

AZIMUTH PATTERN Horizontal Polarization

Proposal No. **C-70185**
 Date **23-Mar-17**
 Call Letters **WUPL**
 Channel **17**
 Frequency **491 MHz**
 Antenna Type **TUD-C5SP-10/50U-2-B**
 Gain **1.84 (2.65dB)**
 Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.830	36	0.790	72	0.470	108	0.420	144	0.420	180	0.450	216	0.810	252	0.790	288	0.810
1	0.820	37	0.780	73	0.450	109	0.420	145	0.420	181	0.470	217	0.820	253	0.800	289	0.810
2	0.820	38	0.770	74	0.430	110	0.420	146	0.410	182	0.500	218	0.830	254	0.810	290	0.810
3	0.820	39	0.770	75	0.410	111	0.430	147	0.410	183	0.520	219	0.840	255	0.820	291	0.810
4	0.820	40	0.760	76	0.400	112	0.430	148	0.410	184	0.540	220	0.850	256	0.830	292	0.810
5	0.820	41	0.760	77	0.390	113	0.440	149	0.410	185	0.560	221	0.860	257	0.840	293	0.810
6	0.820	42	0.760	78	0.380	114	0.450	150	0.400	186	0.580	222	0.870	258	0.860	294	0.820
7	0.830	43	0.750	79	0.370	115	0.450	151	0.400	187	0.610	223	0.880	259	0.870	295	0.830
8	0.840	44	0.750	80	0.360	116	0.460	152	0.400	188	0.630	224	0.890	260	0.890	296	0.840
9	0.850	45	0.750	81	0.360	117	0.460	153	0.400	189	0.650	225	0.900	261	0.900	297	0.850
10	0.860	46	0.750	82	0.360	118	0.470	154	0.410	190	0.660	226	0.910	262	0.920	298	0.860
11	0.870	47	0.750	83	0.360	119	0.470	155	0.410	191	0.680	227	0.920	263	0.930	299	0.870
12	0.880	48	0.750	84	0.370	120	0.480	156	0.410	192	0.700	228	0.930	264	0.950	300	0.880
13	0.890	49	0.750	85	0.370	121	0.480	157	0.410	193	0.710	229	0.930	265	0.960	301	0.890
14	0.900	50	0.750	86	0.380	122	0.480	158	0.410	194	0.720	230	0.940	266	0.970	302	0.900
15	0.910	51	0.750	87	0.380	123	0.490	159	0.410	195	0.730	231	0.940	267	0.980	303	0.910
16	0.920	52	0.750	88	0.390	124	0.490	160	0.410	196	0.740	232	0.940	268	0.980	304	0.910
17	0.930	53	0.750	89	0.390	125	0.490	161	0.400	197	0.750	233	0.940	269	0.990	305	0.910
18	0.930	54	0.740	90	0.400	126	0.490	162	0.400	198	0.760	234	0.940	270	0.990	306	0.910
19	0.930	55	0.740	91	0.400	127	0.490	163	0.400	199	0.760	235	0.930	271	0.990	307	0.910
20	0.930	56	0.730	92	0.410	128	0.490	164	0.390	200	0.770	236	0.920	272	0.990	308	0.910
21	0.930	57	0.720	93	0.410	129	0.490	165	0.390	201	0.770	237	0.920	273	0.980	309	0.900
22	0.930	58	0.710	94	0.410	130	0.490	166	0.380	202	0.770	238	0.910	274	0.980	310	0.890
23	0.930	59	0.700	95	0.410	131	0.490	167	0.380	203	0.780	239	0.890	275	0.970	311	0.880
24	0.920	60	0.690	96	0.410	132	0.490	168	0.370	204	0.780	240	0.880	276	0.960	312	0.870
25	0.910	61	0.680	97	0.410	133	0.480	169	0.370	205	0.780	241	0.870	277	0.950	313	0.860
26	0.900	62	0.660	98	0.410	134	0.480	170	0.360	206	0.780	242	0.850	278	0.940	314	0.850
27	0.890	63	0.650	99	0.410	135	0.480	171	0.360	207	0.780	243	0.840	279	0.930	315	0.830
28	0.880	64	0.630	100	0.410	136	0.470	172	0.360	208	0.780	244	0.830	280	0.910	316	0.820
29	0.870	65	0.610	101	0.410	137	0.470	173	0.360	209	0.780	245	0.820	281	0.900	317	0.810
30	0.860	66	0.590	102	0.410	138	0.460	174	0.370	210	0.780	246	0.810	282	0.880	318	0.800
31	0.850	67	0.570	103	0.410	139	0.450	175	0.380	211	0.780	247	0.800	283	0.870	319	0.790
32	0.830	68	0.550	104	0.410	140	0.450	176	0.390	212	0.790	248	0.800	284	0.850	320	0.780
33	0.820	69	0.530	105	0.410	141	0.440	177	0.400	213	0.790	249	0.790	285	0.840	321	0.770
34	0.810	70	0.510	106	0.410	142	0.440	178	0.420	214	0.800	250	0.790	286	0.830	322	0.770
35	0.800	71	0.490	107	0.410	143	0.430	179	0.430	215	0.800	251	0.790	287	0.820	323	0.770

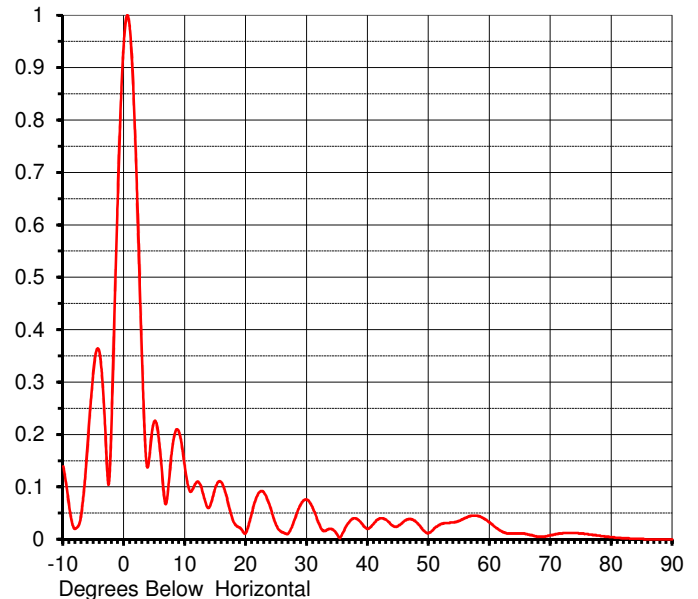
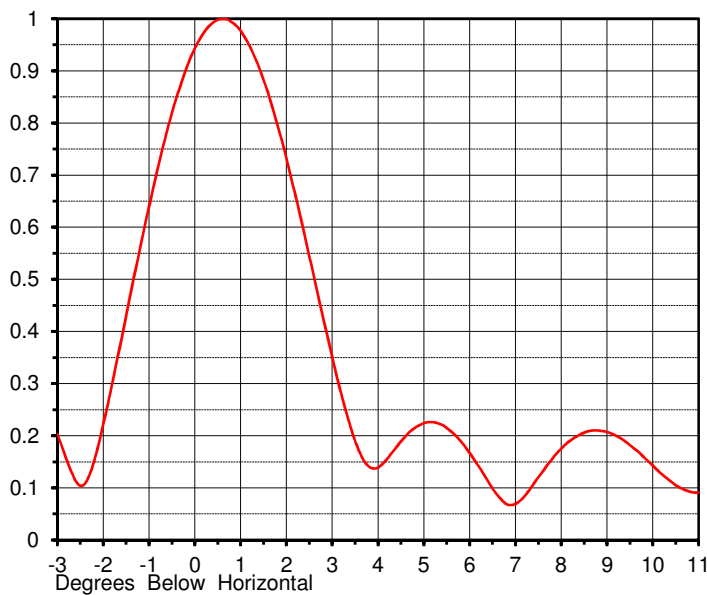
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ELEVATION PATTERN

Proposal No. **C-70185**
 Date **23-Mar-17**
 Call Letters **WUPL**
 Channel **17**
 Frequency **491 MHz**
 Antenna Type **TUD-C5SP-10/50U-2-B**

RMS Directivity at Main Lobe **17.4 (12.41 dB)**
 RMS Directivity at Horizontal **16.0 (12.04 dB)**
Calculated

Beam Tilt **0.50 deg**
 Pattern Number **10U174050**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.139	10.0	0.134	30.0	0.075	50.0	0.012	70.0	0.008
-9.0	0.061	11.0	0.091	31.0	0.058	51.0	0.022	71.0	0.010
-8.0	0.020	12.0	0.110	32.0	0.029	52.0	0.029	72.0	0.012
-7.0	0.052	13.0	0.085	33.0	0.016	53.0	0.031	73.0	0.012
-6.0	0.182	14.0	0.062	34.0	0.020	54.0	0.032	74.0	0.012
-5.0	0.327	15.0	0.100	35.0	0.008	55.0	0.035	75.0	0.011
-4.0	0.352	16.0	0.108	36.0	0.015	56.0	0.041	76.0	0.010
-3.0	0.179	17.0	0.072	37.0	0.034	57.0	0.045	77.0	0.008
-2.0	0.260	18.0	0.032	38.0	0.040	58.0	0.045	78.0	0.007
-1.0	0.679	19.0	0.022	39.0	0.030	59.0	0.040	79.0	0.005
0.0	0.960	20.0	0.013	40.0	0.020	60.0	0.032	80.0	0.004
1.0	0.963	21.0	0.053	41.0	0.031	61.0	0.022	81.0	0.003
2.0	0.696	22.0	0.087	42.0	0.040	62.0	0.015	82.0	0.002
3.0	0.314	23.0	0.088	43.0	0.037	63.0	0.011	83.0	0.001
4.0	0.146	24.0	0.060	44.0	0.026	64.0	0.011	84.0	0.001
5.0	0.226	25.0	0.026	45.0	0.026	65.0	0.011	85.0	0.001
6.0	0.154	26.0	0.013	46.0	0.035	66.0	0.010	86.0	0.000
7.0	0.075	27.0	0.012	47.0	0.039	67.0	0.007	87.0	0.000
8.0	0.184	28.0	0.039	48.0	0.032	68.0	0.005	88.0	0.000
9.0	0.204	29.0	0.067	49.0	0.018	69.0	0.005	89.0	0.000
								90.0	0.000

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