

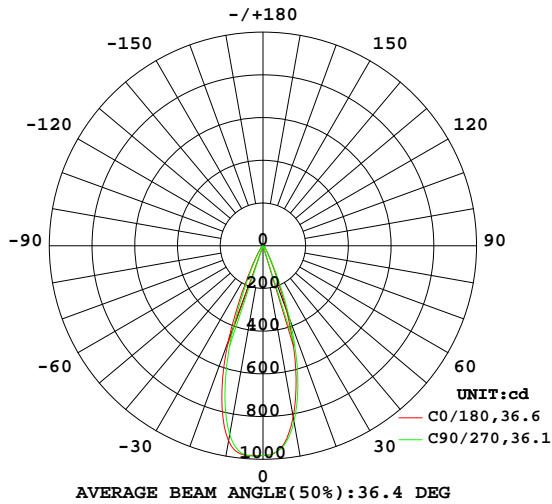
## LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:12.062V I:0.5833A P:5.7362W PF:0.8153 Freq:59.99Hz UTHDi:0.00% ITHDi:0.00% Lamp Flux:386.277x1 lm

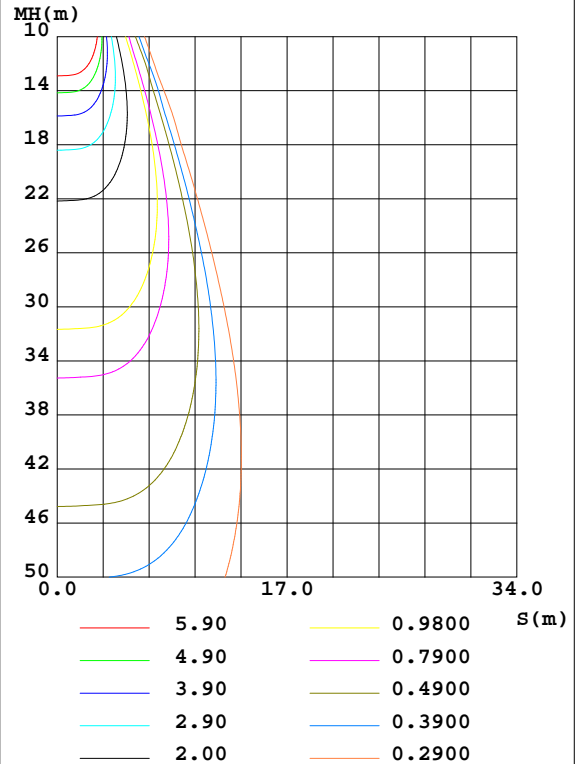
|                     |                       |                  |
|---------------------|-----------------------|------------------|
| NAME: 5311-30BZ-35° | TYPE: Landscape Light | WEIGHT:          |
| SPEC.:              | DIM.:                 | SERIAL No.:      |
| MFR.: WAC Lighting  | SUR.:                 | Shielding Angle: |

| DATA OF LAMP     |         | PHOTOMETRIC DATA |        |                        |          | Eff: 67.34 lm/W |
|------------------|---------|------------------|--------|------------------------|----------|-----------------|
| MODEL            |         | Imax(cd)         | 990.6  | S/MH(C0/180)           | 0.53     |                 |
| NOMINAL POWER(W) |         | LOR(%)           | 100.0  | S/MH(C90/270)          | 0.55     |                 |
| RATED VOLTAGE(V) | 12      | TOTAL FLUX(lm)   | 386.28 | $\eta$ UP,DN(C0-180)   | 0.0,52.0 |                 |
| NOMINAL FLUX(lm) | 386.277 | CIE CLASS        | DIRECT | $\eta$ UP,DN(C180-360) | 0.1,47.9 |                 |
| LAMPS INSIDE     | 1       | $\eta$ up(%)     | 0.1    | CIBSE SHR NOM          | 0.50     |                 |
| TEST VOLTAGE(V)  | 12      | $\eta$ down(%)   | 99.9   | CIBSE SHR MAX          | 0.55     |                 |

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:Oliver  
Test Date:2021-01-04

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:2.514m [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       | 927.7                 | 935.1  | 897.3  | 841.9  | 814.3  | 806.6  | 835.9  | 887.6  | 0- 10    | 89.35       | 89.35        | 23.1,23.1  |
| 20       | 473.1                 | 463.3  | 403.6  | 341.3  | 325.0  | 324.9  | 366.1  | 434.1  | 10- 20   | 177.6       | 266.9        | 69.1,69.1  |
| 30       | 75.77                 | 68.99  | 62.99  | 58.24  | 55.12  | 53.58  | 63.40  | 76.00  | 20- 30   | 80.21       | 347.1        | 89.9,89.9  |
| 40       | 20.89                 | 19.17  | 18.83  | 20.35  | 18.80  | 18.17  | 20.02  | 24.19  | 30- 40   | 22.29       | 369.4        | 95.6,95.6  |
| 50       | 8.828                 | 9.014  | 8.452  | 8.696  | 8.605  | 8.835  | 8.926  | 9.560  | 40- 50   | 10.39       | 379.8        | 98.3,98.3  |
| 60       | 2.375                 | 2.503  | 2.129  | 2.133  | 2.462  | 2.609  | 2.536  | 2.509  | 50- 60   | 4.685       | 384.5        | 99.5,99.5  |
| 70       | 0.4921                | 0.5367 | 0.4403 | 0.4398 | 0.5002 | 0.5117 | 0.5195 | 0.5093 | 60- 70   | 1.163       | 385.6        | 99.8,99.8  |
| 80       | 0.0911                | 0.0885 | 0.0819 | 0.0760 | 0.0917 | 0.0990 | 0.0957 | 0.0902 | 70- 80   | 0.2566      | 385.9        | 99.9,99.9  |
| 90       | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 80- 90   | 0.0231      | 385.9        | 99.9,99.9  |
| 100      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 90-100   | 0           | 385.9        | 99.9,99.9  |
| 110      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 100-110  | 0           | 385.9        | 99.9,99.9  |
| 120      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 110-120  | 0           | 385.9        | 99.9,99.9  |
| 130      | 0                     | 0      | 0      | 0      | 0.0000 | 0.0000 | 0      | 0      | 120-130  | 0.0000      | 385.9        | 99.9,99.9  |
| 140      | 0.0167                | 0.0119 | 0.0182 | 0.0249 | 0.1366 | 0.1343 | 0.1179 | 0.1011 | 130-140  | 0.0192      | 385.9        | 99.9,99.9  |
| 150      | 0.1168                | 0.1139 | 0.1178 | 0.1240 | 0.3483 | 0.3454 | 0.3288 | 0.3068 | 140-150  | 0.0912      | 386.0        | 99.9,99.9  |
| 160      | 0.1666                | 0.1606 | 0.1599 | 0.1594 | 0.4743 | 0.4713 | 0.4642 | 0.4584 | 150-160  | 0.1269      | 386.2        | 100,100    |
| 170      | 0.1944                | 0.1846 | 0.1797 | 0.1771 | 0.4307 | 0.4261 | 0.4265 | 0.4375 | 160-170  | 0.0905      | 386.2        | 100,100    |
| 180      | 0.2820                | 0.2691 | 0.2767 | 0.2968 | 0.2806 | 0.2737 | 0.2702 | 0.2814 | 170-180  | 0.0273      | 386.3        | 100,100    |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |            |

Conical surface Flux(90deg): 375.4 lm

%lum = 97.2%

%lamp = 97.2%

Conical surface Flux(120deg): 384.48 lm

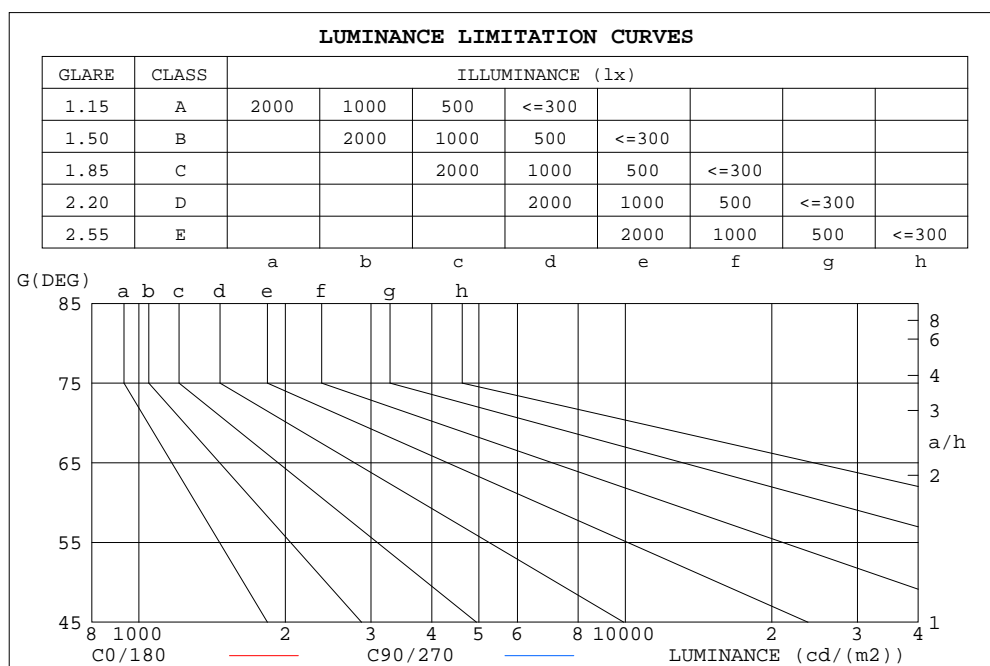
%lum = 99.5%

%lamp = 99.5%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Oliver  
 Test Date:2021-01-04

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:2.514m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

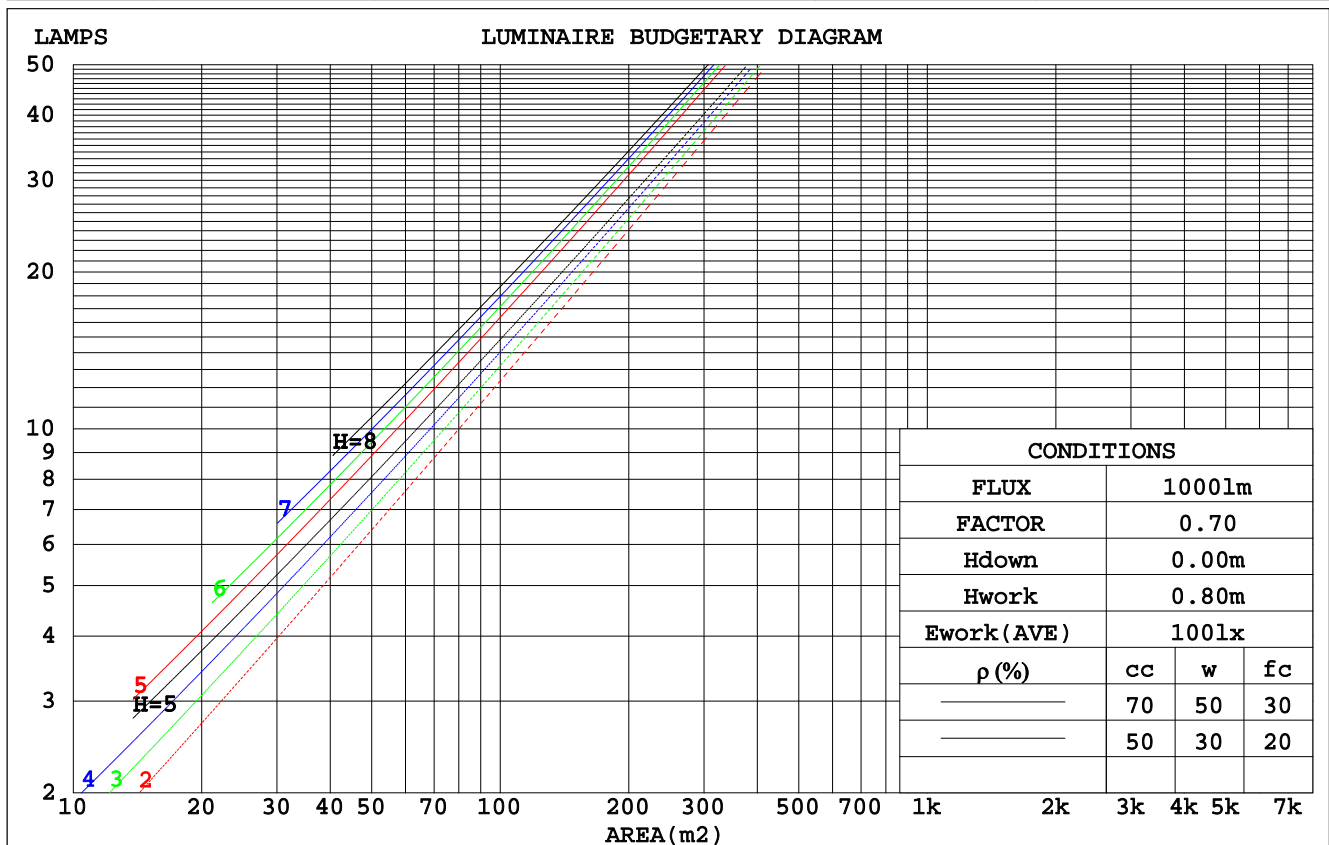


C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Oliver  
 Test Date: 2021-01-04

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 2.514m [K=1.0000]  
 Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| $\rho_{cc}$ | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0   |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|-----|
| $\rho_w$    | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0   |
| $\rho_{fc}$ | 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         | 1.12                  | 1.10 | 1.08 | 1.10 | 1.08 | 1.06 | 1.06                            | 1.04 | 1.03 | 1.02 | 1.01 | 1.00 | .99  | .98  | .97  | .95 |
| 2.0         | 1.06                  | 1.03 | .00  | 1.04 | 1.01 | .99  | 1.01                            | .99  | .97  | .98  | .96  | .95  | .96  | .94  | .93  | .91 |
| 3.0         | 1.01                  | .97  | .93  | .99  | .96  | .93  | .97                             | .94  | .91  | .94  | .92  | .90  | .92  | .90  | .88  | .87 |
| 4.0         | .96                   | .91  | .88  | .95  | .91  | .87  | .93                             | .89  | .86  | .91  | .88  | .85  | .89  | .87  | .84  | .83 |
| 5.0         | .91                   | .87  | .83  | .91  | .86  | .83  | .89                             | .85  | .82  | .87  | .84  | .82  | .86  | .83  | .81  | .80 |
| 6.0         | .88                   | .83  | .79  | .87  | .82  | .79  | .85                             | .82  | .79  | .84  | .81  | .78  | .83  | .80  | .78  | .76 |
| 7.0         | .84                   | .79  | .76  | .83  | .79  | .76  | .82                             | .78  | .75  | .81  | .78  | .75  | .80  | .77  | .75  | .73 |
| 8.0         | .81                   | .76  | .73  | .80  | .76  | .73  | .79                             | .75  | .72  | .78  | .75  | .72  | .77  | .74  | .72  | .71 |
| 9.0         | .78                   | .73  | .70  | .77  | .73  | .70  | .76                             | .72  | .70  | .76  | .72  | .69  | .75  | .72  | .69  | .68 |
| 10.0        | .75                   | .70  | .67  | .75  | .70  | .67  | .74                             | .70  | .67  | .73  | .69  | .67  | .72  | .69  | .67  | .66 |



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Oliver  
 Test Date: 2021-01-04

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 2.514m [K=1.0000]  
 Remarks:

## WEC AND CCEC

| 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  | .151                  | .086 | .027 | .145 | .083 | .026 | .132                            | .076 | .024 | .121 | .070 | .022 | .110 | .064 | .021 |   |  |
| 2.0  | .142                  | .078 | .024 | .137 | .075 | .023 | .126                            | .070 | .022 | .117 | .065 | .020 | .108 | .061 | .019 |   |  |
| 3.0  | .134                  | .071 | .021 | .129 | .069 | .021 | .120                            | .065 | .020 | .112 | .061 | .019 | .105 | .058 | .018 |   |  |
| 4.0  | .126                  | .066 | .019 | .122 | .064 | .019 | .115                            | .061 | .018 | .108 | .058 | .017 | .101 | .055 | .017 |   |  |
| 5.0  | .119                  | .061 | .018 | .116 | .060 | .017 | .110                            | .057 | .017 | .104 | .055 | .016 | .098 | .052 | .016 |   |  |
| 6.0  | .113                  | .057 | .016 | .111 | .056 | .016 | .105                            | .054 | .016 | .100 | .052 | .015 | .095 | .050 | .015 |   |  |
| 7.0  | .108                  | .053 | .015 | .106 | .053 | .015 | .101                            | .051 | .015 | .096 | .049 | .014 | .092 | .048 | .014 |   |  |
| 8.0  | .103                  | .050 | .014 | .101 | .050 | .014 | .097                            | .048 | .014 | .093 | .047 | .014 | .089 | .046 | .013 |   |  |
| 9.0  | .099                  | .048 | .013 | .097 | .047 | .013 | .093                            | .046 | .013 | .089 | .045 | .013 | .086 | .044 | .013 |   |  |
| 10.0 | .095                  | .045 | .013 | .093 | .045 | .013 | .090                            | .044 | .012 | .086 | .043 | .012 | .083 | .042 | .012 |   |  |

| 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 | .112                                       | .112 | .112 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .170                  | .158 | .148 | .145 | .136 | .127 | .100                                       | .093 | .088 | .057 | .054 | .051 | .018 | .017 | .017 |   |
| 2.0  | .153                  | .133 | .117 | .131 | .115 | .101 | .090                                       | .079 | .070 | .052 | .046 | .041 | .017 | .015 | .013 |   |
| 3.0  | .139                  | .114 | .094 | .119 | .098 | .082 | .082                                       | .068 | .057 | .047 | .040 | .034 | .015 | .013 | .011 |   |
| 4.0  | .127                  | .099 | .077 | .109 | .086 | .067 | .075                                       | .060 | .047 | .043 | .035 | .028 | .014 | .011 | .009 |   |
| 5.0  | .117                  | .087 | .064 | .101 | .075 | .056 | .069                                       | .053 | .040 | .040 | .031 | .023 | .013 | .010 | .008 |   |
| 6.0  | .109                  | .077 | .054 | .094 | .067 | .047 | .065                                       | .047 | .033 | .038 | .028 | .020 | .012 | .009 | .007 |   |
| 7.0  | .102                  | .069 | .046 | .088 | .060 | .040 | .061                                       | .042 | .029 | .035 | .025 | .017 | .011 | .008 | .006 |   |
| 8.0  | .096                  | .063 | .040 | .082 | .054 | .035 | .057                                       | .038 | .025 | .033 | .023 | .015 | .011 | .007 | .005 |   |
| 9.0  | .090                  | .057 | .035 | .078 | .050 | .030 | .054                                       | .035 | .022 | .031 | .021 | .013 | .010 | .007 | .004 |   |
| 10.0 | .086                  | .053 | .031 | .074 | .046 | .027 | .051                                       | .032 | .019 | .030 | .019 | .011 | .010 | .006 | .004 |   |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Oliver  
 Test Date: 2021-01-04

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 2.514m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

|                                                                 |                  |     |     |     |     |                |     |     |     |     |
|-----------------------------------------------------------------|------------------|-----|-----|-----|-----|----------------|-----|-----|-----|-----|
| 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                                                   | 2.5              | 3.3 | 2.7 | 3.4 | 3.6 | 2.0            | 2.8 | 2.2 | 2.9 | 3.1 |
| 3H                                                              | 2.4              | 3.1 | 2.7 | 3.3 | 3.5 | 1.9            | 2.6 | 2.2 | 2.8 | 3.0 |
| 4H                                                              | 2.3              | 3.0 | 2.6 | 3.2 | 3.4 | 1.8            | 2.5 | 2.1 | 2.7 | 2.9 |
| 6H                                                              | 2.3              | 2.9 | 2.6 | 3.1 | 3.4 | 1.8            | 2.4 | 2.1 | 2.6 | 2.9 |
| 8H                                                              | 2.2              | 2.8 | 2.5 | 3.1 | 3.3 | 1.7            | 2.3 | 2.0 | 2.6 | 2.8 |
| 12H                                                             | 2.2              | 2.8 | 2.5 | 3.0 | 3.3 | 1.7            | 2.3 | 2.0 | 2.5 | 2.8 |
| 4H 2H                                                           | 2.4              | 3.1 | 2.7 | 3.3 | 3.5 | 1.9            | 2.6 | 2.2 | 2.8 | 3.0 |
| 3H                                                              | 2.3              | 2.9 | 2.6 | 3.1 | 3.4 | 1.8            | 2.4 | 2.1 | 2.6 | 2.9 |
| 4H                                                              | 2.2              | 2.7 | 2.5 | 3.0 | 3.3 | 1.7            | 2.2 | 2.1 | 2.5 | 2.8 |
| 6H                                                              | 2.1              | 2.6 | 2.5 | 2.9 | 3.2 | 1.6            | 2.1 | 2.0 | 2.4 | 2.8 |
| 8H                                                              | 2.1              | 2.5 | 2.4 | 2.8 | 3.2 | 1.6            | 2.0 | 2.0 | 2.4 | 2.7 |
| 12H                                                             | 2.0              | 2.4 | 2.4 | 2.8 | 3.2 | 1.5            | 1.9 | 1.9 | 2.3 | 2.7 |
| 8H 4H                                                           | 2.1              | 2.5 | 2.4 | 2.8 | 3.2 | 1.6            | 2.0 | 2.0 | 2.4 | 2.7 |
| 6H                                                              | 2.0              | 2.3 | 2.4 | 2.7 | 3.1 | 1.5            | 1.8 | 1.9 | 2.2 | 2.6 |
| 8H                                                              | 1.9              | 2.2 | 2.3 | 2.6 | 3.1 | 1.4            | 1.7 | 1.9 | 2.2 | 2.6 |
| 12H                                                             | 1.8              | 2.1 | 2.3 | 2.5 | 3.0 | 1.4            | 1.6 | 1.8 | 2.1 | 2.5 |
| 12H 4H                                                          | 2.0              | 2.4 | 2.4 | 2.8 | 3.2 | 1.5            | 1.9 | 1.9 | 2.3 | 2.7 |
| 6H                                                              | 1.9              | 2.2 | 2.3 | 2.6 | 3.1 | 1.4            | 1.7 | 1.9 | 2.2 | 2.6 |
| 8H                                                              | 1.8              | 2.1 | 2.3 | 2.6 | 3.0 | 1.4            | 1.6 | 1.8 | 2.1 | 2.5 |
| Variations with the observer position at spacings(CIE Pub.117): |                  |     |     |     |     |                |     |     |     |     |
| S = 1.0H                                                        | + 2.4 / - 4.4    |     |     |     |     | + 2.2 / - 4.5  |     |     |     |     |
| 1.5H                                                            | + 3.1 / - 3.0    |     |     |     |     | + 2.5 / - 2.7  |     |     |     |     |
| 2.0H                                                            | + 3.7 / - 6.2    |     |     |     |     | + 3.8 / - 6.3  |     |     |     |     |

CIE Pub.117, 386.3 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = -3.3$ )  
Area: 0.03 m<sup>2</sup>

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Oliver  
Test Date:2021-01-04

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:2.514m [K=1.0000]  
Remarks:

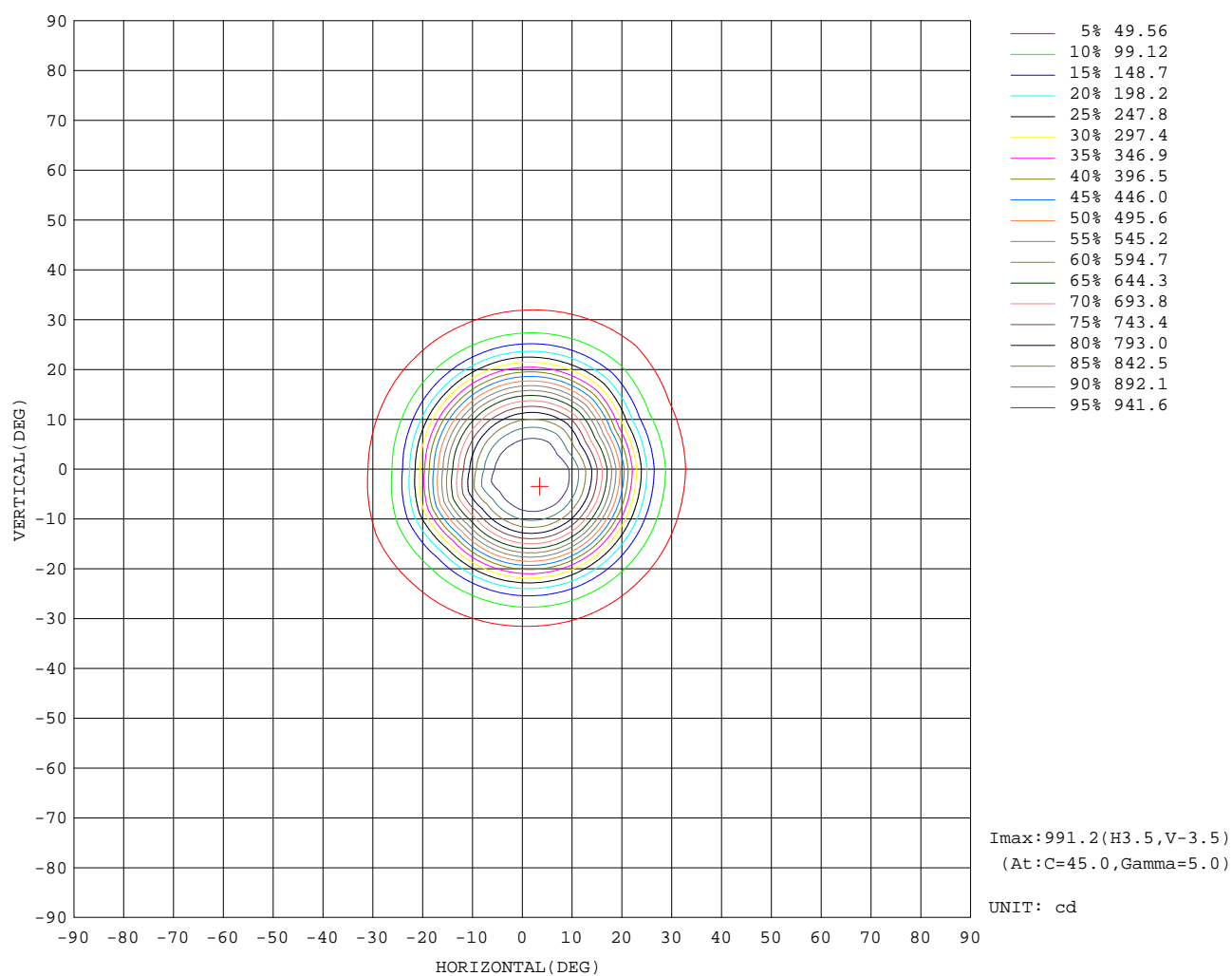
## UTILIZATION FACTORS TABLE

| 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                         | 89                                                  | 83  | 79  | 88        | 83  | 79  | 88  | 82            | 79  | 75     |
| 0.80                             | 96                                                  | 90  | 87  | 95        | 90  | 87  | 94  | 90            | 86  | 83     |
| 1.00                             | 100                                                 | 95  | 91  | 99        | 94  | 91  | 98  | 94            | 91  | 87     |
| 1.25                             | 104                                                 | 99  | 96  | 103       | 99  | 95  | 101 | 97            | 95  | 91     |
| 1.50                             | 107                                                 | 102 | 99  | 105       | 101 | 98  | 103 | 100           | 97  | 93     |
| 2.00                             | 109                                                 | 105 | 102 | 108       | 104 | 101 | 105 | 102           | 100 | 95     |
| 2.50                             | 111                                                 | 107 | 104 | 109       | 106 | 103 | 106 | 103           | 101 | 96     |
| 3.00                             | 112                                                 | 109 | 106 | 110       | 107 | 105 | 107 | 105           | 103 | 97     |
| 4.00                             | 114                                                 | 111 | 109 | 112       | 110 | 108 | 108 | 107           | 105 | 98     |
| 5.00                             | 115                                                 | 113 | 111 | 113       | 111 | 110 | 109 | 108           | 107 | 99     |
| 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: Oliver  
 Test Date: 2021-01-04

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 2.514m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

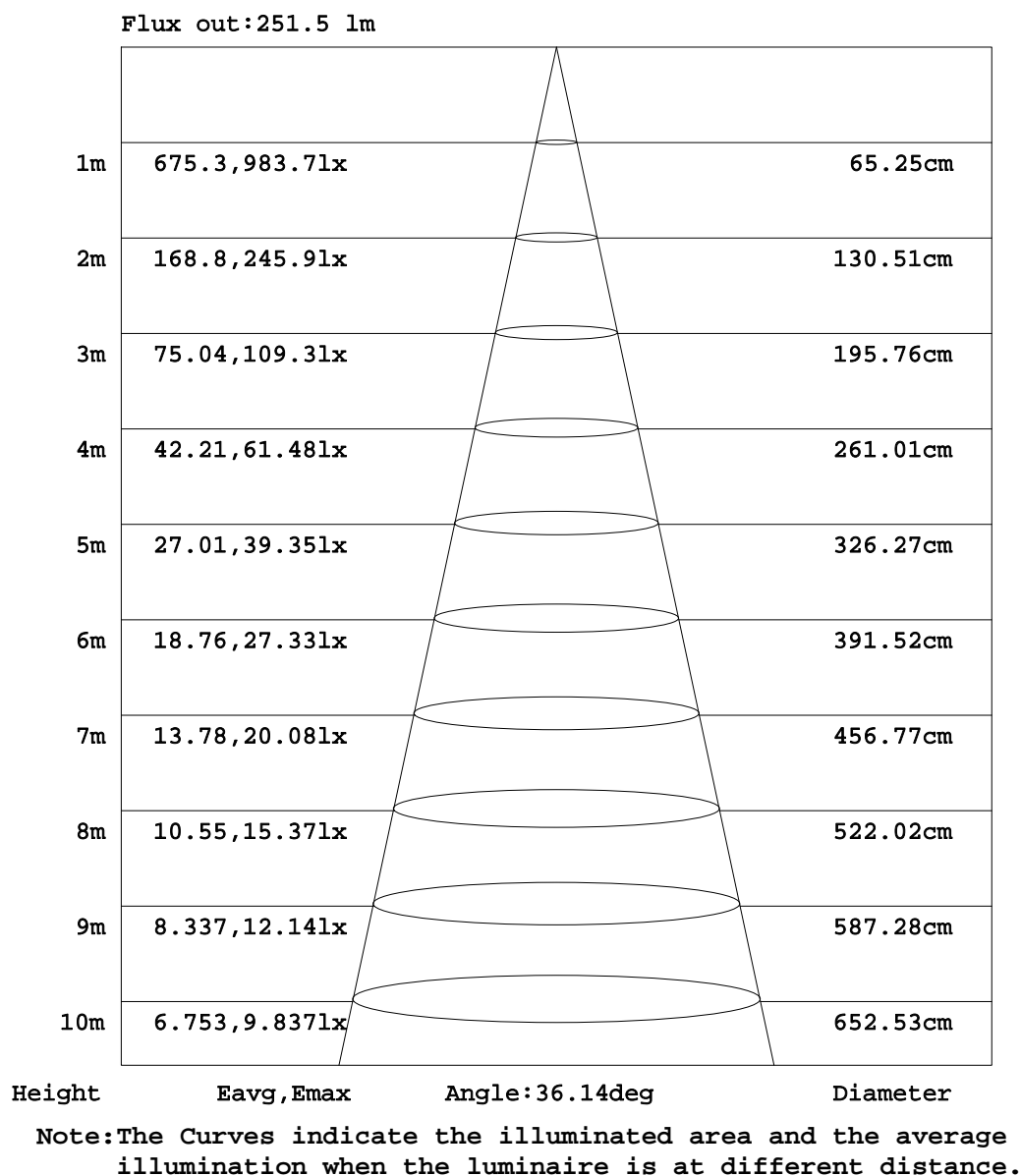


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Oliver  
Test Date: 2021-01-04

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 2.514m [K=1.0000]  
Remarks:



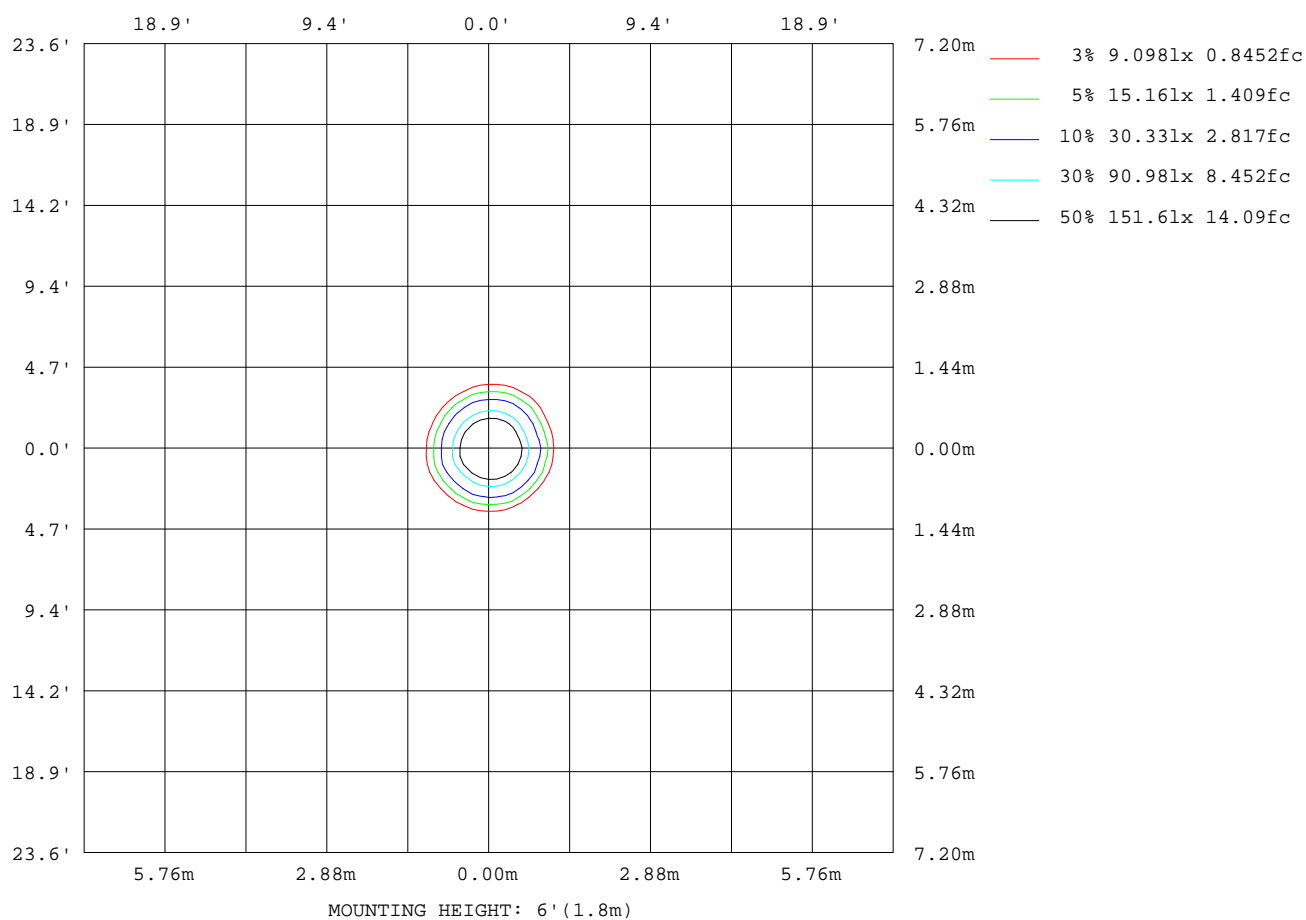
## AAI Figure



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Oliver  
 Test Date: 2021-01-04

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 2.514m [K=1.0000]  
 Remarks:

## ISOLUX DIAGRAM



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Oliver  
 Test Date: 2021-01-04

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 2.514m [K=1.0000]  
 Remarks:

## LED Avg.L Report

Test:U:12.062V I:0.5833A P:5.7362W PF:0.8153 Freq:59.99Hz UTHDi:0.00% ITHDi:0.00% Lamp Flux:386.277x1 lm

|                     |                       |                  |
|---------------------|-----------------------|------------------|
| NAME: 5311-30BZ-35° | TYPE: Landscape Light | WEIGHT:          |
| SPEC.:              | DIM.:                 | SERIAL No.:      |
| MFR.: WAC Lighting  | SUR.:                 | Shielding Angle: |

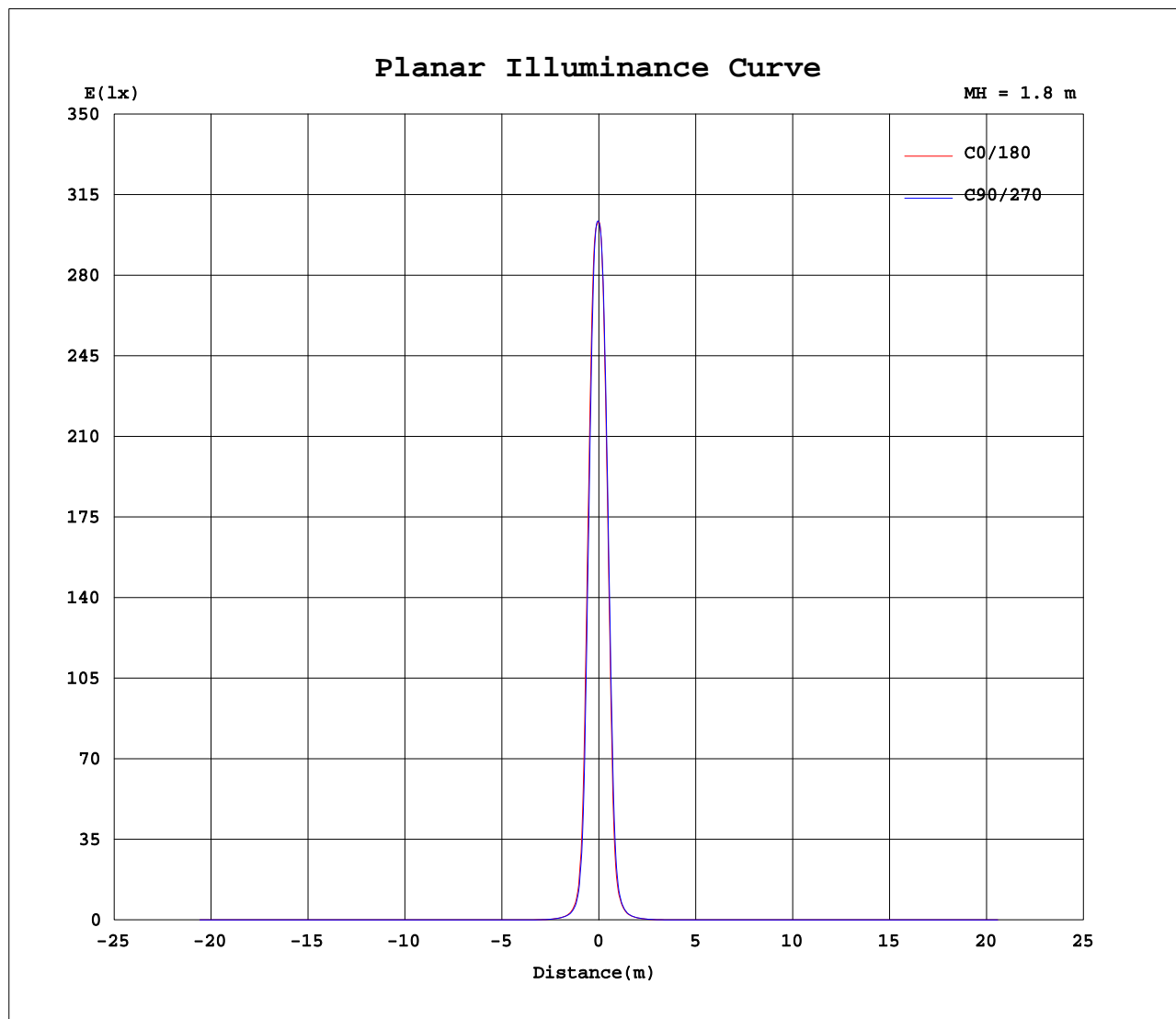
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 83    |
| L_0~180(75)av  | 28    |
| L_0~180(85)av  | 2     |
| L_90~270(65)av | 79    |
| L_90~270(75)av | 28    |
| L_90~270(85)av | 1     |
| L_45(65)av     | 83    |
| L_45(75)av     | 28    |
| L_45(85)av     | 1     |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Oliver  
 Test Date:2021-01-04

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:2.514m [K=1.0000]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Oliver  
Test Date: 2021-01-04

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 2.514m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

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                 | 983  | 983  | 983  | 983  | 983  | 983   | 983  | 983   | 983  | 983   | 983  | 983   | 983  | 983   | 983  | 983   |  |  |  |
| 5                 | 984  | 989  | 991  | 988  | 982  | 973   | 964  | 968   | 952  | 946   | 945  | 948   | 954  | 963   | 970  | 973   |  |  |  |
| 10                | 928  | 939  | 935  | 919  | 897  | 867   | 842  | 857   | 814  | 805   | 807  | 816   | 836  | 863   | 888  | 886   |  |  |  |
| 15                | 746  | 755  | 747  | 723  | 688  | 653   | 623  | 648   | 593  | 585   | 589  | 603   | 629  | 662   | 699  | 687   |  |  |  |
| 20                | 473  | 476  | 463  | 436  | 404  | 371   | 341  | 376   | 325  | 321   | 325  | 341   | 366  | 400   | 434  | 409   |  |  |  |
| 25                | 199  | 199  | 189  | 176  | 161  | 145   | 132  | 149   | 123  | 122   | 125  | 135   | 151  | 169   | 186  | 166   |  |  |  |
| 30                | 75.8 | 73.3 | 69.0 | 66.6 | 63.0 | 60.2  | 58.2 | 62.7  | 55.1 | 53.5  | 53.6 | 56.9  | 63.4 | 70.2  | 76.0 | 67.4  |  |  |  |
| 35                | 36.7 | 34.7 | 32.5 | 31.9 | 31.4 | 32.7  | 32.5 | 34.4  | 31.2 | 30.7  | 31.0 | 32.1  | 34.0 | 37.3  | 39.6 | 34.2  |  |  |  |
| 40                | 20.9 | 20.2 | 19.2 | 18.5 | 18.8 | 20.8  | 20.3 | 19.9  | 18.8 | 18.1  | 18.2 | 18.8  | 20.0 | 24.0  | 24.2 | 19.9  |  |  |  |
| 45                | 13.1 | 13.1 | 12.9 | 12.5 | 12.6 | 13.7  | 13.3 | 13.2  | 12.5 | 12.2  | 12.5 | 12.7  | 13.0 | 15.3  | 15.1 | 12.5  |  |  |  |
| 50                | 8.83 | 8.72 | 9.01 | 8.48 | 8.45 | 8.82  | 8.70 | 9.04  | 8.61 | 8.53  | 8.84 | 8.71  | 8.93 | 9.94  | 9.56 | 8.27  |  |  |  |
| 55                | 5.09 | 4.85 | 5.13 | 4.64 | 4.47 | 4.58  | 4.71 | 5.62  | 5.24 | 5.27  | 5.54 | 5.49  | 5.47 | 5.55  | 5.56 | 4.60  |  |  |  |
| 60                | 2.38 | 2.33 | 2.50 | 2.17 | 2.13 | 2.17  | 2.13 | 2.75  | 2.46 | 2.46  | 2.61 | 2.56  | 2.54 | 2.76  | 2.51 | 2.08  |  |  |  |
| 65                | 1.06 | 1.02 | 1.11 | 0.94 | 0.92 | 0.90  | 0.92 | 1.20  | 1.05 | 1.04  | 1.10 | 1.08  | 1.08 | 1.22  | 1.07 | 0.93  |  |  |  |
| 70                | 0.49 | 0.49 | 0.54 | 0.48 | 0.44 | 0.41  | 0.44 | 0.57  | 0.50 | 0.50  | 0.51 | 0.53  | 0.52 | 0.53  | 0.51 | 0.45  |  |  |  |
| 75                | 0.21 | 0.21 | 0.22 | 0.21 | 0.21 | 0.20  | 0.20 | 0.24  | 0.22 | 0.22  | 0.23 | 0.23  | 0.23 | 0.22  | 0.22 | 0.19  |  |  |  |
| 80                | 0.09 | 0.09 | 0.09 | 0.08 | 0.08 | 0.08  | 0.08 | 0.10  | 0.09 | 0.10  | 0.10 | 0.10  | 0.10 | 0.09  | 0.09 | 0.07  |  |  |  |
| 85                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.01  | 0.01 | 0.01  | 0.01 | 0.01  | 0.00 | 0.00  | 0.00 | 0.00  |  |  |  |
| 90                | 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  |  |  |  |
| 95                | 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  |  |  |  |
| 100               | 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  |  |  |  |
| 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  |  |  |  |
| 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  |  |  |  |
| 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  |  |  |  |
| 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  |  |  |  |
| 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  |  |  |  |
| 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  |  |  |  |
| 135               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.06 | 0.06  | 0.05 | 0.05  | 0.04 | 0.04  | 0.03 | 0.04  |  |  |  |
| 140               | 0.02 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02  | 0.02 | 0.02  | 0.14 | 0.14  | 0.13 | 0.13  | 0.12 | 0.11  | 0.10 | 0.11  |  |  |  |
| 145               | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08  | 0.08 | 0.07  | 0.24 | 0.24  | 0.24 | 0.23  | 0.22 | 0.21  | 0.20 | 0.21  |  |  |  |
| 150               | 0.12 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12  | 0.12 | 0.12  | 0.35 | 0.35  | 0.35 | 0.34  | 0.33 | 0.32  | 0.31 | 0.32  |  |  |  |
| 155               | 0.15 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14  | 0.15 | 0.15  | 0.43 | 0.43  | 0.43 | 0.42  | 0.42 | 0.41  | 0.40 | 0.41  |  |  |  |
| 160               | 0.17 | 0.17 | 0.16 | 0.16 | 0.16 | 0.16  | 0.16 | 0.16  | 0.47 | 0.47  | 0.47 | 0.47  | 0.46 | 0.46  | 0.46 | 0.46  |  |  |  |
| 165               | 0.18 | 0.18 | 0.17 | 0.17 | 0.17 | 0.17  | 0.17 | 0.17  | 0.48 | 0.48  | 0.47 | 0.47  | 0.47 | 0.47  | 0.47 | 0.47  |  |  |  |
| 170               | 0.19 | 0.19 | 0.18 | 0.18 | 0.18 | 0.18  | 0.18 | 0.18  | 0.43 | 0.43  | 0.43 | 0.42  | 0.43 | 0.43  | 0.44 | 0.43  |  |  |  |
| 175               | 0.21 | 0.20 | 0.20 | 0.19 | 0.20 | 0.20  | 0.20 | 0.19  | 0.35 | 0.35  | 0.34 | 0.34  | 0.34 | 0.35  | 0.36 | 0.35  |  |  |  |
| 180               | 0.28 | 0.27 | 0.27 | 0.28 | 0.28 | 0.28  | 0.30 | 0.29  | 0.28 | 0.28  | 0.27 | 0.27  | 0.27 | 0.27  | 0.28 | 0.27  |  |  |  |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
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