

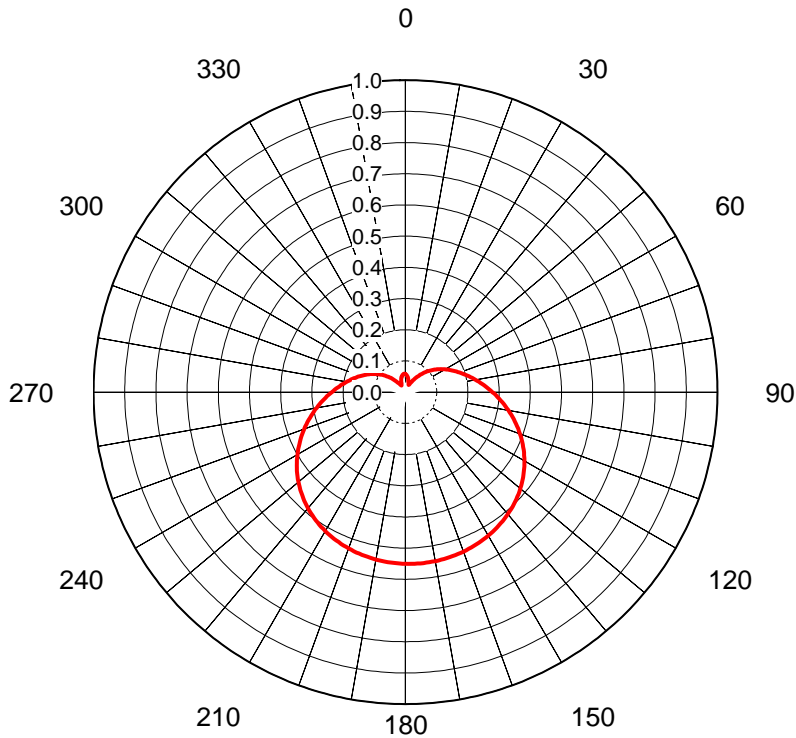
AZIMUTH PATTERN Horizontal Polarization

Proposal No. **KPTH/KMEG**
 Date **29-Jun-21**
 Call Letters **KPTH**
 Channel **30**
 Frequency **569 MHz**
 Antenna Type **TFU-24WB/VP-R C160**
 Gain **1.65 (2.18dB)**
 Calculated

Pattern Number **WB-C160-30 Hpol**

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

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AZIMUTH PATTERN Vertical Polarization

Proposal No. **KPTH/KMEG**
 Date **29-Jun-21**
 Call Letters **KPTH**
 Channel **30**
 Frequency **569 MHz**
 Antenna Type **TFU-24WB/VP-R C160**
 Gain **2.64 (4.22dB)**
 Calculated

Pattern Number **WB-C160-30 Vpol**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.058	36	0.058	72	0.192	108	0.380	144	0.520	180	0.550	216	0.498	252	0.334	288	0.160	324	0.032
1	0.057	37	0.061	73	0.196	109	0.385	145	0.522	181	0.550	217	0.495	253	0.329	289	0.156	325	0.030
2	0.057	38	0.065	74	0.201	110	0.391	146	0.524	182	0.550	218	0.492	254	0.323	290	0.152	326	0.028
3	0.056	39	0.069	75	0.205	111	0.396	147	0.526	183	0.549	219	0.489	255	0.317	291	0.149	327	0.027
4	0.055	40	0.073	76	0.209	112	0.401	148	0.527	184	0.549	220	0.486	256	0.312	292	0.145	328	0.026
5	0.053	41	0.076	77	0.214	113	0.406	149	0.529	185	0.548	221	0.483	257	0.306	293	0.142	329	0.025
6	0.052	42	0.080	78	0.218	114	0.411	150	0.531	186	0.548	222	0.479	258	0.300	294	0.138	330	0.025
7	0.051	43	0.084	79	0.223	115	0.416	151	0.532	187	0.547	223	0.476	259	0.295	295	0.134	331	0.025
8	0.049	44	0.088	80	0.228	116	0.421	152	0.534	188	0.546	224	0.472	260	0.289	296	0.131	332	0.026
9	0.047	45	0.091	81	0.233	117	0.426	153	0.535	189	0.546	225	0.468	261	0.284	297	0.127	333	0.028
10	0.046	46	0.095	82	0.237	118	0.431	154	0.537	190	0.545	226	0.464	262	0.278	298	0.124	334	0.029
11	0.044	47	0.099	83	0.242	119	0.436	155	0.538	191	0.544	227	0.460	263	0.273	299	0.120	335	0.031
12	0.042	48	0.102	84	0.247	120	0.440	156	0.539	192	0.543	228	0.456	264	0.267	300	0.116	336	0.033
13	0.040	49	0.106	85	0.252	121	0.445	157	0.541	193	0.542	229	0.452	265	0.262	301	0.113	337	0.035
14	0.038	50	0.110	86	0.258	122	0.449	158	0.542	194	0.541	230	0.448	266	0.257	302	0.109	338	0.037
15	0.036	51	0.114	87	0.263	123	0.453	159	0.543	195	0.540	231	0.444	267	0.252	303	0.106	339	0.039
16	0.034	52	0.117	88	0.268	124	0.458	160	0.544	196	0.539	232	0.439	268	0.247	304	0.102	340	0.041
17	0.032	53	0.121	89	0.273	125	0.462	161	0.545	197	0.537	233	0.434	269	0.242	305	0.098	341	0.043
18	0.030	54	0.125	90	0.279	126	0.466	162	0.545	198	0.536	234	0.430	270	0.237	306	0.095	342	0.045
19	0.029	55	0.128	91	0.284	127	0.470	163	0.546	199	0.535	235	0.425	271	0.232	307	0.091	343	0.046
20	0.027	56	0.132	92	0.290	128	0.473	164	0.547	200	0.533	236	0.420	272	0.227	308	0.087	344	0.048
21	0.026	57	0.135	93	0.295	129	0.477	165	0.547	201	0.531	237	0.415	273	0.222	309	0.084	345	0.050
22	0.026	58	0.139	94	0.301	130	0.481	166	0.548	202	0.530	238	0.410	274	0.218	310	0.080	346	0.051
23	0.026	59	0.143	95	0.307	131	0.484	167	0.549	203	0.528	239	0.405	275	0.213	311	0.076	347	0.053
24	0.026	60	0.146	96	0.312	132	0.487	168	0.549	204	0.526	240	0.400	276	0.208	312	0.073	348	0.054
25	0.027	61	0.150	97	0.318	133	0.491	169	0.549	205	0.525	241	0.395	277	0.204	313	0.069	349	0.055
26	0.028	62	0.154	98	0.324	134	0.494	170	0.550	206	0.523	242	0.390	278	0.200	314	0.065	350	0.056
27	0.030	63	0.157	99	0.329	135	0.497	171	0.550	207	0.521	243	0.384	279	0.195	315	0.062	351	0.057
28	0.032	64	0.161	100	0.335	136	0.500	172	0.550	208	0.518	244	0.379	280	0.191	316	0.058	352	0.058
29	0.035	65	0.165	101	0.341	137	0.503	173	0.551	209	0.516	245	0.373	281	0.187	317	0.054	353	0.058
30	0.038	66	0.169	102	0.346	138	0.505	174	0.551	210	0.514	246	0.368	282	0.183	318	0.051	354	0.059
31	0.041	67	0.172	103	0.352	139	0.508	175	0.551	211	0.512	247	0.362	283	0.179	319	0.047	355	0.059
32	0.044	68	0.176	104	0.358	140	0.510	176	0.551	212	0.509	248	0.357	284	0.175	320	0.044	356	0.059
33	0.047	69	0.180	105	0.363	141	0.513	177	0.551	213	0.507	249	0.351	285	0.171	321	0.041	357	0.059
34	0.051	70	0.184	106	0.369	142	0.515	178	0.551	214	0.504	250	0.346	286	0.167	322	0.038	358	0.059
35	0.054	71	0.188	107	0.374	143	0.517	179	0.550	215	0.501	251	0.340	287	0.164	323	0.035	359	0.059

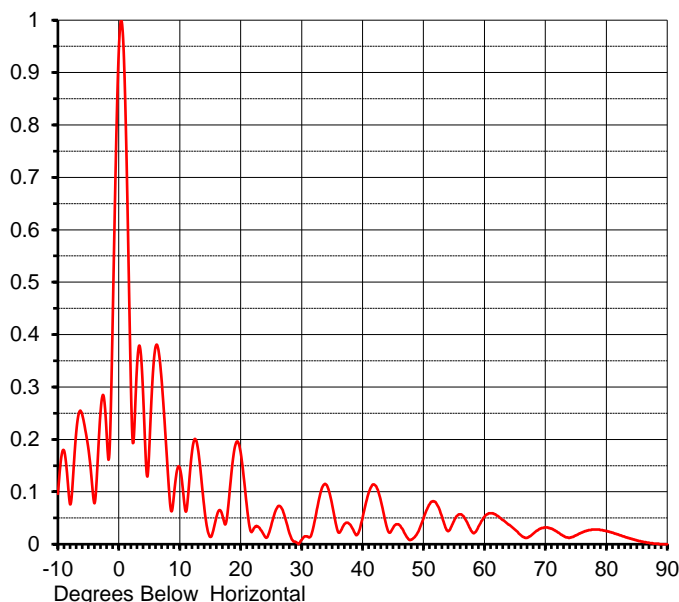
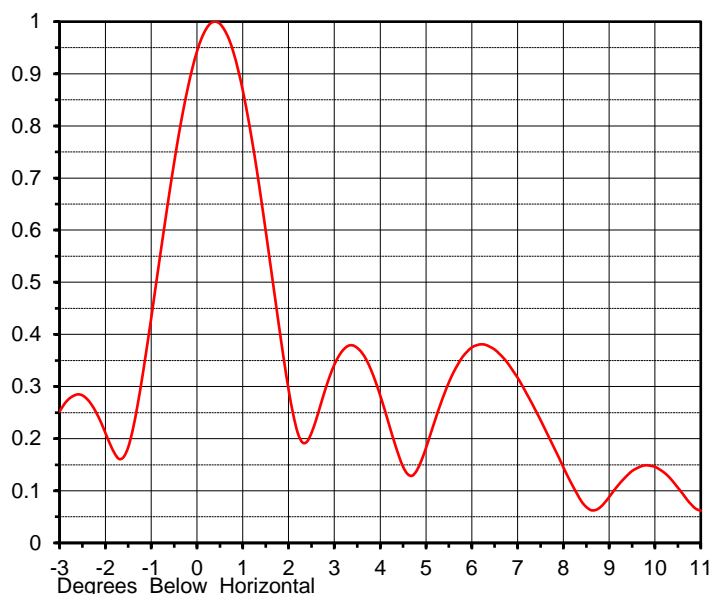
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ELEVATION PATTERN

Proposal No. **KPTH/KMEG**
 Date **29-Jun-21**
 Call Letters **KPTH**
 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 **19.2 (12.83 dB)**
Calculated

Beam Tilt **0.50 deg**
 Pattern Number **24W216050-30**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.096	10.0	0.146	30.0	0.008	50.0	0.049	70.0	0.032
-9.0	0.179	11.0	0.062	31.0	0.014	51.0	0.076	71.0	0.030
-8.0	0.076	12.0	0.175	32.0	0.036	52.0	0.080	72.0	0.023
-7.0	0.212	13.0	0.181	33.0	0.093	53.0	0.054	73.0	0.016
-6.0	0.247	14.0	0.073	34.0	0.114	54.0	0.025	74.0	0.012
-5.0	0.183	15.0	0.014	35.0	0.076	55.0	0.044	75.0	0.017
-4.0	0.078	16.0	0.051	36.0	0.023	56.0	0.057	76.0	0.022
-3.0	0.252	17.0	0.055	37.0	0.038	57.0	0.045	77.0	0.026
-2.0	0.211	18.0	0.077	38.0	0.037	58.0	0.023	78.0	0.028
-1.0	0.431	19.0	0.183	39.0	0.017	59.0	0.033	79.0	0.027
0.0	0.943	20.0	0.175	40.0	0.050	60.0	0.052	80.0	0.025
1.0	0.868	21.0	0.074	41.0	0.098	61.0	0.059	81.0	0.022
2.0	0.294	22.0	0.026	42.0	0.113	62.0	0.055	82.0	0.018
3.0	0.342	23.0	0.032	43.0	0.083	63.0	0.046	83.0	0.014
4.0	0.283	24.0	0.014	44.0	0.032	64.0	0.037	84.0	0.011
5.0	0.182	25.0	0.035	45.0	0.031	65.0	0.028	85.0	0.007
6.0	0.375	26.0	0.070	46.0	0.037	66.0	0.017	86.0	0.005
7.0	0.317	27.0	0.061	47.0	0.019	67.0	0.012	87.0	0.003
8.0	0.145	28.0	0.021	48.0	0.009	68.0	0.020	88.0	0.001
9.0	0.088	29.0	0.004	49.0	0.021	69.0	0.029	89.0	0.000
								90.0	0.000

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