

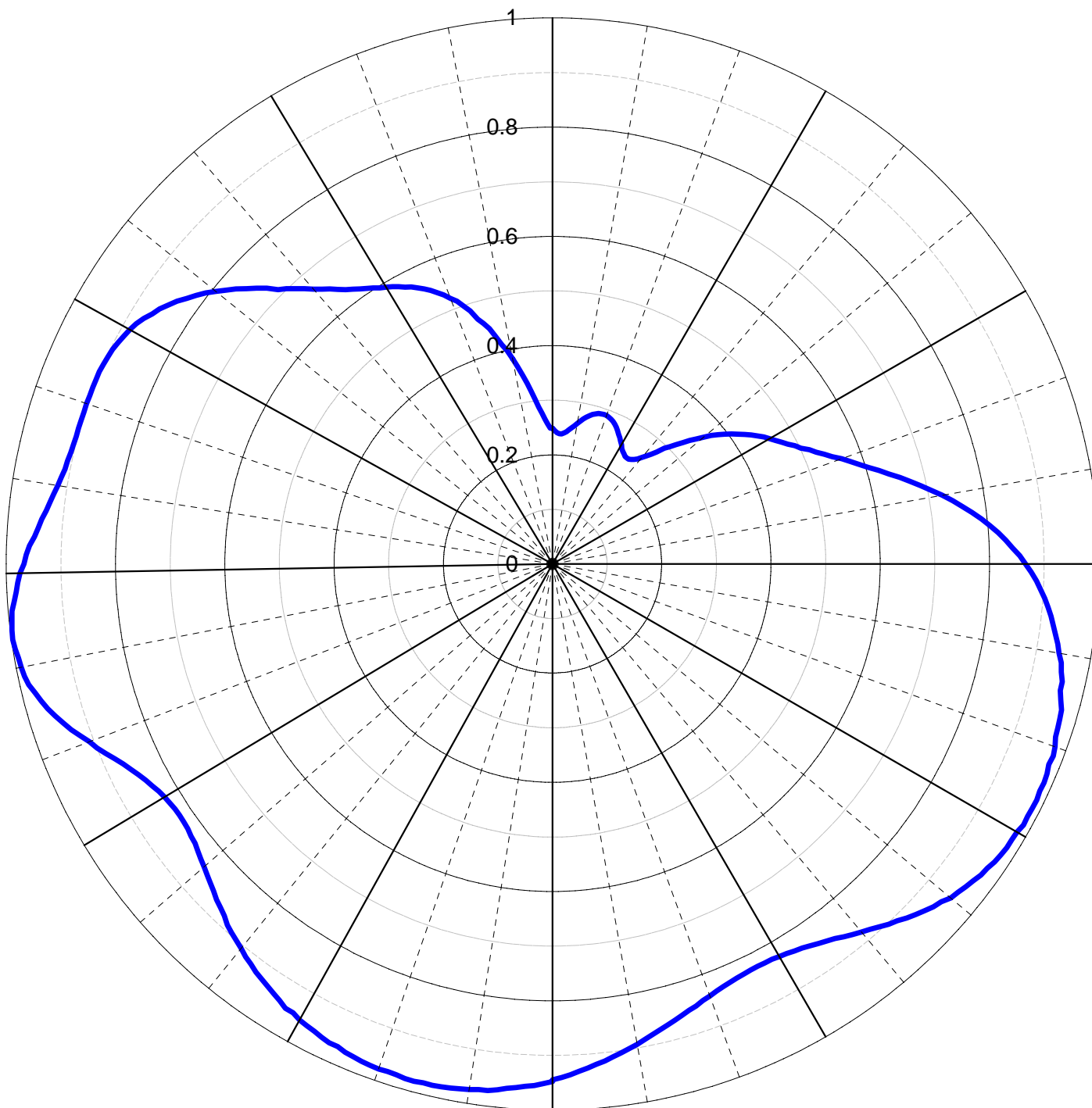
AZIMUTH PATTERN

TYPE: CH29AZH
Numeric dB

Polarization: Horizontal
Channel: 29 (DTV)

Directivity:

Location: Ontario, CA



Note: Pattern shape and directivity may vary with channel and mounting configuration.



Electronics Research, Inc.

7777 Gardner Road
Chandler, IN 47610

TABULATED DATA FOR AZIMUTH PATTERN

TYPE: CH29AZH

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.25	-12.09	90	0.87	-1.25	180	0.94	-0.50	270	0.97	-0.22
2	0.24	-12.38	92	0.89	-1.05	182	0.95	-0.43	272	0.96	-0.33
4	0.24	-12.45	94	0.90	-0.88	184	0.96	-0.37	274	0.95	-0.45
6	0.24	-12.26	96	0.92	-0.75	186	0.96	-0.32	276	0.94	-0.55
8	0.25	-11.98	98	0.93	-0.63	188	0.97	-0.25	278	0.93	-0.66
10	0.26	-11.65	100	0.94	-0.52	190	0.97	-0.22	280	0.92	-0.75
12	0.27	-11.33	102	0.95	-0.43	192	0.98	-0.20	282	0.91	-0.83
14	0.28	-11.07	104	0.96	-0.37	194	0.98	-0.18	284	0.91	-0.86
16	0.29	-10.88	106	0.97	-0.27	196	0.98	-0.17	286	0.90	-0.89
18	0.29	-10.78	108	0.97	-0.24	198	0.98	-0.19	288	0.90	-0.90
20	0.29	-10.77	110	0.98	-0.19	200	0.98	-0.19	290	0.90	-0.90
22	0.29	-10.86	112	0.98	-0.18	202	0.98	-0.21	292	0.90	-0.90
24	0.28	-11.05	114	0.99	-0.13	204	0.97	-0.25	294	0.90	-0.90
26	0.27	-11.32	116	0.99	-0.12	206	0.97	-0.29	296	0.90	-0.94
28	0.26	-11.64	118	0.99	-0.13	208	0.96	-0.35	298	0.89	-0.98
30	0.25	-11.96	120	0.98	-0.16	210	0.95	-0.40	300	0.88	-1.07
32	0.24	-12.28	122	0.98	-0.17	212	0.95	-0.45	302	0.87	-1.18
34	0.24	-12.48	124	0.98	-0.21	214	0.94	-0.56	304	0.86	-1.34
36	0.24	-12.49	126	0.97	-0.27	216	0.93	-0.65	306	0.84	-1.52
38	0.24	-12.31	128	0.96	-0.35	218	0.92	-0.75	308	0.82	-1.76
40	0.25	-11.88	130	0.95	-0.43	220	0.91	-0.86	310	0.79	-2.02
42	0.27	-11.35	132	0.94	-0.55	222	0.90	-0.96	312	0.77	-2.29
44	0.29	-10.61	134	0.92	-0.69	224	0.88	-1.10	314	0.74	-2.60
46	0.31	-10.06	136	0.91	-0.83	226	0.87	-1.21	316	0.71	-2.97
48	0.34	-9.42	138	0.89	-0.97	228	0.86	-1.34	318	0.69	-3.23
50	0.36	-8.85	140	0.88	-1.11	230	0.85	-1.46	320	0.67	-3.52
52	0.38	-8.31	142	0.87	-1.25	232	0.84	-1.57	322	0.65	-3.77
54	0.41	-7.84	144	0.85	-1.38	234	0.83	-1.64	324	0.63	-4.02
56	0.42	-7.45	146	0.84	-1.48	236	0.82	-1.68	326	0.62	-4.22
58	0.44	-7.08	148	0.84	-1.56	238	0.82	-1.69	328	0.60	-4.40
60	0.46	-6.77	150	0.83	-1.62	240	0.83	-1.64	330	0.59	-4.56
62	0.47	-6.47	152	0.83	-1.65	242	0.84	-1.54	332	0.58	-4.72
64	0.49	-6.13	154	0.83	-1.64	244	0.85	-1.41	334	0.57	-4.89
66	0.51	-5.77	156	0.83	-1.62	246	0.87	-1.24	336	0.56	-5.10
68	0.54	-5.42	158	0.83	-1.57	248	0.89	-1.03	338	0.54	-5.35
70	0.56	-4.99	160	0.84	-1.49	250	0.91	-0.84	340	0.52	-5.66
72	0.59	-4.58	162	0.85	-1.40	252	0.93	-0.61	342	0.50	-6.03
74	0.62	-4.13	164	0.86	-1.31	254	0.95	-0.43	344	0.47	-6.58
76	0.66	-3.67	166	0.87	-1.21	256	0.97	-0.28	346	0.45	-7.01
78	0.69	-3.23	168	0.88	-1.10	258	0.98	-0.14	348	0.41	-7.71
80	0.72	-2.80	170	0.89	-0.98	260	0.99	-0.08	350	0.38	-8.35
82	0.76	-2.41	172	0.90	-0.88	262	1.00	-0.04	352	0.35	-9.14
84	0.79	-2.05	174	0.92	-0.77	264	1.00	-0.03	354	0.32	-9.94
86	0.82	-1.75	176	0.93	-0.67	266	0.99	-0.06	356	0.29	-10.81
88	0.84	-1.49	178	0.94	-0.57	268	0.98	-0.15	358	0.27	-11.52



Electronics Research, Inc.

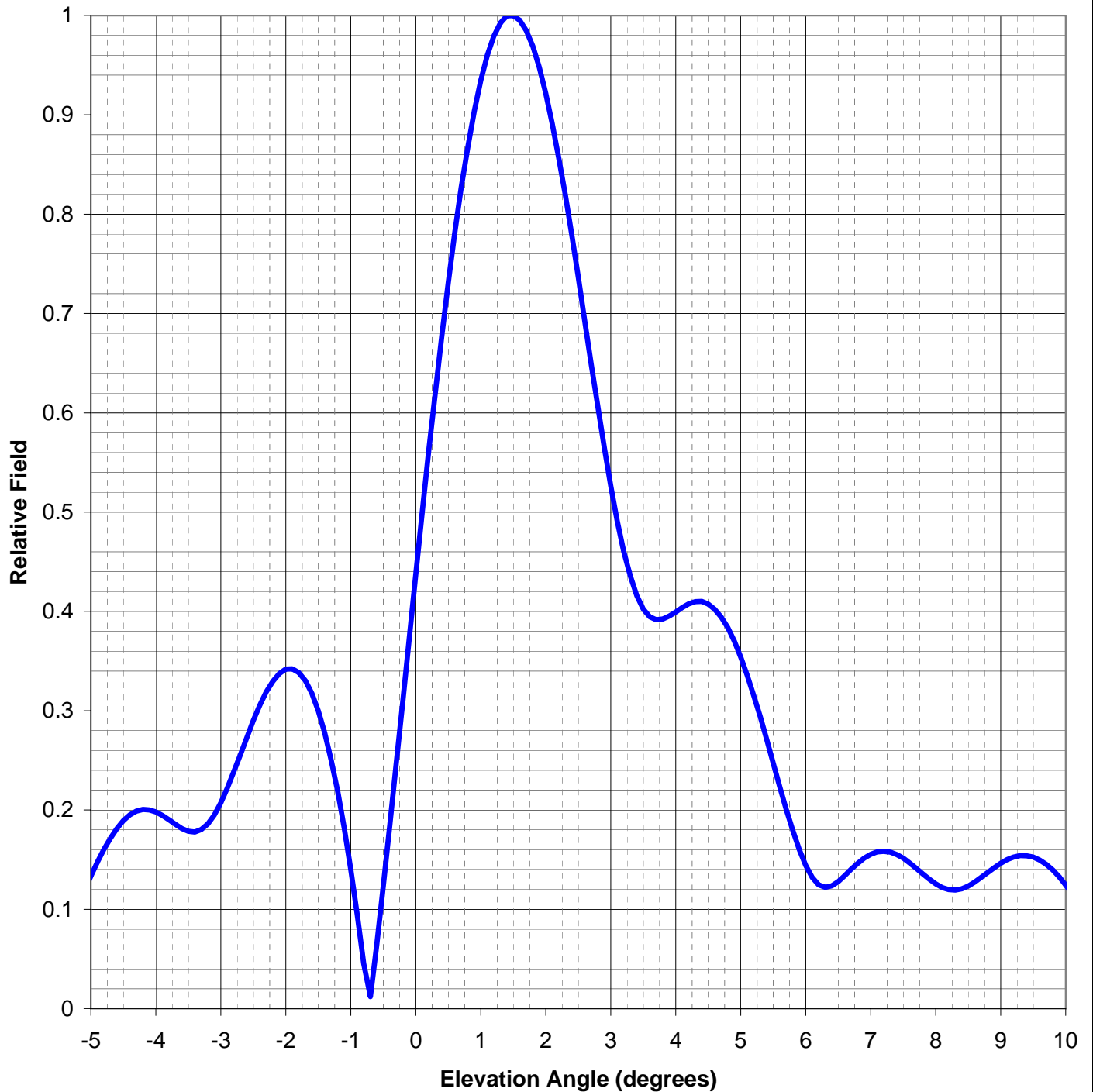
7777 Gardner Road

Chandler, IN 47610

ELEVATION PATTERN

TYPE: CH29ELH
Directivity: Numeric dBd
Main Lobe:
Horizontal:

Beam Tilt: _____
Polarization: Horizontal
Channel: 29 (DTV)
Location: Ontario, CA



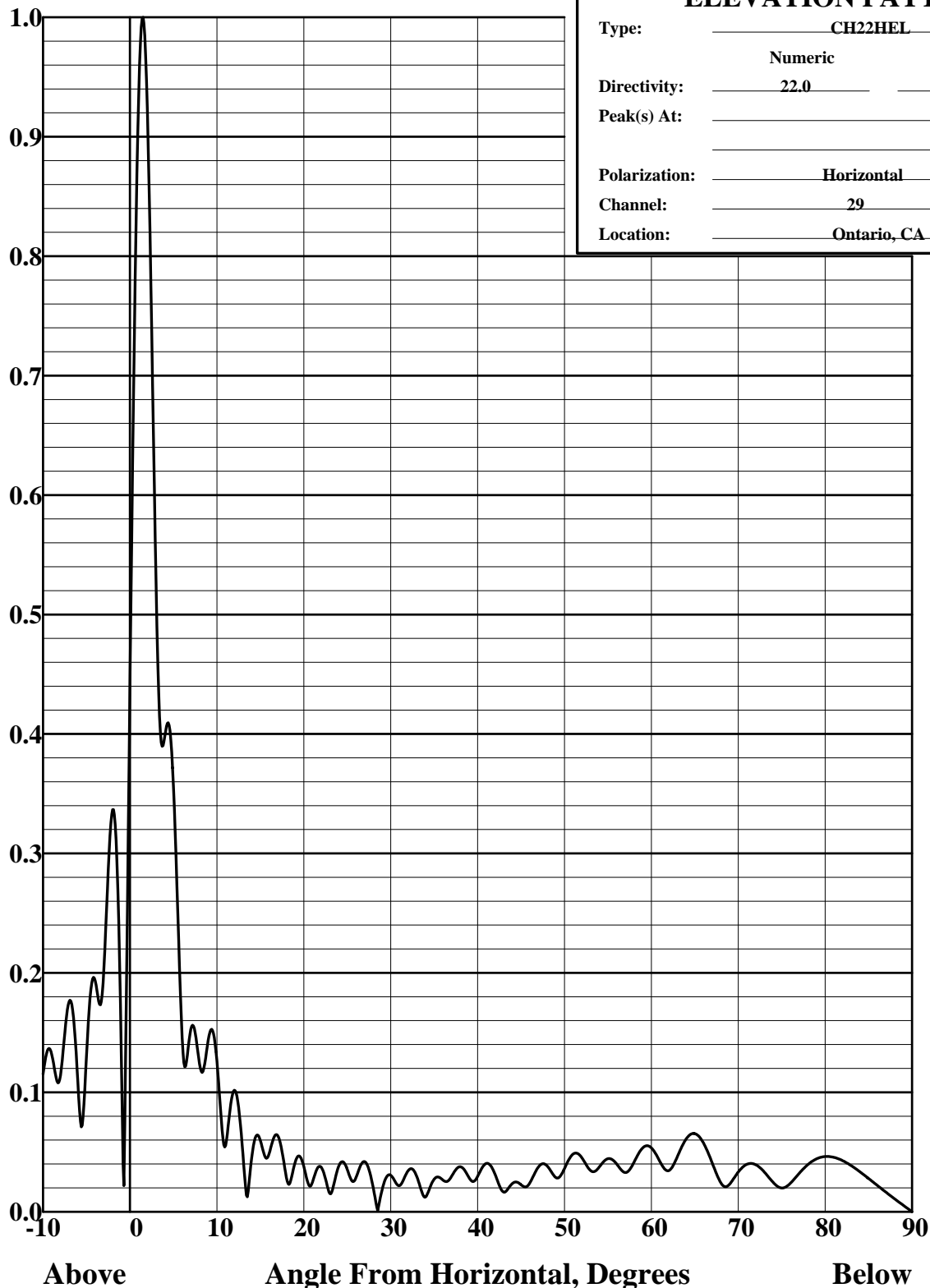
Electronics Research, Inc.

7777 Gardner Road
Chandler, IN 47610



ELEVATION PATTERN

Relative Field



Type: CH22HEL

	Numeric	dBd
Directivity:	<u>22.0</u>	<u>13.42</u>
Peak(s) At:	<u></u>	
Polarization:	<u>Horizontal</u>	
Channel:	<u>29</u>	
Location:	<u>Ontario, CA</u>	



TABULATED DATA FOR ELEVATION PATTERN
TYPE : CH28HEL

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	0.132	-17.59	8.75	0.132	-17.62	35.00	0.027	-31.37	62.50	0.039	-28.18
-4.75	0.164	-15.73	9.00	0.143	-16.89	35.50	0.029	-30.75	63.00	0.046	-26.74
-4.50	0.186	-14.61	9.25	0.151	-16.42	36.00	0.027	-31.37	63.50	0.054	-25.35
-4.25	0.195	-14.18	9.50	0.152	-16.36	36.50	0.025	-32.04	64.00	0.061	-24.29
-4.00	0.193	-14.29	9.75	0.143	-16.89	37.00	0.030	-30.46	64.50	0.065	-23.74
-3.75	0.183	-14.77	10.00	0.126	-17.99	37.50	0.035	-29.12	65.00	0.065	-23.74
-3.50	0.174	-15.19	10.50	0.078	-22.16	38.00	0.038	-28.40	65.50	0.063	-24.01
-3.25	0.179	-14.94	11.00	0.055	-25.19	38.50	0.035	-29.12	66.00	0.057	-24.88
-3.00	0.204	-13.81	11.50	0.085	-21.41	39.00	0.029	-30.75	66.50	0.050	-26.02
-2.75	0.244	-12.25	12.00	0.102	-19.83	39.50	0.025	-32.04	67.00	0.041	-27.74
-2.50	0.286	-10.87	12.50	0.087	-21.21	40.00	0.029	-30.75	67.50	0.032	-29.90
-2.25	0.320	-9.90	13.00	0.048	-26.38	40.50	0.037	-28.64	68.00	0.024	-32.40
-2.00	0.337	-9.45	13.50	0.013	-37.72	41.00	0.040	-27.96	68.50	0.021	-33.56
-1.75	0.328	-9.67	14.00	0.045	-26.94	41.50	0.039	-28.18	69.00	0.023	-32.77
-1.50	0.293	-10.66	14.50	0.063	-24.01	42.00	0.032	-29.90	69.50	0.028	-31.06
-1.25	0.226	-12.90	15.00	0.060	-24.44	42.50	0.022	-33.15	70.00	0.033	-29.63
-1.00	0.133	-17.52	15.50	0.047	-26.56	43.00	0.016	-35.92	70.50	0.037	-28.64
-0.75	0.031	-30.17	16.00	0.048	-26.38	43.50	0.019	-34.42	71.00	0.040	-27.96
-0.50	0.131	-17.65	16.50	0.061	-24.29	44.00	0.024	-32.40	71.50	0.040	-27.96
-0.25	0.285	-10.92	17.00	0.064	-23.88	44.50	0.025	-32.04	72.00	0.039	-28.18
0.00	0.442	-7.09	17.50	0.050	-26.02	45.00	0.023	-32.77	72.50	0.037	-28.64
0.25	0.595	-4.51	18.00	0.029	-30.75	45.50	0.021	-33.56	73.00	0.033	-29.63
0.50	0.734	-2.69	18.50	0.026	-31.70	46.00	0.024	-32.40	73.50	0.029	-30.75
0.75	0.849	-1.43	19.00	0.041	-27.74	46.50	0.031	-30.17	74.00	0.025	-32.04
1.00	0.935	-0.58	19.50	0.047	-26.56	47.00	0.037	-28.64	74.50	0.021	-33.56
1.25	0.985	-0.13	20.00	0.038	-28.40	47.50	0.040	-27.96	75.00	0.020	-33.98
1.50	1.000	-0.00	20.50	0.024	-32.40	48.00	0.038	-28.40	75.50	0.021	-33.56
1.75	0.976	-0.21	21.00	0.025	-32.04	48.50	0.033	-29.63	76.00	0.024	-32.40
2.00	0.921	-0.71	21.50	0.035	-29.12	49.00	0.029	-30.75	76.50	0.028	-31.06
2.25	0.838	-1.54	22.00	0.037	-28.64	49.50	0.030	-30.46	77.00	0.032	-29.90
2.50	0.736	-2.66	22.50	0.027	-31.37	50.00	0.036	-28.87	77.50	0.036	-28.87
2.75	0.627	-4.05	23.00	0.015	-36.48	50.50	0.044	-27.13	78.00	0.039	-28.18
3.00	0.526	-5.58	23.50	0.024	-32.40	51.00	0.048	-26.38	78.50	0.042	-27.54
3.25	0.447	-6.99	24.00	0.038	-28.40	51.50	0.049	-26.20	79.00	0.044	-27.13
3.50	0.401	-7.94	24.50	0.042	-27.54	52.00	0.045	-26.94	79.50	0.046	-26.74
3.75	0.390	-8.18	25.00	0.035	-29.12	52.50	0.039	-28.18	80.00	0.046	-26.74
4.00	0.398	-8.00	25.50	0.026	-31.70	53.00	0.034	-29.37	80.50	0.046	-26.74
4.25	0.407	-7.80	26.00	0.028	-31.06	53.50	0.034	-29.37	81.00	0.046	-26.74
4.50	0.407	-7.81	26.50	0.038	-28.40	54.00	0.037	-28.64	81.50	0.044	-27.13
4.75	0.390	-8.18	27.00	0.042	-27.54	54.50	0.042	-27.54	82.00	0.043	-27.33
5.00	0.356	-8.97	27.50	0.035	-29.12	55.00	0.044	-27.13	82.50	0.041	-27.74
5.25	0.307	-10.24	28.00	0.020	-33.98	55.50	0.044	-27.13	83.00	0.039	-28.18
5.50	0.251	-12.01	28.50	0.001	-60.00	56.00	0.040	-27.96	83.50	0.036	-28.87
5.75	0.193	-14.29	29.00	0.018	-34.89	56.50	0.035	-29.12	84.00	0.033	-29.63
6.00	0.146	-16.71	29.50	0.029	-30.75	57.00	0.033	-29.63	84.50	0.031	-30.17
6.25	0.123	-18.20	30.00	0.031	-30.17	57.50	0.035	-29.12	85.00	0.028	-31.06
6.50	0.126	-17.99	30.50	0.025	-32.04	58.00	0.041	-27.74	85.50	0.025	-32.04
6.75	0.140	-17.08	31.00	0.022	-33.15	58.50	0.048	-26.38	86.00	0.022	-33.15
7.00	0.153	-16.31	31.50	0.027	-31.37	59.00	0.053	-25.51	86.50	0.019	-34.42
7.25	0.156	-16.14	32.00	0.034	-29.37	59.50	0.055	-25.19	87.00	0.016	-35.92
7.50	0.150	-16.48	32.50	0.036	-28.87	60.00	0.053	-25.51	87.50	0.014	-37.08
7.75	0.137	-17.27	33.00	0.030	-30.46	60.50	0.048	-26.38	88.00	0.011	-39.17
8.00	0.124	-18.13	33.50	0.018	-34.89	61.00	0.042	-27.54	88.50	0.008	-41.94
8.25	0.117	-18.64	34.00	0.012	-38.42	61.50	0.036	-28.87	89.00	0.005	-46.02
8.50	0.120	-18.42	34.50	0.020	-33.98	62.00	0.034	-29.37	89.50	0.003	-50.46

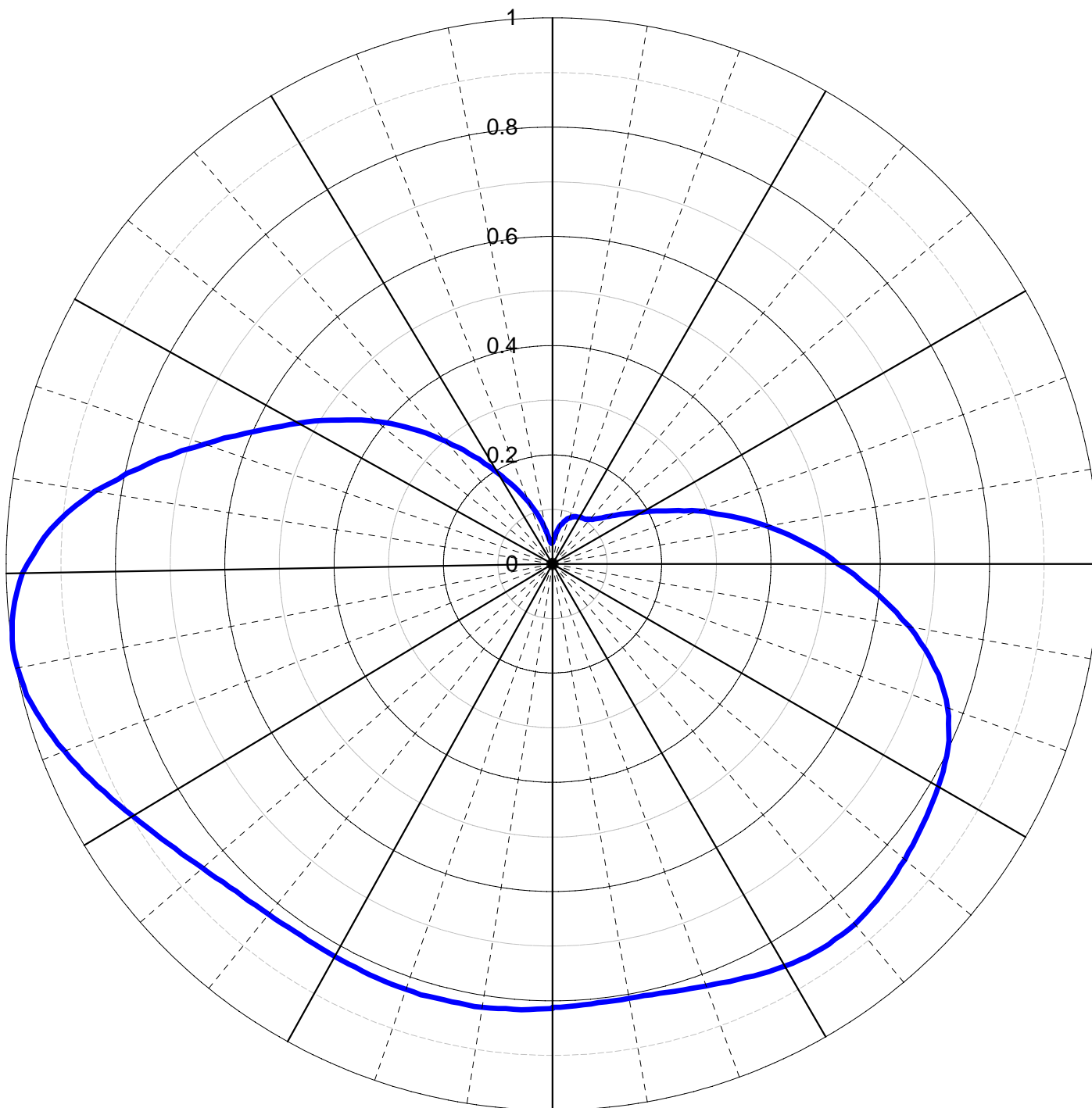
AZIMUTH PATTERN

TYPE: CH29AZV
Numeric dB

Polarization: Vertical
Channel: 29 (DTV)

Directivity:

Location: Ontario, CA



Note: Pattern shape and directivity may vary with channel and mounting configuration.



Electronics Research, Inc.

7777 Gardner Road
Chandler, IN 47610

TABULATED DATA FOR AZIMUTH PATTERN

TYPE: CH29AZV

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.04	-28.09	90	0.52	-5.64	180	0.81	-1.81	270	0.97	-0.26
2	0.04	-27.07	92	0.55	-5.15	182	0.81	-1.78	272	0.95	-0.44
4	0.05	-26.25	94	0.58	-4.76	184	0.82	-1.76	274	0.93	-0.61
6	0.06	-25.13	96	0.61	-4.33	186	0.82	-1.74	276	0.91	-0.85
8	0.06	-24.38	98	0.64	-3.93	188	0.82	-1.72	278	0.88	-1.12
10	0.07	-23.32	100	0.66	-3.56	190	0.82	-1.71	280	0.85	-1.42
12	0.07	-22.76	102	0.69	-3.25	192	0.82	-1.70	282	0.81	-1.82
14	0.08	-22.26	104	0.71	-2.94	194	0.82	-1.69	284	0.78	-2.19
16	0.08	-21.67	106	0.74	-2.67	196	0.82	-1.69	286	0.75	-2.56
18	0.09	-21.21	108	0.75	-2.46	198	0.83	-1.67	288	0.71	-2.97
20	0.09	-20.93	110	0.77	-2.28	200	0.82	-1.68	290	0.67	-3.43
22	0.09	-20.71	112	0.78	-2.14	202	0.82	-1.68	292	0.64	-3.83
24	0.09	-20.51	114	0.79	-2.00	204	0.82	-1.69	294	0.61	-4.27
26	0.10	-20.32	116	0.80	-1.91	206	0.82	-1.69	296	0.58	-4.69
28	0.10	-20.25	118	0.81	-1.83	208	0.82	-1.70	298	0.56	-5.11
30	0.10	-20.12	120	0.82	-1.77	210	0.82	-1.70	300	0.53	-5.49
32	0.10	-20.03	122	0.82	-1.72	212	0.82	-1.71	302	0.51	-5.88
34	0.10	-19.92	124	0.83	-1.66	214	0.82	-1.70	304	0.48	-6.32
36	0.10	-19.89	126	0.83	-1.61	216	0.82	-1.70	306	0.46	-6.74
38	0.10	-19.58	128	0.84	-1.55	218	0.82	-1.69	308	0.44	-7.17
40	0.11	-19.38	130	0.84	-1.49	220	0.83	-1.67	310	0.41	-7.65
42	0.11	-19.20	132	0.85	-1.45	222	0.83	-1.64	312	0.39	-8.12
44	0.12	-18.77	134	0.85	-1.40	224	0.83	-1.60	314	0.37	-8.68
46	0.12	-18.40	136	0.86	-1.36	226	0.84	-1.55	316	0.34	-9.26
48	0.13	-17.85	138	0.86	-1.32	228	0.84	-1.49	318	0.32	-9.88
50	0.14	-17.39	140	0.86	-1.30	230	0.85	-1.42	320	0.30	-10.52
52	0.14	-16.82	142	0.86	-1.30	232	0.86	-1.34	322	0.28	-11.21
54	0.15	-16.22	144	0.86	-1.30	234	0.87	-1.26	324	0.25	-11.96
56	0.17	-15.62	146	0.86	-1.33	236	0.88	-1.16	326	0.23	-12.61
58	0.18	-15.03	148	0.85	-1.36	238	0.89	-1.06	328	0.21	-13.42
60	0.19	-14.44	150	0.85	-1.41	240	0.90	-0.95	330	0.19	-14.24
62	0.21	-13.72	152	0.85	-1.46	242	0.91	-0.83	332	0.18	-15.08
64	0.22	-13.11	154	0.84	-1.52	244	0.92	-0.73	334	0.16	-15.78
66	0.24	-12.39	156	0.83	-1.59	246	0.93	-0.61	336	0.15	-16.62
68	0.26	-11.71	158	0.83	-1.65	248	0.94	-0.50	338	0.13	-17.50
70	0.28	-10.95	160	0.82	-1.70	250	0.96	-0.39	340	0.12	-18.39
72	0.30	-10.35	162	0.82	-1.75	252	0.97	-0.28	342	0.11	-19.41
74	0.33	-9.75	164	0.81	-1.79	254	0.98	-0.19	344	0.10	-20.40
76	0.35	-9.14	166	0.81	-1.82	256	0.99	-0.11	346	0.08	-21.50
78	0.37	-8.53	168	0.81	-1.85	258	0.99	-0.06	348	0.07	-22.81
80	0.40	-7.97	170	0.81	-1.86	260	1.00	-0.02	350	0.06	-24.32
82	0.42	-7.47	172	0.81	-1.85	262	1.00	0.00	352	0.05	-25.68
84	0.45	-6.97	174	0.81	-1.86	264	1.00	-0.03	354	0.04	-27.07
86	0.47	-6.48	176	0.81	-1.84	266	0.99	-0.08	356	0.04	-28.02
88	0.50	-6.01	178	0.81	-1.82	268	0.98	-0.16	358	0.04	-28.47



Electronics Research, Inc.

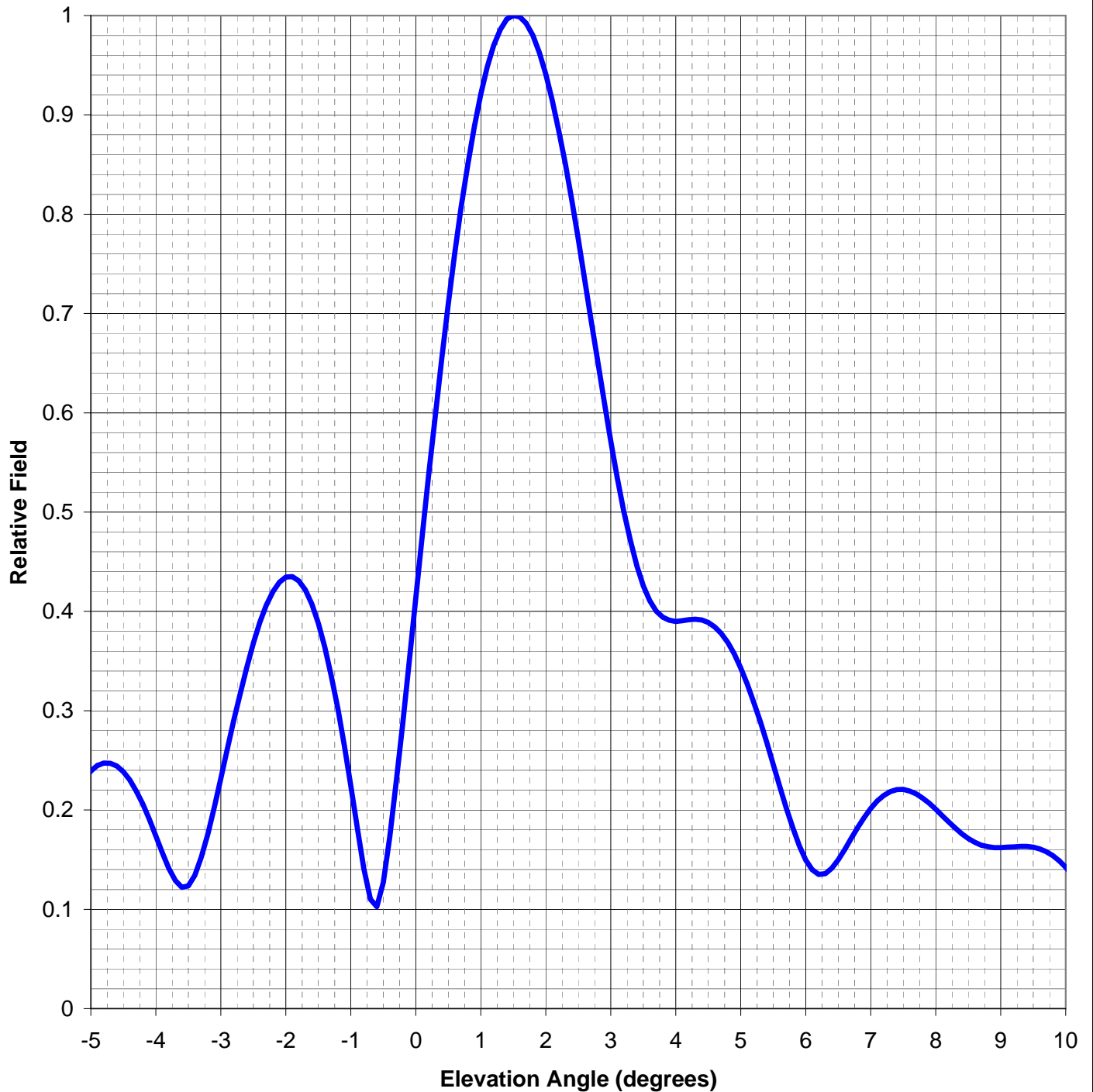
7777 Gardner Road

Chandler, IN 47610

ELEVATION PATTERN

TYPE: CH29ELV
Directivity: Numeric dBd
Main Lobe:
Horizontal:

Beam Tilt: _____
Polarization: Vertical
Channel: 29 (DTV)
Location: Ontario, CA



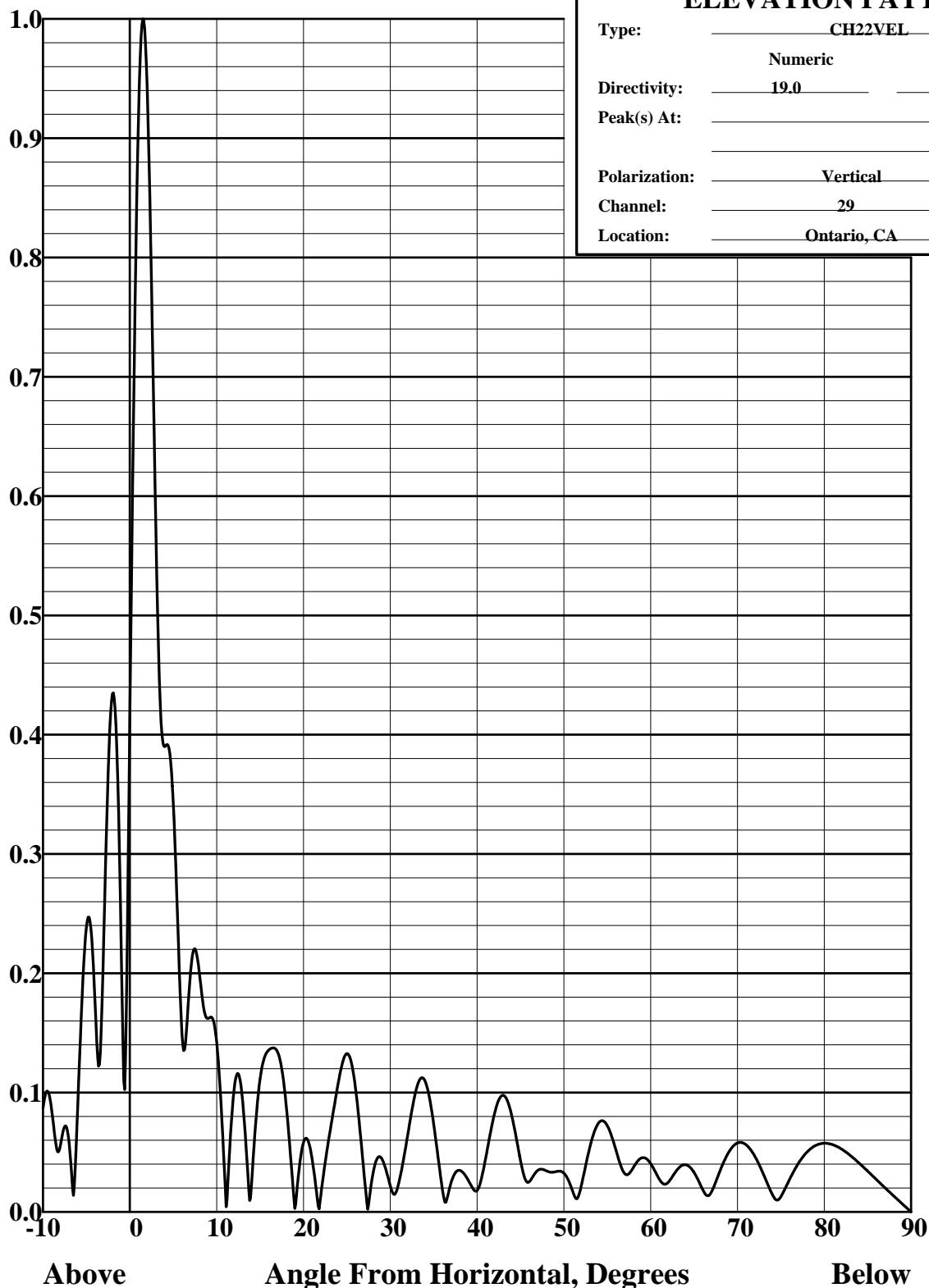
Electronics Research, Inc.

7777 Gardner Road
Chandler, IN 47610



ELEVATION PATTERN

Relative Field



Type: CH22VEL

	Numeric	dBd
Directivity:	19.0	12.79
Peak(s) At:		
Polarization:	Vertical	
Channel:	29	
Location:	Ontario, CA	



TABULATED DATA FOR ELEVATION PATTERN
TYPE : CH22VEL

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	0.239	-12.43	8.75	0.164	-15.70	35.00	0.074	-22.62	62.50	0.030	-30.46
-4.75	0.247	-12.15	9.00	0.162	-15.81	35.50	0.046	-26.74	63.00	0.035	-29.12
-4.50	0.238	-12.47	9.25	0.163	-15.76	36.00	0.019	-34.42	63.50	0.038	-28.40
-4.25	0.213	-13.45	9.50	0.162	-15.81	36.50	0.010	-40.00	64.00	0.039	-28.18
-4.00	0.174	-15.19	9.75	0.156	-16.14	37.00	0.024	-32.40	64.50	0.038	-28.40
-3.75	0.135	-17.39	10.00	0.142	-16.95	37.50	0.033	-29.63	65.00	0.033	-29.63
-3.50	0.124	-18.13	10.50	0.091	-20.82	38.00	0.035	-29.12	65.50	0.026	-31.70
-3.25	0.164	-15.70	11.00	0.019	-34.42	38.50	0.032	-29.90	66.00	0.019	-34.42
-3.00	0.232	-12.69	11.50	0.053	-25.51	39.00	0.026	-31.70	66.50	0.014	-37.08
-2.75	0.304	-10.34	12.00	0.102	-19.83	39.50	0.020	-33.98	67.00	0.017	-35.39
-2.50	0.368	-8.68	12.50	0.116	-18.71	40.00	0.018	-34.89	67.50	0.025	-32.04
-2.25	0.413	-7.68	13.00	0.092	-20.72	40.50	0.028	-31.06	68.00	0.035	-29.12
-2.00	0.434	-7.25	13.50	0.042	-27.54	41.00	0.045	-26.94	68.50	0.043	-27.33
-1.75	0.426	-7.40	14.00	0.021	-33.56	41.50	0.065	-23.74	69.00	0.050	-26.02
-1.50	0.388	-8.22	14.50	0.075	-22.50	42.00	0.082	-21.72	69.50	0.055	-25.19
-1.25	0.318	-9.94	15.00	0.111	-19.09	42.50	0.094	-20.54	70.00	0.058	-24.73
-1.00	0.224	-13.00	15.50	0.129	-17.79	43.00	0.098	-20.18	70.50	0.058	-24.73
-0.75	0.126	-17.99	16.00	0.136	-17.33	43.50	0.093	-20.63	71.00	0.056	-25.04
-0.50	0.127	-17.92	16.50	0.137	-17.27	44.00	0.080	-21.94	71.50	0.052	-25.68
-0.25	0.258	-11.77	17.00	0.134	-17.46	44.50	0.063	-24.01	72.00	0.047	-26.56
0.00	0.413	-7.68	17.50	0.120	-18.42	45.00	0.043	-27.33	72.50	0.039	-28.18
0.25	0.568	-4.92	18.00	0.090	-20.92	45.50	0.028	-31.06	73.00	0.031	-30.17
0.50	0.709	-2.99	18.50	0.048	-26.38	46.00	0.025	-32.04	73.50	0.023	-32.77
0.75	0.828	-1.63	19.00	0.003	-50.46	46.50	0.030	-30.46	74.00	0.015	-36.48
1.00	0.920	-0.72	19.50	0.036	-28.87	47.00	0.035	-29.12	74.50	0.010	-40.00
1.25	0.977	-0.20	20.00	0.058	-24.73	47.50	0.036	-28.87	75.00	0.013	-37.72
1.50	1.000	-0.00	20.50	0.060	-24.44	48.00	0.034	-29.37	75.50	0.020	-33.98
1.75	0.986	-0.12	21.00	0.044	-27.13	48.50	0.033	-29.63	76.00	0.027	-31.37
2.00	0.941	-0.53	21.50	0.017	-35.39	49.00	0.034	-29.37	76.50	0.034	-29.37
2.25	0.867	-1.24	22.00	0.014	-37.08	49.50	0.034	-29.37	77.00	0.040	-27.96
2.50	0.774	-2.23	22.50	0.041	-27.74	50.00	0.032	-29.90	77.50	0.046	-26.74
2.75	0.672	-3.45	23.00	0.065	-23.74	50.50	0.027	-31.37	78.00	0.050	-26.02
3.00	0.571	-4.87	23.50	0.087	-21.21	51.00	0.018	-34.89	78.50	0.053	-25.51
3.25	0.486	-6.27	24.00	0.108	-19.33	51.50	0.011	-39.17	79.00	0.056	-25.04
3.50	0.426	-7.41	24.50	0.125	-18.06	52.00	0.022	-33.15	79.50	0.057	-24.88
3.75	0.397	-8.02	25.00	0.133	-17.52	52.50	0.039	-28.18	80.00	0.057	-24.88
4.00	0.390	-8.18	25.50	0.126	-17.99	53.00	0.054	-25.35	80.50	0.057	-24.88
4.25	0.391	-8.15	26.00	0.103	-19.74	53.50	0.067	-23.48	81.00	0.056	-25.04
4.50	0.389	-8.20	26.50	0.069	-23.22	54.00	0.075	-22.50	81.50	0.055	-25.19
4.75	0.373	-8.57	27.00	0.030	-30.46	54.50	0.076	-22.38	82.00	0.053	-25.51
5.00	0.343	-9.29	27.50	0.006	-44.44	55.00	0.072	-22.85	82.50	0.050	-26.02
5.25	0.299	-10.49	28.00	0.032	-29.90	55.50	0.063	-24.01	83.00	0.047	-26.56
5.50	0.246	-12.18	28.50	0.045	-26.94	56.00	0.052	-25.68	83.50	0.044	-27.13
5.75	0.192	-14.33	29.00	0.045	-26.94	56.50	0.040	-27.96	84.00	0.041	-27.74
6.00	0.150	-16.48	29.50	0.035	-29.12	57.00	0.032	-29.90	84.50	0.038	-28.40
6.25	0.136	-17.36	30.00	0.022	-33.15	57.50	0.032	-29.90	85.00	0.034	-29.37
6.50	0.150	-16.48	30.50	0.015	-36.48	58.00	0.037	-28.64	85.50	0.031	-30.17
6.75	0.176	-15.07	31.00	0.025	-32.04	58.50	0.043	-27.33	86.00	0.027	-31.37
7.00	0.202	-13.89	31.50	0.043	-27.33	59.00	0.045	-26.94	86.50	0.024	-32.40
7.25	0.216	-13.29	32.00	0.064	-23.88	59.50	0.045	-26.94	87.00	0.020	-33.98
7.50	0.221	-13.11	32.50	0.085	-21.41	60.00	0.040	-27.96	87.50	0.017	-35.39
7.75	0.214	-13.39	33.00	0.103	-19.74	60.50	0.034	-29.37	88.00	0.013	-37.72
8.00	0.201	-13.94	33.50	0.112	-19.02	61.00	0.027	-31.37	88.50	0.010	-40.00
8.25	0.185	-14.66	34.00	0.110	-19.17	61.50	0.023	-32.77	89.00	0.007	-43.10
8.50	0.171	-15.34	34.50	0.096	-20.35	62.00	0.025	-32.04	89.50	0.003	-50.46