

AZIMUTH PATTERN Horizontal Polarization

In Free Space

Proposal No. **C-71718-2**
Date **27-Jul-21**
Call Letters **W19EZ**
Channel **19**
Frequency **503 MHz**
Antenna Type **TUL-C3SP-4/12M-1**
Gain **1.98 (2.96dB)**
Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.525	36	0.068	72	0.165	108	0.645	144	0.959	180	0.765	216	0.870	252	0.671	288	0.858
1	0.508	37	0.071	73	0.174	109	0.662	145	0.953	181	0.772	217	0.880	253	0.650	289	0.864
2	0.492	38	0.073	74	0.183	110	0.680	146	0.947	182	0.779	218	0.889	254	0.628	290	0.869
3	0.475	39	0.076	75	0.192	111	0.697	147	0.940	183	0.785	219	0.897	255	0.607	291	0.874
4	0.458	40	0.079	76	0.202	112	0.715	148	0.931	184	0.791	220	0.905	256	0.588	292	0.878
5	0.442	41	0.081	77	0.211	113	0.731	149	0.922	185	0.795	221	0.912	257	0.570	293	0.882
6	0.425	42	0.083	78	0.221	114	0.748	150	0.912	186	0.799	222	0.919	258	0.553	294	0.886
7	0.408	43	0.085	79	0.231	115	0.764	151	0.900	187	0.802	223	0.924	259	0.540	295	0.890
8	0.391	44	0.087	80	0.241	116	0.780	152	0.888	188	0.803	224	0.929	260	0.528	296	0.894
9	0.374	45	0.088	81	0.251	117	0.795	153	0.875	189	0.804	225	0.933	261	0.520	297	0.897
10	0.357	46	0.089	82	0.262	118	0.810	154	0.862	190	0.804	226	0.936	262	0.516	298	0.902
11	0.341	47	0.090	83	0.272	119	0.825	155	0.848	191	0.803	227	0.938	263	0.514	299	0.906
12	0.324	48	0.090	84	0.283	120	0.838	156	0.834	192	0.801	228	0.940	264	0.517	300	0.911
13	0.307	49	0.090	85	0.294	121	0.851	157	0.819	193	0.799	229	0.940	265	0.522	301	0.916
14	0.290	50	0.090	86	0.306	122	0.864	158	0.805	194	0.796	230	0.940	266	0.531	302	0.922
15	0.274	51	0.090	87	0.317	123	0.876	159	0.791	195	0.793	231	0.938	267	0.543	303	0.927
16	0.257	52	0.090	88	0.329	124	0.887	160	0.777	196	0.790	232	0.937	268	0.557	304	0.933
17	0.241	53	0.090	89	0.342	125	0.898	161	0.764	197	0.787	233	0.934	269	0.573	305	0.940
18	0.225	54	0.090	90	0.355	126	0.908	162	0.751	198	0.785	234	0.930	270	0.590	306	0.946
19	0.209	55	0.090	91	0.368	127	0.917	163	0.740	199	0.783	235	0.925	271	0.609	307	0.952
20	0.194	56	0.090	92	0.381	128	0.925	164	0.730	200	0.781	236	0.919	272	0.628	308	0.959
21	0.179	57	0.091	93	0.395	129	0.933	165	0.722	201	0.780	237	0.912	273	0.648	309	0.965
22	0.164	58	0.092	94	0.410	130	0.940	166	0.715	202	0.780	238	0.904	274	0.668	310	0.971
23	0.150	59	0.093	95	0.424	131	0.946	167	0.710	203	0.781	239	0.895	275	0.688	311	0.976
24	0.137	60	0.096	96	0.440	132	0.952	168	0.706	204	0.783	240	0.885	276	0.707	312	0.981
25	0.124	61	0.098	97	0.455	133	0.957	169	0.705	205	0.785	241	0.873	277	0.726	313	0.986
26	0.112	62	0.101	98	0.471	134	0.961	170	0.705	206	0.789	242	0.860	278	0.743	314	0.990
27	0.102	63	0.105	99	0.487	135	0.964	171	0.706	207	0.794	243	0.846	279	0.760	315	0.994
28	0.092	64	0.110	100	0.504	136	0.967	172	0.709	208	0.800	244	0.830	280	0.776	316	0.996
29	0.084	65	0.115	101	0.521	137	0.969	173	0.714	209	0.807	245	0.813	281	0.790	317	0.998
30	0.077	66	0.121	102	0.538	138	0.970	174	0.720	210	0.815	246	0.796	282	0.803	318	1.000
31	0.072	67	0.127	103	0.556	139	0.970	175	0.726	211	0.823	247	0.777	283	0.815	319	1.000
32	0.068	68	0.134	104	0.573	140	0.970	176	0.733	212	0.832	248	0.757	284	0.826	320	1.000
33	0.066	69	0.141	105	0.591	141	0.968	177	0.741	213	0.842	249	0.736	285	0.835	321	0.998
34	0.066	70	0.149	106	0.609	142	0.966	178	0.749	214	0.851	250	0.715	286	0.844	322	0.997
35	0.067	71	0.157	107	0.627	143	0.963	179	0.757	215	0.861	251	0.693	287	0.851	323	0.994

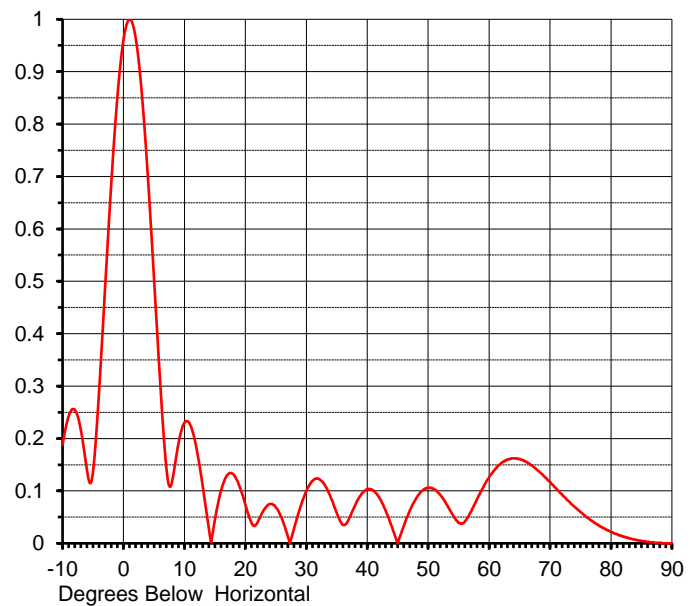
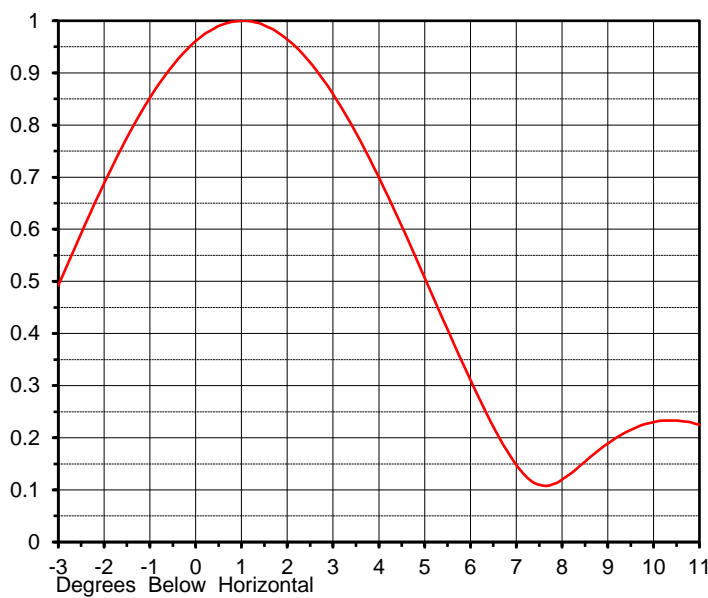
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ELEVATION PATTERN

Proposal No. **C-71718-2**
 Date **27-Jul-21**
 Call Letters **W19EZ**
 Channel **19**
 Frequency **503 MHz**
 Antenna Type **TUL-C3SP-4/12M-1**

RMS Directivity at Main Lobe **9.0 (9.55 dB)**
 RMS Directivity at Horizontal **8.3 (9.19 dB)**
Calculated

Beam Tilt **1.00 deg**
 Pattern Number **04U091100**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.188	10.0	0.230	30.0	0.100	50.0	0.106	70.0	0.117
-9.0	0.242	11.0	0.225	31.0	0.119	51.0	0.103	71.0	0.105
-8.0	0.255	12.0	0.180	32.0	0.123	52.0	0.092	72.0	0.093
-7.0	0.216	13.0	0.109	33.0	0.112	53.0	0.075	73.0	0.081
-6.0	0.140	14.0	0.029	34.0	0.088	54.0	0.055	74.0	0.070
-5.0	0.137	15.0	0.045	35.0	0.058	55.0	0.039	75.0	0.060
-4.0	0.292	16.0	0.100	36.0	0.035	56.0	0.041	76.0	0.050
-3.0	0.492	17.0	0.130	37.0	0.047	57.0	0.060	77.0	0.042
-2.0	0.688	18.0	0.132	38.0	0.072	58.0	0.084	78.0	0.034
-1.0	0.852	19.0	0.110	39.0	0.093	59.0	0.106	79.0	0.028
0.0	0.961	20.0	0.074	40.0	0.103	60.0	0.126	80.0	0.022
1.0	1.000	21.0	0.039	41.0	0.101	61.0	0.142	81.0	0.017
2.0	0.964	22.0	0.040	42.0	0.087	62.0	0.153	82.0	0.013
3.0	0.859	23.0	0.063	43.0	0.063	63.0	0.160	83.0	0.010
4.0	0.700	24.0	0.075	44.0	0.033	64.0	0.162	84.0	0.007
5.0	0.507	25.0	0.069	45.0	0.000	65.0	0.161	85.0	0.005
6.0	0.311	26.0	0.047	46.0	0.033	66.0	0.156	86.0	0.003
7.0	0.148	27.0	0.012	47.0	0.063	67.0	0.149	87.0	0.002
8.0	0.120	28.0	0.029	48.0	0.085	68.0	0.139	88.0	0.001
9.0	0.189	29.0	0.068	49.0	0.100	69.0	0.128	89.0	0.000
								90.0	0.000

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