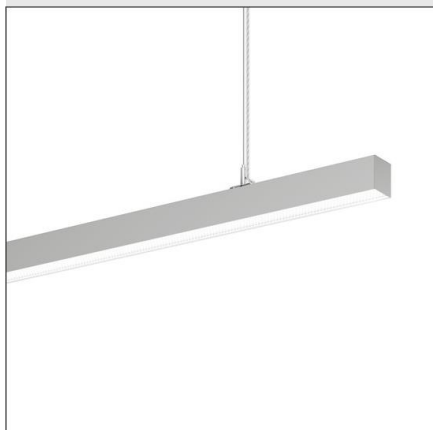


## Photometric test report

Family  
**Silica® 21**



Order number: **51MX33TBT9S**  
EAN: **4058352685648**

LP number  
**59332\_93**

serial  
documentation  
**03.05.2023**

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

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

**Controlgear** ECG-DALI

**Setting** factory setting

**Rated values** Net luminous flux = 7170 lm  
Power consumption = 70.8 W  
Luminous efficacy = 101.3 lm/W

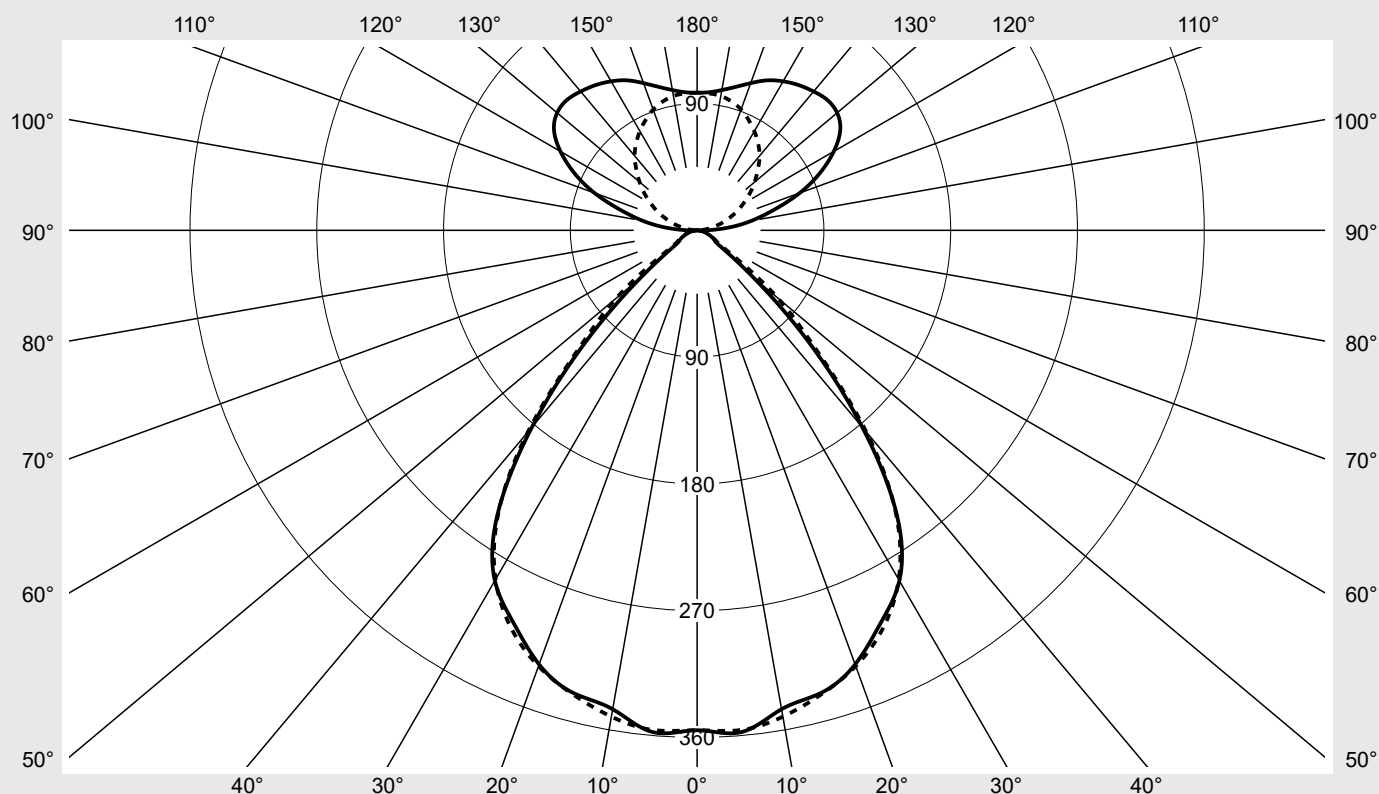
**siteco**

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  
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>Silica® 21                     | Order number: 51MX33TBT9S<br>EAN: 4058352685648 | LP number<br>59332_93      |
| 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°           | 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>Silica® 21         |     | Order number: 51MX33TBT9S<br>EAN: 4058352685648 |      |      |      |      |                    |      | LP number<br>59332_93 |      |
| 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 |
|                              | 3H  | 15.3                                            | 16.1 | 16.2 | 17.0 | 18.1 | 15.6               | 16.4 | 16.5                  | 17.3 |
|                              | 4H  | 15.3                                            | 16.0 | 16.2 | 16.9 | 18.1 | 15.6               | 16.3 | 16.5                  | 17.2 |
|                              | 6H  | 15.2                                            | 15.8 | 16.1 | 16.8 | 17.9 | 15.6               | 16.2 | 16.5                  | 17.1 |
|                              | 8H  | 15.1                                            | 15.7 | 16.1 | 16.7 | 17.9 | 15.5               | 16.0 | 16.4                  | 17.0 |
|                              | 12H | 15.0                                            | 15.6 | 16.0 | 16.5 | 17.8 | 15.5               | 16.0 | 16.4                  | 17.0 |
| 4H                           | 2H  | 15.2                                            | 15.9 | 16.1 | 16.8 | 17.9 | 15.3               | 16.0 | 16.2                  | 16.9 |
|                              | 3H  | 15.2                                            | 15.8 | 16.1 | 16.7 | 17.9 | 15.4               | 16.0 | 16.3                  | 16.9 |
|                              | 4H  | 15.2                                            | 15.7 | 16.1 | 16.7 | 17.9 | 15.4               | 16.0 | 16.4                  | 16.9 |
|                              | 6H  | 15.2                                            | 15.6 | 16.1 | 16.6 | 17.8 | 15.5               | 15.9 | 16.5                  | 16.9 |
|                              | 8H  | 15.1                                            | 15.5 | 16.1 | 16.5 | 17.8 | 15.5               | 15.9 | 16.5                  | 16.9 |
|                              | 12H | 15.1                                            | 15.4 | 16.0 | 16.4 | 17.7 | 15.5               | 15.9 | 16.5                  | 16.8 |
| 8H                           | 4H  | 15.1                                            | 15.5 | 16.0 | 16.4 | 17.7 | 15.3               | 15.7 | 16.2                  | 16.6 |
|                              | 6H  | 15.1                                            | 15.5 | 16.1 | 16.5 | 17.7 | 15.4               | 15.7 | 16.4                  | 16.7 |
|                              | 8H  | 15.1                                            | 15.4 | 16.1 | 16.4 | 17.7 | 15.5               | 15.8 | 16.5                  | 16.8 |
|                              | 12H | 15.1                                            | 15.3 | 16.1 | 16.3 | 17.6 | 15.6               | 15.8 | 16.6                  | 16.8 |
| 12H                          | 4H  | 15.0                                            | 15.3 | 16.0 | 16.3 | 17.6 | 15.2               | 15.5 | 16.2                  | 16.5 |
|                              | 6H  | 15.1                                            | 15.3 | 16.1 | 16.3 | 17.6 | 15.3               | 15.6 | 16.4                  | 16.6 |
|                              | 8H  | 15.1                                            | 15.3 | 16.1 | 16.3 | 17.6 | 15.4               | 15.7 | 16.5                  | 16.7 |

| 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°             | 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

Family  
Silica® 21

Order number: 51MX33TBT9S  
EAN: 4058352685648

LP number  
59332\_93

Luminance values in cd/m²

γ 65°

γ 70°

γ 75°

γ 80°

γ 85°

siteco

