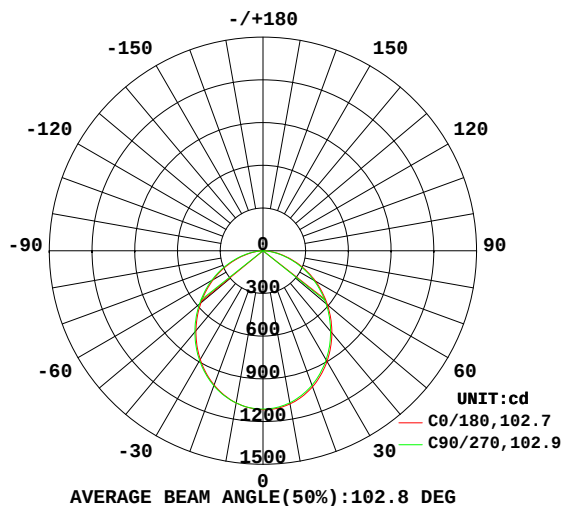


## LUMINAIRE PHOTOMETRIC TEST REPORT

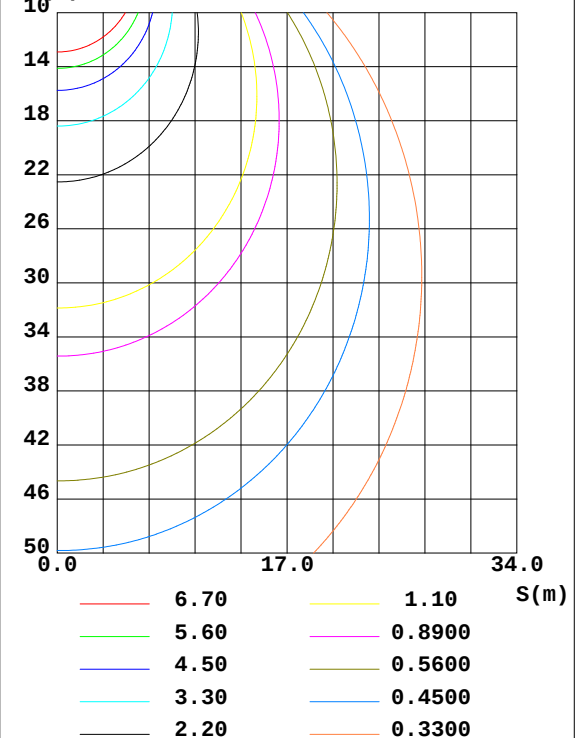
|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.19V I:0.1251A P:27.873W PF:0.9677 Freq:49.99Hz Lamp Flux:2846.33x1 lm |             |                  |
| NAME: DL30096-BKTC30S01S                                                         | TYPE:       | WEIGHT:          |
| SPEC.: black RA80 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 160mm | Shielding Angle: |

| DATA OF LAMP     |                | PHOTOMETRIC DATA Eff: 102.12 lm/W |        |                    |           |
|------------------|----------------|-----------------------------------|--------|--------------------|-----------|
| MODEL            | 2835 144 3000K | I <sub>max</sub> (cd)             | 1116   | S/MH(C0/180)       | 1.18      |
| NOMINAL POWER(W) | 30             | LOR(%)                            | 100.0  | S/MH(C90/270)      | 1.20      |
| RATED VOLTAGE(V) | 220-240        | TOTAL FLUX(lm)                    | 2846.3 | η UP, DN(C0-180)   | 0.0, 50.0 |
| NOMINAL FLUX(lm) | 2846.33        | CIE CLASS                         | DIRECT | η UP, DN(C180-360) | 0.0, 50.0 |
| LAMPS INSIDE     | 1              | η up(%)                           | 0.0    | CIBSE SHR NOM      | 1.25      |
| TEST VOLTAGE(V)  | 220            | η down(%)                         | 100.0  | CIBSE SHR MAX      | 1.35      |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators:  
Test Date: 2024-03-03

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 7.450m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

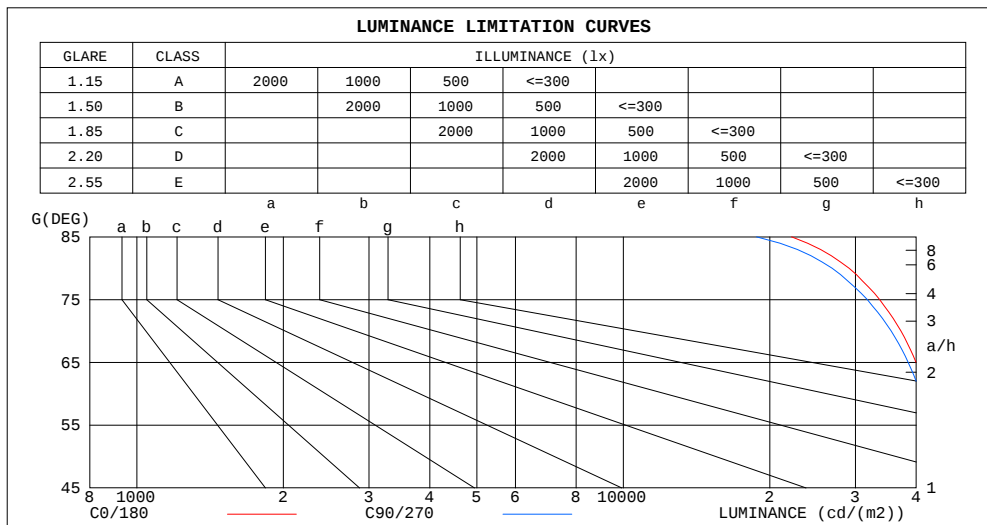
| $\gamma$ | C0                    | C45   | C90   | C135  | C180  | C225  | C270   | C315  | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|-------|-------|-------|-------|-------|--------|-------|----------|-------------|--------------|------------|
| 10       | 1092                  | 1089  | 1084  | 1080  | 1085  | 1084  | 1086   | 1088  | 0- 10    | 104.9       | 104.9        | 3.69, 3.69 |
| 20       | 1017                  | 1013  | 1005  | 998.7 | 1004  | 1005  | 1009   | 1013  | 10- 20   | 296.6       | 401.5        | 14.1, 14.1 |
| 30       | 898.9                 | 895.2 | 885.9 | 876.7 | 881.6 | 884.4 | 890.6  | 895.7 | 20- 30   | 438.4       | 840.0        | 29.5, 29.5 |
| 40       | 752.5                 | 749.1 | 738.9 | 728.2 | 732.6 | 736.5 | 744.1  | 749.9 | 30- 40   | 511.0       | 1351         | 47.5, 47.5 |
| 50       | 591.2                 | 588.2 | 578.0 | 566.4 | 569.8 | 574.5 | 582.8  | 589.4 | 40- 50   | 510.3       | 1861         | 65.4, 65.4 |
| 60       | 424.1                 | 421.3 | 411.3 | 399.8 | 401.9 | 406.8 | 415.6  | 422.7 | 50- 60   | 444.0       | 2305         | 81, 81     |
| 70       | 256.0                 | 253.4 | 244.3 | 233.2 | 234.4 | 239.0 | 248.2  | 255.4 | 60- 70   | 325.2       | 2630         | 92.4, 92.4 |
| 80       | 101.6                 | 100.3 | 93.83 | 84.63 | 83.18 | 87.14 | 94.79  | 101.0 | 70- 80   | 175.9       | 2806         | 98.6, 98.6 |
| 90       | 1.606                 | 1.618 | 1.637 | 1.652 | 1.035 | 1.023 | 0.9960 | 1.027 | 80- 90   | 39.94       | 2846         | 100, 100   |
| 100      |                       |       |       |       |       |       |        |       | 90-100   |             |              |            |
| 110      |                       |       |       |       |       |       |        |       | 100-110  |             |              |            |
| 120      |                       |       |       |       |       |       |        |       | 110-120  |             |              |            |
| 130      |                       |       |       |       |       |       |        |       | 120-130  |             |              |            |
| 140      |                       |       |       |       |       |       |        |       | 130-140  |             |              |            |
| 150      |                       |       |       |       |       |       |        |       | 140-150  |             |              |            |
| 160      |                       |       |       |       |       |       |        |       | 150-160  |             |              |            |
| 170      |                       |       |       |       |       |       |        |       | 160-170  |             |              |            |
| 180      |                       |       |       |       |       |       |        |       | 170-180  |             |              |            |
| DEG      | LUMINOUS INTENSITY:cd |       |       |       |       |       |        |       |          | UNIT:lm     |              |            |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2024-03-03

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.19V I:0.1251A P:27.873W PF:0.9677 Freq:49.99Hz Lamp Flux:2846.33x1 lm |             |                  |
| NAME: DL30096-BKTC30S01S                                                         | TYPE:       | WEIGHT:          |
| SPEC.: black RA80 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 160mm | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G(DEG)            | C0/180 | C90/270 |
| 85                | 22177  | 18791   |
| 80                | 29105  | 26870   |
| 75                | 33643  | 31723   |
| 70                | 37215  | 35519   |
| 65                | 39957  | 38510   |
| 60                | 42177  | 40904   |
| 55                | 44049  | 42914   |
| 50                | 45736  | 44716   |
| 45                | 47326  | 46387   |

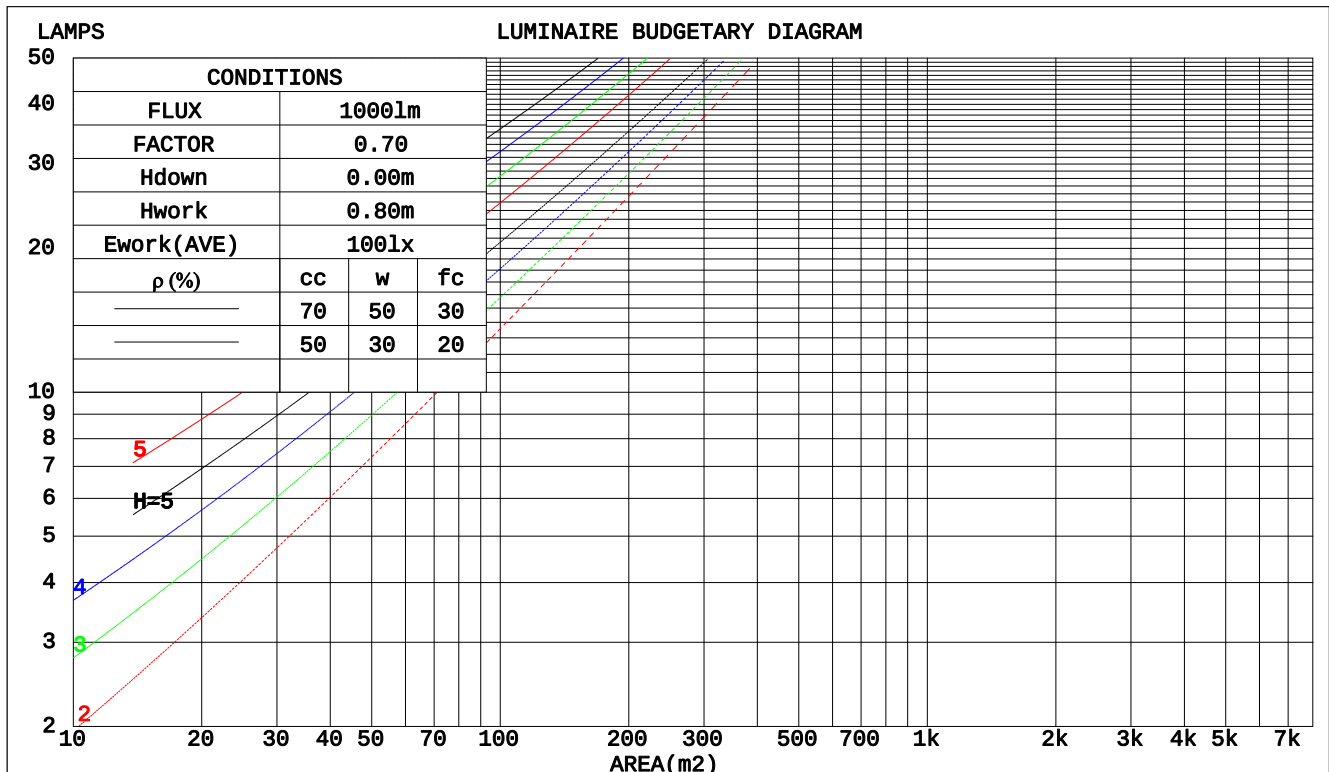
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators:  
Test Date: 2024-03-03

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 7.450m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.19V I:0.1251A P:27.873W PF:0.9677 Freq:49.99Hz Lamp Flux:2846.33x1 lm |             |                  |
| NAME: DL30096-BKTC30S01S                                                         | TYPE:       | WEIGHT:          |
| SPEC.: black RA80 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 160mm | 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 | 1.00 |
| 1.0         | 1.05                  | 1.00 | .97  | 1.02 | .99  | .95  | .98                             | .95  | .92  | .94  | .92  | .89  | .91  | .89  | .87  | .85  |
| 2.0         | .92                   | .85  | .79  | .90  | .84  | .78  | .86                             | .81  | .77  | .83  | .79  | .75  | .80  | .76  | .73  | .71  |
| 3.0         | .81                   | .73  | .66  | .79  | .72  | .66  | .76                             | .70  | .65  | .73  | .68  | .63  | .71  | .66  | .62  | .60  |
| 4.0         | .72                   | .63  | .56  | .70  | .62  | .56  | .68                             | .61  | .55  | .66  | .59  | .55  | .63  | .58  | .54  | .52  |
| 5.0         | .64                   | .55  | .49  | .63  | .55  | .49  | .61                             | .54  | .48  | .59  | .53  | .48  | .57  | .52  | .47  | .45  |
| 6.0         | .58                   | .49  | .43  | .57  | .49  | .43  | .55                             | .48  | .42  | .53  | .47  | .42  | .52  | .46  | .41  | .39  |
| 7.0         | .53                   | .44  | .38  | .52  | .44  | .38  | .50                             | .43  | .37  | .49  | .42  | .37  | .47  | .42  | .37  | .35  |
| 8.0         | .48                   | .40  | .34  | .47  | .39  | .34  | .46                             | .39  | .34  | .45  | .38  | .33  | .44  | .38  | .33  | .31  |
| 9.0         | .44                   | .36  | .31  | .44  | .36  | .31  | .42                             | .35  | .30  | .41  | .35  | .30  | .40  | .34  | .30  | .28  |
| 10.0        | .41                   | .33  | .28  | .40  | .33  | .28  | .39                             | .32  | .28  | .38  | .32  | .27  | .38  | .32  | .27  | .26  |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2024-03-03

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

### WEC AND CCEC

|                                                                                  |  |  |             |  |                  |
|----------------------------------------------------------------------------------|--|--|-------------|--|------------------|
| Test:U:230.19V I:0.1251A P:27.873W PF:0.9677 Freq:49.99Hz Lamp Flux:2846.33x1 lm |  |  |             |  |                  |
| NAME: DL30096-BKTC30S01S                                                         |  |  | TYPE:       |  | WEIGHT:          |
| SPEC.: black RA80 3000K+5700K                                                    |  |  | DIM.:       |  | SERIAL No.:      |
| MFR.:                                                                            |  |  | SUR.: 160mm |  | 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 |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |
| 0.0         |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |
| 1.0         | .296                  | .169 | .053 | .289 | .165 | .052 | .276                            | .158 | .051 | .264 | .152 | .049 | .253 | .147 | .047 |   |
| 2.0         | .281                  | .154 | .047 | .275 | .152 | .047 | .264                            | .147 | .046 | .253 | .142 | .044 | .243 | .137 | .043 |   |
| 3.0         | .262                  | .139 | .042 | .256 | .137 | .041 | .246                            | .133 | .041 | .237 | .130 | .040 | .228 | .126 | .039 |   |
| 4.0         | .242                  | .126 | .037 | .238 | .124 | .037 | .229                            | .121 | .036 | .220 | .118 | .036 | .212 | .115 | .035 |   |
| 5.0         | .225                  | .115 | .033 | .221 | .113 | .033 | .212                            | .111 | .033 | .205 | .108 | .032 | .198 | .106 | .032 |   |
| 6.0         | .209                  | .105 | .030 | .205 | .104 | .030 | .198                            | .101 | .030 | .191 | .099 | .029 | .185 | .097 | .029 |   |
| 7.0         | .195                  | .096 | .027 | .192 | .095 | .027 | .185                            | .094 | .027 | .179 | .092 | .027 | .173 | .090 | .026 |   |
| 8.0         | .182                  | .089 | .025 | .179 | .088 | .025 | .174                            | .087 | .025 | .168 | .085 | .025 | .163 | .084 | .024 |   |
| 9.0         | .171                  | .083 | .023 | .168 | .082 | .023 | .163                            | .081 | .023 | .158 | .079 | .023 | .154 | .078 | .023 |   |
| 10.0        | .161                  | .077 | .021 | .159 | .077 | .021 | .154                            | .075 | .021 | .150 | .074 | .021 | .145 | .073 | .021 |   |

| ρ <sub>cc</sub> | 80%                   |      |      | 70%  |      |      | 50%                                        |      |      | 30%  |      |      | 10%  |      |      | 0 |
|-----------------|-----------------------|------|------|------|------|------|--------------------------------------------|------|------|------|------|------|------|------|------|---|
| ρ <sub>w</sub>  | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                        | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρ <sub>fc</sub> | 20%                   |      |      | 20%  |      |      | 20%                                        |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR             | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0             | .190                  | .190 | .190 | .163 | .163 | .163 | .111                                       | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0             | .179                  | .156 | .135 | .153 | .134 | .117 | .105                                       | .092 | .081 | .060 | .053 | .047 | .019 | .017 | .015 |   |
| 2.0             | .171                  | .132 | .099 | .146 | .114 | .086 | .100                                       | .079 | .060 | .058 | .046 | .035 | .019 | .015 | .011 |   |
| 3.0             | .163                  | .114 | .075 | .140 | .099 | .065 | .096                                       | .068 | .046 | .055 | .040 | .027 | .018 | .013 | .009 |   |
| 4.0             | .155                  | .101 | .059 | .133 | .087 | .052 | .092                                       | .061 | .036 | .053 | .036 | .021 | .017 | .012 | .007 |   |
| 5.0             | .148                  | .090 | .048 | .127 | .078 | .042 | .087                                       | .055 | .029 | .051 | .032 | .017 | .016 | .010 | .006 |   |
| 6.0             | .141                  | .082 | .040 | .121 | .071 | .035 | .083                                       | .050 | .025 | .048 | .029 | .015 | .016 | .010 | .005 |   |
| 7.0             | .134                  | .075 | .034 | .115 | .065 | .029 | .080                                       | .046 | .021 | .046 | .027 | .012 | .015 | .009 | .004 |   |
| 8.0             | .128                  | .069 | .029 | .110 | .060 | .025 | .076                                       | .042 | .018 | .044 | .025 | .011 | .014 | .008 | .004 |   |
| 9.0             | .122                  | .064 | .026 | .105 | .056 | .022 | .073                                       | .039 | .016 | .042 | .023 | .009 | .014 | .008 | .003 |   |
| 10.0            | .116                  | .060 | .023 | .100 | .052 | .020 | .069                                       | .037 | .014 | .040 | .022 | .008 | .013 | .007 | .003 |   |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2024-03-03

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

|                                                                                  |               |                  |      |      |      |               |                |      |                  |      |      |
|----------------------------------------------------------------------------------|---------------|------------------|------|------|------|---------------|----------------|------|------------------|------|------|
| Test:U:230.19V I:0.1251A P:27.873W PF:0.9677 Freq:49.99Hz Lamp Flux:2846.33x1 lm |               |                  |      |      |      |               |                |      |                  |      |      |
| NAME: DL30096-BKTC30S01S                                                         |               |                  |      |      |      | TYPE:         |                |      | WEIGHT:          |      |      |
| SPEC.: black RA80 3000K+5700K                                                    |               |                  |      |      |      | DIM.:         |                |      | SERIAL No.:      |      |      |
| MFR.:                                                                            |               |                  |      |      |      | SUR.: 160mm   |                |      | 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                                                                    | 22.4          | 23.8             | 22.6 | 24.0 | 24.3 | 22.3          | 23.7           | 22.5 | 23.9             | 24.1 |      |
|                                                                                  | 3H            | 23.8             | 25.1 | 24.1 | 25.4 | 25.6          | 23.6           | 25.0 | 23.9             | 25.2 | 25.5 |
|                                                                                  | 4H            | 24.3             | 25.6 | 24.6 | 25.9 | 26.1          | 24.1           | 25.4 | 24.5             | 25.7 | 25.9 |
|                                                                                  | 6H            | 24.7             | 25.9 | 25.0 | 26.2 | 26.5          | 24.5           | 25.7 | 24.8             | 26.0 | 26.2 |
|                                                                                  | 8H            | 24.8             | 26.0 | 25.1 | 26.3 | 26.5          | 24.6           | 25.7 | 24.9             | 26.0 | 26.3 |
|                                                                                  | 12H           | 24.8             | 26.0 | 25.2 | 26.3 | 26.6          | 24.6           | 25.7 | 24.9             | 26.0 | 26.3 |
| 4H                                                                               | 2H            | 22.9             | 24.2 | 23.2 | 24.5 | 24.7          | 22.8           | 24.1 | 23.2             | 24.4 | 24.6 |
|                                                                                  | 3H            | 24.5             | 25.7 | 24.9 | 26.0 | 26.3          | 24.4           | 25.5 | 24.8             | 25.8 | 26.1 |
|                                                                                  | 4H            | 25.2             | 26.2 | 25.6 | 26.6 | 26.9          | 25.0           | 26.1 | 25.4             | 26.4 | 26.7 |
|                                                                                  | 6H            | 25.7             | 26.6 | 26.1 | 27.0 | 27.3          | 25.5           | 26.4 | 25.9             | 26.8 | 27.1 |
|                                                                                  | 8H            | 25.8             | 26.7 | 26.2 | 27.1 | 27.4          | 25.6           | 26.5 | 26.0             | 26.8 | 27.2 |
|                                                                                  | 12H           | 25.9             | 26.7 | 26.3 | 27.1 | 27.5          | 25.7           | 26.5 | 26.1             | 26.9 | 27.3 |
| 8H                                                                               | 4H            | 25.4             | 26.3 | 25.8 | 26.6 | 27.0          | 25.3           | 26.1 | 25.7             | 26.5 | 26.9 |
|                                                                                  | 6H            | 26.0             | 26.8 | 26.5 | 27.2 | 27.6          | 25.9           | 26.6 | 26.3             | 27.0 | 27.4 |
|                                                                                  | 8H            | 26.3             | 26.9 | 26.7 | 27.3 | 27.8          | 26.1           | 26.7 | 26.5             | 27.1 | 27.6 |
|                                                                                  | 12H           | 26.4             | 27.0 | 26.9 | 27.4 | 27.9          | 26.2           | 26.7 | 26.7             | 27.2 | 27.7 |
| 12H                                                                              | 4H            | 25.4             | 26.2 | 25.9 | 26.6 | 27.0          | 25.3           | 26.1 | 25.7             | 26.5 | 26.9 |
|                                                                                  | 6H            | 26.1             | 26.7 | 26.5 | 27.1 | 27.6          | 25.9           | 26.6 | 26.4             | 27.0 | 27.4 |
|                                                                                  | 8H            | 26.3             | 26.9 | 26.8 | 27.3 | 27.8          | 26.2           | 26.7 | 26.6             | 27.1 | 27.6 |
| Variations with the observer position at spacings(CIE Pub.117):                  |               |                  |      |      |      |               |                |      |                  |      |      |
| 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, 2846 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.6)  
Area: 0.02011 m2

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2024-03-03

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.19V I:0.1251A P:27.873W PF:0.9677 Freq:49.99Hz Lamp Flux:2846.33x1 lm |             |                  |
| NAME: DL30096-BKTC30S01S                                                         | TYPE:       | WEIGHT:          |
| SPEC.: black RA80 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 160mm | Shielding Angle: |

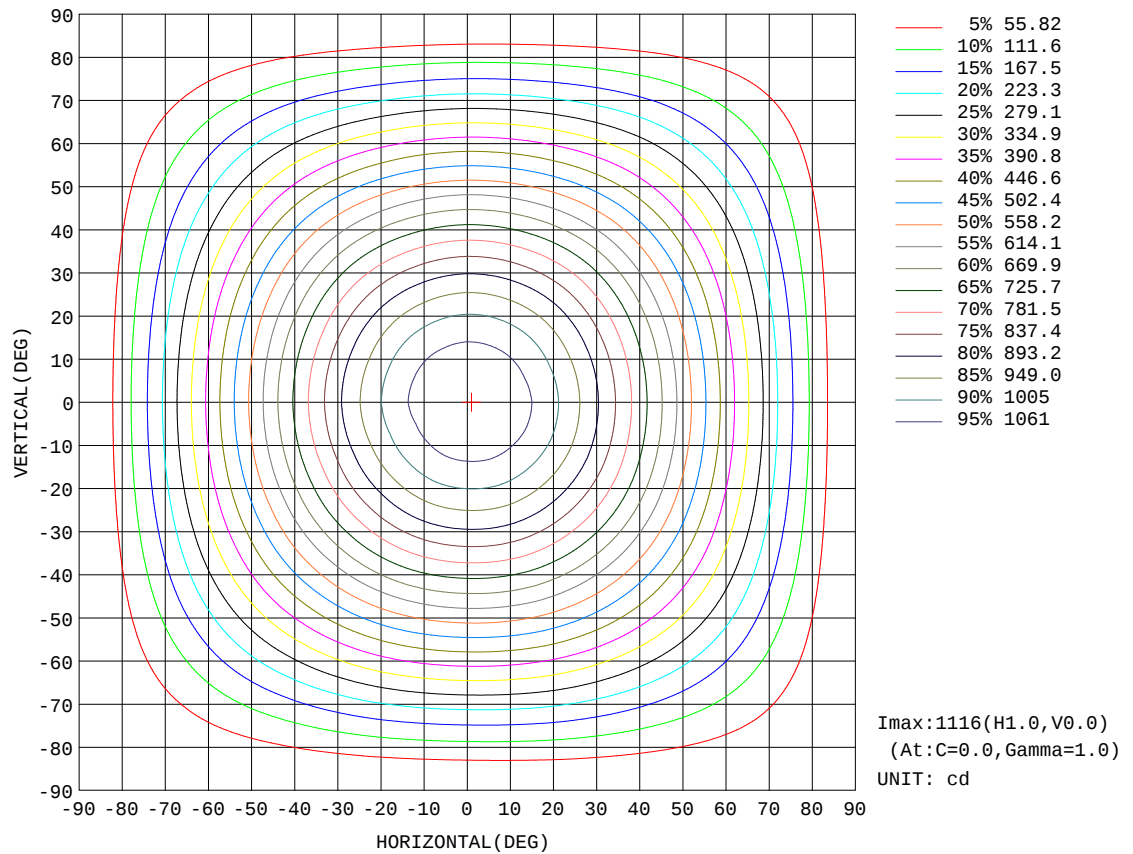
| REFLECTANCE                      |                                                     |     |           |     |     |     |     |               |     |        |
|----------------------------------|-----------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 59                                                  | 48  | 41        | 58  | 48  | 41  | 57  | 47            | 41  | 34     |
| 0.80                             | 69                                                  | 58  | 51        | 68  | 57  | 51  | 66  | 57            | 50  | 43     |
| 1.00                             | 78                                                  | 67  | 60        | 76  | 66  | 59  | 74  | 67            | 59  | 52     |
| 1.25                             | 85                                                  | 74  | 67        | 83  | 74  | 67  | 80  | 72            | 66  | 59     |
| 1.50                             | 89                                                  | 80  | 73        | 88  | 79  | 73  | 85  | 77            | 72  | 64     |
| 2.00                             | 96                                                  | 88  | 82        | 94  | 87  | 81  | 91  | 84            | 79  | 72     |
| 2.50                             | 100                                                 | 92  | 87        | 98  | 91  | 86  | 94  | 88            | 84  | 76     |
| 3.00                             | 103                                                 | 96  | 91        | 101 | 95  | 90  | 97  | 92            | 88  | 80     |
| 4.00                             | 107                                                 | 101 | 97        | 105 | 100 | 96  | 100 | 96            | 93  | 84     |
| 5.00                             | 109                                                 | 105 | 101       | 107 | 103 | 99  | 102 | 99            | 96  | 87     |
| 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: 25DEG  
 Operators:  
 Test Date: 2024-03-03

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.19V I:0.1251A P:27.873W PF:0.9677 Freq:49.99Hz Lamp Flux:2846.33x1 lm |             |                  |
| NAME: DL30096-BKTC30S01S                                                         | TYPE:       | WEIGHT:          |
| SPEC.: black RA80 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 160mm | Shielding Angle: |



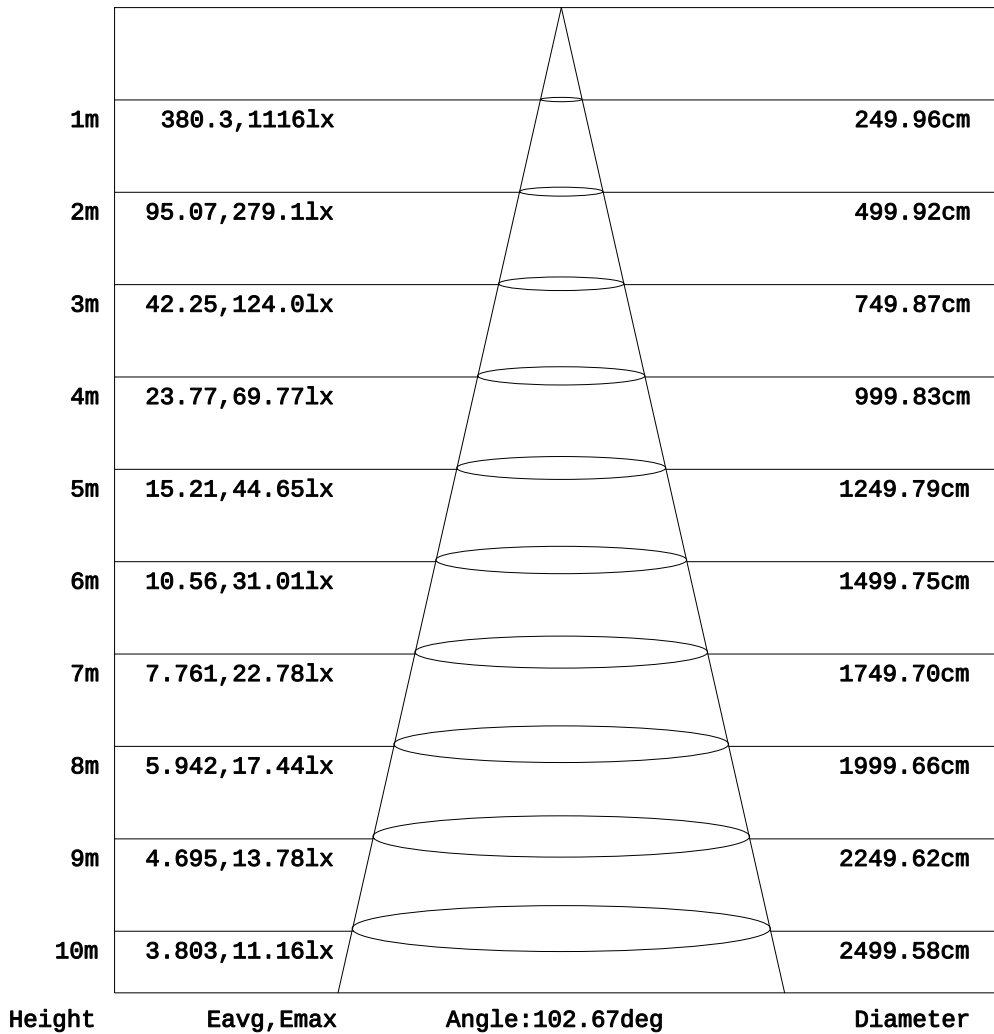
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2024-03-03

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

### AAI Figure

|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.19V I:0.1251A P:27.873W PF:0.9677 Freq:49.99Hz Lamp Flux:2846.33x1 lm |             |                  |
| NAME: DL30096-BKTC30S01S                                                         | TYPE:       | WEIGHT:          |
| SPEC.: black RA80 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 160mm | Shielding Angle: |

Flux out:1957 lm



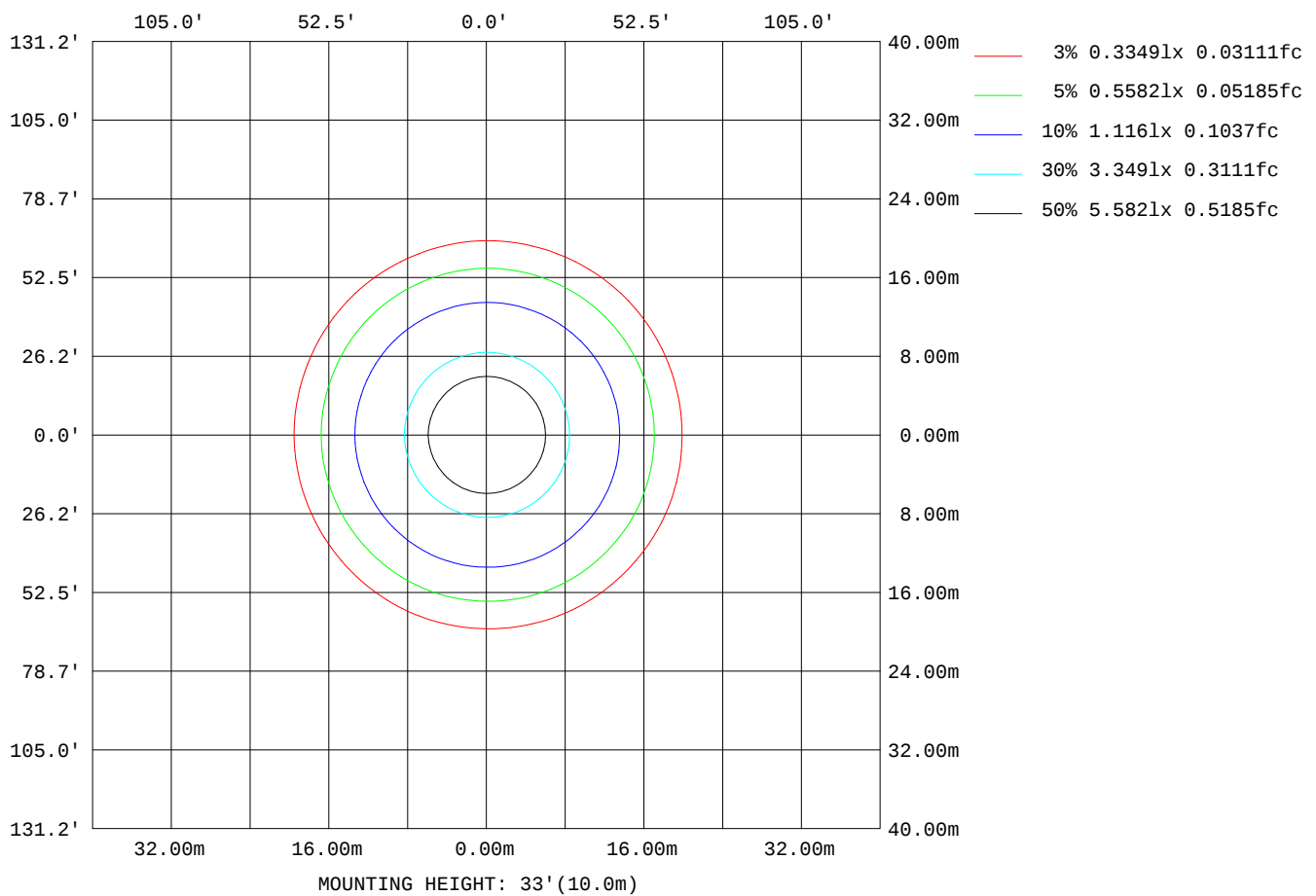
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2024-03-03

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

### ISOLUX DIAGRAM

|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.19V I:0.1251A P:27.873W PF:0.9677 Freq:49.99Hz Lamp Flux:2846.33x1 lm |             |                  |
| NAME: DL30096-BKTC30S01S                                                         | TYPE:       | WEIGHT:          |
| SPEC.: black RA80 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 160mm | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2024-03-03

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

## LED Avg.L Report

|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.19V I:0.1251A P:27.873W PF:0.9677 Freq:49.99Hz Lamp Flux:2846.33x1 lm |             |                  |
| NAME: DL30096-BKTC30S01S                                                         | TYPE:       | WEIGHT:          |
| SPEC.: black RA80 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 160mm | Shielding Angle: |

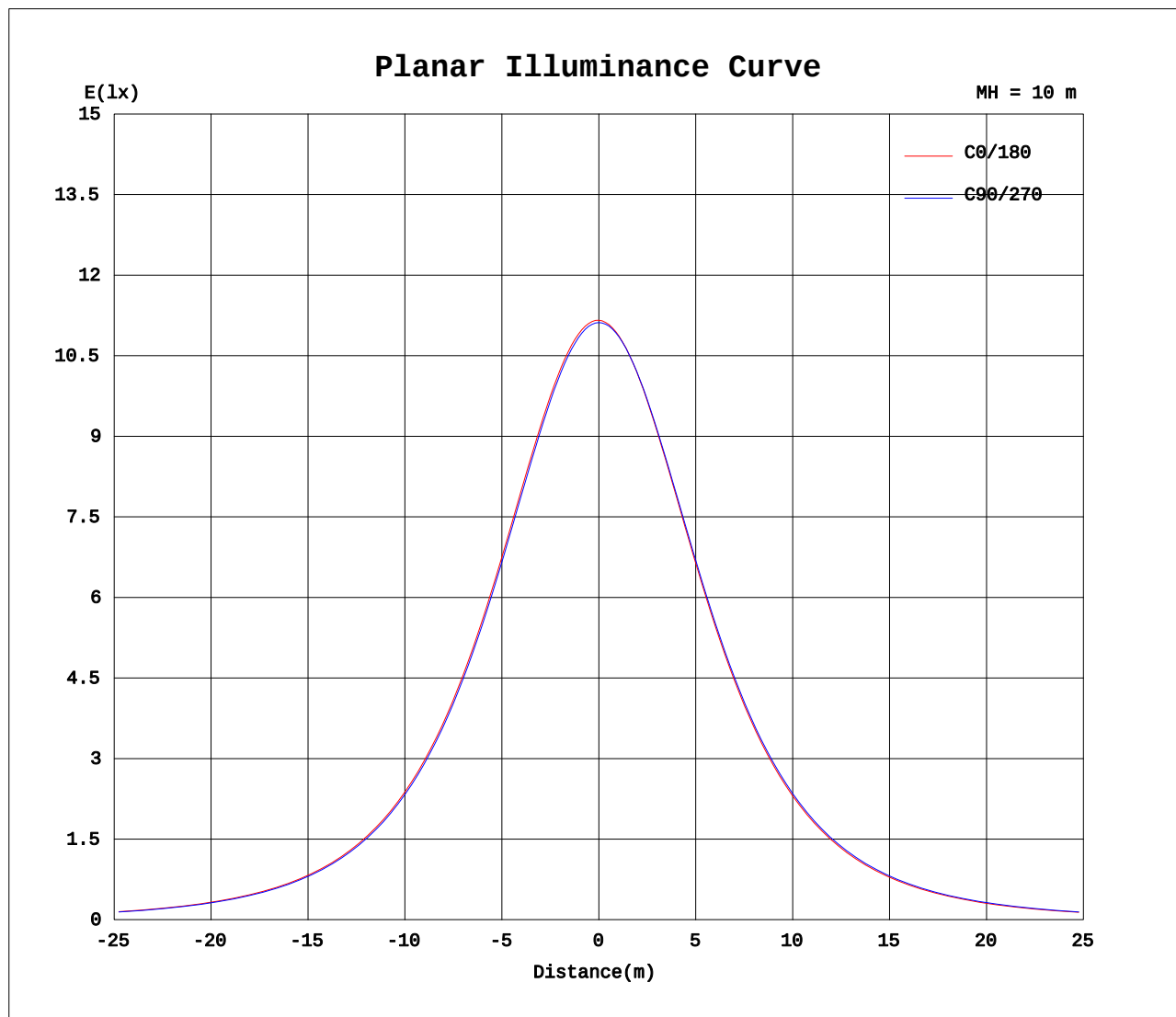
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 38654 |
| L_0~180(75)av  | 31692 |
| L_0~180(85)av  | 17938 |
| L_90~270(65)av | 38748 |
| L_90~270(75)av | 31992 |
| L_90~270(85)av | 18787 |
| L_45(65)av     | 38639 |
| L_45(75)av     | 31792 |
| L_45(85)av     | 18391 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2024-03-03

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2024-03-03

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

```

Range: 0 - 90DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

```