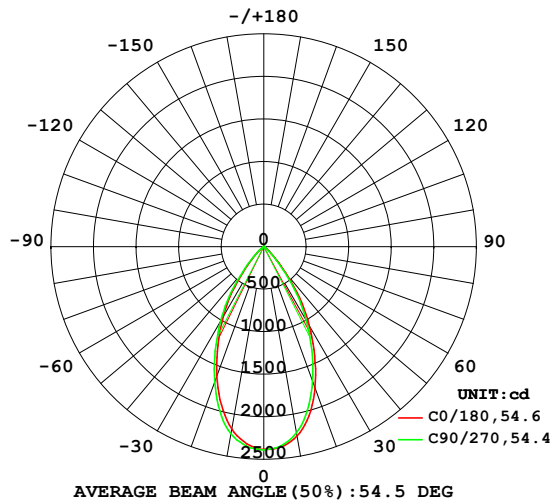


## LUMINAIRE PHOTOMETRIC TEST REPORT

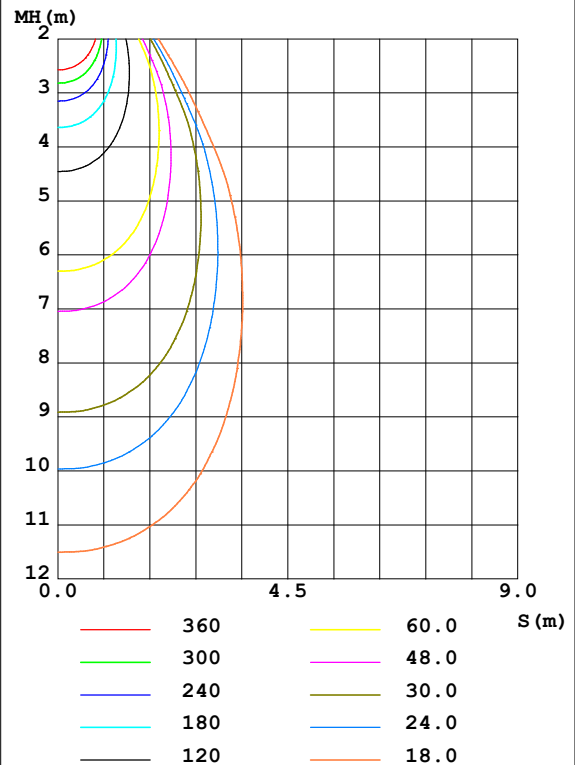
|                                                                                |                    |                  |
|--------------------------------------------------------------------------------|--------------------|------------------|
| Test:U:121.3V I:0.1540A P:18.50W PF:0.9900 Freq:60.00Hz Lamp Flux:1982.45x1 lm |                    |                  |
| NAME: WL-2CLD3IN20WB5D3HVWH                                                    | TYPE:4000K         | WEIGHT:          |
| SPEC.:                                                                         | DIM.: 4IN          | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.024/*3.1415 | Shielding Angle: |

| DATA OF LAMP     |         | PHOTOMETRIC DATA Eff: 107.16 lm/W |        |                    |          |
|------------------|---------|-----------------------------------|--------|--------------------|----------|
| MODEL            |         | I <sub>max</sub> (cd)             | 2389   | S/MH (C0/180)      | 0.87     |
| NOMINAL POWER(W) | 20W     | LOR(%)                            | 100.0  | S/MH (C90/270)     | 0.83     |
| RATED VOLTAGE(V) | 120.0   | TOTAL FLUX(lm)                    | 1982.4 | η UP,DN (C0-180)   | 0.1,50.9 |
| NOMINAL FLUX(lm) | 1982.45 | CIE CLASS                         | DIRECT | η UP,DN (C180-360) | 0.1,48.9 |
| LAMPS INSIDE     | 1       | η up (%)                          | 0.1    | CIBSE SHR NOM      | 0.75     |
| TEST VOLTAGE(V)  | 120.0   | η down (%)                        | 99.9   | CIBSE SHR MAX      | 0.90     |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2026-01-16

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.353  
Humidity: 65.0%  
Test Distance: 7.540m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

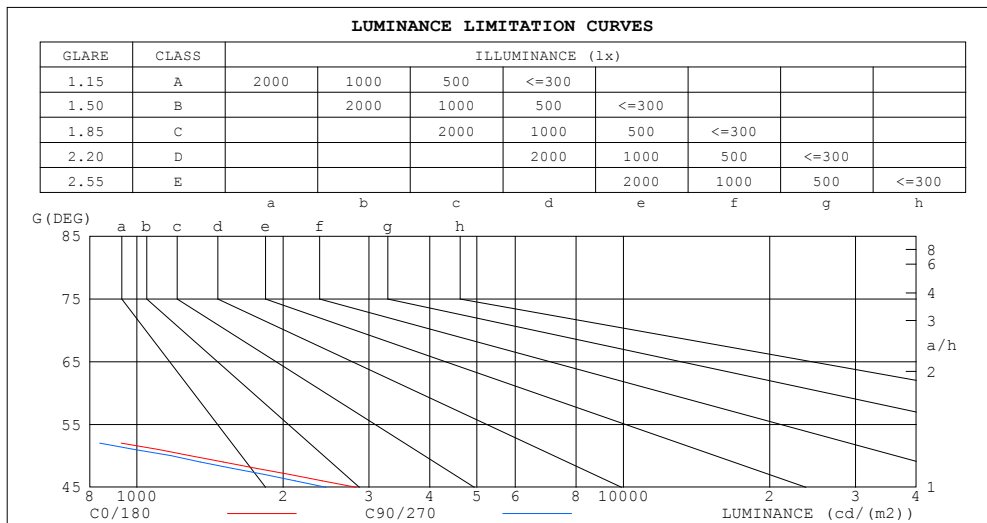
| $\gamma$ | C0                    | C45    | C90    | C135   | C180   | C225   | C270   | C315   | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|------------|
| 10       | 2257                  | 2232   | 2220   | 2234   | 2173   | 2203   | 2230   | 2220   | 0- 10    | 220.1       | 220.1        | 11.1,11.1  |
| 20       | 1763                  | 1713   | 1680   | 1707   | 1618   | 1641   | 1689   | 1671   | 10- 20   | 553.0       | 773.1        | 39,39      |
| 30       | 1074                  | 1034   | 997.0  | 1040   | 959.5  | 986.3  | 1021   | 995.6  | 20- 30   | 614.2       | 1387         | 70,70      |
| 40       | 399.6                 | 369.9  | 349.3  | 403.0  | 343.3  | 356.2  | 384.4  | 346.2  | 30- 40   | 424.5       | 1812         | 91.4,91.4  |
| 50       | 75.11                 | 72.44  | 68.68  | 77.41  | 66.05  | 73.01  | 70.12  | 59.99  | 40- 50   | 140.5       | 1952         | 98.5,98.5  |
| 60       | 8.248                 | 8.434  | 7.220  | 8.067  | 6.113  | 7.723  | 6.856  | 4.552  | 50- 60   | 26.52       | 1979         | 99.8,99.8  |
| 70       | 0.0702                | 0.0652 | 0.0679 | 0.0557 | 0.0557 | 0.0533 | 0.0629 | 0.0534 | 60- 70   | 1.182       | 1980         | 99.9,99.9  |
| 80       | 0.0315                | 0.0363 | 0.0339 | 0.0411 | 0.0314 | 0.0267 | 0.0266 | 0.0315 | 70- 80   | 0.0471      | 1980         | 99.9,99.9  |
| 90       | 0.0049                | 0.0048 | 0.0073 | 0.0024 | 0      | 0.0073 | 0.0048 | 0.0096 | 80- 90   | 0.0189      | 1980         | 99.9,99.9  |
| 100      | 0.0024                | 0.0024 | 0.0000 | 0      | 0      | 0.0048 | 0.0001 | 0      | 90-100   | 0.0031      | 1980         | 99.9,99.9  |
| 110      | 0.0217                | 0.0170 | 0.0169 | 0.0097 | 0.0121 | 0.0073 | 0.0073 | 0.0096 | 100-110  | 0.0053      | 1980         | 99.9,99.9  |
| 120      | 0.0991                | 0.0946 | 0.0992 | 0.0849 | 0.0728 | 0.0677 | 0.0704 | 0.0774 | 110-120  | 0.0396      | 1980         | 99.9,99.9  |
| 130      | 0.3410                | 0.3467 | 0.3556 | 0.3418 | 0.2668 | 0.2613 | 0.2595 | 0.2758 | 120-130  | 0.1611      | 1980         | 99.9,99.9  |
| 140      | 0.7332                | 0.7415 | 0.7575 | 0.7391 | 0.6132 | 0.5930 | 0.5963 | 0.6172 | 130-140  | 0.3672      | 1981         | 99.9,99.9  |
| 150      | 1.213                 | 1.228  | 1.225  | 1.248  | 1.037  | 1.027  | 1.047  | 1.073  | 140-150  | 0.5614      | 1981         | 99.9,99.9  |
| 160      | 1.697                 | 1.701  | 1.709  | 1.720  | 1.512  | 1.499  | 1.524  | 1.564  | 150-160  | 0.6305      | 1982         | 100,100    |
| 170      | 2.082                 | 2.066  | 2.066  | 2.093  | 1.981  | 1.942  | 1.962  | 2.005  | 160-170  | 0.5139      | 1982         | 100,100    |
| 180      | 2.226                 | 2.172  | 2.187  | 2.223  | 2.214  | 2.170  | 2.189  | 2.226  | 170-180  | 0.2014      | 1982         | 100,100    |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |            |

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2026-01-16

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.353  
 Humidity:65.0%  
 Test Distance:7.540m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

|                                                                                |                    |                  |
|--------------------------------------------------------------------------------|--------------------|------------------|
| Test:U:121.3V I:0.1540A P:18.50W PF:0.9900 Freq:60.00Hz Lamp Flux:1982.45x1 lm |                    |                  |
| NAME: WL-2CLD3IN20WB5D3HVWH                                                    | TYPE:4000K         | WEIGHT:          |
| SPEC.:                                                                         | DIM.: 4IN          | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.024/*3.1415 | Shielding Angle: |



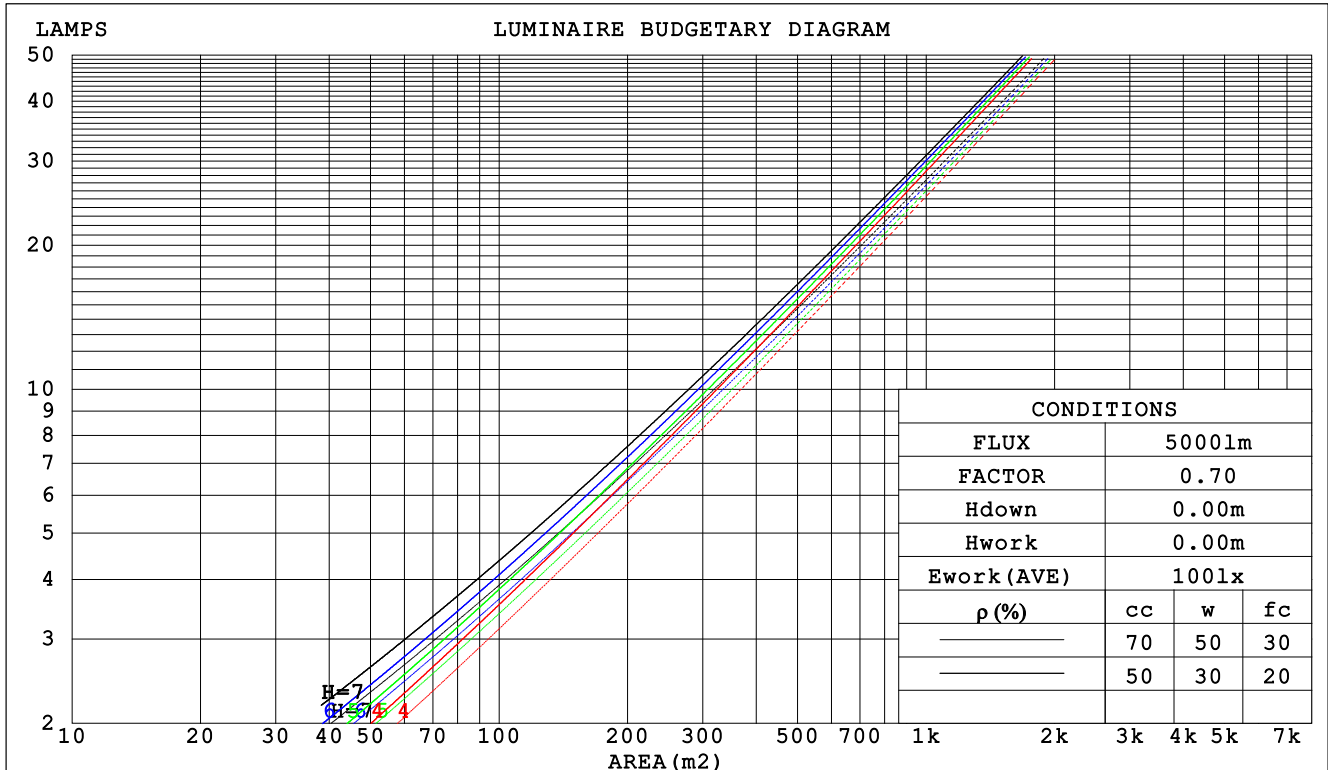
C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2026-01-16

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                                                |                    |                  |
|--------------------------------------------------------------------------------|--------------------|------------------|
| Test:U:121.3V I:0.1540A P:18.50W PF:0.9900 Freq:60.00Hz Lamp Flux:1982.45x1 lm |                    |                  |
| NAME: WL-2CLD3IN20WB5D3HVWH                                                    | TYPE:4000K         | WEIGHT:          |
| SPEC.:                                                                         | DIM.: 4IN          | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.024/*3.1415 | 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         | 1.11                  | 1.08 | 1.06 | 1.09 | 1.06 | 1.04 | 1.05                            | 1.03 | 1.01 | 1.01 | .99  | .98  | .97  | .96  | .95  | .93 |
| 2.0         | 1.03                  | .99  | .96  | 1.01 | .98  | .95  | .98                             | .95  | .93  | .95  | .93  | .91  | .92  | .90  | .89  | .87 |
| 3.0         | .96                   | .91  | .87  | .95  | .90  | .86  | .92                             | .88  | .85  | .90  | .86  | .84  | .87  | .85  | .82  | .81 |
| 4.0         | .90                   | .84  | .80  | .89  | .83  | .80  | .86                             | .82  | .79  | .84  | .81  | .78  | .83  | .79  | .77  | .75 |
| 5.0         | .84                   | .78  | .74  | .83  | .78  | .74  | .81                             | .77  | .73  | .80  | .75  | .72  | .78  | .74  | .72  | .70 |
| 6.0         | .79                   | .73  | .69  | .78  | .72  | .68  | .76                             | .72  | .68  | .75  | .71  | .67  | .74  | .70  | .67  | .65 |
| 7.0         | .74                   | .68  | .64  | .73  | .68  | .64  | .72                             | .67  | .63  | .71  | .66  | .63  | .70  | .66  | .63  | .61 |
| 8.0         | .70                   | .64  | .60  | .69  | .64  | .60  | .68                             | .63  | .59  | .67  | .62  | .59  | .66  | .62  | .59  | .57 |
| 9.0         | .66                   | .60  | .56  | .65  | .60  | .56  | .64                             | .59  | .56  | .64  | .59  | .56  | .63  | .58  | .55  | .54 |
| 10.0        | .62                   | .57  | .53  | .62  | .56  | .53  | .61                             | .56  | .52  | .60  | .56  | .52  | .60  | .55  | .52  | .51 |



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2026-01-16

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.0000]  
Remarks:

### WEC AND CCEC

|                                                                                |                    |                  |
|--------------------------------------------------------------------------------|--------------------|------------------|
| Test:U:121.3V I:0.1540A P:18.50W PF:0.9900 Freq:60.00Hz Lamp Flux:1982.45x1 lm |                    |                  |
| NAME: WL-2CLD3IN20WB5D3HVWH                                                    | TYPE:4000K         | WEIGHT:          |
| SPEC.:                                                                         | DIM.: 4IN          | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.024/*3.1415 | 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  | .177                  | .101 | .032 | .170 | .097 | .031 | .158                            | .090 | .029 | .146 | .084 | .027 | .135 | .078 | .025 |   |  |
| 2.0  | .170                  | .093 | .029 | .165 | .091 | .028 | .154                            | .086 | .027 | .144 | .081 | .025 | .135 | .076 | .024 |   |  |
| 3.0  | .163                  | .087 | .026 | .158 | .084 | .025 | .149                            | .081 | .024 | .140 | .077 | .024 | .132 | .073 | .023 |   |  |
| 4.0  | .155                  | .081 | .024 | .151 | .079 | .023 | .143                            | .076 | .023 | .136 | .073 | .022 | .129 | .070 | .021 |   |  |
| 5.0  | .148                  | .075 | .022 | .145 | .074 | .022 | .138                            | .072 | .021 | .131 | .069 | .021 | .125 | .067 | .020 |   |  |
| 6.0  | .142                  | .071 | .020 | .138 | .070 | .020 | .132                            | .068 | .020 | .127 | .066 | .019 | .121 | .064 | .019 |   |  |
| 7.0  | .135                  | .067 | .019 | .133 | .066 | .019 | .127                            | .064 | .019 | .122 | .063 | .018 | .117 | .061 | .018 |   |  |
| 8.0  | .130                  | .063 | .018 | .127 | .063 | .018 | .122                            | .061 | .017 | .118 | .060 | .017 | .114 | .058 | .017 |   |  |
| 9.0  | .124                  | .060 | .017 | .122 | .059 | .017 | .118                            | .058 | .016 | .114 | .057 | .016 | .110 | .056 | .016 |   |  |
| 10.0 | .119                  | .057 | .016 | .117 | .057 | .016 | .113                            | .056 | .016 | .110 | .054 | .015 | .106 | .053 | .015 |   |  |

| 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  | .191                  | .191 | .191 | .164 | .164 | .164 | .112                                       | .112 | .112 | .064 | .064 | .064 | .021 | .021 | .021 |   |
| 1.0  | .172                  | .158 | .146 | .147 | .136 | .126 | .101                                       | .093 | .087 | .058 | .054 | .050 | .019 | .017 | .016 |   |
| 2.0  | .157                  | .133 | .114 | .134 | .115 | .098 | .092                                       | .079 | .069 | .053 | .046 | .040 | .017 | .015 | .013 |   |
| 3.0  | .145                  | .115 | .090 | .124 | .099 | .078 | .085                                       | .069 | .055 | .049 | .040 | .032 | .016 | .013 | .011 |   |
| 4.0  | .135                  | .100 | .073 | .116 | .086 | .064 | .079                                       | .060 | .045 | .046 | .035 | .027 | .015 | .011 | .009 |   |
| 5.0  | .126                  | .088 | .060 | .108 | .076 | .053 | .075                                       | .053 | .037 | .043 | .031 | .022 | .014 | .010 | .007 |   |
| 6.0  | .119                  | .079 | .050 | .102 | .068 | .044 | .070                                       | .048 | .031 | .041 | .028 | .018 | .013 | .009 | .006 |   |
| 7.0  | .112                  | .072 | .043 | .097 | .062 | .037 | .067                                       | .043 | .026 | .039 | .026 | .016 | .013 | .008 | .005 |   |
| 8.0  | .107                  | .065 | .037 | .092 | .057 | .032 | .064                                       | .040 | .023 | .037 | .023 | .014 | .012 | .008 | .004 |   |
| 9.0  | .102                  | .060 | .032 | .088 | .052 | .028 | .061                                       | .037 | .020 | .035 | .022 | .012 | .011 | .007 | .004 |   |
| 10.0 | .097                  | .056 | .028 | .084 | .048 | .025 | .058                                       | .034 | .017 | .034 | .020 | .010 | .011 | .007 | .003 |   |

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2026-01-16

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

|                                                                                |                  |      |      |      |                    |                |      |                  |      |      |
|--------------------------------------------------------------------------------|------------------|------|------|------|--------------------|----------------|------|------------------|------|------|
| Test:U:121.3V I:0.1540A P:18.50W PF:0.9900 Freq:60.00Hz Lamp Flux:1982.45x1 lm |                  |      |      |      |                    |                |      |                  |      |      |
| NAME: WL-2CLD3IN20WB5D3HVWH                                                    |                  |      |      |      | TYPE:4000K         |                |      | WEIGHT:          |      |      |
| SPEC.:                                                                         |                  |      |      |      | DIM.: 4IN          |                |      | SERIAL No.:      |      |      |
| MFR.: WS                                                                       |                  |      |      |      | SUR.:0.024/*3.1415 |                |      | 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                                                                  | 12.0             | 13.0 | 12.3 | 13.2 | 13.3               | 11.6           | 12.6 | 11.9             | 12.8 | 12.9 |
| 3H                                                                             | 11.9             | 12.8 | 12.1 | 13.0 | 13.2               | 11.5           | 12.3 | 11.7             | 12.5 | 12.7 |
| 4H                                                                             | 11.8             | 12.6 | 12.1 | 12.8 | 13.1               | 11.4           | 12.2 | 11.7             | 12.4 | 12.6 |
| 6H                                                                             | 11.7             | 12.5 | 12.0 | 12.7 | 13.0               | 11.3           | 12.1 | 11.6             | 12.3 | 12.6 |
| 8H                                                                             | 11.7             | 12.4 | 12.0 | 12.7 | 12.9               | 11.2           | 12.0 | 11.5             | 12.2 | 12.5 |
| 12H                                                                            | 11.6             | 12.3 | 11.9 | 12.6 | 12.9               | 11.2           | 11.9 | 11.5             | 12.2 | 12.5 |
| 4H 2H                                                                          | 11.8             | 12.6 | 12.1 | 12.8 | 13.1               | 11.4           | 12.2 | 11.7             | 12.4 | 12.7 |
| 3H                                                                             | 11.6             | 12.3 | 11.9 | 12.6 | 12.9               | 11.2           | 11.9 | 11.5             | 12.2 | 12.5 |
| 4H                                                                             | 11.5             | 12.2 | 11.9 | 12.5 | 12.8               | 11.1           | 11.7 | 11.5             | 12.1 | 12.4 |
| 6H                                                                             | 11.4             | 12.0 | 11.8 | 12.3 | 12.7               | 11.0           | 11.6 | 11.4             | 11.9 | 12.3 |
| 8H                                                                             | 11.4             | 11.9 | 11.8 | 12.2 | 12.6               | 11.0           | 11.5 | 11.4             | 11.8 | 12.2 |
| 12H                                                                            | 11.3             | 11.8 | 11.7 | 12.2 | 12.6               | 10.9           | 11.4 | 11.3             | 11.8 | 12.2 |
| 8H 4H                                                                          | 11.4             | 11.9 | 11.8 | 12.2 | 12.6               | 11.0           | 11.5 | 11.4             | 11.8 | 12.2 |
| 6H                                                                             | 11.3             | 11.7 | 11.7 | 12.1 | 12.5               | 10.9           | 11.3 | 11.3             | 11.7 | 12.1 |
| 8H                                                                             | 11.2             | 11.6 | 11.7 | 12.0 | 12.5               | 10.8           | 11.2 | 11.3             | 11.6 | 12.0 |
| 12H                                                                            | 11.2             | 11.5 | 11.6 | 11.9 | 12.4               | 10.7           | 11.1 | 11.2             | 11.5 | 12.0 |
| 12H 4H                                                                         | 11.3             | 11.8 | 11.7 | 12.2 | 12.6               | 10.9           | 11.4 | 11.3             | 11.8 | 12.2 |
| 6H                                                                             | 11.2             | 11.6 | 11.7 | 12.0 | 12.5               | 10.8           | 11.2 | 11.3             | 11.6 | 12.0 |
| 8H                                                                             | 11.2             | 11.5 | 11.6 | 11.9 | 12.4               | 10.7           | 11.1 | 11.2             | 11.5 | 12.0 |
| Variations with the observer position at spacings:                             |                  |      |      |      |                    |                |      |                  |      |      |
| S = 1.0H                                                                       | + 3.4 / -13.8    |      |      |      |                    | + 3.2 / -13.7  |      |                  |      |      |
| 1.5H                                                                           | + 5.4 / -10.0    |      |      |      |                    | + 5.1 / - 9.5  |      |                  |      |      |
| 2.0H                                                                           | + 6.8 / -31.6    |      |      |      |                    | + 6.4 / -34.0  |      |                  |      |      |

CIE Pub.117 Corrected 1982 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.4)

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2026-01-16

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

|                                                                                |                    |                  |
|--------------------------------------------------------------------------------|--------------------|------------------|
| Test:U:121.3V I:0.1540A P:18.50W PF:0.9900 Freq:60.00Hz Lamp Flux:1982.45x1 lm |                    |                  |
| NAME: WL-2CLD3IN20WB5D3HVWH                                                    | TYPE:4000K         | WEIGHT:          |
| SPEC.:                                                                         | DIM.: 4IN          | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.024/*3.1415 | Shielding Angle: |

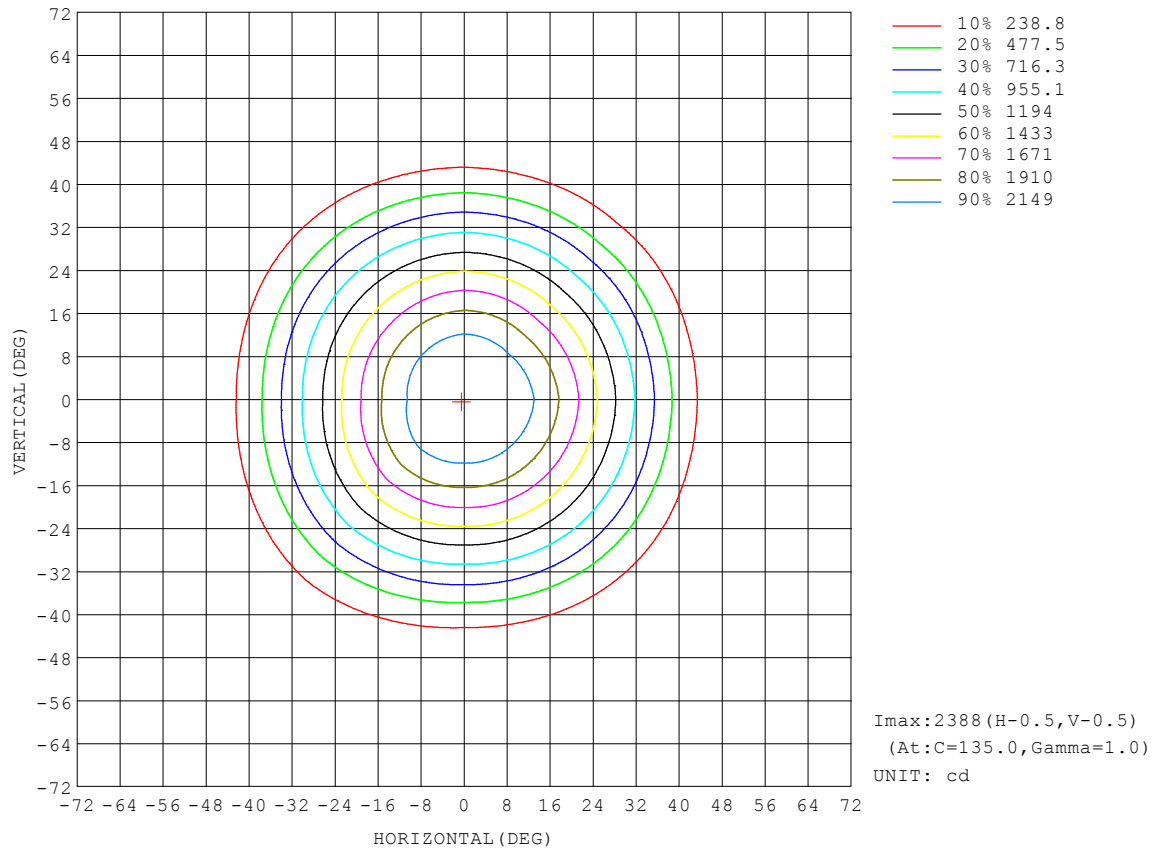
| REFLECTANCE                      |                                                      |     |           |     |     |     |     |               |     |        |
|----------------------------------|------------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling                          | 0.8                                                  | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 0.5 | 0.5           | 0.5 | 0      |
| Walls                            | 0.7                                                  | 0.5 | 0.3       | 0.7 | 0.5 | 0.3 | 0.7 | 0.5           | 0.3 | 0      |
| Working plane                    | 0.2                                                  | 0.2 | 0.2       | 0.2 | 0.2 | 0.2 | 0.2 | 0.2           | 0.2 | 0      |
| ROOM INDEX                       | UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 86                                                   | 79  | 76        | 86  | 79  | 75  | 85  | 79            | 75  | 72     |
| 0.80                             | 94                                                   | 88  | 84        | 93  | 87  | 84  | 92  | 87            | 83  | 80     |
| 1.00                             | 99                                                   | 93  | 89        | 98  | 92  | 89  | 96  | 92            | 88  | 84     |
| 1.25                             | 103                                                  | 98  | 94        | 102 | 97  | 94  | 100 | 96            | 93  | 89     |
| 1.50                             | 106                                                  | 101 | 97        | 104 | 100 | 97  | 102 | 99            | 96  | 91     |
| 2.00                             | 108                                                  | 104 | 101       | 107 | 103 | 100 | 104 | 101           | 99  | 93     |
| 2.50                             | 110                                                  | 106 | 103       | 108 | 105 | 102 | 105 | 103           | 100 | 94     |
| 3.00                             | 112                                                  | 108 | 106       | 110 | 107 | 104 | 106 | 104           | 102 | 96     |
| 4.00                             | 114                                                  | 111 | 109       | 112 | 109 | 107 | 108 | 106           | 105 | 97     |
| 5.00                             | 115                                                  | 113 | 111       | 113 | 111 | 109 | 109 | 107           | 106 | 98     |
| ROOM INDEX                       | UF (total)                                           |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |                                                      |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2026-01-16

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

|                                                                                |                    |                  |
|--------------------------------------------------------------------------------|--------------------|------------------|
| Test:U:121.3V I:0.1540A P:18.50W PF:0.9900 Freq:60.00Hz Lamp Flux:1982.45x1 lm |                    |                  |
| NAME: WL-2CLD3IN20WB5D3HVWH                                                    | TYPE:4000K         | WEIGHT:          |
| SPEC.:                                                                         | DIM.: 4IN          | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.024/*3.1415 | Shielding Angle: |

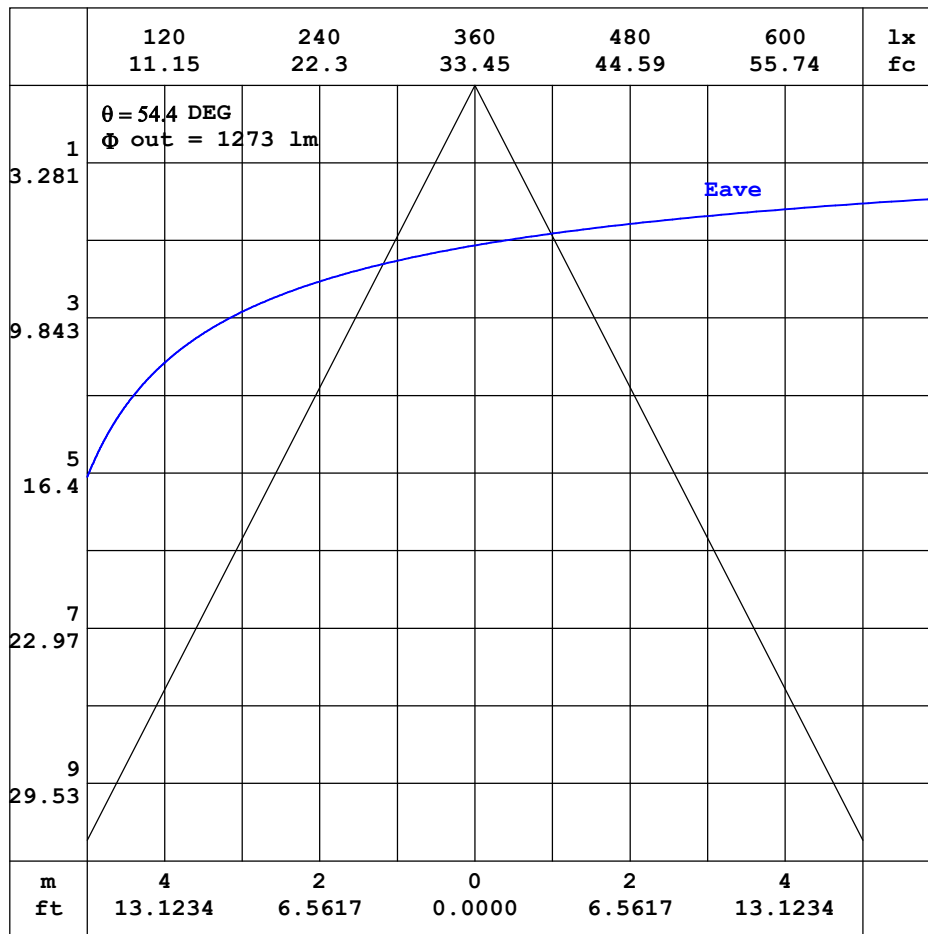


C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2026-01-16

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.0000]  
Remarks:

### AAI CURVES

|                                                                                |                    |                  |
|--------------------------------------------------------------------------------|--------------------|------------------|
| Test:U:121.3V I:0.1540A P:18.50W PF:0.9900 Freq:60.00Hz Lamp Flux:1982.45x1 lm |                    |                  |
| NAME: WL-2CLD3IN20WB5D3HVWH                                                    | TYPE:4000K         | WEIGHT:          |
| SPEC.:                                                                         | DIM.: 4IN          | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.024/*3.1415 | Shielding Angle: |



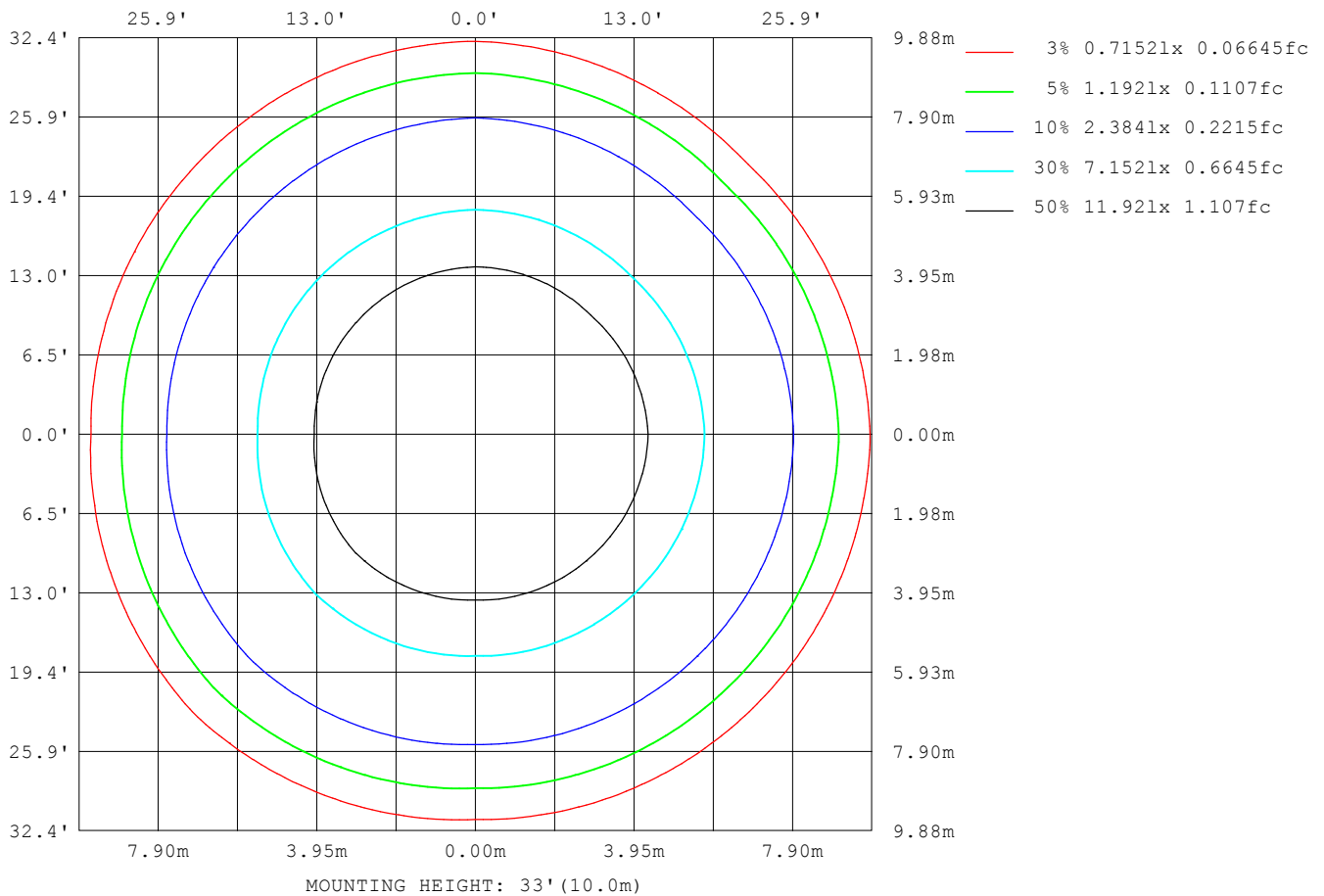
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2026-01-16

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.353  
Humidity: 65.0%  
Test Distance: 7.540m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

|                                                                                |                    |                  |
|--------------------------------------------------------------------------------|--------------------|------------------|
| Test:U:121.3V I:0.1540A P:18.50W PF:0.9900 Freq:60.00Hz Lamp Flux:1982.45x1 lm |                    |                  |
| NAME: WL-2CLD3IN20WB5D3HVWH                                                    | TYPE:4000K         | WEIGHT:          |
| SPEC.:                                                                         | DIM.: 4IN          | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.024/*3.1415 | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2026-01-16

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.0000]  
Remarks:

## LED Avg.L Report

|                                                                                |                    |                  |
|--------------------------------------------------------------------------------|--------------------|------------------|
| Test:U:121.3V I:0.1540A P:18.50W PF:0.9900 Freq:60.00Hz Lamp Flux:1982.45x1 lm |                    |                  |
| NAME: WL-2CLD3IN20WB5D3HVWH                                                    | TYPE:4000K         | WEIGHT:          |
| SPEC.:                                                                         | DIM.: 4IN          | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.024/*3.1415 | Shielding Angle: |

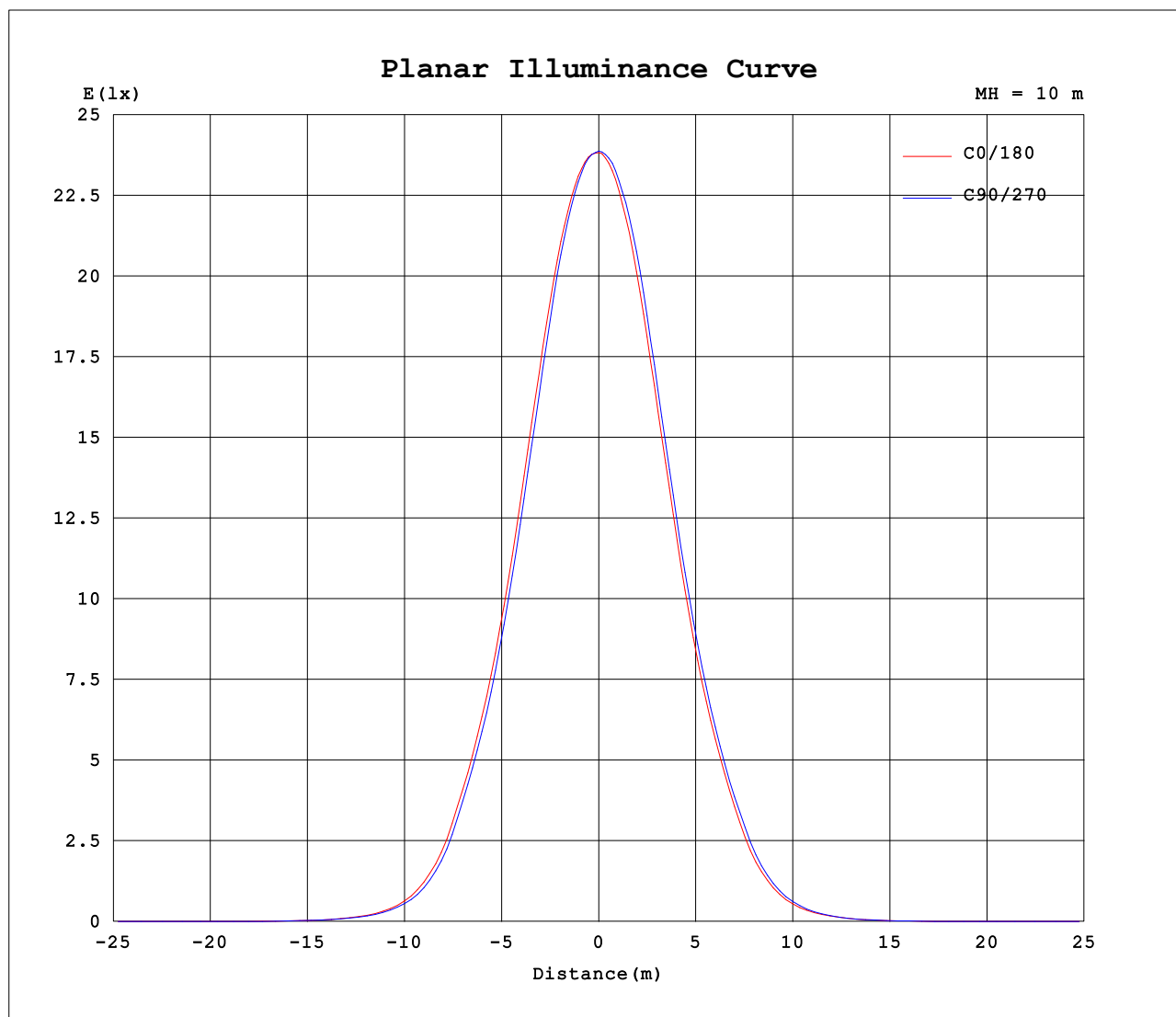
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 2     |
| L_0~180 (75) av  | 2     |
| L_0~180 (85) av  | 3     |
| L_90~270 (65) av | 2     |
| L_90~270 (75) av | 2     |
| L_90~270 (85) av | 2     |
| L_45 (65) av     | 2     |
| L_45 (75) av     | 2     |
| L_45 (85) av     | 1     |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2026-01-16

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2026-01-16

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.353  
Humidity: 65.0%  
Test Distance: 7.540m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                |                    |                  |
|--------------------------------------------------------------------------------|--------------------|------------------|
| Test:U:121.3V I:0.1540A P:18.50W PF:0.9900 Freq:60.00Hz Lamp Flux:1982.45x1 lm |                    |                  |
| NAME: WL-2CLD3IN20WB5D3HVWH                                                    | TYPE:4000K         | WEIGHT:          |
| SPEC.:                                                                         | DIM.: 4IN          | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.024/*3.1415 | Shielding Angle: |

Table--1

UNIT: cd

| C (DEG)<br>γ (DEG) | 0    | 45   | 90   | 135  | 180  | 225  | 270  | 315  |  |  |  |  |  |  |  |  |  |  |
|--------------------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|
| 0                  | 2383 | 2385 | 2387 | 2385 | 2383 | 2385 | 2387 | 2385 |  |  |  |  |  |  |  |  |  |  |
| 5                  | 2360 | 2351 | 2349 | 2357 | 2326 | 2339 | 2353 | 2347 |  |  |  |  |  |  |  |  |  |  |
| 10                 | 2257 | 2232 | 2220 | 2234 | 2173 | 2203 | 2230 | 2220 |  |  |  |  |  |  |  |  |  |  |
| 15                 | 2060 | 2016 | 1990 | 2013 | 1926 | 1955 | 1999 | 1986 |  |  |  |  |  |  |  |  |  |  |
| 20                 | 1763 | 1713 | 1680 | 1707 | 1618 | 1641 | 1689 | 1671 |  |  |  |  |  |  |  |  |  |  |
| 25                 | 1417 | 1370 | 1337 | 1373 | 1280 | 1311 | 1354 | 1334 |  |  |  |  |  |  |  |  |  |  |
| 30                 | 1074 | 1034 | 997  | 1040 | 959  | 986  | 1021 | 996  |  |  |  |  |  |  |  |  |  |  |
| 35                 | 745  | 708  | 681  | 726  | 650  | 675  | 705  | 681  |  |  |  |  |  |  |  |  |  |  |
| 40                 | 400  | 370  | 349  | 403  | 343  | 356  | 384  | 346  |  |  |  |  |  |  |  |  |  |  |
| 45                 | 182  | 172  | 158  | 188  | 156  | 165  | 176  | 150  |  |  |  |  |  |  |  |  |  |  |
| 50                 | 75.1 | 72.4 | 68.7 | 77.4 | 66.1 | 73.0 | 70.1 | 60.0 |  |  |  |  |  |  |  |  |  |  |
| 55                 | 28.5 | 28.0 | 26.4 | 27.5 | 25.7 | 26.4 | 24.3 | 19.3 |  |  |  |  |  |  |  |  |  |  |
| 60                 | 8.25 | 8.43 | 7.22 | 8.07 | 6.11 | 7.72 | 6.86 | 4.55 |  |  |  |  |  |  |  |  |  |  |
| 65                 | 0.10 | 0.08 | 0.08 | 0.11 | 0.08 | 0.09 | 0.08 | 0.08 |  |  |  |  |  |  |  |  |  |  |
| 70                 | 0.07 | 0.07 | 0.07 | 0.06 | 0.06 | 0.05 | 0.06 | 0.05 |  |  |  |  |  |  |  |  |  |  |
| 75                 | 0.05 | 0.04 | 0.05 | 0.04 | 0.05 | 0.05 | 0.04 | 0.04 |  |  |  |  |  |  |  |  |  |  |
| 80                 | 0.03 | 0.04 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 |  |  |  |  |  |  |  |  |  |  |
| 85                 | 0.03 | 0.01 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 |  |  |  |  |  |  |  |  |  |  |
| 90                 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 |  |  |  |  |  |  |  |  |  |  |
| 95                 | 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 |  |  |  |  |  |  |  |  |  |  |
| 105                | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |
| 110                | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |  |  |  |  |  |  |  |  |  |  |
| 115                | 0.05 | 0.05 | 0.04 | 0.03 | 0.03 | 0.03 | 0.02 | 0.03 |  |  |  |  |  |  |  |  |  |  |
| 120                | 0.10 | 0.09 | 0.10 | 0.08 | 0.07 | 0.07 | 0.07 | 0.08 |  |  |  |  |  |  |  |  |  |  |
| 125                | 0.20 | 0.20 | 0.21 | 0.19 | 0.16 | 0.14 | 0.15 | 0.16 |  |  |  |  |  |  |  |  |  |  |
| 130                | 0.34 | 0.35 | 0.36 | 0.34 | 0.27 | 0.26 | 0.26 | 0.28 |  |  |  |  |  |  |  |  |  |  |
| 135                | 0.52 | 0.53 | 0.54 | 0.53 | 0.43 | 0.41 | 0.41 | 0.43 |  |  |  |  |  |  |  |  |  |  |
| 140                | 0.73 | 0.74 | 0.76 | 0.74 | 0.61 | 0.59 | 0.60 | 0.62 |  |  |  |  |  |  |  |  |  |  |
| 145                | 0.98 | 0.98 | 1.00 | 0.99 | 0.82 | 0.79 | 0.81 | 0.83 |  |  |  |  |  |  |  |  |  |  |
| 150                | 1.21 | 1.23 | 1.22 | 1.25 | 1.04 | 1.03 | 1.05 | 1.07 |  |  |  |  |  |  |  |  |  |  |
| 155                | 1.46 | 1.48 | 1.48 | 1.48 | 1.27 | 1.26 | 1.28 | 1.31 |  |  |  |  |  |  |  |  |  |  |
| 160                | 1.70 | 1.70 | 1.71 | 1.72 | 1.51 | 1.50 | 1.52 | 1.56 |  |  |  |  |  |  |  |  |  |  |
| 165                | 1.90 | 1.91 | 1.91 | 1.93 | 1.78 | 1.74 | 1.77 | 1.81 |  |  |  |  |  |  |  |  |  |  |
| 170                | 2.08 | 2.07 | 2.07 | 2.09 | 1.98 | 1.94 | 1.96 | 2.01 |  |  |  |  |  |  |  |  |  |  |
| 175                | 2.19 | 2.16 | 2.16 | 2.21 | 2.14 | 2.10 | 2.11 | 2.16 |  |  |  |  |  |  |  |  |  |  |
| 180                | 2.23 | 2.17 | 2.19 | 2.22 | 2.21 | 2.17 | 2.19 | 2.23 |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2026-01-16

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.0000]  
Remarks: