
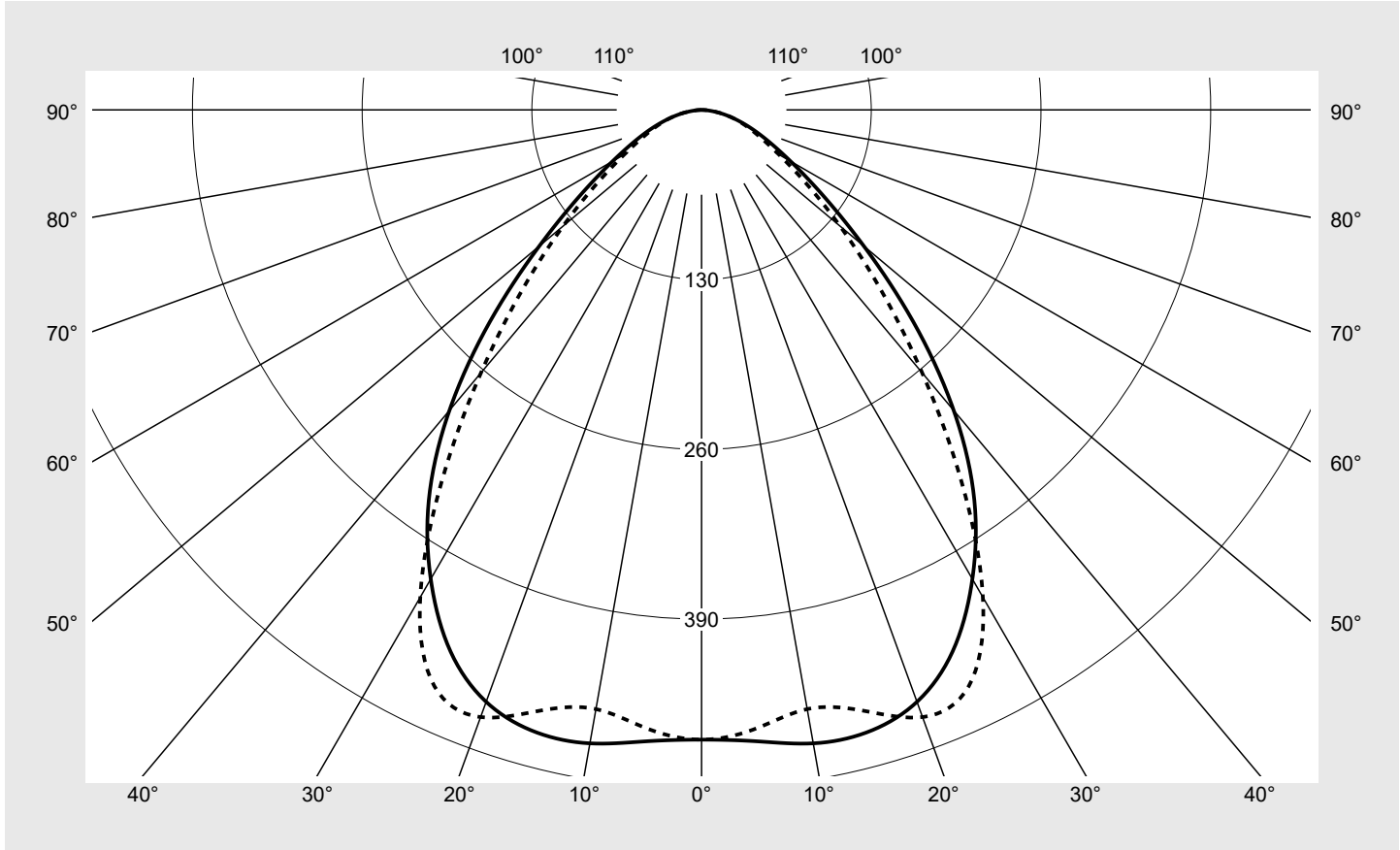


# Photometric test report

|  |  |   |
|--|--|---|
| <b>Family</b><br><b>Licross® Recessed</b>  | <b>Order number: 51TL12CN48XF</b><br><b>EAN: 4058352210895</b>   | <b>LP number</b><br><b>58637_15</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 Multilumen<br><b>Rated values</b> Net luminous flux = 8280 lm<br>Power consumption = 48.0 W<br>Luminous efficacy = 172.5 lm/W | <b>serial documentation</b><br><b>11.11.2019</b>                                    |
|  |  |  |

**Luminous intensity in cd/klm** C180-0 C270-90 **Imax: 498 cd/klm**



| Classifications |                                    |
|-----------------|------------------------------------|
| DIN 5040        | A 5 0                              |
| CIE             | N1=67 N2=92 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

## Photometric test report

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

**sITeco**

|   |                                   |
|---|-----------------------------------|
| <b>Table of values for luminous intensities</b> | <b>Maximum luminous intensity</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°                           | 482.3      | 482.3                | 482.3                | 482.3                | 482.3                | 482.3                | 482.3       | 2.9                     | 2.9               |
| 5°                           | 485.4      | 482.8                | 478.2                | 477.5                | 477.4                | 475.9                | 475.7       | 22.9                    | 25.8              |
| 10°                          | 492.7      | 488.2                | 477.9                | 471.3                | 467.6                | 465.9                | 466.0       | 45.2                    | 71.0              |
| 15°                          | 493.2      | 486.1                | 471.9                | 467.9                | 471.0                | 473.7                | 476.3       | 67.5                    | 138.5             |
| 20°                          | 482.5      | 473.5                | 462.5                | 471.9                | 487.1                | 492.8                | 494.9       | 89.9                    | 228.4             |
| 25°                          | 456.4      | 447.1                | 449.2                | 479.4                | 497.6                | 491.1                | 485.8       | 109.5                   | 337.8             |
| 30°                          | 414.9      | 406.8                | 427.0                | 475.1                | 479.0                | 447.1                | 431.1       | 121.4                   | 459.2             |
| 35°                          | 364.2      | 358.0                | 387.7                | 436.7                | 420.7                | 368.9                | 346.8       | 122.0                   | 581.2             |
| 40°                          | 300.5      | 296.3                | 322.5                | 357.9                | 336.0                | 284.8                | 262.9       | 110.4                   | 691.6             |
| 45°                          | 229.2      | 226.3                | 238.5                | 259.8                | 247.2                | 211.8                | 193.4       | 90.1                    | 781.7             |
| 50°                          | 162.3      | 159.3                | 161.6                | 173.6                | 174.5                | 155.2                | 138.5       | 68.2                    | 849.9             |
| 55°                          | 112.5      | 108.0                | 105.1                | 112.3                | 121.6                | 110.9                | 97.2        | 49.6                    | 899.5             |
| 60°                          | 78.7       | 73.1                 | 68.3                 | 73.1                 | 83.7                 | 77.4                 | 68.5        | 35.5                    | 935.0             |
| 65°                          | 56.0       | 50.2                 | 45.0                 | 48.4                 | 56.8                 | 54.5                 | 49.6        | 25.5                    | 960.5             |
| 70°                          | 39.5       | 34.5                 | 29.5                 | 32.1                 | 37.8                 | 38.5                 | 36.6        | 18.1                    | 978.6             |
| 75°                          | 26.0       | 22.0                 | 18.4                 | 20.2                 | 23.9                 | 25.9                 | 25.8        | 12.0                    | 990.6             |
| 80°                          | 14.9       | 12.2                 | 9.9                  | 10.8                 | 13.0                 | 14.8                 | 15.3        | 6.8                     | 997.4             |
| 85°                          | 5.4        | 4.3                  | 3.6                  | 4.0                  | 4.7                  | 5.6                  | 5.8         | 2.5                     | 1000.0            |
| 90°                          | 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

|                                    |  |                              |
|------------------------------------|--|------------------------------|
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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                  | 22.0 | 23.5 | 22.3 | 23.8 | 24.1               | 22.1 | 23.6 | 22.4 | 23.9 | 24.2 |
|                              | 3H                  | 22.5 | 23.8 | 22.9 | 24.1 | 24.5               | 22.6 | 23.9 | 23.0 | 24.3 | 24.6 |
|                              | 4H                  | 22.7 | 23.9 | 23.1 | 24.3 | 24.7               | 22.9 | 24.1 | 23.3 | 24.4 | 24.8 |
|                              | 6H                  | 22.9 | 24.0 | 23.3 | 24.4 | 24.8               | 23.0 | 24.2 | 23.5 | 24.5 | 24.9 |
|                              | 8H                  | 23.0 | 24.0 | 23.4 | 24.4 | 24.8               | 23.2 | 24.2 | 23.6 | 24.6 | 25.0 |
|                              | 12H                 | 23.0 | 24.0 | 23.4 | 24.4 | 24.8               | 23.2 | 24.1 | 23.6 | 24.5 | 25.0 |
| 4H                           | 2H                  | 22.2 | 23.4 | 22.6 | 23.8 | 24.1               | 22.3 | 23.5 | 22.7 | 23.9 | 24.2 |
|                              | 3H                  | 22.8 | 23.8 | 23.2 | 24.2 | 24.6               | 23.0 | 24.0 | 23.4 | 24.4 | 24.8 |
|                              | 4H                  | 23.1 | 24.0 | 23.5 | 24.4 | 24.8               | 23.3 | 24.2 | 23.8 | 24.7 | 25.1 |
|                              | 6H                  | 23.3 | 24.1 | 23.8 | 24.5 | 25.0               | 23.6 | 24.4 | 24.1 | 24.8 | 25.3 |
|                              | 8H                  | 23.4 | 24.1 | 23.9 | 24.6 | 25.0               | 23.7 | 24.4 | 24.2 | 24.9 | 25.3 |
|                              | 12H                 | 23.5 | 24.1 | 23.9 | 24.5 | 25.0               | 23.8 | 24.4 | 24.3 | 24.9 | 25.4 |
| 8H                           | 4H                  | 23.1 | 23.9 | 23.6 | 24.3 | 24.8               | 23.4 | 24.1 | 23.9 | 24.5 | 25.0 |
|                              | 6H                  | 23.4 | 24.0 | 23.9 | 24.5 | 25.0               | 23.7 | 24.3 | 24.2 | 24.8 | 25.3 |
|                              | 8H                  | 23.5 | 24.0 | 24.0 | 24.5 | 25.0               | 23.9 | 24.4 | 24.4 | 24.9 | 25.4 |
|                              | 12H                 | 23.6 | 24.0 | 24.1 | 24.5 | 25.0               | 24.0 | 24.4 | 24.5 | 24.9 | 25.4 |
| 12H                          | 4H                  | 23.2 | 23.8 | 23.7 | 24.2 | 24.7               | 23.4 | 24.0 | 23.9 | 24.5 | 25.0 |
|                              | 6H                  | 23.4 | 23.9 | 23.9 | 24.4 | 24.9               | 23.7 | 24.2 | 24.2 | 24.7 | 25.2 |
|                              | 8H                  | 23.5 | 24.0 | 24.0 | 24.5 | 25.0               | 23.9 | 24.3 | 24.4 | 24.8 | 25.3 |

|                        |   |                                      |                 |
|------------------------|---|--------------------------------------|-----------------|
| <b>Luminance table</b> | <b>Max. for <math>\gamma \geq 65^\circ</math></b> | <b>Photometric dimensions in mm:</b> | <b>L = 1500</b> |
|                        |   |                                      | <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°      |          | 30842.6                        | 30459.3                     | 32101.8                     | 34965.8                     | 33267.0                     | 28512.4                     | 26024.2     |  |
| 50°      |          | 24030.6                        | 23592.2                     | 23927.1                     | 25709.2                     | 25841.6                     | 22984.4                     | 20507.8     |  |
| 55°      |          | 18663.9                        | 17917.9                     | 17440.7                     | 18640.9                     | 20183.8                     | 18409.1                     | 16124.7     |  |
| 60°      |          | 14982.0                        | 13922.0                     | 13005.1                     | 13920.5                     | 15923.3                     | 14726.2                     | 13029.1     |  |
| 65°      |          | 12618.7                        | 11295.7                     | 10140.4                     | 10907.6                     | 12793.0                     | 12273.0                     | 11178.8     |  |
| 70°      |          | 10987.6                        | 9595.2                      | 8213.6                      | 8931.5                      | 10513.7                     | 10718.0                     | 10193.4     |  |
| 75°      |          | 9547.8                         | 8098.6                      | 6778.1                      | 7426.1                      | 8776.7                      | 9533.5                      | 9482.0      |  |
| 80°      |          | 8145.5                         | 6674.5                      | 5415.0                      | 5929.1                      | 7099.8                      | 8134.5                      | 8396.5      |  |
| 85°      |          | 5842.1                         | 4726.1                      | 3915.8                      | 4351.5                      | 5150.9                      | 6076.9                      | 6330.2      |  |

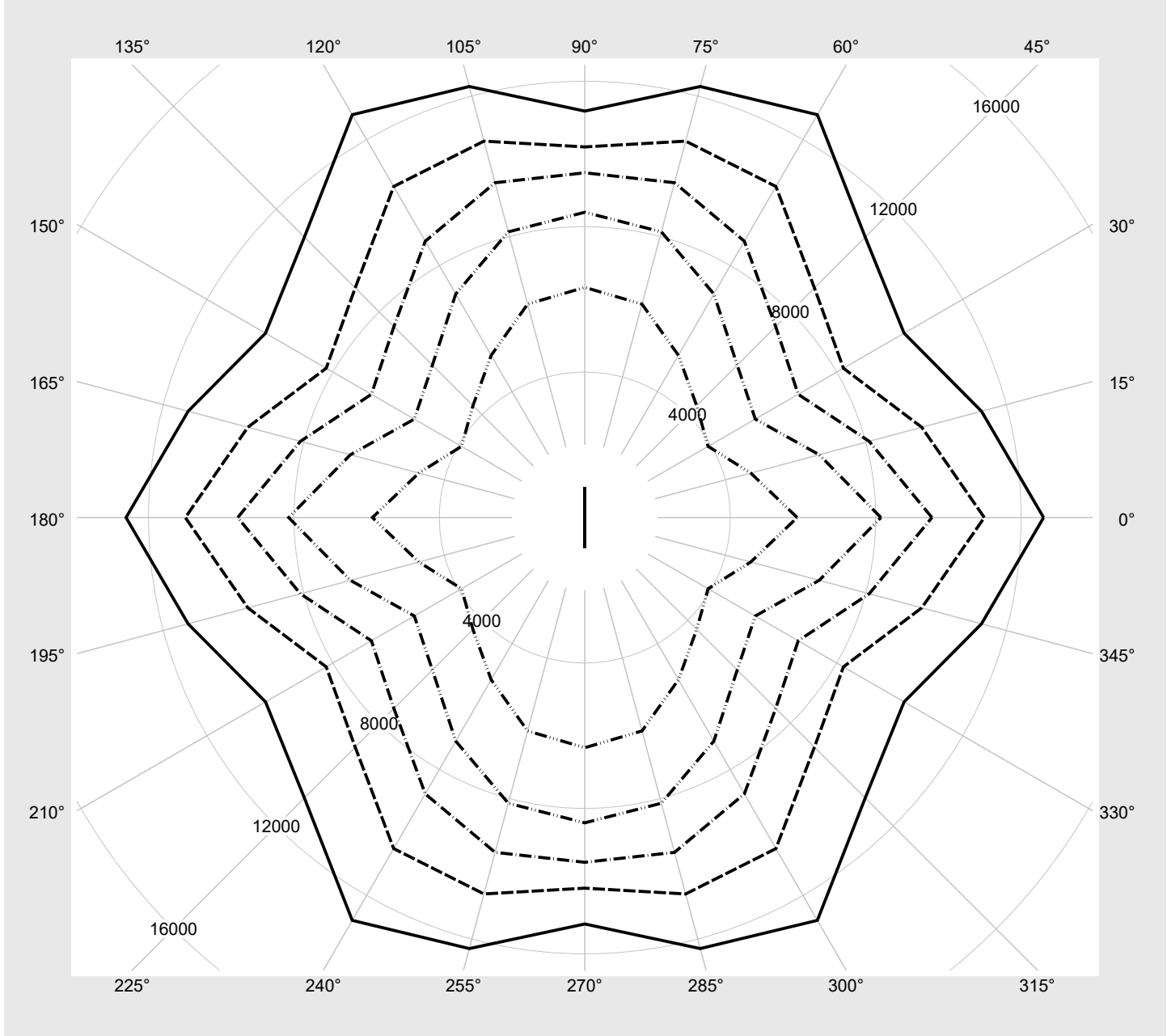
# Photometric test report

|   |  |                                     |
|---|--|-------------------------------------|
| <b>Family</b><br><b>Licross® Recessed</b> | <b>Order number: 51TL12CN48XF</b><br><b>EAN: 4058352210895</b> | <b>LP number</b><br><b>58637_15</b> |
|---|--|-------------------------------------|



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

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| $\gamma$ 65° | $\gamma$ 70° | $\gamma$ 75° | $\gamma$ 80° | $\gamma$ 85° |
|--------------|--------------|--------------|--------------|--------------|



### Photometric test report

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

|                         |                                 |               |
|-------------------------|---------------------------------|---------------|
| <b>Multilumen Table</b> | environmental temperature: 25°C | <b>sITeco</b> |
|-------------------------|---------------------------------|---------------|

| DIP-Step | Switch Setting |   |   | Luminous flux [lm] | Power consumption [W] | Power consumption [W] | Power consumption [W] |
|----------|----------------|---|---|--------------------|-----------------------|-----------------------|-----------------------|
|          | 1              | 2 | 3 |                    |                       | end of lifetime       | average               |
| 1        | A              | C | E | 8280               | 48.0                  | 53.0                  | 50.5                  |
| 2        | A              | C | F | 7930               | 45.8                  | 50.7                  | 48.2                  |
| 3        | A              | D | E | 7440               | 42.7                  | 47.1                  | 44.9                  |
| 4        | A              | D | F | 6870               | 39.1                  | 43.1                  | 41.1                  |
| 5        | B              | C | E | 6410               | 36.5                  | 39.9                  | 38.2                  |
| 6        | B              | C | F | 5830               | 33.0                  | 36.0                  | 34.5                  |
| 7        | B              | D | E | 5530               | 31.2                  | 34.2                  | 32.7                  |
| 8        | B              | D | F | 4790               | 26.9                  | 29.4                  | 28.2                  |