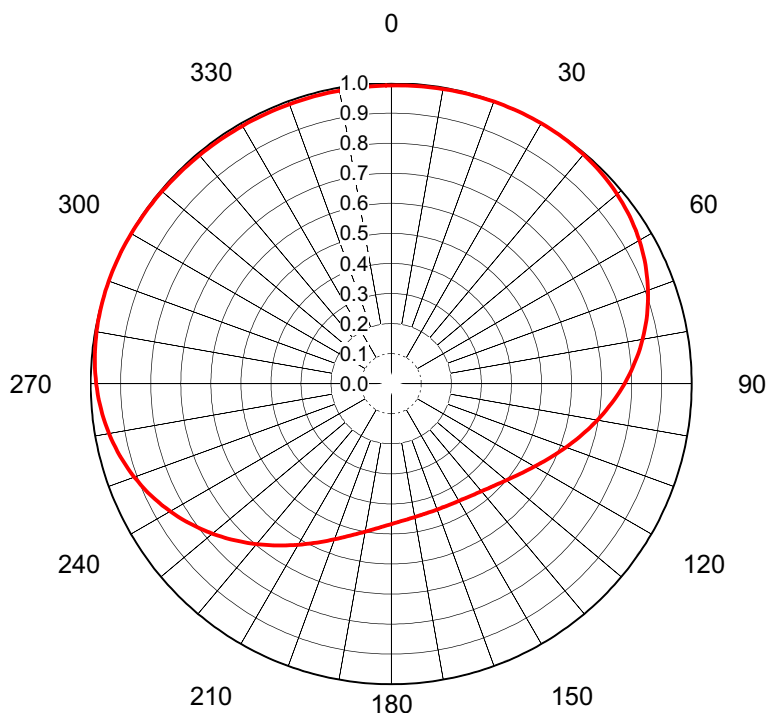


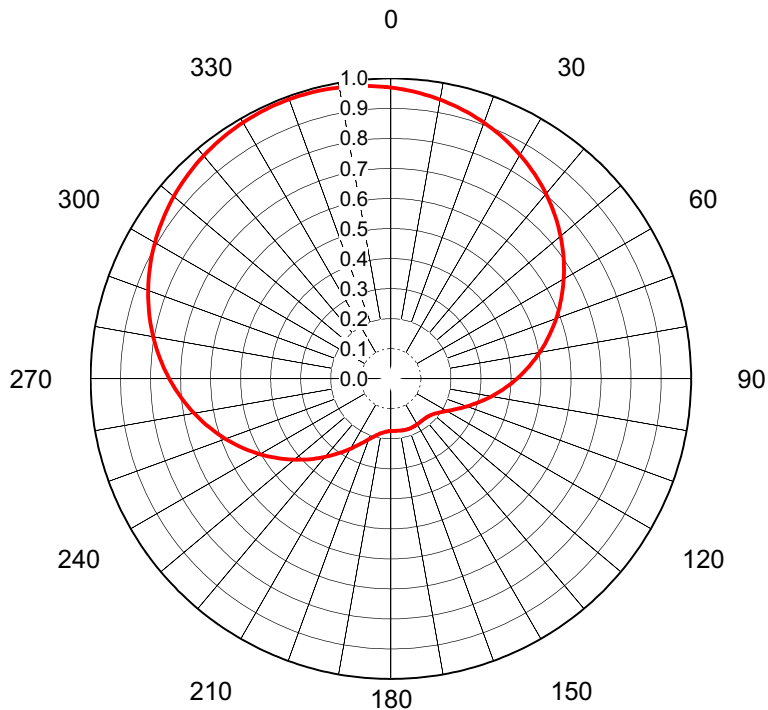
AZIMUTH PATTERN Horizontal Polarization

Proposal No. **C-80011-3**
 Date **10-May-23**
 Call Letters **WLOS**
 Channel **13**
 Frequency **213 MHz**
 Antenna Type **THV-7A13/VP-R C150**
 Gain **1.45 (1.62dB)**
 Calculated



Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.992	36	0.998	72	0.899	108	0.634	144	0.459	180	0.467	216	0.665	252	0.920	288	1.000
1	0.993	37	0.998	73	0.893	109	0.627	145	0.457	181	0.470	217	0.673	253	0.924	289	1.000
2	0.993	38	0.997	74	0.887	110	0.619	146	0.456	182	0.472	218	0.681	254	0.929	290	1.000
3	0.993	39	0.996	75	0.881	111	0.612	147	0.454	183	0.475	219	0.689	255	0.933	291	1.000
4	0.993	40	0.995	76	0.875	112	0.604	148	0.453	184	0.478	220	0.697	256	0.938	292	1.000
5	0.994	41	0.995	77	0.869	113	0.597	149	0.452	185	0.481	221	0.705	257	0.942	293	1.000
6	0.994	42	0.994	78	0.863	114	0.590	150	0.451	186	0.485	222	0.713	258	0.946	294	1.000
7	0.994	43	0.992	79	0.856	115	0.583	151	0.450	187	0.488	223	0.721	259	0.950	295	1.000
8	0.995	44	0.991	80	0.849	116	0.577	152	0.449	188	0.492	224	0.729	260	0.953	296	1.000
9	0.995	45	0.990	81	0.843	117	0.570	153	0.448	189	0.496	225	0.737	261	0.957	297	0.999
10	0.995	46	0.988	82	0.836	118	0.564	154	0.448	190	0.500	226	0.745	262	0.960	298	0.999
11	0.996	47	0.987	83	0.829	119	0.557	155	0.447	191	0.504	227	0.753	263	0.963	299	0.999
12	0.996	48	0.985	84	0.822	120	0.551	156	0.447	192	0.509	228	0.761	264	0.966	300	0.999
13	0.997	49	0.983	85	0.814	121	0.545	157	0.446	193	0.513	229	0.769	265	0.969	301	0.998
14	0.997	50	0.981	86	0.807	122	0.539	158	0.446	194	0.518	230	0.777	266	0.972	302	0.998
15	0.997	51	0.979	87	0.799	123	0.534	159	0.446	195	0.523	231	0.784	267	0.974	303	0.998
16	0.998	52	0.977	88	0.792	124	0.528	160	0.446	196	0.528	232	0.792	268	0.977	304	0.998
17	0.998	53	0.974	89	0.784	125	0.523	161	0.446	197	0.534	233	0.799	269	0.979	305	0.997
18	0.998	54	0.972	90	0.777	126	0.518	162	0.446	198	0.539	234	0.807	270	0.981	306	0.997
19	0.998	55	0.969	91	0.769	127	0.513	163	0.446	199	0.545	235	0.814	271	0.983	307	0.997
20	0.999	56	0.966	92	0.761	128	0.509	164	0.447	200	0.551	236	0.822	272	0.985	308	0.996
21	0.999	57	0.963	93	0.753	129	0.504	165	0.447	201	0.557	237	0.829	273	0.987	309	0.996
22	0.999	58	0.960	94	0.745	130	0.500	166	0.448	202	0.564	238	0.836	274	0.988	310	0.995
23	0.999	59	0.957	95	0.737	131	0.496	167	0.448	203	0.570	239	0.843	275	0.990	311	0.995
24	1.000	60	0.953	96	0.729	132	0.492	168	0.449	204	0.577	240	0.849	276	0.991	312	0.995
25	1.000	61	0.950	97	0.721	133	0.488	169	0.450	205	0.583	241	0.856	277	0.992	313	0.994
26	1.000	62	0.946	98	0.713	134	0.485	170	0.451	206	0.590	242	0.863	278	0.994	314	0.994
27	1.000	63	0.942	99	0.705	135	0.481	171	0.452	207	0.597	243	0.869	279	0.995	315	0.994
28	1.000	64	0.938	100	0.697	136	0.478	172	0.453	208	0.604	244	0.875	280	0.995	316	0.993
29	1.000	65	0.933	101	0.689	137	0.475	173	0.454	209	0.612	245	0.881	281	0.996	317	0.993
30	1.000	66	0.929	102	0.681	138	0.472	174	0.456	210	0.619	246	0.887	282	0.997	318	0.993
31	1.000	67	0.924	103	0.673	139	0.470	175	0.457	211	0.627	247	0.893	283	0.998	319	0.993
32	1.000	68	0.920	104	0.665	140	0.467	176	0.459	212	0.634	248	0.899	284	0.998	320	0.992
33	0.999	69	0.914	105	0.657	141	0.465	177	0.461	213	0.642	249	0.904	285	0.999	321	0.992
34	0.999	70	0.909	106	0.649	142	0.463	178	0.463	214	0.649	250	0.909	286	0.999	322	0.992
35	0.999	71	0.904	107	0.642	143	0.461	179	0.465	215	0.657	251	0.914	287	0.999	323	0.992

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AZIMUTH PATTERN Vertical Polarization

Proposal No. **C-80011-3**
 Date **10-May-23**
 Call Letters **WLOS**
 Channel **13**
 Frequency **213 MHz**
 Antenna Type **THV-7A13/VP-R C150**
 Gain **2.32 (3.66dB)**
 Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.969	36	0.827	72	0.569	108	0.282	144	0.174	180	0.174	216	0.310	252	0.602	288	0.850
1	0.967	37	0.822	73	0.561	109	0.276	145	0.174	181	0.175	217	0.317	253	0.610	289	0.855
2	0.965	38	0.816	74	0.553	110	0.269	146	0.175	182	0.175	218	0.325	254	0.618	290	0.860
3	0.963	39	0.810	75	0.545	111	0.263	147	0.175	183	0.176	219	0.332	255	0.626	291	0.865
4	0.960	40	0.804	76	0.536	112	0.257	148	0.175	184	0.176	220	0.340	256	0.634	292	0.870
5	0.958	41	0.797	77	0.528	113	0.251	149	0.175	185	0.177	221	0.348	257	0.642	293	0.875
6	0.955	42	0.791	78	0.520	114	0.245	150	0.176	186	0.178	222	0.355	258	0.649	294	0.880
7	0.952	43	0.785	79	0.511	115	0.240	151	0.176	187	0.179	223	0.363	259	0.657	295	0.885
8	0.950	44	0.778	80	0.503	116	0.234	152	0.176	188	0.181	224	0.371	260	0.665	296	0.890
9	0.947	45	0.772	81	0.495	117	0.229	153	0.176	189	0.182	225	0.379	261	0.672	297	0.894
10	0.944	46	0.765	82	0.486	118	0.224	154	0.177	190	0.184	226	0.387	262	0.680	298	0.899
11	0.940	47	0.758	83	0.478	119	0.220	155	0.177	191	0.186	227	0.395	263	0.687	299	0.903
12	0.937	48	0.752	84	0.470	120	0.215	156	0.177	192	0.188	228	0.403	264	0.695	300	0.907
13	0.934	49	0.745	85	0.461	121	0.211	157	0.177	193	0.191	229	0.412	265	0.702	301	0.911
14	0.930	50	0.738	86	0.453	122	0.207	158	0.177	194	0.194	230	0.420	266	0.710	302	0.915
15	0.927	51	0.731	87	0.445	123	0.203	159	0.177	195	0.197	231	0.428	267	0.717	303	0.919
16	0.923	52	0.724	88	0.436	124	0.200	160	0.177	196	0.200	232	0.436	268	0.724	304	0.923
17	0.919	53	0.717	89	0.428	125	0.197	161	0.177	197	0.203	233	0.445	269	0.731	305	0.927
18	0.915	54	0.710	90	0.420	126	0.194	162	0.177	198	0.207	234	0.453	270	0.738	306	0.930
19	0.911	55	0.702	91	0.412	127	0.191	163	0.177	199	0.211	235	0.461	271	0.745	307	0.934
20	0.907	56	0.695	92	0.403	128	0.188	164	0.177	200	0.215	236	0.470	272	0.752	308	0.937
21	0.903	57	0.687	93	0.395	129	0.186	165	0.177	201	0.220	237	0.478	273	0.758	309	0.940
22	0.899	58	0.680	94	0.387	130	0.184	166	0.177	202	0.224	238	0.486	274	0.765	310	0.944
23	0.894	59	0.672	95	0.379	131	0.182	167	0.176	203	0.229	239	0.495	275	0.772	311	0.947
24	0.890	60	0.665	96	0.371	132	0.181	168	0.176	204	0.234	240	0.503	276	0.778	312	0.950
25	0.885	61	0.657	97	0.363	133	0.179	169	0.176	205	0.240	241	0.511	277	0.785	313	0.952
26	0.880	62	0.649	98	0.355	134	0.178	170	0.176	206	0.245	242	0.520	278	0.791	314	0.955
27	0.875	63	0.642	99	0.348	135	0.177	171	0.175	207	0.251	243	0.528	279	0.797	315	0.958
28	0.870	64	0.634	100	0.340	136	0.176	172	0.175	208	0.257	244	0.536	280	0.804	316	0.960
29	0.865	65	0.626	101	0.332	137	0.176	173	0.175	209	0.263	245	0.545	281	0.810	317	0.963
30	0.860	66	0.618	102	0.325	138	0.175	174	0.175	210	0.269	246	0.553	282	0.816	318	0.965
31	0.855	67	0.610	103	0.317	139	0.175	175	0.174	211	0.276	247	0.561	283	0.822	319	0.967
32	0.850	68	0.602	104	0.310	140	0.174	176	0.174	212	0.282	248	0.569	284	0.827	320	0.969
33	0.844	69	0.594	105	0.303	141	0.174	177	0.174	213	0.289	249	0.578	285	0.833	321	0.971
34	0.839	70	0.586	106	0.296	142	0.174	178	0.174	214	0.296	250	0.586	286	0.839	322	0.973
35	0.833	71	0.578	107	0.289	143	0.174	179	0.174	215	0.303	251	0.594	287	0.844	323	0.975

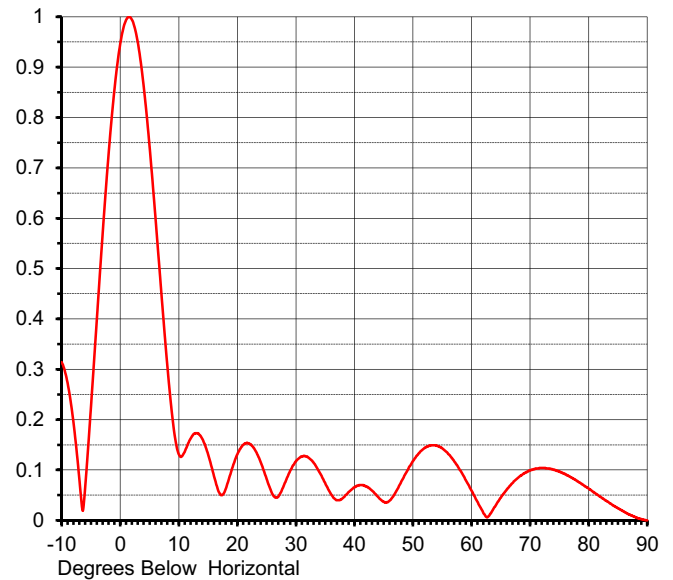
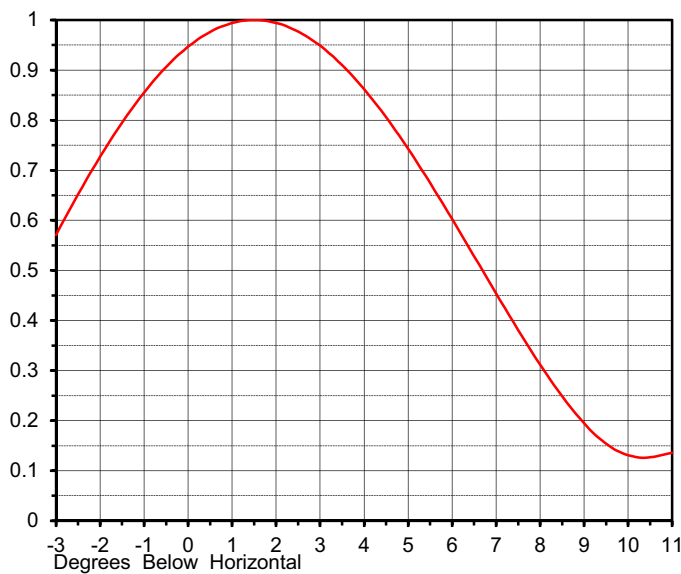
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ELEVATION PATTERN

Proposal No. **C-80011-3**
 Date **10-May-23**
 Call Letters **WLOS**
 Channel **13**
 Frequency **213 MHz**
 Antenna Type **THV-7A13/VP-R C150**

RMS Directivity at Main Lobe **7.0 (8.45 dB)**
 RMS Directivity at Horizontal **6.3 (7.99 dB)**
Calculated

Beam Tilt **1.50 deg**
 Pattern Number **07V070150**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.314	10.0	0.131	30.0	0.117	50.0	0.118	70.0	0.099
-9.0	0.273	11.0	0.136	31.0	0.127	51.0	0.133	71.0	0.103
-8.0	0.195	12.0	0.162	32.0	0.126	52.0	0.144	72.0	0.104
-7.0	0.083	13.0	0.173	33.0	0.115	53.0	0.149	73.0	0.103
-6.0	0.065	14.0	0.162	34.0	0.096	54.0	0.148	74.0	0.101
-5.0	0.226	15.0	0.131	35.0	0.074	55.0	0.143	75.0	0.097
-4.0	0.400	16.0	0.088	36.0	0.052	56.0	0.132	76.0	0.092
-3.0	0.571	17.0	0.053	37.0	0.040	57.0	0.118	77.0	0.085
-2.0	0.727	18.0	0.062	38.0	0.044	58.0	0.100	78.0	0.078
-1.0	0.855	19.0	0.099	39.0	0.056	59.0	0.080	79.0	0.071
0.0	0.947	20.0	0.131	40.0	0.066	60.0	0.059	80.0	0.063
1.0	0.994	21.0	0.150	41.0	0.070	61.0	0.037	81.0	0.055
2.0	0.994	22.0	0.153	42.0	0.067	62.0	0.015	82.0	0.047
3.0	0.949	23.0	0.140	43.0	0.059	63.0	0.009	83.0	0.039
4.0	0.862	24.0	0.115	44.0	0.047	64.0	0.027	84.0	0.031
5.0	0.743	25.0	0.082	45.0	0.037	65.0	0.045	85.0	0.024
6.0	0.603	26.0	0.052	46.0	0.039	66.0	0.061	86.0	0.017
7.0	0.454	27.0	0.047	47.0	0.055	67.0	0.074	87.0	0.011
8.0	0.312	28.0	0.071	48.0	0.077	68.0	0.085	88.0	0.006
9.0	0.195	29.0	0.098	49.0	0.098	69.0	0.093	89.0	0.002
								90.0	0.000

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