

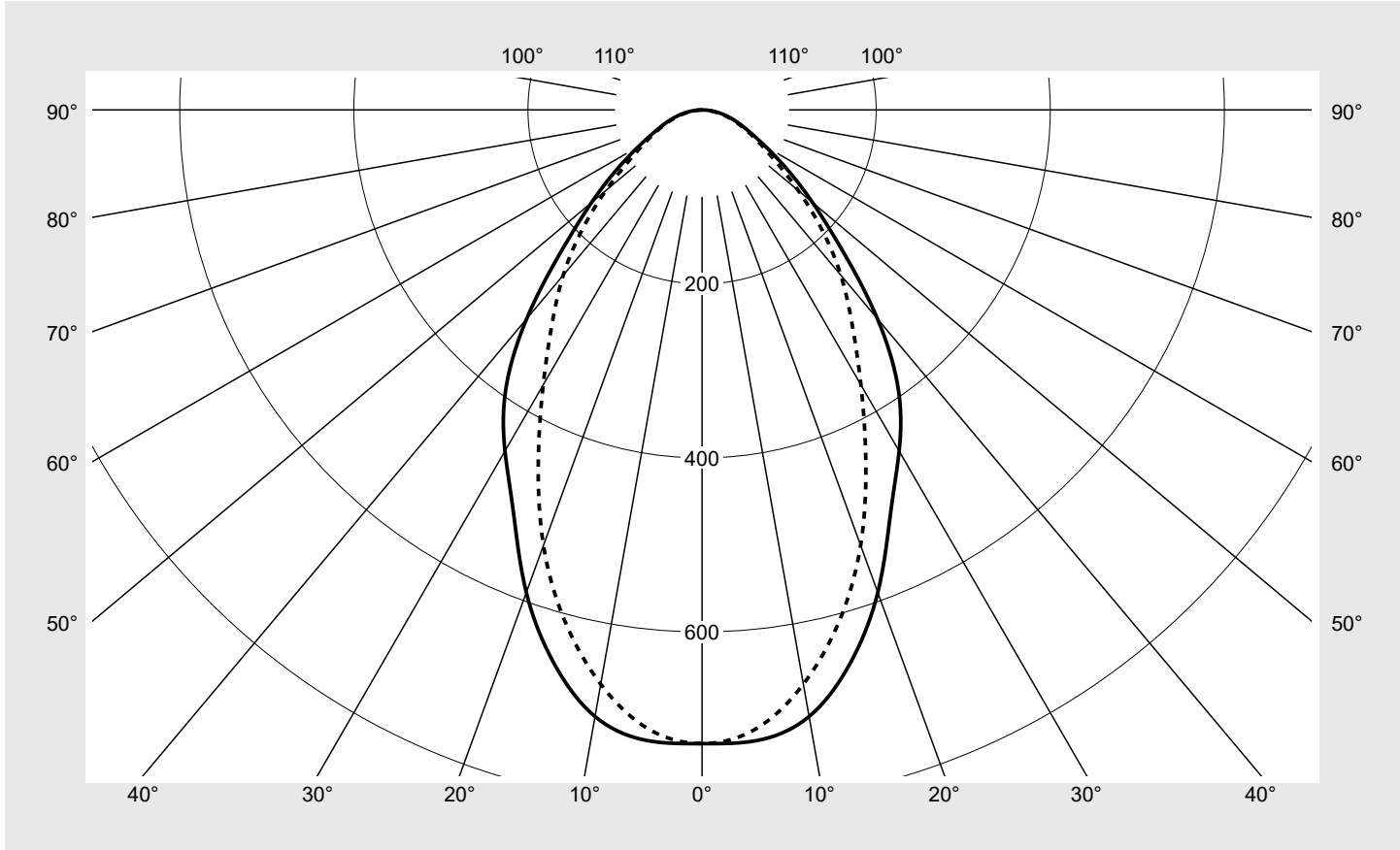


# Photometric test report

|  |  |   |
|--|--|---|
| <b>Family</b><br><b>Licross® 21 Recessed</b>                                     | <b>Order number: 52TL12DV4L2MD</b><br><b>EAN: 4058352891063</b>  | <b>LP number</b><br><b>59446_41</b>   |
|  | <b>Version</b> cover frosted, wide distribution, high visual comfort<br><b>Lamps</b> LED 4000 K   CRI ≥ 80<br><b>Controlgear</b> ECG-DALI<br><b>Setting</b> AC-mode<br><b>Rated values</b> Net luminous flux = 22710 lm<br>Power consumption = 125.6 W<br>Luminous efficacy = 180.8 lm/W | <b>serial documentation</b><br><b>10.08.2023</b><br><br> |

**Luminous intensity in cd/klm** C180-0 C270-90 **Imax: 728 cd/klm**



| Classifications |                                    |
|-----------------|------------------------------------|
| DIN 5040        | A 5 0                              |
| CIE             | N1=69 N2=91 N3=98<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>Licross® 21 Recessed</b>           | Order number: <b>52TL12DV4L2MD</b><br>EAN: <b>4058352891063</b> | LP number<br><b>59446_41</b>      |
| <b>Table of values for luminous intensities</b> |   | <b>Maximum luminous intensity</b> |
|   |   | <b>siteco</b>                     |

| C-planes<br>$\gamma$         | 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°                           | 728.4      | 728.4                | 728.4                | 728.4                | 728.4                | 728.4                | 728.4                   | 4.4      | 4.4               |
| 5°                           | 727.5      | 724.8                | 717.6                | 716.9                | 716.5                | 714.4                | 713.9                   | 34.3     | 38.7              |
| 10°                          | 708.0      | 704.6                | 693.5                | 687.1                | 680.0                | 672.5                | 670.2                   | 65.5     | 104.1             |
| 15°                          | 658.1      | 653.2                | 637.7                | 629.5                | 623.7                | 612.7                | 608.6                   | 89.6     | 193.8             |
| 20°                          | 590.3      | 582.5                | 562.9                | 551.9                | 546.6                | 538.5                | 532.6                   | 104.5    | 298.2             |
| 25°                          | 512.2      | 499.8                | 475.2                | 461.5                | 453.8                | 449.4                | 445.1                   | 108.8    | 407.1             |
| 30°                          | 452.8      | 433.7                | 396.2                | 371.8                | 363.4                | 365.0                | 364.9                   | 106.8    | 513.9             |
| 35°                          | 393.4      | 374.1                | 335.3                | 295.7                | 285.6                | 295.2                | 300.5                   | 101.3    | 615.2             |
| 40°                          | 313.5      | 300.8                | 276.8                | 238.3                | 224.4                | 239.2                | 248.1                   | 91.6     | 706.8             |
| 45°                          | 227.2      | 217.7                | 208.5                | 191.4                | 176.2                | 187.2                | 194.9                   | 77.0     | 783.8             |
| 50°                          | 165.8      | 151.3                | 143.3                | 147.8                | 138.9                | 142.4                | 144.5                   | 61.5     | 845.3             |
| 55°                          | 119.7      | 105.2                | 93.7                 | 108.9                | 109.4                | 104.2                | 103.2                   | 47.4     | 892.7             |
| 60°                          | 84.3       | 73.0                 | 63.0                 | 78.5                 | 83.8                 | 75.4                 | 76.1                    | 35.9     | 928.6             |
| 65°                          | 60.6       | 51.5                 | 43.5                 | 55.3                 | 61.5                 | 55.5                 | 56.9                    | 27.0     | 955.6             |
| 70°                          | 44.8       | 36.9                 | 29.5                 | 37.3                 | 40.5                 | 40.0                 | 42.0                    | 19.5     | 975.1             |
| 75°                          | 31.9       | 25.4                 | 19.2                 | 23.6                 | 27.6                 | 27.0                 | 29.3                    | 13.5     | 988.6             |
| 80°                          | 20.2       | 15.5                 | 11.1                 | 12.8                 | 15.3                 | 15.6                 | 17.2                    | 8.0      | 996.7             |
| 85°                          | 9.4        | 7.2                  | 4.9                  | 5.0                  | 5.8                  | 6.0                  | 6.3                     | 3.3      | 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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|                                       |   |                              |
|---------------------------------------|---|------------------------------|
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|---------------------------------------|---|------------------------------|

|                  |                      |               |
|------------------|----------------------|---------------|
| <b>UGR-Table</b> | <b>Standard room</b> | <b>siteco</b> |
|------------------|----------------------|---------------|

|                              |                     |      |      |      |      |                    |      |      |      |      |      |
|------------------------------|---------------------|------|------|------|------|--------------------|------|------|------|------|------|
| 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                  | 23.8 | 25.2 | 24.1 | 25.5 | 25.8               | 23.4 | 24.8 | 23.7 | 25.1 | 25.5 |
|                              | 3H                  | 24.4 | 25.7 | 24.8 | 26.1 | 26.4               | 24.2 | 25.5 | 24.6 | 25.8 | 26.2 |
|                              | 4H                  | 24.8 | 26.0 | 25.2 | 26.3 | 26.7               | 24.5 | 25.7 | 24.9 | 26.1 | 26.5 |
|                              | 6H                  | 25.1 | 26.2 | 25.5 | 26.6 | 27.0               | 24.8 | 25.9 | 25.2 | 26.3 | 26.7 |
|                              | 8H                  | 25.3 | 26.3 | 25.7 | 26.7 | 27.1               | 25.0 | 26.0 | 25.4 | 26.3 | 26.7 |
| 12H                          | 25.4                | 26.3 | 25.9 | 26.7 | 27.1 | 25.0               | 25.9 | 25.4 | 26.3 | 26.7 |      |
| 4H                           | 2H                  | 24.0 | 25.2 | 24.4 | 25.6 | 26.0               | 23.8 | 24.9 | 24.2 | 25.3 | 25.7 |
|                              | 3H                  | 24.8 | 25.8 | 25.2 | 26.2 | 26.6               | 24.7 | 25.7 | 25.2 | 26.1 | 26.5 |
|                              | 4H                  | 25.2 | 26.1 | 25.6 | 26.5 | 26.9               | 25.2 | 26.1 | 25.6 | 26.5 | 26.9 |
|                              | 6H                  | 25.6 | 26.4 | 26.1 | 26.8 | 27.3               | 25.6 | 26.3 | 26.0 | 26.8 | 27.2 |
|                              | 8H                  | 25.8 | 26.5 | 26.3 | 26.9 | 27.4               | 25.7 | 26.4 | 26.2 | 26.8 | 27.3 |
| 12H                          | 26.0                | 26.5 | 26.4 | 27.0 | 27.5 | 25.8               | 26.4 | 26.3 | 26.8 | 27.3 |      |
| 8H                           | 4H                  | 25.3 | 26.0 | 25.8 | 26.4 | 26.9               | 25.3 | 26.0 | 25.8 | 26.4 | 26.9 |
|                              | 6H                  | 25.7 | 26.3 | 26.2 | 26.8 | 27.3               | 25.8 | 26.3 | 26.3 | 26.8 | 27.3 |
|                              | 8H                  | 25.9 | 26.4 | 26.4 | 26.9 | 27.4               | 25.9 | 26.4 | 26.4 | 26.9 | 27.4 |
|                              | 12H                 | 26.1 | 26.6 | 26.7 | 27.1 | 27.6               | 26.0 | 26.4 | 26.6 | 27.0 | 27.5 |
| 12H                          | 4H                  | 25.3 | 25.9 | 25.8 | 26.4 | 26.9               | 25.3 | 25.9 | 25.8 | 26.4 | 26.9 |
|                              | 6H                  | 25.8 | 26.2 | 26.3 | 26.7 | 27.3               | 25.8 | 26.3 | 26.3 | 26.7 | 27.3 |
|                              | 8H                  | 26.0 | 26.4 | 26.5 | 26.9 | 27.4               | 26.0 | 26.4 | 26.5 | 26.9 | 27.4 |

|                        |   |                                      |                                  |
|------------------------|---|--------------------------------------|----------------------------------|
| <b>Luminance table</b> | <b>Max. for <math>\gamma \geq 65^\circ</math></b> | <b>Photometric dimensions in mm:</b> | <b>L = 2250</b><br><b>B = 58</b> |
|------------------------|---|--------------------------------------|----------------------------------|

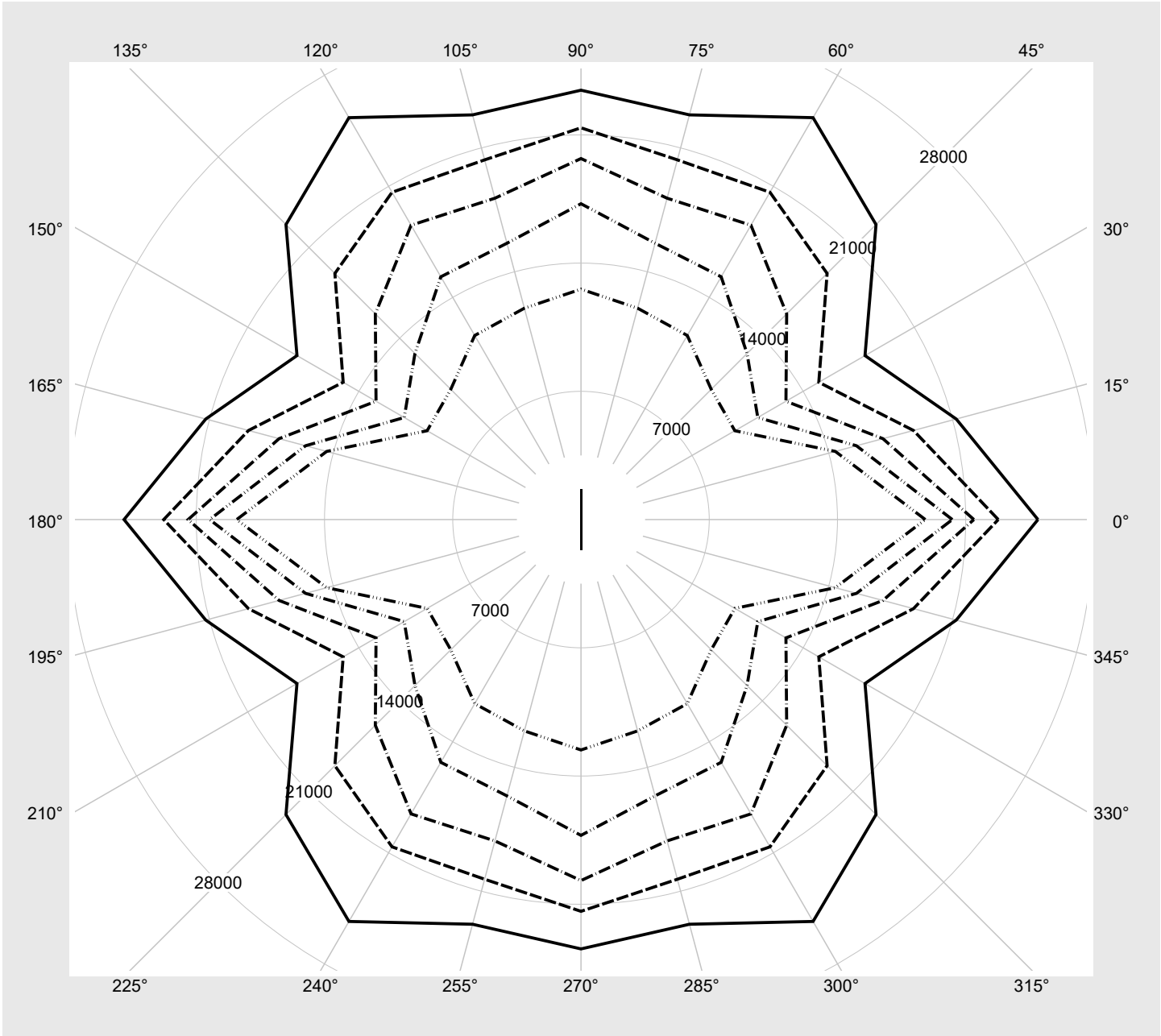
| C-planes | $\gamma$ | Luminance in cd/m <sup>2</sup> |                             |                             |                             |                             |                             |             |
|----------|----------|--------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|
|          |          | 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°      |          | 55927.0                        | 53574.5                     | 51313.5                     | 47111.8                     | 43367.5                     | 46059.4                     | 47958.1     |
| 50°      |          | 44896.8                        | 40958.2                     | 38794.0                     | 40001.7                     | 37615.2                     | 38546.2                     | 39108.3     |
| 55°      |          | 36325.5                        | 31930.4                     | 28433.4                     | 33044.5                     | 33204.4                     | 31610.9                     | 31314.8     |
| 60°      |          | 29355.2                        | 25397.3                     | 21919.2                     | 27316.7                     | 29155.5                     | 26243.7                     | 26497.1     |
| 65°      |          | 24944.0                        | 21205.5                     | 17901.4                     | 22774.8                     | 25333.1                     | 22870.7                     | 23438.1     |
| 70°      |          | 22778.4                        | 18790.3                     | 14989.0                     | 19000.0                     | 20630.2                     | 20327.4                     | 21386.3     |
| 75°      |          | 21446.0                        | 17062.8                     | 12918.3                     | 15877.4                     | 18552.8                     | 18160.8                     | 19706.6     |
| 80°      |          | 20270.7                        | 15566.5                     | 11142.0                     | 12818.6                     | 15303.0                     | 15616.6                     | 17240.1     |
| 85°      |          | 18794.8                        | 14372.2                     | 9697.9                      | 10053.3                     | 11602.8                     | 11944.2                     | 12577.1     |

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

**Luminance values in cd/m<sup>2</sup>**

γ 65°
γ 70°
γ 75°
γ 80°
γ 85°



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|                                       |   |                                     |
|---------------------------------------|---|-------------------------------------|
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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                       | 22710              | 125.6                 |
| 95              | 240                  | 252                       | 21570              | 118.9                 |
| 90              | 226                  | 250                       | 20420              | 112.2                 |
| 85              | 213                  | 248                       | 19335              | 106.0                 |
| 80              | 199                  | 245                       | 18156              | 99.1                  |
| 75              | 186                  | 243                       | 17045              | 92.8                  |
| 70              | 173                  | 240                       | 15923              | 86.4                  |
| 65              | 160                  | 237                       | 14788              | 80.1                  |
| 60              | 147                  | 234                       | 13642              | 73.8                  |
| 55              | 134                  | 231                       | 12488              | 67.4                  |
| 50              | 121                  | 227                       | 11315              | 61.2                  |
| 45              | 109                  | 223                       | 10228              | 55.4                  |
| 40              | 96                   | 218                       | 9040               | 49.1                  |
| 35              | 84                   | 213                       | 7929               | 43.3                  |
| 30              | 72                   | 208                       | 6813               | 37.6                  |
| 25              | 60                   | 201                       | 5691               | 31.8                  |
| 20              | 48                   | 193                       | 4555               | 26.0                  |
| 15              | 36                   | 182                       | 3416               | 20.2                  |
| 10              | 24                   | 168                       | 2271               | 14.0                  |
| 5               | 12                   | 142                       | 1113               | 7.6                   |
| 1               | 4                    | 102                       | 340                | 2.8                   |