

TECHNICAL EXHIBIT  
MINOR MODIFICATION APPLICATION  
STATION KLAX-DT (FACILITY ID 52907)  
ALEXANDRIA, LOUISIANA  
CH 32 3.1 KW 316 M

Technical Narrative

This Technical Exhibit supports a minor modification application for digital television station KLAX-DT on channel 32 at Alexandria, Louisiana. Station KLAX-DT is authorized to operate with a non-directional antenna visual effective radiated power (ERP) of 50 kW and an antenna height above average terrain (HAAT) of 333 meters (BPCDT-19991029AET).

This application proposes to specify a different non-directional antenna, reduce the effective radiated power and radiation center. There is no proposed change in channel (32), transmitter site or city of license (Alexandria). The site coordinates remain (NAD27): 31-33-54 N, 92-33-00 W. The antenna structure registration number (ASRN) is 1047137.

The proposed facility will not result in any extension of the composite authorized/allotted noise-limited contour as shown in Figure 2. Therefore, the proposal meets the terms of the FCC Filing Freeze for digital television stations.<sup>1</sup> The proposal complies with Section 73.622(f)(8) concerning maximum power and antenna heights.

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<sup>1</sup> See August 2004 Filing Freeze PN, DA 04-2446 (MB released Aug. 3, 2004).

### Allocation Considerations

An interference analysis using the provisions of the FCC's OET-69 program was conducted. The OET-69 results indicate that no new interference will be caused to any station. After consideration of terrain and interference, the proposed KLAX-DT operation would serve 206,587 people which is 80.3% of the KLAX-TV analog service population of 257,319 persons. Therefore, the proposed KLAX-TV appears to meet the FCC 80% "use-it-or-lose-it" criteria adopted in the Report and Order in the Second Periodic Review of digital television (September 2004).

### Radiofrequency Electromagnetic Field Exposure

The proposed KLAX-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 antenna is located 296 meters above ground level with an ERP of 3.1 kW. A conservative relative field value of 0.25 was assumed for the calculation (see Figure 2). The calculated power density at a point 2 meters above ground level will be less than  $0.001 \text{ mW/cm}^2$ . This is less than 5% of the FCC's recommended limit of  $0.39 \text{ mW/cm}^2$  for channel 32 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 stations are at reduced power or shut down. 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 as part of the tower registration process.

Jonathan N. Edwards

du Treil, Lundin & Rackley, Inc.

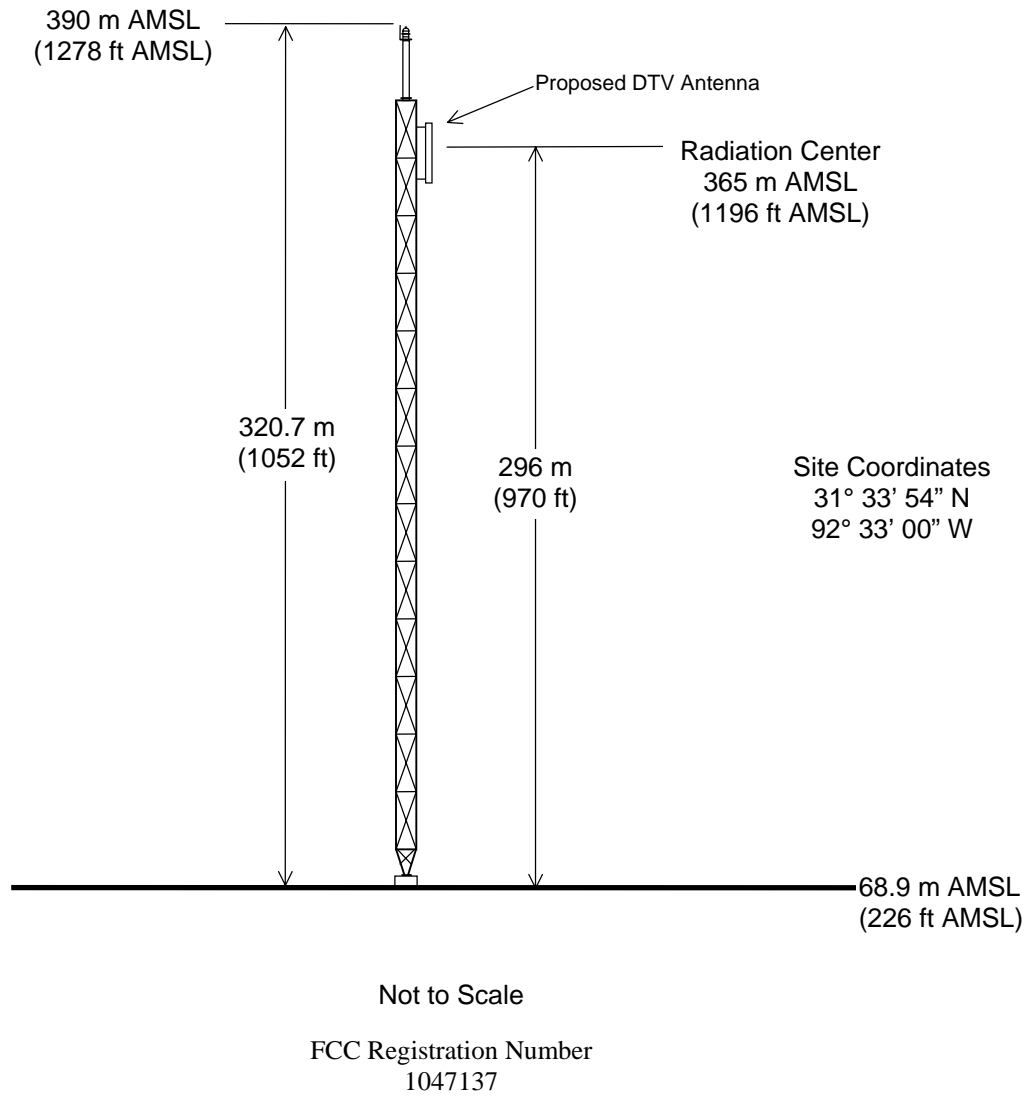
201 Fletcher Avenue

Sarasota, Florida 34237

(941) 329-6000

June 26, 2006

Figure 1

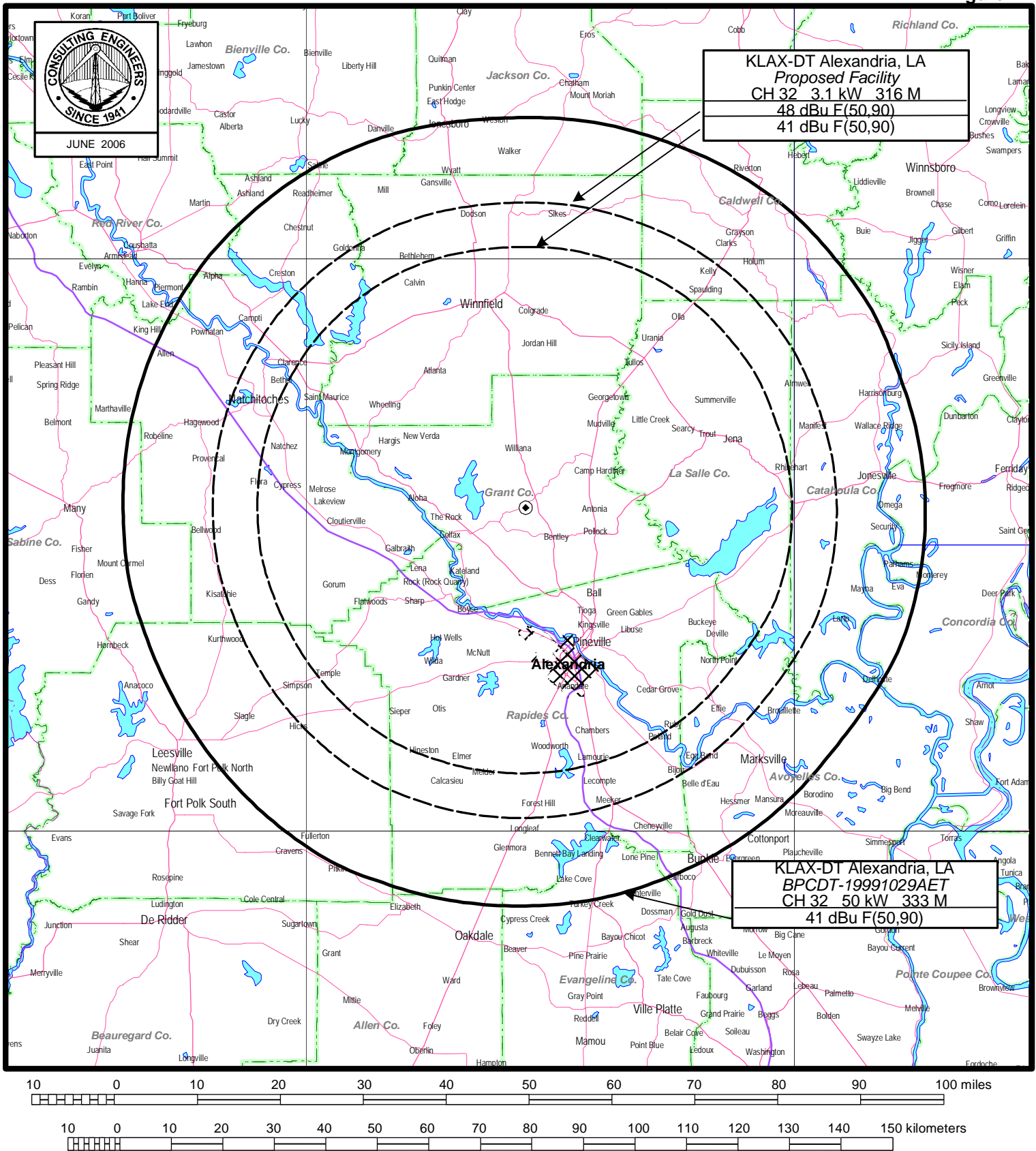


## **PROPOSED ANTENNA AND SUPPORTING STRUCTURE**

TELEVISION STATION KLAX-DT  
ALEXANDRIA, LOUISIANA  
CH 32 3.1 KW (MAX-DA) 316 M

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**Figure 2**



## **PREDICTED COVERAGE CONTOURS**

**TELEVISION STATION KLAX-DT**

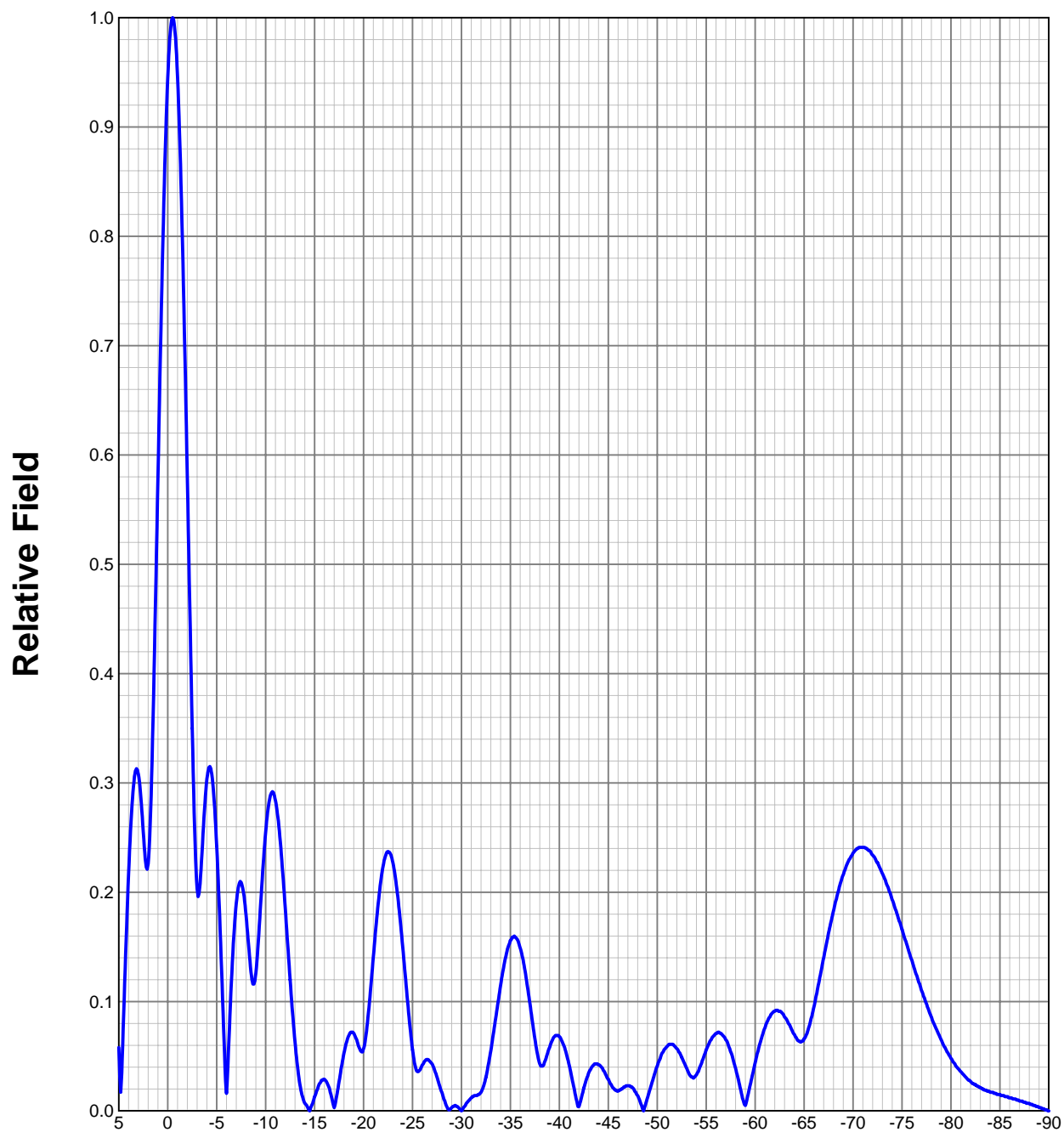
**ALEXANDRIA, LOUISIANA**

**CH 32 3.1 KW (MAX-DA) 316 M**

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## APPENDIX A

### MANUFACTURER'S DIRECTIONAL ANTENNA VERTICAL PLANE PATTERN

**ELEVATION PATTERN****Type:****ALP16L2****Channel:****32****Directivity:****Numeric****dBd****Location:****Main Lobe:****16.59****12.20****Beam Tilt:****-0.50****Horizontal:****14.82****11.71****Polarization:****Horizontal**

## TABULATED DATA FOR ELEVATION PATTERN

Type: ALP16L2

PolarizationHorizontal

ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB
5.00	0.058	-24.73	-6.75	0.160	-15.92	-27.00	0.043	-27.33	-50.50
4.75	0.026	-31.70	-7.00	0.190	-14.42	-27.50	0.031	-30.17	-51.00
4.50	0.089	-21.01	-7.25	0.206	-13.72	-28.00	0.017	-35.39	-51.50
4.25	0.156	-16.14	-7.50	0.209	-13.60	-28.50	0.004	-47.96	-52.00
4.00	0.217	-13.27	-7.75	0.199	-14.02	-29.00	0.003	-50.46	-52.50
3.75	0.265	-11.55	-8.00	0.179	-14.94	-29.50	0.004	-47.96	-53.00
3.50	0.297	-10.54	-8.25	0.153	-16.33	-30.00	0.000	-40.00	-53.50
3.25	0.312	-10.12	-8.50	0.127	-17.92	-30.50	0.007	-43.10	-54.00
3.00	0.308	-10.23	-8.75	0.116	-18.71	-31.00	0.012	-38.42	-54.50
2.75	0.287	-10.84	-9.00	0.126	-17.99	-31.50	0.014	-37.08	-55.00
2.50	0.255	-11.87	-9.25	0.155	-16.19	-32.00	0.017	-35.39	-55.50
2.25	0.227	-12.88	-9.50	0.191	-14.38	-32.50	0.031	-30.17	-56.00
2.00	0.226	-12.92	-9.75	0.226	-12.94	-33.00	0.055	-25.19	-56.50
1.75	0.274	-11.24	-10.00	0.255	-11.87	-33.50	0.085	-21.41	-57.00
1.50	0.359	-8.90	-10.50	0.289	-10.78	-34.00	0.115	-18.79	-57.50
1.25	0.467	-6.62	-11.00	0.284	-10.93	-34.50	0.140	-17.08	-58.00
1.00	0.580	-4.73	-11.50	0.246	-12.18	-35.00	0.156	-16.14	-58.50
0.75	0.693	-3.19	-12.00	0.186	-14.61	-35.50	0.159	-15.97	-59.00
0.50	0.794	-2.00	-12.50	0.120	-18.42	-36.00	0.149	-16.54	-59.50
0.25	0.880	-1.11	-13.00	0.063	-24.01	-36.50	0.128	-17.86	-60.00
0.00	0.945	-0.49	-13.50	0.024	-32.40	-37.00	0.098	-20.18	-60.50
-0.25	0.986	-0.13	-14.00	0.007	-43.10	-37.50	0.066	-23.61	-61.00
-0.50	1.000	0.00	-14.50	0.000	-40.00	-38.00	0.043	-27.33	-61.50
-0.75	0.986	-0.12	-15.00	0.013	-37.72	-38.50	0.045	-26.94	-62.00
-1.00	0.946	-0.48	-15.50	0.025	-32.04	-39.00	0.058	-24.73	-62.50
-1.25	0.881	-1.10	-16.00	0.029	-30.75	-39.50	0.068	-23.35	-63.00
-1.50	0.796	-1.98	-16.50	0.021	-33.56	-40.00	0.068	-23.35	-63.50
-1.75	0.693	-3.19	-17.00	0.003	-50.46	-40.50	0.059	-24.58	-64.00
-2.00	0.579	-4.75	-17.50	0.027	-31.37	-41.00	0.042	-27.54	-64.50
-2.25	0.462	-6.71	-18.00	0.053	-25.51	-41.50	0.021	-33.56	-65.00
-2.50	0.350	-9.12	-18.50	0.069	-23.22	-42.00	0.004	-47.96	-65.50
-2.75	0.258	-11.78	-19.00	0.071	-22.97	-42.50	0.021	-33.56	-66.00
-3.00	0.203	-13.85	-19.50	0.059	-24.58	-43.00	0.035	-29.12	-66.50
-3.25	0.204	-13.83	-20.00	0.057	-24.88	-43.50	0.042	-27.54	-67.00
-3.50	0.236	-12.54	-20.50	0.090	-20.92	-44.00	0.042	-27.54	-67.50
-3.75	0.275	-11.21	-21.00	0.141	-17.02	-44.50	0.037	-28.64	-68.00
-4.00	0.304	-10.34	-21.50	0.190	-14.42	-45.00	0.029	-30.75	-68.50
-4.25	0.315	-10.05	-22.00	0.224	-13.00	-45.50	0.021	-33.56	-69.00
-4.50	0.308	-10.23	-22.50	0.237	-12.51	-46.00	0.018	-34.89	-69.50
-4.75	0.282	-10.98	-23.00	0.227	-12.88	-46.50	0.021	-33.56	-70.00
-5.00	0.242	-12.32	-23.50	0.196	-14.15	-47.00	0.023	-32.77	-70.50
-5.25	0.190	-14.45	-24.00	0.150	-16.48	-47.50	0.021	-33.56	-71.00
-5.50	0.129	-17.79	-24.50	0.100	-20.00	-48.00	0.014	-37.08	-71.50
-5.75	0.065	-23.74	-25.00	0.056	-25.04	-48.50	0.002	-53.98	-72.00
-6.00	0.016	-35.92	-25.50	0.036	-28.87	-49.00	0.012	-38.42	-72.50
-6.25	0.065	-23.74	-26.00	0.042	-27.54	-49.50	0.027	-31.37	-73.00
-6.50	0.118	-18.56	-26.50	0.047	-26.56	-50.00	0.041	-27.74	-73.50