

LED Downlight CATO Series CS6R-20S-840



| | | |
|---------------------|---------|--------------------------|
| Light Output Ratio: | 100.0% | |
| Luminaire Power: | 21.52 W | |
| SHR Nominal: | 1.25 | Calculated using the TM5 |
| SHR Maximum: | 1.25 | fine grid method. |

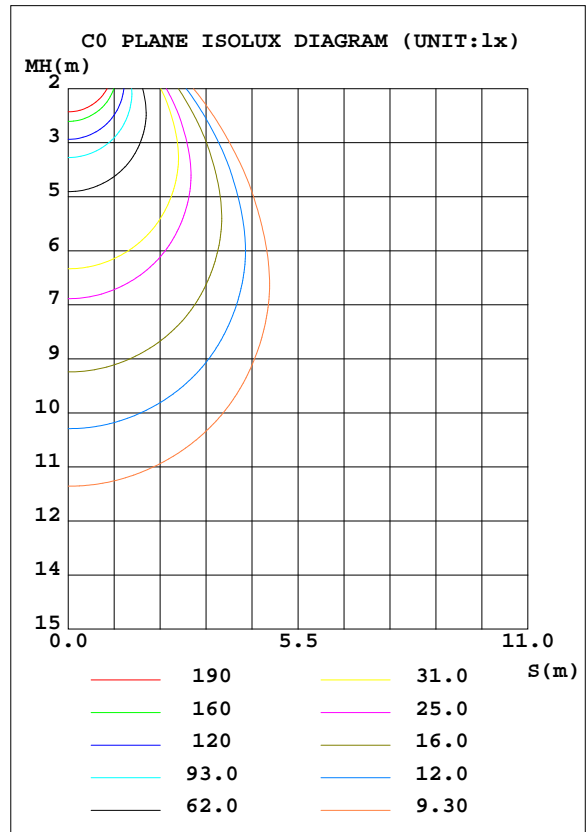
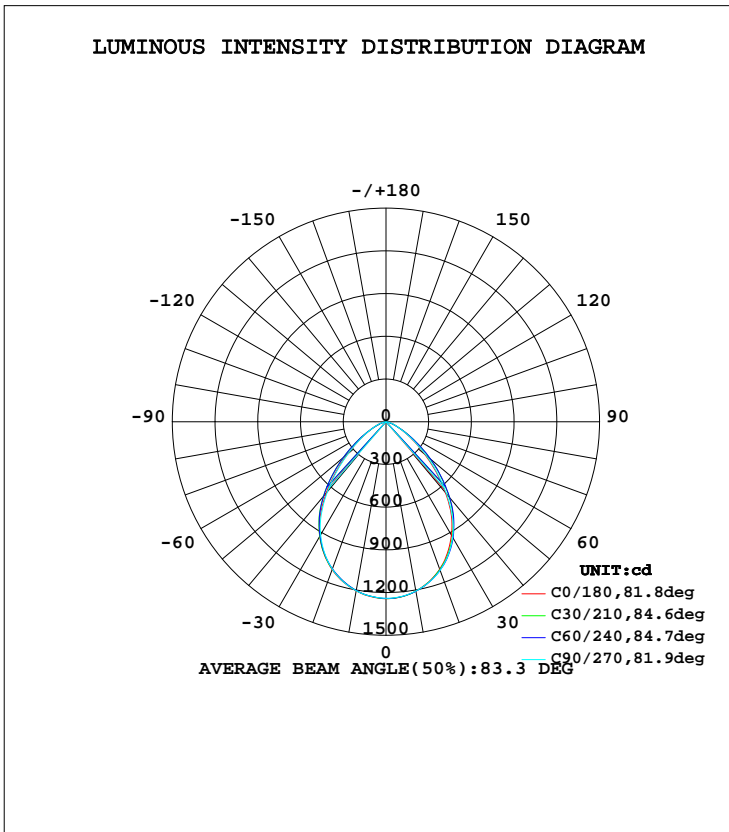
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Cao Chengpei
 Test Date: 2014-08-29

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:220.3V I:0.1018A P:21.52W PF:0.9595 Lamp Flux:2196.98x1 lm | | |
| NAME: CS6R-20S-840 | TYPE:Downlight | SERIAL No.: |
| SPEC.:4000K | DIM.: L169mm*W169mm*H66mm | |
| MFR.: E-LITE LIGHTING CO.,LTD. | | |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 102.08 lm/W | | | |
|------------------|---------------|-----------------------------------|--------|--------------------|-----------|
| MODEL | SAMSUNG-4000K | Imax(cd) | 1243 | S/MH(C0/180) | 1.13 |
| NOMINAL POWER(W) | 22 | LOR(%) | 100.0 | S/MH(C90/270) | 1.12 |
| RATED VOLTAGE(V) | 220 | TOTAL FLUX(lm) | 2197.0 | η UP, DN(C0-180) | 0.0, 50.5 |
| NOMINAL FLUX(lm) | 2196.98 | CIE CLASS | DIRECT | η UP, DN(C180-360) | 0.0, 49.5 |
| 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 |



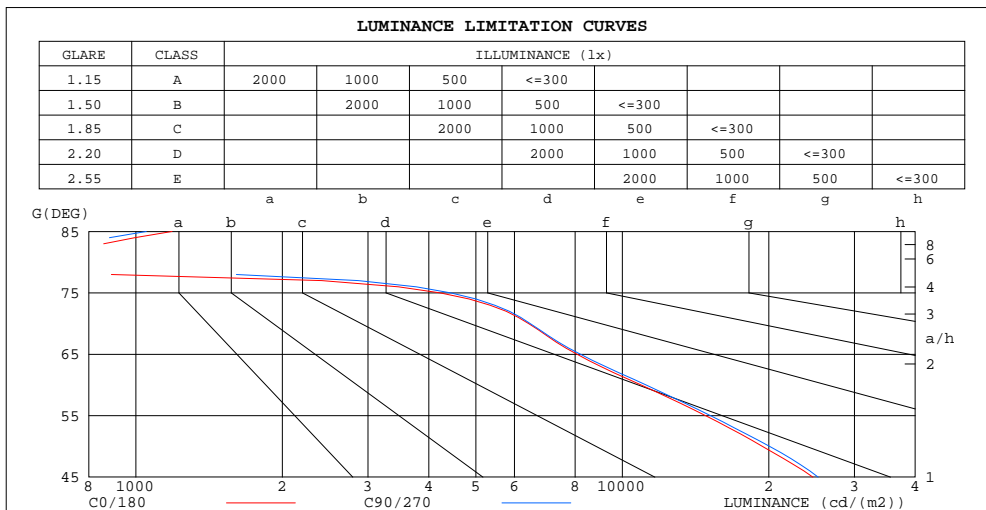
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
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 Test Date:2014-08-29

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 | 1207 | 1213 | 1207 | 1205 | 1207 | 1198 | 1205 | 1201 | 0- 10 | 116.7 | 116.7 | 5.31,5.31 |
| 20 | 1102 | 1113 | 1111 | 1106 | 1105 | 1096 | 1102 | 1099 | 10- 20 | 327.1 | 443.8 | 20.2,20.2 |
| 30 | 919.4 | 947.7 | 937.0 | 942.5 | 929.8 | 927.1 | 918.6 | 930.2 | 20- 30 | 471.2 | 915.0 | 41.6,41.6 |
| 40 | 649.4 | 714.4 | 661.1 | 712.5 | 652.2 | 692.9 | 638.7 | 692.1 | 30- 40 | 505.6 | 1421 | 64.7,64.7 |
| 50 | 356.3 | 427.3 | 368.6 | 423.8 | 351.4 | 405.9 | 345.2 | 411.4 | 40- 50 | 406.0 | 1827 | 83.1,83.1 |
| 60 | 156.0 | 178.7 | 159.8 | 176.3 | 152.8 | 163.0 | 153.8 | 170.4 | 50- 60 | 236.9 | 2064 | 93.9,93.9 |
| 70 | 62.70 | 52.67 | 63.19 | 51.92 | 61.93 | 47.67 | 63.00 | 50.50 | 60- 70 | 100.6 | 2164 | 98.5,98.5 |
| 80 | 3.076 | 7.587 | 2.737 | 7.508 | 2.980 | 6.538 | 3.287 | 6.841 | 70- 80 | 29.13 | 2193 | 99.8,99.8 |
| 90 | 0.1851 | 1.025 | 1.356 | 0.6883 | 0.1185 | 0.0977 | 0.1040 | 0.1019 | 80- 90 | 3.668 | 2197 | 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 | 1186 | 1050 |
| 80 | 620 | 552 |
| 75 | 4226 | 4443 |
| 70 | 6418 | 6469 |
| 65 | 8073 | 8199 |
| 60 | 10924 | 11189 |
| 55 | 14828 | 15182 |
| 50 | 19407 | 20079 |
| 45 | 24642 | 25254 |

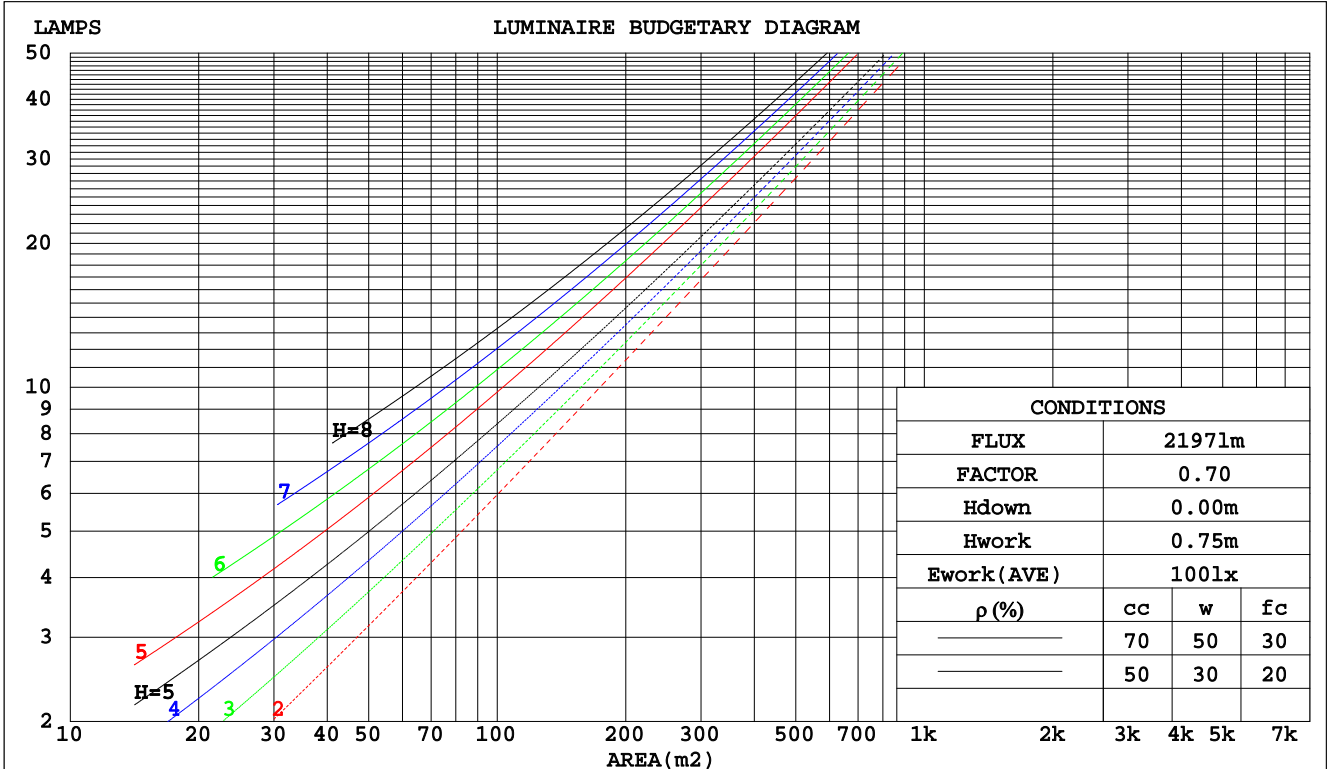
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γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity: 53.0%
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CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|---|---------------------------|-------------|
| Test:U:220.3V I:0.1018A P:21.52W PF:0.9595 Lamp Flux:2196.98x1 lm | | |
| NAME: CS6R-20S-840 | TYPE:Downlight | SERIAL No.: |
| SPEC.:4000K | DIM.: L169mm*W169mm*H66mm | |
| MFR.: E-LITE LIGHTING CO.,LTD. | | |

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| pw | | | | | | | | | | | | | | | | |
| pfc | | | | | | | | | | | | | | | | |
| 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 | 1.00 |
| 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 | .97 | .92 | .88 | .96 | .91 | .87 | .92 | .88 | .85 | .89 | .86 | .83 | .86 | .83 | .81 | .79 |
| 3.0 | .88 | .81 | .76 | .86 | .80 | .75 | .84 | .78 | .74 | .81 | .77 | .73 | .79 | .75 | .72 | .70 |
| 4.0 | .80 | .72 | .67 | .78 | .72 | .66 | .76 | .70 | .66 | .74 | .69 | .65 | .72 | .68 | .64 | .62 |
| 5.0 | .72 | .65 | .59 | .71 | .64 | .59 | .69 | .63 | .58 | .68 | .62 | .58 | .66 | .61 | .57 | .55 |
| 6.0 | .66 | .59 | .53 | .65 | .58 | .53 | .64 | .57 | .52 | .62 | .56 | .52 | .61 | .56 | .52 | .50 |
| 7.0 | .61 | .53 | .48 | .60 | .53 | .48 | .59 | .52 | .47 | .57 | .51 | .47 | .56 | .51 | .47 | .45 |
| 8.0 | .56 | .49 | .43 | .55 | .48 | .43 | .54 | .48 | .43 | .53 | .47 | .43 | .52 | .47 | .43 | .41 |
| 9.0 | .52 | .45 | .40 | .51 | .44 | .40 | .50 | .44 | .39 | .49 | .43 | .39 | .48 | .43 | .39 | .37 |
| 10.0 | .48 | .41 | .36 | .48 | .41 | .36 | .47 | .40 | .36 | .46 | .40 | .36 | .45 | .40 | .36 | .34 |



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 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
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WEC AND CCEC

| | | |
|---|---------------------------|-------------|
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| 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 | .231 | .131 | .042 | .224 | .128 | .041 | .211 | .121 | .039 | .199 | .115 | .037 | .188 | .109 | .035 | |
| 2.0 | .226 | .124 | .038 | .220 | .121 | .037 | .208 | .116 | .036 | .198 | .111 | .035 | .189 | .107 | .034 | |
| 3.0 | .215 | .115 | .034 | .210 | .113 | .034 | .200 | .109 | .033 | .191 | .105 | .032 | .183 | .101 | .031 | |
| 4.0 | .204 | .106 | .031 | .199 | .104 | .031 | .191 | .101 | .030 | .183 | .098 | .030 | .176 | .095 | .029 | |
| 5.0 | .193 | .098 | .028 | .189 | .097 | .028 | .181 | .094 | .028 | .174 | .092 | .027 | .168 | .090 | .027 | |
| 6.0 | .182 | .091 | .026 | .179 | .090 | .026 | .172 | .088 | .026 | .166 | .086 | .025 | .160 | .084 | .025 | |
| 7.0 | .172 | .085 | .024 | .169 | .084 | .024 | .163 | .082 | .024 | .157 | .081 | .023 | .152 | .079 | .023 | |
| 8.0 | .163 | .080 | .022 | .160 | .079 | .022 | .155 | .077 | .022 | .150 | .076 | .022 | .145 | .074 | .022 | |
| 9.0 | .155 | .075 | .021 | .152 | .074 | .021 | .147 | .073 | .021 | .143 | .071 | .020 | .138 | .070 | .020 | |
| 10.0 | .147 | .070 | .020 | .144 | .070 | .019 | .140 | .069 | .019 | .136 | .068 | .019 | .132 | .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 | .037 | .018 | .015 | .012 | |
| 3.0 | .154 | .114 | .082 | .132 | .098 | .071 | .091 | .068 | .050 | .052 | .040 | .029 | .017 | .013 | .010 | |
| 4.0 | .146 | .100 | .065 | .125 | .086 | .057 | .086 | .060 | .040 | .050 | .035 | .024 | .016 | .011 | .008 | |
| 5.0 | .138 | .089 | .053 | .119 | .077 | .046 | .082 | .054 | .032 | .047 | .032 | .019 | .015 | .010 | .006 | |
| 6.0 | .132 | .080 | .044 | .113 | .070 | .038 | .078 | .049 | .027 | .045 | .029 | .016 | .015 | .009 | .005 | |
| 7.0 | .125 | .073 | .037 | .108 | .064 | .032 | .075 | .045 | .023 | .043 | .026 | .014 | .014 | .009 | .004 | |
| 8.0 | .120 | .067 | .032 | .103 | .058 | .028 | .071 | .041 | .020 | .041 | .024 | .012 | .013 | .008 | .004 | |
| 9.0 | .114 | .062 | .027 | .098 | .054 | .024 | .068 | .038 | .017 | .040 | .023 | .010 | .013 | .007 | .003 | |
| 10.0 | .109 | .058 | .024 | .094 | .051 | .021 | .065 | .036 | .015 | .038 | .021 | .009 | .012 | .007 | .003 | |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Cao Chengpei
 Test Date:2014-08-29

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:220.3V I:0.1018A P:21.52W PF:0.9595 Lamp Flux:2196.98x1 lm | | |
| NAME: CS6R-20S-840 | TYPE:Downlight | SERIAL No.: |
| SPEC.:4000K | 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 | 23.0 | 22.0 | 23.2 | 23.4 | 21.9 | 23.2 | 22.1 | 23.3 | 23.5 |
| 3H | 22.0 | 23.1 | 22.3 | 23.4 | 23.6 | 22.1 | 23.2 | 22.4 | 23.5 | 23.7 |
| 4H | 22.0 | 23.1 | 22.3 | 23.3 | 23.6 | 22.1 | 23.2 | 22.4 | 23.4 | 23.7 |
| 6H | 21.9 | 22.9 | 22.2 | 23.2 | 23.5 | 22.0 | 23.1 | 22.3 | 23.3 | 23.6 |
| 8H | 21.9 | 22.8 | 22.2 | 23.1 | 23.4 | 22.0 | 23.0 | 22.3 | 23.2 | 23.5 |
| 12H | 21.8 | 22.8 | 22.2 | 23.0 | 23.3 | 21.9 | 22.9 | 22.3 | 23.2 | 23.4 |
| 4H 2H | 21.9 | 23.0 | 22.2 | 23.2 | 23.4 | 22.0 | 23.1 | 22.3 | 23.3 | 23.5 |
| 3H | 22.1 | 23.1 | 22.5 | 23.4 | 23.7 | 22.2 | 23.2 | 22.6 | 23.5 | 23.7 |
| 4H | 22.2 | 23.0 | 22.5 | 23.4 | 23.7 | 22.3 | 23.1 | 22.6 | 23.4 | 23.8 |
| 6H | 22.1 | 22.9 | 22.5 | 23.2 | 23.6 | 22.2 | 23.0 | 22.6 | 23.3 | 23.7 |
| 8H | 22.1 | 22.8 | 22.5 | 23.1 | 23.5 | 22.2 | 22.9 | 22.6 | 23.2 | 23.6 |
| 12H | 22.0 | 22.7 | 22.4 | 23.0 | 23.4 | 22.1 | 22.8 | 22.5 | 23.1 | 23.5 |
| 8H 4H | 22.1 | 22.8 | 22.5 | 23.2 | 23.5 | 22.2 | 22.9 | 22.6 | 23.2 | 23.6 |
| 6H | 22.0 | 22.6 | 22.5 | 23.0 | 23.4 | 22.1 | 22.7 | 22.6 | 23.1 | 23.5 |
| 8H | 22.0 | 22.5 | 22.5 | 22.9 | 23.4 | 22.1 | 22.6 | 22.5 | 23.0 | 23.5 |
| 12H | 22.0 | 22.4 | 22.4 | 22.8 | 23.3 | 22.1 | 22.5 | 22.5 | 22.9 | 23.4 |
| 12H 4H | 22.1 | 22.7 | 22.5 | 23.1 | 23.5 | 22.2 | 22.8 | 22.6 | 23.2 | 23.6 |
| 6H | 22.0 | 22.5 | 22.4 | 22.9 | 23.4 | 22.1 | 22.6 | 22.5 | 23.0 | 23.5 |
| 8H | 22.0 | 22.4 | 22.4 | 22.8 | 23.3 | 22.1 | 22.5 | 22.5 | 22.9 | 23.4 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | + 1.2 / - 1.7 | | | | | + 1.1 / - 1.6 | | | | |
| 1.5H | + 0.5 / - 1.0 | | | | | + 0.5 / - 0.9 | | | | |
| 2.0H | + 2.1 / - 2.4 | | | | | + 2.1 / - 2.5 | | | | |

CIE Pub.117 Corrected 2197 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.7)

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 C Interval: 15.0DEG
 Test Speed: HIGH
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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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| SPEC.:4000K | DIM.: L169mm*W169mm*H66mm | |
| 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 | 69 | 59 | 54 | 68 | 59 | 54 | 67 | 59 | 53 | 48 |
| 0.80 | 79 | 70 | 64 | 78 | 69 | 64 | 77 | 69 | 63 | 58 |
| 1.00 | 87 | 78 | 73 | 86 | 78 | 72 | 84 | 78 | 72 | 66 |
| 1.25 | 93 | 85 | 80 | 92 | 84 | 79 | 89 | 83 | 78 | 73 |
| 1.50 | 97 | 90 | 85 | 96 | 89 | 84 | 93 | 87 | 83 | 77 |
| 2.00 | 102 | 96 | 91 | 101 | 95 | 91 | 98 | 93 | 89 | 83 |
| 2.50 | 105 | 99 | 95 | 103 | 98 | 94 | 100 | 96 | 92 | 85 |
| 3.00 | 107 | 102 | 98 | 105 | 101 | 97 | 102 | 98 | 95 | 88 |
| 4.00 | 110 | 106 | 103 | 108 | 104 | 101 | 104 | 101 | 99 | 91 |
| 5.00 | 112 | 108 | 106 | 110 | 107 | 104 | 105 | 103 | 101 | 93 |
| 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):

1642.9 lm

%lum = 74.8%

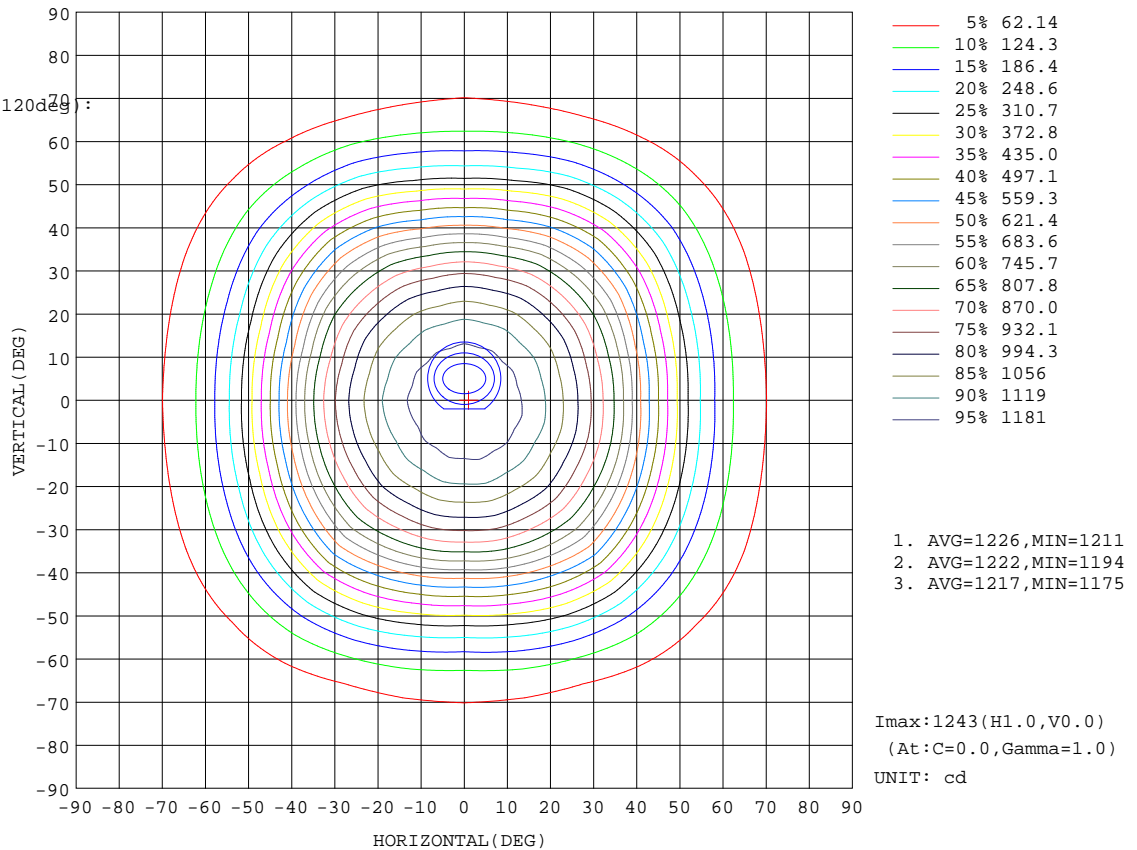
%lamp = 74.8%

Conical surface Flux(120deg):

2063.6 lm

%lum = 93.9%

%lamp = 93.9%

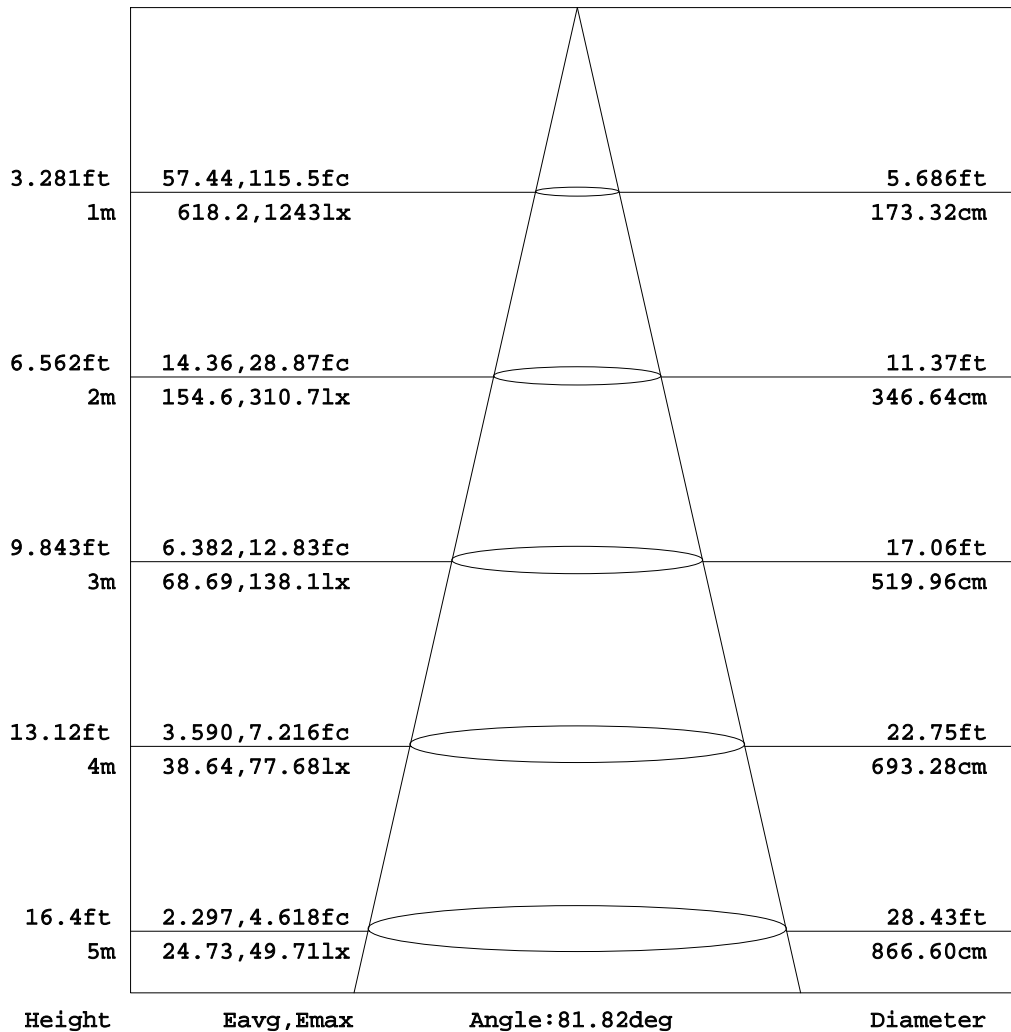

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AAI Figure

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

Flux out:1468 lm



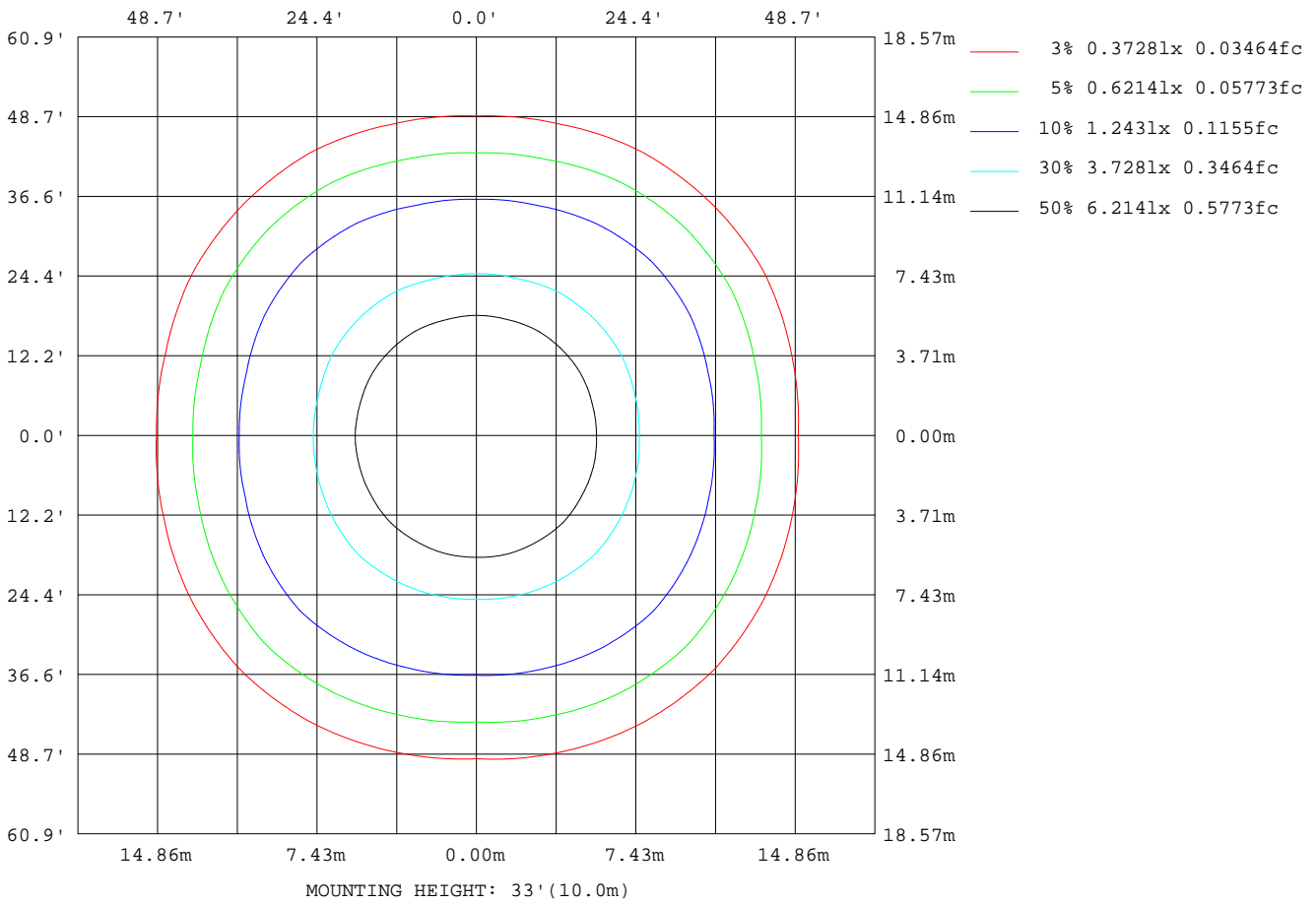
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Cao Chengpei
Test Date:2014-08-29

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

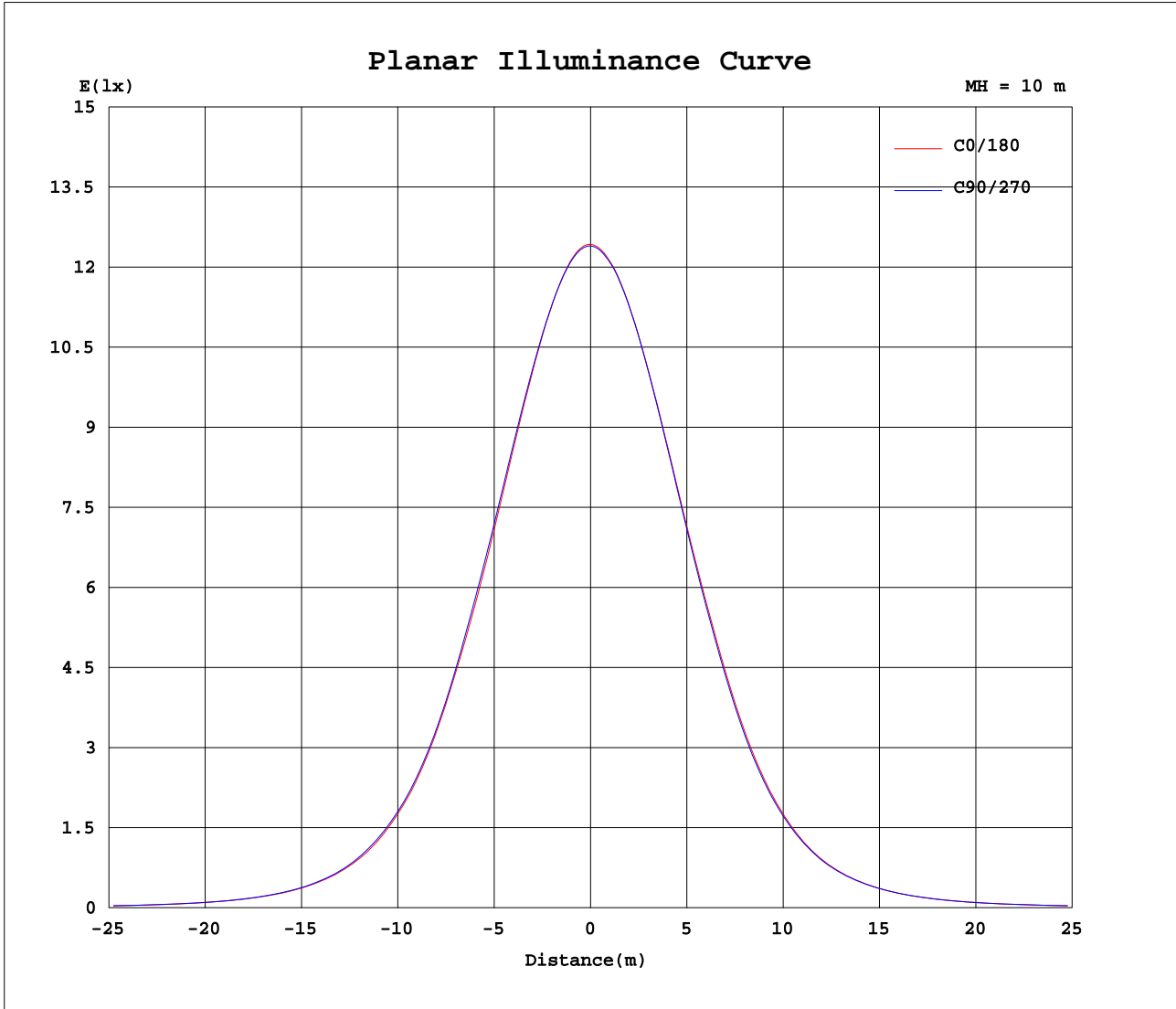
| | | |
|---|---------------------------|-------------|
| Test:U:220.3V I:0.1018A P:21.52W PF:0.9595 Lamp Flux:2196.98x1 lm | | |
| NAME: CS6R-20S-840 | TYPE:Downlight | SERIAL No.: |
| SPEC.:4000K | DIM.: L169mm*W169mm*H66mm | |
| MFR.: E-LITE LIGHTING CO.,LTD. | | |



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Cao Chengpei
 Test Date:2014-08-29

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: 2014-08-29

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|---|---------------------------|-------------|
| Test:U:220.3V I:0.1018A P:21.52W PF:0.9595 Lamp Flux:2196.98x1 lm | | |
| NAME: CS6R-20S-840 | TYPE:Downlight | SERIAL No.: |
| SPEC.:4000K | DIM.: L169mm*W169mm*H66mm | |
| MFR.: E-LITE LIGHTING CO.,LTD. | | |

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 | 1243 | 1242 | 1242 | 1241 | 1241 | 1240 | 1240 | 1239 | 1239 | 1239 | 1239 | 1239 | 1243 | 1242 | 1242 | 1241 | 1241 | 1240 | 1240 |
| 5 | 1235 | 1235 | 1235 | 1235 | 1234 | 1234 | 1232 | 1232 | 1230 | 1230 | 1228 | 1228 | 1232 | 1230 | 1230 | 1228 | 1230 | 1228 | 1230 |
| 10 | 1207 | 1212 | 1208 | 1213 | 1209 | 1213 | 1207 | 1209 | 1203 | 1205 | 1199 | 1203 | 1207 | 1200 | 1204 | 1198 | 1203 | 1200 | 1205 |
| 15 | 1164 | 1169 | 1165 | 1170 | 1167 | 1173 | 1167 | 1169 | 1160 | 1162 | 1156 | 1160 | 1164 | 1157 | 1160 | 1154 | 1159 | 1156 | 1163 |
| 20 | 1102 | 1109 | 1105 | 1113 | 1110 | 1117 | 1111 | 1112 | 1103 | 1106 | 1098 | 1101 | 1105 | 1098 | 1102 | 1096 | 1099 | 1095 | 1102 |
| 25 | 1020 | 1028 | 1029 | 1040 | 1036 | 1041 | 1034 | 1036 | 1030 | 1034 | 1023 | 1024 | 1027 | 1019 | 1026 | 1021 | 1023 | 1014 | 1020 |
| 30 | 919 | 929 | 933 | 948 | 942 | 945 | 937 | 941 | 937 | 943 | 930 | 928 | 930 | 922 | 931 | 927 | 927 | 913 | 919 |
| 35 | 801 | 814 | 822 | 837 | 830 | 826 | 812 | 822 | 826 | 835 | 820 | 808 | 805 | 801 | 819 | 816 | 815 | 792 | 792 |
| 40 | 649 | 669 | 692 | 714 | 696 | 679 | 661 | 676 | 693 | 713 | 686 | 661 | 652 | 652 | 684 | 693 | 681 | 644 | 639 |
| 45 | 498 | 516 | 545 | 576 | 550 | 528 | 510 | 525 | 547 | 572 | 540 | 508 | 496 | 501 | 536 | 552 | 535 | 496 | 486 |
| 50 | 356 | 374 | 404 | 427 | 411 | 386 | 369 | 384 | 408 | 424 | 399 | 364 | 351 | 358 | 392 | 406 | 393 | 358 | 345 |
| 55 | 243 | 257 | 276 | 290 | 280 | 263 | 249 | 261 | 278 | 287 | 270 | 248 | 238 | 242 | 263 | 270 | 266 | 245 | 235 |
| 60 | 156 | 166 | 174 | 179 | 176 | 170 | 160 | 168 | 174 | 176 | 169 | 159 | 153 | 155 | 164 | 163 | 167 | 158 | 154 |
| 65 | 97.4 | 99.7 | 99.4 | 102 | 98.8 | 102 | 99.0 | 101 | 98.8 | 100 | 95.7 | 95.6 | 95.7 | 93.8 | 92.5 | 92.1 | 94.3 | 96.2 | 97.7 |
| 70 | 62.7 | 60.0 | 52.8 | 52.7 | 52.5 | 59.8 | 63.2 | 60.2 | 52.6 | 51.9 | 50.9 | 57.4 | 61.9 | 56.9 | 50.0 | 47.7 | 50.6 | 57.3 | 63.0 |
| 75 | 31.2 | 30.8 | 26.1 | 24.4 | 26.1 | 31.0 | 32.8 | 31.5 | 26.2 | 24.2 | 25.2 | 29.2 | 31.4 | 28.5 | 24.7 | 22.1 | 24.2 | 28.1 | 30.4 |
| 80 | 3.08 | 3.72 | 4.45 | 7.59 | 5.05 | 3.44 | 2.74 | 3.41 | 4.61 | 7.51 | 4.58 | 3.59 | 2.98 | 3.73 | 4.60 | 6.54 | 4.74 | 4.00 | 3.29 |
| 85 | 2.95 | 3.43 | 3.76 | 3.96 | 3.67 | 3.14 | 2.61 | 3.13 | 3.56 | 3.84 | 3.67 | 3.32 | 2.86 | 3.41 | 3.90 | 4.17 | 4.02 | 3.63 | 3.15 |
| 90 | 0.19 | 0.47 | 0.87 | 1.03 | 1.28 | 1.40 | 1.36 | 1.27 | 1.09 | 0.69 | 0.43 | 0.20 | 0.12 | 0.11 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Cao Chengpei
 Test Date:2014-08-29

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 | 1243 | 1242 | 1242 | 1241 | 1241 | 1240 | 1240 | 1239 | 1239 | 1239 |
| 3.0 | 1240 | 1241 | 1240 | 1240 | 1239 | 1239 | 1237 | 1237 | 1236 | 1235 |
| 6.0 | 1231 | 1232 | 1231 | 1232 | 1230 | 1230 | 1229 | 1229 | 1226 | 1226 |
| 9.0 | 1214 | 1219 | 1215 | 1219 | 1215 | 1219 | 1213 | 1216 | 1209 | 1212 |
| 12.0 | 1192 | 1197 | 1193 | 1198 | 1194 | 1199 | 1193 | 1195 | 1188 | 1189 |
| 15.0 | 1164 | 1169 | 1165 | 1170 | 1167 | 1173 | 1167 | 1169 | 1160 | 1162 |
| 18.0 | 1129 | 1135 | 1131 | 1138 | 1135 | 1141 | 1136 | 1137 | 1128 | 1130 |
| 21.0 | 1087 | 1094 | 1091 | 1099 | 1097 | 1103 | 1097 | 1098 | 1090 | 1093 |
| 24.0 | 1038 | 1046 | 1046 | 1056 | 1053 | 1058 | 1051 | 1053 | 1046 | 1049 |
| 27.0 | 981.5 | 990.4 | 992.3 | 1005 | 1001 | 1005 | 996.9 | 1000 | 994.6 | 999.5 |
| 30.0 | 919.4 | 929.1 | 933.0 | 947.7 | 942.0 | 944.7 | 937.0 | 940.9 | 937.0 | 942.5 |
| 33.0 | 850.9 | 862.3 | 868.0 | 882.7 | 876.6 | 876.8 | 867.2 | 873.4 | 872.4 | 879.1 |
| 36.0 | 773.0 | 787.4 | 797.6 | 813.2 | 805.3 | 797.5 | 782.8 | 794.0 | 801.0 | 811.2 |
| 39.0 | 681.2 | 699.9 | 720.0 | 739.8 | 724.6 | 709.1 | 692.2 | 706.1 | 721.2 | 738.2 |
| 42.0 | 586.7 | 607.4 | 634.1 | 662.0 | 638.1 | 617.7 | 599.4 | 614.8 | 635.3 | 658.7 |
| 45.0 | 497.7 | 515.9 | 544.9 | 576.5 | 549.9 | 527.5 | 510.0 | 524.7 | 546.9 | 572.4 |
| 48.0 | 409.9 | 428.9 | 460.2 | 486.5 | 466.6 | 440.8 | 424.4 | 438.1 | 463.3 | 482.6 |
| 51.0 | 331.6 | 348.0 | 376.6 | 398.1 | 384.0 | 358.1 | 341.8 | 356.8 | 380.6 | 394.8 |
| 54.0 | 263.5 | 278.2 | 299.3 | 315.6 | 304.8 | 284.9 | 270.0 | 283.0 | 302.2 | 312.7 |
| 57.0 | 205.0 | 217.6 | 232.0 | 241.6 | 235.3 | 222.5 | 209.6 | 220.5 | 233.0 | 238.6 |
| 60.0 | 156.0 | 165.8 | 174.1 | 178.7 | 175.9 | 169.8 | 159.8 | 167.7 | 174.4 | 176.3 |
| 63.0 | 117.1 | 123.2 | 126.0 | 129.9 | 126.1 | 126.2 | 119.8 | 124.9 | 125.6 | 127.6 |
| 66.0 | 89.01 | 89.96 | 87.47 | 90.37 | 86.92 | 91.28 | 90.12 | 90.74 | 87.10 | 88.70 |
| 69.0 | 68.70 | 66.44 | 59.69 | 60.69 | 59.41 | 66.55 | 69.20 | 66.65 | 59.48 | 59.78 |
| 72.0 | 50.97 | 48.12 | 40.94 | 39.22 | 40.73 | 47.76 | 51.73 | 48.38 | 40.86 | 38.80 |
| 75.0 | 31.24 | 30.81 | 26.06 | 24.41 | 26.14 | 31.05 | 32.85 | 31.50 | 26.23 | 24.15 |
| 78.0 | 5.290 | 10.74 | 12.22 | 13.28 | 12.88 | 12.82 | 9.559 | 12.78 | 12.69 | 13.14 |
| 81.0 | 3.043 | 3.674 | 4.213 | 5.489 | 4.207 | 3.375 | 2.706 | 3.358 | 4.061 | 5.401 |
| 84.0 | 2.970 | 3.497 | 3.857 | 4.100 | 3.782 | 3.200 | 2.635 | 3.189 | 3.668 | 3.979 |
| 87.0 | 2.920 | 3.277 | 3.526 | 3.661 | 3.429 | 3.023 | 2.579 | 2.984 | 3.316 | 3.529 |
| 90.0 | 0.1851 | 0.4721 | 0.8713 | 1.025 | 1.277 | 1.397 | 1.356 | 1.275 | 1.094 | 0.6883 |
| G/C | 150.0 | 165.0 | 180.0 | 195.0 | 210.0 | 225.0 | 240.0 | 255.0 | 270.0 | 285.0 |
| 0.0 | 1239 | 1239 | 1243 | 1242 | 1242 | 1241 | 1241 | 1240 | 1240 | 1239 |
| 3.0 | 1234 | 1234 | 1238 | 1237 | 1237 | 1236 | 1236 | 1235 | 1235 | 1235 |
| 6.0 | 1223 | 1225 | 1229 | 1225 | 1227 | 1224 | 1226 | 1224 | 1226 | 1224 |
| 9.0 | 1206 | 1209 | 1213 | 1208 | 1211 | 1206 | 1211 | 1207 | 1212 | 1208 |
| 12.0 | 1184 | 1187 | 1191 | 1185 | 1188 | 1182 | 1187 | 1184 | 1190 | 1186 |
| 15.0 | 1156 | 1160 | 1164 | 1157 | 1160 | 1154 | 1159 | 1156 | 1163 | 1158 |
| 18.0 | 1123 | 1127 | 1131 | 1124 | 1127 | 1120 | 1125 | 1121 | 1129 | 1124 |
| 21.0 | 1085 | 1087 | 1091 | 1084 | 1088 | 1082 | 1086 | 1080 | 1087 | 1083 |
| 24.0 | 1040 | 1041 | 1044 | 1037 | 1043 | 1038 | 1040 | 1032 | 1038 | 1035 |
| 27.0 | 988.1 | 987.8 | 990.2 | 982.9 | 990.4 | 986.0 | 986.9 | 975.8 | 982.1 | 980.0 |
| 30.0 | 930.3 | 928.0 | 929.8 | 922.1 | 931.2 | 927.1 | 927.2 | 912.9 | 918.6 | 916.7 |
| 33.0 | 866.1 | 860.1 | 859.7 | 853.8 | 865.8 | 861.9 | 861.5 | 843.9 | 847.0 | 846.9 |
| 36.0 | 794.7 | 780.2 | 775.7 | 772.3 | 793.9 | 791.9 | 790.4 | 763.7 | 762.4 | 765.2 |
| 39.0 | 714.3 | 691.8 | 683.7 | 682.9 | 712.2 | 718.6 | 709.7 | 675.0 | 670.2 | 676.0 |
| 42.0 | 628.4 | 599.3 | 588.9 | 590.1 | 625.4 | 639.0 | 623.5 | 583.2 | 576.6 | 584.3 |
| 45.0 | 539.6 | 508.1 | 496.2 | 501.4 | 535.9 | 551.7 | 535.4 | 496.4 | 486.0 | 497.2 |
| 48.0 | 455.3 | 420.5 | 406.7 | 413.6 | 447.9 | 465.2 | 448.6 | 412.2 | 400.2 | 412.1 |
| 51.0 | 371.4 | 338.4 | 326.2 | 332.5 | 363.9 | 377.1 | 366.1 | 332.0 | 320.6 | 331.8 |
| 54.0 | 293.3 | 269.2 | 258.0 | 263.0 | 286.9 | 295.7 | 288.7 | 264.8 | 255.0 | 264.0 |
| 57.0 | 226.5 | 209.4 | 200.3 | 204.6 | 220.1 | 223.5 | 222.8 | 207.4 | 199.5 | 207.2 |
| 60.0 | 169.3 | 159.5 | 152.8 | 155.2 | 163.8 | 163.0 | 166.7 | 158.3 | 153.8 | 159.2 |
| 63.0 | 122.1 | 118.3 | 115.1 | 115.1 | 118.4 | 117.0 | 120.6 | 117.9 | 116.7 | 119.4 |
| 66.0 | 84.18 | 86.27 | 87.62 | 84.62 | 81.68 | 81.13 | 83.52 | 86.73 | 89.58 | 87.84 |
| 69.0 | 57.98 | 63.64 | 67.80 | 62.71 | 56.55 | 55.02 | 57.47 | 63.50 | 69.13 | 64.68 |
| 72.0 | 39.43 | 45.79 | 50.31 | 45.44 | 39.06 | 35.80 | 39.03 | 45.26 | 50.71 | 46.48 |
| 75.0 | 25.19 | 29.17 | 31.43 | 28.53 | 24.67 | 22.14 | 24.19 | 28.05 | 30.44 | 28.75 |
| 78.0 | 12.17 | 10.39 | 7.636 | 8.667 | 11.17 | 11.67 | 10.87 | 7.331 | 3.693 | 7.044 |
| 81.0 | 4.167 | 3.535 | 2.949 | 3.675 | 4.430 | 4.982 | 4.567 | 3.916 | 3.254 | 3.945 |
| 84.0 | 3.788 | 3.368 | 2.878 | 3.478 | 4.020 | 4.329 | 4.149 | 3.702 | 3.173 | 3.725 |
| 87.0 | 3.406 | 3.163 | 2.818 | 3.228 | 3.580 | 3.762 | 3.669 | 3.426 | 3.111 | 3.443 |
| 90.0 | 0.4346 | 0.1996 | 0.1185 | 0.1081 | 0.0977 | 0.0977 | 0.0977 | 0.1040 | 0.1040 | 0.1019 |
| G/C | 300.0 | 315.0 | 330.0 | 345.0 | | | | | | |
| 0.0 | 1239 | 1239 | 1239 | 1239 | | | | | | |
| 3.0 | 1235 | 1235 | 1236 | 1236 | | | | | | |
| 6.0 | 1227 | 1225 | 1228 | 1226 | | | | | | |
| 9.0 | 1212 | 1208 | 1213 | 1209 | | | | | | |
| 12.0 | 1190 | 1185 | 1190 | 1187 | | | | | | |
| 15.0 | 1162 | 1157 | 1162 | 1159 | | | | | | |
| 18.0 | 1129 | 1124 | 1129 | 1125 | | | | | | |
| 21.0 | 1090 | 1085 | 1090 | 1084 | | | | | | |

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: Cao Chengpei

Test Date: 2014-08-29

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 | 1044 | 1041 | 1044 | 1036 |
| 27.0 | 991.1 | 989.1 | 991.0 | 980.4 |
| 30.0 | 930.9 | 930.2 | 930.8 | 918.1 |
| 33.0 | 863.8 | 864.0 | 864.3 | 850.6 |
| 36.0 | 791.6 | 792.3 | 794.0 | 778.1 |
| 39.0 | 709.2 | 717.8 | 719.2 | 691.9 |
| 42.0 | 621.9 | 639.4 | 634.4 | 599.5 |
| 45.0 | 533.3 | 555.4 | 545.7 | 510.5 |
| 48.0 | 446.5 | 469.8 | 458.4 | 425.3 |
| 51.0 | 365.3 | 382.6 | 375.3 | 345.1 |
| 54.0 | 289.7 | 301.5 | 298.7 | 276.1 |
| 57.0 | 223.8 | 230.1 | 231.9 | 216.1 |
| 60.0 | 168.3 | 170.4 | 173.8 | 164.3 |
| 63.0 | 122.6 | 123.5 | 125.5 | 121.3 |
| 66.0 | 85.91 | 86.14 | 86.47 | 88.73 |
| 69.0 | 60.03 | 58.42 | 59.43 | 65.00 |
| 72.0 | 41.17 | 37.84 | 40.60 | 46.76 |
| 75.0 | 25.80 | 23.34 | 25.70 | 29.47 |
| 78.0 | 11.33 | 12.31 | 12.09 | 9.436 |
| 81.0 | 4.536 | 5.102 | 4.536 | 3.723 |
| 84.0 | 4.141 | 4.373 | 4.104 | 3.526 |
| 87.0 | 3.717 | 3.841 | 3.672 | 3.291 |
| 90.0 | 0.0998 | 0.1019 | 0.1019 | 0.2475 |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Cao Chengpei
 Test Date: 2014-08-29

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: