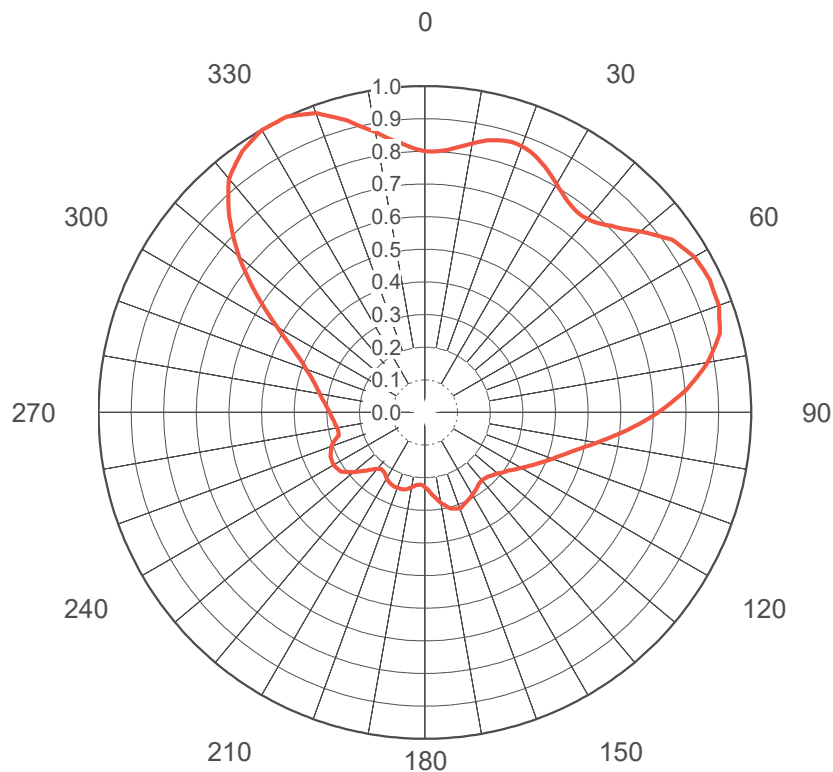


AZIMUTH PATTERN Horizontal Polarization

Proposal No. **C-70105**
 Date **6-Apr-17**
 Call Letters **WFPT**
 Channel **21**
 Frequency **515 MHz**
 Antenna Type **TUF-C4SP-6/16U-1-T**
 Gain **2.66 (4.24dB)**
 Calculated



Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.801	36	0.774	72	0.949	108	0.433	144	0.277	180	0.229	216	0.220	252	0.294	288	0.371	324	0.968
1	0.800	37	0.772	73	0.944	109	0.425	145	0.280	181	0.225	217	0.219	253	0.288	289	0.378	325	0.977
2	0.801	38	0.771	74	0.940	110	0.416	146	0.282	182	0.223	218	0.220	254	0.281	290	0.387	326	0.981
3	0.802	39	0.772	75	0.936	111	0.407	147	0.285	183	0.222	219	0.222	255	0.274	291	0.395	327	0.985
4	0.805	40	0.775	76	0.925	112	0.399	148	0.287	184	0.222	220	0.226	256	0.272	292	0.405	328	0.990
5	0.808	41	0.778	77	0.914	113	0.390	149	0.289	185	0.223	221	0.229	257	0.272	293	0.415	329	0.994
6	0.813	42	0.783	78	0.902	114	0.382	150	0.292	186	0.223	222	0.234	258	0.272	294	0.426	330	0.999
7	0.819	43	0.790	79	0.891	115	0.375	151	0.294	187	0.225	223	0.239	259	0.272	295	0.439	331	0.999
8	0.825	44	0.799	80	0.879	116	0.367	152	0.296	188	0.227	224	0.245	260	0.273	296	0.453	332	0.999
9	0.831	45	0.809	81	0.864	117	0.360	153	0.298	189	0.230	225	0.252	261	0.274	297	0.469	333	0.999
10	0.837	46	0.817	82	0.850	118	0.353	154	0.300	190	0.233	226	0.257	262	0.276	298	0.486	334	0.999
11	0.844	47	0.827	83	0.835	119	0.346	155	0.302	191	0.236	227	0.264	263	0.278	299	0.504	335	1.000
12	0.850	48	0.838	84	0.820	120	0.339	156	0.304	192	0.238	228	0.270	264	0.279	300	0.523	336	0.995
13	0.856	49	0.850	85	0.805	121	0.334	157	0.306	193	0.241	229	0.277	265	0.281	301	0.542	337	0.990
14	0.860	50	0.863	86	0.787	122	0.329	158	0.309	194	0.243	230	0.284	266	0.283	302	0.563	338	0.985
15	0.863	51	0.874	87	0.769	123	0.323	159	0.311	195	0.244	231	0.290	267	0.285	303	0.585	339	0.980
16	0.867	52	0.886	88	0.751	124	0.317	160	0.314	196	0.245	232	0.296	268	0.287	304	0.607	340	0.976
17	0.869	53	0.898	89	0.733	125	0.311	161	0.312	197	0.246	233	0.303	269	0.289	305	0.630	341	0.966
18	0.870	54	0.911	90	0.716	126	0.308	162	0.310	198	0.246	234	0.309	270	0.290	306	0.652	342	0.956
19	0.870	55	0.924	91	0.696	127	0.304	163	0.308	199	0.246	235	0.315	271	0.294	307	0.674	343	0.946
20	0.868	56	0.930	92	0.677	128	0.300	164	0.307	200	0.245	236	0.317	272	0.298	308	0.697	344	0.936
21	0.866	57	0.936	93	0.659	129	0.295	165	0.305	201	0.245	237	0.318	273	0.301	309	0.720	345	0.927
22	0.862	58	0.942	94	0.640	130	0.290	166	0.300	202	0.245	238	0.320	274	0.304	310	0.744	346	0.914
23	0.857	59	0.948	95	0.623	131	0.288	167	0.295	203	0.245	239	0.322	275	0.306	311	0.765	347	0.903
24	0.851	60	0.954	96	0.604	132	0.285	168	0.290	204	0.244	240	0.323	276	0.311	312	0.785	348	0.892
25	0.844	61	0.955	97	0.585	133	0.282	169	0.286	205	0.243	241	0.322	277	0.315	313	0.806	349	0.881
26	0.838	62	0.957	98	0.568	134	0.280	170	0.281	206	0.242	242	0.322	278	0.319	314	0.827	350	0.872
27	0.831	63	0.959	99	0.551	135	0.277	171	0.275	207	0.240	243	0.321	279	0.323	315	0.848	351	0.861
28	0.823	64	0.961	100	0.535	136	0.275	172	0.269	208	0.238	244	0.320	280	0.326	316	0.865	352	0.851
29	0.815	65	0.963	101	0.519	137	0.274	173	0.263	209	0.236	245	0.319	281	0.331	317	0.883	353	0.842
30	0.807	66	0.961	102	0.504	138	0.273	174	0.258	210	0.233	246	0.316	282	0.336	318	0.900	354	0.835
31	0.800	67	0.960	103	0.490	139	0.272	175	0.253	211	0.230	247	0.313	283	0.340	319	0.917	355	0.828
32	0.793	68	0.959	104	0.477	140	0.272	176	0.247	212	0.227	248	0.310	284	0.345	320	0.934	356	0.820
33	0.787	69	0.959	105	0.465	141	0.273	177	0.242	213	0.224	249	0.308	285	0.351	321	0.943	357	0.813
34	0.782	70	0.959	106	0.454	142	0.273	178	0.236	214	0.222	250	0.305	286	0.357	322	0.951	358	0.808
35	0.777	71	0.954	107	0.443	143	0.275	179	0.232	215	0.221	251	0.300	287	0.363	323	0.960	359	0.804

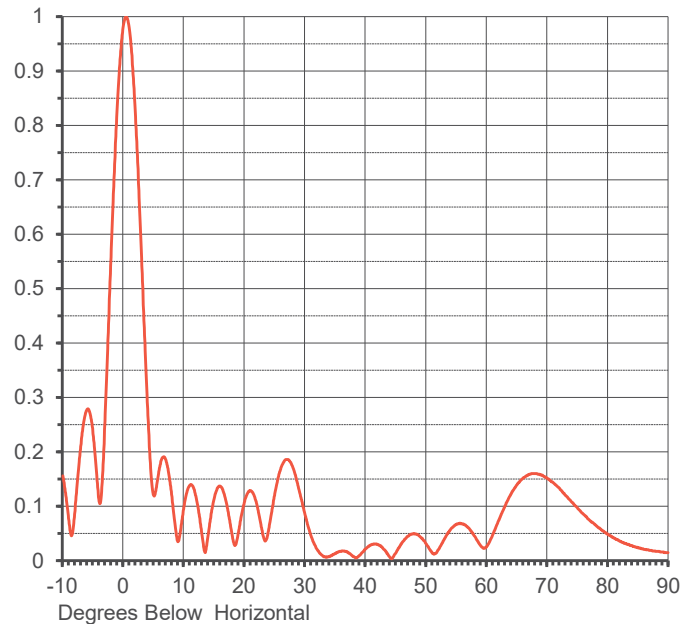
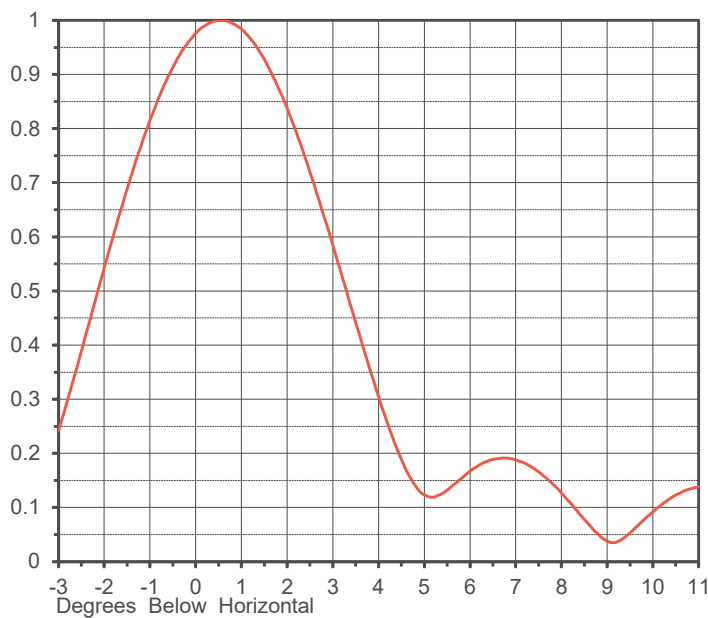
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ELEVATION PATTERN

Proposal No. **C-70105**
 Date **6-Apr-17**
 Call Letters **WFPT**
 Channel **21**
 Frequency **515 MHz**
 Antenna Type **TUF-C4SP-6/16U-1-T**

RMS Directivity at Main Lobe **12.4 (10.94 dB)**
 RMS Directivity at Horizontal **12.0 (10.79 dB)**
Calculated

Beam Tilt **0.50 deg**
 Pattern Number **TUF-C4SP-51050**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.156	10.0	0.099	30.0	0.084	50.0	0.031	70.0	0.151
-9.0	0.073	11.0	0.139	31.0	0.045	51.0	0.014	71.0	0.143
-8.0	0.092	12.0	0.117	32.0	0.020	52.0	0.020	72.0	0.133
-7.0	0.215	13.0	0.046	33.0	0.008	53.0	0.040	73.0	0.120
-6.0	0.278	14.0	0.048	34.0	0.008	54.0	0.057	74.0	0.108
-5.0	0.233	15.0	0.115	35.0	0.014	55.0	0.067	75.0	0.096
-4.0	0.109	16.0	0.137	36.0	0.018	56.0	0.068	76.0	0.085
-3.0	0.270	17.0	0.106	37.0	0.016	57.0	0.060	77.0	0.074
-2.0	0.573	18.0	0.044	38.0	0.008	58.0	0.045	78.0	0.065
-1.0	0.837	19.0	0.053	39.0	0.010	59.0	0.027	79.0	0.056
0.0	0.984	20.0	0.109	40.0	0.022	60.0	0.027	80.0	0.048
1.0	0.976	21.0	0.129	41.0	0.030	61.0	0.049	81.0	0.042
2.0	0.816	22.0	0.104	42.0	0.030	62.0	0.075	82.0	0.036
3.0	0.556	23.0	0.049	43.0	0.021	63.0	0.101	83.0	0.031
4.0	0.279	24.0	0.058	44.0	0.006	64.0	0.123	84.0	0.027
5.0	0.120	25.0	0.123	45.0	0.015	65.0	0.140	85.0	0.024
6.0	0.173	26.0	0.170	46.0	0.033	66.0	0.152	86.0	0.021
7.0	0.185	27.0	0.186	47.0	0.045	67.0	0.159	87.0	0.019
8.0	0.117	28.0	0.171	48.0	0.050	68.0	0.160	88.0	0.017
9.0	0.035	29.0	0.130	49.0	0.044	69.0	0.158	89.0	0.016
								90.0	0.015

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