

## AZIMUTH PATTERN Horizontal Polarization

Proposal No. **C-70516**  
 Date **23-Mar-17**  
 Call Letters **WZDX**  
 Channel **18**  
 Frequency **497 MHz**  
 Antenna Type **TUD-S5B-14/70H-1-T**  
 Gain **1.86 (2.7dB)**  
 Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.626	36	0.557	72	0.774	108	0.746	144	0.626	180	0.557	216	0.774	252	0.763	288	0.820
1	0.608	37	0.573	73	0.766	109	0.752	145	0.608	181	0.573	217	0.766	253	0.776	289	0.805
2	0.590	38	0.590	74	0.759	110	0.759	146	0.590	182	0.590	218	0.759	254	0.790	290	0.790
3	0.573	39	0.608	75	0.752	111	0.766	147	0.573	183	0.608	219	0.752	255	0.805	291	0.776
4	0.557	40	0.626	76	0.746	112	0.774	148	0.557	184	0.626	220	0.746	256	0.820	292	0.763
5	0.542	41	0.645	77	0.740	113	0.783	149	0.542	185	0.645	221	0.740	257	0.836	293	0.751
6	0.527	42	0.664	78	0.736	114	0.791	150	0.527	186	0.664	222	0.735	258	0.853	294	0.740
7	0.514	43	0.683	79	0.731	115	0.800	151	0.514	187	0.683	223	0.730	259	0.869	295	0.731
8	0.502	44	0.701	80	0.728	116	0.808	152	0.502	188	0.701	224	0.726	260	0.885	296	0.723
9	0.492	45	0.720	81	0.725	117	0.817	153	0.492	189	0.720	225	0.723	261	0.901	297	0.716
10	0.483	46	0.737	82	0.723	118	0.825	154	0.483	190	0.737	226	0.720	262	0.917	298	0.710
11	0.475	47	0.754	83	0.721	119	0.832	155	0.475	191	0.754	227	0.717	263	0.931	299	0.706
12	0.469	48	0.770	84	0.720	120	0.839	156	0.469	192	0.770	228	0.715	264	0.945	300	0.703
13	0.463	49	0.784	85	0.720	121	0.844	157	0.463	193	0.784	229	0.713	265	0.957	301	0.701
14	0.459	50	0.798	86	0.719	122	0.849	158	0.459	194	0.798	230	0.712	266	0.968	302	0.700
15	0.456	51	0.810	87	0.719	123	0.852	159	0.456	195	0.810	231	0.710	267	0.977	303	0.699
16	0.454	52	0.821	88	0.719	124	0.855	160	0.454	196	0.821	232	0.709	268	0.985	304	0.700
17	0.452	53	0.831	89	0.719	125	0.856	161	0.452	197	0.831	233	0.708	269	0.992	305	0.700
18	0.451	54	0.839	90	0.719	126	0.855	162	0.451	198	0.839	234	0.706	270	0.996	306	0.701
19	0.450	55	0.845	91	0.720	127	0.853	163	0.450	199	0.845	235	0.705	271	0.999	307	0.702
20	0.450	56	0.850	92	0.720	128	0.850	164	0.450	200	0.850	236	0.704	272	1.000	308	0.704
21	0.450	57	0.853	93	0.720	129	0.845	165	0.450	201	0.853	237	0.702	273	0.999	309	0.705
22	0.451	58	0.855	94	0.719	130	0.839	166	0.451	202	0.855	238	0.701	274	0.996	310	0.706
23	0.452	59	0.856	95	0.719	131	0.831	167	0.452	203	0.856	239	0.700	275	0.992	311	0.708
24	0.454	60	0.855	96	0.719	132	0.821	168	0.454	204	0.855	240	0.700	276	0.985	312	0.709
25	0.456	61	0.852	97	0.719	133	0.810	169	0.456	205	0.852	241	0.699	277	0.977	313	0.710
26	0.459	62	0.849	98	0.719	134	0.798	170	0.459	206	0.849	242	0.700	278	0.968	314	0.712
27	0.463	63	0.844	99	0.720	135	0.784	171	0.463	207	0.844	243	0.701	279	0.957	315	0.713
28	0.469	64	0.839	100	0.720	136	0.770	172	0.469	208	0.839	244	0.703	280	0.945	316	0.715
29	0.475	65	0.832	101	0.721	137	0.754	173	0.475	209	0.832	245	0.706	281	0.931	317	0.717
30	0.483	66	0.825	102	0.723	138	0.737	174	0.483	210	0.825	246	0.710	282	0.917	318	0.720
31	0.492	67	0.817	103	0.725	139	0.720	175	0.492	211	0.817	247	0.716	283	0.901	319	0.723
32	0.502	68	0.808	104	0.728	140	0.701	176	0.502	212	0.808	248	0.723	284	0.885	320	0.726
33	0.514	69	0.800	105	0.731	141	0.683	177	0.514	213	0.800	249	0.731	285	0.869	321	0.730
34	0.527	70	0.791	106	0.736	142	0.664	178	0.527	214	0.791	250	0.740	286	0.853	322	0.735
35	0.542	71	0.783	107	0.740	143	0.645	179	0.542	215	0.783	251	0.751	287	0.836	323	0.740

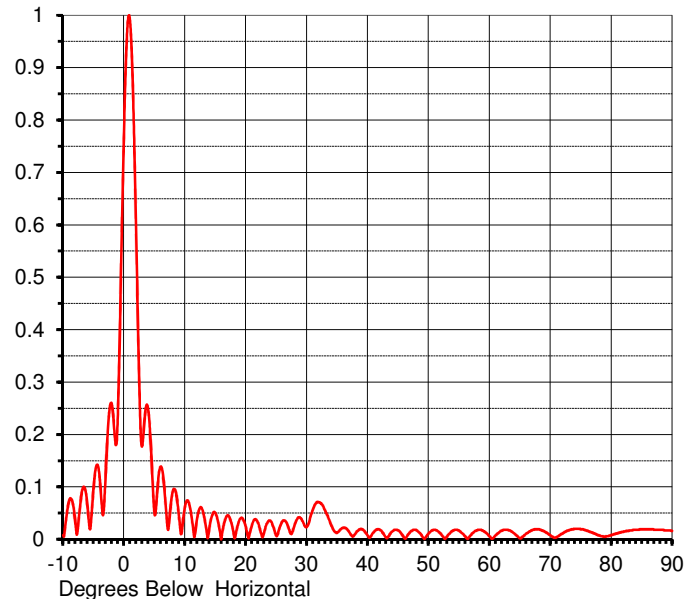
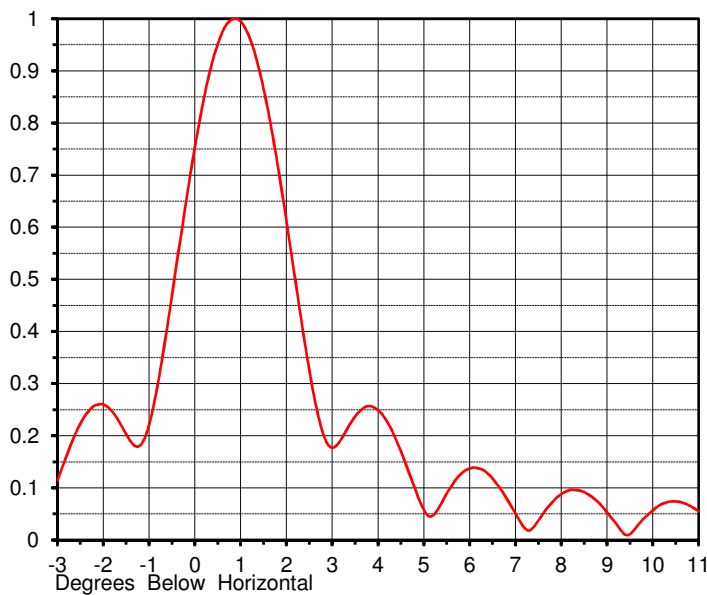
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## ELEVATION PATTERN

Proposal No. **C-70516**  
 Date **23-Mar-17**  
 Call Letters **WZDX**  
 Channel **18**  
 Frequency **497 MHz**  
 Antenna Type **TUD-S5B-14/70H-1-T**

RMS Directivity at Main Lobe **30.1 ( 14.79 dB )**  
 RMS Directivity at Horizontal **19.4 ( 12.88 dB )**  
**Calculated**

Beam Tilt **0.80 deg**  
 Pattern Number



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.008	10.0	0.064	30.0	0.024	50.0	0.012	70.0	0.007
-9.0	0.075	11.0	0.047	31.0	0.058	51.0	0.018	71.0	0.004
-8.0	0.029	12.0	0.042	32.0	0.070	52.0	0.010	72.0	0.012
-7.0	0.087	13.0	0.049	33.0	0.054	53.0	0.006	73.0	0.017
-6.0	0.059	14.0	0.023	34.0	0.026	54.0	0.017	74.0	0.020
-5.0	0.103	15.0	0.049	35.0	0.013	55.0	0.016	75.0	0.019
-4.0	0.113	16.0	0.007	36.0	0.022	56.0	0.005	76.0	0.016
-3.0	0.138	17.0	0.046	37.0	0.012	57.0	0.010	77.0	0.012
-2.0	0.255	18.0	0.008	38.0	0.012	58.0	0.018	78.0	0.007
-1.0	0.258	19.0	0.039	39.0	0.019	59.0	0.015	79.0	0.005
0.0	0.802	20.0	0.020	40.0	0.006	60.0	0.005	80.0	0.008
1.0	0.982	21.0	0.029	41.0	0.014	61.0	0.008	81.0	0.012
2.0	0.554	22.0	0.030	42.0	0.018	62.0	0.017	82.0	0.015
3.0	0.182	23.0	0.016	43.0	0.003	63.0	0.018	83.0	0.017
4.0	0.240	24.0	0.035	44.0	0.015	64.0	0.011	84.0	0.018
5.0	0.046	25.0	0.006	45.0	0.017	65.0	0.002	85.0	0.019
6.0	0.139	26.0	0.035	46.0	0.002	66.0	0.011	86.0	0.019
7.0	0.036	27.0	0.020	47.0	0.015	67.0	0.018	87.0	0.018
8.0	0.093	28.0	0.029	48.0	0.017	68.0	0.019	88.0	0.018
9.0	0.042	29.0	0.040	49.0	0.004	69.0	0.015	89.0	0.017
								90.0	0.016

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