

INTERFERENCE ANALYSIS FOR LICENSED KQFX-LD, COLUMBIA, MO, CHANNEL 22, WITH RESPECT TO KRBK-TV

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: kqfx_lic3, Model: Longley-Rice

Study build station data: LMS TV 2019-04-02

Proposal: KQFX-LD D22 LD LIC COLUMBIA, MO
File number: BLANK0000063117
Facility ID: 56176
Station data: LMS TV 2019-04-02
Record ID: 25076ff3667cab310166b084c2341e09
Country: U.S.

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

Search options:
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WMEC	D21	DT	LIC	MACOMB, IL	BLEDT20031031ADO	238.7 km
No	WPXS	D21	DT	LIC	MOUNT VERNON, IL	BLCDT20081103AAG	259.9
No	KTAJ-TV	D21	DT	LIC	ST. JOSEPH, MO	BLCDT20060703AAK	171.5
No	K22HS-D	D22	LD	LIC	EUREKA SPRINGS, AR	BLDTL20110517ADA	288.2
No	KJNE-LD	D22z	LD	LIC	JONESBORO, AR	BLANK0000055090	361.1
No	KATV	D22	DT	LIC	LITTLE ROCK, AR	BLCDT20090225AAV	442.2
No	KPXR-TV	D22	DT	LIC	CEDAR RAPIDS, IA	BLANK0000063428	395.4
No	WBUI	D22	DT	LIC	DECATUR, IL	BLCDT20091119ACF	345.2
Yes	WVDM-LD	D22	LD	CP	QUINCY, IL	BLANK0000052701	142.4
No	WTVW	D22	DT	CP	EVANSVILLE, IN	BLANK0000034881	460.0
No	WVUT	D22	DT	LIC	VINCENNES, IN	BLEDT20090709AFJ	440.7
No	K22KX-D	D22	LD	CP	EMPORIA, KS	BNPDTL20100930ARN	312.7
No	KMJC-LD	D22	LD	LIC	Kansas City, KS	BLANK0000016622	180.3
No	K40IJ-D	D22	LD	CP	TOPEKA, KS	BLANK0000030155	279.2
No	KBSI	D22	DT	LIC	CAPE GIRARDEAU, MO	BLCDT20110608ABZ	302.9
No	KGCS-LD	D22	LD	LIC	JOPLIN, MO	BLDTL20080918AAO	257.0
Yes	KRBK	D22	DT	LIC	OSAGE BEACH, MO	BLANK0000063419	176.3
Yes	K22KA-D	D22	LD	CP	ROLLA, MO	BNPDTL20100406AAM	112.4
No	WOWT	D22	DT	LIC	OMAHA, NE	BLCDT20110509AAN	408.2
No	KOKI-TV	D22	DT	LIC	TULSA, OK	BLCDT20021127AGL	411.4
Yes	K23MK-D	D23	LD	CP	COLUMBIA, MO	BNPDTL20100423ACE	31.7
No	KODE-TV	D23	DT	CP	JOPLIN, MO	BLANK0000067510	257.6
No	KCDN-LD	D23	LD	CP	KANSAS CITY, MO	BLANK0000051767	171.5
Yes	K23LE-D	D23	LD	CP	SEDALIA, MO	BNPDTL20100319AEZ	65.8
Yes	KOZK	D23	DT	LIC	SPRINGFIELD, MO	BLEDT20030911AAS	181.6
No	KETC	D23	DT	LIC	ST. LOUIS, MO	BLANK0000055432	190.2

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D22

Mask: Simple
Latitude: 38 46 29.00 N (NAD83)
Longitude: 92 33 23.00 W
Height AMSL: 554.0 m
HAAT: 0.0 m
Peak ERP: 11.8 kW
Antenna: AND-ALP16M4-HSOC (ID 1004266) 0.0 deg
Elev Pattn: Generic
Elec Tilt: 1.00

49.6 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	9.88 kW	333.6 m	56.8 km
45.0	11.7	337.7	57.9
90.0	8.95	337.4	56.4
135.0	4.98	360.7	54.4
180.0	4.58	329.5	52.4

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225.0	5.36	323.9	53.0
270.0	4.36	301.3	50.6
315.0	5.64	318.7	53.0

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 330 m

Distance to Canadian border: 873.6 km

Distance to Mexican border: 1287.6 km

Conditions at FCC monitoring station: Grand Island NE
Bearing: 297.3 degrees Distance: 554.9 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 281.8 degrees Distance: 1096.6 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 proposal scenario 1
4.63% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KQFX-LD	D22	LD	LIC	COLUMBIA, MO	BLANK0000063117	
Undesireds:	WVDM-LD	D22	LD	CP	QUINCY, IL	BLANK0000052701	142.4 km
	KRBK	D22	DT	LIC	OSAGE BEACH, MO	BLANK0000063419	176.3
	K22KA-D	D22	LD	CP	ROLLA, MO	BNPDTL20100406AAM	112.4
	K23MK-D	D23	LD	CP	COLUMBIA, MO	BNPDTL20100423ACE	31.7
	K23LE-D	D23	LD	CP	SEDALIA, MO	BNPDTL20100319AEZ	65.8

	Service area	Terrain-limited	IX-free	Percent IX
	9258.6	336,820	9162.4	335,475
			8658.5	319,937
				5.50 4.63

Undesired	Total IX	Unique IX	Prcnt Unique IX
WVDM-LD D22 LD CP	3.0 121	1.0 74	0.01 0.02
KRBK D22 DT LIC	453.9 11,166	383.7 9,973	4.19 2.97
K22KA-D D22 LD CP	94.3 1,484	28.1 339	0.31 0.10
K23MK-D D23 LD CP	17.9 3,931	16.9 3,931	0.18 1.17
K23LE-D D23 LD CP	6.0 76	4.0 28	0.04 0.01

(Predicted interference received exceeding 2%.)