

Electronic Supporting Information (ESI)

Sustainable Hydrogen Production via CO₂-Assisted BH₃+BH₃ Reaction: A Computational Analysis

Trinh Le Huyen¹, Tran Thi Thanh Huyen¹, Chi Nam Cao¹, Pham Cam Nam^{1*}

¹ Faculty of Chemical Engineering, University of Science and Technology, Danang University, Danang 550000, Viet Nam

Correspondance to Pham Cam Nam, pcnam@dut.udn.vn

Table S1. Cartesian coordinates of all species related to all reactions were calculated at the M06-2X/6-311++G(3df,2p) level of theory in the gas phase .

BH ₃				IM0			
5	0.000076000	-0.000001000	0.000000000	5	0.875437000	0.000000000	-0.000113000
1	-0.595949000	1.024323000	0.000000000	5	-0.875437000	0.000000000	0.000114000
1	-0.589374000	-1.028116000	0.000000000	1	1.448181000	1.034447000	-0.000276000
1	1.184944000	0.003797000	0.000000000	1	1.448183000	-1.034446000	-0.000073000
				1	-0.000114000	-0.000099000	-0.973936000
				1	0.000113000	0.000097000	0.973934000
				1	-1.448181000	1.034447000	0.000070000
				1	-1.448182000	-1.034445000	0.000278000
CO ₂				BH ₂ BH ₂			
6	0.000000000	0.000000000	0.000000000	5	0.818017000	-0.000092000	0.000091000
8	0.000000000	0.000000000	1.153793000	5	-0.817980000	0.000020000	0.000027000
8	0.000000000	0.000000000	-1.153793000	1	1.447239000	-0.746501000	-0.683123000
				1	1.447325000	0.746683000	0.682862000
				1	-1.447093000	0.683374000	-0.746435000
				1	-1.447653000	-0.683198000	0.746108000
TS0				TS1			
5	0.928281000	-0.005057000	-0.070327000	5	-1.377887000	-0.741196000	-0.009444000
5	-0.709059000	0.179320000	0.004842000	5	-2.799112000	0.072093000	-0.176163000
1	1.600863000	0.973306000	-0.071674000	1	-0.763009000	-1.003779000	-0.992874000
1	1.472034000	-1.054744000	0.063876000	1	-0.847558000	-0.924052000	1.041370000
1	-0.807045000	-1.010959000	-0.492190000	1	-3.137660000	-0.380333000	0.988067000
1	-0.462507000	0.104412000	1.196115000	1	-2.032785000	1.011343000	-0.043761000
1	-1.420808000	1.013343000	-0.430396000	1	-3.615744000	0.052201000	-1.027014000
1	-1.478651000	-0.896675000	0.061695000	1	-3.469942000	0.427583000	0.907620000
				6	1.577262000	0.186436000	0.001878000
				8	2.204216000	-0.780452000	-0.001758000
				8	0.956799000	1.160944000	0.007178000
IM1				IM2			
5	1.411520000	-0.628732000	-0.000013000	5	-0.173254000	1.153600000	-0.593495000
5	2.977295000	0.144566000	0.000007000	1	0.953099000	1.691533000	-0.985567000
1	0.894281000	-0.885786000	1.033627000	1	-1.061586000	1.624422000	-1.217141000
1	0.893983000	-0.884962000	-1.033711000	1	-0.035400000	-0.020949000	-0.511116000
1	2.623640000	-1.119207000	-0.000593000	1	1.838006000	1.702839000	0.846615000
1	1.759691000	0.631838000	0.000362000	1	-0.179451000	1.667999000	0.609121000
1	3.490243000	0.395443000	1.034991000	1	0.831238000	3.367582000	0.150991000
1	3.489967000	0.396404000	-1.034890000	6	-2.801074000	-0.409037000	0.061610000

6	-1.594236000	0.174925000	0.000083000	8	-2.991781000	-1.070606000	-0.862618000
8	-2.163915000	-0.826864000	-0.000063000	8	-2.612171000	0.253345000	0.988994000
8	-1.027393000	1.181558000	0.000031000	6	2.515752000	-0.807479000	0.071491000
				8	2.914477000	-0.413591000	-0.937642000
				8	2.119332000	-1.204129000	1.079097000
				5	0.958689000	2.195502000	0.226663000
BH ₂ BH ₂ -CO ₂				BH ₂ BH ₂ -2CO ₂			
5	-1.501224000	-0.821588000	0.000231000	5	0.149808000	0.246313000	0.114265000
5	-2.808768000	0.167757000	-0.000252000	5	-0.543405000	1.734242000	0.031051000
1	-1.024460000	-1.234117000	-1.012310000	1	0.423303000	-0.376027000	-0.865519000
1	-1.025065000	-1.233635000	1.013236000	1	0.432332000	-0.257392000	1.156826000
1	-2.715396000	1.353939000	-0.000375000	1	0.117813000	2.722066000	-0.021600000
1	-3.914089000	-0.279510000	-0.000441000	1	-1.725927000	1.899543000	0.020234000
6	1.375084000	0.209575000	-0.000008000	6	3.174218000	-0.132119000	-0.041932000
8	2.303784000	-0.470143000	-0.000198000	8	3.624541000	-1.188635000	-0.123031000
8	0.443525000	0.895772000	0.000204000	8	2.726335000	0.931090000	0.038761000
				6	-3.051551000	-0.498361000	-0.004390000
				8	-2.086717000	-1.102347000	0.199806000
				8	-4.016101000	0.096382000	-0.207859000
TS2				TS3			
5	0.048918000	0.676444000	0.465429000	5	0.884404000	0.088391000	-0.659242000
5	-0.735429000	2.041410000	-0.015213000	5	-0.737247000	0.363248000	-0.624693000
1	0.118800000	-0.225853000	-0.309239000	1	1.488221000	0.194581000	0.360960000
1	0.697937000	0.607765000	1.459479000	1	1.444776000	-0.375943000	-1.599119000
1	-0.899482000	2.278498000	1.231498000	1	-0.610881000	0.623201000	-1.858537000
1	0.420481000	2.270062000	-0.331593000	1	-0.597342000	-0.836989000	-0.438004000
1	-1.640946000	2.194004000	-0.755528000	1	-1.385028000	1.055526000	0.077932000
1	-0.780539000	3.060266000	0.805331000	1	-1.417958000	0.206881000	-1.719650000
6	2.906643000	-0.400446000	-0.133205000	6	-3.662219000	-0.738761000	0.152785000
8	2.909349000	-1.497915000	0.218110000	8	-3.944712000	-0.472944000	-0.935512000
8	2.911506000	0.699405000	-0.487072000	8	-3.388708000	-1.009102000	1.238857000
6	-2.656133000	-0.677983000	-0.065592000	6	2.548690000	-2.415911000	0.153728000
8	-2.418073000	-0.747147000	1.063631000	8	3.652683000	-2.086327000	0.154550000
8	-2.901126000	-0.617272000	-1.189450000	8	1.443421000	-2.752779000	0.153722000
				6	1.130736000	3.014053000	0.222322000
				8	1.621192000	2.868378000	-0.814376000
				8	0.646022000	3.167556000	1.255644000
IM3				BH ₂ BH ₂ -3CO ₂			
5	-0.027802000	-0.003067000	-0.032108000	5	-1.121585000	0.451711000	0.056313000
1	1.028759000	0.341714000	-0.442096000	5	0.252605000	-0.389113000	0.383974000
1	-1.027186000	0.483107000	-0.441535000	1	-1.477097000	0.671921000	-1.058520000
1	-0.116232000	-1.306706000	-0.114574000	1	-1.804024000	0.885090000	0.932090000
1	0.894753000	-1.706651000	1.605289000	1	0.231220000	-1.574801000	0.494220000
1	-1.163843000	-1.573786000	1.607428000	1	1.312085000	0.143967000	0.520923000
1	-0.023537000	0.073797000	1.274306000	6	2.955182000	-1.921416000	-0.170417000
6	0.281701000	3.118323000	-0.125921000	8	3.285843000	-2.135638000	0.913029000
8	0.347261000	3.397807000	-1.242012000	8	2.629256000	-1.709865000	-1.258639000
8	0.215874000	2.838807000	0.992999000	6	-3.866184000	-0.879469000	0.017668000
6	-3.220093000	-1.129099000	-0.157891000	8	-4.837659000	-0.263701000	-0.016487000
8	-2.790616000	-1.906873000	-0.894755000	8	-2.891183000	-1.501519000	0.044898000
8	-3.650569000	-0.351692000	0.577027000	6	1.167752000	2.811999000	-0.022555000
6	2.987825000	-1.540352000	-0.139134000	8	0.011605000	2.796264000	-0.019442000
8	2.469509000	-2.267768000	-0.870436000	8	2.303846000	2.829601000	-0.031741000
8	3.507606000	-0.813685000	0.590240000				
5	-0.108565000	-1.232428000	1.196979000				

Table S2. Computed vibrational modes and frequencies of BH_3BH_3 , CO_2 , $\text{BH}_3\text{BH}_3\text{--CO}_2$, $\text{BH}_3\text{BH}_3\text{--}2\text{CO}_2$, and $\text{BH}_3\text{BH}_3\text{--}3\text{CO}_2$ were calculated at the M06-2X/6-311++G(3df,2p) level of theory in the gas phase.

# IR Spectrum of CO2 # IR Spectrum # X-Axis: Frequency (cm-1) # Y-Axis: ϵ ; (M-1 cm-1)				# IR Spectrum of IM0 # IR Spectrum # X-Axis: Frequency (cm-1) # Y-Axis: ϵ ; (M-1 cm-1)			
# Peak information # X Y # 702.4258000000 218.3722966345 # 702.4258000000 218.3722966345 # 1417.3958000000 0.0000000000 # 2463.1012000000 1285.4837633965				# Peak information # X Y # 331.6973000000 206.0996960494 # 816.5676000000 0.0000000000 # 859.1255000000 0.0000000000 # 886.5419000000 0.0000000000 # 930.3726000000 0.0000000000 # 958.0999000000 1.5368820921 # 998.1973000000 98.5350250585 # 1050.4539000000 0.0000000000 # 1197.7797000000 248.9778548852 # 1207.6680000000 0.0000000000 # 1726.6475000000 1119.3412961243 # 1882.4025000000 0.0000000000 # 2019.9405000000 16.8047452981 # 2189.6973000000 0.0000000000 # 2670.0121000000 210.0556130875 # 2683.5704000000 0.0000000000 # 2759.2543000000 0.0004337473 # 2773.5177000000 236.7529346516			
# Spectra # X Y DY/DX 600.0000000000 0.4047012984 0.0078902976 604.0000000000 0.4382082789 0.0088896556 608.0000000000 0.4760528716 0.0100650486 612.0000000000 0.5190168709 0.0114569795 616.0000000000 0.5680663443 0.0131176595 620.0000000000 0.6244062768 0.0151151519 624.0000000000 0.6895550779 0.0175392777 628.0000000000 0.7654476488 0.0205101730 632.0000000000 0.8545802232 0.0241909148 636.0000000000 0.9602174887 0.0288065231 640.0000000000 1.0866945408 0.0346731991 644.0000000000 1.2398666489 0.0422444296 648.0000000000 1.4277955353 0.0521857208 652.0000000000 1.6618254091 0.0654995646 656.0000000000 1.9583231385 0.0837419236 660.0000000000 2.3415942359 0.1094128038 664.0000000000 2.8489746035 0.1466948609 668.0000000000 3.5401616434 0.2029294377 672.0000000000 4.5153257184 0.2917662144 676.0000000000 5.9527904257 0.4404373652 680.0000000000 8.1944099048 0.7082688473 684.0000000000 11.9608823662 1.2398456348 688.0000000000 18.9743161159 2.4427948538 692.0000000000 34.1002921574 5.7021733413 696.0000000000 74.2214581191 16.6494922799 700.0000000000 194.3025181156 43.0751378348 704.0000000000 230.1217796029 -39.2093986806 708.0000000000 90.3348305687 -21.3947808226 712.0000000000 39.4947520772 -7.0241876543 716.0000000000 21.2335852929 -2.8785629539 720.0000000000 13.0896775606 -1.4162772790 724.0000000000 8.8321714596 -0.7915612205 728.0000000000 6.3462127957 -0.4844468586 732.0000000000 4.7743718168 -0.3170737633 736.0000000000 3.7194843234 -0.2184670601 740.0000000000 2.9781156222 -0.1567428281 744.0000000000 2.4376176160 -0.1161903036 748.0000000000 2.0316287141 -0.0884754061 752.0000000000 1.7190379646 -0.0689035308 756.0000000000 1.4732943175 -0.0546952420 760.0000000000 1.2766390140 -0.0441345764 764.0000000000 1.1168342014 -0.0361235991 768.0000000000 0.9852267120 -0.0299378207 772.0000000000 0.8755593272 -0.0250861610 776.0000000000 0.7832173445 -0.0212277990 780.0000000000 0.7047375130 -0.0181211982 784.0000000000 0.6374799653 -0.0155919606 788.0000000000 0.5794041655 -0.0135120393 792.0000000000 0.5289128456 -0.0117859880 796.0000000000 0.4847413473 -0.0103416796 800.0000000000 0.4458778851 -0.0091239247 804.0000000000 0.4115052406 -0.0080900085 808.0000000000 0.3809575515 -0.0072065234 812.0000000000 0.3536878916 -0.0064470868 816.0000000000 0.3292436693 -0.0057906775 820.0000000000 0.3072477623 -0.0052204064				# Spectra # X Y DY/DX 0.0000000000 0.0000000000 0.0000000000 6.0000000000 0.0000000000 0.0000000000 12.0000000000 0.0000000000 0.0000000000 18.0000000000 0.0000000000 0.0000000000 24.0000000000 0.0000000000 0.0000000000 30.0000000000 0.0000000000 0.0000000000 36.0000000000 0.0000000000 0.0000000000 42.0000000000 0.0000000000 0.0000000000 48.0000000000 0.0000000000 0.0000000000 54.0000000000 0.0000000000 0.0000000000 60.0000000000 0.0000000000 0.0000000000 66.0000000000 0.0000000000 0.0000000000 72.0000000000 0.0000000000 0.0000000000 78.0000000000 0.0000000000 0.0000000000 84.0000000000 0.0000000000 0.0000000000 90.0000000000 0.0000000000 0.0000000000 96.0000000000 0.0000000000 0.0000000000 102.0000000000 0.0000000000 0.0000000000 108.0000000000 0.0000000000 0.0000000000 114.0000000000 0.0000000000 0.0000000000 120.0000000000 0.0000000000 0.0000000000 126.0000000000 0.0000000000 0.0000000000 132.0000000000 0.0000000000 0.0000000000 138.0000000000 0.0000000000 0.0000000000 144.0000000000 0.0000000000 0.0000000000 150.0000000000 0.0000000000 0.0000000000 156.0000000000 0.0000000000 0.0000000000 162.0000000000 0.0000000000 0.0000000000 168.0000000000 0.0000000000 0.0000000000 174.0000000000 0.0380783938 0.0004826197 180.0000000000 0.0411480168 0.0005421247 186.0000000000 0.0446042498 0.0006118254 192.0000000000 0.0485148309 0.0006940018 198.0000000000 0.0529630059 0.0007915738 204.0000000000 0.0580519905 0.0009083213 210.0000000000 0.0639110054 0.0010491939 216.0000000000 0.0707035498 0.0012207569 222.0000000000 0.0786389172 0.0014318401 228.0000000000 0.0879884859 0.0016945043 234.0000000000 0.0991091927 0.0020255080 240.0000000000 0.1124780432 0.0024485872 246.0000000000 0.1287440136 0.0029980906			

824.0000000000	0.2873839099	-0.0047225998	252.0000000000	0.1488081181	0.0037249495
828.0000000000	0.2693852999	-0.0042861072	258.0000000000	0.1739505503	0.0047068106
832.0000000000	0.2530255754	-0.0039017748	264.0000000000	0.2060393600	0.0060659002
836.0000000000	0.2381116935	-0.0035620405	270.0000000000	0.2478862940	0.0080019295
840.0000000000	0.2244782116	-0.0032606202	276.0000000000	0.3038813159	0.0108558959
844.0000000000	0.2119826855	-0.0029922627	282.0000000000	0.3811856149	0.0152415569
848.0000000000	0.2005019374	-0.0027525574	288.0000000000	0.4921226019	0.0223369955
852.0000000000	0.1899290127	-0.0025377810	294.0000000000	0.6593614884	0.0345924189
856.0000000000	0.1801706819	-0.0023447759	300.0000000000	0.9283256273	0.0576562617
860.0000000000	0.1711453809	-0.0021708524	306.0000000000	1.4009872496	0.1064582666
864.0000000000	0.0000000000	0.0000000000	312.0000000000	2.3455392289	0.2287260509
868.0000000000	0.0000000000	0.0000000000	318.0000000000	4.6536584485	0.6261054861
872.0000000000	0.0000000000	0.0000000000	324.0000000000	12.5924152807	2.5762026299
876.0000000000	0.0000000000	0.0000000000	330.0000000000	50.1863308795	9.0230431213
880.0000000000	0.0000000000	0.0000000000	336.0000000000	27.4549649528	-6.8455190649
884.0000000000	0.0000000000	0.0000000000	342.0000000000	7.7576206916	-1.3086745792
888.0000000000	0.0000000000	0.0000000000	348.0000000000	3.3627868531	-0.3891183834
892.0000000000	0.0000000000	0.0000000000	354.0000000000	1.8456178435	-0.1603483642
896.0000000000	0.0000000000	0.0000000000	360.0000000000	1.1597426891	-0.0803479287
900.0000000000	0.0000000000	0.0000000000	366.0000000000	0.7944823737	-0.0457004386
904.0000000000	0.0000000000	0.0000000000	372.0000000000	0.5776717915	-0.0283870324
908.0000000000	0.0000000000	0.0000000000	378.0000000000	0.4386971090	-0.0188087265
912.0000000000	0.0000000000	0.0000000000	384.0000000000	0.3443701631	-0.0130917792
916.0000000000	0.0000000000	0.0000000000	390.0000000000	0.2774531817	-0.0094730890
920.0000000000	0.0000000000	0.0000000000	396.0000000000	0.2282815234	-0.0070728470
924.0000000000	0.0000000000	0.0000000000	402.0000000000	0.1910991731	-0.0054189251
928.0000000000	0.0000000000	0.0000000000	408.0000000000	0.1623060785	-0.0042426090
932.0000000000	0.0000000000	0.0000000000	414.0000000000	0.1395576596	-0.0033833347
936.0000000000	0.0000000000	0.0000000000	420.0000000000	0.1212741532	-0.0027411577
940.0000000000	0.0000000000	0.0000000000	426.0000000000	0.1063598078	-0.0022516597
944.0000000000	0.0000000000	0.0000000000	432.0000000000	0.0940353365	-0.0018720538
948.0000000000	0.0000000000	0.0000000000	438.0000000000	0.0837342999	-0.0015731662
952.0000000000	0.0000000000	0.0000000000	444.0000000000	0.0750369985	-0.0013346415
956.0000000000	0.0000000000	0.0000000000	450.0000000000	0.0676271274	-0.0011419841
960.0000000000	0.0000000000	0.0000000000	456.0000000000	0.0612626604	-0.0009846815
964.0000000000	0.0000000000	0.0000000000	462.0000000000	0.0557558666	-0.0008549842
968.0000000000	0.0000000000	0.0000000000	468.0000000000	0.0509593275	-0.0007470942
972.0000000000	0.0000000000	0.0000000000	474.0000000000	0.0467559811	-0.0006566153
976.0000000000	0.0000000000	0.0000000000	480.0000000000	0.0430519199	-0.0005801732
980.0000000000	0.0000000000	0.0000000000	486.0000000000	0.0397711056	-0.0005151484
984.0000000000	0.0000000000	0.0000000000	492.0000000000	0.0000000000	0.0000000000
988.0000000000	0.0000000000	0.0000000000	498.0000000000	0.0000000000	0.0000000000
992.0000000000	0.0000000000	0.0000000000	504.0000000000	0.0000000000	0.0000000000
996.0000000000	0.0000000000	0.0000000000	510.0000000000	0.0000000000	0.0000000000
1000.0000000000	0.0000000000	0.0000000000	516.0000000000	0.0000000000	0.0000000000
1004.0000000000	0.0000000000	0.0000000000	522.0000000000	0.0000000000	0.0000000000
1008.0000000000	0.0000000000	0.0000000000	528.0000000000	0.0000000000	0.0000000000
1012.0000000000	0.0000000000	0.0000000000	534.0000000000	0.0000000000	0.0000000000
1016.0000000000	0.0000000000	0.0000000000	540.0000000000	0.0000000000	0.0000000000
1020.0000000000	0.0000000000	0.0000000000	546.0000000000	0.0000000000	0.0000000000
1024.0000000000	0.0000000000	0.0000000000	552.0000000000	0.0000000000	0.0000000000
1028.0000000000	0.0000000000	0.0000000000	558.0000000000	0.0000000000	0.0000000000
1032.0000000000	0.0000000000	0.0000000000	564.0000000000	0.0000000000	0.0000000000
1036.0000000000	0.0000000000	0.0000000000	570.0000000000	0.0000000000	0.0000000000
1040.0000000000	0.0000000000	0.0000000000	576.0000000000	0.0000000000	0.0000000000
1044.0000000000	0.0000000000	0.0000000000	582.0000000000	0.0000000000	0.0000000000
1048.0000000000	0.0000000000	0.0000000000	588.0000000000	0.0000000000	0.0000000000
1052.0000000000	0.0000000000	0.0000000000	594.0000000000	0.0000000000	0.0000000000
1056.0000000000	0.0000000000	0.0000000000	600.0000000000	0.0000000000	0.0000000000
1060.0000000000	0.0000000000	0.0000000000	606.0000000000	0.0000000000	0.0000000000
1064.0000000000	0.0000000000	0.0000000000	612.0000000000	0.0000000000	0.0000000000
1068.0000000000	0.0000000000	0.0000000000	618.0000000000	0.0000000000	0.0000000000
1072.0000000000	0.0000000000	0.0000000000	624.0000000000	0.0000000000	0.0000000000
1076.0000000000	0.0000000000	0.0000000000	630.0000000000	0.0000000000	0.0000000000
1080.0000000000	0.0000000000	0.0000000000	636.0000000000	0.0000000000	0.0000000000
1084.0000000000	0.0000000000	0.0000000000	642.0000000000	0.0000000000	0.0000000000
1088.0000000000	0.0000000000	0.0000000000	648.0000000000	0.0000000000	0.0000000000
1092.0000000000	0.0000000000	0.0000000000	654.0000000000	0.0000000000	0.0000000000
1096.0000000000	0.0000000000	0.0000000000	660.0000000000	0.0000000000	0.0000000000
1100.0000000000	0.0000000000	0.0000000000	666.0000000000	0.0000000000	0.0000000000
1104.0000000000	0.0000000000	0.0000000000	672.0000000000	0.0000000000	0.0000000000
1108.0000000000	0.0000000000	0.0000000000	678.0000000000	0.0000000000	0.0000000000
1112.0000000000	0.0000000000	0.0000000000	684.0000000000	0.0000000000	0.0000000000
1116.0000000000	0.0000000000	0.0000000000	690.0000000000	0.0000000000	0.0000000000
1120.0000000000	0.0000000000	0.0000000000	696.0000000000	0.0000000000	0.0000000000
1124.0000000000	0.0000000000	0.0000000000	702.0000000000	0.0000000000	0.0000000000
1128.0000000000	0.0000000000	0.0000000000	708.0000000000	0.0000000000	0.0000000000
1132.0000000000	0.0000000000	0.0000000000	714.0000000000	0.0000000000	0.0000000000

1136.0000000000	0.0000000000	0.0000000000	720.0000000000	0.0000000000	0.0000000000
1140.0000000000	0.0000000000	0.0000000000	726.0000000000	0.0000000000	0.0000000000
1144.0000000000	0.0000000000	0.0000000000	732.0000000000	0.0000000000	0.0000000000
1148.0000000000	0.0000000000	0.0000000000	738.0000000000	0.0000000000	0.0000000000
1152.0000000000	0.0000000000	0.0000000000	744.0000000000	0.0000000000	0.0000000000
1156.0000000000	0.0000000000	0.0000000000	750.0000000000	0.0000000000	0.0000000000
1160.0000000000	0.0000000000	0.0000000000	756.0000000000	0.0000000000	0.0000000000
1164.0000000000	0.0000000000	0.0000000000	762.0000000000	0.0000000000	0.0000000000
1168.0000000000	0.0000000000	0.0000000000	768.0000000000	0.0000000000	0.0000000000
1172.0000000000	0.0000000000	0.0000000000	774.0000000000	0.0000000000	0.0000000000
1176.0000000000	0.0000000000	0.0000000000	780.0000000000	0.0000000000	0.0000000000
1180.0000000000	0.0000000000	0.0000000000	786.0000000000	0.0000000000	0.0000000000
1184.0000000000	0.0000000000	0.0000000000	792.0000000000	0.0000000000	0.0000000000
1188.0000000000	0.0000000000	0.0000000000	798.0000000000	0.0000000000	0.0000000000
1192.0000000000	0.0000000000	0.0000000000	804.0000000000	0.0008588974	0.0000111398
1196.0000000000	0.0000000000	0.0000000000	810.0000000000	0.0009298487	0.0000125479
1200.0000000000	0.0000000000	0.0000000000	816.0000000000	0.0010099665	0.0000142036
1204.0000000000	0.0000000000	0.0000000000	822.0000000000	0.0011009002	0.0000161639
1208.0000000000	0.0000000000	0.0000000000	828.0000000000	0.0012046871	0.0000185019
1212.0000000000	0.0000000000	0.0000000000	834.0000000000	0.0013238681	0.0000213134
1216.0000000000	0.0000000000	0.0000000000	840.0000000000	0.0559016917	0.0007125397
1220.0000000000	0.0000000000	0.0000000000	846.0000000000	0.0604360528	0.0008012346
1224.0000000000	0.0000000000	0.0000000000	852.0000000000	0.0655473092	0.0009053561
1228.0000000000	0.0000000000	0.0000000000	858.0000000000	0.0713381726	0.0010284348
1232.0000000000	0.0000000000	0.0000000000	864.0000000000	0.0779354644	0.0011750282
1236.0000000000	0.0000000000	0.0000000000	870.0000000000	0.0854973265	0.0013510928
1240.0000000000	0.0000000000	0.0000000000	876.0000000000	0.0942231293	0.0015645226
1244.0000000000	0.0000000000	0.0000000000	882.0000000000	0.1043673278	0.0018259463
1248.0000000000	0.0000000000	0.0000000000	888.0000000000	0.1162592387	0.0021499372
1252.0000000000	0.0000000000	0.0000000000	894.0000000000	0.1303319562	0.0025569088
1256.0000000000	0.0000000000	0.0000000000	900.0000000000	0.1471658653	0.0030761985
1260.0000000000	0.0000000000	0.0000000000	906.0000000000	0.1675565025	0.0037513289
1264.0000000000	0.0000000000	0.0000000000	912.0000000000	0.1926253211	0.0046495546
1268.0000000000	0.0000000000	0.0000000000	918.0000000000	0.2240117255	0.0058806517
1272.0000000000	0.0000000000	0.0000000000	924.0000000000	0.2642347649	0.0076382039
1276.0000000000	0.0000000000	0.0000000000	930.0000000000	0.3174594925	0.0103050544
1280.0000000000	0.0000000000	0.0000000000	936.0000000000	0.3914238532	0.0147845954
1284.0000000000	0.0000000000	0.0000000000	942.0000000000	0.5036670204	0.0238856488
1288.0000000000	0.0000000000	0.0000000000	948.0000000000	0.7105838945	0.0508904142
1292.0000000000	0.0000000000	0.0000000000	954.0000000000	1.3143208025	0.1865423180
1296.0000000000	0.0000000000	0.0000000000	960.0000000000	1.9650205395	-0.1538158555
1300.0000000000	0.0000000000	0.0000000000	966.0000000000	1.5553912391	0.0267755983
1304.0000000000	0.0000000000	0.0000000000	972.0000000000	2.0387648267	0.1318597569
1308.0000000000	0.0000000000	0.0000000000	978.0000000000	3.2654111918	0.3016420001
1312.0000000000	0.0000000000	0.0000000000	984.0000000000	6.2959779660	0.8155803391
1316.0000000000	0.0000000000	0.0000000000	990.0000000000	16.4065091674	3.2279665679
1320.0000000000	0.0000000000	0.0000000000	996.0000000000	65.4692255075	13.8098843649
1324.0000000000	0.0000000000	0.0000000000	1002.0000000000	44.7670716958	-11.1753174531
1328.0000000000	0.0000000000	0.0000000000	1008.0000000000	12.1704520661	-2.1275496198
1332.0000000000	0.0000000000	0.0000000000	1014.0000000000	5.1370166282	-0.6104557390
1336.0000000000	0.0000000000	0.0000000000	1020.0000000000	2.7798791401	-0.2463995026
1340.0000000000	0.0000000000	0.0000000000	1026.0000000000	1.7323275883	-0.1219072675
1344.0000000000	0.0000000000	0.0000000000	1032.0000000000	1.1803896644	-0.0687586317
1348.0000000000	0.0000000000	0.0000000000	1038.0000000000	1.0169327639	-0.0404352101
1352.0000000000	0.0000000000	0.0000000000	1044.0000000000	0.8223656306	-0.0257419453
1356.0000000000	0.0000000000	0.0000000000	1050.0000000000	0.6965683287	-0.0168767703
1360.0000000000	0.0000000000	0.0000000000	1056.0000000000	0.6136880636	-0.0111311678
1364.0000000000	0.0000000000	0.0000000000	1062.0000000000	0.5594930765	-0.0071554248
1368.0000000000	0.0000000000	0.0000000000	1068.0000000000	0.5257609594	-0.0042202589
1372.0000000000	0.0000000000	0.0000000000	1074.0000000000	0.5076275895	-0.0019012725
1376.0000000000	0.0000000000	0.0000000000	1080.0000000000	0.5022524520	0.0000684600
1380.0000000000	0.0000000000	0.0000000000	1086.0000000000	0.5081217521	0.0018732035
1384.0000000000	0.0000000000	0.0000000000	1092.0000000000	0.5246884179	0.0036562484
1388.0000000000	0.0000000000	0.0000000000	1098.0000000000	0.5522105675	0.0055464137
1392.0000000000	0.0000000000	0.0000000000	1104.0000000000	0.5917277335	0.0076786250
1396.0000000000	0.0000000000	0.0000000000	1110.0000000000	0.6451580747	0.0102145582
1400.0000000000	0.0000000000	0.0000000000	1116.0000000000	0.7155333124	0.0133689172
1404.0000000000	0.0000000000	0.0000000000	1122.0000000000	0.8066668144	0.0174581387
1408.0000000000	0.0000000000	0.0000000000	1128.0000000000	0.9269772063	0.0229279387
1412.0000000000	0.0000000000	0.0000000000	1134.0000000000	1.0860322544	0.0305285399
1416.0000000000	0.0000000000	0.0000000000	1140.0000000000	1.2999926557	0.0414951212
1420.0000000000	0.0000000000	0.0000000000	1146.0000000000	1.5949359491	0.0580016013
1424.0000000000	0.0000000000	0.0000000000	1152.0000000000	2.0149771567	0.0841168622
1428.0000000000	0.0000000000	0.0000000000	1158.0000000000	2.6393773479	0.1280485528
1432.0000000000	0.0000000000	0.0000000000	1164.0000000000	3.5724479863	0.2085896550
1436.0000000000	0.0000000000	0.0000000000	1170.0000000000	5.2475614493	0.3701244424
1440.0000000000	0.0000000000	0.0000000000	1176.0000000000	8.4297354347	0.7488329252
1444.0000000000	0.0000000000	0.0000000000	1182.0000000000	15.5984240612	1.8576561816

1448.0000000000	0.0000000000	0.0000000000	1188.0000000000	37.0250086694	6.4866582745
1452.0000000000	0.0000000000	0.0000000000	1194.0000000000	136.4837776650	34.0662672214
1456.0000000000	0.0000000000	0.0000000000	1200.0000000000	197.4973067371	-41.9024255316
1460.0000000000	0.0000000000	0.0000000000	1206.0000000000	49.4603435705	-9.7298708113
1464.0000000000	0.0000000000	0.0000000000	1212.0000000000	18.9424609672	-2.4688045525
1468.0000000000	0.0000000000	0.0000000000	1218.0000000000	9.7292297267	-0.9260824623
1472.0000000000	0.0000000000	0.0000000000	1224.0000000000	5.8756807955	-0.4379849560
1476.0000000000	0.0000000000	0.0000000000	1230.0000000000	3.9212394930	-0.2397074129
1480.0000000000	0.0000000000	0.0000000000	1236.0000000000	2.7990181339	-0.1448807431
1484.0000000000	0.0000000000	0.0000000000	1242.0000000000	2.0967294691	-0.0940614419
1488.0000000000	0.0000000000	0.0000000000	1248.0000000000	1.6286201023	-0.0644501650
1492.0000000000	0.0000000000	0.0000000000	1254.0000000000	1.3012046841	-0.0460563528
1496.0000000000	0.0000000000	0.0000000000	1260.0000000000	1.0633333736	-0.0340389488
1500.0000000000	0.0000000000	0.0000000000	1266.0000000000	0.8851300767	-0.0258602650
1504.0000000000	0.0000000000	0.0000000000	1272.0000000000	0.7482036916	-0.0201033090
1508.0000000000	0.0000000000	0.0000000000	1278.0000000000	0.6407341064	-0.0159347449
1512.0000000000	0.0000000000	0.0000000000	1284.0000000000	0.5548454948	-0.0128427730
1516.0000000000	0.0000000000	0.0000000000	1290.0000000000	0.4851270580	-0.0105012906
1520.0000000000	0.0000000000	0.0000000000	1296.0000000000	0.4277624417	-0.0086958433
1524.0000000000	0.0000000000	0.0000000000	1302.0000000000	0.3799976801	-0.0072814749
1528.0000000000	0.0000000000	0.0000000000	1308.0000000000	0.3398052349	-0.0061578183
1532.0000000000	0.0000000000	0.0000000000	1314.0000000000	0.3056657090	-0.0052538852
1536.0000000000	0.0000000000	0.0000000000	1320.0000000000	0.2764223970	-0.0045185069
1540.0000000000	0.0000000000	0.0000000000	1326.0000000000	0.2511821742	-0.0039141690
1544.0000000000	0.0000000000	0.0000000000	1332.0000000000	0.2292465937	-0.0034129438
1548.0000000000	0.0000000000	0.0000000000	1338.0000000000	0.2100631113	-0.0029937507
1552.0000000000	0.0000000000	0.0000000000	1344.0000000000	0.1931899913	-0.0026404750
1556.0000000000	0.0000000000	0.0000000000	1350.0000000000	0.1782706776	-0.0023406558
1560.0000000000	0.0000000000	0.0000000000	1356.0000000000	0.1650148213	-0.0020845545
1564.0000000000	0.0000000000	0.0000000000	1362.0000000000	0.0000000000	0.0000000000
1568.0000000000	0.0000000000	0.0000000000	1368.0000000000	0.0000000000	0.0000000000
1572.0000000000	0.0000000000	0.0000000000	1374.0000000000	0.0000000000	0.0000000000
1576.0000000000	0.0000000000	0.0000000000	1380.0000000000	0.0000000000	0.0000000000
1580.0000000000	0.0000000000	0.0000000000	1386.0000000000	0.0000000000	0.0000000000
1584.0000000000	0.0000000000	0.0000000000	1392.0000000000	0.0000000000	0.0000000000
1588.0000000000	0.0000000000	0.0000000000	1398.0000000000	0.0000000000	0.0000000000
1592.0000000000	0.0000000000	0.0000000000	1404.0000000000	0.0000000000	0.0000000000
1596.0000000000	0.0000000000	0.0000000000	1410.0000000000	0.0000000000	0.0000000000
1600.0000000000	0.0000000000	0.0000000000	1416.0000000000	0.0000000000	0.0000000000
1604.0000000000	0.0000000000	0.0000000000	1422.0000000000	0.0000000000	0.0000000000
1608.0000000000	0.0000000000	0.0000000000	1428.0000000000	0.0000000000	0.0000000000
1612.0000000000	0.0000000000	0.0000000000	1434.0000000000	0.0000000000	0.0000000000
1616.0000000000	0.0000000000	0.0000000000	1440.0000000000	0.0000000000	0.0000000000
1620.0000000000	0.0000000000	0.0000000000	1446.0000000000	0.0000000000	0.0000000000
1624.0000000000	0.0000000000	0.0000000000	1452.0000000000	0.0000000000	0.0000000000
1628.0000000000	0.0000000000	0.0000000000	1458.0000000000	0.0000000000	0.0000000000
1632.0000000000	0.0000000000	0.0000000000	1464.0000000000	0.0000000000	0.0000000000
1636.0000000000	0.0000000000	0.0000000000	1470.0000000000	0.0000000000	0.0000000000
1640.0000000000	0.0000000000	0.0000000000	1476.0000000000	0.0000000000	0.0000000000
1644.0000000000	0.0000000000	0.0000000000	1482.0000000000	0.0000000000	0.0000000000
1648.0000000000	0.0000000000	0.0000000000	1488.0000000000	0.0000000000	0.0000000000
1652.0000000000	0.0000000000	0.0000000000	1494.0000000000	0.0000000000	0.0000000000
1656.0000000000	0.0000000000	0.0000000000	1500.0000000000	0.0000000000	0.0000000000
1660.0000000000	0.0000000000	0.0000000000	1506.0000000000	0.0000000000	0.0000000000
1664.0000000000	0.0000000000	0.0000000000	1512.0000000000	0.0000000000	0.0000000000
1668.0000000000	0.0000000000	0.0000000000	1518.0000000000	0.0000000000	0.0000000000
1672.0000000000	0.0000000000	0.0000000000	1524.0000000000	0.0000000000	0.0000000000
1676.0000000000	0.0000000000	0.0000000000	1530.0000000000	0.0000000000	0.0000000000
1680.0000000000	0.0000000000	0.0000000000	1536.0000000000	0.0000000000	0.0000000000
1684.0000000000	0.0000000000	0.0000000000	1542.0000000000	0.0000000000	0.0000000000
1688.0000000000	0.0000000000	0.0000000000	1548.0000000000	0.0000000000	0.0000000000
1692.0000000000	0.0000000000	0.0000000000	1554.0000000000	0.0000000000	0.0000000000
1696.0000000000	0.0000000000	0.0000000000	1560.0000000000	0.0000000000	0.0000000000
1700.0000000000	0.0000000000	0.0000000000	1566.0000000000	0.0000000000	0.0000000000
1704.0000000000	0.0000000000	0.0000000000	1572.0000000000	1.1193789344	0.0144668431
1708.0000000000	0.0000000000	0.0000000000	1578.0000000000	1.2115010808	0.0162885276
1712.0000000000	0.0000000000	0.0000000000	1584.0000000000	1.3154783489	0.0184292721
1716.0000000000	0.0000000000	0.0000000000	1590.0000000000	1.4334350882	0.0209620793
1720.0000000000	0.0000000000	0.0000000000	1596.0000000000	1.5679935454	0.0239809428
1724.0000000000	0.0000000000	0.0000000000	1602.0000000000	1.7224207033	0.0276082357
1728.0000000000	0.0000000000	0.0000000000	1608.0000000000	1.9008282226	0.0320052292
1732.0000000000	0.0000000000	0.0000000000	1614.0000000000	2.1084486107	0.0373873089
1736.0000000000	0.0000000000	0.0000000000	1620.0000000000	2.3520227212	0.0440463892
1740.0000000000	0.0000000000	0.0000000000	1626.0000000000	2.6403529578	0.0523845928
1744.0000000000	0.0000000000	0.0000000000	1632.0000000000	2.9851083543	0.0629659781
1748.0000000000	0.0000000000	0.0000000000	1638.0000000000	3.4020215494	0.0765979630
1752.0000000000	0.0000000000	0.0000000000	1644.0000000000	3.9127116672	0.0944630621
1756.0000000000	0.0000000000	0.0000000000	1650.0000000000	4.5475367350	0.1183387652

1760.0000000000	0.0000000000	0.0000000000	1656.0000000000	5.3501972005	0.1509777626
1764.0000000000	0.0000000000	0.0000000000	1662.0000000000	6.3854343353	0.1967928107
1768.0000000000	0.0000000000	0.0000000000	1668.0000000000	7.7524471452	0.2631502211
1772.0000000000	0.0000000000	0.0000000000	1674.0000000000	9.6094409363	0.3629531787
1776.0000000000	0.0000000000	0.0000000000	1680.0000000000	12.2212313957	0.5201575600
1780.0000000000	0.0000000000	0.0000000000	1686.0000000000	16.0583255572	0.7825479602
1784.0000000000	0.0000000000	0.0000000000	1692.0000000000	22.0221335004	1.2544902577
1788.0000000000	0.0000000000	0.0000000000	1698.0000000000	32.0180137341	2.1925631396
1792.0000000000	0.0000000000	0.0000000000	1704.0000000000	50.6491569226	4.3375182712
1796.0000000000	0.0000000000	0.0000000000	1710.0000000000	91.3859448929	10.3796914618
1800.0000000000	0.0000000000	0.0000000000	1716.0000000000	207.0724428210	34.0854372800
1804.0000000000	0.0000000000	0.0000000000	1722.0000000000	712.4823890000	176.1344363229
1808.0000000000	0.0000000000	0.0000000000	1728.0000000000	1502.5196532033	-227.9576671581
1812.0000000000	0.0000000000	0.0000000000	1734.0000000000	382.3735699110	-80.2578223993
1816.0000000000	0.0000000000	0.0000000000	1740.0000000000	137.8810564963	-18.9517098619
1820.0000000000	0.0000000000	0.0000000000	1746.0000000000	68.5979179999	-6.7988514617
1824.0000000000	0.0000000000	0.0000000000	1752.0000000000	40.6661679895	-3.1301409882
1828.0000000000	0.0000000000	0.0000000000	1758.0000000000	26.8161803661	-1.6832267330
1832.0000000000	0.0000000000	0.0000000000	1764.0000000000	18.9828742966	-1.0048939362
1836.0000000000	0.0000000000	0.0000000000	1770.0000000000	14.1332980360	-0.6465137842
1840.0000000000	0.0000000000	0.0000000000	1776.0000000000	10.9267625922	-0.4399150085
1844.0000000000	0.0000000000	0.0000000000	1782.0000000000	8.6979494096	-0.3126422033
1848.0000000000	0.0000000000	0.0000000000	1788.0000000000	7.0867438920	-0.2300394643
1852.0000000000	0.0000000000	0.0000000000	1794.0000000000	5.8845988222	-0.1741261706
1856.0000000000	0.0000000000	0.0000000000	1800.0000000000	4.9640257291	-0.1349458630
1860.0000000000	0.0000000000	0.0000000000	1806.0000000000	4.2435569324	-0.1066835079
1864.0000000000	0.0000000000	0.0000000000	1812.0000000000	3.6691723309	-0.0857884998
1868.0000000000	0.0000000000	0.0000000000	1818.0000000000	3.2039125948	-0.0700972373
1872.0000000000	0.0000000000	0.0000000000	1824.0000000000	2.8218024752	-0.0578731253
1876.0000000000	0.0000000000	0.0000000000	1830.0000000000	2.5041559974	-0.0483860705
1880.0000000000	0.0000000000	0.0000000000	1836.0000000000	2.2372537748	-0.0408635246
1884.0000000000	0.0000000000	0.0000000000	1842.0000000000	2.0108397572	-0.0348223876
1888.0000000000	0.0000000000	0.0000000000	1848.0000000000	1.8171230434	-0.0299153444
1892.0000000000	0.0000000000	0.0000000000	1854.0000000000	1.6500997954	-0.0258883578
1896.0000000000	0.0000000000	0.0000000000	1860.0000000000	1.5234641325	-0.0223230061
1900.0000000000	0.0000000000	0.0000000000	1866.0000000000	1.3982119439	-0.0195086266
1904.0000000000	0.0000000000	0.0000000000	1872.0000000000	1.2884902984	-0.0171302118
1908.0000000000	0.0000000000	0.0000000000	1878.0000000000	1.1919482576	-0.0151029662
1912.0000000000	0.0000000000	0.0000000000	1884.0000000000	1.1066866206	-0.0133602065
1916.0000000000	0.0000000000	0.0000000000	1890.0000000000	0.0278392335	0.0004280864
1920.0000000000	0.0000000000	0.0000000000	1896.0000000000	0.0305970167	0.0004932235
1924.0000000000	0.0000000000	0.0000000000	1902.0000000000	0.0337856670	0.0005722691
1928.0000000000	0.0000000000	0.0000000000	1908.0000000000	0.0374998061	0.0006691409
1932.0000000000	0.0000000000	0.0000000000	1914.0000000000	0.0418615173	0.0007891585
1936.0000000000	0.0000000000	0.0000000000	1920.0000000000	0.0470304908	0.0009396646
1940.0000000000	0.0000000000	0.0000000000	1926.0000000000	0.0532188225	0.0011309820
1944.0000000000	0.0000000000	0.0000000000	1932.0000000000	0.0607130763	0.0013779254
1948.0000000000	0.0000000000	0.0000000000	1938.0000000000	0.0699079843	0.0017022544
1952.0000000000	0.0000000000	0.0000000000	1944.0000000000	0.0813593621	0.0021367850
1956.0000000000	0.0000000000	0.0000000000	1950.0000000000	0.0958698446	0.0027325309
1960.0000000000	0.0000000000	0.0000000000	1956.0000000000	0.1146329129	0.0035716344
1964.0000000000	0.0000000000	0.0000000000	1962.0000000000	0.1394852464	0.0047919369
1968.0000000000	0.0000000000	0.0000000000	1968.0000000000	0.1733713631	0.0066364093
1972.0000000000	0.0000000000	0.0000000000	1974.0000000000	0.2212515230	0.0095596185
1976.0000000000	0.0000000000	0.0000000000	1980.0000000000	0.2920091766	0.0144770076
1980.0000000000	0.0000000000	0.0000000000	1986.0000000000	0.4028381883	0.0234127167
1984.0000000000	0.0000000000	0.0000000000	1992.0000000000	0.5905795246	0.0414250701
1988.0000000000	0.0000000000	0.0000000000	1998.0000000000	0.9459420538	0.0834541415
1992.0000000000	0.0000000000	0.0000000000	2004.0000000000	1.7419426151	0.2056089117
1996.0000000000	0.0000000000	0.0000000000	2010.0000000000	4.0979304223	0.7095936119
2000.0000000000	0.0000000000	0.0000000000	2016.0000000000	14.9233938248	3.7304295166
2004.0000000000	0.0000000000	0.0000000000	2022.0000000000	23.2441747845	-4.7300133663
2008.0000000000	0.0000000000	0.0000000000	2028.0000000000	5.8118060608	-1.1571845683
2012.0000000000	0.0000000000	0.0000000000	2034.0000000000	2.2019886359	-0.2897826166
2016.0000000000	0.0000000000	0.0000000000	2040.0000000000	1.1245612081	-0.1078347181
2020.0000000000	0.0000000000	0.0000000000	2046.0000000000	0.6768803977	-0.0507530633
2024.0000000000	0.0000000000	0.0000000000	2052.0000000000	0.4507498541	-0.0276885518
2028.0000000000	0.0000000000	0.0000000000	2058.0000000000	0.3212630211	-0.0166977080
2032.0000000000	0.0000000000	0.0000000000	2064.0000000000	0.2403885114	-0.0108227914
2036.0000000000	0.0000000000	0.0000000000	2070.0000000000	0.1865608910	-0.0074062783
2040.0000000000	0.0000000000	0.0000000000	2076.0000000000	0.1489545492	-0.0052872405
2044.0000000000	0.0000000000	0.0000000000	2082.0000000000	0.1216579990	-0.0039044684
2048.0000000000	0.0000000000	0.0000000000	2088.0000000000	0.1012238013	-0.0029643286
2052.0000000000	0.0000000000	0.0000000000	2094.0000000000	0.0855324832	-0.0023031130
2056.0000000000	0.0000000000	0.0000000000	2100.0000000000	0.0732232785	-0.0018246666
2060.0000000000	0.0000000000	0.0000000000	2106.0000000000	0.0633903047	-0.0014699982
2064.0000000000	0.0000000000	0.0000000000	2112.0000000000	0.0554116812	-0.0012015548
2068.0000000000	0.0000000000	0.0000000000	2118.0000000000	0.0488490695	-0.0009946598

2072.0000000000	0.0000000000	0.0000000000	2124.0000000000	0.0433863365	-0.0008326452
2076.0000000000	0.0000000000	0.0000000000	2130.0000000000	0.0387908542	-0.0007039771
2080.0000000000	0.0000000000	0.0000000000	2136.0000000000	0.0348883742	-0.0006005020
2084.0000000000	0.0000000000	0.0000000000	2142.0000000000	0.0315462952	-0.0005163458
2088.0000000000	0.0000000000	0.0000000000	2148.0000000000	0.0286622692	-0.0004472036
2092.0000000000	0.0000000000	0.0000000000	2154.0000000000	0.0261562830	-0.0003898719
2096.0000000000	0.0000000000	0.0000000000	2160.0000000000	0.0239650569	-0.0003419336
2100.0000000000	0.0000000000	0.0000000000	2166.0000000000	0.0220380149	-0.0003015415
2104.0000000000	0.0000000000	0.0000000000	2172.0000000000	0.0203343434	-0.0002672675
2108.0000000000	0.0000000000	0.0000000000	2178.0000000000	0.0188208152	-0.0002379961
2112.0000000000	0.0000000000	0.0000000000	2184.0000000000	0.0000000000	0.0000000000
2116.0000000000	0.0000000000	0.0000000000	2190.0000000000	0.0000000000	0.0000000000
2120.0000000000	0.0000000000	0.0000000000	2196.0000000000	0.0000000000	0.0000000000
2124.0000000000	0.0000000000	0.0000000000	2202.0000000000	0.0000000000	0.0000000000
2128.0000000000	0.0000000000	0.0000000000	2208.0000000000	0.0000000000	0.0000000000
2132.0000000000	0.0000000000	0.0000000000	2214.0000000000	0.0000000000	0.0000000000
2136.0000000000	0.0000000000	0.0000000000	2220.0000000000	0.0000000000	0.0000000000
2140.0000000000	0.0000000000	0.0000000000	2226.0000000000	0.0000000000	0.0000000000
2144.0000000000	0.0000000000	0.0000000000	2232.0000000000	0.0000000000	0.0000000000
2148.0000000000	0.0000000000	0.0000000000	2238.0000000000	0.0000000000	0.0000000000
2152.0000000000	0.0000000000	0.0000000000	2244.0000000000	0.0000000000	0.0000000000
2156.0000000000	0.0000000000	0.0000000000	2250.0000000000	0.0000000000	0.0000000000
2160.0000000000	0.0000000000	0.0000000000	2256.0000000000	0.0000000000	0.0000000000
2164.0000000000	0.0000000000	0.0000000000	2262.0000000000	0.0000000000	0.0000000000
2168.0000000000	0.0000000000	0.0000000000	2268.0000000000	0.0000000000	0.0000000000
2172.0000000000	0.0000000000	0.0000000000	2274.0000000000	0.0000000000	0.0000000000
2176.0000000000	0.0000000000	0.0000000000	2280.0000000000	0.0000000000	0.0000000000
2180.0000000000	0.0000000000	0.0000000000	2286.0000000000	0.0000000000	0.0000000000
2184.0000000000	0.0000000000	0.0000000000	2292.0000000000	0.0000000000	0.0000000000
2188.0000000000	0.0000000000	0.0000000000	2298.0000000000	0.0000000000	0.0000000000
2192.0000000000	0.0000000000	0.0000000000	2304.0000000000	0.0000000000	0.0000000000
2196.0000000000	0.0000000000	0.0000000000	2310.0000000000	0.0000000000	0.0000000000
2200.0000000000	0.0000000000	0.0000000000	2316.0000000000	0.0000000000	0.0000000000
2204.0000000000	0.0000000000	0.0000000000	2322.0000000000	0.0000000000	0.0000000000
2208.0000000000	0.0000000000	0.0000000000	2328.0000000000	0.0000000000	0.0000000000
2212.0000000000	0.0000000000	0.0000000000	2334.0000000000	0.0000000000	0.0000000000
2216.0000000000	0.0000000000	0.0000000000	2340.0000000000	0.0000000000	0.0000000000
2220.0000000000	0.0000000000	0.0000000000	2346.0000000000	0.0000000000	0.0000000000
2224.0000000000	0.0000000000	0.0000000000	2352.0000000000	0.0000000000	0.0000000000
2228.0000000000	0.0000000000	0.0000000000	2358.0000000000	0.0000000000	0.0000000000
2232.0000000000	0.0000000000	0.0000000000	2364.0000000000	0.0000000000	0.0000000000
2236.0000000000	0.0000000000	0.0000000000	2370.0000000000	0.0000000000	0.0000000000
2240.0000000000	0.0000000000	0.0000000000	2376.0000000000	0.0000000000	0.0000000000
2244.0000000000	0.0000000000	0.0000000000	2382.0000000000	0.0000000000	0.0000000000
2248.0000000000	0.0000000000	0.0000000000	2388.0000000000	0.0000000000	0.0000000000
2252.0000000000	0.0000000000	0.0000000000	2394.0000000000	0.0000000000	0.0000000000
2256.0000000000	0.0000000000	0.0000000000	2400.0000000000	0.0000000000	0.0000000000
2260.0000000000	0.0000000000	0.0000000000	2406.0000000000	0.0000000000	0.0000000000
2264.0000000000	0.0000000000	0.0000000000	2412.0000000000	0.0000000000	0.0000000000
2268.0000000000	0.0000000000	0.0000000000	2418.0000000000	0.0000000000	0.0000000000
2272.0000000000	0.0000000000	0.0000000000	2424.0000000000	0.0000000000	0.0000000000
2276.0000000000	0.0000000000	0.0000000000	2430.0000000000	0.0000000000	0.0000000000
2280.0000000000	0.0000000000	0.0000000000	2436.0000000000	0.0000000000	0.0000000000
2284.0000000000	0.0000000000	0.0000000000	2442.0000000000	0.0000000000	0.0000000000
2288.0000000000	0.0000000000	0.0000000000	2448.0000000000	0.0000000000	0.0000000000
2292.0000000000	0.0000000000	0.0000000000	2454.0000000000	0.0000000000	0.0000000000
2296.0000000000	0.0000000000	0.0000000000	2460.0000000000	0.0000000000	0.0000000000
2300.0000000000	0.0000000000	0.0000000000	2466.0000000000	0.0000000000	0.0000000000
2304.0000000000	1.7326653705	0.0217669116	2472.0000000000	0.0000000000	0.0000000000
2308.0000000000	1.8231271473	0.0234932468	2478.0000000000	0.0000000000	0.0000000000
2312.0000000000	1.9208611021	0.0254070244	2484.0000000000	0.0000000000	0.0000000000
2316.0000000000	2.0266679197	0.0275343842	2490.0000000000	0.0000000000	0.0000000000
2320.0000000000	2.1414615628	0.0299059642	2496.0000000000	0.0000000000	0.0000000000
2324.0000000000	2.2662890565	0.0325578297	2502.0000000000	0.0000000000	0.0000000000
2328.0000000000	2.4023544230	0.0355326283	2508.0000000000	0.0000000000	0.0000000000
2332.0000000000	2.5510477928	0.0388810356	2514.0000000000	0.3191778454	0.0040890183
2336.0000000000	2.7139810115	0.0426635733	2520.0000000000	0.3452021124	0.0045990537
2340.0000000000	2.8930314520	0.0469529154	2526.0000000000	0.3745431108	0.0051975408
2344.0000000000	3.0903962663	0.0518368312	2532.0000000000	0.4077891912	0.0059045103
2348.0000000000	3.3086600188	0.0574219723	2538.0000000000	0.4456651491	0.0067456901
2352.0000000000	3.5508796075	0.0638387849	2544.0000000000	0.4890720204	0.0077544890
2356.0000000000	3.8206917121	0.0712479374	2550.0000000000	0.5391411038	0.0089748091
2360.0000000000	4.1224498643	0.0798488107	2556.0000000000	0.5973083274	0.0104651000
2364.0000000000	4.4614008463	0.0898908259	2562.0000000000	0.6654182075	0.0123043044
2368.0000000000	4.8439138570	0.1016887212	2568.0000000000	0.7458716582	0.0146007510
2372.0000000000	5.2777812735	0.1156433969	2574.0000000000	0.8418401225	0.0175057414
2376.0000000000	5.7726177421	0.1322707161	2580.0000000000	0.9575823242	0.0212348126
2380.0000000000	6.3403960968	0.1522418462	2586.0000000000	1.0989239033	0.0261019154

2384.0000000000	6.9961764187	0.1764406071	2592.0000000000	1.2740030988	0.0325760359
2388.0000000000	7.7591119980	0.2060463305	2598.0000000000	1.4944653312	0.0413782827
2392.0000000000	8.6538591102	0.2426557227	2604.0000000000	1.7774445816	0.0536550643
2396.0000000000	9.7125868251	0.2884656344	2610.0000000000	2.1489784176	0.0713013888
2400.0000000000	10.9778970577	0.3465531838	2616.0000000000	3.0167769783	0.1022494964
2404.0000000000	12.5071575640	0.4213155689	2622.0000000000	3.7452823351	0.1437751381
2408.0000000000	14.3790852764	0.5191795080	2628.0000000000	4.7943157913	0.2118206958
2412.0000000000	16.7040186968	0.6497809883	2634.0000000000	6.3884340444	0.3315312767
2416.0000000000	19.6404390339	0.8279961583	2640.0000000000	8.9900753621	0.5628753439
2420.0000000000	23.4224789098	1.0775788076	2646.0000000000	13.6777589533	1.0719235718
2424.0000000000	28.4076020708	1.4379811873	2652.0000000000	23.4506167999	2.4264662771
2428.0000000000	35.1632209396	1.9778494442	2658.0000000000	49.1795656507	7.2806656221
2432.0000000000	44.6330713566	2.8234796322	2664.0000000000	149.8377382195	34.3901718748
2436.0000000000	58.4789781696	4.2235927797	2670.0000000000	486.7076287351	0.7512166570
2440.0000000000	79.8431377644	6.7112543561	2676.0000000000	150.8702707488	-34.6029712764
2444.0000000000	115.2326124218	11.5586053141	2682.0000000000	49.7593142562	-7.2834408985
2448.0000000000	179.8307292350	22.2552889346	2688.0000000000	24.1353139544	-2.3965168530
2452.0000000000	315.1973008781	50.2607394192	2694.0000000000	14.5801369548	-1.0302455416
2456.0000000000	660.6799371738	141.2563398325	2700.0000000000	10.1724239022	-0.56110144278
2460.0000000000	1713.1692744574	414.7861968488	2706.0000000000	7.9186707914	-0.2667560552
2464.0000000000	2611.1034972508	-279.2577299954	2712.0000000000	6.7646840864	-0.1287422885
2468.0000000000	1097.2235774679	-268.7657590828	2718.0000000000	6.2901369004	-0.0334752543
2472.0000000000	461.0530510921	-86.2039594009	2724.0000000000	6.3403720763	0.0502557359
2476.0000000000	240.6362771660	-34.0381130134	2730.0000000000	6.9164355966	0.1458032145
2480.0000000000	145.5287158926	-16.3097471175	2736.0000000000	8.1721787810	0.2832788682
2484.0000000000	96.9322133907	-8.9485274788	2742.0000000000	10.5125823843	0.5217062371
2488.0000000000	69.0101374376	-5.4037863281	2748.0000000000	14.9172219949	1.0110121760
2492.0000000000	51.5625872253	-3.5014116896	2754.0000000000	24.0290861730	2.2288348822
2496.0000000000	39.9579106020	-2.3937542685	2760.0000000000	46.7578839843	6.2092200069
2500.0000000000	31.8594050481	-1.7067956688	2766.0000000000	126.3532383892	26.0057616825
2504.0000000000	25.9884561050	-1.2588253869	2772.0000000000	498.0038889709	82.4495371572
2508.0000000000	21.5989788633	-0.9545422141	2778.0000000000	252.8479529076	-62.6515248153
2512.0000000000	18.2323741138	-0.7407618635	2784.0000000000	72.9014575911	-12.0524058479
2516.0000000000	15.5943851130	-0.5862411471	2790.0000000000	32.1785129608	-3.6346122193
2520.0000000000	13.4892797975	-0.4718181028	2796.0000000000	17.9433792179	-1.5128151540
2524.0000000000	11.7828119351	-0.3853014060	2802.0000000000	11.4480801772	-0.7643743075
2528.0000000000	10.3804462167	-0.3186857751	2808.0000000000	7.9608782194	-0.4381675539
2532.0000000000	9.2140672341	-0.2665682240	2814.0000000000	5.8746861872	-0.2742973991
2536.0000000000	8.2335981854	-0.2252131183	2820.0000000000	4.5268364340	-0.1831976043
2540.0000000000	7.4015625964	-0.1919819340	2826.0000000000	3.6045598165	-0.1285636864
2544.0000000000	6.6894655358	-0.1649752851	2832.0000000000	2.6487329315	-0.0901605764
2548.0000000000	6.0753309403	-0.1428023646	2838.0000000000	2.1805447768	-0.0673730823
2552.0000000000	5.5419916881	-0.1244289985	2844.0000000000	1.8262380522	-0.0516548029
2556.0000000000	5.0758806576	-0.1090754155	2850.0000000000	1.5516933122	-0.0404658410
2560.0000000000	4.6661618673	-0.0961461650	2856.0000000000	1.3346653038	-0.0322865283
2564.0000000000	4.3040966576	-0.0851812482	2862.0000000000	1.1601512968	-0.0261698660
2568.0000000000	3.9825749897	-0.0758215068	2868.0000000000	1.0177367808	-0.0215048901
2572.0000000000	3.6957644947	-0.0677837573	2874.0000000000	0.9000099089	-0.0178854541
2576.0000000000	3.4388446500	-0.0608426899	2880.0000000000	0.8015799549	-0.0150344289
2580.0000000000	3.2078032879	-0.0548175317	2886.0000000000	0.7184505439	-0.0127583278
2584.0000000000	2.9992792794	-0.0495621082	2892.0000000000	0.6476083794	-0.0109192850
2588.0000000000	2.8104397998	-0.0449573606	2898.0000000000	0.5867467960	-0.0094172665
2592.0000000000	2.6388837569	-0.0409056559	2904.0000000000	0.5340759063	-0.0081784947
2596.0000000000	2.4825651968	-0.0373264211	2910.0000000000	0.4881896832	-0.0071477495
			2916.0000000000	0.4479712724	-0.0062831444
			2922.0000000000	0.4125238430	-0.0055525094
			2928.0000000000	0.3811228295	-0.0049308883
			2934.0000000000	0.0000000000	0.0000000000
			2940.0000000000	0.0000000000	0.0000000000
			2946.0000000000	0.0000000000	0.0000000000
			2952.0000000000	0.0000000000	0.0000000000
			2958.0000000000	0.0000000000	0.0000000000
			2964.0000000000	0.0000000000	0.0000000000
			2970.0000000000	0.0000000000	0.0000000000
			2976.0000000000	0.0000000000	0.0000000000
			2982.0000000000	0.0000000000	0.0000000000
			2988.0000000000	0.0000000000	0.0000000000
			2994.0000000000	0.0000000000	0.0000000000
# IR Spectrum of IM1			# IR Spectrum of IM2		
# IR Spectrum			# IR Spectrum		
# X-Axis: Frequency (cm-1)			# X-Axis: Frequency (cm-1)		
# Y-Axis: ε (M-1 cm-1)			# Y-Axis: ε (M-1 cm-1)		
# Peak information			# Peak information		
#	X	Y	#	X	Y
#	41.2650000000	32.9960337117	#	16.8532000000	0.4024147089
#	62.3723000000	0.8314935659	#	29.3197000000	0.8572121677
#	71.4378000000	2.8201395966	#	33.3913000000	13.6439486506

#	158.0283000000	2.0726004531		#	61.7351000000	14.4622287342	
#	178.9656000000	1.6763148010		#	69.7369000000	3.9586832763	
#	369.1779000000	158.8452261534		#	83.2010000000	10.6206839235	
#	696.4860000000	349.4289766598		#	109.9743000000	1.0193478551	
#	699.1987000000	180.9793036942		#	141.1197000000	3.8248768076	
#	826.2890000000	2.0949081132		#	173.7150000000	0.4547106953	
#	876.2515000000	0.0364223960		#	207.9105000000	3.5094946318	
#	890.5996000000	3.1042596416		#	408.5224000000	184.2863820226	
#	941.1462000000	0.1068195509		#	695.1912000000	446.5914910552	
#	966.4256000000	0.8693551697		#	697.8103000000	251.5815902555	
#	1006.5014000000	108.9708427405		#	699.7287000000	102.5341973848	
#	1058.9503000000	0.0026371192		#	700.0796000000	235.9745179705	
#	1200.5521000000	243.1725443905		#	829.2735000000	1.8612651343	
#	1216.1381000000	41.4774766200		#	873.9626000000	0.4071733135	
#	1416.5678000000	0.345528641		#	891.4151000000	1.3739334239	
#	1733.1607000000	1228.2600060238		#	947.8453000000	0.6746885832	
#	1880.6803000000	0.0663951967		#	973.0818000000	3.0760465008	
#	2033.0728000000	11.1928710492		#	1005.0463000000	97.1462825737	
#	2197.6628000000	2.2736519169		#	1064.7942000000	3.7443890633	
#	2461.0481000000	1156.4837627369		#	1218.3059000000	227.2137954390	
#	2663.4027000000	224.5154906393		#	1232.9616000000	39.7573789471	
#	2684.9508000000	25.0783910312		#	1417.6998000000	0.1249412918	
#	2753.1915000000	42.9622273425		#	1419.6239000000	0.3085576638	
#	2776.8726000000	169.7253999175		#	1716.8506000000	1142.7341764622	
# Spectra				#	1875.5434000000	0.1954770125	
#	X	Y	DY/DX	#	2032.2485000000	5.9172097160	
	0.0000000000	0.0118912413	0.0005506177	#	2190.8545000000	2.4497000217	
	6.0000000000	0.0160537897	0.0008692380	#	2462.0372000000	826.0257918298	
	12.0000000000	0.0229130459	0.0014916124	#	2467.2148000000	1349.5772959435	
	18.0000000000	0.0354326252	0.0028834797	#	2670.6215000000	191.9715854164	
	24.0000000000	0.0622289720	0.0066885941	#	2692.8606000000	28.4561128691	
	30.0000000000	0.1348189118	0.0209471705	#	2758.9465000000	53.2345447355	
	36.0000000000	0.4353802986	0.1041718037	#	2783.6317000000	199.2255370194	
	42.0000000000	1.1463997277	-0.1010286380	# Spectra			
	48.0000000000	0.3163559808	-0.0666815530	#	X	Y	DY/DX
	54.0000000000	0.1236770191	-0.0125537451		-500.0000000000	0.0000000000	0.0000000000
	60.0000000000	0.1044453672	0.0050189405		-493.0000000000	0.0000000000	0.0000000000
	66.0000000000	0.1168514007	0.0061397805		-486.0000000000	0.0000000000	0.0000000000
	72.0000000000	0.1983818369	-0.0142021556		-479.0000000000	0.0000000000	0.0000000000
	78.0000000000	0.0649778035	-0.0115558981		-472.0000000000	0.0000000000	0.0000000000
	84.0000000000	0.0290825875	-0.0028986075		-465.0000000000	0.0000000000	0.0000000000
	90.0000000000	0.0180620533	-0.0011441880		-458.0000000000	0.0000000000	0.0000000000
	96.0000000000	0.0131795660	-0.0005699404		-451.0000000000	0.0000000000	0.0000000000
	102.0000000000	0.0106255132	-0.0003095293		-444.0000000000	0.0000000000	0.0000000000
	108.0000000000	0.0092547510	-0.0001578573		-437.0000000000	0.0000000000	0.0000000000
	114.0000000000	0.0086569321	-0.0000442445		-430.0000000000	0.0000000000	0.0000000000
	120.0000000000	0.0087234198	0.0000692143		-423.0000000000	0.0000000000	0.0000000000
	126.0000000000	0.0095639472	0.0002219506		-416.0000000000	0.0000000000	0.0000000000
	132.0000000000	0.0116118257	0.0004910611		-409.0000000000	0.0000000000	0.0000000000
	138.0000000000	0.0161045094	0.0011001478		-402.0000000000	0.0000000000	0.0000000000
	144.0000000000	0.0271133980	0.0029506047		-395.0000000000	0.0000000000	0.0000000000
	150.0000000000	0.0634298597	0.0115482608		-388.0000000000	0.0000000000	0.0000000000
	156.0000000000	0.2352593913	0.0461309683		-381.0000000000	0.0000000000	0.0000000000
	162.0000000000	0.1582678032	-0.0342200888		-374.0000000000	0.0000000000	0.0000000000
	168.0000000000	0.0713856925	-0.0019075996		-367.0000000000	0.0000000000	0.0000000000
	174.0000000000	0.1204153680	0.0229871846		-360.0000000000	0.0000000000	0.0000000000
	180.0000000000	0.2539715769	-0.0303445934		-353.0000000000	0.0000000000	0.0000000000
	186.0000000000	0.0703474148	-0.0140584672		-346.0000000000	0.0000000000	0.0000000000
	192.0000000000	0.0273134346	-0.0033770023		-339.0000000000	0.0000000000	0.0000000000
	198.0000000000	0.0147859120	-0.0012585681		-332.0000000000	0.0000000000	0.0000000000
	204.0000000000	0.0087963251	-0.0005989572		-325.0000000000	0.0000000000	0.0000000000
	210.0000000000	0.0381555638	0.0000668814		-318.0000000000	0.0000000000	0.0000000000
	216.0000000000	0.0391237902	0.0002433165		-311.0000000000	0.0000000000	0.0000000000
	222.0000000000	0.0409789414	0.0003701942		-304.0000000000	0.0000000000	0.0000000000
	228.0000000000	0.0435049243	0.0004794107		-297.0000000000	0.0000000000	0.0000000000
	234.0000000000	0.0465933133	0.0005870139		-290.0000000000	0.0000000000	0.0000000000
	240.0000000000	0.0504491229	0.0007000420		-283.0000000000	0.0000000000	0.0000000000
	246.0000000000	0.0550222693	0.0008272922		-276.0000000000	0.0000000000	0.0000000000
	252.0000000000	0.0604193136	0.0009759188		-269.0000000000	0.0000000000	0.0000000000
	258.0000000000	0.0667922441	0.0011540894		-262.0000000000	0.0000000000	0.0000000000
	264.0000000000	0.0743477973	0.0013720771		-255.0000000000	0.0000000000	0.0000000000
	270.0000000000	0.0833638391	0.0016435713		-248.0000000000	0.0000000000	0.0000000000
	276.0000000000	0.0942150474	0.0019875260		-241.0000000000	0.0000000000	0.0000000000
	282.0000000000	0.1074123471	0.0024309886		-234.0000000000	0.0000000000	0.0000000000
	288.0000000000	0.1236640012	0.0030136511		-227.0000000000	0.0000000000	0.0000000000
	294.0000000000	0.1439723237	0.0037954739		-220.0000000000	0.0000000000	0.0000000000
	300.0000000000	0.1697913487	0.0048699715		-213.0000000000	0.0000000000	0.0000000000

306.0000000000	0.2032932308	0.0063883899	-206.0000000000	0.0000000000	0.0000000000
312.0000000000	0.2478378953	0.0086059486	-199.0000000000	0.0000000000	0.0000000000
318.0000000000	0.3088439285	0.0119756045	-192.0000000000	0.0000000000	0.0000000000
324.0000000000	0.3953400338	0.0173539512	-185.0000000000	0.0000000000	0.0000000000
330.0000000000	0.5242784039	0.0264762616	-178.0000000000	0.0000000000	0.0000000000
336.0000000000	0.7280021409	0.0432438688	-171.0000000000	0.0000000000	0.0000000000
342.0000000000	1.0771054578	0.0775827742	-164.0000000000	0.0000000000	0.0000000000
348.0000000000	1.7498793148	0.1595629452	-157.0000000000	0.0000000000	0.0000000000
354.0000000000	3.2992224508	0.4065068243	-150.0000000000	0.0000000000	0.0000000000
360.0000000000	8.1092863230	1.4850516093	-143.0000000000	0.0000036765	0.0000000460
366.0000000000	31.1438548732	7.5843421451	-136.0000000000	0.0000040207	0.0000000526
372.0000000000	33.9182336163	-7.9886208364	-129.0000000000	0.0000183051	0.0000002359
378.0000000000	8.6627917971	-1.6289985033	-122.0000000000	0.0002814232	0.0000036324
384.0000000000	3.4486356881	-0.4337478460	-115.0000000000	0.0003086833	0.0000041728
390.0000000000	1.8080462009	-0.1674852367	-108.0000000000	0.0003401052	0.0000048260
396.0000000000	1.1052451610	-0.0806200341	-101.0000000000	0.0003765815	0.0000056229
402.0000000000	0.7434667758	-0.0446398217	-94.0000000000	0.0009291692	0.0000131495
408.0000000000	0.5336454509	-0.0272030502	-87.0000000000	0.0011842836	0.0000173271
414.0000000000	0.4013909570	-0.0177688910	-80.0000000000	0.0013157193	0.0000203343
420.0000000000	0.3127590142	-0.0122322186	-73.0000000000	0.0019723800	0.0000305124
426.0000000000	0.2505045730	-0.0087736752	-66.0000000000	0.0022051764	0.0000362241
432.0000000000	0.2051233138	-0.0065039239	-59.0000000000	0.0024831700	0.0000435076
438.0000000000	0.1710316989	-0.0049535220	-52.0000000000	0.0028193321	0.0000529653
444.0000000000	0.144764142	-0.0038588552	-45.0000000000	0.0032965058	0.000063456
450.0000000000	0.1241293035	-0.0030641620	-38.0000000000	0.0038179074	0.0000835456
456.0000000000	0.1076008321	-0.0024734008	-31.0000000000	0.0044821895	0.0001076778
462.0000000000	0.0941647838	-0.0020251695	-24.0000000000	0.0053510073	0.0001428980
468.0000000000	0.0830955813	-0.0016789698	-17.0000000000	0.0068252924	0.0002007827
474.0000000000	0.0738685166	-0.0014073579	-10.0000000000	0.0085166132	0.0002904415
480.0000000000	0.0660965623	-0.0011912888	-3.0000000000	0.0110582841	0.0004535775
486.0000000000	0.0594892043	-0.0010172654	4.0000000000	0.0152864934	0.0008055352
492.0000000000	0.0538249479	-0.0008755414	11.0000000000	0.0238908825	0.0018946354
498.0000000000	0.0489325415	-0.0007589600	18.0000000000	0.0442453231	0.0031458057
504.0000000000	0.0446779001	-0.0006621853	25.0000000000	0.0996455638	0.0171819781
510.0000000000	0.0409548321	-0.0005811846	32.0000000000	0.3894748996	0.0523477511
516.0000000000	0.0376783565	-0.0005128712	39.0000000000	0.1709316348	-0.0294891618
522.0000000000	0.0347798164	-0.0004548557	46.0000000000	0.1009534351	0.0012987556
528.0000000000	0.0322032560	-0.0004052691	53.0000000000	0.1785689837	0.0261436584
534.0000000000	0.0000000000	0.0000000000	60.0000000000	0.7190322185	0.1261402997
540.0000000000	0.2068264636	0.0026266272	67.0000000000	0.4985294194	-0.0253540593
546.0000000000	0.2235347504	0.0029512021	74.0000000000	0.3155171543	-0.0167193966
552.0000000000	0.2423522075	0.0033315239	81.0000000000	0.6538979277	0.1167685058
558.0000000000	0.2636492965	0.0037800914	88.0000000000	0.3511165478	-0.0793101565
564.0000000000	0.2878815177	0.0043129215	95.0000000000	0.1084631135	-0.0121832484
570.0000000000	0.3156139504	0.0049507615	102.0000000000	0.0712248506	0.0001713505
576.0000000000	0.3475544701	0.0057208012	109.0000000000	0.1272025420	0.0092602934
582.0000000000	0.3845993302	0.0066591333	116.0000000000	0.0609421488	-0.0068354374
588.0000000000	0.4278966629	0.0078143463	123.0000000000	0.0450321718	0.0006059708
594.0000000000	0.4789364222	0.0092528765	130.0000000000	0.0694948224	0.0078801799
600.0000000000	0.5396801383	0.0110671452	137.0000000000	0.2396500501	0.0564006559
606.0000000000	0.6127519625	0.0133882268	144.0000000000	0.3193034077	-0.0731106910
612.0000000000	0.7017264513	0.0164060905	151.0000000000	0.0771949958	-0.0113468257
618.0000000000	0.8115733647	0.0204029144	158.0000000000	0.0381651838	-0.0022621228
624.0000000000	0.9493655169	0.0258097783	165.0000000000	0.0344173689	0.0013689651
630.0000000000	1.1254435614	0.0333069199	172.0000000000	0.0769495441	0.0103236910
636.0000000000	1.3554083124	0.0440090836	179.0000000000	0.0451411153	-0.0055222825
642.0000000000	1.6636865845	0.0598265110	186.0000000000	0.0334256090	0.0006215885
648.0000000000	2.0902664215	0.0842129330	193.0000000000	0.0504787746	0.0048815541
654.0000000000	2.7042741222	0.1238360336	200.0000000000	0.1343688660	0.0256954592
660.0000000000	3.6336313936	0.1926698417	207.0000000000	0.6054092397	0.0648911478
666.0000000000	5.1367733941	0.3232697570	214.0000000000	0.1941769986	-0.0438089470
672.0000000000	7.8018101762	0.6030244965	221.0000000000	0.0570678397	-0.0076139426
678.0000000000	13.1996579692	1.3179354520	228.0000000000	0.0263101950	-0.0023562666
684.0000000000	26.7259291488	3.7246577521	235.0000000000	0.0152558083	-0.0010105742
690.0000000000	75.5258855461	16.1648638674	242.0000000000	0.0101272242	-0.0005256366
696.0000000000	274.6310037791	28.7449526315	249.0000000000	0.0478297098	0.0002092046
702.0000000000	146.2451753717	-34.5552732215	256.0000000000	0.0499696238	0.0003932483
708.0000000000	41.4729349239	-7.0535318481	263.0000000000	0.0532604343	0.0005443123
714.0000000000	17.9151620498	-2.0739220543	270.0000000000	0.0575173143	0.0006906378
720.0000000000	9.8406208053	-0.8525520425	277.0000000000	0.0628882166	0.0008467783
726.0000000000	6.1937165076	-0.4273544082	284.0000000000	0.0694266389	0.0010262553
732.0000000000	4.2516251478	-0.2433013475	291.0000000000	0.0773399945	0.0012419088
738.0000000000	3.0968328577	-0.1512733587	298.0000000000	0.0869336182	0.0015092729
744.0000000000	2.3559854646	-0.1002989118	305.0000000000	0.0983599541	0.0018525524
750.0000000000	1.8529063769	-0.0698277458	312.0000000000	0.1128029483	0.0022941622
756.0000000000	1.4960466503	-0.0505024617	319.0000000000	0.1308174222	0.0028819064
762.0000000000	1.2340698494	-0.0376477526	326.0000000000	0.1536455189	0.0036834700
768.0000000000	1.0364312695	-0.0287480142	333.0000000000	0.1831322065	0.0048071343

774.0000000000	0.8841019596	-0.0223620527	340.0000000000	0.2220689400	0.0064340264
780.0000000000	0.7648327202	-0.0176126687	347.0000000000	0.2750573835	0.0088796454
786.0000000000	0.6706986452	-0.0139215890	354.0000000000	0.3496259982	0.0127326268
792.0000000000	0.5965928683	-0.0108479140	361.0000000000	0.4592419597	0.0191677718
798.0000000000	0.5402149331	-0.0079182227	368.0000000000	0.6293536712	0.0307622713
804.0000000000	0.5029309469	-0.0042640874	375.0000000000	0.9155587112	0.0538568814
810.0000000000	0.4959736221	0.0028586070	382.0000000000	1.4504511376	0.1069430895
816.0000000000	0.5687922012	0.0273022773	389.0000000000	2.6276653276	0.2583491325
822.0000000000	1.0365780137	0.1689221070	396.0000000000	6.0384595978	0.8751320747
828.0000000000	1.5787458797	-0.2334506672	403.0000000000	22.4425540940	5.3309685608
834.0000000000	0.6055653505	-0.0685598926	410.0000000000	57.3883251086	-9.3269077640
840.0000000000	0.3857443862	-0.0187280056	417.0000000000	11.8756432769	-2.2915055230
846.0000000000	0.3119746319	-0.0080053725	424.0000000000	4.0832882712	-0.4946037454
852.0000000000	0.3407827822	-0.0032588159	431.0000000000	2.0019649768	-0.1726619292
858.0000000000	0.1998612154	0.0008967652	438.0000000000	1.1792012114	-0.0785600325
864.0000000000	0.1484560549	0.0044887453	445.0000000000	0.7749126507	-0.0419822256
870.0000000000	0.1905526933	0.0106269702	452.0000000000	0.5473998329	-0.0249694274
876.0000000000	0.2953444070	0.0231926981	459.0000000000	0.4069867689	-0.0160248133
882.0000000000	0.5427139002	0.0806874402	466.0000000000	0.3143408284	-0.0108851373
888.0000000000	1.8034789481	0.3859283111	473.0000000000	0.2500404967	-0.0077261524
894.0000000000	1.5196409242	-0.3411187631	480.0000000000	0.2036096784	-0.0056793744
900.0000000000	0.5096191359	-0.0636949198	487.0000000000	0.1689966375	-0.0042957158
906.0000000000	0.3101813241	-0.0153881196	494.0000000000	0.1425087906	-0.0033271266
912.0000000000	0.2598962813	-0.0035542759	501.0000000000	0.1217899466	-0.0026290154
918.0000000000	0.2542319167	0.0011370384	508.0000000000	0.1052795638	-0.0021132319
924.0000000000	0.2703036669	0.0041277007	515.0000000000	0.0919109645	-0.0017239577
930.0000000000	0.3044757443	0.0075279513	522.0000000000	0.0809350672	-0.0014246799
936.0000000000	0.3706050847	0.0165197789	529.0000000000	0.0718133545	-0.0011908318
942.0000000000	0.4826216403	0.0036653865	536.0000000000	0.2338537188	0.0011252488
948.0000000000	0.5102996187	0.0131939514	543.0000000000	0.4779787006	0.0045874707
954.0000000000	0.6354222771	0.0293218423	550.0000000000	0.5132854608	0.0055212248
960.0000000000	0.9142408714	0.0747647134	557.0000000000	0.5556216625	0.0066035160
966.0000000000	1.6477124036	0.0823747539	564.0000000000	0.6062006251	0.0078859978
972.0000000000	1.5159766828	0.0132441702	571.0000000000	0.6271428073	0.0099216229
978.0000000000	1.9200696589	0.1141298656	578.0000000000	0.7028195262	0.0117704585
984.0000000000	2.9525831703	0.2467583373	585.0000000000	0.7930671859	0.0141086723
990.0000000000	5.2980464639	0.6018681195	592.0000000000	0.9018810312	0.0171094947
996.0000000000	12.0557142284	2.0013259089	599.0000000000	1.0347255659	0.0210252599
1002.0000000000	41.9356388839	10.4075300913	606.0000000000	1.1992339416	0.0262329616
1008.0000000000	83.3297370500	-13.6871669528	613.0000000000	1.4063288833	0.0333124292
1014.0000000000	21.0554143378	-4.3704356141	620.0000000000	1.6720825650	0.0431859343
1020.0000000000	7.6763462068	-1.0448373897	627.0000000000	2.0209293124	0.0573793121
1026.0000000000	3.8426968136	-0.3778248195	634.0000000000	2.4914842551	0.0785377333
1032.0000000000	2.2868812533	-0.1748027430	641.0000000000	3.1476950347	0.1115131271
1038.0000000000	1.5121934902	-0.0943086498	648.0000000000	4.1017379039	0.1658465827
1044.0000000000	1.2378256623	-0.0543194130	655.0000000000	5.5652367617	0.2620267351
1050.0000000000	0.9788114954	-0.0339421434	662.0000000000	7.9771764909	0.4494188422
1056.0000000000	0.8130818585	-0.0217308142	669.0000000000	12.3739645624	0.8672295270
1062.0000000000	0.7339420266	-0.0145812755	676.0000000000	21.7080314641	2.0088177526
1068.0000000000	0.6638099602	-0.0091606580	683.0000000000	47.2831997956	6.3790964227
1074.0000000000	0.6207413276	-0.0053861628	690.0000000000	160.2583741903	35.5507254099
1080.0000000000	0.5974730548	-0.0024747511	697.0000000000	501.6542206315	3.8871025329
1086.0000000000	0.5901092601	-0.0000351035	704.0000000000	192.8170746566	-44.3558529212
1092.0000000000	0.5966087747	0.0021811023	711.0000000000	52.8753087043	-7.5322070744
1098.0000000000	0.6162110300	0.0043608999	718.0000000000	23.4054313114	-2.2491171144
1104.0000000000	0.6491447942	0.0066704403	725.0000000000	13.0949073320	-0.9439869824
1110.0000000000	0.6968005825	0.0092808262	732.0000000000	8.3488046188	-0.4809058192
1116.0000000000	0.7615278500	0.0124000586	739.0000000000	5.7821850704	-0.2771839020
1122.0000000000	0.8471662126	0.0163057616	746.0000000000	4.2402872500	-0.1739809891
1128.0000000000	0.9591142678	0.0214054372	753.0000000000	3.2426100754	-0.1162207026
1134.0000000000	1.1071388817	0.0283052341	760.0000000000	2.5605206013	-0.0813989196
1140.0000000000	1.3043448551	0.0380111858	767.0000000000	2.0740469692	-0.0591533768
1146.0000000000	1.5722088953	0.0522279571	774.0000000000	1.7154059118	-0.0442537229
1152.0000000000	1.9460824344	0.0740342213	781.0000000000	1.4440850453	-0.0338525780
1158.0000000000	2.4873076210	0.1093825067	788.0000000000	1.2352566501	-0.0262769830
1164.0000000000	3.3098165426	0.1707950058	795.0000000000	1.0724851529	-0.0204424758
1170.0000000000	4.5880566186	0.2883266375	802.0000000000	0.9471812215	-0.0153992059
1176.0000000000	6.9689724467	0.5401120473	809.0000000000	0.8585408398	-0.0095500879
1182.0000000000	11.8265417532	1.1915542757	816.0000000000	0.8301499729	0.0035277857
1188.0000000000	24.1810935442	3.4328187104	823.0000000000	1.0294340518	0.0777000771
1194.0000000000	70.0481998307	15.3901972399	830.0000000000	1.8738864671	-0.1220899578
1200.0000000000	250.7092584998	17.1026343173	837.0000000000	0.8089350794	-0.0646121524
1206.0000000000	94.4712260841	-20.1250900584	844.0000000000	0.5742462806	-0.0172560607
1212.0000000000	48.6249475064	0.9895663767	851.0000000000	0.5485793120	-0.0073552569
1218.0000000000	48.5446942994	-8.2457342625	858.0000000000	0.2568337256	0.0005610307
1224.0000000000	16.1374811086	-2.4085969599	865.0000000000	0.1653221635	0.0114538733
1230.0000000000	7.9407107053	-0.7529173613	872.0000000000	0.3852553430	0.0541248439
1236.0000000000	4.8830845657	-0.3419768402	879.0000000000	0.3192240771	-0.0133068320

1242.0000000000	3.3546619958	-0.1886790294	886.0000000000	0.5149740019	0.0864818050
1248.0000000000	2.4627604780	-0.1165983142	893.0000000000	1.0523512854	-0.1563117927
1254.0000000000	1.8909705471	-0.0776145720	900.0000000000	0.3346760726	-0.0341793585
1260.0000000000	1.5005485831	-0.0544703422	907.0000000000	0.2310494174	-0.0048202025
1266.0000000000	1.2208986069	-0.0397862789	914.0000000000	0.2231241256	0.0014567124
1272.0000000000	1.0134485597	-0.0299864558	921.0000000000	0.2448592358	0.0046198619
1278.0000000000	0.8551230704	-0.0231813520	928.0000000000	0.2886046765	0.0081322075
1284.0000000000	0.7314498085	-0.0183011568	935.0000000000	0.3675619874	0.0158130957
1290.0000000000	0.6329533341	-0.0147065630	942.0000000000	0.5710366243	0.0543015716
1296.0000000000	0.5532073316	-0.0119983532	949.0000000000	1.0212242624	-0.0474417165
1302.0000000000	0.4877230643	-0.0099179330	956.0000000000	0.8118845227	0.0162819130
1308.0000000000	0.4332856660	-0.0082925066	963.0000000000	1.1578236515	0.0917369625
1314.0000000000	0.3875425046	-0.0070034683	970.0000000000	2.7428120234	0.4531169384
1320.0000000000	0.3487395096	-0.0059674662	977.0000000000	3.0306284865	-0.2135132088
1326.0000000000	0.3155475434	-0.0051246720	984.0000000000	3.2740180375	0.2206691846
1332.0000000000	0.2869453441	-0.0044312928	991.0000000000	6.4847019685	0.8225623630
1338.0000000000	0.2621390672	-0.0038546506	998.0000000000	20.6968037242	4.4201327970
1344.0000000000	0.2405062171	-0.0033698468	1005.0000000000	84.6307450295	0.4873062705
1350.0000000000	0.2215564304	-0.0029573999	1012.0000000000	21.0796632125	-4.5453190547
1356.0000000000	0.2049045809	-0.0026014390	1019.0000000000	6.4714828283	-0.8504587921
1362.0000000000	0.0351040703	-0.0003672947	1026.0000000000	3.0276082027	-0.2726320409
1368.0000000000	0.0331528518	-0.0002818596	1033.0000000000	1.7647241260	-0.1160815175
1374.0000000000	0.0317497058	-0.0001821376	1040.0000000000	1.1920148601	-0.0551714845
1380.0000000000	0.0050139012	0.0002709825	1047.0000000000	0.9372637108	-0.0184527136
1386.0000000000	0.0071389937	0.0004592288	1054.0000000000	0.9851070272	0.0450030879
1392.0000000000	0.0109507508	0.0008684504	1061.0000000000	2.4091636484	0.4404332039
1398.0000000000	0.0188068826	0.0019359094	1068.0000000000	2.6181035079	-0.5217606980
1404.0000000000	0.0390045807	0.0056361357	1075.0000000000	0.9540034720	-0.031216319
1410.0000000000	0.1147326747	0.0254850278	1082.0000000000	0.6451288572	-0.0220901846
1416.0000000000	0.4156761506	0.0289198848	1089.0000000000	0.5489302577	-0.0079997533
1422.0000000000	0.1490883424	-0.0355921382	1096.0000000000	0.5146672784	-0.0024404494
1428.0000000000	0.0462512150	-0.0072088678	1103.0000000000	0.5095115458	0.0007595555
1434.0000000000	0.0212104452	-0.0023117599	1110.0000000000	0.5232637045	0.0032085790
1440.0000000000	0.0120071056	-0.0009958196	1117.0000000000	0.5537420962	0.0055076748
1446.0000000000	0.0076903341	-0.0005131025	1124.0000000000	0.6008432289	0.0080078993
1452.0000000000	0.0053363327	-0.0002974232	1131.0000000000	0.6670190718	0.0110100692
1458.0000000000	0.0039159209	-0.0001872823	1138.0000000000	0.7554651976	0.0148955509
1464.0000000000	0.0029944348	-0.0001253701	1145.0000000000	0.8771229615	0.0201541554
1470.0000000000	0.0023632292	-0.0000879641	1152.0000000000	1.0428294378	0.0276640288
1476.0000000000	0.0019121969	-0.0000640587	1159.0000000000	1.2730721850	0.0389228847
1482.0000000000	0.0015788323	-0.0000480789	1166.0000000000	1.5506418084	0.0573893907
1488.0000000000	0.0013255353	-0.0000369971	1173.0000000000	2.0476504888	0.0874060814
1494.0000000000	0.0011285958	-0.0000290730	1180.0000000000	2.8316628854	0.1425672331
1500.0000000000	0.0009724663	-0.0000232581	1187.0000000000	4.1749738972	0.2558643456
1506.0000000000	0.0008466098	-0.0000188952	1194.0000000000	6.7696091010	0.5290443657
1512.0000000000	0.0007436813	-0.0000155582	1201.0000000000	12.8193280457	1.3744985479
1518.0000000000	0.0006584344	-0.0000129626	1208.0000000000	32.4612415652	5.3780559621
1524.0000000000	0.0005870410	-0.0000109135	1215.0000000000	144.4904402436	35.1959334225
1530.0000000000	0.0005266555	-0.0000092743	1222.0000000000	134.4139657321	-31.4498025232
1536.0000000000	0.0004751266	-0.0000079475	1229.0000000000	50.8695792756	0.5303265806
1542.0000000000	0.0004308038	-0.0000068621	1236.0000000000	38.5874258330	-7.7391114497
1548.0000000000	0.0003924040	-0.0000059657	1243.0000000000	11.9498631732	-1.4843123035
1554.0000000000	0.0003589172	-0.0000052188	1250.0000000000	5.9779285785	-0.4803062369
1560.0000000000	0.0003295400	-0.0000045915	1257.0000000000	3.6796971884	-0.2222989159
1566.0000000000	0.0003036264	-0.0000040608	1264.0000000000	2.5177580213	-0.1231808793
1572.0000000000	0.0002806529	-0.0000036089	1271.0000000000	1.8387451814	-0.0759953940
1578.0000000000	1.2247976004	0.0157769867	1278.0000000000	1.4047015776	-0.0503901372
1584.0000000000	1.3252423037	0.0177565533	1285.0000000000	1.1094000140	-0.0352049017
1590.0000000000	1.4385659689	0.0200815418	1292.0000000000	0.8989955301	-0.0255964922
1596.0000000000	1.5670676181	0.0228306797	1299.0000000000	0.7436181764	-0.0192069998
1602.0000000000	1.7135829634	0.0261052389	1306.0000000000	0.6255425508	-0.0147866491
1608.0000000000	1.8816420256	0.0300369386	1313.0000000000	0.5336822907	-0.0116279712
1614.0000000000	2.0756835045	0.0347991782	1320.0000000000	0.4608039885	-0.0093087900
1620.0000000000	2.3013505002	0.0406232659	1327.0000000000	0.4020213983	-0.0075659543
1626.0000000000	2.5659048639	0.0478222843	1334.0000000000	0.3539372800	-0.0062292343
1632.0000000000	2.8788178215	0.0568268870	1341.0000000000	0.3141327569	-0.0051848131
1638.0000000000	3.2526280273	0.0682401704	1348.0000000000	0.2808528942	-0.0043541203
1644.0000000000	3.7042148469	0.0829238544	1355.0000000000	0.2528086898	-0.0036808895
1650.0000000000	4.2567332495	0.1021373728	1362.0000000000	0.2290526285	-0.0031226294
1656.0000000000	4.9426340661	0.1277693689	1369.0000000000	0.2089066843	-0.0026437190
1662.0000000000	5.8085247049	0.1627367235	1376.0000000000	0.1919395933	-0.0022076288
1668.0000000000	6.9232713116	0.2117006143	1383.0000000000	0.0366461593	-0.0000458943
1674.0000000000	8.3920658777	0.2824130411	1390.0000000000	0.0374625520	0.0003217730
1680.0000000000	10.3820490170	0.3883922144	1397.0000000000	0.0170261586	0.0015005026
1686.0000000000	13.1717289113	0.5545995145	1404.0000000000	0.0353961015	0.0044256945
1692.0000000000	17.2531580229	0.8304885072	1411.0000000000	0.1075065968	0.0216962257
1698.0000000000	23.5622452088	1.3231361342	1418.0000000000	0.4783636202	0.0510779084
1704.0000000000	34.0584385753	2.2927731487	1425.0000000000	0.1706470122	-0.0398438966

1710.0000000000	53.4131856228	4.4788066769	1432.0000000000	0.0470251250	-0.0066956711
1716.0000000000	95.0318598630	10.5047841146	1439.0000000000	0.0207380444	-0.0020096800
1722.0000000000	209.9186048370	33.3354789082	1446.0000000000	0.0115364529	-0.0008405689
1728.0000000000	692.1054375255	167.5585988951	1453.0000000000	0.0073184705	-0.0004262355
1734.0000000000	1766.3827834294	-177.5008764182	1460.0000000000	0.0050480928	-0.0002446438
1740.0000000000	470.0267691153	-102.4165984238	1467.0000000000	0.0036894517	-0.0001530294
1746.0000000000	163.1562693046	-23.1665850460	1474.0000000000	0.0028130561	-0.0001019561
1752.0000000000	79.5495171663	-8.0807618039	1481.0000000000	0.0022152257	-0.0000712829
1758.0000000000	46.6143869027	-3.6583951940	1488.0000000000	0.0017893862	-0.0000517685
1764.0000000000	30.5115042559	-1.9459932311	1495.0000000000	0.0014754181	-0.0000387698
1770.0000000000	21.4885071001	-1.1530041484	1502.0000000000	0.0012373320	-0.0000297807
1776.0000000000	15.9391793421	-0.7376962722	1509.0000000000	0.0010525201	-0.0000233677
1782.0000000000	12.2879741990	-0.4998365661	1516.0000000000	0.0009062042	-0.0000186707
1788.0000000000	9.7597122439	-0.3540433082	1523.0000000000	0.0007883943	-0.0000151523
1794.0000000000	7.9375635848	-0.2597995034	1530.0000000000	0.0006921415	-0.0000124649
1800.0000000000	6.5813869011	-0.1962144057	1537.0000000000	0.0006124918	-0.0000103771
1806.0000000000	5.5449967892	-0.1517783817	1544.0000000000	0.0005458360	-0.0000087306
1812.0000000000	4.7353036913	-0.1197971695	1551.0000000000	0.0004894948	-0.0000074147
1818.0000000000	4.0907638992	-0.0961974314	1558.0000000000	1.0774319894	0.0135448490
1824.0000000000	3.5693794669	-0.0784039952	1565.0000000000	1.1789029631	0.0155056292
1830.0000000000	3.1417041175	-0.0647343138	1572.0000000000	1.2954343801	0.0178630710
1836.0000000000	2.7866063826	-0.0540566556	1579.0000000000	1.4300611672	0.0207240728
1842.0000000000	2.4886191313	-0.0455889157	1586.0000000000	1.5867474643	0.0242301689
1848.0000000000	2.2362423313	-0.0387743572	1593.0000000000	1.7709891253	0.0285689975
1854.0000000000	2.0208573045	-0.0331967610	1600.0000000000	1.9892730143	0.0340082924
1860.0000000000	1.8361181549	-0.0284980064	1607.0000000000	2.2505288066	0.0409200997
1866.0000000000	1.6780647547	-0.0241811295	1614.0000000000	2.5668166548	0.0498381168
1872.0000000000	1.5483245329	-0.0184125808	1621.0000000000	2.9547418872	0.0615458864
1878.0000000000	1.4932013018	-0.0019617961	1628.0000000000	3.4376753093	0.0772245119
1884.0000000000	1.3741686147	-0.0327199612	1635.0000000000	4.0493489642	0.0987091414
1890.0000000000	1.2309613089	-0.0181105237	1642.0000000000	4.8398937892	0.1289531768
1896.0000000000	0.0236768746	-0.0005992669	1649.0000000000	5.8864133593	0.1729100761
1902.0000000000	0.0220205718	-0.0000537131	1656.0000000000	7.3124447752	0.2393068668
1908.0000000000	0.0224126896	0.0001590509	1663.0000000000	9.3259737948	0.3444641467
1914.0000000000	0.0237579742	0.0002818795	1670.0000000000	12.2992983255	0.5212438282
1920.0000000000	0.0257469669	0.0003794800	1677.0000000000	16.9528022106	0.8423313258
1926.0000000000	0.0283098990	0.0004758476	1684.0000000000	24.8305628304	1.4896407045
1932.0000000000	0.0314803390	0.0005837429	1691.0000000000	39.7418296930	3.0028348035
1938.0000000000	0.0353580374	0.0007132842	1698.0000000000	73.2296868386	7.4347202052
1944.0000000000	0.0401049201	0.0008755237	1705.0000000000	173.8305866449	26.3364860290
1950.0000000000	0.0459582895	0.0010849529	1712.0000000000	687.9494657331	168.8393358531
1956.0000000000	0.0532597348	0.0013624215	1719.0000000000	1318.7970986954	-274.9401512463
1962.0000000000	0.0625056421	0.0017396351	1726.0000000000	272.7218421359	-50.0491615122
1968.0000000000	0.0744334930	0.0022669743	1733.0000000000	98.2415083036	-11.4632876351
1974.0000000000	0.0901729488	0.0030280795	1740.0000000000	49.2732370711	-4.1335360181
1980.0000000000	0.1115219453	0.0041687796	1747.0000000000	29.3991062087	-1.9164692949
1986.0000000000	0.1414801270	0.0059584997	1754.0000000000	19.4788315145	-1.0366329630
1992.0000000000	0.1853532952	0.0089315686	1761.0000000000	13.8381176858	-0.6217487892
1998.0000000000	0.2532466482	0.0142465646	1768.0000000000	10.3312857655	-0.4014844091
2004.0000000000	0.3663518696	0.0247246489	1775.0000000000	8.0048185273	-0.2739952636
2010.0000000000	0.5753055601	0.0484033457	1782.0000000000	6.3833615777	-0.1951946914
2016.0000000000	1.0258975888	0.1139136803	1789.0000000000	5.2086249112	-0.1439076770
2022.0000000000	2.2756909578	0.3635782514	1796.0000000000	4.3305415590	-0.1091079702
2028.0000000000	7.5579403754	1.8373573755	1803.0000000000	3.6571221371	-0.0846704562
2034.0000000000	18.7082634731	-2.0577165573	1810.0000000000	3.1294517290	-0.0670073370
2040.0000000000	4.9322742161	-1.0672939223	1817.0000000000	2.7083990945	-0.0539214228
2046.0000000000	1.7255263248	-0.2431695983	1824.0000000000	2.3671706339	-0.0440142230
2052.0000000000	0.8460775489	-0.0852063742	1831.0000000000	2.0869580499	-0.0363629083
2058.0000000000	0.4984201171	-0.0386579088	1838.0000000000	1.8543209240	-0.0303322406
2064.0000000000	0.3282095418	-0.0205712037	1845.0000000000	1.6596346262	-0.0254480890
2070.0000000000	0.2328698642	-0.0121723947	1852.0000000000	1.4964087209	-0.0212576568
2076.0000000000	0.1743661982	-0.0077612391	1859.0000000000	1.3622598455	-0.0169011888
2082.0000000000	0.1360552779	-0.0052253404	1866.0000000000	1.2690041410	-0.0079086870
2088.0000000000	0.1097457454	-0.0036618941	1873.0000000000	1.3472844764	0.0370189351
2094.0000000000	0.0910395462	-0.0026413226	1880.0000000000	0.1488904704	-0.0351258826
2100.0000000000	0.0774152974	-0.0019411240	1887.0000000000	0.0424044780	-0.0052612435
2106.0000000000	0.0673559927	-0.0014375442	1894.0000000000	0.0229621921	-0.0013487931
2112.0000000000	0.0599202864	-0.0010570505	1901.0000000000	0.0173196770	-0.0004395803
2118.0000000000	0.0545200424	-0.0007526753	1908.0000000000	0.0155375009	-0.0001149927
2124.0000000000	0.0508024145	-0.0004913847	1915.0000000000	0.0153414240	0.0000442315
2130.0000000000	0.0485909245	-0.0002463534	1922.0000000000	0.0160323319	0.0001482326
2136.0000000000	0.0478665415	0.0000090681	1929.0000000000	0.0173805359	0.0002361713
2142.0000000000	0.0487859867	0.0003081586	1936.0000000000	0.0193458248	0.0003269943
2148.0000000000	0.0517510270	0.0007017647	1943.0000000000	0.0219965577	0.0004341730
2154.0000000000	0.0575718829	0.0012805198	1950.0000000000	0.0254949816	0.0005718332
2160.0000000000	0.0678396937	0.0022273736	1957.0000000000	0.0301175260	0.0007592624
2166.0000000000	0.0858326530	0.0039595811	1964.0000000000	0.0363101110	0.0010268608
2172.0000000000	0.1189975016	0.0075767327	1971.0000000000	0.0447994236	0.0014269156

2178.0000000000	0.1870222626	0.0165944463	1978.0000000000	0.0568147778	0.0020561407
2184.0000000000	0.3555631579	0.0458905619	1985.0000000000	0.0745551894	0.0031078856
2190.0000000000	0.9397236214	0.1899594089	1992.0000000000	0.1022599288	0.0050068949
2196.0000000000	3.6908455234	0.6541081147	1999.0000000000	0.1489595099	0.0088073975
2202.0000000000	1.9895365498	-0.4957595362	2006.0000000000	0.2367279089	0.0176012900
2208.0000000000	0.5637282740	-0.0948637608	2013.0000000000	0.4315157526	0.0429495542
2214.0000000000	0.2448121480	-0.0282749170	2020.0000000000	1.0041781002	0.1481266053
2220.0000000000	0.1344951812	-0.0116680952	2027.0000000000	3.8278093407	0.9226420244
2226.0000000000	0.0845648634	-0.0058518694	2034.0000000000	8.7446330567	-1.6058773207
2232.0000000000	0.0579546876	-0.0033304261	2041.0000000000	1.8035184128	-0.3402676301
2238.0000000000	0.0421512965	-0.0020695952	2048.0000000000	0.6347399586	-0.0752263378
2244.0000000000	0.0320175699	-0.0013717163	2055.0000000000	0.3163760573	-0.0265749434
2250.0000000000	0.0251374859	-0.0009550189	2062.0000000000	0.1894382781	-0.0121436370
2256.0000000000	0.0202555498	-0.0006911804	2069.0000000000	0.1269642427	-0.0064772408
2262.0000000000	0.0166675747	-0.0005161367	2076.0000000000	0.0919858897	-0.0038167729
2268.0000000000	0.0139540343	-0.0003954963	2083.0000000000	0.0706984219	-0.0024004929
2274.0000000000	0.0118524728	-0.0003096791	2090.0000000000	0.0570385627	-0.0015696361
2280.0000000000	0.0101919259	-0.0002469826	2097.0000000000	0.0480326738	-0.0010392684
2286.0000000000	0.0088571785	-0.0002001208	2104.0000000000	0.0421156905	-0.0006707426
2292.0000000000	0.0077683029	-0.0001643967	2111.0000000000	0.0384433683	-0.0003883258
2298.0000000000	0.0068684477	-0.0001366901	2118.0000000000	0.0365910952	-0.0001439410
2304.0000000000	1.6045690354	0.0202281489	2125.0000000000	0.0364289669	0.0001008860
2310.0000000000	1.7333542411	0.0227649541	2132.0000000000	0.0381014583	0.0003883274
2316.0000000000	1.8786078085	0.0257320939	2139.0000000000	0.0421077344	0.0007812061
2322.0000000000	2.0431946739	0.0292277860	2146.0000000000	0.0495483143	0.0013968006
2328.0000000000	2.2306469405	0.0333775410	2153.0000000000	0.0627588250	0.0024936202
2334.0000000000	2.4453546884	0.0383437115	2160.0000000000	0.0870518879	0.0047394692
2340.0000000000	2.6928250512	0.0443389550	2167.0000000000	0.1363253457	0.0102332401
2346.0000000000	2.9800384398	0.0516455528	2174.0000000000	0.2561934162	0.0277316769
2352.0000000000	3.3159454932	0.0606436344	2181.0000000000	0.6651975279	0.1144942742
2358.0000000000	3.7094793917	0.0718867899	2188.0000000000	3.0874244194	0.7282033248
2364.0000000000	4.1815335417	0.0860283084	2195.0000000000	2.2416591075	-0.5600572641
2370.0000000000	4.7497157908	0.1041332232	2202.0000000000	0.5305141048	-0.0843353793
2376.0000000000	5.4419929706	0.1276920165	2209.0000000000	0.2154608640	-0.0226475960
2382.0000000000	6.2972846721	0.1589209911	2216.0000000000	0.1147466892	-0.0089013726
2388.0000000000	7.3710387197	0.2012099653	2223.0000000000	0.0708924879	-0.0043434717
2394.0000000000	8.7444176174	0.2599150535	2230.0000000000	0.0480439630	-0.0024292705
2400.0000000000	10.5400341058	0.3438265116	2237.0000000000	0.0346739958	-0.0014916039
2406.0000000000	12.9501590312	0.4680321794	2244.0000000000	0.0261895093	-0.0009800260
2412.0000000000	16.2900938906	0.6598611205	2251.0000000000	0.0204734346	-0.0006777990
2418.0000000000	21.1059662713	0.9721821530	2258.0000000000	0.0164414942	-0.0004879955
2424.0000000000	28.4106802603	1.5160460108	2265.0000000000	0.0134921728	-0.0003628816
2430.0000000000	40.2557206968	2.5507824346	2272.0000000000	0.0112701766	-0.0002771037
2436.0000000000	61.3141660540	4.7739692423	2279.0000000000	0.0095547627	-0.0002163497
2442.0000000000	104.1363435740	10.4722376325	2286.0000000000	0.0082095226	-0.0001721254
2448.0000000000	211.8086751098	29.6768594932	2293.0000000000	0.0071188471	-0.0001391730
2454.0000000000	600.6784045216	128.9256326334	2300.0000000000	0.0062361857	-0.0001141196
2460.0000000000	2307.2170930693	282.8543217735	2307.0000000000	1.1774728071	0.0150137069
2466.0000000000	973.5613027445	-237.9477754083	2314.0000000000	3.2549287432	0.0429016523
2472.0000000000	290.1926521088	-46.7568741630	2321.0000000000	3.5775432041	0.0494808944
2478.0000000000	130.0404925429	-14.5331170055	2328.0000000000	3.9509358841	0.0574668597
2484.0000000000	72.6800487885	-6.1465616240	2335.0000000000	4.3862832611	0.0672592527
2490.0000000000	46.1828669547	-3.1305599590	2342.0000000000	4.8980323257	0.0794014011
2496.0000000000	31.8752886519	-1.8003718691	2349.0000000000	5.5051151204	0.0946445303
2502.0000000000	23.3010211226	-1.1272159877	2356.0000000000	6.2299997098	0.1140800289
2508.0000000000	18.1093913051	-0.7469278138	2363.0000000000	7.1124686873	0.1391609054
2514.0000000000	14.3608916713	-0.5204360131	2370.0000000000	8.1966609182	0.1721683844
2520.0000000000	11.7021588532	-0.3759746494	2377.0000000000	9.5491037630	0.2164990427
2526.0000000000	9.7913380046	-0.2789241862	2384.0000000000	11.2662005981	0.2774573763
2532.0000000000	8.3310576752	-0.2116833787	2391.0000000000	13.4919096779	0.3636332477
2538.0000000000	7.2138089297	-0.1632405293	2398.0000000000	16.4489538755	0.4895442547
2544.0000000000	6.3475046626	-0.1272065535	2405.0000000000	20.4968380446	0.6810158295
2550.0000000000	5.6706581875	-0.0995529041	2412.0000000000	26.2466354922	0.9869536667
2556.0000000000	5.1414675595	-0.0776269383	2419.0000000000	34.8062220070	1.5075004956
2562.0000000000	4.7313733865	-0.0595976659	2426.0000000000	48.3577249177	2.4694383584
2568.0000000000	4.4212004821	-0.0441249648	2433.0000000000	71.7023909939	4.4605431519
2574.0000000000	4.1988941902	-0.0301460430	2440.0000000000	117.1890803756	9.3249535135
2580.0000000000	4.0583428104	-0.0167191595	2447.0000000000	225.1116762300	24.8096626606
2586.0000000000	3.9990691569	-0.0028841449	2454.0000000000	591.8529134892	103.3209506422
2592.0000000000	4.0268006996	0.0124977708	2461.0000000000	2495.7111459657	392.8013728460
2598.0000000000	4.2232112919	0.0318519491	2468.0000000000	3324.2525731677	-388.9728118866
2604.0000000000	4.4829209718	0.0558914264	2475.0000000000	755.6061115909	-144.0191896914
2610.0000000000	4.9124861336	0.0893172927	2482.0000000000	264.7295452002	-31.3463292335
2616.0000000000	5.5871931311	0.1391810282	2489.0000000000	132.0132729213	-11.1084279389
2622.0000000000	5.3923850750	0.2416531070	2496.0000000000	78.7483921342	-5.1247927318
2628.0000000000	7.2150144932	0.3798561246	2503.0000000000	52.2360928230	-2.7696461632
2634.0000000000	10.2054495065	0.6489970304	2510.0000000000	37.1624362424	-1.6621282333
2640.0000000000	15.6383894420	1.2485029825	2517.0000000000	28.0840251695	-1.0705316108

2646.0000000000	27.1266105092	2.8768868482	2524.0000000000	21.8838525821	-0.7296492878
2652.0000000000	58.1869112339	8.9254240034	2531.0000000000	17.5706971526	-0.5184312154
2658.0000000000	185.3151085116	43.9601973011	2538.0000000000	14.5011941918	-0.3798529297
2664.0000000000	509.4949052330	-36.8055749816	2545.0000000000	12.1920728175	-0.2855539791
2670.0000000000	143.9476453749	-30.3629985796	2552.0000000000	10.4400201383	-0.2186471660
2676.0000000000	58.0712786748	-5.0144989766	2559.0000000000	9.0899019857	-0.1694760334
2682.0000000000	61.7265118554	6.6928112364	2566.0000000000	8.0401049475	-0.1320502718
2688.0000000000	51.4489683769	-9.9205825770	2573.0000000000	7.2230236648	-0.1024517578
2694.0000000000	19.6537151768	-2.2837004459	2580.0000000000	6.5939462365	-0.0779457319
2700.0000000000	11.6429683530	-0.7578689633	2587.0000000000	6.1248100128	-0.0564364492
2706.0000000000	8.5882681361	-0.3299436269	2594.0000000000	5.8011492574	-0.0360748288
2712.0000000000	7.2378189318	-0.1392809390	2601.0000000000	5.7031997038	-0.0138529151
2718.0000000000	6.7909146275	-0.0142268611	2608.0000000000	5.6899474641	0.0109215452
2724.0000000000	7.0651335627	0.1098415676	2615.0000000000	5.8735900629	0.0432974510
2730.0000000000	8.2304419711	0.2971341523	2622.0000000000	6.3310405093	0.0908907620
2736.0000000000	11.0595944253	0.7115822665	2629.0000000000	4.7656380466	0.2076181807
2742.0000000000	18.5327325650	2.0955180444	2636.0000000000	6.6642597195	0.3519104516
2748.0000000000	47.2489579274	9.7151968964	2643.0000000000	10.0869049100	0.6720329238
2754.0000000000	111.7659214265	-8.5585391512	2650.0000000000	17.2793365126	1.5413918895
2760.0000000000	49.0705759197	-3.3261537500	2657.0000000000	36.7487338193	4.8222388362
2766.0000000000	58.7069961823	6.5718583314	2664.0000000000	120.7576707121	26.3758896482
2772.0000000000	169.6344508652	39.8397996414	2671.0000000000	443.2134404876	-20.4348329336
2778.0000000000	381.5780238036	-49.5984866397	2678.0000000000	106.3620315043	-20.5499012554
2784.0000000000	100.1574573082	-20.9887293251	2685.0000000000	46.7173272037	-1.3334260246
2790.0000000000	36.4845984056	-4.9097574604	2692.0000000000	79.8347952762	5.1987960994
2796.0000000000	18.5410542240	-1.7633865084	2699.0000000000	30.0685036579	-5.0777589730
2802.0000000000	11.2736009205	-0.8185251041	2706.0000000000	13.2303248461	-1.0374275568
2808.0000000000	7.6332847503	-0.4454221669	2713.0000000000	8.9341062381	-0.3394482883
2814.0000000000	5.5474399636	-0.2696377177	2720.0000000000	7.5259192398	-0.0916202621
2820.0000000000	4.2371842028	-0.1760960517	2727.0000000000	7.4722214575	0.0743892777
2826.0000000000	3.0441080457	-0.1178536970	2734.0000000000	8.6733336705	0.2880773750
2832.0000000000	2.4447559917	-0.0844223719	2741.0000000000	12.0992932389	0.7749752493
2838.0000000000	2.0081108593	-0.0625870389	2748.0000000000	22.4981746037	2.7041925440
2844.0000000000	1.6799160171	-0.0477138593	2755.0000000000	74.9406712407	16.7147784954
2850.0000000000	1.3925973565	-0.0368129950	2762.0000000000	97.3434247224	-17.9910769049
2856.0000000000	1.1955853655	-0.0292459288	2769.0000000000	51.7126193650	1.2428539136
2862.0000000000	1.0377763000	-0.0236246074	2776.0000000000	110.9627817495	20.5322609644
2868.0000000000	0.9093887352	-0.0193604633	2783.0000000000	472.8492006870	35.8217754590
2874.0000000000	0.8035183237	-0.0160665892	2790.0000000000	138.6032152648	-30.7513861581
2880.0000000000	0.7151774488	-0.0134814358	2797.0000000000	41.4105062701	-5.5020310394
2886.0000000000	0.6406894659	-0.0114238223	2804.0000000000	19.3202629462	-1.7380622222
2892.0000000000	0.5772953180	-0.0097655076	2811.0000000000	11.2309905637	-0.7538494706
2898.0000000000	0.5228914383	-0.0084139674	2818.0000000000	7.3965037073	-0.3937543516
2904.0000000000	0.4758511092	-0.0073012945	2825.0000000000	5.2736969178	-0.2319523752
2910.0000000000	0.4349002092	-0.0063768752	2832.0000000000	3.6984702759	-0.1451886296
2916.0000000000	0.3372141548	-0.0048435555	2839.0000000000	2.8609347280	-0.0982095286
2922.0000000000	0.3099283837	-0.0042678794	2846.0000000000	2.2813590806	-0.0695879326
2928.0000000000	0.2858244768	-0.0037799153	2853.0000000000	1.8218510944	-0.0506276797
2934.0000000000	0.2644263721	-0.0033635778	2860.0000000000	1.5134414713	-0.0382616544
2940.0000000000	0.0000000000	0.0000000000	2867.0000000000	1.2775477471	-0.0296287913
2946.0000000000	0.0000000000	0.0000000000	2874.0000000000	1.0930270627	-0.0234172447
2952.0000000000	0.0000000000	0.0000000000	2881.0000000000	0.9459324668	-0.0188324812
2958.0000000000	0.0000000000	0.0000000000	2888.0000000000	0.8267577802	-0.0153738551
2964.0000000000	0.0000000000	0.0000000000	2895.0000000000	0.7288402869	-0.0127150784
2970.0000000000	0.0000000000	0.0000000000	2902.0000000000	0.6473963880	-0.0106372166
2976.0000000000	0.0000000000	0.0000000000	2909.0000000000	0.5789187562	-0.0089895939
2982.0000000000	0.0000000000	0.0000000000	2916.0000000000	0.5207878874	-0.0076661712
2988.0000000000	0.0000000000	0.0000000000	2923.0000000000	0.3954197454	-0.0056697870
2994.0000000000	0.0000000000	0.0000000000	2930.0000000000	0.3585301424	-0.0048953575
			2937.0000000000	0.3265708638	-0.0042557540
			2944.0000000000	0.0000000000	0.0000000000
			2951.0000000000	0.0000000000	0.0000000000
			2958.0000000000	0.0000000000	0.0000000000
			2965.0000000000	0.0000000000	0.0000000000
			2972.0000000000	0.0000000000	0.0000000000
			2979.0000000000	0.0000000000	0.0000000000
			2986.0000000000	0.0000000000	0.0000000000
			2993.0000000000	0.0000000000	0.0000000000
# IR Spectrum of IM3					
# IR Spectrum					
# X-Axis: Frequency (cm-1)					
# Y-Axis: ε (M-1 cm-1)					
# Peak information					
#	X	Y			
#	10.0782000000	1.2271171366			

#	16.0612000000	0.5961294143	
#	31.5947000000	0.1641483101	
#	36.3941000000	3.7269643005	
#	41.4126000000	3.5065189145	
#	44.7240000000	4.8257400747	
#	62.5476000000	7.6091666074	
#	66.7826000000	1.7383489743	
#	76.3122000000	1.3069330315	
#	83.2551000000	7.8345527683	
#	110.7724000000	18.9291490580	
#	121.6441000000	3.1287050629	
#	169.7900000000	5.5638689162	
#	205.2840000000	0.1029978284	
#	222.9854000000	0.2129010644	
#	445.4116000000	243.9461035259	
#	694.8726000000	569.7513558880	
#	696.8833000000	360.3464181741	
#	698.1152000000	105.6764417642	
#	698.8402000000	332.7632801092	
#	700.2021000000	112.9756122653	
#	701.7132000000	62.2048888403	
#	833.5407000000	2.2456315067	
#	877.2750000000	0.4160951374	
#	893.6359000000	0.7870439861	
#	956.4037000000	1.2250956527	
#	981.4140000000	1.5759805447	
#	1003.5919000000	92.6222641053	
#	1068.2923000000	1.2106823532	
#	1225.7668000000	206.1081751172	
#	1234.9790000000	6.6622454217	
#	1417.1597000000	0.0836074457	
#	1418.7428000000	0.1200691688	
#	1418.9326000000	0.4110483466	
#	1734.8146000000	1021.0207317050	
#	1890.9360000000	0.2293295473	
#	2040.2872000000	4.5423845671	
#	2194.1713000000	2.0952701180	
#	2459.6374000000	532.6669586485	
#	2463.3336000000	739.4685210329	
#	2467.1629000000	1903.8883344669	
#	2667.9094000000	169.0281937770	
#	2691.5119000000	25.9534239685	
#	2754.0403000000	65.3311482475	
#	2779.7442000000	222.3636408534	
# Spectra			
#	X	Y	DY/DX
	-500.0000000000	0.0000000000	0.0000000000
	-493.0000000000	0.0000000000	0.0000000000
	-486.0000000000	0.0000000000	0.0000000000
	-479.0000000000	0.0000000000	0.0000000000
	-472.0000000000	0.0000000000	0.0000000000
	-465.0000000000	0.0000000000	0.0000000000
	-458.0000000000	0.0000000000	0.0000000000
	-451.0000000000	0.0000000000	0.0000000000
	-444.0000000000	0.0000000000	0.0000000000
	-437.0000000000	0.0000000000	0.0000000000
	-430.0000000000	0.0000000000	0.0000000000
	-423.0000000000	0.0000000000	0.0000000000
	-416.0000000000	0.0000000000	0.0000000000
	-409.0000000000	0.0000000000	0.0000000000
	-402.0000000000	0.0000000000	0.0000000000
	-395.0000000000	0.0000000000	0.0000000000
	-388.0000000000	0.0000000000	0.0000000000
	-381.0000000000	0.0000000000	0.0000000000
	-374.0000000000	0.0000000000	0.0000000000
	-367.0000000000	0.0000000000	0.0000000000
	-360.0000000000	0.0000000000	0.0000000000
	-353.0000000000	0.0000000000	0.0000000000
	-346.0000000000	0.0000000000	0.0000000000
	-339.0000000000	0.0000000000	0.0000000000
	-332.0000000000	0.0000000000	0.0000000000
	-325.0000000000	0.0000000000	0.0000000000
	-318.0000000000	0.0000000000	0.0000000000
	-311.0000000000	0.0000000000	0.0000000000
	-304.0000000000	0.0000000000	0.0000000000
	-297.0000000000	0.0000000000	0.0000000000
	-290.0000000000	0.0000000000	0.0000000000

-283.0000000000	0.0000000000	0.0000000000
-276.0000000000	0.0000000000	0.0000000000
-269.0000000000	0.0000000000	0.0000000000
-262.0000000000	0.0000000000	0.0000000000
-255.0000000000	0.0000000000	0.0000000000
-248.0000000000	0.0000000000	0.0000000000
-241.0000000000	0.0000000000	0.0000000000
-234.0000000000	0.0000000000	0.0000000000
-227.0000000000	0.0000000000	0.0000000000
-220.0000000000	0.0000000000	0.0000000000
-213.0000000000	0.0000000000	0.0000000000
-206.0000000000	0.0000000000	0.0000000000
-199.0000000000	0.0000000000	0.0000000000
-192.0000000000	0.0000000000	0.0000000000
-185.0000000000	0.0000000000	0.0000000000
-178.0000000000	0.0000000000	0.0000000000
-171.0000000000	0.0000000000	0.0000000000
-164.0000000000	0.0000000000	0.0000000000
-157.0000000000	0.0000000000	0.0000000000
-150.0000000000	0.0000000000	0.0000000000
-143.0000000000	0.0000125523	0.0000001613
-136.0000000000	0.0000137626	0.0000001852
-129.0000000000	0.0000151567	0.0000002141
-122.0000000000	0.0000947081	0.0000012338
-115.0000000000	0.0003033820	0.0000039373
-108.0000000000	0.0003329484	0.0000045287
-101.0000000000	0.0003670760	0.0000052455
-94.0000000000	0.0006757631	0.0000095573
-87.0000000000	0.0008160340	0.0000120315
-80.0000000000	0.0009638859	0.0000148564
-73.0000000000	0.0014471435	0.0000223268
-66.0000000000	0.0016174441	0.0000264932
-59.0000000000	0.0018207116	0.0000318057
-52.0000000000	0.0020664162	0.0000387080
-45.0000000000	0.0035648595	0.0000632390
-38.0000000000	0.0042635730	0.0000806364
-31.0000000000	0.0048969602	0.0001015245
-24.0000000000	0.0057065877	0.0001318172
-17.0000000000	0.0067813719	0.0001791419
-10.0000000000	0.0082977532	0.0002633984
-3.0000000000	0.0107138104	0.0004607464
4.0000000000	0.0160729199	0.0013176206
11.0000000000	0.0299993442	0.0004301074
18.0000000000	0.0331396308	-0.0002185377
25.0000000000	0.0444852969	0.0039752751
32.0000000000	0.1129879533	0.0196392674
39.0000000000	0.2638680416	0.0172307788
46.0000000000	0.2849558079	-0.0375430315
53.0000000000	0.1478911693	0.0034417327
60.0000000000	0.3751635208	0.0722315034
67.0000000000	0.3591955056	-0.0424077795
74.0000000000	0.2539065092	0.0190882456
81.0000000000	0.5326868070	0.0819373145
88.0000000000	0.3214459689	-0.0554953729
95.0000000000	0.1925814898	0.0037214559
102.0000000000	0.3627736628	0.0573684687
109.0000000000	1.5720533368	0.2843112817
116.0000000000	0.7990264832	-0.1363833928
123.0000000000	0.4870373424	-0.0710586346
130.0000000000	0.1524764489	-0.0193399076
137.0000000000	0.0801719790	-0.0050919259
144.0000000000	0.0602635362	-0.0010983942
151.0000000000	0.0633723858	0.0022427842
158.0000000000	0.1049050360	0.0120263696
165.0000000000	0.3520028800	0.0821776094
172.0000000000	0.6396942659	-0.1330542385
179.0000000000	0.1405373708	-0.0239568157
186.0000000000	0.0564413423	-0.0055695148
193.0000000000	0.0330411356	-0.0018295922
200.0000000000	0.0278782297	0.0006651078
207.0000000000	0.0321662748	-0.0031121166
214.0000000000	0.0209372855	0.0002814986
221.0000000000	0.0428690130	0.0061785280
228.0000000000	0.0234587923	-0.0041281134
235.0000000000	0.0102359346	-0.0007735748
242.0000000000	0.0068696845	-0.0002924696
249.0000000000	0.0050283549	-0.0001577346
256.0000000000	0.0041351838	-0.0001039479

263.0000000000	0.0035159372	-0.0000755600
270.0000000000	0.0030522459	-0.0000581771
277.0000000000	0.0016371676	-0.0000338424
284.0000000000	0.0012257939	-0.0000244759
291.0000000000	0.0641953843	0.0007972983
298.0000000000	0.0702027970	0.0009227061
305.0000000000	0.0771707091	0.0010727836
312.0000000000	0.0852960991	0.0012547956
319.0000000000	0.0948345952	0.0014783844
326.0000000000	0.1061207024	0.0017566638
333.0000000000	0.1191061769	0.0021138782
340.0000000000	0.1354087159	0.0025631746
347.0000000000	0.1553078585	0.0031490287
354.0000000000	0.1799424375	0.0039275600
361.0000000000	0.2109405839	0.0049849511
368.0000000000	0.2506840246	0.0064581697
375.0000000000	0.3028277395	0.0085727934
382.0000000000	0.3730875660	0.0117193900
389.0000000000	0.4708988721	0.0166115871
396.0000000000	0.6128412105	0.0246440596
403.0000000000	0.8299028608	0.0387906082
410.0000000000	1.1858922233	0.0661337884
417.0000000000	1.8294780085	0.1262808474
424.0000000000	3.1742861983	0.2865026823
431.0000000000	6.7326778490	0.8675115740
438.0000000000	21.2325187597	4.4371326750
445.0000000000	93.1425858196	4.7419760538
452.0000000000	25.3515699192	-5.6231165458
459.0000000000	7.5061126690	-1.0166837681
466.0000000000	3.4237826251	-0.3204958230
473.0000000000	1.9380037095	-0.1376014883
480.0000000000	1.2422583186	-0.0708829378
487.0000000000	0.8627780618	-0.0411109780
494.0000000000	0.6336420470	-0.0259064547
501.0000000000	0.4848767025	-0.0173553836
508.0000000000	0.3828993698	-0.0121857022
515.0000000000	0.3099818886	-0.0088796715
522.0000000000	0.2560551927	-0.0066683376
529.0000000000	0.2150587819	-0.0051339045
536.0000000000	0.4004411652	-0.0013026649
543.0000000000	0.7859632965	0.0049207478
550.0000000000	0.8267600295	0.0067453952
557.0000000000	0.8806647351	0.0086839488
564.0000000000	0.9488572344	0.0108465967
571.0000000000	1.0333241182	0.0133560200
578.0000000000	1.1369978213	0.0163625339
585.0000000000	1.2640139052	0.0200633223
592.0000000000	1.4201293820	0.0247300851
599.0000000000	1.6133827655	0.0307519121
606.0000000000	1.7967761614	0.0394317633
613.0000000000	2.1081944828	0.0501131776
620.0000000000	2.5081686668	0.0650273154
627.0000000000	3.0337447017	0.0864958824
634.0000000000	3.7435694516	0.1185519902
641.0000000000	4.7349652776	0.1686116449
648.0000000000	6.1790904807	0.2513022798
655.0000000000	8.3998825619	0.3981550133
662.0000000000	12.0721325840	0.6855184297
669.0000000000	18.7980832491	1.3301417046
676.0000000000	33.1793845167	3.1076299562
683.0000000000	73.0638163093	10.0142971227
690.0000000000	252.8062692617	56.8484898524
697.0000000000	767.8732024876	-5.2579834835
704.0000000000	267.8419072463	-59.4520212815
711.0000000000	75.5212242737	-10.5790075568
718.0000000000	33.8444428786	-3.2088141507
725.0000000000	19.0672469240	-1.3599958166
732.0000000000	12.2079534422	-0.6972383603
739.0000000000	8.4793068999	-0.4036295795
746.0000000000	6.2305296692	-0.2541630264
753.0000000000	4.7712780525	-0.1702114286
760.0000000000	3.7712950258	-0.1194684384
767.0000000000	3.0566152548	-0.0869961828
774.0000000000	2.5286080537	-0.0652341789
781.0000000000	2.1280774990	-0.0500662033
788.0000000000	1.8179427292	-0.0391002772
795.0000000000	1.5744034313	-0.0308348755
802.0000000000	1.3831985169	-0.0241605211

809.0000000000	1.2358116929	-0.0178678800
816.0000000000	1.1385699785	-0.0089496029
823.0000000000	1.1501945604	0.0190580843
830.0000000000	1.7599754849	0.2131122571
837.0000000000	1.6978349815	-0.2400993281
844.0000000000	0.9593016855	-0.0428240311
851.0000000000	0.7809374703	-0.0154303378
858.0000000000	0.3625925085	-0.0037249638
865.0000000000	0.1383580293	0.0046918964
872.0000000000	0.2313378266	0.0299138579
879.0000000000	0.4091009699	-0.0421980234
886.0000000000	0.2941739742	0.0179282632
893.0000000000	0.7327660618	0.0456210274
900.0000000000	0.3160836652	-0.0372851071
907.0000000000	0.2088441361	-0.0041636600
914.0000000000	0.2049438444	0.0016972166
921.0000000000	0.2266609820	0.0043615535
928.0000000000	0.2659739619	0.0069808708
935.0000000000	0.3277355822	0.0110892271
942.0000000000	0.4332113469	0.0207609985
949.0000000000	0.6867916598	0.0646919755
956.0000000000	1.6084978475	0.0761481876
963.0000000000	1.1135756130	-0.0165116993
970.0000000000	1.3587491679	0.0779793447
977.0000000000	2.4281230829	0.2778894920
984.0000000000	4.1934625750	0.0988930756
991.0000000000	7.5987158808	1.0288703212
998.0000000000	27.3449343079	6.4402078222
1005.0000000000	71.6977842466	-11.2237196937
1012.0000000000	14.8957675468	-2.8840764891
1019.0000000000	5.1116998956	-0.6189297423
1026.0000000000	2.5114784923	-0.2152120348
1033.0000000000	1.4884200038	-0.0972664213
1040.0000000000	0.9913492554	-0.0508794325
1047.0000000000	0.7235742476	-0.0277109855
1054.0000000000	0.5910321266	-0.0094518592
1061.0000000000	0.6530569290	0.0410335211
1068.0000000000	1.5686304156	0.0326260862
1075.0000000000	0.7078013453	-0.0696548172
1082.0000000000	0.4742563252	-0.0147807213
1089.0000000000	0.4117149789	-0.0051126039
1096.0000000000	0.3895924218	-0.0016273751
1103.0000000000	0.3856984805	0.0003921130
1110.0000000000	0.3940978273	0.0019728667
1117.0000000000	0.4125122923	0.0034811994
1124.0000000000	0.4424227512	0.0050981490
1131.0000000000	0.4845526139	0.0070016224
1138.0000000000	0.5415707233	0.0093899264
1145.0000000000	0.6169798347	0.0125509862
1152.0000000000	0.7191756245	0.0168948168
1159.0000000000	0.8579191985	0.0231465471
1166.0000000000	1.0017163158	0.0331650773
1173.0000000000	1.2816874429	0.0480449664
1180.0000000000	1.6981098941	0.0732870734
1187.0000000000	2.3560017171	0.1197059705
1194.0000000000	3.4843538896	0.2149416530
1201.0000000000	5.6621888866	0.4435099333
1208.0000000000	10.7126311551	1.1423232608
1215.0000000000	26.8195355850	4.3591349630
1222.0000000000	116.6154669045	29.0338688493
1229.0000000000	134.5787242344	-31.8489107779
1236.0000000000	35.6996233404	-5.7197468251
1243.0000000000	12.6079959330	-1.5155607574
1250.0000000000	6.2768664972	-0.5250596704
1257.0000000000	3.7594305065	-0.2425217472
1264.0000000000	2.5030215715	-0.1315952167
1271.0000000000	1.7855916960	-0.0792589288
1278.0000000000	1.3377203818	-0.0513807070
1285.0000000000	1.0395018597	-0.0351835167
1292.0000000000	0.8310049402	-0.0251356975
1299.0000000000	0.6795586645	-0.0185743104
1306.0000000000	0.5661196549	-0.0141086018
1313.0000000000	0.4789801814	-0.0109636030
1320.0000000000	0.4106230838	-0.0086839770
1327.0000000000	0.3560455015	-0.0069900283
1334.0000000000	0.3118172495	-0.0057032204
1341.0000000000	0.2755286146	-0.0047055331
1348.0000000000	0.2454555023	-0.0039161455

1355.0000000000	0.2203524562	-0.0032772530
1362.0000000000	0.1993266676	-0.0027445321
1369.0000000000	0.1817716490	-0.0022791234
1376.0000000000	0.1673621650	-0.0018372868
1383.0000000000	0.1561531148	-0.0013485317
1390.0000000000	0.0192016454	0.0009300834
1397.0000000000	0.0249837741	0.0022363545
1404.0000000000	0.0526276301	0.0067137385
1411.0000000000	0.1639618842	0.0338812069
1418.0000000000	0.7201754970	0.0558991211
1425.0000000000	0.2170830080	-0.0491761139
1432.0000000000	0.0625531631	-0.0086337663
1439.0000000000	0.0281772662	-0.0026721866
1446.0000000000	0.0158468289	-0.0011361158
1453.0000000000	0.0101186479	-0.0005818132
1460.0000000000	0.0070097318	-0.0003361297
1467.0000000000	0.0051388007	-0.0002112316
1474.0000000000	0.0039270409	-0.0001412194
1481.0000000000	0.0030979038	-0.0000989973
1488.0000000000	0.0025058847	-0.0000720482
1495.0000000000	0.0020685524	-0.0000540505
1502.0000000000	0.0017363929	-0.0000415778
1509.0000000000	0.0014782172	-0.0000326638
1516.0000000000	0.0012735899	-0.0000261252
1523.0000000000	0.0011086708	-0.0000212209
1530.0000000000	0.0009738167	-0.0000174707
1537.0000000000	0.0008621425	-0.0000145544
1544.0000000000	0.0007686264	-0.0000122525
1551.0000000000	0.0006895359	-0.0000104114
1558.0000000000	0.0006220504	-0.0000089213
1565.0000000000	0.0005640062	-0.0000077025
1572.0000000000	0.0005137213	-0.0000066959
1579.0000000000	1.0105839357	0.0129630775
1586.0000000000	1.1078222048	0.0148778735
1593.0000000000	1.2197969517	0.0171890241
1600.0000000000	1.3496426585	0.0200045925
1607.0000000000	1.5013734692	0.0234700021
1614.0000000000	1.6801968353	0.0277840105
1621.0000000000	1.8929657685	0.0332229878
1628.0000000000	2.1488443558	0.0401786858
1635.0000000000	2.4603096472	0.0492185482
1642.0000000000	2.8446990967	0.0611848862
1649.0000000000	3.3266711977	0.0773635033
1656.0000000000	3.9422508146	0.0997815781
1663.0000000000	4.7457412478	0.1317577124
1670.0000000000	5.8220800194	0.1789717047
1677.0000000000	7.3101423925	0.2516774978
1684.0000000000	9.4496343309	0.3696355274
1691.0000000000	12.6833055400	0.5741679543
1698.0000000000	17.9034880929	0.9612814879
1705.0000000000	27.1312148044	1.7878153260
1712.0000000000	45.7614992957	3.8919615216
1719.0000000000	92.2629559132	10.9665021913
1726.0000000000	262.0283716669	49.3008530994
1733.0000000000	1272.5657506715	239.3847047734
1740.0000000000	572.4471974952	-138.4228888704
1747.0000000000	149.2629641984	-22.1155292568
1754.0000000000	63.9227973533	-6.3860589314
1761.0000000000	34.9899329783	-2.6115051342
1768.0000000000	21.9747640249	-1.3053676165
1775.0000000000	15.0546032153	-0.7418768790
1782.0000000000	10.9488822058	-0.4607374635
1789.0000000000	8.3172574073	-0.3052961619
1796.0000000000	6.5308738492	-0.2125340083
1803.0000000000	5.2633713084	-0.1538143564
1810.0000000000	4.3318364379	-0.1148587116
1817.0000000000	3.6273477755	-0.0880075228
1824.0000000000	3.0817894831	-0.0689012748
1831.0000000000	2.6508128257	-0.0549337437
1838.0000000000	2.3045613408	-0.0444799370
1845.0000000000	2.0223776563	-0.0364869102
1852.0000000000	1.7896792351	-0.0302425515
1859.0000000000	1.5961181872	-0.0252276571
1866.0000000000	1.4347041166	-0.0209721694
1873.0000000000	1.3024545640	-0.0166869757
1880.0000000000	1.2081842336	-0.0088703317
1887.0000000000	1.2556508360	0.0338689698
1894.0000000000	1.2110153272	-0.0692211891

1901.0000000000	0.0578647347	-0.0087002970
1908.0000000000	0.0269011153	-0.0020631700
1915.0000000000	0.0182760541	-0.0006865420
1922.0000000000	0.0152977226	-0.0002331825
1929.0000000000	0.0144620695	-0.0000273174
1936.0000000000	0.0147306991	0.0000965365
1943.0000000000	0.0157537311	0.0001938886
1950.0000000000	0.0174425604	0.0002898937
1957.0000000000	0.0198480477	0.0004012573
1964.0000000000	0.0231349440	0.0005448728
1971.0000000000	0.0276046168	0.0007439548
1978.0000000000	0.0337657196	0.0010362997
1985.0000000000	0.0424847923	0.0014900794
1992.0000000000	0.0553053237	0.0022392914
1999.0000000000	0.0751716288	0.0035733727
2006.0000000000	0.1082556059	0.0061958824
2013.0000000000	0.1692957412	0.0121118986
2020.0000000000	0.3007983565	0.0285045397
2027.0000000000	0.6674683674	0.0920699185
2034.0000000000	2.3136545944	0.5238517116
2041.0000000000	7.7845238587	-0.6719642120
2048.0000000000	1.7049455961	-0.3477041134
2055.0000000000	0.5558760485	-0.0698994634
2062.0000000000	0.2671780941	-0.0234226148
2069.0000000000	0.1569122911	-0.0103792258
2076.0000000000	0.1040298789	-0.0054245831
2083.0000000000	0.0749491149	-0.0031473989
2090.0000000000	0.0575079722	-0.0019519361
2097.0000000000	0.0464788872	-0.0012561315
2104.0000000000	0.0393428531	-0.0008124410
2111.0000000000	0.0347988640	-0.0005014811
2118.0000000000	0.0321669205	-0.0002577350
2125.0000000000	0.0311344651	-0.0000382206
2132.0000000000	0.0316613693	0.0001941995
2139.0000000000	0.0339868762	0.0004847665
2146.0000000000	0.0387517604	0.0009077360
2153.0000000000	0.0473403982	0.0016132190
2160.0000000000	0.0627885192	0.0029588777
2167.0000000000	0.0924748496	0.0059605544
2174.0000000000	0.1578665894	0.0142682785
2181.0000000000	0.3427827429	0.0466615515
2188.0000000000	1.1840894328	0.2687961416
2195.0000000000	3.8241562692	-0.3793684354
2202.0000000000	0.8244847036	-0.1670271709
2209.0000000000	0.2701391716	-0.0339633465
2216.0000000000	0.1293893169	-0.0114698300
2223.0000000000	0.0752256848	-0.0051202319
2230.0000000000	0.0490293381	-0.0027031826
2237.0000000000	0.0344394458	-0.0015943346
2244.0000000000	0.0255005157	-0.0010169738
2251.0000000000	0.0196343243	-0.0006875937
2258.0000000000	0.0155798577	-0.0004862675
2265.0000000000	0.0126618241	-0.0003563970
2272.0000000000	0.0104923441	-0.0002689163
2279.0000000000	0.0088358336	-0.0002078596
2286.0000000000	0.0075425396	-0.0001639630
2293.0000000000	0.0065135943	-0.0001316003
2300.0000000000	0.7178327017	0.0088092899
2307.0000000000	1.8163052097	0.0233094698
2314.0000000000	4.7648091105	0.0629987455
2321.0000000000	5.2385747161	0.0726681288
2328.0000000000	5.7869930636	0.0844124896
2335.0000000000	6.4265529633	0.0988224244
2342.0000000000	7.1785782682	0.1167015612
2349.0000000000	8.0710302063	0.1391621818
2356.0000000000	9.1387153618	0.1678031695
2363.0000000000	10.4371629095	0.2048210506
2370.0000000000	12.0334878718	0.2535850204
2377.0000000000	14.0263467506	0.3191522881
2384.0000000000	16.5589265709	0.4094370565
2391.0000000000	19.8454587742	0.5372875664
2398.0000000000	24.2181814107	0.7244870105
2405.0000000000	30.2150071350	1.0099428515
2412.0000000000	38.7539275856	1.4677311343
2419.0000000000	51.5084003316	2.2506661980
2426.0000000000	71.8006796416	3.7085839806
2433.0000000000	107.0305550293	6.7637827277
2440.0000000000	176.6339490064	14.3970522727

2447.0000000000	346.7222970915	39.8866010725
2454.0000000000	968.9273068336	181.8619106960
2461.0000000000	3400.3888564008	376.4031572073
2468.0000000000	4778.1445928994	-597.0679559006
2475.0000000000	1079.0069780830	-204.5053485404
2482.0000000000	380.1815671264	-44.7937641747
2489.0000000000	190.1975640164	-15.9353959123
2496.0000000000	113.6962937563	-7.3705412792
2503.0000000000	75.5322492532	-3.9908030271
2510.0000000000	54.0480387519	-2.3952620093
2517.0000000000	40.5300322534	-1.5485700030
2524.0000000000	31.5536681883	-1.0574064915
2531.0000000000	25.2969226576	-0.7529301727
2538.0000000000	20.8101897042	-0.5534796550
2545.0000000000	17.4395762228	-0.4177354451
2552.0000000000	14.8700510735	-0.3216588596
2559.0000000000	12.8765700519	-0.2513720320
2566.0000000000	11.3109197338	-0.1982916112
2573.0000000000	10.0734753954	-0.1568440411
2580.0000000000	9.0969718368	-0.1231988212
2587.0000000000	8.3371726556	-0.0945051841
2594.0000000000	7.7679478075	-0.0683617045
2601.0000000000	7.4861880540	-0.0409491964
2608.0000000000	7.2988131444	-0.0117643058
2615.0000000000	7.3394143822	0.0252295843
2622.0000000000	7.3461123973	0.0918479869
2629.0000000000	4.8683441582	0.2232071969
2636.0000000000	6.9494612026	0.3929377597
2643.0000000000	10.8889353265	0.7957331034
2650.0000000000	19.8567726476	2.0131610451
2657.0000000000	47.9297090644	7.5419763484
2664.0000000000	202.0020982086	50.0448094087
2671.0000000000	247.9234497777	-58.9459758783
2678.0000000000	59.1839413386	-8.3960128872
2685.0000000000	38.3402108216	1.4809794765
2692.0000000000	71.8634253177	-4.3854139374
2699.0000000000	21.9251108498	-3.1321269187
2706.0000000000	11.1910463647	-0.6841995585
2713.0000000000	8.4600501095	-0.1885332398
2720.0000000000	7.9725254581	0.0347089098
2727.0000000000	8.9409266081	0.2547479838
2734.0000000000	11.9924440917	0.6816526248
2741.0000000000	20.6110324848	2.1198967946
2748.0000000000	57.1592551198	11.4210491464
2755.0000000000	162.0824685266	-15.6704344693
2762.0000000000	58.2203224014	-3.5471790028
2769.0000000000	76.3548718707	9.3427530149
2776.0000000000	291.0784686688	70.7410028023
2783.0000000000	325.5896318664	-79.0531640255
2790.0000000000	73.1236218293	-12.0804752003
2797.0000000000	29.1070843031	-3.0727151851
2804.0000000000	15.5830105016	-1.1837755026
2811.0000000000	9.7662610600	-0.5753483446
2818.0000000000	6.7357847913	-0.3230290231
2825.0000000000	4.9518890006	-0.1999181157
2832.0000000000	3.5775188142	-0.1298571160
2839.0000000000	2.8181723340	-0.0903102524
2846.0000000000	2.2794792453	-0.0654003702
2853.0000000000	1.8460093327	-0.0484584913
2860.0000000000	1.5486693710	-0.0371645600
2867.0000000000	1.3181401687	-0.0291368165
2874.0000000000	1.1357382030	-0.0232720731
2881.0000000000	0.9888981225	-0.0188864798
2888.0000000000	0.8689128497	-0.0155405160
2895.0000000000	0.7695920423	-0.0129427904
2902.0000000000	0.6864355256	-0.0108948442
2909.0000000000	0.6161073519	-0.0092582860
2916.0000000000	0.4610751050	-0.0067619593
2923.0000000000	0.4171506220	-0.0058193197
2930.0000000000	0.3792151018	-0.0050440189
2937.0000000000	0.3462274863	-0.0044005197
2944.0000000000	0.0000000000	0.0000000000
2951.0000000000	0.0000000000	0.0000000000
2958.0000000000	0.0000000000	0.0000000000
2965.0000000000	0.0000000000	0.0000000000
2972.0000000000	0.0000000000	0.0000000000
2979.0000000000	0.0000000000	0.0000000000
2986.0000000000	0.0000000000	0.0000000000

2993.0000000000	0.0000000000	0.0000000000	
-----------------	--------------	--------------	--