



# Photometric test report

|  |   |  |
|--|---|--|
| <b>Family</b><br><b>Silica® 21</b>   | <b>Order number: 51MX23TBT5B</b><br><b>EAN: 4058352687314</b> | <b>LP number</b><br><b>59330_136</b>   |
|  | <b>Version</b>  | surface-mounted luminaire, with homogeneous illumination, prismatic cover, direct distribution, extremely wide distribution, UGR≤19 (L65≤3000cd/m²), tunable white |
|  | <b>Lamps</b>  | LED 4000 K   CRI ≥ 80  |
|  | <b>Controlgear</b>  | ECG-DALI   |
|  | <b>Setting</b>  | factory setting  |
|  | <b>Rated values</b>   | Net luminous flux = 4030 lm<br>Power consumption = 42.6 W<br>Luminous efficacy = 94.6 lm/W   |
|  |   | <b>serial documentation</b><br><b>03.05.2023</b>   |
|  |   |   |

**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<br>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><b>Silica® 21</b>              | Order number: <b>51MX23TBT5B</b><br>EAN: <b>4058352687314</b> | LP number<br><b>59330_136</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°                           | 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><b>Silica® 21</b> | Order number: <b>51MX23TBT5B</b><br>EAN: <b>4058352687314</b> | LP number<br><b>59330_136</b> |
|-----------------------------|---|-------------------------------|

|                  |                      |               |
|------------------|----------------------|---------------|
| <b>UGR-Table</b> | <b>Standard room</b> | <b>siteco</b> |
|------------------|----------------------|---------------|

|                              |                     |      |      |      |      |                    |      |      |      |      |      |
|------------------------------|---------------------|------|------|------|------|--------------------|------|------|------|------|------|
| 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 | 19.7 | 18.7 | 20.0 | 20.4               | 18.6 | 20.0 | 18.9 | 20.3 | 20.6 |
|                              | 3H                  | 18.4 | 19.6 | 18.8 | 20.0 | 20.3               | 18.7 | 19.9 | 19.1 | 20.2 | 20.6 |
|                              | 4H                  | 18.5 | 19.6 | 18.9 | 19.9 | 20.3               | 18.7 | 19.8 | 19.1 | 20.2 | 20.6 |
|                              | 6H                  | 18.5 | 19.5 | 18.9 | 19.9 | 20.3               | 18.8 | 19.8 | 19.2 | 20.2 | 20.6 |
|                              | 8H                  | 18.6 | 19.5 | 19.0 | 19.9 | 20.3               | 18.9 | 19.8 | 19.3 | 20.2 | 20.6 |
|                              | 12H                 | 18.6 | 19.4 | 19.0 | 19.8 | 20.2               | 18.9 | 19.8 | 19.4 | 20.1 | 20.6 |
| 4H                           | 2H                  | 18.3 | 19.4 | 18.7 | 19.8 | 20.1               | 18.5 | 19.6 | 18.9 | 20.0 | 20.4 |
|                              | 3H                  | 18.4 | 19.4 | 18.9 | 19.8 | 20.2               | 18.7 | 19.6 | 19.1 | 20.0 | 20.4 |
|                              | 4H                  | 18.5 | 19.3 | 19.0 | 19.8 | 20.2               | 18.8 | 19.6 | 19.2 | 20.0 | 20.5 |
|                              | 6H                  | 18.6 | 19.3 | 19.1 | 19.7 | 20.2               | 18.9 | 19.6 | 19.4 | 20.1 | 20.5 |
|                              | 8H                  | 18.6 | 19.3 | 19.1 | 19.7 | 20.2               | 19.0 | 19.6 | 19.5 | 20.1 | 20.6 |
|                              | 12H                 | 18.7 | 19.2 | 19.1 | 19.7 | 20.2               | 19.1 | 19.6 | 19.6 | 20.1 | 20.6 |
| 8H                           | 4H                  | 18.5 | 19.2 | 19.0 | 19.6 | 20.1               | 18.8 | 19.4 | 19.2 | 19.9 | 20.3 |
|                              | 6H                  | 18.7 | 19.2 | 19.2 | 19.7 | 20.2               | 19.0 | 19.5 | 19.5 | 20.0 | 20.5 |
|                              | 8H                  | 18.7 | 19.2 | 19.2 | 19.6 | 20.2               | 19.1 | 19.5 | 19.6 | 20.0 | 20.5 |
|                              | 12H                 | 18.7 | 19.1 | 19.3 | 19.6 | 20.2               | 19.2 | 19.5 | 19.7 | 20.0 | 20.6 |
| 12H                          | 4H                  | 18.5 | 19.1 | 19.0 | 19.5 | 20.0               | 18.8 | 19.3 | 19.3 | 19.8 | 20.3 |
|                              | 6H                  | 18.7 | 19.1 | 19.2 | 19.6 | 20.1               | 19.0 | 19.4 | 19.5 | 19.9 | 20.4 |
|                              | 8H                  | 18.7 | 19.1 | 19.3 | 19.6 | 20.1               | 19.1 | 19.4 | 19.6 | 20.0 | 20.5 |

|                        |   |                                      |                                  |
|------------------------|---|--------------------------------------|----------------------------------|
| <b>Luminance table</b> | <b>Max. for <math>\gamma \geq 65^\circ</math></b> | <b>Photometric dimensions in mm:</b> | <b>L = 1500</b><br><b>B = 50</b> |
|------------------------|---|--------------------------------------|----------------------------------|

| 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°      |          | 15075.3                        | 15124.1                     | 15251.9                     | 15464.7                     | 15675.5                     | 15900.2                     | 16116.3     |  |
| 50°      |          | 7849.2                         | 9067.6                      | 10200.3                     | 9299.4                      | 8379.5                      | 9971.5                      | 11166.7     |  |
| 55°      |          | 3532.2                         | 4776.8                      | 4517.0                      | 5150.0                      | 3884.7                      | 5383.0                      | 5006.4      |  |
| 60°      |          | 2739.1                         | 2851.6                      | 3025.5                      | 2810.3                      | 2802.6                      | 2990.3                      | 3114.4      |  |
| 65°      |          | 2666.1                         | 2648.8                      | 2759.4                      | 2682.4                      | 2809.2                      | 2795.6                      | 2834.7      |  |
| 70°      |          | 2387.4                         | 2437.7                      | 2537.4                      | 2526.1                      | 2572.1                      | 2602.3                      | 2734.4      |  |
| 75°      |          | 2195.9                         | 2275.8                      | 2505.2                      | 2397.1                      | 2450.4                      | 2570.2                      | 2574.6      |  |
| 80°      |          | 1976.1                         | 2099.5                      | 2318.0                      | 2521.0                      | 2333.5                      | 2609.2                      | 2615.1      |  |
| 85°      |          | 1493.8                         | 1516.0                      | 1617.1                      | 1977.2                      | 2131.3                      | 2504.9                      | 2627.6      |  |

**Photometric test report**

|                                    |   |                                      |
|------------------------------------|---|--------------------------------------|
| <b>Family</b><br><b>Silica® 21</b> | <b>Order number: 51MX23TBT5B</b><br><b>EAN: 4058352687314</b> | <b>LP number</b><br><b>59330_136</b> |
|------------------------------------|---|--------------------------------------|

**Luminance values in cd/m<sup>2</sup>**     γ 65°   γ 70°   γ 75°   γ 80°   γ 85°     **siteco**

