



Shenzhen Belling Efficiency  
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Client:

LumCAT: LL4G-HO-5CCT(3000K)

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.030

LampCAT:

Current(A): 0.123

Lamp flux(lm): -1.0

Power (W): 14.567

Number of Lamps: 1

PF: 0.988

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

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### Photometric Results

Lumens(lm): 1376.71, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 94.51

Central intensity(cd): 2180.013, Maximum intensity(cd): 2180.013

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=40.4

[C90/270]Total=41.4

Field angle(10%Imax): [C0/180]Total=76.9

[C90/270]Total=77.9

Maximum s/h(1/2): C0\_180=0.59 C90\_270=0.65

Maximum s/h(1/4): C0\_180=0.66 C90\_270=0.73

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.10%

Down flux rate of LUM(%): 99.90%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 96.582%

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Equipment: GMS-3000  
Temperature(°C): 25

Date:  
Humidity(%): 58%

Operator: Sam

## LL4G-HO-5CCT(3000K)

## Zonal flux distribution table

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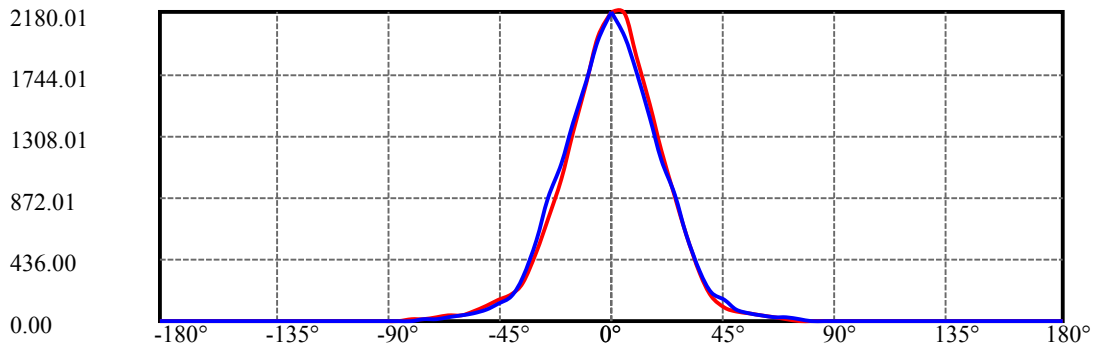
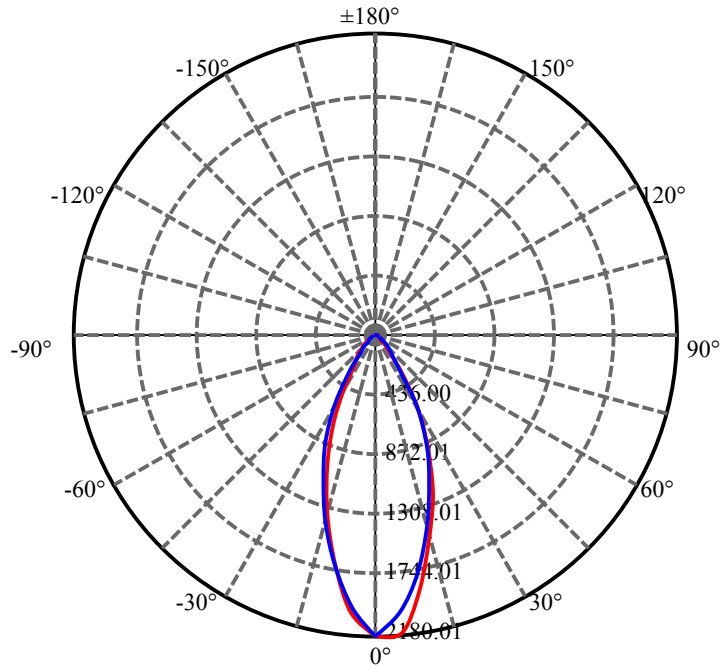
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0                | 2180.013      | 0.000       | 0         | 0.00%       | 0.00%      |
| 5.0                | 2050.357      | 50.573      | 50.573    | 0.00%       | 3.67%      |
| 10.0               | 1757.616      | 136.223     | 186.796   | 0.00%       | 13.57%     |
| 15.0               | 1422.025      | 188.614     | 375.41    | 0.00%       | 27.27%     |
| 20.0               | 1119.968      | 209.496     | 584.906   | 0.00%       | 42.49%     |
| 25.0               | 842.987       | 205.878     | 790.784   | 0.00%       | 57.44%     |
| 30.0               | 553.047       | 176.669     | 967.453   | 0.00%       | 70.27%     |
| 35.0               | 311.487       | 127.309     | 1094.762  | 0.00%       | 79.52%     |
| 40.0               | 183.663       | 82.612      | 1177.374  | 0.00%       | 85.52%     |
| 45.0               | 124.666       | 57.090      | 1234.463  | 0.00%       | 89.67%     |
| 50.0               | 84.002        | 42.164      | 1276.628  | 0.00%       | 92.73%     |
| 55.0               | 56.325        | 30.512      | 1307.139  | 0.00%       | 94.95%     |
| 60.0               | 41.079        | 22.515      | 1329.654  | 0.00%       | 96.58%     |
| 65.0               | 30.520        | 17.406      | 1347.06   | 0.00%       | 97.85%     |
| 70.0               | 20.018        | 12.797      | 1359.857  | 0.00%       | 98.78%     |
| 75.0               | 10.916        | 8.086       | 1367.942  | 0.00%       | 99.36%     |
| 80.0               | 5.501         | 4.393       | 1372.335  | 0.00%       | 99.68%     |
| 85.0               | 2.558         | 2.190       | 1374.525  | 0.00%       | 99.84%     |
| 90.0               | 0.500         | 0.837       | 1375.362  | 0.00%       | 99.90%     |
| 95.0               | 0.014         | 0.141       | 1375.503  | 0.00%       | 99.91%     |
| 100.0              | 0.029         | 0.012       | 1375.515  | 0.00%       | 99.91%     |
| 105.0              | 0.029         | 0.015       | 1375.53   | 0.00%       | 99.91%     |
| 110.0              | 0.014         | 0.011       | 1375.541  | 0.00%       | 99.91%     |
| 115.0              | 0.029         | 0.011       | 1375.552  | 0.00%       | 99.92%     |
| 120.0              | 0.014         | 0.010       | 1375.563  | 0.00%       | 99.92%     |
| 125.0              | 0.043         | 0.013       | 1375.576  | 0.00%       | 99.92%     |
| 130.0              | 0.100         | 0.031       | 1375.607  | 0.00%       | 99.92%     |
| 135.0              | 0.114         | 0.043       | 1375.65   | 0.00%       | 99.92%     |
| 140.0              | 0.157         | 0.050       | 1375.7    | 0.00%       | 99.93%     |
| 145.0              | 0.257         | 0.069       | 1375.77   | 0.00%       | 99.93%     |
| 150.0              | 0.600         | 0.126       | 1375.896  | 0.00%       | 99.94%     |
| 155.0              | 0.771         | 0.174       | 1376.069  | 0.00%       | 99.95%     |
| 160.0              | 1.014         | 0.187       | 1376.257  | 0.00%       | 99.97%     |
| 165.0              | 1.200         | 0.183       | 1376.439  | 0.00%       | 99.98%     |
| 170.0              | 1.286         | 0.147       | 1376.587  | 0.00%       | 99.99%     |
| 175.0              | 1.329         | 0.094       | 1376.68   | 0.00%       | 100.00%    |
| 180.0              | 1.412         | 0.033       | 1376.713  | 0.00%       | 100.00%    |

## ZONAL LUMEN SUMMARY

| Zone    | Lumens  | %Lamp | %Fixt   |
|---------|---------|-------|---------|
| 0-30    | 967.45  | N.A.  | 70.27%  |
| 0-40    | 1177.37 | N.A.  | 85.52%  |
| 0-60    | 1329.65 | N.A.  | 96.58%  |
| 0-90    | 1375.36 | N.A.  | 99.90%  |
| 0-120   | 1375.56 | N.A.  | 99.92%  |
| 0-180   | 1376.71 | N.A.  | 100.00% |
| 60-90   | 45.71   | N.A.  | 3.32%   |
| 90-120  | 0.20    | N.A.  | 0.01%   |
| 90-130  | 0.24    | N.A.  | 0.02%   |
| 90-150  | 0.53    | N.A.  | 0.04%   |
| 90-180  | 1.32    | N.A.  | 0.10%   |
| 0-35.40 | 1101.37 | N.A.  | 80.00%  |

## ZONAL LUMEN SUMMARY

|         |        |
|---------|--------|
| 0-10    | 186.80 |
| 10-20   | 398.11 |
| 20-30   | 382.55 |
| 30-40   | 209.92 |
| 40-50   | 99.25  |
| 50-60   | 53.03  |
| 60-70   | 30.20  |
| 70-80   | 12.48  |
| 80-90   | 3.03   |
| 90-100  | 0.15   |
| 100-110 | 0.03   |
| 110-120 | 0.02   |
| 120-130 | 0.04   |
| 130-140 | 0.09   |
| 140-150 | 0.20   |
| 150-160 | 0.36   |
| 160-170 | 0.33   |
| 170-180 | 0.09   |

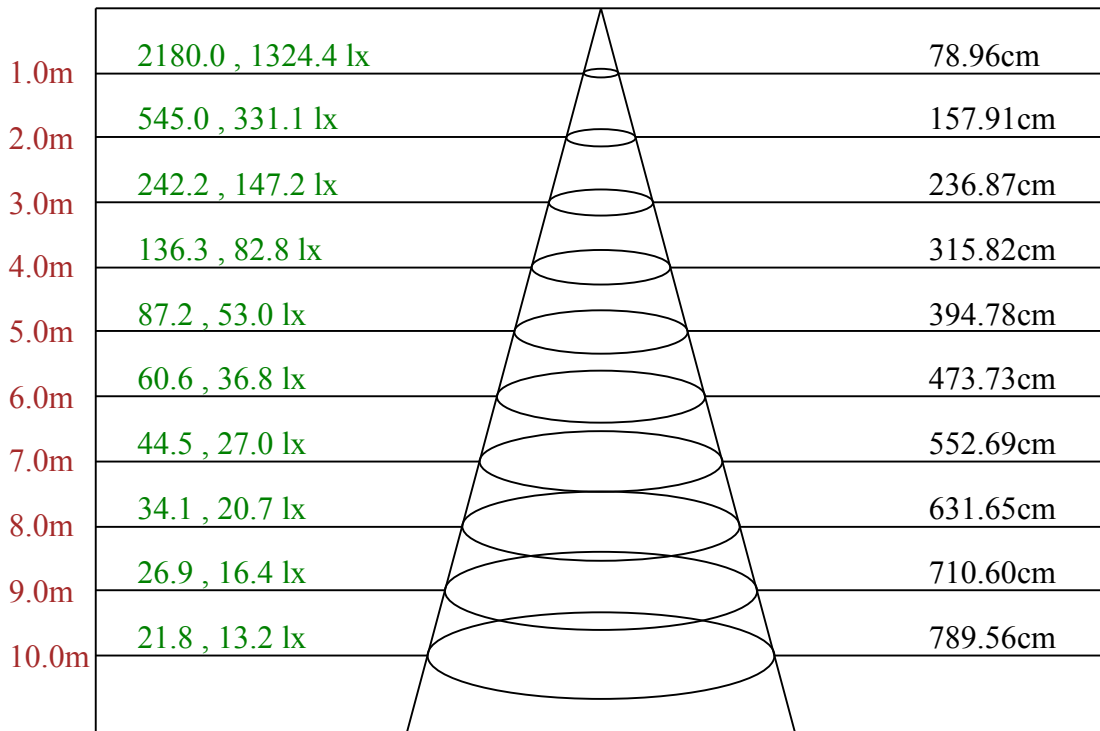


C0/C180: —

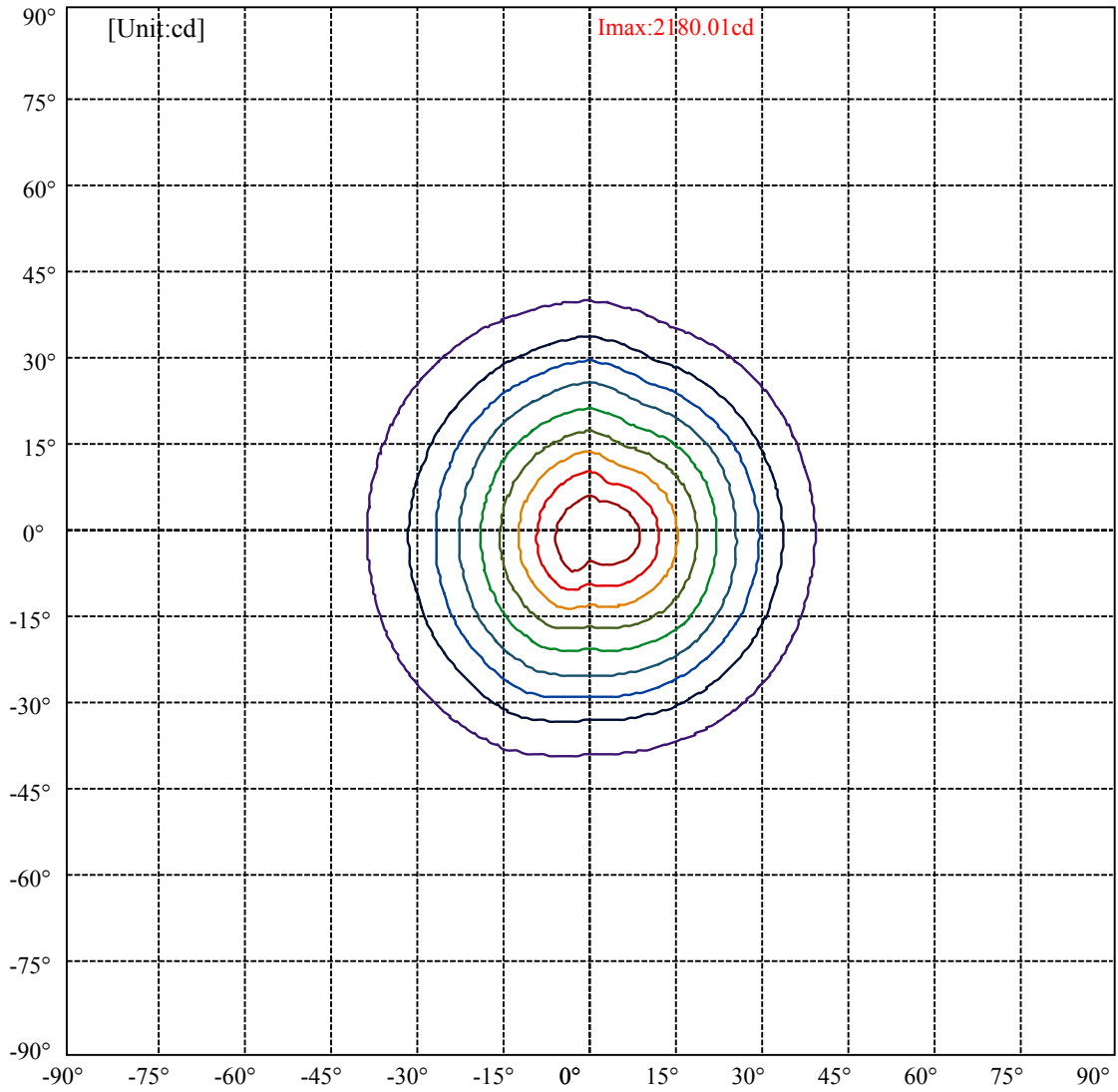
C90/C270: —

Field angle(10%Imax):C0/180Left:38.2 Right:38.7  
:C90/270Left:38.5 Right:39.4

Beam Angle(50%Imax):C0/180Left:18.6 Right:21.8  
:C90/270Left:20.4 Right:21.0



Max , Ave      Beam angle of C0 plane 43.09



|                   |   |
|-------------------|---|
| (10%Imax) 218.001 | — |
| (20%Imax) 436.003 | — |
| (30%Imax) 654.004 | — |
| (40%Imax) 872.005 | — |
| (50%Imax) 1090.01 | — |
| (60%Imax) 1308.01 | — |
| (70%Imax) 1526.01 | — |
| (80%Imax) 1744.01 | — |
| (90%Imax) 1962.01 | — |

LL4G-HO-5CCT(3000K)

Intensity data(cd)

|        |         |         |         |         |         |        |        |        |        |
|--------|---------|---------|---------|---------|---------|--------|--------|--------|--------|
| C/γ(°) | 0.0     | 5.0     | 10.0    | 15.0    | 20.0    | 25.0   | 30.0   | 35.0   | 40.0   |
| 0.0    | 2180.01 | 2159.95 | 1870.75 | 1526.92 | 1204.57 | 877.88 | 605.83 | 339.49 | 176.49 |
| 22.5   | 2180.01 | 2107.60 | 1817.03 | 1489.19 | 1182.39 | 878.11 | 558.96 | 296.97 | 167.80 |
| 45.0   | 2180.01 | 2036.04 | 1745.24 | 1420.84 | 1115.64 | 834.44 | 518.73 | 274.80 | 165.06 |
| 67.5   | 2180.01 | 1977.06 | 1666.37 | 1340.14 | 1053.46 | 784.83 | 485.81 | 262.91 | 166.20 |
| 90.0   | 2180.01 | 2009.98 | 1755.30 | 1429.07 | 1139.64 | 896.63 | 611.09 | 348.18 | 200.95 |
| 112.5  | 2180.01 | 1984.37 | 1715.75 | 1378.77 | 1086.38 | 826.90 | 528.79 | 300.63 | 190.44 |
| 135.0  | 2180.01 | 1977.51 | 1687.40 | 1342.20 | 1038.60 | 775.46 | 472.09 | 274.11 | 184.95 |
| 157.5  | 2180.01 | 1987.80 | 1675.52 | 1315.90 | 998.36  | 729.28 | 459.97 | 268.85 | 184.04 |
| 180.0  | 2180.01 | 2004.03 | 1676.89 | 1329.85 | 1001.10 | 721.96 | 481.23 | 276.85 | 185.18 |
| 202.5  | 2180.01 | 2040.38 | 1715.52 | 1363.69 | 1046.37 | 766.32 | 505.92 | 289.88 | 188.38 |
| 225.0  | 2180.01 | 2086.11 | 1767.65 | 1422.21 | 1118.38 | 843.59 | 555.76 | 321.66 | 194.78 |
| 247.5  | 2180.01 | 2127.03 | 1826.17 | 1475.25 | 1178.96 | 913.54 | 644.46 | 389.33 | 212.15 |
| 270.0  | 2180.01 | 1978.89 | 1695.18 | 1390.89 | 1109.24 | 865.53 | 573.59 | 311.14 | 177.41 |
| 292.5  | 2180.01 | 2037.18 | 1768.79 | 1461.99 | 1175.54 | 903.94 | 609.94 | 341.55 | 183.12 |
| 315.0  | 2180.01 | 2118.34 | 1842.40 | 1519.60 | 1237.95 | 946.69 | 615.89 | 342.24 | 183.12 |
| 337.5  | 2180.01 | 2173.44 | 1895.90 | 1545.89 | 1232.92 | 922.69 | 620.69 | 345.21 | 178.55 |
| 360.0  | 2180.01 | 2159.95 | 1870.75 | 1526.92 | 1204.57 | 877.88 | 605.83 | 339.49 | 176.49 |
| C/γ(°) | 45.0    | 50.0    | 55.0    | 60.0    | 65.0    | 70.0   | 75.0   | 80.0   | 85.0   |
| 0.0    | 99.90   | 63.33   | 48.24   | 34.06   | 24.23   | 13.03  | 5.94   | 2.52   | 0.00   |
| 22.5   | 98.30   | 61.96   | 47.10   | 33.61   | 24.23   | 12.35  | 5.94   | 2.74   | 0.00   |
| 45.0   | 98.99   | 62.87   | 46.87   | 34.06   | 24.69   | 13.03  | 5.94   | 2.97   | 0.23   |
| 67.5   | 100.13  | 64.70   | 47.10   | 34.52   | 24.92   | 13.95  | 6.40   | 3.20   | 0.46   |
| 90.0   | 144.71  | 85.96   | 57.61   | 44.35   | 32.24   | 22.40  | 11.89  | 6.63   | 3.43   |
| 112.5  | 143.11  | 93.73   | 61.27   | 44.35   | 33.38   | 23.78  | 13.26  | 6.86   | 3.89   |
| 135.0  | 144.26  | 99.90   | 62.18   | 45.27   | 34.52   | 24.23  | 15.32  | 7.54   | 4.34   |
| 157.5  | 141.74  | 103.11  | 63.33   | 45.95   | 35.44   | 25.15  | 16.23  | 8.00   | 5.26   |
| 180.0  | 143.11  | 104.71  | 63.78   | 46.64   | 36.12   | 26.29  | 16.69  | 8.23   | 5.72   |
| 202.5  | 145.40  | 106.31  | 64.93   | 48.01   | 36.81   | 26.52  | 16.69  | 7.77   | 5.49   |
| 225.0  | 147.91  | 105.16  | 65.84   | 48.24   | 36.81   | 26.52  | 16.69  | 8.00   | 4.80   |
| 247.5  | 151.34  | 104.02  | 66.76   | 48.01   | 36.12   | 25.61  | 16.00  | 7.32   | 4.34   |
| 270.0  | 119.79  | 76.36   | 52.81   | 40.01   | 29.03   | 19.43  | 8.00   | 5.49   | 1.83   |
| 292.5  | 109.51  | 76.81   | 53.04   | 38.41   | 27.89   | 17.83  | 7.09   | 4.12   | 0.69   |
| 315.0  | 104.48  | 69.73   | 51.21   | 37.04   | 26.52   | 16.00  | 6.63   | 3.66   | 0.46   |
| 337.5  | 101.96  | 65.38   | 49.15   | 34.75   | 25.38   | 14.17  | 5.94   | 2.97   | 0.00   |
| 360.0  | 99.90   | 63.33   | 48.24   | 34.06   | 24.23   | 13.03  | 5.94   | 2.52   | 0.00   |
| C/γ(°) | 90.0    | 95.0    | 100.0   | 105.0   | 110.0   | 115.0  | 120.0  | 125.0  | 130.0  |
| 0.0    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   |
| 22.5   | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.23   |
| 45.0   | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   |
| 67.5   | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   |
| 90.0   | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   |
| 112.5  | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   |
| 135.0  | 1.14    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   |
| 157.5  | 1.37    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   |
| 180.0  | 1.60    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   |
| 202.5  | 1.60    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   |
| 225.0  | 1.37    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   |
| 247.5  | 0.69    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   |
| 270.0  | 0.23    | 0.23    | 0.23    | 0.46    | 0.23    | 0.46   | 0.23   | 0.46   | 0.46   |
| 292.5  | 0.00    | 0.00    | 0.23    | 0.00    | 0.00    | 0.00   | 0.00   | 0.23   | 0.46   |
| 315.0  | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.23   |
| 337.5  | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.23   |
| 360.0  | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   |

LL4G-HO-5CCT(3000K)

Intensity data(cd)

| C/γ(°) | 135.0 | 140.0 | 145.0 | 150.0 | 155.0 | 160.0 | 165.0 | 170.0 | 175.0 |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.0    | 0.00  | 0.00  | 0.23  | 0.69  | 0.69  | 1.37  | 1.14  | 1.14  | 1.37  |
| 22.5   | 0.23  | 0.23  | 0.46  | 0.91  | 0.91  | 0.69  | 1.37  | 1.37  | 1.60  |
| 45.0   | 0.23  | 0.23  | 0.23  | 0.69  | 0.91  | 1.14  | 1.37  | 1.37  | 1.60  |
| 67.5   | 0.23  | 0.23  | 0.46  | 0.91  | 0.91  | 1.37  | 1.14  | 1.37  | 1.37  |
| 90.0   | 0.00  | 0.46  | 0.23  | 0.69  | 0.69  | 0.91  | 1.14  | 1.37  | 1.14  |
| 112.5  | 0.00  | 0.00  | 0.23  | 0.46  | 0.91  | 0.69  | 1.14  | 1.14  | 1.14  |
| 135.0  | 0.00  | 0.00  | 0.23  | 0.46  | 0.46  | 0.91  | 0.91  | 1.14  | 1.14  |
| 157.5  | 0.00  | 0.00  | 0.23  | 0.46  | 0.46  | 0.91  | 1.14  | 1.14  | 1.14  |
| 180.0  | 0.00  | 0.23  | 0.00  | 0.46  | 0.91  | 0.91  | 1.14  | 1.14  | 1.14  |
| 202.5  | 0.00  | 0.00  | 0.00  | 0.46  | 0.69  | 0.91  | 1.14  | 1.37  | 1.14  |
| 225.0  | 0.00  | 0.00  | 0.00  | 0.46  | 0.69  | 0.91  | 1.14  | 1.14  | 1.37  |
| 247.5  | 0.00  | 0.00  | 0.00  | 0.23  | 0.46  | 0.91  | 0.91  | 1.37  | 1.37  |
| 270.0  | 0.46  | 0.69  | 0.69  | 1.14  | 1.14  | 1.37  | 1.60  | 1.60  | 1.60  |
| 292.5  | 0.46  | 0.23  | 0.46  | 0.69  | 0.91  | 1.14  | 1.14  | 1.37  | 1.60  |
| 315.0  | 0.23  | 0.00  | 0.46  | 0.46  | 0.91  | 0.91  | 1.37  | 1.14  | 1.37  |
| 337.5  | 0.00  | 0.23  | 0.23  | 0.46  | 0.69  | 1.14  | 1.37  | 1.37  | 1.14  |
| 360.0  | 0.00  | 0.00  | 0.23  | 0.69  | 0.69  | 1.37  | 1.14  | 1.14  | 1.37  |

| C/γ(°) | 180.0 |
|--------|-------|
| 0.0    | 1.41  |
| 22.5   | 1.41  |
| 45.0   | 1.41  |
| 67.5   | 1.41  |
| 90.0   | 1.41  |
| 112.5  | 1.41  |
| 135.0  | 1.41  |
| 157.5  | 1.41  |
| 180.0  | 1.41  |
| 202.5  | 1.41  |
| 225.0  | 1.41  |
| 247.5  | 1.41  |
| 270.0  | 1.41  |
| 292.5  | 1.41  |
| 315.0  | 1.41  |
| 337.5  | 1.41  |
| 360.0  | 1.41  |