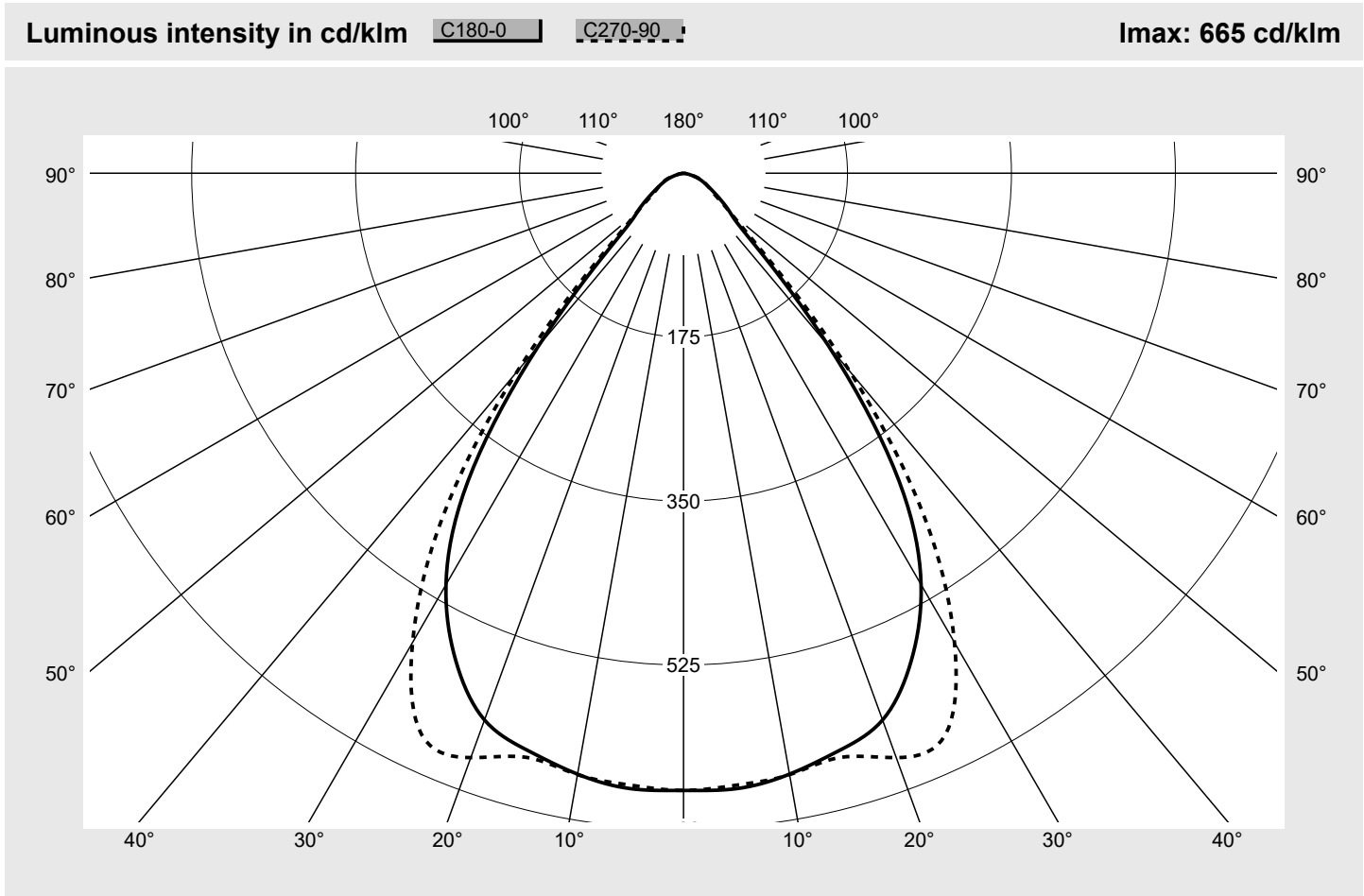


# Photometric test report

|                                                                                   |                                                                |                                                                                               |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Family</b><br><b>Highbay 11 Xtreme</b>                                         | <b>Order number: 51HF82DA4NMA</b><br><b>EAN: 4058352919972</b> | <b>LP number</b><br><b>59481_21</b>                                                           |
|  | <b>Version</b>                                                 | wide distribution, toughened safety glass, chain suspension                                   |
|                                                                                   | <b>Lamps</b>                                                   | LED 4000 K   CRI ≥ 80                                                                         |
|                                                                                   | <b>Controlgear</b>                                             | ECG-DALI                                                                                      |
|                                                                                   | <b>Rated values</b>                                            | Net luminous flux = 33700 lm<br>Power consumption = 187.7 W<br>Luminous efficacy = 179.5 lm/W |
|                                                                                   |                                                                | <b>serial documentation</b><br><b>15.06.2026</b>                                              |
|                                                                                   |                                                                |            |



| Classifications |                    | Luminaire light output ratios |        |
|-----------------|--------------------|-------------------------------|--------|
| DIN 5040        | A 6 0              | $\eta_{LB}$                   | 100.0% |
| CIE             | N1=83 N2=96 N3=100 | $\phi_u$                      | 100.0% |
|                 | N4=100 N5=100      | $\phi_o$                      | 0.0%   |

| Measurement conditions    |
|---------------------------|
| DIN EN 13032 and DIN 5032 |

Photometric test report

|                                          |                                                  |                            |
|------------------------------------------|--------------------------------------------------|----------------------------|
| Family<br>Highbay 11 Xtreme              | Order number: 51HF82DA4NMA<br>EAN: 4058352919972 | LP number<br>59481_21      |
| Table of values for luminous intensities |                                                  | Maximum luminous intensity |
|                                          |                                                  | siteco                     |

| C-<br>planes | 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                | Total<br>Phi-zone |
|--------------|------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|-------------------------|-------------------|
| γ            | Luminous intensity in cd/klm |                             |                             |                             |                             |                             |             | Luminous flux in lm/klm |                   |
| 0°           | 658.9                        | 658.9                       | 658.9                       | 658.9                       | 658.9                       | 658.9                       | 658.9       | 3.9                     | 3.9               |
| 5°           | 659.4                        | 658.0                       | 657.6                       | 657.5                       | 656.3                       | 656.4                       | 655.7       | 31.4                    | 35.3              |
| 10°          | 651.4                        | 650.9                       | 652.2                       | 654.2                       | 654.0                       | 653.1                       | 651.9       | 62.1                    | 97.5              |
| 15°          | 638.5                        | 638.9                       | 644.0                       | 649.4                       | 650.3                       | 647.7                       | 645.7       | 91.6                    | 189.0             |
| 20°          | 621.1                        | 623.4                       | 633.8                       | 648.8                       | 662.5                       | 665.0                       | 663.9       | 121.1                   | 310.1             |
| 25°          | 574.8                        | 581.6                       | 605.3                       | 632.9                       | 653.3                       | 661.4                       | 661.4       | 144.9                   | 455.0             |
| 30°          | 507.1                        | 516.1                       | 549.5                       | 579.4                       | 585.2                       | 579.5                       | 578.4       | 153.1                   | 608.1             |
| 35°          | 401.0                        | 412.8                       | 459.3                       | 493.1                       | 482.7                       | 458.1                       | 448.6       | 143.1                   | 751.2             |
| 40°          | 241.2                        | 257.9                       | 312.8                       | 355.4                       | 335.4                       | 297.6                       | 275.9       | 106.7                   | 858.0             |
| 45°          | 104.4                        | 112.7                       | 137.4                       | 158.8                       | 151.2                       | 131.0                       | 122.3       | 52.0                    | 909.9             |
| 50°          | 64.5                         | 64.2                        | 65.8                        | 69.0                        | 66.2                        | 63.4                        | 64.8        | 27.5                    | 937.5             |
| 55°          | 46.7                         | 46.0                        | 43.6                        | 42.3                        | 40.8                        | 40.9                        | 42.1        | 19.3                    | 956.8             |
| 60°          | 33.4                         | 31.7                        | 30.6                        | 30.2                        | 31.1                        | 31.3                        | 32.1        | 14.9                    | 971.6             |
| 65°          | 24.6                         | 23.1                        | 22.4                        | 22.7                        | 24.0                        | 23.8                        | 25.6        | 11.7                    | 983.3             |
| 70°          | 17.3                         | 16.4                        | 15.6                        | 16.8                        | 17.7                        | 18.3                        | 19.2        | 8.8                     | 992.2             |
| 75°          | 9.4                          | 9.7                         | 9.3                         | 10.5                        | 10.4                        | 10.4                        | 11.2        | 5.3                     | 997.5             |
| 80°          | 3.2                          | 3.3                         | 3.5                         | 4.0                         | 4.3                         | 4.4                         | 4.5         | 2.1                     | 999.6             |
| 85°          | 0.5                          | 0.5                         | 0.5                         | 0.6                         | 0.8                         | 1.0                         | 1.1         | 0.4                     | 1000.0            |
| 90°          | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 95°          | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 100°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 105°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 110°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 115°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 120°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 125°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 130°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 135°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 140°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 145°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 150°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 155°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 160°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 165°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 170°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 175°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |
| 180°         | 0.0                          | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0                         | 0.0         | 0.0                     | 1000.0            |

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|                              |     |                                                  |      |      |      |      |                    |      |                       |      |
|------------------------------|-----|--------------------------------------------------|------|------|------|------|--------------------|------|-----------------------|------|
| Family<br>Highbay 11 Xtreme  |     | Order number: 51HF82DA4NMA<br>EAN: 4058352919972 |      |      |      |      |                    |      | LP number<br>59481_21 |      |
| UGR-Table                    |     | Standard room                                    |      |      |      |      |                    |      | siteco                |      |
| Reflection factor of ceiling |     | 0.7                                              | 0.7  | 0.5  | 0.5  | 0.3  | 0.7                | 0.7  | 0.5                   | 0.5  |
| Reflection factor of walls   |     | 0.5                                              | 0.3  | 0.5  | 0.3  | 0.3  | 0.5                | 0.3  | 0.5                   | 0.3  |
| Reflection factor of floor   |     | 0.2                                              | 0.2  | 0.2  | 0.2  | 0.2  | 0.2                | 0.2  | 0.2                   | 0.2  |
| Room dimensions              |     | View crosswise (C0)                              |      |      |      |      | View endwise (C90) |      |                       |      |
| x                            | y   |                                                  |      |      |      |      |                    |      |                       |      |
| 2H                           | 2H  | 22.9                                             | 24.2 | 23.2 | 24.5 | 24.8 | 23.3               | 24.6 | 23.7                  | 25.0 |
|                              | 3H  | 23.0                                             | 24.2 | 23.4 | 24.6 | 24.9 | 23.5               | 24.7 | 23.9                  | 25.0 |
|                              | 4H  | 23.1                                             | 24.2 | 23.5 | 24.5 | 24.9 | 23.6               | 24.7 | 24.0                  | 25.0 |
|                              | 6H  | 23.1                                             | 24.1 | 23.5 | 24.4 | 24.8 | 23.6               | 24.6 | 24.0                  | 24.9 |
|                              | 8H  | 23.1                                             | 24.0 | 23.6 | 24.4 | 24.8 | 23.7               | 24.5 | 24.1                  | 24.9 |
|                              | 12H | 23.1                                             | 23.9 | 23.5 | 24.3 | 24.7 | 23.6               | 24.4 | 24.1                  | 24.8 |
| 4H                           | 2H  | 22.8                                             | 23.9 | 23.2 | 24.3 | 24.7 | 23.3               | 24.4 | 23.7                  | 24.7 |
|                              | 3H  | 23.1                                             | 24.0 | 23.5 | 24.4 | 24.8 | 23.6               | 24.5 | 24.0                  | 24.8 |
|                              | 4H  | 23.2                                             | 24.0 | 23.6 | 24.4 | 24.8 | 23.7               | 24.5 | 24.1                  | 24.9 |
|                              | 6H  | 23.2                                             | 23.9 | 23.7 | 24.3 | 24.8 | 23.7               | 24.4 | 24.2                  | 24.8 |
|                              | 8H  | 23.2                                             | 23.8 | 23.6 | 24.2 | 24.7 | 23.7               | 24.3 | 24.2                  | 24.7 |
|                              | 12H | 23.2                                             | 23.7 | 23.7 | 24.1 | 24.6 | 23.7               | 24.2 | 24.2                  | 24.7 |
| 8H                           | 4H  | 23.2                                             | 23.8 | 23.7 | 24.2 | 24.7 | 23.6               | 24.2 | 24.1                  | 24.7 |
|                              | 6H  | 23.2                                             | 23.7 | 23.7 | 24.2 | 24.7 | 23.7               | 24.2 | 24.2                  | 24.6 |
|                              | 8H  | 23.1                                             | 23.6 | 23.7 | 24.1 | 24.6 | 23.6               | 24.1 | 24.2                  | 24.6 |
|                              | 12H | 23.1                                             | 23.5 | 23.7 | 24.0 | 24.5 | 23.7               | 24.0 | 24.2                  | 24.5 |
| 12H                          | 4H  | 23.2                                             | 23.7 | 23.7 | 24.2 | 24.7 | 23.6               | 24.1 | 24.1                  | 24.6 |
|                              | 6H  | 23.2                                             | 23.6 | 23.7 | 24.1 | 24.6 | 23.7               | 24.1 | 24.2                  | 24.6 |
|                              | 8H  | 23.1                                             | 23.5 | 23.7 | 24.0 | 24.5 | 23.6               | 24.0 | 24.2                  | 24.5 |

|                          |          |                                 |                             |                               |                             |                             |                             |
|--------------------------|----------|---------------------------------|-----------------------------|-------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Luminance table          |          | Max. for $\gamma \geq 65^\circ$ |                             | Photometric dimensions in mm: |                             | L = 545<br>B = 235          |                             |
| C-planes                 | $\gamma$ | 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° |
|                          |          |                                 | Luminance in cd/m²          |                               |                             |                             |                             |
| 45°<br>50°<br>55°<br>60° | $\gamma$ | 38832.4                         | 41922.4                     | 51132.7                       | 59103.1                     | 56255.3                     | 48749.3                     |
|                          |          | 26399.2                         | 26269.0                     | 26915.4                       | 28255.2                     | 27097.5                     | 25972.6                     |
|                          |          | 21442.3                         | 21101.5                     | 20002.3                       | 19393.1                     | 18732.5                     | 18784.4                     |
|                          |          | 17570.0                         | 16700.1                     | 16123.9                       | 15907.1                     | 16347.6                     | 16490.7                     |
| 65°<br>70°<br>75°<br>80° | $\gamma$ | 15315.6                         | 14364.9                     | 13930.9                       | 14117.1                     | 14964.5                     | 14831.9                     |
|                          |          | 13327.1                         | 12646.3                     | 11975.4                       | 12904.8                     | 13650.3                     | 14054.2                     |
|                          |          | 9531.0                          | 9859.4                      | 9419.2                        | 10691.0                     | 10600.6                     | 10598.5                     |
|                          |          | 4865.6                          | 5047.4                      | 5324.7                        | 6050.5                      | 6582.4                      | 6699.1                      |
| 85°                      | $\gamma$ | 1624.2                          | 1551.8                      | 1566.9                        | 1856.7                      | 2433.3                      | 2952.6                      |

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Family  
Highbay 11 Xtreme

Order number: 51HF82DA4NMA  
EAN: 4058352919972

LP number  
59481\_21

Luminance values in cd/m²

γ 65°

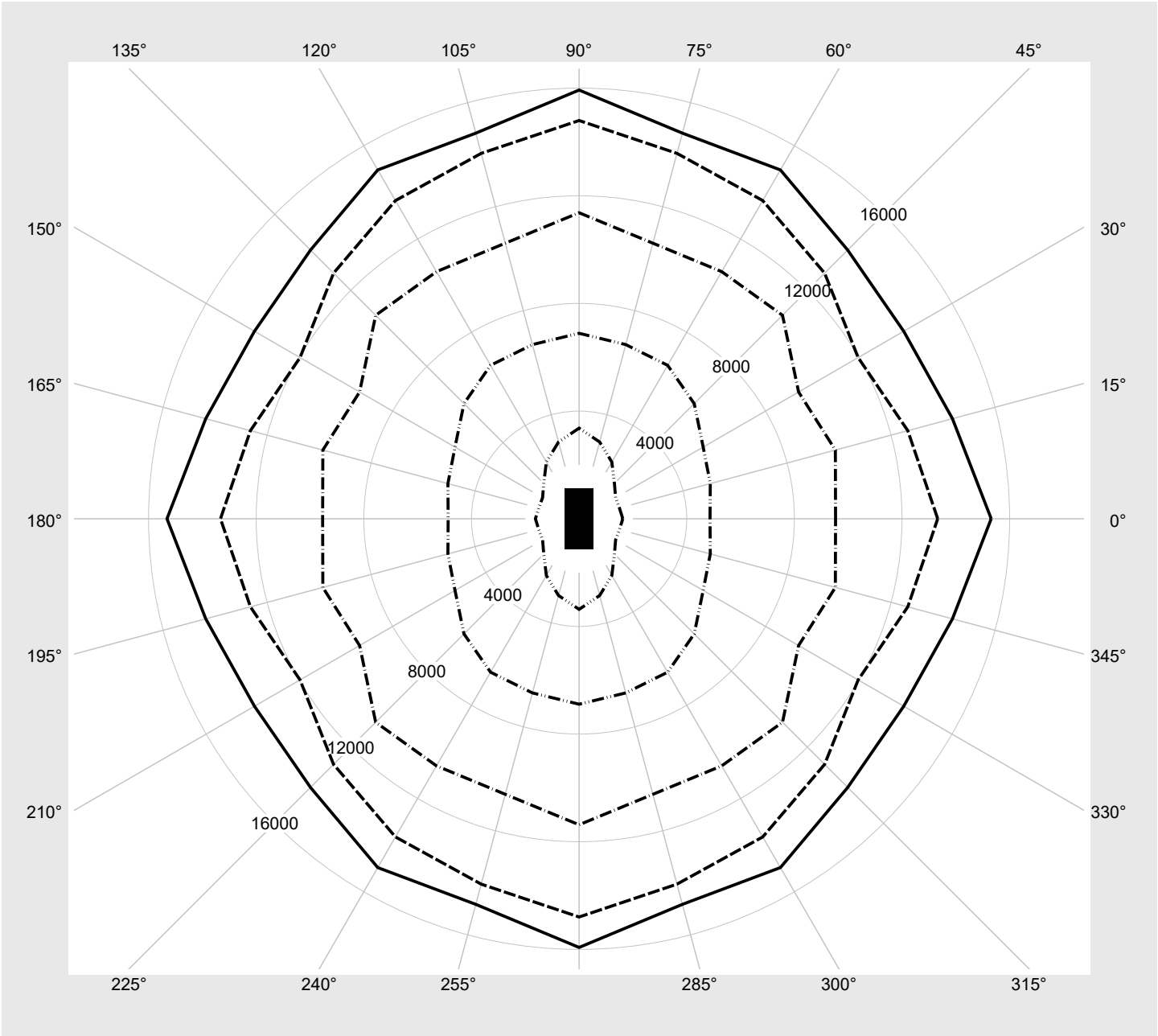
γ 70°

γ 75°

γ 80°

γ 85°

siteco



# Photometric test report

|                                           |                                                                |                                        |
|-------------------------------------------|----------------------------------------------------------------|----------------------------------------|
| <b>Family</b><br><b>Highbay 11 Xtreme</b> | <b>Order number: 51HF82DA4NMA</b><br><b>EAN: 4058352919972</b> | <b>LP number</b><br><b>59481_21</b>    |
| <b>Dimming levels table</b>               |                                                                | <b>environmental temperature: 25°C</b> |

siteco

| Luminous flux [%] | Dimming level linear | Dimming level logarithmic | Luminous flux [lm] | Power consumption [W] |
|-------------------|----------------------|---------------------------|--------------------|-----------------------|
| 100               | 254                  | 254                       | 33700              | 187.7                 |
| 95                | 240                  | 252                       | 32017              | 177.2                 |
| 90                | 226                  | 250                       | 30323              | 166.8                 |
| 85                | 212                  | 247                       | 28632              | 156.3                 |
| 80                | 199                  | 245                       | 27008              | 146.5                 |
| 75                | 185                  | 242                       | 25280              | 136.3                 |
| 70                | 172                  | 240                       | 23633              | 127.1                 |
| 65                | 158                  | 237                       | 21844              | 116.3                 |
| 60                | 145                  | 233                       | 20166              | 107.0                 |
| 55                | 132                  | 230                       | 18473              | 96.9                  |
| 50                | 120                  | 227                       | 16882              | 88.8                  |
| 45                | 107                  | 222                       | 15146              | 79.4                  |
| 40                | 95                   | 218                       | 13521              | 70.7                  |
| 35                | 82                   | 213                       | 11741              | 61.4                  |
| 30                | 70                   | 207                       | 10077              | 52.7                  |
| 25                | 58                   | 200                       | 8397               | 43.9                  |
| 20                | 46                   | 191                       | 6697               | 35.3                  |
| 15                | 35                   | 181                       | 5123               | 27.4                  |
| 10                | 23                   | 166                       | 3388               | 18.9                  |
| 5                 | 11                   | 139                       | 1632               | 10.3                  |
| 2                 | 4                    | 102                       | 598                | 5.4                   |

|                             |  |                                        |
|-----------------------------|--|----------------------------------------|
| <b>Dimming levels table</b> |  | <b>environmental temperature: 45°C</b> |
|-----------------------------|--|----------------------------------------|

| Luminous flux [%] | Dimming level linear | Dimming level logarithmic | Luminous flux [lm] | Power consumption [W] |
|-------------------|----------------------|---------------------------|--------------------|-----------------------|
| 100               | 254                  | 254                       | 32680              | 186.9                 |
| 95                | 240                  | 252                       | 31052              | 176.5                 |
| 90                | 226                  | 250                       | 29416              | 166.0                 |
| 85                | 212                  | 247                       | 27783              | 155.6                 |
| 80                | 198                  | 245                       | 26092              | 145.2                 |
| 75                | 185                  | 242                       | 24544              | 135.6                 |
| 70                | 171                  | 240                       | 22828              | 125.5                 |
| 65                | 158                  | 237                       | 21219              | 115.8                 |
| 60                | 145                  | 233                       | 19596              | 106.5                 |
| 55                | 132                  | 230                       | 17957              | 96.4                  |
| 50                | 119                  | 226                       | 16286              | 87.7                  |
| 45                | 107                  | 222                       | 14733              | 79.1                  |
| 40                | 94                   | 218                       | 13026              | 69.7                  |
| 35                | 82                   | 213                       | 11431              | 61.1                  |
| 30                | 70                   | 207                       | 9815               | 52.4                  |
| 25                | 58                   | 200                       | 8182               | 43.7                  |
| 20                | 46                   | 191                       | 6530               | 35.1                  |
| 15                | 34                   | 180                       | 4857               | 26.5                  |
| 10                | 23                   | 166                       | 3307               | 18.8                  |
| 5                 | 11                   | 139                       | 1594               | 10.3                  |
| 2                 | 4                    | 102                       | 585                | 5.4                   |

Photometric test report

|                             |                                                  |                       |
|-----------------------------|--------------------------------------------------|-----------------------|
| Family<br>Highbay 11 Xtreme | Order number: 51HF82DA4NMA<br>EAN: 4058352919972 | LP number<br>59481_21 |
| Luminousfluxs table         |                                                  | siteco                |

| Temperature<br>°C | Luminous flux<br>lm | Power consumption<br>W |
|-------------------|---------------------|------------------------|
| 25.0              | 33700.0             | 187.7                  |
| 45.0              | 32680.0             | 186.9                  |