

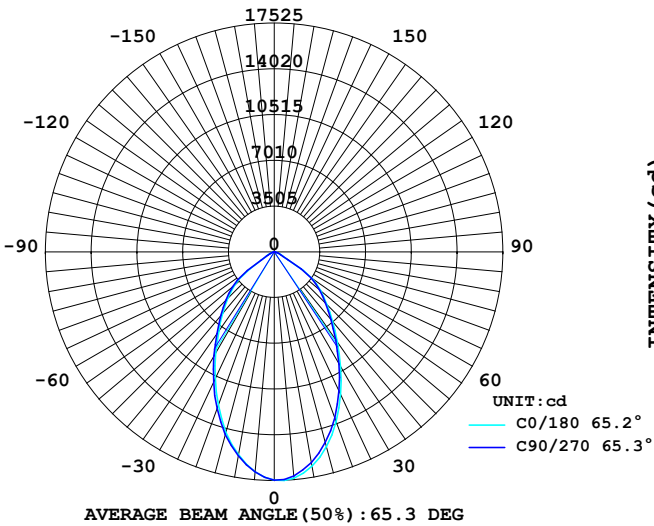
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

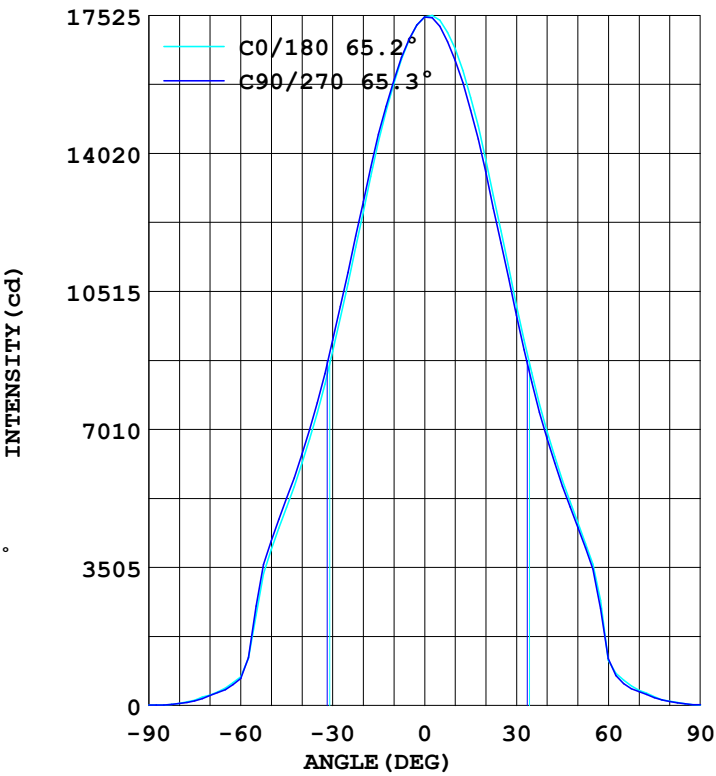
| | | |
|------------------------------------|-------------------------|-------------|
| MANUFACTURER: ILUMEN GMBH | Address: | |
| NAME: Klose | TYPE: IL-FL19-N15040-60 | WEIGHT: |
| SPECIFICATION: 2835LED、4000K、60DEG | DIMENSION: | SERIAL No.: |

| | | | | | |
|-------------------|---------|--------------------|---------|-------------------|-------|
| DATA OF LAMP | | Imax(cd) | 17525 | S/MH (C0/180) | 0.87 |
| MODEL | | EFFICIENCY (%) | 100.0 | S/MH (C90/270) | 0.89 |
| NOMINAL POWER(W) | 150 | TOTAL FLUX(lm) | 23966 | Voltage(V) | 230.3 |
| RATED VOLTAGE (V) | 230 | EFFICIENCY (lm/W) | 159.8 | Current(A) | 0.660 |
| NOMINAL FLUX(lm) | 23966.2 | η up (%) | 0.0 | Power(W) | 149.9 |
| LAMPS QUANTITY | 1 | η down (%) | 100.0 | Power Factor (PF) | 0.987 |
| TEST VOLTAGE (V) | 230.4 | Effective Flux(lm) | 23966.2 | EEl | 0.094 |

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



Test System:
 Temperature:25.3DEG
 Operators:
 Test Date:2024.11.19

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:10.000 m
 Remarks:

Color Temperature Data List

Report number:

| | | |
|------------------------------------|-------------------------|-------------|
| MANUFACTURER: ILUMEN GMBH | Address: | |
| NAME: Klose | TYPE: IL-FL19-N15040-60 | WEIGHT: |
| SPECIFICATION: 2835LED、4000K、60DEG | DIMENSION: | SERIAL No.: |

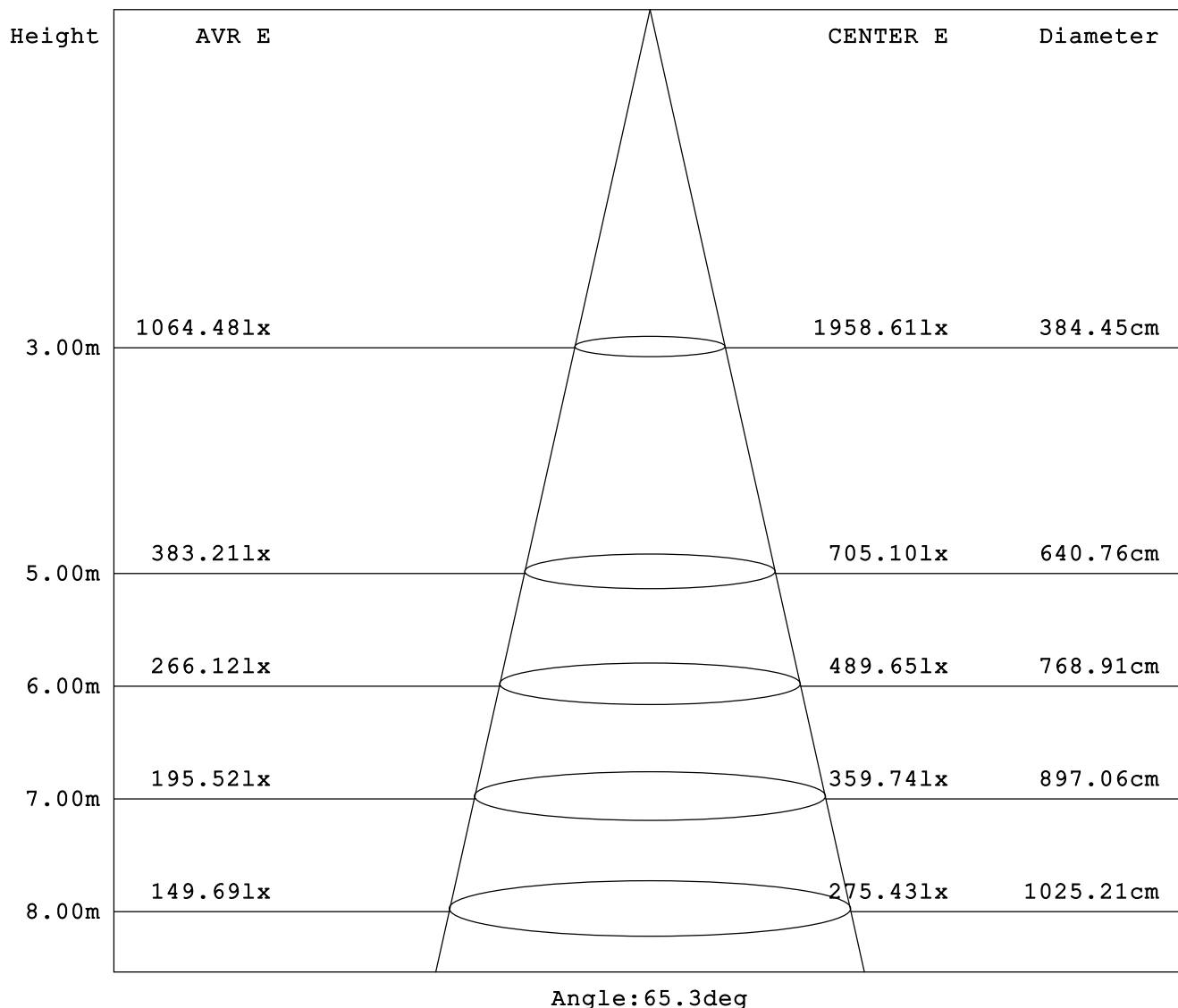
Test System:
Temperature: 25.3DEG
Operators:
Test Date: 2024.11.19

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 10.000 m
Remarks:

AVERAGE AND CENTER E Figure

Report number:

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| NAME: Klose | TYPE: IL-FL19-N15040-60 | WEIGHT: |
| SPECIFICATION: 2835LED、4000K、60DEG | DIMENSION: | SERIAL No.: |



Test System:
Temperature: 25.3DEG
Operators:
Test Date: 2024.11.19

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 10.000 m
Remarks:

ZONAL FLUX DIAGRAM

Report number:

| | | |
|------------------------------------|-------------------------|-------------|
| MANUFACTURER: ILUMEN GMBH | Address: | |
| NAME: Klose | TYPE: IL-FL19-N15040-60 | WEIGHT: |
| SPECIFICATION: 2835LED、4000K、60DEG | DIMENSION: | SERIAL No.: |

| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Zone | total |
|-------|--------------------------|-------|-------|-------|-------|-------|-------|-------|---------|---------|-------|
| 5.0 | 1691 | 1692 | 1692 | 1702 | 1740 | 1734 | 1724 | 1721 | 0- 5 | 413.6 | 413.6 |
| 10.0 | 1579 | 1582 | 1586 | 1604 | 1668 | 1658 | 1638 | 1629 | 5- 10 | 1190 | 1604 |
| 15.0 | 1432 | 1437 | 1450 | 1463 | 1544 | 1535 | 1511 | 1495 | 10- 15 | 1839 | 3443 |
| 20.0 | 1253 | 1266 | 1279 | 1295 | 1387 | 1381 | 1356 | 1336 | 15- 20 | 2308 | 5751 |
| 25.0 | 1071 | 1090 | 1099 | 1121 | 1205 | 1199 | 1174 | 1156 | 20- 25 | 2573 | 8324 |
| 30.0 | 899.0 | 913.9 | 927.7 | 941.6 | 1016 | 1012 | 991.2 | 975.2 | 25- 30 | 2652 | 10976 |
| 35.0 | 742.3 | 754.6 | 768.2 | 776.8 | 844.7 | 838.4 | 821.6 | 808.0 | 30- 35 | 2574 | 13550 |
| 40.0 | 615.2 | 626.7 | 637.8 | 643.3 | 695.3 | 688.5 | 677.6 | 664.6 | 35- 40 | 2410 | 15960 |
| 45.0 | 502.8 | 513.2 | 526.0 | 528.9 | 570.7 | 564.8 | 556.1 | 546.7 | 40- 45 | 2205 | 18166 |
| 50.0 | 395.3 | 409.1 | 417.6 | 425.3 | 464.6 | 459.8 | 452.5 | 444.4 | 45- 50 | 1962 | 20128 |
| 55.0 | 229.7 | 308.4 | 252.0 | 323.2 | 358.9 | 360.1 | 346.4 | 343.7 | 50- 55 | 1638 | 21766 |
| 60.0 | 72.72 | 190.3 | 68.58 | 206.6 | 114.9 | 256.2 | 119.1 | 237.8 | 55- 60 | 1086 | 22852 |
| 65.0 | 44.43 | 78.01 | 40.07 | 87.49 | 64.91 | 139.7 | 55.50 | 122.8 | 60- 65 | 568.1 | 23421 |
| 70.0 | 26.80 | 35.14 | 25.19 | 38.65 | 38.63 | 51.62 | 35.37 | 48.21 | 65- 70 | 281.2 | 23702 |
| 75.0 | 13.18 | 19.24 | 11.95 | 21.41 | 22.35 | 26.56 | 20.22 | 24.58 | 70- 75 | 147.3 | 23849 |
| 80.0 | 5.689 | 7.398 | 4.925 | 8.539 | 11.23 | 12.60 | 10.25 | 11.17 | 75- 80 | 75.66 | 23925 |
| 85.0 | 1.563 | 2.304 | 1.386 | 2.617 | 4.384 | 3.683 | 4.159 | 3.304 | 80- 85 | 30.55 | 23955 |
| 90.0 | 1.402 | 1.638 | 1.060 | 1.635 | 1.611 | 1.249 | 1.679 | 1.276 | 85- 90 | 10.82 | 23966 |
| 95.0 | | | | | | | | | 90- 95 | | |
| 100.0 | | | | | | | | | 95-100 | | |
| 105.0 | | | | | | | | | 100-105 | | |
| 110.0 | | | | | | | | | 105-110 | | |
| 115.0 | | | | | | | | | 110-115 | | |
| 120.0 | | | | | | | | | 115-120 | | |
| 125.0 | | | | | | | | | 120-125 | | |
| 130.0 | | | | | | | | | 125-130 | | |
| 135.0 | | | | | | | | | 130-135 | | |
| 140.0 | | | | | | | | | 135-140 | | |
| 145.0 | | | | | | | | | 140-145 | | |
| 150.0 | | | | | | | | | 145-150 | | |
| 155.0 | | | | | | | | | 150-155 | | |
| 160.0 | | | | | | | | | 155-160 | | |
| 165.0 | | | | | | | | | 160-165 | | |
| 170.0 | | | | | | | | | 165-170 | | |
| 175.0 | | | | | | | | | 170-175 | | |
| 180.0 | | | | | | | | | 175-180 | | |
| DEG | LUMINOUS INTENSITY:×10cd | | | | | | | | | UNIT:lm | |

Test System:
Temperature:25.3DEG
Operators:
Test Date:2024.11.19

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:10.000 m
Remarks:

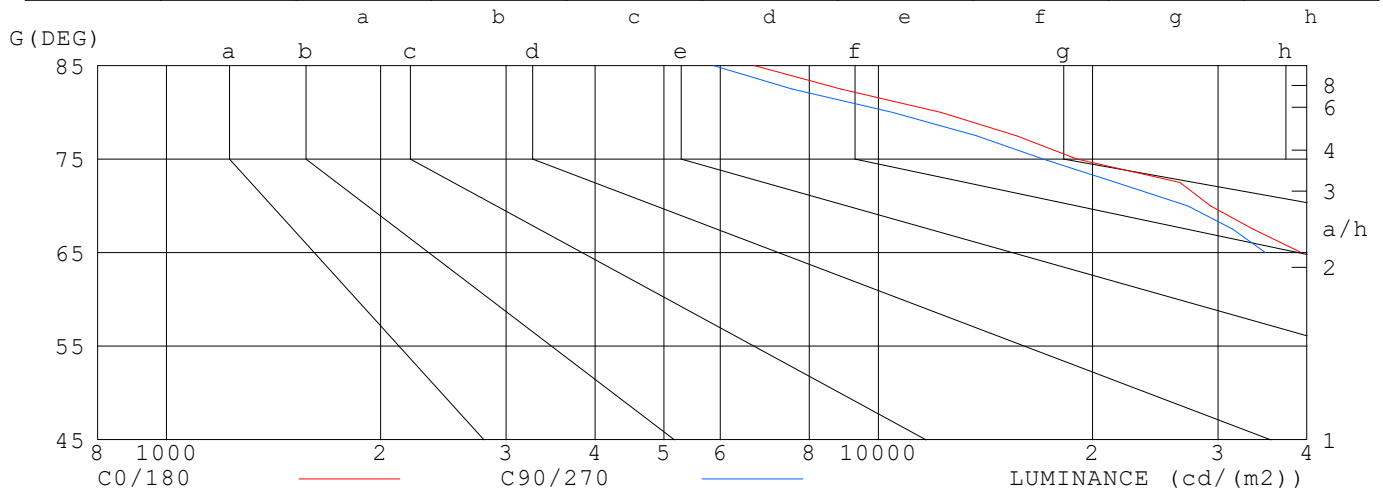
LUMINANCE LIMITATION CURVES

Report number:

| | | |
|------------------------------------|-------------------------|-------------|
| MANUFACTURER: ILUMEN GMBH | Address: | |
| NAME: Klose | TYPE: IL-FL19-N15040-60 | WEIGHT: |
| SPECIFICATION: 2835LED、4000K、60DEG | DIMENSION: | SERIAL No.: |

LUMINANCE LIMITATION CURVES

| GLARE | CLASS | ILLUMINANCE (lx) | | | | | | | |
|-------|-------|------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.50 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 500 | <=300 | | |
| 2.20 | D | | | | 2000 | 1000 | 500 | <=300 | |
| 2.55 | E | | | | | 2000 | 1000 | 500 | <=300 |



| LUMINANCE $\text{cd}/(\text{m}^2)$ | | |
|------------------------------------|--------|---------|
| G (DEG) | C0/180 | C90/270 |
| 85 | 6700 | 5871 |
| 80 | 12237 | 10469 |
| 75 | 19025 | 17048 |
| 70 | 29269 | 27193 |
| 65 | 39270 | 34997 |
| 60 | 54322 | 50625 |
| 55 | 149564 | 162158 |
| 50 | 229703 | 239780 |
| 45 | 265600 | 274590 |

Test System:
 Temperature: 25.3DEG
 Operators:
 Test Date: 2024.11.19

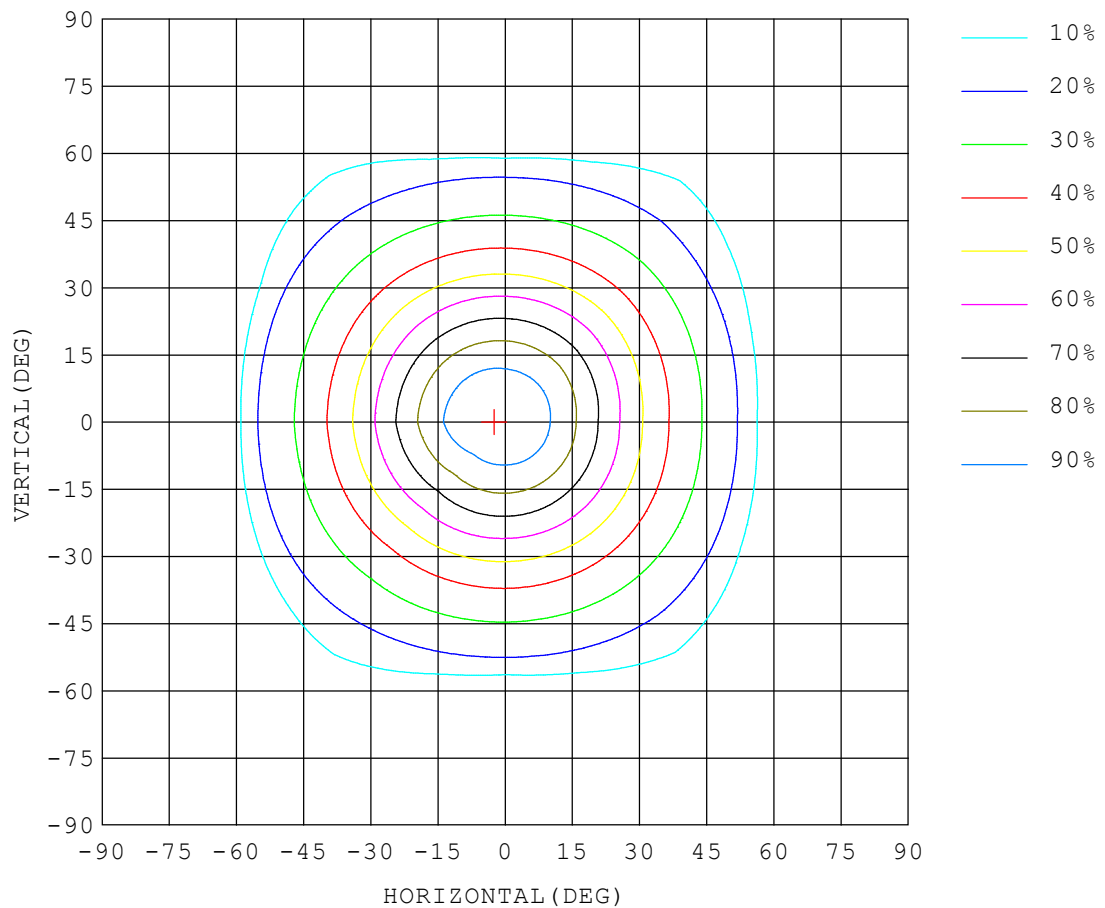
Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 10.000 m
 Remarks:

ISOCANDELA DIAGRAM

Report number:

| | | |
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| MANUFACTURER: ILUMEN GMBH | Address: | |
| NAME: Klose | TYPE: IL-FL19-N15040-60 | WEIGHT: |
| SPECIFICATION: 2835LED、4000K、60DEG | DIMENSION: | SERIAL No.: |

UNIT: cd



Test System:
Temperature: 25.3 DEG
Operators:
Test Date: 2024.11.19

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Humidity: 65.0%
Test Distance: 10.000 m
Remarks: