

K31LN-D Fi 185269

Minor Modification: Change ASR, ERP, antenna make and model. ASR 11025244 is outside the 121km circle for Minneapolis. Controlled access site.

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: ASR 185269, Model: Longley-Rice
Start: 2022.06.30 16:44:03

Study created: 2022.06.30 16:44:03

Study build station data: LMS TV 2022-06-29

Proposal: K31LN-D D31 LD CP ROCHESTER, MN
File number: ASR 185269
Facility ID: 185269
Station data: User record
Record ID: 1183
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	KSTC-TV	D30	DT	LIC	MINNEAPOLIS, MN	BLANK0000080959	129.9 km
No	KSTC-TV	D30	DT	CP	MINNEAPOLIS, MN	BLANK0000158230	129.9
No	K30QY-D	D30	LD	CP	OAKLAND, MN	BLANK0000153906	73.4
No	K30QY-D	D30	LD	APP	OAKLAND, MN	BLANK0000194117	94.7
No	K30RA-D	D30	LD	LIC	RACINE, MN	BLANK0000178831	16.0
No	WEAU	D30	LD	LIC	EAU CLAIRE, WI	BLANK0000124038	81.9
No	W30EN-D	D30	LD	CP	EAU CLAIRE, WI	BLANK0000071871	107.6
No	K31PO-D	D31-	LD	LIC	Des Moines, IA	BLANK0000160447	227.3
No	K31NJ-D	D31	LD	LIC	LANSING, IA	BLANK0000093973	118.4
No	K31PP-D	D31	LD	CP	SIOUX CITY, IA	BLANK0000073028	365.3
No	WFLD	D31	DT	LIC	CHICAGO, IL	BLANK0000055195	451.8
No	WQAD-TV	D31	DT	LIC	MOLINE, IL	BLANK0000120809	343.1
No	K31EF-D	D31	LD	LIC	FROST, MN	BLDPT20090730ACQ	137.2
No	WRPT	D31	DT	LIC	HIBBING, MN	BLDPT20090603AAY	374.2
No	K31NT-D	D31	LD	LIC	JACKSON, MN	BLANK0000064445	218.2
No	WDMI-LD	D31	LD	LIC	MINNEAPOLIS, MN	BLDPTL20100809CIU	131.9
Yes	KARE	D31	DT	LIC	MINNEAPOLIS, MN	BLANK0000165989	129.9
No	K31OR-D	D31	LD	LIC	OLIVIA, MN	BLANK0000081516	216.3
No	K31KX-D	D31	LD	CP	ST CHARLES, MN	BNPDTL20090825BXU	32.6
No	K31KV-D	D31	LD	LIC	ST. JAMES, MN	BLDPTL20120625AAY	180.5
No	KMTV-TV	D31	DT	LIC	OMAHA, NE	BLANK0000187563	427.9
No	W31DN-D	D31	LD	CP	EAU CLAIRE, WI	BNPDTL20090825AYR	107.6
No	K31GH-D	D31-	LD	LIC	HAYWARD, WI	BLANK0000016624	229.5
No	K31GH-D	N31-	TX	LIC	HAYWARD, WI	BLTTL20020729AAS	229.5
No	WITI	D31	DT	LIC	MILWAUKEE, WI	BLANK0000086971	373.1
No	W31EV-D	D31	LD	LIC	WAUSAU, WI	BLANK0000187442	224.9
No	W31EV-D	D31	LD	APP	WAUSAU, WI	BLANK0000193285	226.0
No	KFKZ-LD	D32	LD	LIC	CEDAR FALLS, IA	BLANK0000069608	198.5
No	KCRG-TV	D32	DT	CP	CEDAR RAPIDS, IA	BLANK0000150618	195.8
No	WCCO-TV	D32	DT	LIC	MINNEAPOLIS, MN	BLANK0000176702	129.9
No	W32DW-D	D32	LD	CP	LA CROSSE, WI	BNPDTL20090825CAP	76.4

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D31
Mask: Simple
Latitude: 44 2 31.90 N (NAD83)
Longitude: 92 20 26.60 W
Height AMSL: 392.8 m (Adjusted based on actual ground elevation calculation)
HAAT: 0.0 m

Peak ERP: 0.100 kW
 Antenna: SBP-UPSL (ID 100733) 240.0 deg
 Elev Pattn: Generic

50.4 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.000 kW	44.9 m	2.1 km
45.0	0.000	44.1	2.1
90.0	0.000	14.3	2.1
135.0	0.000	2.6	2.1
180.0	0.008	34.0	5.5
225.0	0.081	56.6	12.7
270.0	0.050	56.1	11.3
315.0	0.001	61.0	4.9

Database HAAT does not agree with computed HAAT
 Database HAAT: 0 m Computed HAAT: 39 m

Distance to Canadian border: 448.8 km

Distance to Mexican border: 1776.2 km

Conditions at FCC monitoring station: Allegan MI
 Bearing: 105.0 degrees Distance: 540.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
 Bearing: 252.3 degrees Distance: 1145.6 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 BLANK0000165989 LIC scenario 1

Distance	Call	Chan	Svc	Status	City, State	File Number	
Desired:	KARE	D31	DT	LIC	MINNEAPOLIS, MN	BLANK0000165989	
Undesireds:	K31LN-D	D31	LD	CP	ROCHESTER, MN	ASR 185269	129.9
km	KSTC-TV	D30	DT	LIC	MINNEAPOLIS, MN	BLANK0000080959	0.0
	WRPT	D31	DT	LIC	HIBBING, MN	BLEDT20090603AAY	258.1
	Service area			Terrain-limited	IX-free, before	IX-free, after	Percent
New IX	39778.4	3,866,675	39179.4	3,856,911	39167.4	3,856,075	39158.3 3,855,190 0.02
Undesired				Total IX	Unique IX, before	Unique IX, after	
K31LN-D	D31 LD CP	9.1		885		9.1 885	
WRPT	D31 DT LIC	12.1		836	12.1 836	12.1 836	

 Interference to proposal scenario 1
 33.11% interference received

Distance	Call	Chan	Svc	Status	City, State	File Number	
Desired:	K31LN-D	D31	LD	CP	ROCHESTER, MN	ASR 185269	
Undesireds:	K30QY-D	D30	LD	CP	OAKLAND, MN	BLANK0000153906	73.4
km							

K30RA-D	D30	LD	LIC	RACINE, MN	BLANK0000178831	16.0
K31NJ-D	D31	LD	LIC	LANSING, IA	BLANK0000093973	118.4
WDMI-LD	D31	LD	LIC	MINNEAPOLIS, MN	BLDTL20100809CIU	131.9
KARE	D31	DT	LIC	MINNEAPOLIS, MN	BLANK0000165989	129.9
K31KX-D	D31	LD	CP	ST CHARLES, MN	BNPDTL20090825BXU	32.6
K31GH-D	D31-	LD	LIC	HAYWARD, WI	BLANK0000016624	229.5
W31EV-D	D31	LD	LIC	WAUSAU, WI	BLANK0000187442	224.9

Service area	Terrain-limited	IX-free	Percent IX
137.2 58,980	132.2 58,009	92.8 38,803	29.76 33.11

Undesired	Total IX	Unique IX	Prcnt Unique IX
K30RA-D D30 LD LIC	21.2 15,401	6.1 7,902	4.58 13.62
K31NJ-D D31 LD LIC	1.0 0	0.0 0	0.00 0.00
WDMI-LD D31 LD LIC	4.0 44	0.0 0	0.00 0.00
KARE D31 DT LIC	30.3 9,164	11.1 1,597	8.39 2.75
K31KX-D D31 LD CP	19.2 6,223	1.0 0	0.76 0.00

K31LN-D.C

BNPDTL-20100309AAW

Latitude: 43-59-10.10 N

Longitude: 092-25-03.60 W

ERP: 4.00 kW

Channel: 31

Frequency: 575.0 MHz

AMSL Height: 417.0 m

Elevation: 317.0 m

Horiz. Pattern: Directional

Vert. Pattern: Yes

Elec Tilt: 0.75

Prop Model: Longley-Rice

Climate: Cont temperate

Conductivity: 0.0050

Dielec Const: 15.0

Refractivity: 311.0


Receiver Ht AG: 10.0 m

Receiver Gain: 0 dB

Time Variability: 90.0%

Sit. Variability: 50.0%

ITM Mode: Broadcast

 Line of Sight