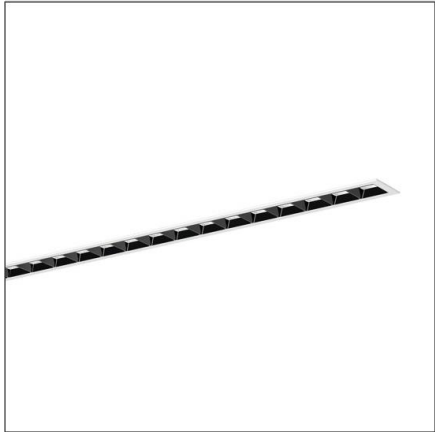



# Photometric test report

|  |   |   |
|--|---|---|
| <b>Family</b><br><b>Silica® 21</b>   | <b>Order number: 51MX12TBT5W</b><br><b>EAN: 4058352754757</b> | <b>LP number</b><br><b>59272_49</b>   |
|  | <b>Version</b>  | recessed luminaire, reflector, black, direct distribution, wide distribution, UGR≤19 (L65≤1000cd/m²), tunable white |
|  | <b>Lamps</b>  | LED 6500 K   CRI ≥ 80   |
|  | <b>Controlgear</b>  | ECG-DALI  |
|  | <b>Setting</b>  | individual position   |
|  | <b>Rated values</b>   | Net luminous flux = 4650 lm<br>Power consumption = 40.2 W<br>Luminous efficacy = 115.7 lm/W                         |
|  |   | <b>serial documentation</b><br><b>03.05.2023</b>  |
|  |   |                                  |

**Luminous intensity in cd/klm**    **C180-0**    **C270-90**    **Imax: 700 cd/klm**



| Classifications |                                     |
|-----------------|-------------------------------------|
| DIN 5040        | A 6 0                               |
| CIE             | N1=84 N2=99 N3=100<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

|   |   |                                     |
|---|---|-------------------------------------|
| <b>Family</b><br><b>Silica® 21</b>              | <b>Order number: 51MX12TBT5W</b><br><b>EAN: 4058352754757</b> | <b>LP number</b><br><b>59272_49</b> |
| <b>Table of values for luminous intensities</b> |   | <b>Maximum luminous intensity</b>   |
|   |   | <b>siteco</b>                       |

| C-planes<br>γ                | 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°                           | 698.3      | 698.3                | 698.3                | 698.3                | 698.3                | 698.3                | 698.3       | 4.2                     | 4.2               |
| 5°                           | 699.6      | 698.5                | 693.9                | 696.9                | 698.4                | 696.4                | 699.4       | 33.3                    | 37.5              |
| 10°                          | 694.6      | 694.5                | 689.5                | 695.3                | 694.0                | 687.7                | 690.0       | 65.9                    | 103.4             |
| 15°                          | 672.6      | 676.2                | 675.2                | 682.1                | 683.0                | 677.2                | 674.7       | 96.2                    | 199.5             |
| 20°                          | 643.1      | 649.9                | 651.2                | 653.1                | 656.2                | 653.1                | 648.8       | 122.2                   | 321.7             |
| 25°                          | 605.9      | 614.8                | 613.8                | 608.6                | 601.9                | 597.0                | 589.1       | 140.3                   | 462.0             |
| 30°                          | 546.6      | 557.0                | 551.8                | 537.6                | 523.2                | 517.8                | 519.3       | 147.1                   | 609.1             |
| 35°                          | 452.6      | 459.5                | 452.6                | 444.2                | 440.2                | 442.2                | 446.7       | 140.9                   | 750.0             |
| 40°                          | 321.1      | 327.1                | 329.4                | 337.0                | 343.8                | 344.5                | 346.6       | 118.4                   | 868.3             |
| 45°                          | 172.2      | 187.2                | 203.3                | 211.2                | 210.4                | 196.6                | 193.1       | 77.0                    | 945.3             |
| 50°                          | 63.8       | 73.4                 | 88.4                 | 94.7                 | 94.6                 | 78.0                 | 74.0        | 34.9                    | 980.1             |
| 55°                          | 17.5       | 22.2                 | 30.2                 | 37.1                 | 33.0                 | 23.7                 | 21.3        | 12.4                    | 992.5             |
| 60°                          | 5.9        | 7.1                  | 10.7                 | 14.2                 | 11.5                 | 8.5                  | 8.2         | 4.7                     | 997.2             |
| 65°                          | 2.1        | 2.5                  | 3.7                  | 4.8                  | 4.2                  | 3.3                  | 3.2         | 1.8                     | 998.9             |
| 70°                          | 1.4        | 1.5                  | 1.1                  | 1.1                  | 1.3                  | 1.7                  | 1.7         | 0.7                     | 999.6             |
| 75°                          | 0.3        | 0.4                  | 0.3                  | 0.5                  | 0.4                  | 0.5                  | 0.5         | 0.2                     | 999.9             |
| 80°                          | 0.1        | 0.1                  | 0.1                  | 0.1                  | 0.2                  | 0.2                  | 0.2         | 0.1                     | 999.9             |
| 85°                          | 0.0        | 0.0                  | 0.1                  | 0.1                  | 0.1                  | 0.2                  | 0.2         | 0.1                     | 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>51MX12TBT5W</b><br>EAN: <b>4058352754757</b> | LP number<br><b>59272_49</b> |
|-----------------------------|---|------------------------------|

|           |               |        |  |
|-----------|---------------|--------|--|
| 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                  | 18.6 | 19.9 | 19.0 | 20.2 | 20.6               | 18.7 | 20.0 | 19.1 | 20.4 | 20.7 |
|                              | 3H                  | 18.5 | 19.6 | 18.9 | 20.0 | 20.3               | 18.6 | 19.8 | 19.0 | 20.1 | 20.4 |
|                              | 4H                  | 18.4 | 19.5 | 18.8 | 19.8 | 20.2               | 18.5 | 19.6 | 18.9 | 19.9 | 20.3 |
|                              | 6H                  | 18.4 | 19.3 | 18.8 | 19.7 | 20.1               | 18.5 | 19.4 | 18.9 | 19.8 | 20.2 |
|                              | 8H                  | 18.4 | 19.2 | 18.8 | 19.6 | 20.0               | 18.5 | 19.3 | 18.9 | 19.7 | 20.1 |
|                              | 12H                 | 18.4 | 19.1 | 18.8 | 19.5 | 19.9               | 18.5 | 19.2 | 18.9 | 19.6 | 20.1 |
| 4H                           | 2H                  | 18.5 | 19.5 | 18.9 | 19.9 | 20.2               | 18.6 | 19.6 | 19.0 | 20.0 | 20.3 |
|                              | 3H                  | 18.3 | 19.2 | 18.7 | 19.6 | 20.0               | 18.4 | 19.3 | 18.8 | 19.7 | 20.1 |
|                              | 4H                  | 18.2 | 19.0 | 18.7 | 19.4 | 19.8               | 18.3 | 19.1 | 18.8 | 19.5 | 19.9 |
|                              | 6H                  | 18.1 | 18.8 | 18.6 | 19.2 | 19.7               | 18.3 | 18.9 | 18.7 | 19.3 | 19.8 |
|                              | 8H                  | 18.1 | 18.7 | 18.6 | 19.1 | 19.6               | 18.2 | 18.8 | 18.7 | 19.2 | 19.7 |
|                              | 12H                 | 18.1 | 18.6 | 18.6 | 19.0 | 19.5               | 18.2 | 18.7 | 18.7 | 19.1 | 19.6 |
| 8H                           | 4H                  | 18.1 | 18.7 | 18.6 | 19.1 | 19.6               | 18.2 | 18.8 | 18.7 | 19.2 | 19.7 |
|                              | 6H                  | 18.0 | 18.5 | 18.5 | 18.9 | 19.5               | 18.1 | 18.6 | 18.6 | 19.1 | 19.6 |
|                              | 8H                  | 17.9 | 18.4 | 18.4 | 18.8 | 19.4               | 18.0 | 18.5 | 18.6 | 19.0 | 19.5 |
|                              | 12H                 | 17.9 | 18.2 | 18.4 | 18.7 | 19.3               | 18.0 | 18.4 | 18.6 | 18.9 | 19.4 |
| 12H                          | 4H                  | 18.1 | 18.6 | 18.6 | 19.0 | 19.5               | 18.2 | 18.7 | 18.7 | 19.1 | 19.6 |
|                              | 6H                  | 18.0 | 18.4 | 18.5 | 18.8 | 19.4               | 18.1 | 18.5 | 18.6 | 19.0 | 19.5 |
|                              | 8H                  | 17.9 | 18.2 | 18.4 | 18.7 | 19.3               | 18.0 | 18.4 | 18.6 | 18.9 | 19.4 |

|                 |                                 |                               |                    |
|-----------------|---------------------------------|-------------------------------|--------------------|
| Luminance table | Max. for $\gamma \geq 65^\circ$ | Photometric dimensions in mm: | L = 1470<br>B = 49 |
|-----------------|---------------------------------|-------------------------------|--------------------|

|                    |          |            |                      |                      |                      |                      |                      |             |
|--------------------|----------|------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------|
| C-planes           | $\gamma$ | 0°<br>180° | 15°                  | 30°                  | 45°                  | 60°                  | 75°                  | 90°<br>270° |
|                    |          |            | 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° |             |
| Luminance in cd/m² |          |            |                      |                      |                      |                      |                      |             |
| 45°                |          | 15725.2    | 17086.3              | 18560.6              | 19278.1              | 19212.9              | 17951.7              | 17629.9     |
| 50°                |          | 6408.6     | 7376.3               | 8881.8               | 9511.4               | 9497.6               | 7836.5               | 7432.3      |
| 55°                |          | 1966.5     | 2494.6               | 3397.9               | 4177.4               | 3714.3               | 2661.8               | 2393.3      |
| 60°                |          | 763.8      | 919.4                | 1380.1               | 1837.0               | 1479.1               | 1094.1               | 1054.1      |
| 65°                |          | 326.0      | 385.7                | 558.8                | 735.7                | 645.4                | 500.6                | 489.0       |
| 70°                |          | 257.1      | 274.3                | 208.6                | 204.0                | 247.3                | 319.2                | 327.3       |
| 75°                |          | 76.1       | 101.0                | 84.3                 | 117.7                | 109.2                | 128.2                | 116.5       |
| 80°                |          | 21.2       | 24.9                 | 35.3                 | 46.1                 | 60.2                 | 71.0                 | 74.4        |
| 85°                |          | 28.1       | 31.9                 | 52.6                 | 74.1                 | 102.2                | 130.4                | 141.5       |

**Photometric test report**

|                                    |   |                                     |
|------------------------------------|---|-------------------------------------|
| <b>Family</b><br><b>Silica® 21</b> | <b>Order number: 51MX12TBT5W</b><br><b>EAN: 4058352754757</b> | <b>LP number</b><br><b>59272_49</b> |
|------------------------------------|---|-------------------------------------|

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

