

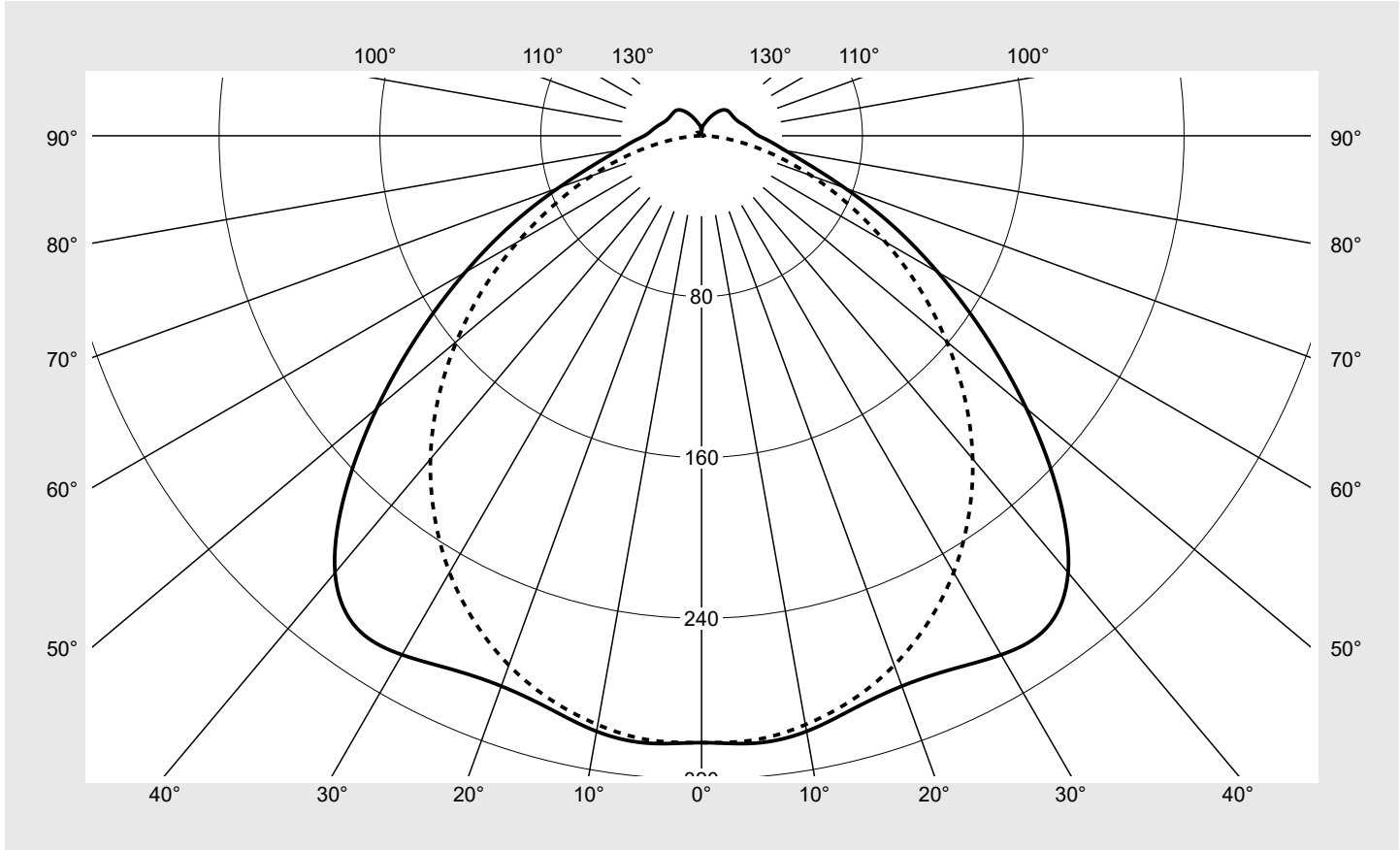


Photometric test report

| | | |
|--|--|--|
| Family DUS® 31 | Order number: 53BD812M1V4120 EAN: 4058352421765 | LP number 59064_7 |
|  | Version diffuser optic, frosted, wide distribution Lamps LED 4000 K CRI ≥ 80 Controlgear ECG Multilumen Rated values Net luminous flux = 12380 lm Power consumption = 77.3 W Luminous efficacy = 160.2 lm/W | serial documentation 01.09.2020 |
| |  | |

Luminous intensity in cd/klm **C180-0** **C270-90** **Imax: 303 cd/klm**



| Classifications | |
|-----------------|-----------------------------------|
| DIN 5040 | A 4 1 |
| CIE | N1=47 N2=80 N3=95 N4=92 N5=100 |

| Luminaire light output ratios | |
|-------------------------------|--------|
| η_{LB} | 100.0% |
| ϕ_u | 92.2% |
| ϕ_o | 7.8% |

| Measurement conditions |
|---------------------------|
| DIN EN 13032 and DIN 5032 |

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

| 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° | 301.8 | 301.8 | 301.8 | 301.8 | 301.8 | 301.8 | 301.8 | 1.8 | 1.8 |
| 5° | 303.3 | 302.1 | 299.9 | 300.9 | 301.9 | 301.5 | 301.6 | 14.4 | 16.2 |
| 10° | 300.8 | 300.0 | 297.7 | 298.5 | 298.9 | 297.8 | 297.4 | 28.4 | 44.6 |
| 15° | 294.6 | 294.3 | 291.7 | 292.6 | 293.1 | 291.2 | 290.3 | 41.5 | 86.1 |
| 20° | 291.3 | 290.6 | 285.8 | 284.4 | 284.3 | 281.8 | 280.2 | 53.5 | 139.7 |
| 25° | 293.0 | 291.5 | 283.0 | 276.7 | 273.3 | 269.6 | 266.9 | 64.6 | 204.3 |
| 30° | 298.0 | 296.0 | 283.3 | 270.8 | 261.1 | 254.6 | 250.8 | 74.9 | 279.2 |
| 35° | 299.0 | 297.5 | 283.8 | 265.6 | 248.4 | 237.0 | 231.5 | 83.7 | 362.9 |
| 40° | 283.7 | 284.3 | 276.5 | 258.3 | 235.0 | 217.5 | 209.8 | 89.2 | 452.1 |
| 45° | 250.6 | 253.6 | 254.2 | 243.8 | 219.3 | 195.5 | 185.4 | 89.4 | 541.5 |
| 50° | 210.8 | 214.1 | 220.0 | 218.9 | 199.3 | 171.7 | 159.1 | 84.6 | 626.1 |
| 55° | 171.6 | 174.1 | 180.5 | 185.1 | 173.7 | 146.4 | 132.4 | 75.7 | 701.8 |
| 60° | 135.7 | 137.3 | 141.6 | 147.2 | 142.6 | 119.7 | 105.6 | 64.0 | 765.8 |
| 65° | 104.1 | 104.9 | 107.1 | 111.0 | 110.3 | 93.2 | 80.6 | 51.2 | 817.1 |
| 70° | 75.8 | 76.7 | 78.0 | 80.6 | 80.3 | 68.4 | 58.2 | 38.7 | 855.8 |
| 75° | 55.2 | 55.4 | 55.7 | 57.0 | 55.4 | 46.3 | 38.3 | 27.9 | 883.7 |
| 80° | 42.4 | 41.9 | 40.8 | 39.2 | 35.6 | 27.7 | 21.5 | 19.5 | 903.3 |
| 85° | 34.5 | 33.8 | 31.7 | 27.6 | 21.5 | 14.0 | 8.7 | 13.7 | 916.9 |
| 90° | 28.5 | 27.9 | 25.4 | 20.0 | 13.0 | 5.8 | 0.8 | 9.7 | 926.7 |
| 95° | 25.4 | 25.0 | 22.9 | 18.2 | 11.9 | 5.4 | 1.1 | 8.8 | 935.5 |
| 100° | 23.4 | 22.9 | 21.0 | 17.1 | 11.6 | 5.5 | 1.7 | 8.2 | 943.6 |
| 105° | 21.5 | 21.0 | 19.3 | 16.3 | 11.6 | 5.8 | 2.4 | 7.6 | 951.2 |
| 110° | 19.9 | 19.3 | 18.1 | 15.8 | 11.8 | 6.2 | 2.9 | 7.1 | 958.3 |
| 115° | 18.9 | 18.4 | 17.5 | 15.6 | 12.1 | 6.5 | 2.9 | 6.7 | 965.0 |
| 120° | 18.5 | 17.9 | 17.3 | 15.6 | 12.2 | 6.6 | 2.9 | 6.3 | 971.4 |
| 125° | 18.2 | 17.7 | 17.1 | 15.5 | 11.7 | 6.5 | 2.7 | 5.9 | 977.3 |
| 130° | 18.1 | 17.6 | 16.9 | 14.9 | 10.9 | 6.2 | 2.5 | 5.4 | 982.6 |
| 135° | 17.9 | 17.2 | 16.1 | 13.6 | 9.8 | 5.6 | 2.4 | 4.7 | 987.3 |
| 140° | 16.8 | 15.9 | 14.5 | 12.0 | 8.4 | 5.0 | 2.2 | 3.8 | 991.1 |
| 145° | 14.9 | 14.0 | 12.6 | 10.1 | 6.9 | 4.5 | 2.0 | 3.0 | 994.1 |
| 150° | 12.5 | 11.8 | 10.5 | 8.0 | 5.7 | 4.2 | 1.8 | 2.2 | 996.3 |
| 155° | 10.2 | 9.6 | 8.4 | 6.3 | 5.0 | 3.7 | 1.6 | 1.5 | 997.8 |
| 160° | 8.1 | 7.7 | 6.3 | 5.1 | 4.6 | 3.6 | 1.5 | 1.0 | 998.8 |
| 165° | 6.4 | 6.2 | 4.7 | 4.5 | 4.1 | 4.7 | 1.5 | 0.7 | 999.5 |
| 170° | 5.4 | 4.4 | 3.9 | 4.0 | 3.9 | 3.8 | 1.5 | 0.4 | 999.8 |
| 175° | 3.9 | 3.2 | 4.4 | 4.7 | 3.9 | 2.2 | 1.5 | 0.2 | 1000.0 |
| 180° | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 0.0 | 1000.0 |

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|------------------|----------------------|---------------|
| 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 | 23.4 | 25.1 | 23.8 | 25.4 | 25.8 | 23.2 | 24.9 | 23.6 | 25.2 | 25.6 |
| | 3H | 24.4 | 25.9 | 24.8 | 26.3 | 26.6 | 24.4 | 25.9 | 24.8 | 26.3 | 26.6 |
| | 4H | 24.8 | 26.2 | 25.2 | 26.6 | 26.9 | 24.8 | 26.2 | 25.2 | 26.6 | 27.0 |
| | 6H | 25.1 | 26.4 | 25.5 | 26.8 | 27.2 | 25.1 | 26.4 | 25.5 | 26.8 | 27.2 |
| | 8H | 25.3 | 26.6 | 25.7 | 26.9 | 27.3 | 25.2 | 26.4 | 25.6 | 26.8 | 27.2 |
| | 12H | 25.5 | 26.7 | 25.9 | 27.0 | 27.5 | 25.2 | 26.4 | 25.6 | 26.8 | 27.2 |
| 4H | 2H | 24.1 | 25.5 | 24.5 | 25.9 | 26.2 | 24.0 | 25.4 | 24.4 | 25.8 | 26.1 |
| | 3H | 25.2 | 26.4 | 25.6 | 26.8 | 27.2 | 25.3 | 26.5 | 25.7 | 26.9 | 27.3 |
| | 4H | 25.7 | 26.8 | 26.1 | 27.2 | 27.6 | 25.8 | 27.0 | 26.3 | 27.4 | 27.8 |
| | 6H | 26.1 | 27.1 | 26.6 | 27.5 | 28.0 | 26.2 | 27.2 | 26.7 | 27.6 | 28.1 |
| | 8H | 26.4 | 27.2 | 26.8 | 27.7 | 28.2 | 26.3 | 27.2 | 26.8 | 27.7 | 28.1 |
| | 12H | 26.6 | 27.4 | 27.1 | 27.9 | 28.3 | 26.4 | 27.2 | 26.9 | 27.7 | 28.2 |
| 8H | 4H | 26.0 | 26.9 | 26.4 | 27.3 | 27.8 | 26.1 | 27.0 | 26.6 | 27.4 | 27.9 |
| | 6H | 26.5 | 27.3 | 27.0 | 27.7 | 28.2 | 26.6 | 27.3 | 27.1 | 27.8 | 28.3 |
| | 8H | 26.8 | 27.5 | 27.3 | 28.0 | 28.5 | 26.8 | 27.5 | 27.3 | 27.9 | 28.4 |
| | 12H | 27.2 | 27.8 | 27.7 | 28.2 | 28.8 | 26.9 | 27.5 | 27.4 | 28.0 | 28.5 |
| 12H | 4H | 26.0 | 26.8 | 26.5 | 27.3 | 27.7 | 26.2 | 26.9 | 26.6 | 27.4 | 27.9 |
| | 6H | 26.6 | 27.3 | 27.1 | 27.7 | 28.3 | 26.7 | 27.3 | 27.2 | 27.8 | 28.3 |
| | 8H | 27.0 | 27.5 | 27.5 | 28.0 | 28.6 | 26.9 | 27.5 | 27.4 | 28.0 | 28.5 |

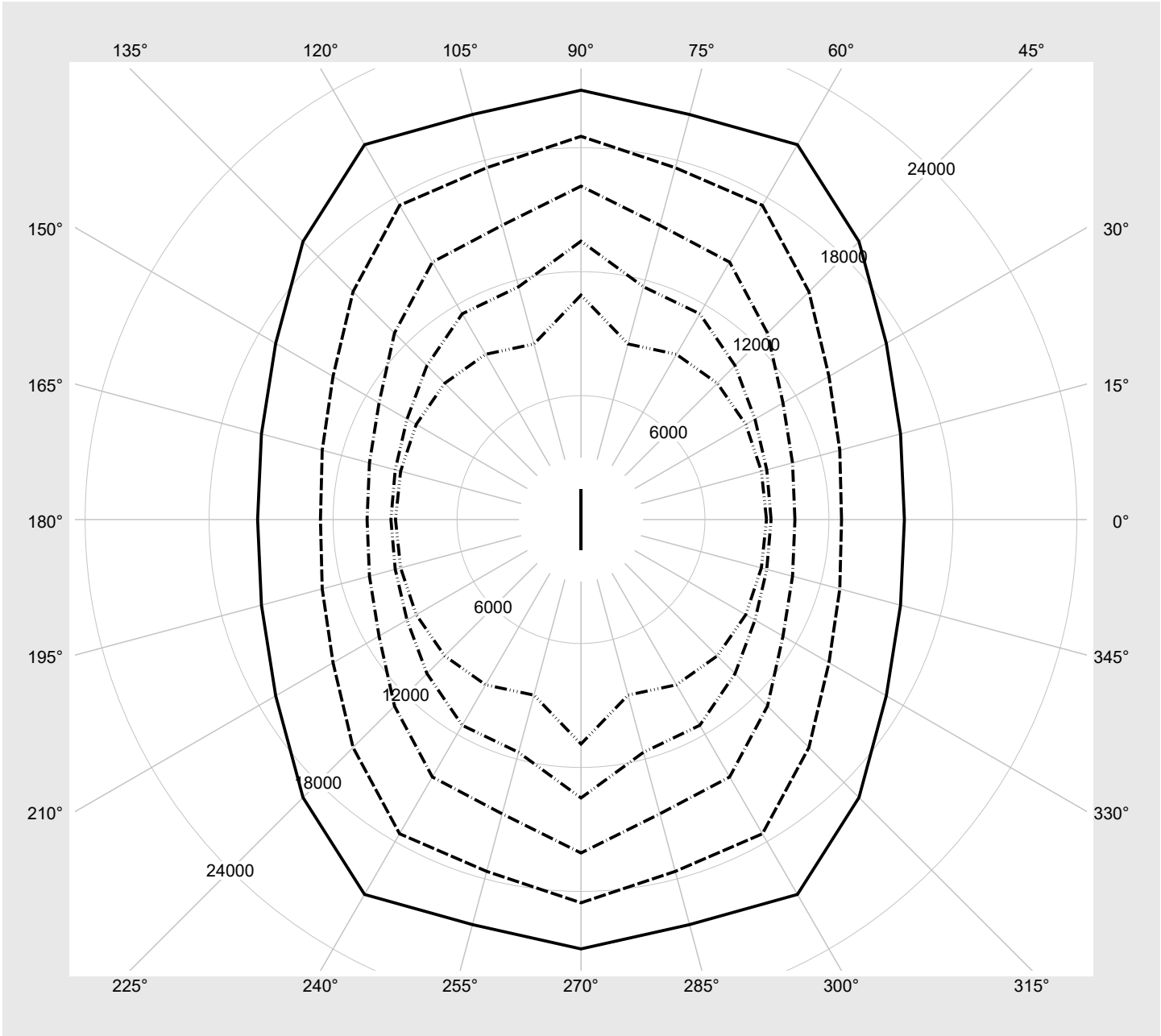
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|------------------------|---|--------------------------------------|-----------------|-------------------|---------------------|
| Luminance table | Max. for $\gamma \geq 65^\circ$ | Photometric dimensions in mm: | L = 1514 | H(C0) = 25 | H(C180) = 25 |
| | | | B = 75 | 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° | | 28983.3 | 29573.0 | 30408.5 | 30420.3 | 28984.7 | 27744.9 | 28581.8 | |
| 50° | | 25595.3 | 26245.2 | 27757.6 | 28988.7 | 28205.8 | 26407.7 | 26992.6 | |
| 55° | | 22100.9 | 22672.4 | 24294.5 | 26322.4 | 26664.1 | 24772.3 | 25157.6 | |
| 60° | | 18763.4 | 19217.3 | 20583.1 | 22795.0 | 24126.6 | 22713.9 | 23027.1 | |
| 65° | | 15653.7 | 16012.6 | 17064.0 | 19029.4 | 20953.8 | 20299.0 | 20783.6 | |
| 70° | | 12611.3 | 12968.0 | 13859.3 | 15602.7 | 17563.1 | 17631.5 | 18551.0 | |
| 75° | | 10355.0 | 10600.1 | 11288.6 | 12767.3 | 14388.6 | 14746.8 | 16139.7 | |
| 80° | | 9200.6 | 9309.2 | 9725.2 | 10544.5 | 11499.7 | 11666.6 | 13475.1 | |
| 85° | | 8979.4 | 9039.3 | 9209.9 | 9330.4 | 9236.7 | 8799.0 | 10863.2 | |

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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 | | |
| 1 | A | C | E | 12380 | 77.3 |
| 2 | A | C | F | 11050 | 67.5 |
| 3 | A | D | E | 10060 | 60.6 |
| 4 | A | D | F | 9050 | 53.8 |
| 5 | B | C | E | 8010 | 47.0 |
| 6 | B | C | F | 7020 | 40.8 |
| 7 | B | D | E | 6010 | 34.7 |
| 8 | B | D | F | 5050 | 29.1 |