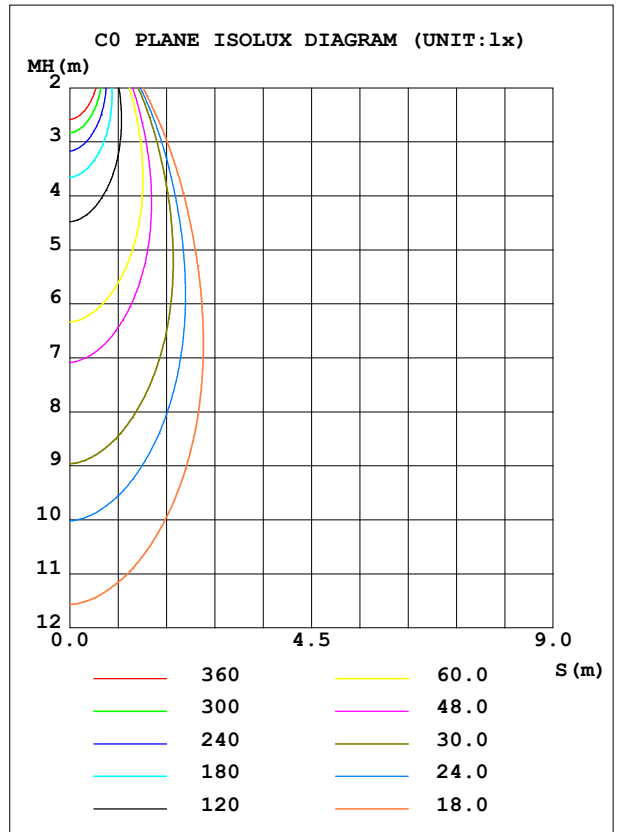
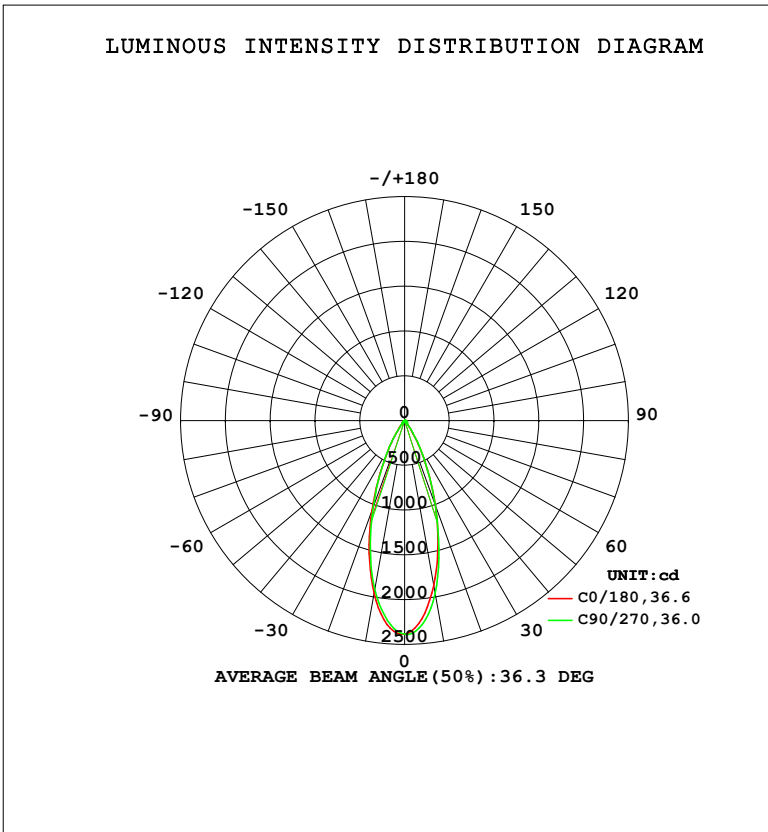


LUMINAIRE PHOTOMETRIC TEST REPORT

|   |       |                  |
|---|-------|------------------|
| Test:U:119.82V I:0.1150A P:13.581W PF:0.9855 Freq:59.98Hz |       |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.23x1 lm    |       |                  |
| NAME: AD-LED-4-S15W-3018K                                 | TYPE: | WEIGHT:          |
| SPEC.: 3000K  | DIM.: | SERIAL No.:      |
| MFR.: LTS   | SUR.: | Shielding Angle: |

| DATA OF LAMP      |                     | PHOTOMETRIC DATA |        |                          |          |
|-------------------|---------------------|------------------|--------|--------------------------|----------|
| MODEL             | AD-LED-4-S15W-3018K | Imax (cd)        | 2390   | S/MH (C0/180)            | 0.61     |
| NOMINAL POWER (W) | 15                  | LOR (%)          | 100.0  | S/MH (C90/270)           | 0.59     |
| RATED VOLTAGE (V) | 120                 | TOTAL FLUX (lm)  | 1047.2 | $\eta$ UP, DN (C0-180)   | 0.0,49.9 |
| NOMINAL FLUX (lm) | 1047.23             | CIE CLASS        | DIRECT | $\eta$ UP, DN (C180-360) | 0.0,50.1 |
| LAMPS INSIDE      | 1                   | $\eta$ up (%)    | 0.0    | CIBSE SHR NOM            | 0.50     |
| TEST VOLTAGE (V)  | 120                 | $\eta$ down (%)  | 100.0  | CIBSE SHR MAX            | 0.60     |



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2023-08-02

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.080m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

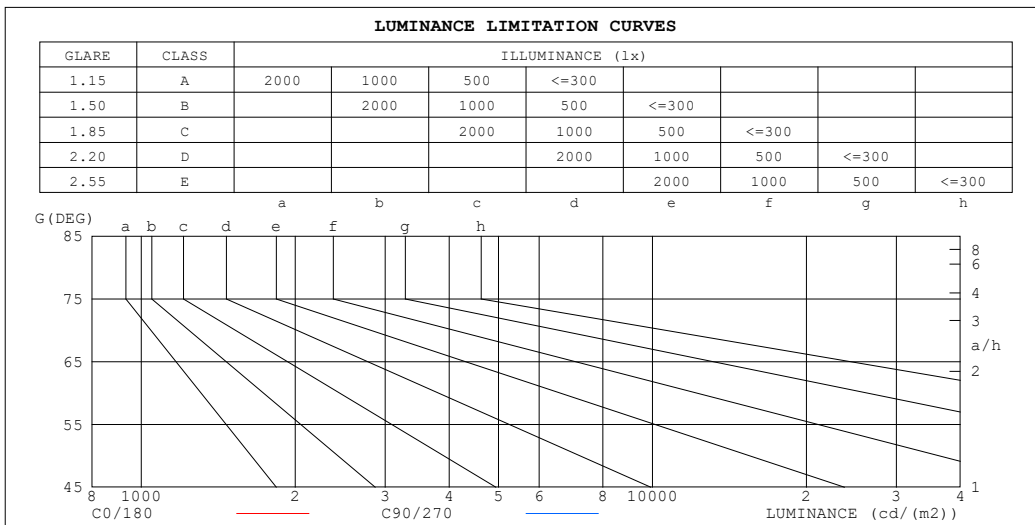
| $\gamma$ | C0                    | C45    | C90    | C135   | C180   | C225   | C270   | C315   | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum,lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|-----------|
| 10       | 1873                  | 1933   | 1965   | 1970   | 1961   | 1936   | 1917   | 1884   | 0- 10    | 204.8       | 204.8        | 19.6,19.6 |
| 20       | 1004                  | 1019   | 1004   | 1039   | 1075   | 1065   | 1030   | 1006   | 10- 20   | 407.3       | 612.1        | 58.4,58.4 |
| 30       | 310.8                 | 317.9  | 332.4  | 336.1  | 337.0  | 338.5  | 345.1  | 321.9  | 20- 30   | 288.3       | 900.4        | 86,86     |
| 40       | 45.42                 | 45.89  | 44.27  | 45.76  | 49.39  | 49.71  | 47.41  | 46.00  | 30- 40   | 88.87       | 989.3        | 94.5,94.5 |
| 50       | 23.49                 | 25.65  | 26.93  | 26.47  | 25.15  | 26.90  | 28.07  | 26.06  | 40- 50   | 26.15       | 1015         | 97,97     |
| 60       | 11.94                 | 14.12  | 15.73  | 14.41  | 13.24  | 14.52  | 15.48  | 13.52  | 50- 60   | 17.47       | 1033         | 98.6,98.6 |
| 70       | 5.260                 | 6.022  | 6.870  | 6.077  | 5.821  | 6.202  | 6.443  | 5.614  | 60- 70   | 9.431       | 1042         | 99.5,99.5 |
| 80       | 1.431                 | 1.818  | 2.530  | 2.093  | 1.906  | 1.970  | 2.266  | 1.626  | 70- 80   | 4.185       | 1047         | 99.9,99.9 |
| 90       | 0.0458                | 0.0513 | 0.0652 | 0.0450 | 0.0414 | 0.0373 | 0.0452 | 0.0312 | 80- 90   | 0.6942      | 1047         | 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:24.3 °C  
 Operators:  
 Test Date:2023-08-02

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

|   |       |                  |
|---|-------|------------------|
| Test:U:119.82V I:0.1150A P:13.581W PF:0.9855 Freq:59.98Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.23x1 lm |       |                  |
| NAME: AD-LED-4-S15W-3018K   | TYPE: | WEIGHT:          |
| SPEC.: 3000K  | DIM.: | SERIAL No.:      |
| MFR.: LTS   | SUR.: | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 11     | 81      |
| 80                | 75     | 131     |
| 75                | 112    | 164     |
| 70                | 140    | 180     |
| 65                | 159    | 236     |
| 60                | 217    | 283     |
| 55                | 272    | 325     |
| 50                | 332    | 376     |
| 45                | 387    | 424     |

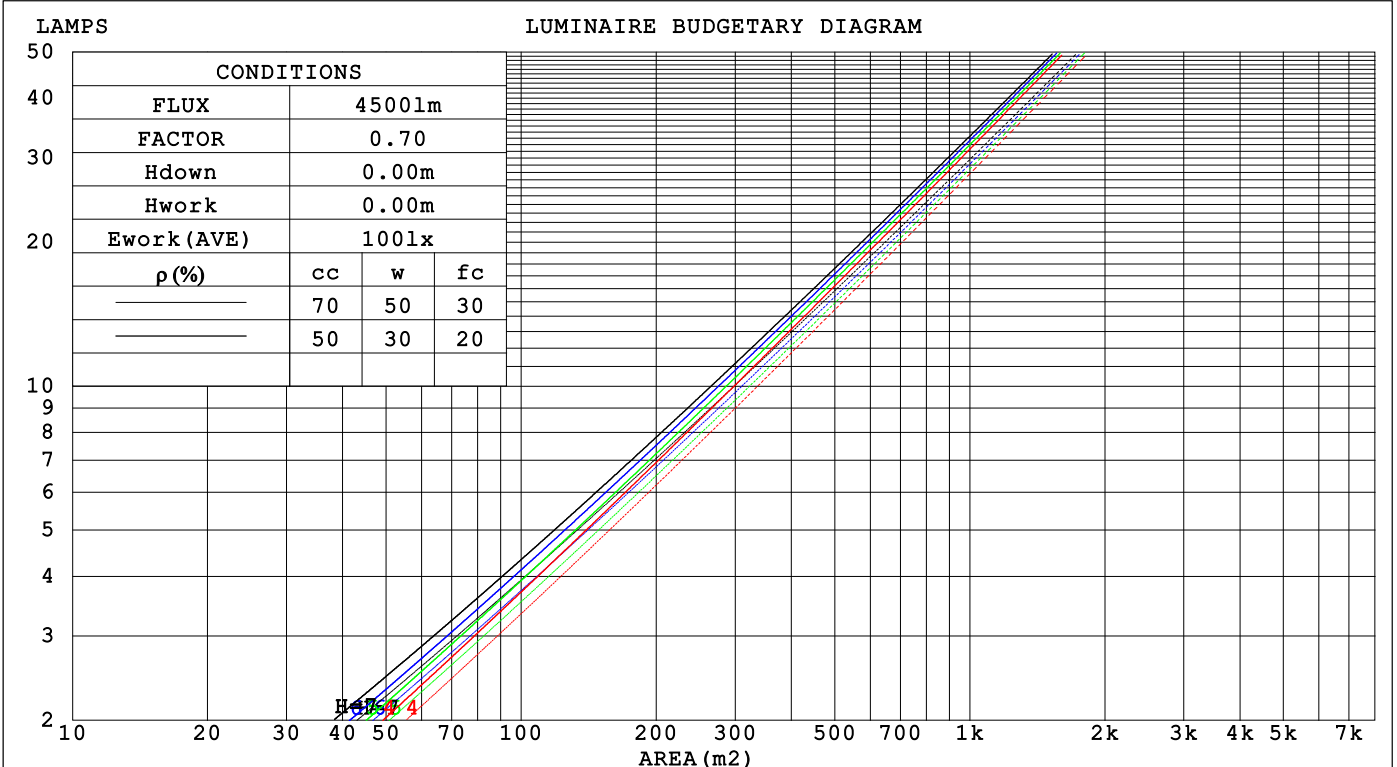
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2023-08-02

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.080m [K=1.0000]  
 Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

|   |       |                  |
|---|-------|------------------|
| Test:U:119.82V I:0.1150A P:13.581W PF:0.9855 Freq:59.98Hz |       |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.23x1 lm    |       |                  |
| NAME: AD-LED-4-S15W-3018K                                 | TYPE: | WEIGHT:          |
| SPEC.: 3000K  | DIM.: | SERIAL No.:      |
| MFR.: LTS   | SUR.: | Shielding Angle: |

|             |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| $\rho_{cc}$ | 80%   |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0    |
| $\rho_w$    | 50%   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0    |
| $\rho_{fc}$ | 20%   |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0    |
| RCR         | RCR:Room Cavity Ratio Coefficients of Utilization(CU) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.0         | 1.19  | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 1.00 |
| 1.0         | 1.12  | 1.09 | 1.07 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.02 | 1.02 | 1.00 | .99  | .98  | .97  | .96  | .95  |
| 2.0         | 1.05  | 1.01 | .98  | 1.03 | .90  | .97  | .90  | .97  | .95  | .97  | .95  | .93  | .94  | .93  | .91  | .89  |
| 3.0         | .99   | .95  | .91  | .98  | .94  | .90  | .95  | .92  | .89  | .93  | .90  | .88  | .90  | .88  | .86  | .85  |
| 4.0         | .94   | .89  | .85  | .93  | .88  | .85  | .91  | .87  | .84  | .89  | .85  | .83  | .87  | .84  | .82  | .80  |
| 5.0         | .89   | .84  | .80  | .88  | .83  | .80  | .86  | .82  | .79  | .85  | .81  | .78  | .83  | .80  | .78  | .76  |
| 6.0         | .85   | .80  | .76  | .84  | .79  | .76  | .83  | .78  | .75  | .81  | .77  | .75  | .80  | .77  | .74  | .73  |
| 7.0         | .81   | .76  | .72  | .80  | .75  | .72  | .79  | .75  | .71  | .78  | .74  | .71  | .77  | .73  | .71  | .70  |
| 8.0         | .77   | .72  | .69  | .77  | .72  | .68  | .76  | .71  | .68  | .75  | .71  | .68  | .74  | .70  | .68  | .66  |
| 9.0         | .74   | .69  | .66  | .74  | .69  | .65  | .73  | .68  | .65  | .72  | .68  | .65  | .71  | .67  | .65  | .64  |
| 10.0        | .71   | .66  | .63  | .71  | .66  | .63  | .70  | .66  | .63  | .69  | .65  | .62  | .69  | .65  | .62  | .61  |



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2023-08-02

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**WEC AND CCEC**

|   |       |                  |
|---|-------|------------------|
| Test:U:119.82V I:0.1150A P:13.581W PF:0.9855 Freq:59.98Hz |       |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.23x1 lm    |       |                  |
| NAME: AD-LED-4-S15W-3018K                                 | TYPE: | WEIGHT:          |
| SPEC.: 3000K  | DIM.: | SERIAL No.:      |
| MFR.: LTS   | SUR.: | Shielding Angle: |

| $\rho_{cc}$ | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0 |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|
| $\rho_w$    | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| $\rho_{fc}$ | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR         | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |
| 0.0         |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |
| 1.0         | .163                  | .092 | .029 | .156 | .089 | .028 | .143                            | .082 | .026 | .132 | .076 | .024 | .121 | .070 | .023 |   |
| 2.0         | .153                  | .084 | .026 | .148 | .081 | .025 | .137                            | .076 | .024 | .128 | .072 | .022 | .119 | .067 | .021 |   |
| 3.0         | .144                  | .077 | .023 | .140 | .075 | .023 | .131                            | .071 | .022 | .123 | .067 | .021 | .115 | .064 | .020 |   |
| 4.0         | .136                  | .071 | .021 | .132 | .069 | .020 | .125                            | .066 | .020 | .118 | .063 | .019 | .111 | .060 | .018 |   |
| 5.0         | .129                  | .066 | .019 | .126 | .065 | .019 | .119                            | .062 | .018 | .113 | .060 | .018 | .107 | .057 | .017 |   |
| 6.0         | .123                  | .062 | .018 | .120 | .060 | .017 | .114                            | .058 | .017 | .109 | .056 | .017 | .104 | .055 | .016 |   |
| 7.0         | .117                  | .058 | .016 | .114 | .057 | .016 | .109                            | .055 | .016 | .105 | .054 | .016 | .100 | .052 | .015 |   |
| 8.0         | .112                  | .055 | .015 | .109 | .054 | .015 | .105                            | .052 | .015 | .101 | .051 | .015 | .097 | .050 | .014 |   |
| 9.0         | .107                  | .052 | .014 | .105 | .051 | .014 | .101                            | .050 | .014 | .097 | .049 | .014 | .094 | .048 | .014 |   |
| 10.0        | .102                  | .049 | .014 | .101 | .049 | .014 | .097                            | .048 | .013 | .094 | .047 | .013 | .091 | .046 | .013 |   |

| $\rho_{cc}$ | 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 |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0         | .190                  | .190 | .190 | .163 | .163 | .163 | .111                                       | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0         | .170                  | .157 | .146 | .146 | .135 | .126 | .100                                       | .093 | .087 | .057 | .054 | .051 | .018 | .017 | .016 |   |
| 2.0         | .154                  | .133 | .115 | .132 | .114 | .099 | .090                                       | .079 | .069 | .052 | .046 | .041 | .017 | .015 | .013 |   |
| 3.0         | .140                  | .113 | .092 | .120 | .098 | .080 | .083                                       | .068 | .056 | .048 | .040 | .033 | .015 | .013 | .011 |   |
| 4.0         | .129                  | .098 | .075 | .111 | .085 | .065 | .076                                       | .059 | .046 | .044 | .035 | .027 | .014 | .011 | .009 |   |
| 5.0         | .120                  | .087 | .062 | .103 | .075 | .054 | .071                                       | .052 | .038 | .041 | .031 | .023 | .013 | .010 | .007 |   |
| 6.0         | .111                  | .077 | .052 | .096 | .067 | .045 | .066                                       | .047 | .032 | .038 | .027 | .019 | .012 | .009 | .006 |   |
| 7.0         | .104                  | .069 | .044 | .090 | .060 | .039 | .062                                       | .042 | .027 | .036 | .025 | .016 | .012 | .008 | .005 |   |
| 8.0         | .098                  | .063 | .038 | .085 | .054 | .033 | .059                                       | .038 | .024 | .034 | .023 | .014 | .011 | .007 | .005 |   |
| 9.0         | .093                  | .057 | .033 | .080 | .050 | .029 | .056                                       | .035 | .021 | .032 | .021 | .012 | .010 | .007 | .004 |   |
| 10.0        | .088                  | .053 | .029 | .076 | .046 | .025 | .053                                       | .032 | .018 | .031 | .019 | .011 | .010 | .006 | .004 |   |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2023-08-02

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**UGR(Unified Glare Rating) Table**

|   |       |                  |
|---|-------|------------------|
| Test:U:119.82V I:0.1150A P:13.581W PF:0.9855 Freq:59.98Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.23x1 lm |       |                  |
| NAME: AD-LED-4-S15W-3018K   | TYPE: | WEIGHT:          |
| SPEC.: 3000K  | DIM.: | SERIAL No.:      |
| MFR.: LTS   | SUR.: | Shielding Angle: |

|                |     |     |     |     |     |     |     |     |     |     |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ceiling/cavity | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| walls          | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| working plane  | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

| Room dimensions | Viewed crosswise |     |     |     |     | Viewed endwise |     |     |     |     |
|-----------------|------------------|-----|-----|-----|-----|----------------|-----|-----|-----|-----|
| x = 2H y = 2H   | 2.9              | 3.7 | 3.1 | 3.9 | 4.0 | 3.5            | 4.3 | 3.7 | 4.5 | 4.7 |
| 3H              | 3.1              | 3.8 | 3.3 | 4.0 | 4.2 | 3.8            | 4.6 | 4.1 | 4.8 | 5.0 |
| 4H              | 3.1              | 3.9 | 3.4 | 4.1 | 4.3 | 4.0            | 4.7 | 4.2 | 4.9 | 5.1 |
| 6H              | 3.1              | 3.8 | 3.4 | 4.1 | 4.3 | 4.0            | 4.7 | 4.3 | 4.9 | 5.2 |
| 8H              | 3.1              | 3.8 | 3.4 | 4.0 | 4.3 | 4.0            | 4.7 | 4.3 | 4.9 | 5.2 |
| 12H             | 3.1              | 3.7 | 3.4 | 4.0 | 4.2 | 4.0            | 4.6 | 4.3 | 4.9 | 5.2 |
| 4H 2H           | 3.0              | 3.7 | 3.2 | 3.9 | 4.1 | 3.5            | 4.3 | 3.8 | 4.5 | 4.7 |
| 3H              | 3.3              | 3.9 | 3.6 | 4.2 | 4.4 | 4.0            | 4.6 | 4.3 | 4.9 | 5.1 |
| 4H              | 3.4              | 4.0 | 3.7 | 4.3 | 4.6 | 4.2            | 4.7 | 4.5 | 5.0 | 5.3 |
| 6H              | 3.4              | 3.9 | 3.8 | 4.3 | 4.6 | 4.3            | 4.8 | 4.7 | 5.1 | 5.5 |
| 8H              | 3.4              | 3.9 | 3.8 | 4.2 | 4.6 | 4.3            | 4.8 | 4.7 | 5.1 | 5.5 |
| 12H             | 3.3              | 3.8 | 3.8 | 4.1 | 4.5 | 4.3            | 4.7 | 4.7 | 5.1 | 5.5 |
| 8H 4H           | 3.4              | 3.8 | 3.8 | 4.2 | 4.6 | 4.1            | 4.6 | 4.5 | 4.9 | 5.3 |
| 6H              | 3.4              | 3.8 | 3.9 | 4.2 | 4.6 | 4.3            | 4.7 | 4.7 | 5.1 | 5.5 |
| 8H              | 3.4              | 3.8 | 3.9 | 4.2 | 4.6 | 4.3            | 4.7 | 4.8 | 5.1 | 5.5 |
| 12H             | 3.4              | 3.7 | 3.9 | 4.1 | 4.6 | 4.3            | 4.6 | 4.8 | 5.1 | 5.5 |
| 12H 4H          | 3.3              | 3.8 | 3.8 | 4.1 | 4.5 | 4.1            | 4.5 | 4.5 | 4.9 | 5.3 |
| 6H              | 3.4              | 3.8 | 3.9 | 4.2 | 4.6 | 4.3            | 4.6 | 4.7 | 5.0 | 5.5 |
| 8H              | 3.4              | 3.7 | 3.9 | 4.1 | 4.6 | 4.3            | 4.6 | 4.8 | 5.0 | 5.5 |

|   |               |               |
|---|---------------|---------------|
| Variations with the observer position at spacings(CIE Pub.117): |               |               |
| S = 1.0H  | + 1.1 / - 1.1 | + 1.0 / - 0.9 |
| 1.5H  | + 1.7 / - 0.7 | + 1.6 / - 0.6 |
| 2.0H  | + 1.1 / - 1.2 | + 0.8 / - 0.8 |

CIE Pub.117, 1047 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.2)  
 Area: 0.111111 m2

|                      |   |
|----------------------|---|
| C Range: 0 - 360DEG  | γ Range: 0 - 90DEG                                  |
| C Interval: 22.5DEG  | γ Interval: 1.0DEG                                  |
| Test Speed: HIGH     | Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460 |
| Temperature:24.3°C   | Humidity:65.0%                                      |
| Operators:           | Test Distance:3.080m [K=1.0000]                     |
| Test Date:2023-08-02 | Remarks:  |

**UTILIZATION FACTORS TABLE**

|   |       |                  |
|---|-------|------------------|
| Test:U:119.82V I:0.1150A P:13.581W PF:0.9855 Freq:59.98Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.23x1 lm |       |                  |
| NAME: AD-LED-4-S15W-3018K   | TYPE: | WEIGHT:          |
| SPEC.: 3000K  | DIM.: | SERIAL No.:      |
| MFR.: LTS   | SUR.: | Shielding Angle: |

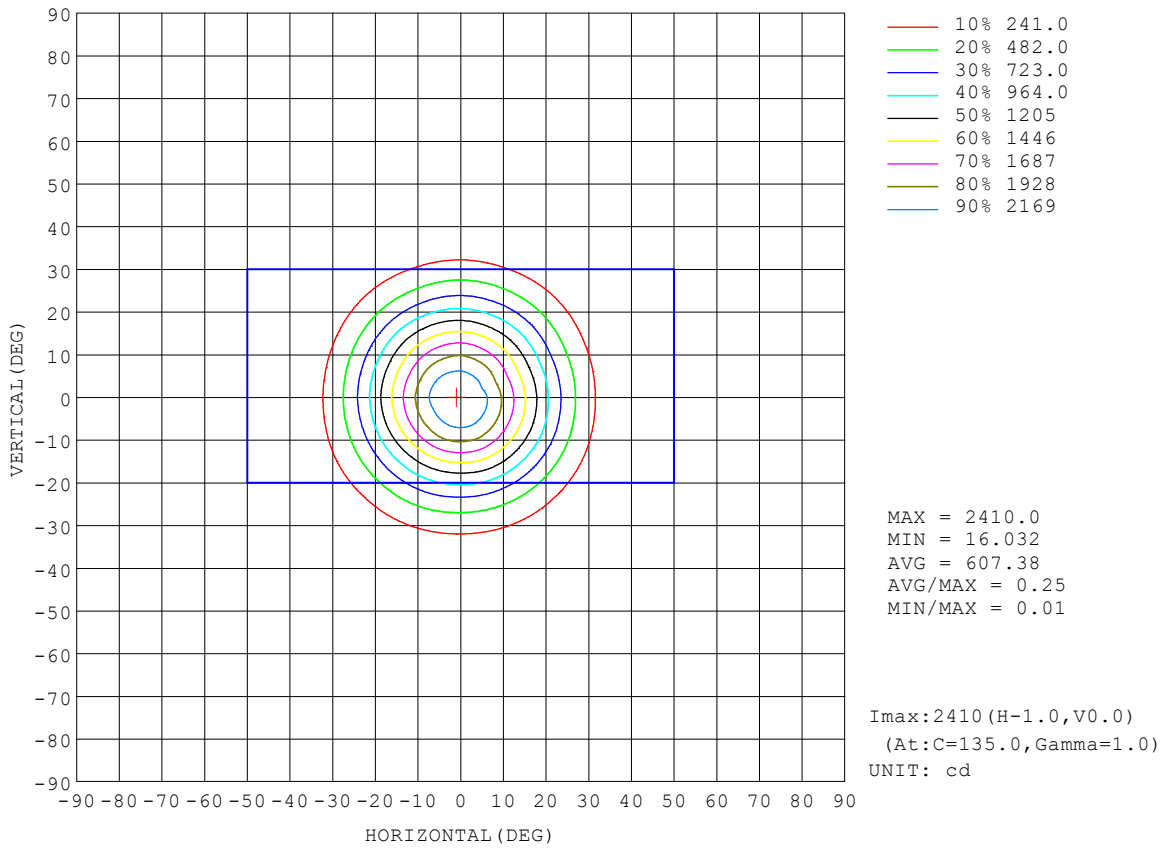
| REFLECTANCE                      |  |     |           |     |     |     |               |     |     |        |
|----------------------------------|--|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling                          | 0.8  | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 0.5           | 0.5 | 0.5 | 0      |
| Walls                            | 0.7  | 0.5 | 0.3       | 0.7 | 0.5 | 0.3 | 0.7           | 0.5 | 0.3 | 0      |
| Working plane                    | 0.2  | 0.2 | 0.2       | 0.2 | 0.2 | 0.2 | 0.2           | 0.2 | 0.2 | 0      |
| ROOM INDEX                       | UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$ |     |           |     |     |     |               |     |     |        |
| $k = 0.60$                       | 88   | 82  | 78        | 88  | 82  | 78  | 87            | 81  | 78  | 74     |
| 0.80                             | 95   | 90  | 86        | 95  | 89  | 86  | 94            | 89  | 85  | 82     |
| 1.00                             | 100  | 94  | 91        | 99  | 94  | 90  | 97            | 93  | 90  | 86     |
| 1.25                             | 103  | 98  | 95        | 102 | 98  | 95  | 101           | 97  | 94  | 90     |
| 1.50                             | 106  | 101 | 98        | 105 | 101 | 98  | 103           | 99  | 97  | 92     |
| 2.00                             | 109  | 105 | 101       | 107 | 104 | 101 | 105           | 102 | 99  | 94     |
| 2.50                             | 110  | 107 | 104       | 109 | 105 | 103 | 106           | 103 | 101 | 95     |
| 3.00                             | 112  | 109 | 106       | 110 | 107 | 105 | 107           | 104 | 103 | 96     |
| 4.00                             | 114  | 111 | 109       | 112 | 110 | 108 | 108           | 106 | 105 | 98     |
| 5.00                             | 115  | 113 | 111       | 113 | 111 | 110 | 109           | 108 | 106 | 99     |
| 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:24.3°C  
 Operators:  
 Test Date:2023-08-02

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

|   |       |                  |
|---|-------|------------------|
| Test:U:119.82V I:0.1150A P:13.581W PF:0.9855 Freq:59.98Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.23x1 lm |       |                  |
| NAME: AD-LED-4-S15W-3018K   | TYPE: | WEIGHT:          |
| SPEC.: 3000K  | DIM.: | SERIAL No.:      |
| MFR.: LTS   | SUR.: | Shielding Angle: |



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2023-08-02

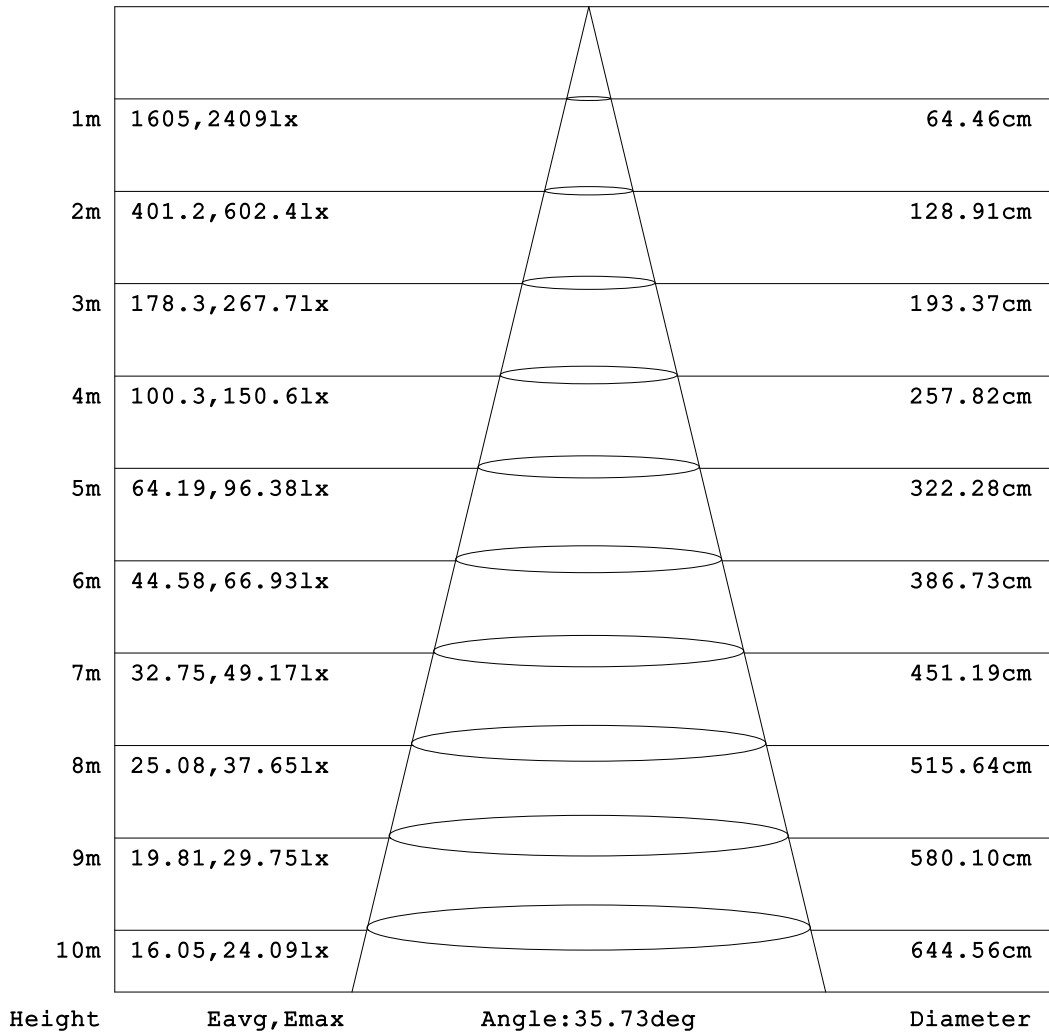
γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:



**AAI Figure**

|   |       |                  |
|---|-------|------------------|
| Test:U:119.82V I:0.1150A P:13.581W PF:0.9855 Freq:59.98Hz |       |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.23x1 lm    |       |                  |
| NAME: AD-LED-4-S15W-3018K                                 | TYPE: | WEIGHT:          |
| SPEC.: 3000K  | DIM.: | SERIAL No.:      |
| MFR.: LTS   | SUR.: | Shielding Angle: |

Flux out:532.3 lm



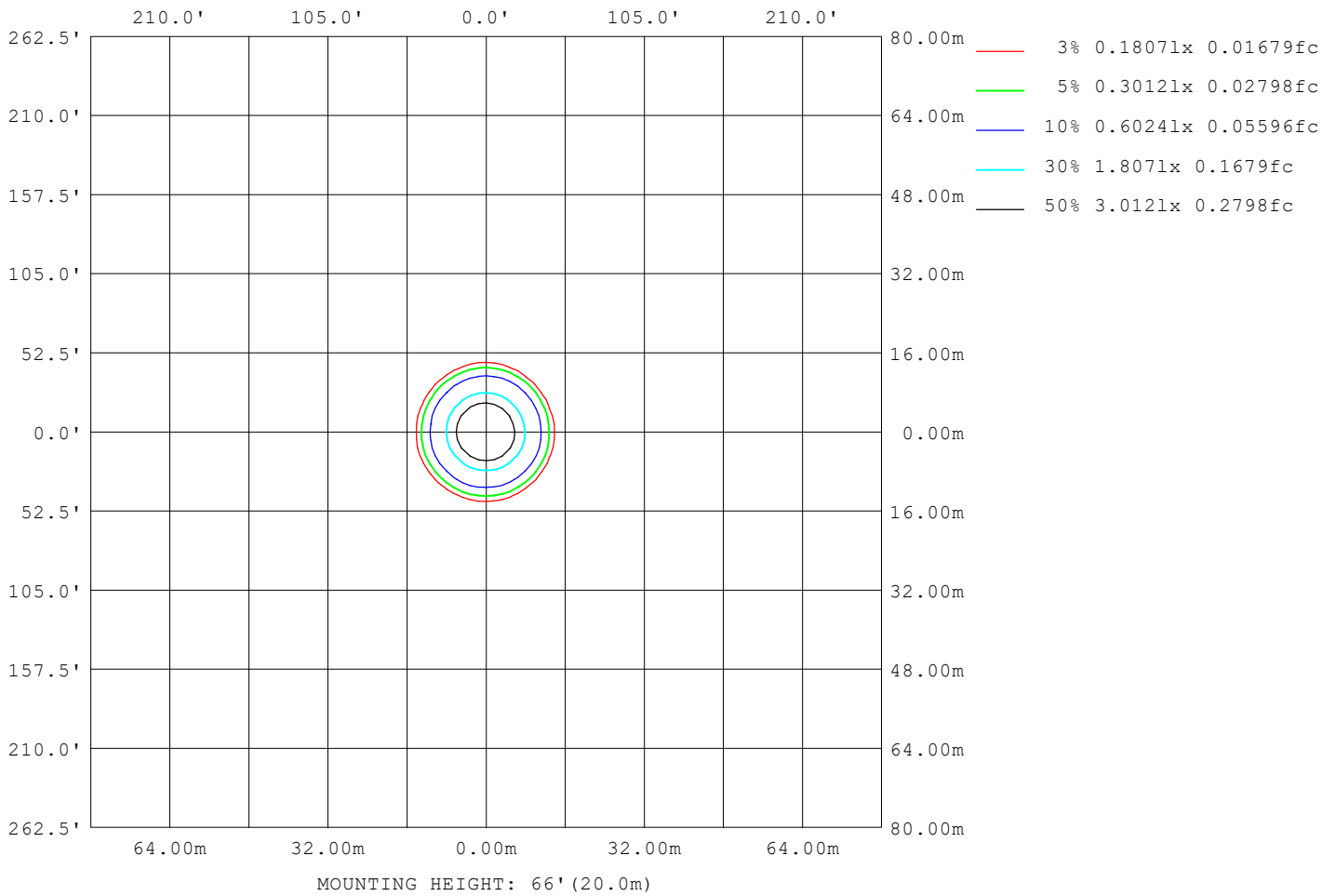
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2023-08-02

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

|   |       |                  |
|---|-------|------------------|
| Test:U:119.82V I:0.1150A P:13.581W PF:0.9855 Freq:59.98Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.23x1 lm |       |                  |
| NAME: AD-LED-4-S15W-3018K   | TYPE: | WEIGHT:          |
| SPEC.: 3000K  | DIM.: | SERIAL No.:      |
| MFR.: LTS   | SUR.: | Shielding Angle: |



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3°C  
 Operators:  
 Test Date: 2023-08-02

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.080m [K=1.0000]  
 Remarks:

**LED Avg.L Report**

|   |       |                  |
|---|-------|------------------|
| Test:U:119.82V I:0.1150A P:13.581W PF:0.9855 Freq:59.98Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.23x1 lm |       |                  |
| NAME: AD-LED-4-S15W-3018K   | TYPE: | WEIGHT:          |
| SPEC.: 3000K  | DIM.: | SERIAL No.:      |
| MFR.: LTS   | SUR.: | Shielding Angle: |

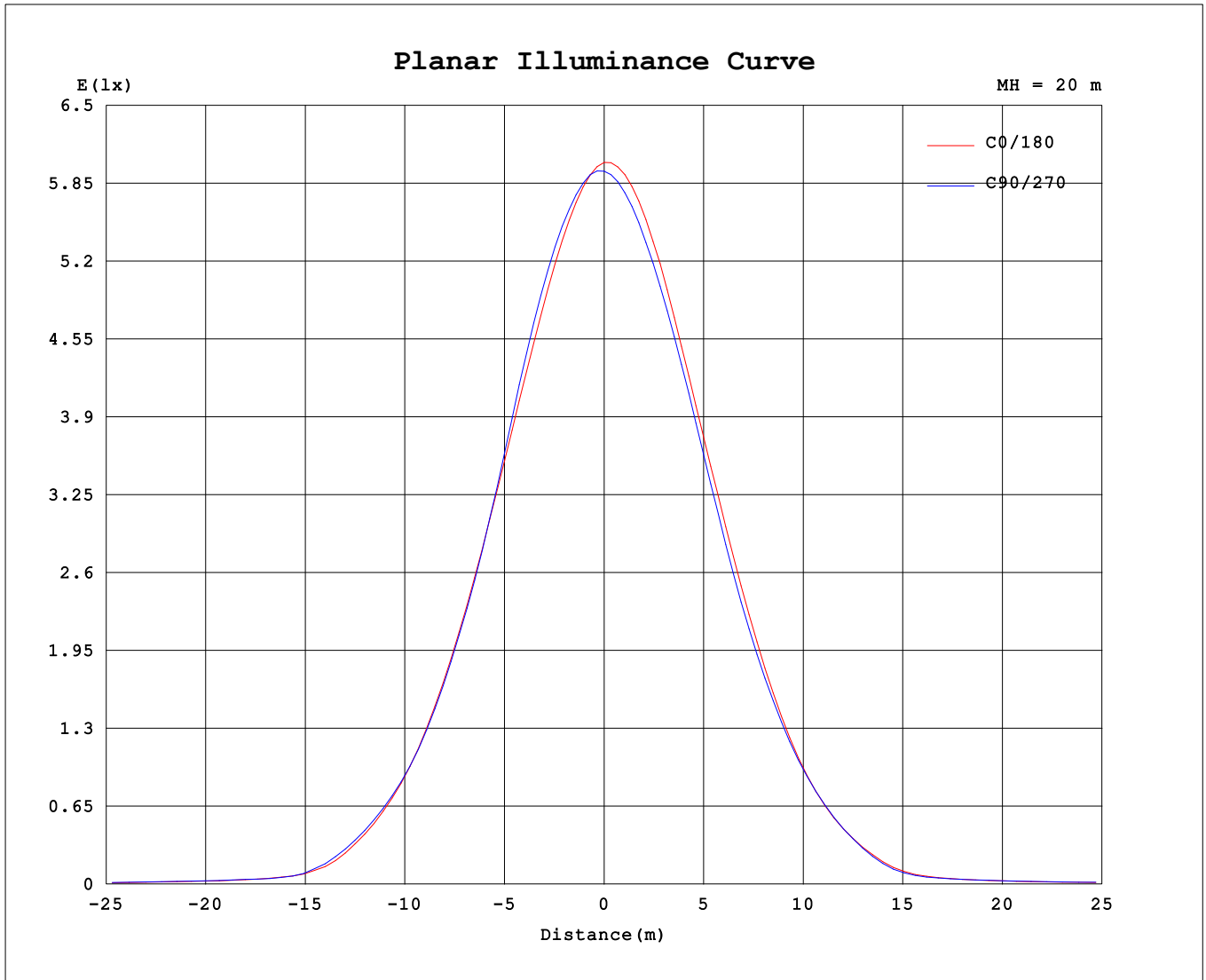
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 168   |
| L_0~180 (75) av  | 122   |
| L_0~180 (85) av  | 25    |
| L_90~270 (65) av | 231   |
| L_90~270 (75) av | 158   |
| L_90~270 (85) av | 74    |
| L_45 (65) av     | 196   |
| L_45 (75) av     | 135   |
| L_45 (85) av     | 33    |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3℃  
 Operators:  
 Test Date:2023-08-02

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2023-08-02

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.080m [K=1.0000]  
 Remarks:

**LUMINOUS DISTRIBUTION INTENSITY DATA**

|   |       |                  |
|---|-------|------------------|
| Test:U:119.82V I:0.1150A P:13.581W PF:0.9855 Freq:59.98Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.23x1 lm |       |                  |
| NAME: AD-LED-4-S15W-3018K   | TYPE: | WEIGHT:          |
| SPEC.: 3000K  | DIM.: | SERIAL No.:      |
| MFR.: LTS   | SUR.: | Shielding Angle: |

Table--1

UNIT: cd

| C (DEG) \ 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                 | 2385 | 2385 | 2385 | 2385 | 2385 | 2385  | 2385 | 2385  | 2385 | 2385  | 2385 | 2385  | 2385 | 2385  | 2385 | 2385  |  |  |  |
| 5                 | 2220 | 2241 | 2257 | 2277 | 2284 | 2289  | 2289 | 2291  | 2284 | 2269  | 2262 | 2246  | 2238 | 2223  | 2215 | 2208  |  |  |  |
| 10                | 1873 | 1907 | 1933 | 1963 | 1965 | 1976  | 1970 | 1979  | 1961 | 1941  | 1936 | 1919  | 1917 | 1893  | 1884 | 1860  |  |  |  |
| 15                | 1448 | 1470 | 1479 | 1495 | 1478 | 1495  | 1513 | 1542  | 1534 | 1514  | 1516 | 1495  | 1486 | 1465  | 1453 | 1430  |  |  |  |
| 20                | 1004 | 1023 | 1019 | 1016 | 1004 | 1023  | 1039 | 1068  | 1075 | 1081  | 1065 | 1044  | 1030 | 1011  | 1006 | 987   |  |  |  |
| 25                | 604  | 615  | 609  | 607  | 607  | 625   | 633  | 649   | 652  | 646   | 646  | 635   | 642  | 628   | 621  | 597   |  |  |  |
| 30                | 311  | 319  | 318  | 324  | 332  | 338   | 336  | 348   | 337  | 336   | 339  | 334   | 345  | 329   | 322  | 308   |  |  |  |
| 35                | 106  | 113  | 118  | 126  | 125  | 130   | 132  | 142   | 135  | 130   | 130  | 126   | 127  | 118   | 112  | 107   |  |  |  |
| 40                | 45.4 | 45.6 | 45.9 | 45.9 | 44.3 | 44.2  | 45.8 | 48.9  | 49.4 | 48.6  | 49.7 | 49.0  | 47.4 | 45.8  | 46.0 | 44.9  |  |  |  |
| 45                | 30.1 | 31.2 | 31.9 | 32.7 | 33.4 | 33.5  | 33.6 | 32.9  | 32.1 | 33.2  | 34.0 | 34.1  | 34.8 | 34.1  | 32.7 | 30.1  |  |  |  |
| 50                | 23.5 | 24.7 | 25.6 | 26.3 | 26.9 | 27.1  | 26.5 | 25.6  | 25.1 | 26.0  | 26.9 | 27.2  | 28.1 | 27.5  | 26.1 | 23.7  |  |  |  |
| 55                | 17.2 | 17.8 | 19.2 | 20.1 | 20.7 | 20.9  | 19.3 | 18.4  | 18.2 | 18.7  | 19.7 | 20.0  | 20.4 | 20.2  | 18.6 | 17.3  |  |  |  |
| 60                | 11.9 | 12.8 | 14.1 | 15.1 | 15.7 | 15.7  | 14.4 | 13.5  | 13.2 | 13.6  | 14.5 | 15.0  | 15.5 | 15.2  | 13.5 | 12.0  |  |  |  |
| 65                | 7.40 | 8.06 | 9.45 | 10.5 | 11.1 | 11.0  | 9.26 | 8.53  | 8.34 | 8.84  | 9.93 | 10.3  | 10.6 | 10.03 | 8.10 | 7.37  |  |  |  |
| 70                | 5.26 | 5.56 | 6.02 | 6.51 | 6.87 | 6.63  | 6.08 | 5.92  | 5.82 | 5.81  | 6.20 | 6.26  | 6.44 | 6.04  | 5.61 | 5.22  |  |  |  |
| 75                | 3.20 | 3.54 | 3.88 | 4.44 | 4.72 | 4.53  | 4.08 | 3.88  | 3.80 | 3.90  | 4.06 | 4.30  | 4.40 | 4.06  | 3.51 | 3.15  |  |  |  |
| 80                | 1.43 | 1.67 | 1.82 | 2.29 | 2.53 | 2.45  | 2.09 | 1.96  | 1.91 | 1.97  | 1.97 | 2.19  | 2.27 | 2.04  | 1.63 | 1.38  |  |  |  |
| 85                | 0.11 | 0.21 | 0.30 | 0.61 | 0.79 | 0.68  | 0.47 | 0.42  | 0.38 | 0.39  | 0.36 | 0.58  | 0.66 | 0.39  | 0.13 | 0.08  |  |  |  |
| 90                | 0.05 | 0.04 | 0.05 | 0.06 | 0.07 | 0.05  | 0.04 | 0.06  | 0.04 | 0.03  | 0.04 | 0.04  | 0.05 | 0.04  | 0.03 | 0.04  |  |  |  |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2023-08-02

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks: