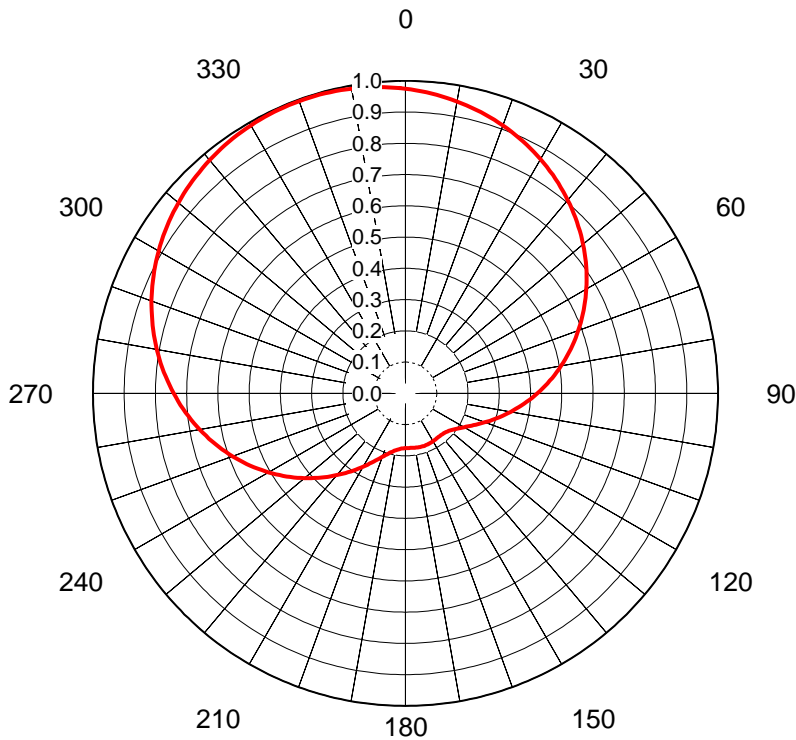


AZIMUTH PATTERN Horizontal Polarization

Proposal No. **C-80011-1**
 Date **24-Feb-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-80011-1**
 Date **24-Feb-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	Deg	Value
0	0.974	36	0.832	72	0.572	108	0.284	144	0.175	180	0.175	216	0.312	252	0.605	288	0.854	324	0.982
1	0.972	37	0.826	73	0.564	109	0.277	145	0.175	181	0.176	217	0.319	253	0.613	289	0.859	325	0.983
2	0.970	38	0.820	74	0.556	110	0.271	146	0.175	182	0.176	218	0.326	254	0.621	290	0.865	326	0.985
3	0.968	39	0.814	75	0.548	111	0.264	147	0.176	183	0.176	219	0.334	255	0.629	291	0.870	327	0.986
4	0.965	40	0.808	76	0.539	112	0.258	148	0.176	184	0.177	220	0.342	256	0.637	292	0.875	328	0.988
5	0.963	41	0.801	77	0.531	113	0.252	149	0.176	185	0.178	221	0.349	257	0.645	293	0.880	329	0.989
6	0.960	42	0.795	78	0.522	114	0.247	150	0.177	186	0.179	222	0.357	258	0.653	294	0.885	330	0.990
7	0.957	43	0.789	79	0.514	115	0.241	151	0.177	187	0.180	223	0.365	259	0.660	295	0.890	331	0.991
8	0.954	44	0.782	80	0.506	116	0.236	152	0.177	188	0.182	224	0.373	260	0.668	296	0.894	332	0.992
9	0.951	45	0.776	81	0.497	117	0.230	153	0.177	189	0.183	225	0.381	261	0.676	297	0.899	333	0.992
10	0.948	46	0.769	82	0.489	118	0.226	154	0.178	190	0.185	226	0.389	262	0.683	298	0.903	334	0.993
11	0.945	47	0.762	83	0.480	119	0.221	155	0.178	191	0.187	227	0.397	263	0.691	299	0.908	335	0.994
12	0.942	48	0.756	84	0.472	120	0.216	156	0.178	192	0.189	228	0.405	264	0.698	300	0.912	336	0.994
13	0.939	49	0.749	85	0.464	121	0.212	157	0.178	193	0.192	229	0.414	265	0.706	301	0.916	337	0.995
14	0.935	50	0.742	86	0.455	122	0.208	158	0.178	194	0.195	230	0.422	266	0.713	302	0.920	338	0.995
15	0.931	51	0.735	87	0.447	123	0.204	159	0.178	195	0.198	231	0.430	267	0.720	303	0.924	339	0.995
16	0.928	52	0.728	88	0.439	124	0.201	160	0.178	196	0.201	232	0.439	268	0.728	304	0.928	340	0.995
17	0.924	53	0.720	89	0.430	125	0.198	161	0.178	197	0.204	233	0.447	269	0.735	305	0.931	341	0.995
18	0.920	54	0.713	90	0.422	126	0.195	162	0.178	198	0.208	234	0.455	270	0.742	306	0.935	342	0.995
19	0.916	55	0.706	91	0.414	127	0.192	163	0.178	199	0.212	235	0.464	271	0.749	307	0.939	343	0.995
20	0.912	56	0.698	92	0.405	128	0.189	164	0.178	200	0.216	236	0.472	272	0.756	308	0.942	344	0.994
21	0.908	57	0.691	93	0.397	129	0.187	165	0.178	201	0.221	237	0.480	273	0.762	309	0.945	345	0.994
22	0.903	58	0.683	94	0.389	130	0.185	166	0.178	202	0.226	238	0.489	274	0.769	310	0.948	346	0.993
23	0.899	59	0.676	95	0.381	131	0.183	167	0.177	203	0.230	239	0.497	275	0.776	311	0.951	347	0.992
24	0.894	60	0.668	96	0.373	132	0.182	168	0.177	204	0.236	240	0.506	276	0.782	312	0.954	348	0.992
25	0.890	61	0.660	97	0.365	133	0.180	169	0.177	205	0.241	241	0.514	277	0.789	313	0.957	349	0.991
26	0.885	62	0.653	98	0.357	134	0.179	170	0.177	206	0.247	242	0.522	278	0.795	314	0.960	350	0.990
27	0.880	63	0.645	99	0.349	135	0.178	171	0.176	207	0.252	243	0.531	279	0.801	315	0.963	351	0.989
28	0.875	64	0.637	100	0.342	136	0.177	172	0.176	208	0.258	244	0.539	280	0.808	316	0.965	352	0.988
29	0.870	65	0.629	101	0.334	137	0.176	173	0.176	209	0.264	245	0.548	281	0.814	317	0.968	353	0.986
30	0.865	66	0.621	102	0.326	138	0.176	174	0.175	210	0.271	246	0.556	282	0.820	318	0.970	354	0.985
31	0.859	67	0.613	103	0.319	139	0.176	175	0.175	211	0.277	247	0.564	283	0.826	319	0.972	355	0.983
32	0.854	68	0.605	104	0.312	140	0.175	176	0.175	212	0.284	248	0.572	284	0.832	320	0.974	356	0.982
33	0.849	69	0.597	105	0.305	141	0.175	177	0.175	213	0.291	249	0.581	285	0.837	321	0.976	357	0.980
34	0.843	70	0.589	106	0.297	142	0.175	178	0.175	214	0.297	250	0.589	286	0.843	322	0.978	358	0.978
35	0.837	71	0.581	107	0.291	143	0.175	179	0.175	215	0.305	251	0.597	287	0.849	323	0.980	359	0.976

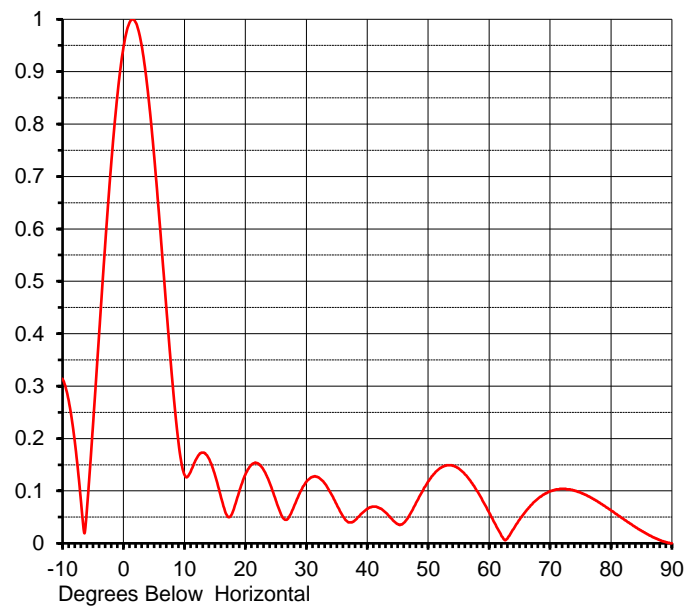
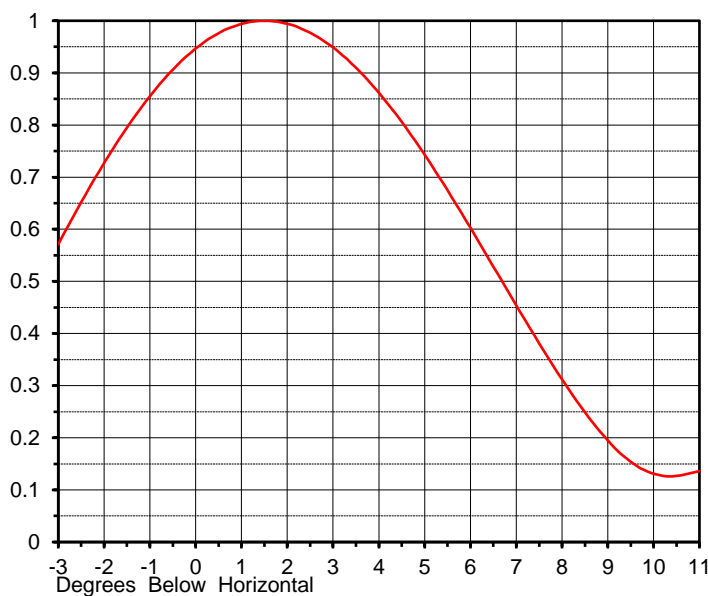
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ELEVATION PATTERN

Proposal No. **C-80011-1**
 Date **24-Feb-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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