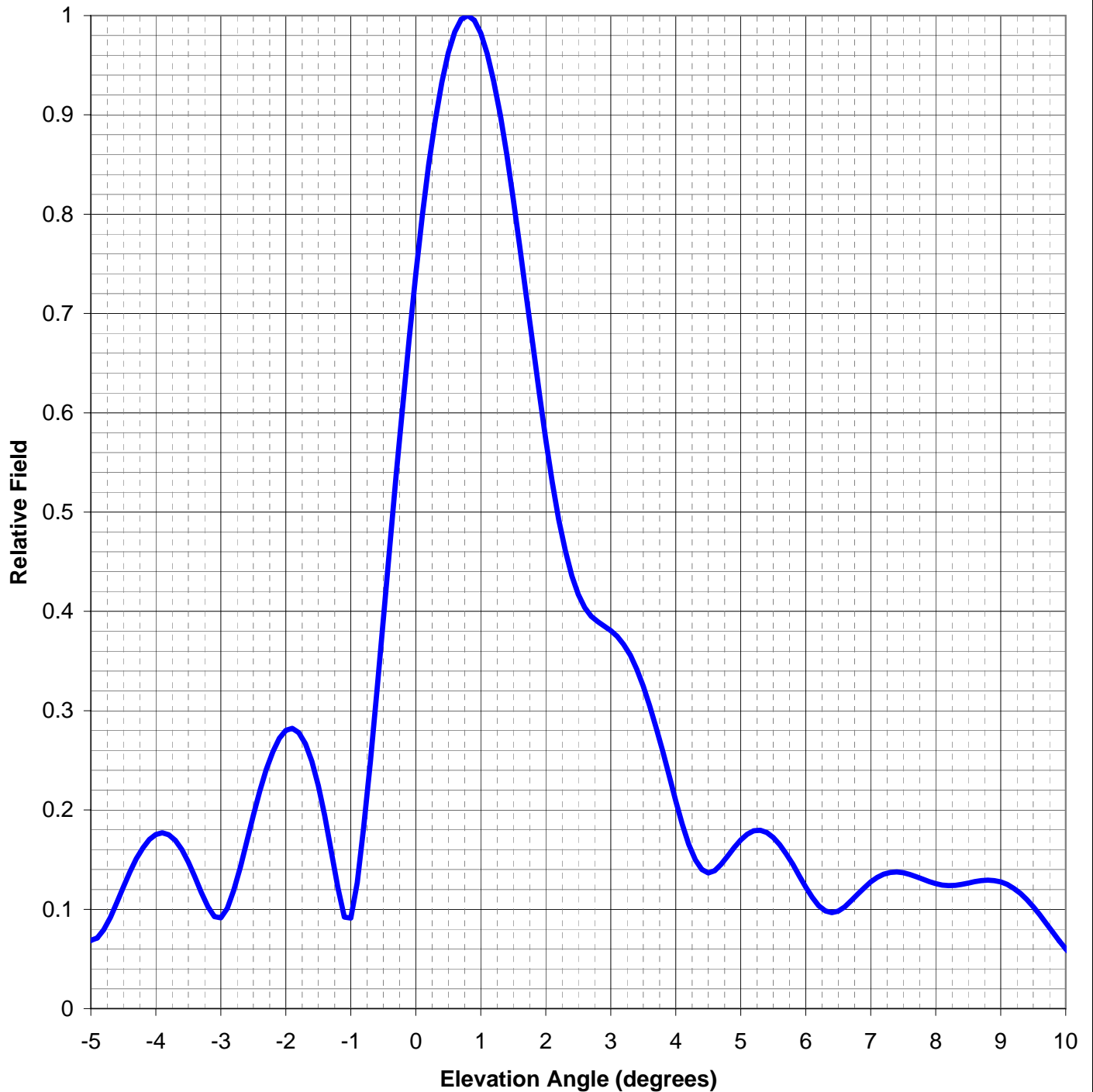


ELEVATION PATTERN

TYPE: CH23ELH
Directivity: Numeric dBd
Main Lobe:
Horizontal:

Beam Tilt: _____
Polarization: Horizontal
Channel: 23 (DTV)
Location: Greenville, NC



Electronics Research, Inc.

7777 Gardner Road
Chandler, IN 47610

TABULATED DATA FOR ELEVATION PATTERN

TYPE: CH23ELH

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
-5.00	0.07	-23.25	-0.50	0.39	-8.14	2.00	0.57	-4.84	6.50	0.10	-20.16
-4.90	0.07	-22.96	-0.40	0.47	-6.65	2.10	0.53	-5.51	6.60	0.10	-19.79
-4.80	0.08	-22.01	-0.30	0.54	-5.39	2.20	0.49	-6.15	6.70	0.11	-19.29
-4.70	0.09	-20.73	-0.20	0.61	-4.31	2.30	0.46	-6.73	6.80	0.12	-18.77
-4.60	0.11	-19.43	-0.10	0.68	-3.40	2.40	0.44	-7.21	6.90	0.12	-18.29
-4.50	0.12	-18.25	0.00	0.74	-2.62	2.50	0.42	-7.59	7.00	0.13	-17.89
-4.40	0.14	-17.24	0.05	0.74	-2.62	2.60	0.40	-7.88	7.10	0.13	-17.58
-4.30	0.15	-16.44	0.10	0.80	-1.96	2.70	0.40	-8.06	7.20	0.14	-17.37
-4.20	0.16	-15.81	0.15	0.80	-1.96	2.80	0.39	-8.19	7.30	0.14	-17.25
-4.10	0.17	-15.38	0.20	0.85	-1.41	2.90	0.39	-8.29	7.40	0.14	-17.22
-4.00	0.18	-15.12	0.25	0.85	-1.41	3.00	0.38	-8.39	7.50	0.14	-17.27
-3.90	0.18	-15.03	0.30	0.90	-0.96	3.10	0.37	-8.52	7.60	0.14	-17.38
-3.80	0.18	-15.14	0.35	0.90	-0.96	3.20	0.37	-8.71	7.70	0.13	-17.53
-3.70	0.17	-15.43	0.40	0.93	-0.60	3.30	0.36	-8.98	7.80	0.13	-17.70
-3.60	0.16	-15.92	0.45	0.93	-0.60	3.40	0.34	-9.33	7.90	0.13	-17.87
-3.50	0.15	-16.62	0.50	0.96	-0.33	3.50	0.32	-9.77	8.00	0.13	-18.00
-3.40	0.13	-17.54	0.55	0.96	-0.33	3.60	0.30	-10.32	8.10	0.12	-18.10
-3.30	0.12	-18.63	0.60	0.98	-0.14	3.70	0.28	-10.98	8.20	0.12	-18.14
-3.20	0.10	-19.78	0.65	0.98	-0.14	3.80	0.26	-11.74	8.30	0.12	-18.11
-3.10	0.09	-20.67	0.70	1.00	-0.03	3.90	0.23	-12.62	8.40	0.13	-18.06
-3.00	0.09	-20.78	0.75	1.00	-0.03	4.00	0.21	-13.60	8.50	0.13	-17.97
-2.90	0.10	-19.92	0.80	1.00	0.00	4.10	0.19	-14.62	8.60	0.13	-17.87
-2.80	0.12	-18.47	0.85	1.00	0.00	4.20	0.17	-15.62	8.70	0.13	-17.80
-2.70	0.14	-16.91	0.90	1.00	-0.04	4.30	0.15	-16.49	8.80	0.13	-17.76
-2.60	0.17	-15.47	0.95	1.00	-0.04	4.40	0.14	-17.07	8.90	0.13	-17.79
-2.50	0.19	-14.22	1.00	0.98	-0.15	4.50	0.14	-17.29	9.00	0.13	-17.88
-2.40	0.22	-13.19	1.05	0.98	-0.15	4.60	0.14	-17.14	9.10	0.13	-18.05
-2.30	0.24	-12.37	1.10	0.96	-0.34	4.70	0.15	-16.75	9.20	0.12	-18.33
-2.20	0.26	-11.74	1.15	0.96	-0.34	4.80	0.15	-16.26	9.30	0.12	-18.69
-2.10	0.27	-11.30	1.20	0.93	-0.60	4.90	0.16	-15.79	9.40	0.11	-19.18
-2.00	0.28	-11.05	1.25	0.93	-0.60	5.00	0.17	-15.39	9.50	0.10	-19.77
-1.90	0.28	-10.99	1.30	0.90	-0.92	5.10	0.18	-15.11	9.60	0.09	-20.48
-1.80	0.28	-11.12	1.35	0.90	-0.92	5.20	0.18	-14.94	9.70	0.09	-21.32
-1.70	0.27	-11.48	1.40	0.86	-1.31	5.30	0.18	-14.92	9.80	0.08	-22.27
-1.60	0.25	-12.08	1.45	0.86	-1.31	5.40	0.18	-15.02	9.90	0.07	-23.32
-1.50	0.22	-12.98	1.50	0.81	-1.78	5.50	0.17	-15.27	10.00	0.06	-24.42
-1.40	0.19	-14.24	1.55	0.81	-1.78	5.60	0.17	-15.64			
-1.30	0.16	-15.99	1.60	0.77	-2.30	5.70	0.16	-16.14			
-1.20	0.12	-18.30	1.65	0.77	-2.30	5.80	0.15	-16.76			
-1.10	0.09	-20.70	1.70	0.72	-2.87	5.90	0.13	-17.48			
-1.00	0.09	-20.80	1.75	0.72	-2.87	6.00	0.12	-18.25			
-0.90	0.13	-17.93	1.80	0.67	-3.50	6.10	0.11	-19.01			
-0.80	0.18	-14.74	1.85	0.67	-3.50	6.20	0.10	-19.69			
-0.70	0.25	-12.09	1.90	0.62	-4.16	6.30	0.10	-20.15			
-0.60	0.32	-9.92	1.95	0.62	-4.16	6.40	0.10	-20.30			



Electronics Research, Inc.

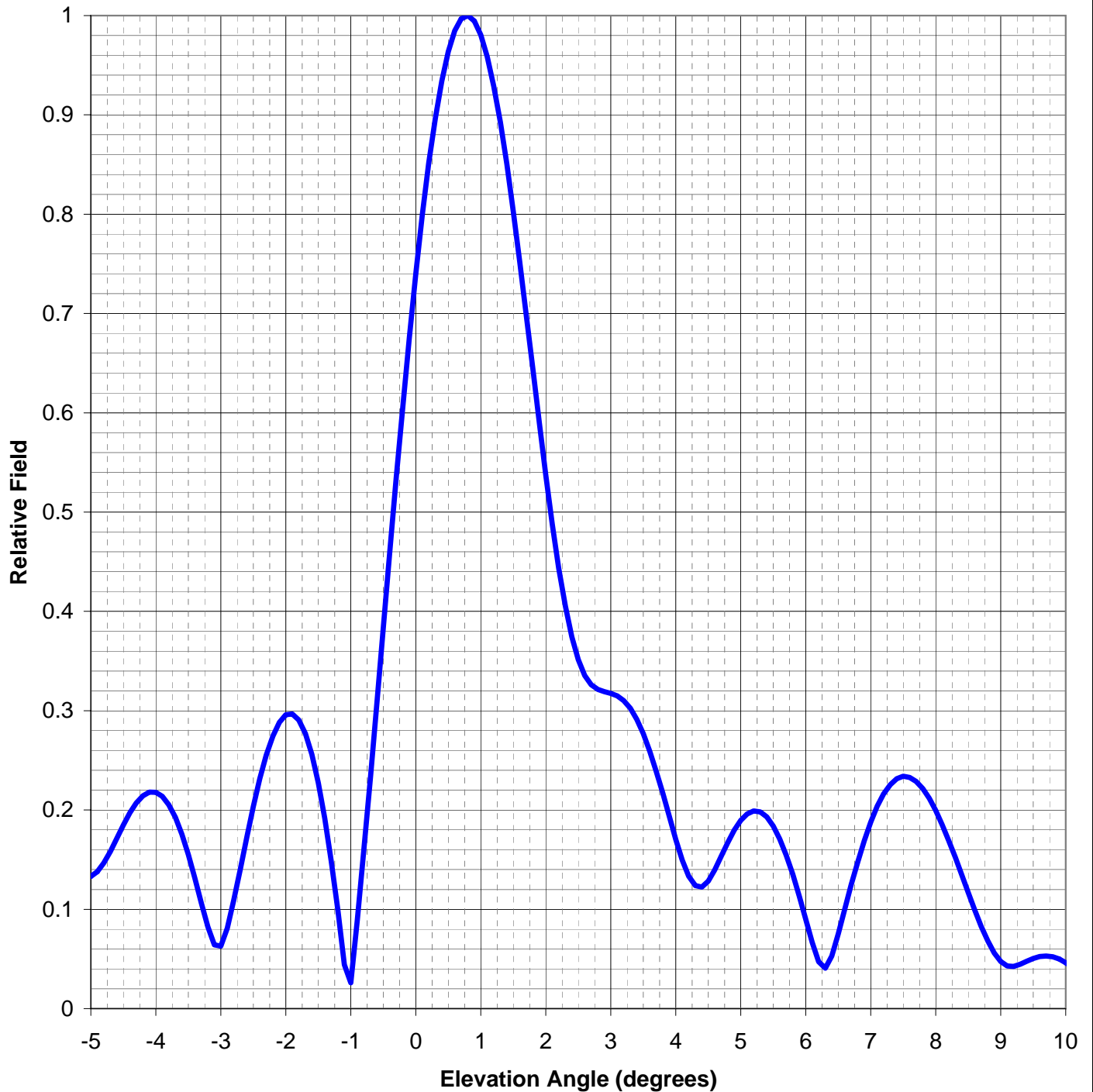
7777 Gardner Road

Chandler, IN 47610

ELEVATION PATTERN

TYPE: CH23ELV
Directivity: Numeric dBd
Main Lobe:
Horizontal:

Beam Tilt: _____
Polarization: Vertical
Channel: 23 (DTV)
Location: Greenville, NC



Electronics Research, Inc.

7777 Gardner Road
Chandler, IN 47610

TABULATED DATA FOR ELEVATION PATTERN

TYPE: CH23ELV

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
-5.00	0.13	-17.52	-0.50	0.38	-8.32	2.00	0.54	-5.40	6.50	0.08	-22.48
-4.90	0.14	-17.21	-0.40	0.46	-6.75	2.10	0.49	-6.23	6.60	0.10	-20.01
-4.80	0.15	-16.68	-0.30	0.53	-5.44	2.20	0.44	-7.06	6.70	0.12	-18.09
-4.70	0.16	-16.01	-0.20	0.61	-4.34	2.30	0.41	-7.84	6.80	0.15	-16.60
-4.60	0.17	-15.31	-0.10	0.68	-3.40	2.40	0.37	-8.53	6.90	0.17	-15.44
-4.50	0.18	-14.67	0.00	0.74	-2.61	2.50	0.35	-9.09	7.00	0.19	-14.52
-4.40	0.20	-14.11	0.05	0.74	-2.61	2.60	0.34	-9.49	7.10	0.20	-13.82
-4.30	0.21	-13.68	0.10	0.80	-1.95	2.70	0.33	-9.73	7.20	0.22	-13.30
-4.20	0.21	-13.38	0.15	0.80	-1.95	2.80	0.32	-9.86	7.30	0.23	-12.93
-4.10	0.22	-13.23	0.20	0.85	-1.40	2.90	0.32	-9.92	7.40	0.23	-12.71
-4.00	0.22	-13.24	0.25	0.85	-1.40	3.00	0.32	-9.97	7.50	0.23	-12.62
-3.90	0.21	-13.40	0.30	0.90	-0.95	3.10	0.31	-10.04	7.60	0.23	-12.66
-3.80	0.21	-13.75	0.35	0.90	-0.95	3.20	0.31	-10.17	7.70	0.23	-12.81
-3.70	0.19	-14.31	0.40	0.93	-0.59	3.30	0.30	-10.39	7.80	0.22	-13.09
-3.60	0.18	-15.11	0.45	0.93	-0.59	3.40	0.29	-10.72	7.90	0.21	-13.49
-3.50	0.16	-16.18	0.50	0.96	-0.32	3.50	0.28	-11.15	8.00	0.20	-14.00
-3.40	0.13	-17.61	0.55	0.96	-0.32	3.60	0.26	-11.72	8.10	0.19	-14.65
-3.30	0.11	-19.44	0.60	0.98	-0.13	3.70	0.24	-12.43	8.20	0.17	-15.42
-3.20	0.08	-21.71	0.65	0.98	-0.13	3.80	0.22	-13.28	8.30	0.15	-16.34
-3.10	0.06	-23.84	0.70	1.00	-0.03	3.90	0.19	-14.27	8.40	0.13	-17.42
-3.00	0.06	-24.01	0.75	1.00	-0.03	4.00	0.17	-15.37	8.50	0.12	-18.65
-2.90	0.08	-21.84	0.80	1.00	0.00	4.10	0.15	-16.50	8.60	0.10	-20.05
-2.80	0.11	-19.24	0.85	1.00	0.00	4.20	0.13	-17.50	8.70	0.08	-21.63
-2.70	0.14	-17.02	0.90	0.99	-0.05	4.30	0.12	-18.14	8.80	0.07	-23.33
-2.60	0.17	-15.24	0.95	0.99	-0.05	4.40	0.12	-18.24	8.90	0.06	-25.05
-2.50	0.20	-13.82	1.00	0.98	-0.17	4.50	0.13	-17.83	9.00	0.05	-26.50
-2.40	0.23	-12.71	1.05	0.98	-0.17	4.60	0.14	-17.10	9.10	0.04	-27.33
-2.30	0.26	-11.86	1.10	0.96	-0.37	4.70	0.15	-16.29	9.20	0.04	-27.42
-2.20	0.27	-11.23	1.15	0.96	-0.37	4.80	0.17	-15.53	9.30	0.04	-26.99
-2.10	0.29	-10.80	1.20	0.93	-0.64	4.90	0.18	-14.91	9.40	0.05	-26.42
-2.00	0.30	-10.58	1.25	0.93	-0.64	5.00	0.19	-14.45	9.50	0.05	-25.92
-1.90	0.30	-10.55	1.30	0.89	-0.99	5.10	0.20	-14.15	9.60	0.05	-25.61
-1.80	0.29	-10.73	1.35	0.89	-0.99	5.20	0.20	-14.02	9.70	0.05	-25.52
-1.70	0.28	-11.15	1.40	0.85	-1.41	5.30	0.20	-14.06	9.80	0.05	-25.66
-1.60	0.26	-11.84	1.45	0.85	-1.41	5.40	0.19	-14.29	9.90	0.05	-26.05
-1.50	0.23	-12.86	1.50	0.80	-1.91	5.50	0.18	-14.71	10.00	0.05	-26.68
-1.40	0.19	-14.35	1.55	0.80	-1.91	5.60	0.17	-15.34			
-1.30	0.15	-16.57	1.60	0.75	-2.48	5.70	0.15	-16.22			
-1.20	0.10	-20.10	1.65	0.75	-2.48	5.80	0.14	-17.38			
-1.10	0.04	-27.09	1.70	0.70	-3.11	5.90	0.11	-18.92			
-1.00	0.03	-31.75	1.75	0.70	-3.11	6.00	0.09	-20.92			
-0.90	0.09	-21.05	1.80	0.64	-3.82	6.10	0.07	-23.53			
-0.80	0.16	-16.00	1.85	0.64	-3.82	6.20	0.05	-26.54			
-0.70	0.23	-12.69	1.90	0.59	-4.58	6.30	0.04	-27.82			
-0.60	0.31	-10.25	1.95	0.59	-4.58	6.40	0.05	-25.51			



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7777 Gardner Road

Chandler, IN 47610