	0.090	-20.92
124	0.090	-20.92
126	0.090	-20.92
128	0.090	-20.92
130	0.080	-21.94
132	0.080	-21.94
134	0.070	-23.10
136	0.060	-24.44
138	0.050	-26.02
140	0.040	-27.96
142	0.040	-27.96
144	0.030	-30.46
146	0.030	-30.46
148	0.030	-30.46
150	0.030	-30.46
152	0.030	-30.46
154	0.030	-30.46
156	0.040	-27.96
158	0.050	-26.02
160	0.050	-26.02
162	0.060	-24.44
164	0.070	-23.10
166	0.070	-23.10
168	0.080	-21.94
170	0.080	-21.94
172	0.090	-20.92
174	0.090	-20.92
176	0.090	-20.92
178	0.100	-20.00
180	0.100	-20.00
182	0.100	-20.00
184	0.090	-20.92
186	0.090	-20.92
188	0.090	-20.92
190	0.080	-21.94
192	0.080	-21.94
194	0.070	-23.10
196	0.070	-23.10
198	0.060	-24.44
200	0.050	-26.02
202	0.050	-26.02
204	0.040	-27.96
206	0.030	-30.46
208	0.030	-30.46
210	0.030	-30.46
212	0.030	-30.46
214	0.030	-30.46
216	0.030	-30.46
218	0.040	-27.96
220	0.040	-27.96
222	0.050	-26.02
224	0.060	-24.44
226	0.070	-23.10
228	0.080	-21.94
230	0.080	-21.94
232	0.090	-20.92
234	0.090	-20.92
236	0.090	-20.92
238	0.090	-20.92
240	0.090	-20.92
242	0.090	-20.92
244	0.090	-20.92
246	0.080	-21.94
248	0.080	-21.94
250	0.070	-23.10
252	0.070	-23.10
254	0.060	-24.44
256	0.060	-24.44
258	0.050	-26.02
260	0.040	-27.96
262	0.040	-27.96
264	0.040	-27.96
266	0.030	-30.46
268	0.040	-27.96
270	0.040	-27.96
272	0.040	-27.96
274	0.050	-26.02
276	0.060	-24.44
278	0.070	-23.10
280	0.080	-21.94
282	0.090	-20.92
284	0.100	-20.00
286	0.120	-18.42
288	0.130	-17.72
290	0.140	-17.08
292	0.160	-15.92
294	0.180	-14.89
296	0.200	-13.98
298	0.220	-13.15
300	0.240	-12.40
302	0.270	-11.37
304	0.300	-10.46
306	0.320	-9.90
308	0.350	-9.12
310	0.370	-8.64
312	0.410	-7.74
314	0.440	-7.13
316	0.470	-6.56
318	0.510	-5.85
320	0.540	-5.35
322	0.580	-4.73
324	0.610	-4.29
326	0.630	-4.01
328	0.670	-3.48
330	0.710	-2.97
332	0.740	-2.62
334	0.770	-2.27
336	0.800	-1.94
338	0.830	-1.62
340	0.860	-1.31
342	0.880	-1.11
344	0.900	-0.92
346	0.920	-0.72
348	0.940	-0.54
350	0.960	-0.35
352	0.970	-0.26
354	0.980	-0.18
356	0.990	-0.09
358	1.000	0.00
360	1.000	0.00

Elevation Pattern

Type:	ETU-1U1-H		**Polarization:**	Horizontal
Directivity:			**Frequency:**	22 (ATSC)
Main Lobe:	2.86 numeric	(4.57 dB)	**Location:**	Dayton, OH
Horizontal:	2.86 numeric	(4.57 dB)	**Beam Tilt:**	0.00 degrees

Tabulated Data for Elevation Pattern

Type: ETU-1U1-H

-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	0.760	-2.38	2.25	0.985	-0.13	19.00	0.320	-9.90	43.50	0.230	-12.77	68.00	0.080	-21.94
-9.75	0.770	-2.27	2.50	0.980	-0.18	19.50	0.290	-10.75	44.00	0.230	-12.77	68.50	0.080	-21.94
-9.50	0.780	-2.16	2.75	0.980	-0.18	20.00	0.260	-11.70	44.50	0.220	-13.15	69.00	0.080	-21.94
-9.25	0.795	-1.99	3.00	0.980	-0.18	20.50	0.240	-12.40	45.00	0.220	-13.15	69.50	0.080	-21.94
-9.00	0.800	-1.94	3.25	0.970	-0.26	21.00	0.220	-13.15	45.50	0.220	-13.15	70.00	0.080	-21.94
-8.75	0.810	-1.83	3.50	0.970	-0.26	21.50	0.200	-13.98	46.00	0.210	-13.56	70.50	0.080	-21.94
-8.50	0.820	-1.72	3.75	0.960	-0.35	22.00	0.170	-15.39	46.50	0.210	-13.56	71.00	0.090	-20.92
-8.25	0.830	-1.62	4.00	0.960	-0.35	22.50	0.160	-15.92	47.00	0.200	-13.98	71.50	0.090	-20.92
-8.00	0.840	-1.51	4.25	0.950	-0.45	23.00	0.140	-17.08	47.50	0.200	-13.98	72.00	0.090	-20.92
-7.75	0.845	-1.46	4.50	0.950	-0.45	23.50	0.130	-17.72	48.00	0.190	-14.42	72.50	0.090	-20.92
-7.50	0.860	-1.31	4.75	0.940	-0.54	24.00	0.120	-18.42	48.50	0.190	-14.42	73.00	0.090	-20.92
-7.25	0.865	-1.26	5.00	0.940	-0.54	24.50	0.120	-18.42	49.00	0.180	-14.89	73.50	0.090	-20.92
-7.00	0.870	-1.21	5.25	0.930	-0.63	25.00	0.110	-19.17	49.50	0.180	-14.89	74.00	0.090	-20.92
-6.75	0.880	-1.11	5.50	0.920	-0.72	25.50	0.110	-19.17	50.00	0.170	-15.39	74.50	0.090	-20.92
-6.50	0.890	-1.01	5.75	0.915	-0.77	26.00	0.110	-19.17	50.50	0.170	-15.39	75.00	0.100	-20.00
-6.25	0.900	-0.92	6.00	0.910	-0.82	26.50	0.110	-19.17	51.00	0.160	-15.92	75.50	0.100	-20.00
-6.00	0.910	-0.82	6.25	0.900	-0.92	27.00	0.110	-19.17	51.50	0.160	-15.92	76.00	0.100	-20.00
-5.75	0.915	-0.77	6.50	0.890	-1.01	27.50	0.110	-19.17	52.00	0.150	-16.48	76.50	0.100	-20.00
-5.50	0.920	-0.72	6.75	0.880	-1.11	28.00	0.110	-19.17	52.50	0.150	-16.48	77.00	0.100	-20.00
-5.25	0.930	-0.63	7.00	0.870	-1.21	28.50	0.110	-19.17	53.00	0.140	-17.08	77.50	0.100	-20.00
-5.00	0.940	-0.54	7.25	0.865	-1.26	29.00	0.110	-19.17	53.50	0.140	-17.08	78.00	0.100	-20.00
-4.75	0.940	-0.54	7.50	0.860	-1.31	29.50	0.120	-18.42	54.00	0.130	-17.72	78.50	0.100	-20.00
-4.50	0.950	-0.45	7.75	0.845	-1.46	30.00	0.130	-17.72	54.50	0.130	-17.72	79.00	0.100	-20.00
-4.25	0.950	-0.45	8.00	0.840	-1.51	30.50	0.140	-17.08	55.00	0.120	-18.42	79.50	0.100	-20.00
-4.00	0.960	-0.35	8.25	0.830	-1.62	31.00	0.150	-16.48	55.50	0.120	-18.42	80.00	0.100	-20.00
-3.75	0.960	-0.35	8.50	0.820	-1.72	31.50	0.160	-15.92	56.00	0.110	-19.17	80.50	0.100	-20.00
-3.50	0.970	-0.26	8.75	0.810	-1.83	32.00	0.170	-15.39	56.50	0.110	-19.17	81.00	0.100	-20.00
-3.25	0.970	-0.26	9.00	0.800	-1.94	32.50	0.180	-14.89	57.00	0.110	-19.17	81.50	0.100	-20.00
-3.00	0.980	-0.18	9.25	0.795	-1.99	33.00	0.190	-14.42	57.50	0.100	-20.00	82.00	0.100	-20.00
-2.75	0.980	-0.18	9.50	0.780	-2.16	33.50	0.190	-14.42	58.00	0.100	-20.00	82.50	0.100	-20.00
-2.50	0.980	-0.18	9.75	0.770	-2.27	34.00	0.200	-13.98	58.50	0.100	-20.00	83.00	0.100	-20.00
-2.25	0.985	-0.13	10.00	0.760	-2.38	34.50	0.210	-13.56	59.00	0.090	-20.92	83.50	0.100	-20.00
-2.00	0.990	-0.09	10.50	0.740	-2.62	35.00	0.220	-13.15	59.50	0.090	-20.92	84.00	0.100	-20.00
-1.75	0.990	-0.09	11.00	0.720	-2.85	35.50	0.220	-13.15	60.00	0.090	-20.92	84.50	0.100	-20.00
-1.50	0.990	-0.09	11.50	0.700	-3.10	36.00	0.220	-13.15	60.50	0.090	-20.92	85.00	0.100	-20.00
-1.25	0.990	-0.09	12.00	0.670	-3.48	36.50	0.230	-12.77	61.00	0.080	-21.94	85.50	0.100	-20.00
-1.00	1.000	0.00	12.50	0.650	-3.74	37.00	0.230	-12.77	61.50	0.080	-21.94	86.00	0.100	-20.00
-0.75	1.000	0.00	13.00	0.620	-4.15	37.50	0.240	-12.40	62.00	0.080	-21.94	86.50	0.100	-20.00
-0.50	1.000	0.00	13.50	0.600	-4.44	38.00	0.240	-12.40	62.50	0.080	-21.94	87.00	0.100	-20.00
-0.25	1.000	0.00	14.00	0.570	-4.88	38.50	0.240	-12.40	63.00	0.080	-21.94	87.50	0.100	-20.00
0.00	1.000	0.00	14.50	0.540	-5.35	39.00	0.240	-12.40	63.50	0.080	-21.94	88.00	0.100	-20.00
0.25	1.000	0.00	15.00	0.520	-5.68	39.50	0.240	-12.40	64.00	0.080	-21.94	88.50	0.100	-20.00
0.50	1.000	0.00	15.50	0.490	-6.20	40.00	0.240	-12.40	64.50	0.080	-21.94	89.00	0.100	-20.00
0.75	1.000	0.00	16.00	0.470	-6.56	40.50	0.240	-12.40	65.00	0.080	-21.94	89.50	0.100	-20.00
1.00	1.000	0.00	16.50	0.440	-7.13	41.00	0.240	-12.40	65.50	0.080	-21.94	90.00	0.100	-20.00
1.25	0.990	-0.09	17.00	0.420	-7.54	41.50	0.240	-12.40	66.00	0.080	-21.94			
1.50	0.990	-0.09	17.50	0.390	-8.18	42.00	0.240	-12.40	66.50	0.080	-21.94			
1.75	0.990	-0.09	18.00	0.370	-8.64	42.50	0.230	-12.77	67.00	0.080	-21.94			
2.00	0.990	-0.09	18.50	0.340	-9.37	43.00	0.230	-12.77	67.50	0.080	-21.94			