



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.  
www.bellingeel.com

Tel:0755-21038430

Address:Rm. 108, No.1 Building, Meibaohe industrial park, No.14 Shilongzi Road, Dalang street, Longhua district, Shenzhen, China

---

Client:

LumCAT: LL4RR-5CCT-5000K

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.17

LampCAT:

Current(A): 0.1200

Lamp flux(lm): -1.0

Power (W): 14.18

Number of Lamps: 1

PF: 0.9861

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

---

### Photometric Results

Lumens(lm): 959.07, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 67.64

Central intensity(cd): 370.456, Maximum intensity(cd): 370.456

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

Beam Angle(50%Imax): [C0/180]Total=105.7

[C90/270]Total=105.6

Field angle(10%Imax): [C0/180]Total=151.3

[C90/270]Total=151.1

Maximum s/h(1/2): C0\_180=1.26 C90\_270=1.25

Maximum s/h(1/4): C0\_180=1.36 C90\_270=1.36

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.52%

Down flux rate of LUM(%): 99.48%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 83.182%

---

Equipment: GMS-3000  
Temperature( $^{\circ}$ C): 25

Date:  
Humidity(%): 58%

Operator: Sam

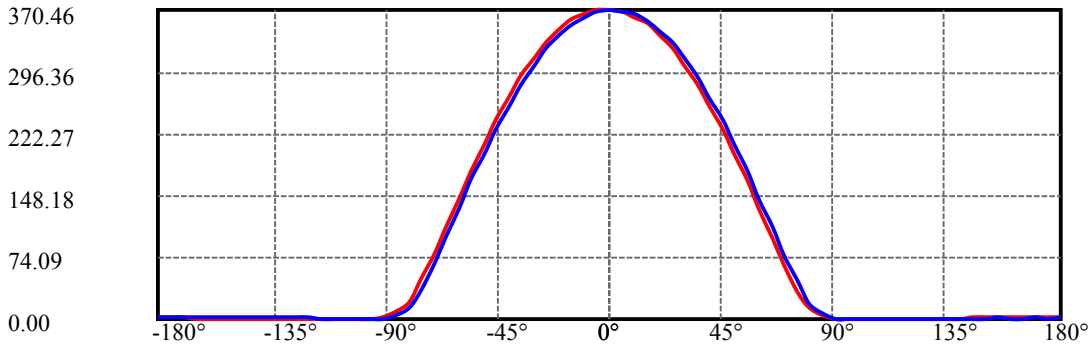
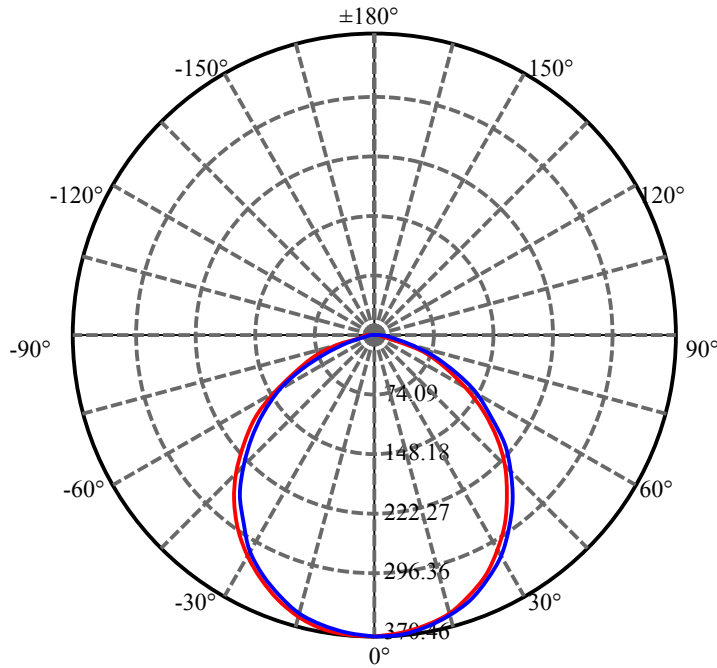
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0                | 370.456       | 0.000       | 0         | 0.00%       | 0.00%      |
| 5.0                | 368.680       | 8.836       | 8.836     | 0.00%       | 0.92%      |
| 10.0               | 363.731       | 26.201      | 35.037    | 0.00%       | 3.65%      |
| 15.0               | 355.581       | 42.669      | 77.706    | 0.00%       | 8.10%      |
| 20.0               | 343.805       | 57.639      | 135.345   | 0.00%       | 14.11%     |
| 25.0               | 328.060       | 70.466      | 205.811   | 0.00%       | 21.46%     |
| 30.0               | 308.821       | 80.598      | 286.409   | 0.00%       | 29.86%     |
| 35.0               | 285.984       | 87.589      | 373.998   | 0.00%       | 39.00%     |
| 40.0               | 260.738       | 91.216      | 465.215   | 0.00%       | 48.51%     |
| 45.0               | 233.032       | 91.425      | 556.64    | 0.00%       | 58.04%     |
| 50.0               | 203.102       | 88.127      | 644.767   | 0.00%       | 67.23%     |
| 55.0               | 171.479       | 81.446      | 726.214   | 0.00%       | 75.72%     |
| 60.0               | 138.109       | 71.560      | 797.774   | 0.00%       | 83.18%     |
| 65.0               | 104.052       | 58.870      | 856.644   | 0.00%       | 89.32%     |
| 70.0               | 71.264        | 44.391      | 901.035   | 0.00%       | 93.95%     |
| 75.0               | 40.197        | 29.134      | 930.169   | 0.00%       | 96.99%     |
| 80.0               | 16.857        | 15.266      | 945.435   | 0.00%       | 98.58%     |
| 85.0               | 6.986         | 6.479       | 951.914   | 0.00%       | 99.25%     |
| 90.0               | 0.926         | 2.166       | 954.08    | 0.00%       | 99.48%     |
| 95.0               | 0.424         | 0.370       | 954.45    | 0.00%       | 99.52%     |
| 100.0              | 0.450         | 0.237       | 954.687   | 0.00%       | 99.54%     |
| 105.0              | 0.529         | 0.262       | 954.949   | 0.00%       | 99.57%     |
| 110.0              | 0.530         | 0.277       | 955.226   | 0.00%       | 99.60%     |
| 115.0              | 0.688         | 0.308       | 955.534   | 0.00%       | 99.63%     |
| 120.0              | 0.741         | 0.347       | 955.882   | 0.00%       | 99.67%     |
| 125.0              | 0.847         | 0.367       | 956.249   | 0.00%       | 99.71%     |
| 130.0              | 0.926         | 0.386       | 956.634   | 0.00%       | 99.75%     |
| 135.0              | 1.006         | 0.390       | 957.025   | 0.00%       | 99.79%     |
| 140.0              | 0.953         | 0.363       | 957.387   | 0.00%       | 99.82%     |
| 145.0              | 1.138         | 0.349       | 957.736   | 0.00%       | 99.86%     |
| 150.0              | 1.164         | 0.339       | 958.075   | 0.00%       | 99.90%     |
| 155.0              | 1.191         | 0.298       | 958.373   | 0.00%       | 99.93%     |
| 160.0              | 1.165         | 0.247       | 958.62    | 0.00%       | 99.95%     |
| 165.0              | 1.165         | 0.192       | 958.812   | 0.00%       | 99.97%     |
| 170.0              | 1.217         | 0.141       | 958.954   | 0.00%       | 99.99%     |
| 175.0              | 1.297         | 0.090       | 959.044   | 0.00%       | 100.00%    |
| 180.0              | 1.317         | 0.031       | 959.075   | 0.00%       | 100.00%    |

## ZONAL LUMEN SUMMARY

| Zone    | Lumens | %Lamp | %Fixt   |
|---------|--------|-------|---------|
| 0-30    | 286.41 | N.A.  | 29.86%  |
| 0-40    | 465.21 | N.A.  | 48.51%  |
| 0-60    | 797.77 | N.A.  | 83.18%  |
| 0-90    | 954.08 | N.A.  | 99.48%  |
| 0-120   | 955.88 | N.A.  | 99.67%  |
| 0-180   | 959.07 | N.A.  | 100.00% |
| 60-90   | 156.31 | N.A.  | 16.30%  |
| 90-120  | 1.80   | N.A.  | 0.19%   |
| 90-130  | 2.55   | N.A.  | 0.27%   |
| 90-150  | 3.99   | N.A.  | 0.42%   |
| 90-180  | 4.96   | N.A.  | 0.52%   |
| 0-57.87 | 767.26 | N.A.  | 80.00%  |

## ZONAL LUMEN SUMMARY

|         |        |
|---------|--------|
| 0-10    | 35.04  |
| 10-20   | 100.31 |
| 20-30   | 151.06 |
| 30-40   | 178.81 |
| 40-50   | 179.55 |
| 50-60   | 153.01 |
| 60-70   | 103.26 |
| 70-80   | 44.40  |
| 80-90   | 8.65   |
| 90-100  | 0.61   |
| 100-110 | 0.54   |
| 110-120 | 0.66   |
| 120-130 | 0.75   |
| 130-140 | 0.75   |
| 140-150 | 0.69   |
| 150-160 | 0.55   |
| 160-170 | 0.33   |
| 170-180 | 0.09   |

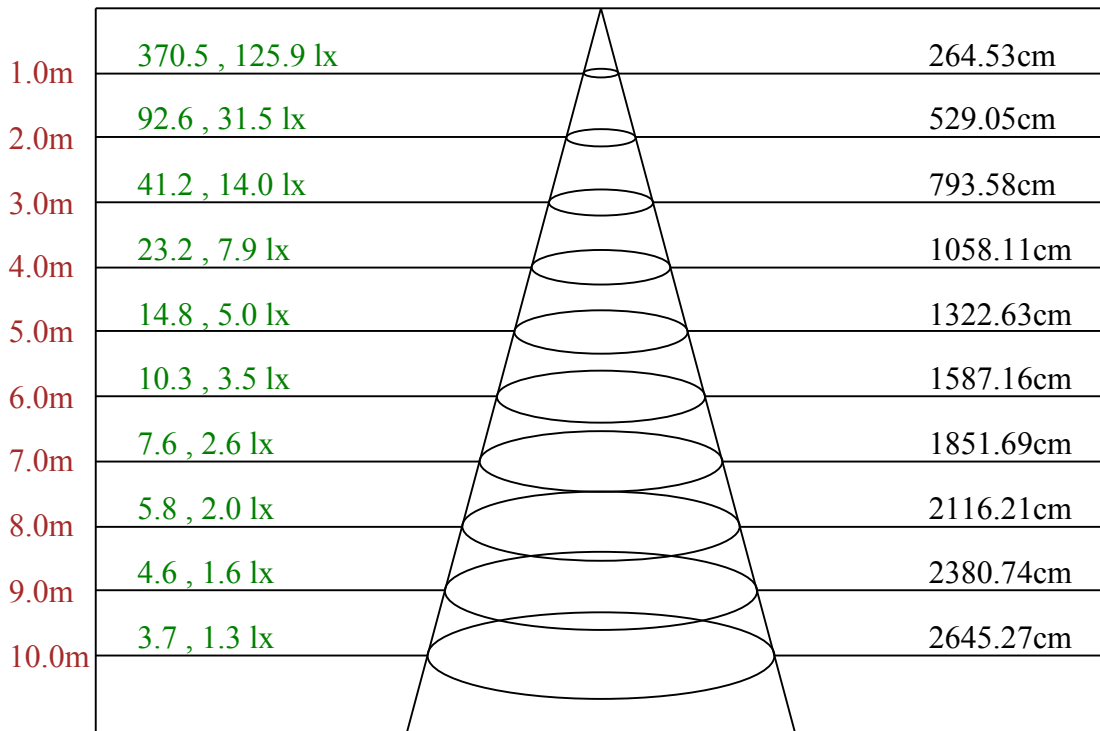


C0/C180: —

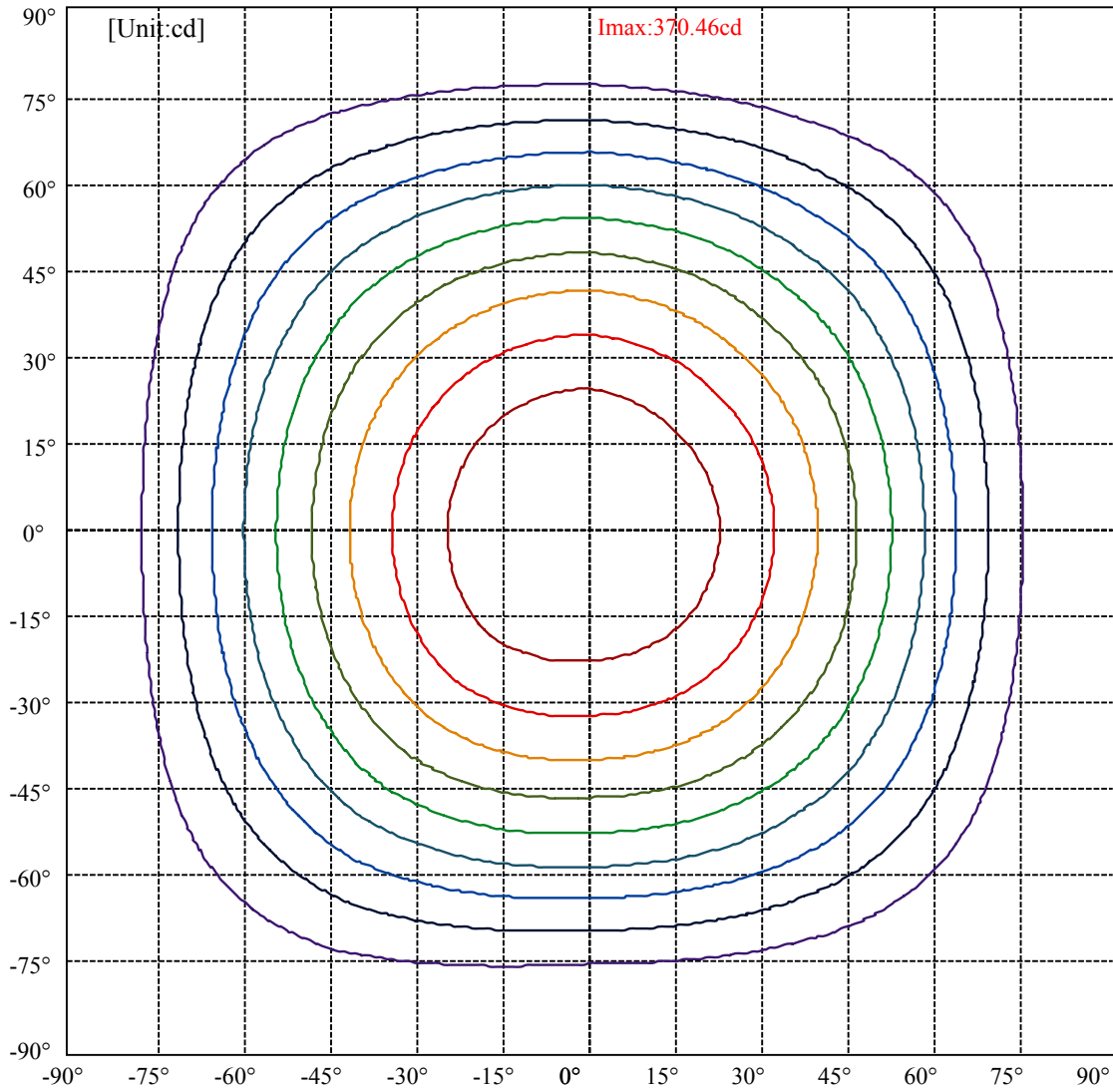
C90/C270: —










Field angle(10%Imax):C0/180Left:76.9 Right:74.4  
:C90/270Left:74.5 Right:76.6

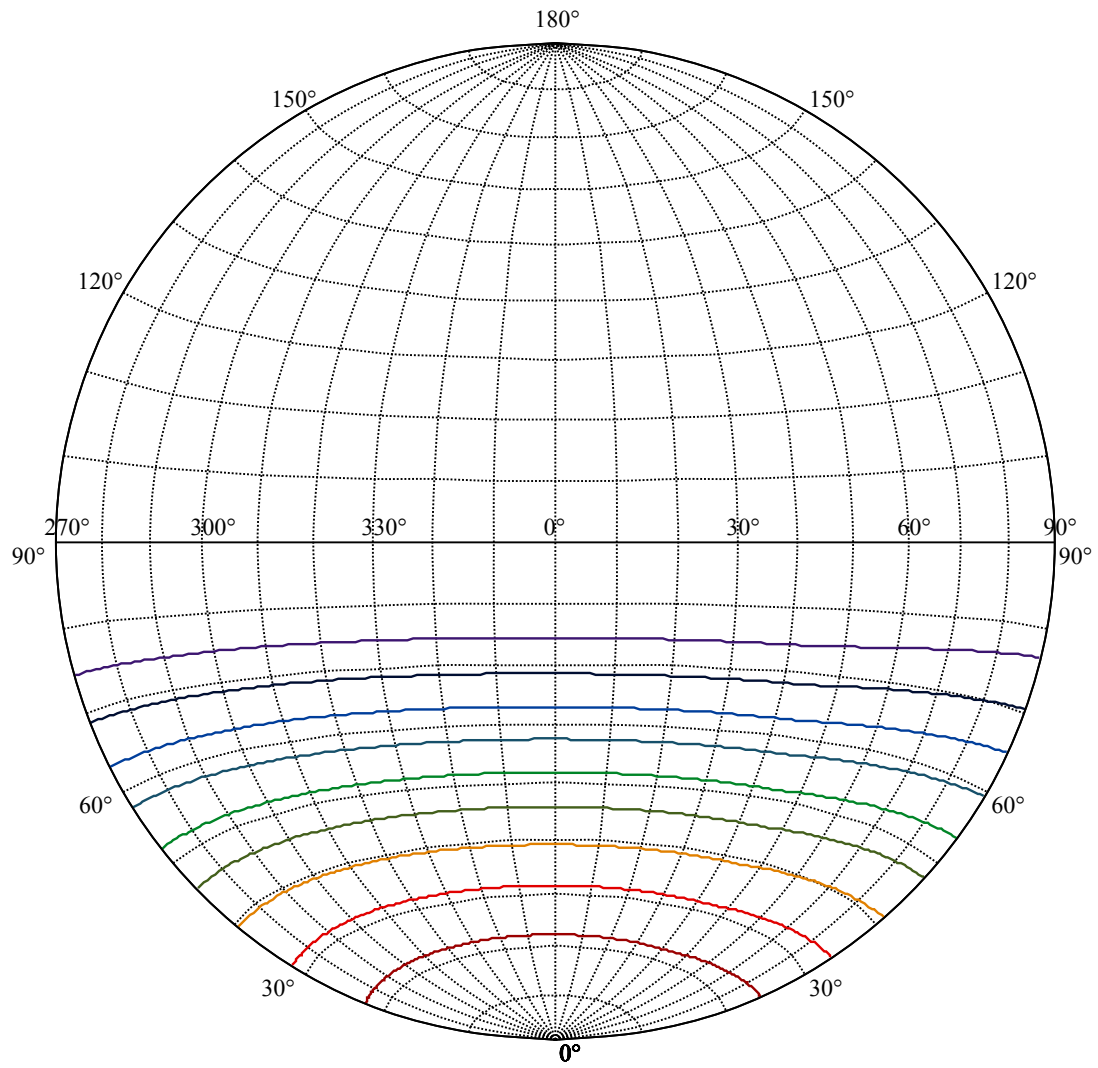
Beam Angle(50%Imax):C0/180Left:53.8 Right:51.9  
:C90/270Left:52.0 Right:53.6



Max , Ave      Beam angle of C0 plane 105.82



|           |         |   |
|-----------|---------|---|
| (10%Imax) | 37.0456 |  |
| (20%Imax) | 74.0912 |  |
| (30%Imax) | 111.137 |  |
| (40%Imax) | 148.182 |  |
| (50%Imax) | 185.228 |  |
| (60%Imax) | 222.274 |  |
| (70%Imax) | 259.319 |  |
| (80%Imax) | 296.365 |  |
| (90%Imax) | 333.41  |  |












House

[Unit:cd]

Road

**Imax:370.46**

|                   |   |
|-------------------|---|
| (10%Imax) 37.0456 |  |
| (20%Imax) 74.0912 |  |
| (30%Imax) 111.137 |  |
| (40%Imax) 148.182 |  |
| (50%Imax) 185.228 |  |
| (60%Imax) 222.274 |  |
| (70%Imax) 259.319 |  |
| (80%Imax) 296.365 |  |
| (90%Imax) 333.41  |  |

LL4RR-5CCT-5000K

Intensity data(cd)

|               |              |              |              |              |              |              |              |              |              |
|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>C/γ(°)</b> | <b>0.0</b>   | <b>5.0</b>   | <b>10.0</b>  | <b>15.0</b>  | <b>20.0</b>  | <b>25.0</b>  | <b>30.0</b>  | <b>35.0</b>  | <b>40.0</b>  |
| 0.0           | 370.46       | 367.94       | 362.22       | 353.54       | 341.05       | 324.75       | 304.22       | 280.93       | 254.89       |
| 45.0          | 370.46       | 368.15       | 362.44       | 353.54       | 340.63       | 323.48       | 303.37       | 280.08       | 254.04       |
| 90.0          | 370.46       | 369.00       | 364.76       | 357.14       | 345.92       | 331.53       | 312.47       | 289.82       | 265.69       |
| 135.0         | 370.46       | 369.21       | 364.76       | 357.14       | 346.13       | 331.31       | 312.47       | 290.03       | 265.48       |
| 180.0         | 370.46       | 369.84       | 365.61       | 358.20       | 346.98       | 331.74       | 313.74       | 291.94       | 266.32       |
| 225.0         | 370.46       | 370.06       | 365.82       | 358.41       | 347.62       | 332.59       | 314.59       | 292.57       | 267.38       |
| 270.0         | 370.46       | 367.52       | 362.01       | 353.12       | 341.26       | 324.54       | 304.85       | 281.35       | 256.16       |
| 315.0         | 370.46       | 367.73       | 362.22       | 353.54       | 340.84       | 324.54       | 304.85       | 281.14       | 255.95       |
| 360.0         | 370.46       | 367.94       | 362.22       | 353.54       | 341.05       | 324.75       | 304.22       | 280.93       | 254.89       |
| <b>C/γ(°)</b> | <b>45.0</b>  | <b>50.0</b>  | <b>55.0</b>  | <b>60.0</b>  | <b>65.0</b>  | <b>70.0</b>  | <b>75.0</b>  | <b>80.0</b>  | <b>85.0</b>  |
| 0.0           | 227.58       | 197.31       | 165.34       | 131.26       | 96.75        | 64.15        | 33.24        | 13.13        | 4.87         |
| 45.0          | 225.68       | 195.61       | 163.43       | 130.62       | 95.48        | 63.09        | 32.39        | 12.91        | 4.66         |
| 90.0          | 238.17       | 208.74       | 176.35       | 143.75       | 111.14       | 76.85        | 45.73        | 18.63        | 7.83         |
| 135.0         | 237.95       | 208.32       | 177.20       | 143.32       | 109.24       | 77.27        | 46.79        | 20.75        | 8.89         |
| 180.0         | 238.80       | 208.74       | 178.04       | 144.17       | 110.30       | 78.12        | 47.21        | 20.96        | 9.74         |
| 225.0         | 240.28       | 210.86       | 179.74       | 145.23       | 112.41       | 79.18        | 48.27        | 22.23        | 9.53         |
| 270.0         | 227.79       | 197.52       | 167.03       | 133.58       | 98.23        | 66.05        | 33.87        | 12.91        | 4.87         |
| 315.0         | 228.00       | 197.73       | 164.71       | 132.95       | 98.87        | 65.42        | 34.08        | 13.34        | 5.50         |
| 360.0         | 227.58       | 197.31       | 165.34       | 131.26       | 96.75        | 64.15        | 33.24        | 13.13        | 4.87         |
| <b>C/γ(°)</b> | <b>90.0</b>  | <b>95.0</b>  | <b>100.0</b> | <b>105.0</b> | <b>110.0</b> | <b>115.0</b> | <b>120.0</b> | <b>125.0</b> | <b>130.0</b> |
| 0.0           | 0.42         | 0.64         | 0.64         | 0.64         | 0.85         | 0.85         | 1.06         | 1.06         | 1.06         |
| 45.0          | 0.85         | 0.64         | 0.42         | 0.64         | 0.64         | 0.85         | 0.64         | 0.85         | 1.27         |
| 90.0          | 0.85         | 0.21         | 0.21         | 0.21         | 0.21         | 0.64         | 0.42         | 0.42         | 0.64         |
| 135.0         | 1.06         | 0.21         | 0.21         | 0.42         | 0.21         | 0.42         | 0.64         | 0.85         | 0.85         |
| 180.0         | 1.27         | 0.21         | 0.21         | 0.21         | 0.21         | 0.42         | 0.42         | 0.64         | 0.64         |
| 225.0         | 1.48         | 0.21         | 0.21         | 0.42         | 0.21         | 0.42         | 0.64         | 0.64         | 0.85         |
| 270.0         | 1.06         | 0.64         | 0.85         | 0.85         | 0.85         | 1.06         | 1.27         | 1.27         | 1.27         |
| 315.0         | 0.42         | 0.64         | 0.85         | 0.85         | 1.06         | 0.85         | 0.85         | 1.06         | 0.85         |
| 360.0         | 0.42         | 0.64         | 0.64         | 0.64         | 0.85         | 0.85         | 1.06         | 1.06         | 1.06         |
| <b>C/γ(°)</b> | <b>135.0</b> | <b>140.0</b> | <b>145.0</b> | <b>150.0</b> | <b>155.0</b> | <b>160.0</b> | <b>165.0</b> | <b>170.0</b> | <b>175.0</b> |
| 0.0           | 1.06         | 1.06         | 1.48         | 1.27         | 1.27         | 1.27         | 1.27         | 1.27         | 1.48         |
| 45.0          | 1.06         | 1.06         | 1.27         | 1.27         | 1.27         | 1.27         | 1.27         | 1.06         | 1.27         |
| 90.0          | 0.85         | 0.85         | 1.06         | 0.85         | 1.27         | 0.85         | 1.06         | 1.27         | 1.06         |
| 135.0         | 0.85         | 0.64         | 0.85         | 1.06         | 1.27         | 1.06         | 1.06         | 1.27         | 1.06         |
| 180.0         | 0.85         | 0.64         | 0.85         | 0.85         | 1.06         | 0.85         | 0.85         | 1.27         | 1.27         |
| 225.0         | 1.06         | 0.85         | 1.06         | 1.27         | 0.85         | 1.06         | 1.06         | 1.06         | 1.48         |
| 270.0         | 1.27         | 1.27         | 1.27         | 1.48         | 1.27         | 1.48         | 1.48         | 1.48         | 1.48         |
| 315.0         | 1.06         | 1.27         | 1.27         | 1.27         | 1.27         | 1.48         | 1.27         | 1.06         | 1.27         |
| 360.0         | 1.06         | 1.06         | 1.48         | 1.27         | 1.27         | 1.27         | 1.27         | 1.27         | 1.48         |
| <b>C/γ(°)</b> | <b>180.0</b> |              |              |              |              |              |              |              |              |
| 0.0           | 1.32         |              |              |              |              |              |              |              |              |
| 45.0          | 1.32         |              |              |              |              |              |              |              |              |
| 90.0          | 1.32         |              |              |              |              |              |              |              |              |
| 135.0         | 1.32         |              |              |              |              |              |              |              |              |
| 180.0         | 1.32         |              |              |              |              |              |              |              |              |
| 225.0         | 1.32         |              |              |              |              |              |              |              |              |
| 270.0         | 1.32         |              |              |              |              |              |              |              |              |
| 315.0         | 1.32         |              |              |              |              |              |              |              |              |
| 360.0         | 1.32         |              |              |              |              |              |              |              |              |