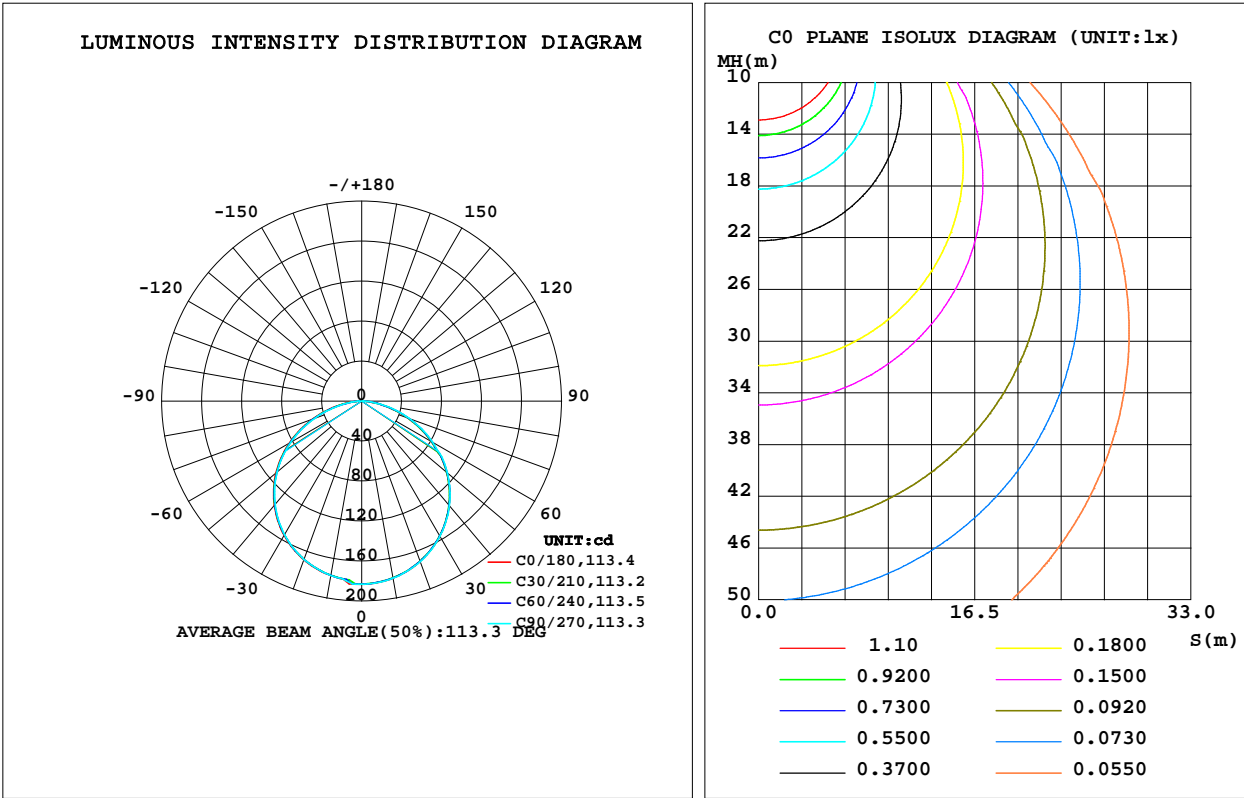


LUMINAIRE PHOTOMETRIC TEST REPORT

| | | |
|--|---------------|------------------|
| Test:U:23.998V I:0.2243A P:5.3833W PF:1.0000 Freq:0Hz Lamp Flux:525.562x1 lm | | |
| NAME: HCP-3125483 | TYPE: | WEIGHT: |
| SPEC.:2216-24V-240D-4MM 3000K 4.8W | DIM.: | SERIAL No.: |
| MFR.: HAVIT LIGHTING | SUR.:1000*4mm | Shielding Angle: |

| DATA OF LAMP | | PHOTOMETRIC DATA | | | | Eff: 97.63 lm/W |
|------------------|-------------|-----------------------|--------|-------------------|----------|-----------------|
| MODEL | HCP-3125483 | I _{max} (cd) | 183.4 | S/MH(C0/180) | 1.26 | |
| NOMINAL POWER(W) | 4.8 | LOR(%) | 100.0 | S/MH(C90/270) | 1.26 | |
| RATED VOLTAGE(V) | 24 | TOTAL FLUX(lm) | 525.56 | η UP,DN(C0-180) | 0.0,50.0 | |
| NOMINAL FLUX(lm) | 525.562 | CIE CLASS | DIRECT | η UP,DN(C180-360) | 0.0,50.0 | |
| LAMPS INSIDE | 1 | η up(%) | 0.0 | CIBSE SHR NOM | 1.25 | |
| TEST VOLTAGE(V) | 24 | η down(%) | 100.0 | CIBSE SHR MAX | 1.35 | |



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Qin Meng
Test Date:2024-07-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:6.920m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | %lum,lamp |
|-----|-----------------------|-------|--------|--------|--------|--------|-------|--------|---------|---------|---------|-----------|
| 10 | 179.9 | 176.5 | 180.0 | 177.2 | 177.3 | 180.2 | 177.1 | 180.3 | 0- 10 | 17.21 | 17.21 | 3.27,3.27 |
| 20 | 170.9 | 167.7 | 171.0 | 168.6 | 169.0 | 171.7 | 168.6 | 171.4 | 10- 20 | 49.37 | 66.59 | 12.7,12.7 |
| 30 | 156.2 | 153.4 | 156.4 | 154.6 | 155.2 | 157.4 | 154.4 | 156.8 | 20- 30 | 75.31 | 141.9 | 27.27 |
| 40 | 136.2 | 133.9 | 136.6 | 135.4 | 136.1 | 137.7 | 134.9 | 136.8 | 30- 40 | 91.56 | 233.4 | 44.4,44.4 |
| 50 | 111.2 | 109.7 | 112.1 | 111.2 | 112.0 | 113.0 | 110.4 | 111.8 | 40- 50 | 95.77 | 329.2 | 62.6,62.6 |
| 60 | 80.23 | 81.11 | 81.72 | 82.94 | 83.49 | 82.11 | 81.56 | 80.70 | 50- 60 | 86.64 | 415.9 | 79.1,79.1 |
| 70 | 48.44 | 49.63 | 50.49 | 51.53 | 51.79 | 50.13 | 49.59 | 48.63 | 60- 70 | 65.24 | 481.1 | 91.5,91.5 |
| 80 | 18.14 | 19.15 | 19.50 | 20.71 | 21.12 | 19.34 | 18.24 | 17.98 | 70- 80 | 35.99 | 517.1 | 98.4,98.4 |
| 90 | 0 | 0 | 0.1167 | 0.2364 | 0.1343 | 0.0038 | 0 | 0.0001 | 80- 90 | 8.459 | 525.6 | 100,100 |
| 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90-100 | 0.0028 | 525.6 | 100,100 |
| 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100-110 | 0 | 525.6 | 100,100 |
| 120 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110-120 | 0 | 525.6 | 100,100 |
| 130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120-130 | 0 | 525.6 | 100,100 |
| 140 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130-140 | 0 | 525.6 | 100,100 |
| 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 140-150 | 0 | 525.6 | 100,100 |
| 160 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 150-160 | 0 | 525.6 | 100,100 |
| 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 160-170 | 0 | 525.6 | 100,100 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 170-180 | 0 | 525.6 | 100,100 |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |

Conical surface Flux(90deg): 281.62 lm

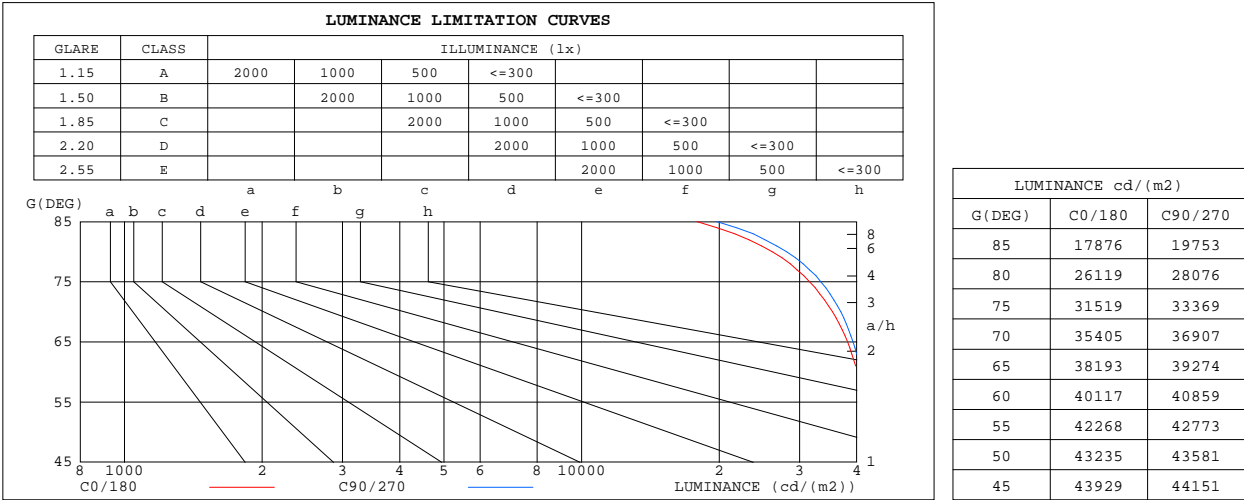
%lum = 53.6%
%lamp = 53.6%

Conical surface Flux(120deg): 415.87 lm

%lum = 79.1%
%lamp = 79.1%

LUMINANCE LIMITATION CURVES

| | | |
|--|---------------|------------------|
| Test:U:23.998V I:0.2243A P:5.3833W PF:1.0000 Freq:0Hz Lamp Flux:525.562x1 lm | | |
| NAME: HCP-3125483 | TYPE: | WEIGHT: |
| SPEC.:2216-24V-240D-4MM 3000K 4.8W | DIM.: | SERIAL No.: |
| MFR.: HAVIT LIGHTING | SUR.:1000*4mm | Shielding Angle: |



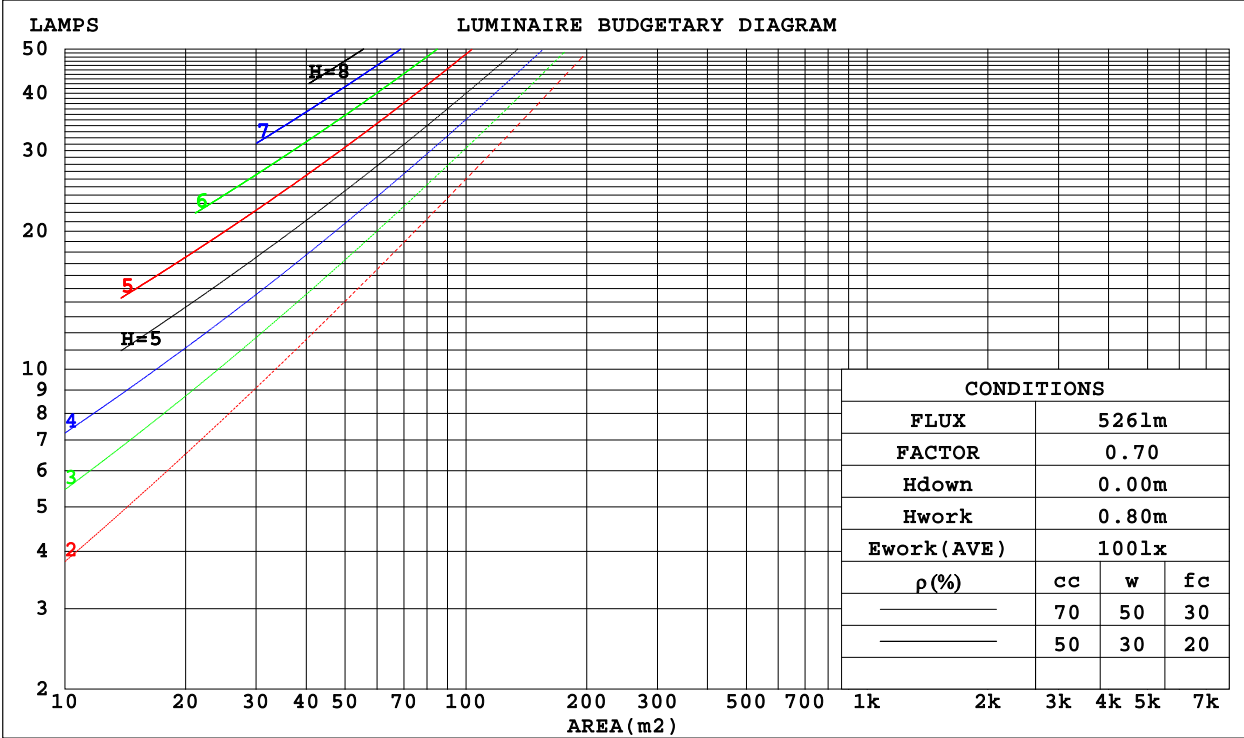
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Qin Meng
Test Date:2024-07-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:6.920m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|--|---------------|------------------|
| Test:U:23.998V I:0.2243A P:5.3833W PF:1.0000 Freq:0Hz Lamp Flux:525.562x1 lm | | |
| NAME: HCP-3125483 | TYPE: | WEIGHT: |
| SPEC.:2216-24V-240D-4MM 3000K 4.8W | DIM.: | SERIAL No.: |
| MFR.: HAVIT LIGHTING | SUR.:1000*4mm | Shielding Angle: |

| | | | | | | | | | | | | | | | | | |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|-----|--|
| ρ_{cc} | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 | |
| ρ_w | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 | |
| ρ_{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 | .00 | |
| 1.0 | 1.04 | .00 | .96 | 1.02 | .98 | .94 | .97 | .94 | .91 | .94 | .91 | .89 | .90 | .88 | .86 | .84 | |
| 2.0 | .91 | .84 | .78 | .89 | .82 | .77 | .85 | .80 | .75 | .82 | .77 | .74 | .79 | .75 | .72 | .70 | |
| 3.0 | .79 | .71 | .65 | .78 | .70 | .64 | .75 | .68 | .63 | .72 | .67 | .62 | .70 | .65 | .61 | .59 | |
| 4.0 | .70 | .61 | .55 | .69 | .61 | .54 | .66 | .59 | .54 | .64 | .58 | .53 | .62 | .57 | .52 | .50 | |
| 5.0 | .63 | .54 | .47 | .62 | .53 | .47 | .59 | .52 | .46 | .57 | .51 | .46 | .56 | .50 | .45 | .43 | |
| 6.0 | .56 | .47 | .41 | .55 | .47 | .41 | .54 | .46 | .40 | .52 | .45 | .40 | .50 | .44 | .40 | .38 | |
| 7.0 | .51 | .42 | .36 | .50 | .42 | .36 | .49 | .41 | .36 | .47 | .40 | .35 | .46 | .40 | .35 | .33 | |
| 8.0 | .47 | .38 | .32 | .46 | .38 | .32 | .45 | .37 | .32 | .43 | .37 | .32 | .42 | .36 | .31 | .30 | |
| 9.0 | .43 | .34 | .29 | .42 | .34 | .29 | .41 | .34 | .29 | .40 | .33 | .29 | .39 | .33 | .28 | .27 | |
| 10.0 | .39 | .31 | .26 | .39 | .31 | .26 | .38 | .31 | .26 | .37 | .30 | .26 | .36 | .30 | .26 | .24 | |



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Qin Meng
Test Date:2024-07-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:6.920m [K=1.0000]
Remarks:

WEC AND CCEC

| | | |
|--|---------------|------------------|
| Test:U:23.998V I:0.2243A P:5.3833W PF:1.0000 Freq:0Hz Lamp Flux:525.562x1 lm | | |
| NAME: HCP-3125483 | TYPE: | WEIGHT: |
| SPEC.:2216-24V-240D-4MM 3000K 4.8W | DIM.: | SERIAL No.: |
| MFR.: HAVIT LIGHTING | SUR.:1000*4mm | 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 | .307 | .175 | .055 | .300 | .171 | .054 | .287 | .164 | .053 | .274 | .158 | .051 | .263 | .153 | .049 | |
| 2.0 | .290 | .159 | .049 | .284 | .157 | .048 | .273 | .152 | .047 | .262 | .147 | .046 | .252 | .142 | .045 | |
| 3.0 | .269 | .143 | .043 | .264 | .141 | .043 | .254 | .137 | .042 | .244 | .134 | .041 | .235 | .130 | .040 | |
| 4.0 | .249 | .129 | .038 | .244 | .128 | .038 | .235 | .125 | .037 | .226 | .122 | .037 | .219 | .119 | .036 | |
| 5.0 | .230 | .117 | .034 | .226 | .116 | .034 | .218 | .113 | .033 | .210 | .111 | .033 | .203 | .109 | .033 | |
| 6.0 | .214 | .107 | .031 | .210 | .106 | .031 | .203 | .104 | .030 | .196 | .102 | .030 | .190 | .100 | .030 | |
| 7.0 | .199 | .098 | .028 | .196 | .097 | .028 | .189 | .096 | .028 | .183 | .094 | .027 | .177 | .092 | .027 | |
| 8.0 | .186 | .091 | .026 | .183 | .090 | .025 | .177 | .088 | .025 | .172 | .087 | .025 | .166 | .085 | .025 | |
| 9.0 | .174 | .084 | .024 | .172 | .084 | .023 | .166 | .082 | .023 | .161 | .081 | .023 | .157 | .080 | .023 | |
| 10.0 | .164 | .079 | .022 | .161 | .078 | .022 | .157 | .077 | .022 | .152 | .076 | .021 | .148 | .074 | .021 | |

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
| pw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| pfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio Ceiling Cavity Exitance Coefficients(CCEC) | | | | | | | | | | | | | | | |
| 0.0 | .190 | .190 | .190 | .163 | .163 | .163 | .111 | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 | |
| 1.0 | .180 | .156 | .135 | .154 | .134 | .116 | .105 | .092 | .080 | .061 | .053 | .047 | .019 | .017 | .015 | |
| 2.0 | .172 | .132 | .098 | .147 | .114 | .085 | .101 | .079 | .059 | .058 | .046 | .035 | .019 | .015 | .011 | |
| 3.0 | .164 | .114 | .074 | .141 | .099 | .064 | .097 | .068 | .045 | .056 | .040 | .027 | .018 | .013 | .009 | |
| 4.0 | .157 | .101 | .058 | .135 | .087 | .051 | .093 | .061 | .036 | .054 | .036 | .021 | .017 | .012 | .007 | |
| 5.0 | .149 | .091 | .047 | .128 | .078 | .041 | .088 | .055 | .029 | .051 | .032 | .017 | .017 | .010 | .006 | |
| 6.0 | .142 | .082 | .039 | .122 | .071 | .034 | .084 | .050 | .024 | .049 | .029 | .014 | .016 | .010 | .005 | |
| 7.0 | .135 | .075 | .033 | .117 | .065 | .029 | .081 | .046 | .020 | .047 | .027 | .012 | .015 | .009 | .004 | |
| 8.0 | .129 | .070 | .029 | .111 | .060 | .025 | .077 | .042 | .018 | .045 | .025 | .011 | .014 | .008 | .003 | |
| 9.0 | .123 | .065 | .025 | .106 | .056 | .022 | .073 | .039 | .016 | .043 | .023 | .009 | .014 | .008 | .003 | |
| 10.0 | .117 | .060 | .022 | .101 | .052 | .020 | .070 | .037 | .014 | .041 | .022 | .008 | .013 | .007 | .003 | |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Qin Meng
 Test Date:2024-07-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:6.920m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

| | | | | | | | | | | | |
|--|---------------|------------------|------|------|---------------|---------------|----------------|------------------|------|------|------|
| Test:U:23.998V I:0.2243A P:5.3833W PF:1.0000 Freq:0Hz Lamp Flux:525.562x1 lm | | | | | | | | | | | |
| NAME: HCP-3125483 | | | | | TYPE: | | | WEIGHT: | | | |
| SPEC.:2216-24V-240D-4MM 3000K 4.8W | | | | | DIM.: | | | SERIAL No.: | | | |
| MFR.: HAVIT LIGHTING | | | | | SUR.:1000*4mm | | | 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 | 25.8 | 27.3 | 26.1 | 27.5 | 27.7 | 25.9 | 27.4 | 26.2 | 27.6 | 27.8 | |
| | 3H | 27.2 | 28.6 | 27.5 | 28.9 | 29.1 | 27.4 | 28.8 | 27.7 | 29.0 | 29.3 |
| | 4H | 27.8 | 29.1 | 28.1 | 29.3 | 29.6 | 28.0 | 29.3 | 28.3 | 29.6 | 29.8 |
| | 6H | 28.1 | 29.4 | 28.4 | 29.6 | 29.9 | 28.4 | 29.6 | 28.7 | 29.9 | 30.2 |
| | 8H | 28.2 | 29.4 | 28.5 | 29.7 | 30.0 | 28.4 | 29.7 | 28.8 | 29.9 | 30.2 |
| | 12H | 28.2 | 29.4 | 28.5 | 29.7 | 30.0 | 28.5 | 29.7 | 28.8 | 29.9 | 30.3 |
| 4H | 2H | 26.4 | 27.8 | 26.7 | 28.0 | 28.3 | 26.5 | 27.8 | 26.8 | 28.1 | 28.3 |
| | 3H | 28.0 | 29.2 | 28.4 | 29.5 | 29.8 | 28.2 | 29.3 | 28.5 | 29.6 | 29.9 |
| | 4H | 28.7 | 29.7 | 29.0 | 30.0 | 30.4 | 28.9 | 29.9 | 29.2 | 30.3 | 30.6 |
| | 6H | 29.1 | 30.0 | 29.5 | 30.4 | 30.8 | 29.4 | 30.3 | 29.8 | 30.7 | 31.0 |
| | 8H | 29.2 | 30.1 | 29.6 | 30.5 | 30.8 | 29.5 | 30.4 | 29.9 | 30.7 | 31.1 |
| | 12H | 29.3 | 30.1 | 29.7 | 30.5 | 30.9 | 29.6 | 30.4 | 30.0 | 30.8 | 31.2 |
| 8H | 4H | 28.9 | 29.8 | 29.3 | 30.2 | 30.5 | 29.1 | 30.0 | 29.5 | 30.3 | 30.7 |
| | 6H | 29.5 | 30.2 | 29.9 | 30.6 | 31.0 | 29.7 | 30.4 | 30.1 | 30.8 | 31.3 |
| | 8H | 29.7 | 30.3 | 30.1 | 30.7 | 31.2 | 29.9 | 30.6 | 30.4 | 31.0 | 31.4 |
| | 12H | 29.8 | 30.3 | 30.2 | 30.8 | 31.2 | 30.0 | 30.6 | 30.5 | 31.1 | 31.5 |
| 12H | 4H | 28.9 | 29.7 | 29.3 | 30.1 | 30.5 | 29.1 | 29.9 | 29.5 | 30.3 | 30.7 |
| | 6H | 29.5 | 30.2 | 30.0 | 30.6 | 31.0 | 29.7 | 30.4 | 30.2 | 30.8 | 31.3 |
| | 8H | 29.7 | 30.3 | 30.2 | 30.7 | 31.2 | 30.0 | 30.5 | 30.5 | 31.0 | 31.5 |
| Variations with the observer position at spacings: | | | | | | | | | | | |
| S = 1.0H | + 0.2 / - 0.2 | | | | | + 0.2 / - 0.2 | | | | | |
| 1.5H | + 0.2 / - 0.3 | | | | | + 0.2 / - 0.3 | | | | | |
| 2.0H | + 0.2 / - 0.2 | | | | | + 0.2 / - 0.3 | | | | | |

CIE Pub.117, 525.6 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -2.2$)
Area: 0.004 m²

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Qin Meng
Test Date:2024-07-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:6.920m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

| | | |
|--|---------------|------------------|
| Test:U:23.998V I:0.2243A P:5.3833W PF:1.0000 Freq:0Hz Lamp Flux:525.562x1 lm | | |
| NAME: HCP-3125483 | TYPE: | WEIGHT: |
| SPEC.:2216-24V-240D-4MM 3000K 4.8W | DIM.: | SERIAL No.: |
| MFR.: HAVIT LIGHTING | SUR.:1000*4mm | Shielding Angle: |

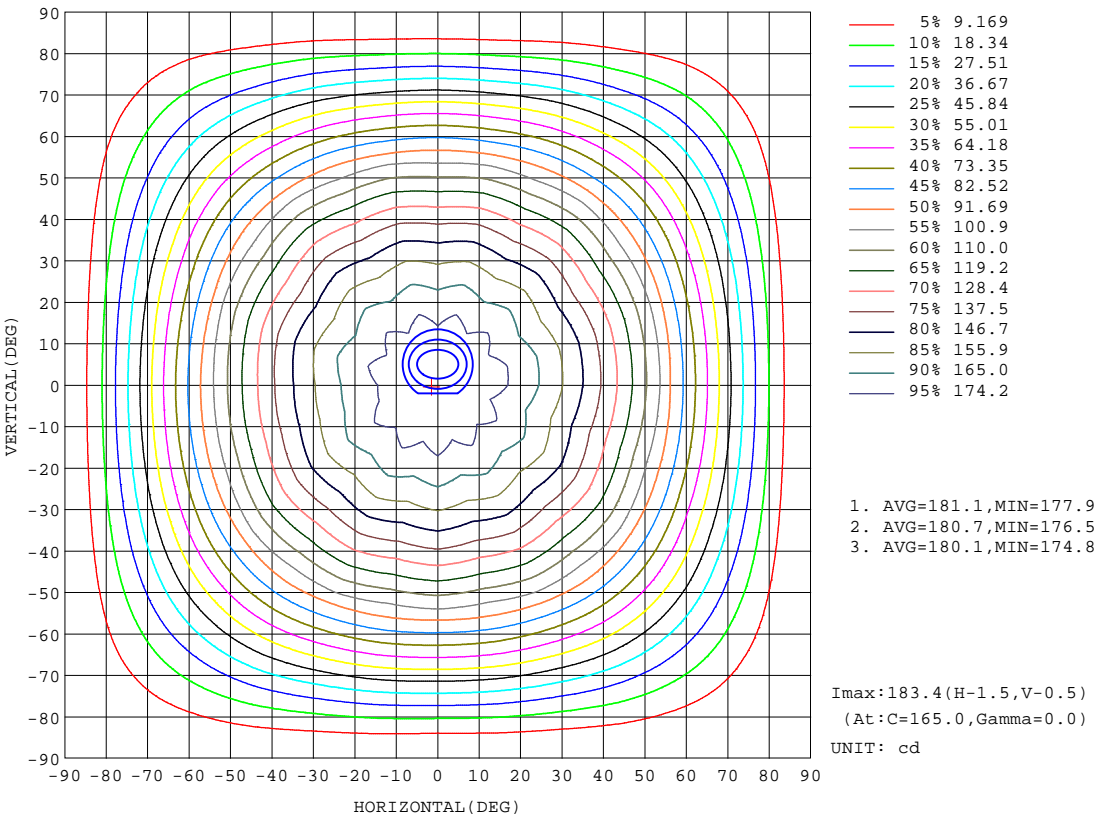
| REFLECTANCE | | | | | | | | | | |
|----------------------------------|---|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 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 | 57 | 46 | 39 | 57 | 45 | 39 | 55 | 45 | 38 | 32 |
| 0.80 | 67 | 56 | 48 | 66 | 55 | 48 | 65 | 55 | 48 | 41 |
| 1.00 | 76 | 65 | 57 | 75 | 64 | 57 | 72 | 66 | 57 | 50 |
| 1.25 | 83 | 73 | 65 | 82 | 72 | 65 | 79 | 70 | 64 | 57 |
| 1.50 | 88 | 78 | 71 | 86 | 77 | 71 | 83 | 76 | 70 | 62 |
| 2.00 | 95 | 87 | 80 | 93 | 85 | 79 | 90 | 83 | 78 | 70 |
| 2.50 | 99 | 91 | 85 | 97 | 90 | 84 | 93 | 87 | 82 | 74 |
| 3.00 | 102 | 95 | 90 | 100 | 94 | 89 | 96 | 91 | 87 | 78 |
| 4.00 | 106 | 101 | 96 | 104 | 99 | 95 | 100 | 96 | 92 | 83 |
| 5.00 | 109 | 104 | 100 | 106 | 102 | 98 | 102 | 98 | 95 | 86 |
| ROOM INDEX | UF(total) | | | | | | | | | Direct |
| According to DIN EN 13032-2 2004 | | | Suspended | | | | | SHRNOM = 1.25 | | |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Qin Meng
 Test Date:2024-07-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:6.920m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

| | | |
|--|---------------|------------------|
| Test:U:23.998V I:0.2243A P:5.3833W PF:1.0000 Freq:0Hz Lamp Flux:525.562x1 lm | | |
| NAME: HCP-3125483 | TYPE: | WEIGHT: |
| SPEC.:2216-24V-240D-4MM 3000K 4.8W | DIM.: | SERIAL No.: |
| MFR.: HAVIT LIGHTING | SUR.:1000*4mm | Shielding Angle: |



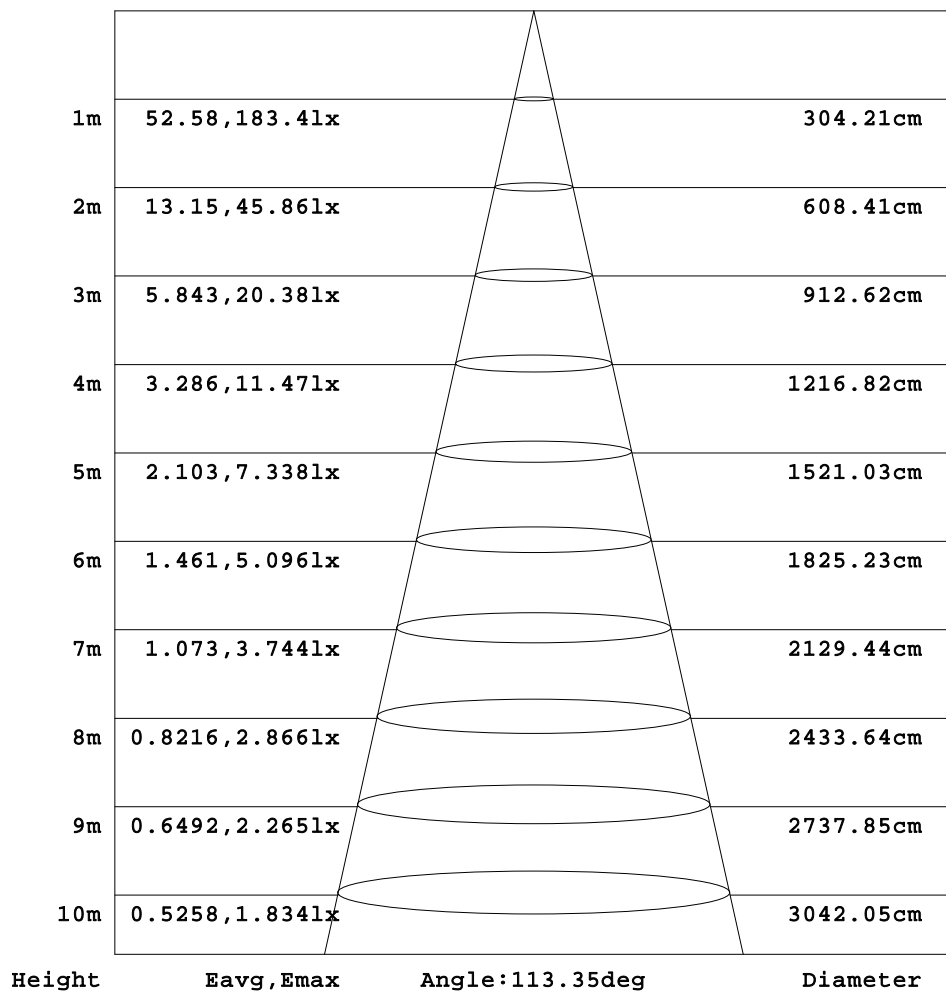
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Qin Meng
Test Date:2024-07-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:6.920m [K=1.0000]
Remarks:

AAI Figure

| | | |
|--|---------------|------------------|
| Test:U:23.998V I:0.2243A P:5.3833W PF:1.0000 Freq:0Hz Lamp Flux:525.562x1 lm | | |
| NAME: HCP-3125483 | TYPE: | WEIGHT: |
| SPEC.:2216-24V-240D-4MM 3000K 4.8W | DIM.: | SERIAL No.: |
| MFR.: HAVIT LIGHTING | SUR.:1000*4mm | Shielding Angle: |

Flux out:391.7 lm



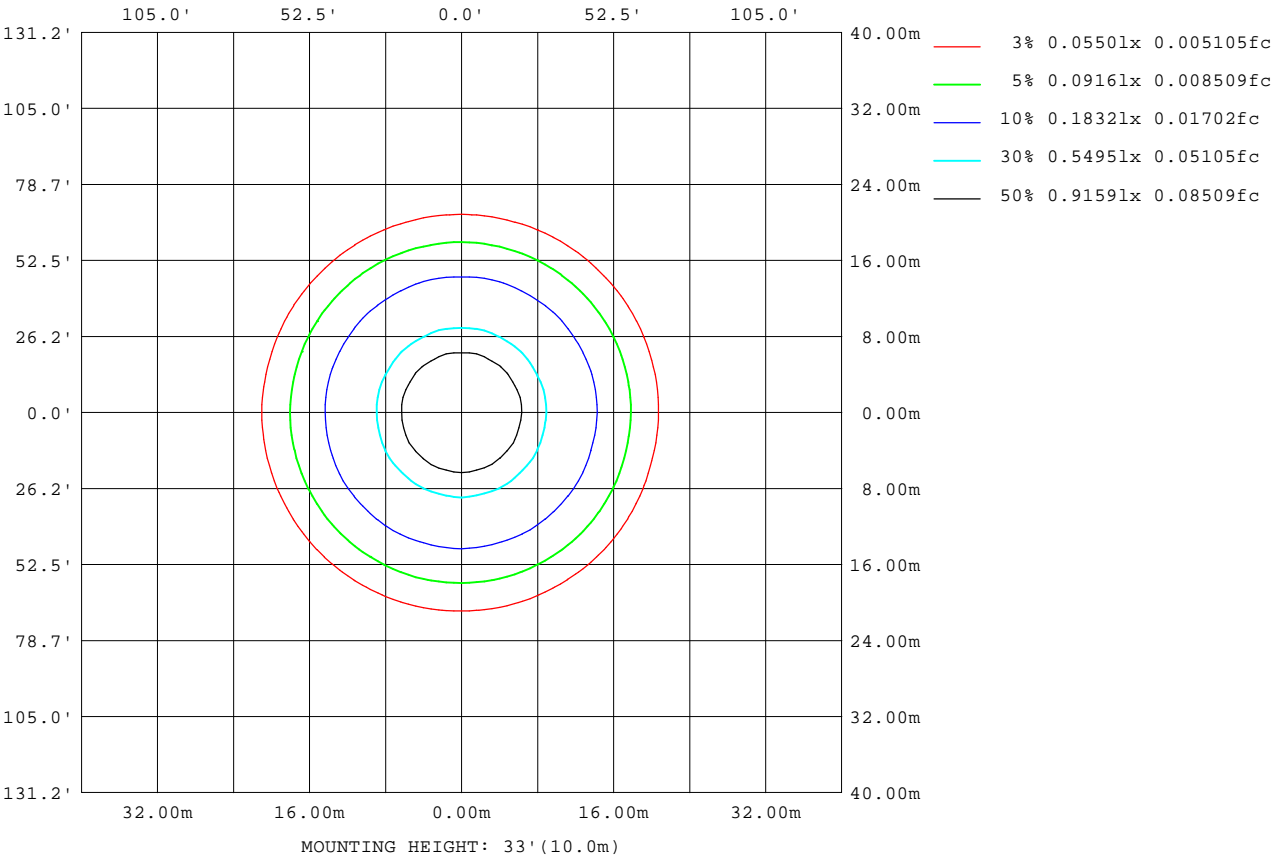
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators: Qin Meng
 Test Date: 2024-07-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.421
 Humidity: 65.0%
 Test Distance: 6.920m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

| | | |
|--|---------------|------------------|
| Test:U:23.998V I:0.2243A P:5.3833W PF:1.0000 Freq:0Hz Lamp Flux:525.562x1 lm | | |
| NAME: HCP-3125483 | TYPE: | WEIGHT: |
| SPEC.:2216-24V-240D-4MM 3000K 4.8W | DIM.: | SERIAL No.: |
| MFR.: HAVIT LIGHTING | SUR.:1000*4mm | Shielding Angle: |



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Qin Meng
Test Date:2024-07-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:6.920m [K=1.0000]
Remarks:

LED Avg.L Report

| | | |
|--|---------------|------------------|
| Test:U:23.998V I:0.2243A P:5.3833W PF:1.0000 Freq:0Hz Lamp Flux:525.562x1 lm | | |
| NAME: HCP-3125483 | TYPE: | WEIGHT: |
| SPEC.:2216-24V-240D-4MM 3000K 4.8W | DIM.: | SERIAL No.: |
| MFR.: HAVIT LIGHTING | SUR.:1000*4mm | Shielding Angle: |

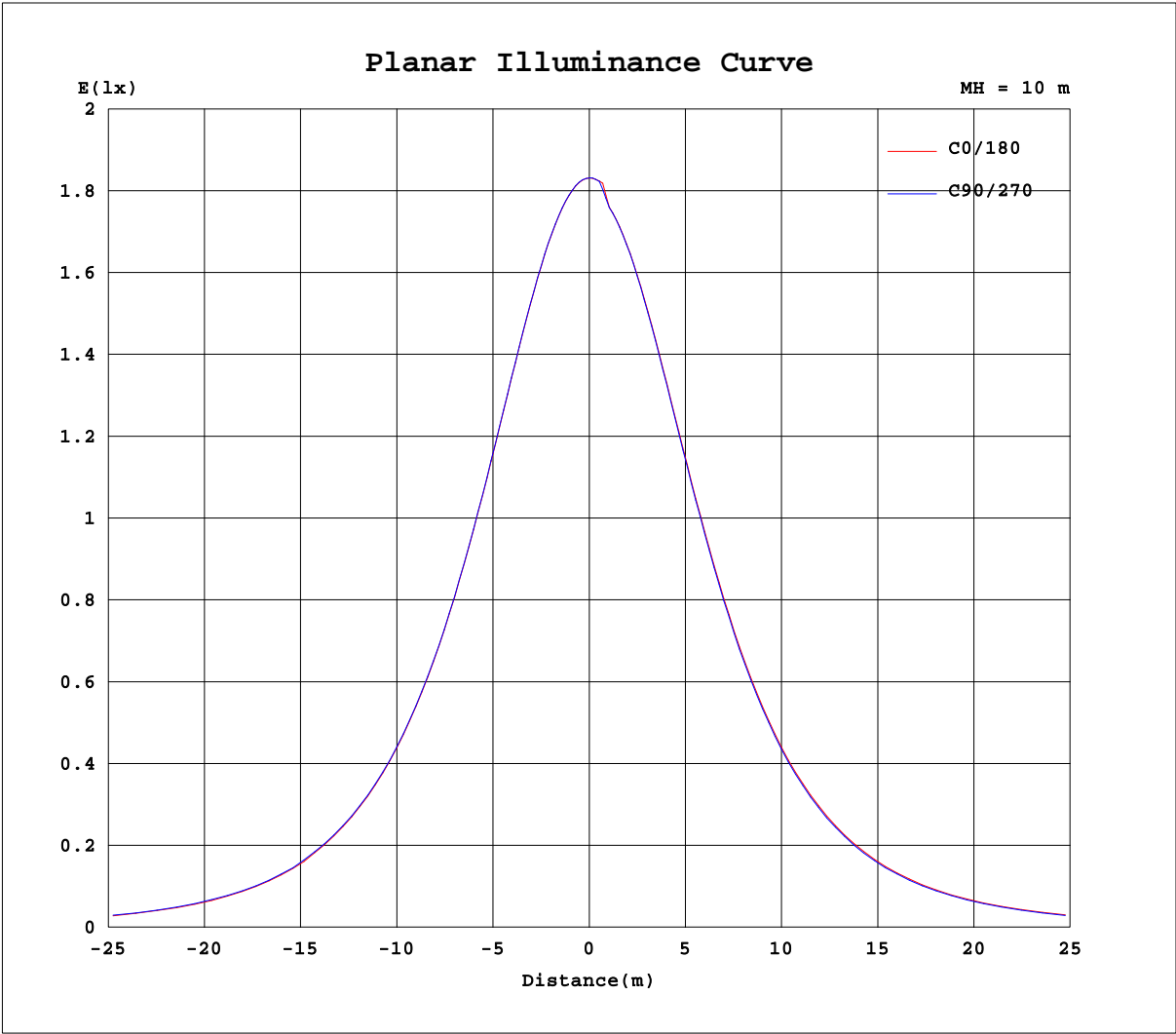
| AvgL | cd/m2 |
|----------------|-------|
| L_0~180(65)av | 39175 |
| L_0~180(75)av | 33104 |
| L_0~180(85)av | 21139 |
| L_90~270(65)av | 39108 |
| L_90~270(75)av | 32821 |
| L_90~270(85)av | 18460 |
| L_45(65)av | 39105 |
| L_45(75)av | 32812 |
| L_45(85)av | 20366 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Qin Meng
Test Date:2024-07-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:6.920m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25DEG
Operators: Qin Meng
Test Date: 2024-07-24

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.421
Humidity: 65.0%
Test Distance: 6.920m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|--|---------------|------------------|
| Test:U:23.998V I:0.2243A P:5.3833W PF:1.0000 Freq:0Hz Lamp Flux:525.562x1 lm | | |
| NAME: HCP-3125483 | TYPE: | WEIGHT: |
| SPEC.:2216-24V-240D-4MM 3000K 4.8W | DIM.: | SERIAL No.: |
| MFR.: HAVIT LIGHTING | SUR.:1000*4mm | Shielding Angle: |

| Table--1 | | | | | | | | | | | | | | | | | | UNIT: cd | |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|
| C(DEG) γ (DEG) | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 |
| 0 | 183 | 183 | 183 | 183 | 183 | 183 | 183 | 183 | 183 | 183 | 183 | 183 | 183 | 183 | 183 | 183 | 183 | 183 | 183 |
| 5 | 182 | 179 | 182 | 179 | 182 | 179 | 182 | 179 | 182 | 181 | 183 | 181 | 181 | 182 | 179 | 182 | 179 | 182 | 180 |
| 10 | 180 | 176 | 180 | 176 | 180 | 177 | 180 | 177 | 180 | 177 | 180 | 177 | 177 | 180 | 177 | 180 | 177 | 180 | 177 |
| 15 | 176 | 173 | 176 | 173 | 176 | 173 | 176 | 173 | 176 | 174 | 177 | 174 | 174 | 177 | 173 | 177 | 174 | 177 | 174 |
| 20 | 171 | 167 | 170 | 168 | 171 | 168 | 171 | 168 | 171 | 169 | 172 | 169 | 169 | 172 | 169 | 172 | 169 | 172 | 169 |
| 25 | 164 | 161 | 164 | 161 | 164 | 161 | 164 | 162 | 165 | 162 | 165 | 163 | 163 | 165 | 162 | 165 | 162 | 165 | 162 |
| 30 | 156 | 153 | 156 | 153 | 156 | 154 | 156 | 154 | 157 | 155 | 158 | 155 | 155 | 157 | 155 | 157 | 155 | 157 | 154 |
| 35 | 147 | 144 | 147 | 144 | 147 | 144 | 147 | 145 | 148 | 146 | 148 | 146 | 146 | 148 | 146 | 148 | 146 | 148 | 145 |
| 40 | 136 | 134 | 136 | 134 | 136 | 134 | 137 | 135 | 137 | 135 | 138 | 136 | 136 | 138 | 136 | 138 | 135 | 137 | 135 |
| 45 | 124 | 122 | 124 | 122 | 124 | 123 | 125 | 123 | 126 | 124 | 126 | 124 | 125 | 126 | 124 | 126 | 124 | 125 | 123 |
| 50 | 111 | 109 | 111 | 110 | 112 | 110 | 112 | 111 | 113 | 111 | 113 | 112 | 112 | 113 | 111 | 113 | 111 | 112 | 110 |
| 55 | 97.0 | 94.8 | 97.0 | 95.9 | 97.6 | 96.3 | 98.1 | 96.9 | 98.8 | 97.6 | 99.3 | 97.8 | 98.3 | 99.2 | 97.6 | 98.9 | 97.1 | 98.3 | 96.5 |
| 60 | 80.2 | 79.6 | 80.4 | 81.1 | 81.2 | 81.7 | 81.7 | 82.4 | 82.3 | 82.9 | 82.7 | 83.0 | 83.5 | 82.5 | 82.7 | 82.1 | 82.2 | 81.5 | 81.6 |
| 65 | 64.6 | 63.5 | 64.8 | 65.6 | 65.7 | 66.3 | 66.4 | 67.0 | 67.0 | 67.5 | 67.2 | 67.4 | 67.9 | 66.9 | 67.0 | 66.4 | 66.5 | 65.8 | 65.8 |
| 70 | 48.4 | 47.7 | 48.6 | 49.6 | 49.7 | 50.5 | 50.5 | 51.2 | 51.0 | 51.5 | 51.1 | 51.3 | 51.8 | 50.7 | 50.8 | 50.1 | 50.2 | 49.6 | 49.6 |
| 75 | 32.6 | 32.0 | 32.8 | 33.7 | 33.8 | 34.6 | 34.5 | 35.2 | 35.0 | 35.5 | 35.0 | 35.2 | 35.9 | 34.7 | 34.8 | 34.1 | 34.1 | 33.4 | 33.4 |
| 80 | 18.1 | 17.7 | 18.4 | 19.1 | 19.0 | 19.6 | 19.5 | 20.2 | 20.1 | 20.7 | 20.4 | 20.4 | 21.1 | 19.9 | 20.1 | 19.3 | 19.2 | 18.3 | 18.2 |
| 85 | 6.23 | 5.97 | 6.49 | 7.06 | 6.90 | 7.17 | 6.89 | 7.58 | 7.71 | 8.24 | 7.95 | 7.91 | 8.51 | 7.50 | 7.61 | 7.04 | 6.93 | 6.21 | 5.98 |
| 90 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.18 | 0.12 | 0.28 | 0.22 | 0.24 | 0.03 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 100 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 105 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 110 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 115 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 120 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 125 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 130 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 135 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Qin Meng
Test Date:2024-07-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:6.920m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|--|---------------|------------------|
| Test:U:23.998V I:0.2243A P:5.3833W PF:1.0000 Freq:0Hz Lamp Flux:525.562x1 lm | | |
| NAME: HCP-3125483 | TYPE: | WEIGHT: |
| SPEC.:2216-24V-240D-4MM 3000K 4.8W | DIM.: | SERIAL No.: |
| MFR.: HAVIT LIGHTING | SUR.:1000*4mm | Shielding Angle: |

| | | | | | | | | | | | | | | | | | | | | |
|-------------------|------|------|------|------|------|--|--|--|--|--|----------|--|--|--|--|--|--|--|--|--|
| Table--2 | | | | | | | | | | | UNIT: cd | | | | | | | | | |
| C(DEG) γ (DEG) | 285 | 300 | 315 | 330 | 345 | | | | | | | | | | | | | | | |
| 0 | 183 | 183 | 183 | 183 | 183 | | | | | | | | | | | | | | | |
| 5 | 183 | 181 | 183 | 181 | 183 | | | | | | | | | | | | | | | |
| 10 | 180 | 177 | 180 | 177 | 180 | | | | | | | | | | | | | | | |
| 15 | 177 | 173 | 177 | 173 | 177 | | | | | | | | | | | | | | | |
| 20 | 172 | 168 | 171 | 168 | 171 | | | | | | | | | | | | | | | |
| 25 | 165 | 162 | 165 | 162 | 165 | | | | | | | | | | | | | | | |
| 30 | 157 | 154 | 157 | 154 | 157 | | | | | | | | | | | | | | | |
| 35 | 148 | 145 | 148 | 145 | 147 | | | | | | | | | | | | | | | |
| 40 | 137 | 135 | 137 | 135 | 137 | | | | | | | | | | | | | | | |
| 45 | 125 | 123 | 125 | 123 | 125 | | | | | | | | | | | | | | | |
| 50 | 112 | 110 | 112 | 110 | 112 | | | | | | | | | | | | | | | |
| 55 | 97.8 | 96.2 | 97.5 | 96.0 | 97.4 | | | | | | | | | | | | | | | |
| 60 | 81.0 | 81.2 | 80.7 | 81.0 | 80.5 | | | | | | | | | | | | | | | |
| 65 | 65.2 | 65.4 | 64.9 | 65.1 | 64.7 | | | | | | | | | | | | | | | |
| 70 | 49.0 | 49.1 | 48.6 | 48.9 | 48.5 | | | | | | | | | | | | | | | |
| 75 | 32.8 | 33.0 | 32.6 | 32.9 | 32.5 | | | | | | | | | | | | | | | |
| 80 | 17.8 | 18.3 | 18.0 | 18.4 | 17.9 | | | | | | | | | | | | | | | |
| 85 | 5.84 | 6.27 | 6.06 | 6.35 | 6.00 | | | | | | | | | | | | | | | |
| 90 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 100 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 105 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 110 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 115 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 120 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 125 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 130 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 135 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 140 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 145 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 150 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 155 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 160 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 165 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 170 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 175 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |
| 180 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | | |

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Qin Meng
Test Date:2024-07-24

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:6.920m [K=1.0000]
Remarks: