

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: Olivia21dP, Model: Longley-Rice
Start: 2018.04.23 08:31:15

Study created: 2018.04.23 08:21:54

Study build station data: LMS TV 2018-04-19

Proposal: K38LC-D D21 LD APP OLIVIA, MN
Facility ID: 55744
Station data: User record
Record ID: 473
Country: U.S.

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

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KKTW-LD	N19-	TX	LIC	Buffalo, MN	BLTTTL19870921IE	98.1 km
No	KSMQ-TV	D20	DT	LIC	AUSTIN, MN	BLEDT20081223AAK	224.4
No	K20LV-D	D20	LD	CP	BREWSTER, MN	BNPDTL20100510AJH	131.7
No	KTCJ-LD	D20	LD	APP	MINNEAPOLIS, MN	BLANK0000052074	137.9
No	KMBD-LD	D20	LD	APP	MINNEAPOLIS, MN	BLANK0000051629	128.4
No	K20JY-D	D20	LD	LIC	OLIVIA, MN	BLDTT20120213ABM	0.0
No	K20KW-D	D20	LD	CP	SAINT CLOUD, MN	BLANK0000013930	99.3
No	K20LP-D	D20	LD	LIC	ST. JAMES, MN	BLDTL20120625AAR	75.6
No	KABY-LD	D20	LD	LIC	SIOUX FALLS, SD	BLANK0000013894	191.3
No	K20KZ-D	D20	LD	CP	WATERTOWN, SD	BNPDTL20100505ADZ	172.0
No	KMIK-LD	D21	LD	LIC	Cedar Rapids, IA	BLANK0000004384	323.2
No	KMIK-LD	D21	LD	CP	Cedar Rapids, IA	BLANK0000004671	365.4
No	KAJR-LD	D21	LD	APP	Des Moines, IA	BLANK0000051611	353.5
No	KBVK-LP	D21	LD	LIC	SPENCER, IA	BLDTL20130327AAK	167.3
No	K21GN-D	D21	LD	LIC	ALEXANDRIA, MN	BLDTL20120312ACI	138.0
No	K21KY-D	D21	LD	LIC	BIGFORK/MARCELL, MN	BLDTT20111107ALH	334.4
No	K21KZ-D	D21	LD	CP	DULUTH, MN	BNPDTL20090902AAE	286.6
No	K21KR-D	D21	LD	CP	DULUTH, MN	BNPDTL20090825AQR	310.6

No	K21KF-D	D21	LD	LIC	FROST, MN	BLDTL20130321ACF	150.6
No	K48KJ-D	D21	LD	APP	GENEVA, MN	BLANK0000051972	142.4
Yes	K21LF-D	D21	LD	LIC	GRANITE FALLS, MN	BLDTL20110824ACJ	56.0
No	K38OH-D	D21	LD	APP	Minneapolis, MN	BLANK0000051606	104.4
Yes	K21DG-D	D21	LD	LIC	ST. JAMES, MN	BLDTL20091204ADE	75.8
No	K21HX-D	D21	LD	LIC	WALKER, MN	BLDTT20140224ACZ	260.4
No	WDAY-TV	D21	DT	LIC	FARGO, ND	BLCDT20061222ABH	308.0
No	KQMK-LD	D21	LD	APP	LINCOLN, NE	BLANK0000052625	402.5
No	K21HS	N21-	TX	LIC	NORFOLK, NE	BLTT20060510AAY	363.5
Yes	KDLT-TV	D21	DT	CP	SIOUX FALLS, SD	BLANK0000027512	193.5
No	K21LK-D	D21	LD	CP	WENTWORTH, SD	BNPDTL20100505AEK	185.2
No	WEUX	D21	DT	CP	CHIPPEWA FALLS, WI	BLANK0000034736	253.5
No	W21DH-D	D21	LD	CP	EAU CLAIRE, WI	BNPDTL20100507ACR	276.0
No	W21DC-D	D21	LD	CP	GALESVILLE, WI	BNPDTL20090825CAZ	293.7
No	WIFS	D21	DT	CP	JANESVILLE, WI	BLANK0000034588	467.4
No	K22DO-D	D22	LD	LIC	GRANITE FALLS, MN	BLDTL20110824ACP	56.0
No	WUCW	D22	DT	LIC	MINNEAPOLIS, MN	BLCDT20060405AAI	140.6
Yes	K22KU-D	D22	LD	LIC	REDWOOD FALLS, MN	BLDTT20120604AAW	24.4
No	K22LG-D	D22	LD	CP	WELLS, MN	BNPDTL20100510AJO	152.5
No	K22HJ-D	D22	LD	LIC	WORTHINGTON, MN	BLDTL20131213AAJ	142.6
No	K22KF-D	D22	LD	CP	WATERTOWN, SD	BNPDTL20100331AFD	172.0

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: Stringent
 Latitude: 44 45 32.90 N (NAD83)
 Longitude: 94 52 24.00 W
 Height AMSL: 423.9 m
 HAAT: 0.0 m
 Peak ERP: 0.790 kW
 Antenna: SCA-4X2KBBU (ID 20756) 220.0 deg
 Elev Pattn: Generic

49.5 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.003 kW	84.8 m	7.4 km
45.0	0.002	86.6	7.0
90.0	0.006	93.3	9.1
135.0	0.198	92.3	21.5
180.0	0.720	94.7	28.6
225.0	0.624	97.4	28.1
270.0	0.790	94.9	29.1
315.0	0.111	88.9	18.0

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 92 m

Distance to Canadian border: 425.6 km

Distance to Mexican border: 1758.3 km

Conditions at FCC monitoring station: Grand Island NE

Bearing: 215.4 degrees Distance: 515.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 242.5 degrees Distance: 990.2 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 BLDTL20110824ACJ LIC scenario 1

**IX: 6.36% interference caused

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	K21LF-D	D21	LD	LIC	GRANITE FALLS, MN	BLDTL20110824ACJ			
Undesireds:	K38LC-D	D21	LD	APP	OLIVIA, MN		56.0 km		
	K21DG-D	D21	LD	LIC	ST. JAMES, MN	BLDTL20091204ADE	110.1		
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX		
	3378.9 24,558	3376.9 24,558		3374.9 24,557		3260.1 22,995	3.40 6.36		
Undesired				Total IX	Unique IX, before	Unique IX, after			
K38LC-D D21 LD APP				115.8 1,563		114.8 1,562			
K21DG-D D21 LD LIC				2.0 1	2.0 1	1.0 0			

Interference to BLDTL20091204ADE LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	K21DG-D	D21	LD	LIC	ST. JAMES, MN	BLDTL20091204ADE			
Undesireds:	K38LC-D	D21	LD	APP	OLIVIA, MN		75.8 km		
	KMIK-LD	D21	LD	LIC	Cedar Rapids, IA	BLANK0000004384	254.7		
	K21KF-D	D21	LD	LIC	FROST, MN	BLDTL20130321ACF	78.8		
	K48KJ-D	D21	LD	APP	GENEVA, MN	BLANK0000051972	97.0		
	K21LF-D	D21	LD	LIC	GRANITE FALLS, MN	BLDTL20110824ACJ	110.1		
	KDLT-TV	D21	DT	CP	SIOUX FALLS, SD	BLANK0000027512	170.9		
	K22KU-D	D22	LD	LIC	REDWOOD FALLS, MN	BLDTT20120604AAW	57.4		
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX		
	6773.0 78,248	6768.0 78,227		6737.7 76,622		6737.7 76,622	0.00 0.00		
Undesired				Total IX	Unique IX, before	Unique IX, after			
K38LC-D D21 LD APP				2.0 0		0.0 0			
K21KF-D D21 LD LIC				14.2 54	13.2 40	13.2 40			
K48KJ-D D21 LD APP				11.1 626	7.0 569	7.0 569			
K21LF-D D21 LD LIC				1.0 0	0.0 0	0.0 0			
KDLT-TV D21 DT CP				8.1 996	4.0 939	4.0 939			

K22KU-D D22 LD LIC	2.0	0	1.0	0	0.0	0
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Interference to BLANK0000027512 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KDLT-TV	D21	DT	CP	SIOUX FALLS, SD	BLANK0000027512	
Undesireds:	K38LC-D	D21	LD	APP	OLIVIA, MN		193.5 km
	WDAY-TV	D21	DT	LIC	FARGO, ND	BLCDT20061222ABH	392.6
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	44115.1 641,370	43458.8	630,306	43412.8	630,249	42960.5 627,138	1.04 0.49
Undesired			Total IX		Unique IX, before	Unique IX, after	
K38LC-D D21 LD APP	471.3	3,131		452.3	3,111		
WDAY-TV D21 DT LIC	46.1	57		27.0	37		

Interference to BLDTT20120604AAW LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K22KU-D	D22	LD	LIC	REDWOOD FALLS, MN	BLDTT20120604AAW	
Undesireds:	K38LC-D	D21	LD	APP	OLIVIA, MN		24.4 km
	K21DG-D	D21	LD	LIC	ST. JAMES, MN	BLDTL20091204ADE	57.4
	K22DO-D	D22	LD	LIC	GRANITE FALLS, MN	BLDTL20110824ACP	56.2
	WUCW	D22	DT	LIC	MINNEAPOLIS, MN	BLCDT20060405AAI	155.0
	K23FP-D	D23	LD	LIC	OLIVIA, MN	BLDTT20120213ABJ	24.4
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	1806.5 13,256	1802.5	13,254	1720.5	13,115	1720.5 13,115	0.00 0.00
Undesired			Total IX		Unique IX, before	Unique IX, after	
K38LC-D D21 LD APP	2.0	0		0.0	0		
K21DG-D D21 LD LIC	1.0	0		1.0	0		
K22DO-D D22 LD LIC	67.9	126		54.9	99		
WUCW D22 DT LIC	24.0	40		11.0	13		

K23FP-D D23 LD LIC	2.0	0	2.0	0	0.0	0
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Interference to proposal scenario 1
29.22% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K38LC-D	D21	LD	APP	OLIVIA, MN		
Undesireds:	KMIK-LD	D21	LD	LIC	Cedar Rapids, IA	BLANK00000004384	323.2 km
	K21LF-D	D21	LD	LIC	GRANITE FALLS, MN	BLDTL20110824ACJ	56.0
	K21DG-D	D21	LD	LIC	ST. JAMES, MN	BLDTL20091204ADE	75.8
	KDLT-TV	D21	DT	CP	SIOUX FALLS, SD	BLANK00000027512	193.5
	K22KU-D	D22	LD	LIC	REDWOOD FALLS, MN	BLDTT20120604AAW	24.4

Service area		Terrain-limited		IX-free		Percent IX
1303.7	9,340	1298.7	9,262	980.7	6,556	24.49 29.22

Undesired			Total IX		Unique IX	Prcnt Unique IX
K21LF-D D21 LD LIC	93.7	1,468	83.7	1,462	6.44	15.78
K21DG-D D21 LD LIC	224.3	1,055	216.3	1,015	16.65	10.96
KDLT-TV D21 DT CP	3.0	14	1.0	9	0.08	0.10
K22KU-D D22 LD LIC	15.0	220	4.0	174	0.31	1.88