

# INTERFERENCE ANALYSIS FOR LICENSED W17DF-D, MUSKEGON, MI, CHANNEL 17, WITH RESPECT TO WOTV

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: w17df\_lic, Model: Longley-Rice

Study build station data: LMS TV 2018-04-12

Proposal: W17DF-D D17 LD LIC MUSKEGON, MI

File number: BLDLTL20110215AAG

Facility ID: 64442

Station data: LMS TV 2018-04-12

Record ID: f2bc10a7d173422f9c57cf6212b6c0ea

Country: U.S.

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WTVO	D16	DT	LIC	ROCKFORD, IL	BLCDT20021024AAS	271.1 km
No	WEID-LD	D16	LD	LIC	SOUTH BEND, IN	BLDTL20141105ADE	182.0
No	WOBC-CD	D16	DC	CP	BATTLE CREEK, MI	BLANK0000027730	139.7
No	WSMH	D16	DT	LIC	FLINT, MI	BLCDT20090804ABG	168.5
No	W16DN-D	D16	LD	CP	TRAVERSE CITY, MI	BNPDTL20100510AGN	164.7
No	KWQC-TV	D17	DT	CP	DAVENPORT, IA	BLANK0000033932	405.3
No	KQCT-LP	D17	LD	CP	DAVENPORT, IA	BMPDTL20120206AAB	412.3
No	WIDN-LD	D17	LD	LIC	ROCKFORD, IL	BLANK0000008118	257.6
No	WIDN-LD	D17	LD	CP	ROCKFORD, IL	BLANK0000013332	257.4
No	WYIN	D17	DT	LIC	GARY, IN	BLEDT20040206AAA	241.2
No	WISH-TV	D17	LD	LIC	INDIANAPOLIS, IN	BLCDT20110207ACU	380.6
No	WALV-CD	D17	DC	CP	INDIANAPOLIS, IN	BLANK0000028083	376.3
Yes	WOTV	D17	DT	CP	BATTLE CREEK, MI	BLANK0000034787	99.7
Yes	WXMI	D17	LD	LIC	GRAND RAPIDS, MI	BLCDT20141105ACV	140.2
No	WBNX-TV	D17	DT	CP	AKRON, OH	BLANK0000028072	424.4
No	W23DE-D	D17	LD	APP	LIMA, OH	BLANK0000051874	326.9
No	WEAU	D17	DT	CP	EAU CLAIRE, WI	BLANK0000034098	412.5
No	WGBD-LD	D17	LD	APP	GREEN BAY, WI	BLANK0000048529	191.0
Yes	WBME-CD	D17	DC	CP	MILWAUKEE, WI	BLANK0000034630	145.6
Yes	WYTU-LD	D17	LD	LIC	MILWAUKEE, WI	BLDTL20120731ALQ	145.6
No	WMEU-CD	D18	DC	CP	CHICAGO, IL	BLANK0000034599	200.3
No	WFWA	D18	DT	CP	FORT WAYNE, IN	BLANK0000034724	258.2
No	WBWM-LD	D18	LD	CP	MT PLEASANT, MI	BDCCDTL20121130BNU	87.6
No	WURO-LD	D18	LD	LIC	ROSCOMMON, MI	BLDTL20141113AFT	190.9
No	WEYI-TV	D18	DT	CP	SAGINAW, MI	BLANK0000034331	197.2
No	WMSN-TV	D18	DT	CP	MADISON, WI	BLANK0000034381	275.4

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

**Channel: D17**

Mask: Stringent

Latitude: 43 18 50.10 N (NAD83)

Longitude: 86 9 17.20 W

Height AMSL: 327.9 m

HAAT: 0.0 m

Peak ERP: 15.0 kW

Antenna: Omnidirectional

Elev Pattn: Generic

Elec Tilt: 1.75

49.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	115.8 m	46.6 km
45.0	15.0	109.9	46.0
90.0	15.0	124.4	47.2
135.0	15.0	128.8	47.5
180.0	15.0	133.4	47.8
225.0	15.0	145.6	48.7
270.0	15.0	129.9	47.6
315.0	15.0	122.9	47.1

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 126 m

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Proposal 24.04 dBu contour does not cross Canadian border  
Distance to Canadian border: 274.1 km

Distance to Mexican border: 2023.0 km

Conditions at FCC monitoring station: Allegan MI  
Bearing: 168.3 degrees Distance: 80.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 264.0 degrees Distance: 1616.5 km

No land mobile station failures found

Proposal is not within the Offshore Radio Service protected area

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

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

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Interference to BLANK0000034787 CP scenario 1

**\*\*IX: 7.54% interference caused**

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WOTV	D17	DT	CP	BATTLE CREEK, MI	BLANK0000034787	
Undesireds:	W17DF-D	D17	LD	LIC	MUSKEGON, MI	BLDTL20110215AAG	99.7 km
	WFWC-CD	D16	DC	CP	FORT WAYNE, IN	BLANK0000025862	165.8
	WOBC-CD	D16	DC	CP	BATTLE CREEK, MI	BLANK0000027730	40.1
	WSMH	D16	DT	LIC	FLINT, MI	BLCDT20090804ABG	134.7
	WYIN	D17	DT	LIC	GARY, IN	BLEDT20040206AAA	209.6
	WALV-CD	D17	DC	CP	INDIANAPOLIS, IN	BLANK0000028083	299.7
	WBNX-TV	D17	DT	CP	AKRON, OH	BLANK0000028072	338.5
	WBME-CD	D17	DC	CP	MILWAUKEE, WI	BLANK0000034630	209.4
	WMEU-CD	D18	DC	CP	CHICAGO, IL	BLANK0000034599	194.3
	WFWA	D18	DT	CP	FORT WAYNE, IN	BLANK0000034724	164.7
	WEYI-TV	D18	DT	CP	SAGINAW, MI	BLANK0000034331	159.4
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	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	27508.6	2,368,326	27495.6	2,368,069	27332.8	2,357,750	24716.8 2,179,987 9.57 <b>7.54</b>

Undesired			Total IX	Unique IX, before		Unique IX, after	
W17DF-D D17 LD LIC	2634.0		178,050			2616.0	177,763
WSMH D16 DT LIC	47.2		1,105	45.2	1,079	45.2	1,079
WYIN D17 DT LIC	107.6		9,091	101.6	8,986	97.6	8,872
WBME-CD D17 DC CP	14.0		228	8.0	123	0.0	0
WEYI-TV D18 DT CP	2.0		26	0.0	0	0.0	0

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Interference to proposal scenario 1

**\*\*MX: 31.07% interference received**

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W17DF-D	D17	LD	LIC	MUSKEGON, MI	BLDTL20110215AAG	
Undesireds:	WIDN-LD	D17	LD	LIC	ROCKFORD, IL	BLANK0000008118	257.6 km
	WOTV	D17	DT	CP	BATTLE CREEK, MI	BLANK0000034787	99.7
	WXMI	D17	LD	LIC	GRAND RAPIDS, MI	BLCDT20141105ACV	140.2
	WGBD-LD	D17	LD	APP	GREEN BAY, WI	BLANK0000048529	191.0
	WBME-CD	D17	DC	CP	MILWAUKEE, WI	BLANK0000034630	145.6
	WYTU-LD	D17	LD	LIC	MILWAUKEE, WI	BLDTL20120731ALQ	145.6

	Service area	Terrain-limited		IX-free	Percent IX	
	7038.8	367,227	6989.1	364,382	5084.3	251,182 27.25 31.07
Undesired			Total IX	Unique IX		Prct Unique IX
WOTV D17 DT CP	1902.9		113,074	1894.8	113,021	27.11 <b>31.02</b>
WXMI D17 LD LIC	1.0		9	0.0	0	0.00 0.00

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WGBD-LD D17 LD APP	1.0	11	0.0	0	0.00	0.00
WBME-CD D17 DC CP	7.1	126	0.0	0	0.00	0.00
WYTU-LD D17 LD LIC	8.1	159	0.0	0	0.00	0.00

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