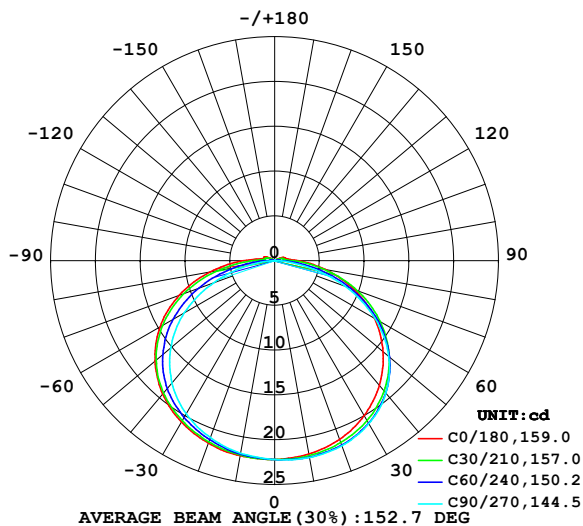


LUMINAIRE PHOTOMETRIC TEST REPORT

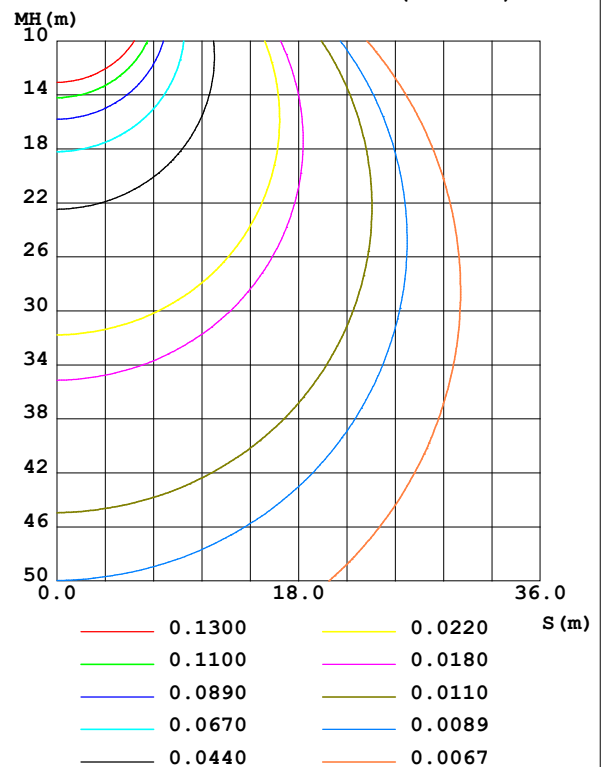
|                        |              |                  |
|------------------------|--------------|------------------|
| NAME: HCP-3456350 B    | TYPE: 2835 B | WEIGHT:          |
| SPEC.:                 | DIM.: 1*0.01 | SERIAL No.:      |
| MFR.: HAVIT COMMERCIAL | SUR.:        | Shielding Angle: |

| DATA OF LAMP      |             | PHOTOMETRIC DATA      |        |                     |           | Eff: 17.97 lm/W |
|-------------------|-------------|-----------------------|--------|---------------------|-----------|-----------------|
| MODEL             | HCP-3456350 | I <sub>max</sub> (cd) | 22.35  | S/MH (C0/180)       | 1.41      |                 |
| NOMINAL POWER (W) | 12          | LOR (%)               | 100.0  | S/MH (C90/270)      | 1.33      |                 |
| RATED VOLTAGE (V) | 24          | TOTAL FLUX (lm)       | 82.558 | η UP, DN (C0-180)   | 1.3, 49.5 |                 |
| NOMINAL FLUX (lm) | 82.5579     | CIE CLASS             | DIRECT | η UP, DN (C180-360) | 1.3, 47.9 |                 |
| LAMPS INSIDE      | 1           | η up (%)              | 2.6    | CIBSE SHR NOM       | 1.50      |                 |
| TEST VOLTAGE (V)  | 24          | η down (%)            | 97.4   | CIBSE SHR MAX       | 1.55      |                 |

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: JING  
Test Date: 2022-05-20

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity: 65.0%  
Test Distance: 6.070m [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       | 21.93                 | 22.20  | 22.32 | 22.28  | 22.11  | 21.99  | 21.84  | 21.80  | 0- 10    | 2.113       | 2.113        | 2.56,2.56  |
| 20       | 21.23                 | 21.76  | 21.99 | 22.04  | 21.67  | 21.39  | 21.02  | 21.08  | 10- 20   | 6.182       | 8.295        | 10,10      |
| 30       | 20.00                 | 20.80  | 21.03 | 21.36  | 20.82  | 20.43  | 19.75  | 19.90  | 20- 30   | 9.746       | 18.04        | 21.9,21.9  |
| 40       | 18.19                 | 19.15  | 19.32 | 20.07  | 19.45  | 18.98  | 17.84  | 18.15  | 30- 40   | 12.42       | 30.46        | 36.9,36.9  |
| 50       | 15.80                 | 16.72  | 16.64 | 17.96  | 17.44  | 16.78  | 15.14  | 15.76  | 40- 50   | 13.80       | 44.26        | 53.6,53.6  |
| 60       | 12.87                 | 13.45  | 12.98 | 14.86  | 14.75  | 13.75  | 11.64  | 12.63  | 50- 60   | 13.53       | 57.80        | 70,70      |
| 70       | 9.457                 | 9.427  | 8.351 | 10.77  | 11.34  | 9.919  | 7.243  | 8.833  | 60- 70   | 11.44       | 69.24        | 83.9,83.9  |
| 80       | 5.732                 | 4.971  | 3.311 | 6.030  | 7.298  | 5.468  | 2.756  | 4.649  | 70- 80   | 7.738       | 76.98        | 93.2,93.2  |
| 90       | 2.631                 | 1.446  | 0     | 1.862  | 3.498  | 1.716  | 0.0002 | 1.447  | 80- 90   | 3.440       | 80.42        | 97.4,97.4  |
| 100      | 1.345                 | 0.7319 | 0     | 0.7765 | 1.370  | 0.8045 | 0      | 0.7269 | 90-100   | 1.115       | 81.53        | 98.8,98.8  |
| 110      | 1.086                 | 0.3716 | 0     | 0.5157 | 1.231  | 0.4840 | 0      | 0.3571 | 100-110  | 0.6481      | 82.18        | 99.5,99.5  |
| 120      | 0.3617                | 0.0480 | 0     | 0.1586 | 0.5871 | 0.1475 | 0      | 0.0599 | 110-120  | 0.3188      | 82.50        | 99.9,99.9  |
| 130      | 0.0438                | 0      | 0     | 0.0043 | 0.0725 | 0.0175 | 0      | 0.0059 | 120-130  | 0.0577      | 82.56        | 100,100    |
| 140      | 0.0000                | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 130-140  | 0.0025      | 82.56        | 100,100    |
| 150      | 0                     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 140-150  | 0.0000      | 82.56        | 100,100    |
| 160      | 0                     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 150-160  | 0           | 82.56        | 100,100    |
| 170      | 0                     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 160-170  | 0           | 82.56        | 100,100    |
| 180      | 0                     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 170-180  | 0           | 82.56        | 100,100    |
| DEG      | LUMINOUS INTENSITY:cd |        |       |        |        |        |        |        |          | UNIT:lm     |              |            |

0 - 60 DEG Zonal Flux:57.796      %lum: 70.0%  
0 - 60 DEG Zonal Flux:57.796      %lum: 70.0%  
All measured values may vary less than 35 %  
from the average measured value in the 0 to 130 deg. zone: 14.6%  
All measured values in the 0 to 130 deg. zone  
may vary less than 50% from the average value of itself: 21.6%

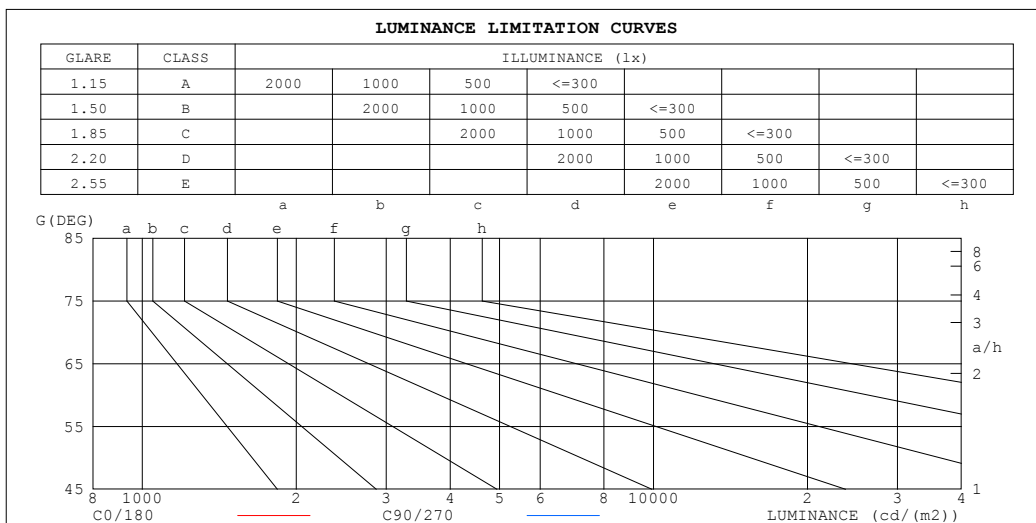
|                      |                                                   |
|----------------------|---------------------------------------------------|
| C Range: 0 - 360DEG  | $\gamma$ Range: 0 - 180DEG                        |
| C Interval: 30.0DEG  | $\gamma$ Interval: 1.0DEG                         |
| Test Speed: HIGH     | Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.454 |
| Temperature:25.3DEG  | Humidity:65.0%                                    |
| Operators:JING       | Test Distance:6.070m [K=1.0000]                   |
| Test Date:2022-05-20 | Remarks:                                          |

# IES Flood Report

## Photometric Filename: HCP-3456350-1M B.IES

### LUMINANCE LIMITATION CURVES

|                        |              |                  |
|------------------------|--------------|------------------|
| NAME: HCP-3456350 B    | TYPE: 2835 B | WEIGHT:          |
| SPEC.:                 | DIM.: 1*0.01 | SERIAL No.:      |
| MFR.: HAVIT COMMERCIAL | SUR.:        | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 464    | 133     |
| 80                | 330    | 191     |
| 75                | 294    | 225     |
| 70                | 277    | 244     |
| 65                | 266    | 255     |
| 60                | 258    | 260     |
| 55                | 251    | 261     |
| 50                | 246    | 259     |
| 45                | 242    | 256     |

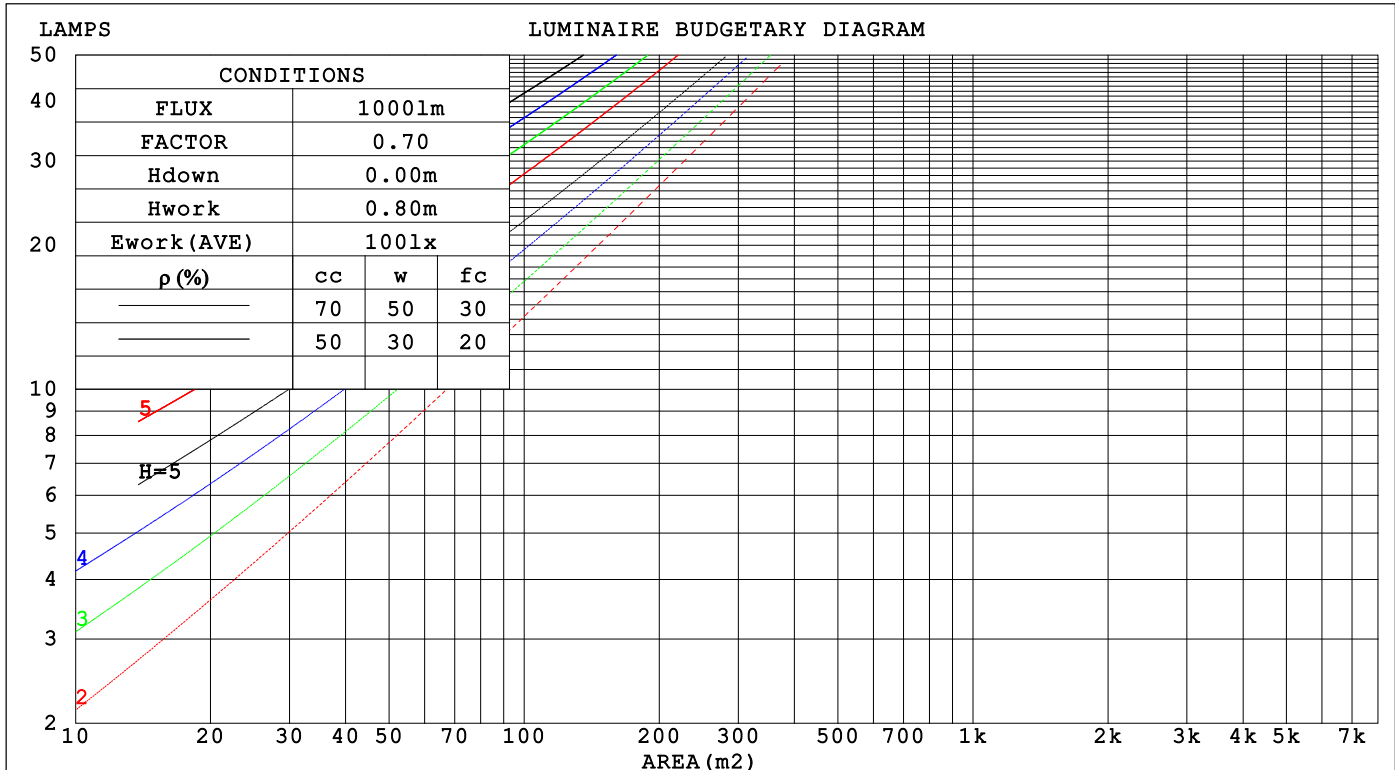
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JING  
Test Date: 2022-05-20

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity: 65.0%  
Test Distance: 6.070m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                        |              |                  |
|------------------------|--------------|------------------|
| NAME: HCP-3456350 B    | TYPE: 2835 B | WEIGHT:          |
| SPEC.:                 | DIM.: 1*0.01 | SERIAL No.:      |
| MFR.: HAVIT COMMERCIAL | SUR.:        | 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 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |   |



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JING  
Test Date: 2022-05-20

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity: 65.0%  
Test Distance: 6.070m [K=1.0000]  
Remarks:

WEC AND CCEC

|                        |              |                  |
|------------------------|--------------|------------------|
| NAME: HCP-3456350 B    | TYPE: 2835 B | WEIGHT:          |
| SPEC.:                 | DIM.: 1*0.01 | SERIAL No.:      |
| MFR.: HAVIT COMMERCIAL | SUR.:        | 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  | .353                  | .201 | .064 | .345 | .197 | .063 | .330 | .189 | .060 | .316 | .183 | .059 | .304 | .176 | .057 |                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.0  | .321                  | .176 | .054 | .314 | .173 | .053 | .301 | .167 | .052 | .288 | .162 | .051 | .277 | .157 | .049 |                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.0  | .292                  | .155 | .046 | .285 | .153 | .046 | .273 | .148 | .045 | .262 | .144 | .044 | .252 | .140 | .043 |                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.0  | .266                  | .138 | .041 | .260 | .136 | .040 | .250 | .132 | .040 | .240 | .129 | .039 | .231 | .125 | .038 |                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.0  | .243                  | .124 | .036 | .238 | .122 | .036 | .229 | .119 | .035 | .220 | .116 | .035 | .212 | .113 | .034 |                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.0  | .224                  | .112 | .032 | .220 | .111 | .032 | .211 | .108 | .031 | .203 | .106 | .031 | .196 | .103 | .031 |                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7.0  | .207                  | .103 | .029 | .203 | .101 | .029 | .196 | .099 | .029 | .189 | .097 | .028 | .182 | .095 | .028 |                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8.0  | .193                  | .094 | .026 | .189 | .093 | .026 | .182 | .091 | .026 | .176 | .089 | .026 | .170 | .087 | .025 |                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.0  | .180                  | .087 | .024 | .177 | .086 | .024 | .171 | .084 | .024 | .165 | .083 | .024 | .159 | .081 | .023 |                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.0 | .169                  | .081 | .022 | .166 | .080 | .022 | .160 | .078 | .022 | .155 | .077 | .022 | .150 | .075 | .022 |                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

| 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  | .210                  | .210 | .210 | .180 | .180 | .180 | .123                                       | .123 | .123 | .070 | .070 | .070 | .023 | .023 | .023 |   |
| 1.0  | .203                  | .176 | .151 | .174 | .151 | .130 | .119                                       | .104 | .090 | .068 | .060 | .052 | .022 | .019 | .017 |   |
| 2.0  | .196                  | .152 | .115 | .168 | .131 | .099 | .115                                       | .090 | .069 | .066 | .053 | .040 | .021 | .017 | .013 |   |
| 3.0  | .189                  | .135 | .091 | .162 | .116 | .079 | .111                                       | .081 | .056 | .064 | .047 | .033 | .021 | .015 | .011 |   |
| 4.0  | .181                  | .122 | .076 | .155 | .105 | .066 | .107                                       | .073 | .047 | .062 | .043 | .028 | .020 | .014 | .009 |   |
| 5.0  | .174                  | .111 | .066 | .149 | .096 | .057 | .103                                       | .067 | .040 | .059 | .040 | .024 | .019 | .013 | .008 |   |
| 6.0  | .166                  | .103 | .058 | .143 | .089 | .051 | .099                                       | .063 | .036 | .057 | .037 | .021 | .018 | .012 | .007 |   |
| 7.0  | .159                  | .096 | .052 | .137 | .084 | .046 | .095                                       | .059 | .032 | .055 | .035 | .019 | .018 | .011 | .006 |   |
| 8.0  | .152                  | .091 | .048 | .131 | .079 | .042 | .091                                       | .055 | .030 | .053 | .033 | .018 | .017 | .011 | .006 |   |
| 9.0  | .146                  | .086 | .045 | .126 | .074 | .039 | .087                                       | .052 | .028 | .051 | .031 | .017 | .016 | .010 | .006 |   |
| 10.0 | .140                  | .081 | .042 | .121 | .071 | .037 | .084                                       | .050 | .026 | .049 | .029 | .016 | .016 | .010 | .005 |   |

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JING  
Test Date:2022-05-20

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:6.070m [K=1.0000]  
Remarks:

**UGR(Unified Glare Rating) Table**

|                                                                 |                  |      |      |      |              |                |      |                  |      |      |
|-----------------------------------------------------------------|------------------|------|------|------|--------------|----------------|------|------------------|------|------|
| NAME: HCP-3456350 B                                             |                  |      |      |      | TYPE: 2835 B |                |      | WEIGHT:          |      |      |
| SPEC.:                                                          |                  |      |      |      | DIM.: 1*0.01 |                |      | SERIAL No.:      |      |      |
| MFR.: HAVIT COMMERCIAL                                          |                  |      |      |      | SUR.:        |                |      | 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                                                   | 16.9             | 18.4 | 17.2 | 18.7 | 19.0         | 16.9           | 18.4 | 17.2             | 18.7 | 18.9 |
| 3H                                                              | 18.8             | 20.3 | 19.2 | 20.6 | 20.9         | 18.6           | 20.0 | 18.9             | 20.3 | 20.6 |
| 4H                                                              | 19.8             | 21.2 | 20.1 | 21.5 | 21.8         | 19.2           | 20.6 | 19.6             | 20.9 | 21.2 |
| 6H                                                              | 20.6             | 21.9 | 21.0 | 22.3 | 22.6         | 19.7           | 21.0 | 20.0             | 21.3 | 21.6 |
| 8H                                                              | 21.0             | 22.3 | 21.4 | 22.6 | 23.0         | 19.8           | 21.0 | 20.2             | 21.4 | 21.7 |
| 12H                                                             | 21.5             | 22.7 | 21.9 | 23.0 | 23.4         | 19.8           | 21.0 | 20.2             | 21.4 | 21.8 |
| 4H 2H                                                           | 17.6             | 19.0 | 18.0 | 19.3 | 19.6         | 17.6           | 19.0 | 17.9             | 19.3 | 19.6 |
| 3H                                                              | 19.8             | 21.0 | 20.2 | 21.4 | 21.7         | 19.5           | 20.7 | 19.9             | 21.1 | 21.4 |
| 4H                                                              | 20.9             | 22.0 | 21.3 | 22.4 | 22.8         | 20.3           | 21.4 | 20.7             | 21.8 | 22.2 |
| 6H                                                              | 21.9             | 22.9 | 22.3 | 23.3 | 23.7         | 20.9           | 21.9 | 21.3             | 22.3 | 22.7 |
| 8H                                                              | 22.4             | 23.3 | 22.8 | 23.7 | 24.2         | 21.0           | 22.0 | 21.5             | 22.4 | 22.9 |
| 12H                                                             | 22.9             | 23.8 | 23.4 | 24.2 | 24.7         | 21.1           | 22.0 | 21.6             | 22.4 | 22.9 |
| 8H 4H                                                           | 21.2             | 22.2 | 21.7 | 22.6 | 23.0         | 20.7           | 21.7 | 21.2             | 22.1 | 22.5 |
| 6H                                                              | 22.5             | 23.3 | 23.0 | 23.7 | 24.2         | 21.5           | 22.3 | 22.0             | 22.7 | 23.2 |
| 8H                                                              | 23.1             | 23.8 | 23.6 | 24.3 | 24.8         | 21.8           | 22.5 | 22.3             | 23.0 | 23.5 |
| 12H                                                             | 23.8             | 24.4 | 24.3 | 24.9 | 25.5         | 22.0           | 22.6 | 22.5             | 23.1 | 23.6 |
| 12H 4H                                                          | 21.2             | 22.1 | 21.7 | 22.6 | 23.0         | 20.8           | 21.7 | 21.3             | 22.1 | 22.6 |
| 6H                                                              | 22.6             | 23.3 | 23.1 | 23.7 | 24.3         | 21.7           | 22.4 | 22.2             | 22.8 | 23.3 |
| 8H                                                              | 23.3             | 23.9 | 23.8 | 24.4 | 24.9         | 22.0           | 22.6 | 22.5             | 23.1 | 23.7 |
| Variations with the observer position at spacings(CIE Pub.117): |                  |      |      |      |              |                |      |                  |      |      |
| S = 1.0H                                                        | + 0.1 / - 0.1    |      |      |      |              | + 0.1 / - 0.2  |      |                  |      |      |
| 1.5H                                                            | + 0.2 / - 0.3    |      |      |      |              | + 0.2 / - 0.3  |      |                  |      |      |
| 2.0H                                                            | + 0.2 / - 0.4    |      |      |      |              | + 0.2 / - 0.4  |      |                  |      |      |

CIE Pub.117, 82.56 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -8.7)  
Area: 0.1 m2

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JING  
Test Date:2022-05-20

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:6.070m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

|                        |              |                  |
|------------------------|--------------|------------------|
| NAME: HCP-3456350 B    | TYPE: 2835 B | WEIGHT:          |
| SPEC.:                 | DIM.: 1*0.01 | SERIAL No.:      |
| MFR.: HAVIT COMMERCIAL | SUR.:        | Shielding Angle: |

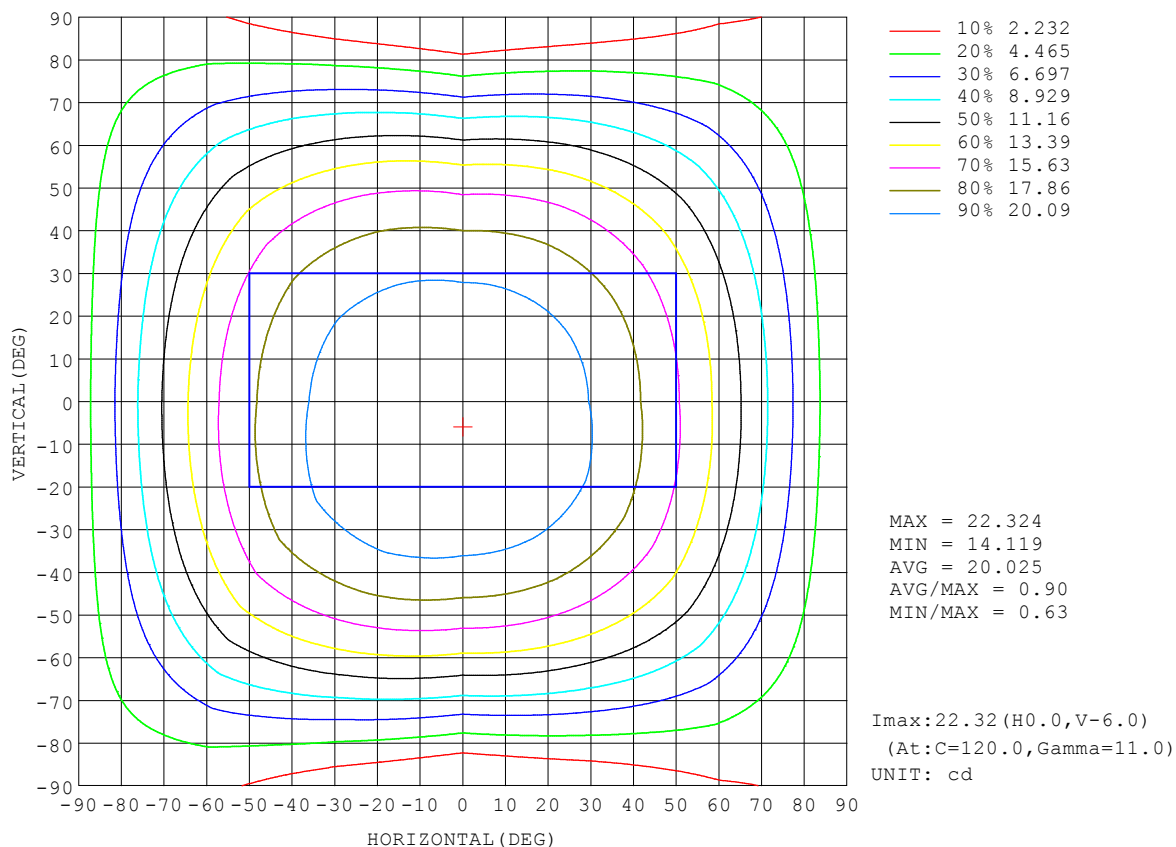
| REFLECTANCE                      |                                                      |     |           |     |     |     |     |               |     |        |
|----------------------------------|------------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 53                                                   | 41  | 33        | 52  | 41  | 33  | 51  | 40            | 33  | 26     |
| 0.80                             | 63                                                   | 50  | 42        | 62  | 50  | 42  | 60  | 49            | 42  | 34     |
| 1.00                             | 71                                                   | 59  | 51        | 70  | 58  | 51  | 67  | 60            | 50  | 42     |
| 1.25                             | 78                                                   | 67  | 59        | 77  | 66  | 58  | 74  | 64            | 58  | 49     |
| 1.50                             | 84                                                   | 73  | 65        | 82  | 72  | 64  | 78  | 70            | 63  | 55     |
| 2.00                             | 91                                                   | 81  | 74        | 89  | 80  | 73  | 85  | 77            | 71  | 63     |
| 2.50                             | 95                                                   | 86  | 79        | 93  | 85  | 78  | 89  | 82            | 76  | 67     |
| 3.00                             | 99                                                   | 91  | 84        | 96  | 89  | 83  | 92  | 86            | 81  | 71     |
| 4.00                             | 103                                                  | 97  | 91        | 101 | 95  | 90  | 96  | 91            | 87  | 77     |
| 5.00                             | 106                                                  | 100 | 96        | 103 | 98  | 94  | 98  | 94            | 90  | 80     |
| 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: JING  
Test Date: 2022-05-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity: 65.0%  
Test Distance: 6.070m [K=1.0000]  
Remarks:

### ISOCANDELA DIAGRAM

|                        |              |                  |
|------------------------|--------------|------------------|
| NAME: HCP-3456350 B    | TYPE: 2835 B | WEIGHT:          |
| SPEC.:                 | DIM.: 1*0.01 | SERIAL No.:      |
| MFR.: HAVIT COMMERCIAL | SUR.:        | Shielding Angle: |

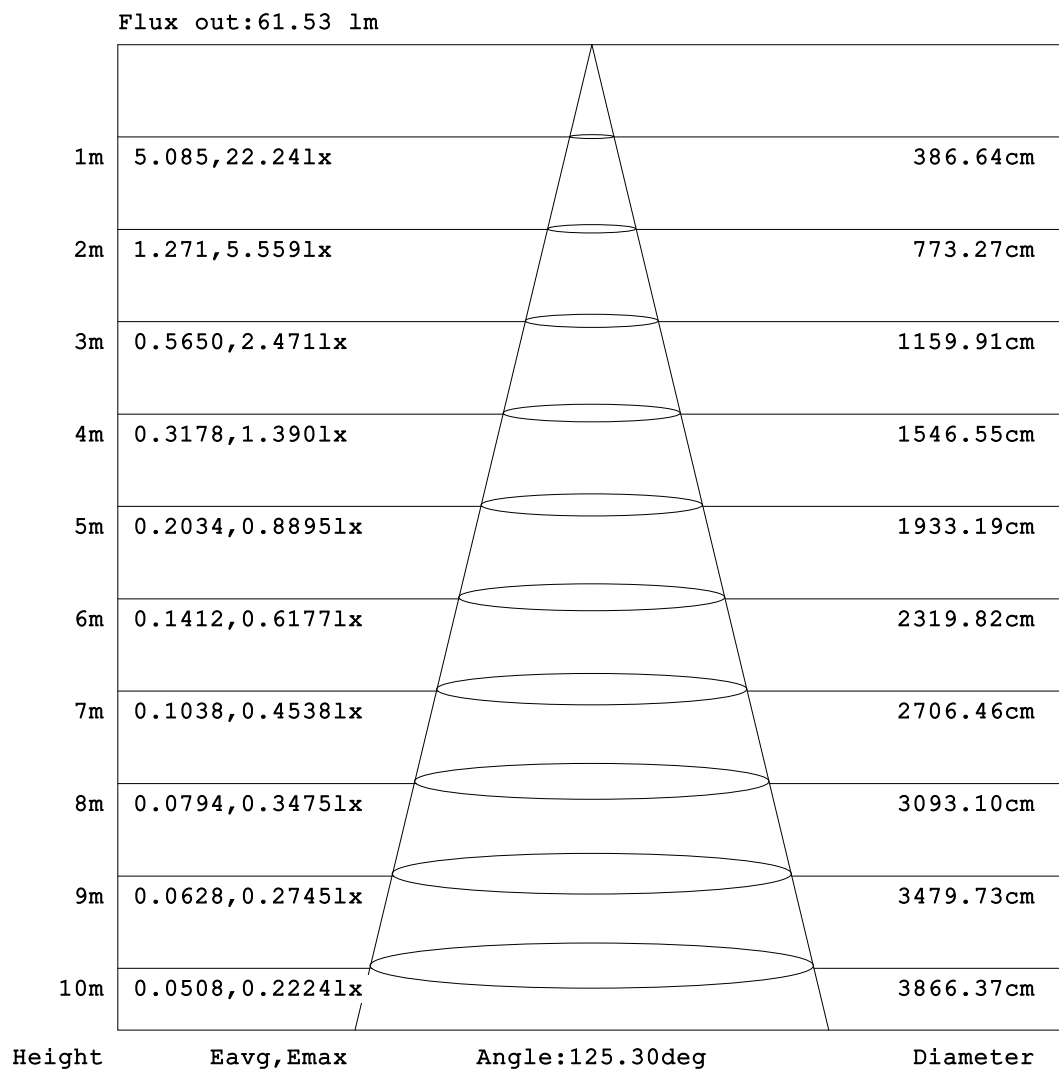


C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JING  
 Test Date:2022-05-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
 Humidity:65.0%  
 Test Distance:6.070m [K=1.0000]  
 Remarks:

AAI Figure

|                        |              |                  |
|------------------------|--------------|------------------|
| NAME: HCP-3456350 B    | TYPE: 2835 B | WEIGHT:          |
| SPEC.:                 | DIM.: 1*0.01 | SERIAL No.:      |
| MFR.: HAVIT COMMERCIAL | SUR.:        | 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: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JING  
Test Date:2022-05-20

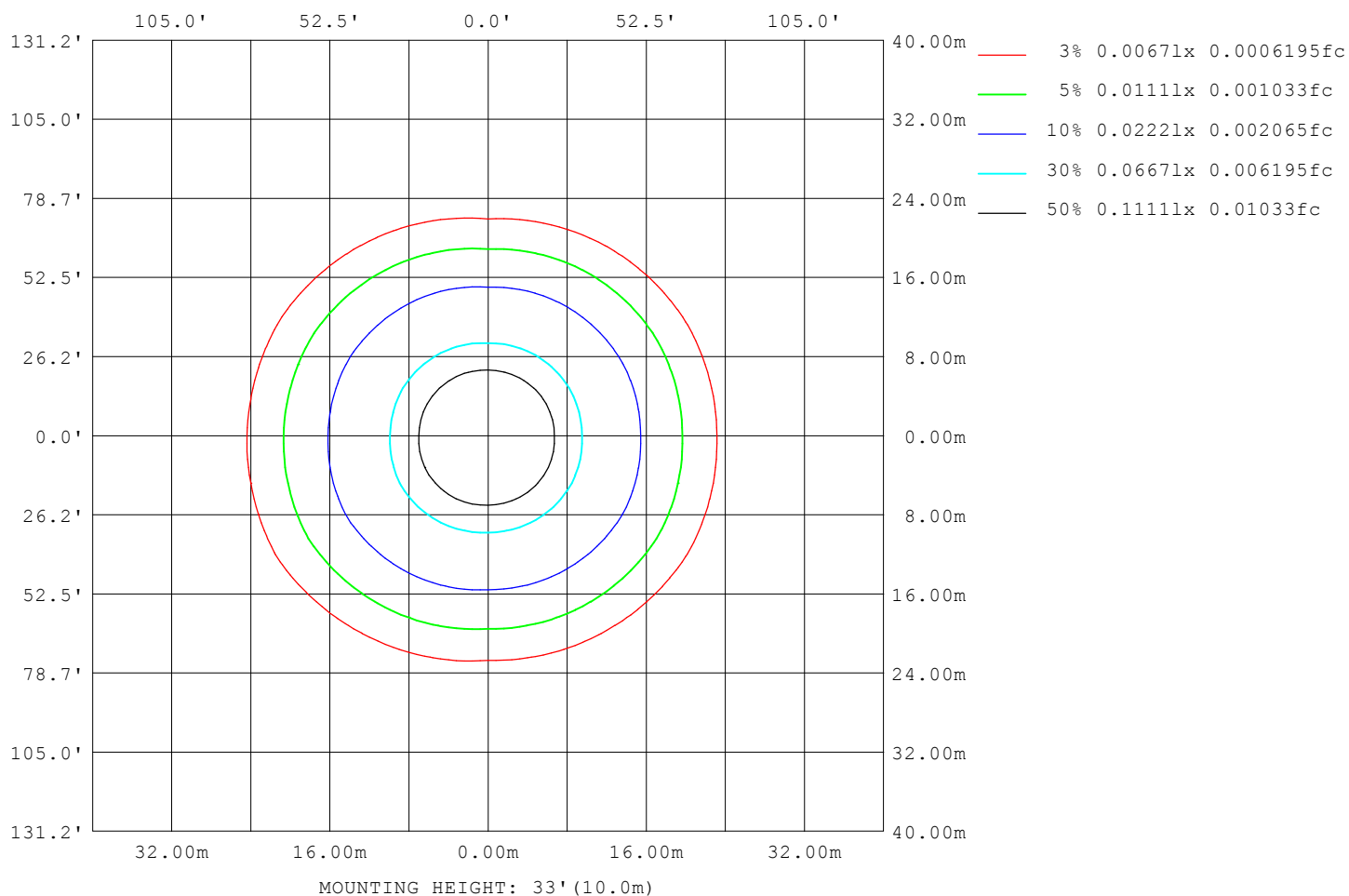
γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity:65.0%  
Test Distance:6.070m [K=1.0000]  
Remarks:

# IES Flood Report

## Photometric Filename: HCP-3456350-1M B.IES

### ISOLUX DIAGRAM

|                        |              |                  |
|------------------------|--------------|------------------|
| NAME: HCP-3456350 B    | TYPE: 2835 B | WEIGHT:          |
| SPEC.:                 | DIM.: 1*0.01 | SERIAL No.:      |
| MFR.: HAVIT COMMERCIAL | SUR.:        | Shielding Angle: |



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: JING  
 Test Date: 2022-05-20

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
 Humidity: 65.0%  
 Test Distance: 6.070m [K=1.0000]  
 Remarks:

LED Avg.L Report

|                        |              |                  |
|------------------------|--------------|------------------|
| NAME: HCP-3456350 B    | TYPE: 2835 B | WEIGHT:          |
| SPEC.:                 | DIM.: 1*0.01 | SERIAL No.:      |
| MFR.: HAVIT COMMERCIAL | SUR.:        | Shielding Angle: |

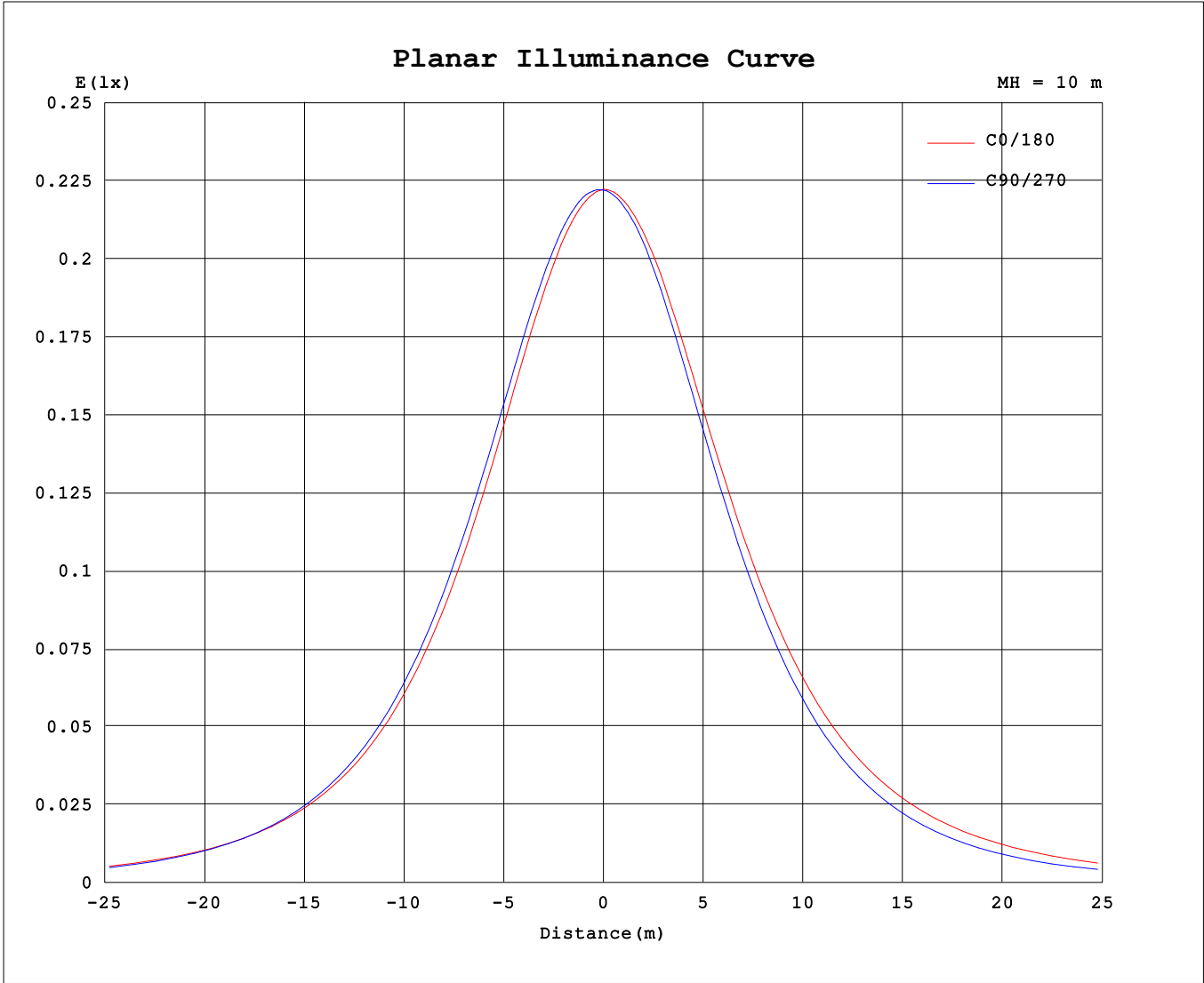
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 288   |
| L_0~180 (75) av  | 328   |
| L_0~180 (85) av  | 535   |
| L_90~270 (65) av | 240   |
| L_90~270 (75) av | 208   |
| L_90~270 (85) av | 116   |
| L_45 (65) av     | 281   |
| L_45 (75) av     | 294   |
| L_45 (85) av     | 370   |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JING  
Test Date: 2022-05-20

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity: 65.0%  
Test Distance: 6.070m [K=1.0000]  
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: JING  
 Test Date: 2022-05-20

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
 Humidity: 65.0%  
 Test Distance: 6.070m [K=1.0000]  
 Remarks:

### LUMINOUS DISTRIBUTION INTENSITY DATA

|                        |              |                  |
|------------------------|--------------|------------------|
| NAME: HCP-3456350 B    | TYPE: 2835 B | WEIGHT:          |
| SPEC.:                 | DIM.: 1*0.01 | SERIAL No.:      |
| MFR.: HAVIT COMMERCIAL | SUR.:        | Shielding Angle: |

Table--1

UNIT: cd

| C (DEG)<br>γ (DEG) | 0    | 30   | 60   | 90   | 120  | 150  | 180  | 210  | 240  | 270  | 300  | 330  |  |  |  |  |  |  |  |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|
| 0                  | 22.2 | 22.2 | 22.2 | 22.2 | 22.2 | 22.2 | 22.2 | 22.2 | 22.2 | 22.2 | 22.2 | 22.2 |  |  |  |  |  |  |  |
| 5                  | 22.1 | 22.2 | 22.3 | 22.3 | 22.3 | 22.3 | 22.2 | 22.2 | 22.1 | 22.0 | 22.0 | 22.0 |  |  |  |  |  |  |  |
| 10                 | 21.9 | 22.1 | 22.3 | 22.3 | 22.3 | 22.2 | 22.1 | 22.0 | 21.9 | 21.8 | 21.8 | 21.8 |  |  |  |  |  |  |  |
| 15                 | 21.6 | 21.9 | 22.1 | 22.2 | 22.3 | 22.1 | 22.0 | 21.8 | 21.7 | 21.5 | 21.5 | 21.5 |  |  |  |  |  |  |  |
| 20                 | 21.2 | 21.6 | 21.9 | 22.0 | 22.1 | 21.9 | 21.7 | 21.5 | 21.3 | 21.0 | 21.0 | 21.1 |  |  |  |  |  |  |  |
| 25                 | 20.7 | 21.2 | 21.5 | 21.6 | 21.8 | 21.7 | 21.3 | 21.1 | 20.8 | 20.5 | 20.5 | 20.6 |  |  |  |  |  |  |  |
| 30                 | 20.0 | 20.6 | 21.0 | 21.0 | 21.4 | 21.3 | 20.8 | 20.6 | 20.2 | 19.8 | 19.8 | 20.0 |  |  |  |  |  |  |  |
| 35                 | 19.2 | 19.9 | 20.2 | 20.3 | 20.8 | 20.8 | 20.2 | 20.0 | 19.5 | 18.9 | 19.0 | 19.2 |  |  |  |  |  |  |  |
| 40                 | 18.2 | 19.0 | 19.3 | 19.3 | 20.0 | 20.2 | 19.5 | 19.3 | 18.7 | 17.8 | 18.1 | 18.2 |  |  |  |  |  |  |  |
| 45                 | 17.1 | 17.9 | 18.1 | 18.1 | 18.9 | 19.3 | 18.5 | 18.4 | 17.6 | 16.6 | 17.0 | 17.1 |  |  |  |  |  |  |  |
| 50                 | 15.8 | 16.7 | 16.7 | 16.6 | 17.6 | 18.3 | 17.4 | 17.3 | 16.3 | 15.1 | 15.6 | 15.9 |  |  |  |  |  |  |  |
| 55                 | 14.4 | 15.2 | 15.1 | 14.9 | 16.1 | 17.0 | 16.2 | 16.0 | 14.8 | 13.5 | 14.1 | 14.5 |  |  |  |  |  |  |  |
| 60                 | 12.9 | 13.6 | 13.3 | 13.0 | 14.2 | 15.5 | 14.8 | 14.4 | 13.1 | 11.6 | 12.4 | 12.9 |  |  |  |  |  |  |  |
| 65                 | 11.2 | 11.8 | 11.2 | 10.8 | 12.2 | 13.7 | 13.2 | 12.7 | 11.2 | 9.52 | 10.4 | 11.2 |  |  |  |  |  |  |  |
| 70                 | 9.46 | 9.82 | 9.03 | 8.35 | 9.90 | 11.6 | 11.3 | 10.8 | 9.04 | 7.24 | 8.38 | 9.28 |  |  |  |  |  |  |  |
| 75                 | 7.61 | 7.76 | 6.69 | 5.81 | 7.48 | 9.45 | 9.37 | 8.67 | 6.78 | 4.97 | 6.21 | 7.29 |  |  |  |  |  |  |  |
| 80                 | 5.73 | 5.59 | 4.35 | 3.31 | 5.00 | 7.06 | 7.30 | 6.43 | 4.51 | 2.76 | 4.04 | 5.26 |  |  |  |  |  |  |  |
| 85                 | 4.04 | 3.62 | 2.22 | 1.16 | 2.69 | 4.67 | 5.28 | 4.24 | 2.43 | 0.87 | 2.13 | 3.43 |  |  |  |  |  |  |  |
| 90                 | 2.63 | 2.06 | 0.84 | 0.00 | 1.03 | 2.69 | 3.50 | 2.47 | 0.96 | 0.00 | 0.86 | 2.03 |  |  |  |  |  |  |  |
| 95                 | 1.72 | 1.23 | 0.54 | 0.00 | 0.55 | 1.44 | 2.09 | 1.42 | 0.56 | 0.00 | 0.53 | 1.30 |  |  |  |  |  |  |  |
| 100                | 1.35 | 1.04 | 0.42 | 0.00 | 0.46 | 1.09 | 1.37 | 1.17 | 0.43 | 0.00 | 0.37 | 1.08 |  |  |  |  |  |  |  |
| 105                | 1.21 | 0.96 | 0.19 | 0.00 | 0.28 | 1.04 | 1.27 | 1.07 | 0.24 | 0.00 | 0.15 | 0.96 |  |  |  |  |  |  |  |
| 110                | 1.09 | 0.71 | 0.03 | 0.00 | 0.12 | 0.91 | 1.23 | 0.89 | 0.08 | 0.00 | 0.02 | 0.69 |  |  |  |  |  |  |  |
| 115                | 0.76 | 0.44 | 0.00 | 0.00 | 0.01 | 0.66 | 1.01 | 0.59 | 0.00 | 0.00 | 0.00 | 0.40 |  |  |  |  |  |  |  |
| 120                | 0.36 | 0.10 | 0.00 | 0.00 | 0.00 | 0.32 | 0.59 | 0.29 | 0.00 | 0.00 | 0.00 | 0.12 |  |  |  |  |  |  |  |
| 125                | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.24 | 0.13 | 0.00 | 0.00 | 0.00 | 0.05 |  |  |  |  |  |  |  |
| 130                | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.07 | 0.04 | 0.00 | 0.00 | 0.00 | 0.01 |  |  |  |  |  |  |  |
| 135                | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |
| 140                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |
| 145                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |
| 150                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |
| 155                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |
| 160                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |
| 165                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |
| 170                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |
| 175                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |
| 180                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
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Operators: JING  
Test Date: 2022-05-20

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γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.454  
Humidity: 65.0%  
Test Distance: 6.070m [K=1.0000]  
Remarks: