

## Luminaire Property

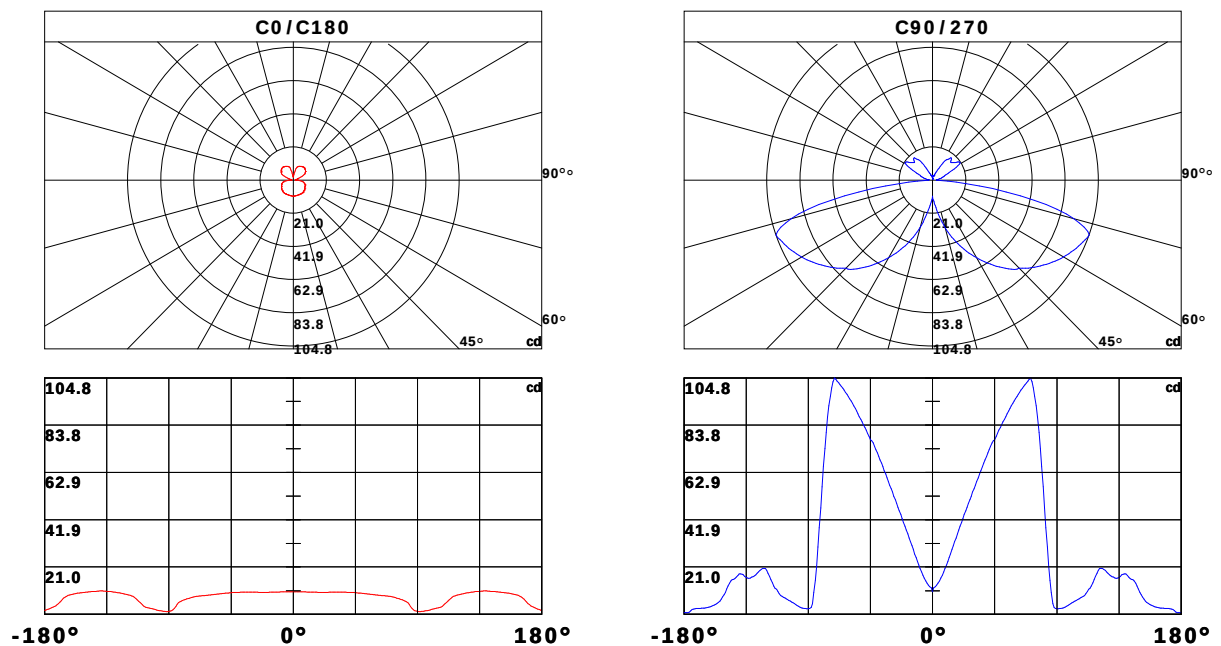
Luminaire Description: GW-8507  
Luminaire Category:  
Lamp Category:  
Lamp Description:  
Number of Lamp:  
Lamp Lumens(lm): 465.32  
Luminous Length(m): 0.0  
Luminous Width(m): 0.0  
Luminous Height(m): 0.0

Voltage: 220.4 V  
Current: 0.087 A  
Power: 10.28 W  
Power Factor: 0.535  
Test Lab: 0  
Photometric Type: Type C  
Manufactory:

## Photometric Results

CIE Class: Direct  
Measurement Flux: 465.32 lm  
Efficiency: 45.2646 lm/W  
Central Intensity: 9.96cd  
Max. Intensity: 104.796cd  
Field Angle(10%Imax): Left: -220.5 Right:78.5

Max.Intensity Angle: C:90.0 G:71.0  
Beam Angle(50%Imax): L: -151.4 R:9.4  
Luminaire Efficacy Rating(LER) : 100.00%  
Upward Ratio: 38.43%  
Downward Ratio: 61.57%  
Beamwidth(50%Imax): C0/180=205.67 C90/270=299.97



## Light intensity data Unit[cd]

| C\G    | G0.0  | G1.0  | G2.0  | G3.0  | G4.0  | G5.0  | G6.0  | G7.0  | G8.0  | G9.0  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C0.0   | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 9.9   | 9.9   | 9.9   | 9.9   | 9.9   |
| C45.0  | 10.0  | 8.8   | 8.9   | 9.1   | 9.4   | 9.7   | 10.1  | 10.6  | 11.1  | 11.7  |
| C90.0  | 10.0  | 11.8  | 12.3  | 12.9  | 13.7  | 14.8  | 16.0  | 17.3  | 18.7  | 20.3  |
| C135.0 | 10.0  | 9.4   | 9.5   | 9.7   | 10.0  | 10.4  | 10.8  | 11.3  | 11.8  | 12.4  |
| C180.0 | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 9.9   | 9.9   | 9.9   | 9.9   | 9.9   |
| C225.0 | 10.0  | 8.8   | 8.9   | 9.1   | 9.4   | 9.7   | 10.1  | 10.6  | 11.1  | 11.7  |
| C270.0 | 10.0  | 11.8  | 12.3  | 12.9  | 13.7  | 14.8  | 16.0  | 17.3  | 18.7  | 20.3  |
| C315.0 | 10.0  | 9.4   | 9.5   | 9.7   | 10.0  | 10.4  | 10.8  | 11.3  | 11.8  | 12.4  |
| C360.0 | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 9.9   | 9.9   | 9.9   | 9.9   | 9.9   |
|        |       |       |       |       |       |       |       |       |       |       |
| C\G    | G10.0 | G11.0 | G12.0 | G13.0 | G14.0 | G15.0 | G16.0 | G17.0 | G18.0 | G19.0 |
| C0.0   | 9.9   | 9.9   | 9.9   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   |
| C45.0  | 12.4  | 13.2  | 13.9  | 14.8  | 15.6  | 16.6  | 17.5  | 18.5  | 19.6  | 20.7  |
| C90.0  | 21.9  | 23.4  | 25.1  | 26.8  | 28.8  | 30.4  | 32.3  | 33.9  | 35.6  | 37.4  |
| C135.0 | 13.1  | 13.7  | 14.5  | 15.4  | 16.2  | 17.1  | 18.1  | 19.0  | 20.1  | 21.1  |
| C180.0 | 9.9   | 9.9   | 9.9   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   |
| C225.0 | 12.4  | 13.2  | 13.9  | 14.8  | 15.6  | 16.6  | 17.5  | 18.5  | 19.6  | 20.7  |
| C270.0 | 21.9  | 23.4  | 25.1  | 26.8  | 28.8  | 30.4  | 32.3  | 33.9  | 35.6  | 37.4  |
| C315.0 | 13.1  | 13.7  | 14.5  | 15.4  | 16.2  | 17.1  | 18.1  | 19.0  | 20.1  | 21.1  |
| C360.0 | 9.9   | 9.9   | 9.9   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   |
|        |       |       |       |       |       |       |       |       |       |       |
| C\G    | G20.0 | G21.0 | G22.0 | G23.0 | G24.0 | G25.0 | G26.0 | G27.0 | G28.0 | G29.0 |
| C0.0   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.9   |
| C45.0  | 21.7  | 22.9  | 23.9  | 25.0  | 26.1  | 27.3  | 28.4  | 29.5  | 30.8  | 31.9  |
| C90.0  | 39.0  | 40.8  | 42.4  | 44.3  | 45.9  | 47.5  | 49.1  | 50.9  | 52.3  | 54.3  |
| C135.0 | 22.1  | 23.3  | 24.3  | 25.3  | 26.4  | 27.6  | 28.7  | 29.8  | 31.0  | 32.1  |
| C180.0 | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.9   |
| C225.0 | 21.7  | 22.9  | 23.9  | 25.0  | 26.1  | 27.3  | 28.4  | 29.5  | 30.8  | 31.9  |
| C270.0 | 39.0  | 40.8  | 42.4  | 44.3  | 45.9  | 47.5  | 49.1  | 50.9  | 52.3  | 54.3  |
| C315.0 | 22.1  | 23.3  | 24.3  | 25.3  | 26.4  | 27.6  | 28.7  | 29.8  | 31.0  | 32.1  |
| C360.0 | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.8   | 9.9   |
|        |       |       |       |       |       |       |       |       |       |       |
| C\G    | G30.0 | G31.0 | G32.0 | G33.0 | G34.0 | G35.0 | G36.0 | G37.0 | G38.0 | G39.0 |
| C0.0   | 9.8   | 9.9   | 9.9   | 9.9   | 9.9   | 9.9   | 9.9   | 9.9   | 9.8   | 9.8   |
| C45.0  | 33.0  | 34.2  | 35.3  | 36.5  | 37.6  | 38.7  | 39.7  | 40.8  | 42.0  | 43.0  |
| C90.0  | 55.7  | 57.3  | 58.9  | 60.5  | 62.2  | 63.7  | 65.5  | 67.0  | 68.4  | 70.0  |
| C135.0 | 33.3  | 34.5  | 35.5  | 36.7  | 37.8  | 39.0  | 40.1  | 41.2  | 42.4  | 43.6  |
| C180.0 | 9.8   | 9.9   | 9.9   | 9.9   | 9.9   | 9.9   | 9.9   | 9.9   | 9.8   | 9.8   |
| C225.0 | 33.0  | 34.2  | 35.3  | 36.5  | 37.6  | 38.7  | 39.7  | 40.8  | 42.0  | 43.0  |
| C270.0 | 55.7  | 57.3  | 58.9  | 60.5  | 62.2  | 63.7  | 65.5  | 67.0  | 68.4  | 70.0  |
| C315.0 | 33.3  | 34.5  | 35.5  | 36.7  | 37.8  | 39.0  | 40.1  | 41.2  | 42.4  | 43.6  |
| C360.0 | 9.8   | 9.9   | 9.9   | 9.9   | 9.9   | 9.9   | 9.9   | 9.9   | 9.8   | 9.8   |

## Light intensity data Unit[cd]

| C\G    | G40.0 | G41.0 | G42.0 | G43.0 | G44.0 | G45.0 | G46.0 | G47.0 | G48.0 | G49.0 |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C0.0   | 9.8   | 9.7   | 9.7   | 9.6   | 9.6   | 9.6   | 9.5   | 9.4   | 9.4   | 9.4   |
| C45.0  | 44.1  | 45.2  | 46.3  | 47.2  | 48.3  | 49.2  | 50.3  | 51.2  | 52.3  | 53.5  |
| C90.0  | 71.5  | 73.0  | 74.4  | 75.9  | 77.0  | 77.3  | 78.7  | 80.1  | 81.6  | 82.8  |
| C135.0 | 44.5  | 45.7  | 46.8  | 47.7  | 48.8  | 49.9  | 50.8  | 51.8  | 52.9  | 54.2  |
| C180.0 | 9.8   | 9.7   | 9.7   | 9.6   | 9.6   | 9.6   | 9.5   | 9.4   | 9.4   | 9.4   |
| C225.0 | 44.1  | 45.2  | 46.3  | 47.2  | 48.3  | 49.2  | 50.3  | 51.2  | 52.3  | 53.5  |
| C270.0 | 71.5  | 73.0  | 74.4  | 75.9  | 77.0  | 77.3  | 78.7  | 80.1  | 81.6  | 82.8  |
| C315.0 | 44.5  | 45.7  | 46.8  | 47.7  | 48.8  | 49.9  | 50.8  | 51.8  | 52.9  | 54.2  |
| C360.0 | 9.8   | 9.7   | 9.7   | 9.6   | 9.6   | 9.6   | 9.5   | 9.4   | 9.4   | 9.4   |
|        |       |       |       |       |       |       |       |       |       |       |
| C\G    | G50.0 | G51.0 | G52.0 | G53.0 | G54.0 | G55.0 | G56.0 | G57.0 | G58.0 | G59.0 |
| C0.0   | 9.3   | 9.2   | 9.1   | 9.1   | 9.1   | 9.0   | 8.9   | 8.8   | 8.7   | 8.6   |
| C45.0  | 54.5  | 55.3  | 56.3  | 57.1  | 58.0  | 58.8  | 59.7  | 60.5  | 61.2  | 62.1  |
| C90.0  | 84.0  | 85.3  | 86.5  | 87.6  | 88.9  | 90.1  | 91.2  | 92.3  | 93.5  | 94.5  |
| C135.0 | 55.1  | 56.2  | 57.2  | 58.2  | 59.0  | 60.0  | 60.9  | 61.7  | 62.5  | 63.2  |
| C180.0 | 9.3   | 9.2   | 9.1   | 9.1   | 9.1   | 9.0   | 8.9   | 8.8   | 8.7   | 8.6   |
| C225.0 | 54.5  | 55.3  | 56.3  | 57.1  | 58.0  | 58.8  | 59.7  | 60.5  | 61.2  | 62.1  |
| C270.0 | 84.0  | 85.3  | 86.5  | 87.6  | 88.9  | 90.1  | 91.2  | 92.3  | 93.5  | 94.5  |
| C315.0 | 55.1  | 56.2  | 57.2  | 58.2  | 59.0  | 60.0  | 60.9  | 61.7  | 62.5  | 63.2  |
| C360.0 | 9.3   | 9.2   | 9.1   | 9.1   | 9.1   | 9.0   | 8.9   | 8.8   | 8.7   | 8.6   |
|        |       |       |       |       |       |       |       |       |       |       |
| C\G    | G60.0 | G61.0 | G62.0 | G63.0 | G64.0 | G65.0 | G66.0 | G67.0 | G68.0 | G69.0 |
| C0.0   | 8.6   | 8.5   | 8.5   | 8.4   | 8.3   | 8.3   | 8.2   | 8.2   | 8.1   | 8.0   |
| C45.0  | 62.8  | 63.5  | 64.4  | 64.9  | 65.7  | 66.3  | 66.9  | 67.6  | 68.4  | 68.8  |
| C90.0  | 95.6  | 96.5  | 97.5  | 98.3  | 99.3  | 100.2 | 101.0 | 101.8 | 102.5 | 103.4 |
| C135.0 | 63.7  | 64.1  | 64.7  | 65.1  | 65.5  | 66.0  | 66.6  | 67.1  | 67.9  | 68.8  |
| C180.0 | 8.6   | 8.5   | 8.5   | 8.4   | 8.3   | 8.3   | 8.2   | 8.2   | 8.1   | 8.0   |
| C225.0 | 62.8  | 63.5  | 64.4  | 64.9  | 65.7  | 66.3  | 66.9  | 67.6  | 68.4  | 68.8  |
| C270.0 | 95.6  | 96.5  | 97.5  | 98.3  | 99.3  | 100.2 | 101.0 | 101.8 | 102.5 | 103.4 |
| C315.0 | 63.7  | 64.1  | 64.7  | 65.1  | 65.5  | 66.0  | 66.6  | 67.1  | 67.9  | 68.8  |
| C360.0 | 8.6   | 8.5   | 8.5   | 8.4   | 8.3   | 8.3   | 8.2   | 8.2   | 8.1   | 8.0   |
|        |       |       |       |       |       |       |       |       |       |       |
| C\G    | G70.0 | G71.0 | G72.0 | G73.0 | G74.0 | G75.0 | G76.0 | G77.0 | G78.0 | G79.0 |
| C0.0   | 8.0   | 7.8   | 7.7   | 7.5   | 7.4   | 7.2   | 7.0   | 6.9   | 6.6   | 6.4   |
| C45.0  | 69.4  | 69.8  | 70.4  | 70.7  | 71.0  | 71.2  | 71.2  | 71.0  | 70.9  | 70.7  |
| C90.0  | 104.2 | 104.8 | 103.1 | 100.3 | 96.6  | 92.4  | 87.4  | 80.7  | 73.5  | 65.5  |
| C135.0 | 69.4  | 70.2  | 70.7  | 71.2  | 71.7  | 71.9  | 71.9  | 71.8  | 71.8  | 71.4  |
| C180.0 | 8.0   | 7.8   | 7.7   | 7.5   | 7.4   | 7.2   | 7.0   | 6.9   | 6.6   | 6.4   |
| C225.0 | 69.4  | 69.8  | 70.4  | 70.7  | 71.0  | 71.2  | 71.2  | 71.0  | 70.9  | 70.7  |
| C270.0 | 104.2 | 104.8 | 103.1 | 100.3 | 96.6  | 92.4  | 87.4  | 80.7  | 73.5  | 65.5  |
| C315.0 | 69.4  | 70.2  | 70.7  | 71.2  | 71.7  | 71.9  | 71.9  | 71.8  | 71.8  | 71.4  |
| C360.0 | 8.0   | 7.8   | 7.7   | 7.5   | 7.4   | 7.2   | 7.0   | 6.9   | 6.6   | 6.4   |

## Light intensity data Unit[cd]

| C\G    | G80.0  | G81.0  | G82.0  | G83.0  | G84.0  | G85.0  | G86.0  | G87.0  | G88.0  | G89.0  |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| C0.0   | 6.2    | 5.9    | 5.6    | 5.1    | 4.5    | 3.5    | 2.5    | 2.0    | 1.6    | 1.4    |
| C45.0  | 70.1   | 67.7   | 65.1   | 62.1   | 58.5   | 54.4   | 49.8   | 44.7   | 38.5   | 32.6   |
| C90.0  | 56.5   | 47.1   | 38.4   | 29.8   | 21.3   | 15.0   | 9.6    | 4.7    | 3.0    | 2.6    |
| C135.0 | 70.9   | 68.8   | 66.4   | 63.4   | 60.2   | 56.1   | 51.7   | 46.5   | 40.5   | 34.6   |
| C180.0 | 6.2    | 5.9    | 5.6    | 5.1    | 4.5    | 3.5    | 2.5    | 2.0    | 1.6    | 1.4    |
| C225.0 | 70.1   | 67.7   | 65.1   | 62.1   | 58.5   | 54.4   | 49.8   | 44.7   | 38.5   | 32.6   |
| C270.0 | 56.5   | 47.1   | 38.4   | 29.8   | 21.3   | 15.0   | 9.6    | 4.7    | 3.0    | 2.6    |
| C315.0 | 70.9   | 68.8   | 66.4   | 63.4   | 60.2   | 56.1   | 51.7   | 46.5   | 40.5   | 34.6   |
| C360.0 | 6.2    | 5.9    | 5.6    | 5.1    | 4.5    | 3.5    | 2.5    | 2.0    | 1.6    | 1.4    |
|        |        |        |        |        |        |        |        |        |        |        |
| C\G    | G90.0  | G91.0  | G92.0  | G93.0  | G94.0  | G95.0  | G96.0  | G97.0  | G98.0  | G99.0  |
| C0.0   | 1.3    | 1.2    | 1.2    | 1.3    | 1.4    | 1.5    | 1.6    | 1.7    | 1.8    | 1.9    |
| C45.0  | 26.8   | 20.5   | 16.4   | 14.2   | 13.7   | 14.8   | 17.5   | 22.2   | 28.5   | 34.6   |
| C90.0  | 2.5    | 2.5    | 2.5    | 2.6    | 2.8    | 2.9    | 3.2    | 3.5    | 3.9    | 4.3    |
| C135.0 | 28.8   | 22.8   | 18.1   | 16.0   | 15.6   | 16.7   | 19.3   | 23.9   | 30.1   | 36.1   |
| C180.0 | 1.3    | 1.2    | 1.2    | 1.3    | 1.4    | 1.5    | 1.6    | 1.7    | 1.8    | 1.9    |
| C225.0 | 26.8   | 20.5   | 16.4   | 14.2   | 13.7   | 14.8   | 17.5   | 22.2   | 28.5   | 34.6   |
| C270.0 | 2.5    | 2.5    | 2.5    | 2.6    | 2.8    | 2.9    | 3.2    | 3.5    | 3.9    | 4.3    |
| C315.0 | 28.8   | 22.8   | 18.1   | 16.0   | 15.6   | 16.7   | 19.3   | 23.9   | 30.1   | 36.1   |
| C360.0 | 1.3    | 1.2    | 1.2    | 1.3    | 1.4    | 1.5    | 1.6    | 1.7    | 1.8    | 1.9    |
|        |        |        |        |        |        |        |        |        |        |        |
| C\G    | G100.0 | G101.0 | G102.0 | G103.0 | G104.0 | G105.0 | G106.0 | G107.0 | G108.0 | G109.0 |
| C0.0   | 2.1    | 2.3    | 2.5    | 2.6    | 2.7    | 2.8    | 3.0    | 3.2    | 3.5    | 4.1    |
| C45.0  | 41.0   | 47.6   | 53.0   | 58.0   | 61.9   | 65.4   | 68.0   | 70.4   | 72.4   | 73.3   |
| C90.0  | 4.7    | 5.1    | 5.5    | 5.8    | 6.2    | 6.5    | 6.9    | 7.2    | 7.6    | 7.9    |
| C135.0 | 42.2   | 48.1   | 54.4   | 58.9   | 62.8   | 66.2   | 68.8   | 71.2   | 73.2   | 74.0   |
| C180.0 | 2.1    | 2.3    | 2.5    | 2.6    | 2.7    | 2.8    | 3.0    | 3.2    | 3.5    | 4.1    |
| C225.0 | 41.0   | 47.6   | 53.0   | 58.0   | 61.9   | 65.4   | 68.0   | 70.4   | 72.4   | 73.3   |
| C270.0 | 4.7    | 5.1    | 5.5    | 5.8    | 6.2    | 6.5    | 6.9    | 7.2    | 7.6    | 7.9    |
| C315.0 | 42.2   | 48.1   | 54.4   | 58.9   | 62.8   | 66.2   | 68.8   | 71.2   | 73.2   | 74.0   |
| C360.0 | 2.1    | 2.3    | 2.5    | 2.6    | 2.7    | 2.8    | 3.0    | 3.2    | 3.5    | 4.1    |
|        |        |        |        |        |        |        |        |        |        |        |
| C\G    | G110.0 | G111.0 | G112.0 | G113.0 | G114.0 | G115.0 | G116.0 | G117.0 | G118.0 | G119.0 |
| C0.0   | 4.8    | 5.3    | 5.9    | 6.4    | 7.0    | 7.5    | 7.9    | 8.1    | 8.4    | 8.5    |
| C45.0  | 73.3   | 72.9   | 72.8   | 72.3   | 72.0   | 71.7   | 71.3   | 71.0   | 70.5   | 70.2   |
| C90.0  | 8.3    | 9.1    | 10.2   | 11.0   | 11.5   | 12.6   | 13.9   | 15.3   | 16.8   | 18.2   |
| C135.0 | 73.9   | 73.7   | 73.2   | 72.6   | 72.0   | 71.0   | 70.0   | 69.0   | 67.5   | 66.6   |
| C180.0 | 4.8    | 5.3    | 5.9    | 6.4    | 7.0    | 7.5    | 7.9    | 8.1    | 8.4    | 8.5    |
| C225.0 | 73.3   | 72.9   | 72.8   | 72.3   | 72.0   | 71.7   | 71.3   | 71.0   | 70.5   | 70.2   |
| C270.0 | 8.3    | 9.1    | 10.2   | 11.0   | 11.5   | 12.6   | 13.9   | 15.3   | 16.8   | 18.2   |
| C315.0 | 73.9   | 73.7   | 73.2   | 72.6   | 72.0   | 71.0   | 70.0   | 69.0   | 67.5   | 66.6   |
| C360.0 | 4.8    | 5.3    | 5.9    | 6.4    | 7.0    | 7.5    | 7.9    | 8.1    | 8.4    | 8.5    |

## Light intensity data Unit[cd]

| C\G    | G120.0 | G121.0 | G122.0 | G123.0 | G124.0 | G125.0 | G126.0 | G127.0 | G128.0 | G129.0 |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| C0.0   | 8.7    | 8.9    | 9.0    | 9.1    | 9.2    | 9.4    | 9.5    | 9.6    | 9.7    | 9.8    |
| C45.0  | 69.6   | 69.0   | 68.5   | 67.8   | 67.2   | 66.6   | 65.9   | 65.2   | 64.4   | 63.7   |
| C90.0  | 19.5   | 20.3   | 20.4   | 20.3   | 19.9   | 19.5   | 18.8   | 18.2   | 17.6   | 17.1   |
| C135.0 | 65.9   | 65.4   | 65.3   | 65.1   | 65.3   | 65.4   | 65.2   | 65.3   | 65.1   | 64.5   |
| C180.0 | 8.7    | 8.9    | 9.0    | 9.1    | 9.2    | 9.4    | 9.5    | 9.6    | 9.7    | 9.8    |
| C225.0 | 69.6   | 69.0   | 68.5   | 67.8   | 67.2   | 66.6   | 65.9   | 65.2   | 64.4   | 63.7   |
| C270.0 | 19.5   | 20.3   | 20.4   | 20.3   | 19.9   | 19.5   | 18.8   | 18.2   | 17.6   | 17.1   |
| C315.0 | 65.9   | 65.4   | 65.3   | 65.1   | 65.3   | 65.4   | 65.2   | 65.3   | 65.1   | 64.5   |
| C360.0 | 8.7    | 8.9    | 9.0    | 9.1    | 9.2    | 9.4    | 9.5    | 9.6    | 9.7    | 9.8    |
|        |        |        |        |        |        |        |        |        |        |        |
| C\G    | G130.0 | G131.0 | G132.0 | G133.0 | G134.0 | G135.0 | G136.0 | G137.0 | G138.0 | G139.0 |
| C0.0   | 9.9    | 9.9    | 10.0   | 10.1   | 10.1   | 10.2   | 10.2   | 10.3   | 10.3   | 10.3   |
| C45.0  | 63.0   | 62.1   | 61.3   | 60.4   | 59.5   | 58.4   | 57.3   | 56.2   | 54.9   | 53.6   |
| C90.0  | 16.7   | 16.5   | 16.2   | 16.0   | 16.0   | 16.3   | 16.9   | 17.4   | 17.8   | 18.0   |
| C135.0 | 63.8   | 63.0   | 62.2   | 61.3   | 60.4   | 59.3   | 58.1   | 57.0   | 55.4   | 54.1   |
| C180.0 | 9.9    | 9.9    | 10.0   | 10.1   | 10.1   | 10.2   | 10.2   | 10.3   | 10.3   | 10.3   |
| C225.0 | 63.0   | 62.1   | 61.3   | 60.4   | 59.5   | 58.4   | 57.3   | 56.2   | 54.9   | 53.6   |
| C270.0 | 16.7   | 16.5   | 16.2   | 16.0   | 16.0   | 16.3   | 16.9   | 17.4   | 17.8   | 18.0   |
| C315.0 | 63.8   | 63.0   | 62.2   | 61.3   | 60.4   | 59.3   | 58.1   | 57.0   | 55.4   | 54.1   |
| C360.0 | 9.9    | 9.9    | 10.0   | 10.1   | 10.1   | 10.2   | 10.2   | 10.3   | 10.3   | 10.3   |
|        |        |        |        |        |        |        |        |        |        |        |
| C\G    | G140.0 | G141.0 | G142.0 | G143.0 | G144.0 | G145.0 | G146.0 | G147.0 | G148.0 | G149.0 |
| C0.0   | 10.3   | 10.3   | 10.2   | 10.2   | 10.2   | 10.1   | 10.1   | 10.0   | 9.9    | 9.9    |
| C45.0  | 52.1   | 50.8   | 49.1   | 47.8   | 46.4   | 44.8   | 43.4   | 42.0   | 40.5   | 38.9   |
| C90.0  | 17.9   | 17.2   | 16.5   | 15.9   | 15.5   | 15.4   | 14.9   | 13.8   | 12.6   | 11.2   |
| C135.0 | 52.7   | 50.9   | 49.3   | 47.7   | 46.3   | 44.8   | 43.4   | 42.2   | 40.7   | 38.9   |
| C180.0 | 10.3   | 10.3   | 10.2   | 10.2   | 10.2   | 10.1   | 10.1   | 10.0   | 9.9    | 9.9    |
| C225.0 | 52.1   | 50.8   | 49.1   | 47.8   | 46.4   | 44.8   | 43.4   | 42.0   | 40.5   | 38.9   |
| C270.0 | 17.9   | 17.2   | 16.5   | 15.9   | 15.5   | 15.4   | 14.9   | 13.8   | 12.6   | 11.2   |
| C315.0 | 52.7   | 50.9   | 49.3   | 47.7   | 46.3   | 44.8   | 43.4   | 42.2   | 40.7   | 38.9   |
| C360.0 | 10.3   | 10.3   | 10.2   | 10.2   | 10.2   | 10.1   | 10.1   | 10.0   | 9.9    | 9.9    |
|        |        |        |        |        |        |        |        |        |        |        |
| C\G    | G150.0 | G151.0 | G152.0 | G153.0 | G154.0 | G155.0 | G156.0 | G157.0 | G158.0 | G159.0 |
| C0.0   | 9.8    | 9.7    | 9.7    | 9.6    | 9.5    | 9.4    | 9.3    | 9.2    | 9.1    | 9.0    |
| C45.0  | 37.0   | 34.9   | 31.1   | 26.2   | 19.4   | 12.2   | 6.9    | 3.8    | 2.7    | 2.5    |
| C90.0  | 9.8    | 8.6    | 7.7    | 6.8    | 5.9    | 5.3    | 4.9    | 4.5    | 4.2    | 3.8    |
| C135.0 | 37.0   | 34.4   | 30.7   | 24.9   | 18.2   | 11.4   | 6.6    | 3.8    | 2.9    | 2.9    |
| C180.0 | 9.8    | 9.7    | 9.7    | 9.6    | 9.5    | 9.4    | 9.3    | 9.2    | 9.1    | 9.0    |
| C225.0 | 37.0   | 34.9   | 31.1   | 26.2   | 19.4   | 12.2   | 6.9    | 3.8    | 2.7    | 2.5    |
| C270.0 | 9.8    | 8.6    | 7.7    | 6.8    | 5.9    | 5.3    | 4.9    | 4.5    | 4.2    | 3.8    |
| C315.0 | 37.0   | 34.4   | 30.7   | 24.9   | 18.2   | 11.4   | 6.6    | 3.8    | 2.9    | 2.9    |
| C360.0 | 9.8    | 9.7    | 9.7    | 9.6    | 9.5    | 9.4    | 9.3    | 9.2    | 9.1    | 9.0    |

## Light intensity data Unit[cd]

| C\G    | G160.0 | G161.0 | G162.0 | G163.0 | G164.0 | G165.0 | G166.0 | G167.0 | G168.0 | G169.0 |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| C0.0   | 8.9    | 8.7    | 8.5    | 8.4    | 8.1    | 7.7    | 7.3    | 6.7    | 6.0    | 5.4    |
| C45.0  | 2.5    | 2.6    | 2.6    | 2.5    | 2.5    | 2.5    | 2.4    | 2.3    | 2.2    | 2.1    |
| C90.0  | 3.5    | 3.3    | 3.2    | 3.0    | 2.9    | 2.8    | 2.7    | 2.7    | 2.6    | 2.6    |
| C135.0 | 3.0    | 3.1    | 3.2    | 3.2    | 3.3    | 3.3    | 3.3    | 3.2    | 3.1    | 3.0    |
| C180.0 | 8.9    | 8.7    | 8.5    | 8.4    | 8.1    | 7.7    | 7.3    | 6.7    | 6.0    | 5.4    |
| C225.0 | 2.5    | 2.6    | 2.6    | 2.5    | 2.5    | 2.5    | 2.4    | 2.3    | 2.2    | 2.1    |
| C270.0 | 3.5    | 3.3    | 3.2    | 3.0    | 2.9    | 2.8    | 2.7    | 2.7    | 2.6    | 2.6    |
| C315.0 | 3.0    | 3.1    | 3.2    | 3.2    | 3.3    | 3.3    | 3.3    | 3.2    | 3.1    | 3.0    |
| C360.0 | 8.9    | 8.7    | 8.5    | 8.4    | 8.1    | 7.7    | 7.3    | 6.7    | 6.0    | 5.4    |
|        |        |        |        |        |        |        |        |        |        |        |
| C\G    | G170.0 | G171.0 | G172.0 | G173.0 | G174.0 | G175.0 | G176.0 | G177.0 | G178.0 | G179.0 |
| C0.0   | 4.8    | 4.2    | 3.8    | 3.5    | 3.1    | 2.8    | 2.6    | 2.3    | 2.1    | 1.9    |
| C45.0  | 2.1    | 2.0    | 2.0    | 1.9    | 1.9    | 1.9    | 1.8    | 1.7    | 1.7    | 1.5    |
| C90.0  | 2.5    | 2.5    | 2.4    | 2.3    | 2.2    | 1.7    | 1.1    | 0.8    | 0.7    | 0.7    |
| C135.0 | 2.9    | 2.7    | 2.6    | 2.4    | 2.3    | 2.2    | 2.1    | 2.1    | 2.0    | 2.0    |
| C180.0 | 4.8    | 4.2    | 3.8    | 3.5    | 3.1    | 2.8    | 2.6    | 2.3    | 2.1    | 1.9    |
| C225.0 | 2.1    | 2.0    | 2.0    | 1.9    | 1.9    | 1.9    | 1.8    | 1.7    | 1.7    | 1.5    |
| C270.0 | 2.5    | 2.5    | 2.4    | 2.3    | 2.2    | 1.7    | 1.1    | 0.8    | 0.7    | 0.7    |
| C315.0 | 2.9    | 2.7    | 2.6    | 2.4    | 2.3    | 2.2    | 2.1    | 2.1    | 2.0    | 2.0    |
| C360.0 | 4.8    | 4.2    | 3.8    | 3.5    | 3.1    | 2.8    | 2.6    | 2.3    | 2.1    | 1.9    |
|        |        |        |        |        |        |        |        |        |        |        |
| C\G    | G180.0 |        |        |        |        |        |        |        |        |        |
| C0.0   | 1.7    |        |        |        |        |        |        |        |        |        |
| C45.0  | 1.3    |        |        |        |        |        |        |        |        |        |
| C90.0  | 0.8    |        |        |        |        |        |        |        |        |        |
| C135.0 | 1.7    |        |        |        |        |        |        |        |        |        |
| C180.0 | 1.7    |        |        |        |        |        |        |        |        |        |
| C225.0 | 1.3    |        |        |        |        |        |        |        |        |        |
| C270.0 | 0.8    |        |        |        |        |        |        |        |        |        |
| C315.0 | 1.7    |        |        |        |        |        |        |        |        |        |
| C360.0 | 1.7    |        |        |        |        |        |        |        |        |        |

## Zonal Luminous Flux Data

| Gamma<br>[°] | I <sub>mean</sub><br>[cd] | Zonal Flux<br>[lm] | Sum Flux<br>[lm] | Zonal Flux<br>[%] | Sum Flux<br>[%] |
|--------------|---------------------------|--------------------|------------------|-------------------|-----------------|
| 0.0          | 9.96                      | 0.00               | 0.00             | 0.00              | 0.00            |
| 0.0-1.0      | 10.00                     | 0.01               | 0.01             | 0.00              | 0.00            |
| 1.0-2.0      | 10.17                     | 0.03               | 0.04             | 0.01              | 0.01            |
| 2.0-3.0      | 10.43                     | 0.05               | 0.09             | 0.01              | 0.02            |
| 3.0-4.0      | 10.76                     | 0.07               | 0.16             | 0.02              | 0.03            |
| 4.0-5.0      | 11.20                     | 0.09               | 0.25             | 0.02              | 0.05            |
| 5.0-6.0      | 11.72                     | 0.12               | 0.37             | 0.03              | 0.08            |
| 6.0-7.0      | 12.28                     | 0.15               | 0.52             | 0.03              | 0.11            |
| 7.0-8.0      | 12.91                     | 0.18               | 0.70             | 0.04              | 0.15            |
| 8.0-9.0      | 13.61                     | 0.21               | 0.92             | 0.05              | 0.20            |
| 9.0-10.0     | 14.30                     | 0.25               | 1.17             | 0.05              | 0.25            |
| 10.0-11.0    | 15.06                     | 0.29               | 1.46             | 0.06              | 0.31            |
| 11.0-12.0    | 15.87                     | 0.34               | 1.80             | 0.07              | 0.39            |
| 12.0-13.0    | 16.69                     | 0.39               | 2.19             | 0.08              | 0.47            |
| 13.0-14.0    | 17.60                     | 0.44               | 2.63             | 0.09              | 0.56            |
| 14.0-15.0    | 18.50                     | 0.50               | 3.12             | 0.11              | 0.67            |
| 15.0-16.0    | 19.41                     | 0.56               | 3.68             | 0.12              | 0.79            |
| 16.0-17.0    | 20.30                     | 0.62               | 4.30             | 0.13              | 0.92            |
| 17.0-18.0    | 21.27                     | 0.69               | 4.98             | 0.15              | 1.07            |
| 18.0-19.0    | 22.21                     | 0.76               | 5.74             | 0.16              | 1.23            |
| 19.0-20.0    | 23.15                     | 0.83               | 6.57             | 0.18              | 1.41            |
| 20.0-21.0    | 24.17                     | 0.91               | 7.48             | 0.20              | 1.61            |
| 21.0-22.0    | 25.11                     | 0.99               | 8.47             | 0.21              | 1.82            |
| 22.0-23.0    | 26.10                     | 1.07               | 9.54             | 0.23              | 2.05            |
| 23.0-24.0    | 27.05                     | 1.16               | 10.70            | 0.25              | 2.30            |
| 24.0-25.0    | 28.05                     | 1.25               | 11.96            | 0.27              | 2.57            |
| 25.0-26.0    | 29.00                     | 1.35               | 13.30            | 0.29              | 2.86            |
| 26.0-27.0    | 30.00                     | 1.44               | 14.75            | 0.31              | 3.17            |
| 27.0-28.0    | 30.98                     | 1.54               | 16.29            | 0.33              | 3.50            |
| 28.0-29.0    | 32.02                     | 1.65               | 17.94            | 0.35              | 3.86            |
| 29.0-30.0    | 32.94                     | 1.75               | 19.69            | 0.38              | 4.23            |
| 30.0-31.0    | 33.95                     | 1.86               | 21.55            | 0.40              | 4.63            |
| 31.0-32.0    | 34.90                     | 1.97               | 23.53            | 0.42              | 5.06            |
| 32.0-33.0    | 35.90                     | 2.09               | 25.61            | 0.45              | 5.50            |
| 33.0-34.0    | 36.87                     | 2.20               | 27.81            | 0.47              | 5.98            |
| 34.0-35.0    | 37.82                     | 2.32               | 30.13            | 0.50              | 6.48            |
| 35.0-36.0    | 38.81                     | 2.44               | 32.57            | 0.52              | 7.00            |
| 36.0-37.0    | 39.72                     | 2.56               | 35.14            | 0.55              | 7.55            |
| 37.0-38.0    | 40.66                     | 2.68               | 37.82            | 0.58              | 8.13            |
| 38.0-39.0    | 41.58                     | 2.81               | 40.63            | 0.60              | 8.73            |
| 39.0-40.0    | 42.46                     | 2.93               | 43.56            | 0.63              | 9.36            |

## Zonal Luminous Flux Data

| Gamma<br>[°] | I <sub>mean</sub><br>[cd] | Zonal Flux<br>[lm] | Sum Flux<br>[lm] | Zonal Flux<br>[%] | Sum Flux<br>[%] |
|--------------|---------------------------|--------------------|------------------|-------------------|-----------------|
| 40.0-41.0    | 43.40                     | 3.06               | 46.61            | 0.66              | 10.02           |
| 41.0-42.0    | 44.29                     | 3.19               | 49.80            | 0.68              | 10.70           |
| 42.0-43.0    | 45.12                     | 3.31               | 53.11            | 0.71              | 11.41           |
| 43.0-44.0    | 45.92                     | 3.44               | 56.55            | 0.74              | 12.15           |
| 44.0-45.0    | 46.48                     | 3.55               | 60.10            | 0.76              | 12.92           |
| 45.0-46.0    | 47.33                     | 3.67               | 63.77            | 0.79              | 13.70           |
| 46.0-47.0    | 48.16                     | 3.80               | 67.56            | 0.82              | 14.52           |
| 47.0-48.0    | 49.06                     | 3.93               | 71.49            | 0.84              | 15.36           |
| 48.0-49.0    | 49.97                     | 4.07               | 75.56            | 0.87              | 16.24           |
| 49.0-50.0    | 50.73                     | 4.20               | 79.76            | 0.90              | 17.14           |
| 50.0-51.0    | 51.51                     | 4.33               | 84.08            | 0.93              | 18.07           |
| 51.0-52.0    | 52.29                     | 4.45               | 88.54            | 0.96              | 19.03           |
| 52.0-53.0    | 52.98                     | 4.58               | 93.12            | 0.98              | 20.01           |
| 53.0-54.0    | 53.73                     | 4.70               | 97.82            | 1.01              | 21.02           |
| 54.0-55.0    | 54.48                     | 4.83               | 102.65           | 1.04              | 22.06           |
| 55.0-56.0    | 55.17                     | 4.95               | 107.61           | 1.06              | 23.13           |
| 56.0-57.0    | 55.83                     | 5.08               | 112.68           | 1.09              | 24.22           |
| 57.0-58.0    | 56.50                     | 5.19               | 117.88           | 1.12              | 25.33           |
| 58.0-59.0    | 57.10                     | 5.31               | 123.19           | 1.14              | 26.47           |
| 59.0-60.0    | 57.68                     | 5.42               | 128.61           | 1.17              | 27.64           |
| 60.0-61.0    | 58.19                     | 5.53               | 134.14           | 1.19              | 28.83           |
| 61.0-62.0    | 58.74                     | 5.63               | 139.77           | 1.21              | 30.04           |
| 62.0-63.0    | 59.17                     | 5.73               | 145.51           | 1.23              | 31.27           |
| 63.0-64.0    | 59.70                     | 5.83               | 151.34           | 1.25              | 32.52           |
| 64.0-65.0    | 60.18                     | 5.93               | 157.27           | 1.28              | 33.80           |
| 65.0-66.0    | 60.70                     | 6.03               | 163.30           | 1.30              | 35.09           |
| 66.0-67.0    | 61.16                     | 6.13               | 169.43           | 1.32              | 36.41           |
| 67.0-68.0    | 61.73                     | 6.23               | 175.66           | 1.34              | 37.75           |
| 68.0-69.0    | 62.24                     | 6.32               | 181.98           | 1.36              | 39.11           |
| 69.0-70.0    | 62.74                     | 6.42               | 188.40           | 1.38              | 40.49           |
| 70.0-71.0    | 63.16                     | 6.51               | 194.91           | 1.40              | 41.89           |
| 71.0-72.0    | 62.98                     | 6.56               | 201.47           | 1.41              | 43.30           |
| 72.0-73.0    | 62.44                     | 6.56               | 208.02           | 1.41              | 44.71           |
| 73.0-74.0    | 61.68                     | 6.53               | 214.55           | 1.40              | 46.11           |
| 74.0-75.0    | 60.68                     | 6.46               | 221.01           | 1.39              | 47.50           |
| 75.0-76.0    | 59.39                     | 6.37               | 227.39           | 1.37              | 48.87           |
| 76.0-77.0    | 57.61                     | 6.24               | 233.63           | 1.34              | 50.21           |
| 77.0-78.0    | 55.69                     | 6.07               | 239.69           | 1.30              | 51.51           |
| 78.0-79.0    | 53.50                     | 5.87               | 245.56           | 1.26              | 52.77           |
| 79.0-80.0    | 50.92                     | 5.63               | 251.19           | 1.21              | 53.98           |
| 80.0-81.0    | 47.39                     | 5.32               | 256.50           | 1.14              | 55.12           |

## Zonal Luminous Flux Data

| Gamma<br>[°] | I <sub>mean</sub><br>[cd] | Zonal Flux<br>[lm] | Sum Flux<br>[lm] | Zonal Flux<br>[%] | Sum Flux<br>[%] |
|--------------|---------------------------|--------------------|------------------|-------------------|-----------------|
| 81.0-82.0    | 43.85                     | 4.95               | 261.45           | 1.06              | 56.19           |
| 82.0-83.0    | 40.11                     | 4.56               | 266.02           | 0.98              | 57.17           |
| 83.0-84.0    | 36.12                     | 4.15               | 270.17           | 0.89              | 58.06           |
| 84.0-85.0    | 32.26                     | 3.73               | 273.90           | 0.80              | 58.86           |
| 85.0-86.0    | 28.41                     | 3.32               | 277.22           | 0.71              | 59.58           |
| 86.0-87.0    | 24.47                     | 2.89               | 280.11           | 0.62              | 60.20           |
| 87.0-88.0    | 20.89                     | 2.48               | 282.60           | 0.53              | 60.73           |
| 88.0-89.0    | 17.82                     | 2.12               | 284.72           | 0.46              | 61.19           |
| 89.0-90.0    | 14.84                     | 1.79               | 286.51           | 0.38              | 61.57           |
| 90.0-91.0    | 11.76                     | 1.46               | 287.97           | 0.31              | 61.89           |
| 91.0-92.0    | 9.55                      | 1.17               | 289.14           | 0.25              | 62.14           |
| 92.0-93.0    | 8.53                      | 0.99               | 290.13           | 0.21              | 62.35           |
| 93.0-94.0    | 8.37                      | 0.92               | 291.05           | 0.20              | 62.55           |
| 94.0-95.0    | 8.98                      | 0.95               | 292.00           | 0.20              | 62.75           |
| 95.0-96.0    | 10.41                     | 1.06               | 293.06           | 0.23              | 62.98           |
| 96.0-97.0    | 12.82                     | 1.27               | 294.32           | 0.27              | 63.25           |
| 97.0-98.0    | 16.07                     | 1.57               | 295.89           | 0.34              | 63.59           |
| 98.0-99.0    | 19.25                     | 1.92               | 297.81           | 0.41              | 64.00           |
| 99.0-100.0   | 22.49                     | 2.26               | 300.07           | 0.49              | 64.49           |
| 100.0-101.0  | 25.78                     | 2.60               | 302.67           | 0.56              | 65.05           |
| 101.0-102.0  | 28.84                     | 2.93               | 305.60           | 0.63              | 65.68           |
| 102.0-103.0  | 31.33                     | 3.22               | 308.82           | 0.69              | 66.37           |
| 103.0-104.0  | 33.42                     | 3.45               | 312.28           | 0.74              | 67.11           |
| 104.0-105.0  | 35.25                     | 3.65               | 315.92           | 0.78              | 67.89           |
| 105.0-106.0  | 36.69                     | 3.80               | 319.72           | 0.82              | 68.71           |
| 106.0-107.0  | 38.00                     | 3.93               | 323.65           | 0.84              | 69.55           |
| 107.0-108.0  | 39.19                     | 4.04               | 327.69           | 0.87              | 70.42           |
| 108.0-109.0  | 39.85                     | 4.11               | 331.80           | 0.88              | 71.30           |
| 109.0-110.0  | 40.04                     | 4.13               | 335.92           | 0.89              | 72.19           |
| 110.0-111.0  | 40.27                     | 4.12               | 340.05           | 0.89              | 73.08           |
| 111.0-112.0  | 40.53                     | 4.12               | 344.17           | 0.89              | 73.96           |
| 112.0-113.0  | 40.59                     | 4.11               | 348.28           | 0.88              | 74.85           |
| 113.0-114.0  | 40.63                     | 4.08               | 352.36           | 0.88              | 75.73           |
| 114.0-115.0  | 40.69                     | 4.06               | 356.42           | 0.87              | 76.60           |
| 115.0-116.0  | 40.78                     | 4.03               | 360.45           | 0.87              | 77.46           |
| 116.0-117.0  | 40.87                     | 4.01               | 364.46           | 0.86              | 78.32           |
| 117.0-118.0  | 40.77                     | 3.97               | 368.43           | 0.85              | 79.18           |
| 118.0-119.0  | 40.89                     | 3.93               | 372.37           | 0.85              | 80.02           |
| 119.0-120.0  | 40.91                     | 3.90               | 376.27           | 0.84              | 80.86           |
| 120.0-121.0  | 40.90                     | 3.86               | 380.13           | 0.83              | 81.69           |
| 121.0-122.0  | 40.79                     | 3.82               | 383.95           | 0.82              | 82.51           |

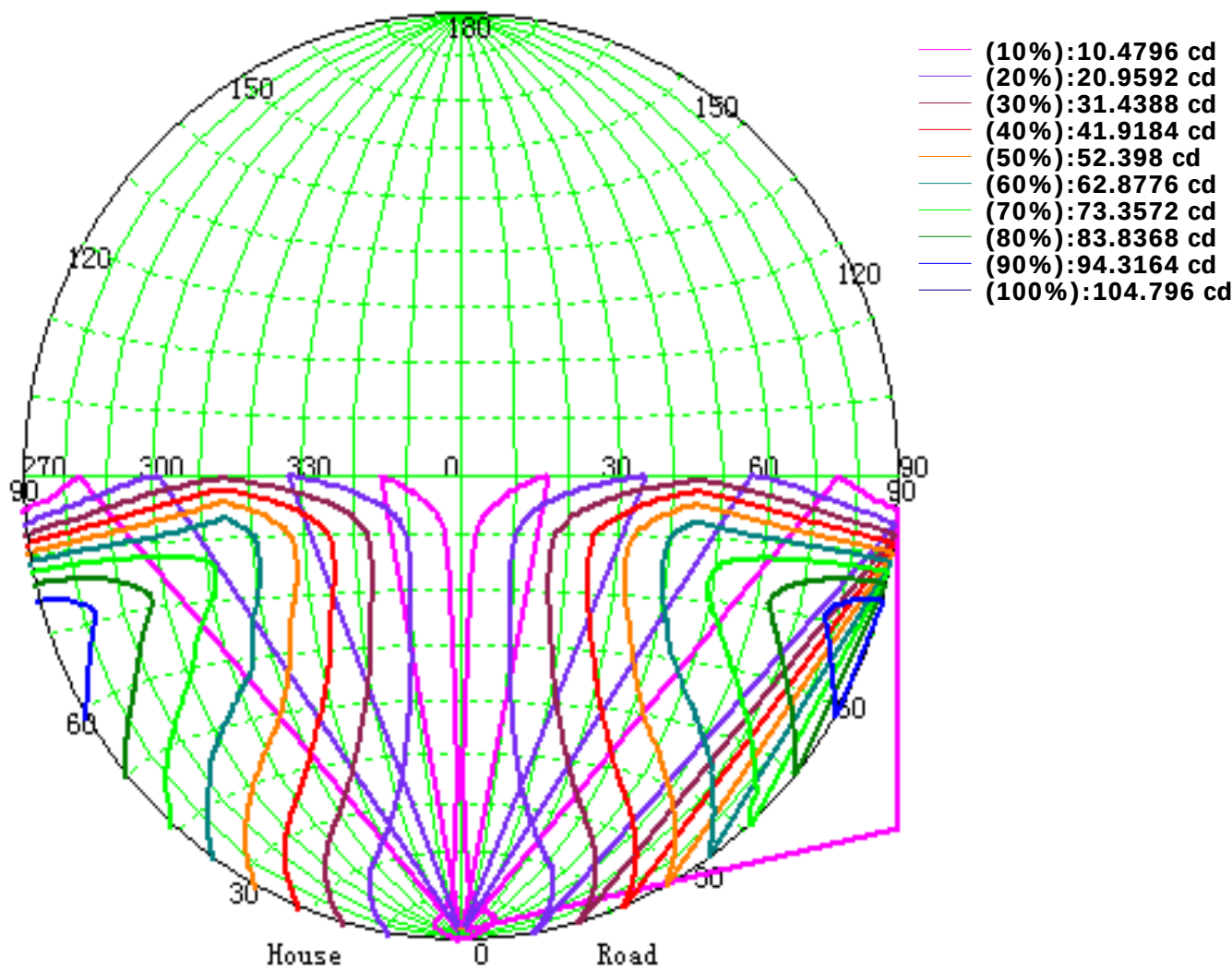
## Zonal Luminous Flux Data

| Gamma<br>[°] | I <sub>mean</sub><br>[cd] | Zonal Flux<br>[lm] | Sum Flux<br>[lm] | Zonal Flux<br>[%] | Sum Flux<br>[%] |
|--------------|---------------------------|--------------------|------------------|-------------------|-----------------|
| 122.0-123.0  | 40.59                     | 3.76               | 387.72           | 0.81              | 83.32           |
| 123.0-124.0  | 40.43                     | 3.70               | 391.42           | 0.80              | 84.12           |
| 124.0-125.0  | 40.20                     | 3.64               | 395.06           | 0.78              | 84.90           |
| 125.0-126.0  | 39.87                     | 3.57               | 398.64           | 0.77              | 85.67           |
| 126.0-127.0  | 39.57                     | 3.50               | 402.14           | 0.75              | 86.42           |
| 127.0-128.0  | 39.21                     | 3.43               | 405.57           | 0.74              | 87.16           |
| 128.0-129.0  | 38.78                     | 3.35               | 408.91           | 0.72              | 87.88           |
| 129.0-130.0  | 38.33                     | 3.26               | 412.18           | 0.70              | 88.58           |
| 130.0-131.0  | 37.87                     | 3.18               | 415.35           | 0.68              | 89.26           |
| 131.0-132.0  | 37.41                     | 3.09               | 418.44           | 0.66              | 89.93           |
| 132.0-133.0  | 36.94                     | 3.01               | 421.45           | 0.65              | 90.57           |
| 133.0-134.0  | 36.50                     | 2.92               | 424.37           | 0.63              | 91.20           |
| 134.0-135.0  | 36.06                     | 2.84               | 427.21           | 0.61              | 91.81           |
| 135.0-136.0  | 35.64                     | 2.76               | 429.96           | 0.59              | 92.40           |
| 136.0-137.0  | 35.23                     | 2.67               | 432.64           | 0.57              | 92.98           |
| 137.0-138.0  | 34.60                     | 2.59               | 435.22           | 0.56              | 93.53           |
| 138.0-139.0  | 34.00                     | 2.49               | 437.72           | 0.54              | 94.07           |
| 139.0-140.0  | 33.26                     | 2.40               | 440.11           | 0.51              | 94.58           |
| 140.0-141.0  | 32.31                     | 2.29               | 442.40           | 0.49              | 95.07           |
| 141.0-142.0  | 31.29                     | 2.17               | 444.57           | 0.47              | 95.54           |
| 142.0-143.0  | 30.40                     | 2.06               | 446.63           | 0.44              | 95.98           |
| 143.0-144.0  | 29.58                     | 1.96               | 448.59           | 0.42              | 96.40           |
| 144.0-145.0  | 28.78                     | 1.86               | 450.44           | 0.40              | 96.80           |
| 145.0-146.0  | 27.96                     | 1.76               | 452.21           | 0.38              | 97.18           |
| 146.0-147.0  | 27.02                     | 1.66               | 453.87           | 0.36              | 97.54           |
| 147.0-148.0  | 25.93                     | 1.56               | 455.43           | 0.34              | 97.87           |
| 148.0-149.0  | 24.71                     | 1.45               | 456.88           | 0.31              | 98.19           |
| 149.0-150.0  | 23.38                     | 1.34               | 458.22           | 0.29              | 98.47           |
| 150.0-151.0  | 21.90                     | 1.22               | 459.44           | 0.26              | 98.74           |
| 151.0-152.0  | 19.79                     | 1.09               | 460.53           | 0.23              | 98.97           |
| 152.0-153.0  | 16.84                     | 0.93               | 461.46           | 0.20              | 99.17           |
| 153.0-154.0  | 13.27                     | 0.74               | 462.20           | 0.16              | 99.33           |
| 154.0-155.0  | 9.59                      | 0.54               | 462.74           | 0.12              | 99.44           |
| 155.0-156.0  | 6.91                      | 0.38               | 463.11           | 0.08              | 99.53           |
| 156.0-157.0  | 5.32                      | 0.27               | 463.38           | 0.06              | 99.58           |
| 157.0-158.0  | 4.71                      | 0.21               | 463.59           | 0.05              | 99.63           |
| 158.0-159.0  | 4.57                      | 0.19               | 463.78           | 0.04              | 99.67           |
| 159.0-160.0  | 4.49                      | 0.17               | 463.95           | 0.04              | 99.71           |
| 160.0-161.0  | 4.42                      | 0.16               | 464.11           | 0.04              | 99.74           |
| 161.0-162.0  | 4.35                      | 0.15               | 464.26           | 0.03              | 99.77           |
| 162.0-163.0  | 4.27                      | 0.14               | 464.41           | 0.03              | 99.80           |

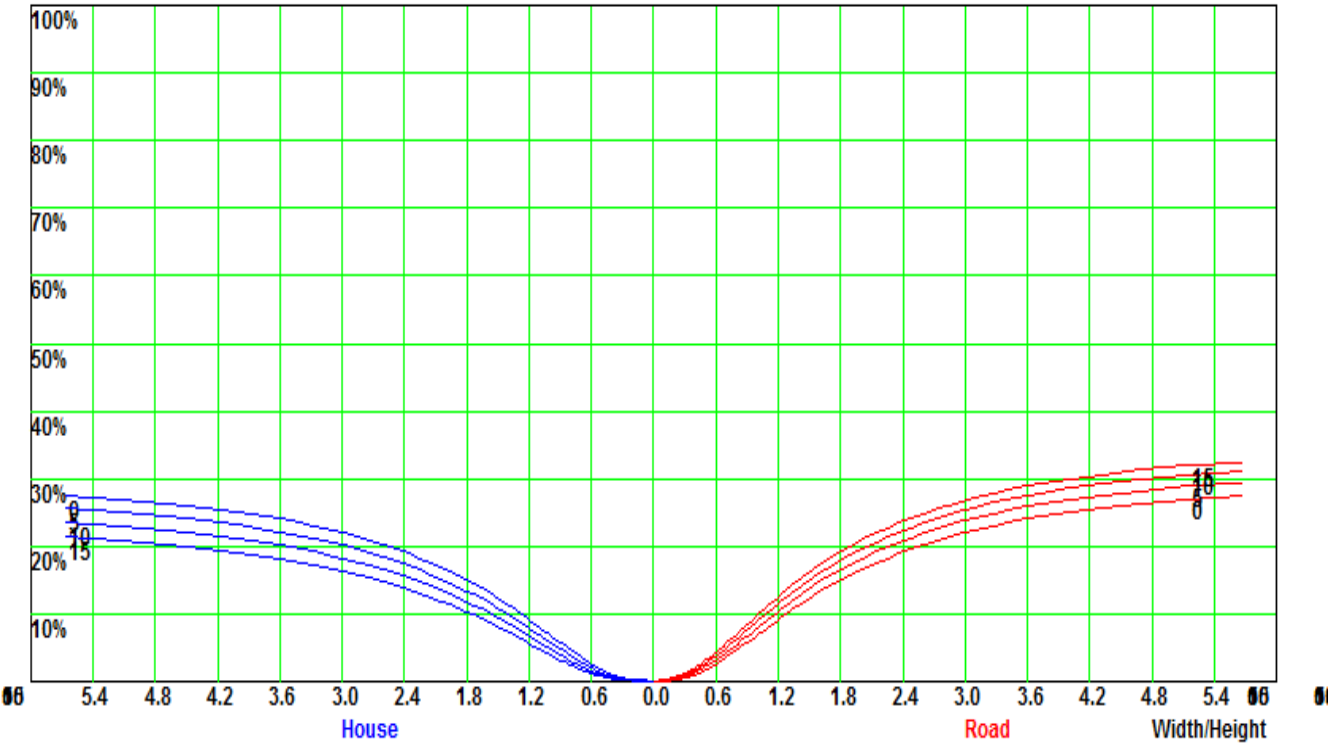
## Zonal Luminous Flux Data

[illegible]

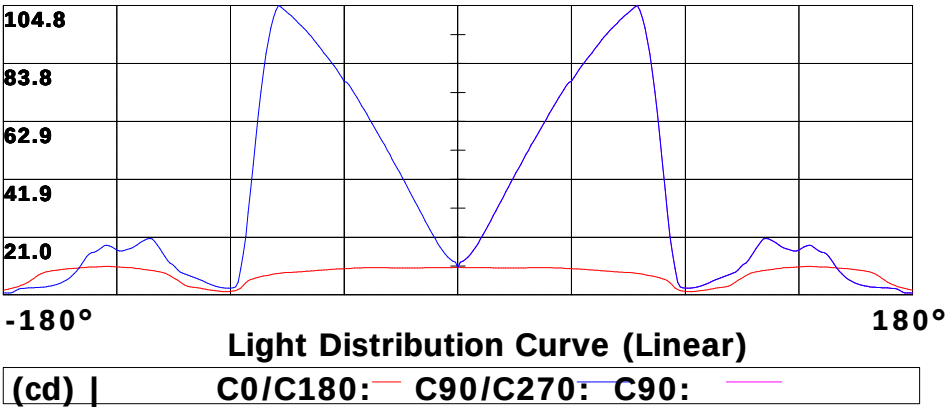
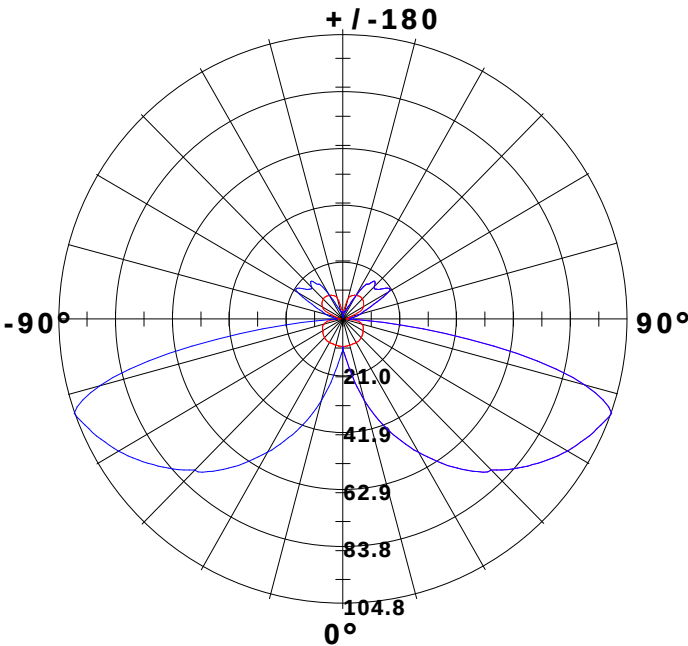
Iso-Candela [cd]

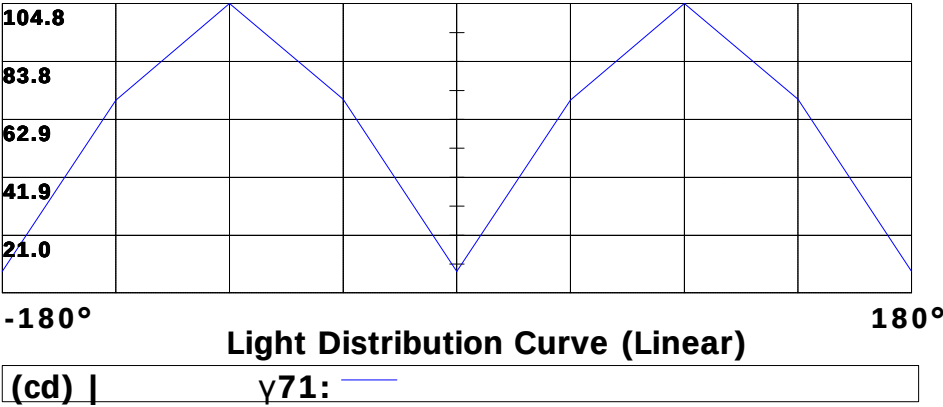
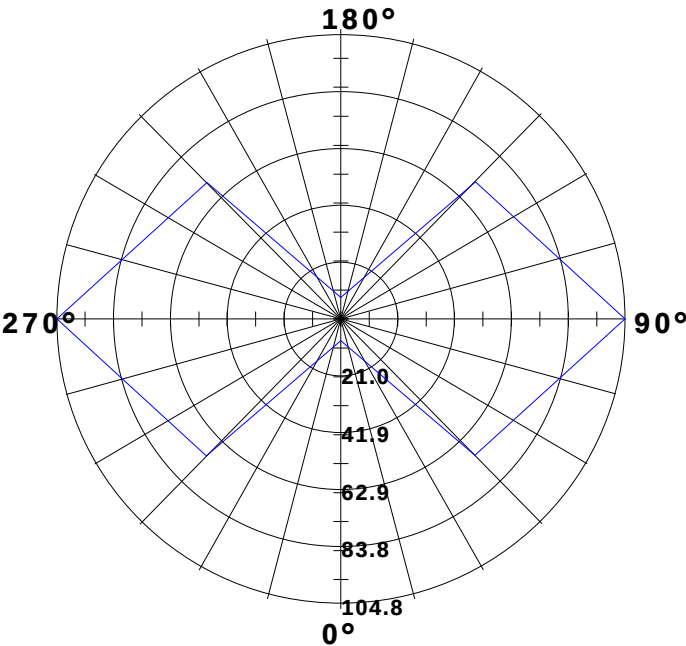


Coefficient Utilization Curve

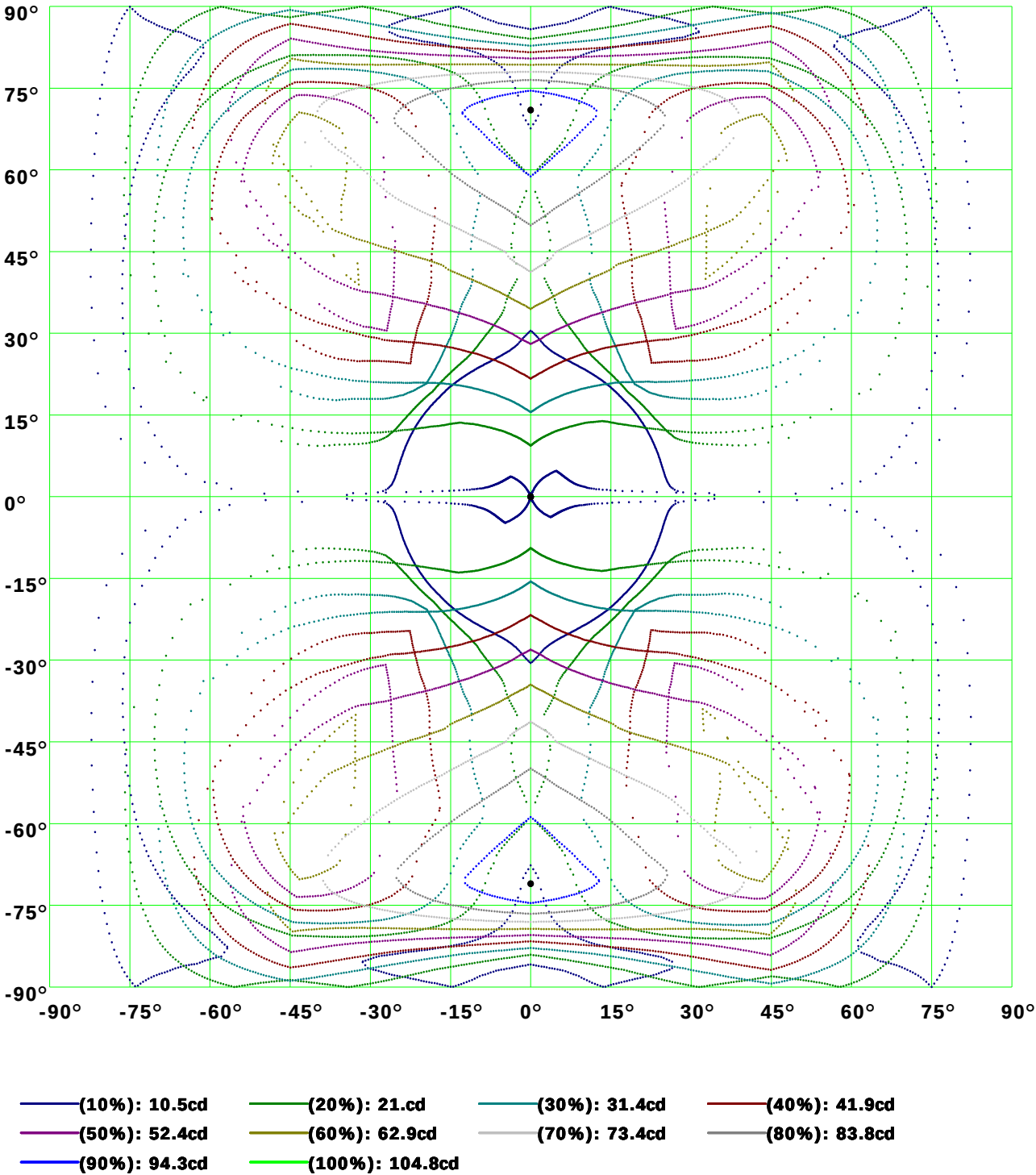


Light Distribution Curve [Unit: cd]

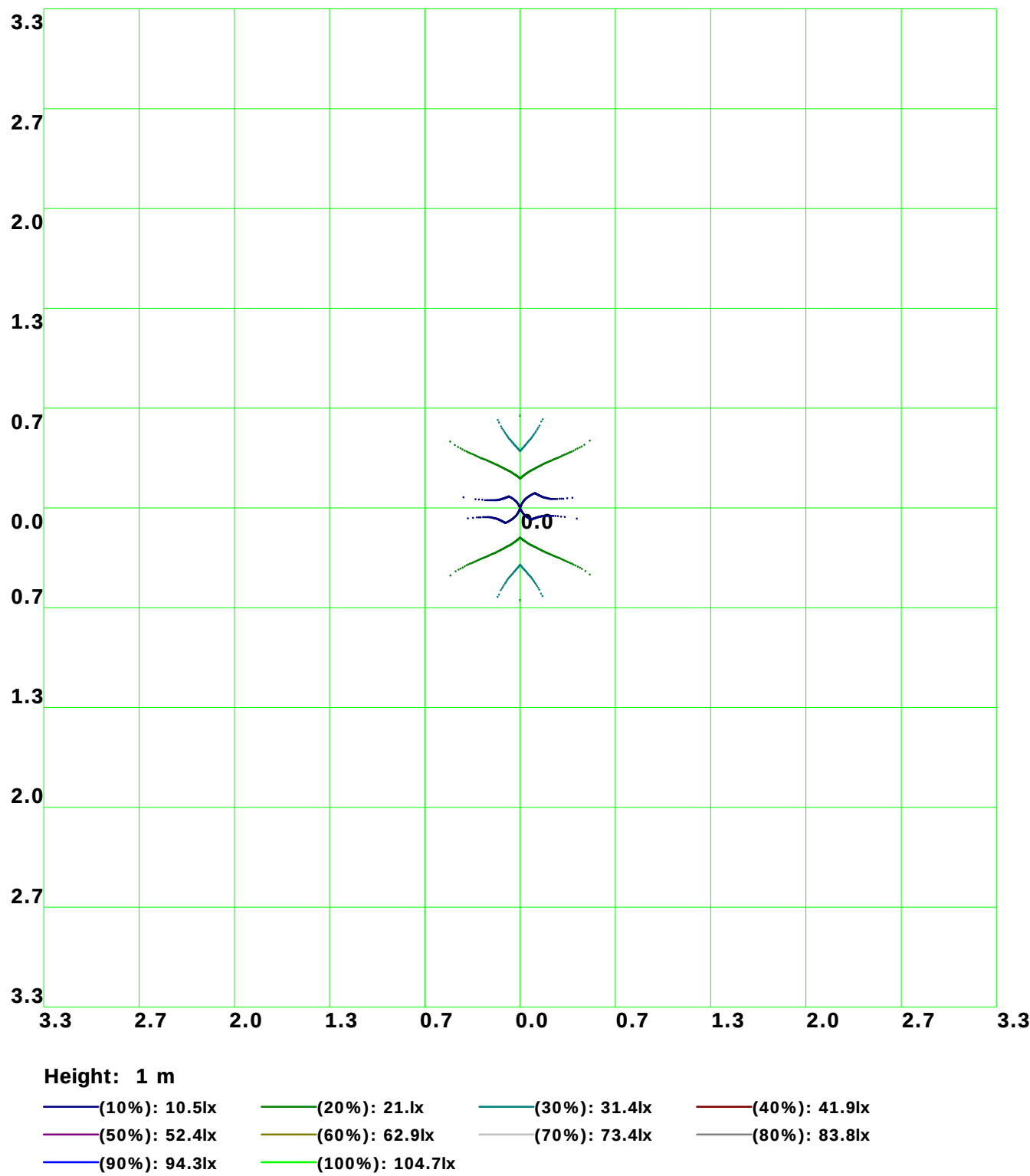




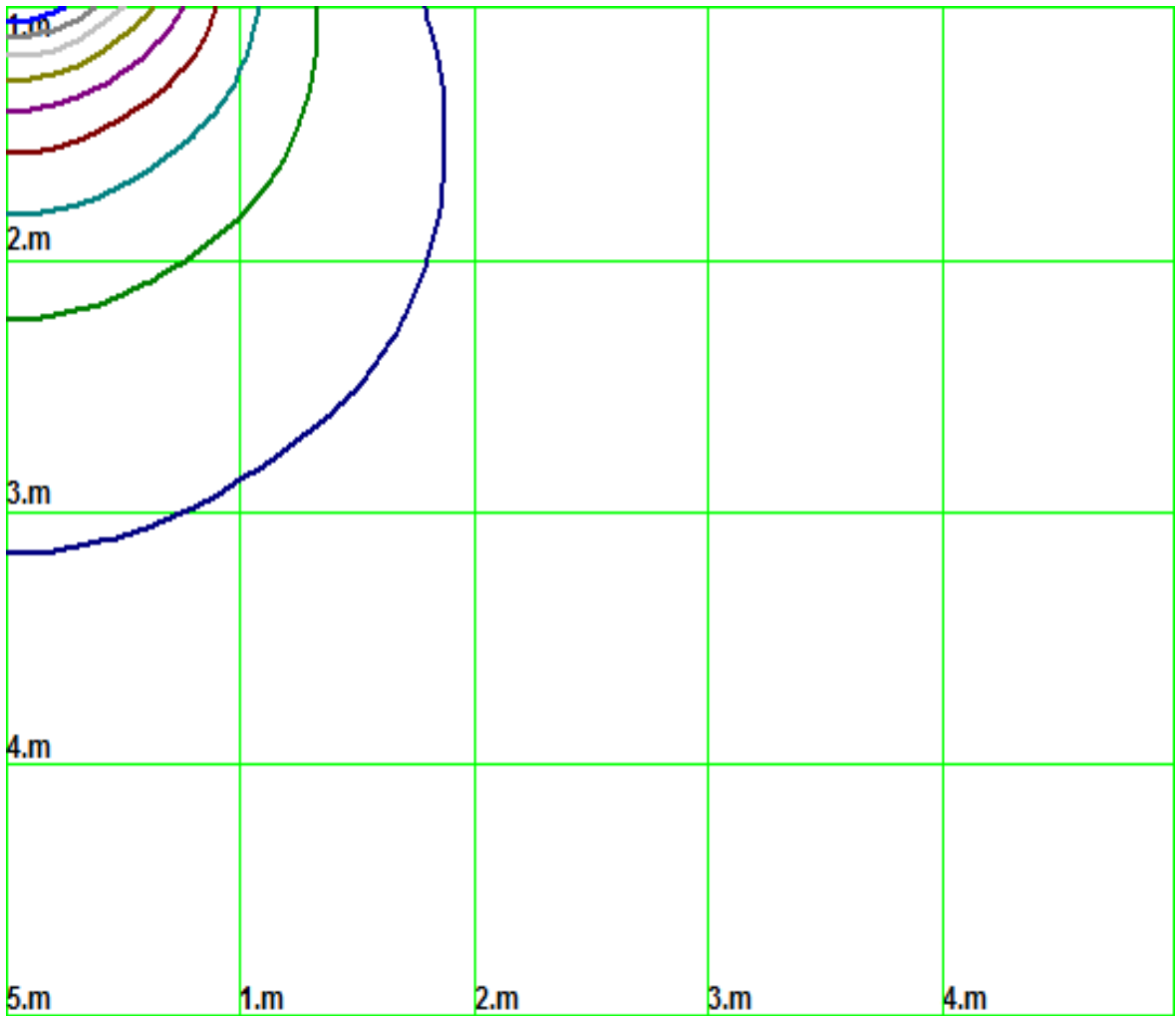
Isocandela(rectangle)



Isolx curve



Space Isolx Curve



(10%): 10.5lx      (20%): 21.1lx      (30%): 31.4lx      (40%): 41.9lx  
(50%): 52.4lx      (60%): 62.9lx      (70%): 73.4lx      (80%): 83.8lx  
(90%): 94.3lx      (100%): 104.7lx

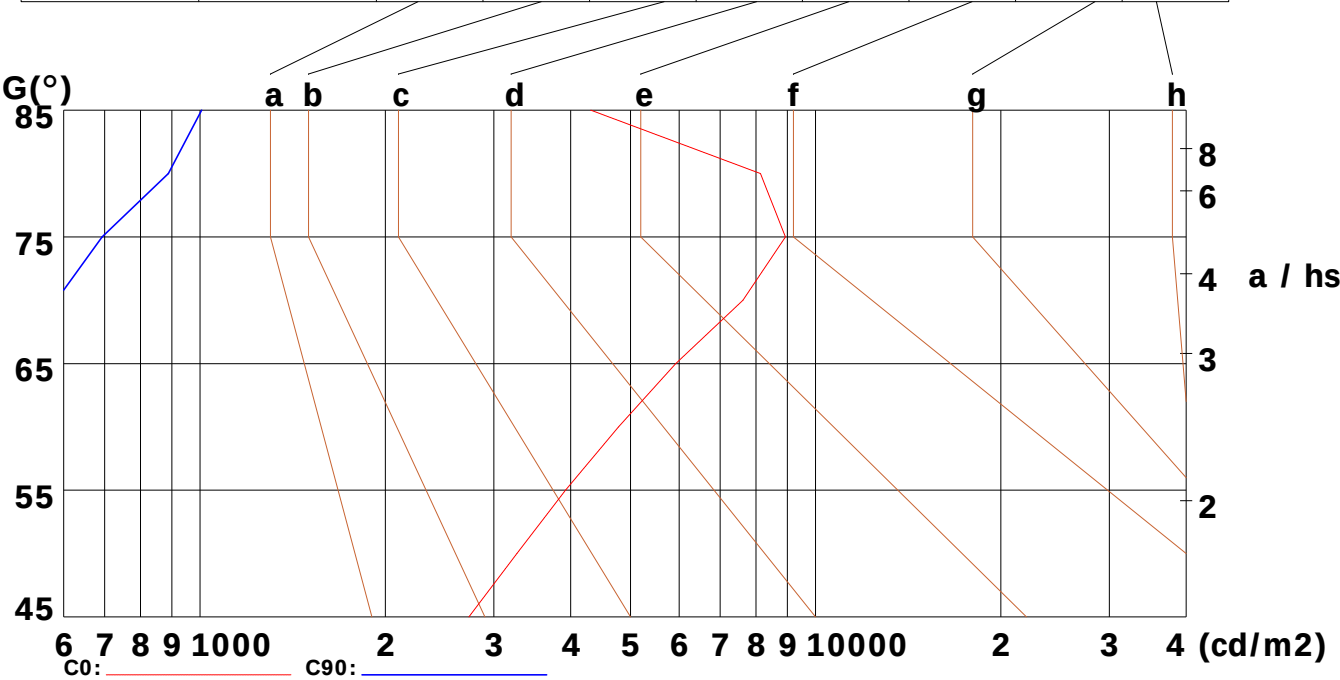
## Luminance Limiting Curve

Diameter: 0mm  
 Length: 0mm  
 Width: 0mm  
 Height: 0mm

(cd/m<sup>2</sup>)

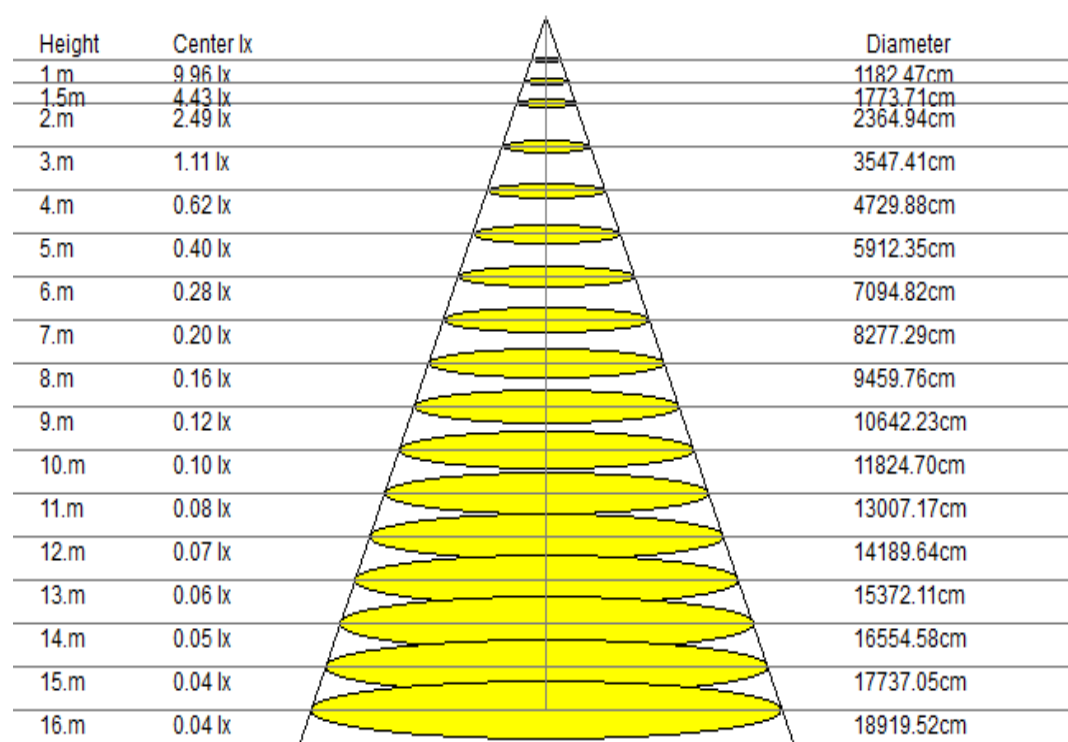
| $\gamma$ | 45°  | 50°  | 55°  | 60°  | 65°  | 70°  | 75°  | 80°  | 85°  |
|----------|------|------|------|------|------|------|------|------|------|
| C0       | 2734 | 3269 | 3926 | 4781 | 5926 | 7615 | 8929 | 8135 | 4313 |
| C90      | 338  | 362  | 391  | 429  | 490  | 582  | 693  | 888  | 1005 |

| Glare | Quality | Service Values Illuminance (lx) |      |      |      |      |      |      |      |
|-------|---------|---------------------------------|------|------|------|------|------|------|------|
| 1.15  | A       | 2000                            | 1000 | 500  | ≤300 |      |      |      |      |
| 1.5   | B       |                                 | 2000 | 1000 | 500  | ≤300 |      |      |      |
| 1.85  | C       |                                 |      | 2000 | 1000 | 500  | ≤300 |      |      |
| 2.2   | D       |                                 |      |      | 2000 | 1000 | 500  | ≤300 |      |
| 2.55  | E       |                                 |      |      |      | 2000 | 1000 | 500  | ≤300 |



Lum. Limiting Curve (C0/C90)

## Lux-Distance Curve

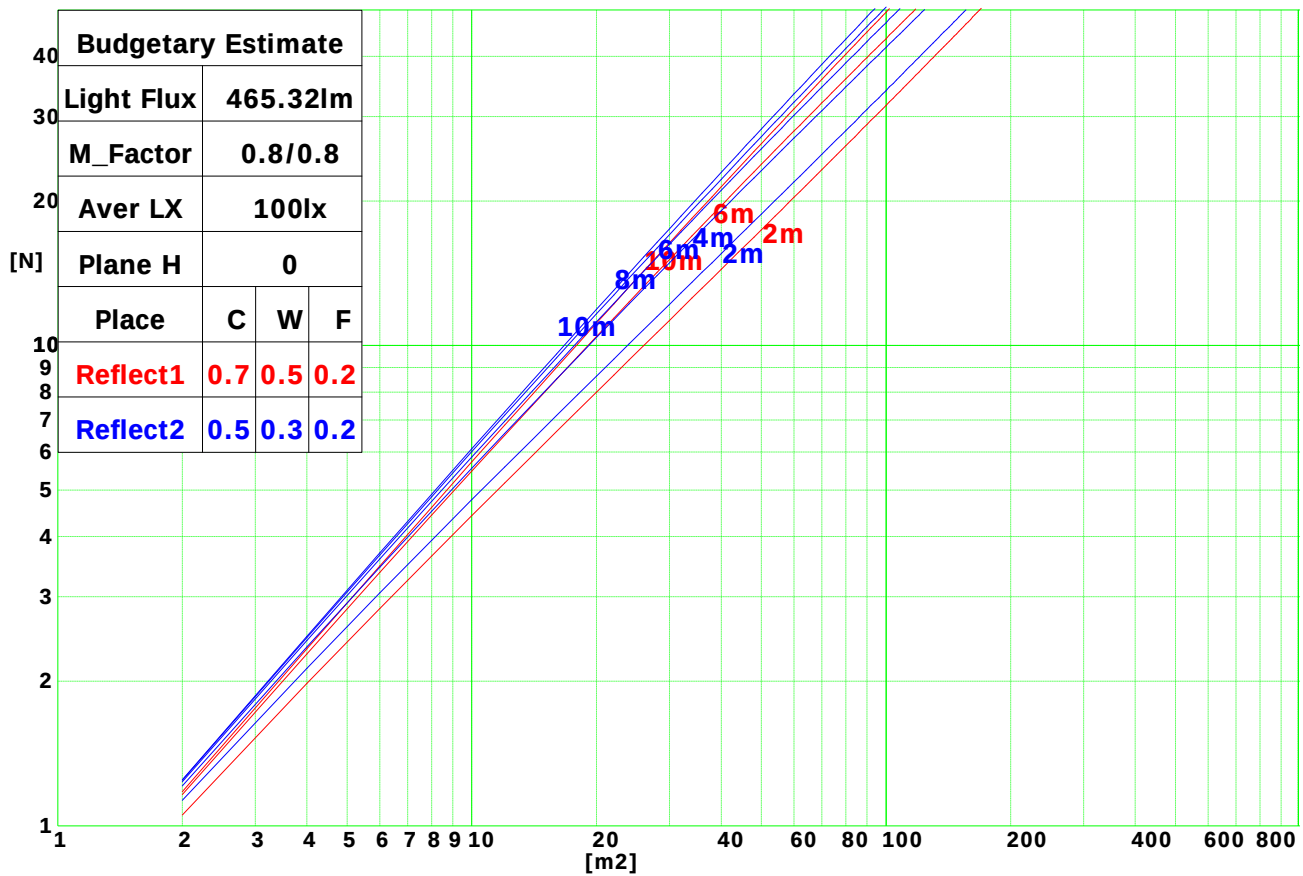


**Beam Angle:160.80°(50%Imax)**

## Coefficients of Utilization

| RHOCC | 80                                       |      |      | 70   |      |      | 50   |      |      | 30   |      |      | 10   |      |      | 0    |
|-------|------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| RHOW  | 50                                       | 30   | 10   | 50   | 30   | 10   | 50   | 30   | 10   | 50   | 30   | 10   | 50   | 30   | 10   | 0    |
| RCR   | COEFFICIENTS OF UTILIZATION FOR RHOFC=20 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0     | 1.19                                     | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 1.00 |
| 1     | 1.01                                     | 0.98 | 0.97 | 0.99 | 0.97 | 0.95 | 0.96 | 0.93 | 0.91 | 0.92 | 0.89 | 0.86 | 0.86 | 0.83 | 0.80 | 0.75 |
| 2     | 0.87                                     | 0.84 | 0.82 | 0.86 | 0.83 | 0.80 | 0.84 | 0.80 | 0.77 | 0.81 | 0.77 | 0.73 | 0.77 | 0.72 | 0.68 | 0.64 |
| 3     | 0.77                                     | 0.74 | 0.72 | 0.77 | 0.74 | 0.71 | 0.76 | 0.72 | 0.68 | 0.74 | 0.69 | 0.65 | 0.70 | 0.65 | 0.61 | 0.56 |
| 4     | 0.71                                     | 0.68 | 0.66 | 0.71 | 0.67 | 0.65 | 0.70 | 0.65 | 0.62 | 0.68 | 0.63 | 0.59 | 0.66 | 0.60 | 0.56 | 0.52 |
| 5     | 0.66                                     | 0.63 | 0.62 | 0.66 | 0.63 | 0.61 | 0.66 | 0.61 | 0.58 | 0.64 | 0.59 | 0.55 | 0.62 | 0.57 | 0.52 | 0.48 |
| 6     | 0.62                                     | 0.60 | 0.59 | 0.63 | 0.60 | 0.57 | 0.62 | 0.58 | 0.55 | 0.61 | 0.56 | 0.52 | 0.60 | 0.54 | 0.49 | 0.46 |
| 7     | 0.60                                     | 0.58 | 0.56 | 0.60 | 0.57 | 0.55 | 0.60 | 0.56 | 0.53 | 0.59 | 0.54 | 0.50 | 0.58 | 0.52 | 0.48 | 0.44 |
| 8     | 0.58                                     | 0.56 | 0.55 | 0.58 | 0.55 | 0.53 | 0.58 | 0.54 | 0.51 | 0.57 | 0.52 | 0.49 | 0.56 | 0.50 | 0.46 | 0.43 |
| 9     | 0.56                                     | 0.54 | 0.53 | 0.56 | 0.54 | 0.52 | 0.56 | 0.52 | 0.50 | 0.55 | 0.51 | 0.47 | 0.54 | 0.49 | 0.45 | 0.42 |
| 10    | 0.55                                     | 0.53 | 0.52 | 0.55 | 0.53 | 0.51 | 0.55 | 0.51 | 0.49 | 0.54 | 0.50 | 0.46 | 0.53 | 0.48 | 0.44 | 0.41 |

## Indoor Budgetary Estimate Chart



UGR Glare Index

|           |     |                                             |      |      |      |      |                                              |      |      |      |      |
|-----------|-----|---------------------------------------------|------|------|------|------|----------------------------------------------|------|------|------|------|
| Ceiling   |     | 70                                          | 70   | 50   | 50   | 30   | 70                                           | 70   | 50   | 50   | 30   |
| Wall      |     | 50                                          | 30   | 50   | 30   | 30   | 50                                           | 30   | 50   | 30   | 30   |
| Floor     |     | 20                                          | 20   | 20   | 20   | 20   | 20                                           | 20   | 20   | 20   | 20   |
| Room Size |     | Left to light axis direction of observation |      |      |      |      | Direction of light axis parallel observation |      |      |      |      |
| X         | Y   |                                             |      |      |      |      |                                              |      |      |      |      |
| 2H        | 2H  | 16.3                                        | 17.7 | 16.6 | 17.6 | 18.3 | 16.3                                         | 17.7 | 16.4 | 17.7 | 18.3 |
|           | 3H  | 18.1                                        | 19.3 | 18.5 | 19.8 | 19.9 | 17.9                                         | 19.3 | 18.2 | 19.8 | 19.9 |
|           | 4H  | 18.8                                        | 20.0 | 19.2 | 20.7 | 20.9 | 18.8                                         | 20.0 | 19.2 | 20.6 | 20.9 |
|           | 6H  | 19.5                                        | 20.5 | 19.9 | 21.0 | 21.0 | 19.4                                         | 20.4 | 19.8 | 21.0 | 21.1 |
|           | 8H  | 19.7                                        | 20.9 | 20.0 | 21.1 | 21.4 | 19.7                                         | 20.8 | 19.9 | 21.1 | 21.4 |
|           | 12H | 19.8                                        | 20.9 | 20.1 | 21.3 | 21.7 | 19.7                                         | 20.7 | 20.1 | 21.3 | 21.7 |
| 4H        | 2H  | 17.4                                        | 18.4 | 17.6 | 18.6 | 18.9 | 17.3                                         | 18.4 | 17.5 | 18.7 | 18.8 |
|           | 3H  | 19.3                                        | 20.4 | 19.6 | 20.4 | 20.8 | 19.2                                         | 20.2 | 19.5 | 20.4 | 20.8 |
|           | 4H  | 20.2                                        | 20.9 | 20.5 | 21.2 | 21.6 | 20.0                                         | 21.0 | 20.4 | 21.2 | 21.7 |
|           | 6H  | 20.9                                        | 21.6 | 21.2 | 21.9 | 22.4 | 20.8                                         | 21.6 | 21.0 | 21.9 | 22.3 |
|           | 8H  | 21.0                                        | 21.8 | 21.5 | 22.2 | 22.6 | 21.1                                         | 21.7 | 21.4 | 22.2 | 22.5 |
|           | 12H | 21.3                                        | 22.0 | 21.8 | 22.3 | 22.8 | 21.2                                         | 21.9 | 21.6 | 22.3 | 22.7 |
| 8H        | 4H  | 20.4                                        | 21.2 | 20.9 | 21.5 | 22.0 | 20.5                                         | 21.2 | 20.8 | 21.6 | 22.0 |
|           | 6H  | 21.3                                        | 21.9 | 21.9 | 22.4 | 22.8 | 21.3                                         | 21.9 | 21.8 | 22.4 | 22.8 |
|           | 8H  | 21.9                                        | 22.4 | 22.4 | 22.8 | 23.2 | 21.8                                         | 22.2 | 22.3 | 22.7 | 23.3 |
|           | 12H | 22.2                                        | 22.6 | 22.6 | 23.1 | 23.5 | 21.9                                         | 22.5 | 22.6 | 23.1 | 23.6 |
| 12H       | 4H  | 20.6                                        | 21.3 | 21.1 | 21.7 | 22.0 | 20.5                                         | 21.1 | 21.0 | 21.6 | 22.0 |
|           | 6H  | 21.6                                        | 22.2 | 22.0 | 22.4 | 23.0 | 21.5                                         | 22.1 | 22.0 | 22.4 | 22.9 |
|           | 8H  | 22.0                                        | 22.5 | 22.5 | 22.8 | 23.4 | 21.9                                         | 22.4 | 22.5 | 22.9 | 23.4 |
|           |     |                                             |      |      |      |      |                                              |      |      |      |      |
|           |     |                                             |      |      |      |      |                                              |      |      |      |      |