

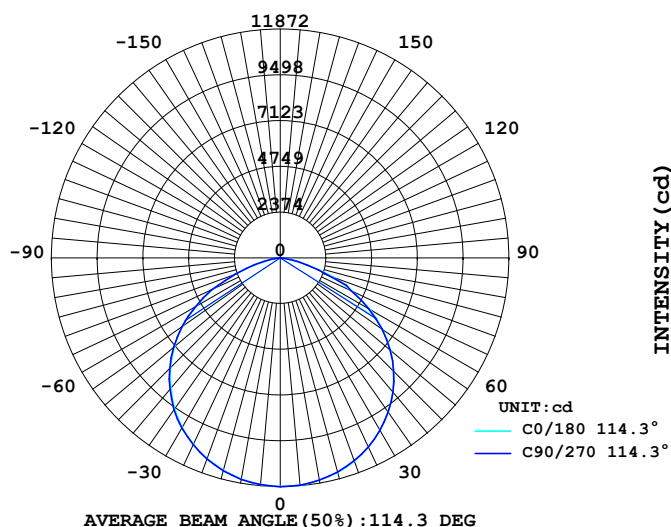
# LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

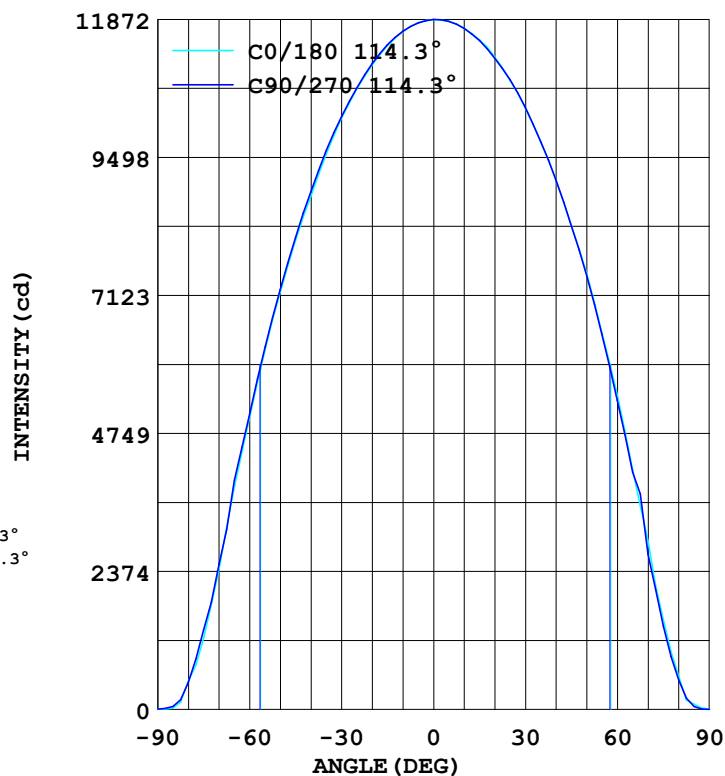
|                                     |                          |             |
|-------------------------------------|--------------------------|-------------|
| MANUFACTURER: ILUMEN GMBH           | Address:                 |             |
| NAME: Klose                         | TYPE: IL-FL19-N20040-110 | WEIGHT:     |
| SPECIFICATION: 2835LED、4000K、110deg | DIMENSION:               | SERIAL No.: |

|                   |         |                    |         |                   |       |
|-------------------|---------|--------------------|---------|-------------------|-------|
| DATA OF LAMP      |         | Imax(cd)           | 11872   | S/MH (C0/180)     | 1.27  |
| MODEL             |         | EFFICIENCY (%)     | 100.0   | S/MH (C90/270)    | 1.28  |
| NOMINAL POWER(W)  | 200     | TOTAL FLUX(lm)     | 33021   | Voltage(V)        | 230.3 |
| RATED VOLTAGE (V) | 230     | EFFICIENCY (lm/W)  | 164.7   | Current(A)        | 0.882 |
| NOMINAL FLUX(lm)  | 33020.6 | $\eta$ up (%)      | 0.0     | Power(W)          | 200.5 |
| LAMPS QUANTITY    | 1       | $\eta$ down (%)    | 100.0   | Power Factor (PF) | 0.987 |
| TEST VOLTAGE (V)  | 230.4   | Effective Flux(lm) | 33020.6 | EEL               | 0.091 |

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



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

Test Set: 6.0 deg/s C-Gamma (TYPE C)  
 Humidity: 65.0%  
 Test Distance: 10.000 m  
 Remarks:

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## Color Temperature Data List

Report number:

|                                    |                         |             |
|------------------------------------|-------------------------|-------------|
| MANUFACTURER: ILUMEN GMBH          | Address:                |             |
| NAME: Klose                        | TYPE:IL-FL19-N20040-110 | WEIGHT:     |
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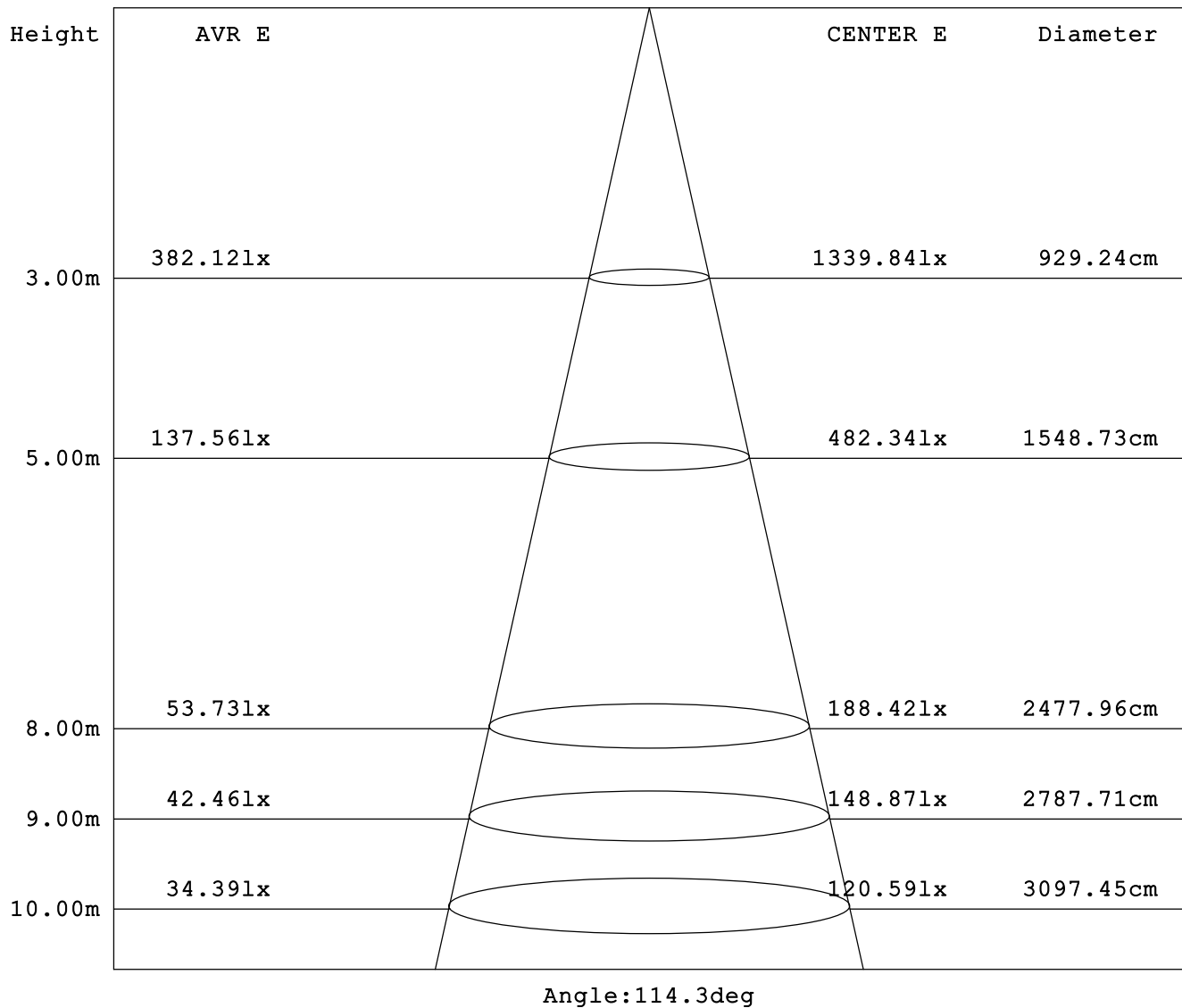
Test System:  
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Operators:  
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## AVERAGE AND CENTER E Figure

Report number:

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

Test Set: 6.0deg/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-N20040-110 | WEIGHT:     |
| SPECIFICATION: 2835LED、4000K、110deg | DIMENSION:               | SERIAL No.: |

| γ     | C0                       | C45   | C90   | C135  | C180  | C225  | C270  | C315  | γ       | Zone    | total |
|-------|--------------------------|-------|-------|-------|-------|-------|-------|-------|---------|---------|-------|
| 5.0   | 1181                     | 1181  | 1181  | 1183  | 1184  | 1184  | 1184  | 1183  | 0- 5    | 283.2   | 283.2 |
| 10.0  | 1166                     | 1166  | 1167  | 1171  | 1172  | 1173  | 1171  | 1169  | 5- 10   | 841.4   | 1125  |
| 15.0  | 1142                     | 1142  | 1143  | 1149  | 1152  | 1153  | 1150  | 1146  | 10- 15  | 1374    | 2499  |
| 20.0  | 1109                     | 1109  | 1112  | 1119  | 1123  | 1123  | 1120  | 1113  | 15- 20  | 1865    | 4364  |
| 25.0  | 1068                     | 1066  | 1070  | 1078  | 1082  | 1086  | 1083  | 1073  | 20- 25  | 2299    | 6662  |
| 30.0  | 1018                     | 1015  | 1020  | 1028  | 1034  | 1039  | 1035  | 1024  | 25- 30  | 2661    | 9323  |
| 35.0  | 955.6                    | 954.2 | 961.8 | 970.6 | 976.1 | 981.2 | 976.5 | 963.7 | 30- 35  | 2937    | 12260 |
| 40.0  | 883.0                    | 883.0 | 890.5 | 901.8 | 910.1 | 915.3 | 910.0 | 895.4 | 35- 40  | 3115    | 15375 |
| 45.0  | 806.9                    | 803.6 | 812.0 | 824.9 | 831.4 | 837.1 | 831.4 | 816.0 | 40- 45  | 3185    | 18560 |
| 50.0  | 717.2                    | 713.9 | 722.1 | 734.1 | 749.1 | 752.5 | 745.5 | 730.0 | 45- 50  | 3140    | 21700 |
| 55.0  | 618.8                    | 615.3 | 623.5 | 637.6 | 648.5 | 655.0 | 645.1 | 629.1 | 50- 55  | 2974    | 24673 |
| 60.0  | 503.4                    | 502.0 | 509.2 | 527.4 | 541.3 | 547.1 | 531.6 | 521.6 | 55- 60  | 2676    | 27349 |
| 65.0  | 382.9                    | 384.7 | 394.6 | 410.6 | 412.8 | 424.8 | 408.1 | 398.7 | 60- 65  | 2254    | 29603 |
| 70.0  | 240.7                    | 244.7 | 249.9 | 259.8 | 290.6 | 293.4 | 267.1 | 255.5 | 65- 70  | 1702    | 31305 |
| 75.0  | 123.0                    | 131.0 | 137.5 | 151.6 | 154.2 | 163.6 | 143.3 | 143.1 | 70- 75  | 1063    | 32368 |
| 80.0  | 48.64                    | 43.39 | 46.31 | 52.46 | 56.93 | 61.43 | 50.76 | 49.38 | 75- 80  | 507.5   | 32875 |
| 85.0  | 2.540                    | 4.278 | 5.287 | 7.623 | 9.035 | 10.60 | 5.149 | 5.810 | 80- 85  | 130.8   | 33006 |
| 90.0  | 0.661                    | 0.714 | 0.874 | 0.710 | 0.887 | 0.714 | 0.337 | 0.617 | 85- 90  | 14.61   | 33021 |
| 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: 6.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:10.000 m  
Remarks:

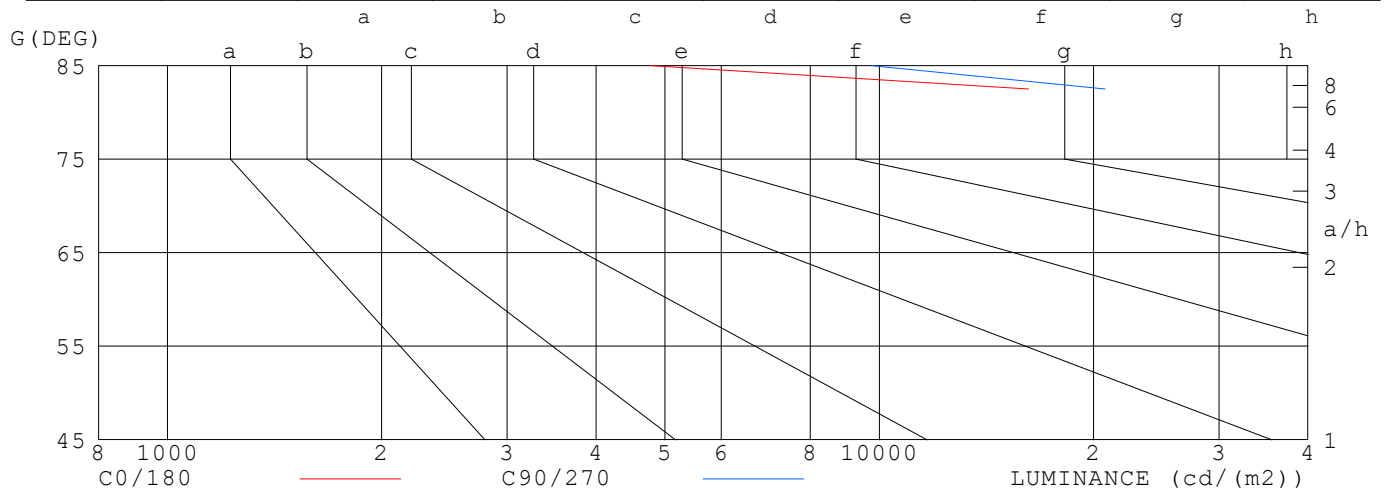
## LUMINANCE LIMITATION CURVES

Report number:

|                                     |                          |             |
|-------------------------------------|--------------------------|-------------|
| MANUFACTURER: ILUMEN GMBH           | Address:                 |             |
| NAME: Klose                         | TYPE: IL-FL19-N20040-110 | WEIGHT:     |
| SPECIFICATION: 2835LED、4000K、110deg | 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 cd/(m²) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 4776   | 9749    |
| 80                | 45896  | 42861   |
| 75                | 77915  | 85403   |
| 70                | 115315 | 117454  |
| 65                | 148452 | 150060  |
| 60                | 164942 | 163656  |
| 55                | 176752 | 174695  |
| 50                | 182794 | 180533  |
| 45                | 186956 | 184553  |

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

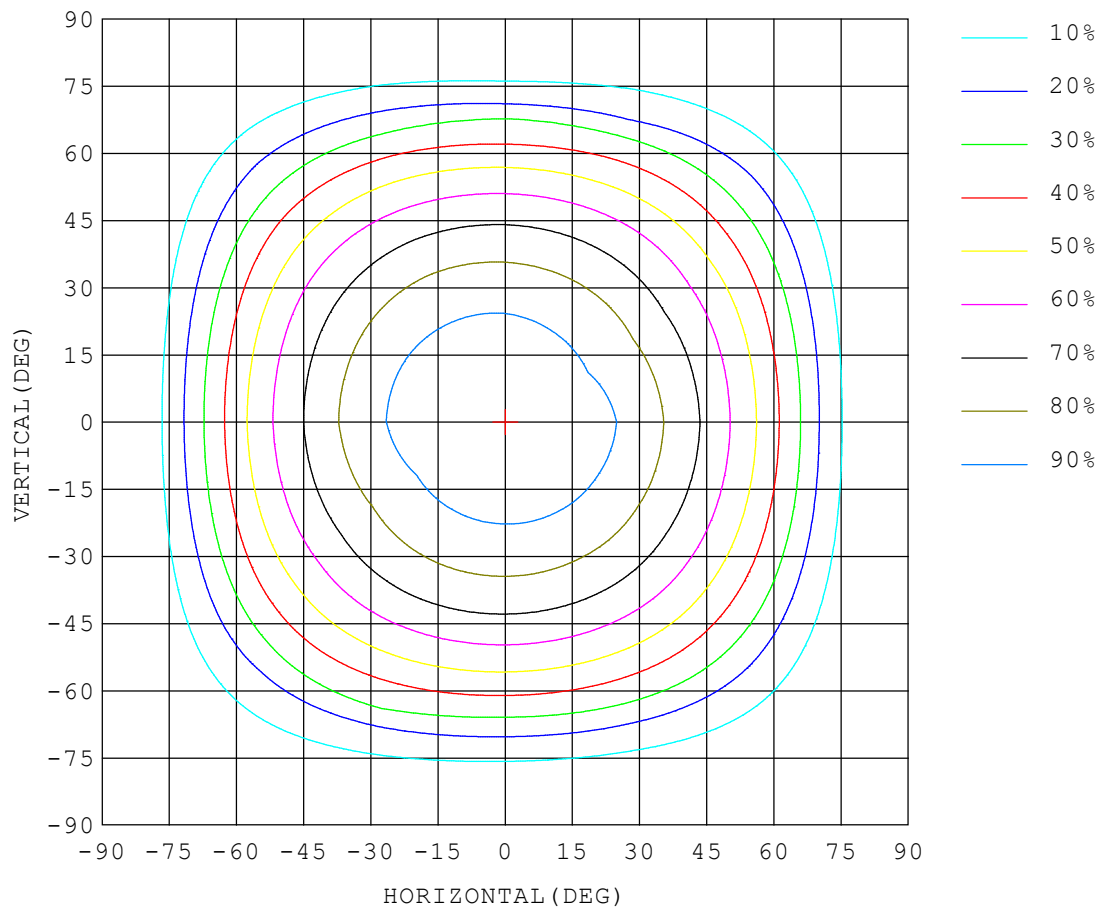
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## ISOCANDELA DIAGRAM

Report number:

|                                     |                          |             |
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| NAME: Klose                         | TYPE: IL-FL19-N20040-110 | WEIGHT:     |
| SPECIFICATION: 2835LED、4000K、110deg | DIMENSION:               | SERIAL No.: |

UNIT: cd



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