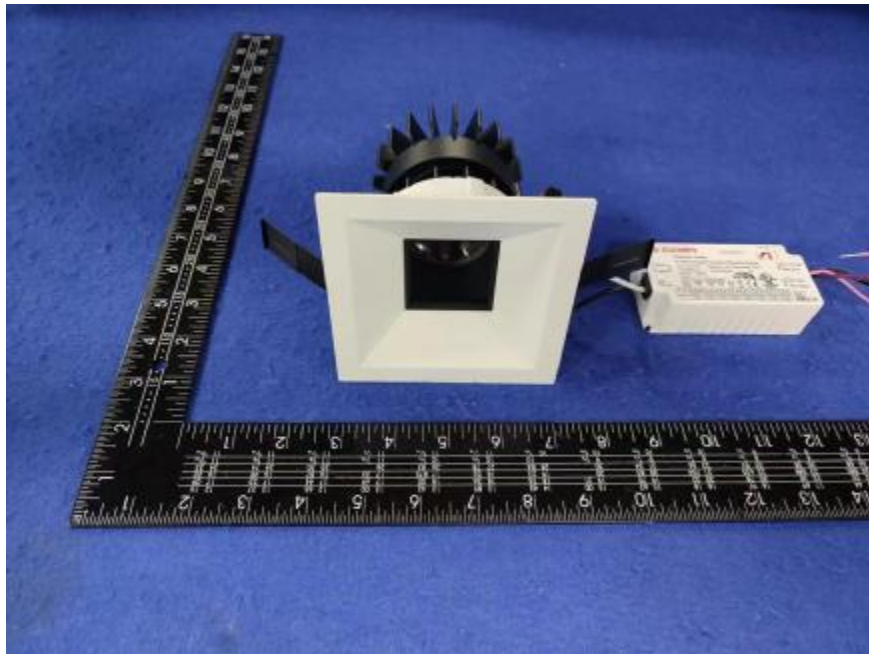


## Luminaire Photograph



|                     |         |                          |
|---------------------|---------|--------------------------|
| Light Output Ratio: | 76.0%   |                          |
| Luminaire Power:    | 20.97 W |                          |
| SHR Nominal:        | 0.75    | Calculated using the TM5 |
| SHR Maximum:        | 0.80    | fine grid method.        |

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3 °C  
Operators: zoe  
Test Date: 2024-7-24

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity: 65.0%  
Test Distance: 3.160m [K=1.0000]  
Remarks: LAMP: BXRE-30G1000-A-83 Ra:90  
LENS: PM-1083C 50R  
DRIVER: PUP20A-1WMC 500mA  
30minutes warm-up

## LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

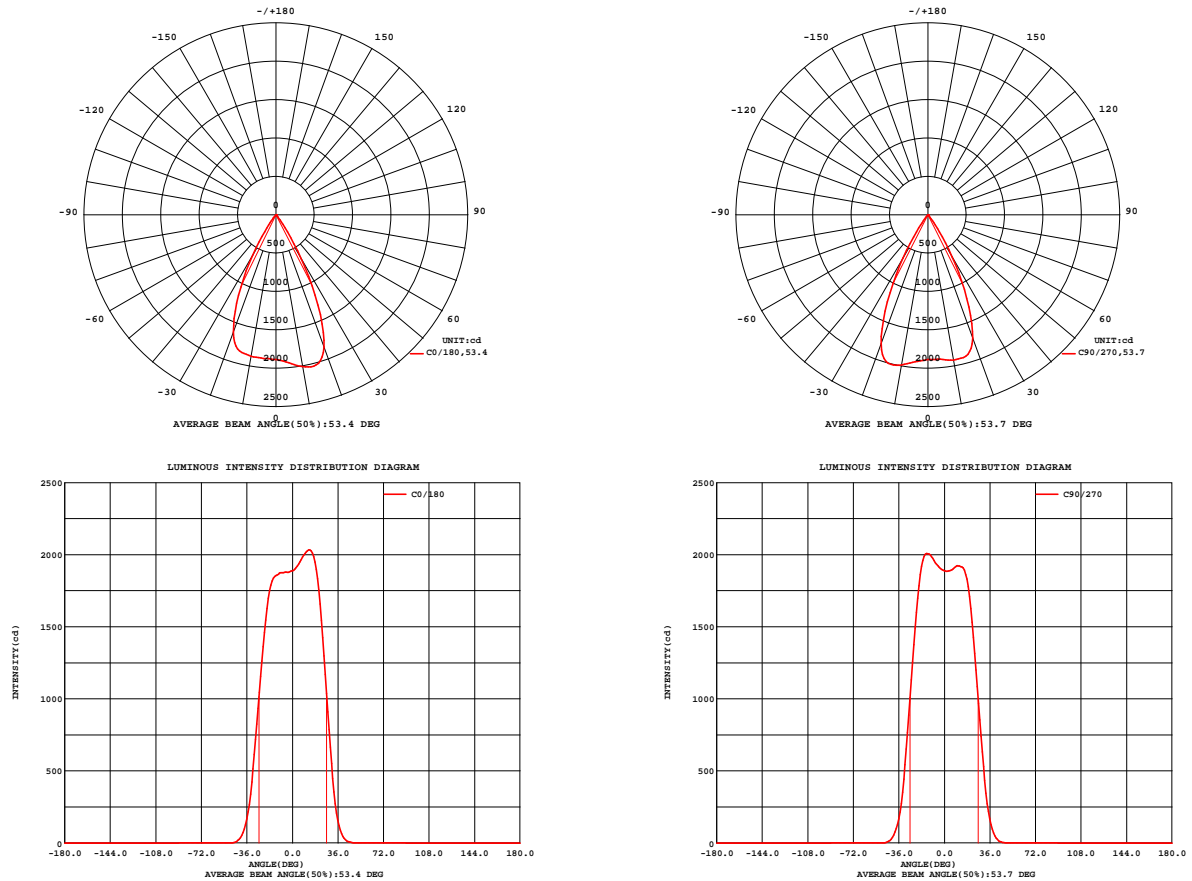


Fig. C0/C180

Fig. C90/C270

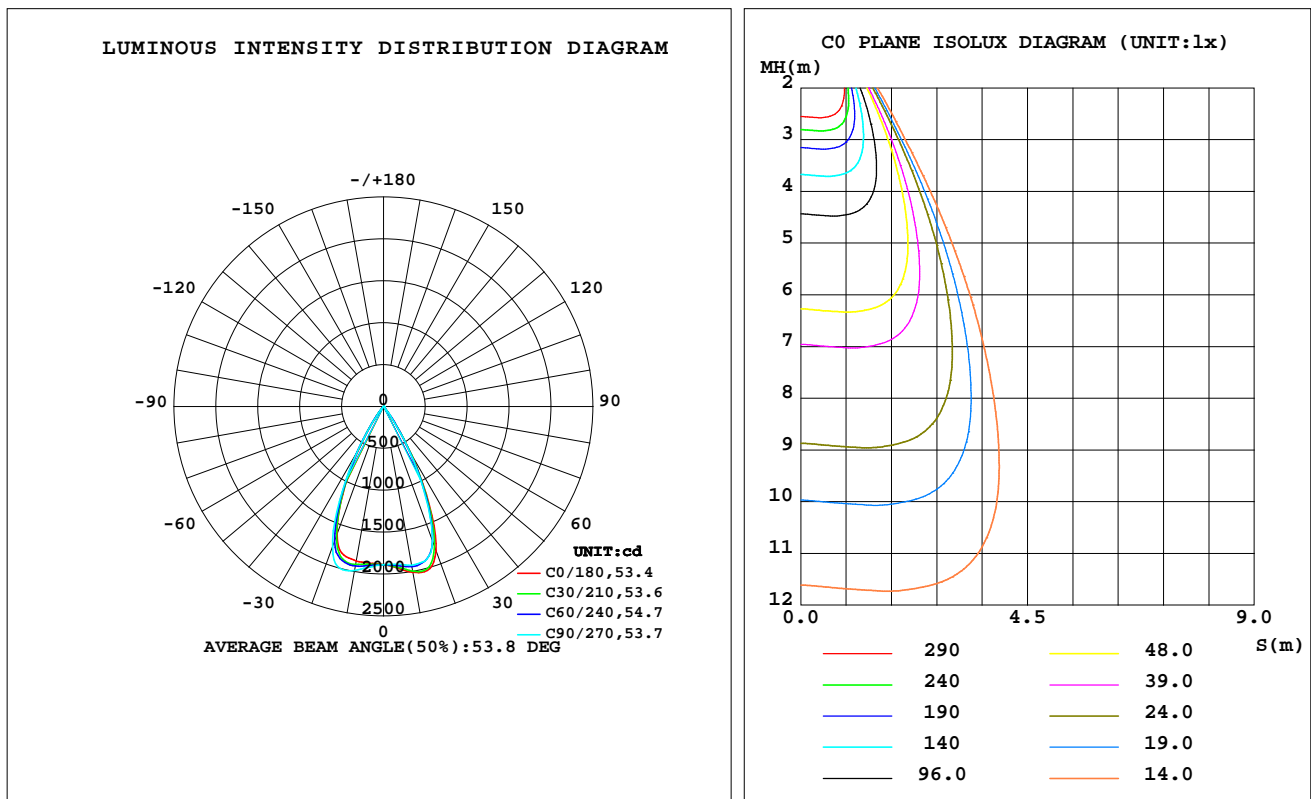
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3 °C  
Operators: zoe  
Test Date: 2024-7-24

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity: 65.0%  
Test Distance: 3.160m [K=1.0000]  
Remarks: LAMP: BXRE-30G1000-A-83 Ra: 90  
LENS: PM-1083C 50R  
DRIVER: PUP20A-1WMC 500mA  
30minutes warm-up

## LUMINAIRE PHOTOMETRIC TEST REPORT

|  |                |                        |
|--|----------------|------------------------|
| Test:U:120.06V I:0.1756A P:20.970W PF:0.9934 Freq:59.98Hz<br>Lamp Flux:1897.7x1 lm |                |                        |
| NAME: 2418.119-LEA-15  | TYPE:          | WEIGHT:                |
| SPEC.: 3000K   | DIM.:          | SERIAL No.: 2407240942 |
| MFR.: RISE   | SUR.: 0.0064m2 | Shielding Angle:       |

| DATA OF LAMP     |           | PHOTOMETRIC DATA Eff: 68.80 lm/W |        |                        |          |
|------------------|-----------|----------------------------------|--------|------------------------|----------|
| MODEL            | Bridgelux | Imax(cd)                         | 2055   | S/MH(C0/180)           | 0.79     |
| NOMINAL POWER(W) | 20        | LOR(%)                           | 76.0   | S/MH(C90/270)          | 0.80     |
| RATED VOLTAGE(V) | 120       | TOTAL FLUX(lm)                   | 1442.8 | $\eta$ UP,DN(C0-180)   | 0.0,37.9 |
| NOMINAL FLUX(lm) | 1897.7    | CIE CLASS                        | DIRECT | $\eta$ UP,DN(C180-360) | 0.0,38.1 |
| LAMPS INSIDE     | 1         | $\eta$ up(%)                     | 0.0    | CIBSE SHR NOM          | 0.75     |
| TEST VOLTAGE(V)  | 120       | $\eta$ down(%)                   | 76.0   | CIBSE SHR MAX          | 0.80     |



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:zoe  
Test Date:2024-7-24

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks: LAMP:BXRE-30G1000-A-83 Ra:90  
LENS;PM-1083C 50R  
DRIVER: PUP20A-1WMC 500mA  
30minutes warm-up

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

| $\gamma$ | C0                    | C45    | C90    | C135   | C180   | C225   | C270   | C315   | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum,lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|-----------|
| 10       | 2009                  | 1967   | 1923   | 1901   | 1872   | 1924   | 1986   | 2023   | 0- 10    | 183.6       | 183.6        | 12.7,9.67 |
| 20       | 1833                  | 1748   | 1708   | 1652   | 1626   | 1677   | 1785   | 1821   | 10- 20   | 537.9       | 721.4        | 50,38     |
| 30       | 664.7                 | 659.8  | 632.3  | 647.1  | 614.6  | 639.3  | 652.3  | 676.1  | 20- 30   | 545.4       | 1267         | 87.8,66.8 |
| 40       | 46.09                 | 46.45  | 49.97  | 58.96  | 52.22  | 58.85  | 54.77  | 51.55  | 30- 40   | 163.7       | 1431         | 99.2,75.4 |
| 50       | 1.110                 | 1.703  | 0.8746 | 1.522  | 0.8277 | 1.218  | 0.7788 | 1.199  | 40- 50   | 11.72       | 1442         | 100,76    |
| 60       | 0.1486                | 0.1493 | 0.1255 | 0.1640 | 0.1531 | 0.1412 | 0.1080 | 0.1291 | 50- 60   | 0.3607      | 1443         | 100,76    |
| 70       | 0.0586                | 0.0371 | 0.0316 | 0.0399 | 0.0620 | 0.0377 | 0.0292 | 0.0360 | 60- 70   | 0.0790      | 1443         | 100,76    |
| 80       | 0.0319                | 0.0210 | 0.0279 | 0.0188 | 0.0384 | 0.0216 | 0.0273 | 0.0160 | 70- 80   | 0.0300      | 1443         | 100,76    |
| 90       | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 80- 90   | 0.0214      | 1443         | 100,76    |
| 100      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 90-100   | 0           | 1443         | 100,76    |
| 110      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 100-110  | 0           | 1443         | 100,76    |
| 120      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 110-120  | 0           | 1443         | 100,76    |
| 130      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 120-130  | 0           | 1443         | 100,76    |
| 140      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 130-140  | 0           | 1443         | 100,76    |
| 150      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 140-150  | 0           | 1443         | 100,76    |
| 160      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 150-160  | 0           | 1443         | 100,76    |
| 170      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 160-170  | 0           | 1443         | 100,76    |
| 180      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 170-180  | 0           | 1443         | 100,76    |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |           |

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3 °C  
Operators:zoe  
Test Date:2024-7-24

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks: LAMP:BXRE-30G1000-A-83 Ra:90  
LENS;PM-1083C 50R  
DRIVER: PUP20A-1WMC 500mA  
30minutes warm-up

### LUMINANCE LIMITATION CURVES

Test:U:120.06V I:0.1756A P:20.970W PF:0.9934 Freq:59.98Hz  
Lamp Flux:1897.7x1 lm

NAME: 2418.119-LEA-15

TYPE:

WEIGHT:

SPEC.: 3000K

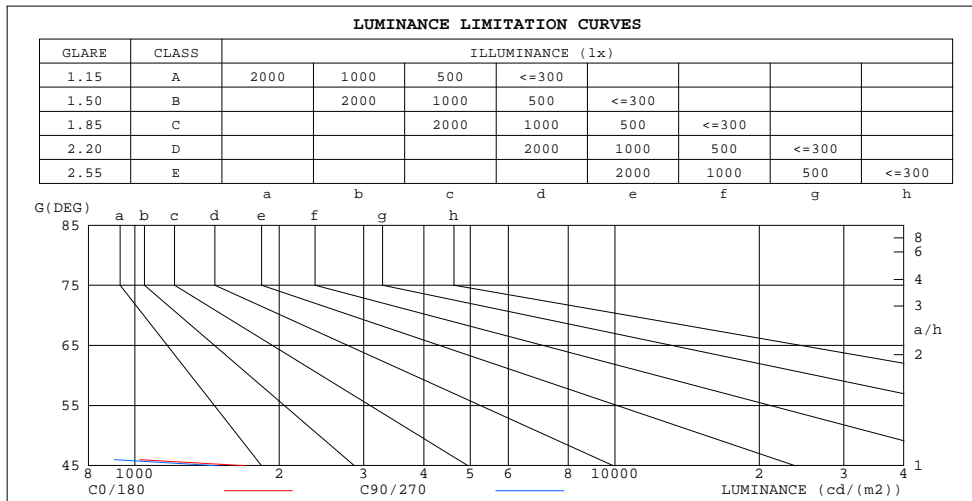
DIM.:

SERIAL No.: 2407240942

MFR.: RISE

SUR.: 0.0064m2

Shielding Angle:



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G(180)            | C0/180 | C90/270 |
| 85                | 53     | 45      |
| 80                | 29     | 25      |
| 75                | 21     | 17      |
| 70                | 27     | 14      |
| 65                | 32     | 23      |
| 60                | 46     | 39      |
| 55                | 85     | 78      |
| 50                | 270    | 213     |
| 45                | 1704   | 1489    |

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:zoe  
Test Date:2024-7-24

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks: LAMP:BXRE-30G1000-A-83 Ra:90  
LENS;PM-1083C 50R  
DRIVER: PUP20A-1WMC 500mA  
30minutes warm-up

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.06V I:0.1756A P:20.970W PF:0.9934 Freq:59.98Hz  
Lamp Flux:1897.7x1 lm

NAME: 2418.119-LEA-15

TYPE:

WEIGHT:

SPEC.: 3000K

DIM.:

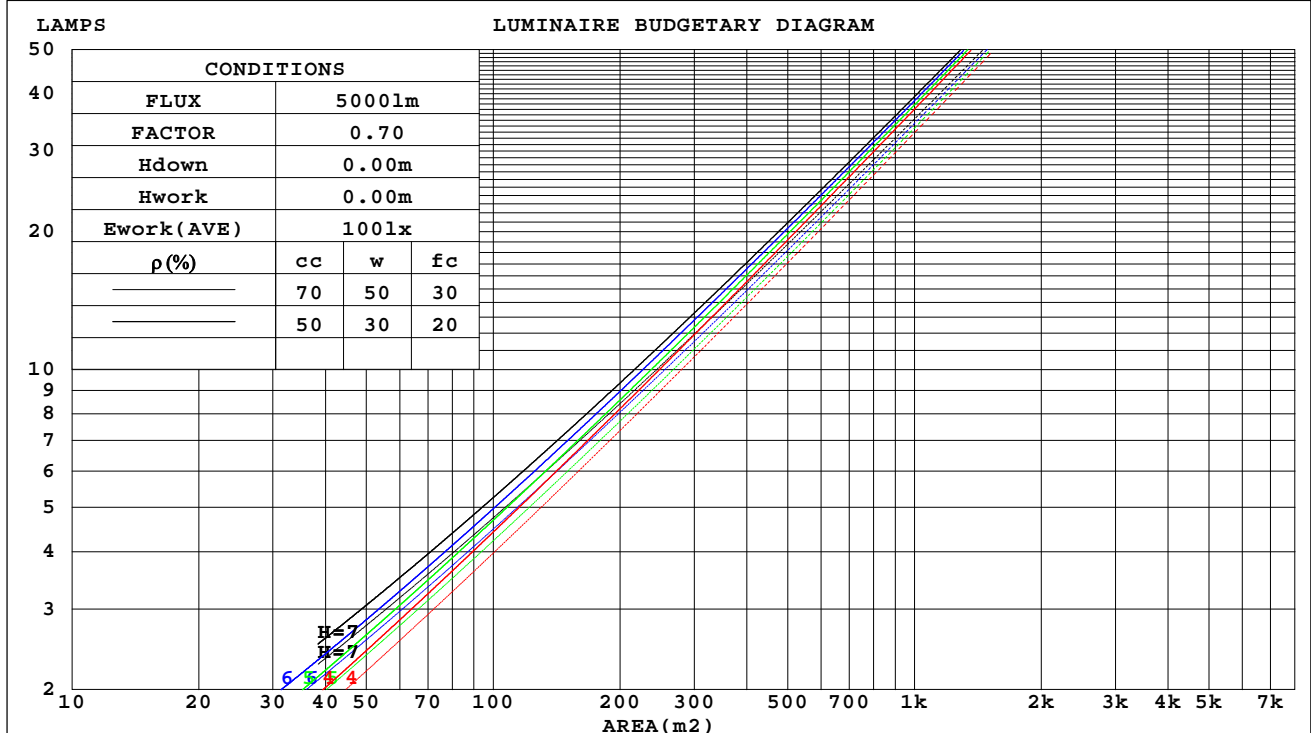
SERIAL No.: 2407240942

MFR.: RISE

SUR.: 0.0064m2

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 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |   |



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:zoe  
Test Date:2024-7-24

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks: LAMP:BXRE-30G1000-A-83 Ra:90  
LENS;PM-1083C 50R  
DRIVER: PUP20A-1WMC 500mA  
30minutes warm-up

### WEC AND CCEC

|  |                |                        |
|--|----------------|------------------------|
| Test:U:120.06V I:0.1756A P:20.970W PF:0.9934 Freq:59.98Hz<br>Lamp Flux:1897.7x1 lm |                |                        |
| NAME: 2418.119-LEA-15  | TYPE:          | WEIGHT:                |
| SPEC.: 3000K   | DIM.:          | SERIAL No.: 2407240942 |
| MFR.: RISE   | SUR.: 0.0064m2 | 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  | .123                  | .070 | .022 | .118 | .067 | .021 | .108                            | .062 | .020 | .099 | .057 | .018 | .091 | .053 | .017 |   |  |
| 2.0  | .116                  | .064 | .020 | .112 | .062 | .019 | .104                            | .058 | .018 | .097 | .054 | .017 | .090 | .051 | .016 |   |  |
| 3.0  | .110                  | .059 | .018 | .107 | .057 | .017 | .100                            | .054 | .016 | .094 | .051 | .016 | .088 | .049 | .015 |   |  |
| 4.0  | .105                  | .054 | .016 | .102 | .053 | .016 | .096                            | .051 | .015 | .091 | .049 | .015 | .086 | .047 | .014 |   |  |
| 5.0  | .100                  | .051 | .015 | .097 | .050 | .015 | .092                            | .048 | .014 | .088 | .046 | .014 | .083 | .045 | .013 |   |  |
| 6.0  | .096                  | .048 | .014 | .093 | .047 | .014 | .089                            | .046 | .013 | .085 | .044 | .013 | .081 | .043 | .013 |   |  |
| 7.0  | .092                  | .045 | .013 | .090 | .045 | .013 | .086                            | .043 | .012 | .082 | .042 | .012 | .079 | .041 | .012 |   |  |
| 8.0  | .088                  | .043 | .012 | .086 | .042 | .012 | .083                            | .041 | .012 | .079 | .040 | .012 | .076 | .039 | .011 |   |  |
| 9.0  | .084                  | .041 | .011 | .083 | .040 | .011 | .080                            | .039 | .011 | .077 | .039 | .011 | .074 | .038 | .011 |   |  |
| 10.0 | .081                  | .039 | .011 | .080 | .039 | .011 | .077                            | .038 | .011 | .075 | .037 | .011 | .072 | .036 | .010 |   |  |

| 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  | .145                  | .145 | .145 | .124 | .124 | .124 | .084                                       | .084 | .084 | .049 | .049 | .049 | .016 | .016 | .016 |   |
| 1.0  | .129                  | .120 | .111 | .111 | .103 | .096 | .076                                       | .071 | .066 | .044 | .041 | .038 | .014 | .013 | .012 |   |
| 2.0  | .117                  | .101 | .087 | .100 | .087 | .075 | .069                                       | .060 | .053 | .040 | .035 | .031 | .013 | .011 | .010 |   |
| 3.0  | .107                  | .086 | .070 | .092 | .074 | .061 | .063                                       | .052 | .043 | .036 | .030 | .025 | .012 | .010 | .008 |   |
| 4.0  | .098                  | .075 | .057 | .084 | .065 | .049 | .058                                       | .045 | .035 | .034 | .026 | .021 | .011 | .009 | .007 |   |
| 5.0  | .091                  | .066 | .047 | .079 | .057 | .041 | .054                                       | .040 | .029 | .031 | .023 | .017 | .010 | .008 | .006 |   |
| 6.0  | .086                  | .059 | .039 | .073 | .051 | .034 | .051                                       | .036 | .024 | .029 | .021 | .014 | .009 | .007 | .005 |   |
| 7.0  | .080                  | .053 | .033 | .069 | .046 | .029 | .048                                       | .032 | .021 | .028 | .019 | .012 | .009 | .006 | .004 |   |
| 8.0  | .076                  | .048 | .029 | .065 | .042 | .025 | .045                                       | .029 | .018 | .026 | .017 | .011 | .009 | .006 | .003 |   |
| 9.0  | .072                  | .044 | .025 | .062 | .038 | .022 | .043                                       | .027 | .015 | .025 | .016 | .009 | .008 | .005 | .003 |   |
| 10.0 | .069                  | .041 | .022 | .059 | .035 | .019 | .041                                       | .025 | .013 | .024 | .015 | .008 | .008 | .005 | .003 |   |

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:zoe  
Test Date:2024-7-24

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks: LAMP:BXRE-30G1000-A-83 Ra:90  
LENS;PM-1083C 50R  
DRIVER: PUP20A-1WMC 500mA  
30minutes warm-up

UGR(Unified Glare Rating) Table

|  |                  |      |      |      |                |                |      |                        |      |      |
|--|------------------|------|------|------|----------------|----------------|------|------------------------|------|------|
| Test:U:120.06V I:0.1756A P:20.970W PF:0.9934 Freq:59.98Hz<br>Lamp Flux:1897.7x1 lm |                  |      |      |      |                |                |      |                        |      |      |
| NAME: 2418.119-LEA-15  |                  |      |      |      | TYPE:          |                |      | WEIGHT:                |      |      |
| SPEC.: 3000K   |                  |      |      |      | DIM.:          |                |      | SERIAL No.: 2407240942 |      |      |
| MFR.: RISE   |                  |      |      |      | SUR.: 0.0064m2 |                |      | Shielding Angle:       |      |      |
| ceiling/cavity   | 0.7              | 0.7  | 0.5  | 0.5  | 0.3            | 0.7            | 0.7  | 0.5                    | 0.5  | 0.3  |
| walls  | 0.5              | 0.3  | 0.5  | 0.3  | 0.3            | 0.5            | 0.3  | 0.5                    | 0.3  | 0.3  |
| working plane  | 0.2              | 0.2  | 0.2  | 0.2  | 0.2            | 0.2            | 0.2  | 0.2                    | 0.2  | 0.2  |
| Room dimensions  | Viewed crosswise |      |      |      |                | Viewed endwise |      |                        |      |      |
| x = 2H y = 2H  | 12.3             | 13.1 | 12.5 | 13.3 | 13.4           | 12.0           | 12.9 | 12.2                   | 13.0 | 13.2 |
| 3H   | 12.1             | 12.9 | 12.4 | 13.1 | 13.3           | 11.9           | 12.6 | 12.1                   | 12.8 | 13.0 |
| 4H   | 12.0             | 12.8 | 12.3 | 13.0 | 13.2           | 11.8           | 12.5 | 12.0                   | 12.7 | 12.9 |
| 6H   | 11.9             | 12.6 | 12.2 | 12.9 | 13.1           | 11.7           | 12.4 | 12.0                   | 12.6 | 12.9 |
| 8H   | 11.9             | 12.6 | 12.2 | 12.8 | 13.1           | 11.6           | 12.3 | 11.9                   | 12.6 | 12.8 |
| 12H  | 11.9             | 12.5 | 12.2 | 12.8 | 13.0           | 11.6           | 12.2 | 11.9                   | 12.5 | 12.8 |
| 4H 2H  | 12.0             | 12.8 | 12.3 | 13.0 | 13.2           | 11.8           | 12.5 | 12.0                   | 12.7 | 12.9 |
| 3H   | 11.9             | 12.5 | 12.2 | 12.8 | 13.0           | 11.6           | 12.2 | 11.9                   | 12.5 | 12.8 |
| 4H   | 11.8             | 12.3 | 12.1 | 12.6 | 12.9           | 11.5           | 12.1 | 11.8                   | 12.4 | 12.7 |
| 6H   | 11.7             | 12.2 | 12.0 | 12.5 | 12.8           | 11.4           | 11.9 | 11.8                   | 12.2 | 12.6 |
| 8H   | 11.6             | 12.1 | 12.0 | 12.4 | 12.8           | 11.4           | 11.8 | 11.7                   | 12.2 | 12.5 |
| 12H  | 11.6             | 12.0 | 12.0 | 12.4 | 12.7           | 11.3           | 11.7 | 11.7                   | 12.1 | 12.5 |
| 8H 4H  | 11.6             | 12.1 | 12.0 | 12.4 | 12.8           | 11.4           | 11.8 | 11.7                   | 12.2 | 12.5 |
| 6H   | 11.5             | 11.9 | 11.9 | 12.3 | 12.7           | 11.2           | 11.6 | 11.7                   | 12.0 | 12.4 |
| 8H   | 11.4             | 11.8 | 11.9 | 12.2 | 12.6           | 11.2           | 11.5 | 11.6                   | 11.9 | 12.4 |
| 12H  | 11.4             | 11.7 | 11.9 | 12.1 | 12.6           | 11.1           | 11.4 | 11.6                   | 11.9 | 12.3 |
| 12H 4H   | 11.6             | 12.0 | 12.0 | 12.4 | 12.7           | 11.3           | 11.7 | 11.7                   | 12.1 | 12.5 |
| 6H   | 11.4             | 11.8 | 11.9 | 12.2 | 12.6           | 11.2           | 11.5 | 11.6                   | 11.9 | 12.4 |
| 8H   | 11.4             | 11.7 | 11.9 | 12.1 | 12.6           | 11.1           | 11.4 | 11.6                   | 11.9 | 12.3 |
| Variations with the observer position at spacings(CIE Pub.117):                    |                  |      |      |      |                |                |      |                        |      |      |
| S = 1.0H   | + 4.9 / -29.1    |      |      |      |                | + 5.0 / -30.5  |      |                        |      |      |
| 1.5H   | + 7.6 / -26.3    |      |      |      |                | + 7.8 / -27.9  |      |                        |      |      |
| 2.0H   | + 7.8 / -14.6    |      |      |      |                | + 7.9 / -14.7  |      |                        |      |      |

CIE Pub.117, 1898 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.2)  
Area: 0.0064 m2

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:zoe  
Test Date:2024-7-24

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks: LAMP:BXRE-30G1000-A-83 Ra:90  
LENS;PM-1083C 50R  
DRIVER: PUP20A-1WMC 500mA  
30minutes warm-up



### UTILIZATION FACTORS TABLE

|  |                |                        |
|--|----------------|------------------------|
| Test:U:120.06V I:0.1756A P:20.970W PF:0.9934 Freq:59.98Hz<br>Lamp Flux:1897.7x1 lm |                |                        |
| NAME: 2418.119-LEA-15  | TYPE:          | WEIGHT:                |
| SPEC.: 3000K   | DIM.:          | SERIAL No.: 2407240942 |
| MFR.: RISE   | SUR.: 0.0064m2 | Shielding Angle:       |

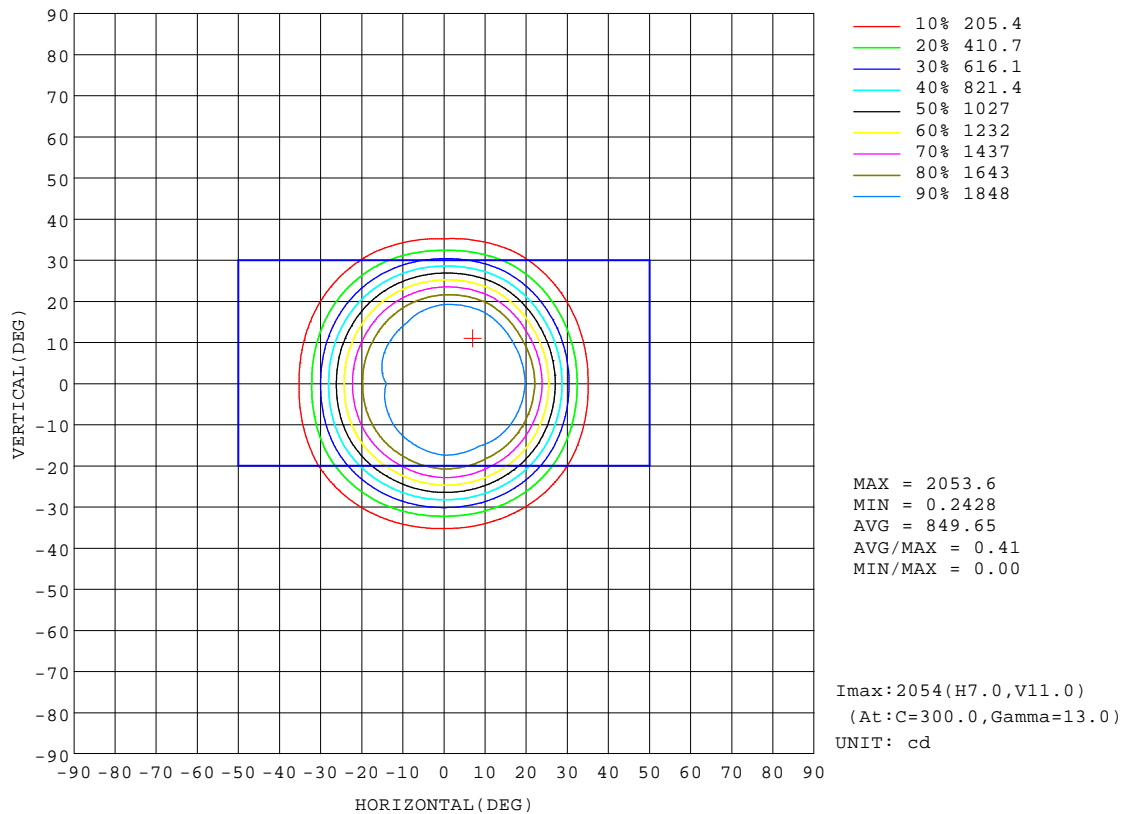
| REFLECTANCE                      |   |     |           |     |     |     |     |               |     |        |
|----------------------------------|---|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling                          | 0.8   | 0.8 | 0.8       | 0.7 | 0.7 | 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                         | 69  | 65  | 62        | 69  | 65  | 62  | 68  | 65            | 62  | 60     |
| 0.80                             | 75  | 71  | 68        | 74  | 70  | 68  | 73  | 70            | 68  | 65     |
| 1.00                             | 77  | 74  | 71        | 77  | 73  | 71  | 76  | 73            | 71  | 68     |
| 1.25                             | 80  | 77  | 74        | 79  | 76  | 74  | 78  | 75            | 73  | 70     |
| 1.50                             | 82  | 79  | 76        | 81  | 78  | 76  | 79  | 77            | 75  | 72     |
| 2.00                             | 84  | 81  | 79        | 82  | 80  | 78  | 80  | 78            | 77  | 73     |
| 2.50                             | 85  | 82  | 80        | 83  | 81  | 79  | 81  | 79            | 78  | 74     |
| 3.00                             | 86  | 83  | 81        | 84  | 82  | 81  | 82  | 80            | 79  | 74     |
| 4.00                             | 87  | 85  | 84        | 86  | 84  | 83  | 83  | 82            | 81  | 75     |
| 5.00                             | 88  | 86  | 85        | 86  | 85  | 84  | 83  | 83            | 82  | 76     |
| ROOM INDEX                       | UF(total)   |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |   |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:zoe  
Test Date:2024-7-24

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks: LAMP:BXRE-30G1000-A-83 Ra:90  
LENS;PM-1083C 50R  
DRIVER: PUP20A-1WMC 500mA  
30minutes warm-up

## ISOCANDELA DIAGRAM

|  |                |                        |
|--|----------------|------------------------|
| Test:U:120.06V I:0.1756A P:20.970W PF:0.9934 Freq:59.98Hz<br>Lamp Flux:1897.7x1 lm |                |                        |
| NAME: 2418.119-LEA-15  | TYPE:          | WEIGHT:                |
| SPEC.: 3000K   | DIM.:          | SERIAL No.: 2407240942 |
| MFR.: RISE   | SUR.: 0.0064m2 | Shielding Angle:       |

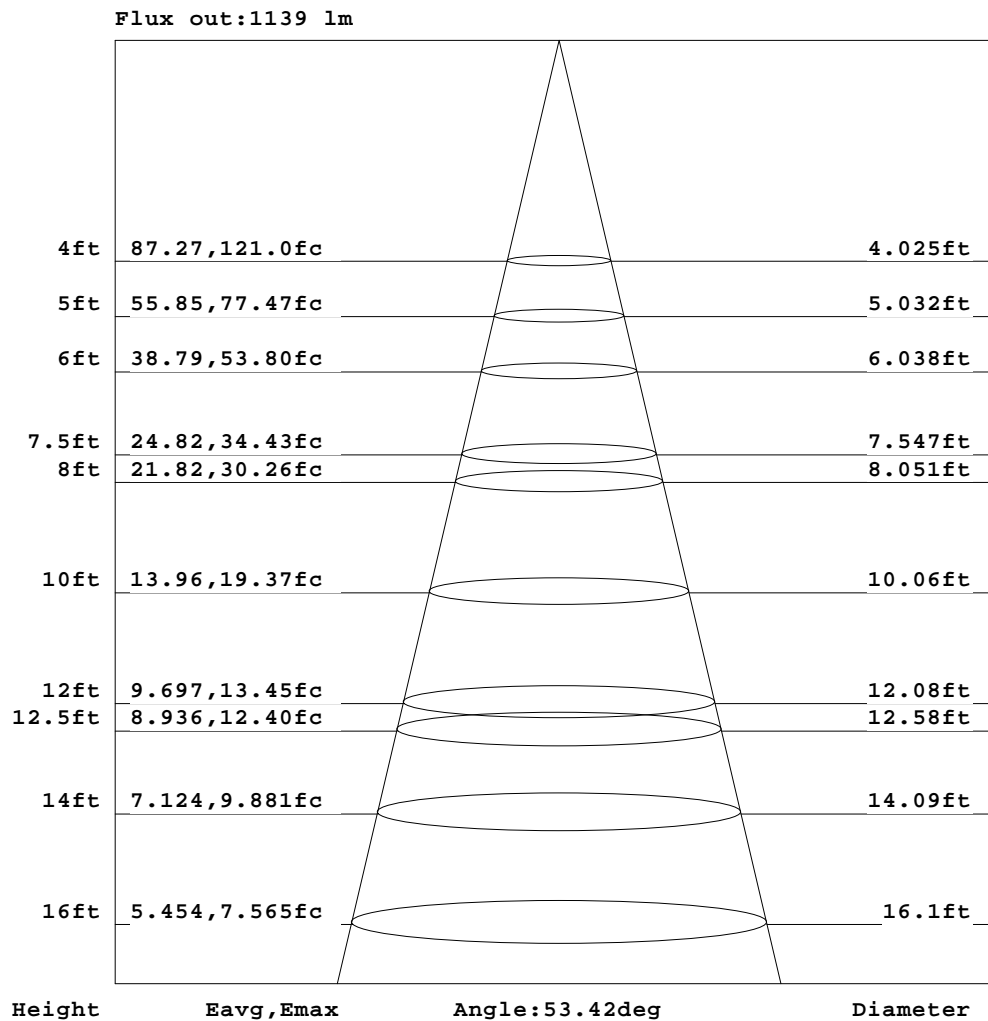


C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:zoe  
Test Date:2024-7-24

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks: LAMP:BXRE-30G1000-A-83 Ra:90  
LENS;PM-1083C 50R  
DRIVER: PUP20A-1WMC 500mA  
30minutes warm-up

## AAI Figure

|  |                |                        |
|--|----------------|------------------------|
| Test:U:120.06V I:0.1756A P:20.970W PF:0.9934 Freq:59.98Hz<br>Lamp Flux:1897.7x1 lm |                |                        |
| NAME: 2418.119-LEA-15  | TYPE:          | WEIGHT:                |
| SPEC.: 3000K   | DIM.:          | SERIAL No.: 2407240942 |
| MFR.: RISE   | SUR.: 0.0064m2 | Shielding Angle:       |



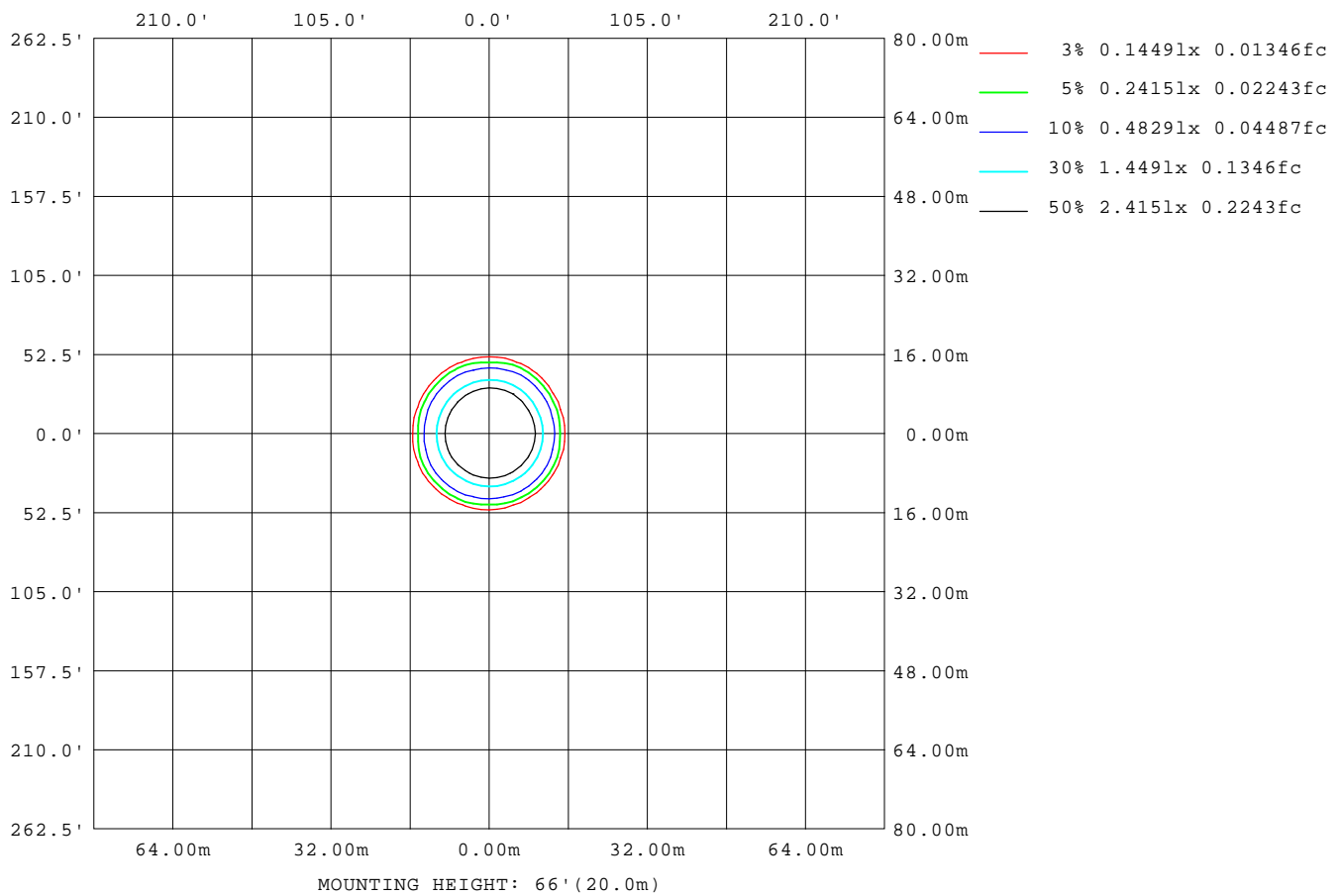
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: zoe  
Test Date: 2024-7-24

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity: 65.0%  
Test Distance: 3.160m [K=1.0000]  
Remarks: LAMP: BXRE-30G1000-A-83 Ra: 90  
LENS: PM-1083C 50R  
DRIVER: PUP20A-1WMC 500mA  
30minutes warm-up

## ISOLUX DIAGRAM

|  |                |                        |
|--|----------------|------------------------|
| Test:U:120.06V I:0.1756A P:20.970W PF:0.9934 Freq:59.98Hz<br>Lamp Flux:1897.7x1 lm |                |                        |
| NAME: 2418.119-LEA-15  | TYPE:          | WEIGHT:                |
| SPEC.: 3000K   | DIM.:          | SERIAL No.: 2407240942 |
| MFR.: RISE   | SUR.: 0.0064m2 | Shielding Angle:       |



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:zoe  
Test Date:2024-7-24

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks: LAMP:BXRE-30G1000-A-83 Ra:90  
LENS;PM-1083C 50R  
DRIVER: PUP20A-1WMC 500mA  
30minutes warm-up

## LED Avg.L Report

|  |                |                        |
|--|----------------|------------------------|
| Test:U:120.06V I:0.1756A P:20.970W PF:0.9934 Freq:59.98Hz<br>Lamp Flux:1897.7x1 lm |                |                        |
| NAME: 2418.119-LEA-15  | TYPE:          | WEIGHT:                |
| SPEC.: 3000K   | DIM.:          | SERIAL No.: 2407240942 |
| MFR.: RISE   | SUR.: 0.0064m2 | Shielding Angle:       |

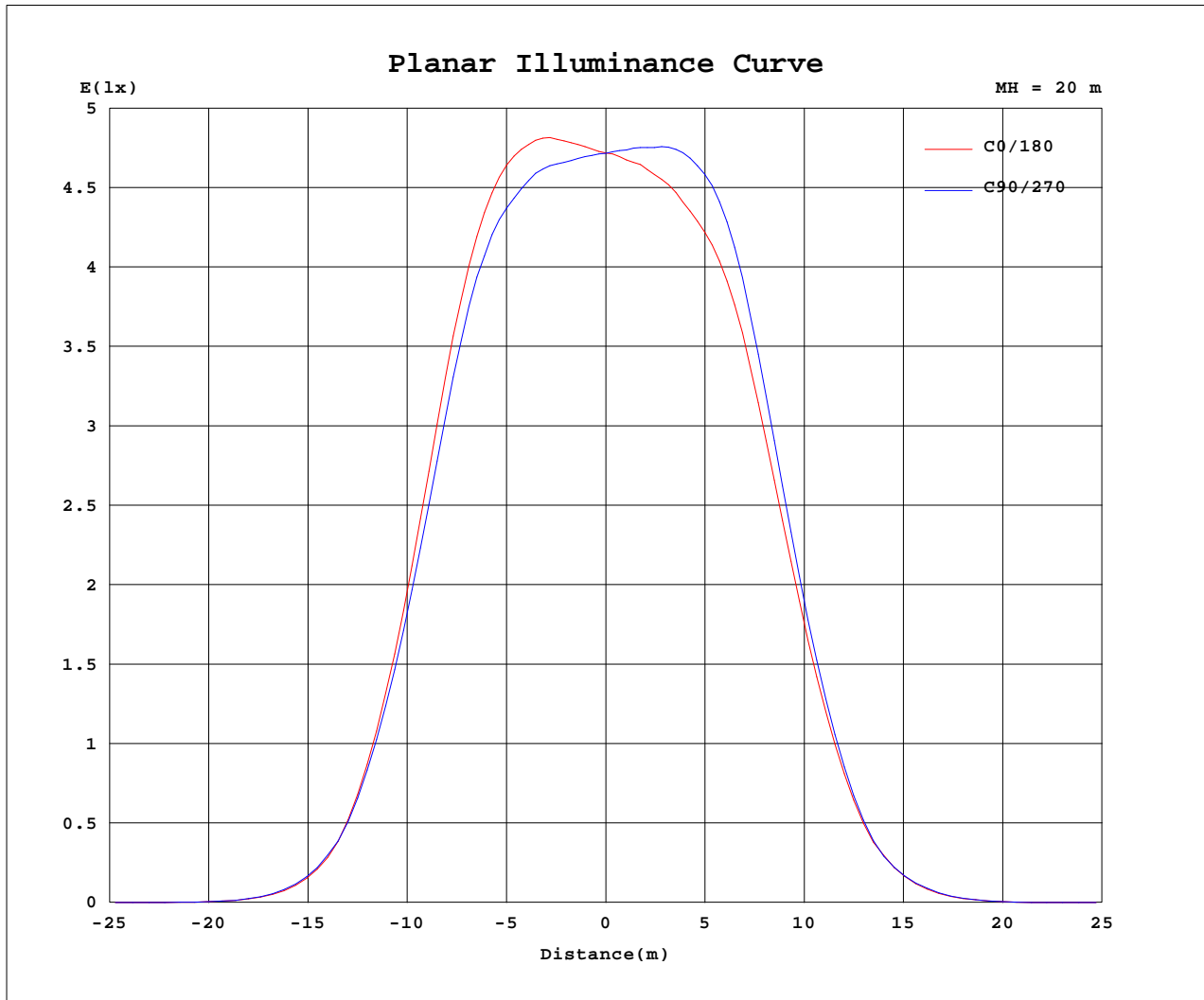
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 33    |
| L_0~180(75)av  | 22    |
| L_0~180(85)av  | 57    |
| L_90~270(65)av | 23    |
| L_90~270(75)av | 17    |
| L_90~270(85)av | 44    |
| L_45(65)av     | 28    |
| L_45(75)av     | 14    |
| L_45(85)av     | 26    |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:zoe  
Test Date:2024-7-24

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks: LAMP:BXRE-30G1000-A-83 Ra:90  
LENS;PM-1083C 50R  
DRIVER: PUP20A-1WMC 500mA  
30minutes warm-up

## Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3 °C  
 Operators: zoe  
 Test Date: 2024-7-24

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
 Humidity: 65.0%  
 Test Distance: 3.160m [K=1.0000]  
 Remarks: LAMP: BXRE-30G1000-A-83 Ra:90  
 LENS: PM-1083C 50R  
 DRIVER: PUP20A-1WMC 500mA  
 30minutes warm-up



## LUMINOUS DISTRIBUTION INTENSITY DATA

|  |                |                        |
|--|----------------|------------------------|
| Test:U:120.06V I:0.1756A P:20.970W PF:0.9934 Freq:59.98Hz<br>Lamp Flux:1897.7x1 lm |                |                        |
| NAME: 2418.119-LEA-15  | TYPE:          | WEIGHT:                |
| SPEC.: 3000K   | DIM.:          | SERIAL No.: 2407240942 |
| MFR.: RISE   | SUR.: 0.0064m2 | Shielding Angle:       |

Table--1

UNIT: cd

| C(DEG)<br>γ (DEG) | 0    | 30   | 60   | 90   | 120  | 150  | 180  | 210  | 240  | 270  | 300  | 330  |  |  |  |  |  |  |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|
| 0                 | 1887 | 1887 | 1887 | 1887 | 1887 | 1887 | 1887 | 1887 | 1887 | 1887 | 1887 | 1887 |  |  |  |  |  |  |
| 5                 | 1935 | 1924 | 1906 | 1890 | 1882 | 1876 | 1880 | 1890 | 1906 | 1924 | 1938 | 1942 |  |  |  |  |  |  |
| 10                | 2009 | 1994 | 1941 | 1923 | 1912 | 1890 | 1872 | 1914 | 1933 | 1986 | 2021 | 2025 |  |  |  |  |  |  |
| 15                | 2026 | 2006 | 1909 | 1909 | 1882 | 1856 | 1836 | 1887 | 1904 | 2003 | 2045 | 2036 |  |  |  |  |  |  |
| 20                | 1833 | 1785 | 1711 | 1708 | 1660 | 1643 | 1626 | 1646 | 1708 | 1785 | 1834 | 1807 |  |  |  |  |  |  |
| 25                | 1299 | 1263 | 1220 | 1200 | 1166 | 1181 | 1155 | 1167 | 1210 | 1254 | 1305 | 1261 |  |  |  |  |  |  |
| 30                | 665  | 673  | 647  | 632  | 639  | 655  | 615  | 629  | 649  | 652  | 695  | 657  |  |  |  |  |  |  |
| 35                | 207  | 239  | 227  | 219  | 240  | 254  | 217  | 234  | 241  | 213  | 254  | 227  |  |  |  |  |  |  |
| 40                | 46.1 | 45.7 | 47.2 | 50.0 | 55.0 | 62.9 | 52.2 | 57.3 | 60.3 | 54.8 | 55.1 | 48.0 |  |  |  |  |  |  |
| 45                | 7.71 | 11.4 | 10.8 | 6.74 | 12.3 | 14.4 | 6.56 | 13.6 | 13.4 | 7.92 | 13.2 | 10.4 |  |  |  |  |  |  |
| 50                | 1.11 | 2.15 | 1.25 | 0.87 | 1.20 | 1.84 | 0.83 | 1.50 | 0.94 | 0.78 | 1.10 | 1.30 |  |  |  |  |  |  |
| 55                | 0.31 | 0.39 | 0.29 | 0.29 | 0.31 | 0.42 | 0.28 | 0.32 | 0.24 | 0.22 | 0.23 | 0.27 |  |  |  |  |  |  |
| 60                | 0.15 | 0.17 | 0.13 | 0.13 | 0.14 | 0.19 | 0.15 | 0.16 | 0.12 | 0.11 | 0.11 | 0.14 |  |  |  |  |  |  |
| 65                | 0.09 | 0.08 | 0.07 | 0.06 | 0.07 | 0.09 | 0.09 | 0.09 | 0.06 | 0.06 | 0.06 | 0.08 |  |  |  |  |  |  |
| 70                | 0.06 | 0.04 | 0.03 | 0.03 | 0.03 | 0.05 | 0.06 | 0.05 | 0.03 | 0.03 | 0.03 | 0.04 |  |  |  |  |  |  |
| 75                | 0.04 | 0.02 | 0.03 | 0.03 | 0.02 | 0.03 | 0.04 | 0.03 | 0.02 | 0.03 | 0.02 | 0.02 |  |  |  |  |  |  |
| 80                | 0.03 | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 | 0.04 | 0.03 | 0.02 | 0.03 | 0.01 | 0.02 |  |  |  |  |  |  |
| 85                | 0.03 | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 | 0.03 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 |  |  |  |  |  |  |
| 90                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 95                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 100               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 105               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 110               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 115               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 120               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 125               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 130               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 135               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 140               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 145               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 150               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 155               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 160               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 165               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 170               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 175               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |
| 180               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:zoe  
Test Date:2024-7-24

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γ Interval: 1.0DEG  
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Humidity:65.0%  
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