

# INTERFERENCE ANALYSIS FOR PROPOSED KQFX-LD, COLUMBIA, MO (CHANNEL 30)

tvstudy v2.2.5 (4uoc83)  
Database: localhost, Study: kqfx30p4, Model: Longley-Rice

Study build station data: LMS TV 2019-12-11

Proposal: KQFX30P4 D30 LD APP COLUMBIA, MO  
File number: kqfx30p4  
Facility ID: 56176  
Station data: User record  
Record ID: 4241  
Country: U.S.

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	KLMC-LP	N28+	TX	LIC	JEFFERSON CITY, MO	BLTTL20050613AFP	35.1 km
No	K30NF-D	D29	LD	CP	KEOKUK, IA	BLANK0000072001	204.5
Yes	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDT20090618ACY	172.8
No	KKAF-LD	D30	LD	LIC	FAYETTEVILLE, AR	BLANK0000062918	325.6
No	K30MF-D	D30	LD	LIC	JONESBORO, AR	BLANK0000001516	333.9
No	KLRT-TV	D30	DT	LIC	LITTLE ROCK, AR	BLCDT20020507AAK	442.0
No	KMIK-LD	D30	LD	CP	CEDAR FALLS, IA	BLANK0000052697	418.5
No	KLJB	D30	DT	CP	DAVENPORT, IA	BLANK0000034774	337.4
No	K30NF-D	D30	LD	LIC	KEOKUK, IA	BLANK0000010562	204.5
No	WEIU-TV	D30	DT	CP	CHARLESTON, IL	BLANK0000029172	376.7
No	WTCT	D30	DT	CP	MARION, IL	BLANK0000034912	337.2
Yes	WODK-LD	D30	LD	CP	SPRINGFIELD, IL	BLANK0000089135	194.9
No	K30LZ-D	D30	LD	CP	FORT RILEY, KS	BNPDTL20100510AFK	357.8
No	K30AL-D	D30	LD	LIC	IOLA, KS	BLDTT20090226ABD	243.6
No	K30NO-D	D30	LD	CP	PAXICO, KS	BNPDTL20100514AIC	315.0
No	KCLJ-LP	D30	LD	CP	JOPLIN/CARTHAGE, MO	BDFCDTA20100813CAI	250.0
No	KCLJ-LP	N30z	TX	LIC	JOPLIN/CARTHAGE, MO	BLTTA20050506ACG	250.0
Yes	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	171.5
No	K30MG-D	D30	LD	LIC	KIRKSVILLE, MO	BLDTT20120607ABF	161.6
No	K30OK-D	D30	LD	LIC	TULSA, OK	BLANK0000080580	420.6
No	KOTV-DT	D30	LD	LIC	TULSA, OK	BLCDT20120817ACF	355.0
No	KWBM	D31	DT	APP	HARRISON, AR	BLANK0000036086	234.4
No	KWBM	D31	DT	LIC	HARRISON, AR	BLCDT20091201ASC	234.4
Yes	KCWE	D31	DT	LIC	KANSAS CITY, MO	BLCDT20051014ABT	172.8
No	KDNL-TV	D31	DT	LIC	ST. LOUIS, MO	BLCDT20021216AAE	194.5

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D30

Mask: Simple

Latitude: 38 46 32.10 N (NAD83)

Longitude: 92 33 24.90 W

Height AMSL: 575.6 m

HAAT: 0.0 m

Peak ERP: 15.0 kW

Antenna: Omnidirectional

Elev Pattn: Generic

Elec Tilt: 0.75

50.3 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	356.6 m	59.2 km
45.0	15.0	357.6	59.2
90.0	15.0	360.5	59.4
135.0	15.0	381.2	60.4
180.0	15.0	351.5	58.9
225.0	15.0	345.1	58.6
270.0	15.0	321.7	57.4
315.0	15.0	341.4	58.4

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 352 m

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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: 554.8 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 BLCDT20090618ACY LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDT20090618ACY	
Undesireds:	KQFX30P4	D30	LD	APP	COLUMBIA, MO	kqfx30p4	172.8 km
	KXVO	D29	DT	LIC	OMAHA, NE	BLANK0000078842	264.4
	KTZT-CD	D29	DC	CP	TULSA, OK	BLANK0000036113	350.4
	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	6.8
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
34003.1		2,511,626		33505.8 2,509,773		32614.3 2,488,474	0.01 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
KQFX30P4 D30 LD APP		4.0		2		4.0	2
KXVO D29 DT LIC		737.4		18,051		727.4	17,387
KPXE-TV D30 DT LIC		160.1		3,910		150.2	3,246

## Interference to BLANK0000089135 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WODK-LD	D30	LD	CP	SPRINGFIELD, IL	BLANK0000089135	
Undesireds:	KQFX30P4	D30	LD	APP	COLUMBIA, MO	kqfx30p4	194.9 km
	WLEH-LD	D29	LD	LIC	ST. LOUIS, IL	BLANK0000080775	44.5
	K3ONF-D	D30	LD	LIC	KEOKUK, IA	BLANK0000010562	222.5
	WEIU-TV	D30	DT	CP	CHARLESTON, IL	BLANK0000029172	206.4
	WTCT	D30	DT	CP	MARION, IL	BLANK0000034912	160.5
	KDNL-TV	D31	DT	LIC	ST. LOUIS, MO	BLCDT20021216AAE	0.8
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
7092.5		2,361,273		6824.3 2,347,712		3494.7 1,747,742	0.00 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
KQFX30P4 D30 LD APP		1.0		0		0.0	0
WLEH-LD D29 LD LIC		60.3		1,713		1.0	127
WEIU-TV D30 DT CP		7.0		308		0.0	0
WTCT D30 DT CP		621.4		39,616		54.2	4,712
KDNL-TV D31 DT LIC		3269.3		595,056		2690.2	560,017

## Interference to BLANK0000001701 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	
Undesireds:	KQFX30P4	D30	LD	APP	COLUMBIA, MO	kqfx30p4	171.5 km
	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDT20090618ACY	6.8
	KCWE	D31	DT	LIC	KANSAS CITY, MO	BLCDT20051014ABT	6.8
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
32176.9		2,439,945		31908.3 2,438,780		31079.3 2,426,323	2.18 0.40
Undesired		Total IX		Unique IX, before		Unique IX, after	
KQFX30P4 D30 LD APP		706.6		9,858		692.7	9,818

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KMBC-TV D29 DT LIC	101.6	2,243	13.0	508	13.0	508
KCWE D31 DT LIC	123.4	2,131	34.7	396	31.8	391

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## Interference to BLCDT20051014ABT LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCWE	D31	DT	LIC	KANSAS CITY, MO	BLCDT20051014ABT	
Undesireds:	KQFX30P4	D30	LD	APP	COLUMBIA, MO	kqfx30p4	172.8 km
	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	6.8
	KWBM	D31	DT	APP	HARRISON, AR	BLANK0000036086	293.5
	KDCU-DT	D31	DT	LIC	DERBY, KS	BLCDT20090821AAM	298.2
	KDNL-TV	D31	DT	LIC	ST. LOUIS, MO	BLCDT20021216AAE	366.8
	KMTV-TV	D31	DT	LIC	OMAHA, NE	BLANK0000074904	278.4
	KSMO-TV	D32	DT	LIC	KANSAS CITY, MO	BLANK0000072612	3.9
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	32206.9	2,459,121	31763.8	2,455,885	30719.9	2,433,927	0.00 <span style="background-color: yellow;">0.00</span>

Undesired		Total IX	Unique IX, before	Unique IX, after
KQFX30P4 D30 LD APP	9.0	22		1.0
KPXE-TV D30 DT LIC	129.0	2,916	56.0	448
KWBM D31 DT APP	304.2	879	198.9	539
KDCU-DT D31 DT LIC	231.9	6,079	134.9	4,246
KDNL-TV D31 DT LIC	32.8	83	10.9	36
KMTV-TV D31 DT LIC	389.5	9,533	337.9	7,870
KSMO-TV D32 DT LIC	188.4	6,889	112.5	4,577

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## Interference to BLCDT20051014ABT LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCWE	D31	DT	LIC	KANSAS CITY, MO	BLCDT20051014ABT	
Undesireds:	KQFX30P4	D30	LD	APP	COLUMBIA, MO	kqfx30p4	172.8 km
	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	6.8
	KWBM	D31	DT	LIC	HARRISON, AR	BLCDT20091201ASC	293.5
	KDCU-DT	D31	DT	LIC	DERBY, KS	BLCDT20090821AAM	298.2
	KDNL-TV	D31	DT	LIC	ST. LOUIS, MO	BLCDT20021216AAE	366.8
	KMTV-TV	D31	DT	LIC	OMAHA, NE	BLANK0000074904	278.4
	KSMO-TV	D32	DT	LIC	KANSAS CITY, MO	BLANK0000072612	3.9
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	32206.9	2,459,121	31763.8	2,455,885	30900.7	2,434,437	0.00 <span style="background-color: yellow;">0.00</span>

Undesired		Total IX	Unique IX, before	Unique IX, after
KQFX30P4 D30 LD APP	9.0	22		1.0
KPXE-TV D30 DT LIC	129.0	2,916	63.0	481
KWBM D31 DT LIC	48.2	102	18.1	30
KDCU-DT D31 DT LIC	231.9	6,079	157.0	4,308
KDNL-TV D31 DT LIC	32.8	83	17.8	52
KMTV-TV D31 DT LIC	389.5	9,533	337.9	7,870
KSMO-TV D32 DT LIC	188.4	6,889	124.5	4,624

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## Interference to proposal scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KQFX30P4	D30	LD	APP	COLUMBIA, MO	kqfx30p4	
Undesireds:	K30NF-D	D30	LD	LIC	KEOKUK, IA	BLANK0000010562	204.5 km
	KCLJ-LP	D30	LD	CP	JOPLIN/CARTHAGE, MO	BDFCDA20100813CAI	250.0
	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	171.5
	K30MG-D	D30	LD	LIC	KIRKSVILLE, MO	BLDTT20120607ABF	161.6
	Service area		Terrain-limited		IX-free	Percent IX	
	10882.9	359,083	10760.6	358,215	10520.6	351,652	2.23 1.83
Undesired			Total IX		Unique IX	Prcnt Unique IX	
KPXE-TV D30 DT LIC	240.0		6,563	239.0	6,563	2.22	1.83
K30MG-D D30 LD LIC	1.0		0	0.0	0	0.00	0.00

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