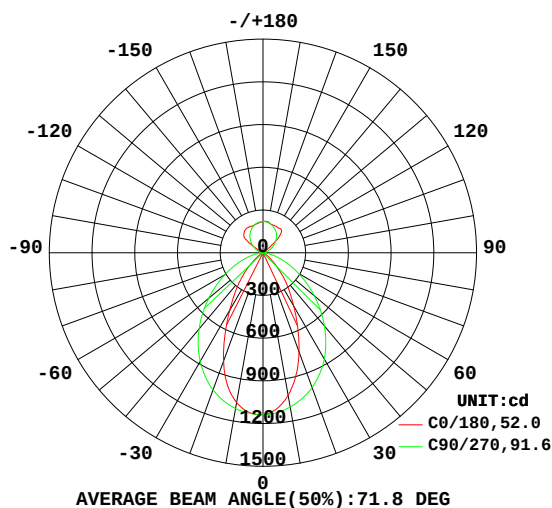


## LUMINAIRE PHOTOMETRIC TEST REPORT

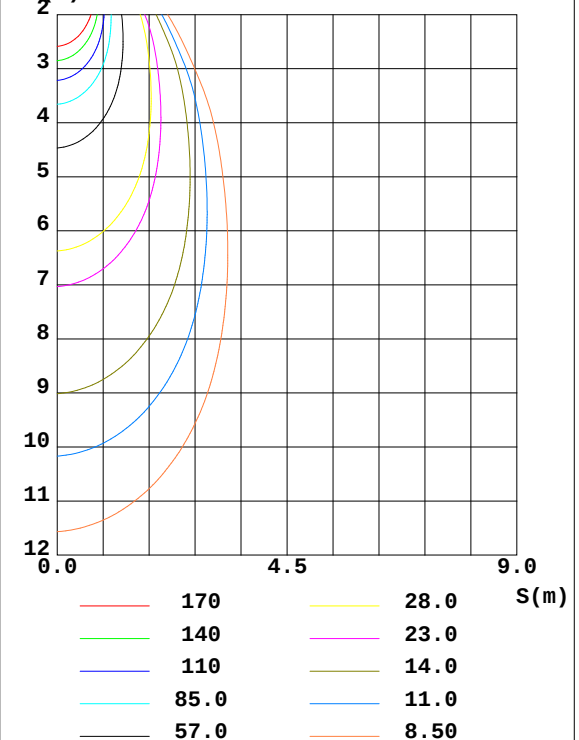
|                                                                                |                             |                  |
|--------------------------------------------------------------------------------|-----------------------------|------------------|
| Test:U:120.0V I:0.1690A P:20.00W PF:0.9800 Freq:60.00Hz Lamp Flux:2147.79x1 lm |                             |                  |
| NAME: 12代 2FT 黑色                                                               | TYPE:20W 3500K              | WEIGHT:          |
| SPEC.:                                                                         | DIM.:                       | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.38*0.017+0.605*0.017 | Shielding Angle: |

| DATA OF LAMP     |         | PHOTOMETRIC DATA Eff: 107.39 lm/W |         |                    |            |
|------------------|---------|-----------------------------------|---------|--------------------|------------|
| MODEL            | 上下发光    | I <sub>max</sub> (cd)             | 1143    | S/MH(C0/180)       | 0.78       |
| NOMINAL POWER(W) | 20      | LOR(%)                            | 100.0   | S/MH(C90/270)      | 1.16       |
| RATED VOLTAGE(V) | 120.0   | TOTAL FLUX(lm)                    | 2147.8  | η UP, DN(C0-180)   | 12.8, 37.3 |
| NOMINAL FLUX(lm) | 2147.79 | CIE CLASS                         | SEMI-D. | η UP, DN(C180-360) | 12.7, 37.2 |
| LAMPS INSIDE     | 1       | η up(%)                           | 25.5    | CIBSE SHR NOM      | 1.00       |
| TEST VOLTAGE(V)  | 120.0   | η down(%)                         | 74.5    | CIBSE SHR MAX      | 1.00       |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:何俊伟  
Test Date:

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.3263]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

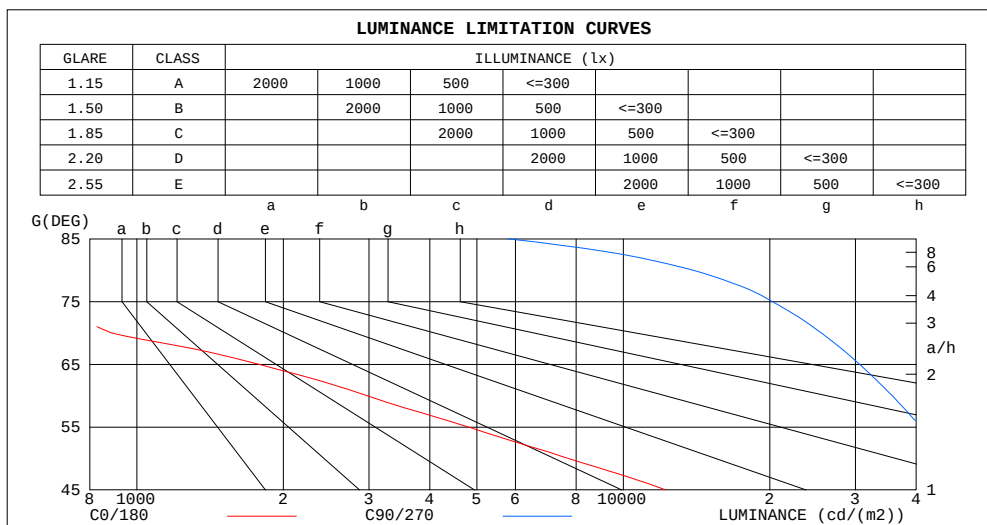
| $\gamma$ | C0                    | C45   | C90    | C135  | C180   | C225  | C270   | C315  | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|-------|--------|-------|--------|-------|--------|-------|----------|-------------|--------------|------------|
| 10       | 1017                  | 1055  | 1100   | 1107  | 1068   | 1091  | 1111   | 1041  | 0- 10    | 105.5       | 105.5        | 4.91, 4.91 |
| 20       | 740.7                 | 862.5 | 1008   | 958.0 | 810.3  | 927.7 | 1025   | 839.9 | 10- 20   | 279.4       | 384.9        | 17.9, 17.9 |
| 30       | 432.5                 | 601.0 | 861.4  | 697.0 | 468.9  | 656.8 | 882.2  | 575.9 | 20- 30   | 355.3       | 740.1        | 34.5, 34.5 |
| 40       | 222.4                 | 364.9 | 671.4  | 423.9 | 238.6  | 394.4 | 698.2  | 348.8 | 30- 40   | 330.6       | 1071         | 49.9, 49.9 |
| 50       | 79.17                 | 201.6 | 471.3  | 237.1 | 78.66  | 219.6 | 497.6  | 193.3 | 40- 50   | 253.8       | 1325         | 61.7, 61.7 |
| 60       | 23.80                 | 80.31 | 285.7  | 96.22 | 21.69  | 87.80 | 310.5  | 78.66 | 50- 60   | 162.2       | 1487         | 69.2, 69.2 |
| 70       | 4.855                 | 19.23 | 139.7  | 21.69 | 3.924  | 20.98 | 157.1  | 20.05 | 60- 70   | 79.54       | 1566         | 72.9, 72.9 |
| 80       | 1.750                 | 2.461 | 38.66  | 2.662 | 1.481  | 2.654 | 48.43  | 2.623 | 70- 80   | 29.03       | 1595         | 74.3, 74.3 |
| 90       | 0.7999                | 1.472 | 0.1674 | 1.738 | 0.8662 | 1.667 | 0.0870 | 1.508 | 80- 90   | 5.180       | 1601         | 74.5, 74.5 |
| 100      | 1.098                 | 1.870 | 14.08  | 3.659 | 2.251  | 3.586 | 12.25  | 1.849 | 90-100   | 2.653       | 1603         | 74.6, 74.6 |
| 110      | 2.973                 | 4.863 | 39.90  | 18.85 | 5.053  | 21.58 | 35.95  | 5.055 | 100-110  | 9.956       | 1613         | 75.1, 75.1 |
| 120      | 6.923                 | 55.81 | 74.36  | 119.8 | 24.17  | 117.9 | 69.23  | 59.24 | 110-120  | 38.06       | 1651         | 76.9, 76.9 |
| 130      | 66.18                 | 152.2 | 112.2  | 157.3 | 173.5  | 153.7 | 107.3  | 151.3 | 120-130  | 93.13       | 1744         | 81.2, 81.2 |
| 140      | 203.6                 | 169.3 | 148.4  | 175.3 | 200.9  | 170.0 | 143.1  | 167.7 | 130-140  | 121.0       | 1865         | 86.8, 86.8 |
| 150      | 205.6                 | 185.8 | 178.7  | 185.6 | 206.5  | 182.4 | 174.6  | 184.2 | 140-150  | 113.2       | 1979         | 92.1, 92.1 |
| 160      | 207.5                 | 199.1 | 200.7  | 199.1 | 203.5  | 198.6 | 199.3  | 201.4 | 150-160  | 89.68       | 2068         | 96.3, 96.3 |
| 170      | 219.6                 | 217.6 | 215.0  | 211.9 | 210.7  | 211.5 | 215.0  | 218.9 | 160-170  | 58.83       | 2127         | 99, 99     |
| 180      | 217.8                 | 217.8 | 217.8  | 217.8 | 217.8  | 217.8 | 217.8  | 217.8 | 170-180  | 20.76       | 2148         | 100, 100   |
| DEG      | LUMINOUS INTENSITY:cd |       |        |       |        |       |        |       |          | UNIT: lm    |              |            |

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3DEG  
 Operators: 何俊伟  
 Test Date:

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
 Humidity: 65.0%  
 Test Distance: 7.540m [K=1.3263]  
 Remarks:

## LUMINANCE LIMITATION CURVES

|                                                                                |                             |                  |
|--------------------------------------------------------------------------------|-----------------------------|------------------|
| Test:U:120.0V I:0.1690A P:20.00W PF:0.9800 Freq:60.00Hz Lamp Flux:2147.79x1 lm |                             |                  |
| NAME: 12代 2FT 黑色                                                               | TYPE:20W 3500K              | WEIGHT:          |
| SPEC.:                                                                         | DIM.:                       | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.38*0.017+0.605*0.017 | Shielding Angle: |



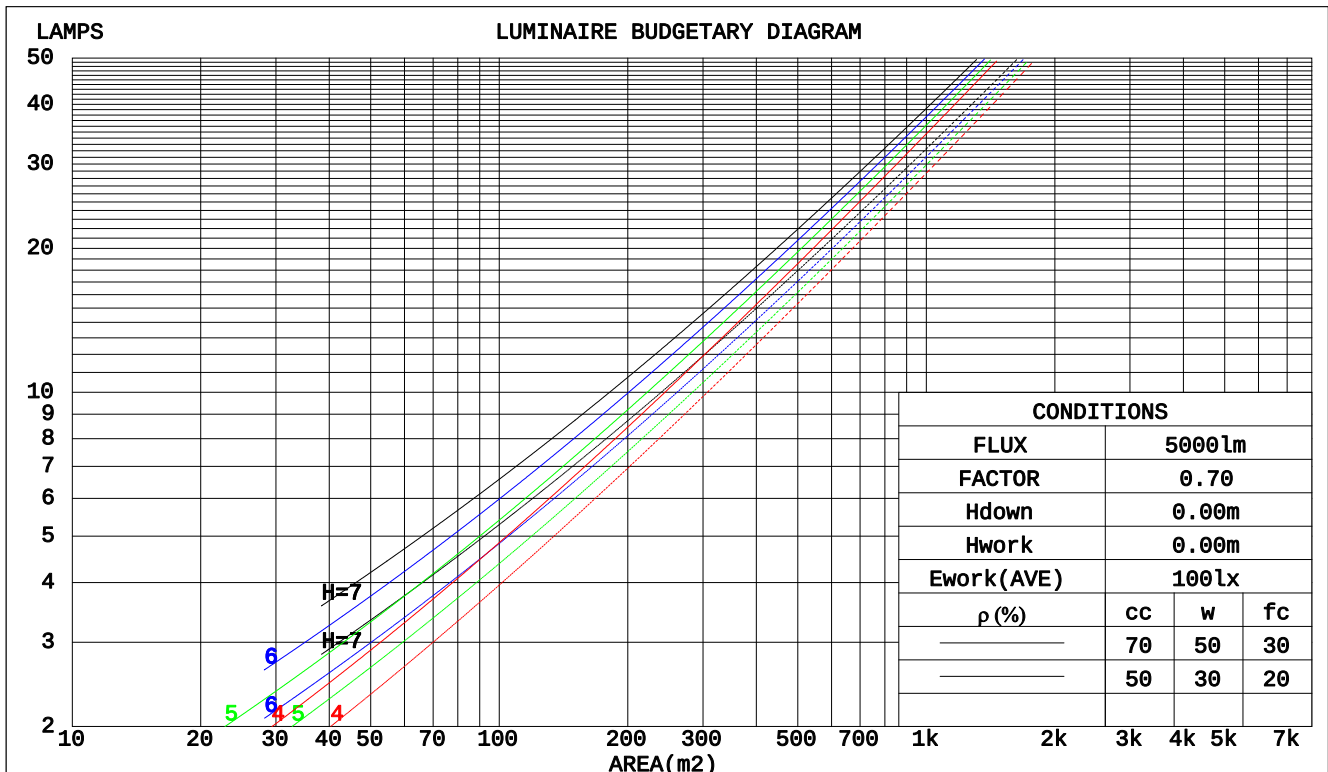
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:何俊伟  
Test Date:

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.3263]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                                                |                             |                  |
|--------------------------------------------------------------------------------|-----------------------------|------------------|
| Test:U:120.0V I:0.1690A P:20.00W PF:0.9800 Freq:60.00Hz Lamp Flux:2147.79x1 lm |                             |                  |
| NAME: 12代 2FT 黑色                                                               | TYPE:20W 3500K              | WEIGHT:          |
| SPEC.:                                                                         | DIM.:                       | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.38*0.017+0.605*0.017 | Shielding Angle: |

| $\rho_{CC}$ | 80%                   |      |      | 70%  |      |      | 50%                             |     |     | 30% |     |     | 10% |     |     | 0   |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| $\rho_W$    | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0   |
| $\rho_{fc}$ | 20%                   |      |      | 20%  |      |      | 20%                             |     |     | 20% |     |     | 20% |     |     | 0   |
| RCR         | RCR:Room Cavity Ratio |      |      |      |      |      | Coefficients of Utilization(CU) |     |     |     |     |     |     |     |     |     |
| 0.0         | 1.13                  | 1.13 | 1.13 | 1.07 | 1.07 | 1.07 | .97                             | .97 | .97 | .87 | .87 | .87 | .79 | .79 | .79 | .75 |
| 1.0         | 1.02                  | .98  | .95  | .97  | .94  | .91  | .88                             | .86 | .84 | .80 | .78 | .77 | .73 | .71 | .70 | .67 |
| 2.0         | .91                   | .86  | .81  | .87  | .82  | .78  | .80                             | .76 | .73 | .73 | .70 | .67 | .66 | .64 | .62 | .59 |
| 3.0         | .82                   | .75  | .70  | .79  | .73  | .68  | .72                             | .68 | .64 | .66 | .63 | .60 | .61 | .58 | .56 | .53 |
| 4.0         | .74                   | .67  | .62  | .71  | .65  | .60  | .66                             | .60 | .56 | .61 | .56 | .53 | .56 | .52 | .50 | .47 |
| 5.0         | .67                   | .60  | .55  | .65  | .58  | .53  | .60                             | .55 | .50 | .56 | .51 | .48 | .51 | .48 | .45 | .42 |
| 6.0         | .62                   | .54  | .49  | .59  | .52  | .48  | .55                             | .49 | .45 | .51 | .46 | .43 | .47 | .44 | .41 | .38 |
| 7.0         | .56                   | .49  | .44  | .55  | .48  | .43  | .51                             | .45 | .41 | .47 | .43 | .39 | .44 | .40 | .37 | .35 |
| 8.0         | .52                   | .45  | .40  | .50  | .44  | .39  | .47                             | .41 | .37 | .44 | .39 | .36 | .41 | .37 | .34 | .32 |
| 9.0         | .48                   | .41  | .36  | .47  | .40  | .36  | .44                             | .38 | .34 | .41 | .36 | .33 | .38 | .34 | .31 | .30 |
| 10.0        | .45                   | .38  | .33  | .43  | .37  | .33  | .41                             | .35 | .31 | .38 | .34 | .30 | .36 | .32 | .29 | .27 |



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:何俊伟  
Test Date:

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.3263]  
Remarks:

## WEC AND CCEC

|                                                                                |  |  |  |  |                             |  |  |                  |  |
|--------------------------------------------------------------------------------|--|--|--|--|-----------------------------|--|--|------------------|--|
| Test:U:120.0V I:0.1690A P:20.00W PF:0.9800 Freq:60.00Hz Lamp Flux:2147.79x1 lm |  |  |  |  |                             |  |  |                  |  |
| NAME: 12代 2FT 黑色                                                               |  |  |  |  | TYPE:20W 3500K              |  |  | WEIGHT:          |  |
| SPEC.:                                                                         |  |  |  |  | DIM.:                       |  |  | SERIAL No.:      |  |
| MFR.: WS                                                                       |  |  |  |  | SUR.:0.38*0.017+0.605*0.017 |  |  | Shielding Angle: |  |

| $\rho_{cc}$ | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0 |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|
| $\rho_w$    | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| $\rho_{fc}$ | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR         | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |
| 0.0         |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |
| 1.0         | .237                  | .135 | .043 | .223 | .127 | .040 | .195                            | .112 | .036 | .170 | .098 | .032 | .147 | .085 | .027 |   |
| 2.0         | .227                  | .124 | .038 | .213 | .118 | .036 | .189                            | .105 | .033 | .166 | .093 | .029 | .146 | .082 | .026 |   |
| 3.0         | .214                  | .114 | .034 | .202 | .108 | .033 | .180                            | .097 | .030 | .159 | .087 | .027 | .140 | .078 | .024 |   |
| 4.0         | .201                  | .104 | .031 | .190 | .099 | .029 | .170                            | .090 | .027 | .151 | .081 | .024 | .134 | .073 | .022 |   |
| 5.0         | .188                  | .096 | .028 | .179 | .092 | .027 | .160                            | .083 | .025 | .143 | .076 | .022 | .127 | .068 | .020 |   |
| 6.0         | .177                  | .089 | .025 | .168 | .085 | .024 | .151                            | .078 | .023 | .136 | .071 | .021 | .121 | .064 | .019 |   |
| 7.0         | .167                  | .082 | .023 | .159 | .079 | .023 | .143                            | .072 | .021 | .129 | .066 | .019 | .115 | .060 | .018 |   |
| 8.0         | .157                  | .077 | .022 | .150 | .074 | .021 | .136                            | .068 | .019 | .122 | .062 | .018 | .110 | .056 | .016 |   |
| 9.0         | .149                  | .072 | .020 | .142 | .069 | .019 | .129                            | .064 | .018 | .116 | .058 | .017 | .104 | .053 | .015 |   |
| 10.0        | .141                  | .068 | .019 | .135 | .065 | .018 | .122                            | .060 | .017 | .111 | .055 | .016 | .100 | .050 | .014 |   |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                                        |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|--------------------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                        | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                                        |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .385                  | .385 | .385 | .329 | .329 | .329 | .224                                       | .224 | .224 | .129 | .129 | .129 | .041 | .041 | .041 |   |
| 1.0  | .371                  | .353 | .336 | .317 | .303 | .289 | .217                                       | .208 | .200 | .125 | .120 | .116 | .040 | .039 | .038 |   |
| 2.0  | .361                  | .329 | .303 | .309 | .283 | .262 | .212                                       | .196 | .183 | .122 | .114 | .107 | .039 | .037 | .035 |   |
| 3.0  | .352                  | .312 | .280 | .302 | .269 | .243 | .207                                       | .187 | .171 | .120 | .109 | .101 | .038 | .035 | .033 |   |
| 4.0  | .344                  | .299 | .265 | .295 | .258 | .230 | .203                                       | .180 | .162 | .117 | .105 | .096 | .038 | .034 | .031 |   |
| 5.0  | .337                  | .289 | .253 | .289 | .250 | .220 | .199                                       | .174 | .155 | .115 | .102 | .092 | .037 | .033 | .030 |   |
| 6.0  | .330                  | .280 | .245 | .284 | .243 | .213 | .196                                       | .170 | .151 | .114 | .100 | .090 | .037 | .033 | .030 |   |
| 7.0  | .324                  | .274 | .238 | .279 | .237 | .208 | .193                                       | .166 | .147 | .112 | .098 | .088 | .036 | .032 | .029 |   |
| 8.0  | .318                  | .268 | .233 | .274 | .233 | .204 | .190                                       | .163 | .144 | .110 | .096 | .086 | .036 | .032 | .028 |   |
| 9.0  | .313                  | .263 | .230 | .270 | .229 | .200 | .187                                       | .161 | .142 | .109 | .095 | .085 | .035 | .031 | .028 |   |
| 10.0 | .308                  | .259 | .227 | .266 | .225 | .198 | .184                                       | .158 | .141 | .108 | .094 | .084 | .035 | .031 | .028 |   |

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:何俊伟  
 Test Date:

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
 Humidity:65.0%  
 Test Distance:7.540m [K=1.3263]  
 Remarks:

### UGR(Unified Glare Rating) Table

|                                                                                |     |                  |      |      |                             |      |                |                  |      |      |      |
|--------------------------------------------------------------------------------|-----|------------------|------|------|-----------------------------|------|----------------|------------------|------|------|------|
| Test:U:120.0V I:0.1690A P:20.00W PF:0.9800 Freq:60.00Hz Lamp Flux:2147.79x1 lm |     |                  |      |      |                             |      |                |                  |      |      |      |
| NAME: 12代 2FT 黑色                                                               |     |                  |      |      | TYPE:20W 3500K              |      |                | WEIGHT:          |      |      |      |
| SPEC.:                                                                         |     |                  |      |      | DIM.:                       |      |                | SERIAL No.:      |      |      |      |
| MFR.: WS                                                                       |     |                  |      |      | SUR.:0.38*0.017+0.605*0.017 |      |                | 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                                                                  |     | 16.0             | 17.0 | 16.6 | 17.6                        | 18.2 | 23.6           | 24.6             | 24.2 | 25.2 | 25.8 |
|                                                                                | 3H  | 15.8             | 16.7 | 16.4 | 17.3                        | 18.0 | 24.6           | 25.5             | 25.2 | 26.1 | 26.7 |
|                                                                                | 4H  | 15.6             | 16.5 | 16.3 | 17.1                        | 17.8 | 24.8           | 25.7             | 25.5 | 26.3 | 27.0 |
|                                                                                | 6H  | 15.5             | 16.3 | 16.1 | 16.9                        | 17.7 | 25.0           | 25.7             | 25.6 | 26.4 | 27.1 |
|                                                                                | 8H  | 15.4             | 16.2 | 16.1 | 16.8                        | 17.6 | 24.9           | 25.7             | 25.6 | 26.3 | 27.1 |
|                                                                                | 12H | 15.3             | 16.1 | 16.0 | 16.7                        | 17.5 | 24.9           | 25.6             | 25.6 | 26.3 | 27.0 |
| 4H                                                                             | 2H  | 16.7             | 17.5 | 17.3 | 18.1                        | 18.8 | 23.3           | 24.2             | 24.0 | 24.8 | 25.5 |
|                                                                                | 3H  | 16.4             | 17.1 | 17.1 | 17.8                        | 18.5 | 24.3           | 25.1             | 25.0 | 25.7 | 26.5 |
|                                                                                | 4H  | 16.2             | 16.9 | 16.9 | 17.6                        | 18.4 | 24.7           | 25.3             | 25.4 | 26.0 | 26.8 |
|                                                                                | 6H  | 16.1             | 16.7 | 16.8 | 17.4                        | 18.2 | 24.9           | 25.4             | 25.6 | 26.2 | 27.0 |
|                                                                                | 8H  | 16.0             | 16.5 | 16.8 | 17.3                        | 18.1 | 24.9           | 25.4             | 25.6 | 26.1 | 27.0 |
|                                                                                | 12H | 15.9             | 16.4 | 16.7 | 17.2                        | 18.1 | 24.8           | 25.3             | 25.6 | 26.1 | 27.0 |
| 8H                                                                             | 4H  | 16.3             | 16.9 | 17.1 | 17.6                        | 18.5 | 24.5           | 25.0             | 25.2 | 25.7 | 26.6 |
|                                                                                | 6H  | 16.2             | 16.6 | 17.0 | 17.4                        | 18.3 | 24.7           | 25.1             | 25.5 | 25.9 | 26.8 |
|                                                                                | 8H  | 16.1             | 16.5 | 16.9 | 17.3                        | 18.2 | 24.7           | 25.1             | 25.5 | 25.9 | 26.8 |
|                                                                                | 12H | 16.0             | 16.4 | 16.8 | 17.2                        | 18.1 | 24.7           | 25.0             | 25.5 | 25.8 | 26.8 |
| 12H                                                                            | 4H  | 16.3             | 16.8 | 17.1 | 17.5                        | 18.4 | 24.4           | 24.9             | 25.2 | 25.6 | 26.5 |
|                                                                                | 6H  | 16.2             | 16.5 | 17.0 | 17.3                        | 18.3 | 24.6           | 25.0             | 25.4 | 25.8 | 26.7 |
|                                                                                | 8H  | 16.1             | 16.4 | 16.9 | 17.2                        | 18.2 | 24.6           | 25.0             | 25.5 | 25.8 | 26.7 |
| Variations with the observer position at spacings:                             |     |                  |      |      |                             |      |                |                  |      |      |      |
| S = 1.0H                                                                       |     | + 1.9 / - 3.8    |      |      |                             |      | + 0.4 / - 0.3  |                  |      |      |      |
| 1.5H                                                                           |     | + 1.4 / - 2.7    |      |      |                             |      | + 0.9 / - 1.3  |                  |      |      |      |
| 2.0H                                                                           |     | + 2.6 / - 4.5    |      |      |                             |      | + 1.9 / - 2.7  |                  |      |      |      |

CIE Pub.117 Corrected 2148 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.7)

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:何俊伟  
Test Date:

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.3263]  
Remarks:

### UTILIZATION FACTORS TABLE

|                                                                                |                             |                  |
|--------------------------------------------------------------------------------|-----------------------------|------------------|
| Test:U:120.0V I:0.1690A P:20.00W PF:0.9800 Freq:60.00Hz Lamp Flux:2147.79x1 lm |                             |                  |
| NAME: 12代 2FT 黑色                                                               | TYPE:20W 3500K              | WEIGHT:          |
| SPEC.:                                                                         | DIM.:                       | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.38*0.017+0.605*0.017 | Shielding Angle: |

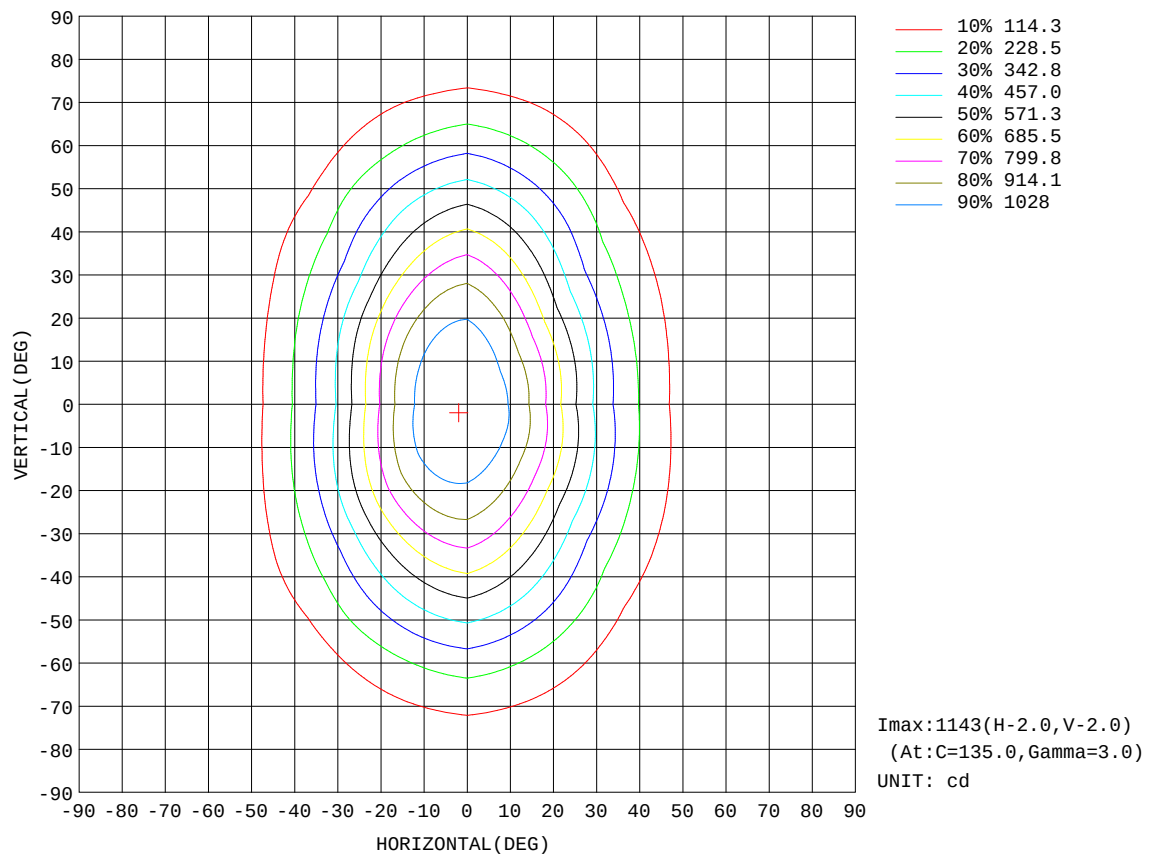
| REFLECTANCE                      |                                                     |     |           |     |     |     |     |               |     |        |
|----------------------------------|-----------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| 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                         | 60                                                  | 51  | 45        | 59  | 50  | 45  | 56  | 48            | 44  | 37     |
| 0.80                             | 70                                                  | 60  | 54        | 68  | 59  | 54  | 64  | 57            | 52  | 44     |
| 1.00                             | 77                                                  | 68  | 62        | 75  | 66  | 61  | 70  | 64            | 59  | 50     |
| 1.25                             | 83                                                  | 75  | 69        | 80  | 73  | 67  | 75  | 69            | 64  | 55     |
| 1.50                             | 88                                                  | 80  | 74        | 84  | 77  | 72  | 78  | 73            | 69  | 58     |
| 2.00                             | 93                                                  | 86  | 81        | 89  | 83  | 79  | 83  | 78            | 74  | 62     |
| 2.50                             | 96                                                  | 90  | 85        | 92  | 87  | 82  | 85  | 81            | 77  | 64     |
| 3.00                             | 99                                                  | 93  | 89        | 95  | 90  | 86  | 87  | 83            | 80  | 66     |
| 4.00                             | 102                                                 | 98  | 94        | 98  | 94  | 90  | 89  | 86            | 84  | 68     |
| 5.00                             | 104                                                 | 100 | 97        | 100 | 96  | 93  | 91  | 88            | 86  | 69     |
| ROOM INDEX                       | UF(total)                                           |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |                                                     |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:何俊伟  
Test Date:

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.3263]  
Remarks:

## ISOCANDELA DIAGRAM

|                                                                                |                             |                  |
|--------------------------------------------------------------------------------|-----------------------------|------------------|
| Test:U:120.0V I:0.1690A P:20.00W PF:0.9800 Freq:60.00Hz Lamp Flux:2147.79x1 lm |                             |                  |
| NAME: 12代 2FT 黑色                                                               | TYPE:20W 3500K              | WEIGHT:          |
| SPEC.:                                                                         | DIM.:                       | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.38*0.017+0.605*0.017 | Shielding Angle: |

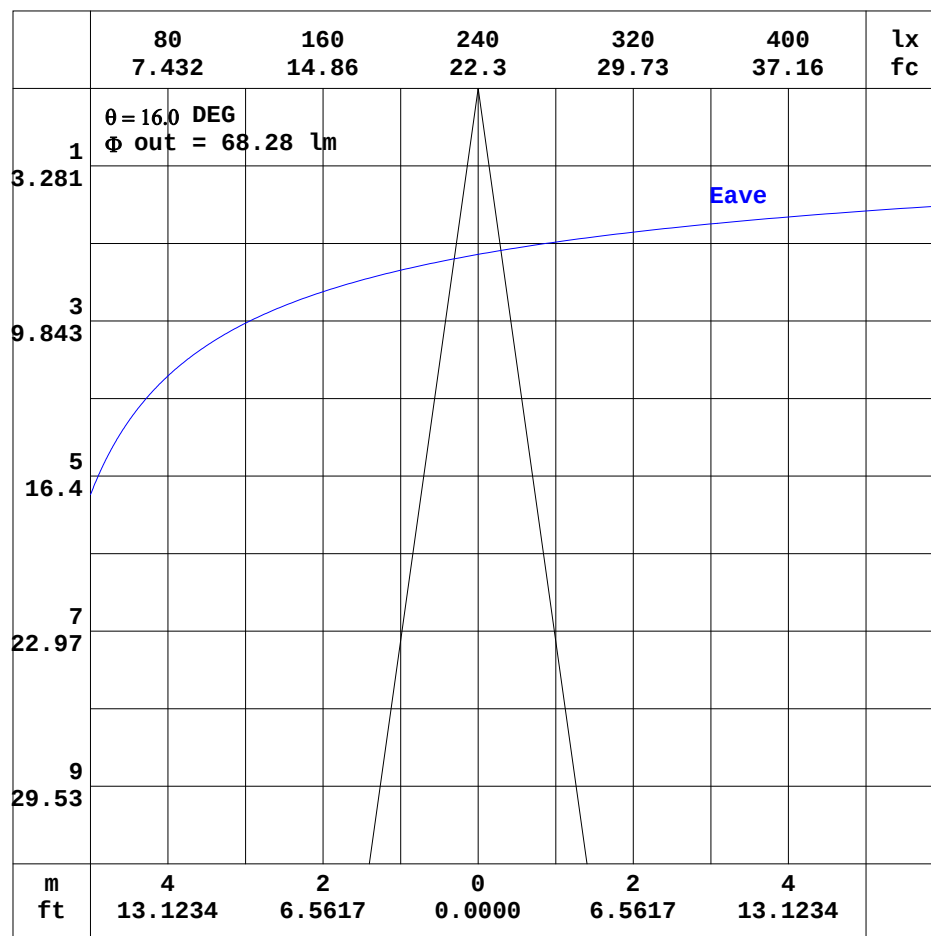


C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:何俊伟  
Test Date:

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.3263]  
Remarks:

## AAI CURVES

|                                                                                |                             |                  |
|--------------------------------------------------------------------------------|-----------------------------|------------------|
| Test:U:120.0V I:0.1690A P:20.00W PF:0.9800 Freq:60.00Hz Lamp Flux:2147.79x1 lm |                             |                  |
| NAME: 12代 2FT 黑色                                                               | TYPE:20W 3500K              | WEIGHT:          |
| SPEC.:                                                                         | DIM.:                       | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.38*0.017+0.605*0.017 | Shielding Angle: |



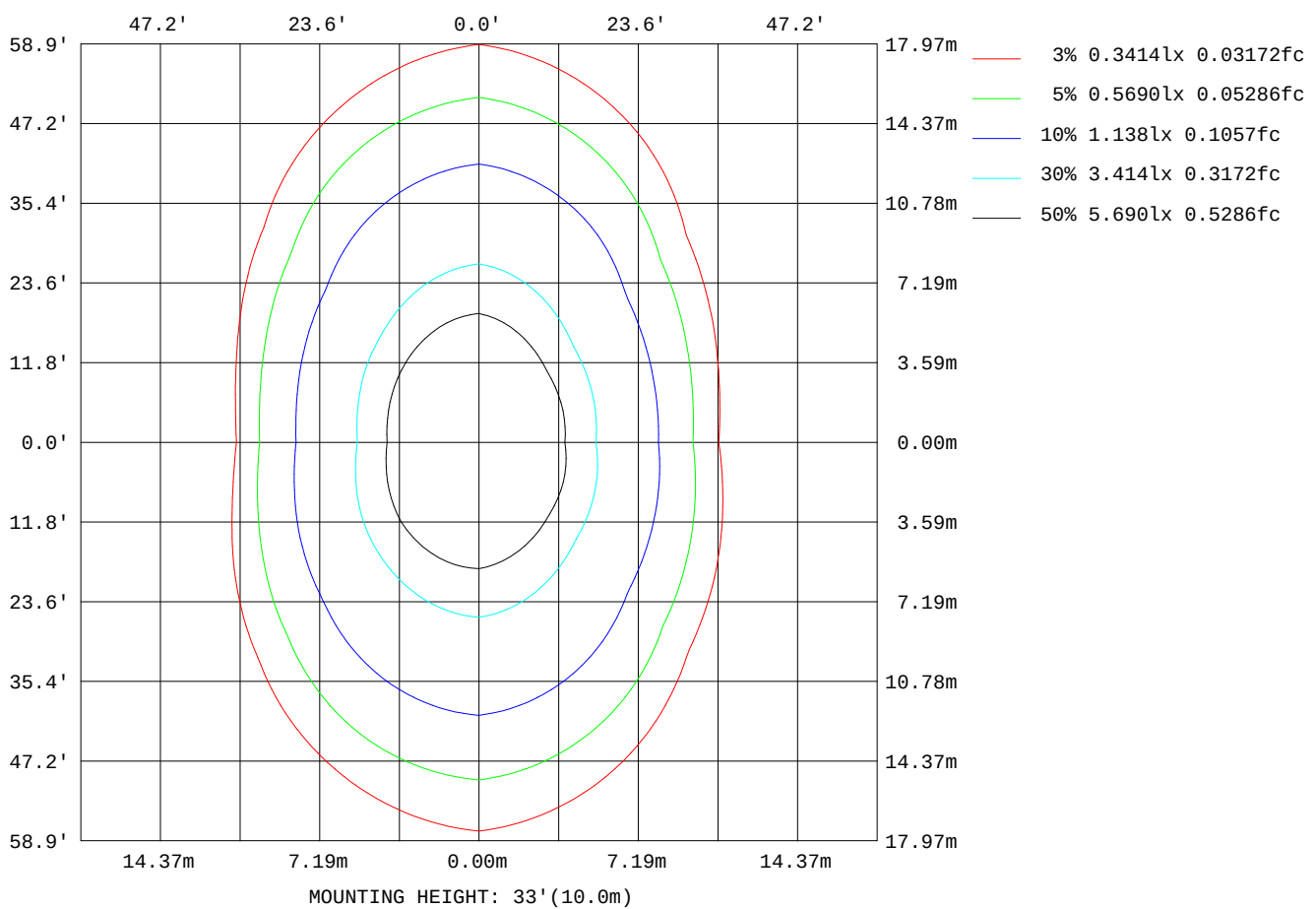
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range:  $0 - 360 \text{ DEG}$   
 C Interval:  $5.0 \text{ DEG}$   
 Test Speed: MEDIUM  
 Temperature:  $25.3 \text{ DEG}$   
 Operators: 何俊伟  
 Test Date:

$\gamma$  Range:  $0 - 180 \text{ DEG}$   
 $\gamma$  Interval:  $0.5 \text{ DEG}$   
 Test System: EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
 Humidity: 65.0%  
 Test Distance: 7.540m [K=1.3263]  
 Remarks:

## ISOLUX DIAGRAM

|                                                                                |                             |                  |
|--------------------------------------------------------------------------------|-----------------------------|------------------|
| Test:U:120.0V I:0.1690A P:20.00W PF:0.9800 Freq:60.00Hz Lamp Flux:2147.79x1 lm |                             |                  |
| NAME: 12代 2FT 黑色                                                               | TYPE:20W 3500K              | WEIGHT:          |
| SPEC.:                                                                         | DIM.:                       | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.38*0.017+0.605*0.017 | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:何俊伟  
Test Date:

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.3263]  
Remarks:

## LED Avg.L Report

|                                                                                |                             |                  |
|--------------------------------------------------------------------------------|-----------------------------|------------------|
| Test:U:120.0V I:0.1690A P:20.00W PF:0.9800 Freq:60.00Hz Lamp Flux:2147.79x1 lm |                             |                  |
| NAME: 12代 2FT 黑色                                                               | TYPE:20W 3500K              | WEIGHT:          |
| SPEC.:                                                                         | DIM.:                       | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.38*0.017+0.605*0.017 | Shielding Angle: |

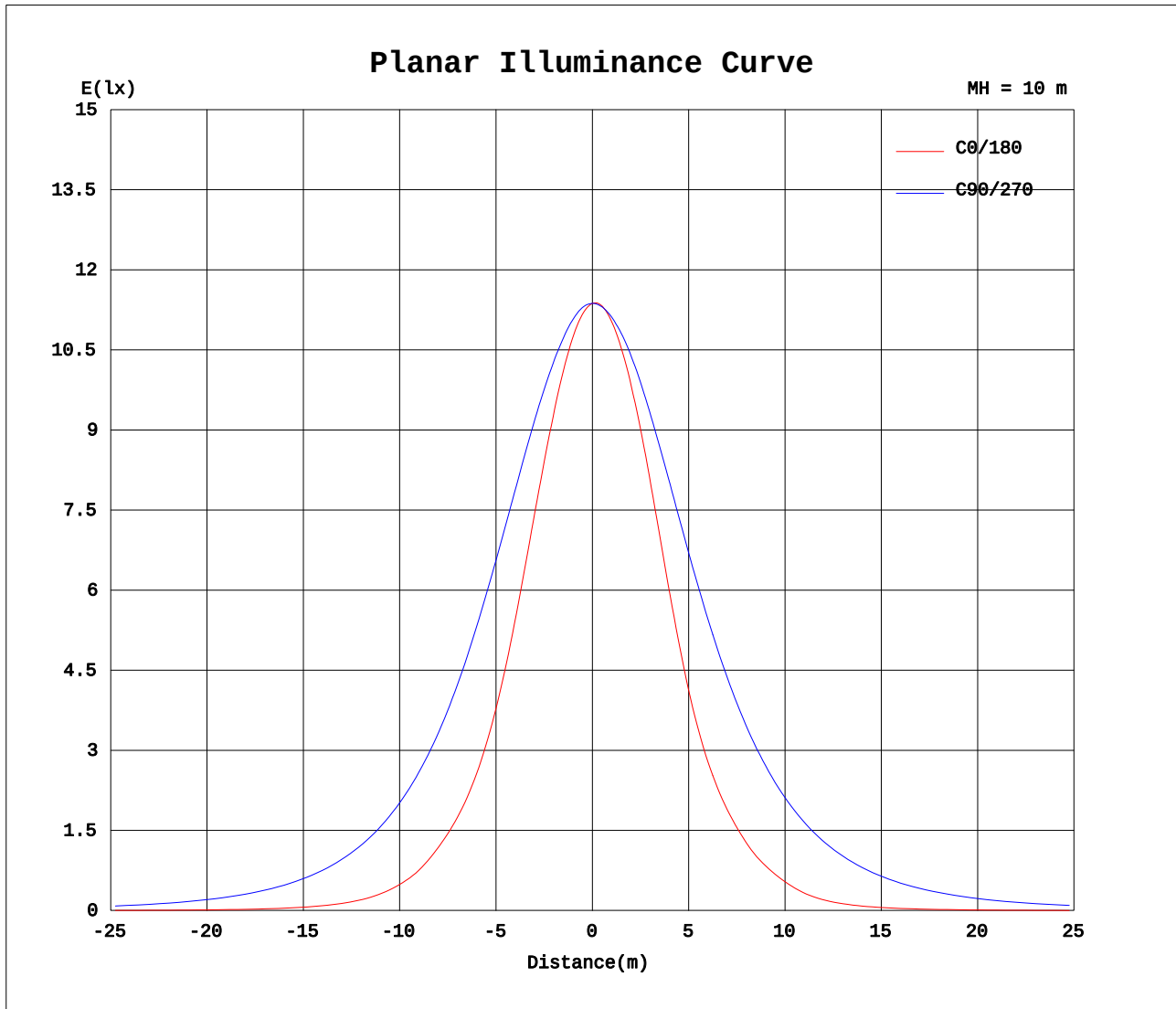
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 1624  |
| L_0~180(75)av  | 601   |
| L_0~180(85)av  | 786   |
| L_90~270(65)av | 32176 |
| L_90~270(75)av | 21793 |
| L_90~270(85)av | 7635  |
| L_45(65)av     | 6535  |
| L_45(75)av     | 1231  |
| L_45(85)av     | 1256  |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:何俊伟  
 Test Date:

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
 Humidity:65.0%  
 Test Distance:7.540m [K=1.3263]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3DEG  
Operators: 何俊伟  
Test Date:

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
Humidity: 65.0%  
Test Distance: 7.540m [K=1.3263]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                |                             |                  |
|--------------------------------------------------------------------------------|-----------------------------|------------------|
| Test:U:120.0V I:0.1690A P:20.00W PF:0.9800 Freq:60.00Hz Lamp Flux:2147.79x1 lm |                             |                  |
| NAME: 12代 2FT 黑色                                                               | TYPE:20W 3500K              | WEIGHT:          |
| SPEC.:                                                                         | DIM.:                       | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.38*0.017+0.605*0.017 | Shielding Angle: |

Table--1

UNIT: cd

| C(DEG)<br>γ (DEG) | 0    | 5    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 |
| 5                 | 1100 | 1102 | 1103 | 1104 | 1106 | 1107 | 1108 | 1110 | 1111 | 1113 | 1114 | 1116 | 1117 | 1119 | 1121 | 1122 | 1124 | 1126 | 1127 |
| 10                | 1017 | 1021 | 1025 | 1029 | 1033 | 1038 | 1042 | 1046 | 1051 | 1055 | 1061 | 1066 | 1072 | 1077 | 1082 | 1087 | 1092 | 1096 | 1100 |
| 15                | 894  | 902  | 910  | 918  | 926  | 934  | 943  | 952  | 961  | 970  | 982  | 993  | 1005 | 1016 | 1026 | 1036 | 1046 | 1054 | 1061 |
| 20                | 741  | 753  | 766  | 779  | 792  | 806  | 819  | 833  | 848  | 862  | 881  | 900  | 919  | 937  | 954  | 970  | 985  | 997  | 1008 |
| 25                | 577  | 593  | 609  | 625  | 642  | 660  | 678  | 696  | 716  | 736  | 762  | 789  | 816  | 842  | 866  | 888  | 909  | 926  | 940  |
| 30                | 432  | 447  | 462  | 479  | 496  | 515  | 535  | 556  | 578  | 601  | 635  | 669  | 703  | 736  | 767  | 796  | 822  | 844  | 861  |
| 35                | 318  | 329  | 341  | 355  | 371  | 388  | 407  | 428  | 451  | 475  | 512  | 551  | 590  | 627  | 663  | 696  | 725  | 750  | 770  |
| 40                | 222  | 230  | 240  | 252  | 266  | 281  | 299  | 319  | 341  | 365  | 404  | 444  | 484  | 523  | 561  | 595  | 626  | 651  | 671  |
| 45                | 138  | 146  | 155  | 166  | 180  | 195  | 212  | 231  | 252  | 275  | 313  | 352  | 391  | 429  | 465  | 498  | 527  | 552  | 571  |
| 50                | 79.2 | 85.6 | 93.8 | 104  | 116  | 129  | 145  | 162  | 181  | 202  | 236  | 272  | 307  | 342  | 375  | 405  | 432  | 454  | 471  |
| 55                | 44.1 | 46.8 | 51.3 | 57.6 | 65.8 | 75.9 | 87.8 | 101  | 117  | 134  | 165  | 196  | 227  | 258  | 288  | 315  | 339  | 359  | 375  |
| 60                | 23.8 | 22.8 | 23.5 | 26.2 | 30.6 | 36.9 | 45.0 | 54.9 | 66.7 | 80.3 | 106  | 132  | 159  | 185  | 211  | 234  | 255  | 272  | 286  |
| 65                | 12.1 | 8.79 | 7.19 | 7.24 | 8.95 | 12.3 | 17.3 | 24.0 | 32.3 | 42.3 | 62.3 | 83.3 | 105  | 126  | 146  | 165  | 182  | 196  | 207  |
| 70                | 4.86 | 1.22 | 0.21 | 0.20 | 0.18 | 0.16 | 2.68 | 6.89 | 12.4 | 19.2 | 33.6 | 48.9 | 64.5 | 80.1 | 95.0 | 109  | 121  | 132  | 140  |
| 75                | 2.55 | 0.14 | 0.14 | 0.14 | 0.13 | 0.13 | 0.12 | 0.12 | 0.61 | 4.64 | 13.9 | 23.8 | 34.0 | 44.2 | 54.1 | 63.3 | 71.6 | 78.5 | 83.8 |
| 80                | 1.75 | 0.11 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.63 | 2.46 | 6.69 | 11.2 | 15.9 | 20.5 | 25.1 | 29.3 | 33.0 | 36.2 | 38.7 |
| 85                | 1.10 | 0.86 | 0.70 | 0.62 | 0.60 | 0.66 | 0.79 | 1.00 | 1.27 | 1.62 | 2.39 | 3.20 | 4.03 | 4.86 | 5.67 | 6.41 | 7.08 | 7.65 | 8.08 |
| 90                | 0.80 | 0.97 | 1.12 | 1.24 | 1.34 | 1.42 | 1.47 | 1.49 | 1.49 | 1.47 | 1.34 | 1.18 | 1.02 | 0.85 | 0.68 | 0.52 | 0.38 | 0.26 | 0.17 |
| 95                | 0.67 | 0.62 | 0.69 | 0.79 | 0.88 | 0.95 | 0.99 | 1.03 | 1.07 | 1.26 | 1.60 | 1.97 | 2.34 | 2.72 | 3.08 | 3.43 | 3.74 | 4.01 | 4.23 |
| 100               | 1.10 | 0.62 | 0.49 | 0.57 | 0.63 | 0.68 | 0.72 | 0.75 | 1.22 | 1.87 | 3.29 | 4.79 | 6.35 | 7.91 | 9.42 | 10.8 | 12.1 | 13.2 | 14.1 |
| 105               | 1.60 | 0.69 | 0.35 | 0.40 | 0.45 | 0.49 | 0.52 | 0.80 | 1.75 | 2.96 | 5.60 | 8.42 | 11.3 | 14.2 | 17.1 | 19.7 | 22.1 | 24.2 | 25.8 |
| 110               | 2.97 | 1.54 | 0.52 | 0.35 | 0.38 | 0.42 | 0.55 | 1.58 | 3.02 | 4.86 | 8.75 | 12.9 | 17.3 | 21.6 | 25.9 | 30.0 | 33.8 | 37.1 | 39.9 |
| 115               | 4.54 | 3.75 | 3.39 | 3.46 | 3.97 | 4.90 | 6.26 | 8.06 | 10.3 | 12.9 | 17.1 | 21.7 | 26.5 | 31.5 | 36.5 | 41.6 | 46.7 | 51.6 | 56.2 |
| 120               | 6.92 | 13.9 | 20.4 | 26.6 | 32.4 | 37.9 | 42.9 | 47.6 | 51.9 | 55.8 | 58.3 | 60.5 | 62.5 | 64.4 | 66.2 | 68.0 | 69.9 | 72.0 | 74.4 |
| 125               | 15.7 | 33.7 | 50.1 | 64.8 | 77.9 | 89.5 | 99.4 | 108  | 114  | 119  | 119  | 118  | 115  | 112  | 108  | 104  | 99.9 | 96.3 | 93.3 |
| 130               | 66.2 | 82.0 | 96.2 | 109  | 120  | 130  | 138  | 144  | 149  | 152  | 150  | 147  | 142  | 137  | 132  | 126  | 121  | 116  | 112  |
| 135               | 163  | 164  | 165  | 166  | 166  | 166  | 166  | 165  | 164  | 162  | 158  | 154  | 150  | 146  | 142  | 138  | 135  | 132  | 131  |
| 140               | 204  | 199  | 195  | 191  | 187  | 183  | 179  | 176  | 172  | 169  | 166  | 162  | 159  | 156  | 154  | 152  | 150  | 149  | 148  |
| 145               | 209  | 205  | 201  | 197  | 194  | 190  | 187  | 184  | 182  | 179  | 176  | 174  | 172  | 170  | 168  | 167  | 166  | 165  | 165  |
| 150               | 206  | 203  | 200  | 198  | 195  | 193  | 191  | 189  | 187  | 186  | 184  | 183  | 182  | 181  | 180  | 180  | 179  | 179  | 179  |
| 155               | 208  | 205  | 203  | 201  | 199  | 197  | 195  | 194  | 192  | 191  | 191  | 190  | 190  | 190  | 190  | 190  | 190  | 191  | 191  |
| 160               | 207  | 206  | 205  | 204  | 202  | 202  | 201  | 200  | 199  | 199  | 199  | 199  | 199  | 199  | 199  | 200  | 200  | 200  | 201  |
| 165               | 210  | 210  | 210  | 210  | 210  | 210  | 209  | 209  | 209  | 209  | 209  | 209  | 209  | 209  | 209  | 209  | 209  | 209  | 209  |
| 170               | 220  | 219  | 219  | 219  | 219  | 219  | 218  | 218  | 218  | 218  | 217  | 217  | 217  | 216  | 216  | 216  | 216  | 215  | 215  |
| 175               | 223  | 223  | 223  | 223  | 223  | 222  | 222  | 222  | 222  | 222  | 221  | 221  | 221  | 220  | 220  | 220  | 219  | 219  | 219  |
| 180               | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  |

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:何俊伟  
Test Date:

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.3263]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                |                             |                  |
|--------------------------------------------------------------------------------|-----------------------------|------------------|
| Test:U:120.0V I:0.1690A P:20.00W PF:0.9800 Freq:60.00Hz Lamp Flux:2147.79x1 lm |                             |                  |
| NAME: 12代 2FT 黑色                                                               | TYPE:20W 3500K              | WEIGHT:          |
| SPEC.:                                                                         | DIM.:                       | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.38*0.017+0.605*0.017 | Shielding Angle: |

Table--2

UNIT: cd

| $\gamma$ (DEG) \ C (DEG) | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  | 140  | 145  | 150  | 155  | 160  | 165  | 170  | 175  | 180  | 185  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                        | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 |
| 5                        | 1129 | 1131 | 1133 | 1134 | 1136 | 1137 | 1138 | 1139 | 1139 | 1138 | 1137 | 1135 | 1134 | 1132 | 1130 | 1129 | 1127 | 1126 | 1126 |
| 10                       | 1103 | 1105 | 1107 | 1108 | 1109 | 1110 | 1109 | 1109 | 1107 | 1103 | 1099 | 1094 | 1089 | 1085 | 1080 | 1076 | 1072 | 1068 | 1069 |
| 15                       | 1064 | 1066 | 1066 | 1065 | 1064 | 1061 | 1057 | 1052 | 1047 | 1037 | 1027 | 1016 | 1006 | 996  | 986  | 978  | 970  | 964  | 967  |
| 20                       | 1010 | 1010 | 1008 | 1004 | 998  | 990  | 981  | 970  | 958  | 940  | 921  | 902  | 883  | 865  | 848  | 833  | 820  | 810  | 815  |
| 25                       | 940  | 937  | 930  | 921  | 909  | 894  | 877  | 858  | 838  | 812  | 784  | 757  | 731  | 706  | 683  | 662  | 645  | 632  | 639  |
| 30                       | 858  | 849  | 836  | 820  | 800  | 777  | 752  | 725  | 697  | 666  | 635  | 604  | 575  | 547  | 522  | 500  | 482  | 469  | 476  |
| 35                       | 761  | 747  | 729  | 706  | 679  | 650  | 619  | 586  | 553  | 522  | 492  | 464  | 437  | 412  | 389  | 370  | 355  | 344  | 349  |
| 40                       | 660  | 643  | 620  | 593  | 563  | 530  | 495  | 460  | 424  | 395  | 367  | 341  | 317  | 295  | 276  | 260  | 247  | 239  | 243  |
| 45                       | 559  | 540  | 517  | 490  | 459  | 426  | 392  | 356  | 321  | 294  | 268  | 244  | 222  | 202  | 185  | 171  | 160  | 153  | 157  |
| 50                       | 460  | 443  | 421  | 395  | 367  | 336  | 303  | 270  | 237  | 212  | 187  | 165  | 144  | 125  | 109  | 95.8 | 85.5 | 78.7 | 82.5 |
| 55                       | 364  | 349  | 329  | 306  | 280  | 253  | 224  | 195  | 166  | 145  | 125  | 107  | 90.7 | 76.0 | 63.5 | 53.2 | 45.5 | 40.5 | 43.2 |
| 60                       | 275  | 260  | 241  | 220  | 197  | 172  | 146  | 121  | 96.2 | 81.8 | 68.8 | 57.3 | 47.3 | 38.9 | 32.1 | 27.0 | 23.5 | 21.7 | 21.8 |
| 65                       | 197  | 184  | 168  | 150  | 130  | 109  | 88.1 | 67.3 | 47.4 | 38.1 | 30.3 | 23.8 | 18.6 | 14.7 | 11.9 | 10.2 | 9.59 | 9.90 | 8.79 |
| 70                       | 132  | 122  | 110  | 96.7 | 82.0 | 66.7 | 51.2 | 36.1 | 21.7 | 16.0 | 11.4 | 7.84 | 5.28 | 3.61 | 2.73 | 2.55 | 2.98 | 3.92 | 2.56 |
| 75                       | 78.6 | 71.8 | 63.6 | 54.5 | 44.7 | 34.5 | 24.3 | 14.4 | 5.09 | 2.32 | 0.40 | 0.13 | 0.12 | 0.11 | 0.10 | 0.10 | 1.16 | 2.42 | 0.94 |
| 80                       | 36.3 | 33.2 | 29.4 | 25.2 | 20.8 | 16.1 | 11.4 | 6.91 | 2.66 | 1.40 | 0.53 | 0.20 | 0.19 | 0.17 | 0.16 | 0.40 | 0.90 | 1.48 | 0.72 |
| 85                       | 7.68 | 7.15 | 6.52 | 5.80 | 5.02 | 4.21 | 3.39 | 2.59 | 1.84 | 1.56 | 1.34 | 1.18 | 1.07 | 1.00 | 0.98 | 0.99 | 1.03 | 1.09 | 0.93 |
| 90                       | 0.30 | 0.45 | 0.63 | 0.82 | 1.02 | 1.22 | 1.41 | 1.59 | 1.74 | 1.69 | 1.61 | 1.51 | 1.41 | 1.29 | 1.17 | 1.06 | 0.96 | 0.87 | 0.95 |
| 95                       | 4.15 | 4.02 | 3.84 | 3.62 | 3.38 | 3.12 | 2.84 | 2.57 | 2.29 | 2.14 | 2.00 | 1.87 | 1.76 | 1.66 | 1.59 | 1.53 | 1.49 | 1.47 | 1.50 |
| 100                      | 13.5 | 12.6 | 11.6 | 10.4 | 9.08 | 7.71 | 6.32 | 4.96 | 3.66 | 3.17 | 2.78 | 2.49 | 2.29 | 2.16 | 2.10 | 2.10 | 2.16 | 2.25 | 2.18 |
| 105                      | 24.6 | 23.0 | 21.0 | 18.7 | 16.3 | 13.7 | 11.1 | 8.51 | 6.07 | 5.16 | 4.44 | 3.91 | 3.55 | 3.32 | 3.23 | 3.26 | 3.38 | 3.58 | 3.46 |
| 110                      | 39.2 | 37.9 | 36.0 | 33.7 | 31.1 | 28.2 | 25.2 | 22.0 | 18.9 | 16.5 | 14.3 | 12.3 | 10.4 | 8.79 | 7.40 | 6.30 | 5.50 | 5.05 | 5.99 |
| 115                      | 60.5 | 64.4 | 67.8 | 70.7 | 73.0 | 74.5 | 75.2 | 75.1 | 74.0 | 66.8 | 58.8 | 50.4 | 41.9 | 33.6 | 25.8 | 18.7 | 12.8 | 8.25 | 13.7 |
| 120                      | 81.1 | 88.0 | 94.8 | 101  | 107  | 112  | 116  | 119  | 120  | 110  | 99.1 | 87.2 | 75.0 | 62.9 | 51.3 | 40.6 | 31.5 | 24.2 | 31.3 |
| 125                      | 97.9 | 103  | 109  | 115  | 121  | 127  | 132  | 137  | 141  | 138  | 135  | 131  | 126  | 121  | 116  | 112  | 108  | 104  | 107  |
| 130                      | 115  | 119  | 123  | 128  | 134  | 140  | 146  | 152  | 157  | 161  | 164  | 166  | 169  | 170  | 172  | 173  | 173  | 174  | 173  |
| 135                      | 133  | 136  | 140  | 144  | 149  | 153  | 159  | 164  | 169  | 173  | 176  | 179  | 182  | 185  | 187  | 189  | 190  | 190  | 189  |
| 140                      | 150  | 152  | 154  | 157  | 161  | 164  | 168  | 171  | 175  | 179  | 183  | 187  | 190  | 193  | 196  | 198  | 200  | 201  | 199  |
| 145                      | 165  | 166  | 168  | 170  | 172  | 174  | 177  | 179  | 182  | 186  | 189  | 193  | 196  | 199  | 202  | 204  | 206  | 207  | 205  |
| 150                      | 179  | 179  | 179  | 180  | 181  | 182  | 183  | 184  | 186  | 188  | 191  | 194  | 197  | 199  | 202  | 204  | 205  | 207  | 205  |
| 155                      | 191  | 191  | 191  | 191  | 191  | 191  | 191  | 192  | 192  | 194  | 196  | 197  | 199  | 201  | 202  | 203  | 204  | 205  | 204  |
| 160                      | 201  | 200  | 200  | 200  | 200  | 199  | 199  | 199  | 199  | 200  | 200  | 201  | 201  | 202  | 202  | 203  | 203  | 204  | 203  |
| 165                      | 208  | 208  | 208  | 208  | 207  | 207  | 207  | 206  | 206  | 206  | 206  | 206  | 206  | 206  | 206  | 206  | 206  | 206  | 206  |
| 170                      | 215  | 214  | 214  | 214  | 213  | 213  | 212  | 212  | 212  | 212  | 211  | 211  | 211  | 211  | 211  | 211  | 211  | 211  | 211  |
| 175                      | 218  | 218  | 218  | 217  | 217  | 217  | 217  | 216  | 216  | 216  | 216  | 215  | 215  | 215  | 215  | 215  | 215  | 215  | 215  |
| 180                      | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  |

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:何俊伟  
 Test Date:

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
 Humidity:65.0%  
 Test Distance:7.540m [K=1.3263]  
 Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                |                             |                  |
|--------------------------------------------------------------------------------|-----------------------------|------------------|
| Test:U:120.0V I:0.1690A P:20.00W PF:0.9800 Freq:60.00Hz Lamp Flux:2147.79x1 lm |                             |                  |
| NAME: 12代 2FT 黑色                                                               | TYPE:20W 3500K              | WEIGHT:          |
| SPEC.:                                                                         | DIM.:                       | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.38*0.017+0.605*0.017 | Shielding Angle: |

Table--3

UNIT: cd

| C(DEG)<br>γ (DEG) | 190  | 195  | 200  | 205  | 210  | 215  | 220  | 225  | 230  | 235  | 240  | 245  | 250  | 255  | 260  | 265  | 270  | 275  | 280  |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 |
| 5                 | 1126 | 1126 | 1126 | 1127 | 1127 | 1128 | 1129 | 1129 | 1130 | 1131 | 1131 | 1132 | 1132 | 1132 | 1132 | 1131 | 1131 | 1128 | 1125 |
| 10                | 1070 | 1072 | 1075 | 1078 | 1081 | 1084 | 1087 | 1091 | 1095 | 1099 | 1102 | 1105 | 1108 | 1110 | 1111 | 1112 | 1111 | 1105 | 1098 |
| 15                | 971  | 976  | 983  | 991  | 999  | 1008 | 1017 | 1026 | 1035 | 1043 | 1051 | 1059 | 1065 | 1070 | 1074 | 1076 | 1075 | 1066 | 1055 |
| 20                | 824  | 834  | 847  | 861  | 877  | 893  | 910  | 928  | 944  | 960  | 975  | 989  | 1001 | 1011 | 1018 | 1023 | 1025 | 1011 | 995  |
| 25                | 650  | 665  | 683  | 704  | 726  | 750  | 775  | 800  | 825  | 850  | 874  | 896  | 915  | 932  | 945  | 955  | 960  | 943  | 921  |
| 30                | 488  | 504  | 524  | 546  | 571  | 599  | 627  | 657  | 690  | 724  | 756  | 786  | 814  | 838  | 858  | 873  | 882  | 862  | 836  |
| 35                | 359  | 372  | 389  | 410  | 433  | 458  | 486  | 515  | 554  | 593  | 632  | 669  | 703  | 734  | 760  | 780  | 794  | 772  | 743  |
| 40                | 251  | 262  | 277  | 296  | 317  | 340  | 366  | 394  | 435  | 477  | 519  | 558  | 596  | 630  | 659  | 682  | 698  | 676  | 646  |
| 45                | 164  | 175  | 189  | 206  | 225  | 248  | 272  | 299  | 339  | 380  | 420  | 459  | 496  | 530  | 559  | 582  | 598  | 577  | 549  |
| 50                | 89.9 | 100  | 114  | 131  | 149  | 171  | 194  | 220  | 257  | 295  | 332  | 369  | 403  | 434  | 461  | 482  | 498  | 479  | 453  |
| 55                | 48.6 | 56.6 | 67.2 | 80.1 | 95.2 | 112  | 132  | 153  | 185  | 219  | 252  | 285  | 316  | 343  | 367  | 387  | 401  | 384  | 361  |
| 60                | 23.7 | 27.4 | 32.8 | 40.1 | 49.2 | 60.2 | 73.0 | 87.8 | 116  | 145  | 175  | 204  | 231  | 256  | 279  | 297  | 310  | 296  | 276  |
| 65                | 8.67 | 9.65 | 11.8 | 15.3 | 20.2 | 26.7 | 34.7 | 44.5 | 67.0 | 90.6 | 115  | 138  | 161  | 182  | 201  | 217  | 228  | 216  | 201  |
| 70                | 1.75 | 1.60 | 2.22 | 3.73 | 6.25 | 9.88 | 14.8 | 21.0 | 37.4 | 54.7 | 72.4 | 90.0 | 107  | 123  | 137  | 148  | 157  | 148  | 136  |
| 75                | 0.12 | 0.14 | 0.17 | 0.19 | 0.21 | 0.23 | 2.06 | 5.22 | 15.9 | 27.4 | 39.2 | 51.0 | 62.4 | 73.0 | 82.5 | 90.5 | 96.7 | 90.6 | 82.7 |
| 80                | 0.16 | 0.18 | 0.20 | 0.22 | 0.24 | 0.26 | 1.10 | 2.65 | 8.02 | 13.7 | 19.7 | 25.6 | 31.3 | 36.6 | 41.4 | 45.4 | 48.4 | 45.4 | 41.4 |
| 85                | 0.80 | 0.71 | 0.68 | 0.72 | 0.84 | 1.05 | 1.37 | 1.81 | 3.16 | 4.60 | 6.07 | 7.55 | 8.97 | 10.3 | 11.5 | 12.5 | 13.2 | 12.5 | 11.5 |
| 90                | 1.04 | 1.15 | 1.26 | 1.36 | 1.46 | 1.55 | 1.62 | 1.67 | 1.51 | 1.33 | 1.14 | 0.94 | 0.74 | 0.55 | 0.37 | 0.21 | 0.09 | 0.19 | 0.32 |
| 95                | 1.56 | 1.63 | 1.71 | 1.81 | 1.91 | 2.01 | 2.13 | 2.24 | 2.36 | 2.47 | 2.58 | 2.68 | 2.76 | 2.83 | 2.88 | 2.91 | 2.92 | 2.80 | 2.66 |
| 100               | 2.15 | 2.17 | 2.23 | 2.36 | 2.55 | 2.82 | 3.16 | 3.59 | 4.67 | 5.81 | 6.96 | 8.10 | 9.18 | 10.2 | 11.0 | 11.7 | 12.2 | 11.5 | 10.6 |
| 105               | 3.41 | 3.45 | 3.59 | 3.84 | 4.22 | 4.73 | 5.39 | 6.22 | 8.30 | 10.5 | 12.7 | 14.9 | 17.0 | 18.9 | 20.5 | 21.9 | 22.9 | 21.5 | 19.7 |
| 110               | 7.26 | 8.81 | 10.6 | 12.6 | 14.7 | 17.0 | 19.3 | 21.6 | 24.1 | 26.5 | 28.7 | 30.8 | 32.6 | 34.0 | 35.1 | 35.8 | 36.0 | 33.4 | 30.4 |
| 115               | 20.6 | 28.5 | 37.0 | 46.0 | 55.1 | 63.9 | 72.1 | 79.4 | 79.6 | 78.7 | 76.8 | 74.0 | 70.5 | 66.5 | 61.9 | 56.9 | 51.7 | 47.3 | 42.7 |
| 120               | 40.4 | 50.8 | 62.3 | 74.2 | 86.2 | 97.7 | 108  | 118  | 116  | 113  | 109  | 103  | 96.8 | 90.1 | 83.1 | 76.0 | 69.2 | 67.7 | 66.5 |
| 125               | 111  | 115  | 119  | 124  | 128  | 132  | 135  | 137  | 133  | 128  | 122  | 116  | 110  | 104  | 97.8 | 92.7 | 88.3 | 91.9 | 96.2 |
| 130               | 172  | 170  | 169  | 166  | 164  | 161  | 157  | 154  | 148  | 142  | 135  | 129  | 124  | 119  | 114  | 110  | 107  | 112  | 117  |
| 135               | 187  | 185  | 182  | 179  | 175  | 171  | 167  | 163  | 158  | 153  | 148  | 143  | 138  | 134  | 131  | 128  | 126  | 128  | 130  |
| 140               | 197  | 194  | 191  | 187  | 183  | 179  | 174  | 170  | 166  | 162  | 158  | 155  | 152  | 149  | 146  | 144  | 143  | 144  | 146  |
| 145               | 203  | 200  | 196  | 192  | 188  | 184  | 180  | 176  | 173  | 171  | 168  | 166  | 164  | 162  | 161  | 160  | 160  | 160  | 161  |
| 150               | 203  | 200  | 198  | 195  | 192  | 188  | 185  | 182  | 181  | 179  | 178  | 177  | 176  | 175  | 175  | 175  | 175  | 175  | 175  |
| 155               | 203  | 201  | 200  | 198  | 196  | 194  | 192  | 190  | 190  | 189  | 188  | 188  | 188  | 188  | 188  | 188  | 188  | 188  | 188  |
| 160               | 203  | 202  | 202  | 201  | 200  | 200  | 199  | 199  | 198  | 198  | 198  | 198  | 199  | 199  | 199  | 199  | 199  | 199  | 200  |
| 165               | 206  | 206  | 206  | 206  | 206  | 205  | 205  | 205  | 206  | 206  | 206  | 206  | 207  | 207  | 207  | 208  | 208  | 209  | 210  |
| 170               | 211  | 211  | 211  | 211  | 211  | 211  | 211  | 212  | 212  | 212  | 212  | 213  | 213  | 214  | 214  | 215  | 215  | 215  | 216  |
| 175               | 215  | 215  | 215  | 215  | 216  | 216  | 216  | 216  | 216  | 217  | 217  | 217  | 217  | 218  | 218  | 218  | 219  | 219  | 219  |
| 180               | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  |

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:何俊伟  
Test Date:

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
Humidity:65.0%  
Test Distance:7.540m [K=1.3263]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                |                             |                  |
|--------------------------------------------------------------------------------|-----------------------------|------------------|
| Test:U:120.0V I:0.1690A P:20.00W PF:0.9800 Freq:60.00Hz Lamp Flux:2147.79x1 lm |                             |                  |
| NAME: 12代 2FT 黑色                                                               | TYPE:20W 3500K              | WEIGHT:          |
| SPEC.:                                                                         | DIM.:                       | SERIAL No.:      |
| MFR.: WS                                                                       | SUR.:0.38*0.017+0.605*0.017 | Shielding Angle: |

Table--4

UNIT: cd

| C(DEG)<br>γ (DEG) |      | 285  | 290  | 295  | 300  | 305  | 310  | 315  | 320  | 325  | 330  | 335  | 340  | 345  | 350  | 355  |  |  |  |  |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|
| 0                 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 | 1137 |  |  |  |  |
| 5                 | 1122 | 1119 | 1116 | 1113 | 1109 | 1106 | 1104 | 1102 | 1101 | 1100 | 1099 | 1099 | 1099 | 1099 | 1099 | 1100 |  |  |  |  |
| 10                | 1091 | 1083 | 1074 | 1066 | 1057 | 1049 | 1041 | 1036 | 1032 | 1028 | 1025 | 1022 | 1020 | 1019 | 1018 |      |  |  |  |  |
| 15                | 1042 | 1028 | 1013 | 998  | 982  | 967  | 952  | 943  | 934  | 926  | 918  | 912  | 906  | 901  | 897  |      |  |  |  |  |
| 20                | 976  | 956  | 933  | 910  | 887  | 863  | 840  | 825  | 810  | 797  | 785  | 774  | 764  | 755  | 747  |      |  |  |  |  |
| 25                | 896  | 868  | 838  | 806  | 774  | 742  | 710  | 689  | 670  | 652  | 636  | 622  | 608  | 596  | 586  |      |  |  |  |  |
| 30                | 805  | 771  | 733  | 694  | 655  | 615  | 576  | 552  | 530  | 510  | 492  | 476  | 462  | 450  | 440  |      |  |  |  |  |
| 35                | 709  | 671  | 629  | 586  | 541  | 497  | 454  | 429  | 406  | 386  | 368  | 353  | 340  | 330  | 323  |      |  |  |  |  |
| 40                | 611  | 572  | 529  | 484  | 438  | 393  | 349  | 324  | 301  | 282  | 265  | 251  | 240  | 231  | 225  |      |  |  |  |  |
| 45                | 516  | 478  | 437  | 394  | 350  | 306  | 264  | 240  | 218  | 199  | 182  | 168  | 157  | 148  | 142  |      |  |  |  |  |
| 50                | 423  | 389  | 351  | 312  | 272  | 232  | 193  | 171  | 151  | 134  | 119  | 106  | 95.9 | 88.0 | 82.4 |      |  |  |  |  |
| 55                | 334  | 303  | 270  | 235  | 200  | 165  | 131  | 112  | 95.6 | 81.4 | 69.5 | 59.9 | 52.5 | 47.4 | 44.6 |      |  |  |  |  |
| 60                | 253  | 226  | 198  | 168  | 137  | 107  | 78.7 | 63.8 | 51.1 | 40.6 | 32.3 | 26.3 | 22.4 | 20.6 | 21.1 |      |  |  |  |  |
| 65                | 182  | 160  | 137  | 113  | 89.0 | 65.2 | 42.5 | 31.5 | 22.3 | 15.1 | 9.77 | 6.38 | 4.92 | 5.38 | 7.76 |      |  |  |  |  |
| 70                | 122  | 107  | 89.5 | 71.8 | 54.0 | 36.5 | 20.1 | 12.3 | 6.11 | 1.41 | 0.27 | 0.27 | 0.27 | 0.26 | 0.52 |      |  |  |  |  |
| 75                | 73.2 | 62.6 | 51.3 | 39.5 | 27.7 | 16.2 | 5.45 | 0.76 | 0.25 | 0.25 | 0.24 | 0.22 | 0.21 | 0.19 | 0.17 |      |  |  |  |  |
| 80                | 36.6 | 31.3 | 25.6 | 19.7 | 13.7 | 8.00 | 2.62 | 0.30 | 0.25 | 0.24 | 0.22 | 0.21 | 0.19 | 0.16 | 0.13 |      |  |  |  |  |
| 85                | 10.3 | 8.94 | 7.51 | 6.03 | 4.54 | 3.09 | 1.73 | 1.13 | 0.65 | 0.31 | 0.25 | 0.23 | 0.21 | 0.30 | 0.63 |      |  |  |  |  |
| 90                | 0.48 | 0.65 | 0.83 | 1.02 | 1.19 | 1.36 | 1.51 | 1.53 | 1.53 | 1.51 | 1.46 | 1.38 | 1.27 | 1.14 | 0.98 |      |  |  |  |  |
| 95                | 2.50 | 2.33 | 2.14 | 1.95 | 1.76 | 1.56 | 1.38 | 1.26 | 1.15 | 1.05 | 0.96 | 0.88 | 0.81 | 0.75 | 0.71 |      |  |  |  |  |
| 100               | 9.50 | 8.29 | 7.00 | 5.68 | 4.35 | 3.06 | 1.85 | 1.29 | 0.84 | 0.64 | 0.61 | 0.57 | 0.53 | 0.46 | 0.70 |      |  |  |  |  |
| 105               | 17.6 | 15.3 | 12.8 | 10.3 | 7.77 | 5.30 | 2.99 | 1.92 | 1.07 | 0.46 | 0.38 | 0.36 | 0.34 | 0.31 | 0.83 |      |  |  |  |  |
| 110               | 27.1 | 23.5 | 19.7 | 15.9 | 12.1 | 8.44 | 5.05 | 3.39 | 2.09 | 1.14 | 0.55 | 0.32 | 0.45 | 0.93 | 1.77 |      |  |  |  |  |
| 115               | 38.2 | 33.6 | 29.2 | 24.9 | 20.8 | 16.9 | 13.4 | 10.9 | 8.83 | 7.11 | 5.76 | 4.78 | 4.17 | 3.93 | 4.05 |      |  |  |  |  |
| 120               | 65.6 | 64.8 | 64.1 | 63.3 | 62.3 | 61.0 | 59.2 | 55.5 | 51.2 | 46.5 | 41.2 | 35.3 | 29.0 | 22.2 | 14.8 |      |  |  |  |  |
| 125               | 101  | 106  | 111  | 115  | 118  | 120  | 121  | 116  | 110  | 101  | 91.4 | 79.7 | 66.2 | 51.1 | 34.2 |      |  |  |  |  |
| 130               | 123  | 129  | 135  | 140  | 145  | 149  | 151  | 148  | 144  | 137  | 129  | 120  | 109  | 96.2 | 82.0 |      |  |  |  |  |
| 135               | 134  | 137  | 141  | 146  | 150  | 154  | 159  | 160  | 162  | 163  | 164  | 165  | 165  | 164  | 164  |      |  |  |  |  |
| 140               | 148  | 150  | 153  | 156  | 160  | 164  | 168  | 171  | 175  | 178  | 182  | 186  | 190  | 195  | 199  |      |  |  |  |  |
| 145               | 163  | 164  | 167  | 169  | 172  | 175  | 178  | 180  | 183  | 187  | 190  | 194  | 197  | 201  | 205  |      |  |  |  |  |
| 150               | 176  | 177  | 178  | 179  | 181  | 182  | 184  | 186  | 188  | 190  | 192  | 195  | 197  | 200  | 203  |      |  |  |  |  |
| 155               | 188  | 188  | 189  | 189  | 190  | 191  | 192  | 193  | 194  | 196  | 197  | 199  | 201  | 203  | 205  |      |  |  |  |  |
| 160               | 200  | 200  | 200  | 200  | 201  | 201  | 201  | 202  | 202  | 203  | 204  | 204  | 205  | 206  | 207  |      |  |  |  |  |
| 165               | 210  | 211  | 211  | 212  | 212  | 213  | 213  | 213  | 213  | 213  | 213  | 212  | 212  | 212  | 211  |      |  |  |  |  |
| 170               | 216  | 217  | 217  | 218  | 218  | 219  | 219  | 219  | 219  | 220  | 220  | 220  | 220  | 220  | 220  |      |  |  |  |  |
| 175               | 220  | 220  | 220  | 221  | 221  | 221  | 222  | 222  | 222  | 222  | 222  | 223  | 223  | 223  | 223  |      |  |  |  |  |
| 180               | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  | 218  |      |  |  |  |  |

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:何俊伟  
 Test Date:

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE G0-2000\_V1 SYSTEM V2.0.353  
 Humidity:65.0%  
 Test Distance:7.540m [K=1.3263]  
 Remarks: