



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

LumCAT: LRG6-30K-HO

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 119.95

LampCAT:

Current(A): 0.1500

Lamp flux(lm): -1.0

Power (W): 17.80

Number of Lamps: 1

PF: 0.9874

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

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### Photometric Results

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Lumens(lm): 1553.76, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 87.28

Central intensity(cd): 2565.683, Maximum intensity(cd): 2606.071

Angle of maximum intensity: C=90.0  $\gamma$ =5.0

Beam Angle(50%Imax): [C0/180]Total=41.6

[C90/270]Total=41.5

Field angle(10%Imax): [C0/180]Total=75.1

[C90/270]Total=75.2

Maximum s/h(1/2): C0\_180=0.69 C90\_270=0.72

Maximum s/h(1/4): C0\_180=0.72 C90\_270=0.75

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.11%

Down flux rate of LUM(%): 99.89%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 96.915%

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

Date:  
Humidity(%): 59%

Operator: jarvis

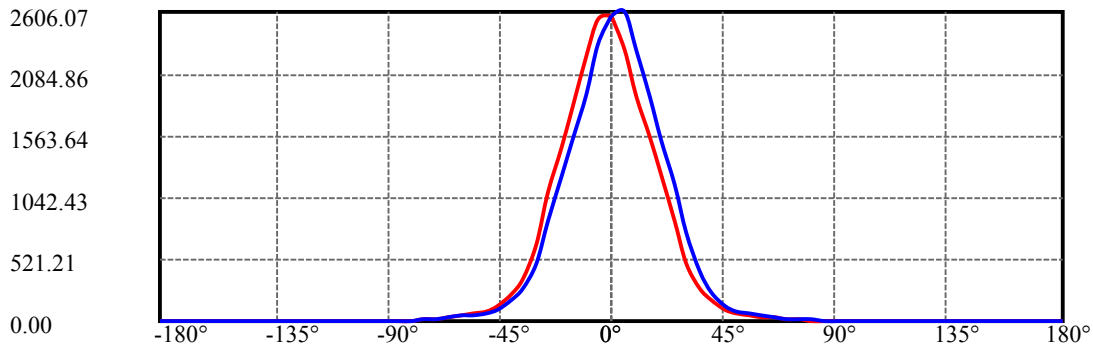
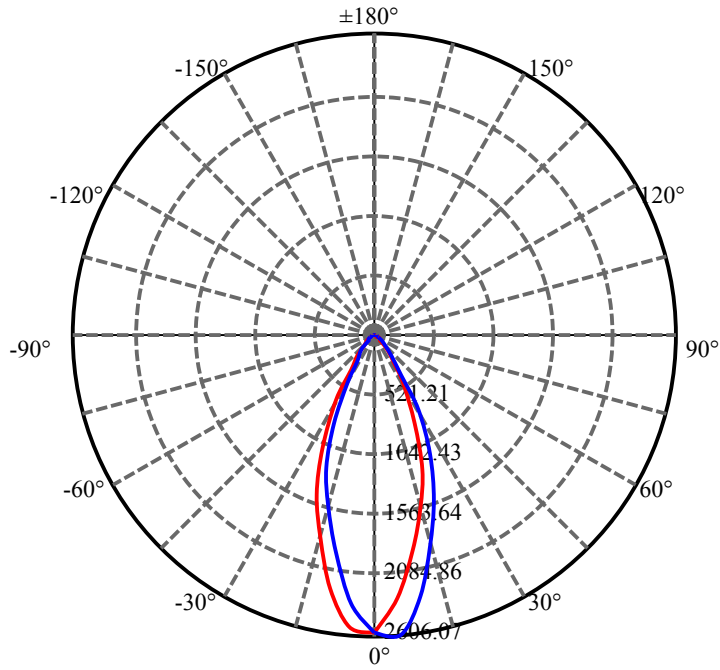
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0                | 2565.683      | 0.000       | 0         | 0.00%       | 0.00%      |
| 5.0                | 2423.150      | 59.640      | 59.64     | 0.00%       | 3.84%      |
| 10.0               | 2068.433      | 160.678     | 220.318   | 0.00%       | 14.18%     |
| 15.0               | 1685.027      | 222.653     | 442.971   | 0.00%       | 28.51%     |
| 20.0               | 1342.149      | 249.482     | 692.453   | 0.00%       | 44.57%     |
| 25.0               | 966.798       | 242.166     | 934.618   | 0.00%       | 60.15%     |
| 30.0               | 592.766       | 197.364     | 1131.983  | 0.00%       | 72.85%     |
| 35.0               | 335.174       | 136.646     | 1268.628  | 0.00%       | 81.65%     |
| 40.0               | 206.734       | 90.413      | 1359.041  | 0.00%       | 87.47%     |
| 45.0               | 113.031       | 59.207      | 1418.249  | 0.00%       | 91.28%     |
| 50.0               | 71.668        | 37.321      | 1455.57   | 0.00%       | 93.68%     |
| 55.0               | 55.681        | 27.690      | 1483.259  | 0.00%       | 95.46%     |
| 60.0               | 41.942        | 22.565      | 1505.825  | 0.00%       | 96.91%     |
| 65.0               | 30.507        | 17.613      | 1523.437  | 0.00%       | 98.05%     |
| 70.0               | 17.806        | 12.233      | 1535.67   | 0.00%       | 98.84%     |
| 75.0               | 11.341        | 7.619       | 1543.289  | 0.00%       | 99.33%     |
| 80.0               | 7.449         | 5.028       | 1548.316  | 0.00%       | 99.65%     |
| 85.0               | 3.165         | 2.884       | 1551.2    | 0.00%       | 99.83%     |
| 90.0               | 0.067         | 0.885       | 1552.086  | 0.00%       | 99.89%     |
| 95.0               | 0.014         | 0.022       | 1552.108  | 0.00%       | 99.89%     |
| 100.0              | 0.014         | 0.007       | 1552.115  | 0.00%       | 99.89%     |
| 105.0              | 0.014         | 0.007       | 1552.122  | 0.00%       | 99.89%     |
| 110.0              | 0.014         | 0.007       | 1552.129  | 0.00%       | 99.89%     |
| 115.0              | 0.027         | 0.010       | 1552.14   | 0.00%       | 99.90%     |
| 120.0              | 0.067         | 0.023       | 1552.163  | 0.00%       | 99.90%     |
| 125.0              | 0.067         | 0.031       | 1552.194  | 0.00%       | 99.90%     |
| 130.0              | 0.121         | 0.041       | 1552.235  | 0.00%       | 99.90%     |
| 135.0              | 0.135         | 0.052       | 1552.287  | 0.00%       | 99.90%     |
| 140.0              | 0.283         | 0.077       | 1552.364  | 0.00%       | 99.91%     |
| 145.0              | 0.526         | 0.135       | 1552.499  | 0.00%       | 99.92%     |
| 150.0              | 0.754         | 0.188       | 1552.687  | 0.00%       | 99.93%     |
| 155.0              | 1.091         | 0.234       | 1552.921  | 0.00%       | 99.95%     |
| 160.0              | 1.347         | 0.256       | 1553.177  | 0.00%       | 99.96%     |
| 165.0              | 1.468         | 0.232       | 1553.409  | 0.00%       | 99.98%     |
| 170.0              | 1.670         | 0.186       | 1553.595  | 0.00%       | 99.99%     |
| 175.0              | 1.832         | 0.125       | 1553.72   | 0.00%       | 100.00%    |
| 180.0              | 1.902         | 0.045       | 1553.765  | 0.00%       | 100.00%    |

ZONAL LUMEN SUMMARY

| Zone    | Lumens  | %Lamp | %Fixt   |
|---------|---------|-------|---------|
| 0-30    | 1131.98 | N.A.  | 72.85%  |
| 0-40    | 1359.04 | N.A.  | 87.47%  |
| 0-60    | 1505.82 | N.A.  | 96.91%  |
| 0-90    | 1552.09 | N.A.  | 99.89%  |
| 0-120   | 1552.16 | N.A.  | 99.90%  |
| 0-180   | 1553.76 | N.A.  | 100.00% |
| 60-90   | 46.26   | N.A.  | 2.98%   |
| 90-120  | 0.08    | N.A.  | 0.00%   |
| 90-130  | 0.15    | N.A.  | 0.01%   |
| 90-150  | 0.60    | N.A.  | 0.04%   |
| 90-180  | 1.63    | N.A.  | 0.11%   |
| 0-34.06 | 1243.01 | N.A.  | 80.00%  |

ZONAL LUMEN SUMMARY

|         |        |
|---------|--------|
| 0-10    | 220.32 |
| 10-20   | 472.13 |
| 20-30   | 439.53 |
| 30-40   | 227.06 |
| 40-50   | 96.53  |
| 50-60   | 50.26  |
| 60-70   | 29.85  |
| 70-80   | 12.65  |
| 80-90   | 3.77   |
| 90-100  | 0.03   |
| 100-110 | 0.01   |
| 110-120 | 0.03   |
| 120-130 | 0.07   |
| 130-140 | 0.13   |
| 140-150 | 0.32   |
| 150-160 | 0.49   |
| 160-170 | 0.42   |
| 170-180 | 0.13   |

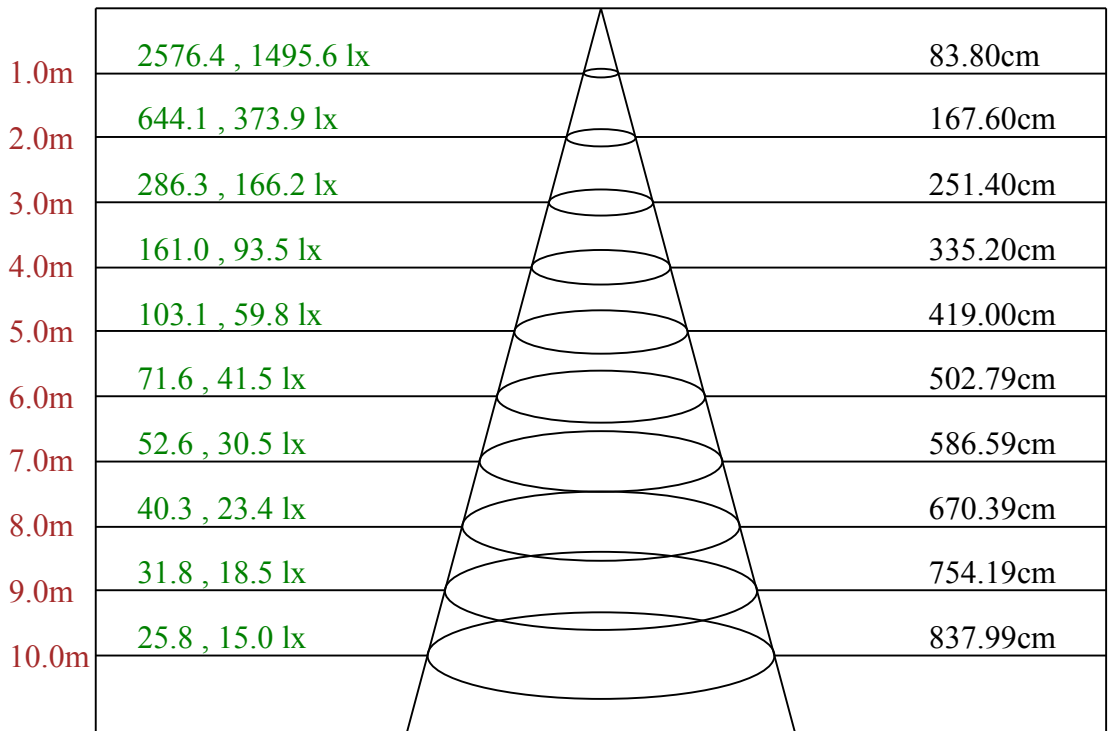


C0/C180: —

C90/C270: —

Field angle(10%Imax):C0/180Left:39.1 Right:36.0  
:C90/270Left:35.7 Right:39.5

Beam Angle(50%Imax):C0/180Left:22.3 Right:19.3  
:C90/270Left:18.6 Right:22.9



Max , Ave      Beam angle of C90 plane 45.47

LRG6-30K-HO

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    | 2565.68 | 2274.63 | 1885.86 | 1553.77 | 1235.91 | 844.34  | 482.29 | 276.71 | 176.50 |
| 22.5   | 2565.68 | 2283.68 | 1896.85 | 1544.29 | 1210.91 | 816.97  | 475.18 | 268.95 | 172.40 |
| 45.0   | 2565.68 | 2284.33 | 1892.97 | 1545.15 | 1196.04 | 809.21  | 474.11 | 278.65 | 172.83 |
| 67.5   | 2565.68 | 2289.93 | 1893.19 | 1545.58 | 1212.20 | 832.06  | 493.72 | 282.96 | 173.05 |
| 90.0   | 2565.68 | 2606.07 | 2287.34 | 1888.66 | 1516.92 | 1143.89 | 747.79 | 419.37 | 243.95 |
| 112.5  | 2565.68 | 2575.47 | 2267.30 | 1869.91 | 1507.66 | 1153.80 | 760.08 | 439.41 | 248.47 |
| 135.0  | 2565.68 | 2561.89 | 2238.21 | 1838.45 | 1505.72 | 1135.27 | 748.44 | 441.35 | 249.55 |
| 157.5  | 2565.68 | 2552.84 | 2240.36 | 1832.63 | 1469.30 | 1101.65 | 731.42 | 403.42 | 236.84 |
| 180.0  | 2565.68 | 2539.48 | 2230.67 | 1818.84 | 1457.44 | 1077.08 | 653.19 | 361.40 | 232.74 |
| 202.5  | 2565.68 | 2541.64 | 2224.63 | 1788.67 | 1418.01 | 1041.74 | 632.07 | 341.36 | 226.71 |
| 225.0  | 2565.68 | 2540.34 | 2239.93 | 1783.50 | 1398.40 | 1014.15 | 618.49 | 346.53 | 226.06 |
| 247.5  | 2565.68 | 2540.99 | 2232.61 | 1787.38 | 1432.44 | 1032.90 | 625.17 | 351.70 | 225.85 |
| 270.0  | 2565.68 | 2326.35 | 1910.64 | 1531.79 | 1218.02 | 840.03  | 480.36 | 274.55 | 179.73 |
| 292.5  | 2565.68 | 2295.96 | 1892.11 | 1539.55 | 1233.54 | 871.71  | 510.74 | 288.34 | 182.32 |
| 315.0  | 2565.68 | 2288.21 | 1879.18 | 1540.20 | 1233.32 | 885.93  | 530.78 | 298.90 | 183.39 |
| 337.5  | 2565.68 | 2268.59 | 1883.06 | 1552.05 | 1228.58 | 868.04  | 520.44 | 289.20 | 177.36 |
| 360.0  | 2565.68 | 2274.63 | 1885.86 | 1553.77 | 1235.91 | 844.34  | 482.29 | 276.71 | 176.50 |
| C/γ(°) | 45.0    | 50.0    | 55.0    | 60.0    | 65.0    | 70.0    | 75.0   | 80.0   | 85.0   |
| 0.0    | 98.92   | 64.87   | 51.29   | 38.58   | 27.15   | 14.44   | 10.56  | 6.68   | 2.59   |
| 22.5   | 99.13   | 64.00   | 50.64   | 38.14   | 26.51   | 14.22   | 10.34  | 6.47   | 2.37   |
| 45.0   | 97.84   | 63.57   | 50.21   | 37.50   | 26.08   | 13.58   | 10.13  | 6.25   | 2.16   |
| 67.5   | 99.56   | 63.36   | 49.78   | 37.50   | 26.08   | 13.36   | 9.91   | 6.03   | 1.94   |
| 90.0   | 130.16  | 80.17   | 60.13   | 45.26   | 34.05   | 21.34   | 12.07  | 8.41   | 4.10   |
| 112.5  | 128.87  | 77.15   | 59.91   | 45.26   | 33.19   | 20.69   | 12.07  | 7.97   | 3.66   |
| 135.0  | 126.07  | 75.64   | 59.69   | 44.39   | 32.97   | 20.69   | 11.85  | 8.19   | 3.66   |
| 157.5  | 124.56  | 76.50   | 59.05   | 44.18   | 33.40   | 20.69   | 11.85  | 8.19   | 3.66   |
| 180.0  | 126.72  | 76.50   | 59.05   | 44.61   | 33.40   | 20.69   | 11.85  | 7.97   | 3.88   |
| 202.5  | 126.07  | 76.72   | 59.05   | 44.83   | 33.40   | 20.47   | 11.85  | 8.19   | 3.88   |
| 225.0  | 126.28  | 78.66   | 59.48   | 45.04   | 33.83   | 21.55   | 12.28  | 8.41   | 4.10   |
| 247.5  | 129.95  | 82.54   | 59.91   | 45.90   | 34.70   | 21.98   | 12.28  | 8.62   | 4.31   |
| 270.0  | 99.99   | 67.45   | 54.09   | 40.73   | 29.09   | 15.73   | 11.42  | 7.11   | 2.80   |
| 292.5  | 99.13   | 67.02   | 53.88   | 40.30   | 28.23   | 15.52   | 11.21  | 7.11   | 2.59   |
| 315.0  | 98.49   | 66.81   | 52.58   | 39.65   | 28.45   | 15.30   | 10.78  | 6.90   | 2.59   |
| 337.5  | 96.76   | 65.73   | 52.15   | 39.22   | 27.58   | 14.65   | 10.99  | 6.68   | 2.37   |
| 360.0  | 98.92   | 64.87   | 51.29   | 38.58   | 27.15   | 14.44   | 10.56  | 6.68   | 2.59   |
| 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    | 0.22   | 0.22   | 0.22   |
| 22.5   | 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   |
| 67.5   | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.22   | 0.00   |
| 90.0   | 0.22    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.22   |
| 112.5  | 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   |
| 157.5  | 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   |
| 202.5  | 0.22    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   |
| 225.0  | 0.22    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   |
| 247.5  | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   |
| 270.0  | 0.43    | 0.22    | 0.22    | 0.22    | 0.22    | 0.43    | 0.43   | 0.43   | 0.65   |
| 292.5  | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.22   | 0.22   | 0.43   |
| 315.0  | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.22   | 0.00   | 0.22   |
| 337.5  | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.22   |
| 360.0  | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.22   | 0.22   | 0.22   |

LRG6-30K-HO

Intensity data(cd)

Appendix Page: 7 Total:7

| C/γ(°) | 135.0 | 140.0 | 145.0 | 150.0 | 155.0 | 160.0 | 165.0 | 170.0 | 175.0 |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.0    | 0.22  | 0.43  | 0.65  | 0.86  | 1.08  | 1.51  | 1.29  | 1.72  | 1.94  |
| 22.5   | 0.22  | 0.22  | 0.65  | 0.86  | 0.86  | 1.29  | 1.51  | 1.72  | 1.94  |
| 45.0   | 0.00  | 0.43  | 0.65  | 0.86  | 1.29  | 1.08  | 1.29  | 1.72  | 1.94  |
| 67.5   | 0.22  | 0.43  | 0.43  | 0.86  | 1.29  | 1.51  | 1.51  | 1.72  | 1.72  |
| 90.0   | 0.00  | 0.43  | 0.43  | 0.86  | 1.08  | 1.29  | 1.29  | 1.94  | 1.94  |
| 112.5  | 0.00  | 0.22  | 0.43  | 0.43  | 0.86  | 1.08  | 1.29  | 1.51  | 1.72  |
| 135.0  | 0.00  | 0.00  | 0.65  | 0.43  | 0.86  | 1.08  | 1.29  | 1.51  | 1.72  |
| 157.5  | 0.00  | 0.00  | 0.22  | 0.43  | 0.86  | 1.08  | 1.08  | 1.51  | 1.51  |
| 180.0  | 0.00  | 0.22  | 0.22  | 0.43  | 0.86  | 1.29  | 1.51  | 1.51  | 1.72  |
| 202.5  | 0.00  | 0.00  | 0.22  | 0.65  | 1.08  | 1.29  | 1.51  | 1.72  | 1.72  |
| 225.0  | 0.00  | 0.00  | 0.22  | 0.65  | 0.86  | 1.08  | 1.51  | 1.51  | 1.72  |
| 247.5  | 0.00  | 0.00  | 0.43  | 0.65  | 0.86  | 1.29  | 1.29  | 1.51  | 1.51  |
| 270.0  | 0.65  | 1.08  | 1.08  | 1.51  | 1.94  | 1.94  | 2.37  | 2.16  | 2.59  |
| 292.5  | 0.43  | 0.43  | 0.86  | 0.86  | 1.29  | 1.72  | 1.51  | 1.72  | 1.94  |
| 315.0  | 0.22  | 0.43  | 0.65  | 0.86  | 1.29  | 1.51  | 1.51  | 1.72  | 1.94  |
| 337.5  | 0.22  | 0.22  | 0.65  | 0.86  | 1.08  | 1.51  | 1.72  | 1.51  | 1.72  |
| 360.0  | 0.22  | 0.43  | 0.65  | 0.86  | 1.08  | 1.51  | 1.29  | 1.72  | 1.94  |
| C/γ(°) | 180.0 |       |       |       |       |       |       |       |       |
| 0.0    | 1.90  |       |       |       |       |       |       |       |       |
| 22.5   | 1.90  |       |       |       |       |       |       |       |       |
| 45.0   | 1.90  |       |       |       |       |       |       |       |       |
| 67.5   | 1.90  |       |       |       |       |       |       |       |       |
| 90.0   | 1.90  |       |       |       |       |       |       |       |       |
| 112.5  | 1.90  |       |       |       |       |       |       |       |       |
| 135.0  | 1.90  |       |       |       |       |       |       |       |       |
| 157.5  | 1.90  |       |       |       |       |       |       |       |       |
| 180.0  | 1.90  |       |       |       |       |       |       |       |       |
| 202.5  | 1.90  |       |       |       |       |       |       |       |       |
| 225.0  | 1.90  |       |       |       |       |       |       |       |       |
| 247.5  | 1.90  |       |       |       |       |       |       |       |       |
| 270.0  | 1.90  |       |       |       |       |       |       |       |       |
| 292.5  | 1.90  |       |       |       |       |       |       |       |       |
| 315.0  | 1.90  |       |       |       |       |       |       |       |       |
| 337.5  | 1.90  |       |       |       |       |       |       |       |       |
| 360.0  | 1.90  |       |       |       |       |       |       |       |       |