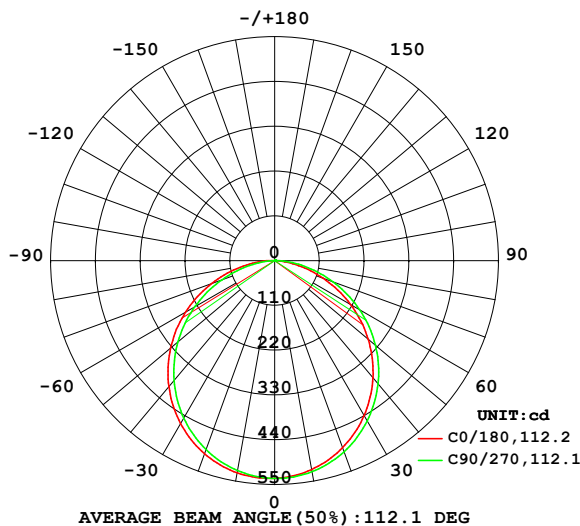


## LUMINAIRE PHOTOMETRIC TEST REPORT

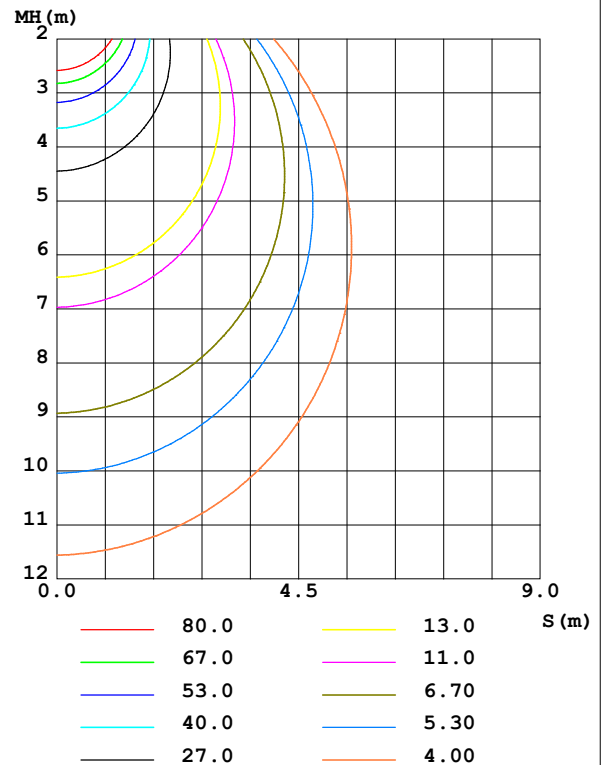
|                                                                                  |                       |                  |
|----------------------------------------------------------------------------------|-----------------------|------------------|
| Test:U:229.92V I:0.0862A P:18.528W PF:0.9347 Freq:49.99Hz<br>Lamp Flux:1530x1 lm |                       |                  |
| NAME: SGS SKU No.: 0017440192                                                    | TYPE:                 | WEIGHT:          |
| SPEC.: 18W Slim Downlight, 3CCT DIMMABLE IP20 In Front DIM.:                     | SERIAL No.: 18W 4000K |                  |
| MFR.: LIT by CARDI                                                               | SUR.: $\phi$ 0.249    | Shielding Angle: |

| DATA OF LAMP     |      | PHOTOMETRIC DATA      |        |                        |          | Eff: 82.58 lm/W |
|------------------|------|-----------------------|--------|------------------------|----------|-----------------|
| MODEL            |      | I <sub>max</sub> (cd) | 535.0  | S/MH(C0/180)           | 1.28     |                 |
| NOMINAL POWER(W) | 18   | LOR(%)                | 100.0  | S/MH(C90/270)          | 1.24     |                 |
| RATED VOLTAGE(V) | 230  | TOTAL FLUX(lm)        | 1530.0 | $\eta$ UP,DN(C0-180)   | 0.1,48.9 |                 |
| NOMINAL FLUX(lm) | 1530 | CIE CLASS             | DIRECT | $\eta$ UP,DN(C180-360) | 0.1,50.8 |                 |
| LAMPS INSIDE     | 1    | $\eta$ up (%)         | 0.3    | CIBSE SHR NOM          | 1.25     |                 |
| TEST VOLTAGE(V)  | 230  | $\eta$ down (%)       | 99.7   | CIBSE SHR MAX          | 1.35     |                 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:8.800m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

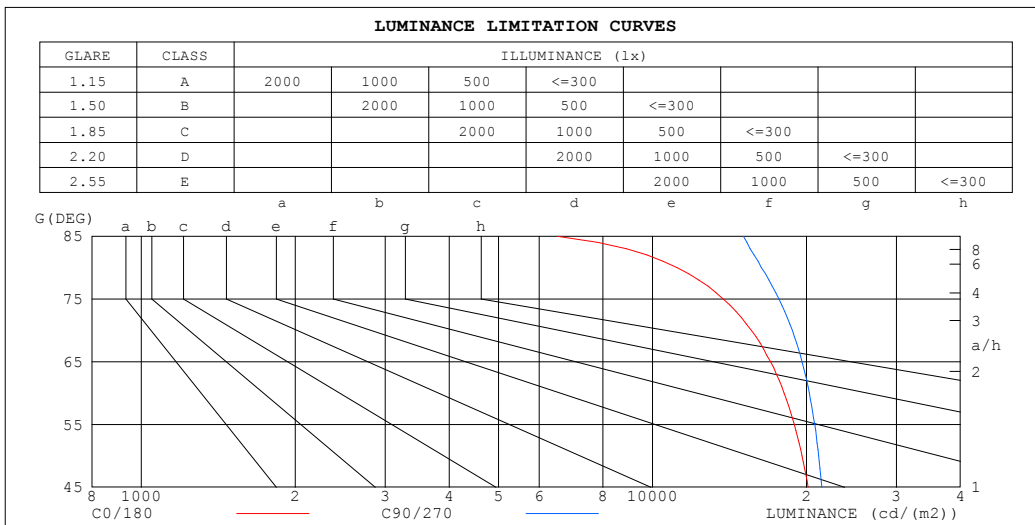
| $\gamma$ | C0                    | C90    | C180   | C270   |  |  |  |  | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|--------|--------|--------|--|--|--|--|----------|-------------|--------------|------------|
| 10       | 521.1                 | 526.5  | 529.2  | 523.8  |  |  |  |  | 0- 10    | 50.59       | 50.59        | 3.31,3.31  |
| 20       | 488.6                 | 499.2  | 504.4  | 493.7  |  |  |  |  | 10- 20   | 144.8       | 195.4        | 12.8,12.8  |
| 30       | 439.6                 | 455.0  | 462.1  | 446.7  |  |  |  |  | 20- 30   | 219.2       | 414.6        | 27.1,27.1  |
| 40       | 375.9                 | 395.4  | 404.3  | 384.6  |  |  |  |  | 30- 40   | 264.1       | 678.7        | 44.4,44.4  |
| 50       | 300.3                 | 323.2  | 333.7  | 310.2  |  |  |  |  | 40- 50   | 273.6       | 952.3        | 62.2,62.2  |
| 60       | 215.5                 | 241.0  | 252.6  | 226.2  |  |  |  |  | 50- 60   | 246.8       | 1199         | 78.4,78.4  |
| 70       | 127.2                 | 152.7  | 164.7  | 138.0  |  |  |  |  | 60- 70   | 187.8       | 1387         | 90.6,90.6  |
| 80       | 46.18                 | 67.48  | 78.61  | 54.93  |  |  |  |  | 70- 80   | 108.3       | 1495         | 97.7,97.7  |
| 90       | 0.0477                | 2.644  | 9.381  | 0.0582 |  |  |  |  | 80- 90   | 30.77       | 1526         | 99.7,99.7  |
| 100      | 0.1574                | 0.1575 | 0.1625 | 0.1667 |  |  |  |  | 90-100   | 0.3858      | 1526         | 99.8,99.8  |
| 110      | 0.3435                | 0.3530 | 0.3631 | 0.3860 |  |  |  |  | 100-110  | 0.2738      | 1527         | 99.8,99.8  |
| 120      | 0.5438                | 0.5486 | 0.5730 | 0.6007 |  |  |  |  | 110-120  | 0.4595      | 1527         | 99.8,99.8  |
| 130      | 0.7109                | 0.7250 | 0.7831 | 0.7961 |  |  |  |  | 120-130  | 0.5911      | 1528         | 99.8,99.8  |
| 140      | 0.8495                | 0.8918 | 0.9787 | 0.9774 |  |  |  |  | 130-140  | 0.6493      | 1528         | 99.9,99.9  |
| 150      | 0.9975                | 1.025  | 1.155  | 1.135  |  |  |  |  | 140-150  | 0.6270      | 1529         | 99.9,99.9  |
| 160      | 1.146                 | 1.173  | 1.313  | 1.273  |  |  |  |  | 150-160  | 0.5315      | 1530         | 100,100    |
| 170      | 1.289                 | 1.292  | 1.442  | 1.383  |  |  |  |  | 160-170  | 0.3639      | 1530         | 100,100    |
| 180      | 1.442                 | 1.426  | 1.451  | 1.431  |  |  |  |  | 170-180  | 0.1319      | 1530         | 100,100    |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |  |  |  |  |          | UNIT:lm     |              |            |

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:8.800m [K=1.0000]  
Remarks:

### LUMINANCE LIMITATION CURVES

|                                                                                  |                    |                       |
|----------------------------------------------------------------------------------|--------------------|-----------------------|
| Test:U:229.92V I:0.0862A P:18.528W PF:0.9347 Freq:49.99Hz<br>Lamp Flux:1530x1 lm |                    |                       |
| NAME: SGS SKU No.: 0017440192                                                    | TYPE:              | WEIGHT:               |
| SPEC.: 18W Slim Downlight, 3CCT DIMMABLE IP20 In Front DIM.:                     |                    | SERIAL No.: 18W 4000K |
| MFR.: LIT by CARDI                                                               | SUR.: $\phi 0.249$ | Shielding Angle:      |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 6519   | 15062   |
| 80                | 11169  | 16337   |
| 75                | 13744  | 17670   |
| 70                | 15620  | 18768   |
| 65                | 17017  | 19611   |
| 60                | 18097  | 20265   |
| 55                | 18945  | 20759   |
| 50                | 19618  | 21136   |
| 45                | 20164  | 21442   |

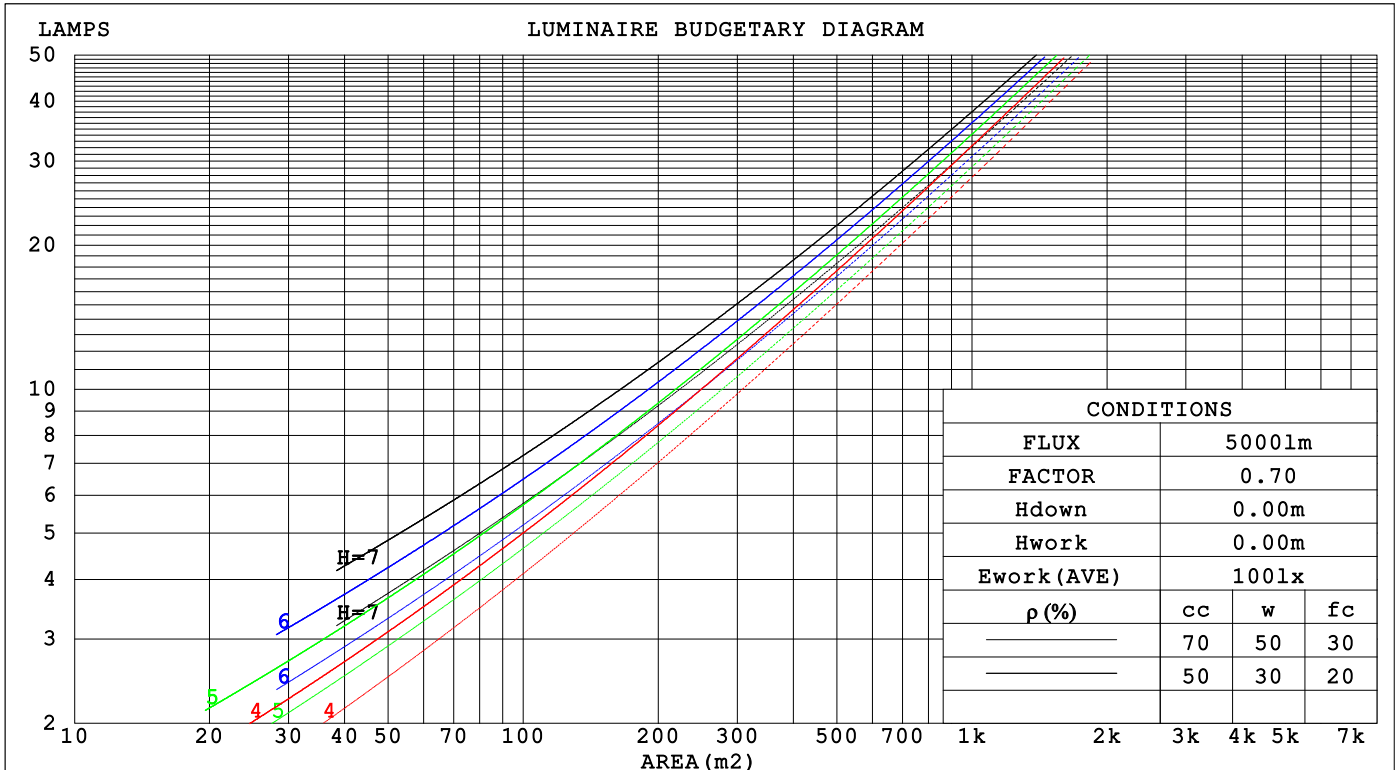
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:8.800m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                                                  |                       |                  |
|----------------------------------------------------------------------------------|-----------------------|------------------|
| Test:U:229.92V I:0.0862A P:18.528W PF:0.9347 Freq:49.99Hz<br>Lamp Flux:1530x1 lm |                       |                  |
| NAME: SGS SKU No.: 0017440192                                                    | TYPE:                 | WEIGHT:          |
| SPEC.: 18W Slim Downlight, 3CCT DIMMABLE IP20 In Front DIM.:                     | SERIAL No.: 18W 4000K |                  |
| MFR.: LIT by CARDI                                                               | SUR.: $\phi 0.249$    | 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         | 1.04                  | .99  | .95  | 1.01                            | .97  | .94  | .97  | .94  | .91  | .93  | .90  | .88  | .89  | .87  | .85  | .83 |
| 2.0         | .90                   | .83  | .78  | .88                             | .82  | .77  | .85  | .79  | .75  | .81  | .77  | .73  | .78  | .75  | .71  | .69 |
| 3.0         | .79                   | .71  | .64  | .78                             | .70  | .64  | .75  | .68  | .63  | .72  | .66  | .61  | .69  | .64  | .60  | .58 |
| 4.0         | .70                   | .61  | .54  | .69                             | .60  | .54  | .66  | .59  | .53  | .64  | .58  | .53  | .62  | .56  | .52  | .50 |
| 5.0         | .63                   | .54  | .47  | .61                             | .53  | .47  | .59  | .52  | .46  | .57  | .51  | .45  | .55  | .50  | .45  | .43 |
| 6.0         | .56                   | .47  | .41  | .55                             | .47  | .41  | .54  | .46  | .40  | .52  | .45  | .40  | .50  | .44  | .40  | .37 |
| 7.0         | .51                   | .42  | .36  | .50                             | .42  | .36  | .49  | .41  | .36  | .47  | .40  | .35  | .46  | .40  | .35  | .33 |
| 8.0         | .47                   | .38  | .32  | .46                             | .38  | .32  | .45  | .37  | .32  | .43  | .37  | .32  | .42  | .36  | .31  | .29 |
| 9.0         | .43                   | .34  | .29  | .42                             | .34  | .29  | .41  | .34  | .29  | .40  | .33  | .28  | .39  | .33  | .28  | .26 |
| 10.0        | .39                   | .31  | .26  | .39                             | .31  | .26  | .38  | .31  | .26  | .37  | .30  | .26  | .36  | .30  | .26  | .24 |



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:8.800m [K=1.0000]  
Remarks:

### WEC AND CCEC

|                                                                                  |                    |                       |
|----------------------------------------------------------------------------------|--------------------|-----------------------|
| Test:U:229.92V I:0.0862A P:18.528W PF:0.9347 Freq:49.99Hz<br>Lamp Flux:1530x1 lm |                    |                       |
| NAME: SGS SKU No.: 0017440192                                                    | TYPE:              | WEIGHT:               |
| SPEC.: 18W Slim Downlight, 3CCT DIMMABLE IP20 In Front DIM.:                     |                    | SERIAL No.: 18W 4000K |
| MFR.: LIT by CARDI                                                               | SUR.: $\phi$ 0.249 | 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  | .311                  | .177 | .056 | .304 | .174 | .055 | .291                            | .167 | .053 | .279 | .161 | .052 | .267 | .155 | .050 |   |
| 2.0  | .293                  | .160 | .049 | .286 | .158 | .049 | .274                            | .153 | .047 | .264 | .148 | .046 | .253 | .143 | .045 |   |
| 3.0  | .271                  | .144 | .043 | .265 | .142 | .043 | .255                            | .138 | .042 | .245 | .134 | .041 | .236 | .131 | .040 |   |
| 4.0  | .250                  | .130 | .038 | .245 | .128 | .038 | .235                            | .125 | .037 | .227 | .122 | .037 | .219 | .119 | .036 |   |
| 5.0  | .231                  | .118 | .034 | .226 | .116 | .034 | .218                            | .114 | .033 | .210 | .111 | .033 | .203 | .109 | .033 |   |
| 6.0  | .214                  | .107 | .031 | .210 | .106 | .031 | .203                            | .104 | .030 | .196 | .102 | .030 | .189 | .100 | .030 |   |
| 7.0  | .199                  | .098 | .028 | .196 | .097 | .028 | .189                            | .096 | .028 | .183 | .094 | .027 | .177 | .092 | .027 |   |
| 8.0  | .186                  | .091 | .026 | .183 | .090 | .025 | .177                            | .088 | .025 | .171 | .087 | .025 | .166 | .085 | .025 |   |
| 9.0  | .174                  | .084 | .024 | .171 | .084 | .023 | .166                            | .082 | .023 | .161 | .081 | .023 | .156 | .079 | .023 |   |
| 10.0 | .164                  | .078 | .022 | .161 | .078 | .022 | .156                            | .077 | .022 | .152 | .075 | .021 | .148 | .074 | .021 |   |

| 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  | .192                  | .192 | .192 | .164 | .164 | .164 | .112                                        | .112 | .112 | .064 | .064 | .064 | .021 | .021 | .021 |   |
| 1.0  | .182                  | .158 | .136 | .156 | .136 | .117 | .107                                        | .093 | .081 | .061 | .054 | .047 | .020 | .017 | .015 |   |
| 2.0  | .174                  | .134 | .100 | .149 | .115 | .086 | .102                                        | .080 | .060 | .059 | .046 | .035 | .019 | .015 | .012 |   |
| 3.0  | .167                  | .116 | .076 | .143 | .100 | .066 | .098                                        | .070 | .046 | .057 | .041 | .027 | .018 | .013 | .009 |   |
| 4.0  | .159                  | .103 | .060 | .136 | .089 | .052 | .094                                        | .062 | .037 | .054 | .036 | .022 | .017 | .012 | .007 |   |
| 5.0  | .152                  | .093 | .049 | .130 | .080 | .043 | .090                                        | .056 | .030 | .052 | .033 | .018 | .017 | .011 | .006 |   |
| 6.0  | .144                  | .084 | .041 | .124 | .073 | .036 | .086                                        | .051 | .025 | .050 | .030 | .015 | .016 | .010 | .005 |   |
| 7.0  | .138                  | .077 | .035 | .118 | .067 | .031 | .082                                        | .047 | .022 | .047 | .028 | .013 | .015 | .009 | .004 |   |
| 8.0  | .131                  | .072 | .031 | .113 | .062 | .027 | .078                                        | .044 | .019 | .045 | .026 | .011 | .015 | .008 | .004 |   |
| 9.0  | .125                  | .067 | .027 | .108 | .058 | .024 | .075                                        | .041 | .017 | .043 | .024 | .010 | .014 | .008 | .003 |   |
| 10.0 | .119                  | .062 | .024 | .103 | .054 | .021 | .071                                        | .038 | .015 | .042 | .023 | .009 | .013 | .007 | .003 |   |

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:8.800m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

|                                                                                  |                  |      |      |      |                           |                |      |                       |      |      |      |
|----------------------------------------------------------------------------------|------------------|------|------|------|---------------------------|----------------|------|-----------------------|------|------|------|
| Test:U:229.92V I:0.0862A P:18.528W PF:0.9347 Freq:49.99Hz<br>Lamp Flux:1530x1 lm |                  |      |      |      |                           |                |      |                       |      |      |      |
| NAME: SGS SKU No.: 0017440192                                                    |                  |      |      |      | TYPE:                     |                |      | WEIGHT:               |      |      |      |
| SPEC.: 18W Slim Downlight, 3CCT DIMMABLE IP20 In Front                           |                  |      |      |      | DIM.:                     |                |      | SERIAL No.: 18W 4000K |      |      |      |
| MFR.: LIT by CARDI                                                               |                  |      |      |      | SUR.: $\varnothing 0.249$ |                |      | 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                                                                    | 2H               | 21.5 | 23.0 | 21.8 | 23.2                      | 23.4           | 21.9 | 23.4                  | 22.2 | 23.6 | 23.8 |
|                                                                                  | 3H               | 22.9 | 24.3 | 23.2 | 24.5                      | 24.7           | 23.4 | 24.8                  | 23.7 | 25.1 | 25.3 |
|                                                                                  | 4H               | 23.4 | 24.7 | 23.7 | 25.0                      | 25.2           | 24.1 | 25.4                  | 24.4 | 25.7 | 25.9 |
|                                                                                  | 6H               | 23.7 | 24.9 | 24.0 | 25.2                      | 25.5           | 24.6 | 25.8                  | 24.9 | 26.1 | 26.4 |
|                                                                                  | 8H               | 23.7 | 25.0 | 24.1 | 25.2                      | 25.5           | 24.7 | 25.9                  | 25.1 | 26.2 | 26.5 |
|                                                                                  | 12H              | 23.7 | 24.9 | 24.1 | 25.2                      | 25.5           | 24.8 | 26.0                  | 25.2 | 26.3 | 26.6 |
| 4H                                                                               | 2H               | 22.1 | 23.5 | 22.4 | 23.7                      | 24.0           | 22.4 | 23.8                  | 22.7 | 24.0 | 24.3 |
|                                                                                  | 3H               | 23.7 | 24.9 | 24.0 | 25.2                      | 25.5           | 24.2 | 25.3                  | 24.5 | 25.6 | 26.0 |
|                                                                                  | 4H               | 24.3 | 25.4 | 24.7 | 25.7                      | 26.0           | 24.9 | 26.0                  | 25.3 | 26.3 | 26.7 |
|                                                                                  | 6H               | 24.7 | 25.7 | 25.1 | 26.0                      | 26.4           | 25.5 | 26.5                  | 25.9 | 26.8 | 27.2 |
|                                                                                  | 8H               | 24.8 | 25.7 | 25.3 | 26.1                      | 26.5           | 25.8 | 26.6                  | 26.2 | 27.0 | 27.4 |
|                                                                                  | 12H              | 24.9 | 25.7 | 25.3 | 26.1                      | 26.5           | 25.9 | 26.7                  | 26.3 | 27.1 | 27.5 |
| 8H                                                                               | 4H               | 24.6 | 25.5 | 25.0 | 25.9                      | 26.2           | 25.1 | 26.0                  | 25.6 | 26.4 | 26.8 |
|                                                                                  | 6H               | 25.2 | 25.9 | 25.6 | 26.3                      | 26.7           | 25.9 | 26.6                  | 26.3 | 27.0 | 27.5 |
|                                                                                  | 8H               | 25.3 | 26.0 | 25.8 | 26.4                      | 26.9           | 26.2 | 26.9                  | 26.7 | 27.3 | 27.7 |
|                                                                                  | 12H              | 25.4 | 26.0 | 25.9 | 26.4                      | 26.9           | 26.4 | 27.0                  | 26.9 | 27.5 | 27.9 |
| 12H                                                                              | 4H               | 24.6 | 25.4 | 25.0 | 25.8                      | 26.2           | 25.1 | 26.0                  | 25.6 | 26.4 | 26.8 |
|                                                                                  | 6H               | 25.2 | 25.9 | 25.7 | 26.3                      | 26.8           | 25.9 | 26.6                  | 26.4 | 27.0 | 27.5 |
|                                                                                  | 8H               | 25.4 | 26.0 | 25.9 | 26.5                      | 26.9           | 26.3 | 26.8                  | 26.8 | 27.3 | 27.8 |
| Variations with the observer position at spacings(CIE Pub.117):                  |                  |      |      |      |                           |                |      |                       |      |      |      |
| S = 1.0H                                                                         | + 0.2 / - 0.2    |      |      |      |                           | + 0.1 / - 0.2  |      |                       |      |      |      |
| 1.5H                                                                             | + 0.2 / - 0.4    |      |      |      |                           | + 0.2 / - 0.3  |      |                       |      |      |      |
| 2.0H                                                                             | + 0.2 / - 0.3    |      |      |      |                           | + 0.2 / - 0.3  |      |                       |      |      |      |

CIE Pub.117, 1530 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 1.5$ )  
Area: 0.0238 m<sup>2</sup>

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:8.800m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

|                                                                                  |                    |                       |
|----------------------------------------------------------------------------------|--------------------|-----------------------|
| Test:U:229.92V I:0.0862A P:18.528W PF:0.9347 Freq:49.99Hz<br>Lamp Flux:1530x1 lm |                    |                       |
| NAME: SGS SKU No.: 0017440192                                                    | TYPE:              | WEIGHT:               |
| SPEC.: 18W Slim Downlight, 3CCT DIMMABLE IP20 In Front DIM.:                     |                    | SERIAL No.: 18W 4000K |
| MFR.: LIT by CARDI                                                               | SUR.: $\phi$ 0.249 | Shielding Angle:      |

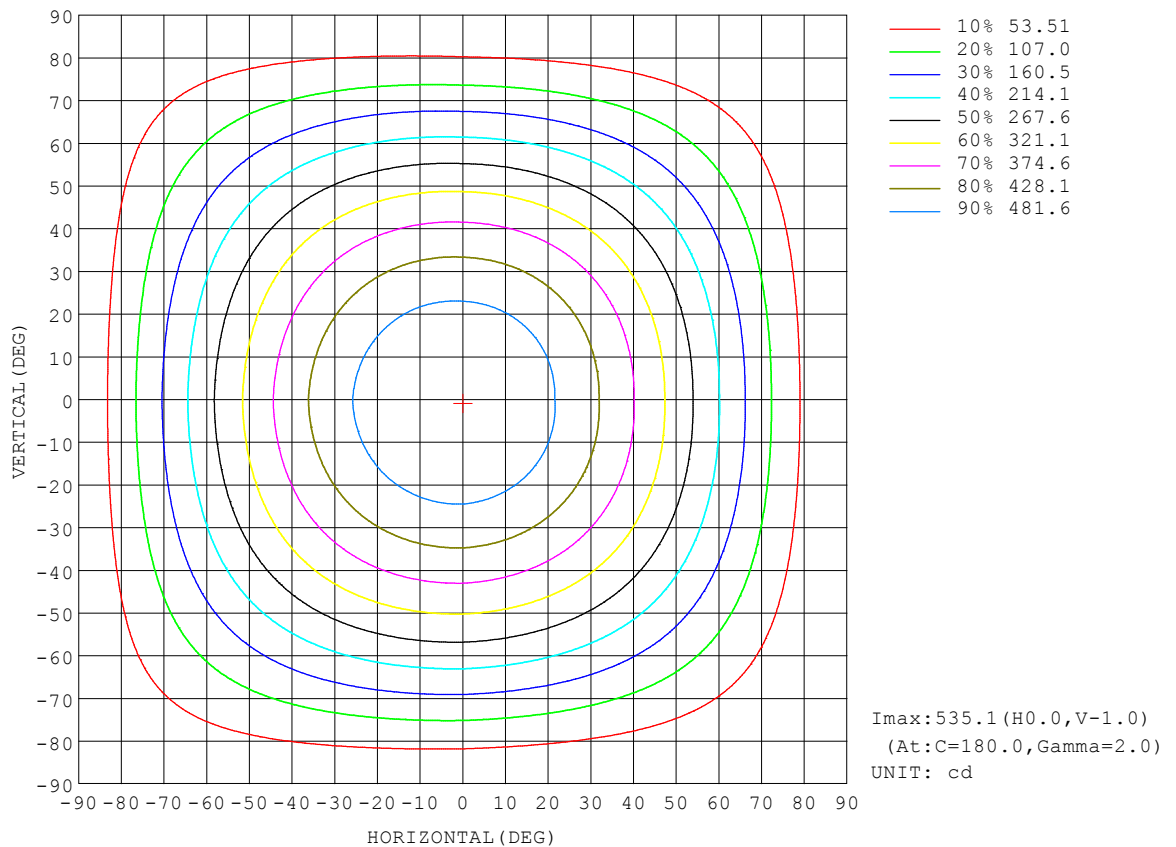
| REFLECTANCE                      |                                                      |     |           |     |     |     |     |               |     |        |
|----------------------------------|------------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 57                                                   | 46  | 39        | 57  | 45  | 39  | 55  | 45            | 38  | 32     |
| 0.80                             | 67                                                   | 56  | 48        | 66  | 55  | 48  | 65  | 54            | 48  | 41     |
| 1.00                             | 76                                                   | 65  | 57        | 75  | 64  | 57  | 72  | 65            | 56  | 49     |
| 1.25                             | 83                                                   | 72  | 65        | 81  | 72  | 65  | 79  | 70            | 64  | 57     |
| 1.50                             | 88                                                   | 78  | 71        | 86  | 77  | 70  | 83  | 75            | 69  | 62     |
| 2.00                             | 95                                                   | 86  | 80        | 93  | 85  | 79  | 89  | 83            | 77  | 69     |
| 2.50                             | 99                                                   | 91  | 85        | 97  | 89  | 84  | 93  | 87            | 82  | 74     |
| 3.00                             | 102                                                  | 95  | 90        | 100 | 94  | 89  | 96  | 91            | 86  | 78     |
| 4.00                             | 106                                                  | 100 | 96        | 104 | 99  | 94  | 99  | 95            | 92  | 83     |
| 5.00                             | 109                                                  | 104 | 100       | 106 | 102 | 98  | 101 | 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: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:8.800m [K=1.0000]  
Remarks:

### ISOCANDELA DIAGRAM

|                                                                                  |                    |                       |
|----------------------------------------------------------------------------------|--------------------|-----------------------|
| Test:U:229.92V I:0.0862A P:18.528W PF:0.9347 Freq:49.99Hz<br>Lamp Flux:1530x1 lm |                    |                       |
| NAME: SGS SKU No.: 0017440192                                                    | TYPE:              | WEIGHT:               |
| SPEC.: 18W Slim Downlight, 3CCT DIMMABLE IP20 In Front DIM.:                     |                    | SERIAL No.: 18W 4000K |
| MFR.: LIT by CARDI                                                               | SUR.: $\phi$ 0.249 | Shielding Angle:      |

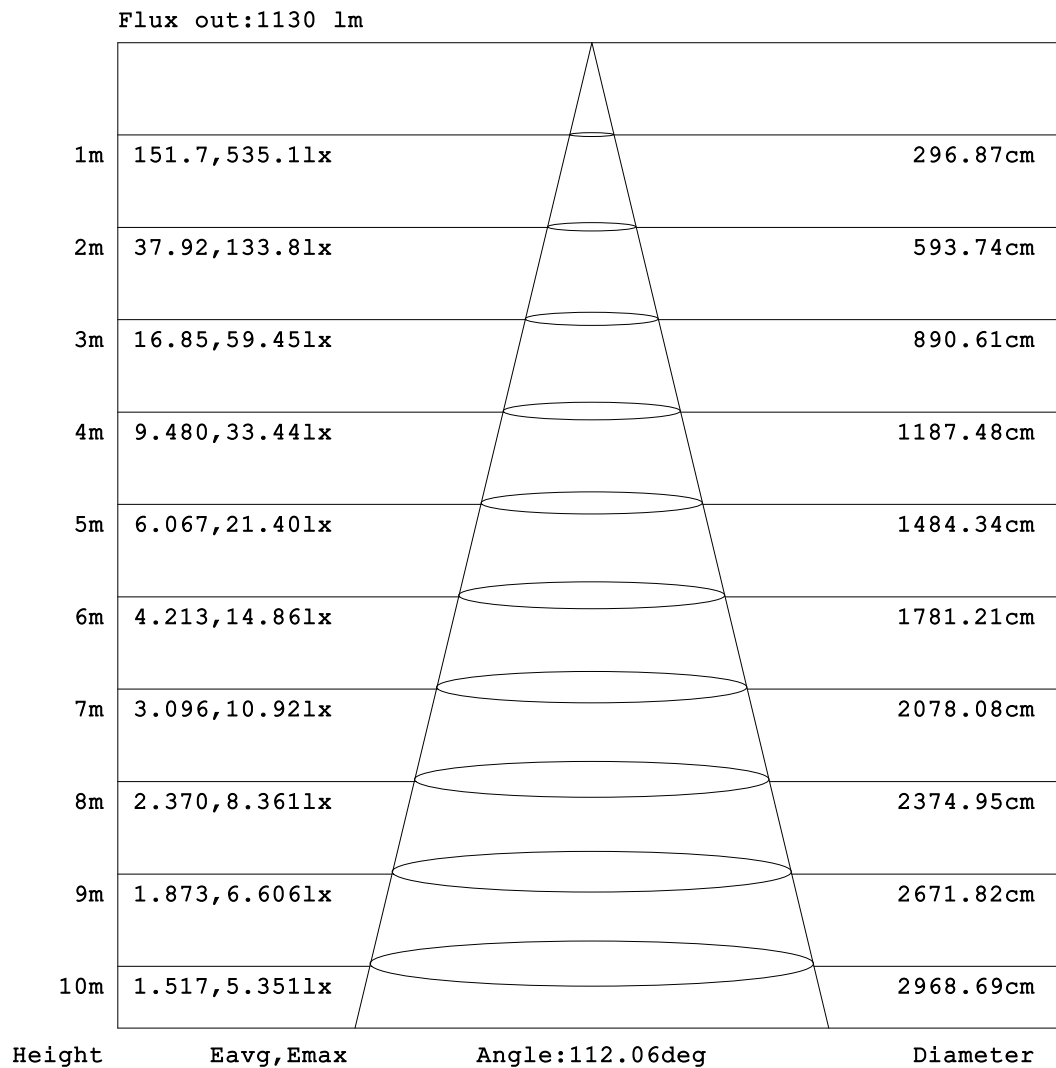


C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:8.800m [K=1.0000]  
Remarks:

### AAI Figure

|                                                                                  |                    |                       |
|----------------------------------------------------------------------------------|--------------------|-----------------------|
| Test:U:229.92V I:0.0862A P:18.528W PF:0.9347 Freq:49.99Hz<br>Lamp Flux:1530x1 lm |                    |                       |
| NAME: SGS SKU No.: 0017440192                                                    | TYPE:              | WEIGHT:               |
| SPEC.: 18W Slim Downlight, 3CCT DIMMABLE IP20 In Front DIM.:                     |                    | SERIAL No.: 18W 4000K |
| MFR.: LIT by CARDI                                                               | SUR.: $\phi$ 0.249 | Shielding Angle:      |



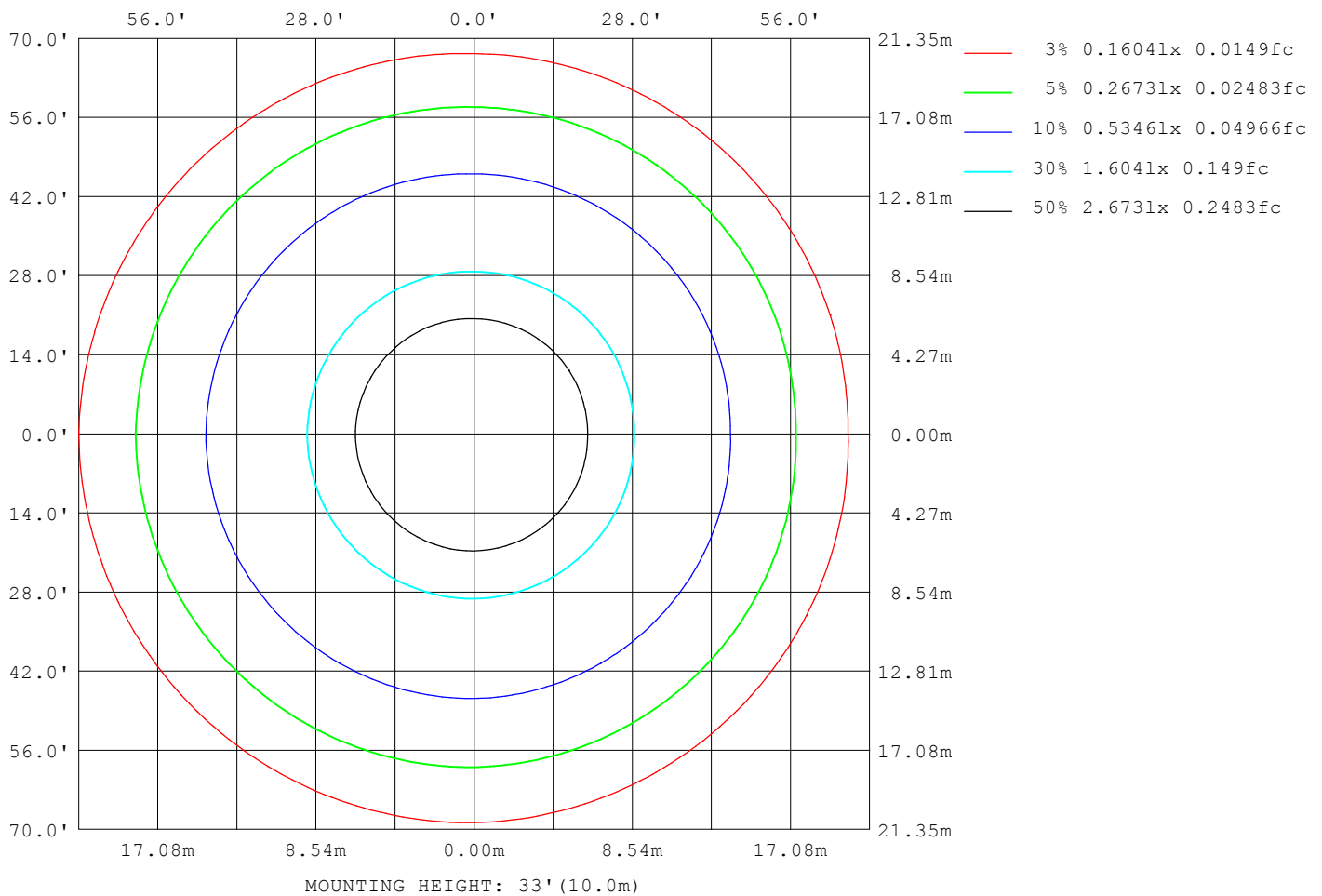
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:8.800m [K=1.0000]  
Remarks:

## ISOLUX DIAGRAM

|                                                                                  |                       |                  |
|----------------------------------------------------------------------------------|-----------------------|------------------|
| Test:U:229.92V I:0.0862A P:18.528W PF:0.9347 Freq:49.99Hz<br>Lamp Flux:1530x1 lm |                       |                  |
| NAME: SGS SKU No.: 0017440192                                                    | TYPE:                 | WEIGHT:          |
| SPEC.: 18W Slim Downlight, 3CCT DIMMABLE IP20 In Front DIM.:                     | SERIAL No.: 18W 4000K |                  |
| MFR.: LIT by CARDI                                                               | SUR.: $\phi$ 0.249    | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:8.800m [K=1.0000]  
Remarks:

### LED Avg.L Report

|                                                                                  |                    |                       |
|----------------------------------------------------------------------------------|--------------------|-----------------------|
| Test:U:229.92V I:0.0862A P:18.528W PF:0.9347 Freq:49.99Hz<br>Lamp Flux:1530x1 lm |                    |                       |
| NAME: SGS SKU No.: 0017440192                                                    | TYPE:              | WEIGHT:               |
| SPEC.: 18W Slim Downlight, 3CCT DIMMABLE IP20 In Front DIM.:                     |                    | SERIAL No.: 18W 4000K |
| MFR.: LIT by CARDI                                                               | SUR.: $\phi$ 0.249 | Shielding Angle:      |

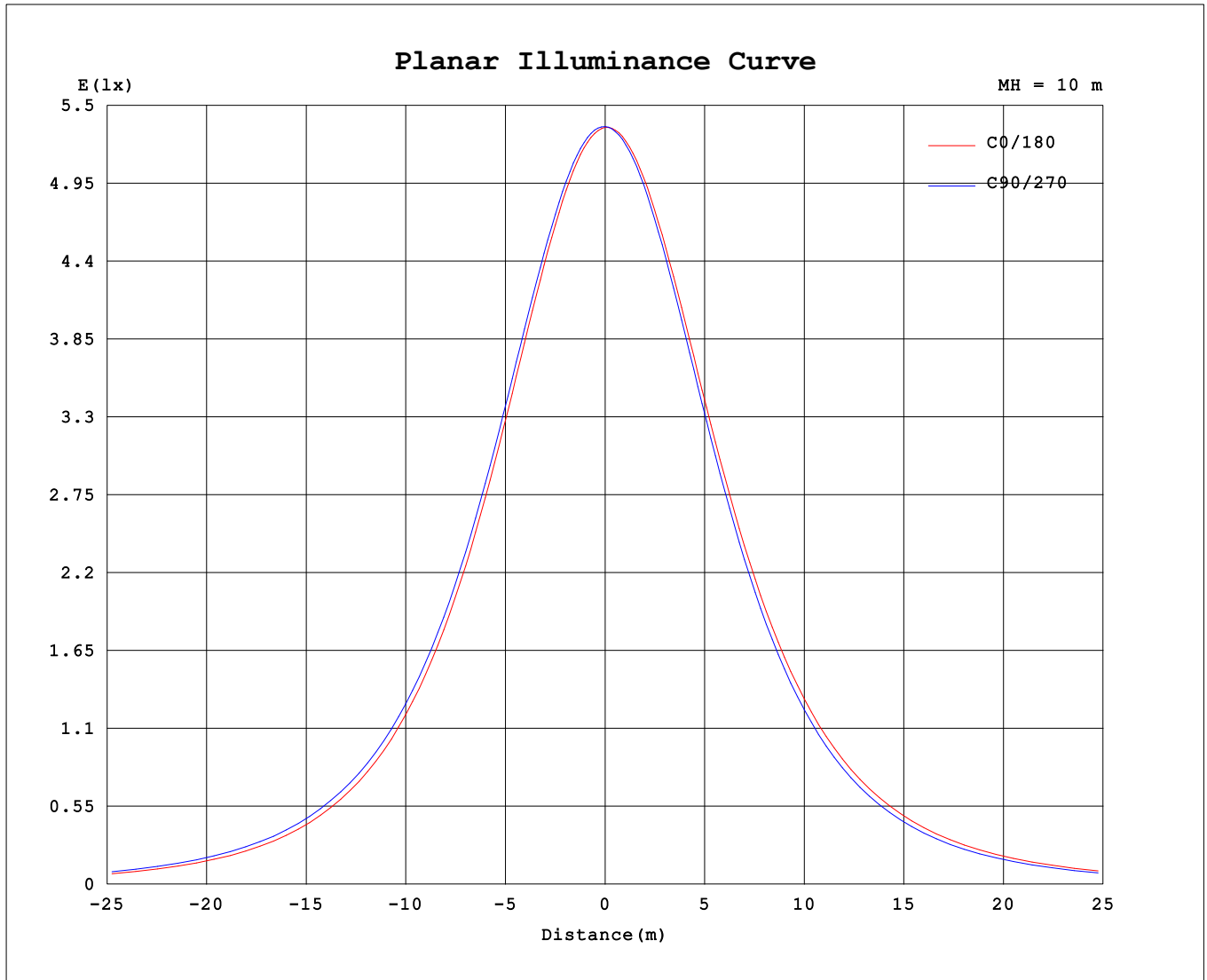
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 18903 |
| L_0~180 (75) av  | 16658 |
| L_0~180 (85) av  | 13078 |
| L_90~270 (65) av | 18854 |
| L_90~270 (75) av | 16522 |
| L_90~270 (85) av | 12476 |
| L_45 (65) av     | 18990 |
| L_45 (75) av     | 16755 |
| L_45 (85) av     | 13112 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:8.800m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2024-09-27

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
 Humidity: 65.0%  
 Test Distance: 8.800m [K=1.0000]  
 Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                  |                    |                       |
|----------------------------------------------------------------------------------|--------------------|-----------------------|
| Test:U:229.92V I:0.0862A P:18.528W PF:0.9347 Freq:49.99Hz<br>Lamp Flux:1530x1 lm |                    |                       |
| NAME: SGS SKU No.: 0017440192                                                    | TYPE:              | WEIGHT:               |
| SPEC.: 18W Slim Downlight, 3CCT DIMMABLE IP20 In Front DIM.:                     |                    | SERIAL No.: 18W 4000K |
| MFR.: LIT by CARDI                                                               | SUR.: $\phi$ 0.249 | Shielding Angle:      |

Table--1

UNIT: cd

| C (DEG)<br>γ (DEG) | 0    | 90   | 180  | 270  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                  | 535  | 535  | 535  | 535  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                  | 530  | 533  | 534  | 532  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                 | 521  | 527  | 529  | 524  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                 | 507  | 515  | 519  | 511  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                 | 489  | 499  | 504  | 494  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                 | 466  | 479  | 485  | 472  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                 | 440  | 455  | 462  | 447  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                 | 409  | 427  | 435  | 417  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                 | 376  | 395  | 404  | 385  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                 | 340  | 361  | 371  | 349  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                 | 300  | 323  | 334  | 310  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                 | 259  | 283  | 294  | 269  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                 | 215  | 241  | 253  | 226  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                 | 171  | 197  | 209  | 182  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                 | 127  | 153  | 165  | 138  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                 | 84.7 | 109  | 121  | 94.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                 | 46.2 | 67.5 | 78.6 | 54.9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                 | 13.5 | 31.2 | 40.7 | 20.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                 | 0.05 | 2.64 | 9.38 | 0.06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                 | 0.08 | 0.09 | 0.09 | 0.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100                | 0.16 | 0.16 | 0.16 | 0.17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105                | 0.25 | 0.25 | 0.25 | 0.27 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110                | 0.34 | 0.35 | 0.36 | 0.39 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115                | 0.43 | 0.45 | 0.48 | 0.49 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120                | 0.54 | 0.55 | 0.57 | 0.60 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125                | 0.62 | 0.65 | 0.68 | 0.70 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130                | 0.71 | 0.73 | 0.78 | 0.80 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135                | 0.78 | 0.82 | 0.89 | 0.89 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140                | 0.85 | 0.89 | 0.98 | 0.98 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145                | 0.92 | 0.95 | 1.06 | 1.06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150                | 1.00 | 1.03 | 1.16 | 1.13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155                | 1.07 | 1.10 | 1.23 | 1.21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160                | 1.15 | 1.17 | 1.31 | 1.27 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165                | 1.22 | 1.24 | 1.38 | 1.33 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170                | 1.29 | 1.29 | 1.44 | 1.38 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175                | 1.36 | 1.36 | 1.45 | 1.42 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180                | 1.44 | 1.43 | 1.45 | 1.43 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-09-27

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
γ Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:8.800m [K=1.0000]  
Remarks: