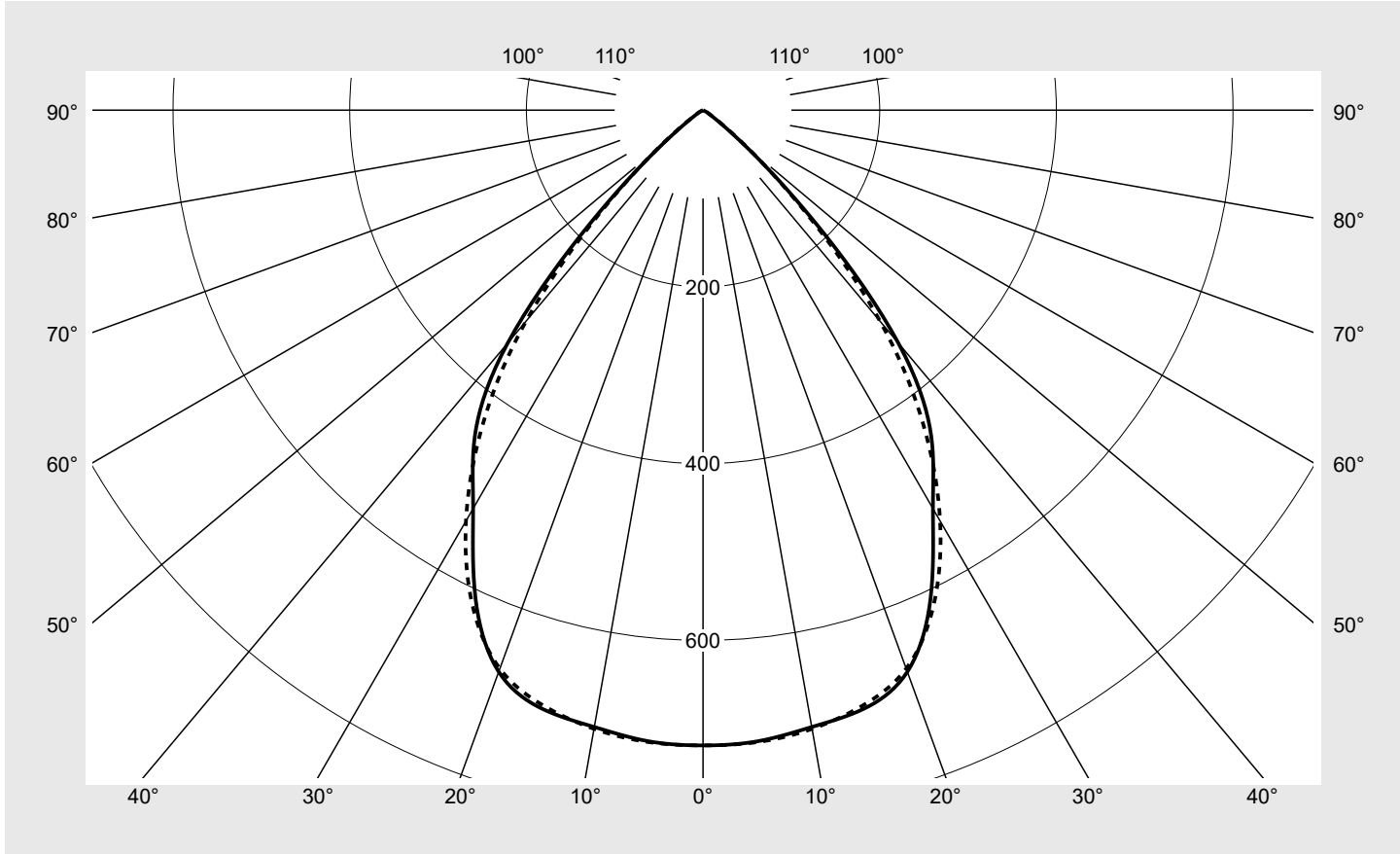


# Photometric test report

|   |   |  |
|---|---|--|
| <b>Family</b><br><b>Silica® 21</b>  | <b>Order number: 51MX6KDU34W</b><br><b>EAN: 4058352988862</b>   | <b>LP number</b><br><b>59266_197</b>             |
|   | <b>Version</b><br>recessed luminaire for lay-in mounting, white, square M625, reflector, black, wide distribution, UGR≤19 (L65≤1000cd/m²) | <b>serial documentation</b><br><b>20.10.2023</b> |
| <b>Lamps</b><br>LED 3000 K   CRI ≥ 80   | <b>Controlgear</b><br>ECG-DALI  |  |
| <b>Rated values</b><br>Net luminous flux = 4600 lm<br>Power consumption = 31.9 W<br>Luminous efficacy = 144.2 lm/W  |   |  |

**Luminous intensity in cd/klm** C180-0 C270-90 Imax: 719 cd/klm



| Classifications |                                      |
|-----------------|--------------------------------------|
| DIN 5040        | A 6 0                                |
| CIE             | N1=86 N2=100 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>Silica® 21                     | <b>Order number: 51MX6KDU34W</b><br><b>EAN: 4058352988862</b> | <b>LP number</b><br>59266_197     |
| <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°                           | 718.8      | 718.8                | 718.8                | 718.8                | 718.8                | 718.8                | 718.8       | 4.3                     | 4.3               |
| 5°                           | 716.8      | 715.7                | 712.2                | 716.2                | 717.8                | 715.2                | 717.7       | 34.2                    | 38.5              |
| 10°                          | 708.8      | 709.0                | 703.3                | 708.6                | 709.9                | 707.6                | 710.9       | 67.4                    | 105.9             |
| 15°                          | 701.5      | 704.3                | 697.3                | 698.3                | 698.8                | 696.7                | 697.6       | 99.2                    | 205.1             |
| 20°                          | 676.3      | 682.5                | 681.1                | 681.0                | 677.6                | 673.2                | 672.5       | 127.2                   | 332.2             |
| 25°                          | 609.5      | 618.9                | 627.5                | 636.4                | 634.5                | 625.9                | 617.8       | 145.0                   | 477.3             |
| 30°                          | 520.6      | 528.9                | 533.1                | 542.9                | 550.7                | 541.7                | 536.8       | 147.4                   | 624.6             |
| 35°                          | 450.5      | 455.7                | 444.2                | 436.3                | 445.0                | 443.0                | 435.2       | 139.8                   | 764.4             |
| 40°                          | 343.9      | 350.9                | 343.2                | 332.9                | 329.4                | 321.5                | 312.0       | 117.8                   | 882.2             |
| 45°                          | 178.2      | 185.2                | 190.8                | 192.2                | 186.9                | 176.3                | 167.1       | 71.3                    | 953.5             |
| 50°                          | 59.7       | 64.4                 | 73.8                 | 78.7                 | 75.2                 | 68.1                 | 63.7        | 29.5                    | 983.0             |
| 55°                          | 15.6       | 18.5                 | 24.7                 | 31.2                 | 26.2                 | 20.2                 | 17.4        | 10.3                    | 993.3             |
| 60°                          | 6.1        | 6.8                  | 9.1                  | 12.2                 | 9.8                  | 7.7                  | 7.0         | 4.1                     | 997.4             |
| 65°                          | 2.1        | 2.4                  | 3.4                  | 4.3                  | 3.8                  | 3.0                  | 2.8         | 1.6                     | 999.0             |
| 70°                          | 1.4        | 1.4                  | 1.0                  | 1.0                  | 1.2                  | 1.5                  | 1.5         | 0.7                     | 999.7             |
| 75°                          | 0.3        | 0.4                  | 0.3                  | 0.4                  | 0.4                  | 0.5                  | 0.4         | 0.2                     | 999.9             |
| 80°                          | 0.0        | 0.0                  | 0.1                  | 0.1                  | 0.1                  | 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>51MX6KDU34W</b><br>EAN: <b>4058352988862</b> | LP number<br><b>59266_197</b> |
|-----------------------------|---|-------------------------------|

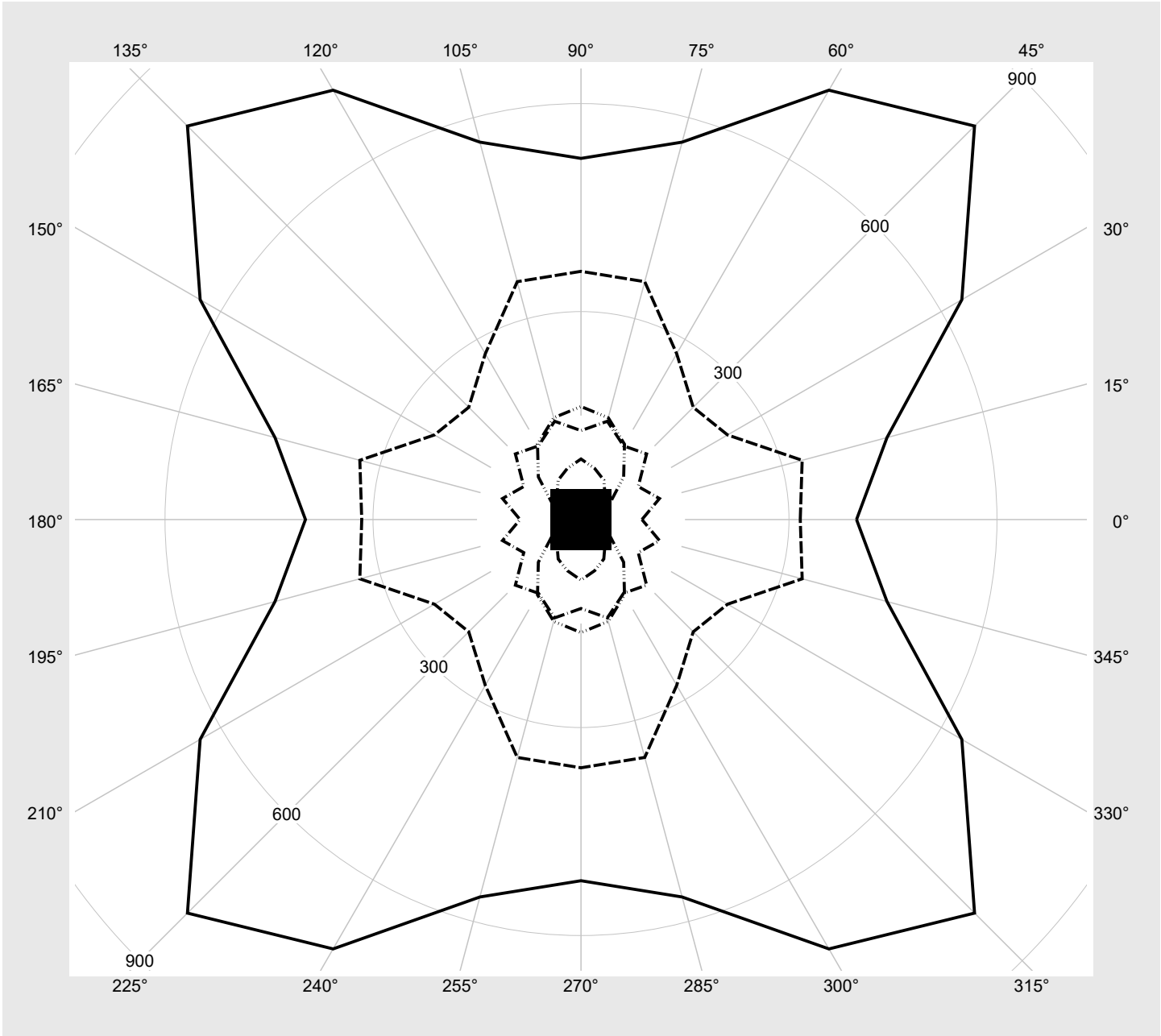
| UGR-Table                    |     | Standard room       |      |      |      |      |                    |      |      |      |      |
|------------------------------|-----|---------------------|------|------|------|------|--------------------|------|------|------|------|
| Reflection factor of ceiling | 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  | 19.3                | 20.5 | 19.6 | 20.9 | 21.2 | 19.1               | 20.4 | 19.4 | 20.7 | 21.0 |
|                              | 3H  | 19.1                | 20.2 | 19.5 | 20.6 | 20.9 | 18.9               | 20.1 | 19.3 | 20.4 | 20.8 |
|                              | 4H  | 19.1                | 20.1 | 19.5 | 20.4 | 20.8 | 18.9               | 19.9 | 19.3 | 20.3 | 20.6 |
|                              | 6H  | 19.0                | 19.9 | 19.4 | 20.3 | 20.7 | 18.8               | 19.7 | 19.2 | 20.1 | 20.5 |
|                              | 8H  | 19.0                | 19.8 | 19.5 | 20.2 | 20.6 | 18.9               | 19.7 | 19.3 | 20.1 | 20.5 |
|                              | 12H | 19.0                | 19.7 | 19.4 | 20.1 | 20.6 | 18.8               | 19.6 | 19.3 | 20.0 | 20.4 |
| 4H                           | 2H  | 19.1                | 20.1 | 19.5 | 20.5 | 20.8 | 18.9               | 19.9 | 19.3 | 20.3 | 20.7 |
|                              | 3H  | 18.9                | 19.8 | 19.3 | 20.2 | 20.6 | 18.7               | 19.6 | 19.2 | 20.0 | 20.4 |
|                              | 4H  | 18.8                | 19.6 | 19.3 | 20.0 | 20.4 | 18.7               | 19.4 | 19.1 | 19.8 | 20.3 |
|                              | 6H  | 18.7                | 19.4 | 19.2 | 19.8 | 20.3 | 18.6               | 19.2 | 19.0 | 19.6 | 20.1 |
|                              | 8H  | 18.7                | 19.3 | 19.2 | 19.7 | 20.2 | 18.5               | 19.1 | 19.0 | 19.6 | 20.0 |
|                              | 12H | 18.7                | 19.2 | 19.2 | 19.6 | 20.1 | 18.5               | 19.0 | 19.0 | 19.5 | 20.0 |
| 8H                           | 4H  | 18.7                | 19.3 | 19.2 | 19.7 | 20.2 | 18.5               | 19.1 | 19.0 | 19.6 | 20.0 |
|                              | 6H  | 18.6                | 19.1 | 19.1 | 19.5 | 20.1 | 18.4               | 18.9 | 18.9 | 19.4 | 19.9 |
|                              | 8H  | 18.5                | 19.0 | 19.1 | 19.4 | 20.0 | 18.4               | 18.8 | 18.9 | 19.3 | 19.8 |
|                              | 12H | 18.5                | 18.8 | 19.0 | 19.3 | 19.9 | 18.3               | 18.7 | 18.9 | 19.2 | 19.7 |
| 12H                          | 4H  | 18.7                | 19.2 | 19.2 | 19.6 | 20.1 | 18.5               | 19.0 | 19.0 | 19.5 | 20.0 |
|                              | 6H  | 18.6                | 19.0 | 19.1 | 19.4 | 20.0 | 18.4               | 18.8 | 18.9 | 19.3 | 19.8 |
|                              | 8H  | 18.5                | 18.8 | 19.0 | 19.3 | 19.9 | 18.3               | 18.7 | 18.9 | 19.2 | 19.7 |

| Luminance table |          | Max. for $\gamma \geq 65^\circ$ |         |         |         |         |         |         | Photometric dimensions in mm: |  | L = 294 | B = 196 |
|-----------------|----------|---------------------------------|---------|---------|---------|---------|---------|---------|-------------------------------|--|---------|---------|
| C-planes        | $\gamma$ | 0°                              | 15°     | 30°     | 45°     | 60°     | 75°     | 90°     |                               |  |         |         |
|                 |          | 180°                            | 165°    | 150°    | 135°    | 120°    | 105°    |         | 270°                          |  |         |         |
|                 |          | 195°                            | 210°    | 225°    | 240°    | 255°    |         |         |                               |  |         |         |
|                 |          | 345°                            | 330°    | 315°    | 300°    | 285°    |         |         |                               |  |         |         |
|                 |          | Luminance in cd/m <sup>2</sup>  |         |         |         |         |         |         |                               |  |         |         |
| 45°             |          | 20118.4                         | 20912.3 | 21535.7 | 21699.5 | 21100.8 | 19897.6 | 18867.6 |                               |  |         |         |
| 50°             |          | 7419.0                          | 8002.9  | 9160.5  | 9769.5  | 9333.9  | 8459.8  | 7916.6  |                               |  |         |         |
| 55°             |          | 2172.4                          | 2572.8  | 3432.3  | 4346.6  | 3644.2  | 2815.2  | 2422.4  |                               |  |         |         |
| 60°             |          | 973.7                           | 1088.5  | 1459.6  | 1947.3  | 1570.7  | 1229.0  | 1112.3  |                               |  |         |         |
| 65°             |          | 397.4                           | 456.9   | 634.3   | 802.8   | 715.1   | 563.6   | 521.0   |                               |  |         |         |
| 70°             |          | 316.3                           | 330.3   | 244.1   | 229.0   | 276.1   | 355.2   | 358.0   |                               |  |         |         |
| 75°             |          | 87.9                            | 117.2   | 95.3    | 133.9   | 122.8   | 146.8   | 128.3   |                               |  |         |         |
| 80°             |          | 22.1                            | 22.1    | 32.6    | 49.2    | 65.7    | 76.3    | 87.3    |                               |  |         |         |
| 85°             |          | 22.0                            | 38.5    | 48.5    | 87.0    | 125.5   | 152.0   | 163.0   |                               |  |         |         |

**Photometric test report**

|                                    |   |                                      |
|------------------------------------|---|--------------------------------------|
| <b>Family</b><br><b>Silica® 21</b> | <b>Order number: 51MX6KDU34W</b><br><b>EAN: 4058352988862</b> | <b>LP number</b><br><b>59266_197</b> |
|------------------------------------|---|--------------------------------------|

**Luminance values in cd/m²**     γ 65°   γ 70°   γ 75°   γ 80°   γ 85°     **siteco**



## Photometric test report

|                             |   |                               |
|-----------------------------|---|-------------------------------|
| <b>Family</b><br>Silica® 21 | <b>Order number: 51MX6KDU34W</b><br><b>EAN: 4058352988862</b> | <b>LP number</b><br>59266_197 |
|-----------------------------|---|-------------------------------|

|                             |                                 |               |
|-----------------------------|---------------------------------|---------------|
| <b>Dimming levels table</b> | environmental temperature: 25°C | <b>sITeco</b> |
|-----------------------------|---------------------------------|---------------|

| Luminous flux % | Dimming level linear | Dimming level logarithmic | Luminous flux [lm] | Power consumption [W] |
|-----------------|----------------------|---------------------------|--------------------|-----------------------|
| 100             | 254                  | 254                       | 4600               | 31.9                  |
| 95              | 240                  | 252                       | 4371               | 30.1                  |
| 90              | 226                  | 250                       | 4137               | 28.5                  |
| 85              | 212                  | 247                       | 3902               | 26.8                  |
| 80              | 199                  | 245                       | 3681               | 25.2                  |
| 75              | 186                  | 243                       | 3456               | 23.5                  |
| 70              | 172                  | 240                       | 3212               | 21.9                  |
| 65              | 159                  | 237                       | 2984               | 20.4                  |
| 60              | 146                  | 234                       | 2752               | 18.8                  |
| 55              | 134                  | 231                       | 2536               | 17.4                  |
| 50              | 121                  | 227                       | 2299               | 15.9                  |
| 45              | 109                  | 223                       | 2079               | 14.5                  |
| 40              | 96                   | 218                       | 1839               | 12.8                  |
| 35              | 84                   | 213                       | 1614               | 11.3                  |
| 30              | 72                   | 208                       | 1387               | 9.9                   |
| 25              | 60                   | 201                       | 1159               | 8.5                   |
| 20              | 48                   | 193                       | 928                | 7.1                   |
| 15              | 36                   | 182                       | 697                | 5.7                   |
| 10              | 24                   | 168                       | 462                | 4.4                   |
| 5               | 12                   | 142                       | 228                | 3.0                   |
| 2               | 4                    | 102                       | 70                 | 2.0                   |