

Technical Certifications

This exhibit for the minor modification of KAWF demonstrates compliance with all engineering standards and requirements specified in the applicable FCC rules and regulations. This application proposes a change in the location. The licensed and proposed parameters are as follows:

	Licensed	Minor Mod
Channel / Class	203B	203B
ASRN	1024395	1010998
Geographical Coordinates	31 26 49.8 119 37 13.5	36 12 16.0 119 33 56.0
Tower AGL	148.4 m	132.1 m
Site AMSL	81.1 m	69.2 m
COR AGL	138 m	110 m
COR AMSL	219.1 m	179.2 m
HAAT	150.0 m	102.3 m
ERP	50.0 kW (H&V, DA)	40.0 kW (H&V, DA)

GLOBE terrain data

Channel Study

REFERENCE CH# 203B - 88.5 MHz, Pwr= 40 kW DA, HAAT= 102.3 M, COR= 179.2 M DISPLAY DATES
 36 12 16.0 N. Average Protected F(50-50)= 43.3 km
 119 33 56.0 W. Standard Directional

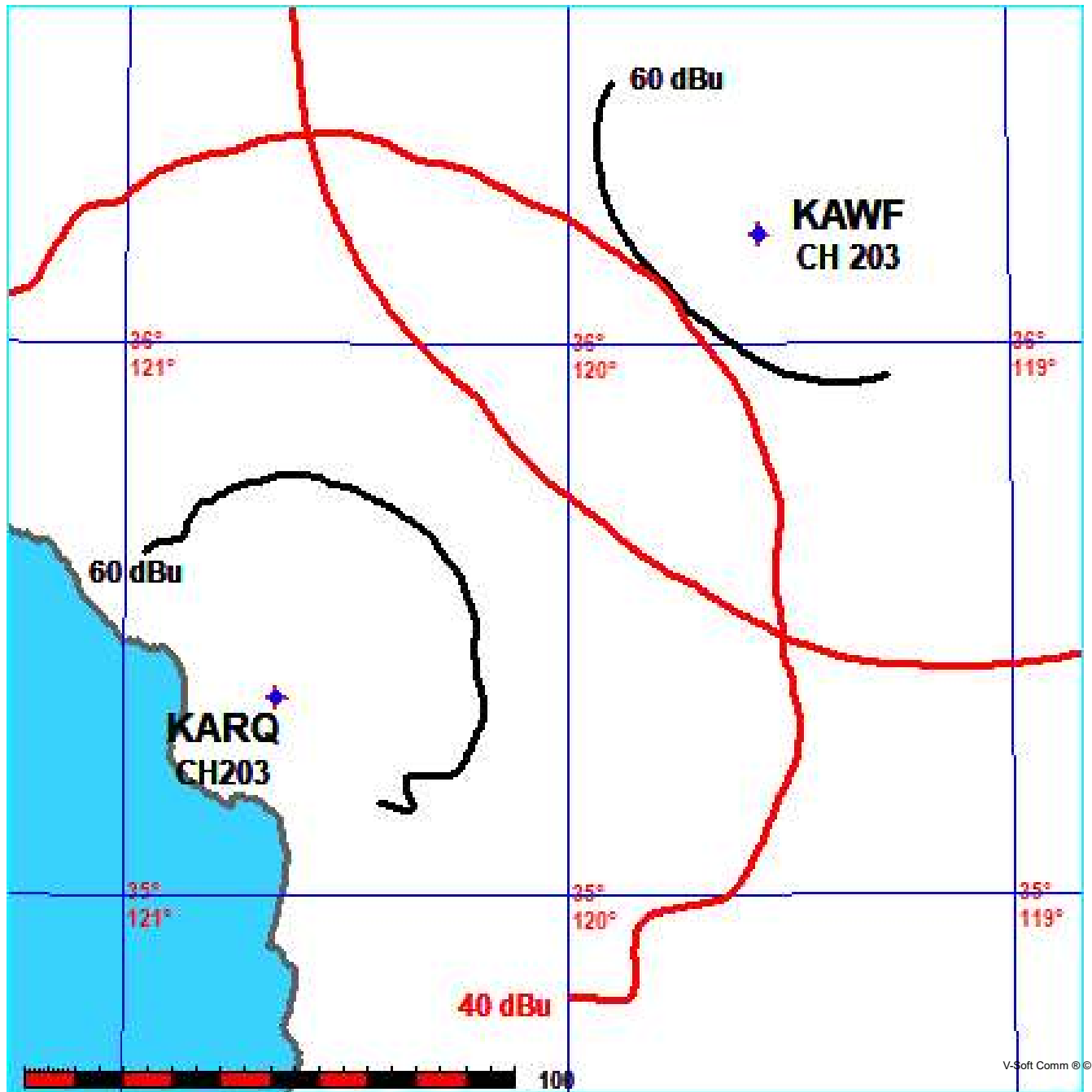
CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	*IN* (Overlap in km)	*OUT*
203B Selma	KAWF!	LIC	DCN CA	349.7 169.7	27.42 BMLED20050518AAE	36 26 49.80 119 37 13.50	50.000 150		---Reference---		
06 -- Visalia	KMCF-LD	LI	DHN CA	22.6 202.8	65.24 0000221127	35 57 56.80 115 30 06.00	3.000	67.6 1041	36.6	104.1R	-38.9M
06+-- Bakersfield	KNXT-LD	LI	DCY CA	138.7 319.2	113.07 0000177520	35 57 56.80 115 30 06.00	3.000	60.9 1046	62.3	123.2R	-10.1M
203B San Luis Obispo	KARQ	LIC	CN CA	226.7 46.0	135.98 BMLED20181221AAY	35 21 36.90 120 39 23.60	2.800 455	114.5 782	45.0	0.7	24.6
203B Bishop	KWTW	LIC	DCN CA	42.0 222.8	182.01 BLED20020128AAA	37 24 47.70 118 11 11.40	0.900 889	131.3 3299	55.9	8.6	1.0
202B Coalinga	KAWK	LIC	DVN CA	281.1 100.4	98.46 BMLED20151016AFO	36 22 10.80 120 38 41.80	1.400 722	61.0 1624	40.6	3.2	6.2
205B Visalia	KDUV	LIC	DCN CA	81.8 262.2	65.79 BLED19920131KC	36 17 13.80 118 50 20.30	1.000 807	1.9 1767	57.7	21.9	3.4
204B Tehachapi	KBLV	LIC	DCN CA	133.3 313.9	121.21 BLED20091009AEF	35 27 10.80 118 35 28.30	0.390 1126	70.2 2348	47.5	9.5	10.1
202B1 Greenacres	KAXL	LIC	DCN CA	161.1 341.3	92.68 BLED19940421KA	35 24 54.80 119 14 04.30	21.000 100	47.9 206	26.1	12.3	10.4
204B Modesto	KMPO	LIC	CN CA	344.7 164.4	153.30 BLED19840213AO	37 31 59.80 120 01 32.60	2.050 622	84.2 1311	56.4	26.2	30.0
203B1 Inyokern	KYUA	LIC	DCN CA	115.1 296.2	186.52 BLED20080424ACC	35 28 38.90 117 42 01.20	1.000 396	76.8 1360	23.1	70.5	29.1
201B Fresno	KFCF	LIC	CN CA	7.0 187.1	97.30 BLED19800318AE	37 04 22.80 119 25 54.40	2.400 579	3.2 1409	60.7	51.5	32.1
257B1 Fresno	KJWL<	LIC	NCN CA	341.5 161.4	62.14 BLH20040112ACI	36 44 06.80 119 47 12.50	14.500 105	30.5 185	20.7	16.5R	45.6M

Terrain database is GLOBE 30 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= - ZN1A, Co to 3rd adjacent.
 All separation margins (if shown) include rounding. Call signs with exclamation marks need not be protected.
 Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E),
 Beamtilt(Y,N,X)
 < = Station meets FCC minimum distance spacing for its class.
 Reference station has protected zone issue: AM tower

FMCommander Single Allocation Study - 11-27-2023 - GLOBE 30 Sec
KAWF's Overlaps (In= 0.74 km, Out= 24.6 km)

KAWF CH 203 B DA
Lat= 36 12 16.00, Lng= 119 33 56.00
40.0 kW 102.3 m HAAT, 179.2 m COR
Prot.= 60 dBu, Intef.= 40 dBu

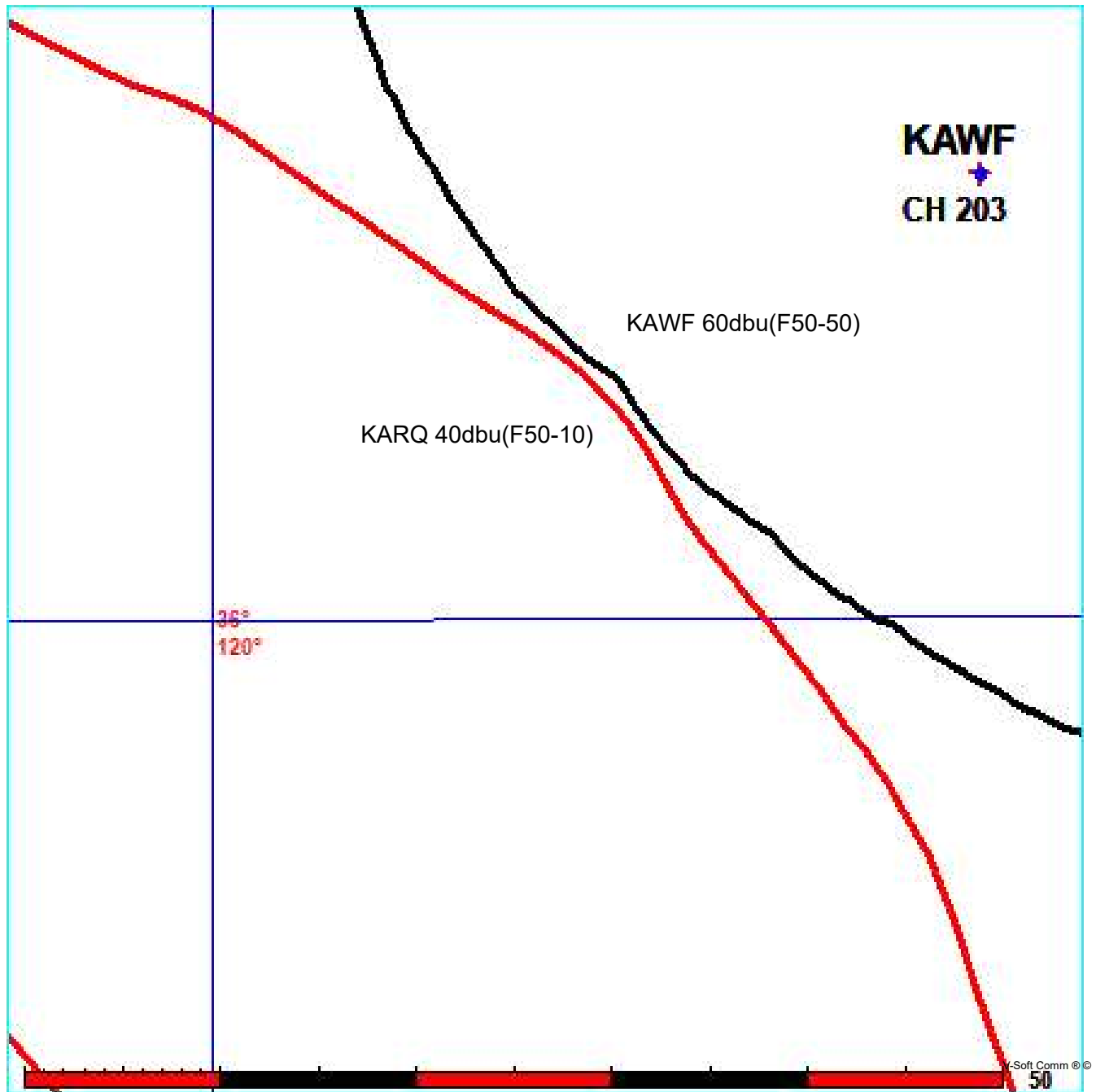
KARQ CH 203 B BMLED20181221AAY
Lat= 35 21 36.90, Lng= 120 39 23.60
2.8 kW 455 m HAAT, 782 m COR
Prot.= 60 dBu, Intef.= 40 dBu



FMCommander Single Allocation Study - 11-27-2023 - GLOBE 30 Sec
KAWF's Overlaps (In= 0.74 km, Out= 24.6 km)

KAWF CH 203 B DA
Lat= 36 12 16.00, Lng= 119 33 56.00
40.0 kW 102.3 m HAAT, 179.2 m COR
Prot.= 60 dBu, Intef.= 40 dBu

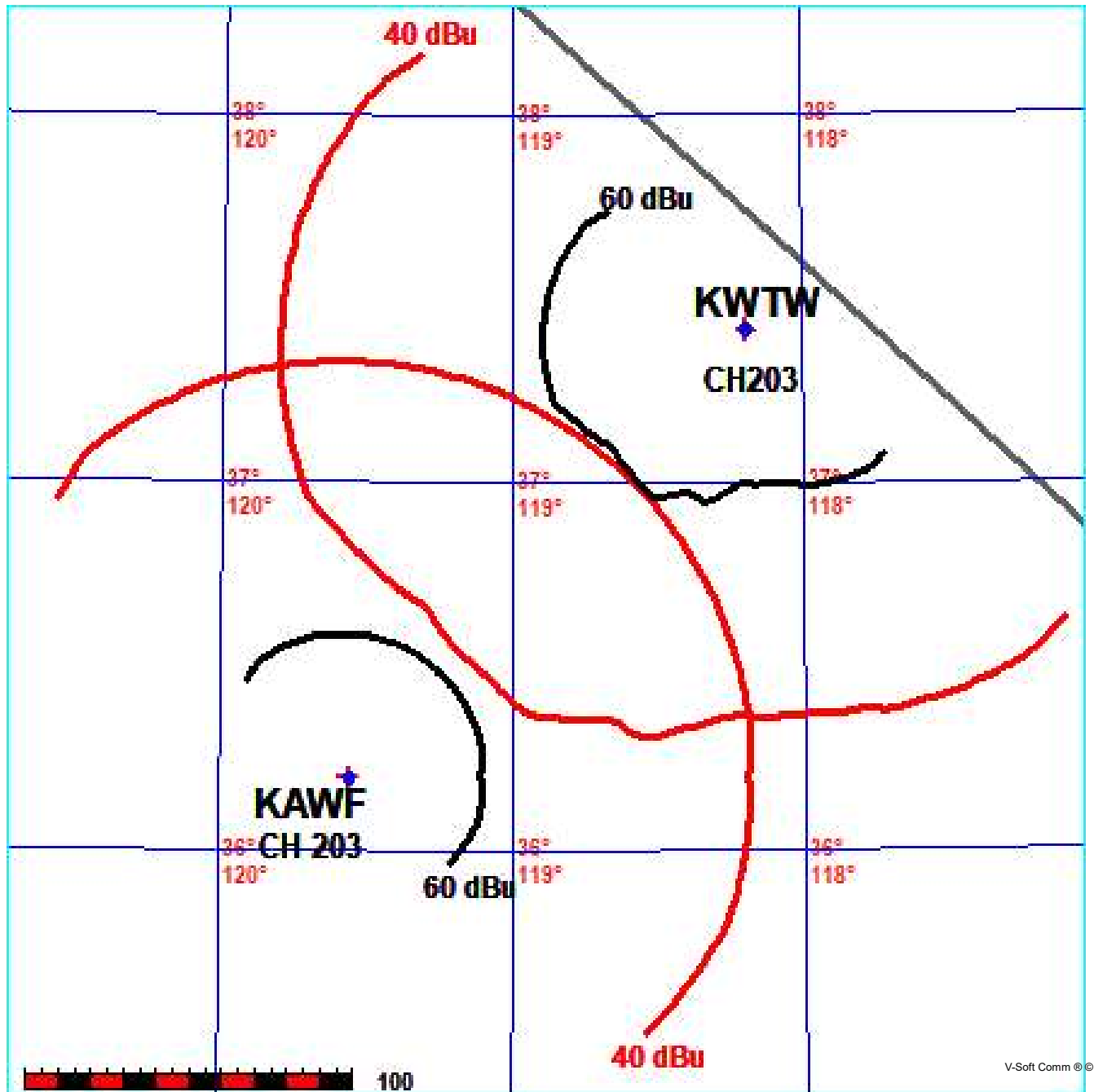
KARQ CH 203 B BMLED20181221AAY
Lat= 35 21 36.90, Lng= 120 39 23.60
2.8 kW 455 m HAAT, 782 m COR
Prot.= 60 dBu, Intef.= 40 dBu



FMCommander Single Allocation Study - 11-27-2023 - GLOBE 30 Sec
KAWF's Overlaps (In= 8.58 km, Out= 0.99 km)

KAWF CH 203 B DA
Lat= 36 12 16.00, Lng= 119 33 56.00
40.0 kW 102.3 m HAAT, 179.2 m COR
Prot.= 60 dBu, Intef.= 40 dBu

KWTW CH 203 B DA BLED20020128AAA
Lat= 37 24 47.70, Lng= 118 11 11.40
0.9 kW 889 m HAAT, 3299 m COR
Prot.= 60 dBu, Intef.= 40 dBu

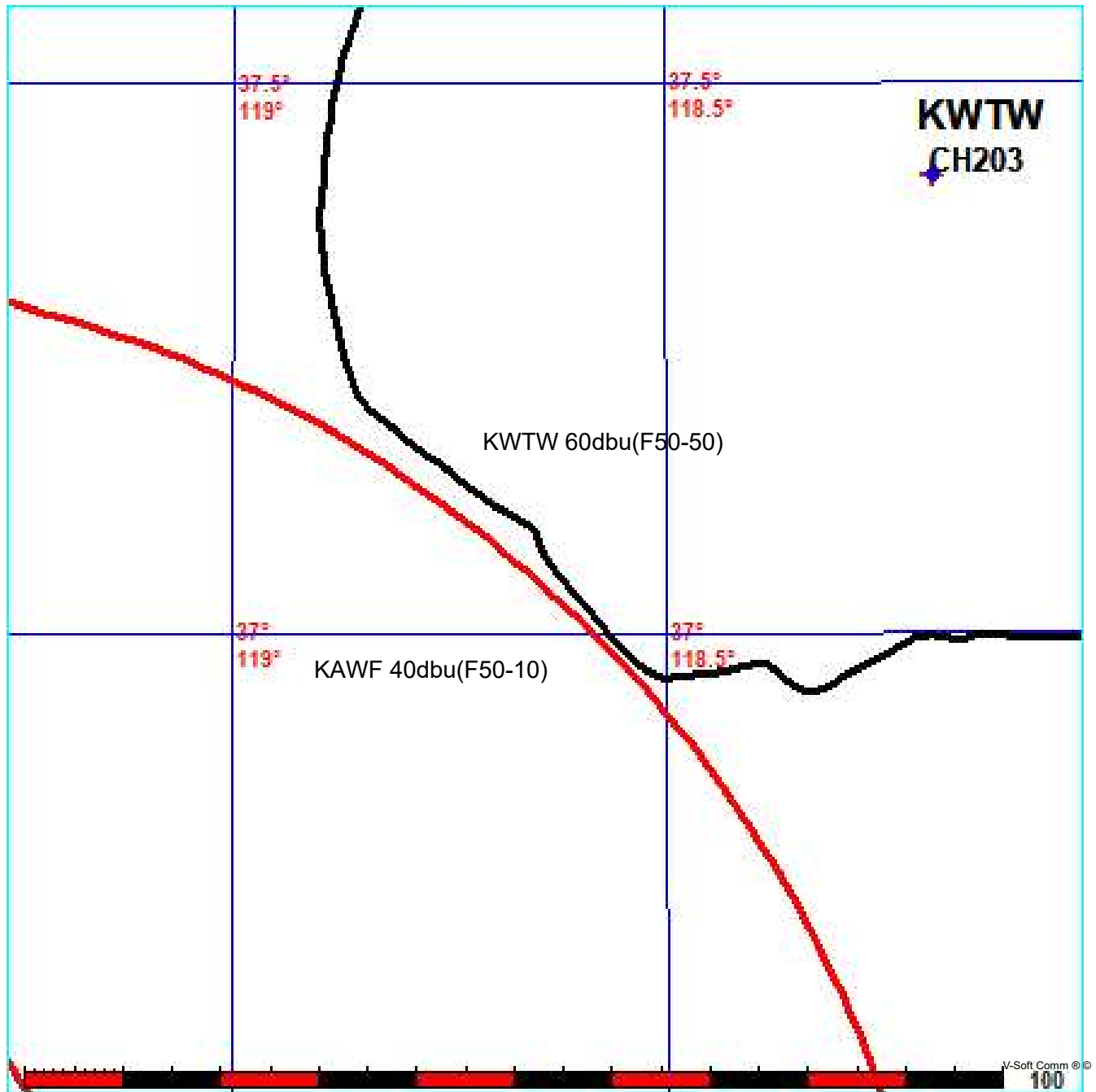


Educational Media Foundation

FMCommander Single Allocation Study - 11-27-2023 - GLOBE 30 Sec
KAWF's Overlaps (In= 8.58 km, Out= 0.99 km)

KAWF CH 203 B DA
Lat= 36 12 16.00, Lng= 119 33 56.00
40.0 kW 102.3 m HAAT, 179.2 m COR
Prot.= 60 dBu, Intef.= 40 dBu

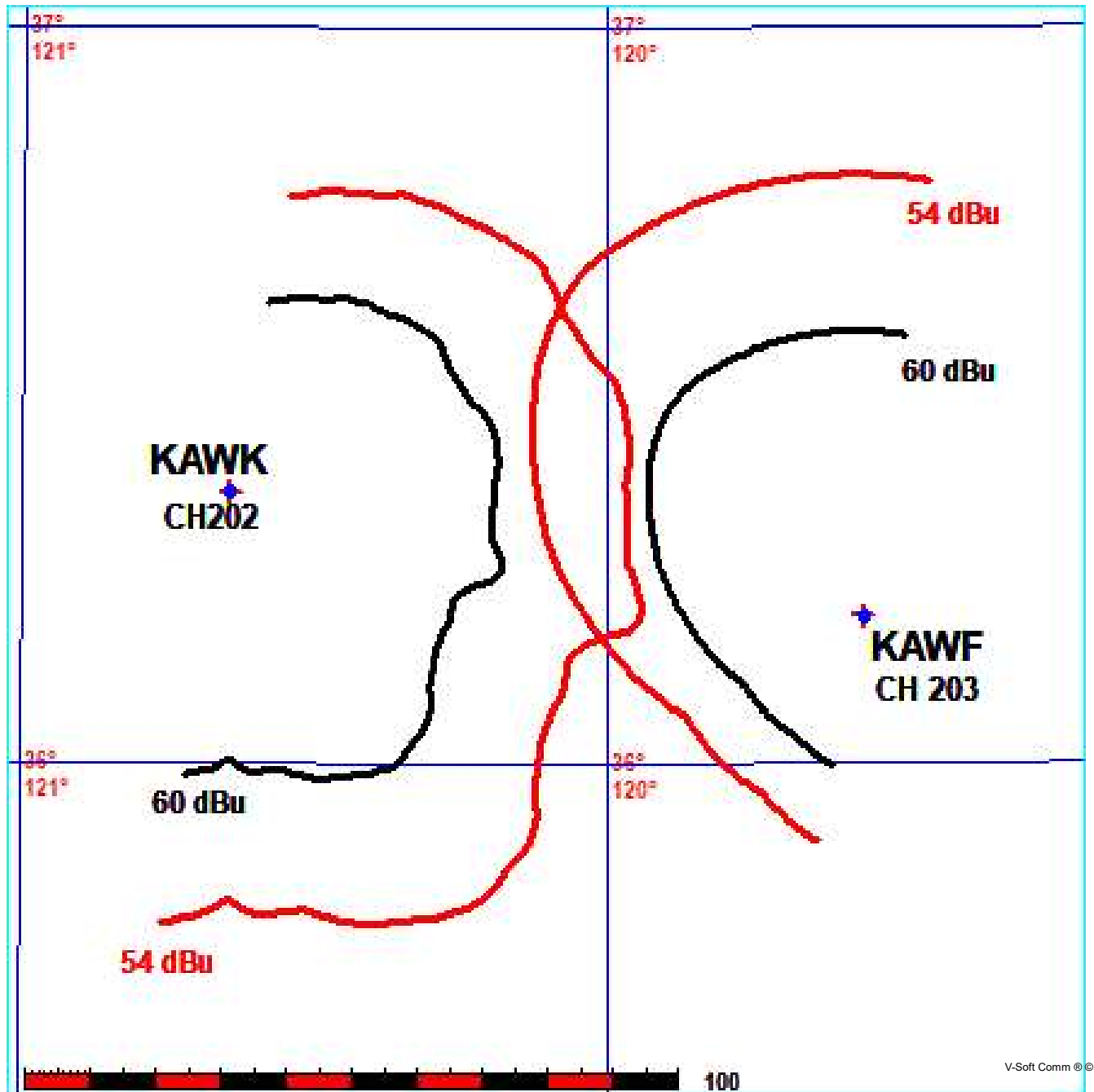
KWTW CH 203 B DA BLED20020128AAA
Lat= 37 24 47.70, Lng= 118 11 11.40
0.9 kW 889 m HAAT, 3299 m COR
Prot.= 60 dBu, Intef.= 40 dBu



FMCommander Single Allocation Study - 11-27-2023 - GLOBE 30 Sec
KAWF's Overlaps (In= 3.18 km, Out= 6.22 km)

KAWF CH 203 B DA
Lat= 36 12 16.00, Lng= 119 33 56.00
40.0 kW 102.3 m HAAT, 179.2 m COR
Prot.= 60 dBu, Intef.= 54 dBu

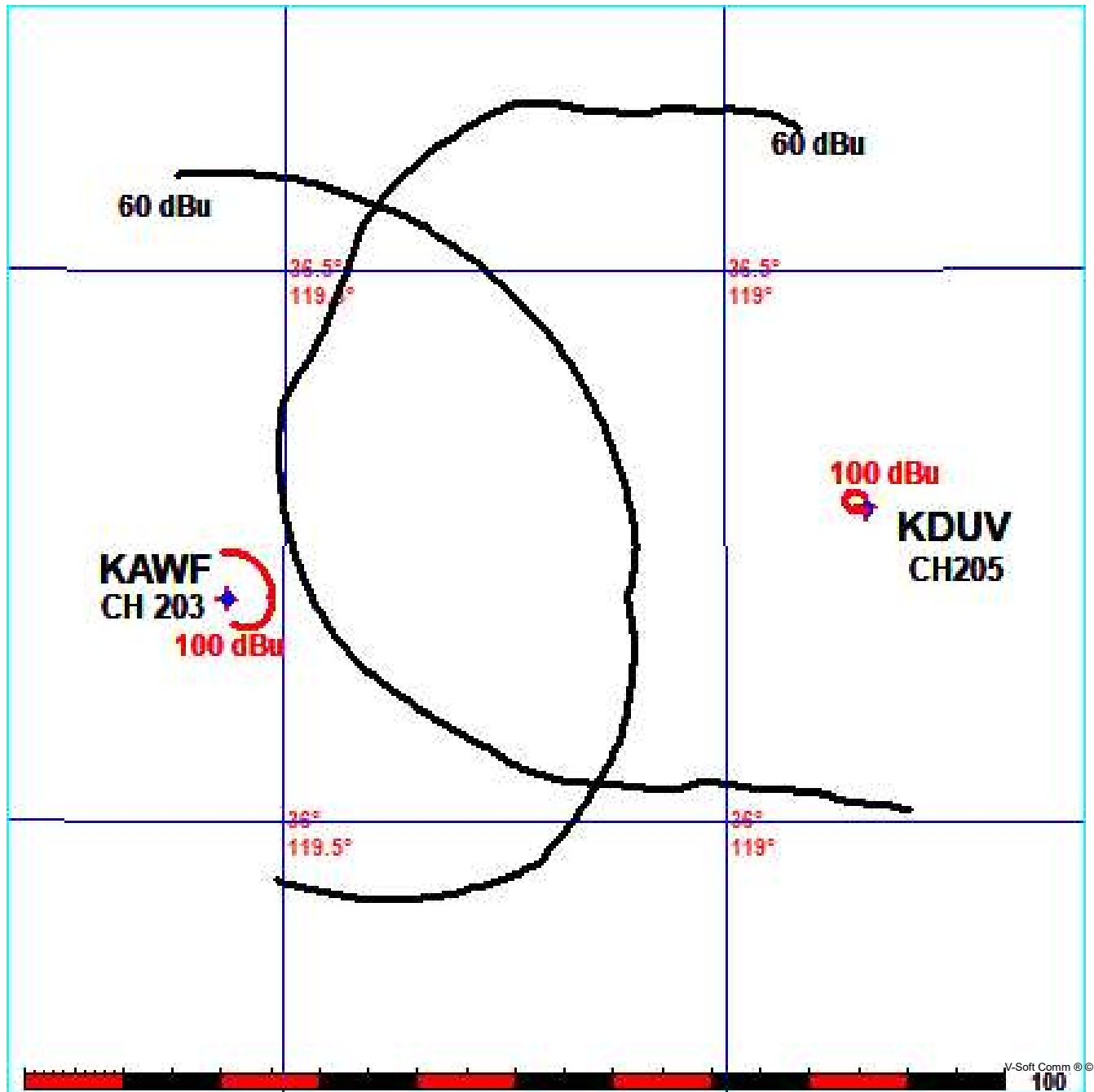
KAWK CH 202 B DA BMLED20151016AFO
Lat= 36 22 10.80, Lng= 120 38 41.80
1.4 kW 722 m HAAT, 1624 m COR
Prot.= 60 dBu, Intef.= 54 dBu



FMCommander Single Allocation Study - 11-27-2023 - GLOBE 30 Sec
KAWF's Overlaps (In= 21.92 km, Out= 3.4 km)

KAWF CH 203 B DA
Lat= 36 12 16.00, Lng= 119 33 56.00
40.0 kW 102.3 m HAAT, 179.2 m COR
Prot.= 60 dBu, Intef.= 100 dBu

KDUV CH 205 B DA BLED19920131KC
Lat= 36 17 13.80, Lng= 118 50 20.30
1.0 kW 807 m HAAT, 1767 m COR
Prot.= 60 dBu, Intef.= 100 dBu



Overlap Population Report
KAWF.P (203) / Selma, CA

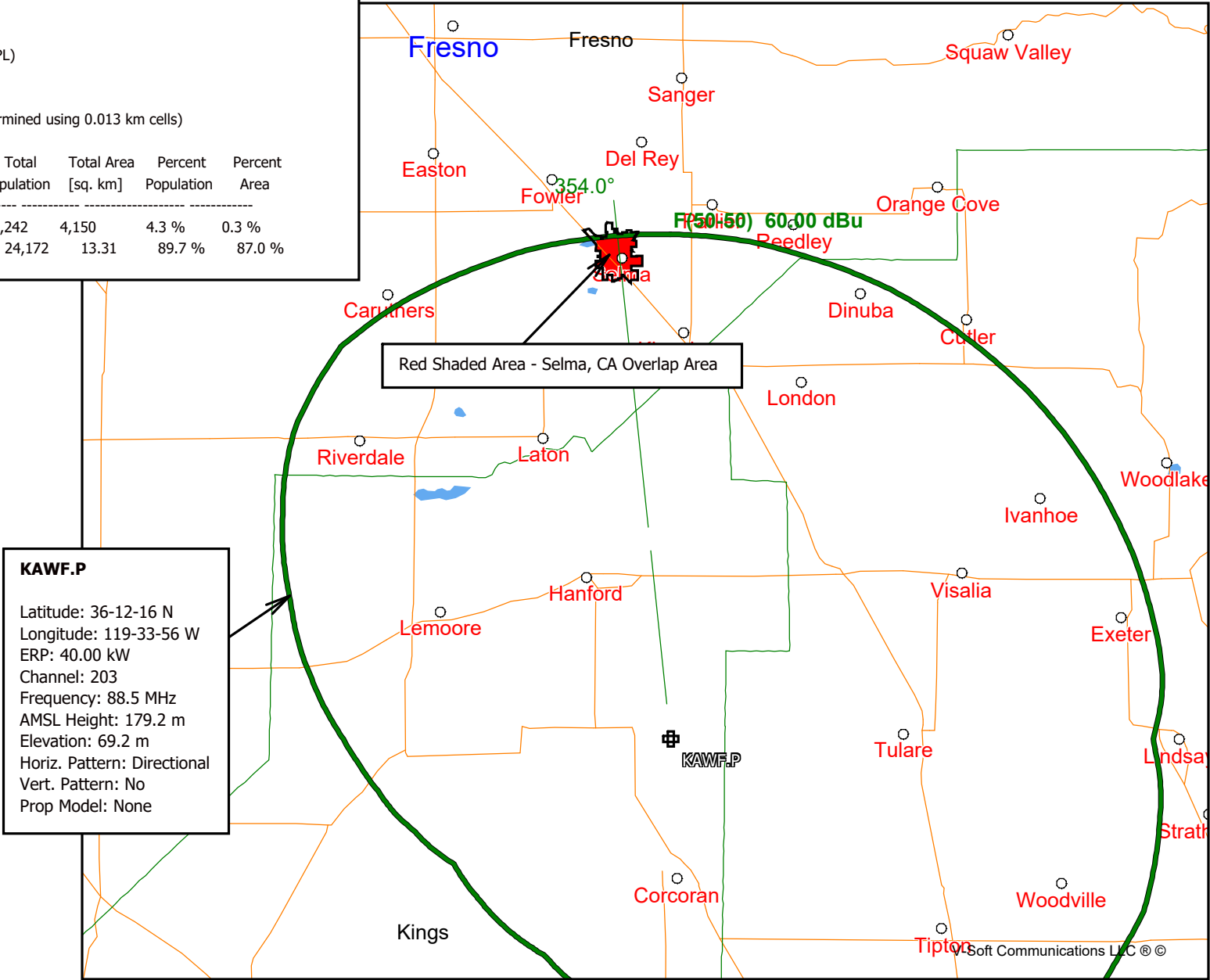
Overlap Area Type: Intersection
Areas Included:
KAWF.P (203): FCC F(50-50) 60.00 dBu (FCC HAAT)
PLST: Selma, CA

Population Database: 2020 US Census (PL)

Total Population: 21,679
Overlap Area: 11.58 sq. km (Area determined using 0.013 km cells)

Area Description	Total Population	Total Area [sq. km]	Percent Population	Percent Area
KAWF.P (203): FCC F(50-50) 60	500,242	4,150	4.3 %	0.3 %
PLST: Selma, CA	24,172	13.31	89.7 %	87.0 %

Exhibit 2 - Community of License Coverage
Note: 89.7% of the Population and 87.0% of the Area of Selma, CA is contained within the 60dbu Service Contour



Overlap Population Report
KAWF.P (203) / Selma, CA

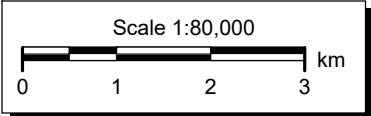
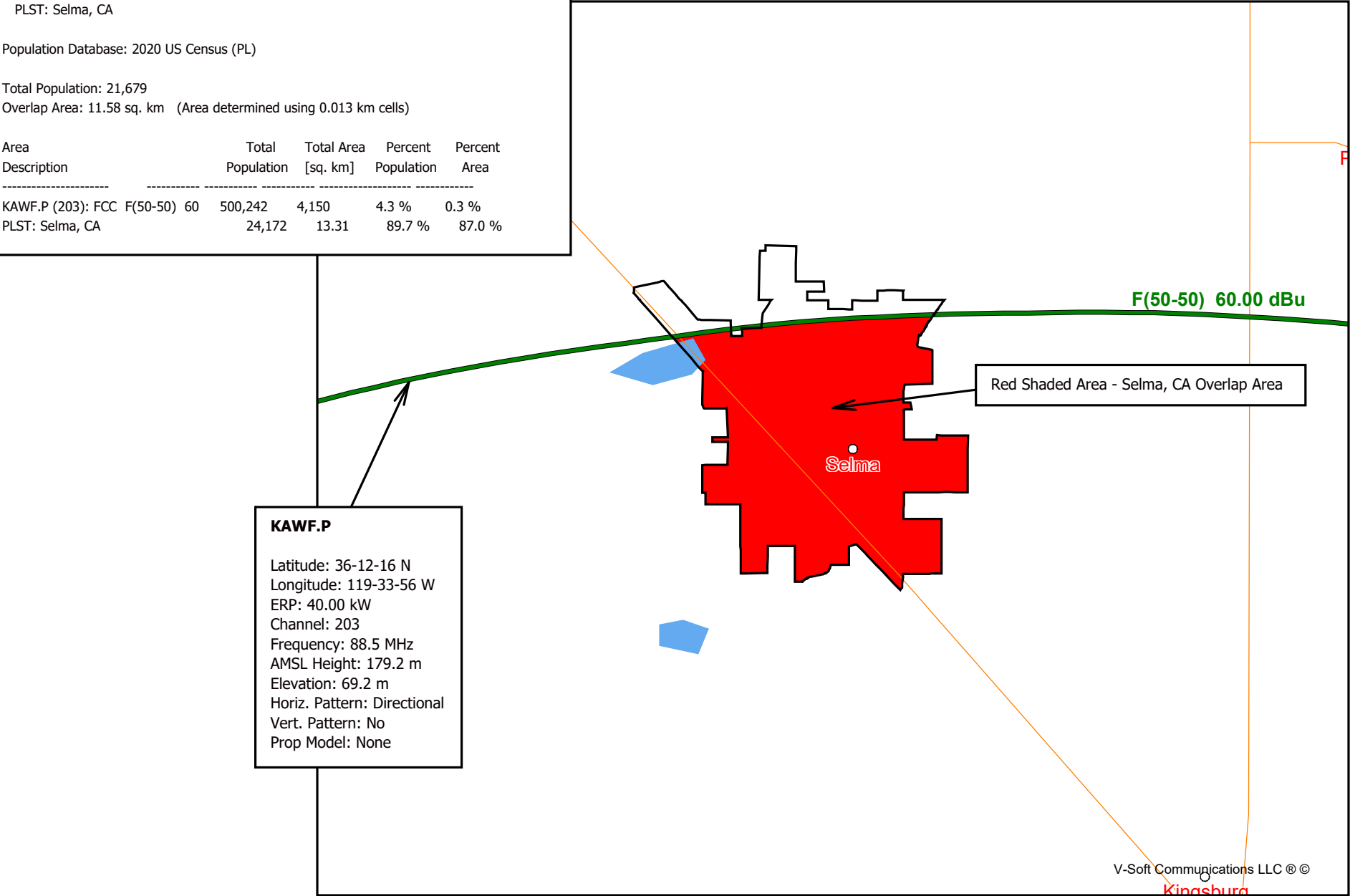
Overlap Area Type: Intersection
Areas Included:
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Environmental Effects

Educational Media Foundation (“EMF”) certifies that this KAWF proposed minor modification complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments.

The RF worksheet in the Instructions to form 303-S was unusable to determine compliance for this facility because of the “worst case” nature of the worksheet. Therefore, EMF used RFHAZ, a commercial software package created by V-Soft Communications, to determine compliance for this site.

The site is shared with (other FM broadcast facilities. These were each evaluated using the RFHAZ software. The results are as follows:

Call	Channel	COR AGL	ERP	EPA Antenna used	Max Pub (uW/cm ²)	Max	% of Max Pub
KGEN	233A	127m	3.3kw H+V	Jampro EPA Type 2	200	1.82	0.91
KAWF.P	203B	110m	40kw H+V	AAT IV-CP EPA Type 2	200	24.54	12.27
Totals						26.36	13.18

*KGEN-FM uses a Jampro 4 bay antenna. Since the antennas are mounted at different elevations and have a different number of bays, the maximum RF levels will not fall at the same distance from the tower. However, in the interest of simplicity, the maximum values were simply added. Since the site complies using this over-simplified math, no more detailed evaluation was performed.

Co-located AM station KGEN(AM) Tulare, CA operates on 1370khz at 0.71 kW maximum power via a single tower that is 214.6° (0.596λ) in height. The protective fencing installed around the tower is located farther from the tower than the two meter distance required by Table 3 of OET-65, Supplement A.

Based on this evaluation, (KAWF is only 12.27% of the public (uncontrolled) exposure limits. The combined KAWF-KGEN-FM contribution to the site is 13.18% of the public (uncontrolled) exposure limit and co-located KGEN(AM) is adequately fenced. Therefore, the KAWF proposed minor modification fully complies with the FCC’s maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments.