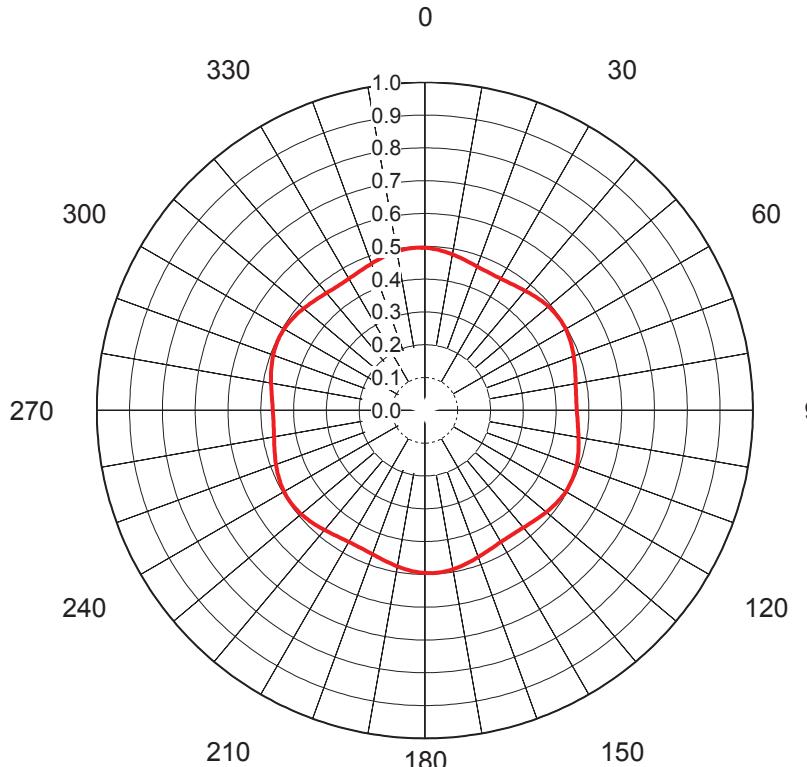


AZIMUTH PATTERN Horizontal Polarization

Proposal No.	C-70004-4
Date	1-May-18
Call Letters	WGXA
Channel	26
Frequency	545 MHz
Antenna Type	TFU-28JTH/VP-R O6
Gain	1.09 (0.36dB)
Calculated	
Circularity	+/- 1.0 dB

Deg	Value																		
0	0.998	36	0.936	72	0.959	108	0.982	144	0.922	180	0.998	216	0.936	252	0.959	288	0.982	324	0.922
1	0.996	37	0.939	73	0.954	109	0.986	145	0.921	181	0.996	217	0.939	253	0.954	289	0.986	325	0.921
2	0.994	38	0.943	74	0.950	110	0.989	146	0.921	182	0.994	218	0.943	254	0.950	290	0.989	326	0.921
3	0.992	39	0.946	75	0.946	111	0.992	147	0.921	183	0.992	219	0.946	255	0.946	291	0.992	327	0.921
4	0.989	40	0.950	76	0.943	112	0.994	148	0.921	184	0.989	220	0.950	256	0.943	292	0.994	328	0.921
5	0.986	41	0.954	77	0.939	113	0.996	149	0.921	185	0.986	221	0.954	257	0.939	293	0.996	329	0.921
6	0.982	42	0.959	78	0.936	114	0.998	150	0.922	186	0.982	222	0.959	258	0.936	294	0.998	330	0.922
7	0.979	43	0.963	79	0.933	115	0.999	151	0.924	187	0.979	223	0.963	259	0.933	295	0.999	331	0.924
8	0.975	44	0.967	80	0.930	116	1.000	152	0.925	188	0.975	224	0.967	260	0.930	296	1.000	332	0.925
9	0.971	45	0.971	81	0.928	117	1.000	153	0.928	189	0.971	225	0.971	261	0.928	297	1.000	333	0.928
10	0.967	46	0.975	82	0.925	118	1.000	154	0.930	190	0.967	226	0.975	262	0.925	298	1.000	334	0.930
11	0.963	47	0.979	83	0.924	119	0.999	155	0.933	191	0.963	227	0.979	263	0.924	299	0.999	335	0.933
12	0.959	48	0.982	84	0.922	120	0.998	156	0.936	192	0.959	228	0.982	264	0.922	300	0.998	336	0.936
13	0.954	49	0.986	85	0.921	121	0.996	157	0.939	193	0.954	229	0.986	265	0.921	301	0.996	337	0.939
14	0.950	50	0.989	86	0.921	122	0.994	158	0.943	194	0.950	230	0.989	266	0.921	302	0.994	338	0.943
15	0.946	51	0.992	87	0.921	123	0.992	159	0.946	195	0.946	231	0.992	267	0.921	303	0.992	339	0.946
16	0.943	52	0.994	88	0.921	124	0.989	160	0.950	196	0.943	232	0.994	268	0.921	304	0.989	340	0.950
17	0.939	53	0.996	89	0.921	125	0.986	161	0.954	197	0.939	233	0.996	269	0.921	305	0.986	341	0.954
18	0.936	54	0.998	90	0.922	126	0.982	162	0.959	198	0.936	234	0.998	270	0.922	306	0.982	342	0.959
19	0.933	55	0.999	91	0.924	127	0.979	163	0.963	199	0.933	235	0.999	271	0.924	307	0.979	343	0.963
20	0.930	56	1.000	92	0.925	128	0.975	164	0.967	200	0.930	236	1.000	272	0.925	308	0.975	344	0.967
21	0.928	57	1.000	93	0.928	129	0.971	165	0.971	201	0.928	237	1.000	273	0.928	309	0.971	345	0.971
22	0.925	58	1.000	94	0.930	130	0.967	166	0.975	202	0.925	238	1.000	274	0.930	310	0.967	346	0.975
23	0.924	59	0.999	95	0.933	131	0.963	167	0.979	203	0.924	239	0.999	275	0.933	311	0.963	347	0.979
24	0.922	60	0.998	96	0.936	132	0.959	168	0.982	204	0.922	240	0.998	276	0.936	312	0.959	348	0.982
25	0.921	61	0.996	97	0.939	133	0.954	169	0.986	205	0.921	241	0.996	277	0.939	313	0.954	349	0.986
26	0.921	62	0.994	98	0.943	134	0.950	170	0.989	206	0.921	242	0.994	278	0.943	314	0.950	350	0.989
27	0.921	63	0.992	99	0.946	135	0.946	171	0.992	207	0.921	243	0.992	279	0.946	315	0.946	351	0.992
28	0.921	64	0.989	100	0.950	136	0.943	172	0.994	208	0.921	244	0.989	280	0.950	316	0.943	352	0.994
29	0.921	65	0.986	101	0.954	137	0.939	173	0.996	209	0.921	245	0.986	281	0.954	317	0.939	353	0.996
30	0.922	66	0.982	102	0.959	138	0.936	174	0.998	210	0.922	246	0.982	282	0.959	318	0.936	354	0.998
31	0.924	67	0.979	103	0.963	139	0.933	175	0.999	211	0.924	247	0.979	283	0.963	319	0.933	355	0.999
32	0.925	68	0.975	104	0.967	140	0.930	176	1.000	212	0.925	248	0.975	284	0.967	320	0.930	356	1.000
33	0.928	69	0.971	105	0.971	141	0.928	177	1.000	213	0.928	249	0.971	285	0.971	321	0.928	357	1.000
34	0.930	70	0.967	106	0.975	142	0.925	178	1.000	214	0.930	250	0.967	286	0.975	322	0.925	358	1.000
35	0.933	71	0.963	107	0.979	143	0.924	179	0.999	215	0.933	251	0.963	287	0.979	323	0.924	359	0.999

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.



AZIMUTH PATTERN Vertical Polarization

Proposal No.	C-70004-4
Date	1-May-18
Call Letters	WGXA
Channel	26
Frequency	545 MHz
Antenna Type	TFU-28JTH/VP-R O6
Gain	1.07 (0.3dB)
Calculated	
Circularity	+/- 1.0 dB

Deg	Value																		
0	0.496	36	0.469	72	0.479	108	0.489	144	0.463	180	0.496	216	0.469	252	0.479	288	0.489	324	0.463
1	0.495	37	0.471	73	0.478	109	0.491	145	0.463	181	0.495	217	0.471	253	0.478	289	0.491	325	0.463
2	0.494	38	0.473	74	0.476	110	0.492	146	0.463	182	0.494	218	0.473	254	0.476	290	0.492	326	0.463
3	0.493	39	0.474	75	0.474	111	0.493	147	0.463	183	0.493	219	0.474	255	0.474	291	0.493	327	0.463
4	0.492	40	0.476	76	0.472	112	0.494	148	0.463	184	0.492	220	0.476	256	0.472	292	0.494	328	0.463
5	0.491	41	0.478	77	0.471	113	0.495	149	0.463	185	0.491	221	0.478	257	0.471	293	0.495	329	0.463
6	0.489	42	0.479	78	0.469	114	0.496	150	0.463	186	0.489	222	0.479	258	0.469	294	0.496	330	0.463
7	0.488	43	0.481	79	0.468	115	0.496	151	0.464	187	0.488	223	0.481	259	0.468	295	0.496	331	0.464
8	0.486	44	0.483	80	0.467	116	0.496	152	0.465	188	0.486	224	0.483	260	0.467	296	0.496	332	0.465
9	0.485	45	0.485	81	0.466	117	0.496	153	0.466	189	0.485	225	0.485	261	0.466	297	0.496	333	0.466
10	0.483	46	0.486	82	0.465	118	0.496	154	0.467	190	0.483	226	0.486	262	0.465	298	0.496	334	0.467
11	0.481	47	0.488	83	0.464	119	0.496	155	0.468	191	0.481	227	0.488	263	0.464	299	0.496	335	0.468
12	0.479	48	0.489	84	0.463	120	0.496	156	0.469	192	0.479	228	0.489	264	0.463	300	0.496	336	0.469
13	0.478	49	0.491	85	0.463	121	0.496	157	0.471	193	0.478	229	0.491	265	0.463	301	0.495	337	0.471
14	0.476	50	0.492	86	0.463	122	0.494	158	0.473	194	0.476	230	0.492	266	0.463	302	0.494	338	0.473
15	0.474	51	0.493	87	0.463	123	0.493	159	0.474	195	0.474	231	0.493	267	0.463	303	0.493	339	0.474
16	0.472	52	0.494	88	0.463	124	0.492	160	0.476	196	0.472	232	0.494	268	0.463	304	0.492	340	0.476
17	0.471	53	0.495	89	0.463	125	0.491	161	0.478	197	0.471	233	0.495	269	0.463	305	0.491	341	0.478
18	0.469	54	0.496	90	0.463	126	0.489	162	0.479	198	0.469	234	0.496	270	0.463	306	0.489	342	0.479
19	0.468	55	0.496	91	0.464	127	0.488	163	0.481	199	0.468	235	0.496	271	0.464	307	0.488	343	0.481
20	0.467	56	0.496	92	0.465	128	0.486	164	0.483	200	0.467	236	0.496	272	0.465	308	0.486	344	0.483
21	0.466	57	0.496	93	0.466	129	0.485	165	0.485	201	0.466	237	0.496	273	0.466	309	0.485	345	0.485
22	0.465	58	0.496	94	0.467	130	0.483	166	0.486	202	0.465	238	0.496	274	0.467	310	0.483	346	0.486
23	0.464	59	0.496	95	0.468	131	0.481	167	0.488	203	0.464	239	0.496	275	0.468	311	0.481	347	0.488
24	0.463	60	0.496	96	0.469	132	0.479	168	0.489	204	0.463	240	0.496	276	0.469	312	0.479	348	0.489
25	0.463	61	0.495	97	0.471	133	0.478	169	0.491	205	0.463	241	0.495	277	0.471	313	0.478	349	0.491
26	0.463	62	0.494	98	0.473	134	0.476	170	0.492	206	0.463	242	0.494	278	0.473	314	0.476	350	0.492
27	0.463	63	0.493	99	0.474	135	0.474	171	0.493	207	0.463	243	0.493	279	0.474	315	0.474	351	0.493
28	0.463	64	0.492	100	0.476	136	0.472	172	0.494	208	0.463	244	0.492	280	0.476	316	0.472	352	0.494
29	0.463	65	0.491	101	0.478	137	0.471	173	0.495	209	0.463	245	0.491	281	0.478	317	0.471	353	0.495
30	0.463	66	0.489	102	0.479	138	0.469	174	0.496	210	0.463	246	0.489	282	0.479	318	0.469	354	0.496
31	0.464	67	0.488	103	0.481	139	0.468	175	0.496	211	0.464	247	0.488	283	0.481	319	0.468	355	0.496
32	0.465	68	0.486	104	0.483	140	0.467	176	0.496	212	0.465	248	0.486	284	0.483	320	0.467	356	0.496
33	0.466	69	0.485	105	0.485	141	0.466	177	0.496	213	0.466	249	0.485	285	0.485	321	0.466	357	0.496
34	0.467	70	0.483	106	0.486	142	0.465	178	0.496	214	0.467	250	0.483	286	0.486	322	0.465	358	0.496
35	0.468	71	0.481	107	0.488	143	0.464	179	0.496	215	0.468	251	0.481	287	0.488	323	0.464	359	0.496

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.

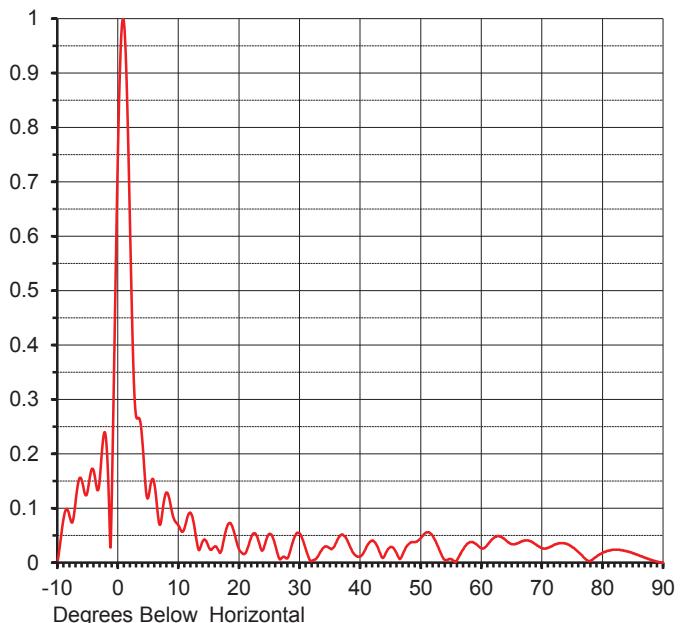
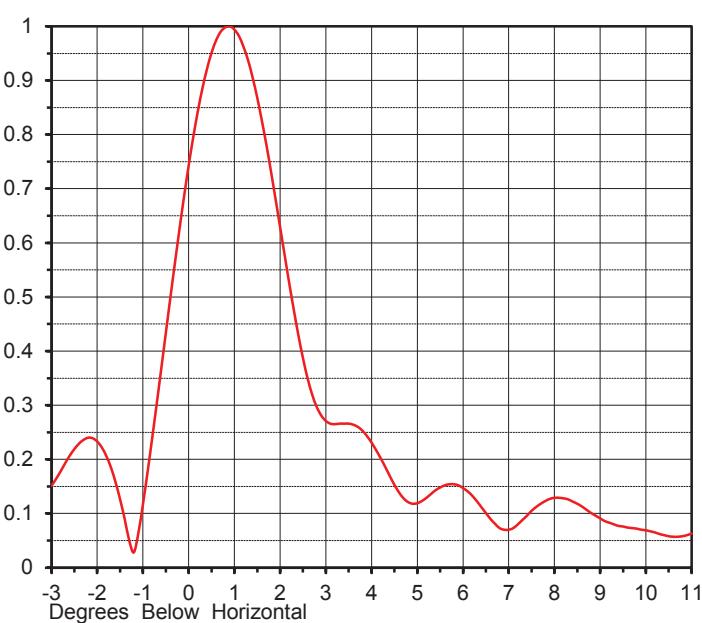
ELEVATION PATTERN

Proposal No. **C-70004-4**
 Date **1-May-18**
 Call Letters **WGXA**
 Channel **26**
 Frequency **545 MHz**
 Antenna Type **TFU-28JTH/VP-R O6**

RMS Directivity at Main Lobe
 RMS Directivity at Horizontal

26.5 (14.23 dB)
16.7 (12.23 dB)
Calculated

Beam Tilt **0.75 deg**
 Pattern Number **28J265075**



Angle	Field								
-10.0	0.005	10.0	0.067	30.0	0.053	50.0	0.046	70.0	0.027
-9.0	0.084	11.0	0.067	31.0	0.023	51.0	0.056	71.0	0.028
-8.0	0.083	12.0	0.090	32.0	0.004	52.0	0.047	72.0	0.033
-7.0	0.119	13.0	0.035	33.0	0.013	53.0	0.023	73.0	0.036
-6.0	0.150	14.0	0.041	34.0	0.029	54.0	0.004	74.0	0.035
-5.0	0.137	15.0	0.027	35.0	0.026	55.0	0.006	75.0	0.028
-4.0	0.165	16.0	0.030	36.0	0.038	56.0	0.007	76.0	0.019
-3.0	0.164	17.0	0.022	37.0	0.052	57.0	0.026	77.0	0.008
-2.0	0.222	18.0	0.068	38.0	0.036	58.0	0.038	78.0	0.004
-1.0	0.176	19.0	0.060	39.0	0.015	59.0	0.035	79.0	0.012
0.0	0.795	20.0	0.023	40.0	0.012	60.0	0.026	80.0	0.019
1.0	0.982	21.0	0.018	41.0	0.030	61.0	0.034	81.0	0.022
2.0	0.577	22.0	0.049	42.0	0.041	62.0	0.046	82.0	0.024
3.0	0.266	23.0	0.045	43.0	0.023	63.0	0.048	83.0	0.023
4.0	0.217	24.0	0.027	44.0	0.014	64.0	0.041	84.0	0.021
5.0	0.123	25.0	0.053	45.0	0.029	65.0	0.034	85.0	0.017
6.0	0.141	26.0	0.028	46.0	0.016	66.0	0.036	86.0	0.013
7.0	0.073	27.0	0.009	47.0	0.017	67.0	0.041	87.0	0.009
8.0	0.129	28.0	0.010	48.0	0.035	68.0	0.040	88.0	0.005
9.0	0.086	29.0	0.045	49.0	0.038	69.0	0.033	89.0	0.002
								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.