

Photometric test report

Family
Silica® 21

Order number: 51MX32TCTDW
EAN: 4058352795163

LP number
59308_47



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

Lamps LED 2700 K | CRI ≥ 80

Controlgear ECG-DALI

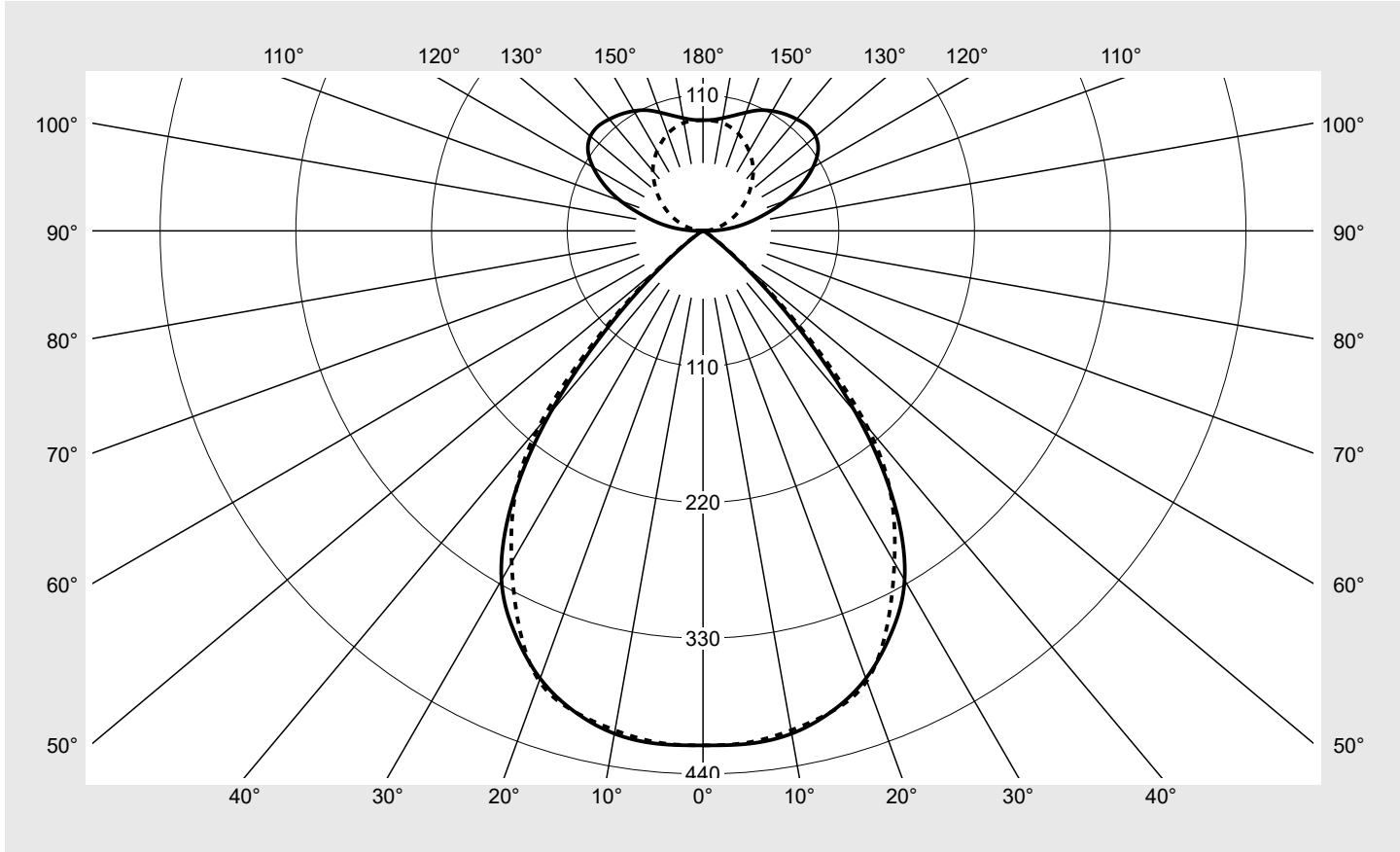
Setting individual position

Rated values Net luminous flux = 15540 lm
Power consumption = 151.4 W
Luminous efficacy = 102.6 lm/W

serial documentation
03.05.2023



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

| | |
|-------------|--------|
| η_{LB} | 100.0% |
| ϕ_u | 59.8% |
| ϕ_o | 40.2% |

Measurement conditions
DIN EN 13032 and DIN 5032

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| | | |
|---|---|-----------------------------------|
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| Table of values for luminous intensities | | Maximum luminous intensity |
| | | siteco |

| C-planes γ | 0° 180° | 15° | 30° | 45° | 60° | 75° | 90° 270° | Phi-zone | Total Phi-zone |
|------------------------------|------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------|-------------------------|-------------------|
| | | 165° 195° 345° | 150° 210° 330° | 135° 225° 315° | 120° 240° 300° | 105° 255° 285° | | | |
| 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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| 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 | 18.8 |
| | 3H | 15.7 | 16.4 | 16.5 | 17.3 | 18.4 | 15.8 | 16.6 | 16.6 | 17.4 | 18.5 |
| | 4H | 15.5 | 16.2 | 16.4 | 17.1 | 18.2 | 15.6 | 16.4 | 16.5 | 17.2 | 18.3 |
| | 6H | 15.3 | 15.9 | 16.2 | 16.8 | 18.0 | 15.5 | 16.1 | 16.4 | 17.0 | 18.1 |
| | 8H | 15.2 | 15.8 | 16.2 | 16.7 | 17.9 | 15.3 | 15.9 | 16.2 | 16.8 | 18.0 |
| | 12H | 15.1 | 15.6 | 16.1 | 16.6 | 17.7 | 15.3 | 15.8 | 16.2 | 16.7 | 17.9 |
| 4H | 2H | 15.6 | 16.3 | 16.4 | 17.1 | 18.2 | 15.6 | 16.3 | 16.5 | 17.2 | 18.3 |
| | 3H | 15.3 | 15.9 | 16.2 | 16.8 | 17.9 | 15.4 | 16.0 | 16.3 | 16.9 | 18.0 |
| | 4H | 15.1 | 15.7 | 16.1 | 16.6 | 17.7 | 15.2 | 15.8 | 16.2 | 16.7 | 17.8 |
| | 6H | 15.0 | 15.4 | 15.9 | 16.3 | 17.5 | 15.1 | 15.5 | 16.0 | 16.4 | 17.6 |
| | 8H | 14.9 | 15.3 | 15.8 | 16.2 | 17.4 | 15.0 | 15.4 | 15.9 | 16.3 | 17.5 |
| | 12H | 14.8 | 15.1 | 15.7 | 16.1 | 17.3 | 14.9 | 15.2 | 15.9 | 16.2 | 17.4 |
| 8H | 4H | 14.9 | 15.3 | 15.8 | 16.2 | 17.4 | 15.0 | 15.4 | 15.9 | 16.3 | 17.5 |
| | 6H | 14.8 | 15.1 | 15.7 | 16.0 | 17.3 | 14.8 | 15.1 | 15.8 | 16.1 | 17.3 |
| | 8H | 14.7 | 15.0 | 15.6 | 15.9 | 17.2 | 14.8 | 15.1 | 15.7 | 16.0 | 17.3 |
| | 12H | 14.6 | 14.8 | 15.6 | 15.8 | 17.0 | 14.7 | 14.9 | 15.7 | 15.9 | 17.1 |
| 12H | 4H | 14.8 | 15.1 | 15.8 | 16.1 | 17.3 | 14.9 | 15.2 | 15.8 | 16.2 | 17.4 |
| | 6H | 14.6 | 14.9 | 15.6 | 15.9 | 17.1 | 14.7 | 15.0 | 15.7 | 16.0 | 17.2 |
| | 8H | 14.6 | 14.8 | 15.6 | 15.8 | 17.0 | 14.7 | 14.9 | 15.7 | 15.9 | 17.1 |

| | | | |
|------------------------|---|--------------------------------------|----------------------------------|
| Luminance table | Max. for $\gamma \geq 65^\circ$ | Photometric dimensions in mm: | L = 2940 B = 49 |
|------------------------|---|--------------------------------------|----------------------------------|

| C-planes | γ | Luminance in cd/m ² | | | | | | | |
|----------|----------|--------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|--|
| | | 0° 180° | 15° 165° 195° 345° | 30° 150° 210° 330° | 45° 135° 225° 315° | 60° 120° 240° 300° | 75° 105° 255° 285° | 90° 270° | |
| 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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Luminance values in cd/m² γ 65° γ 70° γ 75° γ 80° γ 85° **siteco**

