

TECHNICAL STATEMENT  
K245CD ALBUQUERQUE, NEW MEXICO  
MOUNTAIN COMMUNITY TRANSLATORS, LLC  
FCC FORM 349  
FEBRUARY 2017

This Technical Statement is made in support of a minor change application for FM translator station K245CD at Albuquerque, facility ID 140729. K245CD seeks to increase its Effective Radiated Power from 0.07 kilowatts to 0.16 kilowatts, and rotate its current directional antenna system by 10 degrees towards the south. No other changes are being proposed. The following will show that the new proposed operation of K245CD will meet all of the Commissions technical requirements for an FM translator station.

Figure 1 is a detailed interference study conducted on channel 245D with these new proposed facilities. It shows that the new operation of K245CD 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.

It should be noted that it appears that there is prohibited overlap with a New LPFM Construction Permit, BNPL-20131113ABT, at Isleta, New Mexico on channel 245L1, facility ID 194895. However, the CP expired on January 31<sup>st</sup>, 2017 and it appears that no license application or call letter assignment has been made at this time.

The proposed operation of K245CD on 244D is located within the protected 60 dBμ contours of 3rd adjacent and 2nd adjacent channel of KBZU and KKSS. The

predicted F(50-50) field strength of KBZU at the proposed K245CD transmitter site is 130.5 dB $\mu$  and KKSS is 74.2 dB $\mu$ . Therefore, the respective predicted interfering contour F(50-10) generated by the proposed K245CD on channel 244D is an additional 40 dB $\mu$  or 114.2 dBu (as referenced from KKSS).

Figure 2 shows the coverage area for the worse case 100 dB $\mu$  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 K245CD until such interference can be eliminated.

The proposed operation of K245CD 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 3 shows that the proposed 60 dB $\mu$  contour for the proposed K245CD 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 K245CD Albuquerque, New Mexico on channel 245D, will satisfy all of the required commission rules and regulations for an FM translator station.

FIGURE 1 - DETAILED INTERFERENCE STUDY

K245CD ALBUQUERQUE, NM, CH. 245D

CH# 245D - 96.9 MHz, Pwr= 0.16 kW DA, HAAT= 0.0 M, COR= 3235 M

Average Protected F(50-50)= 6.34 km

Standard Directional

DISPLAY DATES

DATA 02-01-17

SEARCH 02-01-17

REFERENCE  
35 12 53.0 N.  
106 27 02.0 W.

CH CITY	CALL	TYPE ANT STATE	AZI --	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap	*OUT* in km)
242C KBZU Albuquerque	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,	-9.7*	-93.2*	
247C KKSS Santa Fe	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 Univision Radio License Co	36.5	-34.9*	
245L1 NEW ** Isleta	CP ____ NM	202.0 21.9	52.05 BNPL20131113ABT	34 46 47.0 106 39 52.0	0.100 1	1539	Pueblo Of Isleta	-1.6	-22.3 **	
245D K245CD Albuquerque	LIC DV_ NM	0.0 0.0	0.00 BLFT20161003AAI	35 12 53.0 106 27 02.0	0.070	5.4 3235	0.6 Mountain Community Transla	-6.3*	-8.6*	
244D K292FW Tijeras	CP DV_ NM	153.4 333.4	20.09 BPFT20160129AAZ	35 03 10.6 106 21 05.1	0.015	19.1 2330	3.1 Telebeeper Of New Mexico	-2.4	9.1	
244C3 KMYN Grants	LIC _CX NM	272.7 92.0	104.36 BLH20121203BTF	35 15 11.0 107 35 46.0	0.265 818	55.2 3349	35.8 Royal Diversified Industri	4.7	0.6	
245L1 KMRD-LP Madrid	LIC ____ NM	52.4 232.6	33.93 BLL20141024ACI	35 24 01.6 106 09 14.6	0.035 50	1940	16.8 Madrid Cultural Projects		1.5	
245C0 KDAG Farmington	LIC _CX NM	324.3 143.5	219.99 BLH20060309AED	36 48 52.0 107 53 32.0	100.000 303	177.6 2129	76.4 Capstar TX, Llc	12.7	84.2	
244C KNMB Cloudcroft	LIC _CX NM	162.9 343.2	210.07 BLH20021002ABF	33 24 14.0 105 46 56.0	25.000 878	125.2 3304	84.2 Mtd, Inc.	69.9	123.5	
244L1 KSHF-LP Española	LIC ____ NM	22.7 203.0	93.54 BLL20150129AGD	35 59 28.0 106 02 53.0	0.100	1766	77.1 Holy Cross, A New Mexico N		82.1	
298C1 KQBA Los Alamos	LIC _C_ NM	21.3 201.6	104.29 BLH20000410ABB	36 05 21.0 106 01 41.0	100.000 243	2.4 2140	24.2 Hutton Broadcasting, Llc	21.5R	82.8M	
244C3 KMDZ Las Vegas	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	91.8	96.5	
244C1 KNMB Capitan	LIC _CX NM	162.8 343.2	210.08 BLH20160120ABM	33 24 14.0 105 46 55.0	1.000 917	77.9 3312	51.0 Mtd, Inc.	117.2	156.5	
298C3 KABR Alamo Community	LIC _CX NM	227.5 46.9	130.65 BLED20120402AUZ	34 25 01.0 107 30 04.0	10.000 -41	2.4 1917	24.2 Alamo Navajo School Board,	11.5R	119.2M	
246C1 KBCQ-FM Roswell	LIC _CN NM	136.1 317.2	277.15 BLH19851224KD	33 24 05.0 104 22 45.0	100.000 110	84.6 1203	55.4 Majestic Broadcasting, Llc	187.8	218.4	
246C3 KZBR La Jara	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 Broadcasting, L	191.9	206.3	
243C2 KBKZ Raton	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 Phillips Broadcasting Comp	258.2	216.1	
248C1 KNDN-FM Shiprock	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 Krjg, Inc.	234.8	220.0	
243C3 KSLV-FM Del Norte	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 Broadcasti	261.8	239.4	
243C0 KRFM Show Low	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, Llc	284.5	268.8	
243C2 KKNM Bovina	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 Tejas Broadcasting, Llp	317.2	281.3	
248C1 KLMX-FM Clayton	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 Jimmy N. Mccollum	317.1	284.0	
247A NEW Lake City	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	295.4	285.4	
298C1 KSMX-FM Clovis	LIC _CX NM	110.5 292.3	311.91 BMLH20090810ACV	34 11 34.0 103 16 44.0	100.000 165	2.4 1397	24.2 Rooney Moon Broadcasting,	21.5R	290.4M	
242C KHEY-FM El Paso	LIC _CY TX	180.4 0.4	379.13 BLH7752	31 47 47.0 106 28 55.0	100.000 424	3.2 1649	53.3 Cc Licenses, Llc	352.5	306.1	

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	Page # 2 *IN* (Overlap in km)	*OUT*
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	353.0	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 Eagles Communication	348.4	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 Eagles Communication	349.1	339.2
298C1 Olathe	KSYP	LIC NCX CO		343.2 162.5	368.62 BMLED20150623AAI	38 23 15.0 107 40 26.0	20.000 531	2.4 2909	24.2 Montrose Christian Broadca	21.5R	347.1M
246L1 El Paso	NEW	CP ____ TX		179.9 359.9	379.01 BNPL20131114BVR	31 47 50.6 106 26 35.0	0.100 -44			347.8	371.7
								1186	Sin Fronteras 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.  
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.

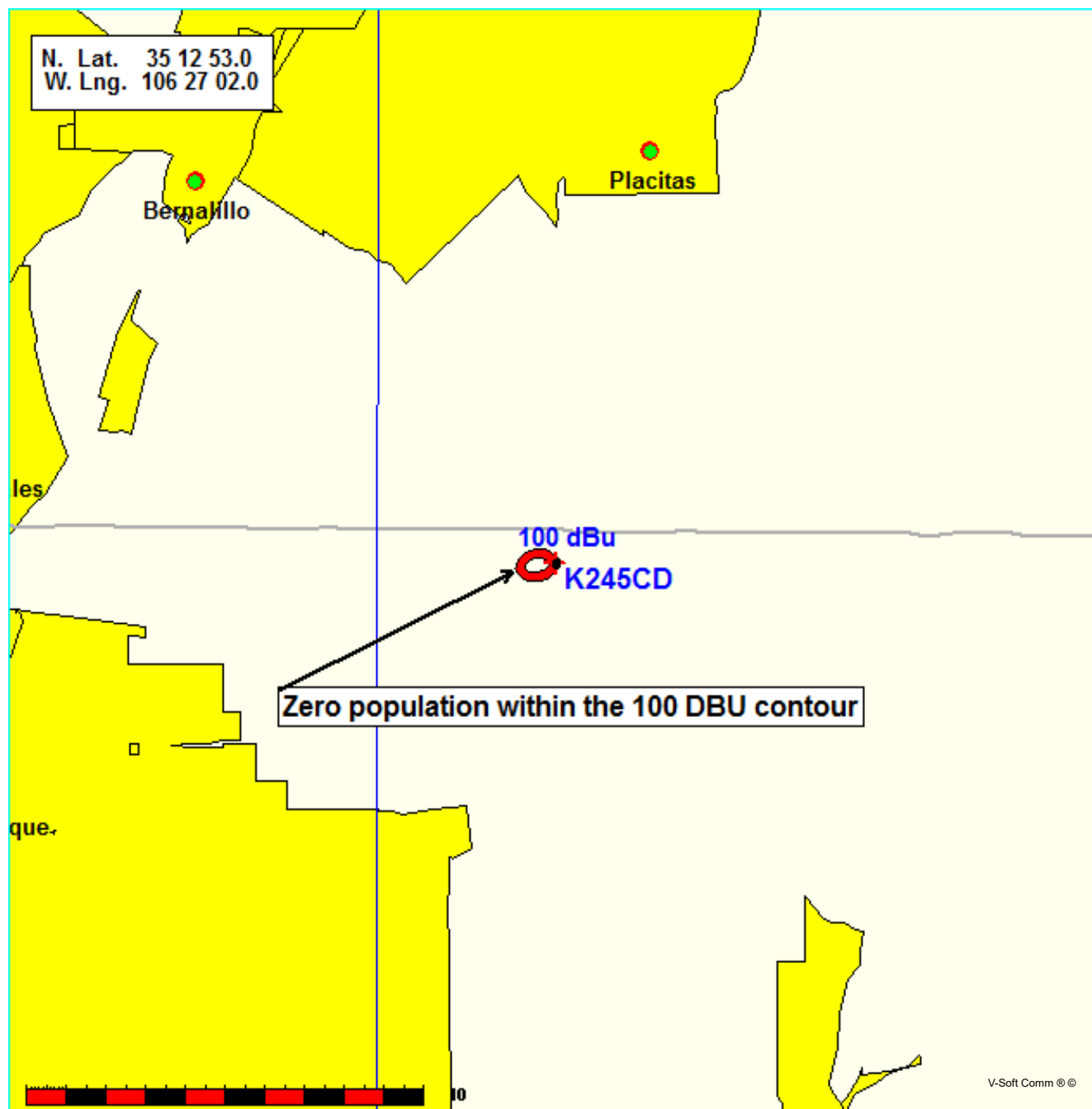
\* No actual interference will be caused to either 2nd and 3rd adjacent channel stations KBZU(FM) or KKSS(FM) since the worse case 100 DBU interference contour will not cover any population. See the Technical Statement for more details.

\*\* The new LPFM at Isleta, NM on channel 245L1 construction permit expired on January 31st, 2017. No call sign has been requested, nor license application filed. Thus, this record can be dismissed.

FIGURE 2 - PREDICTED 100 DBU INTERFERENCE CONTOUR  
K245CD ALBUQUERQUE, NM, CH. 245D

Coverage Study - NGDC 30 SEC  
02-01-2017

K245CD CH245 D , 0.16 kW, 0.0m HAAT, 3235.0m COR AMSL  
Interference Contour = 100 dBu. Population = 0



**K245CD**

BLFT20161003AAI

Latitude: 35-12-53 N

Longitude: 106-27-02 W

ERP: 0.16 kW

Channel: 245

Frequency: 96.9 MHz

AMSL Height: 3235.0 m

Elevation: 3229.0 m

Horiz. Pattern: Directional

Vert. Pattern: No

Prop Model:

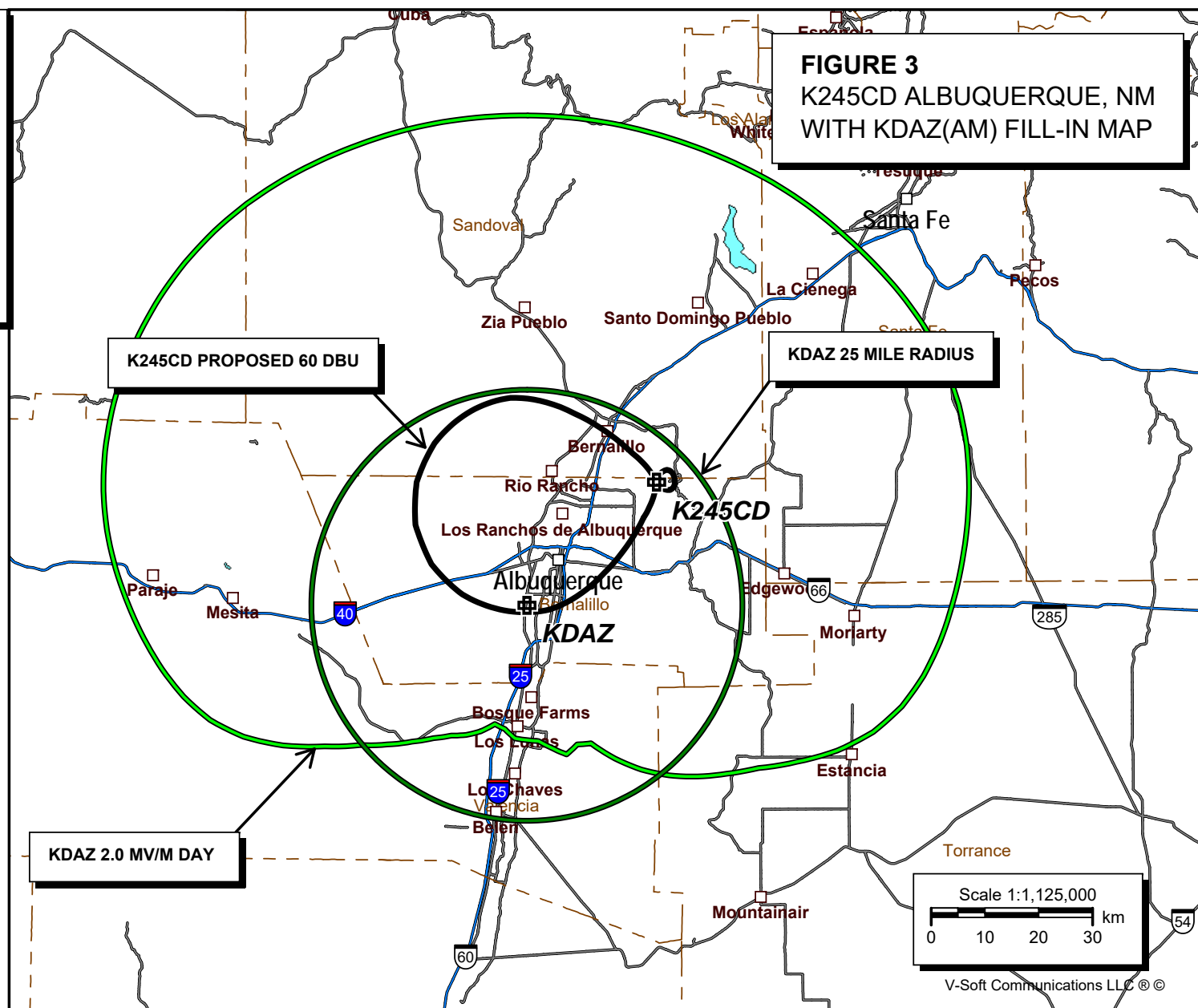
**FIGURE 3****K245CD ALBUQUERQUE, NM  
WITH KDAZ(AM) FILL-IN MAP**

FIGURE 4 - DIRECTIONAL ANTENNA DATA

K245CD

02-01-2017

RMS(V) = .392

Graph is Relative Field

Azi	Field	dBk	kW
000	0.010	-47.959	0.000
010	0.010	-47.959	0.000
020	0.015	-44.437	0.000
030	0.025	-40.000	0.000
040	0.034	-37.329	0.000
050	0.038	-36.363	0.000
060	0.040	-35.918	0.000
070	0.040	-35.918	0.000
080	0.040	-35.918	0.000
090	0.040	-35.918	0.000
100	0.040	-35.918	0.000
110	0.038	-36.363	0.000
120	0.034	-37.329	0.000
130	0.025	-40.000	0.000
140	0.015	-44.437	0.000
150	0.010	-47.959	0.000
160	0.010	-47.959	0.000
170	0.010	-47.959	0.000
180	0.010	-47.959	0.000
190	0.020	-41.938	0.000
200	0.085	-29.370	0.001
210	0.250	-20.000	0.010
220	0.470	-14.517	0.035
230	0.645	-11.768	0.067
240	0.820	-9.683	0.108
250	0.950	-8.404	0.144
260	1.000	-7.959	0.160
270	0.950	-8.404	0.144
280	0.820	-9.683	0.108
290	0.645	-11.768	0.067
300	0.470	-14.517	0.035
310	0.250	-20.000	0.010
320	0.085	-29.370	0.001
330	0.020	-41.938	0.000
340	0.010	-47.959	0.000
350	0.010	-47.959	0.000

