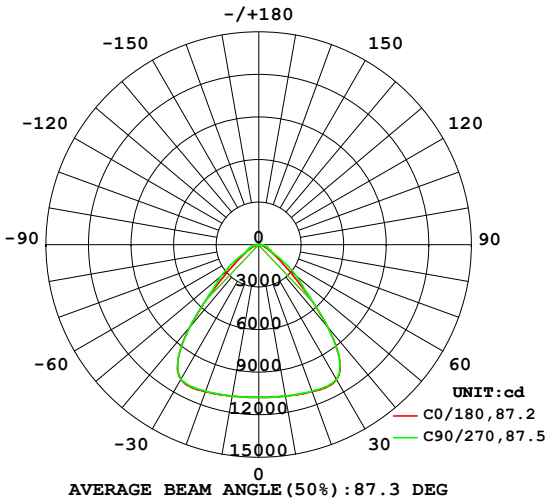
# LUMINAIRE PHOTOMETRIC TEST REPORT

| | | |
|---|---|---|
| Test:U:229.9V I:0.8024A P:178.3W PF:0.9663 Lamp Flux:21883.5x1 lm | | |
| NAME: LHB01-180 | TYPE:180W | WEIGHT: |
| SPEC.:4000K Ra80 90DEG L02805 | DIM.: 0.718*0.275*0.102 | SERIAL No.: |
| MFR.: | SUR.:0.255*0.69 | Shielding Angle: |

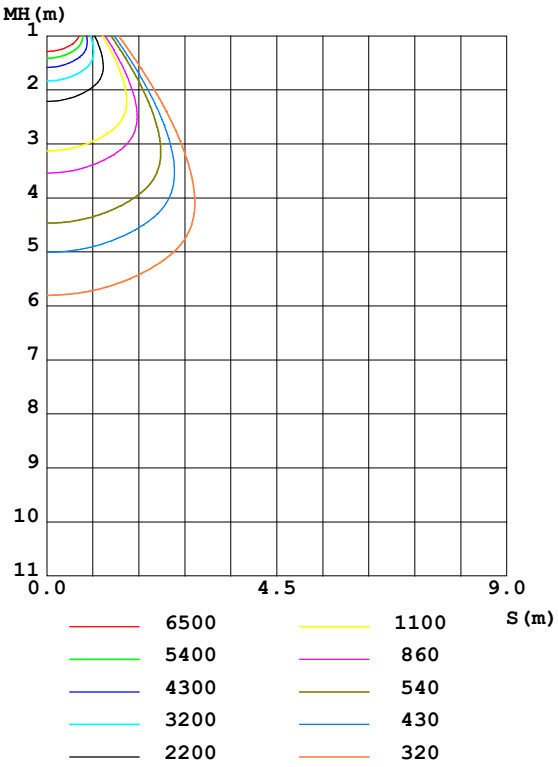
| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 122.75 lm/W | | | |
|---|---|---|---|---|---|
| MODEL | LHB01-180 | Imax(cd) | 11141 | S/MH(C0/180) | 1.26 |
| NOMINAL POWER(W) | 180 | LOR(%) | 100.0 | S/MH(C90/270) | 1.26 |
| RATED VOLTAGE(V) | 230 | TOTAL FLUX(lm) | 21883 | η UP,DN(C0-180) | 0.0,50.0 |
| NOMINAL FLUX(lm) | 21883.5 | 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) | 230 | η down(%) | 100.0 | CIBSE SHR MAX | 1.30 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM




AVERAGE BEAM ANGLE(50%):87.3 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)




C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 0- 5 | 258.0 | 258.0 | 1.18,1.18 |
| 10 | 1085 | 1085 | 1084 | 1085 | 1085 | 1085 | 1084 | 1085 | 5- 10 | 774.7 | 1033 | 4.72,4.72 |
| 15 | 1094 | 1094 | 1091 | 1094 | 1094 | 1094 | 1091 | 1094 | 10- 15 | 1292 | 2325 | 10.6,10.6 |
| 20 | 1104 | 1103 | 1099 | 1103 | 1104 | 1103 | 1099 | 1103 | 15- 20 | 1810 | 4135 | 18.9,18.9 |
| 25 | 1114 | 1108 | 1108 | 1108 | 1114 | 1108 | 1108 | 1108 | 20- 25 | 2322 | 6456 | 29.5,29.5 |
| 30 | 1099 | 1091 | 1098 | 1091 | 1099 | 1091 | 1098 | 1091 | 25- 30 | 2798 | 9255 | 42.3,42.3 |
| 35 | 995.8 | 993.1 | 993.1 | 993.1 | 995.8 | 993.1 | 993.1 | 993.1 | 30- 35 | 3098 | 12352 | 56.4,56.4 |
| 40 | 753.2 | 752.4 | 756.1 | 752.4 | 753.2 | 752.4 | 756.1 | 752.4 | 35- 40 | 2932 | 15284 | 69.8,69.8 |
| 45 | 462.5 | 465.6 | 485.1 | 465.6 | 462.5 | 465.6 | 485.1 | 465.6 | 40- 45 | 2234 | 17518 | 80,80 |
| 50 | 260.7 | 264.3 | 347.0 | 264.3 | 260.7 | 264.3 | 347.0 | 264.3 | 45- 50 | 1471 | 18989 | 86.8,86.8 |
| 55 | 156.1 | 159.9 | 224.8 | 159.9 | 156.1 | 159.9 | 224.8 | 159.9 | 50- 55 | 983.3 | 19972 | 91.3,91.3 |
| 60 | 101.2 | 110.1 | 102.7 | 110.1 | 101.2 | 110.1 | 102.7 | 110.1 | 55- 60 | 653.7 | 20626 | 94.3,94.3 |
| 65 | 68.38 | 71.77 | 85.72 | 71.77 | 68.38 | 71.77 | 85.72 | 71.77 | 60- 65 | 426.2 | 21052 | 96.2,96.2 |
| 70 | 45.91 | 47.47 | 68.72 | 47.47 | 45.91 | 47.47 | 68.72 | 47.47 | 65- 70 | 314.2 | 21366 | 97.6,97.6 |
| 75 | 28.23 | 34.79 | 51.72 | 34.79 | 28.23 | 34.79 | 51.72 | 34.79 | 70- 75 | 232.6 | 21599 | 98.7,98.7 |
| 80 | 9.127 | 22.92 | 34.72 | 22.92 | 9.127 | 22.92 | 34.72 | 22.92 | 75- 80 | 159.8 | 21759 | 99.4,99.4 |
| 85 | 2.078 | 11.66 | 17.72 | 11.66 | 2.078 | 11.66 | 17.72 | 11.66 | 80- 85 | 92.32 | 21851 | 99.9,99.9 |
| 90 | 0.3473 | 0.7134 | 0.7238 | 0.7134 | 0.3473 | 0.7134 | 0.7238 | 0.7134 | 85- 90 | 32.57 | 21883 | 100,100 |
| 95 | | | | | | | | | 90- 95 | | | |
| 100 | | | | | | | | | 95-100 | | | |
| 105 | | | | | | | | | 100-105 | | | |
| 110 | | | | | | | | | 105-110 | | | |
| 115 | | | | | | | | | 110-115 | | | |
| 120 | | | | | | | | | 115-120 | | | |
| 125 | | | | | | | | | 120-125 | | | |
| 130 | | | | | | | | | 125-130 | | | |
| 135 | | | | | | | | | 130-135 | | | |
| 140 | | | | | | | | | 135-140 | | | |
| 145 | | | | | | | | | 140-145 | | | |
| 150 | | | | | | | | | 145-150 | | | |
| 155 | | | | | | | | | 150-155 | | | |
| 160 | | | | | | | | | 155-160 | | | |
| 165 | | | | | | | | | 160-165 | | | |
| 170 | | | | | | | | | 165-170 | | | |
| 175 | | | | | | | | | 170-175 | | | |
| 180 | | | | | | | | | 175-180 | | | |
| DEG | LUMINOUS INTENSITY:×10cd | | | | | | | | | UNIT:lm | | |

Conical surface Flux(90deg): 17518 lm

%lum = 80.0%
%lamp = 80.0%

Conical surface Flux(120deg): 20626 lm

%lum = 94.3%
%lamp = 94.3%

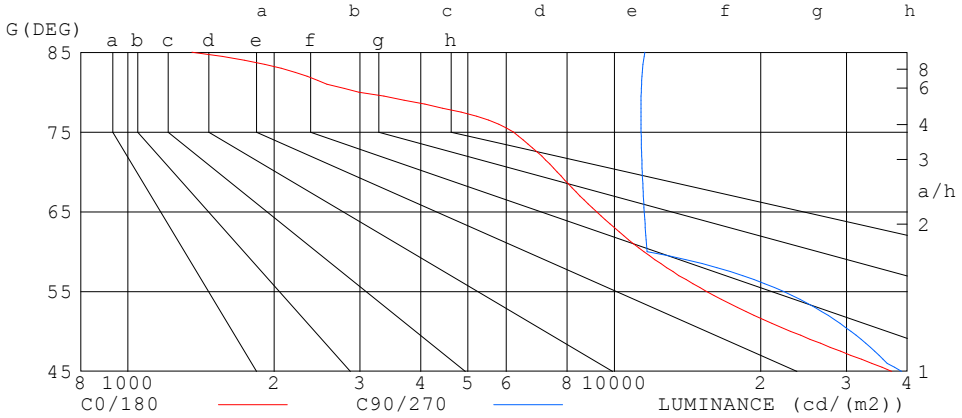
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

# LUMINANCE LIMITATION CURVES

**LUMINANCE LIMITATION CURVES**

| GLARE | CLASS | ILLUMINANCE (lx) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.50 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 500 | <=300 | | |
| 2.20 | D | | | | 2000 | 1000 | 500 | <=300 | |
| 2.55 | E | | | | | 2000 | 1000 | 500 | <=300 |
| | | a | b | c | d | e | f | g | h |



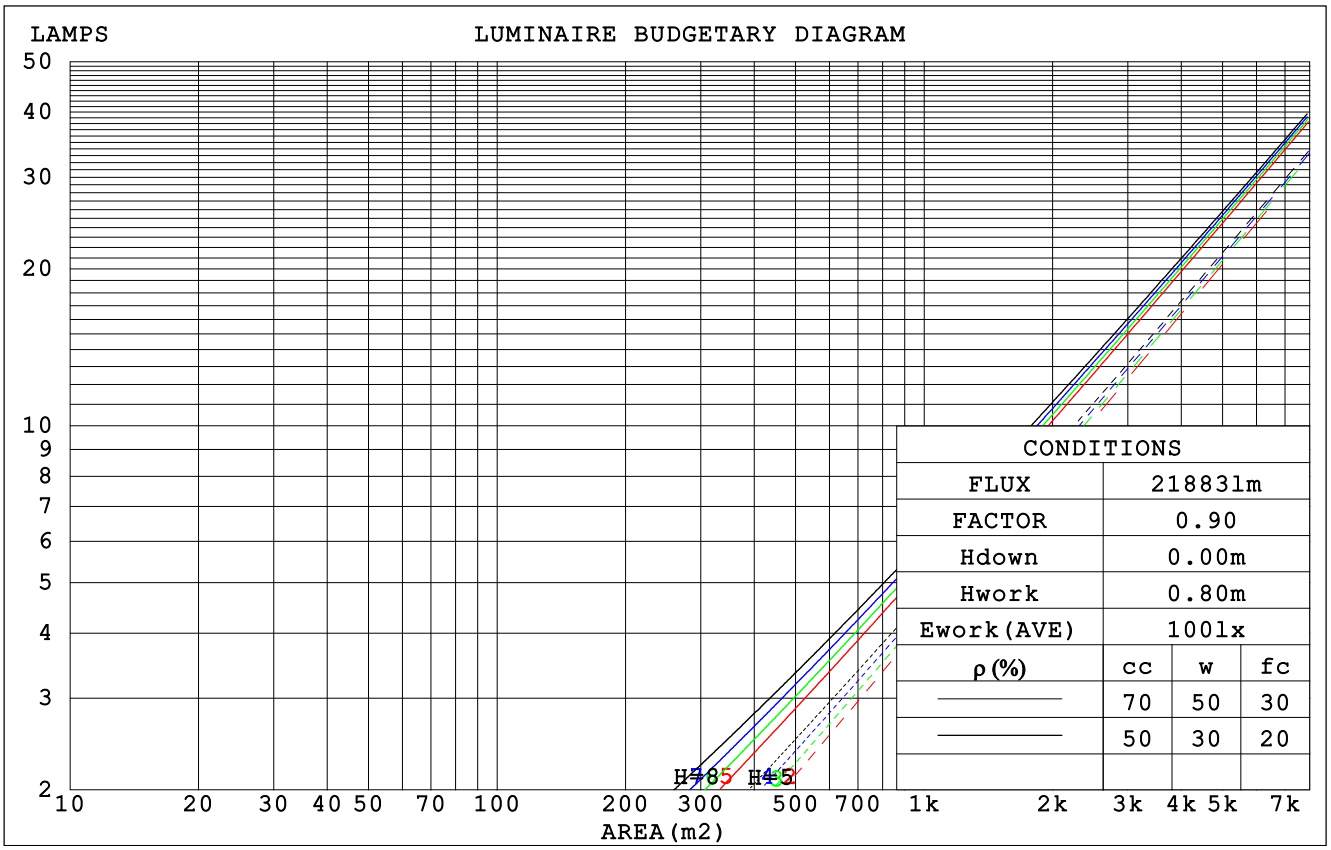

| LUMINANCE cd/(m2) | | |
|---|---|---|
| G(DEG) | C0/180 | C90/270 |
| 85 | 1355 | 11554 |
| 80 | 2986 | 11362 |
| 75 | 6197 | 11355 |
| 70 | 7628 | 11417 |
| 65 | 9194 | 11525 |
| 60 | 11502 | 11673 |
| 55 | 15465 | 22274 |
| 50 | 23042 | 30670 |
| 45 | 37166 | 38977 |

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| 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 | | | 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 | 1.08 | 1.05 | 1.02 | 1.06 | 1.03 | 1.00 | 1.02 | .99 | .97 | .98 | .96 | .94 | .94 | .93 | .91 | .90 |
| 2.0 | .98 | .92 | .88 | .96 | .91 | .87 | .92 | .88 | .85 | .89 | .86 | .83 | .86 | .84 | .81 | .79 |
| 3.0 | .88 | .82 | .77 | .87 | .81 | .76 | .84 | .79 | .75 | .82 | .77 | .74 | .79 | .76 | .73 | .71 |
| 4.0 | .80 | .73 | .68 | .79 | .73 | .67 | .77 | .71 | .67 | .75 | .70 | .66 | .73 | .68 | .65 | .63 |
| 5.0 | .73 | .66 | .60 | .72 | .65 | .60 | .70 | .64 | .59 | .68 | .63 | .59 | .67 | .62 | .58 | .57 |
| 6.0 | .67 | .60 | .54 | .66 | .59 | .54 | .65 | .58 | .54 | .63 | .57 | .53 | .62 | .57 | .53 | .51 |
| 7.0 | .62 | .54 | .49 | .61 | .54 | .49 | .59 | .53 | .48 | .58 | .52 | .48 | .57 | .52 | .48 | .46 |
| 8.0 | .57 | .49 | .44 | .56 | .49 | .44 | .55 | .49 | .44 | .54 | .48 | .44 | .53 | .47 | .44 | .42 |
| 9.0 | .53 | .45 | .40 | .52 | .45 | .40 | .51 | .45 | .40 | .50 | .44 | .40 | .49 | .44 | .40 | .38 |
| 10.0 | .49 | .42 | .37 | .48 | .42 | .37 | .47 | .41 | .37 | .47 | .41 | .37 | .46 | .40 | .37 | .35 |




C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

## WEC AND CCEC

| 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 | | | | | | Wall Exitance Coeffcients(WEC) | | | | | | | | | |
| 0.0 | | | | | | | | | | | | | | | | |
| 1.0 | .231 | .131 | .042 | .224 | .128 | .041 | .211 | .121 | .039 | .200 | .115 | .037 | .189 | .109 | .035 | |
| 2.0 | .223 | .122 | .037 | .217 | .119 | .037 | .206 | .114 | .036 | .196 | .110 | .034 | .186 | .105 | .033 | |
| 3.0 | .212 | .113 | .034 | .207 | .111 | .033 | .197 | .107 | .032 | .188 | .103 | .032 | .180 | .100 | .031 | |
| 4.0 | .200 | .104 | .031 | .196 | .103 | .030 | .187 | .099 | .030 | .180 | .096 | .029 | .172 | .094 | .029 | |
| 5.0 | .190 | .097 | .028 | .186 | .095 | .028 | .178 | .093 | .027 | .171 | .090 | .027 | .165 | .088 | .026 | |
| 6.0 | .179 | .090 | .026 | .176 | .089 | .026 | .169 | .087 | .025 | .163 | .085 | .025 | .157 | .083 | .025 | |
| 7.0 | .170 | .084 | .024 | .167 | .083 | .024 | .161 | .081 | .023 | .155 | .080 | .023 | .150 | .078 | .023 | |
| 8.0 | .161 | .079 | .022 | .158 | .078 | .022 | .153 | .076 | .022 | .148 | .075 | .022 | .143 | .074 | .021 | |
| 9.0 | .153 | .074 | .021 | .151 | .073 | .021 | .146 | .072 | .020 | .141 | .071 | .020 | .137 | .070 | .020 | |
| 10.0 | .146 | .070 | .019 | .143 | .069 | .019 | .139 | .068 | .019 | .135 | .067 | .019 | .131 | .066 | .019 | |

| 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 | .175 | .157 | .141 | .150 | .135 | .121 | .102 | .093 | .084 | .059 | .054 | .049 | .019 | .017 | .016 | |
| 2.0 | .163 | .132 | .106 | .140 | .114 | .092 | .096 | .079 | .064 | .055 | .046 | .038 | .018 | .015 | .012 | |
| 3.0 | .153 | .114 | .083 | .131 | .098 | .072 | .090 | .068 | .050 | .052 | .040 | .030 | .017 | .013 | .010 | |
| 4.0 | .145 | .100 | .066 | .124 | .086 | .057 | .085 | .060 | .040 | .049 | .035 | .024 | .016 | .011 | .008 | |
| 5.0 | .137 | .089 | .053 | .118 | .077 | .046 | .081 | .054 | .033 | .047 | .032 | .019 | .015 | .010 | .006 | |
| 6.0 | .131 | .080 | .044 | .112 | .069 | .038 | .077 | .049 | .027 | .045 | .029 | .016 | .015 | .009 | .005 | |
| 7.0 | .124 | .073 | .037 | .107 | .063 | .032 | .074 | .044 | .023 | .043 | .026 | .014 | .014 | .009 | .005 | |
| 8.0 | .119 | .067 | .032 | .102 | .058 | .028 | .071 | .041 | .020 | .041 | .024 | .012 | .013 | .008 | .004 | |
| 9.0 | .114 | .062 | .028 | .098 | .054 | .024 | .068 | .038 | .017 | .039 | .022 | .010 | .013 | .007 | .003 | |
| 10.0 | .109 | .058 | .024 | .094 | .050 | .021 | .065 | .035 | .015 | .038 | .021 | .009 | .012 | .007 | .003 | |

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

## UGR(Unified Glare Rating) Table

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 22.1 | 23.4 | 22.4 | 23.6 | 23.7 | 22.7 | 24.0 | 23.0 | 24.2 | 24.4 |
| | 3H | 22.2 | 23.4 | 22.5 | 23.6 | 23.8 | 23.0 | 24.2 | 23.3 | 24.4 | 24.6 |
| | 4H | 22.3 | 23.3 | 22.6 | 23.6 | 23.8 | 23.2 | 24.3 | 23.5 | 24.5 | 24.8 |
| | 6H | 22.2 | 23.2 | 22.5 | 23.5 | 23.8 | 23.4 | 24.4 | 23.7 | 24.7 | 24.9 |
| | 8H | 22.2 | 23.2 | 22.5 | 23.4 | 23.7 | 23.5 | 24.5 | 23.8 | 24.7 | 25.0 |
| | 12H | 22.1 | 23.1 | 22.5 | 23.4 | 23.6 | 23.6 | 24.5 | 23.9 | 24.8 | 25.0 |
| 4H | 2H | 22.1 | 23.2 | 22.4 | 23.4 | 23.6 | 22.6 | 23.7 | 22.9 | 24.0 | 24.2 |
| | 3H | 22.3 | 23.2 | 22.6 | 23.5 | 23.8 | 23.1 | 24.0 | 23.4 | 24.3 | 24.6 |
| | 4H | 22.4 | 23.2 | 22.7 | 23.5 | 23.8 | 23.4 | 24.2 | 23.7 | 24.5 | 24.8 |
| | 6H | 22.4 | 23.1 | 22.8 | 23.5 | 23.8 | 23.7 | 24.4 | 24.1 | 24.8 | 25.1 |
| | 8H | 22.4 | 23.1 | 22.8 | 23.4 | 23.8 | 23.9 | 24.5 | 24.3 | 24.9 | 25.3 |
| | 12H | 22.3 | 23.0 | 22.8 | 23.3 | 23.7 | 24.0 | 24.6 | 24.4 | 25.0 | 25.4 |
| 8H | 4H | 22.4 | 23.1 | 22.8 | 23.4 | 23.8 | 23.4 | 24.0 | 23.8 | 24.4 | 24.8 |
| | 6H | 22.5 | 23.0 | 22.9 | 23.4 | 23.9 | 23.8 | 24.3 | 24.2 | 24.7 | 25.2 |
| | 8H | 22.5 | 23.0 | 22.9 | 23.4 | 23.9 | 24.0 | 24.5 | 24.5 | 24.9 | 25.4 |
| | 12H | 22.5 | 22.9 | 23.0 | 23.4 | 23.8 | 24.2 | 24.6 | 24.7 | 25.1 | 25.6 |
| 12H | 4H | 22.4 | 23.0 | 22.8 | 23.4 | 23.8 | 23.3 | 23.9 | 23.7 | 24.3 | 24.7 |
| | 6H | 22.5 | 23.0 | 23.0 | 23.4 | 23.9 | 23.8 | 24.3 | 24.2 | 24.7 | 25.1 |
| | 8H | 22.5 | 23.0 | 23.0 | 23.4 | 23.9 | 24.0 | 24.5 | 24.5 | 24.9 | 25.4 |
| Variations with the observer position at spacings: | | | | | | | | | | | |
| S = 1.0H | | + 1.5 / - 2.7 | | | | | + 1.0 / - 1.4 | | | | |
| 1.5H | | + 2.3 / - 2.4 | | | | | + 1.6 / - 1.3 | | | | |
| 2.0H | | + 3.3 / - 2.2 | | | | | + 2.3 / - 1.9 | | | | |

CIE Pub.117 Corrected 21883 lm Total Lamp Luminous Flux.(8log(F/F0) = 10.7)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

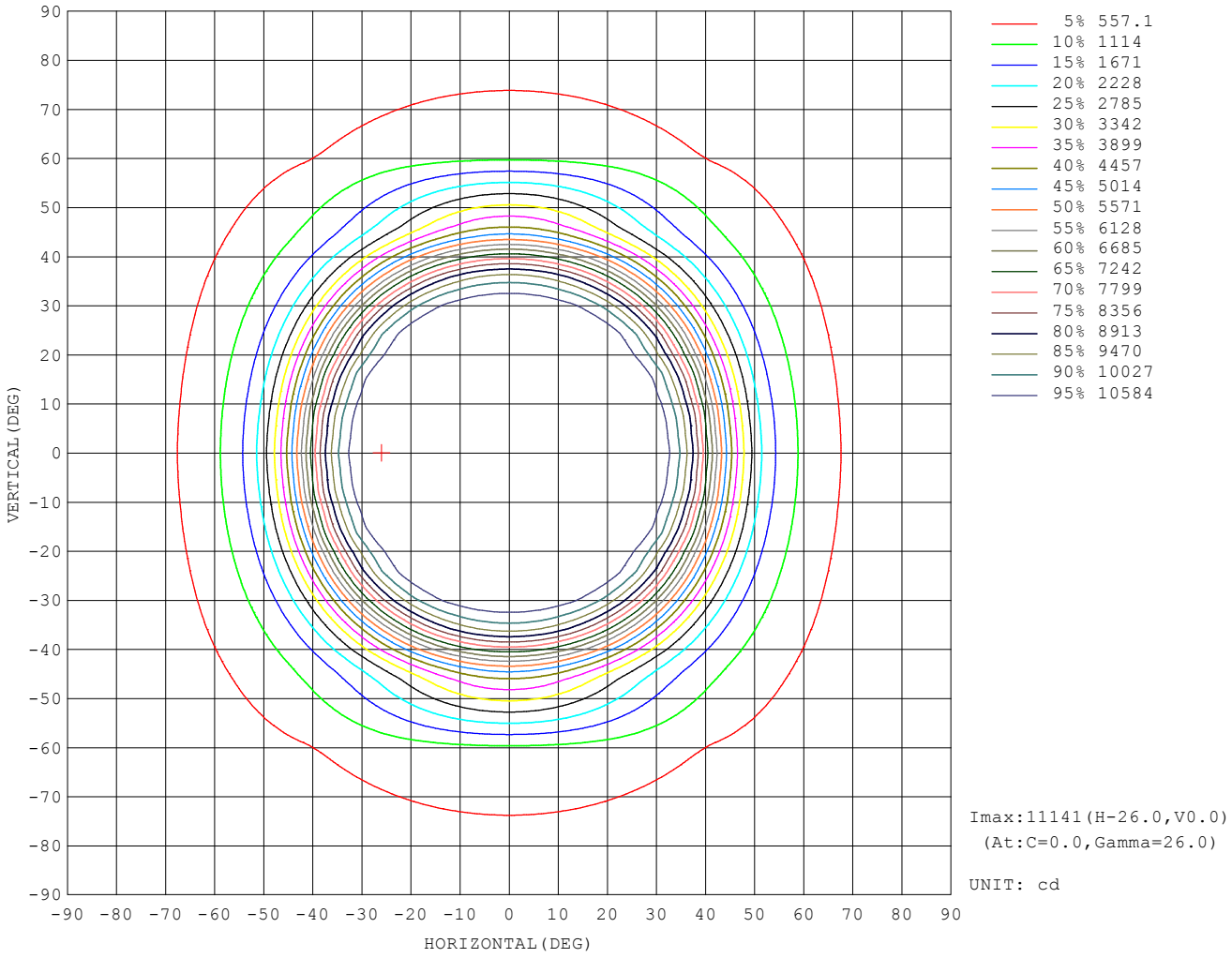
# UTILIZATION FACTORS TABLE

| 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) x RCR = 5 | | | | | | | | | |
| k = 0.60 | 72 | 64 | 58 | 72 | 63 | 58 | 71 | 63 | 58 | 53 |
| 0.80 | 82 | 73 | 68 | 81 | 73 | 68 | 80 | 72 | 67 | 62 |
| 1.00 | 89 | 81 | 76 | 88 | 80 | 75 | 86 | 81 | 75 | 70 |
| 1.25 | 95 | 87 | 82 | 93 | 87 | 82 | 91 | 85 | 81 | 76 |
| 1.50 | 99 | 92 | 87 | 97 | 91 | 86 | 95 | 89 | 85 | 80 |
| 2.00 | 103 | 97 | 93 | 102 | 96 | 92 | 99 | 94 | 91 | 84 |
| 2.50 | 106 | 100 | 96 | 104 | 99 | 95 | 101 | 97 | 93 | 86 |
| 3.00 | 108 | 103 | 99 | 106 | 102 | 98 | 102 | 99 | 96 | 89 |
| 4.00 | 111 | 107 | 104 | 108 | 105 | 102 | 105 | 102 | 99 | 92 |
| 5.00 | 112 | 109 | 106 | 110 | 107 | 105 | 106 | 104 | 101 | 93 |
| ROOM INDEX | UF(total) | | | | | | | | | Direct |
| According to DIN EN 13032-2 2004 | | | | Suspended | | | | | SHRNOM = 1.25 | |

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

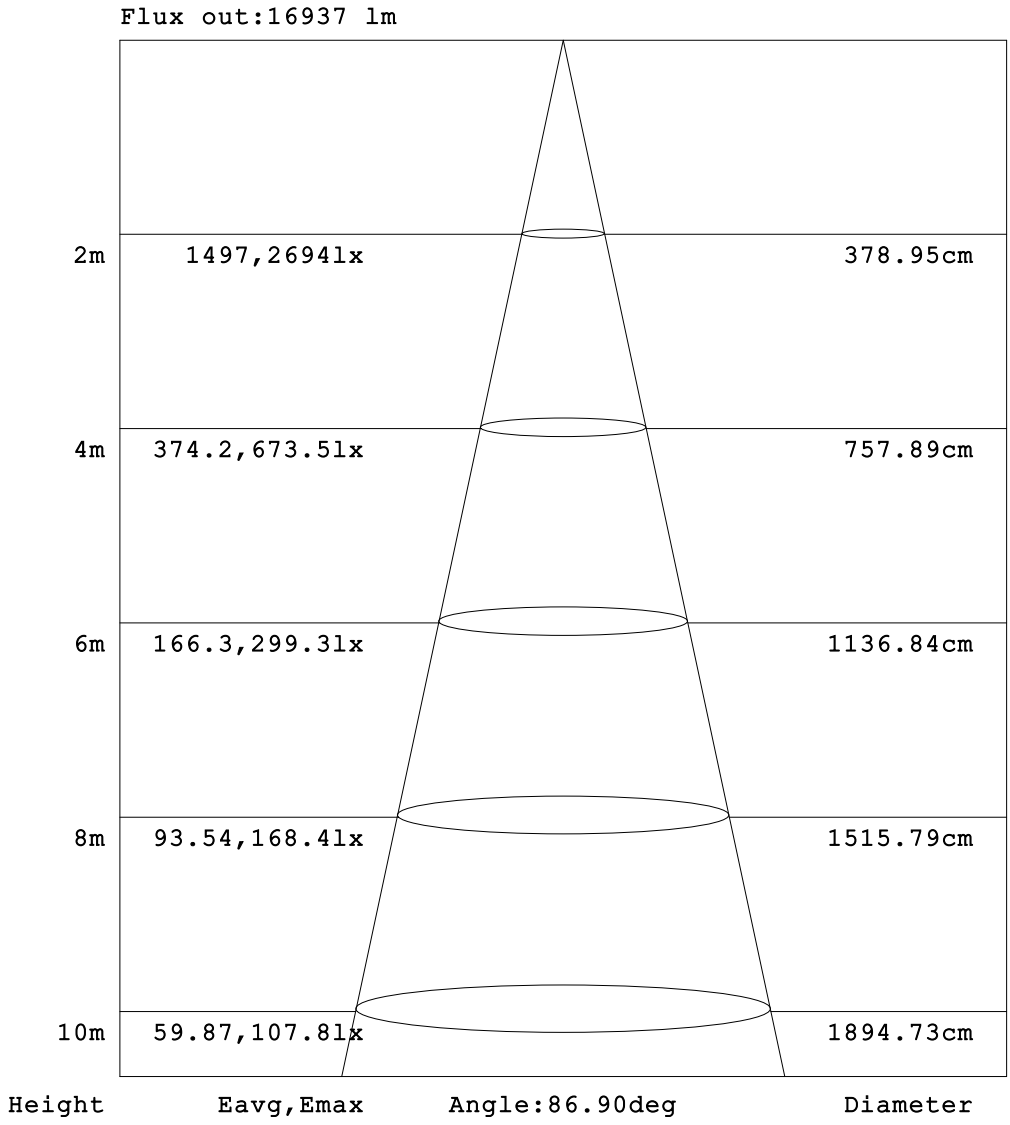
## ISOCANDELA DIAGRAM




C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

## AAI Figure

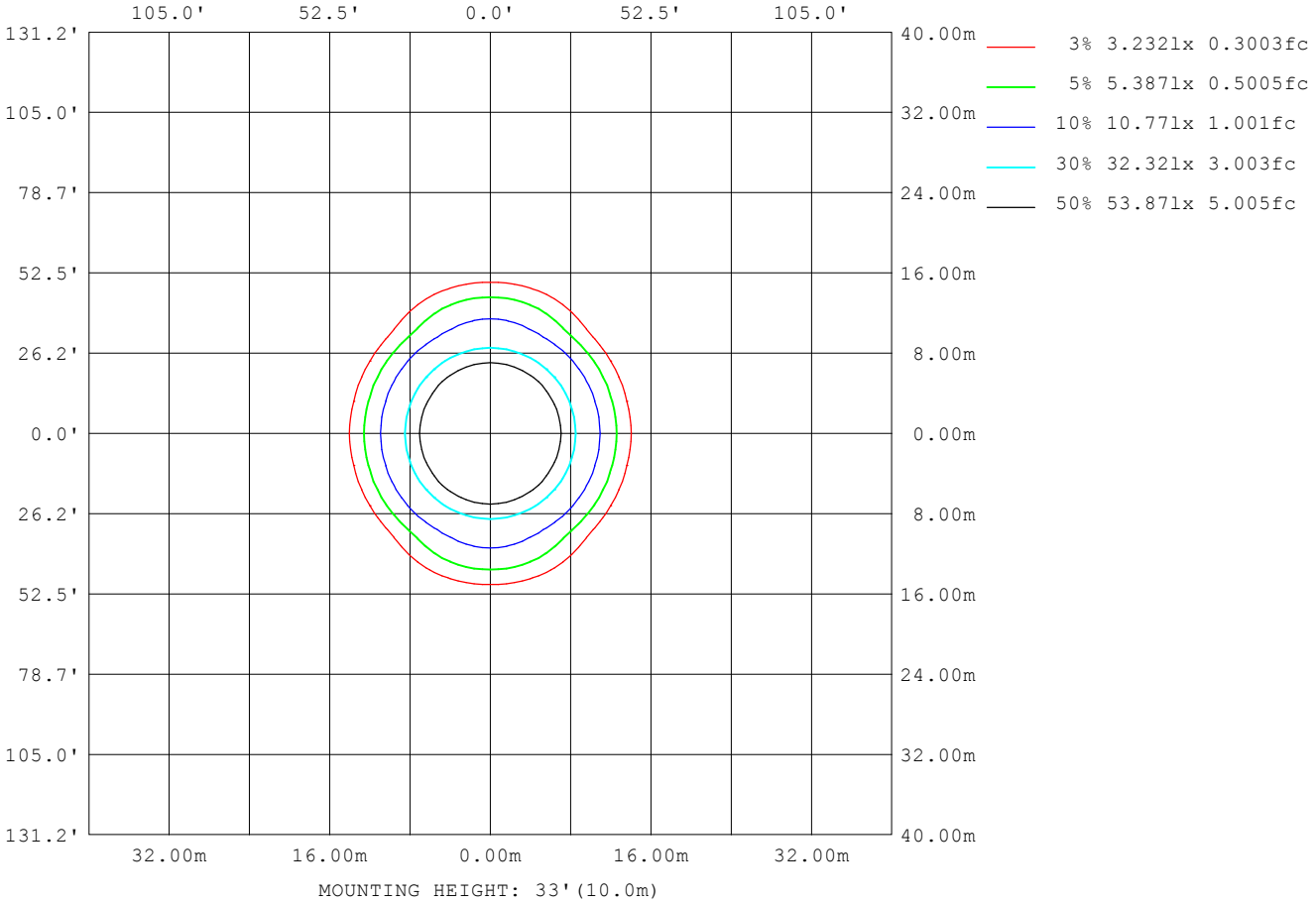



**Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.**

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

## ISOLUX DIAGRAM




C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

## LED Avg.L Report

| Test:U:229.9V I:0.8024A P:178.3W PF:0.9663 Lamp Flux:21883.5x1 lm | | |
|---|---|---|
| NAME: LHB01-180 | TYPE:180W | WEIGHT: |
| SPEC.:4000K Ra80 90DEG L02805 | DIM.: 0.718*0.275*0.102 | SERIAL No.: |
| MFR.: | SUR.:0.255*0.69 | Shielding Angle: |

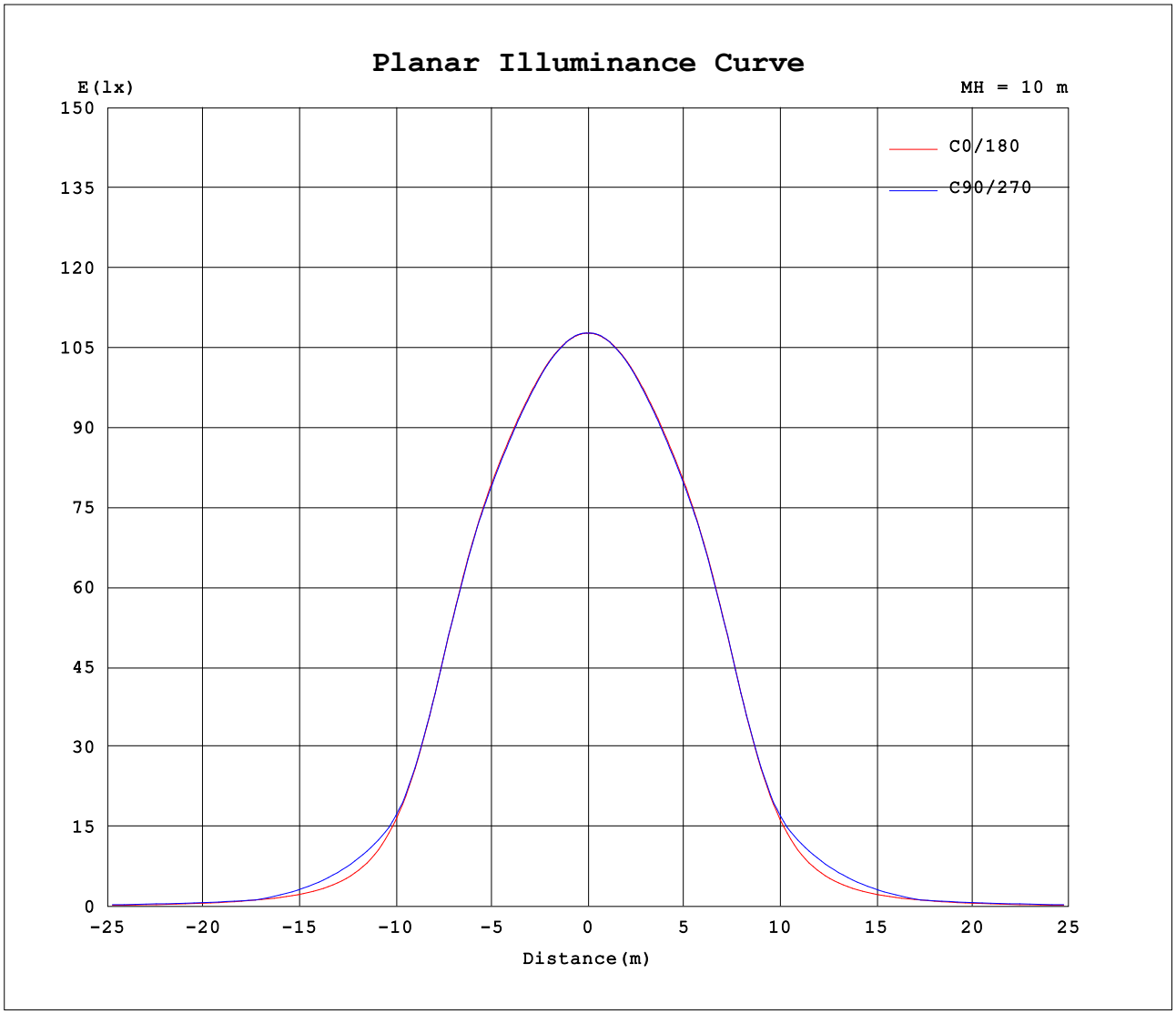
| AvgL | cd/m2 |
|---|---|
| L_0~180(65)av | 9194 |
| L_0~180(75)av | 6197 |
| L_0~180(85)av | 1355 |
| L_90~270(65)av | 11525 |
| L_90~270(75)av | 11355 |
| L_90~270(85)av | 11554 |
| L_45(65)av | 9649 |
| L_45(75)av | 7636 |
| L_45(85)av | 7604 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

## Planar Illuminance Curve




C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1 UNIT: ×10cd

| C(DEG) / γ (DEG) | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 |
| 5 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 |
| 10 | 1085 | 1086 | 1086 | 1086 | 1086 | 1086 | 1086 | 1086 | 1086 | 1085 | 1085 | 1085 | 1085 | 1085 | 1085 | 1084 | 1084 | 1084 | 1084 |
| 15 | 1094 | 1094 | 1095 | 1095 | 1095 | 1094 | 1094 | 1094 | 1094 | 1094 | 1093 | 1093 | 1093 | 1092 | 1092 | 1091 | 1091 | 1091 | 1091 |
| 20 | 1104 | 1105 | 1105 | 1105 | 1104 | 1104 | 1104 | 1104 | 1103 | 1103 | 1102 | 1102 | 1101 | 1101 | 1100 | 1100 | 1100 | 1100 | 1099 |
| 25 | 1114 | 1113 | 1113 | 1113 | 1112 | 1111 | 1111 | 1111 | 1110 | 1108 | 1107 | 1107 | 1108 | 1108 | 1109 | 1108 | 1108 | 1108 | 1108 |
| 30 | 1099 | 1096 | 1096 | 1097 | 1093 | 1094 | 1098 | 1088 | 1086 | 1091 | 1098 | 1096 | 1095 | 1094 | 1094 | 1095 | 1096 | 1097 | 1098 |
| 35 | 996 | 988 | 991 | 986 | 986 | 992 | 979 | 982 | 996 | 993 | 994 | 997 | 993 | 992 | 991 | 993 | 992 | 993 | 993 |
| 40 | 753 | 743 | 752 | 742 | 752 | 742 | 746 | 751 | 751 | 752 | 752 | 753 | 755 | 754 | 754 | 754 | 755 | 756 | 756 |
| 45 | 463 | 457 | 459 | 459 | 461 | 462 | 463 | 463 | 465 | 466 | 467 | 469 | 469 | 468 | 471 | 472 | 479 | 484 | 485 |
| 50 | 261 | 258 | 258 | 260 | 260 | 261 | 262 | 262 | 264 | 264 | 264 | 268 | 277 | 296 | 314 | 328 | 339 | 345 | 347 |
| 55 | 156 | 155 | 155 | 155 | 155 | 155 | 156 | 157 | 157 | 160 | 169 | 182 | 193 | 204 | 213 | 219 | 222 | 224 | 225 |
| 60 | 101 | 101 | 100 | 100 | 100 | 100 | 100 | 101 | 105 | 110 | 115 | 119 | 121 | 121 | 118 | 113 | 108 | 104 | 103 |
| 65 | 68.4 | 67.7 | 67.0 | 67.0 | 66.9 | 67.0 | 67.9 | 69.7 | 71.2 | 71.8 | 70.4 | 68.3 | 71.9 | 75.5 | 78.8 | 81.7 | 83.9 | 85.2 | 85.7 |
| 70 | 45.9 | 44.8 | 44.3 | 44.2 | 44.4 | 45.0 | 45.4 | 45.3 | 44.7 | 47.5 | 50.5 | 53.6 | 56.7 | 59.8 | 62.7 | 65.2 | 67.1 | 68.3 | 68.7 |
| 75 | 28.2 | 27.4 | 27.1 | 27.2 | 27.8 | 28.0 | 28.5 | 30.5 | 32.5 | 34.8 | 37.2 | 39.7 | 42.2 | 44.6 | 46.9 | 48.9 | 50.4 | 51.4 | 51.7 |
| 80 | 9.13 | 9.90 | 12.0 | 14.3 | 15.6 | 17.0 | 18.4 | 19.9 | 21.4 | 22.9 | 24.6 | 26.3 | 28.1 | 29.8 | 31.4 | 32.8 | 33.8 | 34.5 | 34.7 |
| 85 | 2.08 | 2.51 | 3.50 | 5.82 | 7.67 | 8.53 | 9.31 | 10.1 | 10.9 | 11.7 | 12.5 | 13.4 | 14.3 | 15.2 | 16.0 | 16.7 | 17.3 | 17.6 | 17.7 |
| 90 | 0.35 | 0.71 | 0.78 | 0.77 | 0.75 | 0.74 | 0.73 | 0.72 | 0.71 | 0.71 | 0.72 | 0.72 | 0.72 | 0.73 | 0.73 | 0.73 | 0.73 | 0.72 | 0.72 |

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2 UNIT: ×10cd

| C(DEG) / γ (DEG) | 95 | 100 | 105 | 110 | 115 | 120 | 125 | 130 | 135 | 140 | 145 | 150 | 155 | 160 | 165 | 170 | 175 | 180 | 185 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 |
| 5 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 |
| 10 | 1084 | 1084 | 1084 | 1085 | 1085 | 1085 | 1085 | 1085 | 1085 | 1086 | 1086 | 1086 | 1086 | 1086 | 1086 | 1086 | 1086 | 1085 | 1086 |
| 15 | 1091 | 1091 | 1091 | 1092 | 1092 | 1093 | 1093 | 1093 | 1094 | 1094 | 1094 | 1094 | 1094 | 1095 | 1095 | 1095 | 1094 | 1094 | 1094 |
| 20 | 1100 | 1100 | 1100 | 1100 | 1101 | 1101 | 1102 | 1102 | 1103 | 1103 | 1104 | 1104 | 1104 | 1104 | 1105 | 1105 | 1105 | 1104 | 1105 |
| 25 | 1108 | 1108 | 1108 | 1109 | 1108 | 1108 | 1107 | 1107 | 1108 | 1110 | 1111 | 1111 | 1111 | 1112 | 1113 | 1113 | 1113 | 1114 | 1113 |
| 30 | 1097 | 1096 | 1095 | 1094 | 1094 | 1095 | 1096 | 1098 | 1091 | 1086 | 1088 | 1098 | 1094 | 1093 | 1097 | 1096 | 1096 | 1099 | 1096 |
| 35 | 993 | 992 | 993 | 991 | 992 | 993 | 997 | 994 | 993 | 996 | 982 | 979 | 992 | 986 | 986 | 991 | 988 | 996 | 988 |
| 40 | 756 | 755 | 754 | 754 | 754 | 755 | 753 | 752 | 752 | 751 | 751 | 746 | 742 | 752 | 742 | 752 | 743 | 753 | 743 |
| 45 | 484 | 479 | 472 | 471 | 468 | 469 | 469 | 467 | 466 | 465 | 463 | 463 | 462 | 461 | 459 | 459 | 457 | 463 | 457 |
| 50 | 345 | 339 | 328 | 314 | 296 | 277 | 268 | 264 | 264 | 264 | 262 | 262 | 261 | 260 | 260 | 258 | 258 | 261 | 258 |
| 55 | 224 | 222 | 219 | 213 | 204 | 193 | 182 | 169 | 160 | 157 | 157 | 156 | 155 | 155 | 155 | 155 | 155 | 156 | 155 |
| 60 | 104 | 108 | 113 | 118 | 121 | 121 | 119 | 115 | 110 | 105 | 101 | 100 | 100 | 100 | 100 | 100 | 101 | 101 | 101 |
| 65 | 85.2 | 83.9 | 81.7 | 78.8 | 75.5 | 71.9 | 68.3 | 70.4 | 71.8 | 71.2 | 69.7 | 67.9 | 67.0 | 66.9 | 67.0 | 67.0 | 67.7 | 68.4 | 67.7 |
| 70 | 68.3 | 67.1 | 65.2 | 62.7 | 59.8 | 56.7 | 53.6 | 50.5 | 47.5 | 44.7 | 45.3 | 45.4 | 45.0 | 44.4 | 44.2 | 44.3 | 44.8 | 45.9 | 44.8 |
| 75 | 51.4 | 50.4 | 48.9 | 46.9 | 44.6 | 42.2 | 39.7 | 37.2 | 34.8 | 32.5 | 30.5 | 28.5 | 28.0 | 27.8 | 27.2 | 27.1 | 27.4 | 28.2 | 27.4 |
| 80 | 34.5 | 33.8 | 32.8 | 31.4 | 29.8 | 28.1 | 26.3 | 24.6 | 22.9 | 21.4 | 19.9 | 18.4 | 17.0 | 15.6 | 14.3 | 12.0 | 9.90 | 9.13 | 9.90 |
| 85 | 17.6 | 17.3 | 16.7 | 16.0 | 15.2 | 14.3 | 13.4 | 12.5 | 11.7 | 10.9 | 10.1 | 9.31 | 8.53 | 7.67 | 5.82 | 3.50 | 2.51 | 2.08 | 2.51 |
| 90 | 0.72 | 0.73 | 0.73 | 0.73 | 0.73 | 0.72 | 0.72 | 0.72 | 0.71 | 0.71 | 0.72 | 0.73 | 0.74 | 0.75 | 0.77 | 0.78 | 0.71 | 0.35 | 0.71 |

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Table--3 UNIT: ×10cd

| C(DEG) / γ (DEG) | 190 | 195 | 200 | 205 | 210 | 215 | 220 | 225 | 230 | 235 | 240 | 245 | 250 | 255 | 260 | 265 | 270 | 275 | 280 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 |
| 5 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 |
| 10 | 1086 | 1086 | 1086 | 1086 | 1086 | 1086 | 1086 | 1085 | 1085 | 1085 | 1085 | 1085 | 1085 | 1084 | 1084 | 1084 | 1084 | 1084 | 1084 |
| 15 | 1095 | 1095 | 1095 | 1094 | 1094 | 1094 | 1094 | 1094 | 1093 | 1093 | 1093 | 1092 | 1092 | 1091 | 1091 | 1091 | 1091 | 1091 | 1091 |
| 20 | 1105 | 1105 | 1104 | 1104 | 1104 | 1104 | 1103 | 1103 | 1102 | 1102 | 1101 | 1101 | 1100 | 1100 | 1100 | 1100 | 1099 | 1100 | 1100 |
| 25 | 1113 | 1113 | 1112 | 1111 | 1111 | 1111 | 1110 | 1108 | 1107 | 1107 | 1108 | 1108 | 1109 | 1108 | 1108 | 1108 | 1108 | 1108 | 1108 |
| 30 | 1096 | 1097 | 1093 | 1094 | 1098 | 1088 | 1086 | 1091 | 1098 | 1096 | 1095 | 1094 | 1094 | 1095 | 1096 | 1097 | 1098 | 1097 | 1096 |
| 35 | 991 | 986 | 986 | 992 | 979 | 982 | 996 | 993 | 994 | 997 | 993 | 992 | 991 | 993 | 992 | 993 | 993 | 993 | 992 |
| 40 | 752 | 742 | 752 | 742 | 746 | 751 | 751 | 752 | 752 | 753 | 755 | 754 | 754 | 754 | 755 | 756 | 756 | 756 | 755 |
| 45 | 459 | 459 | 461 | 462 | 463 | 463 | 465 | 466 | 467 | 469 | 469 | 468 | 471 | 472 | 479 | 484 | 485 | 484 | 479 |
| 50 | 258 | 260 | 260 | 261 | 262 | 262 | 264 | 264 | 264 | 268 | 277 | 296 | 314 | 328 | 339 | 345 | 347 | 345 | 339 |
| 55 | 155 | 155 | 155 | 155 | 156 | 157 | 157 | 160 | 169 | 182 | 193 | 204 | 213 | 219 | 222 | 224 | 225 | 224 | 222 |
| 60 | 100 | 100 | 100 | 100 | 100 | 101 | 105 | 110 | 115 | 119 | 121 | 121 | 118 | 113 | 108 | 104 | 103 | 104 | 108 |
| 65 | 67.0 | 67.0 | 66.9 | 67.0 | 67.9 | 69.7 | 71.2 | 71.8 | 70.4 | 68.3 | 71.9 | 75.5 | 78.8 | 81.7 | 83.9 | 85.2 | 85.7 | 85.2 | 83.9 |
| 70 | 44.3 | 44.2 | 44.4 | 45.0 | 45.4 | 45.3 | 44.7 | 47.5 | 50.5 | 53.6 | 56.7 | 59.8 | 62.7 | 65.2 | 67.1 | 68.3 | 68.7 | 68.3 | 67.1 |
| 75 | 27.1 | 27.2 | 27.8 | 28.0 | 28.5 | 30.5 | 32.5 | 34.8 | 37.2 | 39.7 | 42.2 | 44.6 | 46.9 | 48.9 | 50.4 | 51.4 | 51.7 | 51.4 | 50.4 |
| 80 | 12.0 | 14.3 | 15.6 | 17.0 | 18.4 | 19.9 | 21.4 | 22.9 | 24.6 | 26.3 | 28.1 | 29.8 | 31.4 | 32.8 | 33.8 | 34.5 | 34.7 | 34.5 | 33.8 |
| 85 | 3.50 | 5.82 | 7.67 | 8.53 | 9.31 | 10.1 | 10.9 | 11.7 | 12.5 | 13.4 | 14.3 | 15.2 | 16.0 | 16.7 | 17.3 | 17.6 | 17.7 | 17.6 | 17.3 |
| 90 | 0.78 | 0.77 | 0.75 | 0.74 | 0.73 | 0.72 | 0.71 | 0.71 | 0.72 | 0.72 | 0.72 | 0.73 | 0.73 | 0.73 | 0.73 | 0.72 | 0.72 | 0.72 | 0.73 |

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Table--4 UNIT: ×10cd

| C(DEG) / γ (DEG) | 285 | 290 | 295 | 300 | 305 | 310 | 315 | 320 | 325 | 330 | 335 | 340 | 345 | 350 | 355 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | 1077 | | | | |
| 5 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | | | | |
| 10 | 1084 | 1085 | 1085 | 1085 | 1085 | 1085 | 1085 | 1086 | 1086 | 1086 | 1086 | 1086 | 1086 | 1086 | 1086 | | | | |
| 15 | 1091 | 1092 | 1092 | 1093 | 1093 | 1093 | 1094 | 1094 | 1094 | 1094 | 1094 | 1095 | 1095 | 1095 | 1094 | | | | |
| 20 | 1100 | 1100 | 1101 | 1101 | 1102 | 1102 | 1103 | 1103 | 1104 | 1104 | 1104 | 1104 | 1105 | 1105 | 1105 | | | | |
| 25 | 1108 | 1109 | 1108 | 1108 | 1107 | 1107 | 1108 | 1110 | 1111 | 1111 | 1111 | 1112 | 1113 | 1113 | 1113 | | | | |
| 30 | 1095 | 1094 | 1094 | 1095 | 1096 | 1098 | 1091 | 1086 | 1088 | 1098 | 1094 | 1093 | 1097 | 1096 | 1096 | | | | |
| 35 | 993 | 991 | 992 | 993 | 997 | 994 | 993 | 996 | 982 | 979 | 992 | 986 | 986 | 991 | 988 | | | | |
| 40 | 754 | 754 | 754 | 755 | 753 | 752 | 752 | 751 | 751 | 746 | 742 | 752 | 742 | 752 | 743 | | | | |
| 45 | 472 | 471 | 468 | 469 | 469 | 467 | 466 | 465 | 463 | 463 | 462 | 461 | 459 | 459 | 457 | | | | |
| 50 | 328 | 314 | 296 | 277 | 268 | 264 | 264 | 264 | 262 | 262 | 261 | 260 | 260 | 258 | 258 | | | | |
| 55 | 219 | 213 | 204 | 193 | 182 | 169 | 160 | 157 | 157 | 156 | 155 | 155 | 155 | 155 | 155 | | | | |
| 60 | 113 | 118 | 121 | 121 | 119 | 115 | 110 | 105 | 101 | 100 | 100 | 100 | 100 | 100 | 101 | | | | |
| 65 | 81.7 | 78.8 | 75.5 | 71.9 | 68.3 | 70.4 | 71.8 | 71.2 | 69.7 | 67.9 | 67.0 | 66.9 | 67.0 | 67.0 | 67.7 | | | | |
| 70 | 65.2 | 62.7 | 59.8 | 56.7 | 53.6 | 50.5 | 47.5 | 44.7 | 45.3 | 45.4 | 45.0 | 44.4 | 44.2 | 44.3 | 44.8 | | | | |
| 75 | 48.9 | 46.9 | 44.6 | 42.2 | 39.7 | 37.2 | 34.8 | 32.5 | 30.5 | 28.5 | 28.0 | 27.8 | 27.2 | 27.1 | 27.4 | | | | |
| 80 | 32.8 | 31.4 | 29.8 | 28.1 | 26.3 | 24.6 | 22.9 | 21.4 | 19.9 | 18.4 | 17.0 | 15.6 | 14.3 | 12.0 | 9.90 | | | | |
| 85 | 16.7 | 16.0 | 15.2 | 14.3 | 13.4 | 12.5 | 11.7 | 10.9 | 10.1 | 9.31 | 8.53 | 7.67 | 5.82 | 3.50 | 2.51 | | | | |
| 90 | 0.73 | 0.73 | 0.73 | 0.72 | 0.72 | 0.72 | 0.71 | 0.71 | 0.72 | 0.73 | 0.74 | 0.75 | 0.77 | 0.78 | 0.71 | | | | |

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2017-03-24

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:9.500m [K=1.0000]
Remarks: