

JOHN J. MULLANEY
JOHN H. MULLANEY, P.E. (1994)
ALAN E. GEARING, P.E.
TIMOTHY Z. SAWYER

301 921-0115 Voice
301 590-9757 Fax
mullengr@aol.com E-mail

MULLANEY ENGINEERING, INC.

9049 SHADY GROVE COURT
GAITHERSBURG, MD 20877

ENGINEERING EXHIBIT EE-1:

**APPLICATION FOR
CONSTRUCTION PERMIT**

**APPLICATION FOR MAXIMIZATION
OF POST-TRANSITION
DIGITAL TELEVISION PERMIT**

**GOCOM MEDIA OF ILLINOIS, LLC
WCCU-DT
DIGITAL TELEVISION CHANNEL 26
URBANA, ILLINOIS**

FCC FACILITY NUMBER 69544

JUNE 2008

**ENGINEERING EXHIBIT
IN SUPPORT OF
APPLICATION FOR A CONSTRUCTION PERMIT FOR
MAXIMIZATION OF POST-TRANSITION
DIGITAL TELEVISION FACILITY**

**DIGITAL TELEVISION STATION WCCU-DT
URBANA, ILLINOIS**

ENGINEERING EXHIBIT EE-1:

**APPLICATION FOR
CONSTRUCTION PERMIT**

**APPLICATION FOR MAXIMIZATION
OF POST-TRANSITION
DIGITAL TELEVISION PERMIT**

**GOCOM MEDIA OF ILLINOIS, LLC
WCCU-DT**

**DIGITAL TELEVISION CHANNEL 26
URBANA, ILLINOIS**

FCC FACILITY NUMBER 69544

TABLE OF CONTENTS:

1. F.C.C. Form 301, Section III-D (DTV Engineering)
2. F.C.C. Form 301, Section III (Preparer's Certification)
3. Declaration of Engineer
4. Narrative Statement
5. Figure 1, Proposed Directional Antenna Details
6. Figure 2, Proposed Digital Service Contours
7. Figure 3, Interference Study - OET Bulletin No. 69 Study

DECLARATION

I, Timothy Z. Sawyer, declare and that I have provided engineering services in the area of telecommunications since 1969. My qualifications are a matter of record with the Federal Communications Commission. I am a senior engineer with the firm of Mullaney Engineering, Inc., consulting radio telecommunications engineers with offices in Gaithersburg, Maryland.

The firm of Mullaney Engineering, Inc., has been retained by GOCOM MEDIA OF ILLINOIS, LLC, to prepare the instant engineering exhibit in support of **an Application for a Construction Permit - Digital Television Broadcast Station - WCCU-DT, Urbana, Illinois for Maximization of a Post-Transition Facility, FCC FACILITY ID NUMBER: 69544.**

All facts contained herein are true of my own knowledge except those stated to be on information and belief, and as to those facts, I believe them to be true. I declare under the penalty of perjury that the foregoing is true and correct.



Timothy Z. Sawyer

Executed on the 19th day of June 2008

ENGINEERING EXHIBIT EE-1:

**APPLICATION FOR
CONSTRUCTION PERMIT**

**APPLICATION FOR MAXIMIZATION
OF POST-TRANSITION
DIGITAL TELEVISION PERMIT**

GOCOM MEDIA OF ILLINOIS, LLC

**WCCU-DT
DIGITAL TELEVISION CHANNEL 26
URBANA, ILLINOIS**

FCC FACILITY NUMBER 69544

ENGINEERING STATEMENT

The technical exhibit, of which this narrative is part, was prepared on behalf of GOCOM MEDIA OF ILLINOIS, LLC, in support of an application for a construction permit to maximize the facilities of Digital Television Station WCCU-DT, Urbana, Illinois. The FCC facility identification number is 69544.

The proposed station will operate on Digital TV Channel 26 with an effective radiated power (ERP) of 1000 kilowatts and an antenna height above average terrain (HAAT) of 114 meters utilizing a directional antenna.

The request to modify the current digital facility is a result of the Commission's lifting of the August 3, 2004 "freeze" concerning expansion of service area.¹ This

¹

Public Notice "*Commission Lifts the Freeze On the Filing of Maximization Applications and Petitions for Digital Channel Substitutions, Effective Immediately*" DA 08-1213, released May 30, 2008.

instant application is intended to be filed by June 20, 2008 in response to the FCC notice.

WCCU-DT is licensed to operate on Channel 26 as a digital television facility with an effective radiated power of 507 kilowatts and a height above average terrain of 114 meters. That permit authorizes the use of a directional antenna. The supporting structure has been registered with the FCC and issued tower registration number 1007955.

WCCU-DT proposes to modify its license by increasing the authorized effective radiated power to 1000 kilowatts. No other changes are proposed.

The proposal would not be subject to environmental processing in accordance with 47 C.F.R. §1.1306. This proposal does not involve a site location specified under 47 C.F.R. §1.1307 (a)(1)-(7), or involve high intensity lighting under 47 C.F.R. §1.1307(a)(8) or result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in 47 C.F.R. §1.1307(b).

This application conforms with all applicable rules and regulations of the Federal Communications Commission.

The proposed transmitting facility will use the authorized directional antenna a DIE TFU-16DSB-M(C), mounted on the existing guyed, uniform cross-section, steel tower. No increase in tower height will occur, and no changes to the directional antenna radiation pattern or its mounting height above ground or sea level will occur.

DIRECTIONAL ANTENNA DETAILS (FIGURE 1)

Figure 1 contains the details of the proposed antenna as required by the Commission's rules. The antenna employs horizontal polarization and an electrical beam tilt of 1.0 degrees. There are no changes to the antenna system from that previously authorized and in use by the station.

FCC F(50,90) COVERAGE CONTOURS (FIGURE 2)

The predicted 41 and 48 dBu f(50,90) coverage contours were calculated in accordance with the provisions of 47 C.F.R. §73.313. In accordance with current FCC practice, no consideration was given to terrain roughness correction factors.

The average terrain elevations from 3 to 16 kilometers from the proposed site were obtained from the N.G.D.C. 3-second terrain database. 360 radials, evenly spaced at 1-degree intervals were used for determining the average terrain elevations and the distance to the service contours.

The antenna radiation center heights above average terrain in the individual radial directions and the effective radiated power in the appropriate directions were used in conjunction with the appropriate F(50,90) curve contained with the Commission's rules.

The proposed digital service contours have been drawn on the map in Figure 2. As the map in Figure 2 shows, the 48 dBu (City Grade) contour from this proposal completely encompasses the city of license, Urbana, Illinois.

POPULATION AND AREA

The population to be served within the predicted digital service contour was determined by a computer program that adds the population of census districts whose centroids lie within the contour as defined in OET Bulletin 69. The 2000 U.S. Census data was employed. The area within the digital service contour was calculated by a computer program using a root mean square algorithm.

Post-Transition Population Summary

Population Summary (2000 Census) OET Bulletin 69 Method	Appendix B	Proposed
Within Noise Limited Contour	385000	389009
Service Match to Appendix B	----	101.0%

INTERFERENCE STUDY

Figure 3, contains a detailed interference study using the procedures outlined in OET Bulletin Number 69² and complies with the 0.5 percent limit of new interference caused to Appendix B facilities and/or current post-transition authorizations of nearby stations of concern. Protection requirements to Class A television stations were also considered in this study if applicable. The proposed facility is full-spaced to all post-transition facilities or allotments.

ENVIRONMENTAL CONSIDERATIONS

The proposed facilities were evaluated in terms of potential radiofrequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields."

Power density contribution from the proposed operation was computed using the appropriate equations of the OET Bulletin 65. The maximum radiated power is 1000 kilowatts. Using a "worst-case" relative field pattern of 0.5 for all values 10 degrees and greater below the horizon, the power density was computed at a level of 2 meters above ground to be 0.2208 mW/cm² or 12.15 % of the recommended limit of 1.817

²

The implementation of OET Bulletin number 69 for this study followed the guidelines of the bulletin as specified therein. A standard cell size of 2-kilometers was employed. Comparisons of various results of this computer program to the Commission's implementation of the bulletin shows excellent correlation.

mW/cm² for a controlled area at the base of the tower and 60.8 % of the recommended limit of 0.363 mW/cm² for an uncontrolled area.

Therefore, at ground level (and 2 meters above), at the base of the tower, the potential for radiofrequency radiation exposure will be well within the FCC guidelines.

The "worst-case" minimum distance from the antenna was computed to be 45.2 meters for a controlled environment. As the minimum distance is more than 79.8 meters above ground level, no exposure in excess of the guidelines to workers is predicted to occur from this proposal at ground level.

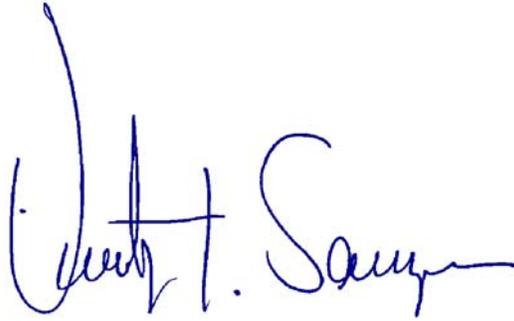
The permittee/licensee/applicant will coordinate with other users of the site and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of the FCC guidelines.

Suitable warning signs and a fence or other devices have been placed at the base of the tower to prevent unauthorized access. If work is required on the tower, the power to the antenna will be terminated or reduced as required. The applicant will fully comply with the provisions contained within the OET bulletin.

The tower has been in service for a number of years and as no new tower construction will occur this proposal is fully exempt from further environmental processing or notification.

Inquiries concerning the technical portion of this application should be directed to the office of the undersigned.

June 19, 2008



Timothy Z Sawyer
Mullaney Engineering, Inc.

FIGURE 1

WCCU-DT DIRECTIONAL ANTENNA DETAILS

NO CHANGE IN PREVIOUS AUTHORIZED ANTENNA

Dielectric

December 2004

**ANTENNA THEORETICAL HORIZONTAL
PLANE RADIATION PATTERN**

Prepared for
URBANA-CHAPAIN BROADCASTING PARTNERS

STATION WCCU-DT **URBANA, ILLINOIS**
CH 26 **507 KW (MAX-DA, BT) 114 METERS**

Denny & Associates, P.C. Consulting Engineers

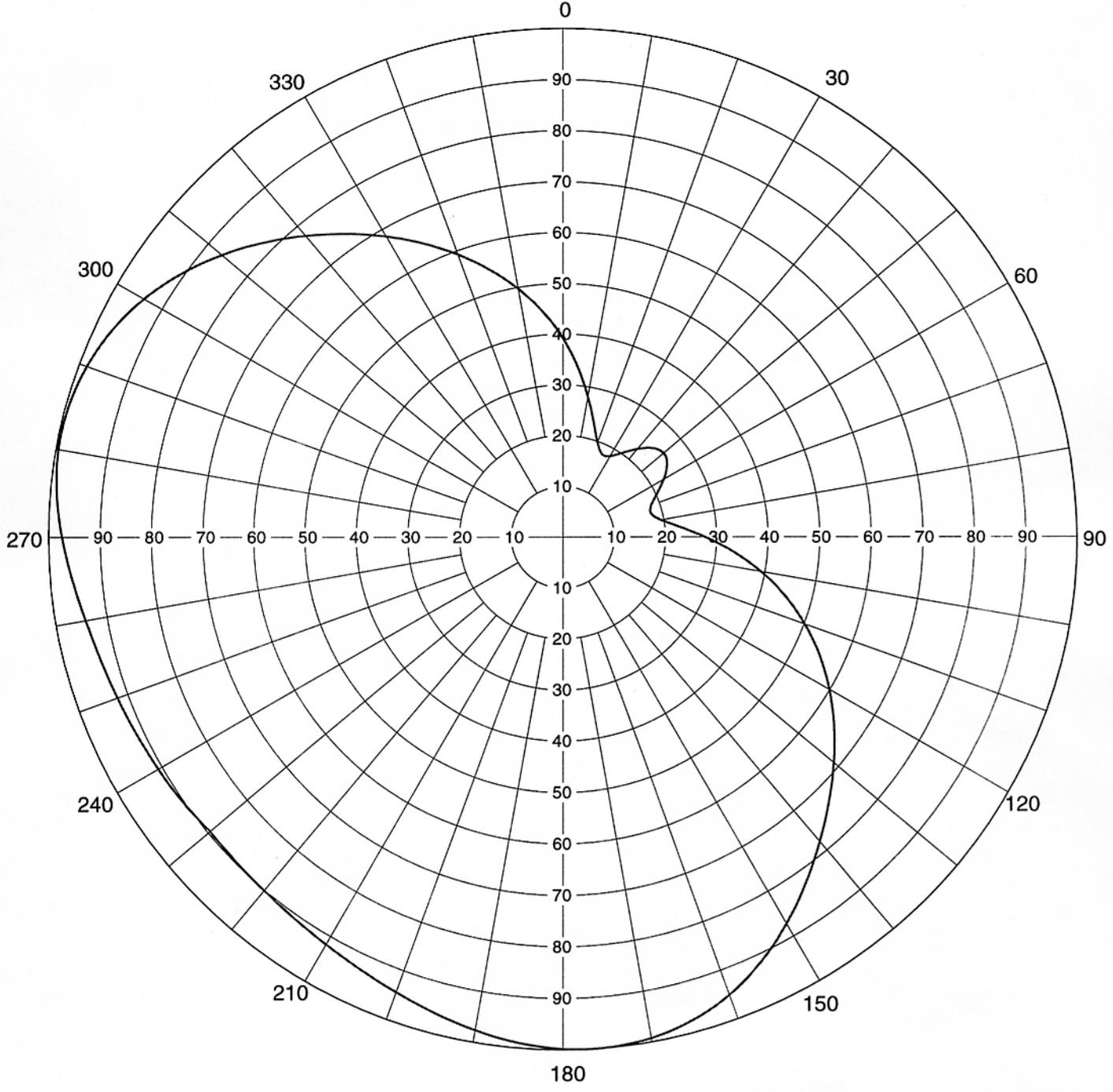
AZIMUTH PATTERN

RMS Gain at Main Lobe
Calculated / Measured

1.90 (2.79 dB)
Calculated

Frequency
Drawing #

545 MHz
DSB-M



Remarks:



December 2004

**ANTENNA THEORETICAL HORIZONTAL
PLANE RADIATION PATTERN**

Prepared for
URBANA-CHAPAIN BROADCASTING PARTNERS

STATION WCCU-DT URBANA, ILLINOIS
CH 26 507 KW (MAX-DA, BT) 114 METERS

Denny & Associates, P.C. Consulting Engineers

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing # **DSB-M**

Angle	Field	ERP (kW)	ERP (dBk)
0	0.392	77.9	18.92
10	0.280	39.7	15.99
20	0.197	19.7	12.94
30	0.184	17.2	12.35
40	0.226	25.9	14.13
50	0.257	33.5	15.25
60	0.227	26.1	14.17
70	0.183	17.0	12.30
80	0.194	19.1	12.81
90	0.278	39.2	15.93
100	0.393	78.3	18.94
110	0.502	127.8	21.06
120	0.599	181.9	22.60
130	0.688	240.0	23.80
140	0.778	306.9	24.87
150	0.873	386.4	25.87
160	0.951	458.5	26.61
170	0.993	499.9	26.99
180	0.998	505.0	27.03
190	0.976	483.0	26.84
200	0.944	451.8	26.55
210	0.918	427.3	26.31
220	0.901	411.6	26.14
230	0.895	406.1	26.09
240	0.908	418.0	26.21
250	0.921	430.1	26.34
260	0.942	449.9	26.53
270	0.974	481.0	26.82
280	0.995	501.9	27.01
290	0.985	491.9	26.92
300	0.940	448.0	26.51
310	0.865	379.4	25.79
320	0.775	304.5	24.84
330	0.684	237.2	23.75
340	0.593	178.3	22.51
350	0.497	125.2	20.98

Maxima

Angle	Field	ERP (kW)	ERP (dBk)
50	0.257	33.5	15.25
177	1.000	507.0	27.05
282	0.996	503.0	27.02

Minima

Angle	Field	ERP (kW)	ERP (dBk)
26	0.179	16.2	12.11
74	0.178	16.1	12.06
230	0.895	406.1	26.09

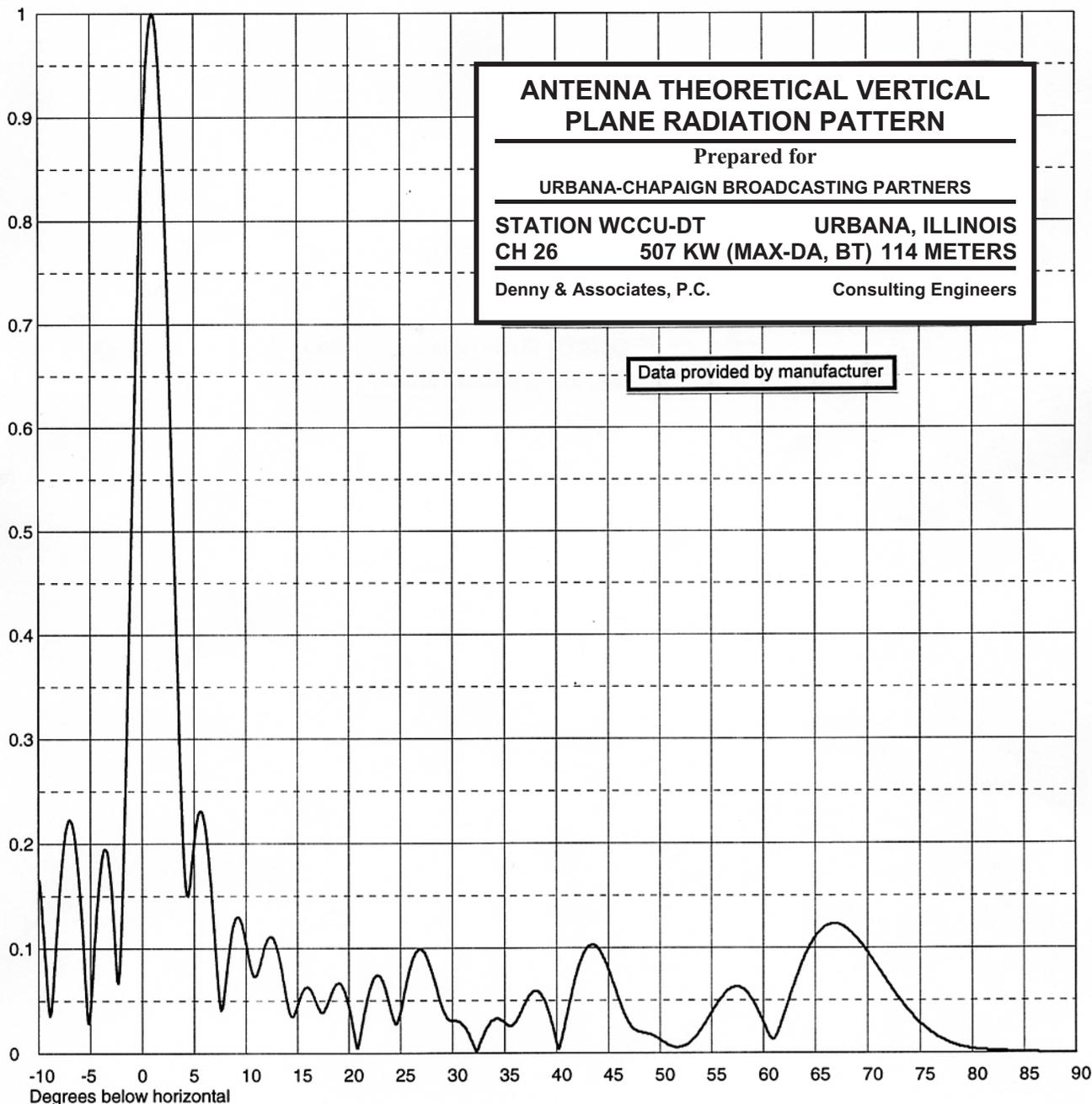
Remarks:

Dielectric

December 2004

ELEVATION PATTERN

RMS Gain at Main Lobe	16.0 (12.04 dB)	Beam Tilt	1.00 Degrees
RMS Gain at Horizontal	11.8 (10.72 dB)	Frequency	545.00 MHz
Calculated / Measured	Calculated	Drawing #	16B160100



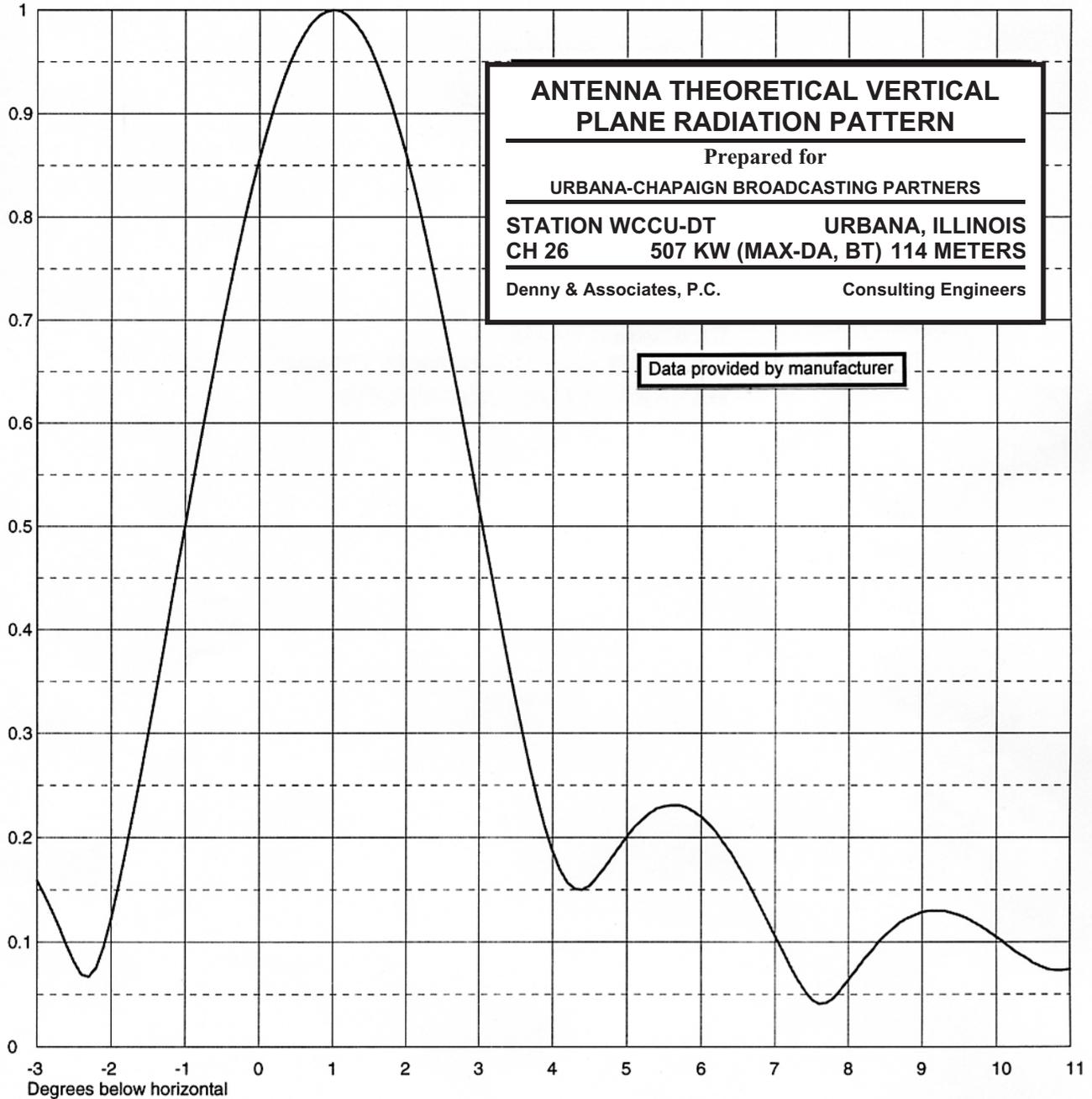
Remarks:

Dielectric

December 2004

ELEVATION PATTERN

RMS Gain at Main Lobe	16.0 (12.04 dB)	Beam Tilt	1.00 Degrees
RMS Gain at Horizontal	11.8 (10.72 dB)	Frequency	545.00 MHz
Calculated / Measured	Calculated	Drawing #	16B160100



**ANTENNA THEORETICAL VERTICAL
PLANE RADIATION PATTERN**

Prepared for
URBANA-CHAPAIN BROADCASTING PARTNERS

STATION WCCU-DT URBANA, ILLINOIS
CH 26 507 KW (MAX-DA, BT) 114 METERS

Denny & Associates, P.C. Consulting Engineers

Data provided by manufacturer

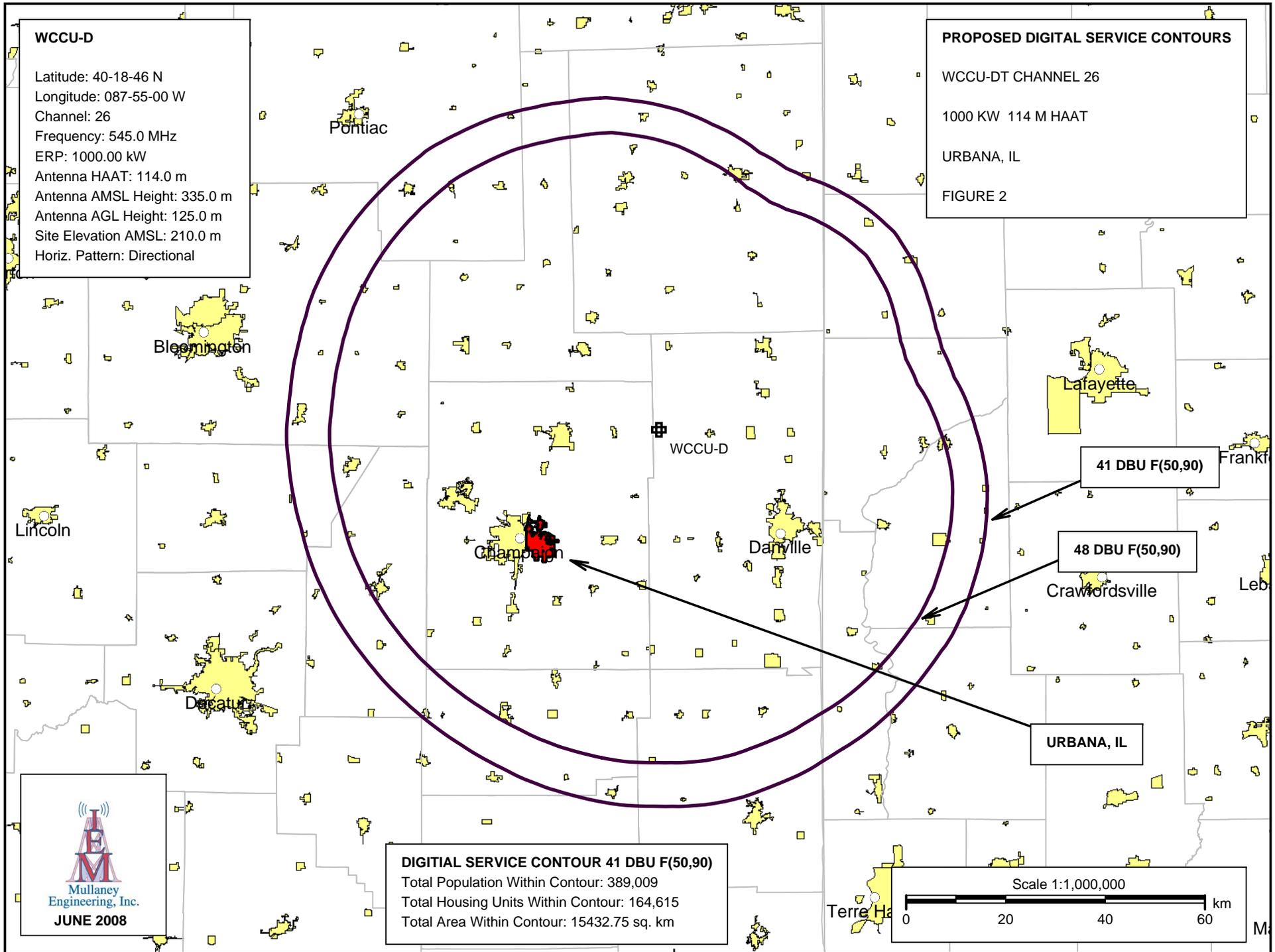
Remarks:

WCCU-D

Latitude: 40-18-46 N
Longitude: 087-55-00 W
Channel: 26
Frequency: 545.0 MHz
ERP: 1000.00 kW
Antenna HAAT: 114.0 m
Antenna AMSL Height: 335.0 m
Antenna AGL Height: 125.0 m
Site Elevation AMSL: 210.0 m
Horiz. Pattern: Directional

PROPOSED DIGITAL SERVICE CONTOURS

WCCU-DT CHANNEL 26
1000 KW 114 M HAAT
URBANA, IL
FIGURE 2



DIGITAL SERVICE CONTOUR 41 DBU F(50,90)

Total Population Within Contour: 389,009
Total Housing Units Within Contour: 164,615
Total Area Within Contour: 15432.75 sq. km

Scale 1:1,000,000



FIGURE 3 OET BULLETIN NUMBER 69 INTERFERENCE STUDY

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 06-19-2008 Time: 12:20:54

Record Selected for Analysis

WCCU-DT USERRECORD-01 URBANA_2 IL US
Channel 26 ERP 1000. kW HAAT 114. m RCAMSL 00335 m
Latitude 040-18-46 Longitude 0087-55-00
Status APP Zone 1 Border
Dir Antenna Make usr Model USRPAT01 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	153.664	109.0	65.3
45.0	58.322	110.7	60.9
90.0	77.284	123.3	63.4
135.0	537.289	117.6	72.7
180.0	996.004	112.0	75.6
225.0	806.404	115.8	74.8
270.0	948.676	107.6	74.8
315.0	672.400	115.3	73.7

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

No spacing violations found to other full service stations

LANDMOBILE SPACING VIOLATIONS FOUND

NONE

Proposed facility OK to FCC Monitoring Stations
 Proposed facility OK toward West Virginia quite zone
 Proposed facility OK toward Table Mountain
 Proposed facility is beyond the Canadian coordination distance
 Proposed facility is beyond the Mexican coordination distance
 Proposed station is OK toward AM broadcast stations

 Start of Interference Analysis

		Proposed Station		
Channel	Call	City/State	ARN	
26	WCCU-DT	URBANA_2 IL	USERRECORD01	

Stations Potentially Affected by Proposed Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
25	WEEK-TV	PEORIA IL	142.4	LIC	BDTV	-0546
25	WRTV	INDIANAPOLIS IN	152.9	LIC	BDTV	-0585
26	WLKY-TV	LOUISVILLE KY	280.8	LIC	BDTV	-0652
26	KPLR-TV	ST. LOUIS MO	283.0	LIC	BDTV	-0879
26	WBDT	SPRINGFIELD OH	318.5	LIC	BDTV	-1222
26	WKOW-TV	MADISON WI	333.2	LIC	BDTV	-1754
27	WCIU-TV	CHICAGO IL	175.7	LIC	BDTV	-0524
27	WIPX	BLOOMINGTON IN	181.9	LIC	BDTV	-0564

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
25	WEEK-TV	PEORIA IL	BDTV	-0546

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
25	KWKB	IOWA CITY IA	193.9	LIC	BDTV	-0478
25	WRTV	INDIANAPOLIS IN	295.2	LIC	BDTV	-0585
25	WCGV-TV	MILWAUKEE WI	306.0	LIC	BDTV	-1761
26	WCCU-DT	URBANA_2 IL	142.4	APP	USERRECORD-01	

Proposal causes no interference

#####

Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
25	WRTV	INDIANAPOLIS IN	BDTV	-0585

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
24	WPTA	FORT WAYNE IN	158.9	LIC	BDTV	-0574
24	WCVN-TV	COVINGTON KY	174.5	LIC	BDTV	-0639
25	WEEK-TV	PEORIA IL	295.2	LIC	BDTV	-0546
25	WCGV-TV	MILWAUKEE WI	382.5	LIC	BDTV	-1761
26	WLKY-TV	LOUISVILLE KY	173.1	LIC	BDTV	-0652
26	WBDT	SPRINGFIELD OH	167.3	LIC	BDTV	-1222
26	WCCU-DT	URBANA_2 IL	152.9	APP	USERRECORD-01	

Proposal causes no interference

#####

Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
26	WLKY-TV	LOUISVILLE KY	BDTV	-0652

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
25	WRTV	INDIANAPOLIS IN	173.1	LIC	BDTV	-0585
26	WKAS	ASHLAND KY	279.7	LIC	BDTV	-0631
26	KPLR-TV	ST. LOUIS MO	391.8	LIC	BDTV	-0879
26	WBDT	SPRINGFIELD OH	202.9	LIC	BDTV	-1222
26	WATE-TV	KNOXVILLE TN	311.5	LIC	BDTV	-1462
27	WIPX	BLOOMINGTON IN	118.3	LIC	BDTV	-0564
26	WCCU-DT	URBANA_2 IL	280.8	APP	USERRECORD-01	

Total scenarios = 2

Result key: 1
 Scenario 1 Affected station 3
 Before Analysis

Results for: 26A KY LOUISVILLE BDTV 0652 LIC
 HAAT 392.0 m, ATV ERP 600.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1702258	29731.7
not affected by terrain losses	1690271	29263.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	2247	169.5
lost to ATV IX only	2247	169.5
lost to all IX	2247	169.5

Potential Interfering Stations Included in above Scenario 1

26A KY ASHLAND	BDTV	0631	LIC
----------------	------	------	-----

26A OH SPRINGFIELD	BDTV	1222	LIC
26A TN KNOXVILLE	BDTV	1462	LIC
27A IN BLOOMINGTON	BDTV	0564	LIC

After Analysis

Results for: 26A KY LOUISVILLE	BDTV	0652	LIC
HAAT 392.0 m, ATV ERP 600.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	1702258	29731.7	
not affected by terrain losses	1690271	29263.6	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	2932	226.0	
lost to ATV IX only	2932	226.0	
lost to all IX	2932	226.0	

Potential Interfering Stations Included in above Scenario 1

26A KY ASHLAND	BDTV	0631	LIC
26A OH SPRINGFIELD	BDTV	1222	LIC
26A TN KNOXVILLE	BDTV	1462	LIC
27A IN BLOOMINGTON	BDTV	0564	LIC
26A IL URBANA_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	0652
*Percent Service lost with proposal:	0.0	to BDTV	0652

Result key: 2
Scenario 2 Affected station 3
Before Analysis

Results for: 26A KY LOUISVILLE	BDTV	0652	LIC
HAAT 392.0 m, ATV ERP 600.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	1702258	29731.7	
not affected by terrain losses	1690271	29263.6	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	2247	169.5	
lost to ATV IX only	2247	169.5	
lost to all IX	2247	169.5	

Potential Interfering Stations Included in above Scenario 2

26A KY ASHLAND	BDTV	0631	LIC
26A OH SPRINGFIELD	BDTV	1222	LIC
26A TN KNOXVILLE	BDTV	1462	LIC
27A IN BLOOMINGTON	BDTV	0564	LIC

After Analysis

Results for: 26A KY LOUISVILLE	BDTV	0652	LIC
HAAT 392.0 m, ATV ERP 600.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	1702258	29731.7	
not affected by terrain losses	1690271	29263.6	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	2932	226.0	
lost to ATV IX only	2932	226.0	
lost to all IX	2932	226.0	

Potential Interfering Stations Included in above Scenario 2

26A KY ASHLAND	BDTV	0631	LIC	
26A OH SPRINGFIELD	BDTV	1222	LIC	
26A TN KNOXVILLE	BDTV	1462	LIC	
27A IN BLOOMINGTON	BDTV	0564	LIC	
26A IL URBANA_2	USERRECORD01		APP	
*Percent Service lost without proposal:		0.0	to BDTV	0652
*Percent Service lost with proposal:		0.0	to BDTV	0652

#####

Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
26	KPLR-TV	ST. LOUIS MO	BDTV	-0879

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
26	WLKY-TV	LOUISVILLE KY	391.8	LIC	BDTV	-0652
26	WCCU-DT	URBANA_2 IL	283.0	APP	USERRECORD-01	

Total scenarios = 2

Result key: 3
Scenario 1 Affected station 4
Before Analysis

Results for: 26A MO ST. LOUIS BDTV 0879 LIC
HAAT 288.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2843935	29908.4
not affected by terrain losses	2842481	29614.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Potential Interfering Stations Included in above Scenario 1

After Analysis

Results for: 26A MO ST. LOUIS BDTV 0879 LIC
HAAT 288.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2843935	29908.4
not affected by terrain losses	2842481	29614.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1041	36.2
lost to ATV IX only	1041	36.2
lost to all IX	1041	36.2

Potential Interfering Stations Included in above Scenario 1

26A IL URBANA_2 USERRECORD01 APP
*Percent Service lost without proposal: 0.0 to BDTV 0879
*Percent Service lost with proposal: 0.0 to BDTV 0879

Result key: 4
Scenario 2 Affected station 4
Before Analysis

Results for: 26A MO ST. LOUIS BDTV 0879 LIC
HAAT 288.0 m, ATV ERP 1000.0 kW

POPULATION AREA (sq km)
within Noise Limited Contour 2843935 29908.4
not affected by terrain losses 2842481 29614.9
lost to NTSC IX 0 0.0
lost to additional IX by ATV 0 0.0
lost to ATV IX only 0 0.0
lost to all IX 0 0.0

Potential Interfering Stations Included in above Scenario 2

After Analysis

Results for: 26A MO ST. LOUIS BDTV 0879 LIC
HAAT 288.0 m, ATV ERP 1000.0 kW

POPULATION AREA (sq km)
within Noise Limited Contour 2843935 29908.4
not affected by terrain losses 2842481 29614.9
lost to NTSC IX 0 0.0
lost to additional IX by ATV 1041 36.2
lost to ATV IX only 1041 36.2
lost to all IX 1041 36.2

Potential Interfering Stations Included in above Scenario 2

26A IL URBANA_2 USERRECORD01 APP
*Percent Service lost without proposal: 0.0 to BDTV 0879
*Percent Service lost with proposal: 0.0 to BDTV 0879

#####

Analysis of Interference to Affected Station 5

Analysis of current record

Channel Call City/State Application Ref. No.
26 WBDT SPRINGFIELD OH BDTV -1222

Stations Potentially Affecting This Station

Chan Call City/State Dist(km) Status Application Ref.
No.
25 WRTV INDIANAPOLIS IN 167.3 LIC BDTV -0585
26 WKAS ASHLAND KY 198.9 LIC BDTV -0631
26 WLKY-TV LOUISVILLE KY 202.9 LIC BDTV -0652

26	WVIZ	CLEVELAND OH	278.2	LIC	BDTV	-1200
26	WATE-TV	KNOXVILLE TN	414.5	LIC	BDTV	-1462
27	WIPX	BLOOMINGTON IN	165.7	LIC	BDTV	-0564
27	WOUB-TV	ATHENS OH	186.2	LIC	BDTV	-1186
27	WBGU-TV	BOWLING GREEN OH	159.7	LIC	BDTV	-1187
26	WCCU-DT	URBANA_2 IL	318.5	APP	USERRECORD-01	

Total scenarios = 2

Result key: 5
 Scenario 1 Affected station 5
 Before Analysis

Results for: 26A OH SPRINGFIELD BDTV 1222 LIC
 HAAT 291.0 m, ATV ERP 50.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2022758	15329.2
not affected by terrain losses	2021623	15309.2
lost to NTSC IX	0	0.0
lost to additional IX by ATV	17902	132.0
lost to ATV IX only	17902	132.0
lost to all IX	17902	132.0

Potential Interfering Stations Included in above Scenario 1

26A KY ASHLAND	BDTV	0631	LIC
26A KY LOUISVILLE	BDTV	0652	LIC
26A OH CLEVELAND	BDTV	1200	LIC

After Analysis

Results for: 26A OH SPRINGFIELD BDTV 1222 LIC
 HAAT 291.0 m, ATV ERP 50.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2022758	15329.2
not affected by terrain losses	2021623	15309.2
lost to NTSC IX	0	0.0
lost to additional IX by ATV	17902	132.0
lost to ATV IX only	17902	132.0
lost to all IX	17902	132.0

Potential Interfering Stations Included in above Scenario 1

26A KY ASHLAND	BDTV	0631	LIC
26A KY LOUISVILLE	BDTV	0652	LIC
26A OH CLEVELAND	BDTV	1200	LIC
26A IL URBANA_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1222
*Percent Service lost with proposal:	0.0	to BDTV	1222

Result key: 6
 Scenario 2 Affected station 5
 Before Analysis

Results for: 26A OH SPRINGFIELD BDTV 1222 LIC
 HAAT 291.0 m, ATV ERP 50.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2022758	15329.2

not affected by terrain losses	2021623	15309.2
lost to NTSC IX	0	0.0
lost to additional IX by ATV	17902	132.0
lost to ATV IX only	17902	132.0
lost to all IX	17902	132.0

Potential Interfering Stations Included in above Scenario 2

26A KY ASHLAND	BDTV	0631	LIC
26A KY LOUISVILLE	BDTV	0652	LIC
26A OH CLEVELAND	BDTV	1200	LIC

After Analysis

Results for: 26A OH SPRINGFIELD BDTV 1222 LIC

HAAT 291.0 m, ATV ERP 50.0 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	2022758	15329.2
not affected by terrain losses	2021623	15309.2
lost to NTSC IX	0	0.0
lost to additional IX by ATV	17902	132.0
lost to ATV IX only	17902	132.0
lost to all IX	17902	132.0

Potential Interfering Stations Included in above Scenario 2

26A KY ASHLAND	BDTV	0631	LIC
26A KY LOUISVILLE	BDTV	0652	LIC
26A OH CLEVELAND	BDTV	1200	LIC
26A IL URBANA_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1222
*Percent Service lost with proposal:	0.0	to BDTV	1222

#####

Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
26	WKOW-TV	MADISON WI	BDTV	-1754

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
25	KWKB	IOWA CITY IA	210.1	LIC	BDTV	-0478
25	WCGV-TV	MILWAUKEE WI	132.4	LIC	BDTV	-1761
26	WCMU-TV	MOUNT PLEASANT MI	357.6	LIC	BDTV	-0805
26	KTCI-TV	ST. PAUL MN	362.9	LIC	BDTV	-0843
27	WCIU-TV	CHICAGO IL	203.3	LIC	BDTV	-0524
27	WACY	APPLETON WI	191.2	LIC	BDTV	-1733
26	WCCU-DT	URBANA_2 IL	333.2	APP	USERRECORD-01	

Total scenarios = 2

Result key: 7

Scenario 1 Affected station 6
 Before Analysis

Results for: 26A WI MADISON BDTV 1754 LIC
 HAAT 455.0 m, ATV ERP 400.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1477744	30672.5
not affected by terrain losses	1468804	30294.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	18477	161.1
lost to ATV IX only	18477	161.1
lost to all IX	18477	161.1

Potential Interfering Stations Included in above Scenario 1

25A WI MILWAUKEE	BDTV	1761	LIC
26A MI MOUNT PLEASANT	BDTV	0805	LIC
26A MN ST. PAUL	BDTV	0843	LIC

After Analysis

Results for: 26A WI MADISON BDTV 1754 LIC
 HAAT 455.0 m, ATV ERP 400.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1477744	30672.5
not affected by terrain losses	1468804	30294.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	18731	165.1
lost to ATV IX only	18731	165.1
lost to all IX	18731	165.1

Potential Interfering Stations Included in above Scenario 1

25A WI MILWAUKEE	BDTV	1761	LIC
26A MI MOUNT PLEASANT	BDTV	0805	LIC
26A MN ST. PAUL	BDTV	0843	LIC
26A IL URBANA_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1754
*Percent Service lost with proposal:	0.0	to BDTV	1754

Result key: 8
 Scenario 2 Affected station 6
 Before Analysis

Results for: 26A WI MADISON BDTV 1754 LIC
 HAAT 455.0 m, ATV ERP 400.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1477744	30672.5
not affected by terrain losses	1468804	30294.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	18477	161.1
lost to ATV IX only	18477	161.1
lost to all IX	18477	161.1

Potential Interfering Stations Included in above Scenario 2

25A WI MILWAUKEE	BDTV	1761	LIC
26A MI MOUNT PLEASANT	BDTV	0805	LIC
26A MN ST. PAUL	BDTV	0843	LIC

After Analysis

Results for: 26A WI MADISON BDTV 1754 LIC
 HAAT 455.0 m, ATV ERP 400.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1477744	30672.5
not affected by terrain losses	1468804	30294.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	18731	165.1
lost to ATV IX only	18731	165.1
lost to all IX	18731	165.1

Potential Interfering Stations Included in above Scenario 2

25A WI MILWAUKEE	BDTV	1761	LIC
26A MI MOUNT PLEASANT	BDTV	0805	LIC
26A MN ST. PAUL	BDTV	0843	LIC
26A IL URBANA_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1754
*Percent Service lost with proposal:	0.0	to BDTV	1754

#####

Analysis of Interference to Affected Station 7

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
27	WCIU-TV	CHICAGO IL	BDTV	-0524

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
26	WKOW-TV	MADISON WI	203.3	LIC	BDTV	-1754
27	KFXA	CEDAR RAPIDS IA	368.4	LIC	BDTV	-0463
27	WIPX	BLOOMINGTON IN	302.5	LIC	BDTV	-0564
27	WBGU-TV	BOWLING GREEN OH	321.2	LIC	BDTV	-1187
27	WACY	APPLETON WI	277.0	LIC	BDTV	-1733
28	WYZZ-TV	BLOOMINGTON IL	188.2	LIC	BDTV	-0515
28	WSJV	ELKHART IN	123.1	LIC	BDTV	-0567
28	WTMJ-TV	MILWAUKEE WI	136.5	LIC	BDTV	-1762
26	WCCU-DT	URBANA_2 IL	175.7	APP	USERRECORD-01	

Proposal causes no interference

#####

Analysis of Interference to Affected Station 8

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
27	WIPX	BLOOMINGTON IN	BDTV	-0564

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
26	WLKY-TV	LOUISVILLE KY	118.3	LIC	BDTV	-0652
26	WBDT	SPRINGFIELD OH	165.7	LIC	BDTV	-1222
27	WCIU-TV	CHICAGO IL	302.5	LIC	BDTV	-0524
27	WOUB-TV	ATHENS OH	343.4	LIC	BDTV	-1186
27	WBGU-TV	BOWLING GREEN OH	270.3	LIC	BDTV	-1187
27	WKRN-TV	NASHVILLE TN	378.0	LIC	BDTV	-1483
28	WTVW	EVANSVILLE IN	186.3	LIC	BDTV	-0570
28	WPTO	OXFORD OH	140.9	LIC	BDTV	-1217
26	WCCU-DT	URBANA_2 IL	181.9	APP	USERRECORD-01	

Proposal causes no interference

#####

Analysis of Interference to Affected Station 9

Analysis of current record

Channel	Call	City/State	Application Ref.	No.
26	WCCU-DT	URBANA_2 IL	USERRECORD-01	

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
25	WEEK-TV	PEORIA IL	142.4	LIC	BDTV	-0546
25	WRTV	INDIANAPOLIS IN	152.9	LIC	BDTV	-0585
26	WLKY-TV	LOUISVILLE KY	280.8	LIC	BDTV	-0652
26	KPLR-TV	ST. LOUIS MO	283.0	LIC	BDTV	-0879
26	WBDT	SPRINGFIELD OH	318.5	LIC	BDTV	-1222
26	WKOW-TV	MADISON WI	333.2	LIC	BDTV	-1754
27	WCIU-TV	CHICAGO IL	175.7	LIC	BDTV	-0524
27	WIPX	BLOOMINGTON IN	181.9	LIC	BDTV	-0564

Total scenarios = 1

Result key: 9
Scenario 1 Affected station 9
Before Analysis

Results for: 26A IL URBANA_2 USERRECORD01 APP

	POPULATION	AREA (sq km)
HAAT 114.0 m, ATV ERP 1000.0 kW		
within Noise Limited Contour	396626	16086.1
not affected by terrain losses	395259	16066.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Potential Interfering Stations Included in above Scenario 1

#####

FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED