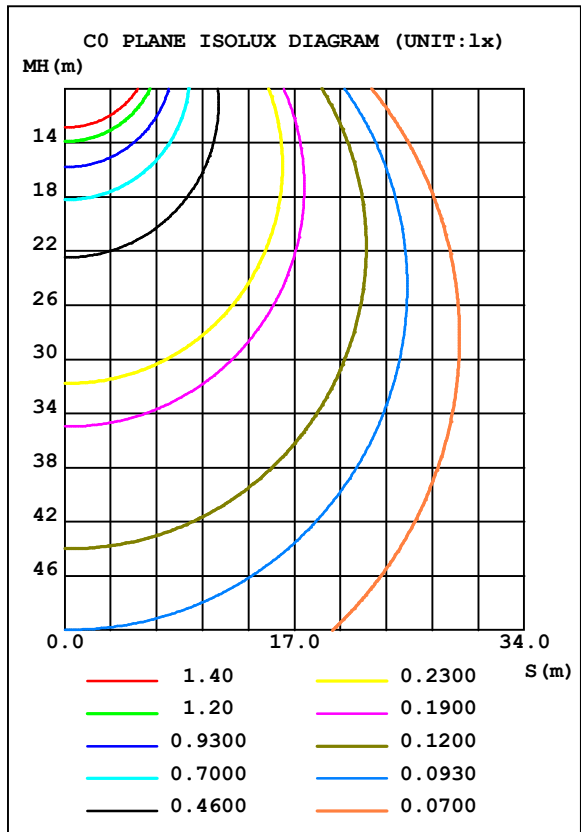
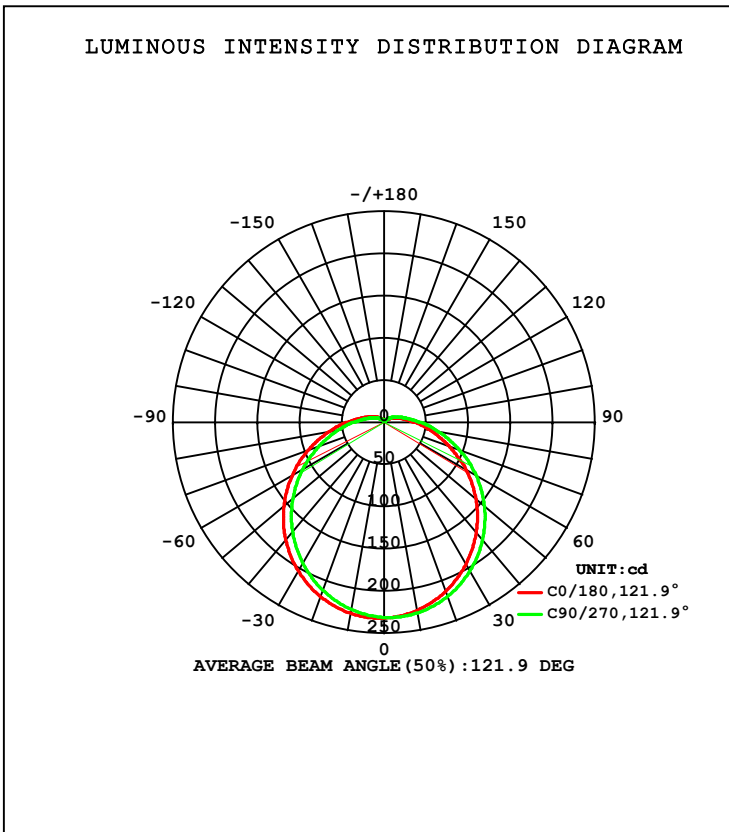


LUMINAIRE PHOTOMETRIC TEST REPORT

| | | |
|---|--------|-------------------|
| Test:U:120.9V I:0.1745A P:12.64W PF:0.5993 Lamp Flux:871.877x1 lm | | |
| NAME: BR30球泡 | TYPE: | WEIGHT: |
| DIM.: | SPEC.: | SERIAL No.:2# |
| MFR.: 惠州市华阳光电技术有限公司 | SUR.: | PROTECTION ANGLE: |

| DATA OF LAMP | | PHOTOMETRIC DATA | | | | Eff: 68.96 lm/W |
|-------------------|---------|-----------------------|---------|---------------------|-----------|-----------------|
| MODEL | 2200K | I _{max} (cd) | 232.3 | S/MH (C0/180) | 1.30 | |
| NOMINAL POWER (W) | 12 | LOR (%) | 100.0 | S/MH (C90/270) | 1.24 | |
| RATED VOLTAGE (V) | 120 | TOTAL FLUX (lm) | 871.88 | η UP, DN (C0-180) | 5.2, 43.7 | |
| NOMINAL FLUX (lm) | 871.877 | CIE CLASS | SEMI-D. | η UP, DN (C180-360) | 5.5, 45.6 | |
| LAMPS INSIDE | 1 | η up (%) | 10.7 | CIBSE SHR NOM | 1.50 | |
| TEST VOLTAGE (V) | 120.9 | η down (%) | 89.3 | CIBSE SHR MAX | 1.50 | |



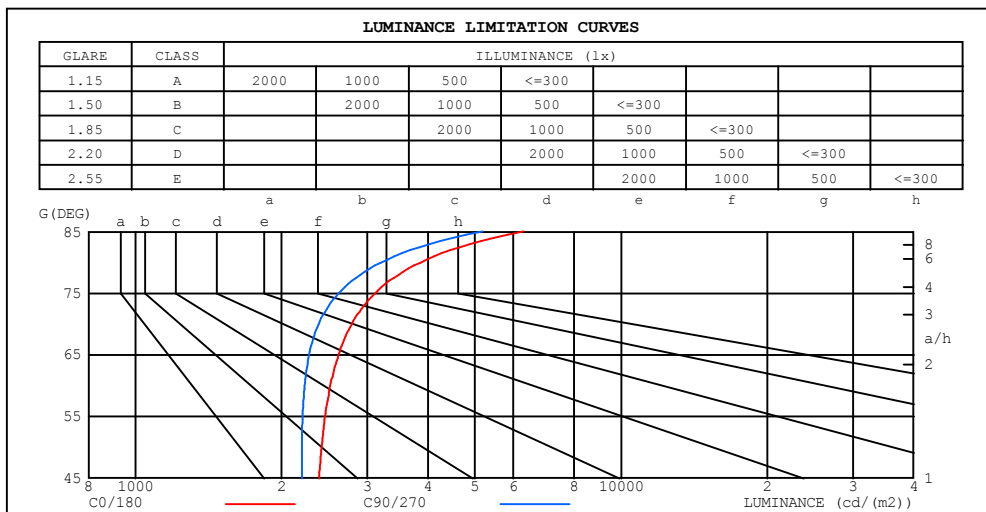
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2021-03-13

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.261
 Humidity: 65.0%
 Test Distance: 12.983m [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 | %lum, lamp |
|-----|-----------------------|-------|-------|-------|-------|-------|-------|-------|---------|--------|---------|------------|
| 5 | 232.0 | 230.4 | 229.1 | 229.0 | 230.1 | 230.6 | 231.3 | 231.4 | 0- 5 | 5.521 | 5.521 | 0.63,0.63 |
| 10 | 229.9 | 227.4 | 225.3 | 224.9 | 226.3 | 227.8 | 229.3 | 229.6 | 5- 10 | 16.38 | 21.90 | 2.51,2.51 |
| 15 | 225.8 | 222.4 | 219.5 | 219.0 | 220.7 | 223.1 | 225.5 | 225.9 | 10- 15 | 26.70 | 48.60 | 5.57,5.57 |
| 20 | 220.1 | 215.8 | 212.1 | 211.5 | 213.3 | 216.6 | 219.9 | 220.3 | 15- 20 | 36.16 | 84.75 | 9.72,9.72 |
| 25 | 212.5 | 207.6 | 203.2 | 202.6 | 204.6 | 208.5 | 212.5 | 213.1 | 20- 25 | 44.48 | 129.2 | 14.8,14.8 |
| 30 | 203.6 | 197.9 | 193.0 | 192.2 | 194.3 | 199.0 | 203.6 | 204.2 | 25- 30 | 51.43 | 180.7 | 20.7,20.7 |
| 35 | 193.1 | 187.1 | 181.6 | 180.6 | 182.8 | 188.2 | 193.3 | 194.1 | 30- 35 | 56.83 | 237.5 | 27.2,27.2 |
| 40 | 181.6 | 175.0 | 169.0 | 168.0 | 170.2 | 176.1 | 181.8 | 182.7 | 35- 40 | 60.56 | 298.0 | 34.2,34.2 |
| 45 | 168.9 | 162.0 | 155.6 | 154.5 | 156.7 | 163.1 | 169.2 | 170.0 | 40- 45 | 62.55 | 360.6 | 41.4,41.4 |
| 50 | 155.3 | 148.0 | 141.3 | 140.3 | 142.4 | 149.2 | 155.5 | 156.5 | 45- 50 | 62.81 | 423.4 | 48.6,48.6 |
| 55 | 140.9 | 133.5 | 126.6 | 125.5 | 127.5 | 134.5 | 141.2 | 142.1 | 50- 55 | 61.39 | 484.8 | 55.6,55.6 |
| 60 | 125.9 | 118.4 | 111.5 | 110.4 | 112.4 | 119.4 | 126.1 | 127.2 | 55- 60 | 58.41 | 543.2 | 62.3,62.3 |
| 65 | 110.6 | 103.1 | 96.29 | 95.21 | 96.11 | 103.9 | 110.8 | 112.0 | 60- 65 | 54.02 | 597.2 | 68.5,68.5 |
| 70 | 95.28 | 87.99 | 81.46 | 80.54 | 81.43 | 88.06 | 94.44 | 95.55 | 65- 70 | 48.41 | 645.6 | 74.1,74.1 |
| 75 | 80.52 | 73.76 | 67.80 | 67.08 | 67.87 | 73.87 | 79.71 | 80.68 | 70- 75 | 42.27 | 687.9 | 78.9,78.9 |
| 80 | 66.96 | 60.84 | 55.60 | 55.03 | 55.80 | 61.01 | 66.08 | 66.97 | 75- 80 | 36.02 | 723.9 | 83,83 |
| 85 | 54.89 | 49.49 | 45.09 | 44.67 | 45.43 | 49.78 | 54.01 | 54.84 | 80- 85 | 30.02 | 753.9 | 86.5,86.5 |
| 90 | 44.53 | 40.17 | 36.50 | 36.17 | 36.86 | 40.34 | 43.73 | 44.44 | 85- 90 | 24.59 | 778.5 | 89.3,89.3 |
| 95 | 36.05 | 32.56 | 29.61 | 29.38 | 29.98 | 32.67 | 35.27 | 35.90 | 90- 95 | 19.91 | 798.4 | 91.6,91.6 |
| 100 | 29.26 | 26.57 | 24.28 | 24.14 | 24.61 | 26.64 | 28.55 | 29.11 | 95-100 | 16.05 | 814.5 | 93.4,93.4 |
| 105 | 24.02 | 21.99 | 20.19 | 20.05 | 20.41 | 21.97 | 23.37 | 23.82 | 100-105 | 12.96 | 827.5 | 94.9,94.9 |
| 110 | 19.94 | 18.37 | 16.85 | 16.70 | 16.95 | 18.25 | 19.35 | 19.73 | 105-110 | 10.49 | 837.9 | 96.1,96.1 |
| 115 | 16.61 | 15.28 | 13.95 | 13.76 | 13.94 | 15.04 | 16.00 | 16.37 | 110-115 | 8.437 | 846.4 | 97.1,97.1 |
| 120 | 13.70 | 12.60 | 11.44 | 11.23 | 11.33 | 12.26 | 13.08 | 13.47 | 115-120 | 6.674 | 853.1 | 97.8,97.8 |
| 125 | 11.19 | 10.27 | 9.302 | 9.073 | 9.100 | 9.871 | 10.56 | 10.93 | 120-125 | 5.174 | 858.2 | 98.4,98.4 |
| 130 | 9.046 | 8.317 | 7.501 | 7.271 | 7.226 | 7.846 | 8.426 | 8.778 | 125-130 | 3.925 | 862.2 | 98.9,98.9 |
| 135 | 7.243 | 6.673 | 6.015 | 5.786 | 5.685 | 6.163 | 6.635 | 6.956 | 130-135 | 2.911 | 865.1 | 99.2,99.2 |
| 140 | 5.758 | 5.316 | 4.809 | 4.598 | 4.442 | 4.793 | 5.171 | 5.449 | 135-140 | 2.112 | 867.2 | 99.5,99.5 |
| 145 | 4.562 | 4.248 | 3.878 | 3.694 | 3.509 | 3.734 | 4.010 | 4.253 | 140-145 | 1.501 | 868.7 | 99.6,99.6 |
| 150 | 3.618 | 3.439 | 3.202 | 3.044 | 2.858 | 2.970 | 3.143 | 3.341 | 145-150 | 1.055 | 869.7 | 99.8,99.8 |
| 155 | 2.966 | 2.898 | 2.760 | 2.652 | 2.484 | 2.485 | 2.567 | 2.699 | 150-155 | 0.7419 | 870.5 | 99.8,99.8 |
| 160 | 2.535 | 2.570 | 2.511 | 2.455 | 2.331 | 2.277 | 2.241 | 2.342 | 155-160 | 0.5313 | 871.0 | 99.9,99.9 |
| 165 | 2.355 | 2.438 | 2.437 | 2.403 | 2.306 | 2.207 | 2.119 | 2.185 | 160-165 | 0.3856 | 871.4 | 99.9,99.9 |
| 170 | 2.295 | 2.392 | 2.446 | 2.414 | 2.305 | 2.181 | 2.074 | 2.133 | 165-170 | 0.2708 | 871.7 | 100,100 |
| 175 | 2.255 | 2.331 | 2.385 | 2.336 | 2.207 | 2.083 | 2.061 | 2.081 | 170-175 | 0.1618 | 871.8 | 100,100 |
| 180 | 2.130 | 2.110 | 2.105 | 2.106 | 2.128 | 2.118 | 2.105 | 2.103 | 175-180 | 0.0514 | 871.9 | 100,100 |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | UNIT:lm | | | |



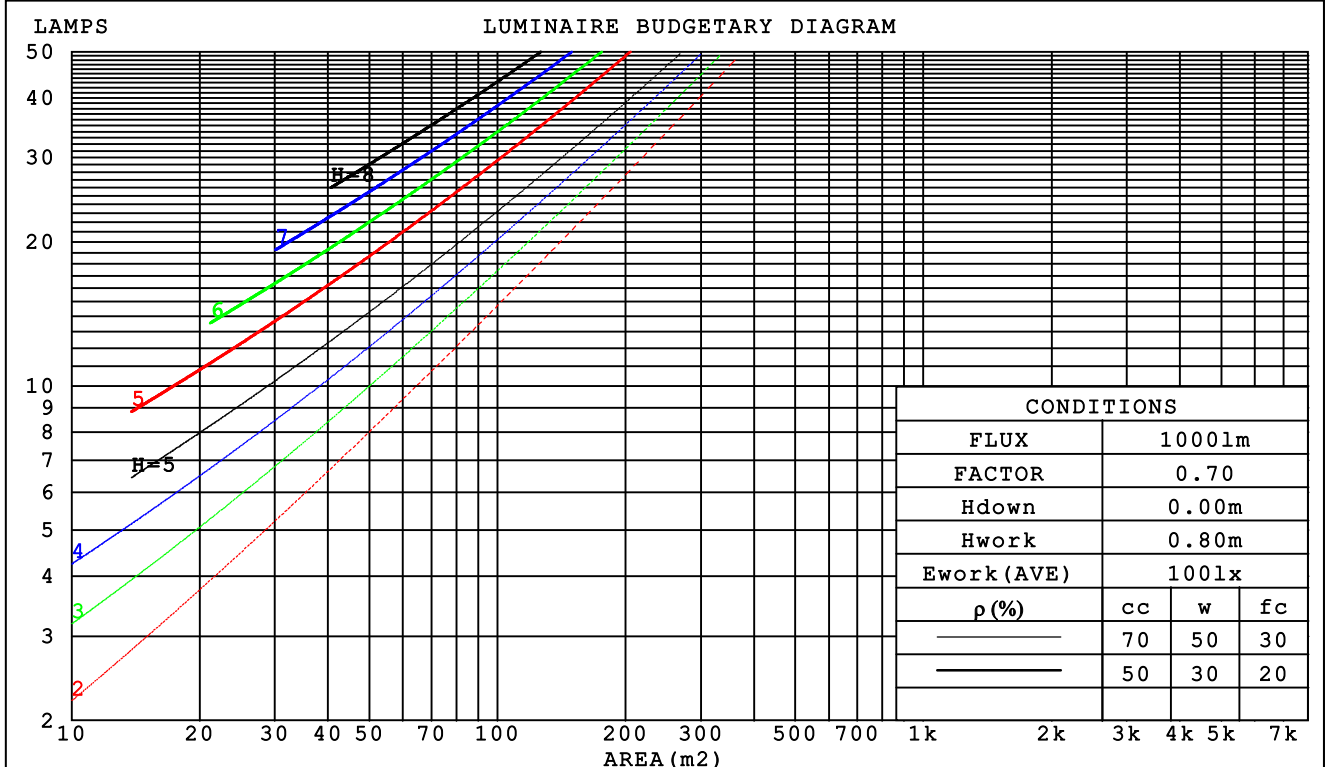
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2021-03-13

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.261
Humidity: 65.0%
Test Distance: 12.983m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|---|--------|-------------------|
| Test:U:120.9V I:0.1745A P:12.64W PF:0.5993 Lamp Flux:871.877x1 lm | | |
| NAME: BR30球泡 | TYPE: | WEIGHT: |
| DIM.: | SPEC.: | SERIAL No.:2# |
| MFR.: 惠州市华阳光电技术有限公司 | SUR.: | PROTECTION ANGLE: |

| 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 | 1.16 | 1.16 | 1.16 | 1.13 | 1.13 | 1.13 | 1.05 | 1.05 | 1.05 | .98 | .98 | .98 | .92 | .92 | .92 | .89 |
| 1.0 | .98 | .93 | .89 | .95 | .90 | .86 | .89 | .85 | .81 | .83 | .80 | .77 | .77 | .75 | .73 | .70 |
| 2.0 | .84 | .77 | .70 | .82 | .75 | .69 | .76 | .70 | .65 | .71 | .67 | .62 | .67 | .63 | .59 | .57 |
| 3.0 | .74 | .65 | .58 | .71 | .63 | .56 | .67 | .60 | .54 | .62 | .57 | .52 | .58 | .54 | .50 | .47 |
| 4.0 | .65 | .55 | .48 | .63 | .54 | .47 | .59 | .51 | .46 | .55 | .49 | .44 | .52 | .46 | .42 | .39 |
| 5.0 | .58 | .48 | .41 | .56 | .47 | .40 | .52 | .45 | .39 | .49 | .43 | .38 | .46 | .41 | .36 | .34 |
| 6.0 | .52 | .42 | .36 | .50 | .41 | .35 | .47 | .40 | .34 | .44 | .38 | .33 | .42 | .36 | .32 | .29 |
| 7.0 | .47 | .38 | .31 | .45 | .37 | .31 | .43 | .35 | .30 | .40 | .34 | .29 | .38 | .32 | .28 | .26 |
| 8.0 | .43 | .34 | .28 | .41 | .33 | .27 | .39 | .32 | .27 | .37 | .31 | .26 | .35 | .29 | .25 | .23 |
| 9.0 | .39 | .31 | .25 | .38 | .30 | .25 | .36 | .29 | .24 | .34 | .28 | .23 | .32 | .27 | .22 | .21 |
| 10.0 | .36 | .28 | .22 | .35 | .27 | .22 | .33 | .26 | .22 | .32 | .25 | .21 | .30 | .24 | .20 | .19 |



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-03-13

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.261
 Humidity:65.0%
 Test Distance:12.983m [K=1.0000]
 Remarks:

WEC AND CCEC

| | | |
|---|--------|-------------------|
| Test:U:120.9V I:0.1745A P:12.64W PF:0.5993 Lamp Flux:871.877x1 lm | | |
| NAME: BR30球泡 | TYPE: | WEIGHT: |
| DIM.: | SPEC.: | SERIAL No.:2# |
| MFR.: 惠州市华阳光电技术有限公司 | SUR.: | PROTECTION ANGLE: |

| ρ _{cc} | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|-----------------|-----------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|------|------|------|---|
| ρ _w | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| ρ _{fc} | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Wall Exitance Coefficients (WEC) | | | | | | | | | |
| 0.0 | | | | | | | | | | | | | | | | |
| 1.0 | .368 | .209 | .066 | .358 | .204 | .065 | .338 | .194 | .062 | .320 | .185 | .059 | .303 | .176 | .057 | |
| 2.0 | .324 | .178 | .054 | .315 | .173 | .053 | .297 | .165 | .051 | .281 | .158 | .049 | .266 | .150 | .047 | |
| 3.0 | .291 | .155 | .046 | .282 | .151 | .045 | .266 | .144 | .044 | .252 | .138 | .042 | .238 | .132 | .041 | |
| 4.0 | .263 | .137 | .040 | .255 | .134 | .040 | .241 | .128 | .038 | .228 | .122 | .037 | .216 | .117 | .036 | |
| 5.0 | .240 | .122 | .035 | .233 | .120 | .035 | .220 | .115 | .034 | .208 | .110 | .033 | .197 | .105 | .032 | |
| 6.0 | .221 | .111 | .032 | .214 | .108 | .031 | .203 | .104 | .030 | .192 | .100 | .029 | .182 | .096 | .028 | |
| 7.0 | .204 | .101 | .029 | .198 | .099 | .028 | .188 | .095 | .027 | .178 | .091 | .027 | .168 | .088 | .026 | |
| 8.0 | .189 | .093 | .026 | .184 | .091 | .026 | .175 | .087 | .025 | .166 | .084 | .024 | .157 | .081 | .023 | |
| 9.0 | .177 | .086 | .024 | .172 | .084 | .024 | .163 | .081 | .023 | .155 | .078 | .022 | .147 | .075 | .022 | |
| 10.0 | .166 | .079 | .022 | .161 | .078 | .022 | .153 | .075 | .021 | .146 | .072 | .021 | .138 | .070 | .020 | |

| ρ _{cc} | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|-----------------|-----------------------|------|------|------|------|------|---|------|------|------|------|------|------|------|------|---|
| ρ _w | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| ρ _{fc} | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Ceiling Cavity Exitance Coefficients (CCEC) | | | | | | | | | |
| 0.0 | .272 | .272 | .272 | .233 | .233 | .233 | .159 | .159 | .159 | .091 | .091 | .091 | .029 | .029 | .029 | |
| 1.0 | .267 | .238 | .212 | .228 | .204 | .182 | .156 | .140 | .126 | .090 | .081 | .073 | .029 | .026 | .024 | |
| 2.0 | .259 | .215 | .177 | .222 | .185 | .153 | .152 | .128 | .107 | .088 | .074 | .063 | .028 | .024 | .020 | |
| 3.0 | .252 | .198 | .155 | .216 | .171 | .134 | .148 | .118 | .094 | .086 | .069 | .055 | .027 | .022 | .018 | |
| 4.0 | .244 | .185 | .140 | .209 | .160 | .121 | .144 | .111 | .086 | .083 | .065 | .051 | .027 | .021 | .017 | |
| 5.0 | .236 | .175 | .130 | .203 | .151 | .113 | .140 | .106 | .080 | .081 | .062 | .047 | .026 | .020 | .016 | |
| 6.0 | .229 | .167 | .122 | .197 | .144 | .106 | .136 | .101 | .075 | .079 | .059 | .045 | .025 | .019 | .015 | |
| 7.0 | .222 | .160 | .117 | .191 | .139 | .102 | .132 | .097 | .072 | .077 | .057 | .043 | .025 | .019 | .014 | |
| 8.0 | .215 | .154 | .113 | .185 | .134 | .098 | .128 | .094 | .070 | .075 | .055 | .042 | .024 | .018 | .014 | |
| 9.0 | .209 | .150 | .110 | .180 | .130 | .096 | .125 | .091 | .068 | .073 | .054 | .040 | .024 | .018 | .013 | |
| 10.0 | .203 | .145 | .107 | .175 | .126 | .093 | .121 | .089 | .066 | .071 | .052 | .040 | .023 | .017 | .013 | |

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-03-13

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.261
Humidity:65.0%
Test Distance:12.983m [K=1.0000]
Remarks:

Uncorrected UGR Table

| | | | | | | | | | | |
|---|------------------|------|------|------|--------|----------------|------|-------------------|------|------|
| Test:U:120.9V I:0.1745A P:12.64W PF:0.5993 Lamp Flux:871.877x1 lm | | | | | | | | | | |
| NAME: BR30球泡 | | | | | TYPE: | | | WEIGHT: | | |
| DIM.: | | | | | SPEC.: | | | SERIAL No.:2# | | |
| MFR.: 惠州市华阳光电技术有限公司 | | | | | SUR.: | | | PROTECTION 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 | 15.4 | 16.8 | 15.8 | 17.2 | 17.6 | 14.9 | 16.3 | 15.3 | 16.7 | 17.2 |
| 3H | 17.4 | 18.8 | 17.9 | 19.2 | 19.7 | 16.8 | 18.1 | 17.2 | 18.6 | 19.0 |
| 4H | 18.5 | 19.8 | 19.0 | 20.2 | 20.7 | 17.8 | 19.0 | 18.2 | 19.5 | 20.0 |
| 6H | 19.6 | 20.8 | 20.1 | 21.3 | 21.8 | 18.8 | 20.0 | 19.3 | 20.4 | 20.9 |
| 8H | 20.2 | 21.4 | 20.7 | 21.9 | 22.4 | 19.3 | 20.5 | 19.8 | 21.0 | 21.5 |
| 12H | 20.9 | 22.0 | 21.4 | 22.5 | 23.1 | 19.9 | 21.1 | 20.4 | 21.5 | 22.1 |
| 4H 2H | 16.0 | 17.3 | 16.5 | 17.7 | 18.2 | 15.7 | 16.9 | 16.1 | 17.4 | 17.9 |
| 3H | 18.3 | 19.4 | 18.8 | 19.9 | 20.4 | 17.8 | 18.9 | 18.3 | 19.4 | 19.9 |
| 4H | 19.5 | 20.5 | 20.0 | 21.0 | 21.6 | 18.9 | 19.9 | 19.4 | 20.4 | 21.0 |
| 6H | 20.8 | 21.7 | 21.4 | 22.3 | 22.9 | 20.1 | 21.0 | 20.6 | 21.5 | 22.1 |
| 8H | 21.5 | 22.4 | 22.1 | 23.0 | 23.6 | 20.7 | 21.6 | 21.3 | 22.1 | 22.8 |
| 12H | 22.4 | 23.2 | 22.9 | 23.7 | 24.4 | 21.5 | 22.3 | 22.0 | 22.8 | 23.5 |
| 8H 4H | 19.9 | 20.8 | 20.5 | 21.3 | 22.0 | 19.4 | 20.3 | 20.0 | 20.8 | 21.4 |
| 6H | 21.5 | 22.2 | 22.1 | 22.8 | 23.5 | 20.9 | 21.6 | 21.5 | 22.2 | 22.8 |
| 8H | 22.4 | 23.0 | 23.0 | 23.6 | 24.3 | 21.7 | 22.3 | 22.3 | 22.9 | 23.6 |
| 12H | 23.4 | 24.0 | 24.1 | 24.6 | 25.3 | 22.6 | 23.2 | 23.3 | 23.8 | 24.5 |
| 12H 4H | 20.0 | 20.8 | 20.6 | 21.4 | 22.0 | 19.5 | 20.3 | 20.1 | 20.9 | 21.5 |
| 6H | 21.7 | 22.3 | 22.3 | 22.9 | 23.6 | 21.1 | 21.7 | 21.7 | 22.3 | 23.0 |
| 8H | 22.7 | 23.2 | 23.3 | 23.9 | 24.6 | 22.0 | 22.6 | 22.7 | 23.2 | 23.9 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | + 0.1 / - 0.1 | | | | | + 0.1 / - 0.1 | | | | |
| 1.5H | + 0.2 / - 0.3 | | | | | + 0.2 / - 0.3 | | | | |
| 2.0H | + 0.2 / - 0.3 | | | | | + 0.2 / - 0.4 | | | | |

CIE Pub.117 Corrected 871.9 lm Total Lamp Luminous Flux. (8log(F/F0) = -0.5)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-03-13

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.261
Humidity:65.0%
Test Distance:12.983m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

| | | |
|---|--------|-------------------|
| Test:U:120.9V I:0.1745A P:12.64W PF:0.5993 Lamp Flux:871.877x1 lm | | |
| NAME: BR30球泡 | TYPE: | WEIGHT: |
| DIM.: | SPEC.: | SERIAL No.:2# |
| MFR.: 惠州市华阳光电技术有限公司 | SUR.: | PROTECTION ANGLE: |

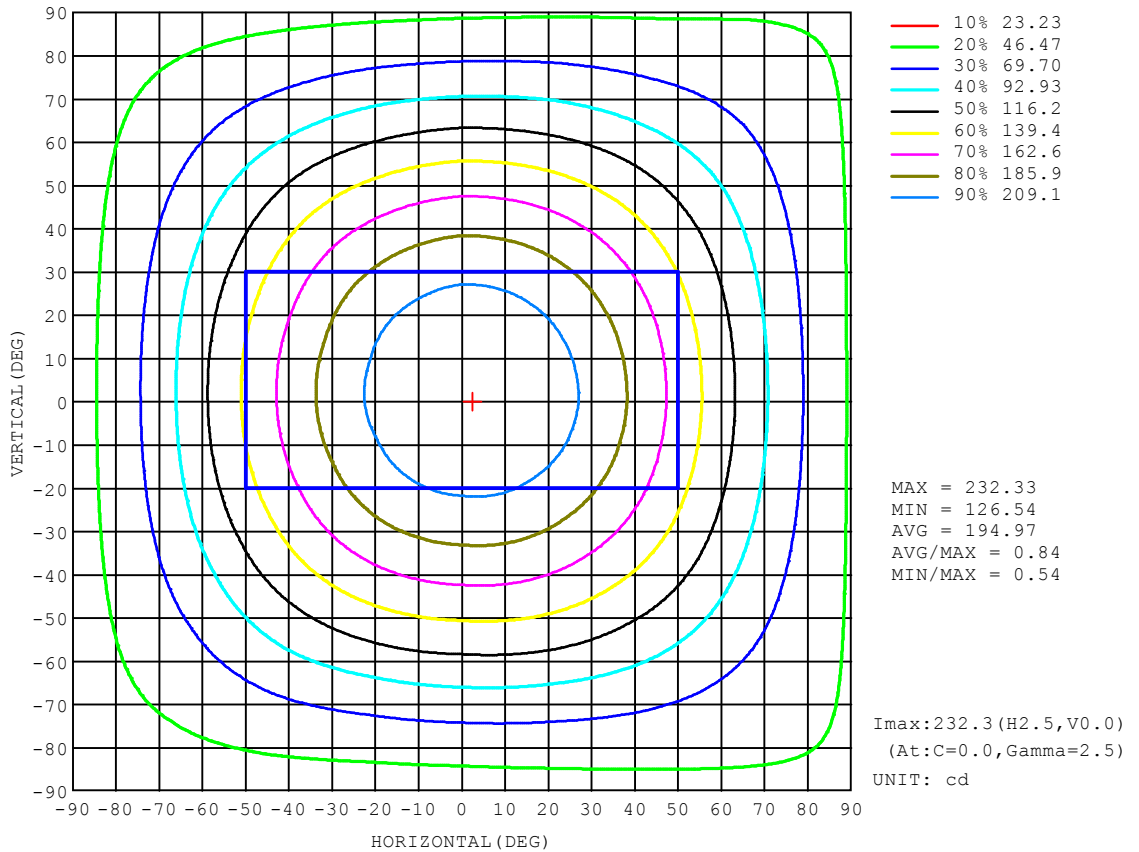
| REFLECTANCE | | | | | | | | | | |
|----------------------------------|--|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0 |
| ROOM INDEX | UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$ | | | | | | | | | |
| $k = 0.60$ | 51 | 39 | 32 | 50 | 39 | 32 | 49 | 38 | 31 | 25 |
| 0.80 | 61 | 48 | 40 | 59 | 47 | 40 | 57 | 46 | 39 | 32 |
| 1.00 | 68 | 56 | 48 | 67 | 55 | 48 | 64 | 56 | 47 | 39 |
| 1.25 | 75 | 63 | 55 | 73 | 62 | 55 | 70 | 60 | 53 | 45 |
| 1.50 | 80 | 69 | 61 | 78 | 68 | 60 | 74 | 65 | 58 | 49 |
| 2.00 | 88 | 77 | 69 | 85 | 76 | 68 | 80 | 72 | 66 | 56 |
| 2.50 | 92 | 82 | 75 | 89 | 80 | 74 | 84 | 77 | 71 | 60 |
| 3.00 | 96 | 87 | 80 | 93 | 85 | 78 | 87 | 81 | 75 | 64 |
| 4.00 | 100 | 93 | 87 | 97 | 90 | 85 | 91 | 85 | 81 | 69 |
| 5.00 | 103 | 96 | 91 | 99 | 94 | 89 | 93 | 89 | 84 | 72 |
| ROOM INDEX | UF(total) | | | | | | | | | Direct |
| According to DIN EN 13032-2 2004 | | | Suspended | | | | SHRNOM = 1.25 | | | |

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-03-13

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.261
Humidity:65.0%
Test Distance:12.983m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

| | | |
|---|--------|-------------------|
| Test:U:120.9V I:0.1745A P:12.64W PF:0.5993 Lamp Flux:871.877x1 lm | | |
| NAME: BR30球泡 | TYPE: | WEIGHT: |
| DIM.: | SPEC.: | SERIAL No.:2# |
| MFR.: 惠州市华阳光电技术有限公司 | SUR.: | PROTECTION ANGLE: |

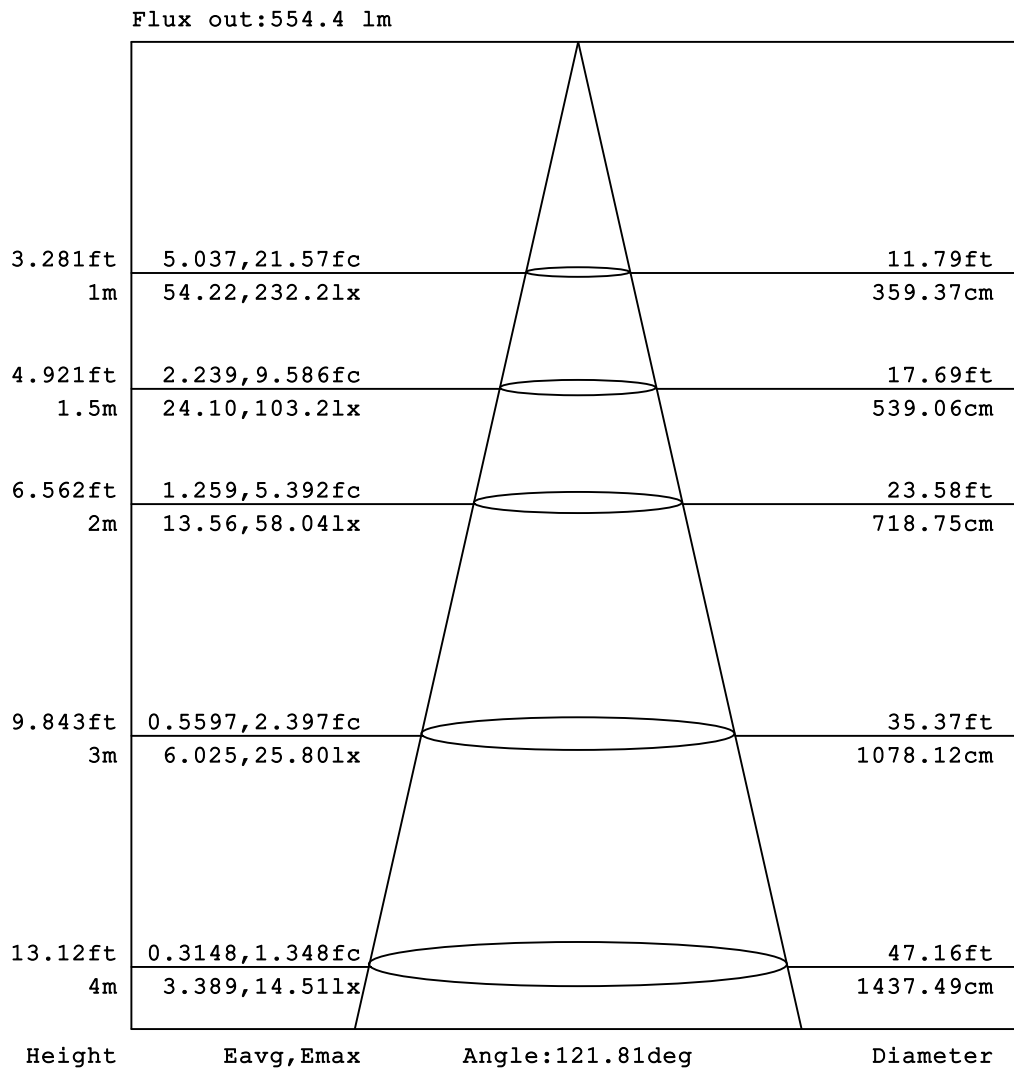


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-03-13

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.261
 Humidity:65.0%
 Test Distance:12.983m [K=1.0000]
 Remarks:

AAI Figure

| | | |
|---|--------|-------------------|
| Test:U:120.9V I:0.1745A P:12.64W PF:0.5993 Lamp Flux:871.877x1 lm | | |
| NAME: BR30球泡 | TYPE: | WEIGHT: |
| DIM.: | SPEC.: | SERIAL No.:2# |
| MFR.: 惠州市华阳光电技术有限公司 | SUR.: | PROTECTION ANGLE: |



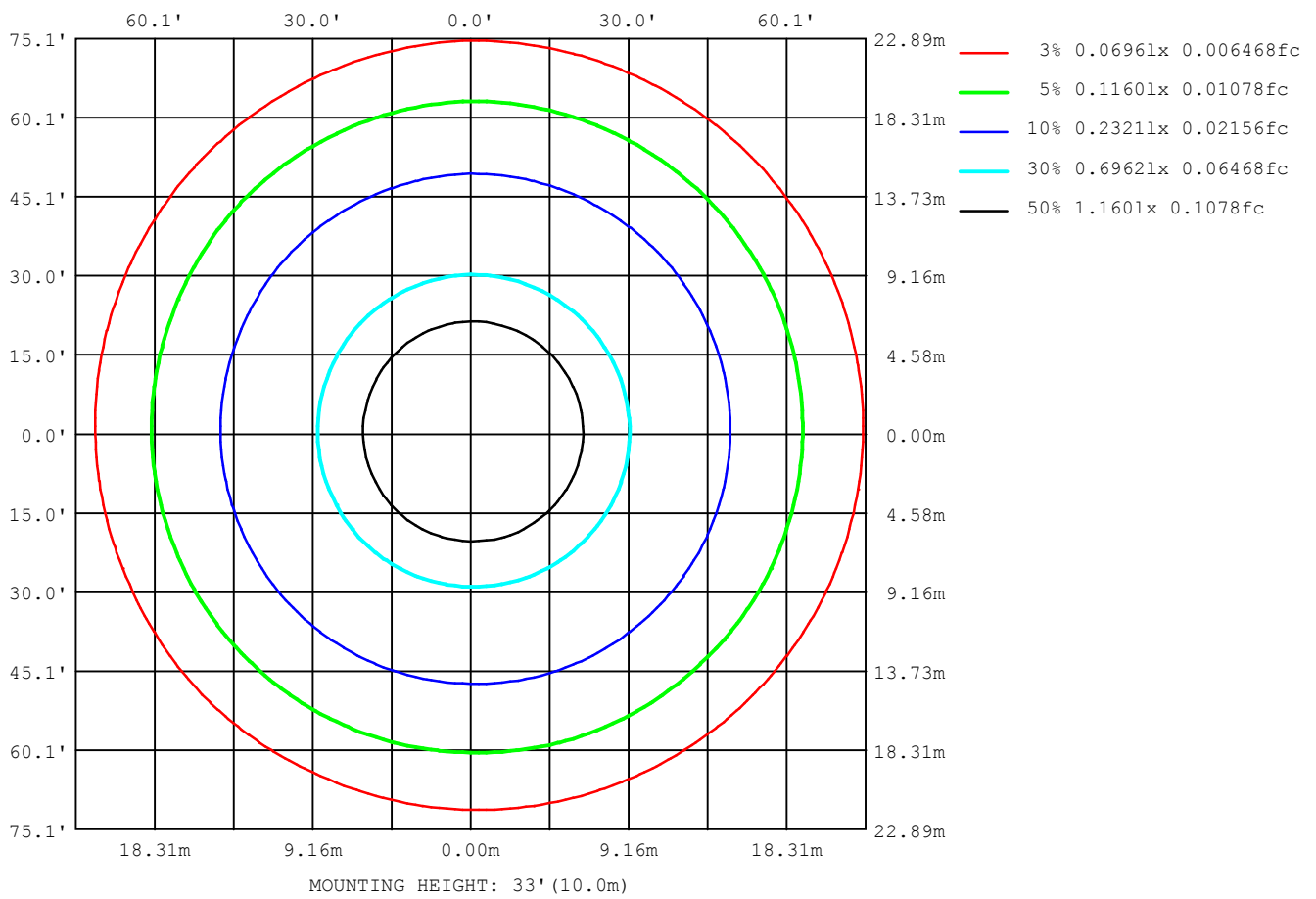
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-03-13

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.261
Humidity:65.0%
Test Distance:12.983m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

| | | |
|---|--------|-------------------|
| Test:U:120.9V I:0.1745A P:12.64W PF:0.5993 Lamp Flux:871.877x1 lm | | |
| NAME: BR30球泡 | TYPE: | WEIGHT: |
| DIM.: | SPEC.: | SERIAL No.:2# |
| MFR.: 惠州市华阳光电技术有限公司 | SUR.: | PROTECTION ANGLE: |



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-03-13

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.261
Humidity:65.0%
Test Distance:12.983m [K=1.0000]
Remarks:

Average Luminance Table (CIBSE)

| | | |
|---|--------|-------------------|
| Test:U:120.9V I:0.1745A P:12.64W PF:0.5993 Lamp Flux:871.877x1 lm | | |
| NAME: BR30球泡 | TYPE: | WEIGHT: |
| DIM.: | SPEC.: | SERIAL No.:2# |
| MFR.: 惠州市华阳光电技术有限公司 | SUR.: | PROTECTION ANGLE: |

| Parameter description for average Luminance | Symbol | Value | Unit |
|--|--------|---------------|----------|
| Luminance in Azimuth Plane | Bc | refer Table 2 | cd/sq.m. |
| Intensity at angle Gamma in given azimuth plane | I | from data | cd/klm |
| Number of lamps | N | 1 | |
| Output of each lamp(initial lumens as specified) | F | 871.877 | lm |
| Multiplying factor | K | 1 | |
| Luminous area in horizontal plane used in calculations | A | 0.1 | sq.m. |
| Angle to the downward vertical from light centre | Gamma | from data | deg |

Table 1. Calculation parameters for determination of CIBSE LG3:1996 Average Luminance

| G deg | C plane(deg) | | | | | | | | | | | | | | | | | | |
|----------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
| 55 | 2456 | 2436 | 2411 | 2379 | 2344 | 2314 | 2290 | 2265 | 2234 | 2207 | 2197 | 2193 | 2190 | 2189 | 2187 | 2185 | 2190 | 2205 | 2224 |
| 60 | 2518 | 2495 | 2466 | 2429 | 2388 | 2353 | 2325 | 2295 | 2260 | 2230 | 2218 | 2214 | 2211 | 2208 | 2206 | 2204 | 2210 | 2226 | 2247 |
| 65 | 2617 | 2593 | 2560 | 2516 | 2466 | 2418 | 2376 | 2339 | 2306 | 2278 | 2254 | 2238 | 2240 | 2249 | 2247 | 2235 | 2231 | 2248 | 2274 |
| 70 | 2786 | 2737 | 2689 | 2642 | 2596 | 2547 | 2495 | 2449 | 2412 | 2382 | 2356 | 2339 | 2341 | 2351 | 2348 | 2335 | 2331 | 2350 | 2381 |
| 75 | 3111 | 3051 | 2992 | 2935 | 2878 | 2818 | 2755 | 2699 | 2655 | 2620 | 2589 | 2569 | 2572 | 2586 | 2585 | 2569 | 2565 | 2587 | 2622 |
| 80 | 3856 | 3776 | 3697 | 3619 | 3542 | 3461 | 3379 | 3306 | 3248 | 3202 | 3163 | 3139 | 3144 | 3161 | 3161 | 3142 | 3138 | 3167 | 3213 |
| 85 | 6298 | 6163 | 6026 | 5887 | 5747 | 5610 | 5477 | 5358 | 5256 | 5174 | 5114 | 5079 | 5087 | 5114 | 5114 | 5088 | 5087 | 5137 | 5213 |

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

| CIBSE Category | Gamma (deg) | Average Luminance | | Patch Luminance | |
|-------------------|----------------|-------------------|-----------|-----------------|-----------|
| | | maximum | specified | maximum | specified |
| | | calculated | maximum | measured | maximum |
| Category 1 | 55 to 90 | 6298 | 200 | --- | 500 |
| Category 2 | 65 to 90 | 6298 | 200 | --- | 500 |
| Category 3 | 75 to 90 | 6298 | 200 | --- | 500 |

Table 3. Tabulation of Average and Patch Luminance(cd/sq.m.) for defined CIBSE categories

No match

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-03-13

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.261
Humidity:65.0%
Test Distance:12.983m [K=1.0000]
Remarks:

Average Luminance Table (CIBSE)

| | | |
|---|--------|-------------------|
| Test:U:120.9V I:0.1745A P:12.64W PF:0.5993 Lamp Flux:871.877x1 lm | | |
| NAME: BR30球泡 | TYPE: | WEIGHT: |
| DIM.: | SPEC.: | SERIAL No.:2# |
| MFR.: 惠州市华阳光电技术有限公司 | SUR.: | PROTECTION ANGLE: |

| Parameter description for average Luminance | Symbol | Value | Unit |
|--|--------|---------------|----------|
| Luminance in Azimuth Plane | Bc | refer Table 2 | cd/sq.m. |
| Intensity at angle Gamma in given azimuth plane | I | from data | cd/klm |
| Number of lamps | N | 1 | |
| Output of each lamp(initial lumens as specified) | F | 871.877 | lm |
| Multiplying factor | K | 1 | |
| Luminous area in horizontal plane used in calculations | A | 0.1 | sq.m. |
| Angle to the downward vertical from light centre | Gamma | from data | deg |

Table 1. Calculation parameters for determination of CIBSE LG3:2001 Average Luminance

| G deg | C plane(deg) | | | | | | | | | | | | | | | | | | |
|-------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
| 55 | 2456 | 2436 | 2411 | 2379 | 2344 | 2314 | 2290 | 2265 | 2234 | 2207 | 2197 | 2193 | 2190 | 2189 | 2187 | 2185 | 2190 | 2205 | 2224 |
| 60 | 2518 | 2495 | 2466 | 2429 | 2388 | 2353 | 2325 | 2295 | 2260 | 2230 | 2218 | 2214 | 2211 | 2208 | 2206 | 2204 | 2210 | 2226 | 2247 |
| 65 | 2617 | 2593 | 2560 | 2516 | 2466 | 2418 | 2376 | 2339 | 2306 | 2278 | 2254 | 2238 | 2240 | 2249 | 2247 | 2235 | 2231 | 2248 | 2274 |
| 70 | 2786 | 2737 | 2689 | 2642 | 2596 | 2547 | 2495 | 2449 | 2412 | 2382 | 2356 | 2339 | 2341 | 2351 | 2348 | 2335 | 2331 | 2350 | 2381 |
| 75 | 3111 | 3051 | 2992 | 2935 | 2878 | 2818 | 2755 | 2699 | 2655 | 2620 | 2589 | 2569 | 2572 | 2586 | 2585 | 2569 | 2565 | 2587 | 2622 |
| 80 | 3856 | 3776 | 3697 | 3619 | 3542 | 3461 | 3379 | 3306 | 3248 | 3202 | 3163 | 3139 | 3144 | 3161 | 3161 | 3142 | 3138 | 3167 | 3213 |
| 85 | 6298 | 6163 | 6026 | 5887 | 5747 | 5610 | 5477 | 5358 | 5256 | 5174 | 5114 | 5079 | 5087 | 5114 | 5114 | 5088 | 5087 | 5137 | 5213 |

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

| range (deg) | Maximum measured | Average Luminance(cd/sq.m) | | | |
|-------------|------------------|--|-------------------------------------|------------------------------------|------------------------------------|
| | | Maximum limit for screen type & software category used | | | |
| | | Type I,II screen Some neg.s'ware | Type I,II screen Only pos.s'ware | Type III screen Some neg.s'ware | Type III screen Only pos.s'ware |
| 55 to 90 | 6298 | 1000 | 1500 | 200 | 500 |
| 65 to 90 | 6298 | 1000 | 1500 | 200 | 500 |

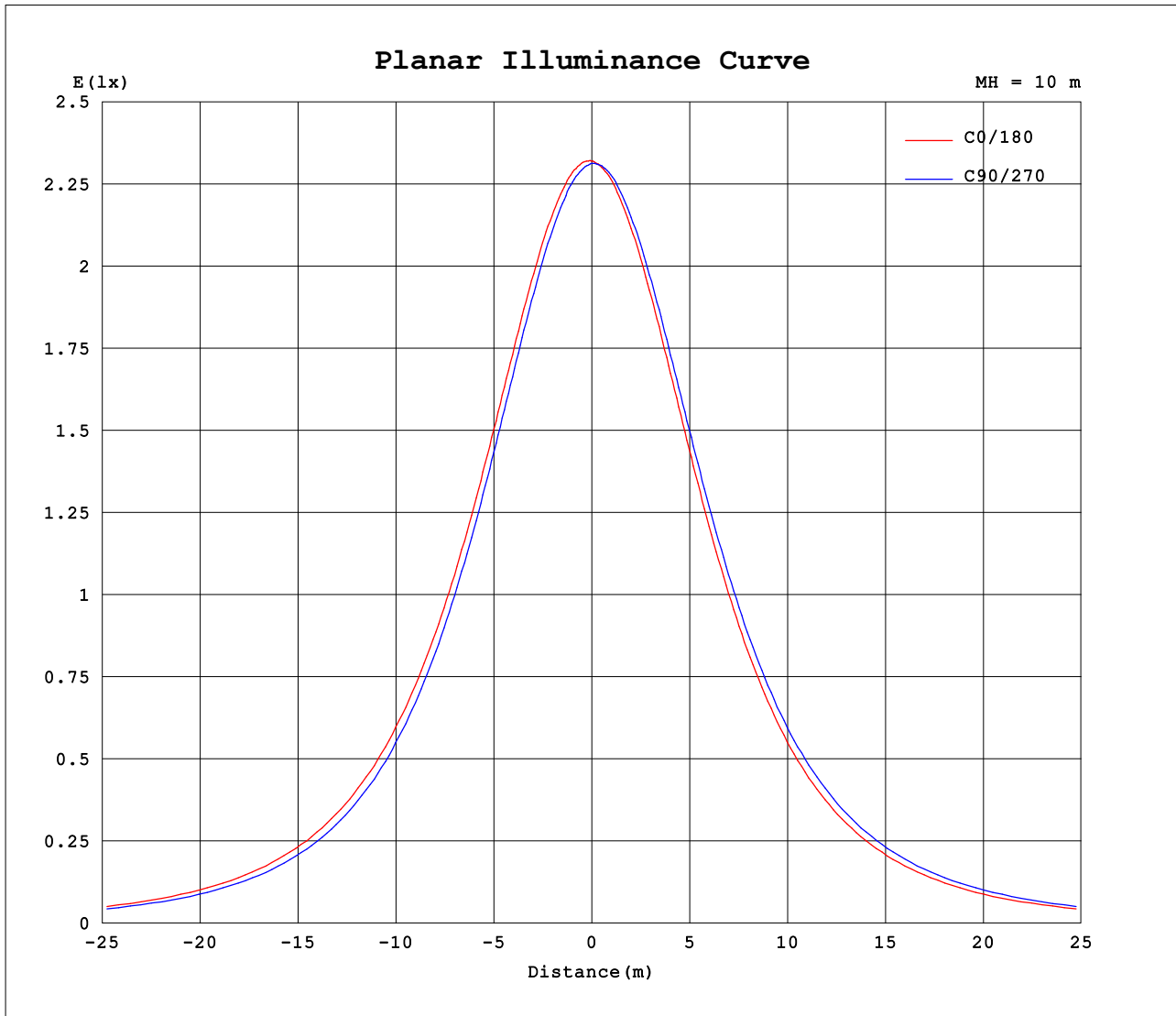
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

No match

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-03-13

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.261
Humidity:65.0%
Test Distance:12.983m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2021-03-13

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.261
 Humidity: 65.0%
 Test Distance: 12.983m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|---|--------|-------------------|
| Test:U:120.9V I:0.1745A P:12.64W PF:0.5993 Lamp Flux:871.877x1 lm | | |
| NAME: BR30球泡 | TYPE: | WEIGHT: |
| DIM.: | SPEC.: | SERIAL No.:2# |
| MFR.: 惠州市华阳光电技术有限公司 | SUR.: | PROTECTION ANGLE: |

Table--1

UNIT: cd

| C (DEG) \ γ (DEG) | 0 | 23 | 45 | 68 | 90 | 113 | 135 | 158 | 180 | 203 | 225 | 248 | 270 | 293 | 315 | 338 | | | |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|
| 0 | 232 | 232 | 232 | 231 | 231 | 231 | 231 | 231 | 232 | 232 | 232 | 231 | 231 | 231 | 231 | 231 | | | |
| 5 | 232 | 231 | 230 | 230 | 229 | 229 | 229 | 229 | 230 | 230 | 231 | 231 | 231 | 231 | 231 | 231 | | | |
| 10 | 230 | 228 | 227 | 226 | 225 | 225 | 225 | 225 | 226 | 227 | 228 | 228 | 229 | 230 | 230 | 229 | | | |
| 15 | 226 | 224 | 222 | 221 | 219 | 219 | 219 | 219 | 221 | 221 | 223 | 224 | 226 | 226 | 226 | 226 | | | |
| 20 | 220 | 218 | 216 | 214 | 212 | 212 | 212 | 212 | 213 | 214 | 217 | 218 | 220 | 220 | 220 | 220 | | | |
| 25 | 213 | 210 | 208 | 206 | 203 | 203 | 203 | 203 | 205 | 206 | 208 | 210 | 213 | 213 | 213 | 213 | | | |
| 30 | 204 | 201 | 198 | 196 | 193 | 192 | 192 | 192 | 194 | 196 | 199 | 201 | 204 | 204 | 204 | 204 | | | |
| 35 | 193 | 191 | 187 | 184 | 182 | 181 | 181 | 181 | 183 | 185 | 188 | 191 | 193 | 194 | 194 | 194 | | | |
| 40 | 182 | 179 | 175 | 172 | 169 | 168 | 168 | 168 | 170 | 172 | 176 | 179 | 182 | 182 | 183 | 182 | | | |
| 45 | 169 | 166 | 162 | 159 | 156 | 155 | 154 | 154 | 157 | 159 | 163 | 166 | 169 | 170 | 170 | 170 | | | |
| 50 | 155 | 152 | 148 | 145 | 141 | 141 | 140 | 140 | 142 | 145 | 149 | 152 | 156 | 156 | 156 | 156 | | | |
| 55 | 141 | 138 | 133 | 130 | 127 | 126 | 126 | 125 | 128 | 130 | 135 | 138 | 141 | 142 | 142 | 142 | | | |
| 60 | 126 | 123 | 118 | 115 | 111 | 111 | 110 | 110 | 112 | 115 | 119 | 123 | 126 | 127 | 127 | 127 | | | |
| 65 | 111 | 108 | 103 | 99.2 | 96.3 | 94.5 | 95.2 | 94.2 | 96.1 | 99.6 | 104 | 107 | 111 | 112 | 112 | 112 | | | |
| 70 | 95.3 | 91.6 | 88.0 | 84.1 | 81.5 | 79.9 | 80.5 | 79.6 | 81.4 | 84.6 | 88.1 | 91.9 | 94.4 | 96.1 | 95.5 | 96.5 | | | |
| 75 | 80.5 | 77.1 | 73.8 | 70.2 | 67.8 | 66.4 | 67.1 | 66.3 | 67.9 | 70.8 | 73.9 | 77.3 | 79.7 | 81.2 | 80.7 | 81.7 | | | |
| 80 | 67.0 | 63.9 | 60.8 | 57.7 | 55.6 | 54.4 | 55.0 | 54.4 | 55.8 | 58.3 | 61.0 | 64.0 | 66.1 | 67.4 | 67.0 | 67.9 | | | |
| 85 | 54.9 | 52.2 | 49.5 | 46.9 | 45.1 | 44.2 | 44.7 | 44.3 | 45.4 | 47.4 | 49.8 | 52.2 | 54.0 | 55.1 | 54.8 | 55.7 | | | |
| 90 | 44.5 | 42.4 | 40.2 | 38.0 | 36.5 | 35.8 | 36.2 | 35.9 | 36.9 | 38.5 | 40.3 | 42.2 | 43.7 | 44.6 | 44.4 | 45.1 | | | |
| 95 | 36.1 | 34.4 | 32.6 | 30.8 | 29.6 | 29.0 | 29.4 | 29.3 | 30.0 | 31.2 | 32.7 | 34.1 | 35.3 | 36.0 | 35.9 | 36.5 | | | |
| 100 | 29.3 | 28.0 | 26.6 | 25.3 | 24.3 | 23.9 | 24.1 | 24.1 | 24.6 | 25.6 | 26.6 | 27.7 | 28.6 | 29.1 | 29.1 | 29.6 | | | |
| 105 | 24.0 | 23.0 | 22.0 | 21.0 | 20.2 | 19.8 | 20.1 | 20.0 | 20.4 | 21.2 | 22.0 | 22.8 | 23.4 | 23.8 | 23.8 | 24.2 | | | |
| 110 | 19.9 | 19.2 | 18.4 | 17.5 | 16.9 | 16.5 | 16.7 | 16.6 | 17.0 | 17.6 | 18.2 | 18.9 | 19.4 | 19.7 | 19.7 | 20.0 | | | |
| 115 | 16.6 | 16.0 | 15.3 | 14.6 | 14.0 | 13.6 | 13.8 | 13.7 | 13.9 | 14.5 | 15.0 | 15.6 | 16.0 | 16.3 | 16.4 | 16.7 | | | |
| 120 | 13.7 | 13.2 | 12.6 | 12.0 | 11.4 | 11.1 | 11.2 | 11.2 | 11.3 | 11.8 | 12.3 | 12.7 | 13.1 | 13.4 | 13.5 | 13.7 | | | |
| 125 | 11.2 | 10.8 | 10.3 | 9.77 | 9.30 | 9.02 | 9.07 | 9.02 | 9.10 | 9.47 | 9.87 | 10.2 | 10.6 | 10.8 | 10.9 | 11.2 | | | |
| 130 | 9.05 | 8.70 | 8.32 | 7.89 | 7.50 | 7.24 | 7.27 | 7.20 | 7.23 | 7.53 | 7.85 | 8.15 | 8.43 | 8.67 | 8.78 | 8.97 | | | |
| 135 | 7.24 | 6.98 | 6.67 | 6.33 | 6.02 | 5.79 | 5.79 | 5.71 | 5.68 | 5.91 | 6.16 | 6.40 | 6.64 | 6.85 | 6.96 | 7.13 | | | |
| 140 | 5.76 | 5.56 | 5.32 | 5.06 | 4.81 | 4.62 | 4.60 | 4.52 | 4.44 | 4.60 | 4.79 | 4.98 | 5.17 | 5.36 | 5.45 | 5.62 | | | |
| 145 | 4.56 | 4.42 | 4.25 | 4.07 | 3.88 | 3.75 | 3.69 | 3.61 | 3.51 | 3.60 | 3.73 | 3.87 | 4.01 | 4.17 | 4.25 | 4.40 | | | |
| 150 | 3.62 | 3.55 | 3.44 | 3.32 | 3.20 | 3.10 | 3.04 | 2.97 | 2.86 | 2.90 | 2.97 | 3.06 | 3.14 | 3.26 | 3.34 | 3.48 | | | |
| 155 | 2.97 | 2.95 | 2.90 | 2.84 | 2.76 | 2.70 | 2.65 | 2.58 | 2.48 | 2.45 | 2.49 | 2.51 | 2.57 | 2.63 | 2.70 | 2.82 | | | |
| 160 | 2.53 | 2.56 | 2.57 | 2.55 | 2.51 | 2.48 | 2.45 | 2.39 | 2.33 | 2.28 | 2.28 | 2.24 | 2.24 | 2.27 | 2.34 | 2.41 | | | |
| 165 | 2.35 | 2.40 | 2.44 | 2.46 | 2.44 | 2.42 | 2.40 | 2.36 | 2.31 | 2.22 | 2.21 | 2.12 | 2.12 | 2.10 | 2.19 | 2.22 | | | |
| 170 | 2.30 | 2.34 | 2.39 | 2.44 | 2.45 | 2.43 | 2.41 | 2.37 | 2.31 | 2.22 | 2.18 | 2.08 | 2.07 | 2.08 | 2.13 | 2.19 | | | |
| 175 | 2.25 | 2.30 | 2.33 | 2.35 | 2.39 | 2.38 | 2.34 | 2.28 | 2.21 | 2.13 | 2.08 | 2.07 | 2.06 | 2.07 | 2.08 | 2.12 | | | |
| 180 | 2.13 | 2.12 | 2.11 | 2.12 | 2.10 | 2.10 | 2.11 | 2.10 | 2.13 | 2.13 | 2.12 | 2.11 | 2.10 | 2.10 | 2.10 | 2.10 | | | |

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-03-13

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.261
Humidity:65.0%
Test Distance:12.983m [K=1.0000]
Remarks: