

## Lichttechnischer Prüfbefund

**Familie**  
**Silica® 21 round L**

**Bestell-Nr.: 51MF33DC3MBA**  
**EAN: 4069025808387**

**LP-Nummer**  
**60081\_10**

**Seriendokumentation**  
**20.05.2026**

**siteco**



**Ausführung** Pendelleuchte, Gehäuse, schwarz,  
Mikroprismenoptik, direkt-/ indirekt strahlend,  
breit strahlend, UGR≤19

**Bestückung** LED 3000 K | CRI ≥ 80

**Betriebsgerät** EVG-DALI

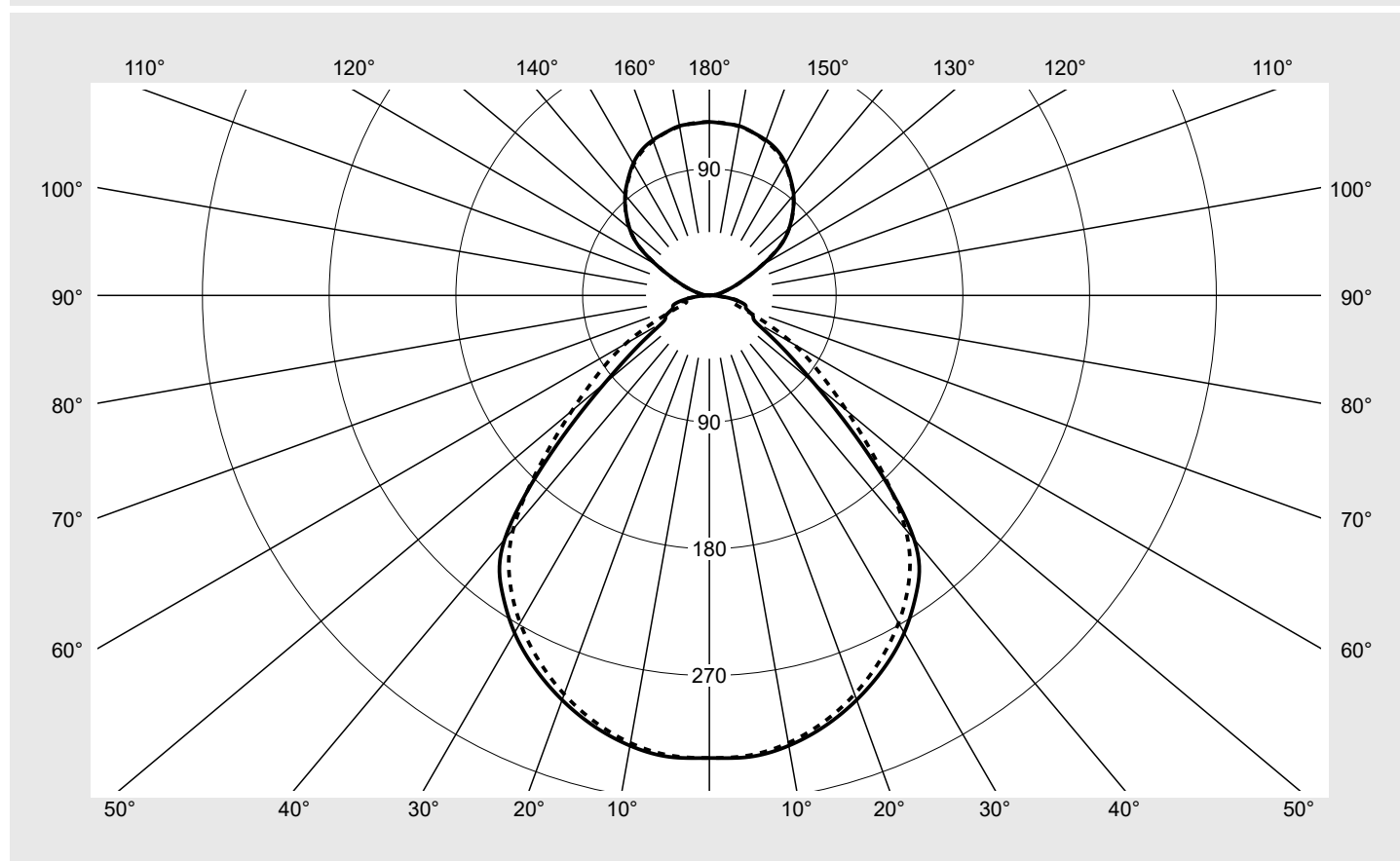
**Bemessungswerte** Nettolichtstrom = 14840 lm  
Systemleistung = 88.9 W  
Lichtausbeute = 166.9 lm/W

**Lichtstärke in cd/klm**

**C180-0**

**C270-90**

**Imax: 329 cd/klm**



### Klassifizierungen

DIN 5040 B 5 3  
CIE N1=64 N2=89 N3=97  
N4=68 N5=100

### Leuchtenbetriebswirkungsgrade

$\eta_{LB}$  100,0%  
 $\phi_u$  67,6%  
 $\phi_o$  32,4%

### Messbedingungen

DIN EN 13032 und DIN 5032

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|                                 |                                                 |                       |
|---------------------------------|-------------------------------------------------|-----------------------|
| Familie<br>Silica® 21 round L   | Bestell-Nr.: 51MF33DC3MBA<br>EAN: 4069025808387 | LP-Nummer<br>60081_10 |
| Wertetabelle Lichtstärkemessung |                                                 | Maximale Lichtstärke  |



| C-<br>Ebenen | 0°<br>180°            | 15°<br>165°<br>195°<br>345° | 30°<br>150°<br>210°<br>330° | 45°<br>135°<br>225°<br>315° | 60°<br>120°<br>240°<br>300° | 75°<br>105°<br>255°<br>285° | 90°<br>270° | Phi-Zone             | Summe<br>Phi-Zone |
|--------------|-----------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|----------------------|-------------------|
| γ            | Lichtstärke in cd/klm |                             |                             |                             |                             |                             |             | Lichtstrom in lm/klm |                   |
| 0°           | 328.6                 | 328.6                       | 328.6                       | 328.6                       | 328.6                       | 328.6                       | 328.6       | 2.0                  | 2.0               |
| 5°           | 329.0                 | 327.3                       | 325.4                       | 326.6                       | 328.1                       | 327.9                       | 327.9       | 15.6                 | 17.6              |
| 10°          | 324.8                 | 323.0                       | 320.8                       | 321.7                       | 323.1                       | 322.8                       | 322.8       | 30.7                 | 48.3              |
| 15°          | 316.7                 | 315.0                       | 312.7                       | 313.2                       | 314.2                       | 313.8                       | 313.7       | 44.5                 | 92.8              |
| 20°          | 305.8                 | 304.0                       | 301.4                       | 301.5                       | 302.1                       | 301.6                       | 301.5       | 56.7                 | 149.5             |
| 25°          | 292.6                 | 290.5                       | 287.3                       | 287.1                       | 287.8                       | 286.9                       | 286.3       | 66.8                 | 216.3             |
| 30°          | 276.7                 | 274.3                       | 270.5                       | 270.3                       | 271.2                       | 269.8                       | 268.7       | 74.4                 | 290.7             |
| 35°          | 256.7                 | 254.3                       | 249.7                       | 250.0                       | 250.6                       | 249.2                       | 247.1       | 78.9                 | 369.6             |
| 40°          | 226.1                 | 226.2                       | 222.1                       | 221.8                       | 218.1                       | 219.2                       | 216.6       | 78.0                 | 447.6             |
| 45°          | 159.9                 | 170.2                       | 172.6                       | 169.3                       | 154.5                       | 169.0                       | 169.8       | 64.6                 | 512.2             |
| 50°          | 97.2                  | 111.5                       | 130.1                       | 111.4                       | 96.5                        | 109.7                       | 127.3       | 47.0                 | 559.2             |
| 55°          | 59.9                  | 68.4                        | 96.9                        | 68.1                        | 59.3                        | 66.6                        | 95.3        | 32.7                 | 591.9             |
| 60°          | 38.2                  | 46.2                        | 68.1                        | 46.7                        | 38.0                        | 45.6                        | 68.9        | 23.6                 | 615.5             |
| 65°          | 34.0                  | 39.5                        | 42.1                        | 40.5                        | 34.9                        | 40.5                        | 39.8        | 19.4                 | 634.9             |
| 70°          | 28.0                  | 34.1                        | 21.6                        | 34.7                        | 28.1                        | 34.8                        | 21.3        | 15.3                 | 650.2             |
| 75°          | 26.4                  | 23.8                        | 18.9                        | 24.3                        | 26.8                        | 24.1                        | 17.3        | 12.3                 | 662.5             |
| 80°          | 19.0                  | 14.4                        | 18.7                        | 13.9                        | 19.2                        | 14.6                        | 20.0        | 9.0                  | 671.6             |
| 85°          | 8.9                   | 8.3                         | 7.0                         | 8.3                         | 8.8                         | 8.5                         | 7.0         | 4.4                  | 676.0             |
| 90°          | 0.7                   | 0.9                         | 0.5                         | 0.8                         | 0.6                         | 0.6                         | 0.4         | 0.3                  | 676.4             |
| 95°          | 2.8                   | 2.7                         | 2.7                         | 2.7                         | 2.7                         | 2.7                         | 2.7         | 1.5                  | 677.8             |
| 100°         | 6.3                   | 6.2                         | 6.2                         | 6.3                         | 6.3                         | 6.3                         | 6.3         | 3.4                  | 681.2             |
| 105°         | 11.1                  | 11.0                        | 11.2                        | 11.3                        | 11.4                        | 11.3                        | 11.4        | 5.9                  | 687.2             |
| 110°         | 18.3                  | 18.1                        | 18.4                        | 18.6                        | 18.6                        | 18.6                        | 18.6        | 9.5                  | 696.7             |
| 115°         | 28.2                  | 28.2                        | 28.4                        | 28.5                        | 28.7                        | 28.8                        | 28.7        | 14.2                 | 710.8             |
| 120°         | 43.5                  | 43.3                        | 43.2                        | 43.2                        | 43.1                        | 43.1                        | 43.0        | 20.5                 | 731.3             |
| 125°         | 61.5                  | 61.3                        | 61.3                        | 61.2                        | 61.6                        | 61.6                        | 61.2        | 27.6                 | 758.9             |
| 130°         | 73.9                  | 73.8                        | 73.9                        | 74.2                        | 74.6                        | 74.3                        | 74.0        | 31.1                 | 790.0             |
| 135°         | 83.8                  | 83.8                        | 84.1                        | 84.6                        | 84.6                        | 84.2                        | 84.0        | 32.6                 | 822.7             |
| 140°         | 93.1                  | 92.9                        | 93.0                        | 93.3                        | 93.2                        | 92.9                        | 92.8        | 32.8                 | 855.5             |
| 145°         | 100.7                 | 100.8                       | 101.0                       | 100.9                       | 100.6                       | 100.5                       | 100.2       | 31.7                 | 887.1             |
| 150°         | 108.2                 | 108.2                       | 108.2                       | 108.0                       | 107.7                       | 107.6                       | 107.4       | 29.6                 | 916.7             |
| 155°         | 113.8                 | 113.5                       | 113.3                       | 113.0                       | 112.9                       | 112.9                       | 112.9       | 26.2                 | 942.9             |
| 160°         | 117.4                 | 117.1                       | 116.9                       | 116.6                       | 116.9                       | 116.5                       | 116.7       | 21.9                 | 964.8             |
| 165°         | 119.8                 | 119.8                       | 119.8                       | 119.9                       | 119.8                       | 119.5                       | 119.8       | 17.0                 | 981.8             |
| 170°         | 122.2                 | 122.2                       | 122.2                       | 121.9                       | 121.5                       | 121.7                       | 121.8       | 11.6                 | 993.4             |
| 175°         | 122.5                 | 122.5                       | 122.6                       | 122.7                       | 122.8                       | 122.9                       | 122.9       | 5.9                  | 999.3             |
| 180°         | 123.2                 | 123.2                       | 123.2                       | 123.2                       | 123.2                       | 123.2                       | 123.2       | 0.7                  | 1000.0            |

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|                               |     |                                     |                                                 |      |      |      |                                       |      |                       |      |      |
|-------------------------------|-----|-------------------------------------|-------------------------------------------------|------|------|------|---------------------------------------|------|-----------------------|------|------|
| Familie<br>Silica® 21 round L |     |                                     | Bestell-Nr.: 51MF33DC3MBA<br>EAN: 4069025808387 |      |      |      |                                       |      | LP-Nummer<br>60081_10 |      |      |
| UGR-Tabelle                   |     |                                     | Standardraum                                    |      |      |      |                                       |      | siteco                |      |      |
| Reflexionsgrad Decke          |     | 0,7                                 | 0,7                                             | 0,5  | 0,5  | 0,3  | 0,7                                   | 0,7  | 0,5                   | 0,5  | 0,3  |
| Reflexionsgrad Wände          |     | 0,5                                 | 0,3                                             | 0,5  | 0,3  | 0,3  | 0,5                                   | 0,3  | 0,5                   | 0,3  | 0,3  |
| Reflexionsgrad Boden          |     | 0,2                                 | 0,2                                             | 0,2  | 0,2  | 0,2  | 0,2                                   | 0,2  | 0,2                   | 0,2  | 0,2  |
| Raumabmessungen               |     | Blickrichtung quer zur Leuchte (C0) |                                                 |      |      |      | Blickrichtung längs zur Leuchte (C90) |      |                       |      |      |
| x                             | y   |                                     |                                                 |      |      |      |                                       |      |                       |      |      |
| 2H                            | 2H  | 13,9                                | 15,0                                            | 14,7 | 15,8 | 16,7 | 13,7                                  | 14,8 | 14,5                  | 15,6 | 16,5 |
|                               | 3H  | 14,5                                | 15,4                                            | 15,3 | 16,2 | 17,2 | 14,4                                  | 15,3 | 15,2                  | 16,1 | 17,1 |
|                               | 4H  | 15,0                                | 15,8                                            | 15,8 | 16,6 | 17,6 | 14,7                                  | 15,5 | 15,5                  | 16,3 | 17,3 |
|                               | 6H  | 15,4                                | 16,2                                            | 16,2 | 17,0 | 18,0 | 15,1                                  | 15,9 | 15,9                  | 16,7 | 17,7 |
|                               | 8H  | 15,5                                | 16,3                                            | 16,4 | 17,1 | 18,1 | 15,3                                  | 16,0 | 16,1                  | 16,8 | 17,9 |
|                               | 12H | 15,7                                | 16,4                                            | 16,5 | 17,2 | 18,3 | 15,4                                  | 16,1 | 16,2                  | 16,9 | 18,0 |
| 4H                            | 2H  | 14,1                                | 14,9                                            | 14,9 | 15,7 | 16,7 | 13,9                                  | 14,8 | 14,7                  | 15,6 | 16,6 |
|                               | 3H  | 14,8                                | 15,5                                            | 15,7 | 16,4 | 17,4 | 14,8                                  | 15,5 | 15,6                  | 16,4 | 17,4 |
|                               | 4H  | 15,4                                | 16,0                                            | 16,2 | 16,8 | 17,9 | 15,3                                  | 16,0 | 16,2                  | 16,8 | 17,9 |
|                               | 6H  | 15,9                                | 16,5                                            | 16,8 | 17,4 | 18,4 | 15,9                                  | 16,4 | 16,7                  | 17,3 | 18,4 |
|                               | 8H  | 16,1                                | 16,6                                            | 17,0 | 17,5 | 18,6 | 16,1                                  | 16,6 | 17,0                  | 17,5 | 18,6 |
|                               | 12H | 16,3                                | 16,8                                            | 17,2 | 17,7 | 18,8 | 16,3                                  | 16,7 | 17,2                  | 17,6 | 18,7 |
| 8H                            | 4H  | 15,5                                | 16,0                                            | 16,4 | 16,9 | 18,0 | 15,5                                  | 16,0 | 16,4                  | 16,9 | 17,9 |
|                               | 6H  | 16,2                                | 16,6                                            | 17,1 | 17,5 | 18,6 | 16,2                                  | 16,6 | 17,1                  | 17,5 | 18,6 |
|                               | 8H  | 16,6                                | 16,9                                            | 17,5 | 17,8 | 19,0 | 16,6                                  | 17,0 | 17,5                  | 17,9 | 19,0 |
|                               | 12H | 16,9                                | 17,2                                            | 17,8 | 18,1 | 19,2 | 16,9                                  | 17,2 | 17,8                  | 18,1 | 19,2 |
| 12H                           | 4H  | 15,5                                | 16,0                                            | 16,4 | 16,9 | 18,0 | 15,5                                  | 16,0 | 16,4                  | 16,9 | 18,0 |
|                               | 6H  | 16,3                                | 16,7                                            | 17,2 | 17,6 | 18,7 | 16,3                                  | 16,7 | 17,2                  | 17,6 | 18,7 |
|                               | 8H  | 16,7                                | 17,0                                            | 17,6 | 17,9 | 19,1 | 16,7                                  | 17,0 | 17,6                  | 18,0 | 19,1 |

| Leuchtdichten-Tabelle |                       | Max. für $\gamma \geq 65^\circ$ |                             | Lichttechnische<br>Abmessungen in mm: D = 886 |                             |                             |             |
|-----------------------|-----------------------|---------------------------------|-----------------------------|-----------------------------------------------|-----------------------------|-----------------------------|-------------|
| C-<br>Ebenen          | 0°<br>180°            | 15°<br>165°<br>195°<br>345°     | 30°<br>150°<br>210°<br>330° | 45°<br>135°<br>225°<br>315°                   | 60°<br>120°<br>240°<br>300° | 75°<br>105°<br>255°<br>285° | 90°<br>270° |
| $\gamma$              | Leuchtdichte in cd/m² |                                 |                             |                                               |                             |                             |             |
| 45°                   | 5442.8                | 5792.9                          | 5876.4                      | 5763.5                                        | 5259.9                      | 5752.2                      | 5779.3      |
| 50°                   | 3638.1                | 4173.8                          | 4873.2                      | 4171.3                                        | 3614.0                      | 4107.6                      | 4767.6      |
| 55°                   | 2513.0                | 2870.9                          | 4068.4                      | 2858.4                                        | 2489.9                      | 2796.3                      | 4000.9      |
| 60°                   | 1836.5                | 2225.0                          | 3276.0                      | 2249.5                                        | 1830.9                      | 2195.9                      | 3314.6      |
| 65°                   | 1939.2                | 2251.2                          | 2398.6                      | 2306.5                                        | 1987.6                      | 2307.5                      | 2269.1      |
| 70°                   | 1967.1                | 2398.1                          | 1519.1                      | 2442.9                                        | 1978.1                      | 2447.5                      | 1500.6      |
| 75°                   | 2457.0                | 2210.4                          | 1754.4                      | 2258.6                                        | 2492.4                      | 2241.7                      | 1608.5      |
| 80°                   | 2628.3                | 1990.1                          | 2597.1                      | 1932.7                                        | 2658.6                      | 2028.3                      | 2770.8      |
| 85°                   | 2444.4                | 2285.6                          | 1929.6                      | 2293.3                                        | 2430.9                      | 2341.7                      | 1940.1      |

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|                                             |                                                               |                                     |
|---------------------------------------------|---------------------------------------------------------------|-------------------------------------|
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|---------------------------------------------|---------------------------------------------------------------|-------------------------------------|

**Leuchtdichten in cd/m²**

γ 65°

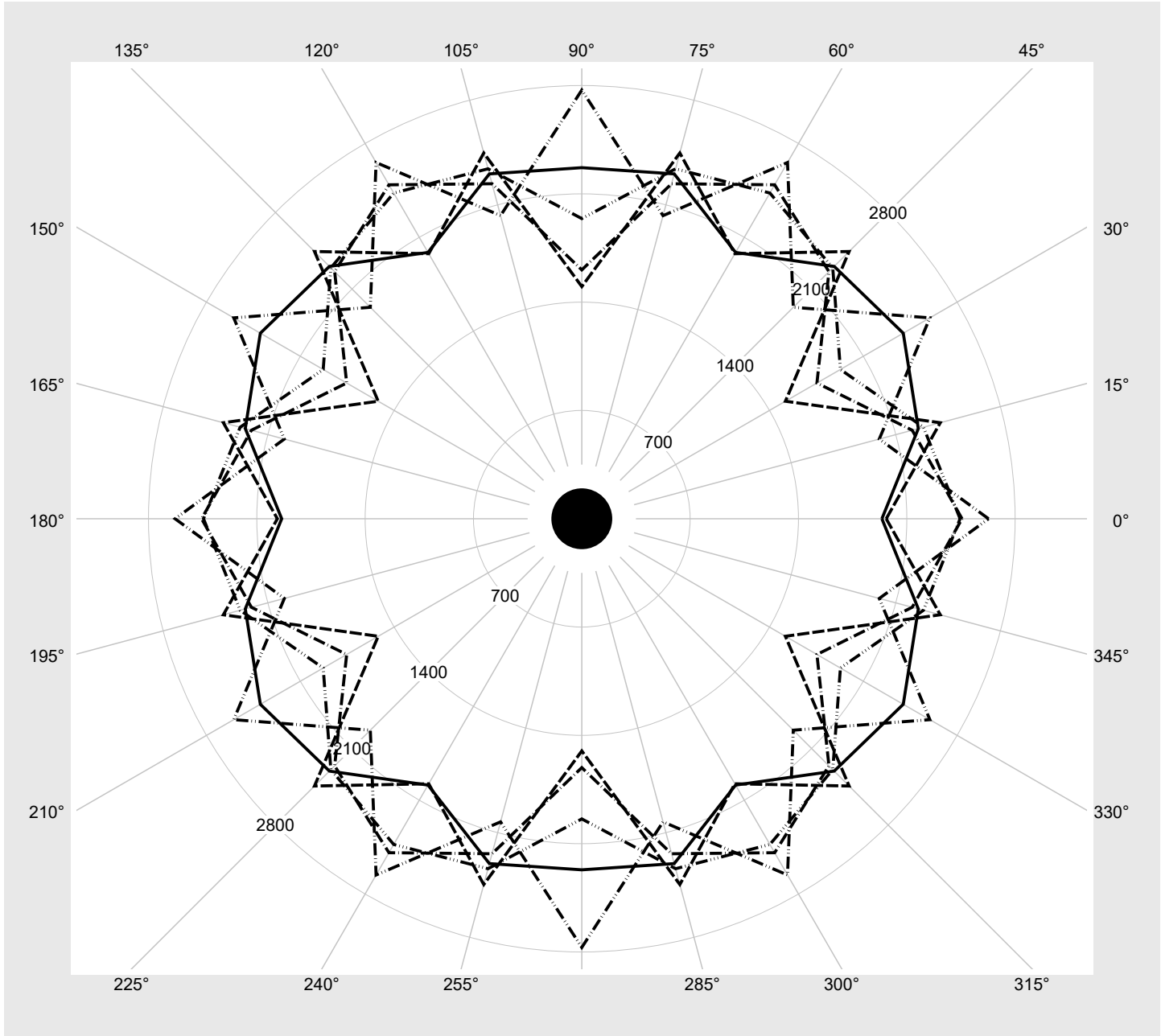
γ 70°

γ 75°

γ 80°

γ 85°

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|                                                        |                                                               |                                     |
|--------------------------------------------------------|---------------------------------------------------------------|-------------------------------------|
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| <b>Dimmstufen-Tabelle</b><br>Umgebungstemperatur: 25°C |                                                               | <b>sit</b> eco                      |

| Lichtstrom [%] | Dimmstufe linear | Dimmstufe logarithmisch | Lichtstrom [lm] | Systemleistung [W] |
|----------------|------------------|-------------------------|-----------------|--------------------|
| 100            | 254              | 254                     | 14840           | 88.9               |
| 95             | 241              | 252                     | 14093           | 84.4               |
| 90             | 228              | 250                     | 13345           | 79.9               |
| 85             | 215              | 248                     | 12594           | 75.3               |
| 80             | 203              | 246                     | 11901           | 71.2               |
| 75             | 190              | 243                     | 11144           | 66.6               |
| 70             | 177              | 241                     | 10387           | 62.1               |
| 65             | 164              | 238                     | 9626            | 57.7               |
| 60             | 152              | 235                     | 8921            | 53.6               |
| 55             | 139              | 232                     | 8157            | 49.1               |
| 50             | 126              | 228                     | 7391            | 44.8               |
| 45             | 114              | 225                     | 6679            | 40.7               |
| 40             | 101              | 220                     | 5908            | 36.3               |
| 35             | 89               | 216                     | 5194            | 32.3               |
| 30             | 77               | 210                     | 4479            | 28.5               |
| 25             | 64               | 204                     | 3700            | 24.3               |
| 20             | 52               | 196                     | 2980            | 20.1               |
| 15             | 39               | 185                     | 2198            | 15.5               |
| 10             | 27               | 172                     | 1474            | 11.2               |
| 5              | 15               | 150                     | 749             | 6.8                |
| 2              | 8                | 127                     | 324             | 4.3                |