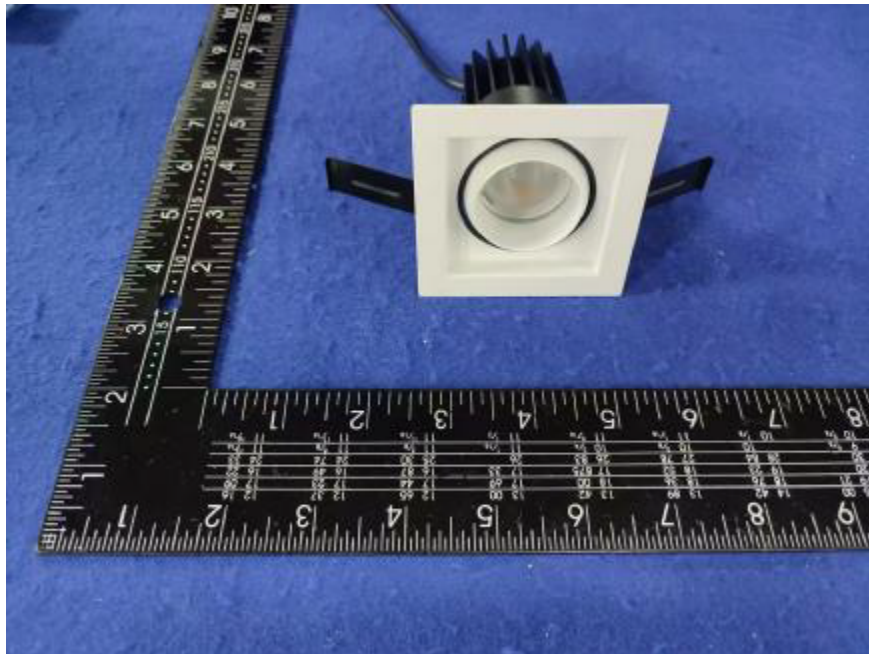


CTL-MPS-1.5-SQ-TF/TL-SH-SG/DB/TP-30K-15

Photometric Report for each Light Engine used  
in single, double and triple configuration  
for Flanged and Flangeless Trim



|                     |         |                          |
|---------------------|---------|--------------------------|
| Light Output Ratio: | 84.6%   |                          |
| Luminaire Power:    | 8.828 W |                          |
| SHR Nominal:        | 0.00    | Calculated using the TM5 |
| SHR Maximum:        | 0.30    | fine grid method.        |

C Range: 0 - 360DEG  
C Interval: For a lens beam angle of 15°  
Test Speed: HIGH  
Temperature: 77.54 °F  
Operators: zoe  
Test Date: 2024-8-22

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity: 65.0%  
Test Distance: 124.409" [K=1.0000]  
Remarks: LAMP: BXRH-30G10T0-G-83 Ra: 90  
LENS: PM-1084 15R  
NO DRIVER: 500mA  
30minutes warm-up

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

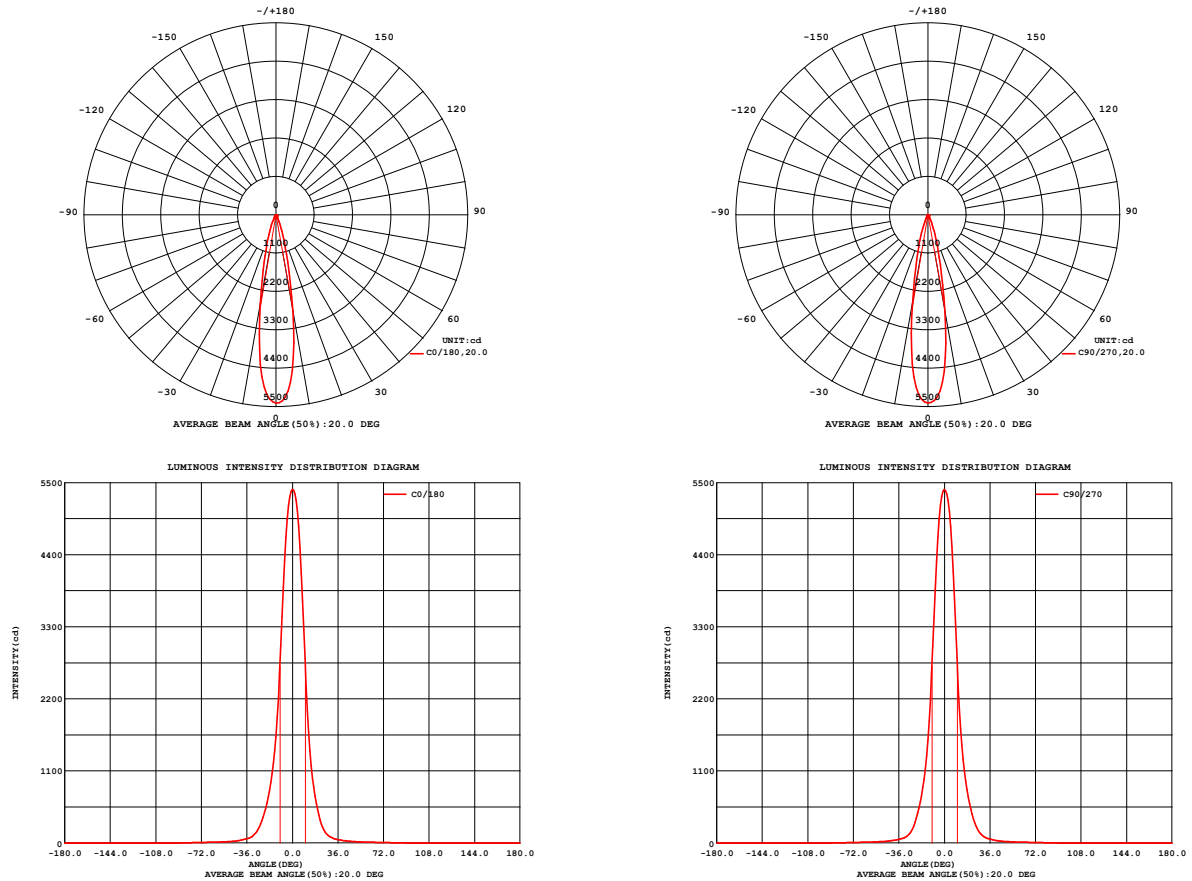


Fig. C0/C180

Fig. C90/C270

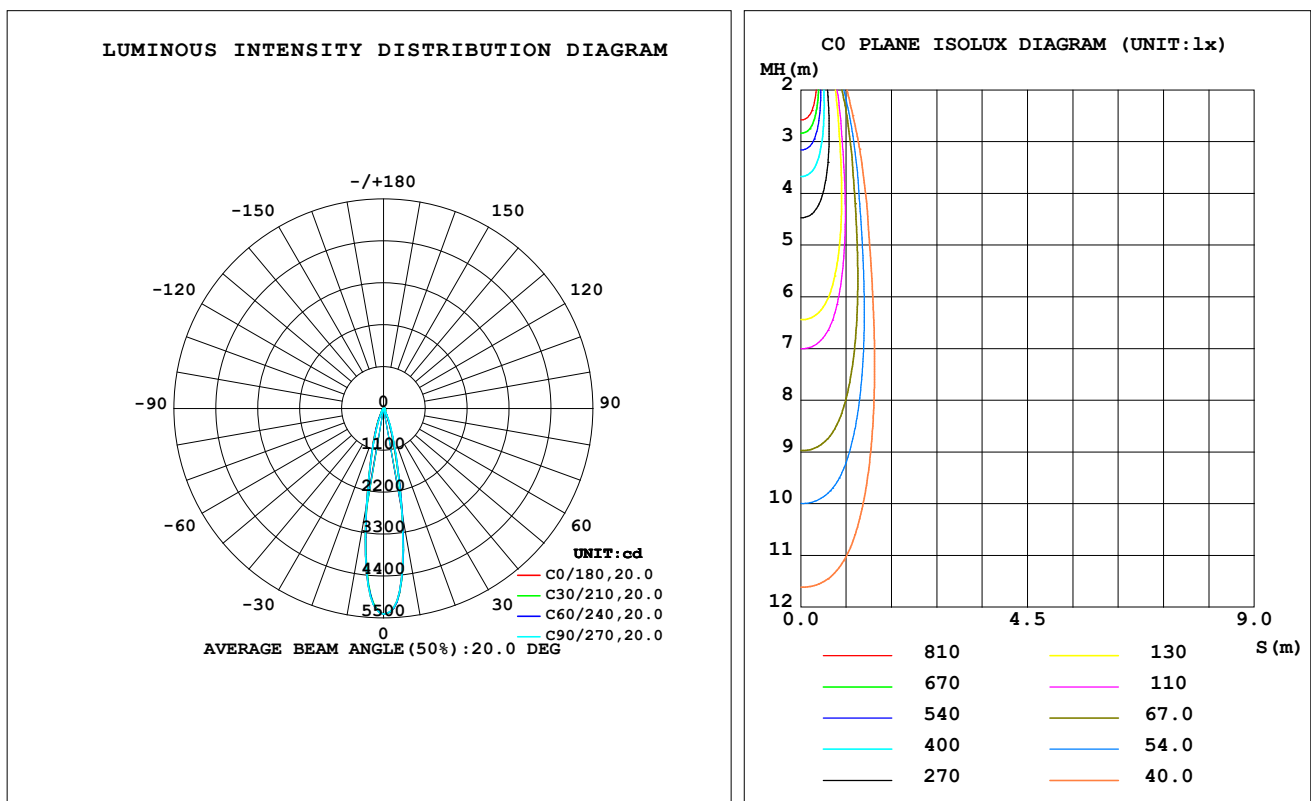
C Range: 0 - 360DEG  
C Interval: For a lens beam angle of 15°  
Test Speed: HIGH  
Temperature: 77.54 °F  
Operators: zoe  
Test Date: 2024-8-22

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity: 65.0%  
Test Distance: 124.409" [K=1.0000]  
Remarks: LAMP: BXRH-30G10T0-G-83 Ra: 90  
LENS: PM-1084 15R  
NO DRIVER: 500mA  
30minutes warm-up

## LUMINAIRE PHOTOMETRIC TEST REPORT

|                                                                                    |                  |                        |
|------------------------------------------------------------------------------------|------------------|------------------------|
| Test:U:17.655V I:0.5000A P:8.8275W PF:1.0000 Freq:49.99Hz<br>Lamp Flux:1124.6x1 lm |                  |                        |
| NAME: CTL-MPS-1.5-SQ-TF/TL-SH-SG/DB/TP-30K-15                                      | TYPE:            | WEIGHT:                |
| SPEC.: 3000K                                                                       | DIM.:            | SERIAL No.: 2408221148 |
| MFR.: MERCURY LIGHTING                                                             | SUR.: 0.002601m2 | Shielding Angle:       |

| DATA OF LAMP      |           | PHOTOMETRIC DATA Eff: 107.73 lm/W |        |                     |           |
|-------------------|-----------|-----------------------------------|--------|---------------------|-----------|
| MODEL             | Brideglux | I <sub>max</sub> (cd)             | 5395   | S/MH (C0/180)       | 0.33      |
| NOMINAL POWER (W) | 9         | LOR (%)                           | 84.6   | S/MH (C90/270)      | 0.33      |
| RATED VOLTAGE (V) | 18        | TOTAL FLUX (lm)                   | 951.00 | ☒ UP, DN (C0-180)   | 0.0, 43.2 |
| NOMINAL FLUX (lm) | 1124.6    | CIE CLASS                         | DIRECT | ☒ UP, DN (C180-360) | 0.0, 41.4 |
| LAMPS INSIDE      | 1         | ☒ up (%)                          | 0.0    | CIBSE SHR NOM       | 0.00      |
| TEST VOLTAGE (V)  | 18        | ☒ down (%)                        | 84.6   | CIBSE SHR MAX       | 0.30      |



C Range: 0 - 360DEG

C Interval: For a lens beam angle of 15°

Test Speed: HIGH

Temperature: 77.54 °F

Operators: zoe

Test Date: 2024-8-22

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

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

Humidity: 65.0%

Test Distance: 124.409" [K=1.0000]

Remarks: LAMP: BXRH-30G10T0-G-83 Ra: 90

LENS: PM-1084 15R

NO DRIVER: 500mA

30minutes warm-up

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

| θ   | C0                    | C45   | C90   | C135  | C180  | C225  | C270  | C315  | φ       | zone    | total | %lum,lamp |
|-----|-----------------------|-------|-------|-------|-------|-------|-------|-------|---------|---------|-------|-----------|
| 10  | 2818                  | 2865  | 2826  | 2699  | 2594  | 2559  | 2583  | 2709  | 0- 10   | 383.6   | 383.6 | 40.3,34.1 |
| 20  | 515.5                 | 548.5 | 604.1 | 615.9 | 610.5 | 571.6 | 536.7 | 519.4 | 10- 20  | 351.8   | 735.5 | 77.3,65.4 |
| 30  | 92.46                 | 101.7 | 114.4 | 122.6 | 128.6 | 114.5 | 96.50 | 88.59 | 20- 30  | 120.0   | 855.4 | 90,76.1   |
| 40  | 38.02                 | 39.44 | 42.47 | 44.65 | 45.45 | 43.05 | 40.34 | 38.30 | 30- 40  | 40.80   | 896.2 | 94.2,79.7 |
| 50  | 19.81                 | 20.12 | 20.66 | 21.21 | 21.28 | 21.16 | 20.88 | 20.46 | 40- 50  | 22.03   | 918.3 | 96.6,81.7 |
| 60  | 11.91                 | 12.01 | 12.35 | 12.89 | 12.88 | 12.83 | 12.57 | 12.24 | 50- 60  | 14.38   | 932.7 | 98.1,82.9 |
| 70  | 7.961                 | 8.103 | 8.403 | 8.786 | 8.957 | 8.743 | 8.369 | 8.066 | 60- 70  | 10.20   | 942.9 | 99.1,83.8 |
| 80  | 3.377                 | 3.736 | 4.033 | 4.434 | 4.518 | 4.321 | 3.660 | 3.582 | 70- 80  | 6.635   | 949.5 | 99.8,84.4 |
| 90  | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 80- 90  | 1.507   | 951.0 | 100,84.6  |
| 100 | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 90-100  | 0       | 951.0 | 100,84.6  |
| 110 | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 100-110 | 0       | 951.0 | 100,84.6  |
| 120 | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 110-120 | 0       | 951.0 | 100,84.6  |
| 130 | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 120-130 | 0       | 951.0 | 100,84.6  |
| 140 | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 130-140 | 0       | 951.0 | 100,84.6  |
| 150 | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 140-150 | 0       | 951.0 | 100,84.6  |
| 160 | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 150-160 | 0       | 951.0 | 100,84.6  |
| 170 | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 160-170 | 0       | 951.0 | 100,84.6  |
| 180 | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 170-180 | 0       | 951.0 | 100,84.6  |
| DEG | LUMINOUS INTENSITY:cd |       |       |       |       |       |       |       |         | UNIT:lm |       |           |

C Range: 0 - 360DEG

C Interval:For a lens beam angle of 15°

Test Speed: HIGH

Temperature:77.54°F

Operators:zoe

Test Date:2024-8-22

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

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

Humidity:65.0%

Test Distance:124.409" [K=1.0000]

Remarks: LAMP:BXRH-30G10T0-G-83 Ra:90

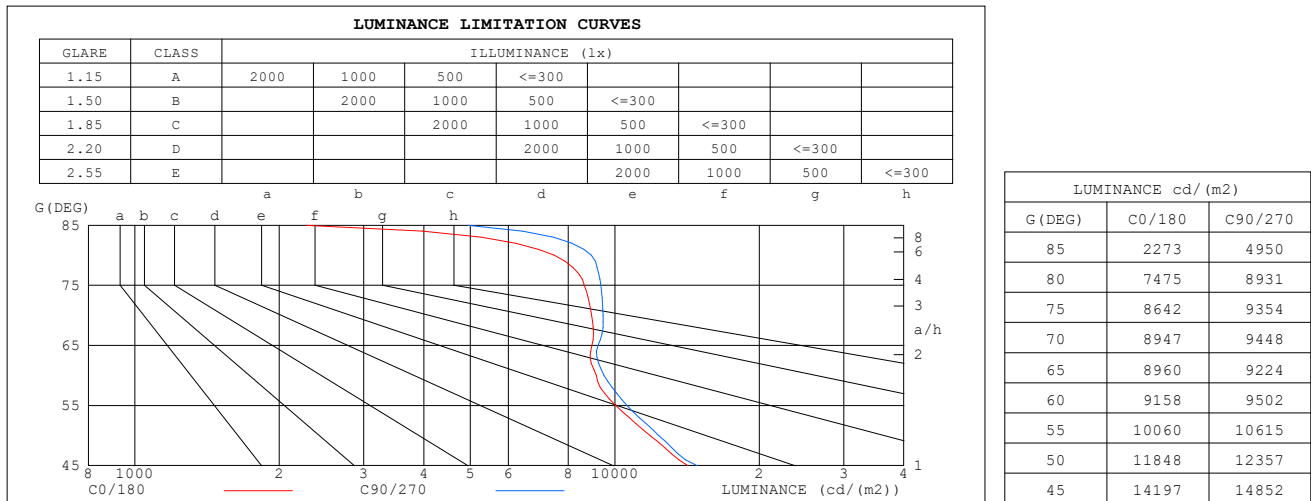
LENS:PM-1084 15R

NO DRIVER:500mA

30minutes warm-up

LUMINANCE LIMITATION CURVES

|                                                                                    |                  |                        |
|------------------------------------------------------------------------------------|------------------|------------------------|
| Test:U:17.655V I:0.5000A P:8.8275W PF:1.0000 Freq:49.99Hz<br>Lamp Flux:1124.6x1 lm |                  |                        |
| NAME: CTL-MPS-1.5-SQ-TF/TL-SH-SG/DB/TP-30K-15                                      | TYPE:            | WEIGHT:                |
| SPEC.: 3000K                                                                       | DIM.:            | SERIAL No.: 2408221148 |
| MFR.: MERCURY LIGHTING                                                             | SUR.: 0.002601m2 | Shielding Angle:       |



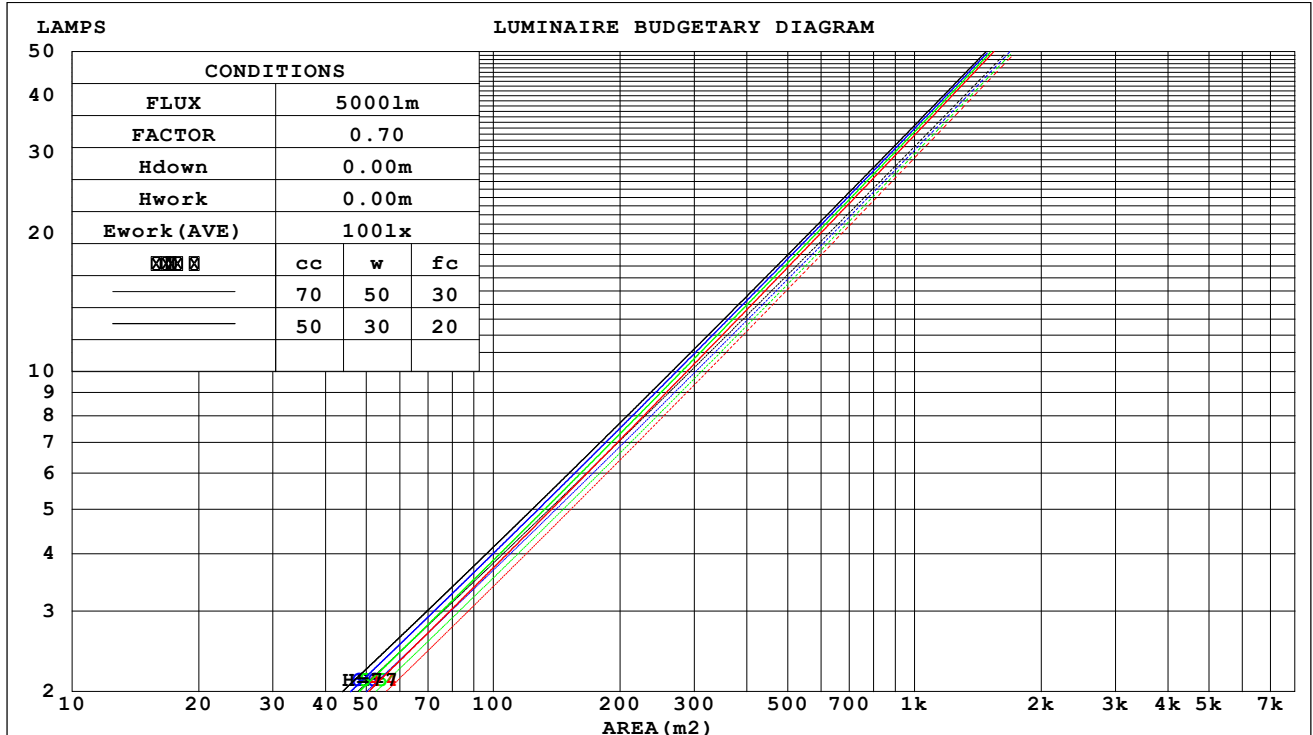
C Range: 0 - 360DEG  
C Interval: For a lens beam angle of 15°  
Test Speed: HIGH  
Temperature: 77.54 °F  
Operators: zoe  
Test Date: 2024-8-22

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity: 65.0%  
Test Distance: 124.409" [K=1.0000]  
Remarks: LAMP: BXRH-30G10T0-G-83 Ra: 90  
LENS: PM-1084 15R  
NO DRIVER: 500mA  
30minutes warm-up

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                                                    |                  |                        |
|------------------------------------------------------------------------------------|------------------|------------------------|
| Test:U:17.655V I:0.5000A P:8.8275W PF:1.0000 Freq:49.99Hz<br>Lamp Flux:1124.6x1 lm |                  |                        |
| NAME: CTL-MPS-1.5-SQ-TF/TL-SH-SG/DB/TP-30K-15                                      | TYPE:            | WEIGHT:                |
| SPEC.: 3000K                                                                       | DIM.:            | SERIAL No.: 2408221148 |
| MFR.:MERCURY LIGHTING                                                              | SUR.: 0.002601m2 | Shielding Angle:       |

| cc  | 80%                   |     |     | 70% |     |     | 50% |     |     | 30% |     |     | 10% |     |     | 0 |
|-----|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| w   | 50%                   | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| fc  | 20%                   |     |     | 20% |     |     | 20% |     |     | 20% |     |     | 20% |     |     | 0 |
| RCR | RCR:Room Cavity Ratio |     |     |     |     |     |     |     |     |     |     |     |     |     |     |   |



C Range: 0 - 360DEG

C Interval:For a lens beam angle of 15°

Test Speed: HIGH

Temperature:77.54 °F

Operators:zoe

Test Date:2024-8-22

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

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

Humidity:65.0%

Test Distance:124.409" [K=1.0000]

Remarks: LAMP:BXRH-30G10T0-G-83 Ra:90

**WEC AND CCEC**

|                                                                                    |                  |                        |
|------------------------------------------------------------------------------------|------------------|------------------------|
| Test:U:17.655V I:0.5000A P:8.8275W PF:1.0000 Freq:49.99Hz<br>Lamp Flux:1124.6x1 lm |                  |                        |
| NAME: CTL-MPS-1.5-SQ-TF/TL-SH-SG/DB/TP-30K-15                                      | TYPE:            | WEIGHT:                |
| SPEC.: 3000K                                                                       | DIM.:            | SERIAL No.: 2408221148 |
| MFR.: MERCURY LIGHTING                                                             | SUR.: 0.002601m2 | Shielding Angle:       |

| θcc  | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0 |  |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|--|
| θw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |  |
| θfc  | 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 | .107                            | .061 | .020 | .097 | .056 | .018 | .089 | .051 | .017 |   |  |
| 2.0  | .114                  | .063 | .019 | .109 | .060 | .019 | .101                            | .056 | .017 | .093 | .052 | .016 | .085 | .048 | .015 |   |  |
| 3.0  | .106                  | .056 | .017 | .102 | .055 | .016 | .095                            | .051 | .016 | .088 | .048 | .015 | .082 | .045 | .014 |   |  |
| 4.0  | .099                  | .051 | .015 | .095 | .050 | .015 | .089                            | .047 | .014 | .083 | .045 | .014 | .078 | .042 | .013 |   |  |
| 5.0  | .092                  | .047 | .014 | .089 | .046 | .013 | .084                            | .044 | .013 | .079 | .042 | .012 | .075 | .040 | .012 |   |  |
| 6.0  | .087                  | .043 | .012 | .084 | .043 | .012 | .080                            | .041 | .012 | .076 | .039 | .012 | .072 | .038 | .011 |   |  |
| 7.0  | .082                  | .041 | .011 | .080 | .040 | .011 | .076                            | .038 | .011 | .072 | .037 | .011 | .069 | .036 | .011 |   |  |
| 8.0  | .078                  | .038 | .011 | .076 | .037 | .011 | .072                            | .036 | .010 | .069 | .035 | .010 | .066 | .034 | .010 |   |  |
| 9.0  | .074                  | .036 | .010 | .072 | .035 | .010 | .069                            | .034 | .010 | .066 | .033 | .010 | .064 | .032 | .009 |   |  |
| 10.0 | .070                  | .034 | .009 | .069 | .033 | .009 | .066                            | .032 | .009 | .064 | .032 | .009 | .061 | .031 | .009 |   |  |

| θcc  | 80%                   |      |      | 70%  |      |      | 50%                                        |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|--------------------------------------------|------|------|------|------|------|------|------|------|---|
| θw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                        | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| θfc  | 20%                   |      |      | 20%  |      |      | 20%                                        |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .161                  | .161 | .161 | .138 | .138 | .138 | .094                                       | .094 | .094 | .054 | .054 | .054 | .017 | .017 | .017 |   |
| 1.0  | .143                  | .133 | .125 | .122 | .114 | .107 | .084                                       | .079 | .074 | .048 | .046 | .043 | .015 | .015 | .014 |   |
| 2.0  | .128                  | .112 | .099 | .110 | .097 | .086 | .075                                       | .067 | .060 | .043 | .039 | .035 | .014 | .013 | .011 |   |
| 3.0  | .115                  | .096 | .080 | .099 | .083 | .069 | .068                                       | .057 | .049 | .039 | .034 | .029 | .013 | .011 | .009 |   |
| 4.0  | .105                  | .083 | .066 | .090 | .072 | .057 | .062                                       | .050 | .040 | .036 | .029 | .024 | .012 | .010 | .008 |   |
| 5.0  | .096                  | .073 | .055 | .083 | .063 | .048 | .057                                       | .044 | .034 | .033 | .026 | .020 | .011 | .008 | .007 |   |
| 6.0  | .088                  | .064 | .047 | .076 | .056 | .041 | .052                                       | .039 | .029 | .030 | .023 | .017 | .010 | .007 | .006 |   |
| 7.0  | .082                  | .057 | .040 | .071 | .050 | .035 | .049                                       | .035 | .025 | .028 | .020 | .015 | .009 | .007 | .005 |   |
| 8.0  | .076                  | .051 | .034 | .066 | .045 | .030 | .045                                       | .031 | .021 | .026 | .018 | .013 | .009 | .006 | .004 |   |
| 9.0  | .071                  | .047 | .030 | .062 | .041 | .026 | .043                                       | .028 | .019 | .025 | .017 | .011 | .008 | .006 | .004 |   |
| 10.0 | .067                  | .043 | .026 | .058 | .037 | .023 | .040                                       | .026 | .016 | .023 | .015 | .010 | .008 | .005 | .003 |   |

C Range: 0 - 360DEG

C Interval:For a lens beam angle of 15°

Test Speed: HIGH

Temperature:77.54 °F

Operators:zoe

Test Date:2024-8-22

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

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

Humidity:65.0%

Test Distance:124.409" [K=1.0000]

Remarks: LAMP:BXRH-30G10T0-G-83 Ra:90

LENS:PM-1084 15R

NO DRIVER:500mA

30minutes warm-up

**UGR(Unified Glare Rating) Table**

|                                                                                    |               |                  |      |      |                  |               |                |                        |      |      |  |
|------------------------------------------------------------------------------------|---------------|------------------|------|------|------------------|---------------|----------------|------------------------|------|------|--|
| Test:U:17.655V I:0.5000A P:8.8275W PF:1.0000 Freq:49.99Hz<br>Lamp Flux:1124.6x1 lm |               |                  |      |      |                  |               |                |                        |      |      |  |
| NAME: CTL-MPS-1.5-SQ-TF/TL-SH-SG/DB/TP-30K-15                                      |               |                  |      |      | TYPE:            |               |                | WEIGHT:                |      |      |  |
| SPEC.: 3000K                                                                       |               |                  |      |      | DIM.:            |               |                | SERIAL No.: 2408221148 |      |      |  |
| MFR.: MERCURY LIGHTING                                                             |               |                  |      |      | SUR.: 0.002601m2 |               |                | 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                                                                      | 13.3          | 14.0             | 13.5 | 14.1 | 14.3             | 13.6          | 14.3           | 13.8                   | 14.4 | 14.6 |  |
|                                                                                    | 3H            | 14.5             | 15.1 | 14.7 | 15.3             | 15.5          | 14.7           | 15.4                   | 15.0 | 15.5 |  |
|                                                                                    | 4H            | 15.0             | 15.6 | 15.3 | 15.8             | 16.0          | 15.3           | 15.9                   | 15.6 | 16.1 |  |
|                                                                                    | 6H            | 15.4             | 16.0 | 15.7 | 16.2             | 16.5          | 15.8           | 16.4                   | 16.1 | 16.6 |  |
|                                                                                    | 8H            | 15.5             | 16.1 | 15.8 | 16.3             | 16.6          | 15.9           | 16.5                   | 16.2 | 16.7 |  |
|                                                                                    | 12H           | 15.5             | 16.1 | 15.8 | 16.3             | 16.6          | 16.0           | 16.5                   | 16.3 | 16.8 |  |
| 4H                                                                                 | 2H            | 13.7             | 14.3 | 14.0 | 14.5             | 14.8          | 14.0           | 14.6                   | 14.2 | 15.0 |  |
|                                                                                    | 3H            | 15.1             | 15.7 | 15.4 | 15.9             | 16.2          | 15.4           | 15.9                   | 15.7 | 16.2 |  |
|                                                                                    | 4H            | 15.8             | 16.3 | 16.2 | 16.6             | 16.9          | 16.1           | 16.6                   | 16.4 | 16.9 |  |
|                                                                                    | 6H            | 16.4             | 16.8 | 16.7 | 17.1             | 17.5          | 16.7           | 17.1                   | 17.1 | 17.5 |  |
|                                                                                    | 8H            | 16.5             | 16.9 | 16.9 | 17.3             | 17.6          | 16.9           | 17.3                   | 17.3 | 17.7 |  |
|                                                                                    | 12H           | 16.5             | 16.9 | 16.9 | 17.2             | 17.6          | 17.0           | 17.3                   | 17.4 | 17.7 |  |
| 8H                                                                                 | 4H            | 16.1             | 16.5 | 16.5 | 16.8             | 17.2          | 16.3           | 16.7                   | 16.7 | 17.1 |  |
|                                                                                    | 6H            | 16.8             | 17.1 | 17.2 | 17.5             | 17.9          | 17.1           | 17.4                   | 17.5 | 17.8 |  |
|                                                                                    | 8H            | 16.9             | 17.2 | 17.4 | 17.7             | 18.1          | 17.3           | 17.6                   | 17.8 | 18.0 |  |
|                                                                                    | 12H           | 17.0             | 17.2 | 17.4 | 17.7             | 18.1          | 17.4           | 17.7                   | 17.9 | 18.1 |  |
| 12H                                                                                | 4H            | 16.1             | 16.5 | 16.5 | 16.8             | 17.2          | 16.3           | 16.7                   | 16.7 | 17.1 |  |
|                                                                                    | 6H            | 16.8             | 17.1 | 17.2 | 17.5             | 18.0          | 17.1           | 17.4                   | 17.5 | 17.8 |  |
|                                                                                    | 8H            | 17.0             | 17.3 | 17.5 | 17.7             | 18.2          | 17.4           | 17.6                   | 17.8 | 18.1 |  |
| Variations with the observer position at spacings(CIE Pub.117):                    |               |                  |      |      |                  |               |                |                        |      |      |  |
| S = 1.0H                                                                           | + 0.4 / - 0.5 |                  |      |      |                  | + 0.4 / - 0.4 |                |                        |      |      |  |
| 1.5H                                                                               | + 0.5 / - 0.4 |                  |      |      |                  | + 0.7 / - 0.3 |                |                        |      |      |  |
| 2.0H                                                                               | + 0.5 / - 0.4 |                  |      |      |                  | + 0.5 / - 0.4 |                |                        |      |      |  |

CIE Pub.117, 1125 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.4)  
 Area: 0.002601 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:77.54 °F                    | Humidity:65.0%                                      |
| Operators:zoe                           | Test Distance:124.409" [K=1.0000]                   |
| Test Date:2024-8-22                     | Remarks: LAMP:BXRH-30G10T0-G-83 Ra:90               |
|                                         | LENS:PM-1084 15R                                    |
|                                         | NO DRIVER:500mA                                     |
|                                         | 30minutes warm-up                                   |

**UTILIZATION FACTORS TABLE**

|                                                                                    |                  |                        |
|------------------------------------------------------------------------------------|------------------|------------------------|
| Test:U:17.655V I:0.5000A P:8.8275W PF:1.0000 Freq:49.99Hz<br>Lamp Flux:1124.6x1 lm |                  |                        |
| NAME: CTL-MPS-1.5-SQ-TF/TL-SH-SG/DB/TP-30K-15                                      | TYPE:            | WEIGHT:                |
| SPEC.: 3000K                                                                       | DIM.:            | SERIAL No.: 2408221148 |
| MFR.: MERCURY LIGHTING                                                             | SUR.: 0.002601m2 | Shielding Angle:       |

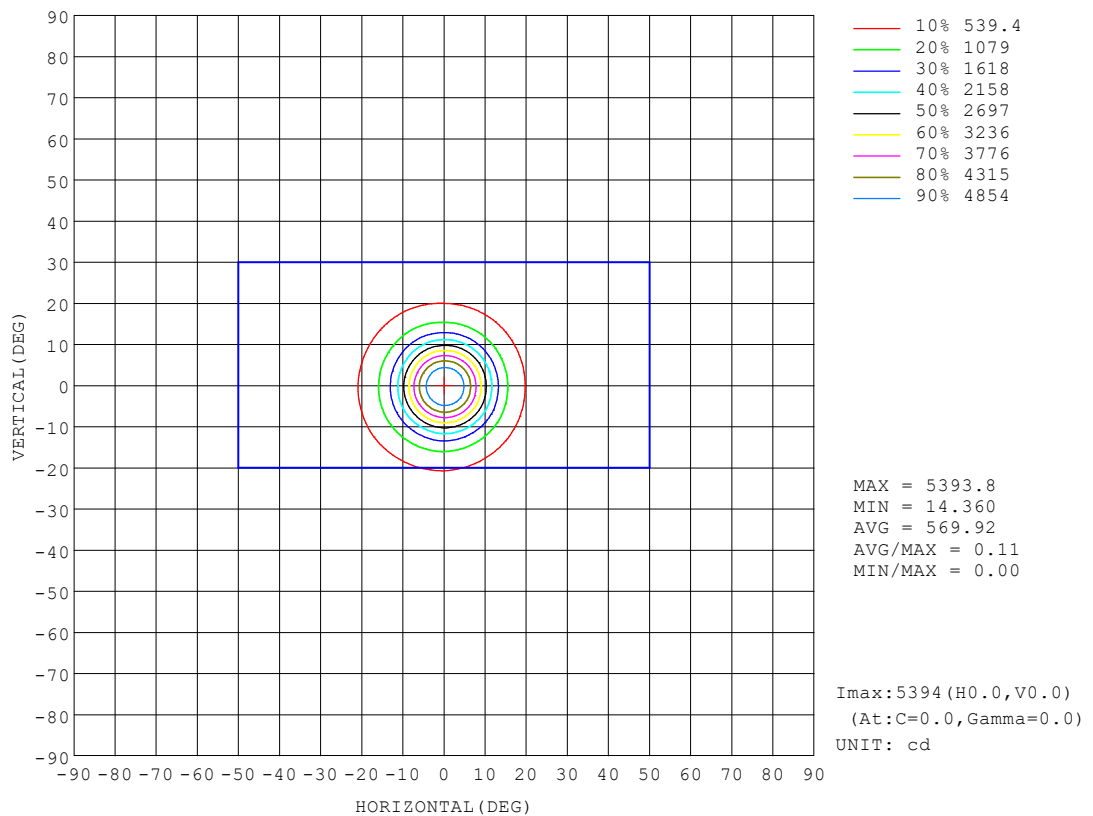
| REFLECTANCE                      |                                                      |     |           |     |     |     |     |               |     |        |
|----------------------------------|------------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 74                                                   | 69  | 66        | 74  | 69  | 66  | 73  | 69            | 66  | 63     |
| 0.80                             | 81                                                   | 76  | 73        | 80  | 75  | 72  | 79  | 75            | 72  | 69     |
| 1.00                             | 84                                                   | 79  | 76        | 83  | 79  | 76  | 82  | 79            | 76  | 72     |
| 1.25                             | 87                                                   | 83  | 80        | 86  | 83  | 80  | 85  | 82            | 79  | 76     |
| 1.50                             | 90                                                   | 86  | 83        | 89  | 85  | 82  | 87  | 84            | 81  | 78     |
| 2.00                             | 92                                                   | 88  | 86        | 91  | 87  | 85  | 88  | 86            | 84  | 79     |
| 2.50                             | 93                                                   | 90  | 87        | 92  | 89  | 87  | 89  | 87            | 85  | 80     |
| 3.00                             | 94                                                   | 92  | 89        | 93  | 90  | 88  | 90  | 88            | 87  | 81     |
| 4.00                             | 96                                                   | 94  | 92        | 94  | 93  | 91  | 91  | 90            | 89  | 83     |
| 5.00                             | 97                                                   | 95  | 94        | 96  | 94  | 93  | 92  | 91            | 90  | 84     |
| 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: 77.54 °F  
 Operators: zoe  
 Test Date: 2024-8-22

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
 Humidity: 65.0%  
 Test Distance: 124.409" [K=1.0000]  
 Remarks: LAMP: BXRH-30G10T0-G-83 Ra:90  
 LENS: PM-1084 15R  
 NO DRIVER: 500mA  
 30minutes warm-up

## ISOCANDELA DIAGRAM

|                                                                                    |                  |                        |
|------------------------------------------------------------------------------------|------------------|------------------------|
| Test:U:17.655V I:0.5000A P:8.8275W PF:1.0000 Freq:49.99Hz<br>Lamp Flux:1124.6x1 lm |                  |                        |
| NAME: CTL-MPS-1.5-SQ-TF/TL-SH-SG/DB/TP-30K-15                                      | TYPE:            | WEIGHT:                |
| SPEC.: 3000K                                                                       | DIM.:            | SERIAL No.: 2408221148 |
| MFR.: MERCURY LIGHTING                                                             | SUR.: 0.002601m2 | Shielding Angle:       |



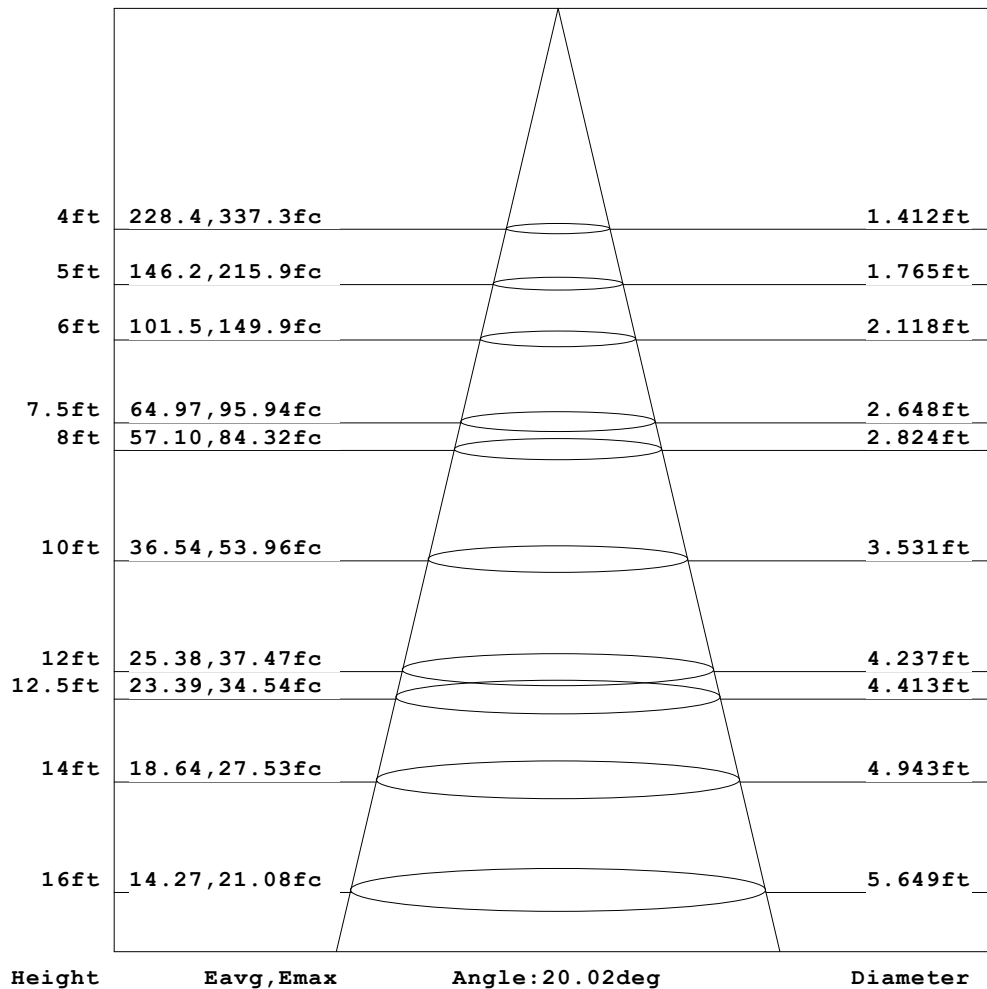
C Range: 0 - 360DEG  
 C Interval: For a lens beam angle of 15°  
 Test Speed: HIGH  
 Temperature: 77.54 °F  
 Operators: zoe  
 Test Date: 2024-8-22

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
 Humidity: 65.0%  
 Test Distance: 124.409" [K=1.0000]  
 Remarks: LAMP: BXRH-30G10T0-G-83 Ra: 90  
 LENS: PM-1084 15R  
 NO DRIVER: 500mA  
 30minutes warm-up

**AAI Figure**

|                                                                                    |                  |                        |
|------------------------------------------------------------------------------------|------------------|------------------------|
| Test:U:17.655V I:0.5000A P:8.8275W PF:1.0000 Freq:49.99Hz<br>Lamp Flux:1124.6x1 lm |                  |                        |
| NAME: CTL-MPS-1.5-SQ-TF/TL-SH-SG/DB/TP-30K-15                                      | TYPE:            | WEIGHT:                |
| SPEC.: 3000K                                                                       | DIM.:            | SERIAL No.: 2408221148 |
| MFR.: MERCURY LIGHTING                                                             | SUR.: 0.002601m2 | Shielding Angle:       |

Flux out:433.8 lm

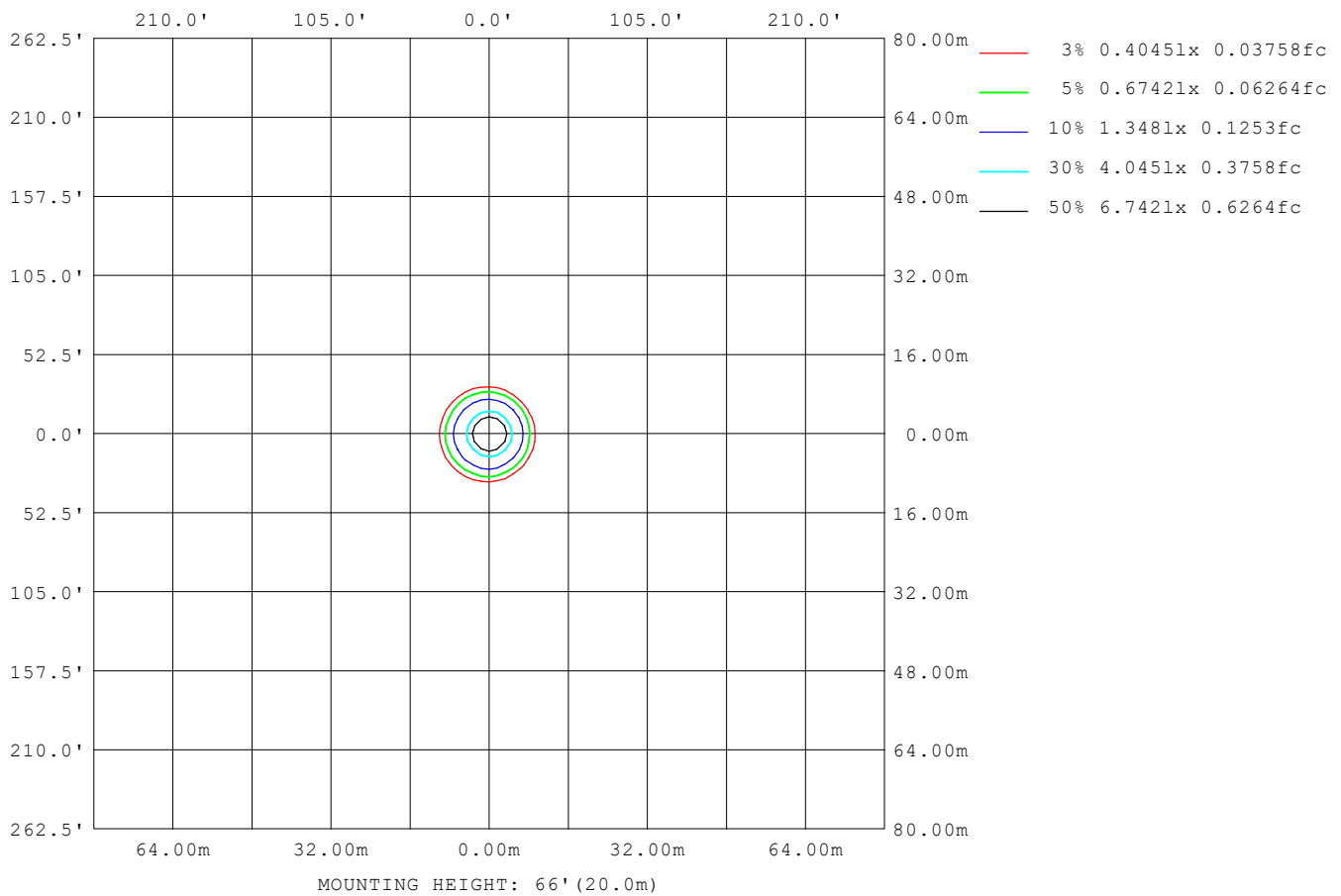


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

|                                          |                                                      |
|------------------------------------------|------------------------------------------------------|
| 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: 77.54 °F                    | Humidity: 65.0%                                      |
| Operators: zoe                           | Test Distance: 124.409" [K=1.0000]                   |
| Test Date: 2024-8-22                     | Remarks: LAMP: BXRH-30G10T0-G-83 Ra: 90              |
|                                          | LENS: PM-1084 15R                                    |
|                                          | NO DRIVER: 500mA                                     |
|                                          | 30minutes warm-up                                    |

**ISOLUX DIAGRAM**

|                                                                                                    |                         |                               |
|----------------------------------------------------------------------------------------------------|-------------------------|-------------------------------|
| <b>Test:</b> U:17.655V I:0.5000A P:8.8275W PF:1.0000 Freq:49.99Hz<br><b>Lamp Flux:</b> 1124.6x1 lm |                         |                               |
| <b>NAME:</b> CTL-MPS-1.5-SQ-TF/TL-SH-SG/DB/TP-30K-15                                               | <b>TYPE:</b>            | <b>WEIGHT:</b>                |
| <b>SPEC.:</b> 3000K                                                                                | <b>DIM.:</b>            | <b>SERIAL No.:</b> 2408221148 |
| <b>MFR.:</b> MERCURY LIGHTING                                                                      | <b>SUR.:</b> 0.002601m2 | <b>Shielding Angle:</b>       |



**C Range:** 0 - 360DEG  
**C Interval:** For a lens beam angle of 15°  
**Test Speed:** HIGH  
**Temperature:** 77.54 °F  
**Operators:** zoe  
**Test Date:** 2024-8-22

**γ Range:** 0 - 180DEG  
**γ Interval:** 1.0DEG  
**Test System:** EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
**Humidity:** 65.0%  
**Test Distance:** 124.409" [K=1.0000]  
**Remarks:** LAMP: BXRH-30G10T0-G-83 Ra:90  
 LENS: PM-1084 15R  
 NO DRIVER: 500mA  
 30minutes warm-up

**LED Avg.L Report**

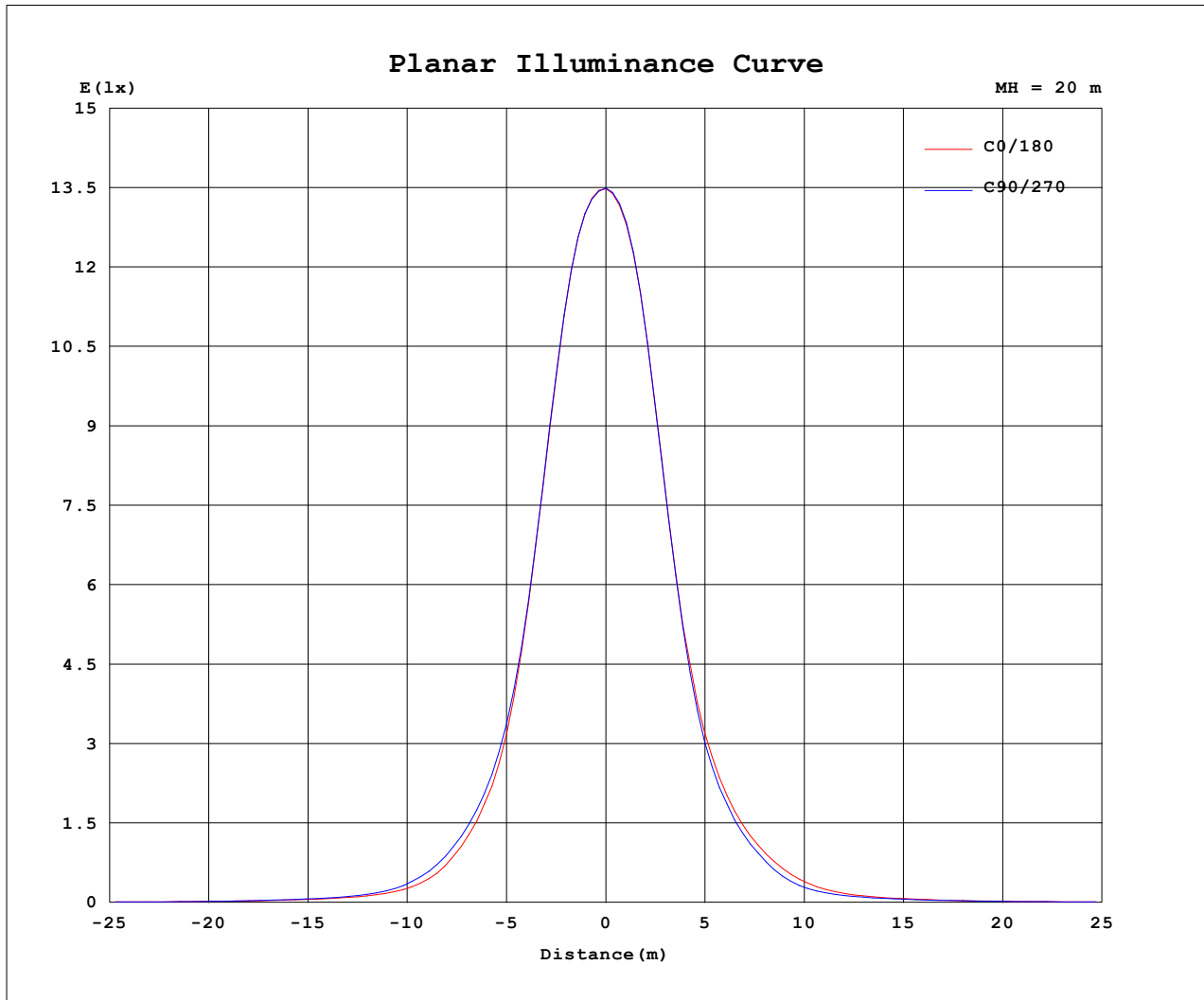
|                                                                                    |                  |                        |
|------------------------------------------------------------------------------------|------------------|------------------------|
| Test:U:17.655V I:0.5000A P:8.8275W PF:1.0000 Freq:49.99Hz<br>Lamp Flux:1124.6x1 lm |                  |                        |
| NAME: CTL-MPS-1.5-SQ-TF/TL-SH-SG/DB/TP-30K-15                                      | TYPE:            | WEIGHT:                |
| SPEC.: 3000K                                                                       | DIM.:            | SERIAL No.: 2408221148 |
| MFR.: MERCURY LIGHTING                                                             | SUR.: 0.002601m2 | Shielding Angle:       |

| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 9315  |
| L_0~180 (75) av  | 9474  |
| L_0~180 (85) av  | 3886  |
| L_90~270 (65) av | 9258  |
| L_90~270 (75) av | 9330  |
| L_90~270 (85) av | 3720  |
| L_45 (65) av     | 9298  |
| L_45 (75) av     | 9400  |
| L_45 (85) av     | 4825  |

Standard: GB/T 29293-2012

|                                                                                                                                                        |                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| C Range: 0 - 360DEG<br>C Interval: For a lens beam angle of 15°<br>Test Speed: HIGH<br>Temperature: 77.54 °F<br>Operators: zoe<br>Test Date: 2024-8-22 | γ Range: 0 - 180DEG<br>γ Interval: 1.0DEG<br>Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.461<br>Humidity: 65.0%<br>Test Distance: 124.409" [K=1.0000]<br>Remarks: LAMP: BXRH-30G10T0-G-83 Ra: 90<br>LENS: PM-1084 15R<br>NO DRIVER: 500mA<br>30minutes warm-up |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: For a lens beam angle of 15°  
Test Speed: HIGH  
Temperature: 77.54 °F  
Operators: zoe  
Test Date: 2024-8-22

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity: 65.0%  
Test Distance: 124.409" [K=1.0000]  
Remarks: LAMP: BXRH-30G10T0-G-83 Ra: 90  
LENS: PM-1084 15R  
NO DRIVER: 500mA  
30minutes warm-up

**LUMINOUS DISTRIBUTION INTENSITY DATA**

|                                                                                    |                  |                        |
|------------------------------------------------------------------------------------|------------------|------------------------|
| Test:U:17.655V I:0.5000A P:8.8275W PF:1.0000 Freq:49.99Hz<br>Lamp Flux:1124.6x1 lm |                  |                        |
| NAME: CTL-MPS-1.5-SQ-TF/TL-SH-SG/DB/TP-30K-15                                      | TYPE:            | WEIGHT:                |
| SPEC.: 3000K                                                                       | DIM.:            | SERIAL No.: 2408221148 |
| MFR.: MERCURY LIGHTING                                                             | SUR.: 0.002601m2 | Shielding Angle:       |

Table--1

UNIT: cd

| C (DEG)<br>(DEG) | 0    | 30   | 60   | 90   | 120  | 150  | 180  | 210  | 240  | 270  | 300  | 330  |  |  |  |  |  |  |
|------------------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|
| 0                | 5395 | 5395 | 5395 | 5395 | 5395 | 5395 | 5395 | 5395 | 5395 | 5395 | 5395 | 5395 |  |  |  |  |  |  |
| 5                | 4823 | 4859 | 4846 | 4823 | 4766 | 4713 | 4661 | 4620 | 4636 | 4661 | 4726 | 4781 |  |  |  |  |  |  |
| 10               | 2818 | 2875 | 2856 | 2826 | 2738 | 2661 | 2594 | 2549 | 2568 | 2583 | 2667 | 2751 |  |  |  |  |  |  |
| 15               | 1175 | 1221 | 1237 | 1269 | 1252 | 1243 | 1220 | 1181 | 1172 | 1136 | 1141 | 1146 |  |  |  |  |  |  |
| 20               | 515  | 537  | 560  | 604  | 610  | 622  | 610  | 578  | 565  | 537  | 526  | 513  |  |  |  |  |  |  |
| 25               | 198  | 219  | 233  | 261  | 274  | 291  | 288  | 265  | 246  | 216  | 201  | 190  |  |  |  |  |  |  |
| 30               | 92.5 | 98.9 | 105  | 114  | 119  | 126  | 129  | 119  | 110  | 96.5 | 88.5 | 88.7 |  |  |  |  |  |  |
| 35               | 55.7 | 57.9 | 60.6 | 65.3 | 67.6 | 70.6 | 70.4 | 67.0 | 63.1 | 58.6 | 55.3 | 54.4 |  |  |  |  |  |  |
| 40               | 38.0 | 39.0 | 39.9 | 42.5 | 43.8 | 45.5 | 45.5 | 43.9 | 42.2 | 40.3 | 38.7 | 37.9 |  |  |  |  |  |  |
| 45               | 26.1 | 26.3 | 26.4 | 27.3 | 27.9 | 28.6 | 28.5 | 28.3 | 27.9 | 27.5 | 27.0 | 26.4 |  |  |  |  |  |  |
| 50               | 19.8 | 20.0 | 20.2 | 20.7 | 21.1 | 21.3 | 21.3 | 21.1 | 21.2 | 20.9 | 20.8 | 20.2 |  |  |  |  |  |  |
| 55               | 15.0 | 15.2 | 15.5 | 15.8 | 16.3 | 16.4 | 16.3 | 16.3 | 16.3 | 16.1 | 15.9 | 15.4 |  |  |  |  |  |  |
| 60               | 11.9 | 12.0 | 12.1 | 12.4 | 12.8 | 13.0 | 12.9 | 12.9 | 12.8 | 12.6 | 12.4 | 12.1 |  |  |  |  |  |  |
| 65               | 9.85 | 9.89 | 9.94 | 10.1 | 10.4 | 10.6 | 10.6 | 10.6 | 10.4 | 10.2 | 10.1 | 9.89 |  |  |  |  |  |  |
| 70               | 7.96 | 8.04 | 8.16 | 8.40 | 8.68 | 8.89 | 8.96 | 8.84 | 8.65 | 8.37 | 8.15 | 7.99 |  |  |  |  |  |  |
| 75               | 5.82 | 5.90 | 6.03 | 6.30 | 6.59 | 6.85 | 6.94 | 6.82 | 6.58 | 6.27 | 6.01 | 5.85 |  |  |  |  |  |  |
| 80               | 3.38 | 3.64 | 3.83 | 4.03 | 4.32 | 4.54 | 4.52 | 4.51 | 4.14 | 3.66 | 3.65 | 3.52 |  |  |  |  |  |  |
| 85               | 0.52 | 0.89 | 1.07 | 1.12 | 1.51 | 1.57 | 1.25 | 1.26 | 0.99 | 0.56 | 0.66 | 0.59 |  |  |  |  |  |  |
| 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:77.54 °F

Operators:zoe

Test Date:2024-8-22

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

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

Humidity:65.0%

Test Distance:124.409" [K=1.0000]

Remarks: LAMP:BXRH-30G10T0-G-83 Ra:90

LENS:PM-1084 15R

NO DRIVER:500mA

30minutes warm-up