

## Photometric test report

**Family**  
**Highbay 11**

**Order number: 51HN12DB4QDA02**  
**EAN: 4069025307767**

**LP number**  
**59710\_61**

**serial**  
**documentation**  
**30.01.2025**

**siteco**



**Version** primary light control with lens, PMMA, housing, white, wide distribution, with Node BT

**Lamps** LED 4000 K | CRI ≥ 80

**Controlgear** ECG-DALI

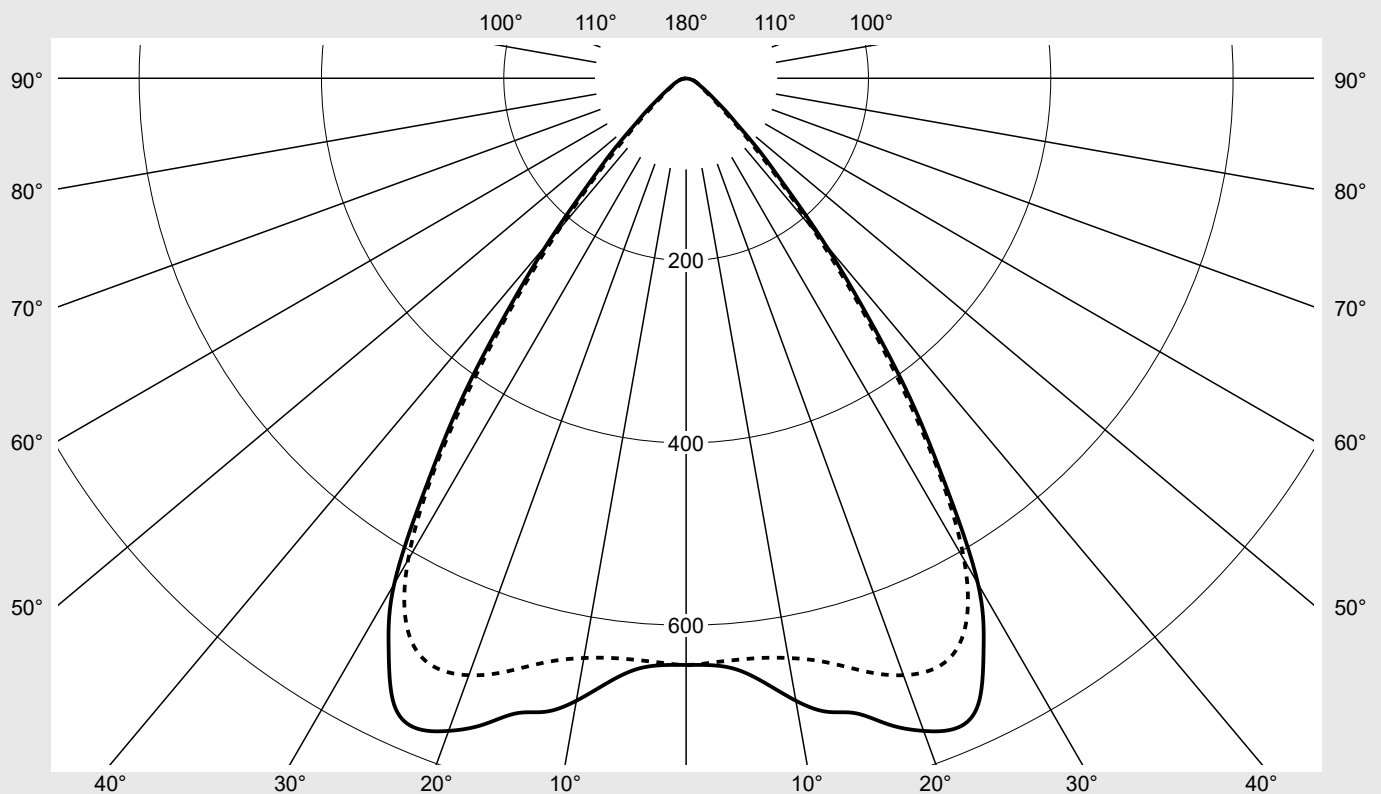
**Rated values** Net luminous flux = 36000 lm  
Power consumption = 178.2 W  
Luminous efficacy = 202 lm/W

**Luminous intensity in cd/klm**

**C180-0**

**C270-90**

**Imax: 772 cd/klm**



### Classifications

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

Photometric test report

|                                          |                                                    |                            |
|------------------------------------------|----------------------------------------------------|----------------------------|
| Family<br>Highbay 11                     | Order number: 51HN12DB4QDA02<br>EAN: 4069025307767 | LP number<br>59710_61      |
| 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 |                   |
| 0,0°         | 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            |

Photometric test report

|                              |     |                     |                                                    |      |      |      |                    |      |      |                       |      |
|------------------------------|-----|---------------------|----------------------------------------------------|------|------|------|--------------------|------|------|-----------------------|------|
| Family<br>Highbay 11         |     |                     | Order number: 51HN12DB4QDA02<br>EAN: 4069025307767 |      |      |      |                    |      |      | LP number<br>59710_61 |      |
| 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  | 20.6                | 21.8                                               | 20.9 | 22.2 | 22.5 | 20.3               | 21.5 | 20.6 | 21.9                  | 22.2 |
|                              | 3H  | 20.6                | 21.7                                               | 20.9 | 22.0 | 22.4 | 20.3               | 21.4 | 20.7 | 21.7                  | 22.1 |
|                              | 4H  | 20.6                | 21.6                                               | 21.0 | 21.9 | 22.3 | 20.3               | 21.3 | 20.7 | 21.7                  | 22.1 |
|                              | 6H  | 20.5                | 21.5                                               | 20.9 | 21.8 | 22.2 | 20.3               | 21.3 | 20.7 | 21.6                  | 22.0 |
|                              | 8H  | 20.6                | 21.4                                               | 21.0 | 21.8 | 22.2 | 20.4               | 21.2 | 20.8 | 21.6                  | 22.0 |
|                              | 12H | 20.6                | 21.3                                               | 21.0 | 21.7 | 22.1 | 20.4               | 21.1 | 20.8 | 21.5                  | 22.0 |
| 4H                           | 2H  | 20.4                | 21.5                                               | 20.8 | 21.8 | 22.2 | 20.2               | 21.2 | 20.6 | 21.6                  | 21.9 |
|                              | 3H  | 20.5                | 21.3                                               | 20.9 | 21.7 | 22.1 | 20.2               | 21.1 | 20.7 | 21.5                  | 21.9 |
|                              | 4H  | 20.5                | 21.2                                               | 20.9 | 21.7 | 22.1 | 20.3               | 21.0 | 20.7 | 21.5                  | 21.9 |
|                              | 6H  | 20.5                | 21.1                                               | 20.9 | 21.5 | 22.0 | 20.3               | 21.0 | 20.8 | 21.4                  | 21.9 |
|                              | 8H  | 20.4                | 21.0                                               | 20.9 | 21.5 | 22.0 | 20.3               | 20.9 | 20.8 | 21.4                  | 21.8 |
|                              | 12H | 20.5                | 20.9                                               | 20.9 | 21.4 | 21.9 | 20.4               | 20.8 | 20.9 | 21.3                  | 21.8 |
| 8H                           | 4H  | 20.4                | 21.0                                               | 20.9 | 21.5 | 21.9 | 20.2               | 20.8 | 20.7 | 21.2                  | 21.7 |
|                              | 6H  | 20.4                | 20.9                                               | 20.9 | 21.3 | 21.9 | 20.3               | 20.7 | 20.8 | 21.2                  | 21.7 |
|                              | 8H  | 20.4                | 20.8                                               | 20.9 | 21.3 | 21.8 | 20.3               | 20.7 | 20.8 | 21.2                  | 21.7 |
|                              | 12H | 20.4                | 20.7                                               | 20.9 | 21.2 | 21.7 | 20.3               | 20.6 | 20.8 | 21.1                  | 21.7 |
| 12H                          | 4H  | 20.4                | 20.9                                               | 20.9 | 21.4 | 21.9 | 20.2               | 20.7 | 20.7 | 21.2                  | 21.7 |
|                              | 6H  | 20.4                | 20.8                                               | 20.9 | 21.3 | 21.8 | 20.3               | 20.6 | 20.8 | 21.1                  | 21.7 |
|                              | 8H  | 20.4                | 20.7                                               | 20.9 | 21.2 | 21.7 | 20.3               | 20.6 | 20.8 | 21.1                  | 21.7 |

| Luminance table |                    | Max. for $\gamma \geq 65^\circ$ |                             | Photometric dimensions in mm: |                             | L = 852<br>B = 264          |             |
|-----------------|--------------------|---------------------------------|-----------------------------|-------------------------------|-----------------------------|-----------------------------|-------------|
| C-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° |
| $\gamma$        | Luminance in cd/m² |                                 |                             |                               |                             |                             |             |
| 45,0°           | 26556.1            | 26003.2                         | 27029.9                     | 27722.7                       | 24732.4                     | 23221.4                     | 23153.0     |
| 50,0°           | 14796.1            | 14446.2                         | 14431.0                     | 14688.7                       | 13180.8                     | 12567.5                     | 12351.9     |
| 55,0°           | 9298.5             | 9049.9                          | 9179.0                      | 9389.7                        | 8517.7                      | 8006.8                      | 7910.5      |
| 60,0°           | 6687.9             | 6456.1                          | 6783.6                      | 6987.2                        | 6541.9                      | 6058.3                      | 6135.4      |
| 65,0°           | 5643.2             | 5133.5                          | 5471.7                      | 5707.6                        | 5589.1                      | 5168.7                      | 5460.7      |
| 70,0°           | 4850.4             | 4425.5                          | 4895.3                      | 4736.2                        | 5195.7                      | 4729.7                      | 5165.3      |
| 75,0°           | 3997.3             | 3702.3                          | 3692.4                      | 3949.0                        | 4103.0                      | 4391.8                      | 4895.8      |
| 80,0°           | 2698.7             | 2518.1                          | 2664.6                      | 2878.5                        | 3249.0                      | 3821.4                      | 4355.9      |
| 85,0°           | 1078.0             | 1072.4                          | 1107.3                      | 1296.5                        | 1917.2                      | 2554.4                      | 3309.2      |

Photometric test report

Family  
Highbay 11

Order number: 51HN12DB4QDA02  
EAN: 4069025307767

LP number  
59710\_61

Luminance values in cd/m²

γ 65°

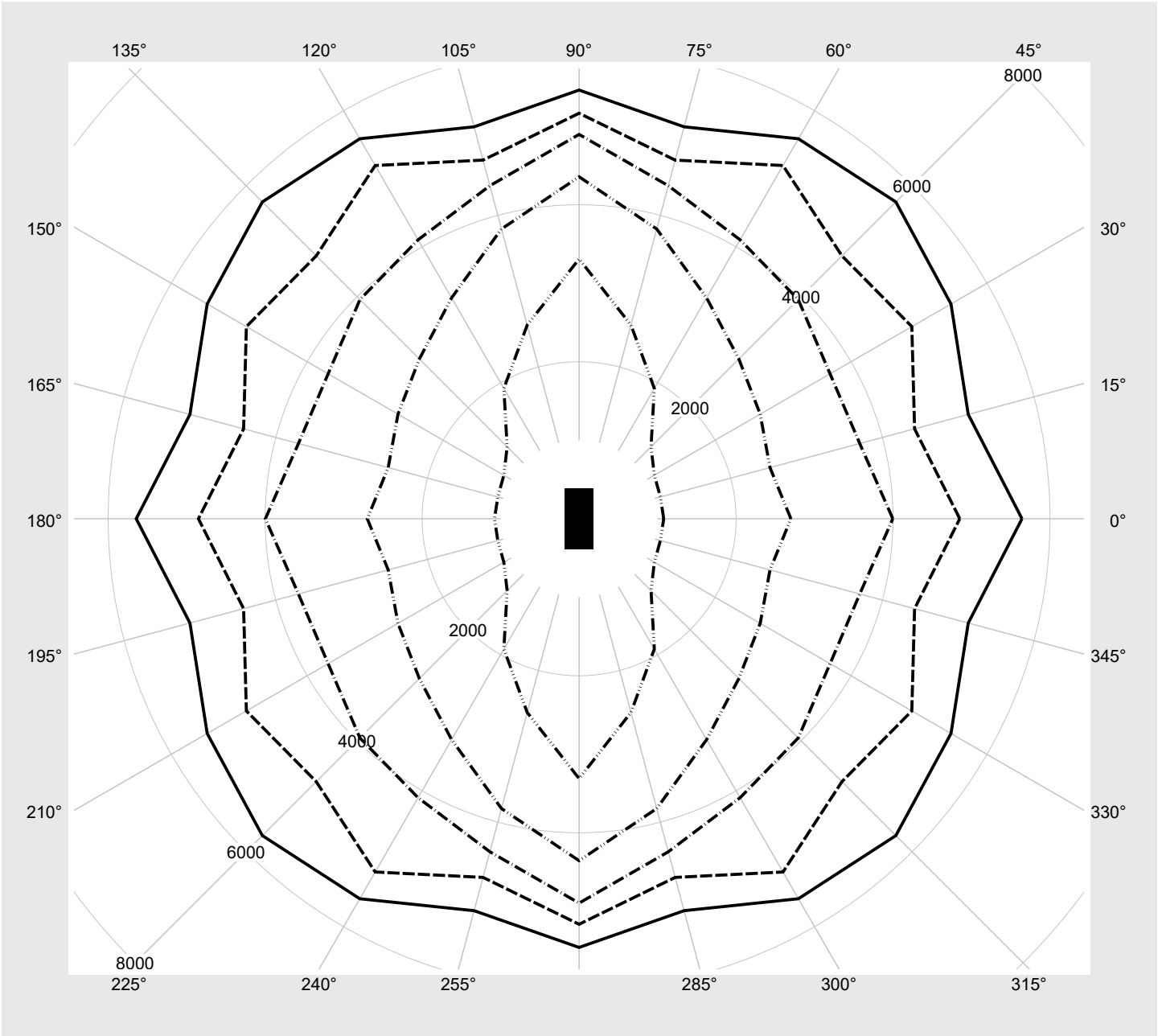
γ 70°

γ 75°

γ 80°

γ 85°

siteco



Photometric test report

|                      |                                                    |                                 |
|----------------------|----------------------------------------------------|---------------------------------|
| Family<br>Highbay 11 | Order number: 51HN12DB4QDA02<br>EAN: 4069025307767 | LP number<br>59710_61           |
| Dimming levels table |                                                    | environmental temperature: 25°C |

siteco

| Luminous flux<br>% | Dimming level<br>linear | Dimming level<br>logarithmic | Luminous flux<br>[lm] | Power consumption<br>[W] |
|--------------------|-------------------------|------------------------------|-----------------------|--------------------------|
| 100                | 254                     | 254                          | 36000                 | 178.2                    |
| 95                 | 241                     | 252                          | 34258                 | 168.8                    |
| 90                 | 227                     | 250                          | 32370                 | 158.7                    |
| 85                 | 214                     | 248                          | 30612                 | 149.5                    |
| 80                 | 201                     | 245                          | 28833                 | 140.1                    |
| 75                 | 188                     | 243                          | 27050                 | 131.0                    |
| 70                 | 175                     | 240                          | 25256                 | 121.7                    |
| 65                 | 162                     | 238                          | 23457                 | 112.7                    |
| 60                 | 149                     | 234                          | 21641                 | 103.6                    |
| 55                 | 136                     | 231                          | 19822                 | 94.6                     |
| 50                 | 123                     | 227                          | 17982                 | 85.6                     |
| 45                 | 111                     | 224                          | 16268                 | 77.4                     |
| 40                 | 98                      | 219                          | 14402                 | 68.5                     |
| 35                 | 86                      | 214                          | 12670                 | 60.4                     |
| 30                 | 73                      | 208                          | 10780                 | 51.5                     |
| 25                 | 61                      | 202                          | 9014                  | 43.5                     |
| 20                 | 49                      | 194                          | 7241                  | 35.6                     |
| 15                 | 37                      | 183                          | 5454                  | 27.7                     |
| 10                 | 25                      | 169                          | 3653                  | 19.8                     |
| 5                  | 13                      | 145                          | 1834                  | 11.6                     |
| 1                  | 4                       | 102                          | 463                   | 5.3                      |