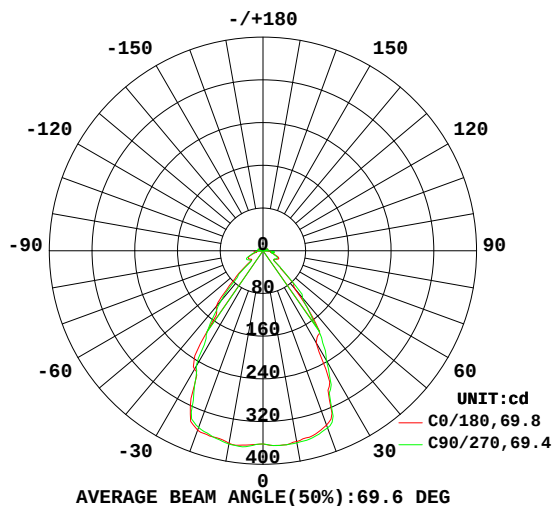


## LUMINAIRE PHOTOMETRIC TEST REPORT

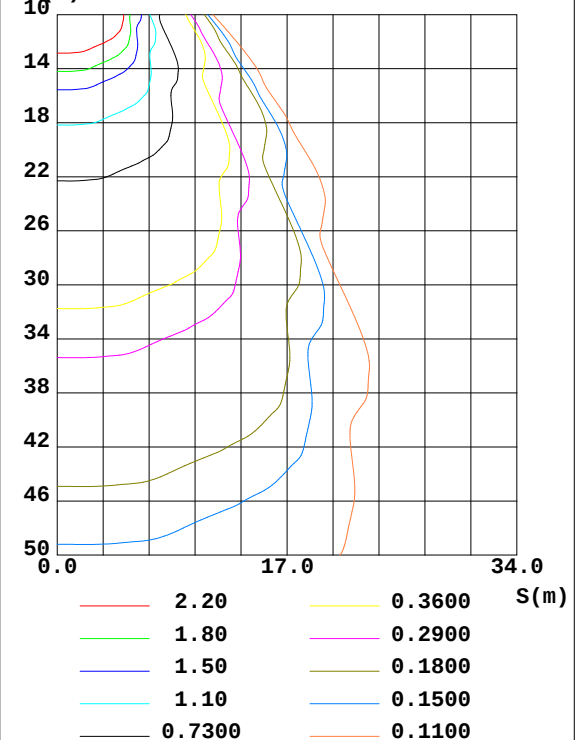
|                                                                                     |           |                      |
|-------------------------------------------------------------------------------------|-----------|----------------------|
| Test:U:120.10V I:0.0793A P:9.3500W PF:0.9817 Freq:60.00Hz<br>Lamp Flux:556.437x1 lm |           |                      |
| NAME: ASD-LCLR-1B-9BK                                                               | TYPE: N/A | WEIGHT: N/A          |
| SPEC.:5000K                                                                         | DIM.: N/A | SERIAL No.: N/A      |
| MFR.:ASD Lighting Corp                                                              | SUR.: N/A | Shielding Angle: N/A |

| DATA OF LAMP     |                 | PHOTOMETRIC DATA      |        |                    |           | Eff: 59.51 lm/W |
|------------------|-----------------|-----------------------|--------|--------------------|-----------|-----------------|
| MODEL            | ASD-LCLR-1B-9BK | I <sub>max</sub> (cd) | 369.2  | S/MH(C0/180)       | 1.02      |                 |
| NOMINAL POWER(W) | 9               | LOR(%)                | 100.0  | S/MH(C90/270)      | 1.01      |                 |
| RATED VOLTAGE(V) | 120             | TOTAL FLUX(lm)        | 556.44 | η UP, DN(C0-180)   | 2.8, 47.7 |                 |
| NOMINAL FLUX(lm) | 556.437         | CIE CLASS             | DIRECT | η UP, DN(C180-360) | 2.8, 46.6 |                 |
| LAMPS INSIDE     | 1               | η up(%)               | 5.6    | CIBSE SHR NOM      | 1.00      |                 |
| TEST VOLTAGE(V)  | 120             | η down(%)             | 94.4   | CIBSE SHR MAX      | 1.10      |                 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.1DEG  
Operators:Hill  
Test Date:2024-10-21

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.446  
Humidity:44%  
Test Distance:2.519m [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       | 366.2                 | 367.1  | 367.6  | 364.1  | 362.7  | 364.0  | 365.1  | 367.6  | 0- 10    | 34.92       | 34.92        | 6.28, 6.28 |
| 20       | 357.6                 | 357.2  | 352.2  | 348.2  | 347.7  | 348.7  | 353.1  | 357.0  | 10- 20   | 102.0       | 136.9        | 24.6, 24.6 |
| 30       | 256.3                 | 253.2  | 250.7  | 223.3  | 199.1  | 221.7  | 237.8  | 258.0  | 20- 30   | 139.0       | 276.0        | 49.6, 49.6 |
| 40       | 136.2                 | 136.2  | 121.8  | 112.0  | 91.98  | 109.0  | 114.7  | 136.4  | 30- 40   | 109.4       | 385.4        | 69.3, 69.3 |
| 50       | 27.81                 | 29.18  | 28.63  | 27.01  | 27.04  | 25.21  | 25.92  | 28.80  | 40- 50   | 50.06       | 435.5        | 78.3, 78.3 |
| 60       | 30.39                 | 32.84  | 33.80  | 31.69  | 31.67  | 30.62  | 29.87  | 31.43  | 50- 60   | 25.79       | 461.2        | 82.9, 82.9 |
| 70       | 24.07                 | 24.71  | 25.25  | 24.24  | 25.86  | 23.40  | 22.18  | 25.43  | 60- 70   | 30.29       | 491.5        | 88.3, 88.3 |
| 80       | 13.35                 | 27.29  | 14.53  | 13.49  | 14.64  | 18.72  | 17.83  | 15.44  | 70- 80   | 19.94       | 511.5        | 91.9, 91.9 |
| 90       | 1.600                 | 2.151  | 1.827  | 2.116  | 1.662  | 1.961  | 1.910  | 2.031  | 80- 90   | 13.66       | 525.1        | 94.4, 94.4 |
| 100      | 7.019                 | 10.11  | 9.165  | 8.545  | 9.024  | 7.643  | 9.234  | 9.191  | 90-100   | 5.849       | 531.0        | 95.4, 95.4 |
| 110      | 7.651                 | 11.20  | 9.773  | 8.295  | 9.248  | 7.337  | 9.400  | 9.826  | 100-110  | 9.740       | 540.7        | 97.2, 97.2 |
| 120      | 5.018                 | 5.991  | 6.199  | 4.625  | 5.534  | 3.224  | 5.457  | 6.078  | 110-120  | 7.627       | 548.4        | 98.5, 98.5 |
| 130      | 1.258                 | 1.983  | 3.470  | 2.180  | 2.832  | 1.879  | 2.974  | 3.575  | 120-130  | 3.336       | 551.7        | 99.1, 99.1 |
| 140      | 1.040                 | 1.558  | 2.648  | 1.686  | 1.973  | 1.609  | 2.440  | 2.784  | 130-140  | 1.687       | 553.4        | 99.5, 99.5 |
| 150      | 1.146                 | 1.595  | 3.177  | 2.660  | 2.397  | 2.123  | 3.409  | 3.499  | 140-150  | 1.536       | 554.9        | 99.7, 99.7 |
| 160      | 1.251                 | 1.685  | 2.407  | 1.751  | 1.378  | 1.486  | 2.189  | 2.346  | 150-160  | 1.060       | 556.0        | 99.9, 99.9 |
| 170      | 1.097                 | 1.298  | 1.186  | 0.8906 | 0.5246 | 0.5814 | 0.8311 | 0.8711 | 160-170  | 0.3880      | 556.4        | 100, 100   |
| 180      | 0.6200                | 0.6117 | 0.5983 | 0.6026 | 0.6205 | 0.6117 | 0.5988 | 0.6026 | 170-180  | 0.0744      | 556.4        | 100, 100   |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |            |

Conical surface Flux(90deg): 419.04 lm

%lum = 75.3%

%lamp = 75.3%

Conical surface Flux(120deg): 461.25 lm

%lum = 82.9%

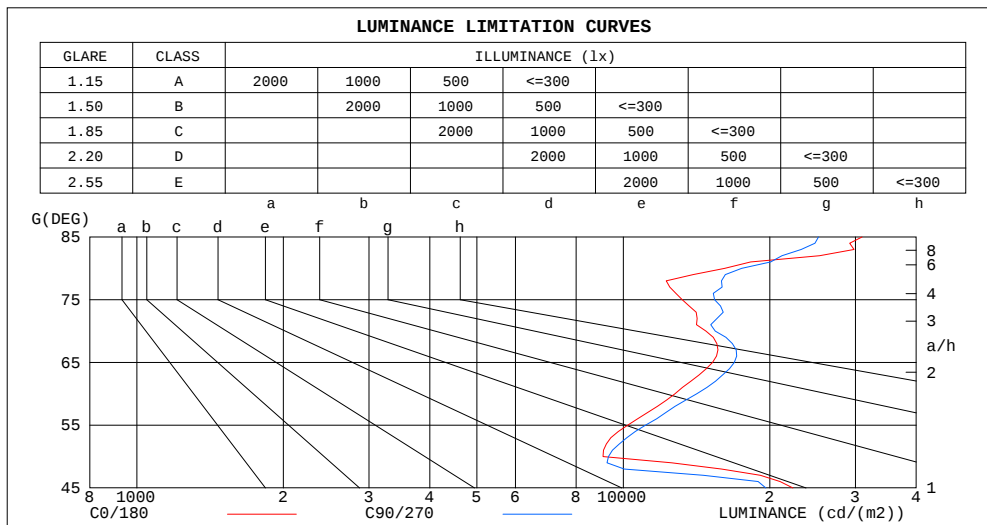
%lamp = 82.9%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.1DEG  
 Operators: Hill  
 Test Date: 2024-10-21

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.00.446  
 Humidity: 44%  
 Test Distance: 2.519m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

|                                                                                     |           |                      |
|-------------------------------------------------------------------------------------|-----------|----------------------|
| Test:U:120.10V I:0.0793A P:9.3500W PF:0.9817 Freq:60.00Hz<br>Lamp Flux:556.437x1 lm |           |                      |
| NAME: ASD-LCLR-1B-9BK                                                               | TYPE: N/A | WEIGHT: N/A          |
| SPEC.:5000K                                                                         | DIM.: N/A | SERIAL No.: N/A      |
| MFR.:ASD Lighting Corp                                                              | SUR.: N/A | Shielding Angle: N/A |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G(DEG)            | C0/180 | C90/270 |
| 85                | 30950  | 25179   |
| 80                | 16151  | 17508   |
| 75                | 13221  | 15406   |
| 70                | 14784  | 15449   |
| 65                | 15247  | 16910   |
| 60                | 12766  | 14146   |
| 55                | 10209  | 11105   |
| 50                | 9086   | 9322    |
| 45                | 22314  | 19634   |

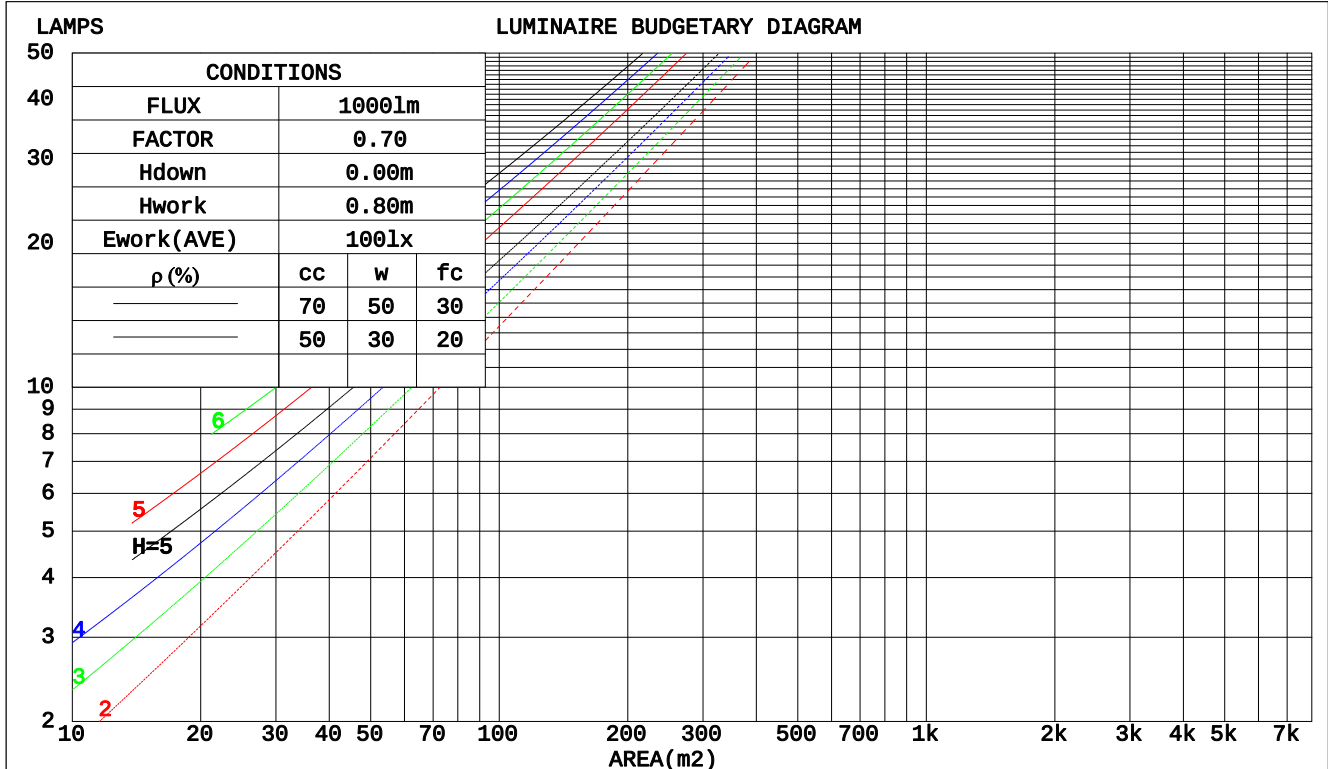
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.1DEG  
Operators:Hill  
Test Date:2024-10-21

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.446  
Humidity:44%  
Test Distance:2.519m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                                                     |           |                      |
|-------------------------------------------------------------------------------------|-----------|----------------------|
| Test:U:120.10V I:0.0793A P:9.3500W PF:0.9817 Freq:60.00Hz<br>Lamp Flux:556.437x1 lm |           |                      |
| NAME: ASD-LCLR-1B-9BK                                                               | TYPE: N/A | WEIGHT: N/A          |
| SPEC.:5000K                                                                         | DIM.: N/A | SERIAL No.: N/A      |
| MFR.:ASD Lighting Corp                                                              | SUR.: N/A | Shielding Angle: N/A |

| $\rho_{CC}$ | 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         | 1.18                  | 1.18 | 1.18 | 1.14 | 1.14 | 1.14 | 1.08                            | 1.08 | 1.08 | 1.02 | 1.02 | 1.02 | .97 | .97 | .97 | .94 |
| 1.0         | 1.05                  | 1.02 | .99  | 1.03 | .99  | .97  | .97                             | .95  | .92  | .93  | .91  | .89  | .88 | .87 | .85 | .83 |
| 2.0         | .95                   | .90  | .85  | .93  | .88  | .84  | .89                             | .84  | .81  | .85  | .81  | .78  | .81 | .78 | .76 | .74 |
| 3.0         | .87                   | .80  | .75  | .85  | .79  | .74  | .81                             | .76  | .72  | .78  | .74  | .70  | .75 | .71 | .68 | .66 |
| 4.0         | .79                   | .72  | .67  | .78  | .71  | .66  | .75                             | .69  | .65  | .72  | .67  | .63  | .69 | .65 | .62 | .60 |
| 5.0         | .73                   | .66  | .60  | .72  | .65  | .60  | .69                             | .63  | .59  | .67  | .61  | .57  | .64 | .60 | .56 | .55 |
| 6.0         | .67                   | .60  | .55  | .66  | .59  | .54  | .64                             | .58  | .53  | .62  | .57  | .53  | .60 | .55 | .52 | .50 |
| 7.0         | .62                   | .55  | .50  | .61  | .55  | .50  | .60                             | .54  | .49  | .58  | .52  | .48  | .56 | .51 | .48 | .46 |
| 8.0         | .58                   | .51  | .46  | .57  | .51  | .46  | .56                             | .50  | .45  | .54  | .49  | .45  | .53 | .48 | .44 | .43 |
| 9.0         | .54                   | .47  | .43  | .54  | .47  | .42  | .52                             | .46  | .42  | .51  | .45  | .42  | .49 | .45 | .41 | .39 |
| 10.0        | .51                   | .44  | .40  | .50  | .44  | .39  | .49                             | .43  | .39  | .48  | .42  | .39  | .47 | .42 | .38 | .37 |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.1DEG  
Operators:Hill  
Test Date:2024-10-21

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.446  
Humidity:44%  
Test Distance:2.519m [K=1.0000]  
Remarks:

### WEC AND CCEC

|                                                                                     |  |  |           |  |                      |
|-------------------------------------------------------------------------------------|--|--|-----------|--|----------------------|
| Test:U:120.10V I:0.0793A P:9.3500W PF:0.9817 Freq:60.00Hz<br>Lamp Flux:556.437x1 lm |  |  |           |  |                      |
| NAME: ASD-LCLR-1B-9BK                                                               |  |  | TYPE: N/A |  | WEIGHT: N/A          |
| SPEC.: 5000K                                                                        |  |  | DIM.: N/A |  | SERIAL No.: N/A      |
| MFR.:ASD Lighting Corp                                                              |  |  | SUR.: N/A |  | Shielding Angle: N/A |

| $\rho_{cc}$ | 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 |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |
| 0.0         |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |
| 1.0         | .255                  | .145 | .046 | .246 | .140 | .045 | .230                            | .132 | .042 | .215 | .124 | .040 | .201 | .117 | .038 |   |
| 2.0         | .233                  | .128 | .039 | .225 | .124 | .038 | .211                            | .118 | .037 | .198 | .111 | .035 | .186 | .105 | .033 |   |
| 3.0         | .215                  | .114 | .034 | .208 | .112 | .034 | .196                            | .106 | .032 | .184 | .101 | .031 | .174 | .096 | .030 |   |
| 4.0         | .199                  | .104 | .030 | .194 | .101 | .030 | .182                            | .097 | .029 | .172 | .092 | .028 | .163 | .088 | .027 |   |
| 5.0         | .186                  | .095 | .027 | .181 | .093 | .027 | .171                            | .089 | .026 | .162 | .085 | .025 | .153 | .082 | .025 |   |
| 6.0         | .174                  | .087 | .025 | .169 | .086 | .025 | .161                            | .082 | .024 | .152 | .079 | .023 | .145 | .076 | .023 |   |
| 7.0         | .164                  | .081 | .023 | .160 | .080 | .023 | .152                            | .077 | .022 | .144 | .074 | .022 | .137 | .071 | .021 |   |
| 8.0         | .155                  | .076 | .021 | .151 | .074 | .021 | .144                            | .072 | .020 | .137 | .069 | .020 | .130 | .067 | .019 |   |
| 9.0         | .146                  | .071 | .020 | .143 | .070 | .020 | .136                            | .067 | .019 | .130 | .065 | .019 | .124 | .063 | .018 |   |
| 10.0        | .139                  | .067 | .018 | .136 | .066 | .018 | .130                            | .064 | .018 | .124 | .062 | .018 | .119 | .060 | .017 |   |

| 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  | .233                  | .233 | .233 | .199 | .199 | .199 | .136                                       | .136 | .136 | .078 | .078 | .078 | .025 | .025 | .025 |   |
| 1.0  | .220                  | .200 | .182 | .188 | .172 | .157 | .129                                       | .118 | .108 | .074 | .068 | .063 | .024 | .022 | .020 |   |
| 2.0  | .208                  | .176 | .149 | .178 | .151 | .128 | .122                                       | .105 | .090 | .070 | .061 | .053 | .023 | .020 | .017 |   |
| 3.0  | .198                  | .158 | .126 | .169 | .136 | .109 | .116                                       | .094 | .077 | .067 | .055 | .045 | .022 | .018 | .015 |   |
| 4.0  | .188                  | .144 | .110 | .162 | .124 | .095 | .111                                       | .087 | .067 | .064 | .051 | .040 | .021 | .017 | .013 |   |
| 5.0  | .180                  | .133 | .098 | .155 | .115 | .085 | .107                                       | .080 | .060 | .062 | .047 | .036 | .020 | .015 | .012 |   |
| 6.0  | .173                  | .124 | .089 | .149 | .108 | .078 | .103                                       | .075 | .055 | .060 | .044 | .033 | .019 | .014 | .011 |   |
| 7.0  | .167                  | .117 | .082 | .143 | .101 | .072 | .099                                       | .071 | .051 | .057 | .042 | .030 | .019 | .014 | .010 |   |
| 8.0  | .161                  | .111 | .077 | .138 | .096 | .067 | .096                                       | .068 | .048 | .056 | .040 | .028 | .018 | .013 | .009 |   |
| 9.0  | .155                  | .106 | .073 | .134 | .092 | .064 | .093                                       | .065 | .045 | .054 | .038 | .027 | .017 | .013 | .009 |   |
| 10.0 | .150                  | .102 | .070 | .129 | .088 | .061 | .090                                       | .062 | .043 | .052 | .037 | .026 | .017 | .012 | .009 |   |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.1DEG  
Operators:Hill  
Test Date:2024-10-21

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.446  
Humidity:44%  
Test Distance:2.519m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

|                                                                                     |                  |      |      |      |           |                |      |                      |      |      |
|-------------------------------------------------------------------------------------|------------------|------|------|------|-----------|----------------|------|----------------------|------|------|
| Test:U:120.10V I:0.0793A P:9.3500W PF:0.9817 Freq:60.00Hz<br>Lamp Flux:556.437x1 lm |                  |      |      |      |           |                |      |                      |      |      |
| NAME: ASD-LCLR-1B-9BK                                                               |                  |      |      |      | TYPE: N/A |                |      | WEIGHT: N/A          |      |      |
| SPEC.:5000K                                                                         |                  |      |      |      | DIM.: N/A |                |      | SERIAL No.: N/A      |      |      |
| MFR.: ASD Lighting Corp                                                             |                  |      |      |      | SUR.: N/A |                |      | Shielding Angle: N/A |      |      |
| 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                                                                       | 22.4             | 23.6 | 22.8 | 23.9 | 24.2      | 22.2           | 23.4 | 22.5                 | 23.6 | 23.9 |
| 3H                                                                                  | 23.8             | 24.9 | 24.2 | 25.2 | 25.5      | 23.8           | 24.9 | 24.2                 | 25.2 | 25.5 |
| 4H                                                                                  | 24.4             | 25.4 | 24.7 | 25.7 | 26.0      | 24.5           | 25.5 | 24.9                 | 25.9 | 26.2 |
| 6H                                                                                  | 25.0             | 25.9 | 25.4 | 26.3 | 26.7      | 25.2           | 26.2 | 25.6                 | 26.5 | 26.9 |
| 8H                                                                                  | 25.8             | 26.7 | 26.2 | 27.1 | 27.5      | 25.7           | 26.6 | 26.1                 | 27.0 | 27.4 |
| 12H                                                                                 | 26.6             | 27.5 | 27.0 | 27.8 | 28.2      | 26.2           | 27.0 | 26.6                 | 27.4 | 27.8 |
| 4H 2H                                                                               | 22.9             | 23.9 | 23.3 | 24.2 | 24.6      | 22.7           | 23.7 | 23.1                 | 24.1 | 24.4 |
| 3H                                                                                  | 24.5             | 25.4 | 24.9 | 25.7 | 26.1      | 24.6           | 25.4 | 25.0                 | 25.8 | 26.2 |
| 4H                                                                                  | 25.2             | 26.0 | 25.7 | 26.4 | 26.9      | 25.4           | 26.2 | 25.9                 | 26.6 | 27.1 |
| 6H                                                                                  | 26.4             | 27.1 | 26.8 | 27.5 | 28.0      | 26.4           | 27.1 | 26.9                 | 27.5 | 28.0 |
| 8H                                                                                  | 27.5             | 28.2 | 28.0 | 28.6 | 29.1      | 27.0           | 27.7 | 27.5                 | 28.1 | 28.6 |
| 12H                                                                                 | 28.5             | 29.1 | 29.0 | 29.6 | 30.1      | 27.7           | 28.3 | 28.2                 | 28.7 | 29.2 |
| 8H 4H                                                                               | 25.7             | 26.3 | 26.2 | 26.8 | 27.3      | 25.8           | 26.5 | 26.3                 | 26.9 | 27.4 |
| 6H                                                                                  | 27.6             | 28.2 | 28.1 | 28.6 | 29.2      | 27.3           | 27.8 | 27.8                 | 28.3 | 28.9 |
| 8H                                                                                  | 29.2             | 29.7 | 29.8 | 30.2 | 30.8      | 28.2           | 28.7 | 28.7                 | 29.2 | 29.8 |
| 12H                                                                                 | 30.5             | 30.9 | 31.1 | 31.5 | 32.0      | 29.1           | 29.5 | 29.6                 | 30.0 | 30.6 |
| 12H 4H                                                                              | 25.8             | 26.4 | 26.3 | 26.9 | 27.4      | 26.1           | 26.7 | 26.6                 | 27.1 | 27.7 |
| 6H                                                                                  | 28.1             | 28.6 | 28.6 | 29.1 | 29.6      | 27.8           | 28.3 | 28.4                 | 28.8 | 29.4 |
| 8H                                                                                  | 29.8             | 30.3 | 30.4 | 30.8 | 31.4      | 28.9           | 29.3 | 29.5                 | 29.9 | 30.5 |
| Variations with the observer position at spacings(CIE Pub.117):                     |                  |      |      |      |           |                |      |                      |      |      |
| S = 1.0H                                                                            | + 0.3 / - 0.2    |      |      |      |           | + 0.3 / - 0.3  |      |                      |      |      |
| 1.5H                                                                                | + 0.1 / - 0.1    |      |      |      |           | + 0.5 / - 0.2  |      |                      |      |      |
| 2.0H                                                                                | + 0.3 / - 0.3    |      |      |      |           | + 0.4 / - 0.5  |      |                      |      |      |

CIE Pub.117, 556.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -2.0)  
 Area: 0.00477594 m2

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.1DEG  
 Operators:Hill  
 Test Date:2024-10-21

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.446  
 Humidity:44%  
 Test Distance:2.519m [K=1.0000]  
 Remarks:

### UTILIZATION FACTORS TABLE

|                                                                                     |           |                      |
|-------------------------------------------------------------------------------------|-----------|----------------------|
| Test:U:120.10V I:0.0793A P:9.3500W PF:0.9817 Freq:60.00Hz<br>Lamp Flux:556.437x1 lm |           |                      |
| NAME: ASD-LCLR-1B-9BK                                                               | TYPE: N/A | WEIGHT: N/A          |
| SPEC.:5000K                                                                         | DIM.: N/A | SERIAL No.: N/A      |
| MFR.: ASD Lighting Corp                                                             | SUR.: N/A | Shielding Angle: N/A |

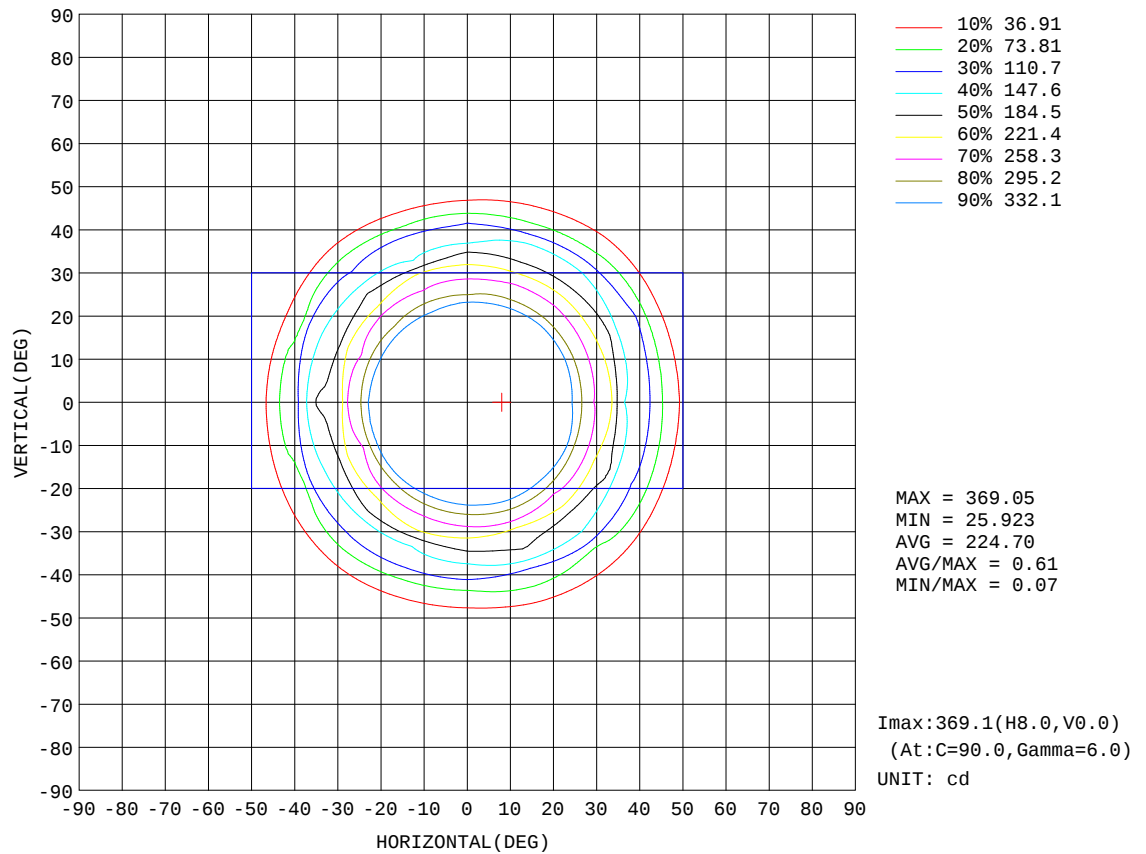
| REFLECTANCE                      |                                                     |     |           |     |     |     |     |               |     |        |
|----------------------------------|-----------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 73                                                  | 64  | 59        | 72  | 64  | 59  | 71  | 63            | 59  | 54     |
| 0.80                             | 81                                                  | 72  | 67        | 80  | 72  | 67  | 78  | 71            | 66  | 61     |
| 1.00                             | 87                                                  | 78  | 73        | 85  | 78  | 73  | 83  | 78            | 72  | 66     |
| 1.25                             | 92                                                  | 84  | 79        | 90  | 83  | 78  | 88  | 81            | 77  | 71     |
| 1.50                             | 95                                                  | 88  | 83        | 94  | 87  | 82  | 91  | 85            | 81  | 74     |
| 2.00                             | 100                                                 | 93  | 88        | 98  | 92  | 87  | 94  | 89            | 85  | 78     |
| 2.50                             | 103                                                 | 97  | 92        | 100 | 95  | 91  | 96  | 92            | 88  | 80     |
| 3.00                             | 105                                                 | 100 | 95        | 103 | 98  | 94  | 98  | 94            | 91  | 82     |
| 4.00                             | 108                                                 | 104 | 100       | 105 | 101 | 98  | 101 | 97            | 95  | 85     |
| 5.00                             | 110                                                 | 106 | 103       | 107 | 104 | 101 | 102 | 99            | 97  | 87     |
| 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:25.1DEG  
Operators:Hill  
Test Date:2024-10-21

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.446  
Humidity:44%  
Test Distance:2.519m [K=1.0000]  
Remarks:

### ISOCANDELA DIAGRAM

|                                                                                     |           |                      |
|-------------------------------------------------------------------------------------|-----------|----------------------|
| Test:U:120.10V I:0.0793A P:9.3500W PF:0.9817 Freq:60.00Hz<br>Lamp Flux:556.437x1 lm |           |                      |
| NAME: ASD-LCLR-1B-9BK                                                               | TYPE: N/A | WEIGHT: N/A          |
| SPEC.:5000K                                                                         | DIM.: N/A | SERIAL No.: N/A      |
| MFR.: ASD Lighting Corp                                                             | SUR.: N/A | Shielding Angle: N/A |

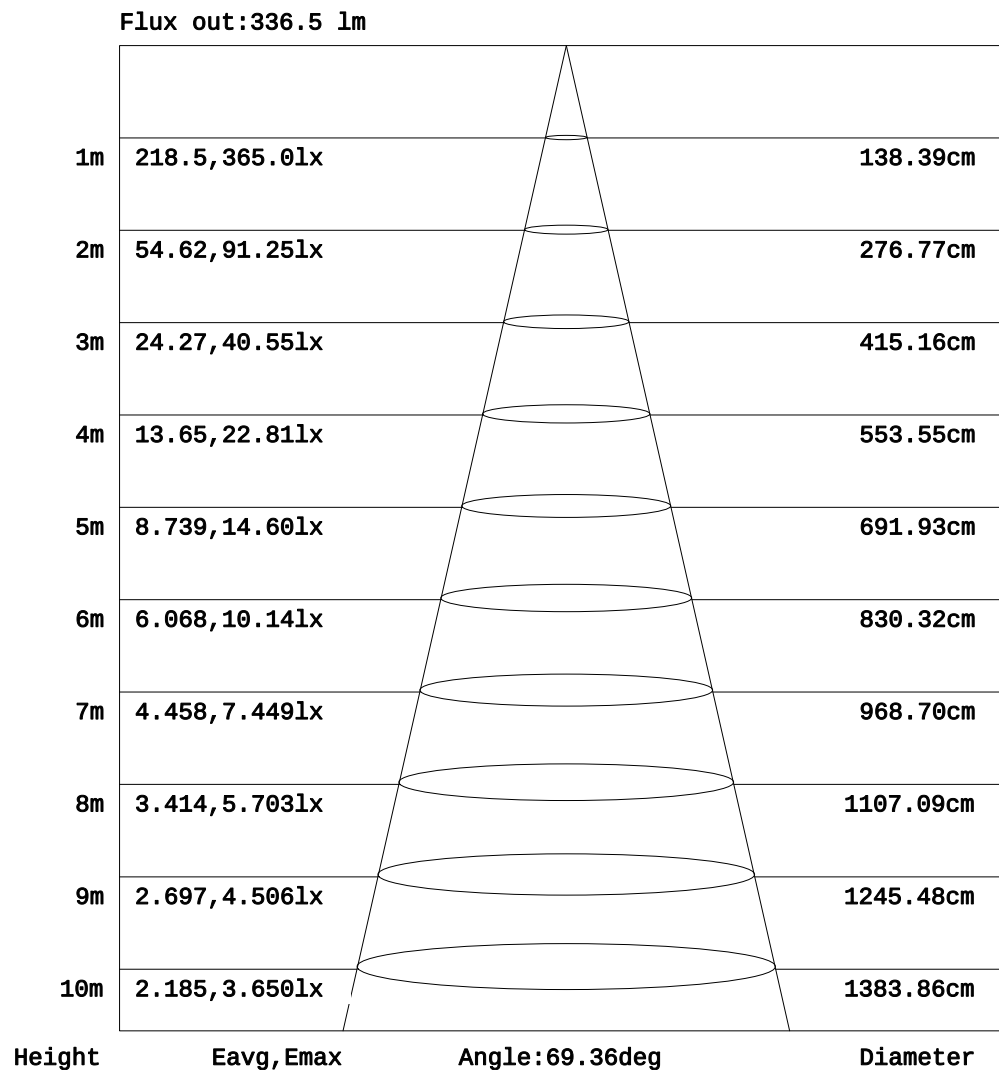


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.1DEG  
Operators:Hill  
Test Date:2024-10-21

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.446  
Humidity:44%  
Test Distance:2.519m [K=1.0000]  
Remarks:

## AAI Figure

|                                                                                     |           |                      |
|-------------------------------------------------------------------------------------|-----------|----------------------|
| Test:U:120.10V I:0.0793A P:9.3500W PF:0.9817 Freq:60.00Hz<br>Lamp Flux:556.437x1 lm |           |                      |
| NAME:ASD-LCLR-1B-9BK                                                                | TYPE: N/A | WEIGHT: N/A          |
| SPEC.: 5000K                                                                        | DIM.: N/A | SERIAL No.: N/A      |
| MFR.:ASD Lighting Corp                                                              | SUR.: N/A | Shielding Angle: N/A |



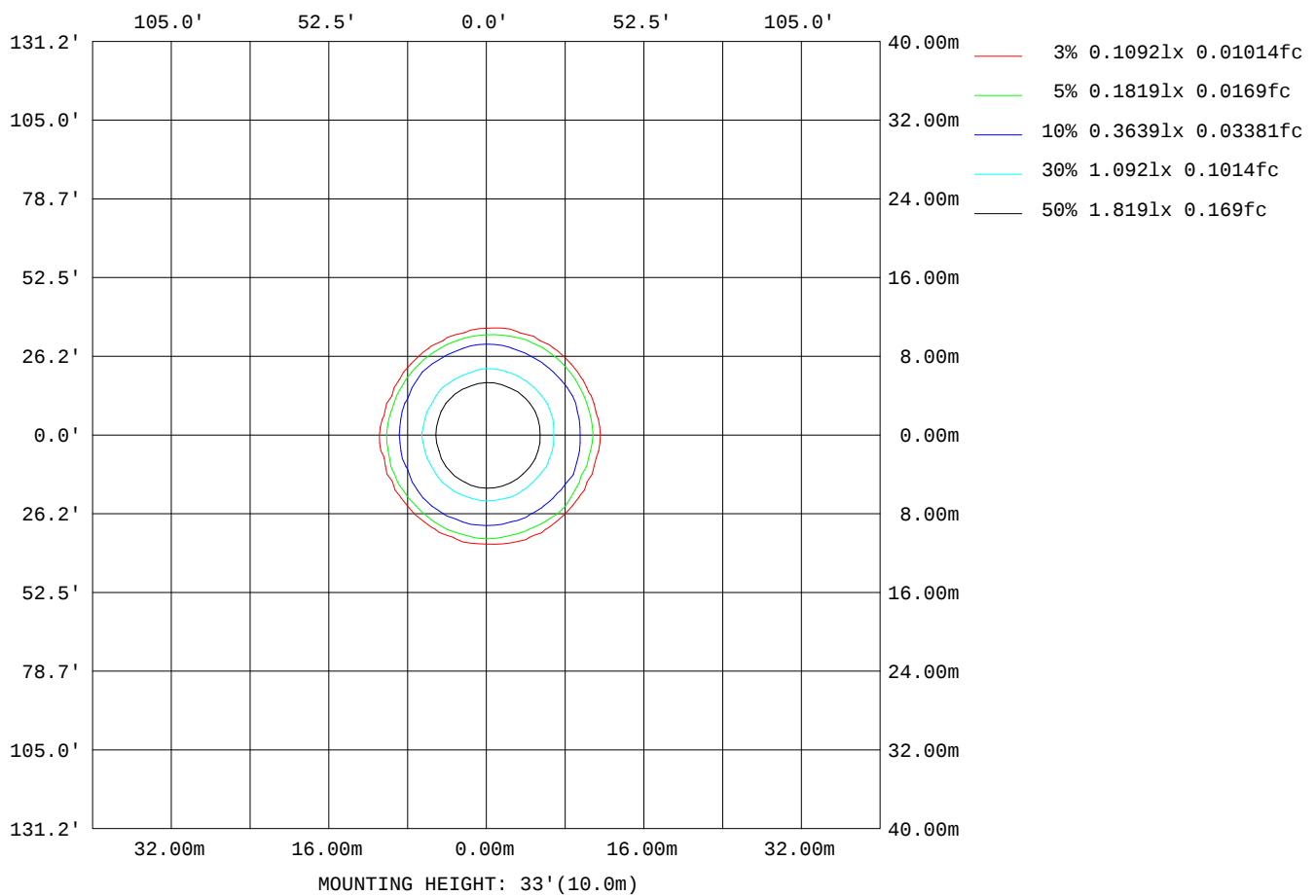
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.1DEG  
Operators:Hill  
Test Date:2024-10-21

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.446  
Humidity:44%  
Test Distance:2.519m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

|                                                                                     |           |                      |
|-------------------------------------------------------------------------------------|-----------|----------------------|
| Test:U:120.10V I:0.0793A P:9.3500W PF:0.9817 Freq:60.00Hz<br>Lamp Flux:556.437x1 lm |           |                      |
| NAME:ASD-LCLR-1B-9BK                                                                | TYPE: N/A | WEIGHT: N/A          |
| SPEC.:5000K                                                                         | DIM.: N/A | SERIAL No.: N/A      |
| MFR.: ASD Lighting Corp                                                             | SUR.: N/A | Shielding Angle: N/A |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.1DEG  
Operators:Hill  
Test Date:2024-10-21

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.446  
Humidity:44%  
Test Distance:2.519m [K=1.0000]  
Remarks:

## LED Avg.L Report

|                                                                                     |           |                      |
|-------------------------------------------------------------------------------------|-----------|----------------------|
| Test:U:120.10V I:0.0793A P:9.3500W PF:0.9817 Freq:60.00Hz<br>Lamp Flux:556.437x1 lm |           |                      |
| NAME: ASD-LCLR-1B-9BK                                                               | TYPE: N/A | WEIGHT: N/A          |
| SPEC.: 5000K                                                                        | DIM.: N/A | SERIAL No.: N/A      |
| MFR.:ASD Lighting Corp                                                              | SUR.: N/A | Shielding Angle: N/A |

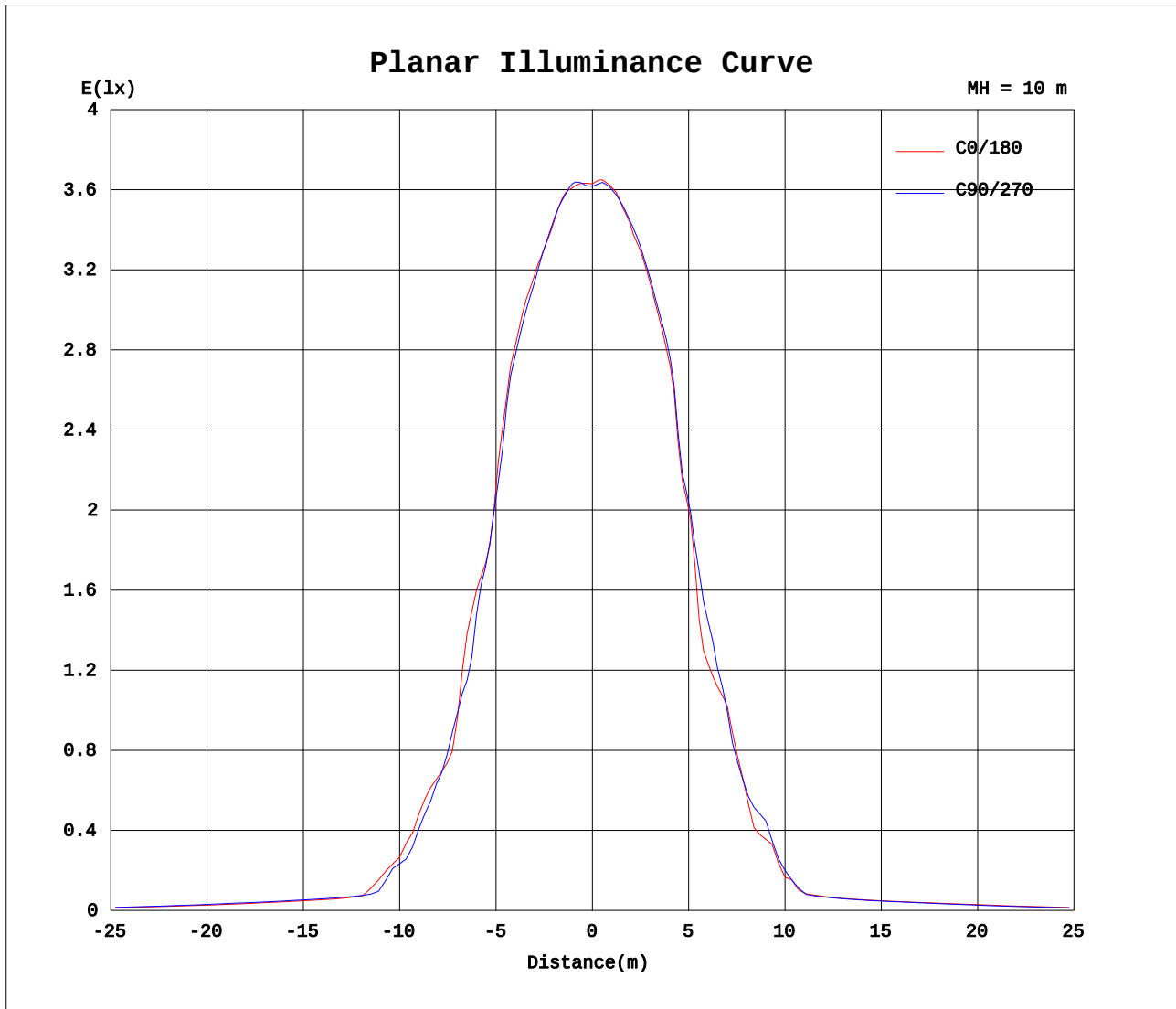
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 15694 |
| L_0~180(75)av  | 14083 |
| L_0~180(85)av  | 26972 |
| L_90~270(65)av | 15833 |
| L_90~270(75)av | 14745 |
| L_90~270(85)av | 35204 |
| L_45(65)av     | 15923 |
| L_45(75)av     | 14456 |
| L_45(85)av     | 37047 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.1DEG  
Operators:Hill  
Test Date:2024-10-21

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-R5000\_V2 SYSTEM V2.00.446  
Humidity:44%  
Test Distance:2.519m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.1DEG  
Operators: Hill  
Test Date: 2024-10-21

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE G0-R5000\_V2 SYSTEM V2.00.446  
Humidity: 44%  
Test Distance: 2.519m [K=1.0000]  
Remarks:

### LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                     |  |  |  |  |  |  |  |  |           |  |  |  |  |  |                      |  |  |
|-------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|-----------|--|--|--|--|--|----------------------|--|--|
| Test:U:120.10V I:0.0793A P:9.3500W PF:0.9817 Freq:60.00Hz<br>Lamp Flux:556.437x1 lm |  |  |  |  |  |  |  |  |           |  |  |  |  |  |                      |  |  |
| NAME: ASD-LCLR-1B-9BK                                                               |  |  |  |  |  |  |  |  | TYPE: N/A |  |  |  |  |  | WEIGHT: N/A          |  |  |
| SPEC.: 5000K                                                                        |  |  |  |  |  |  |  |  | DIM.: N/A |  |  |  |  |  | SERIAL No.: N/A      |  |  |
| MFR.:ASD Lighting Corp                                                              |  |  |  |  |  |  |  |  | SUR.: N/A |  |  |  |  |  | Shielding Angle: N/A |  |  |

Table--1

UNIT: cd

| C(°)  | 0    | 22.5 | 45   | 67.5 | 90   | 112.5 | 135  | 157.5 | 180  | 202.5 | 225  | 247.5 | 270  | 292.5 | 315  | 337.5 |    |    |    |
|-------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|----|----|----|
| γ (°) | 0    | 5    | 10   | 15   | 20   | 25    | 30   | 35    | 40   | 45    | 50   | 55    | 60   | 65    | 70   | 75    | 80 | 85 | 90 |
| 0     | 362  | 362  | 362  | 362  | 362  | 362   | 362  | 362   | 362  | 362   | 362  | 362   | 362  | 362   | 362  | 362   |    |    |    |
| 5     | 365  | 365  | 366  | 366  | 368  | 369   | 368  | 367   | 366  | 365   | 365  | 365   | 366  | 366   | 366  | 365   |    |    |    |
| 10    | 366  | 367  | 367  | 369  | 368  | 367   | 364  | 364   | 363  | 362   | 364  | 364   | 365  | 368   | 368  | 365   |    |    |    |
| 15    | 361  | 364  | 365  | 367  | 361  | 360   | 358  | 357   | 359  | 358   | 359  | 359   | 362  | 364   | 366  | 365   |    |    |    |
| 20    | 358  | 357  | 357  | 354  | 352  | 350   | 348  | 345   | 348  | 347   | 349  | 350   | 353  | 355   | 357  | 354   |    |    |    |
| 25    | 322  | 335  | 326  | 324  | 309  | 303   | 294  | 284   | 288  | 287   | 288  | 292   | 294  | 307   | 322  | 326   |    |    |    |
| 30    | 256  | 253  | 253  | 248  | 251  | 245   | 223  | 225   | 199  | 224   | 222  | 246   | 238  | 254   | 258  | 256   |    |    |    |
| 35    | 175  | 191  | 172  | 189  | 180  | 150   | 160  | 161   | 185  | 164   | 167  | 147   | 182  | 178   | 186  | 197   |    |    |    |
| 40    | 136  | 113  | 136  | 125  | 122  | 117   | 112  | 115   | 92.0 | 118   | 109  | 117   | 115  | 125   | 136  | 121   |    |    |    |
| 45    | 75.1 | 84.3 | 66.5 | 71.9 | 66.3 | 65.9  | 56.4 | 63.1  | 47.0 | 48.0  | 44.1 | 52.3  | 56.9 | 68.5  | 71.0 | 75.5  |    |    |    |
| 50    | 27.8 | 28.3 | 29.2 | 29.9 | 28.6 | 27.0  | 27.0 | 26.9  | 27.0 | 26.3  | 25.2 | 25.1  | 25.9 | 27.3  | 28.8 | 28.7  |    |    |    |
| 55    | 27.9 | 28.6 | 29.8 | 30.6 | 30.4 | 29.4  | 28.0 | 28.3  | 28.1 | 27.4  | 26.8 | 26.7  | 27.0 | 27.4  | 28.1 | 27.9  |    |    |    |
| 60    | 30.4 | 31.6 | 32.8 | 33.9 | 33.8 | 32.2  | 31.7 | 32.0  | 31.7 | 31.7  | 30.6 | 29.7  | 29.9 | 30.7  | 31.4 | 30.5  |    |    |    |
| 65    | 30.7 | 31.7 | 32.9 | 34.4 | 34.1 | 32.7  | 32.0 | 32.3  | 32.7 | 32.2  | 31.3 | 29.7  | 29.8 | 31.2  | 32.3 | 31.6  |    |    |    |
| 70    | 24.1 | 24.6 | 24.7 | 25.9 | 25.2 | 24.6  | 24.2 | 24.7  | 25.9 | 25.0  | 23.4 | 22.1  | 22.2 | 23.6  | 25.4 | 25.4  |    |    |    |
| 75    | 16.3 | 18.7 | 18.9 | 19.3 | 19.1 | 17.2  | 17.8 | 17.6  | 18.5 | 17.9  | 16.5 | 16.4  | 17.4 | 17.6  | 18.2 | 16.4  |    |    |    |
| 80    | 13.4 | 26.7 | 27.3 | 18.8 | 14.5 | 14.2  | 13.5 | 16.0  | 14.6 | 13.4  | 18.7 | 17.7  | 17.8 | 17.1  | 15.4 | 12.9  |    |    |    |
| 85    | 12.8 | 23.9 | 19.0 | 14.9 | 10.5 | 11.8  | 12.4 | 11.3  | 9.61 | 7.92  | 14.2 | 15.4  | 18.8 | 19.4  | 16.0 | 16.2  |    |    |    |
| 90    | 1.60 | 2.34 | 2.15 | 2.09 | 1.83 | 1.68  | 2.12 | 2.05  | 1.66 | 1.42  | 1.96 | 2.19  | 1.91 | 3.78  | 2.03 | 2.00  |    |    |    |
| 95    | 4.45 | 6.22 | 6.91 | 6.21 | 6.43 | 5.12  | 6.33 | 6.22  | 5.63 | 4.92  | 5.44 | 5.34  | 5.68 | 5.42  | 4.97 | 4.73  |    |    |    |
| 100   | 7.02 | 8.99 | 10.1 | 9.39 | 9.17 | 7.37  | 8.55 | 8.95  | 9.02 | 7.84  | 7.64 | 7.61  | 9.23 | 9.14  | 9.19 | 9.14  |    |    |    |
| 105   | 7.55 | 9.95 | 11.7 | 10.3 | 9.98 | 7.91  | 8.76 | 9.21  | 9.64 | 8.30  | 7.74 | 7.80  | 9.82 | 10.5  | 10.3 | 10.7  |    |    |    |
| 110   | 7.65 | 9.77 | 11.2 | 9.98 | 9.77 | 7.76  | 8.30 | 8.88  | 9.25 | 7.95  | 7.34 | 7.55  | 9.40 | 9.79  | 9.83 | 10.2  |    |    |    |
| 115   | 7.52 | 8.86 | 9.52 | 9.24 | 8.71 | 7.09  | 7.44 | 7.71  | 8.02 | 6.91  | 6.07 | 6.81  | 8.82 | 8.61  | 9.11 | 9.19  |    |    |    |
| 120   | 5.02 | 5.12 | 5.99 | 6.17 | 6.20 | 4.84  | 4.62 | 5.00  | 5.53 | 5.02  | 3.22 | 3.85  | 5.46 | 6.39  | 6.08 | 6.32  |    |    |    |
| 125   | 2.89 | 2.32 | 3.22 | 4.19 | 4.51 | 3.81  | 3.11 | 3.78  | 3.84 | 3.66  | 2.24 | 2.75  | 3.83 | 4.73  | 4.55 | 3.32  |    |    |    |
| 130   | 1.26 | 0.80 | 1.98 | 3.22 | 3.47 | 3.04  | 2.18 | 2.90  | 2.83 | 2.86  | 1.88 | 2.05  | 2.97 | 3.61  | 3.58 | 2.10  |    |    |    |
| 135   | 1.08 | 0.62 | 1.67 | 2.59 | 2.87 | 2.56  | 1.68 | 2.42  | 2.29 | 2.29  | 1.78 | 1.78  | 2.56 | 3.04  | 3.09 | 1.79  |    |    |    |
| 140   | 1.04 | 0.65 | 1.56 | 2.42 | 2.65 | 2.34  | 1.69 | 2.19  | 1.97 | 2.04  | 1.61 | 1.77  | 2.44 | 2.88  | 2.78 | 1.65  |    |    |    |
| 145   | 1.08 | 0.70 | 2.06 | 2.94 | 3.20 | 2.87  | 2.50 | 2.85  | 2.44 | 2.09  | 2.79 | 2.78  | 3.43 | 3.47  | 3.40 | 2.61  |    |    |    |
| 150   | 1.15 | 0.74 | 1.60 | 2.98 | 3.18 | 2.42  | 2.66 | 2.40  | 2.40 | 2.20  | 2.12 | 2.26  | 3.41 | 3.25  | 3.50 | 2.49  |    |    |    |
| 155   | 1.17 | 0.85 | 2.04 | 3.28 | 3.08 | 2.40  | 2.42 | 2.43  | 2.16 | 2.00  | 2.06 | 2.41  | 2.95 | 3.11  | 3.10 | 2.18  |    |    |    |
| 160   | 1.25 | 1.00 | 1.68 | 2.66 | 2.41 | 1.87  | 1.75 | 1.72  | 1.38 | 1.33  | 1.49 | 1.80  | 2.19 | 2.21  | 2.35 | 1.73  |    |    |    |
| 165   | 1.28 | 1.49 | 1.91 | 1.95 | 1.70 | 1.39  | 1.16 | 1.18  | 0.77 | 0.82  | 0.91 | 1.06  | 1.30 | 1.31  | 1.41 | 1.37  |    |    |    |
| 170   | 1.10 | 1.15 | 1.30 | 1.29 | 1.19 | 1.05  | 0.89 | 0.88  | 0.52 | 0.56  | 0.58 | 0.68  | 0.83 | 0.86  | 0.87 | 0.84  |    |    |    |
| 175   | 0.90 | 0.87 | 0.91 | 0.91 | 0.88 | 0.83  | 0.75 | 0.73  | 0.52 | 0.53  | 0.53 | 0.58  | 0.65 | 0.66  | 0.66 | 0.67  |    |    |    |
| 180   | 0.62 | 0.61 | 0.61 | 0.60 | 0.60 | 0.60  | 0.60 | 0.61  | 0.62 | 0.61  | 0.61 | 0.60  | 0.60 | 0.60  | 0.60 | 0.61  |    |    |    |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.1DEG  
Operators:Hill  
Test Date:2024-10-21

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