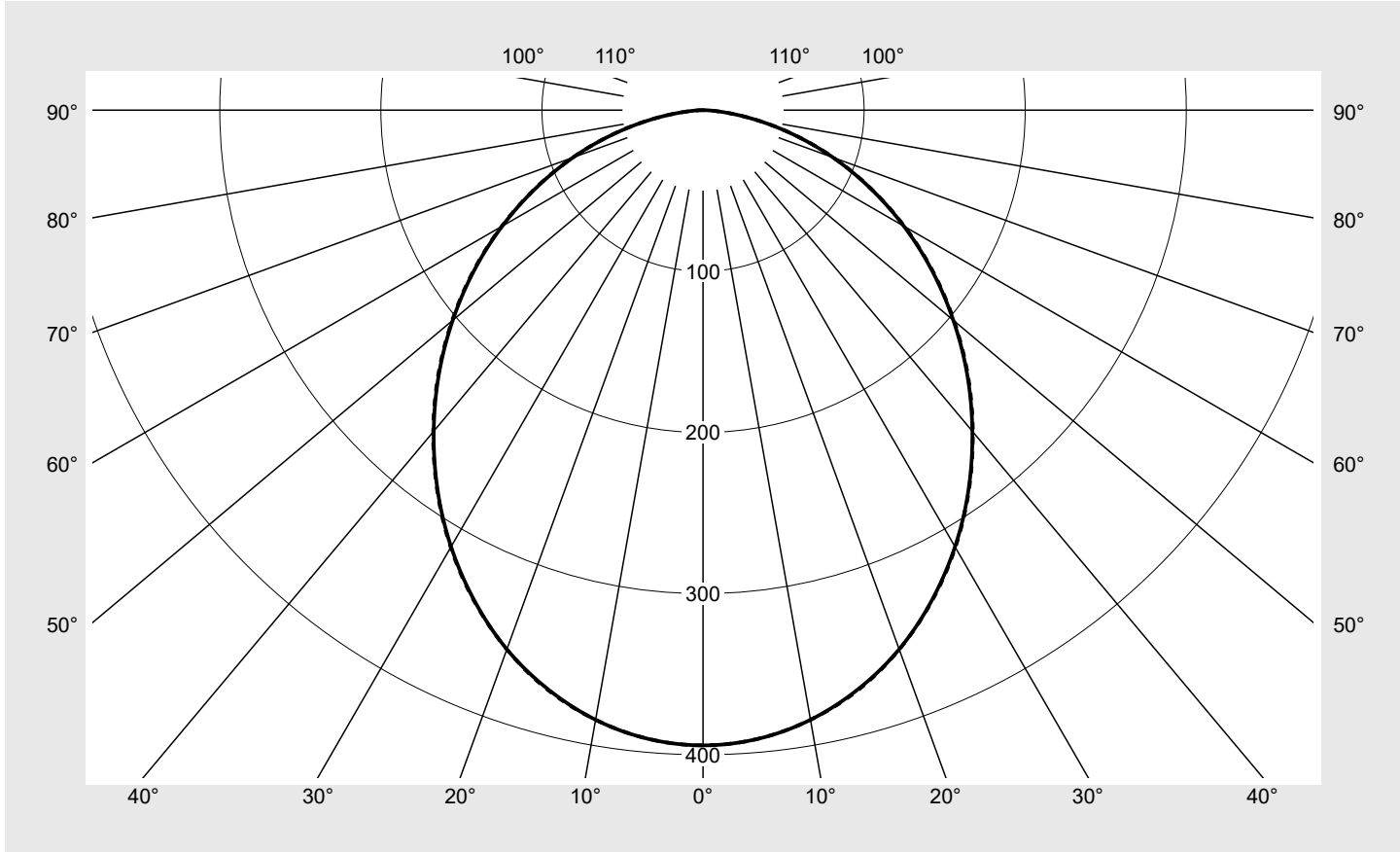


# Photometric test report

|  |   |   |
|--|---|---|
| <b>Family</b><br><b>Mira® 21</b>   | <b>Order number: 51FR427A462A</b><br><b>EAN: 4058352672389</b>  | <b>LP number</b><br><b>59365_3</b>        |
|  | <b>Version</b><br>clean room luminaire, square M625, reflector, semi-specular, cover panel, PMMA, extremely wide distribution | <b>serial documentation</b><br>21.12.2022 |
|  | <b>Lamps</b><br>LED 4000 K   CRI ≥ 80   | <b>Controlgear</b><br>ECG                 |
|  | <b>Rated values</b><br>Net luminous flux = 6420 lm<br>Power consumption = 53.0 W<br>Luminous efficacy = 121.1 lm/W            |   |



Luminous intensity in cd/klm C180-0 C270-90 **Imax: 394 cd/klm**



| Classifications |                                    |
|-----------------|------------------------------------|
| DIN 5040        | A 4 0                              |
| CIE             | N1=50 N2=81 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>Mira® 21</b> | Order number: <b>51FR427A462A</b><br>EAN: <b>4058352672389</b> | LP number<br><b>59365_3</b> |
|---------------------------|--|-----------------------------|



|   |                                   |
|---|-----------------------------------|
| <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°                           | 394.2      | 394.2                | 394.2                | 394.2                | 394.2                | 394.2                | 394.2       | 2.4                     | 2.4               |
| 5°                           | 391.6      | 391.5                | 391.5                | 391.6                | 391.7                | 391.5                | 391.6       | 18.7                    | 21.1              |
| 10°                          | 384.1      | 384.1                | 384.1                | 384.3                | 384.3                | 383.9                | 384.1       | 36.6                    | 57.6              |
| 15°                          | 372.0      | 372.1                | 372.1                | 372.2                | 372.3                | 372.1                | 372.5       | 52.8                    | 110.4             |
| 20°                          | 356.0      | 356.1                | 356.1                | 356.1                | 356.2                | 355.9                | 356.1       | 66.8                    | 177.2             |
| 25°                          | 335.9      | 336.0                | 336.0                | 336.2                | 336.2                | 336.0                | 336.2       | 77.9                    | 255.0             |
| 30°                          | 312.9      | 312.9                | 313.1                | 313.2                | 313.4                | 313.2                | 313.3       | 85.8                    | 340.9             |
| 35°                          | 287.4      | 287.5                | 287.6                | 287.7                | 287.9                | 287.7                | 287.8       | 90.4                    | 431.3             |
| 40°                          | 260.1      | 260.2                | 260.3                | 260.5                | 260.7                | 260.4                | 260.6       | 91.7                    | 523.0             |
| 45°                          | 231.9      | 232.0                | 232.2                | 232.4                | 232.5                | 232.4                | 232.5       | 90.0                    | 613.1             |
| 50°                          | 202.8      | 202.9                | 203.0                | 203.1                | 203.3                | 203.3                | 203.4       | 85.3                    | 698.4             |
| 55°                          | 173.5      | 173.5                | 173.6                | 173.8                | 174.0                | 174.0                | 174.1       | 78.0                    | 776.4             |
| 60°                          | 144.0      | 144.0                | 144.1                | 144.1                | 144.3                | 144.4                | 144.5       | 68.4                    | 844.9             |
| 65°                          | 114.5      | 114.6                | 114.6                | 114.8                | 114.9                | 114.9                | 115.0       | 57.0                    | 901.9             |
| 70°                          | 85.9       | 85.8                 | 85.8                 | 85.9                 | 86.1                 | 86.1                 | 86.1        | 44.3                    | 946.1             |
| 75°                          | 57.7       | 57.7                 | 57.7                 | 57.7                 | 57.8                 | 57.9                 | 58.0        | 30.6                    | 976.7             |
| 80°                          | 31.6       | 31.6                 | 31.6                 | 31.6                 | 31.7                 | 31.7                 | 31.7        | 17.1                    | 993.8             |
| 85°                          | 10.6       | 10.6                 | 10.6                 | 10.6                 | 10.6                 | 10.6                 | 10.6        | 5.8                     | 999.6             |
| 90°                          | 0.8        | 0.7                  | 0.7                  | 0.7                  | 0.8                  | 0.8                  | 0.8         | 0.4                     | 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            |

## Photometric test report

|                           |  |                             |
|---------------------------|--|-----------------------------|
| Family<br><b>Mira® 21</b> | Order number: <b>51FR427A462A</b><br>EAN: <b>4058352672389</b> | LP number<br><b>59365_3</b> |
|---------------------------|--|-----------------------------|

|                  |                      |               |
|------------------|----------------------|---------------|
| <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                  | 19.2 | 20.9 | 19.6 | 21.2 | 21.5               | 19.3 | 20.9 | 19.6 | 21.2 | 21.5 |
|                              | 3H                  | 20.7 | 22.2 | 21.1 | 22.5 | 22.9               | 20.7 | 22.2 | 21.1 | 22.6 | 22.9 |
|                              | 4H                  | 21.3 | 22.7 | 21.7 | 23.0 | 23.4               | 21.3 | 22.7 | 21.7 | 23.0 | 23.4 |
|                              | 6H                  | 21.7 | 22.9 | 22.1 | 23.3 | 23.7               | 21.7 | 23.0 | 22.1 | 23.3 | 23.7 |
|                              | 8H                  | 21.8 | 23.0 | 22.2 | 23.4 | 23.8               | 21.8 | 23.0 | 22.2 | 23.4 | 23.8 |
|                              | 12H                 | 21.8 | 23.0 | 22.3 | 23.4 | 23.8               | 21.9 | 23.0 | 22.3 | 23.4 | 23.8 |
| 4H                           | 2H                  | 20.0 | 21.4 | 20.4 | 21.7 | 22.1               | 20.0 | 21.4 | 20.4 | 21.7 | 22.1 |
|                              | 3H                  | 21.6 | 22.8 | 22.0 | 23.2 | 23.6               | 21.6 | 22.8 | 22.0 | 23.2 | 23.6 |
|                              | 4H                  | 22.3 | 23.3 | 22.7 | 23.8 | 24.2               | 22.3 | 23.4 | 22.7 | 23.8 | 24.2 |
|                              | 6H                  | 22.7 | 23.7 | 23.2 | 24.1 | 24.6               | 22.8 | 23.7 | 23.2 | 24.1 | 24.6 |
|                              | 8H                  | 22.9 | 23.7 | 23.4 | 24.2 | 24.7               | 22.9 | 23.8 | 23.4 | 24.2 | 24.7 |
|                              | 12H                 | 23.0 | 23.7 | 23.5 | 24.2 | 24.7               | 23.0 | 23.7 | 23.5 | 24.2 | 24.7 |
| 8H                           | 4H                  | 22.6 | 23.4 | 23.0 | 23.9 | 24.3               | 22.6 | 23.4 | 23.1 | 23.9 | 24.3 |
|                              | 6H                  | 23.1 | 23.8 | 23.6 | 24.3 | 24.8               | 23.2 | 23.9 | 23.6 | 24.3 | 24.8 |
|                              | 8H                  | 23.3 | 23.9 | 23.8 | 24.4 | 24.9               | 23.3 | 24.0 | 23.8 | 24.4 | 25.0 |
|                              | 12H                 | 23.4 | 24.0 | 24.0 | 24.5 | 25.0               | 23.5 | 24.0 | 24.0 | 24.5 | 25.0 |
| 12H                          | 4H                  | 22.6 | 23.4 | 23.1 | 23.8 | 24.3               | 22.6 | 23.4 | 23.1 | 23.8 | 24.3 |
|                              | 6H                  | 23.2 | 23.8 | 23.7 | 24.3 | 24.8               | 23.2 | 23.8 | 23.7 | 24.3 | 24.8 |
|                              | 8H                  | 23.4 | 23.9 | 23.9 | 24.4 | 25.0               | 23.4 | 23.9 | 23.9 | 24.4 | 25.0 |

|                        |   |                                      |                                  |
|------------------------|---|--------------------------------------|----------------------------------|
| <b>Luminance table</b> | <b>Max. for <math>\gamma \geq 65^\circ</math></b> | <b>Photometric dimensions in mm:</b> | <b>L = 511</b><br><b>B = 511</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°      |          | 8064.5                         | 8067.3                      | 8073.2                      | 8079.4                      | 8085.7                      | 8080.8                      | 8085.3      |  |
| 50°      |          | 7758.5                         | 7759.7                      | 7764.3                      | 7769.2                      | 7776.5                      | 7776.1                      | 7781.1      |  |
| 55°      |          | 7438.6                         | 7437.3                      | 7441.1                      | 7449.3                      | 7459.1                      | 7457.9                      | 7463.0      |  |
| 60°      |          | 7080.3                         | 7080.8                      | 7083.8                      | 7087.2                      | 7098.0                      | 7100.0                      | 7103.9      |  |
| 65°      |          | 6663.7                         | 6666.6                      | 6667.2                      | 6675.9                      | 6684.0                      | 6685.2                      | 6691.0      |  |
| 70°      |          | 6172.6                         | 6169.7                      | 6170.4                      | 6176.9                      | 6187.0                      | 6188.4                      | 6191.3      |  |
| 75°      |          | 5479.5                         | 5477.6                      | 5477.6                      | 5483.3                      | 5492.8                      | 5497.5                      | 5505.1      |  |
| 80°      |          | 4472.0                         | 4473.4                      | 4472.0                      | 4476.3                      | 4483.3                      | 4489.0                      | 4494.7      |  |
| 85°      |          | 2984.0                         | 2984.0                      | 2984.0                      | 2986.8                      | 2992.5                      | 2992.5                      | 2998.1      |  |

**Photometric test report**

|                                  |  |                                    |
|----------------------------------|--|------------------------------------|
| <b>Family</b><br><b>Mira® 21</b> | <b>Order number: 51FR427A462A</b><br><b>EAN: 4058352672389</b> | <b>LP number</b><br><b>59365_3</b> |
|----------------------------------|--|------------------------------------|



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

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

