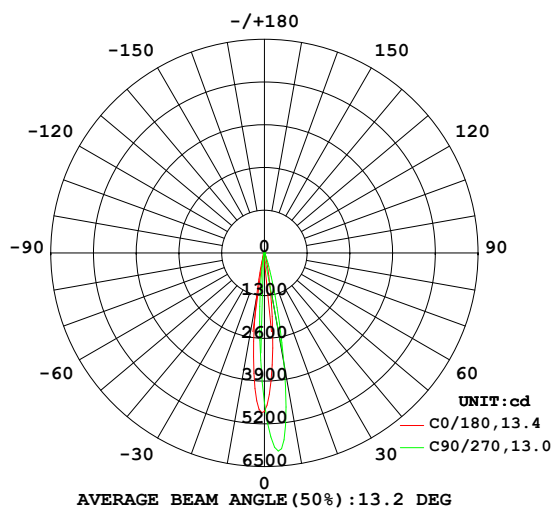


## LUMINAIRE PHOTOMETRIC TEST REPORT

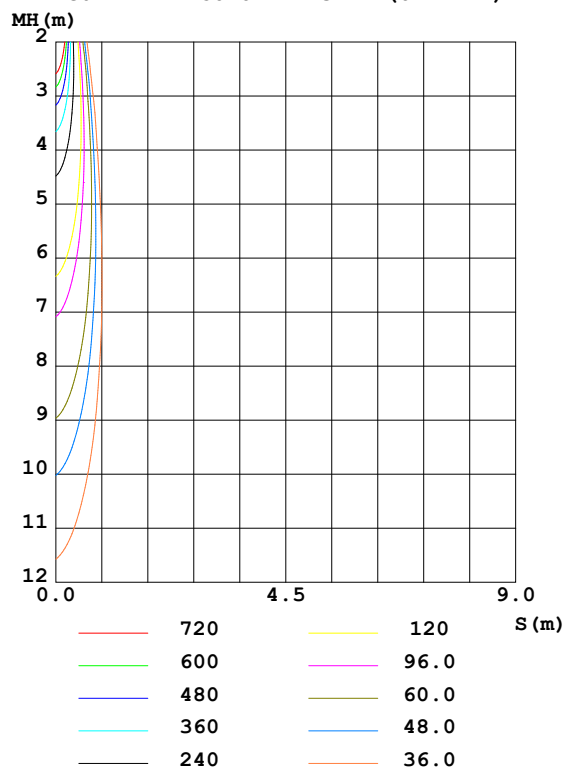
|                                                                                |       |                  |
|--------------------------------------------------------------------------------|-------|------------------|
| Test:U:231.2V I:0.0542A P:11.78W PF:0.9400 Freq:49.37Hz Lamp Flux:453.07lx1 lm |       |                  |
| NAME: W1862LED-X                                                               | TYPE: | WEIGHT:          |
| SPEC.: P-W1862LED-X-10W3012-CI25036R90-YML100                                  | DIM.: | SERIAL No.:      |
| MFR.: CETTIGA                                                                  | SUR.: | Shielding Angle: |

| DATA OF LAMP      |             | PHOTOMETRIC DATA Eff: 38.45 lm/W |        |                     |           |
|-------------------|-------------|----------------------------------|--------|---------------------|-----------|
| MODEL             | CLU7A2 1201 | I <sub>max</sub> (cd)            | 6041   | S/MH (C0/180)       | 0.26      |
| NOMINAL POWER (W) | 10W         | LOR (%)                          | 100.0  | S/MH (C90/270)      | 0.13      |
| RATED VOLTAGE (V) | 220.0       | TOTAL FLUX (lm)                  | 453.07 | η UP, DN (C0-180)   | 0.2, 65.8 |
| NOMINAL FLUX (lm) | 453.071     | CIE CLASS                        | DIRECT | η UP, DN (C180-360) | 0.1, 33.9 |
| LAMPS INSIDE      | 1           | η up (%)                         | 0.3    | CIBSE SHR NOM       | 0.00      |
| TEST VOLTAGE (V)  | 220.2       | η down (%)                       | 99.7   | CIBSE SHR MAX       | 1.00      |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Xie Bi  
Test Date: 2022-12-07

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 6.810m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

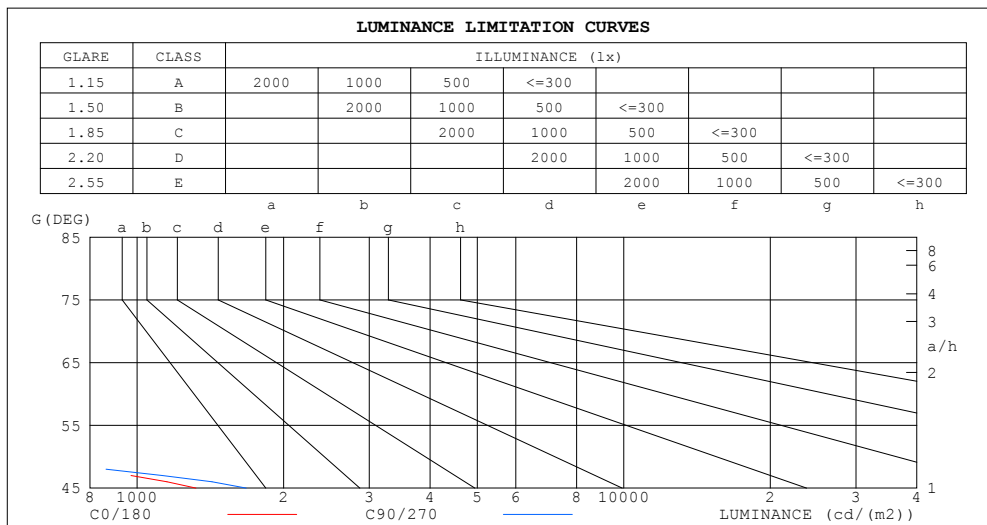
| $\gamma$ | C0                    | C90    | C180   | C270   |  |  |  |  | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|--------|--------|--------|--|--|--|--|----------|-------------|--------------|------------|
| 10       | 911.0                 | 3442   | 1390   | 426.0  |  |  |  |  | 0- 10    | 270.3       | 270.3        | 59.7, 59.7 |
| 20       | 88.68                 | 263.6  | 119.1  | 53.25  |  |  |  |  | 10- 20   | 142.7       | 412.9        | 91.1, 91.1 |
| 30       | 21.18                 | 41.56  | 24.77  | 15.24  |  |  |  |  | 20- 30   | 26.66       | 439.6        | 97, 97     |
| 40       | 6.976                 | 9.774  | 8.068  | 4.924  |  |  |  |  | 30- 40   | 9.033       | 448.6        | 99, 99     |
| 50       | 1.151                 | 0.9058 | 1.543  | 0.2113 |  |  |  |  | 40- 50   | 2.863       | 451.5        | 99.7, 99.7 |
| 60       | 0.0000                | 0      | 0      | 0.0018 |  |  |  |  | 50- 60   | 0.1738      | 451.7        | 99.7, 99.7 |
| 70       | 0                     | 0      | 0      | 0      |  |  |  |  | 60- 70   | 0.0001      | 451.7        | 99.7, 99.7 |
| 80       | 0                     | 0      | 0      | 0      |  |  |  |  | 70- 80   | 0           | 451.7        | 99.7, 99.7 |
| 90       | 0                     | 0      | 0      | 0      |  |  |  |  | 80- 90   | 0           | 451.7        | 99.7, 99.7 |
| 100      | 0                     | 0      | 0      | 0      |  |  |  |  | 90-100   | 0           | 451.7        | 99.7, 99.7 |
| 110      | 0                     | 0      | 0      | 0      |  |  |  |  | 100-110  | 0           | 451.7        | 99.7, 99.7 |
| 120      | 0                     | 0      | 0      | 0      |  |  |  |  | 110-120  | 0           | 451.7        | 99.7, 99.7 |
| 130      | 0                     | 0      | 0.0018 | 0.0052 |  |  |  |  | 120-130  | 0.0002      | 451.7        | 99.7, 99.7 |
| 140      | 0.0575                | 0.0210 | 0.0262 | 0.0488 |  |  |  |  | 130-140  | 0.0113      | 451.7        | 99.7, 99.7 |
| 150      | 0.5503                | 0.1797 | 0.1326 | 0.4198 |  |  |  |  | 140-150  | 0.0784      | 451.8        | 99.7, 99.7 |
| 160      | 2.542                 | 1.561  | 1.101  | 2.122  |  |  |  |  | 150-160  | 0.4227      | 452.2        | 99.8, 99.8 |
| 170      | 2.573                 | 3.055  | 2.438  | 2.060  |  |  |  |  | 160-170  | 0.6742      | 452.9        | 100, 100   |
| 180      | 1.878                 | 1.787  | 1.883  | 1.800  |  |  |  |  | 170-180  | 0.2132      | 453.1        | 100, 100   |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |  |  |  |  |          | UNIT:lm     |              |            |

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Xie Bi  
 Test Date: 2022-12-07

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 6.810m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

|                                                                                |       |                  |
|--------------------------------------------------------------------------------|-------|------------------|
| Test:U:231.2V I:0.0542A P:11.78W PF:0.9400 Freq:49.37Hz Lamp Flux:453.07lx1 lm |       |                  |
| NAME: W1862LED-X                                                               | TYPE: | WEIGHT:          |
| SPEC.:P-W1862LED-X-10W3012-CI25036R90-YML100                                   | DIM.: | SERIAL No.:      |
| MFR.: CETTIGA                                                                  | SUR.: | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 0      | 0       |
| 80                | 0      | 0       |
| 75                | 0      | 0       |
| 70                | 0      | 0       |
| 65                | 0      | 0       |
| 60                | 0      | 0       |
| 55                | 41     | 12      |
| 50                | 466    | 367     |
| 45                | 1321   | 1676    |

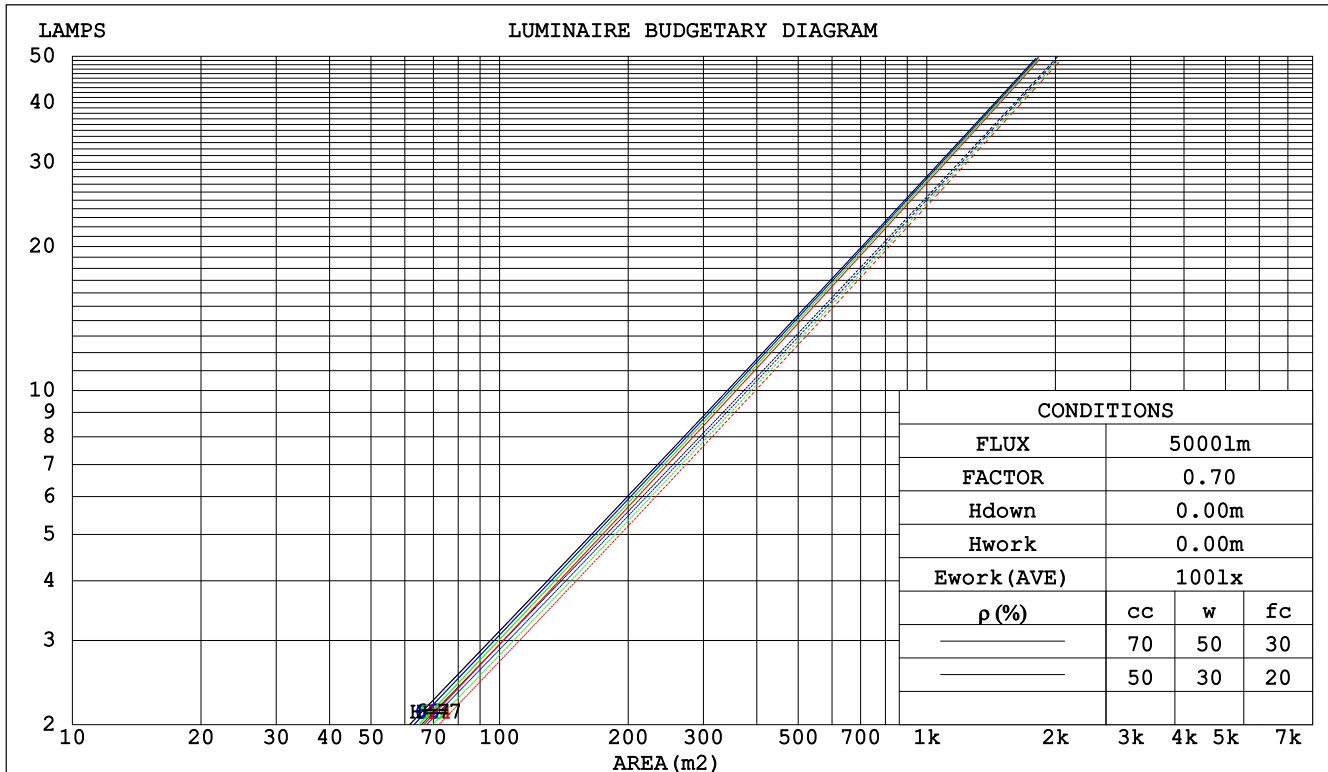
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Xie Bi  
Test Date:2022-12-07

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:6.810m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                                                |       |                  |
|--------------------------------------------------------------------------------|-------|------------------|
| Test:U:231.2V I:0.0542A P:11.78W PF:0.9400 Freq:49.37Hz Lamp Flux:453.07lx1 lm |       |                  |
| NAME: W1862LED-X                                                               | TYPE: | WEIGHT:          |
| SPEC.:P-W1862LED-X-10W3012-CI25036R90-YML100                                   | DIM.: | SERIAL No.:      |
| MFR.: CETTIGA                                                                  | SUR.: | Shielding Angle: |

| $\rho_{cc}$ | 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         | 1.14                  | 1.12 | 1.11 | 1.12 | 1.10 | 1.09 | 1.08                            | 1.07 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | .00  | .99  | .98 |
| 2.0         | 1.10                  | 1.07 | 1.05 | 1.08 | 1.06 | 1.04 | 1.05                            | 1.03 | 1.01 | 1.02 | 1.01 | .99  | .99  | .98  | .97  | .96 |
| 3.0         | 1.06                  | 1.03 | 1.01 | 1.05 | 1.02 | .00  | 1.02                            | 1.00 | .98  | 1.00 | .98  | .97  | .98  | .97  | .95  | .94 |
| 4.0         | 1.03                  | .00  | .97  | 1.02 | .99  | .97  | 1.00                            | .98  | .96  | .98  | .96  | .95  | .97  | .95  | .94  | .92 |
| 5.0         | 1.00                  | .97  | .95  | .00  | .96  | .94  | .98                             | .95  | .93  | .97  | .94  | .93  | .95  | .93  | .92  | .91 |
| 6.0         | .98                   | .95  | .92  | .97  | .94  | .92  | .96                             | .93  | .91  | .95  | .93  | .91  | .94  | .92  | .90  | .89 |
| 7.0         | .96                   | .93  | .90  | .95  | .92  | .90  | .94                             | .92  | .90  | .93  | .91  | .89  | .92  | .90  | .89  | .88 |
| 8.0         | .94                   | .91  | .89  | .94  | .91  | .88  | .93                             | .90  | .88  | .92  | .90  | .88  | .91  | .89  | .87  | .87 |
| 9.0         | .92                   | .89  | .87  | .92  | .89  | .87  | .91                             | .89  | .87  | .91  | .88  | .86  | .90  | .88  | .86  | .85 |
| 10.0        | .91                   | .88  | .86  | .90  | .88  | .86  | .90                             | .87  | .85  | .89  | .87  | .85  | .89  | .87  | .85  | .84 |



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Xie Bi  
 Test Date:2022-12-07

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:6.810m [K=1.0000]  
 Remarks:

### WEC AND CCEC

|                                                                                |       |                  |
|--------------------------------------------------------------------------------|-------|------------------|
| Test:U:231.2V I:0.0542A P:11.78W PF:0.9400 Freq:49.37Hz Lamp Flux:453.07lx1 lm |       |                  |
| NAME: W1862LED-X                                                               | TYPE: | WEIGHT:          |
| SPEC.: P-W1862LED-X-10W3012-CI25036R90-YML100                                  | DIM.: | SERIAL No.:      |
| MFR.: CETTIGA                                                                  | SUR.: | Shielding Angle: |

| pcc  | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|
| pw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| pfc  | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |
| 0.0  |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |
| 1.0  | .118                  | .067 | .021 | .111 | .064 | .020 | .099                            | .057 | .018 | .087 | .050 | .016 | .077 | .045 | .014 |   |
| 2.0  | .107                  | .059 | .018 | .102 | .056 | .017 | .092                            | .051 | .016 | .082 | .046 | .014 | .074 | .042 | .013 |   |
| 3.0  | .099                  | .053 | .016 | .094 | .050 | .015 | .086                            | .046 | .014 | .078 | .043 | .013 | .071 | .039 | .012 |   |
| 4.0  | .091                  | .047 | .014 | .088 | .046 | .014 | .081                            | .043 | .013 | .074 | .040 | .012 | .068 | .037 | .011 |   |
| 5.0  | .085                  | .043 | .013 | .082 | .042 | .012 | .076                            | .040 | .012 | .070 | .037 | .011 | .065 | .035 | .010 |   |
| 6.0  | .080                  | .040 | .011 | .077 | .039 | .011 | .072                            | .037 | .011 | .067 | .035 | .010 | .063 | .033 | .010 |   |
| 7.0  | .075                  | .037 | .010 | .073 | .036 | .010 | .068                            | .034 | .010 | .064 | .033 | .010 | .060 | .031 | .009 |   |
| 8.0  | .071                  | .035 | .010 | .069 | .034 | .010 | .065                            | .032 | .009 | .061 | .031 | .009 | .058 | .030 | .009 |   |
| 9.0  | .067                  | .032 | .009 | .065 | .032 | .009 | .062                            | .031 | .009 | .059 | .030 | .008 | .056 | .028 | .008 |   |
| 10.0 | .064                  | .031 | .008 | .062 | .030 | .008 | .059                            | .029 | .008 | .057 | .028 | .008 | .054 | .027 | .008 |   |

| pcc  | 80%                   |      |      | 70%  |      |      | 50%                                         |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|---------------------------------------------|------|------|------|------|------|------|------|------|---|
| pw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                         | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| pfc  | 20%                   |      |      | 20%  |      |      | 20%                                         |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients (CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .193                  | .193 | .193 | .165 | .165 | .165 | .112                                        | .112 | .112 | .065 | .065 | .065 | .021 | .021 | .021 |   |
| 1.0  | .169                  | .160 | .152 | .145 | .137 | .131 | .099                                        | .095 | .090 | .057 | .055 | .053 | .018 | .018 | .017 |   |
| 2.0  | .150                  | .135 | .123 | .129 | .116 | .106 | .088                                        | .081 | .074 | .051 | .047 | .043 | .016 | .015 | .014 |   |
| 3.0  | .134                  | .116 | .101 | .115 | .100 | .088 | .079                                        | .069 | .061 | .046 | .040 | .036 | .015 | .013 | .012 |   |
| 4.0  | .120                  | .100 | .084 | .103 | .086 | .073 | .071                                        | .060 | .052 | .041 | .035 | .030 | .013 | .011 | .010 |   |
| 5.0  | .109                  | .087 | .071 | .094 | .075 | .062 | .064                                        | .053 | .044 | .037 | .031 | .026 | .012 | .010 | .009 |   |
| 6.0  | .099                  | .077 | .061 | .085 | .067 | .053 | .059                                        | .047 | .038 | .034 | .027 | .022 | .011 | .009 | .007 |   |
| 7.0  | .091                  | .068 | .053 | .078 | .059 | .046 | .054                                        | .042 | .032 | .031 | .024 | .019 | .010 | .008 | .006 |   |
| 8.0  | .084                  | .061 | .046 | .072 | .053 | .040 | .050                                        | .037 | .028 | .029 | .022 | .017 | .009 | .007 | .006 |   |
| 9.0  | .078                  | .055 | .040 | .067 | .048 | .035 | .047                                        | .034 | .025 | .027 | .020 | .015 | .009 | .007 | .005 |   |
| 10.0 | .073                  | .050 | .036 | .063 | .044 | .031 | .043                                        | .031 | .022 | .025 | .018 | .013 | .008 | .006 | .004 |   |

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Xie Bi  
Test Date:2022-12-07

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:6.810m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

|                                                                                |     |                  |     |     |       |     |                |                  |     |     |     |
|--------------------------------------------------------------------------------|-----|------------------|-----|-----|-------|-----|----------------|------------------|-----|-----|-----|
| Test:U:231.2V I:0.0542A P:11.78W PF:0.9400 Freq:49.37Hz Lamp Flux:453.07lx1 lm |     |                  |     |     |       |     |                |                  |     |     |     |
| NAME: W1862LED-X                                                               |     |                  |     |     | TYPE: |     |                | WEIGHT:          |     |     |     |
| SPEC.:P-W1862LED-X-10W3012-CI25036R90-YML100                                   |     |                  |     |     | DIM.: |     |                | SERIAL No.:      |     |     |     |
| MFR.: CETTIGA                                                                  |     |                  |     |     | SUR.: |     |                | Shielding Angle: |     |     |     |
| ceiling/cavity                                                                 | 0.7 | 0.7              | 0.5 | 0.5 | 0.3   | 0.7 | 0.7            | 0.5              | 0.5 | 0.3 |     |
| walls                                                                          | 0.5 | 0.3              | 0.5 | 0.3 | 0.3   | 0.5 | 0.3            | 0.5              | 0.3 | 0.3 |     |
| working plane                                                                  | 0.2 | 0.2              | 0.2 | 0.2 | 0.2   | 0.2 | 0.2            | 0.2              | 0.2 | 0.2 |     |
| Room dimensions                                                                |     | Viewed crosswise |     |     |       |     | Viewed endwise |                  |     |     |     |
| x = 2H y = 2H                                                                  |     | 3.8              | 4.3 | 3.9 | 4.4   | 4.6 | 5.6            | 6.1              | 5.8 | 6.3 | 6.4 |
| 3H                                                                             |     | 3.6              | 4.1 | 3.8 | 4.3   | 4.5 | 5.5            | 6.0              | 5.7 | 6.2 | 6.3 |
| 4H                                                                             |     | 3.5              | 4.0 | 3.8 | 4.2   | 4.4 | 5.4            | 5.9              | 5.7 | 6.1 | 6.3 |
| 6H                                                                             |     | 3.5              | 3.9 | 3.7 | 4.1   | 4.4 | 5.3            | 5.8              | 5.6 | 6.0 | 6.2 |
| 8H                                                                             |     | 3.4              | 3.8 | 3.7 | 4.1   | 4.3 | 5.3            | 5.7              | 5.6 | 6.0 | 6.2 |
| 12H                                                                            |     | 3.4              | 3.8 | 3.7 | 4.0   | 4.3 | 5.2            | 5.7              | 5.5 | 5.9 | 6.2 |
| 4H                                                                             | 2H  | 3.5              | 4.0 | 3.8 | 4.2   | 4.4 | 5.4            | 5.9              | 5.7 | 6.1 | 6.3 |
|                                                                                | 3H  | 3.4              | 3.8 | 3.7 | 4.0   | 4.3 | 5.2            | 5.7              | 5.5 | 5.9 | 6.2 |
|                                                                                | 4H  | 3.3              | 3.7 | 3.6 | 3.9   | 4.2 | 5.1            | 5.5              | 5.5 | 5.8 | 6.1 |
|                                                                                | 6H  | 3.2              | 3.5 | 3.5 | 3.8   | 4.2 | 5.0            | 5.4              | 5.4 | 5.7 | 6.1 |
|                                                                                | 8H  | 3.1              | 3.4 | 3.5 | 3.8   | 4.1 | 5.0            | 5.3              | 5.4 | 5.7 | 6.0 |
| 8H                                                                             | 12H | 3.0              | 3.3 | 3.4 | 3.7   | 4.1 | 4.9            | 5.2              | 5.3 | 5.6 | 6.0 |
|                                                                                | 4H  | 3.1              | 3.4 | 3.5 | 3.8   | 4.1 | 5.0            | 5.3              | 5.4 | 5.7 | 6.0 |
|                                                                                | 6H  | 3.0              | 3.3 | 3.4 | 3.6   | 4.1 | 4.9            | 5.1              | 5.3 | 5.5 | 5.9 |
|                                                                                | 8H  | 2.9              | 3.2 | 3.4 | 3.6   | 4.0 | 4.8            | 5.0              | 5.2 | 5.5 | 5.9 |
|                                                                                | 12H | 2.8              | 3.1 | 3.3 | 3.5   | 4.0 | 4.7            | 4.9              | 5.2 | 5.4 | 5.9 |
| 12H                                                                            | 4H  | 3.0              | 3.3 | 3.4 | 3.7   | 4.1 | 4.9            | 5.2              | 5.3 | 5.6 | 6.0 |
|                                                                                | 6H  | 2.9              | 3.2 | 3.4 | 3.6   | 4.0 | 4.8            | 5.0              | 5.2 | 5.5 | 5.9 |
|                                                                                | 8H  | 2.8              | 3.1 | 3.3 | 3.5   | 4.0 | 4.7            | 4.9              | 5.2 | 5.4 | 5.9 |
| Variations with the observer position at spacings:                             |     |                  |     |     |       |     |                |                  |     |     |     |
| S = 1.0H                                                                       |     | + 2.6 / -37.1    |     |     |       |     | + 3.6 / -47.1  |                  |     |     |     |
| 1.5H                                                                           |     | + 4.5 / -29.7    |     |     |       |     | + 5.8 / -32.7  |                  |     |     |     |
| 2.0H                                                                           |     | + 7.5 / - 1.\$   |     |     |       |     | + 8.1 / - 1.\$ |                  |     |     |     |

CIE Pub.117, 453.1 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -2.8)

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Xie Bi  
Test Date:2022-12-07

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:6.810m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

|                                                                                |       |                  |
|--------------------------------------------------------------------------------|-------|------------------|
| Test:U:231.2V I:0.0542A P:11.78W PF:0.9400 Freq:49.37Hz Lamp Flux:453.07lx1 lm |       |                  |
| NAME: W1862LED-X                                                               | TYPE: | WEIGHT:          |
| SPEC.:P-W1862LED-X-10W3012-CI25036R90-YML100                                   | DIM.: | SERIAL No.:      |
| MFR.: CETTIGA                                                                  | SUR.: | Shielding Angle: |

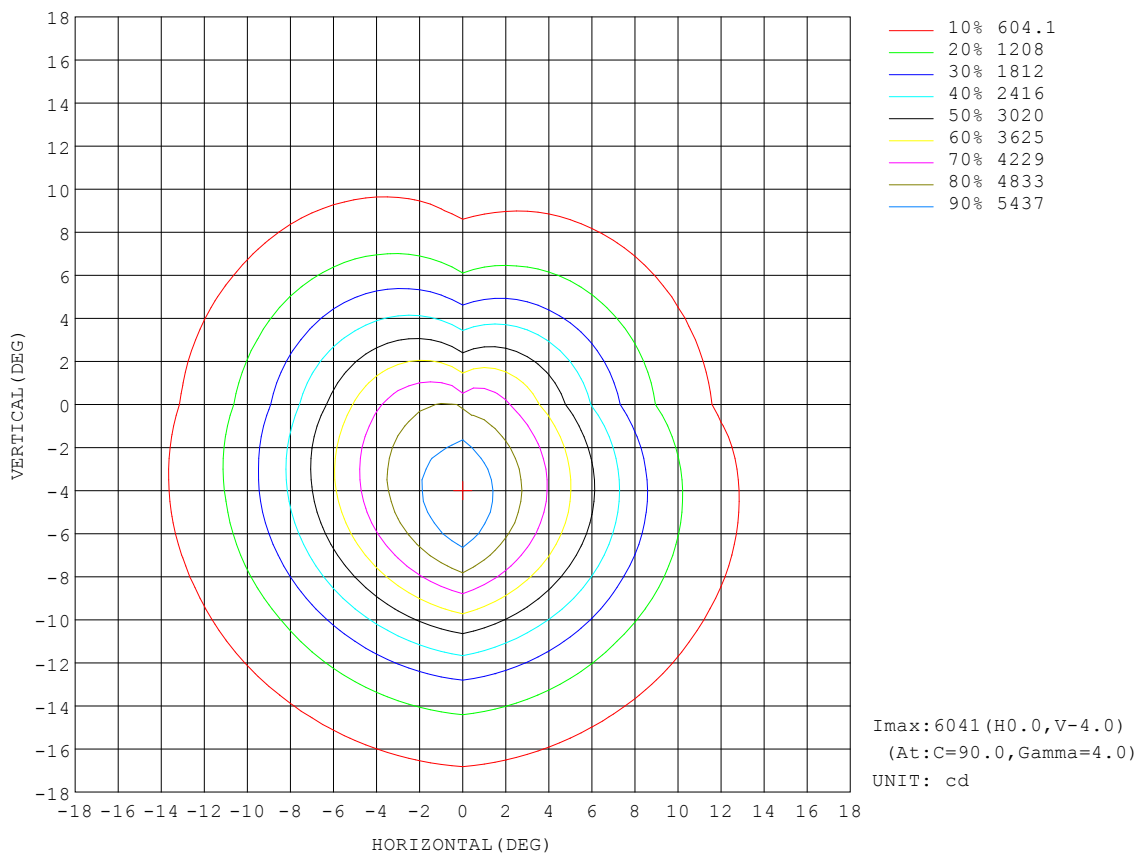
| REFLECTANCE                      |                                                  |     |     |     |     |     |     |     |     |        |
|----------------------------------|--------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| Ceiling                          | 0.8                                              | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0      |
| Walls                            | 0.7                                              | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0      |
| Working plane                    | 0.2                                              | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0      |
| ROOM INDEX                       | UTILIZATION FACTORS (PERCENT)    k(RI) x RCR = 5 |     |     |     |     |     |     |     |     |        |
| k = 0.60                         | 91                                               | 85  | 82  | 90  | 85  | 82  | 90  | 85  | 82  | 78     |
| 0.80                             | 98                                               | 93  | 89  | 97  | 92  | 89  | 96  | 92  | 89  | 86     |
| 1.00                             | 102                                              | 97  | 93  | 101 | 96  | 93  | 99  | 96  | 93  | 89     |
| 1.25                             | 105                                              | 101 | 97  | 104 | 100 | 97  | 102 | 99  | 96  | 92     |
| 1.50                             | 108                                              | 103 | 100 | 106 | 103 | 100 | 104 | 101 | 99  | 95     |
| 2.00                             | 110                                              | 106 | 103 | 108 | 105 | 102 | 106 | 103 | 101 | 96     |
| 2.50                             | 111                                              | 108 | 105 | 110 | 107 | 104 | 107 | 104 | 102 | 97     |
| 3.00                             | 113                                              | 110 | 107 | 111 | 108 | 106 | 107 | 105 | 104 | 97     |
| 4.00                             | 114                                              | 112 | 110 | 112 | 110 | 109 | 109 | 107 | 106 | 99     |
| 5.00                             | 116                                              | 114 | 112 | 114 | 112 | 110 | 110 | 108 | 107 | 100    |
| ROOM INDEX                       | UF (total)                                       |     |     |     |     |     |     |     |     | Direct |
| According to DIN EN 13032-2 2004 |                                                  |     |     |     |     |     |     |     |     |        |
| Suspended                        |                                                  |     |     |     |     |     |     |     |     |        |
| SHRNOM = 1.25                    |                                                  |     |     |     |     |     |     |     |     |        |

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Xie Bi  
Test Date:2022-12-07

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:6.810m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

|                                                                                |       |                  |
|--------------------------------------------------------------------------------|-------|------------------|
| Test:U:231.2V I:0.0542A P:11.78W PF:0.9400 Freq:49.37Hz Lamp Flux:453.07lx1 lm |       |                  |
| NAME: W1862LED-X                                                               | TYPE: | WEIGHT:          |
| SPEC.: P-W1862LED-X-10W3012-CI25036R90-YML100                                  | DIM.: | SERIAL No.:      |
| MFR.: CETTIGA                                                                  | SUR.: | Shielding Angle: |



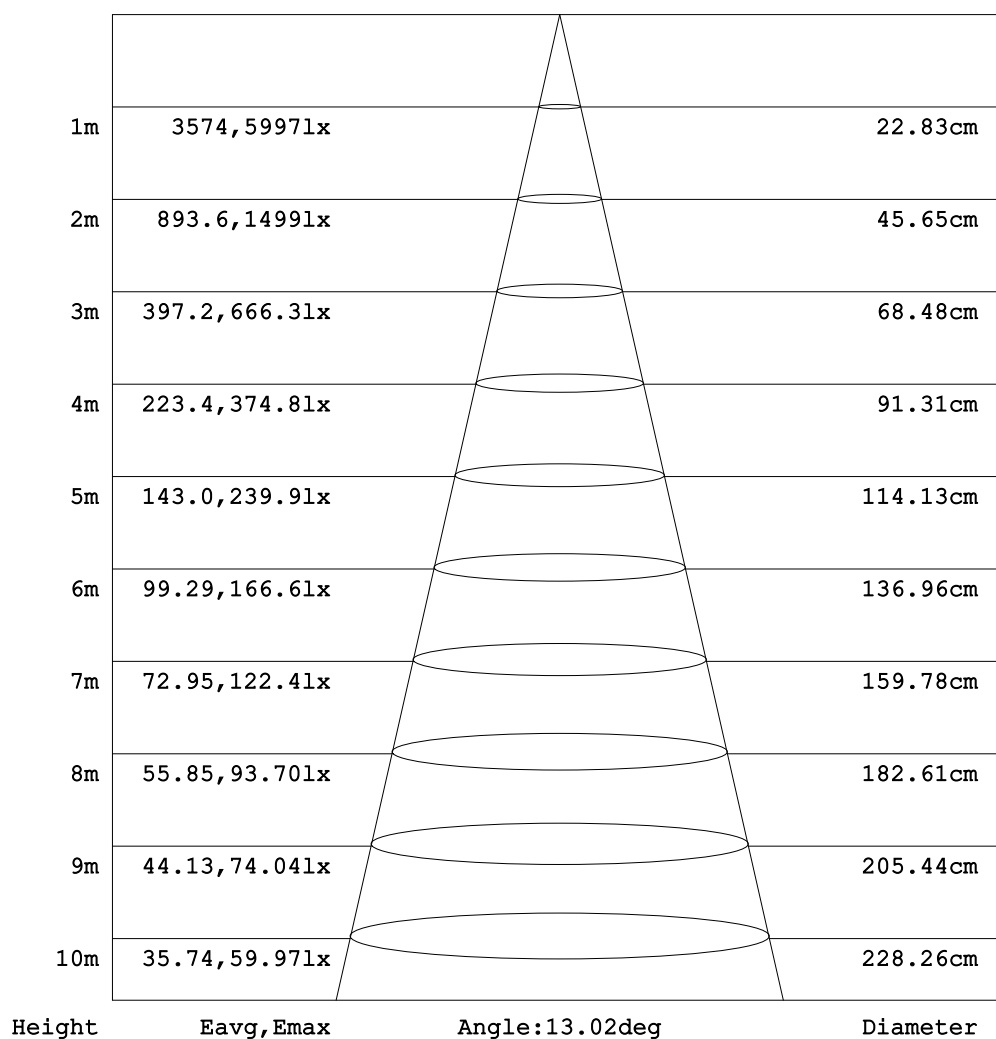
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Xie Bi  
Test Date:2022-12-07

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:6.810m [K=1.0000]  
Remarks:

## AAI Figure

|                                                                                |       |                  |
|--------------------------------------------------------------------------------|-------|------------------|
| Test:U:231.2V I:0.0542A P:11.78W PF:0.9400 Freq:49.37Hz Lamp Flux:453.07lx1 lm |       |                  |
| NAME: W1862LED-X                                                               | TYPE: | WEIGHT:          |
| SPEC.:P-W1862LED-X-10W3012-CI25036R90-YML100                                   | DIM.: | SERIAL No.:      |
| MFR.: CETTIGA                                                                  | SUR.: | Shielding Angle: |

Flux out:169.3 lm



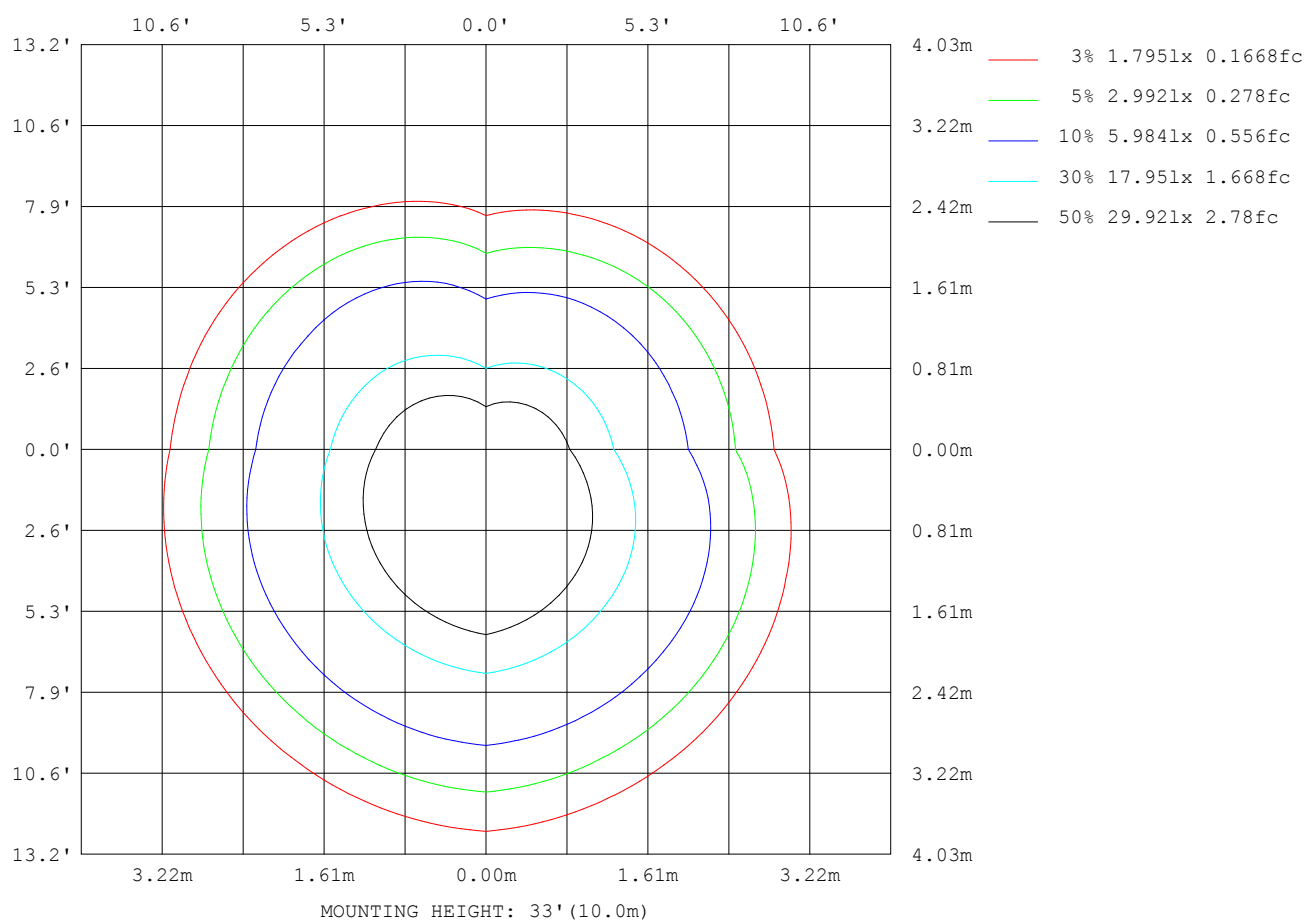
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Xie Bi  
 Test Date: 2022-12-07

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 6.810m [K=1.0000]  
 Remarks:

## ISOLUX DIAGRAM

|                                                                               |       |                  |
|-------------------------------------------------------------------------------|-------|------------------|
| Test:U:231.2V I:0.0542A P:11.78W PF:0.9400 Freq:49.37Hz Lamp Flux:453.07lx 1m |       |                  |
| NAME: W1862LED-X                                                              | TYPE: | WEIGHT:          |
| SPEC.: P-W1862LED-X-10W3012-CI25036R90-YML100                                 | DIM.: | SERIAL No.:      |
| MFR.: CETTIGA                                                                 | SUR.: | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Xie Bi  
Test Date: 2022-12-07

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 6.810m [K=1.0000]  
Remarks:

## LED Avg.L Report

|                                                                                |       |                  |
|--------------------------------------------------------------------------------|-------|------------------|
| Test:U:231.2V I:0.0542A P:11.78W PF:0.9400 Freq:49.37Hz Lamp Flux:453.071x1 lm |       |                  |
| NAME: W1862LED-X                                                               | TYPE: | WEIGHT:          |
| SPEC.:P-W1862LED-X-10W3012-CI25036R90-YML100                                   | DIM.: | SERIAL No.:      |
| MFR.: CETTIGA                                                                  | SUR.: | Shielding Angle: |

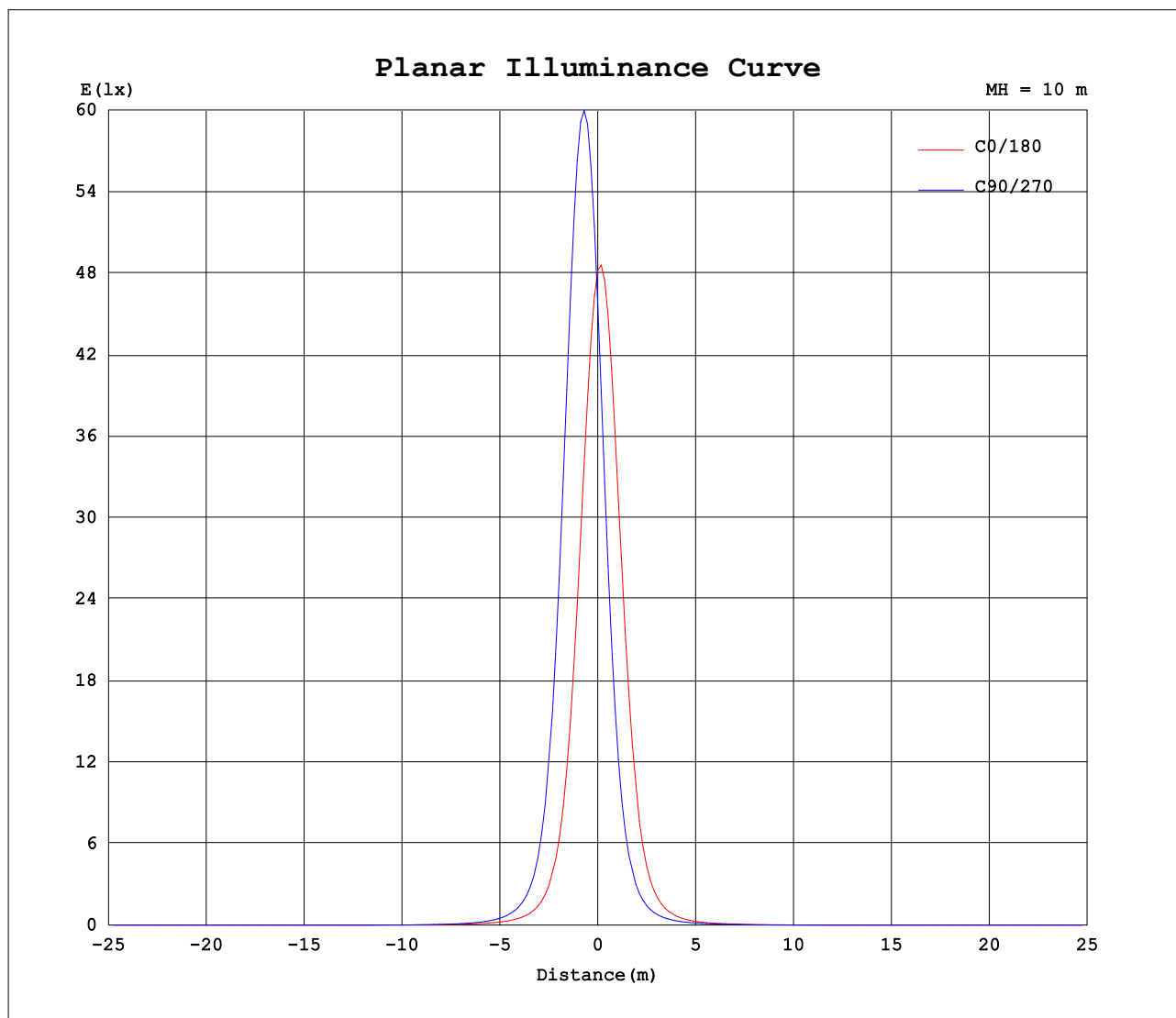
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 0     |
| L_0~180 (75) av  | 0     |
| L_0~180 (85) av  | 0     |
| L_90~270 (65) av | 0     |
| L_90~270 (75) av | 0     |
| L_90~270 (85) av | 0     |
| L_45 (65) av     | 0     |
| L_45 (75) av     | 0     |
| L_45 (85) av     | 0     |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Xie Bi  
Test Date:2022-12-07

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:6.810m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Xie Bi  
Test Date: 2022-12-07

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 6.810m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                |       |                  |
|--------------------------------------------------------------------------------|-------|------------------|
| Test:U:231.2V I:0.0542A P:11.78W PF:0.9400 Freq:49.37Hz Lamp Flux:453.071x1 lm |       |                  |
| NAME: W1862LED-X                                                               | TYPE: | WEIGHT:          |
| SPEC.: P-W1862LED-X-10W3012-CI25036R90-YML100                                  | DIM.: | SERIAL No.:      |
| MFR.: CETTIGA                                                                  | SUR.: | Shielding Angle: |

Table--1

UNIT: cd

| C (DEG)<br>γ (DEG) | 0    | 90   | 180  | 270  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                  | 4822 | 4552 | 4822 | 4552 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                  | 2906 | 5979 | 3680 | 1630 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                 | 911  | 3442 | 1390 | 426  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                 | 253  | 998  | 368  | 129  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                 | 88.7 | 264  | 119  | 53.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                 | 39.3 | 93.3 | 49.1 | 26.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                 | 21.2 | 41.6 | 24.8 | 15.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                 | 12.2 | 20.0 | 14.0 | 9.13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                 | 6.98 | 9.77 | 8.07 | 4.92 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                 | 3.59 | 4.55 | 4.30 | 1.92 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                 | 1.15 | 0.91 | 1.54 | 0.21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                 | 0.09 | 0.03 | 0.15 | 0.02 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100                | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105                | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110                | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115                | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120                | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125                | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130                | 0.00 | 0.00 | 0.00 | 0.01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135                | 0.01 | 0.00 | 0.01 | 0.02 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140                | 0.06 | 0.02 | 0.03 | 0.05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145                | 0.17 | 0.07 | 0.05 | 0.13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150                | 0.55 | 0.18 | 0.13 | 0.42 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155                | 1.45 | 0.58 | 0.41 | 1.16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160                | 2.54 | 1.56 | 1.10 | 2.12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165                | 2.99 | 2.67 | 2.02 | 2.51 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170                | 2.57 | 3.06 | 2.44 | 2.06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175                | 2.01 | 2.50 | 2.21 | 1.52 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180                | 1.88 | 1.79 | 1.88 | 1.80 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Xie Bi  
Test Date:2022-12-07

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:6.810m [K=1.0000]  
Remarks: