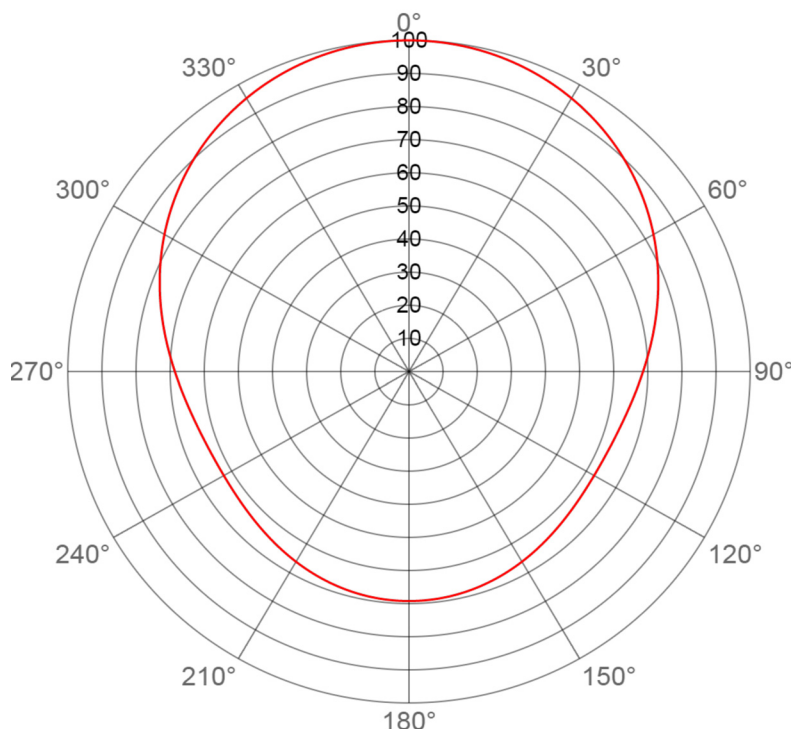


N. Lat. = 411832.0 W. Lng. = 960133.0
 HAAT and Distance to Contour,
 V-Soft 3.2-16.1 km, 130 pts Method - NED 03 SEC

KYNE-TV, Nebraska Educational Telecom, BLANK0000005759

Azi.	AV EL	HAAT	ERP kw	dBk	Field	DAng	VFl d	D-kw	%Max	D-dBk	39-F9
000	373.3	253.7	21.5000	13.32	1.000	0.441	0.919	18.1487	91.9	13.32	68.58
010	347.3	279.7	21.5000	13.32	1.000	0.463	0.922	18.2711	92.2	13.32	70.38
020	346.9	280.1	21.5000	13.32	1.000	0.464	0.922	18.2731	92.2	13.32	70.41
030	338.2	288.8	21.5000	13.32	1.000	0.471	0.923	18.3125	92.3	13.32	71.06
040	323.9	303.1	21.5000	13.32	1.000	0.482	0.925	18.3767	92.5	13.32	72.17
050	312.0	315.0	21.5000	13.32	1.000	0.492	0.926	18.4289	92.6	13.32	73.12
060	314.2	312.8	21.5000	13.32	1.000	0.490	0.926	18.4193	92.6	13.32	72.94
070	321.2	305.8	21.5000	13.32	1.000	0.484	0.925	18.3888	92.5	13.32	72.38
080	330.3	296.7	21.5000	13.32	1.000	0.477	0.924	18.3483	92.4	13.32	71.67
090	320.0	307.0	21.5000	13.32	1.000	0.485	0.925	18.3937	92.5	13.32	72.47
100	318.0	309.0	21.5000	13.32	1.000	0.487	0.925	18.4026	92.5	13.32	72.63
110	312.4	314.6	21.5000	13.32	1.000	0.491	0.926	18.4273	92.6	13.32	73.09
120	316.7	310.3	21.5000	13.32	1.000	0.488	0.925	18.4082	92.5	13.32	72.73
130	331.6	295.4	21.5000	13.32	1.000	0.476	0.924	18.3425	92.4	13.32	71.57
140	342.4	284.6	21.5000	13.32	1.000	0.467	0.922	18.2934	92.2	13.32	70.74
150	353.2	273.8	21.5000	13.32	1.000	0.458	0.921	18.2439	92.1	13.32	69.95
160	352.5	274.5	21.5000	13.32	1.000	0.459	0.921	18.2473	92.1	13.32	70.00
170	326.5	300.5	21.5000	13.32	1.000	0.480	0.924	18.3652	92.4	13.32	71.97
180	331.9	295.1	21.5000	13.32	1.000	0.476	0.924	18.3409	92.4	13.32	71.54
190	333.6	293.4	21.5000	13.32	1.000	0.474	0.923	18.3332	92.3	13.32	71.41
200	337.5	289.5	21.5000	13.32	1.000	0.471	0.923	18.3160	92.3	13.32	71.12
210	339.2	287.8	21.5000	13.32	1.000	0.470	0.923	18.3082	92.3	13.32	70.99
220	347.5	279.5	21.5000	13.32	1.000	0.463	0.922	18.2704	92.2	13.32	70.37
230	345.9	281.1	21.5000	13.32	1.000	0.464	0.922	18.2777	92.2	13.32	70.49
240	351.8	275.2	21.5000	13.32	1.000	0.460	0.921	18.2503	92.1	13.32	70.05
250	352.9	274.1	21.5000	13.32	1.000	0.459	0.921	18.2453	92.1	13.32	69.97
260	358.4	268.6	21.5000	13.32	1.000	0.454	0.921	18.2195	92.1	13.32	69.58
270	358.8	268.2	21.5000	13.32	1.000	0.454	0.921	18.2176	92.1	13.32	69.55
280	359.4	267.6	21.5000	13.32	1.000	0.453	0.920	18.2149	92.0	13.32	69.52
290	357.1	269.9	21.5000	13.32	1.000	0.455	0.921	18.2258	92.1	13.32	69.68
300	350.1	276.9	21.5000	13.32	1.000	0.461	0.922	18.2582	92.2	13.32	70.17
310	363.8	263.2	21.5000	13.32	1.000	0.449	0.920	18.1942	92.0	13.32	69.21
320	375.5	251.5	21.5000	13.32	1.000	0.439	0.918	18.1383	91.8	13.32	68.44
330	374.0	253.0	21.5000	13.32	1.000	0.441	0.919	18.1454	91.9	13.32	68.53
340	366.2	260.8	21.5000	13.32	1.000	0.447	0.920	18.1827	92.0	13.32	69.05
350	376.6	250.4	21.5000	13.32	1.000	0.438	0.918	18.1331	91.8	13.32	68.37

Ave E1= 343.35 M HAAT= 283.65 M AMSL= 627 M



Horizontal Polarization AZIMUTH PATTERN

Exhibit No. **1**
Date **5 Dec 2016**
Call Letters **KYNE-TV**
Antenna Type **DLP-12B**
Channel **17**

Gain **1.7 (2.30 dB)**
Calculated
Drawing # **b-pattern**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	1.000	36	0.933	72	0.768	108	0.636	144	0.652	180	0.692	216	0.652	252	0.636	288	0.768	324	0.933
1	1.000	37	0.929	73	0.763	109	0.635	145	0.654	181	0.692	217	0.650	253	0.638	289	0.773	325	0.936
2	1.000	38	0.925	74	0.758	110	0.633	146	0.655	182	0.692	218	0.649	254	0.639	290	0.778	326	0.940
3	0.999	39	0.922	75	0.753	111	0.632	147	0.657	183	0.692	219	0.647	255	0.641	291	0.783	327	0.943
4	0.999	40	0.918	76	0.748	112	0.631	148	0.659	184	0.692	220	0.646	256	0.643	292	0.788	328	0.946
5	0.999	41	0.914	77	0.743	113	0.630	149	0.661	185	0.691	221	0.644	257	0.646	293	0.793	329	0.950
6	0.998	42	0.910	78	0.738	114	0.629	150	0.662	186	0.691	222	0.642	258	0.648	294	0.798	330	0.953
7	0.997	43	0.906	79	0.734	115	0.628	151	0.664	187	0.690	223	0.641	259	0.651	295	0.803	331	0.956
8	0.997	44	0.902	80	0.729	116	0.628	152	0.666	188	0.690	224	0.639	260	0.653	296	0.808	332	0.959
9	0.996	45	0.897	81	0.724	117	0.627	153	0.667	189	0.689	225	0.638	261	0.656	297	0.813	333	0.962
10	0.995	46	0.893	82	0.720	118	0.627	154	0.669	190	0.689	226	0.637	262	0.659	298	0.818	334	0.964
11	0.993	47	0.889	83	0.715	119	0.627	155	0.670	191	0.688	227	0.635	263	0.662	299	0.823	335	0.967
12	0.992	48	0.884	84	0.711	120	0.627	156	0.672	192	0.687	228	0.634	264	0.665	300	0.828	336	0.970
13	0.991	49	0.880	85	0.707	121	0.627	157	0.673	193	0.686	229	0.633	265	0.668	301	0.833	337	0.972
14	0.990	50	0.875	86	0.702	122	0.627	158	0.675	194	0.685	230	0.632	266	0.672	302	0.837	338	0.974
15	0.988	51	0.871	87	0.698	123	0.627	159	0.676	195	0.684	231	0.631	267	0.675	303	0.842	339	0.977
16	0.986	52	0.866	88	0.694	124	0.628	160	0.678	196	0.683	232	0.630	268	0.679	304	0.847	340	0.979
17	0.985	53	0.861	89	0.690	125	0.628	161	0.679	197	0.682	233	0.629	269	0.682	305	0.852	341	0.981
18	0.983	54	0.857	90	0.686	126	0.629	162	0.680	198	0.680	234	0.629	270	0.686	306	0.857	342	0.983
19	0.981	55	0.852	91	0.682	127	0.629	163	0.682	199	0.679	235	0.628	271	0.690	307	0.861	343	0.985
20	0.979	56	0.847	92	0.679	128	0.630	164	0.683	200	0.678	236	0.628	272	0.694	308	0.866	344	0.986
21	0.977	57	0.842	93	0.675	129	0.631	165	0.684	201	0.676	237	0.627	273	0.698	309	0.871	345	0.988
22	0.974	58	0.837	94	0.672	130	0.632	166	0.685	202	0.675	238	0.627	274	0.702	310	0.875	346	0.990
23	0.972	59	0.833	95	0.668	131	0.633	167	0.686	203	0.673	239	0.627	275	0.707	311	0.880	347	0.991
24	0.970	60	0.828	96	0.665	132	0.634	168	0.687	204	0.672	240	0.627	276	0.711	312	0.884	348	0.992
25	0.967	61	0.823	97	0.662	133	0.635	169	0.688	205	0.670	241	0.627	277	0.715	313	0.889	349	0.993
26	0.964	62	0.818	98	0.659	134	0.637	170	0.689	206	0.669	242	0.627	278	0.720	314	0.893	350	0.995
27	0.962	63	0.813	99	0.656	135	0.638	171	0.689	207	0.667	243	0.627	279	0.724	315	0.897	351	0.996
28	0.959	64	0.808	100	0.653	136	0.639	172	0.690	208	0.666	244	0.628	280	0.729	316	0.902	352	0.997
29	0.956	65	0.803	101	0.651	137	0.641	173	0.690	209	0.664	245	0.628	281	0.734	317	0.906	353	0.997
30	0.953	66	0.798	102	0.648	138	0.642	174	0.691	210	0.662	246	0.629	282	0.738	318	0.910	354	0.998
31	0.950	67	0.793	103	0.646	139	0.644	175	0.691	211	0.661	247	0.630	283	0.743	319	0.914	355	0.999
32	0.946	68	0.788	104	0.643	140	0.646	176	0.692	212	0.659	248	0.631	284	0.748	320	0.918	356	0.999
33	0.943	69	0.783	105	0.641	141	0.647	177	0.692	213	0.657	249	0.632	285	0.753	321	0.922	357	0.999
34	0.940	70	0.778	106	0.639	142	0.649	178	0.692	214	0.655	250	0.633	286	0.758	322	0.925	358	1.000
35	0.936	71	0.773	107	0.638	143	0.650	179	0.692	215	0.654	251	0.635	287	0.763	323	0.929	359	1.000

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ELEVATION PATTERN

Exhibit No. **2**
Date **5 Dec 2016**
Call Letters **KYNE-TV**
Antenna Type **DLP-12B**
Channel **17**

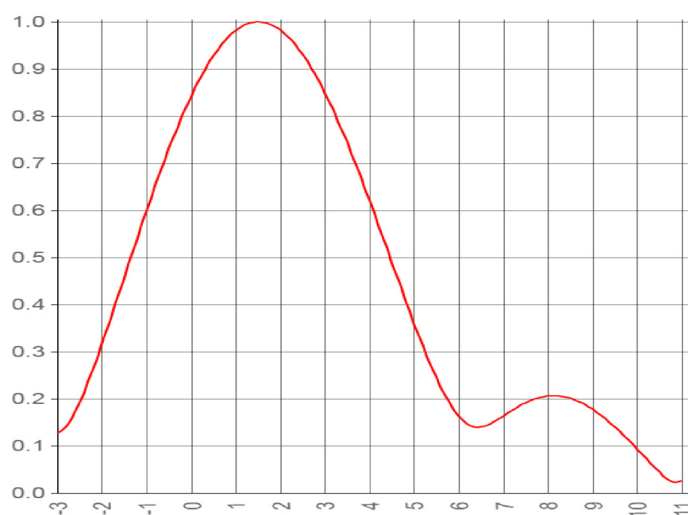
RMS Gain at Main Lobe **12.0 (10.79 dB)**

RMS Gain at Horizontal **8.5 (9.30 dB)**

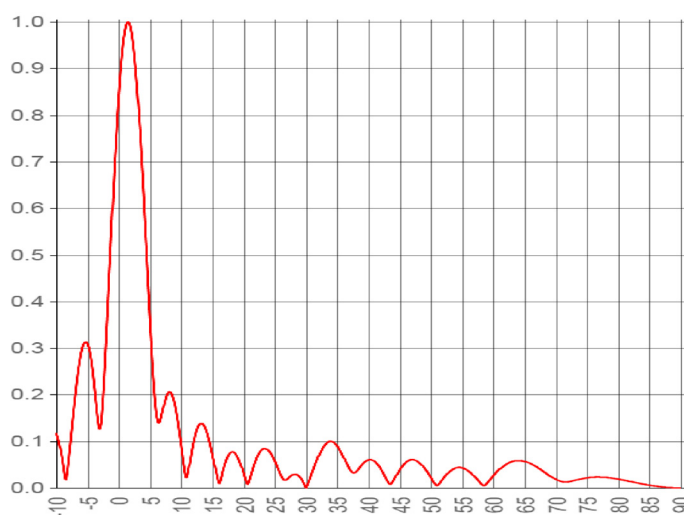
Calculated

Beam Tilt **1.5 Degrees**

Drawing # **12D120150**



Degrees below horizontal



Degrees below horizontal

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.118	10.0	0.093	30.0	0.000	50.0	0.022	70.0	0.019
-9.0	0.055	11.0	0.026	31.0	0.034	51.0	0.005	71.0	0.014
-8.0	0.064	12.0	0.100	32.0	0.068	52.0	0.021	72.0	0.013
-7.0	0.192	13.0	0.137	33.0	0.092	53.0	0.035	73.0	0.016
-6.0	0.289	14.0	0.124	34.0	0.100	54.0	0.043	74.0	0.019
-5.0	0.309	15.0	0.072	35.0	0.089	55.0	0.043	75.0	0.022
-4.0	0.229	16.0	0.011	36.0	0.066	56.0	0.036	76.0	0.023
-3.0	0.127	17.0	0.051	37.0	0.039	57.0	0.024	77.0	0.024
-2.0	0.314	18.0	0.076	38.0	0.034	58.0	0.009	78.0	0.023
-1.0	0.598	19.0	0.067	39.0	0.050	59.0	0.011	79.0	0.021
0.0	0.842	20.0	0.031	40.0	0.059	60.0	0.026	80.0	0.019
1.0	0.981	21.0	0.020	41.0	0.056	61.0	0.040	81.0	0.017
2.0	0.983	22.0	0.060	42.0	0.040	62.0	0.050	82.0	0.014
3.0	0.850	23.0	0.082	43.0	0.016	63.0	0.056	83.0	0.011
4.0	0.621	24.0	0.079	44.0	0.016	64.0	0.058	84.0	0.008
5.0	0.360	25.0	0.057	45.0	0.039	65.0	0.056	85.0	0.006
6.0	0.163	26.0	0.027	46.0	0.055	66.0	0.051	86.0	0.004
7.0	0.163	27.0	0.019	47.0	0.060	67.0	0.044	87.0	0.002
8.0	0.206	28.0	0.029	48.0	0.055	68.0	0.035	88.0	0.001
9.0	0.178	29.0	0.023	49.0	0.041	69.0	0.026	89.0	0.000

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Proposal Number	C-06477	
Date	5-Dec-16	
Call Letters	KYNE	Channel 17
Location		
Customer		
Antenna Type	DLP12B	

SYSTEM SUMMARY

Antenna:

		H Pol
ERP:	21.5 kW	(13.32 dBk)
Peak Gain*:	20.4	(13.10 dB)
Input Power:	1.1 kW	(0.23 dBk)

Transmission Line:

Type:	Flex	Attenuation:	4.73 dB
Size:	1 5/8 in	Efficiency:	33.7%
Impedance:	50 ohm		
Length:	1,001 ft		305.1 m

Transmitter:

Power Required:	3.1 kW	(4.96 dBk)
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* Gain is with respect to half wave dipole.

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