

## Lichttechnischer Prüfbefund

**Familie**  
**Ecopack® 31**

**Bestell-Nr.: 51LJ12MNM70A3G**  
**EAN: 4058352671115**

**LP-Nummer**  
**59349\_11**

**Seriendokumentation**  
**19.08.2022**

**siteco**

**Ausführung**

Diffusoroptik, satiniert, PC, einstellbare  
Farbtemperatur: 3000K | 4000K | 5000K,  
extrem breit strahlend, Notlichtelement 3h  
Betriebsdauer

**Bestückung**

LED 5000 K | CRI ≥ 80

**Betriebsgerät**

EVG-Multilumen

**Einstellung**

indiv. Einstellung: Farbtemperatur 5000K

**Bemessungswerte**

Nettolichtstrom = 6780 lm

Systemleistung = 51.5 W

Lichtausbeute = 131.7 lm/W

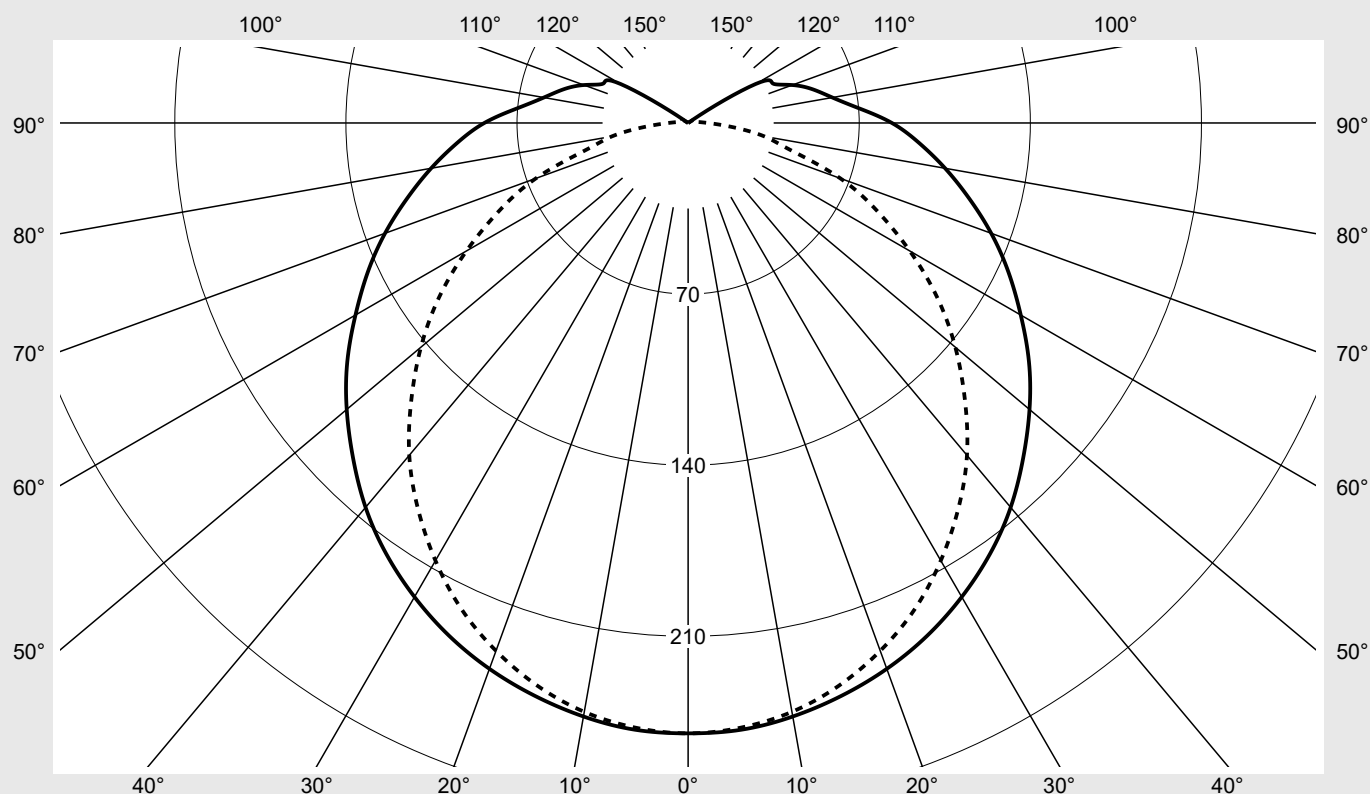


**Lichtstärke in cd/klm**

**C180-0**

**C270-90**

**Imax: 250 cd/klm**



**Klassifizierungen**

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

**Leuchtenbetriebswirkungsgrade**

$\eta_{LB}$  100,0%  
 $\phi_u$  89,0%  
 $\phi_o$  11,0%

**Messbedingungen**

DIN EN 13032 und DIN 5032

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|                                 |                                                   |                       |
|---------------------------------|---------------------------------------------------|-----------------------|
| Familie<br>Ecopack® 31          | Bestell-Nr.: 51LJ12MNM70A3G<br>EAN: 4058352671115 | LP-Nummer<br>59349_11 |
| Wertetabelle Lichtstärkemessung |                                                   | Maximale Lichtstärke  |
|                                 |                                                   | siteco                |

| C-<br>Ebenen | 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             | Summe<br>Phi-Zone |
|--------------|-----------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|----------------------|-------------------|
| γ            | Lichtstärke in cd/klm |                             |                             |                             |                             |                             |             | Lichtstrom in lm/klm |                   |
| 0°           | 249.7                 | 249.7                       | 249.7                       | 249.7                       | 249.7                       | 249.7                       | 249.7       | 1.5                  | 1.5               |
| 5°           | 249.2                 | 249.0                       | 248.9                       | 248.9                       | 248.9                       | 248.6                       | 248.3       | 11.9                 | 13.4              |
| 10°          | 246.5                 | 246.5                       | 246.5                       | 246.0                       | 245.5                       | 245.0                       | 244.6       | 23.4                 | 36.8              |
| 15°          | 242.6                 | 242.6                       | 242.6                       | 241.2                       | 239.9                       | 239.1                       | 238.3       | 34.2                 | 71.0              |
| 20°          | 237.6                 | 237.4                       | 237.2                       | 235.0                       | 232.8                       | 231.3                       | 229.8       | 44.0                 | 114.9             |
| 25°          | 231.4                 | 231.0                       | 230.5                       | 227.1                       | 223.8                       | 221.6                       | 219.4       | 52.5                 | 167.4             |
| 30°          | 223.9                 | 223.0                       | 222.0                       | 217.4                       | 212.7                       | 209.7                       | 206.7       | 59.4                 | 226.8             |
| 35°          | 215.3                 | 214.0                       | 212.6                       | 206.8                       | 200.9                       | 196.8                       | 192.7       | 64.7                 | 291.5             |
| 40°          | 205.3                 | 203.7                       | 202.1                       | 195.0                       | 187.8                       | 182.7                       | 177.5       | 68.3                 | 359.8             |
| 45°          | 193.8                 | 191.9                       | 190.0                       | 181.6                       | 173.2                       | 166.7                       | 160.1       | 69.8                 | 429.6             |
| 50°          | 182.3                 | 179.9                       | 177.4                       | 167.8                       | 158.2                       | 150.4                       | 142.7       | 69.7                 | 499.3             |
| 55°          | 170.2                 | 167.4                       | 164.5                       | 153.6                       | 142.7                       | 133.5                       | 124.4       | 68.0                 | 567.3             |
| 60°          | 157.1                 | 154.0                       | 150.8                       | 138.5                       | 126.1                       | 115.4                       | 104.7       | 64.5                 | 631.9             |
| 65°          | 144.6                 | 141.2                       | 137.8                       | 124.2                       | 110.6                       | 98.0                        | 85.5        | 60.2                 | 692.1             |
| 70°          | 131.9                 | 128.3                       | 124.7                       | 110.2                       | 95.8                        | 81.0                        | 66.3        | 54.9                 | 746.9             |
| 75°          | 119.0                 | 115.0                       | 111.1                       | 96.0                        | 80.9                        | 62.5                        | 44.0        | 48.3                 | 795.2             |
| 80°          | 106.8                 | 102.9                       | 99.0                        | 83.5                        | 67.9                        | 49.8                        | 31.7        | 42.5                 | 837.7             |
| 85°          | 95.0                  | 91.2                        | 87.4                        | 74.0                        | 60.5                        | 39.0                        | 17.4        | 37.1                 | 874.8             |
| 90°          | 83.4                  | 79.7                        | 76.0                        | 61.4                        | 46.8                        | 27.4                        | 8.1         | 30.8                 | 905.6             |
| 95°          | 69.9                  | 64.9                        | 59.9                        | 48.7                        | 37.5                        | 20.9                        | 4.4         | 24.5                 | 930.1             |
| 100°         | 59.9                  | 54.9                        | 50.0                        | 38.0                        | 26.1                        | 14.5                        | 2.9         | 19.3                 | 949.4             |
| 105°         | 53.0                  | 49.1                        | 45.3                        | 33.5                        | 21.6                        | 12.2                        | 2.8         | 16.7                 | 966.2             |
| 110°         | 45.4                  | 42.3                        | 39.1                        | 28.4                        | 17.7                        | 10.2                        | 2.7         | 13.9                 | 980.1             |
| 115°         | 38.2                  | 35.7                        | 33.2                        | 23.7                        | 14.2                        | 8.4                         | 2.5         | 11.2                 | 991.3             |
| 120°         | 31.9                  | 29.5                        | 27.1                        | 19.0                        | 10.8                        | 6.7                         | 2.5         | 8.7                  | 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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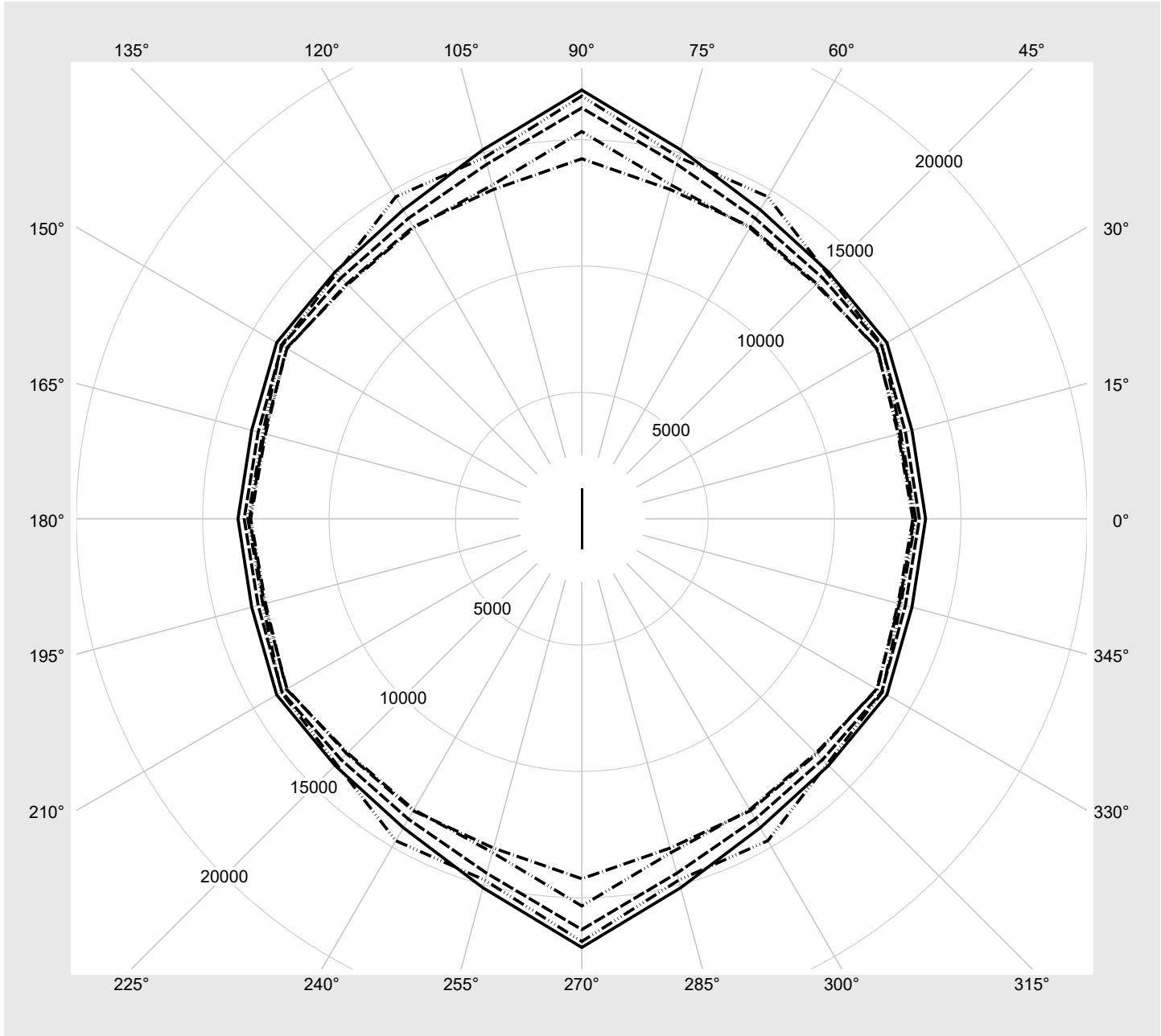
|                        |     |                                     |                                                   |      |      |      |                                       |      |                       |      |      |
|------------------------|-----|-------------------------------------|---------------------------------------------------|------|------|------|---------------------------------------|------|-----------------------|------|------|
| Familie<br>Ecopack® 31 |     |                                     | Bestell-Nr.: 51LJ12MNM70A3G<br>EAN: 4058352671115 |      |      |      |                                       |      | LP-Nummer<br>59349_11 |      |      |
| UGR-Tabelle            |     |                                     | Standardraum                                      |      |      |      |                                       |      | siteco                |      |      |
| Reflexionsgrad Decke   |     | 0,7                                 | 0,7                                               | 0,5  | 0,5  | 0,3  | 0,7                                   | 0,7  | 0,5                   | 0,5  | 0,3  |
| Reflexionsgrad Wände   |     | 0,5                                 | 0,3                                               | 0,5  | 0,3  | 0,3  | 0,5                                   | 0,3  | 0,5                   | 0,3  | 0,3  |
| Reflexionsgrad Boden   |     | 0,2                                 | 0,2                                               | 0,2  | 0,2  | 0,2  | 0,2                                   | 0,2  | 0,2                   | 0,2  | 0,2  |
| Raumabmessungen        |     | Blickrichtung quer zur Leuchte (C0) |                                                   |      |      |      | Blickrichtung längs zur Leuchte (C90) |      |                       |      |      |
| x                      | y   |                                     |                                                   |      |      |      |                                       |      |                       |      |      |
| 2H                     | 2H  | 21,5                                | 23,2                                              | 21,9 | 23,5 | 24,0 | 21,0                                  | 22,7 | 21,4                  | 23,1 | 23,5 |
|                        | 3H  | 23,5                                | 25,1                                              | 24,0 | 25,5 | 25,9 | 22,7                                  | 24,3 | 23,2                  | 24,7 | 25,2 |
|                        | 4H  | 24,5                                | 26,0                                              | 25,0 | 26,4 | 26,9 | 23,3                                  | 24,8 | 23,8                  | 25,2 | 25,7 |
|                        | 6H  | 25,5                                | 26,8                                              | 26,0 | 27,3 | 27,8 | 23,9                                  | 25,2 | 24,3                  | 25,7 | 26,2 |
|                        | 8H  | 26,0                                | 27,2                                              | 26,5 | 27,7 | 28,3 | 24,1                                  | 25,4 | 24,6                  | 25,9 | 26,4 |
|                        | 12H | 26,5                                | 27,6                                              | 27,0 | 28,1 | 28,7 | 24,3                                  | 25,5 | 24,8                  | 26,0 | 26,5 |
| 4H                     | 2H  | 22,2                                | 23,7                                              | 22,7 | 24,1 | 24,6 | 21,8                                  | 23,3 | 22,3                  | 23,7 | 24,2 |
|                        | 3H  | 24,5                                | 25,7                                              | 25,0 | 26,2 | 26,8 | 23,7                                  | 25,0 | 24,2                  | 25,5 | 26,0 |
|                        | 4H  | 25,6                                | 26,8                                              | 26,2 | 27,3 | 27,9 | 24,5                                  | 25,7 | 25,1                  | 26,2 | 26,8 |
|                        | 6H  | 26,8                                | 27,8                                              | 27,3 | 28,3 | 28,9 | 25,3                                  | 26,3 | 25,8                  | 26,8 | 27,4 |
|                        | 8H  | 27,4                                | 28,3                                              | 27,9 | 28,9 | 29,5 | 25,6                                  | 26,6 | 26,2                  | 27,1 | 27,7 |
|                        | 12H | 27,9                                | 28,7                                              | 28,5 | 29,3 | 30,0 | 25,8                                  | 26,7 | 26,4                  | 27,3 | 27,9 |
| 8H                     | 4H  | 26,0                                | 27,0                                              | 26,6 | 27,6 | 28,2 | 25,1                                  | 26,0 | 25,7                  | 26,6 | 27,2 |
|                        | 6H  | 27,4                                | 28,2                                              | 28,0 | 28,8 | 29,5 | 26,1                                  | 26,9 | 26,7                  | 27,5 | 28,1 |
|                        | 8H  | 28,1                                | 28,9                                              | 28,7 | 29,5 | 30,1 | 26,6                                  | 27,3 | 27,2                  | 27,9 | 28,6 |
|                        | 12H | 28,8                                | 29,4                                              | 29,5 | 30,1 | 30,8 | 27,0                                  | 27,6 | 27,6                  | 28,2 | 28,9 |
| 12H                    | 4H  | 26,1                                | 26,9                                              | 26,7 | 27,5 | 28,2 | 25,2                                  | 26,0 | 25,8                  | 26,6 | 27,3 |
|                        | 6H  | 27,5                                | 28,2                                              | 28,1 | 28,8 | 29,5 | 26,3                                  | 27,0 | 26,9                  | 27,6 | 28,3 |
|                        | 8H  | 28,3                                | 28,9                                              | 28,9 | 29,6 | 30,3 | 26,9                                  | 27,5 | 27,5                  | 28,1 | 28,8 |

|                                 |          |                                 |                             |                                       |                             |                             |                             |                             |
|---------------------------------|----------|---------------------------------|-----------------------------|---------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Leuchtdichten-Tabelle           |          | Max. für $\gamma \geq 65^\circ$ |                             | Lichttechnische<br>Abmessungen in mm: |                             | L = 1443<br>B = 56          | H(C0) = 29<br>H(C90) = 0    | H(C180) = 29<br>H(C270) = 0 |
| C-<br>Ebenen                    | $\gamma$ | 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°                 |
|                                 |          |                                 | Leuchtdichte in cd/m²       |                                       |                             |                             |                             |                             |
| 45°<br>50°<br>55°<br>60°        | $\gamma$ | 15153.8                         | 15178.8                     | 15562.2                               | 15771.8                     | 16325.7                     | 17439.6                     | 19001.0                     |
|                                 |          | 14716.0                         | 14707.9                     | 15088.6                               | 15247.4                     | 15780.1                     | 16933.1                     | 18626.3                     |
|                                 |          | 14312.9                         | 14279.4                     | 14667.7                               | 14752.8                     | 15238.7                     | 16396.1                     | 18195.4                     |
|                                 |          | 13899.9                         | 13844.5                     | 14245.3                               | 14219.6                     | 14612.3                     | 15719.9                     | 17573.1                     |
| 65°<br>70°<br>75°<br>80°<br>85° | $\gamma$ | 13605.2                         | 13524.2                     | 13941.0                               | 13811.0                     | 14122.2                     | 15119.7                     | 16967.2                     |
|                                 |          | 13359.8                         | 13257.2                     | 13702.1                               | 13478.4                     | 13726.7                     | 14526.5                     | 16260.0                     |
|                                 |          | 13150.1                         | 13008.5                     | 13472.1                               | 13154.5                     | 13345.4                     | 13494.8                     | 14248.1                     |
|                                 |          | 13102.2                         | 12956.0                     | 13500.4                               | 13106.5                     | 13292.7                     | 13674.2                     | 15324.9                     |
|                                 |          | 13214.4                         | 13067.5                     | 13733.0                               | 13730.6                     | 14715.9                     | 14810.5                     | 16730.3                     |

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|                                                                                                                                     |                                                                      |                                          |
|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|------------------------------------------|
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| <div>Leuchtdichten in cd/m²</div> <div> <div>γ 65°</div> <div>γ 70°</div> <div>γ 75°</div> <div>γ 80°</div> <div>γ 85°</div> </div> |                                                                      |                                          |

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|                                                        |                                                                 |                                     |
|--------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------|
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| <b>Multilumen-Tabelle</b><br>Umgebungstemperatur: 25°C |                                                                 | <b>sit</b> eco                      |

| DIP-Stufe | Schalterstellung |     | Lichtstrom | Systemleistung |
|-----------|------------------|-----|------------|----------------|
|           | 1                | 2   | [lm]       | [W]            |
| 3         | ON               | ON  | 6780       | 51.5           |
| 2         | ON               | OFF | 5940       | 43.5           |
| 1         | OFF              | ON  | 5010       | 35.5           |
| 0         | OFF              | OFF | 4070       | 28.5           |