



# Photometric test report

|   |  |   |
|---|--|---|
| <b>Family</b><br><b>Highbay 11</b>  | <b>Order number: 51HN11DA5KDA</b><br><b>EAN: 4069025424136</b> | <b>LP number</b><br><b>59711_406</b>  |
|  | <b>Version</b>   | primary light control with lens, PMMA, housing, white, narrow distribution                    |
|   | <b>Lamps</b>   | LED 5000 K   CRI ≥ 80   |
|   | <b>Controlgear</b>   | ECG-DALI  |
|   | <b>Setting</b>   | AC-mode   |
|   | <b>Rated values</b>  | Net luminous flux = 22910 lm<br>Power consumption = 117.2 W<br>Luminous efficacy = 195.5 lm/W |
|   |  | <b>serial documentation</b><br>10.04.2025   |
|   |  |            |

**Luminous intensity in cd/klm**    **C180-0**    **C270-90**    **Imax: 2679 cd/klm**



| Classifications |                                     |
|-----------------|-------------------------------------|
| DIN 5040        | A 7 0                               |
| CIE             | N1=85 N2=97 N3=100<br>N4=100 N5=100 |

| Luminaire light output ratios |        |
|-------------------------------|--------|
| $\eta_{LB}$                   | 100.0% |
| $\phi_u$                      | 100.0% |
| $\phi_o$                      | 0.0%   |

**Measurement conditions**  
 DIN EN 13032 and DIN 5032

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|--|--|----------------------------|
| Family<br>Highbay 11                     | Order number: 51HN11DA5KDA<br>EAN: 4069025424136 | LP number<br>59711_406     |
| Table of values for luminous intensities |  | Maximum luminous intensity |
|  |  | <b>siteco</b>              |

| C-planes<br>$\gamma$         | 0°<br>180° | 15°                  | 30°                  | 45°                  | 60°                  | 75°                  | 90°<br>270°             | Phi-zone | Total<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° |                         |          |                   |
| Luminous intensity in cd/klm |            |                      |                      |                      |                      |                      | Luminous flux in lm/klm |          |                   |
| 0,0°                         | 2678.6     | 2678.6               | 2678.6               | 2678.6               | 2678.6               | 2678.6               | 2678.6                  | 4.0      | 4.0               |
| 2,5°                         | 2608.0     | 2619.4               | 2619.4               | 2616.5               | 2617.6               | 2616.2               | 2606.1                  | 31.3     | 35.3              |
| 5,0°                         | 2420.1     | 2415.7               | 2414.1               | 2408.4               | 2406.6               | 2402.3               | 2391.7                  | 57.6     | 92.8              |
| 7,5°                         | 2113.4     | 2116.1               | 2112.3               | 2103.0               | 2097.6               | 2090.5               | 2079.6                  | 75.2     | 168.1             |
| 10,0°                        | 1780.1     | 1768.7               | 1762.7               | 1751.6               | 1743.6               | 1735.2               | 1724.7                  | 83.4     | 251.5             |
| 12,5°                        | 1410.1     | 1409.3               | 1404.7               | 1395.9               | 1388.1               | 1380.5               | 1373.1                  | 82.8     | 334.3             |
| 15,0°                        | 1106.5     | 1097.8               | 1095.0               | 1089.4               | 1083.1               | 1078.4               | 1073.9                  | 77.3     | 411.5             |
| 17,5°                        | 830.1      | 840.2                | 835.5                | 831.1                | 826.6                | 824.9                | 824.1                   | 68.5     | 480.0             |
| 20,0°                        | 671.1      | 661.9                | 651.8                | 643.2                | 639.9                | 639.4                | 641.0                   | 60.8     | 540.8             |
| 22,5°                        | 531.9      | 530.5                | 514.2                | 498.9                | 497.0                | 496.6                | 496.8                   | 53.4     | 594.2             |
| 25,0°                        | 450.6      | 441.3                | 420.6                | 401.3                | 399.0                | 395.8                | 392.4                   | 47.9     | 642.1             |
| 27,5°                        | 370.8      | 368.7                | 351.4                | 331.7                | 326.8                | 321.1                | 316.0                   | 43.1     | 685.2             |
| 30,0°                        | 320.4      | 312.1                | 300.8                | 284.1                | 278.0                | 270.2                | 264.7                   | 39.7     | 724.9             |
| 32,5°                        | 271.0      | 266.8                | 259.0                | 245.6                | 238.0                | 229.0                | 224.7                   | 36.5     | 761.4             |
| 35,0°                        | 235.8      | 228.9                | 222.7                | 210.5                | 201.6                | 193.0                | 191.7                   | 33.3     | 794.7             |
| 37,5°                        | 204.4      | 197.8                | 191.5                | 181.1                | 172.0                | 164.3                | 162.4                   | 30.3     | 825.0             |
| 40,0°                        | 176.7      | 170.7                | 163.1                | 154.3                | 146.1                | 138.3                | 135.6                   | 27.3     | 852.2             |
| 42,5°                        | 147.6      | 145.5                | 138.6                | 130.6                | 123.2                | 115.8                | 113.3                   | 24.2     | 876.4             |
| 45,0°                        | 126.0      | 121.8                | 116.3                | 109.0                | 102.0                | 95.3                 | 93.2                    | 21.1     | 897.6             |
| 47,5°                        | 103.2      | 101.5                | 97.1                 | 90.9                 | 84.6                 | 78.4                 | 76.7                    | 18.3     | 915.9             |
| 50,0°                        | 85.9       | 82.9                 | 79.4                 | 74.6                 | 69.1                 | 63.7                 | 61.9                    | 15.5     | 931.4             |
| 52,5°                        | 69.0       | 67.2                 | 64.5                 | 61.0                 | 56.2                 | 51.6                 | 49.7                    | 13.0     | 944.4             |
| 55,0°                        | 55.6       | 54.1                 | 52.2                 | 49.5                 | 45.7                 | 41.7                 | 40.0                    | 10.9     | 955.3             |
| 57,5°                        | 43.6       | 43.1                 | 41.8                 | 39.8                 | 37.0                 | 33.6                 | 32.2                    | 9.0      | 964.3             |
| 60,0°                        | 33.2       | 33.3                 | 33.9                 | 32.4                 | 30.5                 | 27.5                 | 26.1                    | 7.4      | 971.7             |
| 62,5°                        | 25.9       | 26.0                 | 27.0                 | 26.2                 | 25.1                 | 22.4                 | 21.3                    | 6.1      | 977.8             |
| 65,0°                        | 21.6       | 21.2                 | 21.7                 | 21.3                 | 20.9                 | 18.8                 | 17.7                    | 5.1      | 982.9             |
| 67,5°                        | 17.0       | 17.1                 | 17.8                 | 17.0                 | 17.3                 | 15.6                 | 14.8                    | 4.3      | 987.2             |
| 70,0°                        | 13.5       | 13.4                 | 14.4                 | 13.6                 | 14.1                 | 13.0                 | 12.4                    | 3.5      | 990.7             |
| 72,5°                        | 11.0       | 10.8                 | 10.9                 | 10.9                 | 11.0                 | 10.7                 | 10.6                    | 2.8      | 993.5             |
| 75,0°                        | 9.0        | 8.4                  | 8.4                  | 8.3                  | 8.6                  | 9.0                  | 8.9                     | 2.3      | 995.8             |
| 77,5°                        | 6.6        | 6.4                  | 6.2                  | 6.2                  | 6.6                  | 7.3                  | 7.4                     | 1.8      | 997.5             |
| 80,0°                        | 4.4        | 4.2                  | 4.1                  | 4.2                  | 4.7                  | 5.7                  | 5.8                     | 1.3      | 998.8             |
| 82,5°                        | 2.0        | 2.1                  | 2.2                  | 2.4                  | 3.0                  | 3.9                  | 4.1                     | 0.8      | 999.6             |
| 85,0°                        | 0.8        | 0.8                  | 0.8                  | 1.0                  | 1.5                  | 2.2                  | 2.4                     | 0.4      | 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            |

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| Family<br>Highbay 11 | Order number: 51HN11DA5KDA<br>EAN: 4069025424136 | LP number<br>59711_406 |
|----------------------|--|------------------------|

|           |               |        |  |
|-----------|---------------|--------|--|
| 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  | 0.3  |      |
| Reflection factor of walls   | 0.5                 | 0.3  | 0.5  | 0.3  | 0.3  | 0.5                | 0.3  | 0.5  | 0.3  | 0.3  |      |
| Reflection factor of floor   | 0.2                 | 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                  | 20.4 | 21.5 | 20.7 | 21.9 | 22.2               | 19.2 | 20.4 | 19.5 | 20.7 | 21.0 |
|                              | 3H                  | 20.6 | 21.6 | 21.0 | 22.0 | 22.3               | 19.5 | 20.5 | 19.8 | 20.8 | 21.2 |
|                              | 4H                  | 20.7 | 21.6 | 21.1 | 22.0 | 22.4               | 19.6 | 20.5 | 20.0 | 20.9 | 21.3 |
|                              | 6H                  | 20.7 | 21.6 | 21.1 | 21.9 | 22.3               | 19.7 | 20.6 | 20.2 | 21.0 | 21.4 |
|                              | 8H                  | 20.8 | 21.5 | 21.2 | 21.9 | 22.3               | 19.9 | 20.6 | 20.3 | 21.0 | 21.4 |
|                              | 12H                 | 20.7 | 21.4 | 21.2 | 21.8 | 22.2               | 19.9 | 20.5 | 20.3 | 20.9 | 21.4 |
| 4H                           | 2H                  | 20.4 | 21.4 | 20.8 | 21.7 | 22.1               | 19.4 | 20.3 | 19.8 | 20.7 | 21.0 |
|                              | 3H                  | 20.7 | 21.5 | 21.2 | 21.9 | 22.3               | 19.8 | 20.6 | 20.2 | 20.9 | 21.4 |
|                              | 4H                  | 20.9 | 21.6 | 21.3 | 22.0 | 22.4               | 20.0 | 20.7 | 20.4 | 21.1 | 21.5 |
|                              | 6H                  | 20.9 | 21.5 | 21.4 | 22.0 | 22.4               | 20.2 | 20.7 | 20.6 | 21.2 | 21.7 |
|                              | 8H                  | 20.9 | 21.4 | 21.4 | 21.9 | 22.4               | 20.2 | 20.8 | 20.7 | 21.2 | 21.7 |
|                              | 12H                 | 20.9 | 21.3 | 21.4 | 21.8 | 22.3               | 20.3 | 20.7 | 20.8 | 21.2 | 21.7 |
| 8H                           | 4H                  | 20.8 | 21.4 | 21.3 | 21.8 | 22.3               | 20.0 | 20.5 | 20.5 | 21.0 | 21.4 |
|                              | 6H                  | 20.9 | 21.3 | 21.4 | 21.8 | 22.3               | 20.2 | 20.6 | 20.7 | 21.1 | 21.6 |
|                              | 8H                  | 20.9 | 21.3 | 21.4 | 21.8 | 22.3               | 20.3 | 20.7 | 20.8 | 21.2 | 21.7 |
|                              | 12H                 | 20.9 | 21.2 | 21.4 | 21.7 | 22.2               | 20.4 | 20.7 | 20.9 | 21.2 | 21.7 |
| 12H                          | 4H                  | 20.8 | 21.3 | 21.3 | 21.7 | 22.2               | 20.0 | 20.4 | 20.5 | 20.9 | 21.4 |
|                              | 6H                  | 20.9 | 21.3 | 21.4 | 21.7 | 22.3               | 20.2 | 20.5 | 20.7 | 21.0 | 21.6 |
|                              | 8H                  | 20.9 | 21.2 | 21.4 | 21.7 | 22.2               | 20.3 | 20.6 | 20.8 | 21.1 | 21.7 |

|                 |                                 |                               |                    |
|-----------------|---------------------------------|-------------------------------|--------------------|
| Luminance table | Max. for $\gamma \geq 65^\circ$ | Photometric dimensions in mm: | L = 426<br>B = 264 |
|-----------------|---------------------------------|-------------------------------|--------------------|

| C-planes | $\gamma$ | Luminance 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°    |          | 36295.7                        | 35084.0                     | 33503.6                     | 31408.0                     | 29385.6                     | 27463.2                     | 26848.4     |  |
| 50,0°    |          | 27209.8                        | 26262.5                     | 25150.1                     | 23656.8                     | 21883.0                     | 20174.2                     | 19603.2     |  |
| 55,0°    |          | 19743.5                        | 19209.0                     | 18543.5                     | 17580.3                     | 16226.1                     | 14810.8                     | 14215.5     |  |
| 60,0°    |          | 13546.3                        | 13561.0                     | 13813.1                     | 13197.1                     | 12412.4                     | 11198.7                     | 10639.8     |  |
| 65,0°    |          | 10400.5                        | 10225.0                     | 10456.9                     | 10287.7                     | 10070.3                     | 9049.9                      | 8554.4      |  |
| 70,0°    |          | 8058.0                         | 7960.9                      | 8552.3                      | 8076.4                      | 8381.4                      | 7716.1                      | 7374.2      |  |
| 75,0°    |          | 7064.0                         | 6629.5                      | 6644.5                      | 6554.7                      | 6762.5                      | 7051.4                      | 7038.8      |  |
| 80,0°    |          | 5153.5                         | 4962.3                      | 4800.4                      | 4887.2                      | 5460.9                      | 6631.6                      | 6766.5      |  |
| 85,0°    |          | 1907.2                         | 1883.9                      | 1970.3                      | 2227.5                      | 3419.5                      | 5034.6                      | 5705.4      |  |

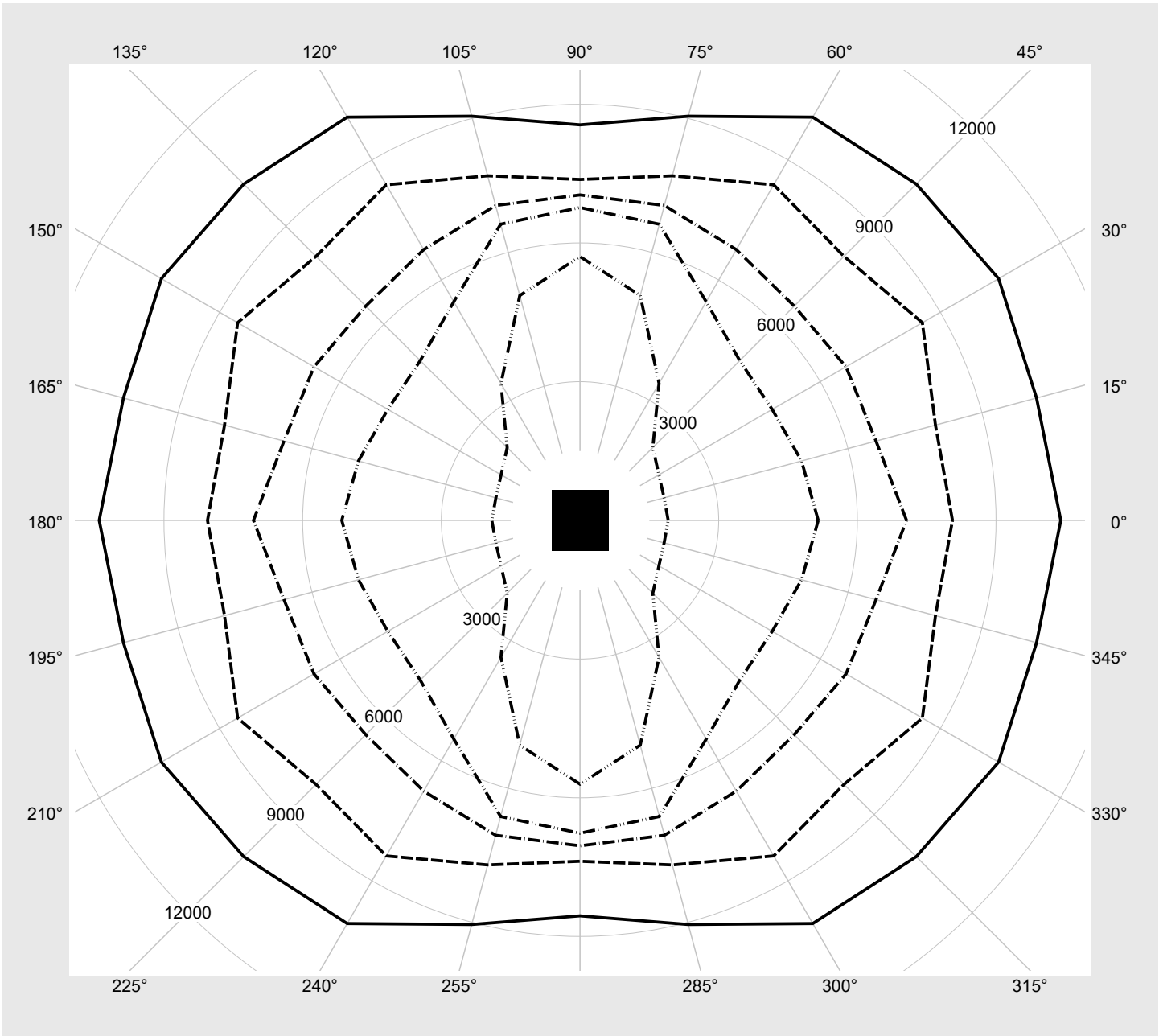
**Photometric test report**

|                             |  |                               |
|-----------------------------|--|-------------------------------|
| <b>Family</b><br>Highbay 11 | <b>Order number: 51HN11DA5KDA</b><br><b>EAN: 4069025424136</b> | <b>LP number</b><br>59711_406 |
|-----------------------------|--|-------------------------------|

**Luminance values in cd/m<sup>2</sup>**

$\gamma$  65°   
   $\gamma$  70°   
   $\gamma$  75°   
   $\gamma$  80°   
   $\gamma$  85°

**siteco**



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|----------------------|--|------------------------|
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|----------------------|--|------------------------|

|                      |                                 |        |
|----------------------|---------------------------------|--------|
| Dimming levels table | environmental temperature: 25°C | sITeco |
|----------------------|---------------------------------|--------|

| Luminous flux % | Dimming level linear | Dimming level logarithmic | Luminous flux [lm] | Power consumption [W] |
|-----------------|----------------------|---------------------------|--------------------|-----------------------|
| 100             | 254                  | 254                       | 22910              | 117.2                 |
| 95              | 240                  | 252                       | 21730              | 110.5                 |
| 90              | 227                  | 250                       | 20629              | 104.4                 |
| 85              | 213                  | 248                       | 19431              | 97.8                  |
| 80              | 200                  | 245                       | 18314              | 91.6                  |
| 75              | 187                  | 243                       | 17185              | 85.6                  |
| 70              | 174                  | 240                       | 16054              | 79.5                  |
| 65              | 161                  | 237                       | 14910              | 73.5                  |
| 60              | 148                  | 234                       | 13760              | 67.6                  |
| 55              | 135                  | 231                       | 12600              | 61.6                  |
| 50              | 122                  | 227                       | 11433              | 55.6                  |
| 45              | 110                  | 223                       | 10349              | 50.1                  |
| 40              | 97                   | 219                       | 9159               | 44.3                  |
| 35              | 85                   | 214                       | 8055               | 38.9                  |
| 30              | 72                   | 208                       | 6844               | 33.1                  |
| 25              | 60                   | 201                       | 5720               | 27.8                  |
| 20              | 48                   | 193                       | 4586               | 22.6                  |
| 15              | 36                   | 182                       | 3435               | 17.4                  |
| 10              | 24                   | 168                       | 2279               | 12.0                  |
| 5               | 12                   | 142                       | 1106               | 6.5                   |
| 2               | 6                    | 117                       | 517                | 3.8                   |