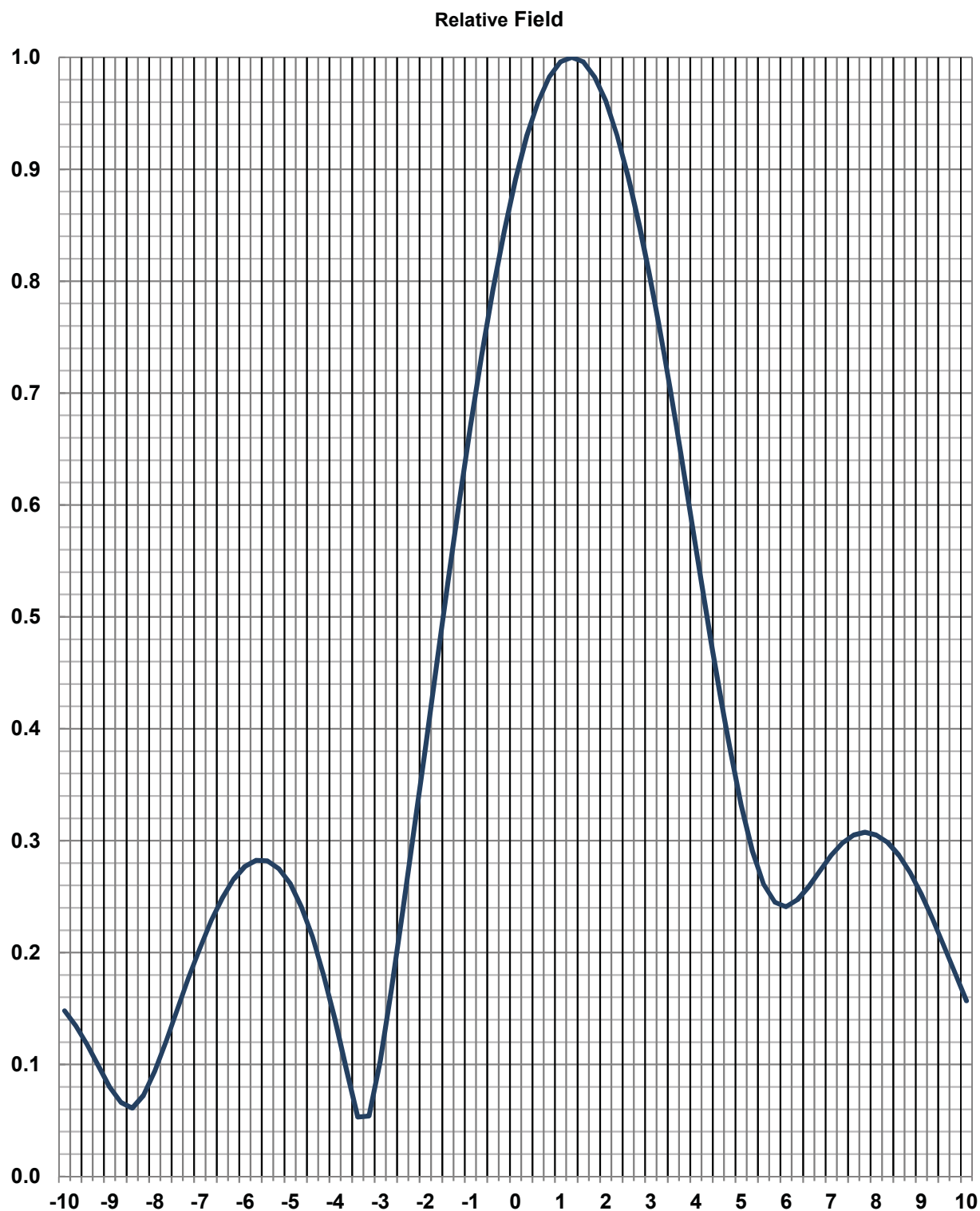


## Elevation Pattern

Type:	AL12PL5	Polarization:	Horizontal
Directivity:		Frequency:	19 (ATSC)
Main Lobe:	12.00 numeric (10.79 dB)	Location:	Durham, NC
Horizontal:	9.53 numeric (9.79 dB)	Beam Tilt:	1.25 degrees



**Tabulated Data for Elevation Pattern****Type:**

AL12PL5

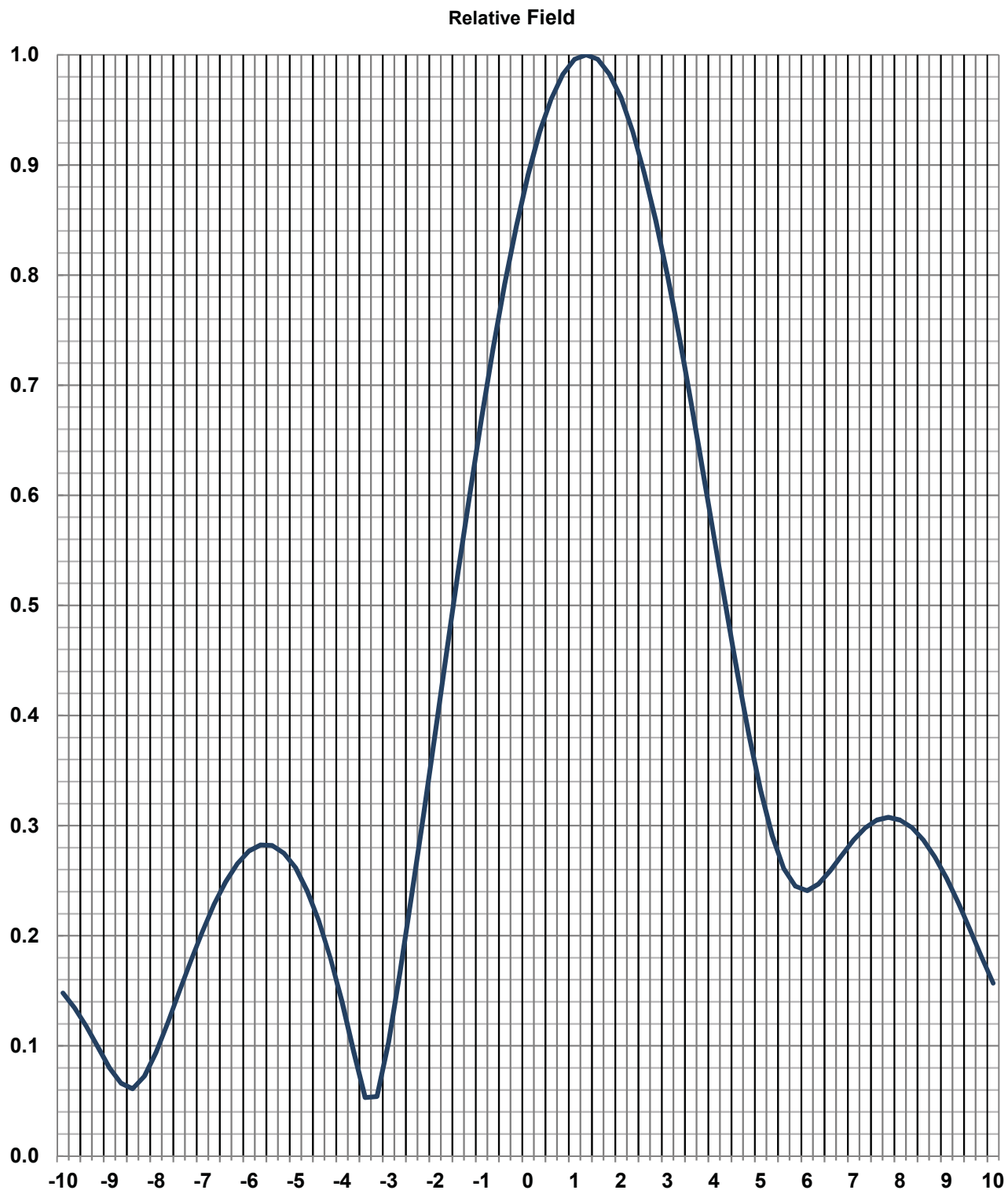
-10 to 10 degrees in 0.25 degree increments.

10 to 90 degrees in 0.50 degree increments.

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-10.00	0.148	-16.59	2.25	0.931	-0.63	19.00	0.119	-18.49	43.50	0.043	-27.33	68.00	0.090	-20.92
-9.75	0.135	-17.43	2.50	0.893	-0.98	19.50	0.104	-19.66	44.00	0.031	-30.17	68.50	0.086	-21.31
-9.50	0.118	-18.56	2.75	0.850	-1.42	20.00	0.083	-21.62	44.50	0.025	-32.04	69.00	0.082	-21.72
-9.25	0.099	-20.09	3.00	0.799	-1.95	20.50	0.061	-24.29	45.00	0.028	-31.06	69.50	0.077	-22.27
-9.00	0.080	-21.94	3.25	0.745	-2.56	21.00	0.048	-26.38	45.50	0.038	-28.40	70.00	0.071	-22.97
-8.75	0.066	-23.61	3.50	0.686	-3.27	21.50	0.052	-25.68	46.00	0.050	-26.02	70.50	0.065	-23.74
-8.50	0.061	-24.29	3.75	0.625	-4.09	22.00	0.069	-23.22	46.50	0.060	-24.44	71.00	0.058	-24.73
-8.25	0.073	-22.79	4.00	0.562	-5.01	22.50	0.086	-21.31	47.00	0.069	-23.22	71.50	0.050	-26.02
-8.00	0.094	-20.54	4.25	0.500	-6.03	23.00	0.098	-20.18	47.50	0.074	-22.62	72.00	0.043	-27.33
-7.75	0.121	-18.38	4.50	0.439	-7.15	23.50	0.104	-19.66	48.00	0.077	-22.27	72.50	0.036	-28.87
-7.50	0.149	-16.54	4.75	0.383	-8.34	24.00	0.102	-19.83	48.50	0.076	-22.38	73.00	0.029	-30.75
-7.25	0.178	-15.02	5.00	0.332	-9.58	24.50	0.093	-20.63	49.00	0.072	-22.85	73.50	0.022	-33.15
-7.00	0.204	-13.81	5.25	0.291	-10.72	25.00	0.079	-22.05	49.50	0.066	-23.61	74.00	0.016	-35.92
-6.75	0.229	-12.82	5.50	0.261	-11.67	25.50	0.062	-24.15	50.00	0.057	-24.88	74.50	0.011	-39.17
-6.50	0.249	-12.08	5.75	0.245	-12.22	26.00	0.045	-26.94	50.50	0.046	-26.74	75.00	0.010	-40.00
-6.25	0.266	-11.52	6.00	0.241	-12.36	26.50	0.038	-28.40	51.00	0.035	-29.12	75.50	0.013	-37.72
-6.00	0.277	-11.15	6.25	0.247	-12.15	27.00	0.045	-26.94	51.50	0.025	-32.04	76.00	0.017	-35.39
-5.75	0.283	-10.98	6.50	0.259	-11.73	27.50	0.060	-24.44	52.00	0.021	-33.56	76.50	0.021	-33.56
-5.50	0.282	-11.00	6.75	0.273	-11.28	28.00	0.074	-22.62	52.50	0.026	-31.70	77.00	0.026	-31.70
-5.25	0.275	-11.21	7.00	0.287	-10.84	28.50	0.084	-21.51	53.00	0.037	-28.64	77.50	0.030	-30.46
-5.00	0.262	-11.63	7.25	0.298	-10.52	29.00	0.089	-21.01	53.50	0.048	-26.38	78.00	0.033	-29.63
-4.75	0.241	-12.36	7.50	0.305	-10.31	29.50	0.088	-21.11	54.00	0.058	-24.73	78.50	0.037	-28.64
-4.50	0.214	-13.39	7.75	0.308	-10.24	30.00	0.081	-21.83	54.50	0.067	-23.48	79.00	0.039	-28.18
-4.25	0.180	-14.92	8.00	0.305	-10.31	30.50	0.069	-23.22	55.00	0.074	-22.62	79.50	0.041	-27.74
-4.00	0.140	-17.08	8.25	0.299	-10.50	31.00	0.055	-25.19	55.50	0.079	-22.05	80.00	0.043	-27.33
-3.75	0.095	-20.45	8.50	0.287	-10.84	31.50	0.040	-27.96	56.00	0.081	-21.83	80.50	0.044	-27.13
-3.50	0.053	-25.51	8.75	0.272	-11.32	32.00	0.032	-29.90	56.50	0.081	-21.83	81.00	0.044	-27.13
-3.25	0.054	-25.35	9.00	0.252	-11.97	32.50	0.036	-28.87	57.00	0.078	-22.16	81.50	0.044	-27.13
-3.00	0.103	-19.74	9.25	0.230	-12.77	33.00	0.049	-26.20	57.50	0.073	-22.73	82.00	0.044	-27.13
-2.75	0.168	-15.52	9.50	0.206	-13.72	33.50	0.062	-24.15	58.00	0.066	-23.61	82.50	0.043	-27.33
-2.50	0.237	-12.51	9.75	0.181	-14.85	34.00	0.073	-22.73	58.50	0.058	-24.73	83.00	0.042	-27.54
-2.25	0.310	-10.19	10.00	0.157	-16.08	34.50	0.079	-22.05	59.00	0.048	-26.38	83.50	0.041	-27.74
-2.00	0.383	-8.34	10.50	0.117	-18.64	35.00	0.081	-21.83	59.50	0.037	-28.64	84.00	0.039	-28.18
-1.75	0.458	-6.79	11.00	0.104	-19.66	35.50	0.078	-22.16	60.00	0.026	-31.70	84.50	0.037	-28.64
-1.50	0.531	-5.50	11.50	0.121	-18.34	36.00	0.071	-22.97	60.50	0.017	-35.39	85.00	0.034	-29.37
-1.25	0.602	-4.41	12.00	0.147	-16.65	36.50	0.060	-24.44	61.00	0.014	-37.08	85.50	0.032	-29.90
-1.00	0.670	-3.48	12.50	0.167	-15.55	37.00	0.047	-26.56	61.50	0.021	-33.56	86.00	0.029	-30.75
-0.75	0.734	-2.69	13.00	0.177	-15.04	37.50	0.035	-29.12	62.00	0.031	-30.17	86.50	0.025	-32.04
-0.50	0.792	-2.03	13.50	0.173	-15.24	38.00	0.028	-31.06	62.50	0.042	-27.54	87.00	0.022	-33.15
-0.25	0.845	-1.46	14.00	0.158	-16.03	38.50	0.032	-29.90	63.00	0.053	-25.51	87.50	0.019	-34.42
0.00	0.891	-1.00	14.50	0.132	-17.59	39.00	0.043	-27.33	63.50	0.062	-24.15	88.00	0.015	-36.48
0.25	0.930	-0.63	15.00	0.102	-19.83	39.50	0.055	-25.19	64.00	0.071	-22.97	88.50	0.011	-39.17
0.50	0.960	-0.35	15.50	0.075	-22.50	40.00	0.066	-23.61	64.50	0.078	-22.16	89.00	0.008	-41.94
0.75	0.983	-0.15	16.00	0.064	-23.88	40.50	0.073	-22.73	65.00	0.084	-21.51	89.50	0.004	-47.96
1.00	0.996	-0.03	16.50	0.076	-22.38	41.00	0.077	-22.27	65.50	0.088	-21.11	90.00	0.000	---
1.25	1.000	0.00	17.00	0.097	-20.26	41.50	0.077	-22.27	66.00	0.091	-20.82			
1.50	0.996	-0.03	17.50	0.115	-18.79	42.00	0.073	-22.73	66.50	0.093	-20.63			
1.75	0.983	-0.15	18.00	0.126	-17.99	42.50	0.065	-23.74	67.00	0.093	-20.63			
2.00	0.961	-0.35	18.50	0.127	-17.92	43.00	0.055	-25.19	67.50	0.092	-20.72			

## Elevation Pattern

Type:	AL12PL5		Polarization:	Vertical
Directivity:			Frequency:	19 (ATSC)
Main Lobe:	12.00 numeric	(10.79 dB)	Location:	Durham, NC
Horizontal:	9.53 numeric	(9.79 dB)	Beam Tilt:	1.25 degrees



**Tabulated Data for Elevation Pattern**

Type:

AL12PL5

-10 to 10 degrees in 0.25 degree increments.

10 to 90 degrees in 0.50 degree increments.

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-10.00	0.148	-16.59	2.25	0.931	-0.63	19.00	0.119	-18.49	43.50	0.043	-27.33	68.00	0.090	-20.92
-9.75	0.135	-17.43	2.50	0.893	-0.98	19.50	0.104	-19.66	44.00	0.031	-30.17	68.50	0.086	-21.31
-9.50	0.118	-18.56	2.75	0.850	-1.42	20.00	0.083	-21.62	44.50	0.025	-32.04	69.00	0.082	-21.72
-9.25	0.099	-20.09	3.00	0.799	-1.95	20.50	0.061	-24.29	45.00	0.028	-31.06	69.50	0.077	-22.27
-9.00	0.080	-21.94	3.25	0.745	-2.56	21.00	0.048	-26.38	45.50	0.038	-28.40	70.00	0.071	-22.97
-8.75	0.066	-23.61	3.50	0.686	-3.27	21.50	0.052	-25.68	46.00	0.050	-26.02	70.50	0.065	-23.74
-8.50	0.061	-24.29	3.75	0.625	-4.09	22.00	0.069	-23.22	46.50	0.060	-24.44	71.00	0.058	-24.73
-8.25	0.073	-22.79	4.00	0.562	-5.01	22.50	0.086	-21.31	47.00	0.069	-23.22	71.50	0.050	-26.02
-8.00	0.094	-20.54	4.25	0.500	-6.03	23.00	0.098	-20.18	47.50	0.074	-22.62	72.00	0.043	-27.33
-7.75	0.121	-18.38	4.50	0.439	-7.15	23.50	0.104	-19.66	48.00	0.077	-22.27	72.50	0.036	-28.87
-7.50	0.149	-16.54	4.75	0.383	-8.34	24.00	0.102	-19.83	48.50	0.076	-22.38	73.00	0.029	-30.75
-7.25	0.178	-15.02	5.00	0.332	-9.58	24.50	0.093	-20.63	49.00	0.072	-22.85	73.50	0.022	-33.15
-7.00	0.204	-13.81	5.25	0.291	-10.72	25.00	0.079	-22.05	49.50	0.066	-23.61	74.00	0.016	-35.92
-6.75	0.229	-12.82	5.50	0.261	-11.67	25.50	0.062	-24.15	50.00	0.057	-24.88	74.50	0.011	-39.17
-6.50	0.249	-12.08	5.75	0.245	-12.22	26.00	0.045	-26.94	50.50	0.046	-26.74	75.00	0.010	-40.00
-6.25	0.266	-11.52	6.00	0.241	-12.36	26.50	0.038	-28.40	51.00	0.035	-29.12	75.50	0.013	-37.72
-6.00	0.277	-11.15	6.25	0.247	-12.15	27.00	0.045	-26.94	51.50	0.025	-32.04	76.00	0.017	-35.39
-5.75	0.283	-10.98	6.50	0.259	-11.73	27.50	0.060	-24.44	52.00	0.021	-33.56	76.50	0.021	-33.56
-5.50	0.282	-11.00	6.75	0.273	-11.28	28.00	0.074	-22.62	52.50	0.026	-31.70	77.00	0.026	-31.70
-5.25	0.275	-11.21	7.00	0.287	-10.84	28.50	0.084	-21.51	53.00	0.037	-28.64	77.50	0.030	-30.46
-5.00	0.262	-11.63	7.25	0.298	-10.52	29.00	0.089	-21.01	53.50	0.048	-26.38	78.00	0.033	-29.63
-4.75	0.241	-12.36	7.50	0.305	-10.31	29.50	0.088	-21.11	54.00	0.058	-24.73	78.50	0.037	-28.64
-4.50	0.214	-13.39	7.75	0.308	-10.24	30.00	0.081	-21.83	54.50	0.067	-23.48	79.00	0.039	-28.18
-4.25	0.180	-14.92	8.00	0.305	-10.31	30.50	0.069	-23.22	55.00	0.074	-22.62	79.50	0.041	-27.74
-4.00	0.140	-17.08	8.25	0.299	-10.50	31.00	0.055	-25.19	55.50	0.079	-22.05	80.00	0.043	-27.33
-3.75	0.095	-20.45	8.50	0.287	-10.84	31.50	0.040	-27.96	56.00	0.081	-21.83	80.50	0.044	-27.13
-3.50	0.053	-25.51	8.75	0.272	-11.32	32.00	0.032	-29.90	56.50	0.081	-21.83	81.00	0.044	-27.13
-3.25	0.054	-25.35	9.00	0.252	-11.97	32.50	0.036	-28.87	57.00	0.078	-22.16	81.50	0.044	-27.13
-3.00	0.103	-19.74	9.25	0.230	-12.77	33.00	0.049	-26.20	57.50	0.073	-22.73	82.00	0.044	-27.13
-2.75	0.168	-15.52	9.50	0.206	-13.72	33.50	0.062	-24.15	58.00	0.066	-23.61	82.50	0.043	-27.33
-2.50	0.237	-12.51	9.75	0.181	-14.85	34.00	0.073	-22.73	58.50	0.058	-24.73	83.00	0.042	-27.54
-2.25	0.310	-10.19	10.00	0.157	-16.08	34.50	0.079	-22.05	59.00	0.048	-26.38	83.50	0.041	-27.74
-2.00	0.383	-8.34	10.50	0.117	-18.64	35.00	0.081	-21.83	59.50	0.037	-28.64	84.00	0.039	-28.18
-1.75	0.458	-6.79	11.00	0.104	-19.66	35.50	0.078	-22.16	60.00	0.026	-31.70	84.50	0.037	-28.64
-1.50	0.531	-5.50	11.50	0.121	-18.34	36.00	0.071	-22.97	60.50	0.017	-35.39	85.00	0.034	-29.37
-1.25	0.602	-4.41	12.00	0.147	-16.65	36.50	0.060	-24.44	61.00	0.014	-37.08	85.50	0.032	-29.90
-1.00	0.670	-3.48	12.50	0.167	-15.55	37.00	0.047	-26.56	61.50	0.021	-33.56	86.00	0.029	-30.75
-0.75	0.734	-2.69	13.00	0.177	-15.04	37.50	0.035	-29.12	62.00	0.031	-30.17	86.50	0.025	-32.04
-0.50	0.792	-2.03	13.50	0.173	-15.24	38.00	0.028	-31.06	62.50	0.042	-27.54	87.00	0.022	-33.15
-0.25	0.845	-1.46	14.00	0.158	-16.03	38.50	0.032	-29.90	63.00	0.053	-25.51	87.50	0.019	-34.42
0.00	0.891	-1.00	14.50	0.132	-17.59	39.00	0.043	-27.33	63.50	0.062	-24.15	88.00	0.015	-36.48
0.25	0.930	-0.63	15.00	0.102	-19.83	39.50	0.055	-25.19	64.00	0.071	-22.97	88.50	0.011	-39.17
0.50	0.960	-0.35	15.50	0.075	-22.50	40.00	0.066	-23.61	64.50	0.078	-22.16	89.00	0.008	-41.94
0.75	0.983	-0.15	16.00	0.064	-23.88	40.50	0.073	-22.73	65.00	0.084	-21.51	89.50	0.004	-47.96
1.00	0.996	-0.03	16.50	0.076	-22.38	41.00	0.077	-22.27	65.50	0.088	-21.11	90.00	0.000	---
1.25	1.000	0.00	17.00	0.097	-20.26	41.50	0.077	-22.27	66.00	0.091	-20.82			
1.50	0.996	-0.03	17.50	0.115	-18.79	42.00	0.073	-22.73	66.50	0.093	-20.63			
1.75	0.983	-0.15	18.00	0.126	-17.99	42.50	0.065	-23.74	67.00	0.093	-20.63			
2.00	0.961	-0.35	18.50	0.127	-17.92	43.00	0.055	-25.19	67.50	0.092	-20.72			