

Antenna Model: **TFU-24WB/VP-R C160**

Reference Number: **C-80013-2**
 Date: **23-Mar-23**
 Customer: **Fox**
 Location: **Houston, TX**

Electrical Specifications

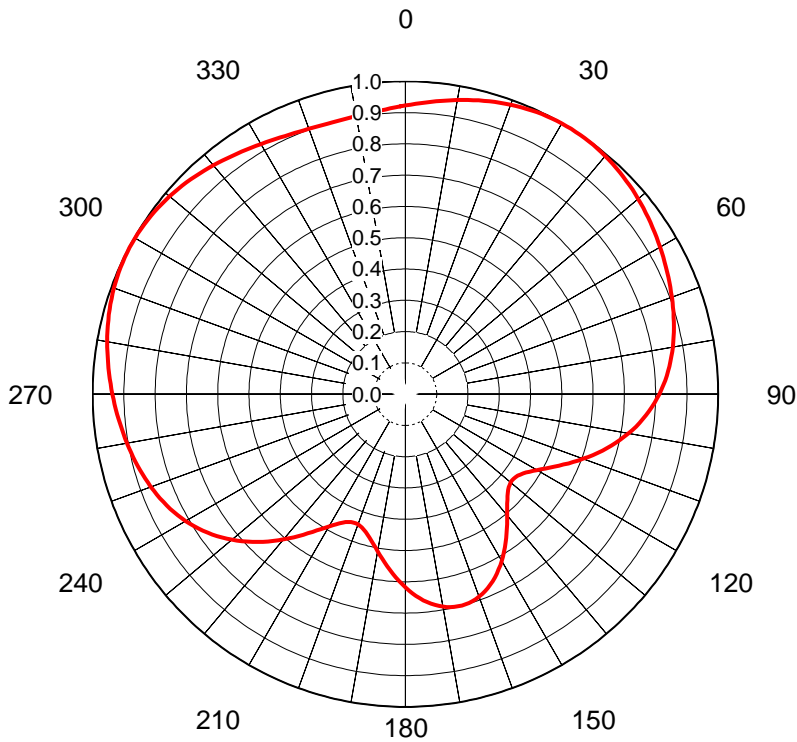
Polarization: **Elliptical**
 Azimuth Pattern: **C160**
 Antenna Input: **8-3/16 in 75 Ohm**
 VSWR: Channel **1.15:1** Band **1.15:1**
 Bandwidth: **470-698 MHz**
 Rated Input Power: **90.0 kW (19.54 dBk) Maximun Combined Average Power**

Mechanical Specifications

Mounting: **Side Mounted**
 Environmental Protection: **Full Radome**
 Height: **44.2 ft**
 Weight: **2,768 lbs** mounts excluded
 Effective Projected Area: **93.7 EPA (ft^2)** Basic Wind Speed: **100 V (mph)**

Channel Specifications

Call	Ch	Freq	Hpol ERP	Vpol ERP	TPO	Peak Gain Main Lobe Hpol	Peak Gain Main Lobe Vpol	Peak Gain at Horizontal Hpol	Peak Gain at Horizontal Vpol
KTXH	19	503	652 kW (28.14 dBk)	443 kW (26.46 dBk)	35.0 kW (15.44 dBk)	25.98 (14.15 dBd)	17.63 (12.46 dBd)	16.96 (12.29 dBd)	11.51 (10.61dB)
KRIV	26	545	787 kW (28.96 dBk)	358 kW (25.54 dBk)	35.0 kW (15.44 dBk)	31.78 (15.02 dBd)	14.45 (11.60 dBd)	19.19 (12.83 dBd)	8.72 (9.41 dBd)



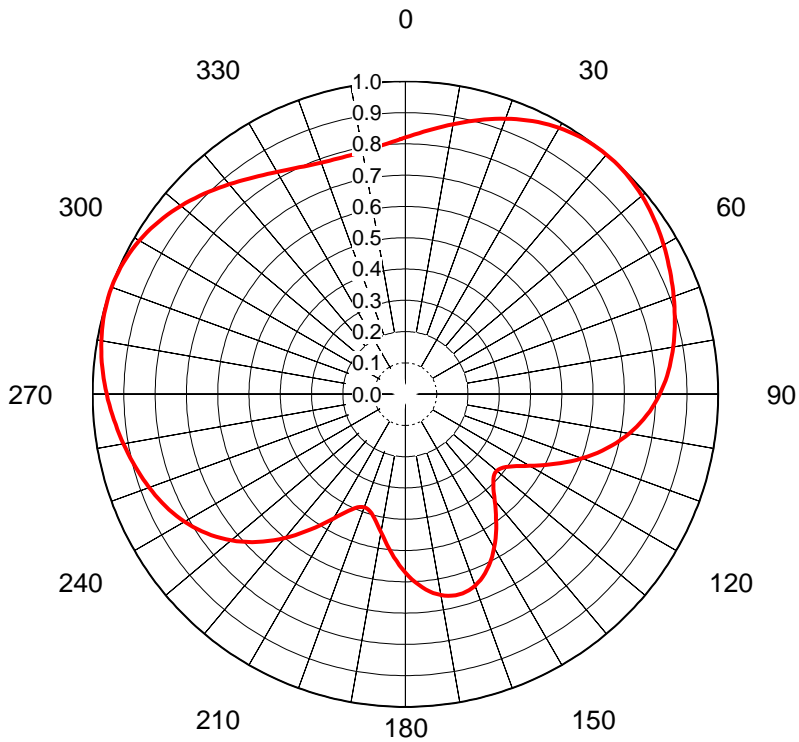
AZIMUTH PATTERN Horizontal Polarization

Proposal No. **C-80013-2**
 Date **23-Mar-23**
 Call Letters **KTXH**
 Channel **19**
 Frequency **503 MHz**
 Antenna Type **TFU-24WB/VP-R C160**
 Gain **1.5 (1.75dB)**
 Calculated

Pattern Number **C160-19 Hppl**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.923	36	0.999	72	0.900	108	0.630	144	0.550	180	0.618	216	0.556	252	0.875	288	0.988	324	0.942
1	0.926	37	0.998	73	0.896	109	0.617	145	0.562	181	0.608	217	0.568	253	0.879	289	0.990	325	0.939
2	0.929	38	0.997	74	0.892	110	0.605	146	0.573	182	0.597	218	0.581	254	0.882	290	0.992	326	0.935
3	0.932	39	0.995	75	0.889	111	0.592	147	0.584	183	0.587	219	0.593	255	0.886	291	0.993	327	0.932
4	0.935	40	0.994	76	0.885	112	0.579	148	0.595	184	0.576	220	0.606	256	0.890	292	0.994	328	0.929
5	0.938	41	0.992	77	0.881	113	0.566	149	0.606	185	0.565	221	0.619	257	0.893	293	0.996	329	0.926
6	0.941	42	0.991	78	0.877	114	0.554	150	0.616	186	0.553	222	0.631	258	0.897	294	0.997	330	0.923
7	0.945	43	0.989	79	0.873	115	0.541	151	0.626	187	0.542	223	0.644	259	0.900	295	0.997	331	0.920
8	0.948	44	0.986	80	0.868	116	0.529	152	0.635	188	0.531	224	0.656	260	0.904	296	0.998	332	0.918
9	0.951	45	0.984	81	0.864	117	0.518	153	0.644	189	0.520	225	0.668	261	0.907	297	0.998	333	0.915
10	0.955	46	0.982	82	0.859	118	0.506	154	0.652	190	0.510	226	0.680	262	0.910	298	0.998	334	0.913
11	0.958	47	0.979	83	0.854	119	0.496	155	0.660	191	0.500	227	0.692	263	0.914	299	0.998	335	0.911
12	0.961	48	0.977	84	0.849	120	0.486	156	0.667	192	0.490	228	0.703	264	0.917	300	0.998	336	0.909
13	0.965	49	0.974	85	0.843	121	0.476	157	0.674	193	0.481	229	0.714	265	0.920	301	0.998	337	0.907
14	0.968	50	0.971	86	0.837	122	0.468	158	0.680	194	0.473	230	0.724	266	0.924	302	0.997	338	0.905
15	0.971	51	0.968	87	0.832	123	0.460	159	0.685	195	0.465	231	0.735	267	0.927	303	0.996	339	0.904
16	0.974	52	0.965	88	0.825	124	0.454	160	0.689	196	0.459	232	0.745	268	0.930	304	0.995	340	0.903
17	0.977	53	0.962	89	0.819	125	0.448	161	0.693	197	0.453	233	0.754	269	0.933	305	0.993	341	0.902
18	0.979	54	0.959	90	0.812	126	0.444	162	0.696	198	0.449	234	0.763	270	0.937	306	0.992	342	0.901
19	0.982	55	0.956	91	0.805	127	0.441	163	0.698	199	0.445	235	0.772	271	0.940	307	0.990	343	0.900
20	0.985	56	0.953	92	0.797	128	0.439	164	0.699	200	0.443	236	0.781	272	0.943	308	0.988	344	0.900
21	0.987	57	0.950	93	0.789	129	0.439	165	0.699	201	0.442	237	0.789	273	0.946	309	0.986	345	0.900
22	0.989	58	0.946	94	0.781	130	0.440	166	0.699	202	0.443	238	0.797	274	0.950	310	0.984	346	0.900
23	0.991	59	0.943	95	0.772	131	0.442	167	0.698	203	0.445	239	0.804	275	0.953	311	0.982	347	0.900
24	0.993	60	0.940	96	0.763	132	0.445	168	0.696	204	0.447	240	0.811	276	0.956	312	0.979	348	0.901
25	0.994	61	0.937	97	0.754	133	0.449	169	0.693	205	0.452	241	0.818	277	0.959	313	0.976	349	0.901
26	0.996	62	0.933	98	0.744	134	0.455	170	0.690	206	0.457	242	0.824	278	0.962	314	0.974	350	0.902
27	0.997	63	0.930	99	0.734	135	0.462	171	0.686	207	0.463	243	0.830	279	0.965	315	0.971	351	0.904
28	0.998	64	0.927	100	0.724	136	0.469	172	0.681	208	0.471	244	0.836	280	0.968	316	0.968	352	0.905
29	0.999	65	0.923	101	0.713	137	0.477	173	0.675	209	0.479	245	0.842	281	0.971	317	0.965	353	0.907
30	0.999	66	0.920	102	0.702	138	0.487	174	0.669	210	0.488	246	0.847	282	0.974	318	0.961	354	0.908
31	1.000	67	0.917	103	0.691	139	0.496	175	0.662	211	0.498	247	0.852	283	0.976	319	0.958	355	0.910
32	1.000	68	0.913	104	0.679	140	0.506	176	0.654	212	0.509	248	0.857	284	0.979	320	0.955	356	0.913
33	1.000	69	0.910	105	0.667	141	0.517	177	0.646	213	0.520	249	0.862	285	0.981	321	0.952	357	0.915
34	1.000	70	0.907	106	0.655	142	0.528	178	0.637	214	0.531	250	0.866	286	0.984	322	0.948	358	0.917
35	0.999	71	0.903	107	0.643	143	0.539	179	0.628	215	0.543	251	0.870	287	0.986	323	0.945	359	0.920

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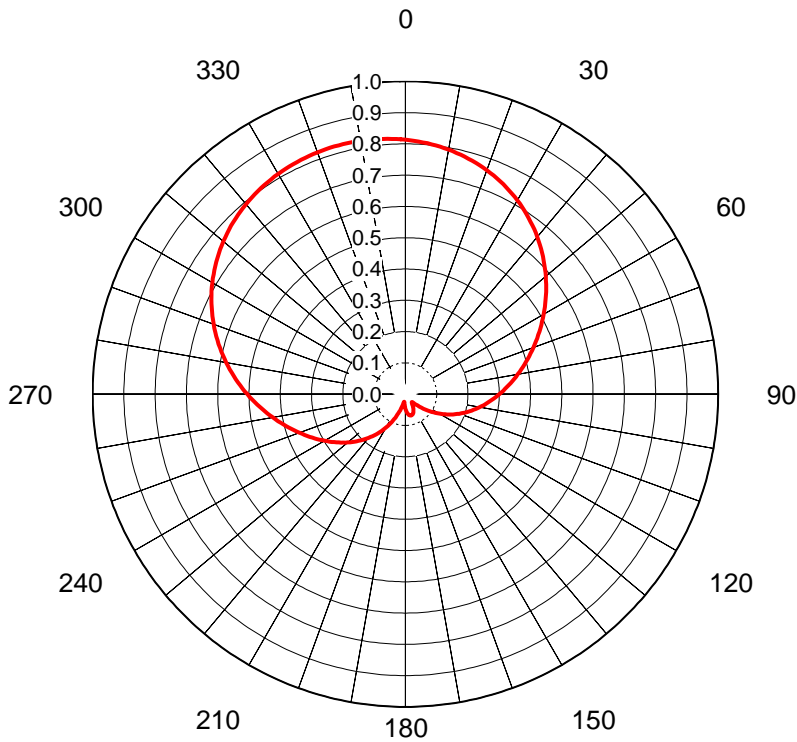
AZIMUTH PATTERN Horizontal Polarization

Proposal No. **C-80013-2**
 Date **23-Mar-23**
 Call Letters **KRIV**
 Channel **26**
 Frequency **545 MHz**
 Antenna Type **TFU-24WB/VP-R C160**
 Gain **1.6 (2.05dB)**
 Calculated

Pattern Number **C160-26 Hpol**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.820	36	0.997	72	0.904	108	0.628	144	0.493	180	0.570	216	0.543	252	0.881	288	0.999	324	0.852
1	0.825	37	0.998	73	0.900	109	0.614	145	0.506	181	0.559	217	0.557	253	0.886	289	0.999	325	0.846
2	0.830	38	0.999	74	0.896	110	0.600	146	0.519	182	0.547	218	0.572	254	0.890	290	0.999	326	0.841
3	0.835	39	1.000	75	0.892	111	0.586	147	0.531	183	0.535	219	0.586	255	0.894	291	0.999	327	0.835
4	0.841	40	1.000	76	0.887	112	0.571	148	0.544	184	0.522	220	0.600	256	0.899	292	0.998	328	0.830
5	0.846	41	1.000	77	0.883	113	0.557	149	0.556	185	0.510	221	0.615	257	0.903	293	0.997	329	0.825
6	0.852	42	1.000	78	0.879	114	0.542	150	0.568	186	0.497	222	0.628	258	0.907	294	0.996	330	0.820
7	0.858	43	0.999	79	0.874	115	0.528	151	0.579	187	0.484	223	0.642	259	0.911	295	0.995	331	0.816
8	0.864	44	0.998	80	0.869	116	0.513	152	0.590	188	0.472	224	0.655	260	0.915	296	0.993	332	0.811
9	0.870	45	0.997	81	0.865	117	0.499	153	0.600	189	0.460	225	0.668	261	0.919	297	0.991	333	0.807
10	0.876	46	0.995	82	0.860	118	0.485	154	0.609	190	0.448	226	0.681	262	0.923	298	0.988	334	0.804
11	0.882	47	0.994	83	0.855	119	0.471	155	0.618	191	0.437	227	0.693	263	0.927	299	0.985	335	0.800
12	0.889	48	0.992	84	0.849	120	0.458	156	0.626	192	0.427	228	0.705	264	0.931	300	0.982	336	0.797
13	0.895	49	0.989	85	0.844	121	0.446	157	0.634	193	0.417	229	0.716	265	0.935	301	0.979	337	0.794
14	0.901	50	0.987	86	0.838	122	0.434	158	0.640	194	0.409	230	0.727	266	0.939	302	0.975	338	0.792
15	0.907	51	0.984	87	0.833	123	0.423	159	0.646	195	0.401	231	0.738	267	0.943	303	0.971	339	0.790
16	0.913	52	0.981	88	0.826	124	0.413	160	0.651	196	0.395	232	0.748	268	0.947	304	0.967	340	0.788
17	0.920	53	0.978	89	0.820	125	0.404	161	0.655	197	0.390	233	0.758	269	0.951	305	0.962	341	0.786
18	0.926	54	0.975	90	0.813	126	0.397	162	0.659	198	0.387	234	0.767	270	0.955	306	0.958	342	0.785
19	0.931	55	0.972	91	0.806	127	0.391	163	0.661	199	0.385	235	0.776	271	0.959	307	0.953	343	0.784
20	0.937	56	0.968	92	0.799	128	0.386	164	0.662	200	0.385	236	0.785	272	0.962	308	0.947	344	0.783
21	0.943	57	0.965	93	0.791	129	0.383	165	0.663	201	0.386	237	0.793	273	0.966	309	0.942	345	0.783
22	0.948	58	0.961	94	0.783	130	0.381	166	0.663	202	0.389	238	0.801	274	0.969	310	0.937	346	0.783
23	0.953	59	0.957	95	0.775	131	0.381	167	0.661	203	0.393	239	0.808	275	0.973	311	0.931	347	0.784
24	0.958	60	0.953	96	0.766	132	0.383	168	0.659	204	0.399	240	0.815	276	0.976	312	0.925	348	0.785
25	0.963	61	0.949	97	0.757	133	0.386	169	0.656	205	0.407	241	0.822	277	0.979	313	0.919	349	0.786
26	0.968	62	0.945	98	0.747	134	0.391	170	0.652	206	0.415	242	0.829	278	0.982	314	0.913	350	0.788
27	0.972	63	0.941	99	0.737	135	0.397	171	0.647	207	0.425	243	0.835	279	0.985	315	0.907	351	0.790
28	0.976	64	0.937	100	0.726	136	0.405	172	0.642	208	0.435	244	0.841	280	0.987	316	0.901	352	0.792
29	0.980	65	0.933	101	0.715	137	0.413	173	0.635	209	0.447	245	0.847	281	0.989	317	0.895	353	0.794
30	0.983	66	0.929	102	0.704	138	0.423	174	0.628	210	0.459	246	0.852	282	0.992	318	0.888	354	0.797
31	0.986	67	0.925	103	0.692	139	0.433	175	0.620	211	0.472	247	0.857	283	0.993	319	0.882	355	0.800
32	0.989	68	0.921	104	0.680	140	0.444	176	0.611	212	0.486	248	0.862	284	0.995	320	0.876	356	0.804
33	0.991	69	0.917	105	0.668	141	0.456	177	0.602	213	0.500	249	0.867	285	0.996	321	0.870	357	0.808
34	0.994	70	0.913	106	0.655	142	0.468	178	0.592	214	0.514	250	0.872	286	0.998	322	0.864	358	0.812
35	0.995	71	0.908	107	0.642	143	0.481	179	0.581	215	0.528	251	0.877	287	0.998	323	0.858	359	0.816

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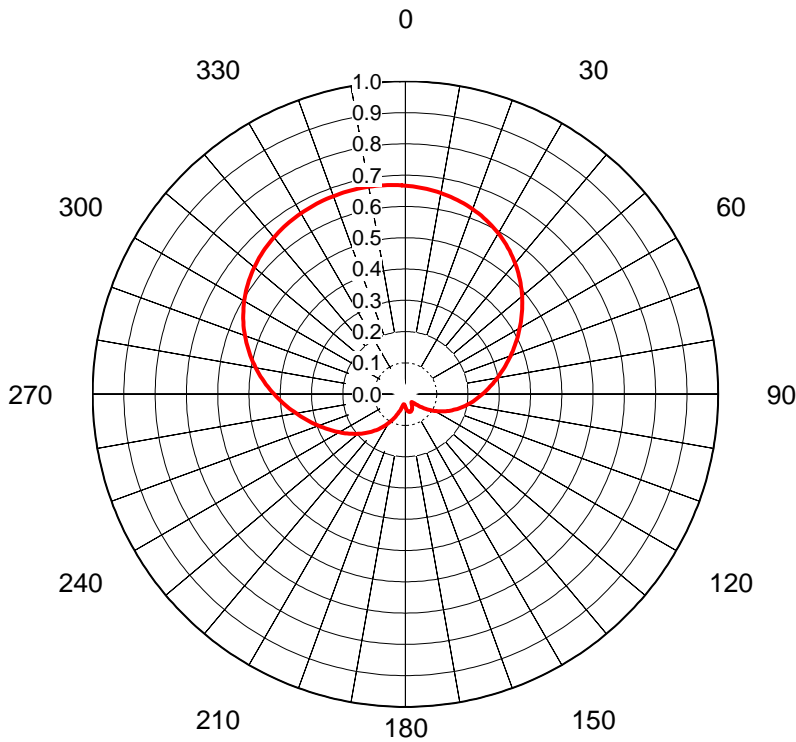
AZIMUTH PATTERN Vertical Polarization

Proposal No. **C-80013-2**
 Date **23-Mar-23**
 Call Letters **KTXH**
 Channel **19**
 Frequency **503 MHz**
 Antenna Type **TFU-24WB/VP-R C160**
 Gain **2.65 (4.23dB)**
 Calculated

Pattern Number **C160-19 Vpol**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.813	36	0.681	72	0.421	108	0.195	144	0.035	180	0.046	216	0.159	252	0.374	288	0.639	324	0.802
1	0.812	37	0.675	73	0.414	109	0.189	145	0.037	181	0.044	217	0.165	253	0.381	289	0.646	325	0.804
2	0.810	38	0.669	74	0.406	110	0.183	146	0.039	182	0.041	218	0.171	254	0.388	290	0.652	326	0.806
3	0.809	39	0.662	75	0.399	111	0.177	147	0.042	183	0.038	219	0.177	255	0.395	291	0.659	327	0.808
4	0.807	40	0.656	76	0.392	112	0.171	148	0.044	184	0.035	220	0.182	256	0.402	292	0.665	328	0.810
5	0.805	41	0.649	77	0.385	113	0.166	149	0.047	185	0.032	221	0.188	257	0.409	293	0.672	329	0.812
6	0.803	42	0.643	78	0.378	114	0.160	150	0.049	186	0.029	222	0.194	258	0.416	294	0.678	330	0.813
7	0.801	43	0.636	79	0.372	115	0.154	151	0.052	187	0.027	223	0.200	259	0.423	295	0.684	331	0.814
8	0.799	44	0.629	80	0.365	116	0.148	152	0.054	188	0.026	224	0.206	260	0.430	296	0.690	332	0.816
9	0.796	45	0.622	81	0.358	117	0.142	153	0.057	189	0.025	225	0.211	261	0.438	297	0.696	333	0.817
10	0.794	46	0.615	82	0.351	118	0.136	154	0.059	190	0.025	226	0.217	262	0.445	298	0.702	334	0.818
11	0.791	47	0.608	83	0.345	119	0.130	155	0.061	191	0.027	227	0.223	263	0.453	299	0.707	335	0.819
12	0.788	48	0.601	84	0.338	120	0.125	156	0.063	192	0.029	228	0.229	264	0.460	300	0.713	336	0.820
13	0.785	49	0.593	85	0.332	121	0.119	157	0.064	193	0.032	229	0.234	265	0.468	301	0.718	337	0.821
14	0.782	50	0.586	86	0.325	122	0.113	158	0.066	194	0.035	230	0.240	266	0.475	302	0.723	338	0.821
15	0.779	51	0.579	87	0.319	123	0.107	159	0.067	195	0.040	231	0.246	267	0.483	303	0.728	339	0.822
16	0.776	52	0.571	88	0.313	124	0.102	160	0.068	196	0.044	232	0.252	268	0.490	304	0.733	340	0.823
17	0.773	53	0.564	89	0.307	125	0.096	161	0.069	197	0.049	233	0.257	269	0.498	305	0.738	341	0.823
18	0.769	54	0.556	90	0.300	126	0.090	162	0.070	198	0.054	234	0.263	270	0.506	306	0.743	342	0.823
19	0.765	55	0.549	91	0.294	127	0.085	163	0.071	199	0.059	235	0.269	271	0.513	307	0.747	343	0.824
20	0.762	56	0.541	92	0.288	128	0.079	164	0.071	200	0.065	236	0.275	272	0.521	308	0.751	344	0.824
21	0.758	57	0.533	93	0.282	129	0.074	165	0.071	201	0.070	237	0.281	273	0.529	309	0.756	345	0.824
22	0.754	58	0.526	94	0.276	130	0.069	166	0.071	202	0.076	238	0.286	274	0.536	310	0.760	346	0.824
23	0.749	59	0.518	95	0.270	131	0.064	167	0.070	203	0.082	239	0.292	275	0.544	311	0.764	347	0.824
24	0.745	60	0.511	96	0.264	132	0.059	168	0.070	204	0.087	240	0.298	276	0.552	312	0.767	348	0.823
25	0.740	61	0.503	97	0.258	133	0.054	169	0.069	205	0.093	241	0.304	277	0.559	313	0.771	349	0.823
26	0.736	62	0.495	98	0.253	134	0.050	170	0.068	206	0.099	242	0.310	278	0.567	314	0.774	350	0.823
27	0.731	63	0.488	99	0.247	135	0.046	171	0.067	207	0.105	243	0.316	279	0.574	315	0.778	351	0.822
28	0.726	64	0.480	100	0.241	136	0.042	172	0.065	208	0.111	244	0.323	280	0.582	316	0.781	352	0.822
29	0.721	65	0.473	101	0.235	137	0.039	173	0.063	209	0.117	245	0.329	281	0.589	317	0.784	353	0.821
30	0.716	66	0.465	102	0.229	138	0.036	174	0.061	210	0.123	246	0.335	282	0.596	318	0.787	354	0.820
31	0.710	67	0.458	103	0.224	139	0.034	175	0.059	211	0.129	247	0.341	283	0.604	319	0.790	355	0.819
32	0.705	68	0.450	104	0.218	140	0.033	176	0.057	212	0.135	248	0.348	284	0.611	320	0.793	356	0.818
33	0.699	69	0.443	105	0.212	141	0.032	177	0.055	213	0.141	249	0.354	285	0.618	321	0.795	357	0.817
34	0.693	70	0.435	106	0.206	142	0.033	178	0.052	214	0.147	250	0.361	286	0.625	322	0.798	358	0.816
35	0.687	71	0.428	107	0.200	143	0.034	179	0.049	215	0.153	251	0.368	287	0.632	323	0.800	359	0.815

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AZIMUTH PATTERN Vertical Polarization

Proposal No. **C-80013-2**
 Date **23-Mar-23**
 Call Letters **KRIV**
 Channel **26**
 Frequency **545 MHz**
 Antenna Type **TFU-24WB/VP-R C160**
 Gain **2.6 (4.15dB)**
 Calculated

Pattern Number **C160-26 Vpol**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.667	36	0.567	72	0.345	108	0.163	144	0.033	180	0.042	216	0.134	252	0.307	288	0.535	324	0.661
1	0.666	37	0.562	73	0.339	109	0.158	145	0.034	181	0.040	217	0.139	253	0.312	289	0.540	325	0.662
2	0.665	38	0.556	74	0.333	110	0.154	146	0.035	182	0.039	218	0.143	254	0.318	290	0.546	326	0.663
3	0.663	39	0.551	75	0.327	111	0.149	147	0.037	183	0.037	219	0.148	255	0.324	291	0.551	327	0.665
4	0.662	40	0.546	76	0.321	112	0.145	148	0.038	184	0.035	220	0.152	256	0.330	292	0.557	328	0.666
5	0.661	41	0.540	77	0.315	113	0.140	149	0.040	185	0.034	221	0.157	257	0.336	293	0.562	329	0.667
6	0.659	42	0.535	78	0.310	114	0.135	150	0.042	186	0.033	222	0.161	258	0.342	294	0.567	330	0.668
7	0.658	43	0.529	79	0.304	115	0.131	151	0.044	187	0.033	223	0.166	259	0.348	295	0.572	331	0.669
8	0.656	44	0.523	80	0.298	116	0.126	152	0.046	188	0.032	224	0.170	260	0.355	296	0.577	332	0.669
9	0.655	45	0.518	81	0.293	117	0.121	153	0.047	189	0.033	225	0.175	261	0.361	297	0.582	333	0.670
10	0.653	46	0.512	82	0.287	118	0.117	154	0.049	190	0.033	226	0.179	262	0.367	298	0.586	334	0.671
11	0.651	47	0.505	83	0.282	119	0.112	155	0.050	191	0.035	227	0.184	263	0.374	299	0.591	335	0.671
12	0.649	48	0.499	84	0.277	120	0.107	156	0.052	192	0.036	228	0.188	264	0.380	300	0.595	336	0.672
13	0.647	49	0.493	85	0.272	121	0.103	157	0.053	193	0.038	229	0.193	265	0.387	301	0.599	337	0.673
14	0.645	50	0.487	86	0.266	122	0.098	158	0.054	194	0.041	230	0.198	266	0.393	302	0.603	338	0.673
15	0.642	51	0.481	87	0.261	123	0.094	159	0.055	195	0.044	231	0.202	267	0.400	303	0.607	339	0.673
16	0.640	52	0.474	88	0.256	124	0.089	160	0.056	196	0.047	232	0.207	268	0.407	304	0.611	340	0.674
17	0.638	53	0.468	89	0.251	125	0.084	161	0.057	197	0.051	233	0.211	269	0.413	305	0.614	341	0.674
18	0.635	54	0.461	90	0.246	126	0.080	162	0.058	198	0.054	234	0.216	270	0.420	306	0.618	342	0.674
19	0.632	55	0.455	91	0.241	127	0.075	163	0.058	199	0.058	235	0.220	271	0.427	307	0.621	343	0.674
20	0.629	56	0.448	92	0.237	128	0.071	164	0.058	200	0.062	236	0.225	272	0.433	308	0.625	344	0.674
21	0.626	57	0.442	93	0.232	129	0.067	165	0.058	201	0.066	237	0.230	273	0.440	309	0.628	345	0.674
22	0.623	58	0.435	94	0.227	130	0.063	166	0.058	202	0.070	238	0.234	274	0.447	310	0.631	346	0.674
23	0.620	59	0.429	95	0.222	131	0.059	167	0.058	203	0.075	239	0.239	275	0.453	311	0.633	347	0.674
24	0.617	60	0.422	96	0.218	132	0.055	168	0.058	204	0.079	240	0.244	276	0.460	312	0.636	348	0.674
25	0.613	61	0.416	97	0.213	133	0.051	169	0.057	205	0.084	241	0.249	277	0.466	313	0.639	349	0.674
26	0.610	62	0.409	98	0.208	134	0.048	170	0.056	206	0.088	242	0.254	278	0.473	314	0.641	350	0.673
27	0.606	63	0.402	99	0.204	135	0.044	171	0.055	207	0.093	243	0.259	279	0.480	315	0.644	351	0.673
28	0.602	64	0.396	100	0.199	136	0.041	172	0.054	208	0.097	244	0.264	280	0.486	316	0.646	352	0.672
29	0.598	65	0.389	101	0.195	137	0.039	173	0.053	209	0.102	245	0.269	281	0.492	317	0.648	353	0.672
30	0.594	66	0.383	102	0.190	138	0.037	174	0.052	210	0.106	246	0.274	282	0.499	318	0.650	354	0.671
31	0.590	67	0.377	103	0.186	139	0.035	175	0.050	211	0.111	247	0.279	283	0.505	319	0.652	355	0.671
32	0.585	68	0.370	104	0.181	140	0.033	176	0.049	212	0.116	248	0.284	284	0.511	320	0.654	356	0.670
33	0.581	69	0.364	105	0.176	141	0.033	177	0.047	213	0.120	249	0.290	285	0.517	321	0.656	357	0.669
34	0.576	70	0.358	106	0.172	142	0.032	178	0.046	214	0.125	250	0.295	286	0.523	322	0.658	358	0.668
35	0.572	71	0.351	107	0.167	143	0.033	179	0.044	215	0.129	251	0.301	287	0.529	323	0.659	359	0.668

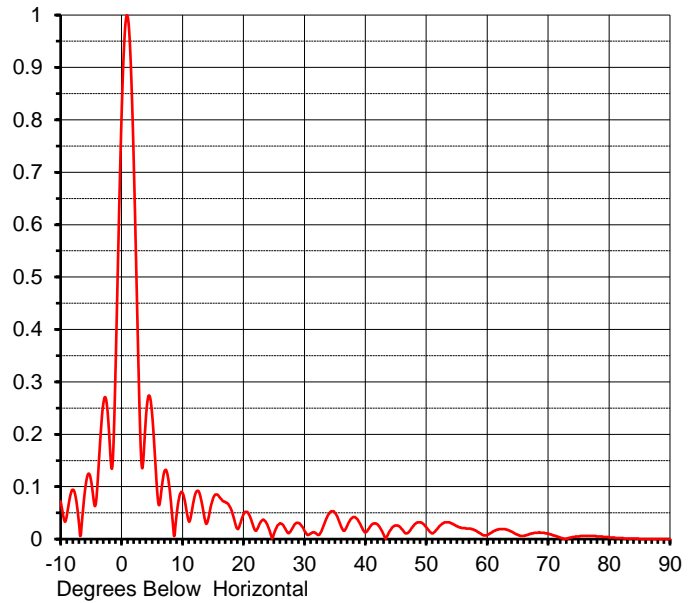
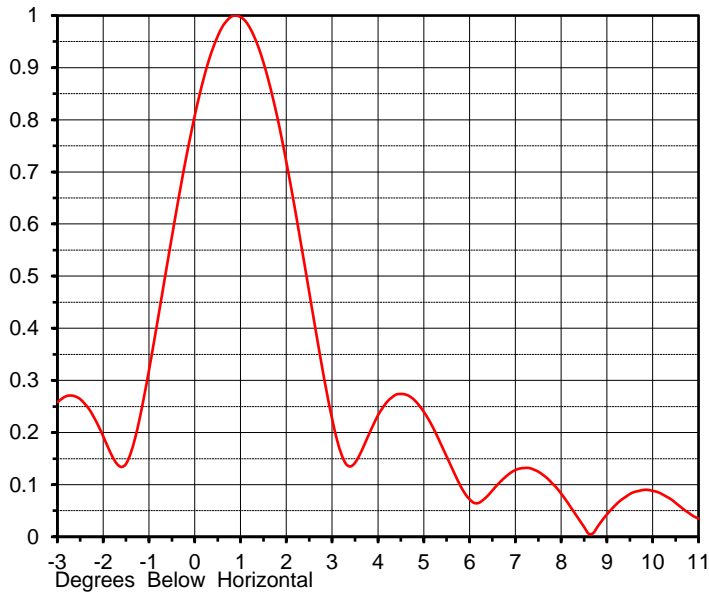
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ELEVATION PATTERN

Proposal No. **C-80013-2**
 Date **23-Mar-23**
 Call Letters **KTXH**
 Channel **19**
 Frequency **503 MHz**
 Antenna Type **TFU-24WB/VP-R C160**

RMS Directivity at Main Lobe **24.0 (13.80 dB)**
 RMS Directivity at Horizontal **15.7 (11.96 dB)**
Calculated

Beam Tilt **1.00 deg**
 Pattern Number **24W240100-19**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.072	10.0	0.088	30.0	0.016	50.0	0.023	70.0	0.010
-9.0	0.044	11.0	0.035	31.0	0.010	51.0	0.011	71.0	0.007
-8.0	0.094	12.0	0.082	32.0	0.010	52.0	0.022	72.0	0.003
-7.0	0.031	13.0	0.078	33.0	0.021	53.0	0.032	73.0	0.001
-6.0	0.093	14.0	0.030	34.0	0.048	54.0	0.031	74.0	0.004
-5.0	0.111	15.0	0.077	35.0	0.050	55.0	0.025	75.0	0.005
-4.0	0.097	16.0	0.081	36.0	0.025	56.0	0.021	76.0	0.006
-3.0	0.258	17.0	0.071	37.0	0.025	57.0	0.020	77.0	0.006
-2.0	0.193	18.0	0.056	38.0	0.042	58.0	0.017	78.0	0.005
-1.0	0.319	19.0	0.020	39.0	0.032	59.0	0.010	79.0	0.004
0.0	0.808	20.0	0.047	40.0	0.013	60.0	0.008	80.0	0.003
1.0	0.997	21.0	0.045	41.0	0.027	61.0	0.015	81.0	0.002
2.0	0.719	22.0	0.016	42.0	0.028	62.0	0.019	82.0	0.002
3.0	0.226	23.0	0.035	43.0	0.009	63.0	0.019	83.0	0.001
4.0	0.233	24.0	0.025	44.0	0.015	64.0	0.014	84.0	0.001
5.0	0.240	25.0	0.010	45.0	0.026	65.0	0.008	85.0	0.000
6.0	0.072	26.0	0.030	46.0	0.019	66.0	0.006	86.0	0.000
7.0	0.128	27.0	0.017	47.0	0.012	67.0	0.010	87.0	0.000
8.0	0.083	28.0	0.020	48.0	0.027	68.0	0.012	88.0	0.000
9.0	0.043	29.0	0.031	49.0	0.032	69.0	0.012	89.0	0.000
								90.0	0.000

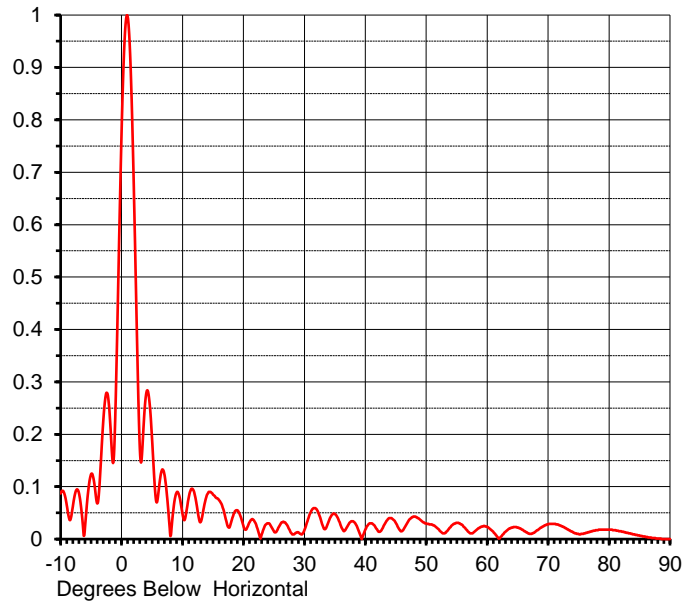
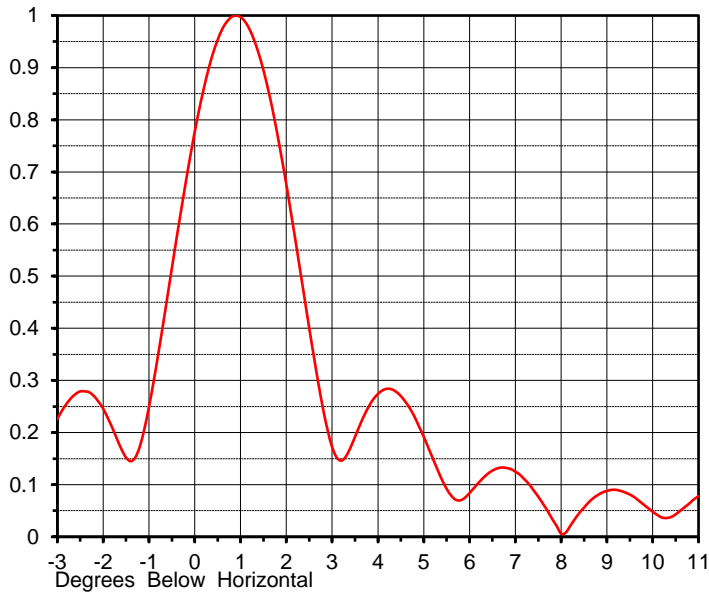
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ELEVATION PATTERN

Proposal No. **C-80013-2**
 Date **23-Mar-23**
 Call Letters **KRIV**
 Channel **26**
 Frequency **545 MHz**
 Antenna Type **TFU-24WB/VP-R C160**

RMS Directivity at Main Lobe **25.4 (14.05 dB)**
 RMS Directivity at Horizontal **15.3 (11.85 dB)**
Calculated

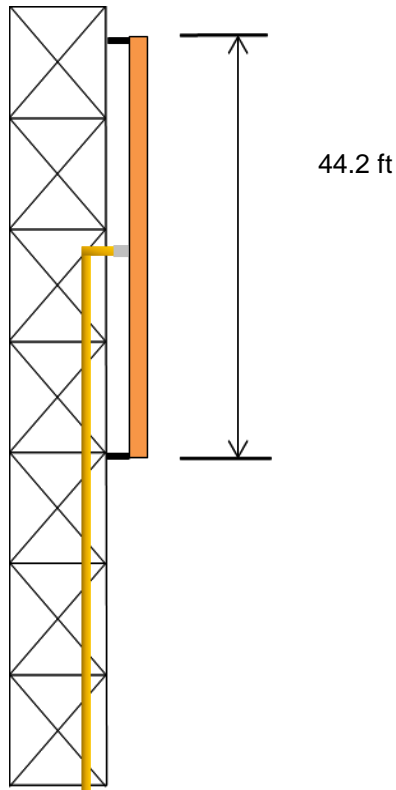
Beam Tilt **1.00 deg**
 Pattern Number **24W254100-26**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.087	10.0	0.048	30.0	0.017	50.0	0.030	70.0	0.028
-9.0	0.065	11.0	0.078	31.0	0.050	51.0	0.027	71.0	0.029
-8.0	0.062	12.0	0.085	32.0	0.057	52.0	0.019	72.0	0.026
-7.0	0.088	13.0	0.033	33.0	0.026	53.0	0.011	73.0	0.020
-6.0	0.023	14.0	0.084	34.0	0.034	54.0	0.023	74.0	0.014
-5.0	0.124	15.0	0.085	35.0	0.048	55.0	0.031	75.0	0.010
-4.0	0.068	16.0	0.074	36.0	0.025	56.0	0.026	76.0	0.011
-3.0	0.226	17.0	0.043	37.0	0.023	57.0	0.013	77.0	0.014
-2.0	0.246	18.0	0.033	38.0	0.034	58.0	0.015	78.0	0.017
-1.0	0.249	19.0	0.055	39.0	0.013	59.0	0.023	79.0	0.018
0.0	0.777	20.0	0.025	40.0	0.018	60.0	0.023	80.0	0.018
1.0	0.997	21.0	0.032	41.0	0.030	61.0	0.014	81.0	0.017
2.0	0.676	22.0	0.030	42.0	0.017	62.0	0.001	82.0	0.015
3.0	0.172	23.0	0.009	43.0	0.025	63.0	0.014	83.0	0.012
4.0	0.274	24.0	0.030	44.0	0.040	64.0	0.022	84.0	0.009
5.0	0.192	25.0	0.015	45.0	0.031	65.0	0.022	85.0	0.007
6.0	0.084	26.0	0.027	46.0	0.015	66.0	0.016	86.0	0.004
7.0	0.125	27.0	0.029	47.0	0.033	67.0	0.010	87.0	0.002
8.0	0.006	28.0	0.009	48.0	0.043	68.0	0.015	88.0	0.001
9.0	0.088	29.0	0.013	49.0	0.037	69.0	0.023	89.0	0.000
								90.0	0.000

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MECHANICAL SPECIFICATIONS



Proposal No.	C-80013-2
Date	23-Mar-23
Call Letters	KTXH
Channel	19
Frequency	503 MHz
Antenna Type	TFU-24WB/VP-R C160

Preliminary Specifications

Side Mounted

Loads per TIA 222G

V (mph)	100
V_ice(mph)	30
ti_min (in)	0.5
Str Cl	II
Exp Cat	C
Topo Cat	1
Twr Ht (ft)	1800
Twr Base Ht (ft)	100
Ant Elev (ft)	1000

Mechanical Specifications

		<u>Dry</u>	<u>w/Ice</u>
Height	H2 (ft)	44.2	
Height of Center of Radiation	H3(ft)	22.1	
Effective Projected Area	EPA (ft^2)	93.7	144
Weight	W (lb)	2768	5701

Antenna designed in accordance with AISC specifications for design of structural steel as prescribed by Mechanical data is based on listed criteria and should be verified by the tower engineer.

Prepared by: CAB **Date:** 23-Mar-23

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