Dielectric®

AZIMUTH PATTERN
Horizontal Polarization
In Free Space

Proposal No.	**C-70558-5**
Date	**27-May-21**
Call Letters	**WIPR**
Channel	**26**
Frequency	**545 MHz**
Antenna Type	**TFU-26JSC/VP-R CT150**
Gain	**1.5 (1.75dB)**
	Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.880	36	0.950	72	0.950	108	0.580	144	0.420	180	0.290	216	0.900	252	0.990	288	0.850	324	0.990
1	0.870	37	0.960	73	0.950	109	0.560	145	0.420	181	0.310	217	0.900	253	0.990	289	0.850	325	0.990
2	0.870	38	0.960	74	0.940	110	0.540	146	0.430	182	0.340	218	0.910	254	0.990	290	0.850	326	0.990
3	0.870	39	0.970	75	0.940	111	0.520	147	0.440	183	0.360	219	0.920	255	0.990	291	0.850	327	0.990
4	0.860	40	0.970	76	0.940	112	0.490	148	0.450	184	0.390	220	0.920	256	0.980	292	0.850	328	1.000
5	0.860	41	0.980	77	0.930	113	0.470	149	0.460	185	0.420	221	0.920	257	0.980	293	0.850	329	1.000
6	0.860	42	0.980	78	0.930	114	0.440	150	0.470	186	0.440	222	0.930	258	0.980	294	0.860	330	1.000
7	0.850	43	0.980	79	0.920	115	0.420	151	0.460	187	0.470	223	0.930	259	0.980	295	0.860	331	1.000
8	0.850	44	0.980	80	0.920	116	0.390	152	0.450	188	0.490	224	0.940	260	0.970	296	0.860	332	1.000
9	0.850	45	0.990	81	0.920	117	0.360	153	0.440	189	0.520	225	0.940	261	0.970	297	0.870	333	0.990
10	0.850	46	0.990	82	0.910	118	0.340	154	0.430	190	0.540	226	0.940	262	0.960	298	0.870	334	0.990
11	0.850	47	0.990	83	0.900	119	0.310	155	0.420	191	0.560	227	0.950	263	0.960	299	0.870	335	0.990
12	0.850	48	0.990	84	0.900	120	0.290	156	0.420	192	0.580	228	0.950	264	0.950	300	0.880	336	0.990
13	0.850	49	0.990	85	0.890	121	0.280	157	0.410	193	0.600	229	0.950	265	0.950	301	0.880	337	0.990
14	0.850	50	1.000	86	0.890	122	0.270	158	0.400	194	0.620	230	0.960	266	0.940	302	0.890	338	0.980
15	0.850	51	1.000	87	0.880	123	0.270	159	0.390	195	0.640	231	0.960	267	0.940	303	0.890	339	0.980
16	0.860	52	0.990	88	0.870	124	0.260	160	0.380	196	0.660	232	0.960	268	0.930	304	0.900	340	0.980
17	0.860	53	0.990	89	0.870	125	0.250	161	0.370	197	0.680	233	0.970	269	0.920	305	0.900	341	0.980
18	0.860	54	0.990	90	0.860	126	0.240	162	0.350	198	0.700	234	0.970	270	0.920	306	0.910	342	0.970
19	0.860	55	0.990	91	0.850	127	0.240	163	0.330	199	0.720	235	0.970	271	0.910	307	0.910	343	0.970
20	0.860	56	0.990	92	0.840	128	0.230	164	0.320	200	0.740	236	0.970	272	0.910	308	0.920	344	0.960
21	0.870	57	0.990	93	0.830	129	0.220	165	0.300	201	0.760	237	0.980	273	0.900	309	0.930	345	0.960
22	0.880	58	0.990	94	0.820	130	0.210	166	0.280	202	0.770	238	0.980	274	0.900	310	0.930	346	0.950
23	0.880	59	0.990	95	0.800	131	0.230	167	0.270	203	0.780	239	0.980	275	0.890	311	0.940	347	0.950
24	0.890	60	0.990	96	0.790	132	0.250	168	0.250	204	0.790	240	0.990	276	0.890	312	0.940	348	0.940
25	0.890	61	0.980	97	0.780	133	0.270	169	0.230	205	0.800	241	0.990	277	0.880	313	0.950	349	0.940
26	0.900	62	0.980	98	0.770	134	0.280	170	0.210	206	0.820	242	0.990	278	0.880	314	0.950	350	0.930
27	0.900	63	0.980	99	0.760	135	0.300	171	0.220	207	0.830	243	0.990	279	0.870	315	0.960	351	0.930
28	0.910	64	0.970	100	0.740	136	0.320	172	0.230	208	0.840	244	0.990	280	0.860	316	0.960	352	0.920
29	0.910	65	0.970	101	0.720	137	0.330	173	0.240	209	0.850	245	0.990	281	0.860	317	0.970	353	0.910
30	0.920	66	0.970	102	0.700	138	0.350	174	0.240	210	0.860	246	0.990	282	0.860	318	0.970	354	0.910
31	0.920	67	0.970	103	0.680	139	0.370	175	0.250	211	0.870	247	0.990	283	0.860	319	0.980	355	0.900
32	0.930	68	0.960	104	0.660	140	0.380	176	0.260	212	0.870	248	0.990	284	0.860	320	0.980	356	0.900
33	0.940	69	0.960	105	0.640	141	0.390	177	0.270	213	0.880	249	1.000	285	0.850	321	0.980	357	0.890
34	0.940	70	0.960	106	0.620	142	0.400	178	0.270	214	0.890	250	1.000	286	0.850	322	0.980	358	0.890
35	0.950	71	0.950	107	0.600	143	0.410	179	0.280	215	0.890	251	0.990	287	0.850	323	0.990	359	0.880

Trusted for Decades. Ready for Tomorrow.

AZIMUTH PATTERN
Vertical Polarization
In Free Space

Proposal No.	**C-70558-5**
Date	**27-May-21**
Call Letters	**WIPR**
Channel	**26**
Frequency	**545 MHz**
Antenna Type	**TFU-26JSC/VP-R CT150**
Gain	**2.12 (3.27dB)**
	Calculated
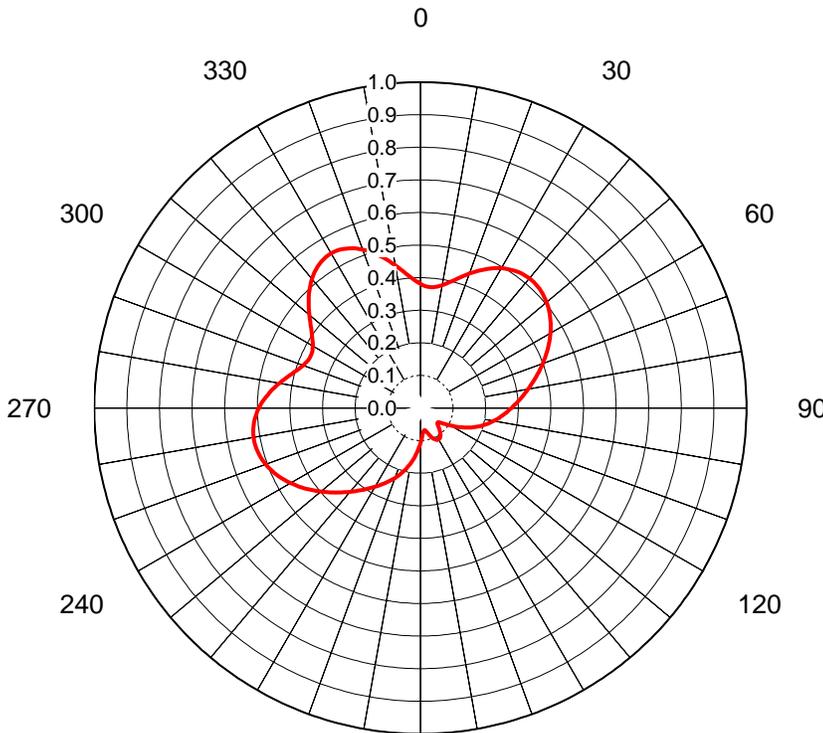
Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.381	36	0.514	72	0.386	108	0.185	144	0.104	180	0.108	216	0.312	252	0.511	288	0.391	324	0.536
1	0.378	37	0.516	73	0.380	109	0.179	145	0.106	181	0.115	217	0.318	253	0.513	289	0.387	325	0.540
2	0.375	38	0.518	74	0.373	110	0.173	146	0.108	182	0.121	218	0.324	254	0.515	290	0.383	326	0.543
3	0.373	39	0.519	75	0.367	111	0.166	147	0.110	183	0.128	219	0.330	255	0.517	291	0.379	327	0.545
4	0.372	40	0.519	76	0.361	112	0.160	148	0.111	184	0.134	220	0.336	256	0.518	292	0.376	328	0.546
5	0.372	41	0.520	77	0.354	113	0.154	149	0.111	185	0.141	221	0.342	257	0.519	293	0.374	329	0.547
6	0.373	42	0.519	78	0.348	114	0.147	150	0.111	186	0.147	222	0.348	258	0.519	294	0.373	330	0.548
7	0.374	43	0.519	79	0.342	115	0.141	151	0.111	187	0.154	223	0.354	259	0.520	295	0.372	331	0.547
8	0.376	44	0.518	80	0.336	116	0.134	152	0.111	188	0.160	224	0.361	260	0.519	296	0.372	332	0.546
9	0.379	45	0.517	81	0.330	117	0.128	153	0.110	189	0.166	225	0.367	261	0.519	297	0.373	333	0.545
10	0.383	46	0.515	82	0.324	118	0.121	154	0.108	190	0.173	226	0.373	262	0.518	298	0.375	334	0.543
11	0.387	47	0.513	83	0.318	119	0.115	155	0.106	191	0.179	227	0.380	263	0.516	299	0.378	335	0.540
12	0.391	48	0.511	84	0.312	120	0.108	156	0.104	192	0.185	228	0.386	264	0.514	300	0.381	336	0.536
13	0.396	49	0.508	85	0.307	121	0.102	157	0.102	193	0.190	229	0.393	265	0.512	301	0.385	337	0.533
14	0.402	50	0.505	86	0.301	122	0.096	158	0.099	194	0.196	230	0.399	266	0.509	302	0.390	338	0.528
15	0.407	51	0.502	87	0.295	123	0.091	159	0.096	195	0.202	231	0.406	267	0.506	303	0.395	339	0.523
16	0.413	52	0.498	88	0.290	124	0.086	160	0.093	196	0.207	232	0.412	268	0.503	304	0.401	340	0.517
17	0.420	53	0.494	89	0.285	125	0.081	161	0.090	197	0.213	233	0.418	269	0.499	305	0.407	341	0.511
18	0.426	54	0.490	90	0.279	126	0.077	162	0.086	198	0.218	234	0.425	270	0.495	306	0.414	342	0.505
19	0.432	55	0.486	91	0.274	127	0.074	163	0.083	199	0.223	235	0.431	271	0.491	307	0.421	343	0.498
20	0.439	56	0.481	92	0.269	128	0.071	164	0.080	200	0.229	236	0.437	272	0.486	308	0.429	344	0.491
21	0.445	57	0.476	93	0.264	129	0.070	165	0.077	201	0.234	237	0.443	273	0.481	309	0.437	345	0.484
22	0.452	58	0.471	94	0.259	130	0.069	166	0.074	202	0.239	238	0.449	274	0.475	310	0.445	346	0.476
23	0.458	59	0.466	95	0.254	131	0.069	167	0.072	203	0.244	239	0.455	275	0.470	311	0.452	347	0.468
24	0.464	60	0.460	96	0.249	132	0.070	168	0.070	204	0.249	240	0.460	276	0.464	312	0.460	348	0.460
25	0.470	61	0.455	97	0.244	133	0.072	169	0.069	205	0.254	241	0.466	277	0.458	313	0.468	349	0.452
26	0.475	62	0.449	98	0.239	134	0.074	170	0.069	206	0.259	242	0.471	278	0.452	314	0.476	350	0.445
27	0.481	63	0.443	99	0.234	135	0.077	171	0.070	207	0.264	243	0.476	279	0.445	315	0.484	351	0.437
28	0.486	64	0.437	100	0.229	136	0.080	172	0.071	208	0.269	244	0.481	280	0.439	316	0.491	352	0.429
29	0.491	65	0.431	101	0.223	137	0.083	173	0.074	209	0.274	245	0.486	281	0.432	317	0.498	353	0.421
30	0.495	66	0.425	102	0.218	138	0.086	174	0.077	210	0.279	246	0.490	282	0.426	318	0.505	354	0.414
31	0.499	67	0.418	103	0.213	139	0.090	175	0.081	211	0.285	247	0.494	283	0.420	319	0.511	355	0.407
32	0.503	68	0.412	104	0.207	140	0.093	176	0.086	212	0.290	248	0.498	284	0.413	320	0.517	356	0.401
33	0.506	69	0.406	105	0.202	141	0.096	177	0.091	213	0.295	249	0.502	285	0.407	321	0.523	357	0.395
34	0.509	70	0.399	106	0.196	142	0.099	178	0.096	214	0.301	250	0.505	286	0.402	322	0.528	358	0.390
35	0.512	71	0.393	107	0.190	143	0.102	179	0.102	215	0.306	251	0.508	287	0.396	323	0.533	359	0.385

Trusted for Decades. Ready for Tomorrow.

Dielectric®

ELEVATION PATTERN

Proposal No.	**C-70558-5**
Date	**27-May-21**
Call Letters	**WIPR**
Channel	**26**
Frequency	**545 MHz**
Antenna Type	**TFU-26JSC/VP-R CT150**

RMS Directivity at Main Lobe   **24.0 (13.80 dB)**   Beam Tilt   **1.50 deg**
RMS Directivity at Horizontal   **4.3 (6.33 dB)**   Pattern Number   **26Y240150**
Calculated
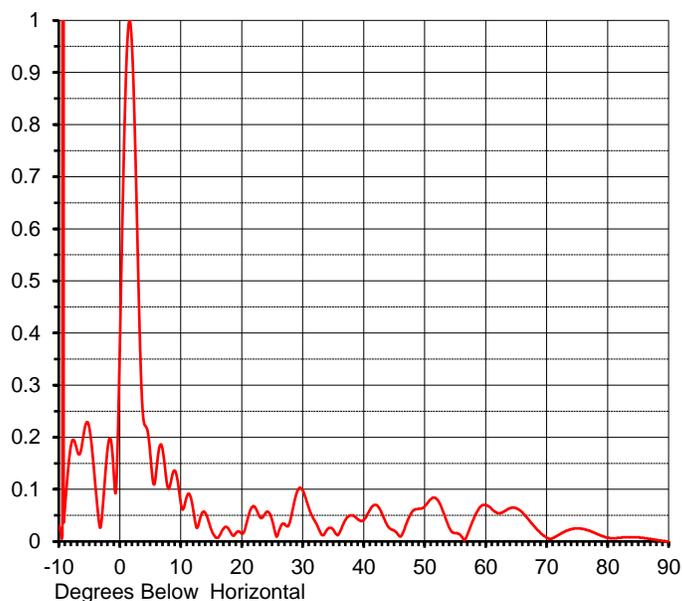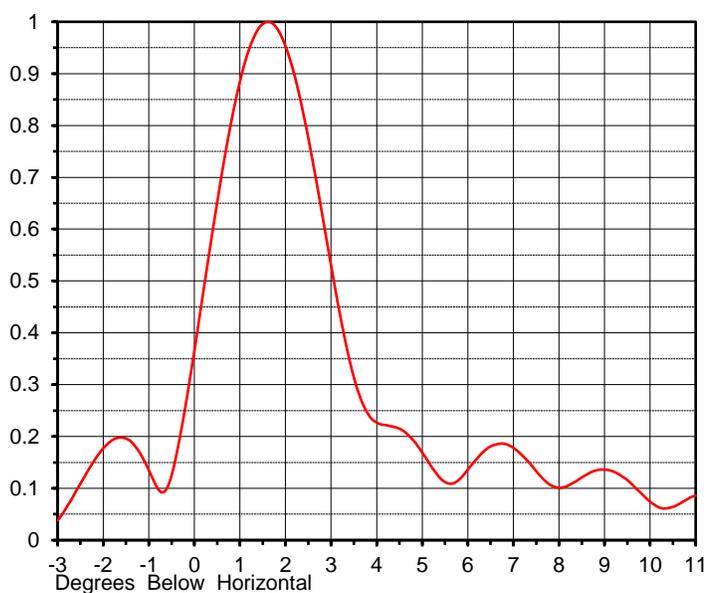
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.029	10.0	0.068	30.0	0.096	50.0	0.069	70.0	0.007
-9.0	0.078	11.0	0.089	31.0	0.061	51.0	0.082	71.0	0.007
-8.0	0.189	12.0	0.057	32.0	0.037	52.0	0.080	72.0	0.013
-7.0	0.171	13.0	0.041	33.0	0.013	53.0	0.055	73.0	0.020
-6.0	0.207	14.0	0.053	34.0	0.024	54.0	0.025	74.0	0.024
-5.0	0.212	15.0	0.020	35.0	0.021	55.0	0.016	75.0	0.025
-4.0	0.095	16.0	0.007	36.0	0.018	56.0	0.009	76.0	0.024
-3.0	0.050	17.0	0.026	37.0	0.043	57.0	0.016	77.0	0.020
-2.0	0.186	18.0	0.019	38.0	0.050	58.0	0.045	78.0	0.015
-1.0	0.116	19.0	0.017	39.0	0.042	59.0	0.066	79.0	0.010
0.0	0.423	20.0	0.015	40.0	0.042	60.0	0.070	80.0	0.007
1.0	0.919	21.0	0.049	41.0	0.062	61.0	0.061	81.0	0.006
2.0	0.927	22.0	0.067	42.0	0.070	62.0	0.054	82.0	0.007
3.0	0.480	23.0	0.045	43.0	0.051	63.0	0.058	83.0	0.008
4.0	0.223	24.0	0.057	44.0	0.027	64.0	0.064	84.0	0.008
5.0	0.156	25.0	0.036	45.0	0.020	65.0	0.063	85.0	0.008
6.0	0.147	26.0	0.020	46.0	0.010	66.0	0.055	86.0	0.006
7.0	0.171	27.0	0.033	47.0	0.037	67.0	0.041	87.0	0.005
8.0	0.102	28.0	0.047	48.0	0.059	68.0	0.027	88.0	0.003
9.0	0.135	29.0	0.096	49.0	0.063	69.0	0.015	89.0	0.001
								90.0	0.000

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