

Preliminary Specification for ALP™ Series Side Mounted UHF Elliptically Polarized Coaxial Slotted Array Television Antenna

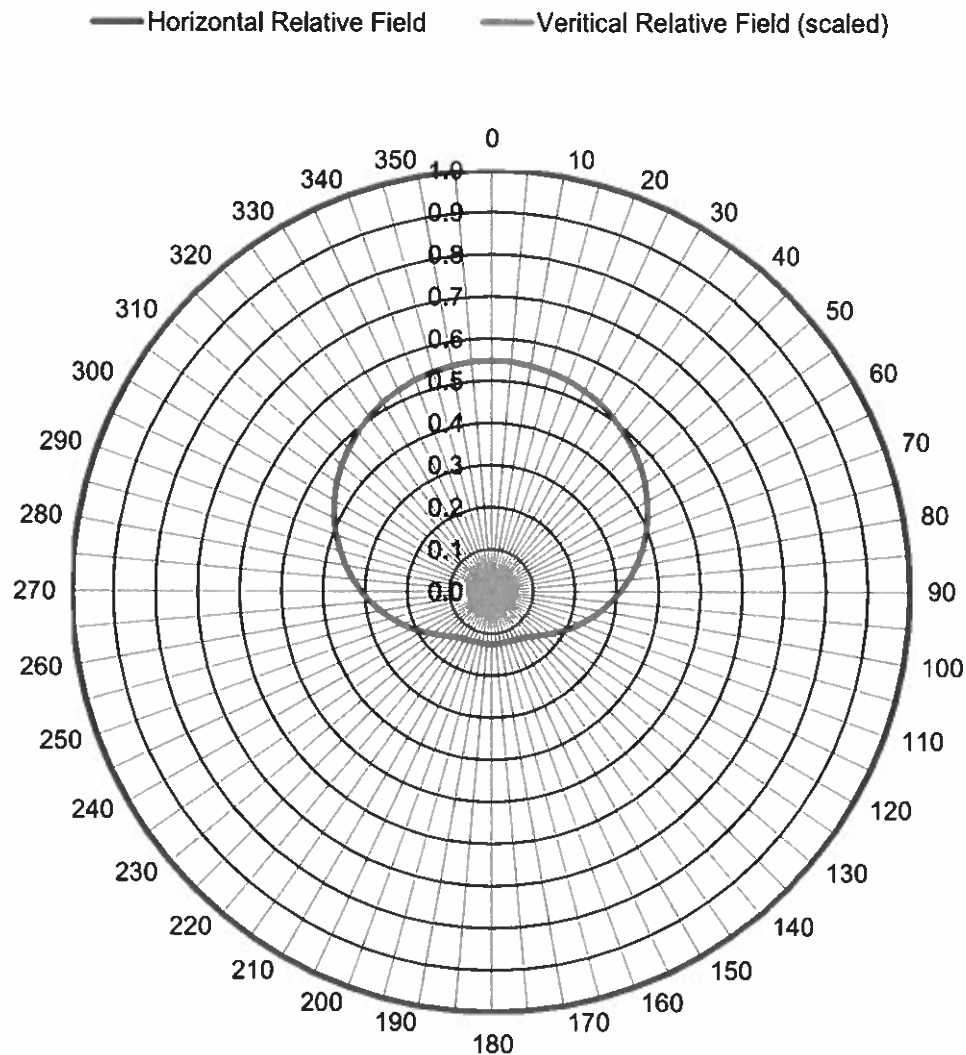
**WVUA-CD, RF Channel 23
The University of Alabama, Tuscaloosa, Alabama
July 06, 2022**

**Antenna Model:
ALP16L3-ESO-23-SP**

**Specification Number
20220629-099**

Composite Azimuth Patterns

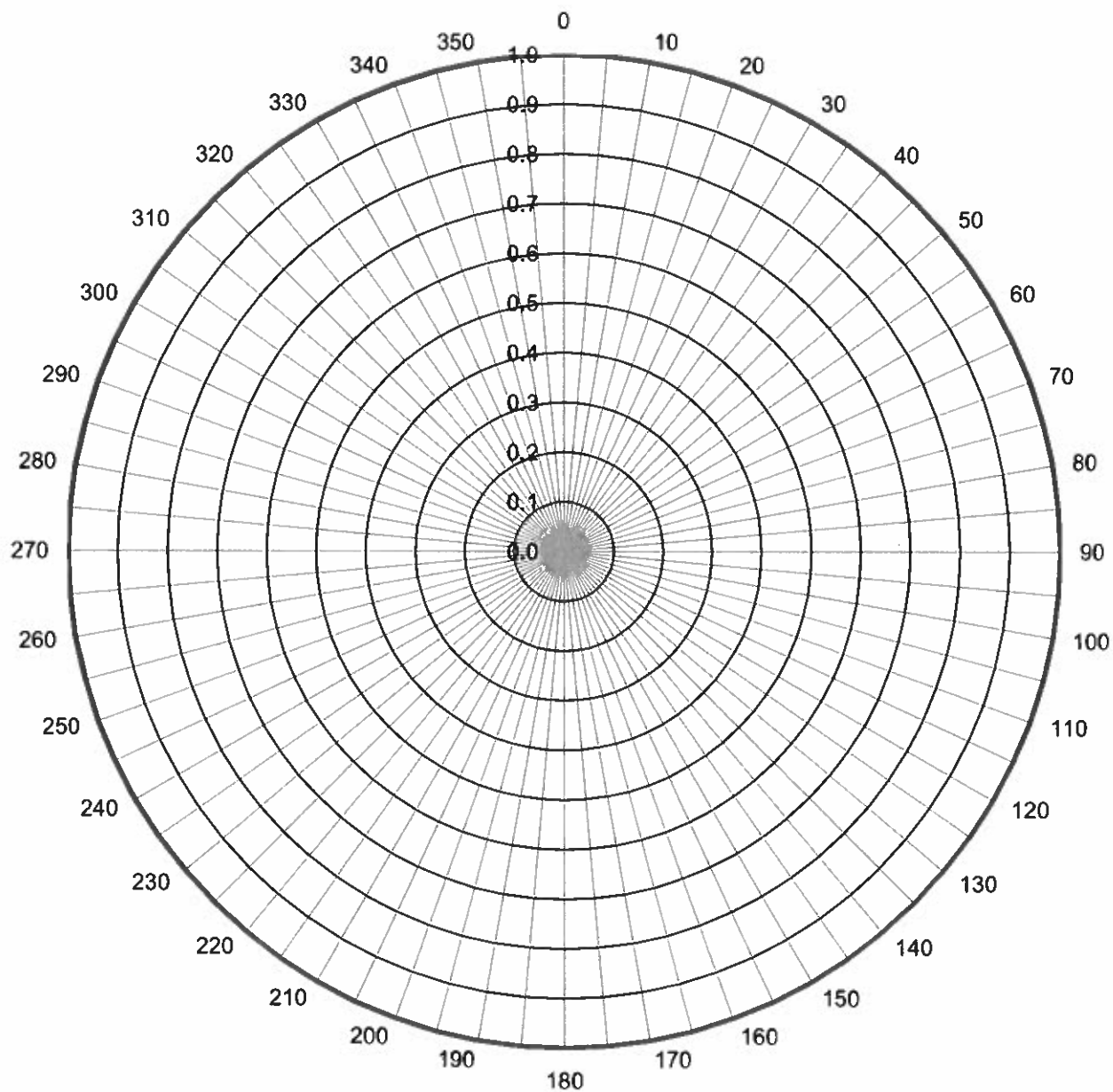
Type:	ALP-O	Polarization:	Elliptical
Directivity (H-Pol):	1.00 numeric (0.00 dB)	Channel:	23 (ATSC)
Directivity (V-Pol):	2.36 numeric (3.73 dB)	Location:	Tuscaloosa, Alabama
Percent Horizontal:	88.72%	NOTE: Pattern shape and directivity may vary with channel and mounting	
Percent Vertical:	11.28%		
Power Ratio:	12.71%		
V/H ERP Ratio:	30.00%		



Azimuth Pattern

Type:	ALP-O	Polarization:	Horizontal
Directivity:	1.00 numeric (0.00 dB)	Channel:	23 (ATSC)
Peak(s) at:		Location:	Tuscaloosa, Alabama
		NOTE: Pattern shape and directivity may vary with channel and mounting configuration.	

Relative Field



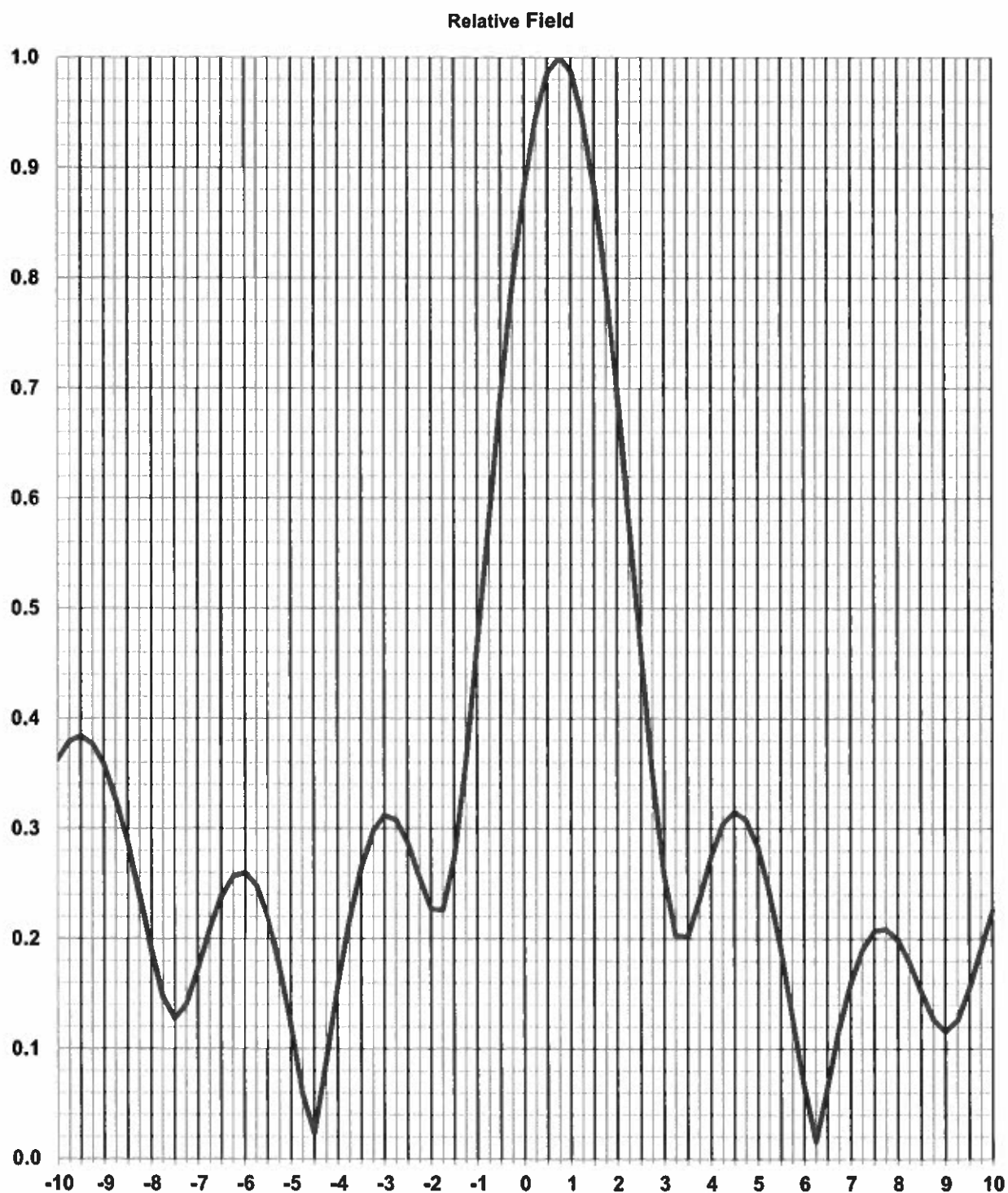
Tabulated Data for Azimuth Pattern

Type: ALP-O

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
0	1.000	0.00	100	1.000	0.00	200	1.000	0.00	300	1.000	0.00
2	1.000	0.00	102	1.000	0.00	202	1.000	0.00	302	1.000	0.00
4	1.000	0.00	104	1.000	0.00	204	1.000	0.00	304	1.000	0.00
6	1.000	0.00	106	1.000	0.00	206	1.000	0.00	306	1.000	0.00
8	1.000	0.00	108	1.000	0.00	208	1.000	0.00	308	1.000	0.00
10	1.000	0.00	110	1.000	0.00	210	1.000	0.00	310	1.000	0.00
12	1.000	0.00	112	1.000	0.00	212	1.000	0.00	312	1.000	0.00
14	1.000	0.00	114	1.000	0.00	214	1.000	0.00	314	1.000	0.00
16	1.000	0.00	116	1.000	0.00	216	1.000	0.00	316	1.000	0.00
18	1.000	0.00	118	1.000	0.00	218	1.000	0.00	318	1.000	0.00
20	1.000	0.00	120	1.000	0.00	220	1.000	0.00	320	1.000	0.00
22	1.000	0.00	122	1.000	0.00	222	1.000	0.00	322	1.000	0.00
24	1.000	0.00	124	1.000	0.00	224	1.000	0.00	324	1.000	0.00
26	1.000	0.00	126	1.000	0.00	226	1.000	0.00	326	1.000	0.00
28	1.000	0.00	128	1.000	0.00	228	1.000	0.00	328	1.000	0.00
30	1.000	0.00	130	1.000	0.00	230	1.000	0.00	330	1.000	0.00
32	1.000	0.00	132	1.000	0.00	232	1.000	0.00	332	1.000	0.00
34	1.000	0.00	134	1.000	0.00	234	1.000	0.00	334	1.000	0.00
36	1.000	0.00	136	1.000	0.00	236	1.000	0.00	336	1.000	0.00
38	1.000	0.00	138	1.000	0.00	238	1.000	0.00	338	1.000	0.00
40	1.000	0.00	140	1.000	0.00	240	1.000	0.00	340	1.000	0.00
42	1.000	0.00	142	1.000	0.00	242	1.000	0.00	342	1.000	0.00
44	1.000	0.00	144	1.000	0.00	244	1.000	0.00	344	1.000	0.00
46	1.000	0.00	146	1.000	0.00	246	1.000	0.00	346	1.000	0.00
48	1.000	0.00	148	1.000	0.00	248	1.000	0.00	348	1.000	0.00
50	1.000	0.00	150	1.000	0.00	250	1.000	0.00	350	1.000	0.00
52	1.000	0.00	152	1.000	0.00	252	1.000	0.00	352	1.000	0.00
54	1.000	0.00	154	1.000	0.00	254	1.000	0.00	354	1.000	0.00
56	1.000	0.00	156	1.000	0.00	256	1.000	0.00	356	1.000	0.00
58	1.000	0.00	158	1.000	0.00	258	1.000	0.00	358	1.000	0.00
60	1.000	0.00	160	1.000	0.00	260	1.000	0.00	360	1.000	0.00
62	1.000	0.00	162	1.000	0.00	262	1.000	0.00			
64	1.000	0.00	164	1.000	0.00	264	1.000	0.00			
66	1.000	0.00	166	1.000	0.00	266	1.000	0.00			
68	1.000	0.00	168	1.000	0.00	268	1.000	0.00			
70	1.000	0.00	170	1.000	0.00	270	1.000	0.00			
72	1.000	0.00	172	1.000	0.00	272	1.000	0.00			
74	1.000	0.00	174	1.000	0.00	274	1.000	0.00			
76	1.000	0.00	176	1.000	0.00	276	1.000	0.00			
78	1.000	0.00	178	1.000	0.00	278	1.000	0.00			
80	1.000	0.00	180	1.000	0.00	280	1.000	0.00			
82	1.000	0.00	182	1.000	0.00	282	1.000	0.00			
84	1.000	0.00	184	1.000	0.00	284	1.000	0.00			
86	1.000	0.00	186	1.000	0.00	286	1.000	0.00			
88	1.000	0.00	188	1.000	0.00	288	1.000	0.00			
90	1.000	0.00	190	1.000	0.00	290	1.000	0.00			
92	1.000	0.00	192	1.000	0.00	292	1.000	0.00			
94	1.000	0.00	194	1.000	0.00	294	1.000	0.00			
96	1.000	0.00	196	1.000	0.00	296	1.000	0.00			
98	1.000	0.00	198	1.000	0.00	298	1.000	0.00			

Elevation Pattern

Type:	ALP16L3	Polarization:	Horizontal
Directivity:		Channel:	23 (ATSC)
Main Lobe:	16.01 numeric (12.04 dB)	Location:	Tuscaloosa, Alabama
Horizontal:	12.40 numeric (10.93 dB)	Beam Tilt:	0.75 degrees



Tabulated Data for Elevation Pattern

Type: ALP16L3

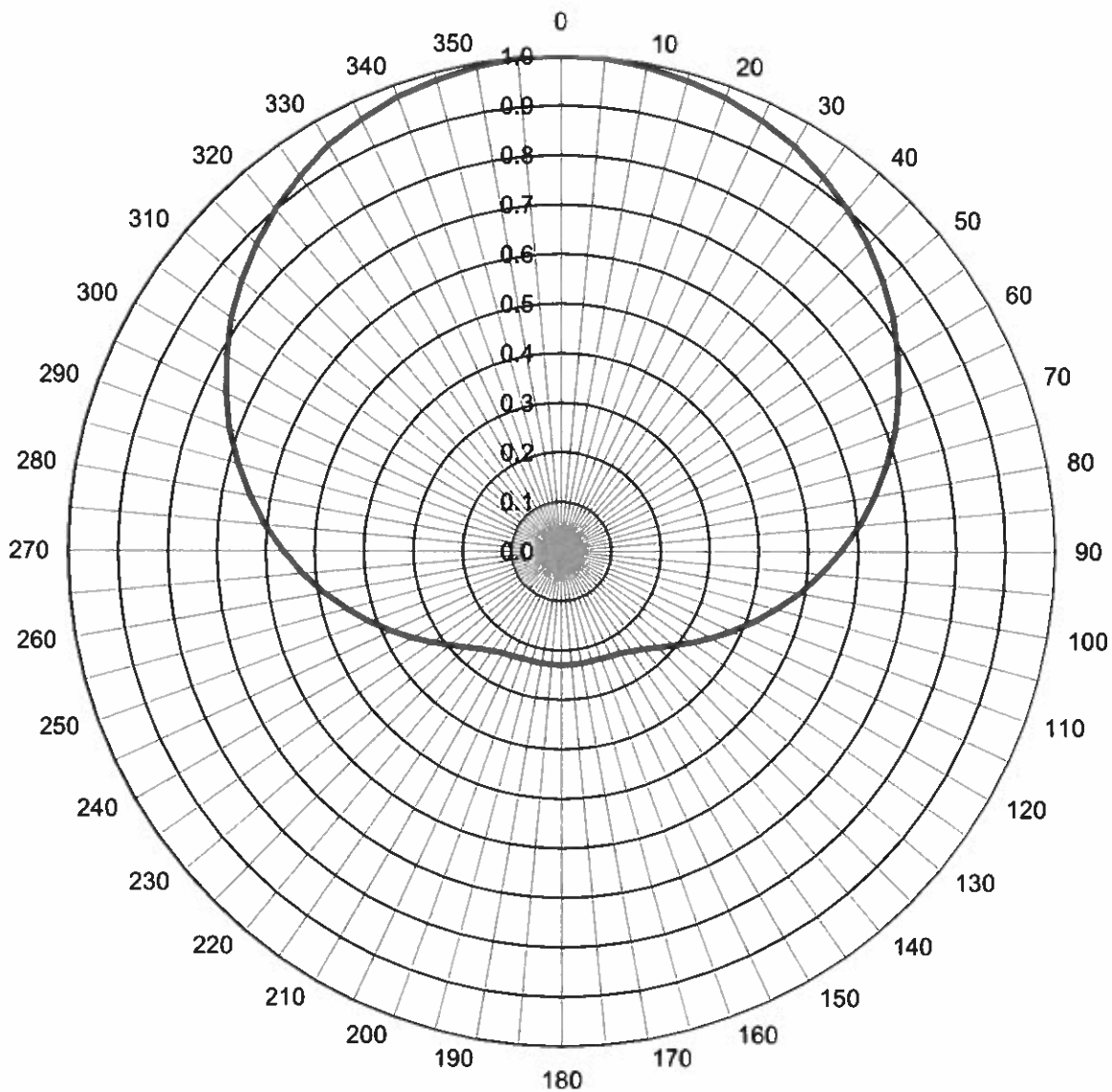
-10 to 10 degrees in 0.25 degree increments.
10 to 90 degrees in 0.50 degree increments.

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-10.00	0.363	-8.80	2.25	0.579	-4.75	19.00	0.072	-22.85	43.50	0.039	-28.18	68.00	0.173	-15.24
-9.75	0.379	-8.43	2.50	0.462	-6.71	19.50	0.066	-23.61	44.00	0.043	-27.33	68.50	0.193	-14.29
-9.50	0.384	-8.31	2.75	0.350	-9.12	20.00	0.054	-25.35	44.50	0.040	-27.96	69.00	0.209	-13.60
-9.25	0.377	-8.47	3.00	0.257	-11.80	20.50	0.069	-23.22	45.00	0.033	-29.63	69.50	0.222	-13.07
-9.00	0.358	-8.92	3.25	0.203	-13.85	21.00	0.115	-18.79	45.50	0.024	-32.40	70.00	0.232	-12.69
-8.75	0.327	-9.71	3.50	0.202	-13.89	21.50	0.167	-15.55	46.00	0.019	-34.42	70.50	0.238	-12.47
-8.50	0.286	-10.87	3.75	0.236	-12.54	22.00	0.210	-13.56	46.50	0.019	-34.42	71.00	0.241	-12.36
-8.25	0.239	-12.43	4.00	0.275	-11.21	22.50	0.234	-12.62	47.00	0.022	-33.15	71.50	0.241	-12.36
-8.00	0.189	-14.47	4.25	0.304	-10.34	23.00	0.235	-12.58	47.50	0.022	-33.15	72.00	0.237	-12.51
-7.75	0.147	-16.65	4.50	0.315	-10.03	23.50	0.214	-13.39	48.00	0.018	-34.89	72.50	0.231	-12.73
-7.50	0.127	-17.92	4.75	0.308	-10.23	24.00	0.174	-15.19	48.50	0.009	-40.92	73.00	0.222	-13.07
-7.25	0.140	-17.08	5.00	0.283	-10.96	24.50	0.125	-18.06	49.00	0.004	-47.96	73.50	0.212	-13.47
-7.00	0.173	-15.24	5.25	0.242	-12.32	25.00	0.076	-22.38	49.50	0.019	-34.42	74.00	0.200	-13.98
-6.75	0.209	-13.60	5.50	0.190	-14.42	25.50	0.042	-27.54	50.00	0.034	-29.37	74.50	0.187	-14.56
-6.50	0.239	-12.43	5.75	0.129	-17.79	26.00	0.037	-28.64	50.50	0.047	-26.56	75.00	0.173	-15.24
-6.25	0.257	-11.80	6.00	0.065	-23.74	26.50	0.045	-26.94	51.00	0.057	-24.88	75.50	0.159	-15.97
-6.00	0.260	-11.70	6.25	0.016	-35.92	27.00	0.046	-26.74	51.50	0.061	-24.29	76.00	0.145	-16.77
-5.75	0.248	-12.11	6.50	0.065	-23.74	27.50	0.037	-28.64	52.00	0.060	-24.44	76.50	0.131	-17.65
-5.50	0.219	-13.19	6.75	0.118	-18.56	28.00	0.024	-32.40	52.50	0.054	-25.35	77.00	0.117	-18.64
-5.25	0.176	-15.09	7.00	0.160	-15.92	28.50	0.010	-40.00	53.00	0.044	-27.13	77.50	0.104	-19.66
-5.00	0.121	-18.34	7.25	0.190	-14.42	29.00	0.001	-60.00	53.50	0.034	-29.37	78.00	0.092	-20.72
-4.75	0.058	-24.73	7.50	0.207	-13.68	29.50	0.005	-46.02	54.00	0.031	-30.17	78.50	0.080	-21.94
-4.50	0.023	-32.77	7.75	0.209	-13.60	30.00	0.003	-50.46	54.50	0.038	-28.40	79.00	0.070	-23.10
-4.25	0.089	-21.01	8.00	0.199	-14.02	30.50	0.003	-50.46	55.00	0.050	-26.02	79.50	0.060	-24.44
-4.00	0.157	-16.08	8.25	0.179	-14.94	31.00	0.010	-40.00	55.50	0.061	-24.29	80.00	0.052	-25.68
-3.75	0.217	-13.27	8.50	0.152	-16.36	31.50	0.013	-37.72	56.00	0.069	-23.22	80.50	0.045	-26.94
-3.50	0.265	-11.54	8.75	0.127	-17.92	32.00	0.015	-36.48	56.50	0.072	-22.85	81.00	0.038	-28.40
-3.25	0.297	-10.54	9.00	0.116	-18.71	32.50	0.023	-32.77	57.00	0.069	-23.22	81.50	0.033	-29.63
-3.00	0.312	-10.12	9.25	0.126	-17.99	33.00	0.042	-27.54	57.50	0.061	-24.29	82.00	0.029	-30.75
-2.75	0.308	-10.23	9.50	0.155	-16.19	33.50	0.070	-23.10	58.00	0.047	-26.56	82.50	0.025	-32.04
-2.50	0.287	-10.84	9.75	0.191	-14.38	34.00	0.100	-20.00	58.50	0.030	-30.46	83.00	0.022	-33.15
-2.25	0.255	-11.87	10.00	0.226	-12.92	34.50	0.128	-17.86	59.00	0.010	-40.00	83.50	0.020	-33.98
-2.00	0.227	-12.88	10.50	0.277	-11.15	35.00	0.149	-16.54	59.50	0.014	-37.08	84.00	0.018	-34.89
-1.75	0.226	-12.92	11.00	0.291	-10.72	35.50	0.159	-15.97	60.00	0.034	-29.37	84.50	0.017	-35.39
-1.50	0.273	-11.28	11.50	0.269	-11.40	36.00	0.156	-16.14	60.50	0.053	-25.51	85.00	0.015	-36.48
-1.25	0.359	-8.90	12.00	0.217	-13.27	36.50	0.140	-17.08	61.00	0.070	-23.10	85.50	0.014	-37.08
-1.00	0.466	-6.63	12.50	0.152	-16.36	37.00	0.113	-18.94	61.50	0.082	-21.72	86.00	0.013	-37.72
-0.75	0.580	-4.73	13.00	0.089	-21.01	37.50	0.081	-21.83	62.00	0.089	-21.01	86.50	0.012	-38.42
-0.50	0.692	-3.20	13.50	0.041	-27.74	38.00	0.052	-25.68	62.50	0.092	-20.72	87.00	0.010	-40.00
-0.25	0.794	-2.00	14.00	0.013	-37.72	38.50	0.041	-27.74	63.00	0.089	-21.01	87.50	0.009	-40.92
0.00	0.880	-1.11	14.50	0.004	-47.96	39.00	0.051	-25.85	63.50	0.083	-21.62	88.00	0.007	-43.10
0.25	0.945	-0.49	15.00	0.006	-44.44	39.50	0.064	-23.88	64.00	0.074	-22.62	88.50	0.006	-44.44
0.50	0.986	-0.12	15.50	0.019	-34.42	40.00	0.069	-23.22	64.50	0.066	-23.61	89.00	0.004	-47.96
0.75	1.000	0.00	16.00	0.028	-31.06	40.50	0.064	-23.88	65.00	0.063	-24.01	89.50	0.002	-53.98
1.00	0.987	-0.11	16.50	0.026	-31.70	41.00	0.051	-25.85	65.50	0.070	-23.10	90.00	0.001	-60.00
1.25	0.946	-0.48	17.00	0.012	-38.42	41.50	0.032	-29.90	66.00	0.085	-21.41			
1.50	0.882	-1.09	17.50	0.013	-37.72	42.00	0.010	-40.00	66.50	0.106	-19.49			
1.75	0.796	-1.98	18.00	0.041	-27.74	42.50	0.012	-38.42	67.00	0.129	-17.79			
2.00	0.693	-3.19	18.50	0.063	-24.01	43.00	0.029	-30.75	67.50	0.152	-16.36			

Azimuth Pattern

Type:	ALP-O	Polarization:	Vertical
Directivity:	2.36 numeric (3.73 dB)	Channel:	23 (ATSC)
Peak(s) at:		Location:	Tuscaloosa, Alabama
		NOTE: Pattern shape and directivity may vary with channel and mounting configuration.	

Relative Field



Tabulated Data for Azimuth Pattern

Type: ALP-O

Angle	Field	dB
0	1.000	0.00
2	1.000	0.00
4	0.999	-0.01
6	0.999	-0.01
8	0.996	-0.03
10	0.993	-0.06
12	0.991	-0.08
14	0.988	-0.10
16	0.983	-0.15
18	0.979	-0.18
20	0.975	-0.22
22	0.968	-0.28
24	0.963	-0.33
26	0.957	-0.38
28	0.951	-0.44
30	0.945	-0.49
32	0.935	-0.58
34	0.926	-0.67
36	0.919	-0.73
38	0.911	-0.81
40	0.901	-0.91
42	0.891	-1.00
44	0.881	-1.10
46	0.872	-1.19
48	0.860	-1.31
50	0.849	-1.42
52	0.838	-1.54
54	0.825	-1.67
56	0.813	-1.80
58	0.800	-1.94
60	0.786	-2.09
62	0.774	-2.23
64	0.760	-2.39
66	0.746	-2.55
68	0.734	-2.69
70	0.719	-2.87
72	0.704	-3.05
74	0.690	-3.23
76	0.674	-3.43
78	0.658	-3.64
80	0.643	-3.84
82	0.628	-4.05
84	0.612	-4.27
86	0.596	-4.50
88	0.581	-4.72
90	0.565	-4.97
92	0.550	-5.20
94	0.535	-5.44
96	0.518	-5.72
98	0.504	-5.96

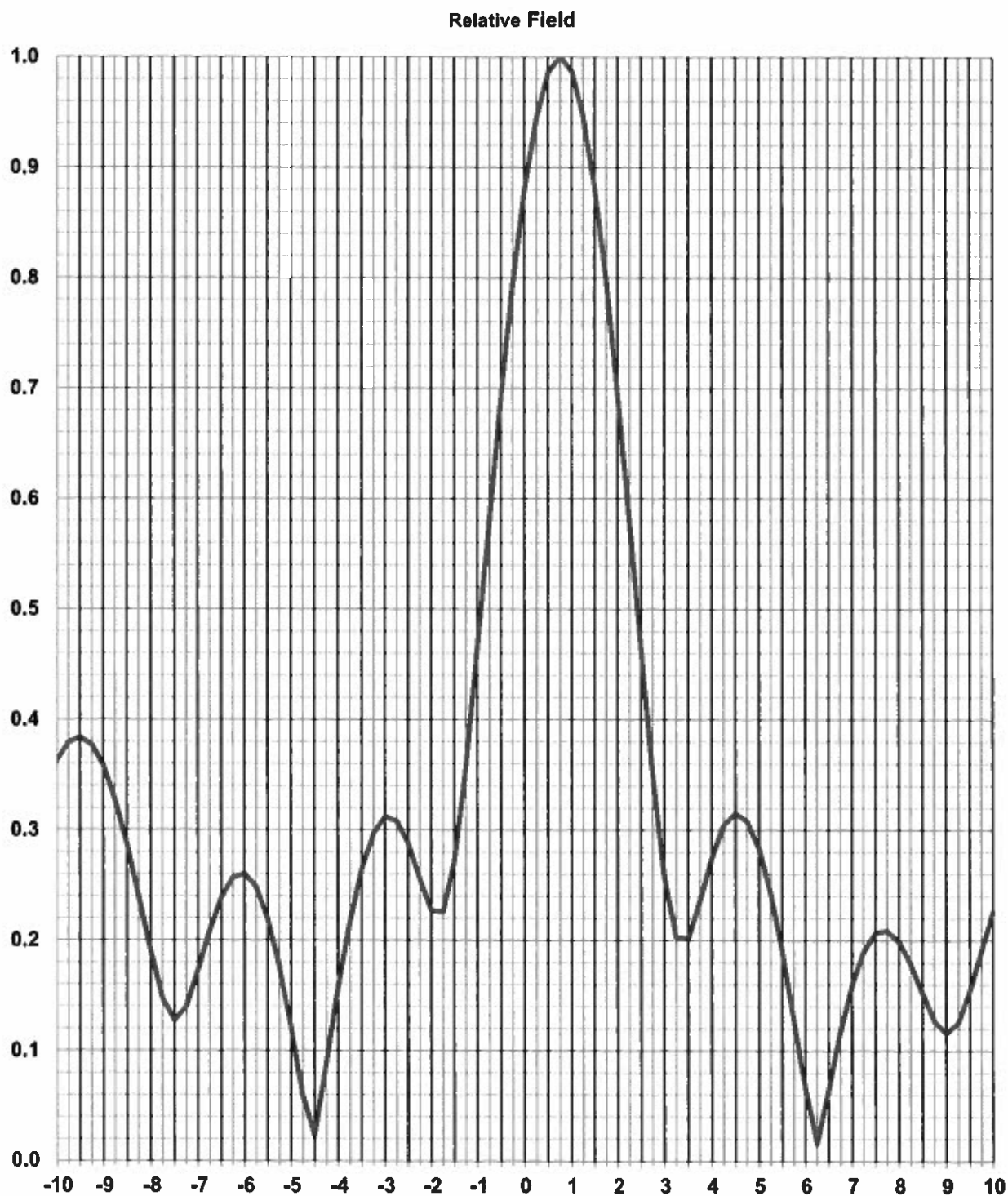
Angle	Field	dB
100	0.488	-6.22
102	0.473	-6.49
104	0.458	-6.77
106	0.442	-7.08
108	0.428	-7.36
110	0.414	-7.65
112	0.400	-7.95
114	0.387	-8.24
116	0.374	-8.53
118	0.361	-8.84
120	0.349	-9.13
122	0.337	-9.44
124	0.326	-9.73
126	0.315	-10.03
128	0.304	-10.33
130	0.295	-10.59
132	0.286	-10.86
134	0.278	-11.11
136	0.271	-11.33
138	0.264	-11.56
140	0.257	-11.79
142	0.252	-11.96
144	0.248	-12.10
146	0.243	-12.28
148	0.240	-12.39
150	0.237	-12.50
152	0.235	-12.57
154	0.233	-12.64
156	0.232	-12.68
158	0.230	-12.76
160	0.230	-12.76
162	0.229	-12.79
164	0.229	-12.79
166	0.229	-12.79
168	0.229	-12.79
170	0.229	-12.79
172	0.229	-12.79
174	0.229	-12.79
176	0.229	-12.79
178	0.229	-12.79
180	0.229	-12.79
182	0.229	-12.79
184	0.229	-12.79
186	0.229	-12.79
188	0.229	-12.79
190	0.229	-12.79
192	0.229	-12.79
194	0.229	-12.79
196	0.229	-12.79
198	0.229	-12.79

Angle	Field	dB
200	0.230	-12.76
202	0.230	-12.76
204	0.232	-12.68
206	0.233	-12.64
208	0.235	-12.57
210	0.237	-12.50
212	0.240	-12.39
214	0.243	-12.28
216	0.248	-12.10
218	0.252	-11.96
220	0.257	-11.79
222	0.264	-11.56
224	0.271	-11.33
226	0.278	-11.11
228	0.286	-10.86
230	0.295	-10.59
232	0.304	-10.33
234	0.315	-10.03
236	0.326	-9.73
238	0.337	-9.44
240	0.349	-9.13
242	0.361	-8.84
244	0.374	-8.53
246	0.387	-8.24
248	0.400	-7.95
250	0.414	-7.65
252	0.428	-7.36
254	0.442	-7.08
256	0.458	-6.77
258	0.473	-6.49
260	0.488	-6.22
262	0.504	-5.96
264	0.518	-5.72
266	0.535	-5.44
268	0.550	-5.20
270	0.565	-4.97
272	0.581	-4.72
274	0.596	-4.50
276	0.612	-4.27
278	0.628	-4.05
280	0.643	-3.84
282	0.658	-3.64
284	0.674	-3.43
286	0.690	-3.23
288	0.704	-3.05
290	0.719	-2.87
292	0.734	-2.69
294	0.746	-2.55
296	0.760	-2.39
298	0.774	-2.23

Angle	Field	dB
300	0.786	-2.09
302	0.800	-1.94
304	0.813	-1.80
306	0.825	-1.67
308	0.838	-1.54
310	0.849	-1.42
312	0.860	-1.31
314	0.872	-1.19
316	0.881	-1.10
318	0.891	-1.00
320	0.901	-0.91
322	0.911	-0.81
324	0.919	-0.73
326	0.926	-0.67
328	0.935	-0.58
330	0.945	-0.49
332	0.951	-0.44
334	0.957	-0.38
336	0.963	-0.33
338	0.968	-0.28
340	0.975	-0.22
342	0.979	-0.18
344	0.983	-0.15
346	0.988	-0.10
348	0.991	-0.08
350	0.993	-0.06
352	0.996	-0.03
354	0.999	-0.01
356	0.999	-0.01
358	1.000	0.00
360	1.000	0.00

Elevation Pattern

Type:	ALP16L3	Polarization:	Vertical
Directivity:		Channel:	23 (ATSC)
Main Lobe:	16.01 numeric (12.04 dB)	Location:	Tuscaloosa, Alabama
Horizontal:	12.40 numeric (10.93 dB)	Beam Tilt:	0.75 degrees



Tabulated Data for Elevation Pattern

Type: ALP16L3

-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	0.363	-8.80	2.25	0.579	-4.75	19.00	0.072	-22.85	43.50	0.039	-28.18	68.00	0.173	-15.24
-9.75	0.379	-8.43	2.50	0.462	-6.71	19.50	0.066	-23.61	44.00	0.043	-27.33	68.50	0.193	-14.29
-9.50	0.384	-8.31	2.75	0.350	-9.12	20.00	0.054	-25.35	44.50	0.040	-27.96	69.00	0.209	-13.60
-9.25	0.377	-8.47	3.00	0.257	-11.80	20.50	0.069	-23.22	45.00	0.033	-29.63	69.50	0.222	-13.07
-9.00	0.358	-8.92	3.25	0.203	-13.85	21.00	0.115	-18.79	45.50	0.024	-32.40	70.00	0.232	-12.69
-8.75	0.327	-9.71	3.50	0.202	-13.89	21.50	0.167	-15.55	46.00	0.019	-34.42	70.50	0.238	-12.47
-8.50	0.286	-10.87	3.75	0.236	-12.54	22.00	0.210	-13.56	46.50	0.019	-34.42	71.00	0.241	-12.36
-8.25	0.239	-12.43	4.00	0.275	-11.21	22.50	0.234	-12.62	47.00	0.022	-33.15	71.50	0.241	-12.36
-8.00	0.189	-14.47	4.25	0.304	-10.34	23.00	0.235	-12.58	47.50	0.022	-33.15	72.00	0.237	-12.51
-7.75	0.147	-16.65	4.50	0.315	-10.03	23.50	0.214	-13.39	48.00	0.018	-34.89	72.50	0.231	-12.73
-7.50	0.127	-17.92	4.75	0.308	-10.23	24.00	0.174	-15.19	48.50	0.009	-40.92	73.00	0.222	-13.07
-7.25	0.140	-17.08	5.00	0.283	-10.96	24.50	0.125	-18.06	49.00	0.004	-47.96	73.50	0.212	-13.47
-7.00	0.173	-15.24	5.25	0.242	-12.32	25.00	0.076	-22.38	49.50	0.019	-34.42	74.00	0.200	-13.98
-6.75	0.209	-13.60	5.50	0.190	-14.42	25.50	0.042	-27.54	50.00	0.034	-29.37	74.50	0.187	-14.56
-6.50	0.239	-12.43	5.75	0.129	-17.79	26.00	0.037	-28.64	50.50	0.047	-26.56	75.00	0.173	-15.24
-6.25	0.257	-11.80	6.00	0.065	-23.74	26.50	0.045	-26.94	51.00	0.057	-24.88	75.50	0.159	-15.97
-6.00	0.260	-11.70	6.25	0.016	-35.92	27.00	0.046	-26.74	51.50	0.061	-24.29	76.00	0.145	-16.77
-5.75	0.248	-12.11	6.50	0.065	-23.74	27.50	0.037	-28.64	52.00	0.060	-24.44	76.50	0.131	-17.65
-5.50	0.219	-13.19	6.75	0.118	-18.56	28.00	0.024	-32.40	52.50	0.054	-25.35	77.00	0.117	-18.64
-5.25	0.176	-15.09	7.00	0.160	-15.92	28.50	0.010	-40.00	53.00	0.044	-27.13	77.50	0.104	-19.66
-5.00	0.121	-18.34	7.25	0.190	-14.42	29.00	0.001	-60.00	53.50	0.034	-29.37	78.00	0.092	-20.72
-4.75	0.058	-24.73	7.50	0.207	-13.68	29.50	0.005	-46.02	54.00	0.031	-30.17	78.50	0.080	-21.94
-4.50	0.023	-32.77	7.75	0.209	-13.60	30.00	0.003	-50.46	54.50	0.038	-28.40	79.00	0.070	-23.10
-4.25	0.089	-21.01	8.00	0.199	-14.02	30.50	0.003	-50.46	55.00	0.050	-26.02	79.50	0.060	-24.44
-4.00	0.157	-16.08	8.25	0.179	-14.94	31.00	0.010	-40.00	55.50	0.061	-24.29	80.00	0.052	-25.68
-3.75	0.217	-13.27	8.50	0.152	-16.36	31.50	0.013	-37.72	56.00	0.069	-23.22	80.50	0.045	-26.94
-3.50	0.265	-11.54	8.75	0.127	-17.92	32.00	0.015	-36.48	56.50	0.072	-22.85	81.00	0.038	-28.40
-3.25	0.297	-10.54	9.00	0.116	-18.71	32.50	0.023	-32.77	57.00	0.069	-23.22	81.50	0.033	-29.63
-3.00	0.312	-10.12	9.25	0.126	-17.99	33.00	0.042	-27.54	57.50	0.061	-24.29	82.00	0.029	-30.75
-2.75	0.308	-10.23	9.50	0.155	-16.19	33.50	0.070	-23.10	58.00	0.047	-26.56	82.50	0.025	-32.04
-2.50	0.287	-10.84	9.75	0.191	-14.38	34.00	0.100	-20.00	58.50	0.030	-30.46	83.00	0.022	-33.15
-2.25	0.255	-11.87	10.00	0.226	-12.92	34.50	0.128	-17.86	59.00	0.010	-40.00	83.50	0.020	-33.98
-2.00	0.227	-12.88	10.50	0.277	-11.15	35.00	0.149	-16.54	59.50	0.014	-37.08	84.00	0.018	-34.89
-1.75	0.226	-12.92	11.00	0.291	-10.72	35.50	0.159	-15.97	60.00	0.034	-29.37	84.50	0.017	-35.39
-1.50	0.273	-11.28	11.50	0.269	-11.40	36.00	0.156	-16.14	60.50	0.053	-25.51	85.00	0.015	-36.48
-1.25	0.359	-8.90	12.00	0.217	-13.27	36.50	0.140	-17.08	61.00	0.070	-23.10	85.50	0.014	-37.08
-1.00	0.466	-6.63	12.50	0.152	-16.36	37.00	0.113	-18.94	61.50	0.082	-21.72	86.00	0.013	-37.72
-0.75	0.580	-4.73	13.00	0.089	-21.01	37.50	0.081	-21.83	62.00	0.089	-21.01	86.50	0.012	-38.42
-0.50	0.692	-3.20	13.50	0.041	-27.74	38.00	0.052	-25.68	62.50	0.092	-20.72	87.00	0.010	-40.00
-0.25	0.794	-2.00	14.00	0.013	-37.72	38.50	0.041	-27.74	63.00	0.089	-21.01	87.50	0.009	-40.92
0.00	0.880	-1.11	14.50	0.004	-47.96	39.00	0.051	-25.85	63.50	0.083	-21.62	88.00	0.007	-43.10
0.25	0.945	-0.49	15.00	0.006	-44.44	39.50	0.064	-23.88	64.00	0.074	-22.62	88.50	0.006	-44.44
0.50	0.986	-0.12	15.50	0.019	-34.42	40.00	0.069	-23.22	64.50	0.066	-23.61	89.00	0.004	-47.96
0.75	1.000	0.00	16.00	0.028	-31.06	40.50	0.064	-23.88	65.00	0.063	-24.01	89.50	0.002	-53.98
1.00	0.987	-0.11	16.50	0.026	-31.70	41.00	0.051	-25.85	65.50	0.070	-23.10	90.00	0.001	-60.00
1.25	0.946	-0.48	17.00	0.012	-38.42	41.50	0.032	-29.90	66.00	0.085	-21.41			
1.50	0.882	-1.09	17.50	0.013	-37.72	42.00	0.010	-40.00	66.50	0.106	-19.49			
1.75	0.796	-1.98	18.00	0.041	-27.74	42.50	0.012	-38.42	67.00	0.129	-17.79			
2.00	0.693	-3.19	18.50	0.063	-24.01	43.00	0.029	-30.75	67.50	0.152	-16.36			