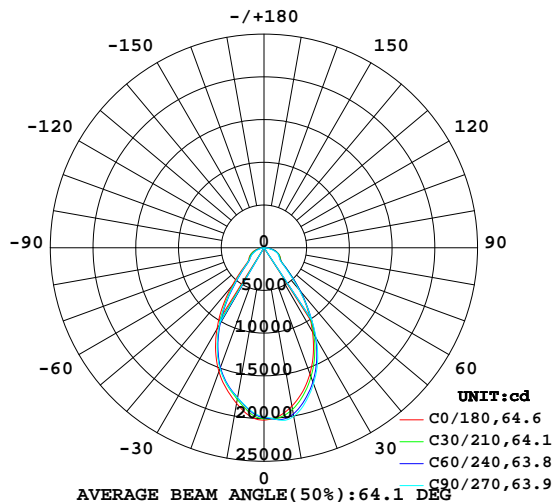


LUMINAIRE PHOTOMETRIC TEST REPORT

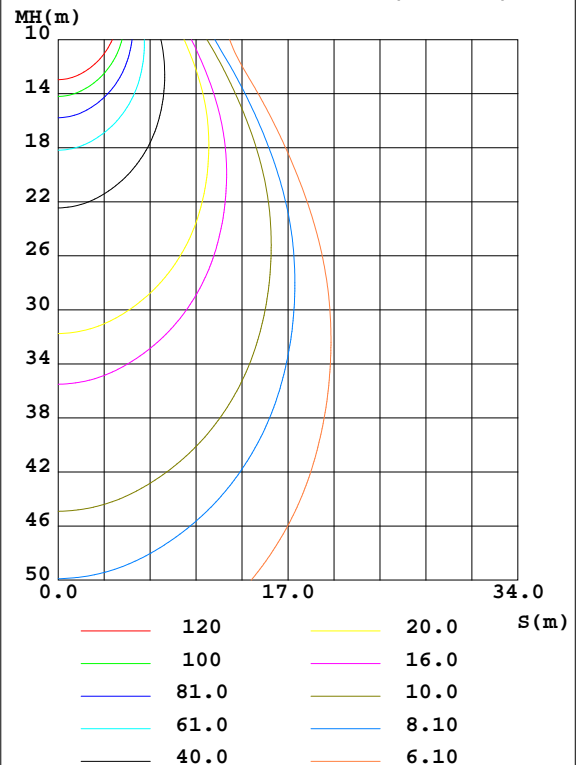
| | | |
|----------------|----------------|------------------|
| NAME: LED灯 | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: EVERFINE | SUR.:21cm*16cm | Shielding Angle: |

| DATA OF LAMP | | PHOTOMETRIC DATA | | | | Eff: 130.21 lm/W |
|------------------|---------------|------------------|--------|------------------------|----------|------------------|
| MODEL | ZGSM-GCD200H5 | Imax(cd) | 20340 | S/MH(C0/180) | 0.93 | |
| NOMINAL POWER(W) | 200 | LOR(%) | 100.2 | S/MH(C90/270) | 0.92 | |
| RATED VOLTAGE(V) | 220 | TOTAL FLUX(lm) | 26042 | η UP,DN(C0-180) | 0.0,53.1 | |
| NOMINAL FLUX(lm) | 26000 | CIE CLASS | DIRECT | η UP,DN(C180-360) | 0.0,47.0 | |
| LAMPS INSIDE | 1 | η up(%) | 0.0 | CIBSE SHR NOM | 1.00 | |
| TEST VOLTAGE(V) | 220.1 | η down(%) | 100.2 | CIBSE SHR MAX | 1.00 | |

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 | 1881 | 1949 | 2004 | 1889 | 1850 | 1786 | 1785 | 1800 | 0- 10 | 1836 | 1836 | 7.05,7.06 |
| 20 | 1572 | 1643 | 1695 | 1612 | 1544 | 1490 | 1505 | 1516 | 10- 20 | 4853 | 6689 | 25.7,25.7 |
| 30 | 1136 | 1193 | 1222 | 1147 | 1104 | 1026 | 1044 | 1059 | 20- 30 | 6201 | 12890 | 49.5,49.6 |
| 40 | 651.4 | 671.7 | 637.8 | 598.8 | 585.1 | 492.2 | 508.0 | 549.1 | 30- 40 | 5256 | 18146 | 69.7,69.8 |
| 50 | 277.1 | 288.1 | 270.8 | 244.3 | 243.7 | 226.2 | 229.9 | 245.9 | 40- 50 | 2962 | 21109 | 81.1,81.2 |
| 60 | 220.4 | 214.0 | 204.7 | 188.9 | 192.6 | 179.8 | 166.3 | 195.7 | 50- 60 | 1946 | 23054 | 88.5,88.7 |
| 70 | 166.7 | 166.3 | 153.0 | 138.5 | 135.9 | 112.1 | 96.35 | 130.0 | 60- 70 | 1647 | 24701 | 94.9,95 |
| 80 | 75.60 | 90.69 | 63.28 | 67.40 | 52.01 | 39.83 | 10.62 | 50.95 | 70- 80 | 1046 | 25747 | 98.9,99 |
| 90 | 6.636 | 10.91 | 1.811 | 3.759 | 2.781 | 1.639 | 0.5714 | 2.609 | 80- 90 | 294.6 | 26042 | 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:×10cd | | | | | | | | | UNIT:lm | | |

Conical surface Flux(90deg): 19885 lm

%lum = 76.4%

%lamp = 76.5%

Conical surface Flux(120deg): 23054 lm

%lum = 88.5%

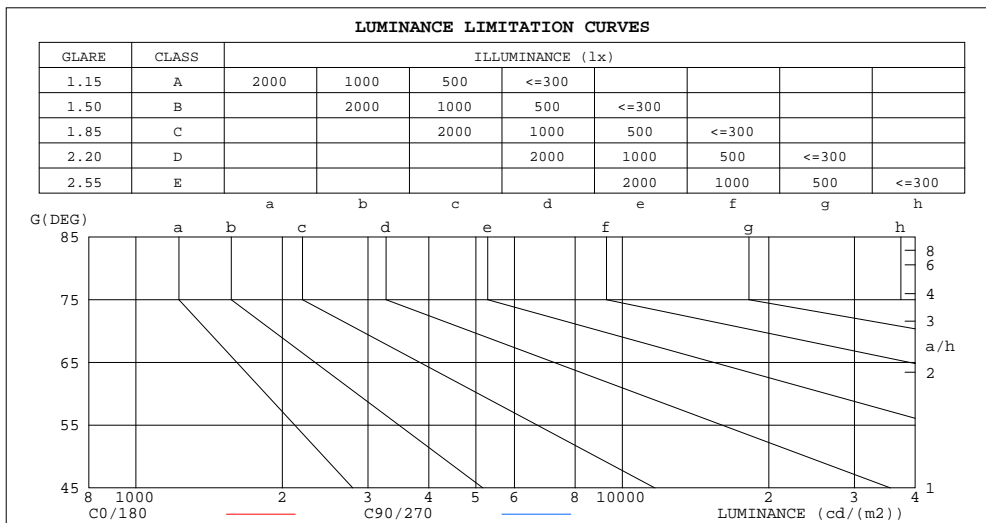
%lamp = 88.7%

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 | 113659 | 45829 |
| 80 | 129580 | 108454 |
| 75 | 151792 | 122664 |
| 70 | 145081 | 133150 |
| 65 | 139211 | 130082 |
| 60 | 131211 | 121868 |
| 55 | 124276 | 115839 |
| 50 | 128284 | 125398 |
| 45 | 179438 | 169457 |

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 | .247 | .140 | .044 | .240 | .137 | .043 | .227 | .130 | .042 | .215 | .124 | .040 | .204 | .118 | .038 | | |
| 2.0 | .232 | .127 | .039 | .227 | .125 | .038 | .215 | .120 | .037 | .205 | .115 | .036 | .196 | .111 | .035 | | |
| 3.0 | .217 | .115 | .035 | .212 | .113 | .034 | .202 | .109 | .033 | .193 | .106 | .032 | .185 | .102 | .032 | | |
| 4.0 | .202 | .105 | .031 | .198 | .103 | .031 | .189 | .100 | .030 | .181 | .097 | .029 | .174 | .095 | .029 | | |
| 5.0 | .189 | .096 | .028 | .185 | .095 | .028 | .178 | .092 | .027 | .171 | .090 | .027 | .164 | .088 | .026 | | |
| 6.0 | .177 | .089 | .025 | .174 | .088 | .025 | .167 | .086 | .025 | .161 | .084 | .025 | .155 | .082 | .024 | | |
| 7.0 | .167 | .082 | .023 | .164 | .082 | .023 | .158 | .080 | .023 | .152 | .078 | .023 | .147 | .076 | .022 | | |
| 8.0 | .157 | .077 | .022 | .155 | .076 | .022 | .149 | .075 | .021 | .144 | .073 | .021 | .140 | .072 | .021 | | |
| 9.0 | .149 | .072 | .020 | .146 | .071 | .020 | .142 | .070 | .020 | .137 | .069 | .020 | .133 | .068 | .020 | | |
| 10.0 | .141 | .068 | .019 | .139 | .067 | .019 | .135 | .066 | .019 | .131 | .065 | .018 | .127 | .064 | .018 | | |

| 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 | .176 | .157 | .140 | .151 | .135 | .120 | .103 | .093 | .083 | .059 | .054 | .048 | .019 | .017 | .016 | | |
| 2.0 | .165 | .132 | .105 | .141 | .114 | .091 | .097 | .079 | .064 | .056 | .046 | .037 | .018 | .015 | .012 | | |
| 3.0 | .154 | .114 | .082 | .132 | .098 | .071 | .091 | .068 | .050 | .052 | .040 | .029 | .017 | .013 | .010 | | |
| 4.0 | .145 | .100 | .065 | .125 | .086 | .057 | .086 | .060 | .040 | .050 | .035 | .024 | .016 | .011 | .008 | | |
| 5.0 | .137 | .089 | .053 | .118 | .077 | .046 | .081 | .054 | .033 | .047 | .032 | .019 | .015 | .010 | .006 | | |
| 6.0 | .130 | .080 | .044 | .112 | .069 | .039 | .077 | .049 | .027 | .045 | .029 | .016 | .014 | .009 | .005 | | |
| 7.0 | .123 | .073 | .038 | .106 | .063 | .033 | .073 | .044 | .023 | .043 | .026 | .014 | .014 | .009 | .005 | | |
| 8.0 | .117 | .067 | .032 | .101 | .058 | .028 | .070 | .041 | .020 | .041 | .024 | .012 | .013 | .008 | .004 | | |
| 9.0 | .112 | .062 | .028 | .096 | .054 | .025 | .067 | .038 | .017 | .039 | .022 | .010 | .013 | .007 | .003 | | |
| 10.0 | .107 | .058 | .025 | .092 | .050 | .022 | .064 | .035 | .015 | .037 | .021 | .009 | .012 | .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 | 17.4 | 18.7 | 17.7 | 18.8 | 19.0 | 17.2 | 18.4 | 17.4 | 18.6 | 18.8 | | | | |
| 3H | 19.1 | 20.2 | 19.4 | 20.4 | 20.7 | 18.7 | 19.8 | 19.0 | 20.1 | 20.3 | | | | |
| 4H | 19.9 | 21.0 | 20.2 | 21.3 | 21.5 | 19.4 | 20.5 | 19.7 | 20.7 | 21.0 | | | | |
| 6H | 20.6 | 21.6 | 20.9 | 21.9 | 22.1 | 19.9 | 20.9 | 20.2 | 21.2 | 21.4 | | | | |
| 8H | 20.8 | 21.8 | 21.1 | 22.0 | 22.3 | 20.0 | 21.0 | 20.4 | 21.3 | 21.6 | | | | |
| 12H | 20.9 | 21.8 | 21.2 | 22.1 | 22.4 | 20.1 | 21.0 | 20.4 | 21.3 | 21.6 | | | | |
| 4H 2H | 18.0 | 19.0 | 18.3 | 19.3 | 19.5 | 17.8 | 18.8 | 18.1 | 19.1 | 19.3 | | | | |
| 3H | 19.9 | 20.9 | 20.3 | 21.1 | 21.4 | 19.6 | 20.5 | 19.9 | 20.8 | 21.1 | | | | |
| 4H | 20.9 | 21.8 | 21.3 | 22.1 | 22.4 | 20.5 | 21.3 | 20.8 | 21.6 | 22.0 | | | | |
| 6H | 21.8 | 22.6 | 22.2 | 22.9 | 23.3 | 21.1 | 21.9 | 21.5 | 22.2 | 22.6 | | | | |
| 8H | 22.1 | 22.8 | 22.5 | 23.1 | 23.5 | 21.3 | 22.0 | 21.7 | 22.4 | 22.8 | | | | |
| 12H | 22.2 | 22.9 | 22.7 | 23.3 | 23.7 | 21.4 | 22.1 | 21.8 | 22.4 | 22.8 | | | | |
| 8H 4H | 21.3 | 22.0 | 21.7 | 22.4 | 22.8 | 20.9 | 21.6 | 21.3 | 22.0 | 22.4 | | | | |
| 6H | 22.4 | 23.0 | 22.8 | 23.4 | 23.8 | 21.8 | 22.4 | 22.2 | 22.8 | 23.2 | | | | |
| 8H | 22.8 | 23.3 | 23.2 | 23.7 | 24.2 | 22.1 | 22.6 | 22.5 | 23.0 | 23.5 | | | | |
| 12H | 23.1 | 23.5 | 23.6 | 24.0 | 24.4 | 22.3 | 22.7 | 22.8 | 23.2 | 23.7 | | | | |
| 12H 4H | 21.4 | 22.0 | 21.8 | 22.4 | 22.8 | 21.0 | 21.6 | 21.4 | 22.0 | 22.4 | | | | |
| 6H | 22.5 | 23.0 | 22.9 | 23.4 | 23.9 | 21.9 | 22.4 | 22.4 | 22.8 | 23.3 | | | | |
| 8H | 22.9 | 23.4 | 23.4 | 23.8 | 24.3 | 22.3 | 22.7 | 22.7 | 23.2 | 23.6 | | | | |
| Variations with the observer position at spacings: | | | | | | | | | | | | | | |
| S = 1.0H | + 0.2 / - 0.3 | | | | | + 0.3 / - 0.4 | | | | | | | | |
| 1.5H | + 0.4 / - 0.3 | | | | | + 0.5 / - 0.4 | | | | | | | | |
| 2.0H | + 0.3 / - 0.3 | | | | | + 0.3 / - 0.3 | | | | | | | | |

CIE Pub.117, 26000 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 11.3)

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: |

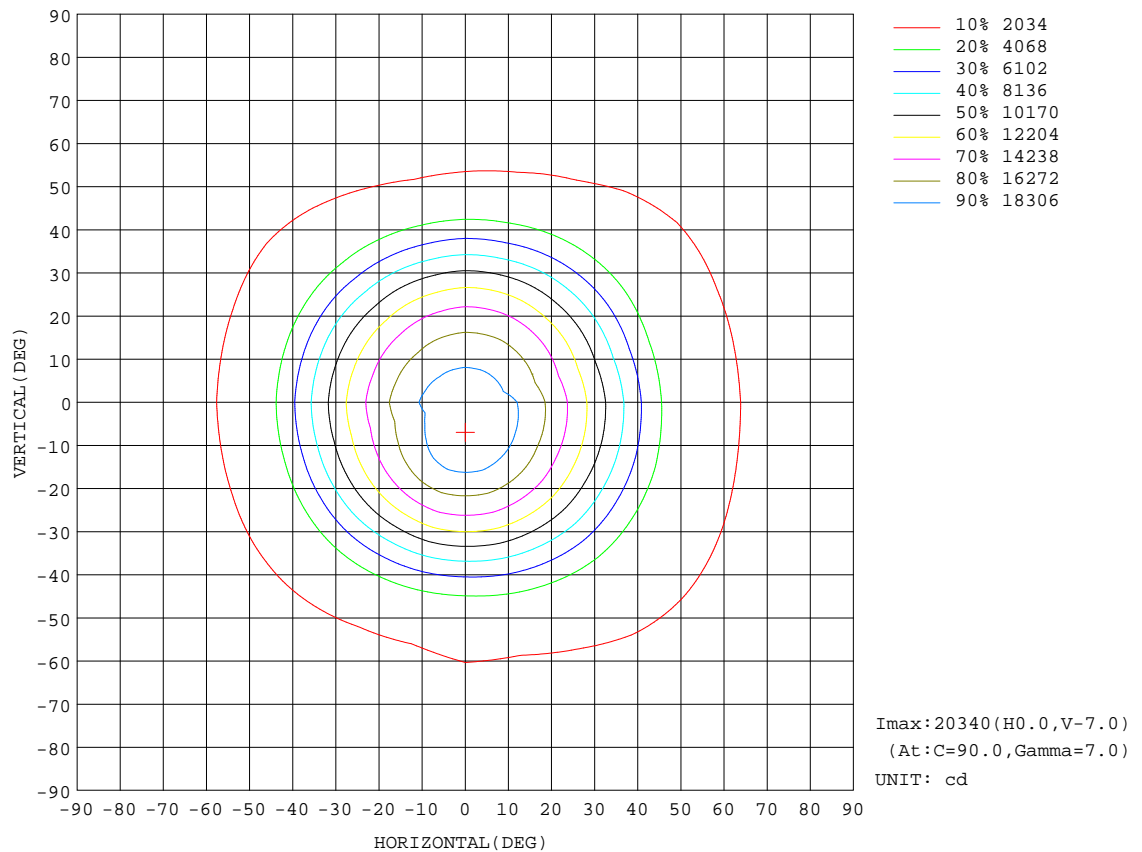
| REFLECTANCE | | | | | | | | | | |
|----------------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0 |
| ROOM INDEX | UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5 | | | | | | | | | |
| k = 0.60 | 73 | 64 | 59 | 73 | 64 | 59 | 72 | 64 | 59 | 54 |
| 0.80 | 82 | 73 | 68 | 81 | 73 | 67 | 79 | 72 | 67 | 62 |
| 1.00 | 88 | 80 | 74 | 87 | 79 | 74 | 85 | 80 | 74 | 68 |
| 1.25 | 93 | 86 | 80 | 92 | 85 | 80 | 90 | 84 | 79 | 73 |
| 1.50 | 97 | 90 | 85 | 96 | 89 | 84 | 93 | 88 | 83 | 77 |
| 2.00 | 102 | 96 | 91 | 100 | 94 | 90 | 97 | 92 | 89 | 82 |
| 2.50 | 105 | 99 | 94 | 103 | 98 | 94 | 99 | 95 | 92 | 85 |
| 3.00 | 107 | 102 | 98 | 105 | 101 | 97 | 101 | 98 | 95 | 87 |
| 4.00 | 110 | 106 | 102 | 108 | 104 | 101 | 104 | 101 | 98 | 90 |
| 5.00 | 112 | 108 | 106 | 110 | 107 | 104 | 105 | 103 | 101 | 92 |
| 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: |



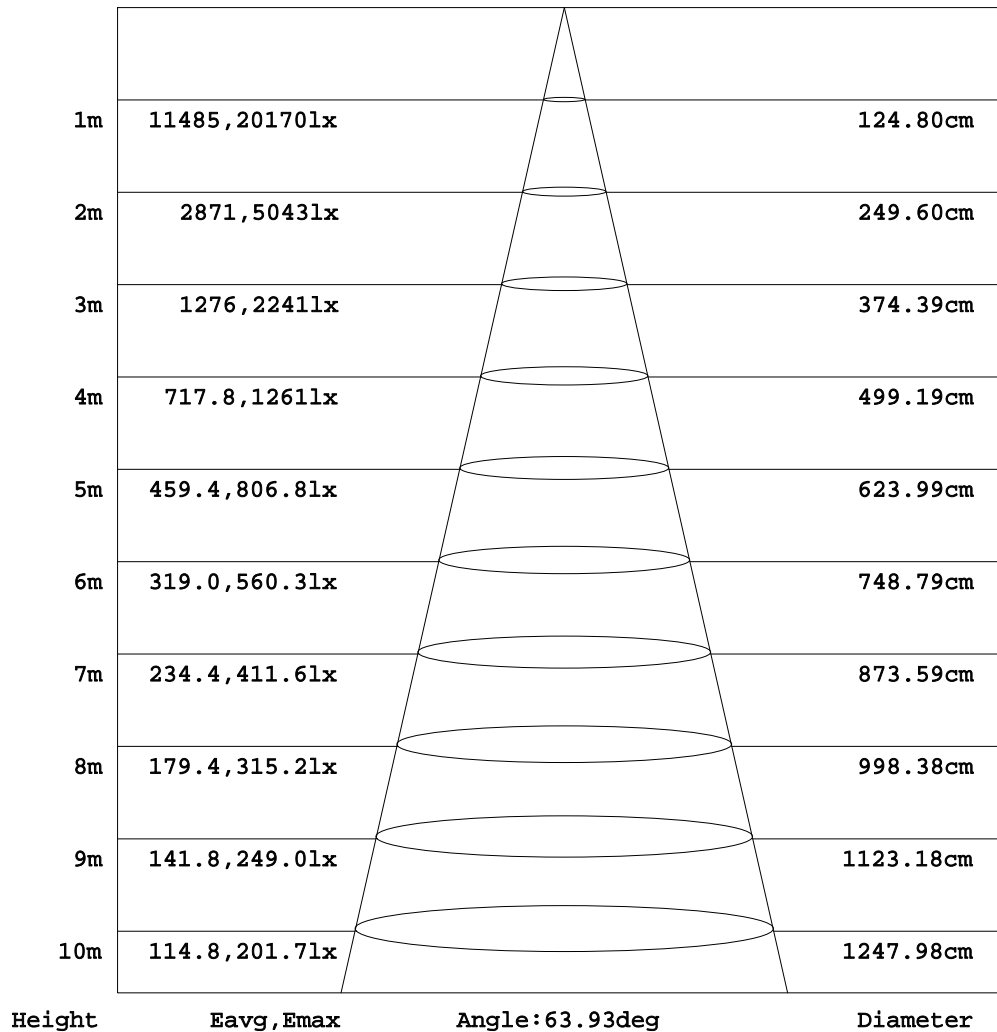
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2017

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: |

Flux out:14088 lm

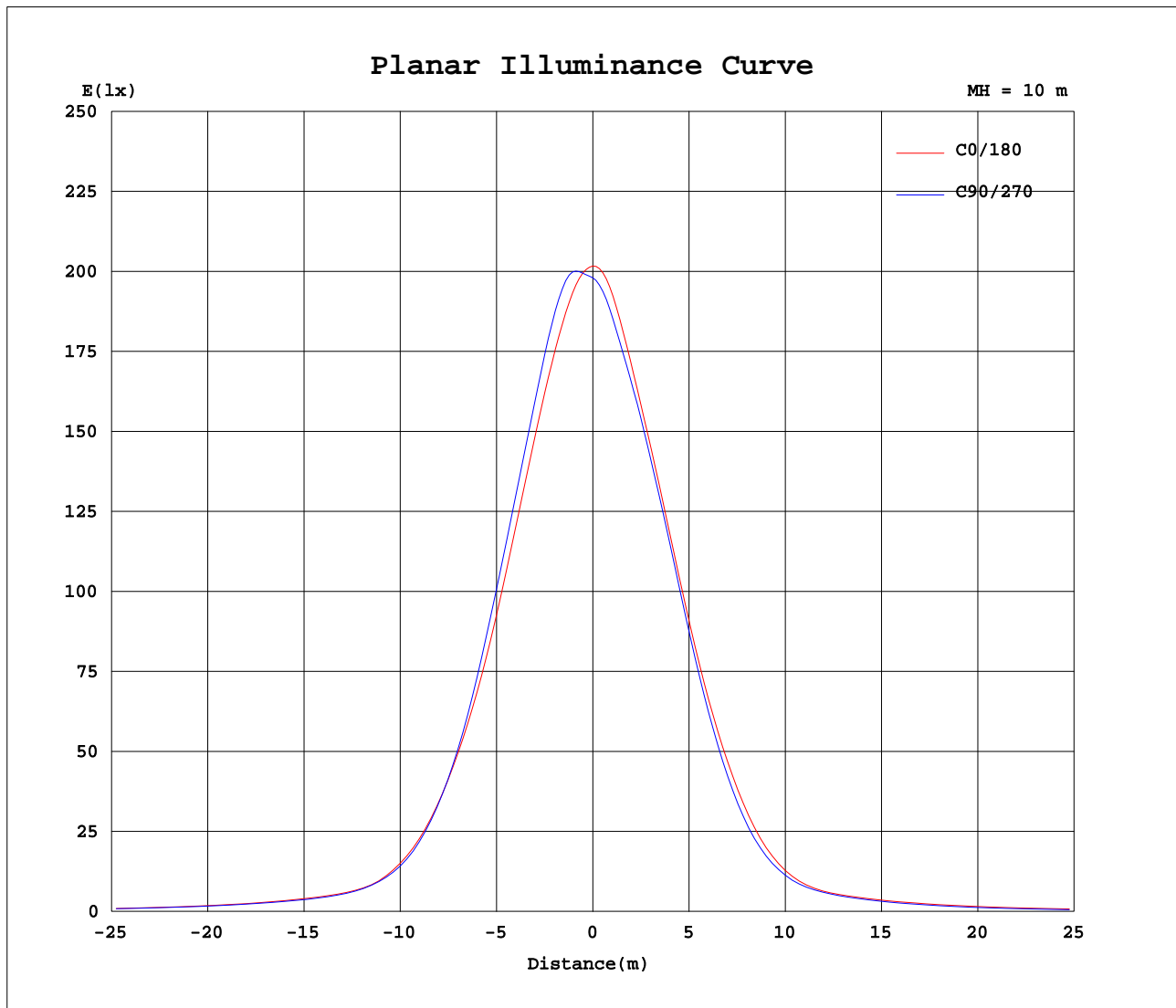


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: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:

