

ENGINEERING STATEMENT
RE BROADCAST ENGINEERING DATA
APPLICATION FOR DISPLACEMENT OF A
LICENSED ANALOG LOW-POWER TELEVISION STATION
WLMO-LP, LIMA, OHIO
CHANNEL 47 15 KW ND ERP 410 METERS RCAMSL

JUNE 2009

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)

Martin R. Doczkat being duly sworn upon his oath, deposes and states that:

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

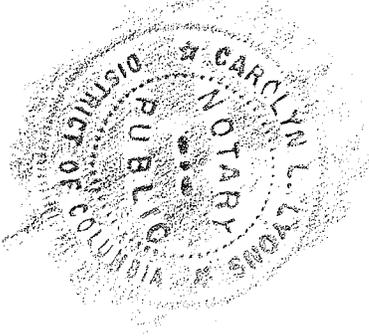
That the attached engineering report was prepared by him or under his supervision and direction and

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.



Martin R. Doczkat
District of Columbia
Professional Engineer
Registration No. PE905122

Subscribed and sworn to before me this 9th day of June, 2009.





Notary Public

My Commission Expires: 2/28/2013

This engineering statement has been prepared in support of an application for digital displacement of a currently licensed low-power television station on behalf of West Central Ohio Broadcasting, Inc., licensee of low-power TV station WLMO-LP, Lima, Ohio. WLMO-LP is licensed to operate on NTSC television Channel 38 with a maximum visual effective radiated power (“ERP”) of 15 kW and an antenna radiation center above mean sea level (“RCAMSL”) of 453.2 meters. WLMO-LP has been displaced by WOSU-DT, DTV Channel 38, Columbus, Ohio, and WSYM-DT, DTV Channel 38, Lansing, Michigan, which prohibit expansion of WLMO-LP on Channel 38 due to interference concerns.

The relative location of these two DTV full service authorizations and post-transition allotments are in accordance with Section 73.3572(a)(4)(iv)(A)(1) of the FCC Rules within 265 km of the WLMO-LP transmitter site.

- WOSU-DT, Columbus, Ohio, Channel 38, located 121.2 km
- WSYM-DT, Lansing, Michigan, Channel 38, located 207 km

Hence, WLMO-LP complies with the intent of this provision and therefore seeks to modify the authorization to operate on Channel 47 as requested herein.

The purpose of this application is to allow for a further increase of its ERP on Channel 47 that is not possible on Channel 38 due to co-channel interference caused to and from the above full-service stations. WLMO-LP proposes to construct low-power digital TV facilities of 15 kW ERP (non-directional) at a RCAMSL of 410 meters from a different site co-located with WLQP-LP.

The DTV transmitter site will be located at 1424 Rive Avenue, Lima, Ohio. The existing tower (Exhibit E-1) has a total overall structure height above ground of 167.3 meters (549 feet). The WLMO-LP antenna will be side-mounted on this tower at 144.8 meters above ground level. The registration number for the existing tower is 1014519.

The geographic coordinates of the proposed site are as follows:

North Latitude: 40° 44' 51"

West Longitude: 84° 07' 54.5"

NAD-27

Equipment Data

Antenna: ERI, Type [AL80-46-PL] (or equivalent) antenna with [1.75°] electrical beam tilt. The vertical plane pattern and other exhibits are herein included as Exhibit E-2

Transmission Line: [ERI, HJ7-50A, 1-5/8", 50 ohm, 167.6 meters (550 feet)]

Power Data

Transmitter output	[3.76 kW]	[5.749 dBk]
Combiner Efficiency/Loss	[95.5%]	[0.2 dB]
Transmission line efficiency/loss [167.6 meters (550 feet)]	[49.2%]	[3.083 dB]
Input power to the antenna	[1.765 kW]	[2.466 dBk]
Antenna power gain Main Lobe	[8.5]	[9.294 dB]
Effective Radiated Power	15 kW	11.76 dBk

As indicated above, the transmitter with a typical power output of [3.76 kW] will deliver [1.765 kW] to the input of the antenna. The antenna having a maximum gain of [8.5] will produce a non-directional ERP of 15 kW. A coverage map providing the protected contours of the analog license and pending digital application of WLMO-LP on Channel 38 in relation to the protected contour for the proposed digital facility has been included as Exhibit E-3 of this report.

Elevation Data

Vertical dimension for Channel 47 antenna	[5.1 meters] [16.8 feet]
Overall height above ground of the proposed antenna structure (including beacon)	167.3 meters 549 feet
Center of radiation of Channel 47 antenna above ground	144.8 meters 475 feet
Elevation of site above mean sea level	265.2 meters 870 feet
Center of radiation of Channel 47 antenna above mean sea level	410 meters 1345 feet
Overall height above mean sea level of proposed tower and antenna (including beacon)	432.5 meters 1419 feet

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

Allocation

The proposed digital operation on Channel 47 at Lima, Ohio, conforms to the requirements of Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b), and 73.1030 of the Commission's Rules. The requirements of these sections regarding this proposed

Channel 47 operation of WLMO-LP are met through demonstration of Longley-Rice prediction methodology where applicable, attached as Table I. The proposed digital low-power television station will not cause any objectionable interference to any existing or proposed full-service DTV station or LPTV/TV translators. Additionally, the proposed operation includes plans for installing a filter that will meet the stringent emission mask with attenuation of at least 85 dB in the L5 (1164-1215 MHz), L2 (1215-1240 MHz) and L1 (1559-1610 MHz) bands in order to comply with Section 74.794(b) of the FCC Rules. The proposed operation is 152.6 kilometers from the Canadian border.

Interference Analysis

A study of predicted interference caused by the proposed WLMO-LP digital low-power television station operation has been performed as shown in Table I using the Longley-Rice program for which the source data has been posted by the Commission on its website at http://www.fcc.gov/oet/dtv/dtv_apps.html. The FCC's FORTRAN-77 code was modified only to the extent necessary (primarily input/output handling) for the program to run on a Microsoft Windows XP platform. Comparison of service/interference areas and population indicates this model closely matches the FCC's digital low-power TV/translator evaluation program. Best efforts have been made to use data and calculation identical to the FCC's program with the simple emission mask. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of approximately 1 sq. km. Using 3-second terrain data sampled approximately every 1.0 km at one-degree azimuth intervals with 1990 census centroids, all studies are based upon data in the current CDBS database update of the FCC's engineering

database. A Longley-Rice study was performed with the proposed WLMO-LP low-power digital facilities and all relevant stations listed in the FCC database as of June 11, 2009.

Environmental Statement

WLMO-LP proposes to operate with an ERI, Type [AL80-47-PL] antenna with an effective radiated power of 15 kW on UHF Channel 47 with a center of radiation above ground of 144.8 meters (475 feet). As shown, the elevation pattern for this antenna shows a maximum relative field of less than 0.1 towards the ground 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 $0.3 \mu\text{W}/\text{cm}^2$. This is less than 0.1% of the $447.3 \mu\text{W}/\text{cm}^2$ maximum human exposure to RFF recommended by the FCC guidelines for an uncontrolled environment.

The total contribution by both existing stations and the proposed DTV operation at 2 meters above ground level is much less than 5 percent of the current FCC guidelines for an uncontrolled environment.

The proposed operation, based upon the current OET Bulletin No. 65, Edition 97-01, dated August 1997 and Supplement A, meets the provisions of the FCC radio frequency field ("RFF") guidelines, and thus, complies with Section 1.1307 of the FCC Rules.

Authorized personnel and rigging contractors will be alerted to the potential zone of high radiation 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 Statement

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 proposed facilities are not located in an officially designated wilderness area.
- (a)(2) The proposed facilities are 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 installation of the DTV facilities on an existing tower at an existing site will not involve a significant change in surface features of the ground in the vicinity of the tower.
- (a)(8) The existing tower lighting will remain unchanged.

- (b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines contained in OET Bulletin 65 (Edition 97-01) and Supplement A. Authorized personnel will be alerted to areas of the antennas where potential radiation levels are in excess of the FCC guidelines. A security fence with a locked gate precludes access to the tower site.

ABOVE MEAN SEA LEVEL

ABOVE GROUND

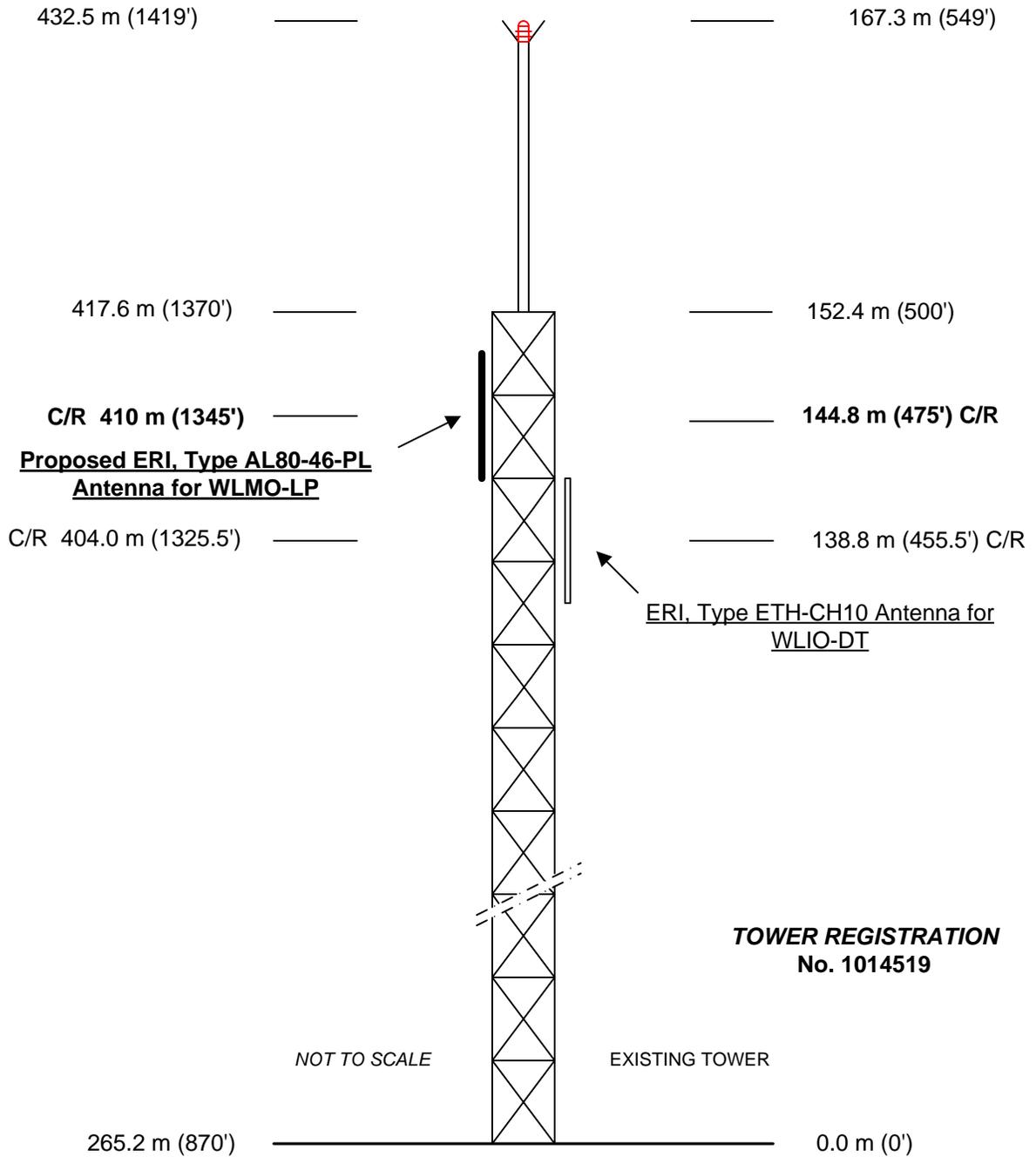


EXHIBIT E - 1
VERTICAL SKETCH
FOR THE PROPOSED DTV OPERATION OF
WLMO-LP, LIMA, OHIO
JUNE 2009

COHEN, DIPPELL AND EVERIST, P.C.

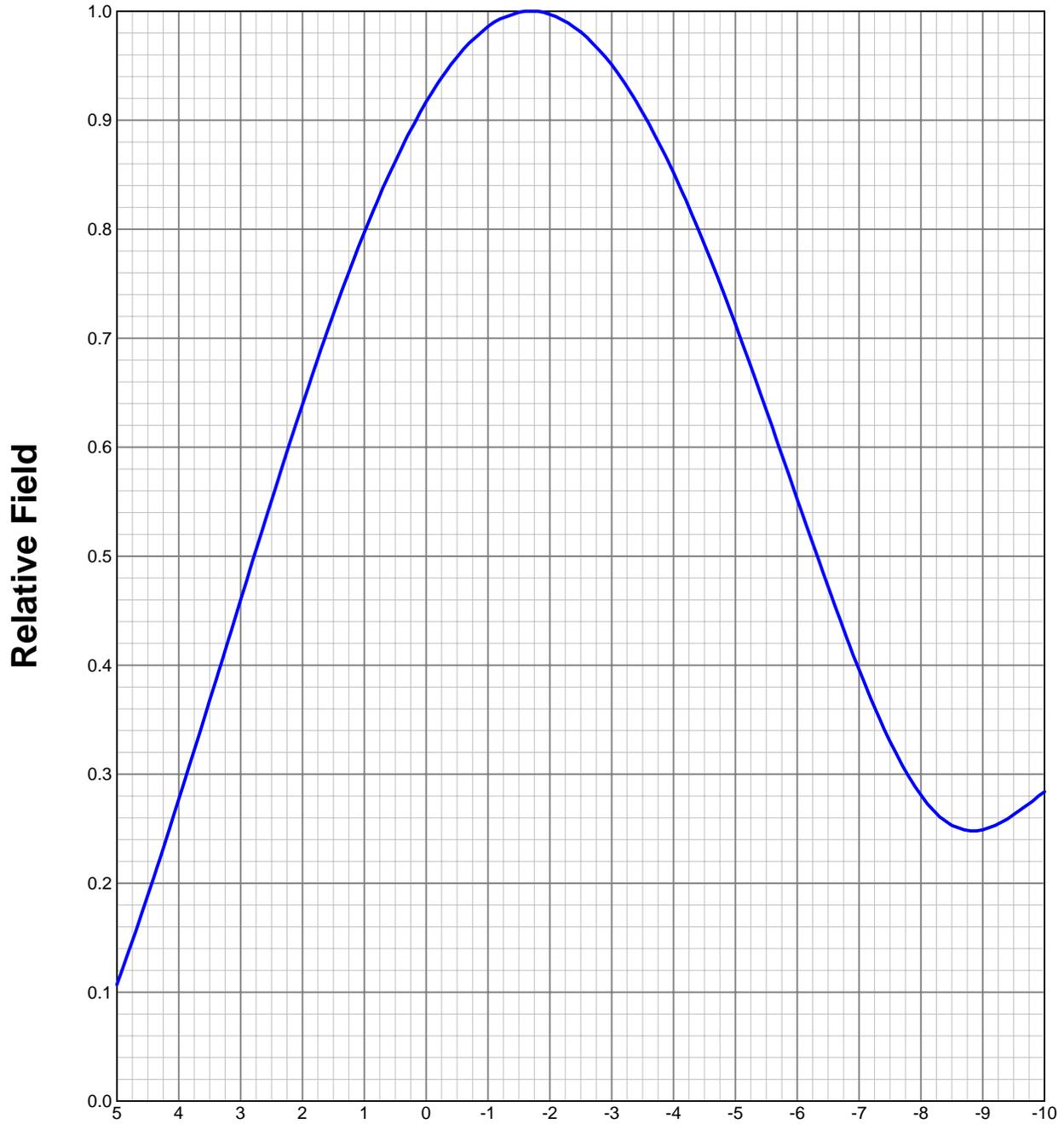
EXHIBIT E-2

ANTENNA MANUFACTURER DATA

WLMO-LP, LIMA, OHIO

ELEVATION PATTERN

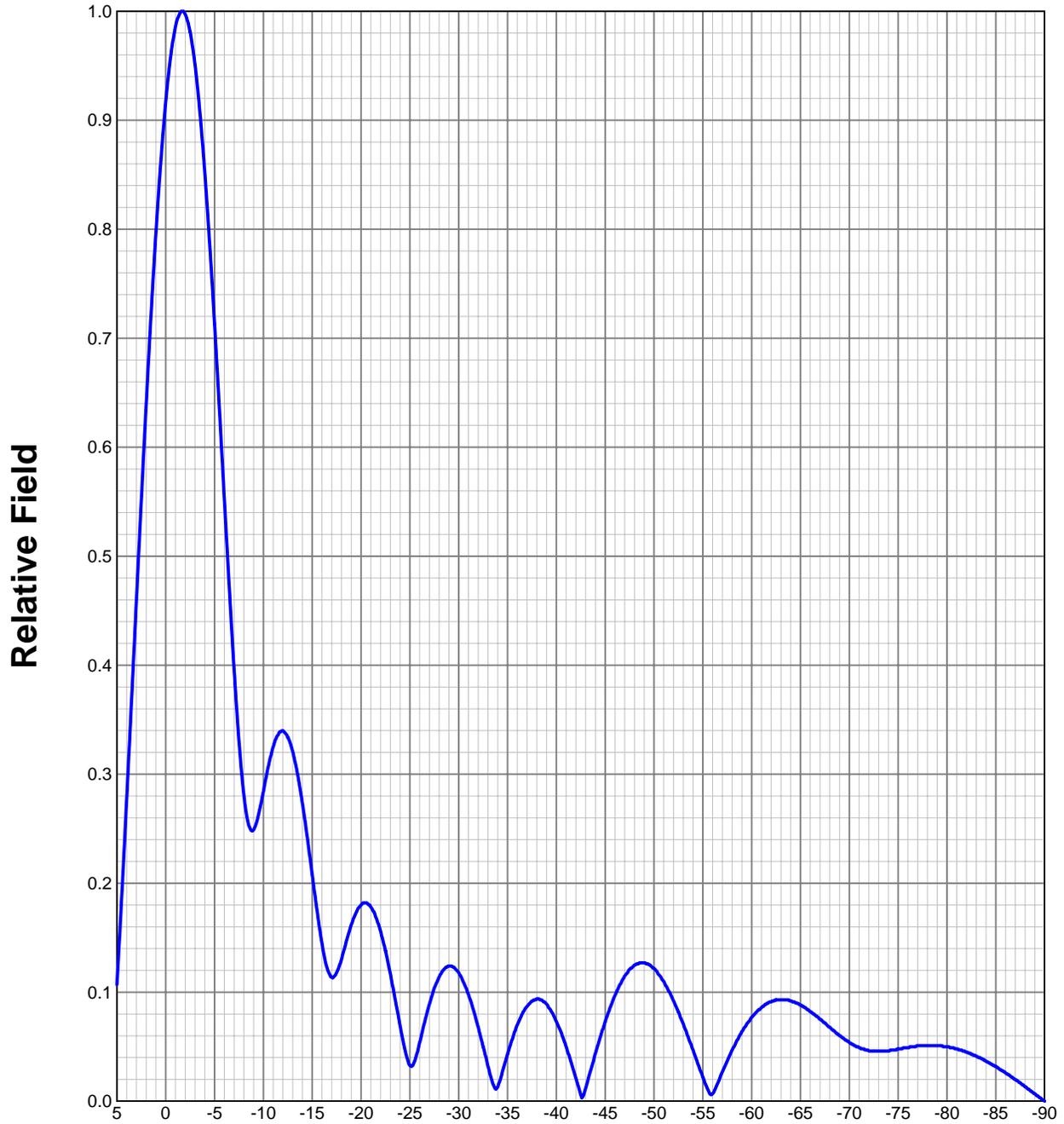
Type:	AL8		Channel:	47
Directivity:	Numeric	dBd	Location:	
Main Lobe:	8.68	9.39	Beam Tilt:	-1.75
Horizontal:	7.30	8.63	Polarization:	Horizontal



Preliminary, subject to final design and review.

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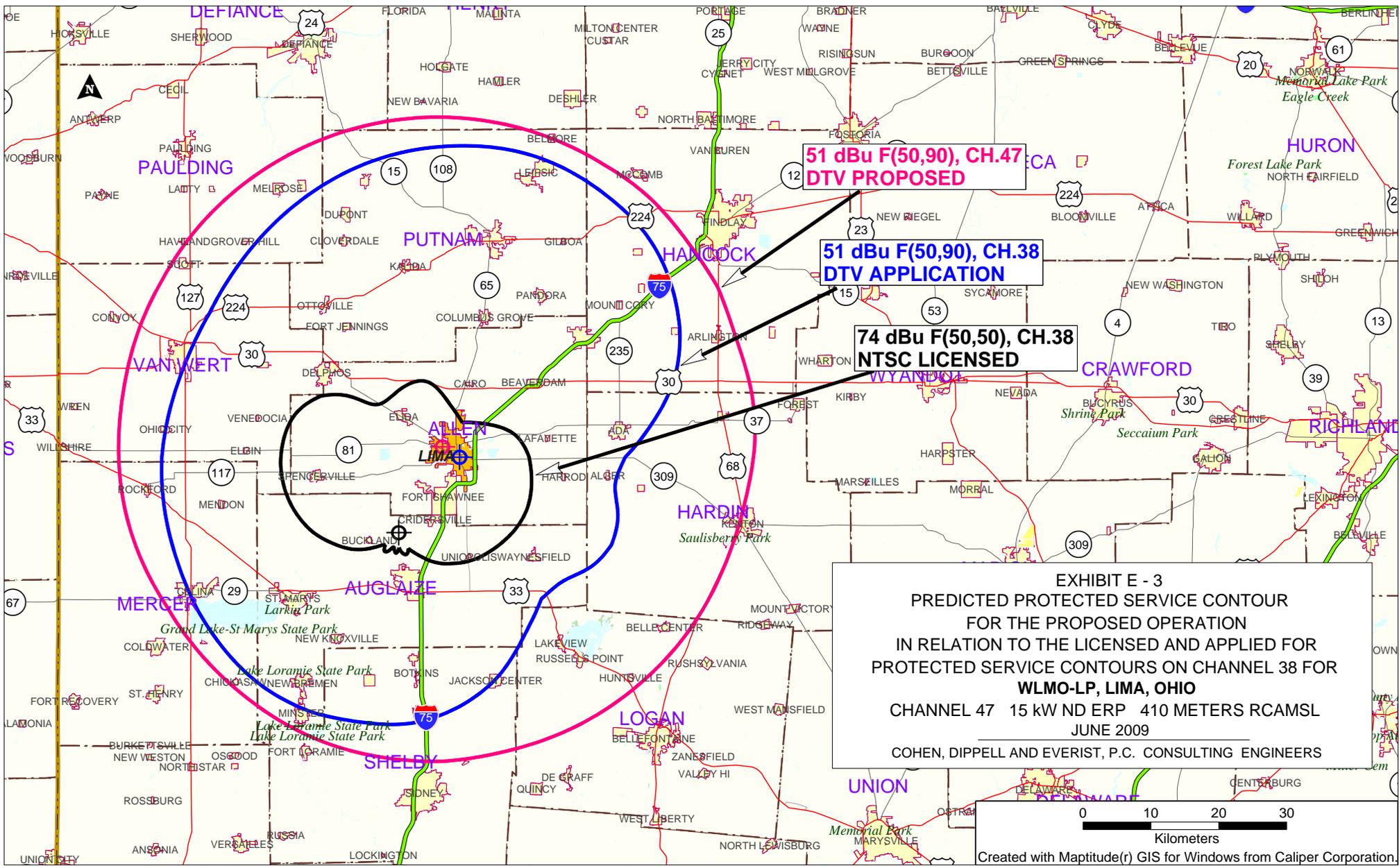
TABULATED DATA FOR ELEVATION PATTERN

Type: AL8

Polarization: Horizontal

ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB					
5.00	0.107	-19.41	-6.75	0.433	-7.27	-27.00	0.089	-21.01	-50.50	0.116	-18.71	-74.00	0.046	-26.74
4.75	0.147	-16.65	-7.00	0.396	-8.05	-27.50	0.104	-19.66	-51.00	0.110	-19.17	-74.50	0.047	-26.56
4.50	0.189	-14.47	-7.25	0.362	-8.84	-28.00	0.114	-18.86	-51.50	0.101	-19.91	-75.00	0.048	-26.38
4.25	0.232	-12.69	-7.50	0.330	-9.63	-28.50	0.121	-18.34	-52.00	0.092	-20.72	-75.50	0.049	-26.20
4.00	0.277	-11.15	-7.75	0.303	-10.37	-29.00	0.124	-18.13	-52.50	0.082	-21.72	-76.00	0.049	-26.20
3.75	0.322	-9.84	-8.00	0.281	-11.03	-29.50	0.123	-18.20	-53.00	0.071	-22.97	-76.50	0.050	-26.02
3.50	0.368	-8.68	-8.25	0.264	-11.57	-30.00	0.118	-18.56	-53.50	0.059	-24.58	-77.00	0.051	-25.85
3.25	0.414	-7.67	-8.50	0.253	-11.94	-30.50	0.109	-19.25	-54.00	0.047	-26.56	-77.50	0.051	-25.85
3.00	0.460	-6.74	-8.75	0.249	-12.09	-31.00	0.098	-20.18	-54.50	0.034	-29.37	-78.00	0.051	-25.85
2.75	0.506	-5.92	-9.00	0.249	-12.08	-31.50	0.084	-21.51	-55.00	0.022	-33.15	-78.50	0.051	-25.85
2.50	0.551	-5.18	-9.25	0.255	-11.89	-32.00	0.068	-23.35	-55.50	0.011	-39.17	-79.00	0.051	-25.85
2.25	0.596	-4.50	-9.50	0.263	-11.60	-32.50	0.050	-26.02	-56.00	0.007	-43.10	-79.50	0.051	-25.85
2.00	0.639	-3.89	-9.75	0.273	-11.28	-33.00	0.032	-29.90	-56.50	0.016	-35.92	-80.00	0.050	-26.02
1.75	0.682	-3.33	-10.00	0.284	-10.93	-33.50	0.016	-35.92	-57.00	0.027	-31.37	-80.50	0.049	-26.20
1.50	0.722	-2.83	-10.50	0.307	-10.26	-34.00	0.013	-37.72	-57.50	0.037	-28.64	-81.00	0.048	-26.38
1.25	0.761	-2.38	-11.00	0.325	-9.76	-34.50	0.028	-31.06	-58.00	0.047	-26.56	-81.50	0.047	-26.56
1.00	0.797	-1.97	-11.50	0.336	-9.47	-35.00	0.043	-27.33	-58.50	0.056	-25.04	-82.00	0.045	-26.94
0.75	0.831	-1.61	-12.00	0.340	-9.37	-35.50	0.057	-24.88	-59.00	0.064	-23.88	-82.50	0.043	-27.33
0.50	0.862	-1.29	-12.50	0.334	-9.53	-36.00	0.070	-23.10	-59.50	0.071	-22.97	-83.00	0.041	-27.74
0.25	0.891	-1.00	-13.00	0.321	-9.87	-36.50	0.080	-21.94	-60.00	0.077	-22.27	-83.50	0.039	-28.18
0.00	0.917	-0.75	-13.50	0.300	-10.46	-37.00	0.087	-21.21	-60.50	0.082	-21.72	-84.00	0.037	-28.64
-0.25	0.939	-0.55	-14.00	0.273	-11.28	-37.50	0.092	-20.72	-61.00	0.086	-21.31	-84.50	0.034	-29.37
-0.50	0.958	-0.37	-14.50	0.242	-12.32	-38.00	0.094	-20.54	-61.50	0.089	-21.01	-85.00	0.032	-29.90
-0.75	0.974	-0.23	-15.00	0.208	-13.64	-38.50	0.093	-20.63	-62.00	0.091	-20.82	-85.50	0.029	-30.75
-1.00	0.986	-0.12	-15.50	0.175	-15.14	-39.00	0.089	-21.01	-62.50	0.093	-20.63	-86.00	0.026	-31.70
-1.25	0.994	-0.05	-16.00	0.145	-16.77	-39.50	0.082	-21.72	-63.00	0.093	-20.63	-86.50	0.023	-32.77
-1.50	0.999	-0.01	-16.50	0.123	-18.20	-40.00	0.073	-22.73	-63.50	0.093	-20.63	-87.00	0.020	-33.98
-1.75	1.000	0.00	-17.00	0.114	-18.86	-40.50	0.063	-24.01	-64.00	0.092	-20.72	-87.50	0.017	-35.39
-2.00	0.997	-0.03	-17.50	0.118	-18.56	-41.00	0.050	-26.02	-64.50	0.090	-20.92	-88.00	0.013	-37.72
-2.25	0.991	-0.08	-18.00	0.130	-17.72	-41.50	0.036	-28.87	-65.00	0.088	-21.11	-88.50	0.010	-40.00
-2.50	0.981	-0.17	-18.50	0.147	-16.65	-42.00	0.021	-33.56	-65.50	0.086	-21.31	-89.00	0.007	-43.10
-2.75	0.967	-0.29	-19.00	0.162	-15.81	-42.50	0.006	-44.44	-66.00	0.082	-21.72	-89.50	0.003	-50.46
-3.00	0.951	-0.44	-19.50	0.173	-15.24	-43.00	0.012	-38.42	-66.50	0.079	-22.05	-90.00	0.000	-40.00
-3.25	0.931	-0.63	-20.00	0.180	-14.89	-43.50	0.028	-31.06	-67.00	0.075	-22.50			
-3.50	0.907	-0.85	-20.50	0.182	-14.80	-44.00	0.044	-27.13	-67.50	0.072	-22.85			
-3.75	0.881	-1.11	-21.00	0.178	-14.99	-44.50	0.059	-24.58	-68.00	0.068	-23.35			
-4.00	0.852	-1.39	-21.50	0.169	-15.44	-45.00	0.073	-22.73	-68.50	0.064	-23.88			
-4.25	0.820	-1.72	-22.00	0.156	-16.14	-45.50	0.086	-21.31	-69.00	0.060	-24.44			
-4.50	0.786	-2.09	-22.50	0.138	-17.20	-46.00	0.097	-20.26	-69.50	0.057	-24.88			
-4.75	0.751	-2.49	-23.00	0.117	-18.64	-46.50	0.107	-19.41	-70.00	0.054	-25.35			
-5.00	0.713	-2.94	-23.50	0.093	-20.63	-47.00	0.115	-18.79	-70.50	0.051	-25.85			
-5.25	0.674	-3.43	-24.00	0.069	-23.22	-47.50	0.121	-18.34	-71.00	0.049	-26.20			
-5.50	0.634	-3.96	-24.50	0.047	-26.56	-48.00	0.125	-18.06	-71.50	0.048	-26.38			
-5.75	0.593	-4.54	-25.00	0.033	-29.63	-48.50	0.127	-17.92	-72.00	0.046	-26.74			
-6.00	0.552	-5.16	-25.50	0.037	-28.64	-49.00	0.127	-17.92	-72.50	0.046	-26.74			
-6.25	0.512	-5.81	-26.00	0.054	-25.35	-49.50	0.125	-18.06	-73.00	0.046	-26.74			
-6.50	0.472	-6.52	-26.50	0.072	-22.85	-50.00	0.122	-18.27	-73.50	0.046	-26.74			

Preliminary, subject to final design and review.



**51 dBu F(50,90), CH.47
DTV PROPOSED**

**51 dBu F(50,90), CH.38
DTV APPLICATION**

**74 dBu F(50,50), CH.38
NTSC LICENSED**

EXHIBIT E - 3
PREDICTED PROTECTED SERVICE CONTOUR
FOR THE PROPOSED OPERATION
IN RELATION TO THE LICENSED AND APPLIED FOR
PROTECTED SERVICE CONTOURS ON CHANNEL 38 FOR
WLMO-LP, LIMA, OHIO
CHANNEL 47 15 kW ND ERP 410 METERS RCAMSL
JUNE 2009
COHEN, DIPPELL AND EVERIST, P.C. CONSULTING ENGINEERS

0 10 20 30
 Kilometers
 Created with Maptitude(r) GIS for Windows from Caliper Corporation

COHEN, DIPPELL AND EVERIST, P.C.

TABLE I
PREDICTED DIGITAL LOW-POWER TELEVISION LONGLEY-RICE INTERFERENCE ANALYSIS*
FOR THE PROPOSED OPERATION OF
WLMO-LP, LIMA, OHIO
CHANNEL 47 15 KW ND ERP 410 METERS RCAMSL
USING THE STRINGENT EMISSION MASK
JUNE 2009

<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Dist(km)</u>	<u>Status</u>	<u>FCC File No.</u>	<u>Result</u>
32	WCSN-LP	COLUMBUS OH	124.3	LIC	BLTTL-20070419AAH	0.0%
32	WWRD-LP	DAYTON OH	118.7	LIC	BLTTL-20071011AAP	0.0%
32	W32AR	LEXINGTON OH	127.5	LIC	BLTT-19920410IC	0.0%
32	W59DC	TOLEDO OH	111.9	APP	BPTTL-20020212AAH	0.0%
33	W55CH	LIMA OH	14.1	APP	BPTTL-20020211ABA	No interference
40	WRCX-LP	DAYTON OH	114.2	LIC	BLTTL-20090223AAQ	0.0%
43	W43BZ	COLUMBUS OH	127.2	LIC	BLTTL-20031121AOO	0.0%
45	W45AG	FORT WAYNE IN	93.7	LIC	BLTTL-19900727IO	0.00%
45	W45ST	LEXINGTON OH	128.8	STA	BSTA-20030724AGX	0.0%
46	WALV-CA	INDIANAPOLIS IN	196.1	CP	BDISTTA-20081208AAT	0.0%
46	WALV-CA	INDIANAPOLIS IN	196.1	CP	BDISTTA-20080804AFE	0.0%
46	WHME-TV	SOUTH BEND IN	194.1	RULE	BPRM-20080619AET	No interference
46	WWHO-DT	CHILLICOTHE OH	155.2	LIC	BLCDDT-20021025AAA	No interference
46	WUPW	TOLEDO OH	116.2	APP	BPCDDT-20080619AJB	0.1%
46	WUPW-DT	TOLEDO OH	116.2	LIC	BLCDDT-20030411AAF	0.0%
47	WTTW-DT	CHICAGO IL	318.4	LIC	BLEDT-20020408ABK	No interference
47	W47AZ	INDIANAPOLIS IN	203.3	LIC	BLTTL-20000211AAQ	No interference
47	WAVE-DT	LOUISVILLE KY	301.8	LIC	BLCDDT-20030306ABQ	No interference
47	W66BV	DETROIT MI	197.9	APP	BDISDTT-20060214ADU	No interference
47	W66BV	DETROIT MI	197.9	CP	BDISDTT-20070105AAR	No interference
47	WOAC-DT	CANTON OH	238.2	LIC	BLCDDT-20060222AAK	0.2%
47	WOTH-LD	CINCINNATI OH	183	LIC	BLDCTL-20081201DCM	0.0%
47	NEW	COLUMBUS OH	123.1	CP	BDCCDTL-20061012ACV	No interference
47	W47AB	MANSFIELD OH	138.7	APP	BMPDPTT-20090602AAH	0.0%
47	W47AB	MANSFIELD OH	138.6	CP	BDFCDTT-20061006ABG	0.0%
47	W47AB	MANSFIELD OH	138.6	LIC	BLTT-20060403BEH	No interference
47	CFMT-DT-	LONDON ON	336.2	AL	CANADA-C1319543	No interference
47	CFMT-TV-	LONDON ON	336.2	APP	BPRM-20041021ABD	No interference
47	ON-PT-16	WHEATLEY ON	209.1	AL	CANADA-1322468NULL	No interference

COHEN, DIPPELL AND EVERIST, P.C.

TABLE I
PREDICTED DIGITAL LOW-POWER TELEVISION LONGLEY-RICE INTERFERENCE ANALYSIS*
FOR THE PROPOSED OPERATION OF
WLMO-LP, LIMA, OHIO
CHANNEL 47 15 KW ND ERP 410 METERS RCAMSL
USING THE STRINGENT EMISSION MASK
JUNE 2009

<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Dist(km)</u>	<u>Status</u>	<u>FCC File No.</u>	<u>Result</u>
47	VACANT	WHEATLEY ON	209.1	LIC	BPFS-20081208ACG	No interference
47	W65CG	PITTSBURGH PA	356.5	CP	BDFCDTT-20060331BCD	0.0%
47	W65CG	PITTSBURGH PA	356.5	CP	BMPPT-20040526ACB	0.00%
48	WHME-DT	SOUTH BEND IN	194.1	APP	BPCDT-20080619ABC	No interference
48	WHME-DT	SOUTH BEND IN	194.1	LIC	BLCDT-20060109ABG	No interference
48	W48BZ	ANN ARBOR MI	173.1	APP	BPTTL-20011231AAC	0.00%
48	W50CD	BOWLING GREEN OH	47.2	APP	BPTTL-20020130ABU	No interference
48	WCPX-LP	COLUMBUS OH	121.4	APP	BDFCDTL-20060322ACI	No interference
48	WCPX-LP	COLUMBUS OH	124.3	LIC	BLTTL-20080131ADD	No interference
48	WSYX	COLUMBUS OH	130.3	RULE	BPRM-20080620AOV	0.2%
48	WNGT-LP	TOLEDO OH	112.6	LIC	BLTTL-19990607JB	No interference
50	WOHZ-LP	MANSFIELD OH	127.5	LIC	BLTTL-19920903IB	0.0%

*Analysis excludes the pre-transition licensed operation of WTLW-DT on Channel 47 in Lima, Ohio (FCC File No. BLCDT-20060809AFC).

Section III - Engineering (Digital)

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: _____
- 2. Translator Input Channel No. _____
- 3. Station proposed to be rebroadcast:

Call Sign	City	State	Channel
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- 4. Antenna Location Coordinates: (NAD 27)
_____ ° _____ ' _____ " N S Latitude
_____ ° _____ ' _____ " E W Longitude

- 5. Antenna Structure Registration Number: _____
 Not applicable See Explanation in Exhibit No. FAA Notification Filed with FAA

- 6. Antenna Location Site Elevation Above Mean Sea Level: _____ meters
- 7. Overall Tower Height Above Ground Level: _____ meters
- 8. Height of Radiation Center Above Ground Level: _____ meters
- 9. Maximum Effective Radiated Power (ERP): _____ kW
- 10. Transmitter Output Power: _____ kW

- 11. a. Transmitting Antenna: Nondirectional Directional Directional composite

Manufacturer	Model
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- b. Electrical Beam Tilt: _____ degrees Not applicable

c. Directional Antenna Relative Field Values:

Rotation: _____ ° No rotation N/A (Nondirectional)

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											

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

12. **Out-of-Channel Emission Mask:** Simple Stringent

CERTIFICATION

13. **Interference.** The proposed facility complies with all of the following applicable rule sections. 47 C.F.R. Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030. Yes No

14. **Environmental Protection Act.** The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (*i.e.*, the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine RF compliance. **An Exhibit is required.** Yes No

By checking "Yes" above, 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.

15. **Channels 52-59.** If the proposed channel is within channels 52-59, the applicant certifies compliance with the following requirements, as applicable:

The applicant is applying for a digital companion channel for which no suitable channel from channel 2-51 is available.

Pursuant to Section 74.786(d), the applicant has notified, within 30 days of filing this application, all commercial wireless licensees of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.

PREPARER'S CERTIFICATION ON PAGE 8 MUST BE COMPLETED AND SIGNED.

16. **Channels 60-69.** If the proposed channel is within channels 60-69, the applicant certifies compliance with the following requirements, as applicable:

- Pursuant to Section 74.786(e), the applicant has notified, within 30 days of filing this application, all commercial wireless licensees of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees,

- Pursuant to Section 74.786(e), the applicant proposing operation on channel 63, 64, 68 and 69 ("public safety channels") has secured a coordinated spectrum use agreement(s) with 700 MHz public safety regional planning committee(s) and state frequency administrator(s) of the region(s) and state(s) within which the antenna site of the digital LPTV or TV translator station is proposed to locate, and those adjoining regions and states with boundaries within 75 miles of the proposed station location.

- Pursuant to Section 74.786(e), an applicant for a channel adjacent to channel 63, 64, 68 or 69 has notified, within 30 days of filing this application, the 700 MHz public safety regional planning committee(s) and state administrator(s) of the region and state containing the proposed digital LPTV or TV translator antenna site and regions and states whose geographic boundaries lie within 50 miles of the proposed LPTV or TV translator antenna site.

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 Martin R. Doczkat		Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature 		Date June 9, 2009	
Mailing Address Cohen, Dippell and Everist, P.C., 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).