

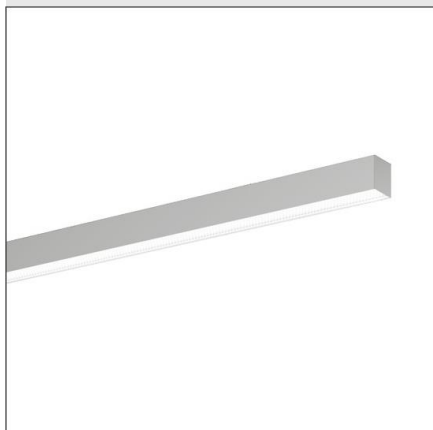
## Photometric test report

Family  
**Silica® 21**

Order number: **51MX23DB45SB**  
EAN: **4058352905197**

LP number  
**59330\_250**

serial  
documentation  
**02.08.2023**



**Version** surface-mounted luminaire, with homogeneous illumination, prismatic cover, direct distribution, extremely wide distribution,  $UGR \leq 19$  ( $L65 \leq 3000 \text{ cd/m}^2$ )

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

**Controlgear** ECG-DALI

**Rated values** Net luminous flux = 4100 lm  
Power consumption = 28.1 W  
Luminous efficacy = 145.9 lm/W

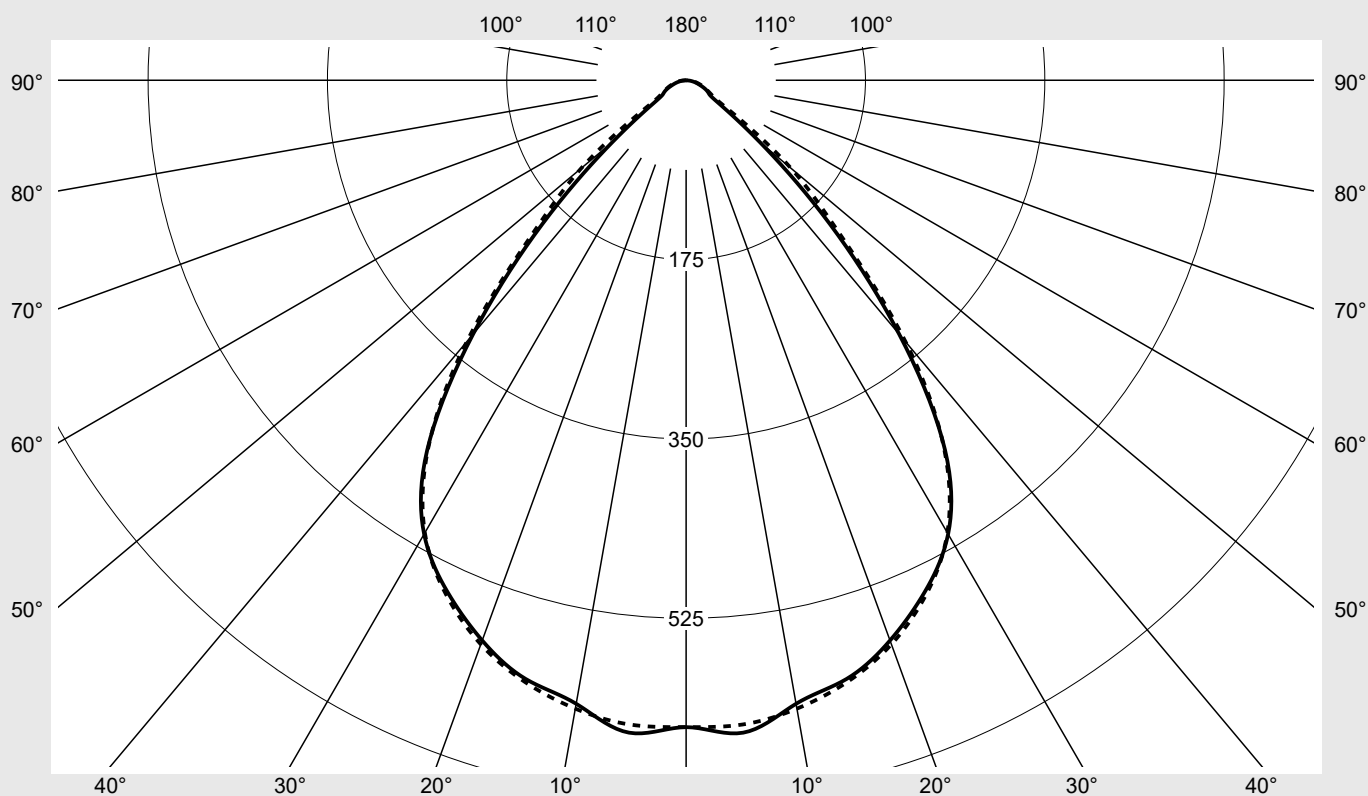
**siteco**

Luminous intensity in cd/klm

**C180-0**

**C270-90**

**Imax: 642 cd/klm**



### Classifications

DIN 5040 A 6 0  
CIE N1=78 N2=96 N3=99  
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>Silica® 21                     | Order number: 51MX23DB45SB<br>EAN: 4058352905197 | LP number<br>59330_250     |
| 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°           | 631.2                        | 631.2                       | 631.2                       | 631.2                       | 631.2                       | 631.2                       | 631.2       | 3.8                     | 3.8               |
| 5°           | 639.0                        | 636.9                       | 635.8                       | 640.8                       | 642.0                       | 634.8                       | 631.1       | 30.5                    | 34.2              |
| 10°          | 617.8                        | 615.8                       | 612.2                       | 616.7                       | 624.6                       | 629.4                       | 622.7       | 59.0                    | 93.2              |
| 15°          | 604.8                        | 603.1                       | 597.6                       | 597.0                       | 601.6                       | 607.9                       | 607.8       | 85.4                    | 178.7             |
| 20°          | 581.7                        | 581.2                       | 575.6                       | 575.6                       | 576.2                       | 579.7                       | 585.7       | 108.5                   | 287.2             |
| 25°          | 550.9                        | 551.4                       | 546.3                       | 545.8                       | 546.2                       | 547.0                       | 553.9       | 127.0                   | 414.1             |
| 30°          | 511.3                        | 512.1                       | 506.5                       | 506.8                       | 506.5                       | 506.0                       | 509.9       | 139.2                   | 553.4             |
| 35°          | 440.5                        | 440.8                       | 437.0                       | 438.8                       | 441.2                       | 438.6                       | 439.0       | 138.1                   | 691.5             |
| 40°          | 323.4                        | 324.8                       | 326.1                       | 329.4                       | 332.6                       | 332.8                       | 333.0       | 115.9                   | 807.4             |
| 45°          | 198.4                        | 199.0                       | 200.7                       | 203.5                       | 206.3                       | 209.2                       | 212.1       | 79.1                    | 886.5             |
| 50°          | 93.9                         | 108.5                       | 122.0                       | 111.2                       | 100.2                       | 119.3                       | 133.6       | 47.2                    | 933.7             |
| 55°          | 37.7                         | 51.0                        | 48.2                        | 55.0                        | 41.5                        | 57.5                        | 53.4        | 22.4                    | 956.1             |
| 60°          | 25.5                         | 26.5                        | 28.2                        | 26.2                        | 26.1                        | 27.8                        | 29.0        | 12.8                    | 968.9             |
| 65°          | 21.0                         | 20.8                        | 21.7                        | 21.1                        | 22.1                        | 22.0                        | 22.3        | 10.7                    | 979.6             |
| 70°          | 15.2                         | 15.5                        | 16.2                        | 16.1                        | 16.4                        | 16.6                        | 17.4        | 8.3                     | 987.9             |
| 75°          | 10.6                         | 11.0                        | 12.1                        | 11.5                        | 11.8                        | 12.4                        | 12.4        | 6.2                     | 994.1             |
| 80°          | 6.4                          | 6.8                         | 7.5                         | 8.1                         | 7.5                         | 8.4                         | 8.5         | 4.1                     | 998.3             |
| 85°          | 2.4                          | 2.5                         | 2.6                         | 3.2                         | 3.5                         | 4.1                         | 4.3         | 1.7                     | 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            |

Photometric test report

|                      |                                                  |                        |
|----------------------|--------------------------------------------------|------------------------|
| Family<br>Silica® 21 | Order number: 51MX23DB45SB<br>EAN: 4058352905197 | LP number<br>59330_250 |
|----------------------|--------------------------------------------------|------------------------|

| 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  | 18.4                | 19.8 | 18.8 | 20.1 | 20.4 | 18.6               | 20.0 | 19.0   | 20.3 | 20.6 |
|                              | 3H  | 18.5                | 19.7 | 18.9 | 20.0 | 20.4 | 18.7               | 19.9 | 19.1   | 20.3 | 20.6 |
|                              | 4H  | 18.5                | 19.7 | 18.9 | 20.0 | 20.4 | 18.8               | 19.9 | 19.2   | 20.3 | 20.6 |
|                              | 6H  | 18.6                | 19.6 | 19.0 | 19.9 | 20.3 | 18.9               | 19.9 | 19.3   | 20.2 | 20.6 |
|                              | 8H  | 18.6                | 19.5 | 19.1 | 19.9 | 20.3 | 19.0               | 19.9 | 19.4   | 20.2 | 20.6 |
|                              | 12H | 18.6                | 19.5 | 19.1 | 19.9 | 20.3 | 19.0               | 19.8 | 19.4   | 20.2 | 20.6 |
| 4H                           | 2H  | 18.4                | 19.5 | 18.8 | 19.8 | 20.2 | 18.6               | 19.7 | 19.0   | 20.0 | 20.4 |
|                              | 3H  | 18.5                | 19.4 | 18.9 | 19.8 | 20.2 | 18.7               | 19.7 | 19.2   | 20.0 | 20.5 |
|                              | 4H  | 18.6                | 19.4 | 19.0 | 19.8 | 20.3 | 18.8               | 19.7 | 19.3   | 20.1 | 20.5 |
|                              | 6H  | 18.7                | 19.4 | 19.1 | 19.8 | 20.3 | 19.0               | 19.7 | 19.4   | 20.1 | 20.6 |
|                              | 8H  | 18.7                | 19.3 | 19.2 | 19.8 | 20.3 | 19.0               | 19.7 | 19.5   | 20.1 | 20.6 |
|                              | 12H | 18.7                | 19.3 | 19.2 | 19.7 | 20.2 | 19.1               | 19.7 | 19.6   | 20.1 | 20.6 |
| 8H                           | 4H  | 18.6                | 19.2 | 19.1 | 19.7 | 20.2 | 18.8               | 19.5 | 19.3   | 19.9 | 20.4 |
|                              | 6H  | 18.7                | 19.2 | 19.2 | 19.7 | 20.2 | 19.0               | 19.5 | 19.5   | 20.0 | 20.5 |
|                              | 8H  | 18.8                | 19.2 | 19.3 | 19.7 | 20.2 | 19.1               | 19.6 | 19.6   | 20.1 | 20.6 |
|                              | 12H | 18.8                | 19.2 | 19.3 | 19.7 | 20.2 | 19.2               | 19.6 | 19.7   | 20.1 | 20.6 |
| 12H                          | 4H  | 18.6                | 19.1 | 19.1 | 19.6 | 20.1 | 18.8               | 19.4 | 19.3   | 19.8 | 20.3 |
|                              | 6H  | 18.7                | 19.2 | 19.3 | 19.7 | 20.2 | 19.0               | 19.5 | 19.5   | 20.0 | 20.5 |
|                              | 8H  | 18.8                | 19.2 | 19.3 | 19.7 | 20.2 | 19.1               | 19.5 | 19.7   | 20.0 | 20.6 |

| Luminance table |                    | Max. for $\gamma \geq 65^\circ$ |                             | Photometric dimensions in mm: |                             | L = 1500<br>B = 50          |             |
|-----------------|--------------------|---------------------------------|-----------------------------|-------------------------------|-----------------------------|-----------------------------|-------------|
| 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°             | 15337.1            | 15386.8                         | 15516.8                     | 15733.4                       | 15947.7                     | 16176.3                     | 16396.2     |
| 50°             | 7985.6             | 9225.1                          | 10377.4                     | 9461.0                        | 8525.0                      | 10144.7                     | 11360.6     |
| 55°             | 3593.5             | 4859.8                          | 4595.5                      | 5239.5                        | 3952.2                      | 5476.5                      | 5093.4      |
| 60°             | 2786.7             | 2901.2                          | 3078.1                      | 2859.1                        | 2851.3                      | 3042.2                      | 3168.5      |
| 65°             | 2712.4             | 2694.8                          | 2807.3                      | 2728.9                        | 2858.0                      | 2844.2                      | 2883.9      |
| 70°             | 2428.8             | 2480.0                          | 2581.5                      | 2570.0                        | 2616.8                      | 2647.5                      | 2781.9      |
| 75°             | 2234.0             | 2315.3                          | 2548.7                      | 2438.7                        | 2493.0                      | 2614.9                      | 2619.3      |
| 80°             | 2010.4             | 2136.0                          | 2358.3                      | 2564.8                        | 2374.0                      | 2654.5                      | 2660.5      |
| 85°             | 1519.8             | 1542.4                          | 1645.2                      | 2011.5                        | 2168.3                      | 2548.4                      | 2673.3      |

Photometric test report

|                                    |                                                                |                                      |
|------------------------------------|----------------------------------------------------------------|--------------------------------------|
| <b>Family</b><br><b>Silica® 21</b> | <b>Order number: 51MX23DB45SB</b><br><b>EAN: 4058352905197</b> | <b>LP number</b><br><b>59330_250</b> |
|------------------------------------|----------------------------------------------------------------|--------------------------------------|

**Luminance values in cd/m²**

γ 65°

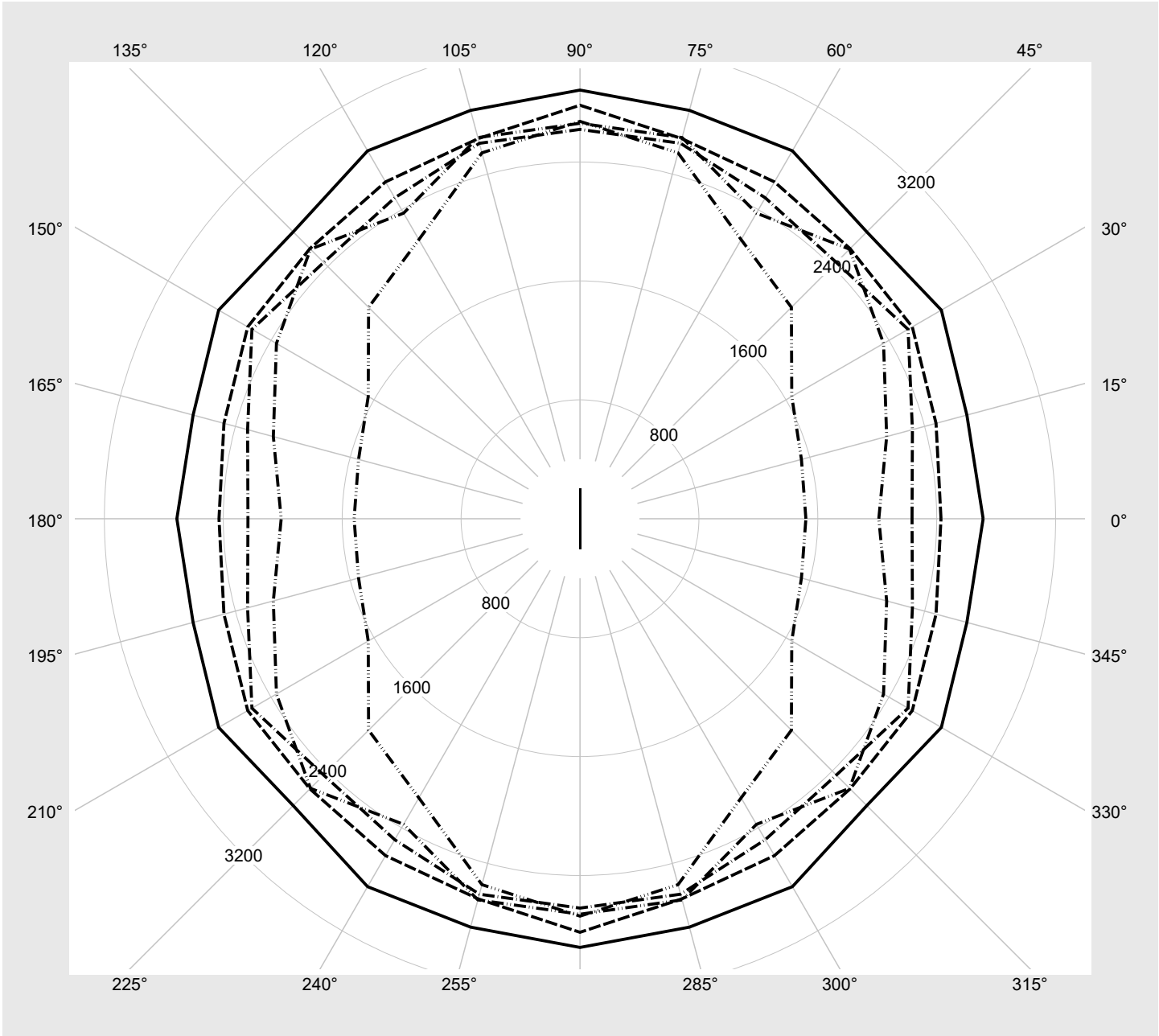
γ 70°

γ 75°

γ 80°

γ 85°

siteco



Photometric test report

|                      |                                                  |                                 |
|----------------------|--------------------------------------------------|---------------------------------|
| Family<br>Silica® 21 | Order number: 51MX23DB45SB<br>EAN: 4058352905197 | LP number<br>59330_250          |
| 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                          | 4100                  | 28.1                     |
| 95                 | 241                     | 252                          | 3900                  | 26.6                     |
| 90                 | 227                     | 250                          | 3684                  | 25.0                     |
| 85                 | 214                     | 248                          | 3482                  | 23.6                     |
| 80                 | 201                     | 245                          | 3278                  | 22.2                     |
| 75                 | 188                     | 243                          | 3073                  | 20.7                     |
| 70                 | 175                     | 240                          | 2867                  | 19.3                     |
| 65                 | 162                     | 238                          | 2659                  | 17.9                     |
| 60                 | 150                     | 235                          | 2467                  | 16.6                     |
| 55                 | 137                     | 231                          | 2258                  | 15.2                     |
| 50                 | 124                     | 228                          | 2047                  | 13.8                     |
| 45                 | 112                     | 224                          | 1852                  | 12.5                     |
| 40                 | 99                      | 219                          | 1640                  | 11.2                     |
| 35                 | 87                      | 215                          | 1442                  | 10.0                     |
| 30                 | 74                      | 209                          | 1229                  | 8.6                      |
| 25                 | 62                      | 202                          | 1030                  | 7.4                      |
| 20                 | 49                      | 194                          | 812                   | 6.0                      |
| 15                 | 37                      | 183                          | 612                   | 4.9                      |
| 10                 | 25                      | 169                          | 411                   | 3.6                      |
| 5                  | 13                      | 145                          | 209                   | 2.2                      |
| 3                  | 9                       | 132                          | 142                   | 1.5                      |