

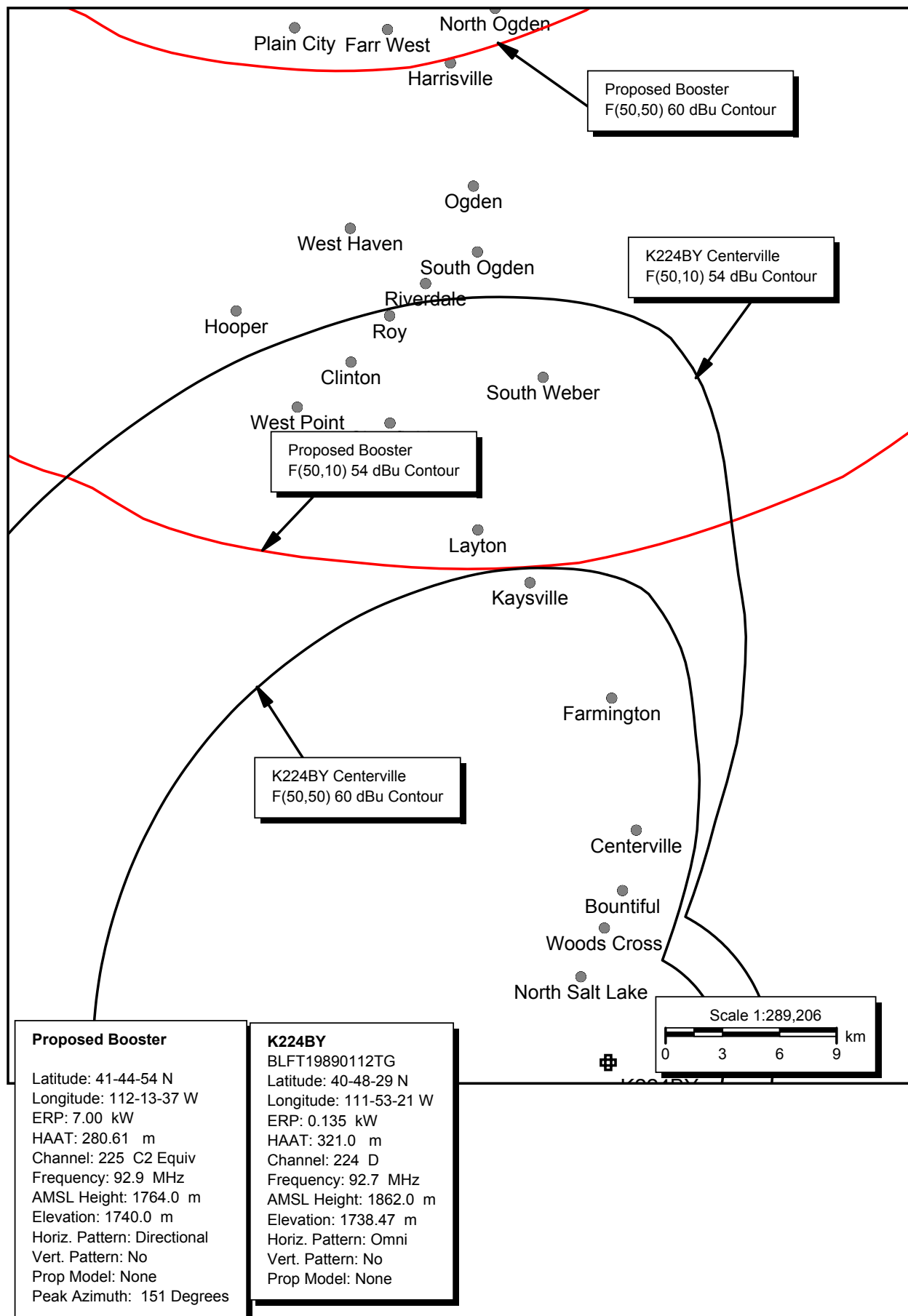
## **Section 74.1204(i) Contour Overlap Study**

### **Contour Studies**

Using the parameters proposed herein for the KBLQ FM1 Booster, the Applicant's proposed facility complies with the Contour Overlap provisions towards all first adjacent stations. Namely, the attached Contour Overlap Map demonstrates that this application complies with the Contour Overlap requirements towards translator K224BY Centerville, UT.

Using the technical parameters proposed in this application, the F(50,50) 60 dBu Contour for the Applicant's proposed booster does not overlap the F(50,10) 54 dBu Interfering Contour of K224BY. Likewise, the F(50,50) 60 dBu Contour for K224BY does not overlap the F(50,10) 54 dBu Interfering Contour of the instantly proposed booster.

Therefore, it appears as though the instant application meets the requirements of Section 74.1204(i).



Proposed KBLQ FM1  
Contour Overlap Channel Study

REFERENCE 41 44 54 N 112 13 37 W	CH# 225C3 - 92.9 MHz, Pwr= 7 kw, HAAT=302.6 M, COR= 1764 M Average Protected F(50-50)= 46.99 km Ave. F(50-10) 40 dBu= 114.2 54 dBu= 69.6 80 dBu= 16.9 100 dBu= 4.4	DISPLAY DATES DATA 01-13-05 SEARCH 01-13-05
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CH CITY	CALL	TYPE STATE		AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(M)	COR(M) INT(km)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
225C1 Logan	KBLQFMA	LIC	CX	68.3 248.3	37.36 BLH20040129AJH	41 52 18 111 48 31	100.000 635	1982 200.1	93.1 Sun Valley Radio, Incorpor	-185.88	-127.76*
225D Tremonton	KBLQF1^	APP	DC	0.0 180.0	0.00 BPFTB20041022ABX	41 44 54 112 13 37	0.000 410	1764 0.0	0.0 Sun Valley Radio, Inc.	-8.38*	-27.83
225D Pleasant View	KBLQF1^	LIC	DC	158.1 338.1	48.75 BLFTB20020326ABJ	41 20 28 112 00 32	0.000 276	1584 0.0	0.0 Sun Valley Radio, Inc.	-6.68*	-84.54
223D Ogden	K223AK	LIC	DCN	159.8 339.8	62.44 BLFT19981116TA	41 13 14 111 58 09	0.250 43	1373 1.1	8.5 Utah St.u/	6.13 Of Agri. & Appl	49.14
227C Salt Lake City	KUBLFMA	LIC	CX	179.0 359.0	120.95 BLH20021203ACG	40 39 34 112 12 05	100.000 818	2263 16.5	100.3 Citadel Broadcasting Compa	55.07	16.64
225D Pocatello	AP225	APP	C	352.4 172.4	120.99 BNPFT20030317ECI	42 49 40 112 25 23	0.250 -296	1419 23.8	7.1 Max T. Nichols	91.86	96.33
225D North Salt Lake	AP225	APP	DV	179.0 359.0	121.56 BNPFT20030317MXG	40 39 14 112 12 08	0.011 1221	2718 70.0	19.0 Michael C. Cusinato	2.19	-19.22
223C Rupert	KKMVA	LIC	CY	300.3 120.3	131.23 BLH19941114KB	42 20 03 113 36 12	100.000 638	2385 14.1	93.2 Tri-market Radio Broadcast	104.11	37.39
228D Laketown	K228EP	CP	C	80.3 260.3	80.66 BNPFT20030828BFW	41 51 57 111 16 09	0.011 412	2315 0.2	12.0 Christina Preziosi	57.04	67.66
225D Sandy	AP225	APP	C	167.6 347.6	133.15 BNPFT20030317BMR	40 34 37 111 53 20	0.010 89	1384 17.9	5.5 Educational Media Foundati	61.89	-1.77
223D Montpelier	AP223	APP	C	43.5 223.5	97.54 BNPFT20030317EPU	42 22 51 111 24 34	0.019 106	2162 0.3	7.0 Radio Assist Ministry, Inc	78.59	89.89
227D Lava Hot Springs	AP227	APP	C	10.8 190.8	98.19 BNPFT20030317MJI	42 36 59 112 00 08	0.250 -254	1647 1.1	7.1 Idaho wireless Corporation	81.28	90.40
222D Montpelier	AP222	APP	C	49.9 229.9	98.59 BNPFT20030317EBK	42 18 54 111 18 38	0.250 -144	1702 1.1	7.1 Max T. Nichols	77.80	90.86
224D Centerville	K224BY	LIC	CN	164.8 344.8	108.19 BLFT19890112TG	40 48 29 111 53 21	0.135 556	1862 41.2	26.6 Bible Broadcasting Network	12.82	0.34
223C2 South Jordan	AL223	RSV		179.0 359.0	120.92 RM10764	40 39 35 112 12 05	50.000 1228	2671 13.5	101.9	57.98	14.97
223C2 South Jordan	KUUU.C^	CP	CX	179.0 359.0	120.92 BPH20040406ABX	40 39 35 112 12 05	50.000 288	1731 8.2	64.5 Millcreek Broadcasting, L.	63.30	52.39
225D Blackfoot	AP225	APP	C	356.6 176.6	160.62 BNPFT20030314BNV	43 11 30 112 20 38	0.250 -56	1420 23.8	7.1 Educational Media Foundati	131.60	136.37
226D Pocatello	AP226	APP	C	354.9 174.9	122.75 BNPFT20030317MLC	42 50 56 112 21 43	0.050 261	2073 21.0	14.0 Idaho wireless Corporation	96.47	101.30

ERP and HAAT are on direct line to and from reference station.  
 "\*"Affixed to 'IN' or 'Out' values = site inside protected contour.  
 ^ = Power and antenna height 'Max classed' as per Sec 73.215 protection requirements

## 01-13-2005 30 Sec. Terrain Data

KBLQF1 BPFTB20041022ABX

Channel = 225D

Max ERP = 7 kW

RCAMSL = 1764 M

N. Lat = 41 44 54

W. Lng = 112 13 37

K224BY BLFT19890112TG

Channel = 224D

Max ERP = 0.135 kW

RCAMSL = 1862 M

N. Lat = 40 48 29

W. Lng = 111 53 21

Protected  
60 dBuInterfering  
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
100.0	000.9480	0276.6	029.6	000.5	000.1350	0517.5	099.3	33.7
101.0	001.0108	0277.0	030.1	000.7	000.1350	0517.5	098.7	33.9
102.0	001.0977	0274.1	030.5	000.9	000.1350	0517.5	098.1	34.0
103.0	001.1882	0270.4	030.9	001.0	000.1350	0517.5	097.5	34.2
104.0	001.2823	0266.2	031.2	001.2	000.1350	0517.5	096.9	34.4
105.0	001.3800	0265.6	031.7	001.4	000.1350	0517.5	096.2	34.5
106.0	001.4812	0271.0	032.6	001.8	000.1350	0513.0	095.5	34.7
107.0	001.5860	0277.9	033.6	002.3	000.1350	0513.0	094.7	34.9
108.0	001.6944	0284.7	034.5	002.7	000.1350	0506.9	093.9	35.0
109.0	001.8064	0289.1	035.2	003.0	000.1350	0506.9	093.1	35.2
110.0	001.9220	0293.3	035.9	003.3	000.1350	0506.9	092.3	35.5
111.0	002.0412	0301.7	036.8	003.8	000.1350	0500.8	091.4	35.6
112.0	002.1795	0312.4	037.9	004.3	000.1350	0500.8	090.5	35.9
113.0	002.3224	0325.1	039.1	004.9	000.1350	0491.3	089.5	36.0
114.0	002.4699	0339.0	040.4	005.5	000.1350	0491.3	088.4	36.3
115.0	002.6218	0353.9	041.6	006.1	000.1350	0475.8	087.3	36.3
116.0	002.7783	0368.5	042.9	006.7	000.1350	0459.2	086.2	36.2
117.0	002.9393	0382.9	044.0	007.3	000.1350	0459.2	085.1	36.6
118.0	003.1049	0397.7	045.2	007.9	000.1350	0439.9	084.0	36.4
119.0	003.2750	0412.4	046.4	008.4	000.1350	0439.9	082.8	36.7
120.0	003.4496	0425.1	047.6	009.0	000.1350	0417.6	081.7	36.5
121.0	003.6288	0434.2	048.5	009.4	000.1350	0417.6	080.5	36.8
122.0	003.7713	0439.5	049.2	009.6	000.1350	0394.9	079.5	36.5
123.0	003.9165	0442.1	049.7	009.7	000.1350	0394.9	078.5	36.8
124.0	004.0645	0443.6	050.1	009.7	000.1350	0394.9	077.5	37.1
125.0	004.2152	0444.7	050.5	009.7	000.1350	0394.9	076.6	37.5
126.0	004.3687	0445.9	050.9	009.7	000.1350	0394.9	075.6	37.8
127.0	004.5249	0447.3	051.3	009.7	000.1350	0394.9	074.6	38.1
128.0	004.6839	0448.6	051.7	009.6	000.1350	0394.9	073.6	38.5
129.0	004.8456	0449.8	052.1	009.5	000.1350	0394.9	072.6	38.8
130.0	005.0100	0450.9	052.5	009.4	000.1350	0417.6	071.7	39.8
131.0	005.1772	0451.8	052.9	009.3	000.1350	0417.6	070.7	40.1
132.0	005.2983	0452.6	053.1	009.1	000.1350	0417.6	069.8	40.4
133.0	005.4208	0453.3	053.4	008.8	000.1350	0417.6	068.8	40.7
134.0	005.5447	0453.9	053.6	008.6	000.1350	0417.6	067.9	41.0
135.0	005.6700	0454.6	053.9	008.3	000.1350	0439.9	067.0	42.0
136.0	005.7967	0455.3	054.1	008.0	000.1350	0439.9	066.1	42.3
137.0	005.9248	0455.9	054.4	007.6	000.1350	0439.9	065.2	42.6
138.0	006.0543	0456.3	054.6	007.2	000.1350	0459.2	064.4	43.4
139.0	006.1852	0456.7	054.8	006.8	000.1350	0459.2	063.5	43.7
140.0	006.3175	0456.9	055.0	006.4	000.1350	0475.8	062.6	44.4
141.0	006.4512	0457.2	055.3	005.9	000.1350	0475.8	061.8	44.7
142.0	006.5051	0457.5	055.4	005.3	000.1350	0491.3	061.1	45.3
143.0	006.5592	0457.8	055.5	004.7	000.1350	0491.3	060.3	45.6
144.0	006.6135	0458.1	055.6	004.1	000.1350	0500.8	059.6	46.1
145.0	006.6680	0458.3	055.6	003.4	000.1350	0506.9	058.9	46.5
146.0	006.7228	0458.3	055.7	002.7	000.1350	0506.9	058.3	46.7
147.0	006.7778	0458.3	055.8	002.0	000.1350	0513.0	057.7	47.1
148.0	006.8330	0458.2	055.9	001.2	000.1350	0517.5	057.1	47.4
149.0	006.8884	0458.2	055.9	000.4	000.1350	0521.6	056.5	47.8
150.0	006.9441	0458.0	056.0	359.6	000.1350	0521.6	055.9	48.0
151.0	007.0000	0457.6	056.1	358.8	000.1350	0525.7	055.4	48.2
152.0	006.9581	0457.1	056.0	357.8	000.1350	0529.0	055.0	48.4
153.0	006.9163	0456.6	055.9	356.9	000.1350	0531.8	054.7	48.6
154.0	006.8746	0456.1	055.8	355.9	000.1350	0534.5	054.4	48.8
155.0	006.8330	0455.7	055.7	354.9	000.1350	0536.7	054.1	48.9
156.0	006.7916	0455.1	055.6	353.9	000.1350	0538.9	053.9	49.1
157.0	006.7503	0454.5	055.5	352.9	000.1350	0541.2	053.7	49.2

158.0	006.7091	0453.7	055.4		351.9	000.1350	0543.5	053.6	49.3
159.0	006.6680	0452.7	055.3		350.8	000.1350	0545.7	053.5	49.3
160.0	006.6271	0451.5	055.2		349.8	000.1350	0547.7	053.4	49.4
161.0	006.5863	0450.2	055.1		348.8	000.1350	0549.5	053.4	49.4
162.0	006.4781	0448.9	054.8		347.7	000.1350	0551.4	053.5	49.4
163.0	006.3708	0447.6	054.6		346.7	000.1350	0553.1	053.7	49.4
164.0	006.2644	0446.2	054.4		345.7	000.1350	0554.6	053.9	49.4
165.0	006.1589	0444.5	054.1		344.7	000.1350	0555.7	054.1	49.3
166.0	006.0543	0442.8	053.8		343.7	000.1350	0556.6	054.4	49.2
167.0	005.9506	0440.8	053.6		342.7	000.1350	0557.4	054.7	49.1
168.0	005.8478	0438.7	053.3		341.8	000.1350	0558.2	055.1	49.0
169.0	005.7459	0436.6	053.0		340.9	000.1350	0559.0	055.5	48.9
170.0	005.6448	0434.7	052.7		340.0	000.1350	0559.8	055.9	48.8
171.0	005.5447	0433.2	052.5		339.1	000.1350	0560.6	056.3	48.6
172.0	005.4085	0432.2	052.2		338.3	000.1350	0561.3	056.8	48.5
173.0	005.2740	0431.2	051.9		337.5	000.1350	0561.3	057.3	48.3
174.0	005.1411	0430.2	051.6		336.7	000.1350	0562.1	057.9	48.1
175.0	005.0100	0428.4	051.3		336.0	000.1350	0563.0	058.5	47.9
176.0	004.8806	0426.4	050.9		335.3	000.1350	0564.0	059.1	47.7
177.0	004.7528	0423.6	050.5		334.7	000.1350	0564.0	059.8	47.5
178.0	004.6268	0417.9	050.0		334.1	000.1350	0565.0	060.7	47.2
179.0	004.5024	0412.2	049.4		333.6	000.1350	0565.0	061.5	46.9
180.0	004.3798	0410.0	049.0		333.1	000.1350	0566.0	062.3	46.7
181.0	004.2588	0410.0	048.8		332.5	000.1350	0566.6	062.9	46.5
182.0	004.1073	0410.2	048.4		332.0	000.1350	0566.6	063.6	46.2
183.0	003.9585	0408.9	048.0		331.5	000.1350	0566.6	064.4	46.0
184.0	003.8125	0407.4	047.6		331.1	000.1350	0567.1	065.2	45.7
185.0	003.6692	0405.8	047.1		330.7	000.1350	0567.1	066.0	45.4
186.0	003.5287	0405.7	046.8		330.3	000.1350	0567.6	066.8	45.2
187.0	003.3909	0405.7	046.4		330.0	000.1350	0567.6	067.6	44.9
188.0	003.2559	0409.3	046.2		329.5	000.1350	0567.6	068.2	44.7
189.0	003.1236	0414.8	046.1		329.1	000.1350	0567.9	068.8	44.5
190.0	002.9940	0419.8	046.0		328.6	000.1350	0567.9	069.4	44.3
191.0	002.8672	0422.9	045.8		328.3	000.1350	0568.1	070.1	44.0
192.0	002.7431	0426.9	045.6		327.9	000.1350	0568.1	070.8	43.8
193.0	002.6218	0430.1	045.4		327.6	000.1350	0568.1	071.5	43.5
194.0	002.5032	0432.6	045.1		327.3	000.1350	0568.1	072.3	43.3
195.0	002.3874	0434.7	044.8		327.1	000.1350	0568.1	073.1	43.0

01-13-2005 30 Sec. Terrain Data

K224BY BLFT19890112TG  
Channel = 224D  
Max ERP = 0.135 kW  
RCAMSL = 1862 M  
N. Lat = 40 48 29  
W. Lng = 111 53 21

KBLQF1 BPFTB20041022ABX  
Channel = 225D  
Max ERP = 7 kW  
RCAMSL = 1764 M  
N. Lat = 41 44 54  
W. Lng = 112 13 37

Protected  
60 dBu

Interfering  
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
315.0	000.1350	0572.5	027.0	173.8	005.1614	0430.2	085.8	51.3
316.0	000.1350	0571.9	027.0	173.6	005.1928	0430.2	085.5	51.4
317.0	000.1350	0571.3	027.0	173.4	005.2272	0431.2	085.3	51.6
318.0	000.1350	0570.8	027.0	173.1	005.2621	0431.2	085.0	51.7
319.0	000.1350	0570.4	027.0	172.8	005.2977	0431.2	084.7	51.8
320.0	000.1350	0570.0	027.0	172.6	005.3340	0431.2	084.5	51.9
321.0	000.1350	0569.6	027.0	172.3	005.3710	0432.2	084.2	52.0
322.0	000.1350	0569.3	026.9	172.0	005.4086	0432.2	084.0	52.1
323.0	000.1350	0569.0	026.9	171.7	005.4469	0432.2	083.8	52.3
324.0	000.1350	0568.7	026.9	171.4	005.4859	0433.2	083.6	52.4
325.0	000.1350	0568.4	026.9	171.1	005.5255	0433.2	083.4	52.5
326.0	000.1350	0568.2	026.9	170.8	005.5600	0433.2	083.2	52.6
327.0	000.1350	0568.1	026.9	170.6	005.5896	0433.2	083.0	52.7
328.0	000.1350	0568.1	026.9	170.3	005.6196	0434.7	082.8	52.8
329.0	000.1350	0567.9	026.9	169.9	005.6502	0434.7	082.6	52.9
330.0	000.1350	0567.6	026.9	169.6	005.6812	0434.7	082.5	52.9
331.0	000.1350	0567.1	026.9	169.3	005.7126	0436.6	082.3	53.1
332.0	000.1350	0566.6	026.9	169.0	005.7445	0436.6	082.2	53.1
333.0	000.1350	0566.0	026.9	168.7	005.7767	0436.6	082.1	53.2
334.0	000.1350	0565.0	026.8	168.4	005.8094	0438.7	082.0	53.3
335.0	000.1350	0564.0	026.8	168.1	005.8424	0438.7	081.9	53.4
336.0	000.1350	0563.0	026.8	167.7	005.8756	0438.7	081.8	53.4
337.0	000.1350	0562.1	026.8	167.4	005.9090	0440.8	081.8	53.5
338.0	000.1350	0561.3	026.7	167.1	005.9425	0440.8	081.7	53.6
339.0	000.1350	0560.6	026.7	166.8	005.9762	0440.8	081.6	53.6
340.0	000.1350	0559.8	026.7	166.4	006.0101	0442.8	081.6	53.7
341.0	000.1350	0559.0	026.7	166.1	006.0441	0442.8	081.6	53.7
342.0	000.1350	0558.2	026.7	165.8	006.0783	0442.8	081.6	53.8
343.0	000.1350	0557.4	026.6	165.4	006.1125	0444.5	081.6	53.9
344.0	000.1350	0556.6	026.6	165.1	006.1468	0444.5	081.6	53.9
345.0	000.1350	0555.7	026.6	164.8	006.1811	0444.5	081.6	53.9
346.0	000.1350	0554.6	026.6	164.5	006.2155	0446.2	081.6	54.0
347.0	000.1350	0553.1	026.5	164.1	006.2498	0446.2	081.7	54.0
348.0	000.1350	0551.4	026.5	163.8	006.2840	0446.2	081.8	54.0
349.0	000.1350	0549.5	026.4	163.5	006.3180	0447.6	081.8	54.0
350.0	000.1350	0547.7	026.4	163.2	006.3518	0447.6	081.9	54.0
351.0	000.1350	0545.7	026.3	162.9	006.3854	0447.6	082.1	54.0
352.0	000.1350	0543.5	026.3	162.6	006.4187	0447.6	082.2	53.9
353.0	000.1350	0541.2	026.2	162.2	006.4517	0448.9	082.3	54.0
354.0	000.1350	0538.9	026.1	161.9	006.4844	0448.9	082.5	53.9
355.0	000.1350	0536.7	026.1	161.6	006.5168	0448.9	082.6	53.9
356.0	000.1350	0534.5	026.0	161.3	006.5488	0450.2	082.8	53.9
357.0	000.1350	0531.8	025.9	161.1	006.5802	0450.2	083.0	53.9
358.0	000.1350	0529.0	025.9	160.8	006.5956	0450.2	083.2	53.8
359.0	000.1350	0525.7	025.8	160.5	006.6068	0451.5	083.4	53.8
000.0	000.1350	0521.6	025.6	160.2	006.6176	0451.5	083.7	53.7
001.0	000.1350	0517.5	025.5	160.0	006.6282	0451.5	084.0	53.6
002.0	000.1350	0513.0	025.4	159.7	006.6384	0451.5	084.3	53.5
003.0	000.1350	0506.9	025.2	159.5	006.6477	0452.7	084.6	53.5
004.0	000.1350	0500.8	025.0	159.3	006.6567	0452.7	084.9	53.4
005.0	000.1350	0491.3	024.7	159.1	006.6642	0452.7	085.4	53.2
006.0	000.1350	0475.8	024.3	159.0	006.6691	0452.7	086.0	53.0
007.0	000.1350	0459.2	023.8	158.9	006.6733	0452.7	086.6	52.8
008.0	000.1350	0439.9	023.3	158.8	006.6766	0452.7	087.3	52.6
009.0	000.1350	0417.6	022.7	158.7	006.6785	0452.7	088.0	52.4
010.0	000.1350	0394.9	022.1	158.7	006.6796	0452.7	088.7	52.2
011.0	000.1350	0368.8	021.4	158.7	006.6785	0452.7	089.4	51.9
012.0	000.1350	0338.1	020.6	158.8	006.6748	0452.7	090.3	51.6

013.0	000.1350	0306.8	019.6		159.0	006.6691	0452.7	091.3	51.3
014.0	000.1350	0279.1	018.7		159.1	006.6629	0452.7	092.3	51.0
015.0	000.1350	0254.2	017.8		159.3	006.6566	0452.7	093.2	50.7
016.0	000.1350	0233.7	017.1		159.4	006.6515	0452.7	094.0	50.5
017.0	000.1350	0216.0	016.4		159.5	006.6468	0451.5	094.7	50.2
018.0	000.1350	0196.7	015.6		159.7	006.6403	0451.5	095.5	50.0
019.0	000.1350	0174.9	014.7		159.9	006.6322	0451.5	096.4	49.7
020.0	000.1350	0156.3	013.8		160.1	006.6236	0451.5	097.2	49.4
021.0	000.1350	0141.3	013.1		160.3	006.6163	0451.5	097.9	49.2
022.0	000.1350	0122.5	012.2		160.5	006.6063	0450.2	098.7	48.9
023.0	000.1350	0100.6	011.1		160.8	006.5930	0450.2	099.7	48.6
024.0	000.1350	0079.8	010.0		161.2	006.5641	0450.2	100.7	48.3
025.0	000.1350	0063.2	008.9		161.5	006.5272	0448.9	101.6	48.0
026.0	000.1350	0050.0	007.8		161.9	006.4897	0448.9	102.4	47.7
027.0	000.1350	0039.4	006.9		162.2	006.4554	0448.9	103.2	47.5
028.0	000.1350	0027.1	006.1		162.5	006.4255	0448.9	103.8	47.3
029.0	000.1350	0009.1	006.1		162.4	006.4299	0448.9	103.9	47.3
030.0	000.1350	-0014.5	006.1		162.4	006.4342	0448.9	104.0	47.3