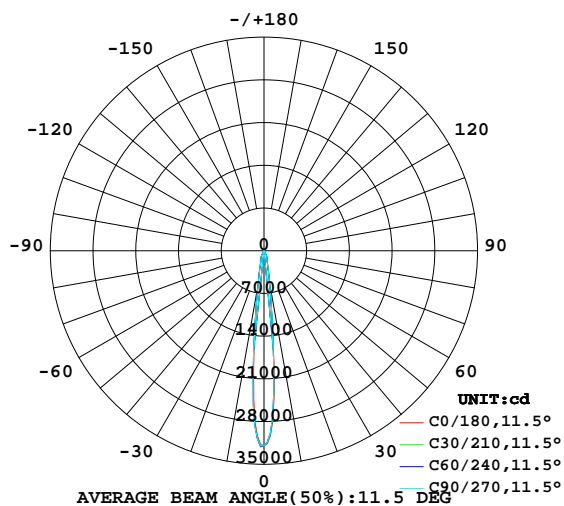


## LUMINAIRE PHOTOMETRIC TEST REPORT

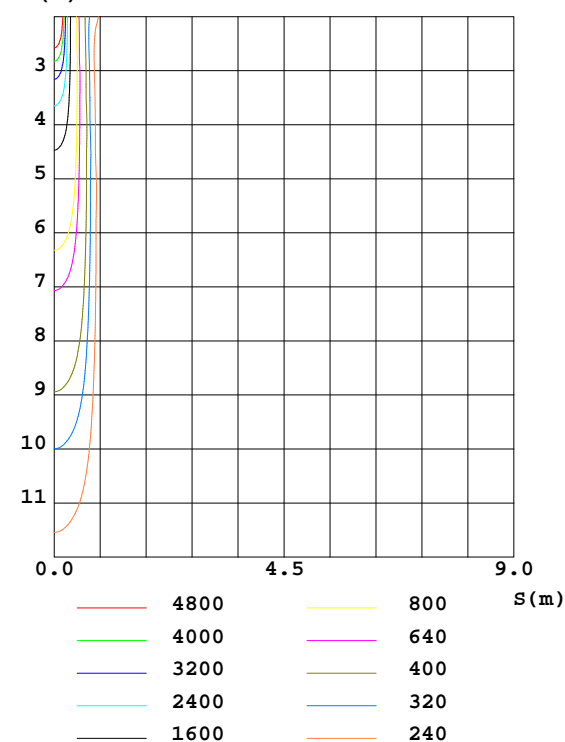
|   |        |                   |
|---|--------|-------------------|
| Test:U:226.5V I:0.1260A P:27.40W PF:0.9610 Lamp Flux:2733.06x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |

| DATA OF LAMP     |                   | PHOTOMETRIC DATA Eff: 99.75 lm/W |        |                   |          |
|------------------|-------------------|----------------------------------|--------|-------------------|----------|
| MODEL            | TL15-30W-830-W-12 | Imax(cd)                         | 32121  | S/MH(C0/180)      | 0.20     |
| NOMINAL POWER(W) | 28                | LOR(%)                           | 100.0  | S/MH(C90/270)     | 0.19     |
| RATED VOLTAGE(V) | 226               | TOTAL FLUX(lm)                   | 2733.1 | η UP,DN(C0-180)   | 1.2,48.0 |
| NOMINAL FLUX(lm) | 2733.06           | CIE CLASS                        | DIRECT | η UP,DN(C180-360) | 1.4,49.4 |
| LAMPS INSIDE     | 1                 | η up(%)                          | 2.6    | CIBSE SHR NOM     | 0.00     |
| TEST VOLTAGE(V)  | 226.6             | η down(%)                        | 97.4   | CIBSE SHR MAX     | 1.00     |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-08

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.590m [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       | 529.7                    | 533.0  | 525.3  | 552.6  | 570.8  | 586.8  | 571.1  | 530.2  | 0- 10    | 1348        | 1348         | 49.3,49.3  |
| 20       | 143.8                    | 145.8  | 143.1  | 145.3  | 146.5  | 144.2  | 144.8  | 142.4  | 10- 20   | 705.1       | 2053         | 75.1,75.1  |
| 30       | 36.41                    | 40.31  | 38.43  | 42.07  | 43.18  | 42.97  | 43.60  | 38.61  | 20- 30   | 477.1       | 2530         | 92.6,92.6  |
| 40       | 4.341                    | 4.629  | 4.554  | 4.494  | 4.572  | 4.574  | 4.629  | 4.527  | 30- 40   | 73.52       | 2603         | 95.3,95.3  |
| 50       | 1.384                    | 1.319  | 1.313  | 1.361  | 1.377  | 1.342  | 1.388  | 1.355  | 40- 50   | 20.97       | 2624         | 96,96      |
| 60       | 1.024                    | 1.015  | 1.010  | 1.031  | 0.9966 | 0.9744 | 0.9718 | 0.9902 | 50- 60   | 9.928       | 2634         | 96.4,96.4  |
| 70       | 0.9744                   | 0.9632 | 0.9579 | 0.9666 | 0.9435 | 0.9361 | 0.9387 | 0.9424 | 60- 70   | 9.786       | 2644         | 96.7,96.7  |
| 80       | 0.8550                   | 0.8262 | 0.8236 | 0.8374 | 0.8146 | 0.8086 | 0.8098 | 0.8110 | 70- 80   | 9.287       | 2653         | 97.1,97.1  |
| 90       | 0.6214                   | 0.5608 | 0.5617 | 0.5727 | 0.7092 | 0.6727 | 0.6713 | 0.6706 | 80- 90   | 8.154       | 2661         | 97.4,97.4  |
| 100      | 0.3689                   | 0.3485 | 0.3519 | 0.3472 | 0.6944 | 0.6794 | 0.6776 | 0.6776 | 90-100   | 6.093       | 2667         | 97.6,97.6  |
| 110      | 0.5524                   | 0.5481 | 0.5536 | 0.5466 | 0.7137 | 0.7163 | 0.7141 | 0.7141 | 100-110  | 5.963       | 2673         | 97.8,97.8  |
| 120      | 0.6781                   | 0.6728 | 0.6784 | 0.6717 | 0.8175 | 0.8229 | 0.8185 | 0.8205 | 110-120  | 6.803       | 2680         | 98.1,98.1  |
| 130      | 1.127                    | 1.120  | 1.132  | 1.107  | 1.207  | 1.212  | 1.204  | 1.216  | 120-130  | 8.089       | 2688         | 98.4,98.4  |
| 140      | 1.913                    | 1.913  | 1.914  | 1.897  | 1.929  | 1.935  | 1.929  | 1.936  | 130-140  | 12.13       | 2700         | 98.8,98.8  |
| 150      | 2.205                    | 2.205  | 2.206  | 2.192  | 2.236  | 2.242  | 2.237  | 2.238  | 140-150  | 13.11       | 2714         | 99.3,99.3  |
| 160      | 2.346                    | 2.347  | 2.347  | 2.338  | 2.353  | 2.358  | 2.353  | 2.350  | 150-160  | 10.61       | 2724         | 99.7,99.7  |
| 170      | 2.357                    | 2.361  | 2.362  | 2.356  | 2.370  | 2.374  | 2.371  | 2.363  | 160-170  | 6.715       | 2731         | 99.9,99.9  |
| 180      | 2.023                    | 2.034  | 2.042  | 2.038  | 2.023  | 2.035  | 2.042  | 2.039  | 170-180  | 2.164       | 2733         | 100,100    |
| DEG      | LUMINOUS INTENSITY:×10cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |            |

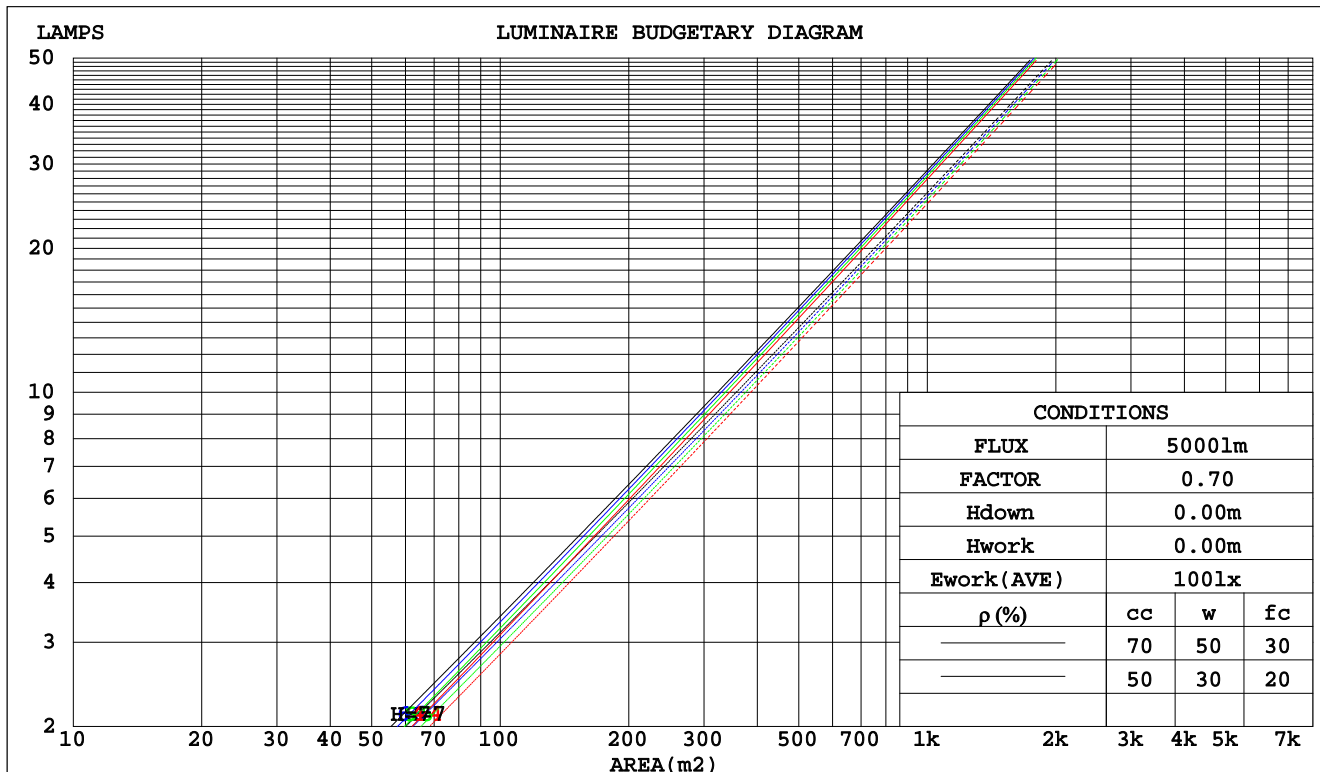
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-08

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.590m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|   |        |                   |
|---|--------|-------------------|
| Test:U:226.5V I:0.1260A P:27.40W PF:0.9610 Lamp Flux:2733.06x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION 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  | Coefficients of Utilization(CU) |      |      |      |      |      |      |      |      |      |      |      |     |     |     |     |
| 0.0  | 1.18                            | 1.18 | 1.18 | 1.15 | 1.15 | 1.15 | 1.10 | 1.10 | 1.10 | 1.04 | 1.04 | 1.04 | .00 | .00 | .00 | .97 |
| 1.0  | 1.12                            | 1.10 | 1.09 | 1.10 | 1.08 | 1.07 | 1.05 | 1.04 | 1.03 | 1.01 | 1.00 | .99  | .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  | .94  | .96  | .94  | .92  | .93 | .92 | .90 | .89 |
| 4.0  | .99                             | .95  | .92  | .98  | .94  | .92  | .95  | .93  | .90  | .93  | .91  | .89  | .91 | .89 | .88 | .86 |
| 5.0  | .96                             | .92  | .89  | .95  | .91  | .88  | .93  | .90  | .87  | .91  | .88  | .86  | .89 | .87 | .85 | .84 |
| 6.0  | .93                             | .89  | .86  | .92  | .88  | .86  | .90  | .87  | .85  | .89  | .86  | .84  | .88 | .85 | .83 | .82 |
| 7.0  | .90                             | .86  | .83  | .89  | .86  | .83  | .88  | .85  | .83  | .87  | .84  | .82  | .86 | .83 | .81 | .80 |
| 8.0  | .88                             | .84  | .81  | .87  | .84  | .81  | .86  | .83  | .81  | .85  | .82  | .80  | .84 | .82 | .80 | .79 |
| 9.0  | .86                             | .82  | .79  | .85  | .81  | .79  | .84  | .81  | .79  | .83  | .80  | .78  | .82 | .80 | .78 | .77 |
| 10.0 | .84                             | .80  | .77  | .83  | .80  | .77  | .82  | .79  | .77  | .82  | .79  | .77  | .81 | .78 | .76 | .76 |



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-08

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.590m [K=1.0000]  
Remarks:

### WEC AND CCEC

|   |  |        |  |                   |  |
|---|--|--------|--|-------------------|--|
| Test:U:226.5V I:0.1260A P:27.40W PF:0.9610 Lamp Flux:2733.06x1 lm |  |        |  |                   |  |
| NAME:   |  | TYPE:  |  | WEIGHT:           |  |
| DIM.:   |  | SPEC.: |  | SERIAL No.:       |  |
| MFR.: Rayconn   |  | SUR.:  |  | PROTECTION 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  | .138                  | .078 | .025 | .131 | .074 | .024 | .117                            | .067 | .021 | .104 | .060 | .019 | .092 | .053 | .017 |   |
| 2.0  | .126                  | .069 | .021 | .120 | .066 | .020 | .108                            | .060 | .019 | .098 | .055 | .017 | .088 | .050 | .016 |   |
| 3.0  | .116                  | .062 | .019 | .111 | .059 | .018 | .101                            | .055 | .017 | .092 | .050 | .015 | .084 | .046 | .014 |   |
| 4.0  | .108                  | .056 | .016 | .103 | .054 | .016 | .095                            | .050 | .015 | .087 | .047 | .014 | .080 | .044 | .013 |   |
| 5.0  | .101                  | .051 | .015 | .097 | .050 | .015 | .090                            | .047 | .014 | .083 | .044 | .013 | .077 | .041 | .012 |   |
| 6.0  | .095                  | .047 | .014 | .091 | .046 | .013 | .085                            | .044 | .013 | .079 | .041 | .012 | .074 | .039 | .012 |   |
| 7.0  | .089                  | .044 | .013 | .086 | .043 | .012 | .081                            | .041 | .012 | .076 | .039 | .011 | .071 | .037 | .011 |   |
| 8.0  | .085                  | .041 | .012 | .082 | .040 | .011 | .077                            | .039 | .011 | .073 | .037 | .011 | .068 | .035 | .010 |   |
| 9.0  | .080                  | .039 | .011 | .078 | .038 | .011 | .074                            | .037 | .010 | .070 | .035 | .010 | .066 | .033 | .010 |   |
| 10.0 | .077                  | .037 | .010 | .075 | .036 | .010 | .071                            | .035 | .010 | .067 | .033 | .009 | .064 | .032 | .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  | .210                  | .210 | .210 | .180 | .180 | .180 | .123                                       | .123 | .123 | .071 | .071 | .071 | .023 | .023 | .023 |   |
| 1.0  | .189                  | .178 | .168 | .161 | .153 | .145 | .110                                       | .105 | .100 | .064 | .061 | .058 | .020 | .020 | .019 |   |
| 2.0  | .170                  | .153 | .138 | .146 | .132 | .120 | .100                                       | .091 | .083 | .058 | .053 | .049 | .019 | .017 | .016 |   |
| 3.0  | .155                  | .134 | .116 | .133 | .115 | .101 | .091                                       | .080 | .071 | .053 | .047 | .042 | .017 | .015 | .014 |   |
| 4.0  | .142                  | .118 | .100 | .122 | .102 | .087 | .084                                       | .071 | .061 | .049 | .042 | .036 | .016 | .014 | .012 |   |
| 5.0  | .132                  | .106 | .087 | .113 | .092 | .076 | .078                                       | .064 | .053 | .045 | .038 | .032 | .015 | .012 | .010 |   |
| 6.0  | .123                  | .096 | .077 | .105 | .083 | .067 | .073                                       | .058 | .047 | .042 | .034 | .028 | .014 | .011 | .009 |   |
| 7.0  | .115                  | .088 | .069 | .099 | .076 | .060 | .068                                       | .053 | .042 | .040 | .031 | .025 | .013 | .010 | .008 |   |
| 8.0  | .108                  | .081 | .062 | .093 | .070 | .054 | .064                                       | .049 | .039 | .037 | .029 | .023 | .012 | .010 | .008 |   |
| 9.0  | .102                  | .075 | .057 | .088 | .065 | .050 | .061                                       | .046 | .035 | .036 | .027 | .021 | .012 | .009 | .007 |   |
| 10.0 | .097                  | .070 | .053 | .084 | .061 | .046 | .058                                       | .043 | .033 | .034 | .025 | .019 | .011 | .008 | .006 |   |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-08

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.590m [K=1.0000]  
Remarks:

### Uncorrected UGR Table

|   |               |                  |      |      |        |               |                |                   |      |      |      |
|---|---------------|------------------|------|------|--------|---------------|----------------|-------------------|------|------|------|
| Test:U:226.5V I:0.1260A P:27.40W PF:0.9610 Lamp Flux:2733.06x1 lm |               |                  |      |      |        |               |                |                   |      |      |      |
| NAME:   |               |                  |      |      | TYPE:  |               |                | WEIGHT:           |      |      |      |
| DIM.:   |               |                  |      |      | SPEC.: |               |                | SERIAL No.:       |      |      |      |
| MFR.: Rayconn   |               |                  |      |      | SUR.:  |               |                | PROTECTION ANGLE: |      |      |      |
| ceiling/cavity  | 0.7           | 0.7              | 0.5  | 0.5  | 0.3    | 0.7           | 0.7            | 0.5               | 0.5  | 0.3  |      |
| walls   | 0.5           | 0.3              | 0.5  | 0.3  | 0.3    | 0.5           | 0.3            | 0.5               | 0.3  | 0.3  |      |
| working plane   | 0.2           | 0.2              | 0.2  | 0.2  | 0.2    | 0.2           | 0.2            | 0.2               | 0.2  | 0.2  |      |
| Room dimensions   |               | Viewed crosswise |      |      |        |               | Viewed endwise |                   |      |      |      |
| x = 2H y = 2H   | 2H            | 6.1              | 6.7  | 6.4  | 6.9    | 7.1           | 6.2            | 6.8               | 6.4  | 7.0  | 7.1  |
|   | 3H            | 7.4              | 7.9  | 7.7  | 8.2    | 8.4           | 7.4            | 8.0               | 7.7  | 8.2  | 8.4  |
|   | 4H            | 8.3              | 8.9  | 8.6  | 9.1    | 9.4           | 8.3            | 8.8               | 8.6  | 9.1  | 9.3  |
|   | 6H            | 9.6              | 10.1 | 9.9  | 10.4   | 10.7          | 9.5            | 10.0              | 9.8  | 10.3 | 10.6 |
|   | 8H            | 10.4             | 10.9 | 10.7 | 11.2   | 11.5          | 10.2           | 10.7              | 10.6 | 11.0 | 11.3 |
|   | 12H           | 11.3             | 11.8 | 11.7 | 12.1   | 12.4          | 11.1           | 11.6              | 11.5 | 11.9 | 12.2 |
| 4H  | 2H            | 6.4              | 6.9  | 6.7  | 7.2    | 7.4           | 6.4            | 7.0               | 6.7  | 7.2  | 7.5  |
|   | 3H            | 8.1              | 8.5  | 8.4  | 8.8    | 9.1           | 8.1            | 8.5               | 8.4  | 8.8  | 9.2  |
|   | 4H            | 9.2              | 9.7  | 9.6  | 10.0   | 10.4          | 9.2            | 9.6               | 9.6  | 10.0 | 10.3 |
|   | 6H            | 10.8             | 11.2 | 11.2 | 11.6   | 11.9          | 10.7           | 11.1              | 11.1 | 11.5 | 11.9 |
|   | 8H            | 11.7             | 12.1 | 12.1 | 12.5   | 12.9          | 11.6           | 12.0              | 12.0 | 12.3 | 12.8 |
|   | 12H           | 12.8             | 13.1 | 13.2 | 13.5   | 14.0          | 12.6           | 13.0              | 13.1 | 13.4 | 13.8 |
| 8H  | 4H            | 9.8              | 10.1 | 10.2 | 10.5   | 10.9          | 9.7            | 10.1              | 10.1 | 10.5 | 10.9 |
|   | 6H            | 11.6             | 11.9 | 12.1 | 12.3   | 12.8          | 11.5           | 11.8              | 12.0 | 12.2 | 12.7 |
|   | 8H            | 12.7             | 13.0 | 13.2 | 13.4   | 13.9          | 12.6           | 12.9              | 13.1 | 13.3 | 13.8 |
|   | 12H           | 14.0             | 14.2 | 14.5 | 14.7   | 15.2          | 13.8           | 14.1              | 14.4 | 14.6 | 15.1 |
| 12H   | 4H            | 9.9              | 10.2 | 10.3 | 10.6   | 11.1          | 9.8            | 10.2              | 10.3 | 10.6 | 11.0 |
|   | 6H            | 11.8             | 12.1 | 12.3 | 12.6   | 13.1          | 11.8           | 12.0              | 12.2 | 12.5 | 13.0 |
|   | 8H            | 13.0             | 13.3 | 13.6 | 13.8   | 14.3          | 12.9           | 13.2              | 13.5 | 13.7 | 14.2 |
| Variations with the observer position at spacings:                |               |                  |      |      |        |               |                |                   |      |      |      |
| S = 1.0H  | + 0.2 / - 0.3 |                  |      |      |        | + 0.2 / - 0.3 |                |                   |      |      |      |
| 1.5H  | + 0.3 / - 0.2 |                  |      |      |        | + 0.4 / - 0.2 |                |                   |      |      |      |
| 2.0H  | + 0.2 / - 0.2 |                  |      |      |        | + 0.2 / - 0.2 |                |                   |      |      |      |

CIE Pub.117 Corrected 2733 lm Total Lamp Luminous Flux.(8log(F/F0) = 3.5)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-08

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.590m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

|   |        |                   |
|---|--------|-------------------|
| Test:U:226.5V I:0.1260A P:27.40W PF:0.9610 Lamp Flux:2733.06x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |

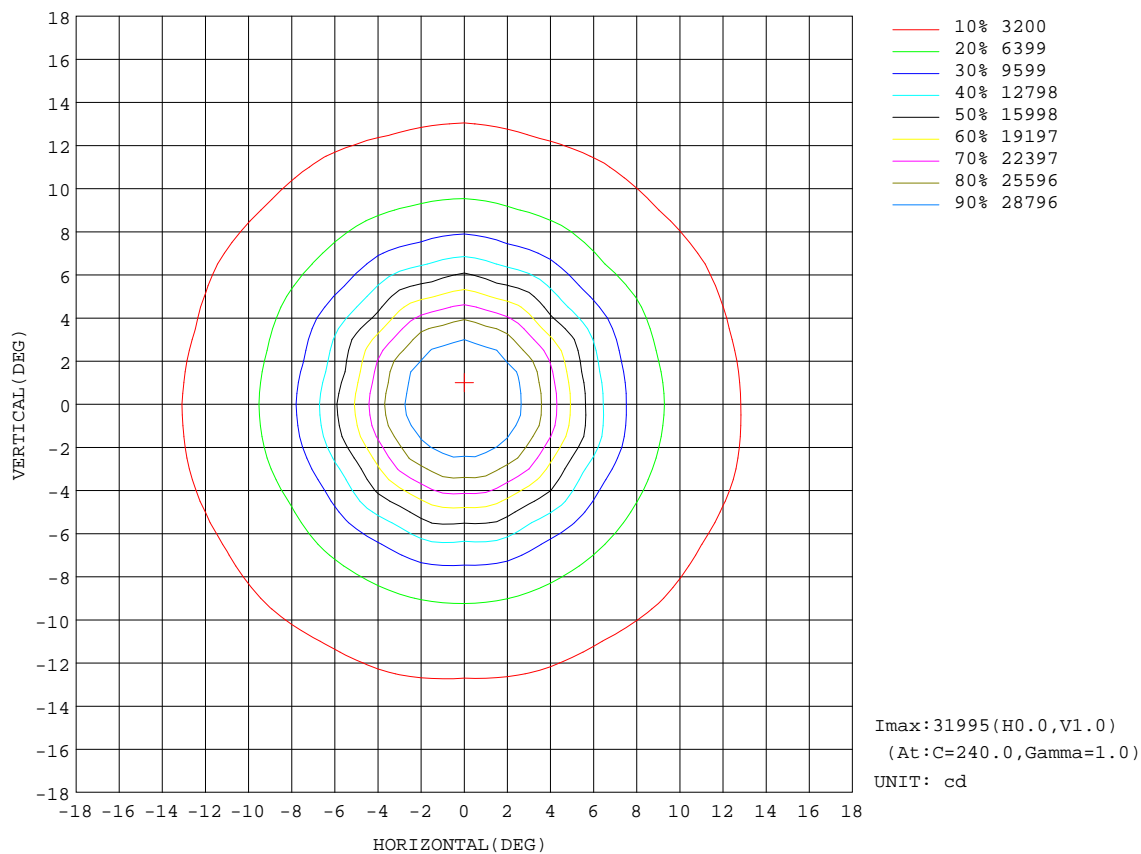
| REFLECTANCE                      |   |     |           |     |     |     |     |               |     |        |
|----------------------------------|---|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling                          | 0.8   | 0.8 | 0.8       | 0.7 | 0.7 | 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 89  | 83  | 79        | 88  | 83  | 79  | 87  | 82            | 79  | 75     |
| 0.80                             | 96  | 90  | 87        | 95  | 90  | 87  | 94  | 89            | 86  | 82     |
| 1.00                             | 100   | 94  | 91        | 99  | 94  | 90  | 97  | 93            | 90  | 86     |
| 1.25                             | 103   | 98  | 95        | 102 | 98  | 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 | 93     |
| 3.00                             | 111   | 108 | 105       | 109 | 106 | 104 | 106 | 103           | 101 | 94     |
| 4.00                             | 113   | 111 | 108       | 111 | 109 | 107 | 107 | 105           | 104 | 96     |
| 5.00                             | 115   | 112 | 111       | 112 | 110 | 109 | 108 | 106           | 105 | 97     |
| ROOM INDEX                       | UF(total)   |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |   |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-08

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.590m [K=1.0000]  
Remarks:

### ISOCANDELA DIAGRAM

|   |        |                   |
|---|--------|-------------------|
| Test:U:226.5V I:0.1260A P:27.40W PF:0.9610 Lamp Flux:2733.06x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |



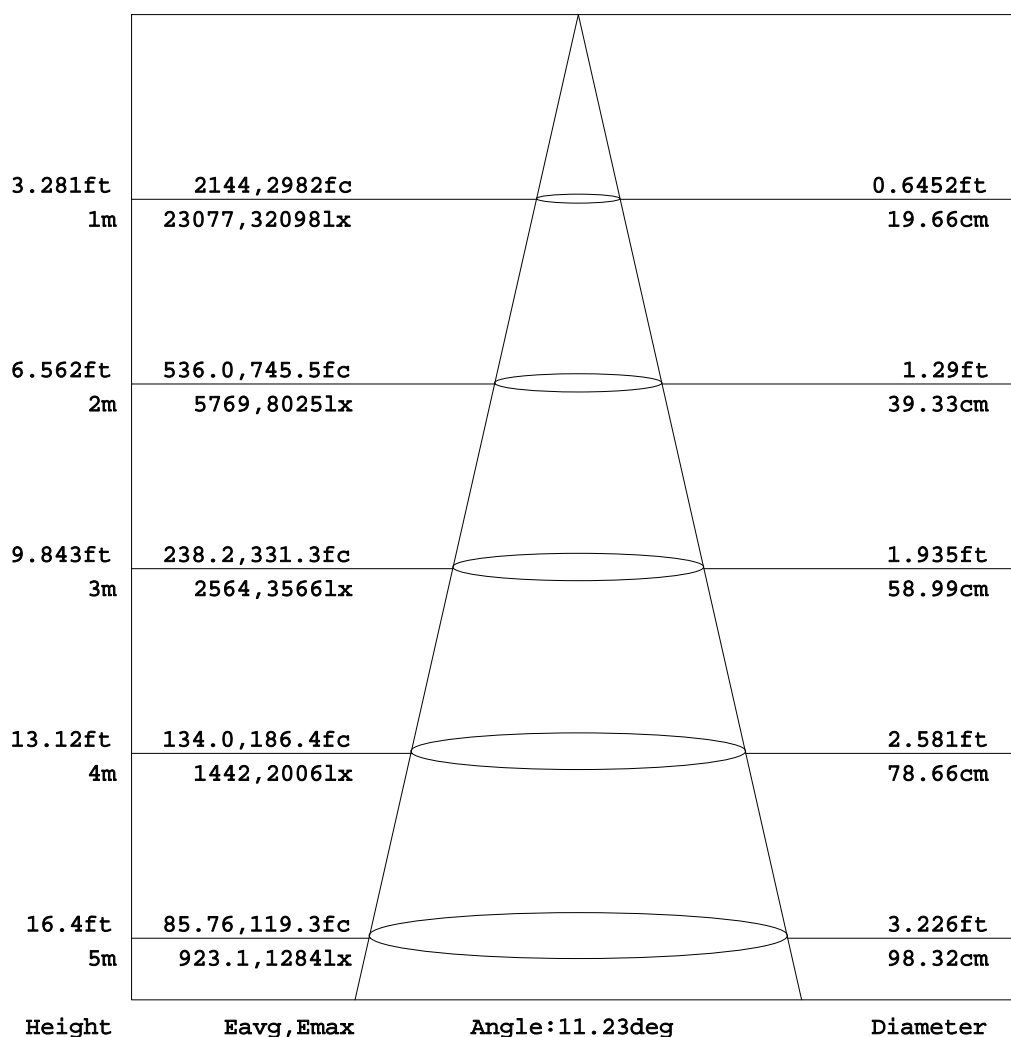
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-08

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.590m [K=1.0000]  
Remarks:

### AAI Figure

|   |        |                   |
|---|--------|-------------------|
| Test:U:226.5V I:0.1260A P:27.40W PF:0.9610 Lamp Flux:2733.06x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |

Flux out:800.9 lm



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

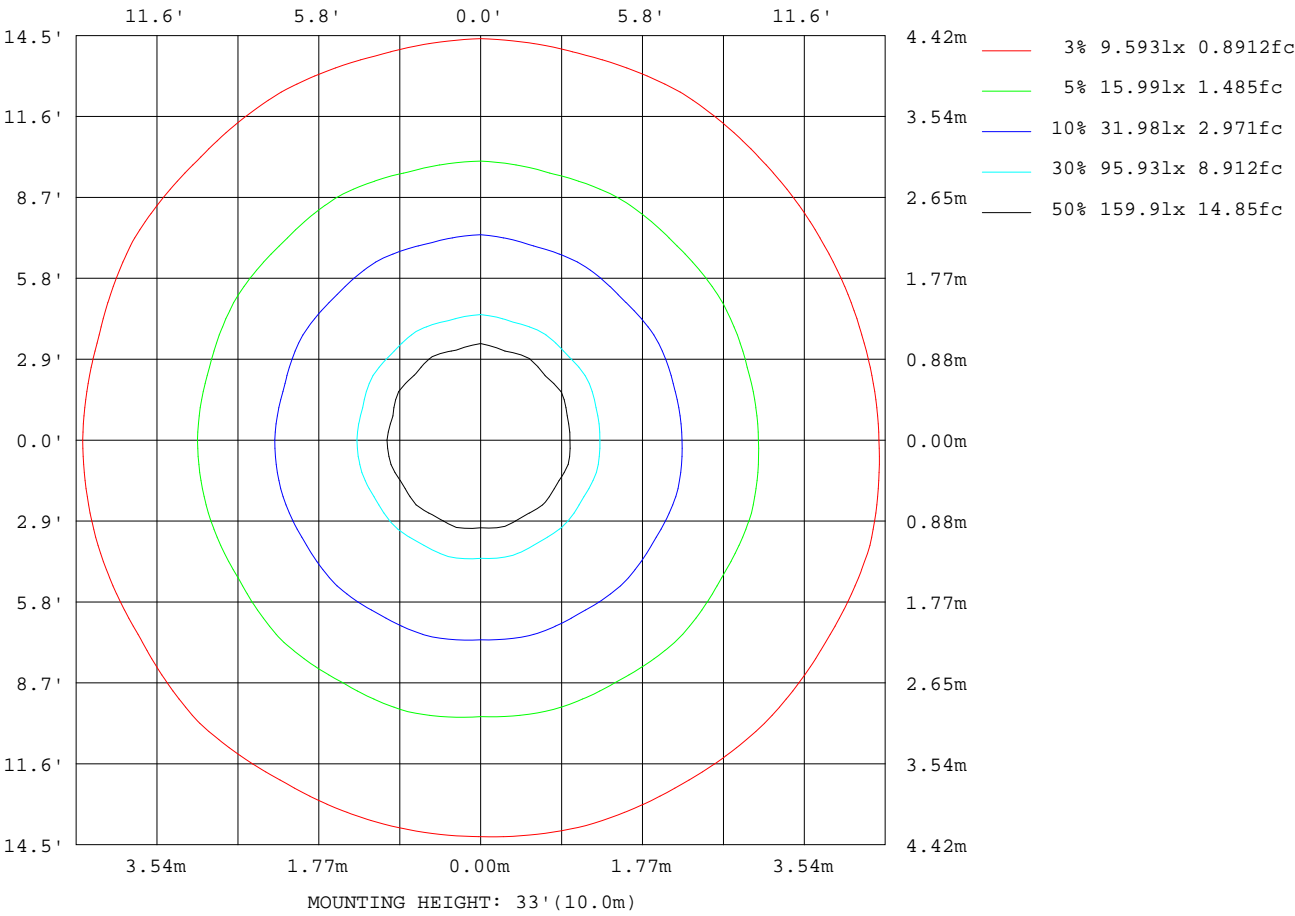
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-08

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.590m [K=1.0000]  
Remarks:



ISOLUX DIAGRAM

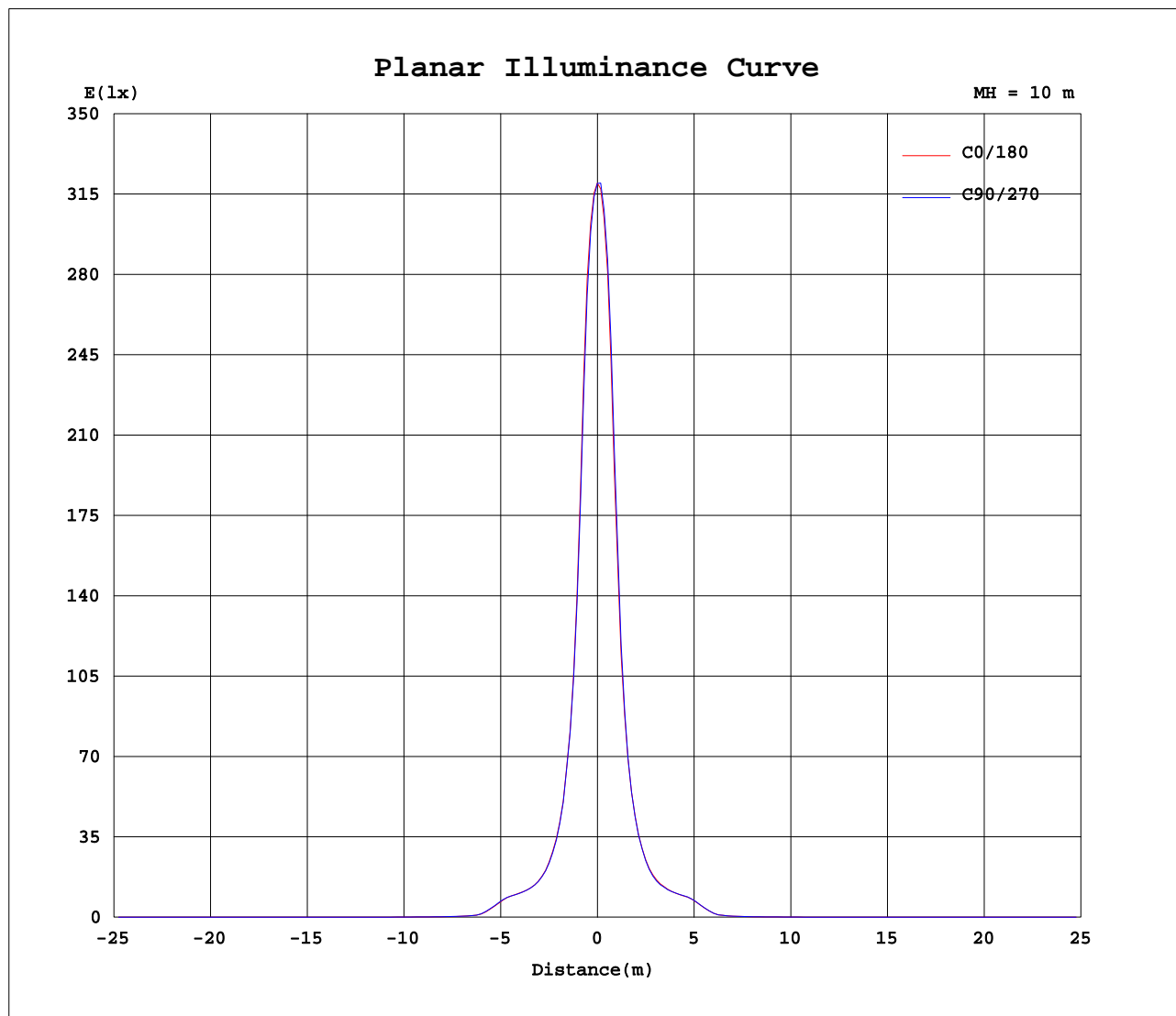
|   |        |                   |
|---|--------|-------------------|
| Test:U:226.5V I:0.1260A P:27.40W PF:0.9610 Lamp Flux:2733.06x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: ZhangXiao  
Test Date: 2016-09-08

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.590m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: ZhangXiao  
Test Date: 2016-09-08

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.590m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|   |  |  |  |  |  |  |  |  |  |        |  |  |  |  |                   |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--------|--|--|--|--|-------------------|--|--|--|--|
| Test:U:226.5V I:0.1260A P:27.40W PF:0.9610 Lamp Flux:2733.06x1 lm |  |  |  |  |  |  |  |  |  |        |  |  |  |  |                   |  |  |  |  |
| NAME:   |  |  |  |  |  |  |  |  |  | TYPE:  |  |  |  |  | WEIGHT:           |  |  |  |  |
| DIM.:   |  |  |  |  |  |  |  |  |  | SPEC.: |  |  |  |  | SERIAL No.:       |  |  |  |  |
| MFR.: Rayconn   |  |  |  |  |  |  |  |  |  | SUR.:  |  |  |  |  | PROTECTION ANGLE: |  |  |  |  |

Table--1

UNIT: ×10cd

| C(DEG)<br>γ (DEG) | 0    | 15   | 30   | 45   | 60   | 75   | 90   | 105  | 120  | 135  | 150  | 165  | 180  | 195  | 210  | 225  | 240  | 255  | 270  |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                 | 3198 | 3198 | 3198 | 3198 | 3198 | 3198 | 3198 | 3198 | 3198 | 3198 | 3198 | 3198 | 3198 | 3198 | 3198 | 3198 | 3198 | 3198 | 3198 |
| 5                 | 1880 | 1895 | 1830 | 1860 | 1806 | 1847 | 1819 | 1867 | 1845 | 1890 | 1873 | 1931 | 1957 | 1926 | 2020 | 1987 | 2062 | 1996 | 2055 |
| 10                | 530  | 537  | 520  | 533  | 520  | 535  | 525  | 540  | 533  | 553  | 548  | 564  | 571  | 576  | 585  | 587  | 586  | 579  | 571  |
| 15                | 228  | 234  | 227  | 232  | 225  | 229  | 224  | 233  | 230  | 235  | 231  | 235  | 237  | 232  | 238  | 232  | 239  | 229  | 232  |
| 20                | 144  | 146  | 144  | 146  | 144  | 144  | 143  | 145  | 143  | 145  | 143  | 145  | 146  | 145  | 146  | 144  | 146  | 143  | 145  |
| 25                | 115  | 119  | 116  | 118  | 117  | 118  | 116  | 116  | 116  | 118  | 116  | 117  | 118  | 117  | 119  | 118  | 119  | 117  | 119  |
| 30                | 36.4 | 38.8 | 36.4 | 40.3 | 38.8 | 41.2 | 38.4 | 41.3 | 39.4 | 42.1 | 39.0 | 42.3 | 43.2 | 42.3 | 45.8 | 43.0 | 44.2 | 41.3 | 43.6 |
| 35                | 8.19 | 8.21 | 8.06 | 8.27 | 8.13 | 8.42 | 8.21 | 8.37 | 8.20 | 8.38 | 8.21 | 8.59 | 8.66 | 8.83 | 9.05 | 8.61 | 8.89 | 8.62 | 8.78 |
| 40                | 4.34 | 4.39 | 4.49 | 4.63 | 4.60 | 4.63 | 4.55 | 4.51 | 4.52 | 4.49 | 4.47 | 4.53 | 4.57 | 4.78 | 4.78 | 4.57 | 4.58 | 4.59 | 4.63 |
| 45                | 2.61 | 2.64 | 2.53 | 2.54 | 2.47 | 2.52 | 2.42 | 2.47 | 2.49 | 2.54 | 2.60 | 2.76 | 2.82 | 2.84 | 2.86 | 2.66 | 2.72 | 2.68 | 2.76 |
| 50                | 1.38 | 1.37 | 1.32 | 1.32 | 1.32 | 1.32 | 1.31 | 1.32 | 1.38 | 1.36 | 1.37 | 1.40 | 1.38 | 1.36 | 1.35 | 1.34 | 1.37 | 1.38 | 1.39 |
| 55                | 1.10 | 1.09 | 1.07 | 1.07 | 1.08 | 1.07 | 1.06 | 1.07 | 1.11 | 1.10 | 1.12 | 1.13 | 1.09 | 1.08 | 1.06 | 1.05 | 1.06 | 1.06 | 1.06 |
| 60                | 1.02 | 1.01 | 1.01 | 1.01 | 1.02 | 1.01 | 1.01 | 1.00 | 1.04 | 1.03 | 1.04 | 1.04 | 1.00 | 1.00 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| 65                | 1.01 | 1.01 | 1.00 | 1.01 | 1.01 | 1.00 | 1.01 | 1.00 | 1.03 | 1.02 | 1.03 | 1.03 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 | 0.97 | 0.96 |
| 70                | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.95 | 0.96 | 0.96 | 0.97 | 0.97 | 0.98 | 0.98 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| 75                | 0.90 | 0.89 | 0.88 | 0.88 | 0.87 | 0.87 | 0.87 | 0.87 | 0.88 | 0.88 | 0.89 | 0.89 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| 80                | 0.86 | 0.84 | 0.83 | 0.83 | 0.82 | 0.82 | 0.82 | 0.83 | 0.84 | 0.84 | 0.84 | 0.83 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |
| 85                | 0.79 | 0.76 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.75 | 0.76 | 0.76 | 0.76 | 0.75 | 0.79 | 0.78 | 0.77 | 0.77 | 0.77 | 0.77 | 0.76 |
| 90                | 0.62 | 0.59 | 0.57 | 0.56 | 0.56 | 0.56 | 0.56 | 0.57 | 0.57 | 0.57 | 0.57 | 0.56 | 0.71 | 0.68 | 0.67 | 0.67 | 0.68 | 0.67 | 0.67 |
| 95                | 0.46 | 0.44 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.43 | 0.42 | 0.42 | 0.42 | 0.71 | 0.69 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 |
| 100               | 0.37 | 0.36 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.36 | 0.35 | 0.35 | 0.35 | 0.69 | 0.69 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 |
| 105               | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.42 | 0.44 | 0.42 | 0.43 | 0.42 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 |
| 110               | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.54 | 0.71 | 0.72 | 0.71 | 0.72 | 0.71 | 0.72 | 0.71 |
| 115               | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.75 | 0.76 | 0.76 | 0.76 | 0.75 | 0.76 | 0.76 |
| 120               | 0.68 | 0.67 | 0.68 | 0.67 | 0.68 | 0.68 | 0.68 | 0.67 | 0.68 | 0.67 | 0.68 | 0.67 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| 125               | 0.82 | 0.81 | 0.81 | 0.81 | 0.82 | 0.81 | 0.82 | 0.80 | 0.81 | 0.80 | 0.81 | 0.80 | 0.94 | 0.95 | 0.94 | 0.95 | 0.94 | 0.95 | 0.95 |
| 130               | 1.13 | 1.12 | 1.13 | 1.12 | 1.14 | 1.12 | 1.13 | 1.11 | 1.13 | 1.11 | 1.12 | 1.10 | 1.21 | 1.22 | 1.20 | 1.21 | 1.20 | 1.21 | 1.20 |
| 135               | 1.59 | 1.58 | 1.59 | 1.58 | 1.60 | 1.58 | 1.59 | 1.57 | 1.59 | 1.57 | 1.58 | 1.56 | 1.61 | 1.62 | 1.60 | 1.61 | 1.60 | 1.61 | 1.60 |
| 140               | 1.91 | 1.91 | 1.92 | 1.91 | 1.92 | 1.91 | 1.91 | 1.90 | 1.91 | 1.90 | 1.91 | 1.89 | 1.93 | 1.94 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 |
| 145               | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.08 | 2.09 | 2.08 | 2.09 | 2.08 | 2.09 | 2.07 | 2.12 | 2.13 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 |
| 150               | 2.20 | 2.21 | 2.21 | 2.21 | 2.21 | 2.20 | 2.21 | 2.20 | 2.21 | 2.19 | 2.20 | 2.19 | 2.24 | 2.25 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 |
| 155               | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.28 | 2.29 | 2.28 | 2.29 | 2.28 | 2.31 | 2.32 | 2.31 | 2.32 | 2.31 | 2.31 | 2.31 |
| 160               | 2.35 | 2.35 | 2.35 | 2.35 | 2.35 | 2.34 | 2.35 | 2.34 | 2.35 | 2.34 | 2.35 | 2.34 | 2.35 | 2.36 | 2.35 | 2.36 | 2.35 | 2.35 | 2.35 |
| 165               | 2.38 | 2.38 | 2.38 | 2.38 | 2.38 | 2.37 | 2.38 | 2.37 | 2.38 | 2.37 | 2.38 | 2.37 | 2.38 | 2.38 | 2.38 | 2.38 | 2.38 | 2.38 | 2.38 |
| 170               | 2.36 | 2.36 | 2.36 | 2.36 | 2.36 | 2.36 | 2.36 | 2.36 | 2.36 | 2.36 | 2.36 | 2.36 | 2.37 | 2.38 | 2.37 | 2.37 | 2.37 | 2.37 | 2.37 |
| 175               | 2.18 | 2.18 | 2.17 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.19 | 2.19 | 2.20 | 2.19 | 2.23 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 |
| 180               | 2.02 | 2.03 | 2.03 | 2.03 | 2.04 | 2.04 | 2.04 | 2.04 | 2.05 | 2.04 | 2.05 | 2.04 | 2.02 | 2.03 | 2.03 | 2.03 | 2.04 | 2.04 | 2.04 |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-08

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.590m [K=1.0000]  
Remarks:

# LUMINOUS DISTRIBUTION INTENSITY DATA

|   |        |                   |
|---|--------|-------------------|
| Test:U:226.5V I:0.1260A P:27.40W PF:0.9610 Lamp Flux:2733.06x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |

Table--2

UNIT: x10cd

| C(DEC)<br>γ (DEC) | 285  | 300  | 315  | 330  | 345  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                 | 3198 | 3198 | 3198 | 3198 | 3198 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                 | 1965 | 2022 | 1928 | 1985 | 1887 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                | 561  | 556  | 530  | 552  | 526  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                | 224  | 230  | 224  | 231  | 225  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                | 143  | 145  | 142  | 144  | 142  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                | 117  | 119  | 117  | 116  | 115  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                | 39.3 | 42.1 | 38.6 | 40.0 | 36.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                | 8.44 | 8.67 | 8.43 | 8.72 | 8.31 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                | 4.48 | 4.52 | 4.53 | 4.61 | 4.45 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                | 2.63 | 2.69 | 2.61 | 2.72 | 2.61 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                | 1.35 | 1.37 | 1.35 | 1.34 | 1.32 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                | 1.05 | 1.08 | 1.08 | 1.06 | 1.05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                | 0.97 | 0.99 | 0.99 | 0.98 | 0.98 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                | 0.96 | 0.97 | 0.97 | 0.97 | 0.97 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                | 0.67 | 0.67 | 0.67 | 0.67 | 0.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                | 0.67 | 0.67 | 0.67 | 0.67 | 0.68 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100               | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105               | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110               | 0.72 | 0.71 | 0.71 | 0.71 | 0.72 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115               | 0.76 | 0.76 | 0.75 | 0.76 | 0.76 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120               | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125               | 0.95 | 0.95 | 0.95 | 0.95 | 0.96 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130               | 1.22 | 1.21 | 1.22 | 1.21 | 1.22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135               | 1.62 | 1.61 | 1.62 | 1.62 | 1.63 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140               | 1.93 | 1.93 | 1.94 | 1.94 | 1.94 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145               | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150               | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155               | 2.31 | 2.31 | 2.31 | 2.32 | 2.31 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160               | 2.35 | 2.35 | 2.35 | 2.36 | 2.35 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165               | 2.37 | 2.38 | 2.37 | 2.38 | 2.37 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170               | 2.37 | 2.37 | 2.36 | 2.37 | 2.36 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175               | 2.23 | 2.24 | 2.23 | 2.24 | 2.23 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180               | 2.04 | 2.04 | 2.04 | 2.05 | 2.04 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-08

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
γ Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.590m [K=1.0000]  
Remarks: