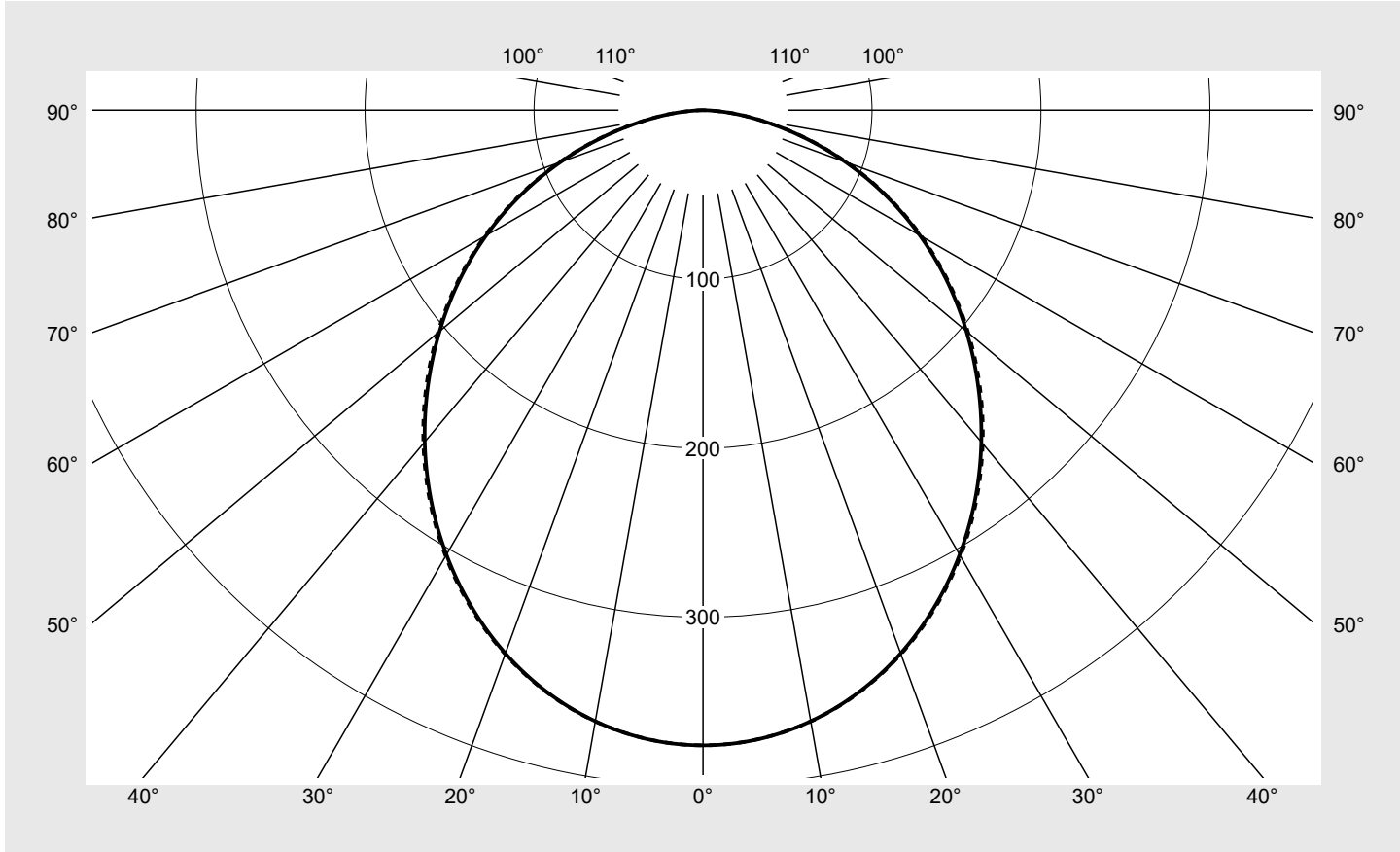


Photometric test report

| | | |
|---|--|--|
| Family Round 21 M | Order number: 51MR36FM8321S EAN: 4058352881583 | LP number 59512_10 |
|  | Version surface-mounted and suspended luminaire, cover, opal, PMMA, symmetric extremely wide distribution, direct distribution, aluminium housing, silver | serial documentation 29.11.2023 |
| | Lamps LED 3000 K CRI ≥ 80 | |
| | Controlgear ECG Multilumen | |
| Rated values | Net luminous flux = 7770 lm Power consumption = 61.1 W Luminous efficacy = 127.2 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 N4=100 N5=100 |

| Luminaire light output ratios | |
|-------------------------------|--------|
| η_{LB} | 100.0% |
| ϕ_u | 100.0% |
| ϕ_o | 0.0% |

Measurement conditions
 DIN EN 13032 and DIN 5032

Photometric test report

| | | |
|-----------------------------|---|------------------------------|
| Family Round 21 M | Order number: 51MR36FM8321S EAN: 4058352881583 | LP number 59512_10 |
|-----------------------------|---|------------------------------|

| | | |
|---|-----------------------------------|---------------|
| Table of values for luminous intensities | Maximum luminous intensity | sITeco |
|---|-----------------------------------|---------------|

| C-planes | 0° 180° | 15° | 30° | 45° | 60° | 75° | 90° 270° | Phi-zone | Total Phi-zone |
|------------------------------|------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------------|----------|-------------------|
| | | 165° 195° 345° | 150° 210° 330° | 135° 225° 315° | 120° 240° 300° | 105° 255° 285° | | | |
| Luminous intensity in cd/klm | | | | | | | Luminous flux in lm/klm | | |
| γ | | | | | | | | | |
| 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 Round 21 M | Order number: 51MR36FM8321S EAN: 4058352881583 | LP number 59512_10 |
|----------------------|---|-----------------------|

| 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 | 19.8 | 21.5 | 20.2 | 21.8 | 22.2 | 19.9 | 21.6 | 20.3 | 21.9 | 22.2 |
| | 3H | 21.4 | 22.9 | 21.8 | 23.3 | 23.6 | 21.5 | 23.0 | 21.8 | 23.3 | 23.7 |
| | 4H | 22.0 | 23.4 | 22.4 | 23.8 | 24.2 | 22.1 | 23.5 | 22.5 | 23.8 | 24.2 |
| | 6H | 22.4 | 23.7 | 22.8 | 24.1 | 24.5 | 22.5 | 23.8 | 22.9 | 24.2 | 24.6 |
| | 8H | 22.6 | 23.8 | 23.0 | 24.2 | 24.6 | 22.7 | 23.9 | 23.1 | 24.3 | 24.7 |
| | 12H | 22.7 | 23.8 | 23.1 | 24.2 | 24.6 | 22.7 | 23.9 | 23.2 | 24.3 | 24.7 |
| 4H | 2H | 20.6 | 22.0 | 21.0 | 22.4 | 22.7 | 20.6 | 22.1 | 21.0 | 22.4 | 22.8 |
| | 3H | 22.3 | 23.5 | 22.7 | 23.9 | 24.3 | 22.4 | 23.6 | 22.8 | 24.0 | 24.4 |
| | 4H | 23.0 | 24.1 | 23.5 | 24.5 | 25.0 | 23.1 | 24.2 | 23.5 | 24.6 | 25.0 |
| | 6H | 23.6 | 24.5 | 24.0 | 24.9 | 25.4 | 23.6 | 24.6 | 24.1 | 25.0 | 25.5 |
| | 8H | 23.7 | 24.6 | 24.2 | 25.0 | 25.5 | 23.8 | 24.7 | 24.3 | 25.1 | 25.6 |
| | 12H | 23.9 | 24.6 | 24.3 | 25.1 | 25.6 | 23.9 | 24.7 | 24.4 | 25.2 | 25.6 |
| 8H | 4H | 23.4 | 24.2 | 23.8 | 24.7 | 25.1 | 23.4 | 24.3 | 23.9 | 24.7 | 25.2 |
| | 6H | 24.0 | 24.7 | 24.5 | 25.2 | 25.7 | 24.0 | 24.8 | 24.5 | 25.2 | 25.7 |
| | 8H | 24.2 | 24.8 | 24.7 | 25.3 | 25.8 | 24.3 | 24.9 | 24.8 | 25.4 | 25.9 |
| | 12H | 24.4 | 24.9 | 24.9 | 25.4 | 26.0 | 24.5 | 25.0 | 25.0 | 25.5 | 26.0 |
| 12H | 4H | 23.4 | 24.2 | 23.9 | 24.6 | 25.1 | 23.5 | 24.2 | 23.9 | 24.7 | 25.2 |
| | 6H | 24.1 | 24.7 | 24.6 | 25.2 | 25.7 | 24.1 | 24.7 | 24.6 | 25.2 | 25.7 |
| | 8H | 24.3 | 24.8 | 24.8 | 25.3 | 25.9 | 24.4 | 24.9 | 24.9 | 25.4 | 25.9 |

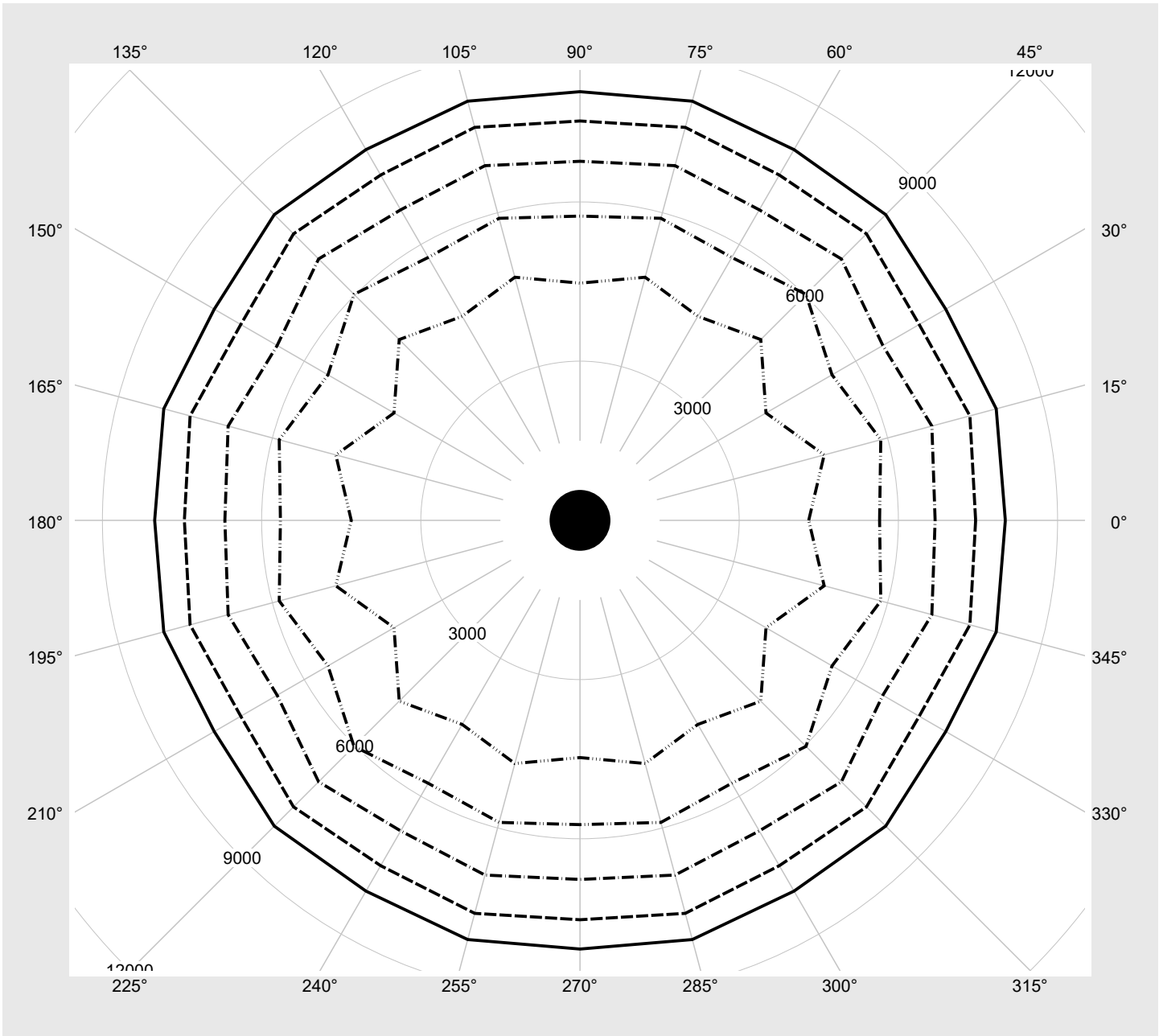
| Luminance table | | Max. for $\gamma \geq 65^\circ$ | | Photometric dimensions in mm: | | D = 590 | |
|-----------------|--------------------------------|---------------------------------|-----------------------------|-------------------------------|-----------------------------|-----------------------------|-------------|
| C-planes | 0° 180° | 15° 165° 195° 345° | 30° 150° 210° 330° | 45° 135° 225° 315° | 60° 120° 240° 300° | 75° 105° 255° 285° | 90° 270° |
| γ | Luminance in cd/m ² | | | | | | |
| 45° | 9251.6 | 9314.2 | 9265.3 | 9332.3 | 9299.9 | 9355.5 | 9312.8 |
| 50° | 8997.0 | 9061.0 | 9011.5 | 9081.9 | 9048.8 | 9109.5 | 9057.5 |
| 55° | 8734.6 | 8801.0 | 8697.7 | 8825.0 | 8783.0 | 8853.9 | 8791.6 |
| 60° | 8419.7 | 8499.9 | 8375.6 | 8527.8 | 8469.8 | 8559.1 | 8479.7 |
| 65° | 8015.6 | 8120.8 | 7958.9 | 8147.5 | 8066.8 | 8177.4 | 8077.9 |
| 70° | 7455.8 | 7607.0 | 7381.5 | 7635.3 | 7513.4 | 7666.4 | 7525.7 |
| 75° | 6692.4 | 6865.0 | 6590.2 | 6966.5 | 6757.3 | 6919.5 | 6766.1 |
| 80° | 5645.8 | 5867.9 | 5484.4 | 6023.2 | 5720.4 | 5892.4 | 5733.5 |
| 85° | 4310.2 | 4764.1 | 4047.4 | 4817.9 | 4440.6 | 4742.9 | 4470.0 |

Photometric test report

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

Luminance values in cd/m²

γ 65°
 γ 70°
 γ 75°
 γ 80°
 γ 85°



Photometric test report

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

| | | |
|-------------------------|---------------------------------|---------------|
| Multilumen Table | environmental temperature: 25°C | sITeco |
|-------------------------|---------------------------------|---------------|

| DIP-Step | Switch Setting | | | | Luminous flux [lm] | Power consumption [W] |
|----------|----------------|-----|-----|-----|-----------------------|--------------------------|
| | 1 | 2 | 3 | 4 | | |
| 15 | ON | ON | ON | ON | 7770 | 61.1 |
| 14 | ON | ON | ON | OFF | 7500 | 58.8 |
| 13 | ON | ON | OFF | ON | 7230 | 56.6 |
| 12 | ON | ON | OFF | OFF | 6950 | 54.3 |
| 11 | ON | OFF | ON | ON | 6680 | 52.0 |
| 10 | ON | OFF | ON | OFF | 6460 | 49.9 |
| 9 | ON | OFF | OFF | ON | 6180 | 47.6 |
| 8 | ON | OFF | OFF | OFF | 5900 | 45.4 |
| 7 | OFF | ON | ON | ON | 5620 | 43.1 |
| 6 | OFF | ON | ON | OFF | 5390 | 41.0 |
| 5 | OFF | ON | OFF | ON | 5060 | 38.7 |
| 4 | OFF | ON | OFF | OFF | 4820 | 36.5 |
| 3 | OFF | OFF | ON | ON | 4580 | 34.4 |
| 2 | OFF | OFF | ON | OFF | 4290 | 32.1 |
| 1 | OFF | OFF | OFF | ON | 4000 | 29.9 |
| 0 | OFF | OFF | OFF | OFF | 3710 | 27.7 |