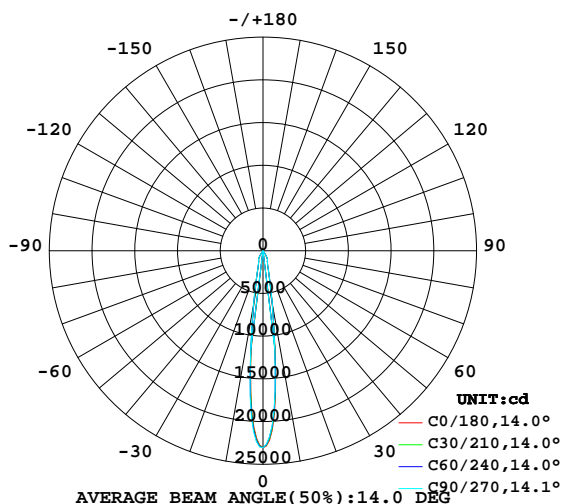


## LUMINAIRE PHOTOMETRIC TEST REPORT

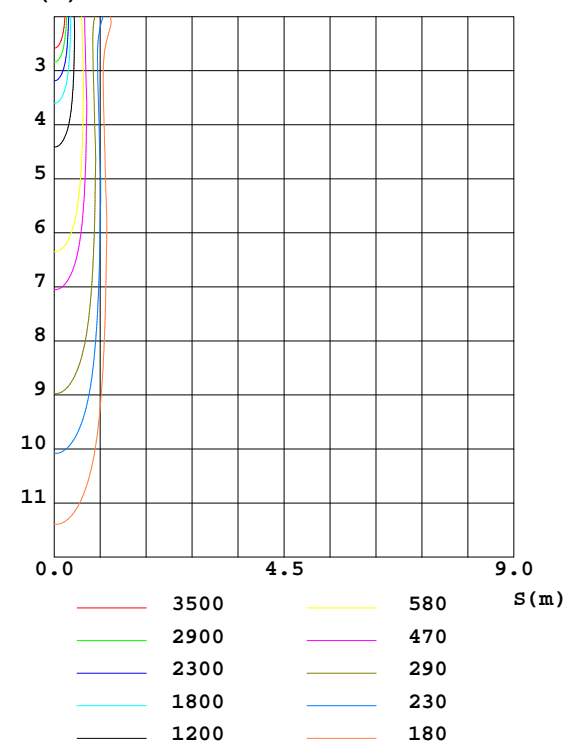
|   |        |                   |
|---|--------|-------------------|
| Test:U:226.5V I:0.1270A P:27.60W PF:0.9610 Lamp Flux:2913.68x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |

| DATA OF LAMP     |                   | PHOTOMETRIC DATA Eff: 105.57 lm/W |        |                   |          |
|------------------|-------------------|-----------------------------------|--------|-------------------|----------|
| MODEL            | TL28-30W-830-W-15 | Imax(cd)                          | 23035  | S/MH(C0/180)      | 0.25     |
| NOMINAL POWER(W) | 28                | LOR(%)                            | 100.0  | S/MH(C90/270)     | 0.24     |
| RATED VOLTAGE(V) | 226               | TOTAL FLUX(lm)                    | 2913.7 | η UP,DN(C0-180)   | 1.2,48.8 |
| NOMINAL FLUX(lm) | 2913.68           | CIE CLASS                         | DIRECT | η UP,DN(C180-360) | 1.4,48.6 |
| LAMPS INSIDE     | 1                 | η up(%)                           | 2.6    | CIBSE SHR NOM     | 0.00     |
| TEST VOLTAGE(V)  | 226.5             | 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:2016-09-07

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       | 635.2                    | 629.2  | 630.1  | 629.4  | 620.7  | 614.1  | 640.1  | 640.0  | 0- 10    | 1212        | 1212         | 41.6,41.6     |
| 20       | 155.1                    | 158.4  | 154.2  | 158.4  | 155.3  | 150.3  | 156.4  | 153.2  | 10- 20   | 787.1       | 1999         | 68.6,68.6     |
| 30       | 92.56                    | 94.28  | 91.25  | 93.09  | 91.19  | 88.17  | 93.60  | 91.10  | 20- 30   | 569.9       | 2569         | 88.2,88.2     |
| 40       | 6.204                    | 5.914  | 5.408  | 5.606  | 5.535  | 5.344  | 5.994  | 6.162  | 30- 40   | 207.5       | 2777         | 95.3,95.3     |
| 50       | 1.345                    | 1.329  | 1.463  | 1.389  | 1.250  | 1.265  | 1.312  | 1.291  | 40- 50   | 19.96       | 2797         | 96,96         |
| 60       | 1.179                    | 1.253  | 1.264  | 1.256  | 1.155  | 1.173  | 1.187  | 1.169  | 50- 60   | 10.82       | 2808         | 96.4,96.4     |
| 70       | 1.002                    | 1.016  | 1.006  | 1.003  | 0.9736 | 0.9764 | 1.024  | 0.9993 | 60- 70   | 11.59       | 2819         | 96.8,96.8     |
| 80       | 0.8440                   | 0.8367 | 0.8425 | 0.8496 | 0.8307 | 0.8329 | 0.8530 | 0.8319 | 70- 80   | 9.469       | 2829         | 97.1,97.1     |
| 90       | 0.6426                   | 0.5844 | 0.5824 | 0.5959 | 0.7408 | 0.6976 | 0.6964 | 0.6969 | 80- 90   | 8.207       | 2837         | 97.4,97.4     |
| 100      | 0.4376                   | 0.4149 | 0.4173 | 0.4172 | 0.7380 | 0.7175 | 0.7154 | 0.7168 | 90-100   | 6.526       | 2843         | 97.6,97.6     |
| 110      | 0.6095                   | 0.6047 | 0.6064 | 0.6055 | 0.7901 | 0.7877 | 0.7844 | 0.7856 | 100-110  | 6.583       | 2850         | 97.8,97.8     |
| 120      | 0.7757                   | 0.7709 | 0.7744 | 0.7725 | 0.9254 | 0.9256 | 0.9204 | 0.9219 | 110-120  | 7.617       | 2858         | 98.1,98.1     |
| 130      | 1.235                    | 1.222  | 1.242  | 1.232  | 1.345  | 1.350  | 1.333  | 1.339  | 120-130  | 9.133       | 2867         | 98.4,98.4     |
| 140      | 1.985                    | 1.976  | 1.992  | 1.979  | 2.025  | 2.027  | 2.012  | 2.014  | 130-140  | 12.82       | 2880         | 98.8,98.8     |
| 150      | 2.307                    | 2.299  | 2.316  | 2.299  | 2.346  | 2.349  | 2.338  | 2.338  | 140-150  | 13.73       | 2893         | 99.3,99.3     |
| 160      | 2.446                    | 2.447  | 2.449  | 2.444  | 2.467  | 2.459  | 2.460  | 2.458  | 150-160  | 11.06       | 2904         | 99.7,99.7     |
| 170      | 2.487                    | 2.491  | 2.484  | 2.485  | 2.509  | 2.500  | 2.505  | 2.498  | 160-170  | 7.060       | 2911         | 99.9,99.9     |
| 180      | 2.260                    | 2.263  | 2.264  | 2.265  | 2.269  | 2.258  | 2.267  | 2.263  | 170-180  | 2.302       | 2914         | 100,100       |
| DEG      | LUMINOUS INTENSITY:×10cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |               |

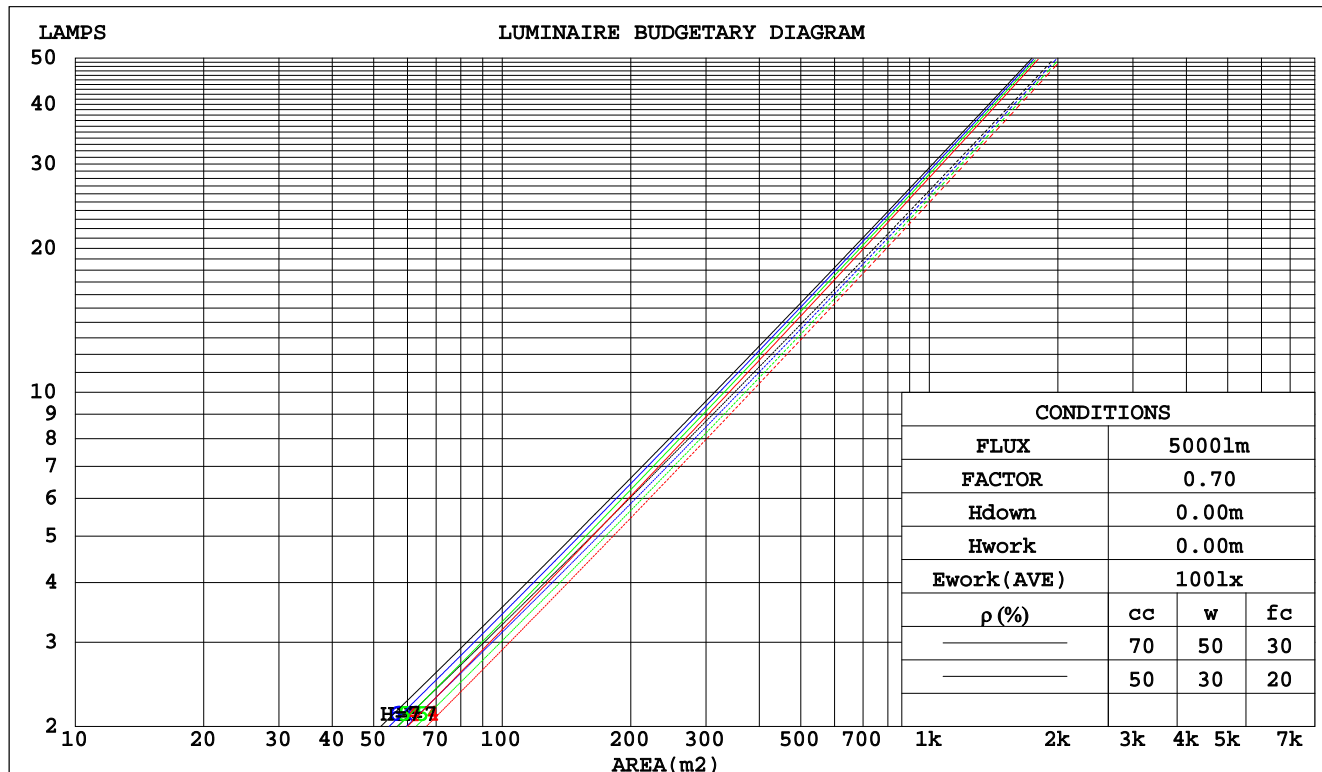
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-07

$\gamma$  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:0.1270A P:27.60W PF:0.9610 Lamp Flux:2913.68x1 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 |      |      |      |      |      | 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 | 1.08 | 1.09 | 1.08 | 1.06 | 1.05                            | 1.04 | 1.02 | 1.01 | .00  | .99  | .97 | .96 | .95 | .94 |
| 2.0  | 1.06                  | 1.03 | 1.00 | 1.04 | 1.01 | .99  | 1.01                            | .98  | .97  | .97  | .96  | .94  | .94 | .93 | .92 | .90 |
| 3.0  | 1.01                  | .98  | .95  | .00  | .96  | .94  | .97                             | .94  | .92  | .94  | .92  | .90  | .92 | .90 | .88 | .87 |
| 4.0  | .97                   | .93  | .90  | .96  | .92  | .89  | .94                             | .90  | .88  | .91  | .89  | .87  | .89 | .87 | .85 | .84 |
| 5.0  | .93                   | .89  | .86  | .92  | .88  | .85  | .90                             | .87  | .85  | .89  | .86  | .84  | .87 | .85 | .83 | .81 |
| 6.0  | .90                   | .86  | .83  | .89  | .85  | .82  | .88                             | .84  | .82  | .86  | .83  | .81  | .85 | .82 | .80 | .79 |
| 7.0  | .87                   | .83  | .80  | .86  | .82  | .79  | .85                             | .81  | .79  | .84  | .81  | .78  | .83 | .80 | .78 | .77 |
| 8.0  | .84                   | .80  | .77  | .84  | .80  | .77  | .83                             | .79  | .76  | .82  | .78  | .76  | .80 | .78 | .76 | .75 |
| 9.0  | .82                   | .78  | .75  | .81  | .77  | .75  | .80                             | .77  | .74  | .79  | .76  | .74  | .79 | .76 | .74 | .73 |
| 10.0 | .80                   | .75  | .73  | .79  | .75  | .73  | .78                             | .75  | .72  | .77  | .74  | .72  | .77 | .74 | .72 | .71 |



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-07

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:0.1270A P:27.60W PF:0.9610 Lamp Flux:2913.68x1 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  | .146                  | .083 | .026 | .138 | .079 | .025 | .125                            | .071 | .023 | .112 | .064 | .021 | .100 | .058 | .019 |   |  |
| 2.0  | .134                  | .074 | .023 | .128 | .071 | .022 | .117                            | .065 | .020 | .106 | .059 | .019 | .096 | .054 | .017 |   |  |
| 3.0  | .125                  | .066 | .020 | .120 | .064 | .019 | .110                            | .059 | .018 | .101 | .055 | .017 | .092 | .051 | .016 |   |  |
| 4.0  | .117                  | .061 | .018 | .112 | .059 | .017 | .104                            | .055 | .016 | .096 | .051 | .016 | .088 | .048 | .015 |   |  |
| 5.0  | .109                  | .056 | .016 | .106 | .054 | .016 | .098                            | .051 | .015 | .091 | .048 | .014 | .085 | .045 | .014 |   |  |
| 6.0  | .103                  | .052 | .015 | .100 | .050 | .015 | .093                            | .048 | .014 | .088 | .045 | .013 | .082 | .043 | .013 |   |  |
| 7.0  | .098                  | .048 | .014 | .095 | .047 | .013 | .089                            | .045 | .013 | .084 | .043 | .013 | .079 | .041 | .012 |   |  |
| 8.0  | .093                  | .045 | .013 | .090 | .044 | .013 | .085                            | .043 | .012 | .081 | .041 | .012 | .076 | .039 | .011 |   |  |
| 9.0  | .089                  | .043 | .012 | .086 | .042 | .012 | .082                            | .040 | .011 | .077 | .039 | .011 | .073 | .037 | .011 |   |  |
| 10.0 | .085                  | .041 | .011 | .082 | .040 | .011 | .078                            | .038 | .011 | .075 | .037 | .011 | .071 | .036 | .010 |   |  |

| 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  | .211                  | .211 | .211 | .180 | .180 | .180 | .123                                       | .123 | .123 | .071 | .071 | .071 | .023 | .023 | .023 |   |  |
| 1.0  | .189                  | .178 | .168 | .162 | .153 | .144 | .111                                       | .105 | .100 | .064 | .061 | .058 | .020 | .020 | .019 |   |  |
| 2.0  | .172                  | .153 | .137 | .147 | .132 | .119 | .101                                       | .091 | .083 | .058 | .053 | .049 | .019 | .017 | .016 |   |  |
| 3.0  | .157                  | .134 | .115 | .135 | .115 | .100 | .092                                       | .080 | .070 | .053 | .047 | .041 | .017 | .015 | .014 |   |  |
| 4.0  | .145                  | .119 | .099 | .124 | .102 | .086 | .085                                       | .071 | .060 | .049 | .042 | .036 | .016 | .014 | .012 |   |  |
| 5.0  | .134                  | .106 | .086 | .115 | .092 | .075 | .080                                       | .064 | .053 | .046 | .038 | .031 | .015 | .012 | .010 |   |  |
| 6.0  | .126                  | .097 | .076 | .108 | .084 | .066 | .074                                       | .059 | .047 | .043 | .034 | .028 | .014 | .011 | .009 |   |  |
| 7.0  | .118                  | .088 | .068 | .102 | .077 | .059 | .070                                       | .054 | .042 | .041 | .032 | .025 | .013 | .010 | .008 |   |  |
| 8.0  | .112                  | .082 | .061 | .096 | .071 | .053 | .066                                       | .050 | .038 | .039 | .029 | .023 | .013 | .010 | .007 |   |  |
| 9.0  | .106                  | .076 | .056 | .091 | .066 | .049 | .063                                       | .046 | .035 | .037 | .027 | .021 | .012 | .009 | .007 |   |  |
| 10.0 | .101                  | .071 | .052 | .087 | .062 | .045 | .060                                       | .044 | .032 | .035 | .026 | .019 | .011 | .008 | .006 |   |  |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-07

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:0.1270A P:27.60W PF:0.9610 Lamp Flux:2913.68x1 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   | 14.3          | 15.0             | 14.5 | 15.1 | 15.3   | 14.0          | 14.7           | 14.3              | 14.9 | 15.1 |      |
|   | 3H            | 14.4             | 15.0 | 14.7 | 15.2   | 15.5          | 14.1           | 14.8              | 14.4 | 15.0 | 15.2 |
|   | 4H            | 14.5             | 15.1 | 14.8 | 15.3   | 15.6          | 14.3           | 14.9              | 14.6 | 15.1 | 15.4 |
|   | 6H            | 14.7             | 15.3 | 15.1 | 15.6   | 15.8          | 14.5           | 15.1              | 14.8 | 15.4 | 15.6 |
|   | 8H            | 14.9             | 15.5 | 15.3 | 15.8   | 16.1          | 14.7           | 15.3              | 15.1 | 15.6 | 15.9 |
|   | 12H           | 15.2             | 15.8 | 15.6 | 16.1   | 16.4          | 15.0           | 15.6              | 15.4 | 15.9 | 16.2 |
| 4H  | 2H            | 14.1             | 14.7 | 14.4 | 15.0   | 15.2          | 13.9           | 14.5              | 14.2 | 14.7 | 15.0 |
|   | 3H            | 14.3             | 14.8 | 14.7 | 15.1   | 15.5          | 14.1           | 14.6              | 14.4 | 14.9 | 15.2 |
|   | 4H            | 14.5             | 15.0 | 14.9 | 15.3   | 15.7          | 14.3           | 14.8              | 14.7 | 15.1 | 15.5 |
|   | 6H            | 15.0             | 15.4 | 15.4 | 15.8   | 16.1          | 14.8           | 15.2              | 15.2 | 15.6 | 16.0 |
|   | 8H            | 15.3             | 15.7 | 15.7 | 16.1   | 16.5          | 15.1           | 15.5              | 15.6 | 15.9 | 16.3 |
|   | 12H           | 15.8             | 16.2 | 16.2 | 16.6   | 17.0          | 15.6           | 16.0              | 16.1 | 16.4 | 16.8 |
| 8H  | 4H            | 14.6             | 15.0 | 15.0 | 15.3   | 15.8          | 14.4           | 14.8              | 14.8 | 15.2 | 15.6 |
|   | 6H            | 15.2             | 15.5 | 15.7 | 16.0   | 16.4          | 15.0           | 15.4              | 15.5 | 15.8 | 16.3 |
|   | 8H            | 15.7             | 16.0 | 16.2 | 16.5   | 17.0          | 15.6           | 15.9              | 16.0 | 16.3 | 16.8 |
|   | 12H           | 16.4             | 16.7 | 16.9 | 17.2   | 17.7          | 16.3           | 16.5              | 16.8 | 17.0 | 17.5 |
| 12H   | 4H            | 14.6             | 14.9 | 15.0 | 15.3   | 15.8          | 14.4           | 14.7              | 14.8 | 15.2 | 15.6 |
|   | 6H            | 15.3             | 15.6 | 15.8 | 16.0   | 16.5          | 15.1           | 15.4              | 15.6 | 15.9 | 16.4 |
|   | 8H            | 15.9             | 16.1 | 16.4 | 16.6   | 17.1          | 15.7           | 16.0              | 16.2 | 16.5 | 17.0 |
| Variations with the observer position at spacings:                |               |                  |      |      |        |               |                |                   |      |      |      |
| S = 1.0H  | + 0.8 / - 0.5 |                  |      |      |        | + 0.7 / - 0.5 |                |                   |      |      |      |
| 1.5H  | + 1.8 / - 0.4 |                  |      |      |        | + 1.6 / - 0.4 |                |                   |      |      |      |
| 2.0H  | + 0.3 / - 0.3 |                  |      |      |        | + 0.3 / - 0.3 |                |                   |      |      |      |

CIE Pub.117 Corrected 2914 lm Total Lamp Luminous Flux.(8log(F/F0) = 3.7)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-07

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:0.1270A P:27.60W PF:0.9610 Lamp Flux:2913.68x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |

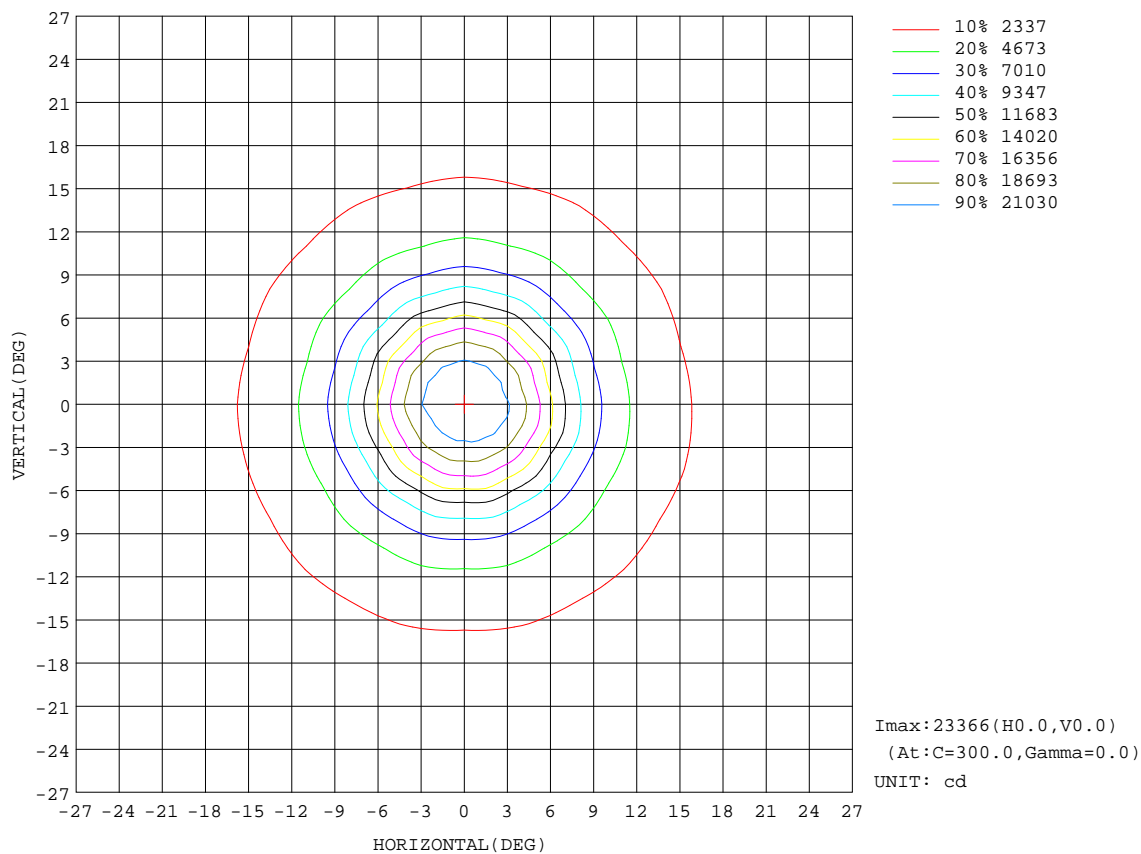
| REFLECTANCE                      |   |     |           |     |     |     |     |               |     |        |
|----------------------------------|---|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling                          | 0.8   | 0.8 | 0.8       | 0.7 | 0.7 | 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:2016-09-07

$\gamma$  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:0.1270A P:27.60W PF:0.9610 Lamp Flux:2913.68x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |



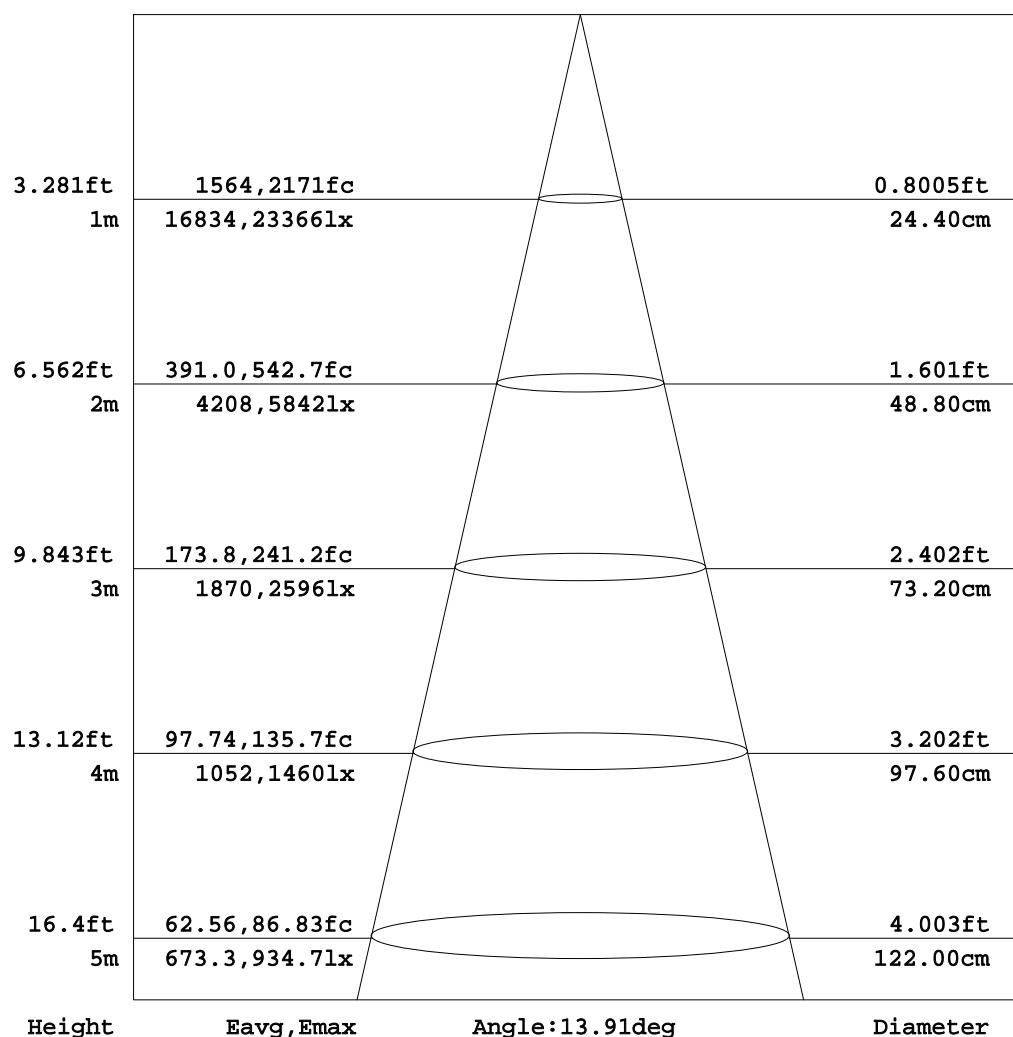
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: ZhangXiao  
Test Date: 2016-09-07

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:0.1270A P:27.60W PF:0.9610 Lamp Flux:2913.68x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |

Flux out:797.3 lm



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

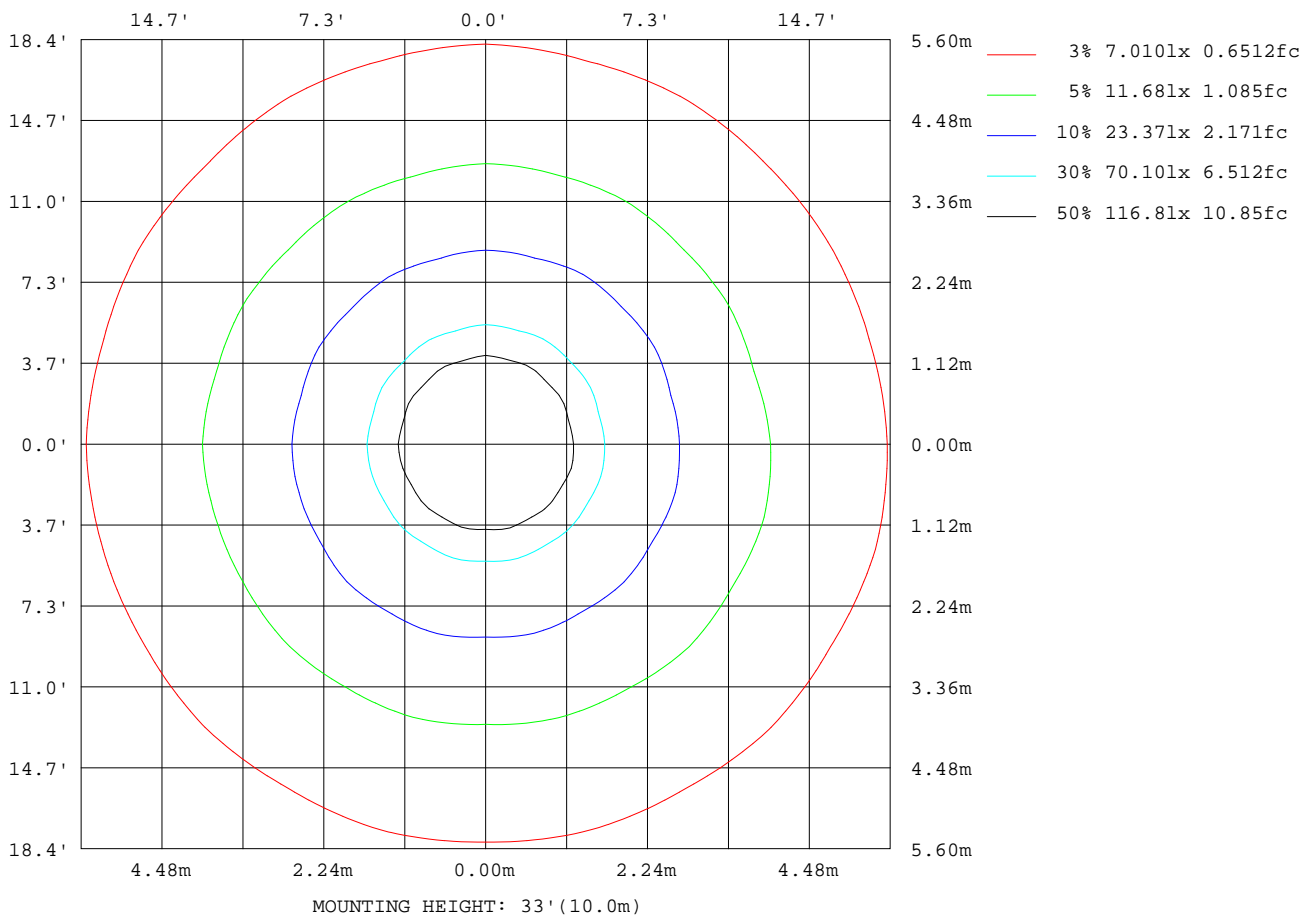
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-07

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

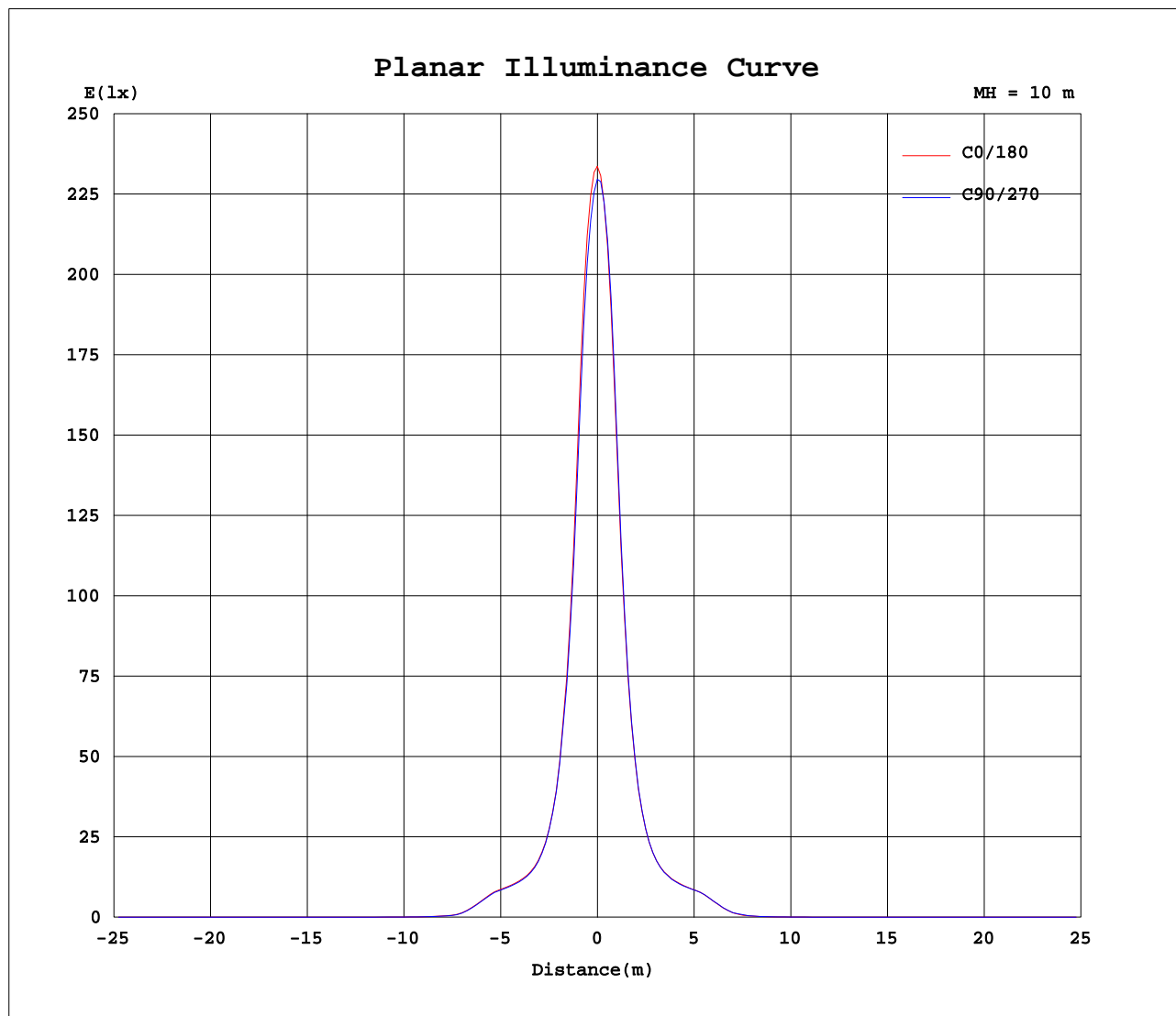
|   |        |                   |
|---|--------|-------------------|
| Test:U:226.5V I:0.1270A P:27.60W PF:0.9610 Lamp Flux:2913.68x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: ZhangXiao  
Test Date: 2016-09-07

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: 2016-09-07

$\gamma$  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:0.1270A P:27.60W PF:0.9610 Lamp Flux:2913.68x1 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                 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 |
| 5                 | 1689 | 1704 | 1665 | 1684 | 1648 | 1667 | 1634 | 1655 | 1625 | 1652 | 1626 | 1658 | 1651 | 1622 | 1672 | 1646 | 1703 | 1671 | 1721 |
| 10                | 635  | 630  | 627  | 629  | 629  | 631  | 630  | 633  | 629  | 629  | 625  | 625  | 621  | 612  | 622  | 614  | 627  | 624  | 640  |
| 15                | 256  | 262  | 255  | 262  | 257  | 264  | 257  | 266  | 260  | 266  | 255  | 259  | 255  | 247  | 254  | 248  | 257  | 251  | 261  |
| 20                | 155  | 158  | 156  | 158  | 156  | 157  | 154  | 158  | 155  | 158  | 154  | 156  | 155  | 150  | 154  | 150  | 155  | 152  | 156  |
| 25                | 125  | 127  | 125  | 126  | 125  | 125  | 124  | 126  | 125  | 125  | 124  | 124  | 124  | 122  | 123  | 122  | 123  | 123  | 124  |
| 30                | 92.6 | 95.1 | 92.2 | 94.3 | 91.2 | 93.2 | 91.3 | 93.7 | 90.8 | 93.1 | 90.3 | 91.9 | 91.2 | 88.0 | 90.6 | 88.2 | 92.1 | 90.3 | 93.6 |
| 35                | 25.3 | 27.5 | 25.9 | 27.9 | 25.3 | 26.6 | 24.0 | 25.4 | 22.9 | 24.6 | 23.0 | 25.3 | 24.6 | 22.9 | 24.8 | 23.4 | 25.4 | 24.0 | 25.9 |
| 40                | 6.20 | 6.07 | 6.19 | 5.91 | 5.54 | 5.66 | 5.41 | 5.60 | 5.35 | 5.61 | 5.40 | 5.63 | 5.54 | 5.38 | 5.56 | 5.34 | 5.59 | 5.62 | 5.99 |
| 45                | 2.18 | 2.25 | 2.14 | 2.19 | 2.15 | 2.20 | 2.14 | 2.21 | 2.11 | 2.15 | 2.04 | 2.08 | 2.06 | 1.99 | 2.09 | 2.02 | 2.15 | 2.10 | 2.25 |
| 50                | 1.34 | 1.33 | 1.32 | 1.33 | 1.37 | 1.44 | 1.46 | 1.41 | 1.39 | 1.39 | 1.37 | 1.30 | 1.25 | 1.24 | 1.26 | 1.26 | 1.31 | 1.32 | 1.31 |
| 55                | 1.17 | 1.15 | 1.17 | 1.20 | 1.22 | 1.25 | 1.27 | 1.24 | 1.24 | 1.26 | 1.25 | 1.21 | 1.12 | 1.12 | 1.12 | 1.14 | 1.17 | 1.18 | 1.16 |
| 60                | 1.18 | 1.18 | 1.20 | 1.25 | 1.24 | 1.23 | 1.26 | 1.26 | 1.26 | 1.26 | 1.25 | 1.23 | 1.16 | 1.16 | 1.16 | 1.17 | 1.19 | 1.20 | 1.19 |
| 65                | 1.22 | 1.22 | 1.23 | 1.27 | 1.26 | 1.25 | 1.25 | 1.23 | 1.21 | 1.21 | 1.21 | 1.21 | 1.17 | 1.16 | 1.16 | 1.18 | 1.20 | 1.21 | 1.22 |
| 70                | 1.00 | 1.01 | 1.00 | 1.02 | 1.01 | 1.00 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 0.97 | 0.97 | 0.97 | 0.98 | 1.00 | 1.01 | 1.02 |
| 75                | 0.89 | 0.88 | 0.88 | 0.89 | 0.90 | 0.89 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.89 | 0.87 | 0.87 | 0.87 | 0.88 | 0.89 | 0.90 | 0.90 |
| 80                | 0.84 | 0.83 | 0.83 | 0.84 | 0.85 | 0.84 | 0.84 | 0.85 | 0.85 | 0.85 | 0.84 | 0.84 | 0.83 | 0.83 | 0.83 | 0.83 | 0.84 | 0.85 | 0.85 |
| 85                | 0.77 | 0.75 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.75 | 0.74 | 0.74 | 0.79 | 0.77 | 0.77 | 0.77 | 0.78 | 0.78 | 0.78 |
| 90                | 0.64 | 0.61 | 0.59 | 0.58 | 0.59 | 0.58 | 0.58 | 0.59 | 0.59 | 0.60 | 0.58 | 0.59 | 0.74 | 0.71 | 0.70 | 0.70 | 0.70 | 0.70 | 0.70 |
| 95                | 0.51 | 0.49 | 0.47 | 0.47 | 0.47 | 0.47 | 0.47 | 0.47 | 0.47 | 0.47 | 0.47 | 0.47 | 0.75 | 0.72 | 0.71 | 0.70 | 0.71 | 0.70 | 0.70 |
| 100               | 0.44 | 0.43 | 0.42 | 0.41 | 0.42 | 0.42 | 0.42 | 0.42 | 0.43 | 0.42 | 0.42 | 0.42 | 0.74 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 |
| 105               | 0.50 | 0.49 | 0.49 | 0.48 | 0.49 | 0.49 | 0.49 | 0.49 | 0.50 | 0.49 | 0.49 | 0.49 | 0.75 | 0.75 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 |
| 110               | 0.61 | 0.60 | 0.61 | 0.60 | 0.61 | 0.60 | 0.61 | 0.60 | 0.61 | 0.61 | 0.61 | 0.61 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.78 |
| 115               | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.70 | 0.69 | 0.69 | 0.69 | 0.84 | 0.85 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| 120               | 0.78 | 0.77 | 0.78 | 0.77 | 0.78 | 0.77 | 0.77 | 0.77 | 0.78 | 0.77 | 0.78 | 0.77 | 0.93 | 0.93 | 0.92 | 0.93 | 0.92 | 0.93 | 0.92 |
| 125               | 0.93 | 0.92 | 0.93 | 0.92 | 0.93 | 0.92 | 0.93 | 0.92 | 0.93 | 0.92 | 0.93 | 0.92 | 1.07 | 1.08 | 1.07 | 1.07 | 1.07 | 1.07 | 1.07 |
| 130               | 1.23 | 1.22 | 1.23 | 1.22 | 1.24 | 1.23 | 1.24 | 1.23 | 1.24 | 1.23 | 1.25 | 1.23 | 1.34 | 1.35 | 1.34 | 1.35 | 1.34 | 1.34 | 1.33 |
| 135               | 1.65 | 1.64 | 1.65 | 1.64 | 1.65 | 1.65 | 1.66 | 1.64 | 1.66 | 1.65 | 1.67 | 1.65 | 1.71 | 1.72 | 1.71 | 1.72 | 1.70 | 1.71 | 1.70 |
| 140               | 1.99 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.99 | 1.98 | 1.99 | 1.98 | 2.00 | 1.98 | 2.02 | 2.03 | 2.02 | 2.03 | 2.02 | 2.02 | 2.01 |
| 145               | 2.19 | 2.22 | 2.18 | 2.17 | 2.18 | 2.22 | 2.22 | 2.17 | 2.18 | 2.18 | 2.23 | 2.20 | 2.22 | 2.22 | 2.22 | 2.24 | 2.22 | 2.22 | 2.21 |
| 150               | 2.31 | 2.32 | 2.30 | 2.30 | 2.30 | 2.31 | 2.32 | 2.30 | 2.30 | 2.30 | 2.31 | 2.30 | 2.35 | 2.34 | 2.35 | 2.35 | 2.34 | 2.34 | 2.34 |
| 155               | 2.38 | 2.39 | 2.38 | 2.38 | 2.38 | 2.38 | 2.39 | 2.38 | 2.39 | 2.38 | 2.38 | 2.38 | 2.42 | 2.41 | 2.42 | 2.42 | 2.41 | 2.41 | 2.41 |
| 160               | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.45 | 2.44 | 2.45 | 2.44 | 2.45 | 2.45 | 2.47 | 2.46 | 2.46 | 2.46 | 2.46 | 2.46 | 2.46 |
| 165               | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.51 | 2.51 | 2.51 | 2.50 | 2.51 | 2.50 | 2.51 |
| 170               | 2.49 | 2.49 | 2.49 | 2.49 | 2.49 | 2.49 | 2.48 | 2.48 | 2.48 | 2.48 | 2.49 | 2.49 | 2.51 | 2.50 | 2.51 | 2.50 | 2.51 | 2.50 | 2.50 |
| 175               | 2.34 | 2.35 | 2.34 | 2.34 | 2.34 | 2.34 | 2.34 | 2.34 | 2.34 | 2.34 | 2.34 | 2.34 | 2.38 | 2.37 | 2.38 | 2.37 | 2.38 | 2.38 | 2.38 |
| 180               | 2.26 | 2.27 | 2.26 | 2.26 | 2.26 | 2.26 | 2.26 | 2.26 | 2.26 | 2.26 | 2.27 | 2.26 | 2.27 | 2.26 | 2.26 | 2.26 | 2.27 | 2.26 | 2.27 |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-07

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:0.1270A P:27.60W PF:0.9610 Lamp Flux:2913.68x1 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                 | 2303 | 2303 | 2303 | 2303 | 2303 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                 | 1688 | 1732 | 1691 | 1726 | 1675 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                | 636  | 649  | 640  | 643  | 629  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                | 256  | 267  | 259  | 265  | 255  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                | 153  | 158  | 153  | 157  | 153  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                | 123  | 124  | 123  | 124  | 124  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                | 90.6 | 93.3 | 91.1 | 93.1 | 91.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                | 23.9 | 24.2 | 23.8 | 25.7 | 24.6 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                | 6.11 | 5.91 | 6.16 | 6.23 | 6.23 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                | 2.17 | 2.24 | 2.19 | 2.29 | 2.17 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                | 1.29 | 1.28 | 1.29 | 1.30 | 1.28 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                | 1.14 | 1.12 | 1.13 | 1.12 | 1.11 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                | 1.18 | 1.16 | 1.17 | 1.15 | 1.14 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                | 1.21 | 1.20 | 1.22 | 1.21 | 1.19 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                | 1.00 | 0.99 | 1.00 | 1.01 | 0.99 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                | 0.89 | 0.87 | 0.88 | 0.88 | 0.87 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                | 0.84 | 0.83 | 0.83 | 0.83 | 0.83 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                | 0.77 | 0.77 | 0.77 | 0.76 | 0.76 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                | 0.70 | 0.69 | 0.70 | 0.70 | 0.70 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                | 0.70 | 0.70 | 0.71 | 0.70 | 0.71 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100               | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105               | 0.74 | 0.74 | 0.74 | 0.74 | 0.75 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110               | 0.79 | 0.78 | 0.79 | 0.78 | 0.79 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115               | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120               | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125               | 1.07 | 1.06 | 1.07 | 1.06 | 1.07 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130               | 1.34 | 1.33 | 1.34 | 1.33 | 1.34 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135               | 1.71 | 1.70 | 1.70 | 1.69 | 1.70 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140               | 2.02 | 2.01 | 2.01 | 2.01 | 2.02 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145               | 2.22 | 2.23 | 2.21 | 2.21 | 2.21 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150               | 2.34 | 2.34 | 2.34 | 2.33 | 2.34 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155               | 2.41 | 2.41 | 2.41 | 2.41 | 2.41 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160               | 2.46 | 2.46 | 2.46 | 2.46 | 2.46 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165               | 2.50 | 2.51 | 2.50 | 2.51 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170               | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175               | 2.37 | 2.38 | 2.38 | 2.38 | 2.38 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180               | 2.26 | 2.27 | 2.26 | 2.27 | 2.26 |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-09-07

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: