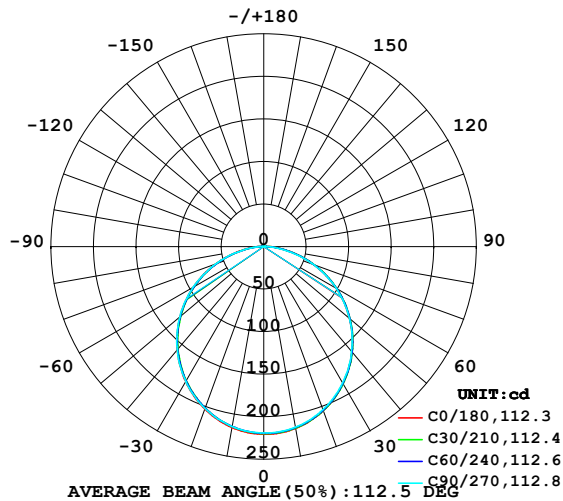


## LUMINAIRE PHOTOMETRIC TEST REPORT

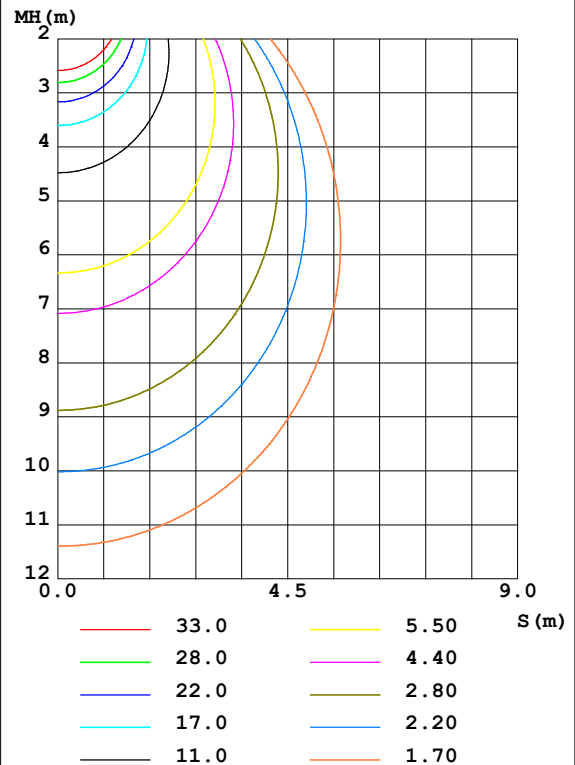
|                                                     |           |  |
|-----------------------------------------------------|-----------|--|
| Test:U:24.00V I:0.4360A P:10.400W PF:1.000 Freq:0Hz |           |  |
| Lamp Flux:638.012x1 lm                              |           |  |
| Name: NSL96W-NW-IP67                                | Type: LED |  |
| MFR.:                                               |           |  |
|                                                     |           |  |

| DATA OF LAMP     |         | PHOTOMETRIC DATA      |        |                   |          | Eff: 61.35 lm/W |
|------------------|---------|-----------------------|--------|-------------------|----------|-----------------|
| MODEL            |         | I <sub>max</sub> (cd) | 220.7  | S/MH(C0/180)      | 1.24     |                 |
| NOMINAL POWER(W) | 10.4    | LOR(%)                | 100.0  | S/MH(C90/270)     | 1.24     |                 |
| RATED VOLTAGE(V) | 24      | TOTAL FLUX(lm)        | 638.01 | η UP,DN(C0-180)   | 0.5,49.7 |                 |
| NOMINAL FLUX(lm) | 638.012 | CIE CLASS             | DIRECT | η UP,DN(C180-360) | 0.7,49.1 |                 |
| LAMPS INSIDE     | 1       | η up(%)               | 1.2    | CIBSE SHR NOM     | 1.25     |                 |
| TEST VOLTAGE(V)  | 24      | η down(%)             | 98.8   | CIBSE SHR MAX     | 1.35     |                 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-12-05

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
Humidity:65.0%  
Test Distance:8.000m [K=0.7125]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

| $\gamma$ | C0                    | C45    | C90    | C135   | C180   | C225   | C270   | C315   | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|------------|
| 10       | 217.0                 | 216.3  | 215.5  | 214.3  | 215.9  | 214.7  | 214.6  | 215.3  | 0- 10    | 20.75       | 20.75        | 3.25,3.25  |
| 20       | 205.2                 | 204.9  | 203.9  | 202.0  | 203.1  | 201.9  | 202.4  | 203.8  | 10- 20   | 59.33       | 80.08        | 12.6,12.6  |
| 30       | 186.2                 | 186.4  | 185.3  | 182.7  | 183.4  | 182.3  | 183.2  | 185.1  | 20- 30   | 89.67       | 169.8        | 26.6,26.6  |
| 40       | 161.3                 | 161.8  | 160.8  | 157.8  | 158.3  | 157.2  | 158.4  | 160.5  | 30- 40   | 107.9       | 277.7        | 43.5,43.5  |
| 50       | 131.8                 | 132.5  | 131.6  | 128.5  | 128.6  | 127.7  | 129.0  | 131.4  | 40- 50   | 112.1       | 389.7        | 61.1,61.1  |
| 60       | 98.74                 | 99.47  | 98.54  | 95.45  | 95.62  | 94.69  | 96.05  | 98.58  | 50- 60   | 101.9       | 491.6        | 77,77      |
| 70       | 63.04                 | 63.60  | 62.54  | 59.76  | 60.28  | 59.27  | 60.32  | 63.07  | 60- 70   | 78.63       | 570.2        | 89.4,89.4  |
| 80       | 28.25                 | 28.03  | 26.21  | 24.99  | 26.25  | 24.64  | 24.52  | 26.78  | 70- 80   | 45.88       | 616.1        | 96.6,96.6  |
| 90       | 6.129                 | 4.905  | 2.045  | 3.924  | 5.473  | 4.286  | 2.234  | 4.071  | 80- 90   | 14.42       | 630.5        | 98.8,98.8  |
| 100      | 1.283                 | 1.529  | 0.2510 | 1.482  | 1.757  | 1.997  | 0.8417 | 1.824  | 90-100   | 2.435       | 633.0        | 99.2,99.2  |
| 110      | 1.043                 | 1.127  | 0.2502 | 1.104  | 1.547  | 1.670  | 0.8029 | 1.608  | 100-110  | 1.423       | 634.4        | 99.4,99.4  |
| 120      | 0.9230                | 0.7681 | 0.2872 | 0.8309 | 1.426  | 1.428  | 0.7965 | 1.275  | 110-120  | 1.106       | 635.5        | 99.6,99.6  |
| 130      | 0.8237                | 0.6118 | 0.3369 | 0.6921 | 1.301  | 1.229  | 0.8155 | 1.090  | 120-130  | 0.8398      | 636.3        | 99.7,99.7  |
| 140      | 0.7190                | 0.5251 | 0.3775 | 0.6019 | 1.158  | 1.066  | 0.8182 | 0.9622 | 130-140  | 0.6406      | 637.0        | 99.8,99.8  |
| 150      | 0.6375                | 0.5057 | 0.4335 | 0.5680 | 1.018  | 0.9369 | 0.8061 | 0.8814 | 140-150  | 0.4714      | 637.4        | 99.9,99.9  |
| 160      | 0.5844                | 0.5242 | 0.5121 | 0.5698 | 0.8837 | 0.8281 | 0.7848 | 0.7970 | 150-160  | 0.3246      | 637.8        | 100,100    |
| 170      | 0.5689                | 0.5906 | 0.5988 | 0.6208 | 0.7403 | 0.7436 | 0.7253 | 0.7270 | 160-170  | 0.1910      | 637.9        | 100,100    |
| 180      | 0.6213                | 0.6561 | 0.6592 | 0.6791 | 0.6565 | 0.6692 | 0.6638 | 0.6547 | 170-180  | 0.0633      | 638.0        | 100,100    |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |            |

Conical surface Flux(90deg): 334.07 lm

%lum = 52.4%

%lamp = 52.4%

Conical surface Flux(120deg): 491.58 lm

%lum = 77.0%

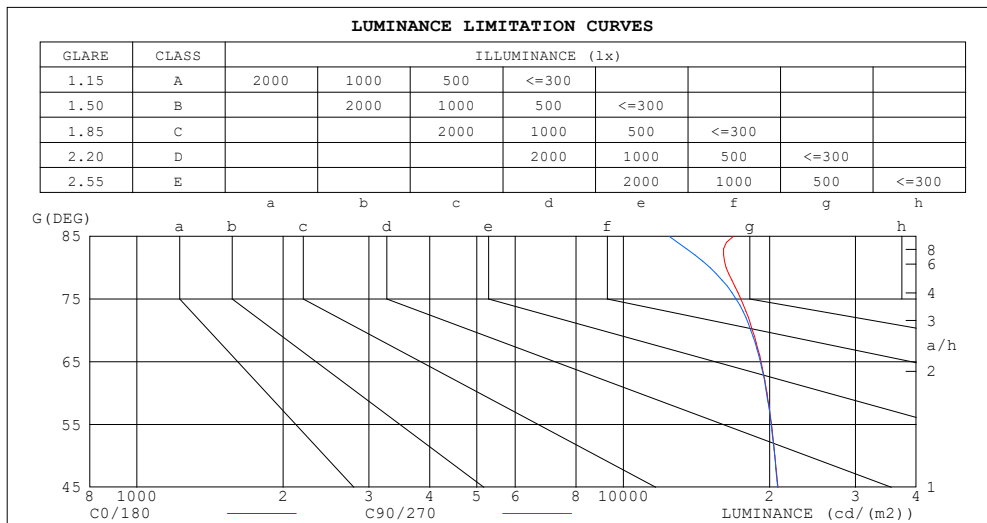
%lamp = 77.0%

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2024-12-05

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
 Humidity:65.0%  
 Test Distance:8.000m [K=0.7125]  
 Remarks:

## LUMINANCE LIMITATION CURVES

|                                                     |           |  |
|-----------------------------------------------------|-----------|--|
| Test:U:24.00V I:0.4360A P:10.400W PF:1.000 Freq:0Hz |           |  |
| Lamp Flux:638.012x1 lm                              |           |  |
| Name: NSL96W-NW-IP67                                | Type: LED |  |
| MFR.:                                               |           |  |
|                                                     |           |  |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 16843  | 12431   |
| 80                | 16266  | 15091   |
| 75                | 17443  | 17054   |
| 70                | 18432  | 18285   |
| 65                | 19190  | 19132   |
| 60                | 19748  | 19709   |
| 55                | 20168  | 20143   |
| 50                | 20504  | 20480   |
| 45                | 20798  | 20758   |

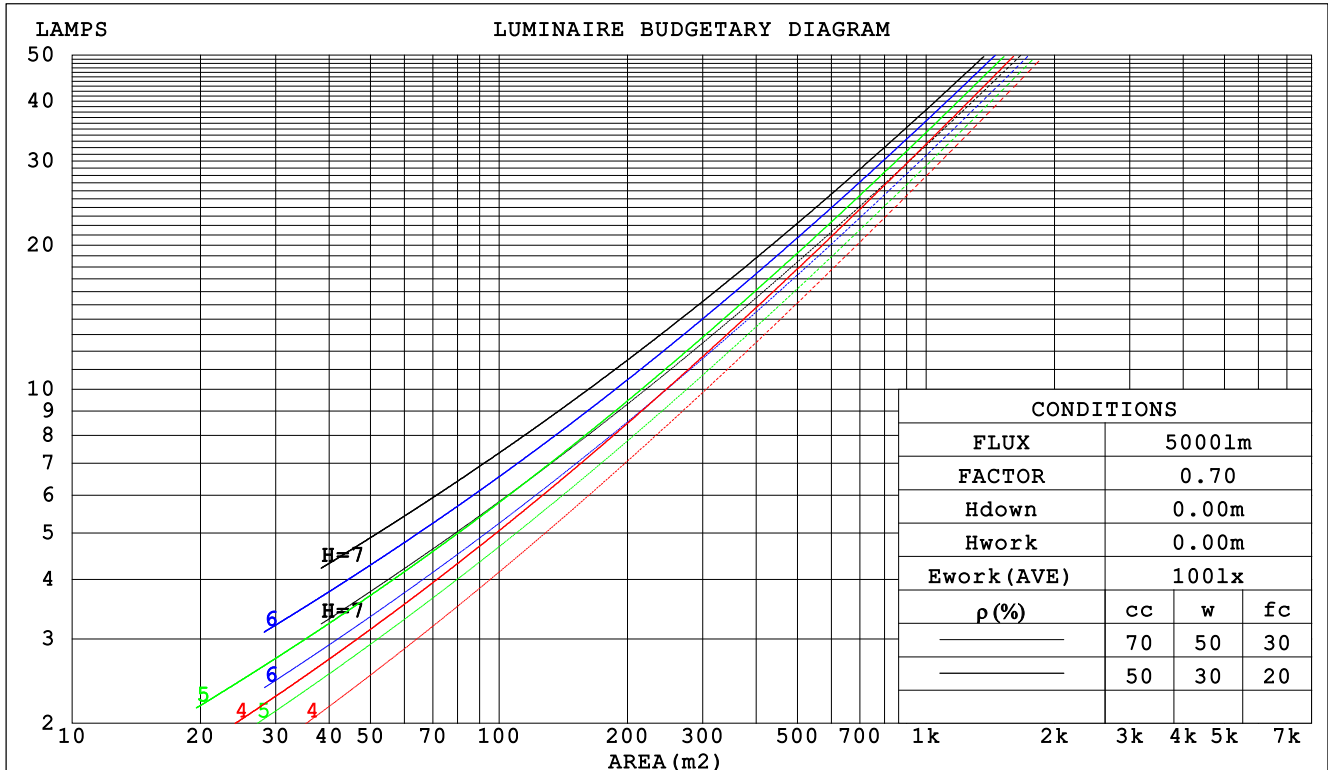
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-12-05

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
Humidity:65.0%  
Test Distance:8.000m [K=0.7125]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                     |           |  |
|-----------------------------------------------------|-----------|--|
| Test:U:24.00V I:0.4360A P:10.400W PF:1.000 Freq:0Hz |           |  |
| Lamp Flux:638.012x1 lm                              |           |  |
| Name: NSL96W-NW-IP67                                | Type: LED |  |
| MFR.:                                               |           |  |
|                                                     |           |  |

| $\rho_{cc}$ | 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 | 1.10                            | 1.10 | 1.10 | 1.06 | 1.06 | 1.06 | 1.01 | 1.01 | 1.01 | .99 |
| 1.0         | 1.03                  | .99  | .95  | 1.01 | .97  | .93  | .96                             | .93  | .90  | .92  | .90  | .87  | .89  | .86  | .84  | .82 |
| 2.0         | .90                   | .83  | .77  | .88  | .81  | .76  | .84                             | .79  | .74  | .81  | .76  | .72  | .77  | .74  | .70  | .68 |
| 3.0         | .79                   | .70  | .64  | .77  | .69  | .63  | .74                             | .67  | .62  | .71  | .65  | .61  | .68  | .64  | .60  | .57 |
| 4.0         | .70                   | .61  | .54  | .68  | .60  | .54  | .66                             | .58  | .53  | .63  | .57  | .52  | .61  | .55  | .51  | .49 |
| 5.0         | .62                   | .53  | .46  | .61  | .52  | .46  | .59                             | .51  | .45  | .57  | .50  | .45  | .55  | .49  | .44  | .42 |
| 6.0         | .56                   | .47  | .40  | .55  | .46  | .40  | .53                             | .45  | .40  | .51  | .44  | .39  | .50  | .44  | .39  | .37 |
| 7.0         | .51                   | .42  | .36  | .50  | .41  | .36  | .48                             | .41  | .35  | .47  | .40  | .35  | .45  | .39  | .34  | .32 |
| 8.0         | .46                   | .38  | .32  | .46  | .37  | .32  | .44                             | .37  | .31  | .43  | .36  | .31  | .41  | .35  | .31  | .29 |
| 9.0         | .42                   | .34  | .29  | .42  | .34  | .28  | .41                             | .33  | .28  | .39  | .33  | .28  | .38  | .32  | .28  | .26 |
| 10.0        | .39                   | .31  | .26  | .39  | .31  | .26  | .37                             | .30  | .26  | .36  | .30  | .25  | .36  | .30  | .25  | .24 |



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-12-05

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
Humidity:65.0%  
Test Distance:8.000m [K=0.7125]  
Remarks:

### WEC AND CCEC

|                                                     |           |  |
|-----------------------------------------------------|-----------|--|
| Test:U:24.00V I:0.4360A P:10.400W PF:1.000 Freq:0Hz |           |  |
| Lamp Flux:638.012x1 lm                              |           |  |
| Name: NSL96W-NW-IP67                                | Type: LED |  |
| MFR.:                                               |           |  |
|                                                     |           |  |

| 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  | .315                  | .179 | .057 | .308 | .175 | .056 | .294                             | .168 | .054 | .281 | .162 | .052 | .269 | .156 | .050 |   |
| 2.0  | .295                  | .162 | .050 | .288 | .159 | .049 | .276                             | .153 | .048 | .264 | .148 | .046 | .254 | .144 | .045 |   |
| 3.0  | .272                  | .145 | .043 | .266 | .143 | .043 | .255                             | .138 | .042 | .245 | .134 | .041 | .236 | .130 | .040 |   |
| 4.0  | .251                  | .130 | .038 | .245 | .128 | .038 | .236                             | .125 | .037 | .227 | .122 | .037 | .218 | .119 | .036 |   |
| 5.0  | .231                  | .118 | .034 | .227 | .116 | .034 | .218                             | .114 | .033 | .210 | .111 | .033 | .202 | .108 | .033 |   |
| 6.0  | .214                  | .107 | .031 | .210 | .106 | .031 | .202                             | .104 | .030 | .195 | .101 | .030 | .188 | .099 | .029 |   |
| 7.0  | .199                  | .099 | .028 | .196 | .097 | .028 | .189                             | .095 | .027 | .182 | .093 | .027 | .176 | .092 | .027 |   |
| 8.0  | .186                  | .091 | .026 | .183 | .090 | .025 | .177                             | .088 | .025 | .171 | .086 | .025 | .165 | .085 | .025 |   |
| 9.0  | .174                  | .084 | .024 | .171 | .084 | .023 | .166                             | .082 | .023 | .160 | .080 | .023 | .155 | .079 | .023 |   |
| 10.0 | .164                  | .079 | .022 | .161 | .078 | .022 | .156                             | .076 | .022 | .151 | .075 | .021 | .147 | .074 | .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  | .199                  | .199 | .199 | .170 | .170 | .170 | .116                                       | .116 | .116 | .067 | .067 | .067 | .021 | .021 | .021 |   |
| 1.0  | .190                  | .165 | .143 | .162 | .142 | .123 | .111                                       | .097 | .085 | .064 | .056 | .049 | .020 | .018 | .016 |   |
| 2.0  | .182                  | .141 | .107 | .156 | .121 | .092 | .107                                       | .084 | .064 | .062 | .049 | .038 | .020 | .016 | .012 |   |
| 3.0  | .174                  | .123 | .083 | .149 | .106 | .072 | .102                                       | .074 | .051 | .059 | .043 | .030 | .019 | .014 | .010 |   |
| 4.0  | .166                  | .110 | .067 | .143 | .095 | .058 | .098                                       | .066 | .041 | .057 | .039 | .024 | .018 | .013 | .008 |   |
| 5.0  | .159                  | .100 | .056 | .136 | .086 | .049 | .094                                       | .060 | .035 | .054 | .035 | .020 | .018 | .012 | .007 |   |
| 6.0  | .152                  | .091 | .048 | .130 | .079 | .042 | .090                                       | .055 | .030 | .052 | .033 | .018 | .017 | .011 | .006 |   |
| 7.0  | .145                  | .085 | .042 | .125 | .073 | .037 | .086                                       | .051 | .026 | .050 | .030 | .016 | .016 | .010 | .005 |   |
| 8.0  | .138                  | .079 | .038 | .119 | .068 | .033 | .082                                       | .048 | .023 | .048 | .028 | .014 | .016 | .009 | .005 |   |
| 9.0  | .132                  | .074 | .034 | .114 | .064 | .030 | .079                                       | .045 | .021 | .046 | .027 | .013 | .015 | .009 | .004 |   |
| 10.0 | .127                  | .070 | .032 | .109 | .060 | .028 | .076                                       | .043 | .020 | .044 | .025 | .012 | .014 | .008 | .004 |   |

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-12-05

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
Humidity:65.0%  
Test Distance:8.000m [K=0.7125]  
Remarks:

### UGR(Unified Glare Rating) Table

|                                                                               |                  |      |      |      |           |                |      |      |      |      |
|-------------------------------------------------------------------------------|------------------|------|------|------|-----------|----------------|------|------|------|------|
| Test:U:24.00V I:0.4360A P:10.400W PF:1.000 Freq:0Hz<br>Lamp Flux:638.012x1 lm |                  |      |      |      |           |                |      |      |      |      |
| Name: NSL96W-NW-IP67                                                          |                  |      |      |      | Type: LED |                |      |      |      |      |
| MFR.:                                                                         |                  |      |      |      |           |                |      |      |      |      |
|                                                                               |                  |      |      |      |           |                |      |      |      |      |
| 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                                                                 | 23.3             | 24.8 | 23.6 | 25.1 | 25.3      | 23.3           | 24.8 | 23.6 | 25.1 | 25.3 |
| 3H                                                                            | 24.9             | 26.3 | 25.2 | 26.6 | 26.8      | 24.9           | 26.3 | 25.2 | 26.5 | 26.8 |
| 4H                                                                            | 25.6             | 26.9 | 25.9 | 27.2 | 27.5      | 25.5           | 26.8 | 25.9 | 27.1 | 27.4 |
| 6H                                                                            | 26.1             | 27.3 | 26.4 | 27.6 | 27.9      | 26.0           | 27.2 | 26.3 | 27.5 | 27.8 |
| 8H                                                                            | 26.2             | 27.4 | 26.6 | 27.7 | 28.1      | 26.1           | 27.3 | 26.4 | 27.6 | 27.9 |
| 12H                                                                           | 26.4             | 27.5 | 26.7 | 27.8 | 28.2      | 26.2           | 27.3 | 26.5 | 27.6 | 28.0 |
| 4H 2H                                                                         | 24.0             | 25.3 | 24.3 | 25.6 | 25.9      | 24.0           | 25.3 | 24.3 | 25.6 | 25.8 |
| 3H                                                                            | 25.7             | 26.9 | 26.1 | 27.2 | 27.6      | 25.7           | 26.9 | 26.1 | 27.2 | 27.5 |
| 4H                                                                            | 26.5             | 27.6 | 26.9 | 27.9 | 28.3      | 26.5           | 27.5 | 26.9 | 27.9 | 28.2 |
| 6H                                                                            | 27.1             | 28.1 | 27.6 | 28.5 | 28.9      | 27.0           | 28.0 | 27.4 | 28.4 | 28.7 |
| 8H                                                                            | 27.4             | 28.3 | 27.8 | 28.7 | 29.1      | 27.2           | 28.1 | 27.6 | 28.5 | 28.9 |
| 12H                                                                           | 27.6             | 28.4 | 28.0 | 28.8 | 29.2      | 27.3           | 28.1 | 27.8 | 28.6 | 29.0 |
| 8H 4H                                                                         | 26.8             | 27.7 | 27.2 | 28.1 | 28.5      | 26.8           | 27.6 | 27.2 | 28.0 | 28.4 |
| 6H                                                                            | 27.6             | 28.3 | 28.1 | 28.8 | 29.2      | 27.5           | 28.2 | 27.9 | 28.6 | 29.1 |
| 8H                                                                            | 27.9             | 28.6 | 28.4 | 29.0 | 29.5      | 27.7           | 28.4 | 28.2 | 28.8 | 29.3 |
| 12H                                                                           | 28.2             | 28.8 | 28.7 | 29.3 | 29.8      | 27.9           | 28.5 | 28.4 | 29.0 | 29.5 |
| 12H 4H                                                                        | 26.8             | 27.6 | 27.3 | 28.0 | 28.5      | 26.8           | 27.6 | 27.2 | 28.0 | 28.4 |
| 6H                                                                            | 27.7             | 28.3 | 28.1 | 28.8 | 29.2      | 27.5           | 28.2 | 28.0 | 28.6 | 29.1 |
| 8H                                                                            | 28.0             | 28.6 | 28.5 | 29.1 | 29.6      | 27.9           | 28.4 | 28.4 | 28.9 | 29.4 |
| Variations with the observer position at spacings(CIE Pub.117):               |                  |      |      |      |           |                |      |      |      |      |
| S = 1.0H                                                                      | + 0.1 / - 0.2    |      |      |      |           | + 0.1 / - 0.2  |      |      |      |      |
| 1.5H                                                                          | + 0.2 / - 0.3    |      |      |      |           | + 0.2 / - 0.3  |      |      |      |      |
| 2.0H                                                                          | + 0.1 / - 0.3    |      |      |      |           | + 0.1 / - 0.3  |      |      |      |      |

CIE Pub.117, 638.0 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = -1.6$ )  
Area: 0.01 m2

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-12-05

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
Humidity:65.0%  
Test Distance:8.000m [K=0.7125]  
Remarks:

### UTILIZATION FACTORS TABLE

|                                                     |           |  |
|-----------------------------------------------------|-----------|--|
| Test:U:24.00V I:0.4360A P:10.400W PF:1.000 Freq:0Hz |           |  |
| Lamp Flux:638.012x1 lm                              |           |  |
| Name: NSL96W-NW-IP67                                | Type: LED |  |
| MFR.:                                               |           |  |
|                                                     |           |  |

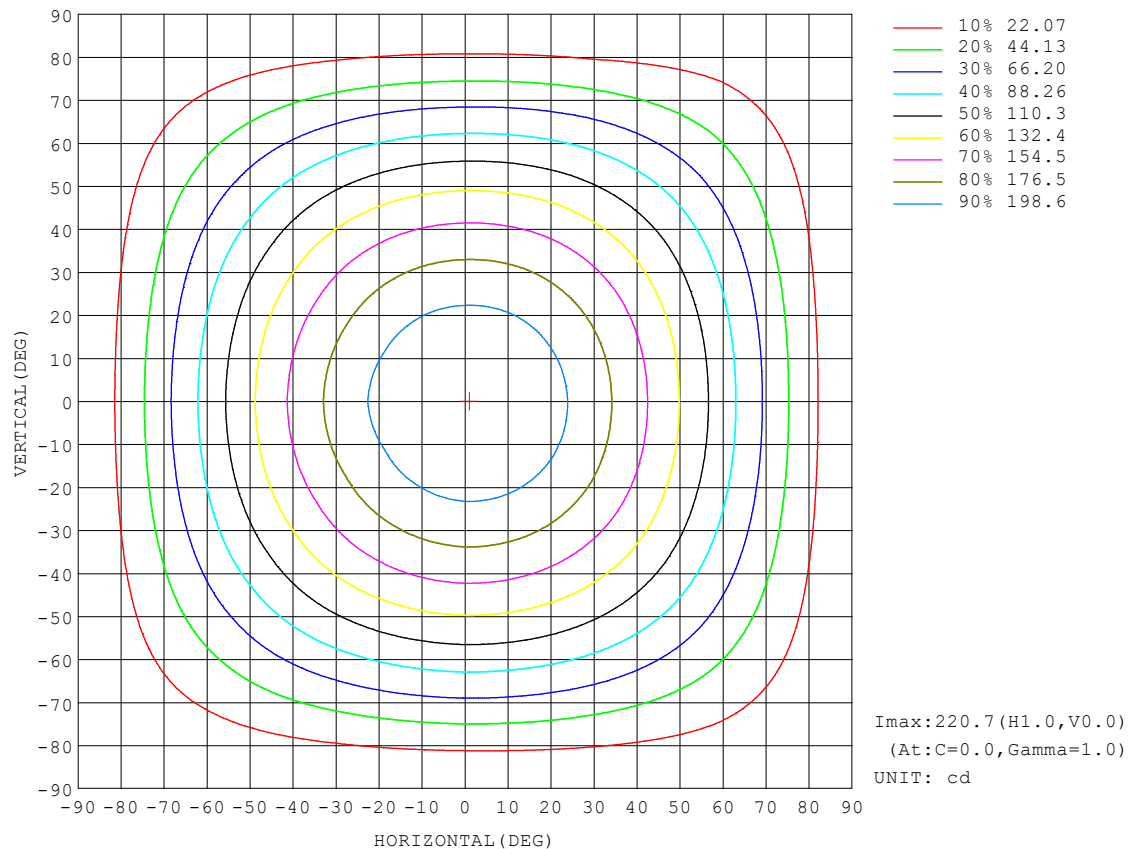
| REFLECTANCE                      |                                                      |     |           |     |     |     |     |               |     |        |
|----------------------------------|------------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 57                                                   | 45  | 38        | 56  | 45  | 38  | 55  | 44            | 38  | 31     |
| 0.80                             | 67                                                   | 55  | 48        | 66  | 55  | 48  | 64  | 54            | 47  | 40     |
| 1.00                             | 75                                                   | 64  | 57        | 74  | 63  | 56  | 72  | 65            | 56  | 48     |
| 1.25                             | 82                                                   | 72  | 64        | 81  | 71  | 64  | 78  | 69            | 63  | 56     |
| 1.50                             | 87                                                   | 77  | 70        | 86  | 76  | 70  | 82  | 74            | 68  | 61     |
| 2.00                             | 94                                                   | 85  | 79        | 92  | 84  | 78  | 89  | 82            | 76  | 68     |
| 2.50                             | 98                                                   | 90  | 84        | 96  | 89  | 83  | 92  | 86            | 81  | 73     |
| 3.00                             | 102                                                  | 95  | 89        | 99  | 93  | 88  | 95  | 90            | 85  | 77     |
| 4.00                             | 106                                                  | 100 | 95        | 103 | 98  | 94  | 99  | 94            | 91  | 81     |
| 5.00                             | 108                                                  | 103 | 99        | 106 | 101 | 97  | 101 | 97            | 94  | 85     |
| ROOM INDEX                       | UF (total)                                           |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |                                                      |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-12-05

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
Humidity:65.0%  
Test Distance:8.000m [K=0.7125]  
Remarks:

## ISOCANDELA DIAGRAM

|                                                     |           |  |
|-----------------------------------------------------|-----------|--|
| Test:U:24.00V I:0.4360A P:10.400W PF:1.000 Freq:0Hz |           |  |
| Lamp Flux:638.012x1 lm                              |           |  |
| Name: NSL96W-NW-IP67                                | Type: LED |  |
| MFR.:                                               |           |  |
|                                                     |           |  |

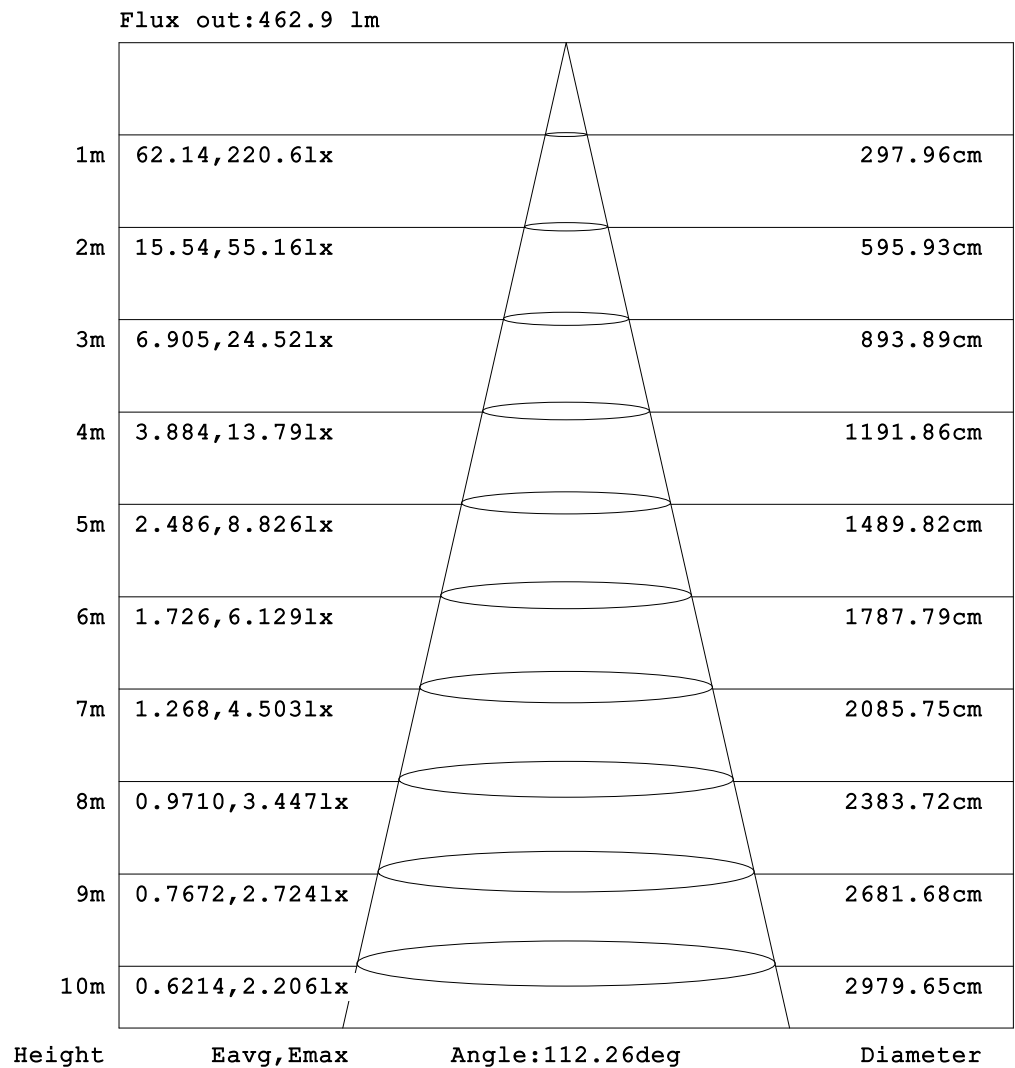


C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-12-05

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
Humidity:65.0%  
Test Distance:8.000m [K=0.7125]  
Remarks:

### AAI Figure

|                                                     |           |  |
|-----------------------------------------------------|-----------|--|
| Test:U:24.00V I:0.4360A P:10.400W PF:1.000 Freq:0Hz |           |  |
| Lamp Flux:638.012x1 lm                              |           |  |
| Name: NSL96W-NW-IP67                                | Type: LED |  |
| MFR.:                                               |           |  |
|                                                     |           |  |



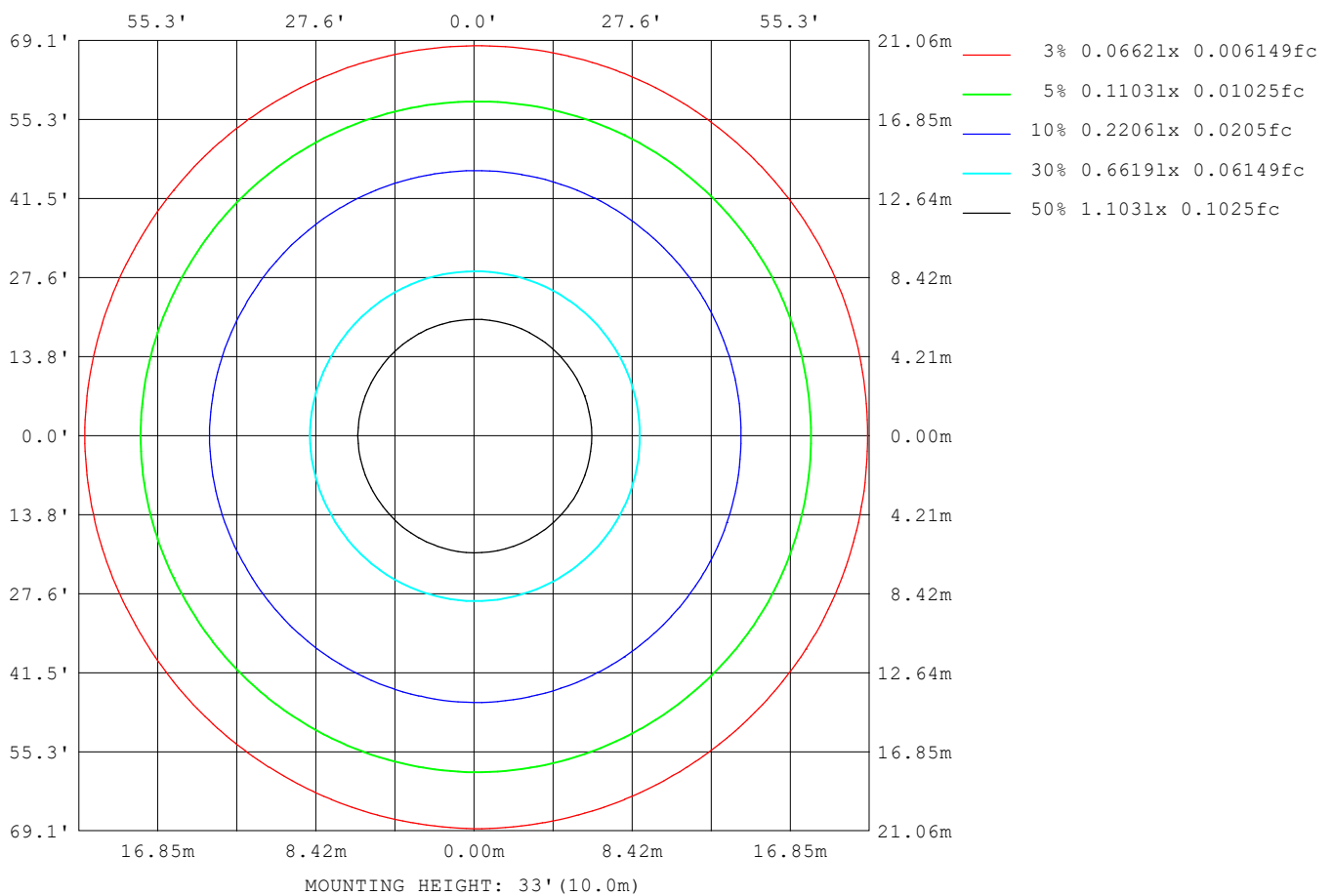
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-12-05

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
Humidity:65.0%  
Test Distance:8.000m [K=0.7125]  
Remarks:

### ISOLUX DIAGRAM

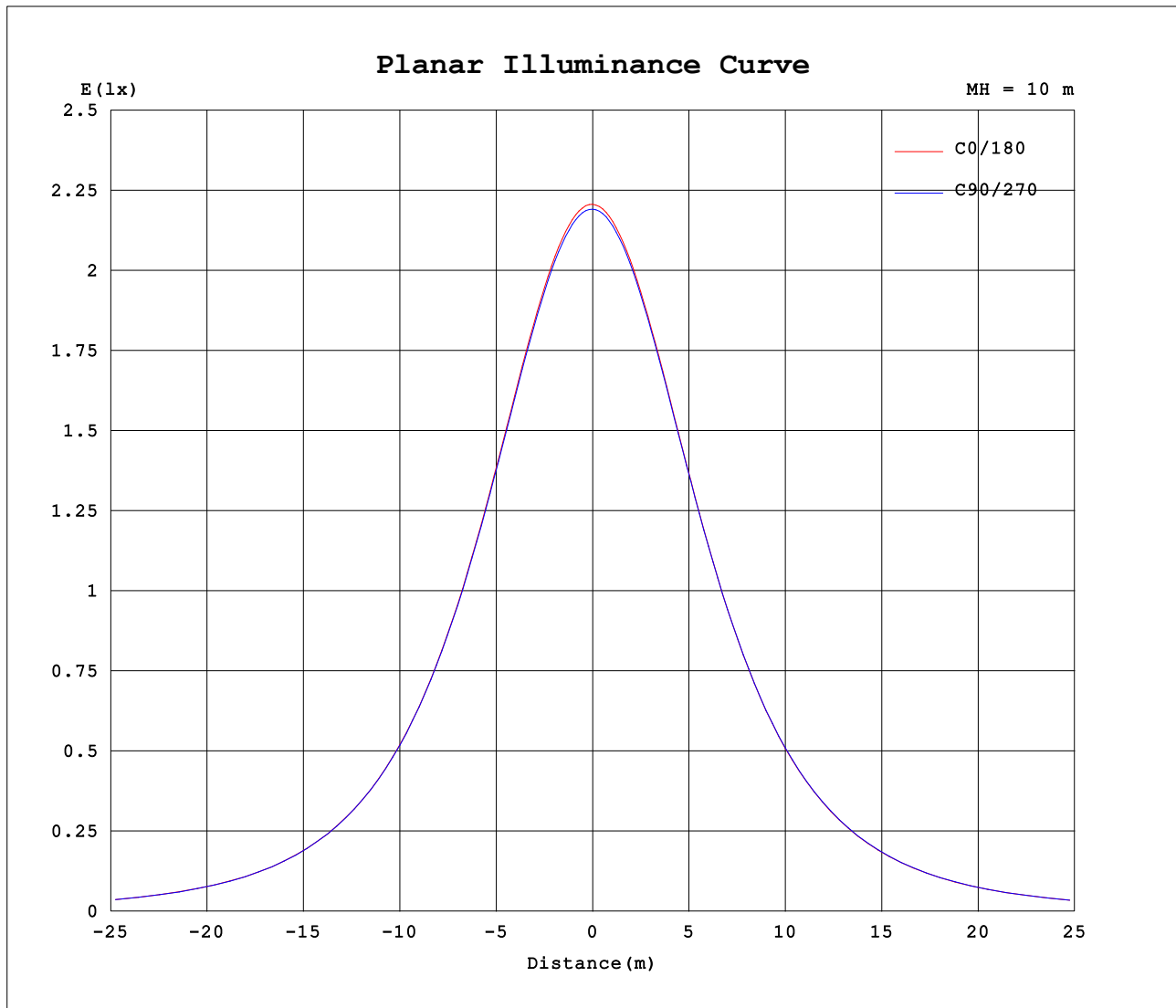
|                                                     |           |  |
|-----------------------------------------------------|-----------|--|
| Test:U:24.00V I:0.4360A P:10.400W PF:1.000 Freq:0Hz |           |  |
| Lamp Flux:638.012x1 lm                              |           |  |
| Name: NSL96W-NW-IP67                                | Type: LED |  |
| MFR.:                                               |           |  |
|                                                     |           |  |



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2024-12-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
 Humidity:65.0%  
 Test Distance:8.000m [K=0.7125]  
 Remarks:

# Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2024-12-05

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
 Humidity: 65.0%  
 Test Distance: 8.000m [K=0.7125]  
 Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                     |           |  |
|-----------------------------------------------------|-----------|--|
| Test:U:24.00V I:0.4360A P:10.400W PF:1.000 Freq:0Hz |           |  |
| Lamp Flux:638.012x1 lm                              |           |  |
| Name: NSL96W-NW-IP67                                | Type: LED |  |
| MFR.:                                               |           |  |
|                                                     |           |  |

Table--1

UNIT: cd

| C (DEG)<br>γ (DEG) | 0    | 30   | 60   | 90   | 120  | 150  | 180  | 210  | 240  | 270  | 300  | 330  |  |  |  |  |  |  |  |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|
| 0                  | 221  | 220  | 219  | 219  | 219  | 219  | 221  | 220  | 219  | 219  | 219  | 219  |  |  |  |  |  |  |  |
| 5                  | 220  | 219  | 219  | 218  | 218  | 218  | 219  | 218  | 218  | 218  | 218  | 218  |  |  |  |  |  |  |  |
| 10                 | 217  | 217  | 216  | 215  | 215  | 214  | 216  | 215  | 215  | 215  | 215  | 216  |  |  |  |  |  |  |  |
| 15                 | 212  | 212  | 211  | 211  | 209  | 209  | 210  | 209  | 209  | 209  | 210  | 211  |  |  |  |  |  |  |  |
| 20                 | 205  | 205  | 205  | 204  | 202  | 201  | 203  | 202  | 202  | 202  | 203  | 204  |  |  |  |  |  |  |  |
| 25                 | 196  | 197  | 196  | 195  | 194  | 192  | 194  | 193  | 193  | 194  | 195  | 196  |  |  |  |  |  |  |  |
| 30                 | 186  | 187  | 186  | 185  | 183  | 182  | 183  | 182  | 183  | 183  | 185  | 186  |  |  |  |  |  |  |  |
| 35                 | 174  | 175  | 174  | 174  | 172  | 170  | 171  | 170  | 171  | 171  | 173  | 174  |  |  |  |  |  |  |  |
| 40                 | 161  | 162  | 162  | 161  | 159  | 157  | 158  | 157  | 158  | 158  | 160  | 161  |  |  |  |  |  |  |  |
| 45                 | 147  | 148  | 148  | 147  | 145  | 143  | 144  | 143  | 143  | 144  | 146  | 147  |  |  |  |  |  |  |  |
| 50                 | 132  | 133  | 132  | 132  | 129  | 128  | 129  | 127  | 128  | 129  | 131  | 132  |  |  |  |  |  |  |  |
| 55                 | 116  | 117  | 116  | 116  | 113  | 111  | 113  | 111  | 112  | 113  | 115  | 116  |  |  |  |  |  |  |  |
| 60                 | 98.7 | 99.7 | 99.2 | 98.5 | 96.3 | 94.6 | 95.6 | 94.3 | 95.1 | 96.1 | 98.0 | 99.2 |  |  |  |  |  |  |  |
| 65                 | 81.1 | 82.1 | 81.5 | 80.9 | 78.6 | 77.1 | 78.2 | 76.9 | 77.6 | 78.4 | 80.5 | 81.7 |  |  |  |  |  |  |  |
| 70                 | 63.0 | 64.0 | 63.2 | 62.5 | 60.4 | 59.2 | 60.3 | 59.0 | 59.5 | 60.3 | 62.4 | 63.8 |  |  |  |  |  |  |  |
| 75                 | 45.1 | 46.0 | 44.8 | 44.1 | 42.2 | 41.5 | 42.6 | 41.3 | 41.5 | 42.0 | 43.5 | 45.8 |  |  |  |  |  |  |  |
| 80                 | 28.2 | 28.8 | 27.3 | 26.2 | 25.0 | 25.0 | 26.2 | 25.0 | 24.3 | 24.5 | 24.9 | 28.6 |  |  |  |  |  |  |  |
| 85                 | 14.7 | 14.6 | 12.4 | 10.8 | 10.8 | 12.1 | 13.4 | 12.3 | 10.5 | 9.96 | 11.1 | 14.4 |  |  |  |  |  |  |  |
| 90                 | 6.13 | 5.84 | 3.98 | 2.04 | 3.38 | 4.47 | 5.47 | 4.92 | 3.65 | 2.23 | 2.97 | 5.17 |  |  |  |  |  |  |  |
| 95                 | 2.27 | 2.26 | 1.90 | 0.26 | 1.84 | 1.87 | 2.36 | 2.46 | 2.31 | 0.86 | 1.86 | 2.84 |  |  |  |  |  |  |  |
| 100                | 1.28 | 1.48 | 1.58 | 0.25 | 1.56 | 1.40 | 1.76 | 2.00 | 2.00 | 0.84 | 1.55 | 2.09 |  |  |  |  |  |  |  |
| 105                | 1.15 | 1.30 | 1.36 | 0.25 | 1.34 | 1.24 | 1.63 | 1.83 | 1.81 | 0.82 | 1.52 | 1.90 |  |  |  |  |  |  |  |
| 110                | 1.04 | 1.17 | 1.08 | 0.25 | 1.10 | 1.11 | 1.55 | 1.70 | 1.64 | 0.80 | 1.45 | 1.76 |  |  |  |  |  |  |  |
| 115                | 0.97 | 1.06 | 0.87 | 0.26 | 0.87 | 1.01 | 1.48 | 1.61 | 1.48 | 0.80 | 1.33 | 1.62 |  |  |  |  |  |  |  |
| 120                | 0.92 | 0.81 | 0.72 | 0.29 | 0.72 | 0.94 | 1.43 | 1.51 | 1.34 | 0.80 | 1.17 | 1.37 |  |  |  |  |  |  |  |
| 125                | 0.88 | 0.73 | 0.62 | 0.31 | 0.63 | 0.87 | 1.37 | 1.43 | 1.22 | 0.81 | 1.08 | 1.28 |  |  |  |  |  |  |  |
| 130                | 0.82 | 0.67 | 0.55 | 0.34 | 0.59 | 0.80 | 1.30 | 1.33 | 1.12 | 0.82 | 1.01 | 1.17 |  |  |  |  |  |  |  |
| 135                | 0.77 | 0.62 | 0.50 | 0.36 | 0.54 | 0.73 | 1.23 | 1.24 | 1.04 | 0.82 | 0.95 | 1.10 |  |  |  |  |  |  |  |
| 140                | 0.72 | 0.58 | 0.47 | 0.38 | 0.52 | 0.68 | 1.16 | 1.16 | 0.98 | 0.82 | 0.90 | 1.03 |  |  |  |  |  |  |  |
| 145                | 0.68 | 0.54 | 0.45 | 0.40 | 0.51 | 0.64 | 1.08 | 1.07 | 0.92 | 0.81 | 0.87 | 0.97 |  |  |  |  |  |  |  |
| 150                | 0.64 | 0.54 | 0.48 | 0.43 | 0.51 | 0.63 | 1.02 | 1.00 | 0.87 | 0.81 | 0.84 | 0.92 |  |  |  |  |  |  |  |
| 155                | 0.62 | 0.53 | 0.48 | 0.47 | 0.51 | 0.62 | 0.96 | 0.93 | 0.83 | 0.80 | 0.80 | 0.87 |  |  |  |  |  |  |  |
| 160                | 0.58 | 0.54 | 0.51 | 0.51 | 0.54 | 0.60 | 0.88 | 0.86 | 0.80 | 0.78 | 0.77 | 0.82 |  |  |  |  |  |  |  |
| 165                | 0.55 | 0.57 | 0.55 | 0.56 | 0.58 | 0.59 | 0.81 | 0.79 | 0.77 | 0.77 | 0.76 | 0.78 |  |  |  |  |  |  |  |
| 170                | 0.57 | 0.59 | 0.59 | 0.60 | 0.62 | 0.62 | 0.74 | 0.75 | 0.74 | 0.73 | 0.73 | 0.73 |  |  |  |  |  |  |  |
| 175                | 0.60 | 0.63 | 0.62 | 0.63 | 0.65 | 0.64 | 0.68 | 0.70 | 0.70 | 0.69 | 0.68 | 0.68 |  |  |  |  |  |  |  |
| 180                | 0.62 | 0.65 | 0.66 | 0.66 | 0.68 | 0.67 | 0.66 | 0.67 | 0.67 | 0.66 | 0.65 | 0.66 |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-12-05

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
Humidity:65.0%  
Test Distance:8.000m [K=0.7125]  
Remarks: