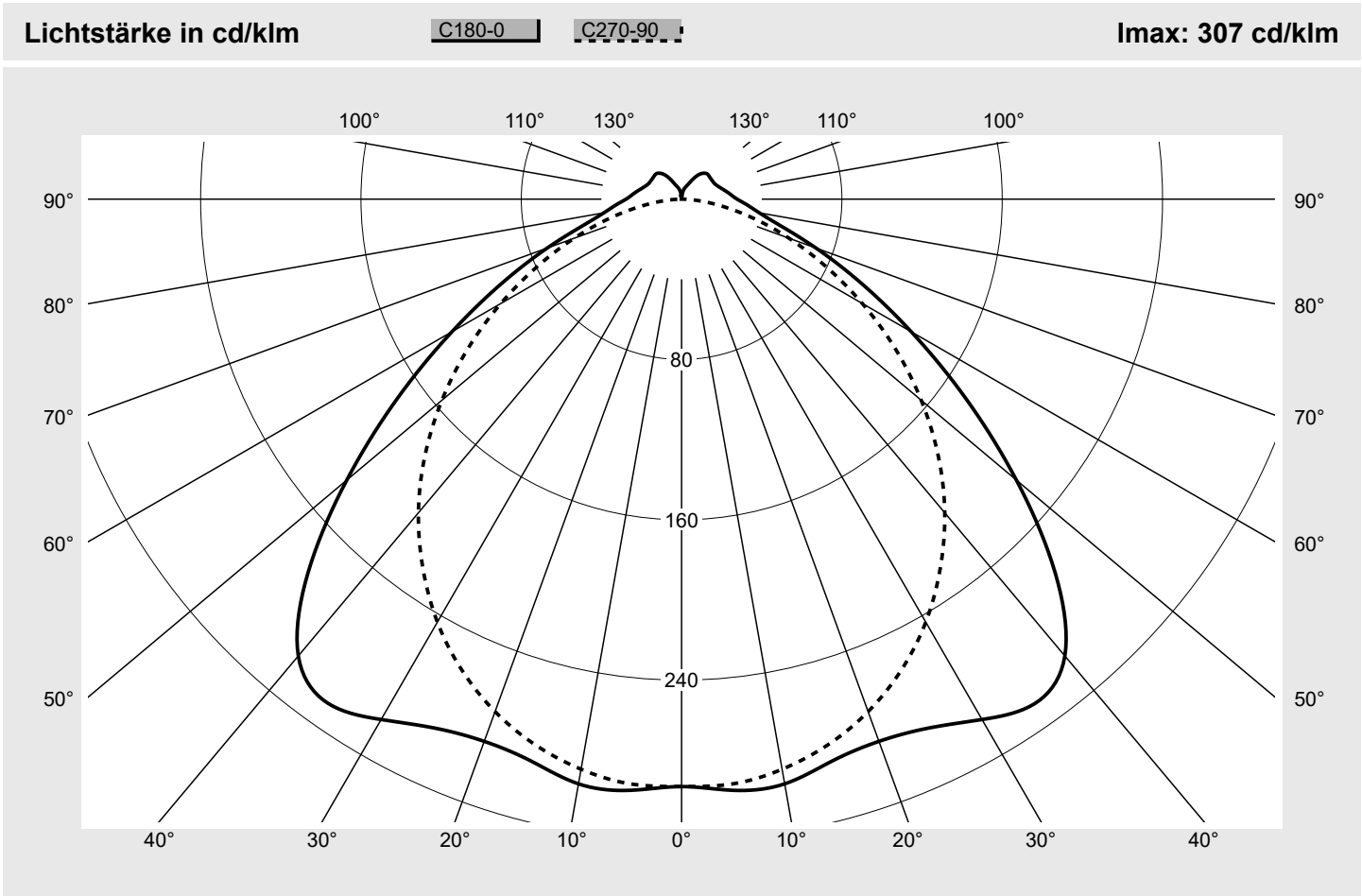


Lichttechnischer Prüfbefund

|                        |                                                          |                                                                                              |
|------------------------|----------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Familie<br>Modario® 31 | Bestell-Nr.: 53BM812DU4GXC23S<br>EAN: 4069025254818      | LP-Nummer<br>59594_26                                                                        |
|                        | Ausführung<br>Bestückung<br>Betriebsgerät<br>Einstellung | Diffusoroptik, satiniert, breit strahlend<br>LED 4000 K   CRI ≥ 80<br>EVG-DALI<br>AC-Betrieb |
|                        | Bemessungswerte                                          | Nettolichtstrom = 16290 lm<br>Systemleistung = 95.9 W<br>Lichtausbeute = 169.9 lm/W          |
|                        |                                                          | Seriendokumentation<br>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 |

Lichttechnischer Prüfbefund

|                                            |                                                                        |                                                   |
|--------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------|
| <div>Familie</div> <div>Modario® 31</div>  | <div>Bestell-Nr.: 53BM812DU4GXC23S</div> <div>EAN: 4069025254818</div> | <div>LP-Nummer</div> <div>59594_26</div>          |
| <div>Wertetabelle Lichtstärkemessung</div> |                                                                        | <div>Maximale Lichtstärke</div> <div>siteco</div> |

| 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            |

Lichttechnischer Prüfbefund

|                        |     |                                     |                                                     |      |      |      |                                       |      |                       |      |      |
|------------------------|-----|-------------------------------------|-----------------------------------------------------|------|------|------|---------------------------------------|------|-----------------------|------|------|
| Familie<br>Modario® 31 |     |                                     | Bestell-Nr.: 53BM812DU4GXC23S<br>EAN: 4069025254818 |      |      |      |                                       |      | LP-Nummer<br>59594_26 |      |      |
| 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  | 22,9                                | 24,6                                                | 23,3 | 24,9 | 25,2 | 22,7                                  | 24,4 | 23,1                  | 24,7 | 25,0 |
|                        | 3H  | 23,8                                | 25,3                                                | 24,1 | 25,6 | 26,0 | 23,8                                  | 25,4 | 24,2                  | 25,7 | 26,0 |
|                        | 4H  | 24,1                                | 25,5                                                | 24,5 | 25,9 | 26,2 | 24,2                                  | 25,7 | 24,6                  | 26,0 | 26,4 |
|                        | 6H  | 24,4                                | 25,7                                                | 24,8 | 26,1 | 26,4 | 24,5                                  | 25,8 | 24,9                  | 26,2 | 26,6 |
|                        | 8H  | 24,6                                | 25,8                                                | 25,0 | 26,2 | 26,6 | 24,6                                  | 25,8 | 25,0                  | 26,2 | 26,6 |
|                        | 12H | 24,7                                | 25,9                                                | 25,1 | 26,3 | 26,7 | 24,6                                  | 25,8 | 25,0                  | 26,2 | 26,6 |
| 4H                     | 2H  | 23,6                                | 25,0                                                | 24,0 | 25,4 | 25,7 | 23,4                                  | 24,9 | 23,8                  | 25,2 | 25,6 |
|                        | 3H  | 24,6                                | 25,8                                                | 25,0 | 26,2 | 26,6 | 24,8                                  | 26,0 | 25,2                  | 26,4 | 26,8 |
|                        | 4H  | 25,0                                | 26,1                                                | 25,4 | 26,5 | 26,9 | 25,3                                  | 26,4 | 25,7                  | 26,8 | 27,2 |
|                        | 6H  | 25,4                                | 26,3                                                | 25,8 | 26,7 | 27,2 | 25,6                                  | 26,6 | 26,1                  | 27,0 | 27,5 |
|                        | 8H  | 25,6                                | 26,4                                                | 26,0 | 26,9 | 27,4 | 25,7                                  | 26,6 | 26,2                  | 27,1 | 27,6 |
|                        | 12H | 25,8                                | 26,6                                                | 26,3 | 27,0 | 27,5 | 25,8                                  | 26,6 | 26,3                  | 27,1 | 27,6 |
| 8H                     | 4H  | 25,2                                | 26,1                                                | 25,7 | 26,6 | 27,0 | 25,5                                  | 26,4 | 26,0                  | 26,8 | 27,3 |
|                        | 6H  | 25,7                                | 26,5                                                | 26,2 | 26,9 | 27,4 | 26,0                                  | 26,7 | 26,5                  | 27,2 | 27,7 |
|                        | 8H  | 26,0                                | 26,7                                                | 26,5 | 27,2 | 27,7 | 26,2                                  | 26,8 | 26,7                  | 27,3 | 27,8 |
|                        | 12H | 26,4                                | 26,9                                                | 26,9 | 27,4 | 27,9 | 26,3                                  | 26,9 | 26,8                  | 27,4 | 27,9 |
| 12H                    | 4H  | 25,3                                | 26,1                                                | 25,7 | 26,5 | 27,0 | 25,6                                  | 26,3 | 26,0                  | 26,8 | 27,3 |
|                        | 6H  | 25,8                                | 26,5                                                | 26,3 | 26,9 | 27,5 | 26,1                                  | 26,7 | 26,6                  | 27,2 | 27,7 |
|                        | 8H  | 26,1                                | 26,7                                                | 26,7 | 27,2 | 27,7 | 26,3                                  | 26,9 | 26,8                  | 27,3 | 27,9 |

|                       |          |                                 |                             |                                       |                             |                             |                             |                             |
|-----------------------|----------|---------------------------------|-----------------------------|---------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Leuchtdichten-Tabelle |          | Max. für $\gamma \geq 65^\circ$ |                             | Lichttechnische<br>Abmessungen in mm: |                             | L = 2392<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°                   |          | 25389.9                         | 26056.3                     | 26776.3                               | 26332.1                     | 24417.3                     | 22959.4                     | 23258.7                     |
| 50°                   |          | 22048.9                         | 22814.5                     | 24384.4                               | 25482.9                     | 24142.7                     | 21997.3                     | 22051.9                     |
| 55°                   |          | 18541.3                         | 19222.5                     | 20948.9                               | 23147.4                     | 23151.6                     | 20793.4                     | 20618.7                     |
| 60°                   |          | 15232.6                         | 15769.1                     | 17223.5                               | 19717.1                     | 21051.4                     | 19175.2                     | 18913.7                     |
| 65°                   |          | 12344.5                         | 12739.7                     | 13805.3                               | 16017.1                     | 18131.1                     | 17124.9                     | 17051.9                     |
| 70°                   |          | 9887.7                          | 10223.2                     | 11008.4                               | 12781.0                     | 14972.8                     | 14810.8                     | 15149.6                     |
| 75°                   |          | 7969.2                          | 8223.4                      | 8929.0                                | 10357.9                     | 12089.2                     | 12302.8                     | 13149.3                     |
| 80°                   |          | 7128.1                          | 7238.6                      | 7664.0                                | 8534.0                      | 9552.8                      | 9664.2                      | 10926.2                     |
| 85°                   |          | 7103.4                          | 7154.4                      | 7299.7                                | 7472.1                      | 7544.3                      | 7176.1                      | 8687.9                      |

Lichttechnischer Prüfbefund

**Familie**  
**Modario® 31**

**Bestell-Nr.: 53BM812DU4GXC23S**  
**EAN: 4069025254818**

**LP-Nummer**  
**59594\_26**

**Leuchtdichten in cd/m²**

γ 65°

γ 70°

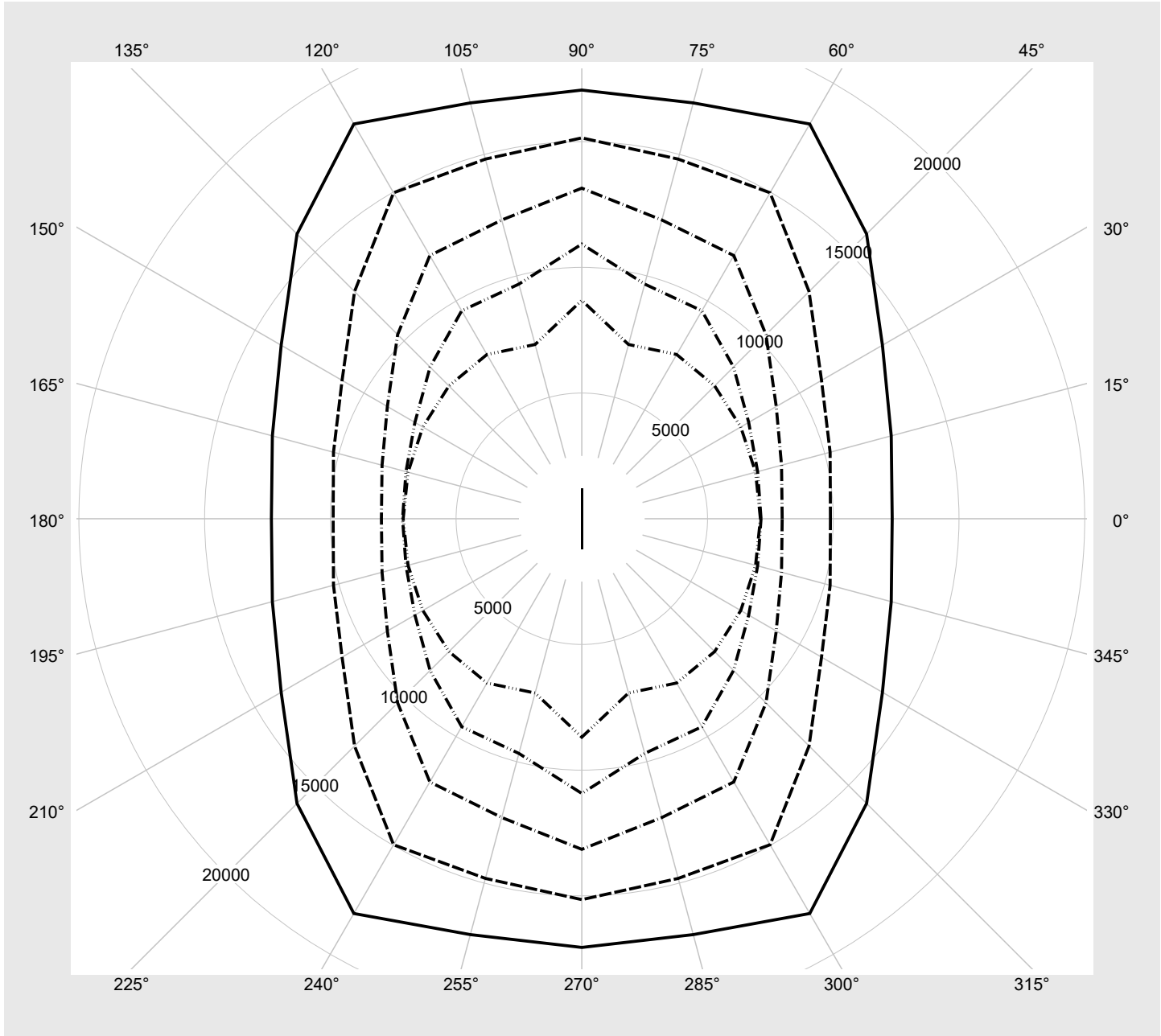
γ 75°

γ 80°

γ 85°

sit

eco



Lichttechnischer Prüfbefund

|                                                            |                                                                |                                  |
|------------------------------------------------------------|----------------------------------------------------------------|----------------------------------|
| <p>Familie</p> <p>Modario® 31</p>                          | <p>Bestell-Nr.: 53BM812DU4GXC23S</p> <p>EAN: 4069025254818</p> | <p>LP-Nummer</p> <p>59594_26</p> |
| <p>Dimmstufen-Tabelle</p> <p>Umgebungstemperatur: 25°C</p> |                                                                | <p>siteco</p>                    |

| Lichtstrom<br>[%] | Dimmstufe<br>linear | Dimmstufe<br>logarithmisch | Lichtstrom<br>[lm] | Systemleistung<br>[W] |
|-------------------|---------------------|----------------------------|--------------------|-----------------------|
| 100               | 254                 | 254                        | 16290              | 95.9                  |
| 95                | 240                 | 252                        | 15481              | 91.0                  |
| 90                | 226                 | 250                        | 14659              | 86.4                  |
| 85                | 212                 | 247                        | 13828              | 81.7                  |
| 80                | 199                 | 245                        | 13045              | 77.4                  |
| 75                | 185                 | 242                        | 12189              | 72.6                  |
| 70                | 172                 | 240                        | 11387              | 68.2                  |
| 65                | 159                 | 237                        | 10576              | 63.6                  |
| 60                | 146                 | 234                        | 9757               | 59.0                  |
| 55                | 134                 | 231                        | 8992               | 54.7                  |
| 50                | 121                 | 227                        | 8154               | 50.1                  |
| 45                | 108                 | 223                        | 7308               | 45.3                  |
| 40                | 96                  | 218                        | 6520               | 40.9                  |
| 35                | 84                  | 213                        | 5725               | 36.4                  |
| 30                | 71                  | 207                        | 4856               | 31.4                  |
| 25                | 59                  | 201                        | 4042               | 27.1                  |
| 20                | 47                  | 192                        | 3227               | 22.8                  |
| 15                | 36                  | 182                        | 2474               | 18.7                  |
| 10                | 24                  | 168                        | 1647               | 14.3                  |
| 5                 | 12                  | 142                        | 814                | 9.8                   |
| 2                 | 4                   | 102                        | 256                | 6.7                   |