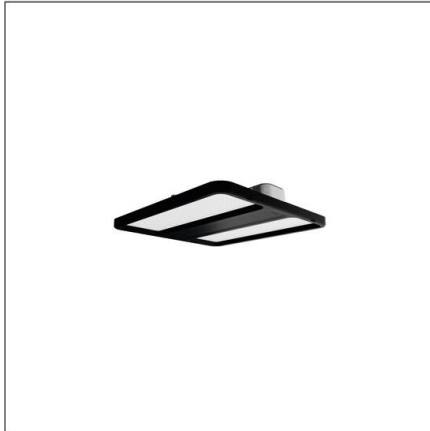


## Lichttechnischer Prüfbefund

**Familie**  
Highbay 11

**Bestell-Nr.:** 51HN32DA4MCA  
**EAN:** 4069025446626

**LP-Nummer**  
59710\_467



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

**Bestückung** LED 4000 K | CRI ≥ 80

**Betriebsgerät** EVG-DALI

**Einstellung** AC-Betrieb

**Bemessungswerte** Nettolichtstrom = 28000 lm  
Systemleistung = 146.6 W  
Lichtausbeute = 191 lm/W

**Seriendokumentation**  
13.05.2025

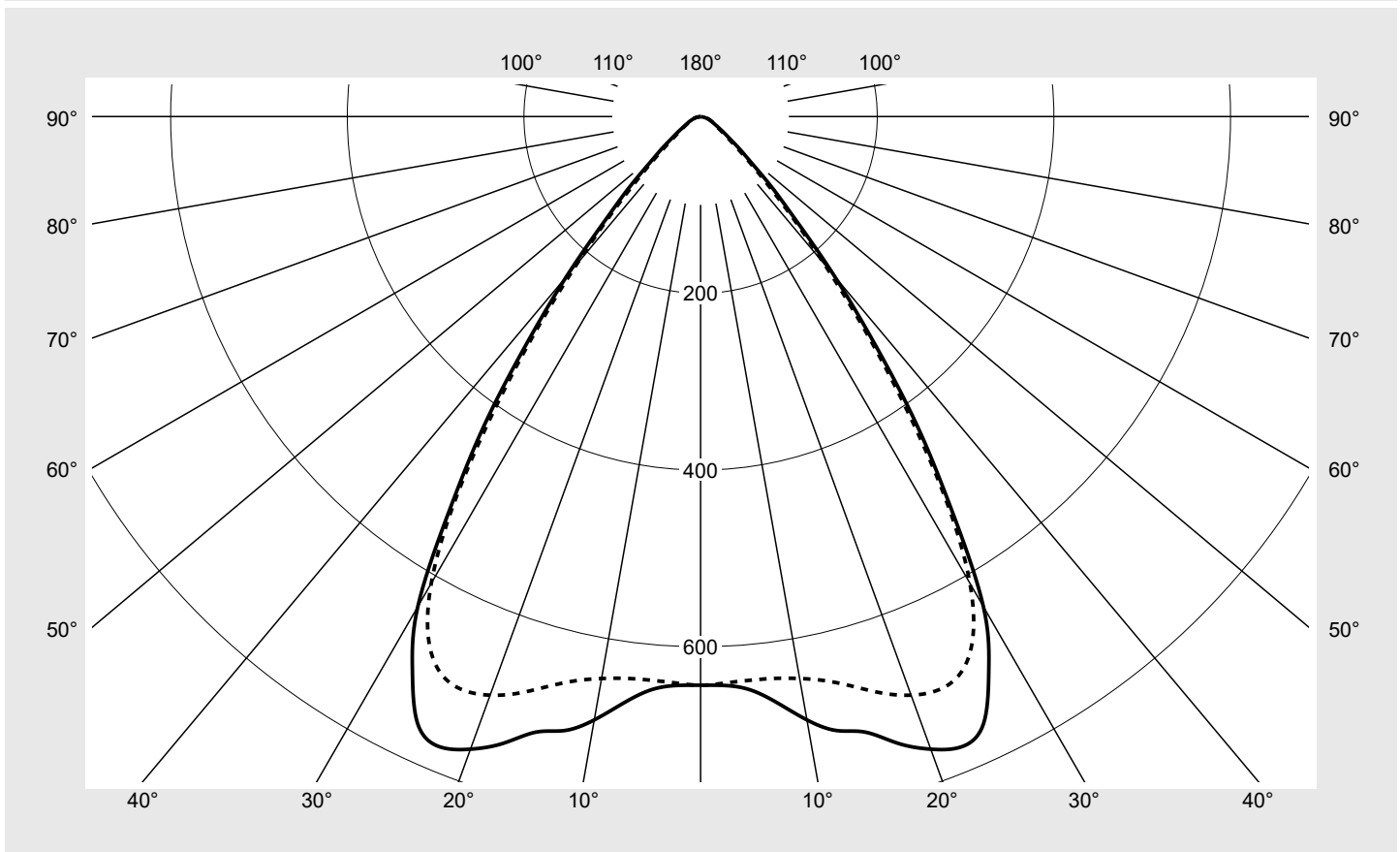
siteco

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

|                              |   |                               |
|------------------------------|---|-------------------------------|
| <b>Familie</b><br>Highbay 11 | <b>Bestell-Nr.: 51HN32DA4MCA</b><br><b>EAN: 4069025446626</b> | <b>LP-Nummer</b><br>59710_467 |
|------------------------------|---|-------------------------------|

|  |                             |               |
|--|-----------------------------|---------------|
| <b>Wertetabelle Lichtstärkemessung</b> | <b>Maximale Lichtstärke</b> | <b>sITeco</b> |
|--|-----------------------------|---------------|

| C-<br>Ebenen | 0°<br>180°            | 15°                  | 30°                  | 45°                  | 60°                  | 75°                  | 90°<br>270° | Phi-Zone             | Summe<br>Phi-Zone |
|--------------|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------|----------------------|-------------------|
|              |                       | 165°<br>195°<br>345° | 150°<br>210°<br>330° | 135°<br>225°<br>315° | 120°<br>240°<br>300° | 105°<br>255°<br>285° |             |                      |                   |
| 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

|                              |   |                               |
|------------------------------|---|-------------------------------|
| <b>Familie</b><br>Highbay 11 | <b>Bestell-Nr.: 51HN32DA4MCA</b><br><b>EAN: 4069025446626</b> | <b>LP-Nummer</b><br>59710_467 |
|------------------------------|---|-------------------------------|

| UGR-Tabelle     |     | Standardraum                        |      |      |      |      |                                       |      |      |      |      |
|-----------------|-----|-------------------------------------|------|------|------|------|---------------------------------------|------|------|------|------|
| Raumabmessungen |     | Blickrichtung quer zur Leuchte (C0) |      |      |      |      | Blickrichtung längs zur Leuchte (C90) |      |      |      |      |
| x               | y   |                                     |      |      |      |      |                                       |      |      |      |      |
| 2H              | 2H  | 22,1                                | 23,4 | 22,5 | 23,7 | 24,0 | 21,8                                  | 23,1 | 22,2 | 23,4 | 23,7 |
|                 | 3H  | 22,1                                | 23,2 | 22,5 | 23,6 | 23,9 | 21,8                                  | 22,9 | 22,2 | 23,3 | 23,6 |
|                 | 4H  | 22,1                                | 23,1 | 22,5 | 23,5 | 23,9 | 21,8                                  | 22,9 | 22,2 | 23,2 | 23,6 |
|                 | 6H  | 22,1                                | 23,0 | 22,5 | 23,4 | 23,8 | 21,9                                  | 22,8 | 22,3 | 23,2 | 23,6 |
|                 | 8H  | 22,1                                | 22,9 | 22,6 | 23,3 | 23,7 | 22,0                                  | 22,8 | 22,4 | 23,1 | 23,5 |
|                 | 12H | 22,1                                | 22,8 | 22,5 | 23,2 | 23,6 | 21,9                                  | 22,7 | 22,4 | 23,1 | 23,5 |
| 4H              | 2H  | 22,0                                | 23,0 | 22,4 | 23,4 | 23,8 | 21,7                                  | 22,7 | 22,1 | 23,1 | 23,5 |
|                 | 3H  | 22,0                                | 22,9 | 22,4 | 23,3 | 23,7 | 21,8                                  | 22,6 | 22,2 | 23,0 | 23,4 |
|                 | 4H  | 22,0                                | 22,8 | 22,5 | 23,2 | 23,6 | 21,8                                  | 22,6 | 22,3 | 23,0 | 23,4 |
|                 | 6H  | 22,0                                | 22,6 | 22,5 | 23,1 | 23,6 | 21,9                                  | 22,5 | 22,3 | 22,9 | 23,4 |
|                 | 8H  | 22,0                                | 22,6 | 22,5 | 23,0 | 23,5 | 21,9                                  | 22,5 | 22,3 | 22,9 | 23,4 |
|                 | 12H | 22,0                                | 22,5 | 22,5 | 22,9 | 23,4 | 21,9                                  | 22,4 | 22,4 | 22,8 | 23,3 |
| 8H              | 4H  | 22,0                                | 22,5 | 22,4 | 23,0 | 23,5 | 21,8                                  | 22,3 | 22,2 | 22,8 | 23,3 |
|                 | 6H  | 21,9                                | 22,4 | 22,4 | 22,9 | 23,4 | 21,8                                  | 22,3 | 22,3 | 22,8 | 23,3 |
|                 | 8H  | 21,9                                | 22,3 | 22,4 | 22,8 | 23,3 | 21,8                                  | 22,2 | 22,3 | 22,7 | 23,3 |
|                 | 12H | 21,9                                | 22,2 | 22,4 | 22,7 | 23,3 | 21,9                                  | 22,2 | 22,4 | 22,7 | 23,2 |
| 12H             | 4H  | 22,0                                | 22,4 | 22,5 | 22,9 | 23,4 | 21,8                                  | 22,2 | 22,3 | 22,7 | 23,2 |
|                 | 6H  | 21,9                                | 22,3 | 22,4 | 22,8 | 23,3 | 21,8                                  | 22,2 | 22,3 | 22,7 | 23,2 |
|                 | 8H  | 21,9                                | 22,2 | 22,4 | 22,7 | 23,3 | 21,8                                  | 22,1 | 22,3 | 22,6 | 23,2 |

## Leuchtdichten-Tabelle Max. für $\gamma \geq 65^\circ$

| C-<br>Ebenen | $\gamma$ | Leuchtdichte in cd/m <sup>2</sup> |                             |                             |                             |                             |                             |             |
|--------------|----------|-----------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|
|              |          | 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° |
|              | 45,0°    | 41309.5                           | 40449.3                     | 42046.4                     | 43124.2                     | 38472.7                     | 36122.1                     | 36015.8     |
|              | 50,0°    | 23016.1                           | 22471.9                     | 22448.3                     | 22849.2                     | 20503.5                     | 19549.5                     | 19214.1     |
|              | 55,0°    | 14464.3                           | 14077.5                     | 14278.5                     | 14606.2                     | 13249.8                     | 12455.0                     | 12305.3     |
|              | 60,0°    | 10403.4                           | 10042.9                     | 10552.3                     | 10869.0                     | 10176.3                     | 9424.0                      | 9544.0      |
|              | 65,0°    | 8778.3                            | 7985.4                      | 8511.5                      | 8878.5                      | 8694.1                      | 8040.2                      | 8494.4      |
|              | 70,0°    | 7545.1                            | 6884.1                      | 7614.9                      | 7367.4                      | 8082.3                      | 7357.2                      | 8035.0      |
|              | 75,0°    | 6218.0                            | 5759.1                      | 5743.7                      | 6143.0                      | 6382.5                      | 6831.7                      | 7615.7      |
|              | 80,0°    | 4198.0                            | 3917.0                      | 4145.0                      | 4477.6                      | 5054.0                      | 5944.3                      | 6775.9      |
|              | 85,0°    | 1676.8                            | 1668.3                      | 1722.5                      | 2016.8                      | 2982.3                      | 3973.5                      | 5147.6      |

**Lichttechnischer Prüfbefund**

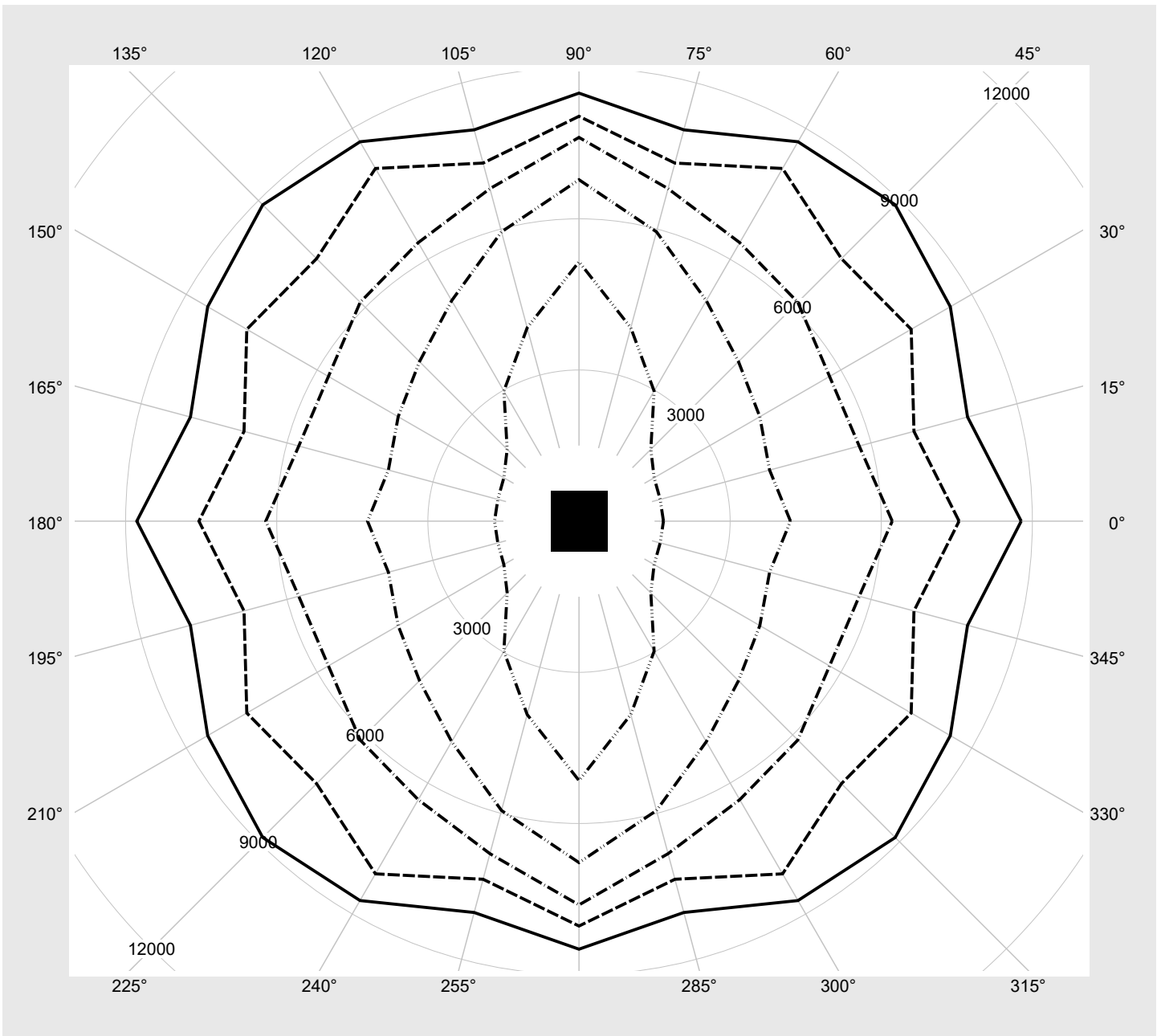
**Familie**  
Highbay 11

**Bestell-Nr.: 51HN32DA4MCA**  
**EAN: 4069025446626**

**LP-Nummer**  
**59710\_467**

**Leuchtdichten in cd/m<sup>2</sup>**

γ 65°
γ 70°
γ 75°
γ 80°
γ 85°



## Lichttechnischer Prüfbefund

|                              |   |                               |
|------------------------------|---|-------------------------------|
| <b>Familie</b><br>Highbay 11 | <b>Bestell-Nr.: 51HN32DA4MCA</b><br><b>EAN: 4069025446626</b> | <b>LP-Nummer</b><br>59710_467 |
|------------------------------|---|-------------------------------|

|                           |                           |               |
|---------------------------|---------------------------|---------------|
| <b>Dimmstufen-Tabelle</b> | Umgebungstemperatur: 25°C | <b>sITeco</b> |
|---------------------------|---------------------------|---------------|

| Lichtstrom [%] | Dimmstufe linear | Dimmstufe logarithmisch | Lichtstrom [lm] | Systemleistung [W] |
|----------------|------------------|-------------------------|-----------------|--------------------|
| 100            | 254              | 254                     | 28000           | 146.6              |
| 95             | 240              | 252                     | 26584           | 138.2              |
| 90             | 227              | 250                     | 25246           | 130.3              |
| 85             | 213              | 248                     | 23796           | 121.9              |
| 80             | 200              | 245                     | 22443           | 114.2              |
| 75             | 186              | 243                     | 20975           | 105.9              |
| 70             | 173              | 240                     | 19598           | 98.3               |
| 65             | 160              | 237                     | 18213           | 90.7               |
| 60             | 147              | 234                     | 16807           | 83.1               |
| 55             | 134              | 231                     | 15399           | 75.7               |
| 50             | 121              | 227                     | 13971           | 68.3               |
| 45             | 109              | 223                     | 12641           | 61.5               |
| 40             | 96               | 218                     | 11192           | 54.1               |
| 35             | 84               | 213                     | 9836            | 47.3               |
| 30             | 71               | 207                     | 8355            | 40.2               |
| 25             | 59               | 201                     | 6969            | 33.5               |
| 20             | 47               | 192                     | 5572            | 27.0               |
| 15             | 35               | 181                     | 4154            | 20.6               |
| 10             | 24               | 168                     | 2843            | 14.6               |
| 5              | 12               | 142                     | 1395            | 7.8                |
| 2              | 5                | 110                     | 539             | 3.9                |