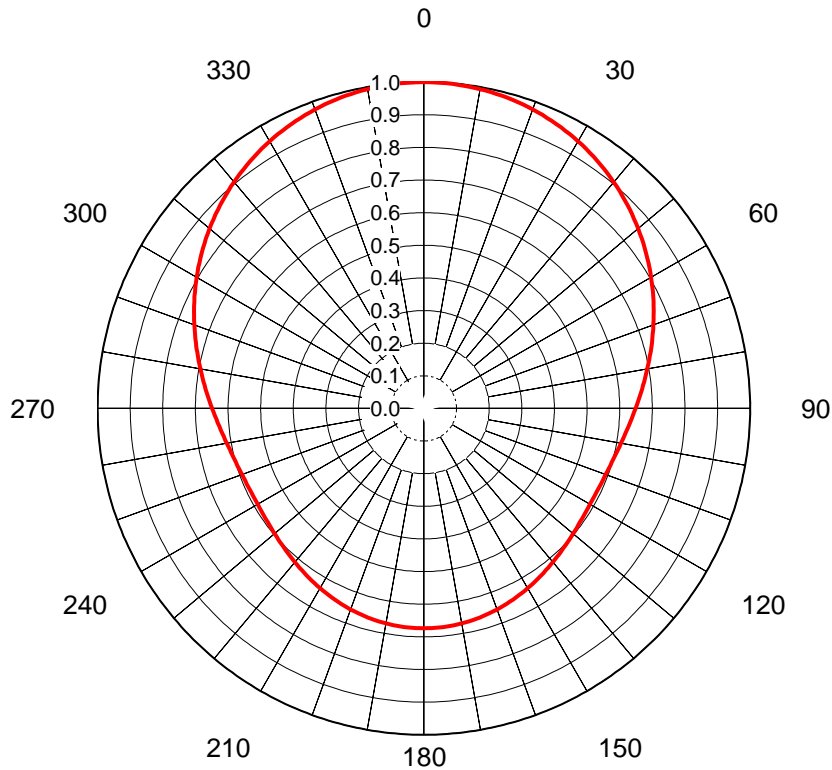


AZIMUTH PATTERN Horizontal Polarization

In Free Space

Proposal No. **C-70245-2-2**
Date **22-Mar-17**
Call Letters **WLWK**
Channel **19**
Frequency **503 MHz**
Antenna Type **TLP-8B (SP)**
Gain **1.74 (2.42dB)**
Calculated



Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	1.000	36	0.922	72	0.738	108	0.596	144	0.623	180	0.674	216	0.623	252	0.596	288	0.738	324	0.922
1	1.000	37	0.918	73	0.732	109	0.594	145	0.625	181	0.674	217	0.621	253	0.598	289	0.743	325	0.926
2	1.000	38	0.914	74	0.727	110	0.593	146	0.628	182	0.674	218	0.619	254	0.599	290	0.749	326	0.930
3	0.999	39	0.910	75	0.722	111	0.592	147	0.630	183	0.673	219	0.617	255	0.601	291	0.754	327	0.934
4	0.999	40	0.905	76	0.716	112	0.591	148	0.632	184	0.673	220	0.615	256	0.603	292	0.760	328	0.938
5	0.998	41	0.901	77	0.711	113	0.590	149	0.634	185	0.673	221	0.613	257	0.606	293	0.765	329	0.942
6	0.998	42	0.896	78	0.706	114	0.589	150	0.636	186	0.672	222	0.611	258	0.608	294	0.771	330	0.945
7	0.997	43	0.892	79	0.701	115	0.589	151	0.638	187	0.671	223	0.609	259	0.611	295	0.776	331	0.949
8	0.996	44	0.887	80	0.695	116	0.588	152	0.640	188	0.671	224	0.607	260	0.614	296	0.782	332	0.952
9	0.995	45	0.882	81	0.690	117	0.588	153	0.642	189	0.670	225	0.605	261	0.617	297	0.787	333	0.955
10	0.994	46	0.877	82	0.685	118	0.588	154	0.644	190	0.669	226	0.603	262	0.619	298	0.793	334	0.959
11	0.992	47	0.872	83	0.681	119	0.588	155	0.646	191	0.668	227	0.602	263	0.623	299	0.799	335	0.962
12	0.991	48	0.868	84	0.676	120	0.588	156	0.648	192	0.667	228	0.600	264	0.626	300	0.804	336	0.965
13	0.989	49	0.862	85	0.671	121	0.589	157	0.650	193	0.666	229	0.598	265	0.630	301	0.810	337	0.967
14	0.988	50	0.857	86	0.666	122	0.589	158	0.652	194	0.665	230	0.597	266	0.633	302	0.815	338	0.970
15	0.986	51	0.852	87	0.662	123	0.590	159	0.654	195	0.663	231	0.596	267	0.637	303	0.820	339	0.973
16	0.984	52	0.847	88	0.657	124	0.590	160	0.656	196	0.662	232	0.594	268	0.641	304	0.826	340	0.975
17	0.982	53	0.842	89	0.653	125	0.591	161	0.657	197	0.660	233	0.593	269	0.645	305	0.831	341	0.978
18	0.980	54	0.837	90	0.649	126	0.592	162	0.659	198	0.659	234	0.592	270	0.649	306	0.837	342	0.980
19	0.978	55	0.831	91	0.645	127	0.593	163	0.660	199	0.657	235	0.591	271	0.653	307	0.842	343	0.982
20	0.975	56	0.826	92	0.641	128	0.594	164	0.662	200	0.656	236	0.590	272	0.657	308	0.847	344	0.984
21	0.973	57	0.820	93	0.637	129	0.596	165	0.663	201	0.654	237	0.590	273	0.662	309	0.852	345	0.986
22	0.970	58	0.815	94	0.633	130	0.597	166	0.665	202	0.652	238	0.589	274	0.666	310	0.857	346	0.988
23	0.967	59	0.810	95	0.630	131	0.598	167	0.666	203	0.650	239	0.589	275	0.671	311	0.862	347	0.989
24	0.965	60	0.804	96	0.626	132	0.600	168	0.667	204	0.648	240	0.588	276	0.676	312	0.868	348	0.991
25	0.962	61	0.799	97	0.623	133	0.602	169	0.668	205	0.646	241	0.588	277	0.681	313	0.872	349	0.992
26	0.959	62	0.793	98	0.619	134	0.603	170	0.669	206	0.644	242	0.588	278	0.685	314	0.877	350	0.994
27	0.955	63	0.787	99	0.617	135	0.605	171	0.670	207	0.642	243	0.588	279	0.690	315	0.882	351	0.995
28	0.952	64	0.782	100	0.614	136	0.607	172	0.671	208	0.640	244	0.588	280	0.695	316	0.887	352	0.996
29	0.949	65	0.776	101	0.611	137	0.609	173	0.671	209	0.638	245	0.589	281	0.701	317	0.892	353	0.997
30	0.945	66	0.771	102	0.608	138	0.611	174	0.672	210	0.636	246	0.589	282	0.706	318	0.896	354	0.998
31	0.942	67	0.765	103	0.606	139	0.613	175	0.673	211	0.634	247	0.590	283	0.711	319	0.901	355	0.998
32	0.938	68	0.760	104	0.603	140	0.615	176	0.673	212	0.632	248	0.591	284	0.716	320	0.905	356	0.999
33	0.934	69	0.754	105	0.601	141	0.617	177	0.673	213	0.630	249	0.592	285	0.722	321	0.910	357	0.999
34	0.930	70	0.749	106	0.599	142	0.619	178	0.674	214	0.628	250	0.593	286	0.727	322	0.914	358	1.000
35	0.926	71	0.743	107	0.598	143	0.621	179	0.674	215	0.625	251	0.594	287	0.732	323	0.918	359	1.000

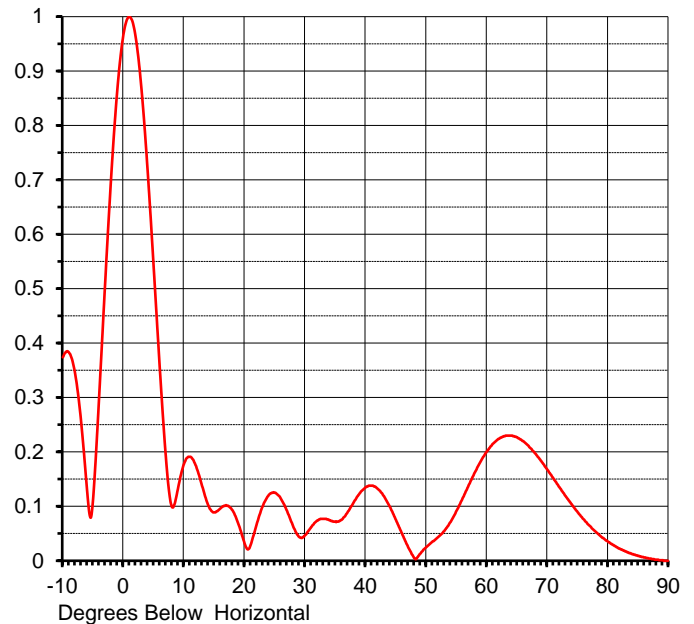
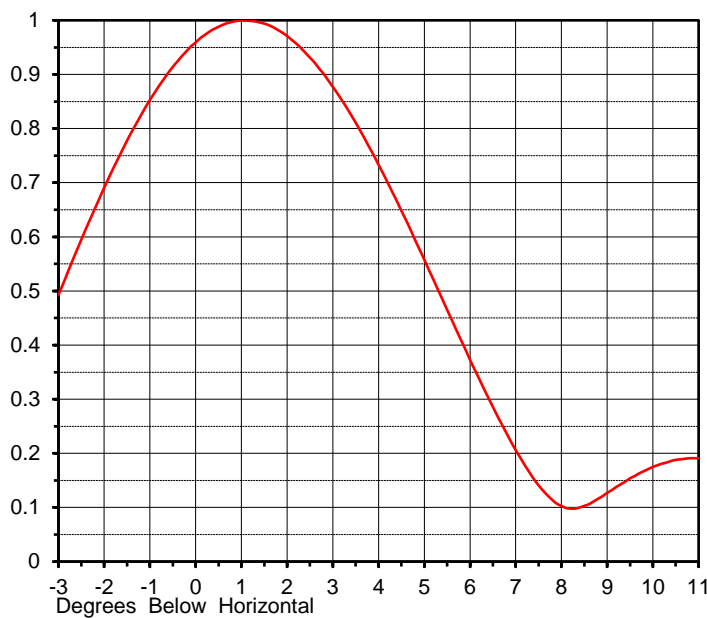
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ELEVATION PATTERN

Proposal No. **C-70245-2-2**
 Date **22-Mar-17**
 Call Letters **WLWK**
 Channel **19**
 Frequency **503 MHz**
 Antenna Type **TLP-8B (SP)**

RMS Directivity at Main Lobe **8.0 (9.03 dB)**
 RMS Directivity at Horizontal **7.5 (8.75 dB)**
Calculated

Beam Tilt **1.00 deg**
 Pattern Number **08L080100**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.374	10.0	0.178	30.0	0.047	50.0	0.025	70.0	0.167
-9.0	0.383	11.0	0.191	31.0	0.062	51.0	0.035	71.0	0.151
-8.0	0.346	12.0	0.174	32.0	0.074	52.0	0.044	72.0	0.135
-7.0	0.258	13.0	0.137	33.0	0.077	53.0	0.055	73.0	0.119
-6.0	0.130	14.0	0.102	34.0	0.075	54.0	0.071	74.0	0.104
-5.0	0.114	15.0	0.089	35.0	0.072	55.0	0.092	75.0	0.089
-4.0	0.303	16.0	0.096	36.0	0.075	56.0	0.115	76.0	0.076
-3.0	0.513	17.0	0.102	37.0	0.089	57.0	0.139	77.0	0.064
-2.0	0.709	18.0	0.093	38.0	0.107	58.0	0.162	78.0	0.053
-1.0	0.866	19.0	0.067	39.0	0.124	59.0	0.183	79.0	0.043
0.0	0.967	20.0	0.032	40.0	0.135	60.0	0.201	80.0	0.035
1.0	1.000	21.0	0.029	41.0	0.138	61.0	0.215	81.0	0.028
2.0	0.964	22.0	0.067	42.0	0.132	62.0	0.224	82.0	0.022
3.0	0.865	23.0	0.100	43.0	0.119	63.0	0.229	83.0	0.017
4.0	0.717	24.0	0.121	44.0	0.099	64.0	0.230	84.0	0.012
5.0	0.539	25.0	0.125	45.0	0.075	65.0	0.227	85.0	0.009
6.0	0.355	26.0	0.114	46.0	0.050	66.0	0.220	86.0	0.006
7.0	0.192	27.0	0.092	47.0	0.025	67.0	0.209	87.0	0.004
8.0	0.099	28.0	0.064	48.0	0.005	68.0	0.197	88.0	0.002
9.0	0.132	29.0	0.044	49.0	0.013	69.0	0.183	89.0	0.001
						90.0	0.000		

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