

ENGINEERING EXHIBIT

Digital Class A Television Station Application for Minor Modification of Licensed Facility prepared for

Gray Television Licensee, LLC
WOHZ-CD Mansfield, OH
Facility ID 41892
Ch. 20 15 kW Directional

Gray Television Licensee, LLC (“Gray”) is the licensee of Class A television station WOHZ-CD, Channel 20, Facility ID 41892, Mansfield OH. WOHZ-CD is licensed to operate (file# 0000146999) with 4 kW effective radiated power (“ERP”), directional. *Gray* herein seeks a minor modification Construction Permit to relocate WOHZ-CD, increase ERP to 15 kW, increase antenna height, and use a different directional antenna.

The proposed WOHZ-CD facility will employ a new antenna to be side-mounted on the existing tower structure associated with FCC Antenna Structure Registration number 1015774, located 41.6 km (25.8 miles) from the licensed site. No change to the overall structure height is proposed.

The proposed antenna is a Dielectric model TLP-8F/VP-R having elliptical polarization. The ERP is 15 kW directional using a “full service” out of channel emission mask. A plot of the directional antenna’s azimuthal pattern is supplied in Figure 1. Figure 2 depicts the coverage contour of the proposed facility as well as that of the licensed facility. The service area overlap demonstrates compliance with §73.3572 for a minor change.

Interference study per OET Bulletin 69¹ shows that the proposal complies with the FCC’s interference protection requirements toward all digital television, television translator, LPTV, and

¹FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 (“OET-69”). This analysis employed the FCC’s current “TVStudy” software with the default application processing template settings, 1 km cell size, and 0.1 km terrain increment. Comparisons of various results of this computer program (run on a Mac processor) to the FCC’s implementation of

Class A stations. FCC processing of this proposal is requested using a 1.0 km cell size and 0.1 km terrain profile increment. The results, summarized in Table 1, show that any new interference does not exceed the FCC's interference limits (0.5 percent to full power and Class A stations, and 2.0 percent to secondary stations) to any facility.

The site is located 129 km from the U.S. – Canada border. For Canada referral purposes, the 24.3 dBμ F(50,10) contour is relevant for digital Class A operations on Channel 20. The proposed WOHZ-CD 24.3 dBμ F(50,10) contour is depicted in Figure 3 and does not reach Canada. Thus, international coordination is not required.

Human Exposure to Radiofrequency Electromagnetic Field

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the FCC's OET Bulletin Number 65. Based on OET-65 equation (10), and considering 25 percent antenna relative field in downward elevations (pattern data shows less than 25 percent relative field at angles 15 to 90 degrees below the antenna), the calculated signal density near the antenna at two meters above ground level attributable to the proposed facility is 0.9 μW/cm², which is 0.3 percent of the general population/uncontrolled maximum permitted exposure limit. No other television or radio broadcast facilities are authorized within sufficient distance to be a significant contributor to RF exposure at this location.

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 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, structure, or antenna from RF electromagnetic field exposure in excess of FCC guidelines. Environmental matters covered by this exhibit are limited to the evaluation of exposure to RF electromagnetic field.

Engineering Exhibit
Gray Television Licensee, LLC (WOHZ-CD)
(page 3 of 3)

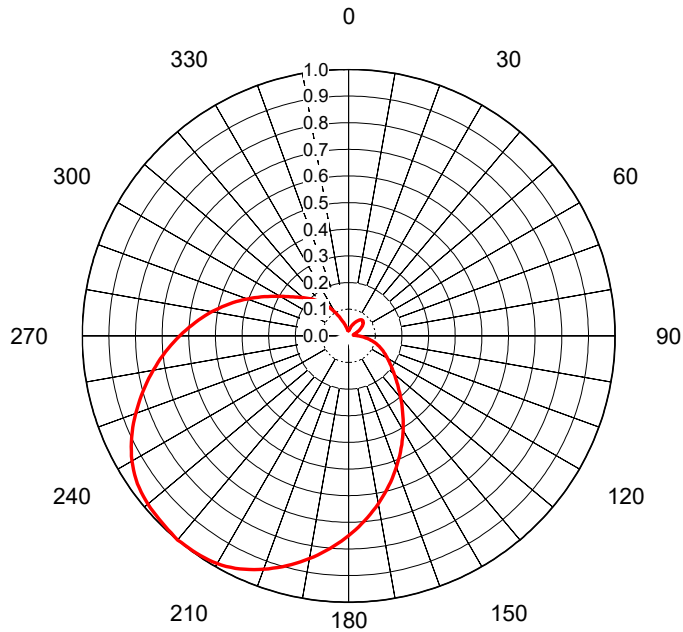


List of Attachments

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Table 1	TVStudy Analysis of Proposal
Form 2100	Saved Version of Engineering Sections from FCC Form at Time of Upload

Chesapeake RF Consultants, LLC

Joseph M. Davis, P.E.	June 8, 2021	
207 Old Dominion Road	Yorktown, VA 23692	703-650-9600



AZIMUTH PATTERN Horizontal Polarization

Proposal No. **20210608 JMD**
Date **8-Jun-21**
Call Letters **WOHZ-CD**
Channel **20**
Frequency **509 MHz**
Antenna Type **TLP-8F/VP-R**
Gain **3.86 (5.86dB)**
Calculated

Pattern Number **TLP-F-20 Hpol**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.019	36	0.074	72	0.024	108	0.117	144	0.344	180	0.750	216	0.997	252	0.830	288	0.428
1	0.020	37	0.075	73	0.023	109	0.121	145	0.354	181	0.760	217	0.997	253	0.819	289	0.417
2	0.020	38	0.076	74	0.021	110	0.125	146	0.365	182	0.771	218	0.998	254	0.809	290	0.405
3	0.021	39	0.077	75	0.020	111	0.129	147	0.376	183	0.781	219	0.998	255	0.798	291	0.393
4	0.022	40	0.077	76	0.019	112	0.134	148	0.387	184	0.791	220	1.000	256	0.788	292	0.382
5	0.023	41	0.078	77	0.018	113	0.138	149	0.398	185	0.801	221	0.998	257	0.777	293	0.370
6	0.024	42	0.078	78	0.018	114	0.142	150	0.409	186	0.811	222	0.996	258	0.766	294	0.359
7	0.025	43	0.078	79	0.017	115	0.146	151	0.420	187	0.821	223	0.994	259	0.755	295	0.348
8	0.026	44	0.077	80	0.017	116	0.151	152	0.432	188	0.830	224	0.993	260	0.745	296	0.337
9	0.027	45	0.077	81	0.017	117	0.155	153	0.443	189	0.840	225	0.991	261	0.734	297	0.326
10	0.028	46	0.076	82	0.018	118	0.159	154	0.455	190	0.849	226	0.990	262	0.723	298	0.316
11	0.030	47	0.075	83	0.019	119	0.164	155	0.466	191	0.858	227	0.988	263	0.712	299	0.306
12	0.031	48	0.074	84	0.020	120	0.168	156	0.478	192	0.867	228	0.987	264	0.701	300	0.296
13	0.033	49	0.072	85	0.021	121	0.173	157	0.489	193	0.876	229	0.985	265	0.690	301	0.287
14	0.034	50	0.071	86	0.023	122	0.178	158	0.501	194	0.885	230	0.983	266	0.678	302	0.278
15	0.036	51	0.069	87	0.026	123	0.183	159	0.513	195	0.893	231	0.981	267	0.667	303	0.270
16	0.038	52	0.068	88	0.028	124	0.188	160	0.525	196	0.901	232	0.978	268	0.656	304	0.262
17	0.039	53	0.066	89	0.031	125	0.194	161	0.536	197	0.909	233	0.975	269	0.645	305	0.255
18	0.041	54	0.064	90	0.035	126	0.199	162	0.548	198	0.917	234	0.972	270	0.634	306	0.248
19	0.043	55	0.062	91	0.038	127	0.205	163	0.559	199	0.925	235	0.968	271	0.623	307	0.241
20	0.045	56	0.060	92	0.042	128	0.211	164	0.571	200	0.932	236	0.963	272	0.611	308	0.235
21	0.047	57	0.058	93	0.047	129	0.217	165	0.583	201	0.940	237	0.958	273	0.600	309	0.228
22	0.048	58	0.055	94	0.051	130	0.224	166	0.594	202	0.947	238	0.952	274	0.589	310	0.223
23	0.050	59	0.053	95	0.055	131	0.230	167	0.606	203	0.953	239	0.946	275	0.578	311	0.217
24	0.052	60	0.051	96	0.060	132	0.237	168	0.617	204	0.959	240	0.939	276	0.566	312	0.211
25	0.054	61	0.048	97	0.065	133	0.245	169	0.629	205	0.965	241	0.932	277	0.555	313	0.206
26	0.056	62	0.046	98	0.070	134	0.252	170	0.640	206	0.971	242	0.924	278	0.544	314	0.200
27	0.058	63	0.043	99	0.075	135	0.260	171	0.651	207	0.976	243	0.916	279	0.532	315	0.195
28	0.060	64	0.041	100	0.080	136	0.268	172	0.663	208	0.980	244	0.907	280	0.521	316	0.189
29	0.062	65	0.039	101	0.085	137	0.277	173	0.674	209	0.984	245	0.899	281	0.509	317	0.184
30	0.064	66	0.036	102	0.090	138	0.286	174	0.685	210	0.987	246	0.889	282	0.498	318	0.178
31	0.066	67	0.034	103	0.094	139	0.295	175	0.696	211	0.990	247	0.880	283	0.486	319	0.172
32	0.068	68	0.032	104	0.099	140	0.304	176	0.707	212	0.992	248	0.870	284	0.475	320	0.165
33	0.069	69	0.030	105	0.104	141	0.314	177	0.718	213	0.993	249	0.860	285	0.463	321	0.159
34	0.071	70	0.028	106	0.108	142	0.324	178	0.729	214	0.995	250	0.850	286	0.452	322	0.153
35	0.073	71	0.026	107	0.112	143	0.334	179	0.739	215	0.996	251	0.840	287	0.440	323	0.146

Figure 1
Antenna Azimuthal Pattern
WOHZ-CD Mansfield, OH
Facility ID 41892
Ch. 20 15 kW Directional

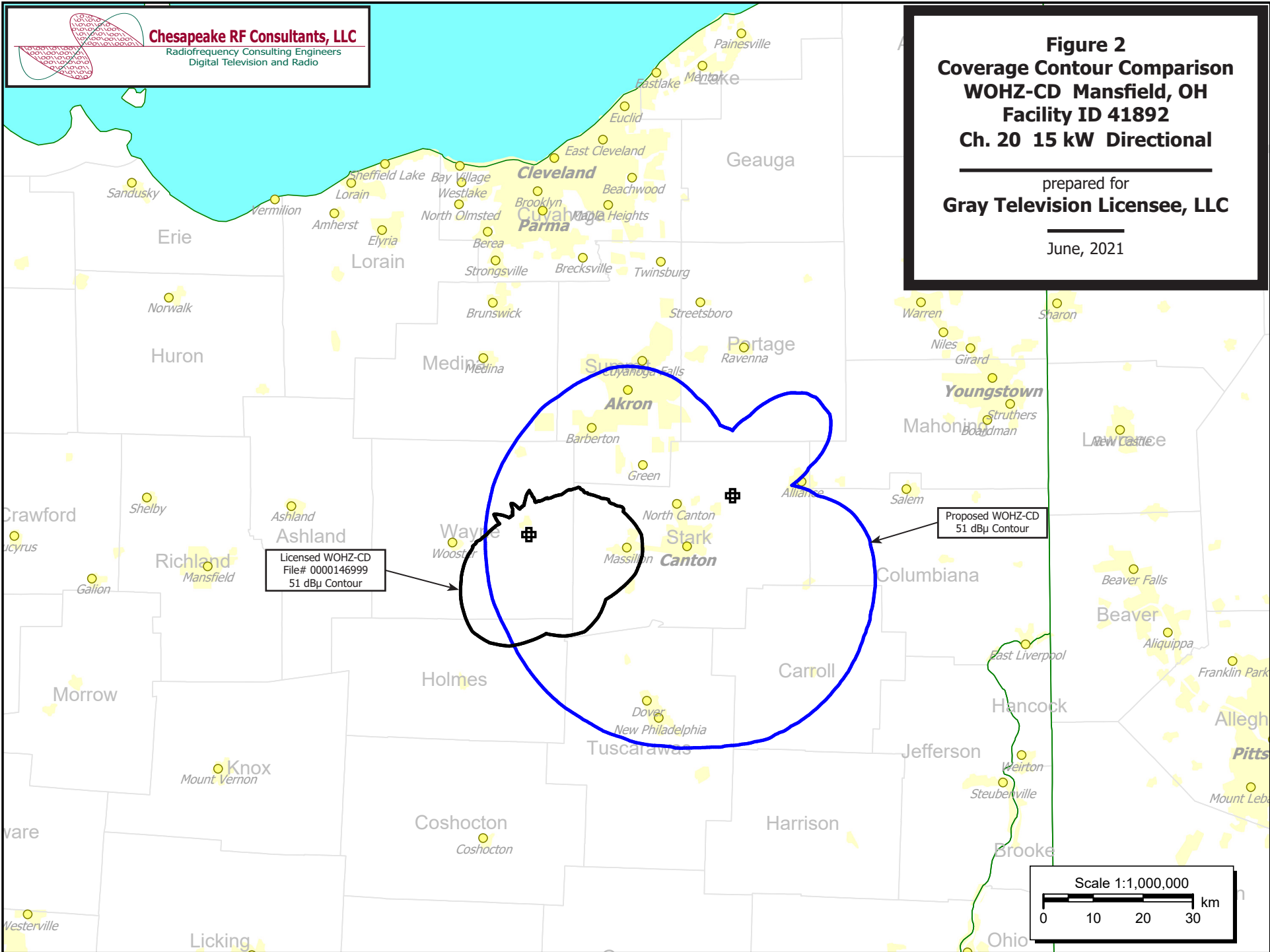
prepared for
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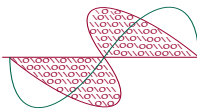
June, 2021

Figure 2
Coverage Contour Comparison
WOHZ-CD Mansfield, OH
Facility ID 41892
Ch. 20 15 kW Directional

prepared for
Gray Television Licensee, LLC

June, 2021





Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Figure 3
Interfering Contour Towards Canada
WOHZ-CD Mansfield, OH
Facility ID 41892
Ch. 20 15 kW Directional

prepared for
Gray Television Licensee, LLC

June, 2021

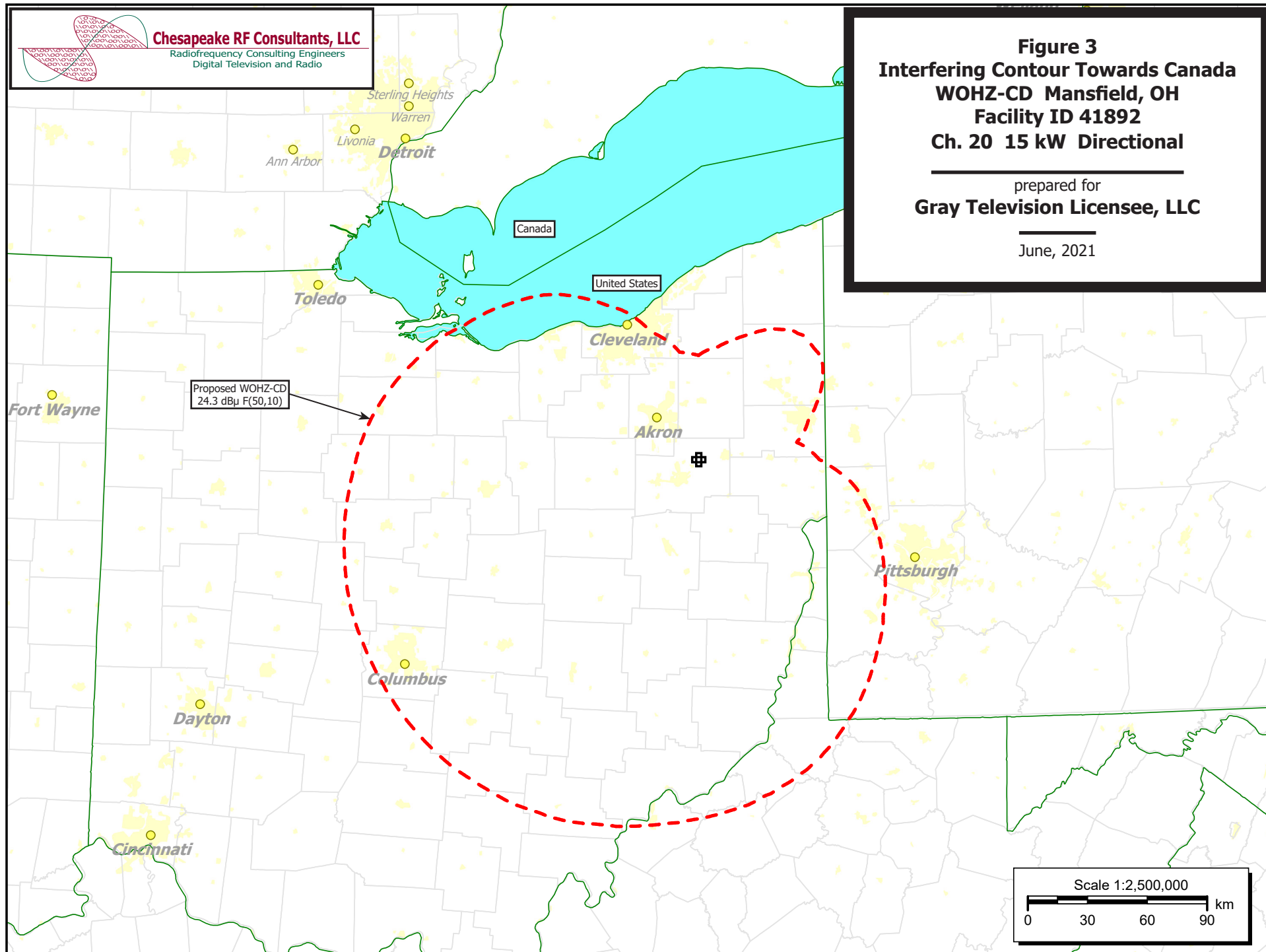


Table 1 WOHz-CD TVStudy Analysis of Proposal (page 1 of 5)



tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: WOHz-CD_1015774, Model: Longley-Rice
Start: 2021.06.08 13:17:26

Study created: 2021.06.08 13:17:26

Study build station data: LMS TV 2021-06-08

Proposal: WOHz-CD D20 DC APP MANSFIELD, OH
File number: WOHz-CD_1015774
Facility ID: 41892
Station data: User record
Record ID: 3705
Country: U.S.

Build options:
Protect LPTV records from Class A

Search options:
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WKYC	D19	DT	LIC	CLEVELAND, OH	BLANK0000087282	65.4 km
No	WCLL-CD	D19	DC	LIC	COLUMBUS, OH	BLANK0000052505	180.4
No	WFND-LD	D19	LD	LIC	FINDLAY, OH	BLANK0000055157	201.0
No	WEPA-LD	D19	LD	CP	ERIE, PA	BNPDTL20100714ACL	169.2
No	WBYD-CD	D19	DC	LIC	PITTSBURGH, PA	BLANK0000096151	140.0
No	WFFT-TV	D20	DT	LIC	FORT WAYNE, IN	BLANK0000086952	330.2
Yes	WTVS	D20	DT	LIC	DETROIT, MI	BLANK0000117036	234.4
No	W20BL-D	D20	LD	LIC	BATH, NY	BLDTL20120315AAG	371.6
No	WWHC-LD	N20	TX	LIC	OLEAN, NY	BLANK0000022154	270.2
No	WWHC-LD	D20	LD	LIC	OLEAN, NY	BLANK0000118115	284.1
No	WWHC-LD	D20	LD	APP	OLEAN, NY	BLANK0000130608	302.6
No	WLWT	D20	DT	LIC	CINCINNATI, OH	BLANK0000087261	339.3
No	WLWT	D20	DT	CP	CINCINNATI, OH	BLANK0000127507	339.3
Yes	WLFM-LD	D20z	LD	LIC	CLEVELAND, OH	BLANK0000118809	65.6
No	WLWD-LD	D20	LD	LIC	SPRINGFIELD, OH	BLANK0000017721	284.2
No	W33CR-D	D20	LD	CP	CHAMBERSBURG, PA	BLANK0000130447	312.1
No	W20CP-D	D20	LD	LIC	MANSFIELD, PA	BLANK0000091020	375.3
Yes	WPGH-TV	D20	DT	LIC	PITTSBURGH, PA	BLANK0000112578	115.3
No	W20AD-D	D20	LD	LIC	WILLIAMSPORT, PA	BLDTT20090810AAD	357.3
No	WHSV-TV	D20	DT	LIC	Massanutten, VA	BLANK0000063970	346.2
No	WAZT-CD	D20	DC	LIC	VIENNA, VA	BLANK0000081642	351.4
No	WAZT-CD	D20	DC	CP	VIENNA, VA	BLANK0000121163	374.3
No	WOVA-LD	D20	LD	LIC	PARKERSBURG, WV	BLANK0000120282	173.0
No	W20DY-D	D20	LD	CP	ROANOKE, WV	BNPDTL20100514AAR	223.5
No	WWJ-TV	D21	DT	LIC	DETROIT, MI	BLANK0000125983	234.4
No	WQDI-LD	D21	LD	LIC	CANTON, OH	BLANK0000079989	74.8
Yes	WJW	D21	LD	CP	CLEVELAND, OH	BDRTCDT20101123AOJ	30.2
Yes	WBNS-TV	D21	DT	LIC	COLUMBUS, OH	BLCDT20021025ABK	180.4
No	WSSS-LP	D21	LD	CP	STEUBENVILLE, OH	BDISDTL20121022AAR	81.7
No	WSEE-TV	D21	DT	LIC	ERIE, PA	BLANK0000074552	162.5
No	WPNT	D21	DT	LIC	PITTSBURGH, PA	BLANK0000112577	115.3
No	W24DS-D	D21	LD	CP	PARKERSBURG, WV	BLANK0000051781	173.0

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D20
Mask: Full Service
Latitude: 40 53 24.00 N (NAD83)
Longitude: 81 16 11.00 W
Height AMSL: 605.3 m
HAAT: 0.0 m
Peak ERP: 15.0 kW
Antenna: DIE TLP-F 220.0 deg
Elev Pattn: Generic
Elec Tilt: 1.00

Table 1 WOHZ-CD TV Study Analysis of Proposal
(page 2 of 5)



49.4 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.005 kW	258.7 m	14.5 km
45.0	0.082	258.3	27.7
90.0	0.018	234.9	19.0
135.0	1.05	230.7	39.7
180.0	8.44	256.2	51.9
225.0	14.7	275.0	55.9
270.0	6.03	262.1	50.5
315.0	0.565	257.6	37.8

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 254 m

Proposal 24.36 dBu contour does not cross Canadian border
Distance to Canadian border: 128.5 km

Distance to Mexican border: 2189.4 km

Conditions at FCC monitoring station: Canandaigua NY
Bearing: 54.5 degrees Distance: 400.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 275.6 degrees Distance: 2019.4 km

No land mobile station failures found

Study cell size: 1.00 km
Profile point spacing: 0.10 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

Interference to BLANK0000087282 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WKYC	D19	DT	LIC	CLEVELAND, OH	BLANK0000087282	
Undesireds:	WOHZ-CD	D20	DC	BL	MANSFIELD, OH	DTVBL41892	104.1 km
	WOHZ-CD	D20	DC	APP	MANSFIELD, OH	WOHZ-CD_1015774	65.4
	WIPB	D19	DT	LIC	MUNCIE, IN	BLANK0000087336	343.3
	WCLL-CD	D19	DC	LIC	COLUMBUS, OH	BLANK0000052505	193.6
	WBYD-CD	D19	DC	LIC	PITTSBURGH, PA	BLANK0000096151	196.0
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	26497.7 4,180,300	26041.4	4,131,477	25801.9	4,104,972	25725.2 4,093,161	0.30 0.29
	2734.0 171	2734.0	171	2734.0	171	2734.0 171	0.00 0.00
(in Canada)							

Undesired	Total IX	Unique IX, before	Unique IX, after
WOHZ-CD D20 DC BL	65.5	5,902	64.5 5,884
WOHZ-CD D20 DC APP	144.2	17,746	141.2 17,695
WIPB D19 DT LIC	1.0	18	0.0 0
WCLL-CD D19 DC LIC	5.0	179	4.0 161
WBYD-CD D19 DC LIC	170.1	20,442	170.1 20,442 167.1 20,391

Interference to BLANK0000117036 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVS	D20	DT	LIC	DETROIT, MI	BLANK0000117036	
Undesireds:	WOHZ-CD	D20	DC	BL	MANSFIELD, OH	DTVBL41892	192.8 km
	WOHZ-CD	D20	DC	APP	MANSFIELD, OH	WOHZ-CD_1015774	234.4
	WFFT-TV	D20	DT	LIC	FORT WAYNE, IN	BLANK0000086952	224.1
	WCMW	D20	DT	LIC	MANISTEE, MI	BLANK0000087364	312.6
	WLWT	D20	DT	LIC	CINCINNATI, OH	BLANK0000087261	386.5

Table 1 WOHz-CD TV Study Analysis of Proposal
(page 3 of 5)



Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
19582.9	5,506,963	19547.8	5,506,183	19508.9	5,499,691	19511.9	5,499,757	-0.02	-0.00
7725.5	557,009	7725.5	557,009	7725.5	557,009	7725.5	557,009	0.00	0.00

(in Canada)

Undesired	Total IX	Unique IX, before	Unique IX, after
WOHZ-CD D20 DC BL 6.0	103	3.0 66	
WOHZ-CD D20 DC APP 0.0	0		0.0 0
WFFT-TV D20 DT LIC 36.0	6,426	32.0 6,389	35.0 6,426
WCMW D20 DT LIC 1.0	0	0.0 0	0.0 0

Interference to BLANK0000118809 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WLFM-LD	D20z	LD	LIC	CLEVELAND, OH	BLANK0000118809	
Undesireds:	WOHz-CD	D20	DC	BL	MANSFIELD, OH	DTVBL41892	103.1 km
	WOHz-CD	D20	DC	APP	MANSFIELD, OH	WOHz-CD_1015774	65.6
	WKYC	D19	DT	LIC	CLEVELAND, OH	BLANK0000087282	1.1
	WTVS	D20	DT	LIC	DETROIT, MI	BLANK0000117036	169.8
	WWHC-LD	N20	TX	LIC	OLEAN, NY	BLANK0000022154	282.2
	WPGH-TV	D20	DT	LIC	PITTSBURGH, PA	BLANK0000112578	173.3

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
7686.4	2,562,894	7579.7	2,548,938	6095.8	2,089,611	6054.4	2,067,801	0.68	1.04

Undesired		Total IX	Unique IX, before		Unique IX, after	
WOHZ-CD D20 DC BL	24.2	11,302	4.0	2,690		
WOHZ-CD D20 DC APP	339.3	113,059			45.5	24,500
WKYC D19 DT LIC	1361.9	439,345	1284.1	420,120	1097.3	351,319
WTVS D20 DT LIC	148.3	30,663	55.4	11,386	33.2	6,672
WPGH-TV D20 DT LIC	86.7	7,661	24.2	2,383	15.1	1,906

Interference to BLANK0000112578 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPGH-TV	D20	DT	LIC	PITTSBURGH, PA	BLANK0000112578	
Undesireds:	WOHz-CD	D20	DC	BL	MANSFIELD, OH	DTVBL41892	222.4 km
	WOHz-CD	D20	DC	APP	MANSFIELD, OH	WOHz-CD_1015774	115.3
	WBVD-CD	D19	DC	LIC	PITTSBURGH, PA	BLANK0000096151	24.9
	WTVS	D20	DT	LIC	DETROIT, MI	BLANK0000117036	341.6
	WHSV-TV	D20	DT	LIC	Massanutten, VA	BLANK0000063970	265.7
	WAZT-CD	D20	DC	LIC	VIENNA, VA	BLANK0000081642	239.0
	WPNT	D21	DT	LIC	PITTSBURGH, PA	BLANK0000112577	0.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
27150.8	3,240,087	26202.5	3,149,665	26154.3	3,144,376	26055.6	3,142,761	0.38	0.05

Undesired	Total IX	Unique IX, before	Unique IX, after
WOHZ-CD D20 DC BL 1.0	15	1.0 15	
WOHZ-CD D20 DC APP 103.7	2,095		99.7 1,630
WBVD-CD D19 DC LIC 3.0	125	3.0 125	3.0 125
WTVS D20 DT LIC 9.1	655	9.1 655	6.1 190
WHSV-TV D20 DT LIC 32.1	4,084	32.1 4,084	32.1 4,084
WPNT D21 DT LIC 3.0	410	3.0 410	2.0 410

Interference to BDRTCDT20101123AOJ CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJW	D21	LD	CP	CLEVELAND, OH	BDRTCDT20101123AOJ	
Undesireds:	WOHz-CD	D20	DC	BL	MANSFIELD, OH	DTVBL41892	144.4 km
	WOHz-CD	D20	DC	APP	MANSFIELD, OH	WOHz-CD_1015774	30.2
	WWJ-TV	D21	DT	LIC	DETROIT, MI	BLANK0000125983	254.2
	WQDI-LD	D21	LD	LIC	CANTON, OH	BLANK0000079989	91.3
	WBNS-TV	D21	DT	LIC	COLUMBUS, OH	BLCDT20021025ABK	207.1
	WSEE-TV	D21	DT	LIC	ERIE, PA	BLANK0000074552	144.3
	WPNT	D21	DT	LIC	PITTSBURGH, PA	BLANK0000112577	89.0

Table 1 WOHZ-CD TV Study Analysis of Proposal
(page 4 of 5)



WHWV-LD	D21z	LD	CP	Huntington, WV	BLANK0000143752	304.4
WVPX-TV	D22	DT	LIC	AKRON, OH	BLANK0000080180	59.6
Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
1821.0	291,726	1793.1	284,703	1294.9	142,006	1292.9 141,433 0.15 0.40
Undesired	Total IX		Unique IX, before		Unique IX, after	
WOHZ-CD D20 DC APP	98.2	73,670	2.0	0	2.0	573
WWJ-TV D21 DT LIC	2.0	28	0.0	0	0.0	0
WQDI-LD D21 LD LIC	4.0	1,282	0.0	0	0.0	0
WBNS-TV D21 DT LIC	25.9	8,832	2.0	111	1.0	50
WSEE-TV D21 DT LIC	17.0	4,158	2.0	405	1.0	4
WPNT D21 DT LIC	441.5	124,593	183.2	35,382	162.4	18,240
WVPX-TV D22 DT LIC	295.1	100,285	46.7	15,463	40.8	11,247

Interference to BLCDDT20021025ABK LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WBNS-TV	D21	DT	LIC	COLUMBUS, OH	BLCDDT20021025ABK	
Undesireds:	WOHZ-CD	D20	DC	BL	MANSFIELD, OH	DTVBL41892	94.7 km
	WOHZ-CD	D20	DC	APP	MANSFIELD, OH	WOHZ-CD_1015774	180.4
	WLWT	D20	DT	LIC	CINCINNATI, OH	BLANK0000087261	158.9
	WFYI	D21	DT	LIC	INDIANAPOLIS, IN	BLEDT20100803ADB	270.5
	WKYT-TV	D21	DT	LIC	LEXINGTON, KY	BLANK0000074953	245.3
	WWJ-TV	D21	DT	LIC	DETROIT, MI	BLANK0000125983	275.6
	WSEE-TV	D21	DT	LIC	ERIE, PA	BLANK0000074552	338.6
	WPNT	D21	DT	LIC	PITTSBURGH, PA	BLANK0000112577	263.1
	WBGU-TV	D22	DT	LIC	BOWLING GREEN, OH	BLANK0000063785	149.3
	WSAZ-TV	D22	DT	LIC	HUNTINGTON, WV	BLANK0000100249	176.7

Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
29762.5	2,836,253	29098.0	2,796,624	28135.6	2,719,782	28163.4 2,723,883 -0.10 -0.15
Undesired	Total IX		Unique IX, before		Unique IX, after	
WOHZ-CD D20 DC BL	84.5	11,191	27.8	4,101	0.0	0
WOHZ-CD D20 DC APP	0.0	0			0.0	0
WLWT D20 DT LIC	17.8	801	4.9	355	4.9	355
WFYI D21 DT LIC	485.4	41,807	195.5	21,621	195.5	21,621
WKYT-TV D21 DT LIC	273.4	22,273	101.4	6,088	101.4	6,088
WWJ-TV D21 DT LIC	365.9	19,654	103.4	3,598	143.2	7,856
WSEE-TV D21 DT LIC	3.0	544	0.0	0	0.0	0
WPNT D21 DT LIC	161.9	15,310	125.0	10,025	127.0	10,510
WBGU-TV D22 DT LIC	35.8	422	6.0	31	6.0	31
WSAZ-TV D22 DT LIC	8.9	140	4.0	42	4.0	42

Interference to BLCDDT20021025ABK LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WBNS-TV	D21	DT	LIC	COLUMBUS, OH	BLCDDT20021025ABK	
Undesireds:	WOHZ-CD	D20	DC	BL	MANSFIELD, OH	DTVBL41892	94.7 km
	WOHZ-CD	D20	DC	APP	MANSFIELD, OH	WOHZ-CD_1015774	180.4
	WLWT	D20	DT	CP	CINCINNATI, OH	BLANK0000127507	158.9
	WFYI	D21	DT	LIC	INDIANAPOLIS, IN	BLEDT20100803ADB	270.5
	WKYT-TV	D21	DT	LIC	LEXINGTON, KY	BLANK0000074953	245.3
	WWJ-TV	D21	DT	LIC	DETROIT, MI	BLANK0000125983	275.6
	WSEE-TV	D21	DT	LIC	ERIE, PA	BLANK0000074552	338.6
	WPNT	D21	DT	LIC	PITTSBURGH, PA	BLANK0000112577	263.1
	WBGU-TV	D22	DT	LIC	BOWLING GREEN, OH	BLANK0000063785	149.3
	WSAZ-TV	D22	DT	LIC	HUNTINGTON, WV	BLANK0000100249	176.7

Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
29762.5	2,836,253	29098.0	2,796,624	28134.6	2,719,745	28162.4 2,723,846 -0.10 -0.15
Undesired	Total IX		Unique IX, before		Unique IX, after	
WOHZ-CD D20 DC BL	84.5	11,191	27.8	4,101	0.0	0
WOHZ-CD D20 DC APP	0.0	0			0.0	0
WLWT D20 DT CP	19.8	838	5.9	392	5.9	392
WFYI D21 DT LIC	485.4	41,807	195.5	21,621	195.5	21,621
WKYT-TV D21 DT LIC	273.4	22,273	101.4	6,088	101.4	6,088

Table 1 WOHZ-CD TVStudy Analysis of Proposal
(page 5 of 5)



WWJ-TV D21 DT LIC	365.9	19,654	103.4	3,598	143.2	7,856
WSEE-TV D21 DT LIC	3.0	544	0.0	0	0.0	0
WPNT D21 DT LIC	161.9	15,310	125.0	10,025	127.0	10,510
WBGU-TV D22 DT LIC	35.8	422	6.0	31	6.0	31
WSAZ-TV D22 DT LIC	8.9	140	4.0	42	4.0	42

Interference to proposal scenario 1
5.27% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WOHZ-CD	D20	DC	APP	MANSFIELD, OH	WOHZ-CD_1015774	
Undesireds:	WKYC	D19	DT	LIC	CLEVELAND, OH	BLANK0000087282	65.4 km
	WTVS	D20	DT	LIC	DETROIT, MI	BLANK0000117036	234.4
	WLWT	D20	DT	LIC	CINCINNATI, OH	BLANK0000087261	339.3
	WPGH-TV	D20	DT	LIC	PITTSBURGH, PA	BLANK0000112578	115.3

	Service area		Terrain-limited		IX-free	Percent IX	
	5025.5	929,186	4937.7	911,151	4853.7	863,114	1.70 5.27
Undesired				Total IX		Unique IX	Prcnt Unique IX
WKYC D19 DT LIC		21.2		34,380	12.1	20,184	0.25 2.22
WTVS D20 DT LIC		14.0		4,041	3.0	314	0.06 0.03
WPGH-TV D20 DT LIC		66.9		24,817	50.8	12,338	1.03 1.35

**Channel and
Facility
Information**

Section	Question	Response
Proposed Community of License	Facility ID	41892
	State	Ohio
	City	MANSFIELD
	DCA Channel	20
	Designated Market Area	Cleveland-Akron (Canton)

**Antenna Location
Data**

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1015774
Coordinates (NAD83)	Latitude	40° 53' 24.0" N+
	Longitude	081° 16' 11.0" W-
	Structure Type	TOWER-A free standing or guyed struct
	Overall Structure Height	238.7 meters
	Support Structure Height	238.0 meters
	Ground Elevation (AMSL)	385.8 meters
Antenna Data	Height of Radiation Center Above Ground Level	219.5 meters
	Height of Radiation Center Above Mean Sea Level	605.3 meters
	Effective Radiated Power	15 kW

**Antenna
Technical Data**

Section	Question	Response
Antenna Type	Antenna Type	Directional Custom
	Do you have an Antenna ID?	No
	Antenna ID	
Antenna Manufacturer and Model	Manufacturer:	Dielectric
	Model	TLP-8F/VP-R
	Rotation	220 degrees
	Electrical Beam Tilt	1.0
	Mechanical Beam Tilt	Not Applicable
	toward azimuth	
	Polarization	Elliptical
Elevation Radiation Pattern	Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?	No
	Uploaded file for elevation antenna (or radiation) pattern data	
	Out-of-Channel Emission Mask:	Full Service

Directional Antenna Relative Field Values (Pre-rotated Pattern)

Degree	Value	Degree	Value	Degree	Value	Degree	Value
0	1.000	90	0.223	180	0.077	270	0.224
10	0.983	100	0.165	190	0.071	280	0.304
20	0.939	110	0.101	200	0.051	290	0.409
30	0.850	120	0.049	210	0.028	300	0.525
40	0.745	130	0.023	220	0.017	310	0.640
50	0.634	140	0.019	230	0.035	320	0.750
60	0.521	150	0.028	240	0.080	330	0.849
70	0.405	160	0.045	250	0.125	340	0.932
80	0.296	170	0.064	260	0.168	350	0.987

Additional Azimuths

Degree	V _A
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