

Lichttechnischer Prüfbefund

Familie  
Modario® 31



Bestell-Nr.: 53BM812DV4A5C23S  
EAN: 4069025254894

Ausführung

Bestückung

Betriebsgerät

Einstellung

Bemessungswerte

Diffusoroptik, satiniert, breit strahlend

LED 4000 K | CRI ≥ 80

EVG-DALI

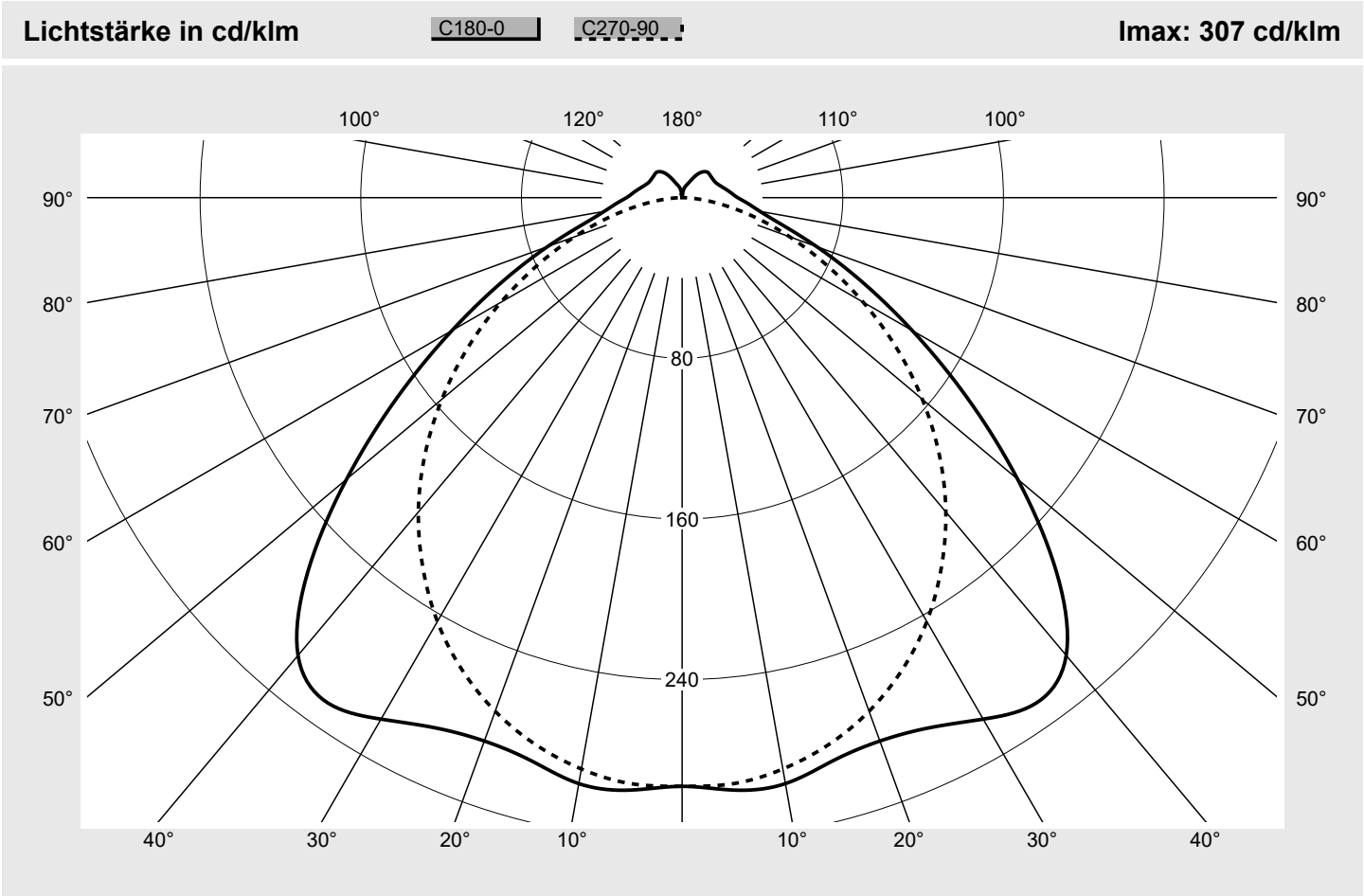
AC-Betrieb

Nettolichtstrom = 10860 lm  
Systemleistung = 65.2 W  
Lichtausbeute = 166.6 lm/W

LP-Nummer  
59594\_21

Seriendokumentation  
02.05.2024

siteco



| Klassifizierungen |                   | Leuchtenbetriebswirkungsgrade |        |
|-------------------|-------------------|-------------------------------|--------|
| DIN 5040          | A 4 1             | $\eta_{LB}$                   | 100,0% |
| CIE               | N1=47 N2=80 N3=95 | $\phi_u$                      | 92,6%  |
|                   | N4=93 N5=100      | $\phi_o$                      | 7,4%   |

| Messbedingungen           |
|---------------------------|
| DIN EN 13032 und DIN 5032 |

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|                                 |                                                     |                       |
|---------------------------------|-----------------------------------------------------|-----------------------|
| Familie<br>Modario® 31          | Bestell-Nr.: 53BM812DV4A5C23S<br>EAN: 4069025254894 | LP-Nummer<br>59594_21 |
| Wertetabelle Lichtstärkemessung |                                                     | Maximale Lichtstärke  |
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| 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°           | 293.1                 | 293.1                       | 293.1                       | 293.1                       | 293.1                       | 293.1                       | 293.1       | 1.8                  | 1.8               |
| 5°           | 296.1                 | 295.6                       | 293.1                       | 293.6                       | 293.8                       | 293.0                       | 292.9       | 14.0                 | 15.8              |
| 10°          | 296.3                 | 296.3                       | 293.6                       | 293.6                       | 292.6                       | 289.9                       | 288.9       | 27.9                 | 43.7              |
| 15°          | 290.3                 | 290.9                       | 288.4                       | 289.1                       | 288.3                       | 284.2                       | 281.9       | 40.8                 | 84.5              |
| 20°          | 287.9                 | 288.2                       | 282.8                       | 281.1                       | 280.6                       | 275.9                       | 272.2       | 52.8                 | 137.3             |
| 25°          | 291.3                 | 290.8                       | 281.6                       | 274.0                       | 270.0                       | 264.7                       | 259.4       | 64.0                 | 201.2             |
| 30°          | 299.8                 | 298.4                       | 283.7                       | 269.7                       | 258.3                       | 250.5                       | 243.7       | 74.6                 | 275.8             |
| 35°          | 307.3                 | 306.0                       | 288.6                       | 266.7                       | 246.6                       | 233.7                       | 225.0       | 84.2                 | 360.1             |
| 40°          | 297.5                 | 299.0                       | 287.4                       | 263.1                       | 235.0                       | 215.2                       | 204.3       | 91.1                 | 451.1             |
| 45°          | 263.6                 | 268.2                       | 268.7                       | 253.4                       | 221.8                       | 194.2                       | 181.1       | 92.3                 | 543.4             |
| 50°          | 218.1                 | 223.5                       | 232.0                       | 231.1                       | 204.9                       | 171.7                       | 156.1       | 87.5                 | 630.9             |
| 55°          | 172.9                 | 177.3                       | 186.9                       | 195.4                       | 181.1                       | 147.5                       | 130.2       | 77.8                 | 708.7             |
| 60°          | 132.3                 | 135.3                       | 142.3                       | 152.9                       | 149.4                       | 121.4                       | 104.1       | 64.8                 | 773.5             |
| 65°          | 98.5                  | 100.2                       | 104.0                       | 112.2                       | 114.5                       | 94.5                        | 79.4        | 50.9                 | 824.4             |
| 70°          | 71.4                  | 72.6                        | 74.4                        | 79.3                        | 82.2                        | 69.0                        | 57.1        | 37.9                 | 862.3             |
| 75°          | 51.0                  | 51.6                        | 52.9                        | 55.5                        | 55.9                        | 46.4                        | 37.5        | 27.0                 | 889.4             |
| 80°          | 39.4                  | 39.1                        | 38.7                        | 38.1                        | 35.5                        | 27.5                        | 20.9        | 18.8                 | 908.2             |
| 85°          | 32.8                  | 32.1                        | 30.1                        | 26.5                        | 21.0                        | 13.7                        | 8.3         | 13.1                 | 921.3             |
| 90°          | 27.7                  | 27.1                        | 24.5                        | 19.3                        | 12.6                        | 5.6                         | 0.8         | 9.4                  | 930.7             |
| 95°          | 24.8                  | 24.4                        | 22.4                        | 17.8                        | 11.6                        | 5.3                         | 0.8         | 8.6                  | 939.3             |
| 100°         | 22.5                  | 22.2                        | 20.5                        | 16.7                        | 11.5                        | 5.5                         | 0.8         | 7.9                  | 947.2             |
| 105°         | 20.6                  | 20.3                        | 18.7                        | 16.0                        | 11.5                        | 5.9                         | 0.8         | 7.3                  | 954.6             |
| 110°         | 19.2                  | 18.7                        | 17.6                        | 15.5                        | 11.7                        | 6.3                         | 0.7         | 6.8                  | 961.4             |
| 115°         | 18.2                  | 17.8                        | 17.0                        | 15.3                        | 12.2                        | 5.8                         | 0.8         | 6.4                  | 967.8             |
| 120°         | 17.9                  | 17.4                        | 16.9                        | 15.5                        | 12.3                        | 5.3                         | 0.8         | 6.1                  | 973.9             |
| 125°         | 17.8                  | 17.4                        | 16.9                        | 15.5                        | 11.8                        | 5.2                         | 0.8         | 5.7                  | 979.6             |
| 130°         | 17.9                  | 17.4                        | 16.8                        | 15.0                        | 10.1                        | 5.0                         | 0.9         | 5.2                  | 984.7             |
| 135°         | 17.9                  | 17.3                        | 16.2                        | 13.6                        | 8.1                         | 4.3                         | 1.0         | 4.5                  | 989.2             |
| 140°         | 16.9                  | 16.0                        | 14.5                        | 11.2                        | 6.7                         | 3.5                         | 1.1         | 3.6                  | 992.8             |
| 145°         | 14.9                  | 14.0                        | 12.0                        | 8.5                         | 5.5                         | 2.8                         | 1.2         | 2.7                  | 995.4             |
| 150°         | 11.8                  | 10.8                        | 9.0                         | 6.5                         | 4.7                         | 2.2                         | 1.4         | 1.8                  | 997.3             |
| 155°         | 8.6                   | 8.1                         | 7.0                         | 5.2                         | 4.0                         | 1.7                         | 1.5         | 1.2                  | 998.5             |
| 160°         | 6.8                   | 6.5                         | 5.3                         | 4.3                         | 3.2                         | 1.5                         | 1.5         | 0.8                  | 999.2             |
| 165°         | 5.5                   | 5.3                         | 3.9                         | 3.4                         | 2.1                         | 1.6                         | 1.6         | 0.5                  | 999.7             |
| 170°         | 3.8                   | 3.1                         | 2.5                         | 2.0                         | 1.6                         | 1.6                         | 1.6         | 0.2                  | 999.9             |
| 175°         | 1.6                   | 1.6                         | 1.6                         | 1.6                         | 1.6                         | 1.6                         | 1.6         | 0.1                  | 1000.0            |
| 180°         | 1.6                   | 1.6                         | 1.6                         | 1.6                         | 1.6                         | 1.6                         | 1.6         | 0.0                  | 1000.0            |

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|                        |     |                                     |                                                     |      |      |      |                                       |      |                       |      |      |
|------------------------|-----|-------------------------------------|-----------------------------------------------------|------|------|------|---------------------------------------|------|-----------------------|------|------|
| Familie<br>Modario® 31 |     |                                     | Bestell-Nr.: 53BM812DV4A5C23S<br>EAN: 4069025254894 |      |      |      |                                       |      | LP-Nummer<br>59594_21 |      |      |
| 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  | 23,2                                | 24,9                                                | 23,5 | 25,2 | 25,5 | 23,0                                  | 24,7 | 23,3                  | 25,0 | 25,3 |
|                        | 3H  | 24,0                                | 25,6                                                | 24,4 | 25,9 | 26,2 | 24,1                                  | 25,6 | 24,5                  | 26,0 | 26,3 |
|                        | 4H  | 24,4                                | 25,8                                                | 24,7 | 26,1 | 26,5 | 24,5                                  | 25,9 | 24,9                  | 26,3 | 26,6 |
|                        | 6H  | 24,6                                | 26,0                                                | 25,1 | 26,3 | 26,7 | 24,7                                  | 26,1 | 25,1                  | 26,4 | 26,8 |
|                        | 8H  | 24,8                                | 26,1                                                | 25,2 | 26,4 | 26,8 | 24,8                                  | 26,1 | 25,3                  | 26,5 | 26,9 |
|                        | 12H | 25,0                                | 26,1                                                | 25,4 | 26,5 | 26,9 | 24,9                                  | 26,1 | 25,3                  | 26,5 | 26,9 |
| 4H                     | 2H  | 23,8                                | 25,3                                                | 24,2 | 25,6 | 26,0 | 23,7                                  | 25,1 | 24,1                  | 25,5 | 25,9 |
|                        | 3H  | 24,8                                | 26,1                                                | 25,2 | 26,4 | 26,8 | 25,0                                  | 26,3 | 25,5                  | 26,6 | 27,1 |
|                        | 4H  | 25,2                                | 26,3                                                | 25,7 | 26,7 | 27,2 | 25,5                                  | 26,7 | 26,0                  | 27,1 | 27,5 |
|                        | 6H  | 25,6                                | 26,6                                                | 26,1 | 27,0 | 27,5 | 25,9                                  | 26,9 | 26,4                  | 27,3 | 27,8 |
|                        | 8H  | 25,8                                | 26,7                                                | 26,3 | 27,2 | 27,6 | 26,0                                  | 26,9 | 26,5                  | 27,3 | 27,8 |
|                        | 12H | 26,1                                | 26,9                                                | 26,6 | 27,3 | 27,8 | 26,1                                  | 26,9 | 26,6                  | 27,3 | 27,8 |
| 8H                     | 4H  | 25,5                                | 26,4                                                | 26,0 | 26,8 | 27,3 | 25,8                                  | 26,7 | 26,3                  | 27,1 | 27,6 |
|                        | 6H  | 26,0                                | 26,7                                                | 26,5 | 27,2 | 27,7 | 26,3                                  | 27,0 | 26,8                  | 27,5 | 28,0 |
|                        | 8H  | 26,3                                | 27,0                                                | 26,8 | 27,4 | 27,9 | 26,4                                  | 27,1 | 26,9                  | 27,6 | 28,1 |
|                        | 12H | 26,6                                | 27,2                                                | 27,1 | 27,7 | 28,2 | 26,6                                  | 27,1 | 27,1                  | 27,6 | 28,2 |
| 12H                    | 4H  | 25,5                                | 26,3                                                | 26,0 | 26,8 | 27,3 | 25,8                                  | 26,6 | 26,3                  | 27,1 | 27,6 |
|                        | 6H  | 26,1                                | 26,7                                                | 26,6 | 27,2 | 27,7 | 26,4                                  | 27,0 | 26,9                  | 27,5 | 28,0 |
|                        | 8H  | 26,4                                | 27,0                                                | 26,9 | 27,5 | 28,0 | 26,6                                  | 27,1 | 27,1                  | 27,6 | 28,2 |

|                       |          |                                 |                             |                                    |                             |                             |                             |                             |
|-----------------------|----------|---------------------------------|-----------------------------|------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Leuchtdichten-Tabelle |          | Max. für $\gamma \geq 65^\circ$ |                             | Lichttechnische Abmessungen in mm: |                             | L = 1476<br>B = 75          | H(C0) = 25<br>H(C90) = 0    | H(C180) = 25<br>H(C270) = 0 |
| C-<br>Ebenen          | $\gamma$ | 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°                 |
|                       |          |                                 | Leuchtdichte in cd/m²       |                                    |                             |                             |                             |                             |
| 45°                   |          | 27431.2                         | 28151.1                     | 28929.1                            | 28449.2                     | 26380.3                     | 24805.2                     | 25128.6                     |
| 50°                   |          | 23821.5                         | 24648.8                     | 26344.8                            | 27531.6                     | 26083.7                     | 23765.8                     | 23824.8                     |
| 55°                   |          | 20032.0                         | 20767.9                     | 22633.2                            | 25008.4                     | 25013.0                     | 22465.2                     | 22276.4                     |
| 60°                   |          | 16457.2                         | 17036.9                     | 18608.2                            | 21302.3                     | 22743.9                     | 20716.8                     | 20434.3                     |
| 65°                   |          | 13337.0                         | 13764.0                     | 14915.2                            | 17304.9                     | 19588.8                     | 18501.7                     | 18422.9                     |
| 70°                   |          | 10682.7                         | 11045.1                     | 11893.4                            | 13808.6                     | 16176.6                     | 16001.5                     | 16367.6                     |
| 75°                   |          | 8609.9                          | 8884.5                      | 9646.9                             | 11190.6                     | 13061.2                     | 13291.9                     | 14206.4                     |
| 80°                   |          | 7701.2                          | 7820.5                      | 8280.1                             | 9220.1                      | 10320.8                     | 10441.1                     | 11804.7                     |
| 85°                   |          | 7674.4                          | 7729.6                      | 7886.6                             | 8072.8                      | 8150.8                      | 7753.0                      | 9386.4                      |

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**Modario® 31**

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**EAN: 4069025254894**

**LP-Nummer**  
**59594\_21**

**Leuchtdichten in cd/m²**

γ 65°

γ 70°

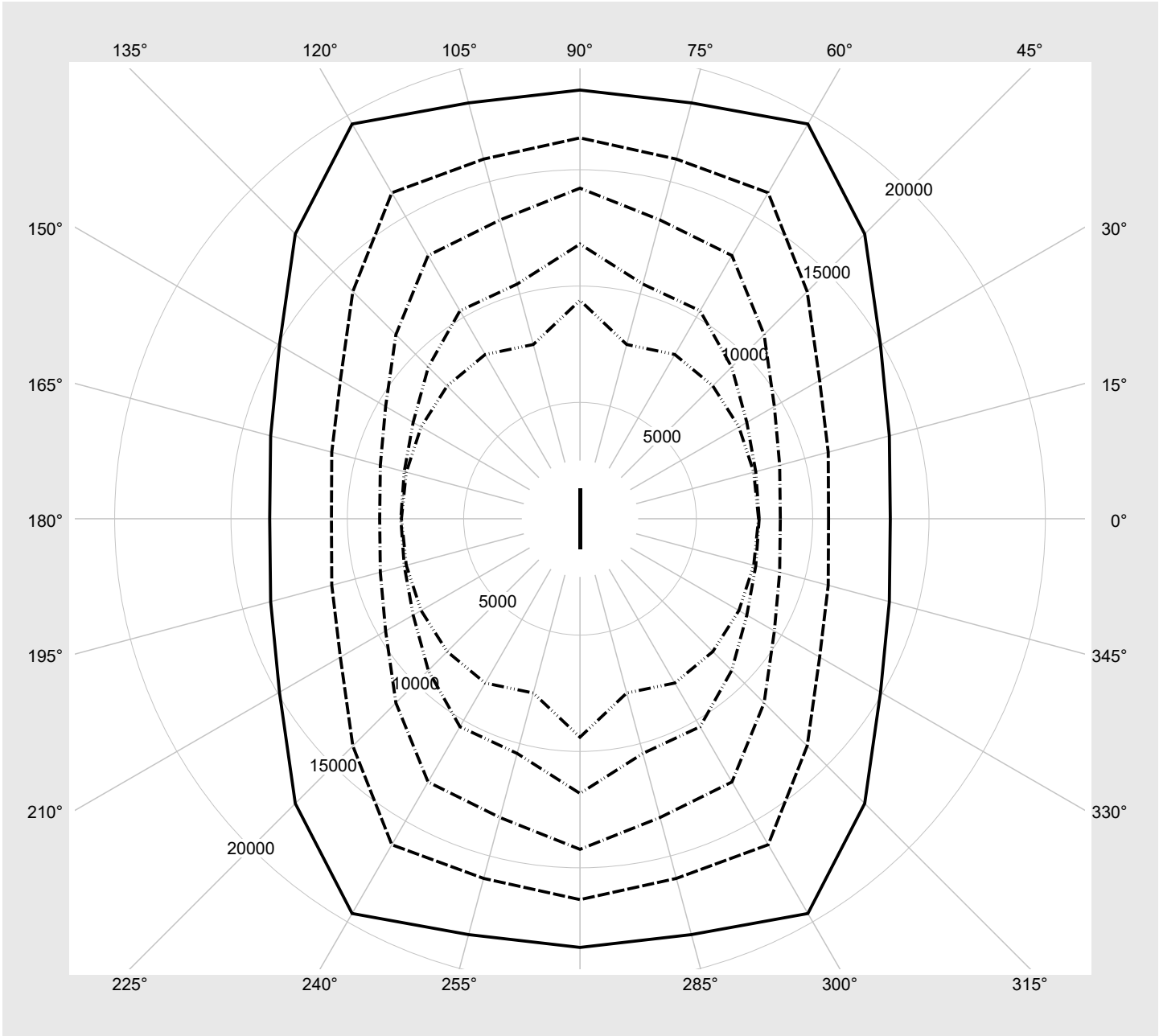
γ 75°

γ 80°

γ 85°

sit

eco



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|                                                            |                                                                |                                  |
|------------------------------------------------------------|----------------------------------------------------------------|----------------------------------|
| <p>Familie</p> <p>Modario® 31</p>                          | <p>Bestell-Nr.: 53BM812DV4A5C23S</p> <p>EAN: 4069025254894</p> | <p>LP-Nummer</p> <p>59594_21</p> |
| <p>Dimmstufen-Tabelle</p> <p>Umgebungstemperatur: 25°C</p> |                                                                | <p>siteco</p>                    |

| Lichtstrom [%] | Dimmstufe linear | Dimmstufe logarithmisch | Lichtstrom [lm] | Systemleistung [W] |
|----------------|------------------|-------------------------|-----------------|--------------------|
| 100            | 254              | 254                     | 10860           | 65.2               |
| 95             | 240              | 252                     | 10320           | 61.7               |
| 90             | 226              | 250                     | 9772            | 58.3               |
| 85             | 212              | 247                     | 9218            | 54.8               |
| 80             | 199              | 245                     | 8697            | 51.7               |
| 75             | 185              | 242                     | 8126            | 48.4               |
| 70             | 172              | 240                     | 7591            | 45.2               |
| 65             | 159              | 237                     | 7051            | 42.1               |
| 60             | 146              | 234                     | 6504            | 39.1               |
| 55             | 134              | 231                     | 5994            | 36.3               |
| 50             | 121              | 227                     | 5436            | 33.2               |
| 45             | 108              | 223                     | 4872            | 30.1               |
| 40             | 96               | 218                     | 4347            | 27.4               |
| 35             | 84               | 213                     | 3817            | 24.6               |
| 30             | 71               | 207                     | 3237            | 21.7               |
| 25             | 59               | 201                     | 2695            | 19.1               |
| 20             | 47               | 192                     | 2151            | 16.4               |
| 15             | 36               | 182                     | 1649            | 13.8               |
| 10             | 24               | 168                     | 1098            | 10.8               |
| 5              | 12               | 142                     | 543             | 8.0                |
| 2              | 4                | 102                     | 170             | 6.2                |