

LANCASTER EDUCATIONAL BROADCAST SERVICE
KLQS-LP 97.5 FM AGUA DULCE, CALIF
FAC ID NO. 195731

MINOR CHANGE OF LICENSED FACILITY

PARAMETERS

Channel	248L1
New Location:	34° 19' 01.5" N 118° 22' 26.0" W -- NAD 83
Antenna AGL	6.9 m
Tower Total	8 m
Antenna Ground	2110 ft = 643 m (see Figure 1)
Antenna COR	649.9 m
HAAT	30 m (see Figure 2)
Power	65 w (100 w possible, but 65 w chosen for second-adjacent channel limitations)
Site Move Type:	LPFM Minor Change (see Figure 3)



Figure 1: Proposed Site

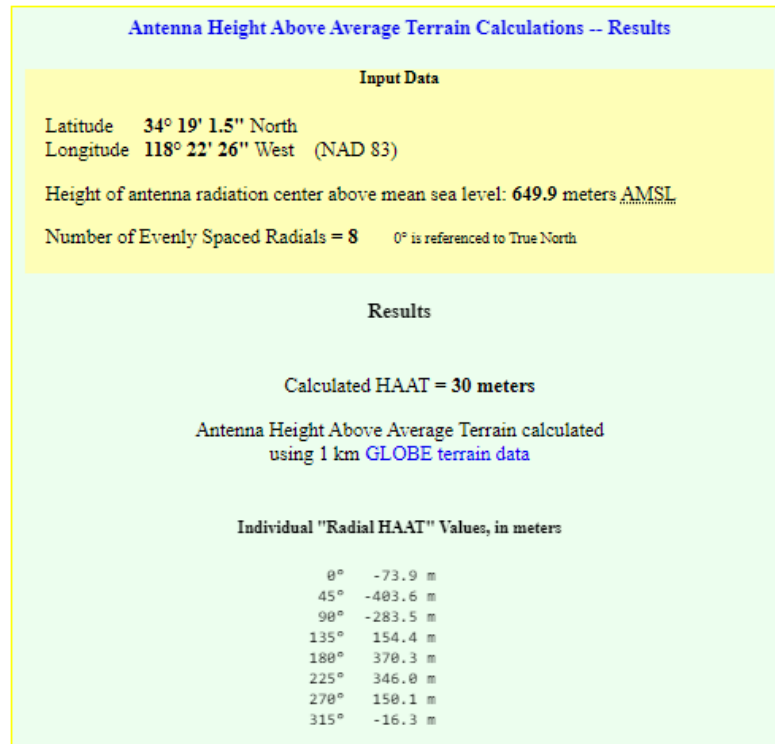
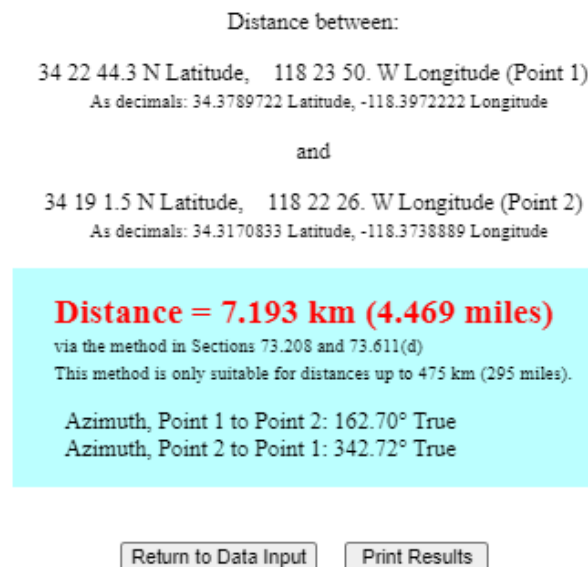


Figure 2: HAAT calculation from <https://www.fcc.gov/media/radio/haat-calculator>



To find the terminal coordinates given a bearing and a distance
use the [Terminal Coordinates](#) function.

Figure 3: Per Section 73.870(a), minor change is < 11.2 km.

TOWAIR (PASS)

DETERMINATION Results							
PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 7190.84 MTRS (7.19080 KM) AWAY							
Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	34-15-49.00N	118-25-5.00W	WHITEMAN	LOS ANGELES LOS ANGELES, CA	292.6	1255.8
Your Specifications							
NAD83 Coordinates							
Latitude					34-19-01.5 north		
Longitude					118-22-26.0 west		
Measurements (Meters)							
Overall Structure Height (AGL)					6.9		
Support Structure Height (AGL)					0		
Site Elevation (AMSL)					643		
Structure Type							
POLE - Any type of Pole							

CHANNEL SPACING

REFERENCE

34 19 01.50 N.

CLASS = L1

DISPLAY DATES

DATA 01-03-22

118 22 26.00 W.

Current Spacings to 2nd Adj.

SEARCH 01-23-22

----- Channel 248 - 97.5 MHz -----

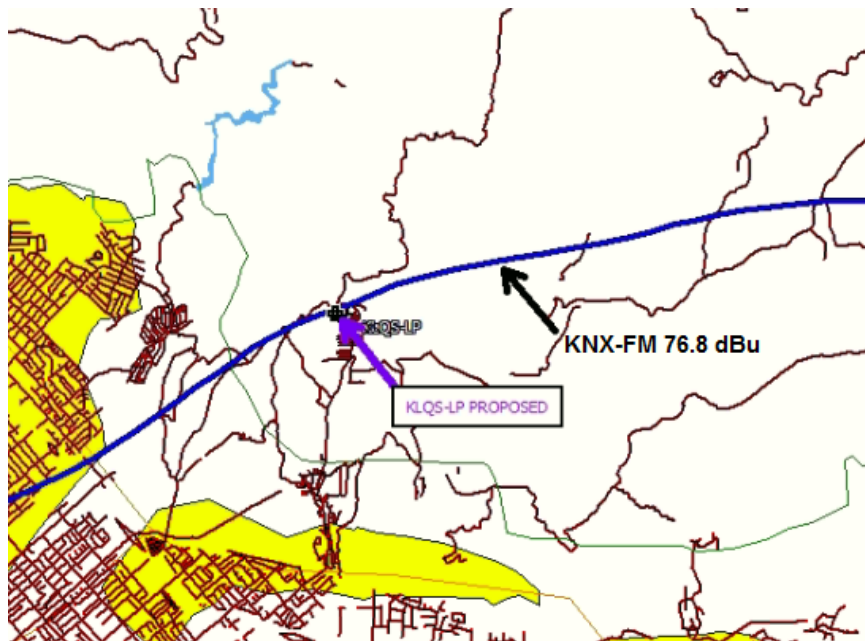
Call	Channel	Location		Azi	Dist	FCC	Margin
*KLAX-FM	LIC-Z 250B	East Los Angeles	CA	136.2	23.59	66.5	-42.9
*KNX-FM	LIC-D 246B	Los Angeles	CA	109.5	29.97	66.5	-36.5
KLQS-LP	LIC 248L1	Santa Clarita	CA	342.6	7.19	23.5	-16.3
KLYY	LIC-D 248B	Riverside	CA	94.3	113.91	111.5	2.4
KHUG-LP	LIC 248L1	Castaic	CA	309.7	31.52	23.5	8.0
KTPI-FM	LIC 249A	Mojave	CA	14.3	75.82	55.5	20.3
KLSB	LIC 248B	Goleta	CA	279.5	147.51	111.5	36.0
KRJK	LIC 247A	Lamont	CA	342.1	102.24	55.5	46.7
K247CN	LIC 247D	Mojave	CA	14.3	75.82	20.5	55.3
K250BV	LIC-D 250D	Ventura	CA	263.6	76.90	7.5	69.4

*Second Adjacent Channel Waiver Request

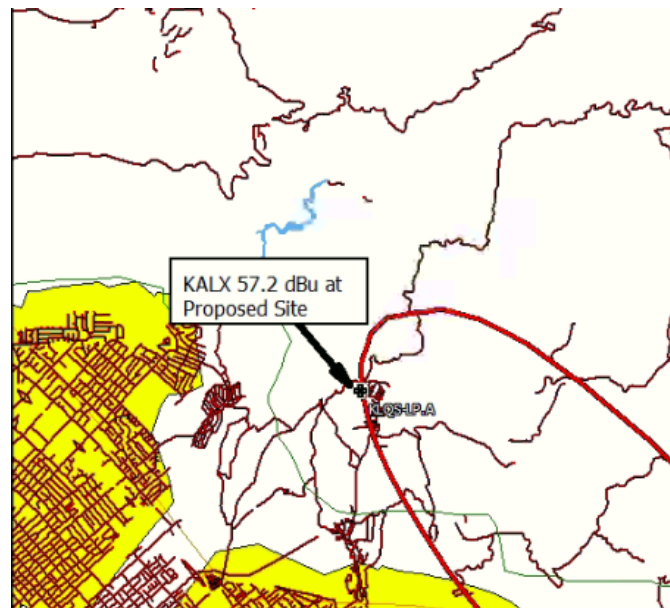
SECOND ADJACENT WAIVER REQUEST

KLAX-FM and KNX-FM are the second adjacent channels the facility is short spaced to.

Regarding KNX-FM: At the proposed site, KNX-FM has a signal strength of 76.8 dBu (FCC).



Regarding KALX-FM: At the proposed site, KALX-FM has a signal strength of 57.2 dBu (FCC)



The value of 57.2 dBu (the lesser value between KNX and KLAX) will then be used to determine interference compliance. Interference will occur when the KLAX signal strength's interfering signal exceeds the desired signal by 40 dbu. So the area of predicted interference would then be bounded by the 97.2 dBu contour. To assure compliance, a directional antenna is proposed, with the 97.2 dBu contour plotted below.



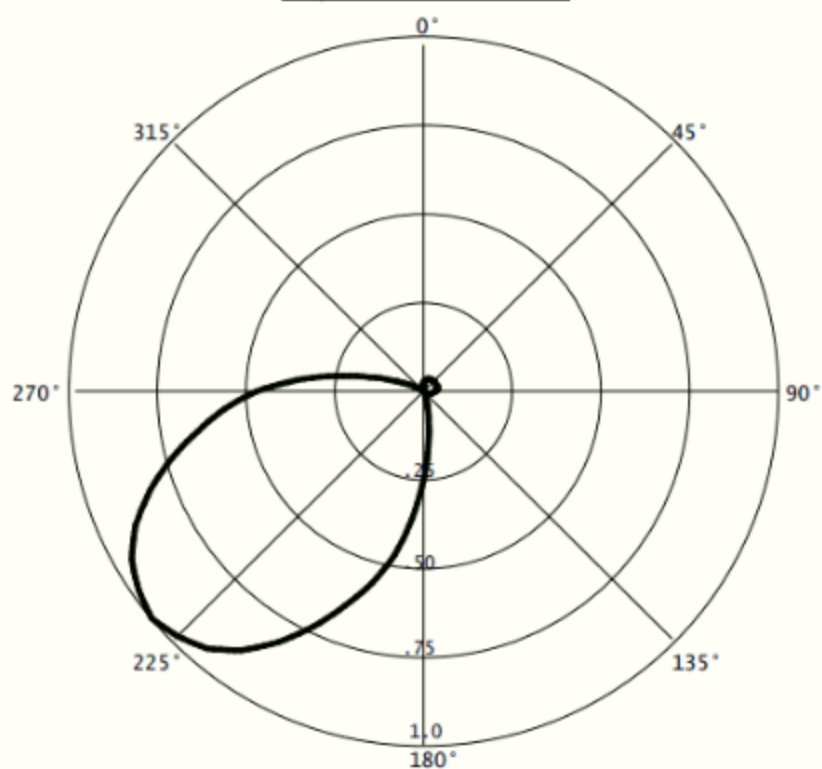
Due to zero population within this radiation radius, as demonstrated in the aerial shot, this meets the "Living Way" Criteria to qualify for a Waiver of 47 C.F.R. Section 73.807.

Applicant respectfully requests a "second adjacent channel waiver" with regards to Section 47 C.F.R. Section 73.807 of the FCC rules based upon the "Living Way" precedence (Living Way Ministries, Inc., Memorandum Opinion and Order, 17 FCC Red 17054, 17056, ¶ 5 (2002), recon. denied 23 FCC Red 15070 (2008)).

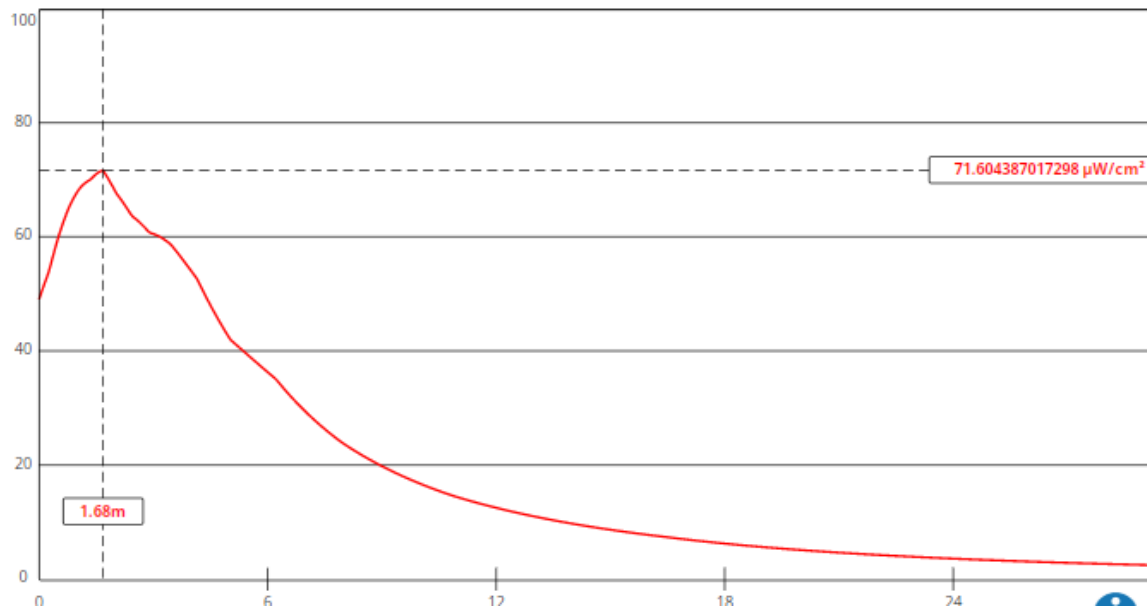
The antenna pattern is demonstrated below -- antenna CL-FM by Scala.

Azi	Field	dbk	kw
000	0.025	-43.912	0.000
010	0.034	-41.370	0.000
020	0.039	-40.162	0.000
030	0.040	-39.830	0.000
040	0.040	-39.830	0.000
050	0.040	-39.830	0.000
060	0.040	-39.830	0.000
070	0.040	-39.830	0.000
080	0.039	-40.162	0.000
090	0.034	-41.370	0.000
100	0.025	-43.912	0.000
110	0.015	-48.349	0.000
120	0.010	-51.871	0.000
130	0.010	-51.871	0.000
140	0.010	-51.871	0.000
150	0.010	-51.871	0.000
160	0.020	-45.850	0.000
170	0.085	-33.282	0.000
180	0.250	-23.912	0.004
190	0.470	-18.429	0.014
200	0.645	-15.680	0.027
210	0.820	-13.595	0.044
220	0.950	-12.316	0.059
230	1.000	-11.871	0.065
240	0.950	-12.316	0.059
250	0.820	-13.595	0.044
260	0.645	-15.680	0.027
270	0.470	-18.429	0.014
280	0.250	-23.912	0.004
290	0.085	-33.282	0.000
300	0.020	-45.850	0.000
310	0.010	-51.871	0.000
320	0.010	-51.871	0.000
330	0.010	-51.871	0.000
340	0.010	-51.871	0.000
350	0.015	-48.349	0.000

Graph is Relative Field



ENVIRONMENTAL COMPLIANCE



A worst-case scenario emitter antenna (ring stub) was used to gauge the maximum RF for the proposal in OET program FM Model for Windows (65 watts, 1-bay, H-pol). The maximum predicted RF exposure was $71.6 \mu\text{W}/\text{cm}^2$ for the level of a 2 m person standing by the pole, 35.8% of the FCC Maximum Permissible Exposure (MPR) for $200 \mu\text{W}/\text{cm}^2$ for uncontrolled environments.

The site will have a sign regarding RF exposure hazards to tower climbers posted. If any work needs to be done around the structure the RF power will be temporarily shut off.