

j =

1

lambda =

0.871640865147295 + 0.423521707712613i
0.871640865147295 - 0.423521707712613i
0.911773678320532 + 0.411252884411105i
0.911773678320532 - 0.411252884411105i
0.914716309368967 + 0.334681957369083i
0.914716309368967 - 0.334681957369083i
0.940006716171593 + 0.282773659751105i
0.940006716171593 - 0.282773659751105i
0.952097804186526 + 0.242739479153533i
0.952097804186526 - 0.242739479153533i
0.961480097910562 + 0.197009854164822i
0.961480097910562 - 0.197009854164822i
0.962443471556079 + 0.157740301730233i
0.962443471556079 - 0.157740301730233i
0.997874933173413 + 0.006413776469074i
0.997874933173413 - 0.006413776469074i
0.995906612294160 + 0.026067828762582i
0.995906612294160 - 0.026067828762582i
1.000862191137953 + 0.054113546088485i
1.000862191137953 - 0.054113546088485i
0.984390041830134 + 0.092042487648301i
0.984390041830134 - 0.092042487648301i
0.984576376917660 + 0.116959856667843i
0.984576376917660 - 0.116959856667843i

ans =

0.003967778679141

j =

2

lambda =

0.873083523684128 + 0.422561554943675i
0.873083523684128 - 0.422561554943675i
0.909596701088070 + 0.414570117863244i
0.909596701088070 - 0.414570117863244i
0.914751717648825 + 0.335064691088584i

```
0.914751717648825 - 0.335064691088584i
0.940626501606982 + 0.283744931936770i
0.940626501606982 - 0.283744931936770i
0.952808451362743 + 0.243635259853018i
0.952808451362743 - 0.243635259853018i
0.963664873018946 + 0.197582413314596i
0.963664873018946 - 0.197582413314596i
0.964589456301553 + 0.155745256447703i
0.964589456301553 - 0.155745256447703i
0.997980012825322 + 0.006368499046777i
0.997980012825322 - 0.006368499046777i
0.996378281643404 + 0.025998631714200i
0.996378281643404 - 0.025998631714200i
1.001061903340770 + 0.054637916583121i
1.001061903340770 - 0.054637916583121i
0.983506891950356 + 0.091361720131826i
0.983506891950356 - 0.091361720131826i
0.986178649956930 + 0.116757920041537i
0.986178649956930 - 0.116757920041537i
```

ans =

```
0.004095448881192
```

j =

```
3
```

lambda =

```
0.874759105224807 + 0.421469249592190i
0.874759105224807 - 0.421469249592190i
0.907071586025296 + 0.417794477560642i
0.907071586025296 - 0.417794477560642i
0.914890633428855 + 0.335485334654245i
0.914890633428855 - 0.335485334654245i
0.941138932535537 + 0.284756439282169i
0.941138932535537 - 0.284756439282169i
0.953330485711631 + 0.244194759457324i
0.953330485711631 - 0.244194759457324i
0.965524478007564 + 0.198046685629562i
0.965524478007564 - 0.198046685629562i
0.966810902699843 + 0.154261519518516i
0.966810902699843 - 0.154261519518516i
0.998049778258748 + 0.006330013136736i
0.998049778258748 - 0.006330013136736i
0.996771059153373 + 0.025914330649881i
0.996771059153373 - 0.025914330649881i
```

```
1.001138850765111 + 0.055095021033733i
1.001138850765111 - 0.055095021033733i
0.982869606315191 + 0.090299595757387i
0.982869606315191 - 0.090299595757387i
0.987682373628532 + 0.116896429753574i
0.987682373628532 - 0.116896429753574i
```

ans =

```
0.004487856503301
```

j =

```
4
```

lambda =

```
0.876848403054868 + 0.419984582964196i
0.876848403054868 - 0.419984582964196i
0.904113678731392 + 0.421169627992089i
0.904113678731392 - 0.421169627992089i
0.915179945628567 + 0.335853885193826i
0.915179945628567 - 0.335853885193826i
0.941623210598997 + 0.285759720175017i
0.941623210598997 - 0.285759720175017i
0.953643053263820 + 0.244439912776376i
0.953643053263820 - 0.244439912776376i
0.967046783534997 + 0.198342658872970i
0.967046783534997 - 0.198342658872970i
0.968868510764957 + 0.153160283719308i
0.968868510764957 - 0.153160283719308i
0.998075084935426 + 0.006298112571771i
0.998075084935426 - 0.006298112571771i
0.997079520815843 + 0.025820907386016i
0.997079520815843 - 0.025820907386016i
1.001076523767163 + 0.055503136623864i
1.001076523767163 - 0.055503136623864i
0.982567382113370 + 0.088996747683772i
0.982567382113370 - 0.088996747683772i
0.988976728136388 + 0.117347590488646i
0.988976728136388 - 0.117347590488646i
```

ans =

```
0.005158603143560
```

j =

5

lambda =

0.879226335752923 + 0.417512953040461i
0.879226335752923 - 0.417512953040461i
0.900933592935306 + 0.425231430636516i
0.900933592935306 - 0.425231430636516i
0.915606285851505 + 0.336087154413244i
0.915606285851505 - 0.336087154413244i
0.942116097859051 + 0.286689360415660i
0.942116097859051 - 0.286689360415660i
0.953769343426896 + 0.244439170462025i
0.953769343426896 - 0.244439170462025i
0.968234111032886 + 0.198503850686581i
0.968234111032886 - 0.198503850686581i
0.970671104908065 + 0.152321257007545i
0.970671104908065 - 0.152321257007545i
0.998062253296335 + 0.006270592909099i
0.998062253296335 - 0.006270592909099i
0.997319763051289 + 0.025726930631954i
0.997319763051289 - 0.025726930631954i
1.000889236917546 + 0.055877833419319i
1.000889236917546 - 0.055877833419319i
0.982617861665783 + 0.087609144810367i
0.982617861665783 - 0.087609144810367i
0.990039686777661 + 0.118057155669261i
0.990039686777661 - 0.118057155669261i

ans =

0.005396981724665

j =

6

lambda =

0.880813892598927 + 0.413848667989358i
0.880813892598927 - 0.413848667989358i
0.898646444259450 + 0.430119821237819i
0.898646444259450 - 0.430119821237819i
0.916118499499624 + 0.336144927401209i
0.916118499499624 - 0.336144927401209i

```
0.942620328091033 + 0.287494597528183i
0.942620328091033 - 0.287494597528183i
0.953774854235873 + 0.244263158091999i
0.953774854235873 - 0.244263158091999i
0.969121502261219 + 0.198598839230326i
0.969121502261219 - 0.198598839230326i
0.972218551488795 + 0.151659839387229i
0.972218551488795 - 0.151659839387229i
0.998028157974413 + 0.006245266742475i
0.998028157974413 - 0.006245266742475i
0.997518947329908 + 0.025640502754823i
0.997518947329908 - 0.025640502754823i
1.000608903646946 + 0.056223830569354i
1.000608903646946 - 0.056223830569354i
0.983005120825295 + 0.086257016728980i
0.983005120825295 - 0.086257016728980i
0.990906462772858 + 0.118974392224355i
0.990906462772858 - 0.118974392224355i
```

Elapsed time is 1.615443 seconds.

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