

## AZIMUTH PATTERN Horizontal Polarization

In Free Space

Proposal No. **C-71095**  
 Date **23-Feb-18**  
 Call Letters **KGO**  
 Channel **12**  
 Frequency **207 MHz**  
 Antenna Type **TLS-V8/VP-R C160**  
 Gain **1.61 (2.08dB)**  
 Calculated

C160-12H

Deg	Value																		
0	0.942	36	0.939	72	0.996	108	0.905	144	0.535	180	0.372	216	0.374	252	0.514	288	0.890	324	0.998
1	0.941	37	0.941	73	0.997	109	0.897	145	0.525	181	0.373	217	0.373	253	0.525	289	0.897	325	0.997
2	0.939	38	0.942	74	0.998	110	0.890	146	0.514	182	0.374	218	0.372	254	0.535	290	0.905	326	0.996
3	0.938	39	0.943	75	0.999	111	0.882	147	0.504	183	0.375	219	0.371	255	0.546	291	0.912	327	0.995
4	0.937	40	0.944	76	0.999	112	0.874	148	0.495	184	0.376	220	0.371	256	0.556	292	0.918	328	0.994
5	0.936	41	0.946	77	1.000	113	0.866	149	0.485	185	0.377	221	0.370	257	0.567	293	0.925	329	0.993
6	0.936	42	0.947	78	1.000	114	0.857	150	0.476	186	0.379	222	0.370	258	0.579	294	0.931	330	0.991
7	0.935	43	0.949	79	1.000	115	0.848	151	0.467	187	0.380	223	0.369	259	0.590	295	0.937	331	0.990
8	0.934	44	0.950	80	1.000	116	0.839	152	0.459	188	0.381	224	0.369	260	0.601	296	0.942	332	0.988
9	0.933	45	0.952	81	1.000	117	0.830	153	0.450	189	0.382	225	0.370	261	0.612	297	0.948	333	0.987
10	0.933	46	0.953	82	0.999	118	0.820	154	0.442	190	0.383	226	0.370	262	0.624	298	0.953	334	0.985
11	0.932	47	0.955	83	0.999	119	0.811	155	0.435	191	0.384	227	0.371	263	0.635	299	0.958	335	0.984
12	0.932	48	0.957	84	0.998	120	0.801	156	0.428	192	0.384	228	0.372	264	0.647	300	0.962	336	0.982
13	0.931	49	0.958	85	0.997	121	0.790	157	0.421	193	0.385	229	0.374	265	0.658	301	0.966	337	0.980
14	0.931	50	0.960	86	0.996	122	0.780	158	0.415	194	0.386	230	0.375	266	0.670	302	0.970	338	0.978
15	0.930	51	0.962	87	0.994	123	0.770	159	0.409	195	0.386	231	0.377	267	0.681	303	0.974	339	0.976
16	0.930	52	0.964	88	0.993	124	0.759	160	0.404	196	0.387	232	0.380	268	0.693	304	0.977	340	0.975
17	0.930	53	0.965	89	0.991	125	0.748	161	0.399	197	0.387	233	0.383	269	0.704	305	0.981	341	0.973
18	0.930	54	0.967	90	0.988	126	0.737	162	0.394	198	0.387	234	0.386	270	0.715	306	0.983	342	0.971
19	0.930	55	0.969	91	0.986	127	0.726	163	0.390	199	0.387	235	0.390	271	0.726	307	0.986	343	0.969
20	0.930	56	0.971	92	0.983	128	0.715	164	0.386	200	0.387	236	0.394	272	0.737	308	0.988	344	0.967
21	0.930	57	0.973	93	0.981	129	0.704	165	0.383	201	0.387	237	0.399	273	0.748	309	0.991	345	0.965
22	0.930	58	0.975	94	0.977	130	0.693	166	0.380	202	0.387	238	0.404	274	0.759	310	0.993	346	0.964
23	0.930	59	0.976	95	0.974	131	0.681	167	0.377	203	0.386	239	0.409	275	0.770	311	0.994	347	0.962
24	0.931	60	0.978	96	0.970	132	0.670	168	0.375	204	0.386	240	0.415	276	0.780	312	0.996	348	0.960
25	0.931	61	0.980	97	0.966	133	0.658	169	0.374	205	0.385	241	0.421	277	0.790	313	0.997	349	0.958
26	0.932	62	0.982	98	0.962	134	0.647	170	0.372	206	0.384	242	0.428	278	0.801	314	0.998	350	0.957
27	0.932	63	0.984	99	0.958	135	0.635	171	0.371	207	0.384	243	0.435	279	0.811	315	0.999	351	0.955
28	0.933	64	0.985	100	0.953	136	0.624	172	0.370	208	0.383	244	0.442	280	0.820	316	0.999	352	0.953
29	0.933	65	0.987	101	0.948	137	0.612	173	0.370	209	0.382	245	0.450	281	0.830	317	1.000	353	0.952
30	0.934	66	0.988	102	0.942	138	0.601	174	0.369	210	0.381	246	0.459	282	0.839	318	1.000	354	0.950
31	0.935	67	0.990	103	0.937	139	0.590	175	0.369	211	0.380	247	0.467	283	0.848	319	1.000	355	0.949
32	0.936	68	0.991	104	0.931	140	0.579	176	0.370	212	0.379	248	0.476	284	0.857	320	1.000	356	0.947
33	0.936	69	0.993	105	0.925	141	0.567	177	0.370	213	0.377	249	0.485	285	0.866	321	1.000	357	0.946
34	0.937	70	0.994	106	0.918	142	0.556	178	0.371	214	0.376	250	0.495	286	0.874	322	0.999	358	0.944
35	0.938	71	0.995	107	0.912	143	0.546	179	0.371	215	0.375	251	0.504	287	0.882	323	0.999	359	0.943

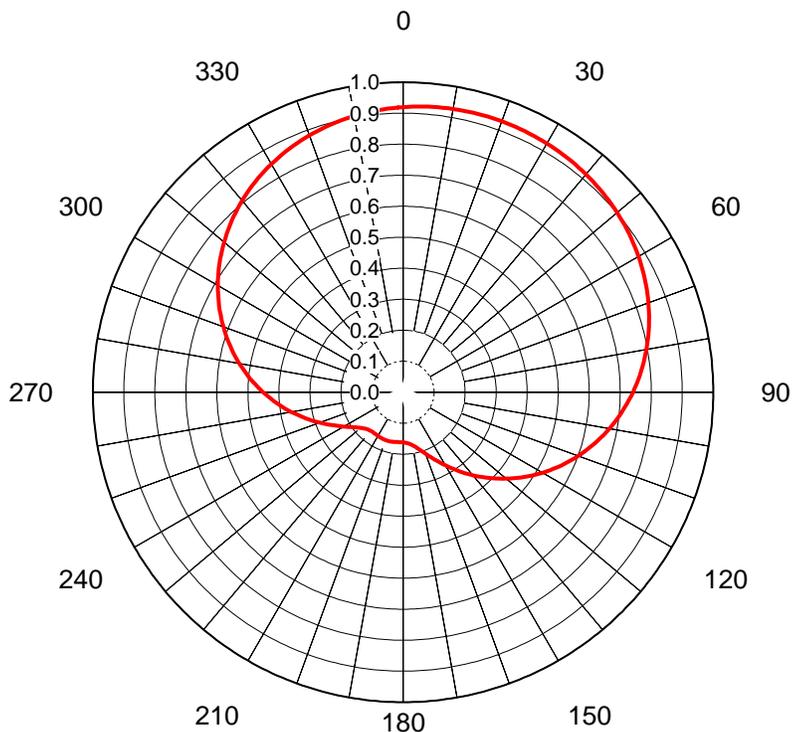
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## AZIMUTH PATTERN Vertical Polarization

In Free Space

Proposal No. **C-71095**  
 Date **23-Feb-18**  
 Call Letters **KGO**  
 Channel **12**  
 Frequency **207 MHz**  
 Antenna Type **TLS-V8/VP-R C160**  
 Gain **2.13 (3.29dB)**  
 Calculated

C160-12V



Deg	Value																		
0	0.920	36	0.922	72	0.834	108	0.616	144	0.317	180	0.162	216	0.161	252	0.302	288	0.601	324	0.825
1	0.921	37	0.921	73	0.829	109	0.608	145	0.309	181	0.162	217	0.162	253	0.309	289	0.608	325	0.829
2	0.922	38	0.920	74	0.825	110	0.601	146	0.302	182	0.161	218	0.162	254	0.317	290	0.616	326	0.834
3	0.923	39	0.919	75	0.821	111	0.593	147	0.294	183	0.161	219	0.162	255	0.325	291	0.624	327	0.838
4	0.924	40	0.917	76	0.816	112	0.585	148	0.287	184	0.161	220	0.163	256	0.333	292	0.631	328	0.842
5	0.925	41	0.916	77	0.811	113	0.577	149	0.279	185	0.162	221	0.163	257	0.341	293	0.639	329	0.846
6	0.925	42	0.915	78	0.807	114	0.569	150	0.272	186	0.162	222	0.164	258	0.350	294	0.646	330	0.850
7	0.926	43	0.913	79	0.802	115	0.561	151	0.265	187	0.162	223	0.165	259	0.358	295	0.654	331	0.853
8	0.927	44	0.912	80	0.797	116	0.552	152	0.258	188	0.162	224	0.166	260	0.366	296	0.661	332	0.857
9	0.927	45	0.910	81	0.792	117	0.544	153	0.252	189	0.163	225	0.168	261	0.374	297	0.668	333	0.860
10	0.928	46	0.909	82	0.787	118	0.536	154	0.245	190	0.163	226	0.170	262	0.383	298	0.675	334	0.864
11	0.928	47	0.907	83	0.781	119	0.528	155	0.239	191	0.163	227	0.172	263	0.391	299	0.682	335	0.867
12	0.929	48	0.905	84	0.776	120	0.519	156	0.233	192	0.163	228	0.174	264	0.400	300	0.689	336	0.870
13	0.929	49	0.903	85	0.770	121	0.511	157	0.227	193	0.164	229	0.176	265	0.408	301	0.696	337	0.873
14	0.929	50	0.901	86	0.765	122	0.502	158	0.221	194	0.164	230	0.179	266	0.417	302	0.703	338	0.876
15	0.930	51	0.899	87	0.759	123	0.494	159	0.216	195	0.164	231	0.182	267	0.425	303	0.709	339	0.879
16	0.930	52	0.897	88	0.753	124	0.485	160	0.211	196	0.164	232	0.185	268	0.434	304	0.716	340	0.882
17	0.930	53	0.895	89	0.747	125	0.477	161	0.206	197	0.164	233	0.189	269	0.443	305	0.722	341	0.885
18	0.930	54	0.892	90	0.741	126	0.468	162	0.201	198	0.165	234	0.193	270	0.451	306	0.729	342	0.887
19	0.930	55	0.890	91	0.735	127	0.460	163	0.197	199	0.165	235	0.197	271	0.460	307	0.735	343	0.890
20	0.930	56	0.887	92	0.729	128	0.451	164	0.193	200	0.165	236	0.201	272	0.468	308	0.741	344	0.892
21	0.930	57	0.885	93	0.722	129	0.443	165	0.189	201	0.164	237	0.206	273	0.477	309	0.747	345	0.895
22	0.930	58	0.882	94	0.716	130	0.434	166	0.185	202	0.164	238	0.211	274	0.485	310	0.753	346	0.897
23	0.930	59	0.879	95	0.709	131	0.425	167	0.182	203	0.164	239	0.216	275	0.494	311	0.759	347	0.899
24	0.929	60	0.876	96	0.703	132	0.417	168	0.179	204	0.164	240	0.221	276	0.502	312	0.765	348	0.901
25	0.929	61	0.873	97	0.696	133	0.408	169	0.176	205	0.164	241	0.227	277	0.511	313	0.770	349	0.903
26	0.929	62	0.870	98	0.689	134	0.400	170	0.174	206	0.163	242	0.233	278	0.519	314	0.776	350	0.905
27	0.928	63	0.867	99	0.682	135	0.391	171	0.172	207	0.163	243	0.239	279	0.528	315	0.781	351	0.907
28	0.928	64	0.864	100	0.675	136	0.383	172	0.170	208	0.163	244	0.245	280	0.536	316	0.787	352	0.909
29	0.927	65	0.860	101	0.668	137	0.374	173	0.168	209	0.163	245	0.252	281	0.544	317	0.792	353	0.910
30	0.927	66	0.857	102	0.661	138	0.366	174	0.166	210	0.162	246	0.258	282	0.552	318	0.797	354	0.912
31	0.926	67	0.853	103	0.654	139	0.358	175	0.165	211	0.162	247	0.265	283	0.561	319	0.802	355	0.913
32	0.925	68	0.850	104	0.646	140	0.350	176	0.164	212	0.162	248	0.272	284	0.569	320	0.807	356	0.915
33	0.925	69	0.846	105	0.639	141	0.341	177	0.163	213	0.162	249	0.279	285	0.577	321	0.811	357	0.916
34	0.924	70	0.842	106	0.631	142	0.333	178	0.163	214	0.161	250	0.287	286	0.585	322	0.816	358	0.917
35	0.923	71	0.838	107	0.624	143	0.325	179	0.162	215	0.161	251	0.294	287	0.593	323	0.821	359	0.919

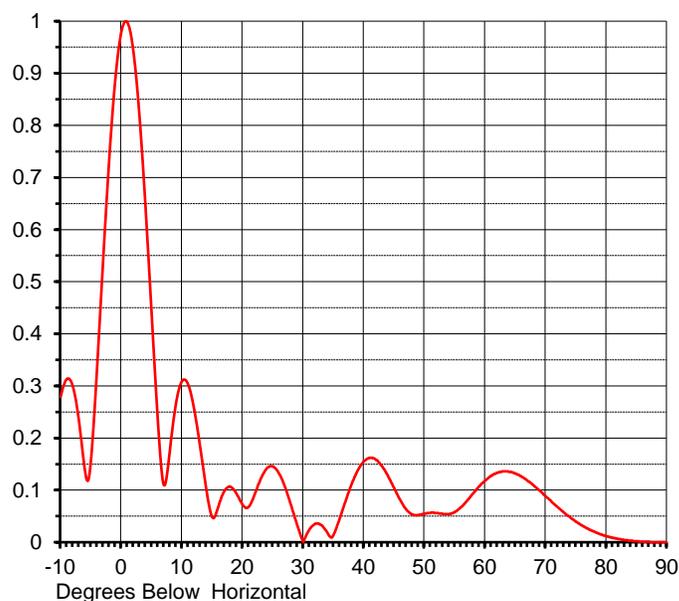
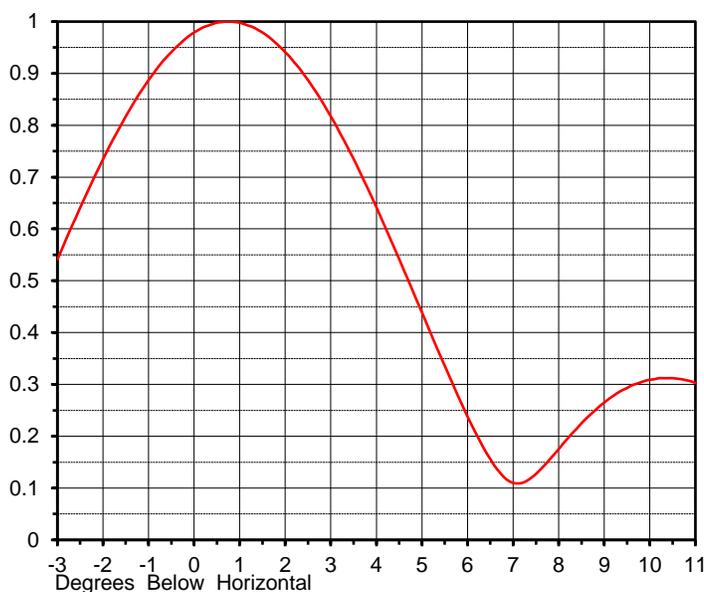
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## ELEVATION PATTERN

Proposal No. **C-71095**  
 Date **23-Feb-18**  
 Call Letters **KGO**  
 Channel **12**  
 Frequency **207 MHz**  
 Antenna Type **TLS-V8/VP-R C160**

RMS Directivity at Main Lobe **8.6 ( 9.36 dB )**  
 RMS Directivity at Horizontal **8.3 ( 9.19 dB )**  
**Calculated**

Beam Tilt **0.75 deg**  
 Pattern Number **08T086075**



Angle	Field								
-10.0	0.279	10.0	0.309	30.0	0.000	50.0	0.055	70.0	0.088
-9.0	0.313	11.0	0.303	31.0	0.024	51.0	0.056	71.0	0.077
-8.0	0.299	12.0	0.256	32.0	0.035	52.0	0.056	72.0	0.067
-7.0	0.234	13.0	0.183	33.0	0.033	53.0	0.054	73.0	0.057
-6.0	0.138	14.0	0.103	34.0	0.018	54.0	0.054	74.0	0.048
-5.0	0.158	15.0	0.048	35.0	0.014	55.0	0.058	75.0	0.039
-4.0	0.334	16.0	0.068	36.0	0.045	56.0	0.067	76.0	0.032
-3.0	0.541	17.0	0.098	37.0	0.079	57.0	0.079	77.0	0.026
-2.0	0.734	18.0	0.106	38.0	0.112	58.0	0.093	78.0	0.020
-1.0	0.887	19.0	0.093	39.0	0.138	59.0	0.107	79.0	0.015
0.0	0.979	20.0	0.072	40.0	0.155	60.0	0.118	80.0	0.012
1.0	0.998	21.0	0.068	41.0	0.162	61.0	0.127	81.0	0.009
2.0	0.941	22.0	0.092	42.0	0.158	62.0	0.133	82.0	0.006
3.0	0.817	23.0	0.122	43.0	0.146	63.0	0.136	83.0	0.004
4.0	0.642	24.0	0.142	44.0	0.127	64.0	0.135	84.0	0.003
5.0	0.439	25.0	0.145	45.0	0.104	65.0	0.132	85.0	0.002
6.0	0.238	26.0	0.132	46.0	0.081	66.0	0.126	86.0	0.001
7.0	0.110	27.0	0.106	47.0	0.063	67.0	0.118	87.0	0.001
8.0	0.175	28.0	0.071	48.0	0.053	68.0	0.109	88.0	0.000
9.0	0.265	29.0	0.033	49.0	0.052	69.0	0.099	89.0	0.000
								90.0	0.000

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