

## AZIMUTH PATTERN Horizontal Polarization

Proposal No.

Date

22-Mar-17

Call Letters

WCIV

Channel

25

Frequency

539 MHz

Antenna Type

TUD-P5SP-16/48-1-B

Gain

2.2 (3.42dB)

Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.891	36	0.996	72	0.665	108	0.220	144	0.293	180	0.244	216	0.720	252	0.982	288	0.853
1	0.889	37	0.992	73	0.656	109	0.220	145	0.290	181	0.252	217	0.726	253	0.975	289	0.842
2	0.887	38	0.986	74	0.646	110	0.220	146	0.287	182	0.262	218	0.733	254	0.967	290	0.828
3	0.885	39	0.979	75	0.635	111	0.220	147	0.283	183	0.273	219	0.740	255	0.958	291	0.813
4	0.881	40	0.972	76	0.623	112	0.220	148	0.279	184	0.286	220	0.747	256	0.950	292	0.796
5	0.878	41	0.963	77	0.611	113	0.221	149	0.275	185	0.300	221	0.755	257	0.940	293	0.778
6	0.875	42	0.953	78	0.597	114	0.221	150	0.270	186	0.315	222	0.764	258	0.931	294	0.759
7	0.872	43	0.942	79	0.582	115	0.222	151	0.265	187	0.331	223	0.773	259	0.922	295	0.739
8	0.870	44	0.931	80	0.567	116	0.223	152	0.260	188	0.348	224	0.783	260	0.913	296	0.717
9	0.868	45	0.919	81	0.551	117	0.224	153	0.255	189	0.366	225	0.793	261	0.904	297	0.695
10	0.870	46	0.906	82	0.534	118	0.225	154	0.251	190	0.384	226	0.804	262	0.896	298	0.673
11	0.866	47	0.893	83	0.516	119	0.227	155	0.246	191	0.403	227	0.816	263	0.889	299	0.650
12	0.867	48	0.880	84	0.498	120	0.229	156	0.242	192	0.422	228	0.828	264	0.882	300	0.628
13	0.869	49	0.867	85	0.480	121	0.231	157	0.238	193	0.441	229	0.841	265	0.877	301	0.605
14	0.873	50	0.854	86	0.461	122	0.234	158	0.234	194	0.461	230	0.854	266	0.873	302	0.584
15	0.877	51	0.841	87	0.441	123	0.238	159	0.231	195	0.480	231	0.867	267	0.869	303	0.563
16	0.882	52	0.828	88	0.422	124	0.242	160	0.229	196	0.498	232	0.880	268	0.867	304	0.543
17	0.889	53	0.816	89	0.403	125	0.246	161	0.227	197	0.516	233	0.893	269	0.866	305	0.524
18	0.896	54	0.804	90	0.384	126	0.251	162	0.225	198	0.534	234	0.906	270	0.870	306	0.507
19	0.904	55	0.793	91	0.366	127	0.255	163	0.224	199	0.551	235	0.919	271	0.868	307	0.492
20	0.913	56	0.783	92	0.348	128	0.260	164	0.223	200	0.567	236	0.931	272	0.870	308	0.478
21	0.922	57	0.773	93	0.331	129	0.265	165	0.222	201	0.582	237	0.942	273	0.872	309	0.466
22	0.931	58	0.764	94	0.315	130	0.270	166	0.221	202	0.597	238	0.953	274	0.875	310	0.457
23	0.940	59	0.755	95	0.300	131	0.275	167	0.221	203	0.611	239	0.963	275	0.878	311	0.448
24	0.950	60	0.747	96	0.286	132	0.279	168	0.220	204	0.623	240	0.972	276	0.881	312	0.442
25	0.958	61	0.740	97	0.273	133	0.283	169	0.220	205	0.635	241	0.979	277	0.885	313	0.437
26	0.967	62	0.733	98	0.262	134	0.287	170	0.220	206	0.646	242	0.986	278	0.887	314	0.434
27	0.975	63	0.726	99	0.252	135	0.290	171	0.220	207	0.656	243	0.992	279	0.889	315	0.431
28	0.982	64	0.720	100	0.244	136	0.293	172	0.220	208	0.665	244	0.996	280	0.891	316	0.430
29	0.988	65	0.714	101	0.238	137	0.295	173	0.221	209	0.674	245	0.998	281	0.891	317	0.429
30	0.992	66	0.708	102	0.232	138	0.297	174	0.222	210	0.681	246	1.000	282	0.890	318	0.428
31	0.996	67	0.702	103	0.228	139	0.298	175	0.223	211	0.689	247	1.000	283	0.888	319	0.428
32	0.999	68	0.695	104	0.225	140	0.298	176	0.225	212	0.695	248	0.999	284	0.884	320	0.428
33	1.000	69	0.689	105	0.223	141	0.298	177	0.228	213	0.702	249	0.996	285	0.879	321	0.428
34	1.000	70	0.681	106	0.222	142	0.297	178	0.232	214	0.708	250	0.992	286	0.872	322	0.428
35	0.998	71	0.674	107	0.221	143	0.295	179	0.238	215	0.714	251	0.988	287	0.864	323	0.429

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## ELEVATION PATTERN

Proposal No.

Date **22-Mar-17**

Call Letters **WCIV**

Channel **25**

Frequency **539 MHz**

Antenna Type **TUD-P5SP-16/48-1-B**

RMS Directivity at Main Lobe

**25.0 ( 13.98 dB )**

Beam Tilt

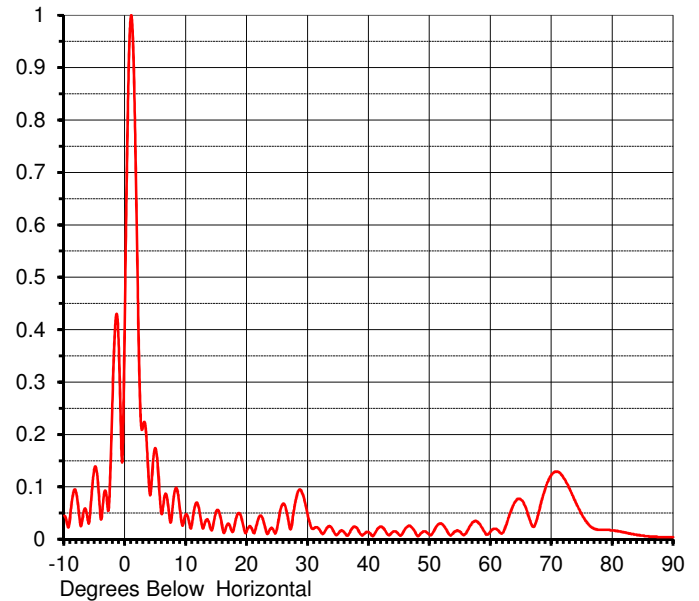
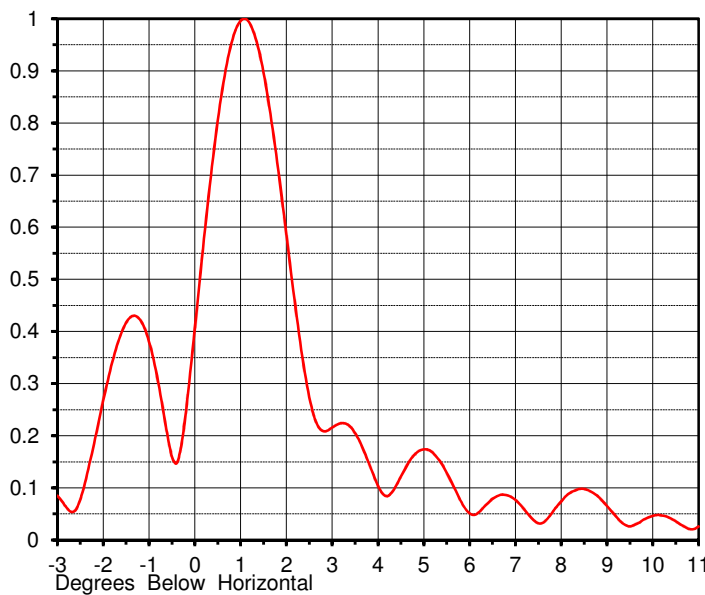
**1.00 deg**

RMS Directivity at Horizontal

**6.1 ( 7.85 dB )**

Pattern Number

**Calculated**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.045	10.0	0.048	30.0	0.043	50.0	0.008	70.0	0.124
-9.0	0.047	11.0	0.033	31.0	0.021	51.0	0.023	71.0	0.129
-8.0	0.087	12.0	0.064	32.0	0.016	52.0	0.029	72.0	0.116
-7.0	0.041	13.0	0.028	33.0	0.020	53.0	0.012	73.0	0.094
-6.0	0.030	14.0	0.021	34.0	0.019	54.0	0.014	74.0	0.069
-5.0	0.138	15.0	0.055	35.0	0.012	55.0	0.014	75.0	0.046
-4.0	0.038	16.0	0.019	36.0	0.012	56.0	0.013	76.0	0.029
-3.0	0.074	17.0	0.029	37.0	0.017	57.0	0.032	77.0	0.020
-2.0	0.306	18.0	0.030	38.0	0.022	58.0	0.031	78.0	0.018
-1.0	0.346	19.0	0.044	39.0	0.008	59.0	0.013	79.0	0.018
0.0	0.492	20.0	0.017	40.0	0.013	60.0	0.016	80.0	0.017
1.0	1.000	21.0	0.013	41.0	0.012	61.0	0.019	81.0	0.015
2.0	0.514	22.0	0.043	42.0	0.024	62.0	0.013	82.0	0.013
3.0	0.221	23.0	0.020	43.0	0.010	63.0	0.044	83.0	0.010
4.0	0.089	24.0	0.022	44.0	0.015	64.0	0.072	84.0	0.008
5.0	0.173	25.0	0.027	45.0	0.008	65.0	0.075	85.0	0.007
6.0	0.048	26.0	0.068	46.0	0.021	66.0	0.051	86.0	0.005
7.0	0.068	27.0	0.021	47.0	0.023	67.0	0.024	87.0	0.005
8.0	0.084	28.0	0.076	48.0	0.006	68.0	0.058	88.0	0.004
9.0	0.055	29.0	0.089	49.0	0.015	69.0	0.099	89.0	0.004
								90.0	0.004

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