

# WNCH (Circular) v. WRGB Digital CP

## WNCH

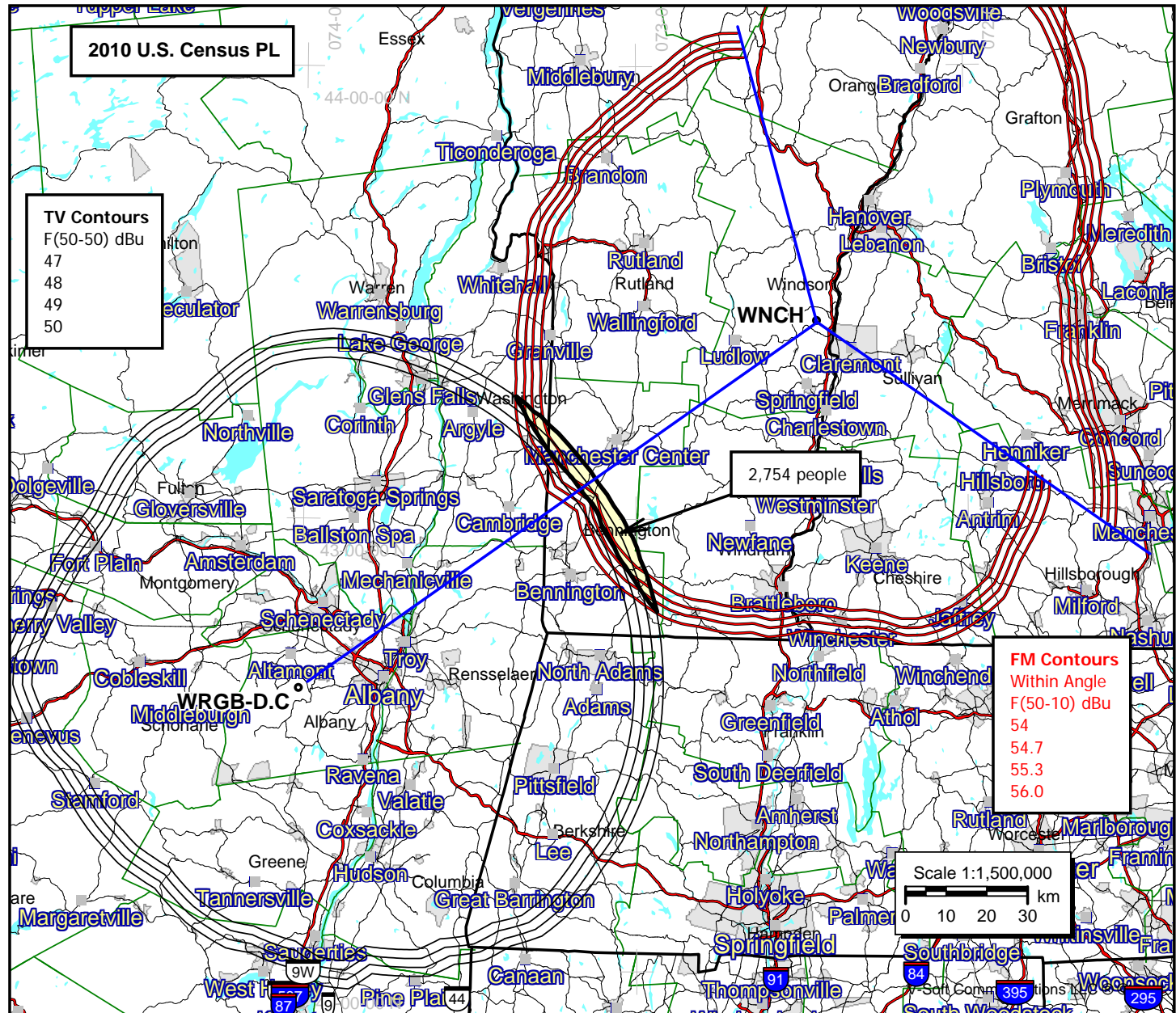
Circular Polarization  
Latitude: 43-26-15 N  
Longitude: 072-27-08 W  
Study ERP: 1.64 kW  
1.6 kW H + 1.6 kW V/40  
Channel: 201  
Frequency: 88.1 MHz  
AMSL Height: 972.5 m  
HAAT: 686.2 m  
Horiz. Pattern: Directional

## WRGB-D.C

BPCDT20080307AAK  
Latitude: 42-37-31 N  
Longitude: 074-00-38 W  
ERP: 4.64 kW  
Channel: 06  
Frequency: 85.0 MHz  
AMSL Height: 653.1 m  
HAAT: 396.0 m  
Horiz. Pattern: Omni  
Prop Model: FCC

6/23/2011

**Doug Vernier**  
401 Main Street, Suite 213  
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# WNCH (Circular) v. WRGB Digital CP - Detail

## WNCH

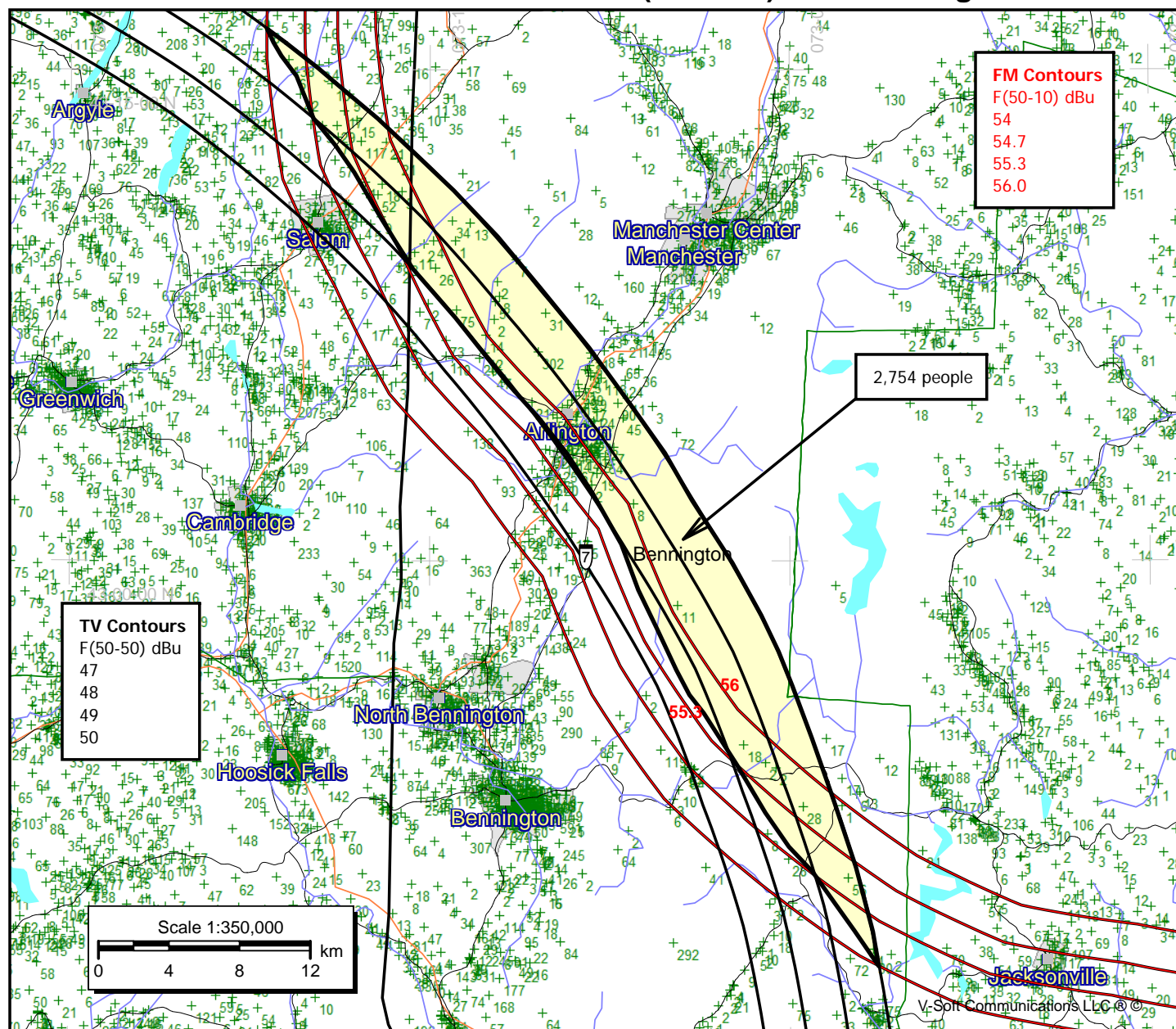
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# Channel-Six TV Protection Study

WRGB CP 06 1C Dom 4.640 kW 396 M HAAT THN Non-DA  
Schenectady NY 653.1 M COR AMSL  
Lat= 42 37 31.0, Lng= 74 00 38.0  
Freedom Broadcasting Of New  
Fac ID# 73942 BPCDT20080307AAK  
Dist.=155.54 km, Azi=235.0°, Rev Azi=54.0°

Direct line HAAT Grade B, 47 dBu= 89.18 km & Grade A= 40.14 km

Distance from reference to Grade B = 66.36 km

Cutoff Dist from Full Service or Class CA= 265

Maximum Co-located power= 1.1 kW

WRGB Signal Contour at Reference location = 24.4 dBu

CH. 201, U/D ratio = 7.0 dB, Maximum FM signal = 54.0 dBu , 6 dB credit added

## TV/FM D to U values

47.0	54.0	55.0	59.7	63.0	65.4	71.0	72.1	79.0	79.4	87.0	86.7
48.0	54.7	56.0	60.4	64.0	66.1	72.0	73.0	80.0	80.3	88.0	87.7
49.0	55.3	57.0	61.1	65.0	66.9	73.0	73.9	81.0	81.2	89.0	88.6
50.0	56.0	58.0	61.7	66.0	67.7	74.0	74.7	82.0	82.1	90.0	89.5
51.0	56.7	59.0	62.4	67.0	68.6	75.0	75.7	83.0	83.0	91.0	89.5
52.0	57.5	60.0	63.1	68.0	69.4	76.0	76.6	84.0	83.9	92.0	89.5
53.0	58.2	61.0	63.9	69.0	70.3	77.0	77.5	85.0	84.9	93.0	89.5
54.0	58.9	62.0	64.6	70.0	71.2	78.0	78.4	86.0	85.8	94.0	89.5

N. Lat. = 432615.0 W. Lng. = 722708.0  
 HAAT and Distance to Contour,  
 FCC, FM 2-10 Mi, 51 pts Method - FCC 30 SEC

Channel-Six Interference Contours

Azi.	AV EL	HAAT	ERP kW	dBk	Field	54-F1	54.7-F1	55.3-F1	56-F1
200	240.7	731.8	1.6000	2.04	1.000	80.14	77.87	75.90	73.59
205	213.8	758.7	1.6000	2.04	1.000	81.30	79.03	77.07	74.75
210	206.9	765.6	1.6000	2.04	1.000	81.58	79.32	77.36	75.05
215	218.6	753.9	1.6000	2.04	1.000	81.10	78.83	76.86	74.55
220	233.4	739.1	1.6000	2.04	1.000	80.46	78.19	76.22	73.91
225	272.1	700.4	1.6000	2.04	1.000	78.72	76.44	74.47	72.18
230	320.3	652.2	1.6000	2.04	1.000	76.41	74.17	72.25	70.02
235	317.8	654.7	1.6000	2.04	1.000	76.53	74.28	72.36	70.13
240	306.4	666.1	1.6000	2.04	1.000	77.08	74.82	72.89	70.64
245	299.5	673.0	1.6000	2.04	1.000	77.41	75.15	73.20	70.94
250	308.5	664.0	1.6000	2.04	1.000	76.98	74.72	72.79	70.54
255	328.9	643.6	1.6000	2.04	1.000	75.99	73.75	71.85	69.63
260	357.1	615.4	1.6000	2.04	1.000	74.62	72.44	70.58	68.42
265	375.2	597.3	1.6000	2.04	1.000	73.76	71.62	69.80	67.67
270	390.7	581.8	1.6000	2.04	1.000	73.02	70.93	69.15	67.06
275	403.5	569.0	1.6000	2.04	1.000	72.40	70.35	68.59	66.53
280	408.7	563.8	1.6000	2.04	1.000	72.14	70.09	68.34	66.30
285	389.4	583.1	1.6000	2.04	1.000	73.09	70.99	69.20	67.11
290	376.9	595.6	1.6000	2.04	1.000	73.68	71.54	69.72	67.60
295	403.5	569.0	1.6000	2.04	1.000	72.40	70.35	68.59	66.53
300	397.4	575.1	1.6000	2.04	1.000	72.70	70.63	68.86	66.79
305	382.9	589.6	1.6000	2.04	1.000	73.39	71.28	69.47	67.37
310	403.4	569.1	1.6000	2.04	1.000	72.41	70.35	68.59	66.54
315	410.8	561.7	1.6000	2.04	1.000	72.03	69.99	68.24	66.20
320	409.0	563.5	1.6000	2.04	1.000	72.12	70.08	68.33	66.28
325	410.0	562.5	1.5840	2.00	0.995	71.94	69.90	68.15	66.11

AMSL= 972.5

N. Lat. = 423731.0 W. Lng. = 740038.0  
 HAAT and Distance to Contour,  
 FCC OET,TV 3.2 - 16.1, 130 pts - FCC 30 SEC

WRGB-D, Freedom Broadcasting Of New , BPCDT20080307AAK - Protected Contours									
Azi.	AV EL	HAAT	ERP kW	dBk	Field	47-F5	48-F5	49-F5	50-F5
030	104.8	548.2	4.6400	6.67	1.000	88.76	86.42	84.06	81.68
035	102.6	550.4	4.6400	6.67	1.000	88.88	86.53	84.18	81.80
040	98.7	554.3	4.6400	6.67	1.000	89.08	86.73	84.38	82.00
045	99.0	554.0	4.6400	6.67	1.000	89.06	86.71	84.36	81.98
050	98.6	554.4	4.6400	6.67	1.000	89.08	86.74	84.38	82.00
055	96.3	556.7	4.6400	6.67	1.000	89.20	86.85	84.50	82.12
060	91.2	561.8	4.6400	6.67	1.000	89.44	87.10	84.75	82.37
065	84.2	568.8	4.6400	6.67	1.000	89.77	87.42	85.08	82.72
070	85.1	567.9	4.6400	6.67	1.000	89.72	87.38	85.04	82.67
075	82.7	570.3	4.6400	6.67	1.000	89.83	87.49	85.15	82.78
080	84.5	568.5	4.6400	6.67	1.000	89.75	87.41	85.07	82.70
085	85.8	567.2	4.6400	6.67	1.000	89.69	87.35	85.01	82.64
090	89.4	563.6	4.6400	6.67	1.000	89.53	87.18	84.84	82.47

AMSL= 653 M