EXHIBIT E

ENGINEERING STATEMENT
RE DTV BROADCAST ENGINEERING DATA
APPLICATION TO INCREASE EFFECTIVE RADIATED POWER
ON BEHALF OF
NVT YOUNGSTOWN LICENSEE, LLC
WKBN-TV, YOUNGSTOWN, OHIO
CHANNEL 41 650 KW ND ERP 440 METERS HAAT

JULY 2010

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President, Secretary and Treasurer of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 29th day of July, 2010.

Notary Public

My Commission Expires: 2/28/2013

This engineering statement has been prepared in support of an application to increase effective radiated power on behalf of NVT Youngstown Licensee, LLC, licensee of WKBN-TV, Youngstown, Ohio. The purpose of the application is to specify the identical antenna transmission line and other passive R-F equipment as now licensed. No other changes are required.

This application seeks to increase the current license operation from 570 kW to 650 kW non-directional on Channel 41 at an HAAT of 440 meters.

WKBN-TV was licensed to operate on NTSC television Channel 27 with a maximum visual ERP of 5000 kW and an antenna height above average terrain ("HAAT") of 439 meters (1440 feet). WKBN-TV was allocated DTV Channel 41 with facilities of 700 kW directional and HAAT of 418 meters in the revised DTV Table of Allotments.[1] WKBN-TV proposes to construct and operate DTV facilities of 650 kW non-directional at a HAAT of 440 meters. No other changes are required.

Allocation

An allocation study from the proposed transmitter site has not been performed as there is no change in site from that now authorized.

There are no AM stations located within 3.2 km of the existing WKBN-TV tower site. In addition to WKBN-TV, there are two FM stations and there is one low-power TV facility authorized within 100 meters.

[1] "In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service", MM Docket 87-268, Memorandum Opinion and Order on Reconsideration of the Seventh Report and Order and Eighth Report and Order (FCC 08-72) Appendix B, Released March 6, 2008.

The DTV antenna as described earlier is top-mounted on the existing tower. The WKBN-TV antenna will be located on an existing tower having a total overall structure height above ground of 432.6 meters (1419.3 feet). The existing transmitter site is located at 3930 Sunset Boulevard (Youngstown 1433). The registration number for the tower is 1013678.

Exhibit E-1 is a vertical sketch of the existing tower and the existing transmitting antenna.

The geographic coordinates of the proposed site are as follows:

North Latitude: 41º 03' 23.2"

West Longitude: 80º 38' 43.7"

NAD-27

Equipment Data
(Existing-No Change)

Antenna:	Dielectric, Model TFU-23JTH-RO4 antenna with 0.75° electrical beam tilt. The vertical plane pattern and other exhibits required by Section 73.625(c) are herein included as Exhibit E-2.
Transmission Line:	514.2 meters (1687 ft) of Dielectric, Type EIA rigid TL, 6-1/8", 75 ohm or equivalent

Power Data

Transmitter output including filters	47.8 kW	16.8 dBk
Transmission line efficiency/loss	61.8 %	2.09 dB
Input power to the antenna	29.55 kW	14.71 dBk
Antenna power gain, Main Lobe	22	13.42 dB

Effective Radiated Power, Maximum	650 kW	28.13 dBk

Elevation Data
(No Change)

Vertical dimension for Channel 41 antenna	12.9 meters 42.4 feet
Overall height above ground of the existing antenna structure (including beacon and lightning rod)	432.6 meters 1419.3 feet
Center of radiation of Channel 41 antenna above ground	425.5 meters 1396 feet
Elevation of site above mean sea level	336.8 meters 1105 feet
Center of radiation of Channel 41 antenna above mean sea level	762.3 meters 2501 feet
Overall height above mean sea level of existing tower and top-mounted antenna (including beacon and lighting rod)	769.4 meters 2524.3 feet
Antenna height above average terrain	440 meters 1443.6 feet

Note: Slight height differences may result due to conversion to metric.

Interference Analysis

A study of predicted interference by the proposed WKBN-TV service has been performed using a version of the Longley-Rice program as described in OET Bulletin No. 69 (July 2, 1997) and the Public Notice, "Additional Application Processing Guidelines for Digital Television (DTV)" (August 1998). The FCC's FORTRAN-77 code was modified only to the extent necessary

(primarily input/output handling) for the program to run on a WindowsXP platform. Comparison of service/interference areas and populations indicates that this model closely matches the FCC's evaluation program. Best efforts have been made to use data and calculations identical to the FCC's program. Any slight differences are attributable to compiler, operating system and/or processor characteristics. The effect of any variance in calculated population values versus the FCC's program is minimized when differencing a given model's results, e.g., new interference equals total interference less baseline interference. The effect is further reduced for ratios of calculated population values, e.g., incremental population affected as a percent of total population served. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of approximately 4 km^2 using 3-second terrain data sampled approximately every 2 km at one degree azimuth intervals with 2000 census centroids. Table I provides a summary of those results.

Coverage

The average elevation data for 3.2 to 16.1 km along each radial are based upon the 3-second NGDC profile data.

The F(50,90) DTV coverage contour has been computed every 45 degrees in azimuth from true north in conjunction with the propagation data for Channels 14-69, as published by the FCC in Figure 10b and Figure 10c, Section 73.699 of the FCC Rules and Regulations.

Utilizing the formula in Section 73.625(b)(2) of the Rules for the effective heights, it is found that the depression angle, A_h, varies from 0.564 to 0.592 degrees. Since the relative vertical field is greater than 90% of the maximum at these depression angles, the maximum power was used in determining the distance to the DTV contour.

Table II includes the distances to the 48 and 41 dBu F(50,90) coverage contours, the average elevation 3.2 to 16.1 km, and the antenna height above average terrain for each of the cardinal radials spaced every 45º starting with True North. Exhibit E-3 provides the 48 and 41 dBu F(50,90) coverage contours and demonstrates that the community of license is covered by the F(50,90) 48 dBu contour.

Total Radiofrequency Field Levels at WKBN-TV Tower Site

As noted above in addition to WKBN-TV, there are two FM stations, WYSU(FM) and WMXY(FM) and one low power television translator statio WYLX-LP.

The total percentage of radiofrequency field levels ("RFF") can be calculated by combining the percentage contribution of each station.

Station	ERP (kW)	Frequency (MHz)	Ch	RCAGL (m)	Relative Field	S ($\mu W/cm^2$)	RFF (%)
WKBN-TV Proposed	650	632-638	41	425.5	0.1[2]	1.2	<1
WYSU(FM) (CP)	50	88.5	203	100	0.25 (H&V)	21.7	10.9
WMXY(FM) Lic	5.9	98.9	255	413	0.25[3] (H&V)	<1	<1
WYFX-LP	25	761	62	217	0.25[4]	1.12	<1

[2]Elevation from 10º to 90º

[3]Assumed

[4]Ibid.

For DTV operation, WKBN-TV proposes to use the existing installed Dielectric, Type TFU-23JTH-RO4. The elevation pattern for this antenna shows a maximum relative field of less than 0.1 towards the ground (elevation 10-90º) in the vicinity of the tower. Using this relative field factor and the procedures prescribed in OET Bulletin 65, the maximum RFF resulting from the proposed operation is less than 2 $\mu W/cm^2$. This is less than one percent of the 423.3 $\mu W/cm^2$ maximum human exposure to RFF recommended by the current FCC guidelines for the uncontrolled/general population.

The total contribution by the proposed WKBN-TV broadcast facilities and the addition of the two FMs and one TV translator operations at 2 meters above ground level is less than 15% of the current FCC guidelines for uncontrolled/general population exposure.

Authorized personnel and rigging contractors will be alerted to the potential zone of high field level on the tower, and if necessary, the station will operate with reduced power or terminate the operation of the transmitter as appropriate when it is necessary for authorized personnel or contractors to perform work on the tower. Workers and the general public, therefore, will not be subjected to RFF levels in excess of the current FCC guidelines.

Environmental Assessment

An environmental assessment ("EA") is categorically excluded under Section 1.1306 of the FCC Rules and Regulations as the tower was constructed prior to the requirements specified in WT Docket No. 03-128 and the licensee indicates:

(a)(1) The existing tower is not located in an officially designated wilderness area.

(a)(2) The existing tower is not located in an officially designated wildlife preserve.

(a)(3) The proposed facilities will not affect any listed threatened or endangered species or habitats.

(a)(3)(ii) The proposed facilities will not jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats.

(a)(4) The proposed facilities located on a tower which was built prior to the adoption of WT Docket No. 03-128 and is grandfathered and has not affected any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.

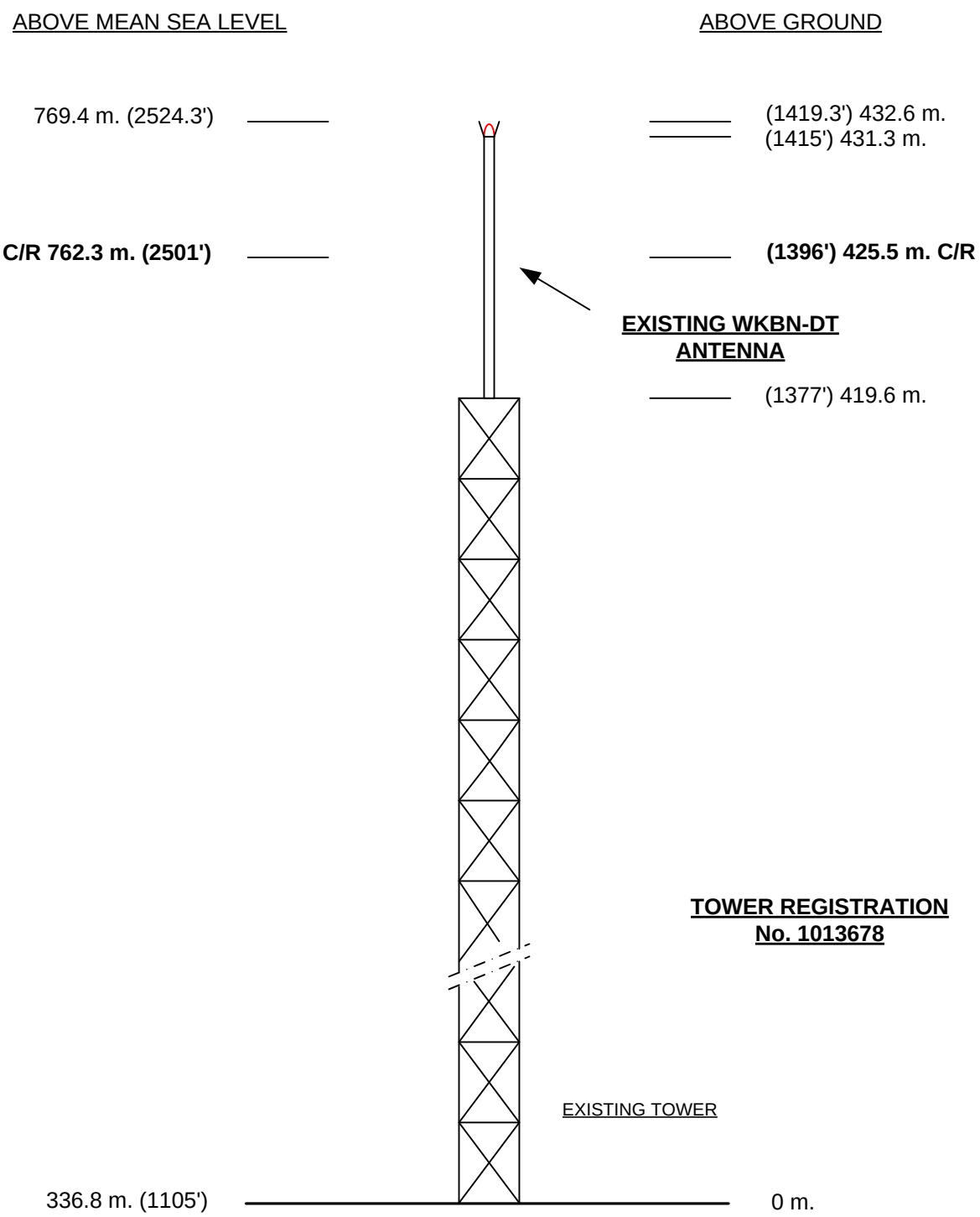
(a)(5) The existing tower is not located near any known Indian religious sites.

(a)(6) The existing tower is not located in a flood plain.

(a)(7) The operation of the existing DTV RF system on an existing guyed tower will not involve a significant change in surface features of the ground in the vicinity of the tower.

(a)(8) It is not proposed to change the current lighting unless required by the FAA.

(b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines contained in OET Bulletin No. 65, Edition 97-01, dated August 1997 and Supplement A.



(NOT TO SCALE)

EXHIBIT E - 1
VERTICAL SKETCH
FOR THE PROPOSED OPERATION OF
WKBN-TV, YOUNGSTOWN, OHIO
JULY 2010

COHEN, DIPPELL AND EVERIST, P.C. Consulting Engineers Washington, D.C.

COHEN, DIPPELL AND EVERIST, P.C.

EXHIBIT E-2

ANTENNA MANUFACTURER DATA

WKBN-TV, YOUNGSTOWN, OHIO

Dielectric

Proposal #: **DCA-11110-2** Antenna Type: **TFU-23JTH-R O4** Channel: **41 DTV**

Call Letters: **WKBN-DT** Location: **Youngstown, OH**

Electrical Specifications		**Value** Ratio	dB	**Remarks**
RMS Gain at Main Lobe over Halfwave Dipole	Hpol	22.0	13.42	
	Vpol			
RMS Gain at Horizontal over Halfwave Dipole	Hpol	16.4	12.15	
	Vpol			
Peak Directional Gain over Halfwave Dipole	Hpol			
	Vpol			
Peak Directional Gain at Horizontal over Halfwave Dipole	Hpol			
	Vpol			
Circularity		+/- 2.0 dB		
Axial Ratio		dB		
Beam Tilt		0.75 deg		
Average Power DTV		38 kW	15.80 dBk	
Antenna Input: T/L		6 1/8 in	75.0 ohm	Type: EIA/DCA
Maximum Antenna Input VSWR		Channel	1.08 : 1	
Patterns	Azimuth	TFU-O4		
	Elevation	23J220075	23J220075-90	

Mechanical Specifications		**Metric**	**English**		**Side Mounted**
Height with Lightning Protector	H4	12.9 m	42.4 ft		
Height Less Lightning Protector	H2	11.7 m	38.4 ft		38.4 ft
Height of Center of Radiation	H3	5.9 m	19.2 ft		
Basic Wind Speed	V	128.7 km/h	80 mi/h	TIA/EIA-222-F.	
Force Coeff. x Projected Area	CaAc	3.53 m²	38.0 ft²	Above base flange	74.1 ft²
Moment Arm	D1	6.5 m	21.3 ft	Above base flange	Exclude Mounts
Force Coeff. x Projected Area	CaAc	m²	ft²		
Moment Arm	D3	m	ft		
Pole Bury Length	D2	m	ft		
Weight	W	1.5 t	3,200 lbs		3,100 lbs
Radome					Exclude Mounts

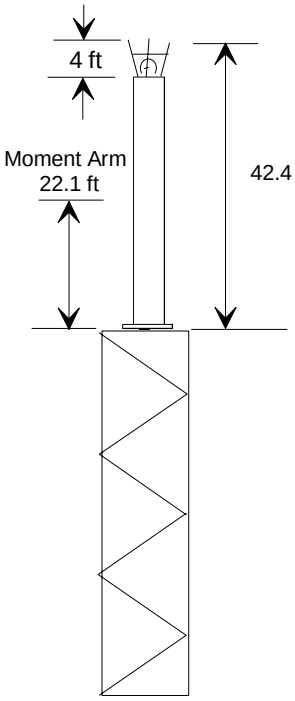
Antenna designed in accordance with AISC specifications for design of structural steel for building as prescribed by TIA/EIA-222-F.

NOTE:

Prepared By : SWB Approved By : JLS

Original Date : 5-Aug-05 **Revision: 2** **Rev. Date: 21-Nov-05** **SWB**

DTV ANTENNA CONFIGURATION
TFU-23JTH-R O4
WKBN-DT : Youngstown, OH



CH d41
TFU-23JTH-R O4

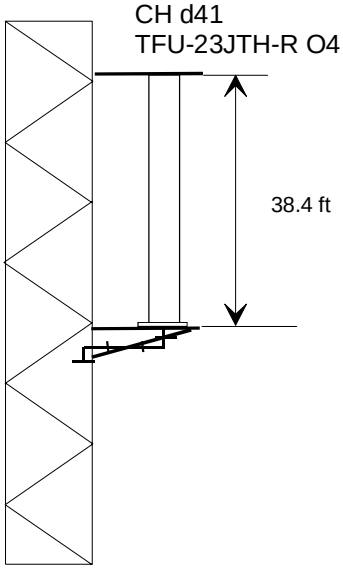
TOP MOUNTED MECHANICAL DATA

CaAc = 38 ft²

D1 = 21.3 ft

Weight = 3,200 lbs

EIA-222-F Specification
(80 mph basic wind speed)



SIDE MOUNTED MECHANICAL DATA

CaAc =74.1 ft² Exclude Mounts

Weight = 3,100 lbs Exclude Mounts

EIA-222-F Specification
(80 mph basic wind speed)

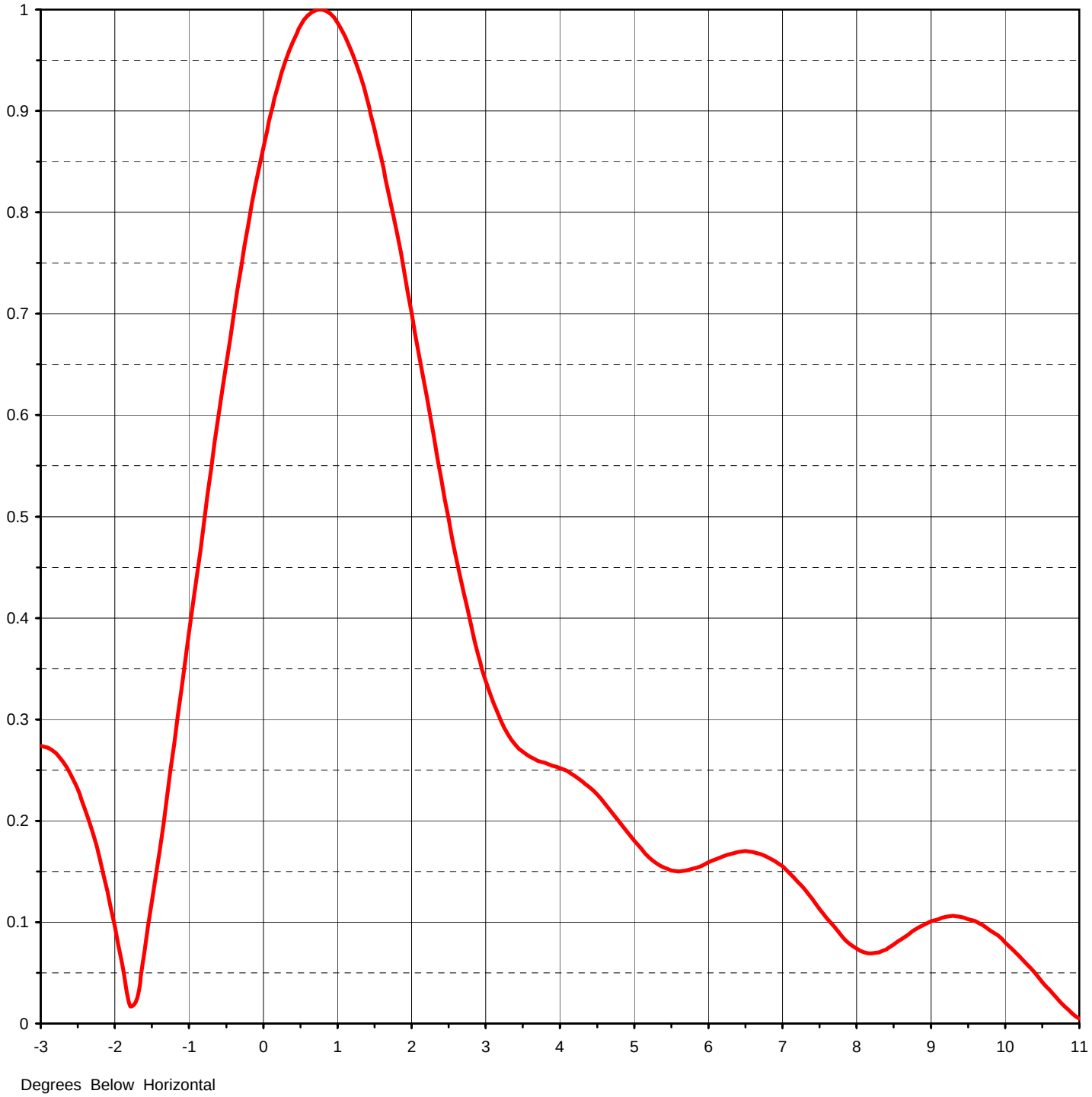
SWB-051121-02SK

NOT DRAWN TO SCALE

Proposal Number	**DCA-11110**	Revision:	**2**
Date	**21-Nov-05**		
Call Letters	**WKBN-DT**	Channel	**41**
Location	**Youngstown, OH**		
Customer			
Antenna Type	**TFU-23JTH-R O4**		

ELEVATION PATTERN

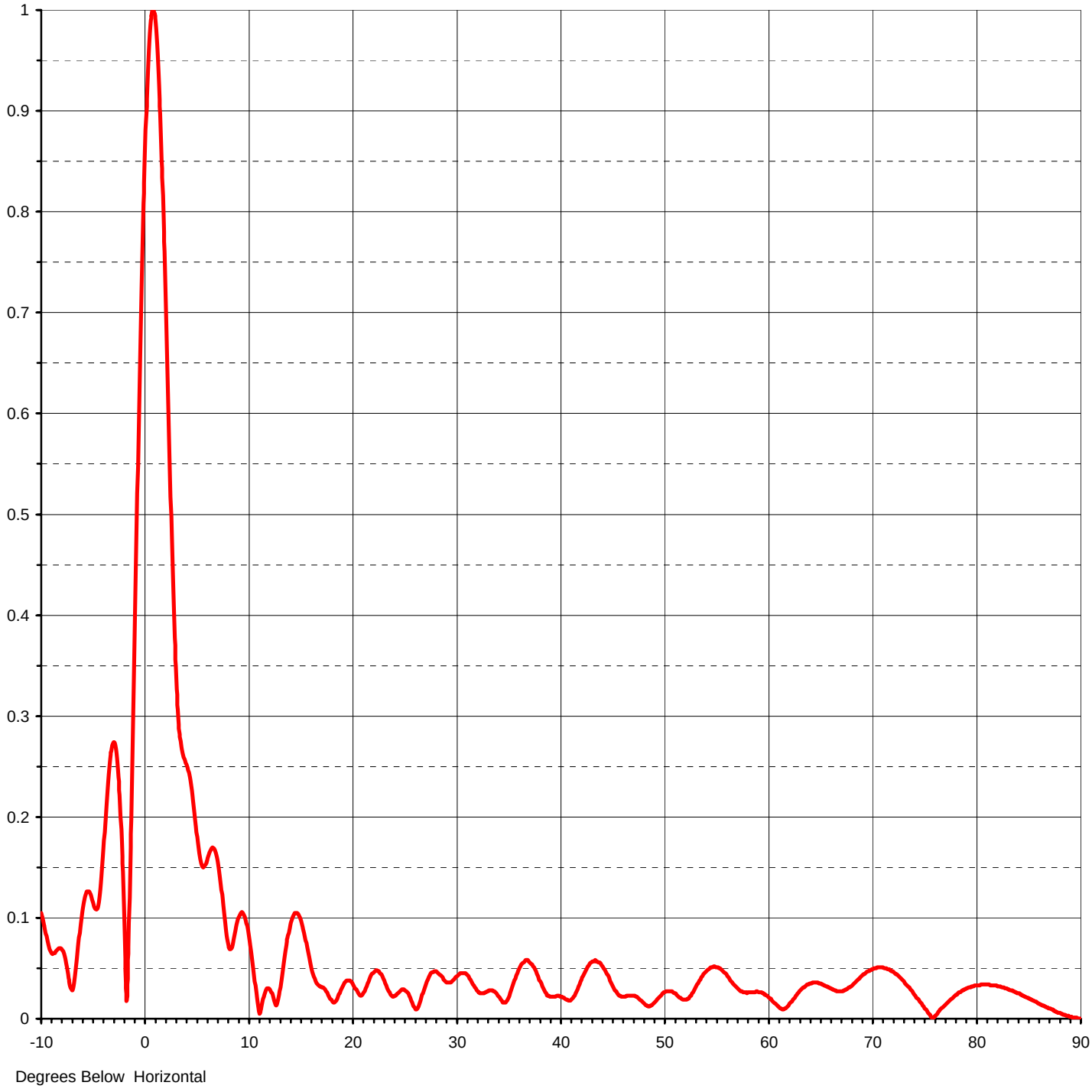
RMS Gain at Main Lobe	**22.00**	**(13.42 dB)**	
RMS Gain at Horizontal	**16.40**	**(12.15 dB)**	
Calculated / Measured	**Calculated**		
Beam Tilt	**0.75 deg**		
Frequency	**635.00 MHz**		
Drawing #	**23J220075**		



Proposal Number	**DCA-11110**	Revision:	**2**
Date	**21-Nov-05**		
Call Letters	**WKBN-DT**	Channel	**41**
Location	**Youngstown, OH**		
Customer			
Antenna Type	**TFU-23JTH-R O4**		

ELEVATION PATTERN

RMS Gain at Main Lobe	**22.00 (13.42 dB)**	Beam Tilt	**0.75 deg**
RMS Gain at Horizontal	**16.40 (12.15 dB)**	Frequency	**635.00 MHz**
Calculated / Measured	**Calculated**	Drawing #	**23J220075-90**



Dielectric

Proposal Number **DCA-11110** Revision: **2**
Date **21-Nov-05**
Call Letters **WKBN-DT** Channel **41**
Location **Youngstown, OH**
Customer
Antenna Type **TFU-23JTH-R O4**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **23J220075-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.105	2.4	0.537	10.6	0.041	30.5	0.045	51.0	0.025	71.5	0.049
-9.5	0.082	2.6	0.460	10.8	0.025	31.0	0.044	51.5	0.021	72.0	0.046
-9.0	0.065	2.8	0.393	11.0	0.010	31.5	0.037	52.0	0.019	72.5	0.042
-8.5	0.068	3.0	0.338	11.5	0.022	32.0	0.028	52.5	0.022	73.0	0.037
-8.0	0.069	3.2	0.299	12.0	0.030	32.5	0.025	53.0	0.030	73.5	0.031
-7.5	0.050	3.4	0.275	12.5	0.018	33.0	0.027	53.5	0.039	74.0	0.024
-7.0	0.028	3.6	0.263	13.0	0.024	33.5	0.028	54.0	0.046	74.5	0.017
-6.5	0.066	3.8	0.257	13.5	0.060	34.0	0.024	54.5	0.051	75.0	0.010
-6.0	0.109	4.0	0.252	14.0	0.090	34.5	0.016	55.0	0.051	75.5	0.004
-5.5	0.126	4.2	0.244	14.5	0.105	35.0	0.020	55.5	0.049	76.0	0.003
-5.0	0.115	4.4	0.233	15.0	0.100	35.5	0.034	56.0	0.044	76.5	0.009
-4.5	0.113	4.6	0.217	15.5	0.080	36.0	0.048	56.5	0.037	77.0	0.014
-4.0	0.169	4.8	0.199	16.0	0.055	36.5	0.056	57.0	0.031	77.5	0.019
-3.5	0.242	5.0	0.180	16.5	0.037	37.0	0.057	57.5	0.027	78.0	0.024
-3.0	0.274	5.2	0.164	17.0	0.032	37.5	0.051	58.0	0.025	78.5	0.027
-2.8	0.267	5.4	0.154	17.5	0.027	38.0	0.039	58.5	0.026	79.0	0.030
-2.6	0.246	5.6	0.150	18.0	0.019	38.5	0.028	59.0	0.027	79.5	0.032
-2.4	0.211	5.8	0.153	18.5	0.018	39.0	0.022	59.5	0.025	80.0	0.033
-2.2	0.161	6.0	0.159	19.0	0.030	39.5	0.022	60.0	0.022	80.5	0.034
-2.0	0.096	6.2	0.165	19.5	0.038	40.0	0.022	60.5	0.017	81.0	0.034
-1.8	0.018	6.4	0.169	20.0	0.036	40.5	0.020	61.0	0.012	81.5	0.033
-1.6	0.071	6.6	0.169	20.5	0.027	41.0	0.018	61.5	0.009	82.0	0.032
-1.4	0.170	6.8	0.164	21.0	0.024	41.5	0.025	62.0	0.013	82.5	0.031
-1.2	0.276	7.0	0.155	21.5	0.035	42.0	0.037	62.5	0.020	83.0	0.029
-1.0	0.385	7.2	0.140	22.0	0.045	42.5	0.048	63.0	0.026	83.5	0.027
-0.8	0.494	7.4	0.123	22.5	0.047	43.0	0.056	63.5	0.031	84.0	0.025
-0.6	0.600	7.6	0.104	23.0	0.040	43.5	0.057	64.0	0.035	84.5	0.023
-0.4	0.699	7.8	0.086	23.5	0.028	44.0	0.053	64.5	0.036	85.0	0.020
-0.2	0.788	8.0	0.074	24.0	0.022	44.5	0.045	65.0	0.035	85.5	0.018
0.0	0.864	8.2	0.069	24.5	0.026	45.0	0.034	65.5	0.032	86.0	0.015
0.2	0.925	8.4	0.073	25.0	0.029	45.5	0.025	66.0	0.030	86.5	0.012
0.4	0.969	8.6	0.083	25.5	0.023	46.0	0.022	66.5	0.027	87.0	0.010
0.6	0.994	8.8	0.093	26.0	0.011	46.5	0.023	67.0	0.027	87.5	0.008
0.8	1.000	9.0	0.101	26.5	0.015	47.0	0.023	67.5	0.029	88.0	0.006
1.0	0.987	9.2	0.105	27.0	0.031	47.5	0.021	68.0	0.033	88.5	0.004
1.2	0.957	9.4	0.105	27.5	0.043	48.0	0.016	68.5	0.038	89.0	0.002
1.4	0.911	9.6	0.101	28.0	0.047	48.5	0.012	69.0	0.043	89.5	0.001
1.6	0.851	9.8	0.097	28.5	0.043	49.0	0.015	69.5	0.047	90.0	0.000
1.8	0.780	10.0	0.087	29.0	0.037	49.5	0.021	70.0	0.049		
2.0	0.701	10.2	0.073	29.5	0.036	50.0	0.026	70.5	0.051		
2.2	0.619	10.4	0.058	30.0	0.041	50.5	0.027	71.0	0.051		

COHEN, DIPPELL AND EVERIST, P.C.

TABLE I
LONGLEY-RICE INTERFERENCE ANALYSIS
FOR THE PROPOSED OPERATION OF
WKBN-TV, YOUNGSTOWN, OHIO
CHANNEL 41 650 KW ND ERP 440 METERS
JULY 2010

Channel	Call	City/State	Dist(km)	Status	FCC File No.	Result
26	WMVH-CA	CHARLEROI PA	121.5	LIC	BLTTL-19980727JG	No interference
40	WHIZ-TV	ZANESVILLE OH	169	CP MO	BMPCDT-20071022BPE	No interference
40	WHIZ-TV	ZANESVILLE OH	169	PLN	DTVPLN-DTVPLN61216	No interference
40	WMVH-CA	CHARLEROI PA	121.5	APP	BDISDTA-20090713ADO	No interference
41	WUTB	BALTIMORE MD	384.1	CP	BPCDT-20080619AJG	No interference
41	WUTB	BALTIMORE MD	384.1	PLN	DTVPLN-DTVPLN60552	No interference
41	WXYZ-TV	DETROIT MI	267.1	CP MO	BMPCDT-20080618ABH	No interference
41	WXYZ-TV	DETROIT MI	267.1	PLN	DTVPLN-DTVPLN10267	0.00%
41	WXYZ-TV	DETROIT MI	267.1	LIC	BLCDT-20030325ABI	No interference
41	WHIO-TV	DAYTON OH	338.5	CP	BPCDT-20080619ACK	-0.22%
41	WHIO-TV	DAYTON OH	338.5	PLN	DTVPLN-DTVPLN41458	0.00%
41	WHIO-TV	DAYTON OH	338.5	LIC	BLCDT-20040614AEY	0.00%
41	CIII-PT-	TORONTO ON	305.4	AL	CANADA-1344574NULL	0.00%
41	CIIITV41	TORONTO ON	305.4	LIC	NULL-304772NULL	-0.05%
41	CIII-TV-	TORONTO ON	305.4	GRANT	BPFS-20081205AEN	0.00%
41	CIII-TV-	TORONTO ON	305.4	OP	CANADA-3718	0.00%
41	WVIA-TV	SCRANTON PA	400	APP	BPEDT-20090721AAG	No interference
41	WVIA-TV	SCRANTON PA	400	CP	BPEDT-20080619ADK	No interference
41	WVIA-TV	SCRANTON PA	400	PLN	DTVPLN-DTVPLN47929	No interference
41	WVIA-TV	SCRANTON PA	400	LIC	BLEDT-20010109AAP	No interference
41	WCHS-TV	CHARLESTON WV	313.4	PLN	DTVPLN-DTVPLN71280	-0.10%
41	WCHS-TV	CHARLESTON WV	313.4	LIC	BLCDT-20050621AAQ	-0.10%
42	WXCB-CD	DELAWARE OH	218.9	CP	BDFCDTA-20080804AAX	No interference
42	WXCB-CD	DELAWARE OH	218.9	LIC	BLDTA-20090511AQS	No interference
42	WGGN-TV	SANDUSKY OH	151.3	CP MO	BMPCDT-20081024AER	No interference
42	WGGN-TV	SANDUSKY OH	183.4	PLN	DTVPLN-DTVPLN11027	No interference
42	CBLN-PT-	CHATHAM ON	195.4	AL	CANADA-1343349NULL	No interference
42	CBLN-TV-	CHATHAM ON	195.4	GRANT	BPFS-20081201AUR	No interference
42		NORMANDALE ON	187.9	APP	BPFS-1051343NULL	No interference

COHEN, DIPPELL AND EVERIST, P.C.

TABLE I
LONGLEY-RICE INTERFERENCE ANALYSIS
FOR THE PROPOSED OPERATION OF
WKBN-TV, YOUNGSTOWN, OHIO
CHANNEL 41 650 KW ND ERP 440 METERS
JULY 2010

Channel	Call	City/State	Dist(km)	Status	FCC File No.	Result
42	CBLN-PT-	NORMANDALE ON	187.9	AL	CANADA-1343874NULL	No interference
42	CBLN-TV-	NORMANDALE ON	187.9	GRANT	BPFS-20081203AEB	No interference
42	WPMY	PITTSBURGH PA	82.5	PLN	DTVPLN-DTVPLN73907	-0.05%
42	WPMY	PITTSBURGH PA	82.5	LIC	BLCDT-20060608AAB	-0.04%
49	WLLS-LP	INDIANA PA	129.5	LIC	BLTTL-19961230JA	No interference

COHEN, DIPPELL AND EVERIST, P.C.

TABLE II
COMPUTED COVERAGE DATA
FOR THE PROPOSED DTV OPERATION OF
WKBN-TV, YOUNGSTOWN, OHIO
CHANNEL 41 650 KW 440 METERS HAAT
JULY 2010

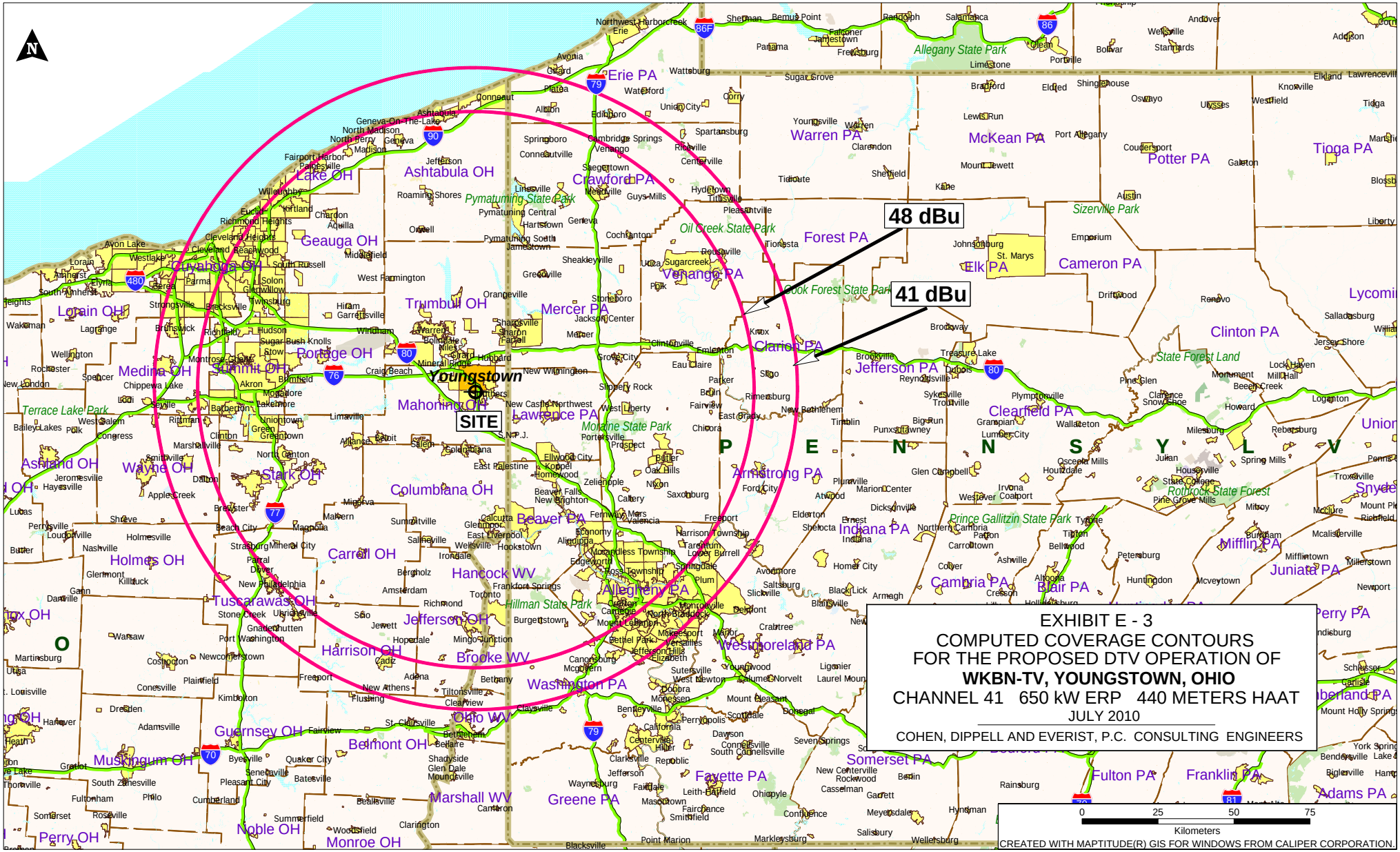
Radial Bearing N ° E, T	Average* Elevation 3.2 to 16.1 km meters	Effective Height meters	Depression Angle	ERP At Radio Horizon kW	Distance to Contour F(50,90) 48 dBu City Grade km	41 dBu Noise-Limited km
0	311.2	451.1	0.588	650	92.0	106.3
45	319.7	442.6	0.583	650	91.5	105.6
90	317.8	444.5	0.584	650	91.6	105.7
135	351.0	411.3	0.562	650	89.8	102.9
180	335.2	427.1	0.572	650	90.7	104.2
225	338.8	423.5	0.570	650	90.5	103.9
270	318.3	444.0	0.584	650	91.6	105.7
315	307.7	454.6	0.591	650	92.2	106.6
Average	325	440				

*Based on data from FCC 3-second data base

DTV Channel 41 (632-638 MHz)
Average Elevation 3.2 to16.1 km 325 meters AMSL
Center of Radiation 762.3 meters AMSL
Antenna Height Above Average Terrain 440 meters
Effective Radiated Power 650 kW (28.13 dBk) Max.

North Latitude: 41° 03' 23.2"
West Longitude: 80° 38' 43.7"

(NAD-27)


48 dBu
41 dBu
SITE
Youngstown
EXHIBIT E - 3
COMPUTED COVERAGE CONTOURS
FOR THE PROPOSED DTV OPERATION OF
WKBN-TV, YOUNGSTOWN, OHIO
CHANNEL 41 650 kW ERP 440 METERS HAAT
JULY 2010
COHEN, DIPPELL AND EVERIST, P.C. CONSULTING ENGINEERS
0 25 50 75
Kilometers
CREATED WITH MAPTITUDE(R) GIS FOR WINDOWS FROM CALIPER CORPORATION.

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.

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 modify 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.

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 on or before March 17, 2008 (45 days of the Report and Order in the Third DTV Periodic Review proceeding, MB Docket No. 07-91).

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. [X] Yes [ ] 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. [ ] Yes [ ] 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. [ ] Yes [ ] 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"). [ ] Yes [X] No [ ] 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. [X] Yes [ ] No [ ] N/A

2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RIF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307. [X] Yes [ ] No

   Applicant must **submit the Exhibit** called for in Item 13.

3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community. [X] Yes [ ] 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. [X] Yes [ ] No

5. The antenna structure to be used by this facility has been registered by the Commission and will not require reregistration 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. [X] Yes [ ] 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 41 Analog TV, if any _____

2. Zone: [X] I [ ] II [ ] III

3. Antenna Location Coordinates: (NAD 27)

41 ° 03 ' 23.2 " [X] N [ ] S Latitude

80 ° 38 ' 43.7 " [ ] E [X] W Longitude

4. Antenna Structure Registration Number: 1013678

[ ] Not applicable [ ] FAA Notification Filed with FAA

5. Antenna Location Site Elevation Above Mean Sea Level: 336.8 meters

6. Overall Tower Height Above Ground Level: 432.6 meters

7. Height of Radiation Center Above Ground Level: 425.5 meters

8. Height of Radiation Center Above Average Terrain: 440 meters

9. Maximum Effective Radiated Power (average power): 650 kW

10. Antenna Specifications:

a. Manufacturer: Dielectric | Model: TFU-23JTH-RO4

b. Electrical Beam Tilt: 0.75 degrees [ ] Not Applicable

c. Mechanical Beam Tilt: _____ degrees toward azimuth _____ degrees True [X] Not Applicable

Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c). Exhibit No. E-2

d. Polorization: [X] Horizontal [ ] Circular [ ] Elliptical

TECH BOX

e. Directional Antenna Relative Field Values: [X] Not applicable (Nondirectional)

Rotation: _____ ° [ ] No rotation

Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value
0		60		120		180		240		300	
10		70		130		190		250		310	
20		80		140		200		260		320	
30		90		150		210		270		330	
40		100		160		220		280		340	
50		110		170		230		290		350	
Additional Azimuths											

If a directional antenna is proposed, the requirements of 47 C.F.R. Section 73.625(c) must be satisfied. **Exhibit required.**

Exhibit No.

11. 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?

[X] Yes [ ] No

If "No," attach as an Exhibit justification therefore, including a summary of any related previously granted waivers.

Exhibit No.

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 No.

13. **Environmental Protection Act. Submit in an Exhibit** the following:

Exhibit No. E

a. 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.

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 radio frequency electromagnetic exposure in excess of FCC guidelines.

If **Certification Checklist** Item 2 is answered "No," an Environmental Assessment as required by 47 C.F.R. Section 1.1311.

10. **Auction Authorization.** If the application is being submitted to obtain a construction permit for which the applicant was the winning bidder in an auction, then the applicant certifies, pursuant to 47 C.F.R. Section 73.5005(a), that it has attached an exhibit containing the information required by 47 C.F.R. Sections 1.2107(d), 1.2110(i), 1.2112(a) and 1.2112(b), if applicable.

An exhibit is required unless this question is inapplicable.

☐ Y WKBN-TV Mod.

Exhibit No.

11. **Anti-Drug Abuse Act Certification.** Applicant certifies that neither applicant nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.

☐ Yes ☐ No

12. **Equal Employment Opportunity (EEO).** If the applicant proposes to employ five or more full-time employees, applicant certifies that it is filing simultaneously with this application a Model EEO Program Report on FCC Form 396-A.

☐ Yes ☐ No ☐ N/A

13. **Petition for Rulemaking/Counterproposal to Add New FM Channel to FM Table of Allotments.** If the application is being submitted concurrently with a Petition for Rulemaking or Counterproposal to Amend the I'M Table of Allotments (47 C.F.R. Section 73.202) to add a new FM channel allotment, petitioner/counter-proponent certifies that, if the FM channel allotment requested is allotted, petitioner/counter- proponent will apply to participate in the auction of the channel allotment requested and specified in this application.

☐ Yes ☐ No ☐ N/A

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in 'good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

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		Relationship to Applicant (e.g., Consulting Engineer)	
Donald G. Everist		Consulting Engineer	
Signature		Date July 29, 2010	
Mailing Address Cohen, Dippell and Everist, PC, 1300 L Street NW, Suite 1100			
City Washington	State or Country (if foreign address) DC		ZIP Code 20005
Telephone Number (include area code) 202-898-0111	E-Mail Address (if available) cde@attglobal.net		

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18. SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).