



ENGINEERING STATEMENT

In support of an Application for
Modification of Construction Permit

For Digital Channel 57

KWKT-DT Waco, TX

200 kW ERP 536 m HAAT

PURPOSE

MARSAND, INC. has been retained by Comcorp of Texas License Corp.(Permitee), permittee of KWKT-DT, digital CH57 of Waco, TX, to prepare this engineering statement in support of an application for Modification of Construction Permit (CP). A CP (BPCDT-19991029AHF) exists which is on file with the Federal Communications Commission (Commission) for a directional antenna with an ERP of 1000 kW and 541 m HAAT. The purpose of this application is to authorize the “as built” KWKT-DT facility which establishes a digital replication service with a directional antenna at an ERP of 200 kW and 536 m HAAT.

DISCUSSION

In 1999, a CP was granted to KWKT-DT for a maximized digital facility. In order to meet the “use it or lose it” deadline imposed by the Commission, the proposed facility has been built out to replicate the paired analog service as of 1997.

Figure 1, below, shows a map of the predicted FCC contours vs. the 1997 analog and allotted digital coverage. The proposed coverage lies within either the allotted digital service contour or the existing CP contour. Therefore, no additional interference is anticipated other than what is already allowed under the existing CP or allotment.

CONCLUSION

It is respectfully requested that the Commission grant the Modification of CP for the facility as indicated in the TECH BOX of the accompanying Form 301.

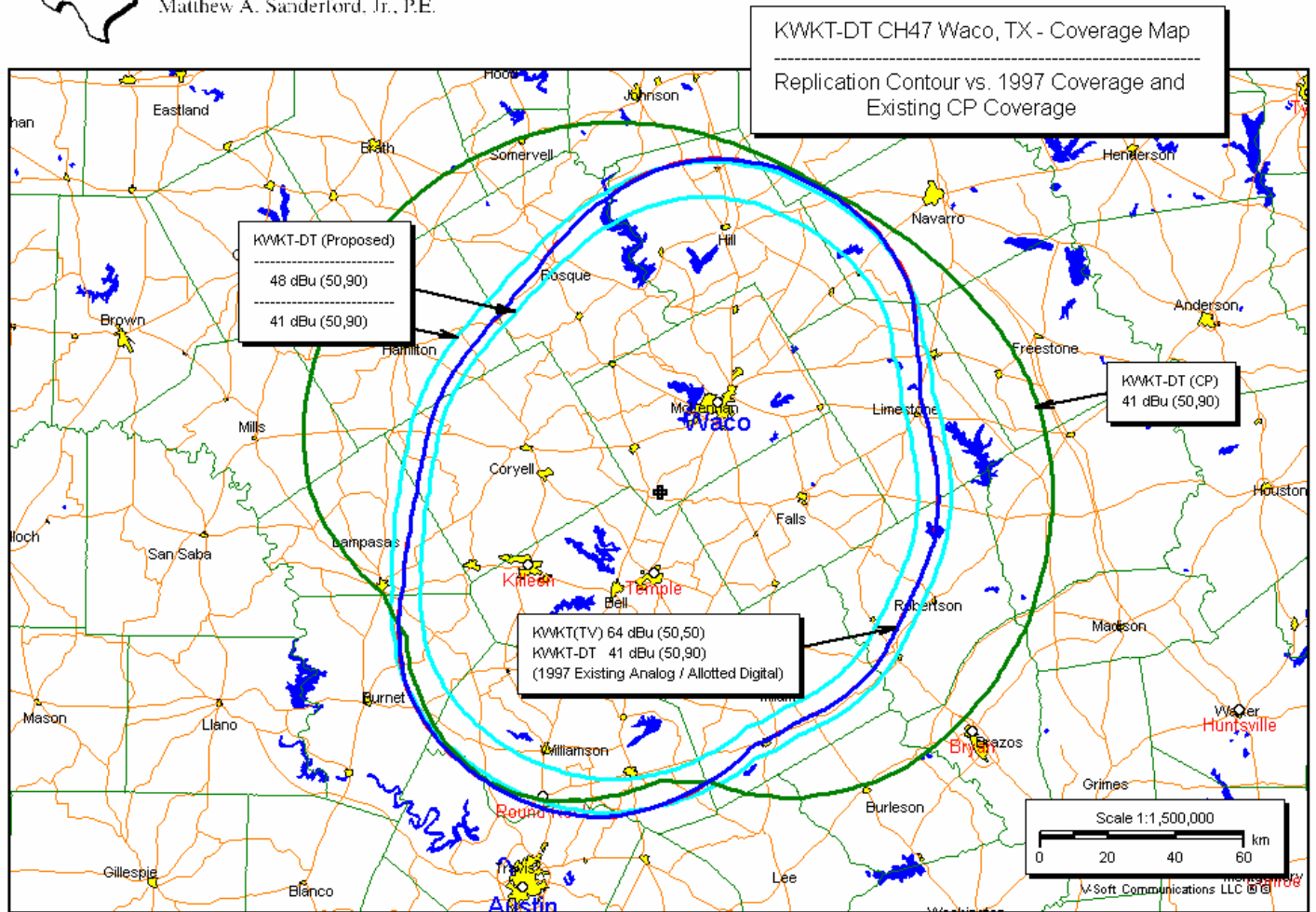



Figure 1

DECLARATION

Matthew A. Sanderford, Jr., P.E., declares and states that he is a graduate Electrical Engineer with a Bachelor of Science Degree in Electrical Engineering from the University of Texas at El Paso, a Licensed Professional Engineer in the State of Texas, and his qualifications are known to the Federal Communications Commission, and that he is President of MARSAND, INC., a Registered Professional Engineering firm in the State of Texas, and that firm has been retained by Comcorp of Texas License Corp., to perform the engineering support as contained in this report.

All facts contained herein are true of his own knowledge except where stated to be on information or belief provided by Comcorp of Texas License Corp., and as to those facts, he believes them to be true.

I declare under penalty of perjury that the foregoing is true and correct.



Matthew A. Sanderford, Jr., P.E.
President - MARSAND, INC.

Executed this 30th day of June, 2005
State of Texas

Appendix

AZIMUTH PATTERN

TYPE: ALP-PX

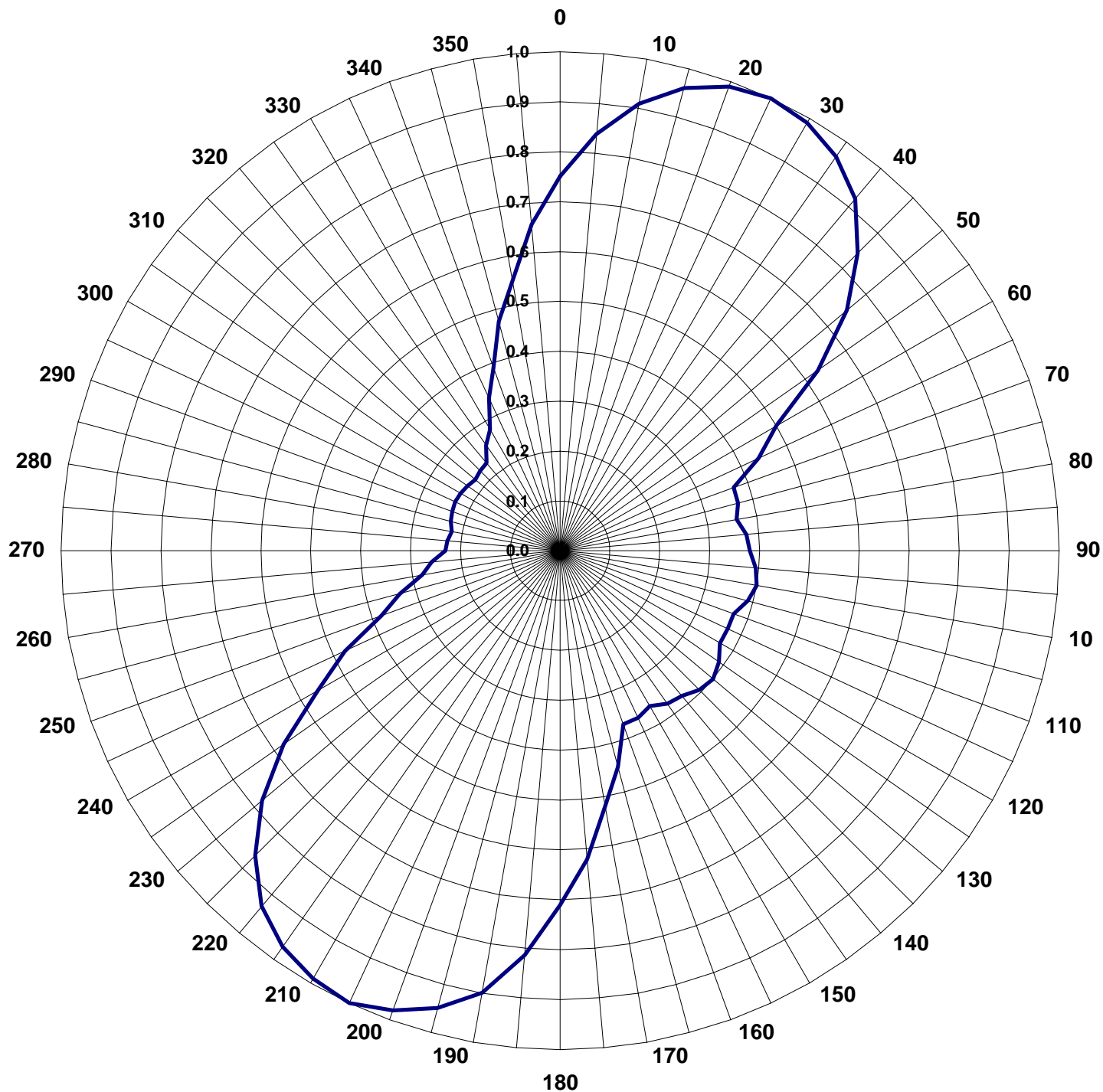
	Numeric	dB
Directivity:	<u>3.00</u>	<u>4.77</u>
Peak(s) at:	<u></u>	<u></u>
	<u></u>	<u></u>

Frequency: 57 (DTV)

Location: Waco, TX

Polarization: Horizontal

Note: Pattern shape and directivity may vary with channel and mounting configuration.



TABULATED DATA FOR AZIMUTH PATTERN

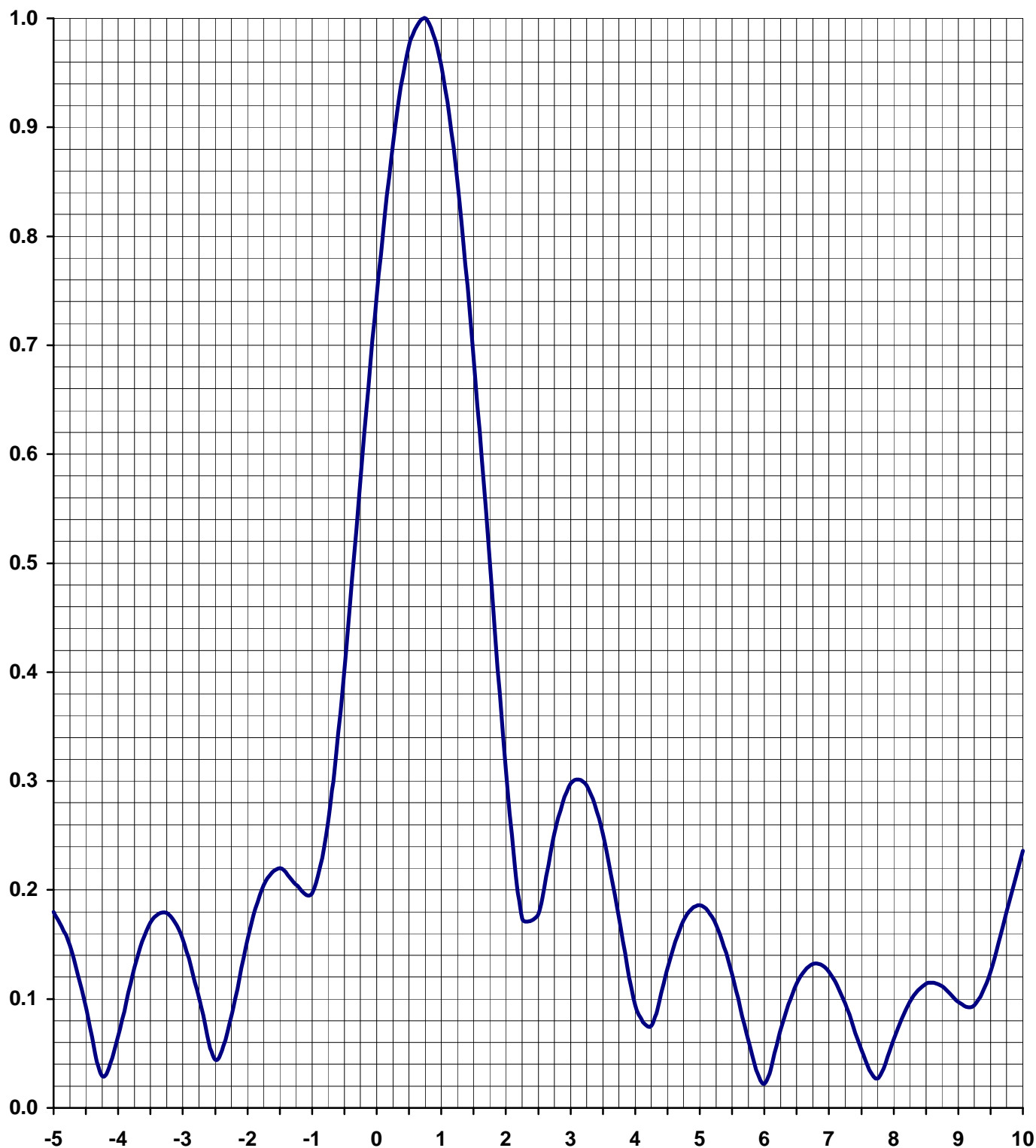
TYPE: ALP-PX

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.750	-2.50	92	0.388	-8.22	184	0.794	-2.00	276	0.226	-12.92
2	0.790	-2.05	94	0.392	-8.13	186	0.832	-1.60	278	0.224	-13.00
4	0.822	-1.70	96	0.396	-8.05	188	0.871	-1.20	280	0.220	-13.15
6	0.855	-1.36	98	0.400	-7.96	190	0.900	-0.92	282	0.224	-13.00
8	0.887	-1.04	100	0.400	-7.96	192	0.925	-0.68	284	0.226	-12.92
10	0.910	-0.82	102	0.398	-8.00	194	0.941	-0.53	286	0.228	-12.84
12	0.935	-0.58	104	0.392	-8.13	196	0.958	-0.37	288	0.230	-12.77
14	0.952	-0.43	106	0.386	-8.27	198	0.974	-0.23	290	0.230	-12.77
16	0.968	-0.28	108	0.380	-8.40	200	0.980	-0.18	292	0.232	-12.69
18	0.984	-0.14	110	0.370	-8.64	202	0.992	-0.07	294	0.232	-12.69
20	0.990	-0.09	112	0.370	-8.64	204	0.994	-0.05	296	0.232	-12.69
22	1.000	0.00	114	0.370	-8.64	206	1.000	0.00	298	0.232	-12.69
24	1.000	0.00	116	0.370	-8.64	208	1.000	0.00	300	0.230	-12.77
26	1.000	0.00	118	0.370	-8.64	210	0.990	-0.09	302	0.230	-12.77
28	1.000	0.00	120	0.370	-8.64	212	0.988	-0.10	304	0.228	-12.84
30	0.990	-0.09	122	0.380	-8.40	214	0.976	-0.21	306	0.226	-12.92
32	0.986	-0.12	124	0.386	-8.27	216	0.964	-0.32	308	0.224	-13.00
34	0.972	-0.25	126	0.392	-8.13	218	0.952	-0.43	310	0.222	-13.07
36	0.958	-0.37	128	0.398	-8.00	220	0.930	-0.63	312	0.224	-13.00
38	0.943	-0.51	130	0.400	-7.96	222	0.909	-0.83	314	0.226	-12.92
40	0.920	-0.72	132	0.400	-7.96	224	0.879	-1.12	316	0.228	-12.84
42	0.895	-0.96	134	0.396	-8.05	226	0.848	-1.43	318	0.230	-12.77
44	0.861	-1.30	136	0.392	-8.13	228	0.818	-1.74	320	0.230	-12.77
46	0.826	-1.66	138	0.388	-8.22	230	0.780	-2.16	322	0.242	-12.32
48	0.792	-2.03	140	0.380	-8.40	232	0.743	-2.58	324	0.253	-11.94
50	0.750	-2.50	142	0.380	-8.40	234	0.699	-3.11	326	0.263	-11.60
52	0.707	-3.01	144	0.376	-8.50	236	0.655	-3.68	328	0.273	-11.28
54	0.657	-3.65	146	0.372	-8.59	238	0.610	-4.29	330	0.280	-11.06
56	0.606	-4.35	148	0.368	-8.68	240	0.560	-5.04	332	0.305	-10.31
58	0.556	-5.10	150	0.360	-8.87	242	0.529	-5.53	334	0.327	-9.71
60	0.500	-6.02	152	0.366	-8.73	244	0.493	-6.14	336	0.349	-9.14
62	0.479	-6.39	154	0.368	-8.68	246	0.457	-6.80	338	0.372	-8.59
64	0.453	-6.88	156	0.370	-8.64	248	0.420	-7.54	340	0.390	-8.18
66	0.426	-7.41	158	0.372	-8.59	250	0.380	-8.40	342	0.426	-7.41
68	0.400	-7.96	160	0.370	-8.64	252	0.364	-8.78	344	0.459	-6.76
70	0.370	-8.64	162	0.404	-7.87	254	0.343	-9.29	346	0.491	-6.18
72	0.372	-8.59	164	0.434	-7.25	256	0.323	-9.82	348	0.523	-5.63
74	0.370	-8.64	166	0.465	-6.65	258	0.303	-10.37	350	0.550	-5.19
76	0.368	-8.68	168	0.495	-6.11	260	0.280	-11.06	352	0.596	-4.50
78	0.366	-8.73	170	0.520	-5.68	262	0.273	-11.28	354	0.636	-3.93
80	0.360	-8.87	172	0.564	-4.97	264	0.263	-11.60	356	0.677	-3.39
82	0.368	-8.68	174	0.602	-4.41	266	0.253	-11.94	358	0.717	-2.89
84	0.372	-8.59	176	0.640	-3.88	268	0.242	-12.32	360	0.750	-2.50
86	0.376	-8.50	178	0.679	-3.36	270	0.230	-12.77			
88	0.380	-8.40	180	0.710	-2.97	272	0.230	-12.77			
90	0.380	-8.40	182	0.756	-2.43	274	0.228	-12.84			

ELEVATION PATTERN

TYPE:	ALP24L3H	
Directivity:	Numeric	dBd
Main Lobe:	25.21	14.02
Horizontal:	13.99	11.46

Frequency:	57 (DTV)
Location:	Waco, TX
Beam Tilt:	0.75
Polarization:	Horizontal



TABULATED DATA FOR ELEVATION PATTERN**TYPE: ALP24L3H****-5 to 10 degrees in 0.25 increments****10 to 90 degrees in 0.50 increments**

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
-5.00	0.180	-14.89	6.75	0.132	-17.59	27.00	0.011	-39.17	50.50	0.014	-37.08	74.00	0.023	-32.77
-4.75	0.149	-16.54	7.00	0.125	-18.06	27.50	0.008	-41.94	51.00	0.009	-40.92	74.50	0.030	-30.46
-4.50	0.093	-20.63	7.25	0.096	-20.35	28.00	0.015	-36.48	51.50	0.007	-43.10	75.00	0.036	-28.87
-4.25	0.029	-30.75	7.50	0.053	-25.51	28.50	0.011	-39.17	52.00	0.017	-35.39	75.50	0.041	-27.74
-4.00	0.066	-23.61	7.75	0.027	-31.37	29.00	0.003	-50.46	52.50	0.026	-31.70	76.00	0.043	-27.33
-3.75	0.129	-17.79	8.00	0.063	-24.01	29.50	0.002	-53.98	53.00	0.028	-31.06	76.50	0.043	-27.33
-3.50	0.170	-15.39	8.25	0.097	-20.26	30.00	0.001	-60.00	53.50	0.024	-32.40	77.00	0.041	-27.74
-3.25	0.179	-14.94	8.50	0.114	-18.86	30.50	0.004	-47.96	54.00	0.012	-38.42	77.50	0.038	-28.40
-3.00	0.155	-16.19	8.75	0.112	-19.02	31.00	0.008	-41.94	54.50	0.007	-43.10	78.00	0.034	-29.37
-2.75	0.101	-19.91	9.00	0.097	-20.26	31.50	0.023	-32.77	55.00	0.023	-32.77	78.50	0.029	-30.75
-2.50	0.044	-27.13	9.25	0.094	-20.54	32.00	0.052	-25.68	55.50	0.035	-29.12	79.00	0.024	-32.40
-2.25	0.084	-21.51	9.50	0.125	-18.06	32.50	0.085	-21.41	56.00	0.039	-28.18	79.50	0.019	-34.42
-2.00	0.155	-16.19	9.75	0.180	-14.89	33.00	0.108	-19.33	56.50	0.034	-29.37	80.00	0.014	-37.08
-1.75	0.204	-13.81	10.00	0.236	-12.54	33.50	0.110	-19.17	57.00	0.020	-33.98	80.50	0.010	-40.00
-1.50	0.220	-13.15	10.50	0.314	-10.06	34.00	0.087	-21.21	57.50	0.010	-40.00	81.00	0.006	-44.44
-1.25	0.205	-13.76	11.00	0.301	-10.43	34.50	0.047	-26.56	58.00	0.027	-31.37	81.50	0.004	-47.96
-1.00	0.197	-14.11	11.50	0.214	-13.39	35.00	0.027	-31.37	58.50	0.045	-26.94	82.00	0.003	-50.46
-0.75	0.262	-11.63	12.00	0.104	-19.66	35.50	0.049	-26.20	59.00	0.055	-25.19	82.50	0.005	-46.02
-0.50	0.402	-7.92	12.50	0.029	-30.75	36.00	0.057	-24.88	59.50	0.056	-25.04	83.00	0.006	-44.44
-0.25	0.575	-4.81	13.00	0.031	-30.17	36.50	0.044	-27.13	60.00	0.052	-25.68	83.50	0.008	-41.94
0.00	0.745	-2.56	13.50	0.025	-32.04	37.00	0.018	-34.89	60.50	0.058	-24.73	84.00	0.008	-41.94
0.25	0.885	-1.06	14.00	0.008	-41.94	37.50	0.026	-31.70	61.00	0.086	-21.31	84.50	0.009	-40.92
0.50	0.975	-0.22	14.50	0.001	-60.00	38.00	0.043	-27.33	61.50	0.129	-17.79	85.00	0.009	-40.92
0.75	1.000	0.00	15.00	0.007	-43.10	38.50	0.042	-27.54	62.00	0.177	-15.04	85.50	0.009	-40.92
1.00	0.957	-0.38	15.50	0.015	-36.48	39.00	0.024	-32.40	62.50	0.221	-13.11	86.00	0.008	-41.94
1.25	0.849	-1.42	16.00	0.011	-39.17	39.50	0.006	-44.44	63.00	0.255	-11.87	86.50	0.008	-41.94
1.50	0.690	-3.22	16.50	0.008	-41.94	40.00	0.027	-31.37	63.50	0.277	-11.15	87.00	0.007	-43.10
1.75	0.501	-6.00	17.00	0.028	-31.06	40.50	0.037	-28.64	64.00	0.284	-10.93	87.50	0.006	-44.44
2.00	0.312	-10.12	17.50	0.031	-30.17	41.00	0.031	-30.17	64.50	0.276	-11.18	88.00	0.005	-46.02
2.25	0.174	-15.19	18.00	0.013	-37.72	41.50	0.013	-37.72	65.00	0.254	-11.90	88.50	0.004	-47.96
2.50	0.178	-14.99	18.50	0.027	-31.37	42.00	0.014	-37.08	65.50	0.220	-13.15	89.00	0.002	-53.98
2.75	0.252	-11.97	19.00	0.050	-26.02	42.50	0.030	-30.46	66.00	0.179	-14.94	89.50	0.001	-60.00
3.00	0.298	-10.52	19.50	0.048	-26.38	43.00	0.034	-29.37	66.50	0.134	-17.46	90.00	0.000	---
3.25	0.296	-10.57	20.00	0.070	-23.10	43.50	0.028	-31.06	67.00	0.091	-20.82			
3.50	0.251	-12.01	20.50	0.146	-16.71	44.00	0.031	-30.17	67.50	0.057	-24.88			
3.75	0.175	-15.14	21.00	0.221	-13.11	44.50	0.052	-25.68	68.00	0.045	-26.94			
4.00	0.094	-20.54	21.50	0.253	-11.94	45.00	0.072	-22.85	68.50	0.056	-25.04			
4.25	0.075	-22.50	22.00	0.225	-12.96	45.50	0.081	-21.83	69.00	0.071	-22.97			
4.50	0.128	-17.86	22.50	0.149	-16.54	46.00	0.077	-22.27	69.50	0.081	-21.83			
4.75	0.172	-15.29	23.00	0.062	-24.15	46.50	0.061	-24.29	70.00	0.085	-21.41			
5.00	0.186	-14.61	23.50	0.046	-26.74	47.00	0.040	-27.96	70.50	0.082	-21.72			
5.25	0.168	-15.49	24.00	0.070	-23.10	47.50	0.020	-33.98	71.00	0.074	-22.62			
5.50	0.123	-18.20	24.50	0.058	-24.73	48.00	0.006	-44.44	71.50	0.062	-24.15			
5.75	0.062	-24.15	25.00	0.026	-31.70	48.50	0.001	-60.00	72.00	0.047	-26.56			
6.00	0.022	-33.15	25.50	0.020	-33.98	49.00	0.003	-50.46	72.50	0.033	-29.63			
6.25	0.072	-22.85	26.00	0.034	-29.37	49.50	0.009	-40.92	73.00	0.022	-33.15			
6.50	0.114	-18.86	26.50	0.029	-30.75	50.00	0.014	-37.08	73.50	0.018	-34.89			