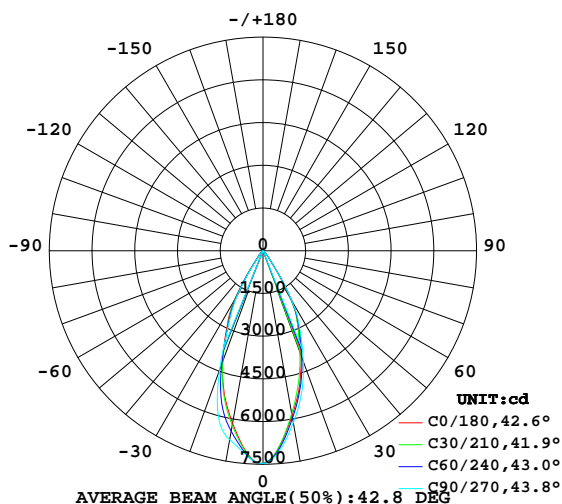


## LUMINAIRE PHOTOMETRIC TEST REPORT

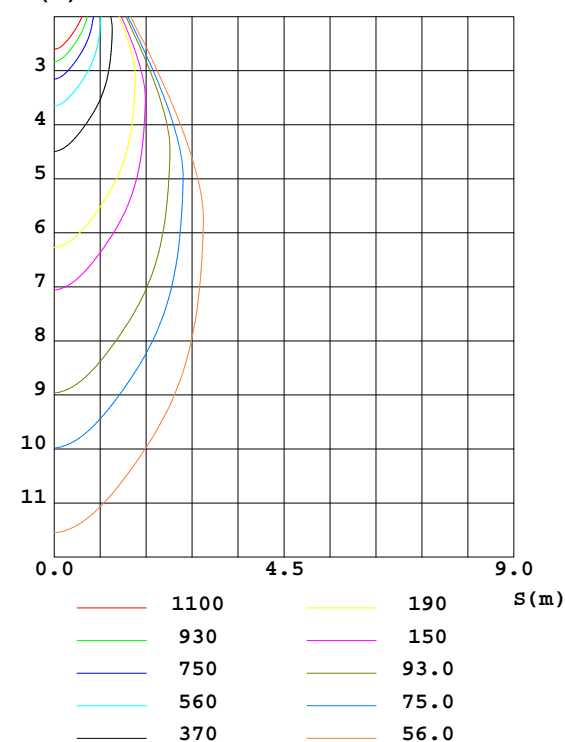
|   |        |                   |
|---|--------|-------------------|
| Test:U:226.6V I:0.1790A P:38.60W PF:0.9490 Lamp Flux:4274.31x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |

| DATA OF LAMP     |                      | PHOTOMETRIC DATA Eff: 110.73 lm/W |        |                        |          |
|------------------|----------------------|-----------------------------------|--------|------------------------|----------|
| MODEL            | DL18-40W-840-W-45-02 | Imax(cd)                          | 7467   | S/MH(C0/180)           | 0.65     |
| NOMINAL POWER(W) | 38                   | LOR(%)                            | 100.0  | S/MH(C90/270)          | 0.68     |
| RATED VOLTAGE(V) | 226                  | TOTAL FLUX(lm)                    | 4274.3 | $\eta$ UP,DN(C0-180)   | 1.3,48.7 |
| NOMINAL FLUX(lm) | 4274.31              | CIE CLASS                         | DIRECT | $\eta$ UP,DN(C180-360) | 1.4,48.6 |
| LAMPS INSIDE     | 1                    | $\eta$ up(%)                      | 2.7    | CIBSE SHR NOM          | 0.75     |
| TEST VOLTAGE(V)  | 226.6                | $\eta$ down(%)                    | 97.3   | CIBSE SHR MAX          | 0.75     |

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

$\gamma$  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:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

| γ   | C0                    | C45   | C90   | C135  | C180  | C225  | C270  | C315  | γ       | Φ zone  | Φ total | %lum, lamp |
|-----|-----------------------|-------|-------|-------|-------|-------|-------|-------|---------|---------|---------|------------|
| 10  | 5879                  | 5894  | 6135  | 6157  | 6153  | 6266  | 6742  | 6432  | 0- 10   | 643.1   | 643.1   | 15.15      |
| 20  | 3898                  | 3897  | 4142  | 4136  | 4148  | 4094  | 4456  | 4261  | 10- 20  | 1461    | 2104    | 49.2,49.2  |
| 30  | 1936                  | 2030  | 2009  | 2087  | 2009  | 1852  | 1776  | 1779  | 20- 30  | 1362    | 3466    | 81.1,81.1  |
| 40  | 272.9                 | 310.3 | 265.2 | 281.1 | 258.4 | 226.5 | 203.0 | 208.0 | 30- 40  | 501.4   | 3968    | 92.8,92.8  |
| 50  | 71.68                 | 79.38 | 68.01 | 70.34 | 65.88 | 60.48 | 57.26 | 57.80 | 40- 50  | 103.7   | 4072    | 95.3,95.3  |
| 60  | 30.59                 | 31.69 | 30.54 | 31.40 | 30.28 | 29.27 | 28.93 | 28.68 | 50- 60  | 39.31   | 4111    | 96.2,96.2  |
| 70  | 18.02                 | 18.29 | 18.13 | 18.42 | 18.14 | 17.94 | 17.39 | 17.44 | 60- 70  | 23.03   | 4134    | 96.7,96.7  |
| 80  | 11.68                 | 11.87 | 11.64 | 11.76 | 12.33 | 12.63 | 12.26 | 12.34 | 70- 80  | 15.51   | 4149    | 97.1,97.1  |
| 90  | 8.141                 | 8.894 | 8.137 | 8.149 | 9.613 | 10.85 | 9.752 | 9.709 | 80- 90  | 11.58   | 4161    | 97.3,97.3  |
| 100 | 8.043                 | 8.239 | 8.059 | 8.085 | 10.31 | 10.58 | 10.36 | 10.38 | 90-100  | 9.920   | 4171    | 97.6,97.6  |
| 110 | 9.873                 | 9.723 | 9.676 | 9.678 | 12.01 | 12.19 | 12.13 | 12.18 | 100-110 | 10.49   | 4181    | 97.8,97.8  |
| 120 | 13.85                 | 13.59 | 13.68 | 13.58 | 15.43 | 15.61 | 15.68 | 15.76 | 110-120 | 12.50   | 4194    | 98.1,98.1  |
| 130 | 19.78                 | 19.65 | 19.71 | 19.50 | 20.74 | 20.83 | 20.87 | 21.06 | 120-130 | 15.49   | 4209    | 98.5,98.5  |
| 140 | 26.48                 | 26.31 | 26.21 | 26.06 | 26.94 | 27.00 | 26.91 | 27.12 | 130-140 | 18.11   | 4227    | 98.9,98.9  |
| 150 | 31.72                 | 31.61 | 31.52 | 31.41 | 32.14 | 32.20 | 32.17 | 32.35 | 140-150 | 18.45   | 4246    | 99.3,99.3  |
| 160 | 33.97                 | 33.93 | 33.93 | 33.80 | 34.33 | 34.34 | 34.29 | 34.25 | 150-160 | 15.35   | 4261    | 99.7,99.7  |
| 170 | 34.47                 | 34.27 | 34.13 | 34.36 | 34.78 | 34.94 | 34.83 | 34.70 | 160-170 | 9.744   | 4271    | 99.9,99.9  |
| 180 | 35.18                 | 35.25 | 35.37 | 35.35 | 35.17 | 35.25 | 35.36 | 35.35 | 170-180 | 3.318   | 4274    | 100,100    |
| DEG | LUMINOUS INTENSITY:cd |       |       |       |       |       |       |       |         | UNIT:lm |         |            |

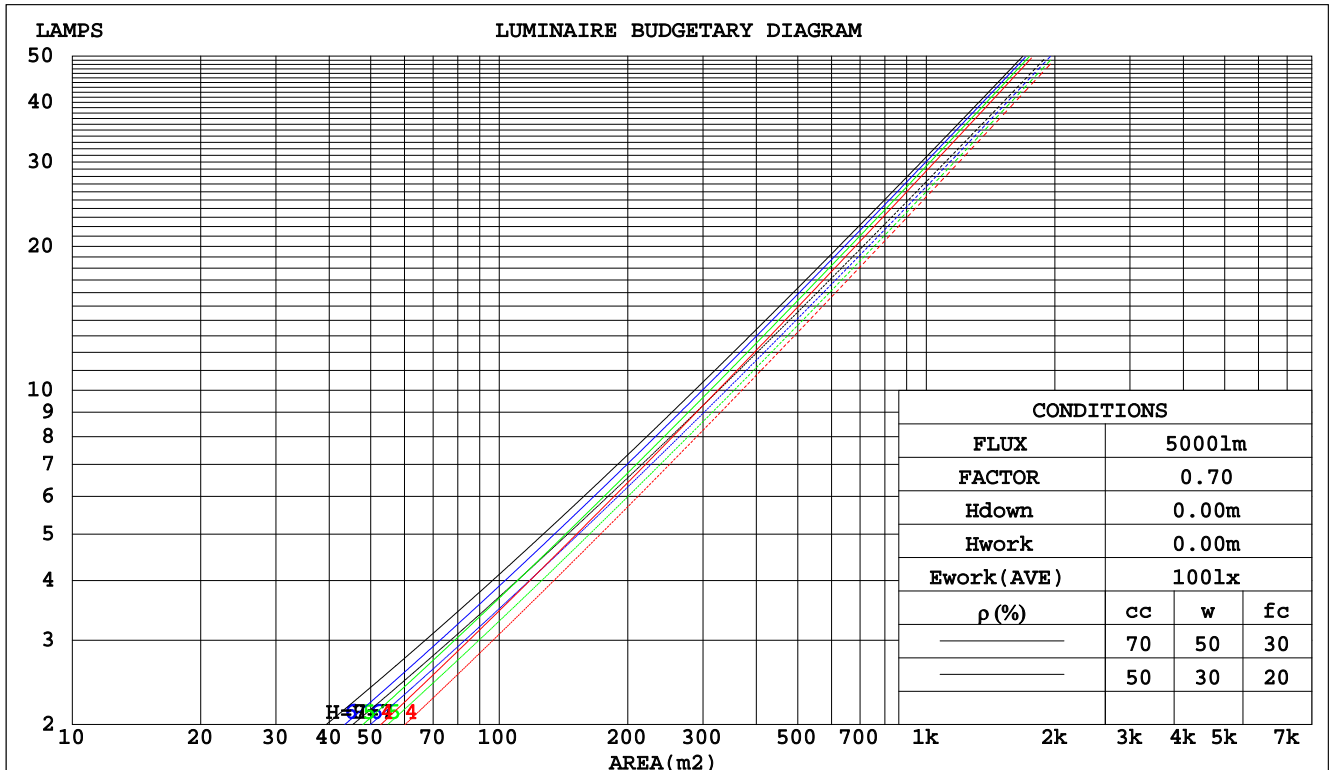
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-08-01

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:0.1790A P:38.60W PF:0.9490 Lamp Flux:4274.31lx1 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  | 1.10                  | 1.08 | 1.06 | 1.08 | 1.06 | 1.04 | 1.04                            | 1.02 | 1.00 | .99  | .98  | .97  | .96 | .95 | .94 | .92 |
| 2.0  | 1.03                  | .00  | .96  | 1.01 | .98  | .95  | .98                             | .95  | .93  | .94  | .92  | .90  | .91 | .90 | .88 | .86 |
| 3.0  | .97                   | .92  | .89  | .96  | .91  | .88  | .93                             | .89  | .86  | .90  | .87  | .85  | .87 | .85 | .83 | .81 |
| 4.0  | .92                   | .86  | .83  | .90  | .86  | .82  | .88                             | .84  | .81  | .86  | .82  | .79  | .83 | .81 | .78 | .77 |
| 5.0  | .86                   | .81  | .77  | .85  | .80  | .77  | .83                             | .79  | .76  | .81  | .78  | .75  | .80 | .77 | .74 | .73 |
| 6.0  | .82                   | .76  | .72  | .81  | .76  | .72  | .79                             | .75  | .71  | .78  | .74  | .71  | .76 | .73 | .70 | .69 |
| 7.0  | .78                   | .72  | .68  | .77  | .72  | .68  | .75                             | .71  | .68  | .74  | .70  | .67  | .73 | .69 | .67 | .65 |
| 8.0  | .74                   | .68  | .65  | .73  | .68  | .64  | .72                             | .67  | .64  | .71  | .67  | .64  | .70 | .66 | .63 | .62 |
| 9.0  | .70                   | .65  | .61  | .70  | .65  | .61  | .69                             | .64  | .61  | .68  | .64  | .61  | .67 | .63 | .60 | .59 |
| 10.0 | .67                   | .62  | .58  | .67  | .62  | .58  | .66                             | .61  | .58  | .65  | .61  | .58  | .64 | .60 | .57 | .56 |



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:0.1790A P:38.60W PF:0.9490 Lamp Flux:4274.31lx1 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  | .171                  | .098 | .031 | .164 | .094 | .030 | .150                            | .086 | .027 | .137 | .079 | .025 | .125 | .072 | .023 |   |
| 2.0  | .161                  | .088 | .027 | .155 | .085 | .026 | .143                            | .080 | .025 | .132 | .074 | .023 | .122 | .069 | .022 |   |
| 3.0  | .152                  | .081 | .024 | .147 | .078 | .024 | .136                            | .074 | .022 | .127 | .070 | .021 | .118 | .065 | .020 |   |
| 4.0  | .144                  | .075 | .022 | .139 | .073 | .022 | .130                            | .069 | .021 | .122 | .065 | .020 | .114 | .062 | .019 |   |
| 5.0  | .136                  | .069 | .020 | .132 | .068 | .020 | .124                            | .065 | .019 | .117 | .062 | .018 | .111 | .059 | .018 |   |
| 6.0  | .130                  | .065 | .019 | .126 | .064 | .018 | .119                            | .061 | .018 | .113 | .059 | .017 | .107 | .056 | .017 |   |
| 7.0  | .124                  | .061 | .017 | .121 | .060 | .017 | .114                            | .058 | .017 | .109 | .056 | .016 | .103 | .054 | .016 |   |
| 8.0  | .118                  | .058 | .016 | .115 | .057 | .016 | .110                            | .055 | .016 | .105 | .053 | .015 | .100 | .051 | .015 |   |
| 9.0  | .113                  | .055 | .015 | .111 | .054 | .015 | .106                            | .052 | .015 | .101 | .051 | .015 | .097 | .049 | .014 |   |
| 10.0 | .109                  | .052 | .014 | .106 | .051 | .014 | .102                            | .050 | .014 | .098 | .048 | .014 | .094 | .047 | .014 |   |

| pcc  | 80%                   |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|--|------|------|------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |      |      |      |   |
| 0.0  | .211                  | .211 | .211 | .180                                       | .180 | .180 | .123 | .123 | .123 | .071 | .071 | .071 | .023 | .023 | .023 |   |
| 1.0  | .191                  | .178 | .166 | .164                                       | .153 | .143 | .112 | .105 | .099 | .064 | .061 | .057 | .021 | .020 | .019 |   |
| 2.0  | .175                  | .153 | .134 | .150                                       | .132 | .116 | .103 | .091 | .081 | .059 | .053 | .047 | .019 | .017 | .015 |   |
| 3.0  | .162                  | .134 | .112 | .139                                       | .116 | .097 | .096 | .080 | .068 | .055 | .047 | .040 | .018 | .015 | .013 |   |
| 4.0  | .152                  | .119 | .095 | .130                                       | .103 | .082 | .089 | .072 | .058 | .052 | .042 | .034 | .017 | .014 | .011 |   |
| 5.0  | .142                  | .108 | .082 | .122                                       | .093 | .071 | .084 | .065 | .050 | .049 | .038 | .030 | .016 | .012 | .010 |   |
| 6.0  | .135                  | .098 | .072 | .116                                       | .085 | .063 | .080 | .060 | .044 | .046 | .035 | .026 | .015 | .011 | .009 |   |
| 7.0  | .128                  | .091 | .064 | .110                                       | .078 | .056 | .076 | .055 | .040 | .044 | .032 | .024 | .014 | .011 | .008 |   |
| 8.0  | .122                  | .084 | .058 | .105                                       | .073 | .051 | .073 | .051 | .036 | .042 | .030 | .021 | .014 | .010 | .007 |   |
| 9.0  | .117                  | .079 | .053 | .101                                       | .069 | .047 | .070 | .048 | .033 | .041 | .028 | .020 | .013 | .009 | .007 |   |
| 10.0 | .112                  | .075 | .049 | .097                                       | .065 | .043 | .067 | .046 | .031 | .039 | .027 | .018 | .013 | .009 | .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:0.1790A P:38.60W PF:0.9490 Lamp Flux:4274.31x1 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            | 19.2             | 20.0 | 19.4 | 20.2   | 20.4          | 19.3           | 20.2              | 19.6 | 20.4 | 20.6 |
|   | 3H            | 19.1             | 19.9 | 19.4 | 20.2   | 20.4          | 19.3           | 20.1              | 19.6 | 20.3 | 20.6 |
|   | 4H            | 19.1             | 19.9 | 19.4 | 20.1   | 20.4          | 19.3           | 20.0              | 19.6 | 20.3 | 20.6 |
|   | 6H            | 19.2             | 19.9 | 19.5 | 20.1   | 20.4          | 19.3           | 20.0              | 19.7 | 20.3 | 20.6 |
|   | 8H            | 19.2             | 19.9 | 19.6 | 20.2   | 20.5          | 19.4           | 20.0              | 19.7 | 20.3 | 20.6 |
|   | 12H           | 19.3             | 19.9 | 19.6 | 20.2   | 20.6          | 19.4           | 20.1              | 19.8 | 20.4 | 20.7 |
| 4H  | 2H            | 19.0             | 19.7 | 19.3 | 20.0   | 20.2          | 19.1           | 19.9              | 19.5 | 20.1 | 20.4 |
|   | 3H            | 19.0             | 19.6 | 19.3 | 19.9   | 20.3          | 19.1           | 19.8              | 19.5 | 20.1 | 20.4 |
|   | 4H            | 19.0             | 19.6 | 19.4 | 20.0   | 20.3          | 19.2           | 19.8              | 19.6 | 20.1 | 20.5 |
|   | 6H            | 19.1             | 19.7 | 19.6 | 20.0   | 20.4          | 19.3           | 19.8              | 19.7 | 20.2 | 20.6 |
|   | 8H            | 19.2             | 19.7 | 19.7 | 20.1   | 20.5          | 19.4           | 19.8              | 19.8 | 20.2 | 20.7 |
|   | 12H           | 19.4             | 19.8 | 19.9 | 20.3   | 20.7          | 19.5           | 20.0              | 20.0 | 20.4 | 20.8 |
| 8H  | 4H            | 19.0             | 19.4 | 19.4 | 19.8   | 20.3          | 19.1           | 19.6              | 19.6 | 20.0 | 20.4 |
|   | 6H            | 19.2             | 19.6 | 19.6 | 20.0   | 20.5          | 19.3           | 19.7              | 19.8 | 20.1 | 20.6 |
|   | 8H            | 19.3             | 19.7 | 19.8 | 20.2   | 20.6          | 19.5           | 19.8              | 19.9 | 20.3 | 20.8 |
|   | 12H           | 19.6             | 19.9 | 20.1 | 20.4   | 20.9          | 19.7           | 20.0              | 20.2 | 20.5 | 21.0 |
| 12H   | 4H            | 18.9             | 19.4 | 19.4 | 19.8   | 20.2          | 19.1           | 19.5              | 19.5 | 19.9 | 20.4 |
|   | 6H            | 19.2             | 19.5 | 19.7 | 20.0   | 20.5          | 19.3           | 19.6              | 19.8 | 20.1 | 20.6 |
|   | 8H            | 19.4             | 19.7 | 19.9 | 20.2   | 20.7          | 19.5           | 19.8              | 20.0 | 20.3 | 20.8 |
| Variations with the observer position at spacings:                |               |                  |      |      |        |               |                |                   |      |      |      |
| S = 1.0H  | + 1.7 / - 2.4 |                  |      |      |        | + 1.7 / - 2.3 |                |                   |      |      |      |
| 1.5H  | + 3.2 / - 2.1 |                  |      |      |        | + 3.4 / - 2.1 |                |                   |      |      |      |
| 2.0H  | + 2.2 / - 0.9 |                  |      |      |        | + 1.9 / - 0.8 |                |                   |      |      |      |

CIE Pub.117 Corrected 4274 lm Total Lamp Luminous Flux.(8log(F/F0) = 5.0)

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:0.1790A P:38.60W PF:0.9490 Lamp Flux:4274.31x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |

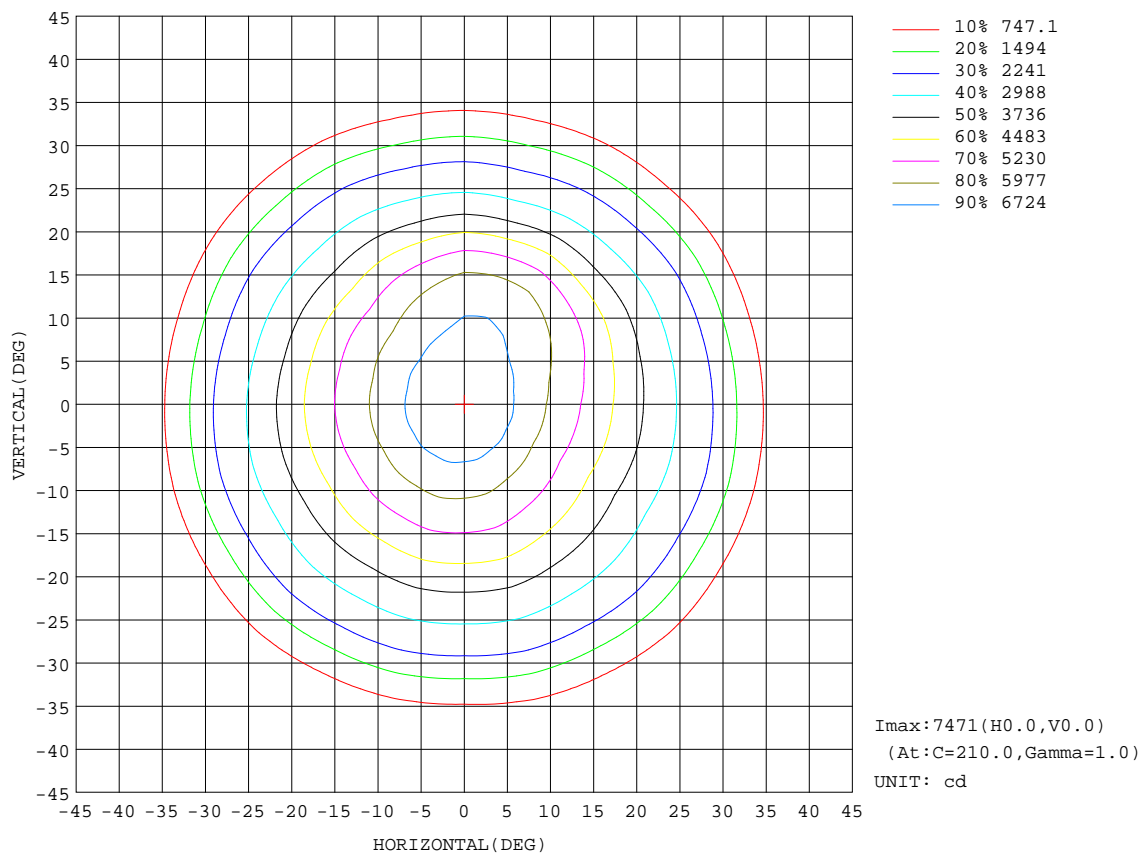
| REFLECTANCE                      |   |     |           |     |     |     |     |               |     |        |
|----------------------------------|---|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling                          | 0.8   | 0.8 | 0.8       | 0.7 | 0.7 | 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 87  | 81  | 77        | 87  | 81  | 77  | 86  | 80            | 77  | 73     |
| 0.80                             | 94  | 89  | 85        | 94  | 88  | 85  | 92  | 87            | 84  | 80     |
| 1.00                             | 99  | 93  | 89        | 98  | 92  | 89  | 96  | 92            | 88  | 84     |
| 1.25                             | 102   | 97  | 94        | 101 | 97  | 93  | 99  | 95            | 92  | 88     |
| 1.50                             | 105   | 100 | 97        | 104 | 99  | 96  | 101 | 98            | 95  | 90     |
| 2.00                             | 108   | 103 | 100       | 106 | 102 | 99  | 103 | 100           | 98  | 92     |
| 2.50                             | 109   | 106 | 102       | 108 | 104 | 101 | 104 | 101           | 99  | 93     |
| 3.00                             | 111   | 107 | 105       | 109 | 106 | 103 | 105 | 103           | 101 | 94     |
| 4.00                             | 113   | 110 | 108       | 111 | 108 | 106 | 107 | 105           | 103 | 95     |
| 5.00                             | 114   | 112 | 110       | 112 | 110 | 108 | 107 | 106           | 105 | 96     |
| 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:0.1790A P:38.60W PF:0.9490 Lamp Flux:4274.31x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |



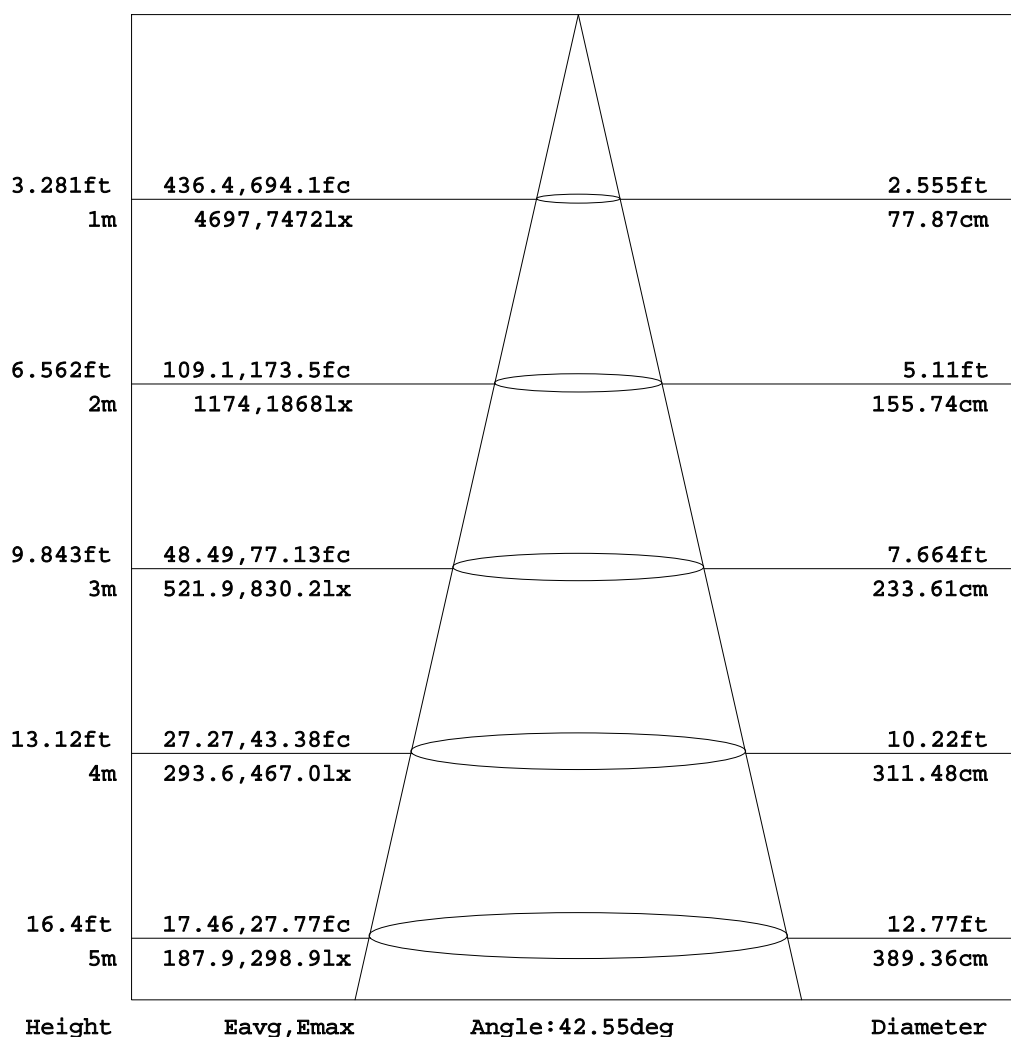
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-08-01

$\gamma$  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:

### AAI Figure

|   |        |                   |
|---|--------|-------------------|
| Test:U:226.6V I:0.1790A P:38.60W PF:0.9490 Lamp Flux:4274.31x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |

Flux out:2409 lm



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

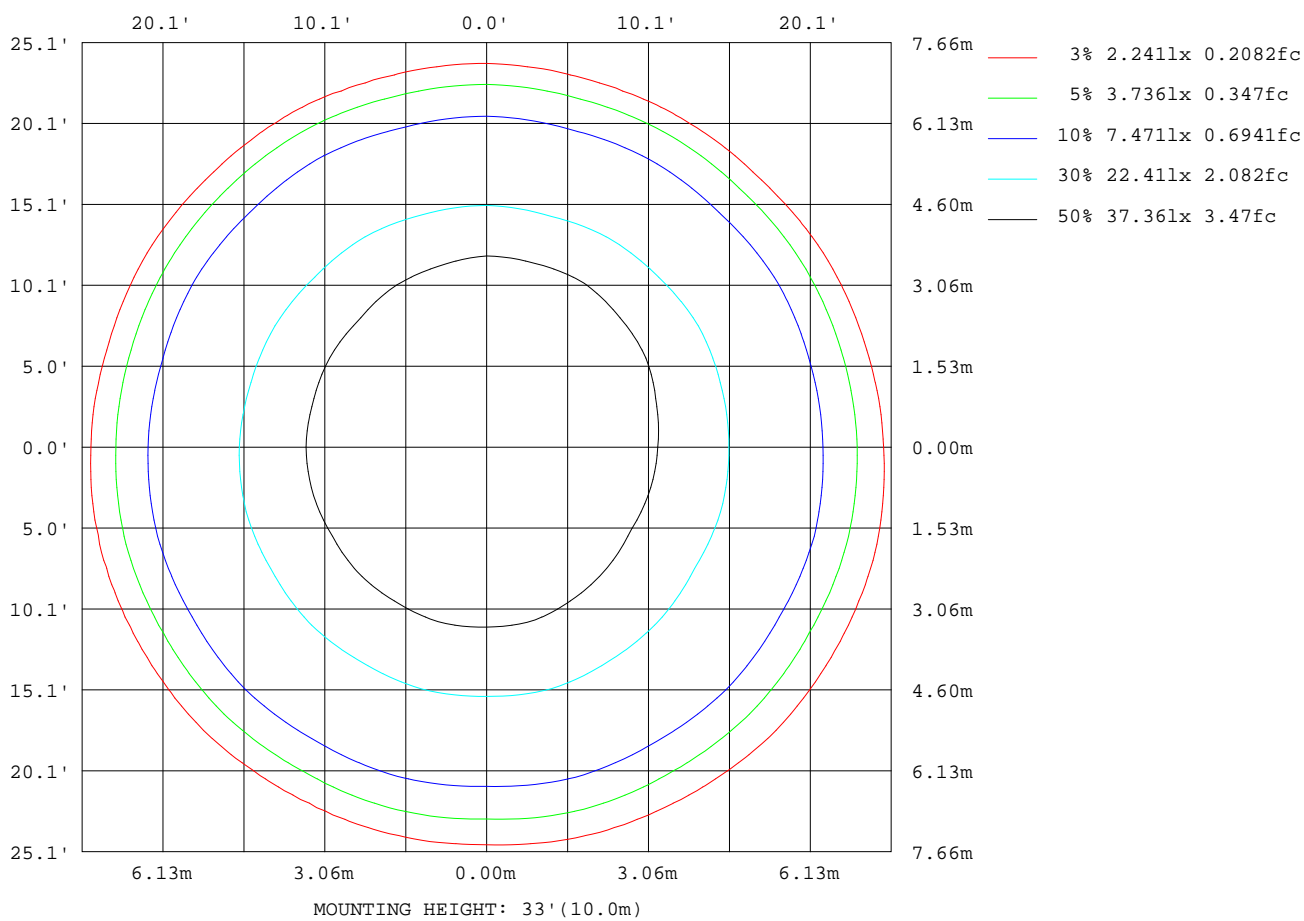
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangXiao  
Test Date:2016-08-01

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

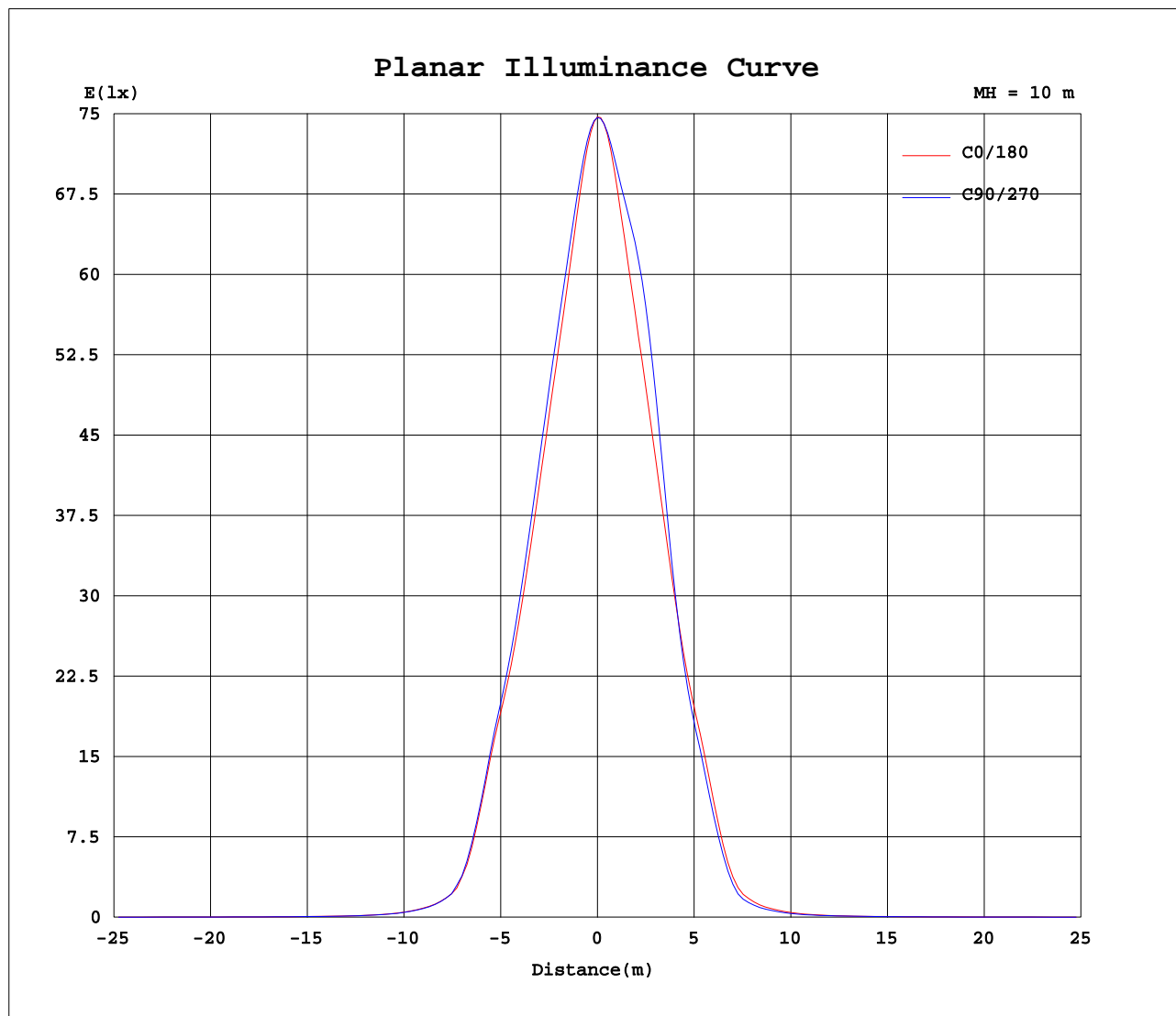
|   |        |                   |
|---|--------|-------------------|
| Test:U:226.6V I:0.1790A P:38.60W PF:0.9490 Lamp Flux:4274.31x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |



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:0.1790A P:38.60W PF:0.9490 Lamp Flux:4274.31x1 lm |  |  |  |  |  |  |  |  |  |        |  |  |  |  |                   |  |  |  |  |
| NAME:   |  |  |  |  |  |  |  |  |  | TYPE:  |  |  |  |  | WEIGHT:           |  |  |  |  |
| DIM.:   |  |  |  |  |  |  |  |  |  | SPEC.: |  |  |  |  | SERIAL No.:       |  |  |  |  |
| MFR.: Rayconn   |  |  |  |  |  |  |  |  |  | SUR.:  |  |  |  |  | PROTECTION ANGLE: |  |  |  |  |

Table--1

UNIT: cd

| C(DEC)  | 0    | 15   | 30   | 45   | 60   | 75   | 90   | 105  | 120  | 135  | 150   | 165  | 180  | 195  | 210  | 225  | 240  | 255  | 270  |
|---------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|
| γ (DEC) | 0    | 5    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50    | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   |
| 0       | 7467 | 7467 | 7467 | 7467 | 7467 | 7467 | 7467 | 7467 | 7467 | 7467 | 7467  | 7467 | 7467 | 7467 | 7467 | 7467 | 7467 | 7467 | 7467 |
| 5       | 6860 | 6871 | 6854 | 6908 | 6925 | 6992 | 7003 | 7045 | 7035 | 7059 | 7031  | 7057 | 7049 | 7032 | 7083 | 7082 | 7138 | 7142 | 7172 |
| 10      | 5879 | 5833 | 5805 | 5894 | 5969 | 6095 | 6135 | 6185 | 6151 | 6157 | 6116  | 6147 | 6153 | 6144 | 6225 | 6266 | 6437 | 6586 | 6742 |
| 15      | 4933 | 4861 | 4802 | 4913 | 5022 | 5179 | 5211 | 5253 | 5203 | 5207 | 5155  | 5205 | 5236 | 5223 | 5296 | 5337 | 5579 | 5786 | 6049 |
| 20      | 3898 | 3854 | 3792 | 3897 | 4005 | 4141 | 4142 | 4176 | 4120 | 4136 | 4090  | 4136 | 4148 | 4097 | 4128 | 4094 | 4249 | 4290 | 4456 |
| 25      | 2920 | 2935 | 2894 | 2972 | 3012 | 3099 | 3077 | 3106 | 3062 | 3088 | 3043  | 3074 | 3030 | 2960 | 2948 | 2891 | 2919 | 2862 | 2874 |
| 30      | 1936 | 2014 | 1966 | 2030 | 1996 | 2078 | 2009 | 2069 | 2022 | 2087 | 2022  | 2069 | 2009 | 1928 | 1937 | 1852 | 1861 | 1760 | 1776 |
| 35      | 688  | 715  | 701  | 745  | 722  | 756  | 701  | 733  | 707  | 750  | 713   | 730  | 687  | 661  | 640  | 622  | 603  | 575  | 562  |
| 40      | 273  | 298  | 304  | 310  | 293  | 282  | 265  | 270  | 270  | 281  | 275   | 273  | 258  | 243  | 239  | 226  | 221  | 207  | 203  |
| 45      | 135  | 151  | 154  | 156  | 144  | 139  | 129  | 131  | 131  | 138  | 133   | 131  | 125  | 118  | 117  | 110  | 108  | 102  | 100  |
| 50      | 71.7 | 77.5 | 79.4 | 79.4 | 73.9 | 70.6 | 68.0 | 68.0 | 69.2 | 70.3 | 69.6  | 68.3 | 65.9 | 63.2 | 62.9 | 60.5 | 59.9 | 57.8 | 57.3 |
| 55      | 43.7 | 46.0 | 46.4 | 46.5 | 44.7 | 43.6 | 42.6 | 43.0 | 43.2 | 43.8 | 43.2  | 43.0 | 42.0 | 41.1 | 41.1 | 40.2 | 40.1 | 39.6 | 39.6 |
| 60      | 30.6 | 31.5 | 31.3 | 31.7 | 31.3 | 31.2 | 30.5 | 31.0 | 31.0 | 31.4 | 30.9  | 30.9 | 30.3 | 29.8 | 29.9 | 29.3 | 29.3 | 28.9 | 28.9 |
| 65      | 23.2 | 23.6 | 23.3 | 23.6 | 23.5 | 23.6 | 23.3 | 23.5 | 23.5 | 23.7 | 23.4  | 23.5 | 23.1 | 22.9 | 22.8 | 22.5 | 22.5 | 22.0 | 21.9 |
| 70      | 18.0 | 18.3 | 18.1 | 18.3 | 18.3 | 18.3 | 18.1 | 18.3 | 18.3 | 18.4 | 18.3  | 18.3 | 18.1 | 18.0 | 18.1 | 17.9 | 17.7 | 17.4 | 17.4 |
| 75      | 14.5 | 14.7 | 14.5 | 14.7 | 14.6 | 14.6 | 14.6 | 14.7 | 14.6 | 14.7 | 14.5  | 14.5 | 14.7 | 14.7 | 14.7 | 14.7 | 14.6 | 14.5 | 14.4 |
| 80      | 11.7 | 11.8 | 11.7 | 11.9 | 11.7 | 11.8 | 11.6 | 11.7 | 11.7 | 11.8 | 11.7  | 11.7 | 12.3 | 12.4 | 12.5 | 12.6 | 12.4 | 12.3 | 12.3 |
| 85      | 9.98 | 9.95 | 10.0 | 10.3 | 10.0 | 9.96 | 9.86 | 9.86 | 9.85 | 9.92 | 10.00 | 10.1 | 11.1 | 11.1 | 11.4 | 11.8 | 11.2 | 11.1 | 11.1 |
| 90      | 8.14 | 8.08 | 8.28 | 8.89 | 8.35 | 8.11 | 8.14 | 8.16 | 8.10 | 8.15 | 8.12  | 8.18 | 9.61 | 9.63 | 9.87 | 10.8 | 9.91 | 9.68 | 9.75 |
| 95      | 7.98 | 7.91 | 8.16 | 8.69 | 8.24 | 7.91 | 8.02 | 7.97 | 8.01 | 7.99 | 8.02  | 8.00 | 9.93 | 9.95 | 10.3 | 10.7 | 10.1 | 9.99 | 10.0 |
| 100     | 8.04 | 8.00 | 8.06 | 8.24 | 8.17 | 8.02 | 8.06 | 8.07 | 8.10 | 8.08 | 8.10  | 8.09 | 10.3 | 10.4 | 10.4 | 10.6 | 10.4 | 10.4 | 10.4 |
| 105     | 8.67 | 8.60 | 8.64 | 8.65 | 8.65 | 8.56 | 8.60 | 8.58 | 8.62 | 8.61 | 8.68  | 8.66 | 11.0 | 11.0 | 11.0 | 11.2 | 11.1 | 11.1 | 11.0 |
| 110     | 9.87 | 9.76 | 9.79 | 9.72 | 9.74 | 9.64 | 9.68 | 9.62 | 9.69 | 9.68 | 9.79  | 9.77 | 12.0 | 12.1 | 12.1 | 12.2 | 12.1 | 12.2 | 12.1 |
| 115     | 11.6 | 11.5 | 11.5 | 11.4 | 11.4 | 11.3 | 11.3 | 11.3 | 11.4 | 11.3 | 11.5  | 11.4 | 13.5 | 13.6 | 13.6 | 13.7 | 13.6 | 13.7 | 13.7 |
| 120     | 13.8 | 13.7 | 13.7 | 13.6 | 13.7 | 13.6 | 13.7 | 13.6 | 13.7 | 13.6 | 13.7  | 13.6 | 15.4 | 15.5 | 15.5 | 15.6 | 15.6 | 15.7 | 15.7 |
| 125     | 16.6 | 16.4 | 16.5 | 16.4 | 16.5 | 16.4 | 16.5 | 16.4 | 16.5 | 16.3 | 16.4  | 16.3 | 17.9 | 18.0 | 17.9 | 18.0 | 18.0 | 18.1 | 18.1 |
| 130     | 19.8 | 19.7 | 19.8 | 19.7 | 19.7 | 19.6 | 19.7 | 19.6 | 19.7 | 19.5 | 19.6  | 19.5 | 20.7 | 20.8 | 20.7 | 20.8 | 20.8 | 20.9 | 20.9 |
| 135     | 23.2 | 23.1 | 23.2 | 23.1 | 23.1 | 23.0 | 23.0 | 22.9 | 23.0 | 22.8 | 23.0  | 22.9 | 23.9 | 23.9 | 23.8 | 23.9 | 23.9 | 24.0 | 23.9 |
| 140     | 26.5 | 26.4 | 26.5 | 26.3 | 26.3 | 26.2 | 26.2 | 26.1 | 26.2 | 26.1 | 26.2  | 26.2 | 26.9 | 27.0 | 26.9 | 27.0 | 26.9 | 27.1 | 26.9 |
| 145     | 29.4 | 29.3 | 29.6 | 29.3 | 29.2 | 29.0 | 29.1 | 29.1 | 29.1 | 29.0 | 29.1  | 29.1 | 30.0 | 29.9 | 29.8 | 29.9 | 30.2 | 30.9 | 29.8 |
| 150     | 31.7 | 31.6 | 31.8 | 31.6 | 31.6 | 31.5 | 31.5 | 31.5 | 31.5 | 31.4 | 31.5  | 31.5 | 32.1 | 32.2 | 32.1 | 32.2 | 32.3 | 32.5 | 32.2 |
| 155     | 33.2 | 33.2 | 33.2 | 33.1 | 33.2 | 33.1 | 33.1 | 33.1 | 33.1 | 33.0 | 33.0  | 33.0 | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.7 | 33.6 |
| 160     | 34.0 | 33.9 | 34.0 | 33.9 | 34.0 | 33.9 | 33.9 | 33.9 | 33.9 | 33.8 | 33.8  | 33.8 | 34.3 | 34.4 | 34.3 | 34.3 | 34.3 | 34.3 | 34.3 |
| 165     | 34.3 | 34.3 | 34.3 | 34.3 | 34.2 | 34.2 | 34.1 | 34.1 | 34.1 | 34.1 | 34.2  | 34.3 | 34.7 | 34.8 | 34.8 | 34.8 | 34.7 | 34.7 | 34.6 |
| 170     | 34.5 | 34.4 | 34.4 | 34.3 | 34.2 | 34.1 | 34.1 | 34.2 | 34.3 | 34.4 | 34.5  | 34.5 | 34.8 | 34.9 | 34.9 | 34.9 | 34.9 | 34.9 | 34.8 |
| 175     | 34.7 | 34.6 | 34.6 | 34.5 | 34.6 | 34.6 | 34.7 | 34.7 | 34.8 | 34.8 | 34.9  | 34.8 | 34.9 | 35.0 | 35.0 | 35.1 | 35.1 | 35.1 | 35.1 |
| 180     | 35.2 | 35.2 | 35.2 | 35.2 | 35.3 | 35.3 | 35.4 | 35.4 | 35.4 | 35.3 | 35.3  | 35.3 | 35.2 | 35.2 | 35.2 | 35.2 | 35.3 | 35.3 | 35.4 |

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:0.1790A P:38.60W PF:0.9490 Lamp Flux:4274.31x1 lm |        |                   |
| NAME:   | TYPE:  | WEIGHT:           |
| DIM.:   | SPEC.: | SERIAL No.:       |
| MFR.: Rayconn   | SUR.:  | PROTECTION ANGLE: |

Table--2

UNIT: cd

| C(DEG)<br>γ (DEG) | 285  | 300  | 315  | 330  | 345  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                 | 7467 | 7467 | 7467 | 7467 | 7467 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                 | 7140 | 7111 | 7023 | 6977 | 6891 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                | 6755 | 6659 | 6432 | 6224 | 6006 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                | 6054 | 5984 | 5675 | 5412 | 5106 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                | 4399 | 4449 | 4261 | 4181 | 3986 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                | 2813 | 2885 | 2888 | 2951 | 2918 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                | 1711 | 1774 | 1779 | 1894 | 1893 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                | 547  | 544  | 569  | 604  | 647  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                | 195  | 201  | 208  | 232  | 249  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                | 96.3 | 99.6 | 102  | 113  | 121  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                | 55.9 | 56.8 | 57.8 | 61.6 | 64.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                | 39.1 | 39.3 | 39.3 | 40.4 | 41.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                | 28.6 | 28.8 | 28.7 | 29.2 | 29.3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                | 21.8 | 21.9 | 21.9 | 22.3 | 22.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                | 17.3 | 17.4 | 17.4 | 17.6 | 17.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                | 14.3 | 14.4 | 14.4 | 14.5 | 14.6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                | 12.3 | 12.3 | 12.3 | 12.3 | 12.3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                | 11.1 | 11.1 | 11.1 | 11.1 | 11.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                | 9.70 | 9.66 | 9.71 | 9.68 | 9.81 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                | 10.0 | 9.97 | 10.0 | 9.95 | 10.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100               | 10.4 | 10.4 | 10.4 | 10.3 | 10.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105               | 11.1 | 11.0 | 11.1 | 11.0 | 11.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110               | 12.2 | 12.1 | 12.2 | 12.1 | 12.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115               | 13.8 | 13.7 | 13.7 | 13.6 | 13.7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120               | 15.8 | 15.7 | 15.8 | 15.6 | 15.7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125               | 18.2 | 18.1 | 18.2 | 18.1 | 18.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130               | 21.0 | 20.9 | 21.1 | 21.0 | 21.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135               | 24.0 | 23.9 | 24.1 | 24.0 | 24.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140               | 27.0 | 26.9 | 27.1 | 27.1 | 27.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145               | 29.8 | 29.8 | 30.3 | 30.2 | 29.9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150               | 32.2 | 32.1 | 32.4 | 32.2 | 32.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155               | 33.7 | 33.6 | 33.7 | 33.6 | 33.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160               | 34.3 | 34.3 | 34.2 | 34.2 | 34.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165               | 34.6 | 34.6 | 34.6 | 34.5 | 34.6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170               | 34.8 | 34.7 | 34.7 | 34.7 | 34.7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175               | 35.1 | 35.0 | 35.0 | 34.9 | 34.9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180               | 35.4 | 35.4 | 35.3 | 35.3 | 35.3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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: