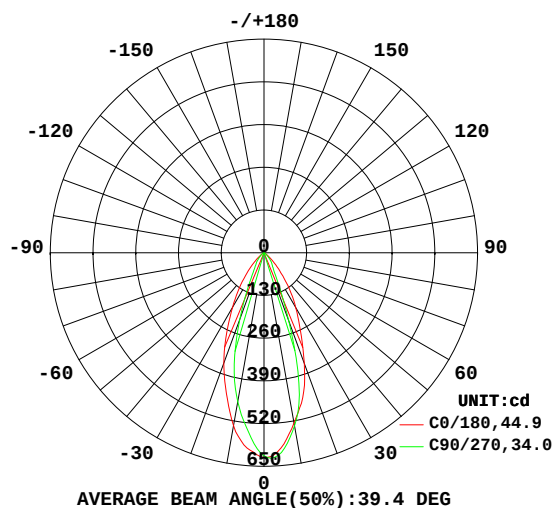


## LUMINAIRE PHOTOMETRIC TEST REPORT

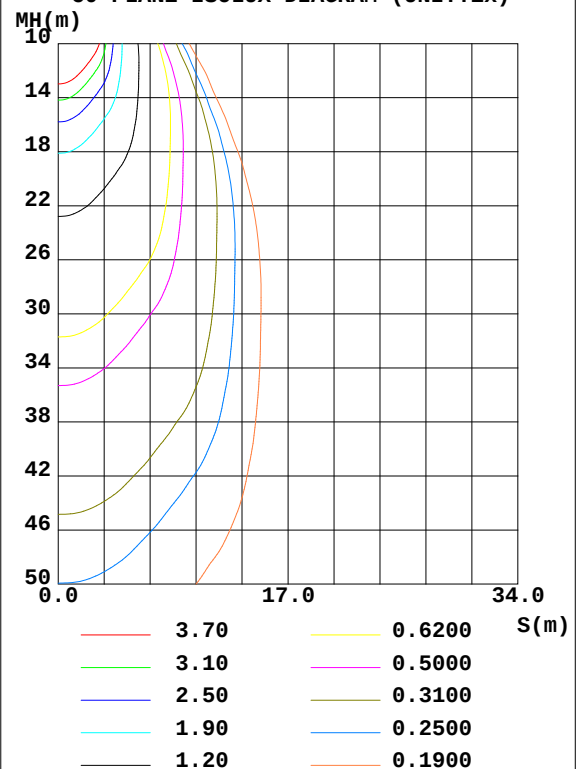
|                                                                                  |                |                  |
|----------------------------------------------------------------------------------|----------------|------------------|
| Test:U:220.41V I:0.1183A P:11.406W PF:0.4375 Freq:50.01Hz Lamp Flux:342.579x1 lm |                |                  |
| NAME: MTHSA601251-BK4K10                                                         | TYPE:          | WEIGHT:          |
| SPEC.: black RA90                                                                | DIM.:          | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130*27mm | Shielding Angle: |

| DATA OF LAMP     |         | PHOTOMETRIC DATA Eff: 30.04 lm/W |        |                    |           |
|------------------|---------|----------------------------------|--------|--------------------|-----------|
| MODEL            | 4000K   | I <sub>max</sub> (cd)            | 627.2  | S/MH(C0/180)       | 0.70      |
| NOMINAL POWER(W) | 10      | LOR(%)                           | 100.0  | S/MH(C90/270)      | 0.55      |
| RATED VOLTAGE(V) | 220-240 | TOTAL FLUX(lm)                   | 342.58 | η UP, DN(C0-180)   | 0.0, 52.3 |
| NOMINAL FLUX(lm) | 342.579 | CIE CLASS                        | DIRECT | η UP, DN(C180-360) | 0.0, 47.7 |
| LAMPS INSIDE     | 1       | η up(%)                          | 0.0    | CIBSE SHR NOM      | 0.50      |
| TEST VOLTAGE(V)  | 220     | η down(%)                        | 100.0  | CIBSE SHR MAX      | 0.65      |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2023-10-16

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

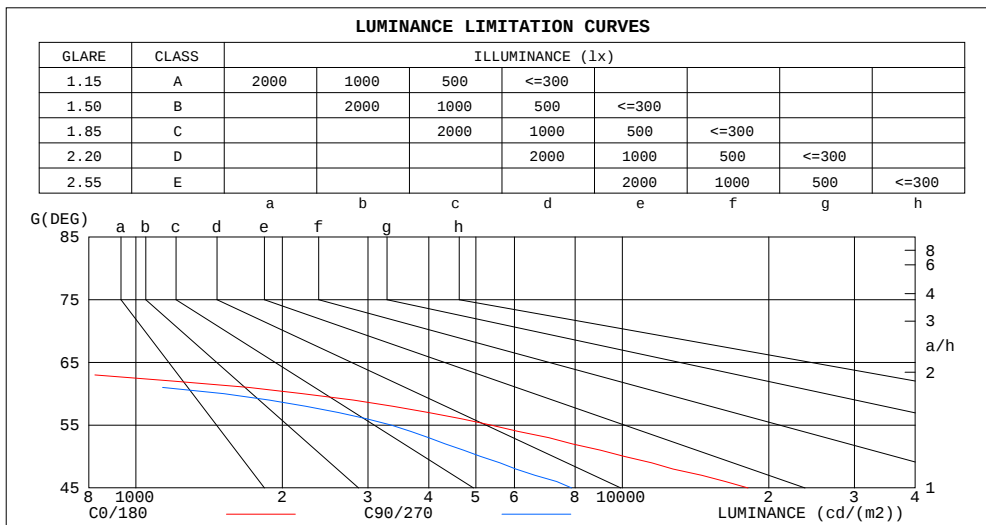
| $\gamma$ | C0                    | C45    | C90   | C135   | C180  | C225   | C270  | C315  | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|--------|-------|--------|-------|--------|-------|-------|----------|-------------|--------------|------------|
| 10       | 526.2                 | 532.9  | 535.5 | 549.6  | 534.9 | 483.7  | 460.1 | 458.4 | 0- 10    | 53.27       | 53.27        | 15.5, 15.5 |
| 20       | 359.0                 | 317.3  | 221.5 | 359.5  | 358.2 | 296.6  | 215.1 | 264.9 | 10- 20   | 113.3       | 166.5        | 48.6, 48.6 |
| 30       | 194.7                 | 107.4  | 57.93 | 141.1  | 191.7 | 121.1  | 62.83 | 102.9 | 20- 30   | 88.69       | 255.2        | 74.5, 74.5 |
| 40       | 80.81                 | 41.92  | 30.66 | 46.71  | 81.38 | 44.71  | 31.21 | 42.12 | 30- 40   | 51.11       | 306.3        | 89.4, 89.4 |
| 50       | 22.78                 | 20.47  | 11.53 | 20.78  | 23.75 | 20.80  | 12.72 | 20.56 | 40- 50   | 25.49       | 331.8        | 96.9, 96.9 |
| 60       | 3.861                 | 5.105  | 2.663 | 5.488  | 4.316 | 5.846  | 3.470 | 5.383 | 50- 60   | 9.314       | 341.1        | 99.6, 99.6 |
| 70       | 0                     | 0.0008 | 0     | 0.0674 | 0     | 0.0954 | 0     | 0     | 60- 70   | 1.451       | 342.6        | 100, 100   |
| 80       | 0                     | 0      | 0     | 0      | 0     | 0      | 0     | 0     | 70- 80   | 0.0005      | 342.6        | 100, 100   |
| 90       | 0                     | 0      | 0     | 0      | 0     | 0      | 0     | 0     | 80- 90   | 0.0001      | 342.6        | 100, 100   |
| 100      |                       |        |       |        |       |        |       |       | 90-100   |             |              |            |
| 110      |                       |        |       |        |       |        |       |       | 100-110  |             |              |            |
| 120      |                       |        |       |        |       |        |       |       | 110-120  |             |              |            |
| 130      |                       |        |       |        |       |        |       |       | 120-130  |             |              |            |
| 140      |                       |        |       |        |       |        |       |       | 130-140  |             |              |            |
| 150      |                       |        |       |        |       |        |       |       | 140-150  |             |              |            |
| 160      |                       |        |       |        |       |        |       |       | 150-160  |             |              |            |
| 170      |                       |        |       |        |       |        |       |       | 160-170  |             |              |            |
| 180      |                       |        |       |        |       |        |       |       | 170-180  |             |              |            |
| DEG      | LUMINOUS INTENSITY:cd |        |       |        |       |        |       |       |          | UNIT:lm     |              |            |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2023-10-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

|                                                                                  |                |                  |
|----------------------------------------------------------------------------------|----------------|------------------|
| Test:U:220.41V I:0.1183A P:11.406W PF:0.4375 Freq:50.01Hz Lamp Flux:342.579x1 lm |                |                  |
| NAME: MTHSA601251-BK4K10                                                         | TYPE:          | WEIGHT:          |
| SPEC.: black RA90                                                                | DIM.:          | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130*27mm | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G(DEG)            | C0/180 | C90/270 |
| 85                | 0      | 0       |
| 80                | 0      | 0       |
| 75                | 0      | 0       |
| 70                | 0      | 0       |
| 65                | 312    | 31      |
| 60                | 2200   | 1518    |
| 55                | 5364   | 3345    |
| 50                | 10095  | 5110    |
| 45                | 18125  | 7865    |

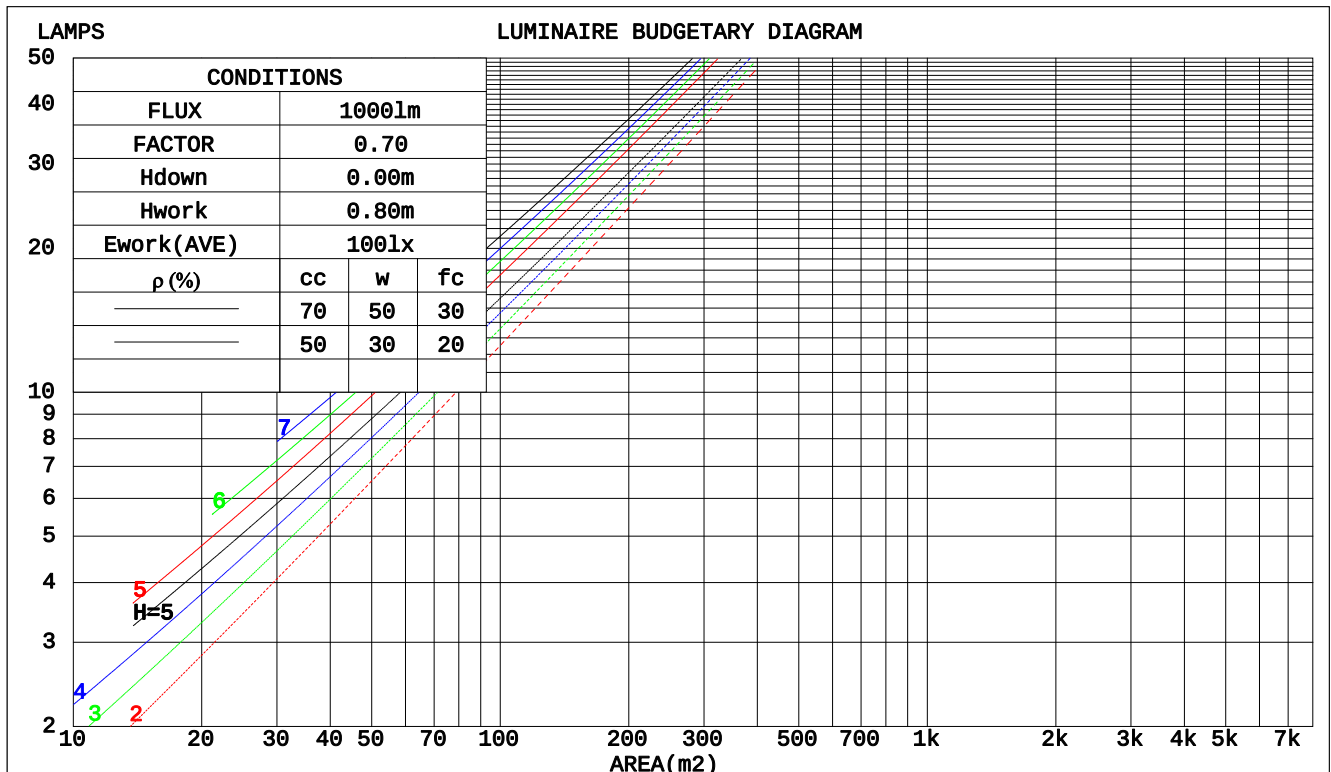
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators:  
Test Date: 2023-10-16

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 7.450m [K=1.0000]  
Remarks:

### CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                                                  |                |                  |
|----------------------------------------------------------------------------------|----------------|------------------|
| Test:U:220.41V I:0.1183A P:11.406W PF:0.4375 Freq:50.01Hz Lamp Flux:342.579x1 lm |                |                  |
| NAME: MTHSA601251-BK4K10                                                         | TYPE:          | WEIGHT:          |
| SPEC.: black RA90                                                                | DIM.:          | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130*27mm | Shielding Angle: |

| $\rho_{CC}$ | 80%                   |      |      | 70%                             |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0    |
|-------------|-----------------------|------|------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| $\rho_W$    | 50%                   | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0    |
| $\rho_{fc}$ | 20%                   |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0    |
| RCR         | RCR:Room Cavity Ratio |      |      | Coefficients of Utilization(CU) |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.0         | 1.19                  | 1.19 | 1.19 | 1.16                            | 1.16 | 1.16 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 1.00 |
| 1.0         | 1.11                  | 1.09 | 1.07 | 1.09                            | 1.07 | 1.05 | 1.05 | 1.03 | 1.02 | 1.01 | .99  | .99  | .98  | .97  | .96  | .94  |
| 2.0         | 1.04                  | .99  | .97  | 1.02                            | .98  | .95  | .99  | .96  | .93  | .96  | .93  | .91  | .93  | .91  | .89  | .88  |
| 3.0         | .97                   | .92  | .88  | .96                             | .91  | .88  | .93  | .89  | .86  | .91  | .88  | .85  | .88  | .86  | .84  | .82  |
| 4.0         | .91                   | .86  | .82  | .90                             | .85  | .81  | .88  | .84  | .80  | .86  | .82  | .79  | .84  | .81  | .78  | .77  |
| 5.0         | .86                   | .80  | .76  | .85                             | .80  | .76  | .83  | .78  | .75  | .81  | .77  | .74  | .80  | .76  | .74  | .72  |
| 6.0         | .81                   | .75  | .71  | .80                             | .75  | .71  | .79  | .74  | .70  | .77  | .73  | .70  | .76  | .72  | .69  | .68  |
| 7.0         | .77                   | .71  | .67  | .76                             | .70  | .67  | .75  | .70  | .66  | .73  | .69  | .66  | .72  | .69  | .66  | .64  |
| 8.0         | .73                   | .67  | .63  | .72                             | .67  | .63  | .71  | .66  | .63  | .70  | .66  | .62  | .69  | .65  | .62  | .61  |
| 9.0         | .69                   | .63  | .60  | .68                             | .63  | .60  | .68  | .63  | .59  | .67  | .62  | .59  | .66  | .62  | .59  | .58  |
| 10.0        | .66                   | .60  | .57  | .65                             | .60  | .57  | .64  | .60  | .56  | .64  | .59  | .56  | .63  | .59  | .56  | .55  |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2023-10-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

### WEC AND CCEC

|                                                                                  |  |  |                |  |                  |
|----------------------------------------------------------------------------------|--|--|----------------|--|------------------|
| Test:U:220.41V I:0.1183A P:11.406W PF:0.4375 Freq:50.01Hz Lamp Flux:342.579x1 lm |  |  |                |  |                  |
| NAME: MTHSA601251-BK4K10                                                         |  |  | TYPE:          |  | WEIGHT:          |
| SPEC.: black RA90                                                                |  |  | DIM.:          |  | SERIAL No.:      |
| MFR.:                                                                            |  |  | SUR.: 130*27mm |  | Shielding Angle: |

| $\rho_{cc}$ | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0 |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|
| $\rho_w$    | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| $\rho_{fc}$ | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR         | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |
| 0.0         |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |
| 1.0         | .172                  | .098 | .031 | .165 | .094 | .030 | .153                            | .088 | .028 | .141 | .081 | .026 | .130 | .076 | .024 |   |
| 2.0         | .165                  | .090 | .028 | .159 | .088 | .027 | .148                            | .083 | .026 | .139 | .078 | .024 | .130 | .073 | .023 |   |
| 3.0         | .157                  | .083 | .025 | .152 | .081 | .024 | .143                            | .077 | .024 | .135 | .074 | .023 | .127 | .070 | .022 |   |
| 4.0         | .149                  | .077 | .023 | .145 | .076 | .022 | .137                            | .073 | .022 | .130 | .070 | .021 | .123 | .067 | .020 |   |
| 5.0         | .142                  | .072 | .021 | .138 | .071 | .021 | .132                            | .068 | .020 | .125 | .066 | .020 | .119 | .064 | .019 |   |
| 6.0         | .135                  | .068 | .019 | .132 | .067 | .019 | .126                            | .065 | .019 | .121 | .063 | .018 | .115 | .061 | .018 |   |
| 7.0         | .129                  | .064 | .018 | .126 | .063 | .018 | .121                            | .061 | .018 | .116 | .059 | .017 | .111 | .058 | .017 |   |
| 8.0         | .123                  | .060 | .017 | .121 | .059 | .017 | .116                            | .058 | .017 | .112 | .057 | .016 | .108 | .055 | .016 |   |
| 9.0         | .118                  | .057 | .016 | .116 | .056 | .016 | .111                            | .055 | .016 | .107 | .054 | .015 | .104 | .053 | .015 |   |
| 10.0        | .113                  | .054 | .015 | .111 | .054 | .015 | .107                            | .052 | .015 | .104 | .051 | .015 | .100 | .050 | .014 |   |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                                        |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|--------------------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                        | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                                        |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .190                  | .190 | .190 | .163 | .163 | .163 | .111                                       | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .171                  | .157 | .145 | .146 | .135 | .125 | .100                                       | .093 | .086 | .058 | .054 | .050 | .018 | .017 | .016 |   |
| 2.0  | .155                  | .133 | .113 | .133 | .114 | .098 | .091                                       | .079 | .068 | .053 | .046 | .040 | .017 | .015 | .013 |   |
| 3.0  | .143                  | .114 | .090 | .122 | .098 | .078 | .084                                       | .068 | .055 | .048 | .040 | .032 | .016 | .013 | .011 |   |
| 4.0  | .132                  | .099 | .073 | .113 | .085 | .064 | .078                                       | .059 | .045 | .045 | .035 | .027 | .015 | .011 | .009 |   |
| 5.0  | .123                  | .087 | .060 | .106 | .075 | .052 | .073                                       | .053 | .037 | .042 | .031 | .022 | .014 | .010 | .007 |   |
| 6.0  | .116                  | .078 | .050 | .099 | .067 | .044 | .069                                       | .047 | .031 | .040 | .028 | .018 | .013 | .009 | .006 |   |
| 7.0  | .109                  | .070 | .043 | .094 | .061 | .037 | .065                                       | .043 | .026 | .038 | .025 | .016 | .012 | .008 | .005 |   |
| 8.0  | .103                  | .064 | .037 | .089 | .055 | .032 | .061                                       | .039 | .023 | .036 | .023 | .014 | .012 | .008 | .004 |   |
| 9.0  | .098                  | .058 | .032 | .084 | .051 | .028 | .058                                       | .036 | .020 | .034 | .021 | .012 | .011 | .007 | .004 |   |
| 10.0 | .093                  | .054 | .028 | .080 | .047 | .024 | .056                                       | .033 | .017 | .033 | .020 | .010 | .011 | .006 | .003 |   |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2023-10-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

|                                                                                  |               |                  |      |      |                |               |                |                  |      |      |      |
|----------------------------------------------------------------------------------|---------------|------------------|------|------|----------------|---------------|----------------|------------------|------|------|------|
| Test:U:220.41V I:0.1183A P:11.406W PF:0.4375 Freq:50.01Hz Lamp Flux:342.579x1 lm |               |                  |      |      |                |               |                |                  |      |      |      |
| NAME: MTHSA601251-BK4K10                                                         |               |                  |      |      | TYPE:          |               |                | WEIGHT:          |      |      |      |
| SPEC.: black RA90                                                                |               |                  |      |      | DIM.:          |               |                | SERIAL No.:      |      |      |      |
| MFR.:                                                                            |               |                  |      |      | SUR.: 130*27mm |               |                | 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                                                                    |               | 21.6             | 22.5 | 21.8 | 22.7           | 22.9          | 17.0           | 18.0             | 17.3 | 18.1 | 18.3 |
|                                                                                  | 3H            | 21.4             | 22.3 | 21.7 | 22.5           | 22.7          | 16.9           | 17.7             | 17.1 | 17.9 | 18.1 |
|                                                                                  | 4H            | 21.4             | 22.1 | 21.6 | 22.4           | 22.6          | 16.8           | 17.6             | 17.1 | 17.8 | 18.0 |
|                                                                                  | 6H            | 21.3             | 22.0 | 21.6 | 22.3           | 22.5          | 16.7           | 17.4             | 17.0 | 17.7 | 17.9 |
|                                                                                  | 8H            | 21.2             | 21.9 | 21.5 | 22.2           | 22.5          | 16.7           | 17.4             | 17.0 | 17.6 | 17.9 |
|                                                                                  | 12H           | 21.2             | 21.9 | 21.5 | 22.1           | 22.4          | 16.6           | 17.3             | 16.9 | 17.6 | 17.8 |
| 4H                                                                               | 2H            | 21.4             | 22.2 | 21.7 | 22.4           | 22.6          | 17.0           | 17.8             | 17.2 | 18.0 | 18.2 |
|                                                                                  | 3H            | 21.2             | 21.9 | 21.5 | 22.2           | 22.4          | 16.8           | 17.5             | 17.1 | 17.7 | 18.0 |
|                                                                                  | 4H            | 21.1             | 21.7 | 21.5 | 22.0           | 22.3          | 16.7           | 17.3             | 17.0 | 17.6 | 17.9 |
|                                                                                  | 6H            | 21.0             | 21.6 | 21.4 | 21.9           | 22.2          | 16.6           | 17.1             | 17.0 | 17.5 | 17.8 |
|                                                                                  | 8H            | 21.0             | 21.5 | 21.4 | 21.8           | 22.2          | 16.5           | 17.0             | 16.9 | 17.4 | 17.8 |
|                                                                                  | 12H           | 20.9             | 21.4 | 21.3 | 21.8           | 22.1          | 16.5           | 17.0             | 16.9 | 17.3 | 17.7 |
| 8H                                                                               | 4H            | 21.0             | 21.5 | 21.4 | 21.8           | 22.2          | 16.5           | 17.0             | 16.9 | 17.4 | 17.8 |
|                                                                                  | 6H            | 20.9             | 21.3 | 21.3 | 21.7           | 22.1          | 16.4           | 16.9             | 16.9 | 17.2 | 17.7 |
|                                                                                  | 8H            | 20.8             | 21.2 | 21.3 | 21.6           | 22.0          | 16.4           | 16.8             | 16.8 | 17.2 | 17.6 |
|                                                                                  | 12H           | 20.8             | 21.1 | 21.2 | 21.5           | 22.0          | 16.3           | 16.6             | 16.8 | 17.1 | 17.6 |
| 12H                                                                              | 4H            | 20.9             | 21.4 | 21.3 | 21.8           | 22.1          | 16.5           | 17.0             | 16.9 | 17.3 | 17.7 |
|                                                                                  | 6H            | 20.8             | 21.2 | 21.3 | 21.6           | 22.0          | 16.4           | 16.8             | 16.8 | 17.2 | 17.6 |
|                                                                                  | 8H            | 20.8             | 21.1 | 21.2 | 21.5           | 22.0          | 16.3           | 16.6             | 16.8 | 17.1 | 17.6 |
| Variations with the observer position at spacings(CIE Pub.117):                  |               |                  |      |      |                |               |                |                  |      |      |      |
| S = 1.0H                                                                         | + 3.3 / - 8.0 |                  |      |      |                | + 2.2 / - 5.5 |                |                  |      |      |      |
| 1.5H                                                                             | + 4.6 / - 5.5 |                  |      |      |                | + 1.7 / - 3.3 |                |                  |      |      |      |
| 2.0H                                                                             | + 5.9 / -10.4 |                  |      |      |                | + 3.7 / - 8.3 |                |                  |      |      |      |

CIE Pub.117, 342.6 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.7)  
Area: 0.00351 m2

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2023-10-16

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

|                                                                                  |                |                  |
|----------------------------------------------------------------------------------|----------------|------------------|
| Test:U:220.41V I:0.1183A P:11.406W PF:0.4375 Freq:50.01Hz Lamp Flux:342.579x1 lm |                |                  |
| NAME: MTHSA601251-BK4K10                                                         | TYPE:          | WEIGHT:          |
| SPEC.: black RA90                                                                | DIM.:          | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130*27mm | Shielding Angle: |

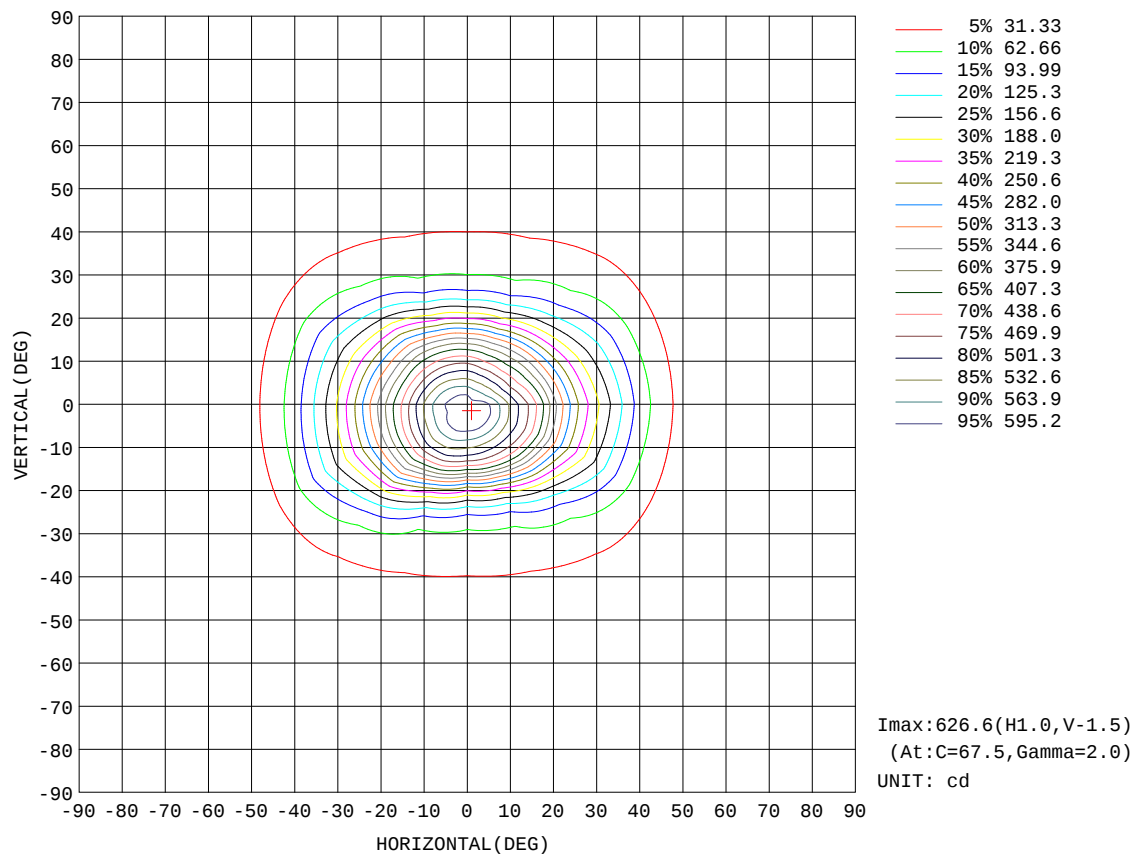
| REFLECTANCE                      |                                                     |     |           |     |     |     |     |               |     |        |
|----------------------------------|-----------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 85                                                  | 78  | 74        | 84  | 78  | 74  | 83  | 77            | 74  | 70     |
| 0.80                             | 93                                                  | 86  | 82        | 92  | 86  | 82  | 91  | 85            | 82  | 78     |
| 1.00                             | 98                                                  | 92  | 88        | 97  | 91  | 88  | 95  | 91            | 87  | 83     |
| 1.25                             | 102                                                 | 97  | 93        | 101 | 96  | 93  | 99  | 95            | 92  | 87     |
| 1.50                             | 105                                                 | 100 | 97        | 104 | 99  | 96  | 102 | 98            | 95  | 90     |
| 2.00                             | 108                                                 | 104 | 100       | 107 | 103 | 100 | 104 | 101           | 98  | 93     |
| 2.50                             | 110                                                 | 106 | 103       | 108 | 105 | 102 | 105 | 102           | 100 | 94     |
| 3.00                             | 111                                                 | 108 | 105       | 110 | 106 | 104 | 106 | 104           | 102 | 95     |
| 4.00                             | 113                                                 | 111 | 108       | 111 | 109 | 107 | 108 | 106           | 104 | 97     |
| 5.00                             | 115                                                 | 112 | 110       | 113 | 110 | 109 | 109 | 107           | 106 | 98     |
| 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:25DEG  
Operators:  
Test Date:2023-10-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

|                                                                                  |                |                  |
|----------------------------------------------------------------------------------|----------------|------------------|
| Test:U:220.41V I:0.1183A P:11.406W PF:0.4375 Freq:50.01Hz Lamp Flux:342.579x1 lm |                |                  |
| NAME: MTHSA601251-BK4K10                                                         | TYPE:          | WEIGHT:          |
| SPEC.: black RA90                                                                | DIM.:          | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130*27mm | Shielding Angle: |

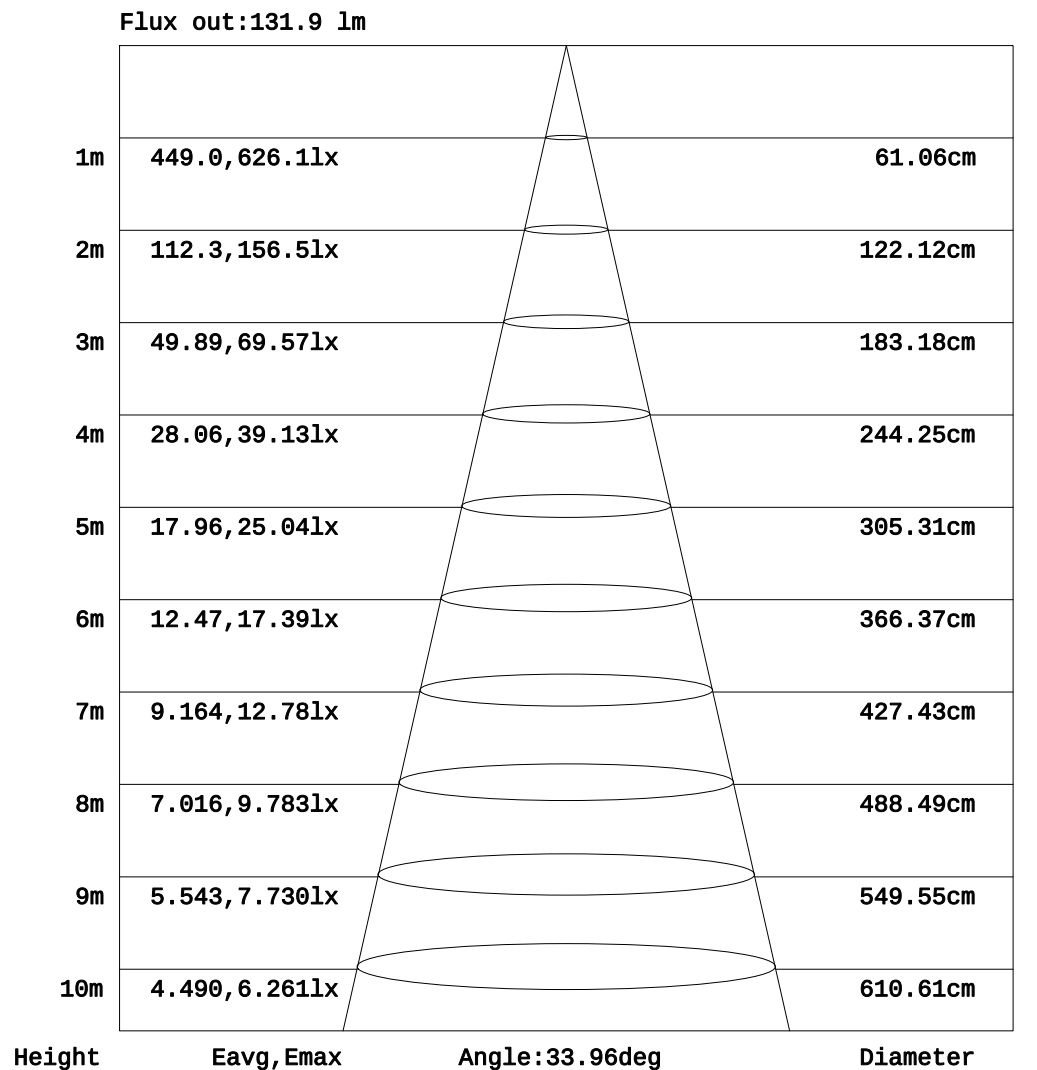


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2023-10-16

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

### AAI Figure

|                                                                                  |                |                  |
|----------------------------------------------------------------------------------|----------------|------------------|
| Test:U:220.41V I:0.1183A P:11.406W PF:0.4375 Freq:50.01Hz Lamp Flux:342.579x1 lm |                |                  |
| NAME: MTHSA601251-BK4K10                                                         | TYPE:          | WEIGHT:          |
| SPEC.: black RA90                                                                | DIM.:          | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130*27mm | Shielding Angle: |



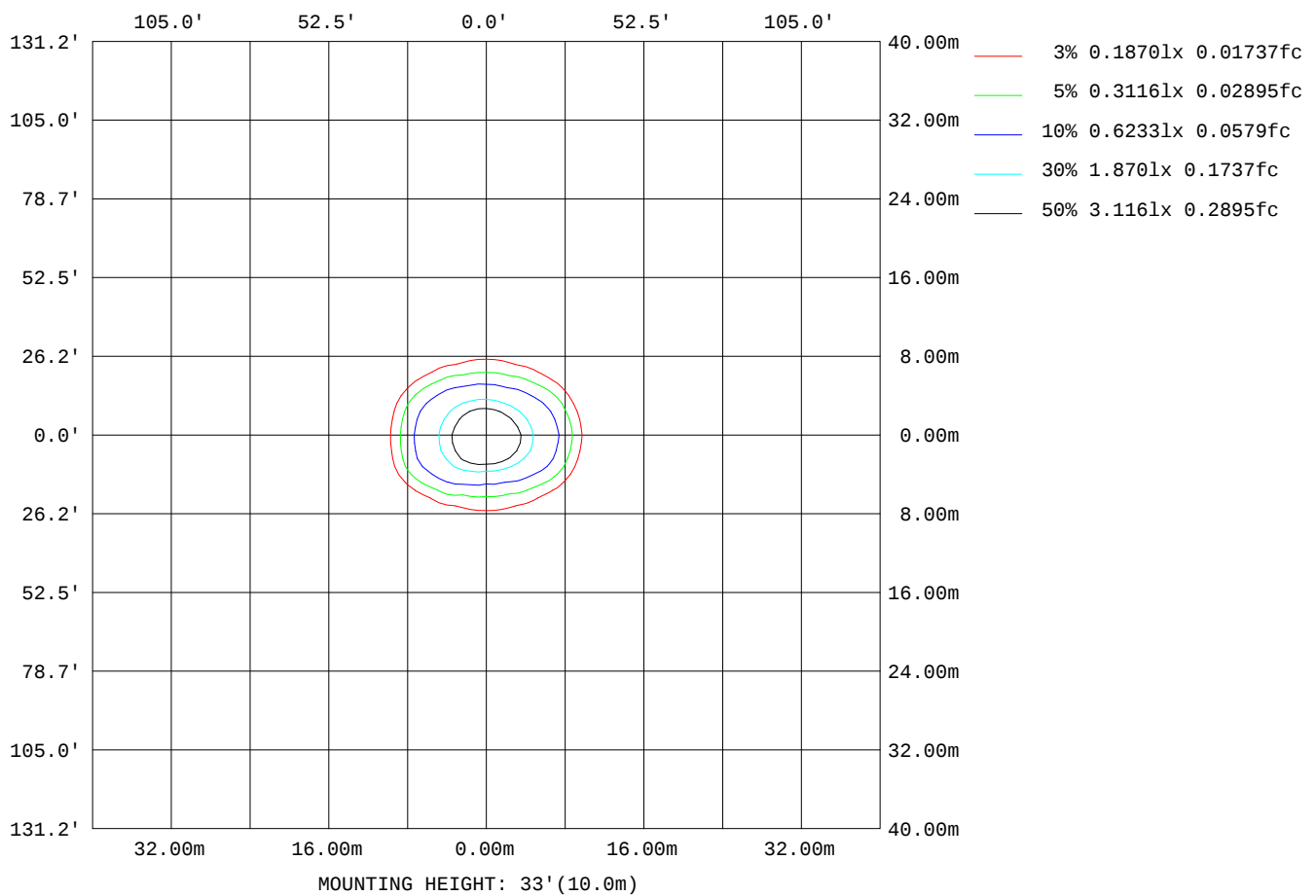
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2023-10-16

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

|                                                                                  |                |                  |
|----------------------------------------------------------------------------------|----------------|------------------|
| Test:U:220.41V I:0.1183A P:11.406W PF:0.4375 Freq:50.01Hz Lamp Flux:342.579x1 lm |                |                  |
| NAME: MTHSA601251-BK4K10                                                         | TYPE:          | WEIGHT:          |
| SPEC.: black RA90                                                                | DIM.:          | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130*27mm | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators:  
Test Date: 2023-10-16

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 7.450m [K=1.0000]  
Remarks:

## LED Avg.L Report

|                                                                                  |                |                  |
|----------------------------------------------------------------------------------|----------------|------------------|
| Test:U:220.41V I:0.1183A P:11.406W PF:0.4375 Freq:50.01Hz Lamp Flux:342.579x1 lm |                |                  |
| NAME: MTHSA601251-BK4K10                                                         | TYPE:          | WEIGHT:          |
| SPEC.: black RA90                                                                | DIM.:          | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130*27mm | Shielding Angle: |

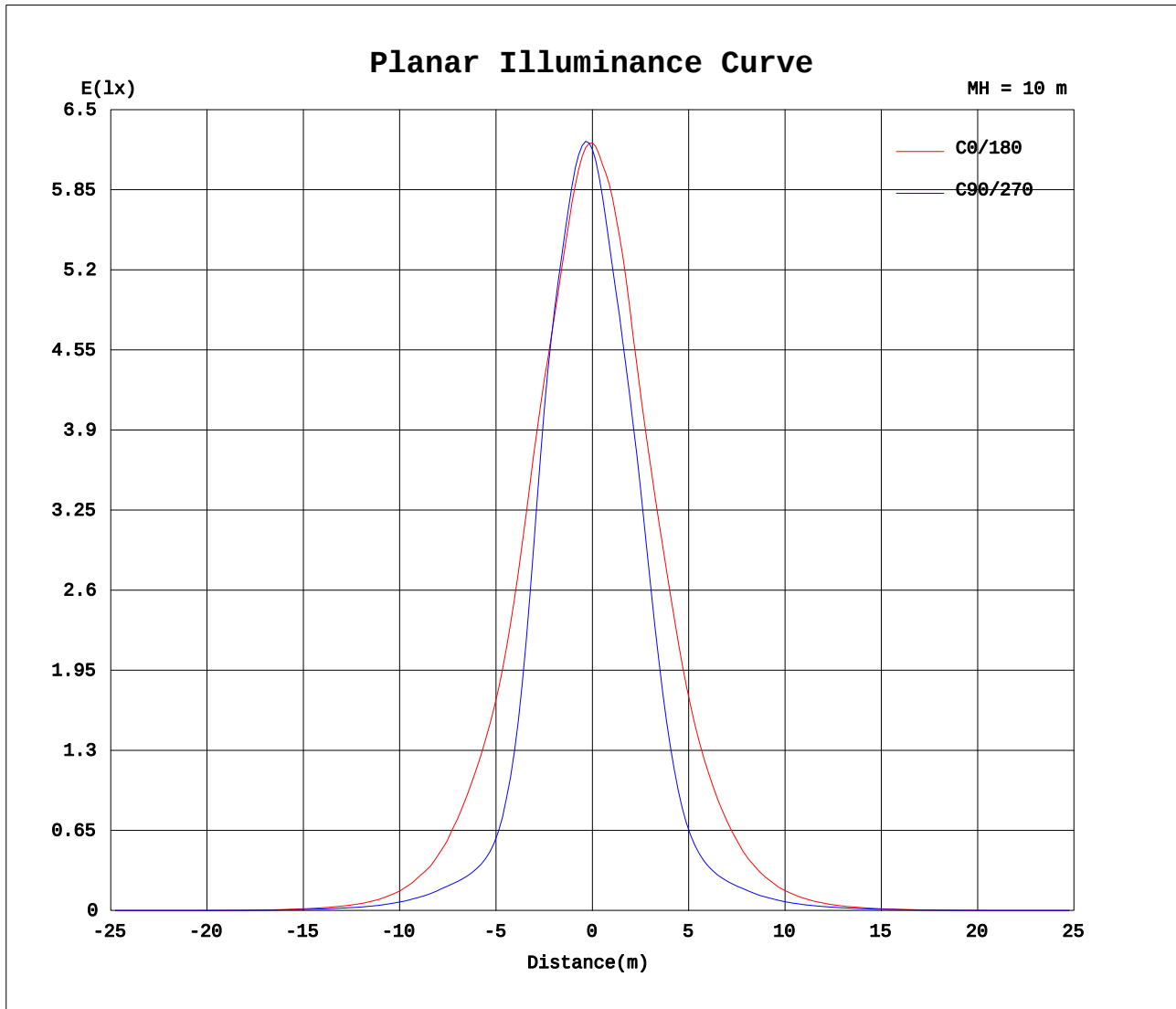
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 393   |
| L_0~180(75)av  | 0     |
| L_0~180(85)av  | 0     |
| L_90~270(65)av | 131   |
| L_90~270(75)av | 0     |
| L_90~270(85)av | 0     |
| L_45(65)av     | 1263  |
| L_45(75)av     | 0     |
| L_45(85)av     | 0     |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2023-10-16

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:7.450m [K=1.0000]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2023-10-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

```

Range: 0 - 90DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

```