

Calvary Chapel of Twin Falls, inc.

K238AY Sacramento, CA, CALIFORNIA, Showing Protection to KBEB , Channel: 223  
 Geographic Coordinates: N. 38 42 28.00 W. 121 28 32.00  
 74.1204(d) Study - Using USGS 03 SEC Terrain Database  
 Translator or LPFM Maximum Licensed ERP = 0.027 kw, Channel: 221  
 Translator or LPFM Antenna Height AG = 81 meters  
 K238AY Antenna Model = FMEC

Protected Station's Contour = 147.4731 dBu  
 Translator's or LPFM's full Interference contour 187.4731

Review Azimuth = 0 Degrees True  
 Horizontal Relative Field at Review Azimuth = 1.000  
 Translator/LPFM ERP on the horizontal at Review Azimuth = 0.027 kw  
 Distance between stations = 0.1 km  
 Protected Station= KBEB, 50 kw, 151 M meters COR AMSL

Depression Height IX Angle From Above Degree(Deg) Ground (m)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)
00.00	1.0	1.0	0.0270	000.0154	000.0154
081.000					
05.00	0.993	1.0	0.0266	000.0153	000.0153
080.999					
10.00	0.974	1.0	0.0256	000.0150	000.0148
080.997					
15.00	0.941	1.0	0.0239	000.0145	000.0140
080.996					
20.00	0.897	1.0	0.0217	000.0138	000.0130
080.995					
25.00	0.843	1.0	0.0192	000.0130	000.0118
080.995					
30.00	0.78	1.0	0.0164	000.0120	000.0104
080.994					
35.00	0.709	1.0	0.0136	000.0109	000.0090
080.994					
40.00	0.633	1.0	0.0108	000.0098	000.0075
080.994					
45.00	0.554	1.0	0.0083	000.0085	000.0060
080.994					
50.00	0.473	1.0	0.0060	000.0073	000.0047
080.994					
55.00	0.394	1.0	0.0042	000.0061	000.0035
080.995					
60.00	0.317	1.0	0.0027	000.0049	000.0024
080.996					
65.00	0.245	1.0	0.0016	000.0038	000.0016
080.997					
70.00	0.181	1.0	0.0009	000.0028	000.0010
080.997					
75.00	0.124	1.0	0.0004	000.0019	000.0005
080.998					
80.00	0.077	1.0	0.0002	000.0012	000.0002
080.999					
85.00	0.041	1.0	0.0000	000.0006	000.0001

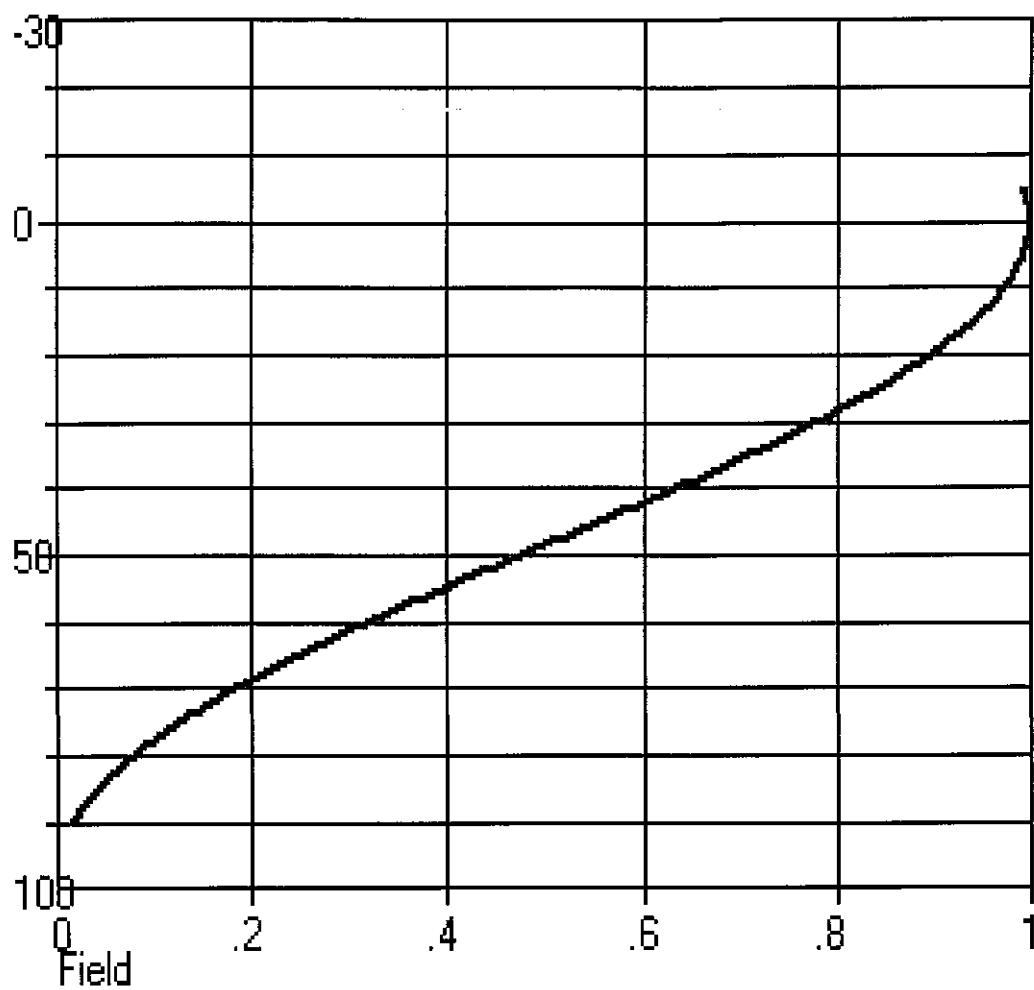
080.999					
90.00	0.016	1.0	0.0000	000.0002	000.0000
081.000					

Communications®LLC

X-Field™ By V-Soft

= FMEC

Depression Angle



MINOR CHANGE TO K238AY, RIO LINDA SACRAMENTO

REFERENCE 38 42 28.0 N. CH# 221D - 92.1 MHZ, PWR= 0.027 kw DA, HAAT= 75.5 M, COR= 91 M DISPLAY DATES  
121 28 32.0 W. Average Protected F(50-50)= 6.43 km DATA 09-05-19  
Standard Directional SEARCH 09-05-19

CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
223B Sacramento	KBEB	LIC _CN CA	201.0 21.0	0.06 BLH19850412KK	38 42 26.0 121 28 33.0	50.000 137	5.6 151	62.5 Amfm Broadcasting Licenses	-12.5*	-63.1*
221A Placerville	KVMX-FM	LIC NCX CA	96.0 276.5	73.20 BLH20060714AAW	38 38 10.5 120 38 14.0	6.000 100	128.2 963	52.6 Lotus Sacramento Corp.	-60.7*	1.3
218A Sacramento	KYDS«	LIC _CN CA	137.6 317.7	14.83 8LED19900426KA	38 36 33.0 121 21 38.0	0.410 33	1.4 58	9.8 San Juan Unified School Di	7.5R	7.3M
221A Walnut Creek	KKDV	LIC _CX CA	210.8 30.5	104.32 BMLH20090325ACY	37 54 02.0 122 05 07.0	3.000 24	84.7 211	29.3 Alpha Media Licensee Llc	12.7	51.2
220B Middletown	KLVR«	LIC ZCX CA	267.9 87.2	100.65 BMLED20100201AAJ	38 40 09.0 122 37 53.0	0.830 911	76.5 1331	51.1 Educational Media Foundati	75.5R	25.2M
218A Fairfield	KASK«	LIC _HX CA	226.3 46.0	62.36 BLED20070727AJF	38 19 09.0 121 59 31.0	0.075 198	0.6 308	16.2 Continuous Bible Talk	7.5R	54.9M
220D Vacaville	K220JB«	LIC DV_ CA	238.8 58.4	64.50 8LFT20180330ABG	38 24 22.0 122 06 29.0	0.010	1.3 857	0.7 Educational Media Foundati	12.5R	52.0M

Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM  
In & Out distances between contours are shown at closest points. Reference zone= East Zone 2A, Co to 3rd adjacent.  
All separation margins (if shown) include rounding.  
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
"\*"affixed to 'IN' or 'OUT' values = site inside restricted contour.