

ENGINEERING EXHIBIT

Application for Digital Television Station Construction Permit

prepared for

WISN Hearst Television Inc.

WISN-TV Milwaukee, WI

Facility ID 65680

Ch. 34 1000 kW 303 m

WISN Hearst Television Inc. (“Hearst”) is the licensee of television station WISN-TV, digital Channel 34, Milwaukee, WI (BLCDT-20050412ADP). WISN-TV is licensed to operate with an effective radiated power (“ERP”) of 863 kW with a side mounted directional antenna at 263 meters height above average terrain (“HAAT”). *Hearst* herein seeks a Construction Permit to increase the WISN-TV facility to 1000 kW ERP and 303 meters HAAT.

The proposed facility will employ a new directional antenna system to be installed at the top-mount position on the existing WISN-TV tower structure, having FCC Antenna Structure Registration (“ASR”) number 1035766. No change to the overall structure height is proposed. The proposed Channel 34 antenna will replace the existing Channel 12 antenna which was associated with WISN-TV’s former analog operation.

The proposed antenna is an elliptically polarized Dielectric model TFU-31ETT/VP-R 4C160 (33 percent vertical polarization). The maximum horizontally polarized ERP is 1000 kW, and the maximum vertically polarized ERP is 330 kW. The vertically polarized component will not exceed the horizontally polarized component at any azimuth.

The antenna will employ 1.0 degree of electrical beam tilt, along with 0.35 degree of mechanical beamtilt at an azimuth of 170 degrees True. The antenna’s horizontal plane pattern,

expressed in terms of relative field without consideration of the mechanical beamtilt, is supplied in **Figure 1** (horizontal polarization) and **Figure 1A** (vertical polarization). **Figure 1B** depicts the horizontal plane relative field pattern (horizontal polarization) with the introduction of the mechanical beamtilt, as determined towards the radio horizon along each azimuth and scaled per the Commission's policies.

Table 1 presents a tabulation of the horizontal plane relative field pattern, to supplement the relative field data within the Form 301 Section III-D "Tech Box" (item 10e). **Table 1** includes pertinent terrain elevation data and provides the derivation of the relative field pattern towards the radio horizon. **Figures 2** and **2A** graphically present the theoretical vertical plane (elevation) pattern for the antenna system. Along each azimuth (considering the mechanical beamtilt), radiation at any angle above horizontal elevations does not exceed the maximum radiation realized at horizontal or below.

Digitized USGS 3 arc-second terrain data was employed. Pursuant to §73.625(b)(4) the calculated average terrain elevation and associated HAAT have been adjusted due to the proximity of the site to the shoreline of Lake Michigan (see **Figure 3**). The 45 and 90 degree radials have been omitted. The 135 degree radial has been truncated to include only the part of the radial extending from 3.2 kilometers to the water's edge. Considering the omitted and truncated radials, the proposed antenna's resulting HAAT is 302.7 meters.

The standard predicted coverage contours are depicted in **Figure 3**. This map includes the location of Milwaukee, WISN-TV's principal community. As demonstrated thereon, the proposed facility complies with §73.625(a)(1), as the entire principal community will be encompassed by the 48 dBμ contour.

The proposed WISN-TV facility's predicted service population provides a 103.8 percent match of the Appendix B allotment facility (MB Docket 87-268, FCC 08-72), as detailed in the following table.

Digital Television Population Summary

Population Summary (2000 Census) OET Bulletin 69 method	Appendix B	Proposed
Within Noise Limited Contour	2,684,970	2,766,639
Not affected by terrain losses	2,661,761	2,765,000
Lost to all interference	1,178	2,101
Net DTV Service	2,660,583	2,762,899
Match of Appendix B	---	103.85%

The proposed facility expands the WISN-TV service contour beyond that established by Appendix B values. A detailed interference study per OET Bulletin 69¹ shows that the proposal complies with the 0.5 percent limit of new interference caused to pertinent nearby digital television stations. The interference study output report is provided as **Table 2**. Protection requirements towards authorized Class A stations are also satisfied.

The nearest FCC monitoring station is 171 km distant at Allegan, MI. This exceeds by a large margin the threshold minimum distance specified in §73.1030(c)(3) that would suggest consideration of the monitoring station. The site is not located within the areas requiring coordination with “quiet” zones specified in §73.1030(a) and (b). There are no AM stations within 3.2 kilometers of the site, based on information contained within the Commission’s database. The site location is beyond the border areas requiring international coordination.

Human Exposure to Radiofrequency Electromagnetic Field (Environmental)

The proposed transmitting antenna’s installation will involve a replacement top-mounted antenna. The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of §1.1306 of the FCC Rules. Since no change in height is proposed, it is believed that this application may be categorically excluded from environmental processing pursuant to §1.1306 of the Commission’s rules.

¹FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 (“OET-69”). The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A standard cell size of 2 km was employed. Comparisons of various results of this computer program (run on a Sun Sparc processor) to the Commission’s implementation of OET-69 show excellent correlation.

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. Based on OET-65 equation (10), and considering 10 percent antenna relative field in downward elevations, the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is $4.2 \mu\text{W}/\text{cm}^2$, which is 1.1 percent of the general population/uncontrolled maximum permitted exposure limit. This is below the five percent threshold limit described in §1.1307(b) regarding sites with multiple emitters, categorically excluding the applicant from responsibility for taking any corrective action in the areas where the proposal's contribution is less than five percent.

The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from RF electromagnetic field exposure in excess of FCC guidelines.

Certification

The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or under his direction, and that they are true and correct to the best of his knowledge and belief.



Joseph M. Davis, P.E.
March 19, 2010

Chesapeake RF Consultants, LLC
11993 Kahns Road
Manassas, VA 20112
703-650-9600

List of Attachments

Figure 1, 1A, 1B	Antenna Azimuthal Pattern
Figure 2, 2A	Antenna Elevation Pattern
Table 1	Antenna Pattern and Elevation Data
Figure 3	Proposed Coverage Contours
Table 2	OET Bulletin 69 Interference Study
Form 301	Saved Version of Engineering Sections from FCC Form at Time of Upload

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Proposal Number	C-03904	Revision:	4
Date	21-Jan-10		
Call Letters	WISN	Channel	34
Location	Milwaukee, WI		
Customer	Hearst Argyle		
Antenna Type	TFU-31ETT/VP-R 4C160		

AZIMUTH PATTERN

Gain **1.60** **(2.04 dB)**
Calculated / Measured **Calculated**

Frequency **593.00 MHz**
Drawing # **4C160H-34**

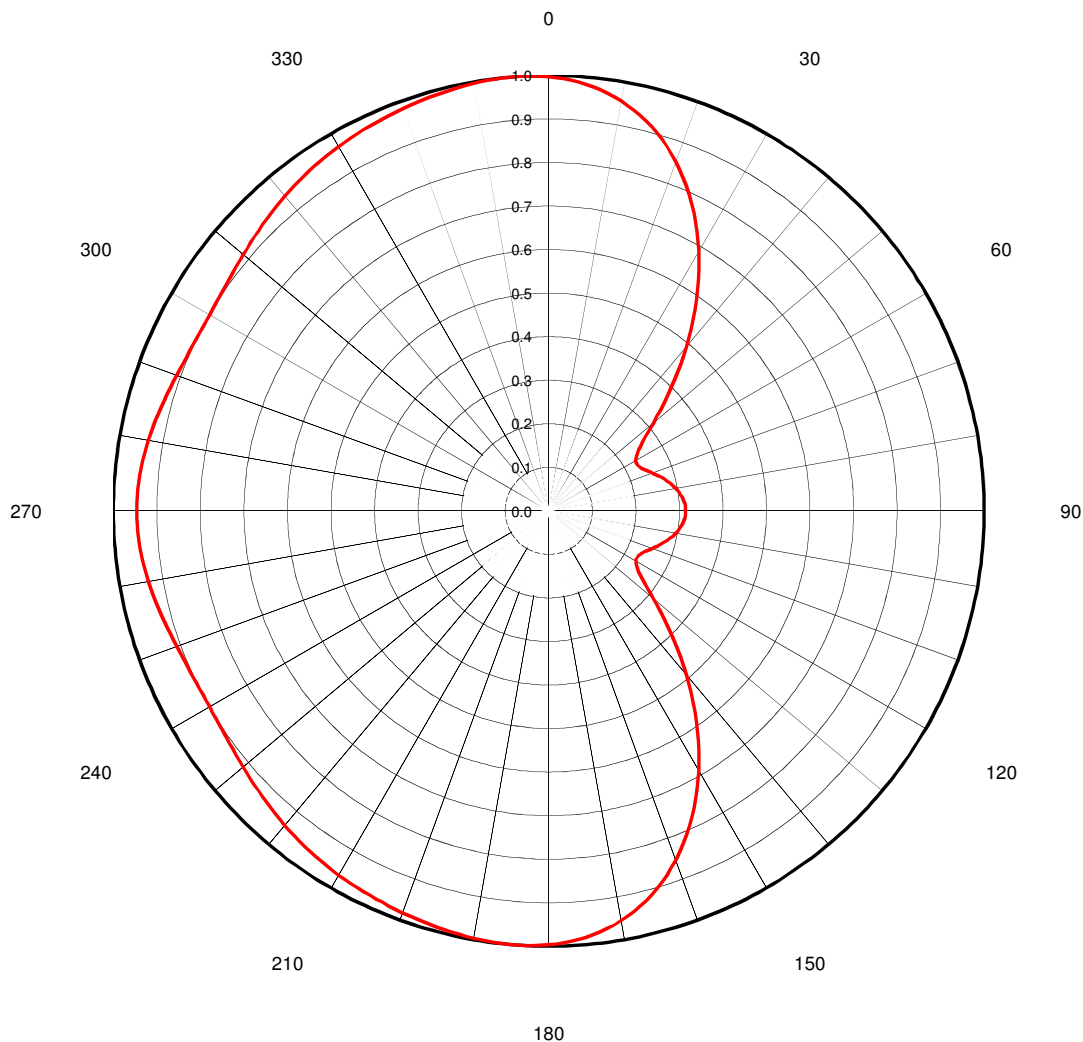


Figure 1
Antenna Azimuthal Pattern - Main Beam
Horizontal Polarization
(No Consideration of Mechanical Beamtilt)
WISN-TV Milwaukee, WI
Facility ID 65680
Ch. 34 1000 kW 303 m

prepared for
WISN Hearst Television Inc.

March, 2010

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Customer	Hearst Argyle		
Antenna Type	TFU-31ETT/VP-R 4C160		

AZIMUTH PATTERN/VERTICAL POLARIZATION

Gain **1.70** (**2.30 dB**)
Calculated / Measured **Calculated**

Frequency **593.00 MHz**
Drawing # **4C170V-34**

0

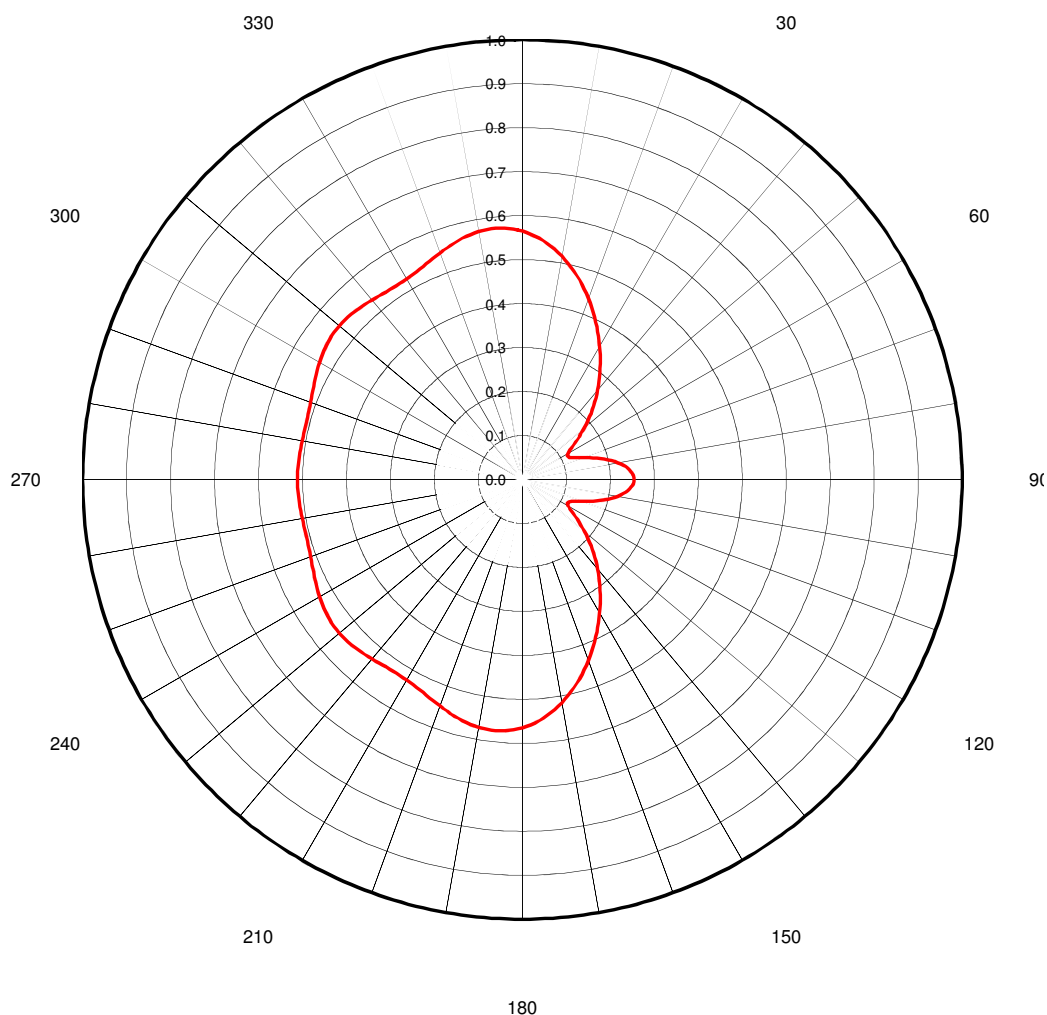


Figure 1A
Antenna Azimuthal Pattern - Main Beam
Vertical Polarization
(No Consideration of Mechanical Beamtilt)
WISN-TV Milwaukee, WI
Facility ID 65680
Ch. 34 1000 kW 303 m

prepared for
WISN Hearst Television Inc.

March, 2010

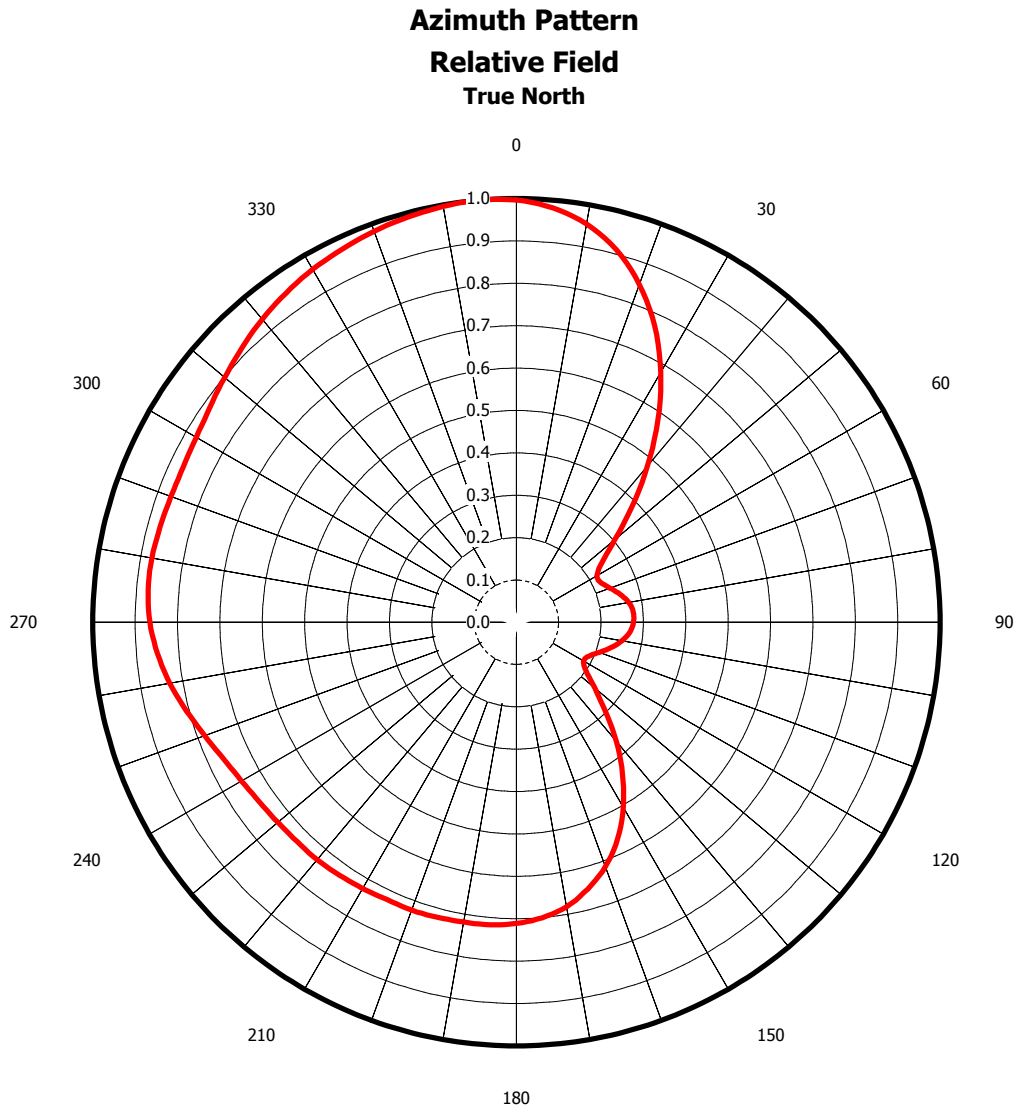


Figure 1B
Antenna Azimuthal Pattern Towards Radio Horizon
Horizontal Polarization
Considering Mechanical Beamtilt
(0.35 Degree at 170 Degrees True)
WISN-TV Milwaukee, WI
Facility ID 65680
Ch. 34 1000 kW 303 m

prepared for
WISN Hearst Television Inc.

March, 2010

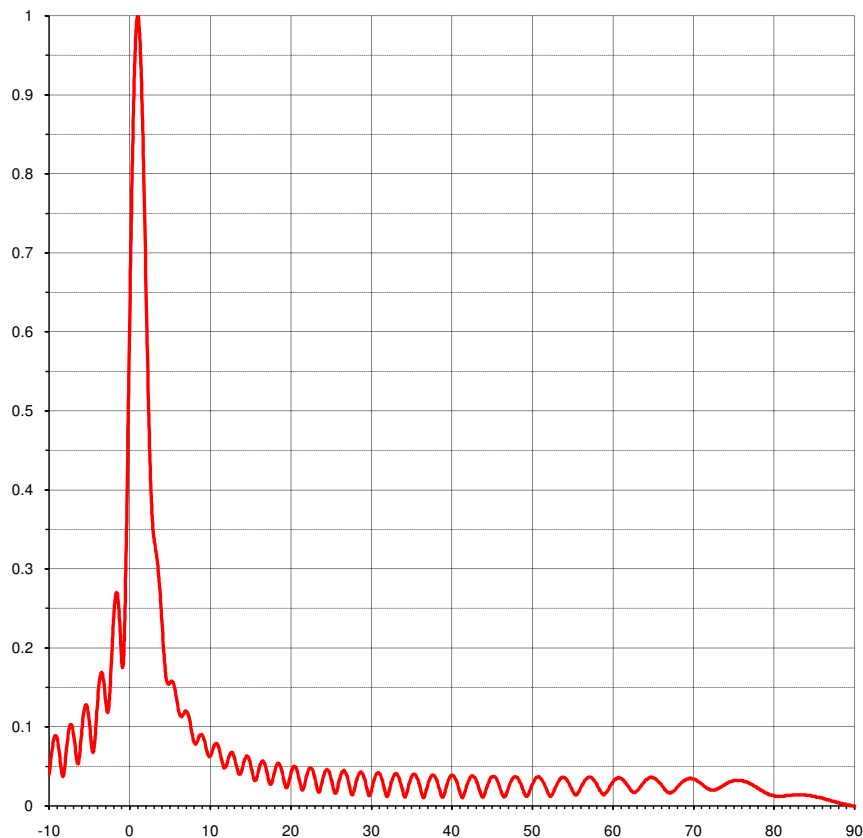




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Call Letters	WISN	Channel	34
Location	Milwaukee, WI		
Customer	Hearst Argyle		
Antenna Type	TFU-31ETT/VP-R 4C160		

ELEVATION PATTERN

RMS Gain at Main Lobe	28.00 (14.47 dB)	Beam Tilt	1.00 deg
RMS Gain at Horizontal	10.40 (10.17 dB)	Frequency	593.00 MHz
Calculated / Measured	Calculated	Drawing #	31E280100-90



Degrees Below Horizontal



Figure 2
Antenna Elevation Pattern
WISN-TV Milwaukee, WI
Facility ID 65680
Ch. 34 1000 kW 303 m

prepared for
WISN Hearst Television Inc.

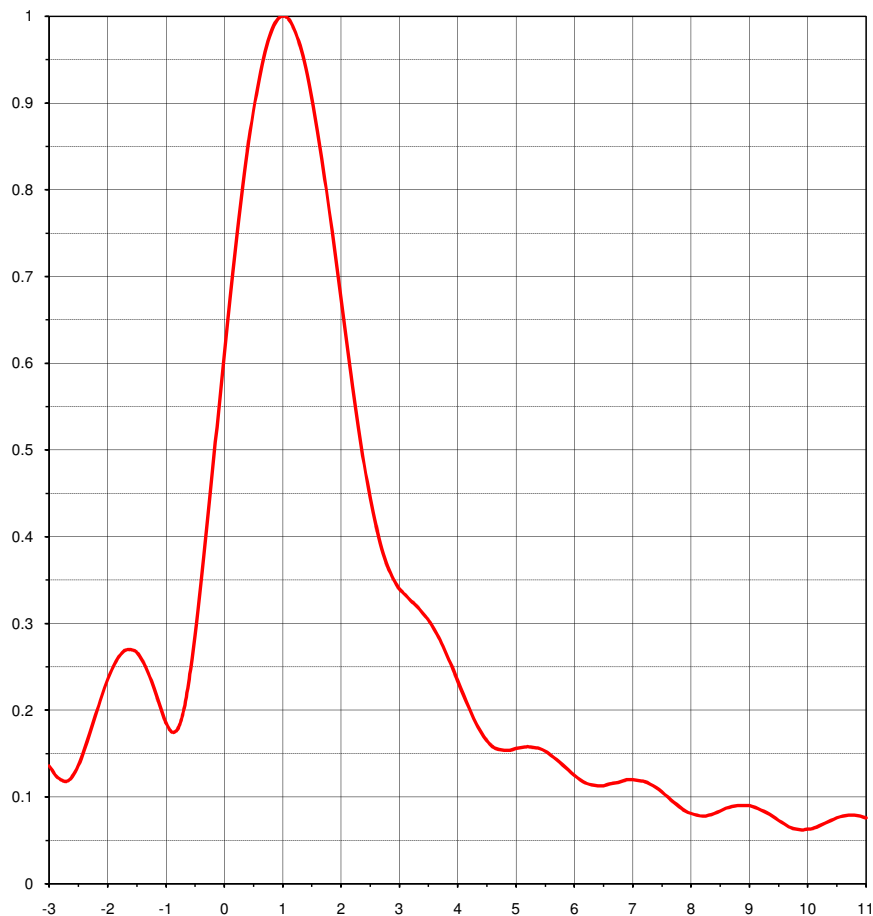
March, 2010



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Antenna Type	TFU-31ETT/VP-R 4C160		

ELEVATION PATTERN

RMS Gain at Main Lobe	28.00 (14.47 dB)	Beam Tilt	1.00 deg
RMS Gain at Horizontal	10.40 (10.17 dB)	Frequency	593.00 MHz
Calculated / Measured	Calculated	Drawing #	31E280100



Degrees Below Horizontal



Figure 2A
Antenna Elevation Pattern - Detail
WISN-TV Milwaukee, WI
Facility ID 65680
Ch. 34 1000 kW 303 m

prepared for
WISN Hearst Television Inc.

March, 2010

Table 1
Antenna Pattern and Elevation Data
 prepared for
WISN Hearst Television Inc.
 WISN-TV Milwaukee, WI



Azimuth (°T)	8-Radial HAAT Comments	Average Elevation (meters)	Effective Height (meters)	Antenna Horizontal Plane Relative Field Before Beamtilt ¹	FCC Depression Angle (°) (degrees)	Mechanical Tilt (degrees)	Effective Tilt (degrees)	Vertical Plane Relative Field at ∠	Composite Relative Field	Normalized Relative Field ²
0		205.9	312.0	0.997	0.49	-0.34	0.66	0.987	0.984	0.996
5		203.6	314.3	0.983	0.49	-0.34	0.66	0.986	0.969	0.982
10		198.0	319.9	0.956	0.50	-0.33	0.67	0.985	0.942	0.954
15		190.5	327.4	0.913	0.50	-0.32	0.68	0.984	0.899	0.910
20		190.6	327.3	0.853	0.50	-0.30	0.70	0.982	0.837	0.848
25		187.6	330.3	0.778	0.50	-0.29	0.71	0.979	0.762	0.772
30		185.8	332.1	0.689	0.50	-0.27	0.73	0.976	0.672	0.681
35		180.6	337.3	0.591	0.51	-0.25	0.75	0.972	0.575	0.582
40		177.2	340.7	0.491	0.51	-0.22	0.78	0.968	0.475	0.481
45	omit	177.0	340.9	0.396	0.51	-0.20	0.80	0.962	0.381	0.386
50		177.0	340.9	0.314	0.51	-0.18	0.83	0.955	0.300	0.304
55		177.0	340.9	0.257	0.51	-0.15	0.85	0.947	0.243	0.247
60		177.0	340.9	0.231	0.51	-0.12	0.88	0.938	0.217	0.220
65		177.0	340.9	0.234	0.51	-0.09	0.91	0.929	0.217	0.220
70		177.0	340.9	0.253	0.51	-0.06	0.94	0.918	0.232	0.235
75		177.0	340.9	0.276	0.51	-0.03	0.97	0.907	0.250	0.254
80		177.0	340.9	0.297	0.51	0.00	1.00	0.895	0.266	0.269
85		177.0	340.9	0.310	0.51	0.03	1.03	0.882	0.273	0.277
90	omit	177.0	340.9	0.314	0.51	0.06	1.06	0.869	0.273	0.276
95		177.0	340.9	0.310	0.51	0.09	1.09	0.855	0.265	0.268
100		177.4	340.5	0.297	0.51	0.12	1.12	0.841	0.250	0.253
105		178.3	339.6	0.277	0.51	0.15	1.15	0.826	0.229	0.232
110		180.0	337.9	0.253	0.51	0.18	1.18	0.811	0.205	0.208
115		181.2	336.7	0.234	0.51	0.20	1.20	0.797	0.187	0.189
120		182.3	335.6	0.231	0.51	0.22	1.22	0.783	0.181	0.183
125		183.0	334.9	0.257	0.51	0.25	1.25	0.770	0.198	0.201
130		184.7	333.2	0.314	0.51	0.27	1.27	0.758	0.238	0.241
135	truncated	202.0	315.9	0.396	0.49	0.29	1.29	0.739	0.293	0.297
140		184.0	333.9	0.491	0.51	0.30	1.30	0.738	0.362	0.367
145		183.7	334.2	0.591	0.51	0.32	1.32	0.730	0.431	0.437
150		183.4	334.5	0.689	0.51	0.33	1.33	0.723	0.498	0.504
155		184.6	333.3	0.778	0.51	0.34	1.34	0.717	0.558	0.565
160		189.4	328.5	0.853	0.50	0.34	1.34	0.710	0.606	0.614
165		197.1	320.8	0.913	0.50	0.35	1.35	0.704	0.643	0.651
170		196.5	321.4	0.956	0.50	0.35	1.35	0.704	0.673	0.682
175		199.7	318.2	0.983	0.49	0.35	1.35	0.703	0.691	0.700
180		203.3	314.6	0.997	0.49	0.34	1.34	0.704	0.702	0.711
185		203.8	314.1	1.000	0.49	0.34	1.34	0.708	0.708	0.717
190		207.4	310.5	0.997	0.49	0.33	1.33	0.712	0.709	0.719
195		206.6	311.3	0.990	0.49	0.32	1.32	0.719	0.712	0.721
200		207.9	310.0	0.982	0.49	0.30	1.30	0.727	0.714	0.723
205		216.6	301.3	0.974	0.48	0.29	1.29	0.733	0.713	0.723
210		220.8	297.1	0.966	0.48	0.27	1.27	0.741	0.716	0.726
215		221.4	296.5	0.955	0.48	0.25	1.25	0.753	0.719	0.729
220		221.1	296.8	0.943	0.48	0.22	1.22	0.766	0.723	0.732
225		225.3	292.6	0.929	0.47	0.20	1.20	0.778	0.723	0.732
230		225.8	292.1	0.916	0.47	0.18	1.18	0.792	0.726	0.735
235		224.1	293.8	0.905	0.47	0.15	1.15	0.808	0.731	0.740
240		225.7	292.2	0.900	0.47	0.12	1.12	0.822	0.740	0.749
245		227.1	290.8	0.901	0.47	0.09	1.09	0.836	0.753	0.763
250		227.7	290.2	0.909	0.47	0.06	1.06	0.850	0.773	0.783

¹ Depicted in **Figure 1**

² Depicted in **Figure 1B** and reported in FCC Form 301 Tech Box

Table 1
Antenna Pattern and Elevation Data
 (page 2 of 2)



Azimuth (°T)	8-Radial HAAT Comments	Average Elevation (meters)	Effective Height (meters)	Antenna Horizontal Plane Relative Field Before Beamtilt ¹	FCC Depression Angle (∠) (degrees)	Mechanical Tilt (degrees)	Effective Tilt (degrees)	Vertical Plane Relative Field at ∠	Composite Relative Field	Normalized Relative Field ²
255		227.9	290.0	0.921	0.47	0.03	1.03	0.864	0.796	0.806
260		227.9	290.0	0.934	0.47	0.00	1.00	0.878	0.820	0.831
265		230.1	287.8	0.943	0.47	-0.03	0.97	0.890	0.839	0.850
270		229.1	288.8	0.946	0.47	-0.06	0.94	0.903	0.854	0.865
275		231.8	286.1	0.943	0.47	-0.09	0.91	0.913	0.861	0.872
280		233.9	284.0	0.934	0.47	-0.12	0.88	0.923	0.862	0.873
285		233.6	284.3	0.921	0.47	-0.15	0.85	0.933	0.859	0.870
290		233.2	284.7	0.909	0.47	-0.18	0.83	0.942	0.856	0.867
295		230.5	287.4	0.901	0.47	-0.20	0.80	0.951	0.857	0.868
300		230.9	287.0	0.900	0.47	-0.22	0.78	0.957	0.862	0.873
305		230.1	287.8	0.905	0.47	-0.25	0.75	0.963	0.872	0.883
306		229.0	288.9	0.907	0.47	-0.25	0.75	0.965	0.875	0.886
310		228.0	289.9	0.916	0.47	-0.27	0.73	0.969	0.887	0.899
315		225.6	292.3	0.929	0.47	-0.29	0.71	0.973	0.904	0.916
320		222.5	295.4	0.943	0.48	-0.30	0.70	0.977	0.921	0.933
325		219.6	298.3	0.955	0.48	-0.32	0.68	0.980	0.936	0.948
330		216.6	301.3	0.966	0.48	-0.33	0.67	0.983	0.949	0.962
335		210.8	307.1	0.974	0.49	-0.34	0.66	0.985	0.959	0.972
340		203.6	314.3	0.982	0.49	-0.34	0.66	0.987	0.969	0.982
345		206.5	311.4	0.990	0.49	-0.35	0.65	0.987	0.977	0.990
350		213.2	304.7	0.997	0.48	-0.35	0.65	0.987	0.984	0.996
355		206.4	311.5	1.000	0.49	-0.35	0.65	0.987	0.987	1.000

Radiation Center Height AMSL	517.9	m	
Cardinal Radial Average Terrain AMSL	215.2	m	Omit 45° and 90°, truncate 135° radials
Radiation Center Height AAT	302.7	m	
Effective Radiated Power (AVG)	1000	kW	30.00 dBk

Beamtilt details

1.0 degree electrical tilt and 0.35 degree mechanical tilt at 170° True

$$\text{Effective Tilt} = (\text{Electrical Tilt})^\circ + [(\text{Maximum Mechanical Tilt})\text{Cos}\phi]^\circ = (1.0)^\circ + (0.35*\text{Cos}(170\text{-Azimuth}))^\circ$$

Where $\phi = 0^\circ$ at azimuth towards mechanical tilt

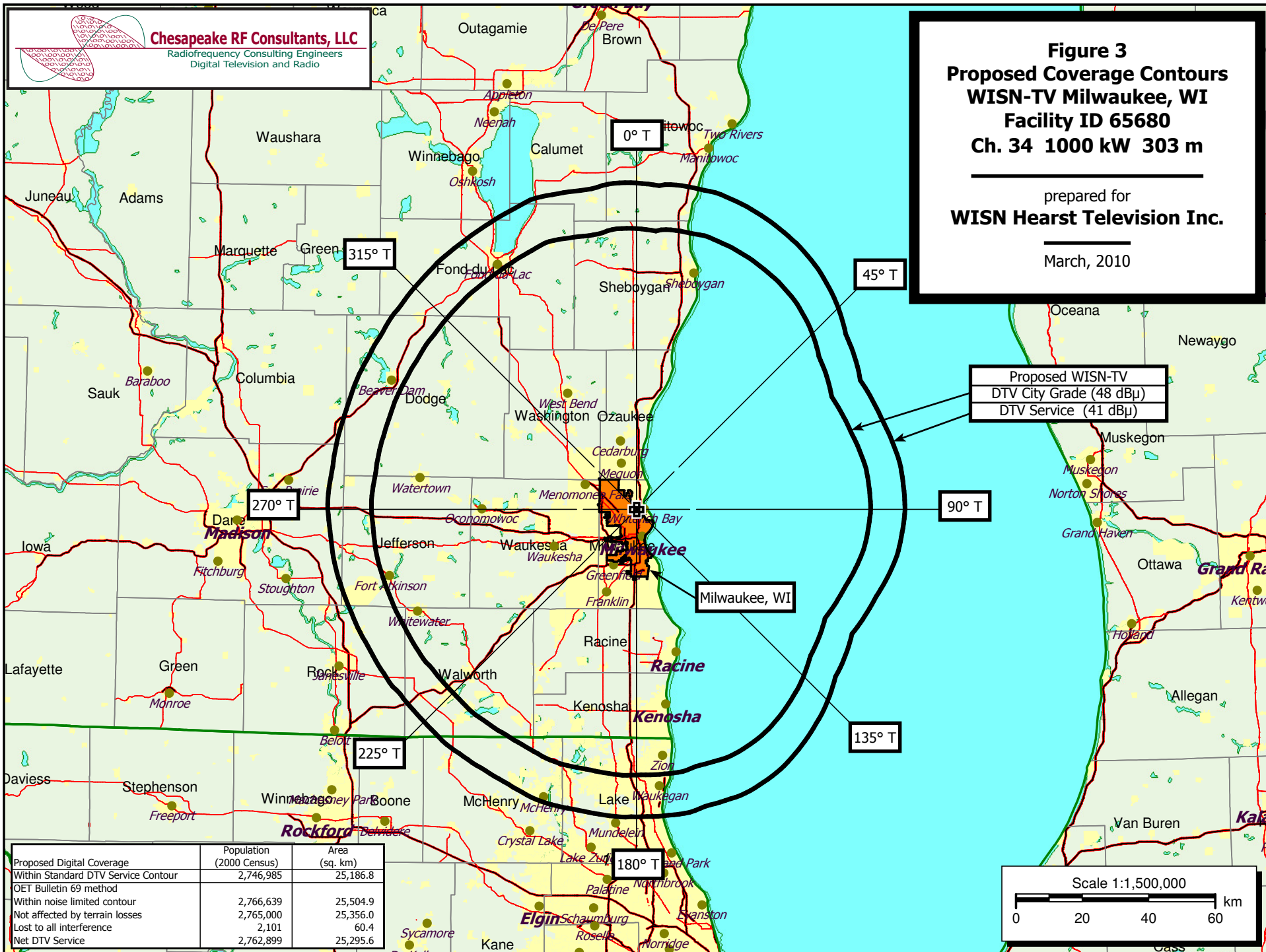


Table 2 WISN-TV OET Bulletin 69 Interference Study

(worst-case scenarios shown page 1 of 20)

TW Census data selected 2000
Post Transition Data Base Selected /space/software/cdbs/pt_tvdb.sff

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 03-17-2010 Time: 17:03:16

Record Selected for Analysis

WISN-TV USERRECORD-01 MILWAUKEE WI US
Channel 34 ERP 1000. kW HAAT 315. m RCMSL 00518 m
Latitude 043-06-42 Longitude 0087-55-42
Status APP Zone 2 Border
Dir Antenna Make usr Model WISN_4C160rev4 Beam tilt N Ref Azimuth 0.
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	41.0 dBu F(50,90) (km)
0.0	992.016	311.8	98.1
45.0	154.056	341.0	85.6
90.0	76.176	341.0	80.7
135.0	92.416	333.5	81.2
180.0	505.521	314.8	92.4
225.0	538.022	292.9	90.1
270.0	748.225	288.9	92.6
315.0	839.056	292.6	94.3

Evaluation toward Class A Stations

Contour overlap to Class A station
WEDE-CA 34 ARLINGTON HEIGHTS IL BLTTA 20050308AAS

Station inside contour of Class A station
WMLW-CA 41 MILWAUKEE WI BLTTA 20021002AAA

Class A Evaluation Complete

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Table 2 WISN-TV OET Bulletin 69 Interference Study

(worst-case scenarios shown page 2 of 20)

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Call	Proposed Station City/State	ARN
34	WISN-TV	MILWAUKEE WI	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	WITI	MILWAUKEE WI	3.4	CP MOD	BMPCDT	-20081204ADM
33	WITI	MILWAUKEE WI	3.5	PLN	DTVPLN	-DTVPI231
34	KQIN	DAVENPORT IA	284.1	CP	BPEDT	-20080620AIO
34	KQIN	DAVENPORT IA	284.1	PLN	DTVPLN	-DTVPI244
34	KQIN	DAVENPORT IA	284.1	LIC	BLEDT	-20080620AFY
34	WEDE-CA	ARLINGTON HEIGHTS IL	139.1	LIC	BLTTA	-20050308AAS
34	WEDE-CA	ARLINGTON HEIGHTS IL	139.1	CP	BDFCDTA	-20081014AAM
34	WHTV	JACKSON MI	288.2	PLN	DTVPLN	-DTVPI250
34	WHTV	JACKSON MI	293.0	APP	BPEDT	-20080620AGY
34	WHTV	JACKSON MI	293.0	LIC	BLCDT	-20071116ABR
35	WNIT	SOUTH BEND IN	219.4	CP	BPEDT	-20081103ACU
35	WNIT	SOUTH BEND IN	219.4	PLN	DTVPLN	-DTVPI285
35	WNIT	SOUTH BEND IN	219.4	LIC	BLEDT	-20040106ABJ
35	WMVT	MILWAUKEE WI	2.6	LIC	BLEDT	-20041207AAK
35	WMVT	MILWAUKEE WI	2.6	PLN	DTVPLN	-DTVPI306
35	WMVT	MILWAUKEE WI	2.6	CP	BPEDT	-20090310ADX
41	WOCH-CA	CHICAGO IL	137.1	APP	BPTTA	-20050127ALO
41	WOCH-CA	CHICAGO IL	137.1	LIC	BLTTA	-20060103ACT
41	WMLW-CA	MILWAUKEE WI	0.2	LIC	BLTTA	-20021002AAA

Analysis of Interference to Affected Station 1

Analysis of current record	Channel	Call	City/State	Application	Ref. No.
	33	WITI	MILWAUKEE WI	BMPCDT	-20081204ADM

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	WBWV	JANESVILLE WI	129.2	LIC	BLCDT	-20040930BHL
32	WBWV	JANESVILLE WI	129.2	PLN	DTVPLN	-DTVPI196
34	WISN-TV	MILWAUKEE WI	3.4	PLN	DTVPLN	-DTVPI271
34	WISN-TV	MILWAUKEE WI	3.4	APP	USERRECORD-01	

Total scenarios = 2

Result key: 1
Scenario 1 Affected station 1
Before Analysis

Results for: 33A WI MILWAUKEE BMPCDT 20081204ADM CP

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 3 of 20)

HAAT 304.0 m, ATV ERP 1000.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	2935203	27315.0	
not affected by terrain losses	2927786	27141.9	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	16019	342.3	
lost to ATV IX only	16019	342.3	
lost to all IX	16019	342.3	
Potential Interfering Stations Included in above Scenario 1			
32A WI JANESVILLE	BLCDT	20040930BHL	LIC
After Analysis			
Results for: 33A WI MILWAUKEE BMPCDT 20081204ADM CP			
HAAT 304.0 m, ATV ERP 1000.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	2935203	27315.0	
not affected by terrain losses	2927786	27141.9	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	16201	346.3	
lost to ATV IX only	16201	346.3	
lost to all IX	16201	346.3	
Potential Interfering Stations Included in above Scenario 1			
32A WI JANESVILLE	BLCDT	20040930BHL	LIC
34A WI MILWAUKEE	USERRECORD01		APP
Percent new IX = 0.0063%			
Worst case new IX 0.0063% Scenario 1			
#####			
Analysis of Interference to Affected Station 2			
Analysis of current record			
Channel	Call	City/State	Application Ref. No.
33	WITI	MILWAUKEE WI	DTVPLN -DTVPI231
Stations Potentially Affecting This Station			
Chan	Call	City/State	Dist(km) Status Application Ref. No.
32	WBWU	JANESVILLE WI	129.2 LIC BLCDT -20040930BHL
32	WBWU	JANESVILLE WI	129.2 PLN DTVPLN -DTVPI196
34	WISN-TV	MILWAUKEE WI	3.5 PLN DTVPLN -DTVPI271
34	WISN-TV	MILWAUKEE WI	3.5 APP USERRECORD-01
Total scenarios = 2			
Result key: 3			
Scenario 1 Affected station 2			
Before Analysis			
Results for: 33A WI MILWAUKEE DTVPLN DTVPI231 PLN			
HAAT 305.0 m, ATV ERP 1000.0 kW			
	POPULATION	AREA (sq km)	

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 4 of 20)

within Noise Limited Contour	2938235	30529.1
not affected by terrain losses	2932517	30364.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	16179	354.4
lost to ATV IX only	16179	354.4
lost to all IX	16179	354.4
Potential Interfering Stations Included in above Scenario 1		
32A WI JANESVILLE	BLCDT	20040930BHL LIC
After Analysis		
Results for: 33A WI MILWAUKEE DTVPLN DTVPI231 PLN		
HAAT 305.0 m, ATV ERP 1000.0 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	2938235	30529.1
not affected by terrain losses	2932517	30364.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	16412	362.4
lost to ATV IX only	16412	362.4
lost to all IX	16412	362.4
Potential Interfering Stations Included in above Scenario 1		
32A WI JANESVILLE	BLCDT	20040930BHL LIC
34A WI MILWAUKEE	USERRECORD01	APP
Percent new IX = 0.0080%		
Worst case new IX 0.0080% Scenario 1		
#####		
Analysis of Interference to Affected Station 3		
Analysis of current record		
Channel	Call	City/State Application Ref. No.
34	KQIN	DAVENPORT IA BPEDT -20080620AIO
Stations Potentially Affecting This Station		
Chan	Call	City/State Dist(km) Status Application Ref. No.
33	KTVO	KIRKSVILLE MO 193.8 LIC BLCDT -20030604AAC
33	KTVO	KIRKSVILLE MO 193.8 PLN DTVPLN -DTVPI213
34	KEFB	AMES IA 288.8 CP BPEDT -20080808ABH
34	KEFB	AMES IA 288.8 PLN DTVPLN -DTVPI243
34	WQEC	QUINCY IL 167.7 LIC BLEDT -20040715ADL
34	WQEC	QUINCY IL 167.7 PLN DTVPLN -DTVPI247
34	WISN-TV	MILWAUKEE WI 284.1 PLN DTVPLN -DTVPI271
35	KRIN	WATERLOO IA 165.7 LIC BLEDT -20050218ABQ
35	KRIN	WATERLOO IA 165.7 PLN DTVPLN -DTVPI284
34	WISN-TV	MILWAUKEE WI 284.1 APP USERRECORD-01
Total scenarios = 2		
Result key: 5		
Scenario 1 Affected station 3		
Before Analysis		

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 5 of 20)

Results for: 34A IA DAVENPORT BPEDT 20080620AIO CP
HAAT 233.0 m, ATV ERP 368.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	635408	17520.2
not affected by terrain losses	635013	17492.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	718	60.0
lost to ATV IX only	718	60.0
lost to all IX	718	60.0

Potential Interfering Stations Included in above Scenario 1

34A IL QUINCY	BLEDT	20040715ADL	LIC
34A WI MILWAUKEE	DTVPLN	DTVP1271	PLN

After Analysis

Results for: 34A IA DAVENPORT BPEDT 20080620AIO CP
HAAT 233.0 m, ATV ERP 368.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	635408	17520.2
not affected by terrain losses	635013	17492.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	718	60.0
lost to ATV IX only	718	60.0
lost to all IX	718	60.0

Potential Interfering Stations Included in above Scenario 1

34A IL QUINCY	BLEDT	20040715ADL	LIC
34A WI MILWAUKEE	USERRECORD01		APP

Percent new IX = 0.0000%

Worst case new IX 0.0000% Scenario 1

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application Ref. No.
34	KQIN	DAVENPORT IA	DTVPLN -DTVP1244

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
33	KTVO	KIRKSVILLE MO	193.8	LIC	BLCDT -20030604AAC
33	KTVO	KIRKSVILLE MO	193.8	PLN	DTVPLN -DTVP1213
34	KEFB	AMES IA	288.8	CP	BPEDT -20080808ABH
34	KEFB	AMES IA	288.8	PLN	DTVPLN -DTVP1243
34	WQEC	QUINCY IL	167.7	LIC	BLEDT -20040715ADL
34	WQEC	QUINCY IL	167.7	PLN	DTVPLN -DTVP1247
34	WISN-TV	MILWAUKEE WI	284.1	PLN	DTVPLN -DTVP1271
35	KRIN	WATERLOO IA	165.7	LIC	BLEDT -20050218ABQ
35	KRIN	WATERLOO IA	165.7	PLN	DTVPLN -DTVP1284
34	WISN-TV	MILWAUKEE WI	284.1	APP	USERRECORD-01

Proposal causes no interference

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 6 of 20)

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application Ref. No.
34	KQIN	DAVENPORT IA	BLEDT -20080620AFY

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
33	KTVO	KIRKSVILLE MO	193.8	LIC	BLCDT -20030604AAC
33	KTVO	KIRKSVILLE MO	193.8	PLN	DTVPLN -DTVP1213
34	KEFB	AMES IA	288.8	CP	BPEDT -20080808ABH
34	KEFB	AMES IA	288.8	PLN	DTVPLN -DTVP1243
34	WQEC	QUINCY IL	167.7	LIC	BLEDT -20040715ADL
34	WQEC	QUINCY IL	167.7	PLN	DTVPLN -DTVP1247
34	WISN-TV	MILWAUKEE WI	284.1	PLN	DTVPLN -DTVP1271
35	KRIN	WATERLOO IA	165.7	LIC	BLEDT -20050218ABQ
35	KRIN	WATERLOO IA	165.7	PLN	DTVPLN -DTVP1284
34	WISN-TV	MILWAUKEE WI	284.1	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application Ref. No.
34	WEDE-CA	ARLINGTON HEIGHTS IL	BLTTA -20050308AAS

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
27	WCIU-TV	CHICAGO IL	0.0	LIC	BLCDT -20060525ADR
27	WCIU-TV	CHICAGO IL	0.0	PLN	DTVPLN -DTVP0983
27	WCIU-TV	CHICAGO IL	0.0	CP MOD	BMPCDT -20090105ACO
31	WFLD	CHICAGO IL	0.0	PLN	DTVPLN -DTVP1130
31	WFLD	CHICAGO IL	0.0	LIC	BLCDT -20090223ABV
33	WCHU-LP	CHICAGO IL	2.5	APP	BSTA -20091029ACT
34	KQIN	DAVENPORT IA	236.6	CP	BPEDT -20080620AIO
34	KQIN	DAVENPORT IA	236.6	PLN	DTVPLN -DTVP1244
34	KQIN	DAVENPORT IA	236.6	LIC	BLEDT -20080620AFY
34	W34DL	CHAMPAIGN IL	196.0	LIC	BLTT -20050921AHY
34	WQEC	QUINCY IL	373.8	LIC	BLEDT -20040715ADL
34	WQEC	QUINCY IL	373.8	PLN	DTVPLN -DTVP1247
34	WMYS-LP	SOUTH BEND IN	123.8	CP	BDISTTL -20080728AAX
34	WHTV	JACKSON MI	263.4	PLN	DTVPLN -DTVP1250
34	WHTV	JACKSON MI	282.7	APP	BPEDT -20080620AGY
34	WHTV	JACKSON MI	282.7	LIC	BLCDT -20071116ABR
34	WISN-TV	MILWAUKEE WI	139.1	PLN	DTVPLN -DTVP1271
35	WNIT	SOUTH BEND IN	123.6	CP	BPEDT -20081103ACU
35	WNIT	SOUTH BEND IN	123.6	PLN	DTVPLN -DTVP1285
35	WNIT	SOUTH BEND IN	123.6	LIC	BLEDT -20040106ABJ
36	WJYS	HAMMOND IN	0.0	CP	BPEDT -20080619AIZ
36	WJYS	HAMMOND IN	0.0	PLN	DTVPLN -DTVP1321
36	WJYS	HAMMOND IN	0.0	LIC	BLCDT -20020801ABI
38	WGBO-DT	JOLIET IL	2.5	CP MOD	BMPCDT -20080618AEI

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 7 of 20)

38	WGBO-TV	JOLIET IL	2.5	PLN	DTVPLN	-DTVPI358
41	WIFR-DR	FREEPORT IL	134.8	APP	BPRM	-20080620AOH
41	WIFR	FREEPORT IL	134.8	PLN	DTVPLN	-DTVPI465
41	WIFR	FREEPORT IL	134.8	CP MOD	BMPCDT	-20081110ADQ
41	WIFR	FREEPORT IL	134.8	CP MOD	BMPCDT	-20050103AFQ
41	WIFR	FREEPORT IL	134.8	LIC	BLCDT	-20041012AIQ
42	WQRF-TV	ROCKFORD IL	134.1	PLN	DTVPLN	-DTVPI495
42	WQRF-TV	ROCKFORD IL	134.5	CP MOD	BMPCDT	-20070207ABW
42	WNDU-TV	SOUTH BEND IN	121.9	LIC	BLCDT	-20060717AAG
42	WNDU-TV	SOUTH BEND IN	121.9	PLN	DTVPLN	-DTVPI498
42	WNDU-TV	SOUTH BEND IN	121.9	CP	BPCDT	-20080619AAB
48	WHME-TV	SOUTH BEND IN	126.4	APP	BPCDT	-20080619ABC
48	WBME-TV	RACINE WI	136.1	PLN	DTVPLN	-DTVPI724
48	WBME-TV	RACINE WI	139.1	CP MOD	BMPCDT	-20090709ABY
48	WBME-TV	RACINE WI	109.8	LIC	BMLCDT	-20070823AED
49	WOCH-CA	CHICAGO IL	2.5	CP MOD	BMPDTA	-20090630AHX
49	WAAA-LP	WESTVILLE IN	64.5	LIC	BLTTL	-20070621AAG
34	WISN-TV	MILWAUKEE WI	139.1	APP	USERRECORD-01	

Total scenarios = 6

Result key: 9
Scenario 3 Affected station 6
Before Analysis

Results for: 34N IL ARLINGTON HEIGHTS BLTTA 20050308AAS LIC

	POPULATION	AREA (sq km)
within Noise Limited Contour	3326291	1621.2
not affected by terrain losses	3326291	1621.2
lost to NTSC IX	308117	60.3
lost to additional IX by ATV	15097	8.0
lost to all IX	323214	68.4

Potential Interfering Stations Included in above Scenario 3

33N IL CHICAGO	BSTA	20091029ACT	APP
34N IL CHAMPAIGN	BLTT	20050921AHY	LIC
34N IN SOUTH BEND	BDISTTL	20080728AAX	CP
31A IL CHICAGO	DTVPLN	DTVPI130	PLN
38A IL JOLIET	BMPCDT	20080618AEI	CP
34A WI MILWAUKEE	DTVPLN	DTVPI271	PLN

After Analysis

Results for: 34N IL ARLINGTON HEIGHTS BLTTA 20050308AAS LIC

	POPULATION	AREA (sq km)
within Noise Limited Contour	3326291	1621.2
not affected by terrain losses	3326291	1621.2
lost to NTSC IX	308117	60.3
lost to additional IX by ATV	12193	4.0
lost to all IX	320310	64.4

Potential Interfering Stations Included in above Scenario 3

33N IL CHICAGO	BSTA	20091029ACT	APP
34N IL CHAMPAIGN	BLTT	20050921AHY	LIC
34N IN SOUTH BEND	BDISTTL	20080728AAX	CP
31A IL CHICAGO	DTVPLN	DTVPI130	PLN
38A IL JOLIET	BMPCDT	20080618AEI	CP
34A WI MILWAUKEE	USERRECORD01		APP

Percent new IX = -0.0873%

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 8 of 20)

Worst case new IX -0.0873% Scenario 3

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Analysis of Interference to Affected Station 7

Analysis of current record

Channel	Call	City/State	Application Ref. No.
34	WEDE-CA	ARLINGTON HEIGHTS IL	BDFCDTA -20081014AAM

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
33	WITI	MILWAUKEE WI	136.4	CP MOD	BMPCDT -20081204ADM
33	WITI	MILWAUKEE WI	136.3	PLN	DTVPLN -DTVPI231
34	KQIN	DAVENPORT IA	236.6	CP	BPEDT -20080620AIO
34	KQIN	DAVENPORT IA	236.6	PLN	DTVPLN -DTVPI244
34	KQIN	DAVENPORT IA	236.6	LIC	BLEDT -20080620AFY
34	WQEC	QUINCY IL	373.8	LIC	BLEDT -20040715ADL
34	WQEC	QUINCY IL	373.8	PLN	DTVPLN -DTVPI247
34	WHTV	JACKSON MI	263.4	PLN	DTVPLN -DTVPI250
34	WHTV	JACKSON MI	282.7	APP	BPCDT -20080620AGY
34	WHTV	JACKSON MI	282.7	LIC	BLCDT -20071116ABR
34	WCET	CINCINNATI OH	403.7	PLN	DTVPLN -DTVPI259
34	WCET	CINCINNATI OH	403.7	LIC	BLEDT -20061031AAR
34	WISN-TV	MILWAUKEE WI	139.1	PLN	DTVPLN -DTVPI271
35	WNIT	SOUTH BEND IN	123.6	CP	BPEDT -20081103ACU
35	WNIT	SOUTH BEND IN	123.6	PLN	DTVPLN -DTVPI285
35	WNIT	SOUTH BEND IN	123.6	LIC	BLEDT -20040106ABJ
35	WMVT	MILWAUKEE WI	137.1	LIC	BLEDT -20041207AAK
35	WMVT	MILWAUKEE WI	137.1	PLN	DTVPLN -DTVPI306
35	WMVT	MILWAUKEE WI	137.1	CP	BPEDT -20090310ADX
34	WISN-TV	MILWAUKEE WI	139.1	APP	USERRECORD-01

Total scenarios = 1

Result key: 13
Scenario 1 Affected station 7
Before Analysis

Results for: 34A IL ARLINGTON HEIGHTS BDFCDTA 20081014AAM CP

HAAT	1.0 m, ATV ERP	4.3 kW
	POPULATION	AREA (sq km)
within Noise Limited Contour	5481528	3974.5
not affected by terrain losses	5481528	3974.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	300191	108.6
lost to ATV IX only	300191	108.6
lost to all IX	300191	108.6

Potential Interfering Stations Included in above Scenario 1

34A WI MILWAUKEE	DTVPLN	DTVPI271	PLN
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After Analysis

Results for: 34A IL ARLINGTON HEIGHTS BDFCDTA 20081014AAM CP

HAAT	1.0 m, ATV ERP	4.3 kW
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Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 9 of 20)

	POPULATION	AREA (sq km)
within Noise Limited Contour	5481528	3974.5
not affected by terrain losses	5481528	3974.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	314743	84.5
lost to ATV IX only	314743	84.5
lost to all IX	314743	84.5

Potential Interfering Stations Included in above Scenario 1

34A WI MILWAUKEE USERRECORD01 APP

Percent new IX = 0.2809%

Worst case new IX 0.2809% Scenario 1

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Analysis of Interference to Affected Station 8

Analysis of current record			
Channel	Call	City/State	Application Ref. No.
34	WHTV	JACKSON MI	DTVPLN -DTVPI250

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
34	WCET	CINCINNATI OH	366.4	PLN	DTVPLN -DTVPI259
34	WCET	CINCINNATI OH	366.4	LIC	BLEDT -20061031AAR
34	WQHS-DT	CLEVELAND OH	260.3	LIC	BLCDDT -20031030AGJ
34	WQHS-TV	CLEVELAND OH	260.3	PLN	DTVPLN -DTVPI260
34	WQHS-DT	CLEVELAND OH	260.3	APP	BPCDDT -20090629ACU
34	WISN-TV	MILWAUKEE WI	288.2	PLN	DTVPLN -DTVPI271
35	WNIT	SOUTH BEND IN	164.2	CP	BPEDT -20081103ACU
35	WNIT	SOUTH BEND IN	164.2	PLN	DTVPLN -DTVPI285
35	WNIT	SOUTH BEND IN	164.2	LIC	BLEDT -20040106ABJ
34	WISN-TV	MILWAUKEE WI	288.2	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 9

Analysis of current record			
Channel	Call	City/State	Application Ref. No.
34	WHTV	JACKSON MI	BPCDDT -20080620AGY

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
34	WCET	CINCINNATI OH	396.4	PLN	DTVPLN -DTVPI259
34	WCET	CINCINNATI OH	396.4	LIC	BLEDT -20061031AAR
34	WQHS-DT	CLEVELAND OH	264.2	LIC	BLCDDT -20031030AGJ
34	WQHS-TV	CLEVELAND OH	264.2	PLN	DTVPLN -DTVPI260
34	WQHS-DT	CLEVELAND OH	264.2	APP	BPCDDT -20090629ACU
34	WISN-TV	MILWAUKEE WI	293.0	PLN	DTVPLN -DTVPI271
35	WNIT	SOUTH BEND IN	191.3	CP	BPEDT -20081103ACU
35	WNIT	SOUTH BEND IN	191.3	PLN	DTVPLN -DTVPI285

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 10 of 20)

35	WNIT	SOUTH BEND IN	191.3	LIC	BLEDT	-20040106ABJ
34	WISN-TV	MILWAUKEE WI	293.0	APP	USERRECORD-01	

Total scenarios = 3

Result key: 14
Scenario 1 Affected station 9
Before Analysis

Results for: 34A MI JACKSON BPCDDT 20080620AGY APP
HAAT 263.0 m, ATV ERP 540.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2129662	21739.3
not affected by terrain losses	2125563	21719.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	15040	72.1
lost to ATV IX only	15040	72.1
lost to all IX	15040	72.1

Potential Interfering Stations Included in above Scenario 1

34A OH CLEVELAND	BLCDDT	20031030AGJ	LIC
34A WI MILWAUKEE	DTVPLN	DTVPI271	PLN

After Analysis

Results for: 34A MI JACKSON BPCDDT 20080620AGY APP
HAAT 263.0 m, ATV ERP 540.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2129662	21739.3
not affected by terrain losses	2125563	21719.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	14886	68.1
lost to ATV IX only	14886	68.1
lost to all IX	14886	68.1

Potential Interfering Stations Included in above Scenario 1

34A OH CLEVELAND	BLCDDT	20031030AGJ	LIC
34A WI MILWAUKEE	USERRECORD01		APP

Percent new IX = -0.0073%

Worst case new IX -0.0073% Scenario 1

#####

Analysis of Interference to Affected Station 10

Analysis of current record			
Channel	Call	City/State	Application Ref. No.
34	WHTV	JACKSON MI	BLCDDT -20071116ABR

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
34	WCET	CINCINNATI OH	396.4	PLN	DTVPLN -DTVPI259
34	WCET	CINCINNATI OH	396.4	LIC	BLEDT -20061031AAR
34	WQHS-DT	CLEVELAND OH	264.2	LIC	BLCDDT -20031030AGJ

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 11 of 20)

34	WQHS-TV	CLEVELAND OH	264.2	PLN	DTVPLN	-DTVPI260
34	WQHS-DT	CLEVELAND OH	264.2	APP	BPCDT	-20090629ACU
34	WISN-TV	MILWAUKEE WI	293.0	PLN	DTVPLN	-DTVPI271
35	WNIT	SOUTH BEND IN	191.3	CP	BPEDT	-20081103ACU
35	WNIT	SOUTH BEND IN	191.3	PLN	DTVPLN	-DTVPI285
35	WNIT	SOUTH BEND IN	191.3	LIC	BLEDT	-20040106ABJ
34	WISN-TV	MILWAUKEE WI	293.0	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 11

Analysis of current record

Channel	Call	City/State	Application Ref. No.
35	WNIT	SOUTH BEND IN	BPEDT -20081103ACU

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
34	WHTV	JACKSON MI	164.2	PLN	DTVPLN -DTVPI250
34	WHTV	JACKSON MI	191.3	APP	BPCDT -20080620AGY
34	WHTV	JACKSON MI	191.3	LIC	BLCDT -20071116ABR
34	WISN-TV	MILWAUKEE WI	219.4	PLN	DTVPLN -DTVPI271
35	WLWT	CINCINNATI OH	310.6	PLN	DTVPLN -DTVPI298
35	WLWT	CINCINNATI OH	310.6	LIC	BLCDT -20050502ABC
35	WMVT	MILWAUKEE WI	216.8	LIC	BLEDT -20041207AAK
35	WMVT	MILWAUKEE WI	216.8	PLN	DTVPLN -DTVPI306
35	WMVT	MILWAUKEE WI	216.8	CP	BPEDT -20090310ADX
36	WFFT-TV	FORT WAYNE IN	100.1	PLN	DTVPLN -DTVPI320
36	WFFT-TV	FORT WAYNE IN	100.1	CP MOD	BMPCDT -20070125ACY
36	WJYS	HAMMOND IN	123.5	CP	BPCDT -20080619AIZ
36	WJYS	HAMMOND IN	123.6	PLN	DTVPLN -DTVPI321
36	WJYS	HAMMOND IN	123.6	LIC	BLCDT -20020801ABI
36	WLNS-TV	LANSING MI	191.3	CP MOD	BMPCDT -20080618AEA
36	WLNS-TV	LANSING MI	191.3	PLN	DTVPLN -DTVPI329
34	WISN-TV	MILWAUKEE WI	219.4	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 12

Analysis of current record

Channel	Call	City/State	Application Ref. No.
35	WNIT	SOUTH BEND IN	DTVPLN -DTVPI285

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
34	WHTV	JACKSON MI	164.2	PLN	DTVPLN -DTVPI250
34	WHTV	JACKSON MI	191.3	APP	BPCDT -20080620AGY
34	WHTV	JACKSON MI	191.3	LIC	BLCDT -20071116ABR
34	WISN-TV	MILWAUKEE WI	219.4	PLN	DTVPLN -DTVPI271
35	WLWT	CINCINNATI OH	310.6	PLN	DTVPLN -DTVPI298
35	WLWT	CINCINNATI OH	310.6	LIC	BLCDT -20050502ABC
35	WMVT	MILWAUKEE WI	216.8	LIC	BLEDT -20041207AAK
35	WMVT	MILWAUKEE WI	216.8	PLN	DTVPLN -DTVPI306

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 12 of 20)

35	WMVT	MILWAUKEE WI	216.8	CP	BPEDT	-20090310ADX
36	WFFT-TV	FORT WAYNE IN	100.1	PLN	DTVPLN	-DTVPI320
36	WFFT-TV	FORT WAYNE IN	100.1	CP MOD	BMPCDT	-20070125ACY
36	WJYS	HAMMOND IN	123.5	CP	BPCDT	-20080619AIZ
36	WJYS	HAMMOND IN	123.6	PLN	DTVPLN	-DTVPI321
36	WJYS	HAMMOND IN	123.6	LIC	BLCDT	-20020801ABI
36	WLNS-TV	LANSING MI	191.3	CP MOD	BMPCDT	-20080618AEA
36	WLNS-TV	LANSING MI	191.3	PLN	DTVPLN	-DTVPI329
34	WISN-TV	MILWAUKEE WI	219.4	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 13

Analysis of current record

Channel	Call	City/State	Application Ref. No.
35	WNIT	SOUTH BEND IN	BLEDT -20040106ABJ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
34	WHTV	JACKSON MI	164.2	PLN	DTVPLN -DTVPI250
34	WHTV	JACKSON MI	191.3	APP	BPCDT -20080620AGY
34	WHTV	JACKSON MI	191.3	LIC	BLCDT -20071116ABR
34	WISN-TV	MILWAUKEE WI	219.4	PLN	DTVPLN -DTVPI271
35	WLWT	CINCINNATI OH	310.6	PLN	DTVPLN -DTVPI298
35	WLWT	CINCINNATI OH	310.6	LIC	BLCDT -20050502ABC
35	WMVT	MILWAUKEE WI	216.8	LIC	BLEDT -20041207AAK
35	WMVT	MILWAUKEE WI	216.8	PLN	DTVPLN -DTVPI306
35	WMVT	MILWAUKEE WI	216.8	CP	BPEDT -20090310ADX
36	WFFT-TV	FORT WAYNE IN	100.1	PLN	DTVPLN -DTVPI320
36	WFFT-TV	FORT WAYNE IN	100.1	CP MOD	BMPCDT -20070125ACY
36	WJYS	HAMMOND IN	123.5	CP	BPCDT -20080619AIZ
36	WJYS	HAMMOND IN	123.6	PLN	DTVPLN -DTVPI321
36	WJYS	HAMMOND IN	123.6	LIC	BLCDT -20020801ABI
36	WLNS-TV	LANSING MI	191.3	CP MOD	BMPCDT -20080618AEA
36	WLNS-TV	LANSING MI	191.3	PLN	DTVPLN -DTVPI329
34	WISN-TV	MILWAUKEE WI	219.4	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 14

Analysis of current record

Channel	Call	City/State	Application Ref. No.
35	WMVT	MILWAUKEE WI	BLEDT -20041207AAK

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
34	WISN-TV	MILWAUKEE WI	2.6	PLN	DTVPLN -DTVPI271
35	KRIN	WATERLOO IA	334.4	LIC	BLEDT -20050218ABQ
35	KRIN	WATERLOO IA	334.4	PLN	DTVPLN -DTVPI284
35	WNIT	SOUTH BEND IN	216.8	CP	BPEDT -20081103ACU
35	WNIT	SOUTH BEND IN	216.8	PLN	DTVPLN -DTVPI285
35	WNIT	SOUTH BEND IN	216.8	LIC	BLEDT -20040106ABJ

Table 2 WISN-TV OET Bulletin 69 Interference Study

(worst-case scenarios shown page 13 of 20)

35	WTOM-TV	CHEBOYGAN MI	400.7	LIC	BLCDDT	-20040420AAI
35	WTOM-TV	CHEBOYGAN MI	400.7	PLN	DTVPLN	-DTVPI289
35	WLUC-TV	MARQUETTE MI	360.2	CP	BPCDDT	-20041021ADR
35	WLUC-TV	MARQUETTE MI	360.2	PLN	DTVPLN	-DTVPI290
35	WLUC-TV	MARQUETTE MI	360.2	LIC	BLCDDT	-20040202ALY
36	WJYS	HAMMOND IN	137.1	CP	BPCDDT	-20080619AIZ
36	WJYS	HAMMOND IN	137.1	PLN	DTVPLN	-DTVPI321
36	WJYS	HAMMOND IN	137.1	LIC	BLCDDT	-20020801ABI
34	WISN-TV	MILWAUKEE WI	2.6	APP	USERRECORD-01	

Total scenarios = 6

Result key: 17
Scenario 1 Affected station 14
Before Analysis

Results for: 35A WI MILWAUKEE BLEDT 20041207AAK LIC
HAAT 355.0 m, ATV ERP 500.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2775349	25572.7
not affected by terrain losses	2770810	25423.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	11848	56.4
lost to ATV IX only	11848	56.4
lost to all IX	11848	56.4

Potential Interfering Stations Included in above Scenario 1

35A IA WATERLOO	BLEDT	20050218ABQ	LIC
35A IN SOUTH BEND	BPEDT	20081103ACU	CP
36A IN HAMMOND	BPCDDT	20080619AIZ	CP

After Analysis

Results for: 35A WI MILWAUKEE BLEDT 20041207AAK LIC
HAAT 355.0 m, ATV ERP 500.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2775349	25572.7
not affected by terrain losses	2770810	25423.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	12148	64.4
lost to ATV IX only	12148	64.4
lost to all IX	12148	64.4

Potential Interfering Stations Included in above Scenario 1

35A IA WATERLOO	BLEDT	20050218ABQ	LIC
35A IN SOUTH BEND	BPEDT	20081103ACU	CP
36A IN HAMMOND	BPCDDT	20080619AIZ	CP
34A WI MILWAUKEE	USERRECORD01		APP

Percent new IX = 0.0109%

Worst case new IX 0.0109% Scenario 1

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Analysis of Interference to Affected Station 15

Table 2 WISN-TV OET Bulletin 69 Interference Study

(worst-case scenarios shown page 14 of 20)

Analysis of current record				
Channel	Call	City/State	Application	Ref. No.
35	WMVT	MILWAUKEE WI	DTVPLN	-DTVPI306

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
34	WISN-TV	MILWAUKEE WI	2.6	PLN	DTVPLN	-DTVPI271
35	KRIN	WATERLOO IA	334.4	LIC	BLEDT	-20050218ABQ
35	KRIN	WATERLOO IA	334.4	PLN	DTVPLN	-DTVPI284
35	WNIT	SOUTH BEND IN	216.8	CP	BPEDT	-20081103ACU
35	WNIT	SOUTH BEND IN	216.8	PLN	DTVPLN	-DTVPI285
35	WNIT	SOUTH BEND IN	216.8	LIC	BLEDT	-20040106ABJ
35	WTOM-TV	CHEBOYGAN MI	400.7	LIC	BLCDDT	-20040420AAI
35	WTOM-TV	CHEBOYGAN MI	400.7	PLN	DTVPLN	-DTVPI289
35	WLUC-TV	MARQUETTE MI	360.2	CP	BPCDDT	-20041021ADR
35	WLUC-TV	MARQUETTE MI	360.2	PLN	DTVPLN	-DTVPI290
35	WLUC-TV	MARQUETTE MI	360.2	LIC	BLCDDT	-20040202ALY
36	WJYS	HAMMOND IN	137.1	CP	BPCDDT	-20080619AIZ
36	WJYS	HAMMOND IN	137.1	PLN	DTVPLN	-DTVPI321
36	WJYS	HAMMOND IN	137.1	LIC	BLCDDT	-20020801ABI
34	WISN-TV	MILWAUKEE WI	2.6	APP	USERRECORD-01	

Total scenarios = 6

Result key: 23
Scenario 1 Affected station 15
Before Analysis

Results for: 35A WI MILWAUKEE DTVPLN DTVPI306 PLN
HAAT 355.0 m, ATV ERP 500.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2775349	25572.7
not affected by terrain losses	2770810	25423.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	11848	56.4
lost to ATV IX only	11848	56.4
lost to all IX	11848	56.4

Potential Interfering Stations Included in above Scenario 1

35A IA WATERLOO	BLEDT	20050218ABQ	LIC
35A IN SOUTH BEND	BPEDT	20081103ACU	CP
36A IN HAMMOND	BPCDDT	20080619AIZ	CP

After Analysis

Results for: 35A WI MILWAUKEE DTVPLN DTVPI306 PLN
HAAT 355.0 m, ATV ERP 500.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2775349	25572.7
not affected by terrain losses	2770810	25423.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	12148	64.4
lost to ATV IX only	12148	64.4
lost to all IX	12148	64.4

Potential Interfering Stations Included in above Scenario 1

35A IA WATERLOO	BLEDT	20050218ABQ	LIC
35A IN SOUTH BEND	BPEDT	20081103ACU	CP

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 15 of 20)

36A IN HAMMOND BPCDT 20080619AIZ CP
34A WI MILWAUKEE USERRECORD01 APP

Percent new IX = 0.0109%

Worst case new IX 0.0109% Scenario 1

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Analysis of Interference to Affected Station 16

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
35	WMVT	MILWAUKEE WI	BPEDT	-20090310ADX

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
34	WISN-TV	MILWAUKEE WI	2.6	PLN	DTVPLN	-DTVP1271
35	KRIN	WATERLOO IA	334.4	LIC	BLEDT	-20050218ABQ
35	KRIN	WATERLOO IA	334.4	PLN	DTVPLN	-DTVP1284
35	WNIT	SOUTH BEND IN	216.8	CP	BPEDT	-20081103ACU
35	WNIT	SOUTH BEND IN	216.8	PLN	DTVPLN	-DTVP1285
35	WNIT	SOUTH BEND IN	216.8	LIC	BLEDT	-20040106ABJ
35	WTOM-TV	CHEBOYGAN MI	400.7	LIC	BLCDT	-20040420AAI
35	WTOM-TV	CHEBOYGAN MI	400.7	PLN	DTVPLN	-DTVP1289
35	WLUC-TV	MARQUETTE MI	360.2	CP	BPEDT	-20041021ADR
35	WLUC-TV	MARQUETTE MI	360.2	PLN	DTVPLN	-DTVP1290
35	WLUC-TV	MARQUETTE MI	360.2	LIC	BLCDT	-20040202ALY
36	WJYS	HAMMOND IN	137.1	CP	BPCDT	-20080619AIZ
36	WJYS	HAMMOND IN	137.1	PLN	DTVPLN	-DTVP1321
36	WJYS	HAMMOND IN	137.1	LIC	BLCDT	-20020801ABI
34	WISN-TV	MILWAUKEE WI	2.6	APP	USERRECORD-01	

Total scenarios = 2

Result key: 29

Scenario 1 Affected station 16

Before Analysis

Results for: 35A WI MILWAUKEE BPEDT 20090310ADX CP
HAAT 355.0 m, ATV ERP 625.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2850379	26011.5
not affected by terrain losses	2846515	25902.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	10252	52.3
lost to ATV IX only	10252	52.3
lost to all IX	10252	52.3

Potential Interfering Stations Included in above Scenario 1

35A IA WATERLOO BLEDT 20050218ABQ LIC
36A IN HAMMOND BPCDT 20080619AIZ CP

After Analysis

Results for: 35A WI MILWAUKEE BPEDT 20090310ADX CP
HAAT 355.0 m, ATV ERP 625.0 kW

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 16 of 20)

	POPULATION	AREA (sq km)
within Noise Limited Contour	2850379	26011.5
not affected by terrain losses	2846515	25902.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	10747	56.4
lost to ATV IX only	10747	56.4
lost to all IX	10747	56.4

Potential Interfering Stations Included in above Scenario 1

35A IA WATERLOO BLEDT 20050218ABQ LIC
36A IN HAMMOND BPCDT 20080619AIZ CP
34A WI MILWAUKEE USERRECORD01 APP

Percent new IX = 0.0175%

Worst case new IX 0.0175% Scenario 1

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Analysis of Interference to Affected Station 17

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
41	WOCH-CA	CHICAGO IL	BPTTA	-20050127ALO

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	WITI	MILWAUKEE WI	134.3	CP MOD	BMPCDT	-20081204ADM
33	WITI	MILWAUKEE WI	134.3	PLN	DTVPLN	-DTVP1231
34	WISN-TV	MILWAUKEE WI	137.1	PLN	DTVPLN	-DTVP1271
38	WGBO-DT	JOLIET IL	0.0	CP MOD	BMPCDT	-20080618AEI
38	WGBO-TV	JOLIET IL	0.0	PLN	DTVPLN	-DTVP1358
40	W40BY	PALATINE IL	2.5	LIC	BLTT	-20060419ACR
41	KGCW	BURLINGTON IA	278.3	LIC	BLCDT	-20081120ABD
41	KGCW-TV	BURLINGTON IA	278.3	PLN	DTVPLN	-DTVP1462
41	WICD	CHAMPAIGN IL	204.8	LIC	BLCDT	-20050620AAO
41	WICD	CHAMPAIGN IL	204.8	PLN	DTVPLN	-DTVP1464
41	WIFR-DR	FREEPORT IL	135.1	APP	BPRM	-20080620AOH
41	WIFR	FREEPORT IL	135.1	PLN	DTVPLN	-DTVP1465
41	WIFR	FREEPORT IL	135.1	CP MOD	BMPCDT	-20081110ADQ
41	WIFR	FREEPORT IL	135.1	CP MOD	BMPCDT	-20050103AFQ
41	WIFR	FREEPORT IL	135.1	LIC	BLCDT	-20041012AIQ
41	WXYZ-TV	DETROIT MI	365.7	CP MOD	BMPCDT	-20080618ABH
41	WXYZ-TV	DETROIT MI	365.7	PLN	DTVPLN	-DTVP1471
41	WXYZ-TV	DETROIT MI	365.7	LIC	BLCDT	-20030325ABI
41	WHIO-TV	DAYTON OH	372.1	PLN	DTVPLN	-DTVP1475
41	WHIO-TV	DAYTON OH	372.1	LIC	BLCDT	-20040614AEY
41	WHIO-TV	DAYTON OH	372.1	CP	BPEDT	-20080619ACK
41	WGBA-TV	GREEN BAY WI	274.9	LIC	BLCDT	-20080813ADO
41	WGBA	GREEN BAY WI	274.9	PLN	DTVPLN	-DTVP1483
41	WGBA-TV	GREEN BAY WI	274.9	APP	BMPCDT	-20080620AEI
41	WMLW-CA	MILWAUKEE WI	137.1	STA	BSTA	-20000714AAU
41	WMLW-CA	MILWAUKEE WI	137.1	LIC	BLTTA	-20021002AAA
42	W64CQ	ARLINGTON HEIGHTS IL	39.8	CP	BDISTT	-20070709ACL
42	WNDU-TV	SOUTH BEND IN	121.4	LIC	BLCDT	-20060717AAG
42	WNDU-TV	SOUTH BEND IN	121.4	PLN	DTVPLN	-DTVP1498
42	WNDU-TV	SOUTH BEND IN	121.4	CP	BPEDT	-20080619AAB
43	WCPX-TV	CHICAGO IL	2.5	LIC	BLCDT	-20010226ABH

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 17 of 20)

43	WCPX	CHICAGO IL	2.5	PLN	DTVPLN	-DTVP1533
43	WCPX-TV	CHICAGO IL	1.1	APP	BPCDT	-20080619AIL
44	WLS-TV	CHICAGO IL	2.5	PLN	DTVPLN	-DTVP1568
44	WLS-TV	CHICAGO IL	2.5	CP	BPCDT	-20091001ACI
44	WLS-DR	CHICAGO IL	2.5	APP	BPRM	-20090724AEG
45	WSNS-TV	CHICAGO IL	2.5	LIC	BLCDT	-20010612AIB
45	WSNS-TV	CHICAGO IL	2.5	PLN	DTVPLN	-DTVP1606
45	WSNS-TV	CHICAGO IL	2.5	CP	BPCDT	-20080620AMW
48	WHME-TV	SOUTH BEND IN	125.9	APP	BPCDT	-20080619ABC
48	WBME-TV	RACINE WI	134.1	PLN	DTVPLN	-DTVP1724
48	WBME-TV	RACINE WI	137.1	CP MOD	BMPCDT	-20090709ABY
48	WBME-TV	RACINE WI	107.8	LIC	BMLCDT	-20070823AED
34	WISN-TV	MILWAUKEE WI	137.1	APP	USERRECORD-01	

Proposed station is beyond the site to
nearest cell evaluation distance

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Analysis of Interference to Affected Station 18

Analysis of current record

Channel	Call	City/State	Application Ref. No.
41	WOCH-CA	CHICAGO IL	BLTTA -20060103ACT

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
33	WITI	MILWAUKEE WI	134.3	CP MOD	BMPCDT -20081204ADM
33	WITI	MILWAUKEE WI	134.3	PLN	DTVPLN -DTVP1231
34	WISN-TV	MILWAUKEE WI	137.1	PLN	DTVPLN -DTVP1271
38	WGBO-DT	JOLIET IL	0.0	CP MOD	BMPCDT -20080618AEI
38	WGBO-TV	JOLIET IL	0.0	PLN	DTVPLN -DTVP1358
40	W40BY	PALATINE IL	2.5	LIC	BLTT -20060419ACR
41	KGCW	BURLINGTON IA	278.3	LIC	BLCDT -20081120ABD
41	KGCW-TV	BURLINGTON IA	278.3	PLN	DTVPLN -DTVP1462
41	WICD	CHAMPAIGN IL	204.8	LIC	BLCDT -20050620AAO
41	WICD	CHAMPAIGN IL	204.8	PLN	DTVPLN -DTVP1464
41	WIFR-DR	FREESPORT IL	135.1	APP	BPRM -20080620AOH
41	WIFR	FREESPORT IL	135.1	PLN	DTVPLN -DTVP1465
41	WIFR	FREESPORT IL	135.1	CP MOD	BMPCDT -20081110ADQ
41	WIFR	FREESPORT IL	135.1	CP MOD	BMPCDT -20050103AFQ
41	WIFR	FREESPORT IL	135.1	LIC	BLCDT -20041012AIQ
41	WXYZ-TV	DETROIT MI	365.7	CP MOD	BMPCDT -20080618ABH
41	WXYZ-TV	DETROIT MI	365.7	PLN	DTVPLN -DTVP1471
41	WXYZ-TV	DETROIT MI	365.7	LIC	BLCDT -20030325ABI
41	WHIO-TV	DAYTON OH	372.1	PLN	DTVPLN -DTVP1475
41	WHIO-TV	DAYTON OH	372.1	LIC	BLCDT -20040614AEY
41	WHIO-TV	DAYTON OH	372.1	CP	BPCDT -20080619ACK
41	WGBA-TV	GREEN BAY WI	274.9	LIC	BLCDT -20080813ADO
41	WGBA	GREEN BAY WI	274.9	PLN	DTVPLN -DTVP1483
41	WGBA-TV	GREEN BAY WI	274.9	APP	BMPCDT -20080620AEI
41	WMLW-CA	MILWAUKEE WI	137.1	STA	BSTA -20000714AAU
41	WMLW-CA	MILWAUKEE WI	137.1	LIC	BLTTA -20021002AAA
42	W64CQ	ARLINGTON HEIGHTS IL	39.8	CP	BDSSTT -20070709ACL
42	WNDU-TV	SOUTH BEND IN	121.4	LIC	BLCDT -20060717AAG
42	WNDU-TV	SOUTH BEND IN	121.4	PLN	DTVPLN -DTVP1498
42	WNDU-TV	SOUTH BEND IN	121.4	CP	BPCDT -20080619AAB
43	WCPX-TV	CHICAGO IL	2.5	LIC	BLCDT -20010226ABH
43	WCPX	CHICAGO IL	2.5	PLN	DTVPLN -DTVP1533

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 18 of 20)

43	WCPX-TV	CHICAGO IL	1.1	APP	BPCDT	-20080619AIL
44	WLS-TV	CHICAGO IL	2.5	PLN	DTVPLN	-DTVP1568
44	WLS-TV	CHICAGO IL	2.5	CP	BPCDT	-20091001ACI
44	WLS-DR	CHICAGO IL	2.5	APP	BPRM	-20090724AEG
45	WSNS-TV	CHICAGO IL	2.5	LIC	BLCDT	-20010612AIB
45	WSNS-TV	CHICAGO IL	2.5	PLN	DTVPLN	-DTVP1606
45	WSNS-TV	CHICAGO IL	2.5	CP	BPCDT	-20080620AMW
48	WHME-TV	SOUTH BEND IN	125.9	APP	BPCDT	-20080619ABC
48	WBME-TV	RACINE WI	134.1	PLN	DTVPLN	-DTVP1724
48	WBME-TV	RACINE WI	137.1	CP MOD	BMPCDT	-20090709ABY
48	WBME-TV	RACINE WI	107.8	LIC	BMLCDT	-20070823AED
34	WISN-TV	MILWAUKEE WI	137.1	APP	USERRECORD-01	

Proposed station is beyond the site to
nearest cell evaluation distance

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Analysis of Interference to Affected Station 19

Analysis of current record

Channel	Call	City/State	Application Ref. No.
41	WMLW-CA	MILWAUKEE WI	BLTTA -20021002AAA

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
33	WITI	MILWAUKEE WI	3.6	CP MOD	BMPCDT -20081204ADM
33	WITI	MILWAUKEE WI	3.7	PLN	DTVPLN -DTVP1231
34	WISN-TV	MILWAUKEE WI	0.2	PLN	DTVPLN -DTVP1271
38	WGBO-DT	JOLIET IL	137.1	CP MOD	BMPCDT -20080618AEI
38	WGBO-TV	JOLIET IL	137.1	PLN	DTVPLN -DTVP1358
39	WFRV-TV	GREEN BAY WI	135.9	LIC	BLCDT -20051004ABD
39	WFRV-TV	GREEN BAY WI	135.9	PLN	DTVPLN -DTVP1416
40	WPXE-TV	KENOSHA WI	2.8	LIC	BLCDT -20040206AAT
40	WPXE	KENOSHA WI	2.8	PLN	DTVPLN -DTVP1452
41	KGCW	BURLINGTON IA	323.3	LIC	BLCDT -20081120ABD
41	KGCW-TV	BURLINGTON IA	323.3	PLN	DTVPLN -DTVP1462
41	WICD	CHAMPAIGN IL	338.1	LIC	BLCDT -20050620AAO
41	WICD	CHAMPAIGN IL	338.1	PLN	DTVPLN -DTVP1464
41	WOCH-CA	CHICAGO IL	137.1	APP	BPTTA -20050127ALO
41	WOCH-CA	CHICAGO IL	137.1	LIC	BLTTA -20060103ACT
41	WIFR-DR	FREESPORT IL	135.9	APP	BPRM -20080620AOH
41	WIFR	FREESPORT IL	135.9	PLN	DTVPLN -DTVP1465
41	WIFR	FREESPORT IL	135.9	CP MOD	BMPCDT -20081110ADQ
41	WIFR	FREESPORT IL	135.9	CP MOD	BMPCDT -20050103AFQ
41	WIFR	FREESPORT IL	135.9	LIC	BLCDT -20041012AIQ
41	WXYZ-TV	DETROIT MI	388.3	CP MOD	BMPCDT -20080618ABH
41	WXYZ-TV	DETROIT MI	388.3	PLN	DTVPLN -DTVP1471
41	WXYZ-TV	DETROIT MI	388.3	LIC	BLCDT -20030325ABI
41	WGBA-TV	GREEN BAY WI	138.6	LIC	BLCDT -20080813ADO
41	WGBA	GREEN BAY WI	138.6	PLN	DTVPLN -DTVP1483
41	WGBA-TV	GREEN BAY WI	138.6	APP	BMPCDT -20080620AEI
43	WCPX-TV	CHICAGO IL	139.1	LIC	BLCDT -20010226ABH
43	WCPX	CHICAGO IL	139.1	PLN	DTVPLN -DTVP1533
43	WCPX-TV	CHICAGO IL	137.3	APP	BPCDT -20080619AIL
43	WWSR-TV	MAYVILLE WI	60.2	PLN	DTVPLN -DTVP1558
43	WWSR-TV	MAYVILLE WI	60.2	LIC	BLCDT -20050825AEW
43	WWSR-TV	MAYVILLE WI	60.2	APP	BPCDT -20080618ATT
44	WLS-TV	CHICAGO IL	139.1	PLN	DTVPLN -DTVP1568

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 19 of 20)

44	WLS-TV	CHICAGO IL	139.1	CP	BPCDT	-20091001ACI
44	WLS-DR	CHICAGO IL	139.1	APP	BPRM	-20090724AEG
45	WSNS-TV	CHICAGO IL	139.1	LIC	BLCDT	-20010612AIB
45	WSNS-TV	CHICAGO IL	139.1	PLN	DTVPLN	-DTVP1606
45	WSNS-TV	CHICAGO IL	139.1	CP	BPCDT	-20080620AMW
48	WBME-TV	RACINE WI	3.6	PLN	DTVPLN	-DTVP1724
48	WBME-TV	RACINE WI	0.0	CP MOD	BMPCDT	-20090709ABY
48	WBME-TV	RACINE WI	29.4	LIC	BMLCDT	-20070823AED
49	WMSN-DR	MADISON WI	130.4	APP	BPRM	-20080620AOW
49	WMSN-TV	MADISON WI	130.4	PLN	DTVPLN	-DTVP1756
49	WMSN-TV	MADISON WI	130.4	CP	BPCDT	-20090209AGC
34	WISN-TV	MILWAUKEE WI	0.2	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 20

Analysis of current record

Channel	Call	City/State	Application Ref. No.
34	WISN-TV	MILWAUKEE WI	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
33	WITI	MILWAUKEE WI	3.4	CP MOD	BMPCDT -20081204ADM
33	WITI	MILWAUKEE WI	3.5	PLN	DTVPLN -DTVP1231
34	KQIN	DAVENPORT IA	284.1	CP	BPEDT -20080620AIO
34	KQIN	DAVENPORT IA	284.1	PLN	DTVPLN -DTVP1244
34	KQIN	DAVENPORT IA	284.1	LIC	BLEDT -20080620AFY
34	WHTV	JACKSON MI	288.2	PLN	DTVPLN -DTVP1250
34	WHTV	JACKSON MI	293.0	APP	BPCDT -20080620AGY
34	WHTV	JACKSON MI	293.0	LIC	BLCDT -20071116ABR
35	WNIT	SOUTH BEND IN	219.4	CP	BPEDT -20081103ACU
35	WNIT	SOUTH BEND IN	219.4	PLN	DTVPLN -DTVP1285
35	WNIT	SOUTH BEND IN	219.4	LIC	BLEDT -20040106ABJ
35	WMVT	MILWAUKEE WI	2.6	LIC	BLEDT -20041207AAK
35	WMVT	MILWAUKEE WI	2.6	PLN	DTVPLN -DTVP1306
35	WMVT	MILWAUKEE WI	2.6	CP	BPEDT -20090310ADX

Total scenarios = 6

Result key: 31

Scenario 1 Affected station 20

Before Analysis

Results for: 34A WI MILWAUKEE USERRECORD01 APP

HAAT 315.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2766639	25504.9
not affected by terrain losses	2765000	25356.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	2101	60.4
lost to ATV IX only	2101	60.4
lost to all IX	2101	60.4

Potential Interfering Stations Included in above Scenario 1

33A WI MILWAUKEE BMPCDT 20081204ADM CP

Table 2 WISN-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 20 of 20)

34A IA DAVENPORT	BPEDT	20080620AIO	CP
35A WI MILWAUKEE	BLEDT	20041207AAK	LIC

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

SECTION III-D - DTV Engineering	
Complete Questions 1-5, and provide all data and information for the proposed facility, as requested in Technical Specifications, Items 1-13.	
<p>Pre-Transition Certification Checklist: An application concerning a pre-transition channel must complete questions 1(a)-(c), and 2-5. A correct answer of "Yes" to all of the questions will ensure an expeditious grant of a construction permit application to change pre-transition facilities. However, if the proposed facility is located within the Canadian or Mexican borders, coordination of the proposal under the appropriate treaties may be required prior to grant of the application. An answer of "No" will require additional evaluation of the applicable information in this form before a construction permit can be granted.</p> <p>Post-Transition Expedited Processing. An application concerning a post-transition channel must complete questions 1(a), (d)-(e), and 2-5. A station applying for a construction permit to build its post-transition channel will receive expedited processing if its application (1) does not seek to expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B"); (2) specifies facilities that match or closely approximate those defined in the new DTV Table Appendix B facilities; and (3) is filed within 45 days of the effective date of Section 73.616 of the rules adopted in the Report and Order in the Third DTV Periodic Review proceeding, MB Docket No. 07-91.</p>	
1. The proposed DTV facility complies with 47 C.F.R. Section 73.622 in the following respects:	
(a) It will operate on the DTV channel for this station as established in 47 C.F.R. Section 73.622.	<input checked="" type="radio"/> Yes <input type="radio"/> No
(b) It will operate a pre-transition facility from a transmitting antenna located within 5.0 km (3.1 miles) of the DTV reference site for this station as established in 47 C.F.R. Section 73.622.	<input type="radio"/> Yes <input type="radio"/> No
(c) It will operate a pre-transition facility with an effective radiated power (ERP) and antenna height above average terrain (HAAT) that do not exceed the DTV reference ERP and HAAT for this station as established in 47 C.F.R. Section 73.622.	<input type="radio"/> Yes <input type="radio"/> No
(d) It will operate at post-transition facilities that do not expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B").	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A
(e) It will operate at post-transition facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the new DTV Table Appendix B.	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307. Applicant must submit the Exhibit called for in Item 13.	<input checked="" type="radio"/> Yes <input type="radio"/> No
3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community.	<input checked="" type="radio"/> Yes <input type="radio"/> No
4. The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied or are not applicable.	<input checked="" type="radio"/> Yes <input type="radio"/> No
5. The antenna structure to be used by this facility has been registered by the Commission and will not require registration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely effect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7.	<input checked="" type="radio"/> Yes <input type="radio"/> No

SECTION III-D - DTV Engineering	
TECHNICAL SPECIFICATIONS	
Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.	
TECH BOX	
1.	Channel Number: DTV 34 Analog TV, if any
2.	Zone: <input checked="" type="radio"/> I <input type="radio"/> II <input type="radio"/> III
3.	Antenna Location Coordinates: (NAD 27) Latitude: Degrees 43 Minutes 6 Seconds 42 <input checked="" type="radio"/> North <input type="radio"/> South Longitude: Degrees 87 Minutes 55 Seconds 42 <input checked="" type="radio"/> West <input type="radio"/> East
4.	Antenna Structure Registration Number: 1035766 <input type="checkbox"/> Not Applicable <input type="checkbox"/> Notification filed with FAA
5.	Antenna Location Site Elevation Above Mean Sea Level: 190 meters
6.	Overall Tower Height Above Ground Level: 337.7 meters
7.	Height of Radiation Center Above Ground Level: 327.9 meters
8.	Height of Radiation Center Above Average Terrain : 302.7 meters
9.	Maximum Effective Radiated Power (average power): 1000 kW

10.	<p>Antenna Specifications:</p> <p>a. Manufacturer DIE Model TFU-31ETT/VP-R 4C160</p> <p>b. Electrical Beam Tilt: 1 degrees <input type="checkbox"/> Not Applicable</p> <p>c. Mechanical Beam Tilt: 0.35 degrees toward azimuth 170 degrees True <input type="checkbox"/> Not Applicable Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c). [Exhibit 43]</p> <p>d. Polarization: <input type="radio"/> Horizontal <input type="radio"/> Circular <input checked="" type="radio"/> Elliptical</p> <p>e. Directional Antenna Relative Field Values: <input type="checkbox"/> Not applicable (Nondirectional)</p> <p>[For a composite directional (not off-the-shelf) antenna, press the following button to fill in the relative field values subform.] [Relative Field Values]</p> <div style="text-align: center;"><p>10e. Directional Antenna Relative Field Values</p><p>[Fill in this subform for a composite directional (not off-the-shelf) antenna, only.]</p></div> <table border="1"><tr><td colspan="12">e. Directional Antenna Relative Field Values:</td></tr><tr><td colspan="12">Rotation (Degrees): <input checked="" type="checkbox"/> No Rotation</td></tr><tr><td>Degrees</td><td>Value</td><td>Degrees</td><td>Value</td><td>Degrees</td><td>Value</td><td>Degrees</td><td>Value</td><td>Degrees</td><td>Value</td><td>Degrees</td><td>Value</td></tr><tr><td>0</td><td>0.996</td><td>10</td><td>0.954</td><td>20</td><td>0.848</td><td>30</td><td>0.681</td><td>40</td><td>0.481</td><td>50</td><td>0.304</td></tr><tr><td>60</td><td>0.22</td><td>70</td><td>0.235</td><td>80</td><td>0.269</td><td>90</td><td>0.276</td><td>100</td><td>0.253</td><td>110</td><td>0.208</td></tr><tr><td>120</td><td>0.183</td><td>130</td><td>0.241</td><td>140</td><td>0.367</td><td>150</td><td>0.504</td><td>160</td><td>0.614</td><td>170</td><td>0.682</td></tr><tr><td>180</td><td>0.711</td><td>190</td><td>0.719</td><td>200</td><td>0.723</td><td>210</td><td>0.726</td><td>220</td><td>0.732</td><td>230</td><td>0.735</td></tr><tr><td>240</td><td>0.749</td><td>250</td><td>0.783</td><td>260</td><td>0.831</td><td>270</td><td>0.865</td><td>280</td><td>0.873</td><td>290</td><td>0.867</td></tr><tr><td>300</td><td>0.873</td><td>310</td><td>0.899</td><td>320</td><td>0.933</td><td>330</td><td>0.962</td><td>340</td><td>0.982</td><td>350</td><td>0.996</td></tr><tr><td>Additional Azimuths</td><td></td><td>355</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> <p style="text-align: center; color: red;">Relative Field Polar Plot</p>											e. Directional Antenna Relative Field Values:												Rotation (Degrees): <input checked="" type="checkbox"/> No Rotation												Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	0	0.996	10	0.954	20	0.848	30	0.681	40	0.481	50	0.304	60	0.22	70	0.235	80	0.269	90	0.276	100	0.253	110	0.208	120	0.183	130	0.241	140	0.367	150	0.504	160	0.614	170	0.682	180	0.711	190	0.719	200	0.723	210	0.726	220	0.732	230	0.735	240	0.749	250	0.783	260	0.831	270	0.865	280	0.873	290	0.867	300	0.873	310	0.899	320	0.933	330	0.962	340	0.982	350	0.996	Additional Azimuths		355	1								
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	If a directional antenna is proposed, the requirements of 47 C.F.R. Sections 73.625(c) must be satisfied. Exhibit required. [Exhibit 44]																																																																																																																																		
11.	<p>Does the proposed facility satisfy the pre-transition interference protection provisions of 47 C.F.R. Section 73.623(a) (Applicable only if Certification Checklist Items 1(a), (b), or (c) are answered "No.") and/or the post-transition interference protection provisions of 47 C.F.R. Section 73.616? <input checked="" type="radio"/> Yes <input type="radio"/> No [Exhibit 45]</p> <p>If "No," attach as an Exhibit justification therefor, including a summary of any related previously granted waivers.</p>																																																																																																																																		
12.	If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefore. (Applicable only if Certification Checklist item 3 is answered "No.") [Exhibit 46]																																																																																																																																		
13.	<p>Environmental Protection Act. Submit in an Exhibit the following: [Exhibit 47]</p> <p>If Certification Checklist Item 2 is answered "Yes," a brief explanation of why an Environmental Assessment is not required. Also describe in the Exhibit the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to the tower site.</p> <p>By checking "Yes" to Certification Checklist Item 2, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.</p> <p>If Certification Checklist Item 2 is answered "No," an Environmental Assessment as required by 47 C.F.R Section 1.1311.</p>																																																																																																																																		
PREPARERS CERTIFICATION ON SECTION III MUST BE COMPLETED AND SIGNED.																																																																																																																																			

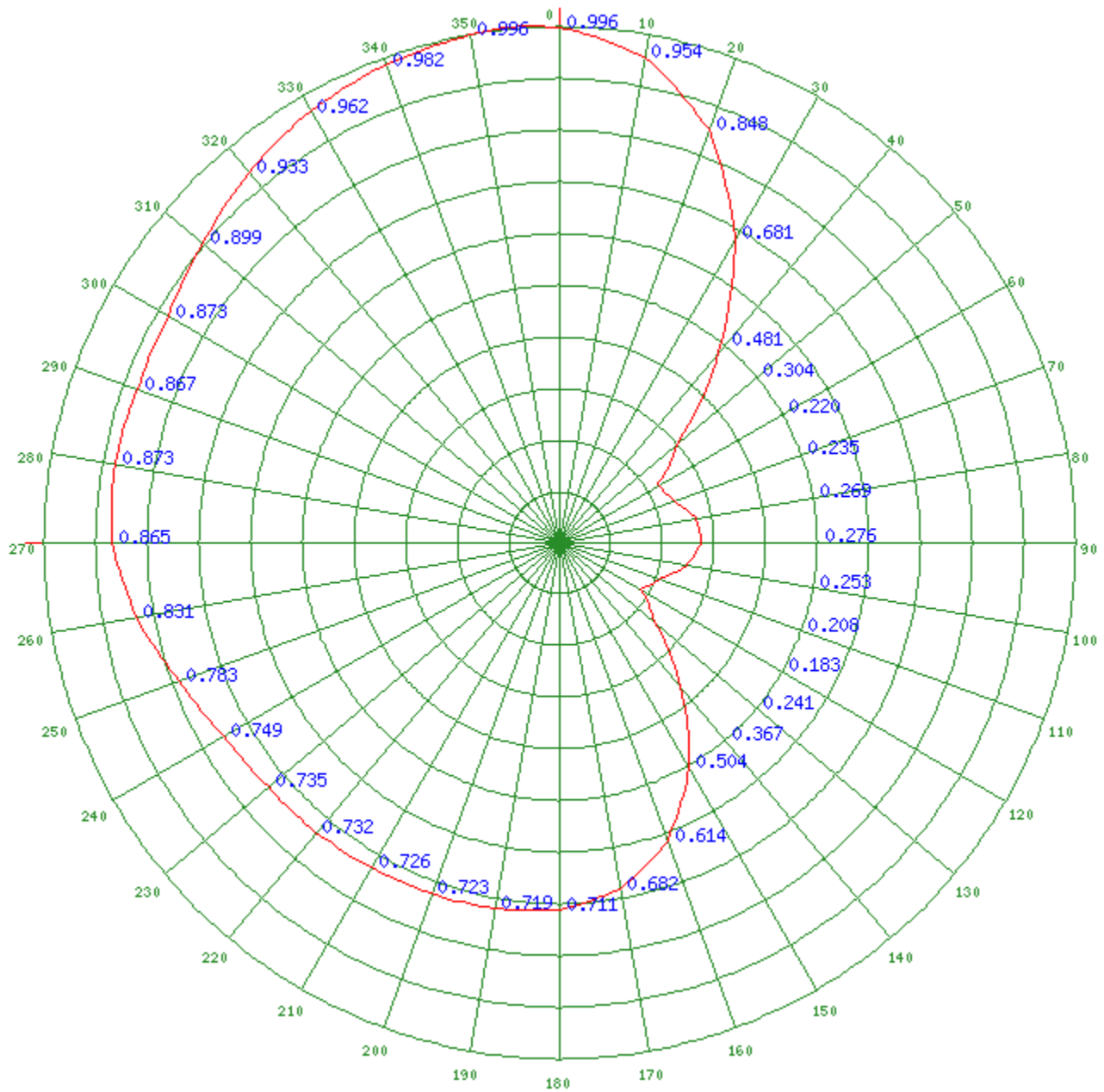
SECTION III - PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name JOSEPH M. DAVIS, P.E.	Relationship to Applicant (e.g., Consulting Engineer) CONSULTING ENGINEER	
Signature	Date 3/19/2010	
Mailing Address CHESAPEAKE RF CONSULTANTS, LLC 11993 KAHNS ROAD		
City MANASSAS	State or Country (if foreign address) VA	Zip Code 20112 -
Telephone Number (include area code) 7036509600	E-Mail Address (if available) JOSEPH.DAVIS@RF-CONSULTANTS.COM	

Any specified rotation has already been applied to the plotted pattern.
Field strength values shown on a rotated pattern may differ from the listed values
because intermediate azimuths are interpolated between entered azimuths.

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