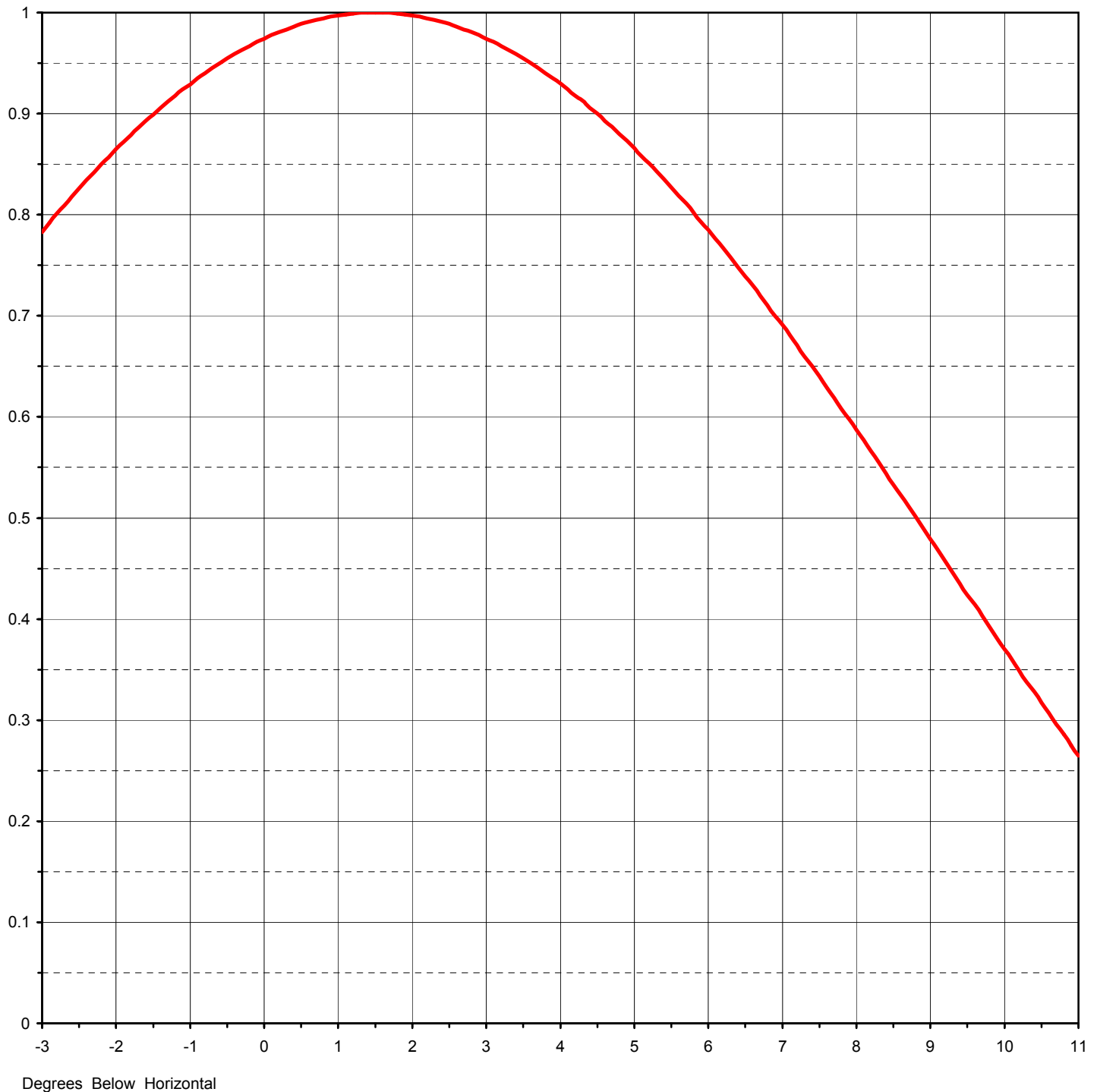




Proposal Number	<b>DCA-10819</b>	
Date	<b>25-Jan-05</b>	
Call Letters	<b>KGUN</b>	Channel <b>9</b>
Location	<b>Tucson, AZ</b>	
Customer		
Antenna Type	<b>THV-5A9-R C140</b>	

## ELEVATION PATTERN

RMS Gain at Main Lobe	<b>5.00 ( 6.99 dB )</b>	Beam Tilt	<b>1.50 deg</b>
RMS Gain at Horizontal	<b>4.70 ( 6.72 dB )</b>	Frequency	<b>189.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>05V050150</b>



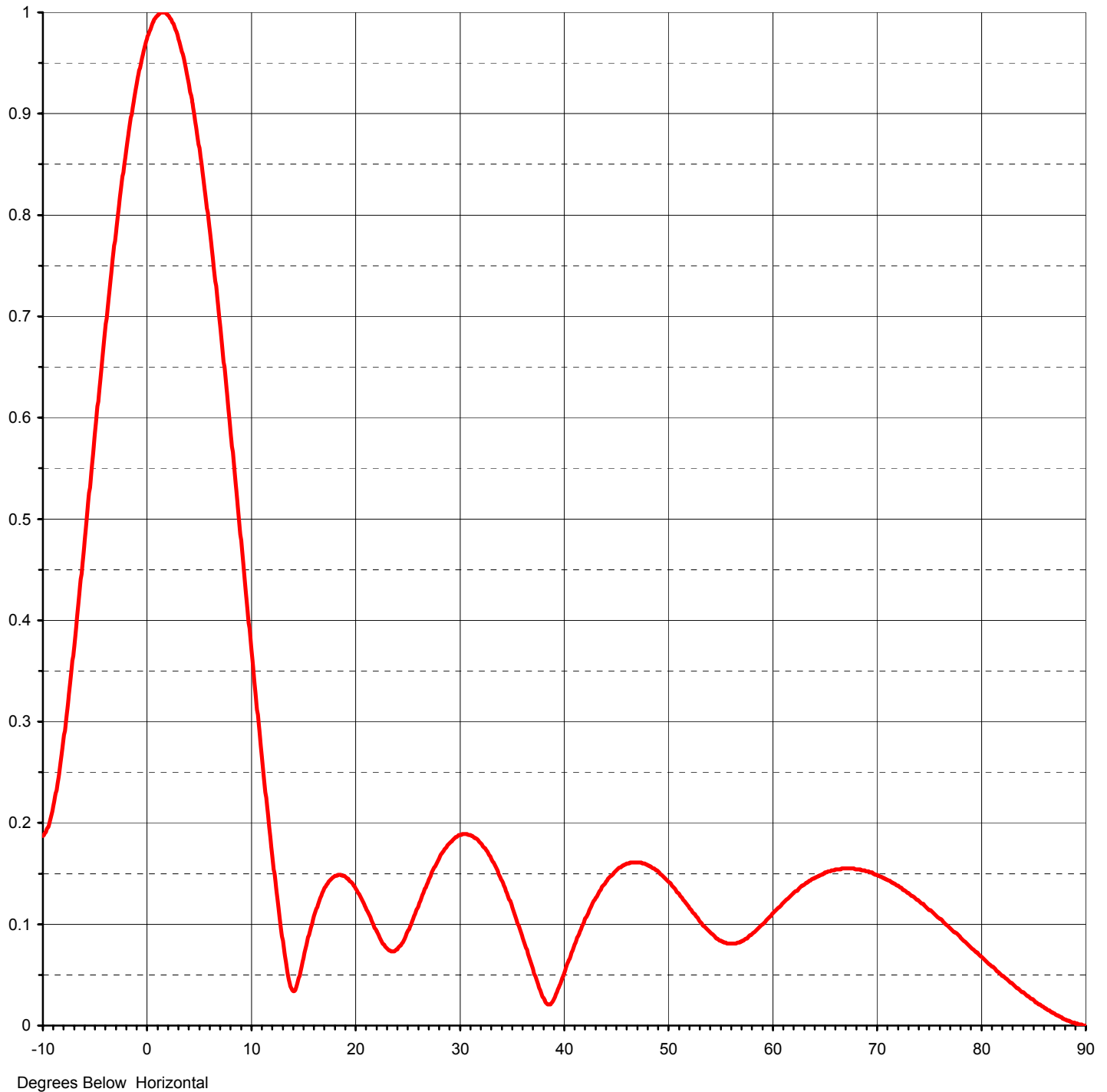


Proposal Number	<b>DCA-10819</b>	
Date	<b>25-Jan-05</b>	
Call Letters	<b>KGUN</b>	Channel <b>9</b>
Location	<b>Tucson, AZ</b>	
Customer		
Antenna Type	<b>THV-5A9-R C140</b>	

## ELEVATION PATTERN

RMS Gain at Main Lobe	<b>5.00</b>	<b>( 6.99 dB )</b>
RMS Gain at Horizontal	<b>4.70</b>	<b>( 6.72 dB )</b>
Calculated / Measured	<b>Calculated</b>	

Beam Tilt	<b>1.50 deg</b>
Frequency	<b>189.00 MHz</b>
Drawing #	<b>05V050150-90</b>





Proposal Number **DCA-10819**

Date **25-Jan-05**

Call Letters **KGUN**

Channel **9**

Location **Tucson, AZ**

Customer

Antenna Type **THV-5A9-R C140**

## TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **05V050150-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.187	2.4	0.991	10.6	0.317	30.5	0.189	51.0	0.131	71.5	0.141
-9.5	0.196	2.6	0.986	10.8	0.296	31.0	0.188	51.5	0.124	72.0	0.138
-9.0	0.216	2.8	0.981	11.0	0.275	31.5	0.185	52.0	0.118	72.5	0.134
-8.5	0.245	3.0	0.974	11.5	0.225	32.0	0.181	52.5	0.111	73.0	0.131
-8.0	0.283	3.2	0.967	12.0	0.177	32.5	0.175	53.0	0.104	73.5	0.127
-7.5	0.327	3.4	0.959	12.5	0.132	33.0	0.167	53.5	0.098	74.0	0.123
-7.0	0.374	3.6	0.950	13.0	0.091	33.5	0.157	54.0	0.093	74.5	0.119
-6.5	0.425	3.8	0.940	13.5	0.056	34.0	0.146	54.5	0.088	75.0	0.114
-6.0	0.478	4.0	0.930	14.0	0.035	34.5	0.133	55.0	0.084	75.5	0.110
-5.5	0.531	4.2	0.918	14.5	0.041	35.0	0.120	55.5	0.082	76.0	0.105
-5.0	0.585	4.4	0.906	15.0	0.063	35.5	0.105	56.0	0.081	76.5	0.101
-4.5	0.637	4.6	0.893	15.5	0.085	36.0	0.090	56.5	0.081	77.0	0.096
-4.0	0.688	4.8	0.880	16.0	0.104	36.5	0.075	57.0	0.083	77.5	0.092
-3.5	0.737	5.0	0.866	16.5	0.120	37.0	0.059	57.5	0.086	78.0	0.087
-3.0	0.783	5.2	0.851	17.0	0.133	37.5	0.043	58.0	0.089	78.5	0.082
-2.8	0.801	5.4	0.835	17.5	0.142	38.0	0.029	58.5	0.094	79.0	0.077
-2.6	0.818	5.6	0.819	18.0	0.147	38.5	0.021	59.0	0.099	79.5	0.072
-2.4	0.834	5.8	0.802	18.5	0.149	39.0	0.024	59.5	0.104	80.0	0.068
-2.2	0.850	6.0	0.785	19.0	0.148	39.5	0.036	60.0	0.110	80.5	0.063
-2.0	0.865	6.2	0.767	19.5	0.143	40.0	0.049	60.5	0.115	81.0	0.058
-1.8	0.879	6.4	0.748	20.0	0.137	40.5	0.063	61.0	0.120	81.5	0.054
-1.6	0.893	6.6	0.730	20.5	0.128	41.0	0.077	61.5	0.125	82.0	0.049
-1.4	0.906	6.8	0.710	21.0	0.118	41.5	0.090	62.0	0.130	82.5	0.045
-1.2	0.918	7.0	0.691	21.5	0.107	42.0	0.102	62.5	0.134	83.0	0.041
-1.0	0.929	7.2	0.671	22.0	0.095	42.5	0.114	63.0	0.138	83.5	0.037
-0.8	0.940	7.4	0.650	22.5	0.085	43.0	0.124	63.5	0.142	84.0	0.033
-0.6	0.950	7.6	0.629	23.0	0.077	43.5	0.133	64.0	0.145	84.5	0.029
-0.4	0.959	7.8	0.608	23.5	0.073	44.0	0.140	64.5	0.148	85.0	0.025
-0.2	0.967	8.0	0.587	24.0	0.075	44.5	0.147	65.0	0.151	85.5	0.021
0.0	0.974	8.2	0.566	24.5	0.081	45.0	0.152	65.5	0.152	86.0	0.018
0.2	0.981	8.4	0.544	25.0	0.091	45.5	0.156	66.0	0.154	86.5	0.015
0.4	0.986	8.6	0.523	25.5	0.103	46.0	0.159	66.5	0.154	87.0	0.012
0.6	0.991	8.8	0.501	26.0	0.116	46.5	0.161	67.0	0.155	87.5	0.009
0.8	0.994	9.0	0.479	26.5	0.129	47.0	0.161	67.5	0.155	88.0	0.006
1.0	0.997	9.2	0.457	27.0	0.141	47.5	0.161	68.0	0.154	88.5	0.004
1.2	0.999	9.4	0.435	27.5	0.153	48.0	0.159	68.5	0.153	89.0	0.002
1.4	1.000	9.6	0.414	28.0	0.163	48.5	0.156	69.0	0.152	89.5	0.001
1.6	1.000	9.8	0.403	28.5	0.172	49.0	0.153	69.5	0.151	90.0	0.000
1.8	0.999	10.0	0.381	29.0	0.179	49.5	0.148	70.0	0.149		
2.0	0.997	10.2	0.360	29.5	0.184	50.0	0.143	70.5	0.146		
2.2	0.994	10.4	0.338	30.0	0.188	50.5	0.137	71.0	0.144		

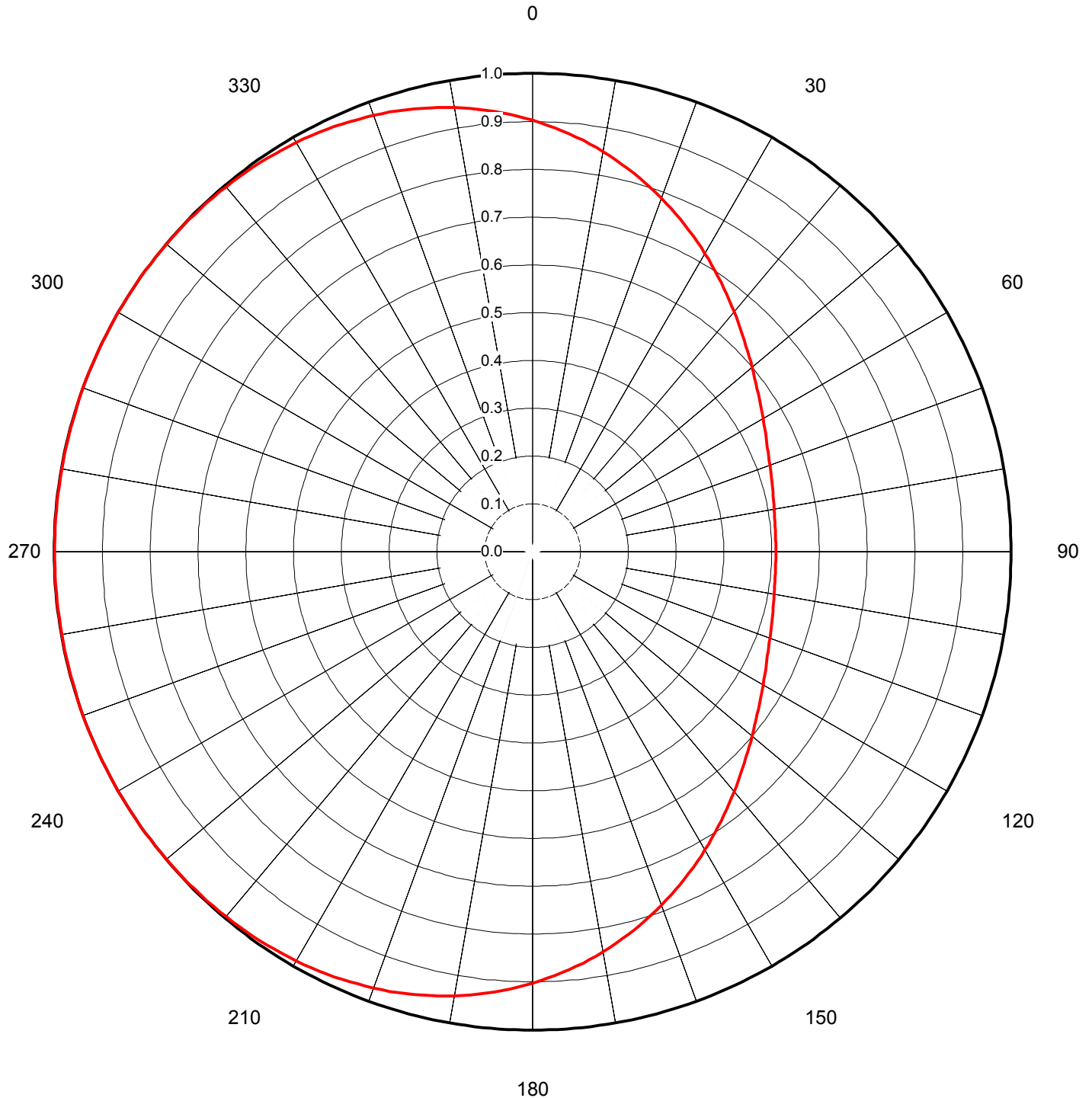


Proposal Number	<b>DCA-10819</b>	
Date	<b>25-Jan-05</b>	
Call Letters	<b>KGUN</b>	Channel <b>9</b>
Location	<b>Tucson, AZ</b>	
Customer		
Antenna Type	<b>THV-5A9-R C140</b>	

### AZIMUTH PATTERN

Gain	<b>1.40</b>	<b>( 1.46 dB)</b>
Calculated / Measured		<b>Calculated</b>

Frequency	<b>189.00 MHz</b>
Drawing #	<b>THV-C140</b>





Proposal Number **DCA-10819**  
 Date **25-Jan-05**  
 Call Letters **KGUN** Channel **9**  
 Location **Tucson, AZ**  
 Customer  
 Antenna Type **THV-5A9-R C140**

## TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #: **THV-C140**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.902	45	0.626	90	0.508	135	0.626	180	0.902	225	0.998	270	0.999	315	0.998
1	0.897	46	0.620	91	0.508	136	0.631	181	0.907	226	0.999	271	0.999	316	0.998
2	0.892	47	0.615	92	0.508	137	0.637	182	0.911	227	0.999	272	0.999	317	0.998
3	0.887	48	0.609	93	0.509	138	0.643	183	0.916	228	0.999	273	0.999	318	0.997
4	0.882	49	0.604	94	0.509	139	0.649	184	0.920	229	0.999	274	0.999	319	0.997
5	0.877	50	0.599	95	0.509	140	0.655	185	0.924	230	0.999	275	0.999	320	0.996
6	0.872	51	0.594	96	0.510	141	0.661	186	0.928	231	1.000	276	0.999	321	0.996
7	0.866	52	0.589	97	0.511	142	0.667	187	0.932	232	1.000	277	0.999	322	0.995
8	0.861	53	0.585	98	0.511	143	0.674	188	0.936	233	1.000	278	0.999	323	0.994
9	0.855	54	0.580	99	0.512	144	0.680	189	0.939	234	1.000	279	0.999	324	0.994
10	0.849	55	0.576	100	0.513	145	0.687	190	0.943	235	1.000	280	0.999	325	0.993
11	0.843	56	0.572	101	0.514	146	0.693	191	0.946	236	1.000	281	0.999	326	0.992
12	0.837	57	0.568	102	0.515	147	0.700	192	0.949	237	1.000	282	0.999	327	0.991
13	0.831	58	0.564	103	0.516	148	0.706	193	0.952	238	1.000	283	0.999	328	0.990
14	0.825	59	0.560	104	0.518	149	0.713	194	0.955	239	1.000	284	0.999	329	0.989
15	0.819	60	0.556	105	0.519	150	0.720	195	0.958	240	1.000	285	0.999	330	0.988
16	0.812	61	0.553	106	0.521	151	0.726	196	0.961	241	1.000	286	0.999	331	0.986
17	0.806	62	0.549	107	0.522	152	0.733	197	0.964	242	1.000	287	0.999	332	0.985
18	0.800	63	0.546	108	0.524	153	0.740	198	0.966	243	1.000	288	1.000	333	0.984
19	0.793	64	0.543	109	0.526	154	0.747	199	0.968	244	1.000	289	1.000	334	0.982
20	0.787	65	0.540	110	0.528	155	0.753	200	0.971	245	1.000	290	1.000	335	0.980
21	0.780	66	0.538	111	0.530	156	0.760	201	0.973	246	1.000	291	1.000	336	0.979
22	0.773	67	0.535	112	0.532	157	0.767	202	0.975	247	1.000	292	1.000	337	0.977
23	0.767	68	0.532	113	0.535	158	0.773	203	0.977	248	1.000	293	1.000	338	0.975
24	0.760	69	0.530	114	0.538	159	0.780	204	0.979	249	1.000	294	1.000	339	0.973
25	0.753	70	0.528	115	0.540	160	0.787	205	0.980	250	1.000	295	1.000	340	0.971
26	0.747	71	0.526	116	0.543	161	0.793	206	0.982	251	1.000	296	1.000	341	0.968
27	0.740	72	0.524	117	0.546	162	0.800	207	0.984	252	1.000	297	1.000	342	0.966
28	0.733	73	0.522	118	0.549	163	0.806	208	0.985	253	0.999	298	1.000	343	0.964
29	0.726	74	0.521	119	0.553	164	0.812	209	0.986	254	0.999	299	1.000	344	0.961
30	0.720	75	0.519	120	0.556	165	0.819	210	0.988	255	0.999	300	1.000	345	0.958
31	0.713	76	0.518	121	0.560	166	0.825	211	0.989	256	0.999	301	1.000	346	0.955
32	0.706	77	0.516	122	0.564	167	0.831	212	0.990	257	0.999	302	1.000	347	0.952
33	0.700	78	0.515	123	0.568	168	0.837	213	0.991	258	0.999	303	1.000	348	0.949
34	0.693	79	0.514	124	0.572	169	0.843	214	0.992	259	0.999	304	1.000	349	0.946
35	0.687	80	0.513	125	0.576	170	0.849	215	0.993	260	0.999	305	1.000	350	0.943
36	0.680	81	0.512	126	0.580	171	0.855	216	0.994	261	0.999	306	1.000	351	0.939
37	0.674	82	0.511	127	0.585	172	0.860	217	0.994	262	0.999	307	1.000	352	0.936
38	0.668	83	0.511	128	0.589	173	0.866	218	0.995	263	0.999	308	1.000	353	0.932
39	0.661	84	0.510	129	0.594	174	0.872	219	0.996	264	0.999	309	1.000	354	0.928
40	0.655	85	0.509	130	0.599	175	0.877	220	0.996	265	0.999	310	0.999	355	0.924
41	0.649	86	0.509	131	0.604	176	0.882	221	0.997	266	0.999	311	0.999	356	0.920
42	0.643	87	0.509	132	0.609	177	0.887	222	0.997	267	0.999	312	0.999	357	0.916
43	0.637	88	0.508	133	0.615	178	0.892	223	0.998	268	0.999	313	0.999	358	0.911
44	0.631	89	0.508	134	0.620	179	0.897	224	0.998	269	0.999	314	0.999	359	0.907