

AZIMUTH PATTERN Horizontal Polarization

In Free Space

Proposal No. **C-71270**
Date **1-Feb-19**
Call Letters **KYW**
Channel **30**
Frequency **569 MHz**
Antenna Type **TFU-24WB/VP-R C160**
Gain **1.65 (2.18dB)**
Calculated

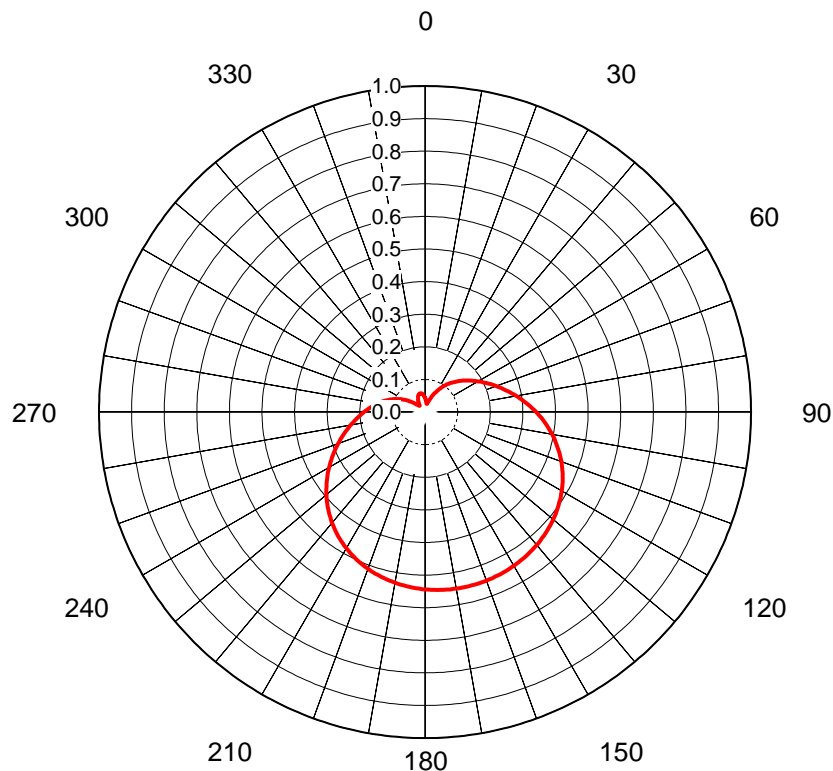
Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.531	36	0.534	72	0.869	108	1.000	144	0.838	180	0.805	216	0.994	252	0.898	288	0.619	324	0.453
1	0.518	37	0.549	73	0.874	109	1.000	145	0.832	181	0.810	217	0.996	253	0.893	289	0.605	325	0.466
2	0.506	38	0.564	74	0.878	110	1.000	146	0.826	182	0.814	218	0.997	254	0.888	290	0.591	326	0.479
3	0.493	39	0.579	75	0.883	111	0.999	147	0.821	183	0.819	219	0.998	255	0.884	291	0.576	327	0.492
4	0.480	40	0.594	76	0.888	112	0.998	148	0.816	184	0.824	220	0.999	256	0.879	292	0.561	328	0.505
5	0.466	41	0.608	77	0.893	113	0.997	149	0.811	185	0.830	221	0.999	257	0.874	293	0.546	329	0.518
6	0.453	42	0.622	78	0.897	114	0.995	150	0.807	186	0.835	222	0.999	258	0.869	294	0.531	330	0.530
7	0.440	43	0.635	79	0.902	115	0.993	151	0.803	187	0.841	223	0.999	259	0.864	295	0.516	331	0.542
8	0.427	44	0.648	80	0.906	116	0.990	152	0.798	188	0.847	224	0.999	260	0.859	296	0.501	332	0.553
9	0.415	45	0.661	81	0.911	117	0.988	153	0.795	189	0.853	225	0.998	261	0.854	297	0.485	333	0.564
10	0.403	46	0.674	82	0.916	118	0.985	154	0.791	190	0.859	226	0.996	262	0.849	298	0.470	334	0.574
11	0.392	47	0.685	83	0.920	119	0.981	155	0.788	191	0.866	227	0.995	263	0.844	299	0.455	335	0.583
12	0.381	48	0.697	84	0.925	120	0.977	156	0.785	192	0.872	228	0.993	264	0.839	300	0.441	336	0.592
13	0.372	49	0.708	85	0.930	121	0.973	157	0.782	193	0.878	229	0.991	265	0.833	301	0.427	337	0.600
14	0.364	50	0.719	86	0.934	122	0.969	158	0.780	194	0.885	230	0.988	266	0.827	302	0.414	338	0.607
15	0.357	51	0.729	87	0.939	123	0.964	159	0.778	195	0.891	231	0.986	267	0.821	303	0.401	339	0.613
16	0.352	52	0.739	88	0.943	124	0.960	160	0.776	196	0.898	232	0.983	268	0.815	304	0.389	340	0.618
17	0.349	53	0.748	89	0.948	125	0.954	161	0.775	197	0.904	233	0.980	269	0.809	305	0.379	341	0.622
18	0.347	54	0.757	90	0.952	126	0.949	162	0.774	198	0.911	234	0.976	270	0.802	306	0.369	342	0.626
19	0.347	55	0.765	91	0.956	127	0.943	163	0.773	199	0.917	235	0.973	271	0.795	307	0.361	343	0.628
20	0.348	56	0.774	92	0.961	128	0.938	164	0.772	200	0.923	236	0.969	272	0.788	308	0.354	344	0.629
21	0.352	57	0.781	93	0.965	129	0.932	165	0.772	201	0.929	237	0.965	273	0.780	309	0.349	345	0.630
22	0.357	58	0.789	94	0.969	130	0.926	166	0.772	202	0.935	238	0.961	274	0.772	310	0.346	346	0.629
23	0.364	59	0.796	95	0.972	131	0.920	167	0.773	203	0.941	239	0.957	275	0.764	311	0.344	347	0.628
24	0.372	60	0.803	96	0.976	132	0.913	168	0.773	204	0.947	240	0.953	276	0.756	312	0.345	348	0.626
25	0.382	61	0.810	97	0.979	133	0.907	169	0.774	205	0.952	241	0.949	277	0.746	313	0.347	349	0.622
26	0.392	62	0.816	98	0.983	134	0.900	170	0.776	206	0.957	242	0.944	278	0.737	314	0.350	350	0.618
27	0.404	63	0.822	99	0.986	135	0.894	171	0.777	207	0.962	243	0.940	279	0.727	315	0.356	351	0.613
28	0.417	64	0.828	100	0.988	136	0.887	172	0.779	208	0.967	244	0.935	280	0.717	316	0.363	352	0.607
29	0.430	65	0.833	101	0.991	137	0.881	173	0.781	209	0.971	245	0.930	281	0.706	317	0.371	353	0.600
30	0.444	66	0.839	102	0.993	138	0.874	174	0.784	210	0.976	246	0.926	282	0.695	318	0.380	354	0.592
31	0.459	67	0.844	103	0.995	139	0.868	175	0.787	211	0.979	247	0.921	283	0.683	319	0.391	355	0.584
32	0.474	68	0.849	104	0.997	140	0.862	176	0.790	212	0.983	248	0.916	284	0.671	320	0.402	356	0.574
33	0.489	69	0.854	105	0.998	141	0.856	177	0.793	213	0.986	249	0.912	285	0.659	321	0.414	357	0.564
34	0.504	70	0.859	106	0.999	142	0.849	178	0.797	214	0.989	250	0.907	286	0.646	322	0.427	358	0.554
35	0.519	71	0.864	107	1.000	143	0.843	179	0.801	215	0.992	251	0.902	287	0.633	323	0.439	359	0.542

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AZIMUTH PATTERN Vertical Polarization

In Free Space

Proposal No. **C-71270**
Date **1-Feb-19**
Call Letters **KYW**
Channel **30**
Frequency **569 MHz**
Antenna Type **TFU-24WB/VP-R C160**
Gain **2.64 (4.22dB)**
Calculated



Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.044	36	0.099	72	0.242	108	0.436	144	0.538	180	0.544	216	0.460	252	0.273	288	0.120
1	0.042	37	0.102	73	0.247	109	0.440	145	0.539	181	0.543	217	0.456	253	0.267	289	0.116
2	0.040	38	0.106	74	0.252	110	0.445	146	0.541	182	0.542	218	0.452	254	0.262	290	0.113
3	0.038	39	0.110	75	0.258	111	0.449	147	0.542	183	0.541	219	0.448	255	0.257	291	0.109
4	0.036	40	0.114	76	0.263	112	0.453	148	0.543	184	0.540	220	0.444	256	0.252	292	0.106
5	0.034	41	0.117	77	0.268	113	0.458	149	0.544	185	0.539	221	0.439	257	0.247	293	0.102
6	0.032	42	0.121	78	0.273	114	0.462	150	0.545	186	0.537	222	0.434	258	0.242	294	0.098
7	0.030	43	0.125	79	0.279	115	0.466	151	0.545	187	0.536	223	0.430	259	0.237	295	0.095
8	0.029	44	0.128	80	0.284	116	0.470	152	0.546	188	0.535	224	0.425	260	0.232	296	0.091
9	0.027	45	0.132	81	0.290	117	0.473	153	0.547	189	0.533	225	0.420	261	0.227	297	0.087
10	0.026	46	0.135	82	0.295	118	0.477	154	0.547	190	0.531	226	0.415	262	0.222	298	0.084
11	0.026	47	0.139	83	0.301	119	0.481	155	0.548	191	0.530	227	0.410	263	0.218	299	0.080
12	0.026	48	0.143	84	0.307	120	0.484	156	0.549	192	0.528	228	0.405	264	0.213	300	0.076
13	0.026	49	0.146	85	0.312	121	0.487	157	0.549	193	0.526	229	0.400	265	0.208	301	0.073
14	0.027	50	0.150	86	0.318	122	0.491	158	0.549	194	0.525	230	0.395	266	0.204	302	0.069
15	0.028	51	0.154	87	0.324	123	0.494	159	0.550	195	0.523	231	0.390	267	0.200	303	0.065
16	0.030	52	0.157	88	0.329	124	0.497	160	0.550	196	0.521	232	0.384	268	0.195	304	0.062
17	0.032	53	0.161	89	0.335	125	0.500	161	0.550	197	0.518	233	0.379	269	0.191	305	0.058
18	0.035	54	0.165	90	0.341	126	0.503	162	0.551	198	0.516	234	0.373	270	0.187	306	0.054
19	0.038	55	0.169	91	0.346	127	0.505	163	0.551	199	0.514	235	0.368	271	0.183	307	0.051
20	0.041	56	0.172	92	0.352	128	0.508	164	0.551	200	0.512	236	0.362	272	0.179	308	0.047
21	0.044	57	0.176	93	0.358	129	0.510	165	0.551	201	0.509	237	0.357	273	0.175	309	0.044
22	0.047	58	0.180	94	0.363	130	0.513	166	0.551	202	0.507	238	0.351	274	0.171	310	0.041
23	0.051	59	0.184	95	0.369	131	0.515	167	0.551	203	0.504	239	0.346	275	0.167	311	0.038
24	0.054	60	0.188	96	0.374	132	0.517	168	0.550	204	0.501	240	0.340	276	0.164	312	0.035
25	0.058	61	0.192	97	0.380	133	0.520	169	0.550	205	0.498	241	0.334	277	0.160	313	0.032
26	0.061	62	0.196	98	0.385	134	0.522	170	0.550	206	0.495	242	0.329	278	0.156	314	0.030
27	0.065	63	0.201	99	0.391	135	0.524	171	0.550	207	0.492	243	0.323	279	0.152	315	0.028
28	0.069	64	0.205	100	0.396	136	0.526	172	0.549	208	0.489	244	0.317	280	0.149	316	0.027
29	0.073	65	0.209	101	0.401	137	0.527	173	0.549	209	0.486	245	0.312	281	0.145	317	0.026
30	0.076	66	0.214	102	0.406	138	0.529	174	0.548	210	0.483	246	0.306	282	0.142	318	0.025
31	0.080	67	0.218	103	0.411	139	0.531	175	0.548	211	0.479	247	0.300	283	0.138	319	0.025
32	0.084	68	0.223	104	0.416	140	0.532	176	0.547	212	0.476	248	0.295	284	0.134	320	0.025
33	0.088	69	0.228	105	0.421	141	0.534	177	0.546	213	0.472	249	0.289	285	0.131	321	0.026
34	0.091	70	0.233	106	0.426	142	0.535	178	0.546	214	0.468	250	0.284	286	0.127	322	0.028
35	0.095	71	0.237	107	0.431	143	0.537	179	0.545	215	0.464	251	0.278	287	0.124	323	0.029

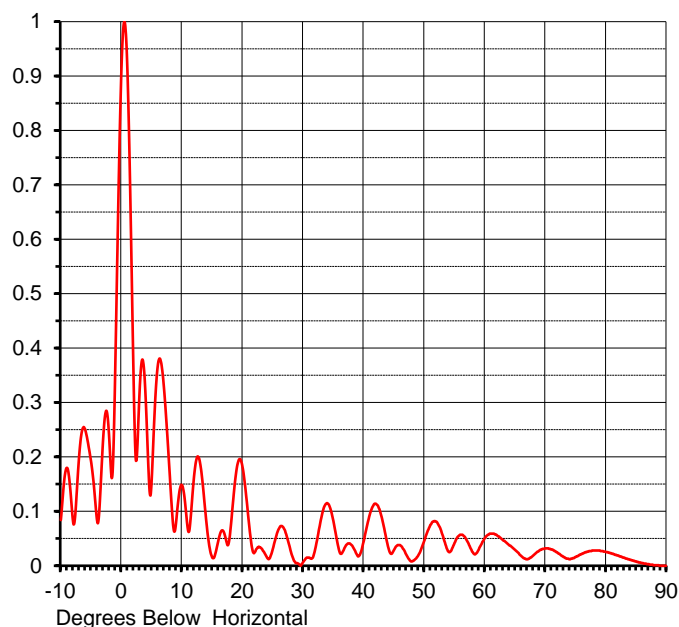
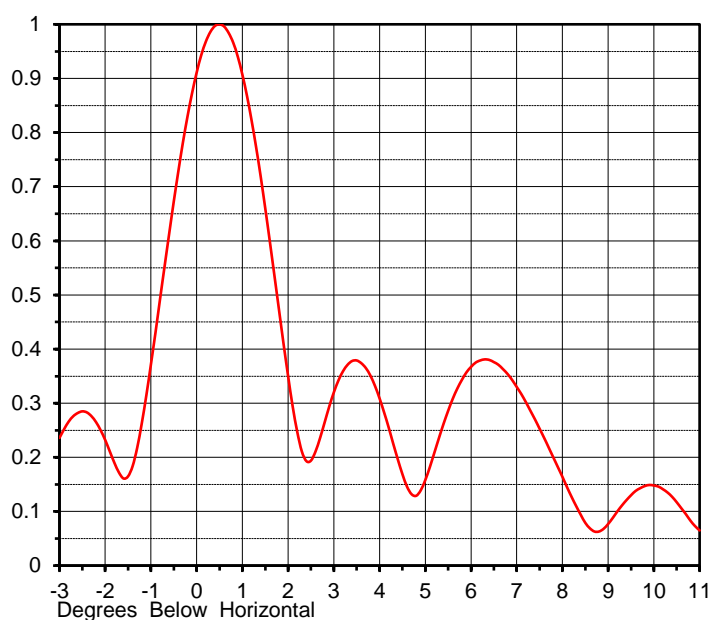
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ELEVATION PATTERN

Proposal No. **C-71270**
 Date **1-Feb-19**
 Call Letters **KYW**
 Channel **30**
 Frequency **569 MHz**
 Antenna Type **TFU-24WB/VP-R C160**

RMS Directivity at Main Lobe **21.6 (13.34 dB)**
 RMS Directivity at Horizontal **17.9 (12.53 dB)**
Calculated

Beam Tilt **0.50 deg**
 Pattern Number **24W216050**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.084	10.0	0.148	30.0	0.007	50.0	0.046	70.0	0.032
-9.0	0.180	11.0	0.065	31.0	0.015	51.0	0.075	71.0	0.030
-8.0	0.083	12.0	0.165	32.0	0.031	52.0	0.081	72.0	0.024
-7.0	0.198	13.0	0.188	33.0	0.088	53.0	0.057	73.0	0.016
-6.0	0.251	14.0	0.083	34.0	0.115	54.0	0.026	74.0	0.012
-5.0	0.191	15.0	0.015	35.0	0.082	55.0	0.042	75.0	0.016
-4.0	0.082	16.0	0.046	36.0	0.026	56.0	0.057	76.0	0.022
-3.0	0.236	17.0	0.059	37.0	0.036	57.0	0.047	77.0	0.026
-2.0	0.232	18.0	0.066	38.0	0.038	58.0	0.025	78.0	0.028
-1.0	0.372	19.0	0.176	39.0	0.018	59.0	0.030	79.0	0.028
0.0	0.911	20.0	0.181	40.0	0.045	60.0	0.051	80.0	0.025
1.0	0.907	21.0	0.084	41.0	0.094	61.0	0.059	81.0	0.022
2.0	0.350	22.0	0.025	42.0	0.114	62.0	0.056	82.0	0.019
3.0	0.320	23.0	0.033	43.0	0.088	63.0	0.047	83.0	0.015
4.0	0.309	24.0	0.016	44.0	0.036	64.0	0.038	84.0	0.011
5.0	0.158	25.0	0.031	45.0	0.029	65.0	0.029	85.0	0.008
6.0	0.367	26.0	0.068	46.0	0.038	66.0	0.018	86.0	0.005
7.0	0.330	27.0	0.065	47.0	0.021	67.0	0.012	87.0	0.003
8.0	0.164	28.0	0.025	48.0	0.008	68.0	0.019	88.0	0.001
9.0	0.077	29.0	0.005	49.0	0.019	69.0	0.028	89.0	0.000
								90.0	0.000

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