

FIGURE 3B - FULL FCC TVSTUDY REPORT (PROVIDED FOR CANADA CKCO-DT DETAILS)

STUDY NOTES - PARAMETERS USED

BEFORE & AFTER STUDY CONDUCTED

Study cell size: 1.00 km

Profile point spacing: 0.10 km

Study build station data: LMS TV 2024-01-08

Proposal: W13DS-D D13 LD APP CLEVELAND, OH
File number: W13DS MOD OF LICENSE
Facility ID: 68016
Station data: User record
Record ID: 722
Country: U.S.

Proposal "before": W13DS-D D13- LD LIC CLEVELAND, OH
File number: BLANK0000164310
Facility ID: 68016
Station data: LMS TV 2024-01-08
Record ID: 25076ff37c9ab055017c9ee9334011f6
Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Search options:

Non-U.S. records included

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLANK0000222027	153.9 km
Yes	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	102.0
No	WBPA-LD	D12+	LD	LIC	PITTSBURGH, PA	BLANK0000125159	152.7
No	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	257.4
No	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	464.6
No	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	464.6
No	WTSF	D13	DT	LIC	ASHLAND, KY	BLANK0000117277	363.2
No	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	442.8
No	WNYI	D13	DT	LIC	ITHACA, NY	BLANK0000181680	408.2
No	WDSS-LD	D13	LD	LIC	SYRACUSE, NY	BLANK0000157036	408.2
Yes	WIVX-LD	D13	LD	LIC	CLEVELAND, OH	BLANK0000219037	60.8
Yes	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	194.3
Yes	W13DP-D	D13	LD	LIC	YOUNGSTOWN, OH	BLANK0000090576	62.1
No	WVFX	D13	DT	LIC	CLARKSBURG, WV	BLANK0000179139	255.4
No	WWPX-TV	D13	DT	LIC	MARTINSBURG, WV	BLANK0000117578	378.7
Yes	CKCO-DT	D13	DT	LIC	KITCHENER, ON	BLANKCANADA182	211.8

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D13
Mask: Full Service
Latitude: 41 31 40.80 N (NAD83)
Longitude: 81 5 5.50 W
Height AMSL: 458.2 m
HAAT: 0.0 m
Peak ERP: 3.00 kW
Antenna: DIE-THA-MC2 (ID 38092) 300.0 deg
Elev Pattern: Generic

48.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	3.00 kW	88.4 m	43.7 km
45.0	0.859	123.3	40.3

90.0	0.000	162.1	1.5
135.0	0.000	140.9	1.5
180.0	0.247	93.0	28.0
225.0	2.61	93.2	43.6
270.0	1.79	86.6	39.9
315.0	1.04	94.5	37.6

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 110 m

****Proposal 21.00 dBu contour crosses Canadian border, coordination required**
Distance to Canadian border: 76.7 km

Distance to Mexican border: 2238.8 km

Conditions at FCC monitoring station: Canandaigua NY
Bearing: 62.6 degrees Distance: 350.0 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 273.7 degrees Distance: 2029.1 km

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 BLANK000074553 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK000074553	
Undesireds:	W13DS-D	D13-	LD	LIC	CLEVELAND, OH	BLANK0000164310	86.8 km
	W13DS-D	D13	LD	APP	CLEVELAND, OH	W13DS MOD OF LICENSE	102.0
	WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLANK0000222027	255.8
	WYOU	D12	DT	LIC	SCRANTON, PA	BLANK0000116962	360.8
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	306.8
	CHEX-DT	D12	DT	LIC	PETERBOROUGH, ON	BLANKCANADA212	291.9
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	18976.5	740,488	17993.9	692,585	17693.9	679,877	17702.9 680,126 -0.05 -0.04
	6189.2	54,128	6189.2	54,128	6189.2	54,128	6189.2 54,128 0.00 0.00 (in
Canada)							

Undesired	Total IX	Unique IX, before	Unique IX, after
W13DS-D D13- LD LIC	9.0 249	9.0 249	
W13DS-D D13 LD APP	0.0 0		0.0 0
WMFD-TV D12 DT LIC	208.1 6,431	181.0 5,139	181.0 5,139
WYOU D12 DT LIC	5.0 1	3.0 1	3.0 1
WBOY-TV D12 DT LIC	36.2 1,401	8.1 109	8.1 109
CHEX-DT D12 DT LIC	70.8 5,918	69.8 5,918	69.8 5,918

Interference to BLANK0000219037 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WIVX-LD	D13	LD	LIC	CLEVELAND, OH	BLANK0000219037	
Undesireds:	W13DS-D	D13-	LD	LIC	CLEVELAND, OH	BLANK0000164310	77.0 km
	W13DS-D	D13	LD	APP	CLEVELAND, OH	W13DS MOD OF LICENSE	60.8
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	143.4
	W13DP-D	D13	LD	LIC	YOUNGSTOWN, OH	BLANK0000090576	97.5
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	4449.2	1,853,235	4380.0	1,804,753	4242.2	1,715,527	4182.8 1,681,716 1.40 1.97

Undesired		Total IX	Unique IX, before	Unique IX, after
W13DS-D D13- LD LIC	21.1	17,917	6.0	10,608
W13DS-D D13 LD APP	110.6	82,069		65.4 44,419
WTVG D13 DT LIC	130.8	78,364	116.7	71,309
W13DP-D D13 LD LIC	1.0	254	0.0	0

Interference to BLANK0000143483 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	
Undesireds:	W13DS-D	D13-	LD	LIC	CLEVELAND, OH	BLANK0000164310	197.0 km
	W13DS-D	D13	LD	APP	CLEVELAND, OH	W13DS MOD OF LICENSE	194.3
	WINM	D12	DD	APP	ANGOLA, IN	BLANK0000218722	143.9
	WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLANK0000222027	121.9
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	303.8
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDDT20100726AKV	273.1
	CKCO-DT	D13	DT	LIC	KITCHENER, ON	BLANKCANADA182	297.3

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25963.7 4,389,411	25802.1 4,374,854	25331.7 4,335,847	25306.6 4,335,847	0.10 0.00
4332.2 389,070	4332.2 389,070	4332.2 389,070	4332.2 389,070	0.00 0.00 (in

Canada)

Undesired		Total IX	Unique IX, before	Unique IX, after
W13DS-D D13- LD LIC	0.0	0	0.0	0
W13DS-D D13 LD APP	27.1	52		25.1 0
WMFD-TV D12 DT LIC	73.4	728	73.4	728 715
WTHR D13 DT LIC	50.2	1,715	27.2	1,416
WZZM D13 DT LIC	368.8	36,824	345.7	36,525
CKCO-DT D13 DT LIC	1.0	39	1.0	39 0.0 0

Interference to BLANK0000143483 LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	
Undesireds:	W13DS-D	D13-	LD	LIC	CLEVELAND, OH	BLANK0000164310	197.0 km
	W13DS-D	D13	LD	APP	CLEVELAND, OH	W13DS MOD OF LICENSE	194.3
	WINM	D12	DD	APP	ANGOLA, IN	BLANK0000218722	143.9
	WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLANK0000222027	121.9
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDDT20130702ABM	303.8
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDDT20100726AKV	273.1
	CKCO-DT	D13	DT	LIC	KITCHENER, ON	BLANKCANADA182	297.3

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25963.7 4,389,411	25802.1 4,374,854	25200.8 4,331,797	25175.7 4,331,797	0.10 0.00
4332.2 389,070	4332.2 389,070	4332.2 389,070	4332.2 389,070	0.00 0.00 (in

Canada)

Undesired		Total IX	Unique IX, before	Unique IX, after
W13DS-D D13- LD LIC	0.0	0	0.0	0
W13DS-D D13 LD APP	27.1	52		25.1 0
WMFD-TV D12 DT LIC	73.4	728	73.4	728 715
WTHR D13 DT APP	210.0	7,257	158.1	5,466
WZZM D13 DT LIC	368.8	36,824	316.8	35,033
CKCO-DT D13 DT LIC	1.0	39	1.0	39 0.0 0

Interference to BLANK0000143483 LIC scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	
Undesireds:	W13DS-D	D13-	LD	LIC	CLEVELAND, OH	BLANK0000164310	197.0 km

W13DS-D	D13	LD	APP	CLEVELAND, OH	W13DS MOD OF LICENSE	194.3
WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	118.3
WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLANK0000222027	121.9
WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	303.8
WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	273.1
CKCO-DT	D13	DT	LIC	KITCHENER, ON	BLANKCANADA182	297.3

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent	New IX	(in
25963.7	4,389,411	25802.1	4,374,854	25324.7	4,335,494	25299.6	4,335,494	0.10	0.00	
4332.2	389,070	4332.2	389,070	4332.2	389,070	4332.2	389,070	0.00	0.00	

Canada)

Undesired		Total IX		Unique IX, before		Unique IX, after	
W13DS-D D13- LD LIC	0.0	0	0.0	0			
W13DS-D D13 LD APP	27.1	52			25.1	0	
WINM D12 DT LIC	20.1	452	7.0	353	7.0	353	
WMFD-TV D12 DT LIC	73.4	728	73.4	728	72.4	715	
WTHR D13 DT LIC	50.2	1,715	24.2	1,397	24.2	1,397	
WZZM D13 DT LIC	368.8	36,824	344.7	36,523	344.7	36,523	
CKCO-DT D13 DT LIC	1.0	39	1.0	39	0.0	0	

Interference to BLANK0000143483 LIC scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	
Undesireds:	W13DS-D	D13-	LD	LIC	CLEVELAND, OH	BLANK0000164310	197.0 km
	W13DS-D	D13	LD	APP	CLEVELAND, OH	W13DS MOD OF LICENSE	194.3
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	118.3
	WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLANK0000222027	121.9
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	303.8
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	273.1
	CKCO-DT	D13	DT	LIC	KITCHENER, ON	BLANKCANADA182	297.3

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent	New IX	(in
25963.7	4,389,411	25802.1	4,374,854	25199.8	4,331,778	25174.7	4,331,778	0.10	0.00	
4332.2	389,070	4332.2	389,070	4332.2	389,070	4332.2	389,070	0.00	0.00	

Canada)

Undesired		Total IX		Unique IX, before		Unique IX, after	
W13DS-D D13- LD LIC	0.0	0	0.0	0			
W13DS-D D13 LD APP	27.1	52			25.1	0	
WINM D12 DT LIC	20.1	452	1.0	19	1.0	19	
WMFD-TV D12 DT LIC	73.4	728	73.4	728	72.4	715	
WTHR D13 DT APP	210.0	7,257	149.1	5,113	149.1	5,113	
WZZM D13 DT LIC	368.8	36,824	316.8	35,033	316.8	35,033	
CKCO-DT D13 DT LIC	1.0	39	1.0	39	0.0	0	

Interference to BLANK000090576 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	W13DP-D	D13	LD	LIC	YOUNGSTOWN, OH	BLANK000090576	
Undesireds:	W13DS-D	D13-	LD	LIC	CLEVELAND, OH	BLANK0000164310	82.4 km
	W13DS-D	D13	LD	APP	CLEVELAND, OH	W13DS MOD OF LICENSE	62.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent	New IX
3654.5	602,206	3613.4	597,099	3613.4	597,099	3605.4	596,928	0.22	0.03

Undesired		Total IX		Unique IX, before		Unique IX, after	
W13DS-D D13- LD LIC	0.0	0	0.0	0			
W13DS-D D13 LD APP	8.0	171			8.0	171	

Interference to BLANKCANADA182 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	CKCO-DT	D13	DT	LIC	KITCHENER, ON	BLANKCANADA182	
Undesireds:	W13DS-D	D13-	LD	LIC	CLEVELAND, OH	BLANK0000164310	186.1 km
	W13DS-D	D13	LD	APP	CLEVELAND, OH	W13DS MOD OF LICENSE	211.8
	WNYI	D13	DT	LIC	ITHACA, NY	BLANK0000181680	347.1
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	297.3
	CKWS-DT	D13	DT	LIC	KINGSTON, ON	BLANKCANADA181	348.0

	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
27339.1	4,346,989	25502.7	3,798,650	25183.0 3,721,362	25112.5 3,718,951
					0.28 0.06

Undesired	Total IX	Unique IX, before	Unique IX, after
W13DS-D D13- LD LIC	0.0	0	0
W13DS-D D13 LD APP	196.5	10,156	70.6 2,411
WNYI D13 DT LIC	5.0	8,089	3.0 6,704
WTVG D13 DT LIC	278.3	14,193	278.3 14,193
CKWS-DT D13 DT LIC	38.4	56,391	36.4 55,006

Interference to proposal scenario 1
18.22% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W13DS-D	D13	LD	APP	CLEVELAND, OH	W13DS MOD OF LICENSE	
Undesireds:	WIVX-LD	D13	LD	LIC	CLEVELAND, OH	BLANK0000219037	60.8 km
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	194.3
	W13DP-D	D13	LD	LIC	YOUNGSTOWN, OH	BLANK0000090576	62.1
	CKCO-DT	D13	DT	LIC	KITCHENER, ON	BLANKCANADA182	211.8

	Service area	Terrain-limited	IX-free	Percent IX
3624.7	755,300	3469.9	619,417	3222.5 506,579
				7.13 18.22

Undesired	Total IX	Unique IX	Prcnt Unique IX
WIVX-LD D13 LD LIC	129.5	101,792	88.3 50,015
WTVG D13 DT LIC	42.2	52,710	5.0 1,453
W13DP-D D13 LD LIC	108.9	9,529	103.8 8,991
CKCO-DT D13 DT LIC	10.0	700	7.0 486
			0.20 0.08