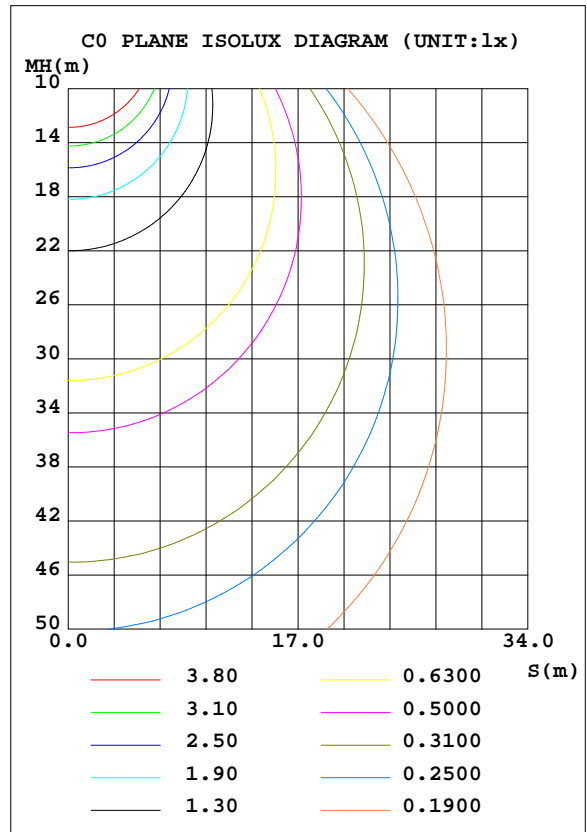
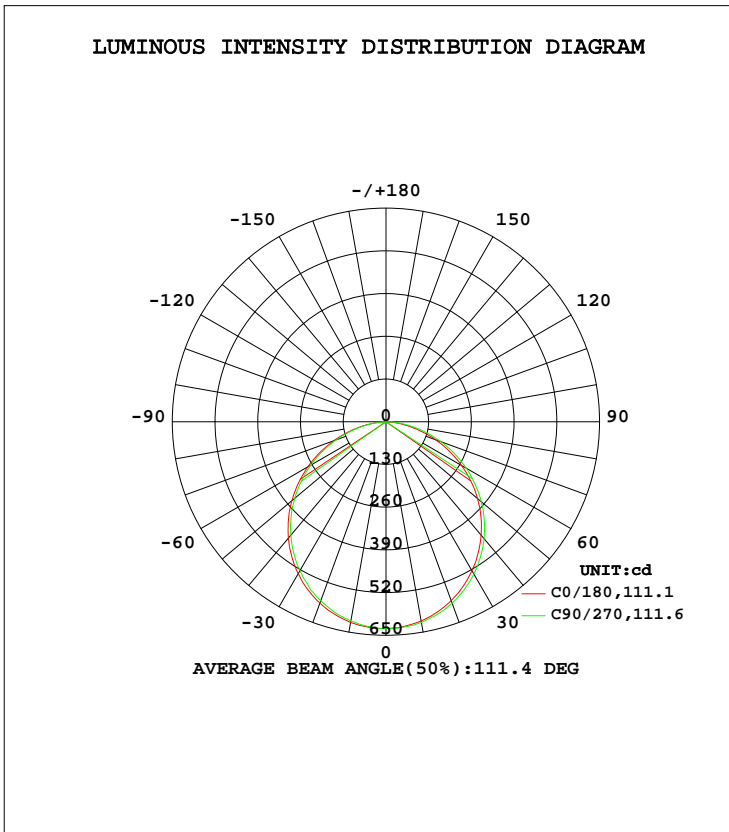


LUMINAIRE PHOTOMETRIC TEST REPORT

|   |           |                     |
|---|-----------|---------------------|
| Test:U:120.1V I:0.2816A P:30.89W PF:0.9134 Lamp Flux:1776.31x1 lm |           |                     |
| NAME: LED ceiling light   | TYPE:N/A  | WEIGHT:N/A          |
| SPEC.:N/A   | DIM.: N/A | SERIAL No.:N/A      |
| MFR.:   | SUR.:N/A  | Shielding Angle:N/A |

| DATA OF LAMP     |             | PHOTOMETRIC DATA Eff: 57.50 lm/W |        |                    |          |
|------------------|-------------|----------------------------------|--------|--------------------|----------|
| MODEL            | 4330-1BN-3K | Imax(cd)                         | 629.5  | S/MH(C0/180)       | 1.24     |
| NOMINAL POWER(W) | 30          | LOR(%)                           | 100.0  | S/MH(C90/270)      | 1.26     |
| RATED VOLTAGE(V) | 120         | TOTAL FLUX(lm)                   | 1776.3 | η UP, DN(C0-180)   | 0.1,49.3 |
| NOMINAL FLUX(lm) | 1776.31     | CIE CLASS                        | DIRECT | η UP, DN(C180-360) | 0.0,50.6 |
| LAMPS INSIDE     | 1           | η up(%)                          | 0.1    | CIBSE SHR NOM      | 1.25     |
| TEST VOLTAGE(V)  | 120         | η down(%)                        | 99.9   | CIBSE SHR MAX      | 1.35     |



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Operators:Ben  
 Test Date:2021-01-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.351  
 Humidity:48%  
 Test Distance:2.503m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

| γ   | C0                    | C45    | C90    | C135   | C180   | C225   | C270   | C315   | γ       | Φ zone  | Φ total | %lum, lamp |
|-----|-----------------------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|------------|
| 10  | 620.0                 | 617.4  | 615.4  | 614.1  | 615.4  | 617.4  | 620.0  | 620.5  | 0- 10   | 59.50   | 59.50   | 3.35,3.35  |
| 20  | 587.3                 | 583.4  | 580.2  | 577.2  | 579.4  | 582.8  | 587.7  | 588.7  | 10- 20  | 170.2   | 229.7   | 12.9,12.9  |
| 30  | 534.0                 | 528.9  | 523.4  | 520.8  | 523.1  | 528.8  | 534.9  | 536.5  | 20- 30  | 257.4   | 487.1   | 27.4,27.4  |
| 40  | 462.1                 | 456.5  | 450.5  | 447.3  | 450.3  | 457.0  | 464.5  | 466.0  | 30- 40  | 309.5   | 796.6   | 44.8,44.8  |
| 50  | 374.1                 | 369.6  | 362.8  | 361.0  | 363.7  | 371.8  | 378.7  | 380.3  | 40- 50  | 320.2   | 1117    | 62.9,62.9  |
| 60  | 274.4                 | 270.2  | 264.2  | 263.4  | 265.3  | 275.8  | 281.3  | 282.5  | 50- 60  | 288.0   | 1405    | 79.1,79.1  |
| 70  | 168.9                 | 163.8  | 160.6  | 158.1  | 161.2  | 171.2  | 178.3  | 176.3  | 60- 70  | 217.7   | 1622    | 91.3,91.3  |
| 80  | 67.02                 | 62.57  | 62.22  | 58.72  | 61.86  | 69.32  | 77.13  | 72.89  | 70- 80  | 122.2   | 1745    | 98.2,98.2  |
| 90  | 0.3478                | 0.1884 | 0.1198 | 0.1189 | 0.0395 | 0.0671 | 0.0706 | 0.3380 | 80- 90  | 29.74   | 1774    | 99.9,99.9  |
| 100 | 0.1635                | 0.1722 | 0.1767 | 0.1762 | 0.0709 | 0.0725 | 0.0688 | 0.0711 | 90-100  | 0.1134  | 1774    | 99.9,99.9  |
| 110 | 0.1969                | 0.2049 | 0.2146 | 0.2064 | 0.1192 | 0.1117 | 0.1143 | 0.1129 | 100-110 | 0.1489  | 1775    | 99.9,99.9  |
| 120 | 0.2557                | 0.2605 | 0.2708 | 0.2585 | 0.1758 | 0.1571 | 0.1640 | 0.1618 | 110-120 | 0.1824  | 1775    | 99.9,99.9  |
| 130 | 0.3697                | 0.3816 | 0.4006 | 0.3837 | 0.2434 | 0.2244 | 0.2184 | 0.2317 | 120-130 | 0.2293  | 1775    | 99.9,99.9  |
| 140 | 0.5782                | 0.6292 | 0.6382 | 0.6228 | 0.3121 | 0.3068 | 0.3032 | 0.3162 | 130-140 | 0.2920  | 1775    | 99.9,99.9  |
| 150 | 0.8241                | 0.9173 | 0.9472 | 0.8979 | 0.3785 | 0.3737 | 0.3879 | 0.3858 | 140-150 | 0.3505  | 1776    | 100,100    |
| 160 | 1.034                 | 1.072  | 1.095  | 1.102  | 0.5002 | 0.5154 | 0.4812 | 0.4785 | 150-160 | 0.3332  | 1776    | 100,100    |
| 170 | 0.9409                | 0.9708 | 0.9919 | 0.9895 | 0.6000 | 0.5824 | 0.5661 | 0.5613 | 160-170 | 0.2250  | 1776    | 100,100    |
| 180 | 0.8049                | 0.7748 | 0.7405 | 0.7836 | 0.8050 | 0.7899 | 0.7432 | 0.7559 | 170-180 | 0.0737  | 1776    | 100,100    |
| DEG | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |         | UNIT:lm |         |            |

Conical surface Flux(90deg): 958.02 lm

%lum = 53.9%  
 %lamp = 53.9%

Conical surface Flux(120deg): 1404.7 lm

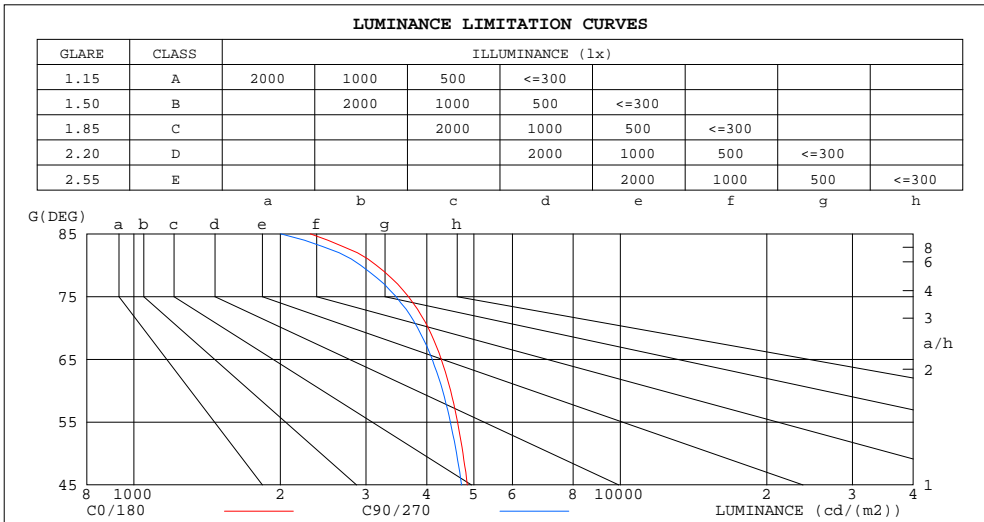
%lum = 79.1%  
 %lamp = 79.1%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Operators:Ben  
 Test Date:2021-01-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.351  
 Humidity:48%  
 Test Distance:2.503m [K=1.0000]  
 Remarks:

LUMINANCE LIMITATION CURVES

|   |           |                     |
|---|-----------|---------------------|
| Test:U:120.1V I:0.2816A P:30.89W PF:0.9134 Lamp Flux:1776.31x1 lm |           |                     |
| NAME: LED ceiling light   | TYPE:N/A  | WEIGHT:N/A          |
| SPEC.:N/A   | DIM.: N/A | SERIAL No.:N/A      |
| MFR.:   | SUR.:N/A  | Shielding Angle:N/A |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 2304   | 2004    |
| 80                | 3149   | 2924    |
| 75                | 3669   | 3461    |
| 70                | 4030   | 3832    |
| 65                | 4284   | 4105    |
| 60                | 4478   | 4312    |
| 55                | 4627   | 4471    |
| 50                | 4749   | 4606    |
| 45                | 4845   | 4716    |

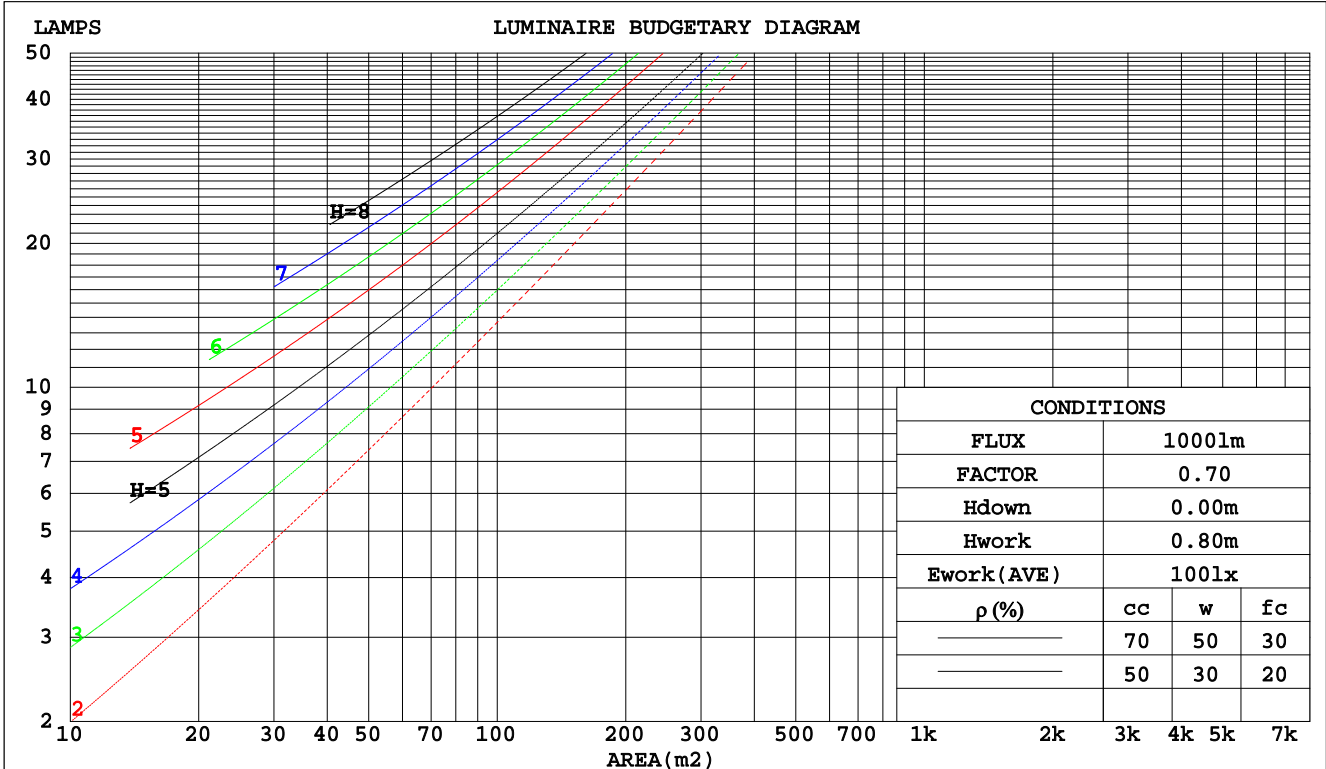
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.0DEG  
 Operators: Ben  
 Test Date: 2021-01-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.351  
 Humidity: 48%  
 Test Distance: 2.503m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|   |           |                     |
|---|-----------|---------------------|
| Test:U:120.1V I:0.2816A P:30.89W PF:0.9134 Lamp Flux:1776.31x1 lm |           |                     |
| NAME: LED ceiling light   | TYPE:N/A  | WEIGHT:N/A          |
| SPEC.:N/A   | DIM.: N/A | SERIAL No.:N/A      |
| MFR.:   | SUR.:N/A  | Shielding Angle:N/A |

| pcc  | 80%  |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0   |
|------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
|      | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0   |
| pw   |  |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 0   |
| pfc  | 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  | 1.04   | .00  | .96  | 1.02 | .98  | .94  | .97  | .94  | .91  | .94  | .91  | .88  | .90  | .88  | .86  | .84 |
| 2.0  | .91  | .84  | .78  | .89  | .82  | .77  | .85  | .80  | .75  | .82  | .77  | .74  | .79  | .75  | .72  | .70 |
| 3.0  | .80  | .71  | .65  | .78  | .70  | .64  | .75  | .68  | .63  | .72  | .67  | .62  | .70  | .65  | .61  | .59 |
| 4.0  | .70  | .62  | .55  | .69  | .61  | .54  | .67  | .59  | .54  | .64  | .58  | .53  | .62  | .57  | .52  | .50 |
| 5.0  | .63  | .54  | .47  | .62  | .53  | .47  | .60  | .52  | .46  | .58  | .51  | .46  | .56  | .50  | .45  | .43 |
| 6.0  | .57  | .48  | .41  | .56  | .47  | .41  | .54  | .46  | .41  | .52  | .45  | .40  | .51  | .45  | .40  | .38 |
| 7.0  | .51  | .43  | .36  | .50  | .42  | .36  | .49  | .41  | .36  | .47  | .41  | .36  | .46  | .40  | .35  | .33 |
| 8.0  | .47  | .38  | .32  | .46  | .38  | .32  | .45  | .37  | .32  | .44  | .37  | .32  | .42  | .36  | .32  | .30 |
| 9.0  | .43  | .35  | .29  | .42  | .34  | .29  | .41  | .34  | .29  | .40  | .33  | .29  | .39  | .33  | .29  | .27 |
| 10.0 | .40  | .32  | .26  | .39  | .31  | .26  | .38  | .31  | .26  | .37  | .31  | .26  | .36  | .30  | .26  | .24 |



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.0DEG  
 Operators: Ben  
 Test Date: 2021-01-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.351  
 Humidity: 48%  
 Test Distance: 2.503m [K=1.0000]  
 Remarks:

WEC AND CCEC

|   |           |                     |
|---|-----------|---------------------|
| Test:U:120.1V I:0.2816A P:30.89W PF:0.9134 Lamp Flux:1776.31x1 lm |           |                     |
| NAME: LED ceiling light   | TYPE:N/A  | WEIGHT:N/A          |
| SPEC.:N/A   | DIM.: N/A | SERIAL No.:N/A      |
| MFR.:   | SUR.:N/A  | Shielding Angle:N/A |

| 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  | .307                  | .174 | .055 | .300 | .171 | .054 | .286                            | .164 | .052 | .274 | .158 | .051 | .263 | .152 | .049 |   |
| 2.0  | .290                  | .159 | .049 | .284 | .156 | .048 | .272                            | .151 | .047 | .261 | .146 | .046 | .251 | .142 | .045 |   |
| 3.0  | .269                  | .143 | .043 | .263 | .141 | .042 | .253                            | .137 | .042 | .243 | .133 | .041 | .234 | .130 | .040 |   |
| 4.0  | .248                  | .129 | .038 | .243 | .127 | .038 | .234                            | .124 | .037 | .226 | .121 | .037 | .218 | .118 | .036 |   |
| 5.0  | .230                  | .117 | .034 | .225 | .116 | .034 | .217                            | .113 | .033 | .210 | .111 | .033 | .202 | .108 | .032 |   |
| 6.0  | .213                  | .107 | .031 | .209 | .106 | .030 | .202                            | .104 | .030 | .195 | .101 | .030 | .189 | .099 | .030 |   |
| 7.0  | .198                  | .098 | .028 | .195 | .097 | .028 | .188                            | .095 | .027 | .182 | .093 | .027 | .177 | .092 | .027 |   |
| 8.0  | .185                  | .091 | .025 | .182 | .090 | .025 | .176                            | .088 | .025 | .171 | .087 | .025 | .166 | .085 | .025 |   |
| 9.0  | .174                  | .084 | .023 | .171 | .083 | .023 | .166                            | .082 | .023 | .161 | .081 | .023 | .156 | .079 | .023 |   |
| 10.0 | .163                  | .078 | .022 | .161 | .078 | .022 | .156                            | .077 | .022 | .152 | .075 | .021 | .147 | .074 | .021 |   |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|--|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .191                  | .191 | .191 | .164 | .164 | .164 | .112                                       | .112 | .112 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .181                  | .157 | .135 | .155 | .135 | .117 | .106                                       | .093 | .081 | .061 | .054 | .047 | .020 | .017 | .015 |   |
| 2.0  | .173                  | .133 | .099 | .148 | .114 | .086 | .101                                       | .079 | .060 | .058 | .046 | .035 | .019 | .015 | .011 |   |
| 3.0  | .165                  | .115 | .075 | .142 | .099 | .065 | .097                                       | .069 | .046 | .056 | .040 | .027 | .018 | .013 | .009 |   |
| 4.0  | .157                  | .102 | .059 | .135 | .088 | .052 | .093                                       | .061 | .036 | .054 | .036 | .021 | .017 | .012 | .007 |   |
| 5.0  | .150                  | .091 | .048 | .129 | .079 | .042 | .089                                       | .055 | .030 | .051 | .032 | .018 | .017 | .011 | .006 |   |
| 6.0  | .143                  | .083 | .040 | .123 | .072 | .035 | .085                                       | .050 | .025 | .049 | .030 | .015 | .016 | .010 | .005 |   |
| 7.0  | .136                  | .076 | .034 | .117 | .066 | .030 | .081                                       | .046 | .021 | .047 | .027 | .013 | .015 | .009 | .004 |   |
| 8.0  | .130                  | .070 | .030 | .112 | .061 | .026 | .077                                       | .043 | .018 | .045 | .025 | .011 | .015 | .008 | .004 |   |
| 9.0  | .124                  | .065 | .026 | .106 | .057 | .023 | .074                                       | .040 | .016 | .043 | .024 | .010 | .014 | .008 | .003 |   |
| 10.0 | .118                  | .061 | .023 | .102 | .053 | .020 | .071                                       | .037 | .014 | .041 | .022 | .009 | .013 | .007 | .003 |   |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Operators:Ben  
 Test Date:2021-01-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.351  
 Humidity:48%  
 Test Distance:2.503m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

|   |                  |      |      |      |           |                |      |                     |      |      |
|---|------------------|------|------|------|-----------|----------------|------|---------------------|------|------|
| Test:U:120.1V I:0.2816A P:30.89W PF:0.9134 Lamp Flux:1776.3lx1 lm |                  |      |      |      |           |                |      |                     |      |      |
| NAME: LED ceiling light   |                  |      |      |      | TYPE:N/A  |                |      | WEIGHT:N/A          |      |      |
| SPEC.:N/A   |                  |      |      |      | DIM.: N/A |                |      | SERIAL No.:N/A      |      |      |
| MFR.:   |                  |      |      |      | SUR.:N/A  |                |      | Shielding Angle:N/A |      |      |
| 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   | 18.2             | 19.7 | 18.5 | 19.9 | 20.1      | 18.1           | 19.6 | 18.3                | 19.8 | 20.0 |
| 3H  | 19.7             | 21.1 | 20.0 | 21.3 | 21.5      | 19.5           | 20.9 | 19.8                | 21.1 | 21.4 |
| 4H  | 20.2             | 21.6 | 20.6 | 21.8 | 22.1      | 20.0           | 21.4 | 20.4                | 21.6 | 21.9 |
| 6H  | 20.6             | 21.9 | 21.0 | 22.1 | 22.4      | 20.4           | 21.7 | 20.7                | 21.9 | 22.2 |
| 8H  | 20.7             | 21.9 | 21.1 | 22.2 | 22.5      | 20.5           | 21.7 | 20.8                | 22.0 | 22.3 |
| 12H   | 20.8             | 21.9 | 21.1 | 22.2 | 22.5      | 20.5           | 21.7 | 20.9                | 22.0 | 22.3 |
| 4H 2H   | 18.8             | 20.1 | 19.1 | 20.3 | 20.6      | 18.7           | 20.0 | 19.0                | 20.2 | 20.5 |
| 3H  | 20.4             | 21.6 | 20.8 | 21.9 | 22.2      | 20.3           | 21.5 | 20.6                | 21.7 | 22.1 |
| 4H  | 21.1             | 22.2 | 21.5 | 22.5 | 22.8      | 20.9           | 22.0 | 21.3                | 22.3 | 22.7 |
| 6H  | 21.6             | 22.6 | 22.0 | 22.9 | 23.3      | 21.4           | 22.4 | 21.8                | 22.7 | 23.1 |
| 8H  | 21.8             | 22.6 | 22.2 | 23.0 | 23.4      | 21.6           | 22.4 | 22.0                | 22.8 | 23.2 |
| 12H   | 21.8             | 22.6 | 22.3 | 23.0 | 23.4      | 21.6           | 22.4 | 22.0                | 22.8 | 23.2 |
| 8H 4H   | 21.3             | 22.2 | 21.8 | 22.6 | 23.0      | 21.2           | 22.1 | 21.6                | 22.4 | 22.8 |
| 6H  | 22.0             | 22.7 | 22.4 | 23.1 | 23.5      | 21.8           | 22.5 | 22.2                | 22.9 | 23.4 |
| 8H  | 22.2             | 22.8 | 22.6 | 23.2 | 23.7      | 22.0           | 22.6 | 22.5                | 23.1 | 23.5 |
| 12H   | 22.3             | 22.9 | 22.8 | 23.3 | 23.8      | 22.1           | 22.7 | 22.6                | 23.1 | 23.6 |
| 12H 4H  | 21.3             | 22.1 | 21.8 | 22.5 | 22.9      | 21.2           | 22.0 | 21.6                | 22.4 | 22.8 |
| 6H  | 22.0             | 22.6 | 22.5 | 23.1 | 23.5      | 21.8           | 22.5 | 22.3                | 22.9 | 23.4 |
| 8H  | 22.2             | 22.8 | 22.7 | 23.2 | 23.7      | 22.1           | 22.6 | 22.5                | 23.1 | 23.5 |
| Variations with the observer position at spacings:                |                  |      |      |      |           |                |      |                     |      |      |
| S = 1.0H  | + 0.2 / - 0.2    |      |      |      |           | + 0.2 / - 0.2  |      |                     |      |      |
| 1.5H  | + 0.2 / - 0.3    |      |      |      |           | + 0.2 / - 0.3  |      |                     |      |      |
| 2.0H  | + 0.2 / - 0.3    |      |      |      |           | + 0.2 / - 0.3  |      |                     |      |      |

CIE Pub.117 Corrected 1776 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.0)

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Operators:Ben  
 Test Date:2021-01-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.351  
 Humidity:48%  
 Test Distance:2.503m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

|   |           |                     |
|---|-----------|---------------------|
| Test:U:120.1V I:0.2816A P:30.89W PF:0.9134 Lamp Flux:1776.31x1 lm |           |                     |
| NAME: LED ceiling light   | TYPE:N/A  | WEIGHT:N/A          |
| SPEC.:N/A   | DIM.: N/A | SERIAL No.:N/A      |
| MFR.:   | SUR.:N/A  | Shielding Angle:N/A |

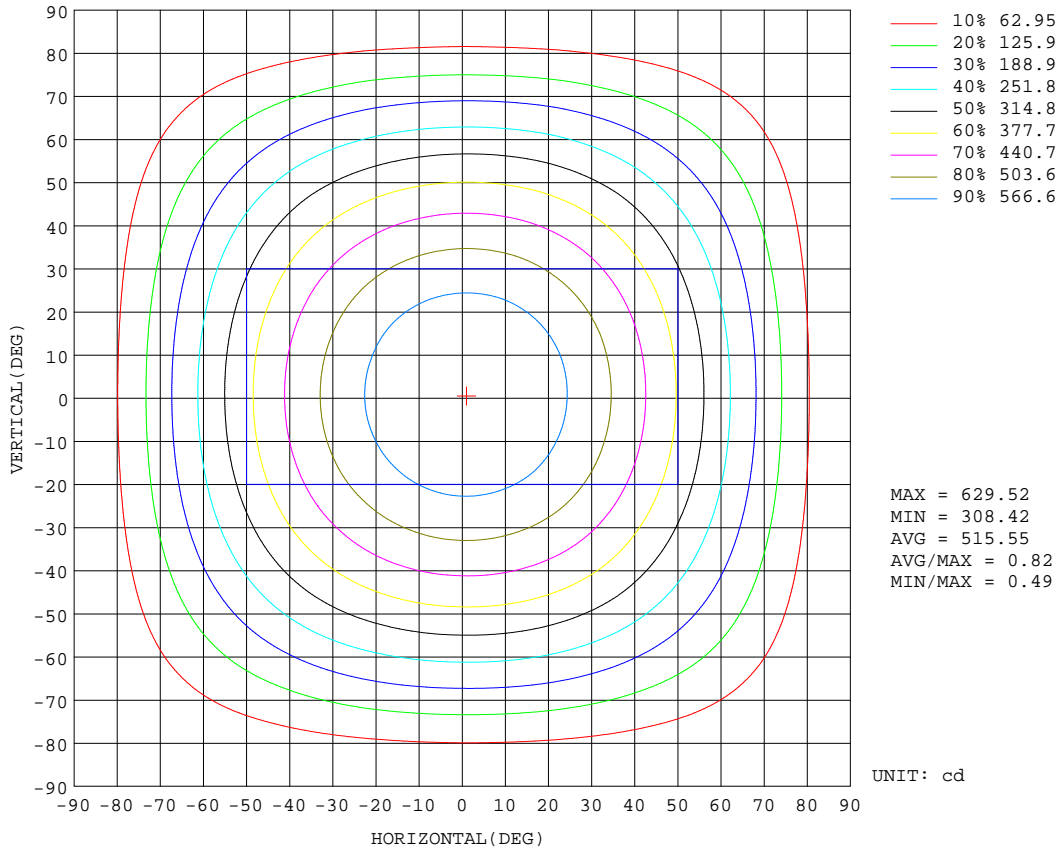
| REFLECTANCE                      |   |     |           |     |     |     |               |     |     |        |
|----------------------------------|---|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling                          | 0.8   | 0.8 | 0.8       | 0.7 | 0.7 | 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                         | 58  | 46  | 39        | 57  | 46  | 39  | 56            | 45  | 39  | 32     |
| 0.80                             | 68  | 56  | 49        | 67  | 56  | 49  | 65            | 55  | 48  | 41     |
| 1.00                             | 76  | 65  | 58        | 75  | 64  | 57  | 73            | 66  | 57  | 50     |
| 1.25                             | 83  | 73  | 66        | 82  | 72  | 65  | 79            | 71  | 64  | 57     |
| 1.50                             | 88  | 78  | 71        | 87  | 77  | 71  | 84            | 76  | 70  | 62     |
| 2.00                             | 95  | 87  | 80        | 93  | 85  | 79  | 90            | 83  | 78  | 70     |
| 2.50                             | 99  | 91  | 85        | 97  | 90  | 84  | 93            | 87  | 82  | 74     |
| 3.00                             | 102   | 96  | 90        | 100 | 94  | 89  | 96            | 91  | 87  | 78     |
| 4.00                             | 106   | 101 | 96        | 104 | 99  | 95  | 100           | 96  | 92  | 83     |
| 5.00                             | 109   | 104 | 100       | 106 | 102 | 98  | 102           | 98  | 95  | 86     |
| 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:25.0DEG  
 Operators:Ben  
 Test Date:2021-01-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.351  
 Humidity:48%  
 Test Distance:2.503m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

|   |           |                     |
|---|-----------|---------------------|
| Test:U:120.1V I:0.2816A P:30.89W PF:0.9134 Lamp Flux:1776.31x1 lm |           |                     |
| NAME: LED ceiling light   | TYPE:N/A  | WEIGHT:N/A          |
| SPEC.:N/A   | DIM.: N/A | SERIAL No.:N/A      |
| MFR.:   | SUR.:N/A  | Shielding Angle:N/A |



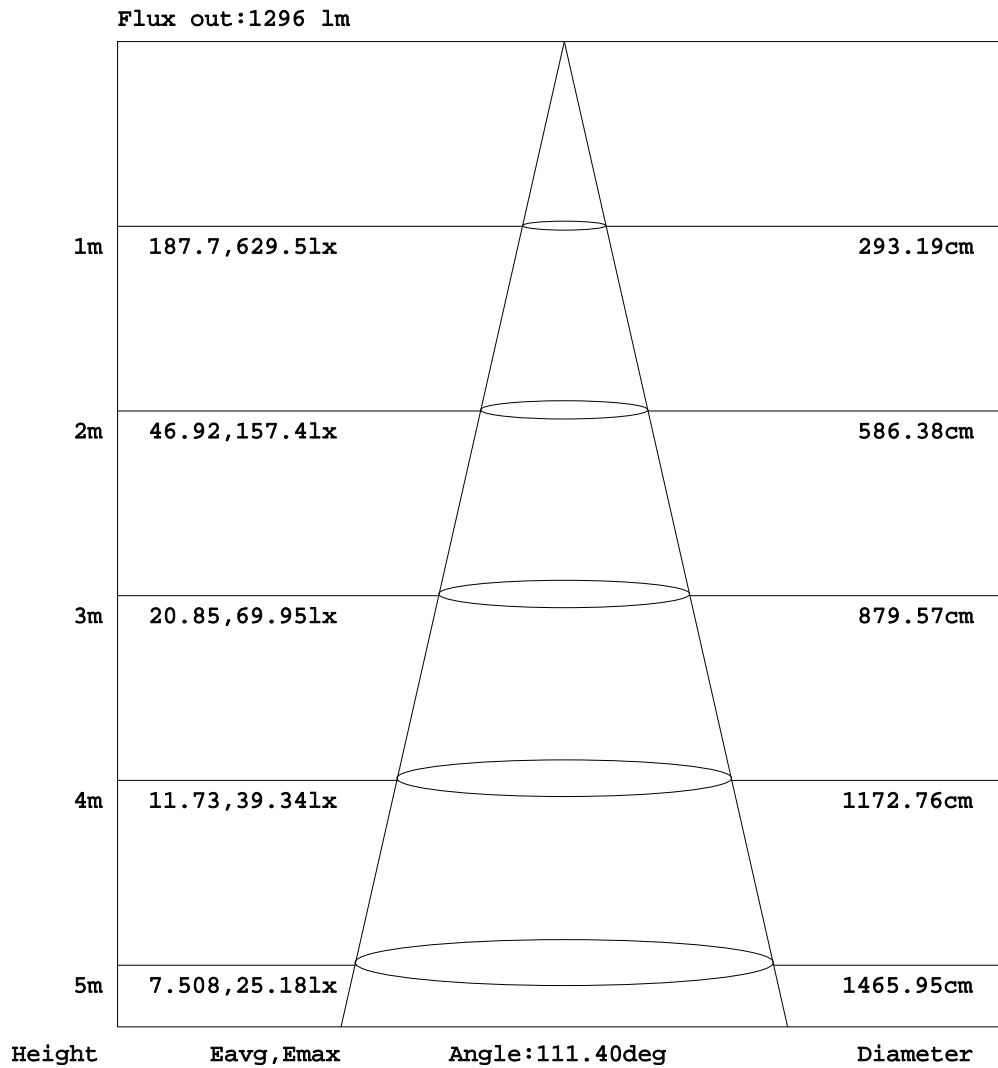
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Operators:Ben  
 Test Date:2021-01-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.351  
 Humidity:48%  
 Test Distance:2.503m [K=1.0000]  
 Remarks:



AAI Figure

|   |           |                     |
|---|-----------|---------------------|
| Test:U:120.1V I:0.2816A P:30.89W PF:0.9134 Lamp Flux:1776.31x1 lm |           |                     |
| NAME: LED ceiling light   | TYPE:N/A  | WEIGHT:N/A          |
| SPEC.:N/A   | DIM.: N/A | SERIAL No.:N/A      |
| MFR.:   | SUR.:N/A  | Shielding Angle:N/A |



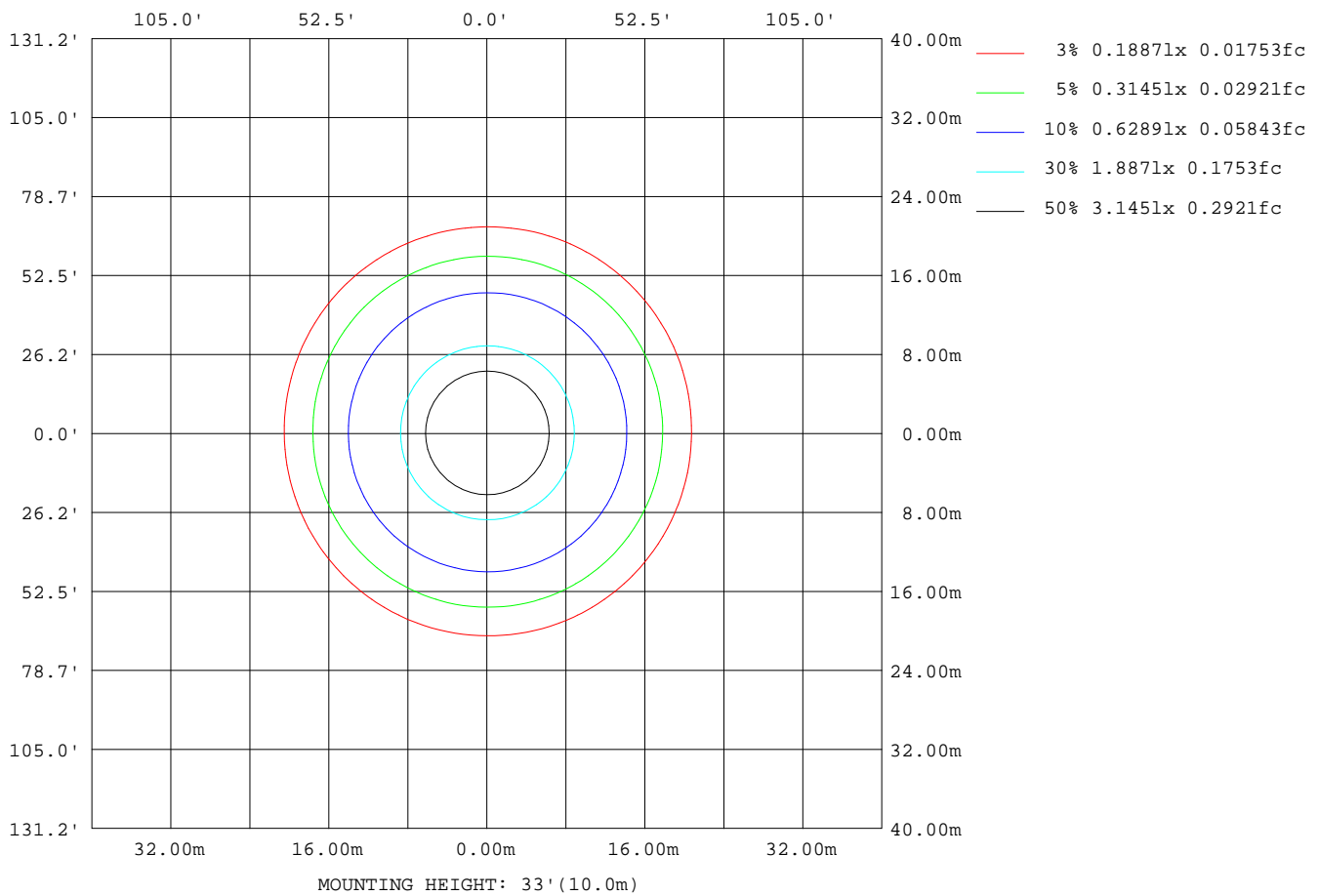
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Operators:Ben  
 Test Date:2021-01-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.351  
 Humidity:48%  
 Test Distance:2.503m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

|   |           |                     |
|---|-----------|---------------------|
| Test:U:120.1V I:0.2816A P:30.89W PF:0.9134 Lamp Flux:1776.31x1 lm |           |                     |
| NAME: LED ceiling light   | TYPE:N/A  | WEIGHT:N/A          |
| SPEC.:N/A   | DIM.: N/A | SERIAL No.:N/A      |
| MFR.:   | SUR.:N/A  | Shielding Angle:N/A |



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Operators:Ben  
 Test Date:2021-01-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.351  
 Humidity:48%  
 Test Distance:2.503m [K=1.0000]  
 Remarks:

**LED Avg.L Report**

|   |           |                     |
|---|-----------|---------------------|
| Test:U:120.1V I:0.2816A P:30.89W PF:0.9134 Lamp Flux:1776.3lx1 lm |           |                     |
| NAME: LED ceiling light   | TYPE:N/A  | WEIGHT:N/A          |
| SPEC.:N/A   | DIM.: N/A | SERIAL No.:N/A      |
| MFR.:   | SUR.:N/A  | Shielding Angle:N/A |

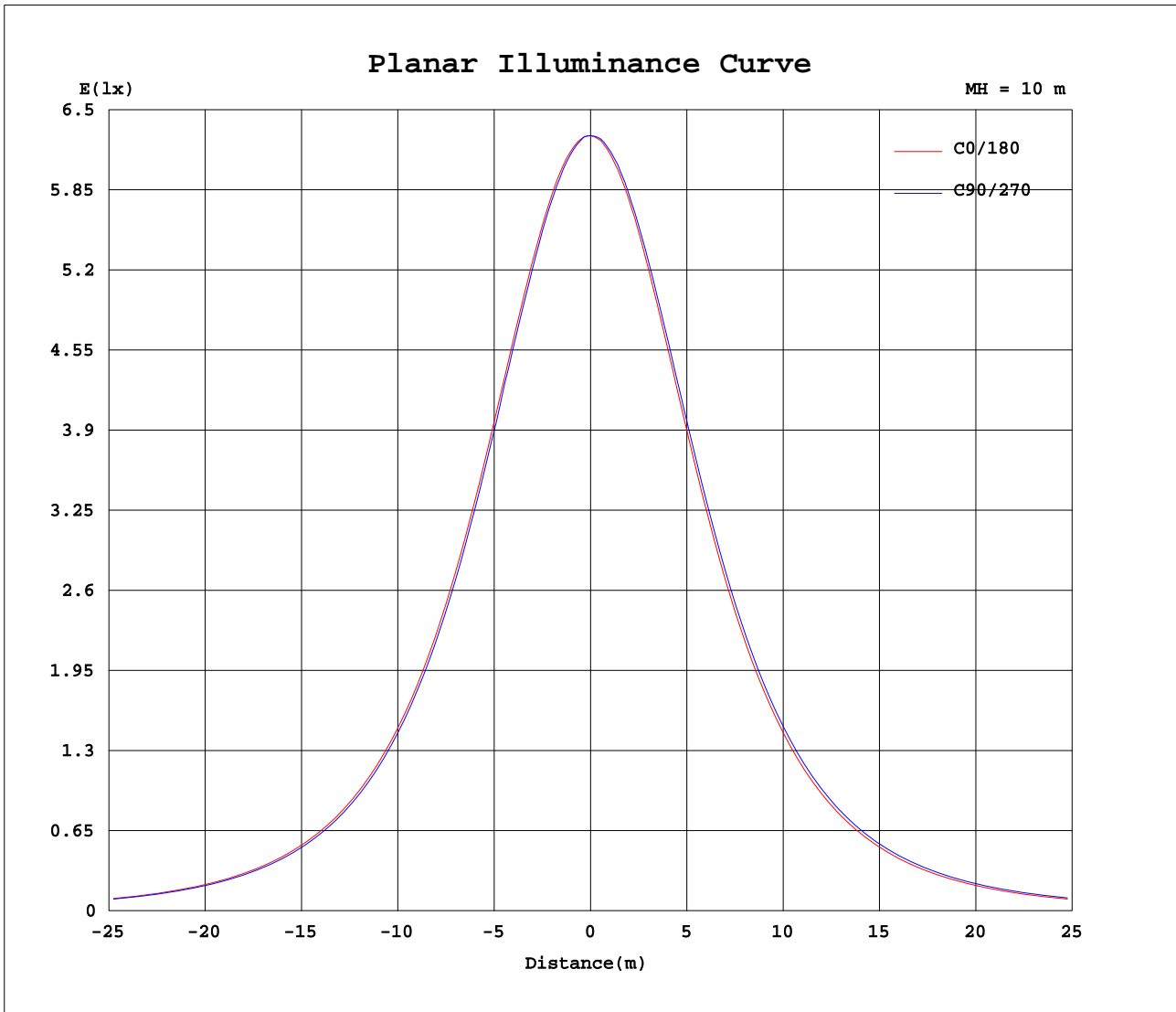
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 4203  |
| L_0~180(75)av  | 3559  |
| L_0~180(85)av  | 2165  |
| L_90~270(65)av | 4275  |
| L_90~270(75)av | 3716  |
| L_90~270(85)av | 2593  |
| L_45(65)av     | 4258  |
| L_45(75)av     | 3614  |
| L_45(85)av     | 2259  |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Operators:Ben  
 Test Date:2021-01-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.351  
 Humidity:48%  
 Test Distance:2.503m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.0DEG  
 Operators: Ben  
 Test Date: 2021-01-06

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.351  
 Humidity: 48%  
 Test Distance: 2.503m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

|   |           |                     |
|---|-----------|---------------------|
| Test:U:120.1V I:0.2816A P:30.89W PF:0.9134 Lamp Flux:1776.3lx1 lm |           |                     |
| NAME: LED ceiling light   | TYPE:N/A  | WEIGHT:N/A          |
| SPEC.:N/A   | DIM.: N/A | SERIAL No.:N/A      |
| MFR.:   | SUR.:N/A  | Shielding Angle:N/A |

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                  | 629  | 629  | 629  | 629  | 629  | 629   | 629  | 629   | 629  | 629   | 629  | 629   | 629  | 629   | 629  | 629   |  |  |  |
| 5                  | 627  | 627  | 626  | 626  | 625  | 625   | 625  | 625   | 625  | 626   | 626  | 627   | 627  | 628   | 627  | 628   |  |  |  |
| 10                 | 620  | 619  | 617  | 616  | 615  | 615   | 614  | 615   | 615  | 616   | 617  | 619   | 620  | 620   | 620  | 620   |  |  |  |
| 15                 | 606  | 606  | 603  | 602  | 600  | 599   | 598  | 599   | 600  | 602   | 603  | 605   | 606  | 607   | 607  | 607   |  |  |  |
| 20                 | 587  | 586  | 583  | 581  | 580  | 578   | 577  | 578   | 579  | 581   | 583  | 586   | 588  | 589   | 589  | 589   |  |  |  |
| 25                 | 563  | 561  | 559  | 556  | 554  | 552   | 551  | 552   | 554  | 556   | 558  | 561   | 564  | 565   | 565  | 565   |  |  |  |
| 30                 | 534  | 532  | 529  | 526  | 523  | 521   | 521  | 521   | 523  | 526   | 529  | 532   | 535  | 536   | 536  | 536   |  |  |  |
| 35                 | 500  | 498  | 495  | 492  | 489  | 487   | 486  | 487   | 488  | 492   | 495  | 498   | 502  | 503   | 503  | 503   |  |  |  |
| 40                 | 462  | 459  | 457  | 453  | 450  | 448   | 447  | 448   | 450  | 453   | 457  | 461   | 465  | 466   | 466  | 465   |  |  |  |
| 45                 | 420  | 417  | 415  | 412  | 409  | 406   | 405  | 406   | 409  | 412   | 416  | 420   | 423  | 425   | 425  | 423   |  |  |  |
| 50                 | 374  | 372  | 370  | 366  | 363  | 361   | 361  | 362   | 364  | 368   | 372  | 376   | 379  | 381   | 380  | 377   |  |  |  |
| 55                 | 325  | 323  | 322  | 318  | 314  | 313   | 314  | 314   | 316  | 320   | 326  | 328   | 331  | 333   | 333  | 329   |  |  |  |
| 60                 | 274  | 272  | 270  | 267  | 264  | 263   | 263  | 263   | 265  | 270   | 276  | 279   | 281  | 283   | 283  | 278   |  |  |  |
| 65                 | 222  | 220  | 217  | 216  | 213  | 212   | 211  | 211   | 213  | 218   | 224  | 228   | 230  | 232   | 230  | 226   |  |  |  |
| 70                 | 169  | 167  | 164  | 163  | 161  | 160   | 158  | 159   | 161  | 166   | 171  | 176   | 178  | 179   | 176  | 173   |  |  |  |
| 75                 | 116  | 114  | 111  | 111  | 110  | 108   | 106  | 107   | 109  | 114   | 118  | 124   | 126  | 126   | 123  | 120   |  |  |  |
| 80                 | 67.0 | 64.3 | 62.6 | 62.6 | 62.2 | 60.4  | 58.7 | 59.6  | 61.9 | 65.1  | 69.3 | 74.7  | 77.1 | 76.3  | 72.9 | 70.0  |  |  |  |
| 85                 | 24.6 | 22.3 | 21.0 | 21.2 | 21.4 | 19.7  | 18.5 | 19.1  | 21.6 | 24.0  | 27.3 | 31.4  | 34.0 | 32.6  | 29.7 | 27.1  |  |  |  |
| 90                 | 0.35 | 0.22 | 0.19 | 0.12 | 0.12 | 0.12  | 0.12 | 0.12  | 0.04 | 0.04  | 0.07 | 0.06  | 0.07 | 0.16  | 0.34 | 0.40  |  |  |  |
| 95                 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.15  | 0.15 | 0.15  | 0.05 | 0.05  | 0.05 | 0.05  | 0.05 | 0.05  | 0.05 | 0.05  |  |  |  |
| 100                | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.17  | 0.18 | 0.17  | 0.07 | 0.07  | 0.07 | 0.07  | 0.07 | 0.07  | 0.07 | 0.07  |  |  |  |
| 105                | 0.18 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19  | 0.19 | 0.18  | 0.09 | 0.09  | 0.09 | 0.09  | 0.09 | 0.09  | 0.09 | 0.10  |  |  |  |
| 110                | 0.20 | 0.20 | 0.20 | 0.21 | 0.21 | 0.21  | 0.21 | 0.20  | 0.12 | 0.11  | 0.11 | 0.11  | 0.11 | 0.11  | 0.11 | 0.12  |  |  |  |
| 115                | 0.23 | 0.22 | 0.23 | 0.23 | 0.24 | 0.23  | 0.23 | 0.23  | 0.15 | 0.14  | 0.13 | 0.13  | 0.14 | 0.14  | 0.13 | 0.14  |  |  |  |
| 120                | 0.26 | 0.26 | 0.26 | 0.27 | 0.27 | 0.26  | 0.26 | 0.26  | 0.18 | 0.17  | 0.16 | 0.16  | 0.16 | 0.16  | 0.16 | 0.17  |  |  |  |
| 125                | 0.30 | 0.31 | 0.31 | 0.33 | 0.33 | 0.32  | 0.31 | 0.31  | 0.21 | 0.20  | 0.19 | 0.19  | 0.19 | 0.19  | 0.20 | 0.20  |  |  |  |
| 130                | 0.37 | 0.38 | 0.38 | 0.40 | 0.40 | 0.39  | 0.38 | 0.38  | 0.24 | 0.24  | 0.22 | 0.22  | 0.22 | 0.23  | 0.23 | 0.23  |  |  |  |
| 135                | 0.46 | 0.47 | 0.49 | 0.50 | 0.50 | 0.49  | 0.48 | 0.46  | 0.28 | 0.27  | 0.26 | 0.26  | 0.27 | 0.27  | 0.28 | 0.27  |  |  |  |
| 140                | 0.58 | 0.61 | 0.63 | 0.63 | 0.64 | 0.63  | 0.62 | 0.59  | 0.31 | 0.31  | 0.31 | 0.30  | 0.30 | 0.31  | 0.32 | 0.31  |  |  |  |
| 145                | 0.71 | 0.76 | 0.80 | 0.82 | 0.82 | 0.81  | 0.78 | 0.75  | 0.34 | 0.34  | 0.34 | 0.35  | 0.36 | 0.36  | 0.36 | 0.36  |  |  |  |
| 150                | 0.82 | 0.90 | 0.92 | 0.95 | 0.95 | 0.94  | 0.90 | 0.87  | 0.38 | 0.38  | 0.37 | 0.38  | 0.39 | 0.39  | 0.39 | 0.41  |  |  |  |
| 155                | 0.95 | 1.02 | 1.03 | 1.04 | 1.04 | 1.03  | 1.03 | 0.98  | 0.43 | 0.41  | 0.45 | 0.43  | 0.42 | 0.44  | 0.44 | 0.48  |  |  |  |
| 160                | 1.03 | 1.08 | 1.07 | 1.12 | 1.10 | 1.11  | 1.10 | 1.05  | 0.50 | 0.50  | 0.52 | 0.48  | 0.48 | 0.48  | 0.48 | 0.53  |  |  |  |
| 165                | 1.01 | 1.05 | 1.06 | 1.07 | 1.09 | 1.08  | 1.07 | 1.03  | 0.55 | 0.54  | 0.54 | 0.54  | 0.52 | 0.52  | 0.52 | 0.58  |  |  |  |
| 170                | 0.94 | 0.98 | 0.97 | 0.97 | 0.99 | 0.98  | 0.99 | 0.97  | 0.60 | 0.60  | 0.58 | 0.57  | 0.57 | 0.56  | 0.56 | 0.60  |  |  |  |
| 175                | 0.91 | 0.90 | 0.90 | 0.87 | 0.86 | 0.90  | 0.91 | 0.91  | 0.69 | 0.69  | 0.67 | 0.65  | 0.63 | 0.60  | 0.64 | 0.68  |  |  |  |
| 180                | 0.80 | 0.79 | 0.77 | 0.75 | 0.74 | 0.76  | 0.78 | 0.80  | 0.80 | 0.81  | 0.79 | 0.78  | 0.74 | 0.75  | 0.76 | 0.79  |  |  |  |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Operators:Ben  
 Test Date:2021-01-06

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.351  
 Humidity:48%  
 Test Distance:2.503m [K=1.0000]  
 Remarks: