

LED Downlight CATO Series CS6F-20S-830



| | | |
|---------------------|---------|--------------------------|
| Light Output Ratio: | 100.0% | |
| Luminaire Power: | 20.64 W | |
| SHR Nominal: | 1.25 | Calculated using the TM5 |
| SHR Maximum: | 1.25 | fine grid method. |

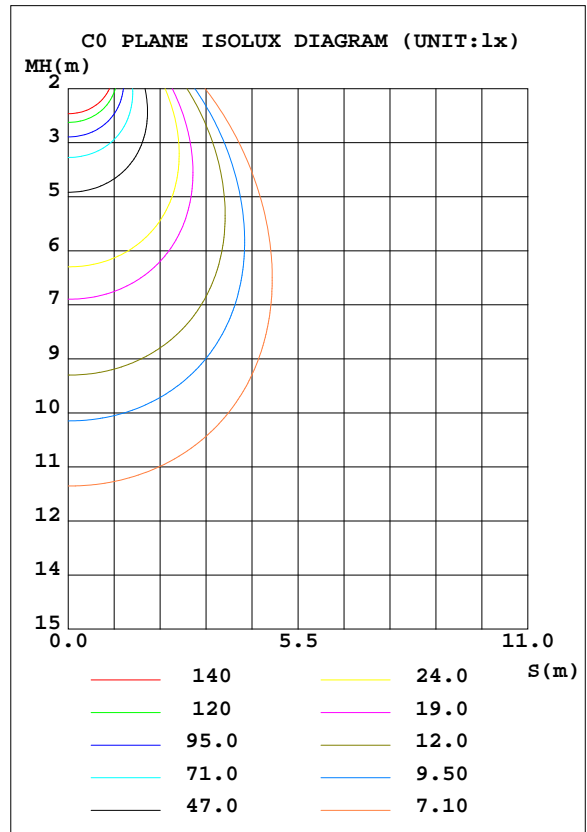
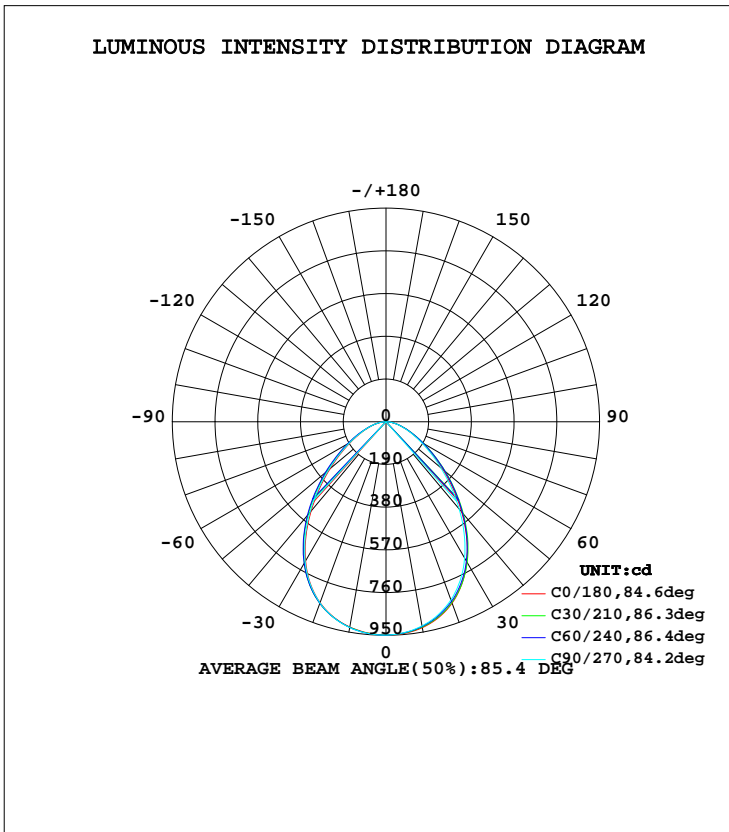
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Cao Chengpei
 Test Date: 2014-08-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity: 53.0%
 Test Distance: 5.780m [K=1.0000]
 Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

| | | |
|---|---------------------------|-------------|
| Test:U:220.4V I:0.1020A P:20.64W PF:0.9183 Lamp Flux:1889.08x1 lm | | |
| NAME: CS6F-20S-830 | TYPE:Downlight | SERIAL No.: |
| SPEC.:3000K | DIM.: L169mm*W169mm*H66mm | |
| MFR.: E-LITE LIGHTING CO.,LTD. | | |

| DATA OF LAMP | | PHOTOMETRIC DATA | | | | Eff: 91.53 lm/W |
|------------------|---------------|------------------|--------|--------------------|-----------|-----------------|
| MODEL | SAMSUNG-3000K | Imax(cd) | 949.0 | S/MH(C0/180) | 1.14 | |
| NOMINAL POWER(W) | 22 | LOR(%) | 100.0 | S/MH(C90/270) | 1.15 | |
| RATED VOLTAGE(V) | 220 | TOTAL FLUX(lm) | 1889.1 | η UP, DN(C0-180) | 0.0, 49.6 | |
| NOMINAL FLUX(lm) | 1889.08 | CIE CLASS | DIRECT | η UP, DN(C180-360) | 0.0, 50.4 | |
| LAMPS INSIDE | 1 | η up(%) | 0.0 | CIBSE SHR NOM | 1.25 | |
| TEST VOLTAGE(V) | 220 | η down(%) | 100.0 | CIBSE SHR MAX | 1.25 | |



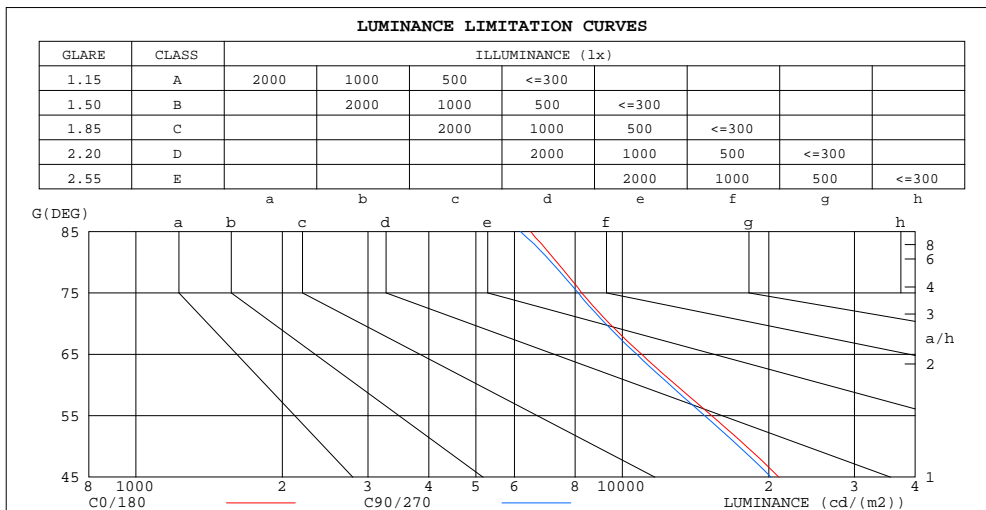
C Range: 0 - 360DEG
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 Temperature:25.3DEG
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γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity:53.0%
 Test Distance:5.780m [K=1.0000]
 Remarks:

**ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES**

ZONAL FLUX DIAGRAM:

| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | Φ lum,lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|-----------------|
| 10 | 930.0 | 926.3 | 922.2 | 923.1 | 927.3 | 928.2 | 929.5 | 930.4 | 0- 10 | 89.50 | 89.50 | 4.74,4.74 |
| 20 | 858.9 | 855.3 | 843.8 | 850.8 | 856.8 | 859.8 | 857.8 | 863.0 | 10- 20 | 252.9 | 342.4 | 18.1,18.1 |
| 30 | 718.7 | 723.9 | 699.8 | 719.1 | 715.6 | 729.1 | 719.0 | 733.9 | 20- 30 | 365.2 | 707.6 | 37.5,37.5 |
| 40 | 524.0 | 541.3 | 506.2 | 535.6 | 518.3 | 545.9 | 526.5 | 552.2 | 30- 40 | 392.0 | 1100 | 58.2,58.2 |
| 50 | 330.4 | 351.3 | 318.7 | 346.2 | 325.0 | 353.6 | 333.9 | 359.5 | 40- 50 | 333.3 | 1433 | 75.9,75.9 |
| 60 | 184.1 | 198.1 | 179.0 | 195.1 | 181.5 | 198.8 | 187.3 | 202.4 | 50- 60 | 232.4 | 1665 | 88.2,88.2 |
| 70 | 91.98 | 98.10 | 90.23 | 96.69 | 91.61 | 97.98 | 94.15 | 99.71 | 60- 70 | 137.2 | 1803 | 95.4,95.4 |
| 80 | 36.38 | 38.13 | 35.44 | 37.41 | 36.26 | 38.33 | 37.58 | 39.16 | 70- 80 | 67.45 | 1870 | 99,99 |
| 90 | 0.2579 | 0.2350 | 0.2246 | 0.2329 | 0.2121 | 0.3930 | 0.7008 | 0.6696 | 80- 90 | 19.00 | 1889 | 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 | | |



| LUMINANCE cd/(m2) | | |
|-------------------|--------|---------|
| G(DEG) | C0/180 | C90/270 |
| 85 | 6480 | 6171 |
| 80 | 7334 | 7146 |
| 75 | 8252 | 8123 |
| 70 | 9416 | 9237 |
| 65 | 10957 | 10704 |
| 60 | 12892 | 12535 |
| 55 | 15261 | 14762 |
| 50 | 17998 | 17361 |
| 45 | 20962 | 20209 |

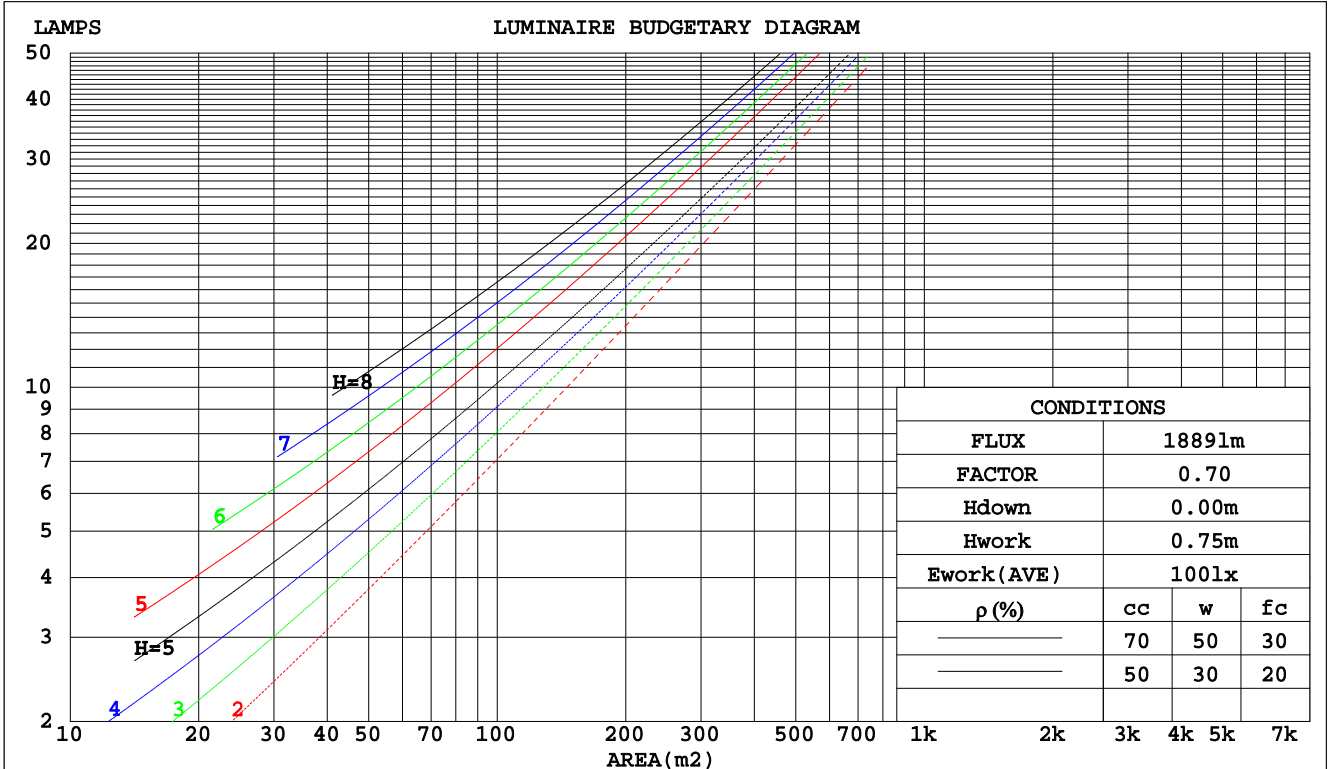
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γ Range: 0 - 90DEG
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 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity:53.0%
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 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|---|---------------------------|-------------|
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| SPEC.:3000K | DIM.: L169mm*W169mm*H66mm | |
| MFR.: E-LITE LIGHTING CO.,LTD. | | |

| 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 | | | | | | | | | | | | | | | |
| | 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 | 1.06 | 1.03 | .00 | 1.04 | 1.01 | .98 | 1.00 | .97 | .95 | .96 | .94 | .92 | .93 | .91 | .89 | .87 |
| 2.0 | .95 | .89 | .84 | .93 | .88 | .83 | .90 | .85 | .81 | .86 | .83 | .79 | .83 | .80 | .78 | .76 |
| 3.0 | .85 | .78 | .72 | .83 | .77 | .71 | .80 | .75 | .70 | .78 | .73 | .69 | .75 | .71 | .68 | .66 |
| 4.0 | .76 | .69 | .63 | .75 | .68 | .62 | .73 | .66 | .61 | .70 | .65 | .61 | .68 | .64 | .60 | .58 |
| 5.0 | .69 | .61 | .55 | .68 | .61 | .55 | .66 | .59 | .54 | .64 | .58 | .54 | .62 | .57 | .53 | .51 |
| 6.0 | .63 | .55 | .49 | .62 | .54 | .49 | .60 | .54 | .48 | .59 | .53 | .48 | .57 | .52 | .48 | .46 |
| 7.0 | .58 | .50 | .44 | .57 | .49 | .44 | .55 | .49 | .44 | .54 | .48 | .43 | .53 | .47 | .43 | .41 |
| 8.0 | .53 | .45 | .40 | .52 | .45 | .40 | .51 | .44 | .39 | .50 | .44 | .39 | .49 | .43 | .39 | .37 |
| 9.0 | .49 | .41 | .36 | .48 | .41 | .36 | .47 | .41 | .36 | .46 | .40 | .36 | .45 | .40 | .36 | .34 |
| 10.0 | .45 | .38 | .33 | .45 | .38 | .33 | .44 | .37 | .33 | .43 | .37 | .33 | .42 | .37 | .33 | .31 |



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γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity:53.0%
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 Remarks:

WEC AND CCEC

| | | |
|---|---------------------------|-------------|
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| MFR.: E-LITE LIGHTING CO.,LTD. | | |

| 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 Coefficients(WEC) | | | | | | | | | |
| 0.0 | | | | | | | | | | | | | | | | |
| 1.0 | .261 | .148 | .047 | .254 | .145 | .046 | .241 | .138 | .044 | .229 | .132 | .042 | .218 | .126 | .041 | |
| 2.0 | .250 | .137 | .042 | .244 | .134 | .041 | .232 | .129 | .040 | .222 | .124 | .039 | .212 | .120 | .038 | |
| 3.0 | .235 | .125 | .037 | .229 | .123 | .037 | .219 | .119 | .036 | .210 | .115 | .035 | .202 | .112 | .035 | |
| 4.0 | .220 | .114 | .034 | .215 | .112 | .033 | .206 | .109 | .033 | .198 | .106 | .032 | .191 | .104 | .032 | |
| 5.0 | .205 | .105 | .030 | .201 | .103 | .030 | .194 | .101 | .030 | .186 | .098 | .029 | .180 | .096 | .029 | |
| 6.0 | .193 | .097 | .028 | .189 | .095 | .027 | .182 | .093 | .027 | .176 | .091 | .027 | .170 | .089 | .027 | |
| 7.0 | .181 | .089 | .025 | .178 | .089 | .025 | .172 | .087 | .025 | .166 | .085 | .025 | .160 | .083 | .024 | |
| 8.0 | .170 | .083 | .023 | .167 | .082 | .023 | .162 | .081 | .023 | .157 | .079 | .023 | .152 | .078 | .023 | |
| 9.0 | .161 | .078 | .022 | .158 | .077 | .022 | .153 | .076 | .021 | .149 | .074 | .021 | .144 | .073 | .021 | |
| 10.0 | .152 | .073 | .020 | .150 | .072 | .020 | .145 | .071 | .020 | .141 | .070 | .020 | .137 | .069 | .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 | .190 | .190 | .190 | .163 | .163 | .163 | .111 | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 | |
| 1.0 | .177 | .157 | .138 | .151 | .134 | .119 | .104 | .092 | .082 | .060 | .053 | .048 | .019 | .017 | .015 | |
| 2.0 | .167 | .132 | .103 | .143 | .114 | .089 | .098 | .079 | .062 | .056 | .046 | .036 | .018 | .015 | .012 | |
| 3.0 | .158 | .114 | .079 | .135 | .098 | .069 | .093 | .068 | .048 | .054 | .040 | .028 | .017 | .013 | .009 | |
| 4.0 | .150 | .100 | .063 | .128 | .087 | .054 | .088 | .060 | .038 | .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 | .046 | .029 | .015 | .015 | .009 | .005 | |
| 7.0 | .129 | .074 | .036 | .111 | .064 | .031 | .076 | .045 | .022 | .044 | .026 | .013 | .014 | .009 | .004 | |
| 8.0 | .123 | .068 | .031 | .106 | .059 | .027 | .073 | .041 | .019 | .042 | .024 | .011 | .014 | .008 | .004 | |
| 9.0 | .117 | .063 | .027 | .101 | .055 | .023 | .070 | .039 | .017 | .041 | .023 | .010 | .013 | .007 | .003 | |
| 10.0 | .112 | .059 | .024 | .096 | .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:Cao Chengpei
 Test Date:2014-08-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity:53.0%
 Test Distance:5.780m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

| | | |
|---|---------------------------|-------------|
| Test:U:220.4V I:0.1020A P:20.64W PF:0.9183 Lamp Flux:1889.08x1 lm | | |
| NAME: CS6F-20S-830 | TYPE:Downlight | SERIAL No.: |
| SPEC.:3000K | DIM.: L169mm*W169mm*H66mm | |
| MFR.: E-LITE LIGHTING CO.,LTD. | | |

| | | | | | | | | | | |
|--|------------------|------|------|------|------|----------------|------|------|------|------|
| 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 | 21.8 | 23.1 | 22.0 | 23.3 | 23.5 | 21.6 | 23.0 | 21.9 | 23.2 | 23.4 |
| 3H | 22.5 | 23.7 | 22.8 | 23.9 | 24.2 | 22.4 | 23.6 | 22.7 | 23.8 | 24.1 |
| 4H | 22.7 | 23.9 | 23.0 | 24.2 | 24.4 | 22.6 | 23.8 | 22.9 | 24.1 | 24.3 |
| 6H | 22.9 | 24.0 | 23.3 | 24.3 | 24.6 | 22.8 | 23.9 | 23.2 | 24.2 | 24.5 |
| 8H | 23.0 | 24.1 | 23.3 | 24.3 | 24.6 | 22.9 | 24.0 | 23.2 | 24.2 | 24.5 |
| 12H | 23.0 | 24.1 | 23.4 | 24.3 | 24.6 | 22.9 | 23.9 | 23.3 | 24.2 | 24.5 |
| 4H 2H | 22.1 | 23.3 | 22.4 | 23.5 | 23.8 | 22.0 | 23.2 | 22.3 | 23.4 | 23.7 |
| 3H | 23.0 | 24.0 | 23.3 | 24.3 | 24.6 | 22.9 | 23.9 | 23.2 | 24.2 | 24.5 |
| 4H | 23.4 | 24.3 | 23.7 | 24.6 | 24.9 | 23.3 | 24.2 | 23.6 | 24.5 | 24.9 |
| 6H | 23.7 | 24.5 | 24.1 | 24.8 | 25.2 | 23.6 | 24.4 | 24.0 | 24.7 | 25.1 |
| 8H | 23.8 | 24.5 | 24.2 | 24.9 | 25.3 | 23.7 | 24.4 | 24.1 | 24.8 | 25.2 |
| 12H | 23.8 | 24.5 | 24.3 | 24.9 | 25.3 | 23.7 | 24.4 | 24.2 | 24.8 | 25.2 |
| 8H 4H | 23.5 | 24.3 | 23.9 | 24.6 | 25.0 | 23.4 | 24.2 | 23.8 | 24.5 | 24.9 |
| 6H | 23.9 | 24.5 | 24.3 | 24.9 | 25.4 | 23.8 | 24.5 | 24.3 | 24.9 | 25.3 |
| 8H | 24.1 | 24.6 | 24.5 | 25.1 | 25.5 | 24.0 | 24.6 | 24.5 | 25.0 | 25.4 |
| 12H | 24.2 | 24.7 | 24.7 | 25.1 | 25.6 | 24.1 | 24.6 | 24.6 | 25.0 | 25.5 |
| 12H 4H | 23.5 | 24.2 | 23.9 | 24.6 | 25.0 | 23.4 | 24.1 | 23.8 | 24.5 | 24.9 |
| 6H | 23.9 | 24.5 | 24.4 | 24.9 | 25.4 | 23.9 | 24.4 | 24.3 | 24.8 | 25.3 |
| 8H | 24.1 | 24.6 | 24.6 | 25.1 | 25.5 | 24.1 | 24.5 | 24.5 | 25.0 | 25.5 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | + 0.4 / - 0.5 | | | | | + 0.4 / - 0.5 | | | | |
| 1.5H | + 0.2 / - 0.3 | | | | | + 0.1 / - 0.4 | | | | |
| 2.0H | + 0.8 / - 0.8 | | | | | + 0.7 / - 0.8 | | | | |

CIE Pub.117 Corrected 1889 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.2)

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 C Interval: 15.0DEG
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 Temperature:25.3DEG
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 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity:53.0%
 Test Distance:5.780m [K=1.0000]
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UTILIZATION FACTORS TABLE

| | | |
|---|---------------------------|-------------|
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| MFR.: E-LITE LIGHTING CO.,LTD. | | |

| 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 | 65 | 55 | 49 | 65 | 55 | 49 | 64 | 54 | 49 | 43 |
| 0.80 | 75 | 65 | 59 | 74 | 65 | 59 | 73 | 64 | 58 | 52 |
| 1.00 | 83 | 74 | 67 | 82 | 73 | 67 | 80 | 74 | 67 | 61 |
| 1.25 | 90 | 81 | 75 | 88 | 80 | 74 | 86 | 79 | 74 | 67 |
| 1.50 | 94 | 86 | 80 | 92 | 85 | 79 | 90 | 83 | 78 | 72 |
| 2.00 | 100 | 93 | 87 | 98 | 91 | 87 | 95 | 89 | 85 | 78 |
| 2.50 | 103 | 96 | 91 | 101 | 95 | 90 | 97 | 92 | 89 | 81 |
| 3.00 | 106 | 100 | 95 | 104 | 98 | 94 | 100 | 96 | 92 | 84 |
| 4.00 | 109 | 104 | 100 | 107 | 102 | 99 | 103 | 99 | 96 | 88 |
| 5.00 | 111 | 107 | 103 | 108 | 105 | 102 | 104 | 101 | 99 | 90 |
| ROOM INDEX | UF(total) | | | | | | | | | Direct |
| According to DIN EN 13032-2 2004 | | | Suspended | | | | SHRNOM = 1.25 | | | |

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ISOCANDELA DIAGRAM

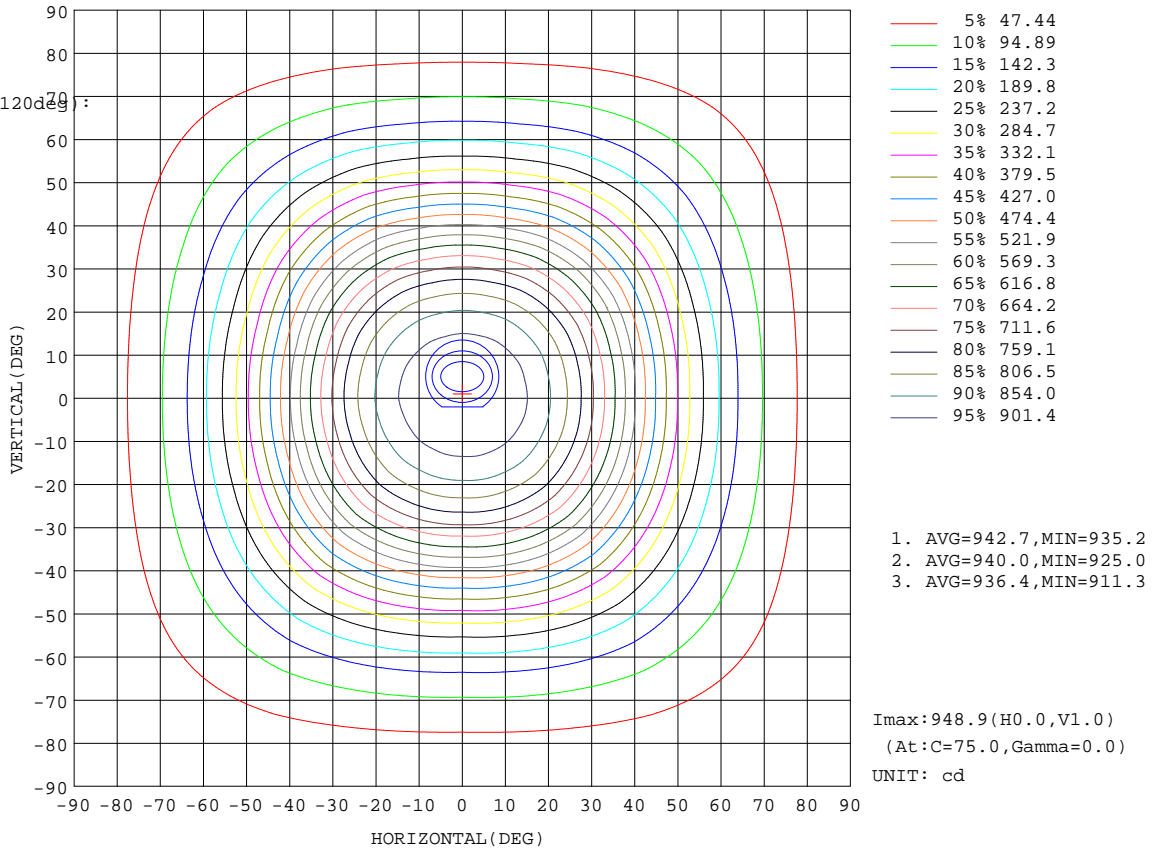
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Conical surface Flux(90deg):

1277.6 lm
 %lum = 67.6%
 %lamp = 67.6%

Conical surface Flux(120deg):

1665.4 lm
 %lum = 88.2%
 %lamp = 88.2%



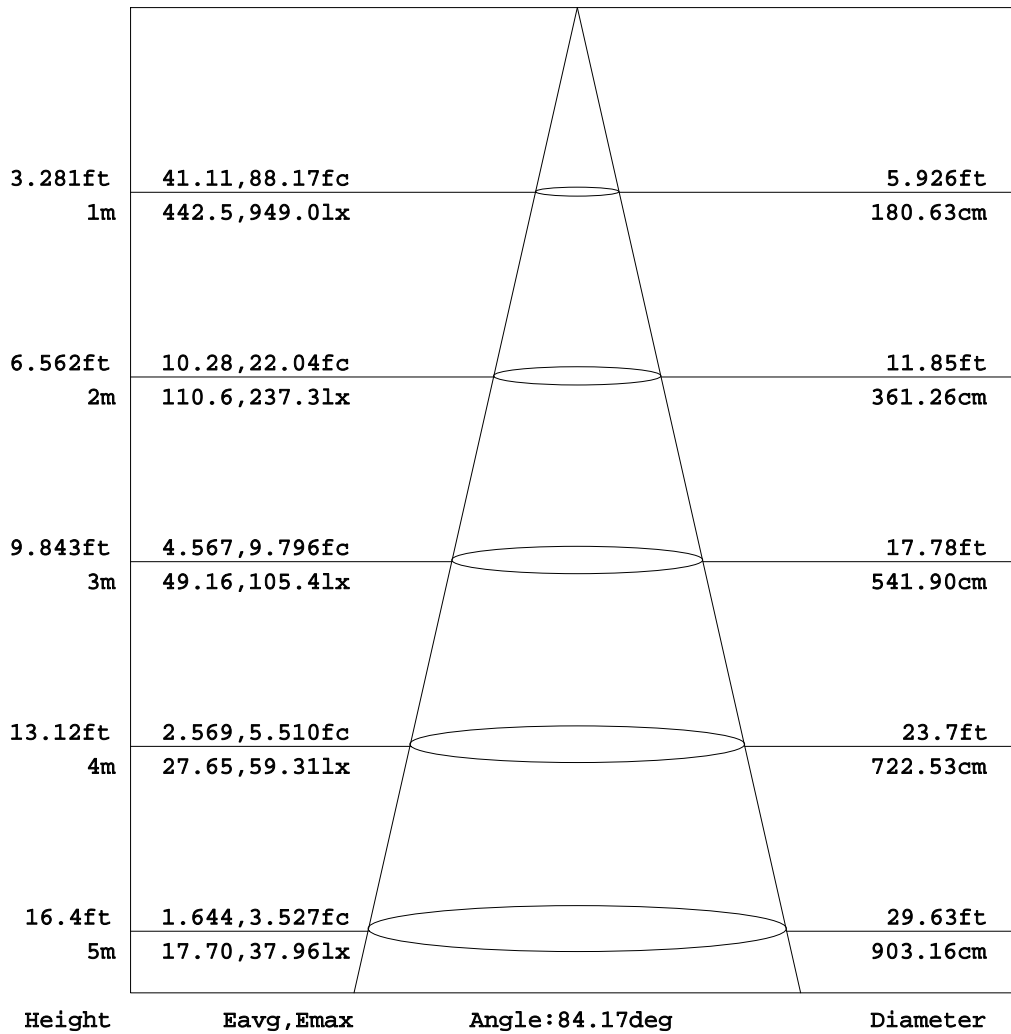
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AAI Figure

| | | |
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| MFR.: E-LITE LIGHTING CO.,LTD. | | |

Flux out:1209 lm



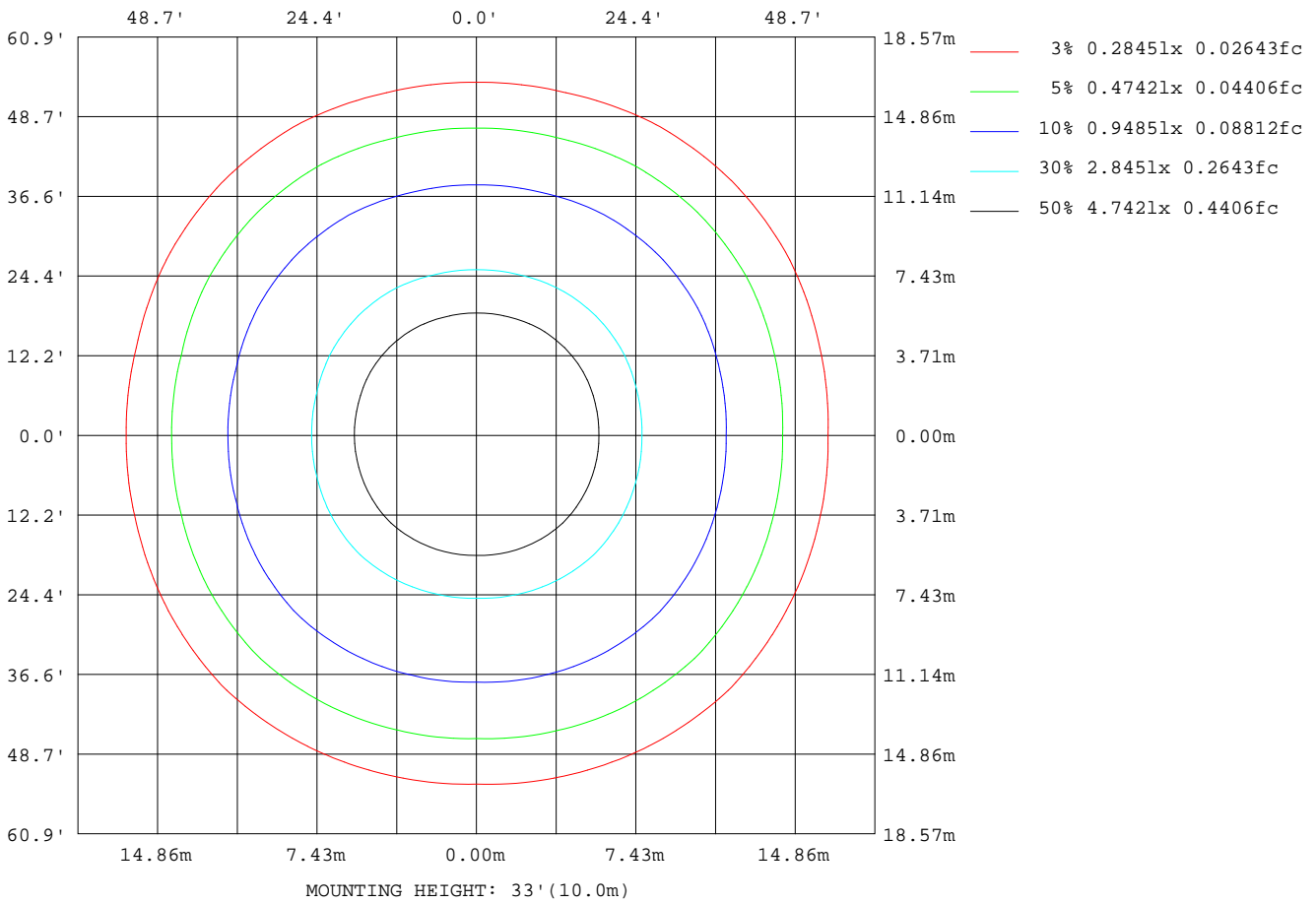
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Cao Chengpei
Test Date:2014-08-28

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Humidity:53.0%
Test Distance:5.780m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

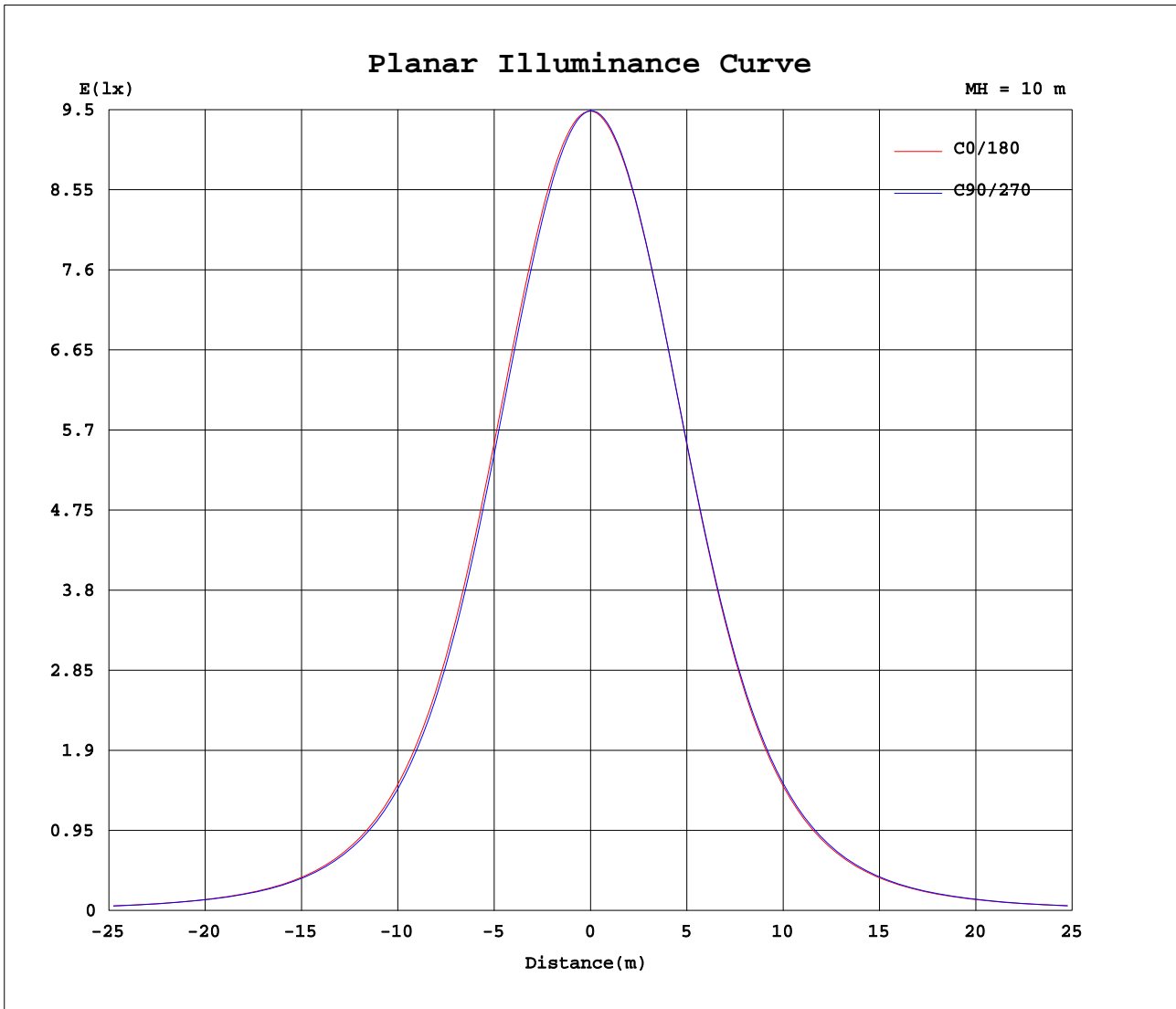
| | | |
|---|---------------------------|-------------|
| Test:U:220.4V I:0.1020A P:20.64W PF:0.9183 Lamp Flux:1889.08x1 lm | | |
| NAME: CS6F-20S-830 | TYPE:Downlight | SERIAL No.: |
| SPEC.:3000K | DIM.: L169mm*W169mm*H66mm | |
| MFR.: E-LITE LIGHTING CO.,LTD. | | |



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
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γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity:53.0%
 Test Distance:5.780m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Cao Chengpei
 Test Date: 2014-08-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity: 53.0%
 Test Distance: 5.780m [K=1.0000]
 Remarks:

Photometric Data Table [cd]

| | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| G/C | 0.0 | 15.0 | 30.0 | 45.0 | 60.0 | 75.0 | 90.0 | 105.0 | 120.0 | 135.0 |
| 0.0 | 948.5 | 948.1 | 948.2 | 948.3 | 948.8 | 949.0 | 948.8 | 948.7 | 948.3 | 947.8 |
| 3.0 | 947.2 | 946.8 | 946.4 | 946.2 | 946.1 | 946.1 | 945.6 | 945.4 | 944.9 | 944.8 |
| 6.0 | 942.5 | 941.9 | 940.8 | 940.3 | 939.4 | 939.3 | 938.4 | 938.3 | 937.8 | 937.9 |
| 9.0 | 933.8 | 933.0 | 931.4 | 930.6 | 929.0 | 928.4 | 926.8 | 927.0 | 926.5 | 927.4 |
| 12.0 | 920.6 | 919.7 | 917.7 | 916.6 | 914.3 | 913.0 | 911.1 | 911.2 | 911.2 | 912.8 |
| 15.0 | 902.1 | 901.4 | 899.1 | 898.0 | 894.6 | 893.1 | 890.4 | 890.9 | 891.2 | 893.7 |
| 18.0 | 878.3 | 877.6 | 875.1 | 874.1 | 870.0 | 867.6 | 864.2 | 865.4 | 866.3 | 869.7 |
| 21.0 | 848.1 | 847.7 | 845.7 | 844.9 | 840.1 | 836.5 | 832.5 | 833.9 | 836.0 | 840.4 |
| 24.0 | 811.3 | 811.6 | 810.4 | 810.3 | 804.1 | 799.3 | 794.3 | 796.6 | 800.0 | 805.6 |
| 27.0 | 768.2 | 769.2 | 769.0 | 769.6 | 762.5 | 756.1 | 749.8 | 753.1 | 758.0 | 765.1 |
| 30.0 | 718.7 | 720.6 | 722.1 | 723.9 | 715.6 | 707.2 | 699.8 | 704.0 | 710.7 | 719.1 |
| 33.0 | 664.0 | 666.5 | 669.9 | 672.8 | 663.6 | 653.4 | 644.7 | 649.8 | 658.4 | 667.9 |
| 36.0 | 605.3 | 609.0 | 613.9 | 618.3 | 607.9 | 596.2 | 586.3 | 592.6 | 602.5 | 613.0 |
| 39.0 | 544.5 | 549.1 | 555.6 | 560.9 | 550.0 | 537.1 | 526.5 | 533.0 | 544.4 | 555.5 |
| 42.0 | 483.3 | 488.5 | 496.1 | 502.4 | 491.1 | 477.2 | 466.5 | 473.4 | 485.5 | 496.6 |
| 45.0 | 423.3 | 429.0 | 437.1 | 444.1 | 432.8 | 419.0 | 408.1 | 415.4 | 427.4 | 438.6 |
| 48.0 | 366.4 | 371.7 | 380.4 | 387.4 | 376.8 | 363.5 | 353.2 | 360.0 | 371.6 | 382.1 |
| 51.0 | 313.3 | 318.5 | 327.0 | 333.6 | 324.2 | 311.7 | 302.3 | 308.6 | 319.4 | 328.7 |
| 54.0 | 264.9 | 269.8 | 277.5 | 283.8 | 275.4 | 264.7 | 256.2 | 261.9 | 271.2 | 279.4 |
| 57.0 | 222.0 | 226.2 | 233.0 | 238.5 | 231.4 | 222.3 | 215.0 | 219.9 | 227.9 | 234.8 |
| 60.0 | 184.1 | 187.9 | 193.3 | 198.1 | 192.4 | 185.0 | 179.0 | 183.1 | 189.4 | 195.1 |
| 63.0 | 151.4 | 154.5 | 158.7 | 162.7 | 158.1 | 152.5 | 147.6 | 151.0 | 155.8 | 160.3 |
| 66.0 | 123.3 | 126.1 | 128.8 | 132.3 | 128.4 | 124.7 | 120.5 | 123.6 | 126.6 | 130.3 |
| 69.0 | 99.25 | 101.4 | 103.4 | 106.0 | 103.1 | 100.5 | 97.25 | 99.55 | 101.7 | 104.5 |
| 72.0 | 78.65 | 80.33 | 81.55 | 83.60 | 81.35 | 79.64 | 77.22 | 78.97 | 80.28 | 82.40 |
| 75.0 | 61.00 | 62.32 | 62.93 | 64.54 | 62.73 | 61.76 | 60.04 | 61.27 | 61.93 | 63.54 |
| 78.0 | 45.72 | 46.54 | 47.02 | 47.97 | 46.83 | 46.02 | 44.71 | 45.64 | 46.18 | 47.15 |
| 81.0 | 31.99 | 32.60 | 32.83 | 33.51 | 32.62 | 32.11 | 31.10 | 31.80 | 32.08 | 32.82 |
| 84.0 | 19.81 | 20.27 | 20.29 | 20.74 | 20.06 | 19.80 | 19.00 | 19.56 | 19.64 | 20.17 |
| 87.0 | 9.509 | 9.723 | 9.557 | 9.644 | 9.301 | 9.272 | 8.866 | 9.141 | 9.040 | 9.240 |
| 90.0 | 0.2579 | 0.2371 | 0.2392 | 0.2350 | 0.2329 | 0.2246 | 0.2246 | 0.2225 | 0.2308 | 0.2329 |
| G/C | 150.0 | 165.0 | 180.0 | 195.0 | 210.0 | 225.0 | 240.0 | 255.0 | 270.0 | 285.0 |
| 0.0 | 947.1 | 946.6 | 948.5 | 948.1 | 948.2 | 948.3 | 948.8 | 949.0 | 948.8 | 948.7 |
| 3.0 | 944.0 | 943.7 | 946.0 | 946.0 | 946.3 | 946.8 | 947.7 | 947.7 | 947.8 | 947.9 |
| 6.0 | 937.4 | 937.6 | 940.4 | 940.6 | 941.2 | 941.5 | 942.4 | 942.6 | 942.9 | 942.7 |
| 9.0 | 927.1 | 928.0 | 931.3 | 931.3 | 932.2 | 932.8 | 933.1 | 932.9 | 933.8 | 933.7 |
| 12.0 | 912.9 | 914.1 | 917.9 | 918.1 | 919.0 | 918.8 | 919.6 | 919.1 | 920.0 | 920.1 |
| 15.0 | 894.0 | 895.9 | 899.9 | 899.8 | 901.1 | 900.9 | 901.5 | 900.1 | 901.4 | 901.6 |
| 18.0 | 870.2 | 872.2 | 876.0 | 876.4 | 878.4 | 878.0 | 878.3 | 876.1 | 877.3 | 877.5 |
| 21.0 | 840.8 | 842.1 | 846.2 | 846.6 | 849.8 | 849.6 | 849.6 | 846.4 | 847.1 | 847.7 |
| 24.0 | 805.3 | 805.6 | 809.4 | 810.1 | 815.0 | 815.3 | 814.9 | 810.5 | 810.6 | 811.8 |
| 27.0 | 763.7 | 762.7 | 765.8 | 767.2 | 774.0 | 775.2 | 774.4 | 768.0 | 767.9 | 769.6 |
| 30.0 | 716.5 | 713.5 | 715.6 | 717.6 | 726.9 | 729.1 | 728.1 | 719.6 | 719.0 | 721.3 |
| 33.0 | 663.9 | 658.8 | 660.1 | 662.7 | 674.6 | 678.3 | 676.7 | 666.6 | 664.8 | 667.9 |
| 36.0 | 607.6 | 600.8 | 600.7 | 603.9 | 618.0 | 623.2 | 622.0 | 609.5 | 607.1 | 610.7 |
| 39.0 | 549.1 | 540.1 | 539.0 | 543.1 | 558.8 | 565.5 | 563.6 | 550.3 | 546.7 | 551.0 |
| 42.0 | 489.7 | 479.2 | 477.3 | 481.5 | 498.8 | 506.5 | 504.6 | 489.9 | 486.3 | 490.6 |
| 45.0 | 430.8 | 420.1 | 417.4 | 421.6 | 439.4 | 447.5 | 445.8 | 430.9 | 426.8 | 431.0 |
| 48.0 | 374.4 | 363.4 | 360.5 | 364.8 | 382.1 | 390.3 | 388.6 | 374.2 | 369.7 | 374.1 |
| 51.0 | 321.5 | 310.8 | 308.1 | 312.0 | 328.1 | 335.8 | 334.5 | 320.9 | 316.8 | 320.8 |
| 54.0 | 272.7 | 263.3 | 260.6 | 263.9 | 278.5 | 285.4 | 284.5 | 272.2 | 268.5 | 272.0 |
| 57.0 | 228.8 | 220.8 | 218.3 | 221.3 | 233.7 | 239.8 | 239.0 | 228.6 | 225.2 | 228.4 |
| 60.0 | 190.0 | 183.5 | 181.5 | 183.6 | 194.1 | 198.8 | 198.5 | 189.7 | 187.3 | 189.5 |
| 63.0 | 156.0 | 151.1 | 149.6 | 151.2 | 159.5 | 163.2 | 163.0 | 156.2 | 154.2 | 156.0 |
| 66.0 | 126.8 | 123.5 | 122.5 | 123.2 | 129.8 | 132.4 | 132.5 | 127.0 | 126.1 | 127.0 |
| 69.0 | 101.7 | 99.42 | 98.74 | 99.30 | 104.2 | 105.9 | 106.3 | 102.2 | 101.5 | 102.1 |
| 72.0 | 80.24 | 78.82 | 78.49 | 78.77 | 82.42 | 83.51 | 83.94 | 80.97 | 80.63 | 80.97 |
| 75.0 | 61.87 | 61.13 | 60.97 | 61.08 | 63.78 | 64.34 | 64.89 | 62.75 | 62.69 | 62.73 |
| 78.0 | 46.12 | 45.52 | 45.56 | 45.84 | 47.59 | 48.12 | 48.43 | 47.16 | 47.00 | 47.22 |
| 81.0 | 32.08 | 31.78 | 31.89 | 32.07 | 33.42 | 33.74 | 34.09 | 33.17 | 33.15 | 33.25 |
| 84.0 | 19.66 | 19.59 | 19.74 | 19.95 | 20.88 | 21.09 | 21.37 | 20.84 | 20.82 | 20.93 |
| 87.0 | 8.971 | 8.991 | 9.458 | 9.522 | 10.08 | 10.12 | 10.41 | 10.23 | 10.29 | 10.31 |
| 90.0 | 0.2329 | 0.2288 | 0.2121 | 0.2412 | 0.2662 | 0.3930 | 0.4991 | 0.6405 | 0.7008 | 0.7320 |
| G/C | 300.0 | 315.0 | 330.0 | 345.0 | | | | | | |
| 0.0 | 948.3 | 947.8 | 947.1 | 946.6 | | | | | | |
| 3.0 | 947.6 | 947.1 | 946.4 | 945.7 | | | | | | |
| 6.0 | 942.8 | 942.7 | 942.1 | 941.4 | | | | | | |
| 9.0 | 934.5 | 934.1 | 934.0 | 932.7 | | | | | | |
| 12.0 | 921.3 | 921.2 | 921.5 | 920.1 | | | | | | |
| 15.0 | 903.7 | 903.6 | 904.2 | 901.9 | | | | | | |
| 18.0 | 880.7 | 881.1 | 881.6 | 879.0 | | | | | | |
| 21.0 | 852.3 | 852.9 | 853.3 | 849.6 | | | | | | |

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: Cao Chengpei

Test Date: 2014-08-28

γ Range: 0 - 90DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288

Humidity: 53.0%

Test Distance: 5.780m [K=1.0000]

Remarks:

Photometric Data Table [cd]

| | | | | |
|------|--------|--------|--------|--------|
| 24.0 | 817.9 | 819.0 | 819.1 | 813.9 |
| 27.0 | 777.5 | 779.5 | 778.9 | 771.8 |
| 30.0 | 731.6 | 733.9 | 733.0 | 723.7 |
| 33.0 | 680.0 | 683.5 | 681.7 | 670.4 |
| 36.0 | 624.7 | 629.2 | 626.5 | 613.1 |
| 39.0 | 566.3 | 571.8 | 568.3 | 553.6 |
| 42.0 | 507.0 | 512.8 | 509.1 | 492.9 |
| 45.0 | 447.9 | 453.8 | 449.8 | 433.1 |
| 48.0 | 390.4 | 396.3 | 392.1 | 376.0 |
| 51.0 | 336.0 | 341.5 | 337.6 | 322.3 |
| 54.0 | 285.7 | 290.5 | 287.1 | 273.2 |
| 57.0 | 240.0 | 244.2 | 241.1 | 229.2 |
| 60.0 | 199.4 | 202.4 | 200.1 | 189.9 |
| 63.0 | 163.9 | 166.2 | 164.4 | 156.3 |
| 66.0 | 133.2 | 134.7 | 133.5 | 127.1 |
| 69.0 | 106.9 | 107.8 | 107.1 | 102.2 |
| 72.0 | 84.47 | 84.93 | 84.62 | 80.97 |
| 75.0 | 65.39 | 65.52 | 65.45 | 62.75 |
| 78.0 | 48.87 | 49.07 | 48.90 | 47.17 |
| 81.0 | 34.49 | 34.48 | 34.46 | 33.15 |
| 84.0 | 21.71 | 21.70 | 21.67 | 20.79 |
| 87.0 | 10.68 | 10.54 | 10.60 | 10.18 |
| 90.0 | 0.6863 | 0.6696 | 0.5968 | 0.5615 |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Cao Chengpei
 Test Date: 2014-08-28

γ Range: 0 - 90DEG
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 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
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