

INTERFERENCE ANALYSIS FOR PROPOSED WDJT-TV MILWAUKEE, WI (CHANNEL 29)

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: wdj_t_p2b, Model: Longley-Rice

Study build station data: LMS TV 2019-06-28

Proposal: WDJT_P2B D29 DT APP MILWAUKEE, WI
File number: wdj_t_p2b
Facility ID: 71427
Station data: User record
Record ID: 3996
Country: U.S.
Zone: I

Search options:
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WEDE-CD	D28	DC	CP	ARLINGTON HEIGHTS, IL	BLANK0000028640	139.1 km
No	WSYM-TV	D28	DT	CP	LANSING, MI	BLANK0000026760	276.8
Yes	WISN-TV	D28	DT	CP	MILWAUKEE, WI	BLANK0000034528	0.2
Yes	KGAN	D29	DT	LIC	CEDAR RAPIDS, IA	BLCDT20140416AAI	332.7
Yes	WSBT-TV	D29	DT	CP	SOUTH BEND, IN	BLANK0000034389	217.7
Yes	WOMS-CD	D29	DC	LIC	MUSKEGON, MI	BLDTA20110812ACT	151.2
Yes	WGTU	D29	DT	APP	TRAVERSE CITY, MI	BLANK0000035794	292.5
Yes	WGTU	D29	DT	LIC	TRAVERSE CITY, MI	BLCDT20090622AFH	292.5
No	WFTC	D29	DT	LIC	MINNEAPOLIS, MN	BLCDT20100809CJF	467.6
No	WGTE-TV	D29	DT	LIC	TOLEDO, OH	BLEDT20031110AKO	403.1
No	WSJV	D30	DT	CP	ELKHART, IN	BLANK0000027461	219.0
Yes	WPXE-TV	D30	DT	CP	KENOSHA, WI	BLANK0000068030	3.6

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D29
Latitude: 43 6 42.00 N (NAD83)
Longitude: 87 55 50.00 W
Height AMSL: 554.1 m
HAAT: 351.0 m
Peak ERP: 1000 kW
Antenna: DIE-TFU-23ETT-R CT3 (ID 105491) 0.0 deg
Elev Pattern: Generic
Elec Tilt: 0.75

40.2 dBu contour:			
Azimuth	ERP	HAAT	Distance
0.0 deg	980 kW	347.9 m	103.0 km
45.0	399	376.9	97.5
90.0	137	377.1	89.3
135.0	385	370.4	96.8
180.0	998	353.8	103.7
225.0	716	331.0	98.7
270.0	980	326.5	101.0
315.0	706	327.9	98.3

Distance to Canadian border: 404.2 km

Distance to Mexican border: 1905.2 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 108.6 degrees Distance: 170.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 263.0 degrees Distance: 1471.1 km

Study cell size: 2.00 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%

Interference to BLANK0000034528 CP scenario 1

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Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WISN-TV	D28	DT	CP	MILWAUKEE, WI	BLANK0000034528	
Undesireds:	WDJT-TV	D29	DT	BL	MILWAUKEE, WI	DTVBL71427	0.2 km
	WDJT_P2B	D29	DT	APP	MILWAUKEE, WI	wdjt_p2b	0.2
	WVTV	D27	DT	CP	MILWAUKEE, WI	BLANK0000034387	2.6
	WEDE-CD	D28	DC	CP	ARLINGTON HEIGHTS, IL	BLANK0000028640	139.1
	WYZZ-TV	D28	DT	LIC	BLOOMINGTON, IL	BLCDT20060609ABE	293.0
	WYOW	D28	DT	LIC	EAGLE RIVER, WI	BLCDT20121005AAF	314.0
	WXOW	D28	DT	LIC	LA CROSSE, WI	BLANK0000058613	288.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
26412.0 3,003,636	26255.6 2,997,695	26011.2 2,980,870	25971.3 2,977,592	0.15 0.11

Undesired	Total IX	Unique IX, before	Unique IX, after
WDJT-TV D29 DT BL	31.9 573	16.0 458	
WDJT_P2B D29 DT APP	79.8 4,194		55.9 3,736
WVTV D27 DT CP	32.0 525	16.1 410	8.1 92
WEDE-CD D28 DC CP	8.0 2,435	0.0 0	0.0 0
WYZZ-TV D28 DT LIC	136.2 8,886	116.3 6,318	112.3 6,277
WYOW D28 DT LIC	24.1 6,699	0.0 0	0.0 0
WXOW D28 DT LIC	72.1 7,089	36.0 257	40.0 273

Interference to BLANK0000034528 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WISN-TV	D28	DT	CP	MILWAUKEE, WI	BLANK0000034528	
Undesireds:	WDJT-TV	D29	DT	BL	MILWAUKEE, WI	DTVBL71427	0.2 km
	WDJT_P2B	D29	DT	APP	MILWAUKEE, WI	wdjt_p2b	0.2
	WVTV	D27	DT	CP	MILWAUKEE, WI	BLANK0000034387	2.6
	WEDE-CD	D28	DC	CP	ARLINGTON HEIGHTS, IL	BLANK0000028640	139.1
	WYZZ-TV	D28	DT	LIC	BLOOMINGTON, IL	BLCDT20060609ABE	293.0
	WYOW	D28	DT	APP	EAGLE RIVER, WI	BPCDT20121019AAE	314.0
	WXOW	D28	DT	LIC	LA CROSSE, WI	BLANK0000058613	288.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
26412.0 3,003,636	26255.6 2,997,695	26011.2 2,980,870	25971.3 2,977,592	0.15 0.11

Undesired	Total IX	Unique IX, before	Unique IX, after
WDJT-TV D29 DT BL	31.9 573	16.0 458	
WDJT_P2B D29 DT APP	79.8 4,194		55.9 3,736
WVTV D27 DT CP	32.0 525	16.1 410	8.1 92
WEDE-CD D28 DC CP	8.0 2,435	0.0 0	0.0 0
WYZZ-TV D28 DT LIC	136.2 8,886	116.3 6,318	112.3 6,277
WYOW D28 DT APP	24.1 6,699	0.0 0	0.0 0
WXOW D28 DT LIC	72.1 7,089	36.0 257	40.0 273

Interference to BLCDT20140416AAI LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KGAN	D29	DT	LIC	CEDAR RAPIDS, IA	BLCDT20140416AAI	
Undesireds:	WDJT-TV	D29	DT	BL	MILWAUKEE, WI	DTVBL71427	332.7 km
	WDJT_P2B	D29	DT	APP	MILWAUKEE, WI	wdjt_p2b	332.7
	WBXF-CD	D28z	DC	CP	DES MOINES, IA	BLANK0000035778	167.1
	WXOW	D28	DT	LIC	LA CROSSE, WI	BLANK0000058613	170.3
	WFTC	D29	DT	LIC	MINNEAPOLIS, MN	BLCDT20100809CJF	321.3
	KXVO	D29	DT	CP	OMAHA, NE	BLANK0000034544	387.9
	KLJB	D30	DT	CP	DAVENPORT, IA	BLANK0000034774	165.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
45150.0 1,083,213	44566.9 1,057,597	44158.6 1,051,062	44102.6 1,050,188	0.13 0.08

Undesired	Total IX	Unique IX, before	Unique IX, after
WDJT-TV D29 DT BL	124.0 1,053	100.1 867	
WDJT_P2B D29 DT APP	187.9 1,945		156.1 1,741
WBXF-CD D28z DC CP	12.1 247	8.0 140	8.0 140
WXOW D28 DT LIC	7.9 28	4.0 14	4.0 14
WFTC D29 DT LIC	123.1 855	99.3 761	95.3 757
KXVO D29 DT CP	20.1 177	12.1 59	12.1 59
KLJB D30 DT CP	157.0 4,493	149.0 4,376	149.0 4,376

Interference to BLCDT20140416AAI LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KGAN	D29	DT	LIC	CEDAR RAPIDS, IA	BLCDT20140416AAI	
Undesireds:	WDJT-TV	D29	DT	BL	MILWAUKEE, WI	DTVBL71427	332.7 km

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WDJT_P2B	D29	DT	APP	MILWAUKEE, WI	wdjt_p2b	332.7
WXOW	D28	DT	LIC	LA CROSSE, WI	BLANK0000058613	170.3
WFTC	D29	DT	LIC	MINNEAPOLIS, MN	BLCDT20100809CJF	321.3
KXVO	D29	DT	CP	OMAHA, NE	BLANK0000034544	387.9
KLJB	D30	DT	CP	DAVENPORT, IA	BLANK0000034774	165.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent	New	IX
45150.0	1,083,213	44566.9	1,057,597	44166.6	1,051,202	44110.6	1,050,328	0.13		0.08
Undesired		Total IX		Unique IX, before		Unique IX, after				
WDJT-TV D29 DT BL	124.0		1,053	100.1	867					
WDJT_P2B D29 DT APP	187.9		1,945			156.1	1,741			
WXOW D28 DT LIC	7.9		28	4.0	14	4.0	14			
WFTC D29 DT LIC	123.1		855	99.3	761	95.3	757			
KXVO D29 DT CP	20.1		177	16.1	166	16.1	166			
KLJB D30 DT CP	157.0		4,493	149.0	4,376	149.0	4,376			

Interference to BLANK0000034389 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WSBT-TV	D29	DT	CP	SOUTH BEND, IN	BLANK0000034389	
Undesireds:							
	WDJT-TV	D29	DT	BL	MILWAUKEE, WI	DTVBL71427	217.8 km
	WDJT_P2B	D29	DT	APP	MILWAUKEE, WI	wdjt_p2b	217.7
	WIWU-CD	D28	DC	CP	MARION, IN	BLANK0000033170	121.1
	WOMS-CD	D29	DC	LIC	MUSKEGON, MI	BLDTA20110812ACT	183.3
	WGTU	D29	DT	APP	TRAVERSE CITY, MI	BLANK0000035794	360.3
	WPTO	D29	DT	CP	OXFORD, OH	BLANK0000034602	312.0
	WGTE-TV	D29	DT	LIC	TOLEDO, OH	BLEDT20031110AKO	231.4
	WSJV	D30	DT	CP	ELKHART, IN	BLANK0000027461	1.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent	New	IX
27552.2	1,763,215	27516.4	1,752,698	27403.8	1,730,778	27351.2	1,724,658	0.19		0.35
Undesired		Total IX		Unique IX, before		Unique IX, after				
WDJT-TV D29 DT BL	88.6		20,251	76.6	19,930					
WDJT_P2B D29 DT APP	141.1		26,371			129.1	26,050			
WIWU-CD D28 DC CP	11.9		254	11.9	254	11.9	254			
WOMS-CD D29 DC LIC	8.0		404	0.0	0	0.0	0			
WGTU D29 DT APP	12.0		1,501	4.0	1,097	4.0	1,097			
WPTO D29 DT CP	4.0		99	0.0	0	0.0	0			
WGTE-TV D29 DT LIC	12.1		321	0.0	0	0.0	0			
WSJV D30 DT CP	4.1		41	4.1	41	4.1	41			

Interference to BLANK0000034389 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WSBT-TV	D29	DT	CP	SOUTH BEND, IN	BLANK0000034389	
Undesireds:							
	WDJT-TV	D29	DT	BL	MILWAUKEE, WI	DTVBL71427	217.8 km
	WDJT_P2B	D29	DT	APP	MILWAUKEE, WI	wdjt_p2b	217.7
	WIWU-CD	D28	DC	CP	MARION, IN	BLANK0000033170	121.1
	WOMS-CD	D29	DC	LIC	MUSKEGON, MI	BLDTA20110812ACT	183.3
	WPTO	D29	DT	CP	OXFORD, OH	BLANK0000034602	312.0
	WGTE-TV	D29	DT	LIC	TOLEDO, OH	BLEDT20031110AKO	231.4
	WSJV	D30	DT	CP	ELKHART, IN	BLANK0000027461	1.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent	New	IX
27552.2	1,763,215	27516.4	1,752,698	27407.7	1,731,875	27355.2	1,725,755	0.19		0.35
Undesired		Total IX		Unique IX, before		Unique IX, after				
WDJT-TV D29 DT BL	88.6		20,251	76.6	19,930					
WDJT_P2B D29 DT APP	141.1		26,371			129.1	26,050			
WIWU-CD D28 DC CP	11.9		254	11.9	254	11.9	254			
WOMS-CD D29 DC LIC	8.0		404	4.0	277	4.0	277			
WPTO D29 DT CP	4.0		99	0.0	0	0.0	0			
WGTE-TV D29 DT LIC	12.1		321	0.0	0	0.0	0			
WSJV D30 DT CP	4.1		41	4.1	41	4.1	41			

Interference to BLDTA20110812ACT LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WOMS-CD	D29	DC	LIC	MUSKEGON, MI	BLDTA20110812ACT	
Undesireds:							
	WDJT-TV	D29	DT	BL	MILWAUKEE, WI	DTVBL71427	151.2 km
	WDJT_P2B	D29	DT	APP	MILWAUKEE, WI	wdjt_p2b	151.2
	WSBT-TV	D29	DT	CP	SOUTH BEND, IN	BLANK0000034389	183.3
	WGTU	D29	DT	APP	TRAVERSE CITY, MI	BLANK0000035794	183.7

INTERFERENCE ANALYSIS FOR PROPOSED WDJT-TV MILWAUKEE, WI (CHANNEL 29)

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
3050.1 261,777	3050.1 261,777	3034.2 261,328	3030.2 260,903	0.13 0.16
Undesired	Total IX	Unique IX, before	Unique IX, after	
WDJT-TV D29 DT BL	8.0 197	4.0 58		
WDJT_P2B D29 DT APP	11.9 622		7.9 483	
WSBT-TV D29 DT CP	4.0 139	0.0 0	0.0 0	
WGTU D29 DT APP	8.0 252	8.0 252	8.0 252	

Interference to BLDTA20110812ACT LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WOMS-CD	D29	DC	LIC	MUSKEGON, MI	BLDTA20110812ACT	
Undesireds:	WDJT-TV	D29	DT	BL	MILWAUKEE, WI	DTVBL71427	151.2 km
	WDJT_P2B	D29	DT	APP	MILWAUKEE, WI	wdjt_p2b	151.2
	WSBT-TV	D29	DT	CP	SOUTH BEND, IN	BLANK0000034389	183.3

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
3050.1 261,777	3050.1 261,777	3042.2 261,580	3038.2 261,155	0.13 0.16
Undesired	Total IX	Unique IX, before	Unique IX, after	
WDJT-TV D29 DT BL	8.0 197	4.0 58		
WDJT_P2B D29 DT APP	11.9 622		7.9 483	
WSBT-TV D29 DT CP	4.0 139	0.0 0	0.0 0	

Interference to BLANK0000035794 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WGTU	D29	DT	APP	TRAVERSE CITY, MI	BLANK0000035794	
Undesireds:	WDJT-TV	D29	DT	BL	MILWAUKEE, WI	DTVBL71427	292.5 km
	WDJT_P2B	D29	DT	APP	MILWAUKEE, WI	wdjt_p2b	292.5
	WSBT-TV	D29	DT	CP	SOUTH BEND, IN	BLANK0000034389	360.3
	WOMS-CD	D29	DC	LIC	MUSKEGON, MI	BLDTA20110812ACT	183.7
	WNEM-TV	D30	DT	CP	BAY CITY, MI	BLANK0000024833	172.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
36469.4 492,016	35537.6 484,510	34993.2 475,815	34877.5 475,463	0.33 0.07
Undesired	Total IX	Unique IX, before	Unique IX, after	
WDJT-TV D29 DT BL	303.4 2,500	271.3 2,328		
WDJT_P2B D29 DT APP	435.2 2,937		387.1 2,680	
WSBT-TV D29 DT CP	76.3 894	12.1 74	4.0 0	
WOMS-CD D29 DC LIC	20.1 75	8.0 64	8.0 64	
WNEM-TV D30 DT CP	212.9 6,046	188.7 5,409	188.7 5,409	

Interference to BLCDT20090622AFH LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WGTU	D29	DT	LIC	TRAVERSE CITY, MI	BLCDT20090622AFH	
Undesireds:	WDJT-TV	D29	DT	BL	MILWAUKEE, WI	DTVBL71427	292.5 km
	WDJT_P2B	D29	DT	APP	MILWAUKEE, WI	wdjt_p2b	292.5
	WSBT-TV	D29	DT	CP	SOUTH BEND, IN	BLANK0000034389	360.3
	WOMS-CD	D29	DC	LIC	MUSKEGON, MI	BLDTA20110812ACT	183.7
	WNEM-TV	D30	DT	CP	BAY CITY, MI	BLANK0000024833	172.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
20551.0 358,543	19966.0 353,477	19746.3 351,444	19718.4 351,056	0.14 0.11
Undesired	Total IX	Unique IX, before	Unique IX, after	
WDJT-TV D29 DT BL	163.6 1,668	151.6 1,542		
WDJT_P2B D29 DT APP	195.5 2,081		179.5 1,930	
WSBT-TV D29 DT CP	16.0 151	4.0 25	0.0 0	
WOMS-CD D29 DC LIC	4.0 38	0.0 0	0.0 0	
WNEM-TV D30 DT CP	52.0 340	52.0 340	52.0 340	

Interference to BLANK0000068030 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPXE-TV	D30	DT	CP	KENOSHA, WI	BLANK0000068030	
Undesireds:	WDJT-TV	D29	DT	BL	MILWAUKEE, WI	DTVBL71427	3.6 km
	WDJT_P2B	D29	DT	APP	MILWAUKEE, WI	wdjt_p2b	3.6
	KLJB	D30	DT	CP	DAVENPORT, IA	BLANK0000034774	284.3
	WSJV	D30	DT	CP	ELKHART, IN	BLANK0000027461	215.5

INTERFERENCE ANALYSIS FOR PROPOSED WDJT-TV MILWAUKEE, WI (CHANNEL 29)

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent	New IX
25845.1	3,067,071	25664.6	3,057,388	25384.2	3,046,308	25344.2	3,045,560	0.16	0.02
Undesired		Total IX		Unique IX, before		Unique IX, after			
WDJT-TV D29 DT BL		27.9	768	16.0	607				
WDJT_P2B D29 DT APP		79.9	1,649			56.0	1,355		
KLJB D30 DT CP		228.4	7,756	196.5	2,821	192.5	2,729		
WSJV D30 DT CP		56.0	7,491	36.0	2,717	32.1	2,717		

Interference to proposal scenario 1
**MX: 1.69% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WDJT_P2B	D29	DT	APP	MILWAUKEE, WI	wdjt_p2b	
Undesireds:	KGAN	D29	DT	LIC	CEDAR RAPIDS, IA	BLCDT20140416AAI	332.7 km
	WSBT-TV	D29	DT	CP	SOUTH BEND, IN	BLANK0000034389	217.7
	WGTU	D29	DT	APP	TRAVERSE CITY, MI	BLANK0000035794	292.5
	WPXE-TV	D30	DT	CP	KENOSHA, WI	BLANK0000068030	3.6

Service area		Terrain-limited		IX-free		Percent IX	
30021.8	3,267,652	29861.3	3,256,507	29293.3	3,201,515	1.90	1.69
Undesired		Total IX		Unique IX		Prcnt Unique IX	
KGAN D29 DT LIC		199.8	24,695	155.9	20,653	0.52	0.63
WSBT-TV D29 DT CP		311.9	32,196	267.9	28,063	0.90	0.86
WGTU D29 DT APP		100.4	2,234	96.3	2,116	0.32	0.06 (No MX case-Less than 0.5% IX)
WPXE-TV D30 DT CP		4.0	27	0.0	0	0.00	0.00

Interference to proposal scenario 2
1.62% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WDJT_P2B	D29	DT	APP	MILWAUKEE, WI	wdjt_p2b	
Undesireds:	KGAN	D29	DT	LIC	CEDAR RAPIDS, IA	BLCDT20140416AAI	332.7 km
	WSBT-TV	D29	DT	CP	SOUTH BEND, IN	BLANK0000034389	217.7
	WPXE-TV	D30	DT	CP	KENOSHA, WI	BLANK0000068030	3.6

Service area		Terrain-limited		IX-free		Percent IX	
30021.8	3,267,652	29861.3	3,256,507	29389.6	3,203,631	1.58	1.62
Undesired		Total IX		Unique IX		Prcnt Unique IX	
KGAN D29 DT LIC		199.8	24,695	155.9	20,653	0.52	0.63
WSBT-TV D29 DT CP		311.9	32,196	271.9	28,181	0.91	0.87
WPXE-TV D30 DT CP		4.0	27	0.0	0	0.00	0.00