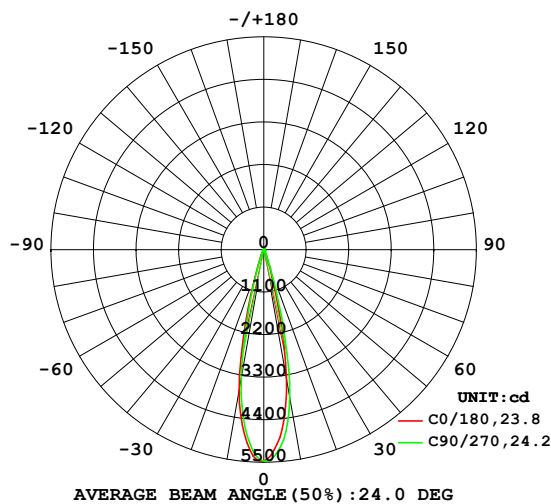


## LUMINAIRE PHOTOMETRIC TEST REPORT

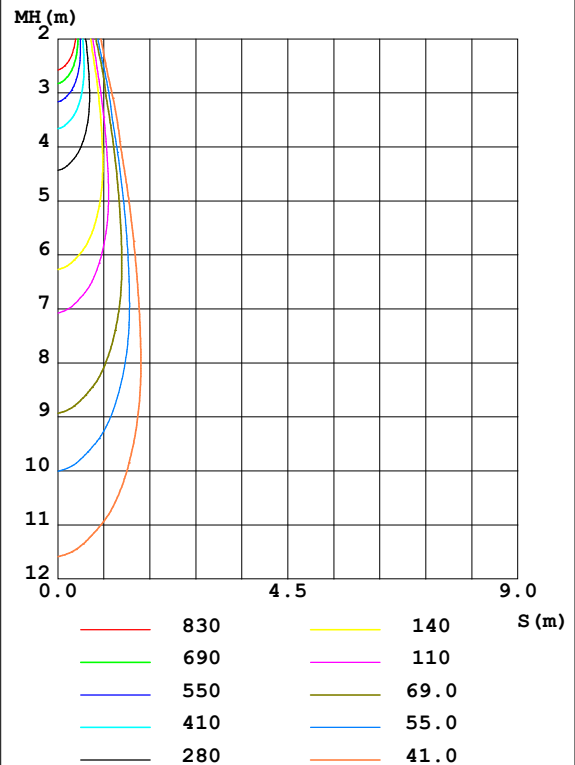
|                     |           |                  |
|---------------------|-----------|------------------|
| NAME: TLO020-31-CCT | TYPE: 24D | WEIGHT: 1        |
| SPEC.: 3500K CRI90  | DIM.:     | SERIAL No.:      |
| MFR.:               | SUR.: 65  | Shielding Angle: |

| DATA OF LAMP      |        | PHOTOMETRIC DATA |        |                          |           | Eff: 54.16 lm/W |
|-------------------|--------|------------------|--------|--------------------------|-----------|-----------------|
| MODEL             |        | Imax (cd)        | 5519   | S/MH (C0/180)            | 0.39      |                 |
| NOMINAL POWER (W) | 20     | LOR (%)          | 100.0  | S/MH (C90/270)           | 0.37      |                 |
| RATED VOLTAGE (V) | 120    | TOTAL FLUX (lm)  | 1043.5 | $\eta$ UP, DN (C0-180)   | 1.2, 51.9 |                 |
| NOMINAL FLUX (lm) | 1043.5 | CIE CLASS        | DIRECT | $\eta$ UP, DN (C180-360) | 1.2, 45.6 |                 |
| LAMPS INSIDE      | 1      | $\eta$ up (%)    | 2.4    | CIBSE SHR NOM            | 0.00      |                 |
| TEST VOLTAGE (V)  | 120    | $\eta$ down (%)  | 97.6   | CIBSE SHR MAX            | 1.00      |                 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 28DEG  
Operators: CJY  
Test Date: 2024-08-30

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity: 65.0%  
Test Distance: 5.190m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

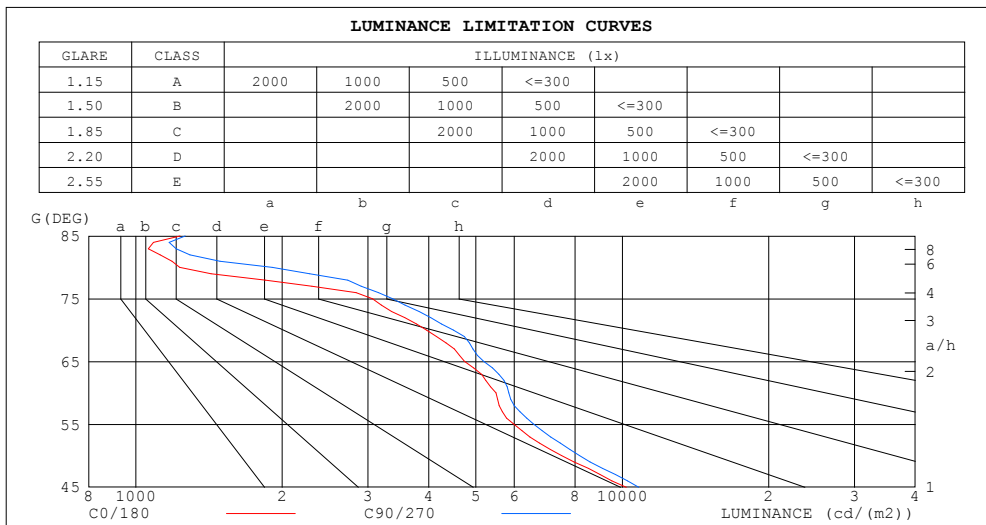
| $\gamma$ | C0                    | C45    | C90    | C135   | C180   | C225   | C270   | C315   | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|------------|
| 10       | 3398                  | 3582   | 3897   | 4100   | 3710   | 3693   | 3377   | 3126   | 0- 10    | 431.5       | 431.5        | 41.4, 41.4 |
| 20       | 362.2                 | 398.7  | 509.7  | 630.8  | 446.7  | 452.9  | 373.1  | 317.3  | 10- 20   | 436.9       | 868.4        | 83.2, 83.2 |
| 30       | 76.75                 | 80.33  | 91.11  | 101.3  | 87.95  | 89.23  | 80.34  | 72.30  | 20- 30   | 86.96       | 955.4        | 91.6, 91.6 |
| 40       | 28.04                 | 27.63  | 29.22  | 32.42  | 30.44  | 30.63  | 28.62  | 26.49  | 30- 40   | 31.53       | 986.9        | 94.6, 94.6 |
| 50       | 12.22                 | 12.56  | 13.41  | 14.22  | 13.33  | 12.94  | 12.42  | 11.58  | 40- 50   | 15.10       | 1002         | 96, 96     |
| 60       | 6.962                 | 7.105  | 7.462  | 7.271  | 7.045  | 6.595  | 6.483  | 6.254  | 50- 60   | 8.310       | 1010         | 96.8, 96.8 |
| 70       | 3.431                 | 3.609  | 3.930  | 3.955  | 3.687  | 3.497  | 3.317  | 2.955  | 60- 70   | 5.178       | 1015         | 97.3, 97.3 |
| 80       | 0.5411                | 0.5509 | 0.8459 | 0.9276 | 0.6603 | 0.6803 | 0.5382 | 0.4293 | 70- 80   | 2.169       | 1018         | 97.5, 97.5 |
| 90       | 0.2412                | 0.2378 | 0.2456 | 0.2396 | 0.2062 | 0.2005 | 0.2147 | 0.2108 | 80- 90   | 0.3341      | 1018         | 97.6, 97.6 |
| 100      | 0.2828                | 0.2796 | 0.2809 | 0.2749 | 0.2896 | 0.2864 | 0.3010 | 0.2972 | 90-100   | 0.2726      | 1018         | 97.6, 97.6 |
| 110      | 0.3728                | 0.3743 | 0.3717 | 0.3612 | 0.3664 | 0.3657 | 0.3785 | 0.3860 | 100-110  | 0.3446      | 1019         | 97.6, 97.6 |
| 120      | 0.6529                | 0.6578 | 0.6101 | 0.5584 | 0.5619 | 0.5775 | 0.6269 | 0.6660 | 110-120  | 0.4575      | 1019         | 97.7, 97.7 |
| 130      | 2.642                 | 2.608  | 2.317  | 2.008  | 2.079  | 2.198  | 2.543  | 2.789  | 120-130  | 1.091       | 1020         | 97.8, 97.8 |
| 140      | 8.580                 | 8.520  | 7.885  | 7.381  | 7.527  | 7.714  | 8.357  | 8.821  | 130-140  | 3.787       | 1024         | 98.1, 98.1 |
| 150      | 14.58                 | 14.53  | 14.19  | 13.91  | 13.98  | 14.12  | 14.56  | 14.86  | 140-150  | 7.089       | 1031         | 98.8, 98.8 |
| 160      | 15.85                 | 16.01  | 16.49  | 16.39  | 16.38  | 16.37  | 16.57  | 15.85  | 150-160  | 7.263       | 1038         | 99.5, 99.5 |
| 170      | 11.23                 | 11.68  | 12.91  | 13.11  | 12.62  | 12.62  | 12.18  | 10.99  | 160-170  | 4.226       | 1043         | 99.9, 99.9 |
| 180      | 7.672                 | 8.003  | 8.147  | 8.083  | 7.696  | 7.992  | 8.130  | 8.092  | 170-180  | 0.9769      | 1043         | 100, 100   |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |            |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 28DEG  
 Operators: CJY  
 Test Date: 2024-08-30

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
 Humidity: 65.0%  
 Test Distance: 5.190m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

|                     |           |                  |
|---------------------|-----------|------------------|
| NAME: TLO020-31-CCT | TYPE: 24D | WEIGHT: 1        |
| SPEC.: 3500K CRI90  | DIM.:     | SERIAL No.:      |
| MFR.:               | SUR.: 65  | Shielding Angle: |



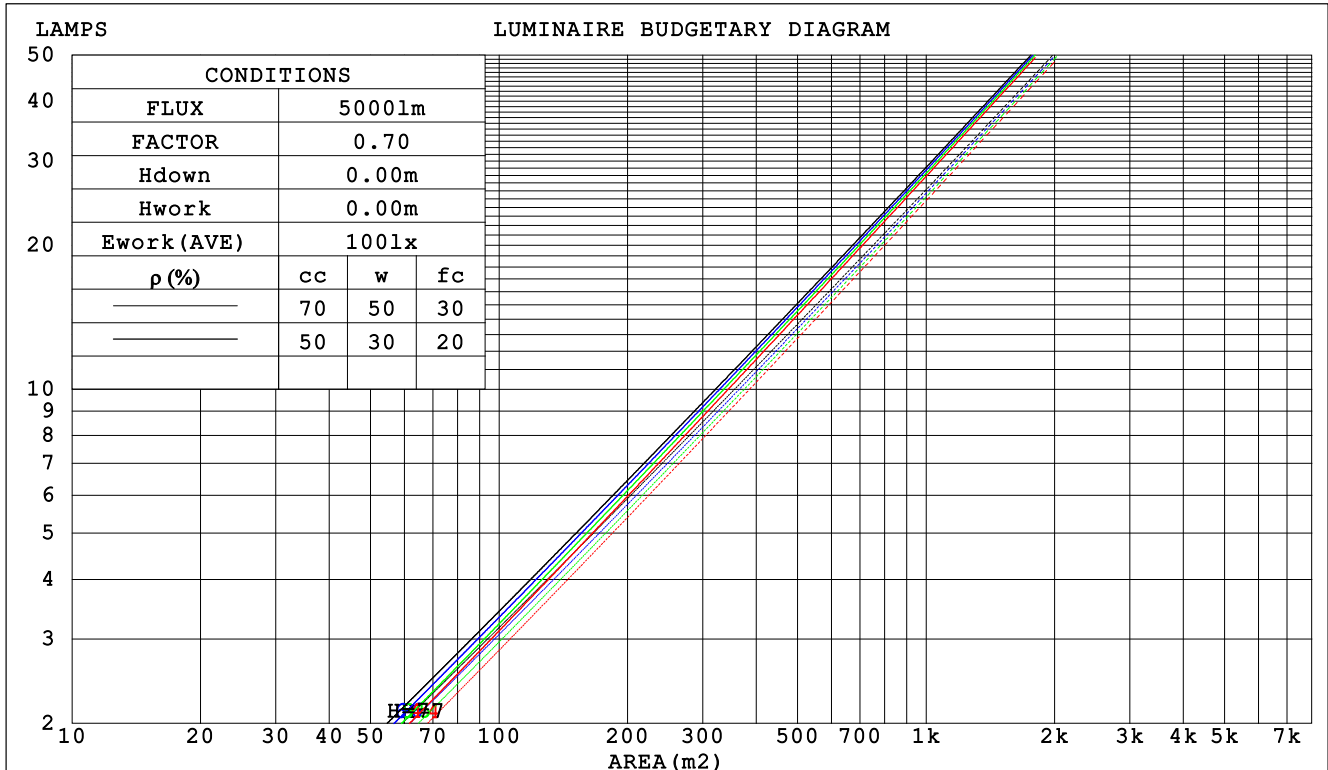
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 28DEG  
Operators: CJY  
Test Date: 2024-08-30

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity: 65.0%  
Test Distance: 5.190m [K=1.0000]  
Remarks:

### CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                     |          |                  |
|---------------------|----------|------------------|
| NAME: TLO020-31-CCT | TYPE:24D | WEIGHT:1         |
| SPEC.:3500K CRI90   | DIM.:    | SERIAL No.:      |
| MFR.:               | SUR.:65  | 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  | 1.18                            | 1.18 | 1.18 | 1.15 | 1.15 | 1.15 | 1.10 | 1.10 | 1.10 | 1.05 | 1.05 | 1.05 | .00 | .00 | .00 | .98 |
| 1.0  | 1.12                            | 1.10 | 1.09 | 1.10 | 1.08 | 1.07 | 1.06 | 1.04 | 1.03 | 1.01 | 1.00 | .00  | .98 | .97 | .96 | .94 |
| 2.0  | 1.07                            | 1.04 | 1.02 | 1.05 | 1.03 | 1.00 | 1.02 | .00  | .98  | .98  | .97  | .95  | .95 | .94 | .93 | .91 |
| 3.0  | 1.03                            | .99  | .96  | 1.01 | .98  | .95  | .98  | .96  | .93  | .96  | .94  | .92  | .93 | .92 | .90 | .89 |
| 4.0  | .99                             | .95  | .92  | .98  | .94  | .91  | .95  | .92  | .90  | .93  | .91  | .89  | .91 | .89 | .87 | .86 |
| 5.0  | .95                             | .91  | .88  | .94  | .91  | .88  | .92  | .89  | .87  | .91  | .88  | .86  | .89 | .87 | .85 | .84 |
| 6.0  | .92                             | .88  | .85  | .91  | .88  | .85  | .90  | .87  | .84  | .88  | .86  | .84  | .87 | .85 | .83 | .82 |
| 7.0  | .90                             | .86  | .83  | .89  | .85  | .82  | .88  | .84  | .82  | .86  | .83  | .81  | .85 | .83 | .81 | .80 |
| 8.0  | .87                             | .83  | .80  | .86  | .83  | .80  | .85  | .82  | .80  | .84  | .81  | .79  | .83 | .81 | .79 | .78 |
| 9.0  | .85                             | .81  | .78  | .84  | .81  | .78  | .83  | .80  | .78  | .82  | .80  | .77  | .82 | .79 | .77 | .76 |
| 10.0 | .83                             | .79  | .76  | .82  | .79  | .76  | .81  | .78  | .76  | .81  | .78  | .76  | .80 | .77 | .75 | .74 |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:CJY  
Test Date:2024-08-30

```

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:5.190m [K=1.0000]
Remarks:

```

TLO020-31-CCT 36V600mA TX-1825SW14A-2860V36-02H90 24D 3500K CRI90 NA

### WEC AND CCEC

|                     |          |                  |
|---------------------|----------|------------------|
| NAME: TLO020-31-CCT | TYPE:24D | WEIGHT:1         |
| SPEC.:3500K CRI90   | DIM.:    | SERIAL No.:      |
| MFR.:               | SUR.:65  | 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  | .137                  | .078 | .025 | .130 | .074 | .024 | .116                             | .067 | .021 | .103 | .060 | .019 | .092 | .053 | .017 |   |  |
| 2.0  | .127                  | .069 | .021 | .120 | .066 | .020 | .109                             | .061 | .019 | .098 | .055 | .017 | .089 | .050 | .016 |   |  |
| 3.0  | .117                  | .062 | .019 | .112 | .060 | .018 | .103                             | .056 | .017 | .094 | .051 | .016 | .085 | .047 | .015 |   |  |
| 4.0  | .109                  | .057 | .017 | .105 | .055 | .016 | .097                             | .051 | .015 | .089 | .048 | .014 | .082 | .044 | .014 |   |  |
| 5.0  | .102                  | .052 | .015 | .099 | .051 | .015 | .092                             | .048 | .014 | .085 | .045 | .013 | .079 | .042 | .013 |   |  |
| 6.0  | .096                  | .048 | .014 | .093 | .047 | .014 | .087                             | .045 | .013 | .081 | .042 | .012 | .076 | .040 | .012 |   |  |
| 7.0  | .091                  | .045 | .013 | .088 | .044 | .013 | .083                             | .042 | .012 | .078 | .040 | .012 | .073 | .038 | .011 |   |  |
| 8.0  | .086                  | .042 | .012 | .084 | .041 | .012 | .079                             | .040 | .011 | .075 | .038 | .011 | .070 | .036 | .011 |   |  |
| 9.0  | .082                  | .040 | .011 | .080 | .039 | .011 | .076                             | .037 | .011 | .072 | .036 | .010 | .068 | .034 | .010 |   |  |
| 10.0 | .079                  | .038 | .010 | .077 | .037 | .010 | .073                             | .036 | .010 | .069 | .034 | .010 | .066 | .033 | .009 |   |  |

| 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  | .209                  | .209 | .209 | .179 | .179 | .179 | .122                                       | .122 | .122 | .070 | .070 | .070 | .022 | .022 | .022 |   |
| 1.0  | .187                  | .176 | .167 | .160 | .151 | .144 | .110                                       | .104 | .099 | .063 | .060 | .058 | .020 | .019 | .019 |   |
| 2.0  | .169                  | .152 | .137 | .145 | .131 | .118 | .099                                       | .090 | .083 | .057 | .053 | .048 | .018 | .017 | .016 |   |
| 3.0  | .154                  | .132 | .115 | .132 | .114 | .100 | .091                                       | .079 | .070 | .052 | .046 | .041 | .017 | .015 | .013 |   |
| 4.0  | .141                  | .117 | .098 | .121 | .101 | .085 | .083                                       | .070 | .060 | .048 | .041 | .036 | .016 | .013 | .012 |   |
| 5.0  | .131                  | .105 | .085 | .112 | .091 | .074 | .077                                       | .063 | .052 | .045 | .037 | .031 | .014 | .012 | .010 |   |
| 6.0  | .122                  | .095 | .075 | .105 | .082 | .066 | .072                                       | .057 | .046 | .042 | .034 | .028 | .014 | .011 | .009 |   |
| 7.0  | .114                  | .086 | .067 | .098 | .075 | .059 | .068                                       | .053 | .041 | .039 | .031 | .025 | .013 | .010 | .008 |   |
| 8.0  | .107                  | .080 | .061 | .092 | .069 | .053 | .064                                       | .049 | .038 | .037 | .029 | .022 | .012 | .009 | .007 |   |
| 9.0  | .102                  | .074 | .055 | .087 | .064 | .048 | .061                                       | .045 | .034 | .035 | .027 | .020 | .011 | .009 | .007 |   |
| 10.0 | .096                  | .069 | .051 | .083 | .060 | .045 | .058                                       | .042 | .032 | .034 | .025 | .019 | .011 | .008 | .006 |   |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:CJY  
Test Date:2024-08-30

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:

TLO020-31-CCT 36V600mA TX-1825SW14A-2860V36-02H90 24D 3500K CRI90 NA

UGR(Unified Glare Rating) Table

|  |                  |      |      |      |          |                |      |                  |      |      |
|--|------------------|------|------|------|----------|----------------|------|------------------|------|------|
| NAME: TLO020-31-CCT                                |                  |      |      |      | TYPE:24D |                |      | WEIGHT:1         |      |      |
| SPEC.:3500K CRI90                                  |                  |      |      |      | DIM.:    |                |      | SERIAL No.:      |      |      |
| MFR.:  |                  |      |      |      | SUR.:65  |                |      | 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                                      | 10.4             | 11.0 | 10.7 | 11.2 | 11.4     | 10.8           | 11.4 | 11.0             | 11.6 | 11.8 |
| 3H   | 11.0             | 11.6 | 11.3 | 11.8 | 12.0     | 11.4           | 12.0 | 11.7             | 12.2 | 12.4 |
| 4H   | 11.1             | 11.7 | 11.4 | 11.9 | 12.2     | 11.6           | 12.1 | 11.9             | 12.4 | 12.6 |
| 6H   | 11.1             | 11.7 | 11.5 | 11.9 | 12.2     | 11.6           | 12.1 | 11.9             | 12.4 | 12.7 |
| 8H   | 11.1             | 11.6 | 11.4 | 11.9 | 12.2     | 11.6           | 12.1 | 11.9             | 12.4 | 12.7 |
| 12H  | 11.1             | 11.6 | 11.4 | 11.9 | 12.2     | 11.5           | 12.0 | 11.9             | 12.3 | 12.6 |
| 4H 2H  | 10.7             | 11.2 | 10.9 | 11.5 | 11.7     | 11.0           | 11.5 | 11.3             | 11.8 | 12.0 |
| 3H   | 11.4             | 11.8 | 11.7 | 12.1 | 12.5     | 11.7           | 12.2 | 12.1             | 12.5 | 12.8 |
| 4H   | 11.6             | 12.0 | 11.9 | 12.4 | 12.7     | 12.0           | 12.4 | 12.3             | 12.7 | 13.1 |
| 6H   | 11.6             | 12.0 | 12.0 | 12.3 | 12.7     | 12.0           | 12.4 | 12.4             | 12.8 | 13.2 |
| 8H   | 11.5             | 11.9 | 12.0 | 12.3 | 12.7     | 12.0           | 12.4 | 12.4             | 12.7 | 13.2 |
| 12H  | 11.5             | 11.8 | 11.9 | 12.2 | 12.7     | 11.9           | 12.3 | 12.4             | 12.7 | 13.1 |
| 8H 4H  | 11.6             | 11.9 | 12.0 | 12.3 | 12.7     | 11.9           | 12.3 | 12.4             | 12.7 | 13.1 |
| 6H   | 11.6             | 11.9 | 12.0 | 12.3 | 12.8     | 12.0           | 12.3 | 12.5             | 12.8 | 13.2 |
| 8H   | 11.5             | 11.8 | 12.0 | 12.3 | 12.8     | 12.0           | 12.3 | 12.5             | 12.7 | 13.2 |
| 12H  | 11.5             | 11.7 | 12.0 | 12.2 | 12.7     | 11.9           | 12.2 | 12.4             | 12.7 | 13.2 |
| 12H 4H   | 11.5             | 11.9 | 12.0 | 12.3 | 12.7     | 11.9           | 12.2 | 12.3             | 12.6 | 13.1 |
| 6H   | 11.5             | 11.8 | 12.0 | 12.3 | 12.7     | 12.0           | 12.2 | 12.4             | 12.7 | 13.2 |
| 8H   | 11.5             | 11.7 | 12.0 | 12.2 | 12.7     | 11.9           | 12.2 | 12.4             | 12.6 | 13.2 |
| Variations with the observer position at spacings: |                  |      |      |      |          |                |      |                  |      |      |
| S = 1.0H   | + 0.9 / - 1.2    |      |      |      |          | + 0.9 / - 1.1  |      |                  |      |      |
| 1.5H   | + 1.6 / - 1.0    |      |      |      |          | + 1.6 / - 0.9  |      |                  |      |      |
| 2.0H   | + 1.6 / - 0.8    |      |      |      |          | + 1.5 / - 0.9  |      |                  |      |      |

CIE Pub.117, 1043 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.1)

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:CJY  
Test Date:2024-08-30

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

|                     |          |                  |
|---------------------|----------|------------------|
| NAME: TLO020-31-CCT | TYPE:24D | WEIGHT:1         |
| SPEC.:3500K CRI90   | DIM.:    | SERIAL No.:      |
| MFR.:               | SUR.:65  | 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) x RCR = 5 |     |     |           |     |     |     |                           |     |        |
| k = 0.60                         | 88   | 82  | 79  | 88        | 82  | 78  | 87  | 81                        | 78  | 75     |
| 0.80                             | 95   | 90  | 86  | 95        | 89  | 86  | 93  | 89                        | 86  | 82     |
| 1.00                             | 99   | 94  | 91  | 98        | 93  | 90  | 97  | 93                        | 90  | 85     |
| 1.25                             | 103  | 98  | 95  | 102       | 97  | 94  | 100 | 96                        | 93  | 89     |
| 1.50                             | 106  | 101 | 98  | 104       | 100 | 97  | 102 | 99                        | 96  | 91     |
| 2.00                             | 108  | 104 | 101 | 107       | 103 | 100 | 104 | 101                       | 98  | 93     |
| 2.50                             | 110  | 106 | 103 | 108       | 105 | 102 | 105 | 102                       | 100 | 94     |
| 3.00                             | 111  | 108 | 105 | 109       | 106 | 104 | 106 | 103                       | 102 | 95     |
| 4.00                             | 113  | 111 | 109 | 111       | 109 | 107 | 107 | 105                       | 104 | 96     |
| 5.00                             | 115  | 112 | 111 | 112       | 110 | 109 | 108 | 107                       | 105 | 97     |
| ROOM INDEX                       | UF(total)  |     |     |           |     |     |     |                           |     | Direct |
| According to DIN EN 13032-2 2004 |  |     |     | Suspended |     |     |     | SHR <sub>NOM</sub> = 1.25 |     |        |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 28DEG  
Operators: CJY  
Test Date: 2024-08-30

```

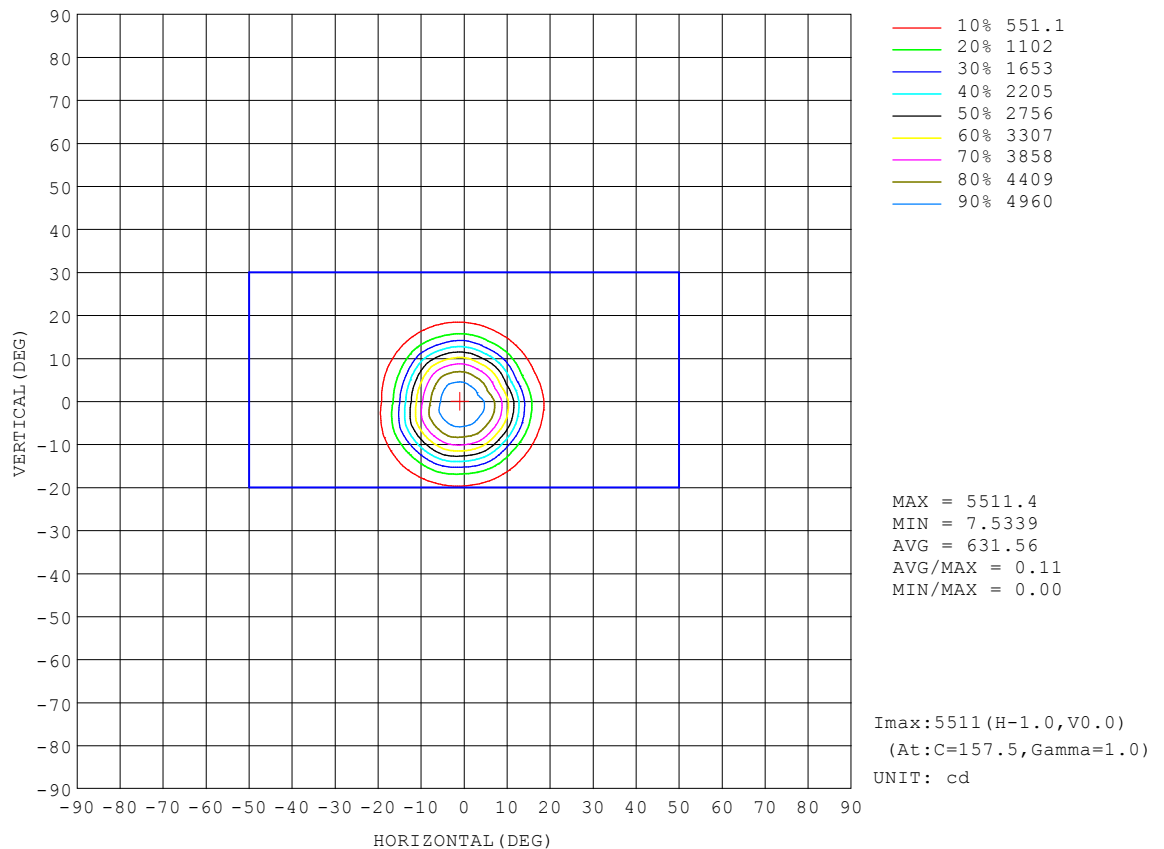
Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:5.190m [K=1.0000]
Remarks:

```

TLO020-31-CCT 36V600mA TX-1825SW14A-2860V36-02H90 24D 3500K CRI90 NA

### ISOCANDELA DIAGRAM

|                     |          |                  |
|---------------------|----------|------------------|
| NAME: TLO020-31-CCT | TYPE:24D | WEIGHT:1         |
| SPEC.:3500K CRI90   | DIM.:    | SERIAL No.:      |
| MFR.:               | SUR.:65  | Shielding Angle: |



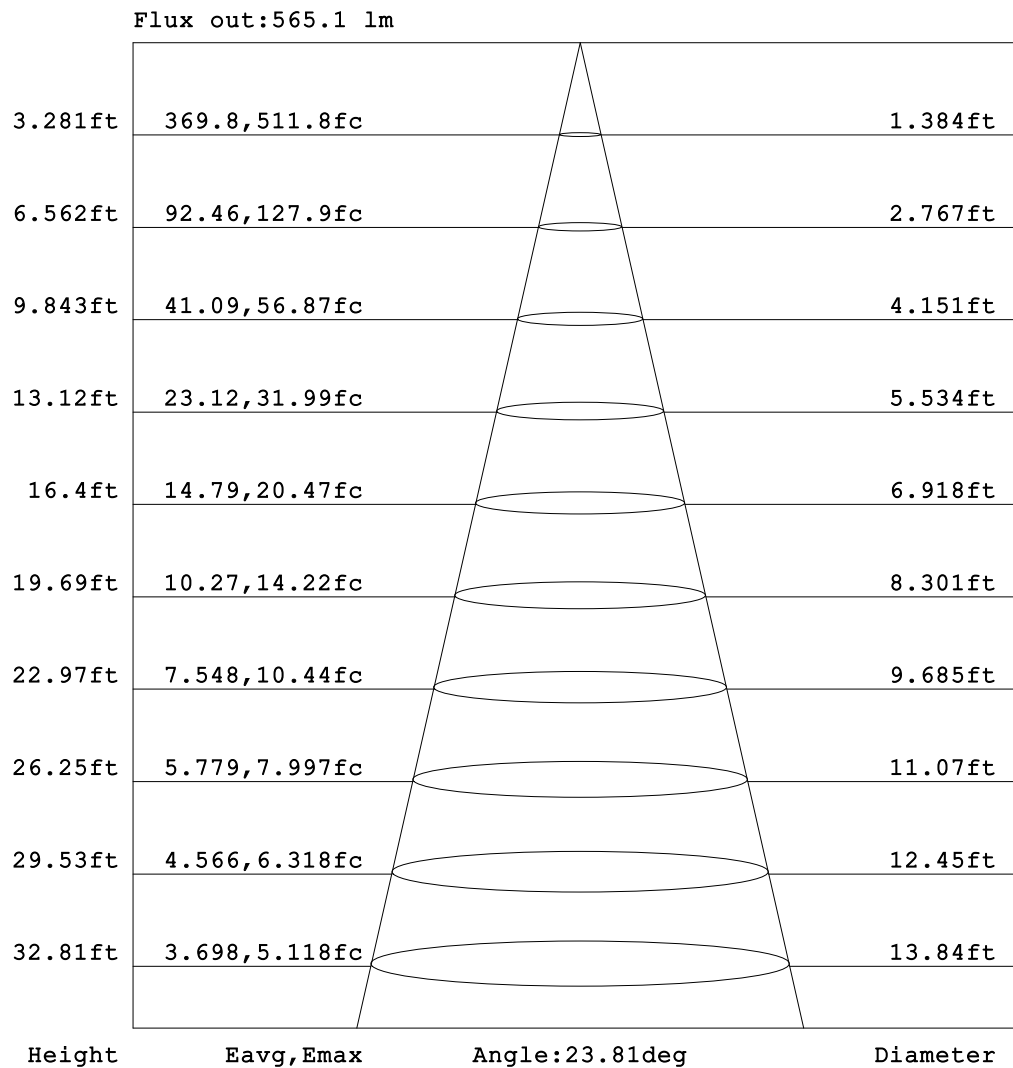
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:CJY  
Test Date:2024-08-30

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:



### AAI Figure

|                     |          |                  |
|---------------------|----------|------------------|
| NAME: TLO020-31-CCT | TYPE:24D | WEIGHT:1         |
| SPEC.:3500K CRI90   | DIM.:    | SERIAL No.:      |
| MFR.:               | SUR.:65  | Shielding Angle: |



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

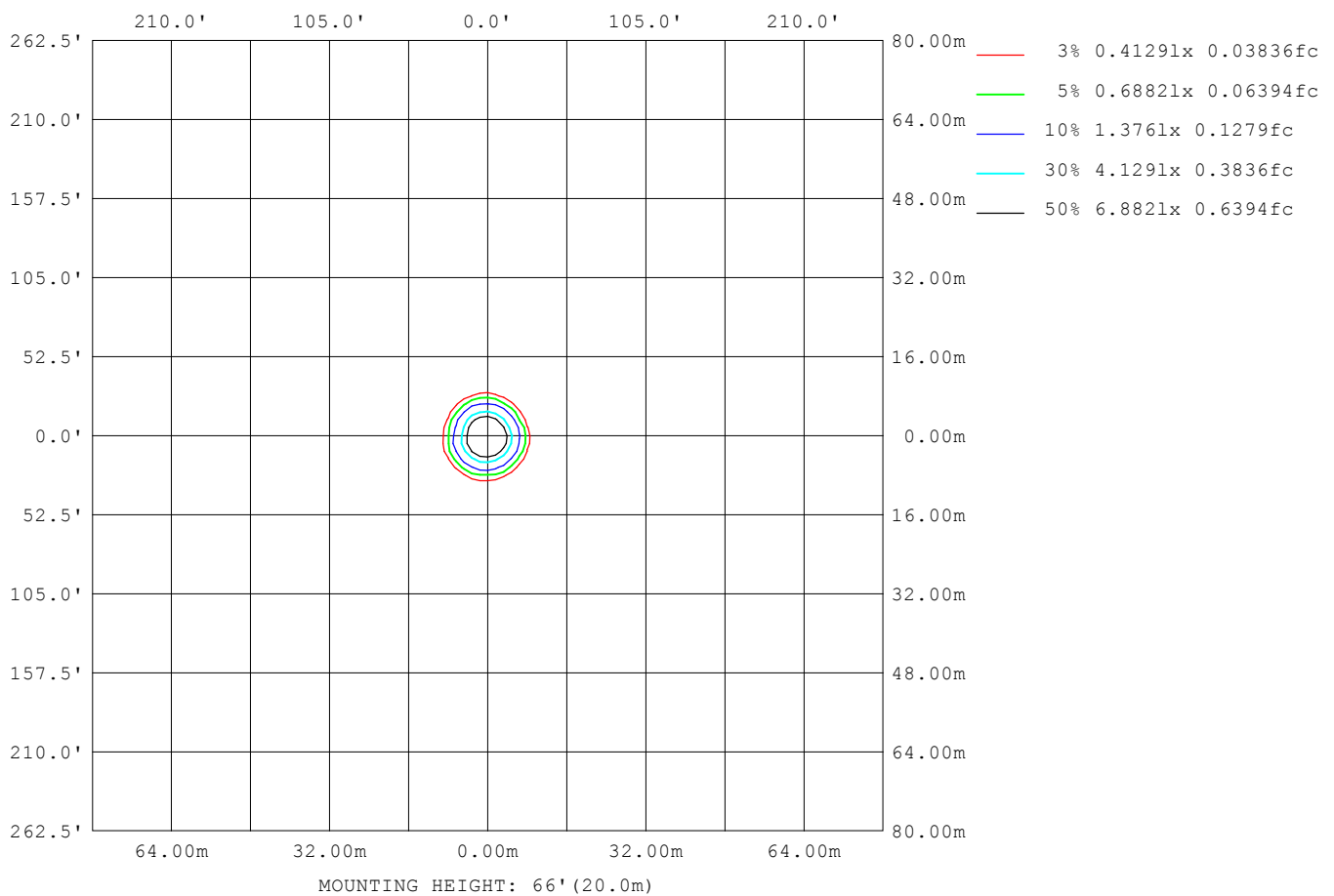
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:CJY  
Test Date:2024-08-30

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:

TLO020-31-CCT 36V600mA TX-1825SW14A-2860V36-02H90 24D 3500K CRI90 NA

### ISOLUX DIAGRAM

|                     |           |                  |
|---------------------|-----------|------------------|
| NAME: TLO020-31-CCT | TYPE: 24D | WEIGHT: 1        |
| SPEC.: 3500K CRI90  | DIM.:     | SERIAL No.:      |
| MFR.:               | SUR.: 65  | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 28DEG  
Operators: CJY  
Test Date: 2024-08-30

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity: 65.0%  
Test Distance: 5.190m [K=1.0000]  
Remarks:

### LED Avg.L Report

|                     |          |                  |
|---------------------|----------|------------------|
| NAME: TLO020-31-CCT | TYPE:24D | WEIGHT:1         |
| SPEC.:3500K CRI90   | DIM.:    | SERIAL No.:      |
| MFR.:               | SUR.:65  | Shielding Angle: |

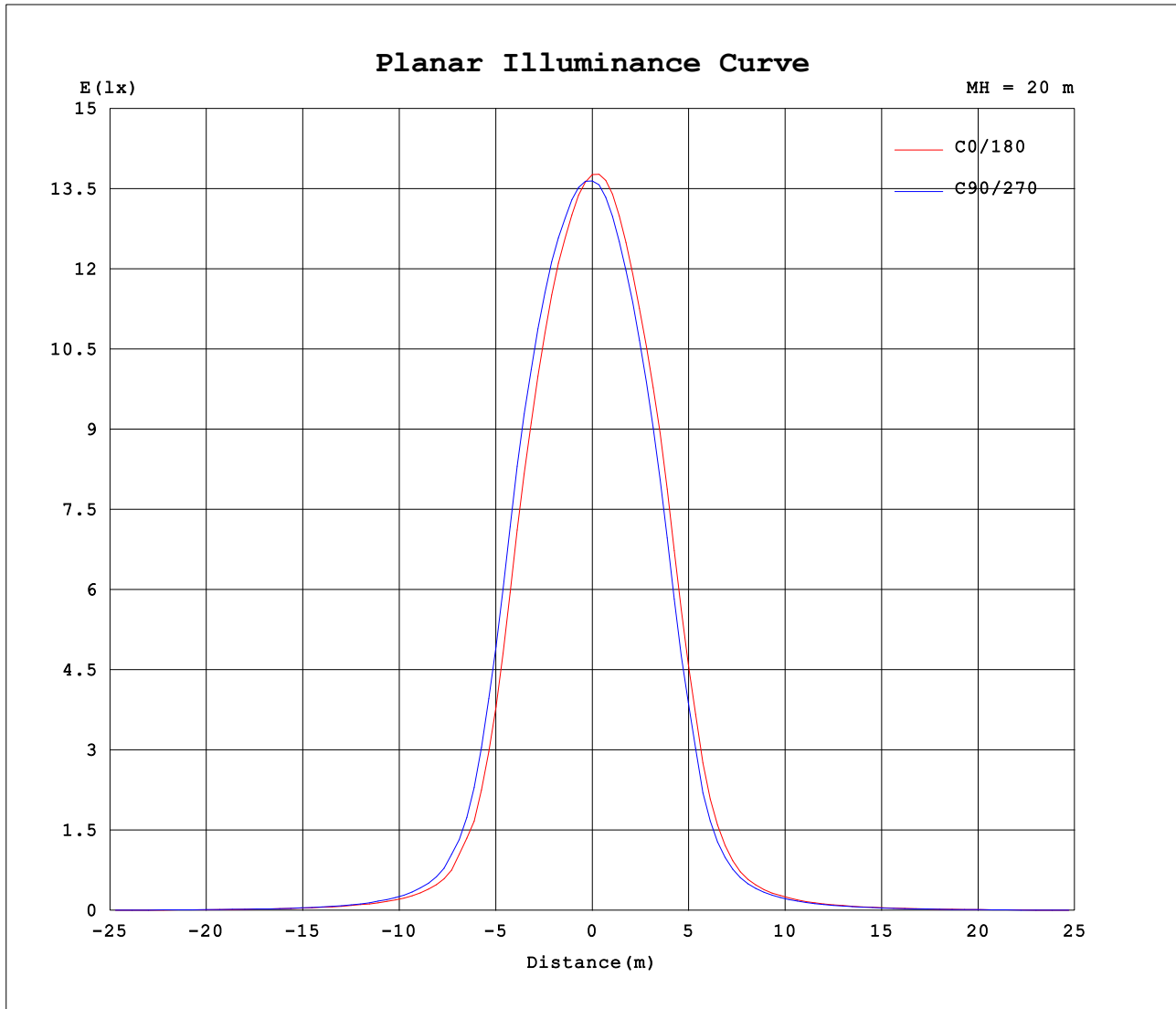
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 4886  |
| L_0~180 (75) av  | 3065  |
| L_0~180 (85) av  | 1125  |
| L_90~270 (65) av | 4834  |
| L_90~270 (75) av | 3179  |
| L_90~270 (85) av | 1091  |
| L_45 (65) av     | 4773  |
| L_45 (75) av     | 3094  |
| L_45 (85) av     | 1112  |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:CJY  
Test Date:2024-08-30

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 28DEG  
 Operators: CJY  
 Test Date: 2024-08-30

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
 Humidity: 65.0%  
 Test Distance: 5.190m [K=1.0000]  
 Remarks:

TLO020-31-CCT 36V600mA TX-1825SW14A-2860V36-02H90 24D 3500K CRI90 NA

### LUMINOUS DISTRIBUTION INTENSITY DATA

|                     |           |                  |
|---------------------|-----------|------------------|
| NAME: TLO020-31-CCT | TYPE: 24D | WEIGHT: 1        |
| SPEC.: 3500K CRI90  | DIM.:     | SERIAL No.:      |
| MFR.:               | SUR.: 65  | Shielding Angle: |

Table--1

UNIT: cd

| C (DEG)<br>γ (DEG) | 0    | 22.5 | 45   | 67.5 | 90   | 112.5 | 135  | 157.5 | 180  | 202.5 | 225  | 247.5 | 270  | 292.5 | 315  | 337.5 |  |  |  |
|--------------------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|--|--|--|
| 0                  | 5467 | 5467 | 5467 | 5467 | 5467 | 5467  | 5467 | 5467  | 5467 | 5467  | 5467 | 5467  | 5467 | 5467  | 5467 | 5467  |  |  |  |
| 5                  | 4864 | 4937 | 4955 | 5043 | 5099 | 5194  | 5203 | 5239  | 5019 | 5000  | 5028 | 4915  | 4853 | 4730  | 4720 | 4675  |  |  |  |
| 10                 | 3398 | 3540 | 3582 | 3802 | 3897 | 4090  | 4100 | 4105  | 3710 | 3625  | 3693 | 3504  | 3377 | 3128  | 3126 | 3026  |  |  |  |
| 15                 | 1307 | 1445 | 1441 | 1713 | 1762 | 1999  | 2056 | 2060  | 1618 | 1534  | 1667 | 1429  | 1350 | 1120  | 1114 | 1030  |  |  |  |
| 20                 | 362  | 393  | 399  | 462  | 510  | 573   | 631  | 590   | 447  | 470   | 453  | 411   | 373  | 328   | 317  | 299   |  |  |  |
| 25                 | 147  | 156  | 158  | 177  | 187  | 209   | 208  | 211   | 172  | 171   | 176  | 164   | 155  | 140   | 138  | 131   |  |  |  |
| 30                 | 76.8 | 80.2 | 80.3 | 87.4 | 91.1 | 101   | 101  | 102   | 87.9 | 87.3  | 89.2 | 84.9  | 80.3 | 74.3  | 72.3 | 70.2  |  |  |  |
| 35                 | 44.2 | 45.5 | 45.4 | 47.1 | 48.5 | 53.5  | 54.8 | 56.6  | 50.0 | 49.8  | 50.9 | 48.7  | 46.4 | 43.5  | 42.4 | 41.1  |  |  |  |
| 40                 | 28.0 | 28.2 | 27.6 | 28.5 | 29.2 | 31.4  | 32.4 | 33.5  | 30.4 | 30.3  | 30.6 | 29.6  | 28.6 | 27.2  | 26.5 | 25.9  |  |  |  |
| 45                 | 18.3 | 18.6 | 18.5 | 19.2 | 19.5 | 20.8  | 21.1 | 21.5  | 19.7 | 19.2  | 19.5 | 19.0  | 18.6 | 17.8  | 17.3 | 17.0  |  |  |  |
| 50                 | 12.2 | 12.4 | 12.6 | 13.2 | 13.4 | 14.2  | 14.2 | 14.4  | 13.3 | 12.8  | 12.9 | 12.7  | 12.4 | 11.8  | 11.6 | 11.5  |  |  |  |
| 55                 | 8.69 | 8.86 | 8.91 | 9.41 | 9.64 | 10.1  | 9.90 | 10.1  | 9.33 | 8.96  | 9.00 | 8.84  | 8.64 | 8.17  | 8.02 | 8.12  |  |  |  |
| 60                 | 6.96 | 6.99 | 7.11 | 7.45 | 7.46 | 7.48  | 7.27 | 7.47  | 7.05 | 6.67  | 6.60 | 6.64  | 6.48 | 6.00  | 6.25 | 6.41  |  |  |  |
| 65                 | 5.08 | 5.16 | 5.27 | 5.59 | 5.61 | 5.74  | 5.77 | 5.91  | 5.46 | 4.97  | 5.03 | 5.06  | 4.81 | 4.68  | 4.51 | 4.64  |  |  |  |
| 70                 | 3.43 | 3.61 | 3.61 | 3.91 | 3.93 | 4.09  | 3.96 | 4.12  | 3.69 | 3.44  | 3.50 | 3.40  | 3.32 | 3.14  | 2.96 | 2.98  |  |  |  |
| 75                 | 2.01 | 2.07 | 2.04 | 2.21 | 2.23 | 2.34  | 2.25 | 2.37  | 2.04 | 2.00  | 2.07 | 2.02  | 1.97 | 1.92  | 1.80 | 1.73  |  |  |  |
| 80                 | 0.54 | 0.58 | 0.55 | 0.75 | 0.85 | 1.01  | 0.93 | 1.00  | 0.66 | 0.64  | 0.68 | 0.58  | 0.54 | 0.46  | 0.43 | 0.41  |  |  |  |
| 85                 | 0.27 | 0.24 | 0.27 | 0.25 | 0.28 | 0.29  | 0.32 | 0.32  | 0.23 | 0.22  | 0.20 | 0.21  | 0.20 | 0.21  | 0.20 | 0.21  |  |  |  |
| 90                 | 0.24 | 0.24 | 0.24 | 0.24 | 0.25 | 0.24  | 0.24 | 0.24  | 0.21 | 0.20  | 0.20 | 0.20  | 0.21 | 0.20  | 0.21 | 0.20  |  |  |  |
| 95                 | 0.25 | 0.27 | 0.25 | 0.26 | 0.25 | 0.26  | 0.24 | 0.26  | 0.25 | 0.24  | 0.24 | 0.24  | 0.25 | 0.24  | 0.26 | 0.24  |  |  |  |
| 100                | 0.28 | 0.30 | 0.28 | 0.30 | 0.28 | 0.29  | 0.27 | 0.29  | 0.29 | 0.27  | 0.29 | 0.27  | 0.30 | 0.28  | 0.30 | 0.28  |  |  |  |
| 105                | 0.32 | 0.34 | 0.32 | 0.34 | 0.32 | 0.33  | 0.31 | 0.33  | 0.33 | 0.31  | 0.32 | 0.31  | 0.33 | 0.32  | 0.34 | 0.32  |  |  |  |
| 110                | 0.37 | 0.40 | 0.37 | 0.39 | 0.37 | 0.38  | 0.36 | 0.37  | 0.37 | 0.35  | 0.37 | 0.35  | 0.38 | 0.37  | 0.39 | 0.38  |  |  |  |
| 115                | 0.46 | 0.47 | 0.46 | 0.47 | 0.45 | 0.45  | 0.42 | 0.43  | 0.43 | 0.41  | 0.43 | 0.42  | 0.45 | 0.45  | 0.47 | 0.46  |  |  |  |
| 120                | 0.65 | 0.66 | 0.66 | 0.64 | 0.61 | 0.59  | 0.56 | 0.57  | 0.56 | 0.55  | 0.58 | 0.59  | 0.63 | 0.65  | 0.67 | 0.66  |  |  |  |
| 125                | 1.20 | 1.16 | 1.21 | 1.11 | 1.06 | 0.96  | 0.93 | 0.90  | 0.94 | 0.98  | 0.99 | 1.07  | 1.13 | 1.26  | 1.25 | 1.28  |  |  |  |
| 130                | 2.64 | 2.57 | 2.61 | 2.43 | 2.32 | 2.08  | 2.01 | 1.95  | 2.08 | 2.17  | 2.20 | 2.39  | 2.54 | 2.79  | 2.79 | 2.84  |  |  |  |
| 135                | 5.25 | 5.12 | 5.13 | 4.87 | 4.72 | 4.31  | 4.22 | 4.12  | 4.33 | 4.45  | 4.50 | 4.81  | 5.07 | 5.38  | 5.43 | 5.49  |  |  |  |
| 140                | 8.58 | 8.43 | 8.52 | 8.13 | 7.88 | 7.50  | 7.38 | 7.30  | 7.53 | 7.66  | 7.71 | 8.06  | 8.36 | 8.77  | 8.82 | 8.88  |  |  |  |
| 145                | 11.9 | 11.8 | 11.9 | 11.5 | 11.3 | 10.9  | 10.9 | 10.8  | 11.0 | 11.1  | 11.1 | 11.5  | 11.7 | 12.2  | 12.2 | 12.3  |  |  |  |
| 150                | 14.6 | 14.5 | 14.5 | 14.3 | 14.2 | 14.0  | 13.9 | 13.9  | 14.0 | 14.1  | 14.1 | 14.4  | 14.6 | 14.9  | 14.9 | 14.9  |  |  |  |
| 155                | 16.0 | 15.9 | 15.9 | 16.0 | 16.0 | 15.8  | 15.8 | 15.8  | 15.8 | 15.9  | 15.9 | 16.1  | 16.2 | 16.3  | 16.1 | 16.2  |  |  |  |
| 160                | 15.8 | 15.9 | 16.0 | 16.3 | 16.5 | 16.5  | 16.4 | 16.5  | 16.4 | 16.3  | 16.4 | 16.6  | 16.6 | 16.3  | 15.8 | 15.8  |  |  |  |
| 165                | 14.0 | 14.2 | 14.7 | 15.2 | 15.4 | 15.7  | 15.6 | 15.6  | 15.2 | 15.1  | 15.3 | 15.4  | 15.2 | 14.6  | 14.0 | 13.7  |  |  |  |
| 170                | 11.2 | 11.5 | 11.7 | 12.4 | 12.9 | 13.2  | 13.1 | 13.3  | 12.6 | 12.7  | 12.6 | 12.5  | 12.2 | 11.6  | 11.0 | 10.8  |  |  |  |
| 175                | 8.48 | 8.57 | 8.80 | 9.14 | 9.53 | 9.97  | 10.2 | 10.1  | 9.54 | 9.68  | 9.83 | 9.47  | 9.11 | 8.72  | 8.41 | 8.03  |  |  |  |
| 180                | 7.67 | 7.69 | 8.00 | 7.93 | 8.15 | 7.97  | 8.08 | 7.74  | 7.70 | 7.71  | 7.99 | 7.96  | 8.13 | 7.96  | 8.09 | 7.71  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 28DEG  
Operators: CJY  
Test Date: 2024-08-30

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity: 65.0%  
Test Distance: 5.190m [K=1.0000]  
Remarks: