System Summary

Exhibit No.	
Date	**24 Nov 2020**
Call Letters	**WDKY-D19**
Channel	**19**
Antenna Type	**TFU-29JTH O4A**
Location	**Danville, KY**
Customer	**Nexstar**

Antenna

	Hpol	Vpol
ERP:	1000.0 kW (30.00 dBk)	250.0 kW (23.98 dBk)
RMS Gain*:	20.4 (13.10 dB)	5.1 (7.08 dB)

Antenna Input Power:

49.0 kW

Transmission Line

Type:	Transmission Line		
Size:	7-3/16" 75 ohm EHT		
Impedance:	75 ohm		
Length:	1170 ft (356.6 m)	Attenuation:	1.1 dB
		Efficiency:	77.78 %

Transmitter Output

63.0 kW (17.99 dBk)

* Gain is with respect to half wave dipole.

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Mechanicals

Exhibit No.	
Date	**24 Nov 2020**
Call Letters	**WDKY-D19**
Channel	**19**
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Location	**Danville, KY**
Customer	**Nexstar**

Preliminary Specifications

Top Mounted

Mechanical Specification without ice TIA-222-G

Basic Wind Speed	90 mph
Structure Class	II
Exposure Category	C
Topography Category	1

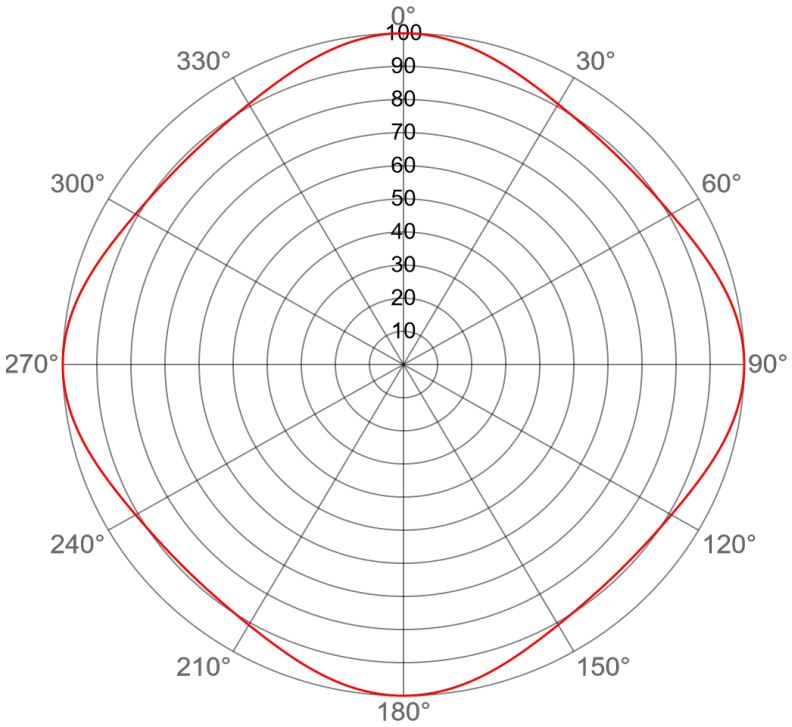
Mechanical Specifications

Height less Lightning Protector	(H2)	59.7 ft (18.2 m)
Height with Lightning Protector	(H4)	63.7 ft (19.4 m)
Center of Radiation	(H3)	29.8 ft (9.1 m)

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Location: Danville, KY
Customer: Nexstar
Generated by DASP

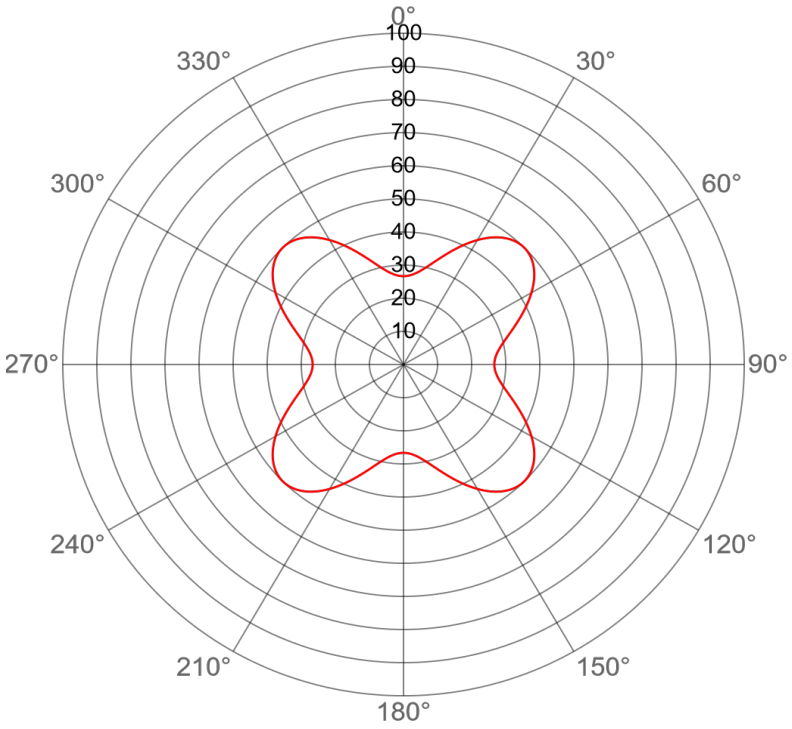


Horizontal Polarization
AZIMUTH PATTERN

Exhibit No.	
Date	**24 Nov 2020**
Call Letters	**WDKY-D19**
Channel	**19**
Antenna Type	**TFU-29JTH O4A**
Location	**Danville, KY**
Customer	**Nexstar**
Gain	**1.1 (0.41 dB)**
	Calculated
Drawing #	**TFU-O4**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	1.000	36	0.895	72	0.951	108	0.951	144	0.895	180	1.000	216	0.895	252	0.951	288	0.951	324	0.895
1	1.000	37	0.894	73	0.956	109	0.947	145	0.897	181	1.000	217	0.894	253	0.956	289	0.947	325	0.897
2	0.999	38	0.893	74	0.960	110	0.943	146	0.899	182	0.999	218	0.893	254	0.960	290	0.943	326	0.899
3	0.998	39	0.892	75	0.964	111	0.939	147	0.901	183	0.998	219	0.892	255	0.964	291	0.939	327	0.901
4	0.997	40	0.891	76	0.968	112	0.935	148	0.903	184	0.997	220	0.891	256	0.968	292	0.935	328	0.903
5	0.995	41	0.890	77	0.972	113	0.931	149	0.905	185	0.995	221	0.890	257	0.972	293	0.931	329	0.905
6	0.993	42	0.889	78	0.976	114	0.927	150	0.908	186	0.993	222	0.889	258	0.976	294	0.927	330	0.908
7	0.991	43	0.889	79	0.979	115	0.924	151	0.911	187	0.991	223	0.889	259	0.979	295	0.924	331	0.911
8	0.989	44	0.889	80	0.983	116	0.920	152	0.914	188	0.989	224	0.889	260	0.983	296	0.920	332	0.914
9	0.986	45	0.889	81	0.986	117	0.917	153	0.917	189	0.986	225	0.889	261	0.986	297	0.917	333	0.917
10	0.983	46	0.889	82	0.989	118	0.914	154	0.920	190	0.983	226	0.889	262	0.989	298	0.914	334	0.920
11	0.979	47	0.889	83	0.991	119	0.911	155	0.924	191	0.979	227	0.889	263	0.991	299	0.911	335	0.924
12	0.976	48	0.889	84	0.993	120	0.908	156	0.927	192	0.976	228	0.889	264	0.993	300	0.908	336	0.927
13	0.972	49	0.890	85	0.995	121	0.905	157	0.931	193	0.972	229	0.890	265	0.995	301	0.905	337	0.931
14	0.968	50	0.891	86	0.997	122	0.903	158	0.935	194	0.968	230	0.891	266	0.997	302	0.903	338	0.935
15	0.964	51	0.892	87	0.998	123	0.901	159	0.939	195	0.964	231	0.892	267	0.998	303	0.901	339	0.939
16	0.960	52	0.893	88	0.999	124	0.899	160	0.943	196	0.960	232	0.893	268	0.999	304	0.899	340	0.943
17	0.956	53	0.894	89	1.000	125	0.897	161	0.947	197	0.956	233	0.894	269	1.000	305	0.897	341	0.947
18	0.951	54	0.895	90	1.000	126	0.895	162	0.951	198	0.951	234	0.895	270	1.000	306	0.895	342	0.951
19	0.947	55	0.897	91	1.000	127	0.894	163	0.956	199	0.947	235	0.897	271	1.000	307	0.894	343	0.956
20	0.943	56	0.899	92	0.999	128	0.893	164	0.960	200	0.943	236	0.899	272	0.999	308	0.893	344	0.960
21	0.939	57	0.901	93	0.998	129	0.892	165	0.964	201	0.939	237	0.901	273	0.998	309	0.892	345	0.964
22	0.935	58	0.903	94	0.997	130	0.891	166	0.968	202	0.935	238	0.903	274	0.997	310	0.891	346	0.968
23	0.931	59	0.905	95	0.995	131	0.890	167	0.972	203	0.931	239	0.905	275	0.995	311	0.890	347	0.972
24	0.927	60	0.908	96	0.993	132	0.889	168	0.976	204	0.927	240	0.908	276	0.993	312	0.889	348	0.976
25	0.924	61	0.911	97	0.991	133	0.889	169	0.979	205	0.924	241	0.911	277	0.991	313	0.889	349	0.979
26	0.920	62	0.914	98	0.989	134	0.889	170	0.983	206	0.920	242	0.914	278	0.989	314	0.889	350	0.983
27	0.917	63	0.917	99	0.986	135	0.889	171	0.986	207	0.917	243	0.917	279	0.986	315	0.889	351	0.986
28	0.914	64	0.920	100	0.983	136	0.889	172	0.989	208	0.914	244	0.920	280	0.983	316	0.889	352	0.989
29	0.911	65	0.924	101	0.979	137	0.889	173	0.991	209	0.911	245	0.924	281	0.979	317	0.889	353	0.991
30	0.908	66	0.927	102	0.976	138	0.889	174	0.993	210	0.908	246	0.927	282	0.976	318	0.889	354	0.993
31	0.905	67	0.931	103	0.972	139	0.890	175	0.995	211	0.905	247	0.931	283	0.972	319	0.890	355	0.995
32	0.903	68	0.935	104	0.968	140	0.891	176	0.997	212	0.903	248	0.935	284	0.968	320	0.891	356	0.997
33	0.901	69	0.939	105	0.964	141	0.892	177	0.998	213	0.901	249	0.939	285	0.964	321	0.892	357	0.998
34	0.899	70	0.943	106	0.960	142	0.893	178	0.999	214	0.899	250	0.943	286	0.960	322	0.893	358	0.999
35	0.897	71	0.947	107	0.956	143	0.894	179	1.000	215	0.897	251	0.947	287	0.956	323	0.894	359	1.000

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Vertical Polarization
AZIMUTH PATTERN

Exhibit No.	
Date	**24 Nov 2020**
Call Letters	**WDKY-D19**
Channel	**19**
Antenna Type	**TFU-29JTH O4A**
Location	**Danville, KY**
Customer	**Nexstar**
Gain	**1.1 (0.41 dB)**
	Calculated
Drawing #	**TFU-O4**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.267	36	0.474	72	0.335	108	0.335	144	0.474	180	0.267	216	0.474	252	0.335	288	0.335	324	0.474
1	0.267	37	0.480	73	0.327	109	0.342	145	0.469	181	0.267	217	0.480	253	0.327	289	0.342	325	0.469
2	0.267	38	0.484	74	0.320	110	0.350	146	0.462	182	0.267	218	0.484	254	0.320	290	0.350	326	0.462
3	0.268	39	0.488	75	0.314	111	0.358	147	0.456	183	0.268	219	0.488	255	0.314	291	0.358	327	0.456
4	0.270	40	0.492	76	0.308	112	0.367	148	0.449	184	0.270	220	0.492	256	0.308	292	0.367	328	0.449
5	0.272	41	0.495	77	0.302	113	0.375	149	0.441	185	0.272	221	0.495	257	0.302	293	0.375	329	0.441
6	0.274	42	0.497	78	0.297	114	0.384	150	0.434	186	0.274	222	0.497	258	0.297	294	0.384	330	0.434
7	0.277	43	0.499	79	0.292	115	0.392	151	0.426	187	0.277	223	0.499	259	0.292	295	0.392	331	0.426
8	0.280	44	0.500	80	0.287	116	0.401	152	0.418	188	0.280	224	0.500	260	0.287	296	0.401	332	0.418
9	0.283	45	0.500	81	0.283	117	0.409	153	0.409	189	0.283	225	0.500	261	0.283	297	0.409	333	0.409
10	0.287	46	0.500	82	0.280	118	0.418	154	0.401	190	0.287	226	0.500	262	0.280	298	0.418	334	0.401
11	0.292	47	0.499	83	0.276	119	0.426	155	0.392	191	0.292	227	0.499	263	0.276	299	0.426	335	0.392
12	0.297	48	0.497	84	0.274	120	0.434	156	0.384	192	0.297	228	0.497	264	0.274	300	0.434	336	0.384
13	0.302	49	0.495	85	0.272	121	0.441	157	0.375	193	0.302	229	0.495	265	0.272	301	0.441	337	0.375
14	0.308	50	0.492	86	0.270	122	0.449	158	0.367	194	0.308	230	0.492	266	0.270	302	0.449	338	0.367
15	0.314	51	0.488	87	0.268	123	0.456	159	0.358	195	0.314	231	0.488	267	0.268	303	0.456	339	0.358
16	0.321	52	0.484	88	0.267	124	0.462	160	0.350	196	0.321	232	0.484	268	0.267	304	0.462	340	0.350
17	0.327	53	0.480	89	0.267	125	0.469	161	0.342	197	0.327	233	0.480	269	0.267	305	0.469	341	0.342
18	0.335	54	0.474	90	0.267	126	0.474	162	0.335	198	0.335	234	0.474	270	0.267	306	0.474	342	0.335
19	0.342	55	0.469	91	0.267	127	0.480	163	0.327	199	0.342	235	0.469	271	0.267	307	0.480	343	0.327
20	0.350	56	0.462	92	0.267	128	0.484	164	0.320	200	0.350	236	0.462	272	0.267	308	0.484	344	0.320
21	0.358	57	0.456	93	0.268	129	0.488	165	0.314	201	0.358	237	0.456	273	0.268	309	0.488	345	0.314
22	0.367	58	0.449	94	0.270	130	0.492	166	0.308	202	0.367	238	0.449	274	0.270	310	0.492	346	0.308
23	0.375	59	0.441	95	0.272	131	0.495	167	0.302	203	0.375	239	0.441	275	0.272	311	0.495	347	0.302
24	0.384	60	0.434	96	0.274	132	0.497	168	0.297	204	0.384	240	0.434	276	0.274	312	0.497	348	0.297
25	0.392	61	0.426	97	0.277	133	0.499	169	0.292	205	0.392	241	0.426	277	0.277	313	0.499	349	0.292
26	0.401	62	0.418	98	0.280	134	0.500	170	0.287	206	0.401	242	0.418	278	0.280	314	0.500	350	0.287
27	0.409	63	0.409	99	0.283	135	0.500	171	0.283	207	0.409	243	0.409	279	0.283	315	0.500	351	0.283
28	0.418	64	0.401	100	0.287	136	0.500	172	0.280	208	0.418	244	0.401	280	0.287	316	0.500	352	0.280
29	0.426	65	0.392	101	0.292	137	0.499	173	0.276	209	0.426	245	0.392	281	0.292	317	0.499	353	0.276
30	0.434	66	0.384	102	0.297	138	0.497	174	0.274	210	0.434	246	0.384	282	0.297	318	0.497	354	0.274
31	0.441	67	0.375	103	0.302	139	0.495	175	0.272	211	0.441	247	0.375	283	0.302	319	0.495	355	0.272
32	0.449	68	0.367	104	0.308	140	0.492	176	0.270	212	0.449	248	0.367	284	0.308	320	0.492	356	0.270
33	0.456	69	0.358	105	0.314	141	0.488	177	0.268	213	0.456	249	0.358	285	0.314	321	0.488	357	0.268
34	0.462	70	0.350	106	0.321	142	0.484	178	0.267	214	0.462	250	0.350	286	0.321	322	0.484	358	0.267
35	0.469	71	0.342	107	0.327	143	0.480	179	0.267	215	0.469	251	0.342	287	0.327	323	0.480	359	0.267

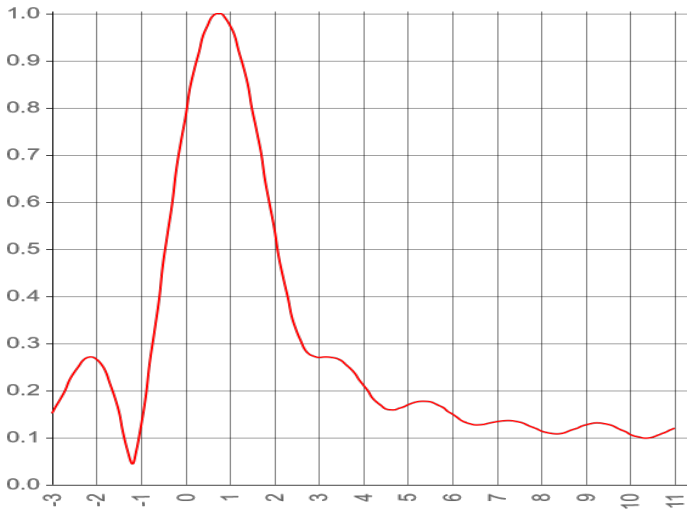
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ELEVATION PATTERN

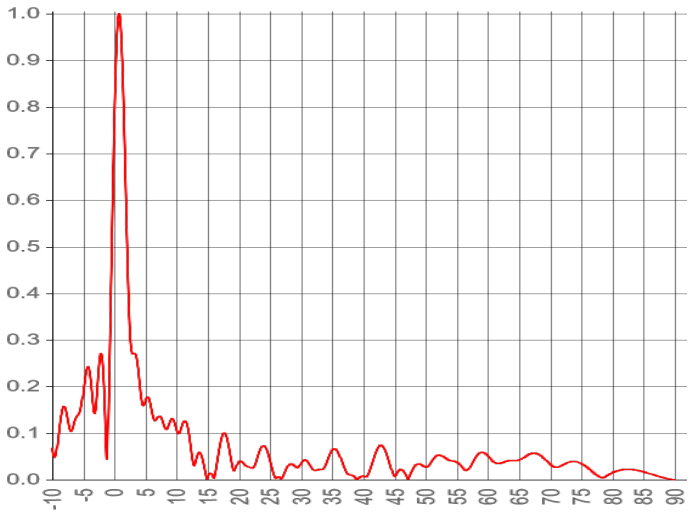
Exhibit No.	
Date	**24 Nov 2020**
Call Letters	**WDKY-D19**
Channel	**19**
Antenna Type	**TFU-29JTH O4A**
Location	**Danville, KY**
Customer	**Nexstar**

Future fill is available!

RMS Gain at Main Lobe	**25.5 (14.07 dB)**	Beam Tilt	**0.75 Degrees**
RMS Gain at Horizontal	**15.8 (11.97 dB)**	Drawing #	**29J255075**
	Calculated		



Degrees below horizontal



Degrees below horizontal

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10	0.068	10	0.107	30	0.035	50	0.027	70	0.033
-9	0.093	11	0.120	31	0.040	51	0.040	71	0.027
-8	0.156	12	0.093	32	0.021	52	0.053	72	0.031
-7	0.104	13	0.037	33	0.022	53	0.048	73	0.038
-6	0.136	14	0.052	34	0.034	54	0.041	74	0.039
-5	0.187	15	0.004	35	0.063	55	0.038	75	0.035
-4	0.232	16	0.004	36	0.057	56	0.025	76	0.026
-3	0.152	17	0.078	37	0.023	57	0.025	77	0.015
-2	0.267	18	0.093	38	0.010	58	0.048	78	0.005
-1	0.124	19	0.027	39	0.001	59	0.059	79	0.008
0	0.786	20	0.039	40	0.008	60	0.051	80	0.015
1	0.976	21	0.031	41	0.021	61	0.038	81	0.020
2	0.539	22	0.025	42	0.059	62	0.035	82	0.022
3	0.270	23	0.048	43	0.073	63	0.040	83	0.022
4	0.211	24	0.073	44	0.045	64	0.041	84	0.020
5	0.169	25	0.040	45	0.007	65	0.042	85	0.017
6	0.150	26	0.003	46	0.022	66	0.050	86	0.013
7	0.134	27	0.005	47	0.006	67	0.057	87	0.009
8	0.114	28	0.031	48	0.023	68	0.056	88	0.005
9	0.127	29	0.029	49	0.034	69	0.046	89	0.002

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