

## Photometric test report

Family  
**Silhouette® 21**

Order number: **51LN12MKM40A3G**  
EAN: **4058352011584**

LP number  
**59582\_13**

serial  
documentation  
**14.03.2024**

**siteco**



### Version

surface-mounted luminaire, white, diffuser,  
PMMA, opal, with homogeneous illumination,  
extremely wide distribution, adjustable color  
temperature: 3000K | 4000K | 5000K,  
emergency light element 3h operating duration

### Lamps

LED 3000 K | CRI ≥ 80

### Controlgear

ECG Multilumen

### Setting

individual position: colour temperature 3000K

### Rated values

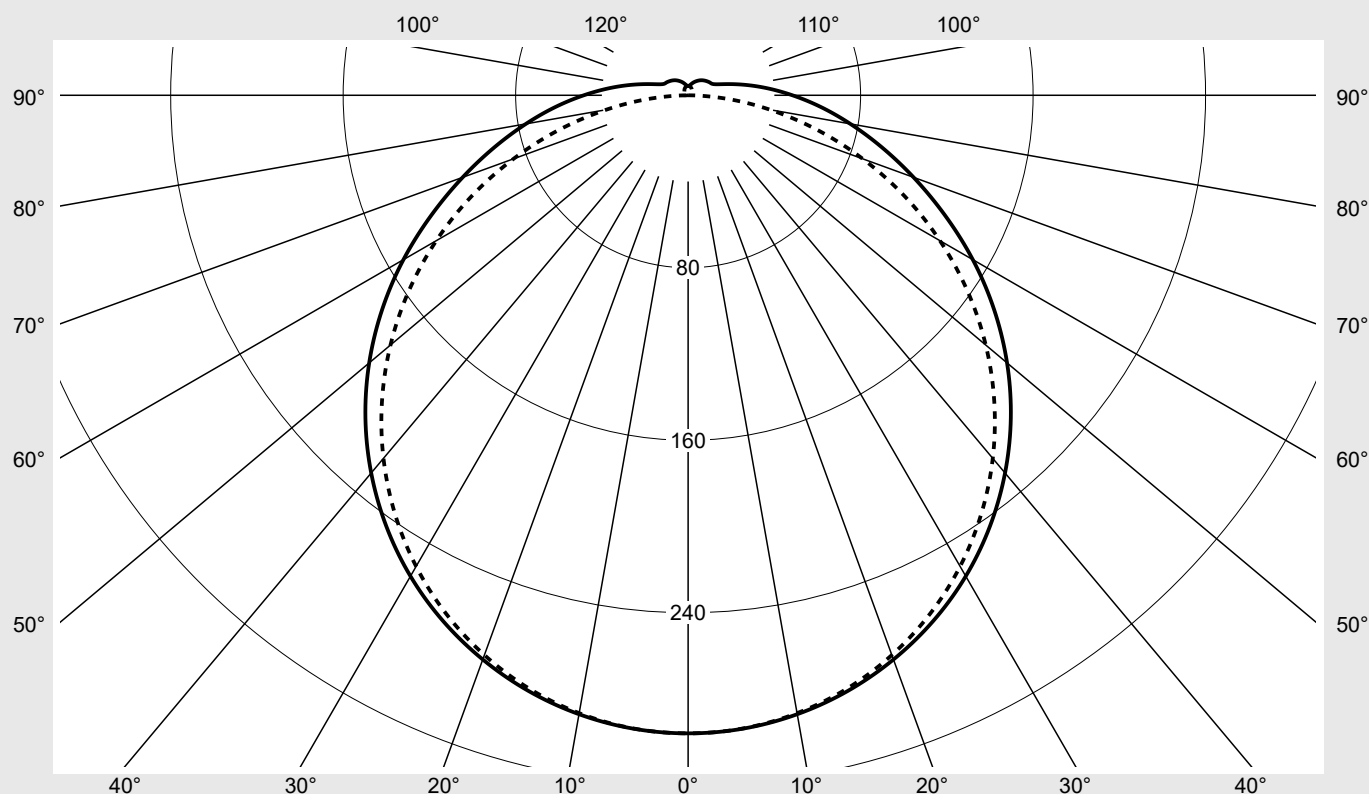
Net luminous flux = 4640 lm  
Power consumption = 35.7 W  
Luminous efficacy = 130 lm/W

Luminous intensity in cd/klm

**C180-0**

**C270-90**

**Imax: 296 cd/klm**



### Classifications

DIN 5040 A 3 1  
CIE N1=43 N2=73 N3=92  
N4=94 N5=100

### Luminaire light output ratios

$\eta_{LB}$  100.0%  
 $\phi_u$  93.9%  
 $\phi_o$  6.1%

### Measurement conditions

DIN EN 13032 and DIN 5032

Photometric test report

|                                          |                                                    |                            |
|------------------------------------------|----------------------------------------------------|----------------------------|
| Family<br>Silhouette® 21                 | Order number: 51LN12MKM40A3G<br>EAN: 4058352011584 | LP number<br>59582_13      |
| Table of values for luminous intensities |                                                    | Maximum luminous intensity |

siteco

| C-<br>planes | 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° | Phi-zone                | Total<br>Phi-zone |
|--------------|------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|-------------------------|-------------------|
| γ            | Luminous intensity in cd/klm |                             |                             |                             |                             |                             |             | Luminous flux in lm/klm |                   |
| 0°           | 295.9                        | 295.9                       | 295.9                       | 295.9                       | 295.9                       | 295.9                       | 295.9       | 1.8                     | 1.8               |
| 5°           | 294.8                        | 294.8                       | 294.8                       | 294.8                       | 294.7                       | 294.7                       | 294.7       | 14.1                    | 15.9              |
| 10°          | 291.5                        | 291.5                       | 291.4                       | 291.2                       | 291.1                       | 291.0                       | 291.0       | 27.7                    | 43.6              |
| 15°          | 286.0                        | 286.0                       | 285.8                       | 285.5                       | 285.1                       | 284.9                       | 284.9       | 40.5                    | 84.1              |
| 20°          | 278.5                        | 278.4                       | 277.9                       | 277.3                       | 276.8                       | 276.4                       | 276.3       | 52.0                    | 136.1             |
| 25°          | 269.0                        | 268.7                       | 268.0                       | 267.0                       | 266.1                       | 265.6                       | 265.4       | 61.9                    | 197.9             |
| 30°          | 257.6                        | 257.2                       | 256.2                       | 254.8                       | 253.4                       | 252.6                       | 252.3       | 69.8                    | 267.8             |
| 35°          | 244.0                        | 243.7                       | 242.4                       | 240.6                       | 238.6                       | 237.4                       | 237.0       | 75.6                    | 343.4             |
| 40°          | 228.7                        | 228.2                       | 226.6                       | 224.4                       | 222.0                       | 220.3                       | 219.8       | 79.0                    | 422.4             |
| 45°          | 211.7                        | 211.0                       | 209.2                       | 206.5                       | 203.7                       | 201.4                       | 200.8       | 80.0                    | 502.4             |
| 50°          | 193.1                        | 192.3                       | 190.2                       | 187.0                       | 183.7                       | 181.0                       | 180.2       | 78.4                    | 580.9             |
| 55°          | 173.2                        | 172.4                       | 169.9                       | 166.3                       | 162.4                       | 159.2                       | 158.1       | 74.5                    | 655.4             |
| 60°          | 152.5                        | 151.5                       | 148.7                       | 144.5                       | 140.0                       | 136.2                       | 134.9       | 68.4                    | 723.8             |
| 65°          | 131.3                        | 130.2                       | 126.9                       | 122.2                       | 117.0                       | 112.6                       | 110.8       | 60.4                    | 784.2             |
| 70°          | 111.3                        | 109.8                       | 105.4                       | 99.6                        | 93.6                        | 88.4                        | 86.2        | 51.1                    | 835.3             |
| 75°          | 92.9                         | 91.2                        | 86.0                        | 78.5                        | 70.7                        | 64.7                        | 62.0        | 41.3                    | 876.7             |
| 80°          | 76.4                         | 74.5                        | 68.7                        | 60.2                        | 50.1                        | 42.0                        | 38.6        | 31.8                    | 908.5             |
| 85°          | 61.7                         | 59.7                        | 53.7                        | 44.6                        | 33.4                        | 22.3                        | 17.3        | 23.0                    | 931.5             |
| 90°          | 48.4                         | 46.4                        | 40.5                        | 31.6                        | 20.6                        | 9.3                         | 0.5         | 15.8                    | 947.3             |
| 95°          | 37.0                         | 35.0                        | 29.6                        | 21.4                        | 11.8                        | 3.6                         | 0.6         | 10.9                    | 958.2             |
| 100°         | 27.5                         | 25.8                        | 21.0                        | 14.1                        | 7.2                         | 3.0                         | 0.8         | 7.7                     | 965.9             |
| 105°         | 20.0                         | 18.6                        | 14.7                        | 9.9                         | 5.9                         | 2.9                         | 1.1         | 5.5                     | 971.4             |
| 110°         | 14.9                         | 13.8                        | 11.4                        | 8.5                         | 5.7                         | 3.0                         | 1.4         | 4.3                     | 975.7             |
| 115°         | 12.5                         | 11.8                        | 10.3                        | 8.2                         | 5.5                         | 3.0                         | 1.6         | 3.8                     | 979.5             |
| 120°         | 11.7                         | 11.3                        | 10.0                        | 7.7                         | 5.3                         | 3.1                         | 1.8         | 3.5                     | 983.0             |
| 125°         | 11.1                         | 10.6                        | 9.3                         | 7.1                         | 5.1                         | 3.1                         | 2.0         | 3.1                     | 986.2             |
| 130°         | 10.5                         | 10.0                        | 8.7                         | 6.8                         | 4.9                         | 3.2                         | 2.2         | 2.8                     | 989.0             |
| 135°         | 9.8                          | 9.4                         | 8.0                         | 6.3                         | 4.7                         | 3.2                         | 2.4         | 2.4                     | 991.4             |
| 140°         | 9.1                          | 8.7                         | 7.2                         | 5.9                         | 4.6                         | 3.3                         | 2.7         | 2.1                     | 993.5             |
| 145°         | 8.3                          | 8.0                         | 6.6                         | 5.5                         | 4.4                         | 3.5                         | 3.0         | 1.8                     | 995.3             |
| 150°         | 7.5                          | 7.2                         | 6.0                         | 5.1                         | 4.3                         | 3.7                         | 3.3         | 1.5                     | 996.7             |
| 155°         | 6.8                          | 6.3                         | 5.5                         | 4.8                         | 4.2                         | 3.9                         | 3.6         | 1.1                     | 997.9             |
| 160°         | 6.0                          | 5.4                         | 4.9                         | 4.5                         | 4.2                         | 4.0                         | 3.8         | 0.9                     | 998.7             |
| 165°         | 5.3                          | 4.7                         | 4.4                         | 4.4                         | 4.3                         | 4.2                         | 4.1         | 0.6                     | 999.4             |
| 170°         | 4.8                          | 4.2                         | 4.3                         | 4.3                         | 4.3                         | 4.3                         | 4.2         | 0.4                     | 999.8             |
| 175°         | 4.4                          | 4.0                         | 4.2                         | 4.3                         | 4.4                         | 4.4                         | 4.4         | 0.2                     | 1000.0            |
| 180°         | 4.3                          | 4.3                         | 4.3                         | 4.3                         | 4.3                         | 4.3                         | 4.3         | 0.0                     | 1000.0            |

Photometric test report

|                              |     |                     |                                                    |      |      |      |                    |      |      |                       |      |
|------------------------------|-----|---------------------|----------------------------------------------------|------|------|------|--------------------|------|------|-----------------------|------|
| Family<br>Silhouette® 21     |     |                     | Order number: 51LN12MKM40A3G<br>EAN: 4058352011584 |      |      |      |                    |      |      | LP number<br>59582_13 |      |
| 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  | 18.9                | 20.6                                               | 19.2 | 20.9 | 21.2 | 18.9               | 20.6 | 19.3 | 21.0                  | 21.3 |
|                              | 3H  | 20.7                | 22.3                                               | 21.1 | 22.6 | 23.0 | 20.6               | 22.2 | 21.0 | 22.5                  | 22.9 |
|                              | 4H  | 21.6                | 23.1                                               | 22.0 | 23.4 | 23.8 | 21.3               | 22.8 | 21.7 | 23.1                  | 23.5 |
|                              | 6H  | 22.4                | 23.8                                               | 22.8 | 24.2 | 24.6 | 21.8               | 23.2 | 22.2 | 23.6                  | 24.0 |
|                              | 8H  | 22.9                | 24.2                                               | 23.3 | 24.5 | 24.9 | 22.1               | 23.4 | 22.5 | 23.8                  | 24.2 |
|                              | 12H | 23.3                | 24.5                                               | 23.7 | 24.9 | 25.3 | 22.2               | 23.5 | 22.6 | 23.8                  | 24.3 |
| 4H                           | 2H  | 19.6                | 21.2                                               | 20.0 | 21.5 | 21.9 | 19.7               | 21.2 | 20.1 | 21.5                  | 21.9 |
|                              | 3H  | 21.7                | 23.0                                               | 22.1 | 23.4 | 23.8 | 21.5               | 22.8 | 22.0 | 23.2                  | 23.6 |
|                              | 4H  | 22.7                | 23.9                                               | 23.1 | 24.3 | 24.7 | 22.4               | 23.5 | 22.8 | 23.9                  | 24.4 |
|                              | 6H  | 23.7                | 24.7                                               | 24.2 | 25.2 | 25.6 | 23.0               | 24.1 | 23.5 | 24.5                  | 25.0 |
|                              | 8H  | 24.2                | 25.2                                               | 24.7 | 25.6 | 26.1 | 23.3               | 24.2 | 23.7 | 24.7                  | 25.2 |
|                              | 12H | 24.7                | 25.6                                               | 25.2 | 26.0 | 26.5 | 23.5               | 24.3 | 24.0 | 24.8                  | 25.3 |
| 8H                           | 4H  | 23.1                | 24.1                                               | 23.5 | 24.5 | 25.0 | 22.8               | 23.8 | 23.3 | 24.2                  | 24.7 |
|                              | 6H  | 24.3                | 25.1                                               | 24.8 | 25.6 | 26.1 | 23.6               | 24.4 | 24.1 | 24.9                  | 25.4 |
|                              | 8H  | 24.9                | 25.6                                               | 25.4 | 26.1 | 26.6 | 24.0               | 24.7 | 24.5 | 25.2                  | 25.7 |
|                              | 12H | 25.6                | 26.2                                               | 26.1 | 26.7 | 27.2 | 24.2               | 24.9 | 24.7 | 25.4                  | 25.9 |
| 12H                          | 4H  | 23.2                | 24.0                                               | 23.6 | 24.5 | 25.0 | 22.9               | 23.8 | 23.4 | 24.2                  | 24.7 |
|                              | 6H  | 24.4                | 25.1                                               | 24.9 | 25.6 | 26.1 | 23.8               | 24.5 | 24.3 | 25.0                  | 25.5 |
|                              | 8H  | 25.1                | 25.7                                               | 25.6 | 26.2 | 26.8 | 24.2               | 24.8 | 24.7 | 25.3                  | 25.8 |

|                 |          |                                 |                             |                               |                             |                             |                             |                             |
|-----------------|----------|---------------------------------|-----------------------------|-------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Luminance table |          | Max. for $\gamma \geq 65^\circ$ |                             | Photometric dimensions in mm: |                             | L = 1133<br>B = 148         | H(C0) = 30<br>H(C90) = 0    | H(C180) = 30<br>H(C270) = 0 |
| C-planes        | $\gamma$ | 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°                 |
|                 |          |                                 | Luminance in cd/m²          |                               |                             |                             |                             |                             |
| 45°             |          | 6887.3                          | 6906.6                      | 6963.9                        | 7067.7                      | 7237.5                      | 7489.0                      | 7858.4                      |
| 50°             |          | 6695.5                          | 6713.2                      | 6770.5                        | 6876.6                      | 7054.8                      | 7332.2                      | 7757.2                      |
| 55°             |          | 6481.4                          | 6499.3                      | 6554.0                        | 6658.0                      | 6843.3                      | 7142.9                      | 7628.7                      |
| 60°             |          | 6245.5                          | 6263.1                      | 6309.4                        | 6406.2                      | 6589.2                      | 6909.0                      | 7463.4                      |
| 65°             |          | 5992.5                          | 6003.1                      | 6035.4                        | 6117.5                      | 6291.3                      | 6625.0                      | 7257.4                      |
| 70°             |          | 5783.2                          | 5778.2                      | 5754.7                        | 5783.8                      | 5923.4                      | 6252.7                      | 6972.8                      |
| 75°             |          | 5656.1                          | 5634.4                      | 5555.2                        | 5466.7                      | 5485.7                      | 5786.0                      | 6627.1                      |
| 80°             |          | 5663.8                          | 5622.5                      | 5485.7                        | 5289.5                      | 5071.5                      | 5161.7                      | 6154.5                      |
| 85°             |          | 5902.5                          | 5849.2                      | 5671.2                        | 5365.6                      | 4915.8                      | 4433.5                      | 5492.3                      |

Photometric test report

Family  
**Silhouette® 21**

Order number: **51LN12MKM40A3G**  
EAN: **4058352011584**

LP number  
**59582\_13**

Luminance values in cd/m²

γ 65°

γ 70°

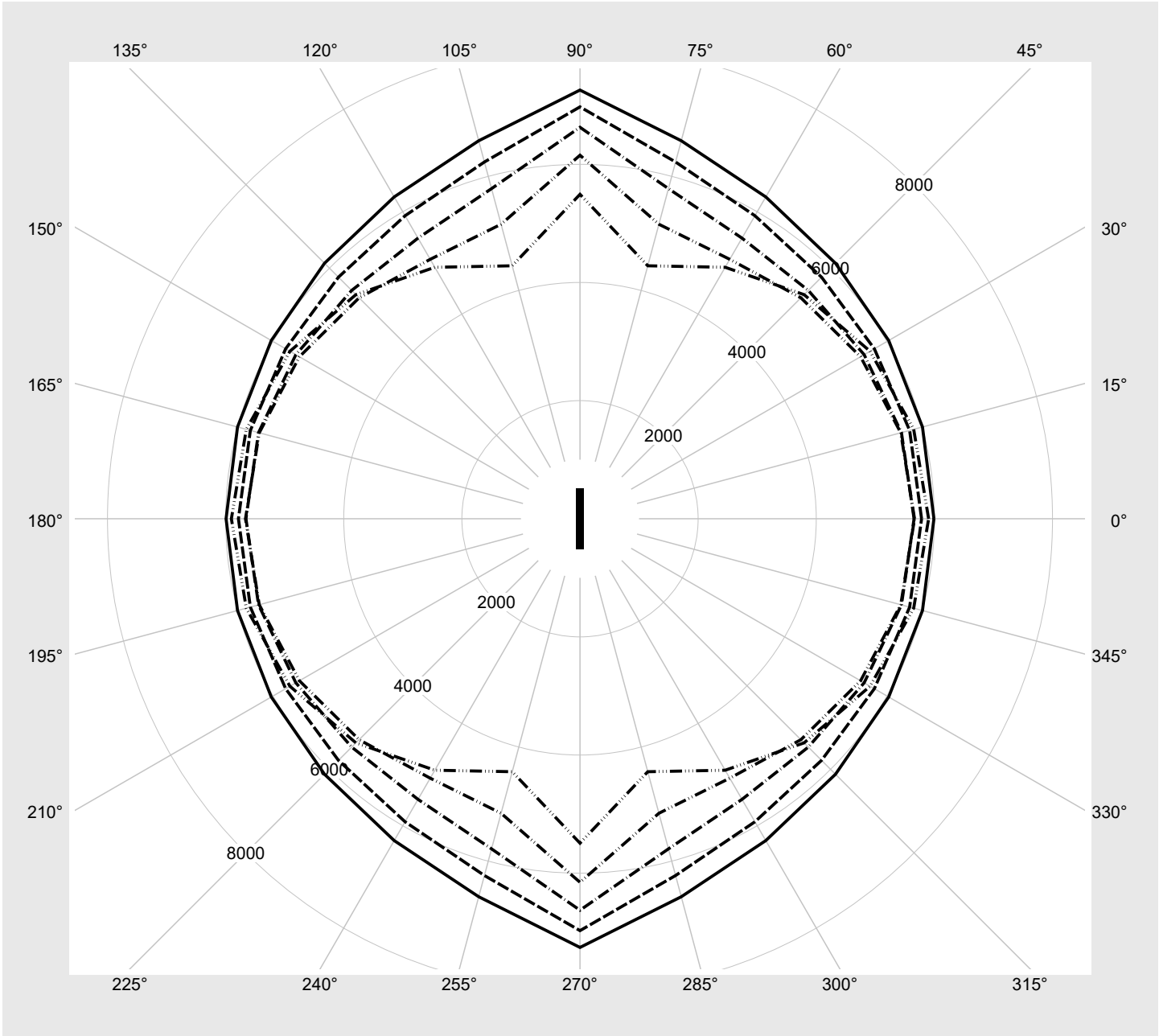
γ 75°

γ 80°

γ 85°

sit

eco



Photometric test report

|                          |                                                    |                       |
|--------------------------|----------------------------------------------------|-----------------------|
| Family<br>Silhouette® 21 | Order number: 51LN12MKM40A3G<br>EAN: 4058352011584 | LP number<br>59582_13 |
| Multilumen Table         | environmental temperature: 25°C                    | siteco                |

| DIP-Step | Switch Setting |     |     | Luminous flux<br>[lm] | Power consumption<br>[W] |
|----------|----------------|-----|-----|-----------------------|--------------------------|
|          | 1              | 2   | 3   |                       |                          |
| 4        | OFF            | OFF | ON  | 2770                  | 20.5                     |
| 2        | OFF            | ON  | OFF | 3320                  | 24.7                     |
| 1        | ON             | OFF | OFF | 3960                  | 29.9                     |
| 0        | OFF            | OFF | OFF | 4640                  | 35.7                     |