

Photometric test report

Family
Ecopack® 31

Order number: 51LJ12MKM40A
EAN: 4058352589564

LP number
59348_4



Version diffuser optic, frosted, polycarbonate,
adjustable color temperature: 3000K | 4000K |
5000K, extremely wide distribution

Lamps LED 5000 K | CRI ≥ 80

Controlgear ECG Multilumen

Setting individual position: colour temperature 5000K

Rated values Net luminous flux = 4890 lm
Power consumption = 35.0 W
Luminous efficacy = 139.7 lm/W

serial
documentation
19.08.2022

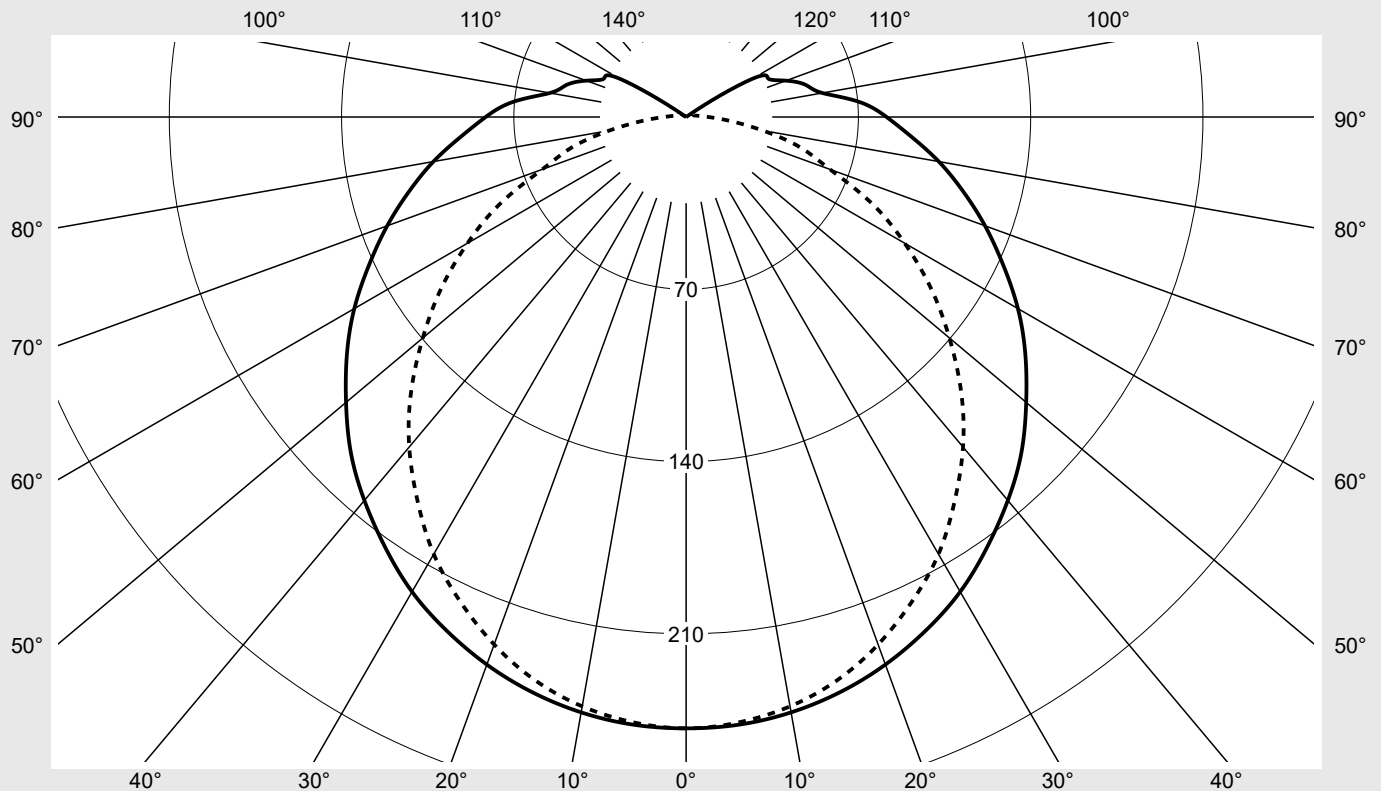
siteco

Luminous intensity in cd/klm

C180-0

C270-90

Imax: 248 cd/klm



Classifications

DIN 5040 B 3 1
CIE N1=39 N2=67 N3=87
N4=89 N5=100

Luminaire light output ratios

η_{LB} 100.0%
 ϕ_u 88.8%
 ϕ_o 11.2%

Measurement conditions

DIN EN 13032 and DIN 5032

Photometric test report

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| Table of values for luminous intensities | | Maximum luminous intensity |
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| C-planes γ | 0° 180° | 15° 165° 195° 345° | 30° 150° 210° 330° | 45° 135° 225° 315° | 60° 120° 240° 300° | 75° 105° 255° 285° | 90° 270° | Phi-zone | Total Phi-zone |
|----------------------|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|----------|-------------------|
| | | | | | | | | | |
| 0° | 248.4 | 248.4 | 248.4 | 248.4 | 248.4 | 248.4 | 248.4 | 1.5 | 1.5 |
| 5° | 247.8 | 248.0 | 248.2 | 247.6 | 247.0 | 246.9 | 246.9 | 11.8 | 13.3 |
| 10° | 245.6 | 246.0 | 246.3 | 244.9 | 243.5 | 243.3 | 243.2 | 23.3 | 36.6 |
| 15° | 241.9 | 242.3 | 242.7 | 240.5 | 238.4 | 237.7 | 237.0 | 34.1 | 70.7 |
| 20° | 236.8 | 237.0 | 237.1 | 234.0 | 230.9 | 229.5 | 228.1 | 43.8 | 114.5 |
| 25° | 230.3 | 230.4 | 230.5 | 226.1 | 221.8 | 219.5 | 217.2 | 52.2 | 166.7 |
| 30° | 222.7 | 222.6 | 222.5 | 216.9 | 211.3 | 208.2 | 205.1 | 59.2 | 225.8 |
| 35° | 213.3 | 213.1 | 212.8 | 205.7 | 198.6 | 194.5 | 190.3 | 64.3 | 290.1 |
| 40° | 203.4 | 202.9 | 202.5 | 193.9 | 185.3 | 180.1 | 175.0 | 67.8 | 357.8 |
| 45° | 192.7 | 192.1 | 191.5 | 181.3 | 171.1 | 164.6 | 158.1 | 69.5 | 427.3 |
| 50° | 180.4 | 179.6 | 178.8 | 167.2 | 155.7 | 147.7 | 139.7 | 69.2 | 496.6 |
| 55° | 168.3 | 167.2 | 166.2 | 153.2 | 140.3 | 130.9 | 121.5 | 67.6 | 564.1 |
| 60° | 155.7 | 154.5 | 153.3 | 139.2 | 125.1 | 113.8 | 102.5 | 64.5 | 628.6 |
| 65° | 142.1 | 141.2 | 140.3 | 124.9 | 109.4 | 96.4 | 83.4 | 60.0 | 688.6 |
| 70° | 129.3 | 128.0 | 126.8 | 110.8 | 94.9 | 78.6 | 62.2 | 54.5 | 743.1 |
| 75° | 116.5 | 115.1 | 113.8 | 97.8 | 81.8 | 65.0 | 48.3 | 49.1 | 792.2 |
| 80° | 104.3 | 102.8 | 101.4 | 86.0 | 70.6 | 51.1 | 31.7 | 43.2 | 835.4 |
| 85° | 91.9 | 90.5 | 89.2 | 73.8 | 58.4 | 38.0 | 17.7 | 36.8 | 872.2 |
| 90° | 81.5 | 79.6 | 77.8 | 62.8 | 47.8 | 28.4 | 9.1 | 31.2 | 903.4 |
| 95° | 70.6 | 66.3 | 62.0 | 50.4 | 38.9 | 22.1 | 5.3 | 25.3 | 928.7 |
| 100° | 56.2 | 54.3 | 52.5 | 39.2 | 26.0 | 14.7 | 3.5 | 19.5 | 948.1 |
| 105° | 50.3 | 48.5 | 46.6 | 34.6 | 22.7 | 12.9 | 3.1 | 16.9 | 965.1 |
| 110° | 43.2 | 41.8 | 40.4 | 29.8 | 19.3 | 11.1 | 2.9 | 14.2 | 979.3 |
| 115° | 36.9 | 35.3 | 33.8 | 24.8 | 15.9 | 9.4 | 2.8 | 11.5 | 990.8 |
| 120° | 31.0 | 29.8 | 28.6 | 20.6 | 12.7 | 7.7 | 2.6 | 9.2 | 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 |

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| UGR-Table | Standard room | siteco |
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| | | | | | | | | | | | |
|------------------------------|---------------------|------|------|------|------|--------------------|------|------|------|------|------|
| 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 | 21.1 | 22.8 | 21.6 | 23.2 | 23.7 | 20.6 | 22.3 | 21.0 | 22.7 | 23.1 |
| | 3H | 23.2 | 24.7 | 23.6 | 25.2 | 25.6 | 22.3 | 23.8 | 22.7 | 24.2 | 24.7 |
| | 4H | 24.2 | 25.6 | 24.6 | 26.1 | 26.5 | 22.9 | 24.4 | 23.4 | 24.9 | 25.3 |
| | 6H | 25.1 | 26.4 | 25.6 | 26.9 | 27.5 | 23.5 | 24.9 | 24.0 | 25.4 | 25.9 |
| | 8H | 25.6 | 26.8 | 26.1 | 27.3 | 27.9 | 23.8 | 25.1 | 24.3 | 25.6 | 26.1 |
| | 12H | 26.0 | 27.2 | 26.6 | 27.7 | 28.3 | 23.9 | 25.2 | 24.4 | 25.7 | 26.2 |
| 4H | 2H | 21.9 | 23.4 | 22.4 | 23.8 | 24.3 | 21.5 | 22.9 | 21.9 | 23.3 | 23.8 |
| | 3H | 24.2 | 25.4 | 24.7 | 25.9 | 26.4 | 23.3 | 24.6 | 23.8 | 25.0 | 25.6 |
| | 4H | 25.3 | 26.5 | 25.8 | 27.0 | 27.5 | 24.2 | 25.3 | 24.7 | 25.9 | 26.4 |
| | 6H | 26.4 | 27.4 | 27.0 | 28.0 | 28.6 | 25.0 | 26.0 | 25.5 | 26.5 | 27.1 |
| | 8H | 27.0 | 27.9 | 27.6 | 28.5 | 29.1 | 25.3 | 26.3 | 25.9 | 26.8 | 27.4 |
| | 12H | 27.5 | 28.3 | 28.1 | 28.9 | 29.6 | 25.5 | 26.4 | 26.1 | 27.0 | 27.6 |
| 8H | 4H | 25.7 | 26.7 | 26.3 | 27.3 | 27.9 | 24.8 | 25.7 | 25.4 | 26.3 | 26.9 |
| | 6H | 27.1 | 27.9 | 27.7 | 28.5 | 29.2 | 25.8 | 26.6 | 26.4 | 27.2 | 27.9 |
| | 8H | 27.8 | 28.5 | 28.4 | 29.1 | 29.8 | 26.3 | 27.0 | 26.9 | 27.6 | 28.3 |
| | 12H | 28.5 | 29.1 | 29.1 | 29.7 | 30.4 | 26.7 | 27.3 | 27.3 | 27.9 | 28.6 |
| 12H | 4H | 25.8 | 26.6 | 26.4 | 27.2 | 27.9 | 24.9 | 25.7 | 25.5 | 26.3 | 27.0 |
| | 6H | 27.2 | 27.9 | 27.8 | 28.5 | 29.2 | 26.0 | 26.7 | 26.7 | 27.3 | 28.0 |
| | 8H | 28.0 | 28.6 | 28.6 | 29.3 | 30.0 | 26.6 | 27.2 | 27.2 | 27.8 | 28.6 |

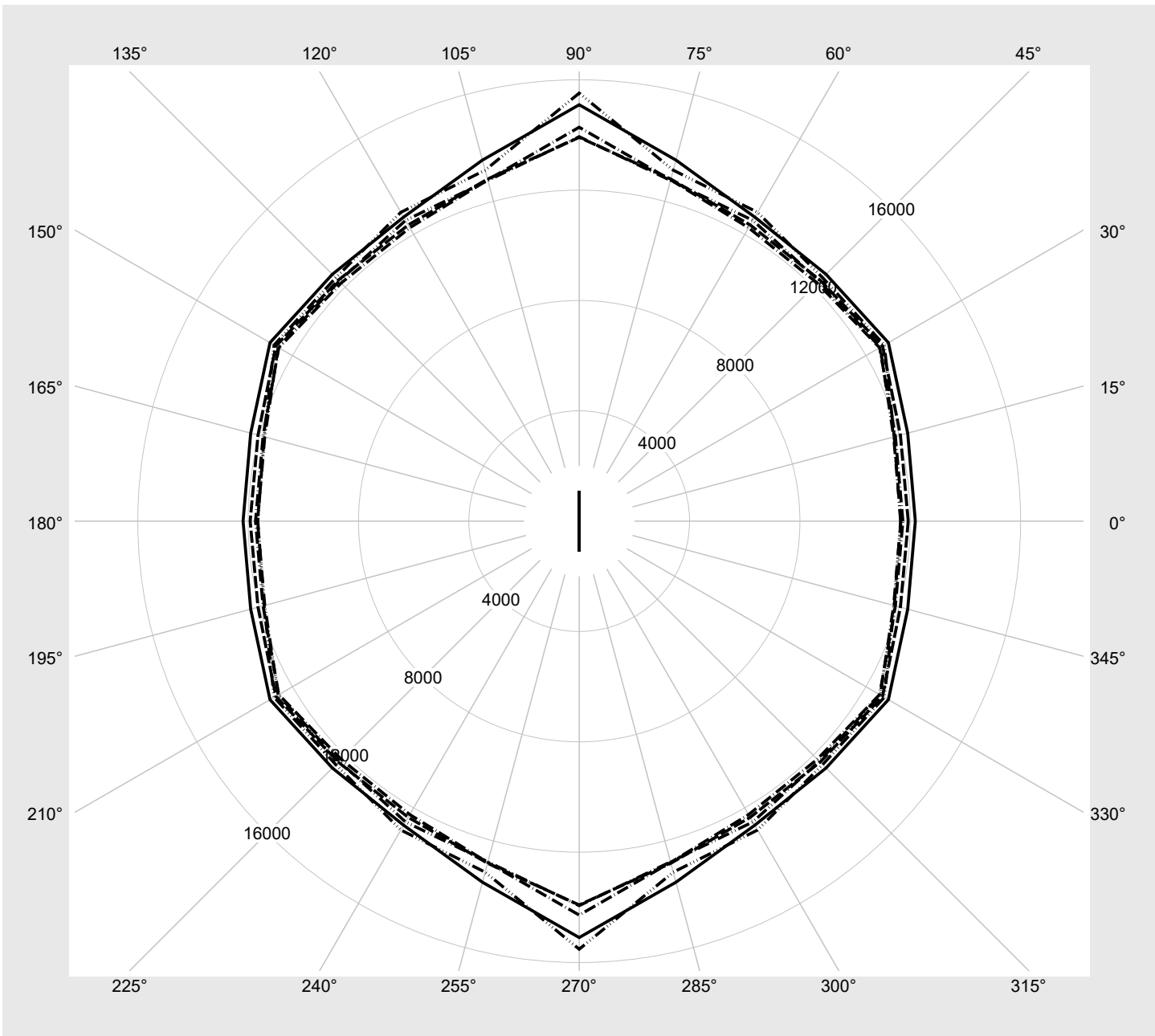
| | | | | | |
|------------------------|---|--------------------------------------|-----------------|-------------------|---------------------|
| Luminance table | Max. for $\gamma \geq 65^\circ$ | Photometric dimensions in mm: | L = 1142 | H(C0) = 29 | H(C180) = 29 |
| | | | B = 56 | H(C90) = 0 | H(C270) = 0 |

| C-planes | γ | Luminance in cd/m ² | | | | | | | |
|----------|----------|--------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|--|
| | | 0° 180° | 15° 165° 195° 345° | 30° 150° 210° 330° | 45° 135° 225° 315° | 60° 120° 240° 300° | 75° 105° 255° 285° | 90° 270° | |
| | 45° | 13727.7 | 13844.5 | 14292.7 | 14349.5 | 14699.4 | 15695.3 | 17092.3 | |
| | 50° | 13268.9 | 13383.3 | 13858.1 | 13848.5 | 14152.0 | 15146.4 | 16612.6 | |
| | 55° | 12895.2 | 13003.1 | 13503.5 | 13414.2 | 13656.3 | 14649.5 | 16200.9 | |
| | 60° | 12550.4 | 12658.2 | 13193.9 | 13023.6 | 13203.4 | 14124.4 | 15682.1 | |
| | 65° | 12184.5 | 12327.8 | 12941.4 | 12654.6 | 12728.4 | 13550.6 | 15094.7 | |
| | 70° | 11927.0 | 12053.8 | 12697.2 | 12352.4 | 12397.7 | 12837.8 | 13913.1 | |
| | 75° | 11733.3 | 11865.2 | 12574.5 | 12205.8 | 12282.6 | 12808.7 | 14279.7 | |
| | 80° | 11661.6 | 11801.5 | 12600.9 | 12306.8 | 12590.4 | 12787.6 | 13937.1 | |
| | 85° | 11651.3 | 11823.7 | 12770.3 | 12479.5 | 12928.8 | 13173.1 | 15516.3 | |

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Luminance values in cd/m² γ 65° γ 70° γ 75° γ 80° γ 85° **siteco**



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

| DIP-Step | Switch Setting | | Luminous flux [lm] | Power consumption [W] |
|----------|----------------|-----|--------------------|-----------------------|
| | 1 | 2 | | |
| 3 | ON | ON | 4890 | 35.0 |
| 2 | ON | OFF | 4310 | 30.0 |
| 1 | OFF | ON | 3620 | 25.0 |
| 0 | OFF | OFF | 2920 | 20.0 |