Dielectric®

AZIMUTH PATTERN
## Horizontal Polarization
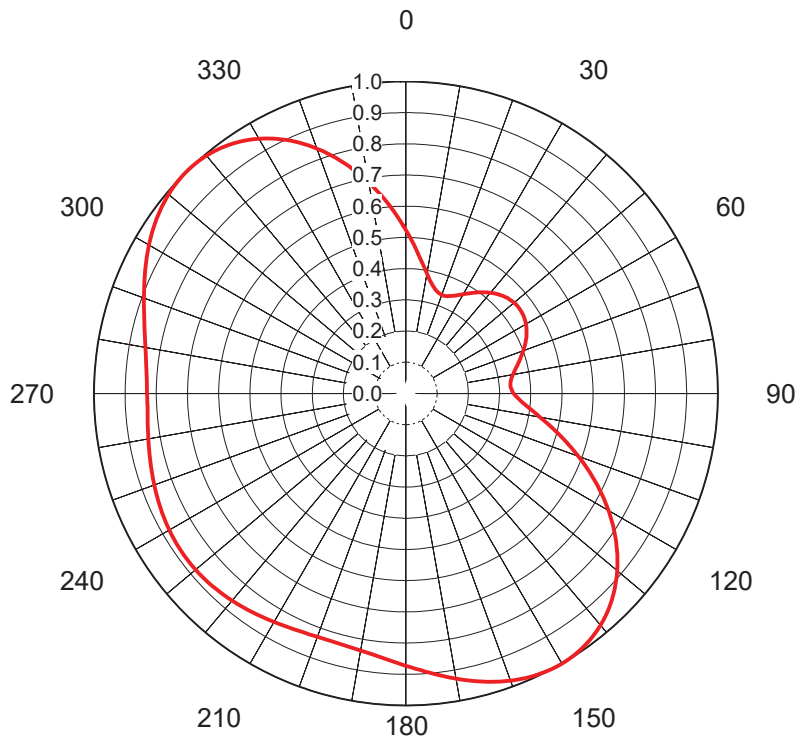
Proposal No.	C-70395-1
Date	6-Mar-17
Call Letters	WPXD
Channel	24
Frequency	533 MHz
Antenna Type	TFU-24GTH/VP-R C160 (SP)
Gain	1.71 (2.33dB)
	Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.524	36	0.401	72	0.389	108	0.556	144	0.989	180	0.873	216	0.859	252	0.854	288	0.883	324	0.981
1	0.508	37	0.406	73	0.384	109	0.572	145	0.992	181	0.868	217	0.861	253	0.852	289	0.888	325	0.976
2	0.493	38	0.411	74	0.378	110	0.588	146	0.995	182	0.864	218	0.863	254	0.850	290	0.894	326	0.970
3	0.478	39	0.416	75	0.372	111	0.605	147	0.997	183	0.859	219	0.865	255	0.848	291	0.899	327	0.964
4	0.464	40	0.421	76	0.367	112	0.621	148	0.998	184	0.855	220	0.867	256	0.846	292	0.905	328	0.957
5	0.450	41	0.426	77	0.362	113	0.638	149	1.000	185	0.851	221	0.869	257	0.844	293	0.911	329	0.950
6	0.437	42	0.430	78	0.357	114	0.654	150	1.000	186	0.848	222	0.870	258	0.842	294	0.917	330	0.942
7	0.423	43	0.434	79	0.352	115	0.670	151	1.000	187	0.844	223	0.872	259	0.840	295	0.923	331	0.934
8	0.412	44	0.438	80	0.348	116	0.687	152	0.999	188	0.842	224	0.873	260	0.838	296	0.928	332	0.925
9	0.400	45	0.441	81	0.344	117	0.703	153	0.999	189	0.839	225	0.875	261	0.836	297	0.934	333	0.916
10	0.390	46	0.444	82	0.342	118	0.719	154	0.997	190	0.837	226	0.876	262	0.835	298	0.940	334	0.906
11	0.380	47	0.447	83	0.339	119	0.734	155	0.995	191	0.835	227	0.877	263	0.833	299	0.946	335	0.895
12	0.371	48	0.449	84	0.337	120	0.750	156	0.993	192	0.833	228	0.878	264	0.832	300	0.951	336	0.884
13	0.363	49	0.451	85	0.336	121	0.765	157	0.990	193	0.832	229	0.879	265	0.831	301	0.956	337	0.873
14	0.357	50	0.452	86	0.336	122	0.780	158	0.987	194	0.831	230	0.879	266	0.830	302	0.961	338	0.861
15	0.350	51	0.454	87	0.337	123	0.794	159	0.983	195	0.830	231	0.880	267	0.830	303	0.966	339	0.848
16	0.346	52	0.454	88	0.339	124	0.808	160	0.980	196	0.829	232	0.880	268	0.829	304	0.971	340	0.835
17	0.341	53	0.454	89	0.341	125	0.822	161	0.976	197	0.829	233	0.880	269	0.829	305	0.976	341	0.822
18	0.339	54	0.454	90	0.346	126	0.835	162	0.971	198	0.829	234	0.880	270	0.829	306	0.980	342	0.808
19	0.337	55	0.454	91	0.350	127	0.848	163	0.966	199	0.830	235	0.880	271	0.830	307	0.983	343	0.794
20	0.336	56	0.452	92	0.357	128	0.861	164	0.961	200	0.830	236	0.879	272	0.831	308	0.987	344	0.780
21	0.336	57	0.451	93	0.363	129	0.873	165	0.956	201	0.831	237	0.879	273	0.832	309	0.990	345	0.765
22	0.337	58	0.449	94	0.371	130	0.884	166	0.951	202	0.832	238	0.878	274	0.833	310	0.993	346	0.750
23	0.339	59	0.447	95	0.380	131	0.895	167	0.946	203	0.833	239	0.877	275	0.835	311	0.995	347	0.734
24	0.342	60	0.444	96	0.390	132	0.906	168	0.940	204	0.835	240	0.876	276	0.837	312	0.997	348	0.719
25	0.344	61	0.441	97	0.400	133	0.916	169	0.934	205	0.836	241	0.875	277	0.839	313	0.999	349	0.703
26	0.348	62	0.438	98	0.412	134	0.925	170	0.928	206	0.838	242	0.873	278	0.842	314	0.999	350	0.687
27	0.352	63	0.434	99	0.423	135	0.934	171	0.923	207	0.840	243	0.872	279	0.844	315	1.000	351	0.670
28	0.357	64	0.430	100	0.437	136	0.942	172	0.917	208	0.842	244	0.870	280	0.848	316	1.000	352	0.654
29	0.362	65	0.426	101	0.450	137	0.950	173	0.911	209	0.844	245	0.869	281	0.851	317	1.000	353	0.638
30	0.367	66	0.421	102	0.464	138	0.957	174	0.905	210	0.846	246	0.867	282	0.855	318	0.998	354	0.621
31	0.372	67	0.416	103	0.478	139	0.964	175	0.899	211	0.848	247	0.865	283	0.859	319	0.997	355	0.605
32	0.378	68	0.411	104	0.493	140	0.970	176	0.894	212	0.850	248	0.863	284	0.864	320	0.995	356	0.588
33	0.384	69	0.406	105	0.508	141	0.976	177	0.888	213	0.852	249	0.861	285	0.868	321	0.992	357	0.572
34	0.389	70	0.401	106	0.524	142	0.981	178	0.883	214	0.854	250	0.859	286	0.873	322	0.989	358	0.556
35	0.395	71	0.395	107	0.540	143	0.985	179	0.878	215	0.857	251	0.857	287	0.878	323	0.985	359	0.540

Trusted for Decades. Ready for Tomorrow.

Dielectric®

AZIMUTH PATTERN
Vertical Polarization

Proposal No.	C-70395-1
Date	6-Mar-17
Call Letters	WPXD
Channel	24
Frequency	533 MHz
Antenna Type	TFU-24GTH/VP-R C160 (SP)
Gain	2.4 (3.81dB)
	Calculated
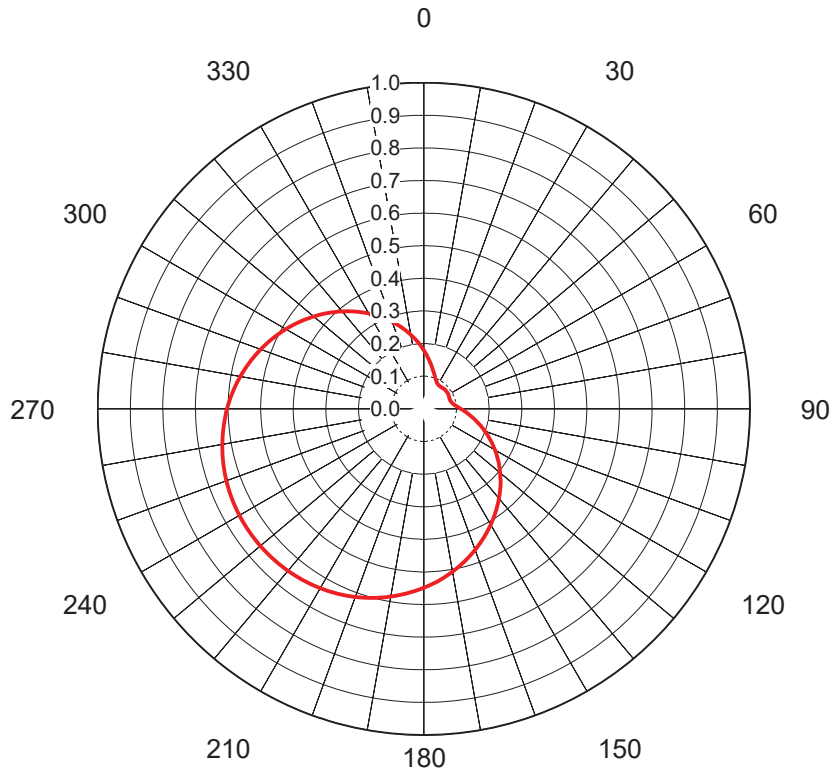
| Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.180	36	0.085	72	0.085	108	0.190	144	0.380	180	0.549	216	0.644	252	0.641	288	0.541	324	0.369
1	0.175	37	0.085	73	0.085	109	0.195	145	0.385	181	0.553	217	0.645	253	0.640	289	0.537	325	0.364
2	0.170	38	0.085	74	0.086	110	0.200	146	0.390	182	0.557	218	0.646	254	0.638	290	0.533	326	0.359
3	0.165	39	0.085	75	0.086	111	0.205	147	0.395	183	0.560	219	0.647	255	0.637	291	0.528	327	0.353
4	0.161	40	0.085	76	0.087	112	0.210	148	0.400	184	0.564	220	0.648	256	0.635	292	0.524	328	0.348
5	0.156	41	0.086	77	0.087	113	0.215	149	0.405	185	0.568	221	0.649	257	0.633	293	0.520	329	0.343
6	0.152	42	0.086	78	0.088	114	0.220	150	0.410	186	0.571	222	0.650	258	0.631	294	0.516	330	0.337
7	0.147	43	0.086	79	0.089	115	0.226	151	0.415	187	0.575	223	0.651	259	0.629	295	0.511	331	0.332
8	0.143	44	0.086	80	0.091	116	0.231	152	0.421	188	0.578	224	0.652	260	0.627	296	0.507	332	0.327
9	0.139	45	0.087	81	0.092	117	0.236	153	0.426	189	0.582	225	0.652	261	0.625	297	0.502	333	0.322
10	0.135	46	0.087	82	0.094	118	0.241	154	0.431	190	0.585	226	0.653	262	0.623	298	0.498	334	0.316
11	0.131	47	0.087	83	0.095	119	0.247	155	0.436	191	0.588	227	0.653	263	0.621	299	0.493	335	0.311
12	0.127	48	0.087	84	0.097	120	0.252	156	0.441	192	0.591	228	0.654	264	0.619	300	0.489	336	0.306
13	0.123	49	0.088	85	0.100	121	0.257	157	0.446	193	0.594	229	0.654	265	0.616	301	0.484	337	0.300
14	0.120	50	0.088	86	0.102	122	0.263	158	0.450	194	0.597	230	0.654	266	0.614	302	0.479	338	0.295
15	0.116	51	0.088	87	0.105	123	0.268	159	0.455	195	0.600	231	0.655	267	0.611	303	0.475	339	0.289
16	0.113	52	0.088	88	0.107	124	0.273	160	0.460	196	0.603	232	0.655	268	0.609	304	0.470	340	0.284
17	0.110	53	0.088	89	0.110	125	0.279	161	0.465	197	0.606	233	0.655	269	0.606	305	0.465	341	0.279
18	0.107	54	0.088	90	0.113	126	0.284	162	0.470	198	0.609	234	0.655	270	0.603	306	0.460	342	0.273
19	0.105	55	0.088	91	0.116	127	0.289	163	0.475	199	0.611	235	0.655	271	0.600	307	0.455	343	0.268
20	0.102	56	0.088	92	0.120	128	0.295	164	0.479	200	0.614	236	0.654	272	0.597	308	0.450	344	0.263
21	0.100	57	0.088	93	0.124	129	0.300	165	0.484	201	0.616	237	0.654	273	0.594	309	0.446	345	0.257
22	0.097	58	0.087	94	0.127	130	0.306	166	0.489	202	0.619	238	0.654	274	0.591	310	0.441	346	0.252
23	0.095	59	0.087	95	0.131	131	0.311	167	0.493	203	0.621	239	0.653	275	0.588	311	0.436	347	0.247
24	0.094	60	0.087	96	0.135	132	0.316	168	0.498	204	0.623	240	0.653	276	0.585	312	0.431	348	0.241
25	0.092	61	0.087	97	0.139	133	0.322	169	0.502	205	0.625	241	0.652	277	0.582	313	0.426	349	0.236
26	0.091	62	0.086	98	0.143	134	0.327	170	0.507	206	0.627	242	0.652	278	0.578	314	0.421	350	0.231
27	0.089	63	0.086	99	0.147	135	0.332	171	0.511	207	0.629	243	0.651	279	0.575	315	0.415	351	0.226
28	0.088	64	0.086	100	0.152	136	0.337	172	0.516	208	0.631	244	0.650	280	0.571	316	0.410	352	0.220
29	0.087	65	0.086	101	0.156	137	0.343	173	0.520	209	0.633	245	0.649	281	0.568	317	0.405	353	0.215
30	0.087	66	0.085	102	0.161	138	0.348	174	0.524	210	0.635	246	0.648	282	0.564	318	0.400	354	0.210
31	0.086	67	0.085	103	0.165	139	0.353	175	0.528	211	0.637	247	0.647	283	0.560	319	0.395	355	0.205
32	0.086	68	0.085	104	0.170	140	0.359	176	0.533	212	0.638	248	0.646	284	0.557	320	0.390	356	0.200
33	0.085	69	0.085	105	0.175	141	0.364	177	0.537	213	0.640	249	0.645	285	0.553	321	0.385	357	0.195
34	0.085	70	0.085	106	0.180	142	0.369	178	0.541	214	0.641	250	0.644	286	0.549	322	0.380	358	0.190
35	0.085	71	0.085	107	0.185	143	0.374	179	0.545	215	0.643	251	0.643	287	0.545	323	0.374	359	0.185

Trusted for Decades. Ready for Tomorrow.

ELEVATION PATTERN

Proposal No.	**C-70395-1**
Date	**6-Mar-17**
Call Letters	**WPXD**
Channel	**24**
Frequency	**533 MHz**
Antenna Type	**TFU-24GTH/VP-R C160 (S P**

RMS Directivity at Main Lobe	**21.5 (13.32 dB)**	Beam Tilt	**0.75 deg**
RMS Directivity at Horizontal	**16.2 (12.10 dB)**	Drawing Number	**24G215075**
	Calculated		

Degrees Below Horizontal

Degrees Below Horizontal
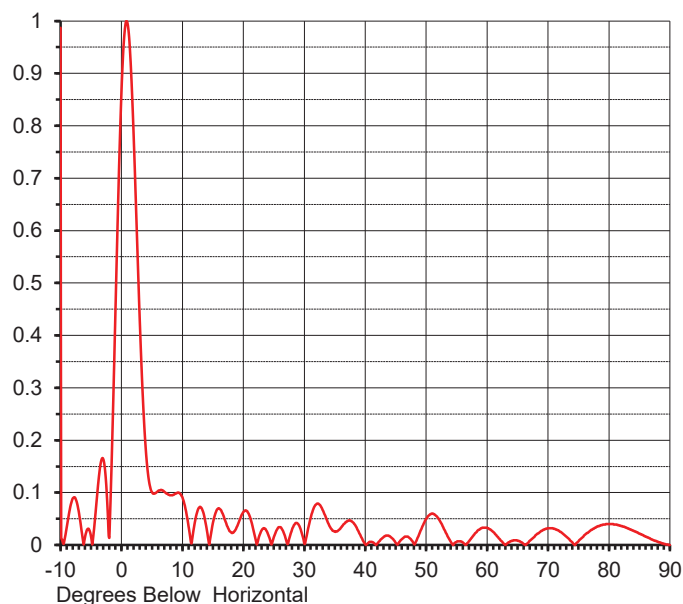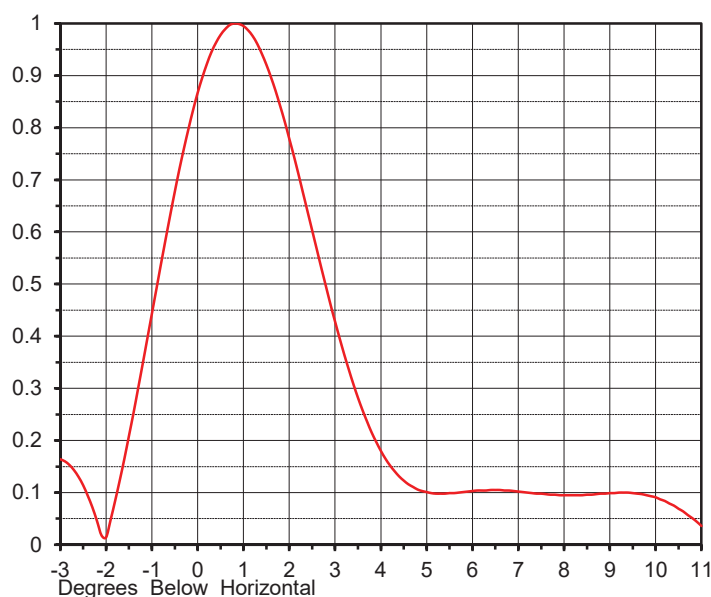
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.987	10.0	0.091	30.0	0.003	50.0	0.050	70.0	0.032
-9.0	0.033	11.0	0.036	31.0	0.050	51.0	0.060	71.0	0.031
-8.0	0.089	12.0	0.041	32.0	0.078	52.0	0.051	72.0	0.025
-7.0	0.063	13.0	0.072	33.0	0.067	53.0	0.029	73.0	0.016
-6.0	0.014	14.0	0.029	34.0	0.040	54.0	0.007	74.0	0.005
-5.0	0.016	15.0	0.042	35.0	0.026	55.0	0.006	75.0	0.007
-4.0	0.095	16.0	0.070	36.0	0.033	56.0	0.005	76.0	0.019
-3.0	0.164	17.0	0.047	37.0	0.045	57.0	0.007	77.0	0.028
-2.0	0.014	18.0	0.024	38.0	0.043	58.0	0.022	78.0	0.035
-1.0	0.443	19.0	0.036	39.0	0.023	59.0	0.032	79.0	0.039
0.0	0.867	20.0	0.063	40.0	0.002	60.0	0.033	80.0	0.040
1.0	0.995	21.0	0.056	41.0	0.006	61.0	0.025	81.0	0.039
2.0	0.779	22.0	0.011	42.0	0.003	62.0	0.012	82.0	0.036
3.0	0.428	23.0	0.028	43.0	0.015	63.0	0.000	83.0	0.032
4.0	0.180	24.0	0.022	44.0	0.017	64.0	0.008	84.0	0.027
5.0	0.101	25.0	0.015	45.0	0.004	65.0	0.008	85.0	0.022
6.0	0.103	26.0	0.034	46.0	0.011	66.0	0.002	86.0	0.016
7.0	0.102	27.0	0.010	47.0	0.016	67.0	0.008	87.0	0.011
8.0	0.095	28.0	0.030	48.0	0.002	68.0	0.019	88.0	0.006
9.0	0.099	29.0	0.040	49.0	0.025	69.0	0.027	89.0	0.002
								90.0	0.000