

INTERFERENCE ANALYSIS FOR PROPOSED KMMW-LD, STOCKTON, CA (CHANNEL 14)

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: kmmw14p40, Model: Longley-Rice

Study build station data: LMS TV 2018-12-10

Proposal: KMMW14P40 D14 LD APP STOCKTON, CA
File number: kmmw14p40
Facility ID: 18744
Station data: User record
Record ID: 3502
Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Search options:

Baseline record excluded if station has CP

User records included:

3488 KSAO-LDP4 D14 LD APP SACRAMENTO, CA ksao_ldp4 (KSAO-LD application with rotation to 290° True, as amended.)

Individual records excluded:

0000053702 KSAO-LD D14 LD APP *P SACRAMENTO, CA BLANK0000053702 (KSAO-LD application prior to amendment.)

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KXBF-LD	D14	LD	LIC	BAKERSFIELD, CA	BLDTL20130821ACC	348.2 km
No	KVIQ-LD	D14	LD	LIC	Eureka, ca, CA	BLANK0000034113	401.2
Yes	KJEO-LD	D14	LD	CP	FRESNO, CA	BLANK0000053775	162.7
No	K14HX-D	D14	LD	LIC	LAKEHEAD, CA	BLDTT20080826AAP	343.9
No	K14PC-D	D14	LD	CP	MONTEREY, CA	BNPDTL20100728AEU	202.3
Yes	K46LG-D	D14	LD	APP	MONTEREY, CA	BLANK0000054315	166.3
Yes	KSAO-LDP4	D14	LD	APP	SACRAMENTO, CA	ksao_ldp4	67.2
Yes	KMMC-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000053901	157.5
Yes	KDTS-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000052106	153.9
Yes	KQTA-LD	D14	LD	APP	San Francisco, CA	BLANK0000054596	156.7
Yes	KAAP-LD	D14	LD	APP	SANTA CRUZ, CA	BLANK0000054935	137.0
No	K48LA-D	D14	LD	CP	SOUTH LAKE TAHOE, CA	BLANK0000054405	150.0
No	K14KQ-D	D14	LD	LIC	LOVELOCK, NV	BLDTL20120530A00	300.0
No	KNRC-LD	D14	LD	LIC	SPARKS, NV	BLDTL20100910AEI	181.4
No	K14JY-D	D14	LD	LIC	WALKER LAKE, NV	BLDTT20111128DZW	196.0
Yes	KBSV	D15	DT	LIC	CERES, CA	BLEDT20090213AAZ	88.7
No	K15CX	D15	LD	CP	OROVILLE, CA	BDFCDTT20110613ACB	166.7
No	K15CX	N15z	TX	LIC	OROVILLE, CA	BLTTL20020613AAH	166.7
No	K15CU-D	D15	LD	LIC	SALINAS, CA	BLDTL20140730AEK	166.3
No	K36LY-D	D15	LD	CP	Yuba City, CA	BLANK0000054788	153.7
No	K15LG-D	D15	LD	CP	HAWTHORNE, NV	BLANK0000063298	175.1
No	K15LG-D	D15	LD	LIC	HAWTHORNE, NV	BLANK0000063682	175.1
No	K15LG-D	D15	LD	LIC	HAWTHORNE, NV	BLANK0000062112	175.1
No	KNPB	D15	LD	APP	RENO, NV	BDRTEDT20090825BIO	150.0
No	KNPB	D15	LD	LIC	RENO, NV	BLEDT20101109ACK	150.0
No	KNPB	D15	DT	LIC	RENO, NV	BLEDT20031023AAU	181.4

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D14

Mask: Stringent

Latitude: 38 7 9.70 N (NAD83)

Longitude: 120 43 30.90 W

Height AMSL: 910.2 m

HAAT: 0.0 m

Peak ERP: 15.0 kW

Antenna: MCX-SFN-2030-G-8 226.0 deg

Elev Pattn: Generic

Elec Tilt: 2.00

48.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.013 kW	514.4 m	25.9 km
45.0	0.094	447.1	35.0
90.0	0.030	525.4	30.5
135.0	0.753	425.1	47.0
180.0	7.00	546.4	64.2
225.0	14.9	655.5	72.4
270.0	7.31	714.8	68.9
315.0	0.843	621.3	52.7

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 556 m

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Distance to Canadian border: 1145.9 km

Distance to Mexican border: 681.9 km

Conditions at FCC monitoring station: Livermore CA
Bearing: 244.4 degrees Distance: 100.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 75.7 degrees Distance: 1350.8 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 BLANK0000053775 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KJEO-LD	D14	LD	CP	FRESNO, CA	BLANK0000053775	
Undesireds:	KMMW14P40	D14	LD	APP	STOCKTON, CA	kmmw14p40	162.7 km
	KFVD-LP	D15	LD	CP	PORTERVILLE, CA	BDFCDTL20100810AAY	102.4
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
10327.4		1,073,946		9286.0		1,050,795	9195.6
						1,034,678	9191.6
						1,034,678	0.04
							0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
KMMW14P40 D14 LD APP		4.0		0		4.0	0
KFVD-LP D15 LD CP		90.4		16,117		90.4	16,117

Interference to BLANK0000054315 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K46LG-D	D14	LD	APP	MONTEREY, CA	BLANK0000054315	
Undesireds:	KMMW14P40	D14	LD	APP	STOCKTON, CA	kmmw14p40	166.3 km
	KJEO-LD	D14	LD	CP	FRESNO, CA	BLANK0000053775	187.3
	K14PC-D	D14	LD	CP	MONTEREY, CA	BNPDTL20100728AEU	44.7
	KMMC-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000053901	132.3
	KDTS-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000052106	136.2
	KQTA-LD	D14	LD	APP	San Francisco, CA	BLANK0000054596	139.3
	KAAP-LD	D14	LD	APP	SANTA CRUZ, CA	BLANK0000054935	55.9
	K15CU-D	D15	LD	LIC	SALINAS, CA	BLDTL20140730AEK	0.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
4528.7		414,682		3794.4		379,768	2813.1
						181,323	2810.0
						181,323	0.11
							0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
KMMW14P40 D14 LD APP		6.0		0		3.0	0
KJEO-LD D14 LD CP		1.0		0		1.0	0
K14PC-D D14 LD CP		412.4		13,415		376.2	12,196
KMMC-LD D14 LD APP		21.1		3,526		8.0	0
KDTS-LD D14 LD APP		15.0		2,039		2.0	0
KQTA-LD D14 LD APP		6.0		1,761		0.0	0
KAAP-LD D14 LD APP		6.0		1,771		0.0	0
K15CU-D D15 LD LIC		592.1		186,249		538.9	180,742

Interference to ksao_ldp4 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KSAO-LDP4	D14	LD	APP	SACRAMENTO, CA	ksao_ldp4	
Undesireds:	KMMW14P40	D14	LD	APP	STOCKTON, CA	kmmw14p40	67.2 km
	KMMC-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000053901	158.3
	KDTS-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000052106	152.8
	KQTA-LD	D14	LD	APP	San Francisco, CA	BLANK0000054596	154.4
	K15CX	D15	LD	CP	OROVILLE, CA	BDFCDTT20110613ACB	99.7
	KNPB	D15	LD	APP	RENO, NV	BDRTEDT20090825BIO	124.8
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
4381.2		1,815,860		4312.4		1,806,443	4279.4
						1,796,882	3645.2
						1,796,882	14.82
							1.38

INTERFERENCE ANALYSIS FOR PROPOSED KMMW-LD, STOCKTON, CA (CHANNEL 14)

Undesired		Total IX	Unique IX, before	Unique IX, after
KMMW14P40 D14 LD APP	639.2	26,239		634.2 24,750
KMMC-LD D14 LD APP	11.0	3,537	0.0 0	0.0 0
KDTS-LD D14 LD APP	5.0	1,200	0.0 0	0.0 0
KQTA-LD D14 LD APP	29.9	9,339	21.9 6,024	19.9 5,700

Interference to BLANK0000053901 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KMMC-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000053901	
Undesireds:	KMMW14P40	D14	LD	APP	STOCKTON, CA	kmmw14p40	157.5 km
	KJEO-LD	D14	LD	CP	FRESNO, CA	BLANK0000053775	273.8
	K14PC-D	D14	LD	CP	MONTEREY, CA	BNPDTL20100728AEU	129.6
	K46LG-D	D14	LD	APP	MONTEREY, CA	BLANK0000054315	132.3
	KSAO-LDP4	D14	LD	APP	SACRAMENTO, CA	ksao_ldp4	158.3
	KDTS-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000052106	6.5
	KQTA-LD	D14	LD	APP	San Francisco, CA	BLANK0000054596	7.8
	KAAP-LD	D14	LD	APP	SANTA CRUZ, CA	BLANK0000054935	78.8

	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
12611.8	5,512,424	10286.0	4,828,621	2204.6	786,934	2203.6 786,560	0.05 0.05

Undesired		Total IX	Unique IX, before	Unique IX, after
KMMW14P40 D14 LD APP	62.6	19,202		1.0 374
KJEO-LD D14 LD CP	6.1	1,114	0.0 0	0.0 0
K14PC-D D14 LD CP	4.0	41	0.0 0	0.0 0
K46LG-D D14 LD APP	1.0	0	0.0 0	0.0 0
KSAO-LDP4 D14 LD APP	61.6	12,008	10.1 66	6.1 49
KDTS-LD D14 LD APP	4319.1	3,771,059	184.2 296,973	184.2 296,973
KQTA-LD D14 LD APP	7830.4	3,721,697	3676.3 251,298	3673.3 249,049
KAAP-LD D14 LD APP	1052.7	1,486,737	16.2 4,477	16.2 4,477

Interference to BLANK0000052106 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KDTS-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000052106	
Undesireds:	KMMW14P40	D14	LD	APP	STOCKTON, CA	kmmw14p40	153.9 km
	KSAO-LDP4	D14	LD	APP	SACRAMENTO, CA	ksao_ldp4	152.8
	KMMC-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000053901	6.5
	KQTA-LD	D14	LD	APP	San Francisco, CA	BLANK0000054596	3.6
	KAAP-LD	D14	LD	APP	SANTA CRUZ, CA	BLANK0000054935	81.9

	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
6962.6	4,212,680	5872.1	3,610,981	2054.9	832,770	2054.9 832,770	0.00 0.00

Undesired		Total IX	Unique IX, before	Unique IX, after
KMMW14P40 D14 LD APP	62.6	8,892		0.0 0
KSAO-LDP4 D14 LD APP	55.6	6,792	1.0 4	0.0 0
KMMC-LD D14 LD APP	3631.9	2,609,706	102.3 289,633	102.3 289,633
KQTA-LD D14 LD APP	3670.4	2,458,642	139.8 143,006	138.8 142,935
KAAP-LD D14 LD APP	888.5	837,658	12.1 13,979	12.1 13,979

Interference to BLANK0000054596 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KQTA-LD	D14	LD	APP	San Francisco, CA	BLANK0000054596	
Undesireds:	KMMW14P40	D14	LD	APP	STOCKTON, CA	kmmw14p40	156.7 km
	KJEO-LD	D14	LD	CP	FRESNO, CA	BLANK0000053775	277.2
	K14PC-D	D14	LD	CP	MONTEREY, CA	BNPDTL20100728AEU	137.3
	K46LG-D	D14	LD	APP	MONTEREY, CA	BLANK0000054315	139.3
	KSAO-LDP4	D14	LD	APP	SACRAMENTO, CA	ksao_ldp4	154.4
	KMMC-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000053901	7.8
	KDTS-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000052106	3.6
	KAAP-LD	D14	LD	APP	SANTA CRUZ, CA	BLANK0000054935	85.2

	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
13943.7	5,494,892	11316.0	4,685,295	2586.5	694,655	2586.5 694,655	0.00 0.00

Undesired		Total IX	Unique IX, before	Unique IX, after
KMMW14P40 D14 LD APP	167.5	25,526		0.0 0
KJEO-LD D14 LD CP	8.1	2	0.0 0	0.0 0
K14PC-D D14 LD CP	1.0	0	0.0 0	0.0 0
K46LG-D D14 LD APP	1.0	0	0.0 0	0.0 0
KSAO-LDP4 D14 LD APP	144.3	10,570	3.0 0	1.0 0
KMMC-LD D14 LD APP	8481.0	3,826,637	4073.5 379,256	4069.5 376,130
KDTS-LD D14 LD APP	4573.1	3,597,238	192.0 158,206	190.0 158,157
KAAP-LD D14 LD APP	1075.6	1,317,732	16.1 2,583	16.1 2,583

INTERFERENCE ANALYSIS FOR PROPOSED KMMW-LD, STOCKTON, CA (CHANNEL 14)

Interference to BLANK0000054935 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KAAP-LD	D14	LD	APP	SANTA CRUZ, CA	BLANK0000054935	
Undesireds:	KMMW14P40	D14	LD	APP	STOCKTON, CA	kmmw14p40	137.0 km
	KJEO-LD	D14	LD	CP	FRESNO, CA	BLANK0000053775	208.1
	K14PC-D	D14	LD	CP	MONTEREY, CA	BNPDTL20100728AEU	71.2
	K46LG-D	D14	LD	APP	MONTEREY, CA	BLANK0000054315	55.9
	KSAO-LDP4	D14	LD	APP	SACRAMENTO, CA	ksao_ldp4	170.6
	KMMC-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000053901	78.8
	KDTS-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000052106	81.9
	KQTA-LD	D14	LD	APP	San Francisco, CA	BLANK0000054596	85.2

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent	New IX
3204.4	2,741,978	2629.5	2,527,253	1479.9	1,419,690	1479.9	1,419,690	0.00	0.00
Undesired		Total IX		Unique IX, before		Unique IX, after			
KMMW14P40	D14 LD APP	8.1	0	0.0	0	0.0	0		
KJEO-LD	D14 LD CP	3.0	0	0.0	0	0.0	0		
K14PC-D	D14 LD CP	1.0	0	0.0	0	0.0	0		
K46LG-D	D14 LD APP	1.0	0	1.0	0	1.0	0		
KSAO-LDP4	D14 LD APP	10.2	9	0.0	0	0.0	0		
KMMC-LD	D14 LD APP	1068.9	1,071,532	83.9	79,447	82.9	79,447		
KDTS-LD	D14 LD APP	785.0	762,224	17.2	5,451	17.2	5,451		
KQTA-LD	D14 LD APP	1018.3	1,017,973	31.3	13,815	31.3	13,815		

Interference to BLEDT20090213AAZ LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KBSV	D15	DT	LIC	CERES, CA	BLEDT20090213AAZ	
Undesireds:	KMMW14P40	D14	LD	APP	STOCKTON, CA	kmmw14p40	88.7 km
	KEZT-CD	D14	DC	BL	SACRAMENTO, CA	DTVBL52891	118.0
	KKPX-TV	D14	DT	BL	SAN JOSE, CA	DTVBL22644	95.6
	K08MM-D	D15	DC	LIC	BAKERSFIELD, CA	BLANK0000001629	329.0
	KSBY	D15	DT	LIC	SAN LUIS OBISPO, CA	BLCDT20081118AEW	247.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent	New IX
9519.8	1,356,966	8427.8	1,264,764	8373.5	1,264,647	8221.5	1,264,369	1.82	0.02
Undesired		Total IX		Unique IX, before		Unique IX, after			
KMMW14P40	D14 LD APP	159.1	280	1.0	0	152.0	278		
KEZT-CD	D14 DC BL	1.0	0	1.0	0	1.0	0		
KKPX-TV	D14 DT BL	9.1	12	8.1	12	5.1	10		
KSBY	D15 DT LIC	45.2	105	44.1	105	40.1	105		

Interference to proposal scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KMMW14P40	D14	LD	APP	STOCKTON, CA	kmmw14p40	
Undesireds:	KJEO-LD	D14	LD	CP	FRESNO, CA	BLANK0000053775	162.7 km
	K46LG-D	D14	LD	APP	MONTEREY, CA	BLANK0000054315	166.3
	KSAO-LDP4	D14	LD	APP	SACRAMENTO, CA	ksao_ldp4	67.2
	KMMC-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000053901	157.5
	KDTS-LD	D14	LD	APP	SAN FRANCISCO, CA	BLANK0000052106	153.9
	KQTA-LD	D14	LD	APP	San Francisco, CA	BLANK0000054596	156.7

Service area		Terrain-limited		IX-free		Percent IX	
8618.8	1,109,593	8287.6	1,100,559	7877.6	1,083,740	4.95	1.53
Undesired		Total IX		Unique IX		Prct Unique IX	
KJEO-LD	D14 LD CP	4.1	0	4.1	0	0.05	0.00
K46LG-D	D14 LD APP	3.0	46	0.0	0	0.00	0.00
KSAO-LDP4	D14 LD APP	393.8	16,698	392.8	16,698	4.74	1.52
KMMC-LD	D14 LD APP	9.1	121	4.0	18	0.05	0.00
KDTS-LD	D14 LD APP	5.1	91	1.0	0	0.01	0.00
KQTA-LD	D14 LD APP	5.0	91	2.0	0	0.02	0.00