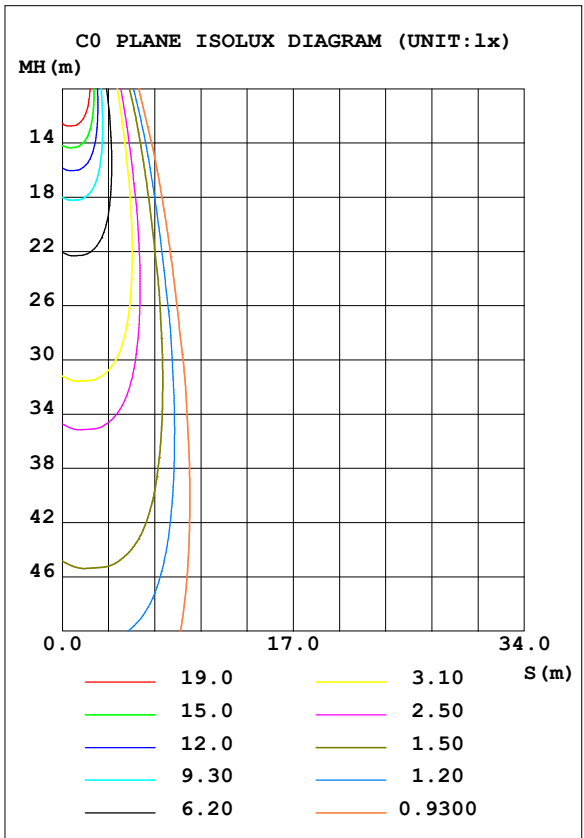
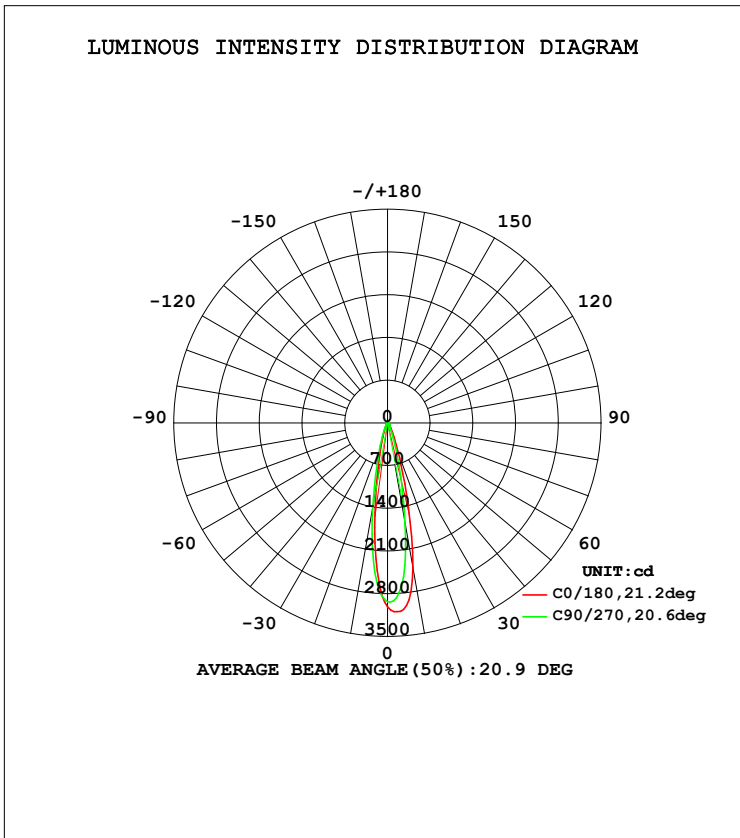


**LUMINAIRE PHOTOMETRIC TEST REPORT**

|                       |                  |                   |
|-----------------------|------------------|-------------------|
| NAME: SD28AL3-7W      | TYPE: SPOT LIGHT | WEIGHT:           |
| DIM.:                 | SPEC.:           | SERIAL No.:       |
| MFR.: wanjia lighting | SUR.:            | PROTECTION ANGLE: |

| DATA OF LAMP      |                  | PHOTOMETRIC DATA |        |                     |           |
|-------------------|------------------|------------------|--------|---------------------|-----------|
| MODEL             | SS3535-3000K-15D | Imax (cd)        | 3097   | S/MH (C0/180)       | 0.44      |
| NOMINAL POWER (W) | 7                | LOR (%)          | 100.0  | S/MH (C90/270)      | 0.37      |
| RATED VOLTAGE (V) | 12               | TOTAL FLUX (lm)  | 613.11 | η UP, DN (C0-180)   | 0.0, 57.7 |
| NOMINAL FLUX (lm) | 613.106          | CIE CLASS        | DIRECT | η UP, DN (C180-360) | 0.0, 42.3 |
| LAMPS INSIDE      | 1                | η up (%)         | 0.0    | CIBSE SHR NOM       | 0.00      |
| TEST VOLTAGE (V)  | 12.2             | η down (%)       | 100.0  | CIBSE SHR MAX       | 1.00      |



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2023-02-13

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
 Humidity: 65.0%  
 Test Distance: 7.415m [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       | 2400                  | 2419  | 1666  | 1163  | 1063   | 998.6  | 1411   | 2010  | 0- 10    | 215.5       | 215.5        | 35.2,35.2  |
| 20       | 527.1                 | 543.5 | 325.5 | 223.9 | 200.3  | 195.7  | 290.8  | 433.4 | 10- 20   | 221.6       | 437.1        | 71.3,71.3  |
| 30       | 128.9                 | 121.7 | 76.51 | 60.74 | 54.81  | 57.79  | 70.59  | 99.78 | 20- 30   | 78.79       | 515.9        | 84.1,84.1  |
| 40       | 53.18                 | 50.92 | 39.39 | 34.86 | 27.62  | 28.19  | 32.15  | 40.11 | 30- 40   | 34.57       | 550.5        | 89.8,89.8  |
| 50       | 30.35                 | 29.62 | 26.18 | 23.73 | 17.70  | 17.76  | 19.95  | 22.61 | 40- 50   | 22.98       | 573.5        | 93.5,93.5  |
| 60       | 19.39                 | 19.59 | 17.22 | 15.44 | 11.32  | 10.92  | 12.55  | 14.05 | 50- 60   | 16.96       | 590.4        | 96.3,96.3  |
| 70       | 12.33                 | 12.80 | 10.76 | 9.415 | 6.316  | 6.144  | 7.603  | 8.696 | 60- 70   | 11.87       | 602.3        | 98.2,98.2  |
| 80       | 7.161                 | 7.372 | 6.054 | 4.961 | 2.864  | 2.600  | 3.528  | 4.632 | 70- 80   | 7.334       | 609.6        | 99.4,99.4  |
| 90       | 3.350                 | 3.526 | 2.426 | 2.047 | 0.6223 | 0.6105 | 0.5792 | 1.346 | 80- 90   | 3.484       | 613.1        | 100,100    |
| 100      |                       |       |       |       |        |        |        |       | 90-100   |             |              |            |
| 110      |                       |       |       |       |        |        |        |       | 100-110  |             |              |            |
| 120      |                       |       |       |       |        |        |        |       | 110-120  |             |              |            |
| 130      |                       |       |       |       |        |        |        |       | 120-130  |             |              |            |
| 140      |                       |       |       |       |        |        |        |       | 130-140  |             |              |            |
| 150      |                       |       |       |       |        |        |        |       | 140-150  |             |              |            |
| 160      |                       |       |       |       |        |        |        |       | 150-160  |             |              |            |
| 170      |                       |       |       |       |        |        |        |       | 160-170  |             |              |            |
| 180      |                       |       |       |       |        |        |        |       | 170-180  |             |              |            |
| DEG      | LUMINOUS INTENSITY:cd |       |       |       |        |        |        |       |          | UNIT:lm     |              |            |

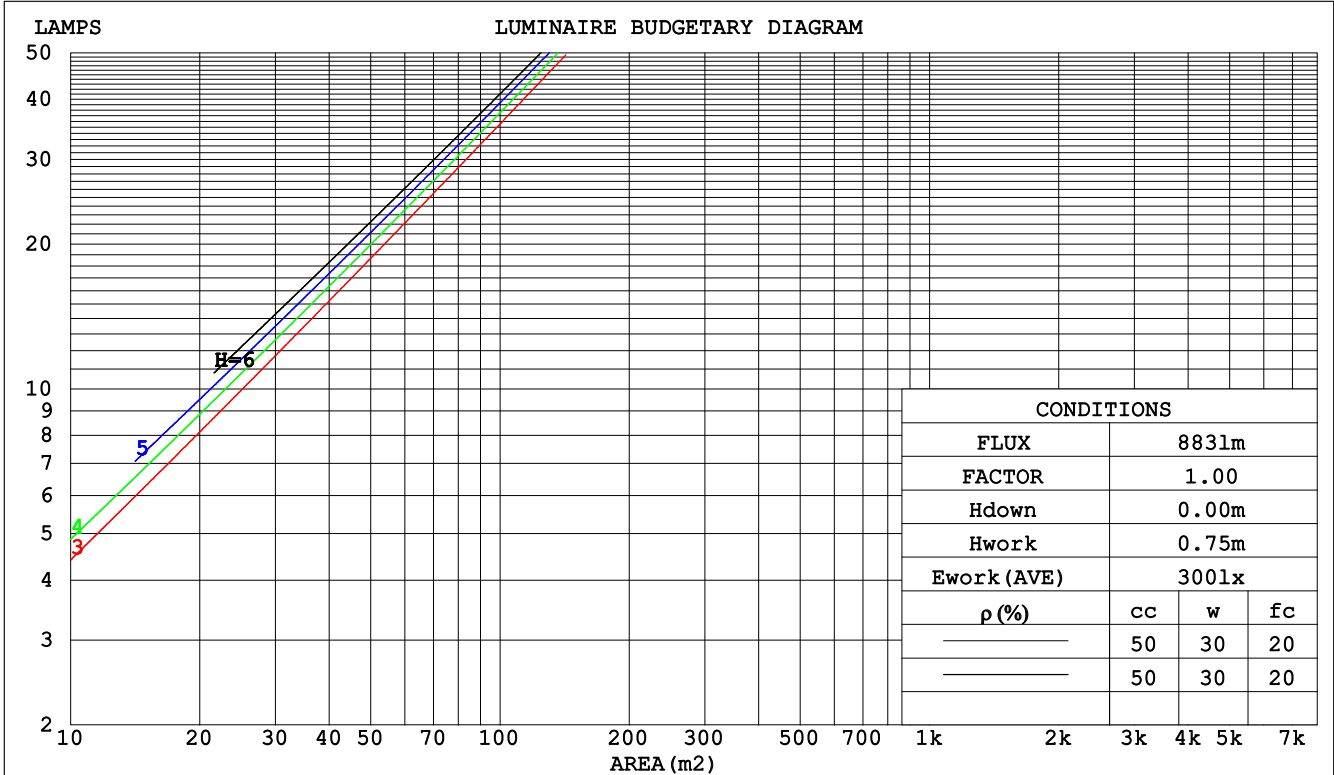
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2023-02-13

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
 Humidity:65.0%  
 Test Distance:7.415m [K=1.0000]  
 Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

|                       |                  |                   |
|-----------------------|------------------|-------------------|
| NAME: SD28AL3-7W      | TYPE: SPOT LIGHT | WEIGHT:           |
| DIM.:                 | SPEC.:           | SERIAL No.:       |
| MFR.: wanjia lighting | SUR.:            | PROTECTION ANGLE: |

|             |                       |      |      |      |      |      |                                  |      |      |      |      |      |      |      |      |     |
|-------------|-----------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|------|------|------|-----|
| $\rho_{cc}$ | 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         | 1.19                  | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11                             | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | .00 |
| 1.0         | 1.12                  | 1.09 | 1.07 | 1.09 | 1.07 | 1.05 | 1.05                             | 1.04 | 1.02 | 1.02 | 1.00 | .99  | .98  | .97  | .96  | .95 |
| 2.0         | 1.05                  | 1.02 | .99  | 1.03 | 1.00 | .97  | 1.00                             | .98  | .95  | .97  | .95  | .93  | .95  | .93  | .91  | .90 |
| 3.0         | .00                   | .95  | .92  | .98  | .94  | .91  | .96                              | .93  | .90  | .93  | .91  | .89  | .91  | .89  | .87  | .86 |
| 4.0         | .95                   | .90  | .87  | .94  | .90  | .86  | .92                              | .88  | .85  | .90  | .87  | .84  | .88  | .86  | .84  | .82 |
| 5.0         | .91                   | .86  | .83  | .90  | .86  | .82  | .88                              | .85  | .82  | .87  | .84  | .81  | .85  | .83  | .80  | .79 |
| 6.0         | .87                   | .83  | .79  | .87  | .82  | .79  | .85                              | .81  | .78  | .84  | .81  | .78  | .83  | .80  | .77  | .76 |
| 7.0         | .84                   | .80  | .76  | .84  | .79  | .76  | .83                              | .79  | .76  | .81  | .78  | .75  | .80  | .77  | .75  | .74 |
| 8.0         | .81                   | .77  | .74  | .81  | .77  | .73  | .80                              | .76  | .73  | .79  | .76  | .73  | .78  | .75  | .73  | .72 |
| 9.0         | .79                   | .74  | .71  | .78  | .74  | .71  | .78                              | .74  | .71  | .77  | .73  | .71  | .76  | .73  | .71  | .69 |
| 10.0        | .77                   | .72  | .69  | .76  | .72  | .69  | .75                              | .72  | .69  | .75  | .71  | .69  | .74  | .71  | .69  | .68 |



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2023-02-13

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
 Humidity: 65.0%  
 Test Distance: 7.415m [K=1.0000]  
 Remarks:

**WEC AND CCEC**

|                       |                  |                   |
|-----------------------|------------------|-------------------|
| NAME: SD28AL3-7W      | TYPE: SPOT LIGHT | WEIGHT:           |
| DIM.:                 | SPEC.:           | SERIAL No.:       |
| MFR.: wanjia lighting | SUR.:            | PROTECTION ANGLE: |

| ρcc  | 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 |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |
| 0.0  |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |
| 1.0  | .164                  | .093 | .029 | .157 | .089 | .028 | .144                            | .083 | .026 | .133 | .077 | .025 | .122 | .071 | .023 |   |
| 2.0  | .151                  | .083 | .025 | .145 | .080 | .025 | .135                            | .075 | .023 | .125 | .070 | .022 | .116 | .066 | .021 |   |
| 3.0  | .140                  | .074 | .022 | .135 | .072 | .022 | .126                            | .068 | .021 | .118 | .065 | .020 | .110 | .061 | .019 |   |
| 4.0  | .130                  | .067 | .020 | .126 | .066 | .019 | .118                            | .063 | .019 | .111 | .060 | .018 | .105 | .057 | .017 |   |
| 5.0  | .121                  | .062 | .018 | .118 | .060 | .018 | .111                            | .058 | .017 | .105 | .056 | .017 | .100 | .053 | .016 |   |
| 6.0  | .114                  | .057 | .016 | .111 | .056 | .016 | .105                            | .054 | .016 | .100 | .052 | .015 | .095 | .050 | .015 |   |
| 7.0  | .107                  | .053 | .015 | .105 | .052 | .015 | .100                            | .050 | .015 | .095 | .049 | .014 | .091 | .047 | .014 |   |
| 8.0  | .101                  | .050 | .014 | .099 | .049 | .014 | .095                            | .047 | .014 | .091 | .046 | .013 | .087 | .045 | .013 |   |
| 9.0  | .096                  | .047 | .013 | .094 | .046 | .013 | .091                            | .045 | .013 | .087 | .044 | .012 | .084 | .043 | .012 |   |
| 10.0 | .092                  | .044 | .012 | .090 | .043 | .012 | .087                            | .042 | .012 | .083 | .041 | .012 | .080 | .040 | .012 |   |

| ρcc  | 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  | .190                  | .190 | .190 | .163 | .163 | .163 | .111                                       | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .170                  | .157 | .146 | .146 | .135 | .126 | .100                                       | .093 | .087 | .057 | .054 | .051 | .018 | .017 | .016 |   |
| 2.0  | .153                  | .133 | .115 | .131 | .114 | .099 | .090                                       | .079 | .069 | .052 | .046 | .041 | .017 | .015 | .013 |   |
| 3.0  | .139                  | .113 | .093 | .119 | .098 | .080 | .082                                       | .068 | .056 | .047 | .040 | .033 | .015 | .013 | .011 |   |
| 4.0  | .127                  | .098 | .076 | .109 | .085 | .066 | .075                                       | .059 | .047 | .043 | .035 | .028 | .014 | .011 | .009 |   |
| 5.0  | .117                  | .086 | .063 | .101 | .075 | .055 | .069                                       | .052 | .039 | .040 | .031 | .023 | .013 | .010 | .008 |   |
| 6.0  | .108                  | .076 | .054 | .093 | .066 | .047 | .064                                       | .046 | .033 | .037 | .027 | .020 | .012 | .009 | .006 |   |
| 7.0  | .101                  | .068 | .046 | .087 | .059 | .040 | .060                                       | .042 | .028 | .035 | .024 | .017 | .011 | .008 | .006 |   |
| 8.0  | .094                  | .062 | .039 | .081 | .054 | .034 | .056                                       | .038 | .024 | .033 | .022 | .015 | .011 | .007 | .005 |   |
| 9.0  | .088                  | .056 | .034 | .076 | .049 | .030 | .053                                       | .034 | .021 | .031 | .020 | .013 | .010 | .007 | .004 |   |
| 10.0 | .083                  | .051 | .030 | .072 | .045 | .026 | .050                                       | .031 | .019 | .029 | .019 | .011 | .009 | .006 | .004 |   |

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2023-02-13

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
 Humidity: 65.0%  
 Test Distance: 7.415m [K=1.0000]  
 Remarks:

**Uncorrected UGR Table**

|  |                  |      |      |      |                  |                |      |      |      |                   |  |  |  |  |  |
|--|------------------|------|------|------|------------------|----------------|------|------|------|-------------------|--|--|--|--|--|
| NAME: SD28AL3-7W                                   |                  |      |      |      | TYPE: SPOT LIGHT |                |      |      |      | WEIGHT:           |  |  |  |  |  |
| DIM.:  |                  |      |      |      | SPEC.:           |                |      |      |      | SERIAL No.:       |  |  |  |  |  |
| MFR.: wanjia lighting                              |                  |      |      |      | 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                                      | 21.5             | 22.3 | 21.7 | 22.4 | 22.6             | 20.8           | 21.6 | 21.0 | 21.7 | 21.9              |  |  |  |  |  |
| 3H   | 22.8             | 23.5 | 23.0 | 23.7 | 23.8             | 22.1           | 22.8 | 22.3 | 23.0 | 23.2              |  |  |  |  |  |
| 4H   | 23.4             | 24.1 | 23.6 | 24.3 | 24.5             | 22.7           | 23.3 | 22.9 | 23.6 | 23.8              |  |  |  |  |  |
| 6H   | 24.0             | 24.6 | 24.3 | 24.9 | 25.1             | 23.3           | 23.9 | 23.5 | 24.1 | 24.4              |  |  |  |  |  |
| 8H   | 24.3             | 24.9 | 24.6 | 25.2 | 25.4             | 23.5           | 24.2 | 23.8 | 24.4 | 24.7              |  |  |  |  |  |
| 12H  | 24.7             | 25.3 | 25.0 | 25.5 | 25.8             | 23.8           | 24.4 | 24.2 | 24.7 | 25.0              |  |  |  |  |  |
| 4H 2H  | 22.0             | 22.7 | 22.3 | 22.9 | 23.1             | 21.4           | 22.1 | 21.7 | 22.3 | 22.6              |  |  |  |  |  |
| 3H   | 23.5             | 24.1 | 23.8 | 24.4 | 24.6             | 22.9           | 23.5 | 23.2 | 23.8 | 24.1              |  |  |  |  |  |
| 4H   | 24.3             | 24.8 | 24.6 | 25.1 | 25.4             | 23.7           | 24.2 | 24.0 | 24.5 | 24.8              |  |  |  |  |  |
| 6H   | 25.1             | 25.5 | 25.4 | 25.9 | 26.2             | 24.4           | 24.9 | 24.8 | 25.3 | 25.6              |  |  |  |  |  |
| 8H   | 25.5             | 25.9 | 25.9 | 26.3 | 26.6             | 24.8           | 25.3 | 25.2 | 25.6 | 26.0              |  |  |  |  |  |
| 12H  | 25.9             | 26.3 | 26.3 | 26.7 | 27.1             | 25.2           | 25.6 | 25.6 | 26.0 | 26.4              |  |  |  |  |  |
| 8H 4H  | 24.6             | 25.0 | 25.0 | 25.4 | 25.7             | 24.1           | 24.5 | 24.5 | 24.9 | 25.2              |  |  |  |  |  |
| 6H   | 25.6             | 26.0 | 26.0 | 26.3 | 26.8             | 25.0           | 25.4 | 25.5 | 25.8 | 26.2              |  |  |  |  |  |
| 8H   | 26.1             | 26.5 | 26.6 | 26.9 | 27.3             | 25.6           | 25.9 | 26.0 | 26.3 | 26.7              |  |  |  |  |  |
| 12H  | 26.8             | 27.1 | 27.2 | 27.5 | 28.0             | 26.1           | 26.4 | 26.6 | 26.8 | 27.3              |  |  |  |  |  |
| 12H 4H   | 24.6             | 25.0 | 25.0 | 25.4 | 25.8             | 24.1           | 24.5 | 24.5 | 24.9 | 25.3              |  |  |  |  |  |
| 6H   | 25.7             | 26.0 | 26.1 | 26.4 | 26.9             | 25.2           | 25.5 | 25.6 | 25.9 | 26.4              |  |  |  |  |  |
| 8H   | 26.3             | 26.6 | 26.8 | 27.1 | 27.5             | 25.8           | 26.1 | 26.2 | 26.5 | 27.0              |  |  |  |  |  |
| Variations with the observer position at spacings: |                  |      |      |      |                  |                |      |      |      |                   |  |  |  |  |  |
| S = 1.0H   | + 0.2 / - 0.3    |      |      |      |                  | + 0.2 / - 0.3  |      |      |      |                   |  |  |  |  |  |
| 1.5H   | + 0.2 / - 0.2    |      |      |      |                  | + 0.1 / - 0.2  |      |      |      |                   |  |  |  |  |  |
| 2.0H   | + 0.2 / - 0.2    |      |      |      |                  | + 0.1 / - 0.3  |      |      |      |                   |  |  |  |  |  |

CIE Pub.117 Corrected 613.1 lm Total Lamp Luminous Flux. (8log(F/F0) = -1.7)

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2023-02-13

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
Humidity: 65.0%  
Test Distance: 7.415m [K=1.0000]  
Remarks:

**UTILIZATION FACTORS TABLE**

|                       |                  |                   |
|-----------------------|------------------|-------------------|
| NAME: SD28AL3-7W      | TYPE: SPOT LIGHT | WEIGHT:           |
| DIM.:                 | SPEC.:           | SERIAL No.:       |
| MFR.: wanjia lighting | SUR.:            | PROTECTION ANGLE: |

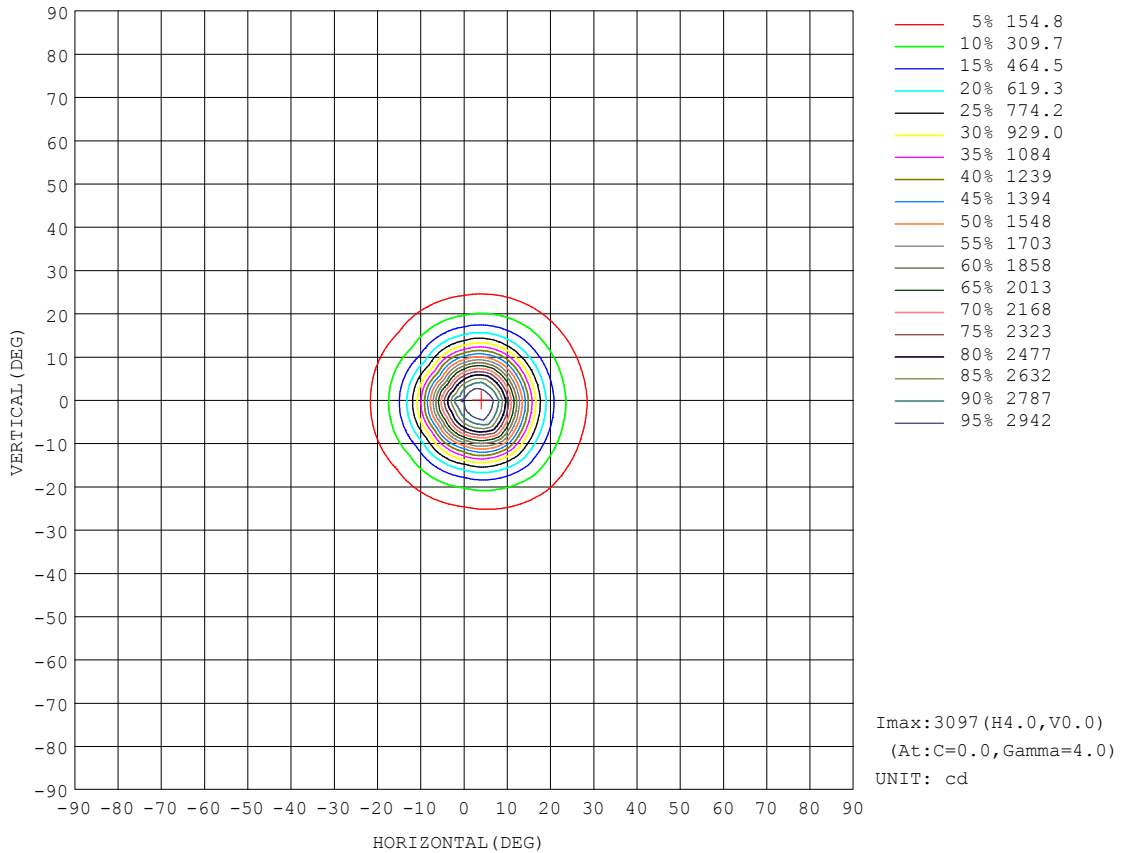
| REFLECTANCE                      |  |     |           |     |     |     |               |     |     |        |
|----------------------------------|--|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling                          | 0.8  | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 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                         | 85   | 79  | 75        | 85  | 78  | 74  | 84            | 78  | 74  | 71     |
| 0.80                             | 93   | 86  | 82        | 92  | 86  | 82  | 91            | 86  | 82  | 78     |
| 1.00                             | 97   | 91  | 87        | 96  | 91  | 87  | 95            | 91  | 87  | 82     |
| 1.25                             | 101  | 96  | 92        | 100 | 95  | 92  | 98            | 94  | 91  | 86     |
| 1.50                             | 104  | 99  | 95        | 103 | 98  | 95  | 101           | 97  | 94  | 89     |
| 2.00                             | 107  | 103 | 99        | 106 | 102 | 98  | 103           | 100 | 97  | 91     |
| 2.50                             | 109  | 105 | 102       | 107 | 104 | 101 | 104           | 101 | 99  | 93     |
| 3.00                             | 111  | 107 | 104       | 109 | 106 | 103 | 106           | 103 | 101 | 94     |
| 4.00                             | 113  | 110 | 108       | 111 | 108 | 106 | 107           | 105 | 103 | 96     |
| 5.00                             | 114  | 112 | 110       | 112 | 110 | 108 | 108           | 107 | 105 | 97     |
| ROOM INDEX                       | UF (total)   |     |           |     |     |     |               |     |     | Direct |
| According to DIN EN 13032-2 2004 |  |     | Suspended |     |     |     | SHRNOM = 1.25 |     |     |        |

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2023-02-13

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
 Humidity: 65.0%  
 Test Distance: 7.415m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

|                              |                         |                          |
|------------------------------|-------------------------|--------------------------|
| <b>NAME:</b> SD28AL3-7W      | <b>TYPE:</b> SPOT LIGHT | <b>WEIGHT:</b>           |
| <b>DIM.:</b>                 | <b>SPEC.:</b>           | <b>SERIAL No.:</b>       |
| <b>MFR.:</b> wanjia lighting | <b>SUR.:</b>            | <b>PROTECTION ANGLE:</b> |

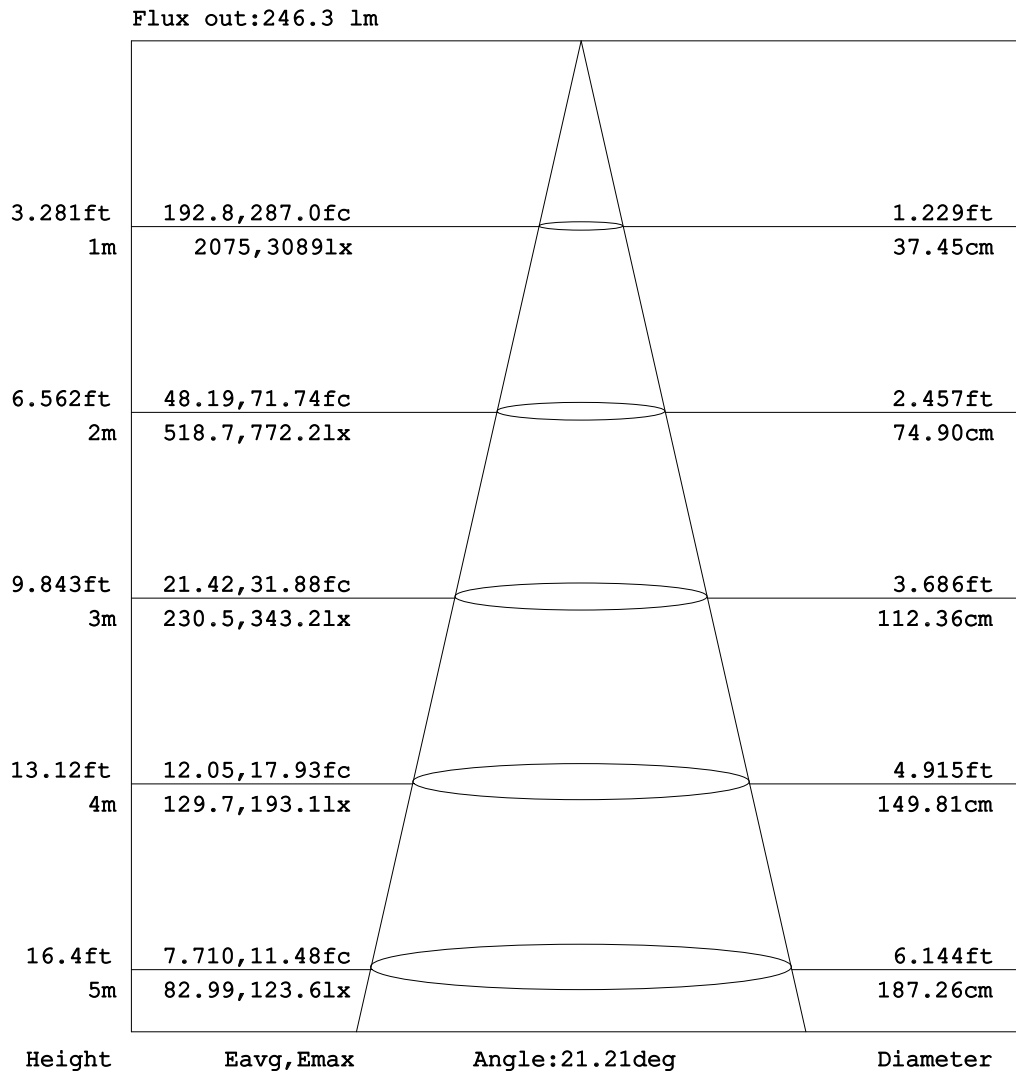


C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2023-02-13

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
Humidity: 65.0%  
Test Distance: 7.415m [K=1.0000]  
Remarks:

**AAI Figure**

|                       |                  |                   |
|-----------------------|------------------|-------------------|
| NAME: SD28AL3-7W      | TYPE: SPOT LIGHT | WEIGHT:           |
| DIM.:                 | SPEC.:           | SERIAL No.:       |
| MFR.: wanjia lighting | SUR.:            | PROTECTION ANGLE: |



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

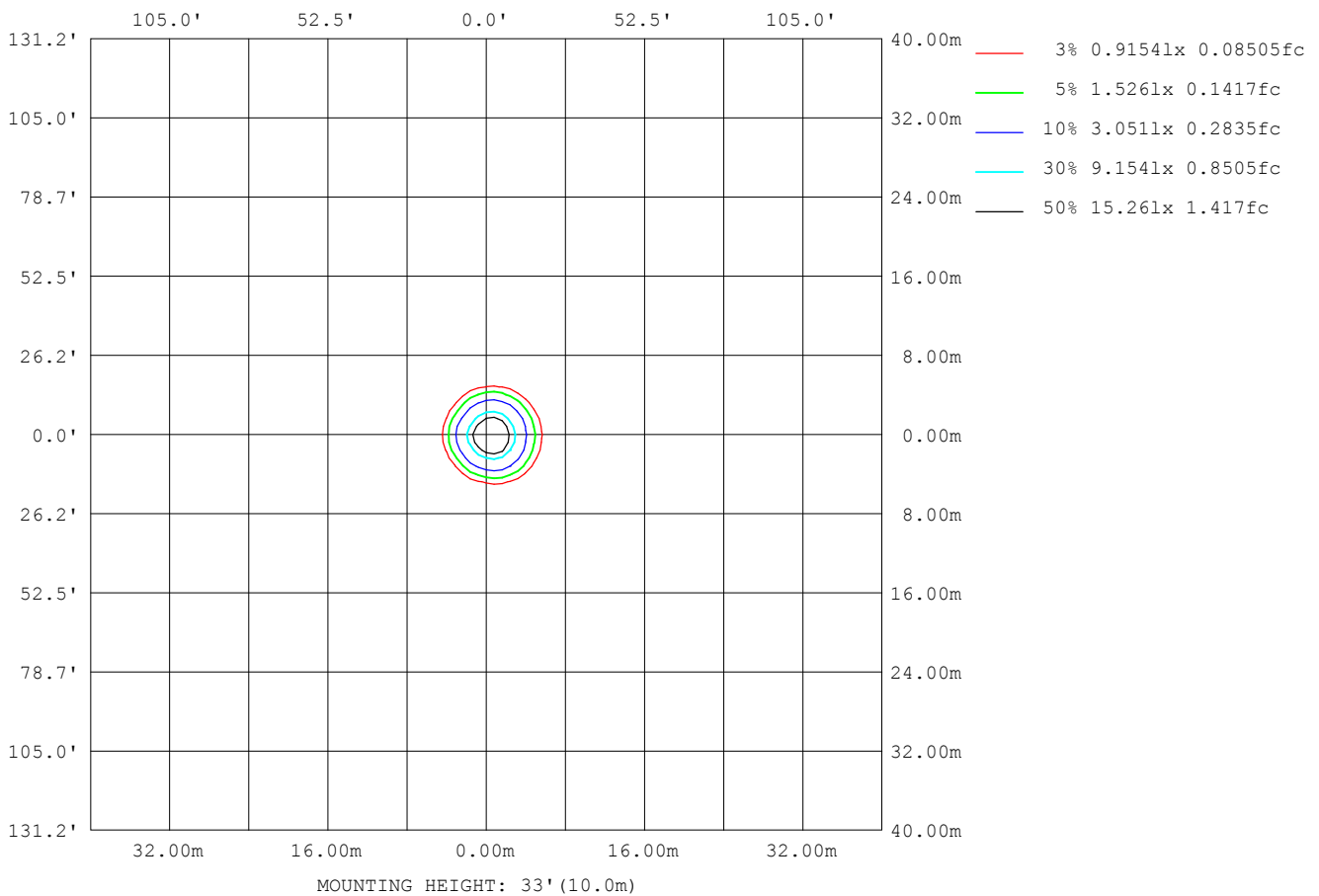
C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2023-02-13

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
Humidity: 65.0%  
Test Distance: 7.415m [K=1.0000]  
Remarks:



**ISOLUX DIAGRAM**

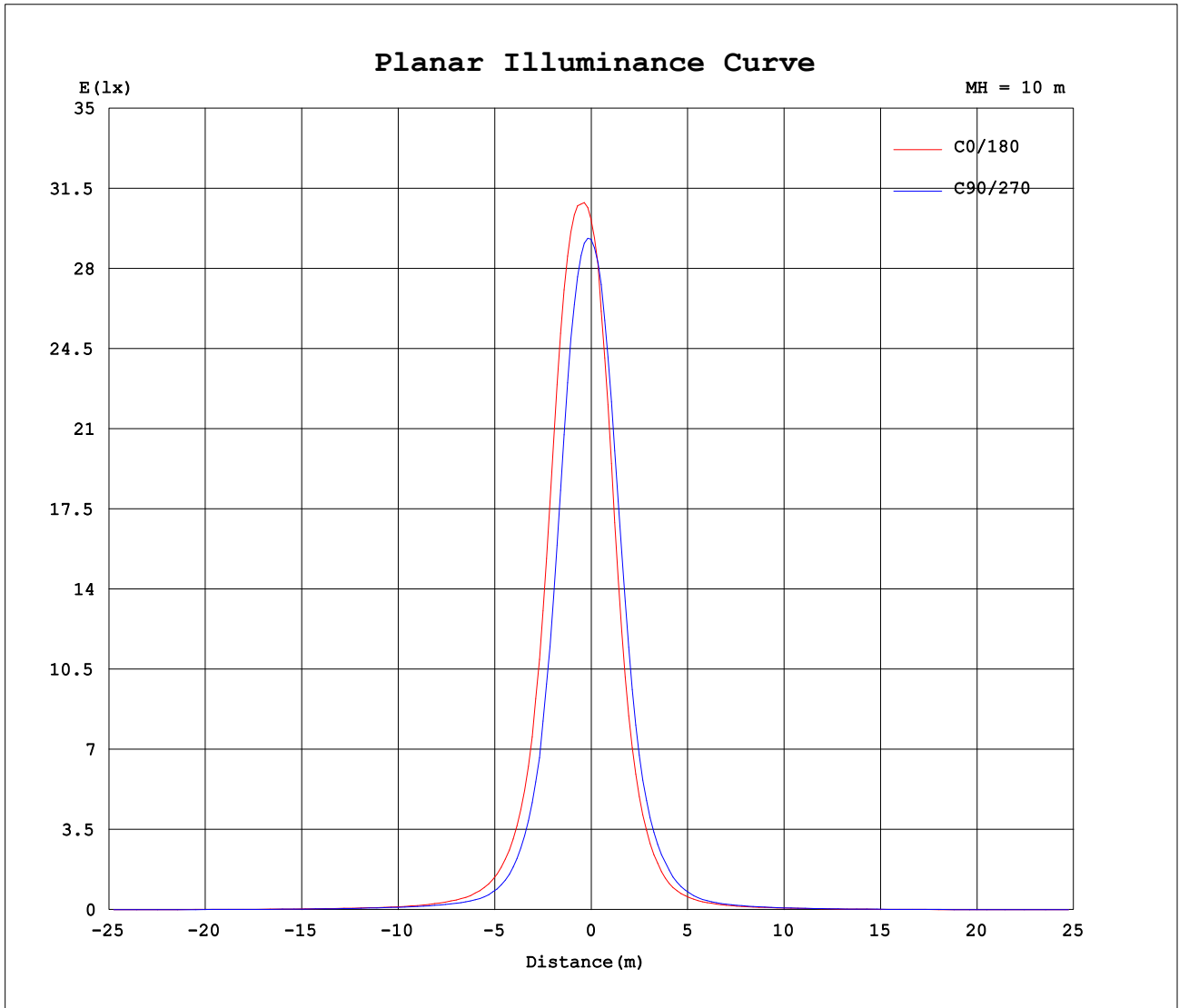
|                       |                  |                   |
|-----------------------|------------------|-------------------|
| NAME: SD28AL3-7W      | TYPE: SPOT LIGHT | WEIGHT:           |
| DIM.:                 | SPEC.:           | SERIAL No.:       |
| MFR.: wanjia lighting | SUR.:            | PROTECTION ANGLE: |



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2023-02-13

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
 Humidity: 65.0%  
 Test Distance: 7.415m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2023-02-13

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
 Humidity: 65.0%  
 Test Distance: 7.415m [K=1.0000]  
 Remarks:

**LUMINOUS DISTRIBUTION INTENSITY DATA**

|                              |                         |                          |
|------------------------------|-------------------------|--------------------------|
| <b>NAME:</b> SD28AL3-7W      | <b>TYPE:</b> SPOT LIGHT | <b>WEIGHT:</b>           |
| <b>DIM.:</b>                 | <b>SPEC.:</b>           | <b>SERIAL No.:</b>       |
| <b>MFR.:</b> wanjia lighting | <b>SUR.:</b>            | <b>PROTECTION ANGLE:</b> |

Table--1

UNIT: cd

| C (DEG)<br>γ (DEG) | 0    | 45   | 90   | 135  | 180  | 225  | 270  | 315  |  |  |  |  |  |  |  |  |  |  |
|--------------------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|
| 0                  | 3015 | 2929 | 2928 | 2953 | 3015 | 2929 | 2928 | 2953 |  |  |  |  |  |  |  |  |  |  |
| 5                  | 3069 | 3032 | 2673 | 2288 | 2231 | 2073 | 2442 | 2866 |  |  |  |  |  |  |  |  |  |  |
| 10                 | 2400 | 2419 | 1666 | 1163 | 1063 | 999  | 1411 | 2010 |  |  |  |  |  |  |  |  |  |  |
| 15                 | 1213 | 1261 | 738  | 491  | 460  | 426  | 628  | 982  |  |  |  |  |  |  |  |  |  |  |
| 20                 | 527  | 544  | 325  | 224  | 200  | 196  | 291  | 433  |  |  |  |  |  |  |  |  |  |  |
| 25                 | 250  | 251  | 146  | 103  | 95.7 | 98.3 | 137  | 201  |  |  |  |  |  |  |  |  |  |  |
| 30                 | 129  | 122  | 76.5 | 60.7 | 54.8 | 57.8 | 70.6 | 99.8 |  |  |  |  |  |  |  |  |  |  |
| 35                 | 78.4 | 72.7 | 52.4 | 44.2 | 36.9 | 39.0 | 45.7 | 58.0 |  |  |  |  |  |  |  |  |  |  |
| 40                 | 53.2 | 50.9 | 39.4 | 34.9 | 27.6 | 28.2 | 32.1 | 40.1 |  |  |  |  |  |  |  |  |  |  |
| 45                 | 38.7 | 38.0 | 31.7 | 28.9 | 21.9 | 22.3 | 24.9 | 28.7 |  |  |  |  |  |  |  |  |  |  |
| 50                 | 30.4 | 29.6 | 26.2 | 23.7 | 17.7 | 17.8 | 20.0 | 22.6 |  |  |  |  |  |  |  |  |  |  |
| 55                 | 24.1 | 24.0 | 21.3 | 19.3 | 14.2 | 14.1 | 15.9 | 17.8 |  |  |  |  |  |  |  |  |  |  |
| 60                 | 19.4 | 19.6 | 17.2 | 15.4 | 11.3 | 10.9 | 12.5 | 14.0 |  |  |  |  |  |  |  |  |  |  |
| 65                 | 15.5 | 15.9 | 13.7 | 12.2 | 8.75 | 8.45 | 9.78 | 10.9 |  |  |  |  |  |  |  |  |  |  |
| 70                 | 12.3 | 12.8 | 10.8 | 9.42 | 6.32 | 6.14 | 7.60 | 8.70 |  |  |  |  |  |  |  |  |  |  |
| 75                 | 9.46 | 9.81 | 8.24 | 6.98 | 4.47 | 3.90 | 5.41 | 6.52 |  |  |  |  |  |  |  |  |  |  |
| 80                 | 7.16 | 7.37 | 6.05 | 4.96 | 2.86 | 2.60 | 3.53 | 4.63 |  |  |  |  |  |  |  |  |  |  |
| 85                 | 5.19 | 5.30 | 4.18 | 3.06 | 1.30 | 1.09 | 1.96 | 2.87 |  |  |  |  |  |  |  |  |  |  |
| 90                 | 3.35 | 3.53 | 2.43 | 2.05 | 0.62 | 0.61 | 0.58 | 1.35 |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |
|                    |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
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γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
 Humidity: 65.0%  
 Test Distance: 7.415m [K=1.0000]  
 Remarks: