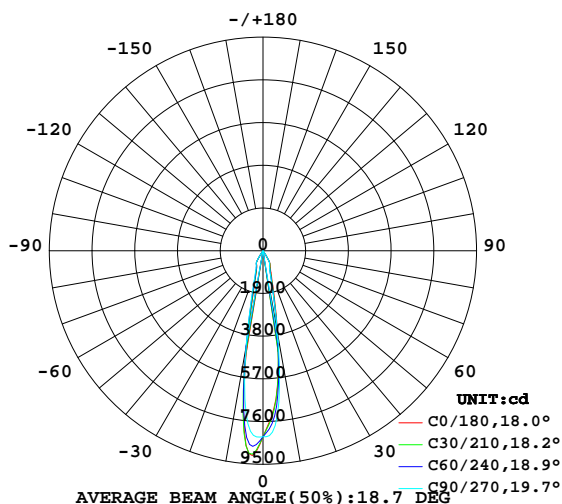


## LUMINAIRE PHOTOMETRIC TEST REPORT

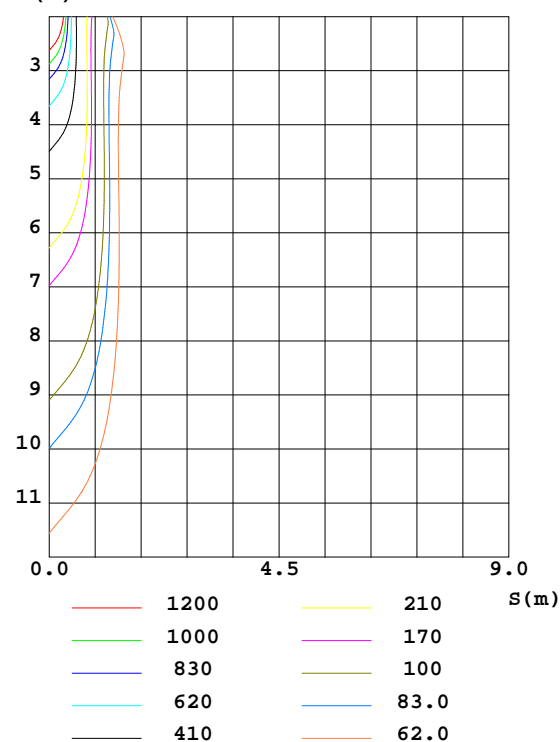
|   |        |                   |
|---|--------|-------------------|
| Test:U:226.6V I:0.0900A P:19.40W PF:0.9540 Lamp Flux:1612.55x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |

| DATA OF LAMP     |                   | PHOTOMETRIC DATA Eff: 83.12 lm/W |        |                   |          |
|------------------|-------------------|----------------------------------|--------|-------------------|----------|
| MODEL            | GL10-20W-930-W-20 | Imax(cd)                         | 9117   | S/MH(C0/180)      | 0.32     |
| NOMINAL POWER(W) | 20                | LOR(%)                           | 100.0  | S/MH(C90/270)     | 0.32     |
| RATED VOLTAGE(V) | 226               | TOTAL FLUX(lm)                   | 1612.6 | η UP,DN(C0-180)   | 1.2,47.5 |
| NOMINAL FLUX(lm) | 1612.55           | CIE CLASS                        | DIRECT | η UP,DN(C180-360) | 1.4,49.9 |
| 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:2016-08-01

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
 Humidity:65.0%  
 Test Distance:6.610m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

| γ   | C0                    | C45   | C90   | C135  | C180  | C225  | C270  | C315  | γ       | Φ zone  | Φ total | %lum, lamp |
|-----|-----------------------|-------|-------|-------|-------|-------|-------|-------|---------|---------|---------|------------|
| 10  | 3750                  | 3705  | 3751  | 3900  | 3909  | 4089  | 4312  | 3884  | 0- 10   | 597.6   | 597.6   | 37.1,37.1  |
| 20  | 1046                  | 935.8 | 884.0 | 877.9 | 842.4 | 871.4 | 963.7 | 1002  | 10- 20  | 490.2   | 1088    | 67.5,67.5  |
| 30  | 577.5                 | 563.8 | 521.2 | 528.1 | 557.5 | 566.5 | 585.8 | 592.3 | 20- 30  | 331.4   | 1419    | 88,88      |
| 40  | 32.06                 | 32.40 | 31.87 | 32.00 | 31.95 | 32.24 | 35.27 | 36.40 | 30- 40  | 107.8   | 1527    | 94.7,94.7  |
| 50  | 13.51                 | 13.38 | 13.30 | 13.67 | 12.75 | 13.45 | 13.49 | 14.14 | 40- 50  | 16.17   | 1543    | 95.7,95.7  |
| 60  | 8.659                 | 8.674 | 8.862 | 8.810 | 8.435 | 8.475 | 8.749 | 8.840 | 50- 60  | 9.420   | 1553    | 96.3,96.3  |
| 70  | 6.424                 | 6.521 | 6.524 | 6.569 | 6.431 | 6.436 | 6.581 | 6.592 | 60- 70  | 7.517   | 1560    | 96.7,96.7  |
| 80  | 4.740                 | 4.780 | 4.683 | 4.673 | 4.677 | 4.667 | 4.803 | 4.786 | 70- 80  | 5.889   | 1566    | 97.1,97.1  |
| 90  | 3.086                 | 3.281 | 3.133 | 3.113 | 3.817 | 3.880 | 3.949 | 3.787 | 80- 90  | 4.545   | 1571    | 97.4,97.4  |
| 100 | 2.326                 | 2.400 | 2.374 | 2.341 | 3.915 | 3.936 | 3.934 | 3.881 | 90-100  | 3.663   | 1574    | 97.6,97.6  |
| 110 | 3.198                 | 3.227 | 3.304 | 3.292 | 4.291 | 4.251 | 4.257 | 4.251 | 100-110 | 3.587   | 1578    | 97.8,97.8  |
| 120 | 4.167                 | 4.222 | 4.391 | 4.406 | 5.142 | 5.070 | 5.017 | 5.010 | 110-120 | 4.150   | 1582    | 98.1,98.1  |
| 130 | 6.851                 | 6.887 | 7.084 | 6.997 | 7.421 | 7.358 | 7.270 | 7.322 | 120-130 | 5.090   | 1587    | 98.4,98.4  |
| 140 | 10.59                 | 10.62 | 10.83 | 10.85 | 10.98 | 10.88 | 10.77 | 10.79 | 130-140 | 6.955   | 1594    | 98.8,98.8  |
| 150 | 12.52                 | 12.51 | 12.66 | 12.69 | 12.84 | 12.77 | 12.75 | 12.75 | 140-150 | 7.436   | 1601    | 99.3,99.3  |
| 160 | 13.36                 | 13.32 | 13.43 | 13.43 | 13.47 | 13.41 | 13.45 | 13.49 | 150-160 | 6.054   | 1607    | 99.7,99.7  |
| 170 | 13.60                 | 13.50 | 13.50 | 13.54 | 13.58 | 13.55 | 13.65 | 13.71 | 160-170 | 3.853   | 1611    | 99.9,99.9  |
| 180 | 12.65                 | 12.68 | 12.79 | 12.84 | 12.65 | 12.68 | 12.79 | 12.84 | 170-180 | 1.259   | 1613    | 100,100    |
| DEG | LUMINOUS INTENSITY:cd |       |       |       |       |       |       |       |         | UNIT:lm |         |            |

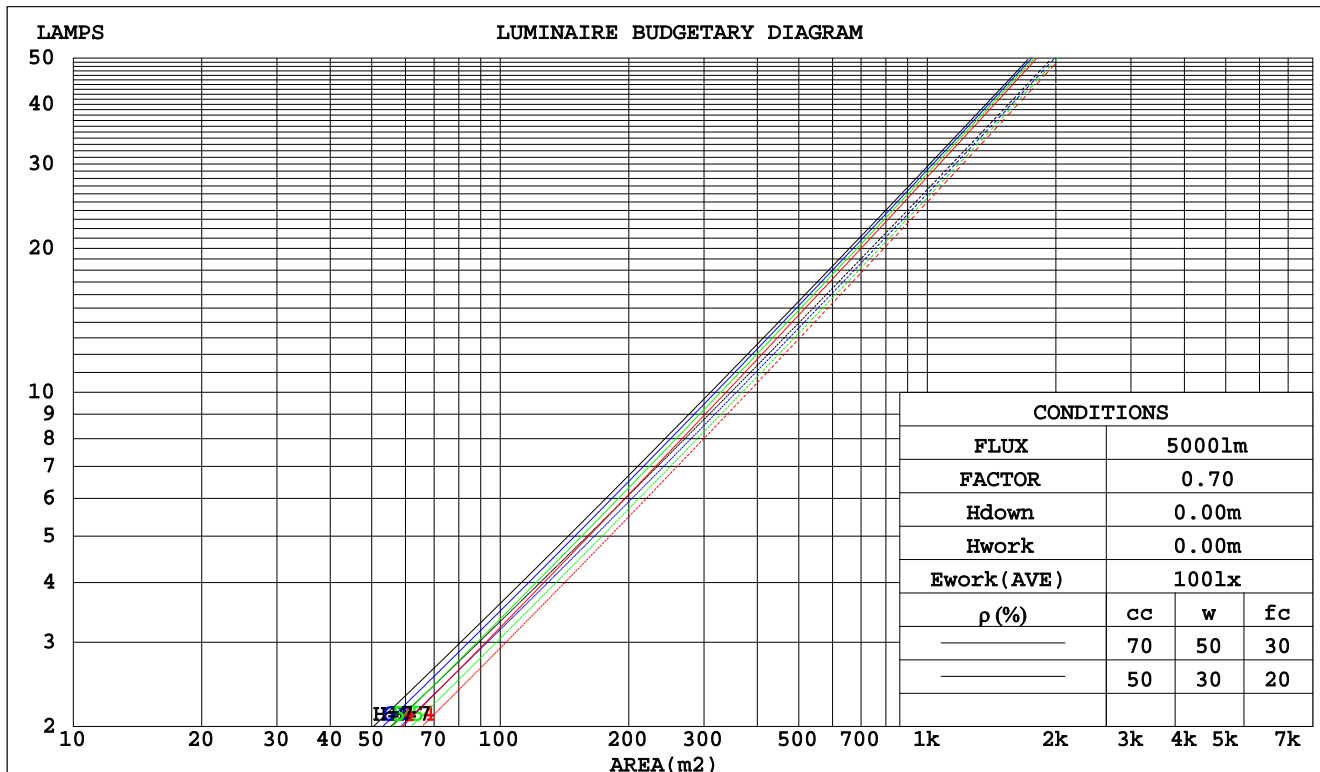
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-08-01

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.610m [K=1.0000]  
Remarks:

### CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|   |        |                   |
|---|--------|-------------------|
| Test:U:226.6V I:0.0900A P:19.40W PF:0.9540 Lamp Flux:1612.55x1 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 | 1.08 | 1.09 | 1.07 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | .00  | .99  | .97 | .96 | .95 | .93 |
| 2.0  | 1.06                            | 1.03 | .00  | 1.04 | 1.01 | .99  | 1.00 | .98  | .96  | .97  | .95  | .94  | .94 | .93 | .91 | .90 |
| 3.0  | 1.01                            | .97  | .94  | .99  | .96  | .93  | .96  | .93  | .91  | .94  | .91  | .89  | .91 | .89 | .88 | .86 |
| 4.0  | .96                             | .92  | .89  | .95  | .91  | .88  | .93  | .90  | .87  | .91  | .88  | .86  | .89 | .86 | .85 | .83 |
| 5.0  | .93                             | .88  | .85  | .91  | .87  | .84  | .90  | .86  | .83  | .88  | .85  | .82  | .86 | .84 | .82 | .80 |
| 6.0  | .89                             | .85  | .81  | .88  | .84  | .81  | .87  | .83  | .80  | .85  | .82  | .80  | .84 | .81 | .79 | .78 |
| 7.0  | .86                             | .81  | .78  | .85  | .81  | .78  | .84  | .80  | .77  | .83  | .79  | .77  | .81 | .78 | .76 | .75 |
| 8.0  | .83                             | .79  | .76  | .82  | .78  | .75  | .81  | .78  | .75  | .80  | .77  | .74  | .79 | .76 | .74 | .73 |
| 9.0  | .80                             | .76  | .73  | .80  | .76  | .73  | .79  | .75  | .73  | .78  | .75  | .72  | .77 | .74 | .72 | .71 |
| 10.0 | .78                             | .74  | .71  | .78  | .73  | .71  | .77  | .73  | .70  | .76  | .73  | .70  | .75 | .72 | .70 | .69 |



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: ZhangXiao  
Test Date: 2016-08-01

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.610m [K=1.0000]  
Remarks:

### WEC AND CCEC

|   |        |                   |
|---|--------|-------------------|
| Test:U:226.6V I:0.0900A P:19.40W PF:0.9540 Lamp Flux:1612.55x1 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  | .150                  | .085 | .027 | .142 | .081 | .026 | .128                            | .074 | .023 | .115 | .067 | .021 | .104 | .060 | .019 |   |  |
| 2.0  | .138                  | .076 | .023 | .132 | .073 | .022 | .120                            | .067 | .021 | .109 | .061 | .019 | .100 | .056 | .018 |   |  |
| 3.0  | .128                  | .068 | .020 | .123 | .066 | .020 | .113                            | .061 | .019 | .104 | .057 | .018 | .096 | .053 | .016 |   |  |
| 4.0  | .120                  | .062 | .018 | .116 | .061 | .018 | .107                            | .057 | .017 | .099 | .053 | .016 | .092 | .050 | .015 |   |  |
| 5.0  | .113                  | .058 | .017 | .109 | .056 | .016 | .102                            | .053 | .016 | .095 | .050 | .015 | .088 | .047 | .014 |   |  |
| 6.0  | .107                  | .053 | .015 | .103 | .052 | .015 | .097                            | .050 | .014 | .091 | .047 | .014 | .085 | .045 | .013 |   |  |
| 7.0  | .101                  | .050 | .014 | .098 | .049 | .014 | .092                            | .047 | .013 | .087 | .045 | .013 | .082 | .043 | .013 |   |  |
| 8.0  | .096                  | .047 | .013 | .094 | .046 | .013 | .088                            | .044 | .013 | .084 | .042 | .012 | .079 | .041 | .012 |   |  |
| 9.0  | .092                  | .044 | .012 | .089 | .044 | .012 | .085                            | .042 | .012 | .081 | .040 | .012 | .076 | .039 | .011 |   |  |
| 10.0 | .088                  | .042 | .012 | .086 | .041 | .012 | .081                            | .040 | .011 | .078 | .039 | .011 | .074 | .037 | .011 |   |  |

| 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 | .070 | .070 | .070 | .023 | .023 | .023 |   |  |
| 1.0  | .189                  | .178 | .167 | .162 | .152 | .144 | .111                                       | .105 | .099 | .064 | .061 | .058 | .020 | .020 | .019 |   |  |
| 2.0  | .172                  | .153 | .137 | .147 | .132 | .118 | .101                                       | .091 | .082 | .058 | .053 | .048 | .019 | .017 | .016 |   |  |
| 3.0  | .158                  | .134 | .115 | .135 | .115 | .099 | .093                                       | .080 | .070 | .054 | .047 | .041 | .017 | .015 | .013 |   |  |
| 4.0  | .145                  | .118 | .098 | .125 | .102 | .085 | .086                                       | .071 | .060 | .050 | .042 | .035 | .016 | .014 | .012 |   |  |
| 5.0  | .135                  | .106 | .085 | .116 | .092 | .074 | .080                                       | .064 | .052 | .046 | .038 | .031 | .015 | .012 | .010 |   |  |
| 6.0  | .127                  | .097 | .075 | .109 | .084 | .065 | .075                                       | .059 | .046 | .044 | .034 | .027 | .014 | .011 | .009 |   |  |
| 7.0  | .119                  | .089 | .067 | .102 | .077 | .058 | .071                                       | .054 | .041 | .041 | .032 | .025 | .013 | .010 | .008 |   |  |
| 8.0  | .113                  | .082 | .061 | .097 | .071 | .053 | .067                                       | .050 | .038 | .039 | .029 | .022 | .013 | .010 | .007 |   |  |
| 9.0  | .107                  | .076 | .056 | .092 | .066 | .048 | .064                                       | .047 | .034 | .037 | .027 | .021 | .012 | .009 | .007 |   |  |
| 10.0 | .102                  | .072 | .051 | .088 | .062 | .045 | .061                                       | .044 | .032 | .036 | .026 | .019 | .012 | .008 | .006 |   |  |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-08-01

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.610m [K=1.0000]  
Remarks:

### Uncorrected UGR Table

|   |                  |      |      |      |        |                |      |                   |      |      |
|---|------------------|------|------|------|--------|----------------|------|-------------------|------|------|
| Test:U:226.6V I:0.0900A P:19.40W PF:0.9540 Lamp Flux:1612.55x1 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   | 12.1             | 12.8 | 12.3 | 13.0 | 13.1   | 10.9           | 11.6 | 11.1              | 11.8 | 12.0 |
| 3H  | 12.2             | 12.9 | 12.5 | 13.1 | 13.3   | 11.2           | 11.8 | 11.5              | 12.1 | 12.3 |
| 4H  | 12.4             | 13.0 | 12.7 | 13.3 | 13.5   | 11.5           | 12.1 | 11.8              | 12.3 | 12.6 |
| 6H  | 12.7             | 13.3 | 13.0 | 13.5 | 13.8   | 11.9           | 12.4 | 12.2              | 12.7 | 13.0 |
| 8H  | 12.9             | 13.4 | 13.2 | 13.7 | 14.0   | 12.1           | 12.7 | 12.5              | 13.0 | 13.3 |
| 12H   | 13.1             | 13.7 | 13.5 | 14.0 | 14.3   | 12.5           | 13.0 | 12.8              | 13.3 | 13.6 |
| 4H 2H   | 12.0             | 12.6 | 12.3 | 12.8 | 13.1   | 10.8           | 11.4 | 11.1              | 11.7 | 12.0 |
| 3H  | 12.3             | 12.8 | 12.6 | 13.1 | 13.4   | 11.3           | 11.9 | 11.7              | 12.2 | 12.5 |
| 4H  | 12.5             | 13.0 | 12.9 | 13.4 | 13.7   | 11.7           | 12.2 | 12.1              | 12.6 | 12.9 |
| 6H  | 13.0             | 13.4 | 13.4 | 13.8 | 14.2   | 12.4           | 12.8 | 12.8              | 13.2 | 13.6 |
| 8H  | 13.3             | 13.7 | 13.8 | 14.1 | 14.5   | 12.8           | 13.2 | 13.2              | 13.6 | 14.0 |
| 12H   | 13.8             | 14.1 | 14.2 | 14.5 | 15.0   | 13.3           | 13.7 | 13.8              | 14.1 | 14.6 |
| 8H 4H   | 12.6             | 13.0 | 13.0 | 13.4 | 13.8   | 11.9           | 12.3 | 12.3              | 12.7 | 13.1 |
| 6H  | 13.3             | 13.6 | 13.7 | 14.0 | 14.5   | 12.7           | 13.1 | 13.2              | 13.5 | 14.0 |
| 8H  | 13.7             | 14.0 | 14.2 | 14.5 | 15.0   | 13.3           | 13.6 | 13.8              | 14.1 | 14.6 |
| 12H   | 14.4             | 14.6 | 14.9 | 15.1 | 15.6   | 14.2           | 14.4 | 14.7              | 14.9 | 15.4 |
| 12H 4H  | 12.6             | 13.0 | 13.1 | 13.4 | 13.8   | 11.9           | 12.3 | 12.3              | 12.7 | 13.1 |
| 6H  | 13.3             | 13.6 | 13.8 | 14.1 | 14.6   | 12.8           | 13.1 | 13.3              | 13.6 | 14.1 |
| 8H  | 13.9             | 14.2 | 14.4 | 14.7 | 15.2   | 13.5           | 13.8 | 14.0              | 14.3 | 14.8 |
| Variations with the observer position at spacings:                |                  |      |      |      |        |                |      |                   |      |      |
| S = 1.0H  | + 0.5 / - 0.4    |      |      |      |        | + 0.4 / - 0.4  |      |                   |      |      |
| 1.5H  | + 0.9 / - 0.3    |      |      |      |        | + 0.7 / - 0.2  |      |                   |      |      |
| 2.0H  | + 0.1 / - 0.2    |      |      |      |        | + 0.1 / - 0.2  |      |                   |      |      |

CIE Pub.117 Corrected 1613 lm Total Lamp Luminous Flux.(8log(F/F0) = 1.7)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-08-01

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.610m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

|   |        |                   |
|---|--------|-------------------|
| Test:U:226.6V I:0.0900A P:19.40W PF:0.9540 Lamp Flux:1612.55x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |

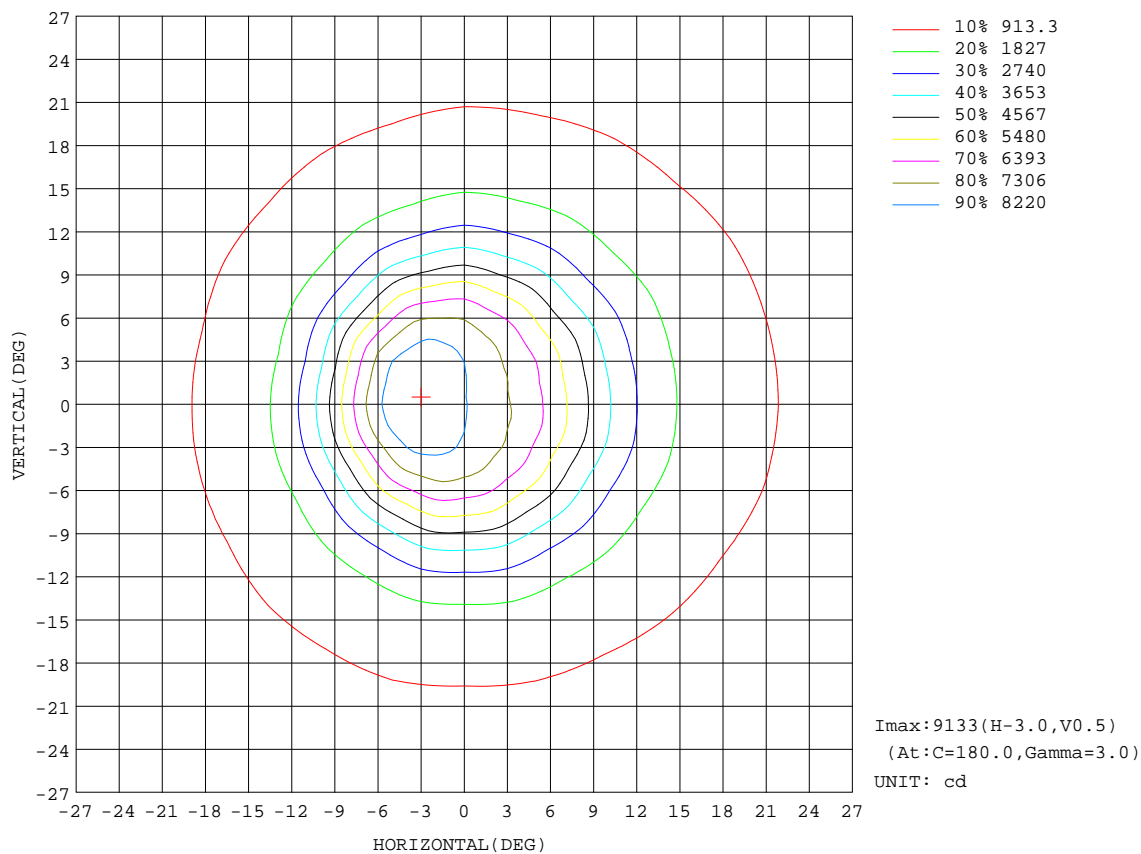
| REFLECTANCE                      |   |     |           |     |     |     |     |               |     |        |
|----------------------------------|---|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling                          | 0.8   | 0.8 | 0.8       | 0.7 | 0.7 | 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 88  | 82  | 79        | 88  | 82  | 79  | 87  | 82            | 78  | 75     |
| 0.80                             | 95  | 90  | 86        | 95  | 89  | 86  | 93  | 89            | 86  | 82     |
| 1.00                             | 99  | 94  | 90        | 98  | 93  | 90  | 97  | 93            | 89  | 85     |
| 1.25                             | 103   | 98  | 95        | 102 | 97  | 94  | 100 | 96            | 93  | 89     |
| 1.50                             | 106   | 101 | 98        | 104 | 100 | 97  | 102 | 98            | 96  | 91     |
| 2.00                             | 108   | 104 | 101       | 106 | 103 | 100 | 103 | 100           | 98  | 92     |
| 2.50                             | 110   | 106 | 103       | 108 | 105 | 102 | 104 | 102           | 100 | 93     |
| 3.00                             | 111   | 108 | 105       | 109 | 106 | 104 | 105 | 103           | 101 | 94     |
| 4.00                             | 113   | 110 | 108       | 111 | 109 | 107 | 107 | 105           | 104 | 96     |
| 5.00                             | 114   | 112 | 110       | 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:2016-08-01

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.610m [K=1.0000]  
Remarks:

### ISOCANDELA DIAGRAM

|   |        |                   |
|---|--------|-------------------|
| Test:U:226.6V I:0.0900A P:19.40W PF:0.9540 Lamp Flux:1612.55x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |



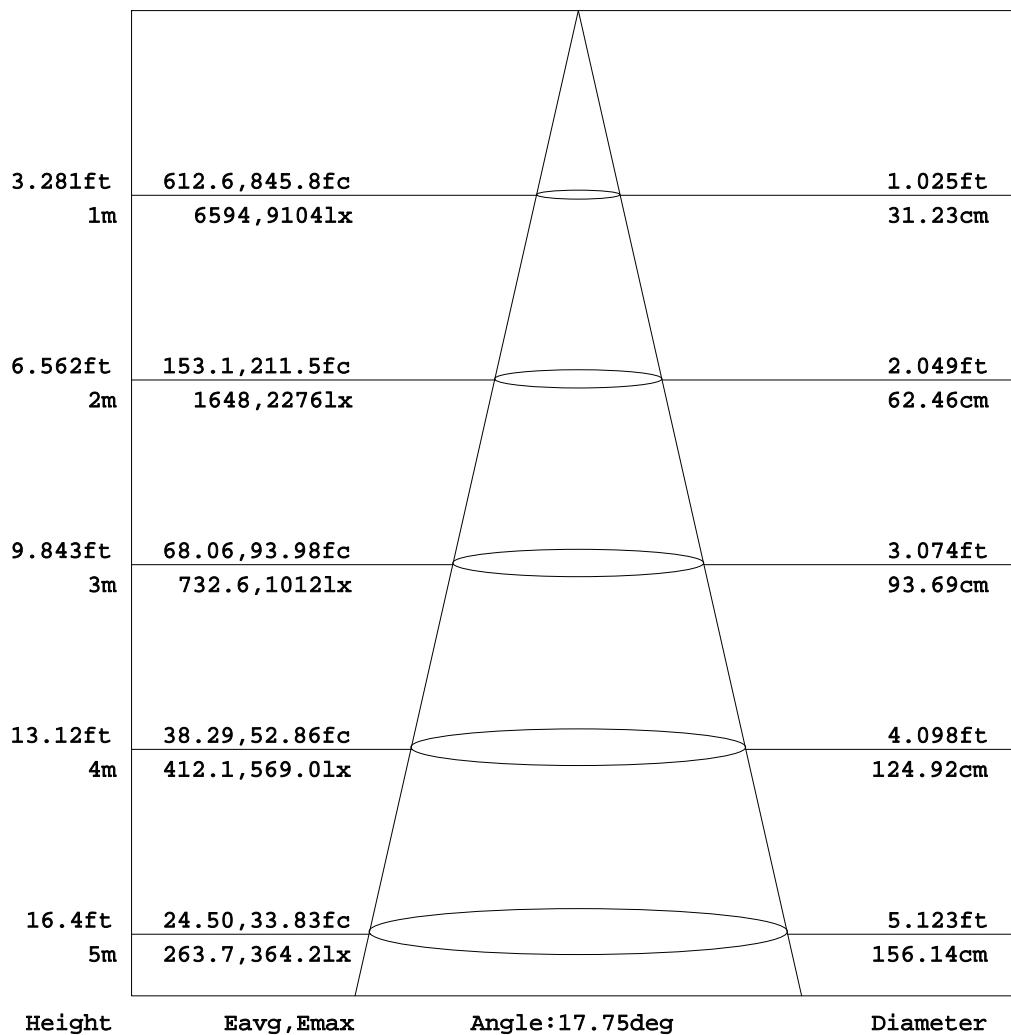
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: ZhangXiao  
 Test Date: 2016-08-01

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
 Humidity: 65.0%  
 Test Distance: 6.610m [K=1.0000]  
 Remarks:

### AAI Figure

|   |        |                   |
|---|--------|-------------------|
| Test:U:226.6V I:0.0900A P:19.40W PF:0.9540 Lamp Flux:1612.55x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |

Flux out:519.6 lm



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

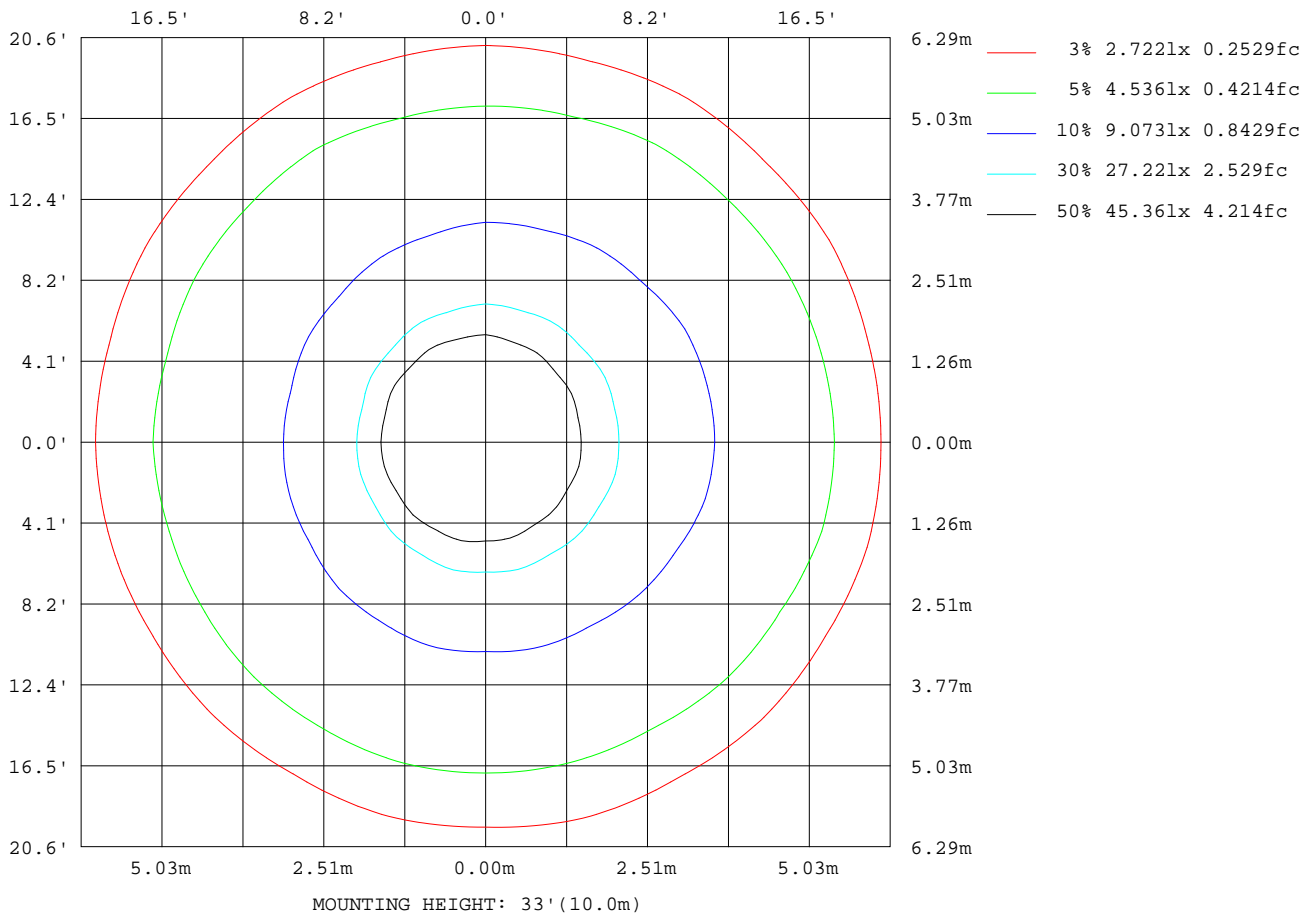
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-08-01

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.610m [K=1.0000]  
Remarks:



### ISOLUX DIAGRAM

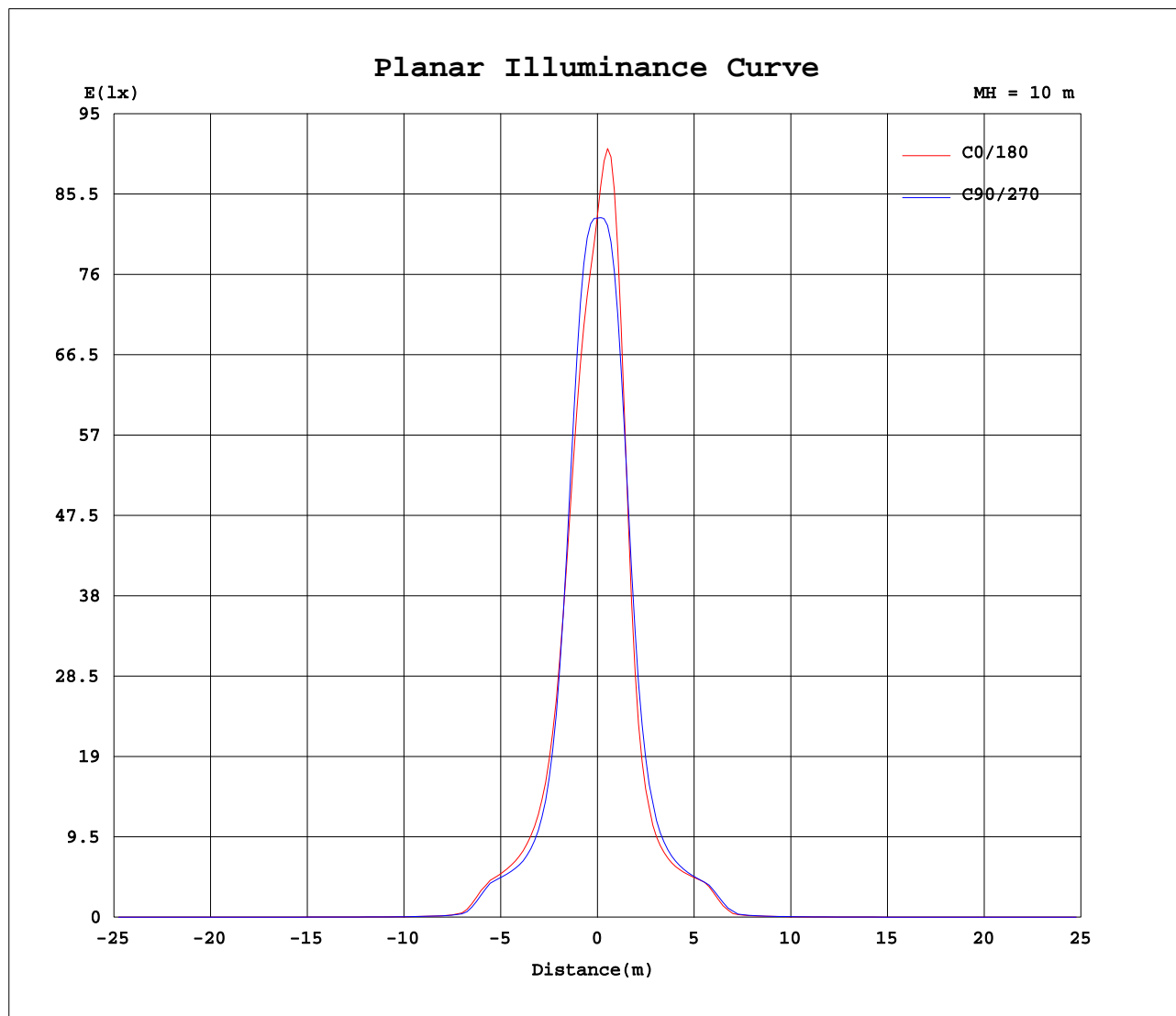
|   |        |                   |
|---|--------|-------------------|
| Test:U:226.6V I:0.0900A P:19.40W PF:0.9540 Lamp Flux:1612.55x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: ZhangXiao  
Test Date: 2016-08-01

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.610m [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: 2016-08-01

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.610m [K=1.0000]  
Remarks:

### LUMINOUS DISTRIBUTION INTENSITY DATA

|   |  |  |  |  |  |  |  |  |  |        |  |  |  |  |                   |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--------|--|--|--|--|-------------------|--|--|--|--|
| Test:U:226.6V I:0.0900A P:19.40W PF:0.9540 Lamp Flux:1612.55x1 lm |  |  |  |  |  |  |  |  |  |        |  |  |  |  |                   |  |  |  |  |
| NAME:   |  |  |  |  |  |  |  |  |  | TYPE:  |  |  |  |  | WEIGHT:           |  |  |  |  |
| DIM.:   |  |  |  |  |  |  |  |  |  | SPEC.: |  |  |  |  | SERIAL No.:       |  |  |  |  |
| MFR.: Rayconn   |  |  |  |  |  |  |  |  |  | SUR.:  |  |  |  |  | PROTECTION ANGLE: |  |  |  |  |

Table--1

UNIT: cd

| 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                 | 8274 | 8274 | 8274 | 8274 | 8274 | 8274 | 8274 | 8274 | 8274 | 8274 | 8274 | 8274 | 8274 | 8274 | 8274 | 8274 | 8274 | 8274 | 8274 |
| 5                 | 6617 | 6653 | 6680 | 6833 | 6942 | 7201 | 7358 | 7669 | 7807 | 8167 | 8279 | 8608 | 8684 | 8599 | 8716 | 8454 | 8342 | 7954 | 7732 |
| 10                | 3750 | 3756 | 3639 | 3705 | 3648 | 3796 | 3751 | 3902 | 3777 | 3900 | 3731 | 3903 | 3909 | 3822 | 4168 | 4089 | 4358 | 4194 | 4312 |
| 15                | 1769 | 1747 | 1646 | 1626 | 1555 | 1582 | 1534 | 1569 | 1491 | 1523 | 1400 | 1457 | 1441 | 1375 | 1516 | 1480 | 1616 | 1625 | 1749 |
| 20                | 1046 | 1020 | 966  | 936  | 904  | 900  | 884  | 899  | 876  | 878  | 849  | 851  | 842  | 838  | 869  | 871  | 912  | 919  | 964  |
| 25                | 769  | 756  | 726  | 711  | 695  | 690  | 690  | 690  | 684  | 692  | 678  | 683  | 680  | 679  | 691  | 693  | 706  | 703  | 716  |
| 30                | 578  | 598  | 568  | 564  | 535  | 545  | 521  | 532  | 511  | 528  | 520  | 542  | 558  | 545  | 568  | 567  | 593  | 579  | 586  |
| 35                | 91.7 | 94.2 | 82.8 | 83.4 | 74.3 | 76.8 | 72.7 | 76.2 | 70.8 | 76.3 | 70.3 | 77.2 | 79.1 | 77.3 | 83.6 | 81.6 | 95.6 | 94.9 | 133  |
| 40                | 32.1 | 32.2 | 32.3 | 32.4 | 31.9 | 31.9 | 31.9 | 32.4 | 31.8 | 32.0 | 30.9 | 31.7 | 32.0 | 32.1 | 32.5 | 32.2 | 33.3 | 33.0 | 35.3 |
| 45                | 19.6 | 19.6 | 19.5 | 19.8 | 19.5 | 19.6 | 19.4 | 19.8 | 19.7 | 19.7 | 19.0 | 19.2 | 19.3 | 19.4 | 19.9 | 20.0 | 20.5 | 20.4 | 21.1 |
| 50                | 13.5 | 13.4 | 13.4 | 13.4 | 13.2 | 13.3 | 13.3 | 13.8 | 13.8 | 13.7 | 13.1 | 12.9 | 12.8 | 12.8 | 13.4 | 13.4 | 13.5 | 13.3 | 13.5 |
| 55                | 10.3 | 10.4 | 10.3 | 10.2 | 10.3 | 10.4 | 10.4 | 10.7 | 10.6 | 10.5 | 10.2 | 10.2 | 10.0 | 9.96 | 10.1 | 10.1 | 10.4 | 10.1 | 9.95 |
| 60                | 8.66 | 8.66 | 8.67 | 8.67 | 8.69 | 8.86 | 8.86 | 8.90 | 8.79 | 8.81 | 8.62 | 8.66 | 8.44 | 8.40 | 8.52 | 8.47 | 8.63 | 8.75 | 8.75 |
| 65                | 7.47 | 7.47 | 7.56 | 7.60 | 7.62 | 7.78 | 7.68 | 7.76 | 7.71 | 7.72 | 7.62 | 7.68 | 7.44 | 7.44 | 7.48 | 7.45 | 7.55 | 7.59 | 7.64 |
| 70                | 6.42 | 6.43 | 6.48 | 6.52 | 6.52 | 6.68 | 6.52 | 6.62 | 6.55 | 6.57 | 6.48 | 6.57 | 6.43 | 6.40 | 6.46 | 6.44 | 6.53 | 6.55 | 6.58 |
| 75                | 5.56 | 5.51 | 5.54 | 5.55 | 5.58 | 5.78 | 5.54 | 5.58 | 5.49 | 5.53 | 5.39 | 5.53 | 5.48 | 5.41 | 5.45 | 5.46 | 5.56 | 5.62 | 5.60 |
| 80                | 4.74 | 4.69 | 4.72 | 4.78 | 4.79 | 5.01 | 4.68 | 4.71 | 4.66 | 4.67 | 4.61 | 4.71 | 4.68 | 4.64 | 4.67 | 4.67 | 4.82 | 4.98 | 4.80 |
| 85                | 3.99 | 3.96 | 3.97 | 4.05 | 4.11 | 4.79 | 3.93 | 3.94 | 3.89 | 3.91 | 3.86 | 3.97 | 4.13 | 4.10 | 4.11 | 4.15 | 4.48 | 4.90 | 4.28 |
| 90                | 3.09 | 3.08 | 3.10 | 3.28 | 3.37 | 4.74 | 3.13 | 3.13 | 3.10 | 3.11 | 3.10 | 3.20 | 3.82 | 3.78 | 3.76 | 3.88 | 4.54 | 5.07 | 3.95 |
| 95                | 2.52 | 2.51 | 2.53 | 2.71 | 2.73 | 4.04 | 2.60 | 2.57 | 2.57 | 2.59 | 2.58 | 2.65 | 3.86 | 3.81 | 3.81 | 3.91 | 4.48 | 4.68 | 3.91 |
| 100               | 2.33 | 2.30 | 2.33 | 2.40 | 2.42 | 2.73 | 2.37 | 2.35 | 2.34 | 2.34 | 2.33 | 2.36 | 3.92 | 3.87 | 3.87 | 3.94 | 4.04 | 4.10 | 3.93 |
| 105               | 2.67 | 2.64 | 2.69 | 2.70 | 2.74 | 2.78 | 2.72 | 2.68 | 2.69 | 2.66 | 2.66 | 2.64 | 4.06 | 4.02 | 4.01 | 4.04 | 4.06 | 4.10 | 4.05 |
| 110               | 3.20 | 3.17 | 3.24 | 3.23 | 3.29 | 3.30 | 3.30 | 3.29 | 3.31 | 3.29 | 3.29 | 3.29 | 4.29 | 4.26 | 4.24 | 4.25 | 4.27 | 4.29 | 4.26 |
| 115               | 3.67 | 3.64 | 3.72 | 3.71 | 3.78 | 3.78 | 3.83 | 3.83 | 3.86 | 3.85 | 3.87 | 3.87 | 4.62 | 4.60 | 4.58 | 4.57 | 4.56 | 4.57 | 4.55 |
| 120               | 4.17 | 4.14 | 4.24 | 4.22 | 4.32 | 4.31 | 4.39 | 4.38 | 4.43 | 4.41 | 4.43 | 4.41 | 5.14 | 5.11 | 5.08 | 5.07 | 5.05 | 5.04 | 5.02 |
| 125               | 5.10 | 5.05 | 5.18 | 5.16 | 5.30 | 5.27 | 5.38 | 5.36 | 5.42 | 5.37 | 5.39 | 5.34 | 6.01 | 5.99 | 5.94 | 5.93 | 5.89 | 5.89 | 5.84 |
| 130               | 6.85 | 6.79 | 6.94 | 6.89 | 7.04 | 6.99 | 7.08 | 7.01 | 7.06 | 7.00 | 6.99 | 6.91 | 7.42 | 7.40 | 7.36 | 7.36 | 7.30 | 7.32 | 7.27 |
| 135               | 8.90 | 8.82 | 8.98 | 8.92 | 9.08 | 9.01 | 9.11 | 9.04 | 9.08 | 9.03 | 9.03 | 8.95 | 9.24 | 9.21 | 9.18 | 9.16 | 9.11 | 9.13 | 9.07 |
| 140               | 10.6 | 10.5 | 10.7 | 10.6 | 10.8 | 10.8 | 10.8 | 10.8 | 10.8 | 10.8 | 10.8 | 10.8 | 11.0 | 10.9 | 10.9 | 10.9 | 10.8 | 10.8 | 10.8 |
| 145               | 11.7 | 11.7 | 11.8 | 11.8 | 11.9 | 11.9 | 11.9 | 11.9 | 11.9 | 12.0 | 12.0 | 12.0 | 12.1 | 12.1 | 12.1 | 12.0 | 12.0 | 12.0 | 12.0 |
| 150               | 12.5 | 12.4 | 12.6 | 12.5 | 12.6 | 12.6 | 12.7 | 12.6 | 12.6 | 12.7 | 12.6 | 12.7 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |
| 155               | 13.0 | 12.9 | 13.0 | 13.0 | 13.1 | 13.1 | 13.1 | 13.1 | 13.1 | 13.1 | 13.1 | 13.1 | 13.3 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 |
| 160               | 13.4 | 13.3 | 13.4 | 13.3 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.5 | 13.4 | 13.5 | 13.4 | 13.5 | 13.4 | 13.5 |
| 165               | 13.7 | 13.6 | 13.7 | 13.6 | 13.7 | 13.6 | 13.7 | 13.7 | 13.6 | 13.7 | 13.6 | 13.7 | 13.7 | 13.6 | 13.7 | 13.6 | 13.7 | 13.7 | 13.7 |
| 170               | 13.6 | 13.5 | 13.6 | 13.5 | 13.5 | 13.5 | 13.5 | 13.5 | 13.5 | 13.5 | 13.5 | 13.6 | 13.6 | 13.5 | 13.6 | 13.5 | 13.6 | 13.6 | 13.7 |
| 175               | 12.8 | 12.7 | 12.7 | 12.7 | 12.8 | 12.8 | 12.8 | 12.9 | 12.9 | 13.0 | 13.0 | 13.1 | 13.1 | 13.0 | 13.1 | 13.0 | 13.1 | 13.1 | 13.1 |
| 180               | 12.7 | 12.6 | 12.7 | 12.7 | 12.8 | 12.7 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 12.6 | 12.7 | 12.7 | 12.8 | 12.7 | 12.8 |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-08-01

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.610m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|   |  |  |        |  |                   |
|---|--|--|--------|--|-------------------|
| Test:U:226.6V I:0.0900A P:19.40W PF:0.9540 Lamp Flux:1612.55x1 lm |  |  |        |  |                   |
| NAME:   |  |  | TYPE:  |  | WEIGHT:           |
| DIM.:   |  |  | SPEC.: |  | SERIAL No.:       |
| MFR.: Rayconn   |  |  | SUR.:  |  | PROTECTION ANGLE: |

Table--2

UNIT: cd

| C(DEC)<br>γ (DEC) | 285  | 300  | 315  | 330  | 345  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                 | 8274 | 8274 | 8274 | 8274 | 8274 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                 | 7354 | 7144 | 6879 | 6764 | 6628 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                | 4086 | 4093 | 3884 | 3908 | 3763 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                | 1720 | 1792 | 1756 | 1825 | 1782 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                | 966  | 997  | 1002 | 1043 | 1047 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                | 720  | 742  | 748  | 754  | 769  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                | 581  | 602  | 592  | 608  | 578  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                | 109  | 141  | 109  | 137  | 94.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                | 36.8 | 37.7 | 36.4 | 35.7 | 32.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                | 21.4 | 22.1 | 21.8 | 21.0 | 19.9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                | 13.7 | 14.1 | 14.1 | 13.8 | 13.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                | 10.1 | 10.3 | 10.5 | 10.3 | 10.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                | 8.79 | 8.82 | 8.84 | 8.70 | 8.43 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                | 7.72 | 7.75 | 7.65 | 7.52 | 7.31 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                | 6.60 | 6.70 | 6.59 | 6.54 | 6.33 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                | 5.62 | 5.70 | 5.62 | 5.58 | 5.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                | 4.82 | 4.87 | 4.79 | 4.75 | 4.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                | 4.25 | 4.30 | 4.22 | 4.19 | 4.15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                | 3.84 | 3.85 | 3.79 | 3.76 | 3.76 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                | 3.86 | 3.85 | 3.82 | 3.79 | 3.81 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100               | 3.91 | 3.90 | 3.88 | 3.84 | 3.86 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105               | 4.05 | 4.03 | 4.02 | 3.98 | 4.01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110               | 4.26 | 4.23 | 4.25 | 4.20 | 4.24 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115               | 4.56 | 4.52 | 4.54 | 4.49 | 4.53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120               | 5.02 | 4.98 | 5.01 | 4.95 | 4.99 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125               | 5.86 | 5.79 | 5.85 | 5.77 | 5.84 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130               | 7.31 | 7.23 | 7.32 | 7.25 | 7.37 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135               | 9.14 | 9.04 | 9.14 | 9.07 | 9.21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140               | 10.8 | 10.7 | 10.8 | 10.7 | 10.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145               | 12.0 | 11.9 | 12.0 | 11.9 | 12.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150               | 12.8 | 12.7 | 12.7 | 12.6 | 12.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155               | 13.2 | 13.1 | 13.2 | 13.1 | 13.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160               | 13.5 | 13.4 | 13.5 | 13.4 | 13.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165               | 13.7 | 13.7 | 13.7 | 13.7 | 13.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170               | 13.7 | 13.6 | 13.7 | 13.7 | 13.7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175               | 13.1 | 13.0 | 13.1 | 13.0 | 13.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180               | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-08-01

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.610m [K=1.0000]  
Remarks: