

WUNTNNew Proposed Community Coverage

WUNTNNew

Modify CP

Latitude: 41-36-33.30 N

Longitude: 089-40-18.60 W

ERP: 8.50 kW

Channel: 204

Frequency: 88.7 MHz

AMSL Height: 330.8 m

Horiz. Pattern: Directional

Pop = 60,988

11/15/2011



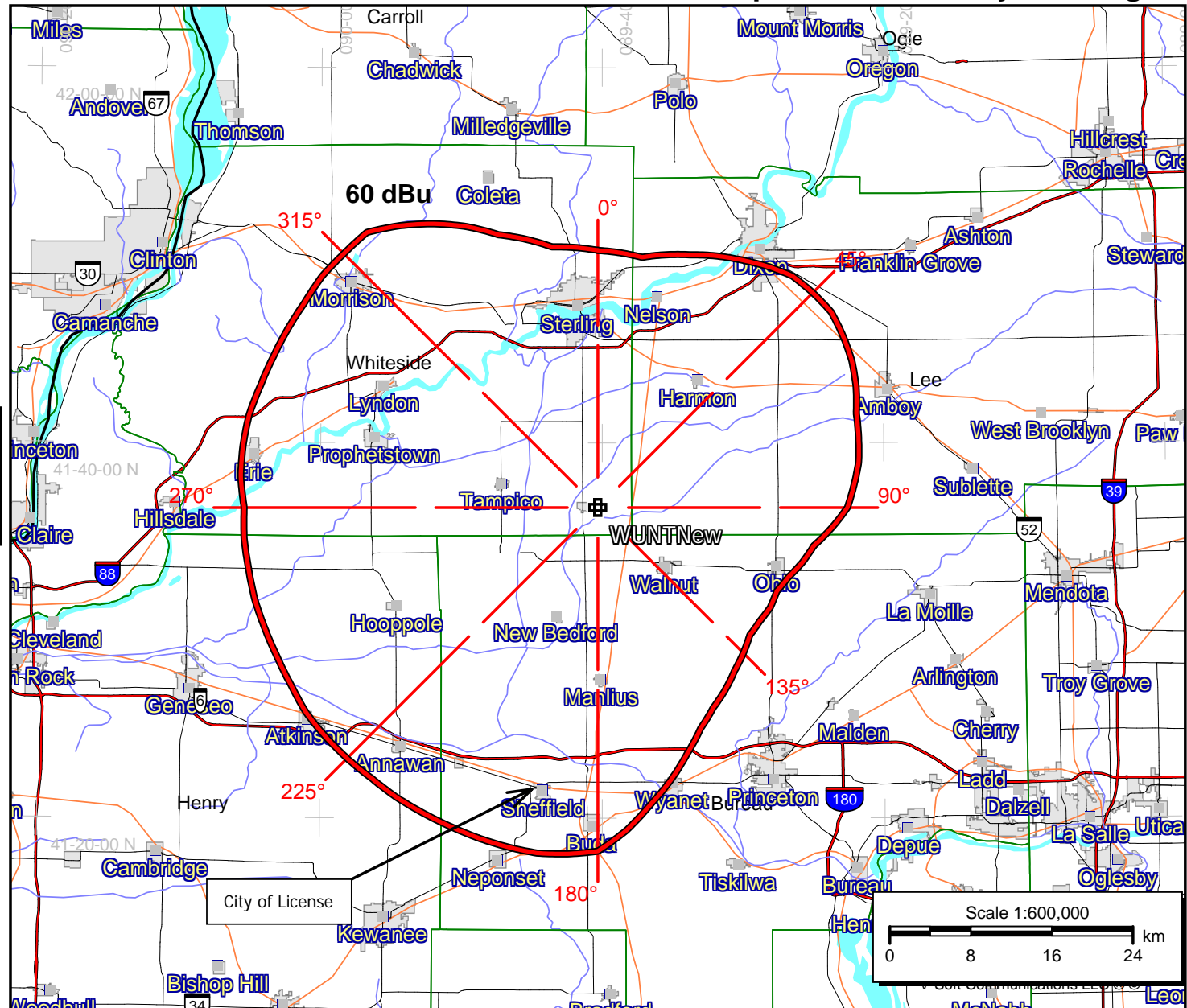
Doug Vernier

401 Main Street, Suite 213
Cedar Falls, Iowa 50613

Telecommunication Consultants

dvernier@v-soft.com

(319)266-8402

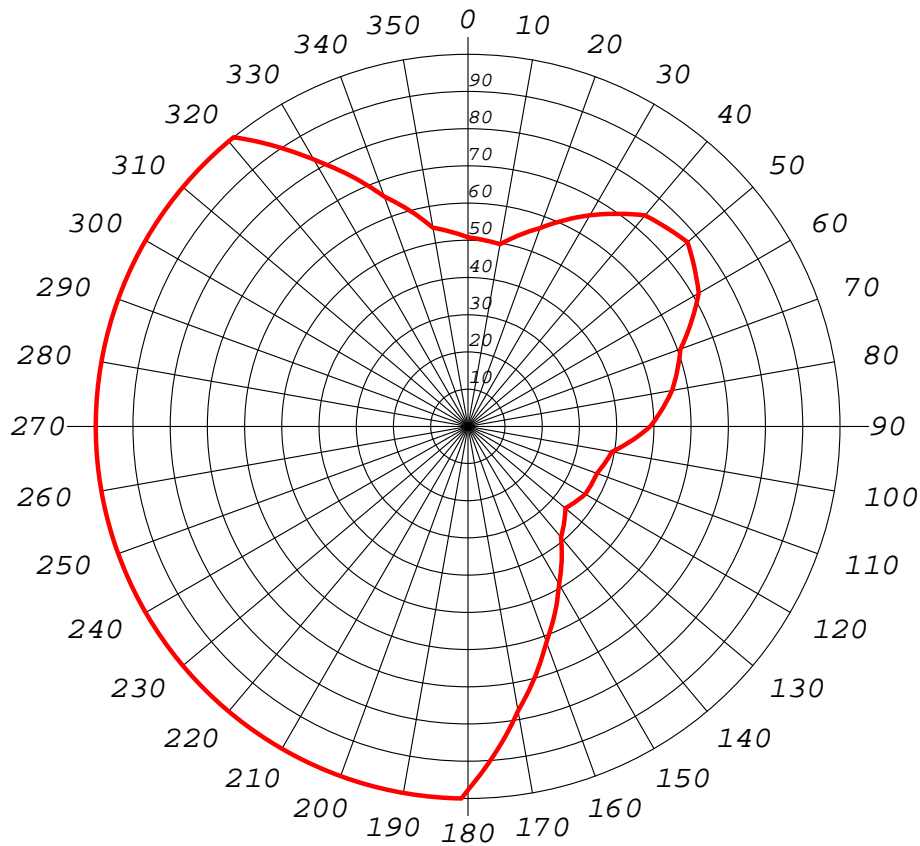


N. Lat. = 413633.3 W. Lng. = 894018.6
 HAAT and Distance to Contour,
 FCC, FM 2-10 Mi, 51 pts Method - FCC 30 SEC
 WUNT New - Distance to 60 dBu Contour

Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	200.0	130.8	2.1935	3.41	0.508	25.38
010	200.7	130.1	2.0996	3.22	0.497	25.08
020	201.2	129.6	2.7327	4.37	0.567	26.54
030	202.1	128.7	3.6467	5.62	0.655	28.22
040	202.0	128.8	4.6546	6.68	0.740	29.84
050	205.5	125.3	5.0397	7.02	0.770	30.04
060	206.8	124.0	4.3576	6.39	0.716	28.93
070	204.1	126.7	3.1421	4.97	0.608	27.13
080	203.8	127.0	2.6371	4.21	0.557	26.12
090	204.6	126.2	2.0409	3.10	0.490	24.61
100	212.6	118.2	1.3128	1.18	0.393	21.64
110	223.8	107.0	1.1574	0.63	0.369	20.01
120	226.1	104.7	1.1262	0.52	0.364	19.65
130	220.5	110.3	0.9942	-0.03	0.342	19.56
140	218.9	111.9	1.2862	1.09	0.389	20.99
150	225.0	105.8	2.0385	3.09	0.490	22.78
160	220.2	110.6	3.2309	5.09	0.617	25.81
170	209.3	121.5	5.1206	7.09	0.776	29.77
180	203.5	127.3	8.1156	9.09	0.977	33.89
190	200.5	130.3	8.5000	9.29	1.000	34.61
200	200.0	130.8	8.5000	9.29	1.000	34.66
210	199.5	131.3	8.5000	9.29	1.000	34.72
220	198.8	132.0	8.5000	9.29	1.000	34.80
230	196.2	134.6	8.5000	9.29	1.000	35.10
240	197.5	133.3	8.5000	9.29	1.000	34.96
250	197.6	133.2	8.5000	9.29	1.000	34.94
260	197.4	133.4	8.5000	9.29	1.000	34.97
270	198.1	132.7	8.5000	9.29	1.000	34.88
280	192.6	138.2	8.5000	9.29	1.000	35.53
290	193.8	137.0	8.5000	9.29	1.000	35.39
300	194.6	136.2	8.5000	9.29	1.000	35.30
310	192.8	138.0	8.5000	9.29	1.000	35.51
320	193.3	137.5	8.5000	9.29	1.000	35.45
330	193.9	136.9	5.8150	7.65	0.827	32.34
340	197.8	133.0	3.6690	5.65	0.657	28.66
350	200.0	130.8	2.4970	3.97	0.542	26.12

Ave El= 203.75 M HAAT= 127.05 M AMSL= 330.8

WUNT New - Proposed Directional Antenna



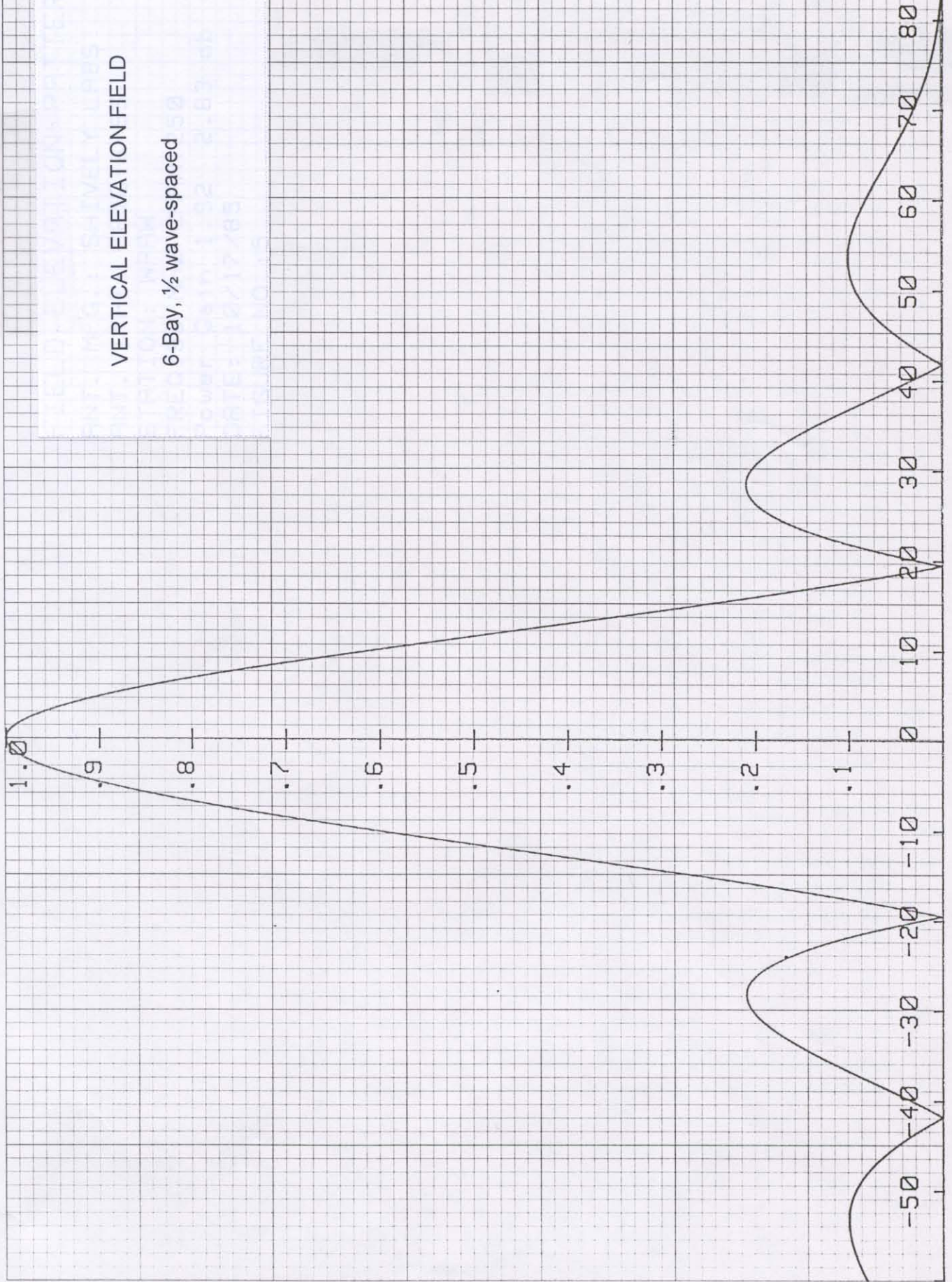
<i>Azi</i>	<i>Rel</i>	<i>dBk</i>	<i>kW</i>	<i>dB</i>	<i>Azi</i>	<i>Rel</i>	<i>dBk</i>	<i>kW</i>	<i>dB</i>
0	0.508	3.41	2.19	-5.88	180	0.977	9.09	8.12	-0.20
10	0.497	3.22	2.10	-6.07	190	1.000	9.29	8.50	0.00
20	0.567	4.37	2.73	-4.93	200	1.000	9.29	8.50	0.00
30	0.655	5.62	3.65	-3.68	210	1.000	9.29	8.50	0.00
40	0.740	6.68	4.65	-2.62	220	1.000	9.29	8.50	0.00
50	0.770	7.02	5.04	-2.27	230	1.000	9.29	8.50	0.00
60	0.716	6.39	4.36	-2.90	240	1.000	9.29	8.50	0.00
70	0.608	4.97	3.14	-4.32	250	1.000	9.29	8.50	0.00
80	0.557	4.21	2.64	-5.08	260	1.000	9.29	8.50	0.00
90	0.490	3.10	2.04	-6.20	270	1.000	9.29	8.50	0.00
100	0.393	1.18	1.31	-8.11	280	1.000	9.29	8.50	0.00
110	0.369	0.63	1.16	-8.66	290	1.000	9.29	8.50	0.00
120	0.364	0.52	1.13	-8.78	300	1.000	9.29	8.50	0.00
130	0.342	-0.03	0.99	-9.32	310	1.000	9.29	8.50	0.00
140	0.389	1.09	1.29	-8.20	320	1.000	9.29	8.50	0.00
150	0.490	3.09	2.04	-6.20	330	0.827	7.65	5.81	-1.65
160	0.617	5.09	3.23	-4.20	340	0.657	5.65	3.67	-3.65
170	0.776	7.09	5.12	-2.20	350	0.542	3.97	2.50	-5.32

Additional Points

<i>Azi</i>	<i>Rel</i>	<i>dBk</i>	<i>kW</i>	<i>dB</i>	<i>Azi</i>	<i>Rel</i>	<i>dBk</i>	<i>kW</i>	<i>dB</i>
181	1.000	9.29	8.50	0.00	321	1.000	9.29	8.50	0.00

VERTICAL ELEVATION FIELD

6-Bay, $\frac{1}{2}$ wave-spaced



Directional Antenna

The proposed custom directional antenna pattern meets the Commission's rules in that the radio frequency radiation does not change more than two dB for each ten degrees of azimuthal variation. Also, the maximum pattern attenuation in the deepest null is less than 15 dB. The pattern shown is a composite of the maximum field values in the horizontal and vertical planes.

The proposed antenna will be mounted on the leg of a tower that has been specified by the antenna manufacturer in accordance with the instructions provided by the manufacturer. The antenna will not be mounted on the top of a tower that includes a top mounted platform larger than the nominal cross-sectional area of the tower in the horizontal plane. No other antennas of any type will be mounted at the same tower level as the directional antenna nor within the horizontal or vertical distance specified by the manufacturer as being necessary to maintain proper directional operation. The antenna will be designed and tested by a major manufacturer of broadcast antennas known to the Commission. The pattern will be achieved through traditional methods including power-splitting, resonators and phasing.