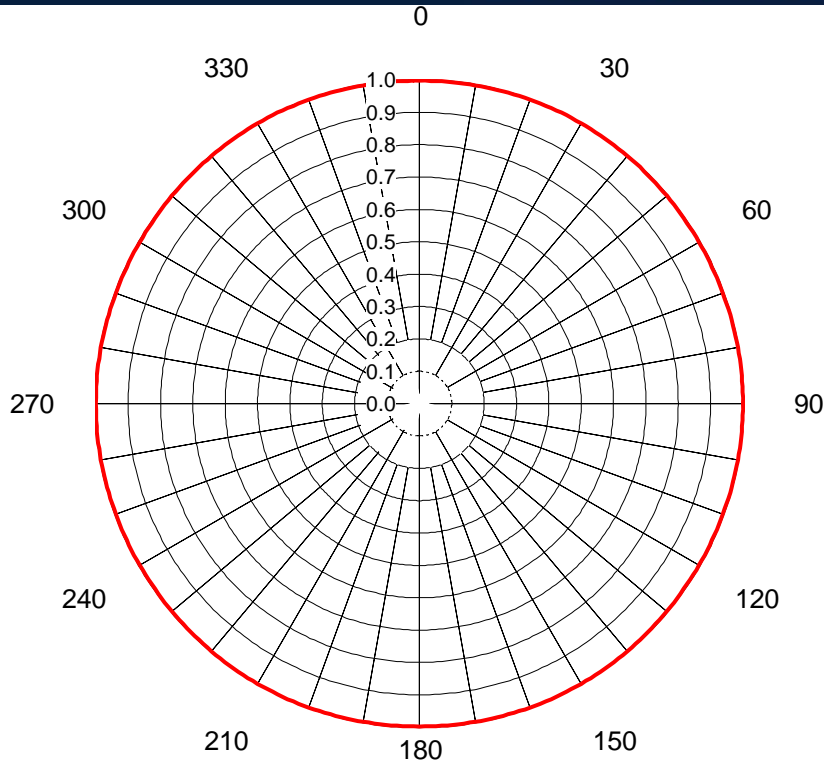


AZIMUTH PATTERN Horizontal Polarization

Proposal No. **C-71566-2**
 Date **5-Nov-20**
 Call Letters **WLUK**
 Channel **18**
 Frequency **497 MHz**
 Antenna Type **TFU-27JTH/VP-R O6**
 Gain **1 (0.01dB)**
 Calculated
 Circularity **+/- 1.0 dB**

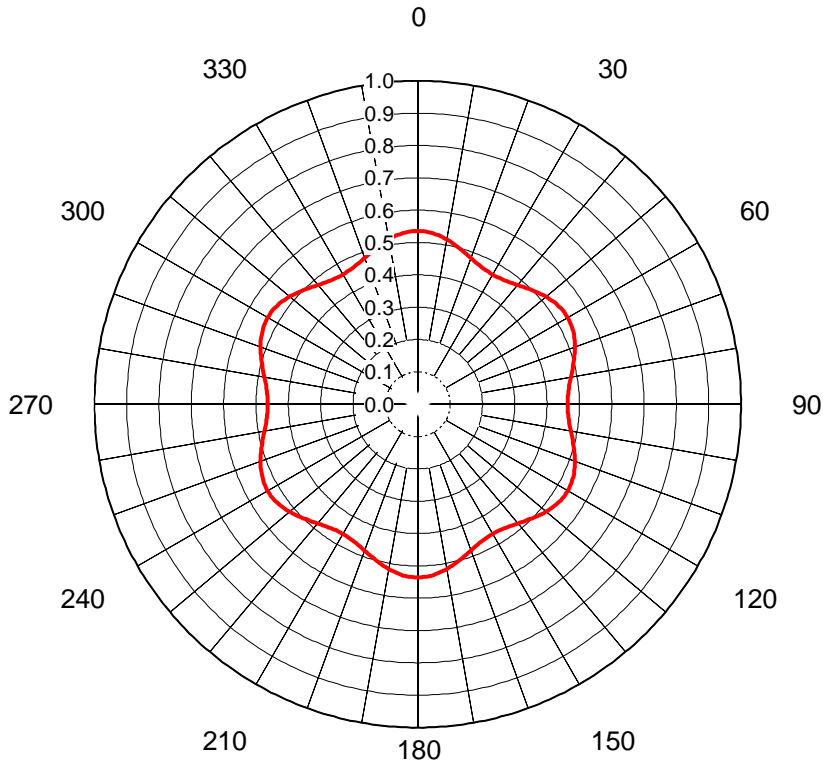


Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.998	36	1.000	72	0.999	108	0.999	144	1.000	180	0.998	216	1.000	252	0.999	288	0.999
1	0.998	37	1.000	73	0.999	109	0.999	145	1.000	181	0.998	217	1.000	253	0.999	289	0.999
2	0.998	38	1.000	74	0.999	110	0.998	146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

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AZIMUTH PATTERN Vertical Polarization

Proposal No. **C-71566-2**
 Date **5-Nov-20**
 Call Letters **WLUK**
 Channel **18**
 Frequency **497 MHz**
 Antenna Type **TFU-27JTH/VP-R O6**
 Gain **1.15 (0.6dB)**
 Calculated
 Circularity **+/- 1.0 dB**



Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.536	36	0.470	72	0.511	108	0.511	144	0.470	180	0.536	216	0.470	252	0.511	288	0.511
1	0.535	37	0.473	73	0.507	109	0.514	145	0.468	181	0.535	217	0.473	253	0.507	289	0.514
2	0.535	38	0.475	74	0.503	110	0.517	146	0.466	182	0.535	218	0.475	254	0.503	290	0.517
3	0.534	39	0.478	75	0.499	111	0.521	147	0.465	183	0.534	219	0.478	255	0.499	291	0.521
4	0.533	40	0.481	76	0.496	112	0.524	148	0.464	184	0.533	220	0.481	256	0.496	292	0.524
5	0.531	41	0.485	77	0.492	113	0.526	149	0.464	185	0.531	221	0.485	257	0.492	293	0.526
6	0.529	42	0.488	78	0.488	114	0.529	150	0.463	186	0.529	222	0.488	258	0.488	294	0.529
7	0.526	43	0.492	79	0.485	115	0.531	151	0.464	187	0.526	223	0.492	259	0.485	295	0.531
8	0.524	44	0.496	80	0.481	116	0.533	152	0.464	188	0.524	224	0.496	260	0.481	296	0.533
9	0.521	45	0.499	81	0.478	117	0.534	153	0.465	189	0.521	225	0.499	261	0.478	297	0.534
10	0.517	46	0.503	82	0.475	118	0.535	154	0.466	190	0.517	226	0.503	262	0.475	298	0.535
11	0.514	47	0.507	83	0.473	119	0.535	155	0.468	191	0.514	227	0.507	263	0.473	299	0.535
12	0.511	48	0.511	84	0.470	120	0.536	156	0.470	192	0.511	228	0.511	264	0.470	300	0.536
13	0.507	49	0.514	85	0.468	121	0.535	157	0.473	193	0.507	229	0.514	265	0.468	301	0.535
14	0.503	50	0.517	86	0.466	122	0.535	158	0.475	194	0.503	230	0.517	266	0.466	302	0.535
15	0.499	51	0.521	87	0.465	123	0.534	159	0.478	195	0.499	231	0.521	267	0.465	303	0.534
16	0.496	52	0.524	88	0.464	124	0.533	160	0.481	196	0.496	232	0.524	268	0.464	304	0.533
17	0.492	53	0.526	89	0.464	125	0.531	161	0.485	197	0.492	233	0.526	269	0.464	305	0.531
18	0.488	54	0.529	90	0.463	126	0.529	162	0.488	198	0.488	234	0.529	270	0.463	306	0.529
19	0.485	55	0.531	91	0.464	127	0.526	163	0.492	199	0.485	235	0.531	271	0.464	307	0.526
20	0.481	56	0.533	92	0.464	128	0.524	164	0.496	200	0.481	236	0.533	272	0.464	308	0.524
21	0.478	57	0.534	93	0.465	129	0.521	165	0.499	201	0.478	237	0.534	273	0.465	309	0.521
22	0.475	58	0.535	94	0.466	130	0.517	166	0.503	202	0.475	238	0.535	274	0.466	310	0.517
23	0.473	59	0.535	95	0.468	131	0.514	167	0.507	203	0.473	239	0.535	275	0.468	311	0.514
24	0.470	60	0.536	96	0.470	132	0.511	168	0.511	204	0.470	240	0.536	276	0.470	312	0.511
25	0.468	61	0.535	97	0.473	133	0.507	169	0.514	205	0.468	241	0.535	277	0.473	313	0.507
26	0.466	62	0.535	98	0.475	134	0.503	170	0.517	206	0.466	242	0.535	278	0.475	314	0.503
27	0.465	63	0.534	99	0.478	135	0.499	171	0.521	207	0.465	243	0.534	279	0.478	315	0.499
28	0.464	64	0.533	100	0.481	136	0.496	172	0.524	208	0.464	244	0.533	280	0.481	316	0.496
29	0.464	65	0.531	101	0.485	137	0.492	173	0.526	209	0.464	245	0.531	281	0.485	317	0.492
30	0.463	66	0.529	102	0.488	138	0.488	174	0.529	210	0.463	246	0.529	282	0.488	318	0.488
31	0.464	67	0.526	103	0.492	139	0.485	175	0.531	211	0.464	247	0.526	283	0.492	319	0.485
32	0.464	68	0.524	104	0.496	140	0.481	176	0.533	212	0.464	248	0.524	284	0.496	320	0.481
33	0.465	69	0.521	105	0.499	141	0.478	177	0.534	213	0.465	249	0.521	285	0.499	321	0.478
34	0.466	70	0.517	106	0.503	142	0.475	178	0.535	214	0.466	250	0.517	286	0.503	322	0.475
35	0.468	71	0.514	107	0.507	143	0.473	179	0.535	215	0.468	251	0.514	287	0.507	323	0.473

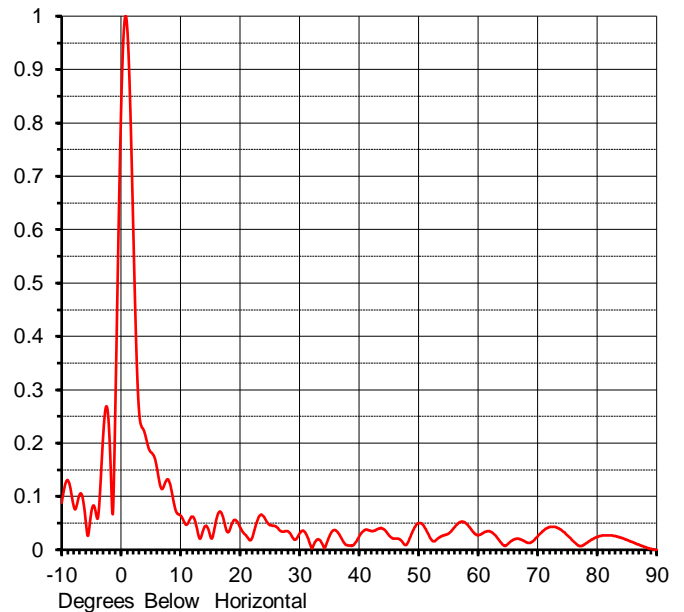
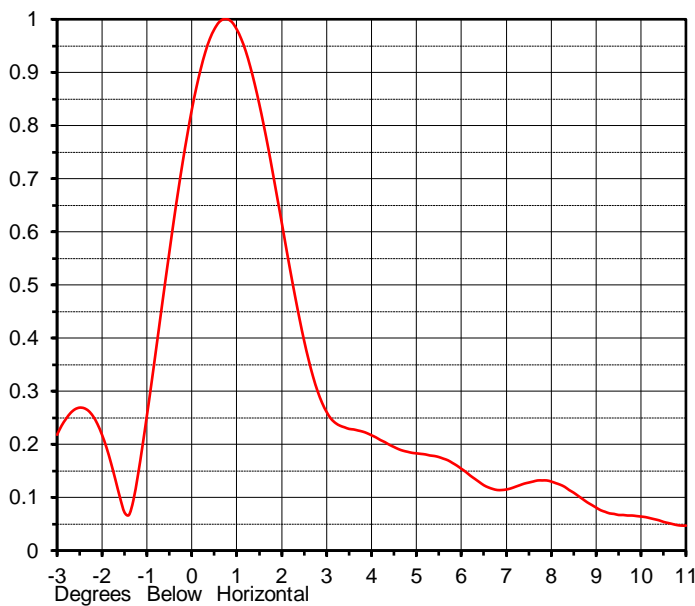
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ELEVATION PATTERN

Proposal No. **C-71566-2**
 Date **5-Nov-20**
 Call Letters **WLUK**
 Channel **18**
 Frequency **497 MHz**
 Antenna Type **TFU-27JTH/VP-R 06**

RMS Directivity at Main Lobe **25.3 (14.03 dB)**
 RMS Directivity at Horizontal **17.4 (12.41 dB)**
Calculated

Beam Tilt **0.75 deg**
 Pattern Number **27J253075**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.088	10.0	0.064	30.0	0.031	50.0	0.050	70.0	0.025
-9.0	0.131	11.0	0.047	31.0	0.031	51.0	0.042	71.0	0.036
-8.0	0.083	12.0	0.062	32.0	0.003	52.0	0.021	72.0	0.043
-7.0	0.103	13.0	0.027	33.0	0.019	53.0	0.019	73.0	0.043
-6.0	0.058	14.0	0.043	34.0	0.006	54.0	0.026	74.0	0.037
-5.0	0.072	15.0	0.025	35.0	0.025	55.0	0.030	75.0	0.027
-4.0	0.058	16.0	0.057	36.0	0.037	56.0	0.042	76.0	0.016
-3.0	0.218	17.0	0.065	37.0	0.022	57.0	0.052	77.0	0.007
-2.0	0.218	18.0	0.033	38.0	0.009	58.0	0.049	78.0	0.011
-1.0	0.254	19.0	0.056	39.0	0.009	59.0	0.036	79.0	0.019
0.0	0.830	20.0	0.042	40.0	0.025	60.0	0.027	80.0	0.024
1.0	0.981	21.0	0.027	41.0	0.037	61.0	0.033	81.0	0.027
2.0	0.618	22.0	0.022	42.0	0.035	62.0	0.034	82.0	0.027
3.0	0.261	23.0	0.058	43.0	0.038	63.0	0.026	83.0	0.026
4.0	0.217	24.0	0.062	44.0	0.039	64.0	0.011	84.0	0.023
5.0	0.183	25.0	0.046	45.0	0.027	65.0	0.011	85.0	0.019
6.0	0.154	26.0	0.044	46.0	0.021	66.0	0.019	86.0	0.014
7.0	0.115	27.0	0.034	47.0	0.018	67.0	0.020	87.0	0.010
8.0	0.130	28.0	0.035	48.0	0.010	68.0	0.015	88.0	0.005
9.0	0.081	29.0	0.020	49.0	0.035	69.0	0.015	89.0	0.002
								90.0	0.000

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