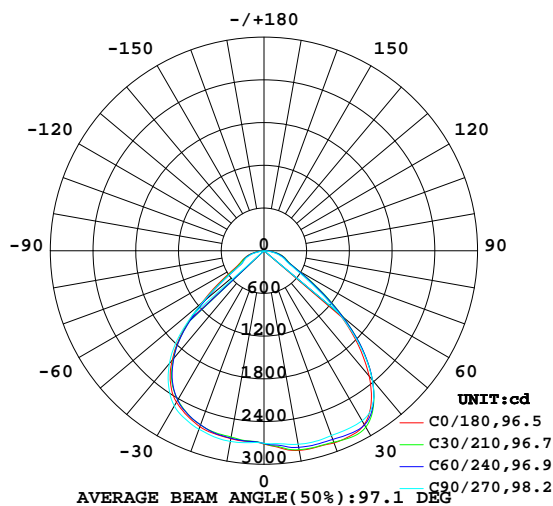


LUMINAIRE PHOTOMETRIC TEST REPORT

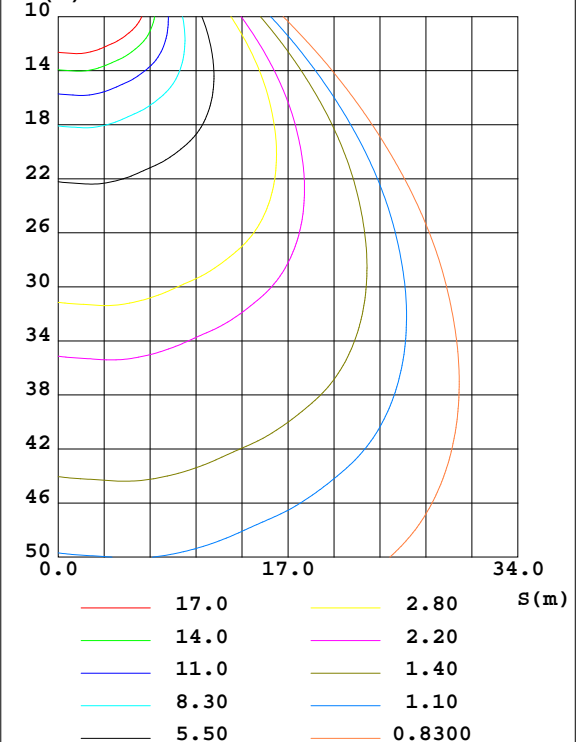
| | | |
|----------------|----------------|------------------|
| NAME: LED灯 | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: EVERFINE | SUR.:21cm*16cm | Shielding Angle: |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 130.13 lm/W | | | |
|------------------|--------------|-----------------------------------|--------|------------------------|----------|
| MODEL | ZGSM-GCD50H5 | Imax(cd) | 2893 | S/MH(C0/180) | 1.33 |
| NOMINAL POWER(W) | 50 | LOR(%) | 100.1 | S/MH(C90/270) | 1.35 |
| RATED VOLTAGE(V) | 220 | TOTAL FLUX(lm) | 6506.3 | η UP,DN(C0-180) | 0.0,52.4 |
| NOMINAL FLUX(lm) | 6500 | CIE CLASS | DIRECT | η UP,DN(C180-360) | 0.0,47.7 |
| LAMPS INSIDE | 1 | η up(%) | 0.0 | CIBSE SHR NOM | 1.25 |
| TEST VOLTAGE(V) | 220.1 | η down(%) | 100.1 | CIBSE SHR MAX | 1.35 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.480m [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 | 2846 | 2823 | 2761 | 2692 | 2679 | 2657 | 2719 | 2794 | 0- 10 | 260.8 | 260.8 | 4.01,4.01 |
| 20 | 2874 | 2839 | 2762 | 2683 | 2631 | 2593 | 2668 | 2783 | 10- 20 | 777.1 | 1038 | 16,16 |
| 30 | 2817 | 2846 | 2756 | 2605 | 2458 | 2411 | 2519 | 2679 | 20- 30 | 1246 | 2284 | 35.1,35.1 |
| 40 | 2297 | 2382 | 2369 | 2184 | 2006 | 1965 | 2068 | 2149 | 30- 40 | 1533 | 3817 | 58.7,58.7 |
| 50 | 1387 | 1469 | 1383 | 1235 | 1149 | 1085 | 1130 | 1228 | 40- 50 | 1345 | 5162 | 79.3,79.4 |
| 60 | 546.7 | 568.4 | 490.4 | 442.2 | 443.0 | 379.8 | 363.7 | 438.5 | 50- 60 | 713.2 | 5875 | 90.3,90.4 |
| 70 | 315.7 | 317.9 | 281.1 | 287.0 | 282.7 | 267.3 | 243.4 | 283.4 | 60- 70 | 350.0 | 6225 | 95.7,95.8 |
| 80 | 153.6 | 174.4 | 131.2 | 134.6 | 111.9 | 106.9 | 20.69 | 135.9 | 70- 80 | 222.9 | 6448 | 99.1,99.2 |
| 90 | 12.13 | 13.66 | 2.716 | 5.584 | 5.722 | 4.143 | 1.261 | 6.908 | 80- 90 | 58.26 | 6506 | 100,100 |
| 100 | | | | | | | | | 90-100 | | | |
| 110 | | | | | | | | | 100-110 | | | |
| 120 | | | | | | | | | 110-120 | | | |
| 130 | | | | | | | | | 120-130 | | | |
| 140 | | | | | | | | | 130-140 | | | |
| 150 | | | | | | | | | 140-150 | | | |
| 160 | | | | | | | | | 150-160 | | | |
| 170 | | | | | | | | | 160-170 | | | |
| 180 | | | | | | | | | 170-180 | | | |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |

Conical surface Flux(90deg): 4550.4 lm

%lum = 69.9%

%lamp = 70.0%

Conical surface Flux(120deg): 5875.1 lm

%lum = 90.3%

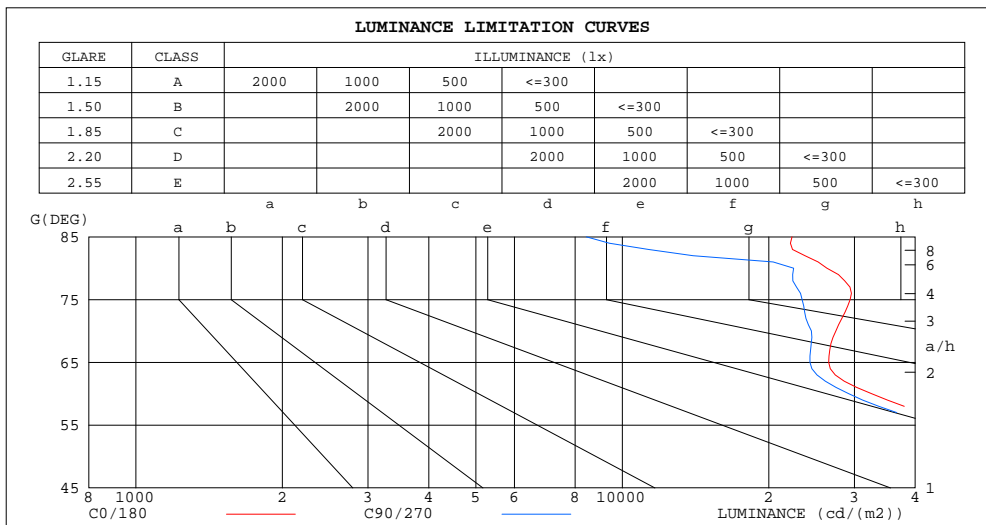
%lamp = 90.4%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.480m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

| | | |
|----------------|----------------|------------------|
| NAME: LED灯 | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: EVERFINE | SUR.:21cm*16cm | Shielding Angle: |



| LUMINANCE cd/(m2) | | |
|-------------------|--------|---------|
| G(DEG) | C0/180 | C90/270 |
| 85 | 22323 | 8433 |
| 80 | 26329 | 22493 |
| 75 | 29400 | 23426 |
| 70 | 27471 | 24463 |
| 65 | 26564 | 24300 |
| 60 | 32542 | 29193 |
| 55 | 47615 | 43693 |
| 50 | 64201 | 64036 |
| 45 | 78794 | 81173 |

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.480m [K=1.0000]
Remarks:

WEC AND CCEC

| | | |
|----------------|----------------|------------------|
| NAME: LED灯 | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: EVERFINE | SUR.:21cm*16cm | Shielding Angle: |

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 | |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|--|
| ρw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 | |
| ρfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 | |
| RCR | RCR:Room Cavity Ratio | | | | | | Wall Exitance Coefficients(WEC) | | | | | | | | | | |
| 0.0 | | | | | | | | | | | | | | | | | |
| 1.0 | .257 | .146 | .046 | .250 | .143 | .045 | .237 | .136 | .043 | .225 | .130 | .042 | .214 | .124 | .040 | | |
| 2.0 | .246 | .135 | .041 | .240 | .132 | .041 | .229 | .127 | .040 | .219 | .123 | .038 | .209 | .118 | .037 | | |
| 3.0 | .232 | .124 | .037 | .227 | .122 | .037 | .217 | .118 | .036 | .208 | .114 | .035 | .200 | .110 | .034 | | |
| 4.0 | .218 | .113 | .033 | .214 | .112 | .033 | .205 | .109 | .032 | .197 | .106 | .032 | .189 | .103 | .031 | | |
| 5.0 | .205 | .104 | .030 | .201 | .103 | .030 | .193 | .101 | .030 | .186 | .098 | .029 | .179 | .096 | .029 | | |
| 6.0 | .193 | .097 | .028 | .189 | .095 | .027 | .182 | .093 | .027 | .176 | .091 | .027 | .170 | .089 | .027 | | |
| 7.0 | .181 | .090 | .025 | .178 | .089 | .025 | .172 | .087 | .025 | .166 | .085 | .025 | .161 | .084 | .025 | | |
| 8.0 | .171 | .084 | .024 | .168 | .083 | .023 | .163 | .081 | .023 | .158 | .080 | .023 | .153 | .078 | .023 | | |
| 9.0 | .162 | .078 | .022 | .159 | .078 | .022 | .154 | .076 | .022 | .150 | .075 | .021 | .145 | .074 | .021 | | |
| 10.0 | .153 | .074 | .020 | .151 | .073 | .020 | .146 | .072 | .020 | .142 | .071 | .020 | .138 | .070 | .020 | | |

| 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 | .191 | .191 | .191 | .163 | .163 | .163 | .111 | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 | |
| 1.0 | .177 | .157 | .139 | .151 | .135 | .119 | .103 | .093 | .083 | .060 | .054 | .048 | .019 | .017 | .016 | |
| 2.0 | .166 | .132 | .104 | .142 | .114 | .090 | .098 | .079 | .062 | .056 | .046 | .037 | .018 | .015 | .012 | |
| 3.0 | .157 | .114 | .080 | .135 | .098 | .069 | .093 | .068 | .048 | .053 | .040 | .029 | .017 | .013 | .009 | |
| 4.0 | .149 | .100 | .063 | .128 | .087 | .055 | .088 | .060 | .039 | .051 | .035 | .023 | .016 | .012 | .007 | |
| 5.0 | .142 | .090 | .051 | .122 | .078 | .044 | .084 | .054 | .031 | .049 | .032 | .019 | .016 | .010 | .006 | |
| 6.0 | .135 | .081 | .042 | .116 | .070 | .037 | .080 | .049 | .026 | .047 | .029 | .015 | .015 | .009 | .005 | |
| 7.0 | .129 | .074 | .036 | .111 | .064 | .031 | .077 | .045 | .022 | .045 | .027 | .013 | .014 | .009 | .004 | |
| 8.0 | .123 | .068 | .031 | .106 | .059 | .027 | .073 | .042 | .019 | .043 | .025 | .011 | .014 | .008 | .004 | |
| 9.0 | .118 | .063 | .027 | .101 | .055 | .023 | .070 | .039 | .017 | .041 | .023 | .010 | .013 | .007 | .003 | |
| 10.0 | .112 | .059 | .024 | .097 | .051 | .021 | .067 | .036 | .015 | .039 | .021 | .009 | .013 | .007 | .003 | |

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.480m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

| | | | | | | | | | | | | | | |
|--|---------------|------|------|------|------------------|---------------|------|------|------|------------------|--|--|--|--|
| NAME: LED灯 | | | | | TYPE: | | | | | WEIGHT: | | | | |
| SPEC.: | | | | | DIM.: | | | | | SERIAL No.: | | | | |
| MFR.: EVERFINE | | | | | SUR.:21cm*16cm | | | | | 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 | 19.7 | 21.1 | 20.0 | 21.2 | 21.4 | 19.6 | 20.9 | 19.8 | 21.1 | 21.3 | | | | |
| 3H | 20.2 | 21.4 | 20.5 | 21.6 | 21.9 | 20.0 | 21.2 | 20.3 | 21.4 | 21.7 | | | | |
| 4H | 20.5 | 21.7 | 20.8 | 21.9 | 22.2 | 20.2 | 21.4 | 20.5 | 21.6 | 21.9 | | | | |
| 6H | 20.8 | 21.9 | 21.1 | 22.2 | 22.5 | 20.4 | 21.5 | 20.7 | 21.8 | 22.0 | | | | |
| 8H | 20.9 | 22.0 | 21.2 | 22.2 | 22.5 | 20.4 | 21.5 | 20.8 | 21.8 | 22.0 | | | | |
| 12H | 21.0 | 22.0 | 21.3 | 22.3 | 22.6 | 20.4 | 21.4 | 20.8 | 21.7 | 22.0 | | | | |
| 4H 2H | 19.8 | 21.0 | 20.1 | 21.2 | 21.4 | 19.7 | 20.9 | 20.0 | 21.1 | 21.3 | | | | |
| 3H | 20.5 | 21.5 | 20.8 | 21.8 | 22.1 | 20.3 | 21.3 | 20.6 | 21.6 | 21.9 | | | | |
| 4H | 21.0 | 21.9 | 21.4 | 22.2 | 22.6 | 20.7 | 21.6 | 21.1 | 21.9 | 22.3 | | | | |
| 6H | 21.5 | 22.3 | 21.9 | 22.7 | 23.0 | 21.0 | 21.8 | 21.4 | 22.2 | 22.5 | | | | |
| 8H | 21.7 | 22.4 | 22.1 | 22.8 | 23.2 | 21.1 | 21.9 | 21.5 | 22.2 | 22.6 | | | | |
| 12H | 21.8 | 22.5 | 22.2 | 22.8 | 23.2 | 21.1 | 21.8 | 21.5 | 22.2 | 22.6 | | | | |
| 8H 4H | 21.2 | 21.9 | 21.6 | 22.3 | 22.7 | 20.9 | 21.7 | 21.3 | 22.0 | 22.4 | | | | |
| 6H | 21.8 | 22.5 | 22.3 | 22.9 | 23.3 | 21.4 | 22.0 | 21.8 | 22.4 | 22.8 | | | | |
| 8H | 22.1 | 22.7 | 22.6 | 23.1 | 23.5 | 21.5 | 22.1 | 22.0 | 22.5 | 23.0 | | | | |
| 12H | 22.3 | 22.8 | 22.8 | 23.2 | 23.7 | 21.6 | 22.1 | 22.1 | 22.6 | 23.0 | | | | |
| 12H 4H | 21.2 | 21.9 | 21.6 | 22.2 | 22.6 | 20.9 | 21.6 | 21.3 | 22.0 | 22.4 | | | | |
| 6H | 21.9 | 22.4 | 22.3 | 22.9 | 23.3 | 21.5 | 22.0 | 21.9 | 22.4 | 22.9 | | | | |
| 8H | 22.2 | 22.7 | 22.7 | 23.1 | 23.6 | 21.7 | 22.1 | 22.1 | 22.6 | 23.0 | | | | |
| Variations with the observer position at spacings: | | | | | | | | | | | | | | |
| S = 1.0H | + 0.6 / - 0.7 | | | | | + 0.7 / - 0.9 | | | | | | | | |
| 1.5H | + 0.3 / - 0.4 | | | | | + 0.5 / - 0.5 | | | | | | | | |
| 2.0H | + 1.5 / - 1.3 | | | | | + 1.9 / - 1.5 | | | | | | | | |

CIE Pub.117, 6500 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 6.5)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.480m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

| | | |
|----------------|----------------|------------------|
| NAME: LED灯 | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: EVERFINE | SUR.:21cm*16cm | Shielding Angle: |

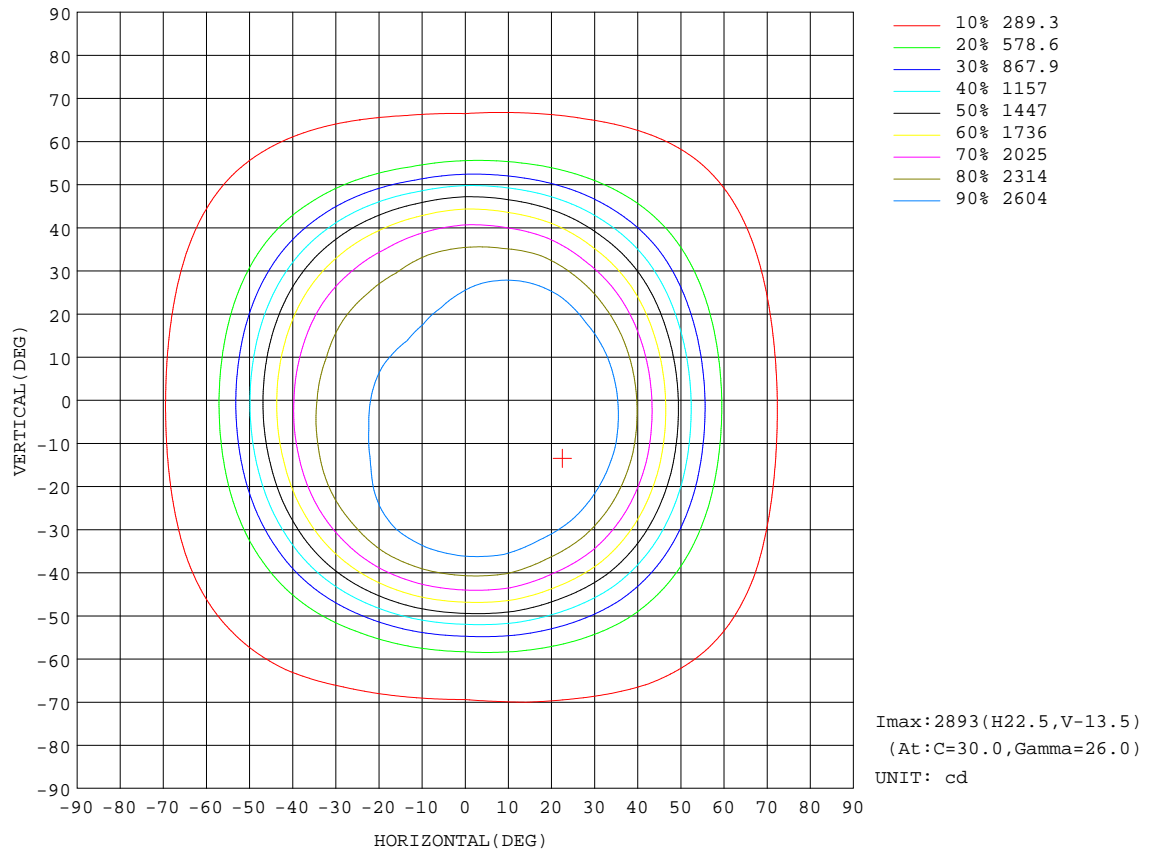
| REFLECTANCE | | | | | | | | | | |
|----------------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0 |
| ROOM INDEX | UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$ | | | | | | | | | |
| $k = 0.60$ | 66 | 55 | 49 | 65 | 55 | 49 | 64 | 55 | 49 | 43 |
| 0.80 | 76 | 66 | 59 | 75 | 65 | 59 | 73 | 65 | 59 | 53 |
| 1.00 | 84 | 75 | 68 | 83 | 74 | 68 | 81 | 75 | 68 | 62 |
| 1.25 | 90 | 82 | 76 | 89 | 81 | 75 | 87 | 80 | 75 | 68 |
| 1.50 | 95 | 87 | 81 | 93 | 86 | 80 | 90 | 84 | 79 | 73 |
| 2.00 | 100 | 93 | 88 | 99 | 92 | 87 | 95 | 90 | 86 | 79 |
| 2.50 | 103 | 97 | 92 | 101 | 96 | 91 | 98 | 93 | 89 | 82 |
| 3.00 | 106 | 100 | 96 | 104 | 99 | 95 | 100 | 96 | 93 | 85 |
| 4.00 | 109 | 104 | 101 | 107 | 103 | 99 | 103 | 99 | 97 | 88 |
| 5.00 | 111 | 107 | 104 | 109 | 105 | 102 | 104 | 101 | 99 | 90 |
| 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:25.3DEG
Operators:DAMIN
Test Date:2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.480m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

| | | |
|----------------|----------------|------------------|
| NAME: LED灯 | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: EVERFINE | SUR.:21cm*16cm | Shielding Angle: |

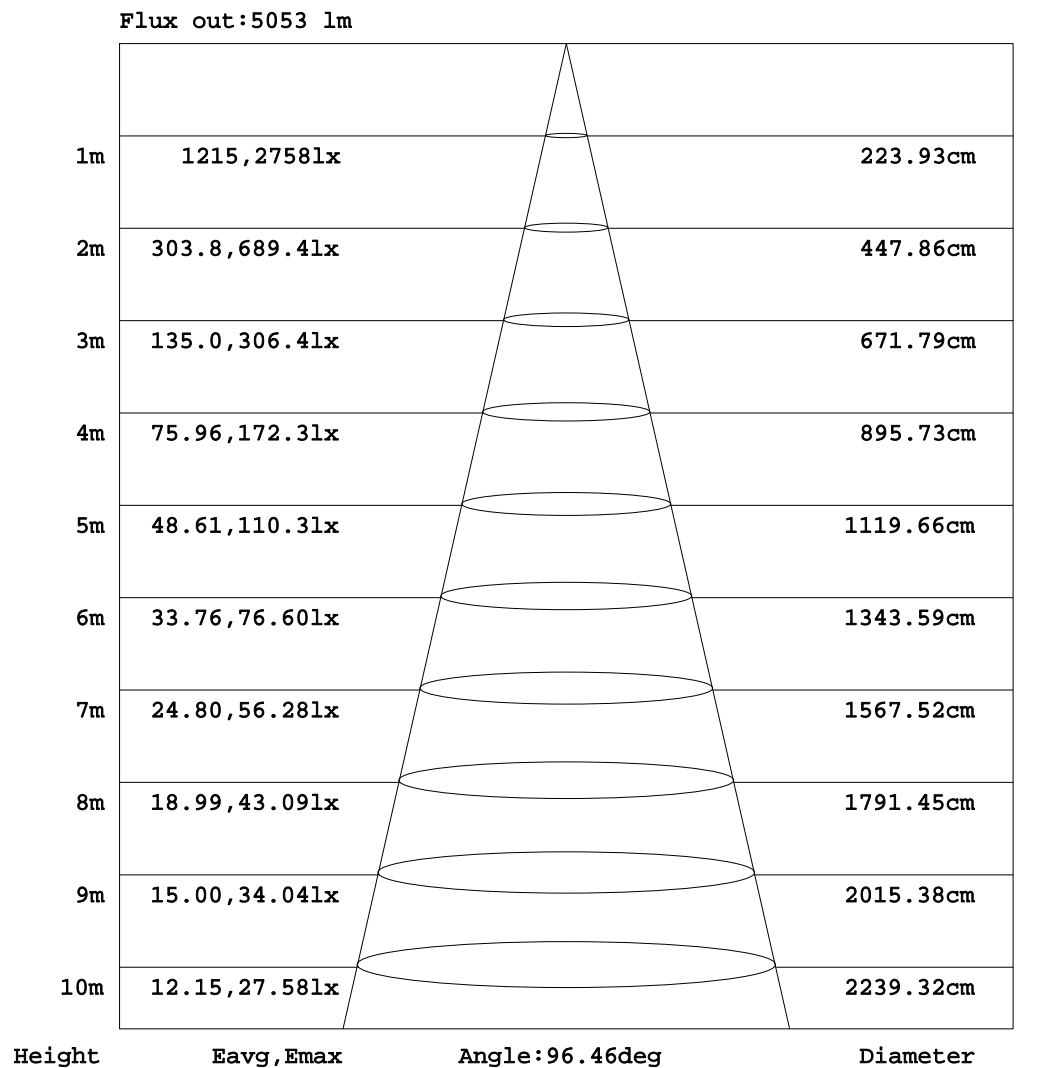


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.480m [K=1.0000]
Remarks:

AAI Figure

| | | |
|----------------|----------------|------------------|
| NAME: LED灯 | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: EVERFINE | SUR.:21cm*16cm | Shielding Angle: |

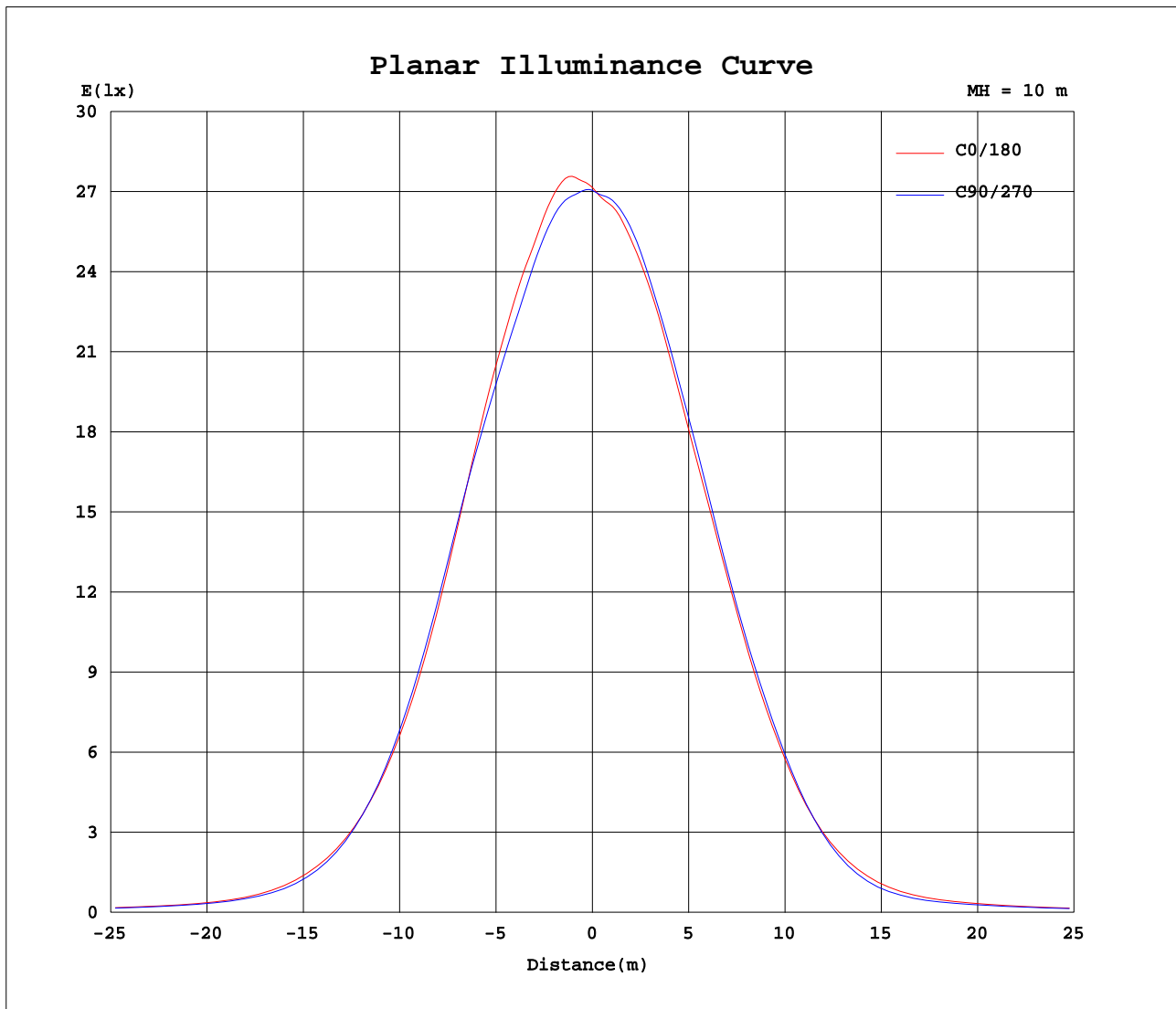


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.480m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.480m [K=1.0000]
Remarks:

E:\ies文件夹\H4 H5 H6 工厂灯嵌灯 3030 GOS\90\ZGSM-XXX50H5 90.GOS