

2

FID

| | | | | | | | |
|----|---|------|------|-------|------|---|---|
| 24 | — | 0.61 | 1.69 | 0.31 | 0.75 | 1 | — |
| 23 | — | 0.81 | 1.13 | 0.31 | 0.94 | 1 | — |
| 22 | — | 4.86 | 0.69 | 48.62 | 1 | 1 | — |
| 21 | — | 3.55 | 3.35 | 0.45 | 0.91 | 1 | — |
| 20 | — | 0.46 | 0.6 | 0.19 | 0.2 | 1 | — |
| 19 | — | 0.65 | 1.67 | 16.71 | 0.37 | 1 | — |
| 18 | — | 0.29 | 1.05 | 10.46 | 0.19 | 1 | — |
| 17 | — | 0.48 | 1.22 | 12.2 | 0.31 | 1 | — |
| 16 | — | 0.52 | 6.74 | 0.36 | 0.27 | 1 | — |
| 15 | — | 0.37 | 1.49 | 14.9 | 0.27 | 1 | — |
| 14 | — | 0.39 | 0.23 | 10 | 0.18 | 1 | — |
| 13 | — | 0.46 | 2.1 | 21.04 | 0.14 | 1 | — |
| 12 | — | 0.31 | 0.13 | 10 | 0.36 | 1 | — |
| 11 | — | 0.45 | 0.17 | 0.19 | 0.15 | 1 | — |
| 10 | — | 0.29 | 0.18 | 10 | 0.14 | 1 | — |
| 9 | — | 0.27 | 0.38 | 10 | 0.17 | 1 | — |
| 8 | — | 0.5 | 0.18 | 0.41 | 0.24 | 1 | — |
| 7 | — | 0.91 | 0.35 | 0.4 | 0.15 | 1 | — |
| 6 | — | 0.73 | 3.12 | 31.17 | 1.27 | 1 | — |
| 5 | — | 0.07 | 0.13 | 0.17 | 0.07 | 1 | — |
| 4 | — | 0.7 | 0.69 | 10 | 0.17 | 1 | — |
| 3 | — | 0.47 | 1.23 | 12.34 | 0.16 | 1 | — |
| 2 | — | 0.45 | 0.27 | 10 | 0.15 | 1 | — |
| 1 | — | 0.35 | 0.14 | 0.52 | 0.08 | 1 | — |

CMAES

GENSA

Grid

MBO

Random

Optimizer

ERT Ratio

40
30
20
10

3

FID

| | | | | | | | |
|----|---|------|------|-------|------|---|---|
| 24 | — | 0.58 | 1.02 | 10.15 | 0.22 | 1 | — |
| 23 | — | 1.89 | 2.03 | 0.25 | 0.65 | 1 | — |
| 22 | — | 1.28 | 0.76 | 0.43 | 0.36 | 1 | — |
| 21 | — | 0.73 | 0.5 | 0.67 | 0.16 | 1 | — |
| 20 | — | 0.45 | 0.28 | 10 | 0.15 | 1 | — |
| 19 | — | 0.34 | 1.73 | 0.69 | 0.21 | 1 | — |
| 18 | — | 0.21 | 1.24 | 0.49 | 0.13 | 1 | — |
| 17 | — | 0.27 | 0.71 | 0.48 | 0.11 | 1 | — |
| 16 | — | 0.33 | 10 | 0.24 | 0.13 | 1 | — |
| 15 | — | 0.31 | 1.55 | 0.34 | 0.31 | 1 | — |
| 14 | — | 0.33 | 0.18 | 0.82 | 0.14 | 1 | — |
| 13 | — | 0.19 | 0.15 | 0.79 | 0.09 | 1 | — |
| 12 | — | 0.27 | 0.15 | 10 | 0.79 | 1 | — |
| 11 | — | 0.33 | 0.16 | 0.2 | 0.15 | 1 | — |
| 10 | — | 0.6 | 0.19 | 0.44 | 0.14 | 1 | — |
| 9 | — | 0.37 | 0.25 | 1.03 | 0.15 | 1 | — |
| 8 | — | 0.22 | 0.17 | 0.36 | 0.13 | 1 | — |
| 7 | — | 0.27 | 0.36 | 10 | 0.09 | 1 | — |
| 6 | — | 0.17 | 0.55 | 1.05 | 0.1 | 1 | — |
| 5 | — | 0.06 | 0.1 | 0.09 | 0.08 | 1 | — |
| 4 | — | 0.37 | 2.09 | 20.88 | 0.45 | 1 | — |
| 3 | — | 0.32 | 0.88 | 0.43 | 0.18 | 1 | — |
| 2 | — | 0.94 | 0.38 | 10 | 0.18 | 1 | — |
| 1 | — | 0.15 | 0.06 | 10 | 0.04 | 1 | — |

CMAES

GENSA

Grid

MBO

Random

Optimizer

ERT Ratio

20
15
10
5

5

FID

| | | | | | | | |
|----|---|------|------|-------|------|---|---|
| 24 | — | 0.17 | 0.79 | 2.16 | 0.07 | 1 | — |
| 23 | — | 2.55 | 1.16 | 0.68 | 0.52 | 1 | — |
| 22 | — | 0.23 | 0.34 | 2.06 | 0.09 | 1 | — |
| 21 | — | 0.54 | 0.35 | 6.27 | 0.08 | 1 | — |
| 20 | — | 0.24 | 0.14 | 1.04 | 0.07 | 1 | — |
| 19 | — | 0.22 | 0.63 | 0.88 | 0.14 | 1 | — |
| 18 | — | 0.16 | 1.84 | 18.41 | 0.13 | 1 | — |
| 17 | — | 0.3 | 2.34 | 4.27 | 0.15 | 1 | — |
| 16 | — | 1.15 | 3.07 | 0.95 | 0.17 | 1 | — |
| 15 | — | 0.21 | 1.86 | 18.61 | 0.07 | 1 | — |
| 14 | — | 0.25 | 0.11 | 2.77 | 0.05 | 1 | — |
| 13 | — | 0.2 | 0.17 | 1.95 | 0.09 | 1 | — |
| 12 | — | 0.1 | 0.08 | 10 | 0.2 | 1 | — |
| 11 | — | 0.28 | 0.16 | 10 | 0.24 | 1 | — |
| 10 | — | 0.35 | 0.23 | 10 | 0.1 | 1 | — |
| 9 | — | 0.25 | 0.14 | 10 | 0.07 | 1 | — |
| 8 | — | 0.24 | 0.13 | 2.03 | 0.14 | 1 | — |
| 7 | — | 0.36 | 0.43 | 10 | 0.12 | 1 | — |
| 6 | — | 0.18 | 0.26 | 1.3 | 0.08 | 1 | — |
| 5 | — | 0.06 | 0.08 | 0.06 | 0.07 | 1 | — |
| 4 | — | 0.18 | 0.74 | 10 | 0.19 | 1 | — |
| 3 | — | 0.21 | 0.95 | 10 | 0.14 | 1 | — |
| 2 | — | 0.25 | 0.16 | 10 | 0.1 | 1 | — |
| 1 | — | 0.15 | 0.06 | 10 | 0.05 | 1 | — |

CMAES

GENSA

Grid

MBO

Random

Optimizer

ERT Ratio

15
10
5