

TECHNICAL EXHIBIT
APPLICATION FOR DTV CONSTRUCTION PERMIT
STATION KCBD-DT (FACILITY ID 27507)
LUBBOCK, TEXAS

JULY 17, 2009

CH 11 41 KW 232 M

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Technical Narrative

This Technical Exhibit supports an application for digital television (DTV) station KCBD-DT, on channel 11 at Lubbock, Texas. Station KCBD-DT is authorized (license application pending) to operate with a non-directional effective radiated power (ERP) of 15 kilowatts (kW) and an antenna height above average terrain (HAAT) of 232 meters.¹ This application proposes to increase ERP only.

Proposed Facilities

This application proposes to increase ERP only. Station KCBD-DT proposes to operate DTV channel 11, with a non-directional antenna ERP of 41 kilowatts and antenna HAAT of 232 meters. The transmitter site coordinates remain:

33° 32' 32" North Latitude
101° 50' 14" West Longitude

A sketch of antenna and pertinent elevations are included as Figure 1. The antenna structure registration number is 1049888. Figure 2 depicts the proposed antenna elevation pattern.

¹ See BPCDT-20080520ACF and BLCDDT-20090622AAP

Figure 3 is a map showing the DTV predicted coverage contours. The proposed 43 dBu contour will encompass all of Lubbock. The Lubbock city limits were derived from information contained in the 2000 U.S. Census of Population and Housing.

Allocation Considerations

The proposed KCBD-DT operation meets the FCC's 0.5% post-transition interference standards to pertinent Class A and DTV facilities using the procedures outlined in the FCC's OET-69 Bulletin and a standard 2 kilometer cell size and 1 kilometer terrain distance increment.

Radiofrequency Electromagnetic Field Exposure

The proposed KCBD-DT facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna is located 230.7 meters above ground level with an ERP of 41 kW. A conservative downward relative field value of 0.2 was assumed for the existing AND ABW12V6-HTO-9/11 antenna (see Figure 2). The calculated power density at a point 2 meters above ground level will not exceed 0.0011 mW/cm^2 . This is less than 1% of the FCC's recommended limit of 0.2 mW/cm^2 for channel 11 for an "uncontrolled" environment.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the station is at reduced power or shut down. The proposed KCBD-DT operation appears to be otherwise categorically excluded from environmental processing.

It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner.

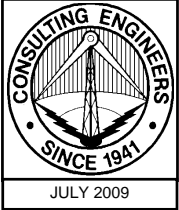


Jonathan N. Edwards

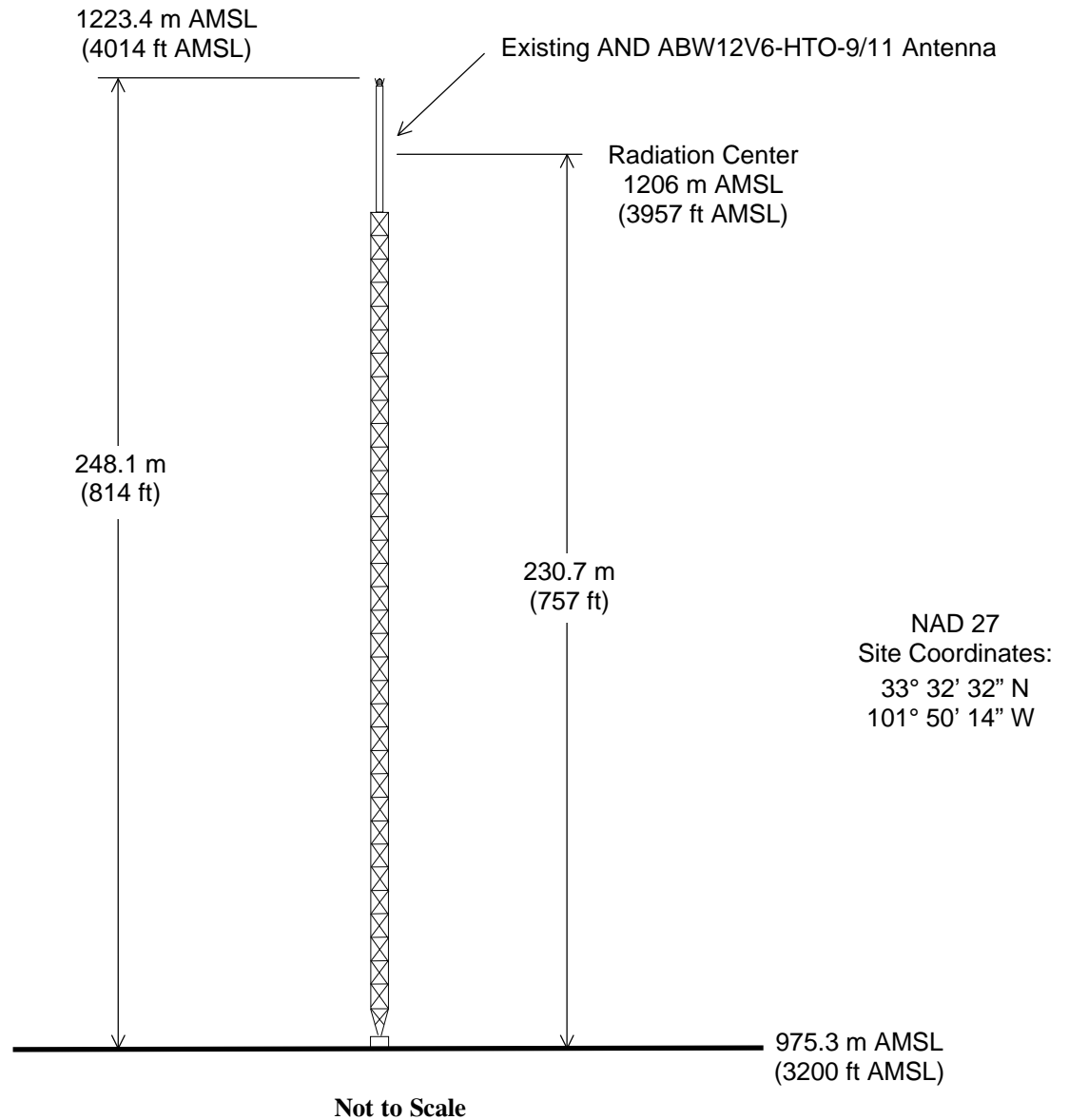
du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
(941) 329-6000
JON@DLR.COM

July 17, 2009

Figure 1



Registration No. 1049888



ANTENNA AND SUPPORTING STRUCTURE

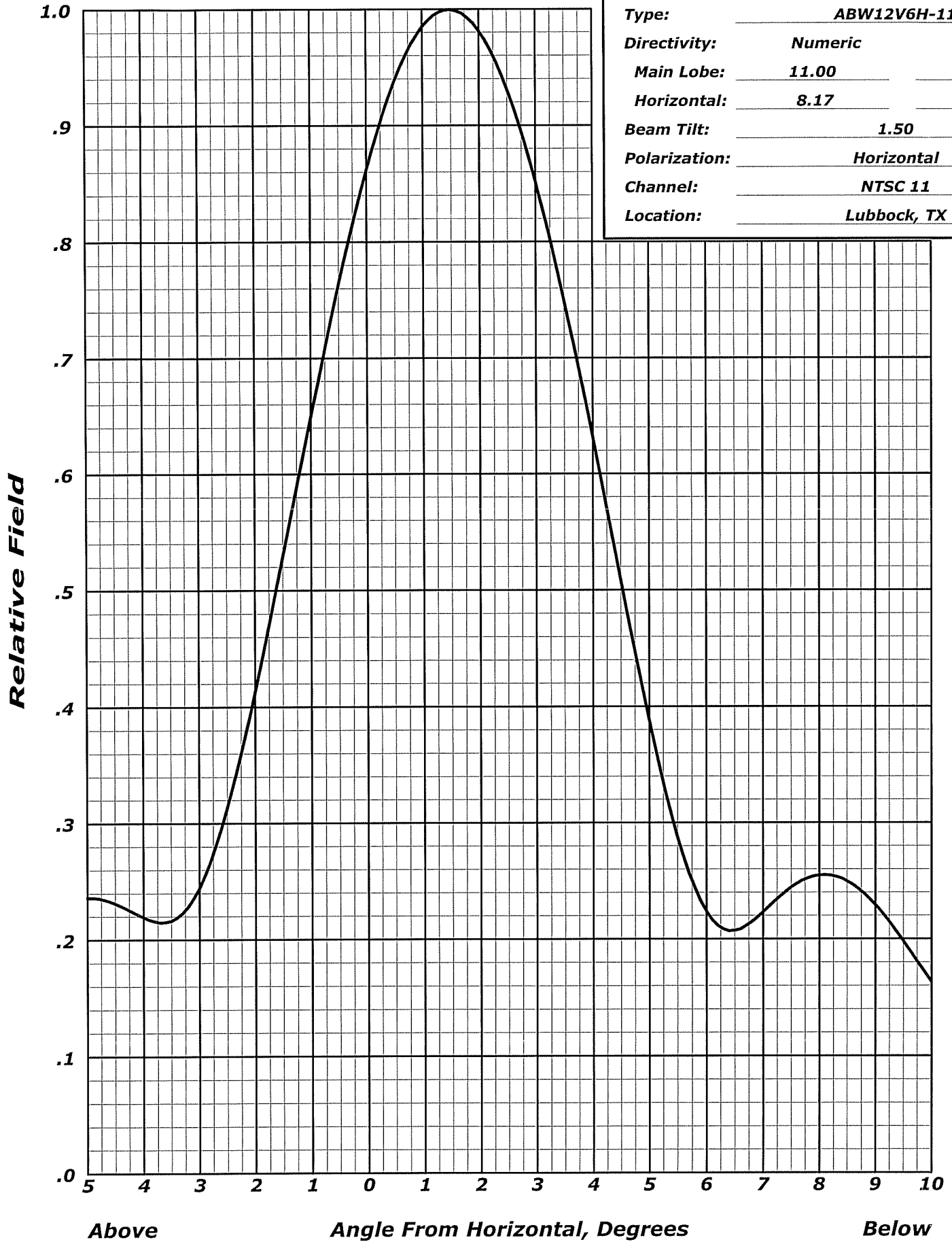
STATION KCBD-DT

LUBBOCK, TEXAS

CH 11 41 KW 232 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

ANDREW Fig 2
ELEVATION PATTERN



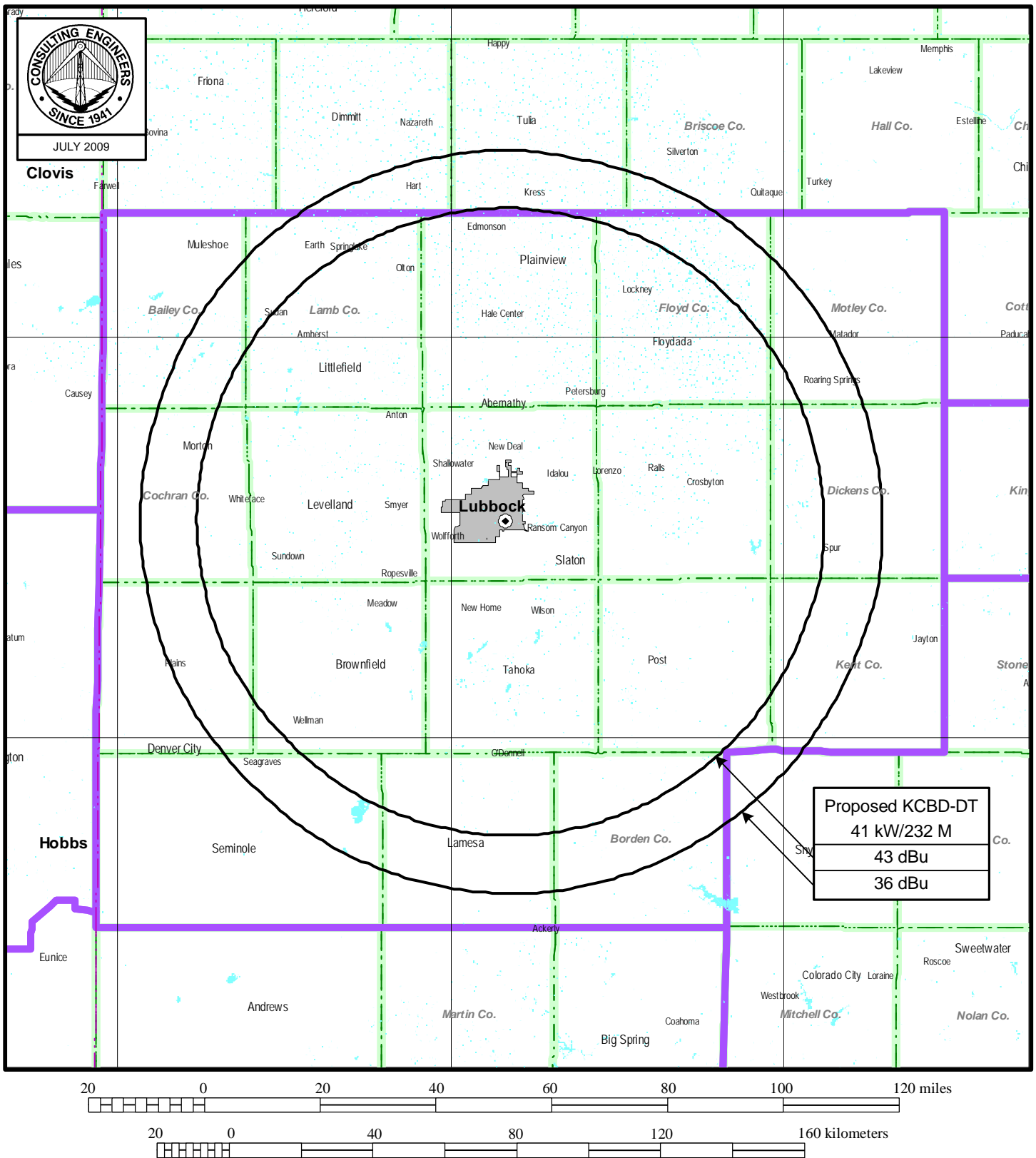
Type:	ABW12V6H-11	
Directivity:	Numeric	dBd
Main Lobe:	11.00	(10.41)
Horizontal:	8.17	(9.12)
Beam Tilt:	1.50	
Polarization:	Horizontal	
Channel:	NTSC 11	
Location:	Lubbock, TX	



TABULATED DATA FOR ELEVATION PATTERN
TYPE : ABW12V6H-11

Angle Field dB -5 To 10 In 0.25 Increments			Angle Field dB 10 To 90 In 0.5 Increments			Angle Field dB			Angle Field dB		
-5.00	0.236	-12.53	8.75	0.241	-12.35	35.00	0.082	-21.70	62.50	0.042	-27.45
-4.75	0.235	-12.57	9.00	0.229	-12.79	35.50	0.072	-22.86	63.00	0.044	-27.21
-4.50	0.231	-12.72	9.25	0.215	-13.36	36.00	0.057	-24.81	63.50	0.044	-27.10
-4.25	0.225	-12.94	9.50	0.198	-14.05	36.50	0.040	-28.07	64.00	0.044	-27.10
-4.00	0.219	-13.17	9.75	0.181	-14.86	37.00	0.019	-34.26	64.50	0.044	-27.21
-3.75	0.215	-13.34	10.00	0.163	-15.74	37.50	0.004	-48.66	65.00	0.042	-27.43
-3.50	0.216	-13.30	10.50	0.133	-17.52	38.00	0.023	-32.86	65.50	0.041	-27.76
-3.25	0.226	-12.94	11.00	0.118	-18.58	38.50	0.042	-27.51	66.00	0.039	-28.17
-3.00	0.244	-12.25	11.50	0.120	-18.41	39.00	0.059	-24.59	66.50	0.037	-28.66
-2.75	0.274	-11.25	12.00	0.132	-17.60	39.50	0.072	-22.80	67.00	0.035	-29.19
-2.50	0.313	-10.09	12.50	0.142	-16.94	40.00	0.082	-21.74	67.50	0.033	-29.74
-2.25	0.360	-8.88	13.00	0.145	-16.74	40.50	0.087	-21.21	68.00	0.031	-30.28
-2.00	0.413	-7.69	13.50	0.140	-17.09	41.00	0.088	-21.14	68.50	0.029	-30.75
-1.75	0.470	-6.56	14.00	0.126	-17.97	41.50	0.084	-21.49	69.00	0.028	-31.11
-1.50	0.529	-5.53	14.50	0.109	-19.28	42.00	0.077	-22.27	69.50	0.027	-31.33
-1.25	0.589	-4.59	15.00	0.093	-20.62	42.50	0.067	-23.52	70.00	0.027	-31.39
-1.00	0.650	-3.75	15.50	0.087	-21.21	43.00	0.054	-25.34	70.50	0.027	-31.29
-0.75	0.708	-3.00	16.00	0.093	-20.60	43.50	0.040	-27.91	71.00	0.028	-31.12
-0.50	0.763	-2.34	16.50	0.107	-19.43	44.00	0.027	-31.35	71.50	0.029	-30.86
-0.25	0.815	-1.78	17.00	0.120	-18.45	44.50	0.019	-34.47	72.00	0.030	-30.59
0.00	0.862	-1.29	17.50	0.127	-17.91	45.00	0.022	-33.35	72.50	0.030	-30.32
0.25	0.903	-0.89	18.00	0.127	-17.93	45.50	0.031	-30.17	73.00	0.031	-30.08
0.50	0.937	-0.56	18.50	0.118	-18.54	46.00	0.041	-27.70	73.50	0.032	-29.91
0.75	0.965	-0.31	19.00	0.103	-19.75	46.50	0.050	-26.04	74.00	0.032	-29.77
1.00	0.985	-0.13	19.50	0.084	-21.55	47.00	0.056	-24.99	74.50	0.033	-29.70
1.25	0.996	-0.03	20.00	0.066	-23.55	47.50	0.060	-24.40	75.00	0.033	-29.68
1.50	1.000	-0.00	20.50	0.061	-24.30	48.00	0.062	-24.20	75.50	0.033	-29.73
1.75	0.994	-0.05	21.00	0.071	-22.97	48.50	0.061	-24.33	76.00	0.032	-29.85
2.00	0.981	-0.17	21.50	0.089	-21.03	49.00	0.058	-24.76	76.50	0.032	-30.03
2.25	0.960	-0.36	22.00	0.106	-19.47	49.50	0.053	-25.46	77.00	0.031	-30.27
2.50	0.931	-0.62	22.50	0.118	-18.53	50.00	0.048	-26.40	77.50	0.030	-30.57
2.75	0.895	-0.97	23.00	0.123	-18.18	50.50	0.042	-27.48	78.00	0.028	-30.92
3.00	0.852	-1.39	23.50	0.120	-18.41	51.00	0.037	-28.56	78.50	0.027	-31.35
3.25	0.803	-1.90	24.00	0.109	-19.24	51.50	0.034	-29.36	79.00	0.026	-31.81
3.50	0.750	-2.50	24.50	0.092	-20.75	52.00	0.033	-29.60	79.50	0.024	-32.36
3.75	0.692	-3.19	25.00	0.070	-23.10	52.50	0.034	-29.29	80.00	0.022	-32.97
4.00	0.632	-3.98	25.50	0.048	-26.36	53.00	0.037	-28.68	80.50	0.021	-33.64
4.25	0.570	-4.88	26.00	0.035	-29.09	53.50	0.040	-28.01	81.00	0.019	-34.41
4.50	0.508	-5.88	26.50	0.042	-27.55	54.00	0.043	-27.43	81.50	0.017	-35.20
4.75	0.447	-6.99	27.00	0.060	-24.50	54.50	0.044	-27.04	82.00	0.016	-36.13
5.00	0.389	-8.21	27.50	0.077	-22.32	55.00	0.045	-26.86	82.50	0.014	-37.10
5.25	0.335	-9.50	28.00	0.089	-21.01	55.50	0.045	-26.86	83.00	0.012	-38.18
5.50	0.288	-10.82	28.50	0.095	-20.41	56.00	0.044	-27.06	83.50	0.011	-39.37
5.75	0.250	-12.03	29.00	0.095	-20.43	56.50	0.042	-27.45	84.00	0.009	-40.66
6.00	0.224	-13.00	29.50	0.089	-21.03	57.00	0.040	-27.97	84.50	0.008	-42.13
6.25	0.210	-13.55	30.00	0.078	-22.20	57.50	0.037	-28.58	85.00	0.007	-43.73
6.50	0.207	-13.67	30.50	0.064	-23.94	58.00	0.035	-29.22	85.50	0.005	-45.61
6.75	0.213	-13.43	31.00	0.050	-25.95	58.50	0.033	-29.75	86.00	0.004	-47.67
7.00	0.223	-13.03	31.50	0.044	-27.13	59.00	0.031	-30.06	86.50	0.003	-49.91
7.25	0.234	-12.61	32.00	0.048	-26.31	59.50	0.031	-30.07	87.00	0.002	-52.72
7.50	0.244	-12.24	32.50	0.059	-24.51	60.00	0.032	-29.79	87.50	0.002	-56.14
7.75	0.251	-12.00	33.00	0.072	-22.88	60.50	0.034	-29.33	88.00	0.001	-59.95
8.00	0.255	-11.88	33.50	0.082	-21.77	61.00	0.036	-28.78	88.50	0.001	-60.00
8.25	0.254	-11.90	34.00	0.087	-21.21	61.50	0.039	-28.25	89.00	0.001	-60.00
8.50	0.250	-12.06	34.50	0.087	-21.18	62.00	0.041	-27.80	89.50	0.001	-60.00

Figure 3



PREDICTED COVERAGE CONTOURS

STATION KCBD-DT

LUBBOCK, TEXAS

CH 11 41 kW 232 M

du Treil, Lundin & Rackley, Inc Sarasota, Florida