

## Lichttechnischer Prüfbefund

Familie  
Silica® 21

Bestell-Nr.: 51MX23TCTAS  
EAN: 4058352807200

LP-Nummer  
59330\_171



**Ausführung** Anbauleuchte, homogen leuchtend, Prismenabdeckung, direkt strahlend, extrem breit strahlend,  $UGR \leq 19$  ( $L65 \leq 3000 \text{cd/m}^2$ ), Tunable White

**Bestückung** LED 2700 K | CRI  $\geq 80$

**Betriebsgerät** EVG-DALI

**Einstellung** indiv. Einstellung

**Bemessungswerte** Nettolichtstrom = 8070 lm  
Systemleistung = 92.2 W  
Lichtausbeute = 87.5 lm/W

Seriendokumentation  
03.05.2023

siteco

Lichtstärke in cd/klm

C180-0

C270-90

Imax: 642 cd/klm



#### Klassifizierungen

DIN 5040 A 6 0  
CIE N1=78 N2=96 N3=99  
N4=100 N5=100

#### Leuchtenbetriebswirkungsgrade

$\eta_{LB}$  100,0%  
 $\phi_u$  100,0%  
 $\phi_o$  0,0%

#### Messbedingungen

DIN EN 13032 und DIN 5032

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|                              |  |                               |
|------------------------------|--|-------------------------------|
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|  |                             |               |
|--|-----------------------------|---------------|
| <b>Wertetabelle Lichtstärkemessung</b> | <b>Maximale Lichtstärke</b> | <b>sITeCO</b> |
|--|-----------------------------|---------------|

| C-<br>Ebenen          | 0°<br>180° | 15°                  | 30°                  | 45°                  | 60°                  | 75°                  | 90°<br>270° | Phi-Zone             | Summe<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° |             |                      |                   |
| Lichtstärke in cd/klm |            |                      |                      |                      |                      |                      |             | Lichtstrom in lm/klm |                   |
| γ                     |            |                      |                      |                      |                      |                      |             |                      |                   |
| 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            |

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| UGR-Tabelle     |     | Standardraum                        |      |      |      |      |                                       |      |      |      |      |
|-----------------|-----|-------------------------------------|------|------|------|------|---------------------------------------|------|------|------|------|
|                 |     | Blickrichtung quer zur Leuchte (C0) |      |      |      |      | Blickrichtung längs zur Leuchte (C90) |      |      |      |      |
| Raumabmessungen |     |                                     |      |      |      |      |                                       |      |      |      |      |
| x               | y   |                                     |      |      |      |      |                                       |      |      |      |      |
| 2H              | 2H  | 18,4                                | 19,7 | 18,7 | 20,1 | 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                                  | 19,9 | 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 | 20,2 | 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                                | 19,4 | 19,0 | 19,8 | 20,2 | 18,8                                  | 19,6 | 19,2 | 20,0 | 20,5 |
|                 | 6H  | 18,6                                | 19,3 | 19,1 | 19,8 | 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 | 19,2 | 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 | 19,3 | 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 | 20,2 | 19,1                                  | 19,5 | 19,6 | 20,0 | 20,5 |

## Leuchtdichten-Tabelle Max. für $\gamma \geq 65^\circ$

Lichttechnische Abmessungen in mm: **L = 3000**  
**B = 50**

| C-<br>Ebenen | $\gamma$ | Leuchtdichte 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°          |          | 15094.0                           | 15142.8                     | 15270.8                     | 15483.9                     | 15694.9                     | 15919.9                     | 16136.3     |
| 50°          |          | 7859.0                            | 9078.9                      | 10212.9                     | 9311.0                      | 8389.9                      | 9983.8                      | 11180.5     |
| 55°          |          | 3536.5                            | 4782.7                      | 4522.6                      | 5156.4                      | 3889.5                      | 5389.7                      | 5012.6      |
| 60°          |          | 2742.5                            | 2855.2                      | 3029.3                      | 2813.7                      | 2806.1                      | 2994.0                      | 3118.2      |
| 65°          |          | 2669.4                            | 2652.1                      | 2762.8                      | 2685.7                      | 2812.7                      | 2799.1                      | 2838.2      |
| 70°          |          | 2390.3                            | 2440.7                      | 2540.6                      | 2529.2                      | 2575.3                      | 2605.5                      | 2737.8      |
| 75°          |          | 2198.6                            | 2278.6                      | 2508.3                      | 2400.0                      | 2453.5                      | 2573.4                      | 2577.8      |
| 80°          |          | 1978.5                            | 2102.1                      | 2320.9                      | 2524.1                      | 2336.4                      | 2612.4                      | 2618.3      |
| 85°          |          | 1495.7                            | 1517.9                      | 1619.1                      | 1979.6                      | 2134.0                      | 2508.0                      | 2630.9      |

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|-------------------------------------|--|--------------------------------------|

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

