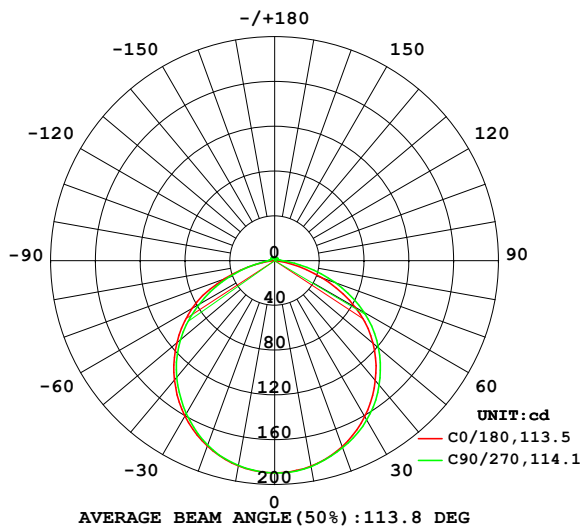


## LUMINAIRE PHOTOMETRIC TEST REPORT

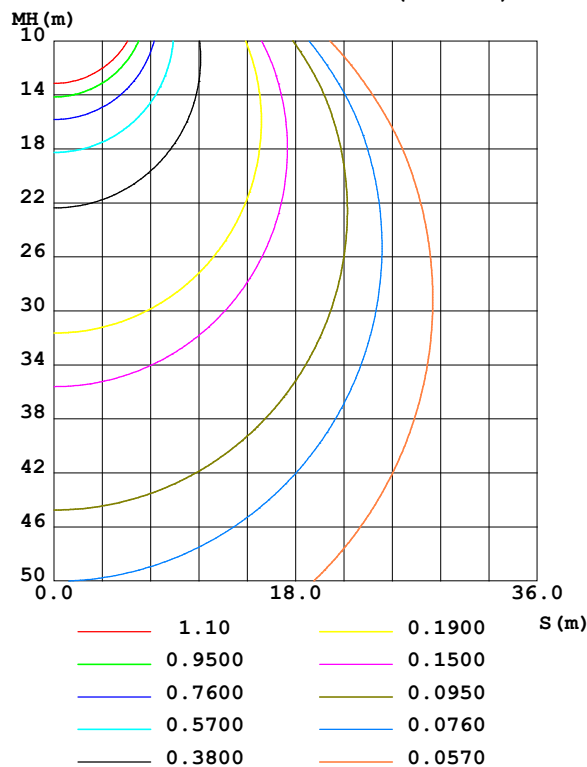
|   |               |                  |
|---|---------------|------------------|
| Test:U:23.998V I:0.4138A P:9.9304W PF:1.0000 Freq:0Hz<br>Lamp Flux:3.85953x120 lm |               |                  |
| NAME: 1615-D  | TYPE:         | WEIGHT:          |
| SPEC.:  | DIM.:         | SERIAL No.:      |
| MFR.:   | SUR.: 0.016*1 | Shielding Angle: |

| DATA OF LAMP     |         | PHOTOMETRIC DATA      |        |                   |          | Eff: 56.32 lm/W |
|------------------|---------|-----------------------|--------|-------------------|----------|-----------------|
| MODEL            | 4000K   | I <sub>max</sub> (cd) | 189.6  | S/MH(C0/180)      | 1.26     |                 |
| NOMINAL POWER(W) | 10      | LOR(%)                | 120.8  | S/MH(C90/270)     | 1.24     |                 |
| RATED VOLTAGE(V) | 24      | TOTAL FLUX(lm)        | 559.27 | η UP,DN(C0-180)   | 1.7,60.8 |                 |
| NOMINAL FLUX(lm) | 3.85953 | CIE CLASS             | DIRECT | η UP,DN(C180-360) | 1.8,56.5 |                 |
| LAMPS INSIDE     | 120     | η up (%)              | 3.4    | CIBSE SHR NOM     | 1.25     |                 |
| TEST VOLTAGE(V)  | 24      | η down (%)            | 117.3  | 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:25.3DEG  
Operators:  
Test Date:2024-01-06

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.450  
Humidity:65.0%  
Test Distance:6.040m [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       | 186.4                 | 186.4  | 186.8  | 187.2  | 186.1  | 186.1  | 185.7  | 185.4  | 0- 10    | 17.94       | 17.94        | 3.21,3.87  |
| 20       | 176.7                 | 176.3  | 177.8  | 178.2  | 176.2  | 176.3  | 175.4  | 174.9  | 10- 20   | 51.41       | 69.34        | 12.4,15    |
| 30       | 160.9                 | 161.2  | 164.6  | 163.6  | 160.5  | 160.4  | 157.7  | 157.6  | 20- 30   | 78.04       | 147.4        | 26.4,31.8  |
| 40       | 140.0                 | 141.4  | 145.3  | 144.9  | 139.3  | 138.0  | 136.2  | 135.1  | 30- 40   | 94.46       | 241.9        | 43.2,52.2  |
| 50       | 114.7                 | 116.5  | 121.2  | 121.1  | 114.0  | 112.6  | 109.8  | 109.1  | 40- 50   | 98.65       | 340.5        | 60.9,73.5  |
| 60       | 83.08                 | 87.39  | 92.23  | 93.13  | 85.15  | 82.56  | 77.81  | 78.22  | 50- 60   | 89.71       | 430.2        | 76.9,92.9  |
| 70       | 44.80                 | 53.27  | 57.50  | 60.18  | 47.53  | 48.75  | 43.83  | 44.25  | 60- 70   | 67.41       | 497.6        | 89,107     |
| 80       | 9.500                 | 20.41  | 23.50  | 26.94  | 11.19  | 16.72  | 13.84  | 13.46  | 70- 80   | 35.95       | 533.6        | 95.4,115   |
| 90       | 0.0969                | 5.195  | 7.703  | 5.827  | 0.1099 | 4.040  | 5.637  | 4.586  | 80- 90   | 9.893       | 543.5        | 97.2,117   |
| 100      | 0.1098                | 4.156  | 4.467  | 3.821  | 0.1466 | 3.578  | 4.501  | 4.170  | 90-100   | 4.106       | 547.6        | 97.9,118   |
| 110      | 0.1726                | 3.210  | 3.380  | 3.059  | 0.2093 | 2.949  | 3.785  | 3.481  | 100-110  | 3.186       | 550.8        | 98.5,119   |
| 120      | 0.2484                | 2.730  | 2.767  | 2.408  | 0.2774 | 2.524  | 3.788  | 3.154  | 110-120  | 2.443       | 553.2        | 98.9,119   |
| 130      | 0.3217                | 2.289  | 2.749  | 1.779  | 0.3559 | 2.218  | 3.904  | 3.000  | 120-130  | 1.960       | 555.2        | 99.3,120   |
| 140      | 0.3871                | 2.550  | 3.152  | 1.658  | 0.4291 | 2.097  | 4.255  | 3.023  | 130-140  | 1.665       | 556.8        | 99.6,120   |
| 150      | 0.4525                | 2.324  | 3.255  | 1.679  | 0.4919 | 1.620  | 3.658  | 2.462  | 140-150  | 1.313       | 558.1        | 99.8,121   |
| 160      | 0.5179                | 1.506  | 2.511  | 1.250  | 0.5468 | 1.158  | 2.455  | 1.491  | 150-160  | 0.7731      | 558.9        | 99.9,121   |
| 170      | 0.5624                | 0.6928 | 0.8931 | 0.7847 | 0.5834 | 0.7941 | 0.7503 | 0.7311 | 160-170  | 0.2991      | 559.2        | 100,121    |
| 180      | 0.5886                | 0.5873 | 0.5959 | 0.5841 | 0.5886 | 0.6057 | 0.6090 | 0.5946 | 170-180  | 0.0626      | 559.3        | 100,121    |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |            |

Conical surface Flux(90deg): 301.37 lm

%lum = 53.9%

%lamp = 65.1%

Conical surface Flux(120deg): 430.22 lm

%lum = 76.9%

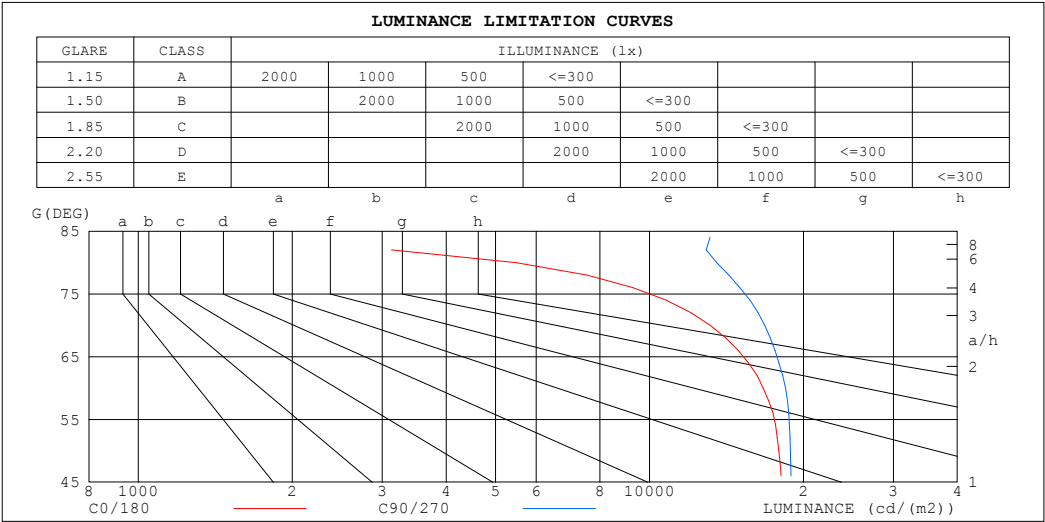
%lamp = 92.9%

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.450  
Humidity:65.0%  
Test Distance:6.040m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

|   |               |                  |
|---|---------------|------------------|
| Test:U:23.998V I:0.4138A P:9.9304W PF:1.0000 Freq:0Hz<br>Lamp Flux:3.85953x120 lm |               |                  |
| NAME: 1615-D  | TYPE:         | WEIGHT:          |
| SPEC.:  | DIM.:         | SERIAL No.:      |
| MFR.:   | SUR.: 0.016*1 | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 629    | 15755   |
| 80                | 5490   | 13530   |
| 75                | 11480  | 16741   |
| 70                | 13144  | 16811   |
| 65                | 16188  | 18582   |
| 60                | 16672  | 18444   |
| 55                | 18078  | 19253   |
| 50                | 17898  | 18848   |
| 45                | 18502  | 19244   |

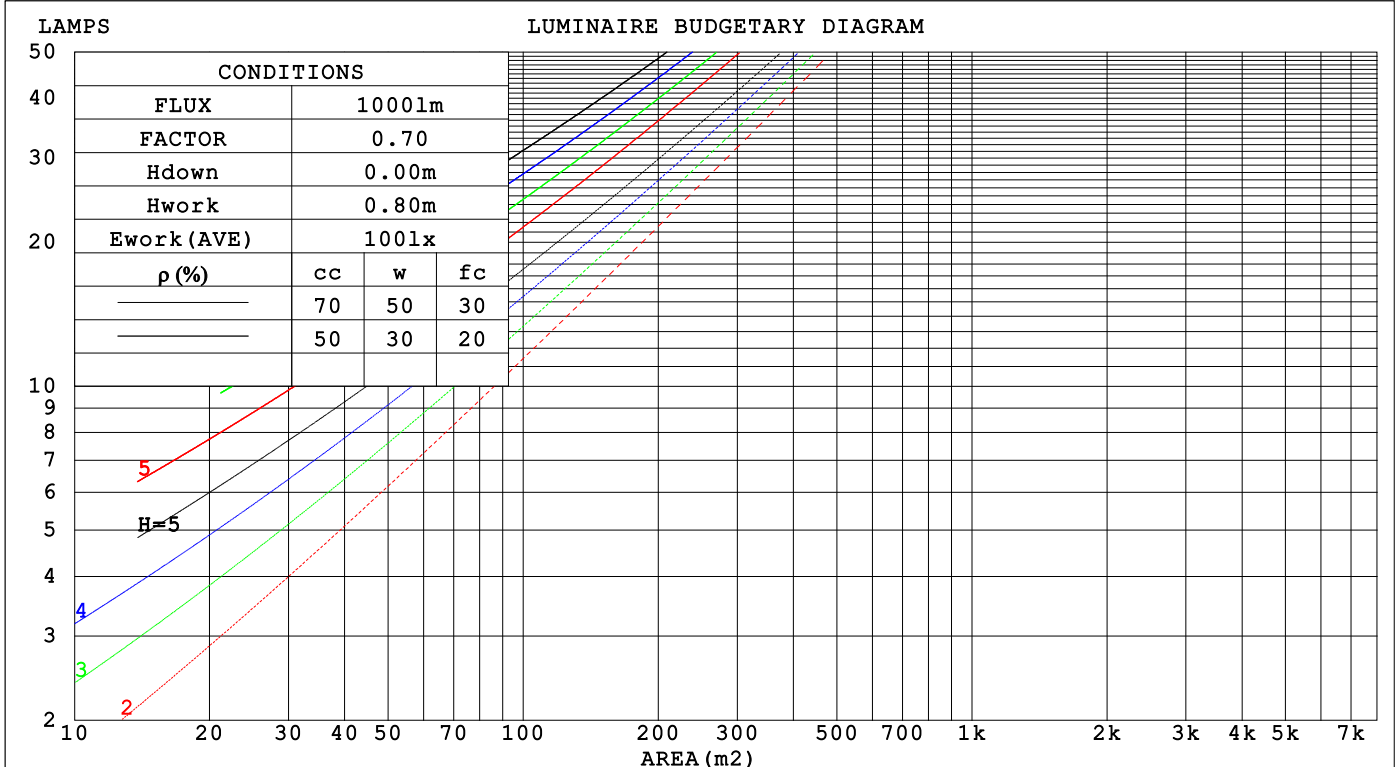
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-06

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.450  
Humidity:65.0%  
Test Distance:6.040m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|   |               |                  |
|---|---------------|------------------|
| Test:U:23.998V I:0.4138A P:9.9304W PF:1.0000 Freq:0Hz |               |                  |
| Lamp Flux:3.85953x120 lm                              |               |                  |
| NAME: 1615-D  | TYPE:         | WEIGHT:          |
| SPEC.:  | DIM.:         | SERIAL No.:      |
| MFR.:   | SUR.: 0.016*1 | Shielding Angle: |

|                 |                       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |   |
|-----------------|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| pcc             | 80%                   |     |     | 70% |     |     | 50% |     |     | 30% |     |     | 10% |     |     | 0 |
| p <sub>w</sub>  | 50%                   | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| p <sub>fc</sub> | 20%                   |     |     | 20% |     |     | 20% |     |     | 20% |     |     | 20% |     |     | 0 |
| RCR             | RCR:Room Cavity Ratio |     |     |     |     |     |     |     |     |     |     |     |     |     |     |   |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-06

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.450  
Humidity:65.0%  
Test Distance:6.040m [K=1.0000]  
Remarks:

### WEC AND CCEC

|   |  |               |  |                  |  |
|---|--|---------------|--|------------------|--|
| Test:U:23.998V I:0.4138A P:9.9304W PF:1.0000 Freq:0Hz<br>Lamp Flux:3.85953x120 lm |  |               |  |                  |  |
| NAME: 1615-D  |  | TYPE:         |  | WEIGHT:          |  |
| SPEC.:  |  | DIM.:         |  | SERIAL No.:      |  |
| MFR.:   |  | SUR.: 0.016*1 |  | 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  | .370                  | .210 | .067 | .360 | .206 | .065 | .343                            | .196 | .063 | .326 | .188 | .060 | .311 | .180 | .058 |   |  |
| 2.0  | .349                  | .191 | .059 | .340 | .188 | .058 | .325                            | .180 | .056 | .310 | .174 | .054 | .296 | .168 | .053 |   |  |
| 3.0  | .323                  | .172 | .052 | .316 | .169 | .051 | .302                            | .164 | .050 | .289 | .158 | .049 | .277 | .153 | .047 |   |  |
| 4.0  | .299                  | .155 | .046 | .292 | .153 | .045 | .280                            | .148 | .044 | .268 | .144 | .043 | .257 | .140 | .043 |   |  |
| 5.0  | .277                  | .141 | .041 | .271 | .139 | .040 | .259                            | .135 | .040 | .249 | .131 | .039 | .239 | .128 | .038 |   |  |
| 6.0  | .257                  | .129 | .037 | .251 | .127 | .037 | .241                            | .124 | .036 | .232 | .120 | .035 | .223 | .117 | .035 |   |  |
| 7.0  | .239                  | .118 | .033 | .234 | .117 | .033 | .225                            | .114 | .033 | .217 | .111 | .032 | .209 | .108 | .032 |   |  |
| 8.0  | .223                  | .109 | .031 | .219 | .108 | .030 | .211                            | .105 | .030 | .203 | .103 | .030 | .196 | .101 | .029 |   |  |
| 9.0  | .209                  | .101 | .028 | .205 | .100 | .028 | .198                            | .098 | .028 | .191 | .096 | .027 | .184 | .094 | .027 |   |  |
| 10.0 | .197                  | .094 | .026 | .193 | .093 | .026 | .187                            | .091 | .026 | .180 | .089 | .025 | .174 | .088 | .025 |   |  |

| 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  | .256                  | .256 | .256 | .219 | .219 | .219 | .149  | .149 | .149 | .086 | .086 | .086 | .027 | .027 | .027 |   |  |
| 1.0  | .244                  | .215 | .189 | .208 | .184 | .162 | .143  | .127 | .112 | .082 | .073 | .065 | .026 | .024 | .021 |   |  |
| 2.0  | .234                  | .186 | .145 | .200 | .160 | .125 | .137  | .111 | .088 | .079 | .064 | .051 | .025 | .021 | .017 |   |  |
| 3.0  | .225                  | .165 | .117 | .193 | .142 | .101 | .132  | .099 | .071 | .076 | .058 | .042 | .025 | .019 | .014 |   |  |
| 4.0  | .216                  | .149 | .097 | .185 | .128 | .085 | .127  | .089 | .060 | .074 | .052 | .035 | .024 | .017 | .012 |   |  |
| 5.0  | .207                  | .136 | .084 | .178 | .118 | .073 | .122  | .082 | .052 | .071 | .048 | .031 | .023 | .016 | .010 |   |  |
| 6.0  | .198                  | .126 | .074 | .170 | .109 | .065 | .117  | .076 | .046 | .068 | .045 | .027 | .022 | .015 | .009 |   |  |
| 7.0  | .190                  | .118 | .067 | .163 | .102 | .059 | .113  | .072 | .041 | .066 | .042 | .025 | .021 | .014 | .008 |   |  |
| 8.0  | .182                  | .111 | .062 | .157 | .096 | .054 | .109  | .067 | .038 | .063 | .040 | .023 | .020 | .013 | .008 |   |  |
| 9.0  | .175                  | .105 | .058 | .151 | .091 | .050 | .104  | .064 | .036 | .061 | .038 | .021 | .020 | .012 | .007 |   |  |
| 10.0 | .168                  | .100 | .054 | .145 | .087 | .047 | .101  | .061 | .034 | .059 | .036 | .020 | .019 | .012 | .007 |   |  |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-06

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.450  
Humidity:65.0%  
Test Distance:6.040m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

|   |  |                  |      |      |               |      |                |                  |      |      |      |
|---|--|------------------|------|------|---------------|------|----------------|------------------|------|------|------|
| Test:U:23.998V I:0.4138A P:9.9304W PF:1.0000 Freq:0Hz<br>Lamp Flux:3.85953x120 lm |  |                  |      |      |               |      |                |                  |      |      |      |
| NAME: 1615-D  |  |                  |      |      | TYPE:         |      |                | WEIGHT:          |      |      |      |
| SPEC.:  |  |                  |      |      | DIM.:         |      |                | SERIAL No.:      |      |      |      |
| MFR.:   |  |                  |      |      | SUR.: 0.016*1 |      |                | 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   |  | 25.4             | 26.9 | 25.8 | 27.2          | 27.4 | 25.8           | 27.2             | 26.1 | 27.5 | 27.7 |
| 3H  |  | 26.8             | 28.2 | 27.1 | 28.4          | 28.7 | 27.3           | 28.7             | 27.6 | 29.0 | 29.2 |
| 4H  |  | 27.2             | 28.5 | 27.6 | 28.8          | 29.1 | 27.9           | 29.2             | 28.3 | 29.5 | 29.8 |
| 6H  |  | 27.3             | 28.6 | 27.7 | 28.9          | 29.2 | 28.3           | 29.5             | 28.7 | 29.8 | 30.2 |
| 8H  |  | 27.3             | 28.5 | 27.7 | 28.8          | 29.2 | 28.4           | 29.6             | 28.8 | 29.9 | 30.3 |
| 12H   |  | 27.3             | 28.4 | 27.7 | 28.7          | 29.1 | 28.5           | 29.6             | 28.9 | 30.0 | 30.3 |
| 4H 2H   |  | 26.1             | 27.4 | 26.4 | 27.7          | 28.0 | 26.3           | 27.6             | 26.7 | 27.9 | 28.2 |
| 3H  |  | 27.6             | 28.8 | 28.0 | 29.1          | 29.5 | 28.0           | 29.2             | 28.4 | 29.5 | 29.9 |
| 4H  |  | 28.2             | 29.2 | 28.6 | 29.6          | 30.0 | 28.7           | 29.8             | 29.2 | 30.1 | 30.5 |
| 6H  |  | 28.5             | 29.4 | 28.9 | 29.8          | 30.2 | 29.2           | 30.2             | 29.7 | 30.6 | 31.0 |
| 8H  |  | 28.5             | 29.4 | 29.0 | 29.8          | 30.2 | 29.4           | 30.3             | 29.9 | 30.7 | 31.1 |
| 12H   |  | 28.5             | 29.3 | 29.0 | 29.7          | 30.2 | 29.6           | 30.3             | 30.0 | 30.8 | 31.2 |
| 8H 4H   |  | 28.5             | 29.3 | 28.9 | 29.8          | 30.2 | 28.9           | 29.8             | 29.4 | 30.2 | 30.7 |
| 6H  |  | 28.9             | 29.6 | 29.4 | 30.1          | 30.6 | 29.6           | 30.3             | 30.1 | 30.7 | 31.2 |
| 8H  |  | 29.0             | 29.7 | 29.5 | 30.1          | 30.6 | 29.8           | 30.4             | 30.3 | 30.9 | 31.4 |
| 12H   |  | 29.1             | 29.6 | 29.6 | 30.1          | 30.6 | 30.0           | 30.6             | 30.5 | 31.1 | 31.6 |
| 12H 4H  |  | 28.5             | 29.3 | 29.0 | 29.7          | 30.2 | 28.9           | 29.7             | 29.4 | 30.2 | 30.6 |
| 6H  |  | 29.0             | 29.6 | 29.5 | 30.1          | 30.6 | 29.6           | 30.2             | 30.1 | 30.7 | 31.2 |
| 8H  |  | 29.1             | 29.7 | 29.6 | 30.1          | 30.7 | 29.9           | 30.4             | 30.4 | 30.9 | 31.4 |
| Variations with the observer position at spacings(CIE Pub.117):                   |  |                  |      |      |               |      |                |                  |      |      |      |
| S = 1.0H  |  | + 0.2 / - 0.2    |      |      |               |      | + 0.1 / - 0.2  |                  |      |      |      |
| 1.5H  |  | + 0.2 / - 0.4    |      |      |               |      | + 0.2 / - 0.3  |                  |      |      |      |
| 2.0H  |  | + 0.2 / - 0.5    |      |      |               |      | + 0.2 / - 0.3  |                  |      |      |      |

CIE Pub.117, 463.1 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -2.7)  
Area: 0.01 m2

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-06

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.450  
Humidity:65.0%  
Test Distance:6.040m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

|   |               |                  |
|---|---------------|------------------|
| Test:U:23.998V I:0.4138A P:9.9304W PF:1.0000 Freq:0Hz<br>Lamp Flux:3.85953x120 lm |               |                  |
| NAME: 1615-D  | TYPE:         | WEIGHT:          |
| SPEC.:  | DIM.:         | SERIAL No.:      |
| MFR.:   | SUR.: 0.016*1 | Shielding Angle: |

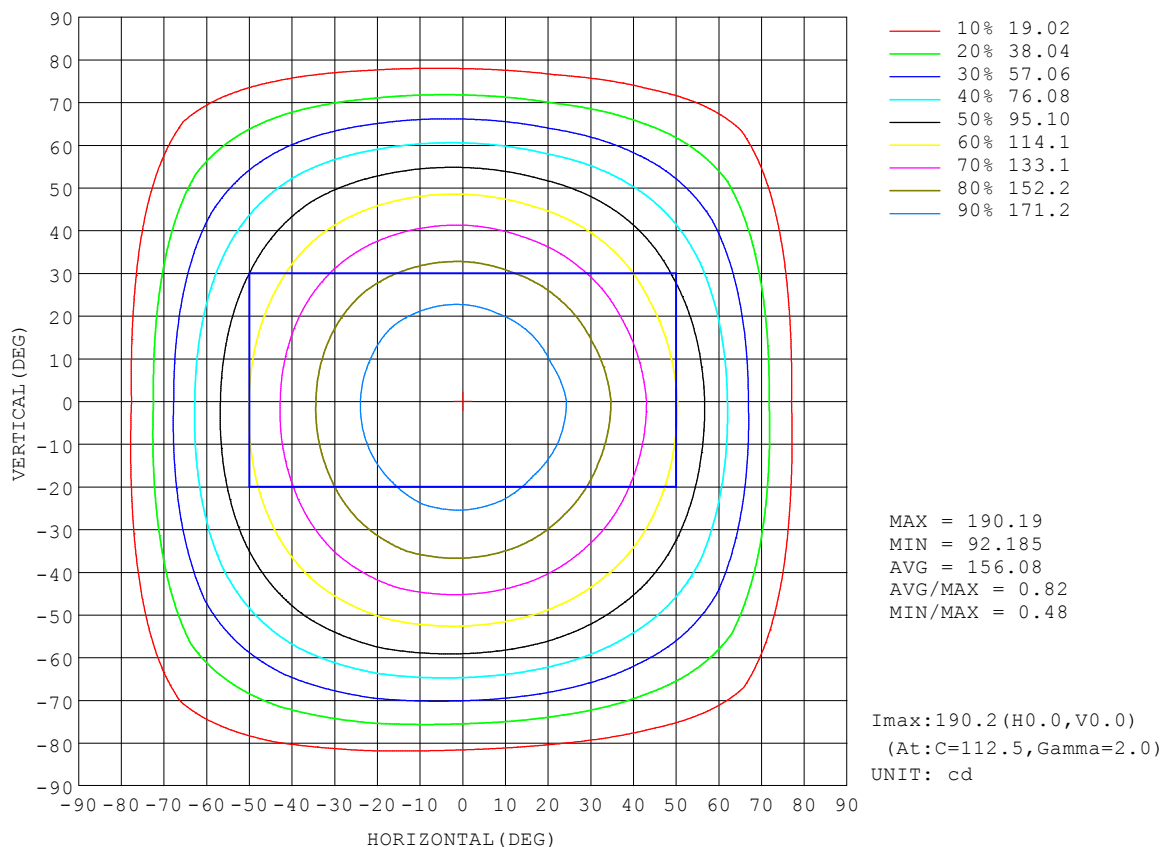
| REFLECTANCE                      |  |     |           |     |     |     |     |               |     |        |
|----------------------------------|--|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling                          | 0.8  | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 68   | 54  | 46        | 67  | 54  | 46  | 66  | 53            | 45  | 38     |
| 0.80                             | 80   | 66  | 57        | 79  | 66  | 57  | 77  | 65            | 57  | 48     |
| 1.00                             | 91   | 77  | 68        | 89  | 76  | 68  | 86  | 78            | 67  | 58     |
| 1.25                             | 99   | 86  | 78        | 97  | 85  | 77  | 94  | 83            | 76  | 67     |
| 1.50                             | 105  | 93  | 85        | 103 | 92  | 84  | 99  | 90            | 82  | 73     |
| 2.00                             | 114  | 103 | 95        | 111 | 102 | 94  | 107 | 99            | 92  | 82     |
| 2.50                             | 118  | 109 | 101       | 116 | 107 | 100 | 111 | 103           | 98  | 87     |
| 3.00                             | 122  | 114 | 107       | 120 | 112 | 106 | 114 | 108           | 103 | 92     |
| 4.00                             | 127  | 120 | 115       | 124 | 118 | 113 | 119 | 113           | 109 | 98     |
| 5.00                             | 130  | 124 | 119       | 127 | 122 | 117 | 121 | 117           | 113 | 101    |
| 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: 25.3DEG  
Operators:  
Test Date: 2024-01-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 2.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.450  
Humidity: 65.0%  
Test Distance: 6.040m [K=1.0000]  
Remarks:

ISOCANDELA DIAGRAM

|   |               |                  |
|---|---------------|------------------|
| Test:U:23.998V I:0.4138A P:9.9304W PF:1.0000 Freq:0Hz<br>Lamp Flux:3.85953x120 lm |               |                  |
| NAME: 1615-D  | TYPE:         | WEIGHT:          |
| SPEC.:  | DIM.:         | SERIAL No.:      |
| MFR.:   | SUR.: 0.016*1 | Shielding Angle: |



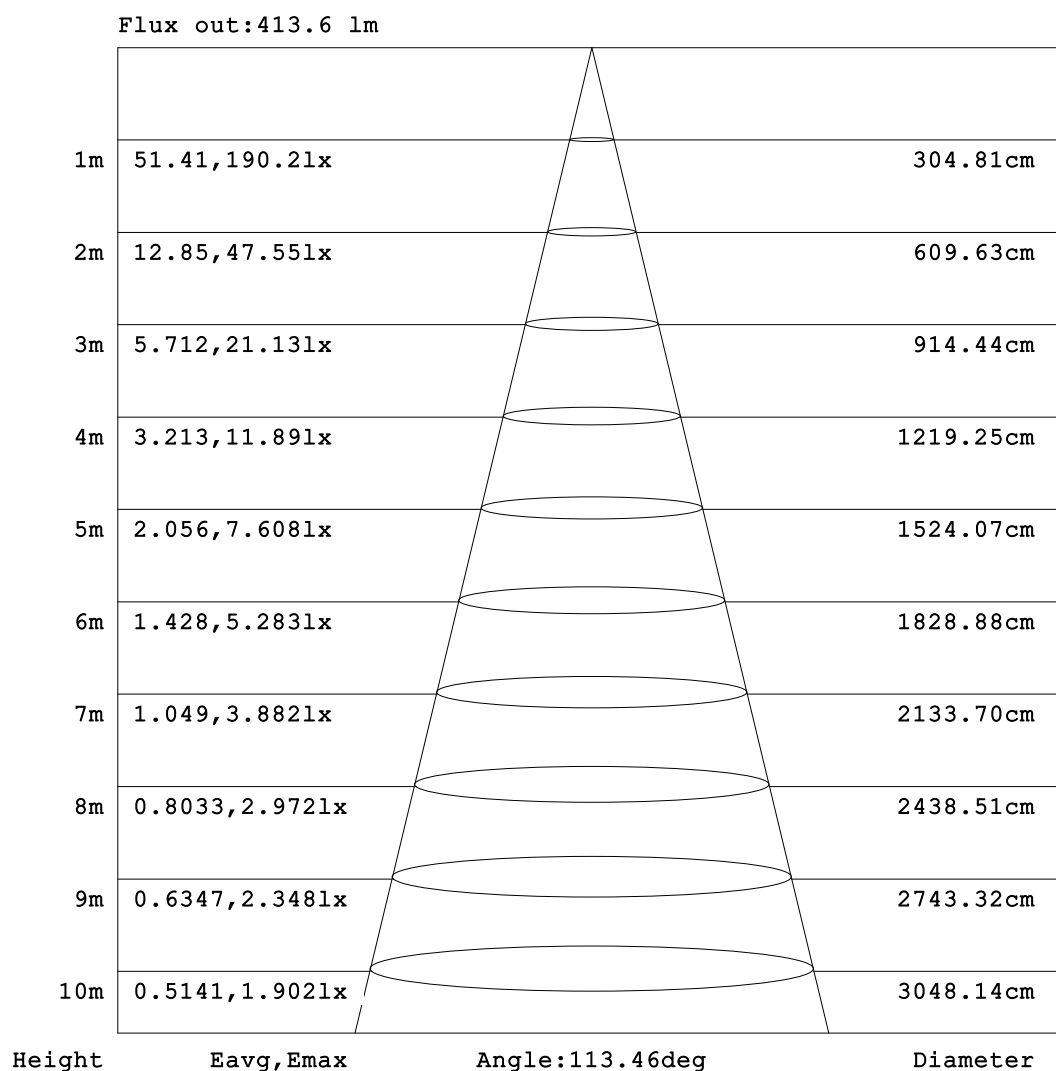
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-06

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.450  
Humidity:65.0%  
Test Distance:6.040m [K=1.0000]  
Remarks:



### AAI Figure

|   |               |                  |
|---|---------------|------------------|
| Test:U:23.998V I:0.4138A P:9.9304W PF:1.0000 Freq:0Hz<br>Lamp Flux:3.85953x120 lm |               |                  |
| NAME: 1615-D  | TYPE:         | WEIGHT:          |
| SPEC.:  | DIM.:         | SERIAL No.:      |
| MFR.:   | SUR.: 0.016*1 | Shielding Angle: |



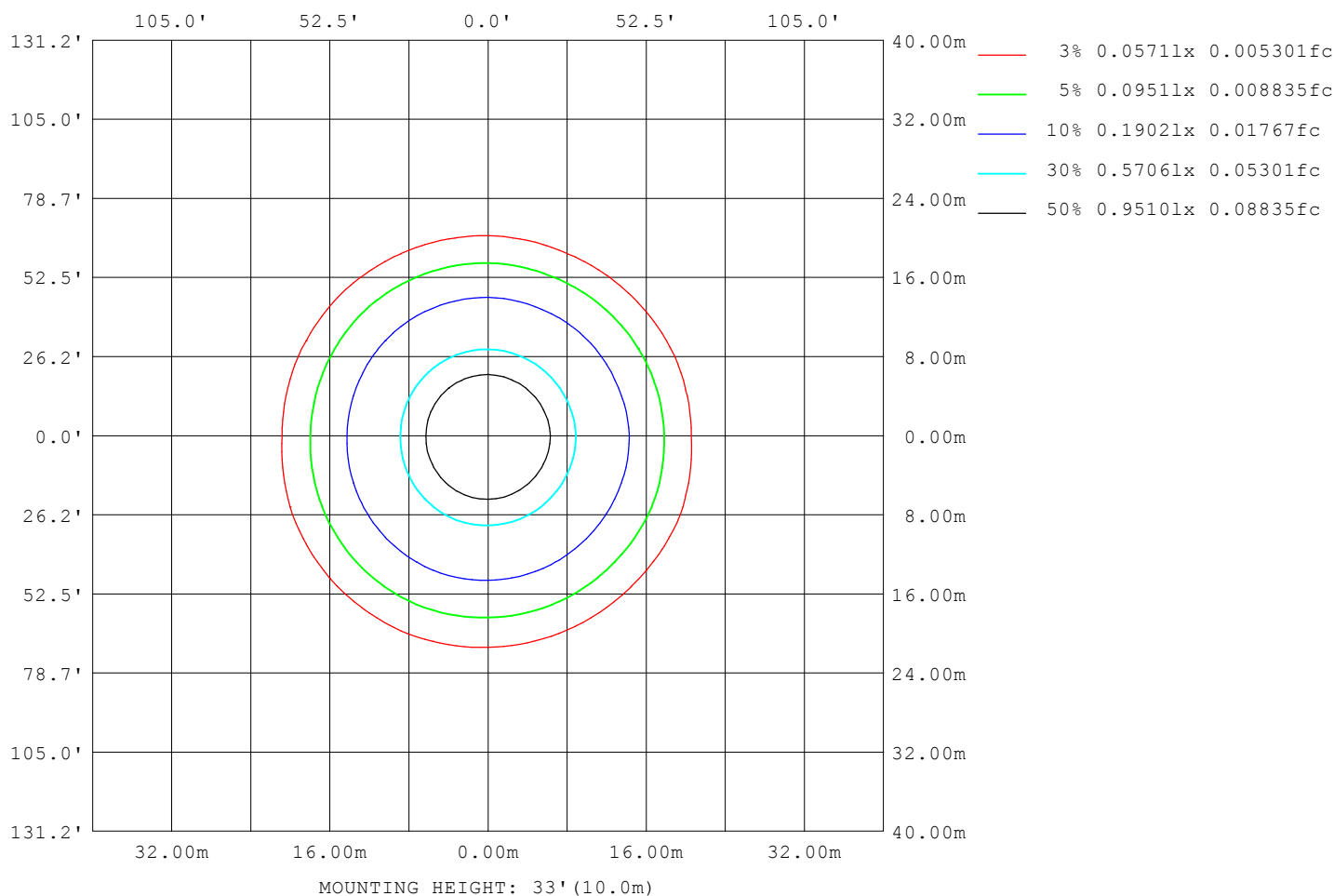
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-06

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.450  
Humidity:65.0%  
Test Distance:6.040m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

|   |               |                  |
|---|---------------|------------------|
| Test:U:23.998V I:0.4138A P:9.9304W PF:1.0000 Freq:0Hz<br>Lamp Flux:3.85953x120 lm |               |                  |
| NAME: 1615-D  | TYPE:         | WEIGHT:          |
| SPEC.:  | DIM.:         | SERIAL No.:      |
| MFR.:   | SUR.: 0.016*1 | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-06

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.450  
Humidity:65.0%  
Test Distance:6.040m [K=1.0000]  
Remarks:

## LED Avg.L Report

|   |               |                  |
|---|---------------|------------------|
| Test:U:23.998V I:0.4138A P:9.9304W PF:1.0000 Freq:0Hz<br>Lamp Flux:3.85953x120 lm |               |                  |
| NAME: 1615-D  | TYPE:         | WEIGHT:          |
| SPEC.:  | DIM.:         | SERIAL No.:      |
| MFR.:   | SUR.: 0.016*1 | Shielding Angle: |

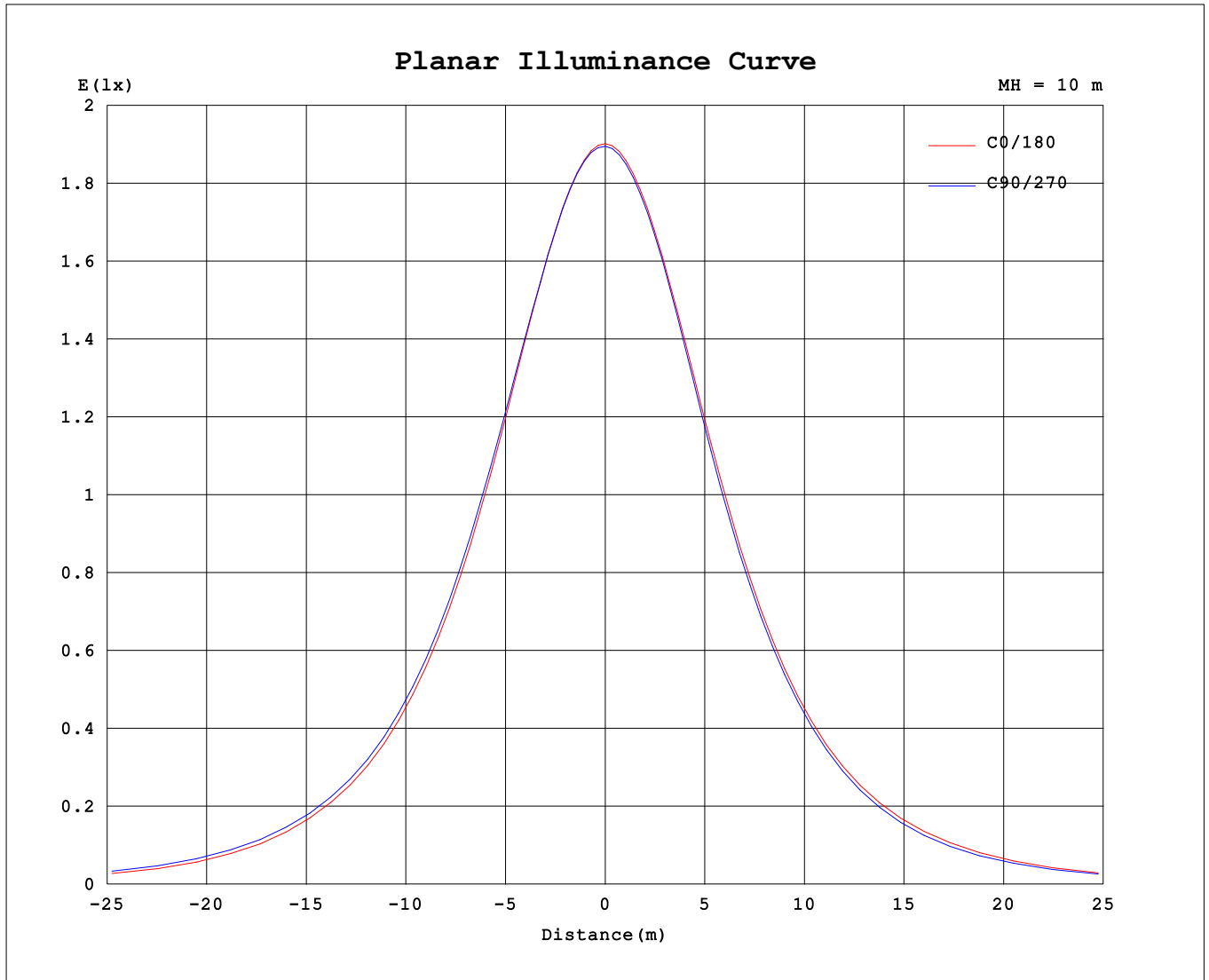
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 15623 |
| L_0~180 (75) av  | 10454 |
| L_0~180 (85) av  | 539   |
| L_90~270 (65) av | 16077 |
| L_90~270 (75) av | 13018 |
| L_90~270 (85) av | 11045 |
| L_45 (65) av     | 16241 |
| L_45 (75) av     | 13446 |
| L_45 (85) av     | 9555  |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-06

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.450  
Humidity:65.0%  
Test Distance:6.040m [K=1.0000]  
Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2024-01-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 2.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.450  
 Humidity: 65.0%  
 Test Distance: 6.040m [K=1.0000]  
 Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|   |  |  |  |  |  |  |  |  |               |  |  |  |  |  |                  |  |  |
|---|--|--|--|--|--|--|--|--|---------------|--|--|--|--|--|------------------|--|--|
| Test:U:23.998V I:0.4138A P:9.9304W PF:1.0000 Freq:0Hz<br>Lamp Flux:3.85953x120 lm |  |  |  |  |  |  |  |  |               |  |  |  |  |  |                  |  |  |
| NAME: 1615-D  |  |  |  |  |  |  |  |  | TYPE:         |  |  |  |  |  | WEIGHT:          |  |  |
| SPEC.:  |  |  |  |  |  |  |  |  | DIM.:         |  |  |  |  |  | SERIAL No.:      |  |  |
| MFR.:   |  |  |  |  |  |  |  |  | SUR.: 0.016*1 |  |  |  |  |  | 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                  | 190  | 190  | 190  | 190  | 190  | 190   | 190  | 190   | 190  | 190   | 190  | 190   | 190  | 190   | 190  | 190   |  |  |  |
| 5                  | 189  | 189  | 189  | 189  | 189  | 189   | 189  | 189   | 189  | 189   | 189  | 189   | 189  | 189   | 189  | 189   |  |  |  |
| 10                 | 186  | 186  | 186  | 187  | 187  | 187   | 187  | 187   | 186  | 186   | 186  | 186   | 186  | 185   | 185  | 186   |  |  |  |
| 15                 | 183  | 183  | 183  | 183  | 184  | 184   | 184  | 184   | 183  | 183   | 183  | 183   | 182  | 182   | 182  | 182   |  |  |  |
| 20                 | 177  | 177  | 176  | 177  | 178  | 178   | 178  | 178   | 176  | 176   | 176  | 176   | 175  | 175   | 175  | 175   |  |  |  |
| 25                 | 171  | 171  | 171  | 172  | 173  | 174   | 173  | 172   | 171  | 170   | 171  | 170   | 169  | 168   | 169  | 169   |  |  |  |
| 30                 | 161  | 161  | 161  | 163  | 165  | 165   | 164  | 163   | 160  | 160   | 160  | 159   | 158  | 157   | 158  | 159   |  |  |  |
| 35                 | 153  | 153  | 154  | 156  | 158  | 158   | 157  | 155   | 152  | 152   | 152  | 150   | 149  | 148   | 149  | 151   |  |  |  |
| 40                 | 140  | 140  | 141  | 144  | 145  | 146   | 145  | 142   | 139  | 139   | 138  | 137   | 136  | 135   | 135  | 137   |  |  |  |
| 45                 | 130  | 131  | 132  | 134  | 136  | 137   | 136  | 133   | 130  | 129   | 128  | 127   | 126  | 125   | 125  | 127   |  |  |  |
| 50                 | 115  | 115  | 117  | 119  | 121  | 123   | 121  | 118   | 114  | 113   | 113  | 111   | 110  | 108   | 109  | 110   |  |  |  |
| 55                 | 103  | 104  | 105  | 108  | 110  | 112   | 110  | 107   | 103  | 101   | 101  | 99.2  | 97.5 | 96.0  | 97.5 | 98.9  |  |  |  |
| 60                 | 83.1 | 86.3 | 87.4 | 90.1 | 92.2 | 94.4  | 93.1 | 89.8  | 85.2 | 83.3  | 82.6 | 79.5  | 77.8 | 76.3  | 78.2 | 80.7  |  |  |  |
| 65                 | 68.2 | 73.7 | 73.9 | 76.2 | 78.5 | 81.1  | 80.4 | 77.5  | 71.6 | 70.9  | 69.1 | 66.1  | 64.3 | 62.7  | 64.7 | 68.1  |  |  |  |
| 70                 | 44.8 | 53.6 | 53.3 | 55.4 | 57.5 | 60.3  | 60.2 | 57.8  | 47.5 | 51.0  | 48.7 | 45.6  | 43.8 | 42.2  | 44.3 | 48.0  |  |  |  |
| 75                 | 29.6 | 40.2 | 39.6 | 41.3 | 43.3 | 46.4  | 46.6 | 44.6  | 31.9 | 37.8  | 35.3 | 32.3  | 30.7 | 29.2  | 30.9 | 34.9  |  |  |  |
| 80                 | 9.50 | 21.3 | 20.4 | 21.6 | 23.5 | 26.1  | 26.9 | 25.5  | 11.2 | 19.2  | 16.7 | 14.8  | 13.8 | 12.7  | 13.5 | 16.8  |  |  |  |
| 85                 | 0.55 | 10.6 | 10.1 | 12.0 | 13.7 | 15.0  | 15.3 | 14.0  | 1.58 | 8.94  | 7.60 | 7.87  | 7.90 | 7.18  | 6.56 | 7.51  |  |  |  |
| 90                 | 0.10 | 3.47 | 5.19 | 6.92 | 7.70 | 7.61  | 5.83 | 3.40  | 0.11 | 1.98  | 4.04 | 5.30  | 5.64 | 5.43  | 4.59 | 3.09  |  |  |  |
| 95                 | 0.09 | 3.12 | 4.49 | 5.43 | 5.93 | 5.92  | 4.70 | 2.49  | 0.11 | 1.91  | 3.91 | 4.97  | 5.17 | 5.20  | 4.55 | 3.12  |  |  |  |
| 100                | 0.11 | 3.10 | 4.16 | 4.44 | 4.47 | 4.50  | 3.82 | 2.40  | 0.15 | 1.90  | 3.58 | 4.45  | 4.50 | 4.56  | 4.17 | 2.98  |  |  |  |
| 105                | 0.13 | 2.84 | 3.75 | 4.11 | 4.10 | 4.18  | 3.61 | 2.42  | 0.18 | 1.86  | 3.31 | 4.02  | 4.08 | 4.18  | 3.89 | 2.77  |  |  |  |
| 110                | 0.17 | 2.14 | 3.21 | 3.44 | 3.38 | 3.52  | 3.06 | 2.00  | 0.21 | 1.67  | 2.95 | 3.68  | 3.79 | 3.85  | 3.48 | 2.30  |  |  |  |
| 115                | 0.20 | 1.92 | 2.98 | 3.11 | 3.01 | 3.12  | 2.75 | 1.69  | 0.24 | 1.52  | 2.78 | 3.53  | 3.69 | 3.72  | 3.38 | 2.07  |  |  |  |
| 120                | 0.25 | 1.59 | 2.73 | 2.86 | 2.77 | 2.78  | 2.41 | 1.26  | 0.28 | 1.31  | 2.52 | 3.50  | 3.79 | 3.72  | 3.15 | 1.73  |  |  |  |
| 125                | 0.27 | 1.48 | 2.52 | 2.79 | 2.72 | 2.68  | 2.00 | 1.20  | 0.31 | 1.21  | 2.30 | 3.44  | 3.76 | 3.65  | 2.96 | 1.60  |  |  |  |
| 130                | 0.32 | 1.36 | 2.29 | 2.70 | 2.75 | 2.49  | 1.78 | 1.05  | 0.36 | 1.15  | 2.22 | 3.43  | 3.90 | 3.78  | 3.00 | 1.55  |  |  |  |
| 135                | 0.35 | 1.32 | 2.27 | 2.78 | 2.82 | 2.33  | 1.71 | 0.98  | 0.39 | 1.13  | 2.23 | 3.34  | 4.09 | 3.95  | 3.13 | 1.55  |  |  |  |
| 140                | 0.39 | 1.23 | 2.55 | 3.02 | 3.15 | 2.34  | 1.66 | 0.96  | 0.43 | 1.05  | 2.10 | 3.17  | 4.26 | 4.09  | 3.02 | 1.39  |  |  |  |
| 145                | 0.41 | 1.19 | 2.58 | 3.04 | 3.30 | 2.44  | 1.81 | 0.95  | 0.46 | 0.98  | 1.95 | 2.94  | 4.13 | 3.85  | 2.85 | 1.25  |  |  |  |
| 150                | 0.45 | 1.02 | 2.32 | 3.08 | 3.26 | 2.09  | 1.68 | 0.94  | 0.49 | 0.87  | 1.62 | 2.37  | 3.66 | 3.42  | 2.46 | 1.03  |  |  |  |
| 155                | 0.48 | 0.85 | 1.99 | 2.83 | 3.10 | 1.87  | 1.49 | 0.93  | 0.51 | 0.84  | 1.40 | 1.98  | 3.22 | 2.98  | 2.08 | 0.88  |  |  |  |
| 160                | 0.52 | 0.64 | 1.51 | 2.16 | 2.51 | 1.51  | 1.25 | 0.82  | 0.55 | 0.80  | 1.16 | 1.43  | 2.46 | 2.22  | 1.49 | 0.72  |  |  |  |
| 165                | 0.54 | 0.57 | 1.17 | 1.65 | 1.85 | 1.16  | 1.12 | 0.71  | 0.56 | 0.74  | 1.00 | 1.08  | 1.86 | 1.67  | 1.13 | 0.65  |  |  |  |
| 170                | 0.56 | 0.57 | 0.69 | 0.93 | 0.89 | 0.85  | 0.78 | 0.62  | 0.58 | 0.67  | 0.79 | 0.78  | 0.75 | 0.97  | 0.73 | 0.60  |  |  |  |
| 175                | 0.57 | 0.58 | 0.61 | 0.63 | 0.68 | 0.65  | 0.67 | 0.58  | 0.59 | 0.64  | 0.67 | 0.69  | 0.61 | 0.71  | 0.63 | 0.59  |  |  |  |
| 180                | 0.59 | 0.59 | 0.59 | 0.60 | 0.60 | 0.60  | 0.58 | 0.58  | 0.59 | 0.61  | 0.61 | 0.61  | 0.61 | 0.60  | 0.59 | 0.59  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-06

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.450  
Humidity:65.0%  
Test Distance:6.040m [K=1.0000]  
Remarks: