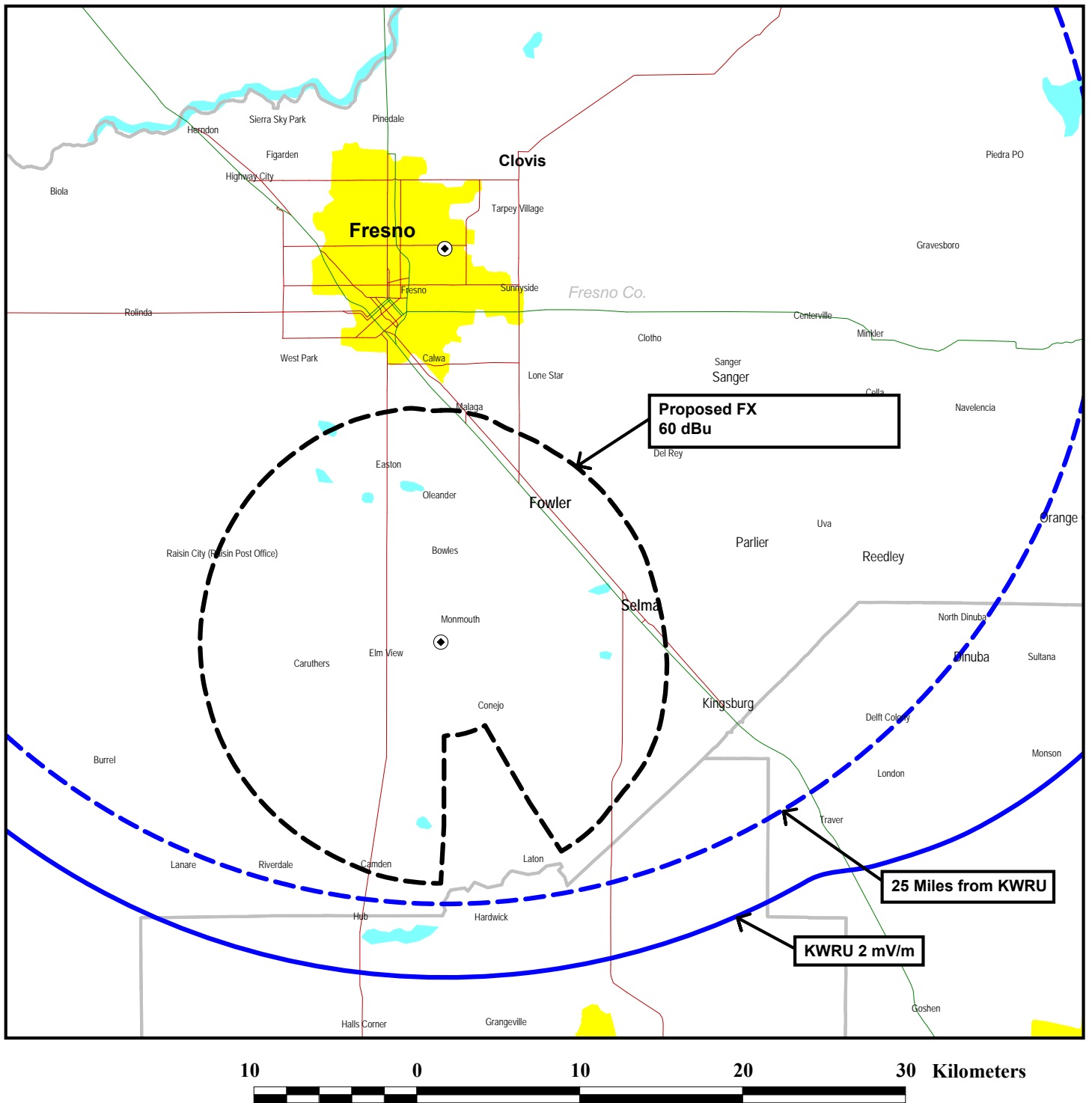


Figure 1



AM FILL-IN COMPLIANCE MAP

NEW FM TRANSLATOR STATION
FRESNO, CALIFORNIA
CH 283 (104.5 MHz) 0.25 KW (DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

FM Contour Study

du Treil, Lundin, & Rackley, Inc., Sarasota, Florida



Channel: 283 **Coordinates:** 036-33-12 119-45-10 (NAD 27) **ERP:** 0.25 kW **Max. HAAT:** 140 m **Considering Only Interference Caused**

Comment: Proposed KWRU-AM FX

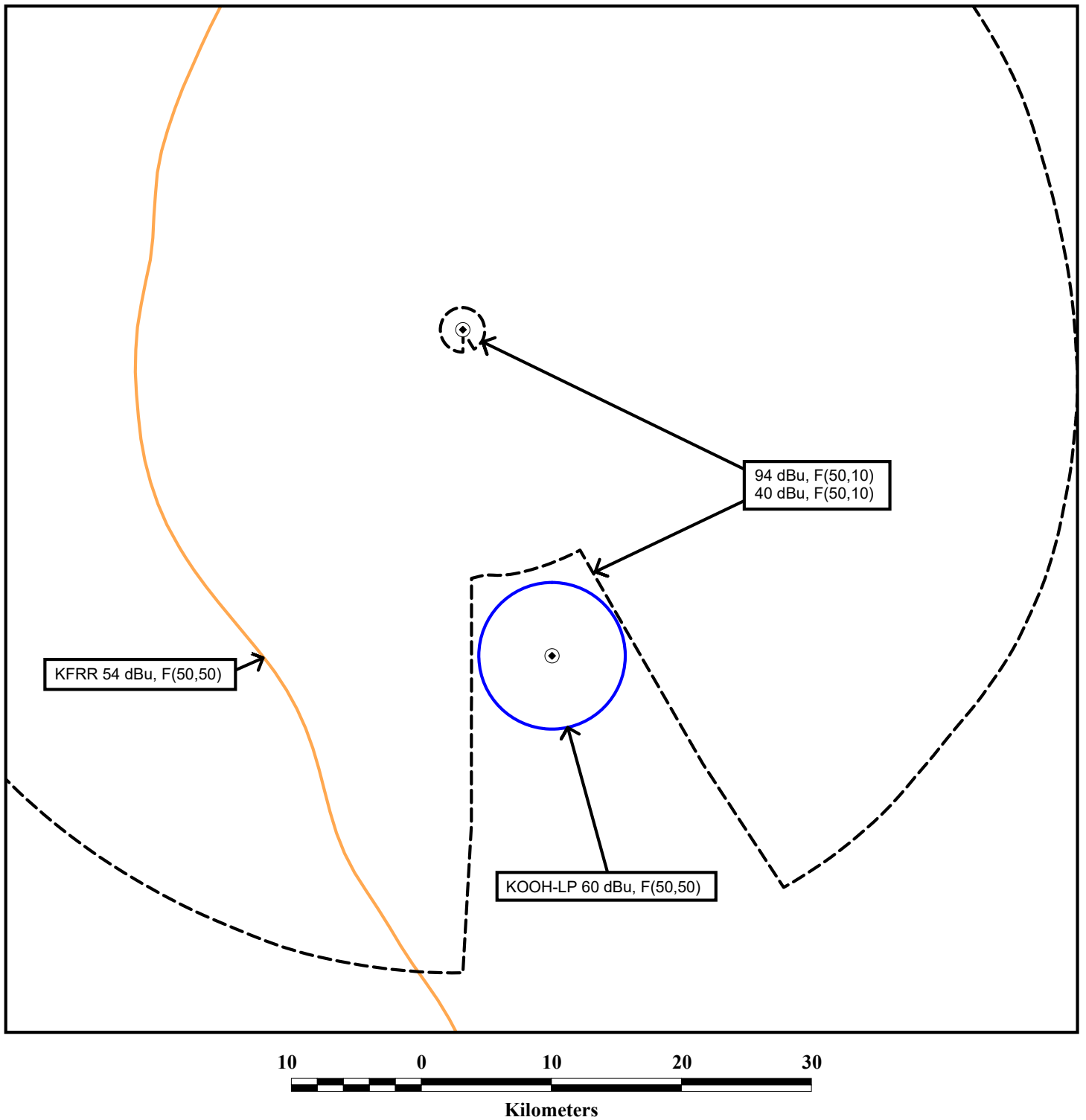
Callsign	Chan.	Service	Status	Freq.	City	State	Co.	Rec.	Latitude	Dist. (km)	Sep. (km)	Spac. (km)
Facility ID	ARN			Class	DA	73.215	ERP (kW)	HAAT (m)	Longitude	Bear. (deg)	Comment	
KFRR	281	FM	LIC	104.1	WOODLAKE	CA	US	C	36-38-12	73.07	66.98	6.09
29051	BMLH	19930604KF	B	N		17	260		118-56-34	82.46	CLOSE	/1
KFRR 54.0 dBu desired distance: 65.2 km				Proposed 94.0 dBu undesired distance: 1.7 km								
KJOI-LP	282	FL	LIC	104.3	BIOLA	CA	US	C	36-48-04.9	36.22	28.58	7.64
194666	BLL	20150226AAV	L1	N	N	0.066	36.816307		120-00-58.1	319.66	CLOSE	
KJOI-LP 60.0 dBu desired distance: 5.6 km				Proposed 54.0 dBu undesired distance: 23.0 km								
NEW	283	FX	APP	104.5	FRESNO	CA	US	C	36-33-12	0	69.91	-69.91
202953	BNPFT	20180130AGH	D	C	N	0.25			119-45-10	0	SHORT	/2
NEW 60.0 dBu desired distance: 19.5 km				Proposed 40.0 dBu undesired distance: 50.4 km								
KOOH-LP	283	FL	LIC	104.5	HANFORD	CA	US	C	36-19-40	25.96	56.08	-30.12
196319	BLL	20151015AGA	L1	N	N	0.1	23.078123		119-40-34	164.68	SHORT	/3
KOOH-LP 60.0 dBu desired distance: 5.6 km				Proposed 40.0 dBu undesired distance: 50.4 km								
KSTT-FM	283	FM	LIC	104.5	ATASCADERO	CA	US	C	35-21-40	155.36	144.22	11.14
42066	BLH	20021017AAU	B	N	N	4.7	440		120-39-21	211.78	CLOSE	
KSTT-FM 54.0 dBu desired distance: 77.2 km				Proposed 34.0 dBu undesired distance: 67.0 km								
KHDZ-LP	283	FL	LIC	104.5	PORTERVILLE	CA	US	C	36-03-15	74.68	56.05	18.63
195137	BLL	20150625ABG	L1	N	N	0.066	36.988026		119-11-42	137.83	CLEAR	
KHDZ-LP 60.0 dBu desired distance: 5.6 km				Proposed 40.0 dBu undesired distance: 50.4 km								
KHTN	284	FM	LIC	104.7	PLANADA	CA	US	C	37-32-00	111.52	106.94	4.58
20334	BMLH	20160707AAD	B	D	Y	1.95	634		120-01-48	347.36	CLOSE	
KHTN 54.0 dBu desired distance: 74.5 km				Proposed 48.0 dBu undesired distance: 32.4 km								
KKBZ	286	FM	LIC	105.1	AUBERRY	CA	US	C	37-04-25	64.48	58.39	6.09
38455	BLH	19980309KA	B1	N	N	0.6	570		119-25-52	26.24	CLOSE	
KKBZ 57.0 dBu desired distance: 57.0 km				Proposed 97.0 dBu undesired distance: 1.4 km								

/1 There will be overlap normally prohibited by Section 74.1204. However, based on the U/D signal strength ratio method, which is permitted by the FCC per Living Way Ministries, there will be no actual interference due to lack of population under Section 74.1204(d). See Figure 17 and Figure 4.

/2 Pending short-form application.

/3 Proposal complies with the contour overlap provisions of Section 74.1204(a). See Exhibit 17 and Figure 3.

Figure 3



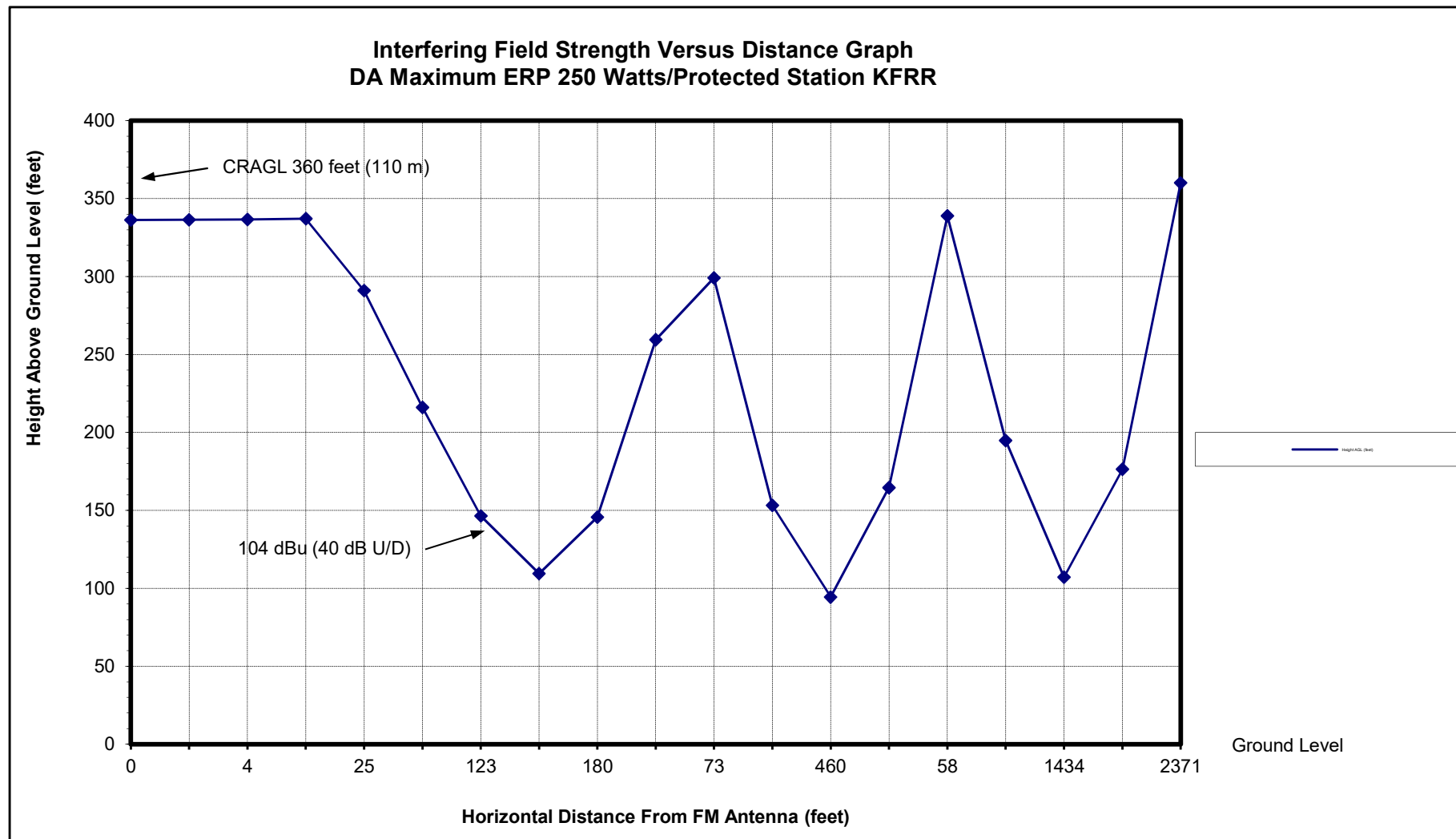
COMPLIANCE WITH SECTION 74.1204(A)

NEW FM TRANSLATOR STATION
FRESNO, CALIFORNIA

CH 283 (104.5 MHZ) 0.25 KW (DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 4





4 x CA2-FM/CP/CV Array
 Frequency: 96.9 MHz
 Gain: 5.9 dBd (x 3.9)
 Circular Polarization

Vertical stacked 0.75 wavelength
 Vertical plane Pattern
 Reduced rear lobe
 1/4 wave offset

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
0	1.000	0.00	5.90	3.89	45	0.060	-24.38	-18.48	0.01
1	0.994	-0.05	5.85	3.84	46	0.076	-22.41	-16.51	0.02
2	0.979	-0.18	5.72	3.73	47	0.089	-20.99	-15.09	0.03
3	0.957	-0.39	5.51	3.56	48	0.101	-19.94	-14.04	0.04
4	0.926	-0.67	5.23	3.34	49	0.110	-19.15	-13.25	0.05
5	0.889	-1.03	4.87	3.07	50	0.118	-18.56	-12.66	0.05
6	0.844	-1.47	4.43	2.77	51	0.124	-18.16	-12.26	0.06
7	0.794	-2.01	3.89	2.45	52	0.127	-17.91	-12.01	0.06
8	0.738	-2.64	3.26	2.12	53	0.129	-17.77	-11.87	0.07
9	0.678	-3.38	2.52	1.79	54	0.130	-17.74	-11.84	0.07
10	0.614	-4.24	1.66	1.47	55	0.129	-17.80	-11.90	0.06
11	0.546	-5.26	0.64	1.16	56	0.126	-18.01	-12.11	0.06
12	0.476	-6.44	-0.54	0.88	57	0.122	-18.31	-12.41	0.06
13	0.406	-7.82	-1.92	0.64	58	0.116	-18.68	-12.78	0.05
14	0.337	-9.45	-3.55	0.44	59	0.110	-19.14	-13.24	0.05
15	0.269	-11.42	-5.52	0.28	60	0.104	-19.68	-13.78	0.04
16	0.202	-13.88	-7.98	0.16	61	0.097	-20.29	-14.39	0.04
17	0.139	-17.13	-11.23	0.08	62	0.089	-20.97	-15.07	0.03
18	0.080	-21.98	-16.08	0.02	63	0.082	-21.74	-15.84	0.03
19	0.024	-32.24	-26.34	0.00	64	0.074	-22.59	-16.69	0.02
20	0.026	-31.69	-25.79	0.00	65	0.067	-23.52	-17.62	0.02
21	0.071	-22.95	-17.05	0.02	66	0.059	-24.59	-18.69	0.01
22	0.111	-19.11	-13.21	0.05	67	0.051	-25.77	-19.87	0.01
23	0.145	-16.80	-10.90	0.08	68	0.044	-27.07	-21.17	0.01
24	0.173	-15.26	-9.36	0.12	69	0.038	-28.49	-22.59	0.01
25	0.195	-14.21	-8.31	0.15	70	0.031	-30.06	-24.16	0.00
26	0.211	-13.51	-7.61	0.17	71	0.026	-31.66	-25.76	0.00
27	0.222	-13.08	-7.18	0.19	72	0.021	-33.43	-27.53	0.00
28	0.227	-12.86	-6.96	0.20	73	0.017	-35.40	-29.50	0.00
29	0.228	-12.84	-6.94	0.20	74	0.013	-37.61	-31.71	0.00
30	0.224	-12.98	-7.08	0.20	75	0.010	-40.00	-34.10	0.00
31	0.216	-13.31	-7.41	0.18	76	0.010	-40.00	-34.10	0.00
32	0.204	-13.80	-7.90	0.16	77	0.010	-40.00	-34.10	0.00
33	0.189	-14.47	-8.57	0.14	78	0.010	-40.00	-34.10	0.00
34	0.172	-15.31	-9.41	0.11	79	0.010	-40.00	-34.10	0.00
35	0.152	-16.36	-10.46	0.09	80	0.010	-40.00	-34.10	0.00
36	0.131	-17.66	-11.76	0.07	81	0.010	-40.00	-34.10	0.00
37	0.109	-19.27	-13.37	0.05	82	0.010	-40.00	-34.10	0.00
38	0.086	-21.32	-15.42	0.03	83	0.010	-40.00	-34.10	0.00
39	0.063	-24.03	-18.13	0.02	84	0.010	-40.00	-34.10	0.00
40	0.040	-27.96	-22.06	0.01	85	0.010	-40.00	-34.10	0.00
41	0.018	-35.12	-29.22	0.00	86	0.010	-40.00	-34.10	0.00
42	0.010	-40.00	-34.10	0.00	87	0.010	-40.00	-34.10	0.00
43	0.024	-32.31	-26.41	0.00	88	0.010	-40.00	-34.10	0.00
44	0.043	-27.31	-21.41	0.01	89	0.010	-40.00	-34.10	0.00
					90	0.010	-40.00	-34.10	0.00