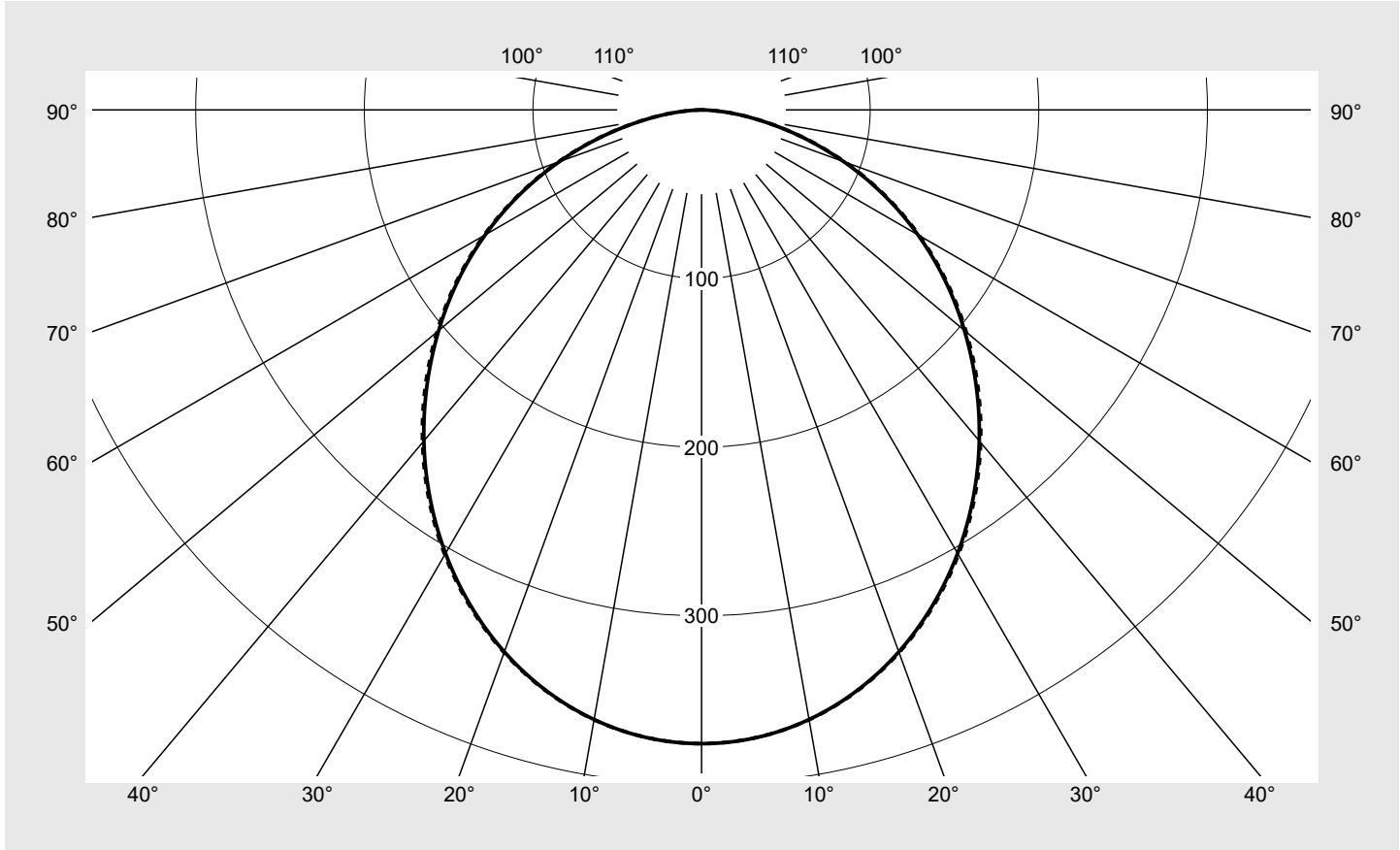


# Photometric test report

|                             |  |   |
|-----------------------------|--|---|
| <b>Family</b><br>Round 21 L | <b>Order number: 51MR38FD0421B</b><br><b>EAN: 4058352829998</b>  | <b>LP number</b><br>59511_14              |
| <b>Version</b>              | surface-mounted and suspended luminaire, cover, opal, PMMA, extremely wide distribution, direct distribution, aluminium housing, black | <b>serial documentation</b><br>31.07.2024 |
| <b>Lamps</b>                | LED 4000 K   CRI ≥ 80  |   |
| <b>Controlgear</b>          | ECG-DALI   |   |
| <b>Rated values</b>         | Net luminous flux = 14150 lm<br>Power consumption = 97.0 W<br>Luminous efficacy = 145.9 lm/W   |   |



**Luminous intensity in cd/klm** C180-0 C270-90 **Imax: 376 cd/klm**



| Classifications |                                    |
|-----------------|------------------------------------|
| DIN 5040        | A 4 0                              |
| CIE             | N1=49 N2=80 N3=96<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

|                             |   |                              |
|-----------------------------|---|------------------------------|
| Family<br><b>Round 21 L</b> | Order number: <b>51MR38FD0421B</b><br>EAN: <b>4058352829998</b> | LP number<br><b>59511_14</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°                           | 375.8      | 375.8                | 375.8                | 375.8                | 375.8                | 375.8                | 375.8       | 2.2                     | 2.2               |
| 5°                           | 373.6      | 373.6                | 373.6                | 373.6                | 373.7                | 373.6                | 373.6       | 17.8                    | 20.1              |
| 10°                          | 367.1      | 367.0                | 367.1                | 367.1                | 367.2                | 367.1                | 367.2       | 34.9                    | 55.0              |
| 15°                          | 356.4      | 356.5                | 356.5                | 356.7                | 356.7                | 356.7                | 356.7       | 50.6                    | 105.6             |
| 20°                          | 342.0      | 342.1                | 342.1                | 342.4                | 342.4                | 342.5                | 342.5       | 64.2                    | 169.8             |
| 25°                          | 324.2      | 324.6                | 324.4                | 324.9                | 324.8                | 325.3                | 324.9       | 75.2                    | 245.0             |
| 30°                          | 303.7      | 304.3                | 303.9                | 304.6                | 304.5                | 305.2                | 304.6       | 83.4                    | 328.5             |
| 35°                          | 280.8      | 281.7                | 281.1                | 282.4                | 281.8                | 282.9                | 282.0       | 88.6                    | 417.1             |
| 40°                          | 256.2      | 257.4                | 256.5                | 258.0                | 257.2                | 258.5                | 257.4       | 90.7                    | 507.8             |
| 45°                          | 230.2      | 231.7                | 230.5                | 232.2                | 231.4                | 232.8                | 231.7       | 89.8                    | 597.5             |
| 50°                          | 203.5      | 204.9                | 203.8                | 205.4                | 204.7                | 206.0                | 204.9       | 86.0                    | 683.6             |
| 55°                          | 176.3      | 177.6                | 175.5                | 178.1                | 177.3                | 178.7                | 177.4       | 79.6                    | 763.2             |
| 60°                          | 148.1      | 149.5                | 147.4                | 150.0                | 149.0                | 150.6                | 149.2       | 70.8                    | 834.0             |
| 65°                          | 119.2      | 120.8                | 118.4                | 121.2                | 120.0                | 121.6                | 120.1       | 59.7                    | 893.7             |
| 70°                          | 89.7       | 91.5                 | 88.8                 | 91.9                 | 90.4                 | 92.3                 | 90.6        | 46.8                    | 940.5             |
| 75°                          | 60.9       | 62.5                 | 60.0                 | 63.4                 | 61.5                 | 63.0                 | 61.6        | 32.8                    | 973.3             |
| 80°                          | 34.5       | 35.9                 | 33.5                 | 36.8                 | 35.0                 | 36.0                 | 35.0        | 19.1                    | 992.4             |
| 85°                          | 13.2       | 14.6                 | 12.4                 | 14.8                 | 13.6                 | 14.5                 | 13.7        | 7.6                     | 1000.0            |
| 90°                          | 0.0        | 0.0                  | 0.0                  | 0.0                  | 0.0                  | 0.0                  | 0.0         | 0.0                     | 1000.0            |

## Photometric test report

|                      |   |                       |
|----------------------|---|-----------------------|
| Family<br>Round 21 L | Order number: 51MR38FD0421B<br>EAN: 4058352829998 | LP number<br>59511_14 |
|----------------------|---|-----------------------|

|           |               |        |  |  |  |  |  |  |  |  |
|-----------|---------------|--------|--|--|--|--|--|--|--|--|
| 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                  | 19.5 | 21.2 | 19.8 | 21.5 | 21.8               | 19.5 | 21.2 | 19.9 | 21.5 | 21.8 |
|                              | 3H                  | 21.0 | 22.6 | 21.4 | 22.9 | 23.2               | 21.1 | 22.6 | 21.5 | 22.9 | 23.3 |
|                              | 4H                  | 21.6 | 23.1 | 22.0 | 23.4 | 23.8               | 21.7 | 23.1 | 22.1 | 23.5 | 23.8 |
|                              | 6H                  | 22.1 | 23.4 | 22.5 | 23.7 | 24.1               | 22.1 | 23.4 | 22.5 | 23.8 | 24.2 |
|                              | 8H                  | 22.2 | 23.4 | 22.6 | 23.8 | 24.2               | 22.3 | 23.5 | 22.7 | 23.9 | 24.3 |
|                              | 12H                 | 22.3 | 23.5 | 22.7 | 23.8 | 24.3               | 22.4 | 23.5 | 22.8 | 23.9 | 24.3 |
| 4H                           | 2H                  | 20.2 | 21.6 | 20.6 | 22.0 | 22.4               | 20.3 | 21.7 | 20.7 | 22.0 | 22.4 |
|                              | 3H                  | 22.0 | 23.2 | 22.4 | 23.5 | 24.0               | 22.0 | 23.2 | 22.4 | 23.6 | 24.0 |
|                              | 4H                  | 22.7 | 23.7 | 23.1 | 24.2 | 24.6               | 22.7 | 23.8 | 23.2 | 24.2 | 24.6 |
|                              | 6H                  | 23.2 | 24.1 | 23.6 | 24.6 | 25.0               | 23.2 | 24.2 | 23.7 | 24.6 | 25.1 |
|                              | 8H                  | 23.4 | 24.2 | 23.8 | 24.7 | 25.1               | 23.4 | 24.3 | 23.9 | 24.7 | 25.2 |
|                              | 12H                 | 23.5 | 24.3 | 24.0 | 24.7 | 25.2               | 23.6 | 24.3 | 24.0 | 24.8 | 25.3 |
| 8H                           | 4H                  | 23.0 | 23.8 | 23.4 | 24.3 | 24.8               | 23.0 | 23.9 | 23.5 | 24.3 | 24.8 |
|                              | 6H                  | 23.6 | 24.3 | 24.1 | 24.8 | 25.3               | 23.7 | 24.4 | 24.2 | 24.9 | 25.4 |
|                              | 8H                  | 23.8 | 24.5 | 24.3 | 25.0 | 25.5               | 23.9 | 24.5 | 24.4 | 25.0 | 25.5 |
|                              | 12H                 | 24.0 | 24.5 | 24.5 | 25.0 | 25.6               | 24.1 | 24.6 | 24.6 | 25.1 | 25.6 |
| 12H                          | 4H                  | 23.0 | 23.8 | 23.5 | 24.3 | 24.7               | 23.1 | 23.8 | 23.6 | 24.3 | 24.8 |
|                              | 6H                  | 23.7 | 24.3 | 24.2 | 24.8 | 25.3               | 23.8 | 24.4 | 24.3 | 24.8 | 25.4 |
|                              | 8H                  | 23.9 | 24.5 | 24.5 | 25.0 | 25.5               | 24.0 | 24.5 | 24.5 | 25.0 | 25.6 |

|                 |                                 |                               |         |
|-----------------|---------------------------------|-------------------------------|---------|
| Luminance table | Max. for $\gamma \geq 65^\circ$ | Photometric dimensions in mm: | D = 840 |
|-----------------|---------------------------------|-------------------------------|---------|

|                    |          |            |                      |                      |                      |                      |                      |             |
|--------------------|----------|------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------|
| C-planes           | $\gamma$ | 0°<br>180° | 15°                  | 30°                  | 45°                  | 60°                  | 75°                  | 90°<br>270° |
|                    |          |            | 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° |             |
| Luminance in cd/m² |          |            |                      |                      |                      |                      |                      |             |
| 45°                |          | 8311.9     | 8368.1               | 8324.2               | 8384.4               | 8355.3               | 8405.2               | 8366.8      |
| 50°                |          | 8083.1     | 8140.6               | 8096.2               | 8159.4               | 8129.7               | 8184.2               | 8137.4      |
| 55°                |          | 7847.4     | 7907.0               | 7814.2               | 7928.6               | 7890.8               | 7954.6               | 7898.6      |
| 60°                |          | 7564.5     | 7636.5               | 7524.8               | 7661.6               | 7609.5               | 7689.7               | 7618.4      |
| 65°                |          | 7201.4     | 7295.9               | 7150.4               | 7319.9               | 7247.4               | 7346.8               | 7257.4      |
| 70°                |          | 6698.5     | 6834.3               | 6631.7               | 6859.7               | 6750.2               | 6887.7               | 6761.2      |
| 75°                |          | 6012.6     | 6167.7               | 5920.8               | 6258.9               | 6070.9               | 6216.6               | 6078.8      |
| 80°                |          | 5072.3     | 5271.9               | 4927.3               | 5411.4               | 5139.4               | 5293.9               | 5151.1      |
| 85°                |          | 3872.4     | 4280.2               | 3636.3               | 4328.5               | 3989.6               | 4261.1               | 4015.9      |

**Photometric test report**

**Family**  
Round 21 L

**Order number: 51MR38FD0421B**  
**EAN: 4058352829998**

**LP number**  
59511\_14

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

