

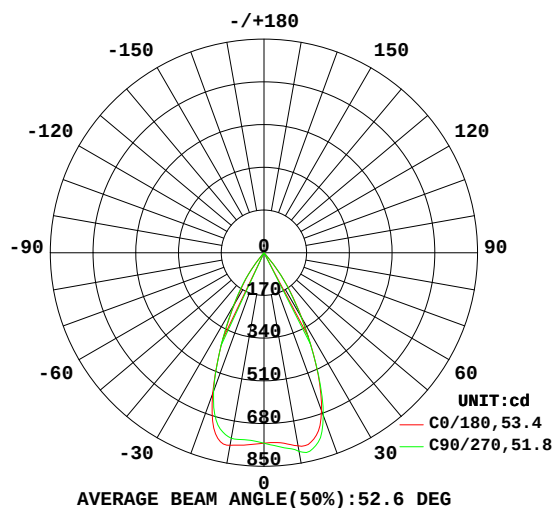
## LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.15V I:0.1071A P:11.693W PF:0.4959 Freq:50.00Hz UTHDi:0.00% ITHDi:0.00% Lamp Flux:573.81x1 lm

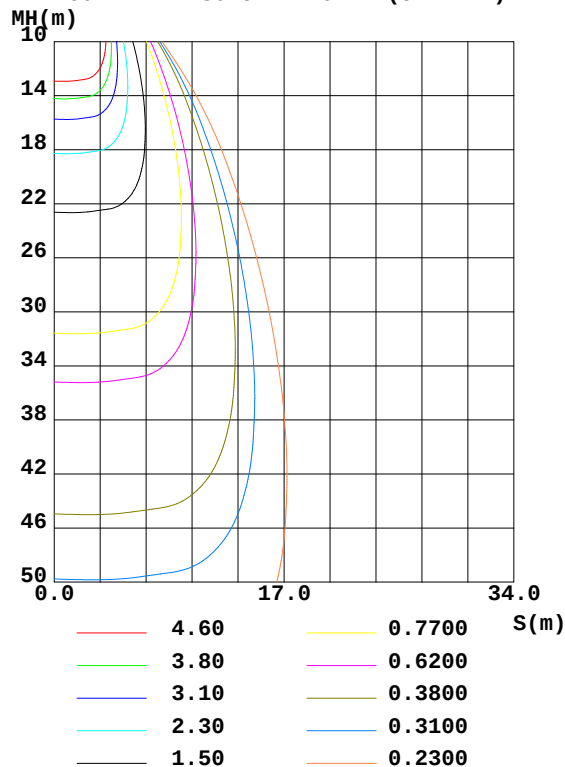
|                          |                          |                  |
|--------------------------|--------------------------|------------------|
| NAME: DDW31-LM13E-530BWT | TYPE: recessed luminaire | WEIGHT:          |
| SPEC.:                   | DIM.:                    | SERIAL No.:      |
| MFR.: WAC Lighting       | SUR.:                    | Shielding Angle: |

| DATA OF LAMP     |        | PHOTOMETRIC DATA Eff: 49.07 lm/W |        |                         |           |
|------------------|--------|----------------------------------|--------|-------------------------|-----------|
| MODEL            |        | Imax(cd)                         | 812.7  | S/MH(C0/180)            | 0.83      |
| NOMINAL POWER(W) |        | LOR(%)                           | 100.0  | S/MH(C90/270)           | 0.82      |
| RATED VOLTAGE(V) | 220    | TOTAL FLUX(lm)                   | 573.81 | $\eta$ UP, DN(C0-180)   | 0.0, 46.9 |
| NOMINAL FLUX(lm) | 573.81 | CIE CLASS                        | DIRECT | $\eta$ UP, DN(C180-360) | 0.0, 53.1 |
| LAMPS INSIDE     | 1      | $\eta$ up(%)                     | 0.0    | CIBSE SHR NOM           | 0.75      |
| TEST VOLTAGE(V)  | 220    | $\eta$ down(%)                   | 100.0  | CIBSE SHR MAX           | 0.80      |

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:2024-05-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:2.482m [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 |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|------|
| 10       | 778.2                 | 754.7  | 749.3  | 771.8  | 780.1  | 799.2  | 802.5  | 794.5  | 0- 10    | 73.31       | 73.31        | 12.8 |
| 20       | 597.7                 | 571.6  | 586.5  | 628.8  | 669.9  | 691.6  | 690.1  | 662.0  | 10- 20   | 207.7       | 281.0        | 49   |
| 30       | 234.2                 | 226.6  | 242.5  | 269.1  | 304.0  | 314.7  | 298.2  | 271.0  | 20- 30   | 202.3       | 483.4        | 84.2 |
| 40       | 18.53                 | 18.07  | 13.12  | 15.11  | 34.44  | 38.06  | 37.63  | 35.21  | 30- 40   | 87.00       | 570.4        | 99.4 |
| 50       | 0.6850                | 0.6495 | 0.5972 | 0.6156 | 0.7029 | 0.7368 | 0.7674 | 0.7741 | 40- 50   | 3.083       | 573.4        | 99.9 |
| 60       | 0.0139                | 0.0128 | 0.0107 | 0.0090 | 0.1825 | 0.1776 | 0.1797 | 0.1823 | 50- 60   | 0.1836      | 573.6        | 100  |
| 70       | 0.0089                | 0.0089 | 0.0077 | 0.0065 | 0.1563 | 0.1292 | 0.1263 | 0.1288 | 60- 70   | 0.0789      | 573.7        | 100  |
| 80       | 0.0026                | 0.0026 | 0.0013 | 0.0009 | 0.3238 | 0.2074 | 0.2005 | 0.2040 | 70- 80   | 0.0897      | 573.8        | 100  |
| 90       | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 80- 90   | 0.0209      | 573.8        | 100  |
| 100      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 90-100   | 0           | 573.8        | 100  |
| 110      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 100-110  | 0           | 573.8        | 100  |
| 120      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 110-120  | 0           | 573.8        | 100  |
| 130      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 120-130  | 0           | 573.8        | 100  |
| 140      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 130-140  | 0           | 573.8        | 100  |
| 150      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 140-150  | 0           | 573.8        | 100  |
| 160      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 150-160  | 0           | 573.8        | 100  |
| 170      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 160-170  | 0           | 573.8        | 100  |
| 180      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 170-180  | 0           | 573.8        | 100  |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT: lm    |              |      |

Conical surface Flux(90deg): 572.94 lm

%lum = 99.8%

%lamp = 99.8%

Conical surface Flux(120deg): 573.62 lm

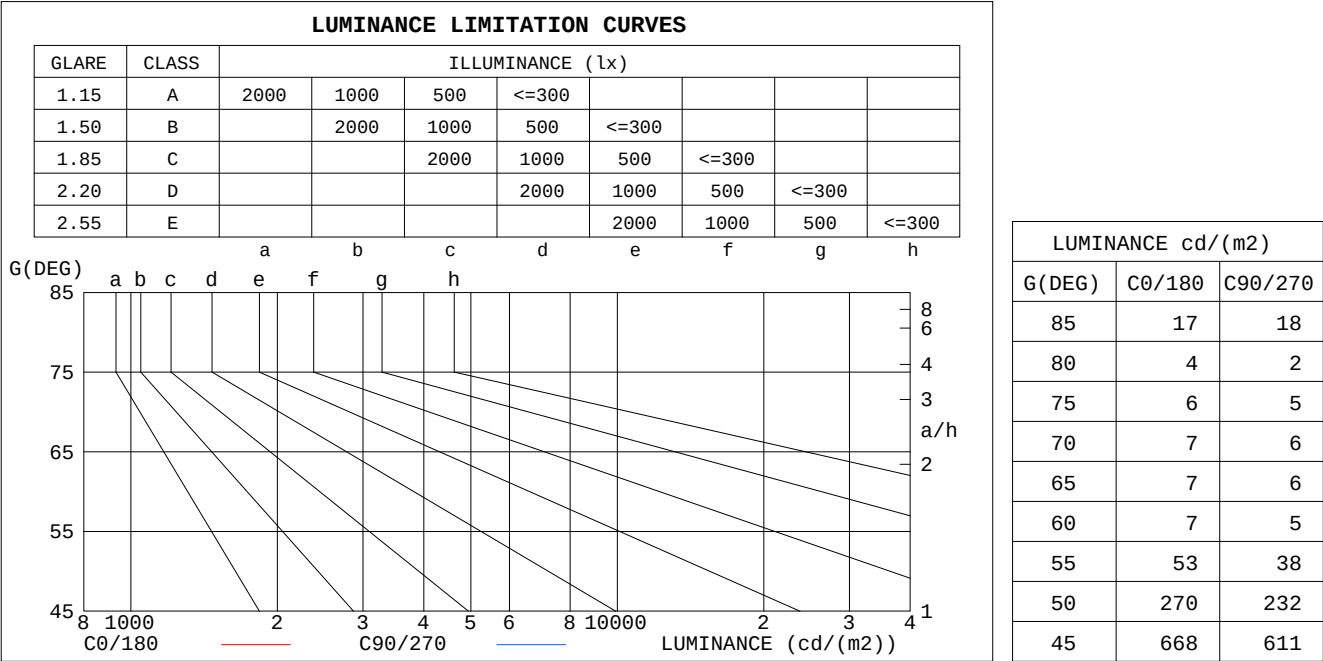
%lum = 100.0%

%lamp = 100.0%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Oliver  
 Test Date:2024-05-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:2.482m [K=1.0000]  
 Remarks:

LUMINANCE LIMITATION CURVES

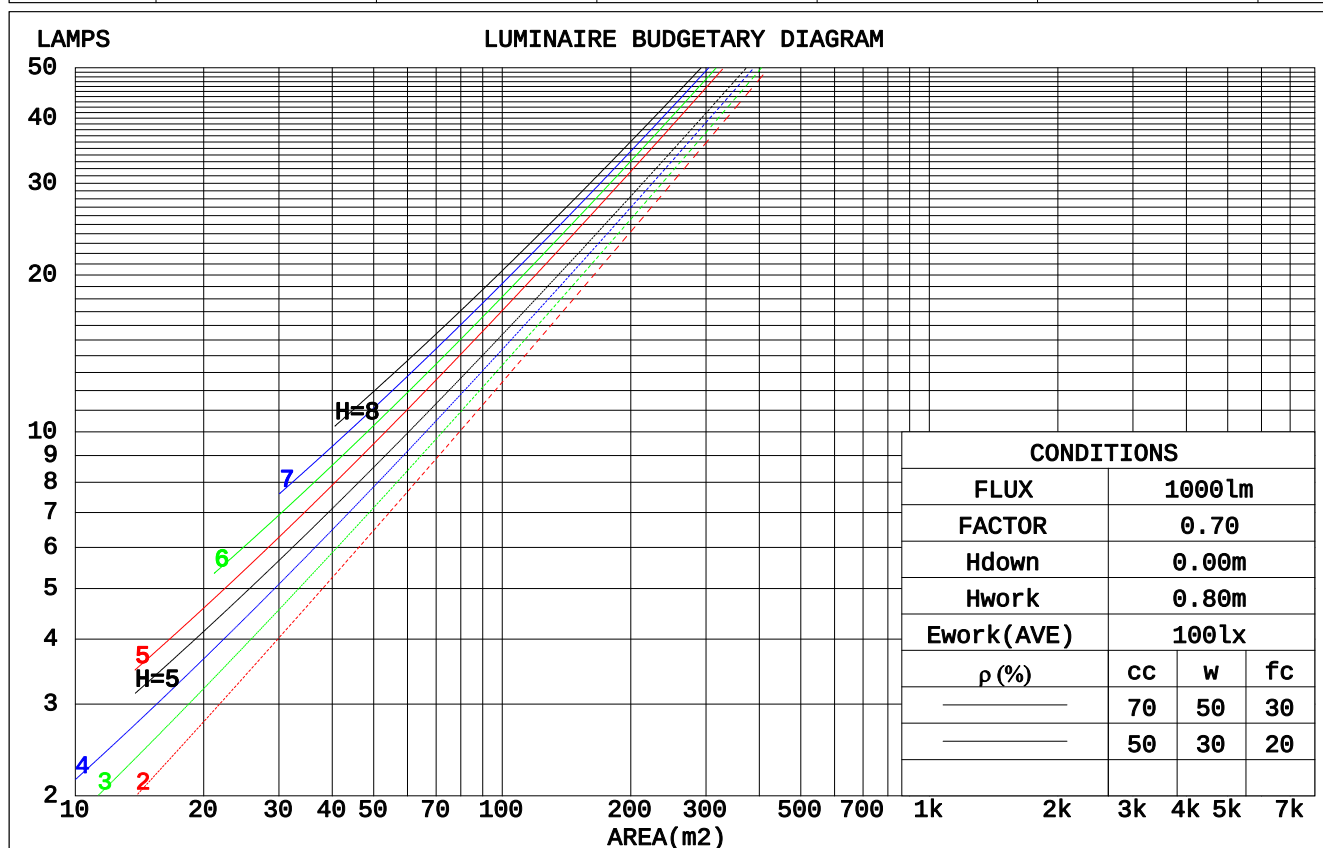


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Oliver  
Test Date:2024-05-27

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:2.482m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| 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  | 1.12                  | 1.09 | 1.07 | 1.09 | 1.07 | 1.06 | 1.05                            | 1.04 | 1.02 | 1.02 | 1.00 | .99  | .98  | .97  | .96  | .95 |
| 2.0  | 1.05                  | 1.01 | .98  | 1.03 | .99  | .97  | .99                             | .97  | .95  | .97  | .95  | .93  | .94  | .92  | .91  | .89 |
| 3.0  | .99                   | .94  | .91  | .97  | .93  | .90  | .95                             | .91  | .88  | .92  | .89  | .87  | .90  | .88  | .86  | .84 |
| 4.0  | .93                   | .88  | .84  | .92  | .87  | .84  | .90                             | .86  | .83  | .88  | .85  | .82  | .86  | .83  | .81  | .79 |
| 5.0  | .88                   | .83  | .79  | .87  | .82  | .78  | .85                             | .81  | .78  | .84  | .80  | .77  | .82  | .79  | .76  | .75 |
| 6.0  | .83                   | .78  | .74  | .82  | .77  | .74  | .81                             | .77  | .73  | .80  | .76  | .73  | .78  | .75  | .72  | .71 |
| 7.0  | .79                   | .74  | .70  | .78  | .73  | .70  | .77                             | .73  | .69  | .76  | .72  | .69  | .75  | .71  | .68  | .67 |
| 8.0  | .75                   | .70  | .66  | .74  | .69  | .66  | .73                             | .69  | .65  | .72  | .68  | .65  | .71  | .68  | .65  | .64 |
| 9.0  | .71                   | .66  | .62  | .71  | .66  | .62  | .70                             | .65  | .62  | .69  | .65  | .62  | .68  | .64  | .62  | .60 |
| 10.0 | .68                   | .63  | .59  | .68  | .62  | .59  | .67                             | .62  | .59  | .66  | .62  | .59  | .65  | .61  | .59  | .57 |



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Oliver  
 Test Date: 2024-05-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 2.482m [K=1.0000]  
 Remarks:

## WEC AND CCEC

| ρ <sub>CC</sub> | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0 |  |
|-----------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|--|
| ρ <sub>W</sub>  | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |  |
| ρ <sub>FC</sub> | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 0 |  |
| RCR             | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |  |
| 0.0             |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |  |
| 1.0             | .163                  | .093 | .029 | .156 | .089 | .028 | .144                            | .083 | .026 | .132 | .076 | .025 | .122 | .071 | .023 |   |  |
| 2.0             | .155                  | .085 | .026 | .149 | .082 | .025 | .139                            | .077 | .024 | .129 | .072 | .023 | .120 | .068 | .021 |   |  |
| 3.0             | .147                  | .078 | .023 | .142 | .076 | .023 | .133                            | .072 | .022 | .125 | .069 | .021 | .118 | .065 | .020 |   |  |
| 4.0             | .140                  | .073 | .021 | .136 | .071 | .021 | .128                            | .068 | .020 | .121 | .065 | .020 | .115 | .062 | .019 |   |  |
| 5.0             | .133                  | .068 | .020 | .130 | .067 | .019 | .123                            | .064 | .019 | .117 | .062 | .018 | .111 | .060 | .018 |   |  |
| 6.0             | .127                  | .064 | .018 | .124 | .063 | .018 | .119                            | .061 | .018 | .113 | .059 | .017 | .108 | .057 | .017 |   |  |
| 7.0             | .122                  | .060 | .017 | .119 | .060 | .017 | .114                            | .058 | .017 | .110 | .056 | .016 | .105 | .055 | .016 |   |  |
| 8.0             | .117                  | .057 | .016 | .115 | .057 | .016 | .110                            | .055 | .016 | .106 | .054 | .015 | .102 | .052 | .015 |   |  |
| 9.0             | .113                  | .054 | .015 | .111 | .054 | .015 | .106                            | .053 | .015 | .103 | .051 | .015 | .099 | .050 | .015 |   |  |
| 10.0            | .108                  | .052 | .014 | .106 | .051 | .014 | .103                            | .050 | .014 | .099 | .049 | .014 | .096 | .048 | .014 |   |  |

| ρ <sub>CC</sub> | 80%                   |      |      | 70%  |      |      | 50%                                        |      |      | 30%  |      |      | 10%  |      |      | 0 |
|-----------------|-----------------------|------|------|------|------|------|--------------------------------------------|------|------|------|------|------|------|------|------|---|
| ρ <sub>W</sub>  | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                        | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρ <sub>FC</sub> | 20%                   |      |      | 20%  |      |      | 20%                                        |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR             | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0             | .190                  | .190 | .190 | .163 | .163 | .163 | .111                                       | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0             | .170                  | .157 | .146 | .146 | .135 | .126 | .100                                       | .093 | .087 | .057 | .054 | .051 | .018 | .017 | .016 |   |
| 2.0             | .154                  | .133 | .115 | .132 | .114 | .099 | .090                                       | .079 | .069 | .052 | .046 | .041 | .017 | .015 | .013 |   |
| 3.0             | .141                  | .113 | .092 | .121 | .098 | .080 | .083                                       | .068 | .056 | .048 | .040 | .033 | .015 | .013 | .011 |   |
| 4.0             | .130                  | .099 | .075 | .111 | .085 | .065 | .077                                       | .059 | .046 | .044 | .035 | .027 | .014 | .011 | .009 |   |
| 5.0             | .121                  | .087 | .062 | .104 | .075 | .054 | .071                                       | .052 | .038 | .041 | .031 | .022 | .013 | .010 | .007 |   |
| 6.0             | .113                  | .077 | .052 | .097 | .067 | .045 | .067                                       | .047 | .032 | .039 | .028 | .019 | .013 | .009 | .006 |   |
| 7.0             | .106                  | .070 | .044 | .092 | .060 | .038 | .063                                       | .042 | .027 | .037 | .025 | .016 | .012 | .008 | .005 |   |
| 8.0             | .101                  | .063 | .037 | .087 | .055 | .033 | .060                                       | .038 | .023 | .035 | .023 | .014 | .011 | .007 | .005 |   |
| 9.0             | .096                  | .058 | .032 | .082 | .050 | .028 | .057                                       | .035 | .020 | .033 | .021 | .012 | .011 | .007 | .004 |   |
| 10.0            | .091                  | .053 | .028 | .079 | .046 | .025 | .055                                       | .033 | .018 | .032 | .019 | .011 | .010 | .006 | .003 |   |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Oliver  
 Test Date: 2024-05-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 2.482m [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                                                   | 13.9             | 14.8 | 14.2 | 15.0 | 15.1 | 14.1           | 14.9 | 14.3 | 15.1 | 15.3 |
| 3H                                                              | 13.8             | 14.6 | 14.0 | 14.8 | 14.9 | 13.9           | 14.7 | 14.2 | 14.9 | 15.1 |
| 4H                                                              | 13.7             | 14.4 | 14.0 | 14.6 | 14.9 | 13.8           | 14.6 | 14.1 | 14.8 | 15.0 |
| 6H                                                              | 13.6             | 14.3 | 13.9 | 14.5 | 14.8 | 13.8           | 14.5 | 14.0 | 14.7 | 14.9 |
| 8H                                                              | 13.6             | 14.2 | 13.9 | 14.5 | 14.7 | 13.7           | 14.4 | 14.0 | 14.6 | 14.9 |
| 12H                                                             | 13.5             | 14.2 | 13.8 | 14.4 | 14.7 | 13.7           | 14.3 | 14.0 | 14.6 | 14.8 |
| 4H 2H                                                           | 13.7             | 14.4 | 14.0 | 14.6 | 14.9 | 13.8           | 14.6 | 14.1 | 14.8 | 15.0 |
| 3H                                                              | 13.5             | 14.2 | 13.8 | 14.4 | 14.7 | 13.7           | 14.3 | 14.0 | 14.6 | 14.8 |
| 4H                                                              | 13.4             | 14.0 | 13.8 | 14.3 | 14.6 | 13.6           | 14.2 | 13.9 | 14.4 | 14.8 |
| 6H                                                              | 13.3             | 13.8 | 13.7 | 14.2 | 14.5 | 13.5           | 14.0 | 13.8 | 14.3 | 14.7 |
| 8H                                                              | 13.3             | 13.7 | 13.7 | 14.1 | 14.5 | 13.4           | 13.9 | 13.8 | 14.2 | 14.6 |
| 12H                                                             | 13.2             | 13.6 | 13.6 | 14.0 | 14.4 | 13.4           | 13.8 | 13.8 | 14.2 | 14.6 |
| 8H 4H                                                           | 13.3             | 13.7 | 13.7 | 14.1 | 14.5 | 13.4           | 13.9 | 13.8 | 14.2 | 14.6 |
| 6H                                                              | 13.2             | 13.6 | 13.6 | 13.9 | 14.4 | 13.3           | 13.7 | 13.7 | 14.1 | 14.5 |
| 8H                                                              | 13.1             | 13.4 | 13.6 | 13.9 | 14.3 | 13.3           | 13.6 | 13.7 | 14.0 | 14.5 |
| 12H                                                             | 13.0             | 13.3 | 13.5 | 13.8 | 14.3 | 13.2           | 13.5 | 13.7 | 13.9 | 14.4 |
| 12H 4H                                                          | 13.2             | 13.6 | 13.6 | 14.0 | 14.4 | 13.4           | 13.8 | 13.8 | 14.2 | 14.6 |
| 6H                                                              | 13.1             | 13.4 | 13.6 | 13.9 | 14.3 | 13.3           | 13.6 | 13.7 | 14.0 | 14.5 |
| 8H                                                              | 13.0             | 13.3 | 13.5 | 13.8 | 14.3 | 13.2           | 13.5 | 13.7 | 13.9 | 14.4 |
| Variations with the observer position at spacings(CIE Pub.117): |                  |      |      |      |      |                |      |      |      |      |
| S = 1.0H                                                        | + 5.3 / -39.9    |      |      |      |      | + 5.4 / -40.3  |      |      |      |      |
| 1.5H                                                            | + 8.1 / -33.6    |      |      |      |      | + 8.2 / -33.5  |      |      |      |      |
| 2.0H                                                            | + 7.3 / -19.0    |      |      |      |      | + 7.3 / -18.9  |      |      |      |      |

CIE Pub.117, 573.8 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = -1.9$ )  
Area: 0.004 m<sup>2</sup>

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Oliver  
Test Date:2024-05-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:2.482m [K=1.0000]  
Remarks:

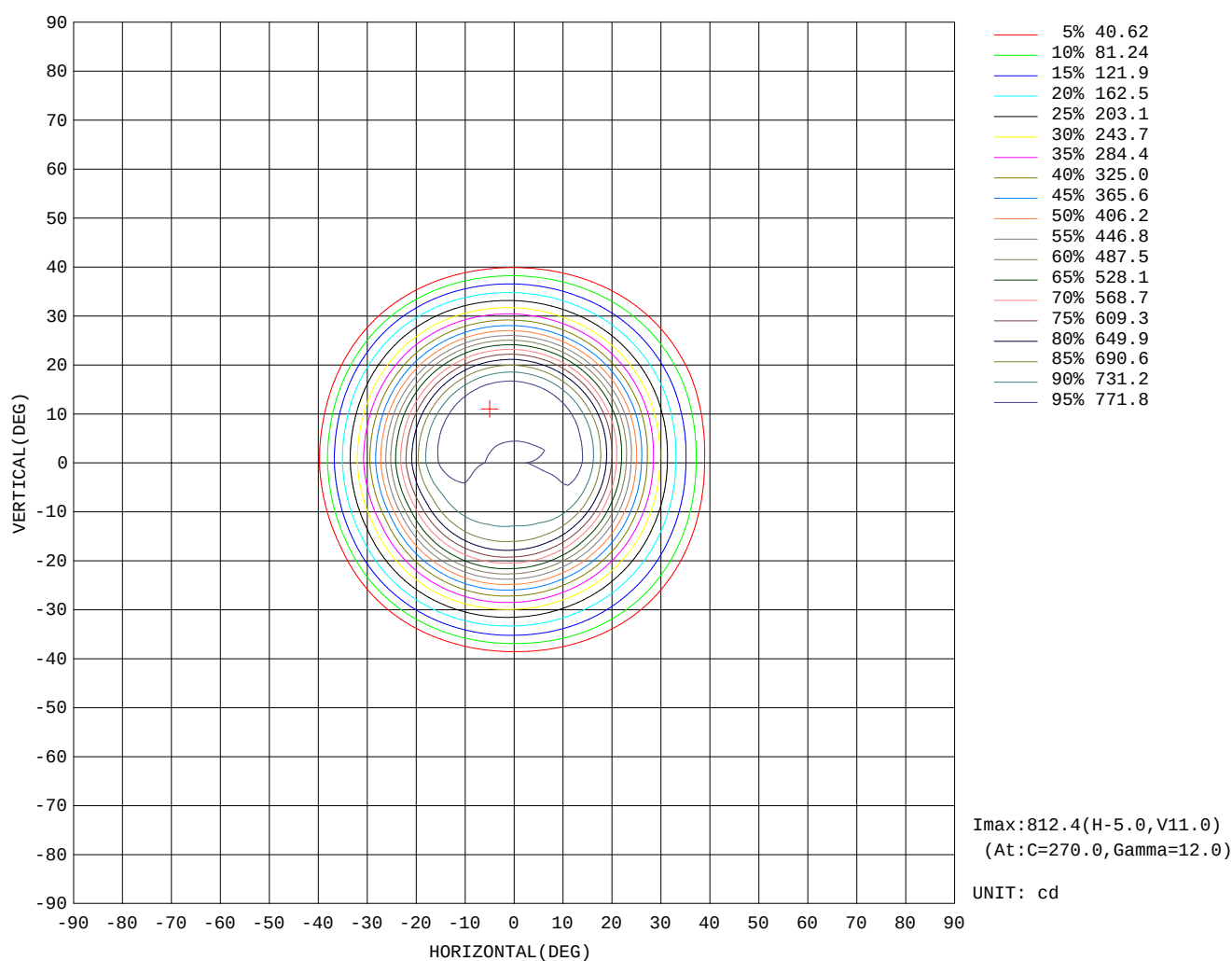
## UTILIZATION FACTORS TABLE

| 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 91                                                  | 86  | 82        | 91  | 85  | 82  | 90  | 85            | 82  | 79     |
| 0.80                             | 98                                                  | 93  | 90        | 97  | 93  | 90  | 96  | 92            | 89  | 86     |
| 1.00                             | 102                                                 | 97  | 94        | 101 | 96  | 93  | 100 | 96            | 93  | 89     |
| 1.25                             | 105                                                 | 101 | 98        | 104 | 100 | 97  | 102 | 99            | 97  | 93     |
| 1.50                             | 108                                                 | 104 | 101       | 107 | 103 | 100 | 104 | 101           | 99  | 95     |
| 2.00                             | 110                                                 | 106 | 103       | 109 | 105 | 103 | 106 | 103           | 101 | 96     |
| 2.50                             | 111                                                 | 108 | 105       | 110 | 107 | 104 | 107 | 104           | 102 | 97     |
| 3.00                             | 113                                                 | 110 | 107       | 111 | 108 | 106 | 108 | 106           | 104 | 98     |
| 4.00                             | 115                                                 | 112 | 110       | 113 | 110 | 109 | 109 | 107           | 106 | 99     |
| 5.00                             | 116                                                 | 114 | 112       | 114 | 112 | 111 | 110 | 109           | 107 | 100    |
| 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: 2024-05-27

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 2.482m [K=1.0000]  
 Remarks:

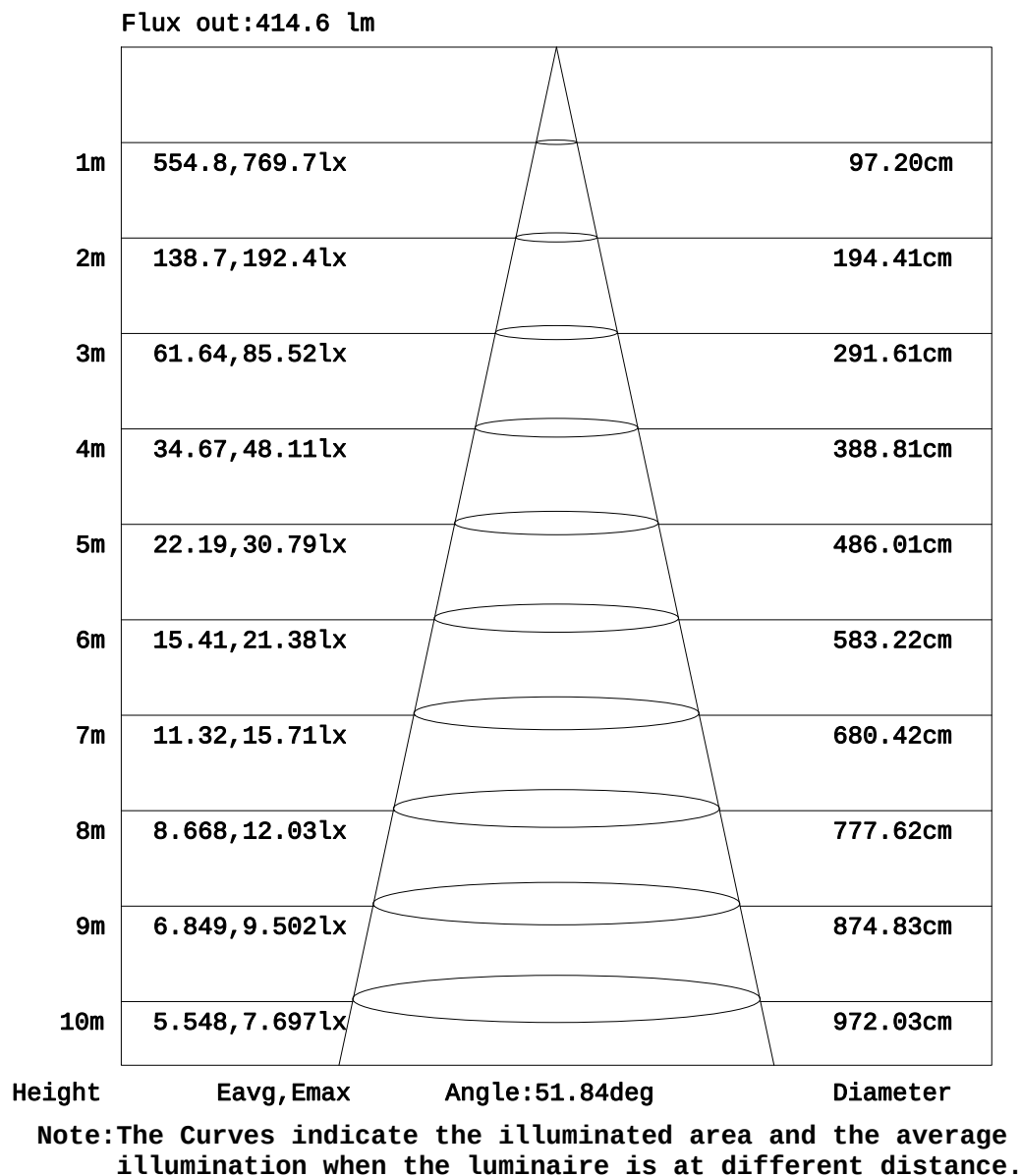
## ISOCANDELA DIAGRAM



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Oliver  
Test Date: 2024-05-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 2.482m [K=1.0000]  
Remarks:

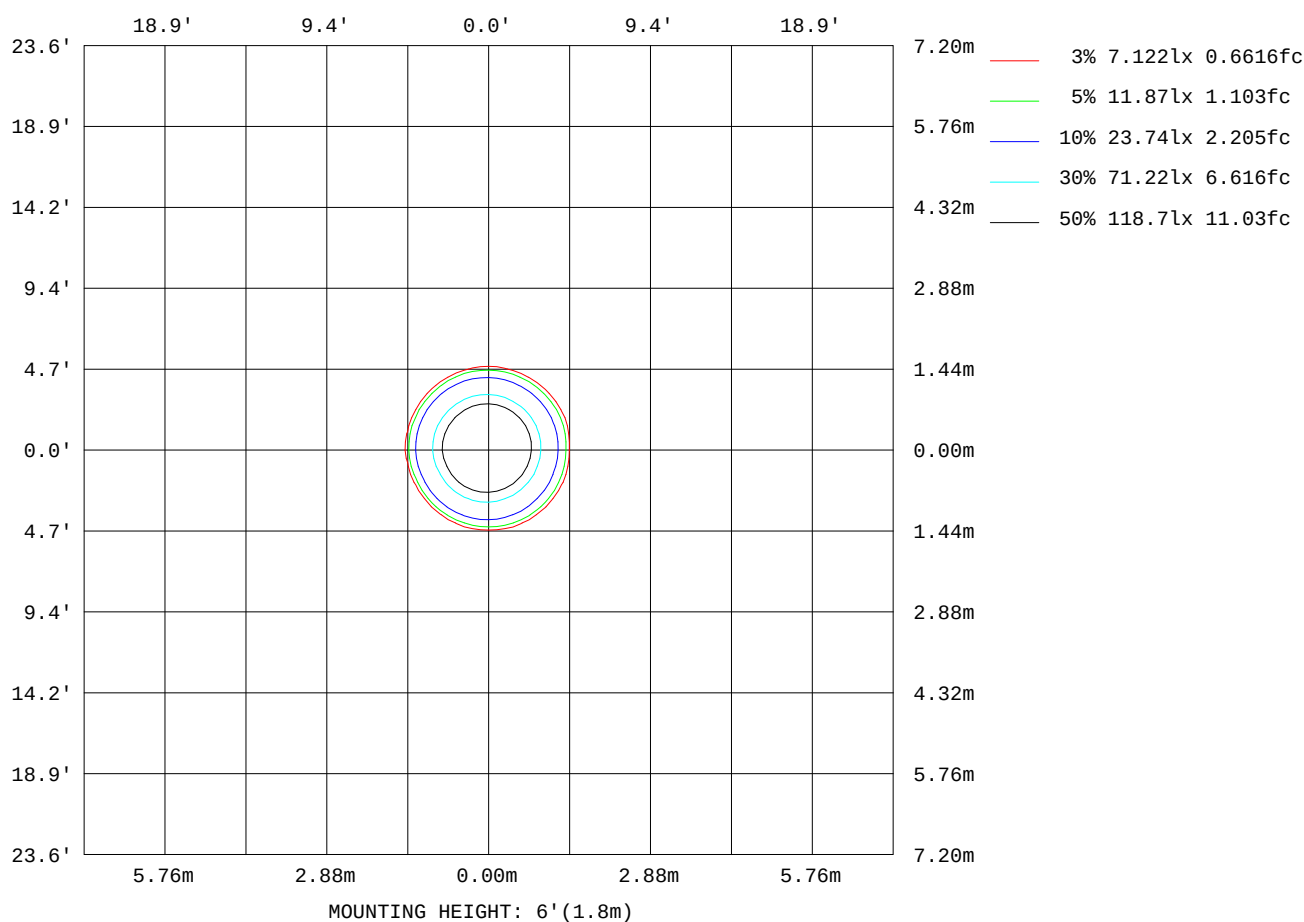
## AAI Figure



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Oliver  
 Test Date: 2024-05-27

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 2.482m [K=1.0000]  
 Remarks:

# ISOLUX DIAGRAM



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Oliver  
Test Date: 2024-05-27

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 2.482m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:220.15V I:0.1071A P:11.693W PF:0.4959 Freq:50.00Hz UTHDi:0.00% ITHDi:0.00% Lamp Flux:573.81x1 lm

|                          |             |                  |
|--------------------------|-------------|------------------|
| NAME: DDW31-LM13E-530BWT | TYPE: 嵌入式灯具 | WEIGHT:          |
| SPEC.:                   | DIM.:       | SERIAL No.:      |
| MFR.: WAC Lighting       | SUR.:       | Shielding Angle: |

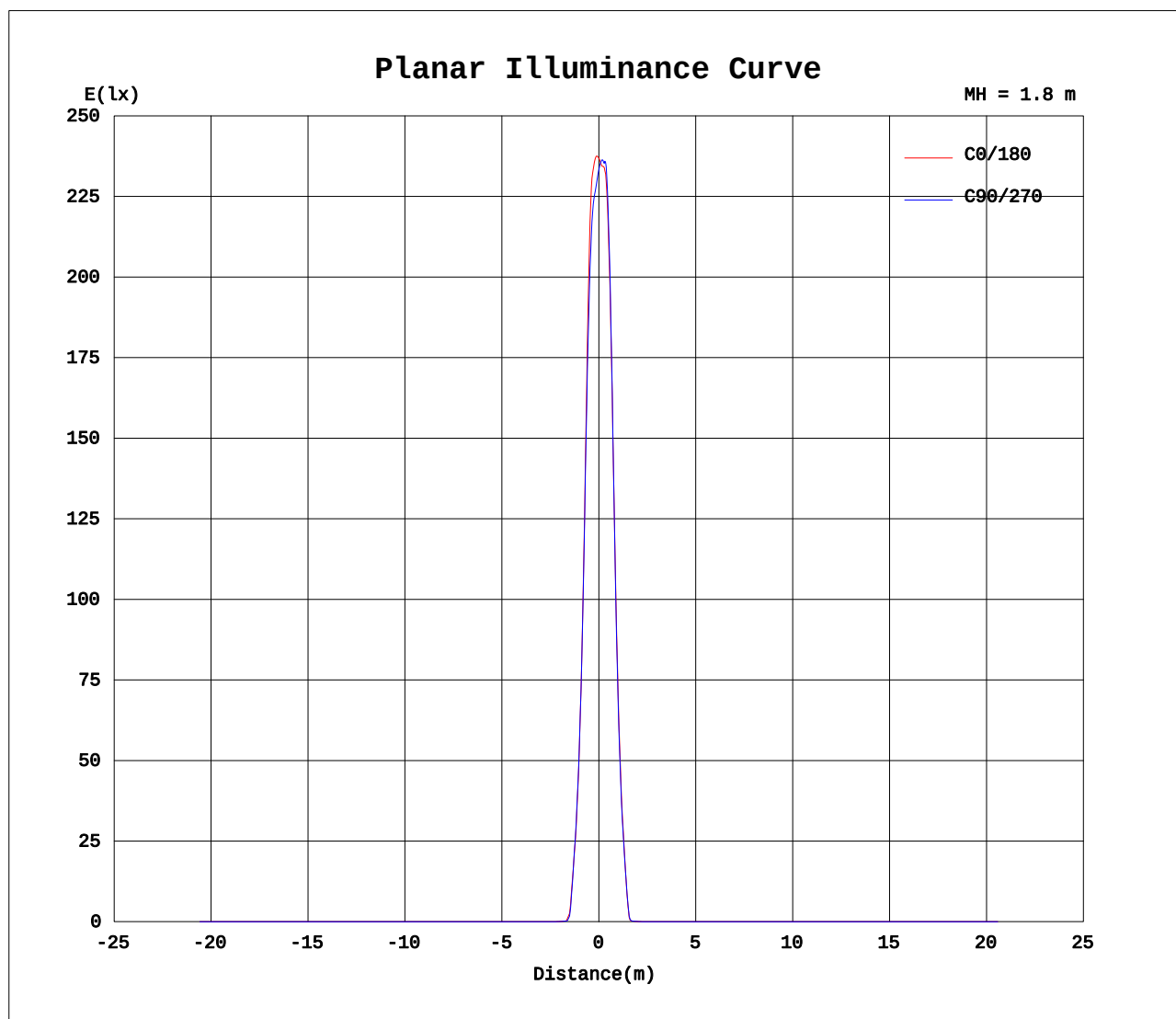
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 49    |
| L_0~180(75)av  | 112   |
| L_0~180(85)av  | 8     |
| L_90~270(65)av | 44    |
| L_90~270(75)av | 84    |
| L_90~270(85)av | 9     |
| L_45(65)av     | 45    |
| L_45(75)av     | 86    |
| L_45(85)av     | 9     |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Oliver  
 Test Date:2024-05-27

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:2.482m [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: 2024-05-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 2.482m [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                 | 758  | 758  | 758  | 758  | 758  | 758   | 758  | 758   | 758  | 758   | 758  | 758   | 758  | 758   | 758  | 758   |  |  |  |
| 5                 | 768  | 761  | 754  | 750  | 748  | 748   | 750  | 755   | 759  | 764   | 768  | 773   | 776  | 778   | 777  | 774   |  |  |  |
| 10                | 778  | 764  | 755  | 750  | 749  | 756   | 772  | 778   | 780  | 792   | 799  | 801   | 802  | 798   | 795  | 790   |  |  |  |
| 15                | 746  | 731  | 718  | 708  | 709  | 721   | 736  | 751   | 767  | 780   | 791  | 794   | 795  | 792   | 787  | 775   |  |  |  |
| 20                | 598  | 579  | 572  | 574  | 586  | 607   | 629  | 647   | 670  | 683   | 692  | 694   | 690  | 679   | 662  | 642   |  |  |  |
| 25                | 399  | 386  | 382  | 387  | 401  | 422   | 444  | 461   | 489  | 501   | 506  | 502   | 490  | 473   | 455  | 436   |  |  |  |
| 30                | 234  | 227  | 227  | 231  | 243  | 256   | 269  | 280   | 304  | 312   | 315  | 309   | 298  | 284   | 271  | 257   |  |  |  |
| 35                | 122  | 119  | 120  | 124  | 128  | 134   | 141  | 147   | 162  | 167   | 169  | 165   | 157  | 147   | 141  | 136   |  |  |  |
| 40                | 18.5 | 18.4 | 18.1 | 15.4 | 13.1 | 13.5  | 15.1 | 16.6  | 34.4 | 36.4  | 38.1 | 38.1  | 37.6 | 36.2  | 35.2 | 34.0  |  |  |  |
| 45                | 1.87 | 1.84 | 1.77 | 1.73 | 1.73 | 1.76  | 1.74 | 1.74  | 1.86 | 1.89  | 1.92 | 1.92  | 1.93 | 1.94  | 1.89 | 1.93  |  |  |  |
| 50                | 0.69 | 0.67 | 0.65 | 0.62 | 0.60 | 0.60  | 0.62 | 0.62  | 0.70 | 0.72  | 0.74 | 0.76  | 0.77 | 0.77  | 0.77 | 0.76  |  |  |  |
| 55                | 0.12 | 0.11 | 0.11 | 0.10 | 0.09 | 0.08  | 0.09 | 0.09  | 0.11 | 0.12  | 0.13 | 0.13  | 0.13 | 0.14  | 0.15 | 0.15  |  |  |  |
| 60                | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01  | 0.01 | 0.01  | 0.18 | 0.18  | 0.18 | 0.18  | 0.18 | 0.18  | 0.18 | 0.18  |  |  |  |
| 65                | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01  | 0.01 | 0.01  | 0.15 | 0.15  | 0.14 | 0.14  | 0.14 | 0.14  | 0.14 | 0.14  |  |  |  |
| 70                | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01  | 0.01 | 0.01  | 0.16 | 0.14  | 0.13 | 0.12  | 0.13 | 0.12  | 0.13 | 0.13  |  |  |  |
| 75                | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01  | 0.01 | 0.00  | 0.23 | 0.20  | 0.17 | 0.17  | 0.17 | 0.17  | 0.17 | 0.17  |  |  |  |
| 80                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.32 | 0.25  | 0.21 | 0.20  | 0.20 | 0.20  | 0.20 | 0.20  |  |  |  |
| 85                | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01  | 0.01 | 0.01  | 0.00 | 0.00  | 0.00 | 0.00  | 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  | 0.00 | 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  |  |  |  |
| 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  |  |  |  |
| 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  |  |  |  |
| 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  |  |  |  |
| 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  |  |  |  |
| 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  |  |  |  |
| 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  |  |  |  |
| 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  |  |  |  |
| 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  |  |  |  |

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