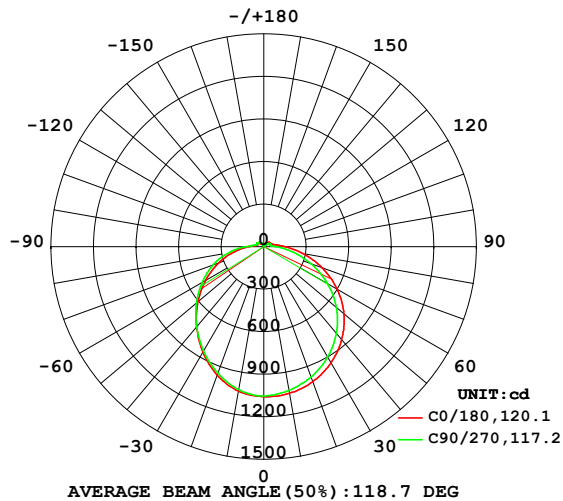


## LUMINAIRE PHOTOMETRIC TEST REPORT

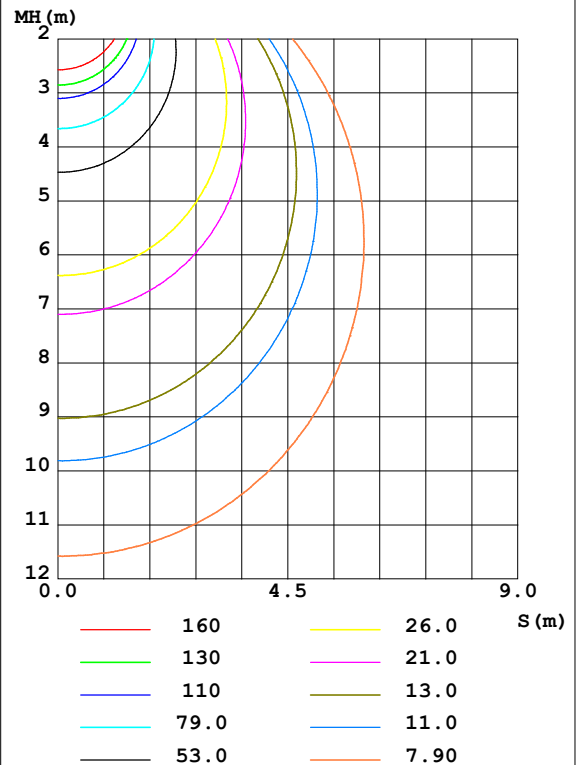
|                                                                               |       |                   |
|-------------------------------------------------------------------------------|-------|-------------------|
| Test:U:119.86V I:0.5141A P:56.215W PF:0.9122 Freq:59.98Hz Lamp Flux:3614.4 lm |       |                   |
| NAME: ASD-FMOV-32D50BZ                                                        | TYPE: | WEIGHT:1          |
| SPEC.:5000K                                                                   | DIM.: | SERIAL No.:1      |
| MFR.: ASD Lighting corp                                                       | SUR.: | Shielding Angle:0 |

| DATA OF LAMP     |                  | PHOTOMETRIC DATA      |        |                   |          | Eff: 64.30 lm/W |
|------------------|------------------|-----------------------|--------|-------------------|----------|-----------------|
| MODEL            | ASD-FMOV-32D50BZ | I <sub>max</sub> (cd) | 1059   | S/MH(C0/180)      | 1.21     |                 |
| NOMINAL POWER(W) | 55               | LOR(%)                | 103.3  | S/MH(C90/270)     | 1.21     |                 |
| RATED VOLTAGE(V) | 120              | TOTAL FLUX(lm)        | 3614.4 | η UP,DN(C0-180)   | 3.7,48.5 |                 |
| NOMINAL FLUX(lm) | 3614.4           | CIE CLASS             | DIRECT | η UP,DN(C180-360) | 4.5,46.7 |                 |
| LAMPS INSIDE     | 1                | η up(%)               | 8.1    | CIBSE SHR NOM     | 1.25     |                 |
| TEST VOLTAGE(V)  | 120              | η down(%)             | 95.1   | CIBSE SHR MAX     | 1.35     |                 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LiFeng Shao  
Test Date:2023-10-10

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
Humidity:65.0%  
Test Distance:8.898m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

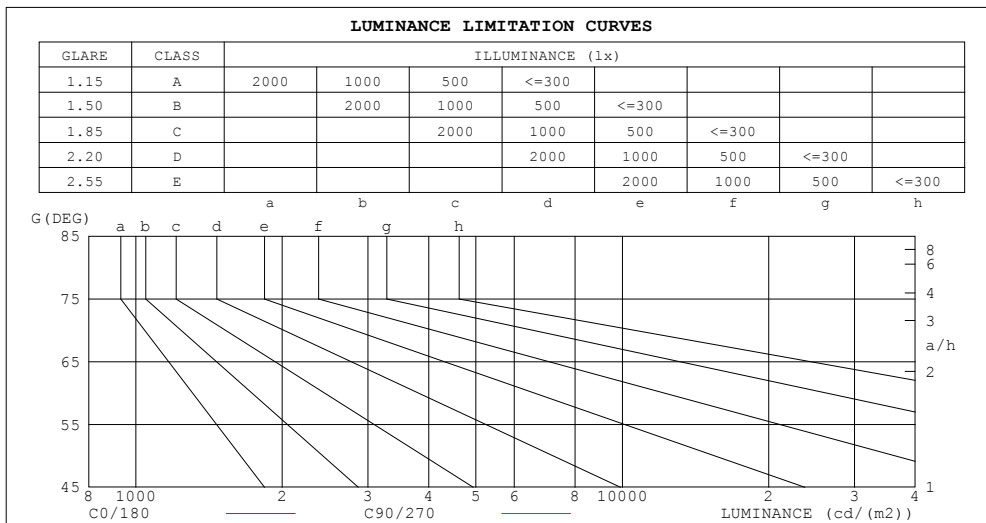
| $\gamma$ | C0                    | C45   | C90   | C135  | C180  | C225  | C270  | C315  | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|-------|-------|-------|-------|-------|-------|-------|----------|-------------|--------------|------------|
| 10       | 1050                  | 1029  | 1029  | 1028  | 1035  | 1024  | 1023  | 1023  | 0- 10    | 99.33       | 99.33        | 2.75,2.84  |
| 20       | 1014                  | 976.5 | 977.4 | 975.6 | 963.0 | 950.0 | 949.4 | 948.9 | 10- 20   | 282.6       | 381.9        | 10.6,10.9  |
| 30       | 947.7                 | 900.8 | 900.3 | 897.0 | 858.2 | 849.2 | 849.9 | 849.6 | 20- 30   | 426.8       | 808.8        | 22.4,23.1  |
| 40       | 856.2                 | 797.5 | 797.8 | 793.4 | 737.1 | 737.0 | 737.9 | 738.3 | 30- 40   | 517.9       | 1327         | 36.7,37.9  |
| 50       | 738.6                 | 669.1 | 669.0 | 664.1 | 606.9 | 619.1 | 619.8 | 621.1 | 40- 50   | 549.3       | 1876         | 51.9,53.6  |
| 60       | 596.5                 | 518.5 | 518.0 | 513.7 | 473.4 | 500.4 | 500.9 | 503.3 | 50- 60   | 520.7       | 2397         | 66.3,68.5  |
| 70       | 438.3                 | 354.4 | 354.5 | 350.6 | 339.0 | 381.7 | 382.0 | 384.8 | 60- 70   | 438.4       | 2835         | 78.4,81    |
| 80       | 278.0                 | 197.9 | 197.9 | 194.8 | 209.6 | 251.1 | 251.7 | 256.2 | 70- 80   | 315.2       | 3150         | 87.2,90    |
| 90       | 149.9                 | 88.62 | 88.93 | 88.24 | 108.6 | 126.2 | 126.9 | 130.7 | 80- 90   | 179.4       | 3330         | 92.1,95.1  |
| 100      | 82.39                 | 50.87 | 51.12 | 51.39 | 58.62 | 65.72 | 66.09 | 67.96 | 90-100   | 87.53       | 3417         | 94.5,97.6  |
| 110      | 54.68                 | 47.62 | 47.97 | 48.73 | 52.99 | 54.72 | 54.97 | 55.62 | 100-110  | 56.78       | 3474         | 96.1,99.3  |
| 120      | 49.55                 | 44.58 | 44.56 | 44.67 | 48.56 | 54.86 | 55.18 | 56.21 | 110-120  | 50.41       | 3524         | 97.5,101   |
| 130      | 46.76                 | 32.36 | 32.46 | 32.44 | 38.71 | 45.51 | 45.89 | 46.99 | 120-130  | 40.33       | 3565         | 98.6,102   |
| 140      | 35.25                 | 21.23 | 21.20 | 20.97 | 26.10 | 34.80 | 35.15 | 36.23 | 130-140  | 26.45       | 3591         | 99.4,103   |
| 150      | 22.87                 | 11.80 | 11.71 | 11.52 | 13.82 | 21.62 | 21.99 | 23.13 | 140-150  | 14.37       | 3606         | 99.8,103   |
| 160      | 11.75                 | 7.335 | 7.335 | 7.307 | 8.103 | 9.913 | 10.01 | 10.50 | 150-160  | 5.934       | 3611         | 99.9,103   |
| 170      | 7.419                 | 7.249 | 7.202 | 7.208 | 7.280 | 7.417 | 7.439 | 7.520 | 160-170  | 2.232       | 3614         | 100,103    |
| 180      | 7.337                 | 7.510 | 7.526 | 7.564 | 7.326 | 7.510 | 7.521 | 7.559 | 170-180  | 0.7050      | 3614         | 100,103    |
| DEG      | LUMINOUS INTENSITY:cd |       |       |       |       |       |       |       |          | UNIT:lm     |              |            |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LiFeng Shao  
 Test Date:2023-10-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:8.898m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

|                                                                               |       |                   |
|-------------------------------------------------------------------------------|-------|-------------------|
| Test:U:119.86V I:0.5141A P:56.215W PF:0.9122 Freq:59.98Hz Lamp Flux:3614.4 lm |       |                   |
| NAME:ASD-FMOV-32D50BZ                                                         | TYPE: | WEIGHT:1          |
| SPEC.:5000K                                                                   | DIM.: | SERIAL No.:1      |
| MFR.: ASD Lighting corp                                                       | SUR.: | Shielding Angle:0 |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 297649 | 189507  |
| 80                | 200101 | 142485  |
| 75                | 172741 | 132450  |
| 70                | 160195 | 129558  |
| 65                | 153661 | 129270  |
| 60                | 149122 | 129511  |
| 55                | 146134 | 129870  |
| 50                | 143630 | 130094  |
| 45                | 141459 | 130168  |

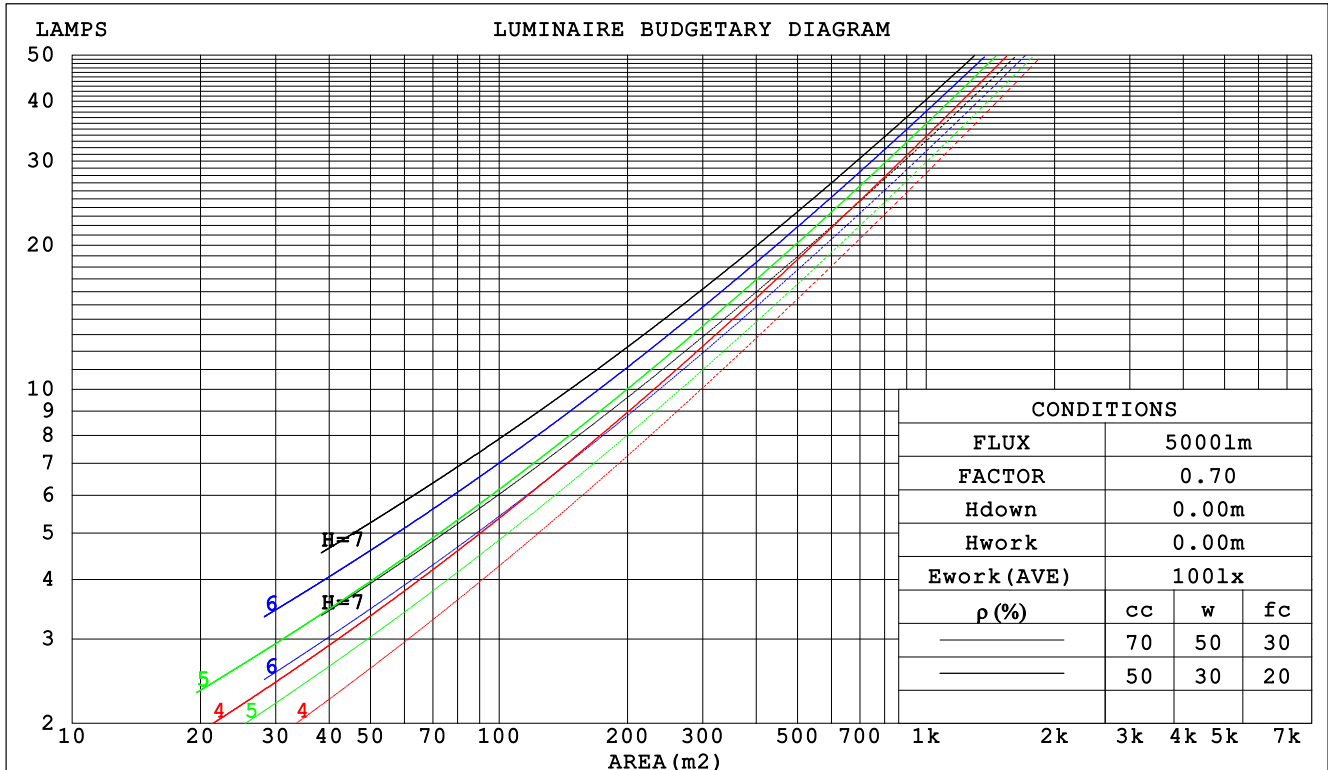
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LiFeng Shao  
Test Date:2023-10-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
Humidity:65.0%  
Test Distance:8.898m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                                               |       |                   |
|-------------------------------------------------------------------------------|-------|-------------------|
| Test:U:119.86V I:0.5141A P:56.215W PF:0.9122 Freq:59.98Hz Lamp Flux:3614.4 lm |       |                   |
| NAME:ASD-FMOV-32D50BZ                                                         | TYPE: | WEIGHT:1          |
| SPEC.:5000K                                                                   | DIM.: | SERIAL No.:1      |
| MFR.: ASD Lighting corp                                                       | SUR.: | Shielding Angle:0 |

| $\rho_{cc}$ | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10% |     |     | 0   |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|-----|-----|-----|-----|
| $\rho_w$    | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50% | 30% | 10% | 0   |
| $\rho_{fc}$ | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20% |     |     | 0   |
| RCR         | RCR:Room Cavity Ratio |      |      |      |      |      | Coefficients of Utilization(CU) |      |      |      |      |      |     |     |     |     |
| 0.0         | 1.21                  | 1.21 | 1.21 | 1.17 | 1.17 | 1.17 | 1.10                            | 1.10 | 1.10 | 1.04 | 1.04 | 1.04 | .98 | .98 | .98 | .95 |
| 1.0         | 1.03                  | .98  | .93  | .90  | .95  | .91  | .94                             | .90  | .87  | .88  | .85  | .83  | .83 | .81 | .79 | .76 |
| 2.0         | .89                   | .81  | .75  | .86  | .79  | .73  | .81                             | .75  | .70  | .76  | .72  | .67  | .72 | .68 | .65 | .62 |
| 3.0         | .77                   | .68  | .61  | .75  | .67  | .60  | .71                             | .64  | .58  | .67  | .61  | .56  | .63 | .58 | .54 | .51 |
| 4.0         | .68                   | .59  | .51  | .66  | .57  | .51  | .63                             | .55  | .49  | .59  | .53  | .47  | .56 | .51 | .46 | .43 |
| 5.0         | .61                   | .51  | .44  | .59  | .50  | .43  | .56                             | .48  | .42  | .53  | .46  | .41  | .50 | .44 | .40 | .37 |
| 6.0         | .55                   | .45  | .38  | .53  | .44  | .38  | .50                             | .43  | .37  | .48  | .41  | .36  | .45 | .39 | .35 | .32 |
| 7.0         | .49                   | .40  | .34  | .48  | .39  | .33  | .46                             | .38  | .32  | .44  | .37  | .32  | .41 | .35 | .31 | .29 |
| 8.0         | .45                   | .36  | .30  | .44  | .35  | .29  | .42                             | .34  | .29  | .40  | .33  | .28  | .38 | .32 | .27 | .25 |
| 9.0         | .41                   | .33  | .27  | .40  | .32  | .26  | .38                             | .31  | .26  | .37  | .30  | .25  | .35 | .29 | .25 | .23 |
| 10.0        | .38                   | .30  | .24  | .37  | .29  | .24  | .36                             | .28  | .23  | .34  | .28  | .23  | .33 | .27 | .22 | .21 |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LiFeng Shao  
Test Date:2023-10-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
Humidity:65.0%  
Test Distance:8.898m [K=1.0000]  
Remarks:

## WEC AND CCEC

|                                                                               |       |                   |
|-------------------------------------------------------------------------------|-------|-------------------|
| Test:U:119.86V I:0.5141A P:56.215W PF:0.9122 Freq:59.98Hz Lamp Flux:3614.4 lm |       |                   |
| NAME: ASD-FMOV-32D50BZ                                                        | TYPE: | WEIGHT:1          |
| SPEC.:5000K                                                                   | DIM.: | SERIAL No.:1      |
| MFR.: ASD Lighting corp                                                       | SUR.: | Shielding Angle:0 |

| 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  | .365                  | .207 | .066 | .355 | .202 | .064 | .336                            | .193 | .062 | .319 | .184 | .059 | .303 | .176 | .057 |   |  |
| 2.0  | .327                  | .179 | .055 | .318 | .175 | .054 | .301                            | .168 | .052 | .286 | .160 | .050 | .272 | .154 | .048 |   |  |
| 3.0  | .295                  | .157 | .047 | .287 | .154 | .046 | .272                            | .148 | .045 | .259 | .142 | .043 | .246 | .136 | .042 |   |  |
| 4.0  | .268                  | .140 | .041 | .261 | .137 | .040 | .248                            | .132 | .039 | .236 | .127 | .038 | .224 | .122 | .037 |   |  |
| 5.0  | .246                  | .125 | .036 | .239 | .123 | .036 | .227                            | .118 | .035 | .216 | .114 | .034 | .206 | .110 | .033 |   |  |
| 6.0  | .226                  | .113 | .032 | .221 | .111 | .032 | .210                            | .107 | .031 | .200 | .104 | .030 | .190 | .100 | .030 |   |  |
| 7.0  | .209                  | .104 | .029 | .204 | .102 | .029 | .194                            | .098 | .028 | .185 | .095 | .028 | .177 | .092 | .027 |   |  |
| 8.0  | .195                  | .095 | .027 | .190 | .094 | .026 | .181                            | .091 | .026 | .173 | .088 | .025 | .165 | .085 | .025 |   |  |
| 9.0  | .182                  | .088 | .025 | .178 | .087 | .024 | .170                            | .084 | .024 | .162 | .081 | .023 | .155 | .079 | .023 |   |  |
| 10.0 | .171                  | .082 | .023 | .167 | .081 | .022 | .159                            | .078 | .022 | .152 | .076 | .021 | .146 | .073 | .021 |   |  |

| 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  | .259                  | .259 | .259 | .221 | .221 | .221 | .151                                       | .151 | .151 | .087 | .087 | .087 | .028 | .028 | .028 |   |
| 1.0  | .252                  | .223 | .198 | .215 | .192 | .170 | .147                                       | .132 | .118 | .085 | .076 | .068 | .027 | .025 | .022 |   |
| 2.0  | .244                  | .199 | .161 | .209 | .171 | .139 | .143                                       | .119 | .097 | .083 | .069 | .057 | .027 | .022 | .019 |   |
| 3.0  | .236                  | .181 | .138 | .203 | .156 | .119 | .139                                       | .109 | .084 | .080 | .063 | .049 | .026 | .021 | .016 |   |
| 4.0  | .228                  | .168 | .122 | .196 | .145 | .106 | .135                                       | .101 | .075 | .078 | .059 | .044 | .025 | .019 | .015 |   |
| 5.0  | .220                  | .158 | .111 | .189 | .136 | .097 | .130                                       | .095 | .068 | .076 | .056 | .041 | .024 | .018 | .013 |   |
| 6.0  | .213                  | .149 | .104 | .183 | .129 | .090 | .126                                       | .090 | .064 | .073 | .053 | .038 | .024 | .017 | .013 |   |
| 7.0  | .206                  | .142 | .098 | .177 | .123 | .085 | .122                                       | .086 | .060 | .071 | .051 | .036 | .023 | .017 | .012 |   |
| 8.0  | .199                  | .136 | .093 | .171 | .118 | .082 | .118                                       | .083 | .058 | .069 | .049 | .034 | .022 | .016 | .011 |   |
| 9.0  | .192                  | .131 | .090 | .166 | .114 | .079 | .115                                       | .080 | .056 | .067 | .047 | .033 | .022 | .016 | .011 |   |
| 10.0 | .186                  | .127 | .087 | .161 | .110 | .076 | .111                                       | .078 | .054 | .065 | .046 | .032 | .021 | .015 | .011 |   |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LiFeng Shao  
Test Date:2023-10-10

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
Humidity:65.0%  
Test Distance:8.898m [K=1.0000]  
Remarks:

UGR(Unified Glare Rating) Table

|                                                                               |                  |      |      |      |       |                |      |                   |      |      |
|-------------------------------------------------------------------------------|------------------|------|------|------|-------|----------------|------|-------------------|------|------|
| Test:U:119.86V I:0.5141A P:56.215W PF:0.9122 Freq:59.98Hz Lamp Flux:3614.4 lm |                  |      |      |      |       |                |      |                   |      |      |
| NAME: ASD-FMOV-32D50BZ                                                        |                  |      |      |      | TYPE: |                |      | WEIGHT:1          |      |      |
| SPEC.:5000K                                                                   |                  |      |      |      | DIM.: |                |      | SERIAL No.:1      |      |      |
| MFR.: ASD Lighting corp                                                       |                  |      |      |      | SUR.: |                |      | Shielding Angle:0 |      |      |
| 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                                                                 | 25.4             | 26.9 | 25.8 | 27.3 | 27.6  | 25.0           | 26.5 | 25.4              | 26.8 | 27.2 |
| 3H                                                                            | 27.4             | 28.8 | 27.8 | 29.2 | 29.6  | 26.8           | 28.1 | 27.2              | 28.5 | 28.9 |
| 4H                                                                            | 28.4             | 29.7 | 28.8 | 30.1 | 30.5  | 27.6           | 28.9 | 28.0              | 29.3 | 29.7 |
| 6H                                                                            | 29.4             | 30.6 | 29.8 | 31.0 | 31.5  | 28.3           | 29.5 | 28.7              | 29.9 | 30.4 |
| 8H                                                                            | 29.9             | 31.0 | 30.3 | 31.5 | 31.9  | 28.6           | 29.8 | 29.1              | 30.2 | 30.7 |
| 12H                                                                           | 30.4             | 31.5 | 30.9 | 32.0 | 32.4  | 29.0           | 30.1 | 29.4              | 30.5 | 31.0 |
| 4H 2H                                                                         | 26.0             | 27.3 | 26.4 | 27.7 | 28.1  | 25.7           | 27.0 | 26.1              | 27.4 | 27.8 |
| 3H                                                                            | 28.2             | 29.3 | 28.6 | 29.7 | 30.2  | 27.6           | 28.8 | 28.1              | 29.2 | 29.7 |
| 4H                                                                            | 29.3             | 30.3 | 29.7 | 30.8 | 31.3  | 28.6           | 29.6 | 29.1              | 30.1 | 30.6 |
| 6H                                                                            | 30.4             | 31.3 | 30.9 | 31.8 | 32.3  | 29.5           | 30.4 | 30.0              | 30.9 | 31.4 |
| 8H                                                                            | 31.0             | 31.8 | 31.5 | 32.3 | 32.9  | 29.9           | 30.7 | 30.4              | 31.3 | 31.8 |
| 12H                                                                           | 31.6             | 32.4 | 32.2 | 32.9 | 33.5  | 30.3           | 31.1 | 30.8              | 31.6 | 32.2 |
| 8H 4H                                                                         | 29.5             | 30.4 | 30.1 | 30.9 | 31.5  | 28.9           | 29.8 | 29.5              | 30.3 | 30.9 |
| 6H                                                                            | 30.8             | 31.6 | 31.4 | 32.1 | 32.7  | 30.0           | 30.8 | 30.6              | 31.3 | 31.9 |
| 8H                                                                            | 31.5             | 32.2 | 32.1 | 32.8 | 33.4  | 30.6           | 31.2 | 31.2              | 31.8 | 32.4 |
| 12H                                                                           | 32.4             | 32.9 | 33.0 | 33.5 | 34.2  | 31.2           | 31.8 | 31.8              | 32.3 | 33.0 |
| 12H 4H                                                                        | 29.6             | 30.4 | 30.1 | 30.9 | 31.5  | 29.0           | 29.8 | 29.5              | 30.3 | 30.9 |
| 6H                                                                            | 30.9             | 31.6 | 31.5 | 32.1 | 32.8  | 30.2           | 30.8 | 30.7              | 31.4 | 32.0 |
| 8H                                                                            | 31.7             | 32.3 | 32.3 | 32.8 | 33.5  | 30.8           | 31.4 | 31.4              | 32.0 | 32.6 |
| Variations with the observer position at spacings:                            |                  |      |      |      |       |                |      |                   |      |      |
| S = 1.0H                                                                      | + 0.1 / - 0.1    |      |      |      |       | + 0.1 / - 0.2  |      |                   |      |      |
| 1.5H                                                                          | + 0.1 / - 0.2    |      |      |      |       | + 0.2 / - 0.3  |      |                   |      |      |
| 2.0H                                                                          | + 0.1 / - 0.3    |      |      |      |       | + 0.1 / - 0.3  |      |                   |      |      |

CIE Pub.117, 3500 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 4.4$ )

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LiFeng Shao  
Test Date:2023-10-10

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
Humidity:65.0%  
Test Distance:8.898m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

|                                                                               |       |                   |
|-------------------------------------------------------------------------------|-------|-------------------|
| Test:U:119.86V I:0.5141A P:56.215W PF:0.9122 Freq:59.98Hz Lamp Flux:3614.4 lm |       |                   |
| NAME:ASD-FMOV-32D50BZ                                                         | TYPE: | WEIGHT:1          |
| SPEC.:5000K                                                                   | DIM.: | SERIAL No.:1      |
| MFR.: ASD Lighting corp                                                       | SUR.: | Shielding Angle:0 |

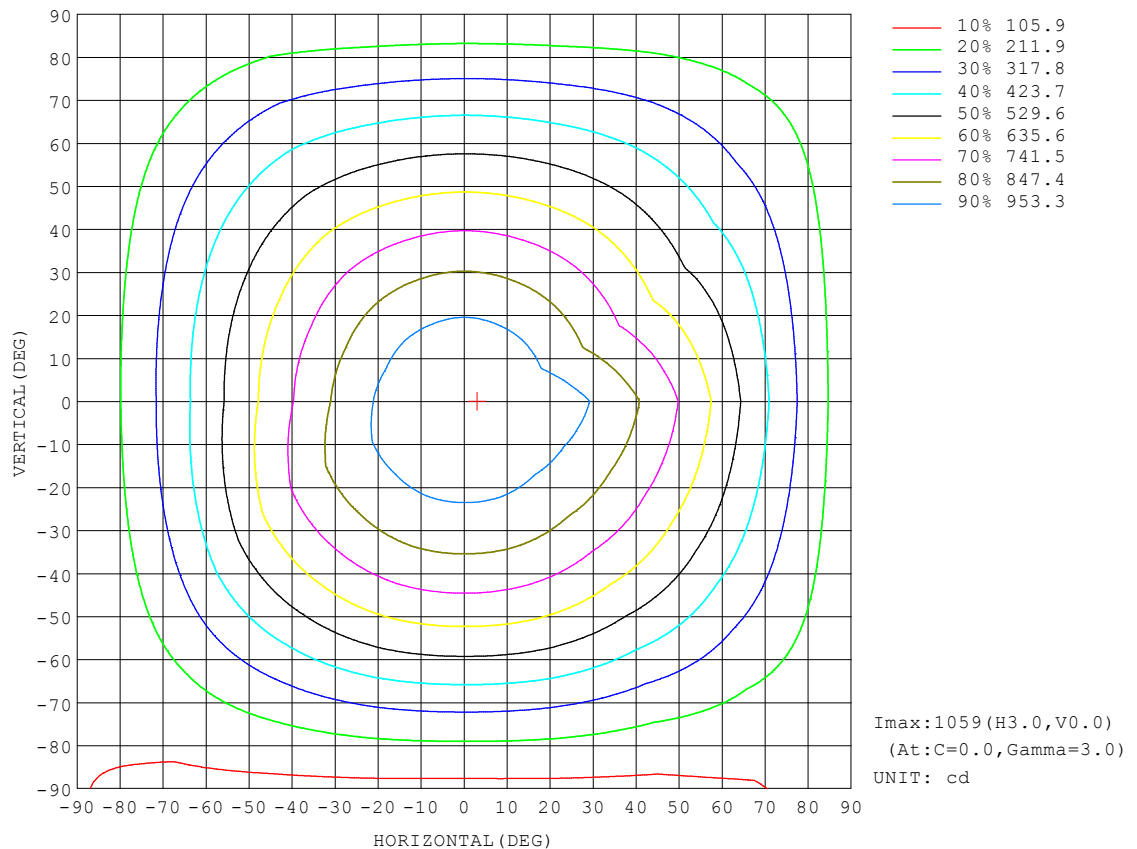
| REFLECTANCE                      |                                                      |     |           |     |     |     |     |               |     |        |
|----------------------------------|------------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 55                                                   | 42  | 35        | 54  | 42  | 35  | 52  | 41            | 34  | 27     |
| 0.80                             | 64                                                   | 52  | 44        | 63  | 51  | 43  | 61  | 50            | 43  | 35     |
| 1.00                             | 73                                                   | 60  | 52        | 71  | 59  | 52  | 68  | 61            | 51  | 43     |
| 1.25                             | 80                                                   | 68  | 60        | 78  | 67  | 59  | 74  | 65            | 58  | 49     |
| 1.50                             | 85                                                   | 74  | 66        | 83  | 72  | 65  | 79  | 70            | 63  | 54     |
| 2.00                             | 92                                                   | 82  | 75        | 90  | 81  | 74  | 85  | 78            | 71  | 61     |
| 2.50                             | 97                                                   | 88  | 80        | 94  | 86  | 79  | 89  | 82            | 76  | 66     |
| 3.00                             | 101                                                  | 92  | 85        | 98  | 90  | 84  | 92  | 86            | 81  | 70     |
| 4.00                             | 105                                                  | 98  | 92        | 102 | 96  | 90  | 96  | 91            | 87  | 75     |
| 5.00                             | 108                                                  | 102 | 97        | 105 | 99  | 94  | 98  | 94            | 90  | 78     |
| ROOM INDEX                       | UF (total)                                           |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |                                                      |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LiFeng Shao  
 Test Date:2023-10-10

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:8.898m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

|                                                                               |       |                   |
|-------------------------------------------------------------------------------|-------|-------------------|
| Test:U:119.86V I:0.5141A P:56.215W PF:0.9122 Freq:59.98Hz Lamp Flux:3614.4 lm |       |                   |
| NAME:ASD-FMOV-32D50BZ                                                         | TYPE: | WEIGHT:1          |
| SPEC.5000K                                                                    | DIM.: | SERIAL No.:1      |
| MFR.: ASD Lighting corp                                                       | SUR.: | Shielding Angle:0 |

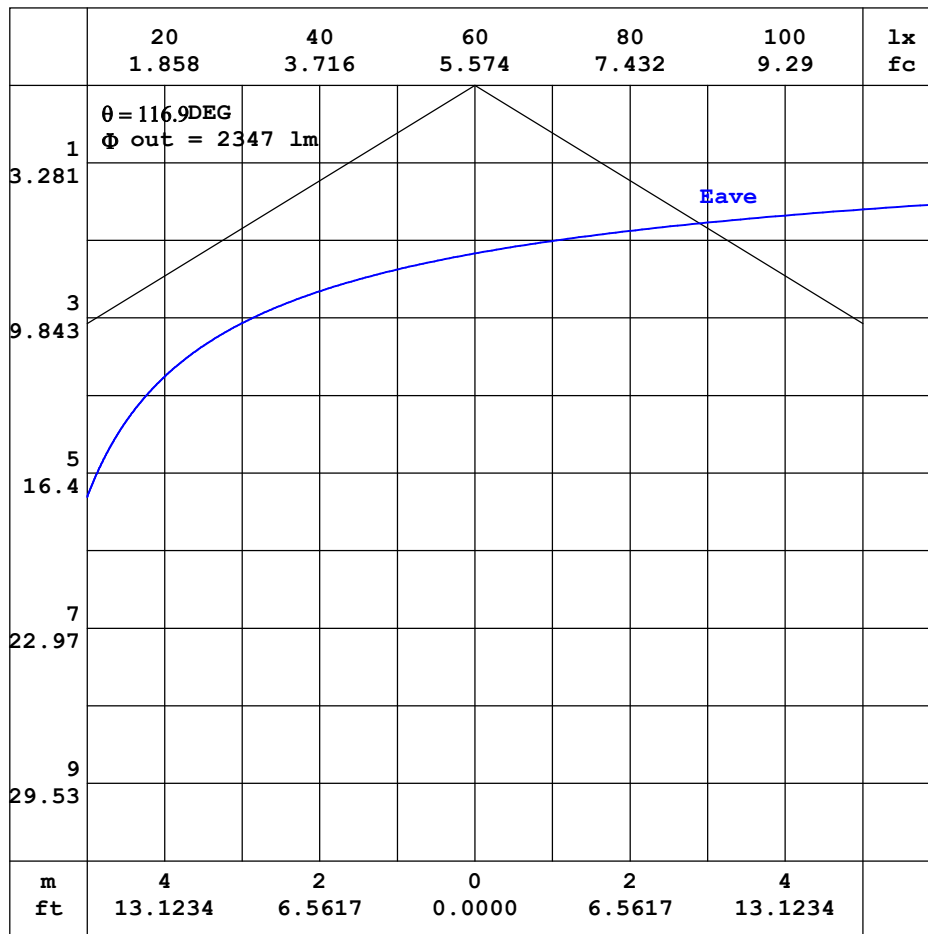


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LiFeng Shao  
Test Date:2023-10-10

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
Humidity:65.0%  
Test Distance:8.898m [K=1.0000]  
Remarks:

## AAI CURVES

|                                                                               |       |                   |
|-------------------------------------------------------------------------------|-------|-------------------|
| Test:U:119.86V I:0.5141A P:56.215W PF:0.9122 Freq:59.98Hz Lamp Flux:3614.4 lm |       |                   |
| NAME:ASD-FMOV-32D50BZ                                                         | TYPE: | WEIGHT:1          |
| SPEC.:5000K                                                                   | DIM.: | SERIAL No.:1      |
| MFR.: ASD Lighting corp                                                       | SUR.: | Shielding Angle:0 |



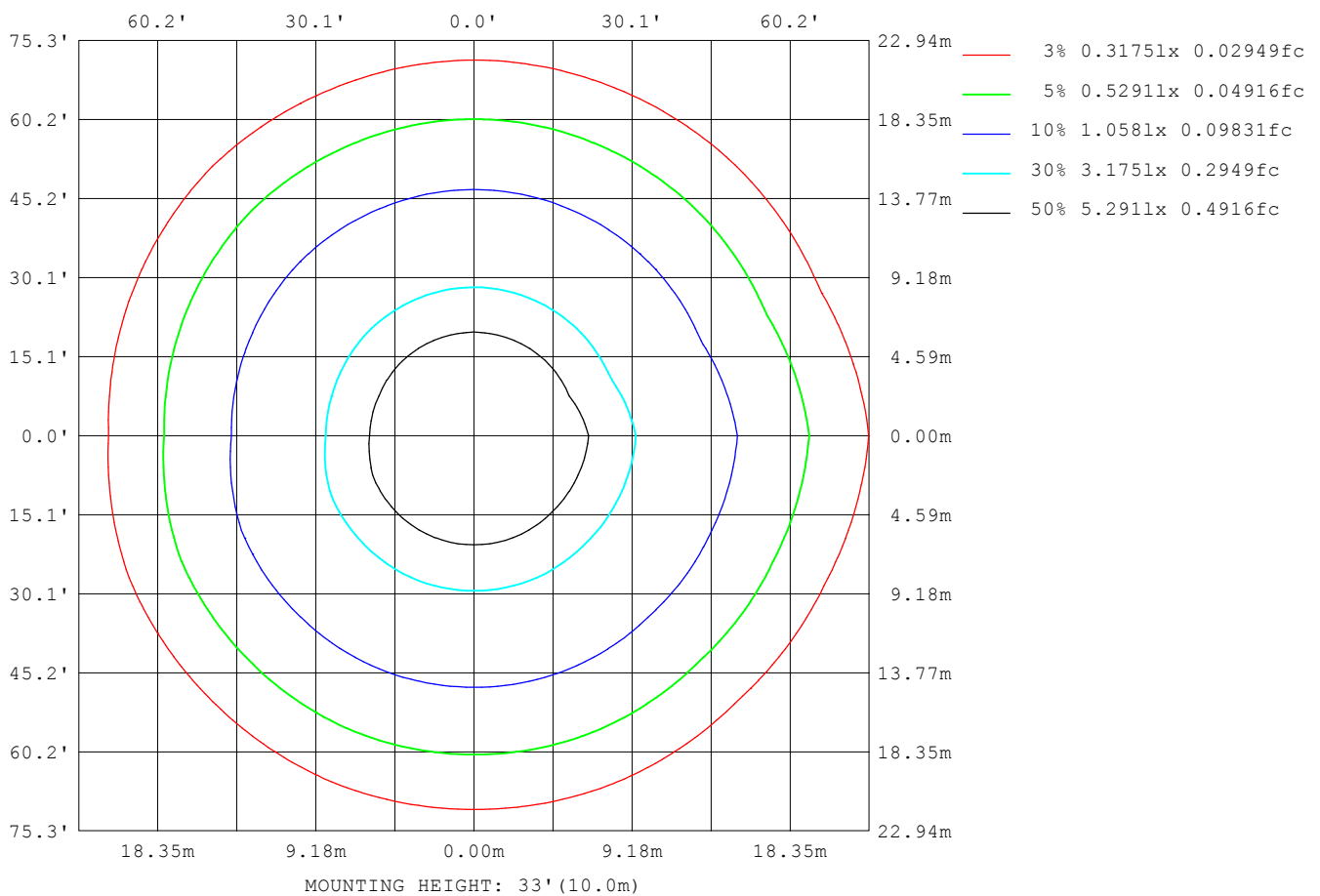
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: LiFeng Shao  
 Test Date: 2023-10-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
 Humidity: 65.0%  
 Test Distance: 8.898m [K=1.0000]  
 Remarks:

## ISOLUX DIAGRAM

|                                                                               |       |                   |
|-------------------------------------------------------------------------------|-------|-------------------|
| Test:U:119.86V I:0.5141A P:56.215W PF:0.9122 Freq:59.98Hz Lamp Flux:3614.4 lm |       |                   |
| NAME:ASD-FMOV-32D50BZ                                                         | TYPE: | WEIGHT:1          |
| SPEC.:5000K                                                                   | DIM.: | SERIAL No.:1      |
| MFR.: ASD Lighting corp                                                       | SUR.: | Shielding Angle:0 |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LiFeng Shao  
Test Date:2023-10-10

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
Humidity:65.0%  
Test Distance:8.898m [K=1.0000]  
Remarks:

## LED Avg.L Report

|                                                                               |       |                   |
|-------------------------------------------------------------------------------|-------|-------------------|
| Test:U:119.86V I:0.5141A P:56.215W PF:0.9122 Freq:59.98Hz Lamp Flux:3614.4 lm |       |                   |
| NAME:ASD-FMOV-32D50BZ                                                         | TYPE: | WEIGHT:1          |
| SPEC.:5000K                                                                   | DIM.: | SERIAL No.:1      |
| MFR.: ASD Lighting corp                                                       | SUR.: | Shielding Angle:0 |

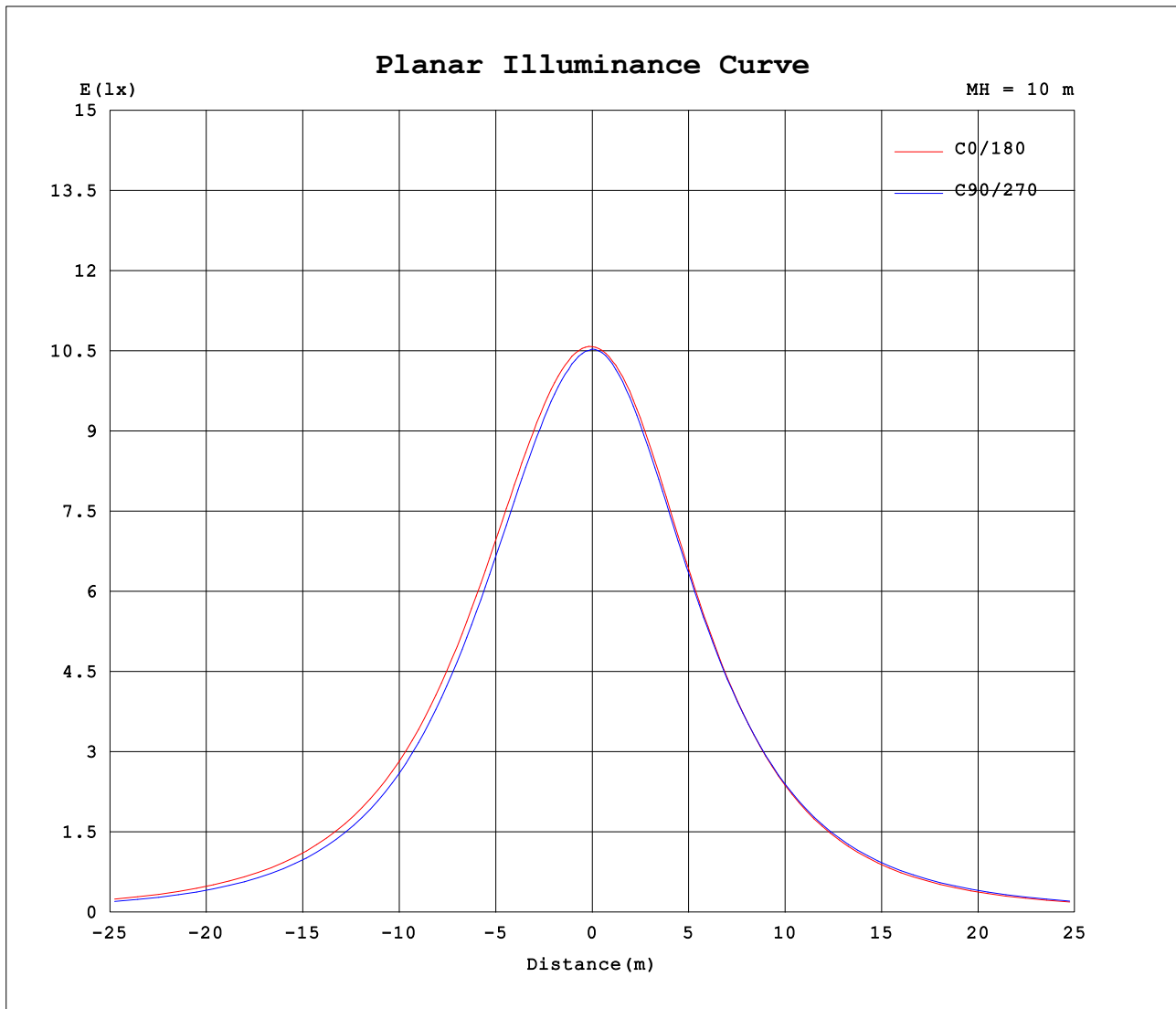
| AvgL             | cd/m2  |
|------------------|--------|
| L_0~180 (65) av  | 136840 |
| L_0~180 (75) av  | 152369 |
| L_0~180 (85) av  | 256820 |
| L_90~270 (65) av | 129967 |
| L_90~270 (75) av | 143060 |
| L_90~270 (85) av | 229724 |
| L_45 (65) av     | 129833 |
| L_45 (75) av     | 142987 |
| L_45 (85) av     | 230343 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LiFeng Shao  
Test Date:2023-10-10

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
Humidity:65.0%  
Test Distance:8.898m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: LiFeng Shao  
Test Date: 2023-10-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
Humidity: 65.0%  
Test Distance: 8.898m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                               |       |                   |
|-------------------------------------------------------------------------------|-------|-------------------|
| Test:U:119.86V I:0.5141A P:56.215W PF:0.9122 Freq:59.98Hz Lamp Flux:3614.4 lm |       |                   |
| NAME:ASD-FMOV-32D50BZ                                                         | TYPE: | WEIGHT:1          |
| SPEC.:5000K                                                                   | DIM.: | SERIAL No.:1      |
| MFR.: ASD Lighting corp                                                       | SUR.: | Shielding Angle:0 |

Table--1

UNIT: cd

| C (DEG)<br>γ (DEG) | 0    | 22.5 | 45   | 67.5 | 90   | 112.5 | 135  | 157.5 | 180  | 202.5 | 225  | 247.5 | 270  | 292.5 | 315  | 337.5 |  |  |  |
|--------------------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|--|--|--|
| 0                  | 1058 | 1053 | 1053 | 1052 | 1054 | 1052  | 1052 | 1052  | 1058 | 1053  | 1053 | 1052  | 1054 | 1052  | 1052 | 1052  |  |  |  |
| 5                  | 1058 | 1048 | 1045 | 1046 | 1045 | 1044  | 1043 | 1043  | 1051 | 1049  | 1045 | 1046  | 1046 | 1046  | 1045 | 1044  |  |  |  |
| 10                 | 1050 | 1037 | 1029 | 1030 | 1029 | 1030  | 1028 | 1028  | 1035 | 1025  | 1024 | 1023  | 1023 | 1023  | 1023 | 1022  |  |  |  |
| 15                 | 1035 | 1016 | 1007 | 1008 | 1006 | 1007  | 1005 | 1005  | 1005 | 993   | 991  | 990   | 991  | 990   | 990  | 990   |  |  |  |
| 20                 | 1014 | 990  | 977  | 978  | 977  | 978   | 976  | 976   | 963  | 949   | 950  | 948   | 949  | 948   | 949  | 948   |  |  |  |
| 25                 | 983  | 956  | 942  | 944  | 942  | 943   | 939  | 939   | 915  | 900   | 902  | 900   | 902  | 899   | 902  | 899   |  |  |  |
| 30                 | 948  | 917  | 901  | 902  | 900  | 901   | 897  | 897   | 858  | 847   | 849  | 848   | 850  | 848   | 850  | 848   |  |  |  |
| 35                 | 905  | 872  | 852  | 854  | 852  | 853   | 849  | 849   | 799  | 790   | 795  | 793   | 794  | 793   | 795  | 793   |  |  |  |
| 40                 | 856  | 818  | 798  | 800  | 798  | 798   | 793  | 794   | 737  | 731   | 737  | 735   | 738  | 736   | 738  | 737   |  |  |  |
| 45                 | 800  | 759  | 736  | 737  | 736  | 737   | 732  | 733   | 673  | 670   | 679  | 677   | 678  | 678   | 680  | 679   |  |  |  |
| 50                 | 739  | 693  | 669  | 671  | 669  | 670   | 664  | 665   | 607  | 609   | 619  | 618   | 620  | 619   | 621  | 620   |  |  |  |
| 55                 | 671  | 623  | 596  | 599  | 596  | 596   | 591  | 593   | 540  | 548   | 560  | 558   | 560  | 559   | 562  | 561   |  |  |  |
| 60                 | 596  | 546  | 518  | 522  | 518  | 520   | 514  | 515   | 473  | 486   | 500  | 499   | 501  | 499   | 503  | 501   |  |  |  |
| 65                 | 520  | 466  | 438  | 441  | 437  | 439   | 433  | 434   | 406  | 424   | 441  | 438   | 442  | 440   | 444  | 443   |  |  |  |
| 70                 | 438  | 383  | 354  | 358  | 354  | 356   | 351  | 352   | 339  | 361   | 382  | 379   | 382  | 381   | 385  | 383   |  |  |  |
| 75                 | 358  | 299  | 274  | 276  | 274  | 275   | 270  | 271   | 273  | 292   | 317  | 315   | 318  | 317   | 322  | 321   |  |  |  |
| 80                 | 278  | 222  | 198  | 200  | 198  | 199   | 195  | 195   | 210  | 225   | 251  | 249   | 252  | 251   | 256  | 256   |  |  |  |
| 85                 | 208  | 152  | 132  | 134  | 132  | 133   | 130  | 131   | 151  | 162   | 187  | 185   | 188  | 188   | 193  | 192   |  |  |  |
| 90                 | 150  | 99.3 | 88.6 | 90.0 | 88.9 | 90.0  | 88.2 | 88.7  | 109  | 107   | 126  | 125   | 127  | 127   | 131  | 130   |  |  |  |
| 95                 | 111  | 69.2 | 62.8 | 63.3 | 63.0 | 63.4  | 62.5 | 62.8  | 77.8 | 74.6  | 87.9 | 86.9  | 88.6 | 88.7  | 91.6 | 91.3  |  |  |  |
| 100                | 82.4 | 53.7 | 50.9 | 51.1 | 51.1 | 51.4  | 51.4 | 51.5  | 58.6 | 58.8  | 65.7 | 65.1  | 66.1 | 66.2  | 68.0 | 67.7  |  |  |  |
| 105                | 64.8 | 45.5 | 47.5 | 47.5 | 47.8 | 48.0  | 48.2 | 48.2  | 51.9 | 53.1  | 56.1 | 56.0  | 56.4 | 56.5  | 57.2 | 57.1  |  |  |  |
| 110                | 54.7 | 43.0 | 47.6 | 47.5 | 48.0 | 48.2  | 48.7 | 48.7  | 53.0 | 52.2  | 54.7 | 54.7  | 55.0 | 55.2  | 55.6 | 55.6  |  |  |  |
| 115                | 51.8 | 44.5 | 46.2 | 46.2 | 46.5 | 46.7  | 47.1 | 47.1  | 52.2 | 50.9  | 55.1 | 55.1  | 55.6 | 56.0  | 56.5 | 56.6  |  |  |  |
| 120                | 49.5 | 43.0 | 44.6 | 44.6 | 44.6 | 44.7  | 44.7 | 44.7  | 48.6 | 50.2  | 54.9 | 54.7  | 55.2 | 55.4  | 56.2 | 56.2  |  |  |  |
| 125                | 48.2 | 40.9 | 39.2 | 39.5 | 39.2 | 39.3  | 39.1 | 39.2  | 43.9 | 45.4  | 50.3 | 50.1  | 50.7 | 50.9  | 51.7 | 51.7  |  |  |  |
| 130                | 46.8 | 35.4 | 32.4 | 32.5 | 32.5 | 32.5  | 32.4 | 32.5  | 38.7 | 39.6  | 45.5 | 45.3  | 45.9 | 46.1  | 47.0 | 47.0  |  |  |  |
| 135                | 41.2 | 29.6 | 26.7 | 26.9 | 26.8 | 26.8  | 26.5 | 26.7  | 32.9 | 34.4  | 40.5 | 40.3  | 40.8 | 41.1  | 41.9 | 41.9  |  |  |  |
| 140                | 35.3 | 24.3 | 21.2 | 21.4 | 21.2 | 21.2  | 21.0 | 21.1  | 26.1 | 28.6  | 34.8 | 34.5  | 35.1 | 35.4  | 36.2 | 36.2  |  |  |  |
| 145                | 29.0 | 19.5 | 16.2 | 16.3 | 16.0 | 16.1  | 15.8 | 15.9  | 19.3 | 22.8  | 28.6 | 28.3  | 28.9 | 29.1  | 30.0 | 30.0  |  |  |  |
| 150                | 22.9 | 15.2 | 11.8 | 11.9 | 11.7 | 11.8  | 11.5 | 11.6  | 13.8 | 17.0  | 21.6 | 21.5  | 22.0 | 22.3  | 23.1 | 23.0  |  |  |  |
| 155                | 17.2 | 10.9 | 9.05 | 9.14 | 8.93 | 9.06  | 8.92 | 8.96  | 9.53 | 12.5  | 15.2 | 15.1  | 15.5 | 15.7  | 16.4 | 16.2  |  |  |  |
| 160                | 11.7 | 8.27 | 7.33 | 7.38 | 7.33 | 7.35  | 7.31 | 7.31  | 8.10 | 8.86  | 9.91 | 9.89  | 10.0 | 10.1  | 10.5 | 10.4  |  |  |  |
| 165                | 7.43 | 7.18 | 7.23 | 7.17 | 7.25 | 7.21  | 7.25 | 7.22  | 7.65 | 7.87  | 8.37 | 8.28  | 8.40 | 8.42  | 8.54 | 8.52  |  |  |  |
| 170                | 7.42 | 7.28 | 7.25 | 7.21 | 7.20 | 7.21  | 7.21 | 7.21  | 7.28 | 7.15  | 7.42 | 7.40  | 7.44 | 7.46  | 7.52 | 7.52  |  |  |  |
| 175                | 7.31 | 7.25 | 7.27 | 7.27 | 7.28 | 7.27  | 7.28 | 7.28  | 7.47 | 7.36  | 7.53 | 7.52  | 7.53 | 7.54  | 7.57 | 7.58  |  |  |  |
| 180                | 7.34 | 7.46 | 7.51 | 7.51 | 7.53 | 7.54  | 7.56 | 7.57  | 7.33 | 7.47  | 7.51 | 7.51  | 7.52 | 7.53  | 7.56 | 7.57  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LiFeng Shao  
Test Date:2023-10-10

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
Humidity:65.0%  
Test Distance:8.898m [K=1.0000]  
Remarks: