

99 AGARD LS 195 Streamline Curvature Calculation

Reynolds: RNI=0.100 f=0.950 RNI=1.000 f=1.000

Min Pressure Ratio

2.018000000 0.010000000 0.025000000 0.050000001 0.075000003  
0.100000001 0.150000006 0.200000003 0.300000012 0.400000006  
0.500000000 0.600000024 0.699999988 0.800000012 0.899999976  
1.000000000 1.100000024 1.200000048  
0.010000000 0.999989867 0.999936700 0.999746859 0.999430478  
0.998987556 0.997721970 0.995950103 0.990887761 0.983800471  
0.974688292 0.963551104 0.950465024 0.935885906 0.919889867  
0.902476788 0.883646786 0.863399744

Max Pressure Ratio

2.018000000 0.010000000 0.025000000 0.050000001 0.075000003  
0.100000001 0.150000006 0.200000003 0.300000012 0.400000006  
0.500000000 0.600000024 0.699999988 0.800000012 0.899999976  
1.000000000 1.100000024 1.200000048  
0.010000000 1.022931457 1.027044296 1.037711859 1.053145409  
1.073344946 1.128042340 1.201803923 1.406519771 1.687492371  
2.044721842 2.478208065 2.901113272 3.221788883 3.495164871  
3.721241474 3.900018692 4.031496048

Mass Flow

18.05100000 0.000000000 0.020408163 0.040816326 0.061224490  
0.081632651 0.102040820 0.122448981 0.142857149 0.163265303  
0.183673471 0.204081640 0.224489793 0.244897962 0.265306115  
0.285714298 0.306122452 0.326530606 0.346938789 0.367346942  
0.387755096 0.408163279 0.428571433 0.448979586 0.469387770  
0.489795923 0.510204077 0.530612230 0.551020384 0.571428597  
0.591836751 0.612244904 0.632653058 0.653061211 0.673469365  
0.693877578 0.714285731 0.734693885 0.755102038 0.775510192  
0.795918345 0.816326559 0.836734712 0.857142866 0.877551019  
0.897959173 0.918367326 0.938775539 0.959183693 0.979591846  
1.000000000  
0.010000000 1.412520051 14.31781673 23.75601959 30.69020844  
35.89085007 40.19200134 44.89599991 49.37599945 52.93119812  
57.06413651 60.94054794 64.41459656 67.65905762 70.85755157  
73.99587250 77.07640839 80.08090210 83.00693512 85.80592346  
88.47598267 91.02296448 93.42433929 95.63295746 97.77275848  
99.8551941 101.8891068 103.8679276 105.7743835 107.6247330  
109.4249649 111.1813278 112.8944016 114.5632629 116.1922226  
117.7889404 119.3586197 120.9040298 122.4254303 123.9116135  
125.4111099 126.9251404 128.4607849 130.0105438 131.5768890  
133.1363373 134.6857605 136.2188568 137.7336273 139.2079468  
140.6690826

0.025000000 2.568218231 14.50288200 24.48032951 31.61848259  
37.61826324 42.95894623 47.76288986 52.16774368 56.41365814  
60.70440292 64.50002289 67.99973297 71.41045380 74.77787018  
78.09602356 81.33597565 84.42395020 87.33405304 90.02076721  
92.53457642 94.90373230 97.21031952 99.4791107 101.7864761  
104.0555038 106.2541809 108.3886185 110.4516068 112.4159470  
114.3551788 116.2771530 118.1792450 120.0457840 121.8735886  
123.6395187 125.3590088 127.0118713 128.7499084 130.5554047  
132.3092957 133.9799194 135.5208130 137.1686096 138.8498383  
140.5222626 142.0381317 143.4569702 145.0775909 146.7546387  
148.4679718  
0.050000001 2.760834694 17.78491211 27.60834694 35.82089996  
42.92147064 49.06377411 54.58139038 59.59147644 64.16146851  
68.35238647 72.30905151 76.09137726 79.71791840 83.27326202  
86.77724457 90.22634888 93.67095184 96.66909027 99.4082642  
102.0505600 104.7459183 107.4301300 110.0863113 112.7073135  
115.3439331 117.8784409 120.2885056 122.6114120 124.9621124  
127.2812653 129.5251617 131.7079010 134.0072021 136.3421783  
138.5679321 140.6539459 142.7797852 144.9767151 147.1457825  
149.2164459 151.3276672 153.5687408 155.7551117 157.7264709  
159.5582123 161.3900604 163.2257690 165.0370636 166.8482971  
168.7794647  
0.075000003 1.797752857 21.05938911 32.61637115 41.65045929  
49.13343430 55.69974899 61.57909775 67.00157166 72.20094299  
77.01042938 81.42459106 85.51161194 89.30930328 92.81455994  
96.20867920 99.6561279 103.1787262 106.6665497 110.1197815  
113.5707016 116.8988495 120.1153793 123.3228683 126.6457138  
129.8812103 133.0225830 136.0831604 139.0650024 141.9397736  
144.7761383 147.6268158 150.4440765 153.1837921 155.8421173  
158.3973083 160.9666443 163.5183563 166.0048065 168.4039307  
170.8714600 173.2511139 175.4050140 177.5962830 180.0292358  
182.3102875 184.1690521 186.1365967 188.2219391 190.2911682  
192.2653503  
0.100000001 0.086705290 23.56340218 38.15097809 47.41843033  
54.73608017 61.40010452 67.73490906 73.74070740 79.36895752  
84.48649597 89.42938232 94.18196869 98.54848480 102.8892441  
107.3371429 111.8530045 116.3123245 120.3442154 124.4312744  
128.5870209 132.5193176 136.3729401 140.2140045 143.9753265  
147.6443176 151.4462585 154.9765625 158.0806580 160.9776306  
163.9246368 167.0092010 170.2095795 173.4557495 176.5997925  
179.6233368 182.4936981 185.3016663 188.0621490 190.7710114  
193.4151154 196.0021362 198.6489868 201.3092957 203.8403473  
206.2413177 208.5401306 210.7490082 212.9131165 215.0833893  
217.1819153  
0.150000006 -0.065388456 29.35691452 45.37850952 56.78046799

66.67730713 75.85356140 83.80314636 91.62779236 99.0864487  
105.6932678 111.6873474 117.3949966 123.1872482 129.2247620  
135.2332153 140.7920532 146.0037994 151.3837280 156.7363892  
161.6224060 167.0319519 171.9708862 176.5161743 180.9327087  
185.4206238 189.7343140 193.8475800 197.8150330 201.6791840  
205.4741211 209.2756500 213.0848083 216.7866211 220.2010651  
223.3911133 226.6609955 229.9768677 233.2200317 236.3419952  
239.3232117 242.1677856 244.9209137 247.9411011 250.9084930  
253.8150024 256.6798401 259.5663757 261.8630676 264.0341187  
266.5272827  
0.200000003 -0.062830679 34.32546616 54.04592133 68.14436340  
80.10016632 90.82399750 100.4809265 109.9481125 118.2107086  
125.9037476 133.7367554 141.6256104 148.8314514 155.6006012  
161.8411560 168.4196014 174.9389038 180.7741241 186.9265747  
193.1326904 199.2537231 204.8775024 210.0216827 215.2631073  
220.3522034 224.9619751 229.0116577 233.0755768 237.6114197  
241.7693176 245.3293457 249.0874481 253.2158813 257.2393188  
260.7243652 263.8836670 267.3952332 270.9438171 273.7912598  
276.7999573 280.2350464 283.5708618 286.2268982 289.0979309  
291.6320801 294.1017761 296.6801758 298.7501831 301.0400391  
303.4299011  
0.300000012 0.158732399 44.09553528 70.48980713 89.93949127  
107.8524170 122.4685440 134.3843231 146.1291199 157.4592285  
167.4804382 177.2116394 186.4209747 195.4409485 204.2368011  
212.3539276 220.3277740 227.9898682 235.2173309 242.2472992  
249.0444794 255.2830353 261.8098450 267.8420105 273.3585815  
278.7908020 284.2814026 288.8534241 293.5690002 298.2229614  
302.4843750 308.0488586 311.5523987 315.9512634 319.8738403  
323.3023376 326.4555664 329.3995972 332.0794983 334.7200012  
337.4750366 340.0339355 342.9081116 344.7397766 347.5512390  
350.5168152 352.9340515 354.9274902 356.7926636 358.6896667  
360.4813843  
0.400000006 0.158740535 56.97377014 92.06982422 116.0592880  
136.5856781 153.8014984 168.3326111 182.4304199 196.0548706  
208.4319000 219.5358429 230.2569275 240.1056366 248.9978333  
257.6838684 265.9123840 273.3374329 280.5232849 287.4630432  
294.2072754 300.5446472 306.7127380 312.4341736 317.8219910  
323.0525513 328.0108337 332.7765198 336.9773254 340.7366333  
344.4983826 348.2704468 351.8430176 355.1841125 358.3105774  
361.1513977 363.6897888 366.0255127 368.2442322 370.3692322  
372.3862610 374.2690735 376.0465393 377.7768860 379.5130310  
381.2185059 382.8114929 384.3241882 385.8177795 387.3107300  
388.8036804  
0.500000000 0.158219486 72.14965820 112.8664474 143.2666016  
165.6727448 185.6484833 202.8061218 218.5637360 232.8845673

245.7437592 257.4731445 268.0972290 278.0090027 287.3743286  
296.2135620 304.3999329 311.9916992 319.1032104 325.4273376  
331.1598206 336.6738281 341.9402161 346.8222656 351.2524414  
355.2697754 358.9520264 362.3414917 365.4750366 368.3928833  
371.1156006 373.6414795 376.0067139 378.2805176 380.4367371  
382.2919312 383.9590454 385.6306152 387.1463013 388.5159912  
389.8241272 391.1337585 392.3615723 393.4265137 394.3555908  
395.2451172 396.1197205 396.8062134 397.4240723 397.9834290  
398.5101318  
0.600000024 0.380309224 84.71983337 136.8516235 169.1752930  
191.7366028 211.6442261 230.3316803 246.6348877 260.6279602  
273.2561646 285.0673218 295.9869080 305.8192444 314.4884644  
322.2954712 329.6566772 336.6154175 343.0051575 348.7558594  
353.9200134 358.5159912 362.5331726 366.0869141 369.2967834  
372.1823425 374.7379456 377.0408020 379.1755676 381.1180115  
382.8499451 384.5631714 386.3248901 387.8024597 389.1094360  
390.1937256 391.3891602 392.3899841 393.3504028 394.3375854  
395.1348572 395.9761047 396.6474304 397.3256226 397.9298706  
398.3855286 398.7385559 399.1293335 399.4842529 399.7795105  
400.0736694  
0.699999988 -0.070887573 96.32466125 152.6673889 187.4682922  
212.4918060 234.1051636 252.6677094 268.6024170 282.7326050  
295.4106750 306.5821838 316.4219666 325.3489685 333.4993591  
340.8096619 347.2996521 352.9808350 357.9305420 362.3053284  
366.1766968 369.6025696 372.6749878 375.4218750 377.8495178  
380.0172424 382.0291748 383.9324646 385.6588745 387.1517944  
388.4473267 389.6036682 390.6257019 391.5241394 392.3390198  
393.0771790 393.7600098 394.3987732 395.0044250 395.4917908  
395.9183960 396.3884583 396.8124695 397.1410522 397.4481201  
397.7561646 398.0390930 398.2092590 398.3581238 398.5069275  
398.6557617  
0.800000012 -0.200736061 103.4999237 163.2469177 200.1250458  
225.6058807 246.6526794 264.6111145 279.9664307 293.3421326  
305.1726074 315.6635742 324.9627075 333.2048645 340.5037537  
346.9616089 352.6742249 357.7259216 362.1940002 366.1484985  
369.6453857 372.7364502 375.4709778 377.8901978 380.0303955  
381.9237671 383.5970459 385.0742798 386.3773804 387.5239868  
388.5325012 389.4146118 390.1728210 390.8227539 391.4050903  
391.9777832 392.5321045 392.9984741 393.3913269 393.7335510  
394.0053711 394.1744080 394.2732544 394.3993225 394.5723877  
394.7376099 394.8489380 394.9399109 395.0308533 395.1217957  
395.2127380  
0.899999976 -0.007254315 109.0772171 171.0008698 206.2217102  
233.2870636 254.5189972 272.2901306 287.6804199 300.7291260  
312.2990417 322.5105286 331.3255310 339.0572815 345.9273376

351.8735657 356.8986511 361.2232056 365.0608215 368.4725952  
371.4685974 374.0927734 376.4142456 378.4942322 380.3692932  
382.0656738 383.6012573 384.9552612 386.1126709 387.0950317  
387.9338074 388.6796875 389.3657227 389.9836731 390.5278625  
390.9897766 391.3460999 391.5984802 391.8090515 392.0420227  
392.2749329 392.4375305 392.5313416 392.5948792 392.6530151  
392.7083435 392.7521362 392.7824707 392.8116150 392.8407593  
392.8699341  
1.000000000 0.350471705 114.8187103 175.5433655 210.1686707  
238.6271362 259.7275696 277.4595337 292.5292664 305.0415344  
316.4823303 326.1425476 334.4693298 341.9898682 348.3938599  
353.5558777 357.8880005 361.7832031 365.2897949 368.3504028  
371.0198364 373.4270020 375.6448364 377.7100830 379.6310425  
381.3412781 382.8027344 384.0335693 385.0627136 385.9360657  
386.7190552 387.4423218 388.0699768 388.5648193 388.9458008  
389.2705994 389.5943298 389.9006958 390.0883789 390.1498718  
390.1661987 390.1832581 390.1820068 390.1435852 390.0916748  
390.0389709 389.9862366 389.9335022 389.8807678 389.8280334  
389.7752991  
1.100000024 0.347084641 116.7850723 178.5453339 214.8480988  
243.5582275 265.6645508 283.8097534 298.0255432 309.6751404  
319.9777832 328.8558350 336.6425476 343.4682617 349.2467957  
354.1231689 358.3756409 362.1337585 365.4111328 368.2797241  
370.8466797 373.1654053 375.2596130 377.1400452 378.7931213  
380.2106934 381.4205933 382.4724731 383.4097900 384.2553406  
384.9989624 385.6168823 386.1096497 386.5077515 386.8435364  
387.1035156 387.2531433 387.3155823 387.3444214 387.3574829  
387.3478699 387.3200073 387.2867432 387.2519531 387.2127380  
387.1762085 387.1650085 387.1585693 387.1522217 387.1459045  
387.1395874  
1.200000048 0.009832776 120.4408417 182.3622589 218.7109528  
247.0467072 269.8609619 288.3538208 301.7345276 312.3394775  
321.6209717 329.8021851 336.9861145 343.2746887 348.7690430  
353.5516663 357.7104492 361.3083496 364.4465332 367.2486267  
369.7487488 371.9352417 373.8410645 375.5153809 376.9711609  
378.2365417 379.3763733 380.4209290 381.3574219 382.1730347  
382.8634644 383.4275513 383.8663635 384.1780701 384.3605347  
384.4491882 384.5003967 384.5289612 384.5339050 384.5260620  
384.5143127 384.5031433 384.4825439 384.4557190 384.4876099  
384.5494385 384.5867310 384.6218872 384.6570435 384.6921997  
384.7273560

Efficiency

18.05100000 0.000000000 0.020408163 0.040816326 0.061224490  
0.081632651 0.102040820 0.122448981 0.142857149 0.163265303

0.183673471 0.204081640 0.224489793 0.244897962 0.265306115  
0.285714298 0.306122452 0.326530606 0.346938789 0.367346942  
0.387755096 0.408163279 0.428571433 0.448979586 0.469387770  
0.489795923 0.510204077 0.530612230 0.551020384 0.571428597  
0.591836751 0.612244904 0.632653058 0.653061211 0.673469365  
0.693877578 0.714285731 0.734693885 0.755102038 0.775510192  
0.795918345 0.816326559 0.836734712 0.857142866 0.877551019  
0.897959173 0.918367326 0.938775539 0.959183693 0.979591846  
1.000000000  
0.010000000 4.170734882 0.860327840 0.653935313 0.526293993  
0.413780242 0.377861083 0.344186336 0.332775027 0.304026306  
0.289851993 0.277065039 0.263934553 0.242756128 0.221349373  
0.205851555 0.200794280 0.196723610 0.193035126 0.189388976  
0.185815766 0.182298779 0.178963780 0.175929382 0.172853962  
0.169703230 0.166542709 0.163586110 0.161455169 0.159304440  
0.156721503 0.153885961 0.150752604 0.147909507 0.145345017  
0.143079951 0.141055956 0.139278159 0.137594640 0.135973945  
0.134415194 0.132914156 0.131467387 0.130072162 0.128725410  
0.127424657 0.126166910 0.124949597 0.123770155 0.122626424  
0.121515855  
0.025000000 2.886961937 0.860327840 0.843614876 0.787840962  
0.697001755 0.656110108 0.613377035 0.592092872 0.568371594  
0.550020576 0.525991619 0.506326973 0.484723121 0.463538289  
0.443306625 0.431669086 0.422576576 0.413928747 0.405095965  
0.396267235 0.387350380 0.379139602 0.371772617 0.365854323  
0.360518396 0.355505437 0.350525886 0.345225245 0.338861376  
0.333071381 0.327977002 0.323473603 0.319399625 0.315758497  
0.312051207 0.308303028 0.304437220 0.300864518 0.297531515  
0.294162780 0.290707469 0.287038654 0.283889651 0.281099975  
0.278557211 0.276125401 0.273812711 0.271794826 0.269796759  
0.267809272  
0.050000001 2.360655785 0.688524604 0.885245919 0.872404397  
0.877493978 0.861339211 0.840168297 0.818566501 0.797337472  
0.776866496 0.756877422 0.737324893 0.718194664 0.699126840  
0.680907369 0.663823366 0.647520840 0.634685338 0.623537838  
0.612844586 0.601980805 0.589947224 0.577642679 0.565897644  
0.556159377 0.547579110 0.539724708 0.532359719 0.525739491  
0.519039810 0.5111789441 0.504242837 0.496663243 0.489578247  
0.483517408 0.478501201 0.473247051 0.467677206 0.462679356  
0.458698988 0.454954624 0.450924516 0.446792603 0.442519903  
0.438354731 0.434689462 0.431060821 0.426818103 0.422064394  
0.417674094  
0.075000003 2.983606577 0.163934425 0.754098356 0.850536883  
0.888195693 0.891592503 0.890017211 0.882384241 0.869206250  
0.850470066 0.829475045 0.809160829 0.791512430 0.773074925

0.755306602 0.739432931 0.724866271 0.709466338 0.695945501  
0.686642408 0.677346349 0.667176902 0.657591462 0.649601638  
0.642729223 0.636386335 0.630064249 0.623814106 0.619045317  
0.613982916 0.607460141 0.600681007 0.594491482 0.588680983  
0.583005726 0.578301191 0.573534310 0.567767680 0.560660779  
0.554866374 0.549460471 0.543898344 0.538585842 0.533920407  
0.529413700 0.524744511 0.520620942 0.516444385 0.511585951  
0.505573809  
0.100000001 4.196721077 -0.327868849 0.557377040 0.809586823  
0.876867115 0.893142462 0.897089183 0.894775033 0.887559414  
0.876007974 0.857355297 0.836614966 0.814712763 0.799407303  
0.788682044 0.778313160 0.766597927 0.752215028 0.741614819  
0.734076738 0.724269509 0.716330349 0.710720837 0.705266535  
0.698546946 0.690201938 0.682226777 0.675496578 0.664059758  
0.654435992 0.649269342 0.644676864 0.637362361 0.632090628  
0.627473116 0.621658742 0.616298795 0.610773206 0.604392886  
0.597980499 0.592974842 0.589595377 0.587114513 0.584561884  
0.581038773 0.576813936 0.572449744 0.568169892 0.563912690  
0.559745431  
0.150000006 5.587773323 -9.92444515 0.461599588 0.835734248  
0.883038580 0.893116891 0.894756019 0.894239187 0.891208470  
0.885272861 0.876458645 0.868155599 0.859878063 0.850400448  
0.840764165 0.832653284 0.825200379 0.816257298 0.808049262  
0.803461790 0.795415103 0.787135661 0.779526055 0.772634923  
0.763650477 0.754627407 0.747109950 0.741211236 0.734130144  
0.728131592 0.722699106 0.716222703 0.709022045 0.701844275  
0.695231974 0.689614058 0.684852660 0.680625558 0.675739586  
0.671022236 0.665622890 0.659179032 0.654082596 0.647961617  
0.643338084 0.640895009 0.636360049 0.629826844 0.624248505  
0.620435059  
0.200000003 5.626566410 -57.42597580 -0.057305280 0.712451220  
0.858502448 0.883524418 0.892687500 0.896459639 0.897411764  
0.894718111 0.890023947 0.884611130 0.878928840 0.871976197  
0.866780519 0.860662639 0.853249729 0.845423877 0.835932374  
0.827515244 0.819847107 0.812432051 0.805293858 0.798408926  
0.790750444 0.783477783 0.775398076 0.767258108 0.760895431  
0.754705906 0.746911943 0.739858389 0.733564734 0.726365983  
0.720082939 0.713299036 0.704994082 0.699146867 0.694162667  
0.688267648 0.682937920 0.679739535 0.675162077 0.669592202  
0.664961040 0.661076784 0.657091618 0.652506411 0.646697581  
0.642645955  
0.300000012 5.144791603 28.60801888 -0.243835583 0.525651813  
0.737522662 0.826732993 0.867955029 0.886242509 0.893785357  
0.897088468 0.897975981 0.896321058 0.892106652 0.885736167  
0.878347099 0.871792078 0.864220619 0.856112778 0.848084271

0.840243638 0.833182573 0.827046454 0.820289791 0.811115444  
0.805860996 0.800282955 0.794254184 0.787492275 0.780935287  
0.775608420 0.770311534 0.765099108 0.758914113 0.753176391  
0.749578178 0.744396746 0.737988830 0.732490540 0.728115797  
0.723581135 0.718290508 0.713819504 0.709537446 0.704004228  
0.700862229 0.696992576 0.692898393 0.689879477 0.686740935  
0.682459116  
0.400000006 4.974608421 18.93460846 -0.600299001 0.453484565  
0.709834218 0.808446884 0.852181613 0.874873102 0.888032436  
0.895579994 0.898776650 0.898153841 0.894810259 0.890340984  
0.885839939 0.881410599 0.876637816 0.871308327 0.865643442  
0.860001504 0.854528189 0.849248707 0.844188035 0.839215875  
0.834264576 0.829491198 0.825009227 0.820518792 0.815863311  
0.811281443 0.806898355 0.802516460 0.798003376 0.793597162  
0.789523304 0.785767913 0.782269955 0.778862953 0.775409102  
0.772113085 0.769061446 0.766202390 0.763286054 0.760341227  
0.757443190 0.754469812 0.751502156 0.748706281 0.746123910  
0.743743241  
0.500000000 4.946991920 15.27810955 -0.563145041 0.473418236  
0.689670026 0.789314747 0.841988683 0.870395482 0.886480868  
0.895256281 0.899058223 0.899860322 0.898313284 0.894749224  
0.890983880 0.887057066 0.883277118 0.878697276 0.873368800  
0.868952334 0.864521265 0.860319555 0.856402814 0.852073789  
0.848327100 0.844338596 0.839892566 0.835500062 0.831534505  
0.828013182 0.824500501 0.820693016 0.816739500 0.813055038  
0.809572220 0.806217253 0.803461194 0.800788641 0.797660887  
0.794892073 0.792464495 0.790106535 0.787434638 0.784520447  
0.781730413 0.779677749 0.777758539 0.775643885 0.773705542  
0.771980882  
0.600000024 4.858841896 12.60521889 -0.488997936 0.450959504  
0.671528757 0.774627805 0.830194533 0.862343371 0.880716383  
0.890137613 0.895706296 0.898922622 0.900425196 0.900640011  
0.899521530 0.897183180 0.894029737 0.890607715 0.887289762  
0.884248197 0.881352544 0.878405988 0.875475287 0.872396946  
0.869108140 0.865956962 0.862838924 0.859586358 0.856332839  
0.853225112 0.850382030 0.847813845 0.845377147 0.842964232  
0.840692461 0.838555098 0.836412430 0.834272981 0.832203269  
0.830243826 0.828387916 0.826612413 0.824869096 0.823158920  
0.821609676 0.820292234 0.819192111 0.818294585 0.817586660  
0.817056000  
0.699999988 4.767308235 10.70390415 -0.901439011 0.341869473  
0.620189726 0.749955475 0.809503257 0.842826188 0.865203679  
0.878960013 0.888297021 0.895073295 0.899359524 0.901878774  
0.902694523 0.901950836 0.900231123 0.897848427 0.895505786  
0.893296778 0.891052485 0.888567507 0.886359513 0.884019554



0.881580710 0.879436493 0.877117991 0.874820948 0.872422934  
0.870223522 0.868046105 0.865931988 0.863868475 0.861960530  
0.860133886 0.858259261 0.856770813 0.854858220 0.853392482  
0.852052629 0.850478470 0.849043190 0.847773373 0.846397460  
0.844883561 0.843643725 0.842868805 0.842105925 0.841492772  
0.841060579  
0.800000012 4.696475983 8.096475601 -1.724676013 0.168009490  
0.528024018 0.679686904 0.761195898 0.810172379 0.842581689  
0.864264309 0.878558695 0.888195515 0.894698560 0.898933887  
0.901605844 0.903290093 0.904377460 0.905035734 0.905249298  
0.904984832 0.904341042 0.903487861 0.902541101 0.901488841  
0.900314093 0.899109840 0.897921979 0.896707833 0.895440400  
0.894106269 0.892733335 0.891450524 0.890377581 0.889447451  
0.888442039 0.887317061 0.886236846 0.885197043 0.884187222  
0.883255124 0.882432342 0.881656885 0.880828261 0.879979312  
0.879131436 0.878336847 0.877708972 0.877286255 0.877054930  
0.877002895  
0.899999976 4.684737682 7.084416389 -3.338263512 -0.148105085  
0.376336962 0.580487192 0.692414820 0.759705663 0.804479539  
0.834675252 0.855793834 0.871433079 0.882786274 0.890715182  
0.896219134 0.899968624 0.902785838 0.905017376 0.906360984  
0.907087028 0.907390177 0.907477915 0.907255232 0.906656384  
0.905943811 0.905229628 0.904507518 0.903758943 0.902936399  
0.902125180 0.901428521 0.900623381 0.899831712 0.899122655  
0.898324072 0.897440970 0.896649361 0.895887136 0.894976199  
0.894150853 0.893360734 0.892480791 0.891639113 0.890822172  
0.889892817 0.889097214 0.888325095 0.887745082 0.887362003  
0.887162924  
1.000000000 4.698155880 6.103765011 -7.195000648 -0.684600055  
0.153926879 0.448538452 0.606107593 0.701189160 0.757471621  
0.795735896 0.823139429 0.843909204 0.859958470 0.872153938  
0.881529629 0.888919771 0.894744098 0.899280310 0.902779996  
0.905355513 0.907179594 0.908691227 0.909978032 0.910869718  
0.911459148 0.911873937 0.912130833 0.912253618 0.912287354  
0.912253201 0.912163496 0.912037373 0.911870182 0.911668301  
0.911459744 0.911190927 0.910787761 0.910273194 0.909672439  
0.909013152 0.908347368 0.907636464 0.906843841 0.906018257  
0.905159950 0.904339910 0.903687954 0.903245926 0.903000891  
0.902939916  
1.100000024 4.730243683 5.717437744 -27.74471283 -1.422365665  
-0.140573755 0.283013552 0.496318281 0.619931877 0.690358579  
0.738928854 0.773507059 0.801420450 0.822912931 0.841528475  
0.855449736 0.865972281 0.874428391 0.880592346 0.886196077  
0.890636921 0.894268572 0.897306025 0.899632931 0.901638508  
0.903374195 0.905074120 0.906429589 0.907185197 0.907771468

0.908200979 0.908516705 0.908775389 0.909163713 0.909383059  
0.909380317 0.909301758 0.909108162 0.908915818 0.908680022  
0.908245564 0.907887220 0.907530904 0.907076597 0.906534076  
0.906188607 0.905709803 0.905379117 0.905251086 0.905314207  
0.905555904  
1.200000048 4.689445972 5.250203609 32.09747696 -2.513371944  
-0.514479756 0.077590950 0.354195088 0.506997168 0.603383243  
0.669756472 0.718590617 0.754828691 0.782560229 0.804249465  
0.821327031 0.835394681 0.847268820 0.857104480 0.865150750  
0.871740937 0.877238393 0.882042766 0.886362255 0.890165925  
0.893439412 0.896237075 0.898582280 0.900475919 0.901956141  
0.903148115 0.904105604 0.904877603 0.905574799 0.906196058  
0.906660318 0.906980813 0.907235384 0.907416284 0.907498777  
0.907564580 0.907672584 0.907766938 0.907820404 0.907819092  
0.907812357 0.907924652 0.908236980 0.908741772 0.909426332  
0.910278797