

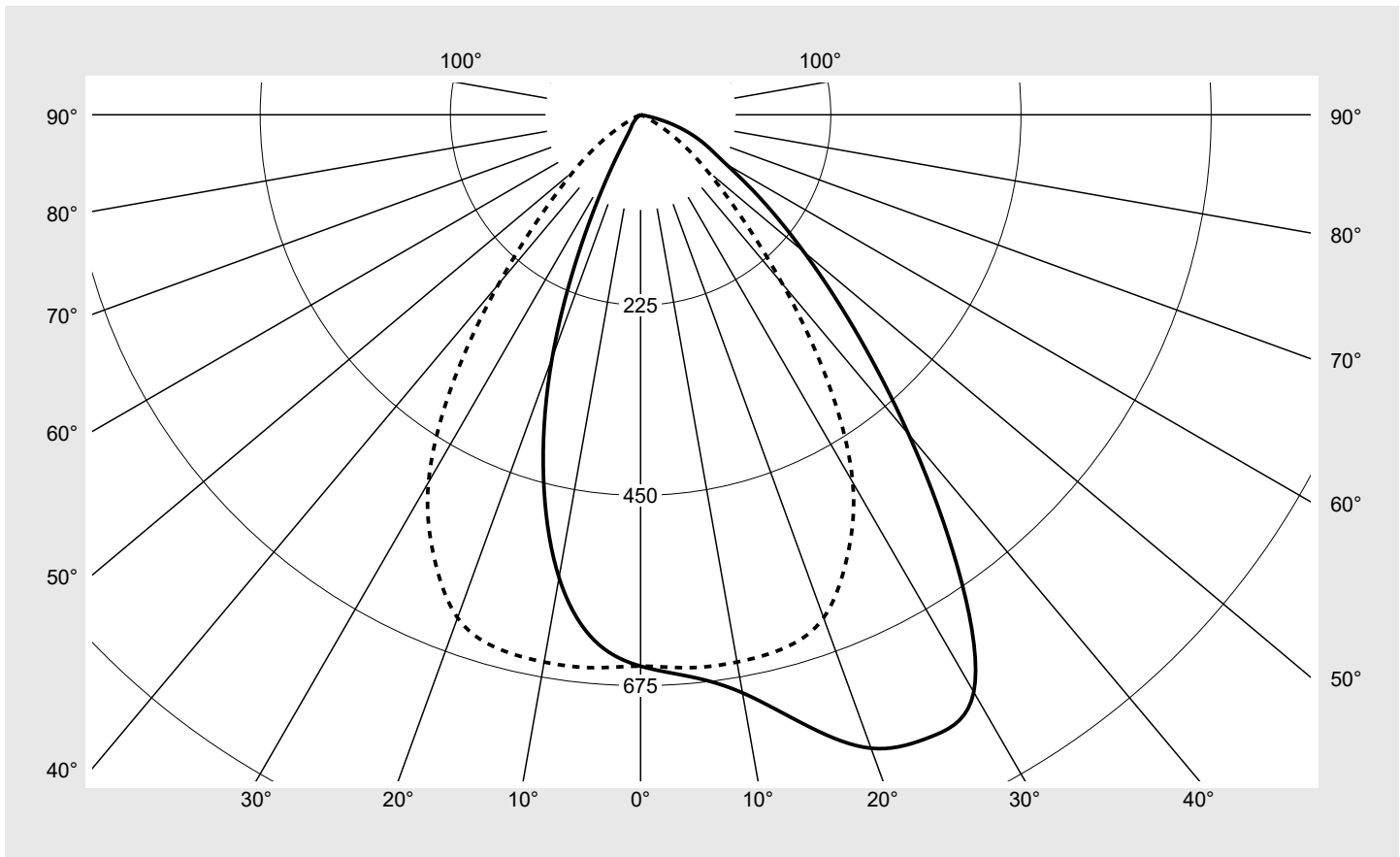


# Photometric test report

|  |   |   |
|--|---|---|
| <b>Family</b><br><b>Silica® 21</b>   | <b>Order number: 51MX24DB35WB</b><br><b>EAN: 4058352905395</b>  | <b>LP number</b><br><b>59270_79</b>   |
|  | <b>Version</b> surface-mounted luminaire, reflector, black, direct distribution, asymmetric distribution<br><b>Lamps</b> LED 3000 K   CRI ≥ 80<br><b>Controlgear</b> ECG-DALI | <b>serial documentation</b><br><b>02.08.2023</b>                                    |
|  | <b>Rated values</b><br>Net luminous flux = 5400 lm<br>Power consumption = 40.3 W<br>Luminous efficacy = 134 lm/W  |  |

**Luminous intensity in cd/klm** C180-0 C270-90 **Imax: 826 cd/klm**



| Classifications |                                    |
|-----------------|------------------------------------|
| DIN 5040        | A 6 0                              |
| CIE             | N1=74 N2=94 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 |

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|  |  |                              |
|--|--|------------------------------|
| Family<br><b>Silica® 21</b>              | Order number: <b>51MX24DB35WB</b><br>EAN: <b>4058352905395</b> | LP number<br><b>59270_79</b> |
| Table of values for luminous intensities |  | Maximum luminous intensity   |
|  |  | <b>sITeco</b>                |

| C-planes | 0°                           | 15°<br>345° | 30°<br>330° | 45°<br>315° | 60°<br>300° | 75°<br>285° | 90°<br>270° |
|----------|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| $\gamma$ | Luminous intensity in cd/klm |             |             |             |             |             |             |
| 0°       | 652.0                        | 652.0       | 652.0       | 652.0       | 652.0       | 652.0       | 652.0       |
| 5°       | 666.9                        | 669.0       | 664.7       | 668.1       | 665.8       | 658.5       | 656.3       |
| 10°      | 694.1                        | 699.5       | 694.9       | 697.8       | 687.8       | 669.7       | 657.2       |
| 15°      | 745.9                        | 757.8       | 758.6       | 751.7       | 720.3       | 681.6       | 653.2       |
| 20°      | 797.2                        | 810.9       | 815.9       | 795.0       | 737.5       | 674.0       | 633.0       |
| 25°      | 811.7                        | 825.8       | 812.3       | 769.4       | 703.1       | 631.1       | 577.8       |
| 30°      | 788.3                        | 790.4       | 769.6       | 695.9       | 622.5       | 550.2       | 501.9       |
| 35°      | 654.2                        | 653.0       | 648.0       | 598.2       | 512.7       | 433.1       | 387.1       |
| 40°      | 493.4                        | 503.0       | 513.6       | 491.7       | 407.8       | 312.4       | 261.1       |
| 45°      | 356.9                        | 371.2       | 396.6       | 382.3       | 311.7       | 212.0       | 163.2       |
| 50°      | 252.0                        | 264.9       | 292.8       | 285.3       | 227.0       | 141.1       | 102.4       |
| 55°      | 174.1                        | 185.5       | 214.4       | 210.2       | 168.5       | 93.5        | 60.0        |
| 60°      | 116.9                        | 126.6       | 154.3       | 157.4       | 127.4       | 55.1        | 26.1        |
| 65°      | 85.8                         | 90.4        | 106.5       | 115.9       | 84.8        | 29.1        | 8.4         |
| 70°      | 58.6                         | 65.3        | 76.1        | 78.1        | 49.1        | 15.0        | 3.2         |
| 75°      | 29.3                         | 36.5        | 51.8        | 37.7        | 23.5        | 8.4         | 1.1         |
| 80°      | 4.9                          | 7.0         | 15.4        | 15.1        | 10.7        | 3.3         | 0.5         |
| 85°      | 1.0                          | 1.2         | 2.3         | 2.1         | 0.8         | 0.3         | 0.3         |
| 90°      | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 95°      | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 100°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 105°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 110°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 115°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 120°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 125°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 130°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 135°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 140°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 145°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 150°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 155°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 160°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 165°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 170°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 175°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| 180°     | 0.0                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |

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|   |  |                                     |
|---|--|-------------------------------------|
| <b>Family</b><br><b>Silica® 21</b>              | <b>Order number: 51MX24DB35WB</b><br><b>EAN: 4058352905395</b> | <b>LP number</b><br><b>59270_79</b> |
| <b>Table of values for luminous intensities</b> |  | <b>Maximum luminous intensity</b>   |
|   |  | <b>siteco</b>                       |

| C-planes | 105°<br>255°                 | 120°<br>240° | 135°<br>225° | 150°<br>210° | 165°<br>195° | 180°  | Phi-zone                | Total<br>Phi-zone |
|----------|------------------------------|--------------|--------------|--------------|--------------|-------|-------------------------|-------------------|
| $\gamma$ | Luminous intensity in cd/klm |              |              |              |              |       | Luminous flux in lm/klm |                   |
| 0°       | 652.0                        | 652.0        | 652.0        | 652.0        | 652.0        | 652.0 | 3.9                     | 3.9               |
| 5°       | 648.8                        | 644.3        | 634.4        | 624.8        | 623.0        | 624.2 | 31.1                    | 35.0              |
| 10°      | 640.2                        | 622.4        | 598.9        | 573.5        | 560.8        | 555.7 | 61.3                    | 96.3              |
| 15°      | 627.5                        | 590.3        | 536.8        | 485.9        | 456.2        | 443.8 | 90.0                    | 186.3             |
| 20°      | 595.4                        | 535.2        | 448.1        | 369.0        | 322.8        | 305.6 | 113.9                   | 300.1             |
| 25°      | 535.8                        | 444.7        | 330.5        | 240.5        | 178.2        | 155.1 | 126.1                   | 426.3             |
| 30°      | 439.6                        | 334.4        | 213.1        | 117.0        | 65.0         | 52.1  | 126.1                   | 552.3             |
| 35°      | 312.5                        | 213.9        | 111.2        | 44.6         | 25.1         | 21.7  | 112.1                   | 664.4             |
| 40°      | 197.6                        | 120.2        | 49.4         | 22.0         | 16.7         | 15.5  | 92.5                    | 756.9             |
| 45°      | 117.6                        | 62.5         | 22.8         | 14.8         | 11.5         | 10.5  | 72.7                    | 829.5             |
| 50°      | 69.7                         | 30.7         | 13.3         | 9.8          | 7.0          | 5.9   | 55.0                    | 884.6             |
| 55°      | 38.5                         | 15.6         | 8.4          | 6.0          | 3.7          | 3.2   | 40.9                    | 925.5             |
| 60°      | 14.7                         | 7.6          | 5.1          | 3.5          | 2.8          | 2.3   | 29.3                    | 954.8             |
| 65°      | 4.9                          | 3.9          | 3.0          | 2.5          | 1.8          | 1.2   | 20.5                    | 975.2             |
| 70°      | 1.9                          | 1.9          | 1.7          | 1.4          | 1.0          | 0.6   | 13.9                    | 989.2             |
| 75°      | 0.7                          | 0.9          | 0.9          | 0.8          | 0.6          | 0.5   | 7.8                     | 997.0             |
| 80°      | 0.4                          | 0.5          | 0.5          | 0.5          | 0.4          | 0.4   | 2.6                     | 999.6             |
| 85°      | 0.4                          | 0.4          | 0.4          | 0.4          | 0.3          | 0.3   | 0.4                     | 1000.0            |
| 90°      | 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                     | 1000.0            |
| 100°     | 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                     | 1000.0            |
| 110°     | 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                     | 1000.0            |
| 120°     | 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                     | 1000.0            |
| 130°     | 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                     | 1000.0            |
| 140°     | 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                     | 1000.0            |
| 150°     | 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                     | 1000.0            |
| 160°     | 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                     | 1000.0            |
| 170°     | 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                     | 1000.0            |
| 180°     | 0.0                          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0   | 0.0                     | 1000.0            |

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

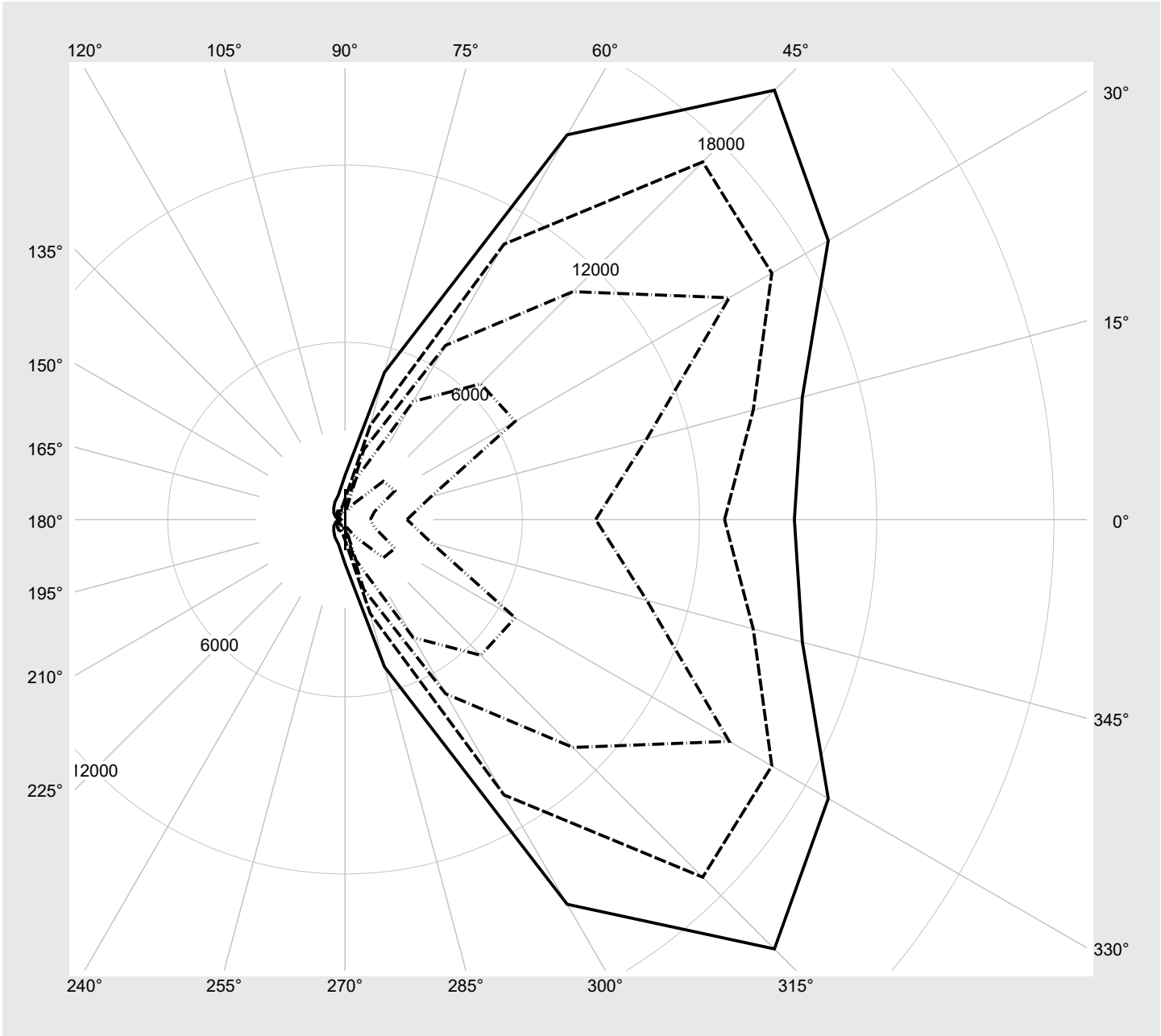
| UGR-Table                    |     | Standard room       |      |      |      |      |                    |      |      |      |      |
|------------------------------|-----|---------------------|------|------|------|------|--------------------|------|------|------|------|
| Reflection factor of ceiling | 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  | 25.0                | 26.4 | 25.4 | 26.7 | 27.0 | 20.4               | 21.8 | 20.8 | 22.1 | 22.4 |
|                              | 3H  | 25.5                | 26.8 | 25.9 | 27.1 | 27.5 | 20.4               | 21.6 | 20.7 | 21.9 | 22.3 |
|                              | 4H  | 25.7                | 26.8 | 26.1 | 27.2 | 27.5 | 20.3               | 21.5 | 20.7 | 21.8 | 22.2 |
|                              | 6H  | 25.7                | 26.7 | 26.1 | 27.1 | 27.5 | 20.2               | 21.3 | 20.7 | 21.7 | 22.1 |
|                              | 8H  | 25.6                | 26.6 | 26.1 | 27.0 | 27.4 | 20.2               | 21.2 | 20.7 | 21.6 | 22.0 |
|                              | 12H | 25.7                | 26.5 | 26.1 | 26.9 | 27.3 | 20.3               | 21.1 | 20.7 | 21.5 | 21.9 |
| 4H                           | 2H  | 25.4                | 26.5 | 25.8 | 26.9 | 27.3 | 21.2               | 22.4 | 21.6 | 22.8 | 23.1 |
|                              | 3H  | 26.1                | 27.1 | 26.5 | 27.5 | 27.9 | 21.4               | 22.4 | 21.8 | 22.8 | 23.2 |
|                              | 4H  | 26.4                | 27.2 | 26.8 | 27.6 | 28.1 | 21.4               | 22.2 | 21.8 | 22.7 | 23.1 |
|                              | 6H  | 26.4                | 27.1 | 26.8 | 27.5 | 28.0 | 21.3               | 22.1 | 21.8 | 22.5 | 23.0 |
|                              | 8H  | 26.3                | 27.0 | 26.8 | 27.4 | 27.9 | 21.3               | 22.0 | 21.8 | 22.4 | 22.9 |
|                              | 12H | 26.3                | 26.9 | 26.8 | 27.4 | 27.9 | 21.3               | 21.9 | 21.8 | 22.3 | 22.8 |
| 8H                           | 4H  | 26.4                | 27.1 | 26.9 | 27.5 | 28.0 | 21.6               | 22.3 | 22.1 | 22.7 | 23.2 |
|                              | 6H  | 26.5                | 27.0 | 26.9 | 27.5 | 28.0 | 21.6               | 22.1 | 22.1 | 22.6 | 23.1 |
|                              | 8H  | 26.4                | 26.9 | 26.9 | 27.4 | 27.9 | 21.6               | 22.0 | 22.1 | 22.5 | 23.1 |
|                              | 12H | 26.4                | 26.8 | 26.9 | 27.3 | 27.8 | 21.5               | 21.9 | 22.1 | 22.4 | 23.0 |
| 12H                          | 4H  | 26.4                | 27.0 | 26.9 | 27.4 | 27.9 | 21.7               | 22.2 | 22.2 | 22.7 | 23.2 |
|                              | 6H  | 26.5                | 26.9 | 27.0 | 27.4 | 27.9 | 21.6               | 22.1 | 22.1 | 22.6 | 23.1 |
|                              | 8H  | 26.4                | 26.8 | 26.9 | 27.3 | 27.8 | 21.6               | 22.0 | 22.1 | 22.5 | 23.0 |

| Luminance table |                                | Max. for $\gamma \geq 65^\circ$ |             |             |             |             |             |              |              |              |              |              |        |
|-----------------|--------------------------------|---------------------------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------|
|                 |                                | Photometric dimensions in mm:   |             |             |             |             |             |              |              |              |              |              |        |
|                 |                                | L = 1470<br>B = 49              |             |             |             |             |             |              |              |              |              |              |        |
| C-planes        | 0°                             | 15°<br>345°                     | 30°<br>330° | 45°<br>315° | 60°<br>300° | 75°<br>285° | 90°<br>270° | 105°<br>255° | 120°<br>240° | 135°<br>225° | 150°<br>210° | 165°<br>195° | 180°   |
| $\gamma$        | Luminance in cd/m <sup>2</sup> |                                 |             |             |             |             |             |              |              |              |              |              |        |
| 45°             | 37839.4                        | 39355.2                         | 42043.7     | 40527.9     | 33048.7     | 22474.8     | 17303.7     | 12471.6      | 6626.9       | 2419.6       | 1571.7       | 1222.7       | 1112.6 |
| 50°             | 29386.5                        | 30896.8                         | 34153.2     | 33272.3     | 26476.2     | 16458.3     | 11940.3     | 8123.8       | 3582.1       | 1555.9       | 1146.8       | 814.9        | 682.8  |
| 55°             | 22760.1                        | 24248.1                         | 28024.4     | 27469.0     | 22017.9     | 12219.3     | 7847.1      | 5028.1       | 2036.2       | 1094.8       | 781.0        | 481.3        | 412.5  |
| 60°             | 17526.2                        | 18986.4                         | 23128.3     | 23597.5     | 19103.7     | 8263.5      | 3917.4      | 2206.5       | 1140.6       | 766.5        | 529.9        | 412.6        | 347.9  |
| 65°             | 15212.9                        | 16028.7                         | 18890.4     | 20558.2     | 15040.6     | 5161.0      | 1495.4      | 861.4        | 684.4        | 540.7        | 437.8        | 325.3        | 215.4  |
| 70°             | 12849.2                        | 14306.8                         | 16684.0     | 17124.5     | 10764.8     | 3293.6      | 697.7       | 416.9        | 416.9        | 369.6        | 307.5        | 221.8        | 135.9  |
| 75°             | 8486.1                         | 10576.2                         | 15018.4     | 10912.3     | 6809.8      | 2445.9      | 320.4       | 210.9        | 257.8        | 246.2        | 226.5        | 183.6        | 148.6  |
| 80°             | 2096.5                         | 3022.1                          | 6650.3      | 6498.8      | 4612.1      | 1426.9      | 203.8       | 192.1        | 227.1        | 233.1        | 221.5        | 192.1        | 174.8  |
| 85°             | 858.4                          | 1032.2                          | 1949.1      | 1833.0      | 649.4       | 289.9       | 278.7       | 313.1        | 348.4        | 359.6        | 336.3        | 289.9        | 278.7  |

**Photometric test report**

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

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



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

|                             |                                 |               |
|-----------------------------|---------------------------------|---------------|
| <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                       | 5400               | 40.3                  |
| 95              | 240                  | 252                       | 5125               | 38.0                  |
| 90              | 227                  | 250                       | 4867               | 35.9                  |
| 85              | 213                  | 248                       | 4588               | 33.7                  |
| 80              | 200                  | 245                       | 4324               | 31.8                  |
| 75              | 187                  | 243                       | 4057               | 29.8                  |
| 70              | 174                  | 240                       | 3789               | 27.8                  |
| 65              | 161                  | 237                       | 3520               | 25.7                  |
| 60              | 148                  | 234                       | 3247               | 23.7                  |
| 55              | 135                  | 231                       | 2972               | 21.8                  |
| 50              | 122                  | 227                       | 2695               | 19.8                  |
| 45              | 110                  | 223                       | 2436               | 17.9                  |
| 40              | 97                   | 219                       | 2155               | 15.9                  |
| 35              | 85                   | 214                       | 1893               | 14.2                  |
| 30              | 73                   | 208                       | 1630               | 12.3                  |
| 25              | 60                   | 201                       | 1342               | 10.4                  |
| 20              | 48                   | 193                       | 1075               | 8.7                   |
| 15              | 36                   | 182                       | 805                | 6.8                   |
| 10              | 24                   | 168                       | 535                | 5.1                   |
| 5               | 12                   | 142                       | 264                | 3.3                   |
| 2               | 4                    | 102                       | 81                 | 2.1                   |