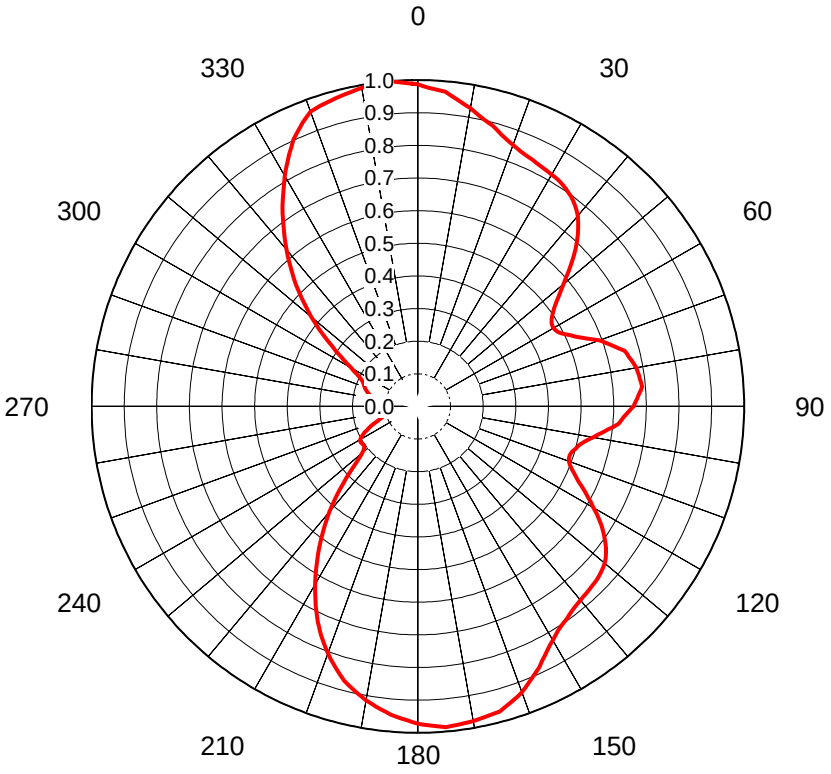


AZIMUTH PATTERN
Horizontal Polarization

Proposal No.	**C-71218**
Date	**30-Aug-18**
Call Letters	**KYTX**
Channel	**15**
Frequency	**479 MHz**
Antenna Type	**TAD-32UDA-3/48P**
Gain	**2.17 (3.36dB)**
	Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.987	36	0.797	72	0.617	108	0.489	144	0.789	180	0.973	216	0.506	252	0.121	288	0.168	324	0.703
1	0.981	37	0.790	73	0.629	109	0.490	145	0.795	181	0.967	217	0.485	253	0.115	289	0.171	325	0.723
2	0.977	38	0.782	74	0.643	110	0.492	146	0.799	182	0.962	218	0.464	254	0.110	290	0.174	326	0.741
3	0.973	39	0.773	75	0.657	111	0.499	147	0.804	183	0.958	219	0.443	255	0.105	291	0.176	327	0.760
4	0.971	40	0.762	76	0.661	112	0.508	148	0.811	184	0.953	220	0.423	256	0.101	292	0.179	328	0.778
5	0.969	41	0.749	77	0.666	113	0.518	149	0.818	185	0.948	221	0.400	257	0.098	293	0.181	329	0.797
6	0.959	42	0.735	78	0.670	114	0.530	150	0.827	186	0.942	222	0.377	258	0.094	294	0.184	330	0.816
7	0.951	43	0.719	79	0.675	115	0.543	151	0.836	187	0.935	223	0.354	259	0.090	295	0.188	331	0.833
8	0.943	44	0.701	80	0.681	116	0.558	152	0.845	188	0.928	224	0.331	260	0.086	296	0.195	332	0.851
9	0.935	45	0.683	81	0.682	117	0.574	153	0.856	189	0.921	225	0.309	261	0.085	297	0.204	333	0.868
10	0.928	46	0.663	82	0.684	118	0.590	154	0.868	190	0.914	226	0.287	262	0.084	298	0.213	334	0.885
11	0.919	47	0.643	83	0.686	119	0.606	155	0.882	191	0.906	227	0.267	263	0.083	299	0.224	335	0.902
12	0.910	48	0.623	84	0.688	120	0.622	156	0.891	192	0.898	228	0.250	264	0.081	300	0.236	336	0.915
13	0.903	49	0.602	85	0.690	121	0.639	157	0.901	193	0.889	229	0.235	265	0.080	301	0.250	337	0.927
14	0.896	50	0.582	86	0.684	122	0.655	158	0.911	194	0.880	230	0.222	266	0.083	302	0.266	338	0.939
15	0.890	51	0.564	87	0.678	123	0.671	159	0.922	195	0.870	231	0.214	267	0.086	303	0.283	339	0.951
16	0.881	52	0.547	88	0.672	124	0.685	160	0.933	196	0.858	232	0.209	268	0.089	304	0.301	340	0.962
17	0.873	53	0.532	89	0.666	125	0.698	161	0.940	197	0.846	233	0.205	269	0.092	305	0.320	341	0.965
18	0.865	54	0.518	90	0.661	126	0.711	162	0.947	198	0.833	234	0.204	270	0.094	306	0.341	342	0.968
19	0.859	55	0.507	91	0.650	127	0.722	163	0.954	199	0.819	235	0.204	271	0.097	307	0.361	343	0.971
20	0.853	56	0.496	92	0.640	128	0.732	164	0.961	200	0.806	236	0.205	272	0.099	308	0.383	344	0.974
21	0.847	57	0.488	93	0.632	129	0.740	165	0.968	201	0.791	237	0.206	273	0.100	309	0.404	345	0.977
22	0.843	58	0.483	94	0.624	130	0.747	166	0.970	202	0.776	238	0.207	274	0.100	310	0.426	346	0.980
23	0.839	59	0.480	95	0.617	131	0.752	167	0.972	203	0.760	239	0.206	275	0.100	311	0.446	347	0.983
24	0.836	60	0.480	96	0.601	132	0.757	168	0.974	204	0.743	240	0.204	276	0.107	312	0.467	348	0.985
25	0.834	61	0.482	97	0.586	133	0.760	169	0.976	205	0.727	241	0.200	277	0.114	313	0.487	349	0.988
26	0.830	62	0.486	98	0.571	134	0.763	170	0.979	206	0.708	242	0.195	278	0.120	314	0.507	350	0.992
27	0.827	63	0.493	99	0.558	135	0.765	171	0.980	207	0.689	243	0.188	279	0.127	315	0.528	351	0.993
28	0.825	64	0.503	100	0.546	136	0.767	172	0.982	208	0.669	244	0.181	280	0.133	316	0.548	352	0.995
29	0.823	65	0.516	101	0.533	137	0.769	173	0.983	209	0.649	245	0.173	281	0.139	317	0.567	353	0.996
30	0.820	66	0.527	102	0.521	138	0.771	174	0.985	210	0.630	246	0.165	282	0.144	318	0.587	354	0.998
31	0.818	67	0.541	103	0.512	139	0.773	175	0.987	211	0.609	247	0.157	283	0.149	319	0.606	355	1.000
32	0.815	68	0.556	104	0.505	140	0.775	176	0.984	212	0.589	248	0.149	284	0.153	320	0.626	356	0.997
33	0.812	69	0.574	105	0.500	141	0.778	177	0.981	213	0.568	249	0.141	285	0.157	321	0.645	357	0.994
34	0.808	70	0.593	106	0.494	142	0.781	178	0.978	214	0.547	250	0.133	286	0.161	322	0.664	358	0.991
35	0.802	71	0.604	107	0.490	143	0.785	179	0.975	215	0.526	251	0.127	287	0.165	323	0.684	359	0.989

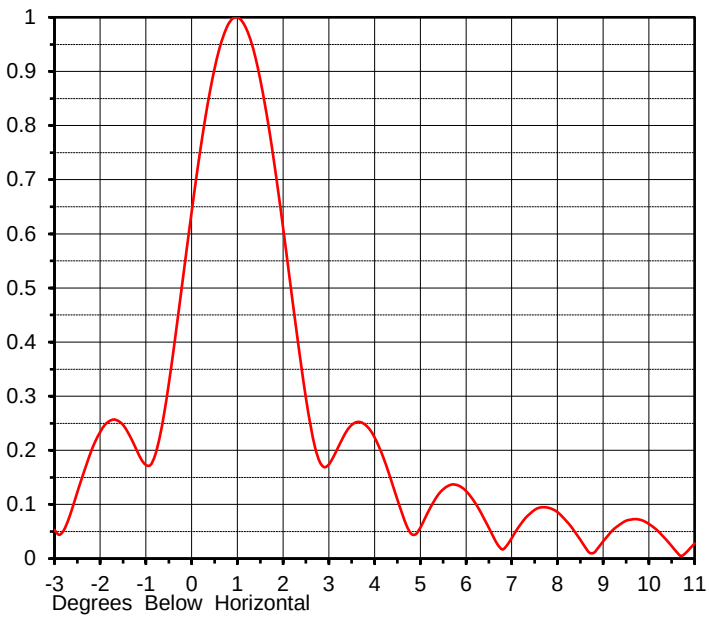
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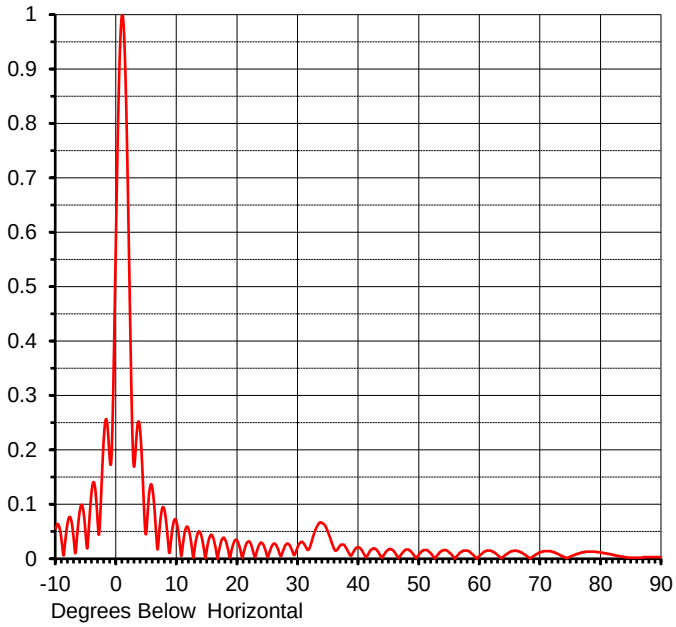
ELEVATION PATTERN

Proposal No.	**C-71218**
Date	**30-Aug-18**
Call Letters	**KYTX**
Channel	**15**
Frequency	**479 MHz**
Antenna Type	**TAD-32UDA-3/48P**

RMS Directivity at Main Lobe	**30.8 (14.89 dB)**	Beam Tilt	**1.00 deg**
RMS Directivity at Horizontal	**12.7 (11.04 dB)**	Pattern Number	**16U308100**

Calculated





Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.056	10.0	0.064	30.0	0.024	50.0	0.009	70.0	0.012
-9.0	0.029	11.0	0.028	31.0	0.027	51.0	0.016	71.0	0.014
-8.0	0.069	12.0	0.051	32.0	0.023	52.0	0.009	72.0	0.013
-7.0	0.031	13.0	0.025	33.0	0.057	53.0	0.007	73.0	0.008
-6.0	0.091	14.0	0.043	34.0	0.065	54.0	0.016	74.0	0.003
-5.0	0.035	15.0	0.022	35.0	0.047	55.0	0.011	75.0	0.004
-4.0	0.132	16.0	0.038	36.0	0.017	56.0	0.002	76.0	0.009
-3.0	0.053	17.0	0.018	37.0	0.025	57.0	0.013	77.0	0.012
-2.0	0.234	18.0	0.034	38.0	0.019	58.0	0.015	78.0	0.013
-1.0	0.173	19.0	0.015	39.0	0.010	59.0	0.006	79.0	0.013
0.0	0.641	20.0	0.032	40.0	0.021	60.0	0.006	80.0	0.011
1.0	1.000	21.0	0.011	41.0	0.006	61.0	0.014	81.0	0.009
2.0	0.611	22.0	0.031	42.0	0.016	62.0	0.014	82.0	0.007
3.0	0.174	23.0	0.006	43.0	0.016	63.0	0.006	83.0	0.005
4.0	0.224	24.0	0.029	44.0	0.004	64.0	0.005	84.0	0.003
5.0	0.057	25.0	0.003	45.0	0.017	65.0	0.013	85.0	0.002
6.0	0.125	26.0	0.028	46.0	0.011	66.0	0.015	86.0	0.002
7.0	0.038	27.0	0.007	47.0	0.008	67.0	0.011	87.0	0.003
8.0	0.086	28.0	0.026	48.0	0.017	68.0	0.003	88.0	0.003
9.0	0.032	29.0	0.015	49.0	0.008	69.0	0.006	89.0	0.003
								90.0	0.003

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Summary

Proposal No.	**C-71218**
Date	**30-Aug-18**
Call Letters	**KYTX**
Channel	**15**
Frequency	**479 MHz**
Antenna Type	**TAD-32UDA-3/48P**

Antenna

	Hpol	
ERP:	**640 kW**	**(28.06 dBk)**
Peak Gain*	66.85	(18.25 dB)

Antenna Input Power **9.57 kW** **(9.81 dBk)**

Transmission Line

Type:	**Rigid**		Attenuation:	**(1.50 dB)**
Size:	**7-3/16"**		Efficiency:	**70.8%**
Impedance:	**75 Ohm**			
Length:	**1650 ft**	**502.9 m**		

Transmitter Output **13.5 kW** **(11.31 dBk)**

Transmitter filter losses not included

* Directivity and Gain are with respect to half wave dipole. The gain includes feed system losses

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