

## AZIMUTH PATTERN Horizontal Polarization

Proposal No. C-70021  
 Date 20-Mar-17  
 Call Letters WDKY  
 Channel 19  
 Frequency 503 MHz  
 Antenna Type TUA-C4SP-14/42H-1-T  
 Gain 2.29 (3.6dB)  
 Calculated

Deg	Value																				
0	0.641	36	0.312	72	0.340	108	0.303	144	0.574	180	0.753	216	0.808	252	1.000	288	0.793	324	0.713		
1	0.627	37	0.309	73	0.340	109	0.302	145	0.589	181	0.747	217	0.790	253	1.000	289	0.808	325	0.722		
2	0.612	38	0.306	74	0.341	110	0.301	146	0.604	182	0.742	218	0.771	254	1.000	290	0.823	326	0.732		
3	0.597	39	0.304	75	0.341	111	0.302	147	0.619	183	0.736	219	0.753	255	0.999	291	0.833	327	0.741		
4	0.582	40	0.301	76	0.341	112	0.304	148	0.634	184	0.730	220	0.734	256	0.999	292	0.843	328	0.751		
5	0.567	41	0.303	77	0.341	113	0.305	149	0.649	185	0.725	221	0.725	257	0.999	293	0.853	329	0.761		
6	0.552	42	0.305	78	0.341	114	0.306	150	0.664	186	0.719	222	0.715	258	0.999	294	0.863	330	0.770		
7	0.537	43	0.306	79	0.341	115	0.307	151	0.676	187	0.713	223	0.706	259	0.999	295	0.873	331	0.776		
8	0.522	44	0.308	80	0.341	116	0.308	152	0.687	188	0.708	224	0.696	260	0.999	296	0.883	332	0.782		
9	0.507	45	0.309	81	0.338	117	0.309	153	0.699	189	0.702	225	0.686	261	0.979	297	0.893	333	0.789		
10	0.492	46	0.311	82	0.334	118	0.310	154	0.711	190	0.697	226	0.677	262	0.960	298	0.903	334	0.795		
11	0.480	47	0.313	83	0.331	119	0.311	155	0.722	191	0.712	227	0.667	263	0.940	299	0.912	335	0.801		
12	0.468	48	0.314	84	0.328	120	0.313	156	0.734	192	0.728	228	0.658	264	0.921	300	0.922	336	0.807		
13	0.456	49	0.316	85	0.324	121	0.320	157	0.745	193	0.744	229	0.648	265	0.901	301	0.908	337	0.813		
14	0.443	50	0.318	86	0.321	122	0.327	158	0.757	194	0.760	230	0.638	266	0.882	302	0.894	338	0.819		
15	0.431	51	0.320	87	0.318	123	0.335	159	0.769	195	0.776	231	0.658	267	0.862	303	0.879	339	0.825		
16	0.419	52	0.322	88	0.314	124	0.342	160	0.780	196	0.792	232	0.677	268	0.843	304	0.865	340	0.831		
17	0.407	53	0.324	89	0.311	125	0.350	161	0.785	197	0.807	233	0.697	269	0.823	305	0.851	341	0.825		
18	0.394	54	0.326	90	0.307	126	0.357	162	0.789	198	0.823	234	0.716	270	0.804	306	0.837	342	0.818		
19	0.382	55	0.328	91	0.308	127	0.365	163	0.794	199	0.839	235	0.736	271	0.791	307	0.822	343	0.811		
20	0.370	56	0.330	92	0.308	128	0.372	164	0.798	200	0.855	236	0.755	272	0.778	308	0.808	344	0.804		
21	0.365	57	0.332	93	0.308	129	0.380	165	0.803	201	0.861	237	0.775	273	0.764	309	0.794	345	0.797		
22	0.361	58	0.334	94	0.309	130	0.387	166	0.807	202	0.868	238	0.794	274	0.751	310	0.779	346	0.790		
23	0.357	59	0.336	95	0.309	131	0.400	167	0.812	203	0.874	239	0.814	275	0.738	311	0.769	347	0.783		
24	0.353	60	0.338	96	0.309	132	0.413	168	0.816	204	0.881	240	0.834	276	0.725	312	0.758	348	0.776		
25	0.348	61	0.338	97	0.310	133	0.425	169	0.821	205	0.887	241	0.850	277	0.712	313	0.748	349	0.769		
26	0.344	62	0.339	98	0.310	134	0.438	170	0.825	206	0.894	242	0.867	278	0.698	314	0.737	350	0.762		
27	0.340	63	0.339	99	0.310	135	0.451	171	0.818	207	0.900	243	0.883	279	0.685	315	0.727	351	0.750		
28	0.335	64	0.339	100	0.311	136	0.464	172	0.811	208	0.906	244	0.900	280	0.672	316	0.716	352	0.738		
29	0.331	65	0.339	101	0.310	137	0.477	173	0.804	209	0.913	245	0.917	281	0.687	317	0.706	353	0.726		
30	0.327	66	0.339	102	0.309	138	0.489	174	0.796	210	0.919	246	0.933	282	0.702	318	0.695	354	0.714		
31	0.324	67	0.340	103	0.308	139	0.502	175	0.789	211	0.901	247	0.950	283	0.717	319	0.685	355	0.702		
32	0.322	68	0.340	104	0.307	140	0.515	176	0.782	212	0.882	248	0.967	284	0.733	320	0.674	356	0.690		
33	0.319	69	0.340	105	0.306	141	0.530	177	0.775	213	0.864	249	0.983	285	0.748	321	0.684	357	0.678		
34	0.317	70	0.340	106	0.305	142	0.545	178	0.767	214	0.845	250	1.000	286	0.763	322	0.693	358	0.666		
35	0.314	71	0.340	107	0.304	143	0.560	179	0.760	215	0.827	251	1.000	287	0.778	323	0.703	359	0.654		

This document contains proprietary and confidential information of Dielectric. It is to be used solely for the purpose for which it is provided. No disclosure, reproduction, or use of this document or any part of it may be made without the written permission of Dielectric.

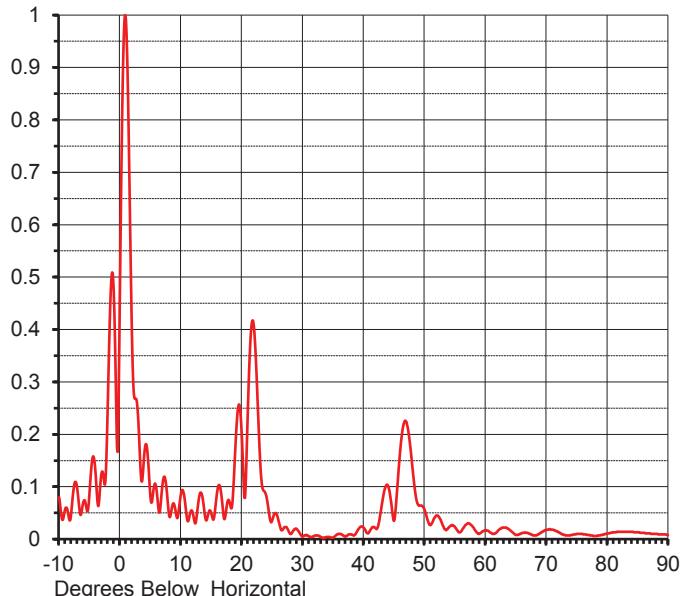
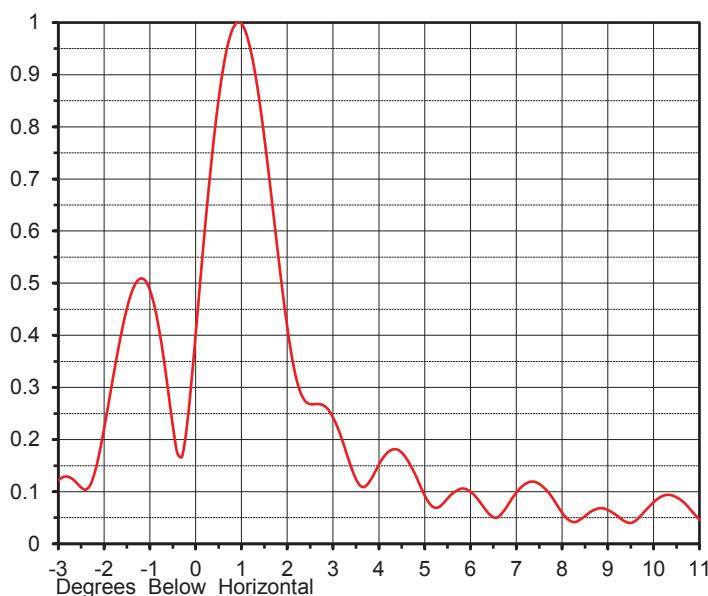
## ELEVATION PATTERN

Proposal No. **C-70021**  
 Date **20-Mar-17**  
 Call Letters **WDKY**  
 Channel **19**  
 Frequency **503 MHz**  
 Antenna Type **TUA-C4SP-14/42H-1-T**

RMS Directivity at Main Lobe  
 RMS Directivity at Horizontal

Beam Tilt **0.80 deg**  
 Pattern Number **14U241080-503**

**Calculated**



Angle	Field								
-10.0	0.080	10.0	0.087	30.0	0.005	50.0	0.055	70.0	0.018
-9.0	0.058	11.0	0.038	31.0	0.005	51.0	0.027	71.0	0.018
-8.0	0.053	12.0	0.046	32.0	0.007	52.0	0.045	72.0	0.013
-7.0	0.093	13.0	0.082	33.0	0.004	53.0	0.025	73.0	0.008
-6.0	0.072	14.0	0.040	34.0	0.004	54.0	0.023	74.0	0.008
-5.0	0.092	15.0	0.048	35.0	0.003	55.0	0.022	75.0	0.010
-4.0	0.121	16.0	0.095	36.0	0.010	56.0	0.015	76.0	0.009
-3.0	0.128	17.0	0.043	37.0	0.005	57.0	0.030	77.0	0.008
-2.0	0.270	18.0	0.069	38.0	0.009	58.0	0.022	78.0	0.006
-1.0	0.456	19.0	0.193	39.0	0.017	59.0	0.011	79.0	0.008
0.0	0.504	20.0	0.190	40.0	0.021	60.0	0.017	80.0	0.011
1.0	0.980	21.0	0.260	41.0	0.016	61.0	0.011	81.0	0.013
2.0	0.359	22.0	0.400	42.0	0.020	62.0	0.016	82.0	0.014
3.0	0.223	23.0	0.146	43.0	0.069	63.0	0.022	83.0	0.014
4.0	0.166	24.0	0.082	44.0	0.101	64.0	0.017	84.0	0.014
5.0	0.078	25.0	0.037	45.0	0.036	65.0	0.008	85.0	0.013
6.0	0.092	26.0	0.035	46.0	0.173	66.0	0.012	86.0	0.012
7.0	0.108	27.0	0.023	47.0	0.223	67.0	0.011	87.0	0.011
8.0	0.049	28.0	0.010	48.0	0.134	68.0	0.007	88.0	0.010
9.0	0.060	29.0	0.019	49.0	0.064	69.0	0.012	89.0	0.009
									90.0 0.000

This document contains proprietary and confidential information of Dielectric. It is to be used solely for the purpose for which it is provided. No disclosure, reproduction, or use of this document or any part of it may be made without the written permission of Dielectric.