

## Photometric test report

Family  
**Silica® 21**



Order number: **51MX32TCTDW**  
EAN: **4058352795163**

LP number  
**59308\_48**

serial  
documentation  
**03.05.2023**

**Version** Suspended luminaire, reflector, black, direct-/indirect distribution, wide distribution, UGR≤16 (L65≤1000cd/m²), tunable white

**Lamps** LED 4000 K | CRI ≥ 80

**Controlgear** ECG-DALI

**Setting** factory setting

**Rated values** Net luminous flux = 15540 lm  
Power consumption = 140.3 W  
Luminous efficacy = 110.8 lm/W

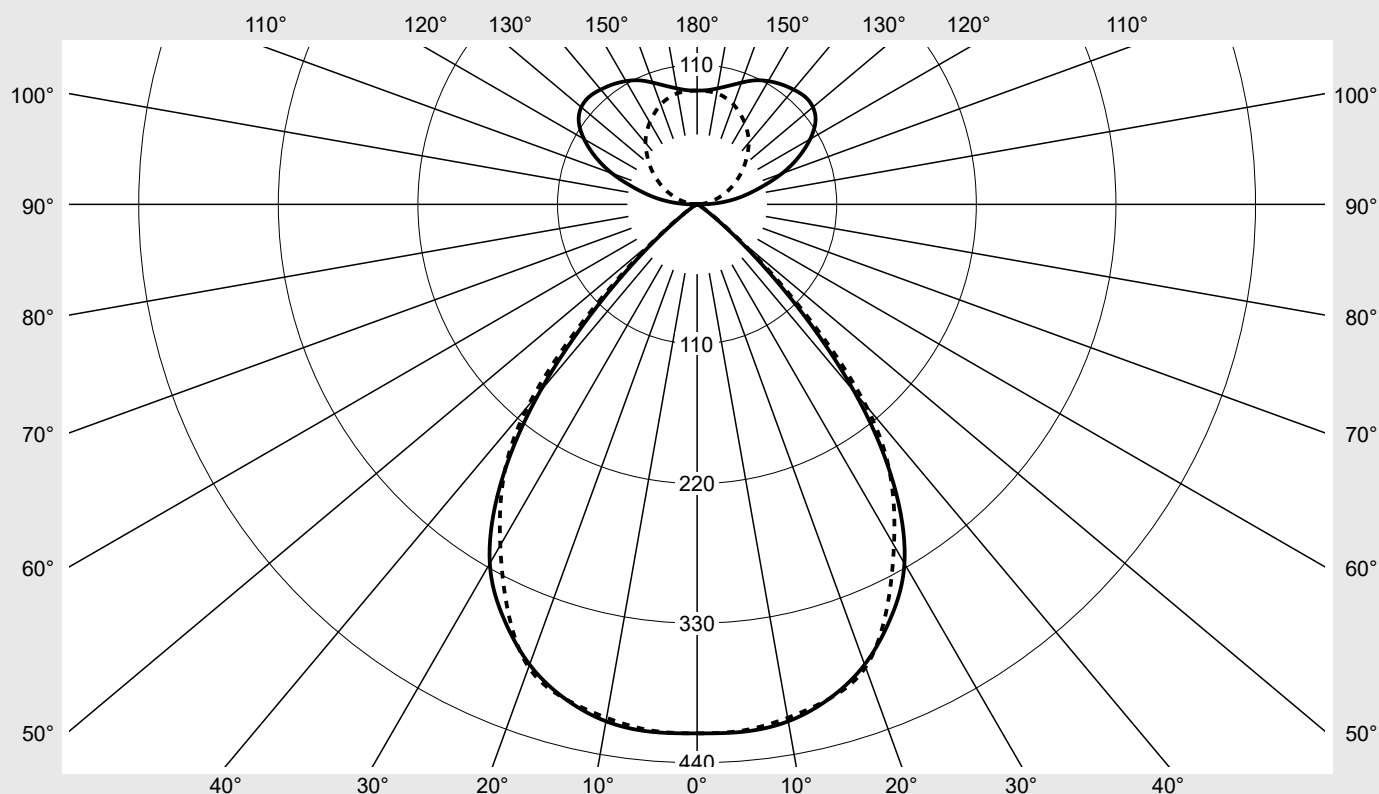
**siteco**

Luminous intensity in cd/klm

**C180-0**

**C270-90**

**Imax: 417 cd/klm**



### Classifications

DIN 5040 C 6 2  
CIE N1=84 N2=99 N3=100  
N4=60 N5=100

### Luminaire light output ratios

$\eta_{LB}$  100.0%  
 $\phi_u$  59.8%  
 $\phi_o$  40.2%

### Measurement conditions

DIN EN 13032 and DIN 5032

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|                                          |                                                 |                            |
|------------------------------------------|-------------------------------------------------|----------------------------|
| Family<br>Silica® 21                     | Order number: 51MX32TCTDW<br>EAN: 4058352795163 | LP number<br>59308_48      |
| 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°           | 416.8                        | 416.8                       | 416.8                       | 416.8                       | 416.8                       | 416.8                       | 416.8       | 2.5                     | 2.5               |
| 5°           | 417.1                        | 417.5                       | 416.5                       | 416.2                       | 416.3                       | 416.7                       | 416.1       | 19.9                    | 22.4              |
| 10°          | 413.6                        | 412.9                       | 413.2                       | 414.2                       | 413.9                       | 410.5                       | 410.8       | 39.3                    | 61.7              |
| 15°          | 403.1                        | 404.2                       | 404.4                       | 407.9                       | 407.9                       | 405.2                       | 403.1       | 57.5                    | 119.2             |
| 20°          | 385.9                        | 389.4                       | 389.1                       | 391.3                       | 390.8                       | 389.3                       | 388.1       | 73.0                    | 192.2             |
| 25°          | 360.3                        | 366.3                       | 366.3                       | 363.6                       | 359.7                       | 355.9                       | 353.0       | 83.7                    | 276.0             |
| 30°          | 326.7                        | 332.1                       | 328.6                       | 321.6                       | 313.5                       | 309.5                       | 310.2       | 87.9                    | 363.8             |
| 35°          | 270.7                        | 274.1                       | 269.6                       | 265.1                       | 262.0                       | 263.6                       | 266.8       | 84.0                    | 447.8             |
| 40°          | 192.8                        | 195.2                       | 197.3                       | 201.1                       | 204.8                       | 204.8                       | 207.1       | 70.6                    | 518.5             |
| 45°          | 103.1                        | 111.4                       | 121.6                       | 126.0                       | 125.3                       | 116.8                       | 115.4       | 45.9                    | 564.4             |
| 50°          | 37.9                         | 43.7                        | 52.7                        | 56.6                        | 56.5                        | 46.6                        | 44.0        | 20.8                    | 585.2             |
| 55°          | 10.5                         | 13.2                        | 18.0                        | 22.2                        | 19.8                        | 14.1                        | 12.7        | 7.4                     | 592.6             |
| 60°          | 3.5                          | 4.2                         | 6.4                         | 8.4                         | 6.8                         | 5.0                         | 4.9         | 2.8                     | 595.3             |
| 65°          | 1.3                          | 1.5                         | 2.2                         | 2.9                         | 2.5                         | 2.0                         | 1.9         | 1.0                     | 596.4             |
| 70°          | 0.8                          | 0.9                         | 0.7                         | 0.6                         | 0.8                         | 1.0                         | 1.0         | 0.4                     | 596.8             |
| 75°          | 0.2                          | 0.2                         | 0.2                         | 0.3                         | 0.3                         | 0.3                         | 0.3         | 0.1                     | 596.9             |
| 80°          | 0.0                          | 0.0                         | 0.1                         | 0.1                         | 0.1                         | 0.1                         | 0.1         | 0.0                     | 597.0             |
| 85°          | 0.4                          | 0.4                         | 0.4                         | 0.4                         | 0.4                         | 0.4                         | 0.4         | 0.2                     | 597.2             |
| 90°          | 5.7                          | 5.5                         | 5.8                         | 5.6                         | 3.2                         | 1.1                         | 0.4         | 2.2                     | 599.4             |
| 95°          | 20.6                         | 21.0                        | 22.7                        | 21.8                        | 14.4                        | 7.5                         | 3.9         | 9.1                     | 608.5             |
| 100°         | 36.2                         | 37.3                        | 38.1                        | 34.2                        | 23.6                        | 13.5                        | 8.9         | 15.2                    | 623.7             |
| 105°         | 52.0                         | 53.4                        | 53.2                        | 46.8                        | 32.5                        | 20.4                        | 14.9        | 21.2                    | 644.8             |
| 110°         | 71.2                         | 71.9                        | 68.5                        | 57.9                        | 41.7                        | 27.4                        | 21.2        | 26.9                    | 671.7             |
| 115°         | 88.3                         | 87.9                        | 82.0                        | 68.2                        | 50.5                        | 34.5                        | 28.1        | 31.6                    | 703.3             |
| 120°         | 102.8                        | 101.5                       | 93.6                        | 76.8                        | 59.0                        | 41.5                        | 34.8        | 34.9                    | 738.2             |
| 125°         | 113.9                        | 111.0                       | 101.5                       | 85.1                        | 66.4                        | 48.1                        | 41.9        | 36.7                    | 774.9             |
| 130°         | 119.1                        | 116.6                       | 105.7                       | 90.2                        | 72.0                        | 54.7                        | 49.0        | 36.6                    | 811.5             |
| 135°         | 120.1                        | 117.6                       | 107.4                       | 93.4                        | 76.1                        | 60.8                        | 56.0        | 35.1                    | 846.6             |
| 140°         | 118.1                        | 116.2                       | 107.6                       | 95.4                        | 79.2                        | 66.4                        | 63.3        | 32.6                    | 879.2             |
| 145°         | 115.5                        | 114.2                       | 107.0                       | 95.9                        | 82.0                        | 71.6                        | 69.2        | 29.5                    | 908.7             |
| 150°         | 112.1                        | 111.5                       | 104.9                       | 94.9                        | 84.1                        | 76.5                        | 74.6        | 25.8                    | 934.6             |
| 155°         | 107.8                        | 107.3                       | 101.1                       | 93.7                        | 85.6                        | 80.9                        | 79.4        | 21.7                    | 956.3             |
| 160°         | 102.1                        | 101.7                       | 97.0                        | 92.3                        | 87.0                        | 84.2                        | 83.8        | 17.3                    | 973.6             |
| 165°         | 96.8                         | 96.2                        | 93.8                        | 90.6                        | 88.4                        | 86.9                        | 86.8        | 12.9                    | 986.6             |
| 170°         | 92.8                         | 92.3                        | 91.6                        | 90.3                        | 89.2                        | 88.9                        | 88.9        | 8.6                     | 995.2             |
| 175°         | 90.3                         | 90.2                        | 89.7                        | 89.5                        | 89.5                        | 89.5                        | 89.5        | 4.3                     | 999.5             |
| 180°         | 89.7                         | 89.7                        | 89.7                        | 89.7                        | 89.7                        | 89.7                        | 89.7        | 0.5                     | 1000.0            |

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|                              |     |                                                 |      |      |      |      |                    |      |                       |      |
|------------------------------|-----|-------------------------------------------------|------|------|------|------|--------------------|------|-----------------------|------|
| Family<br>Silica® 21         |     | Order number: 51MX32TCTDW<br>EAN: 4058352795163 |      |      |      |      |                    |      | LP number<br>59308_48 |      |
| 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  | 15.9                                            | 16.8 | 16.8 | 17.6 | 18.7 | 16.0               | 16.9 | 16.9                  | 17.7 |
|                              | 3H  | 15.7                                            | 16.4 | 16.5 | 17.3 | 18.4 | 15.8               | 16.6 | 16.6                  | 17.4 |
|                              | 4H  | 15.5                                            | 16.2 | 16.4 | 17.1 | 18.2 | 15.6               | 16.4 | 16.5                  | 17.2 |
|                              | 6H  | 15.3                                            | 15.9 | 16.2 | 16.8 | 18.0 | 15.5               | 16.1 | 16.4                  | 17.0 |
|                              | 8H  | 15.2                                            | 15.8 | 16.2 | 16.7 | 17.9 | 15.3               | 15.9 | 16.2                  | 16.8 |
|                              | 12H | 15.1                                            | 15.6 | 16.1 | 16.6 | 17.7 | 15.3               | 15.8 | 16.2                  | 16.7 |
| 4H                           | 2H  | 15.6                                            | 16.3 | 16.4 | 17.1 | 18.2 | 15.6               | 16.3 | 16.5                  | 17.2 |
|                              | 3H  | 15.3                                            | 15.9 | 16.2 | 16.8 | 17.9 | 15.4               | 16.0 | 16.3                  | 16.9 |
|                              | 4H  | 15.1                                            | 15.7 | 16.1 | 16.6 | 17.7 | 15.2               | 15.8 | 16.2                  | 16.7 |
|                              | 6H  | 15.0                                            | 15.4 | 15.9 | 16.3 | 17.5 | 15.1               | 15.5 | 16.0                  | 16.4 |
|                              | 8H  | 14.9                                            | 15.3 | 15.8 | 16.2 | 17.4 | 15.0               | 15.4 | 15.9                  | 16.3 |
|                              | 12H | 14.8                                            | 15.1 | 15.7 | 16.1 | 17.3 | 14.9               | 15.2 | 15.9                  | 16.2 |
| 8H                           | 4H  | 14.9                                            | 15.3 | 15.8 | 16.2 | 17.4 | 15.0               | 15.4 | 15.9                  | 16.3 |
|                              | 6H  | 14.8                                            | 15.1 | 15.7 | 16.0 | 17.3 | 14.8               | 15.1 | 15.8                  | 16.1 |
|                              | 8H  | 14.7                                            | 15.0 | 15.6 | 15.9 | 17.2 | 14.8               | 15.1 | 15.7                  | 16.0 |
|                              | 12H | 14.6                                            | 14.8 | 15.6 | 15.8 | 17.0 | 14.7               | 14.9 | 15.7                  | 15.9 |
| 12H                          | 4H  | 14.8                                            | 15.1 | 15.8 | 16.1 | 17.3 | 14.9               | 15.2 | 15.8                  | 16.2 |
|                              | 6H  | 14.6                                            | 14.9 | 15.6 | 15.9 | 17.1 | 14.7               | 15.0 | 15.7                  | 16.0 |
|                              | 8H  | 14.6                                            | 14.8 | 15.6 | 15.8 | 17.0 | 14.7               | 14.9 | 15.7                  | 15.9 |

| Luminance table |                    | Max. for $\gamma \geq 65^\circ$ |                             | Photometric dimensions in mm: |                             | L = 2940<br>B = 49          |             |
|-----------------|--------------------|---------------------------------|-----------------------------|-------------------------------|-----------------------------|-----------------------------|-------------|
| 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°             | 15735.1            | 17001.5                         | 18543.7                     | 19222.8                       | 19109.3                     | 17818.7                     | 17598.3     |
| 50°             | 6360.3             | 7340.6                          | 8839.2                      | 9500.7                        | 9489.1                      | 7812.1                      | 7387.2      |
| 55°             | 1971.0             | 2491.3                          | 3389.4                      | 4176.6                        | 3716.8                      | 2655.3                      | 2385.8      |
| 60°             | 763.9              | 916.7                           | 1371.0                      | 1821.1                        | 1475.7                      | 1088.2                      | 1052.2      |
| 65°             | 325.7              | 384.7                           | 556.4                       | 734.9                         | 641.7                       | 499.8                       | 485.0       |
| 70°             | 256.4              | 273.1                           | 207.5                       | 204.1                         | 246.6                       | 318.2                       | 326.4       |
| 75°             | 75.9               | 100.9                           | 84.2                        | 117.5                         | 109.2                       | 128.4                       | 116.3       |
| 80°             | 21.1               | 24.8                            | 35.4                        | 46.0                          | 60.3                        | 70.8                        | 73.9        |
| 85°             | 475.3              | 479.0                           | 480.2                       | 460.4                         | 446.8                       | 459.2                       | 466.6       |

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Family  
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Order number: **51MX32TCTDW**  
EAN: **4058352795163**

LP number  
**59308\_48**

Luminance values in cd/m²

γ 65°

γ 70°

γ 75°

γ 80°

γ 85°

sit

eco

