

## Lichttechnischer Prüfbefund

**Familie**  
**Highbay 11**

**Bestell-Nr.: 51HN12DB4REA**  
**EAN: 4069025256416**

**LP-Nummer**  
**59710\_161**

**Seriendokumentation**  
**14.02.2025**

**siteco**



**Ausführung** primäre Lichtlenkung mit Linse, PMMA, Gehäuse, weiß, breit strahlend

**Bestückung** LED 4000 K | CRI ≥ 80

**Betriebsgerät** EVG-DALI

**Einstellung** AC-Betrieb

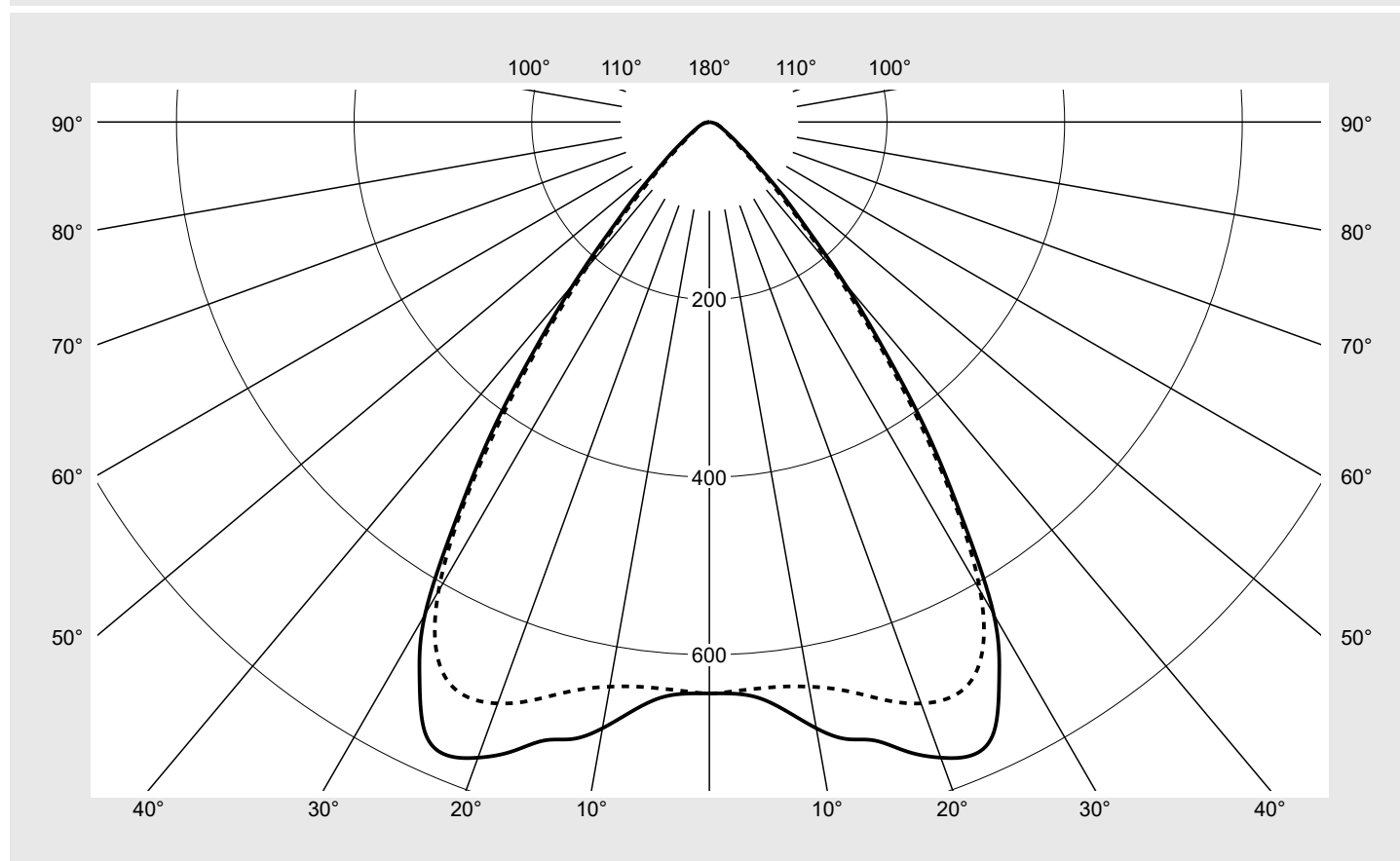
**Bemessungswerte** Nettolichtstrom = 42500 lm  
Systemleistung = 213.7 W  
Lichtausbeute = 198.9 lm/W

**Lichtstärke in cd/klm**

**C180-0**

**C270-90**

**Imax: 772 cd/klm**



### Klassifizierungen

DIN 5040 A 6 0  
CIE N1=88 N2=98 N3=100  
N4=100 N5=100

### Leuchtenbetriebswirkungsgrade

$\eta_{LB}$  100,0%  
 $\phi_u$  100,0%  
 $\phi_o$  0,0%

### Messbedingungen

DIN EN 13032 und DIN 5032

Lichttechnischer Prüfbefund

|                                 |                                                 |                        |
|---------------------------------|-------------------------------------------------|------------------------|
| Familie<br>Highbay 11           | Bestell-Nr.: 51HN12DB4REA<br>EAN: 4069025256416 | LP-Nummer<br>59710_161 |
| Wertetabelle Lichtstärkemessung | Maximale Lichtstärke                            | siteco                 |

| 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 |                   |
| 0,0°         | 643.6                 | 643.6                       | 643.6                       | 643.6                       | 643.6                       | 643.6                       | 643.6       | 1.0                  | 1.0               |
| 2,5°         | 644.5                 | 645.1                       | 645.0                       | 644.3                       | 644.2                       | 643.7                       | 641.7       | 7.7                  | 8.7               |
| 5,0°         | 651.5                 | 652.3                       | 650.7                       | 647.5                       | 645.3                       | 643.2                       | 640.4       | 15.5                 | 24.1              |
| 7,5°         | 669.6                 | 669.1                       | 664.2                       | 657.2                       | 651.2                       | 645.8                       | 641.3       | 23.5                 | 47.6              |
| 10,0°        | 693.4                 | 691.0                       | 681.5                       | 670.0                       | 659.9                       | 651.2                       | 645.8       | 31.9                 | 79.6              |
| 12,5°        | 711.8                 | 709.4                       | 700.3                       | 685.9                       | 671.9                       | 660.7                       | 654.0       | 40.7                 | 120.2             |
| 15,0°        | 721.3                 | 721.7                       | 717.1                       | 704.9                       | 689.4                       | 675.9                       | 667.7       | 49.7                 | 169.9             |
| 17,5°        | 743.8                 | 740.8                       | 737.9                       | 726.5                       | 708.9                       | 693.0                       | 684.2       | 59.4                 | 229.3             |
| 20,0°        | 761.9                 | 761.9                       | 759.6                       | 745.2                       | 724.0                       | 705.6                       | 696.8       | 69.2                 | 298.5             |
| 22,5°        | 772.0                 | 771.2                       | 770.0                       | 754.7                       | 731.1                       | 710.8                       | 702.6       | 78.2                 | 376.7             |
| 25,0°        | 758.1                 | 756.6                       | 756.3                       | 743.6                       | 722.7                       | 703.3                       | 695.6       | 85.1                 | 461.8             |
| 27,5°        | 706.7                 | 709.5                       | 709.5                       | 700.0                       | 685.7                       | 672.3                       | 667.0       | 87.8                 | 549.7             |
| 30,0°        | 640.4                 | 635.6                       | 633.7                       | 626.6                       | 621.7                       | 614.1                       | 609.9       | 85.8                 | 635.5             |
| 32,5°        | 530.6                 | 537.6                       | 535.6                       | 526.2                       | 530.2                       | 524.1                       | 520.8       | 78.1                 | 713.6             |
| 35,0°        | 428.2                 | 426.4                       | 425.9                       | 411.9                       | 420.8                       | 414.2                       | 411.4       | 66.0                 | 779.6             |
| 37,5°        | 322.5                 | 323.4                       | 327.0                       | 311.0                       | 319.4                       | 310.8                       | 308.2       | 53.0                 | 832.6             |
| 40,0°        | 236.1                 | 234.0                       | 241.6                       | 230.8                       | 230.9                       | 219.8                       | 218.4       | 40.7                 | 873.3             |
| 42,5°        | 162.3                 | 165.3                       | 172.9                       | 171.1                       | 161.7                       | 151.3                       | 150.8       | 30.2                 | 903.5             |
| 45,0°        | 117.3                 | 114.9                       | 119.4                       | 122.5                       | 109.3                       | 102.6                       | 102.3       | 21.9                 | 925.4             |
| 47,5°        | 80.5                  | 81.4                        | 82.8                        | 85.5                        | 75.2                        | 71.4                        | 70.8        | 15.9                 | 941.3             |
| 50,0°        | 59.4                  | 58.0                        | 58.0                        | 59.0                        | 52.9                        | 50.5                        | 49.6        | 11.7                 | 953.0             |
| 52,5°        | 43.3                  | 42.8                        | 42.8                        | 43.0                        | 39.3                        | 37.2                        | 36.6        | 8.9                  | 961.8             |
| 55,0°        | 33.3                  | 32.4                        | 32.9                        | 33.7                        | 30.5                        | 28.7                        | 28.3        | 7.1                  | 968.9             |
| 57,5°        | 25.9                  | 25.4                        | 25.9                        | 26.8                        | 24.5                        | 22.9                        | 22.9        | 5.8                  | 974.7             |
| 60,0°        | 20.9                  | 20.2                        | 21.2                        | 21.8                        | 20.4                        | 18.9                        | 19.2        | 4.9                  | 979.5             |
| 62,5°        | 16.9                  | 16.2                        | 17.4                        | 18.0                        | 17.2                        | 15.9                        | 16.4        | 4.1                  | 983.6             |
| 65,0°        | 14.9                  | 13.6                        | 14.4                        | 15.1                        | 14.8                        | 13.6                        | 14.4        | 3.6                  | 987.2             |
| 67,5°        | 12.3                  | 11.4                        | 12.5                        | 12.4                        | 13.0                        | 11.7                        | 12.6        | 3.1                  | 990.3             |
| 70,0°        | 10.4                  | 9.5                         | 10.5                        | 10.1                        | 11.1                        | 10.1                        | 11.0        | 2.7                  | 993.0             |
| 72,5°        | 8.2                   | 7.7                         | 7.9                         | 8.2                         | 8.7                         | 8.6                         | 9.5         | 2.2                  | 995.2             |
| 75,0°        | 6.5                   | 6.0                         | 6.0                         | 6.4                         | 6.6                         | 7.1                         | 7.9         | 1.7                  | 996.9             |
| 77,5°        | 4.5                   | 4.3                         | 4.4                         | 4.7                         | 5.1                         | 5.6                         | 6.3         | 1.3                  | 998.2             |
| 80,0°        | 2.9                   | 2.7                         | 2.9                         | 3.1                         | 3.5                         | 4.1                         | 4.7         | 0.9                  | 999.1             |
| 82,5°        | 1.3                   | 1.4                         | 1.6                         | 1.8                         | 2.2                         | 2.7                         | 3.3         | 0.5                  | 999.7             |
| 85,0°        | 0.6                   | 0.6                         | 0.6                         | 0.7                         | 1.0                         | 1.4                         | 1.8         | 0.3                  | 999.9             |
| 87,5°        | 0.3                   | 0.3                         | 0.3                         | 0.3                         | 0.3                         | 0.4                         | 0.5         | 0.1                  | 1000.0            |
| 90,0°        | 0.0                   | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                  | 1000.0            |

Lichttechnischer Prüfbefund

|                       |     |                                     |                                                 |      |      |      |                                       |      |                        |      |      |
|-----------------------|-----|-------------------------------------|-------------------------------------------------|------|------|------|---------------------------------------|------|------------------------|------|------|
| Familie<br>Highbay 11 |     |                                     | Bestell-Nr.: 51HN12DB4REA<br>EAN: 4069025256416 |      |      |      |                                       |      | LP-Nummer<br>59710_161 |      |      |
| 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  | 21,1                                | 22,4                                            | 21,5 | 22,7 | 23,1 | 20,8                                  | 22,1 | 21,2                   | 22,4 | 22,8 |
|                       | 3H  | 21,1                                | 22,3                                            | 21,5 | 22,6 | 23,0 | 20,9                                  | 22,0 | 21,2                   | 22,3 | 22,7 |
|                       | 4H  | 21,1                                | 22,2                                            | 21,5 | 22,5 | 22,9 | 20,9                                  | 21,9 | 21,3                   | 22,3 | 22,6 |
|                       | 6H  | 21,1                                | 22,0                                            | 21,5 | 22,4 | 22,8 | 20,9                                  | 21,8 | 21,3                   | 22,2 | 22,6 |
|                       | 8H  | 21,2                                | 22,0                                            | 21,6 | 22,4 | 22,8 | 21,0                                  | 21,8 | 21,4                   | 22,2 | 22,6 |
|                       | 12H | 21,1                                | 21,9                                            | 21,6 | 22,3 | 22,7 | 21,0                                  | 21,7 | 21,4                   | 22,1 | 22,5 |
| 4H                    | 2H  | 21,0                                | 22,1                                            | 21,4 | 22,4 | 22,8 | 20,7                                  | 21,8 | 21,1                   | 22,1 | 22,5 |
|                       | 3H  | 21,1                                | 21,9                                            | 21,5 | 22,3 | 22,7 | 20,8                                  | 21,7 | 21,2                   | 22,1 | 22,5 |
|                       | 4H  | 21,1                                | 21,8                                            | 21,5 | 22,2 | 22,7 | 20,9                                  | 21,6 | 21,3                   | 22,0 | 22,5 |
|                       | 6H  | 21,0                                | 21,7                                            | 21,5 | 22,1 | 22,6 | 20,9                                  | 21,5 | 21,4                   | 22,0 | 22,5 |
|                       | 8H  | 21,0                                | 21,6                                            | 21,5 | 22,0 | 22,5 | 20,9                                  | 21,5 | 21,4                   | 21,9 | 22,4 |
|                       | 12H | 21,0                                | 21,5                                            | 21,5 | 22,0 | 22,5 | 21,0                                  | 21,4 | 21,4                   | 21,9 | 22,4 |
| 8H                    | 4H  | 21,0                                | 21,6                                            | 21,5 | 22,0 | 22,5 | 20,8                                  | 21,4 | 21,3                   | 21,8 | 22,3 |
|                       | 6H  | 21,0                                | 21,4                                            | 21,5 | 21,9 | 22,4 | 20,9                                  | 21,3 | 21,3                   | 21,8 | 22,3 |
|                       | 8H  | 20,9                                | 21,4                                            | 21,4 | 21,8 | 22,4 | 20,9                                  | 21,3 | 21,4                   | 21,8 | 22,3 |
|                       | 12H | 20,9                                | 21,2                                            | 21,5 | 21,8 | 22,3 | 20,9                                  | 21,2 | 21,4                   | 21,7 | 22,3 |
| 12H                   | 4H  | 21,0                                | 21,5                                            | 21,5 | 21,9 | 22,4 | 20,8                                  | 21,3 | 21,3                   | 21,7 | 22,2 |
|                       | 6H  | 21,0                                | 21,3                                            | 21,5 | 21,8 | 22,4 | 20,9                                  | 21,2 | 21,4                   | 21,7 | 22,2 |
|                       | 8H  | 20,9                                | 21,3                                            | 21,5 | 21,8 | 22,3 | 20,9                                  | 21,2 | 21,4                   | 21,7 | 22,2 |

| Leuchtdichten-Tabelle |                       | Max. für $\gamma \geq 65^\circ$ |                             | Lichttechnische<br>Abmessungen in mm: |                             | L = 852<br>B = 264          |             |
|-----------------------|-----------------------|---------------------------------|-----------------------------|---------------------------------------|-----------------------------|-----------------------------|-------------|
| 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 |                                 |                             |                                       |                             |                             |             |
| 45,0°                 | 31351.0               | 30698.2                         | 31910.2                     | 32728.2                               | 29198.0                     | 27414.1                     | 27333.4     |
| 50,0°                 | 17467.6               | 17054.6                         | 17036.6                     | 17340.9                               | 15560.7                     | 14836.7                     | 14582.1     |
| 55,0°                 | 10977.4               | 10683.9                         | 10836.4                     | 11085.1                               | 10055.6                     | 9452.5                      | 9338.8      |
| 60,0°                 | 7895.4                | 7621.8                          | 8008.4                      | 8248.8                                | 7723.1                      | 7152.1                      | 7243.2      |
| 65,0°                 | 6662.1                | 6060.3                          | 6459.6                      | 6738.1                                | 6598.2                      | 6101.9                      | 6446.6      |
| 70,0°                 | 5726.2                | 5224.5                          | 5779.2                      | 5591.4                                | 6133.9                      | 5583.6                      | 6098.0      |
| 75,0°                 | 4719.0                | 4370.8                          | 4359.1                      | 4662.1                                | 4843.8                      | 5184.8                      | 5779.8      |
| 80,0°                 | 3186.0                | 2972.7                          | 3145.7                      | 3398.2                                | 3835.6                      | 4511.3                      | 5142.4      |
| 85,0°                 | 1272.6                | 1266.1                          | 1307.3                      | 1530.6                                | 2263.3                      | 3015.6                      | 3906.6      |

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|                                     |                                                               |                                      |
|-------------------------------------|---------------------------------------------------------------|--------------------------------------|
| <b>Familie</b><br><b>Highbay 11</b> | <b>Bestell-Nr.: 51HN12DB4REA</b><br><b>EAN: 4069025256416</b> | <b>LP-Nummer</b><br><b>59710_161</b> |
|-------------------------------------|---------------------------------------------------------------|--------------------------------------|

**Leuchtdichten in cd/m²**

γ 65°

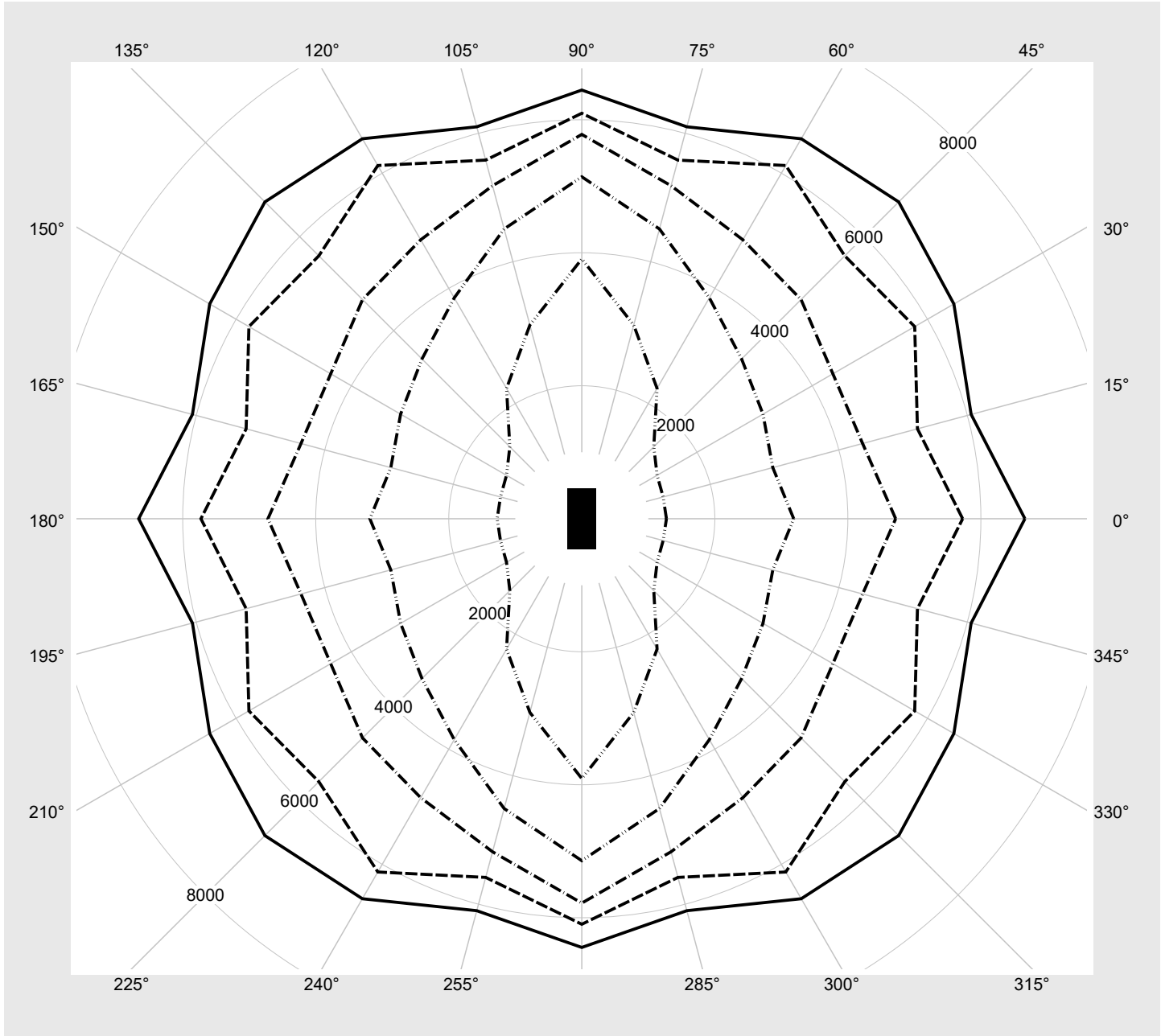
γ 70°

γ 75°

γ 80°

γ 85°

siteco



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|                                                            |                                                            |                                   |
|------------------------------------------------------------|------------------------------------------------------------|-----------------------------------|
| <p>Familie</p> <p>Highbay 11</p>                           | <p>Bestell-Nr.: 51HN12DB4REA</p> <p>EAN: 4069025256416</p> | <p>LP-Nummer</p> <p>59710_161</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                        | 42500              | 213.7                 |
| 95                | 240                 | 252                        | 40311              | 201.5                 |
| 90                | 227                 | 250                        | 38258              | 190.0                 |
| 85                | 214                 | 248                        | 36193              | 178.8                 |
| 80                | 200                 | 245                        | 33955              | 166.7                 |
| 75                | 187                 | 243                        | 31858              | 155.5                 |
| 70                | 174                 | 240                        | 29749              | 144.4                 |
| 65                | 161                 | 237                        | 27625              | 133.3                 |
| 60                | 148                 | 234                        | 25488              | 122.5                 |
| 55                | 135                 | 231                        | 23337              | 111.6                 |
| 50                | 122                 | 227                        | 21171              | 100.8                 |
| 45                | 110                 | 223                        | 19157              | 90.8                  |
| 40                | 97                  | 219                        | 16955              | 80.1                  |
| 35                | 85                  | 214                        | 14901              | 70.3                  |
| 30                | 73                  | 208                        | 12834              | 60.7                  |
| 25                | 60                  | 201                        | 10579              | 50.1                  |
| 20                | 48                  | 193                        | 8469               | 40.5                  |
| 15                | 36                  | 182                        | 6345               | 31.1                  |
| 10                | 24                  | 168                        | 4202               | 21.7                  |
| 5                 | 12                  | 142                        | 2034               | 12.0                  |
| 1                 | 4                   | 102                        | 581                | 5.4                   |