

Photometric report for Flanged and Flangeless Trim



|                     |         |                          |
|---------------------|---------|--------------------------|
| Light Output Ratio: | 30.7%   |                          |
| Luminaire Power:    | 11.21 W |                          |
| SHR Nominal:        | 0.50    | Calculated using the TM5 |
| SHR Maximum:        | 0.55    | fine grid method.        |

C Range: 0 - 360DEG

C Interval: For a lens beam angle of 15°

Test Speed: HIGH

Temperature: 25.3 °C

Operators: zoe

Test Date: 2023-12-30

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: BXRV-DR-1830G-100Z-A-23 Ra: 90

LENS: PM-1103 15R

DRIVER: PUP10A-1WMC-700 500mA

30minutes warm-up

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

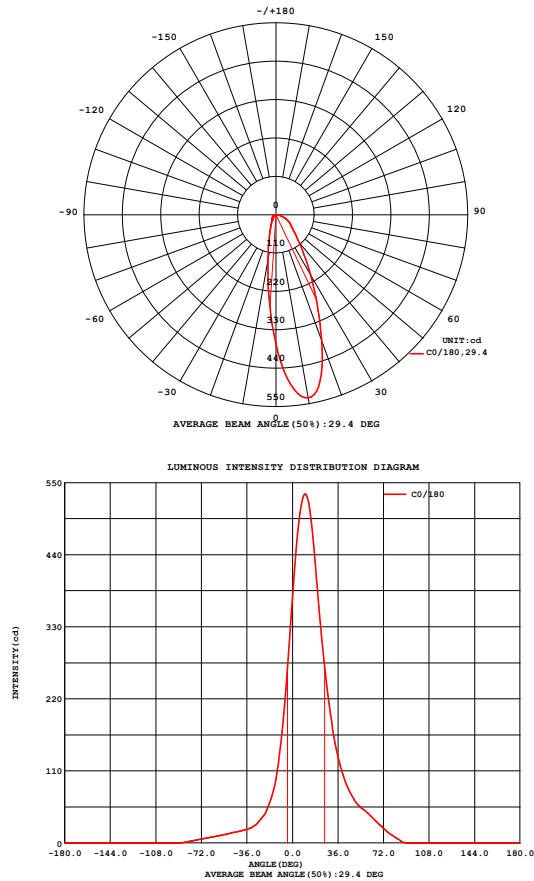


Fig. C0/C180

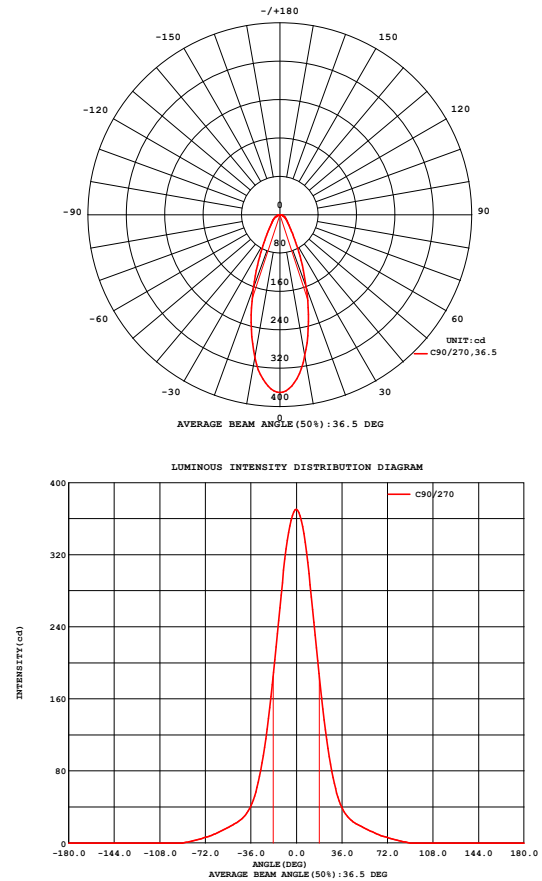


Fig. C90/C270

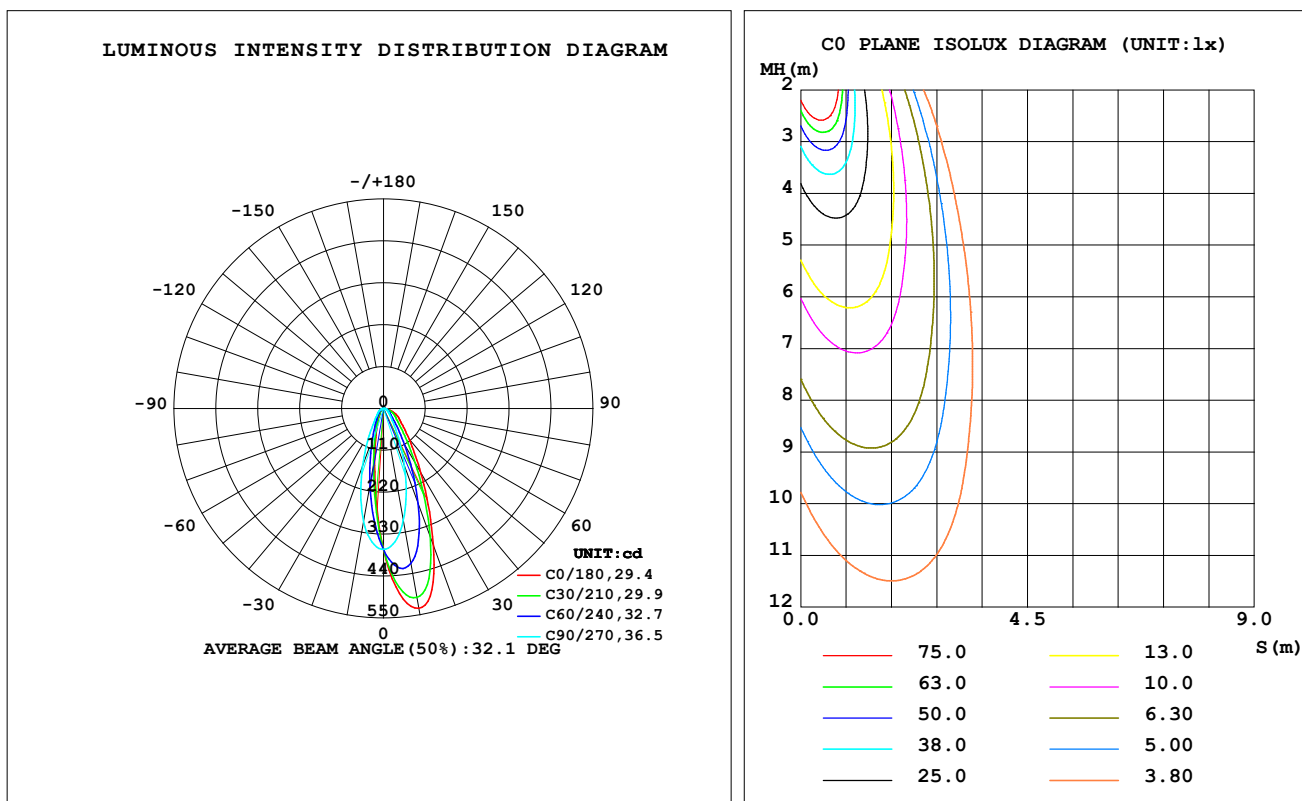
C Range: 0 - 360DEG  
C Interval: For a lens beam angle of 15°  
Test Speed: HIGH  
Temperature:25.3 °C  
Operators:zoe  
Test Date:2023-12-30

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:BXRV-DR-1830G-100Z-A-23 Ra:90  
LENS:PM-1103 15R  
DRIVER:PUP10A-1WMC-700 500mA  
30minutes warm-up

## LUMINAIRE PHOTOMETRIC TEST REPORT

|  |                                 |                        |
|--|---------------------------------|------------------------|
| Test:U:120.21V I:0.0944A P:11.210W PF:0.9865 Freq:59.98Hz<br>Lamp Flux:889.25x1 lm |                                 |                        |
| NAME: CTL-M-1.5-DM-15-RD-WW  | TYPE:                           | WEIGHT:                |
| SPEC.: 3000K   | DIM.:                           | SERIAL No.: 2312301480 |
| MFR.: MERCURY LIGHTING   | SUR.: 0.001319585m <sup>2</sup> | Shielding Angle:       |

| DATA OF LAMP      |           | PHOTOMETRIC DATA Eff: 24.36 lm/W |        |                     |           |
|-------------------|-----------|----------------------------------|--------|---------------------|-----------|
| MODEL             | Bridgelux | I <sub>max</sub> (cd)            | 532.9  | S/MH (C0/180)       | 0.25      |
| NOMINAL POWER (W) | 11        | LOR (%)                          | 30.7   | S/MH (C90/270)      | 0.60      |
| RATED VOLTAGE (V) | 120       | TOTAL FLUX (lm)                  | 273.07 | η UP, DN (C0-180)   | 0.0, 17.4 |
| NOMINAL FLUX (lm) | 889.25    | CIE CLASS                        | DIRECT | η UP, DN (C180-360) | 0.0, 13.3 |
| LAMPS INSIDE      | 1         | η up (%)                         | 0.0    | CIBSE SHR NOM       | 0.50      |
| TEST VOLTAGE (V)  | 120       | η down (%)                       | 30.7   | CIBSE SHR MAX       | 0.55      |



C Range: 0 - 360DEG

C Interval: For a lens beam angle of 15°

Test Speed: HIGH

Temperature: 25.3 °C

Operators: zoe

Test Date: 2023-12-30

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461

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Remarks: LAMP: BXR-V-DR-1830G-100Z-A-23 Ra: 90

LENS: PM-1103 15R

DRIVER: PUP10A-1WMC-700 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       | 532.9                 | 458.0 | 299.1 | 176.6 | 136.4 | 179.0 | 303.0 | 456.4 | 0- 10    | 32.79       | 32.79        | 12,3.69   |
| 20       | 383.4                 | 312.5 | 161.6 | 71.74 | 51.07 | 72.58 | 162.4 | 305.2 | 10- 20   | 70.87       | 103.7        | 38,11.7   |
| 30       | 198.1                 | 140.1 | 66.31 | 33.52 | 26.27 | 34.59 | 67.34 | 137.3 | 20- 30   | 60.15       | 163.8        | 60,18.4   |
| 40       | 104.8                 | 61.44 | 30.20 | 20.85 | 18.79 | 21.49 | 31.59 | 62.49 | 30- 40   | 38.08       | 201.9        | 73.9,22.7 |
| 50       | 62.42                 | 35.44 | 19.22 | 15.35 | 14.41 | 15.76 | 20.21 | 36.88 | 40- 50   | 25.99       | 227.9        | 83.4,25.6 |
| 60       | 44.99                 | 24.86 | 12.44 | 10.74 | 10.47 | 10.85 | 13.04 | 25.89 | 50- 60   | 20.23       | 248.1        | 90.9,27.9 |
| 70       | 25.90                 | 14.64 | 6.885 | 6.810 | 6.700 | 6.801 | 7.018 | 14.85 | 60- 70   | 14.66       | 262.8        | 96.2,29.5 |
| 80       | 10.43                 | 6.114 | 3.049 | 3.060 | 2.931 | 3.007 | 2.999 | 6.045 | 70- 80   | 8.128       | 270.9        | 99.2,30.5 |
| 90       | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 80- 90   | 2.176       | 273.1        | 100,30.7  |
| 100      | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 90-100   | 0           | 273.1        | 100,30.7  |
| 110      | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 100-110  | 0           | 273.1        | 100,30.7  |
| 120      | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 110-120  | 0           | 273.1        | 100,30.7  |
| 130      | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 120-130  | 0           | 273.1        | 100,30.7  |
| 140      | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 130-140  | 0           | 273.1        | 100,30.7  |
| 150      | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 140-150  | 0           | 273.1        | 100,30.7  |
| 160      | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 150-160  | 0           | 273.1        | 100,30.7  |
| 170      | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 160-170  | 0           | 273.1        | 100,30.7  |
| 180      | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 170-180  | 0           | 273.1        | 100,30.7  |
| DEG      | LUMINOUS INTENSITY:cd |       |       |       |       |       |       |       |          | UNIT:lm     |              |           |

C Range: 0 - 360DEG

C Interval: For a lens beam angle of 15°

Test Speed: HIGH

Temperature:25.3℃

Operators:zoe

Test Date:2023-12-30

 $\gamma$  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:BXRV-DR-1830G-100Z-A-23 Ra:90

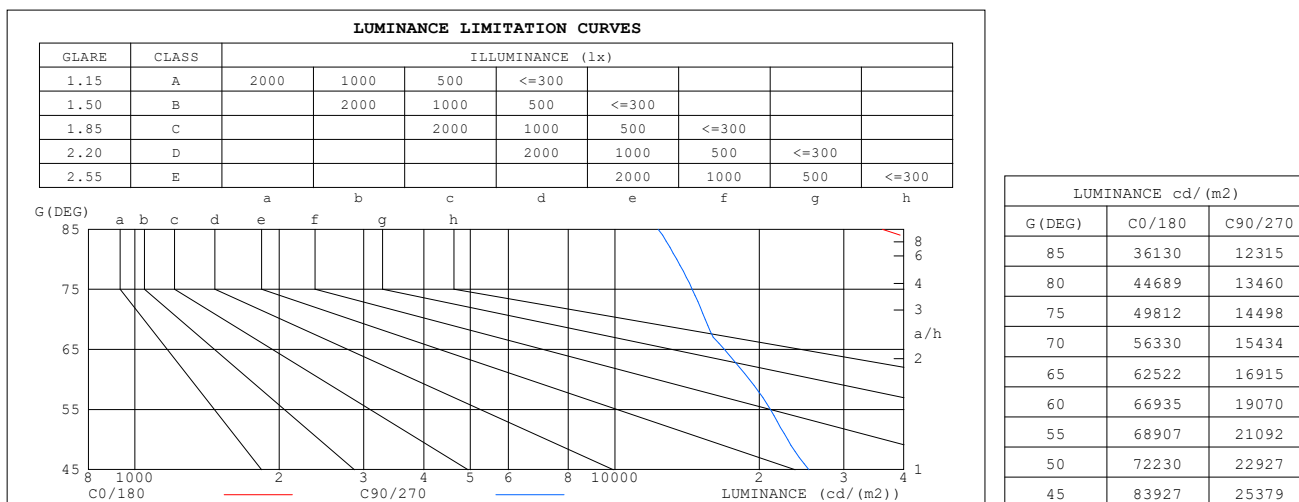
LENS:PM-1103 15R

DRIVER:PUP10A-1WMC-700 500mA

30minutes warm-up

## LUMINANCE LIMITATION CURVES

|  |                     |                        |
|--|---------------------|------------------------|
| Test:U:120.21V I:0.0944A P:11.210W PF:0.9865 Freq:59.98Hz<br>Lamp Flux:889.25x1 lm |                     |                        |
| NAME: CTL-M-1.5-DM-15-RD-WW  | TYPE:               | WEIGHT:                |
| SPEC.: 3000K   | DIM.:               | SERIAL No.: 2312301480 |
| MFR.: MERCURY LIGHTING   | SUR.: 0.001319585m2 | Shielding Angle:       |



C Range: 0 - 360DEG

C Interval: For a lens beam angle of 15°

Test Speed: HIGH

Temperature: 25.3 °C

Operators: zoe

Test Date: 2023-12-30

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461

Humidity: 65.0%

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Remarks: LAMP: BXRV-DR-1830G-100Z-A-23 Ra: 90

LENS: PM-1103 15R

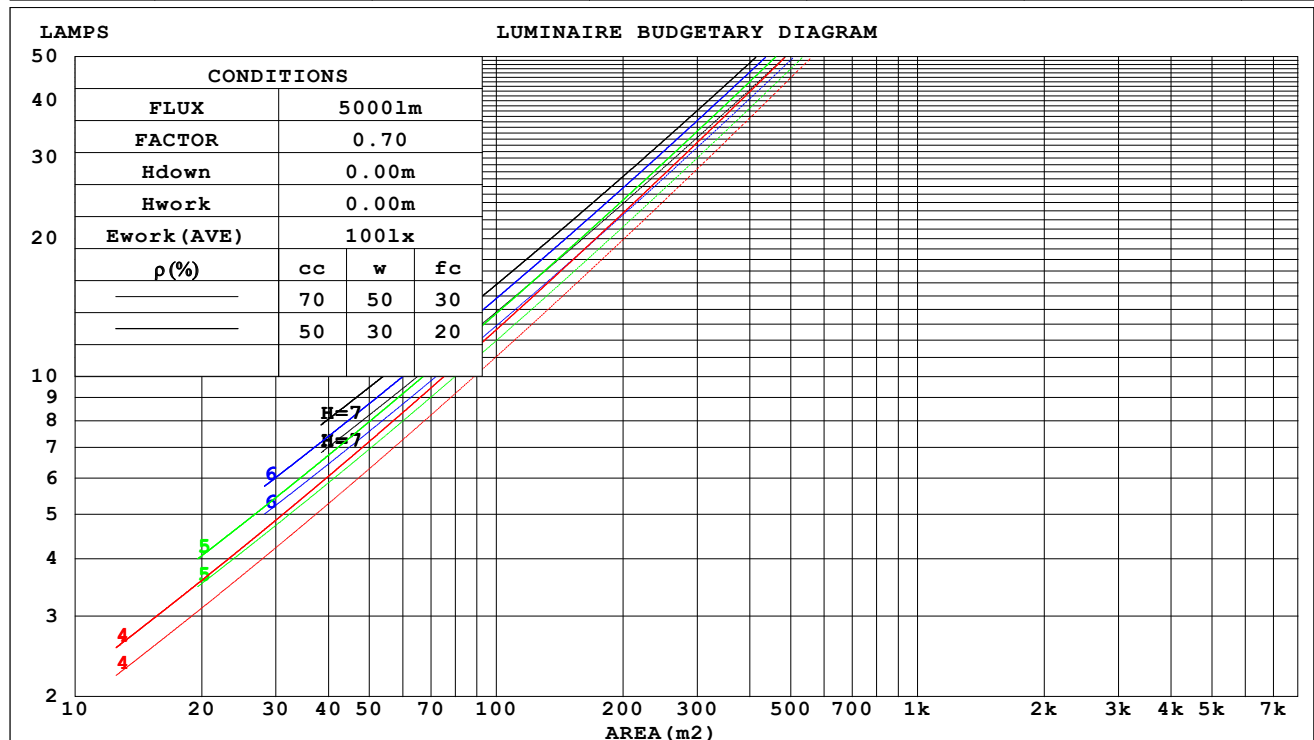
DRIVER: PUP10A-1WMC-700 500mA

30minutes warm-up

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|  |                     |                        |
|--|---------------------|------------------------|
| Test:U:120.21V I:0.0944A P:11.210W PF:0.9865 Freq:59.98Hz<br>Lamp Flux:889.25x1 lm |                     |                        |
| NAME: CTL-M-1.5-DM-15-RD-WW  | TYPE:               | WEIGHT:                |
| SPEC.: 3000K   | DIM.:               | SERIAL No.: 2312301480 |
| MFR.: MERCURY LIGHTING   | SUR.: 0.001319585m2 | 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      Coefficients of Utilization(CU) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0.0  | .37  | .37 | .37 | .36 | .36 | .36 | .34 | .34 | .34 | .33 | .33 | .33 | .31 | .31 | .31 | .31 |
| 1.0  | .33  | .32 | .31 | .33 | .32 | .31 | .31 | .31 | .30 | .30 | .30 | .29 | .29 | .29 | .28 | .28 |
| 2.0  | .30  | .29 | .28 | .30 | .28 | .27 | .29 | .28 | .27 | .28 | .27 | .26 | .27 | .26 | .25 | .25 |
| 3.0  | .28  | .26 | .25 | .27 | .26 | .24 | .27 | .25 | .24 | .26 | .25 | .24 | .25 | .24 | .23 | .23 |
| 4.0  | .26  | .24 | .22 | .25 | .23 | .22 | .25 | .23 | .22 | .24 | .23 | .22 | .23 | .22 | .21 | .21 |
| 5.0  | .24  | .22 | .20 | .24 | .22 | .20 | .23 | .21 | .20 | .22 | .21 | .20 | .22 | .21 | .20 | .19 |
| 6.0  | .22  | .20 | .19 | .22 | .20 | .19 | .22 | .20 | .18 | .21 | .20 | .18 | .21 | .19 | .18 | .18 |
| 7.0  | .21  | .19 | .17 | .21 | .19 | .17 | .20 | .19 | .17 | .20 | .18 | .17 | .20 | .18 | .17 | .17 |
| 8.0  | .20  | .18 | .16 | .19 | .18 | .16 | .19 | .17 | .16 | .19 | .17 | .16 | .18 | .17 | .16 | .16 |
| 9.0  | .19  | .17 | .15 | .18 | .17 | .15 | .18 | .16 | .15 | .18 | .16 | .15 | .18 | .16 | .15 | .15 |
| 10.0 | .18  | .16 | .14 | .17 | .16 | .14 | .17 | .15 | .14 | .17 | .15 | .14 | .17 | .15 | .14 | .14 |



C Range: 0 - 360DEG  
 C Interval: For a lens beam angle of 15°  
 Test Speed: HIGH  
 Temperature: 25.3 °C  
 Operators: zoe  
 Test Date: 2023-12-30

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]  
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 30minutes warm-up

**WEC AND CCEC**

|  |                     |                        |
|--|---------------------|------------------------|
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| NAME: CTL-M-1.5-DM-15-RD-WW  | TYPE:               | WEIGHT:                |
| SPEC.: 3000K   | DIM.:               | SERIAL No.: 2312301480 |
| MFR.: MERCURY LIGHTING   | SUR.: 0.001319585m2 | 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  | .069                  | .039 | .012 | .067 | .038 | .012 | .063                            | .036 | .011 | .059 | .034 | .011 | .056 | .032 | .010 |   |
| 2.0  | .065                  | .036 | .011 | .063 | .035 | .011 | .060                            | .033 | .010 | .057 | .032 | .010 | .054 | .030 | .010 |   |
| 3.0  | .061                  | .032 | .010 | .059 | .032 | .010 | .056                            | .030 | .009 | .053 | .029 | .009 | .051 | .028 | .009 |   |
| 4.0  | .057                  | .029 | .009 | .055 | .029 | .009 | .053                            | .028 | .008 | .050 | .027 | .008 | .048 | .026 | .008 |   |
| 5.0  | .053                  | .027 | .008 | .052 | .027 | .008 | .050                            | .026 | .008 | .047 | .025 | .007 | .046 | .024 | .007 |   |
| 6.0  | .050                  | .025 | .007 | .049 | .025 | .007 | .047                            | .024 | .007 | .045 | .023 | .007 | .043 | .023 | .007 |   |
| 7.0  | .047                  | .023 | .007 | .046 | .023 | .007 | .044                            | .022 | .006 | .042 | .022 | .006 | .041 | .021 | .006 |   |
| 8.0  | .044                  | .022 | .006 | .043 | .021 | .006 | .042                            | .021 | .006 | .040 | .020 | .006 | .039 | .020 | .006 |   |
| 9.0  | .042                  | .020 | .006 | .041 | .020 | .006 | .040                            | .020 | .006 | .038 | .019 | .006 | .037 | .019 | .005 |   |
| 10.0 | .040                  | .019 | .005 | .039 | .019 | .005 | .038                            | .019 | .005 | .037 | .018 | .005 | .035 | .018 | .005 |   |

| 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  | .058                  | .058 | .058 | .050 | .050 | .050 | .034                                       | .034 | .034 | .020 | .020 | .020 | .006 | .006 | .006 |   |
| 1.0  | .054                  | .048 | .043 | .046 | .041 | .037 | .031                                       | .028 | .026 | .018 | .016 | .015 | .006 | .005 | .005 |   |
| 2.0  | .050                  | .041 | .033 | .042 | .035 | .029 | .029                                       | .024 | .020 | .017 | .014 | .012 | .005 | .005 | .004 |   |
| 3.0  | .046                  | .035 | .026 | .040 | .030 | .023 | .027                                       | .021 | .016 | .016 | .012 | .009 | .005 | .004 | .003 |   |
| 4.0  | .043                  | .031 | .021 | .037 | .026 | .018 | .026                                       | .018 | .013 | .015 | .011 | .008 | .005 | .004 | .002 |   |
| 5.0  | .041                  | .027 | .017 | .035 | .023 | .015 | .024                                       | .016 | .011 | .014 | .010 | .006 | .004 | .003 | .002 |   |
| 6.0  | .038                  | .024 | .014 | .033 | .021 | .012 | .023                                       | .015 | .009 | .013 | .009 | .005 | .004 | .003 | .002 |   |
| 7.0  | .036                  | .022 | .012 | .031 | .019 | .011 | .022                                       | .013 | .008 | .012 | .008 | .004 | .004 | .003 | .001 |   |
| 8.0  | .034                  | .020 | .010 | .030 | .017 | .009 | .020                                       | .012 | .006 | .012 | .007 | .004 | .004 | .002 | .001 |   |
| 9.0  | .033                  | .019 | .009 | .028 | .016 | .008 | .019                                       | .011 | .006 | .011 | .007 | .003 | .004 | .002 | .001 |   |
| 10.0 | .031                  | .017 | .008 | .027 | .015 | .007 | .019                                       | .011 | .005 | .011 | .006 | .003 | .004 | .002 | .001 |   |

C Range: 0 - 360DEG

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Test Speed: HIGH

Temperature:25.3℃

Operators:zoe

Test Date:2023-12-30

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461

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Test Distance:3.160m [K=1.0000]

Remarks: LAMP:BXRV-DR-1830G-100Z-A-23 Ra:90

LENS:PM-1103 15R

DRIVER:PUP10A-1WMC-700 500mA

30minutes warm-up

**UGR(Unified Glare Rating) Table**

|  |               |                  |      |      |                     |               |                |                        |      |      |      |
|--|---------------|------------------|------|------|---------------------|---------------|----------------|------------------------|------|------|------|
| Test:U:120.21V I:0.0944A P:11.210W PF:0.9865 Freq:59.98Hz<br>Lamp Flux:889.25x1 lm |               |                  |      |      |                     |               |                |                        |      |      |      |
| NAME: CTL-M-1.5-DM-15-RD-WW  |               |                  |      |      | TYPE:               |               |                | WEIGHT:                |      |      |      |
| SPEC.: 3000K   |               |                  |      |      | DIM.:               |               |                | SERIAL No.: 2312301480 |      |      |      |
| MFR.: MERCURY LIGHTING   |               |                  |      |      | SUR.: 0.001319585m2 |               |                | 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            | 27.5             | 28.7 | 27.8 | 28.8                | 29.0          | 22.1           | 23.3                   | 22.4 | 23.4 | 23.6 |
|  | 3H            | 29.0             | 30.0 | 29.2 | 30.2                | 30.4          | 22.9           | 24.0                   | 23.2 | 24.2 | 24.4 |
|  | 4H            | 29.5             | 30.5 | 29.8 | 30.7                | 31.0          | 23.2           | 24.2                   | 23.5 | 24.5 | 24.7 |
|  | 6H            | 29.9             | 30.8 | 30.2 | 31.1                | 31.3          | 23.5           | 24.4                   | 23.8 | 24.7 | 24.9 |
|  | 8H            | 30.1             | 30.9 | 30.4 | 31.2                | 31.5          | 23.6           | 24.4                   | 23.9 | 24.7 | 25.0 |
|  | 12H           | 30.1             | 31.0 | 30.5 | 31.3                | 31.6          | 23.6           | 24.5                   | 23.9 | 24.7 | 25.0 |
| 4H   | 2H            | 27.7             | 28.6 | 28.0 | 28.9                | 29.1          | 23.4           | 24.4                   | 23.7 | 24.6 | 24.8 |
|  | 3H            | 29.3             | 30.2 | 29.6 | 30.4                | 30.7          | 24.3           | 25.1                   | 24.6 | 25.4 | 25.7 |
|  | 4H            | 30.0             | 30.8 | 30.4 | 31.1                | 31.4          | 24.7           | 25.4                   | 25.0 | 25.7 | 26.1 |
|  | 6H            | 30.6             | 31.2 | 30.9 | 31.6                | 31.9          | 24.9           | 25.6                   | 25.3 | 26.0 | 26.3 |
|  | 8H            | 30.8             | 31.4 | 31.2 | 31.8                | 32.1          | 25.0           | 25.7                   | 25.4 | 26.0 | 26.4 |
|  | 12H           | 30.9             | 31.5 | 31.3 | 31.8                | 32.2          | 25.1           | 25.7                   | 25.5 | 26.1 | 26.5 |
| 8H   | 4H            | 30.0             | 30.7 | 30.4 | 31.0                | 31.4          | 25.3           | 25.9                   | 25.7 | 26.3 | 26.7 |
|  | 6H            | 30.7             | 31.2 | 31.1 | 31.6                | 32.1          | 25.7           | 26.2                   | 26.1 | 26.6 | 27.0 |
|  | 8H            | 31.0             | 31.5 | 31.4 | 31.9                | 32.3          | 25.8           | 26.3                   | 26.3 | 26.7 | 27.2 |
|  | 12H           | 31.2             | 31.6 | 31.7 | 32.0                | 32.5          | 25.9           | 26.3                   | 26.4 | 26.8 | 27.2 |
| 12H  | 4H            | 30.0             | 30.6 | 30.4 | 31.0                | 31.4          | 25.4           | 26.0                   | 25.8 | 26.4 | 26.8 |
|  | 6H            | 30.7             | 31.2 | 31.2 | 31.6                | 32.0          | 25.9           | 26.3                   | 26.3 | 26.8 | 27.2 |
|  | 8H            | 31.0             | 31.4 | 31.5 | 31.9                | 32.3          | 26.0           | 26.4                   | 26.5 | 26.9 | 27.4 |
| Variations with the observer position at spacings(CIE Pub.117):                    |               |                  |      |      |                     |               |                |                        |      |      |      |
| S = 1.0H   | + 0.3 / - 0.2 |                  |      |      |                     | + 0.4 / - 0.5 |                |                        |      |      |      |
| 1.5H   | + 0.6 / - 0.5 |                  |      |      |                     | + 0.3 / - 0.4 |                |                        |      |      |      |
| 2.0H   | + 0.8 / - 0.9 |                  |      |      |                     | + 0.5 / - 0.7 |                |                        |      |      |      |

CIE Pub.117, 889.3 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.4)  
 Area: 0.00131959 m2

|  |   |
|--|---|
| C Range: 0 - 360DEG                      | γ Range: 0 - 180DEG                                 |
| C Interval: For a lens beam angle of 15° | γ Interval: 1.0DEG                                  |
| Test Speed: HIGH                         | Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.461 |
| Temperature:25.3℃                        | Humidity:65.0%                                      |
| Operators:zoe                            | Test Distance:3.160m [K=1.0000]                     |
| Test Date:2023-12-30                     | Remarks: LAMP:BXRV-DR-1830G-100Z-A-23 Ra:90         |
|  | LENS:PM-1103 15R                                    |
|  | DRIVER:PUP10A-1WMC-700 500mA                        |
|  | 30minutes warm-up                                   |



## UTILIZATION FACTORS TABLE

|  |                     |                        |
|--|---------------------|------------------------|
| Test:U:120.21V I:0.0944A P:11.210W PF:0.9865 Freq:59.98Hz<br>Lamp Flux:889.25x1 lm |                     |                        |
| NAME: CTL-M-1.5-DM-15-RD-WW  | TYPE:               | WEIGHT:                |
| SPEC.: 3000K   | DIM.:               | SERIAL No.: 2312301480 |
| MFR.: MERCURY LIGHTING   | SUR.: 0.001319585m2 | 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 23   | 21  | 19        | 23  | 21  | 19  | 23  | 20            | 19  | 18     |
| 0.80                             | 26   | 23  | 22        | 26  | 23  | 22  | 25  | 23            | 22  | 20     |
| 1.00                             | 28   | 25  | 24        | 27  | 25  | 24  | 27  | 25            | 23  | 22     |
| 1.25                             | 29   | 27  | 25        | 29  | 27  | 25  | 28  | 26            | 25  | 23     |
| 1.50                             | 30   | 28  | 27        | 30  | 28  | 27  | 29  | 28            | 26  | 25     |
| 2.00                             | 32   | 30  | 28        | 31  | 30  | 28  | 30  | 29            | 28  | 26     |
| 2.50                             | 32   | 31  | 30        | 32  | 30  | 29  | 31  | 30            | 29  | 27     |
| 3.00                             | 33   | 32  | 31        | 33  | 31  | 30  | 31  | 30            | 30  | 27     |
| 4.00                             | 34   | 33  | 32        | 33  | 32  | 31  | 32  | 31            | 31  | 28     |
| 5.00                             | 35   | 34  | 33        | 34  | 33  | 32  | 33  | 32            | 31  | 29     |
| ROOM INDEX                       | UF(total)  |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |  |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG

C Interval: For a lens beam angle of 15°

Test Speed: HIGH

Temperature: 25.3 °C

Operators: zoe

Test Date: 2023-12-30

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: BXRV-DR-1830G-100Z-A-23 Ra: 90

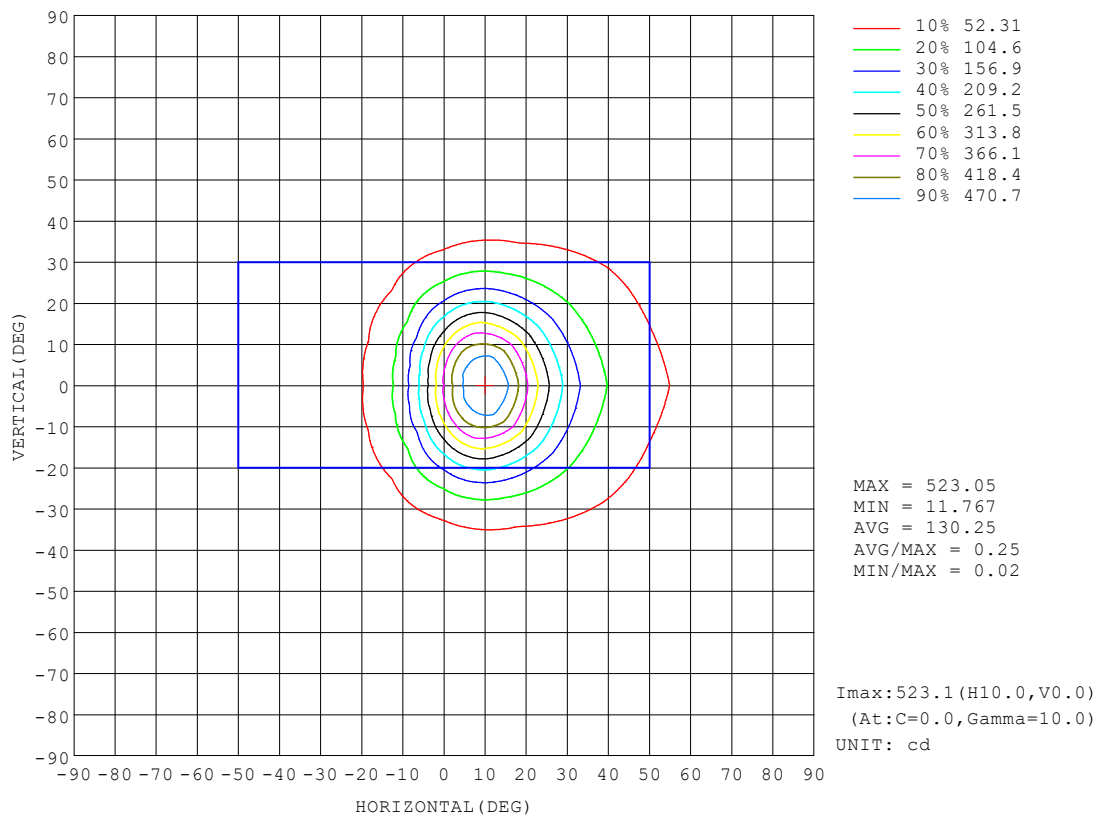
LENS: PM-1103 15R

DRIVER: PUP10A-1WMC-700 500mA

30minutes warm-up

## ISOCANDELA DIAGRAM

|  |                     |                        |
|--|---------------------|------------------------|
| Test:U:120.21V I:0.0944A P:11.210W PF:0.9865 Freq:59.98Hz<br>Lamp Flux:889.25x1 lm |                     |                        |
| NAME: CTL-M-1.5-DM-15-RD-WW  | TYPE:               | WEIGHT:                |
| SPEC.: 3000K   | DIM.:               | SERIAL No.: 2312301480 |
| MFR.: MERCURY LIGHTING   | SUR.: 0.001319585m2 | Shielding Angle:       |



C Range: 0 - 360DEG

C Interval: For a lens beam angle of 15°

Test Speed: HIGH

Temperature:25.3℃

Operators:zoe

Test Date:2023-12-30

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:BXRV-DR-1830G-100Z-A-23 Ra:90

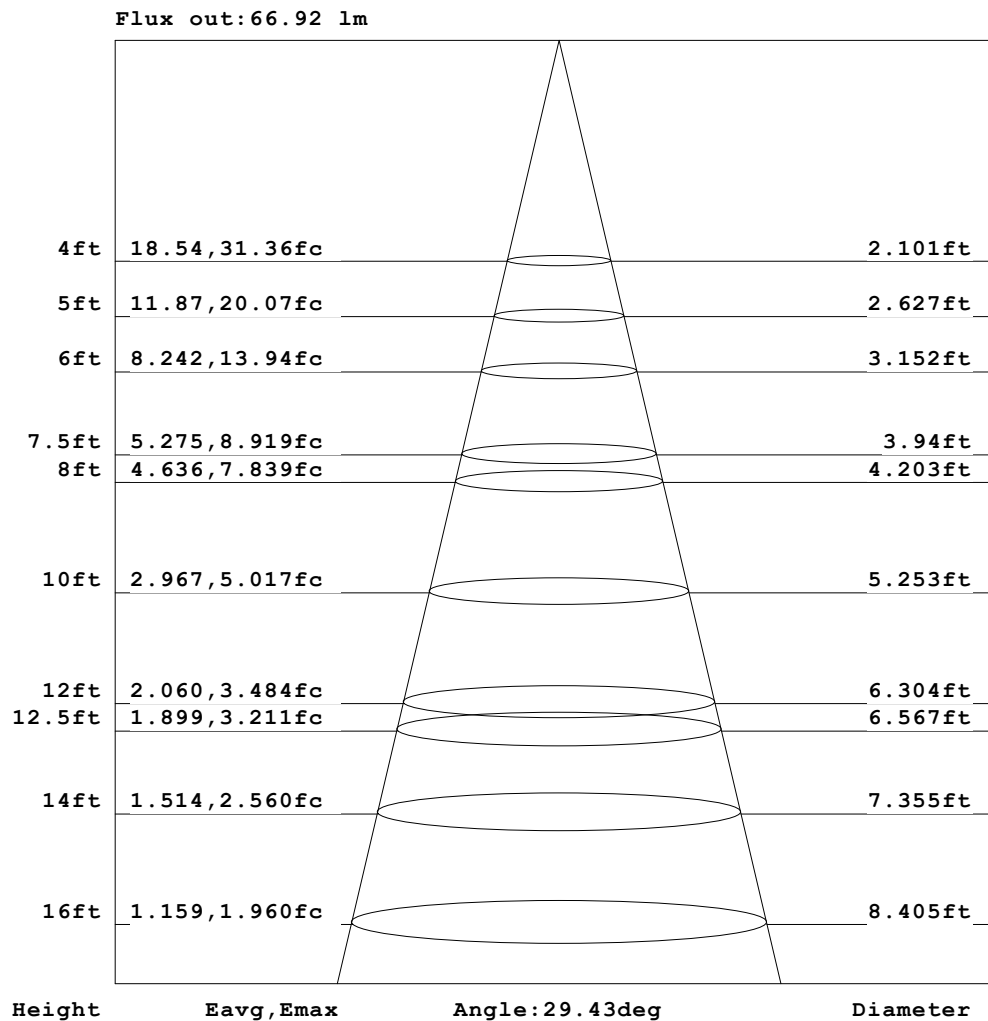
LENS:PM-1103 15R

DRIVER:PUP10A-1WMC-700 500mA

30minutes warm-up

**AAI Figure**

|  |                     |                        |
|--|---------------------|------------------------|
| Test:U:120.21V I:0.0944A P:11.210W PF:0.9865 Freq:59.98Hz<br>Lamp Flux:889.25x1 lm |                     |                        |
| NAME: CTL-M-1.5-DM-15-RD-WW  | TYPE:               | WEIGHT:                |
| SPEC.: 3000K   | DIM.:               | SERIAL No.: 2312301480 |
| MFR.: MERCURY LIGHTING   | SUR.: 0.001319585m2 | Shielding Angle:       |

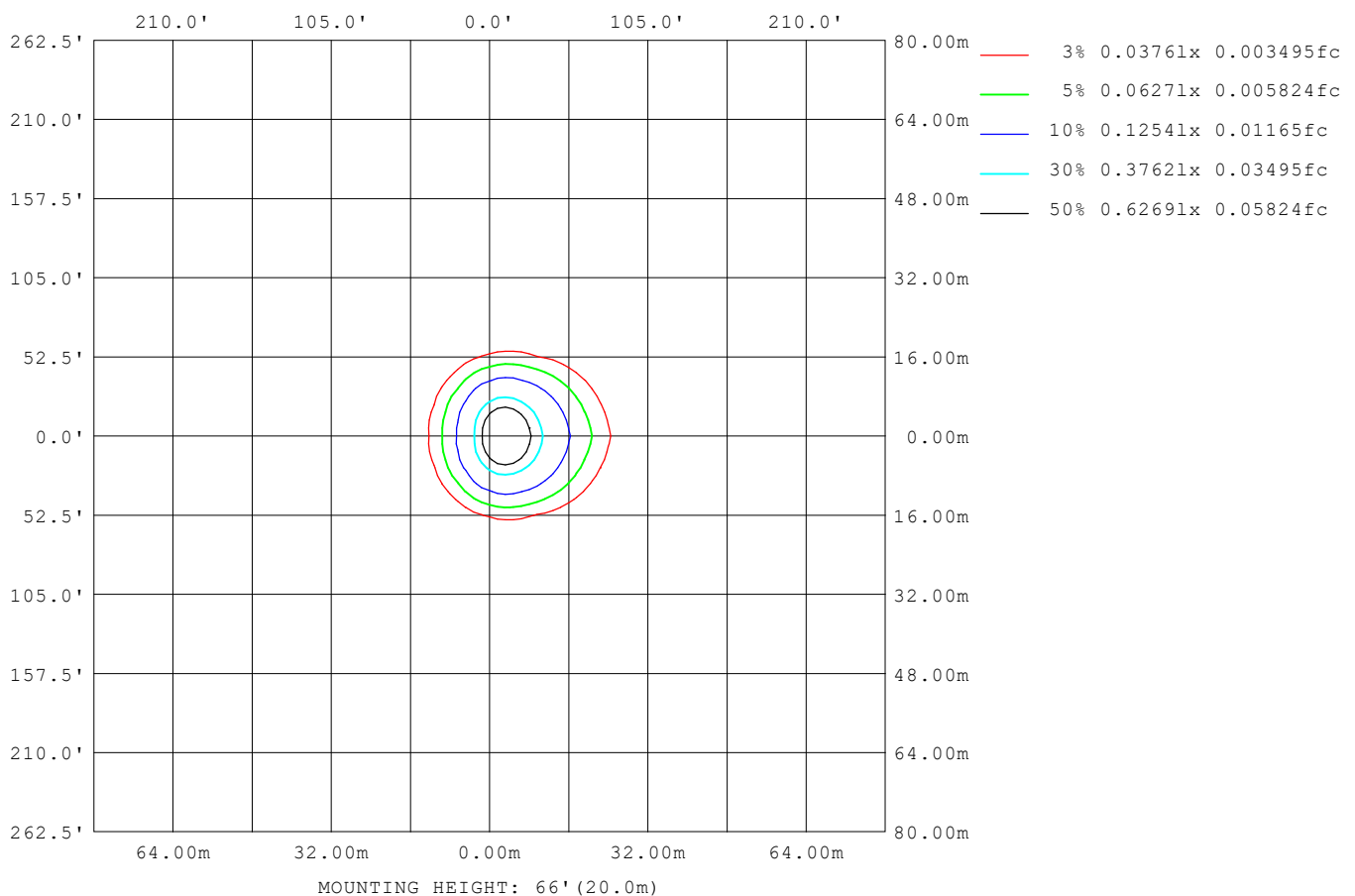


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

|  |  |
|--|--|
| C Range: 0 - 360DEG                      | γ Range: 0 - 180DEG                                  |
| C Interval: For a lens beam angle of 15° | γ Interval: 1.0DEG                                   |
| Test Speed: HIGH                         | Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.461 |
| Temperature: 25.3 °C                     | Humidity: 65.0%                                      |
| Operators: zoe                           | Test Distance: 3.160m [K=1.0000]                     |
| Test Date: 2023-12-30                    | Remarks: LAMP: BXR-V-DR-1830G-100Z-A-23 Ra: 90       |
|  | LENS: PM-1103 15R                                    |
|  | DRIVER: PUP10A-1WMC-700 500mA                        |
|  | 30minutes warm-up                                    |

**ISOLUX DIAGRAM**

|  |                            |                               |
|--|----------------------------|-------------------------------|
| <b>Test:</b> U:120.21V I:0.0944A P:11.210W PF:0.9865 Freq:59.98Hz<br><b>Lamp Flux:</b> 889.25x1 lm |                            |                               |
| <b>NAME:</b> CTL-M-1.5-DM-15-RD-WW   | <b>TYPE:</b>               | <b>WEIGHT:</b>                |
| <b>SPEC.:</b> 3000K  | <b>DIM.:</b>               | <b>SERIAL No.:</b> 2312301480 |
| <b>MFR.:</b> MERCURY LIGHTING  | <b>SUR.:</b> 0.001319585m2 | <b>Shielding Angle:</b>       |


**C Range:** 0 - 360DEG

**C Interval:** For a lens beam angle of 15°

**Test Speed:** HIGH

**Temperature:** 25.3 °C

**Operators:** zoe

**Test Date:** 2023-12-30

**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: BXR-V-DR-1830G-100Z-A-23 Ra: 90

**LENS:** PM-1103 15R

**DRIVER:** PUP10A-1WMC-700 500mA

**30minutes warm-up**

**LED Avg.L Report**

|  |                     |                        |
|--|---------------------|------------------------|
| Test:U:120.21V I:0.0944A P:11.210W PF:0.9865 Freq:59.98Hz<br>Lamp Flux:889.25x1 lm |                     |                        |
| NAME: CTL-M-1.5-DM-15-RD-WW  | TYPE:               | WEIGHT:                |
| SPEC.: 3000K   | DIM.:               | SERIAL No.: 2312301480 |
| MFR.: MERCURY LIGHTING   | SUR.: 0.001319585m2 | Shielding Angle:       |

| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 39558 |
| L_0~180 (75) av  | 32403 |
| L_0~180 (85) av  | 23204 |
| L_90~270 (65) av | 16995 |
| L_90~270 (75) av | 14346 |
| L_90~270 (85) av | 11877 |
| L_45 (65) av     | 25342 |
| L_45 (75) av     | 21763 |
| L_45 (85) av     | 15556 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG

C Interval: For a lens beam angle of 15°

Test Speed: HIGH

Temperature:25.3℃

Operators:zoe

Test Date:2023-12-30

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]

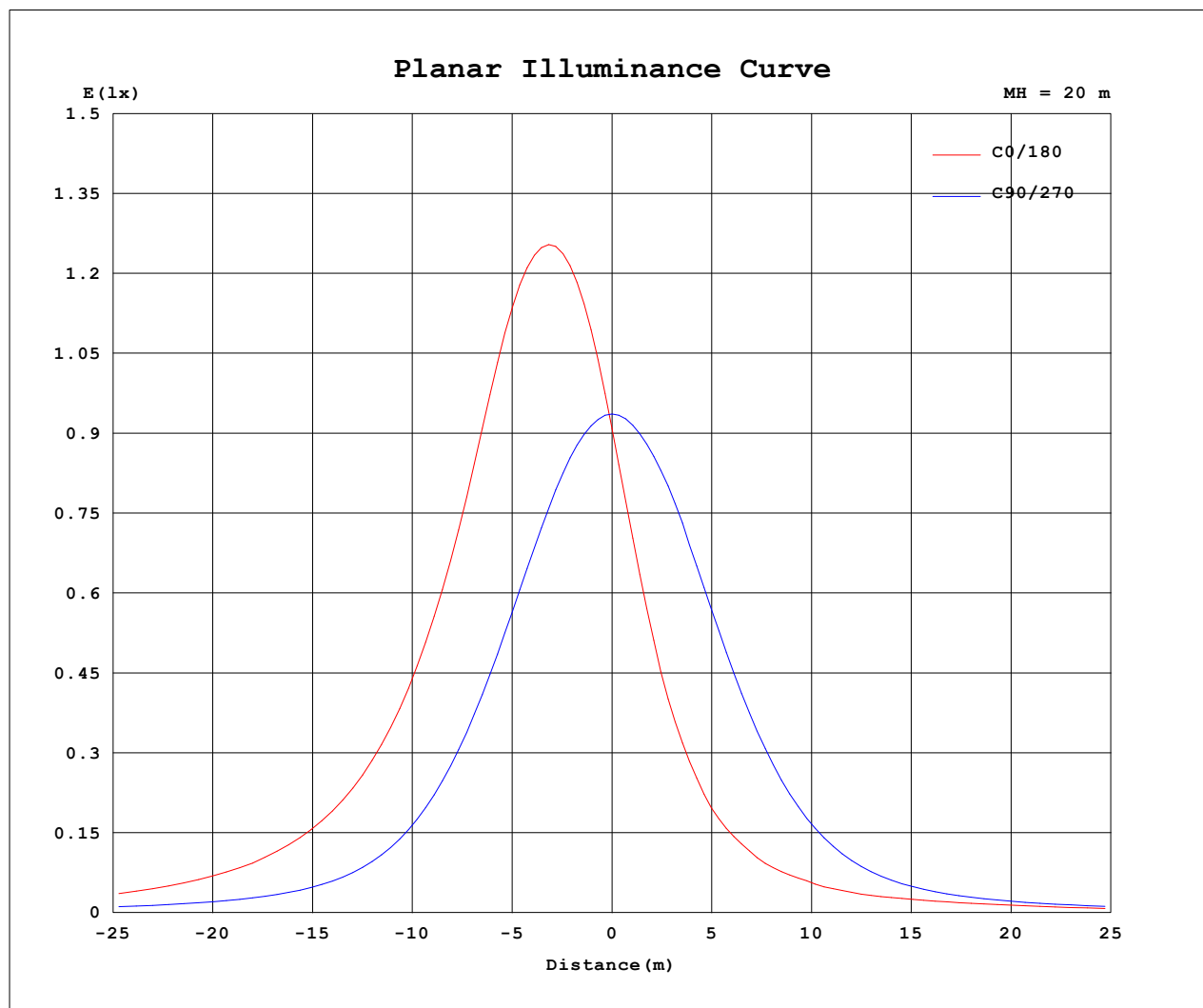
Remarks: LAMP:BXRV-DR-1830G-100Z-A-23 Ra:90

LENS:PM-1103 15R

DRIVER:PUP10A-1WMC-700 500mA

30minutes warm-up

### Planar Illuminance Curve



C Range: 0 - 360DEG

C Interval: For a lens beam angle of 15°

Test Speed: HIGH

Temperature: 25.3 °C

Operators: zoe

Test Date: 2023-12-30

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: BXRV-DR-1830G-100Z-A-23 Ra: 90

LENS: PM-1103 15R

DRIVER: PUP10A-1WMC-700 500mA

30minutes warm-up

**LUMINOUS DISTRIBUTION INTENSITY DATA**

|  |                     |                        |
|--|---------------------|------------------------|
| Test:U:120.21V I:0.0944A P:11.210W PF:0.9865 Freq:59.98Hz<br>Lamp Flux:889.25x1 lm |                     |                        |
| NAME: CTL-M-1.5-DM-15-RD-WW  | TYPE:               | WEIGHT:                |
| SPEC.: 3000K   | DIM.:               | SERIAL No.: 2312301480 |
| MFR.: MERCURY LIGHTING   | SUR.: 0.001319585m2 | Shielding Angle:       |

Table--1

UNIT: cd

| C (DEG)<br>γ (DEG) | 0    | 30   | 60   | 90   | 120  | 150  | 180  | 210  | 240  | 270  | 300  | 330  |  |  |  |  |  |  |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|
| 0                  | 370  | 370  | 370  | 370  | 370  | 370  | 370  | 370  | 370  | 370  | 370  | 370  |  |  |  |  |  |  |
| 5                  | 488  | 470  | 418  | 351  | 290  | 250  | 235  | 250  | 292  | 352  | 418  | 467  |  |  |  |  |  |  |
| 10                 | 533  | 504  | 413  | 299  | 202  | 151  | 136  | 151  | 207  | 303  | 416  | 497  |  |  |  |  |  |  |
| 15                 | 492  | 462  | 357  | 231  | 131  | 90.7 | 79.8 | 92.0 | 134  | 232  | 355  | 451  |  |  |  |  |  |  |
| 20                 | 383  | 359  | 267  | 162  | 85.3 | 58.1 | 51.1 | 58.5 | 86.4 | 162  | 265  | 346  |  |  |  |  |  |  |
| 25                 | 278  | 252  | 179  | 105  | 55.3 | 39.0 | 35.9 | 39.6 | 57.0 | 106  | 177  | 242  |  |  |  |  |  |  |
| 30                 | 198  | 169  | 112  | 66.3 | 38.4 | 28.6 | 26.3 | 29.8 | 39.3 | 67.3 | 111  | 163  |  |  |  |  |  |  |
| 35                 | 142  | 113  | 69.1 | 42.9 | 28.5 | 22.3 | 21.4 | 23.2 | 29.5 | 44.4 | 70.1 | 111  |  |  |  |  |  |  |
| 40                 | 105  | 78.4 | 44.8 | 30.2 | 22.6 | 19.1 | 18.8 | 19.6 | 23.3 | 31.6 | 46.4 | 78.7 |  |  |  |  |  |  |
| 45                 | 79.8 | 58.1 | 31.9 | 23.4 | 18.7 | 16.9 | 16.6 | 17.2 | 19.6 | 24.7 | 33.6 | 59.1 |  |  |  |  |  |  |
| 50                 | 62.4 | 46.0 | 25.1 | 19.2 | 16.0 | 14.7 | 14.4 | 14.9 | 16.6 | 20.2 | 26.7 | 47.1 |  |  |  |  |  |  |
| 55                 | 53.1 | 38.6 | 20.9 | 15.8 | 13.5 | 12.4 | 12.3 | 12.5 | 13.9 | 16.6 | 22.4 | 39.4 |  |  |  |  |  |  |
| 60                 | 45.0 | 32.8 | 17.1 | 12.4 | 11.0 | 10.5 | 10.5 | 10.5 | 11.2 | 13.0 | 18.3 | 33.5 |  |  |  |  |  |  |
| 65                 | 35.5 | 26.3 | 13.0 | 9.32 | 8.81 | 8.61 | 8.60 | 8.62 | 8.85 | 9.63 | 13.9 | 26.6 |  |  |  |  |  |  |
| 70                 | 25.9 | 19.9 | 9.48 | 6.88 | 6.88 | 6.74 | 6.70 | 6.72 | 6.88 | 7.02 | 10.0 | 19.7 |  |  |  |  |  |  |
| 75                 | 17.3 | 13.8 | 6.42 | 4.89 | 4.98 | 4.86 | 4.80 | 4.82 | 4.95 | 4.91 | 6.69 | 13.5 |  |  |  |  |  |  |
| 80                 | 10.4 | 8.45 | 3.83 | 3.05 | 3.12 | 3.00 | 2.93 | 2.94 | 3.07 | 3.00 | 3.96 | 8.14 |  |  |  |  |  |  |
| 85                 | 4.23 | 3.32 | 1.58 | 1.40 | 1.35 | 1.21 | 1.10 | 1.13 | 1.30 | 1.33 | 1.57 | 3.07 |  |  |  |  |  |  |
| 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: For a lens beam angle of 15°

Test Speed: HIGH

Temperature: 25.3 °C

Operators: zoe

Test Date: 2023-12-30

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: BXR-V-DR-1830G-100Z-A-23 Ra: 90

LENS: PM-1103 15R

DRIVER: PUP10A-1WMC-700 500mA

30minutes warm-up