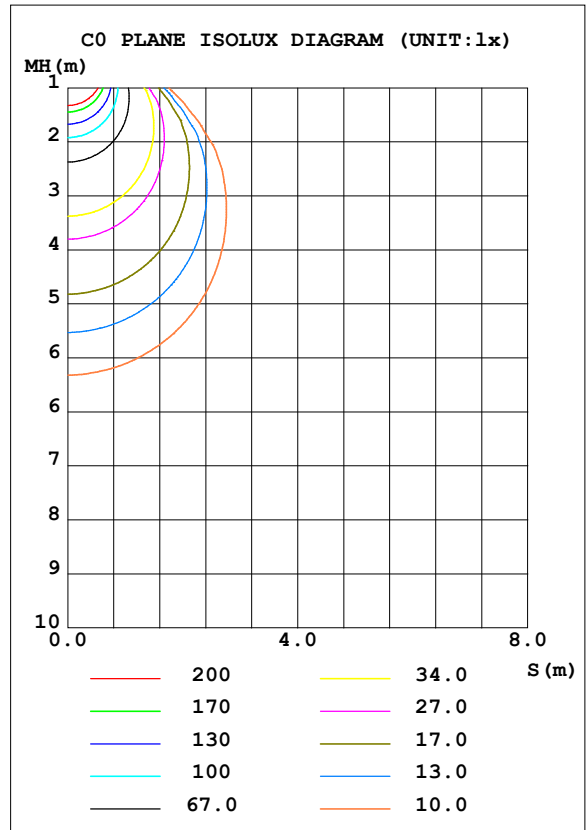
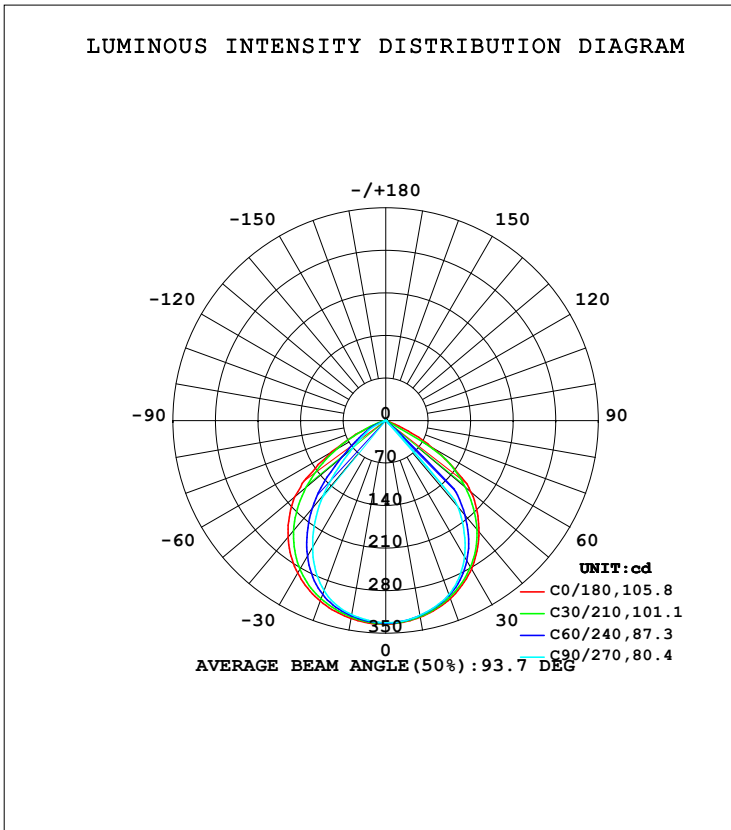




LUMINAIRE PHOTOMETRIC TEST REPORT

|  |               |                  |
|--|---------------|------------------|
| Test:U:12.000V I:0.5830A P:6.9900W PF:1.0000 Freq:0Hz Lamp Flux:632.628x1 lm |               |                  |
| NAME:  | FL-01-12V-YYY | TYPE:            |
| SPEC.:   |               | SERIAL No.:      |
| MFR.:  |               | Shielding Angle: |
| WEIGHT:  |               |                  |

| DATA OF LAMP      |         | PHOTOMETRIC DATA Eff: 90.50 lm/W |        |                     |           |
|-------------------|---------|----------------------------------|--------|---------------------|-----------|
| MODEL             |         | I <sub>max</sub> (cd)            | 335.1  | S/MH (C0/180)       | 1.28      |
| NOMINAL POWER (W) |         | LOR (%)                          | 100.0  | S/MH (C90/270)      | 1.11      |
| RATED VOLTAGE (V) | 12      | TOTAL FLUX (lm)                  | 632.63 | η UP, DN (C0-180)   | 0.0, 48.2 |
| NOMINAL FLUX (lm) | 632.628 | CIE CLASS                        | DIRECT | η UP, DN (C180-360) | 0.0, 51.7 |
| LAMPS INSIDE      | 1       | η up (%)                         | 0.0    | CIBSE SHR NOM       | 1.25      |
| TEST VOLTAGE (V)  | 12      | η down (%)                       | 100.0  | CIBSE SHR MAX       | 1.30      |



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: SENPU  
 Test Date: 2021-06-03

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000 SYSTEM V2.0.402  
 Humidity: 65.0%  
 Test Distance: 8.000m [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       | 328.7                 | 326.5  | 325.1  | 326.2  | 330.6  | 326.7  | 324.1  | 322.9  | 0- 10    | 31.43       | 31.43        | 4.97,4.97  |
| 20       | 311.4                 | 307.7  | 304.5  | 309.5  | 315.6  | 308.1  | 297.2  | 302.2  | 10- 20   | 89.70       | 121.1        | 19.1,19.1  |
| 30       | 282.2                 | 274.6  | 259.5  | 279.7  | 289.9  | 270.7  | 240.9  | 261.1  | 20- 30   | 133.5       | 254.6        | 40.3,40.3  |
| 40       | 239.0                 | 221.4  | 184.5  | 228.7  | 250.2  | 211.6  | 159.4  | 196.1  | 30- 40   | 151.3       | 405.9        | 64.2,64.2  |
| 50       | 182.6                 | 144.7  | 3.862  | 154.9  | 196.0  | 132.3  | 73.27  | 114.6  | 40- 50   | 123.8       | 529.7        | 83.7,83.7  |
| 60       | 85.38                 | 2.090  | 0.2785 | 2.668  | 102.9  | 55.29  | 33.67  | 42.25  | 50- 60   | 72.72       | 602.5        | 95.2,95.2  |
| 70       | 4.675                 | 0.1276 | 0.1054 | 0.1724 | 12.98  | 16.30  | 3.053  | 10.26  | 60- 70   | 26.59       | 629.1        | 99.4,99.4  |
| 80       | 0.3610                | 0.1202 | 0.0976 | 0.1652 | 0.3298 | 1.331  | 1.606  | 1.158  | 70- 80   | 2.821       | 631.9        | 99.9,99.9  |
| 90       | 0.1429                | 0.1277 | 0.1502 | 0.1127 | 0.0451 | 0.5109 | 0.8334 | 0.4585 | 80- 90   | 0.4848      | 632.4        | 100,100    |
| 100      | 0.2028                | 0.1427 | 0.2103 | 0.2103 | 0.0601 | 0.1201 | 0.3528 | 0.1051 | 90-100   | 0.2625      | 632.6        | 100,100    |
| 110      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 100-110  | 0.0092      | 632.6        | 100,100    |
| 120      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 110-120  | 0           | 632.6        | 100,100    |
| 130      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 120-130  | 0           | 632.6        | 100,100    |
| 140      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 130-140  | 0           | 632.6        | 100,100    |
| 150      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 140-150  | 0           | 632.6        | 100,100    |
| 160      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 150-160  | 0           | 632.6        | 100,100    |
| 170      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 160-170  | 0           | 632.6        | 100,100    |
| 180      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 170-180  | 0           | 632.6        | 100,100    |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |            |

Conical surface Flux(90deg): 475.06 lm

%lum = 75.1%

%lamp = 75.1%

Conical surface Flux(120deg): 602.46 lm

%lum = 95.2%

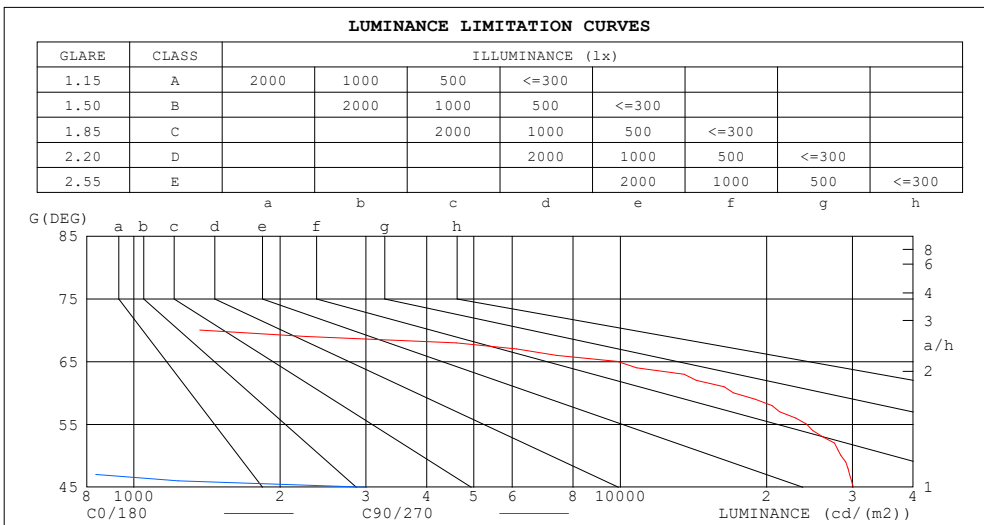
%lamp = 95.2%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:SENPU  
 Test Date:2021-06-03

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks:

LUMINANCE LIMITATION CURVES

|  |       |                  |
|--|-------|------------------|
| Test:U:12.000V I:0.5830A P:6.9900W PF:1.0000 Freq:0Hz Lamp Flux:632.628x1 lm |       |                  |
| NAME:FL-01-12V-YYY   | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 285    | 112     |
| 80                | 208    | 56      |
| 75                | 253    | 41      |
| 70                | 1367   | 31      |
| 65                | 9869   | 53      |
| 60                | 17077  | 56      |
| 55                | 24174  | 136     |
| 50                | 28406  | 601     |
| 45                | 30162  | 3016    |

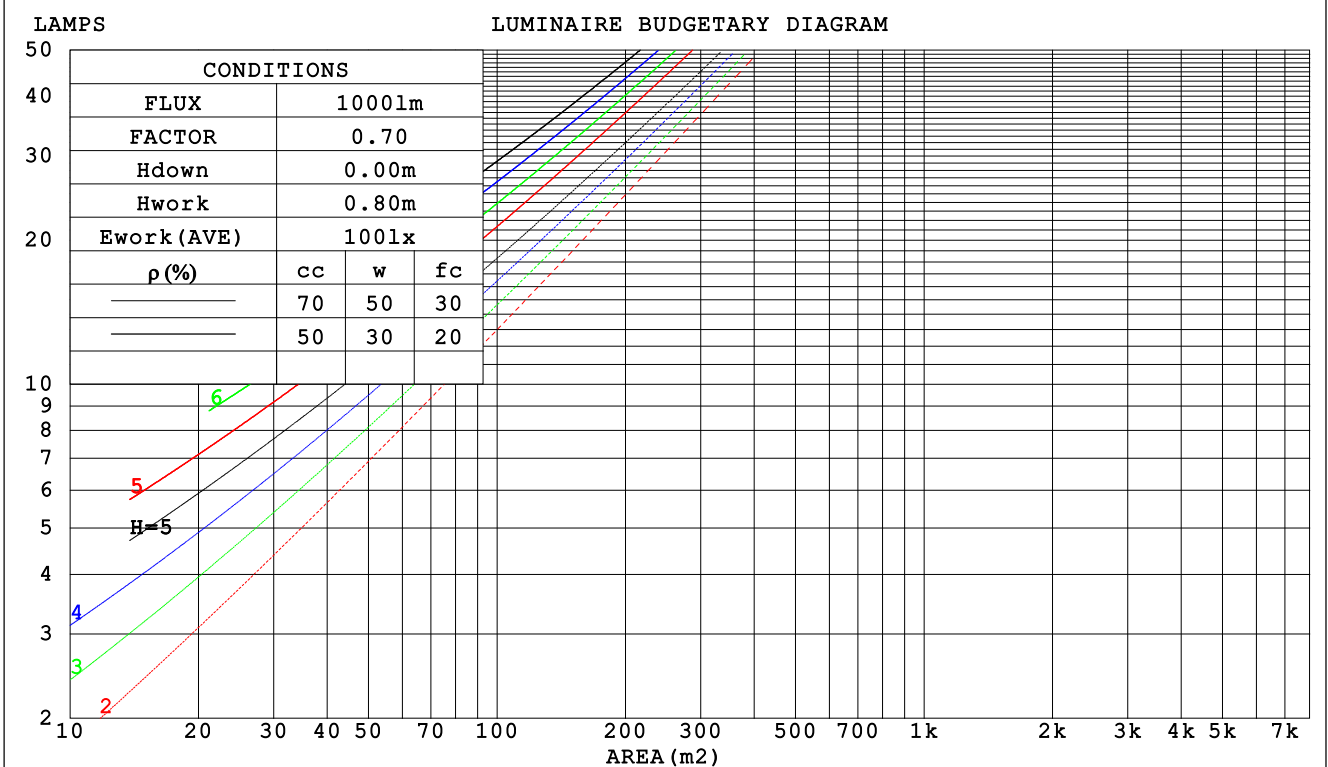
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:SENPU  
 Test Date:2021-06-03

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|  |       |                  |
|--|-------|------------------|
| Test:U:12.000V I:0.5830A P:6.9900W PF:1.0000 Freq:0Hz Lamp Flux:632.628x1 lm |       |                  |
| NAME: FL-01-12V-YYY  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0   |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|-----|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0   |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 0   |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Coefficients of Utilization(CU) |      |      |      |      |      |      |      |      |     |
| 0.0  | 1.19                  | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11                            | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | .00 |
| 1.0  | 1.08                  | 1.05 | 1.02 | 1.06 | 1.03 | 1.01 | 1.02                            | .00  | .97  | .98  | .96  | .94  | .95  | .93  | .92  | .90 |
| 2.0  | .98                   | .92  | .88  | .96  | .91  | .87  | .92                             | .88  | .85  | .89  | .86  | .83  | .86  | .84  | .81  | .79 |
| 3.0  | .88                   | .82  | .76  | .87  | .81  | .76  | .84                             | .79  | .74  | .81  | .77  | .73  | .79  | .75  | .72  | .70 |
| 4.0  | .80                   | .72  | .67  | .78  | .72  | .67  | .76                             | .70  | .66  | .74  | .69  | .65  | .72  | .68  | .64  | .62 |
| 5.0  | .72                   | .65  | .59  | .71  | .64  | .59  | .69                             | .63  | .58  | .68  | .62  | .58  | .66  | .61  | .57  | .55 |
| 6.0  | .66                   | .58  | .53  | .65  | .58  | .53  | .63                             | .57  | .52  | .62  | .56  | .52  | .60  | .55  | .51  | .50 |
| 7.0  | .61                   | .53  | .47  | .60  | .53  | .47  | .58                             | .52  | .47  | .57  | .51  | .47  | .56  | .50  | .46  | .45 |
| 8.0  | .56                   | .48  | .43  | .55  | .48  | .43  | .54                             | .47  | .43  | .53  | .47  | .42  | .52  | .46  | .42  | .40 |
| 9.0  | .51                   | .44  | .39  | .51  | .44  | .39  | .50                             | .43  | .39  | .49  | .43  | .39  | .48  | .42  | .38  | .37 |
| 10.0 | .48                   | .41  | .36  | .47  | .40  | .36  | .46                             | .40  | .36  | .45  | .40  | .35  | .45  | .39  | .35  | .34 |



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:SENPU  
 Test Date:2021-06-03

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks:

WEC AND CCEC

|  |       |                  |
|--|-------|------------------|
| Test:U:12.000V I:0.5830A P:6.9900W PF:1.0000 Freq:0Hz Lamp Flux:632.628x1 lm |       |                  |
| NAME: FL-01-12V-YYY  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                              |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                              | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                              |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients (WEC) |      |      |      |      |      |      |      |      |   |
| 0.0  |                       |      |      |      |      |      |                                  |      |      |      |      |      |      |      |      |   |
| 1.0  | .227                  | .129 | .041 | .220 | .126 | .040 | .207                             | .119 | .038 | .195 | .113 | .036 | .185 | .107 | .034 |   |
| 2.0  | .223                  | .122 | .038 | .217 | .120 | .037 | .206                             | .115 | .036 | .196 | .110 | .034 | .186 | .105 | .033 |   |
| 3.0  | .214                  | .114 | .034 | .209 | .112 | .034 | .199                             | .108 | .033 | .190 | .104 | .032 | .182 | .101 | .031 |   |
| 4.0  | .204                  | .106 | .031 | .199 | .104 | .031 | .191                             | .101 | .030 | .183 | .098 | .030 | .175 | .095 | .029 |   |
| 5.0  | .193                  | .098 | .028 | .189 | .097 | .028 | .181                             | .094 | .028 | .174 | .092 | .027 | .168 | .090 | .027 |   |
| 6.0  | .183                  | .092 | .026 | .179 | .090 | .026 | .172                             | .088 | .026 | .166 | .086 | .025 | .160 | .084 | .025 |   |
| 7.0  | .173                  | .086 | .024 | .170 | .085 | .024 | .164                             | .083 | .024 | .158 | .081 | .024 | .153 | .079 | .023 |   |
| 8.0  | .164                  | .080 | .023 | .161 | .079 | .022 | .156                             | .078 | .022 | .151 | .076 | .022 | .146 | .075 | .022 |   |
| 9.0  | .155                  | .075 | .021 | .153 | .075 | .021 | .148                             | .073 | .021 | .143 | .072 | .021 | .139 | .071 | .020 |   |
| 10.0 | .148                  | .071 | .020 | .145 | .070 | .020 | .141                             | .069 | .019 | .137 | .068 | .019 | .133 | .067 | .019 |   |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%   |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|---|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%   |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients (CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .191                  | .191 | .191 | .163 | .163 | .163 | .111  | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .175                  | .157 | .141 | .150 | .135 | .122 | .102  | .093 | .084 | .059 | .054 | .049 | .019 | .017 | .016 |   |
| 2.0  | .163                  | .133 | .107 | .140 | .114 | .092 | .096  | .079 | .064 | .055 | .046 | .038 | .018 | .015 | .012 |   |
| 3.0  | .154                  | .114 | .083 | .132 | .099 | .072 | .091  | .068 | .050 | .052 | .040 | .030 | .017 | .013 | .010 |   |
| 4.0  | .146                  | .100 | .065 | .125 | .087 | .057 | .086  | .060 | .040 | .050 | .035 | .024 | .016 | .012 | .008 |   |
| 5.0  | .139                  | .089 | .053 | .119 | .077 | .046 | .082  | .054 | .033 | .048 | .032 | .019 | .015 | .010 | .006 |   |
| 6.0  | .132                  | .081 | .044 | .114 | .070 | .038 | .078  | .049 | .027 | .045 | .029 | .016 | .015 | .009 | .005 |   |
| 7.0  | .126                  | .074 | .037 | .108 | .064 | .032 | .075  | .045 | .023 | .044 | .026 | .014 | .014 | .009 | .005 |   |
| 8.0  | .120                  | .068 | .032 | .104 | .059 | .028 | .072  | .041 | .020 | .042 | .024 | .012 | .013 | .008 | .004 |   |
| 9.0  | .115                  | .063 | .028 | .099 | .055 | .024 | .069  | .038 | .017 | .040 | .023 | .010 | .013 | .007 | .003 |   |
| 10.0 | .110                  | .059 | .024 | .095 | .051 | .021 | .066  | .036 | .015 | .038 | .021 | .009 | .012 | .007 | .003 |   |

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:SENPU  
 Test Date:2021-06-03

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks:

## UGR(Unified Glare Rating) Table

| Test:U:12.000V I:0.5830A P:6.9900W PF:1.0000 Freq:0Hz Lamp Flux:632.628x1 lm |                  |      |      |      |       |                |      |                  |      |      |
|--|------------------|------|------|------|-------|----------------|------|------------------|------|------|
| NAME:FL-01-12V-YYY   |                  |      |      |      | TYPE: |                |      | WEIGHT:          |      |      |
| SPEC.:   |                  |      |      |      | DIM.: |                |      | SERIAL No.:      |      |      |
| MFR.:  |                  |      |      |      | SUR.: |                |      | Shielding Angle: |      |      |
| ceiling/cavity   | 0.7              | 0.7  | 0.5  | 0.5  | 0.3   | 0.7            | 0.7  | 0.5              | 0.5  | 0.3  |
| walls  | 0.5              | 0.3  | 0.5  | 0.3  | 0.3   | 0.5            | 0.3  | 0.5              | 0.3  | 0.3  |
| working plane  | 0.2              | 0.2  | 0.2  | 0.2  | 0.2   | 0.2            | 0.2  | 0.2              | 0.2  | 0.2  |
| Room dimensions  | Viewed crosswise |      |      |      |       | Viewed endwise |      |                  |      |      |
| x = 2H y = 2H  | 24.1             | 25.4 | 24.3 | 25.5 | 25.7  | 17.7           | 19.0 | 18.0             | 19.2 | 19.4 |
| 3H   | 24.0             | 25.2 | 24.3 | 25.4 | 25.6  | 17.5           | 18.7 | 17.8             | 18.9 | 19.1 |
| 4H   | 23.9             | 25.0 | 24.2 | 25.3 | 25.5  | 17.4           | 18.5 | 17.7             | 18.8 | 19.0 |
| 6H   | 23.8             | 24.9 | 24.2 | 25.1 | 25.4  | 17.3           | 18.4 | 17.7             | 18.6 | 18.9 |
| 8H   | 23.8             | 24.8 | 24.1 | 25.1 | 25.3  | 17.3           | 18.3 | 17.6             | 18.5 | 18.8 |
| 12H  | 23.8             | 24.7 | 24.1 | 25.0 | 25.3  | 17.2           | 18.2 | 17.6             | 18.5 | 18.8 |
| 4H 2H  | 23.8             | 24.9 | 24.1 | 25.1 | 25.4  | 18.0           | 19.1 | 18.3             | 19.3 | 19.5 |
| 3H   | 23.8             | 24.7 | 24.1 | 25.0 | 25.3  | 17.8           | 18.7 | 18.1             | 19.0 | 19.3 |
| 4H   | 23.7             | 24.5 | 24.0 | 24.8 | 25.1  | 17.7           | 18.5 | 18.0             | 18.8 | 19.2 |
| 6H   | 23.6             | 24.3 | 24.0 | 24.7 | 25.0  | 17.6           | 18.3 | 18.0             | 18.7 | 19.0 |
| 8H   | 23.5             | 24.2 | 23.9 | 24.6 | 24.9  | 17.5           | 18.2 | 17.9             | 18.6 | 19.0 |
| 12H  | 23.5             | 24.1 | 23.9 | 24.5 | 24.9  | 17.5           | 18.1 | 17.9             | 18.5 | 18.9 |
| 8H 4H  | 23.5             | 24.2 | 23.9 | 24.6 | 24.9  | 17.5           | 18.2 | 17.9             | 18.6 | 19.0 |
| 6H   | 23.4             | 24.0 | 23.9 | 24.4 | 24.8  | 17.5           | 18.0 | 17.9             | 18.4 | 18.8 |
| 8H   | 23.4             | 23.9 | 23.8 | 24.3 | 24.7  | 17.4           | 17.9 | 17.9             | 18.3 | 18.8 |
| 12H  | 23.3             | 23.8 | 23.8 | 24.2 | 24.7  | 17.4           | 17.8 | 17.8             | 18.2 | 18.7 |
| 12H 4H   | 23.5             | 24.1 | 23.9 | 24.5 | 24.9  | 17.5           | 18.1 | 17.9             | 18.5 | 18.9 |
| 6H   | 23.4             | 23.9 | 23.8 | 24.3 | 24.7  | 17.4           | 17.9 | 17.9             | 18.3 | 18.8 |
| 8H   | 23.3             | 23.8 | 23.8 | 24.2 | 24.7  | 17.4           | 17.8 | 17.8             | 18.2 | 18.7 |
| Variations with the observer position at spacings:                           |                  |      |      |      |       |                |      |                  |      |      |
| S = 1.0H   | + 1.1 / - 2.6    |      |      |      |       | + 2.8 / -29.4  |      |                  |      |      |
| 1.5H   | + 1.1 / - 1.2    |      |      |      |       | + 3.8 / -21.6  |      |                  |      |      |
| 2.0H   | + 2.2 / -19.4    |      |      |      |       | + 8.0 / -19.9  |      |                  |      |      |

CIE Pub.117, 632.6 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = -1.6$ )

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:SENPU  
 Test Date:2021-06-03

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks:

## UTILIZATION FACTORS TABLE

|  |       |                  |
|--|-------|------------------|
| Test:U:12.000V I:0.5830A P:6.9900W PF:1.0000 Freq:0Hz Lamp Flux:632.628x1 lm |       |                  |
| NAME: FL-01-12V-YYY  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |

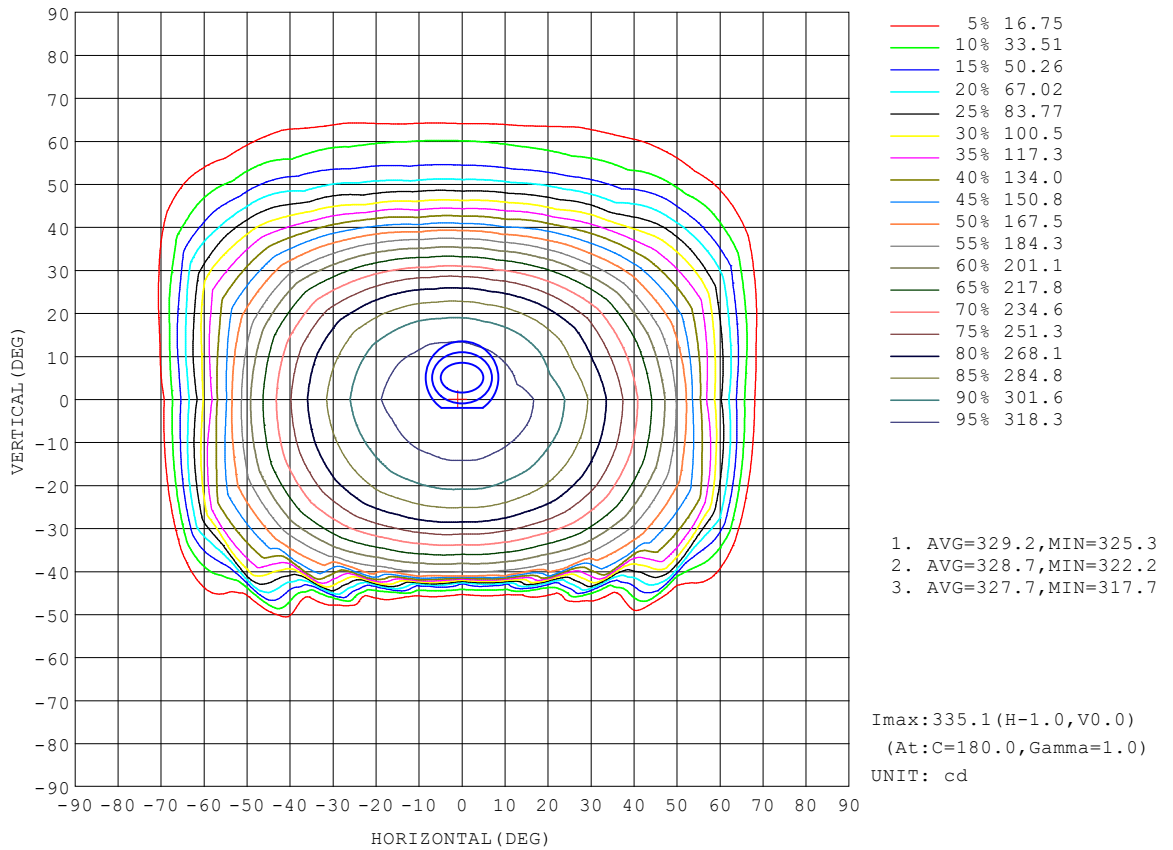
| REFLECTANCE                      |  |     |           |     |     |     |               |     |     |        |
|----------------------------------|--|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling                          | 0.8  | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 0.5           | 0.5 | 0.5 | 0      |
| Walls                            | 0.7  | 0.5 | 0.3       | 0.7 | 0.5 | 0.3 | 0.7           | 0.5 | 0.3 | 0      |
| Working plane                    | 0.2  | 0.2 | 0.2       | 0.2 | 0.2 | 0.2 | 0.2           | 0.2 | 0.2 | 0      |
| ROOM INDEX                       | UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$ |     |           |     |     |     |               |     |     |        |
| k = 0.60                         | 68   | 59  | 53        | 68  | 59  | 53  | 67            | 58  | 53  | 47     |
| 0.80                             | 79   | 69  | 63        | 78  | 69  | 63  | 76            | 68  | 63  | 57     |
| 1.00                             | 87   | 78  | 73        | 86  | 78  | 72  | 84            | 78  | 72  | 66     |
| 1.25                             | 93   | 85  | 80        | 92  | 85  | 79  | 89            | 83  | 79  | 73     |
| 1.50                             | 97   | 90  | 85        | 96  | 89  | 84  | 93            | 88  | 83  | 77     |
| 2.00                             | 102  | 96  | 92        | 101 | 95  | 91  | 98            | 93  | 89  | 83     |
| 2.50                             | 105  | 100 | 95        | 103 | 98  | 94  | 100           | 96  | 92  | 85     |
| 3.00                             | 108  | 103 | 99        | 106 | 101 | 98  | 102           | 98  | 96  | 88     |
| 4.00                             | 110  | 106 | 103       | 108 | 105 | 102 | 104           | 101 | 99  | 91     |
| 5.00                             | 112  | 109 | 106       | 110 | 107 | 104 | 106           | 103 | 101 | 93     |
| ROOM INDEX                       | UF(total)  |     |           |     |     |     |               |     |     | Direct |
| According to DIN EN 13032-2 2004 |  |     | Suspended |     |     |     | SHRNOM = 1.25 |     |     |        |

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:SENPU  
 Test Date:2021-06-03

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

|  |       |                  |
|--|-------|------------------|
| Test:U:12.000V I:0.5830A P:6.9900W PF:1.0000 Freq:0Hz Lamp Flux:632.628x1 lm |       |                  |
| NAME: FL-01-12V-YYY  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |

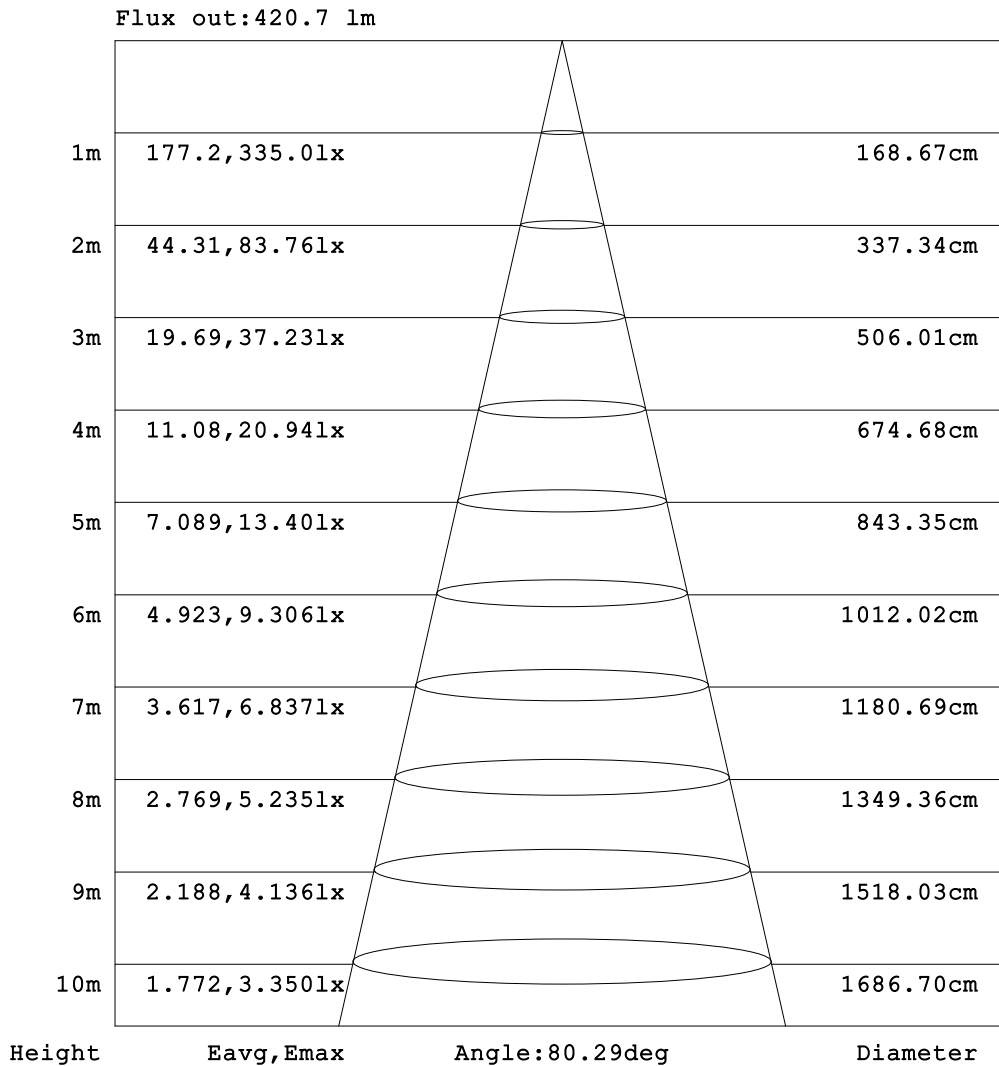


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: SENPU  
 Test Date: 2021-06-03

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000 SYSTEM V2.0.402  
 Humidity: 65.0%  
 Test Distance: 8.000m [K=1.0000]  
 Remarks:

AAI Figure

|  |       |                  |
|--|-------|------------------|
| Test:U:12.000V I:0.5830A P:6.9900W PF:1.0000 Freq:0Hz Lamp Flux:632.628x1 lm |       |                  |
| NAME: FL-01-12V-YYY  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |



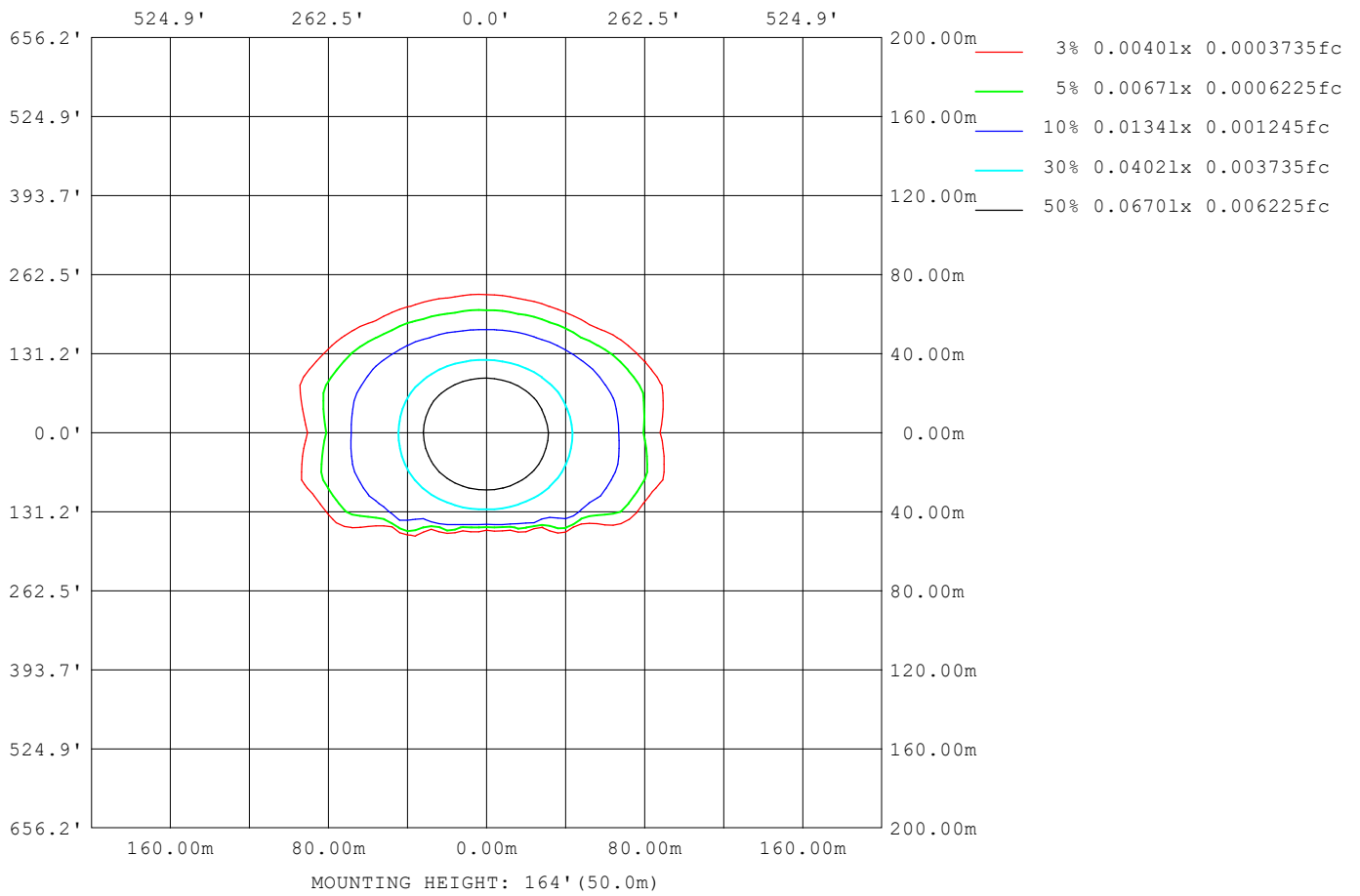
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: SENPU  
 Test Date: 2021-06-03

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000 SYSTEM V2.0.402  
 Humidity: 65.0%  
 Test Distance: 8.000m [K=1.0000]  
 Remarks:

ISOLUX DIAGRAM

|  |       |                  |
|--|-------|------------------|
| Test:U:12.000V I:0.5830A P:6.9900W PF:1.0000 Freq:0Hz Lamp Flux:632.628x1 lm |       |                  |
| NAME: FL-01-12V-YYY  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:SENPU  
 Test Date:2021-06-03

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks:

## LED Avg.L Report

|  |       |                  |
|--|-------|------------------|
| Test:U:12.000V I:0.5830A P:6.9900W PF:1.0000 Freq:0Hz Lamp Flux:632.628x1 lm |       |                  |
| NAME: FL-01-12V-YYY  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |

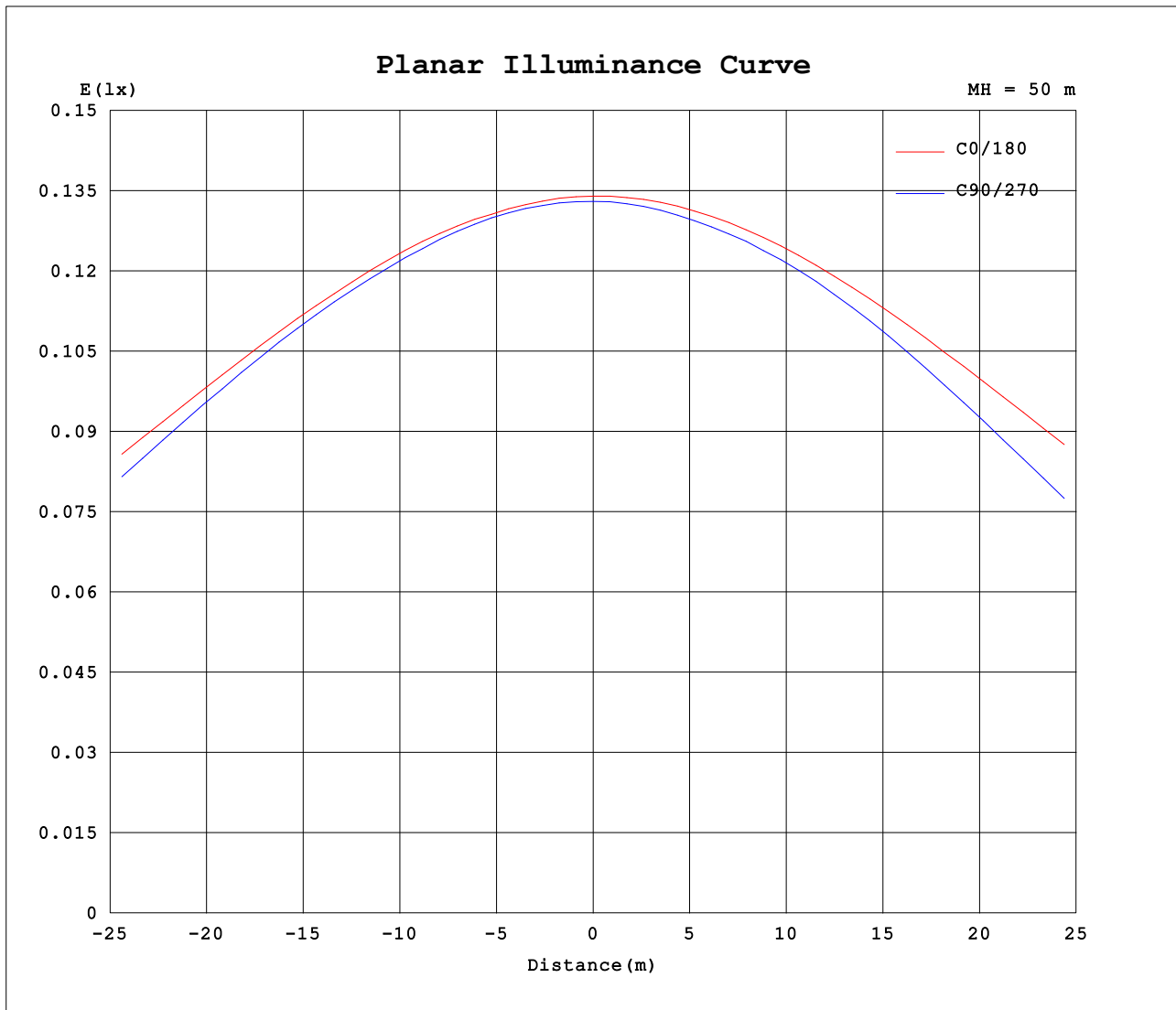
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 11411 |
| L_0~180 (75) av  | 297   |
| L_0~180 (85) av  | 233   |
| L_90~270 (65) av | 1292  |
| L_90~270 (75) av | 408   |
| L_90~270 (85) av | 715   |
| L_45 (65) av     | 3340  |
| L_45 (75) av     | 429   |
| L_45 (85) av     | 500   |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:SENPU  
Test Date:2021-06-03

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000 SYSTEM V2.0.402  
Humidity:65.0%  
Test Distance:8.000m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: SENPU  
Test Date: 2021-06-03

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000 SYSTEM V2.0.402  
Humidity: 65.0%  
Test Distance: 8.000m [K=1.0000]  
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

|  |       |                  |
|--|-------|------------------|
| Test:U:12.000V I:0.5830A P:6.9900W PF:1.0000 Freq:0Hz Lamp Flux:632.628x1 lm |       |                  |
| NAME: FL-01-12V-YYY  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |

Table--1

UNIT: cd

| C (DEG) \ γ (DEG) | 0    | 15   | 30   | 45   | 60   | 75   | 90   | 105  | 120  | 135  | 150  | 165  | 180  | 195  | 210  | 225  | 240  | 255  | 270  |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                 | 335  | 335  | 334  | 334  | 333  | 333  | 332  | 332  | 332  | 332  | 331  | 331  | 335  | 335  | 334  | 334  | 333  | 333  | 332  |
| 5                 | 333  | 332  | 332  | 332  | 331  | 331  | 331  | 331  | 330  | 331  | 330  | 330  | 334  | 333  | 333  | 332  | 331  | 330  | 330  |
| 10                | 329  | 328  | 327  | 326  | 325  | 326  | 325  | 325  | 325  | 326  | 326  | 327  | 331  | 329  | 328  | 327  | 326  | 325  | 324  |
| 15                | 321  | 321  | 320  | 318  | 317  | 317  | 317  | 317  | 318  | 319  | 320  | 321  | 324  | 323  | 321  | 319  | 318  | 315  | 314  |
| 20                | 311  | 311  | 309  | 308  | 306  | 306  | 304  | 305  | 307  | 309  | 311  | 313  | 316  | 314  | 312  | 308  | 304  | 299  | 297  |
| 25                | 298  | 297  | 295  | 294  | 290  | 287  | 285  | 288  | 292  | 297  | 299  | 302  | 304  | 302  | 299  | 292  | 284  | 276  | 273  |
| 30                | 282  | 281  | 279  | 275  | 267  | 262  | 259  | 264  | 270  | 280  | 284  | 287  | 290  | 287  | 282  | 271  | 258  | 245  | 241  |
| 35                | 262  | 261  | 258  | 251  | 238  | 230  | 226  | 232  | 242  | 257  | 266  | 270  | 272  | 269  | 261  | 244  | 225  | 209  | 203  |
| 40                | 239  | 238  | 233  | 221  | 202  | 191  | 185  | 193  | 208  | 229  | 243  | 249  | 250  | 247  | 236  | 212  | 188  | 167  | 159  |
| 45                | 213  | 214  | 205  | 186  | 159  | 35.9 | 21.3 | 37.7 | 166  | 194  | 215  | 225  | 225  | 221  | 206  | 175  | 144  | 117  | 111  |
| 50                | 183  | 186  | 171  | 145  | 7.12 | 3.77 | 3.86 | 3.97 | 11.5 | 155  | 183  | 197  | 196  | 191  | 171  | 132  | 95.0 | 78.3 | 73.3 |
| 55                | 139  | 157  | 135  | 11.1 | 2.27 | 1.08 | 0.78 | 1.26 | 2.67 | 25.0 | 145  | 166  | 147  | 159  | 133  | 88.2 | 62.9 | 50.7 | 47.7 |
| 60                | 85.4 | 113  | 71.5 | 2.09 | 0.46 | 0.23 | 0.28 | 0.27 | 0.53 | 2.67 | 101  | 134  | 103  | 127  | 92.7 | 55.3 | 39.6 | 35.1 | 33.7 |
| 65                | 41.7 | 49.5 | 2.22 | 0.29 | 0.27 | 0.19 | 0.23 | 0.22 | 0.27 | 0.40 | 4.62 | 74.9 | 54.7 | 85.3 | 50.9 | 31.2 | 26.6 | 15.3 | 10.7 |
| 70                | 4.68 | 2.61 | 0.34 | 0.13 | 0.17 | 0.10 | 0.11 | 0.09 | 0.20 | 0.17 | 0.79 | 16.5 | 13.0 | 46.3 | 21.9 | 16.3 | 3.89 | 3.23 | 3.05 |
| 75                | 0.66 | 0.32 | 0.20 | 0.12 | 0.13 | 0.10 | 0.11 | 0.09 | 0.16 | 0.13 | 0.23 | 0.44 | 0.88 | 15.0 | 7.91 | 2.31 | 2.18 | 2.12 | 2.00 |
| 80                | 0.36 | 0.16 | 0.13 | 0.12 | 0.11 | 0.11 | 0.10 | 0.10 | 0.11 | 0.17 | 0.14 | 0.20 | 0.33 | 1.39 | 1.06 | 1.33 | 1.48 | 1.66 | 1.61 |
| 85                | 0.25 | 0.15 | 0.16 | 0.12 | 0.11 | 0.12 | 0.10 | 0.11 | 0.11 | 0.11 | 0.08 | 0.12 | 0.16 | 0.42 | 0.46 | 0.80 | 0.99 | 1.17 | 1.15 |
| 90                | 0.14 | 0.23 | 0.17 | 0.13 | 0.11 | 0.19 | 0.15 | 0.11 | 0.11 | 0.11 | 0.09 | 0.17 | 0.05 | 0.22 | 0.23 | 0.51 | 0.69 | 0.86 | 0.83 |
| 95                | 0.22 | 0.13 | 0.14 | 0.16 | 0.19 | 0.14 | 0.12 | 0.14 | 0.11 | 0.13 | 0.21 | 0.15 | 0.06 | 0.10 | 0.12 | 0.34 | 0.46 | 0.65 | 0.64 |
| 100               | 0.20 | 0.17 | 0.17 | 0.14 | 0.14 | 0.20 | 0.21 | 0.14 | 0.14 | 0.21 | 0.23 | 0.15 | 0.06 | 0.08 | 0.07 | 0.12 | 0.20 | 0.38 | 0.35 |
| 105               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 110               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 115               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 120               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 125               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 130               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 135               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 140               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 145               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 150               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 155               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 160               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 165               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 170               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 175               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 180               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:SENPU  
 Test Date:2021-06-03

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

|  |       |                  |
|--|-------|------------------|
| Test:U:12.000V I:0.5830A P:6.9900W PF:1.0000 Freq:0Hz Lamp Flux:632.628x1 lm |       |                  |
| NAME: FL-01-12V-YYY  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |

Table--2

UNIT: cd

| C (DEG)<br>γ (DEG) | 285  | 300  | 315  | 330  | 345  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                  | 332  | 332  | 332  | 331  | 331  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                  | 329  | 329  | 329  | 329  | 329  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                 | 324  | 323  | 323  | 323  | 323  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                 | 313  | 314  | 315  | 315  | 315  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                 | 297  | 300  | 302  | 304  | 305  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                 | 273  | 278  | 285  | 290  | 291  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                 | 242  | 251  | 261  | 271  | 274  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                 | 204  | 216  | 231  | 248  | 254  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                 | 161  | 177  | 196  | 219  | 230  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                 | 115  | 132  | 158  | 185  | 203  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                 | 75.6 | 87.0 | 115  | 149  | 174  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                 | 47.6 | 54.4 | 69.7 | 112  | 143  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                 | 32.9 | 34.0 | 42.3 | 72.4 | 107  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                 | 13.1 | 22.2 | 24.6 | 36.1 | 61.9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                 | 3.06 | 3.26 | 10.3 | 14.3 | 27.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                 | 2.04 | 1.94 | 1.89 | 3.56 | 4.47 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                 | 1.62 | 1.40 | 1.16 | 0.82 | 0.66 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                 | 1.14 | 0.92 | 0.71 | 0.36 | 0.34 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                 | 0.86 | 0.67 | 0.46 | 0.22 | 0.19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                 | 0.63 | 0.43 | 0.29 | 0.10 | 0.09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100                | 0.32 | 0.15 | 0.11 | 0.09 | 0.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:SENPU  
 Test Date:2021-06-03

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks: