

TECHNICAL EXHIBIT
APPLICATION FOR LICENSE
TELEVISION STATION KCBD-DT
LUBBOCK, TEXAS
CH 9 15 KW 232 M

Technical Statement

This Technical Exhibit was prepared on behalf of Television Station KCBD-DT on Channel 9 assigned to Lubbock, Texas in support of its application for license. The station is presently operating on automatic program test authority with an effective radiated power of 15 kilowatts and an antenna height above average terrain of 232 meters on Channel 9.¹

This application for license is also noting a change in the electrical beam tilt for this facility. The electrical beam tilt was also increased to 1.5 degrees. The Appendix contains the manufacturer's antenna specifications.

Charles A. Cooper

August 12, 2002

du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
941.329.6000

¹ See FCC Construction Permit File Number: BPCDT-19991019ABQ.

ANTENNA MANUFACTURER SPECIFICATIONS

Broadcast Antenna System

Power Analysis

KCBD-TV & DT Channel 9
Lubbock, TX
Type: ABW12V6-HTO-9/11

ANTENNA PARAMETERS:

Azimuth Directivity:
Hor Pol: 1.00 (0.00 dBd)

Elevation Directivity:
Hor Pol: 10.70 (10.29 dBd)

TRANSMISSION LINE:

VERTICAL RUN:

Type: 6-1/8" 75 Ohm MACXLine®

Length: 700 ft.

Attenuation: 0.0620 dB/100 ft.

HORIZONTAL RUN:

Type: 6-1/8" 75 Ohm MACXLine®

Length: 64 ft.

Attenuation: 0.0620 dB/100 ft.

Efficiency: 89.67%

ERP:

kW: 15.00

dBk: 11.76

POWER GAIN:

Ratio: 10.70

dBd: 10.29

ANTENNA INPUT:

kW: 1.402

dBk: 1.467

LINE LOSS:

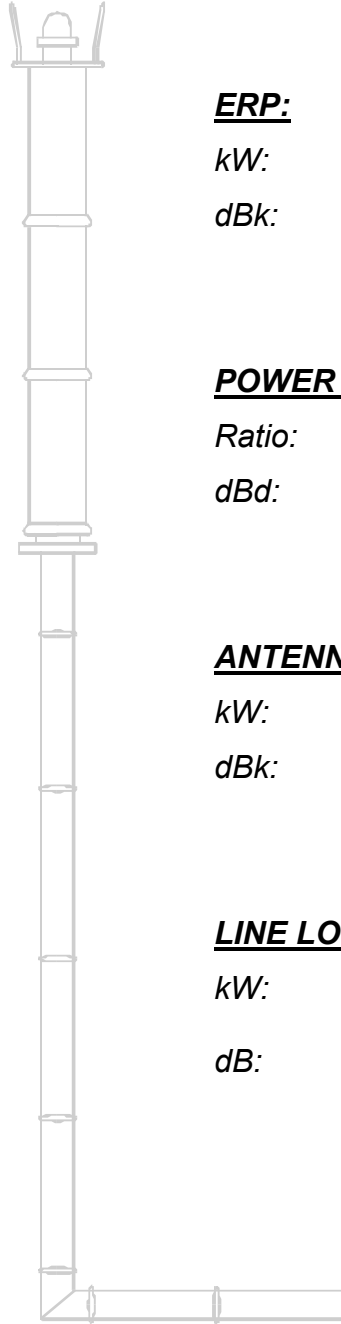
kW: 0.158

dB: 0.474

TRANSMITTER POWER:

kW: 1.56

dBk: 1.93

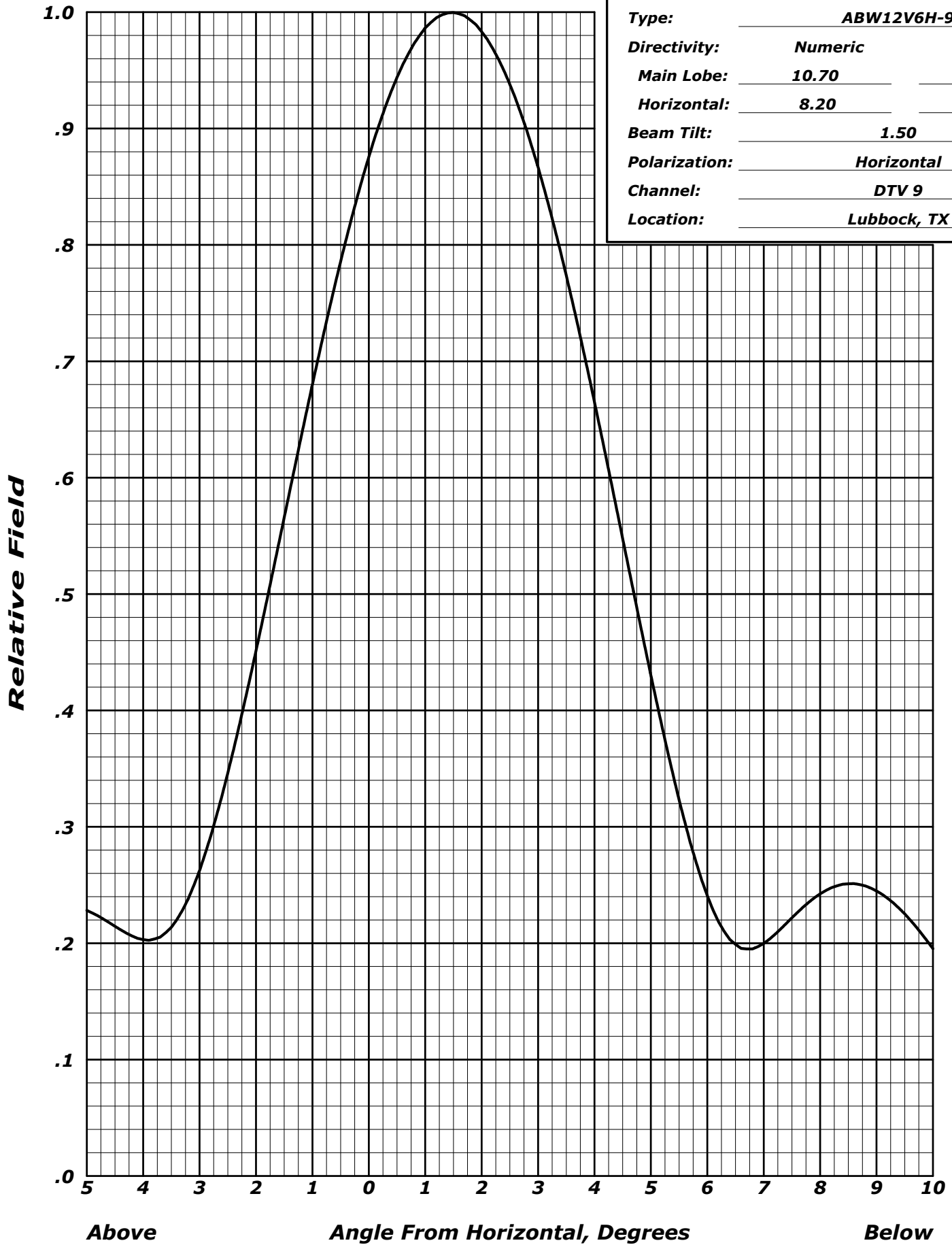


Andrew Corporation
10500 W. 153rd Street
Orland Park, Illinois U.S.A. 60462

AG061200-709 Rev. G -5-

ANDREW
ELEVATION PATTERN

Type:	ABW12V6H-9	
Directivity:	Numeric	dBd
Main Lobe:	10.70	(10.29)
Horizontal:	8.20	(9.14)
Beam Tilt:	1.50	
Polarization:	Horizontal	
Channel:	DTV 9	
Location:	Lubbock, TX	





TABULATED DATA FOR ELEVATION PATTERN
TYPE : ABW12V6H-9

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-5 To 10			10 To 90								
In 0.25 Increments			In 0.5 Increments								
-5.00	0.228	-12.83	8.75	0.250	-12.05	35.00	0.062	-24.21	62.50	0.028	-30.90
-4.75	0.222	-13.07	9.00	0.245	-12.22	35.50	0.071	-22.93	63.00	0.027	-31.52
-4.50	0.215	-13.37	9.25	0.236	-12.52	36.00	0.078	-22.13	63.50	0.025	-32.21
-4.25	0.207	-13.66	9.50	0.225	-12.95	36.50	0.081	-21.78	64.00	0.023	-32.91
-4.00	0.203	-13.84	9.75	0.211	-13.51	37.00	0.081	-21.87	64.50	0.021	-33.53
-3.75	0.204	-13.79	10.00	0.195	-14.19	37.50	0.076	-22.42	65.00	0.020	-34.08
-3.50	0.214	-13.40	10.50	0.161	-15.86	38.00	0.067	-23.50	65.50	0.019	-34.43
-3.25	0.233	-12.64	11.00	0.130	-17.73	38.50	0.055	-25.23	66.00	0.019	-34.56
-3.00	0.262	-11.62	11.50	0.111	-19.09	39.00	0.040	-27.93	66.50	0.019	-34.51
-2.75	0.301	-10.43	12.00	0.110	-19.17	39.50	0.024	-32.50	67.00	0.019	-34.34
-2.50	0.346	-9.21	12.50	0.121	-18.34	40.00	0.006	-43.74	67.50	0.020	-34.05
-2.25	0.397	-8.03	13.00	0.134	-17.46	40.50	0.011	-39.30	68.00	0.020	-33.77
-2.00	0.451	-6.91	13.50	0.142	-16.97	41.00	0.027	-31.25	68.50	0.021	-33.50
-1.75	0.508	-5.88	14.00	0.142	-16.97	41.50	0.042	-27.48	69.00	0.022	-33.28
-1.50	0.566	-4.95	14.50	0.133	-17.50	42.00	0.055	-25.20	69.50	0.022	-33.12
-1.25	0.623	-4.10	15.00	0.119	-18.51	42.50	0.065	-23.74	70.00	0.022	-33.05
-1.00	0.680	-3.35	15.50	0.101	-19.88	43.00	0.072	-22.85	70.50	0.022	-33.03
-0.75	0.734	-2.68	16.00	0.087	-21.23	43.50	0.076	-22.39	71.00	0.022	-33.11
-0.50	0.786	-2.09	16.50	0.082	-21.76	44.00	0.077	-22.31	71.50	0.022	-33.25
-0.25	0.833	-1.59	17.00	0.088	-21.13	44.50	0.074	-22.58	72.00	0.021	-33.48
0.00	0.876	-1.15	17.50	0.100	-19.99	45.00	0.069	-23.19	72.50	0.021	-33.76
0.25	0.913	-0.79	18.00	0.113	-18.97	45.50	0.062	-24.15	73.00	0.020	-34.08
0.50	0.944	-0.50	18.50	0.121	-18.36	46.00	0.053	-25.53	73.50	0.019	-34.49
0.75	0.968	-0.28	19.00	0.122	-18.25	46.50	0.043	-27.41	74.00	0.018	-34.98
1.00	0.986	-0.12	19.50	0.117	-18.64	47.00	0.032	-29.91	74.50	0.017	-35.51
1.25	0.997	-0.03	20.00	0.105	-19.57	47.50	0.022	-33.02	75.00	0.016	-36.05
1.50	1.000	-0.00	20.50	0.089	-21.06	48.00	0.016	-35.66	75.50	0.015	-36.68
1.75	0.995	-0.04	21.00	0.071	-22.97	48.50	0.018	-34.87	76.00	0.014	-37.36
2.00	0.983	-0.15	21.50	0.059	-24.60	49.00	0.024	-32.24	76.50	0.012	-38.10
2.25	0.964	-0.32	22.00	0.059	-24.58	49.50	0.032	-29.93	77.00	0.011	-38.84
2.50	0.938	-0.56	22.50	0.071	-22.98	50.00	0.039	-28.27	77.50	0.010	-39.64
2.75	0.905	-0.86	23.00	0.087	-21.19	50.50	0.044	-27.14	78.00	0.009	-40.45
3.00	0.867	-1.24	23.50	0.102	-19.85	51.00	0.048	-26.43	78.50	0.009	-41.35
3.25	0.823	-1.70	24.00	0.112	-19.04	51.50	0.050	-26.06	79.00	0.008	-42.23
3.50	0.774	-2.23	24.50	0.116	-18.74	52.00	0.050	-25.97	79.50	0.007	-43.09
3.75	0.721	-2.84	25.00	0.113	-18.96	52.50	0.049	-26.13	80.00	0.006	-44.08
4.00	0.665	-3.54	25.50	0.104	-19.70	53.00	0.047	-26.54	80.50	0.006	-45.04
4.25	0.607	-4.34	26.00	0.089	-21.02	53.50	0.044	-27.14	81.00	0.005	-46.12
4.50	0.548	-5.23	26.50	0.070	-23.05	54.00	0.040	-27.94	81.50	0.004	-47.14
4.75	0.488	-6.23	27.00	0.050	-25.94	54.50	0.036	-28.87	82.00	0.004	-48.09
5.00	0.430	-7.33	27.50	0.035	-29.22	55.00	0.032	-29.90	82.50	0.003	-49.26
5.25	0.375	-8.52	28.00	0.033	-29.74	55.50	0.029	-30.86	83.00	0.003	-50.36
5.50	0.323	-9.81	28.50	0.045	-26.97	56.00	0.026	-31.58	83.50	0.003	-51.73
5.75	0.278	-11.12	29.00	0.060	-24.39	56.50	0.025	-31.90	84.00	0.002	-53.04
6.00	0.241	-12.37	29.50	0.074	-22.67	57.00	0.026	-31.77	84.50	0.002	-54.54
6.25	0.214	-13.38	30.00	0.082	-21.67	57.50	0.027	-31.35	85.00	0.002	-56.13
6.50	0.199	-14.02	30.50	0.086	-21.28	58.00	0.029	-30.81	85.50	0.001	-57.82
6.75	0.195	-14.20	31.00	0.085	-21.42	58.50	0.031	-30.30	86.00	0.001	-59.92
7.00	0.200	-13.99	31.50	0.079	-22.08	59.00	0.032	-29.89	86.50	0.001	-60.00
7.25	0.210	-13.56	32.00	0.069	-23.24	59.50	0.033	-29.62	87.00	0.001	-60.00
7.50	0.222	-13.08	32.50	0.057	-24.91	60.00	0.034	-29.47	87.50	0.001	-60.00
7.75	0.233	-12.65	33.00	0.045	-26.87	60.50	0.034	-29.50	88.00	0.001	-60.00
8.00	0.242	-12.31	33.50	0.039	-28.18	61.00	0.033	-29.66	88.50	0.001	-60.00
8.25	0.249	-12.09	34.00	0.041	-27.66	61.50	0.032	-29.96	89.00	0.001	-60.00
8.50	0.251	-12.00	34.50	0.050	-25.94	62.00	0.030	-30.38	89.50	0.001	-60.00