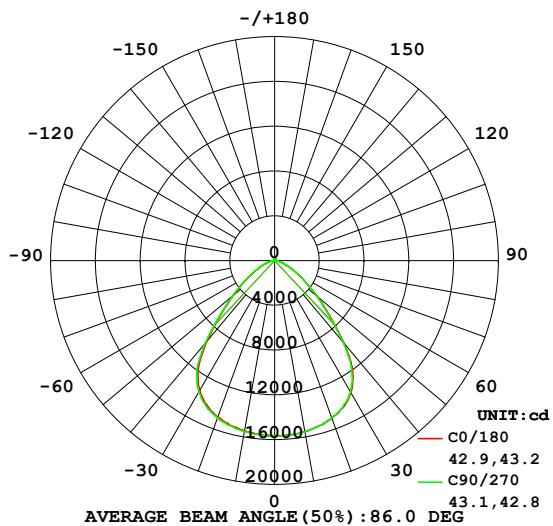


## LUMINAIRE PHOTOMETRIC TEST REPORT

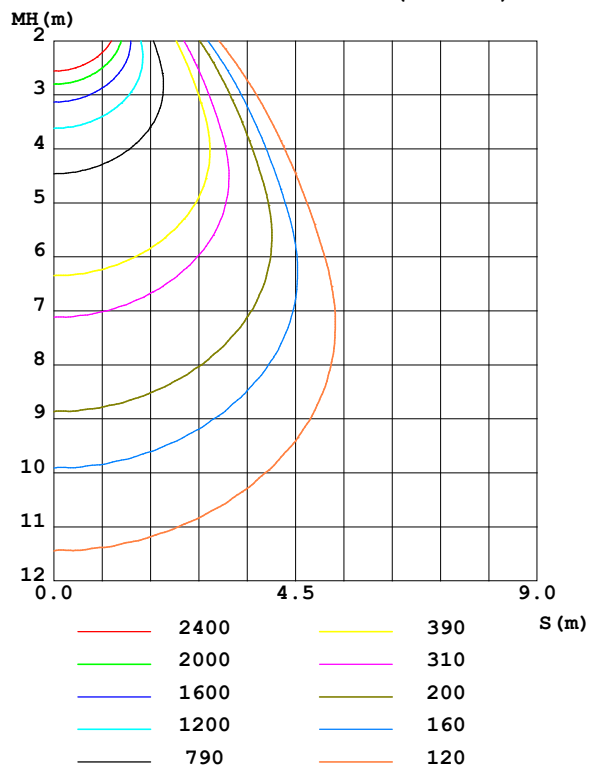
|                                                                                     |       |                  |
|-------------------------------------------------------------------------------------|-------|------------------|
| Test:U:118.90V I:1.7268A P:204.96W PF:0.9982 Freq:60.01Hz<br>Lamp Flux:30649.8x1 lm |       |                  |
| NAME:                                                                               | TYPE: | WEIGHT:          |
| SPEC.:                                                                              | DIM.: | SERIAL No.:      |
| MFR.:Havells Lighting LLC                                                           | SUR.: | Shielding Angle: |

| DATA OF LAMP     |                         | PHOTOMETRIC DATA |        |                        |          | Eff: 149.54 lm/W |
|------------------|-------------------------|------------------|--------|------------------------|----------|------------------|
| MODEL            | HL-RHB-MW-MCCT-ML2-200W | Imax (cd)        | 15707  | S/MH(C0/180)           | 1.22     |                  |
| NOMINAL POWER(W) | 200                     | LOR(%)           | 100.0  | S/MH(C90/270)          | 1.23     |                  |
| RATED VOLTAGE(V) | 120                     | TOTAL FLUX(lm)   | 30650  | $\eta$ UP,DN(C0-180)   | 0.2,49.9 |                  |
| NOMINAL FLUX(lm) | 30649.8                 | CIE CLASS        | DIRECT | $\eta$ UP,DN(C180-360) | 0.1,49.8 |                  |
| LAMPS INSIDE     | 1                       | $\eta$ up (%)    | 0.3    | CIBSE SHR NOM          | 1.25     |                  |
| TEST VOLTAGE(V)  | 120                     | $\eta$ down (%)  | 99.7   | CIBSE SHR MAX          | 1.25     |                  |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: MEDIUM  
Temperature: 28.0 °C  
Operators:DAMIN  
Test Date:2025-10-29

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.471  
Humidity: 100.0%  
Test Distance:26.000m [K=0.4255]  
Remarks:

### ZONAL FLUX DIAGRAM

#### ZONAL FLUX DIAGRAM:

| $\gamma$ | C0                       | C45    | C90    | C135   | C180   | C225   | C270   | C315   | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|--------------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|------------|
| 10       | 1550                     | 1555   | 1554   | 1551   | 1544   | 1549   | 1552   | 1555   | 0- 10    | 1487        | 1487         | 4.85,4.85  |
| 20       | 1499                     | 1496   | 1495   | 1490   | 1487   | 1485   | 1493   | 1502   | 10- 20   | 4315        | 5802         | 18.9,18.9  |
| 30       | 1363                     | 1366   | 1356   | 1353   | 1339   | 1341   | 1356   | 1372   | 20- 30   | 6619        | 12421        | 40.5,40.5  |
| 40       | 964.7                    | 975.7  | 947.2  | 960.6  | 943.1  | 954.9  | 965.1  | 985.7  | 30- 40   | 7437        | 19857        | 64.8,64.8  |
| 50       | 496.6                    | 483.9  | 486.4  | 469.2  | 483.4  | 481.9  | 489.7  | 477.0  | 40- 50   | 5365        | 25222        | 82.3,82.3  |
| 60       | 235.8                    | 229.0  | 232.3  | 219.3  | 227.1  | 223.6  | 229.0  | 224.1  | 50- 60   | 3029        | 28251        | 92.2,92.2  |
| 70       | 101.8                    | 100.8  | 101.3  | 96.65  | 97.92  | 98.98  | 98.91  | 99.41  | 60- 70   | 1542        | 29793        | 97.2,97.2  |
| 80       | 30.33                    | 30.87  | 30.58  | 30.05  | 30.10  | 30.71  | 29.27  | 30.10  | 70- 80   | 649.4       | 30443        | 99.3,99.3  |
| 90       | 0.3423                   | 0.3690 | 0.3536 | 0.3071 | 0.3269 | 0.3157 | 0.3372 | 0.3853 | 80- 90   | 116.7       | 30560        | 99.7,99.7  |
| 100      | 0.2050                   | 0.2061 | 0.2070 | 0.2064 | 0.1308 | 0.1301 | 0.1288 | 0.1287 | 90-100   | 1.780       | 30561        | 99.7,99.7  |
| 110      | 0.4700                   | 0.4758 | 0.4782 | 0.4812 | 0.2111 | 0.2247 | 0.2115 | 0.2026 | 100-110  | 2.573       | 30564        | 99.7,99.7  |
| 120      | 1.000                    | 1.005  | 1.012  | 1.016  | 0.3344 | 0.3331 | 0.3295 | 0.3296 | 110-120  | 4.862       | 30569        | 99.7,99.7  |
| 130      | 1.669                    | 1.669  | 1.703  | 1.719  | 0.6638 | 0.6690 | 0.6598 | 0.6540 | 120-130  | 8.162       | 30577        | 99.8,99.8  |
| 140      | 2.431                    | 2.420  | 2.464  | 2.477  | 1.248  | 1.251  | 1.247  | 1.237  | 130-140  | 11.54       | 30589        | 99.8,99.8  |
| 150      | 3.253                    | 3.230  | 3.276  | 3.295  | 2.067  | 2.063  | 2.066  | 2.038  | 140-150  | 13.93       | 30602        | 99.8,99.8  |
| 160      | 4.236                    | 4.225  | 4.244  | 4.252  | 4.417  | 4.410  | 4.391  | 4.368  | 150-160  | 15.17       | 30618        | 99.9,99.9  |
| 170      | 7.399                    | 7.394  | 7.425  | 7.426  | 16.20  | 16.19  | 16.17  | 16.13  | 160-170  | 18.95       | 30637        | 100,100    |
| 180      | 12.86                    | 12.94  | 12.99  | 13.01  | 13.30  | 13.32  | 13.32  | 13.35  | 170-180  | 13.24       | 30650        | 100,100    |
| DEG      | LUMINOUS INTENSITY:X10cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |            |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: MEDIUM  
Temperature: 28.0℃  
Operators:DAMIN  
Test Date:2025-10-29

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.471  
Humidity: 100.0%  
Test Distance:26.000m [K=0.4255]  
Remarks:

## LUMINANCE LIMITATION CURVES

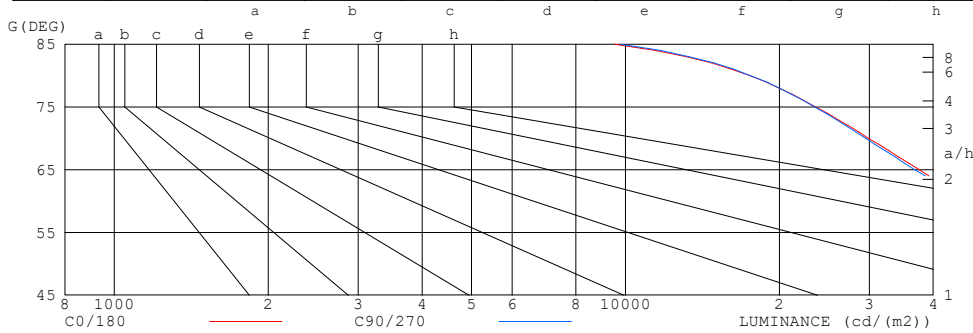
Test:U:118.90V I:1.7268A P:204.96W PF:0.9982 Freq:60.01Hz

Lamp Flux:30649.8x1 lm

|        |       |                  |
|--------|-------|------------------|
| NAME:  | TYPE: | WEIGHT:          |
| SPEC.: | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |

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                | 9520   | 9771    |
| 80                | 17533  | 17547   |
| 75                | 23559  | 23441   |
| 70                | 29882  | 29530   |
| 65                | 37572  | 36838   |
| 60                | 47332  | 46297   |
| 55                | 60277  | 58931   |
| 50                | 77540  | 75404   |
| 45                | 98746  | 95631   |

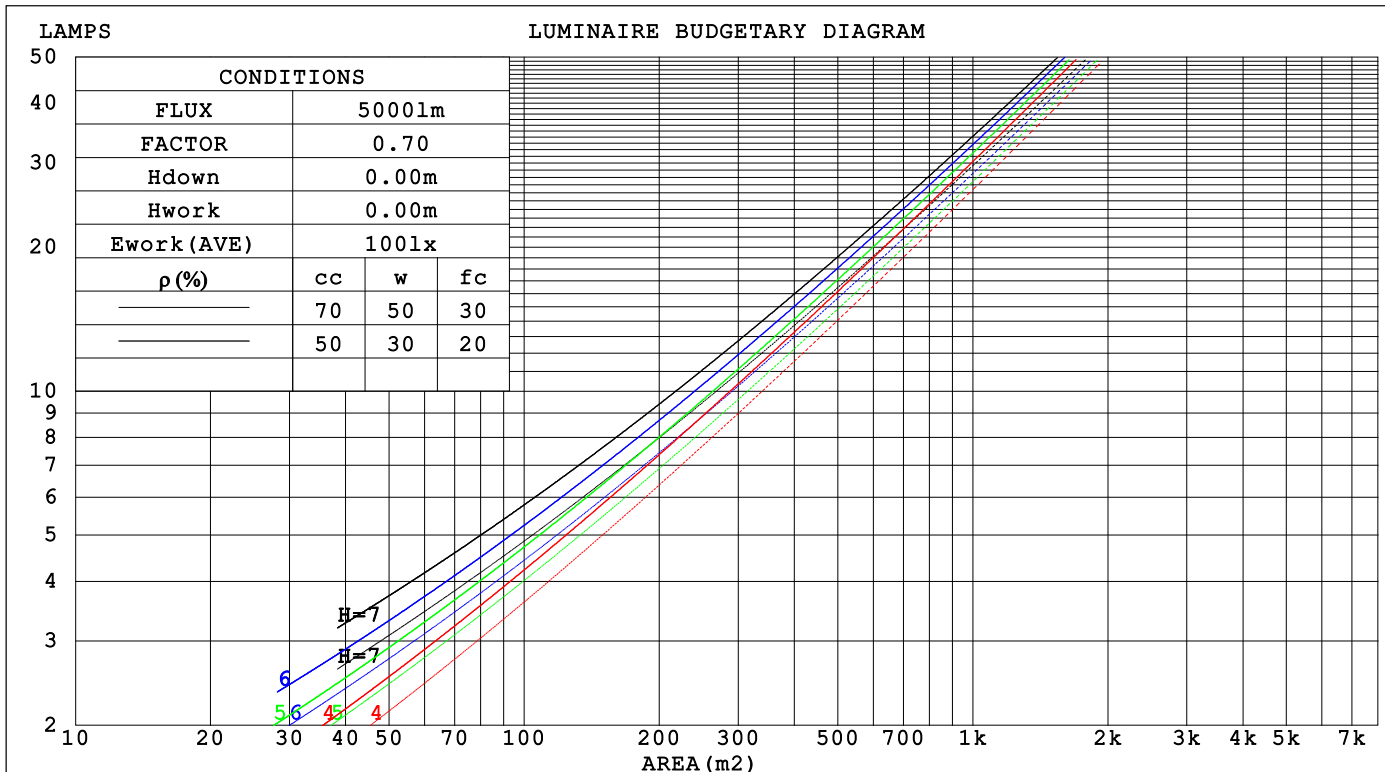
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: MEDIUM  
Temperature: 28.0°C  
Operators:DAMIN  
Test Date:2025-10-29

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.471  
Humidity: 100.0%  
Test Distance:26.000m [K=0.4255]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                           |       |                  |
|-----------------------------------------------------------|-------|------------------|
| Test:U:118.90V I:1.7268A P:204.96W PF:0.9982 Freq:60.01Hz |       |                  |
| Lamp Flux:30649.8x1 lm                                    |       |                  |
| NAME:                                                     | TYPE: | WEIGHT:          |
| SPEC.:                                                    | DIM.: | SERIAL No.:      |
| MFR.:                                                     | SUR.: | Shielding Angle: |

| pcc  | 80%                   |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| pw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| pfc  | 20%                   |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      |      |      |      |      |      |      |      |      |      | Coefficients of Utilization(CU) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0.0  | 1.19                  | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | .00                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.0  | 1.08                  | 1.04 | 1.01 | 1.05 | 1.02 | .00  | 1.01 | .99  | .96  | .97  | .95  | .93  | .94  | .92  | .91  | .89                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.0  | .97                   | .91  | .87  | .95  | .90  | .86  | .91  | .87  | .84  | .88  | .85  | .82  | .85  | .83  | .80  | .78                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.0  | .87                   | .81  | .75  | .86  | .80  | .75  | .83  | .78  | .73  | .80  | .76  | .72  | .78  | .74  | .71  | .69                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.0  | .79                   | .72  | .66  | .78  | .71  | .66  | .75  | .69  | .65  | .73  | .68  | .64  | .71  | .67  | .63  | .61                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.0  | .72                   | .64  | .59  | .71  | .64  | .58  | .69  | .62  | .58  | .67  | .61  | .57  | .65  | .60  | .56  | .55                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.0  | .66                   | .58  | .52  | .65  | .57  | .52  | .63  | .56  | .52  | .61  | .56  | .51  | .60  | .55  | .51  | .49                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7.0  | .60                   | .52  | .47  | .59  | .52  | .47  | .58  | .51  | .47  | .57  | .51  | .46  | .55  | .50  | .46  | .44                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8.0  | .55                   | .48  | .43  | .55  | .48  | .43  | .53  | .47  | .42  | .52  | .46  | .42  | .51  | .46  | .42  | .40                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.0  | .51                   | .44  | .39  | .51  | .44  | .39  | .50  | .43  | .39  | .49  | .43  | .38  | .48  | .42  | .38  | .37                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.0 | .48                   | .40  | .36  | .47  | .40  | .36  | .46  | .40  | .35  | .45  | .39  | .35  | .44  | .39  | .35  | .34                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: MEDIUM  
Temperature: 28.0℃  
Operators:DAMIN  
Test Date:2025-10-29

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.471  
Humidity: 100.0%  
Test Distance:26.000m [K=0.4255]  
Remarks:

### WEC AND CCEC

|                                                                                     |       |                  |
|-------------------------------------------------------------------------------------|-------|------------------|
| Test:U:118.90V I:1.7268A P:204.96W PF:0.9982 Freq:60.01Hz<br>Lamp Flux:30649.8x1 lm |       |                  |
| NAME:                                                                               | TYPE: | WEIGHT:          |
| SPEC.:                                                                              | DIM.: | SERIAL No.:      |
| MFR.:                                                                               | SUR.: | Shielding Angle: |

| pcc  | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0 |  |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|--|
| pw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |  |
| pfc  | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 0 |  |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |  |
| 0.0  |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |  |
| 1.0  | .238                  | .135 | .043 | .231 | .132 | .042 | .218                            | .125 | .040 | .206 | .119 | .038 | .195 | .113 | .036 |   |  |
| 2.0  | .231                  | .126 | .039 | .225 | .124 | .038 | .213                            | .119 | .037 | .203 | .114 | .036 | .193 | .109 | .034 |   |  |
| 3.0  | .219                  | .117 | .035 | .214 | .115 | .034 | .204                            | .111 | .034 | .195 | .107 | .033 | .186 | .103 | .032 |   |  |
| 4.0  | .207                  | .108 | .032 | .202 | .106 | .031 | .194                            | .103 | .031 | .185 | .100 | .030 | .178 | .097 | .029 |   |  |
| 5.0  | .195                  | .099 | .029 | .191 | .098 | .029 | .183                            | .095 | .028 | .176 | .093 | .028 | .169 | .091 | .027 |   |  |
| 6.0  | .184                  | .092 | .026 | .180 | .091 | .026 | .174                            | .089 | .026 | .167 | .087 | .026 | .161 | .085 | .025 |   |  |
| 7.0  | .174                  | .086 | .024 | .171 | .085 | .024 | .164                            | .083 | .024 | .159 | .081 | .024 | .153 | .080 | .023 |   |  |
| 8.0  | .164                  | .080 | .023 | .161 | .080 | .022 | .156                            | .078 | .022 | .151 | .076 | .022 | .146 | .075 | .022 |   |  |
| 9.0  | .156                  | .075 | .021 | .153 | .075 | .021 | .148                            | .073 | .021 | .144 | .072 | .021 | .139 | .071 | .020 |   |  |
| 10.0 | .148                  | .071 | .020 | .146 | .070 | .020 | .141                            | .069 | .019 | .137 | .068 | .019 | .133 | .067 | .019 |   |  |

| pcc  | 80%                   |      |      | 70%  |      |      | 50%                                         |      |      | 30%  |      |      | 10%  |      |      | 0 |  |
|------|-----------------------|------|------|------|------|------|---------------------------------------------|------|------|------|------|------|------|------|------|---|--|
| pw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                         | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |  |
| pfc  | 20%                   |      |      | 20%  |      |      | 20%                                         |      |      | 20%  |      |      | 20%  |      |      | 0 |  |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients (CCEC) |      |      |      |      |      |      |      |      |   |  |
| 0.0  | .193                  | .193 | .193 | .165 | .165 | .165 | .112                                        | .112 | .112 | .065 | .065 | .065 | .021 | .021 | .021 |   |  |
| 1.0  | .178                  | .159 | .142 | .152 | .136 | .122 | .104                                        | .094 | .085 | .060 | .054 | .049 | .019 | .017 | .016 |   |  |
| 2.0  | .166                  | .134 | .108 | .142 | .116 | .093 | .098                                        | .080 | .065 | .056 | .047 | .038 | .018 | .015 | .012 |   |  |
| 3.0  | .157                  | .116 | .084 | .135 | .100 | .073 | .092                                        | .070 | .051 | .053 | .041 | .030 | .017 | .013 | .010 |   |  |
| 4.0  | .149                  | .102 | .067 | .128 | .088 | .058 | .088                                        | .062 | .041 | .051 | .036 | .024 | .016 | .012 | .008 |   |  |
| 5.0  | .141                  | .091 | .055 | .121 | .079 | .048 | .084                                        | .055 | .034 | .048 | .032 | .020 | .016 | .011 | .007 |   |  |
| 6.0  | .135                  | .083 | .046 | .116 | .072 | .040 | .080                                        | .050 | .028 | .046 | .030 | .017 | .015 | .010 | .006 |   |  |
| 7.0  | .128                  | .076 | .039 | .110 | .066 | .034 | .076                                        | .046 | .024 | .044 | .027 | .014 | .014 | .009 | .005 |   |  |
| 8.0  | .122                  | .070 | .034 | .105 | .061 | .029 | .073                                        | .043 | .021 | .042 | .025 | .012 | .014 | .008 | .004 |   |  |
| 9.0  | .117                  | .065 | .030 | .101 | .056 | .026 | .070                                        | .040 | .018 | .041 | .023 | .011 | .013 | .008 | .004 |   |  |
| 10.0 | .112                  | .061 | .026 | .097 | .053 | .023 | .067                                        | .037 | .016 | .039 | .022 | .010 | .013 | .007 | .003 |   |  |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: MEDIUM  
Temperature: 28.0℃  
Operators:DAMIN  
Test Date:2025-10-29

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.471  
Humidity: 100.0%  
Test Distance:26.000m [K=0.4255]  
Remarks:

### UGR(Unified Glare Rating) Table

|                                                                                     |                  |      |       |      |      |                  |      |      |      |      |
|-------------------------------------------------------------------------------------|------------------|------|-------|------|------|------------------|------|------|------|------|
| Test:U:118.90V I:1.7268A P:204.96W PF:0.9982 Freq:60.01Hz<br>Lamp Flux:30649.8x1 lm |                  |      |       |      |      |                  |      |      |      |      |
| NAME:                                                                               |                  |      | TYPE: |      |      | WEIGHT:          |      |      |      |      |
| SPEC.:                                                                              |                  |      | DIM.: |      |      | SERIAL No.:      |      |      |      |      |
| MFR.:                                                                               |                  |      | SUR.: |      |      | Shielding Angle: |      |      |      |      |
| ceiling/cavity                                                                      | 0.7              | 0.7  | 0.5   | 0.5  | 0.3  | 0.7              | 0.7  | 0.5  | 0.5  | 0.3  |
| walls                                                                               | 0.5              | 0.3  | 0.5   | 0.3  | 0.3  | 0.5              | 0.3  | 0.5  | 0.3  | 0.3  |
| working plane                                                                       | 0.2              | 0.2  | 0.2   | 0.2  | 0.2  | 0.2              | 0.2  | 0.2  | 0.2  | 0.2  |
| Room dimensions                                                                     | Viewed crosswise |      |       |      |      | Viewed endwise   |      |      |      |      |
| x = 2H y = 2H                                                                       | 14.5             | 15.8 | 14.7  | 16.0 | 16.2 | 14.4             | 15.7 | 14.6 | 15.9 | 16.1 |
| 3H                                                                                  | 14.9             | 16.0 | 15.1  | 16.3 | 16.5 | 14.8             | 15.9 | 15.1 | 16.2 | 16.4 |
| 4H                                                                                  | 15.0             | 16.1 | 15.3  | 16.3 | 16.6 | 14.9             | 16.0 | 15.2 | 16.2 | 16.5 |
| 6H                                                                                  | 15.0             | 16.0 | 15.3  | 16.3 | 16.6 | 14.9             | 15.9 | 15.2 | 16.2 | 16.5 |
| 8H                                                                                  | 15.0             | 16.0 | 15.3  | 16.2 | 16.5 | 14.9             | 15.9 | 15.2 | 16.2 | 16.5 |
| 12H                                                                                 | 14.9             | 15.9 | 15.3  | 16.2 | 16.5 | 14.9             | 15.8 | 15.2 | 16.1 | 16.4 |
| 4H 2H                                                                               | 14.6             | 15.7 | 14.9  | 15.9 | 16.2 | 14.5             | 15.6 | 14.8 | 15.9 | 16.1 |
| 3H                                                                                  | 15.1             | 16.1 | 15.4  | 16.3 | 16.6 | 15.0             | 16.0 | 15.4 | 16.3 | 16.6 |
| 4H                                                                                  | 15.3             | 16.1 | 15.6  | 16.5 | 16.8 | 15.2             | 16.1 | 15.6 | 16.4 | 16.7 |
| 6H                                                                                  | 15.4             | 16.1 | 15.8  | 16.5 | 16.8 | 15.3             | 16.1 | 15.7 | 16.4 | 16.8 |
| 8H                                                                                  | 15.4             | 16.1 | 15.8  | 16.4 | 16.8 | 15.3             | 16.0 | 15.7 | 16.4 | 16.8 |
| 12H                                                                                 | 15.3             | 16.0 | 15.8  | 16.4 | 16.8 | 15.3             | 15.9 | 15.7 | 16.3 | 16.7 |
| 8H 4H                                                                               | 15.3             | 16.0 | 15.7  | 16.3 | 16.7 | 15.2             | 15.9 | 15.6 | 16.3 | 16.7 |
| 6H                                                                                  | 15.4             | 16.0 | 15.9  | 16.4 | 16.8 | 15.4             | 15.9 | 15.8 | 16.3 | 16.8 |
| 8H                                                                                  | 15.5             | 16.0 | 15.9  | 16.4 | 16.8 | 15.4             | 15.9 | 15.9 | 16.3 | 16.8 |
| 12H                                                                                 | 15.5             | 15.9 | 15.9  | 16.3 | 16.8 | 15.4             | 15.8 | 15.9 | 16.3 | 16.8 |
| 12H 4H                                                                              | 15.2             | 15.9 | 15.7  | 16.3 | 16.7 | 15.2             | 15.8 | 15.6 | 16.2 | 16.6 |
| 6H                                                                                  | 15.4             | 15.9 | 15.9  | 16.3 | 16.8 | 15.3             | 15.9 | 15.8 | 16.3 | 16.7 |
| 8H                                                                                  | 15.4             | 15.9 | 15.9  | 16.3 | 16.8 | 15.4             | 15.8 | 15.9 | 16.3 | 16.8 |
| Variations with the observer position at spacings(CIE Pub.117):                     |                  |      |       |      |      |                  |      |      |      |      |
| S = 1.0H                                                                            | + 0.9 / - 1.2    |      |       |      |      | + 0.9 / - 1.2    |      |      |      |      |
| 1.5H                                                                                | + 1.0 / - 0.8    |      |       |      |      | + 1.0 / - 0.8    |      |      |      |      |
| 2.0H                                                                                | + 1.9 / - 1.5    |      |       |      |      | + 1.8 / - 1.5    |      |      |      |      |

CIE Pub.117, 30650 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 11.9)  
Area: 0.1 m2

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: MEDIUM  
Temperature: 28.0℃  
Operators:DAMIN  
Test Date:2025-10-29

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.471  
Humidity: 100.0%  
Test Distance:26.000m [K=0.4255]  
Remarks:

### UTILIZATION FACTORS TABLE

|                                                                                     |       |                  |
|-------------------------------------------------------------------------------------|-------|------------------|
| Test:U:118.90V I:1.7268A P:204.96W PF:0.9982 Freq:60.01Hz<br>Lamp Flux:30649.8x1 lm |       |                  |
| NAME:                                                                               | TYPE: | WEIGHT:          |
| SPEC.:                                                                              | DIM.: | SERIAL No.:      |
| MFR.:                                                                               | SUR.: | Shielding Angle: |

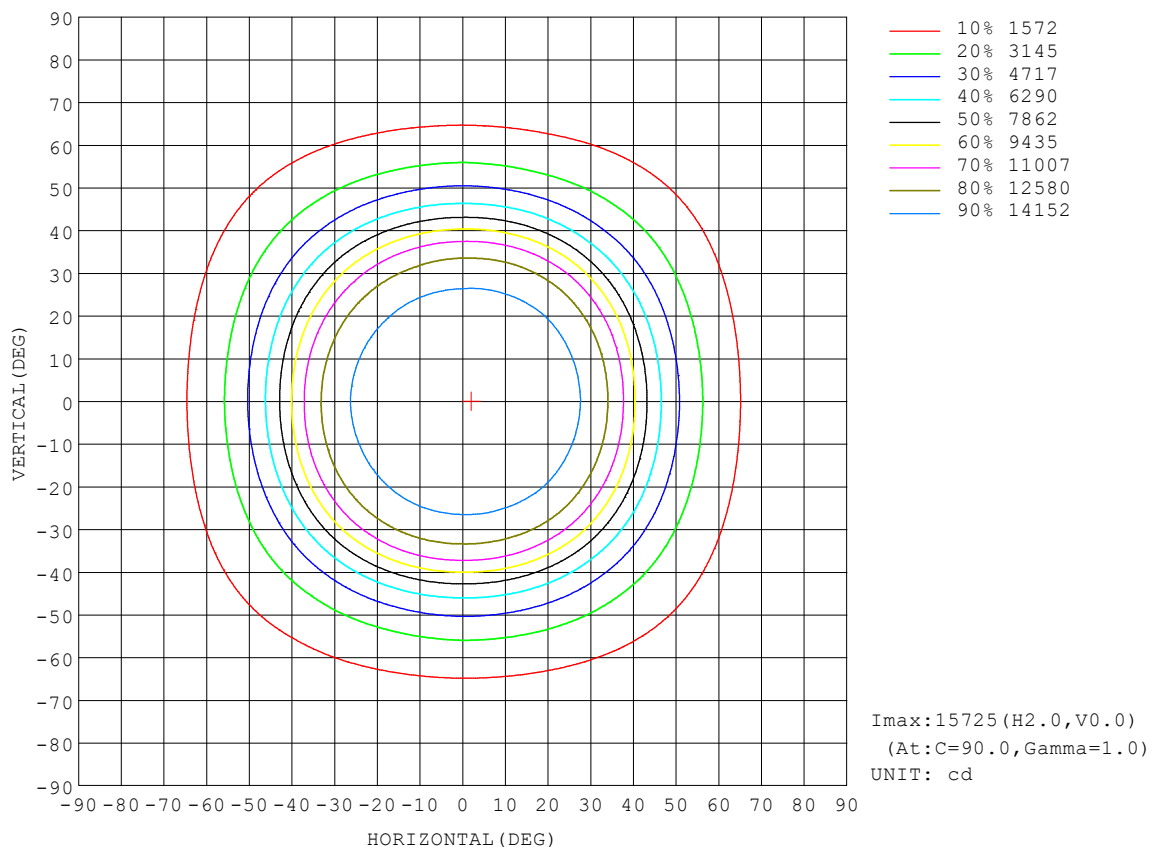
| REFLECTANCE                      |                                                      |     |           |     |     |     |     |               |     |        |
|----------------------------------|------------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling                          | 0.8                                                  | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 0.5 | 0.5           | 0.5 | 0      |
| Walls                            | 0.7                                                  | 0.5 | 0.3       | 0.7 | 0.5 | 0.3 | 0.7 | 0.5           | 0.3 | 0      |
| Working plane                    | 0.2                                                  | 0.2 | 0.2       | 0.2 | 0.2 | 0.2 | 0.2 | 0.2           | 0.2 | 0      |
| ROOM INDEX                       | UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 69                                                   | 60  | 54        | 69  | 60  | 54  | 68  | 59            | 54  | 49     |
| 0.80                             | 79                                                   | 70  | 64        | 78  | 69  | 64  | 77  | 69            | 63  | 58     |
| 1.00                             | 87                                                   | 78  | 72        | 85  | 77  | 72  | 83  | 78            | 71  | 66     |
| 1.25                             | 93                                                   | 85  | 79        | 91  | 84  | 79  | 89  | 83            | 78  | 72     |
| 1.50                             | 97                                                   | 89  | 84        | 95  | 88  | 84  | 93  | 87            | 83  | 76     |
| 2.00                             | 102                                                  | 96  | 91        | 100 | 94  | 90  | 97  | 92            | 88  | 82     |
| 2.50                             | 105                                                  | 99  | 94        | 103 | 98  | 93  | 99  | 95            | 92  | 84     |
| 3.00                             | 107                                                  | 102 | 98        | 105 | 101 | 97  | 101 | 98            | 95  | 87     |
| 4.00                             | 110                                                  | 106 | 102       | 108 | 104 | 101 | 104 | 101           | 98  | 90     |
| 5.00                             | 112                                                  | 108 | 105       | 109 | 106 | 104 | 105 | 103           | 100 | 92     |
| ROOM INDEX                       | UF (total)                                           |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |                                                      |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: MEDIUM  
Temperature: 28.0 °C  
Operators:DAMIN  
Test Date:2025-10-29

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.471  
Humidity: 100.0%  
Test Distance:26.000m [K=0.4255]  
Remarks:

### ISOCANDELA DIAGRAM

|                                                                                     |       |                  |
|-------------------------------------------------------------------------------------|-------|------------------|
| Test:U:118.90V I:1.7268A P:204.96W PF:0.9982 Freq:60.01Hz<br>Lamp Flux:30649.8x1 lm |       |                  |
| NAME:                                                                               | TYPE: | WEIGHT:          |
| SPEC.:                                                                              | DIM.: | SERIAL No.:      |
| MFR.:                                                                               | SUR.: | Shielding Angle: |

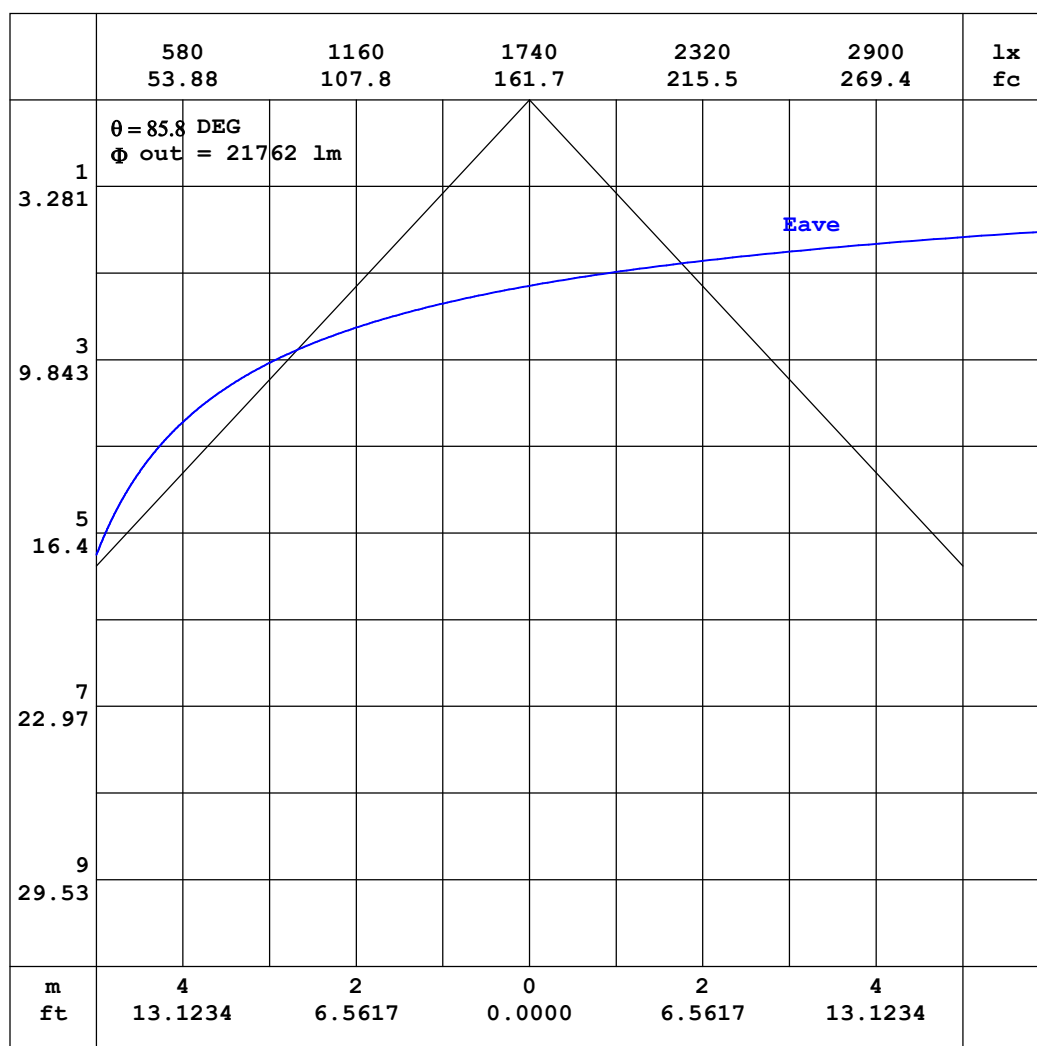


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: MEDIUM  
Temperature: 28.0°C  
Operators:DAMIN  
Test Date:2025-10-29

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.471  
Humidity: 100.0%  
Test Distance:26.000m [K=0.4255]  
Remarks:

### AAI CURVES

|                                                                                     |       |                  |
|-------------------------------------------------------------------------------------|-------|------------------|
| Test:U:118.90V I:1.7268A P:204.96W PF:0.9982 Freq:60.01Hz<br>Lamp Flux:30649.8x1 lm |       |                  |
| NAME:                                                                               | TYPE: | WEIGHT:          |
| SPEC.:                                                                              | DIM.: | SERIAL No.:      |
| MFR.:                                                                               | SUR.: | Shielding Angle: |



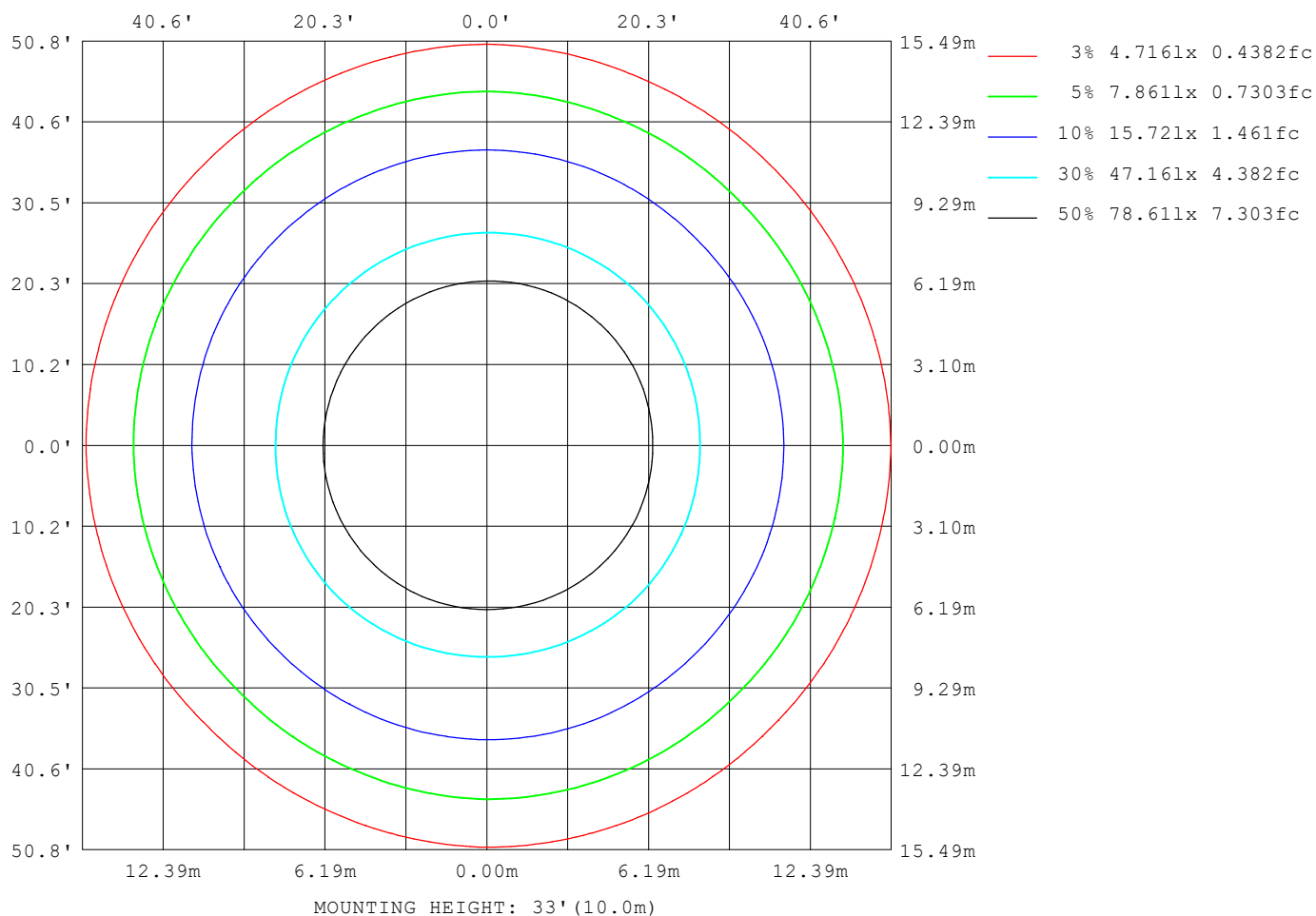
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature: 28.0 °C  
 Operators: DAMIN  
 Test Date: 2025-10-29

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.471  
 Humidity: 100.0%  
 Test Distance: 26.000m [K=0.4255]  
 Remarks:

### ISOLUX DIAGRAM

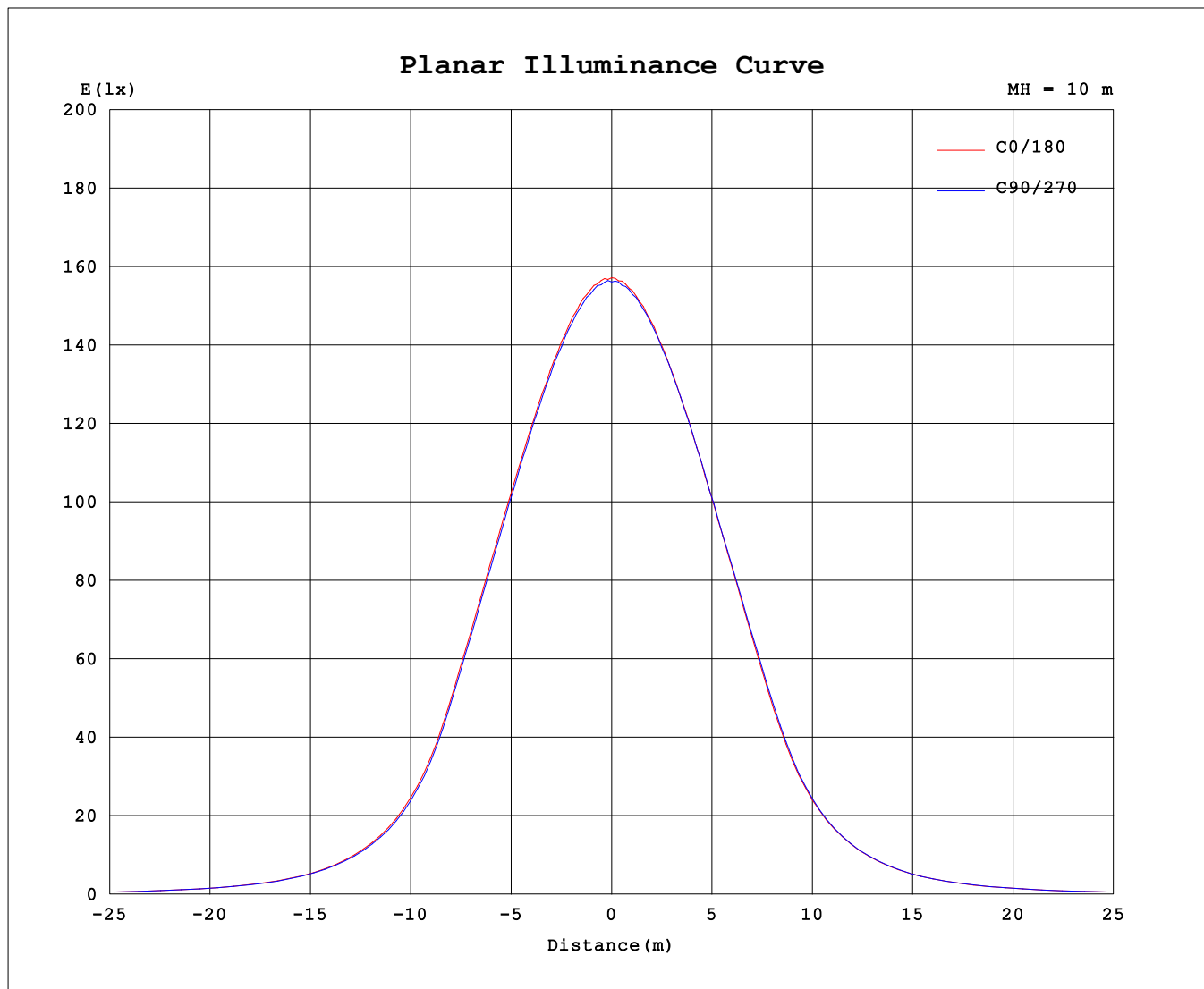
|                                                                                     |       |                  |
|-------------------------------------------------------------------------------------|-------|------------------|
| Test:U:118.90V I:1.7268A P:204.96W PF:0.9982 Freq:60.01Hz<br>Lamp Flux:30649.8x1 lm |       |                  |
| NAME:                                                                               | TYPE: | WEIGHT:          |
| SPEC.:                                                                              | DIM.: | SERIAL No.:      |
| MFR.:                                                                               | SUR.: | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: MEDIUM  
Temperature: 28.0°C  
Operators:DAMIN  
Test Date:2025-10-29

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.471  
Humidity: 100.0%  
Test Distance:26.000m [K=0.4255]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: MEDIUM  
Temperature: 28.0 °C  
Operators:DAMIN  
Test Date:2025-10-29

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.471  
Humidity: 100.0%  
Test Distance:26.000m [K=0.4255]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                     |  |  |  |  |  |  |  |  |       |  |  |  |  |  |                  |  |  |
|-------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|-------|--|--|--|--|--|------------------|--|--|
| Test:U:118.90V I:1.7268A P:204.96W PF:0.9982 Freq:60.01Hz<br>Lamp Flux:30649.8x1 lm |  |  |  |  |  |  |  |  |       |  |  |  |  |  |                  |  |  |
| NAME:                                                                               |  |  |  |  |  |  |  |  | TYPE: |  |  |  |  |  | WEIGHT:          |  |  |
| SPEC.:                                                                              |  |  |  |  |  |  |  |  | DIM.: |  |  |  |  |  | SERIAL No.:      |  |  |
| MFR.:                                                                               |  |  |  |  |  |  |  |  | SUR.: |  |  |  |  |  | Shielding Angle: |  |  |

Table--1

UNIT: X10cd

| C (DEG)<br>γ (DEG) | 0    | 22.5 | 45   | 67.5 | 90    | 112.5 | 135  | 157.5 | 180  | 202.5 | 225  | 247.5 | 270  | 292.5 | 315  | 337.5 |  |  |  |
|--------------------|------|------|------|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|--|--|--|
| 0                  | 1566 | 1566 | 1566 | 1566 | 1566  | 1566  | 1566 | 1566  | 1566 | 1566  | 1566 | 1566  | 1566 | 1566  | 1566 | 1566  |  |  |  |
| 5                  | 1564 | 1561 | 1565 | 1560 | 1565  | 1563  | 1562 | 1561  | 1557 | 1561  | 1559 | 1560  | 1565 | 1560  | 1567 | 1561  |  |  |  |
| 10                 | 1550 | 1551 | 1555 | 1546 | 1554  | 1546  | 1551 | 1543  | 1544 | 1544  | 1549 | 1542  | 1552 | 1548  | 1555 | 1550  |  |  |  |
| 15                 | 1529 | 1530 | 1529 | 1528 | 1532  | 1526  | 1529 | 1521  | 1524 | 1518  | 1524 | 1521  | 1529 | 1532  | 1533 | 1534  |  |  |  |
| 20                 | 1499 | 1495 | 1496 | 1494 | 1495  | 1493  | 1490 | 1486  | 1487 | 1486  | 1485 | 1488  | 1493 | 1498  | 1502 | 1500  |  |  |  |
| 25                 | 1449 | 1443 | 1447 | 1440 | 1443  | 1440  | 1437 | 1431  | 1427 | 1428  | 1429 | 1432  | 1443 | 1444  | 1455 | 1449  |  |  |  |
| 30                 | 1363 | 1365 | 1366 | 1353 | 1356  | 1351  | 1353 | 1342  | 1339 | 1336  | 1341 | 1340  | 1356 | 1362  | 1372 | 1368  |  |  |  |
| 35                 | 1216 | 1223 | 1220 | 1211 | 1205  | 1207  | 1211 | 1202  | 1191 | 1188  | 1194 | 1197  | 1212 | 1226  | 1233 | 1229  |  |  |  |
| 40                 | 965  | 972  | 976  | 960  | 947   | 953   | 961  | 954   | 943  | 950   | 955  | 958   | 965  | 980   | 986  | 979   |  |  |  |
| 45                 | 696  | 695  | 691  | 682  | 679   | 676   | 679  | 676   | 678  | 689   | 690  | 688   | 692  | 694   | 691  | 693   |  |  |  |
| 50                 | 497  | 492  | 484  | 484  | 486   | 473   | 469  | 472   | 483  | 483   | 482  | 482   | 490  | 482   | 477  | 488   |  |  |  |
| 55                 | 344  | 339  | 333  | 337  | 339   | 326   | 320  | 326   | 334  | 330   | 328  | 331   | 338  | 328   | 328  | 337   |  |  |  |
| 60                 | 236  | 231  | 229  | 230  | 232   | 224   | 219  | 223   | 227  | 224   | 224  | 226   | 229  | 223   | 224  | 230   |  |  |  |
| 65                 | 158  | 155  | 155  | 155  | 156   | 151   | 147  | 150   | 152  | 151   | 151  | 152   | 153  | 150   | 152  | 155   |  |  |  |
| 70                 | 102  | 101  | 101  | 101  | 101   | 98.3  | 96.6 | 98.0  | 97.9 | 98.0  | 99.0 | 98.6  | 98.9 | 97.3  | 99.4 | 101   |  |  |  |
| 75                 | 60.8 | 60.7 | 60.9 | 61.0 | 60.9  | 59.8  | 59.1 | 59.9  | 59.4 | 59.8  | 60.6 | 59.9  | 59.1 | 58.7  | 60.1 | 60.9  |  |  |  |
| 80                 | 30.3 | 30.4 | 30.9 | 30.8 | 30.6  | 30.2  | 30.0 | 30.4  | 30.1 | 30.5  | 30.7 | 30.1  | 29.3 | 29.2  | 30.1 | 30.4  |  |  |  |
| 85                 | 8.27 | 8.30 | 8.63 | 8.56 | 8.55  | 8.37  | 8.38 | 8.44  | 8.53 | 8.48  | 8.43 | 8.17  | 8.03 | 7.91  | 8.15 | 8.25  |  |  |  |
| 90                 | 0.34 | 0.36 | 0.37 | 0.37 | 0.35  | 0.33  | 0.31 | 0.29  | 0.33 | 0.32  | 0.32 | 0.32  | 0.34 | 0.36  | 0.39 | 0.41  |  |  |  |
| 95                 | 0.14 | 0.14 | 0.15 | 0.15 | 0.14  | 0.14  | 0.15 | 0.15  | 0.13 | 0.13  | 0.13 | 0.13  | 0.13 | 0.13  | 0.13 | 0.13  |  |  |  |
| 100                | 0.20 | 0.21 | 0.21 | 0.21 | 0.21  | 0.20  | 0.21 | 0.21  | 0.13 | 0.13  | 0.13 | 0.13  | 0.13 | 0.13  | 0.13 | 0.13  |  |  |  |
| 105                | 0.31 | 0.32 | 0.31 | 0.31 | 0.32  | 0.31  | 0.32 | 0.32  | 0.16 | 0.17  | 0.17 | 0.16  | 0.16 | 0.15  | 0.16 | 0.15  |  |  |  |
| 110                | 0.47 | 0.47 | 0.48 | 0.47 | 0.48  | 0.48  | 0.48 | 0.49  | 0.21 | 0.23  | 0.22 | 0.21  | 0.21 | 0.20  | 0.20 | 0.21  |  |  |  |
| 115                | 0.71 | 0.70 | 0.71 | 0.70 | 0.71  | 0.71  | 0.70 | 0.73  | 0.26 | 0.28  | 0.26 | 0.26  | 0.26 | 0.25  | 0.26 | 0.26  |  |  |  |
| 120                | 1.00 | 1.00 | 1.00 | 1.00 | 1.01  | 1.02  | 1.02 | 1.02  | 0.33 | 0.34  | 0.33 | 0.34  | 0.33 | 0.32  | 0.33 | 0.33  |  |  |  |
| 125                | 1.33 | 1.34 | 1.34 | 1.34 | 1.36  | 1.37  | 1.37 | 1.37  | 0.47 | 0.47  | 0.47 | 0.47  | 0.47 | 0.46  | 0.46 | 0.46  |  |  |  |
| 130                | 1.67 | 1.67 | 1.67 | 1.69 | 1.70  | 1.71  | 1.72 | 1.71  | 0.66 | 0.67  | 0.67 | 0.67  | 0.66 | 0.65  | 0.65 | 0.66  |  |  |  |
| 135                | 2.03 | 2.03 | 2.03 | 2.05 | 2.07  | 2.07  | 2.08 | 2.08  | 0.94 | 0.94  | 0.94 | 0.94  | 0.93 | 0.93  | 0.93 | 0.94  |  |  |  |
| 140                | 2.43 | 2.42 | 2.42 | 2.44 | 2.46  | 2.47  | 2.48 | 2.48  | 1.25 | 1.26  | 1.25 | 1.25  | 1.25 | 1.24  | 1.24 | 1.25  |  |  |  |
| 145                | 2.84 | 2.83 | 2.82 | 2.84 | 2.87  | 2.87  | 2.89 | 2.89  | 1.59 | 1.61  | 1.59 | 1.59  | 1.60 | 1.58  | 1.58 | 1.58  |  |  |  |
| 150                | 3.25 | 3.24 | 3.23 | 3.25 | 3.28  | 3.27  | 3.30 | 3.30  | 2.07 | 2.07  | 2.06 | 2.06  | 2.07 | 2.05  | 2.04 | 2.03  |  |  |  |
| 155                | 3.67 | 3.65 | 3.65 | 3.67 | 3.68  | 3.68  | 3.69 | 3.71  | 2.83 | 2.82  | 2.82 | 2.82  | 2.82 | 2.80  | 2.78 | 2.79  |  |  |  |
| 160                | 4.24 | 4.20 | 4.22 | 4.22 | 4.24  | 4.23  | 4.25 | 4.26  | 4.42 | 4.42  | 4.41 | 4.41  | 4.39 | 4.37  | 4.37 | 4.37  |  |  |  |
| 165                | 5.28 | 5.26 | 5.29 | 5.27 | 5.30  | 5.28  | 5.31 | 5.30  | 7.73 | 7.73  | 7.73 | 7.70  | 7.71 | 7.66  | 7.69 | 7.65  |  |  |  |
| 170                | 7.40 | 7.37 | 7.39 | 7.40 | 7.42  | 7.40  | 7.43 | 7.43  | 16.2 | 16.1  | 16.2 | 16.1  | 16.2 | 16.1  | 16.1 | 16.1  |  |  |  |
| 175                | 10.0 | 9.98 | 10.0 | 10.0 | 10.03 | 10.0  | 10.0 | 10.1  | 19.8 | 19.7  | 19.7 | 19.7  | 19.7 | 19.7  | 19.7 | 19.7  |  |  |  |
| 180                | 12.9 | 12.9 | 12.9 | 12.9 | 13.0  | 12.9  | 13.0 | 12.9  | 13.3 | 13.4  | 13.3 | 13.3  | 13.3 | 13.3  | 13.3 | 13.3  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: MEDIUM  
Temperature: 28.0℃  
Operators:DAMIN  
Test Date:2025-10-29

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.471  
Humidity: 100.0%  
Test Distance:26.000m [K=0.4255]  
Remarks: