```
Initial Parameters...
R(load) = 500 \text{ ohms}
r = 1.00
w = 0.50
_____
INITIAL Particle 1 :: pos(duty) = 0.81472369
                                           fitness (Output Power) = 102.09478421
INITIAL Particle 2 :: pos(duty) = 0.90579194 fitness(Output Power) = 131.34414570
INITIAL Particle 3 :: pos(duty) = 0.12698682 fitness(Output Power) = 5.39209111
_____
_____
Iteration No: 1
c1 = 0.50000000 c2 = 0.50000000
velocity =
   0.0455
       \cap
   0.3894
Particle 1 :: pos(duty) = 0.86025781 fitness(Output Power) = 159.93648403
Particle 2 :: pos(duty) = 0.90579194 fitness(Output Power) = 131.34414570
Particle 3 :: pos(duty) = 0.51638938 fitness(Output Power) = 16.48061101
Updated best Fitness Position = 0.86025781
Iteration No: 2
c1 = 0.50000000 c2 = 0.50000000
velocity =
   0.0228
  -0.0228
   0.3666
Particle 1 :: pos(duty) = 0.88302487 fitness(Output Power) = 179.62068834
            pos(duty) = 0.88302487 fitness(Output Power) = 179.62068834
Particle 2 ::
                                  fitness(Output Power) = 179.62068834
Particle 3 :: pos(duty) = 0.88302487
Updated best Fitness Position = 0.88302487
Iteration No: 3
c1 = 0.50000000 c2 = 0.50000000
velocity =
   0.0114
  -0.0114
   0.1833
```

```
Particle 1 ::
               pos(duty) = 0.89440841
                                         fitness(Output Power) = 161.78221553
              pos(duty) = 0.87164134
Particle 2 ::
                                         fitness(Output Power) = 174.85615739
               pos(duty) = 0.95000000
Particle 3 ::
                                         fitness(Output Power) = 37.11431295
Updated best Fitness Position = 0.88302487
_____
Iteration No: 4
c1 = 0.50000000
                 c2 = 0.50000000
velocity =
  -0.0057
   0.0057
   0.0247
                           0.88871664
Particle 1 ::
                                         fitness(Output Power) = 173.58801472
             pos(duty)=
Particle 2 :: pos(duty)=
                          0.87733311
                                       fitness(Output Power) = 179.42367396
Particle 3 :: pos(duty) = 0.97468375 fitness(Output Power) =
                                                                 9.48299559
Updated best Fitness Position = 0.88302487
Iteration No: 5
c1 = 0.50000000 c2 = 0.50000000
velocity =
  -0.0085
   0.0085
  -0.0793
Particle 1 :: pos(duty) = 0.88017899 fitness(Output Power) = 180.21369650
                                        fitness (Output Power) = 177.43675361
Particle 2 ::
              pos(duty) = 0.88587076
Particle 3 ::
             pos(duty)=
                          0.89536675
                                        fitness(Output Power) = 159.41728066
Updated best Fitness Position = 0.88017899
Iteration No: 6
c1 = 0.50000000 c2 = 0.50000000
velocity =
  -0.0043
  -0.0000
  -0.0534
             pos(duty) = 0.87591017
Particle 1 ::
                                       fitness(Output Power) = 178.60535123
Particle 2 :: pos(duty) = 0.88587076 fitness(Output Power) = 177.43675361
Particle 3 :: pos(duty) = 0.84194343 fitness(Output Power) = 133.76605391
```

Updated best Fitness Position = 0.88017899 \_\_\_\_\_ Iteration No: 7 c1 = 0.50000000 c2 = 0.50000000velocity = 0.0021 -0.0043 0.0129 Particle 1 :: pos(duty) = 0.87804458 fitness(Output Power) = 179.74701701 Particle 2 :: pos(duty) = 0.88160193 fitness(Output Power) = 180.10894740 Particle 3 :: pos(duty) = 0.85489028 fitness(Output Power) = 151.96983563 Updated best Fitness Position = 0.88017899 Iteration No: 8 c1 = 0.50000000 c2 = 0.50000000velocity = 0.0032 -0.0028 0.0332 Particle 1 :: pos(duty) = 0.88124620 fitness(Output Power) = 180.16776157 Particle 2 :: pos(duty) = 0.87875605 fitness(Output Power) = 179.97185190 pos(duty) = 0.88807535 Particle 3 :: fitness(Output Power) = 174.61379659 Updated best Fitness Position = 0.88017899 \_\_\_\_\_ Iteration No: 9 c1 = 0.50000000 c2 = 0.50000000velocity = 0.0005 0.0007 0.0101 Particle 1 :: pos(duty) = 0.88177980 fitness(Output Power) = 180.06811138 Particle 2 :: pos(duty) = 0.87946752 fitness(Output Power) = 180.13468474 Particle 3 :: pos(duty) = 0.89819447 fitness(Output Power) = 152.05719816

Updated best Fitness Position = 0.88017899

```
_____
Iteration No: 10
c1 = 0.50000000 c2 = 0.50000000
velocity =
  -0.0013
   0.0007
  -0.0115
Particle 1 :: pos(duty) = 0.88044579
                                        fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88017899 fitness(Output Power) = 180.21369650
Particle 3 :: pos(duty) = 0.88666149 fitness(Output Power) = 176.53729709
Updated best Fitness Position = 0.88044579
_____
Iteration No: 11
c1 = 0.50000000 c2 = 0.50000000
velocity =
  -0.0007
   0.0005
  -0.0107
Particle 1 :: pos(duty) = 0.87977879 fitness(Output Power) = 180.17969307
Particle 2 :: pos(duty) = 0.88066813 fitness(Output Power) = 180.21730934
             pos(duty) = 0.87596884
Particle 3 ::
                                        fitness(Output Power) = 178.66252211
Updated best Fitness Position = 0.88044579
Iteration No: 12
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-03 *
   0.3335
   0.1334
   0.4202
Particle 1 :: pos(duty) = 0.88011229 fitness(Output Power) = 180.21004773
Particle 2 :: pos(duty) = 0.88080153 fitness(Output Power) = 180.21145647
Particle 3 ::
                                      fitness(Output Power) = 178.90543951
             pos(duty) = 0.87638901
Updated best Fitness Position = 0.88044579
Iteration No: 13
```

```
c1 = 0.50000000 c2 = 0.50000000
velocity =
   0.0005
  -0.0002
   0.0056
Particle 1 :: pos(duty) = 0.88061254 fitness(Output Power) = 180.21830170
Particle 2 :: pos(duty) = 0.88062366 fitness(Output Power) = 180.21830170
Particle 3 :: pos(duty) = 0.88194542 fitness(Output Power) = 180.02125983
Updated best Fitness Position = 0.88044579
_____
Iteration No: 14
c1 = 0.50000000 c2 = 0.50000000
velocity =
   0.0001
  -0.0002
   0.0020
Particle 1 :: pos(duty) = 0.88069592 fitness(Output Power) = 180.21612797
Particle 2 :: pos(duty) = 0.88044579 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88397381 fitness(Output Power) = 179.07025989
Updated best Fitness Position = 0.88044579
_____
Iteration No: 15
c1 = 0.50000000 c2 = 0.50000000
velocity =
  -0.0002
  -0.0001
  -0.0018
Particle 1 :: pos(duty) = 0.88048748 fitness(Output Power) = 180.22036773
Particle 2 :: pos(duty) = 0.88035686
                                       fitness(Output Power) = 180.21935595
Particle 3 ::
             pos(duty) = 0.88220980
                                      fitness(Output Power) = 179.94965065
Updated best Fitness Position = 0.88044579
_____
Iteration No: 16
c1 = 0.50000000 c2 = 0.50000000
velocity =
  -0.0001
```

```
0.0000
  -0.0019
Particle 1 :: pos(duty) = 0.88034157 fitness(Output Power) = 180.21935595
Particle 2 :: pos(duty) = 0.88040133 fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88031360 fitness(Output Power) = 180.21861699
Updated best Fitness Position = 0.88044579
_____
Iteration No: 17
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-03 *
   0.0313
   0.0667
  -0.8820
Particle 1 :: pos(duty) = 0.88037284 fitness(Output Power) = 180.21935595
Particle 2 :: pos(duty) = 0.88046803 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.87943160 fitness(Output Power) = 180.12862488
Updated best Fitness Position = 0.88044579
_____
Iteration No: 18
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-03 *
   0.0886
   0.0222
   0.5071
Particle 1 :: pos(duty) = 0.88046143 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88049026 fitness(Output Power) = 180.22036773
Particle 3 ::
             pos(duty) = 0.87993870 fitness(Output Power) = 180.19741424
Updated best Fitness Position = 0.88046143
_____
Iteration No: 19
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-03 *
```

```
0.0443
   -0.0144
   0.7024
Particle 1 :: pos(duty) = 0.88050572
                                        fitness(Output Power) = 180.22036773
Particle 2 :: pos(duty) = 0.88047584
                                        fitness(Output Power) = 180.22036773
Particle 3 :: pos(duty) = 0.88064106 fitness(Output Power) = 180.21730934
Updated best Fitness Position = 0.88046143
_____
Iteration No: 20
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-04 *
  -0.2215
  -0.1833
   0.9763
Particle 1 :: pos(duty) = 0.88048357 fitness(Output Power) = 180.22036773
Particle 2 :: pos(duty) = 0.88045752 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88073870 fitness(Output Power) = 180.21320087
Updated best Fitness Position = 0.88046143
_____
Iteration No: 21
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-03 *
  -0.0332
  -0.0072
  -0.3024
Particle 1 :: pos(duty) = 0.88045035
                                        fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045031
                                       fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88043633 fitness(Output Power) = 180.22024928
Updated best Fitness Position = 0.88045035
Iteration No: 22
c1 = 0.50000000 c2 = 0.50000000
velocity =
```

Iteration No: 25

```
1.0e-03 *
  -0.0166
  -0.0036
  -0.1442
Particle 1 :: pos(duty) = 0.88043374 fitness(Output Power) = 180.22024928
Particle 2 :: pos(duty) = 0.88044673 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88029216 fitness(Output Power) = 180.21768226
Updated best Fitness Position = 0.88045035
_____
Iteration No: 23
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-04 *
   0.0830
   0.0002
   0.7910
Particle 1 :: pos(duty) = 0.88044205 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88044675
                                        fitness(Output Power) = 180.22040503
             pos(duty) = 0.88037126
Particle 3 ::
                                        fitness(Output Power) = 180.21935595
Updated best Fitness Position = 0.88044205
Iteration No: 24
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-03 *
   0.0042
  -0.0023
   0.1075
Particle 1 :: pos(duty) = 0.88044620 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88044441
                                       fitness(Output Power) = 180.22040503
Particle 3 ::
             pos(duty) = 0.88047874 fitness(Output Power) = 180.22036773
Updated best Fitness Position = 0.88044620
```

```
c1 = 0.50000000
                   c2 = 0.50000000
velocity =
   1.0e-04 *
   0.0208
  -0.0027
   0.3747
Particle 1 ::
             pos(duty)=
                          0.88044828
                                         fitness(Output Power) = 180.22040503
Particle 2 ::
             pos(duty) = 0.88044413
                                         fitness(Output Power) = 180.22040503
                                         fitness(Output Power) = 180.22013808
Particle 3 :: pos(duty) = 0.88051621
Updated best Fitness Position = 0.88044828
_____
Iteration No: 26
c1 = 0.50000000
                   c2 = 0.50000000
velocity =
  1.0e-04 *
   0.0104
   0.0193
  -0.3397
Particle 1 ::
             pos(duty)=
                           0.88044931
                                         fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88044607
                                         fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88048224 fitness(Output Power) = 180.22036773
Updated best Fitness Position = 0.88044931
Iteration No: 27
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-04 *
   0.0052
   0.0259
  -0.3345
                           0.88044983 fitness(Output Power) = 180.22040503
Particle 1 ::
             pos(duty)=
Particle 2 :: pos(duty) = 0.88044866 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88044880
                                        fitness(Output Power) = 180.22040503
```

Updated best Fitness Position = 0.88044983

```
_____
Iteration No: 28
c1 = 0.50000000
                 c2 = 0.50000000
velocity =
  1.0e-04 *
   0.0026
   0.0188
  -0.1620
Particle 1 :: pos(duty) = 0.88045009 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045054
                                        fitness(Output Power) = 180.22040503
Particle 3 ::
               pos(duty)=
                          0.88043259
                                        fitness(Output Power) = 180.22024928
Updated best Fitness Position = 0.88045009
_____
Iteration No: 29
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-05 *
   0.0130
   0.0717
   0.8751
Particle 1 :: pos(duty) = 0.88045022 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045126 fitness(Output Power) = 180.22040503
             pos(duty) = 0.88044134
Particle 3 ::
                                        fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045022
-----
Iteration No: 30
c1 = 0.50000000
                 c2 = 0.50000000
velocity =
  1.0e-05 *
   0.0065
  -0.0159
   0.8816
Particle 1 :: pos(duty)=
                           0.88045029
                                        fitness(Output Power) = 180.22040503
Particle 2 ::
                          0.88045110
                                        fitness(Output Power) = 180.22040503
              pos(duty)=
             pos(duty) = 0.88045016 fitness(Output Power) = 180.22040503
Particle 3 ::
```

Updated best Fitness Position = 0.88045029

```
_____
Iteration No: 31
c1 = 0.50000000
                   c2 = 0.50000000
velocity =
  1.0e-05 *
   0.0032
  -0.0485
   0.4473
Particle 1 ::
              pos(duty)=
                           0.88045032
                                         fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045061
                                         fitness (Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045463
                                        fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045032
Iteration No: 32
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-06 *
   0.0162
  -0.3895
   0.0811
Particle 1 ::
             pos(duty)=
                           0.88045034
                                         fitness (Output Power) = 180.22040503
                                         fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045022
Particle 3 :: pos(duty) = 0.88045471
                                         fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045034
Iteration No: 33
                   c2 = 0.50000000
c1 = 0.50000000
velocity =
  1.0e-05 *
   0.0008
  -0.0139
  -0.2147
Particle 1 ::
              pos(duty) = 0.88045034
                                         fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045009
                                         fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045256
                                         fitness(Output Power) = 180.22040503
```

```
Updated best Fitness Position = 0.88045034
_____
Iteration No: 34
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-05 *
   0.0004
   0.0060
  -0.2184
Particle 1 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045015 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045038 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
_____
Iteration No: 35
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-05 *
   0.0002
   0.0131
  -0.1108
Particle 1 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045028
                                       fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88044927 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
Iteration No: 36
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-06 *
   0.0010
   0.1025
  -0.0152
Particle 1 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045038 fitness(Output Power) = 180.22040503
```

```
Particle 3 :: pos(duty) = 0.88044926 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
_____
Iteration No: 37
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-06 *
   0.0005
   0.0372
   0.5393
Particle 1 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045042 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88044980 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
Iteration No: 38
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-06 *
   0.0003
  -0.0137
   0.5472
Particle 1 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045040 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045034 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
Iteration No: 39
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-06 *
   0.0001
  -0.0322
   0.2777
```

```
Particle 1 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045037 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045062
                                        fitness (Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
_____
Iteration No: 40
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-07 *
   0.0006
  -0.2530
   0.0412
Particle 1 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045035
                                        fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045063 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
Iteration No: 41
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-06 *
   0.0000
  -0.0091
  -0.1347
Particle 1 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045034 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045049 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
Iteration No: 42
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-06 *
   0.0000
   0.0035
```

1.0e-07 \*

```
-0.1367
Particle 1 :: pos(duty) = 0.88045035
                                        fitness (Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045034 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045035
                                       fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
Iteration No: 43
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-07 *
   0.0001
   0.0810
  -0.6937
Particle 1 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045029 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
Iteration No: 44
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-08 *
   0.0004
   0.6344
  -0.1010
Particle 1 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045028 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
_____
Iteration No: 45
c1 = 0.50000000 c2 = 0.50000000
velocity =
```

```
0.0000
   0.0230
   0.3368
Particle 1 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045036
                                        fitness(Output Power) = 180.22040503
Particle 3 ::
             pos(duty) = 0.88045032
                                      fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
_____
Iteration No: 46
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-07 *
   0.0000
  -0.0087
   0.3419
Particle 1 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045036 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
_____
Iteration No: 47
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-07 *
   0.0000
  -0.0202
   0.1735
Particle 1 :: pos(duty) = 0.88045035
                                       fitness(Output Power) = 180.22040503
             pos(duty) = 0.88045035
Particle 2 ::
                                        fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045037 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
_____
Iteration No: 48
c1 = 0.50000000 c2 = 0.50000000
velocity =
```

```
1.0e-08 *
   0.0000
  -0.1585
   0.0254
Particle 1 ::
             pos(duty) = 0.88045035
                                        fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045037 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
Iteration No: 49
c1 = 0.50000000 c2 = 0.50000000
velocity =
  1.0e-08 *
   0.0000
  -0.0574
  -0.8419
Particle 1 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045036
                                        fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
Iteration No: 50
c1 = 0.50000000
                   c2 = 0.50000000
velocity =
  1.0e-08 *
   0.0000
   0.0219
  -0.8546
Particle 1 :: pos(duty) = 0.88045035 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045035
                                        fitness (Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045035
                                        fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045035
_____
>>
```