

## Photometric test report

Family  
**Silica® 21**



Order number: **51MX33DA47WB**  
EAN: **4058352888964**

LP number  
**59331\_85**

serial  
documentation  
**02.08.2023**

**Version** Suspended luminaire, with homogeneous illumination, prismatic cover, direct-/ indirect distribution, extremely wide distribution,  $UGR \leq 16$  ( $L65 \leq 3000 \text{ cd/m}^2$ )

**Lamps** LED 4000 K | CRI  $\geq 80$

**Controlgear** ECG-DALI

**Rated values** Net luminous flux = 5910 lm  
Power consumption = 38.4 W  
Luminous efficacy = 153.9 lm/W

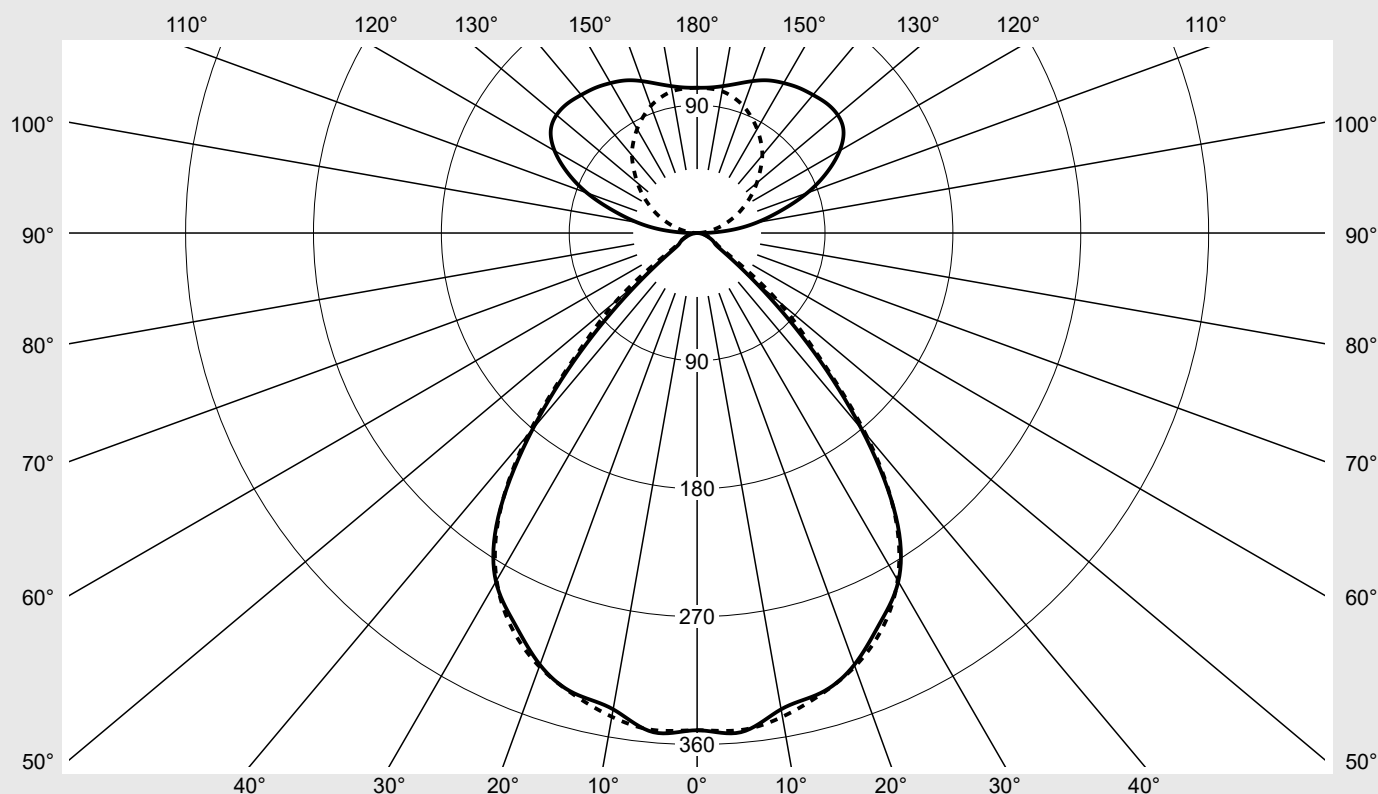
**siteco**

Luminous intensity in cd/klm

**C180-0**

**C270-90**

**Imax: 353 cd/klm**



### Classifications

DIN 5040 C 6 2  
CIE N1=78 N2=96 N3=99  
N4=55 N5=100

### Luminaire light output ratios

$\eta_{LB}$  100.0%  
 $\phi_u$  55.4%  
 $\phi_o$  44.6%

### Measurement conditions

DIN EN 13032 and DIN 5032

Photometric test report

|                                          |                                                  |                            |
|------------------------------------------|--------------------------------------------------|----------------------------|
| Family<br>Silica® 21                     | Order number: 51MX33DA47WB<br>EAN: 4058352888964 | LP number<br>59331_85      |
| 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°           | 349.9                        | 349.9                       | 349.9                       | 349.9                       | 349.9                       | 349.9                       | 349.9       | 2.1                     | 2.1               |
| 5°           | 352.7                        | 353.3                       | 353.1                       | 353.3                       | 352.9                       | 352.0                       | 351.1       | 16.9                    | 18.9              |
| 10°          | 340.4                        | 339.5                       | 339.7                       | 341.6                       | 345.2                       | 345.5                       | 345.7       | 32.6                    | 51.5              |
| 15°          | 335.2                        | 334.1                       | 331.5                       | 331.4                       | 333.4                       | 336.4                       | 336.2       | 47.3                    | 98.9              |
| 20°          | 323.4                        | 322.7                       | 318.7                       | 319.6                       | 318.0                       | 320.3                       | 324.7       | 60.1                    | 159.0             |
| 25°          | 303.6                        | 304.4                       | 302.2                       | 302.2                       | 302.6                       | 302.3                       | 307.6       | 70.2                    | 229.2             |
| 30°          | 283.2                        | 283.0                       | 279.5                       | 280.9                       | 281.3                       | 280.3                       | 282.2       | 77.1                    | 306.3             |
| 35°          | 244.1                        | 243.6                       | 241.2                       | 242.6                       | 243.2                       | 242.2                       | 242.9       | 76.3                    | 382.6             |
| 40°          | 179.9                        | 179.6                       | 180.9                       | 182.1                       | 183.5                       | 183.3                       | 184.4       | 64.1                    | 446.7             |
| 45°          | 110.1                        | 109.9                       | 111.2                       | 112.6                       | 113.8                       | 115.2                       | 117.5       | 43.7                    | 490.4             |
| 50°          | 51.7                         | 59.9                        | 67.3                        | 61.6                        | 55.5                        | 66.0                        | 73.6        | 26.1                    | 516.5             |
| 55°          | 21.0                         | 28.2                        | 26.7                        | 30.5                        | 23.0                        | 31.8                        | 29.6        | 12.4                    | 528.9             |
| 60°          | 14.1                         | 14.7                        | 15.5                        | 14.4                        | 14.4                        | 15.4                        | 16.1        | 7.1                     | 536.0             |
| 65°          | 11.6                         | 11.5                        | 12.0                        | 11.7                        | 12.2                        | 12.2                        | 12.1        | 5.9                     | 541.9             |
| 70°          | 8.4                          | 8.6                         | 8.9                         | 8.9                         | 9.1                         | 9.2                         | 9.2         | 4.6                     | 546.5             |
| 75°          | 5.8                          | 6.1                         | 6.7                         | 6.4                         | 6.5                         | 6.9                         | 6.6         | 3.4                     | 549.9             |
| 80°          | 3.5                          | 3.8                         | 4.1                         | 4.5                         | 4.2                         | 4.7                         | 4.7         | 2.3                     | 552.2             |
| 85°          | 1.8                          | 1.8                         | 1.8                         | 2.1                         | 2.2                         | 2.5                         | 2.7         | 1.2                     | 553.3             |
| 90°          | 5.2                          | 5.0                         | 5.3                         | 5.2                         | 3.1                         | 1.1                         | 0.4         | 2.0                     | 555.4             |
| 95°          | 23.9                         | 24.4                        | 26.2                        | 24.8                        | 15.9                        | 8.2                         | 4.2         | 10.3                    | 565.7             |
| 100°         | 42.8                         | 43.9                        | 44.3                        | 38.8                        | 26.0                        | 14.7                        | 9.7         | 17.5                    | 583.2             |
| 105°         | 61.3                         | 62.6                        | 61.4                        | 52.4                        | 35.9                        | 22.2                        | 16.3        | 24.1                    | 607.3             |
| 110°         | 82.4                         | 82.7                        | 77.5                        | 64.5                        | 46.0                        | 30.0                        | 23.3        | 30.4                    | 637.7             |
| 115°         | 100.7                        | 99.8                        | 92.0                        | 75.7                        | 55.8                        | 37.9                        | 31.1        | 35.4                    | 673.0             |
| 120°         | 115.9                        | 114.0                       | 103.9                       | 84.8                        | 64.9                        | 45.6                        | 38.7        | 38.8                    | 711.8             |
| 125°         | 125.7                        | 122.3                       | 111.1                       | 93.1                        | 72.6                        | 52.9                        | 46.8        | 40.3                    | 752.1             |
| 130°         | 129.2                        | 126.3                       | 114.5                       | 98.0                        | 78.5                        | 60.4                        | 54.8        | 39.9                    | 792.0             |
| 135°         | 129.0                        | 126.3                       | 115.8                       | 101.3                       | 83.2                        | 67.4                        | 62.9        | 38.1                    | 830.1             |
| 140°         | 126.9                        | 124.9                       | 116.2                       | 103.6                       | 87.1                        | 74.0                        | 71.4        | 35.5                    | 865.6             |
| 145°         | 124.8                        | 123.4                       | 116.1                       | 105.0                       | 90.7                        | 80.2                        | 78.2        | 32.3                    | 897.9             |
| 150°         | 121.9                        | 121.3                       | 114.8                       | 104.9                       | 93.7                        | 86.1                        | 84.5        | 28.5                    | 926.4             |
| 155°         | 118.5                        | 118.2                       | 111.9                       | 104.4                       | 96.0                        | 91.3                        | 90.1        | 24.2                    | 950.6             |
| 160°         | 113.8                        | 113.5                       | 108.5                       | 103.6                       | 98.0                        | 95.4                        | 95.1        | 19.5                    | 970.1             |
| 165°         | 108.8                        | 108.2                       | 105.6                       | 102.3                       | 100.0                       | 98.6                        | 98.8        | 14.6                    | 984.7             |
| 170°         | 105.0                        | 104.5                       | 103.8                       | 102.4                       | 101.4                       | 101.2                       | 101.3       | 9.8                     | 994.5             |
| 175°         | 102.8                        | 102.7                       | 102.1                       | 101.9                       | 102.0                       | 102.0                       | 102.0       | 4.9                     | 999.4             |
| 180°         | 102.2                        | 102.2                       | 102.2                       | 102.2                       | 102.2                       | 102.2                       | 102.2       | 0.6                     | 1000.0            |

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|                      |                                                  |                       |
|----------------------|--------------------------------------------------|-----------------------|
| Family<br>Silica® 21 | Order number: 51MX33DA47WB<br>EAN: 4058352888964 | LP number<br>59331_85 |
|----------------------|--------------------------------------------------|-----------------------|

| 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  | 15.4                | 16.3 | 16.3 | 17.2 | 18.3 | 15.6               | 16.5 | 16.5   | 17.4 | 18.5 |
|                              | 3H  | 15.3                | 16.1 | 16.2 | 17.0 | 18.1 | 15.6               | 16.3 | 16.5   | 17.2 | 18.4 |
|                              | 4H  | 15.3                | 16.0 | 16.2 | 16.9 | 18.1 | 15.6               | 16.3 | 16.5   | 17.2 | 18.4 |
|                              | 6H  | 15.2                | 15.8 | 16.1 | 16.8 | 18.0 | 15.5               | 16.2 | 16.5   | 17.1 | 18.3 |
|                              | 8H  | 15.1                | 15.7 | 16.1 | 16.7 | 17.9 | 15.4               | 16.0 | 16.4   | 17.0 | 18.2 |
|                              | 12H | 15.0                | 15.6 | 16.0 | 16.5 | 17.8 | 15.5               | 16.0 | 16.4   | 16.9 | 18.2 |
| 4H                           | 2H  | 15.2                | 15.9 | 16.1 | 16.8 | 17.9 | 15.3               | 16.0 | 16.2   | 16.9 | 18.1 |
|                              | 3H  | 15.2                | 15.7 | 16.1 | 16.7 | 17.9 | 15.4               | 15.9 | 16.3   | 16.9 | 18.1 |
|                              | 4H  | 15.2                | 15.7 | 16.1 | 16.6 | 17.9 | 15.4               | 15.9 | 16.4   | 16.9 | 18.1 |
|                              | 6H  | 15.1                | 15.6 | 16.1 | 16.6 | 17.8 | 15.5               | 15.9 | 16.4   | 16.9 | 18.1 |
|                              | 8H  | 15.1                | 15.5 | 16.1 | 16.5 | 17.8 | 15.5               | 15.9 | 16.5   | 16.9 | 18.1 |
|                              | 12H | 15.0                | 15.4 | 16.0 | 16.4 | 17.7 | 15.5               | 15.8 | 16.5   | 16.8 | 18.1 |
| 8H                           | 4H  | 15.0                | 15.4 | 16.0 | 16.4 | 17.7 | 15.2               | 15.6 | 16.2   | 16.6 | 17.9 |
|                              | 6H  | 15.1                | 15.5 | 16.1 | 16.4 | 17.7 | 15.4               | 15.7 | 16.4   | 16.7 | 18.0 |
|                              | 8H  | 15.1                | 15.4 | 16.1 | 16.4 | 17.7 | 15.5               | 15.8 | 16.5   | 16.8 | 18.1 |
|                              | 12H | 15.1                | 15.3 | 16.1 | 16.3 | 17.7 | 15.5               | 15.8 | 16.6   | 16.8 | 18.1 |
| 12H                          | 4H  | 15.0                | 15.3 | 16.0 | 16.3 | 17.6 | 15.1               | 15.5 | 16.2   | 16.5 | 17.8 |
|                              | 6H  | 15.1                | 15.3 | 16.1 | 16.3 | 17.6 | 15.3               | 15.6 | 16.3   | 16.6 | 17.9 |
|                              | 8H  | 15.1                | 15.3 | 16.1 | 16.3 | 17.6 | 15.4               | 15.7 | 16.4   | 16.7 | 18.0 |

| Luminance table |                    | Max. for $\gamma \geq 65^\circ$ |                             | Photometric dimensions in mm: |                             | L = 1200<br>B = 50          |             |
|-----------------|--------------------|---------------------------------|-----------------------------|-------------------------------|-----------------------------|-----------------------------|-------------|
| C-planes        | 0°                 | 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° |
|                 | 180°               |                                 |                             |                               |                             |                             |             |
| $\gamma$        | Luminance in cd/m² |                                 |                             |                               |                             |                             |             |
| 45°             | 15337.5            | 15304.3                         | 15496.3                     | 15678.9                       | 15848.6                     | 16051.1                     | 16365.1     |
| 50°             | 7920.8             | 9176.2                          | 10319.4                     | 9444.3                        | 8511.2                      | 10108.4                     | 11284.7     |
| 55°             | 3601.3             | 4851.2                          | 4582.4                      | 5234.8                        | 3953.7                      | 5459.5                      | 5074.6      |
| 60°             | 2787.2             | 2892.4                          | 3057.4                      | 2834.0                        | 2844.5                      | 3025.1                      | 3162.0      |
| 65°             | 2707.8             | 2686.6                          | 2794.5                      | 2726.0                        | 2841.6                      | 2837.4                      | 2825.1      |
| 70°             | 2422.6             | 2467.8                          | 2567.8                      | 2567.8                        | 2608.1                      | 2638.0                      | 2641.2      |
| 75°             | 2224.5             | 2308.9                          | 2544.5                      | 2430.0                        | 2485.9                      | 2613.0                      | 2527.4      |
| 80°             | 2009.2             | 2128.3                          | 2347.2                      | 2554.8                        | 2369.9                      | 2643.9                      | 2654.7      |
| 85°             | 1984.6             | 1997.0                          | 2072.7                      | 2395.9                        | 2519.1                      | 2872.9                      | 2994.9      |

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Silica® 21

Order number: 51MX33DA47WB  
EAN: 4058352888964

LP number  
59331\_85

Luminance values in cd/m²

γ 65°

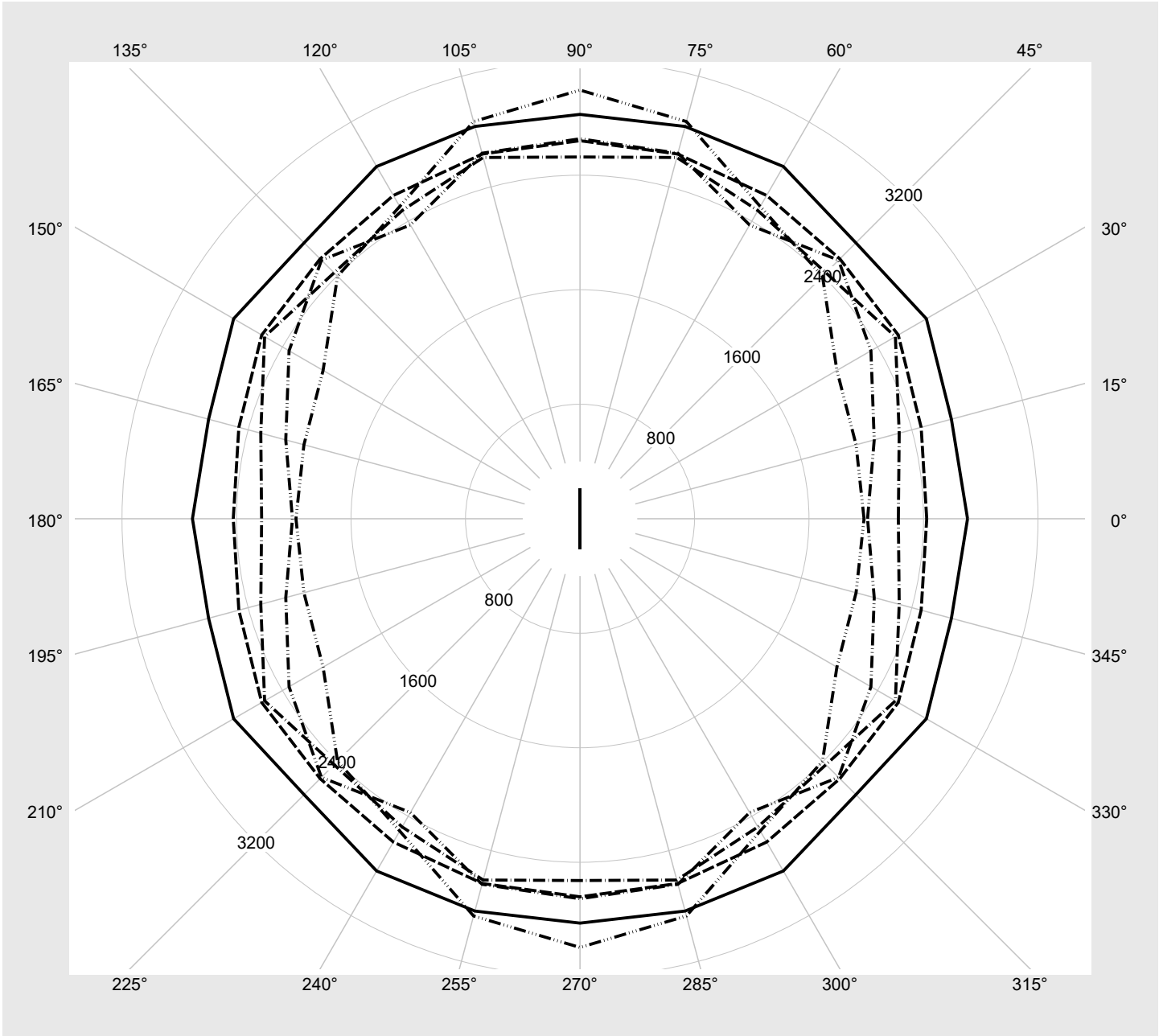
γ 70°

γ 75°

γ 80°

γ 85°

siteco



Photometric test report

|                                                                        |                                                                |                                                                                     |
|------------------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Family</b><br><b>Silica® 21</b>                                     | <b>Order number: 51MX33DA47WB</b><br><b>EAN: 4058352888964</b> | <b>LP number</b><br><b>59331_85</b>                                                 |
| <b>Dimming levels table</b> <div>environmental temperature: 25°C</div> |                                                                |  |

| Luminous flux<br>% | Dimming level<br>linear | Dimming level<br>logarithmic | Luminous flux<br>[lm] | Power consumption<br>[W] |
|--------------------|-------------------------|------------------------------|-----------------------|--------------------------|
| 100                | 254                     | 254                          | 5910                  | 38.4                     |
| 95                 | 241                     | 252                          | 5621                  | 36.4                     |
| 90                 | 228                     | 250                          | 5329                  | 34.4                     |
| 85                 | 214                     | 248                          | 5015                  | 32.4                     |
| 80                 | 201                     | 245                          | 4721                  | 30.4                     |
| 75                 | 188                     | 243                          | 4426                  | 28.4                     |
| 70                 | 175                     | 240                          | 4129                  | 26.5                     |
| 65                 | 163                     | 238                          | 3853                  | 24.6                     |
| 60                 | 150                     | 235                          | 3553                  | 22.9                     |
| 55                 | 137                     | 231                          | 3252                  | 21.1                     |
| 50                 | 124                     | 228                          | 2948                  | 19.4                     |
| 45                 | 112                     | 224                          | 2668                  | 17.7                     |
| 40                 | 99                      | 219                          | 2361                  | 15.8                     |
| 35                 | 87                      | 215                          | 2077                  | 14.0                     |
| 30                 | 74                      | 209                          | 1767                  | 12.1                     |
| 25                 | 62                      | 202                          | 1481                  | 10.3                     |
| 20                 | 49                      | 194                          | 1170                  | 8.4                      |
| 15                 | 37                      | 183                          | 882                   | 6.6                      |
| 10                 | 25                      | 169                          | 592                   | 4.7                      |
| 6                  | 14                      | 148                          | 326                   | 2.9                      |