

INTERFERENCE ANALYSIS FOR LICENSED WFBN-LD, ROCKFORD, IL, CHANNEL 35, WITH RESPECT TO WQRF-TV

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: wfbn3511, Model: Longley-Rice

Study build station data: LMS TV 2018-03-19 #154

Proposal: WFBN35L1 D35 LD LIC ROCKFORD, IL
File number: wfbn3511
Facility ID: 168664
Station data: User record
Record ID: 2447
Country: U.S.

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KQIN	D34	DT	LIC	DAVENPORT, IA	BLEDT20120921ADS	151.5 km
No	WCIA	D34	DT	CP	CHAMPAIGN, IL	BLANK0000028445	245.7
No	WCIA	D34	DT	APP	CHAMPAIGN, IL	BLANK0000034728	245.7
No	WCPX-TV	D34	DT	CP	CHICAGO, IL	BLANK0000026971	126.2
Yes	WCPX-TV	D34	DT	APP	CHICAGO, IL	BLANK0000034347	126.2
Yes	W34EM-D	D34	LD	CP	LEE, IL	BNPDTL20100524AFR	31.9
No	WWRS-TV	D34	DT	CP	MAYVILLE, WI	BLANK0000026658	137.5
No	KRIN	D35	DT	LIC	WATERLOO, IA	BLEDT20050218ABQ	229.1
Yes	WGBO-DT	D35	DT	CP	JOLIET, IL	BLANK0000034007	126.4
No	W35DE-D	D35	LD	LIC	PEORIA, IL	BLANK0000010564	184.4
No	W35DE-D	D35	LD	CP	PEORIA, IL	BLANK0000010597	183.9
No	WTVP	D35	DT	CP	PEORIA, IL	BLANK0000028050	186.7
No	NEW	D35	LD	APP	FORT WAYNE, IN	BNPDTL20091218AFM	360.1
No	WPBY-LD	D35	LD	LIC	Indianapolis, IN	BLANK0000001715	321.9
No	WPBY-LD	D35	LD	CP	Indianapolis, IN	BLANK0000002944	359.9
No	WTWO	D35	DT	CP	TERRE HAUTE, IN	BLANK0000028193	364.7
No	WVIU-LD	D35	LD	CP	CADILLAC, MI	BNPDTL20091211AAU	366.8
No	WOLP-CD	D35	DC	CP	GRAND RAPIDS, MI	BLANK0000027729	295.8
No	WLUC-TV	D35	DT	APP	MARQUETTE, MI	BLANK0000036029	462.7
No	WLUC-TV	D35	DT	LIC	MARQUETTE, MI	BLCDT20040202ALY	462.7
No	WPBN-TV	D35	DT	CP	TRAVERSE CITY, MI	BLANK0000034373	424.5
No	KSTP-TV	D35	DT	APP	ST. PAUL, MN	BLANK0000036053	451.0
No	KSTP-TV	D35	DT	LIC	ST. PAUL, MN	BLCDT20090622ABR	451.0
No	KSDK	D35	DT	LIC	ST. LOUIS, MO	BLCDT19991202ABM	424.6
No	WEZY-LP	D35	LD	CP	TOMAH, WI	BDISDTL20120511AEI	218.8
No	WMEC	D36	DT	CP	MACOMB, IL	BLANK0000026298	249.5
No	WQRF-TV	D36	DT	CP	ROCKFORD, IL	BLANK0000027710	8.4
No	WCCU	D36	DT	CP	URBANA, IL	BLANK0000027777	237.6
No	WCCU	D36	DT	APP	URBANA, IL	BLANK0000034789	262.8
No	WHME-TV	D36	DT	CP	SOUTH BEND, IN	BLANK0000034238	252.1
No	WACY-TV	D36	DT	CP	APPLETON, WI	BLANK0000034873	248.7
No	WZCK-LD	D36	LD	LIC	MADISON-MIDDLETON, WI	BLANK0000017350	93.4
No	WMKE-CD	D36	DC	CP	MILWAUKEE, WI	BLANK0000034620	132.8
No	WMVS	D36	LD	LIC	MILWAUKEE, WI	BLEDT20120921AAO	132.8

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D35

Mask: Stringent
Latitude: 42 15 59.00 N (NAD83)
Longitude: 89 4 23.30 W
Height AMSL: 294.0 m
HAAT: 0.0 m
Peak ERP: 3.50 kW
Antenna: DIE-TLP-4M (ID 102562) 220.0 deg
Elev Pattn: Generic

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50.8 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.274 kW	62.9 m	17.9 km
45.0	0.205	32.2	11.7
90.0	0.541	48.7	18.8
135.0	2.39	58.1	28.0
180.0	3.33	68.1	31.2
225.0	2.84	66.6	30.2
270.0	3.47	46.1	27.2
315.0	1.86	54.3	26.1

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 55 m

Distance to Canadian border: 488.6 km

Distance to Mexican border: 1772.8 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 80.6 degrees Distance: 258.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 265.5 degrees Distance: 1368.7 km

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%

Interference to proposal scenario 1

24.17% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFBN35L1	D35	LD	LIC	ROCKFORD, IL	wfbn35l1	
Undesireds:	W34EM-D	D34	LD	CP	LEE, IL	BNPDTL20100524AFR	31.9 km
	WGBO-DT	D35	DT	CP	JOLIET, IL	BLANK0000034007	126.4
	W35DE-D	D35	LD	LIC	PEORIA, IL	BLANK0000010564	184.4
	WTVP	D35	DT	CP	PEORIA, IL	BLANK0000028050	186.7
	WPBY-LD	D35	LD	LIC	Indianapolis, IN	BLANK0000001715	321.9
	WQRF-TV	D36	DT	CP	ROCKFORD, IL	BLANK0000027710	8.4

Service area	Terrain-limited	IX-free	Percent IX
1812.7 291,885	1811.7 291,885	1108.1 221,338	38.83 24.17

Undesired	Total IX	Unique IX	Prcnt Unique IX
W34EM-D D34 LD CP	160.4 5,359	82.7 1,405	4.57 0.48
WGBO-DT D35 DT CP	41.2 1,459	1.0 0	0.06 0.00
WTVP D35 DT CP	1.0 42	0.0 0	0.00 0.00
WQRF-TV D36 DT CP	619.8 69,142	509.9 63,793	28.14 21.86
