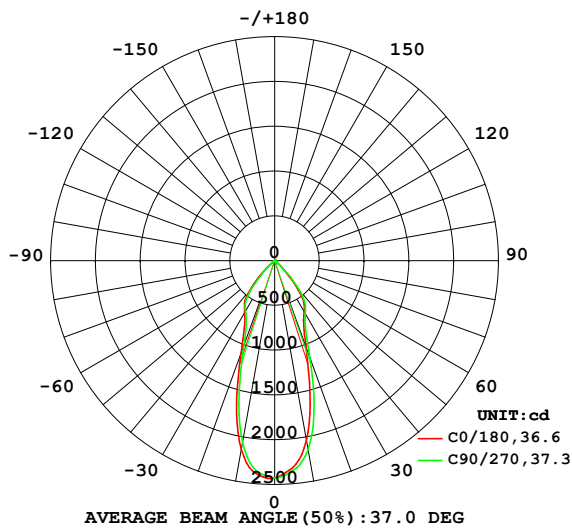


## LUMINAIRE PHOTOMETRIC TEST REPORT

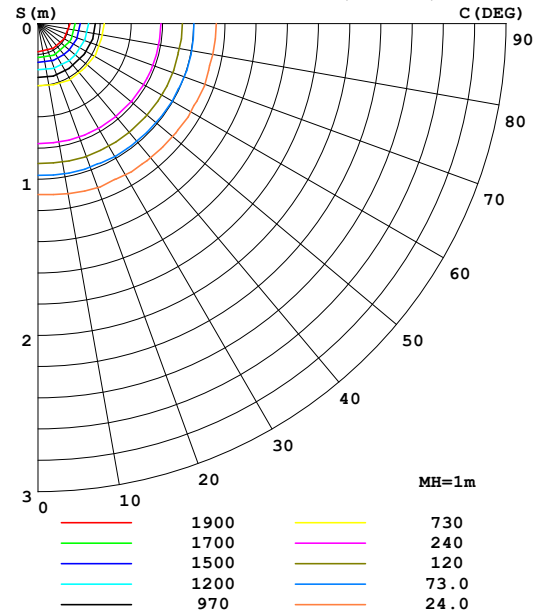
|                                                              |            |                  |
|--------------------------------------------------------------|------------|------------------|
| Test:U:240.4V I:0.0723A P:16.8W PF:0.9667 Freq:49.99Hz       |            |                  |
| UTHDi:0.17% ITHDi:18.44% KDisp:0.9831 Lamp Flux:1568.94x1 lm |            |                  |
| NAME: MD18-18-XX-02 2700K RA90 38D                           | TYPE:      | WEIGHT:          |
| SPEC.:                                                       | DIM.:      | SERIAL No.:      |
| MFR.: Norming lighting                                       | SUR.: 41mm | Shielding Angle: |

| DATA OF LAMP     |         | PHOTOMETRIC DATA      |        |                    |  | Eff: 93.35 lm/W |
|------------------|---------|-----------------------|--------|--------------------|--|-----------------|
| MODEL            |         | I <sub>max</sub> (cd) | 2434   | S/MH (C0/180)      |  | 0.62            |
| NOMINAL POWER(W) | 18      | LOR (%)               | 100.0  | S/MH (C90/270)     |  | 0.59            |
| RATED VOLTAGE(V) | 240     | TOTAL FLUX(lm)        | 1568.9 | η UP,DN (C0-180)   |  | 0.0,50.9        |
| NOMINAL FLUX(lm) | 1568.94 | CIE CLASS             | DIRECT | η UP,DN (C180-360) |  | 0.0,49.1        |
| LAMPS INSIDE     | 1       | η up (%)              | 0.0    | CIBSE SHR NOM      |  | 0.50            |
| TEST VOLTAGE(V)  | 240.39  | η down (%)            | 100.0  | CIBSE SHR MAX      |  | 0.60            |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



PLANAR ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-09-05

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [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       | 2041                  | 2101   | 2145   | 2166   | 2142   | 2098   | 2065   | 2027   | 0- 10    | 216.8       | 216.8        | 13.8,13.8  |
| 20       | 1024                  | 1103   | 1156   | 1142   | 1104   | 1057   | 1007   | 988.0  | 10- 20   | 436.3       | 653.1        | 41.6,41.6  |
| 30       | 661.0                 | 676.8  | 684.2  | 681.6  | 672.1  | 656.4  | 653.7  | 655.0  | 20- 30   | 370.9       | 1024         | 65.3,65.3  |
| 40       | 373.6                 | 399.0  | 423.4  | 440.2  | 433.0  | 399.6  | 381.7  | 367.3  | 30- 40   | 351.0       | 1375         | 87.6,87.6  |
| 50       | 41.02                 | 49.38  | 52.13  | 52.28  | 45.00  | 37.93  | 37.67  | 38.99  | 40- 50   | 148.9       | 1524         | 97.1,97.1  |
| 60       | 14.64                 | 16.83  | 17.07  | 16.41  | 15.55  | 15.01  | 15.01  | 14.43  | 50- 60   | 22.89       | 1547         | 98.6,98.6  |
| 70       | 7.949                 | 8.582  | 8.185  | 7.586  | 7.251  | 7.546  | 8.215  | 7.686  | 60- 70   | 10.57       | 1557         | 99.3,99.3  |
| 80       | 6.782                 | 7.441  | 7.567  | 6.865  | 6.405  | 5.951  | 6.197  | 6.448  | 70- 80   | 8.308       | 1566         | 99.8,99.8  |
| 90       | 0.0622                | 0.0491 | 0.0679 | 0.0528 | 0.0539 | 0.0578 | 0.0669 | 0.0563 | 80- 90   | 3.236       | 1569         | 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     |              |            |

Conical surface Flux(90deg): 1482.3 lm

%lum = 94.5%

%lamp = 94.5%

Conical surface Flux(120deg): 1546.8 lm

%lum = 98.6%

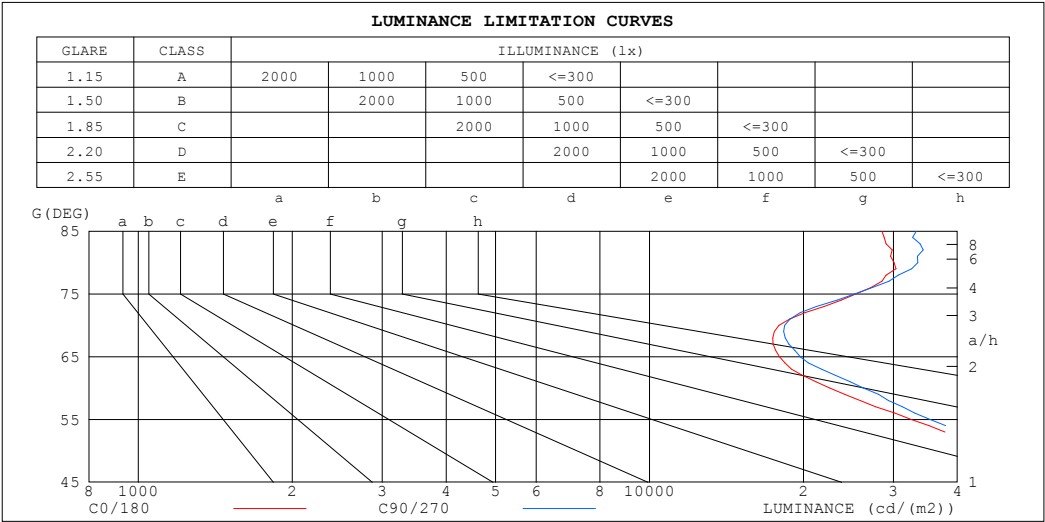
%lamp = 98.6%

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-09-05

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

|                                                              |            |                  |
|--------------------------------------------------------------|------------|------------------|
| Test:U:240.4V I:0.0723A P:16.8W PF:0.9667 Freq:49.99Hz       |            |                  |
| UTHDi:0.17% ITHDi:18.44% KDisp:0.9831 Lamp Flux:1568.94x1 lm |            |                  |
| NAME: MD18-18-XX-02 2700K RA90 38D                           | TYPE:      | WEIGHT:          |
| SPEC.:                                                       | DIM.:      | SERIAL No.:      |
| MFR.: Norming lighting                                       | SUR.: 41mm | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 28501  | 33213   |
| 80                | 30104  | 33477   |
| 75                | 25291  | 25158   |
| 70                | 17913  | 18385   |
| 65                | 17952  | 19720   |
| 60                | 22565  | 26231   |
| 55                | 32544  | 35406   |
| 50                | 49192  | 62307   |
| 45                | 174085 | 224093  |

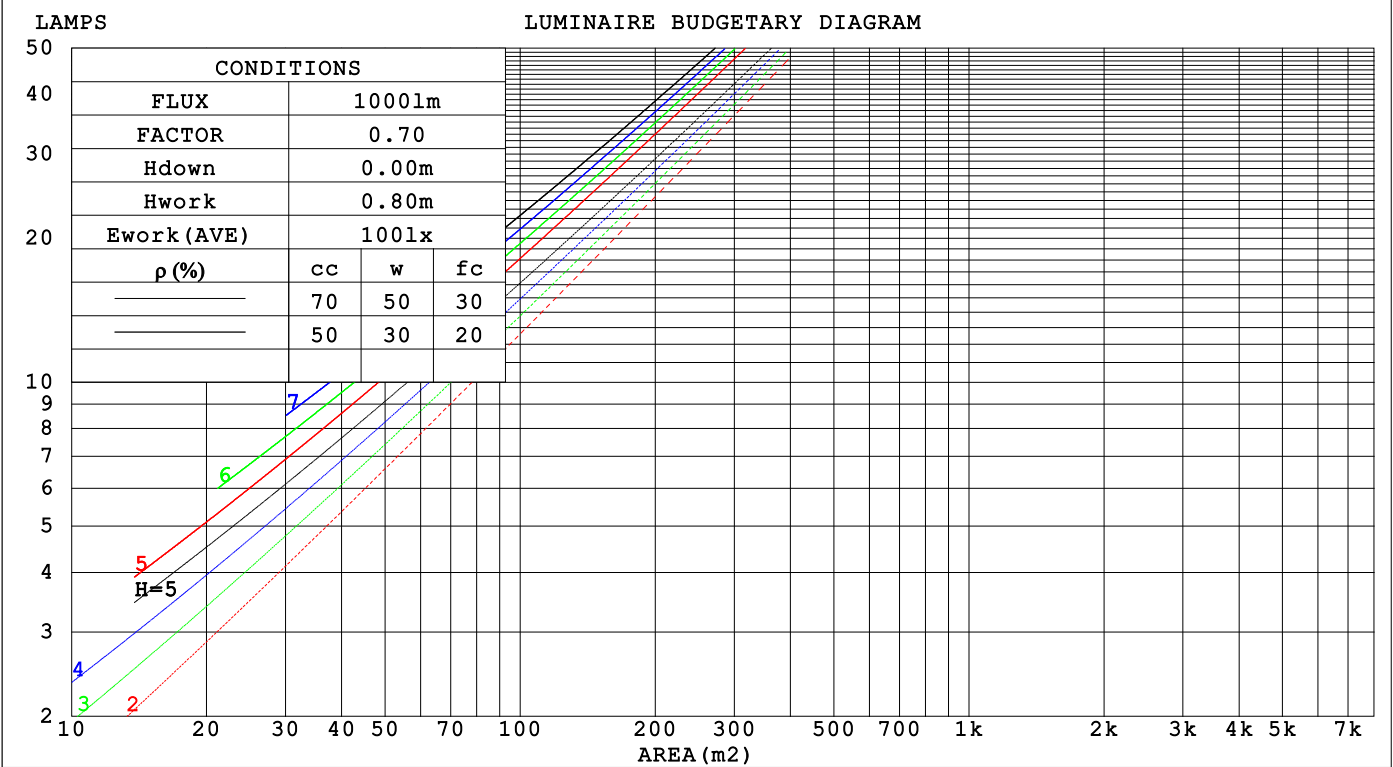
C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-09-05

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                        |            |                  |
|--------------------------------------------------------|------------|------------------|
| Test:U:240.4V I:0.0723A P:16.8W PF:0.9667 Freq:49.99Hz |            |                  |
| UTHDi:0.17% ITHDi:18.44% KDisp:0.9831                  |            |                  |
| Lamp Flux:1568.94x1 lm                                 |            |                  |
| NAME: MD18-18-XX-02 2700K RA90 38D                     | TYPE:      | WEIGHT:          |
| SPEC.:                                                 | DIM.:      | SERIAL No.:      |
| MFR.: Norming lighting                                 | SUR.: 41mm | Shielding Angle: |

| pcc | 80%                   |     |     | 70% |     |     | 50% |     |     | 30% |     |     | 10% |     |     | 0 |
|-----|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| ρw  | 50%                   | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| ρfc | 20%                   |     |     | 20% |     |     | 20% |     |     | 20% |     |     | 20% |     |     | 0 |
| RCR | RCR:Room Cavity Ratio |     |     |     |     |     |     |     |     |     |     |     |     |     |     |   |



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-09-05

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks:

## WEC AND CCEC

|                                                        |  |  |                                       |  |  |                        |  |  |
|--------------------------------------------------------|--|--|---------------------------------------|--|--|------------------------|--|--|
| Test:U:240.4V I:0.0723A P:16.8W PF:0.9667 Freq:49.99Hz |  |  | UTHDi:0.17% ITHDi:18.44% KDisp:0.9831 |  |  | Lamp Flux:1568.94x1 lm |  |  |
| NAME: MD18-18-XX-02 2700K RA90 38D                     |  |  | TYPE:                                 |  |  | WEIGHT:                |  |  |
| SPEC.:                                                 |  |  | DIM.:                                 |  |  | SERIAL No.:            |  |  |
| MFR.: Norming lighting                                 |  |  | SUR.: 41mm                            |  |  | Shielding Angle:       |  |  |

| pcc  | 80%                   |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| pw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| pfc  | 20%                   |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      |      |      |      |      |      |      |      |      |      | Wall Exitance Coefficients(WEC) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0.0  |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.0  | .184                  | .104 | .033 | .177 | .101 | .032 | .164 | .094 | .030 | .153 | .088 | .028 | .142 | .082 | .027 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.0  | .176                  | .096 | .030 | .170 | .094 | .029 | .159 | .089 | .027 | .149 | .084 | .026 | .140 | .079 | .025 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.0  | .167                  | .089 | .027 | .162 | .087 | .026 | .153 | .083 | .025 | .144 | .079 | .024 | .137 | .076 | .023 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.0  | .158                  | .082 | .024 | .154 | .081 | .024 | .146 | .078 | .023 | .139 | .075 | .023 | .132 | .072 | .022 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.0  | .151                  | .077 | .022 | .147 | .075 | .022 | .140 | .073 | .021 | .134 | .071 | .021 | .128 | .068 | .021 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.0  | .143                  | .072 | .021 | .140 | .071 | .020 | .134 | .069 | .020 | .129 | .067 | .020 | .123 | .065 | .019 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7.0  | .137                  | .068 | .019 | .134 | .067 | .019 | .129 | .065 | .019 | .124 | .063 | .018 | .119 | .062 | .018 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8.0  | .131                  | .064 | .018 | .128 | .063 | .018 | .123 | .062 | .018 | .119 | .060 | .017 | .115 | .059 | .017 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.0  | .125                  | .060 | .017 | .123 | .060 | .017 | .118 | .058 | .017 | .114 | .057 | .016 | .110 | .056 | .016 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.0 | .119                  | .057 | .016 | .117 | .057 | .016 | .114 | .056 | .016 | .110 | .055 | .016 | .107 | .054 | .015 |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

| 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  | .190                  | .190 | .190 | .163 | .163 | .163 | .111                                        | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .172                  | .157 | .144 | .147 | .135 | .124 | .100                                        | .093 | .086 | .058 | .054 | .050 | .019 | .017 | .016 |   |
| 2.0  | .157                  | .132 | .112 | .134 | .114 | .097 | .092                                        | .079 | .068 | .053 | .046 | .040 | .017 | .015 | .013 |   |
| 3.0  | .145                  | .114 | .089 | .124 | .098 | .077 | .085                                        | .068 | .054 | .049 | .040 | .032 | .016 | .013 | .010 |   |
| 4.0  | .134                  | .099 | .072 | .115 | .086 | .062 | .079                                        | .060 | .044 | .046 | .035 | .026 | .015 | .011 | .009 |   |
| 5.0  | .126                  | .087 | .059 | .108 | .076 | .051 | .074                                        | .053 | .036 | .043 | .031 | .022 | .014 | .010 | .007 |   |
| 6.0  | .118                  | .078 | .049 | .102 | .068 | .043 | .070                                        | .047 | .030 | .041 | .028 | .018 | .013 | .009 | .006 |   |
| 7.0  | .112                  | .071 | .042 | .096 | .061 | .036 | .067                                        | .043 | .026 | .039 | .025 | .015 | .012 | .008 | .005 |   |
| 8.0  | .106                  | .064 | .036 | .091 | .056 | .031 | .063                                        | .039 | .022 | .037 | .023 | .013 | .012 | .008 | .004 |   |
| 9.0  | .101                  | .059 | .031 | .087 | .051 | .027 | .060                                        | .036 | .019 | .035 | .021 | .011 | .011 | .007 | .004 |   |
| 10.0 | .096                  | .055 | .027 | .083 | .048 | .024 | .058                                        | .034 | .017 | .034 | .020 | .010 | .011 | .007 | .003 |   |

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-09-05

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

|                                                                 |     |                  |      |      |                        |            |                |      |                  |      |      |
|-----------------------------------------------------------------|-----|------------------|------|------|------------------------|------------|----------------|------|------------------|------|------|
| Test:U:240.4V I:0.0723A P:16.8W PF:0.9667 Freq:49.99Hz          |     |                  |      |      |                        |            |                |      |                  |      |      |
| UTHDi:0.17% ITHDi:18.44% KDisp:0.9831                           |     |                  |      |      | Lamp Flux:1568.94x1 lm |            |                |      |                  |      |      |
| NAME: MD18-18-XX-02 2700K RA90 38D                              |     |                  |      |      |                        | TYPE:      |                |      | WEIGHT:          |      |      |
| SPEC.:                                                          |     |                  |      |      |                        | DIM.:      |                |      | SERIAL No.:      |      |      |
| MFR.: Norming lighting                                          |     |                  |      |      |                        | SUR.: 41mm |                |      | Shielding Angle: |      |      |
| ceiling/cavity                                                  |     | 0.7              | 0.7  | 0.5  | 0.5                    | 0.3        | 0.7            | 0.7  | 0.5              | 0.5  | 0.3  |
| walls                                                           |     | 0.5              | 0.3  | 0.5  | 0.3                    | 0.3        | 0.5            | 0.3  | 0.5              | 0.3  | 0.3  |
| working plane                                                   |     | 0.2              | 0.2  | 0.2  | 0.2                    | 0.2        | 0.2            | 0.2  | 0.2              | 0.2  | 0.2  |
| Room dimensions                                                 |     | Viewed crosswise |      |      |                        |            | Viewed endwise |      |                  |      |      |
| x = 2H y = 2H                                                   | 2H  | 26.4             | 27.4 | 26.7 | 27.6                   | 27.7       | 26.8           | 27.8 | 27.0             | 28.0 | 28.1 |
|                                                                 | 3H  | 26.3             | 27.2 | 26.6 | 27.4                   | 27.6       | 26.7           | 27.6 | 27.0             | 27.8 | 28.0 |
|                                                                 | 4H  | 26.3             | 27.1 | 26.5 | 27.3                   | 27.6       | 26.7           | 27.5 | 26.9             | 27.7 | 27.9 |
|                                                                 | 6H  | 26.3             | 27.1 | 26.6 | 27.3                   | 27.6       | 26.7           | 27.4 | 27.0             | 27.7 | 27.9 |
|                                                                 | 8H  | 26.3             | 27.0 | 26.6 | 27.3                   | 27.5       | 26.7           | 27.4 | 27.0             | 27.7 | 27.9 |
|                                                                 | 12H | 26.3             | 27.0 | 26.6 | 27.3                   | 27.5       | 26.7           | 27.4 | 27.0             | 27.7 | 27.9 |
| 4H                                                              | 2H  | 26.2             | 27.0 | 26.5 | 27.3                   | 27.5       | 26.6           | 27.4 | 26.9             | 27.7 | 27.9 |
|                                                                 | 3H  | 26.1             | 26.8 | 26.4 | 27.1                   | 27.4       | 26.5           | 27.2 | 26.8             | 27.5 | 27.8 |
|                                                                 | 4H  | 26.1             | 26.8 | 26.5 | 27.1                   | 27.4       | 26.5           | 27.1 | 26.8             | 27.4 | 27.7 |
|                                                                 | 6H  | 26.2             | 26.8 | 26.5 | 27.1                   | 27.4       | 26.5           | 27.1 | 26.9             | 27.5 | 27.8 |
|                                                                 | 8H  | 26.2             | 26.7 | 26.6 | 27.1                   | 27.5       | 26.6           | 27.1 | 27.0             | 27.5 | 27.8 |
|                                                                 | 12H | 26.2             | 26.7 | 26.6 | 27.1                   | 27.5       | 26.6           | 27.1 | 27.0             | 27.5 | 27.9 |
| 8H                                                              | 4H  | 26.0             | 26.6 | 26.4 | 26.9                   | 27.3       | 26.4           | 26.9 | 26.8             | 27.3 | 27.7 |
|                                                                 | 6H  | 26.2             | 26.6 | 26.6 | 27.0                   | 27.4       | 26.5           | 27.0 | 27.0             | 27.4 | 27.8 |
|                                                                 | 8H  | 26.2             | 26.6 | 26.7 | 27.0                   | 27.5       | 26.6           | 27.0 | 27.1             | 27.4 | 27.9 |
|                                                                 | 12H | 26.3             | 26.6 | 26.7 | 27.1                   | 27.5       | 26.7           | 27.0 | 27.1             | 27.4 | 27.9 |
| 12H                                                             | 4H  | 26.0             | 26.5 | 26.4 | 26.9                   | 27.3       | 26.4           | 26.9 | 26.8             | 27.2 | 27.6 |
|                                                                 | 6H  | 26.1             | 26.5 | 26.6 | 27.0                   | 27.4       | 26.5           | 26.9 | 27.0             | 27.3 | 27.8 |
|                                                                 | 8H  | 26.2             | 26.6 | 26.7 | 27.0                   | 27.5       | 26.6           | 26.9 | 27.1             | 27.4 | 27.8 |
| Variations with the observer position at spacings(CIE Pub.117): |     |                  |      |      |                        |            |                |      |                  |      |      |
| S = 1.0H                                                        |     | + 2.3 / - 6.0    |      |      |                        |            | + 2.4 / - 6.1  |      |                  |      |      |
| 1.5H                                                            |     | + 4.4 / - 5.8    |      |      |                        |            | + 4.4 / - 6.1  |      |                  |      |      |
| 2.0H                                                            |     | + 5.2 / - 2.3    |      |      |                        |            | + 6.0 / - 2.7  |      |                  |      |      |

CIE Pub.117, 1569 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 1.6)  
Area: 0.0013 m2

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-09-05

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

|                                                              |            |                  |
|--------------------------------------------------------------|------------|------------------|
| Test:U:240.4V I:0.0723A P:16.8W PF:0.9667 Freq:49.99Hz       |            |                  |
| UTHDi:0.17% ITHDi:18.44% KDisp:0.9831 Lamp Flux:1568.94x1 lm |            |                  |
| NAME: MD18-18-XX-02 2700K RA90 38D                           | TYPE:      | WEIGHT:          |
| SPEC.:                                                       | DIM.:      | SERIAL No.:      |
| MFR.: Norming lighting                                       | SUR.: 41mm | Shielding Angle: |

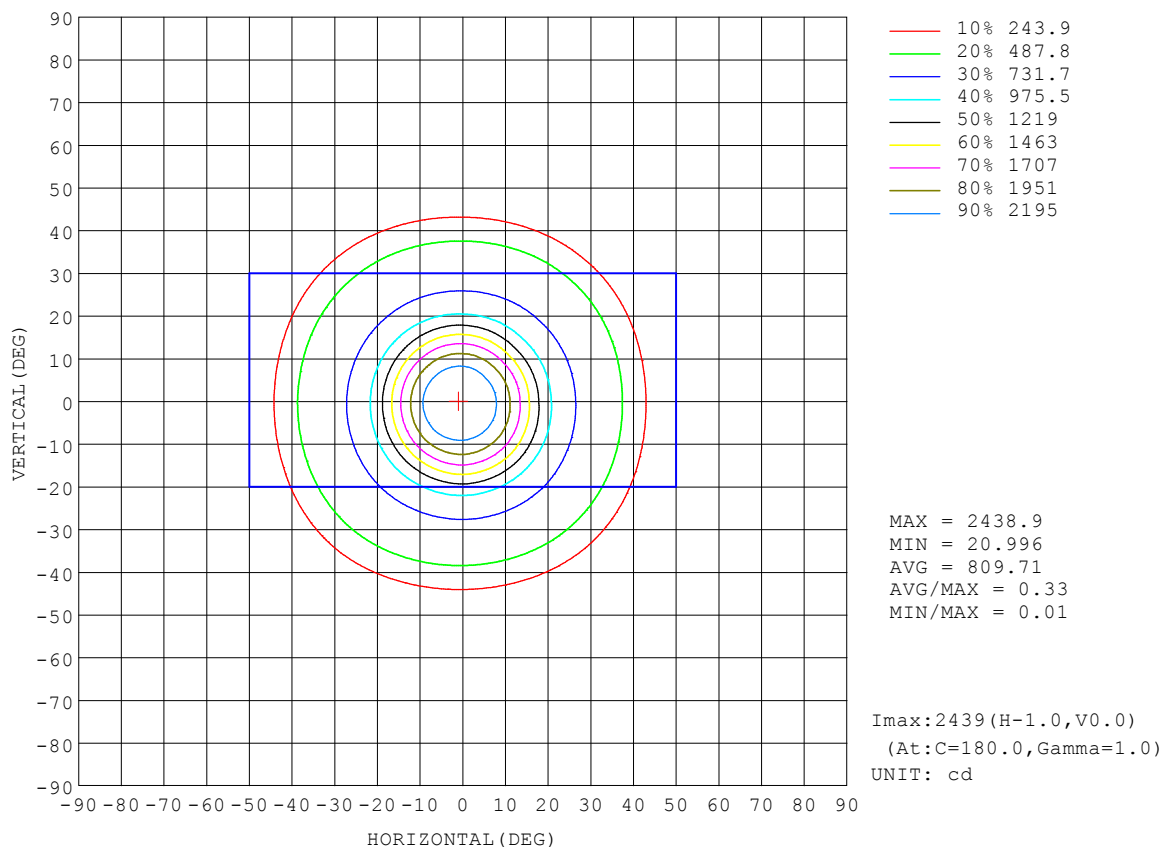
| REFLECTANCE                      |                                                      |     |           |     |     |     |     |               |     |        |
|----------------------------------|------------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 84                                                   | 77  | 73        | 83  | 77  | 73  | 82  | 76            | 72  | 69     |
| 0.80                             | 92                                                   | 85  | 81        | 91  | 85  | 81  | 90  | 84            | 81  | 77     |
| 1.00                             | 97                                                   | 91  | 87        | 96  | 90  | 87  | 94  | 90            | 86  | 82     |
| 1.25                             | 101                                                  | 96  | 92        | 100 | 95  | 92  | 98  | 94            | 91  | 86     |
| 1.50                             | 104                                                  | 99  | 96        | 103 | 98  | 95  | 101 | 97            | 94  | 89     |
| 2.00                             | 107                                                  | 103 | 100       | 106 | 102 | 99  | 103 | 100           | 97  | 92     |
| 2.50                             | 109                                                  | 105 | 102       | 108 | 104 | 101 | 104 | 102           | 99  | 93     |
| 3.00                             | 111                                                  | 107 | 104       | 109 | 106 | 103 | 106 | 103           | 101 | 95     |
| 4.00                             | 113                                                  | 110 | 108       | 111 | 108 | 106 | 107 | 105           | 104 | 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: DAMIN  
 Test Date: 2024-09-05

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
 Humidity: 65.0%  
 Test Distance: 3.090m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

|                                                              |            |                  |
|--------------------------------------------------------------|------------|------------------|
| Test:U:240.4V I:0.0723A P:16.8W PF:0.9667 Freq:49.99Hz       |            |                  |
| UTHDi:0.17% ITHDi:18.44% KDisp:0.9831 Lamp Flux:1568.94x1 lm |            |                  |
| NAME: MD18-18-XX-02 2700K RA90 38D                           | TYPE:      | WEIGHT:          |
| SPEC.:                                                       | DIM.:      | SERIAL No.:      |
| MFR.: Norming lighting                                       | SUR.: 41mm | Shielding Angle: |



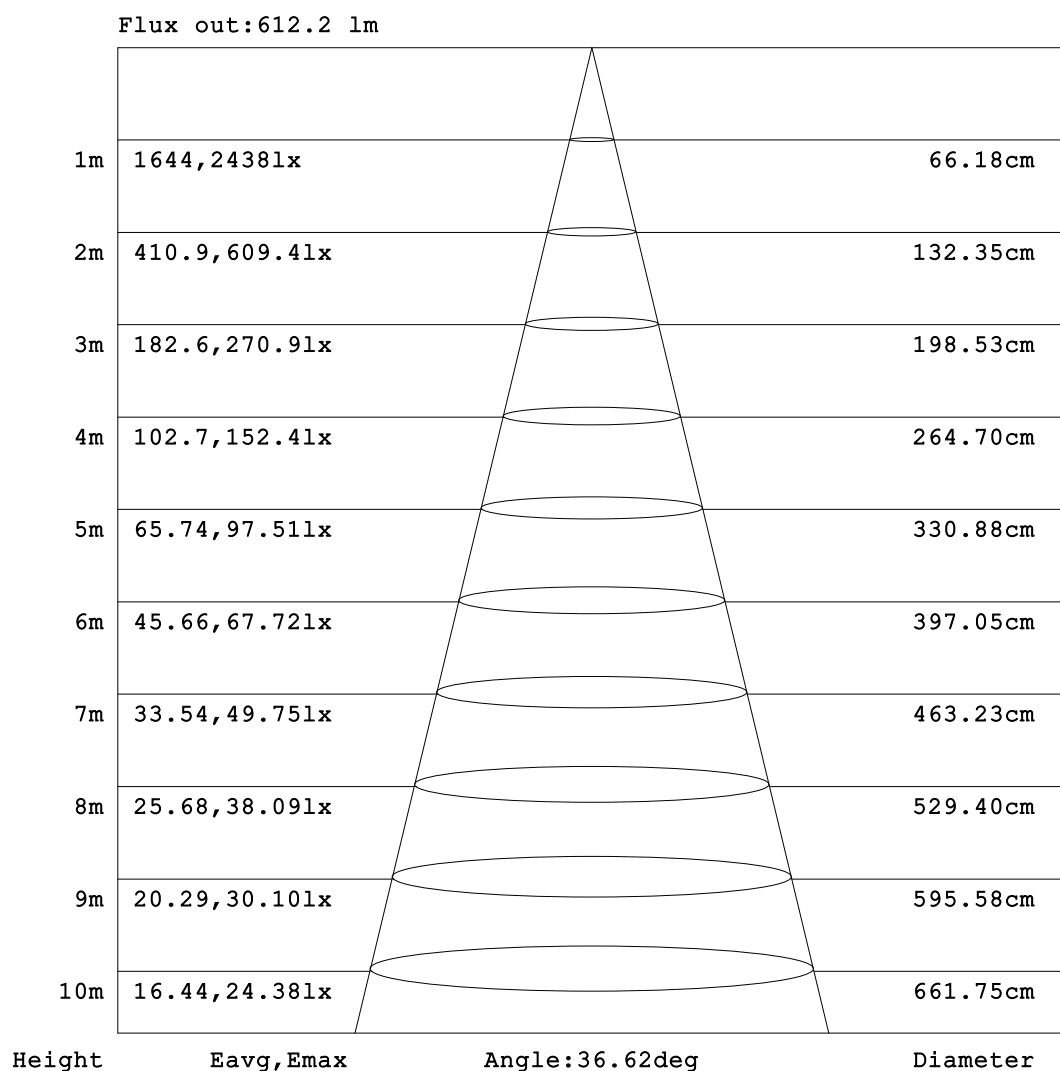
C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-09-05

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks:



## AAI Figure

|                                                              |            |                  |
|--------------------------------------------------------------|------------|------------------|
| Test:U:240.4V I:0.0723A P:16.8W PF:0.9667 Freq:49.99Hz       |            |                  |
| UTHDi:0.17% ITHDi:18.44% KDisp:0.9831 Lamp Flux:1568.94x1 lm |            |                  |
| NAME: MD18-18-XX-02 2700K RA90 38D                           | TYPE:      | WEIGHT:          |
| SPEC.:                                                       | DIM.:      | SERIAL No.:      |
| MFR.: Norming lighting                                       | SUR.: 41mm | Shielding Angle: |

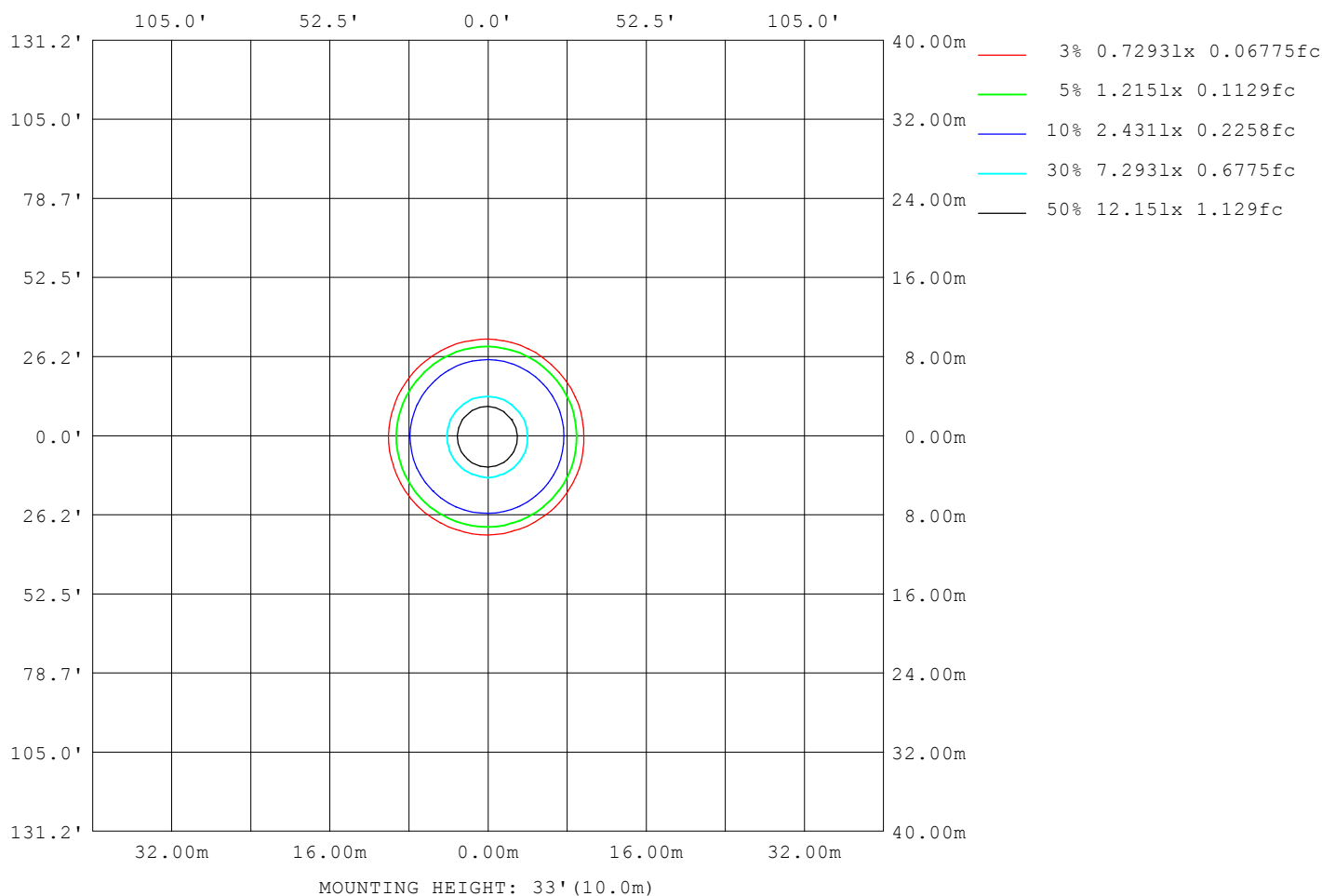


C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-09-05

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks:

## ISOLUX DIAGRAM

|                                                                                                                        |            |                  |
|------------------------------------------------------------------------------------------------------------------------|------------|------------------|
| Test:U:240.4V I:0.0723A P:16.8W PF:0.9667 Freq:49.99Hz<br>UTHDi:0.17% ITHDi:18.44% KDisp:0.9831 Lamp Flux:1568.94x1 lm |            |                  |
| NAME: MD18-18-XX-02 2700K RA90 38D                                                                                     | TYPE:      | WEIGHT:          |
| SPEC.:                                                                                                                 | DIM.:      | SERIAL No.:      |
| MFR.: Norming lighting                                                                                                 | SUR.: 41mm | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2024-09-05

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity: 65.0%  
Test Distance: 3.090m [K=1.0000]  
Remarks:

## LED Avg.L Report

|                                                                                                                        |            |                  |
|------------------------------------------------------------------------------------------------------------------------|------------|------------------|
| Test:U:240.4V I:0.0723A P:16.8W PF:0.9667 Freq:49.99Hz<br>UTHDi:0.17% ITHDi:18.44% KDisp:0.9831 Lamp Flux:1568.94x1 lm |            |                  |
| NAME: MD18-18-XX-02 2700K RA90 38D                                                                                     | TYPE:      | WEIGHT:          |
| SPEC.:                                                                                                                 | DIM.:      | SERIAL No.:      |
| MFR.: Norming lighting                                                                                                 | SUR.: 41mm | Shielding Angle: |

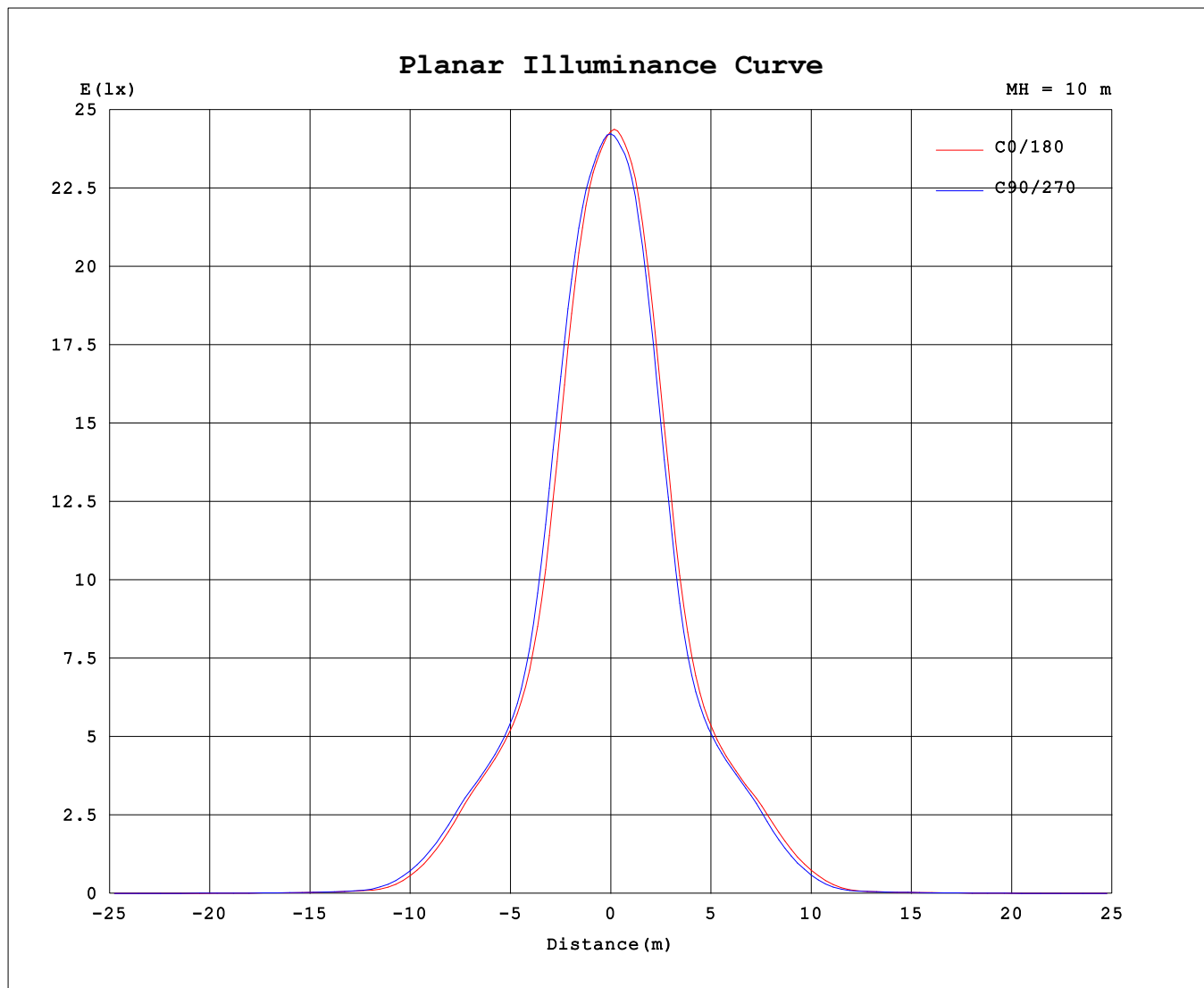
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 17915 |
| L_0~180 (75) av  | 23438 |
| L_0~180 (85) av  | 26846 |
| L_90~270 (65) av | 19037 |
| L_90~270 (75) av | 25283 |
| L_90~270 (85) av | 27550 |
| L_45 (65) av     | 18563 |
| L_45 (75) av     | 24458 |
| L_45 (85) av     | 26161 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2024-09-05

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity:65.0%  
Test Distance:3.090m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2024-09-05

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity: 65.0%  
Test Distance: 3.090m [K=1.0000]  
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

```

## Photometric Data Table [cd]

| G/C  | 0.0    | 45.0   | 90.0   | 135.0  | 180.0  | 225.0  | 270.0  | 315.0  |
|------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0.0  | 2426   | 2426   | 2426   | 2426   | 2426   | 2426   | 2426   | 2426   |
| 3.0  | 2370   | 2375   | 2394   | 2409   | 2420   | 2411   | 2393   | 2378   |
| 6.0  | 2286   | 2304   | 2327   | 2355   | 2362   | 2335   | 2323   | 2290   |
| 9.0  | 2117   | 2167   | 2206   | 2230   | 2214   | 2175   | 2145   | 2106   |
| 12.0 | 1857   | 1938   | 1995   | 2003   | 1966   | 1916   | 1874   | 1829   |
| 15.0 | 1526   | 1640   | 1704   | 1697   | 1648   | 1591   | 1537   | 1489   |
| 18.0 | 1198   | 1309   | 1370   | 1353   | 1302   | 1250   | 1201   | 1156   |
| 21.0 | 958.3  | 1015   | 1062   | 1051   | 1022   | 979.0  | 934.8  | 927.1  |
| 24.0 | 803.3  | 833.5  | 858.4  | 856.7  | 836.6  | 807.7  | 786.9  | 785.2  |
| 27.0 | 717.5  | 737.9  | 749.4  | 746.9  | 735.5  | 714.8  | 705.6  | 706.6  |
| 30.0 | 661.0  | 676.8  | 684.2  | 681.6  | 672.1  | 656.4  | 653.7  | 655.0  |
| 33.0 | 610.4  | 622.9  | 633.0  | 631.4  | 622.3  | 608.0  | 608.0  | 608.5  |
| 36.0 | 540.8  | 559.1  | 577.1  | 578.8  | 572.5  | 552.3  | 544.2  | 537.6  |
| 39.0 | 418.9  | 442.5  | 466.2  | 481.8  | 475.3  | 443.9  | 425.7  | 413.8  |
| 42.0 | 284.1  | 310.7  | 333.8  | 348.8  | 342.5  | 312.3  | 293.2  | 275.4  |
| 45.0 | 159.7  | 188.0  | 206.3  | 216.5  | 210.6  | 184.9  | 167.6  | 149.7  |
| 48.0 | 68.25  | 89.72  | 98.67  | 102.7  | 96.13  | 82.26  | 68.59  | 62.26  |
| 51.0 | 36.55  | 41.36  | 40.78  | 39.21  | 34.41  | 32.75  | 32.46  | 34.65  |
| 54.0 | 26.84  | 29.90  | 29.04  | 27.31  | 25.77  | 24.41  | 24.31  | 25.46  |
| 57.0 | 19.55  | 22.26  | 22.15  | 21.36  | 20.31  | 19.38  | 19.45  | 19.04  |
| 60.0 | 14.64  | 16.83  | 17.07  | 16.41  | 15.55  | 15.01  | 15.01  | 14.43  |
| 63.0 | 11.17  | 12.70  | 12.84  | 12.26  | 11.54  | 11.43  | 11.58  | 11.09  |
| 66.0 | 9.312  | 10.13  | 10.18  | 9.613  | 9.172  | 9.298  | 9.474  | 9.183  |
| 69.0 | 8.155  | 8.713  | 8.535  | 7.971  | 7.641  | 7.872  | 8.291  | 7.971  |
| 72.0 | 8.078  | 8.904  | 7.931  | 7.257  | 6.837  | 7.461  | 8.519  | 7.695  |
| 75.0 | 8.493  | 9.346  | 8.476  | 7.710  | 7.280  | 7.759  | 8.538  | 8.102  |
| 78.0 | 7.832  | 8.656  | 8.292  | 7.554  | 7.239  | 7.222  | 7.390  | 7.445  |
| 81.0 | 6.011  | 6.705  | 6.806  | 6.192  | 5.696  | 5.444  | 5.381  | 5.630  |
| 84.0 | 3.904  | 4.272  | 4.453  | 4.032  | 3.366  | 3.256  | 3.198  | 3.428  |
| 87.0 | 1.085  | 1.716  | 2.064  | 1.818  | 1.233  | 0.6406 | 0.5411 | 0.5488 |
| 90.0 | 0.0622 | 0.0491 | 0.0679 | 0.0528 | 0.0539 | 0.0578 | 0.0669 | 0.0563 |

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
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$\gamma$  Range: 0 - 90DEG  
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Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.453  
Humidity: 65.0%  
Test Distance: 3.090m [K=1.0000]  
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