

TECHNICAL STATEMENT
K230BB ALBUQUERQUE, NEW MEXICO
MOUNTAIN COMMUNITY TRANSLATORS, LLC
FCC FORM 349
FEBRUARY 2016

This Technical Statement is made in support of a minor modification of Construction Permit, BPFT-20160129AXB, for FM translator station K230BB at Albuquerque, New Mexico, facility ID 140729. K230BB seeks to relocate its current authorization to higher elevation more advantageous transmitter site and remain a fill-in translator for KDAZ(AM) Albuquerque, New Mexico, facility ID 51424. This proposal which is normally a major change move is in response to the Commissions AM Revitalization Order DA-1491 released 12/23/2015. The following will show that the new proposed operation of K230BB will meet all of the Commissions technical requirements for an FM translator station.

The proposed operation of K230BB specifies an Effective Radiated Power of 0.07 kilowatts. It will operate with a directional antenna with an “off the shelf” type antenna, or Scala CL-V yagi with vertical only polarization. The antenna will be mounted on an existing monopole, with an overall height of 6 meters above the ground. The antenna will be mounted with a Center of Radiation of 6 meters above the ground, and 3235 meters Above Mean Sea Level. The coordinates of this tower are located at N 35° 12’ 53”, W 106° 27’ 02”, NAD 27. The transmitter site is an established communication site known as “Sandia Crest.

Figure 1 is a detailed interference study conducted on channel 245D with these new proposed facilities. It shows that the new operation of K230BB will not cause any

interference to any existing or proposed FM stations on any of the pertinent same channel or adjacent channels to channel 245, with the exception of 3rd adjacent channel station KBZU Albuquerque, New Mexico operating on channel 242C, facility ID 48596 and second adjacent channel KKSS Santa Fe, New Mexico operating on channel 247C, facility ID 63928.

The proposed operation of K230BB on 245D is located within the protected 60 dB μ contours of 2nd adjacent and 3rd adjacent channel of KKSS and KBZU. The predicted F(50-50) field strength of KBZU at the proposed K230BB transmitter site is 130.5 dB μ and KKSS is 74.2 dB μ , see figure 2 and figure 3 respectively. Therefore, the respective predicted interfering contour F(50-10) generated by the proposed K230BB on channel 245D is an additional 40 dB μ or 114.2 dBu (as referenced from KKSS).

Figure 4 shows the coverage area for the worse case 100 dB μ interference contour F(50-10) and shows that there is no population in the area of interference. The applicant, Mountain Community Translators, LLC, respectfully requests a waiver of C.F.R.

74.1204(d) of the Commission's rules based on the fact that there is no population within the area of predicted interference. There are no homes nearby the proposed existing tower site, which is a privately owned with private access. The transmitter building is uninhabited and does not have indoor plumbing. Should any unforeseen actual interference be caused, the licensee will immediately cease broadcasting with K230BB until such interference can be eliminated.

Figure 5 is the directional antenna data for the proposed Scala CL-V antenna to be utilized by K230BB.

The proposed operation of K230BB Albuquerque will be considered a “Fill-In” operation for Class D AM station KDAZ Albuquerque, New Mexico, facility ID 51424. KDAZ(AM) operates with 1 kilowatts daytime with a directional antenna system on 730 kHz. Figure 6 shows that the proposed 60 dB μ contour for the proposed K230BB will not extend beyond the daytime 2.0 mV/m contour of KDAZ. It will also not extend beyond a 25 miles radius from the KDAZ tower site. Since this is a “Fill-In” translator, the maximum ERP will not exceed the maximum permissible ERP of 250 watts in any azimuth.

It was found that the new proposed operation of K230BB Albuquerque, New Mexico on channel 245D, will satisfy all of the required commission rules and regulations for an FM translator station.

FIGURE 1 - DETAILED CHANNEL INTERFERENCE

K230BB Albuquerque, NM, CH. 245D

REFERENCE 35 12 53.0 N. 106 27 02.0 W. CH# 245D - 96.9 MHz, Pwr= 0.07 kW DA, HAAT= 1221.7 M, COR= 3235 M DISPLAY DATES DATA 02-24-16 SEARCH 02-25-16
Average Protected F(50-50)= 34.06 km Standard Directional

CH CITY	CALL	TYPE STATE	ANT AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
242C Albuquerque	KBZU	LIC_CY NM	160.1 340.1	0.29 BLH19870210KB	35 12 44.0 106 26 58.0	20.000 1260	9.1 3278	93.5 Radio License Holding Cbc,	-9.4*	-93.2*
245D Albuquerque	K230BB	CP_C_ NM	226.5 46.3	33.14 BPFT20160129AXB	35 00 33.0 106 42 52.0	0.002	11.1 1592	3.0 Mountain Community Transla	-3.6	-50.4*
247C Santa Fe	KKSS	LIC_CY NM	353.8 173.8	63.15 BLH19850926KA	35 46 50.0 106 31 35.0	100.000 572	15.9 3057	98.1 Uni vi sion Radi o Li cense Co	35.8	-34.9*
244D Tijeras	K292FW	CP_DV_ NM	153.4 333.4	20.09 BPFT20160129AAZ	35 03 10.6 106 21 05.1	0.015	17.7 2330	3.1 Tel ebeeper Of New Mexi co	2.1	11.7
245L1 Isleta	NEW	CP_ NM	202.0 21.9	52.05 BNPL20131113ABT	34 46 47.0 106 39 52.0	0.100 1	1539	7.5 Puebl o Of Isleta		13.9
244C3 Grants	KMYN	LIC_CX NM	272.7 92.0	104.36 BLH20121203BTF	35 15 11.0 107 35 46.0	0.265 818	54.9 3349	35.8 Royal Di versi fied Industri	11.5	10.5
245L1 Madrid	KMRD-LP	LIC_ NM	52.4 232.6	33.93 BLL20141024ACI	35 24 01.6 106 09 14.6	0.035 50	1940	13.3 Madri d Cul tural Pro jects		10.7
245C0 Farmington	KDAG	LIC_CX NM	324.3 143.5	219.99 BLH20060309AED	36 48 52.0 107 53 32.0	100.000 303	177.4 2129	76.4 Capstar Tx, Li c	15.2	77.0
244L1 Espanola	KSHF-LP	LIC_ NM	22.7 203.0	93.54 BLL20150129AGD	35 59 28.0 106 02 53.0	0.100	1766	75.9 Holy Cross, A New Mexi co N		83.7
244C Cloudcroft	KNMB	LIC_CX NM	162.9 343.2	210.07 BLH20021002ABF	33 24 14.0 105 46 56.0	25.000 878	125.1 3304	84.2 Mtd, Inc.	76.8	124.1
244C3 Las Vegas	KMDZ	LIC_CX NM	69.7 250.4	119.21 BLH20150918ABL	35 34 48.0 105 12 59.0	6.500 -68	24.0 1969	16.1 Sangre De Cristo Broadcast	92.9	98.8
244C1 Capi tan	KNMB	LIC_CX NM	162.8 343.2	210.08 BLH20160120ABM	33 24 14.0 105 46 55.0	1.000 917	77.8 3312	51.0 Mtd, Inc.	124.1	157.1
246C1 Roswell	KBCQ-FM	LIC_CN NM	136.1 317.2	277.15 BLH19851224KD	33 24 05.0 104 22 45.0	100.000 110	84.8 1203	55.4 Maj estic Broadcasing, Li c	190.2	218.5
246C3 La Jara	KZBR	LIC_CX CO	7.1 187.3	240.86 BLH20080416AAD	37 22 05.0 106 06 44.0	25.000 55	38.1 2458	26.0 Wolf Creek Broadcasing, L	191.0	206.9
243C2 Raton	KBKZ	LIC_CX NM	41.4 222.5	265.72 BLH20040927AEI	36 59 33.0 104 28 24.0	5.400 295	4.2 2609	49.0 Phi lli ps Broadcasing Comp	259.4	216.1
248C1 Shi prock	KNDN-FM	LIC_CX NM	300.9 119.4	276.09 BLH20160121AAK	36 27 39.8 109 05 43.5	1.500 729	2.6 2994	55.2 Krj g, Inc.	239.1	220.0
243C3 Del Norte	KSLV-FM	LIC_NC_ CO	357.5 177.4	279.35 BLH20081024AAU	37 43 47.0 106 35 18.0	0.930 485	2.0 3343	37.9 San Luis Valley Broadcasi	261.8	239.4
243C Show Low	KRFM	LIC_CX AZ	251.6 69.6	338.75 BMLH20120917ACR	34 12 20.0 109 56 26.0	100.000 303	9.3 2378	68.2 Petracom Of Holbrook, Li c	292.8	269.2
243C2 Bovina	KKNM	LIC_ZC_ TX	99.4 281.4	325.22 BLH20080417AAS	34 41 17.0 102 56 53.0	50.000 140	4.6 1432	42.8 Tej as Broadcasing, Lip	318.3	281.3
248C1 Clayton	KLMX-FM	LIC_H_ NM	64.1 246.0	324.66 BLH20131223ACG	36 26 39.0 103 11 24.0	52.000 110	4.2 1629	39.4 Ji mmy N. Mccol lum	318.2	284.0
247A Lake City	NEW	CP_CX CO	346.1 165.6	318.24 BNPH20151013AIR	37 59 43.4 107 19 16.9	1.022 242	2.0 3605	29.4 Munera, Campo E	296.5	285.4
242C El Paso	KHEY-FM	LIC_CY TX	180.4 0.4	379.13 BLH7752	31 47 47.0 106 28 55.0	100.000 424	3.7 1649	53.3 Cc Li censes, Li c	360.7	306.1
248C El Paso	KBNA-FM	LIC_EN TX	180.4 0.4	379.53 BLH19890426KA	31 47 34.0 106 28 47.0	100.000 332	3.2 1547	33.0 Tichenor License Corporati	361.3	312.8
248C3 Poncha Springs	KWUZ	CP_NCX CO	6.0 186.2	361.43 BPH20150212ABF	38 27 11.0 106 01 02.0	0.250 834	1.1 3575	39.6 Three Eagl es Communi cation	347.8	321.6
248A Poncha Springs	KWUZ	LIC_ZCX CO	6.0 186.2	361.43 BLH20080109AGB	38 27 11.0 106 01 02.0	0.029 892	0.4 3575	22.2 Three Eagl es Communi cation	348.5	339.2

CH CITY	CALL	TYPE STATE	ANT	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	Page # 2 *IN* (Overlap in km)	*OUT*
246L1 NEW El Paso		CP TX	---	179.9 359.9	379.01 BNPL20131114BVR	31 47 50.6 106 26 35.0	0.100 -44		1186	356.2 Sin Fronteras	372.2 Organizing P

Terrain database is NGDC 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= West Zone, Co to 3rd adjacent. All separation margins (if shown) include rounding. Call signs with strikeout 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) "*"affixed to 'IN' or 'OUT' values = site inside restricted contour.

* No actual interference will be caused to KBZU and KKSS since the 100 DBU interference contour will not cover any population. See the Technical Statement for more details.

FIGURE 2 - KBZU PREDICTED 130.5 CONTOUR AT SITE
K230BB Albuquerque, NM, CH. 245D

Coverage Study - NGDC 30 SEC
02-25-2016

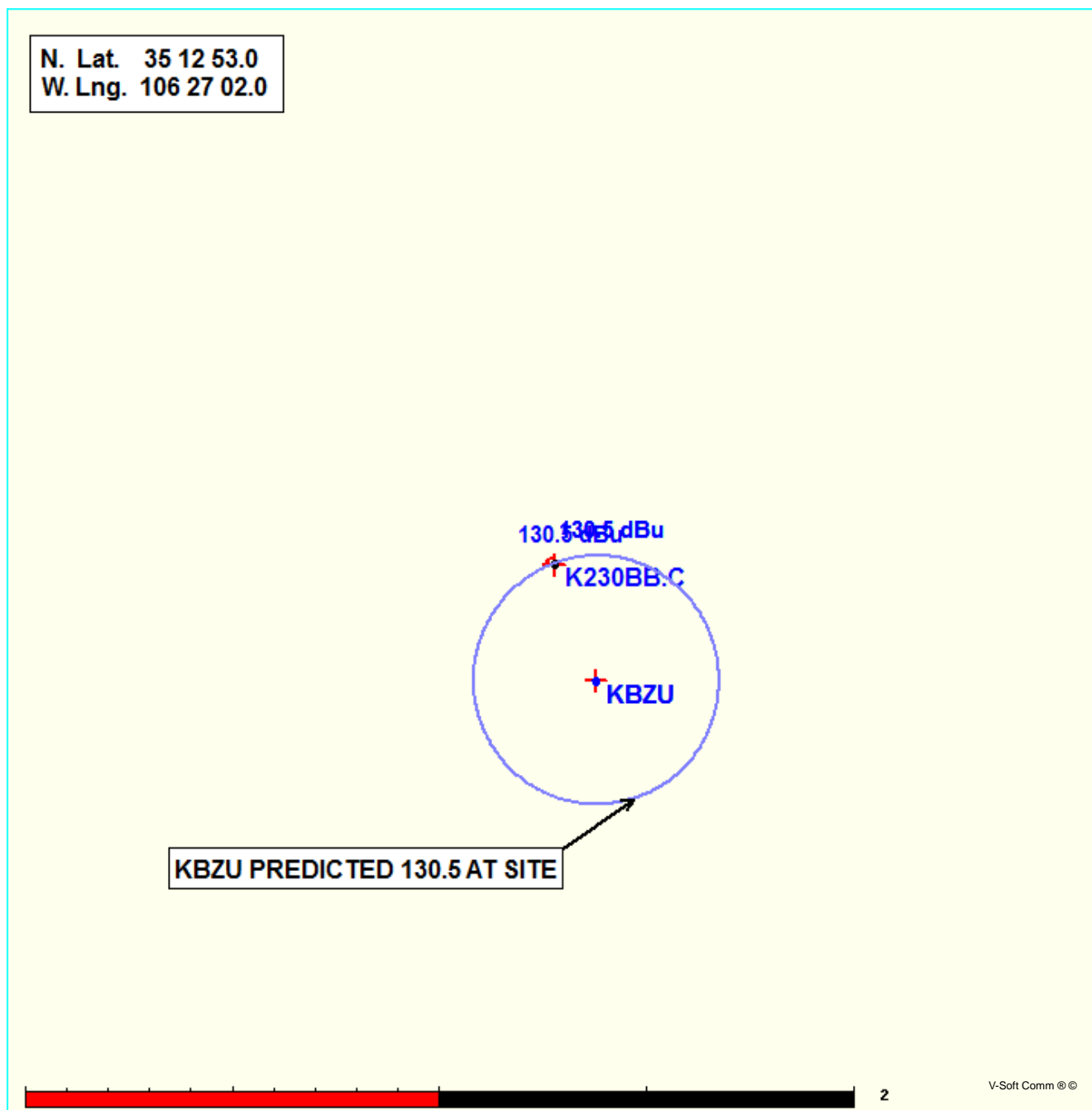


FIGURE 3 - KKSS PREDICTED 74.2 DBU CONTOUR AT SITE
K230BB Albuquerque, NM, CH. 245D

Coverage Study - NGDC 30 SEC
02-25-2016

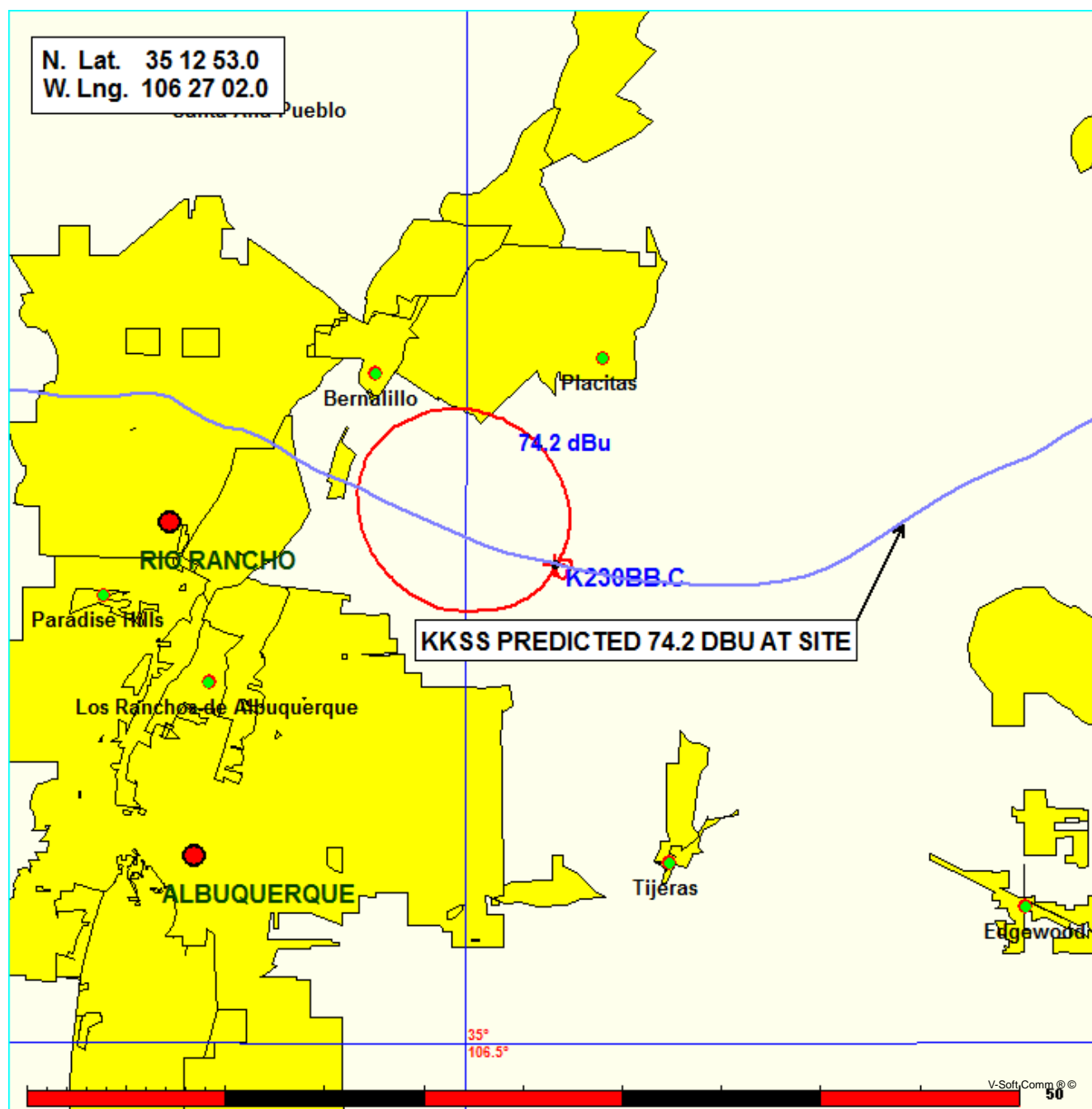


FIGURE 4 - PREDICTED 100 DBU INTERFERENCE CONTOUR
K230BB Albuquerque, NM, CH. 245D

Coverage Study - NGDC 30 SEC
02-25-2016

K230BB CH245 D , 0.07 kW, 1221.7m HAAT, 3235.0m COR AMSL
Interference Contour = 100 dBu. Population = 0

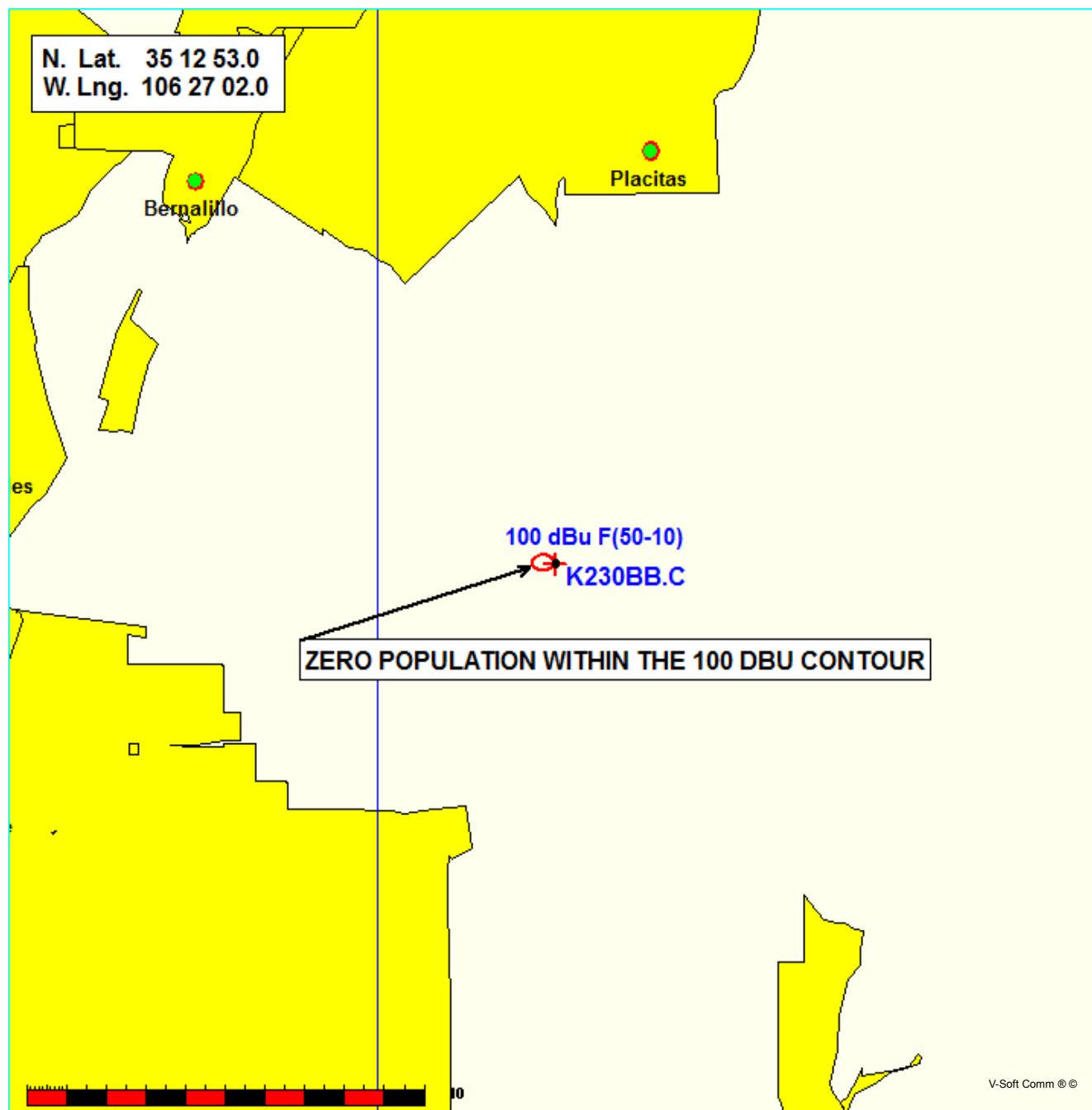


FIGURE 5 - DIRECTIONAL ANTENNA DATA

K230BB.C

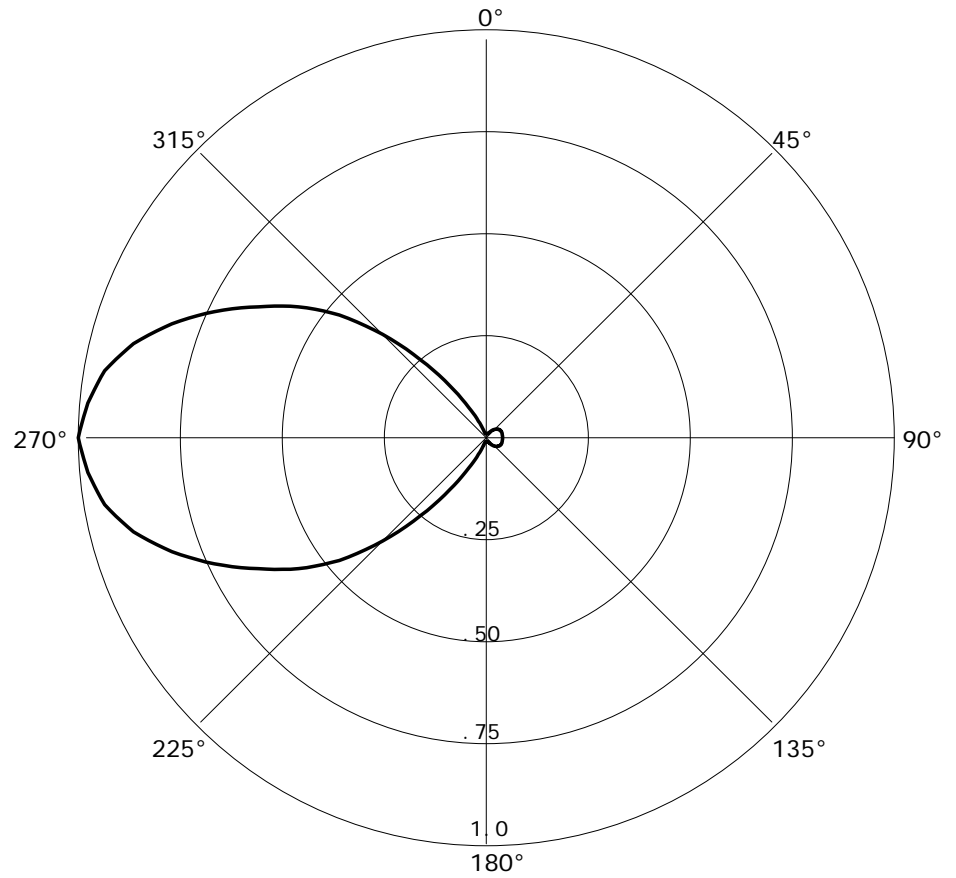
02-25-2016

RMS(V) = .393

SCALA CL-V YAGI ANTENNA

Graph is Relative Field

Azi	Field	dBk	kW
000	0.010	-51.549	0.000
010	0.010	-51.549	0.000
020	0.010	-51.549	0.000
030	0.015	-48.027	0.000
040	0.025	-43.590	0.000
050	0.034	-40.919	0.000
060	0.038	-39.953	0.000
070	0.040	-39.508	0.000
080	0.040	-39.508	0.000
090	0.040	-39.508	0.000
100	0.040	-39.508	0.000
110	0.040	-39.508	0.000
120	0.038	-39.953	0.000
130	0.034	-40.919	0.000
140	0.025	-43.590	0.000
150	0.015	-48.027	0.000
160	0.010	-51.549	0.000
170	0.010	-51.549	0.000
180	0.010	-51.549	0.000
190	0.010	-51.549	0.000
200	0.020	-45.528	0.000
210	0.085	-32.961	0.001
220	0.250	-23.590	0.004
230	0.470	-18.107	0.015
240	0.645	-15.358	0.029
250	0.820	-13.273	0.047
260	0.950	-11.995	0.063
270	1.000	-11.549	0.070
280	0.950	-11.995	0.063
290	0.820	-13.273	0.047
300	0.645	-15.358	0.029
310	0.470	-18.107	0.015
320	0.250	-23.590	0.004
330	0.085	-32.961	0.001
340	0.020	-45.528	0.000
350	0.010	-51.549	0.000



K230BB

BPFT20160129AXB

Latitude: 35-12-53 N

Longitude: 106-27-02 W

ERP: 0.07 kW

Channel: 245

Frequency: 96.9 MHz

AMSL Height: 3235.0 m

Elevation: 3230.904 m

Horiz. Pattern: Directional

Vert. Pattern: No

Prop Model:

FIGURE 6 - FILL-IN COMPLIANCE MAP