



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
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Client:

LumCAT:LD4S-HO-5CCT-2700K

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.08

LampCAT:

Current(A): 0.1560

Lamp flux(lm): -1.0

Power (W): 18.50

Number of Lamps: 0

PF: 0.9870

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1366.23, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 73.85

Central intensity(cd): 3821.230, Maximum intensity(cd): 3821.230

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=34.8

[C90/270]Total=35.0

Field angle(10%Imax): [C0/180]Total=50.8

[C90/270]Total=50.9

Maximum s/h(1/2): C0_180=0.62 C90_270=0.62

Maximum s/h(1/4): C0_180=0.58 C90_270=0.56

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.12%

Down flux rate of LUM(%): 99.88%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.937%

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

Date:
Humidity(%): 59%

Operator: Tester

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 | 3807.363 | 0.000 | 0 | 0.00% | 0.00% |
| 5.0 | 3554.697 | 88.011 | 88.011 | 0.00% | 6.44% |
| 10.0 | 3101.706 | 238.120 | 326.132 | 0.00% | 23.87% |
| 15.0 | 2419.786 | 327.531 | 653.663 | 0.00% | 47.84% |
| 20.0 | 1422.006 | 316.618 | 970.281 | 0.00% | 71.02% |
| 25.0 | 462.808 | 197.682 | 1167.963 | 0.00% | 85.49% |
| 30.0 | 126.757 | 74.610 | 1242.573 | 0.00% | 90.95% |
| 35.0 | 63.379 | 27.999 | 1270.571 | 0.00% | 93.00% |
| 40.0 | 43.981 | 17.912 | 1288.484 | 0.00% | 94.31% |
| 45.0 | 34.508 | 14.533 | 1303.016 | 0.00% | 95.37% |
| 50.0 | 29.268 | 12.887 | 1315.903 | 0.00% | 96.32% |
| 55.0 | 24.769 | 11.749 | 1327.653 | 0.00% | 97.18% |
| 60.0 | 20.191 | 10.392 | 1338.045 | 0.00% | 97.94% |
| 65.0 | 15.825 | 8.756 | 1346.801 | 0.00% | 98.58% |
| 70.0 | 11.697 | 6.969 | 1353.769 | 0.00% | 99.09% |
| 75.0 | 8.098 | 5.174 | 1358.943 | 0.00% | 99.47% |
| 80.0 | 4.737 | 3.434 | 1362.377 | 0.00% | 99.72% |
| 85.0 | 1.747 | 1.762 | 1364.139 | 0.00% | 99.85% |
| 90.0 | 0.027 | 0.485 | 1364.624 | 0.00% | 99.88% |
| 95.0 | 0.027 | 0.015 | 1364.639 | 0.00% | 99.88% |
| 100.0 | 0.053 | 0.022 | 1364.66 | 0.00% | 99.88% |
| 105.0 | 0.027 | 0.021 | 1364.682 | 0.00% | 99.89% |
| 110.0 | 0.027 | 0.014 | 1364.696 | 0.00% | 99.89% |
| 115.0 | 0.053 | 0.020 | 1364.716 | 0.00% | 99.89% |
| 120.0 | 0.053 | 0.026 | 1364.741 | 0.00% | 99.89% |
| 125.0 | 0.079 | 0.031 | 1364.772 | 0.00% | 99.89% |
| 130.0 | 0.053 | 0.029 | 1364.801 | 0.00% | 99.90% |
| 135.0 | 0.106 | 0.032 | 1364.833 | 0.00% | 99.90% |
| 140.0 | 0.159 | 0.049 | 1364.882 | 0.00% | 99.90% |
| 145.0 | 0.291 | 0.075 | 1364.957 | 0.00% | 99.91% |
| 150.0 | 0.662 | 0.140 | 1365.097 | 0.00% | 99.92% |
| 155.0 | 1.085 | 0.221 | 1365.318 | 0.00% | 99.93% |
| 160.0 | 1.350 | 0.255 | 1365.574 | 0.00% | 99.95% |
| 165.0 | 1.694 | 0.251 | 1365.824 | 0.00% | 99.97% |
| 170.0 | 1.905 | 0.213 | 1366.038 | 0.00% | 99.99% |
| 175.0 | 2.091 | 0.143 | 1366.181 | 0.00% | 100.00% |
| 180.0 | 2.170 | 0.051 | 1366.232 | 0.00% | 100.00% |

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

Date:
Humidity(%): 59%

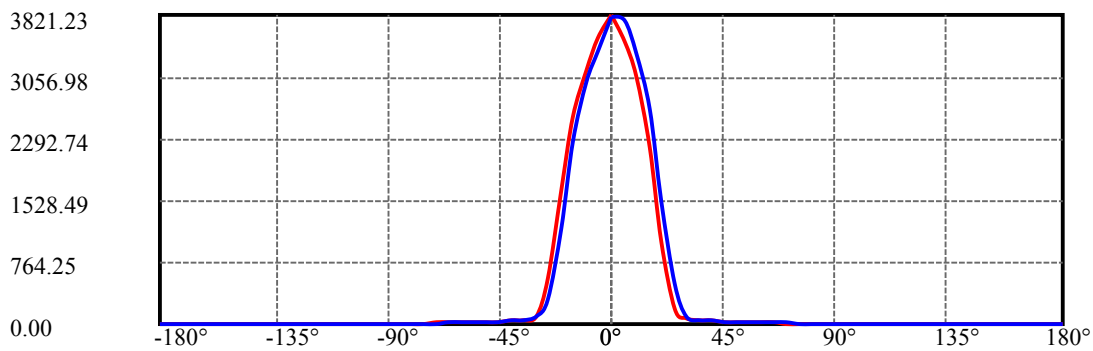
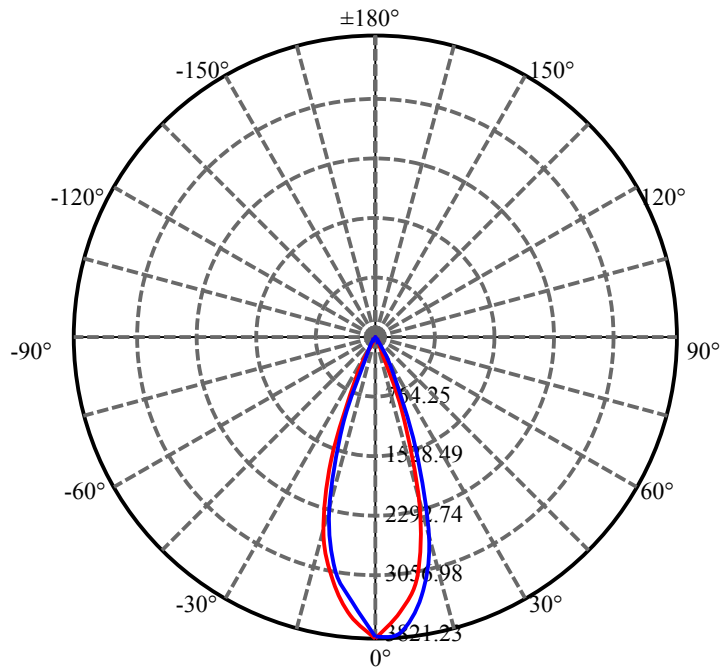
Operator: Tester

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|---------|
| 0-30 | 1242.57 | N.A. | 90.95% |
| 0-40 | 1288.48 | N.A. | 94.31% |
| 0-60 | 1338.05 | N.A. | 97.94% |
| 0-90 | 1364.62 | N.A. | 99.88% |
| 0-120 | 1364.74 | N.A. | 99.89% |
| 0-180 | 1366.23 | N.A. | 100.00% |
| 60-90 | 26.58 | N.A. | 1.95% |
| 90-120 | 0.12 | N.A. | 0.01% |
| 90-130 | 0.18 | N.A. | 0.01% |
| 90-150 | 0.47 | N.A. | 0.03% |
| 90-180 | 1.56 | N.A. | 0.11% |
| 0-23.10 | 1092.99 | N.A. | 80.00% |

ZONAL LUMEN SUMMARY

| | |
|---------|--------|
| 0-10 | 326.13 |
| 10-20 | 644.15 |
| 20-30 | 272.29 |
| 30-40 | 45.91 |
| 40-50 | 27.42 |
| 50-60 | 22.14 |
| 60-70 | 15.72 |
| 70-80 | 8.61 |
| 80-90 | 2.25 |
| 90-100 | 0.04 |
| 100-110 | 0.04 |
| 110-120 | 0.05 |
| 120-130 | 0.06 |
| 130-140 | 0.08 |
| 140-150 | 0.22 |
| 150-160 | 0.48 |
| 160-170 | 0.46 |
| 170-180 | 0.14 |

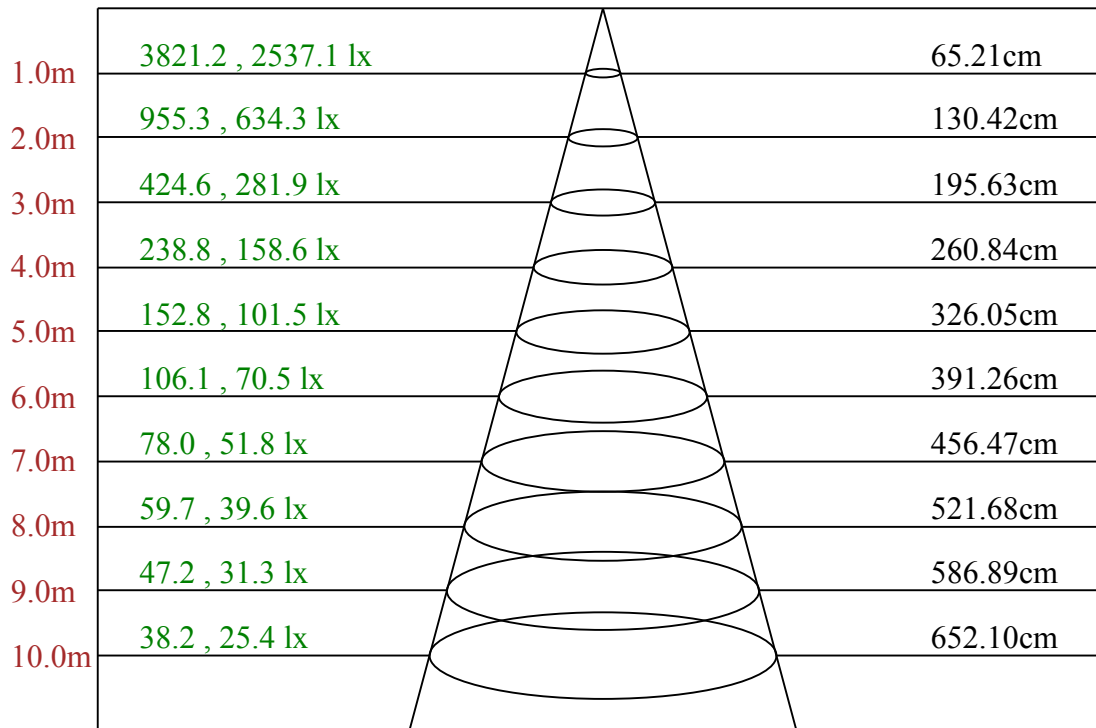


C0/C180: —

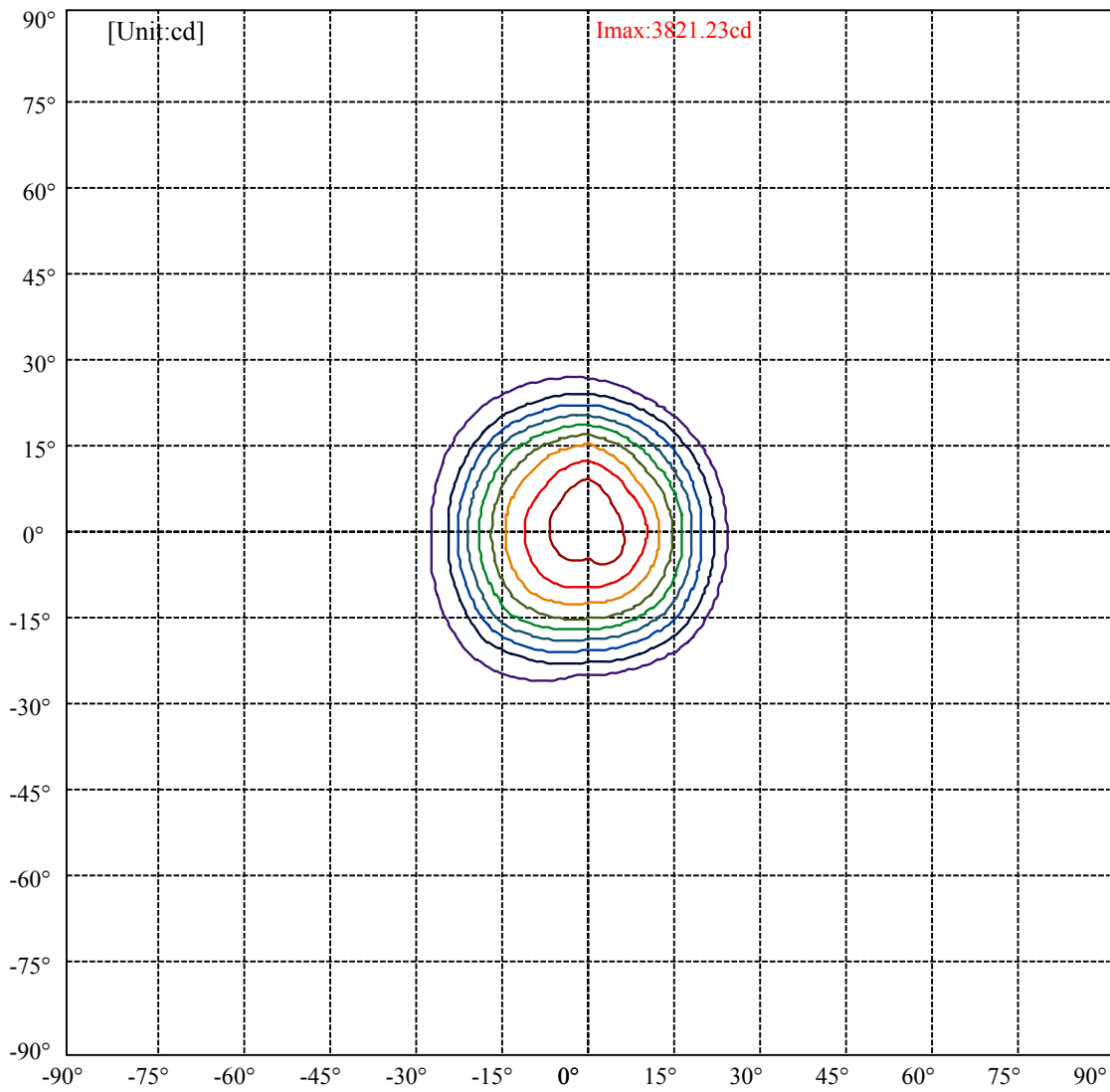
C90/C270: —

Field angle(10%Imax):C0/180Left:26.9 Right:23.9
 :C90/270Left:24.5 Right:26.4

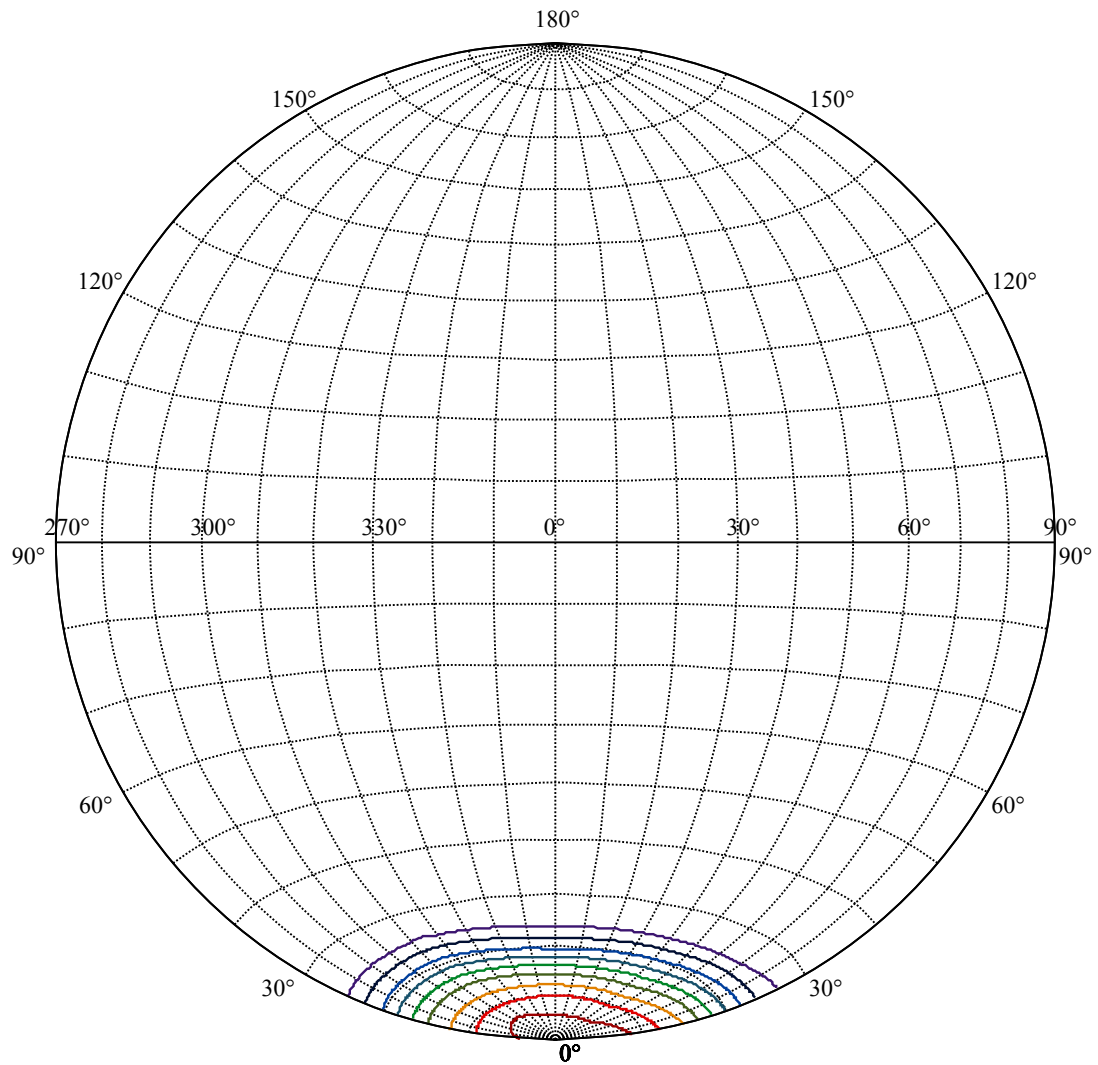
Beam Angle(50%Imax):C0/180Left:18.6 Right:16.2
 :C90/270Left:16.7 Right:18.3



Max , Ave Beam angle of C0 plane 36.12



| | |
|-------------------|---|
| (10%Imax) 378.672 | — |
| (20%Imax) 757.344 | — |
| (30%Imax) 1136.02 | — |
| (40%Imax) 1514.69 | — |
| (50%Imax) 1893.36 | — |
| (60%Imax) 2272.03 | — |
| (70%Imax) 2650.71 | — |
| (80%Imax) 3029.38 | — |
| (90%Imax) 3408.05 | — |



House

[Unit:cd]

Road

Imax:3821.23

| | |
|-------------------|---|
| (10%Imax) 382.123 | — |
| (20%Imax) 764.246 | — |
| (30%Imax) 1146.37 | — |
| (40%Imax) 1528.49 | — |
| (50%Imax) 1910.61 | — |
| (60%Imax) 2292.74 | — |
| (70%Imax) 2674.86 | — |
| (80%Imax) 3056.98 | — |
| (90%Imax) 3439.11 | — |

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 | 3821.23 | 3499.65 | 3052.75 | 2181.38 | 1015.96 | 192.86 | 79.18 | 49.75 | 38.95 |
| 45.0 | 3813.19 | 3504.74 | 3016.34 | 2180.11 | 1170.50 | 248.96 | 87.86 | 55.68 | 39.17 |
| 90.0 | 3786.72 | 3758.57 | 3348.29 | 2657.93 | 1511.13 | 494.54 | 93.78 | 56.31 | 41.49 |
| 135.0 | 3808.32 | 3615.88 | 3110.12 | 2576.42 | 1695.53 | 681.47 | 166.61 | 74.94 | 51.87 |
| 180.0 | 3821.23 | 3547.92 | 3132.35 | 2569.22 | 1659.11 | 559.53 | 99.08 | 55.89 | 42.34 |
| 225.0 | 3813.19 | 3501.14 | 3141.88 | 2593.78 | 1804.76 | 826.06 | 271.61 | 100.98 | 55.47 |
| 270.0 | 3786.72 | 3370.09 | 2987.97 | 2258.44 | 1190.62 | 297.02 | 90.40 | 50.81 | 40.65 |
| 315.0 | 3808.32 | 3639.59 | 3023.96 | 2341.01 | 1328.43 | 402.02 | 125.54 | 62.66 | 41.92 |
| 360.0 | 3821.23 | 3499.65 | 3052.75 | 2181.38 | 1015.96 | 192.86 | 79.18 | 49.75 | 38.95 |
| C/ γ (°) | 45.0 | 50.0 | 55.0 | 60.0 | 65.0 | 70.0 | 75.0 | 80.0 | 85.0 |
| 0.0 | 32.60 | 28.16 | 23.50 | 18.84 | 14.61 | 10.59 | 7.20 | 3.81 | 0.85 |
| 45.0 | 32.60 | 27.10 | 22.86 | 18.63 | 14.82 | 10.59 | 7.20 | 4.02 | 1.06 |
| 90.0 | 34.51 | 30.70 | 26.04 | 21.38 | 16.94 | 12.91 | 9.10 | 5.50 | 2.54 |
| 135.0 | 35.99 | 29.64 | 25.62 | 20.96 | 16.72 | 12.70 | 8.68 | 5.50 | 2.12 |
| 180.0 | 35.14 | 30.70 | 26.25 | 21.38 | 16.94 | 12.28 | 8.68 | 4.87 | 1.69 |
| 225.0 | 36.41 | 30.06 | 25.40 | 20.75 | 16.51 | 12.28 | 8.68 | 5.08 | 2.33 |
| 270.0 | 34.72 | 30.27 | 25.19 | 20.32 | 15.24 | 11.43 | 8.05 | 4.87 | 1.91 |
| 315.0 | 34.08 | 27.52 | 23.29 | 19.27 | 14.82 | 10.80 | 7.20 | 4.23 | 1.48 |
| 360.0 | 32.60 | 28.16 | 23.50 | 18.84 | 14.61 | 10.59 | 7.20 | 3.81 | 0.85 |
| 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 |
| 45.0 | 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 |
| 135.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 180.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 225.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 270.0 | 0.21 | 0.21 | 0.42 | 0.21 | 0.21 | 0.42 | 0.42 | 0.64 | 0.42 |
| 315.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 360.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| C/ γ (°) | 135.0 | 140.0 | 145.0 | 150.0 | 155.0 | 160.0 | 165.0 | 170.0 | 175.0 |
| 0.0 | 0.00 | 0.21 | 0.42 | 0.85 | 1.27 | 1.48 | 1.91 | 1.69 | 1.91 |
| 45.0 | 0.21 | 0.00 | 0.42 | 0.85 | 1.27 | 1.27 | 1.69 | 1.91 | 2.33 |
| 90.0 | 0.00 | 0.00 | 0.21 | 0.85 | 1.06 | 1.27 | 1.48 | 1.91 | 2.12 |
| 135.0 | 0.00 | 0.00 | 0.00 | 0.42 | 0.64 | 1.06 | 1.69 | 1.91 | 1.91 |
| 180.0 | 0.00 | 0.00 | 0.00 | 0.21 | 0.85 | 1.27 | 1.48 | 1.48 | 1.69 |
| 225.0 | 0.00 | 0.00 | 0.00 | 0.21 | 0.85 | 1.06 | 1.48 | 1.69 | 1.91 |
| 270.0 | 0.64 | 0.64 | 0.85 | 1.27 | 1.69 | 1.91 | 2.33 | 2.75 | 2.75 |
| 315.0 | 0.00 | 0.42 | 0.42 | 0.64 | 1.06 | 1.48 | 1.48 | 1.91 | 2.12 |
| 360.0 | 0.00 | 0.21 | 0.42 | 0.85 | 1.27 | 1.48 | 1.91 | 1.69 | 1.91 |
| C/ γ (°) | 180.0 | | | | | | | | |
| 0.0 | 1.69 | | | | | | | | |
| 45.0 | 2.12 | | | | | | | | |
| 90.0 | 2.96 | | | | | | | | |
| 135.0 | 1.91 | | | | | | | | |
| 180.0 | 1.69 | | | | | | | | |
| 225.0 | 2.12 | | | | | | | | |
| 270.0 | 2.96 | | | | | | | | |
| 315.0 | 1.91 | | | | | | | | |
| 360.0 | 1.69 | | | | | | | | |