

TECHNICAL EXHIBIT  
APPLICATION FOR DTV MAXIMIZATION  
STATION WFIE(DT) (FACILITY ID 13991)  
EVANSVILLE, INDIANA  
CH 46 525 KW 311 M

Technical Narrative

This Technical Exhibit supports an application for digital television (DTV) station WFIE(DT) to maximize its post-transition facility. This application requests a construction permit (CP) for a digital television operation on channel 46, using a non-directional antenna.

Proposed Facilities

Station WFIE(DT) proposes to operate DTV channel 46 with a non-directional effective radiated power (ERP) of 525 kilowatts and antenna height above average terrain (HAAT) of 311 meters. The transmitter site coordinates are:

37° 53' 14" North Latitude  
87° 31' 07" West Longitude

A sketch of antenna and pertinent elevations are included as Figure 1. Figure 2 is a map showing the DTV predicted coverage contours. The predicted 48 dBu contour will encompass all of Evansville. The Evansville city limits were derived from information contained in the 2000 U.S. Census of Population and Housing.

---

Population Served

The herein proposed WFIE(DT) “maximized” facility is predicted to serve 781,422 persons, post-transition, based upon the 2000 Census. WFIE(DT)’s associated Appendix B facility is predicted to serve 711,000 persons. Therefore, the herein proposed WFIE(DT) facility would serve more than 100% of WFIE(DT)’s Appendix B population.

Allocation Considerations

The proposed WFIE(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 WFIE(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 276 meters above ground level with an ERP of 525 kW. A conservative relative field value of 0.3 was assumed for the calculation (see Figure 3). The calculated power density at a point 2 meters above ground level will not exceed 0.021 mW/cm<sup>2</sup>. This is less than 5% of the FCC's recommended limit of 0.44 mW/cm<sup>2</sup> for channel 46 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 WFIE(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.

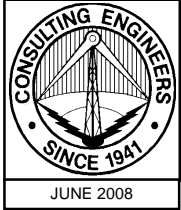


Jonathan N. Edwards

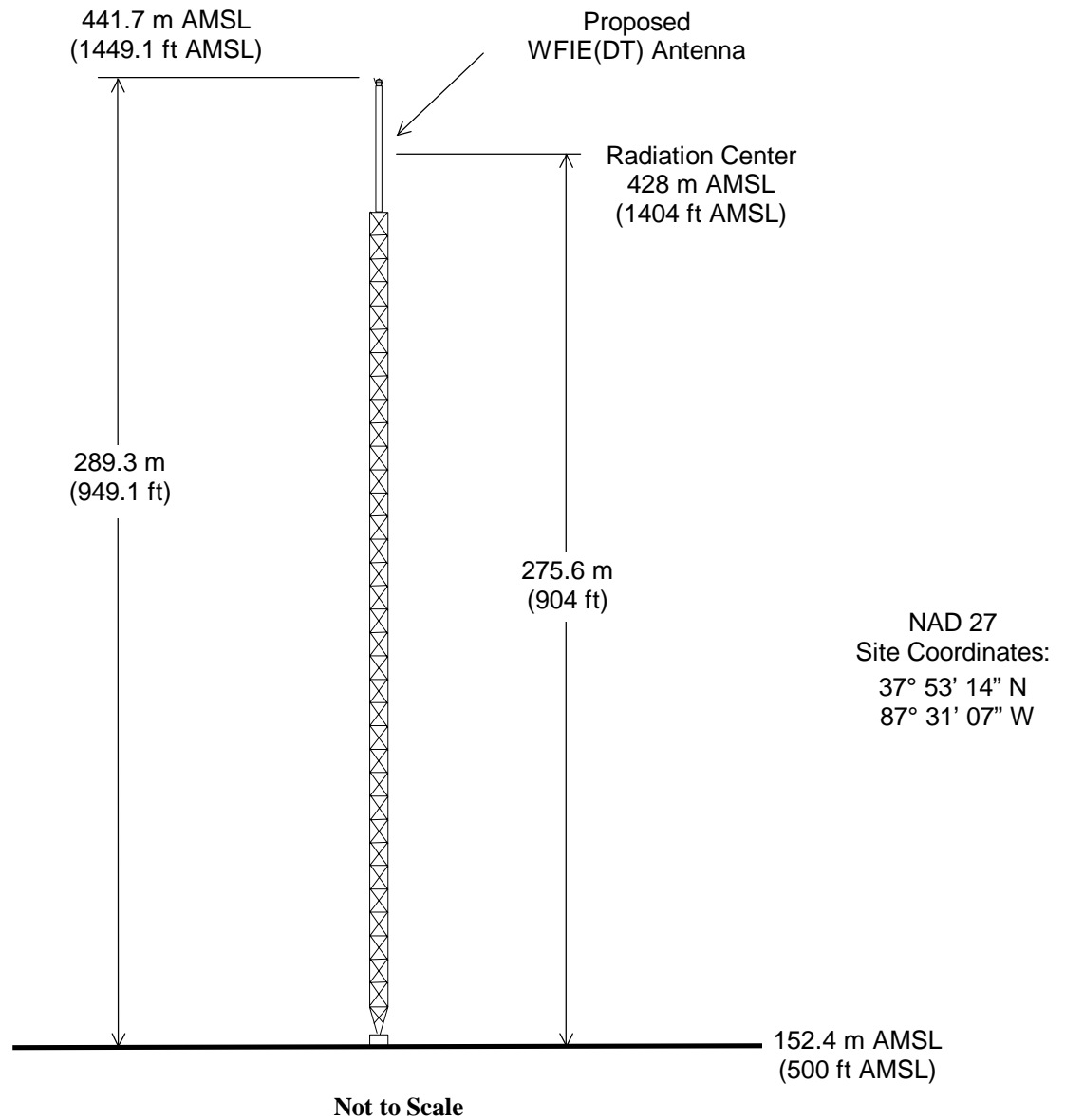
du Treil, Lundin & Rackley, Inc.  
201 Fletcher Avenue  
Sarasota, Florida 34237  
(941) 329-6000  
JON@DLR.COM

June 19, 2008

Figure 1



Registration No. 1043106

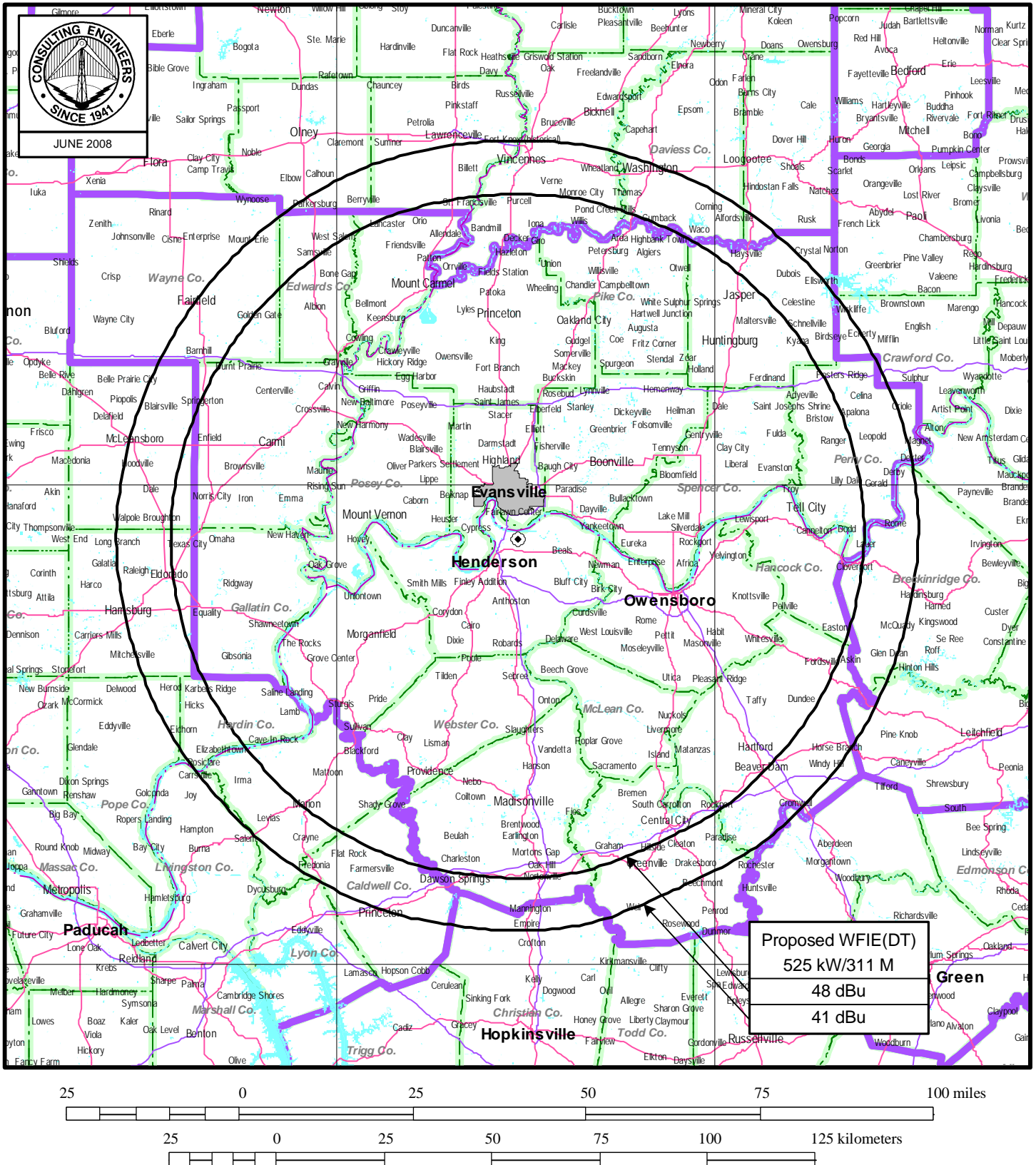


## ANTENNA AND SUPPORTING STRUCTURE

STATION WFIE(DT)  
EVANSVILLE, INDIANA  
CH 46 525 KW 311 M

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

Figure 2



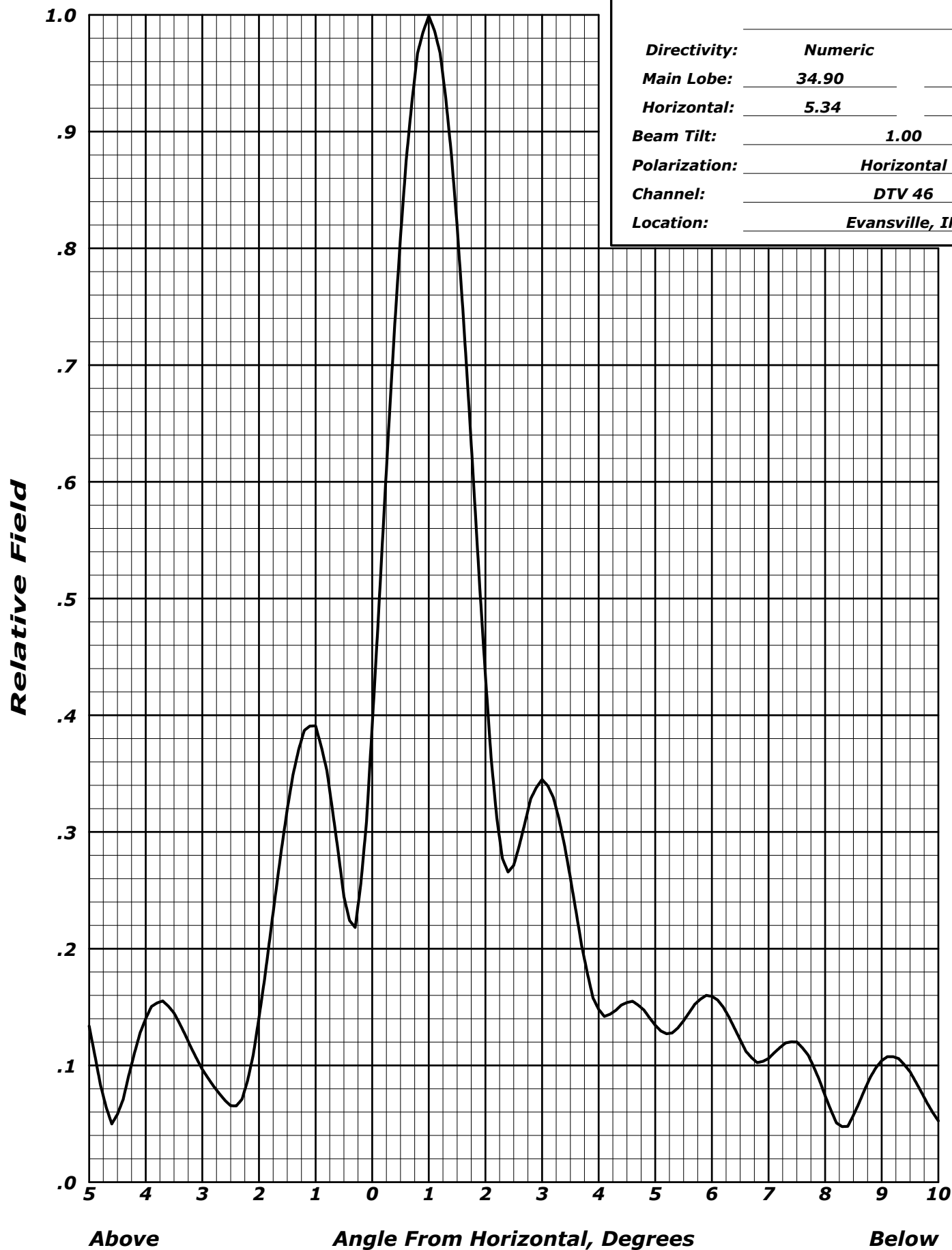
## PREDICTED COVERAGE CONTOURS

STATION WFIE(DT)

EVANSVILLE, INDIANA

CH 46 525 kW 311 M

du Treil, Lundin & Rackley, Inc Sarasota, Florida



Directivity:	Numeric	dBd
Main Lobe:	34.90	(15.43)
Horizontal:	5.34	( 7.27)
Beam Tilt:	1.00	
Polarization:	Horizontal	
Channel:	DTV 46	
Location:	Evansville, IN	


**TABULATED DATA FOR ELEVATION PATTERN**  
**TYPE : ABBP16H4H-46**

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	0.134	-17.48	8.75	0.085	-21.44	35.00	0.034	-29.44	62.50	0.020	-34.07
-4.75	0.074	-22.62	9.00	0.104	-19.65	35.50	0.023	-32.91	63.00	0.017	-35.50
-4.50	0.058	-24.71	9.25	0.107	-19.44	36.00	0.016	-36.14	63.50	0.018	-35.08
-4.25	0.101	-19.93	9.50	0.095	-20.49	36.50	0.017	-35.57	64.00	0.019	-34.44
-4.00	0.140	-17.07	9.75	0.073	-22.78	37.00	0.016	-35.76	64.50	0.019	-34.53
-3.75	0.154	-16.23	10.00	0.053	-25.60	37.50	0.018	-35.09	65.00	0.017	-35.19
-3.50	0.145	-16.78	10.50	0.045	-26.87	38.00	0.020	-34.09	65.50	0.016	-35.77
-3.25	0.121	-18.37	11.00	0.045	-26.95	38.50	0.016	-35.65	66.00	0.017	-35.51
-3.00	0.097	-20.30	11.50	0.048	-26.36	39.00	0.012	-38.37	66.50	0.019	-34.56
-2.75	0.079	-22.05	12.00	0.051	-25.92	39.50	0.017	-35.60	67.00	0.021	-33.63
-2.50	0.065	-23.68	12.50	0.034	-29.41	40.00	0.019	-34.40	67.50	0.022	-33.24
-2.25	0.079	-22.04	13.00	0.039	-28.17	40.50	0.014	-36.92	68.00	0.021	-33.48
-2.00	0.141	-17.03	13.50	0.046	-26.72	41.00	0.013	-37.54	68.50	0.019	-34.26
-1.75	0.231	-12.73	14.00	0.029	-30.75	41.50	0.023	-32.94	69.00	0.017	-35.41
-1.50	0.320	-9.91	14.50	0.046	-26.83	42.00	0.026	-31.56	69.50	0.015	-36.45
-1.25	0.379	-8.43	15.00	0.060	-24.40	42.50	0.020	-33.83	70.00	0.015	-36.69
-1.00	0.391	-8.16	15.50	0.039	-28.13	43.00	0.010	-39.66	70.50	0.016	-36.18
-0.75	0.335	-9.49	16.00	0.023	-32.83	43.50	0.013	-37.56	71.00	0.017	-35.44
-0.50	0.245	-12.23	16.50	0.037	-28.70	44.00	0.017	-35.27	71.50	0.018	-35.02
-0.25	0.237	-12.51	17.00	0.025	-32.07	44.50	0.013	-37.69	72.00	0.018	-35.02
0.00	0.391	-8.16	17.50	0.045	-26.89	45.00	0.014	-37.17	72.50	0.017	-35.58
0.25	0.610	-4.30	18.00	0.078	-22.21	45.50	0.028	-31.04	73.00	0.015	-36.74
0.50	0.810	-1.83	18.50	0.072	-22.91	46.00	0.039	-28.23	73.50	0.012	-38.50
0.75	0.946	-0.48	19.00	0.033	-29.68	46.50	0.039	-28.19	74.00	0.009	-40.84
1.00	0.999	-0.01	19.50	0.023	-32.60	47.00	0.028	-30.92	74.50	0.007	-43.02
1.25	0.948	-0.46	20.00	0.043	-27.39	47.50	0.013	-37.84	75.00	0.007	-43.05
1.50	0.819	-1.73	20.50	0.036	-28.78	48.00	0.011	-39.14	75.50	0.009	-41.21
1.75	0.632	-3.99	21.00	0.023	-32.89	48.50	0.021	-33.75	76.00	0.011	-39.17
2.00	0.434	-7.25	21.50	0.015	-36.66	49.00	0.023	-32.60	76.50	0.013	-37.60
2.25	0.295	-10.61	22.00	0.027	-31.46	49.50	0.020	-33.93	77.00	0.015	-36.55
2.50	0.271	-11.33	22.50	0.058	-24.67	50.00	0.015	-36.67	77.50	0.016	-35.88
2.75	0.318	-9.94	23.00	0.073	-22.69	50.50	0.011	-39.36	78.00	0.017	-35.58
3.00	0.345	-9.24	23.50	0.054	-25.30	51.00	0.008	-41.80	78.50	0.017	-35.52
3.25	0.320	-9.89	24.00	0.044	-27.05	51.50	0.012	-38.79	79.00	0.016	-35.67
3.50	0.261	-11.68	24.50	0.108	-19.31	52.00	0.023	-32.83	79.50	0.016	-36.02
3.75	0.191	-14.38	25.00	0.164	-15.71	52.50	0.035	-29.11	80.00	0.015	-36.55
4.00	0.148	-16.59	25.50	0.174	-15.19	53.00	0.042	-27.47	80.50	0.014	-37.20
4.25	0.145	-16.75	26.00	0.135	-17.41	53.50	0.041	-27.71	81.00	0.013	-37.93
4.50	0.154	-16.26	26.50	0.072	-22.82	54.00	0.031	-30.06	81.50	0.012	-38.72
4.75	0.150	-16.51	27.00	0.054	-25.40	54.50	0.022	-33.23	82.00	0.010	-39.59
5.00	0.134	-17.43	27.50	0.070	-23.11	55.00	0.034	-29.28	82.50	0.010	-40.42
5.25	0.127	-17.89	28.00	0.061	-24.32	55.50	0.059	-24.58	83.00	0.009	-41.21
5.50	0.138	-17.19	28.50	0.037	-28.65	56.00	0.082	-21.76	83.50	0.008	-41.96
5.75	0.155	-16.21	29.00	0.034	-29.44	56.50	0.096	-20.34	84.00	0.008	-42.48
6.00	0.159	-15.96	29.50	0.036	-28.80	57.00	0.100	-20.02	84.50	0.007	-43.00
6.25	0.146	-16.73	30.00	0.032	-29.89	57.50	0.093	-20.66	85.00	0.007	-43.40
6.50	0.122	-18.27	30.50	0.037	-28.53	58.00	0.077	-22.31	85.50	0.007	-43.63
6.75	0.105	-19.62	31.00	0.042	-27.44	58.50	0.056	-25.05	86.00	0.006	-43.74
7.00	0.106	-19.50	31.50	0.035	-29.17	59.00	0.037	-28.74	86.50	0.006	-43.88
7.25	0.117	-18.62	32.00	0.029	-30.67	59.50	0.028	-31.16	87.00	0.006	-44.01
7.50	0.120	-18.41	32.50	0.035	-29.07	60.00	0.031	-30.11	87.50	0.006	-44.01
7.75	0.104	-19.68	33.00	0.032	-29.81	60.50	0.037	-28.72	88.00	0.006	-44.15
8.00	0.074	-22.61	33.50	0.017	-35.27	61.00	0.038	-28.52	88.50	0.006	-44.15
8.25	0.049	-26.17	34.00	0.021	-33.69	61.50	0.033	-29.50	89.00	0.006	-44.22
8.50	0.057	-24.84	34.50	0.034	-29.38	62.00	0.027	-31.52	89.50	0.006	-44.29