

### Channel Study

REFERENCE		CH# 275D - 102.9 MHz, Pwr= 0.23 kW, HAAT= 50.8 M, COR= 74 M								DISPLAY DATES	
37 38 02.5 N.		Average Protected F(50-50)= 9.2 km								DATA 12-12-19	
120 59 54.0 W.		Omni-directional								SEARCH 12-12-19	
CH	CALL	TYPE	ANT	AZI.	DIST	LAT.	Pwr(kW)	INT(km)	PRO(km)	*IN*	*OUT*
CITY			STATE	<--	FILE #	LNG.	HAAT(M)	COR(M)	LICENSEE	(Overlap in km)	
277B	KATM	LIC		258.3	32.14	37 34 29.80	50.000	9.5	86.5	13.2	-55.9*
Modesto			CA	78.1	BLH19840418DD	121 21 16.80	152	434	Radio License Holding Cbc,		
275D	K275CE!	LIC		27.8	0.01	37 38 02.80	0.070		---Reference---		
Patterson			CA	207.8	BLFT20150807AAK	120 59 53.80	51	74	The Association For Commun		
272A	KJSN	LIC		51.3	8.27	37 40 49.70	6.000	2.8	28.5	-2.6	-21.3*
Modesto			CA	231.4	BMLH20100211ABM	120 55 29.80	88	121	Capstar Tx, LLC		
275B	KBLX-FM	LIC		273.2	127.05	37 41 20.80	7.200	133.4	69.6	-15.8*	10.1
Berkeley			CA	92.3	BLH20141219ACO	122 26 11.90	387	445	Bonneville International C		
275B	KBLX-FM	LIC		273.2	127.03	37 41 19.70	6.600	132.5	69.0	-14.9*	10.7
Berkeley			CA	92.3	BMLH20131127BJS	122 26 10.80	393	450	Bonneville International C		
275D	K275BT	LIC		325.3	43.85	37 57 29.70	0.038	21.9	6.5	12.5	6.0
Stockton			CA	145.2	BLFT20151228AMF	121 16 58.80		81	Educational Media Foundati		
275C	KWYL	LIC		27.1	209.94	39 18 37.70	39.000	194.1	92.1	7.1	88.9
South Lake Tahoe			CA	207.8	BLH19991208AAR	119 53 04.70	892	2969	Radio License Holding Cbc,		
273B	KDON-FM	LIC		204.7	107.19	36 45 22.90	15.000	7.5	94.9	90.3	10.7
Salinas			CA	24.4	BLH20040723ABH	121 30 08.80	723	1018	Cc Licenses, LLC		
274D	K274CG	LIC D		53.1	69.65	38 00 29.70	0.250	40.7	26.3	20.8	31.9
Sonora			CA	233.5	BLFT20161202ABQ	120 21 47.70		1049	Clarke Broadcasting Corpor		
276B1	KAAT	LIC		99.1	122.36	37 27 09.70	25.000	86.8	66.1	27.1	42.1
Oakhurst			CA	279.9	BLH20000309AAY	119 37 57.50	-59	1468	Lazer Licenses, LLC		
275L1	KDPT-LP	LIC		156.2	78.99	36 58 56.80	0.100			50.8	41.5
Dos Palos			CA	336.5	BLL20021025ABN	120 38 22.60	26	66	Dos Palos Radio		
275D	KBLX-FM2	LIC D		289.1	85.67	37 52 54.70	0.185	27.4	4.7	48.8	49.4
Pleasanton			CA	108.5	BLFTB20010302ABP	121 55 08.90	927	1155	Bonneville International C		
273B	KSFM	LIC		329.3	123.70	38 35 19.60	50.000	6.1	66.1	108.1	56.0
Woodland			CA	148.8	BMLH19940318KD	121 43 33.80	152	165	Entercom License, LLC		
275A	AU9167021	VAC		184.2	158.33	36 12 39.88	6.000	90.3	31.0	58.3	94.8
King City			CA	4.2	RM11054	121 07 43.70	100	344	Daniel R. Feely		
275D	K275BH	LIC		341.4	96.01	38 27 11.70	0.023	22.0	6.6	65.0	59.6
Elk Grove			CA	161.2	BLFT20080819ACS	121 20 58.80	85	103	Your Christian Companion N		
277D	K277BN	LIC D		224.6	72.61	37 10 02.70	0.023	0.0	0.9	63.1	70.7
San Martin			CA	44.2	BLFT20090306ACM	121 34 23.70	229	670	Coyote Communications, Inc		

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Terrain database is FCC NGDC 30 Sec, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM

Contour distances are on direct line to and from reference station. Reference Zone= East Zone 2A, Co to 3rd adjacent.

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtlt(Y,N,X)

\*\*\*affixed to 'IN' or 'OUT' values = site inside restricted contour.

« = Station meets FCC minimum distance spacing for its class.

**Compliance with C.F.R. 74.1204**

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station KATM, channel 277B, Modesto, CA. According to 74.1204(a)(3), in order to protect second and third adjacent facilities, the difference in dBu between the two facilities must not exceed 40dBu.

The proposed ERP for K275CE.P:	230 watts
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The proposed COR for K275CE.P:	47 meters
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KATM F(50/50) contour at proposed site:	79.1 dBu
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The F(50/10) contour of proposed K275CE.P	119.1 dBu
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By taking into account the antenna vertical elevation pattern for the Shively 6812 2 bay, it has been determined that based on the height of the antenna, the signal is predicted to not reach the ground or any nearby occupied structure (see Exhibit 13-A1).

Therefore, the licensee respectfully requests a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference.

EXHIBIT 13 - A1  
74.1204(d) Showing  
K275CE.P  
Patterson, CA

ERP (kw): 0.23

Height of Antenna above Ground (m): 47

Translator's IX Contour: 119.1

Antenna Type: Shively 6812 2BAY FULL WAVE

<b>Depression Angle from Horizon</b>	<b>Antenna Relative Field</b>	<b>ERP (kw) from the Antenna RF</b>	<b>Dist. To IX Contour (m)</b>	<b>Height IX Contour Above Ground (m)</b>
0	1.000	0.2300	117.9951	47.000
5	0.959	0.2115	113.1573	37.138
10	0.842	0.1631	99.3519	29.748
15	0.664	0.1014	78.3487	26.722
20	0.447	0.0460	52.7438	28.961
25	0.218	0.0109	25.7229	36.129
30	0.001	0.0000	0.1180	46.941
35	0.188	0.0081	22.1831	34.276
40	0.332	0.0254	39.1744	21.819
45	0.428	0.0421	50.5019	11.290
50	0.477	0.0523	56.2837	3.884
55	0.483	0.0537	56.9916	0.315
60	0.456	0.0478	53.8058	0.403
65	0.404	0.0375	47.6700	3.796
70	0.336	0.0260	39.6463	9.745
75	0.257	0.0152	30.3247	17.709
80	0.173	0.0069	20.4131	26.897
85	0.087	0.0017	10.2656	36.773
90	0.001	0.0000	0.1180	46.882

**Compliance with C.F.R. 74.1204**

The proposed FM Translator is located within the protected 60 dBu contour of third adjacent channel station KJSN, channel 272A, Modesto, CA. According to 74.1204(a)(3), in order to protect second and third adjacent facilities, the difference in dBu between the two facilities must not exceed 40dBu.

The proposed ERP for K275CE.P:	230 watts
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The proposed COR for K275CE.P:	47 meters
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KJSN F(50/50) contour at proposed site:	81.7 dBu
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The F(50/10) contour of proposed K275CE.P	121.7 dBu
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By taking into account the antenna vertical elevation pattern for the Shively 6812 2 bay, it has been determined that based on the height of the antenna, the signal is predicted to not reach the ground or any nearby occupied structure (see Exhibit 13-B1).

Therefore, the licensee respectfully requests a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference.

EXHIBIT 13 - B1  
74.1204(d) Showing  
K275CE.P  
Patterson, CA

ERP (kw): 0.23

Height of Antenna above Ground (m): 47

Translator's IX Contour: 121.7

Antenna Type: Shively 6812 2BAY FULL WAVE

<u>Depression Angle from Horizon</u>	<u>Antenna Relative Field</u>	<u>ERP (kw) from the Antenna RF</u>	<u>Dist. To IX Contour (m)</u>	<u>Height IX Contour Above Ground (m)</u>
0	1.000	0.2300	87.4710	47.000
5	0.959	0.2115	83.8847	39.689
10	0.842	0.1631	73.6506	34.211
15	0.664	0.1014	58.0807	31.968
20	0.447	0.0460	39.0995	33.627
25	0.218	0.0109	19.0687	38.941
30	0.001	0.0000	0.0875	46.956
35	0.188	0.0081	16.4445	37.568
40	0.332	0.0254	29.0404	28.333
45	0.428	0.0421	37.4376	20.528
50	0.477	0.0523	41.7237	15.038
55	0.483	0.0537	42.2485	12.392
60	0.456	0.0478	39.8868	12.457
65	0.404	0.0375	35.3383	14.973
70	0.336	0.0260	29.3902	19.382
75	0.257	0.0152	22.4800	25.286
80	0.173	0.0069	15.1325	32.097
85	0.087	0.0017	7.6100	39.419
90	0.001	0.0000	0.0875	46.913