Starting matlabpool using the 'local' configuration ... connected to 8 labs.

Best Mean Stall

Generation f-count f(x) f(x) Generations

1 200 15.87 4687 0

2 300 15.87 4536 1

3 400 15.87 4612 2

4 500 15.87 4014 3

5 600 15.87 3541 0

6 700 15.87 5080 1

7 800 15.87 4435 2

8 900 15.87 3009 3

9 1000 15.87 4313 4

10 1100 15.87 3.173e+004 5

11 1200 15.87 9926 6

12 1300 15.87 2765 7

13 1400 15.87 1.223e+005 8

14 1500 15.87 1.129e+005 9

15 1600 15.87 1956 10

16 1700 15.87 2014 11

17 1800 15.87 1909 12

18 1900 15.87 2098 13

19 2000 15.87 1936 14

20 2100 15.87 2905 15

21 2200 15.87 1415 16

22 2300 15.87 1411 17

Optimization terminated: stop requested from plot function.

Switching to the hybrid optimization algorithm (FMINSEARCH).

Iteration Func-count min f(x) Procedure

0 1 15.8667

1 7 15.8651 initial simplex

2 8 15.8651 reflect

3 10 15.8651 contract inside

4 12 15.8651 contract inside

5 14 15.8651 contract inside

6 15 15.8651 reflect

7 16 15.8651 reflect

8 18 15.8651 contract inside

9 20 15.8651 contract inside

10 21 15.8651 reflect

11 23 15.8651 contract inside

12 25 15.8651 contract outside

13 27 15.8651 contract inside

14 28 15.8651 reflect

15 30 15.8651 contract inside

16 32 15.8651 contract inside

17 34 15.8651 contract inside

18 36 15.8651 contract inside

19 38 15.8651 contract outside

20 40 15.8651 contract inside

21 42 15.8651 contract inside

22 44 15.8651 contract inside

23 46 15.8651 contract outside

24 48 15.8651 contract inside

25 50 15.8651 contract inside

26 51 15.8651 reflect

27 53 15.8651 contract inside

28 55 15.8651 contract inside

29 57 15.8651 contract inside

30 59 15.8651 contract inside

31 61 15.8651 contract inside

32 63 15.8574 contract inside

33 65 15.8396 contract inside

34 67 15.7706 contract inside

35 69 15.7706 contract inside

36 71 15.7272 contract inside

37 72 15.7272 reflect

38 74 15.7272 contract inside

39 76 15.7272 contract inside

40 78 15.7229 contract inside

41 80 15.7229 contract inside

42 82 15.7085 contract inside

43 83 15.7085 reflect

44 85 15.6891 contract outside

45 87 15.6862 contract inside

46 89 15.6716 contract inside

47 91 15.6633 contract inside

48 92 15.6633 reflect

49 94 15.6633 contract inside

50 95 15.6633 reflect

51 97 15.6489 contract inside

52 99 15.6489 contract inside

53 101 15.6489 contract outside

54 103 15.6489 contract inside

55 105 15.6481 contract inside

56 107 15.6476 contract inside

57 109 15.6439 contract inside

58 110 15.6439 reflect

59 112 15.638 contract inside

60 113 15.638 reflect

61 115 15.638 contract inside

62 117 15.638 contract outside

63 119 15.6356 contract inside

64 120 15.6356 reflect

65 122 15.6355 contract inside

66 124 15.6346 contract inside

67 126 15.6344 contract inside

68 128 15.6324 contract inside

69 130 15.6318 contract inside

70 132 15.6295 reflect

71 133 15.6295 reflect

72 135 15.6291 contract inside

73 137 15.6284 reflect

74 139 15.6284 contract inside

75 141 15.6284 contract inside

76 143 15.6261 reflect

77 144 15.6261 reflect

78 146 15.6261 contract inside

79 148 15.6261 contract inside

80 150 15.6224 expand

81 151 15.6224 reflect

82 152 15.6224 reflect

83 154 15.6224 contract inside

84 156 15.6195 expand

85 157 15.6195 reflect

86 159 15.6178 expand

87 160 15.6178 reflect

88 162 15.613 expand

89 164 15.6064 expand

90 165 15.6064 reflect

91 166 15.6064 reflect

92 167 15.6064 reflect

93 169 15.5936 expand

94 170 15.5936 reflect

95 171 15.5936 reflect

96 172 15.5936 reflect

97 174 15.5859 expand

98 176 15.5762 expand

99 177 15.5762 reflect

100 178 15.5762 reflect

101 180 15.571 expand

102 182 15.5674 expand

103 183 15.5674 reflect

104 184 15.5674 reflect

105 186 15.5559 expand

106 187 15.5559 reflect

107 189 15.5559 contract inside

108 190 15.5559 reflect

109 191 15.5559 reflect

110 192 15.5559 reflect

111 193 15.5559 reflect

112 195 15.544 expand

113 196 15.544 reflect

114 197 15.544 reflect

115 199 15.5262 expand

116 200 15.5262 reflect

117 201 15.5262 reflect

118 203 15.5037 expand

119 204 15.5037 reflect

120 205 15.5037 reflect

121 206 15.5037 reflect

122 208 15.498 reflect

123 210 15.498 contract inside

124 212 15.4611 expand

125 214 15.4611 contract inside

126 215 15.4611 reflect

127 216 15.4611 reflect

128 217 15.4611 reflect

129 218 15.4611 reflect

130 220 15.4403 expand

131 221 15.4403 reflect

132 223 15.4317 reflect

133 225 15.3725 expand

134 226 15.3725 reflect

135 227 15.3725 reflect

136 228 15.3725 reflect

137 230 15.3185 expand

138 231 15.3185 reflect

139 232 15.3185 reflect

140 234 15.2924 expand

141 236 15.2196 expand

142 238 15.2196 contract inside

143 239 15.2196 reflect

144 241 15.15 expand

145 242 15.15 reflect

146 243 15.15 reflect

147 245 15.1277 expand

148 247 15.0675 expand

149 248 15.0675 reflect

150 250 15.0675 contract inside

151 252 15.0675 contract outside

152 254 15.0259 expand

153 255 15.0259 reflect

154 256 15.0259 reflect

155 257 15.0259 reflect

156 258 15.0259 reflect

157 260 15.0259 contract inside

158 262 14.9556 expand

159 263 14.9556 reflect

160 264 14.9556 reflect

161 265 14.9556 reflect

162 266 14.9556 reflect

163 268 14.8989 reflect

164 270 14.8989 contract inside

165 272 14.8775 reflect

166 273 14.8775 reflect

167 275 14.8375 contract inside

168 276 14.8375 reflect

169 278 14.8375 contract inside

170 280 14.8375 contract inside

171 281 14.8375 reflect

172 282 14.8375 reflect

173 284 14.8013 contract inside

174 286 14.8013 contract inside

175 288 14.8013 contract outside

176 290 14.7815 contract inside

177 291 14.7815 reflect

178 293 14.7815 contract inside

179 295 14.7606 reflect

180 296 14.7606 reflect

181 297 14.7606 reflect

182 299 14.7436 reflect

183 301 14.7436 contract inside

184 303 14.7403 reflect

185 304 14.7403 reflect

186 306 14.6704 reflect

187 308 14.6704 contract inside

188 310 14.6704 contract inside

189 311 14.6704 reflect

190 313 14.6704 contract inside

191 315 14.6452 expand

192 317 14.6452 contract outside

193 319 14.6452 contract inside

194 321 14.6073 expand

195 322 14.6073 reflect

196 323 14.6073 reflect

197 324 14.6073 reflect

198 325 14.6073 reflect

199 327 14.606 reflect

200 329 14.5424 expand

201 330 14.5424 reflect

202 331 14.5424 reflect

203 333 14.5424 contract inside

204 334 14.5424 reflect

205 335 14.5424 reflect

206 337 14.521 reflect

207 339 14.4733 expand

208 341 14.4733 contract inside

209 342 14.4733 reflect

210 343 14.4733 reflect

211 344 14.4733 reflect

212 346 14.4733 contract inside

213 348 14.4444 expand

214 350 14.4034 expand

215 351 14.4034 reflect

216 353 14.357 expand

217 355 14.357 contract inside

218 356 14.357 reflect

219 357 14.357 reflect

220 358 14.357 reflect

221 359 14.357 reflect

222 361 14.357 contract inside

223 363 14.3524 reflect

224 365 14.3365 reflect

225 367 14.3365 contract inside

226 368 14.3365 reflect

227 369 14.3365 reflect

228 370 14.3365 reflect

229 372 14.3288 reflect

230 373 14.3288 reflect

231 375 14.3232 reflect

232 377 14.3232 contract inside

233 379 14.3232 contract inside

234 381 14.3212 reflect

235 383 14.3212 contract outside

236 385 14.2726 expand

237 387 14.2724 reflect

238 389 14.2724 contract inside

239 391 14.2724 contract inside

240 392 14.2724 reflect

241 393 14.2724 reflect

242 395 14.2724 contract inside

243 397 14.2724 contract outside

244 398 14.2724 reflect

245 400 14.2724 contract inside

246 401 14.2724 reflect

247 403 14.2694 reflect

248 405 14.2652 reflect

249 407 14.242 expand

250 408 14.242 reflect

251 409 14.242 reflect

252 410 14.242 reflect

253 411 14.242 reflect

254 413 14.2313 reflect

255 414 14.2313 reflect

256 416 14.2313 contract inside

257 418 14.2087 expand

258 419 14.2087 reflect

259 420 14.2087 reflect

260 422 14.1826 expand

261 423 14.1826 reflect

262 424 14.1826 reflect

263 425 14.1826 reflect

264 426 14.1826 reflect

265 428 14.1826 contract outside

266 430 14.1826 contract inside

267 431 14.1826 reflect

268 433 14.1759 reflect

269 435 14.1712 reflect

270 436 14.1712 reflect

271 437 14.1712 reflect

272 439 14.1712 contract inside

273 441 14.1712 contract inside

274 443 14.1645 reflect

275 444 14.1645 reflect

276 445 14.1645 reflect

277 447 14.1385 expand

278 449 14.1385 contract inside

279 450 14.1385 reflect

280 452 14.1385 contract inside

281 454 14.1385 contract inside

282 455 14.1385 reflect

283 457 14.1385 contract inside

284 458 14.1385 reflect

285 459 14.1385 reflect

286 461 14.1385 contract inside

287 463 14.1266 expand

288 464 14.1266 reflect

289 465 14.1266 reflect

290 466 14.1266 reflect

291 467 14.1266 reflect

292 468 14.1266 reflect

293 469 14.1266 reflect

294 471 14.1266 contract inside

295 473 14.1131 expand

296 474 14.1131 reflect

297 475 14.1131 reflect

298 477 14.1049 expand

299 478 14.1049 reflect

300 479 14.1049 reflect

301 480 14.1049 reflect

302 482 14.0983 reflect

303 484 14.0983 contract inside

304 486 14.0983 contract inside

305 487 14.0983 reflect

306 489 14.0983 contract inside

307 490 14.0983 reflect

308 491 14.0983 reflect

309 493 14.0983 contract inside

310 495 14.0963 reflect

311 496 14.0963 reflect

312 498 14.0888 expand

313 499 14.0888 reflect

314 501 14.0888 contract inside

315 503 14.0888 contract outside

316 504 14.0888 reflect

317 505 14.0888 reflect

318 507 14.0851 reflect

319 508 14.0851 reflect

320 510 14.0763 expand

321 512 14.0763 contract inside

322 513 14.0763 reflect

323 514 14.0763 reflect

324 515 14.0763 reflect

325 516 14.0763 reflect

326 517 14.0763 reflect

327 519 14.0763 contract inside

328 521 14.0763 contract inside

329 523 14.0763 contract inside

330 525 14.0759 reflect

331 527 14.0759 contract inside

332 529 14.0759 contract inside

333 531 14.0759 contract inside

334 532 14.0759 reflect

335 534 14.075 reflect

336 535 14.075 reflect

337 536 14.075 reflect

338 538 14.0737 reflect

339 539 14.0737 reflect

340 541 14.0737 contract inside

341 543 14.0737 contract inside

342 544 14.0737 reflect

343 545 14.0737 reflect

344 547 14.0736 reflect

345 548 14.0736 reflect

346 549 14.0736 reflect

347 550 14.0736 reflect

348 552 14.0731 contract inside

349 554 14.0717 reflect

350 556 14.0717 contract inside

351 558 14.0717 contract outside

352 560 14.0717 contract inside

353 562 14.0712 expand

354 564 14.0712 contract inside

355 566 14.0712 contract inside

356 568 14.0708 expand

357 569 14.0708 reflect

358 570 14.0708 reflect

359 572 14.0691 expand

360 573 14.0691 reflect

361 574 14.0691 reflect

362 575 14.0691 reflect

363 576 14.0691 reflect

364 577 14.0691 reflect

365 579 14.0691 contract inside

366 581 14.0679 expand

367 583 14.0666 expand

368 585 14.0666 contract inside

369 586 14.0666 reflect

370 587 14.0666 reflect

371 589 14.0654 expand

372 590 14.0654 reflect

373 591 14.0654 reflect

374 592 14.0654 reflect

375 594 14.0653 reflect

376 596 14.0653 contract inside

377 598 14.0636 expand

378 599 14.0636 reflect

379 601 14.0636 contract inside

380 602 14.0636 reflect

381 603 14.0636 reflect

382 604 14.0636 reflect

383 606 14.061 expand

384 607 14.061 reflect

385 609 14.061 contract inside

386 610 14.061 reflect

387 612 14.0595 expand

388 614 14.058 expand

389 615 14.058 reflect

390 617 14.0562 expand

391 619 14.0562 contract inside

392 620 14.0562 reflect

393 621 14.0562 reflect

394 622 14.0562 reflect

395 623 14.0562 reflect

396 625 14.0554 expand

397 627 14.0546 reflect

398 629 14.0546 contract inside

399 630 14.0546 reflect

400 631 14.0546 reflect

401 632 14.0546 reflect

402 633 14.0546 reflect

403 634 14.0546 reflect

404 636 14.0527 reflect

405 637 14.0527 reflect

406 639 14.0525 contract inside

407 640 14.0525 reflect

408 642 14.0525 contract inside

409 644 14.0524 reflect

410 645 14.0524 reflect

411 647 14.0479 expand

412 649 14.0479 contract outside

413 651 14.0479 contract inside

414 652 14.0479 reflect

415 653 14.0479 reflect

416 655 14.0473 reflect

417 656 14.0473 reflect

418 657 14.0473 reflect

419 659 14.0467 reflect

420 661 14.0467 contract inside

421 662 14.0467 reflect

422 664 14.0421 expand

423 665 14.0421 reflect

424 666 14.0421 reflect

425 667 14.0421 reflect

426 669 14.0399 expand

427 670 14.0399 reflect

428 671 14.0399 reflect

429 673 14.0358 expand

430 674 14.0358 reflect

431 675 14.0358 reflect

432 677 14.0358 contract inside

433 679 14.0308 expand

434 680 14.0308 reflect

435 681 14.0308 reflect

436 683 14.0285 expand

437 685 14.0256 expand

438 686 14.0256 reflect

439 687 14.0256 reflect

440 688 14.0256 reflect

441 690 14.0168 expand

442 691 14.0168 reflect

443 693 14.0168 contract inside

444 694 14.0168 reflect

445 695 14.0168 reflect

446 696 14.0168 reflect

447 698 14.0155 reflect

448 700 14.0059 expand

449 702 14.0059 contract outside

450 704 14.0059 contract inside

451 705 14.0059 reflect

452 707 13.9965 expand

453 708 13.9965 reflect

454 709 13.9965 reflect

455 711 13.9965 contract inside

456 712 13.9965 reflect

457 713 13.9965 reflect

458 715 13.9938 reflect

459 717 13.9814 expand

460 718 13.9814 reflect

461 719 13.9814 reflect

462 720 13.9814 reflect

463 721 13.9814 reflect

464 723 13.9633 expand

465 724 13.9633 reflect

466 726 13.9633 contract inside

467 727 13.9633 reflect

468 728 13.9633 reflect

469 730 13.9622 reflect

470 731 13.9622 reflect

471 732 13.9622 reflect

472 734 13.9545 reflect

473 736 13.9422 expand

474 737 13.9422 reflect

475 739 13.9422 contract inside

476 740 13.9422 reflect

477 742 13.9251 expand

478 743 13.9251 reflect

479 744 13.9251 reflect

480 746 13.9239 expand

481 747 13.9239 reflect

482 749 13.8909 expand

483 750 13.8909 reflect

484 752 13.886 reflect

485 753 13.886 reflect

486 754 13.886 reflect

487 756 13.8795 reflect

488 758 13.8778 reflect

489 760 13.8778 contract inside

490 761 13.8778 reflect

491 763 13.8555 reflect

492 765 13.8555 contract inside

493 767 13.8487 reflect

494 769 13.8487 contract inside

495 770 13.8487 reflect

496 772 13.8487 contract inside

497 774 13.8487 contract inside

498 775 13.8487 reflect

499 777 13.8487 contract inside

500 779 13.8487 contract inside

501 780 13.8487 reflect

502 782 13.8487 contract inside

503 784 13.8487 contract inside

504 786 13.8487 contract inside

505 788 13.8487 contract inside

506 790 13.8487 contract inside

507 791 13.8487 reflect

508 793 13.8445 reflect

509 795 13.8445 contract inside

510 796 13.8445 reflect

511 797 13.8445 reflect

512 799 13.8445 contract inside

513 801 13.8445 contract outside

514 802 13.8445 reflect

515 804 13.8445 contract inside

516 806 13.8445 contract inside

517 807 13.8445 reflect

518 808 13.8445 reflect

519 810 13.8445 contract inside

520 811 13.8445 reflect

521 813 13.8445 contract inside

522 815 13.8445 contract inside

523 817 13.8445 contract inside

524 818 13.8445 reflect

525 820 13.8445 contract inside

526 822 13.8439 reflect

527 824 13.8439 contract inside

528 826 13.8439 contract inside

529 828 13.8439 contract inside

530 830 13.8434 reflect

531 832 13.8434 contract inside

532 834 13.8434 contract inside

533 836 13.8434 contract inside

534 838 13.8434 contract inside

535 840 13.8429 reflect

536 842 13.8429 contract outside

537 844 13.8429 contract inside

538 845 13.8429 reflect

539 847 13.8429 contract inside

540 849 13.8429 contract inside

541 850 13.8429 reflect

542 851 13.8429 reflect

543 852 13.8429 reflect

544 854 13.8429 contract inside

545 856 13.8429 contract inside

546 858 13.8429 contract inside

547 860 13.8429 contract inside

548 861 13.8429 reflect

549 863 13.8429 contract inside

550 865 13.8428 reflect

551 867 13.8428 contract inside

552 868 13.8428 reflect

553 869 13.8428 reflect

554 871 13.8428 contract inside

555 873 13.8428 contract inside

556 875 13.8428 reflect

557 876 13.8428 reflect

558 878 13.8428 contract inside

559 879 13.8428 reflect

560 881 13.8428 contract inside

561 883 13.8428 expand

562 885 13.8427 reflect

563 887 13.8427 reflect

564 888 13.8427 reflect

565 890 13.8427 contract inside

566 892 13.8427 contract inside

567 894 13.8427 contract inside

568 896 13.8427 reflect

569 898 13.8427 contract inside

570 900 13.8427 reflect

571 902 13.8427 contract inside

572 903 13.8427 reflect

573 905 13.8427 contract inside

574 907 13.8427 contract inside

575 909 13.8427 contract inside

576 910 13.8427 reflect

577 912 13.8426 reflect

578 914 13.8426 contract inside

579 916 13.8426 contract inside

580 917 13.8426 reflect

581 919 13.8426 contract inside

582 921 13.8426 reflect

583 923 13.8426 contract inside

584 924 13.8426 reflect

585 925 13.8426 reflect

586 927 13.8426 contract inside

587 929 13.8426 contract inside

588 930 13.8426 reflect

589 931 13.8426 reflect

590 933 13.8426 contract inside

591 934 13.8426 reflect

592 936 13.8426 contract inside

593 938 13.8426 contract inside

594 940 13.8426 reflect

595 942 13.8426 contract inside

596 944 13.8426 reflect

597 946 13.8426 contract inside

598 948 13.8426 contract inside

599 949 13.8426 reflect

600 950 13.8426 reflect

601 951 13.8426 reflect

602 952 13.8426 reflect

603 954 13.8426 contract inside

604 956 13.8426 contract inside

605 958 13.8426 reflect

606 960 13.8426 contract inside

607 962 13.8426 reflect

608 964 13.8426 contract inside

609 966 13.8426 reflect

610 968 13.8426 contract outside

611 970 13.8426 expand

612 972 13.8426 contract inside

613 973 13.8426 reflect

614 975 13.8426 reflect

615 977 13.8426 reflect

616 978 13.8426 reflect

617 980 13.8426 expand

618 982 13.8426 contract inside

619 983 13.8426 reflect

620 984 13.8426 reflect

621 985 13.8426 reflect

622 987 13.8426 contract inside

623 989 13.8426 reflect

624 991 13.8426 contract inside

625 992 13.8426 reflect

626 994 13.8426 expand

627 995 13.8426 reflect

628 996 13.8426 reflect

629 998 13.8426 contract inside

630 999 13.8426 reflect

631 1001 13.8426 contract inside

632 1003 13.8426 expand

633 1004 13.8426 reflect

634 1006 13.8426 expand

635 1007 13.8426 reflect

636 1008 13.8426 reflect

637 1010 13.8426 expand

638 1011 13.8426 reflect

639 1013 13.8426 expand

640 1014 13.8426 reflect

641 1016 13.8426 expand

642 1017 13.8426 reflect

643 1019 13.8425 expand

644 1020 13.8425 reflect

645 1021 13.8425 reflect

646 1023 13.8425 expand

647 1024 13.8425 reflect

648 1026 13.8425 expand

649 1027 13.8425 reflect

650 1029 13.8425 expand

651 1030 13.8425 reflect

652 1032 13.8424 expand

653 1033 13.8424 reflect

654 1035 13.8423 expand

655 1036 13.8423 reflect

656 1038 13.8422 expand

657 1039 13.8422 reflect

658 1041 13.842 expand

659 1042 13.842 reflect

660 1044 13.8418 expand

661 1045 13.8418 reflect

662 1047 13.8415 expand

663 1048 13.8415 reflect

664 1050 13.8411 expand

665 1051 13.8411 reflect

666 1053 13.8405 expand

667 1054 13.8405 reflect

668 1056 13.8396 expand

669 1057 13.8396 reflect

670 1059 13.8384 expand

671 1060 13.8384 reflect

672 1062 13.8367 expand

673 1063 13.8367 reflect

674 1065 13.8341 expand

675 1066 13.8341 reflect

676 1068 13.8306 expand

677 1069 13.8306 reflect

678 1071 13.8252 expand

679 1072 13.8252 reflect

680 1074 13.817 expand

681 1075 13.817 reflect

682 1077 13.8045 expand

683 1078 13.8045 reflect

684 1080 13.7891 expand

685 1081 13.7891 reflect

686 1083 13.7788 expand

687 1084 13.7788 reflect

688 1086 13.7736 expand

689 1087 13.7736 reflect

690 1088 13.7736 reflect

691 1089 13.7736 reflect

692 1090 13.7736 reflect

693 1092 13.7736 contract inside

694 1094 13.7736 contract inside

695 1096 13.7736 contract inside

696 1098 13.7736 contract inside

697 1100 13.7736 contract inside

698 1102 13.7736 contract inside

699 1104 13.7736 contract inside

700 1106 13.7736 contract inside

701 1108 13.7736 contract inside

702 1110 13.7736 contract outside

703 1112 13.7736 contract inside

704 1114 13.7736 contract inside

705 1116 13.7736 contract inside

706 1117 13.7736 reflect

707 1119 13.7736 contract inside

708 1121 13.7736 contract inside

709 1123 13.7736 contract inside

710 1124 13.7736 reflect

711 1126 13.7736 contract inside

712 1128 13.7736 contract inside

713 1129 13.7736 reflect

714 1130 13.7736 reflect

715 1131 13.7736 reflect

716 1133 13.7736 expand

717 1134 13.7736 reflect

718 1135 13.7736 reflect

719 1136 13.7736 reflect

720 1137 13.7736 reflect

721 1138 13.7736 reflect

722 1140 13.7736 expand

723 1142 13.7735 expand

724 1144 13.7735 contract inside

725 1145 13.7735 reflect

726 1147 13.7735 expand

727 1148 13.7735 reflect

728 1150 13.7734 expand

729 1151 13.7734 reflect

730 1153 13.7733 expand

731 1154 13.7733 reflect

732 1156 13.7731 expand

733 1157 13.7731 reflect

734 1159 13.773 expand

735 1161 13.7728 expand

736 1162 13.7728 reflect

737 1164 13.7725 expand

738 1166 13.7721 expand

739 1167 13.7721 reflect

740 1169 13.7714 expand

741 1170 13.7714 reflect

742 1172 13.7706 expand

743 1173 13.7706 reflect

744 1175 13.7698 expand

745 1177 13.7685 expand

746 1178 13.7685 reflect

747 1179 13.7685 reflect

748 1181 13.7653 expand

749 1182 13.7653 reflect

750 1183 13.7653 reflect

751 1185 13.7616 expand

752 1186 13.7616 reflect

753 1187 13.7616 reflect

754 1189 13.7554 expand

755 1190 13.7554 reflect

756 1191 13.7554 reflect

757 1193 13.7476 expand

758 1194 13.7476 reflect

759 1196 13.7407 expand

760 1197 13.7407 reflect

761 1199 13.739 reflect

762 1200 13.739 reflect

763 1201 13.739 reflect

764 1202 13.739 reflect

765 1204 13.739 contract inside

766 1206 13.7276 expand

767 1208 13.7276 contract inside

768 1210 13.7276 contract outside

769 1211 13.7276 reflect

770 1213 13.7276 contract inside

771 1214 13.7276 reflect

772 1215 13.7276 reflect

773 1216 13.7276 reflect

774 1218 13.7123 expand

775 1219 13.7123 reflect

776 1221 13.7123 contract inside

777 1223 13.7123 contract inside

778 1224 13.7123 reflect

779 1225 13.7123 reflect

780 1226 13.7123 reflect

781 1228 13.7123 contract inside

782 1230 13.7123 contract inside

783 1232 13.7104 reflect

784 1234 13.7104 contract inside

785 1236 13.7104 contract inside

786 1238 13.7104 contract inside

787 1240 13.7094 reflect

788 1242 13.7094 contract inside

789 1243 13.7094 reflect

790 1245 13.7092 reflect

791 1247 13.7076 expand

792 1249 13.7076 contract inside

793 1251 13.7054 expand

794 1253 13.7054 contract inside

795 1254 13.7054 reflect

796 1255 13.7054 reflect

797 1257 13.7026 expand

798 1258 13.7026 reflect

799 1259 13.7026 reflect

800 1261 13.7021 reflect

801 1262 13.7021 reflect

802 1263 13.7021 reflect

803 1265 13.7021 contract inside

804 1266 13.7021 reflect

805 1268 13.7013 reflect

806 1270 13.7013 contract inside

807 1271 13.7013 reflect

808 1273 13.7013 contract inside

809 1275 13.7013 contract inside

810 1277 13.7013 contract outside

811 1278 13.7013 reflect

812 1280 13.7013 contract inside

813 1282 13.701 reflect

814 1283 13.701 reflect

815 1285 13.701 contract inside

816 1287 13.701 contract inside

817 1288 13.701 reflect

818 1290 13.7007 reflect

819 1292 13.7007 contract inside

820 1294 13.7007 contract inside

821 1296 13.7007 contract inside

822 1297 13.7007 reflect

823 1299 13.7007 contract inside

824 1301 13.7007 contract inside

825 1303 13.7007 contract inside

826 1304 13.7007 reflect

827 1306 13.7007 contract inside

828 1308 13.7007 contract inside

829 1310 13.7007 contract inside

830 1312 13.7007 contract inside

831 1314 13.7007 contract inside

832 1316 13.7007 contract inside

833 1318 13.7007 contract inside

834 1320 13.7006 reflect

835 1322 13.7006 contract inside

836 1324 13.7006 contract inside

837 1325 13.7006 reflect

838 1326 13.7006 reflect

839 1328 13.7006 contract inside

840 1330 13.7006 contract inside

841 1332 13.7006 contract inside

842 1334 13.7006 reflect

843 1335 13.7006 reflect

844 1337 13.7006 contract inside

845 1338 13.7006 reflect

846 1340 13.7006 contract inside

847 1341 13.7006 reflect

848 1343 13.7006 contract inside

849 1344 13.7006 reflect

850 1346 13.7006 contract inside

851 1348 13.7006 contract inside

852 1350 13.7006 contract inside

853 1352 13.7006 reflect

854 1354 13.7006 contract inside

855 1356 13.7006 contract inside

856 1357 13.7006 reflect

857 1358 13.7006 reflect

858 1360 13.7006 reflect

859 1361 13.7006 reflect

860 1363 13.7006 contract inside

861 1365 13.7006 reflect

862 1367 13.7006 reflect

863 1368 13.7006 reflect

864 1370 13.7006 contract inside

865 1372 13.7006 contract inside

866 1374 13.7006 reflect

867 1376 13.7006 contract inside

868 1378 13.7006 expand

869 1380 13.7006 contract inside

870 1382 13.7006 contract inside

871 1383 13.7006 reflect

872 1385 13.7006 contract inside

873 1386 13.7006 reflect

874 1387 13.7006 reflect

875 1388 13.7006 reflect

876 1390 13.7006 reflect

877 1392 13.7006 contract inside

878 1393 13.7006 reflect

879 1395 13.7006 contract outside

880 1397 13.7006 reflect

881 1398 13.7006 reflect

882 1400 13.7006 expand

883 1401 13.7006 reflect

884 1403 13.7006 contract inside

885 1405 13.7006 reflect

886 1407 13.7006 contract inside

887 1409 13.7005 expand

888 1410 13.7005 reflect

889 1412 13.7005 contract inside

890 1413 13.7005 reflect

891 1414 13.7005 reflect

892 1416 13.7005 reflect

893 1418 13.7005 contract inside

894 1420 13.7005 expand

895 1421 13.7005 reflect

896 1422 13.7005 reflect

897 1424 13.7005 contract inside

898 1426 13.7005 expand

899 1427 13.7005 reflect

900 1429 13.7005 expand

901 1431 13.7005 expand

902 1432 13.7005 reflect

903 1434 13.7005 expand

904 1435 13.7005 reflect

905 1436 13.7005 reflect

906 1438 13.7005 expand

907 1439 13.7005 reflect

908 1441 13.7005 expand

909 1442 13.7005 reflect

910 1443 13.7005 reflect

911 1445 13.7004 expand

912 1446 13.7004 reflect

913 1448 13.7004 expand

914 1449 13.7004 reflect

915 1451 13.7003 expand

916 1452 13.7003 reflect

917 1454 13.7002 expand

918 1455 13.7002 reflect

919 1457 13.7001 expand

920 1458 13.7001 reflect

921 1460 13.7 expand

922 1461 13.7 reflect

923 1463 13.6997 expand

924 1464 13.6997 reflect

925 1465 13.6997 reflect

926 1467 13.6993 expand

927 1468 13.6993 reflect

928 1470 13.6989 expand

929 1471 13.6989 reflect

930 1473 13.6984 expand

931 1474 13.6984 reflect

932 1476 13.6974 expand

933 1477 13.6974 reflect

934 1479 13.6964 expand

935 1480 13.6964 reflect

936 1482 13.6948 expand

937 1483 13.6948 reflect

938 1485 13.6924 expand

939 1486 13.6924 reflect

940 1488 13.6897 expand

941 1489 13.6897 reflect

942 1491 13.6853 expand

943 1492 13.6853 reflect

944 1494 13.6792 expand

945 1495 13.6792 reflect

946 1497 13.6715 expand

947 1498 13.6715 reflect

948 1500 13.6656 expand

949 1502 13.6637 reflect

950 1504 13.6579 reflect

951 1505 13.6579 reflect

952 1507 13.6579 contract inside

953 1508 13.6579 reflect

954 1509 13.6579 reflect

955 1511 13.6579 contract inside

956 1512 13.6579 reflect

957 1514 13.6579 contract inside

958 1516 13.6579 contract outside

959 1518 13.656 expand

960 1519 13.656 reflect

961 1521 13.656 contract inside

962 1523 13.65 expand

963 1524 13.65 reflect

964 1525 13.65 reflect

965 1527 13.6477 expand

966 1529 13.6411 expand

967 1531 13.6315 expand

968 1532 13.6315 reflect

969 1534 13.6274 expand

970 1536 13.6108 expand

971 1538 13.5951 expand

972 1539 13.5951 reflect

973 1541 13.5764 expand

974 1542 13.5764 reflect

975 1543 13.5764 reflect

976 1544 13.5764 reflect

977 1545 13.5764 reflect

978 1547 13.5738 reflect

979 1549 13.5669 reflect

980 1550 13.5669 reflect

981 1552 13.5626 expand

982 1554 13.5378 expand

983 1555 13.5378 reflect

984 1556 13.5378 reflect

985 1558 13.5253 reflect

986 1559 13.5253 reflect

987 1560 13.5253 reflect

988 1561 13.5253 reflect

989 1563 13.5253 contract inside

990 1565 13.5164 contract inside

991 1567 13.5066 reflect

992 1569 13.5066 contract inside

993 1570 13.5066 reflect

994 1571 13.5066 reflect

995 1572 13.5066 reflect

996 1574 13.5045 contract inside

997 1576 13.4977 expand

998 1577 13.4977 reflect

999 1579 13.4948 reflect

1000 1581 13.4816 reflect

1001 1582 13.4816 reflect

1002 1584 13.4784 expand

1003 1586 13.4752 reflect

1004 1588 13.4752 contract outside

1005 1590 13.4752 contract inside

1006 1592 13.4482 expand

1007 1593 13.4482 reflect

1008 1594 13.4482 reflect

1009 1596 13.4366 expand

1010 1597 13.4366 reflect

1011 1598 13.4366 reflect

1012 1599 13.4366 reflect

1013 1601 13.4342 reflect

1014 1603 13.4236 contract inside

1015 1605 13.4187 expand

1016 1607 13.4187 contract inside

1017 1608 13.4187 reflect

1018 1610 13.418 contract inside

1019 1612 13.3917 expand

1020 1613 13.3917 reflect

1021 1615 13.3614 expand

1022 1617 13.3614 contract inside

1023 1618 13.3614 reflect

1024 1619 13.3614 reflect

1025 1620 13.3614 reflect

1026 1622 13.3277 expand

1027 1624 13.3277 contract inside

1028 1625 13.3277 reflect

1029 1626 13.3277 reflect

1030 1627 13.3277 reflect

1031 1629 13.3277 contract inside

1032 1630 13.3277 reflect

1033 1631 13.3277 reflect

1034 1633 13.2731 expand

1035 1635 13.2731 contract inside

1036 1636 13.2731 reflect

1037 1637 13.2731 reflect

1038 1638 13.2731 reflect

1039 1640 13.2731 contract inside

1040 1642 13.265 expand

1041 1643 13.265 reflect

1042 1645 13.252 expand

1043 1646 13.252 reflect

1044 1648 13.2223 expand

1045 1650 13.2223 contract inside

1046 1651 13.2223 reflect

1047 1652 13.2223 reflect

1048 1654 13.2218 reflect

1049 1655 13.2218 reflect

1050 1657 13.1912 expand

1051 1658 13.1912 reflect

1052 1660 13.117 expand

1053 1662 13.117 contract inside

1054 1663 13.117 reflect

1055 1665 13.117 contract outside

1056 1666 13.117 reflect

1057 1668 13.117 contract inside

1058 1669 13.117 reflect

1059 1671 13.1124 reflect

1060 1672 13.1124 reflect

1061 1673 13.1124 reflect

1062 1675 13.1033 reflect

1063 1677 13.1033 contract inside

1064 1679 13.1033 contract outside

1065 1681 13.0856 reflect

1066 1683 13.0856 contract outside

1067 1685 13.0856 contract inside

1068 1686 13.0856 reflect

1069 1687 13.0856 reflect

1070 1688 13.0856 reflect

1071 1690 13.0688 expand

1072 1692 13.0354 expand

1073 1694 13.0354 contract inside

1074 1695 13.0354 reflect

1075 1697 13.0354 contract outside

1076 1699 13.0354 contract outside

1077 1700 13.0354 reflect

1078 1702 13.0275 reflect

1079 1704 13.0275 contract inside

1080 1705 13.0275 reflect

1081 1707 13.0275 contract outside

1082 1709 13.0275 contract inside

1083 1710 13.0275 reflect

1084 1712 13.0185 reflect

1085 1713 13.0185 reflect

1086 1714 13.0185 reflect

1087 1716 13.0058 expand

1088 1718 12.9998 expand

1089 1719 12.9998 reflect

1090 1721 12.9998 contract inside

1091 1723 12.9958 expand

1092 1725 12.9739 expand

1093 1727 12.9739 contract inside

1094 1728 12.9739 reflect

1095 1729 12.9739 reflect

1096 1731 12.9508 expand

1097 1732 12.9508 reflect

1098 1734 12.9262 expand

1099 1735 12.9262 reflect

1100 1736 12.9262 reflect

1101 1737 12.9262 reflect

1102 1739 12.9262 contract inside

1103 1740 12.9262 reflect

1104 1742 12.9001 expand

1105 1743 12.9001 reflect

1106 1744 12.9001 reflect

1107 1746 12.9001 contract inside

1108 1748 12.8796 expand

1109 1749 12.8796 reflect

1110 1750 12.8796 reflect

1111 1751 12.8796 reflect

1112 1753 12.8796 contract inside

1113 1755 12.8796 contract inside

1114 1757 12.872 reflect

1115 1759 12.8611 expand

1116 1761 12.8611 contract inside

1117 1763 12.8524 expand

1118 1764 12.8524 reflect

1119 1765 12.8524 reflect

1120 1766 12.8524 reflect

1121 1768 12.8302 expand

1122 1769 12.8302 reflect

1123 1770 12.8302 reflect

1124 1771 12.8302 reflect

1125 1773 12.8302 contract inside

1126 1775 12.8032 expand

1127 1777 12.8032 contract inside

1128 1778 12.8032 reflect

1129 1780 12.7808 expand

1130 1782 12.7808 contract inside

1131 1784 12.7808 contract inside

1132 1785 12.7808 reflect

1133 1786 12.7808 reflect

1134 1788 12.7662 expand

1135 1789 12.7662 reflect

1136 1791 12.7662 contract outside

1137 1793 12.7604 reflect

1138 1794 12.7604 reflect

1139 1796 12.7547 reflect

1140 1797 12.7547 reflect

1141 1799 12.7547 contract inside

1142 1801 12.7547 contract inside

1143 1803 12.7547 contract inside

1144 1805 12.7449 reflect

1145 1807 12.7449 contract inside

1146 1809 12.7449 contract inside

1147 1810 12.7449 reflect

1148 1811 12.7449 reflect

1149 1813 12.7394 expand

1150 1814 12.7394 reflect

1151 1816 12.73 reflect

1152 1818 12.7186 expand

1153 1820 12.7186 contract inside

1154 1821 12.7186 reflect

1155 1822 12.7186 reflect

1156 1824 12.7186 contract inside

1157 1825 12.7186 reflect

1158 1826 12.7186 reflect

1159 1827 12.7186 reflect

1160 1829 12.7112 reflect

1161 1831 12.7112 contract inside

1162 1832 12.7112 reflect

1163 1833 12.7112 reflect

1164 1835 12.7099 contract inside

1165 1836 12.7099 reflect

1166 1838 12.7061 reflect

1167 1839 12.7061 reflect

1168 1841 12.7036 expand

1169 1842 12.7036 reflect

1170 1844 12.6873 expand

1171 1845 12.6873 reflect

1172 1846 12.6873 reflect

1173 1848 12.6873 contract inside

1174 1849 12.6873 reflect

1175 1850 12.6873 reflect

1176 1851 12.6873 reflect

1177 1853 12.6696 expand

1178 1854 12.6696 reflect

1179 1856 12.6696 contract inside

1180 1857 12.6696 reflect

1181 1858 12.6696 reflect

1182 1859 12.6696 reflect

1183 1861 12.6691 reflect

1184 1863 12.6691 contract inside

1185 1865 12.6525 expand

1186 1866 12.6525 reflect

1187 1867 12.6525 reflect

1188 1869 12.6525 contract inside

1189 1870 12.6525 reflect

1190 1872 12.6423 expand

1191 1874 12.6423 contract inside

1192 1875 12.6423 reflect

1193 1876 12.6423 reflect

1194 1877 12.6423 reflect

1195 1878 12.6423 reflect

1196 1880 12.6258 expand

1197 1881 12.6258 reflect

1198 1882 12.6258 reflect

1199 1884 12.6258 contract outside

1200 1886 12.6258 contract inside

1201 1888 12.6125 expand

1202 1890 12.6125 contract inside

1203 1891 12.6125 reflect

1204 1893 12.6125 contract inside

1205 1895 12.6125 contract inside

1206 1896 12.6125 reflect

1207 1897 12.6125 reflect

1208 1898 12.6125 reflect

1209 1900 12.5969 expand

1210 1901 12.5969 reflect

1211 1902 12.5969 reflect

1212 1903 12.5969 reflect

1213 1905 12.5969 contract outside

1214 1907 12.584 expand

1215 1909 12.584 contract inside

1216 1911 12.584 contract inside

1217 1912 12.584 reflect

1218 1914 12.584 contract inside

1219 1916 12.584 contract inside

1220 1918 12.584 contract outside

1221 1919 12.584 reflect

1222 1920 12.584 reflect

1223 1921 12.584 reflect

1224 1922 12.584 reflect

1225 1924 12.581 expand

1226 1925 12.581 reflect

1227 1926 12.581 reflect

1228 1928 12.5777 reflect

1229 1930 12.5777 contract inside

1230 1932 12.5728 reflect

1231 1933 12.5728 reflect

1232 1935 12.5724 reflect

1233 1937 12.5724 contract inside

1234 1939 12.5695 reflect

1235 1941 12.5576 expand

1236 1943 12.5576 contract inside

1237 1944 12.5576 reflect

1238 1945 12.5576 reflect

1239 1946 12.5576 reflect

1240 1947 12.5576 reflect

1241 1948 12.5576 reflect

1242 1949 12.5576 reflect

1243 1950 12.5576 reflect

1244 1951 12.5576 reflect

1245 1953 12.5576 contract inside

1246 1954 12.5576 reflect

1247 1956 12.5576 contract inside

1248 1958 12.5576 contract inside

1249 1960 12.5472 expand

1250 1961 12.5472 reflect

1251 1963 12.5472 contract inside

1252 1964 12.5472 reflect

1253 1966 12.5472 contract inside

1254 1968 12.5468 reflect

1255 1969 12.5468 reflect

1256 1970 12.5468 reflect

1257 1971 12.5468 reflect

1258 1973 12.5339 expand

1259 1974 12.5339 reflect

1260 1975 12.5339 reflect

1261 1976 12.5339 reflect

1262 1977 12.5339 reflect

1263 1978 12.5339 reflect

1264 1979 12.5339 reflect

1265 1980 12.5339 reflect

1266 1981 12.5339 reflect

1267 1983 12.5339 contract outside

1268 1985 12.5339 contract inside

1269 1987 12.5339 contract inside

1270 1989 12.5318 reflect

1271 1991 12.5285 expand

1272 1993 12.5285 contract inside

1273 1995 12.5279 reflect

1274 1997 12.5279 contract inside

1275 1998 12.5279 reflect

1276 1999 12.5279 reflect

1277 2001 12.5235 expand

1278 2003 12.5235 contract inside

1279 2004 12.5235 reflect

1280 2006 12.5226 reflect

1281 2007 12.5226 reflect

1282 2009 12.5196 reflect

1283 2010 12.5196 reflect

1284 2011 12.5196 reflect

1285 2013 12.5196 contract inside

1286 2015 12.517 reflect

1287 2017 12.517 contract inside

1288 2019 12.517 contract inside

1289 2021 12.517 contract inside

1290 2022 12.517 reflect

1291 2023 12.517 reflect

1292 2025 12.5168 reflect

1293 2027 12.5168 contract inside

1294 2029 12.5144 expand

1295 2030 12.5144 reflect

1296 2032 12.5112 expand

1297 2034 12.5112 contract inside

1298 2035 12.5112 reflect

1299 2036 12.5112 reflect

1300 2037 12.5112 reflect

1301 2038 12.5112 reflect

1302 2039 12.5112 reflect

1303 2041 12.5068 expand

1304 2042 12.5068 reflect

1305 2044 12.504 expand

1306 2046 12.504 contract outside

1307 2047 12.504 reflect

1308 2049 12.504 contract inside

1309 2050 12.504 reflect

1310 2051 12.504 reflect

1311 2053 12.5007 expand

1312 2055 12.5007 contract inside

1313 2057 12.5007 contract outside

1314 2058 12.5007 reflect

1315 2059 12.5007 reflect

1316 2061 12.4983 expand

1317 2063 12.4977 expand

1318 2064 12.4977 reflect

1319 2066 12.4977 contract inside

1320 2068 12.496 reflect

1321 2069 12.496 reflect

1322 2070 12.496 reflect

1323 2071 12.496 reflect

1324 2073 12.4934 reflect

1325 2075 12.4911 expand

1326 2076 12.4911 reflect

1327 2077 12.4911 reflect

1328 2079 12.4911 contract inside

1329 2081 12.4859 expand

1330 2082 12.4859 reflect

1331 2084 12.4859 contract outside

1332 2085 12.4859 reflect

1333 2087 12.4844 expand

1334 2089 12.4844 contract inside

1335 2091 12.4844 contract inside

1336 2093 12.4844 contract outside

1337 2094 12.4844 reflect

1338 2095 12.4844 reflect

1339 2097 12.4844 contract inside

1340 2098 12.4844 reflect

1341 2100 12.4844 contract inside

1342 2102 12.4844 contract inside

1343 2104 12.4844 contract inside

1344 2106 12.4842 contract inside

1345 2108 12.4842 contract inside

1346 2109 12.4842 reflect

1347 2111 12.4838 reflect

1348 2113 12.4837 contract inside

1349 2115 12.4837 contract inside

1350 2117 12.482 reflect

1351 2119 12.482 contract inside

1352 2120 12.482 reflect

1353 2122 12.482 contract inside

1354 2124 12.482 contract outside

1355 2125 12.482 reflect

1356 2126 12.482 reflect

1357 2128 12.4818 expand

1358 2130 12.4818 contract outside

1359 2132 12.4818 contract inside

1360 2133 12.4818 reflect

1361 2134 12.4818 reflect

1362 2136 12.4818 contract inside

1363 2138 12.4813 reflect

1364 2140 12.4813 contract inside

1365 2142 12.4813 contract inside

1366 2144 12.4813 contract inside

1367 2146 12.4813 contract inside

1368 2148 12.4813 contract inside

1369 2149 12.4813 reflect

1370 2151 12.4813 contract inside

1371 2153 12.4813 contract inside

1372 2155 12.481 reflect

1373 2157 12.481 contract inside

1374 2158 12.481 reflect

1375 2159 12.481 reflect

1376 2161 12.481 contract inside

1377 2163 12.481 contract outside

1378 2165 12.481 contract inside

1379 2167 12.481 contract inside

1380 2168 12.481 reflect

1381 2170 12.481 contract inside

1382 2171 12.481 reflect

1383 2172 12.481 reflect

1384 2174 12.481 contract inside

1385 2176 12.481 contract inside

1386 2178 12.481 contract inside

1387 2180 12.481 contract inside

1388 2182 12.481 contract inside

1389 2183 12.481 reflect

1390 2184 12.481 reflect

1391 2186 12.481 contract inside

1392 2187 12.481 reflect

1393 2189 12.481 contract inside

1394 2190 12.481 reflect

1395 2192 12.481 contract inside

1396 2193 12.481 reflect

1397 2195 12.481 contract inside

1398 2196 12.481 reflect

1399 2198 12.481 contract outside

1400 2200 12.481 contract inside

1401 2201 12.481 reflect

1402 2203 12.481 contract inside

1403 2205 12.481 contract inside

1404 2207 12.481 contract inside

1405 2209 12.481 contract inside

1406 2211 12.481 contract inside

1407 2213 12.481 contract inside

1408 2215 12.481 contract inside

1409 2217 12.481 reflect

1410 2219 12.481 contract inside

1411 2221 12.481 contract inside

1412 2223 12.481 contract inside

1413 2224 12.481 reflect

1414 2225 12.481 reflect

1415 2227 12.481 contract inside

1416 2228 12.481 reflect

1417 2229 12.481 reflect

1418 2231 12.481 contract inside

1419 2232 12.481 reflect

1420 2233 12.481 reflect

1421 2234 12.481 reflect

1422 2236 12.481 contract inside

1423 2238 12.481 contract inside

1424 2239 12.481 reflect

1425 2241 12.481 contract inside

1426 2243 12.481 contract inside

1427 2245 12.481 reflect

1428 2247 12.481 contract inside

1429 2249 12.481 contract inside

1430 2250 12.481 reflect

1431 2251 12.481 reflect

1432 2253 12.481 contract inside

1433 2254 12.481 reflect

1434 2255 12.481 reflect

1435 2257 12.481 contract inside

1436 2258 12.481 reflect

1437 2259 12.481 reflect

1438 2261 12.481 contract inside

1439 2263 12.481 reflect

1440 2265 12.481 contract inside

1441 2266 12.481 reflect

1442 2268 12.481 reflect

1443 2270 12.481 contract inside

1444 2271 12.481 reflect

1445 2273 12.481 contract inside

1446 2275 12.481 expand

1447 2277 12.481 contract inside

1448 2279 12.481 contract inside

1449 2281 12.481 contract inside

1450 2283 12.481 contract outside

1451 2285 12.481 reflect

1452 2287 12.481 contract inside

1453 2289 12.481 contract inside

1454 2291 12.481 contract outside

1455 2292 12.481 reflect

1456 2293 12.481 reflect

1457 2294 12.481 reflect

1458 2295 12.481 reflect

1459 2297 12.481 contract inside

1460 2299 12.481 contract inside

1461 2301 12.481 contract inside

1462 2303 12.481 contract inside

1463 2305 12.481 contract inside

1464 2307 12.481 contract inside

1465 2308 12.481 reflect

1466 2310 12.481 contract inside

1467 2311 12.481 reflect

1468 2313 12.481 contract inside

1469 2314 12.481 reflect

1470 2316 12.481 contract inside

1471 2318 12.481 contract inside

1472 2320 12.481 contract inside

1473 2322 12.481 contract inside

1474 2324 12.481 contract inside

1475 2326 12.481 reflect

1476 2327 12.481 reflect

1477 2329 12.481 contract outside

1478 2331 12.481 contract inside

1479 2333 12.481 contract inside

1480 2335 12.481 contract inside

1481 2337 12.481 contract inside

1482 2339 12.481 contract inside

1483 2341 12.481 contract inside

1484 2343 12.481 contract inside

1485 2345 12.481 contract inside

1486 2347 12.481 contract inside

1487 2349 12.481 reflect

1488 2351 12.481 contract inside

1489 2353 12.481 contract inside

1490 2354 12.481 reflect

1491 2355 12.481 reflect

1492 2357 12.481 reflect

1493 2359 12.481 reflect

1494 2360 12.481 reflect

1495 2361 12.481 reflect

1496 2363 12.481 contract inside

1497 2365 12.481 contract inside

1498 2367 12.481 contract inside

1499 2368 12.481 reflect

1500 2370 12.481 contract inside

1501 2372 12.481 contract inside

1502 2373 12.481 reflect

1503 2375 12.481 reflect

1504 2376 12.481 reflect

1505 2378 12.481 reflect

1506 2380 12.481 contract inside

1507 2382 12.481 contract inside

1508 2383 12.481 reflect

1509 2385 12.481 contract inside

1510 2387 12.481 contract inside

1511 2389 12.481 contract inside

1512 2391 12.481 contract inside

1513 2393 12.481 reflect

1514 2395 12.481 contract inside

1515 2396 12.481 reflect

1516 2397 12.481 reflect

1517 2399 12.481 contract inside

1518 2401 12.481 contract inside

Exiting: Maximum number of function evaluations has been exceeded

- increase MaxFunEvals option.

Current function value: 12.480955

FMINSEARCH terminated.

**x =[170.2694,1.1581,0.0001,1.0927,4.7195,-1.4926]; % fval =12.4810**

exitflag =-1;

output =

problemtype: 'unconstrained'

rngstate: [1x1 struct]

generations: 22

funccount: 4701

message: [1x223 char]

population =

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.0501 1.1488 0.0541 0.3267 2.5000 -1.5427

169.4938 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.5270 0.1426 1.0157 2.5000 -1.8039

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

168.9751 1.1488 0.0100 1.0157 2.6919 -0.1978

169.5500 1.1488 0.0100 1.0157 2.5000 -0.6142

169.9367 1.1488 0.6095 1.4295 2.2967 -1.5815

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.1427 1.1488 0.0100 1.0157 2.5000 -1.2267

168.9837 1.1488 0.3598 1.8824 2.5000 -1.5315

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.6834 0.5992 1.1347 2.5000 -1.5427

169.5500 1.1488 0.0100 1.4879 2.5000 -1.5427

169.5500 1.1488 0.0100 1.1599 1.9245 -1.2503

169.5500 1.0868 0.0100 1.0157 1.8861 -1.5427

169.2493 0.3052 0.0100 1.0157 2.5000 -1.5427

169.4038 1.0868 0.0100 1.0473 1.7270 -3.1142

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.4954 1.1488 -0.0072 1.9533 2.5000 -2.3673

169.5500 1.1488 0.0100 -0.6208 2.5000 -0.7341

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.2967 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -0.6142

169.0120 1.7497 0.8973 0.5526 2.5232 -0.8888

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 0.9252 -0.4719 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.9413

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

171.6886 1.1488 0.0100 2.2711 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

170.4271 0.4296 0.3206 1.6988 2.6035 -1.5427

169.4165 1.3701 0.0100 1.0157 2.8230 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5828 1.5125 0.7651 1.2978 2.5000 -1.5427

169.5500 1.1488 0.0022 1.4766 2.0855 -1.4920

169.5500 1.1488 0.0100 1.0157 2.5000 -2.1429

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.1242 1.2330 -0.7220 0.6409 2.5000 -1.8865

169.5500 1.1488 0.0100 1.0157 2.5000 -2.1429

167.9757 1.6057 0.3739 0.3333 2.5000 -1.8458

169.5500 1.0387 0.0100 1.0157 2.6286 -2.9573

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.9189 1.0157 2.5000 -2.3446

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

168.5504 1.1488 0.0100 1.0157 2.5000 -1.5315

169.4095 2.1374 1.6521 1.0226 2.5000 -1.5427

170.5026 1.1488 0.0100 1.0157 3.1167 -1.0490

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.7244 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

168.8469 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

170.7933 1.1488 0.0100 1.0157 2.5000 -1.9413

169.5500 0.5352 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 0.7237 -0.1624 1.2143 2.4092 -1.5427

169.5500 0.6628 0.0100 1.0157 2.5000 -1.5427

168.6510 1.1488 0.0100 1.0157 2.0658 -1.5427

169.5500 1.1488 -0.6408 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 0.3739 1.0157 2.5000 -2.1551

169.0120 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5149 1.1488 0.0100 1.0157 2.5000 -1.5427

169.5500 1.1488 -0.5649 1.0157 2.5000 -1.5427

169.5500 1.1488 0.1426 1.0157 2.5000 -0.7344

168.8353 0.9252 -1.5016 0.8861 0.7921 -1.8361

169.5500 1.1488 0.0100 1.0157 2.5000 -1.5427

169.7964 1.7647 0.4043 2.0958 3.4734 -0.9256

170.9612 1.4883 -0.1002 0.9510 1.8730 -2.5433

169.4177 1.2090 -0.7619 1.4059 2.2251 -0.7621

170.4401 2.2345 -0.5787 1.2621 2.8273 0.8707

169.7440 1.5826 0.5238 0.3861 1.8312 -1.5310

169.4734 1.0228 0.4640 0.5368 4.0705 -2.0721

171.5958 0.3589 -0.6507 0.5182 3.6315 -1.8922

169.4248 2.4595 -0.0093 2.7005 1.2007 -1.1779

169.5632 0.4529 -0.0496 -0.2604 3.6083 -1.6093

169.5049 1.1405 -1.5566 1.7988 2.5717 -1.6502

169.8776 1.3996 0.4533 0.3471 1.8230 -1.7234

169.4955 1.0176 -0.2727 0.6918 2.6986 -1.2500

168.8690 1.2462 -0.6274 1.0153 2.2675 -1.0065

169.4500 1.1285 0.6073 1.8507 1.2792 -1.4470

170.8031 1.4776 -0.8514 0.6332 2.7631 -2.0864

168.2960 1.1003 -0.0276 1.0542 3.6260 -1.4806

169.6497 2.0934 0.6314 1.5827 2.3140 -2.3165

170.0391 0.7820 -0.9722 2.2962 2.1876 -0.9095

169.7564 0.8406 0.4276 1.3012 1.8366 -1.4260

169.7396 -0.3286 1.7577 2.1031 2.8106 -0.1888

scores =

1.0e+003 \*

0.0159

0.0159

0.8797

0.0168

2.1412

0.0159

1.8281

0.9001

1.0285

0.0159

0.1281

1.2025

0.0159

2.2511

1.2332

0.2767

0.2250

3.7645

3.4104

0.0159

0.0159

2.2572

3.8425

0.0159

0.0159

0.0159

0.0159

0.0196

0.0159

0.9001

1.1026

0.0159

1.6432

0.5154

0.0159

0.0159

0.9587

0.0159

3.9152

0.9216

0.0159

0.0159

0.5768

1.1299

0.7445

0.0159

2.0091

0.7445

1.2080

2.9117

0.0159

1.4572

0.0159

0.0403

7.2407 - 1.0089i

0.2254

0.0159

0.0159

0.0205

0.0159

0.0319

0.0159

0.5456

3.4874

0.0159

0.0159

3.5946

3.2691

0.0446

1.3704

0.0159

0.0159

0.0159

0.7898

0.0280

0.0163

1.2002

0.6871

5.2777 - 0.2396i

0.0159

2.5342

2.4440

2.6538

8.8721

0.9308

1.1988

5.4733

8.4587

4.6316

5.3782 - 0.4199i

0.6199

1.1319

1.4442

1.4418

3.5120

0.2713

2.9390

4.5699

1.1697

6.8849 - 0.0501i

Sending a stop signal to all the labs ... stopped.

Caculation finished and the elapsedTime= 37.0452hours

**x =[170.2694,1.1581,0.0001,1.0927,4.7195,-1.4926]; % fval =12.4810**

**下面的是精确值：**

**x=[1.7026941e+002,1.1580537e+0,1.0000010e-004,1.0927357e+0,4.7195217e+0,-1.4925868e+0];**

**P\_asterisk =12.4810; L =1.0000; delta =1.0834e-007; AR =3.7643; Re =157.2626;**

**penaltyfun1 =2.1668e-004; penaltyfun2 =0; penaltyfun5 =0; obj\_function =12.4812;**

**由以下初始值代入计算而得： % 继续遗传50代+2400代局部搜索**

**x\_start =[169.55,1.1488,0.01,1.0157,2.5,-1.5427]; % P\_asterisk =15.6817;L =1.0001;delta =9.2522e-005;**