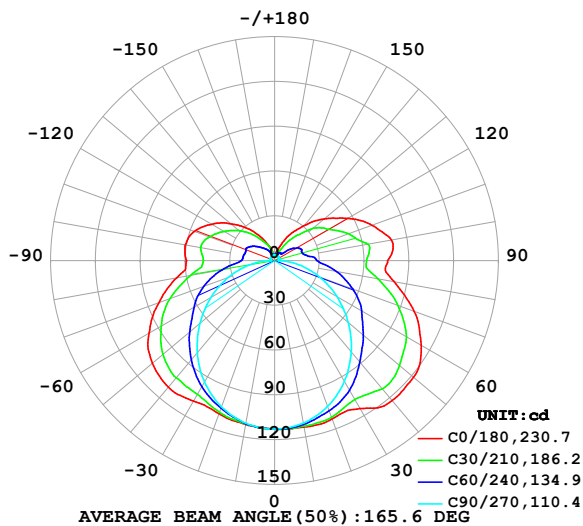


## LUMINAIRE PHOTOMETRIC TEST REPORT

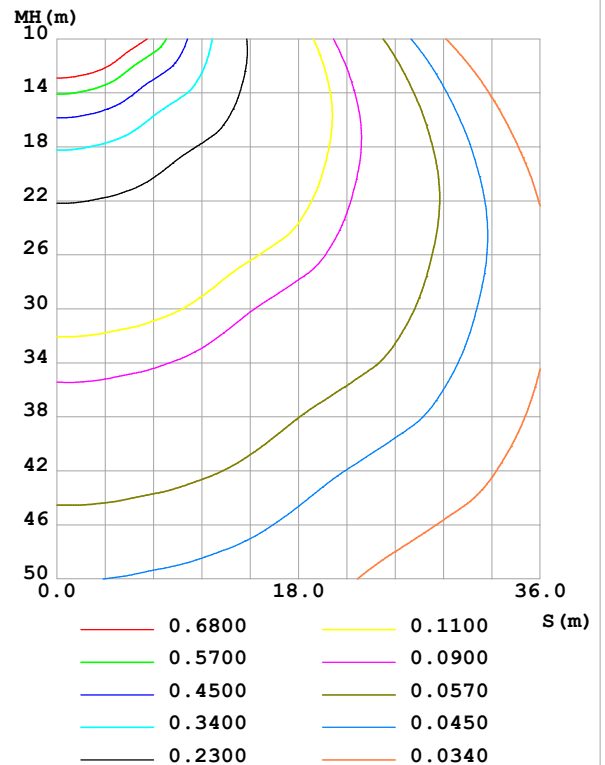
|  |                 |                  |
|--|-----------------|------------------|
| Test:U:24.00V I:0.4277A P:10.26W PF:1.000 Freq:0Hz<br>Lamp Flux:642.677x1 lm |                 |                  |
| NAME: SF18-24V-3528-144-3500K-80   | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.: OLympia lighting   | SUR.:           | Shielding Angle: |

| DATA OF LAMP     |         | PHOTOMETRIC DATA      |         |                   |           | Eff: 62.61 lm/W |
|------------------|---------|-----------------------|---------|-------------------|-----------|-----------------|
| MODEL            | 3528    | I <sub>max</sub> (cd) | 122.7   | S/MH(C0/180)      | 1.51      |                 |
| NOMINAL POWER(W) | 10      | LOR(%)                | 100.0   | S/MH(C90/270)     | 1.24      |                 |
| RATED VOLTAGE(V) | 24      | TOTAL FLUX(lm)        | 642.68  | η UP,DN(C0-180)   | 13.0,37.7 |                 |
| NOMINAL FLUX(lm) | 642.677 | CIE CLASS             | SEMI-D. | η UP,DN(C180-360) | 12.4,36.9 |                 |
| LAMPS INSIDE     | 1       | η up (%)              | 25.4    | CIBSE SHR NOM     | 1.50      |                 |
| TEST VOLTAGE(V)  |         | η down (%)            | 74.6    | CIBSE SHR MAX     | 1.55      |                 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2025-02-19

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.488  
Humidity:65.0%  
Test Distance:6.360m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

| $\gamma$ | C0                    | C45   | C90   | C135  | C180  | C225  | C270  | C315  | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum,lamp |
|----------|-----------------------|-------|-------|-------|-------|-------|-------|-------|----------|-------------|--------------|-----------|
| 10       | 113.3                 | 112.1 | 110.6 | 111.1 | 111.5 | 111.2 | 110.7 | 112.1 | 0- 10    | 10.72       | 10.72        | 1.67,1.67 |
| 20       | 112.9                 | 109.4 | 104.0 | 106.5 | 109.2 | 106.7 | 104.2 | 109.4 | 10- 20   | 31.10       | 41.82        | 6.51,6.51 |
| 30       | 114.5                 | 103.9 | 93.51 | 100.2 | 108.7 | 100.6 | 93.98 | 104.0 | 20- 30   | 48.53       | 90.35        | 14.1,14.1 |
| 40       | 122.5                 | 100.6 | 79.93 | 94.07 | 110.8 | 94.74 | 80.64 | 100.5 | 30- 40   | 62.90       | 153.2        | 23.8,23.8 |
| 50       | 121.6                 | 93.54 | 64.41 | 84.82 | 106.9 | 85.98 | 65.24 | 93.39 | 40- 50   | 72.66       | 225.9        | 35.2,35.2 |
| 60       | 113.4                 | 84.68 | 48.29 | 73.67 | 97.19 | 75.05 | 49.19 | 84.26 | 50- 60   | 75.40       | 301.3        | 46.9,46.9 |
| 70       | 99.64                 | 71.83 | 32.06 | 61.18 | 82.54 | 62.59 | 33.05 | 71.83 | 60- 70   | 71.62       | 372.9        | 58,58     |
| 80       | 81.29                 | 56.13 | 16.42 | 45.16 | 66.72 | 46.53 | 17.30 | 56.16 | 70- 80   | 60.45       | 433.4        | 67.4,67.4 |
| 90       | 75.80                 | 45.03 | 2.962 | 34.49 | 59.14 | 35.05 | 3.137 | 44.52 | 80- 90   | 46.16       | 479.5        | 74.6,74.6 |
| 100      | 79.59                 | 42.58 | 2.936 | 35.04 | 60.72 | 35.74 | 3.115 | 42.52 | 90-100   | 42.04       | 521.6        | 81.2,81.2 |
| 110      | 69.47                 | 36.02 | 2.986 | 32.98 | 57.40 | 33.62 | 3.272 | 34.61 | 100-110  | 38.19       | 559.8        | 87.1,87.1 |
| 120      | 56.76                 | 29.44 | 3.153 | 28.12 | 48.85 | 29.08 | 3.341 | 30.39 | 110-120  | 31.53       | 591.3        | 92,92     |
| 130      | 43.58                 | 21.52 | 3.356 | 22.29 | 38.60 | 22.96 | 3.379 | 21.91 | 120-130  | 23.12       | 614.4        | 95.6,95.6 |
| 140      | 30.57                 | 13.71 | 3.546 | 16.33 | 28.19 | 16.77 | 3.396 | 14.12 | 130-140  | 14.48       | 628.9        | 97.9,97.9 |
| 150      | 19.59                 | 7.754 | 3.601 | 10.80 | 17.86 | 11.04 | 3.459 | 8.817 | 140-150  | 8.119       | 637.0        | 99.1,99.1 |
| 160      | 9.759                 | 5.234 | 3.702 | 6.574 | 9.857 | 6.672 | 3.592 | 5.697 | 150-160  | 3.792       | 640.8        | 99.7,99.7 |
| 170      | 4.292                 | 4.439 | 3.818 | 4.250 | 4.236 | 4.199 | 3.737 | 4.420 | 160-170  | 1.478       | 642.3        | 99.9,99.9 |
| 180      | 3.886                 | 3.913 | 3.852 | 3.935 | 3.848 | 3.906 | 3.844 | 3.950 | 170-180  | 0.3912      | 642.7        | 100,100   |
| DEG      | LUMINOUS INTENSITY:cd |       |       |       |       |       |       |       |          | UNIT:lm     |              |           |

Conical surface Flux(90deg): 188.8 lm

%lum = 29.4%

%lamp = 29.4%

Conical surface Flux(130deg): 338.05 lm

%lum = 52.6%

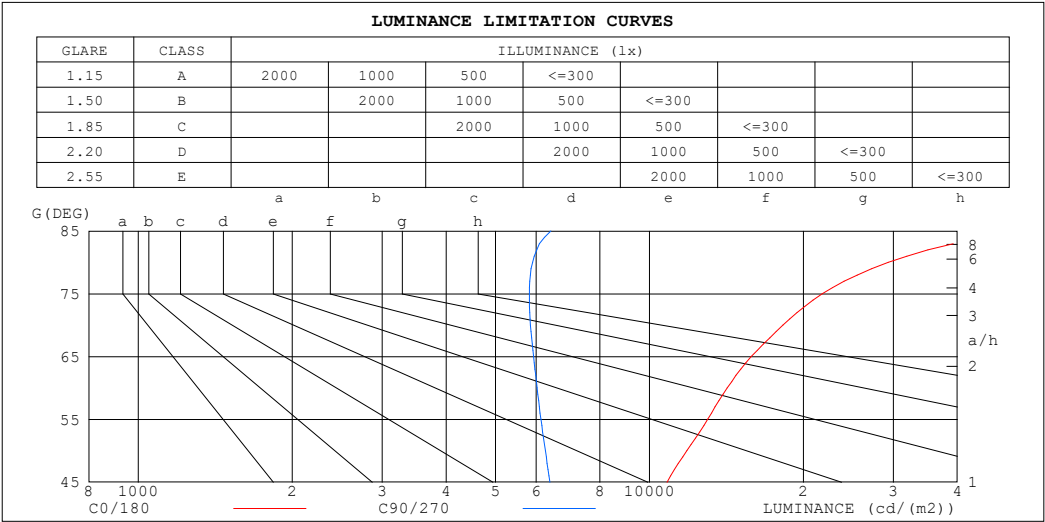
%lamp = 52.6%

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3℃  
 Operators:  
 Test Date:2025-02-19

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.488  
 Humidity:65.0%  
 Test Distance:6.360m [K=1.0000]  
 Remarks:

LUMINANCE LIMITATION CURVES

|  |                 |                  |
|--|-----------------|------------------|
| Test:U:24.00V I:0.4277A P:10.26W PF:1.000 Freq:0Hz<br>Lamp Flux:642.677x1 lm |                 |                  |
| NAME: SF18-24V-3528-144-3500K-80   | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.: OLympia lighting   | SUR.:           | Shielding Angle: |



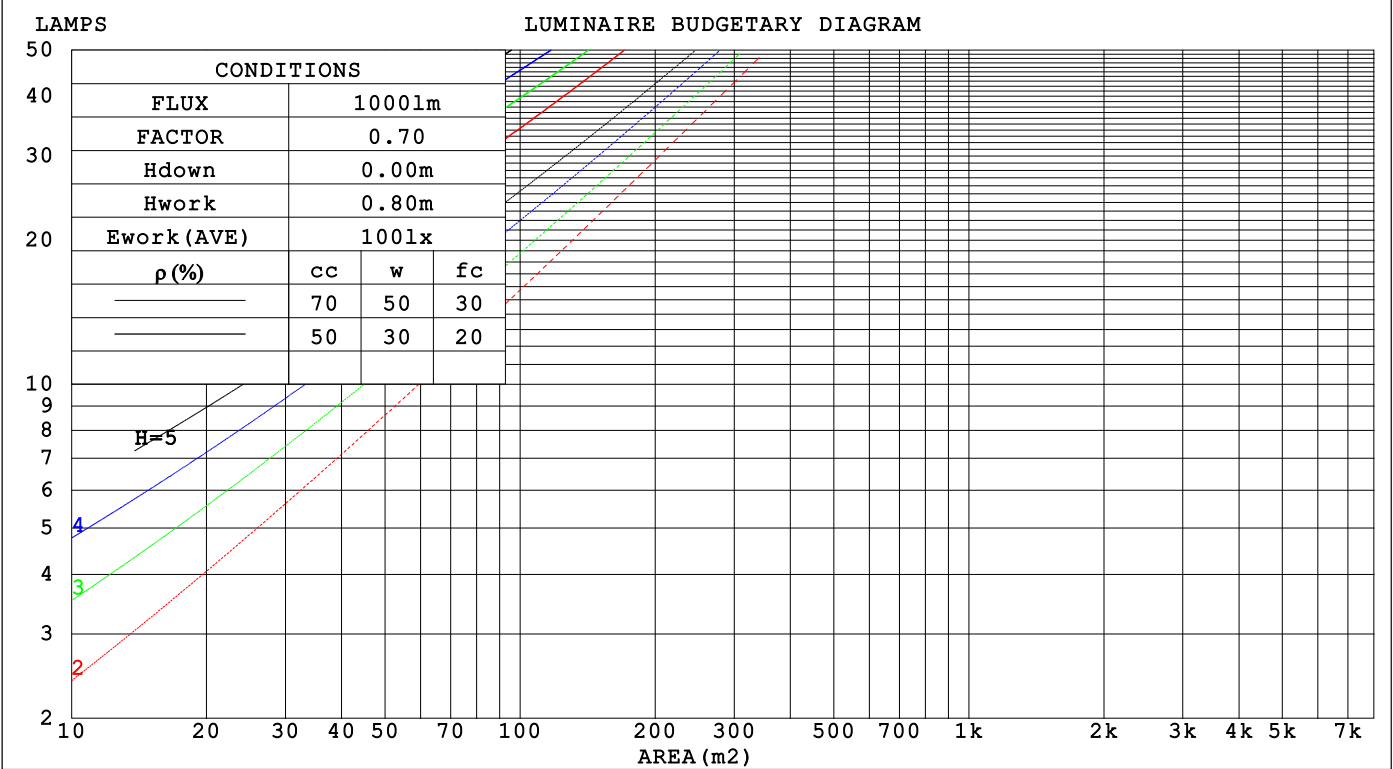
| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 53473  | 6412    |
| 80                | 29296  | 5903    |
| 75                | 21781  | 5821    |
| 70                | 18231  | 5851    |
| 65                | 15827  | 5929    |
| 60                | 14198  | 6028    |
| 55                | 12999  | 6133    |
| 50                | 11841  | 6254    |
| 45                | 10819  | 6383    |

|                      |   |
|----------------------|---|
| C Range: 0 - 360DEG  | γ Range: 0 - 180DEG                               |
| C Interval: 30.0DEG  | γ Interval: 1.0DEG                                |
| Test Speed: HIGH     | Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.488 |
| Temperature:25.3℃    | Humidity:65.0%                                    |
| Operators:           | Test Distance:6.360m [K=1.0000]                   |
| Test Date:2025-02-19 | Remarks:  |

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|  |                 |                  |
|--|-----------------|------------------|
| Test:U:24.00V I:0.4277A P:10.26W PF:1.000 Freq:0Hz |                 |                  |
| Lamp Flux:642.677x1 lm                             |                 |                  |
| NAME: SF18-24V-3528-144-3500K-80                   | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.: OLYMPIA lighting                             | 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  | 1.13   | 1.13 | 1.13 | 1.07 | 1.07 | 1.07 | .97 | .97 | .97 | .87 | .87 | .87 | .79 | .79 | .79 | .75 |
| 1.0  | .94  | .89  | .84  | .89  | .84  | .80  | .80 | .76 | .73 | .72 | .69 | .66 | .64 | .62 | .60 | .56 |
| 2.0  | .80  | .72  | .66  | .76  | .69  | .63  | .68 | .62 | .57 | .61 | .56 | .52 | .54 | .51 | .48 | .44 |
| 3.0  | .69  | .60  | .53  | .66  | .57  | .51  | .59 | .52 | .47 | .53 | .47 | .43 | .47 | .43 | .39 | .35 |
| 4.0  | .61  | .51  | .44  | .57  | .49  | .42  | .52 | .45 | .39 | .46 | .40 | .36 | .41 | .37 | .33 | .29 |
| 5.0  | .54  | .44  | .37  | .51  | .42  | .36  | .46 | .39 | .33 | .41 | .35 | .30 | .37 | .32 | .28 | .25 |
| 6.0  | .48  | .38  | .32  | .45  | .37  | .31  | .41 | .34 | .28 | .37 | .31 | .26 | .33 | .28 | .24 | .21 |
| 7.0  | .43  | .34  | .28  | .41  | .33  | .27  | .37 | .30 | .25 | .33 | .27 | .23 | .30 | .25 | .21 | .19 |
| 8.0  | .39  | .30  | .24  | .37  | .29  | .23  | .34 | .27 | .22 | .31 | .25 | .20 | .28 | .22 | .19 | .16 |
| 9.0  | .36  | .27  | .22  | .34  | .26  | .21  | .31 | .24 | .19 | .28 | .22 | .18 | .25 | .20 | .17 | .15 |
| 10.0 | .33  | .25  | .19  | .31  | .24  | .19  | .28 | .22 | .17 | .26 | .20 | .16 | .23 | .19 | .15 | .13 |



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2025-02-19

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.488  
Humidity:65.0%  
Test Distance:6.360m [K=1.0000]  
Remarks:

## WEC AND CCEC

|  |                 |                  |
|--|-----------------|------------------|
| Test:U:24.00V I:0.4277A P:10.26W PF:1.000 Freq:0Hz<br>Lamp Flux:642.677x1 lm |                 |                  |
| NAME: SF18-24V-3528-144-3500K-80   | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.: OLympia lighting   | 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  | .385                  | .219 | .069 | .370 | .211 | .067 | .342 | .196 | .063 | .316 | .182 | .058 | .292 | .169 | .055 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.0  | .333                  | .183 | .056 | .320 | .176 | .054 | .294 | .164 | .051 | .271 | .152 | .048 | .249 | .141 | .044 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.0  | .296                  | .157 | .047 | .284 | .152 | .046 | .261 | .141 | .043 | .239 | .131 | .040 | .219 | .121 | .038 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.0  | .266                  | .138 | .041 | .255 | .133 | .039 | .234 | .124 | .037 | .215 | .115 | .035 | .196 | .107 | .032 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.0  | .242                  | .123 | .036 | .232 | .119 | .035 | .212 | .111 | .033 | .195 | .103 | .031 | .178 | .095 | .029 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.0  | .221                  | .111 | .032 | .212 | .107 | .031 | .195 | .100 | .029 | .178 | .093 | .027 | .163 | .086 | .025 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7.0  | .204                  | .101 | .029 | .196 | .097 | .028 | .179 | .091 | .026 | .164 | .084 | .025 | .150 | .078 | .023 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8.0  | .189                  | .092 | .026 | .181 | .089 | .025 | .166 | .083 | .024 | .153 | .077 | .022 | .139 | .072 | .021 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.0  | .176                  | .085 | .024 | .169 | .082 | .023 | .155 | .077 | .022 | .142 | .071 | .020 | .130 | .066 | .019 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.0 | .165                  | .079 | .022 | .158 | .076 | .021 | .145 | .071 | .020 | .133 | .066 | .019 | .122 | .061 | .018 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

| 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  | .384                  | .384 | .384 | .328 | .328 | .328 | .224  | .224 | .224 | .129 | .129 | .129 | .041 | .041 | .041 |   |
| 1.0  | .381                  | .350 | .323 | .326 | .301 | .278 | .223  | .207 | .193 | .128 | .120 | .112 | .041 | .039 | .036 |   |
| 2.0  | .374                  | .328 | .289 | .320 | .282 | .250 | .220  | .195 | .174 | .127 | .114 | .102 | .041 | .037 | .033 |   |
| 3.0  | .367                  | .312 | .268 | .315 | .269 | .232 | .216  | .187 | .163 | .125 | .109 | .096 | .040 | .035 | .031 |   |
| 4.0  | .359                  | .300 | .254 | .308 | .259 | .221 | .212  | .180 | .155 | .123 | .106 | .092 | .039 | .034 | .030 |   |
| 5.0  | .352                  | .290 | .244 | .302 | .251 | .213 | .208  | .175 | .150 | .121 | .103 | .089 | .039 | .034 | .029 |   |
| 6.0  | .344                  | .282 | .238 | .296 | .244 | .207 | .204  | .171 | .146 | .118 | .101 | .087 | .038 | .033 | .029 |   |
| 7.0  | .337                  | .276 | .233 | .290 | .239 | .203 | .201  | .168 | .144 | .117 | .099 | .085 | .038 | .032 | .028 |   |
| 8.0  | .331                  | .270 | .229 | .285 | .234 | .199 | .197  | .165 | .141 | .115 | .097 | .084 | .037 | .032 | .028 |   |
| 9.0  | .325                  | .266 | .226 | .280 | .230 | .197 | .194  | .162 | .140 | .113 | .096 | .083 | .037 | .031 | .028 |   |
| 10.0 | .319                  | .261 | .223 | .275 | .227 | .195 | .191  | .160 | .138 | .111 | .094 | .083 | .036 | .031 | .027 |   |

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2025-02-19

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.488  
Humidity:65.0%  
Test Distance:6.360m [K=1.0000]  
Remarks:

UGR(Unified Glare Rating) Table

|  |     |                  |      |      |                 |      |                |                  |      |      |      |
|--|-----|------------------|------|------|-----------------|------|----------------|------------------|------|------|------|
| Test:U:24.00V I:0.4277A P:10.26W PF:1.000 Freq:0Hz<br>Lamp Flux:642.677x1 lm |     |                  |      |      |                 |      |                |                  |      |      |      |
| NAME: SF18-24V-3528-144-3500K-80   |     |                  |      |      | TYPE:           |      |                | WEIGHT:          |      |      |      |
| SPEC.:   |     |                  |      |      | DIM.: Length=1m |      |                | SERIAL No.:      |      |      |      |
| MFR.: OLympia lighting   |     |                  |      |      | 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  | 2H  | 21.5             | 22.8 | 22.1 | 23.5            | 24.2 | 18.0           | 19.3             | 18.6 | 19.9 | 20.6 |
|  | 3H  | 24.3             | 25.5 | 25.0 | 26.2            | 26.9 | 19.7           | 20.9             | 20.3 | 21.5 | 22.3 |
|  | 4H  | 25.8             | 26.9 | 26.4 | 27.6            | 28.3 | 20.4           | 21.6             | 21.1 | 22.2 | 23.0 |
|  | 6H  | 27.3             | 28.4 | 28.0 | 29.1            | 29.9 | 21.1           | 22.1             | 21.7 | 22.8 | 23.6 |
|  | 8H  | 28.2             | 29.2 | 28.9 | 29.9            | 30.7 | 21.3           | 22.3             | 22.0 | 23.0 | 23.8 |
|  | 12H | 29.2             | 30.2 | 29.9 | 30.9            | 31.7 | 21.5           | 22.5             | 22.2 | 23.2 | 24.0 |
| 4H   | 2H  | 22.0             | 23.2 | 22.7 | 23.8            | 24.6 | 19.6           | 20.7             | 20.2 | 21.3 | 22.1 |
|  | 3H  | 25.1             | 26.1 | 25.8 | 26.8            | 27.6 | 21.5           | 22.4             | 22.1 | 23.1 | 24.0 |
|  | 4H  | 26.7             | 27.6 | 27.4 | 28.4            | 29.2 | 22.4           | 23.3             | 23.1 | 24.0 | 24.8 |
|  | 6H  | 28.5             | 29.3 | 29.2 | 30.0            | 30.9 | 23.2           | 24.0             | 23.9 | 24.7 | 25.6 |
|  | 8H  | 29.5             | 30.2 | 30.2 | 31.0            | 31.9 | 23.5           | 24.3             | 24.3 | 25.0 | 25.9 |
|  | 12H | 30.6             | 31.3 | 31.4 | 32.1            | 33.0 | 23.8           | 24.5             | 24.5 | 25.2 | 26.2 |
| 8H   | 4H  | 27.0             | 27.8 | 27.8 | 28.5            | 29.4 | 23.6           | 24.4             | 24.4 | 25.2 | 26.0 |
|  | 6H  | 29.1             | 29.7 | 29.9 | 30.5            | 31.4 | 24.8           | 25.5             | 25.6 | 26.2 | 27.2 |
|  | 8H  | 30.3             | 30.9 | 31.1 | 31.7            | 32.6 | 25.4           | 25.9             | 26.1 | 26.7 | 27.7 |
|  | 12H | 31.7             | 32.2 | 32.5 | 33.0            | 34.0 | 25.8           | 26.3             | 26.6 | 27.1 | 28.1 |
| 12H  | 4H  | 27.0             | 27.7 | 27.8 | 28.5            | 29.4 | 24.0           | 24.7             | 24.8 | 25.5 | 26.4 |
|  | 6H  | 29.2             | 29.8 | 30.0 | 30.6            | 31.5 | 25.4           | 26.0             | 26.2 | 26.8 | 27.7 |
|  | 8H  | 30.5             | 31.0 | 31.3 | 31.8            | 32.8 | 26.1           | 26.6             | 26.9 | 27.4 | 28.4 |
| Variations with the observer position at spacings(CIE Pub.117):              |     |                  |      |      |                 |      |                |                  |      |      |      |
| S = 1.0H   |     | + 0.1 / - 0.1    |      |      |                 |      | + 0.1 / - 0.1  |                  |      |      |      |
| 1.5H   |     | + 0.2 / - 0.2    |      |      |                 |      | + 0.2 / - 0.3  |                  |      |      |      |
| 2.0H   |     | + 0.2 / - 0.3    |      |      |                 |      | + 0.3 / - 0.4  |                  |      |      |      |

CIE Pub.117, 642.7 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.5)  
Area: 0.016 m2

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2025-02-19

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.488  
Humidity:65.0%  
Test Distance:6.360m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

|  |                 |                  |
|--|-----------------|------------------|
| Test:U:24.00V I:0.4277A P:10.26W PF:1.000 Freq:0Hz<br>Lamp Flux:642.677x1 lm |                 |                  |
| NAME: SF18-24V-3528-144-3500K-80   | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.: OLympia lighting   | SUR.:           | Shielding Angle: |

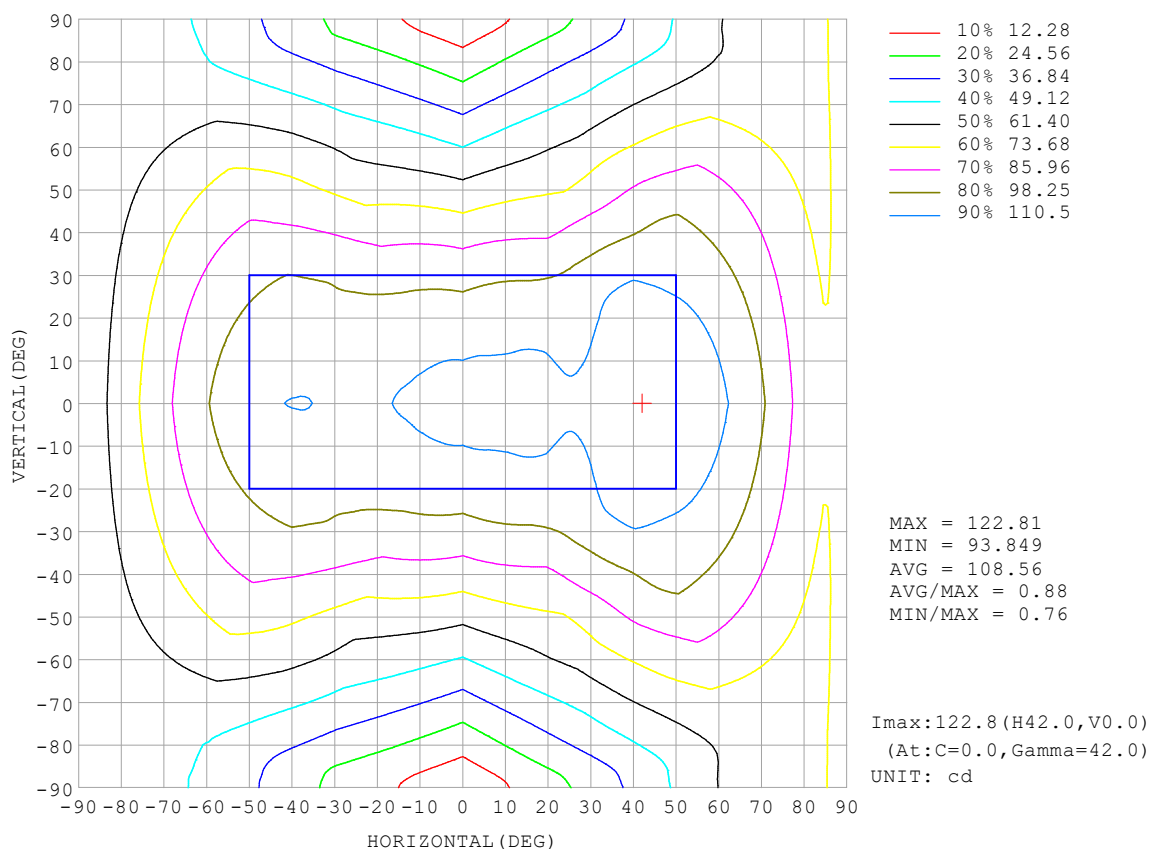
| REFLECTANCE                      |  |     |           |     |     |     |     |               |     |        |
|----------------------------------|--|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling                          | 0.8  | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 45   | 32  | 25        | 43  | 32  | 25  | 41  | 30            | 24  | 17     |
| 0.80                             | 54   | 40  | 32        | 52  | 40  | 32  | 49  | 38            | 31  | 22     |
| 1.00                             | 61   | 48  | 40        | 59  | 47  | 39  | 55  | 47            | 37  | 28     |
| 1.25                             | 68   | 55  | 47        | 66  | 54  | 46  | 61  | 51            | 43  | 33     |
| 1.50                             | 74   | 61  | 52        | 71  | 59  | 51  | 65  | 55            | 48  | 37     |
| 2.00                             | 81   | 70  | 61        | 78  | 67  | 59  | 71  | 62            | 56  | 43     |
| 2.50                             | 86   | 75  | 67        | 82  | 72  | 65  | 75  | 67            | 61  | 46     |
| 3.00                             | 90   | 80  | 72        | 85  | 77  | 70  | 78  | 71            | 65  | 50     |
| 4.00                             | 95   | 86  | 79        | 90  | 83  | 77  | 82  | 76            | 71  | 54     |
| 5.00                             | 98   | 90  | 84        | 93  | 87  | 81  | 84  | 79            | 75  | 57     |
| ROOM INDEX                       | UF (total)   |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |  |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3 °C  
 Operators:  
 Test Date: 2025-02-19

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.488  
 Humidity: 65.0%  
 Test Distance: 6.360m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

|  |                 |                  |
|--|-----------------|------------------|
| Test:U:24.00V I:0.4277A P:10.26W PF:1.000 Freq:0Hz<br>Lamp Flux:642.677x1 lm |                 |                  |
| NAME: SF18-24V-3528-144-3500K-80   | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.: OLympia lighting   | SUR.:           | Shielding Angle: |



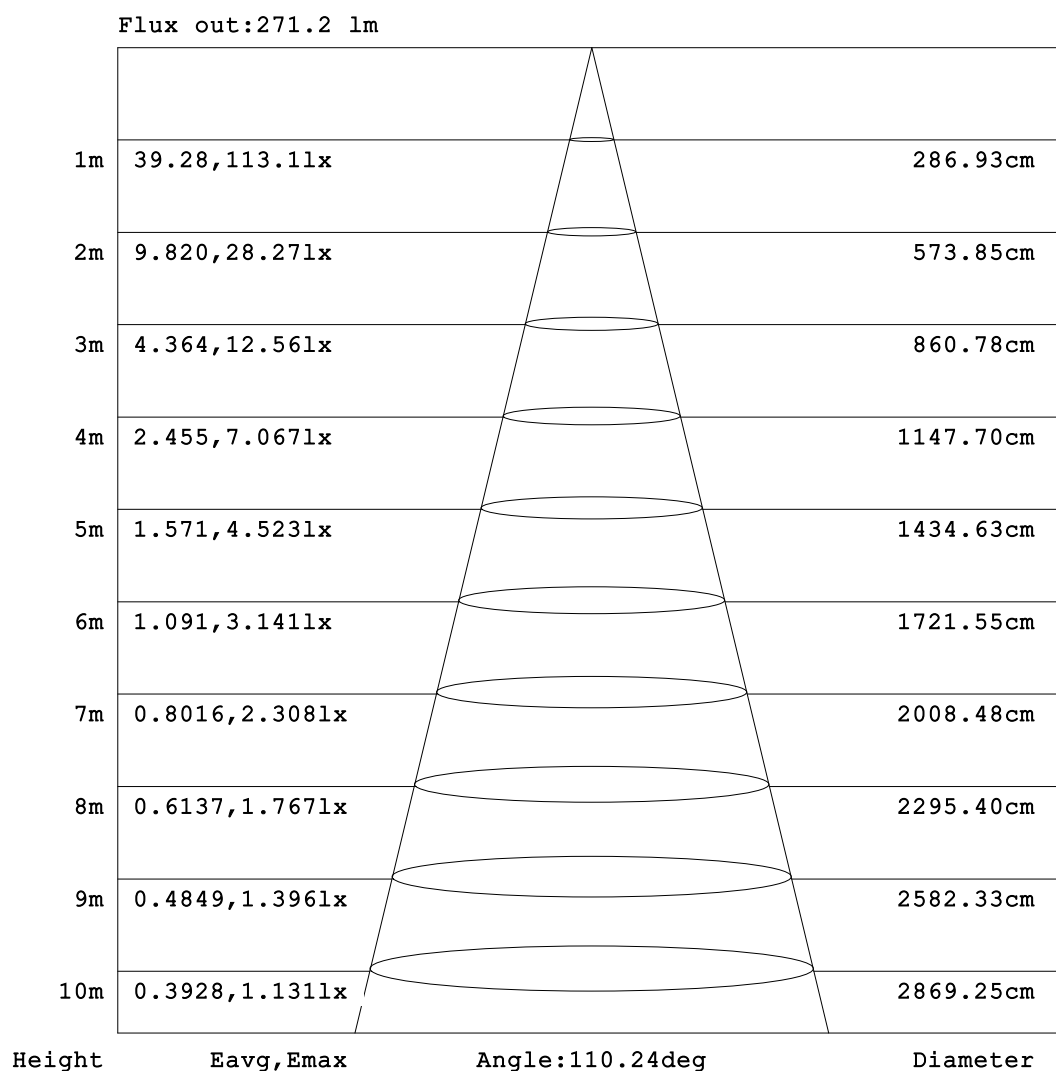
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2025-02-19

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.488  
Humidity:65.0%  
Test Distance:6.360m [K=1.0000]  
Remarks:



## AAI Figure

|  |                 |                  |
|--|-----------------|------------------|
| Test:U:24.00V I:0.4277A P:10.26W PF:1.000 Freq:0Hz<br>Lamp Flux:642.677x1 lm |                 |                  |
| NAME: SF18-24V-3528-144-3500K-80   | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.: OLympia lighting   | SUR.:           | Shielding Angle: |



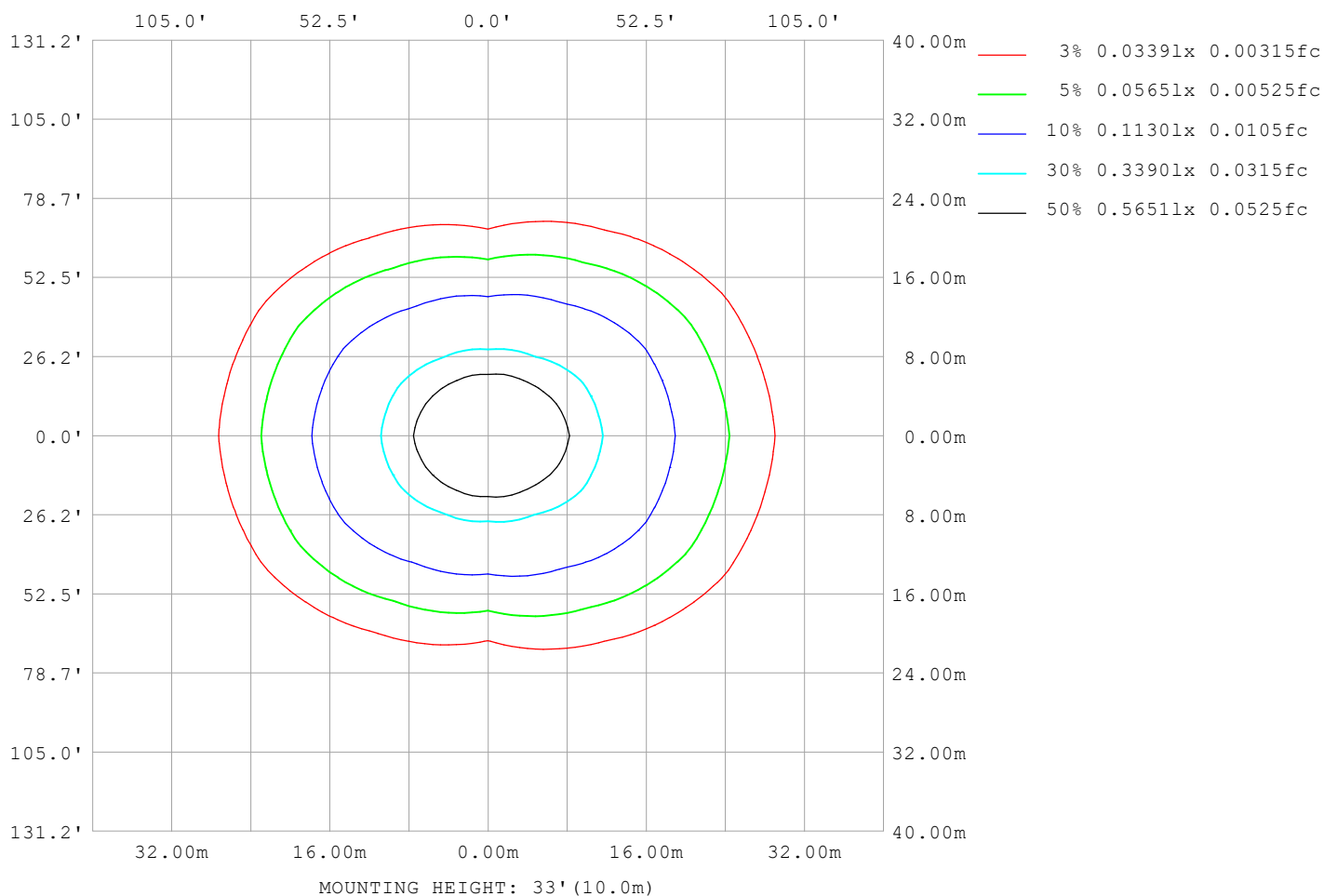
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2025-02-19

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.488  
Humidity:65.0%  
Test Distance:6.360m [K=1.0000]  
Remarks:

## ISOLUX DIAGRAM

|  |                 |                  |
|--|-----------------|------------------|
| Test:U:24.00V I:0.4277A P:10.26W PF:1.000 Freq:0Hz<br>Lamp Flux:642.677x1 lm |                 |                  |
| NAME: SF18-24V-3528-144-3500K-80   | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.: OLympia lighting   | SUR.:           | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 2025-02-19

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.488  
Humidity: 65.0%  
Test Distance: 6.360m [K=1.0000]  
Remarks:

## LED Avg.L Report

|  |                 |                  |
|--|-----------------|------------------|
| Test:U:24.00V I:0.4277A P:10.26W PF:1.000 Freq:0Hz<br>Lamp Flux:642.677x1 lm |                 |                  |
| NAME: SF18-24V-3528-144-3500K-80   | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.: OLympia lighting   | SUR.:           | Shielding Angle: |

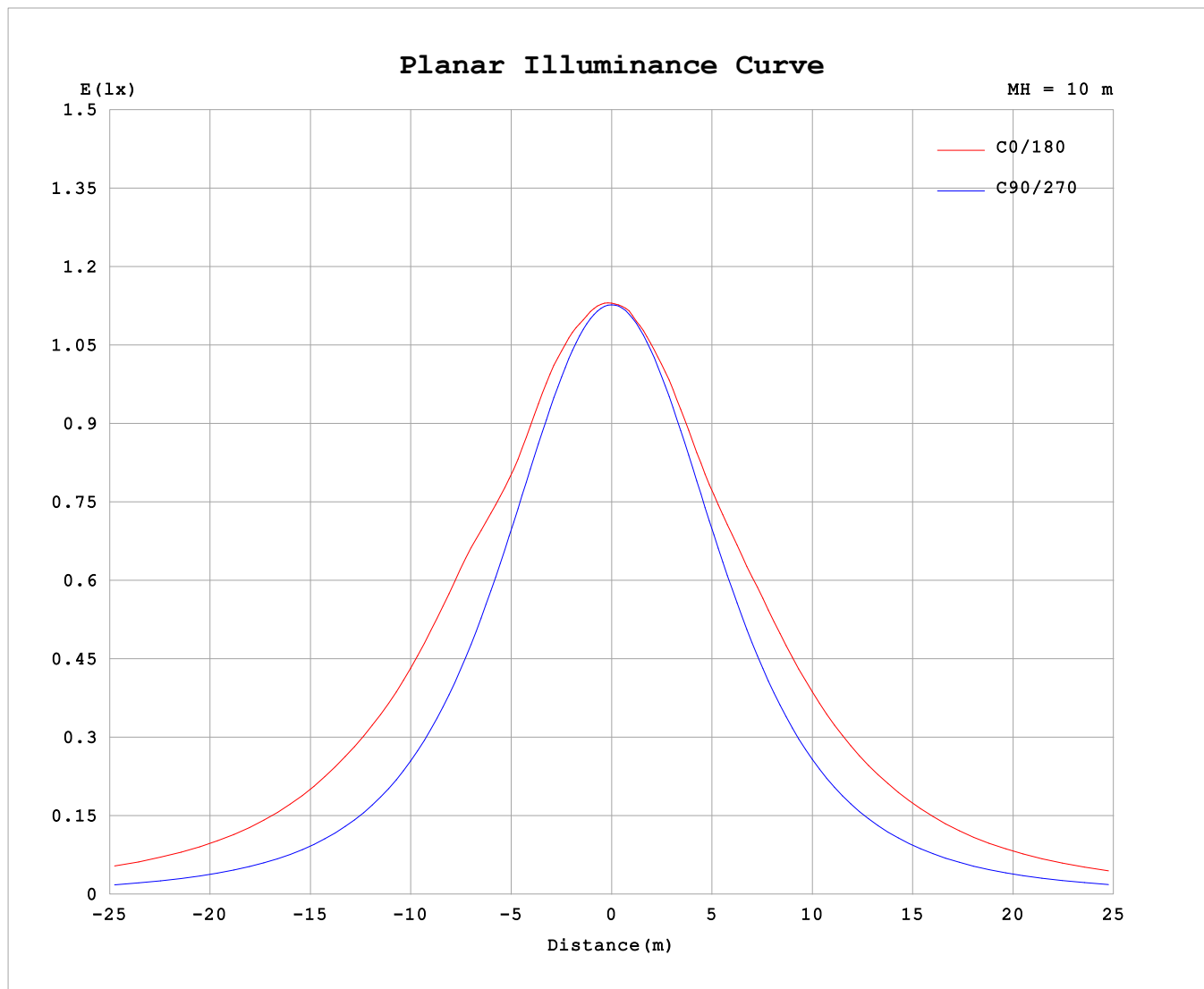
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 14594 |
| L_0~180 (75) av  | 19914 |
| L_0~180 (85) av  | 48154 |
| L_90~270 (65) av | 6010  |
| L_90~270 (75) av | 5941  |
| L_90~270 (85) av | 6706  |
| L_45 (65) av     | 10984 |
| L_45 (75) av     | 14428 |
| L_45 (85) av     | 31235 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2025-02-19

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.488  
Humidity:65.0%  
Test Distance:6.360m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3 °C  
Operators:  
Test Date: 2025-02-19

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.488  
Humidity: 65.0%  
Test Distance: 6.360m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|  |                 |                  |
|--|-----------------|------------------|
| Test:U:24.00V I:0.4277A P:10.26W PF:1.000 Freq:0Hz<br>Lamp Flux:642.677x1 lm |                 |                  |
| NAME: SF18-24V-3528-144-3500K-80   | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.: OLYMPIA lighting   | SUR.:           | Shielding Angle: |

Table--1

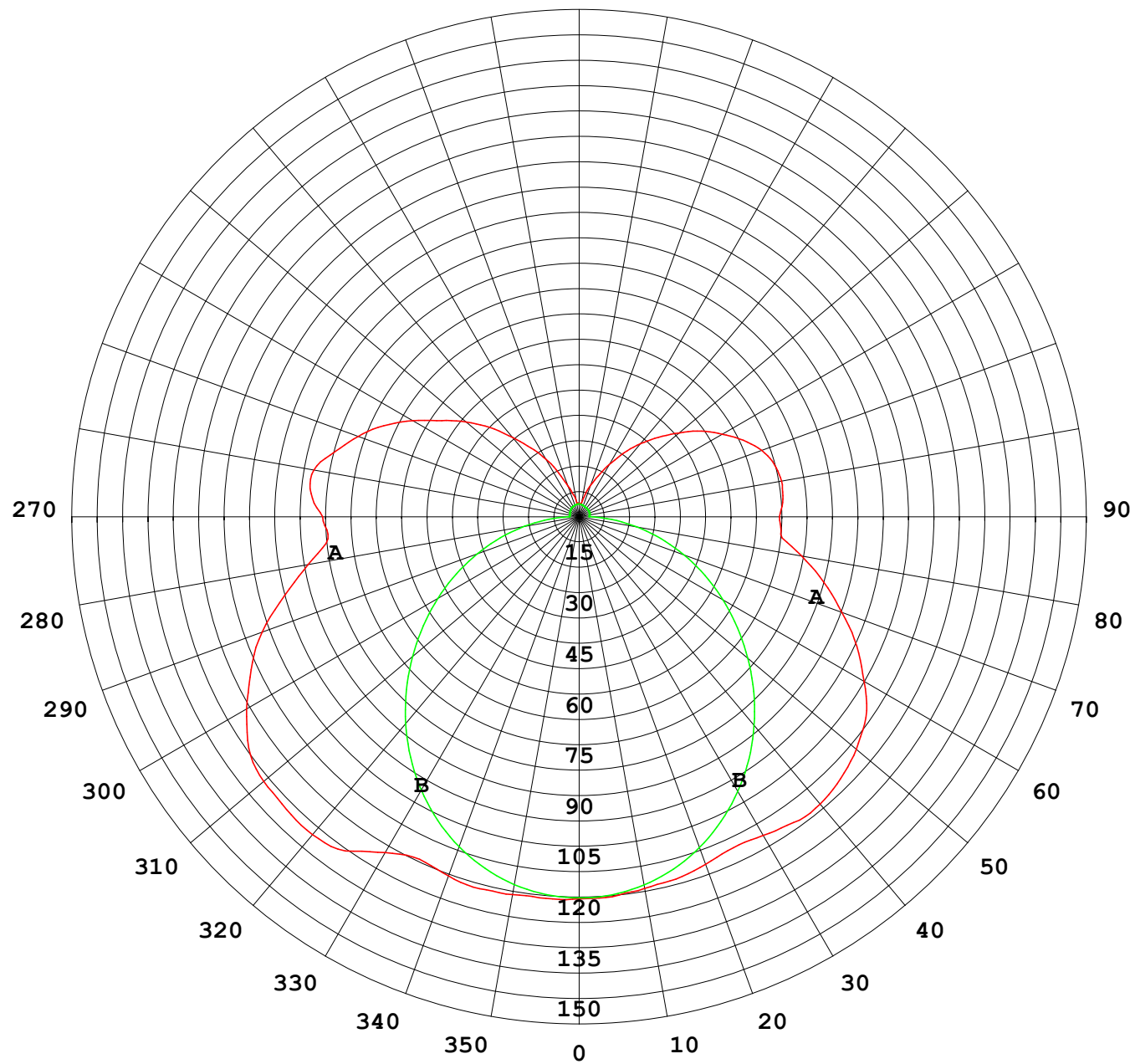
UNIT: cd

| C (DEG)<br>γ (DEG) | 0    | 30   | 60   | 90   | 120  | 150  | 180  | 210  | 240  | 270  | 300  | 330  |  |  |  |  |  |  |  |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|
| 0                  | 113  | 113  | 113  | 113  | 113  | 113  | 113  | 113  | 113  | 113  | 113  | 113  |  |  |  |  |  |  |  |
| 5                  | 113  | 113  | 113  | 112  | 112  | 113  | 113  | 113  | 112  | 112  | 113  | 113  |  |  |  |  |  |  |  |
| 10                 | 113  | 113  | 112  | 111  | 111  | 111  | 111  | 111  | 111  | 111  | 112  | 113  |  |  |  |  |  |  |  |
| 15                 | 114  | 112  | 109  | 108  | 108  | 110  | 111  | 110  | 108  | 108  | 109  | 113  |  |  |  |  |  |  |  |
| 20                 | 113  | 112  | 107  | 104  | 105  | 108  | 109  | 108  | 105  | 104  | 107  | 112  |  |  |  |  |  |  |  |
| 25                 | 112  | 109  | 104  | 99.2 | 101  | 106  | 108  | 106  | 102  | 99.5 | 104  | 109  |  |  |  |  |  |  |  |
| 30                 | 115  | 108  | 100  | 93.5 | 97.0 | 103  | 109  | 104  | 97.6 | 94.0 | 101  | 107  |  |  |  |  |  |  |  |
| 35                 | 120  | 109  | 95.0 | 87.0 | 91.8 | 103  | 110  | 103  | 92.5 | 87.7 | 95.3 | 109  |  |  |  |  |  |  |  |
| 40                 | 123  | 112  | 88.8 | 79.9 | 86.0 | 102  | 111  | 103  | 86.9 | 80.6 | 89.2 | 112  |  |  |  |  |  |  |  |
| 45                 | 122  | 112  | 83.0 | 72.3 | 79.6 | 100  | 109  | 101  | 80.7 | 73.1 | 83.3 | 112  |  |  |  |  |  |  |  |
| 50                 | 122  | 109  | 77.7 | 64.4 | 72.9 | 96.7 | 107  | 97.6 | 74.3 | 65.2 | 77.8 | 109  |  |  |  |  |  |  |  |
| 55                 | 119  | 106  | 72.0 | 56.4 | 66.3 | 92.1 | 103  | 93.2 | 67.7 | 57.2 | 72.1 | 105  |  |  |  |  |  |  |  |
| 60                 | 113  | 102  | 67.3 | 48.3 | 60.4 | 86.9 | 97.2 | 87.8 | 62.3 | 49.2 | 67.1 | 101  |  |  |  |  |  |  |  |
| 65                 | 107  | 95.5 | 62.2 | 40.1 | 55.1 | 81.0 | 90.5 | 81.9 | 57.0 | 41.1 | 62.2 | 95.1 |  |  |  |  |  |  |  |
| 70                 | 99.6 | 87.9 | 55.7 | 32.1 | 48.6 | 73.8 | 82.5 | 74.8 | 50.4 | 33.0 | 55.8 | 87.8 |  |  |  |  |  |  |  |
| 75                 | 90.1 | 79.4 | 49.0 | 24.1 | 41.6 | 64.7 | 74.8 | 65.7 | 43.4 | 25.1 | 49.1 | 79.5 |  |  |  |  |  |  |  |
| 80                 | 81.3 | 70.1 | 42.1 | 16.4 | 33.9 | 56.4 | 66.7 | 57.2 | 35.8 | 17.3 | 42.2 | 70.1 |  |  |  |  |  |  |  |
| 85                 | 74.5 | 62.3 | 34.1 | 8.95 | 25.6 | 48.7 | 59.8 | 49.2 | 27.5 | 9.75 | 34.2 | 62.0 |  |  |  |  |  |  |  |
| 90                 | 75.8 | 61.5 | 28.5 | 2.96 | 21.6 | 47.4 | 59.1 | 47.7 | 22.4 | 3.14 | 28.1 | 60.9 |  |  |  |  |  |  |  |
| 95                 | 79.5 | 63.5 | 26.8 | 2.95 | 20.7 | 48.8 | 60.4 | 48.9 | 21.4 | 3.02 | 26.3 | 62.9 |  |  |  |  |  |  |  |
| 100                | 79.6 | 63.6 | 21.5 | 2.94 | 20.1 | 49.9 | 60.7 | 50.3 | 21.1 | 3.12 | 21.7 | 63.3 |  |  |  |  |  |  |  |
| 105                | 74.6 | 56.9 | 19.5 | 2.95 | 20.0 | 48.9 | 59.7 | 49.5 | 20.5 | 3.21 | 19.0 | 57.1 |  |  |  |  |  |  |  |
| 110                | 69.5 | 52.7 | 19.3 | 2.99 | 20.1 | 45.8 | 57.4 | 46.6 | 20.6 | 3.27 | 19.4 | 49.8 |  |  |  |  |  |  |  |
| 115                | 63.7 | 47.3 | 19.2 | 3.07 | 19.7 | 42.1 | 53.6 | 43.1 | 20.5 | 3.32 | 19.4 | 47.9 |  |  |  |  |  |  |  |
| 120                | 56.8 | 42.0 | 16.9 | 3.15 | 18.1 | 38.1 | 48.8 | 39.2 | 18.9 | 3.34 | 17.6 | 43.1 |  |  |  |  |  |  |  |
| 125                | 49.5 | 38.4 | 14.0 | 3.24 | 16.2 | 34.4 | 44.2 | 35.3 | 17.0 | 3.37 | 14.9 | 38.5 |  |  |  |  |  |  |  |
| 130                | 43.6 | 33.7 | 9.30 | 3.36 | 13.9 | 30.6 | 38.6 | 31.3 | 14.6 | 3.38 | 12.1 | 31.7 |  |  |  |  |  |  |  |
| 135                | 37.4 | 26.2 | 6.65 | 3.47 | 11.9 | 26.7 | 33.2 | 27.1 | 12.5 | 3.39 | 9.49 | 22.5 |  |  |  |  |  |  |  |
| 140                | 30.6 | 21.1 | 6.31 | 3.55 | 10.2 | 22.5 | 28.2 | 22.9 | 10.7 | 3.40 | 8.07 | 20.2 |  |  |  |  |  |  |  |
| 145                | 24.8 | 15.6 | 6.23 | 3.59 | 8.81 | 18.2 | 23.0 | 18.4 | 9.18 | 3.41 | 6.80 | 15.7 |  |  |  |  |  |  |  |
| 150                | 19.6 | 9.60 | 5.91 | 3.60 | 7.04 | 14.5 | 17.9 | 14.7 | 7.37 | 3.46 | 5.75 | 11.9 |  |  |  |  |  |  |  |
| 155                | 14.3 | 7.00 | 5.26 | 3.64 | 5.63 | 11.9 | 13.3 | 12.1 | 5.77 | 3.53 | 5.03 | 8.55 |  |  |  |  |  |  |  |
| 160                | 9.76 | 5.57 | 4.90 | 3.70 | 4.52 | 8.63 | 9.86 | 8.73 | 4.61 | 3.59 | 4.78 | 6.61 |  |  |  |  |  |  |  |
| 165                | 7.03 | 5.01 | 4.49 | 3.77 | 4.22 | 5.82 | 6.72 | 5.77 | 4.16 | 3.67 | 4.39 | 5.13 |  |  |  |  |  |  |  |
| 170                | 4.29 | 4.58 | 4.30 | 3.82 | 4.02 | 4.48 | 4.24 | 4.44 | 3.96 | 3.74 | 4.25 | 4.59 |  |  |  |  |  |  |  |
| 175                | 4.06 | 4.28 | 4.27 | 3.85 | 3.89 | 4.08 | 3.92 | 4.06 | 3.85 | 3.79 | 4.23 | 4.33 |  |  |  |  |  |  |  |
| 180                | 3.89 | 3.93 | 3.90 | 3.85 | 3.89 | 3.98 | 3.85 | 3.92 | 3.89 | 3.84 | 3.90 | 4.00 |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2025-02-19

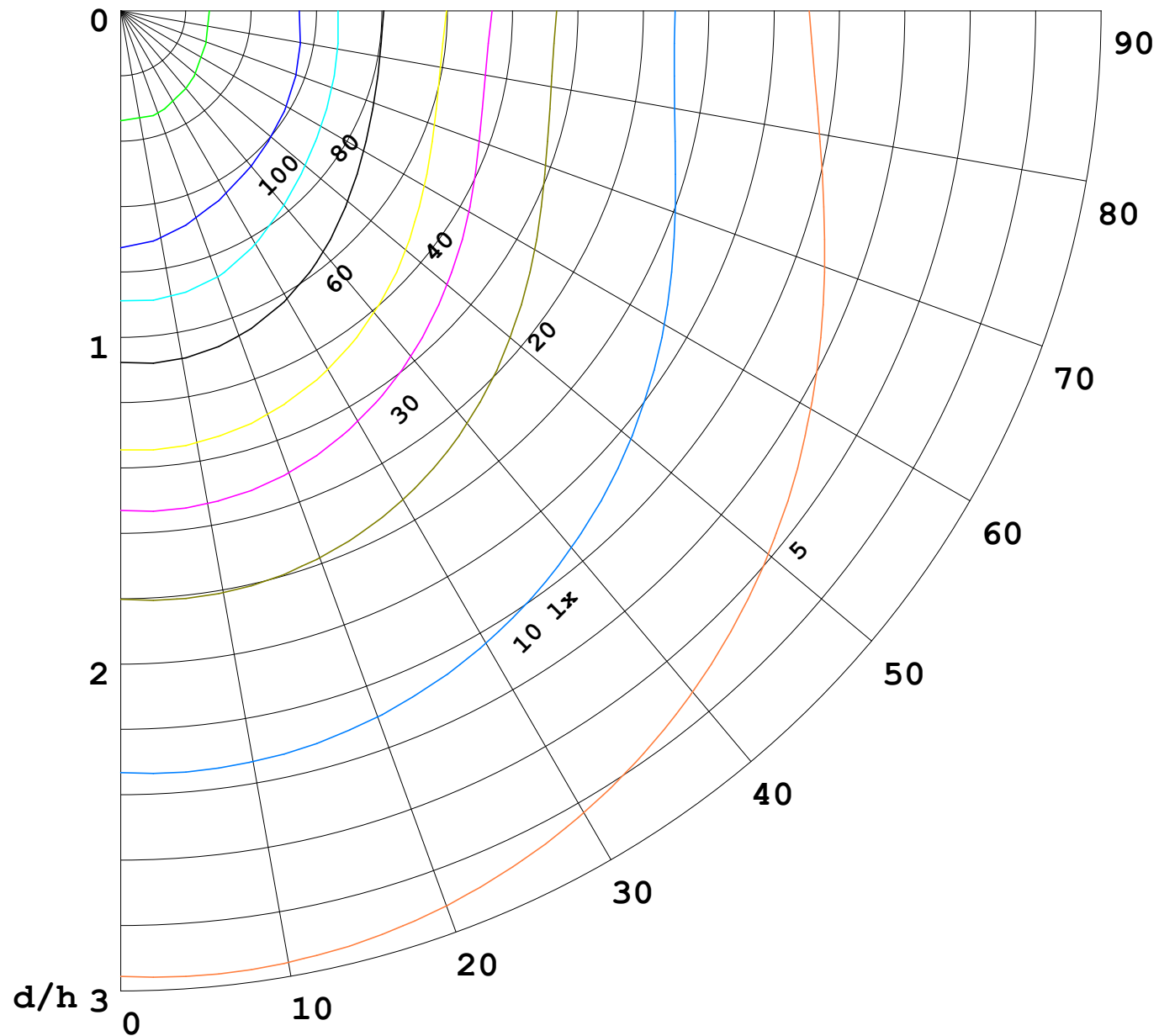
γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.488  
Humidity:65.0%  
Test Distance:6.360m [K=1.0000]  
Remarks:

I (cd)



1000 lm

$\kappa = 1$



F = 1000 lm  
 K = 0.7  
 Hcc = 0.8 m  
 Hfc = 0.0 m  
 Eave = 100 lx

|       | Pcc | Pw | Pfc |
|-------|-----|----|-----|
| ————— | 70  | 50 | 30  |
| ————— | 50  | 30 | 20  |

