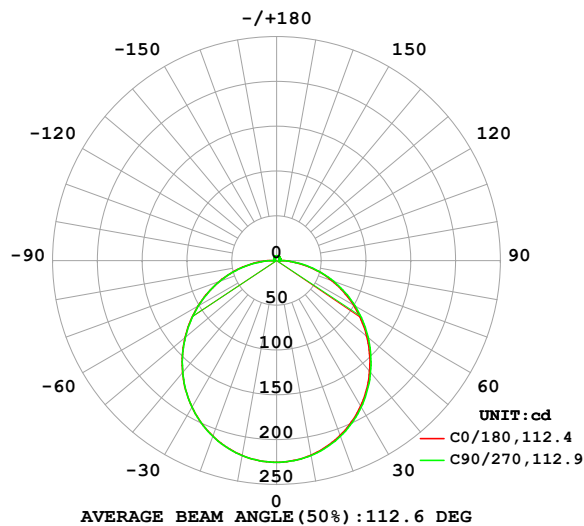


## LUMINAIRE PHOTOMETRIC TEST REPORT

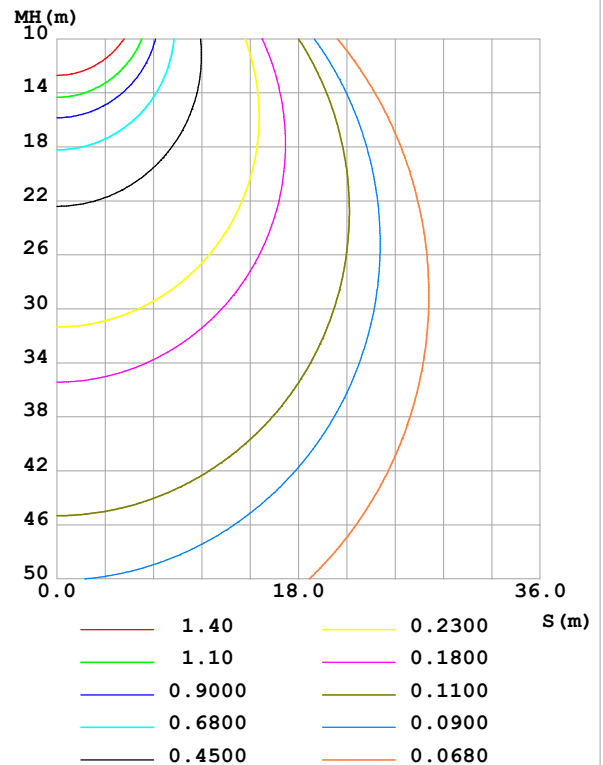
|  |                 |                  |
|--|-----------------|------------------|
| Test:U:24.00V I:0.4313A P:10.35W PF:1.000 Freq:0Hz<br>Lamp Flux:686.338x1 lm |                 |                  |
| NAME: SF16-24V-3528-144-5000-80  | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.:  | SUR.:           | Shielding Angle: |

| DATA OF LAMP     |         | PHOTOMETRIC DATA Eff: 66.31 lm/W |        |                   |          |
|------------------|---------|----------------------------------|--------|-------------------|----------|
| MODEL            |         | I <sub>max</sub> (cd)            | 225.1  | S/MH(C0/180)      | 1.25     |
| NOMINAL POWER(W) |         | LOR(%)                           | 100.0  | S/MH(C90/270)     | 1.25     |
| RATED VOLTAGE(V) |         | TOTAL FLUX(lm)                   | 686.34 | η UP,DN(C0-180)   | 1.9,48.1 |
| NOMINAL FLUX(lm) | 686.338 | CIE CLASS                        | DIRECT | η UP,DN(C180-360) | 1.8,48.2 |
| LAMPS INSIDE     | 1       | η up (%)                         | 3.7    | CIBSE SHR NOM     | 1.25     |
| TEST VOLTAGE(V)  |         | η down (%)                       | 96.3   | CIBSE SHR MAX     | 1.35     |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:Cloud  
Test Date:2024-10-28

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       | 220.6                 | 221.0 | 221.0 | 220.9 | 221.0 | 221.0 | 221.1 | 221.2 | 0- 10    | 21.29       | 21.29        | 3.1,3.1    |
| 20       | 207.7                 | 208.6 | 208.7 | 208.5 | 208.5 | 208.7 | 208.8 | 208.9 | 10- 20   | 60.87       | 82.16        | 12,12      |
| 30       | 187.7                 | 188.8 | 189.1 | 188.8 | 189.0 | 189.1 | 189.0 | 189.2 | 20- 30   | 91.94       | 174.1        | 25.4,25.4  |
| 40       | 161.6                 | 162.9 | 163.3 | 162.9 | 163.4 | 163.4 | 163.2 | 163.5 | 30- 40   | 110.5       | 284.6        | 41.5,41.5  |
| 50       | 131.4                 | 132.8 | 133.3 | 132.8 | 133.4 | 133.3 | 133.2 | 133.2 | 40- 50   | 114.5       | 399.0        | 58.1,58.1  |
| 60       | 99.01                 | 100.3 | 101.2 | 100.3 | 101.1 | 100.8 | 100.7 | 100.6 | 50- 60   | 104.5       | 503.6        | 73.4,73.4  |
| 70       | 65.91                 | 67.11 | 67.79 | 67.04 | 67.98 | 67.55 | 67.30 | 67.32 | 60- 70   | 83.05       | 586.6        | 85.5,85.5  |
| 80       | 33.41                 | 34.37 | 34.54 | 34.24 | 35.32 | 34.77 | 34.20 | 34.51 | 70- 80   | 53.59       | 640.2        | 93.3,93.3  |
| 90       | 7.884                 | 6.708 | 3.249 | 6.707 | 8.902 | 7.170 | 3.490 | 6.705 | 80- 90   | 20.78       | 661.0        | 96.3,96.3  |
| 100      | 3.057                 | 3.063 | 3.183 | 3.105 | 3.000 | 3.473 | 3.447 | 2.946 | 90-100   | 4.039       | 665.0        | 96.9,96.9  |
| 110      | 3.474                 | 3.475 | 3.582 | 3.498 | 3.144 | 3.678 | 3.600 | 3.306 | 100-110  | 3.457       | 668.5        | 97.4,97.4  |
| 120      | 3.882                 | 3.756 | 3.914 | 3.906 | 3.501 | 3.938 | 3.909 | 3.921 | 110-120  | 3.606       | 672.1        | 97.9,97.9  |
| 130      | 4.259                 | 4.081 | 4.218 | 4.282 | 3.886 | 4.223 | 4.239 | 4.213 | 120-130  | 3.578       | 675.7        | 98.4,98.4  |
| 140      | 4.587                 | 4.413 | 4.524 | 4.649 | 4.277 | 4.550 | 4.571 | 4.508 | 130-140  | 3.356       | 679.0        | 98.9,98.9  |
| 150      | 4.915                 | 4.739 | 4.971 | 5.008 | 4.662 | 4.919 | 4.912 | 4.835 | 140-150  | 2.937       | 682.0        | 99.4,99.4  |
| 160      | 5.240                 | 5.229 | 5.310 | 5.337 | 5.071 | 5.291 | 5.256 | 5.173 | 150-160  | 2.329       | 684.3        | 99.7,99.7  |
| 170      | 5.327                 | 5.501 | 5.578 | 5.569 | 5.258 | 5.536 | 5.559 | 5.485 | 160-170  | 1.518       | 685.8        | 99.9,99.9  |
| 180      | 5.445                 | 5.660 | 5.706 | 5.673 | 5.448 | 5.663 | 5.715 | 5.685 | 170-180  | 0.5310      | 686.3        | 100,100    |
| DEG      | LUMINOUS INTENSITY:cd |       |       |       |       |       |       |       |          | UNIT:lm     |              |            |

Conical surface Flux(90deg): 342.21 lm

%lum = 49.9%

%lamp = 49.9%

Conical surface Flux(130deg): 548.37 lm

%lum = 79.9%

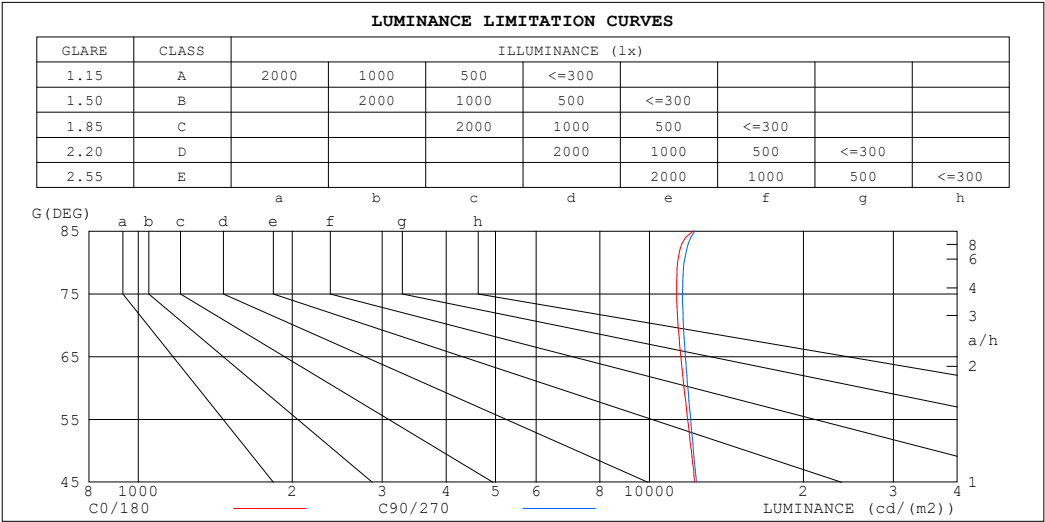
%lamp = 79.9%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3℃  
 Operators:Cloud  
 Test Date:2024-10-28

$\gamma$  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:0.4313A P:10.35W PF:1.000 Freq:0Hz<br>Lamp Flux:686.338x1 lm |                 |                  |
| NAME: SF16-24V-3528-144-5000-80  | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.:  | SUR.:           | Shielding Angle: |



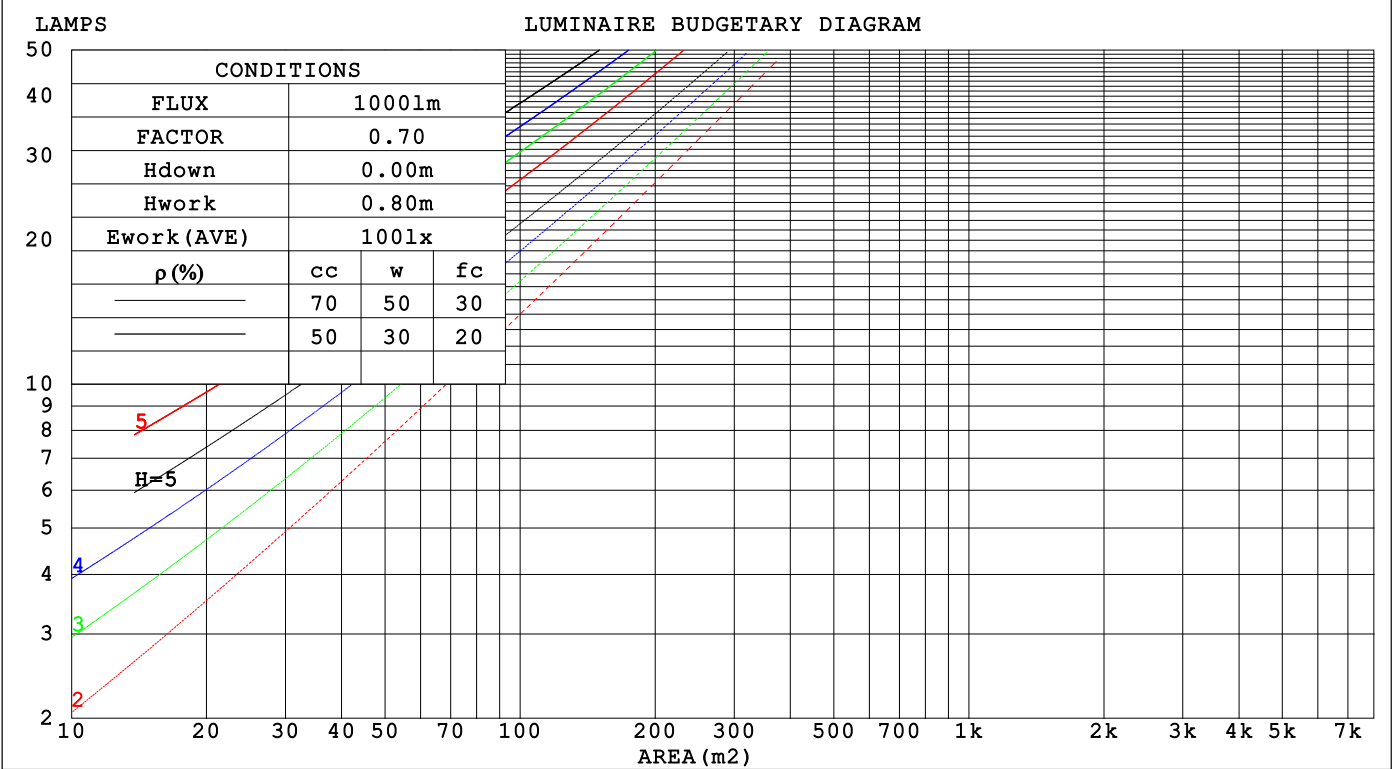
| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 12183  | 12267   |
| 80                | 11358  | 11690   |
| 75                | 11301  | 11602   |
| 70                | 11375  | 11648   |
| 65                | 11515  | 11758   |
| 60                | 11689  | 11888   |
| 55                | 11877  | 12035   |
| 50                | 12070  | 12190   |
| 45                | 12261  | 12353   |

|                      |   |
|----------------------|---|
| C Range: 0 - 360DEG  | γ Range: 0 - 180DEG                               |
| C Interval: 22.5DEG  | γ Interval: 1.0DEG                                |
| Test Speed: HIGH     | Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.488 |
| Temperature:25.3℃    | Humidity:65.0%                                    |
| Operators:Cloud      | Test Distance:6.360m [K=1.0000]                   |
| Test Date:2024-10-28 | Remarks:  |

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|  |                 |                  |
|--|-----------------|------------------|
| Test:U:24.00V I:0.4313A P:10.35W PF:1.000 Freq:0Hz |                 |                  |
| Lamp Flux:686.338x1 lm                             |                 |                  |
| NAME: SF16-24V-3528-144-5000-80                    | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | 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  | 1.18                  | 1.18 | 1.18 | 1.15                            | 1.15 | 1.15 | 1.09 | 1.09 | 1.09 | 1.04 | 1.04 | 1.04 | .99 | .99 | .99 | .96 |
| 1.0  | 1.02                  | .98  | .94  | .99                             | .95  | .92  | .95  | .91  | .88  | .90  | .87  | .85  | .86 | .84 | .82 | .79 |
| 2.0  | .89                   | .82  | .76  | .86                             | .80  | .74  | .82  | .77  | .72  | .78  | .74  | .70  | .75 | .71 | .68 | .65 |
| 3.0  | .78                   | .69  | .62  | .76                             | .68  | .62  | .72  | .66  | .60  | .69  | .63  | .59  | .66 | .61 | .57 | .55 |
| 4.0  | .69                   | .60  | .53  | .67                             | .59  | .52  | .64  | .57  | .51  | .61  | .55  | .50  | .59 | .53 | .49 | .47 |
| 5.0  | .61                   | .52  | .45  | .60                             | .51  | .45  | .57  | .50  | .44  | .55  | .48  | .43  | .53 | .47 | .42 | .40 |
| 6.0  | .55                   | .46  | .39  | .54                             | .45  | .39  | .52  | .44  | .38  | .50  | .43  | .38  | .48 | .42 | .37 | .35 |
| 7.0  | .50                   | .41  | .35  | .49                             | .40  | .35  | .47  | .39  | .34  | .45  | .38  | .33  | .44 | .38 | .33 | .31 |
| 8.0  | .45                   | .37  | .31  | .45                             | .36  | .31  | .43  | .36  | .30  | .41  | .35  | .30  | .40 | .34 | .30 | .28 |
| 9.0  | .42                   | .33  | .28  | .41                             | .33  | .28  | .40  | .32  | .27  | .38  | .32  | .27  | .37 | .31 | .27 | .25 |
| 10.0 | .38                   | .30  | .25  | .38                             | .30  | .25  | .37  | .30  | .25  | .35  | .29  | .24  | .34 | .28 | .24 | .22 |



C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:Cloud

Test Date:2024-10-28

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:0.4313A P:10.35W PF:1.000 Freq:0Hz<br>Lamp Flux:686.338x1 lm |  |  |                 |  |                  |
| NAME: SF16-24V-3528-144-5000-80  |  |  | TYPE:           |  | WEIGHT:          |
| SPEC.:   |  |  | DIM.: Length=1m |  | 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  | .326                  | .186 | .059 | .318 | .181 | .058 | .303 | .174 | .055 | .288 | .166 | .053 | .275 | .160 | .051 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.0  | .301                  | .165 | .051 | .294 | .162 | .050 | .280 | .156 | .048 | .267 | .150 | .047 | .256 | .145 | .046 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.0  | .276                  | .147 | .044 | .269 | .144 | .043 | .257 | .139 | .042 | .246 | .135 | .041 | .235 | .130 | .040 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.0  | .253                  | .131 | .039 | .247 | .129 | .038 | .236 | .125 | .037 | .226 | .121 | .037 | .217 | .118 | .036 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.0  | .233                  | .119 | .034 | .228 | .117 | .034 | .218 | .113 | .033 | .209 | .110 | .033 | .200 | .107 | .032 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.0  | .215                  | .108 | .031 | .211 | .106 | .031 | .202 | .104 | .030 | .194 | .101 | .030 | .186 | .098 | .029 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7.0  | .200                  | .099 | .028 | .196 | .098 | .028 | .188 | .095 | .027 | .181 | .093 | .027 | .174 | .090 | .027 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8.0  | .186                  | .091 | .026 | .183 | .090 | .025 | .176 | .088 | .025 | .169 | .086 | .025 | .163 | .083 | .024 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.0  | .175                  | .084 | .024 | .171 | .083 | .023 | .165 | .081 | .023 | .159 | .080 | .023 | .153 | .078 | .022 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.0 | .164                  | .079 | .022 | .161 | .078 | .022 | .155 | .076 | .021 | .149 | .074 | .021 | .144 | .073 | .021 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

| 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  | .219                  | .219 | .219 | .187 | .187 | .187 | .128  | .128 | .128 | .073 | .073 | .073 | .023 | .023 | .023 |   |
| 1.0  | .210                  | .184 | .161 | .180 | .158 | .139 | .123  | .109 | .096 | .071 | .063 | .056 | .023 | .020 | .018 |   |
| 2.0  | .202                  | .160 | .125 | .173 | .138 | .108 | .119  | .096 | .076 | .068 | .056 | .044 | .022 | .018 | .014 |   |
| 3.0  | .194                  | .143 | .102 | .167 | .123 | .089 | .114  | .086 | .062 | .066 | .050 | .037 | .021 | .016 | .012 |   |
| 4.0  | .187                  | .130 | .087 | .160 | .112 | .075 | .110  | .078 | .053 | .064 | .046 | .031 | .020 | .015 | .010 |   |
| 5.0  | .179                  | .120 | .076 | .154 | .104 | .066 | .106  | .072 | .047 | .061 | .042 | .028 | .020 | .014 | .009 |   |
| 6.0  | .172                  | .111 | .068 | .148 | .096 | .059 | .102  | .068 | .042 | .059 | .040 | .025 | .019 | .013 | .008 |   |
| 7.0  | .165                  | .105 | .062 | .142 | .091 | .054 | .098  | .064 | .038 | .057 | .037 | .023 | .018 | .012 | .008 |   |
| 8.0  | .158                  | .099 | .058 | .136 | .086 | .050 | .094  | .060 | .036 | .055 | .035 | .021 | .018 | .012 | .007 |   |
| 9.0  | .152                  | .094 | .054 | .131 | .081 | .047 | .091  | .057 | .034 | .053 | .034 | .020 | .017 | .011 | .007 |   |
| 10.0 | .147                  | .090 | .052 | .126 | .078 | .045 | .088  | .055 | .032 | .051 | .032 | .019 | .017 | .011 | .006 |   |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:Cloud  
Test Date:2024-10-28

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:0.4313A P:10.35W PF:1.000 Freq:0Hz<br>Lamp Flux:686.338x1 lm |     |                  |      |      |                 |      |                |                  |      |      |      |
| NAME: SF16-24V-3528-144-5000-80  |     |                  |      |      | TYPE:           |      |                | WEIGHT:          |      |      |      |
| SPEC.:   |     |                  |      |      | DIM.: Length=1m |      |                | 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  | 2H  | 22.5             | 24.0 | 22.9 | 24.3            | 24.6 | 22.6           | 24.1             | 22.9 | 24.4 | 24.6 |
|  | 3H  | 24.2             | 25.6 | 24.6 | 25.9            | 26.2 | 24.3           | 25.7             | 24.6 | 26.0 | 26.3 |
|  | 4H  | 24.9             | 26.3 | 25.3 | 26.6            | 26.9 | 25.0           | 26.4             | 25.4 | 26.7 | 27.0 |
|  | 6H  | 25.6             | 26.8 | 25.9 | 27.1            | 27.5 | 25.7           | 26.9             | 26.1 | 27.3 | 27.6 |
|  | 8H  | 25.8             | 27.0 | 26.2 | 27.3            | 27.7 | 25.9           | 27.1             | 26.3 | 27.5 | 27.8 |
|  | 12H | 26.0             | 27.1 | 26.4 | 27.5            | 27.9 | 26.1           | 27.3             | 26.5 | 27.6 | 28.0 |
| 4H   | 2H  | 23.2             | 24.5 | 23.5 | 24.8            | 25.1 | 23.2           | 24.5             | 23.6 | 24.9 | 25.2 |
|  | 3H  | 25.0             | 26.2 | 25.5 | 26.6            | 26.9 | 25.1           | 26.3             | 25.5 | 26.6 | 27.0 |
|  | 4H  | 25.9             | 27.0 | 26.4 | 27.4            | 27.8 | 26.0           | 27.1             | 26.5 | 27.5 | 27.9 |
|  | 6H  | 26.7             | 27.6 | 27.2 | 28.1            | 28.5 | 26.8           | 27.7             | 27.3 | 28.2 | 28.6 |
|  | 8H  | 27.0             | 27.9 | 27.5 | 28.3            | 28.8 | 27.1           | 28.0             | 27.6 | 28.4 | 28.9 |
|  | 12H | 27.3             | 28.1 | 27.8 | 28.5            | 29.0 | 27.4           | 28.2             | 27.9 | 28.6 | 29.1 |
| 8H   | 4H  | 26.3             | 27.1 | 26.7 | 27.6            | 28.0 | 26.4           | 27.2             | 26.8 | 27.7 | 28.1 |
|  | 6H  | 27.2             | 28.0 | 27.7 | 28.4            | 28.9 | 27.3           | 28.1             | 27.8 | 28.5 | 29.0 |
|  | 8H  | 27.7             | 28.3 | 28.2 | 28.8            | 29.3 | 27.8           | 28.4             | 28.3 | 28.9 | 29.4 |
|  | 12H | 28.0             | 28.6 | 28.6 | 29.1            | 29.7 | 28.2           | 28.7             | 28.7 | 29.2 | 29.8 |
| 12H  | 4H  | 26.3             | 27.1 | 26.8 | 27.6            | 28.0 | 26.4           | 27.2             | 26.9 | 27.6 | 28.1 |
|  | 6H  | 27.3             | 28.0 | 27.9 | 28.5            | 29.0 | 27.4           | 28.1             | 27.9 | 28.6 | 29.1 |
|  | 8H  | 27.8             | 28.4 | 28.4 | 28.9            | 29.5 | 27.9           | 28.5             | 28.5 | 29.0 | 29.6 |
| Variations with the observer position at spacings(CIE Pub.117):              |     |                  |      |      |                 |      |                |                  |      |      |      |
| S = 1.0H   |     | + 0.1 / - 0.2    |      |      |                 |      | + 0.1 / - 0.2  |                  |      |      |      |
| 1.5H   |     | + 0.2 / - 0.3    |      |      |                 |      | + 0.2 / - 0.3  |                  |      |      |      |
| 2.0H   |     | + 0.1 / - 0.3    |      |      |                 |      | + 0.1 / - 0.3  |                  |      |      |      |

CIE Pub.117, 686.3 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.3)  
Area: 0.017 m2

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:Cloud  
Test Date:2024-10-28

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:0.4313A P:10.35W PF:1.000 Freq:0Hz<br>Lamp Flux:686.338x1 lm |                 |                  |
| NAME: SF16-24V-3528-144-5000-80  | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.:  | SUR.:           | Shielding Angle: |

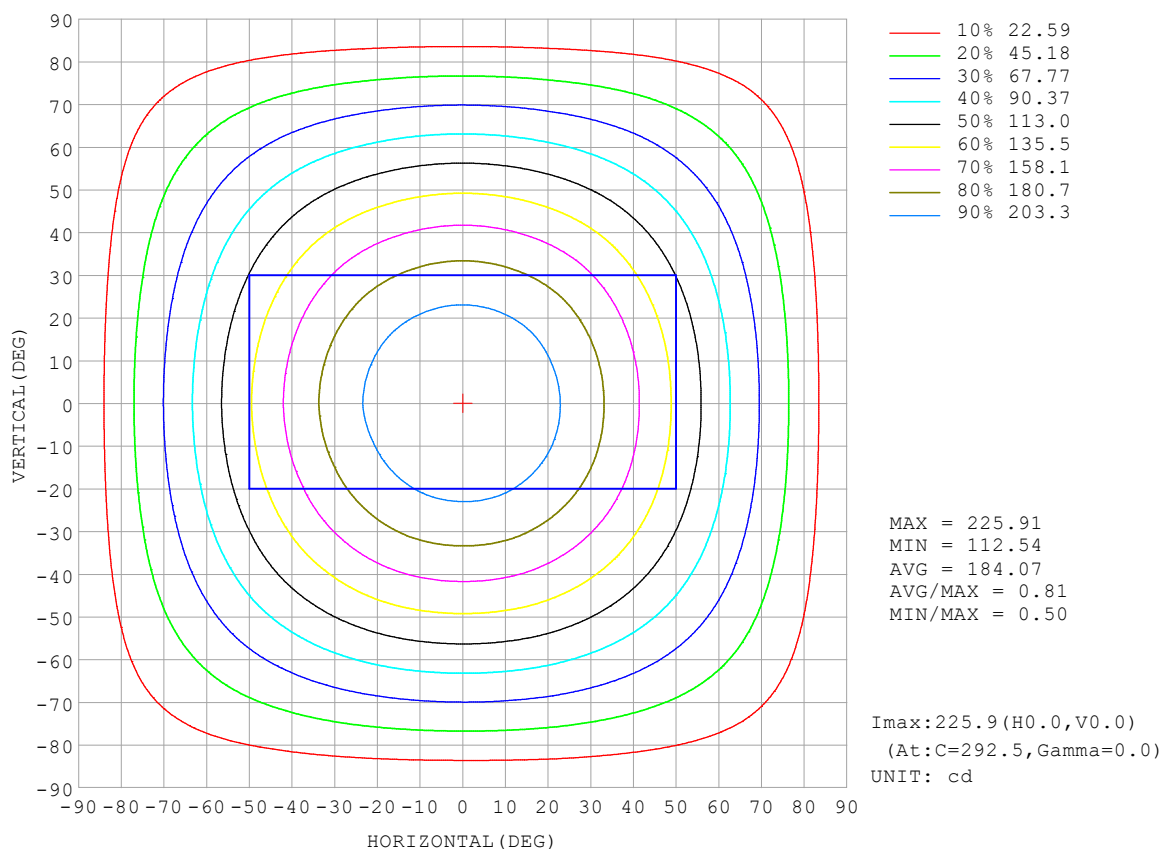
| REFLECTANCE                      |  |     |           |     |     |     |     |               |     |        |
|----------------------------------|--|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling                          | 0.8  | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 56   | 44  | 37        | 55  | 44  | 37  | 53  | 43            | 37  | 30     |
| 0.80                             | 66   | 54  | 46        | 64  | 53  | 46  | 62  | 52            | 45  | 38     |
| 1.00                             | 74   | 62  | 55        | 72  | 62  | 54  | 70  | 63            | 54  | 46     |
| 1.25                             | 81   | 70  | 62        | 79  | 69  | 62  | 76  | 67            | 61  | 53     |
| 1.50                             | 86   | 75  | 68        | 84  | 74  | 68  | 80  | 72            | 66  | 58     |
| 2.00                             | 93   | 84  | 77        | 91  | 82  | 76  | 87  | 80            | 74  | 65     |
| 2.50                             | 97   | 89  | 82        | 94  | 87  | 81  | 90  | 84            | 79  | 69     |
| 3.00                             | 100  | 93  | 87        | 98  | 91  | 86  | 93  | 88            | 83  | 74     |
| 4.00                             | 104  | 98  | 93        | 102 | 96  | 92  | 97  | 92            | 88  | 78     |
| 5.00                             | 107  | 102 | 97        | 104 | 99  | 95  | 99  | 95            | 92  | 81     |
| 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: HIGH  
 Temperature: 25.3°C  
 Operators: Cloud  
 Test Date: 2024-10-28

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:0.4313A P:10.35W PF:1.000 Freq:0Hz<br>Lamp Flux:686.338x1 lm |                 |                  |
| NAME: SF16-24V-3528-144-5000-80  | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.:  | SUR.:           | Shielding Angle: |

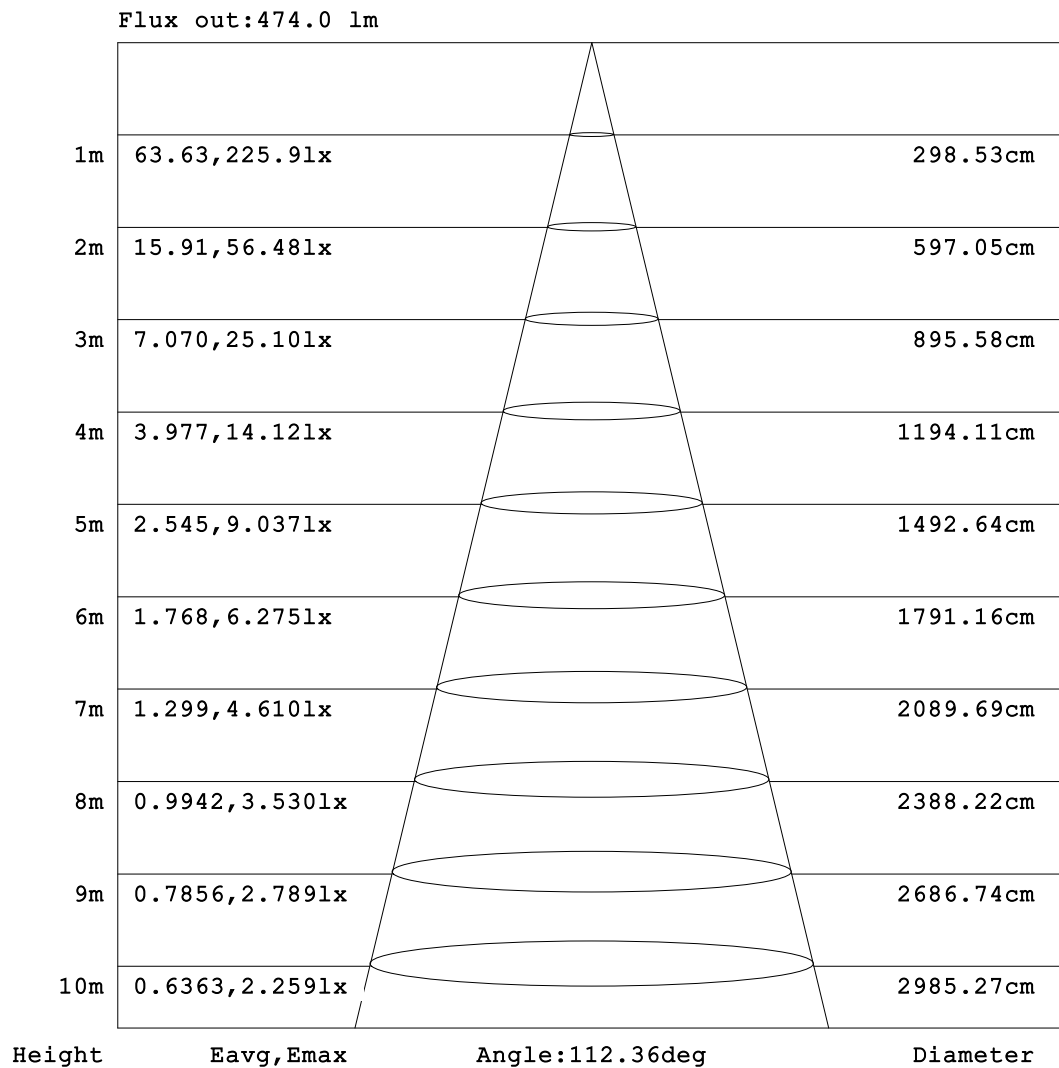


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:Cloud  
Test Date:2024-10-28

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:0.4313A P:10.35W PF:1.000 Freq:0Hz<br>Lamp Flux:686.338x1 lm |                 |                  |
| NAME: SF16-24V-3528-144-5000-80  | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.:  | SUR.:           | Shielding Angle: |



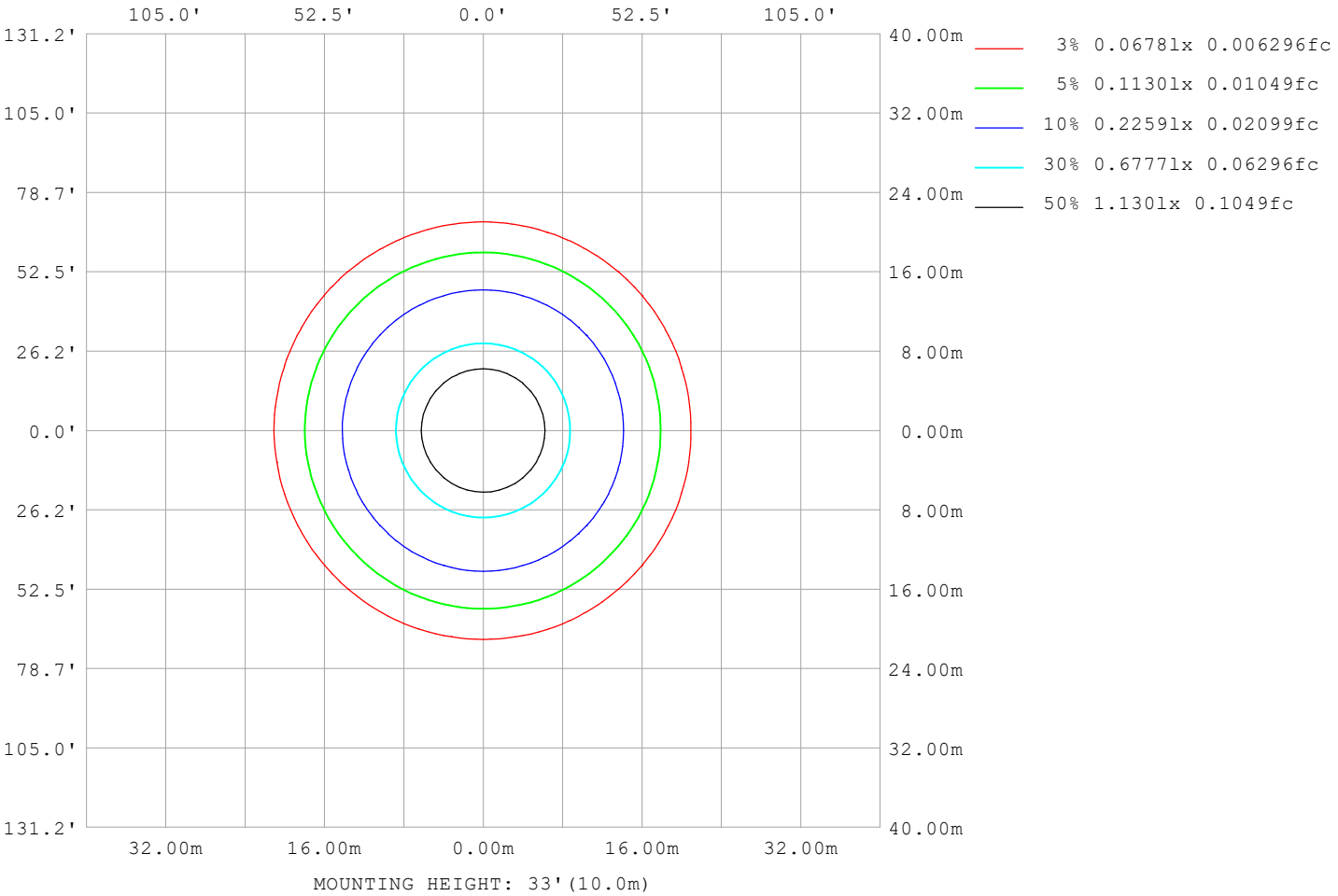
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:Cloud  
Test Date:2024-10-28

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:0.4313A P:10.35W PF:1.000 Freq:0Hz<br>Lamp Flux:686.338x1 lm |                 |                  |
| NAME: SF16-24V-3528-144-5000-80  | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.:  | SUR.:           | Shielding Angle: |



|                      |   |
|----------------------|---|
| C Range: 0 - 360DEG  | γ Range: 0 - 180DEG                               |
| C Interval: 22.5DEG  | γ Interval: 1.0DEG                                |
| Test Speed: HIGH     | Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.488 |
| Temperature:25.3℃    | Humidity:65.0%                                    |
| Operators:Cloud      | Test Distance:6.360m [K=1.0000]                   |
| Test Date:2024-10-28 | Remarks:  |

## LED Avg.L Report

|  |                 |                  |
|--|-----------------|------------------|
| Test:U:24.00V I:0.4313A P:10.35W PF:1.000 Freq:0Hz<br>Lamp Flux:686.338x1 lm |                 |                  |
| NAME: SF16-24V-3528-144-5000-80  | TYPE:           | WEIGHT:          |
| SPEC.:   | DIM.: Length=1m | SERIAL No.:      |
| MFR.:  | SUR.:           | Shielding Angle: |

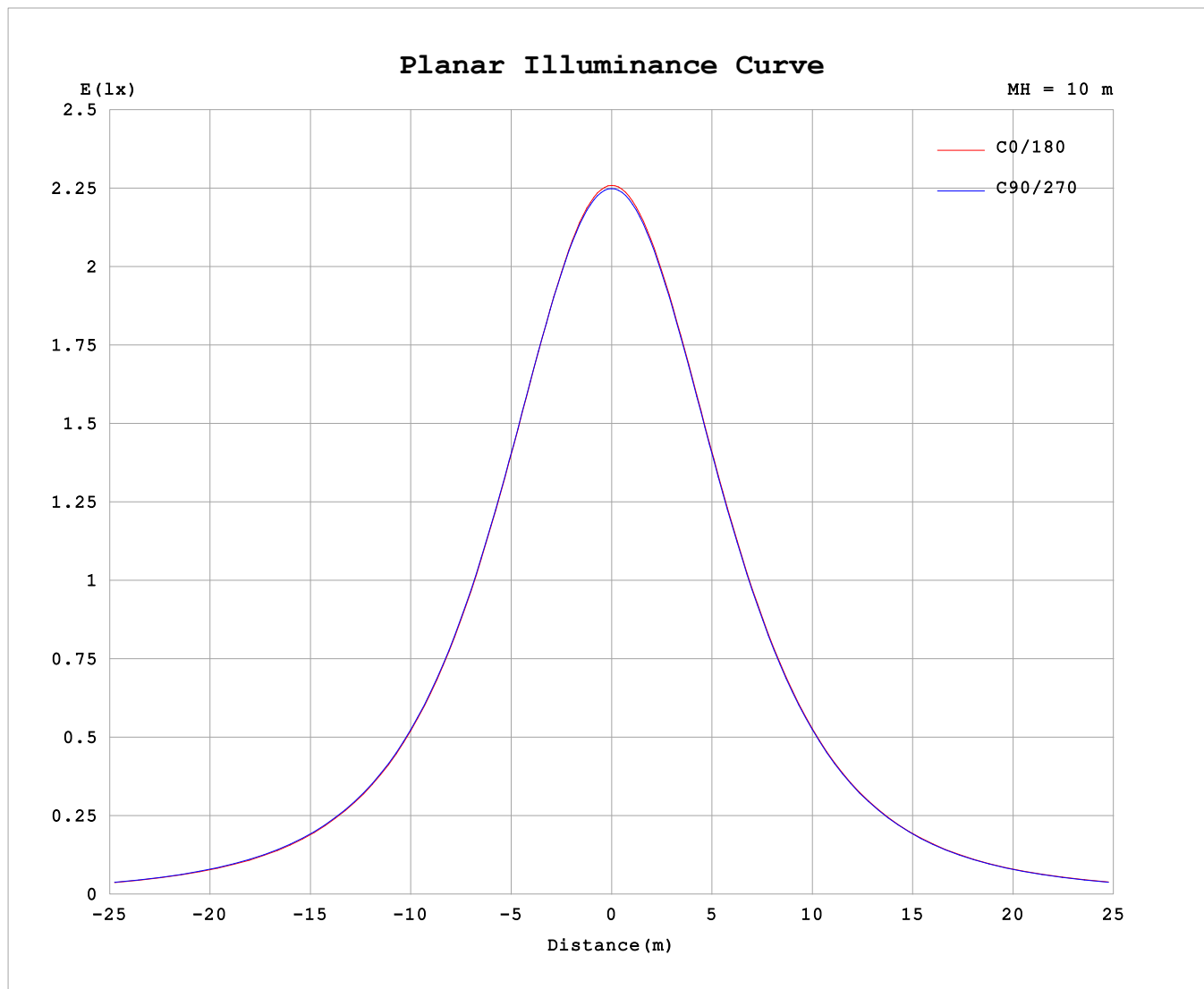
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 11621 |
| L_0~180 (75) av  | 11496 |
| L_0~180 (85) av  | 12753 |
| L_90~270 (65) av | 11732 |
| L_90~270 (75) av | 11567 |
| L_90~270 (85) av | 12175 |
| L_45 (65) av     | 11677 |
| L_45 (75) av     | 11537 |
| L_45 (85) av     | 12431 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:Cloud  
Test Date:2024-10-28

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: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3 °C  
Operators: Cloud  
Test Date: 2024-10-28

$\gamma$  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:0.4313A P:10.35W PF:1.000 Freq:0Hz<br>Lamp Flux:686.338x1 lm |  |  |  |  |  |  |  |  |                 |  |  |  |  |  |                  |  |  |
| NAME: SF16-24V-3528-144-5000-80  |  |  |  |  |  |  |  |  | TYPE:           |  |  |  |  |  | WEIGHT:          |  |  |
| SPEC.:   |  |  |  |  |  |  |  |  | DIM.: Length=1m |  |  |  |  |  | SERIAL No.:      |  |  |
| MFR.:  |  |  |  |  |  |  |  |  | SUR.:           |  |  |  |  |  | Shielding Angle: |  |  |

Table--1

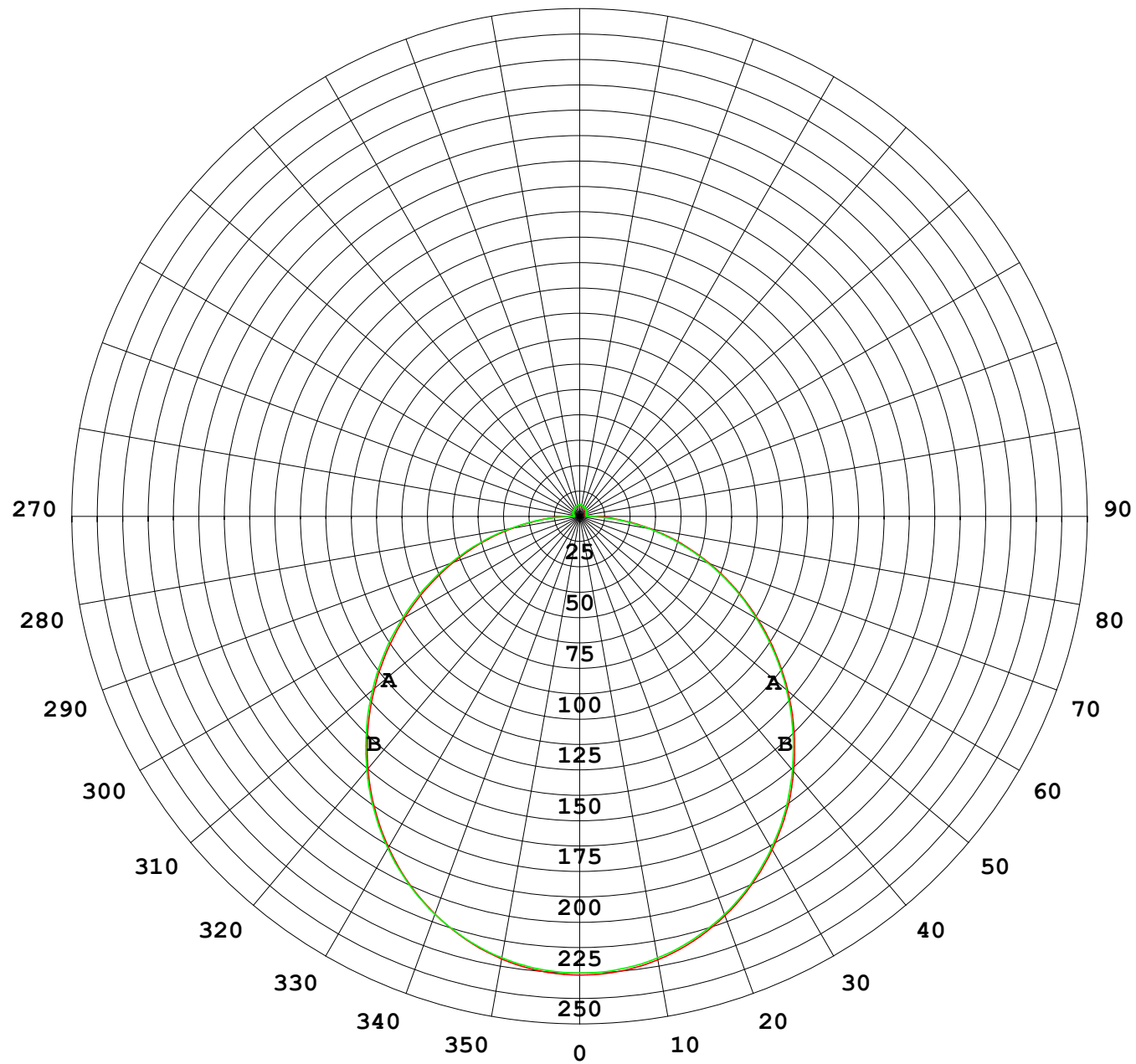
UNIT: cd

| 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                  | 225  | 225  | 225  | 225  | 225  | 225   | 225  | 225   | 225  | 225   | 225  | 225   | 225  | 225   | 225  | 225   |  |  |  |
| 5                  | 224  | 224  | 224  | 224  | 224  | 224   | 224  | 224   | 224  | 224   | 224  | 224   | 224  | 224   | 224  | 224   |  |  |  |
| 10                 | 221  | 221  | 221  | 221  | 221  | 221   | 221  | 221   | 221  | 221   | 221  | 221   | 221  | 221   | 221  | 221   |  |  |  |
| 15                 | 215  | 216  | 216  | 216  | 216  | 216   | 216  | 216   | 216  | 216   | 216  | 216   | 216  | 216   | 216  | 216   |  |  |  |
| 20                 | 208  | 208  | 209  | 209  | 209  | 209   | 208  | 208   | 209  | 208   | 209  | 209   | 209  | 209   | 209  | 208   |  |  |  |
| 25                 | 199  | 199  | 199  | 200  | 200  | 200   | 199  | 199   | 200  | 199   | 200  | 200   | 200  | 200   | 200  | 199   |  |  |  |
| 30                 | 188  | 188  | 189  | 189  | 189  | 189   | 189  | 189   | 189  | 189   | 189  | 189   | 189  | 189   | 189  | 189   |  |  |  |
| 35                 | 175  | 176  | 176  | 177  | 177  | 177   | 176  | 177   | 177  | 177   | 177  | 177   | 177  | 177   | 177  | 176   |  |  |  |
| 40                 | 162  | 163  | 163  | 164  | 163  | 163   | 163  | 163   | 163  | 163   | 163  | 163   | 163  | 163   | 163  | 163   |  |  |  |
| 45                 | 147  | 148  | 148  | 149  | 149  | 149   | 148  | 148   | 149  | 149   | 149  | 148   | 149  | 148   | 149  | 148   |  |  |  |
| 50                 | 131  | 132  | 133  | 134  | 133  | 133   | 133  | 133   | 133  | 133   | 133  | 133   | 133  | 133   | 133  | 133   |  |  |  |
| 55                 | 115  | 116  | 117  | 118  | 117  | 117   | 117  | 117   | 117  | 117   | 117  | 117   | 117  | 117   | 117  | 117   |  |  |  |
| 60                 | 99.0 | 99.8 | 100  | 101  | 101  | 101   | 100  | 100   | 101  | 101   | 101  | 100   | 101  | 100   | 101  | 100   |  |  |  |
| 65                 | 82.4 | 83.2 | 83.7 | 84.5 | 84.6 | 84.3  | 83.7 | 83.8  | 84.5 | 84.2  | 84.2 | 83.8  | 84.0 | 83.8  | 84.0 | 83.5  |  |  |  |
| 70                 | 65.9 | 66.7 | 67.1 | 67.8 | 67.8 | 67.5  | 67.0 | 67.2  | 68.0 | 67.6  | 67.5 | 67.1  | 67.3 | 67.1  | 67.3 | 67.0  |  |  |  |
| 75                 | 49.6 | 50.3 | 50.6 | 51.2 | 51.1 | 50.9  | 50.5 | 50.8  | 51.6 | 51.2  | 51.1 | 50.6  | 50.7 | 50.5  | 50.8 | 50.6  |  |  |  |
| 80                 | 33.4 | 34.1 | 34.4 | 34.8 | 34.5 | 34.5  | 34.2 | 34.5  | 35.3 | 34.9  | 34.8 | 34.2  | 34.2 | 34.1  | 34.5 | 34.3  |  |  |  |
| 85                 | 18.0 | 18.5 | 18.4 | 18.6 | 18.2 | 18.3  | 18.2 | 18.9  | 19.8 | 19.2  | 18.6 | 18.0  | 17.9 | 17.9  | 18.5 | 18.3  |  |  |  |
| 90                 | 7.88 | 7.80 | 6.71 | 5.08 | 3.25 | 4.96  | 6.71 | 8.17  | 8.90 | 8.33  | 7.17 | 5.13  | 3.49 | 4.96  | 6.71 | 7.51  |  |  |  |
| 95                 | 3.24 | 3.11 | 2.93 | 2.94 | 2.98 | 2.97  | 3.11 | 3.28  | 3.24 | 3.28  | 3.47 | 3.54  | 3.44 | 3.21  | 3.07 | 2.85  |  |  |  |
| 100                | 3.06 | 3.05 | 3.06 | 3.10 | 3.18 | 3.15  | 3.11 | 3.21  | 3.00 | 3.19  | 3.47 | 3.56  | 3.45 | 3.12  | 2.95 | 2.50  |  |  |  |
| 105                | 3.26 | 3.25 | 3.27 | 3.31 | 3.39 | 3.36  | 3.28 | 3.29  | 3.02 | 3.21  | 3.55 | 3.65  | 3.50 | 3.12  | 3.00 | 2.65  |  |  |  |
| 110                | 3.47 | 3.46 | 3.48 | 3.56 | 3.58 | 3.59  | 3.50 | 3.47  | 3.14 | 3.34  | 3.68 | 3.75  | 3.60 | 3.28  | 3.31 | 2.86  |  |  |  |
| 115                | 3.69 | 3.67 | 3.67 | 3.70 | 3.75 | 3.79  | 3.71 | 3.68  | 3.31 | 3.50  | 3.81 | 3.85  | 3.74 | 3.59  | 3.68 | 3.07  |  |  |  |
| 120                | 3.88 | 3.87 | 3.76 | 3.86 | 3.91 | 3.98  | 3.91 | 3.89  | 3.50 | 3.67  | 3.94 | 3.97  | 3.91 | 3.85  | 3.92 | 3.29  |  |  |  |
| 125                | 4.07 | 4.05 | 3.90 | 4.01 | 4.06 | 4.16  | 4.09 | 4.08  | 3.69 | 3.84  | 4.08 | 4.10  | 4.07 | 4.04  | 4.06 | 3.51  |  |  |  |
| 130                | 4.26 | 4.24 | 4.08 | 4.18 | 4.22 | 4.33  | 4.28 | 4.28  | 3.89 | 4.03  | 4.22 | 4.25  | 4.24 | 4.20  | 4.21 | 3.74  |  |  |  |
| 135                | 4.42 | 4.42 | 4.25 | 4.35 | 4.37 | 4.50  | 4.47 | 4.46  | 4.08 | 4.24  | 4.38 | 4.39  | 4.40 | 4.36  | 4.35 | 3.99  |  |  |  |
| 140                | 4.59 | 4.40 | 4.41 | 4.50 | 4.52 | 4.68  | 4.65 | 4.65  | 4.28 | 4.43  | 4.55 | 4.56  | 4.57 | 4.51  | 4.51 | 4.31  |  |  |  |
| 145                | 4.75 | 4.56 | 4.58 | 4.66 | 4.68 | 4.85  | 4.83 | 4.83  | 4.48 | 4.60  | 4.73 | 4.72  | 4.74 | 4.68  | 4.67 | 4.56  |  |  |  |
| 150                | 4.92 | 4.72 | 4.74 | 4.82 | 4.97 | 5.03  | 5.01 | 5.01  | 4.66 | 4.77  | 4.92 | 4.90  | 4.91 | 4.85  | 4.83 | 4.74  |  |  |  |
| 155                | 5.08 | 4.89 | 4.90 | 5.12 | 5.14 | 5.20  | 5.18 | 5.18  | 4.79 | 4.95  | 5.12 | 5.08  | 5.09 | 5.02  | 5.00 | 4.92  |  |  |  |
| 160                | 5.24 | 5.06 | 5.23 | 5.30 | 5.31 | 5.36  | 5.34 | 5.34  | 5.07 | 5.13  | 5.29 | 5.24  | 5.26 | 5.19  | 5.17 | 5.10  |  |  |  |
| 165                | 5.38 | 5.21 | 5.37 | 5.44 | 5.45 | 5.50  | 5.47 | 5.47  | 5.25 | 5.30  | 5.42 | 5.40  | 5.42 | 5.35  | 5.34 | 5.27  |  |  |  |
| 170                | 5.33 | 5.40 | 5.50 | 5.57 | 5.58 | 5.61  | 5.57 | 5.58  | 5.26 | 5.44  | 5.54 | 5.53  | 5.56 | 5.49  | 5.49 | 5.43  |  |  |  |
| 175                | 5.39 | 5.60 | 5.60 | 5.66 | 5.66 | 5.69  | 5.65 | 5.65  | 5.38 | 5.56  | 5.63 | 5.63  | 5.67 | 5.61  | 5.60 | 5.56  |  |  |  |
| 180                | 5.44 | 5.63 | 5.66 | 5.70 | 5.71 | 5.71  | 5.67 | 5.66  | 5.45 | 5.62  | 5.66 | 5.70  | 5.71 | 5.70  | 5.68 | 5.65  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:Cloud  
Test Date:2024-10-28

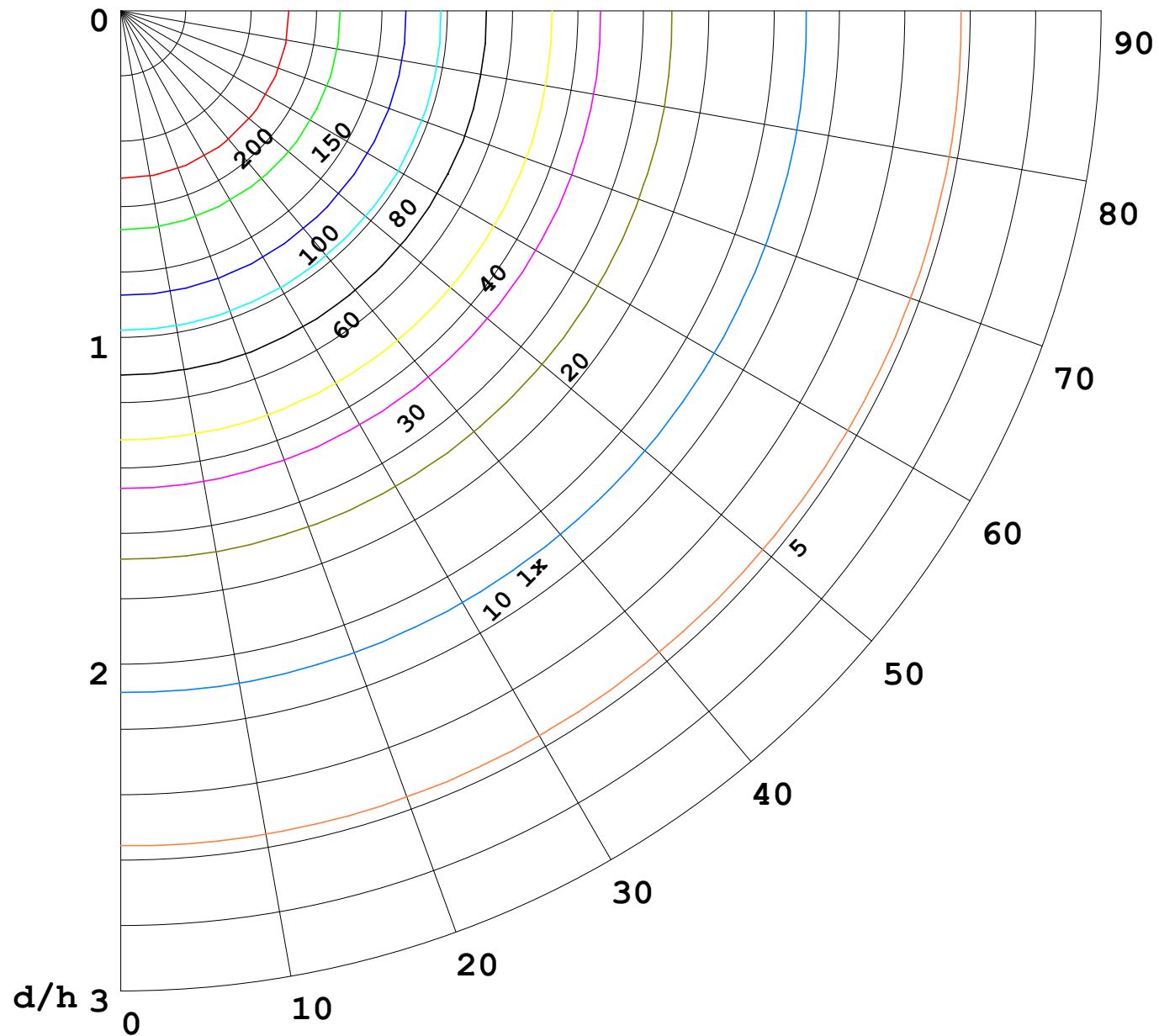
γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.488  
Humidity:65.0%  
Test Distance:6.360m [K=1.0000]  
Remarks:

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  |

