

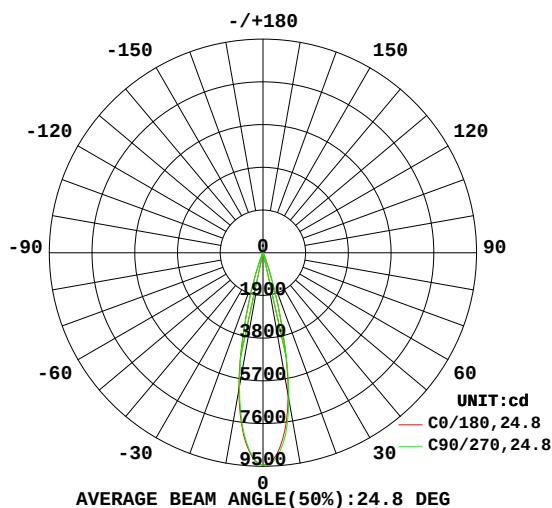
## LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.07V I:0.0946A P:19.547W PF:0.9387 Freq:50.00Hz UTHDi:0.00% ITHDi:0.00% Lamp Flux:1678.8x1 lm

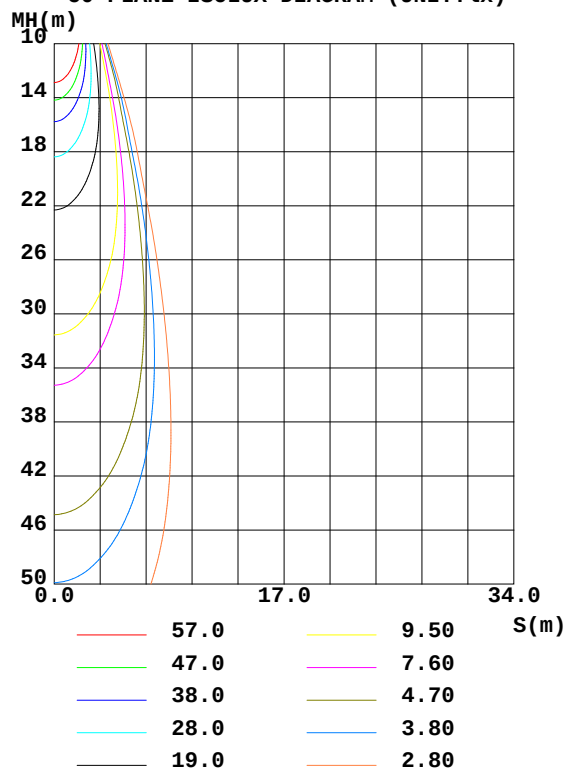
|                          |                          |                  |
|--------------------------|--------------------------|------------------|
| NAME: DDW41-LM18E-230SWT | TYPE: recessed luminaire | WEIGHT:          |
| SPEC.:                   | DIM.:                    | SERIAL No.:      |
| MFR.: WAC Lighting       | SUR.:                    | Shielding Angle: |

| DATA OF LAMP     |        | PHOTOMETRIC DATA |        |                         |           | Eff: 85.88 lm/W |
|------------------|--------|------------------|--------|-------------------------|-----------|-----------------|
| MODEL            |        | Imax(cd)         | 9467   | S/MH(C0/180)            | 0.40      |                 |
| NOMINAL POWER(W) |        | LOR(%)           | 100.0  | S/MH(C90/270)           | 0.40      |                 |
| RATED VOLTAGE(V) | 220    | TOTAL FLUX(lm)   | 1678.8 | $\eta$ UP, DN(C0-180)   | 0.0, 49.4 |                 |
| NOMINAL FLUX(lm) | 1678.8 | CIE CLASS        | DIRECT | $\eta$ UP, DN(C180-360) | 0.0, 50.6 |                 |
| LAMPS INSIDE     | 1      | $\eta$ up(%)     | 0.0    | CIBSE SHR NOM           | 0.00      |                 |
| TEST VOLTAGE(V)  | 220    | $\eta$ down(%)   | 100.0  | CIBSE SHR MAX           | 1.00      |                 |

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:2024-09-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:2.467m [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       | 6193                  | 6347   | 6049   | 6228   | 6456   | 6515   | 6641   | 6300   | 0- 10    | 752.0       | 752.0        | 44.8 |
| 20       | 745.4                 | 883.3  | 802.0  | 798.4  | 714.8  | 713.4  | 729.1  | 656.6  | 10- 20   | 810.5       | 1562         | 93.1 |
| 30       | 55.36                 | 56.54  | 53.64  | 57.30  | 63.32  | 62.45  | 58.72  | 54.17  | 20- 30   | 99.37       | 1662         | 99   |
| 40       | 5.409                 | 6.457  | 6.018  | 5.719  | 4.068  | 3.516  | 3.524  | 3.966  | 30- 40   | 15.08       | 1677         | 99.9 |
| 50       | 0.5330                | 0.6718 | 0.5305 | 0.4503 | 0.3696 | 0.3154 | 0.3459 | 0.4212 | 40- 50   | 1.517       | 1678         | 100  |
| 60       | 0.0348                | 0.0419 | 0.0315 | 0.0228 | 0.1720 | 0.1935 | 0.1962 | 0.1997 | 50- 60   | 0.1750      | 1679         | 100  |
| 70       | 0.0152                | 0.0147 | 0.0143 | 0.0135 | 0.1781 | 0.2162 | 0.2178 | 0.2173 | 60- 70   | 0.0933      | 1679         | 100  |
| 80       | 0.0122                | 0.0101 | 0.0106 | 0.0102 | 0.2330 | 0.1902 | 0.1905 | 0.1921 | 70- 80   | 0.1084      | 1679         | 100  |
| 90       | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 80- 90   | 0.0269      | 1679         | 100  |
| 100      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 90-100   | 0           | 1679         | 100  |
| 110      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 100-110  | 0           | 1679         | 100  |
| 120      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 110-120  | 0           | 1679         | 100  |
| 130      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 120-130  | 0           | 1679         | 100  |
| 140      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 130-140  | 0           | 1679         | 100  |
| 150      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 140-150  | 0           | 1679         | 100  |
| 160      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 150-160  | 0           | 1679         | 100  |
| 170      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 160-170  | 0           | 1679         | 100  |
| 180      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 170-180  | 0           | 1679         | 100  |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT: lm    |              |      |

Conical surface Flux(90deg): 1678 lm

%lum = 100.0%

%lamp = 100.0%

Conical surface Flux(120deg): 1678.6 lm

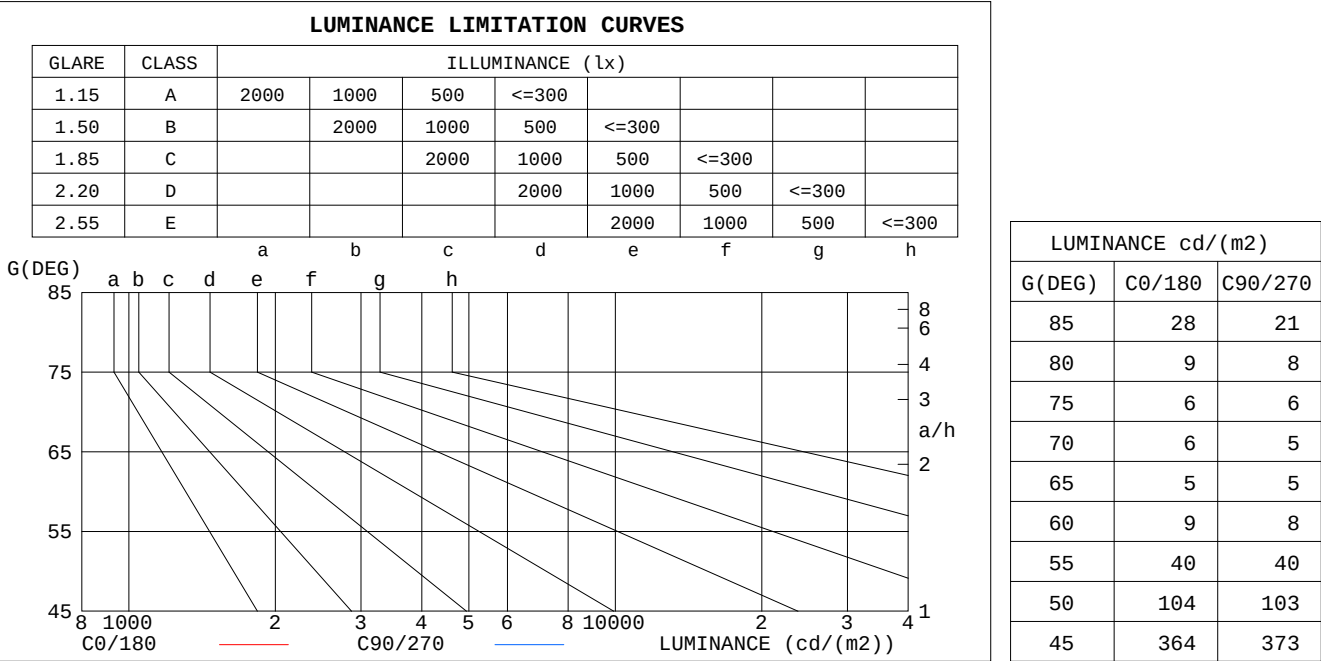
%lum = 100.0%

%lamp = 100.0%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Oliver  
 Test Date:2024-09-20

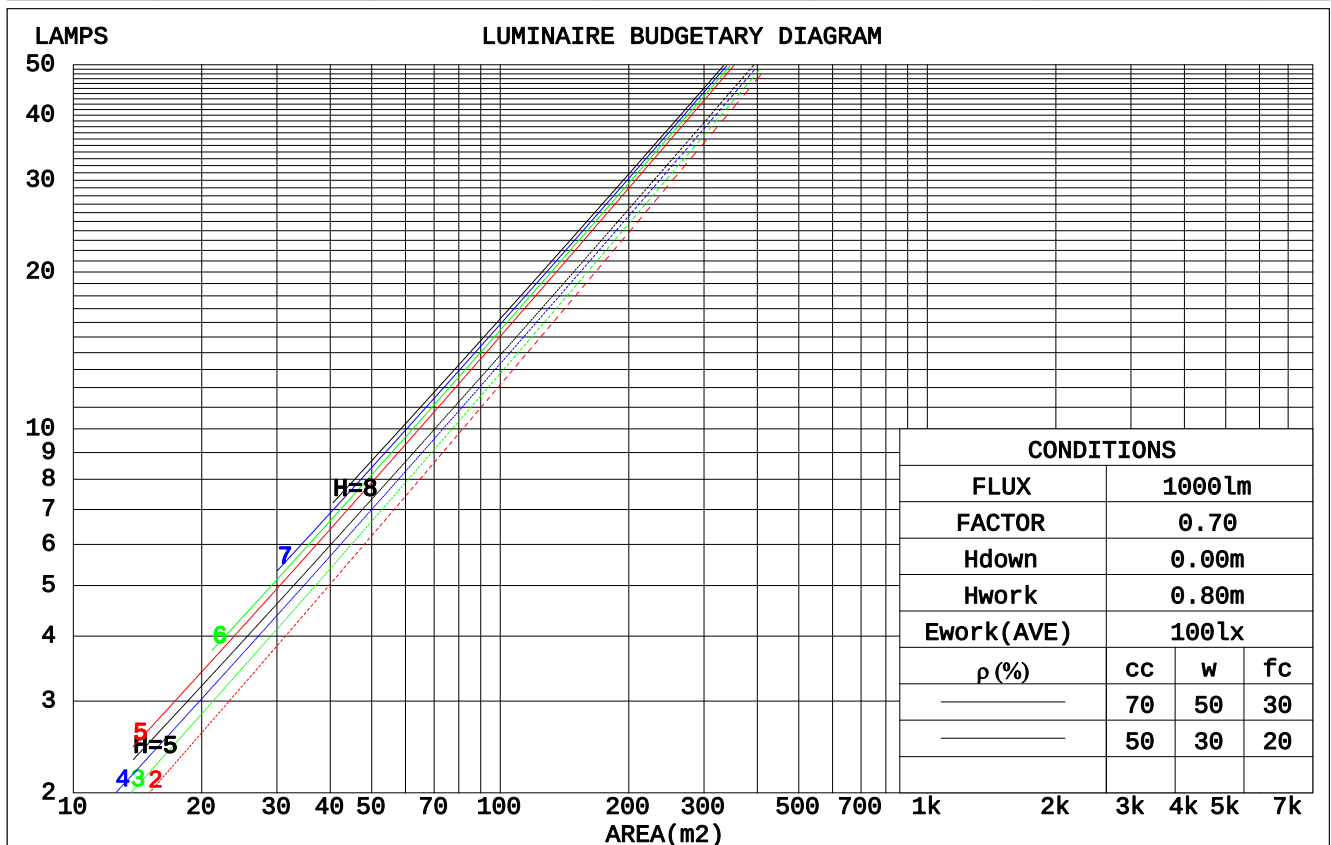
$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:2.467m [K=1.0000]  
 Remarks:

LUMINANCE LIMITATION CURVES



## 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 | 1.00 |
| 1.0         | 1.14                  | 1.12 | 1.10 | 1.11                            | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.00 | .00  | .99  | .98  |
| 2.0         | 1.09                  | 1.06 | 1.04 | 1.07                            | 1.05 | 1.03 | 1.04 | 1.02 | 1.01 | 1.01 | .00  | .99  | .99  | .98  | .97  | .95  |
| 3.0         | 1.05                  | 1.02 | .99  | 1.04                            | 1.01 | .99  | 1.01 | .99  | .97  | .99  | .97  | .96  | .97  | .96  | .94  | .93  |
| 4.0         | 1.02                  | .98  | .96  | 1.01                            | .98  | .95  | .99  | .96  | .94  | .97  | .95  | .93  | .95  | .94  | .92  | .91  |
| 5.0         | .99                   | .95  | .93  | .98                             | .95  | .92  | .96  | .94  | .91  | .95  | .93  | .91  | .94  | .92  | .90  | .89  |
| 6.0         | .96                   | .93  | .90  | .95                             | .92  | .90  | .94  | .91  | .89  | .93  | .90  | .89  | .92  | .90  | .88  | .87  |
| 7.0         | .94                   | .90  | .88  | .93                             | .90  | .87  | .92  | .89  | .87  | .91  | .89  | .87  | .90  | .88  | .86  | .85  |
| 8.0         | .91                   | .88  | .85  | .91                             | .88  | .85  | .90  | .87  | .85  | .89  | .87  | .85  | .89  | .86  | .84  | .84  |
| 9.0         | .89                   | .86  | .84  | .89                             | .86  | .83  | .88  | .85  | .83  | .88  | .85  | .83  | .87  | .85  | .83  | .82  |
| 10.0        | .87                   | .84  | .82  | .87                             | .84  | .82  | .87  | .84  | .82  | .86  | .83  | .81  | .85  | .83  | .81  | .80  |



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Oliver  
 Test Date: 2024-09-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 2.467m [K=1.0000]  
 Remarks:

## WEC AND CCEC

| 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  | .124                  | .071 | .022 | .118 | .067 | .021 | .105                            | .060 | .019 | .094 | .054 | .017 | .084 | .048 | .016 |   |
| 2.0  | .114                  | .062 | .019 | .108 | .060 | .018 | .098                            | .055 | .017 | .089 | .050 | .016 | .080 | .045 | .014 |   |
| 3.0  | .105                  | .056 | .017 | .100 | .054 | .016 | .092                            | .050 | .015 | .084 | .046 | .014 | .077 | .043 | .013 |   |
| 4.0  | .097                  | .051 | .015 | .094 | .049 | .015 | .087                            | .046 | .014 | .080 | .043 | .013 | .074 | .040 | .012 |   |
| 5.0  | .091                  | .047 | .013 | .088 | .045 | .013 | .082                            | .043 | .013 | .077 | .040 | .012 | .072 | .038 | .011 |   |
| 6.0  | .086                  | .043 | .012 | .083 | .042 | .012 | .078                            | .040 | .012 | .074 | .038 | .011 | .069 | .036 | .011 |   |
| 7.0  | .081                  | .040 | .011 | .079 | .039 | .011 | .075                            | .038 | .011 | .071 | .036 | .011 | .067 | .035 | .010 |   |
| 8.0  | .077                  | .038 | .011 | .075 | .037 | .010 | .071                            | .036 | .010 | .068 | .034 | .010 | .065 | .033 | .010 |   |
| 9.0  | .074                  | .036 | .010 | .072 | .035 | .010 | .069                            | .034 | .010 | .065 | .033 | .009 | .063 | .032 | .009 |   |
| 10.0 | .070                  | .034 | .009 | .069 | .033 | .009 | .066                            | .032 | .009 | .063 | .031 | .009 | .061 | .030 | .009 |   |

| 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  | .190                  | .190 | .190 | .163                                       | .163 | .163 | .111 | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .167                  | .158 | .149 | .143                                       | .135 | .128 | .098 | .093 | .089 | .056 | .054 | .052 | .018 | .017 | .017 |   |
| 2.0  | .148                  | .133 | .120 | .127                                       | .114 | .103 | .087 | .079 | .072 | .050 | .046 | .042 | .016 | .015 | .014 |   |
| 3.0  | .133                  | .113 | .098 | .114                                       | .098 | .085 | .078 | .068 | .059 | .045 | .040 | .035 | .014 | .013 | .011 |   |
| 4.0  | .119                  | .098 | .081 | .103                                       | .084 | .070 | .070 | .059 | .049 | .041 | .034 | .029 | .013 | .011 | .010 |   |
| 5.0  | .108                  | .085 | .068 | .093                                       | .074 | .059 | .064 | .051 | .042 | .037 | .030 | .025 | .012 | .010 | .008 |   |
| 6.0  | .099                  | .075 | .058 | .085                                       | .065 | .050 | .059 | .045 | .035 | .034 | .027 | .021 | .011 | .009 | .007 |   |
| 7.0  | .091                  | .066 | .049 | .078                                       | .058 | .043 | .054 | .040 | .030 | .031 | .024 | .018 | .010 | .008 | .006 |   |
| 8.0  | .084                  | .060 | .043 | .073                                       | .052 | .037 | .050 | .036 | .026 | .029 | .021 | .016 | .009 | .007 | .005 |   |
| 9.0  | .078                  | .054 | .037 | .068                                       | .047 | .032 | .047 | .033 | .023 | .027 | .019 | .014 | .009 | .006 | .005 |   |
| 10.0 | .073                  | .049 | .033 | .063                                       | .042 | .028 | .044 | .030 | .020 | .026 | .018 | .012 | .008 | .006 | .004 |   |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Oliver  
 Test Date: 2024-09-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 2.467m [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                                                   | -3.2             | -2.6 | -3.0 | -2.5 | -2.3 | -3.0           | -2.4 | -2.8 | -2.3 | -2.2 |
| 3H                                                              | -3.3             | -2.8 | -3.1 | -2.6 | -2.4 | -3.1           | -2.6 | -2.9 | -2.4 | -2.3 |
| 4H                                                              | -3.4             | -2.9 | -3.1 | -2.7 | -2.5 | -3.2           | -2.7 | -3.0 | -2.5 | -2.3 |
| 6H                                                              | -3.5             | -3.0 | -3.2 | -2.8 | -2.5 | -3.3           | -2.8 | -3.0 | -2.6 | -2.4 |
| 8H                                                              | -3.5             | -3.0 | -3.2 | -2.8 | -2.6 | -3.3           | -2.9 | -3.1 | -2.6 | -2.4 |
| 12H                                                             | -3.6             | -3.1 | -3.3 | -2.9 | -2.6 | -3.4           | -2.9 | -3.1 | -2.7 | -2.4 |
| 4H 2H                                                           | -3.4             | -2.9 | -3.1 | -2.7 | -2.5 | -3.2           | -2.7 | -3.0 | -2.5 | -2.3 |
| 3H                                                              | -3.6             | -3.1 | -3.3 | -2.9 | -2.6 | -3.4           | -2.9 | -3.1 | -2.7 | -2.4 |
| 4H                                                              | -3.7             | -3.2 | -3.3 | -3.0 | -2.7 | -3.5           | -3.1 | -3.2 | -2.8 | -2.5 |
| 6H                                                              | -3.8             | -3.4 | -3.4 | -3.1 | -2.7 | -3.6           | -3.2 | -3.2 | -2.9 | -2.6 |
| 8H                                                              | -3.8             | -3.5 | -3.4 | -3.1 | -2.8 | -3.6           | -3.3 | -3.3 | -3.0 | -2.6 |
| 12H                                                             | -3.9             | -3.6 | -3.5 | -3.2 | -2.8 | -3.7           | -3.4 | -3.3 | -3.0 | -2.6 |
| 8H 4H                                                           | -3.8             | -3.5 | -3.4 | -3.1 | -2.8 | -3.7           | -3.3 | -3.3 | -3.0 | -2.6 |
| 6H                                                              | -3.9             | -3.6 | -3.5 | -3.3 | -2.8 | -3.8           | -3.5 | -3.3 | -3.1 | -2.7 |
| 8H                                                              | -4.0             | -3.7 | -3.6 | -3.3 | -2.9 | -3.8           | -3.6 | -3.4 | -3.2 | -2.7 |
| 12H                                                             | -4.1             | -3.8 | -3.6 | -3.4 | -2.9 | -3.9           | -3.7 | -3.4 | -3.2 | -2.8 |
| 12H 4H                                                          | -3.9             | -3.6 | -3.5 | -3.2 | -2.8 | -3.7           | -3.4 | -3.3 | -3.0 | -2.6 |
| 6H                                                              | -4.0             | -3.7 | -3.6 | -3.3 | -2.9 | -3.8           | -3.6 | -3.4 | -3.2 | -2.7 |
| 8H                                                              | -4.1             | -3.8 | -3.6 | -3.4 | -2.9 | -3.9           | -3.7 | -3.4 | -3.2 | -2.8 |
| Variations with the observer position at spacings(CIE Pub.117): |                  |      |      |      |      |                |      |      |      |      |
| S = 1.0H                                                        | + 4.8 / -20.0    |      |      |      |      | + 4.1 / -21.2  |      |      |      |      |
| 1.5H                                                            | + 7.3 / -15.9    |      |      |      |      | + 6.7 / -16.7  |      |      |      |      |
| 2.0H                                                            | + 7.8 / -12.3    |      |      |      |      | + 7.7 / -13.3  |      |      |      |      |

CIE Pub.117, 1679 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 1.8$ )  
Area: 0.008 m<sup>2</sup>

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Oliver  
Test Date:2024-09-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:2.467m [K=1.0000]  
Remarks:

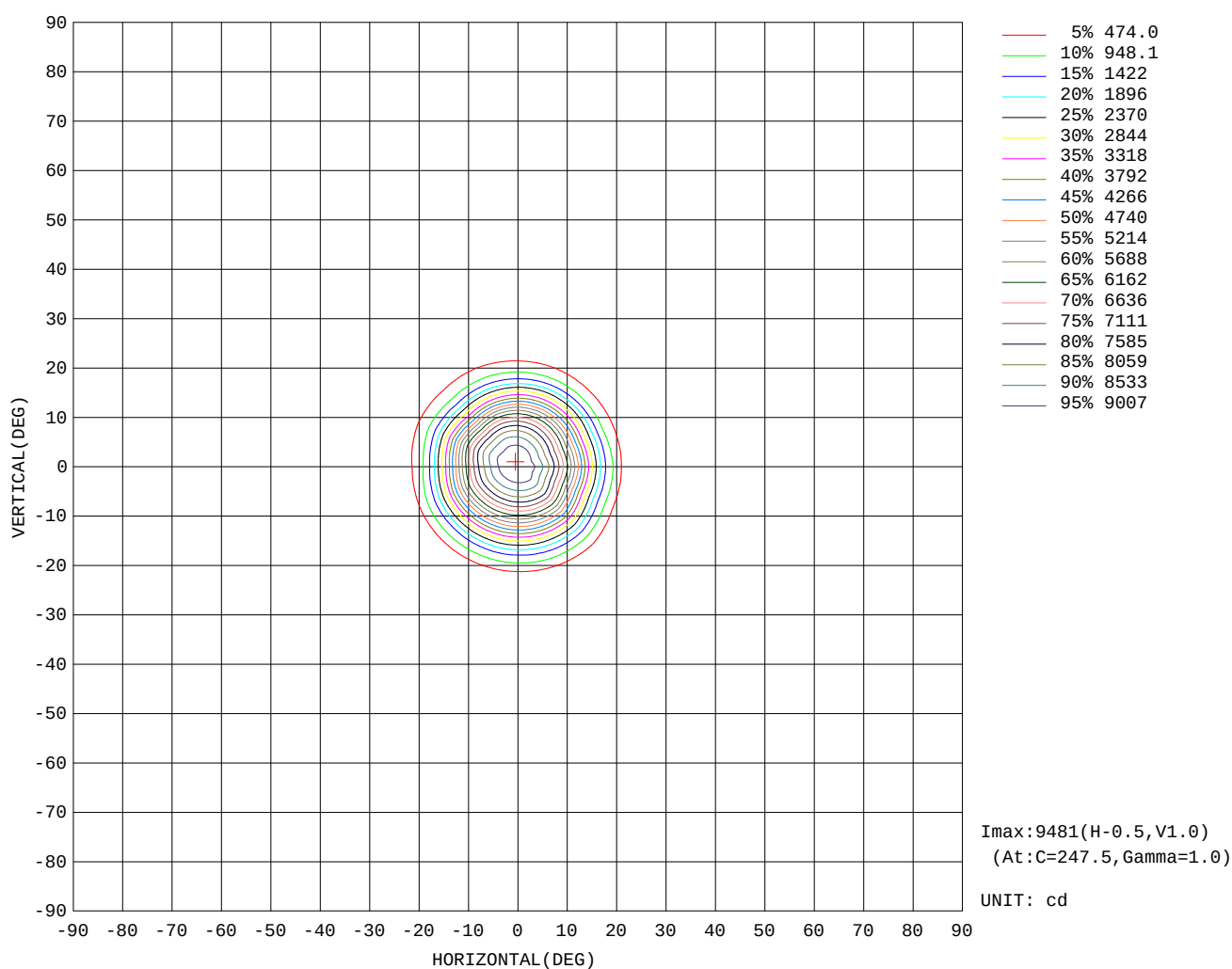
## UTILIZATION FACTORS TABLE

| 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) $k(RI) \times RCR = 5$ |     |     |           |     |     |     |               |     |        |
| $k = 0.60$                       | 92                                                  | 86  | 83  | 91        | 86  | 82  | 90  | 85            | 82  | 79     |
| 0.80                             | 98                                                  | 93  | 90  | 98        | 93  | 90  | 97  | 92            | 90  | 86     |
| 1.00                             | 102                                                 | 97  | 94  | 101       | 97  | 94  | 100 | 96            | 93  | 90     |
| 1.25                             | 106                                                 | 101 | 98  | 105       | 100 | 98  | 103 | 99            | 97  | 93     |
| 1.50                             | 108                                                 | 104 | 101 | 107       | 103 | 100 | 105 | 102           | 99  | 95     |
| 2.00                             | 110                                                 | 106 | 103 | 109       | 105 | 103 | 106 | 103           | 101 | 96     |
| 2.50                             | 111                                                 | 108 | 105 | 110       | 107 | 105 | 107 | 104           | 103 | 97     |
| 3.00                             | 113                                                 | 110 | 107 | 111       | 108 | 106 | 108 | 106           | 104 | 98     |
| 4.00                             | 115                                                 | 112 | 110 | 113       | 111 | 109 | 109 | 107           | 106 | 99     |
| 5.00                             | 116                                                 | 114 | 112 | 114       | 112 | 111 | 110 | 109           | 108 | 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: 2024-09-20

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 2.467m [K=1.0000]  
 Remarks:

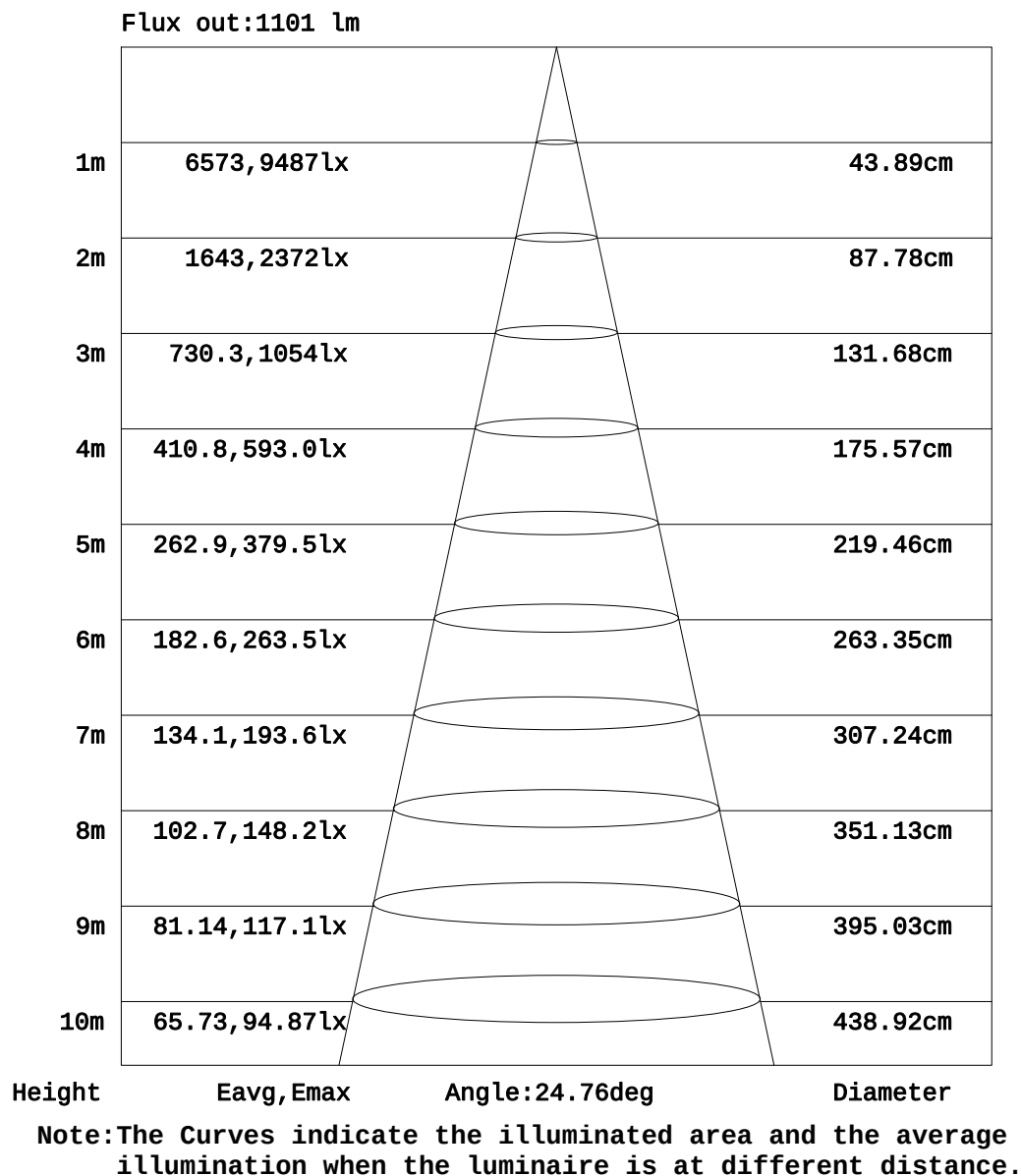
## ISOCANDELA DIAGRAM



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Oliver  
Test Date:2024-09-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:2.467m [K=1.0000]  
Remarks:

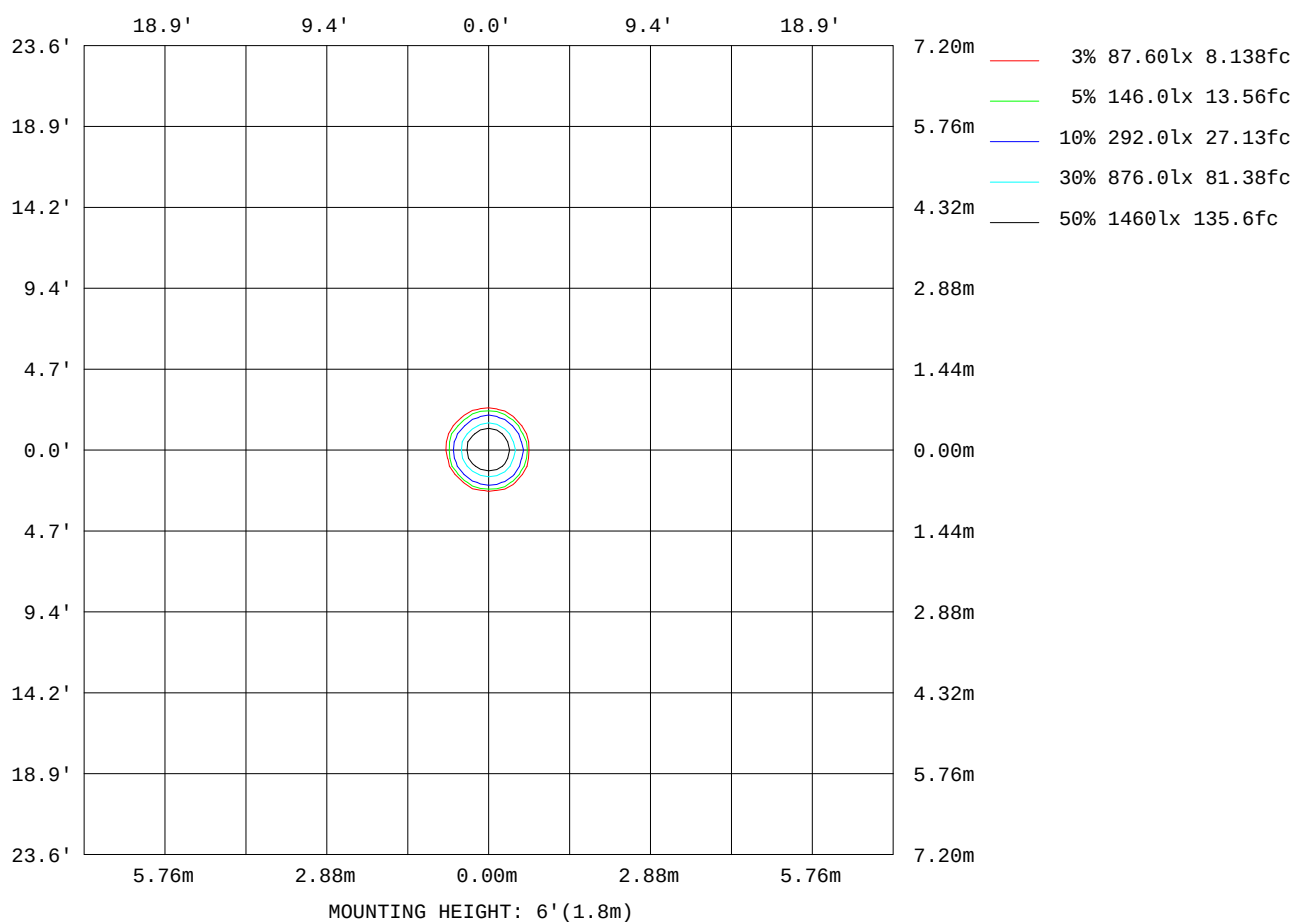
## AAI Figure



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Oliver  
 Test Date:2024-09-20

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:2.467m [K=1.0000]  
 Remarks:

## ISOLUX DIAGRAM



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Oliver  
 Test Date: 2024-09-20

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 2.467m [K=1.0000]  
 Remarks:

## LED Avg.L Report

Test:U:220.07V I:0.0946A P:19.547W PF:0.9387 Freq:50.00Hz UTHDi:0.00% ITHDi:0.00% Lamp Flux:1678.8x1 lm

|                          |             |                  |
|--------------------------|-------------|------------------|
| NAME: DDW41-LM18E-230SWT | TYPE: 嵌入式灯具 | WEIGHT:          |
| SPEC.:                   | DIM.:       | SERIAL No.:      |
| MFR.: WAC Lighting       | SUR.:       | Shielding Angle: |

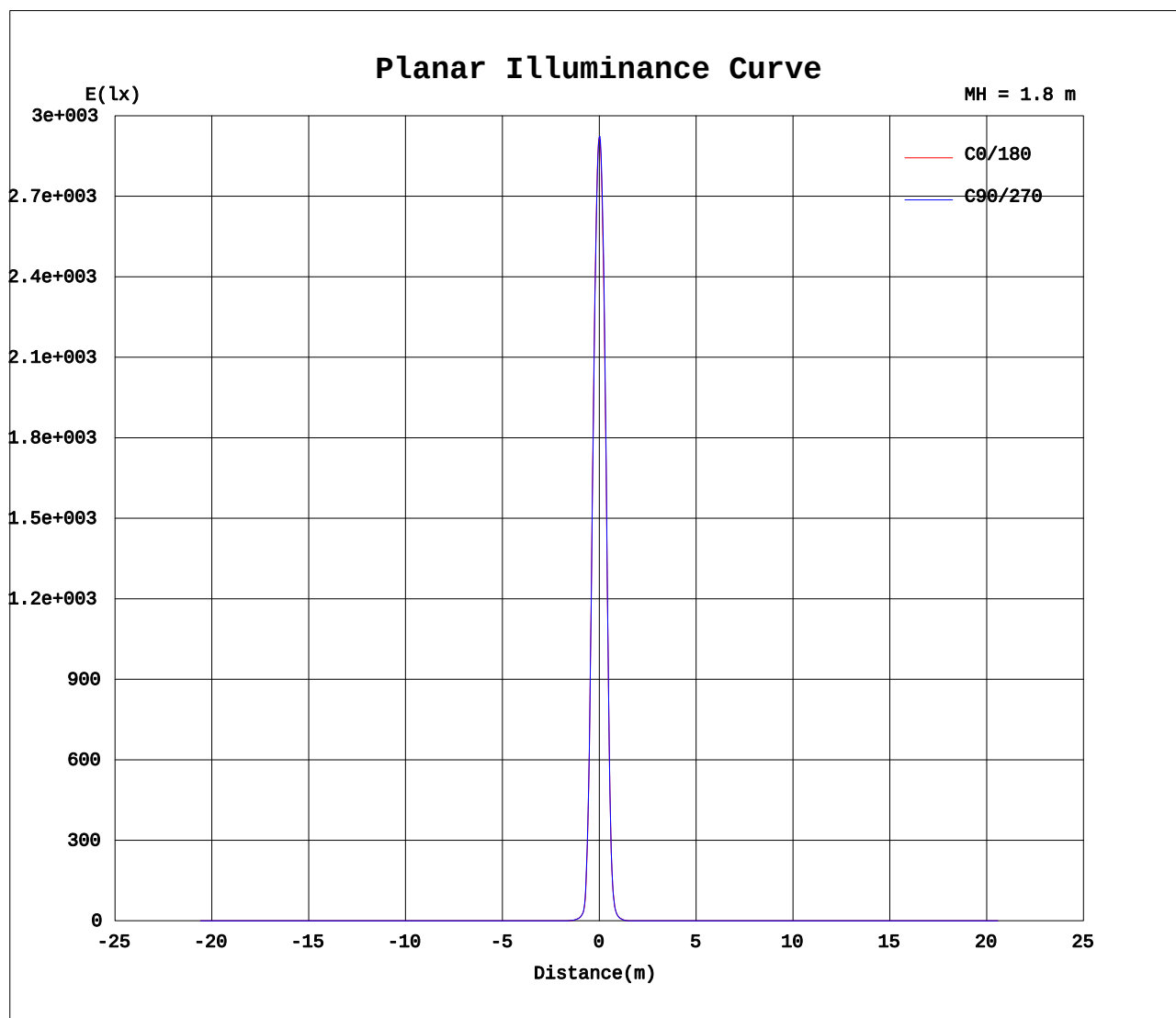
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 29    |
| L_0~180(75)av  | 50    |
| L_0~180(85)av  | 21    |
| L_90~270(65)av | 27    |
| L_90~270(75)av | 45    |
| L_90~270(85)av | 18    |
| L_45(65)av     | 27    |
| L_45(75)av     | 44    |
| L_45(85)av     | 20    |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Oliver  
Test Date:2024-09-20

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:2.467m [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: 2024-09-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 2.467m [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                 | 9445 | 9445 | 9445 | 9445 | 9445 | 9445  | 9445 | 9445  | 9445 | 9445  | 9445 | 9445  | 9445 | 9445  | 9445 | 9445  |  |  |  |
| 5                 | 8552 | 8438 | 8635 | 8535 | 8465 | 8469  | 8560 | 8714  | 8681 | 8896  | 8810 | 8880  | 8833 | 8708  | 8579 | 8440  |  |  |  |
| 10                | 6193 | 5984 | 6347 | 6159 | 6049 | 6070  | 6228 | 6503  | 6456 | 6855  | 6515 | 6672  | 6641 | 6499  | 6300 | 6048  |  |  |  |
| 15                | 2892 | 2705 | 3139 | 2981 | 2874 | 2863  | 2986 | 3173  | 3049 | 3321  | 2876 | 2995  | 3048 | 3038  | 2941 | 2741  |  |  |  |
| 20                | 745  | 704  | 883  | 857  | 802  | 779   | 798  | 851   | 715  | 840   | 713  | 744   | 729  | 697   | 657  | 592   |  |  |  |
| 25                | 133  | 125  | 144  | 135  | 129  | 135   | 146  | 167   | 174  | 210   | 189  | 189   | 174  | 158   | 143  | 128   |  |  |  |
| 30                | 55.4 | 52.3 | 56.5 | 55.4 | 53.6 | 55.2  | 57.3 | 63.3  | 63.3 | 70.9  | 62.5 | 62.6  | 58.7 | 56.0  | 54.2 | 52.9  |  |  |  |
| 35                | 23.0 | 21.1 | 23.9 | 24.2 | 23.4 | 22.8  | 22.6 | 24.6  | 22.9 | 24.7  | 18.1 | 19.1  | 19.2 | 19.1  | 19.6 | 20.3  |  |  |  |
| 40                | 5.41 | 5.28 | 6.46 | 6.24 | 6.02 | 5.89  | 5.72 | 5.27  | 4.07 | 4.13  | 3.52 | 3.41  | 3.52 | 3.53  | 3.97 | 4.46  |  |  |  |
| 45                | 2.05 | 2.09 | 2.37 | 2.16 | 2.10 | 1.99  | 1.95 | 1.84  | 1.52 | 1.59  | 1.15 | 1.23  | 1.38 | 1.42  | 1.55 | 1.71  |  |  |  |
| 50                | 0.53 | 0.52 | 0.67 | 0.62 | 0.53 | 0.49  | 0.45 | 0.42  | 0.37 | 0.37  | 0.32 | 0.33  | 0.35 | 0.38  | 0.42 | 0.44  |  |  |  |
| 55                | 0.18 | 0.18 | 0.22 | 0.20 | 0.18 | 0.17  | 0.15 | 0.14  | 0.11 | 0.11  | 0.09 | 0.10  | 0.12 | 0.13  | 0.15 | 0.15  |  |  |  |
| 60                | 0.03 | 0.03 | 0.04 | 0.04 | 0.03 | 0.03  | 0.02 | 0.02  | 0.17 | 0.17  | 0.19 | 0.19  | 0.20 | 0.20  | 0.20 | 0.20  |  |  |  |
| 65                | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02  | 0.02 | 0.02  | 0.18 | 0.18  | 0.16 | 0.16  | 0.16 | 0.16  | 0.16 | 0.16  |  |  |  |
| 70                | 0.02 | 0.01 | 0.01 | 0.02 | 0.01 | 0.02  | 0.01 | 0.02  | 0.18 | 0.18  | 0.22 | 0.22  | 0.22 | 0.21  | 0.22 | 0.21  |  |  |  |
| 75                | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01  | 0.01 | 0.01  | 0.19 | 0.20  | 0.17 | 0.17  | 0.17 | 0.17  | 0.17 | 0.17  |  |  |  |
| 80                | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01  | 0.01 | 0.01  | 0.23 | 0.23  | 0.19 | 0.19  | 0.19 | 0.19  | 0.19 | 0.20  |  |  |  |
| 85                | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.02  | 0.02 | 0.02  | 0.01 | 0.01  | 0.01 | 0.01  | 0.01 | 0.01  | 0.01 | 0.01  |  |  |  |
| 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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