tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: KCMN-STA_RC100M, Model: Longley-Rice

Start: 2019.05.07 16:59:02

Study created: 2019.05.07 16:59:01

Study build station data: LMS TV 2019-05-06

Proposal: KCMN-LD D28 LD CP TOPEKA, KS

File number: KCMN-STA_RC100M

Facility ID: 184190

Station data: User record

Record ID: 1975

Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Search options:

Non-U.S. records included

All records for new LPTV stations excluded

Individual records excluded:

0000051647 KCMN-LD D28 LD CP TOPEKA, KS BLANK0000051647

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KKSU-LD	N21z	TX	LIC	MANHATTAN, KS	BLTTL19950512ID	179.8 km

Yes	KSNT	D27	DT	LIC	TOPEKA, KS	BLCDT20090910ABY	110.6
No	K28NT-D	D28z	LD	LIC	BENTONVILLE & ROGERS, AR	BLANK0000059138	295.5
No	KRUB-LD	D28	LD	CP	CEDAR RAPIDS, IA	BLANK0000052712	414.4
No	WBXF-CD	D28z	DC	CP	DES MOINES, IA	BLANK0000035778	295.4
No	WBXF-CD	D28z	DC	LIC	DES MOINES, IA	BLANK0000005069	295.4
No	K28NF-D	D28	LD	APP	FORT DODGE, IA	BLANK0000010852	295.4
No	K28JD-D	D28	LD	LIC	FORT MADISON, IA	BLDTT20091229AEU	317.9
No	KSIN-TV	D28	DT	LIC	SIOUX CITY, IA	BLEDT20050726AMC	417.3
No	WRBU	D28	DT	CP	EAST ST. LOUIS, IL	BLANK0000034410	355.5
No	KWKD-LP	N28+	TX	LIC	WICHITA, KS	BLTT20050801AHP	285.6
No	KWKD-LP	D28	LD	CP	WICHITA, KS	BDFCDTL20101025AAU	295.5
No	KLMC-LP	N28+	TX	LIC	JEFFERSON CITY, MO	BLTTL20050613AFP	201.5
No	KLMC-LP	D28	LD	CP	JEFFERSON CITY, MO	BDFCDTL20120625ACS	193.3
No	KJPX-LP	D28+	LD	CP	JOPLIN, MO	BLANK0000054317	218.5
Yes	KCJO-LD	D28	LD	LIC	SAINT JOSEPH, MO	BLANK0000064321	86.6
Yes	KOZL-TV	D28	DT	LIC	SPRINGFIELD, MO	BLCDT20070213ABB	241.7
No	KHNE-TV	D28	DT	CP	HASTINGS, NE	BLANK0000035896	362.5
No	KHNE-TV	D28	DT	LIC	HASTINGS, NE	BLEDT20030409ABN	362.5
No	KTPX-TV	D28	DT	LIC	OKMULGEE, OK	BLCDT20020510AAQ	381.4
No	K28NV-D	D28	LD	LIC	PONCA CITY, OK	BLANK0000055256	336.9
No	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDT20090618ACY	7.6
No	KXVO	D29	DT	CP	OMAHA, NE	BLANK0000034544	271.2

No non-directional AM stations found within 0.8 km

Directional AM stations within 3.2 km:

KCCV 760 L DA2 D OVERLAND PARK, KS BMML20180214AAV

KCCV 760 L DA2 N OVERLAND PARK, KS BMML20180214AAV

KMBZ 980 L DAN D KANSAS CITY, MO BMML20171214ABX

KMBZ 980 L DAN N KANSAS CITY, MO BMML20171214ABX

Record parameters as studied:

Channel: D28
Mask: Full Service
Latitude: 39 0 56.50 N (NAD83)
Longitude: 94 30 25.00 W
Height AMSL: 371.3 m
HAAT: 0.0 m
Peak ERP: 15.0 kW
Antenna: Omnidirectional
Elev Pattrn: Generic
Elec Tilt: 0.75

50.1 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	136.7 m	46.8 km
45.0	15.0	80.7	41.2
90.0	15.0	106.9	44.5
135.0	15.0	81.6	41.3
180.0	15.0	73.1	40.0
225.0	15.0	112.5	45.0
270.0	15.0	81.4	41.3
315.0	15.0	109.1	44.7

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 98 m

Distance to Canadian border: 1015.8 km

Distance to Mexican border: 1205.6 km

Conditions at FCC monitoring station: Grand Island NE

Bearing: 303.6 degrees Distance: 395.6 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 281.0 degrees Distance: 925.9 km

Study cell size: 0.50 km

Profile point spacing: 0.10 km

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

Interference to BLCDT20090910ABY LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KSNT	D27	DT	LIC	TOPEKA, KS	BLCDT20090910ABY	
Undesireds:	KCMN-LD	D28	LD	CP	TOPEKA, KS	KCMN-STA_RC100M	110.6 km

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX

20128.4	618,965	19892.3	594,143	19892.3	594,143	19892.1	594,143	0.00	0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
KCMN-LD D28 LD CP	0.2	0	0.2 0

Interference to BLANK0000064321 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KCJO-LD	D28	LD	LIC	SAINT JOSEPH, MO	BLANK0000064321	
Undesireds:	KCMN-LD	D28	LD	CP	TOPEKA, KS	KCMN-STA_RC100M	86.6 km
	WBXF-CD	D28z	DC	CP	DES MOINES, IA	BLANK0000035778	228.3
	KWKD-LP	N28+	TX	LIC	WICHITA, KS	BLTT20050801AHP	313.5
	KLMC-LP	N28+	TX	LIC	JEFFERSON CITY, MO	BLTTL20050613AFP	258.9
	KHNE-TV	D28	DT	CP	HASTINGS, NE	BLANK0000035896	298.0
	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDT20090618ACY	79.2

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX	
2855.0	126,274	2756.0	126,053	2752.5	126,052	2731.6	125,744	0.76	0.24

Undesired	Total IX	Unique IX, before	Unique IX, after
KCMN-LD D28 LD CP	23.9	309	21.0 308
KMBC-TV D29 DT LIC	3.5	1 3.5	1 0.5 0

Interference to BLCDT20070213ABB LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance

Desired: KOZL-TV D28 DT LIC SPRINGFIELD, MO BLCDT20070213ABB

Undesireds: KCMN-LD D28 LD CP TOPEKA, KS KCMN-STA_RC100M 241.7 km
KARZ-TV D28 DT CP LITTLE ROCK, AR BLANK0000062880 272.1
WRBU D28 DT CP EAST ST. LOUIS, IL BLANK0000034410 252.2
KTPX-TV D28 DT LIC OKMULGEE, OK BLCDT20020510AAQ 322.7
WREG-TV D28 DT LIC MEMPHIS, TN BLCDT20050513AAE 359.8

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
42107.6	993,768	41412.9	975,194	41123.2	969,381	41119.5	969,324	0.01	0.01

Undesired	Total IX		Unique IX, before		Unique IX, after	
KCMN-LD D28 LD CP	4.9	57	3.7	57		
KARZ-TV D28 DT CP	5.4	96	2.9	11	2.9	11
WRBU D28 DT CP	146.8	2,711	135.1	2,548	134.1	2,548
KTPX-TV D28 DT LIC	98.5	1,413	98.5	1,413	98.3	1,413
WREG-TV D28 DT LIC	53.0	1,826	40.1	1,608	40.1	1,608

Interference to BLCDT20070213ABB LIC scenario 2

Call Chan Svc Status City, State File Number Distance

Desired: KOZL-TV D28 DT LIC SPRINGFIELD, MO BLCDT20070213ABB

Undesireds: KCMN-LD D28 LD CP TOPEKA, KS KCMN-STA_RC100M 241.7 km
KARZ-TV D28 DT CP LITTLE ROCK, AR BLANK0000062880 272.1
WRBU D28 DT BL EAST ST. LOUIS, IL DTVBL57221 252.2
KTPX-TV D28 DT LIC OKMULGEE, OK BLCDT20020510AAQ 322.7
WREG-TV D28 DT LIC MEMPHIS, TN BLCDT20050513AAE 359.8

Service area	Terrain-limited	IX-free, before		IX-free, after		Percent New IX	
42107.6	993,768	41412.9	975,194	41250.1	971,876	41245.4	971,819	0.01	0.01

Undesired	Total IX	Unique IX, before		Unique IX, after	
KCMN-LD D28 LD CP	4.9	57		4.7	57
KARZ-TV D28 DT CP	5.4	96	3.2	26	3.2	26
WRBU D28 DT BL	8.9	63	8.2	53	8.2	53
KTPX-TV D28 DT LIC	98.5	1,413	98.5	1,413	98.3	1,413
WREG-TV D28 DT LIC	53.0	1,826	50.3	1,746	50.3	1,746

Interference to proposal scenario 1

24.73% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KCMN-LD	D28	LD	CP	TOPEKA, KS	KCMN-STA_RC100M	
Undesireds:	WBXF-CD	D28z	DC	CP	DES MOINES, IA	BLANK0000035778	295.4 km
	KWKD-LP	N28+	TX	LIC	WICHITA, KS	BLTT20050801AHP	285.6
	KLMC-LP	N28+	TX	LIC	JEFFERSON CITY, MO	BLTTL20050613AFP	201.5
	KCJO-LD	D28	LD	LIC	SAINT JOSEPH, MO	BLANK0000064321	86.6
	KOZL-TV	D28	DT	LIC	SPRINGFIELD, MO	BLCDT20070213ABB	241.7
	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDT20090618ACY	7.6

Service area	Terrain-limited	IX-free	Percent IX	
5863.6	1,762,645	5753.7	1,756,251	3009.6	1,321,968	47.69	24.73

Undesired	Total IX	Unique IX	Prcnt Unique IX

KCJO-LD D28 LD LIC	13.6	1,104	0.5	0	0.01	0.00
KOZL-TV D28 DT LIC	86.3	6,978	5.5	316	0.10	0.02
KMBC-TV D29 DT LIC	2738.2	433,967	2649.2	426,462	46.04	24.28