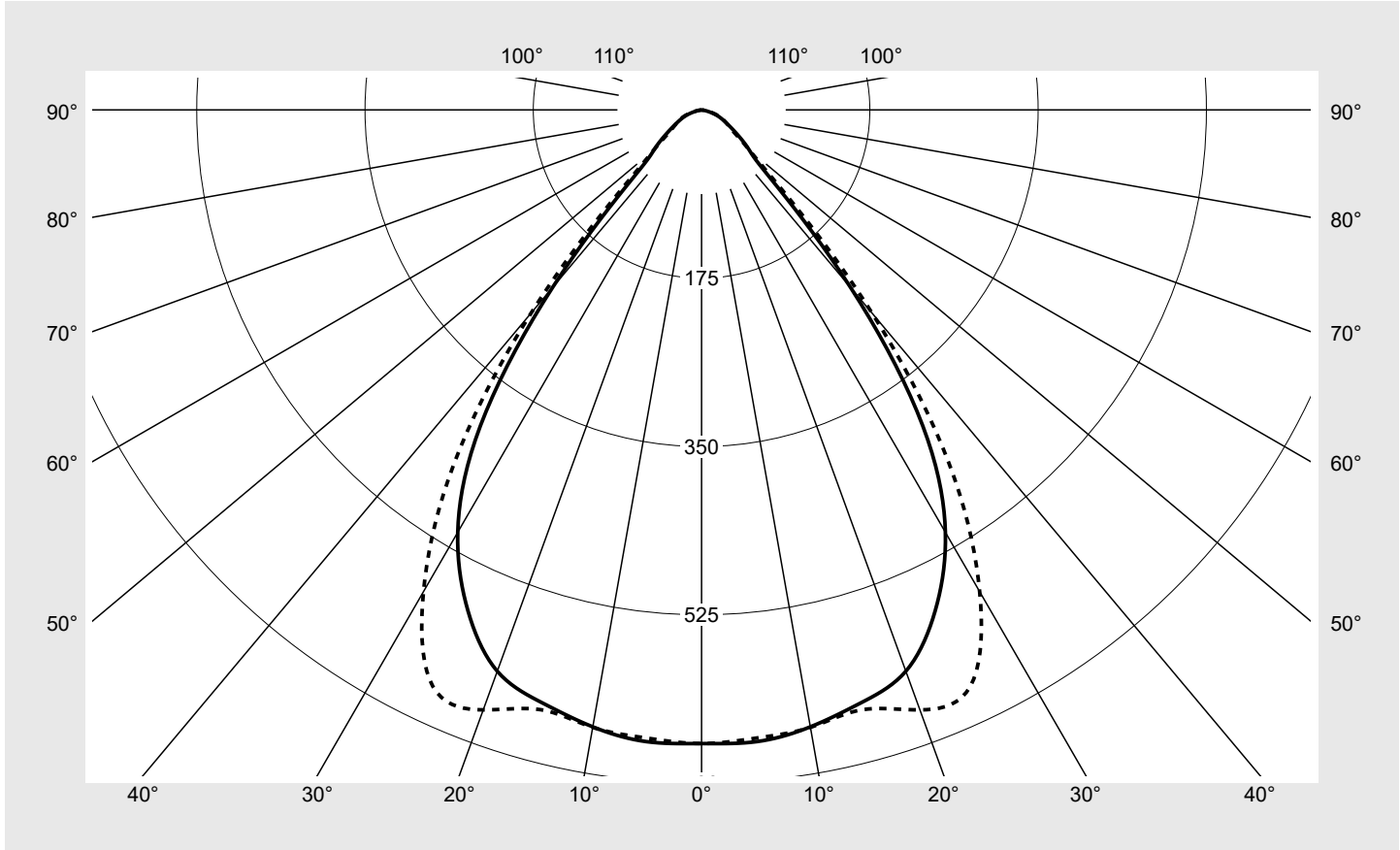


Photometric test report

| | | |
|---|---|---|
| Family Highbay 11 Xtreme | Order number: 51HF82DA4NMA EAN: 4058352919972 | LP number 59481_8 |
|  | Version wide distribution, toughened safety glass, chain suspension | serial documentation 19.10.2023 |
| | Lamps LED 4000 K CRI ≥ 80 Controlgear ECG-DALI | |
| | Rated values Net luminous flux = 33700 lm Power consumption = 187.7 W Luminous efficacy = 179.5 lm/W |  |

Luminous intensity in cd/klm C180-0 C270-90 **Imax: 665 cd/klm**



| Classifications | |
|-----------------|-------------------------------------|
| DIN 5040 | A 6 0 |
| CIE | N1=83 N2=96 N3=100 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 Highbay 11 Xtreme | Order number: 51HF82DA4NMA EAN: 4058352919972 | LP number 59481_8 |
| Table of values for luminous intensities | | Maximum luminous intensity |
| | | sITeco |

| C-planes γ | 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 | |
| 0° | 658.9 | 658.9 | 658.9 | 658.9 | 658.9 | 658.9 | 658.9 | 3.9 | 3.9 |
| 5° | 659.4 | 658.0 | 657.6 | 657.5 | 656.3 | 656.4 | 655.7 | 31.4 | 35.3 |
| 10° | 651.4 | 650.9 | 652.2 | 654.2 | 654.0 | 653.1 | 651.9 | 62.1 | 97.5 |
| 15° | 638.5 | 638.9 | 644.0 | 649.4 | 650.3 | 647.7 | 645.7 | 91.6 | 189.0 |
| 20° | 621.1 | 623.4 | 633.8 | 648.8 | 662.5 | 665.0 | 663.9 | 121.1 | 310.1 |
| 25° | 574.8 | 581.6 | 605.3 | 632.9 | 653.3 | 661.4 | 661.4 | 144.9 | 455.0 |
| 30° | 507.1 | 516.1 | 549.5 | 579.4 | 585.2 | 579.5 | 578.4 | 153.1 | 608.1 |
| 35° | 401.0 | 412.8 | 459.3 | 493.1 | 482.7 | 458.1 | 448.6 | 143.1 | 751.2 |
| 40° | 241.2 | 257.9 | 312.8 | 355.4 | 335.4 | 297.6 | 275.9 | 106.7 | 858.0 |
| 45° | 104.4 | 112.7 | 137.4 | 158.8 | 151.2 | 131.0 | 122.3 | 52.0 | 909.9 |
| 50° | 64.5 | 64.2 | 65.8 | 69.0 | 66.2 | 63.4 | 64.8 | 27.5 | 937.5 |
| 55° | 46.7 | 46.0 | 43.6 | 42.3 | 40.8 | 40.9 | 42.1 | 19.3 | 956.8 |
| 60° | 33.4 | 31.7 | 30.6 | 30.2 | 31.1 | 31.3 | 32.1 | 14.9 | 971.6 |
| 65° | 24.6 | 23.1 | 22.4 | 22.7 | 24.0 | 23.8 | 25.6 | 11.7 | 983.3 |
| 70° | 17.3 | 16.4 | 15.6 | 16.8 | 17.7 | 18.3 | 19.2 | 8.8 | 992.2 |
| 75° | 9.4 | 9.7 | 9.3 | 10.5 | 10.4 | 10.4 | 11.2 | 5.3 | 997.5 |
| 80° | 3.2 | 3.3 | 3.5 | 4.0 | 4.3 | 4.4 | 4.5 | 2.1 | 999.6 |
| 85° | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.1 | 0.4 | 1000.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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

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|------------------------------------|--|-----------------------------|
| Family Highbay 11 Xtreme | Order number: 51HF82DA4NMA EAN: 4058352919972 | LP number 59481_8 |
|------------------------------------|--|-----------------------------|

| | | | |
|-----------|---------------|--------|--|
| 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 | 20.5 | 21.8 | 20.8 | 22.1 | 22.4 | 20.9 | 22.2 | 21.3 | 22.5 | 22.9 |
| | 3H | 20.6 | 21.8 | 21.0 | 22.2 | 22.5 | 21.1 | 22.3 | 21.5 | 22.6 | 23.0 |
| | 4H | 20.7 | 21.8 | 21.1 | 22.1 | 22.5 | 21.2 | 22.3 | 21.6 | 22.6 | 23.0 |
| | 6H | 20.7 | 21.7 | 21.1 | 22.0 | 22.4 | 21.2 | 22.2 | 21.6 | 22.5 | 22.9 |
| | 8H | 20.7 | 21.6 | 21.2 | 22.0 | 22.4 | 21.2 | 22.1 | 21.7 | 22.5 | 22.9 |
| | 12H | 20.7 | 21.5 | 21.1 | 21.9 | 22.3 | 21.2 | 22.0 | 21.7 | 22.4 | 22.8 |
| 4H | 2H | 20.4 | 21.5 | 20.8 | 21.9 | 22.2 | 20.9 | 21.9 | 21.3 | 22.3 | 22.7 |
| | 3H | 20.7 | 21.6 | 21.1 | 22.0 | 22.4 | 21.1 | 22.0 | 21.6 | 22.4 | 22.9 |
| | 4H | 20.8 | 21.6 | 21.2 | 22.0 | 22.4 | 21.3 | 22.1 | 21.7 | 22.5 | 22.9 |
| | 6H | 20.8 | 21.5 | 21.3 | 21.9 | 22.4 | 21.3 | 22.0 | 21.8 | 22.4 | 22.9 |
| | 8H | 20.8 | 21.4 | 21.2 | 21.8 | 22.3 | 21.3 | 21.9 | 21.7 | 22.3 | 22.8 |
| | 12H | 20.8 | 21.3 | 21.3 | 21.7 | 22.2 | 21.3 | 21.8 | 21.8 | 22.3 | 22.7 |
| 8H | 4H | 20.8 | 21.4 | 21.3 | 21.8 | 22.3 | 21.2 | 21.8 | 21.7 | 22.3 | 22.8 |
| | 6H | 20.8 | 21.3 | 21.3 | 21.7 | 22.3 | 21.3 | 21.8 | 21.8 | 22.2 | 22.7 |
| | 8H | 20.7 | 21.2 | 21.2 | 21.7 | 22.2 | 21.2 | 21.7 | 21.7 | 22.2 | 22.7 |
| | 12H | 20.7 | 21.1 | 21.3 | 21.6 | 22.1 | 21.2 | 21.6 | 21.8 | 22.1 | 22.6 |
| 12H | 4H | 20.8 | 21.3 | 21.3 | 21.8 | 22.2 | 21.2 | 21.7 | 21.7 | 22.2 | 22.7 |
| | 6H | 20.8 | 21.2 | 21.3 | 21.7 | 22.2 | 21.3 | 21.7 | 21.8 | 22.1 | 22.7 |
| | 8H | 20.7 | 21.1 | 21.3 | 21.6 | 22.1 | 21.2 | 21.6 | 21.8 | 22.1 | 22.6 |

| | | | |
|-----------------|---------------------------------|-------------------------------|--------------------|
| Luminance table | Max. for $\gamma \geq 65^\circ$ | Photometric dimensions in mm: | L = 545 B = 470 |
|-----------------|---------------------------------|-------------------------------|--------------------|

| 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° | | 19416.2 | 20961.2 | 25566.4 | 29551.6 | 28127.6 | 24374.7 | 22763.0 | |
| 50° | | 13199.6 | 13134.5 | 13457.7 | 14127.6 | 13548.8 | 12986.3 | 13264.9 | |
| 55° | | 10721.2 | 10550.7 | 10001.2 | 9696.6 | 9366.3 | 9392.2 | 9646.3 | |
| 60° | | 8785.0 | 8350.1 | 8062.0 | 7953.5 | 8173.8 | 8245.3 | 8435.6 | |
| 65° | | 7657.8 | 7182.4 | 6965.5 | 7058.5 | 7482.2 | 7415.9 | 7963.5 | |
| 70° | | 6663.6 | 6323.1 | 5987.7 | 6452.4 | 6825.1 | 7027.1 | 7397.9 | |
| 75° | | 4765.5 | 4929.7 | 4709.6 | 5345.5 | 5300.3 | 5299.3 | 5684.6 | |
| 80° | | 2432.8 | 2523.7 | 2662.4 | 3025.3 | 3291.2 | 3349.5 | 3445.0 | |
| 85° | | 812.1 | 775.9 | 783.4 | 928.4 | 1216.7 | 1476.3 | 1683.1 | |

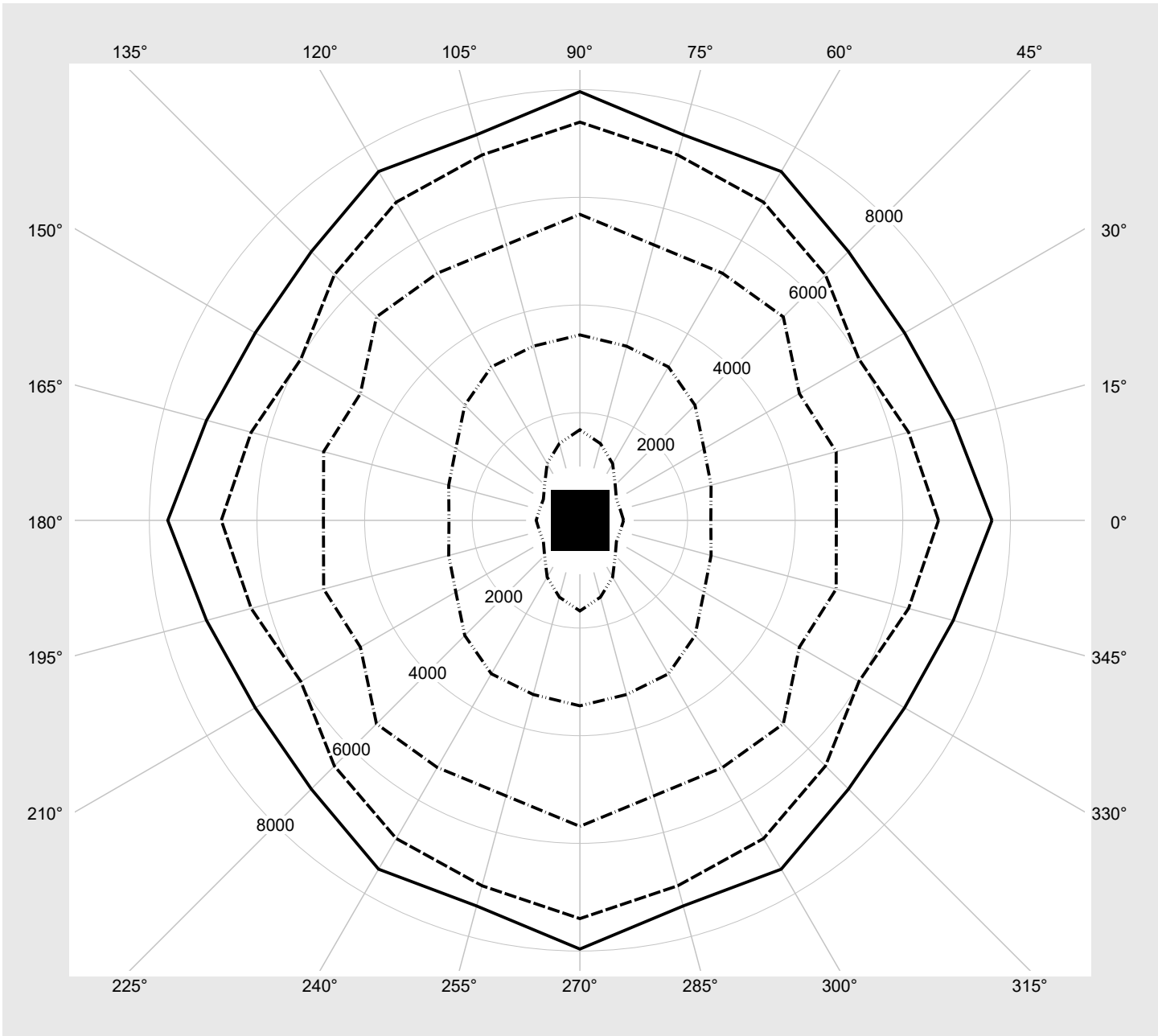
Photometric test report

| | | |
|------------------------------------|--|-----------------------------|
| Family Highbay 11 Xtreme | Order number: 51HF82DA4NMA EAN: 4058352919972 | LP number 59481_8 |
|------------------------------------|--|-----------------------------|

Luminance values in cd/m²

γ 65°
 γ 70°
 γ 75°
 γ 80°
 γ 85°

siteco



Photometric test report

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|------------------------------------|--|-----------------------------|
| Family Highbay 11 Xtreme | Order number: 51HF82DA4NMA EAN: 4058352919972 | LP number 59481_8 |
|------------------------------------|--|-----------------------------|

| | | |
|-----------------------------|---------------------------------|---------------|
| Dimming levels table | environmental temperature: 25°C | siteco |
|-----------------------------|---------------------------------|---------------|

| Luminous flux % | Dimming level linear | Dimming level logarithmic | Luminous flux [lm] | Power consumption [W] |
|-----------------|----------------------|---------------------------|--------------------|-----------------------|
| 100 | 254 | 254 | 33700 | 187.7 |
| 95 | 240 | 252 | 32017 | 177.2 |
| 90 | 226 | 250 | 30323 | 166.8 |
| 85 | 212 | 247 | 28632 | 156.3 |
| 80 | 199 | 245 | 27008 | 146.5 |
| 75 | 185 | 242 | 25280 | 136.3 |
| 70 | 172 | 240 | 23633 | 127.1 |
| 65 | 158 | 237 | 21844 | 116.3 |
| 60 | 145 | 233 | 20166 | 107.0 |
| 55 | 132 | 230 | 18473 | 96.9 |
| 50 | 120 | 227 | 16882 | 88.8 |
| 45 | 107 | 222 | 15146 | 79.4 |
| 40 | 95 | 218 | 13521 | 70.7 |
| 35 | 82 | 213 | 11741 | 61.4 |
| 30 | 70 | 207 | 10077 | 52.7 |
| 25 | 58 | 200 | 8397 | 43.9 |
| 20 | 46 | 191 | 6697 | 35.3 |
| 15 | 35 | 181 | 5123 | 27.4 |
| 10 | 23 | 166 | 3388 | 18.9 |
| 5 | 11 | 139 | 1632 | 10.3 |
| 2 | 4 | 102 | 598 | 5.4 |

| | |
|-----------------------------|---------------------------------|
| Dimming levels table | environmental temperature: 45°C |
|-----------------------------|---------------------------------|

| Luminous flux % | Dimming level linear | Dimming level logarithmic | Luminous flux [lm] | Power consumption [W] |
|-----------------|----------------------|---------------------------|--------------------|-----------------------|
| 100 | 254 | 254 | 32680 | 186.9 |
| 95 | 240 | 252 | 31052 | 176.5 |
| 90 | 226 | 250 | 29416 | 166.0 |
| 85 | 212 | 247 | 27783 | 155.6 |
| 80 | 198 | 245 | 26092 | 145.2 |
| 75 | 185 | 242 | 24544 | 135.6 |
| 70 | 171 | 240 | 22828 | 125.5 |
| 65 | 158 | 237 | 21219 | 115.8 |
| 60 | 145 | 233 | 19596 | 106.5 |
| 55 | 132 | 230 | 17957 | 96.4 |
| 50 | 119 | 226 | 16286 | 87.7 |
| 45 | 107 | 222 | 14733 | 79.1 |
| 40 | 94 | 218 | 13026 | 69.7 |
| 35 | 82 | 213 | 11431 | 61.1 |
| 30 | 70 | 207 | 9815 | 52.4 |
| 25 | 58 | 200 | 8182 | 43.7 |
| 20 | 46 | 191 | 6530 | 35.1 |
| 15 | 34 | 180 | 4857 | 26.5 |
| 10 | 23 | 166 | 3307 | 18.8 |
| 5 | 11 | 139 | 1594 | 10.3 |
| 2 | 4 | 102 | 585 | 5.4 |

Photometric test report

| | | |
|------------------------------------|--|-----------------------------|
| Family Highbay 11 Xtreme | Order number: 51HF82DA4NMA EAN: 4058352919972 | LP number 59481_8 |
|------------------------------------|--|-----------------------------|

| | |
|----------------------------|---------------|
| Luminousfluxs table | siteco |
|----------------------------|---------------|

| Temperature °C | Luminous flux lm | Power consumption W |
|-------------------|---------------------|------------------------|
| 25.0 | 33700.0 | 187.7 |
| 45.0 | 32680.0 | 186.9 |