

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: WVDM-LD CH21 ANT HGT, Model: Longley-Rice
Start: 2022.11.23 11:42:14

Study created: 2022.11.23 11:42:13

Study build station data: LMS TV 2022-11-17

Proposal: WVDM-LD D21 LD APP QUINCY, IL
File number: WVDM-LD CH21 ANT HGT
Facility ID: 188767
Station data: User record
Record ID: 895
Country: U.S.

Build options:
Protect pre-transition records not on baseline channel

Search options:
Non-U.S. records included
Baseline record excluded if station has CP

Individual records excluded:
0000083846 WVDM-LD D22 LD LIC QUINCY, IL BLANK0000083846

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	W18CJ	N18-	TX	LIC	QUINCY, IL	BLTTL20011120AAN	82.5 km
No	WAND	D20	DT	LIC	DECATUR, IL	BLANK0000115806	203.3
No	WAND	D20	DT	LIC	DECATUR, IL	BLANK0000203433	203.3
No	KNLJ	D20	DT	LIC	JEFFERSON CITY, MO	BLCDDT20110121ACA	110.5
No	KEFN-CD	D20z	DC	LIC	ST. LOUIS, MO	BLANK0000146089	101.4
Yes	KGCW	D21	DT	LIC	BURLINGTON, IA	BLANK0000107917	235.8
No	KAJR-LD	D21	LD	LIC	Des moines, IA	BLANK0000106669	338.1
No	WEAE-LD	D21	LD	LIC	SPRINGFIELD, IL	BLANK0000182563	135.2
No	WEEV-LD	D21	LD	LIC	EVANSVILLE, IN	BLANK0000066968	339.6
No	WJYS	D21	DT	LIC	HAMMOND, IN	BLANK0000087539	408.2
No	WFYI	D21	DT	LIC	INDIANAPOLIS, IN	BLEDDT20100803ADB	419.9
Yes	K21PD-D	D21	LD	LIC	COLUMBIA, MO	BLANK0000197529	115.7
No	KGCS-LD	D21	LD	LIC	JOPLIN, MO	BLANK0000078095	392.1
No	KRFT-LD	D21	LD	LIC	SPRINGFIELD, MO	BLANK0000156037	298.9
No	KTAJ-TV	D21	DT	LIC	ST. JOSEPH, MO	BLCDDT20060703AAK	301.3
No	WJKT	D21	DT	LIC	JACKSON, TN	BLANK0000114687	422.1
No	WIFS	D21	DT	LIC	JANESVILLE, WI	BLANK0000090143	439.6
No	WBUI	D22	DT	LIC	DECATUR, IL	BLANK0000203560	202.8
No	WBUI	D22	DT	LIC	DECATUR, IL	BLCDDT20091119ACF	202.8
Yes	KHQA-TV	D22	DT	CP	HANNIBAL, MO	BLANK0000152836	82.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D21
Mask: Full Service
Latitude: 39 15 53.90 N (NAD83)
Longitude: 91 1 58.40 W
Height AMSL: 378.2 m
HAAT: 0.0 m
Peak ERP: 15.0 kW
Antenna: ERI AL12-22-PLF 0.0 deg
Elev Pattn: Generic
Elec Tilt: 1.25

49.5 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	183.2 m	50.6 km
45.0	12.0	186.1	49.6
90.0	6.69	198.3	47.4
135.0	5.68	155.4	44.0
180.0	6.85	167.6	45.7
225.0	5.68	174.7	45.2
270.0	6.69	142.3	43.9
315.0	12.0	138.4	46.6

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 168 m

Distance to Canadian border: 731.5 km

Distance to Mexican border: 1417.5 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 47.3 degrees Distance: 565.2 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 279.2 degrees Distance: 1216.3 km

No land mobile station failures found

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 BLANK0000107917 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KGCW	D21	DT	LIC	BURLINGTON, IA	BLANK0000107917	
Undesireds:	WVDM-LD	D21	LD	APP	QUINCY, IL	WVDM-LD CH21 ANT HGT	235.8 km
	WJYS	D21	DT	LIC	HAMMOND, IN	BLANK0000087539	236.1
	WIFS	D21	DT	LIC	JANESVILLE, WI	BLANK0000090143	204.3
	KPXR-TV	D22	DT	LIC	CEDAR RAPIDS, IA	BLANK0000063428	164.8
	KHQA-TV	D22	DT	CP	HANNIBAL, MO	BLANK0000152836	170.7
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
26083.3	947,939	25910.8	933,936	25669.0	927,890	25668.0 927,890	0.00 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
WVDM-LD	D21 LD APP	11.0	205			1.0 0	
WJYS	D21 DT LIC	80.2	2,625	33.0	1,718	33.0 1,718	
WIFS	D21 DT LIC	202.8	4,293	153.7	3,376	147.7 3,189	
KPXR-TV	D22 DT LIC	4.0	45	3.0	35	3.0 35	
KHQA-TV	D22 DT CP	4.0	0	3.0	0	3.0 0	

Interference to BLANK0000197529 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K21PD-D	D21	LD	LIC	COLUMBIA, MO	BLANK0000197529	
Undesireds:	WVDM-LD	D21	LD	APP	QUINCY, IL	WVDM-LD CH21 ANT HGT	115.7 km
	KNLJ	D20	DT	LIC	JEFFERSON CITY, MO	BLCDT20110121ACA	5.7
	K21JS-D	D21	LD	LIC	HARRISON, AR	BLANK0000194711	285.6
	KTAJ-TV	D21	DT	LIC	ST. JOSEPH, MO	BLCDT20060703AAK	210.9
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
711.7	19,025	678.7	18,991	310.9	9,835	310.9 9,835	0.00 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
WVDM-LD	D21 LD APP	1.0	27			0.0 0	
KNLJ	D20 DT LIC	366.8	9,156	348.8	9,052	347.8 9,025	
KTAJ-TV	D21 DT LIC	19.0	104	1.0	0	1.0 0	

Interference to BLANK0000152836 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KHQA-TV	D22	DT	CP	HANNIBAL, MO	BLANK0000152836	
Undesireds:	WVDM-LD	D21	LD	APP	QUINCY, IL	WVDM-LD CH21 ANT HGT	82.7 km
	KPXR-TV	D22	DT	LIC	CEDAR RAPIDS, IA	BLANK0000063428	262.3
	WLS-TV	D22	DT	CP	CHICAGO, IL	BLANK0000086908	375.8
	WBUI	D22	DT	LIC	DECATUR, IL	BLANK0000203560	212.6
	KRBK	D22	DT	LIC	OSAGE BEACH, MO	BLANK0000171221	336.7
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
28968.8 335,755		28833.9 335,516		28221.5 331,812		28045.9 330,542	0.62 0.38
Undesired		Total IX		Unique IX, before		Unique IX, after	
WVDM-LD D21 LD APP		216.3 1,506				175.6 1,270	
KPXR-TV D22 DT LIC		39.9 1,175		33.9 1,169		33.9 1,169	
WLS-TV D22 DT CP		4.0 15		0.0 0		0.0 0	
WBUI D22 DT LIC		550.8 2,360		520.9 2,253		499.1 2,189	
KRBK D22 DT LIC		48.6 261		26.8 175		17.9 75	

Interference to BLANK0000152836 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KHQA-TV	D22	DT	CP	HANNIBAL, MO	BLANK0000152836	
Undesireds:	WVDM-LD	D21	LD	APP	QUINCY, IL	WVDM-LD CH21 ANT HGT	82.7 km
	KPXR-TV	D22	DT	LIC	CEDAR RAPIDS, IA	BLANK0000063428	262.3
	WLS-TV	D22	DT	CP	CHICAGO, IL	BLANK0000086908	375.8
	WBUI	D22	DT	LIC	DECATUR, IL	BLCDT20091119ACF	212.6
	KRBK	D22	DT	LIC	OSAGE BEACH, MO	BLANK0000171221	336.7
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
28968.8 335,755		28833.9 335,516		28223.5 331,812		28047.9 330,542	0.62 0.38
Undesired		Total IX		Unique IX, before		Unique IX, after	
WVDM-LD D21 LD APP		216.3 1,506				175.6 1,270	
KPXR-TV D22 DT LIC		39.9 1,175		33.9 1,169		33.9 1,169	
WLS-TV D22 DT CP		4.0 15		0.0 0		0.0 0	
WBUI D22 DT LIC		548.7 2,360		518.9 2,253		497.1 2,189	
KRBK D22 DT LIC		48.6 261		26.8 175		17.9 75	

Interference to proposal scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVDM-LD	D21	LD	APP	QUINCY, IL	WVDM-LD CH21 ANT HGT	
Undesireds:	KGCW	D21	DT	LIC	BURLINGTON, IA	BLANK0000107917	235.8 km
	WEAE-LD	D21	LD	LIC	SPRINGFIELD, IL	BLANK0000182563	135.2
	KHQA-TV	D22	DT	CP	HANNIBAL, MO	BLANK0000152836	82.7
Service area		Terrain-limited		IX-free		Percent IX	
6835.3 98,654		6653.5 96,947		6512.4 96,255		2.12 0.71	
Undesired		Total IX		Unique IX		Prcnt Unique IX	
KGCW D21 DT LIC		88.3 288		73.4 171		1.10 0.18	
WEAE-LD D21 LD LIC		7.9 116		3.0 2		0.04 0.00	
KHQA-TV D22 DT CP		59.8 405		49.8 402		0.75 0.41	