

# Photometric test report

**Family**  
Silica® 21

**Order number: 51MX33TBT9W**  
**EAN: 4058352685679**

**LP number**  
**59332\_38**



**Version** Suspended luminaire, with homogeneous illumination, prismatic cover, direct-/ indirect distribution, extremely wide distribution, UGR≤16 (L65≤3000cd/m²), tunable white

**Lamps** LED 2700 K | CRI ≥ 80

**Controlgear** ECG-DALI

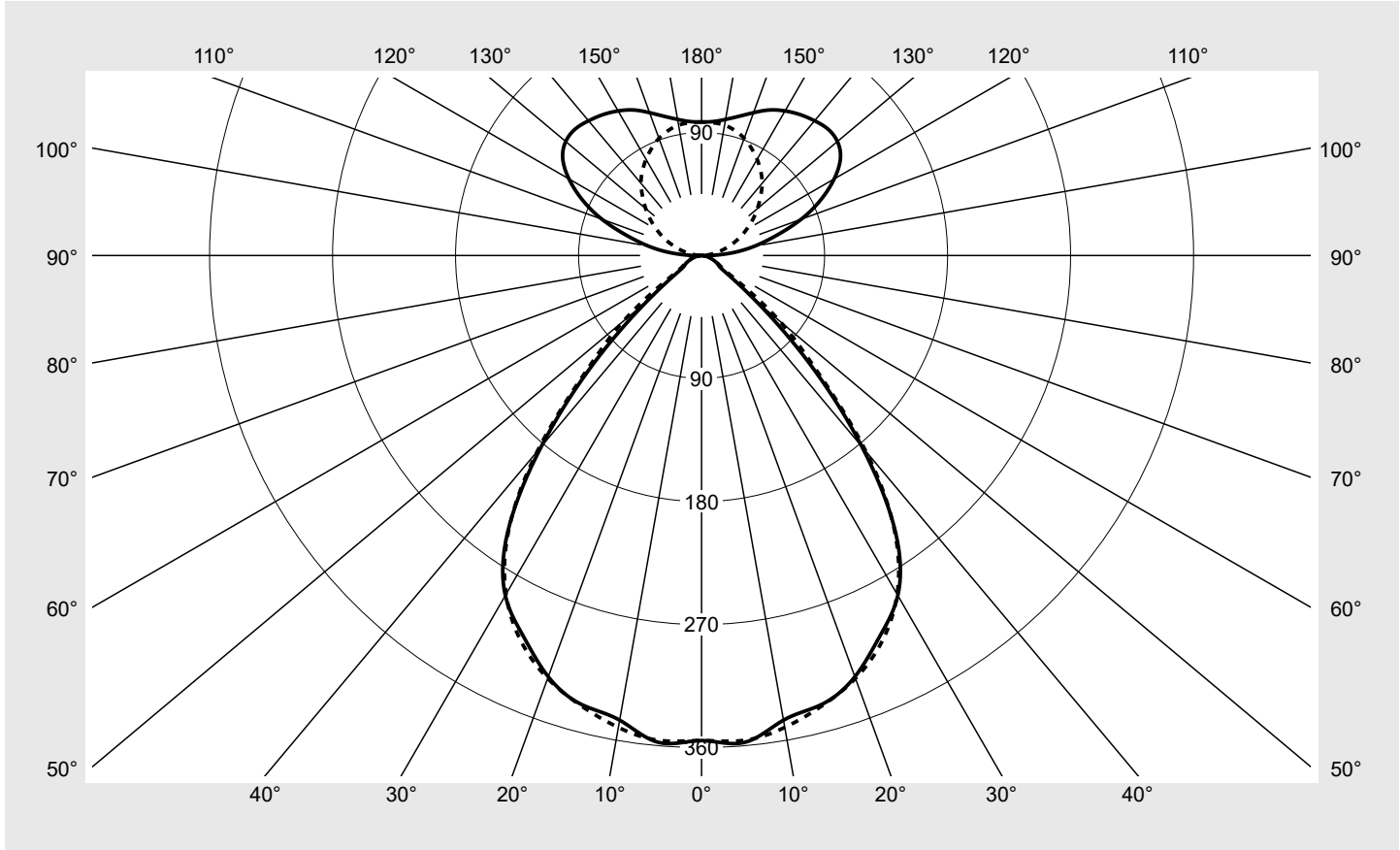
**Setting** individual position

**Rated values** Net luminous flux = 7170 lm  
Power consumption = 76.3 W  
Luminous efficacy = 94 lm/W

**serial documentation**  
**03.05.2023**



**Luminous intensity in cd/klm** C180-0 C270-90 **Imax: 358 cd/klm**



| Classifications |                                   |
|-----------------|-----------------------------------|
| DIN 5040        | C 6 2                             |
| CIE             | N1=78 N2=96 N3=99<br>N4=56 N5=100 |

| Luminaire light output ratios |        |
|-------------------------------|--------|
| $\eta_{LB}$                   | 100.0% |
| $\phi_u$                      | 56.2%  |
| $\phi_o$                      | 43.8%  |

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

## Photometric test report

|  |   |                              |
|--|---|------------------------------|
| Family<br><b>Silica® 21</b>              | Order number: <b>51MX33TBT9W</b><br>EAN: <b>4058352685679</b> | LP number<br><b>59332_38</b> |
| 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°                           | 354.9      | 354.9                | 354.9                | 354.9                | 354.9                | 354.9                | 354.9                   | 2.1      | 2.1               |
| 5°                           | 357.6      | 358.3                | 358.1                | 358.3                | 357.8                | 357.0                | 356.1                   | 17.1     | 19.2              |
| 10°                          | 345.2      | 344.3                | 344.5                | 346.4                | 350.1                | 350.3                | 350.6                   | 33.1     | 52.3              |
| 15°                          | 340.0      | 338.8                | 336.2                | 336.1                | 338.1                | 341.2                | 341.0                   | 48.0     | 100.3             |
| 20°                          | 328.0      | 327.2                | 323.2                | 324.1                | 322.5                | 324.8                | 329.3                   | 60.9     | 161.2             |
| 25°                          | 307.9      | 308.7                | 306.4                | 306.5                | 306.8                | 306.6                | 312.0                   | 71.2     | 232.5             |
| 30°                          | 287.2      | 287.0                | 283.4                | 284.9                | 285.2                | 284.2                | 286.2                   | 78.2     | 310.6             |
| 35°                          | 247.5      | 247.0                | 244.6                | 246.0                | 246.7                | 245.6                | 246.4                   | 77.4     | 388.0             |
| 40°                          | 182.5      | 182.1                | 183.5                | 184.7                | 186.1                | 185.9                | 187.0                   | 65.0     | 453.0             |
| 45°                          | 111.7      | 111.4                | 112.8                | 114.1                | 115.4                | 116.9                | 119.1                   | 44.3     | 497.3             |
| 50°                          | 52.4       | 60.7                 | 68.3                 | 62.5                 | 56.3                 | 66.9                 | 74.7                    | 26.5     | 523.8             |
| 55°                          | 21.3       | 28.6                 | 27.1                 | 30.9                 | 23.3                 | 32.2                 | 30.0                    | 12.6     | 536.4             |
| 60°                          | 14.3       | 14.9                 | 15.7                 | 14.6                 | 14.6                 | 15.6                 | 16.3                    | 7.2      | 543.6             |
| 65°                          | 11.8       | 11.7                 | 12.2                 | 11.9                 | 12.4                 | 12.3                 | 12.4                    | 6.0      | 549.6             |
| 70°                          | 8.5        | 8.7                  | 9.0                  | 9.0                  | 9.2                  | 9.3                  | 9.8                     | 4.7      | 554.2             |
| 75°                          | 5.9        | 6.2                  | 6.8                  | 6.5                  | 6.6                  | 7.0                  | 7.1                     | 3.5      | 557.7             |
| 80°                          | 3.6        | 3.8                  | 4.2                  | 4.6                  | 4.2                  | 4.7                  | 4.8                     | 2.3      | 560.0             |
| 85°                          | 1.8        | 1.8                  | 1.8                  | 2.1                  | 2.2                  | 2.6                  | 2.7                     | 1.2      | 561.2             |
| 90°                          | 6.2        | 6.0                  | 6.3                  | 6.0                  | 3.5                  | 1.2                  | 0.4                     | 2.4      | 563.6             |
| 95°                          | 22.4       | 22.9                 | 24.7                 | 23.8                 | 15.7                 | 8.2                  | 4.2                     | 9.9      | 573.5             |
| 100°                         | 39.4       | 40.6                 | 41.5                 | 37.2                 | 25.7                 | 14.7                 | 9.7                     | 16.6     | 590.1             |
| 105°                         | 56.7       | 58.1                 | 58.0                 | 51.0                 | 35.4                 | 22.2                 | 16.2                    | 23.0     | 613.1             |
| 110°                         | 77.6       | 78.3                 | 74.6                 | 63.1                 | 45.4                 | 29.8                 | 23.1                    | 29.3     | 642.4             |
| 115°                         | 96.2       | 95.7                 | 89.3                 | 74.3                 | 55.1                 | 37.6                 | 30.6                    | 34.4     | 676.8             |
| 120°                         | 112.0      | 110.6                | 101.9                | 83.7                 | 64.3                 | 45.2                 | 37.9                    | 38.0     | 714.8             |
| 125°                         | 124.0      | 121.0                | 110.5                | 92.7                 | 72.3                 | 52.4                 | 45.6                    | 39.9     | 754.8             |
| 130°                         | 129.8      | 127.1                | 115.2                | 98.2                 | 78.4                 | 59.6                 | 53.3                    | 39.9     | 794.7             |
| 135°                         | 130.8      | 128.1                | 117.0                | 101.7                | 82.9                 | 66.3                 | 61.0                    | 38.2     | 832.9             |
| 140°                         | 128.7      | 126.6                | 117.2                | 103.9                | 86.2                 | 72.4                 | 69.0                    | 35.5     | 868.4             |
| 145°                         | 125.8      | 124.5                | 116.6                | 104.5                | 89.3                 | 78.0                 | 75.4                    | 32.1     | 900.6             |
| 150°                         | 122.1      | 121.5                | 114.3                | 103.4                | 91.6                 | 83.4                 | 81.3                    | 28.1     | 928.7             |
| 155°                         | 117.5      | 116.9                | 110.1                | 102.0                | 93.3                 | 88.1                 | 86.5                    | 23.6     | 952.4             |
| 160°                         | 111.2      | 110.8                | 105.7                | 100.5                | 94.8                 | 91.7                 | 91.2                    | 18.9     | 971.3             |
| 165°                         | 105.4      | 104.8                | 102.1                | 98.7                 | 96.3                 | 94.6                 | 94.6                    | 14.1     | 985.4             |
| 170°                         | 101.1      | 100.5                | 99.8                 | 98.3                 | 97.2                 | 96.9                 | 96.9                    | 9.4      | 994.7             |
| 175°                         | 98.4       | 98.3                 | 97.7                 | 97.5                 | 97.5                 | 97.5                 | 97.5                    | 4.7      | 999.4             |
| 180°                         | 97.7       | 97.7                 | 97.7                 | 97.7                 | 97.7                 | 97.7                 | 97.7                    | 0.6      | 1000.0            |

## Photometric test report

|                             |   |                              |
|-----------------------------|---|------------------------------|
| Family<br><b>Silica® 21</b> | Order number: <b>51MX33TBT9W</b><br>EAN: <b>4058352685679</b> | LP number<br><b>59332_38</b> |
|-----------------------------|---|------------------------------|

| UGR-Table                    |     | Standard room       |      |      |      |      |                    |      |      |      |      |
|------------------------------|-----|---------------------|------|------|------|------|--------------------|------|------|------|------|
| 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               | 16.4 | 16.5 | 17.3 | 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 | 17.9 | 15.6               | 16.2 | 16.5 | 17.1 | 18.3 |
|                              | 8H  | 15.1                | 15.7 | 16.1 | 16.7 | 17.9 | 15.5               | 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 | 17.0 | 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                | 15.8 | 16.1 | 16.7 | 17.9 | 15.4               | 16.0 | 16.3 | 16.9 | 18.1 |
|                              | 4H  | 15.2                | 15.7 | 16.1 | 16.7 | 17.9 | 15.4               | 16.0 | 16.4 | 16.9 | 18.1 |
|                              | 6H  | 15.2                | 15.6 | 16.1 | 16.6 | 17.8 | 15.5               | 15.9 | 16.5 | 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 | 15.1                | 15.4 | 16.0 | 16.4 | 17.7 | 15.5               | 15.9 | 16.5 | 16.8 | 18.1 |
| 8H                           | 4H  | 15.1                | 15.5 | 16.0 | 16.4 | 17.7 | 15.3               | 15.7 | 16.2 | 16.6 | 17.9 |
|                              | 6H  | 15.1                | 15.5 | 16.1 | 16.5 | 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 | 17.6 | 15.6               | 15.8 | 16.6 | 16.8 | 18.1 |
| 12H                          | 4H  | 15.0                | 15.3 | 16.0 | 16.3 | 17.6 | 15.2               | 15.5 | 16.2 | 16.5 | 17.8 |
|                              | 6H  | 15.1                | 15.3 | 16.1 | 16.3 | 17.6 | 15.3               | 15.6 | 16.4 | 16.6 | 17.9 |
|                              | 8H  | 15.1                | 15.3 | 16.1 | 16.3 | 17.6 | 15.4               | 15.7 | 16.5 | 16.7 | 18.0 |

| Luminance table |          | Max. for $\gamma \geq 65^\circ$ |                             | Photometric dimensions in mm: |                             | L = 1500<br>B = 50          |                             |             |
|-----------------|----------|---------------------------------|-----------------------------|-------------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|
| 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°             |          | 15096.2                         | 15063.4                     | 15252.6                       | 15432.3                     | 15599.4                     | 15798.5                     | 16107.6     |
| 50°             |          | 7796.1                          | 9031.8                      | 10157.0                       | 9295.6                      | 8377.2                      | 9949.3                      | 11106.9     |
| 55°             |          | 3544.6                          | 4774.7                      | 4510.2                        | 5152.5                      | 3891.5                      | 5373.6                      | 4994.7      |
| 60°             |          | 2743.3                          | 2847.0                      | 3009.3                        | 2789.4                      | 2799.7                      | 2977.6                      | 3112.2      |
| 65°             |          | 2665.2                          | 2644.4                      | 2750.2                        | 2683.1                      | 2796.8                      | 2792.5                      | 2813.1      |
| 70°             |          | 2384.3                          | 2429.0                      | 2527.4                        | 2527.1                      | 2567.1                      | 2596.4                      | 2730.3      |
| 75°             |          | 2189.3                          | 2272.4                      | 2504.0                        | 2391.3                      | 2446.7                      | 2571.6                      | 2633.6      |
| 80°             |          | 1977.5                          | 2094.8                      | 2310.6                        | 2514.9                      | 2332.6                      | 2602.4                      | 2664.6      |
| 85°             |          | 1922.8                          | 1949.2                      | 2026.0                        | 2345.1                      | 2462.5                      | 2817.9                      | 2937.5      |

**Photometric test report**

|                                    |   |                                     |
|------------------------------------|---|-------------------------------------|
| <b>Family</b><br><b>Silica® 21</b> | <b>Order number: 51MX33TBT9W</b><br><b>EAN: 4058352685679</b> | <b>LP number</b><br><b>59332_38</b> |
|------------------------------------|---|-------------------------------------|



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

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

