
Client:

LumCAT: LRS-G

Luminaire: LED outdoor fixture

Report No:

Ballast type:

Test No: LCZP20120153

Voltage(V): 120.090

LampCAT:

Current(A): 0.109

Lamp flux(lm): 874.5

Power (W): 11.770

Number of Lamps: 1

PF: 0.900

Length(mm): 125

Width(mm): 60

Phm Type: C

Height(mm): 125

Photometric Results

Lumens(lm): 874.50, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 74.30

Central intensity(cd): 51.829, Maximum intensity(cd): 158.936

Angle of maximum intensity: C=75.0 γ =110.0

Beam Angle(50% I_{max}): [C0/180]Total=332.0

[C90/270]Total=181.6

Field angle(10% I_{max}): [C0/180]Total=354.2

[C90/270]Total=223.5

Maximum s/h(1/2): C0_180=1.82 C90_270=2.98

Maximum s/h(1/4): C0_180=1.94 C90_270=2.91

Up flux rate of lamp(%): 48.84%

Down flux rate of lamp(%): 51.16%

Up flux rate of LUM(%): 48.84%

Down flux rate of LUM(%): 51.16%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 24.934%

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 | 51.829 | 0.000 | 0 | 0.00% | 0.00% |
| 5.0 | 52.823 | 1.251 | 1.251 | 0.14% | 0.14% |
| 10.0 | 54.554 | 3.841 | 5.092 | 0.44% | 0.58% |
| 15.0 | 57.122 | 6.625 | 11.717 | 0.76% | 1.34% |
| 20.0 | 60.384 | 9.684 | 21.401 | 1.11% | 2.45% |
| 25.0 | 63.758 | 13.020 | 34.421 | 1.49% | 3.94% |
| 30.0 | 66.915 | 16.537 | 50.958 | 1.89% | 5.83% |
| 35.0 | 69.553 | 20.096 | 71.054 | 2.30% | 8.13% |
| 40.0 | 71.651 | 23.559 | 94.612 | 2.69% | 10.82% |
| 45.0 | 73.261 | 26.832 | 121.444 | 3.07% | 13.89% |
| 50.0 | 74.213 | 29.799 | 151.243 | 3.41% | 17.29% |
| 55.0 | 74.563 | 32.349 | 183.592 | 3.70% | 20.99% |
| 60.0 | 74.507 | 34.457 | 218.049 | 3.94% | 24.93% |
| 65.0 | 74.013 | 36.105 | 254.155 | 4.13% | 29.06% |
| 70.0 | 73.691 | 37.400 | 291.555 | 4.28% | 33.34% |
| 75.0 | 73.314 | 38.425 | 329.979 | 4.39% | 37.73% |
| 80.0 | 72.618 | 39.047 | 369.027 | 4.47% | 42.20% |
| 85.0 | 71.742 | 39.226 | 408.253 | 4.49% | 46.68% |
| 90.0 | 71.071 | 39.103 | 447.356 | 4.47% | 51.16% |
| 95.0 | 71.531 | 39.046 | 486.402 | 4.46% | 55.62% |
| 100.0 | 72.233 | 39.064 | 525.466 | 4.47% | 60.09% |
| 105.0 | 73.036 | 38.870 | 564.336 | 4.44% | 64.53% |
| 110.0 | 73.725 | 38.361 | 602.697 | 4.39% | 68.92% |
| 115.0 | 74.061 | 37.420 | 640.118 | 4.28% | 73.20% |
| 120.0 | 73.838 | 35.954 | 676.072 | 4.11% | 77.31% |
| 125.0 | 73.222 | 33.993 | 710.064 | 3.89% | 81.20% |
| 130.0 | 72.061 | 31.589 | 741.654 | 3.61% | 84.81% |
| 135.0 | 70.238 | 28.754 | 770.408 | 3.29% | 88.10% |
| 140.0 | 67.664 | 25.534 | 795.941 | 2.92% | 91.02% |
| 145.0 | 64.223 | 22.004 | 817.946 | 2.52% | 93.53% |
| 150.0 | 60.220 | 18.325 | 836.271 | 2.10% | 95.63% |
| 155.0 | 54.781 | 14.554 | 850.824 | 1.66% | 97.29% |
| 160.0 | 47.395 | 10.716 | 861.541 | 1.23% | 98.52% |
| 165.0 | 38.970 | 7.118 | 868.659 | 0.81% | 99.33% |
| 170.0 | 28.745 | 4.017 | 872.675 | 0.46% | 99.79% |
| 175.0 | 15.688 | 1.590 | 874.265 | 0.18% | 99.97% |
| 180.0 | 3.753 | 0.232 | 874.497 | 0.03% | 100.00% |

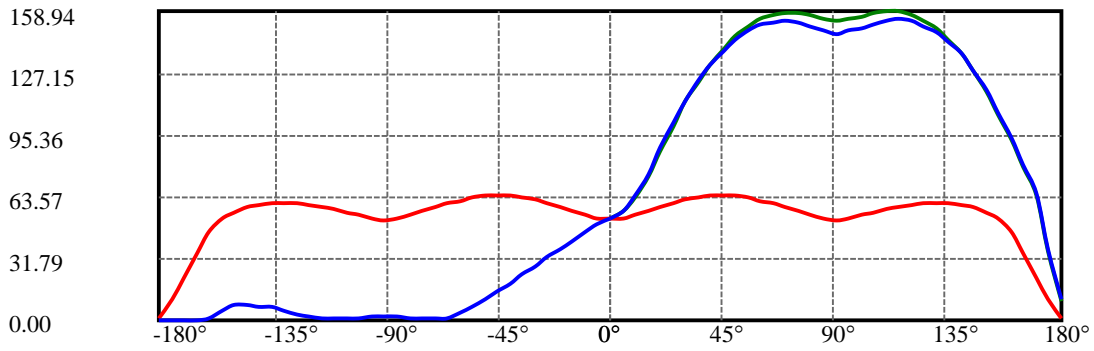
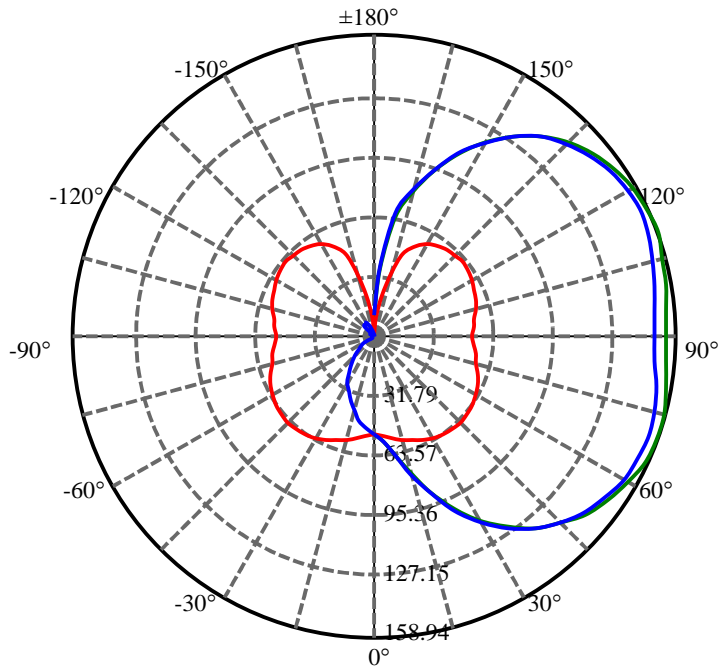
Zonal flux distribution table

Appendix Page: 3 Total:12

| ZONAL LUMEN SUMMARY | | | |
|---------------------|--------|---------|---------|
| Zone | Lumens | %Lamp | %Fixt |
| 0-30 | 50.96 | 5.83% | 5.83% |
| 0-40 | 94.61 | 10.82% | 10.82% |
| 0-60 | 218.05 | 24.93% | 24.93% |
| 0-90 | 447.36 | 51.16% | 51.16% |
| 0-120 | 676.07 | 77.31% | 77.31% |
| 0-180 | 874.50 | 100.00% | 100.00% |
| 60-90 | 229.31 | 26.22% | 26.22% |
| 90-120 | 228.72 | 26.15% | 26.15% |
| 90-130 | 294.30 | 33.65% | 33.65% |
| 90-150 | 388.91 | 44.47% | 44.47% |
| 90-180 | 426.91 | 48.82% | 48.82% |
| 0-123.46 | 699.60 | 80.00% | 80.00% |

ZONAL LUMEN SUMMARY

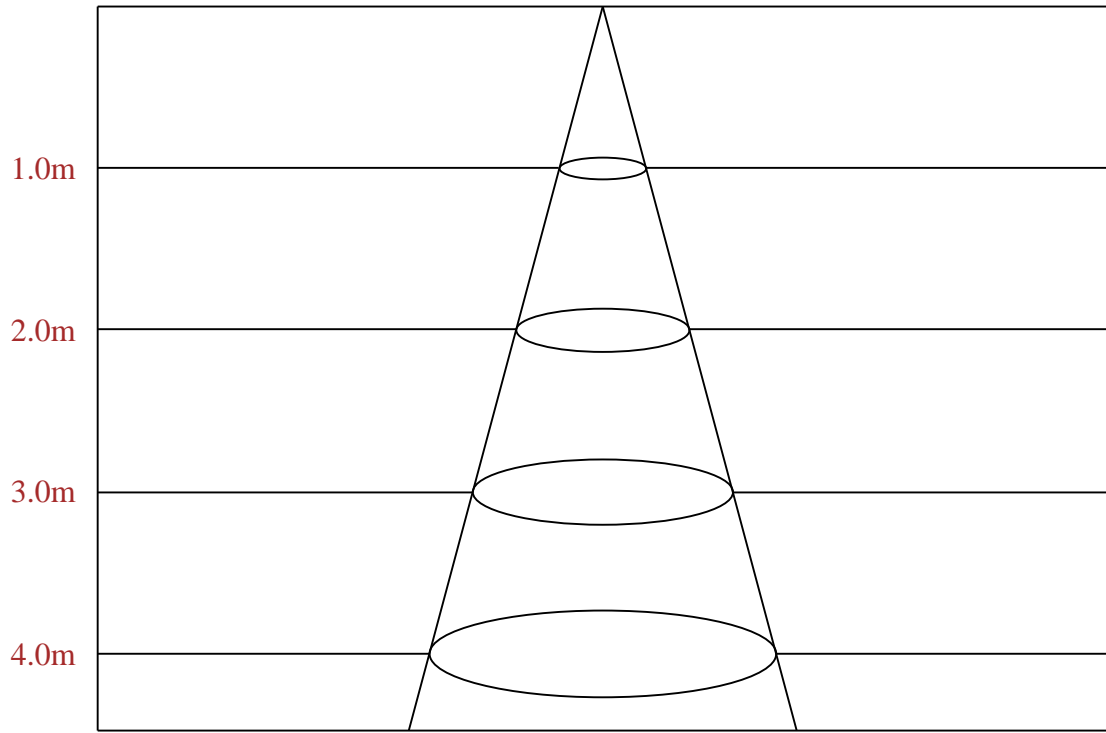
| | |
|---------|-------|
| 0-10 | 5.09 |
| 10-20 | 16.31 |
| 20-30 | 29.56 |
| 30-40 | 43.65 |
| 40-50 | 56.63 |
| 50-60 | 66.81 |
| 60-70 | 73.51 |
| 70-80 | 77.47 |
| 80-90 | 78.33 |
| 90-100 | 78.11 |
| 100-110 | 77.23 |
| 110-120 | 73.37 |
| 120-130 | 65.58 |
| 130-140 | 54.29 |
| 140-150 | 40.33 |
| 150-160 | 25.27 |
| 160-170 | 11.13 |
| 170-180 | 1.59 |



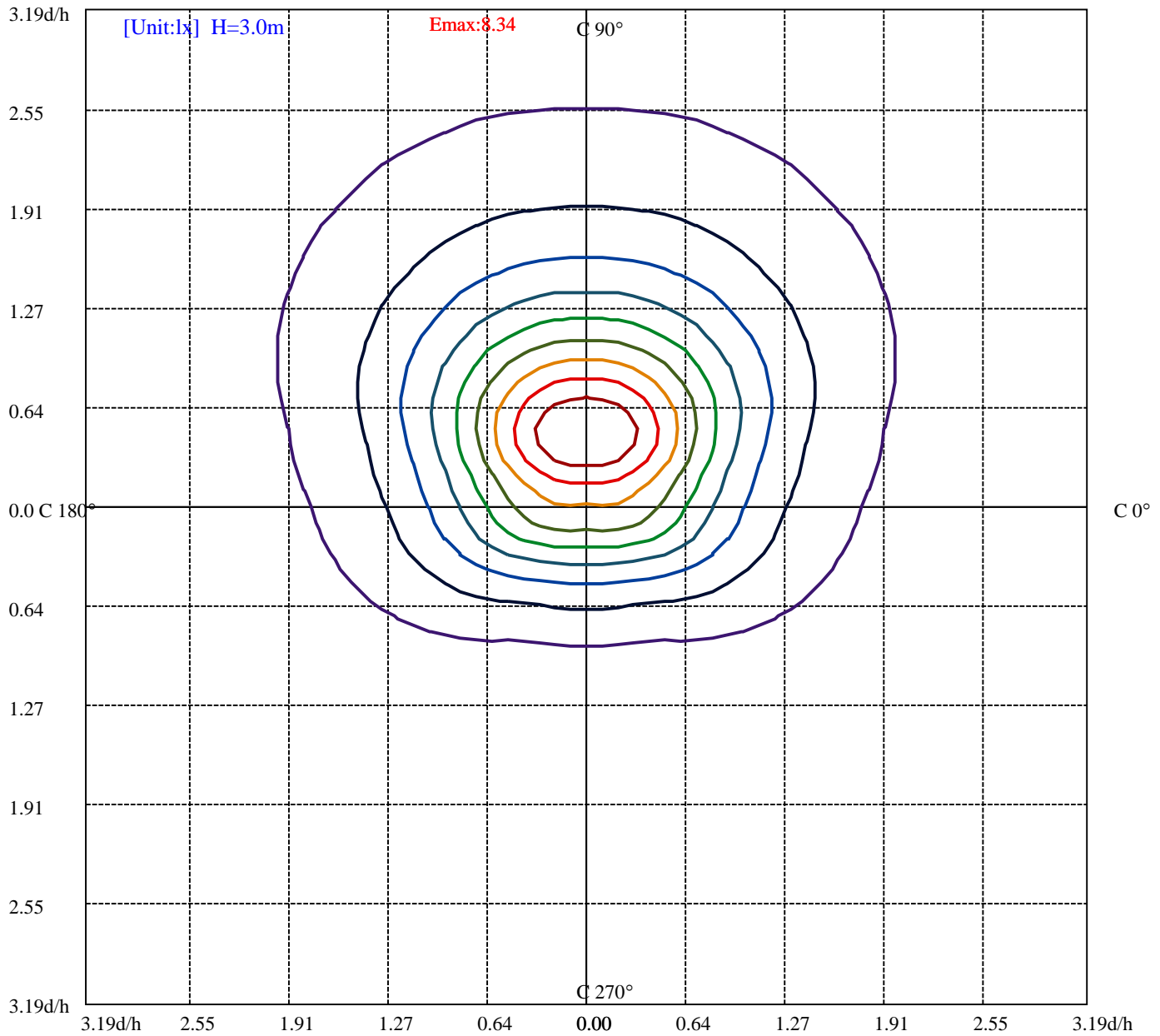
C75(Max): ———
 C0/C180: ———
 C90/C270: ———

Field angle(10% I_{max}):C0/180Left:177.1 Right:177.1
 :C90/270Left:44.4 Right:179.1

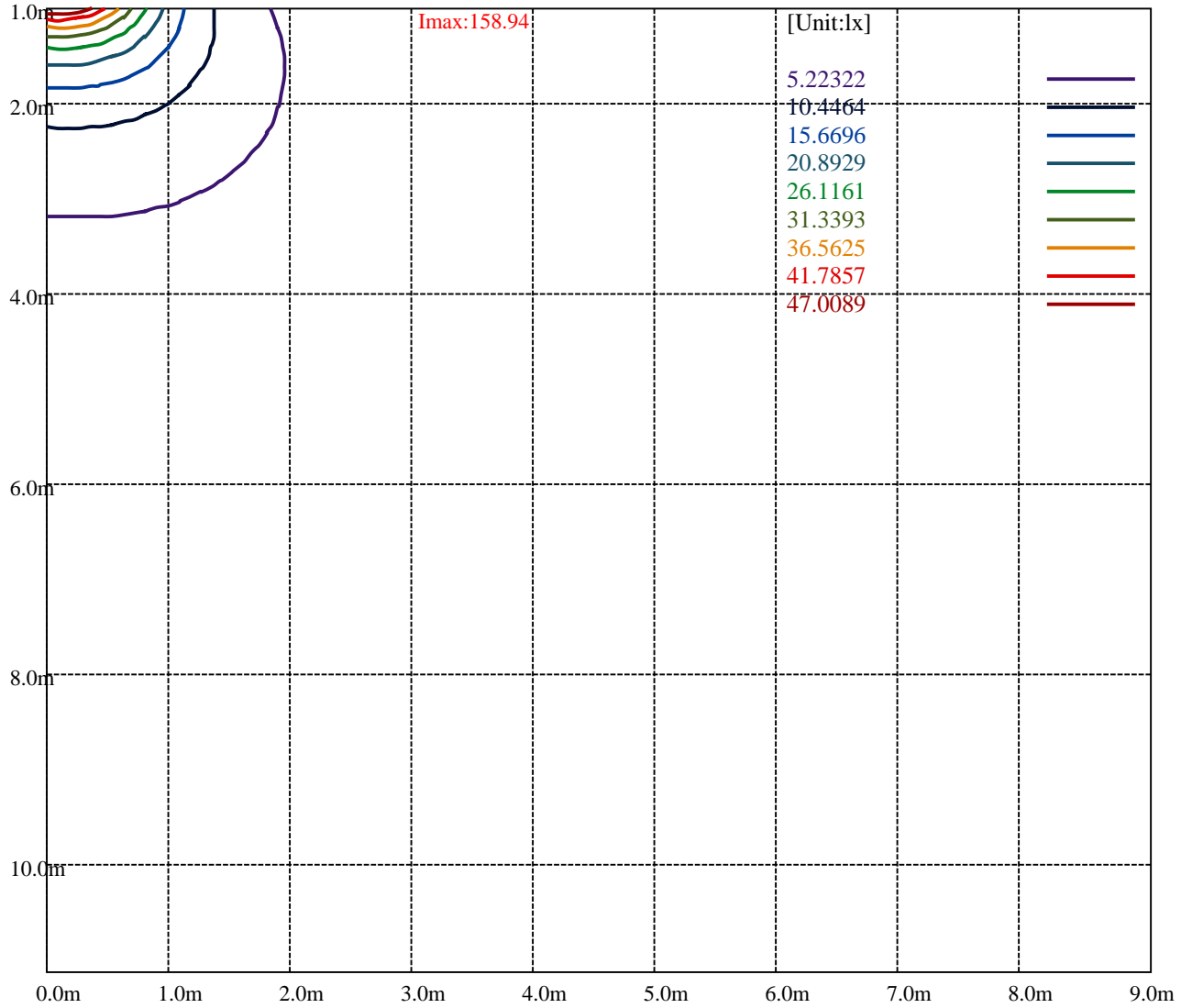
Beam Angle(50% I_{max}):C0/180Left:166.0 Right:166.0
 :C90/270Left:15.9 Right:165.7



Max , Ave Beam angle of C75 plane 212.15



| | |
|---------------------|---|
| (10%Emax) 0.8339511 | — |
| (20%Emax) 1.6679 | — |
| (30%Emax) 2.501856 | — |
| (40%Emax) 3.3358 | — |
| (50%Emax) 4.169756 | — |
| (60%Emax) 5.003711 | — |
| (70%Emax) 5.837656 | — |
| (80%Emax) 6.671611 | — |
| (90%Emax) 7.505567 | — |



Luminance Limiting Curve(no luminous side)

Luminance Table

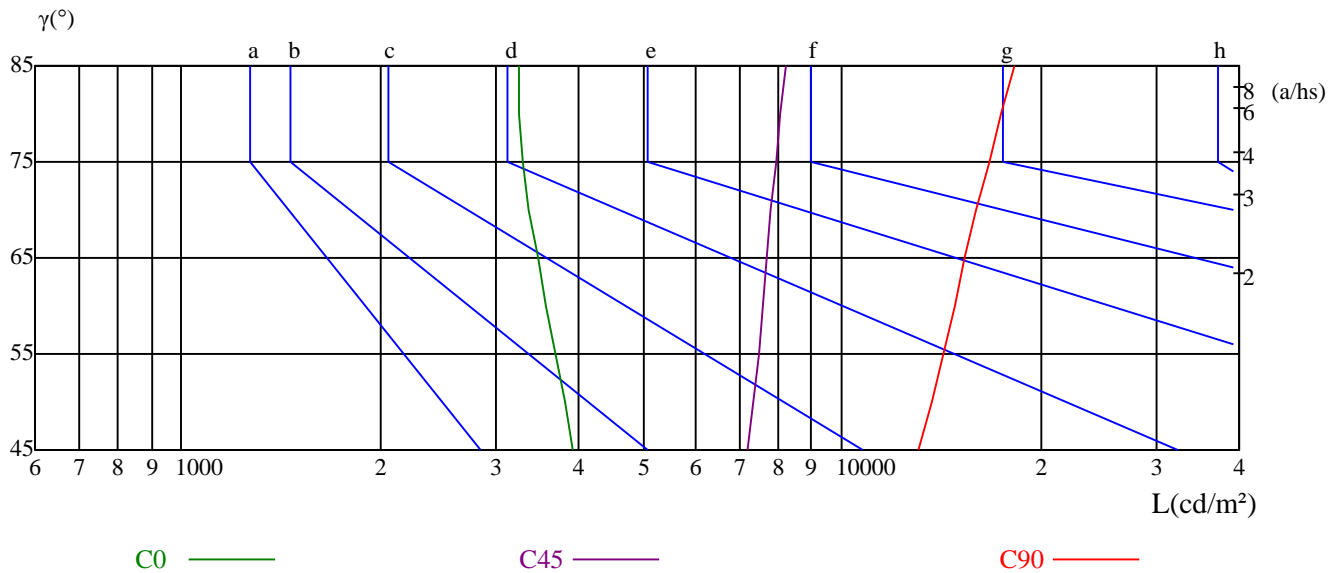
| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C0 | 3924 | 3803 | 3680 | 3563 | 3458 | 3358 | 3286 | 3248 | 3250 |
| C45 | 7194 | 7356 | 7499 | 7615 | 7718 | 7827 | 7949 | 8082 | 8216 |
| C90 | 13062 | 13661 | 14225 | 14799 | 15388 | 16022 | 16697 | 17387 | 18321 |

| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 18910 | 24426 | 24874 | 28834 | 39861 | 40687 | 80638 | 115061 | 119678 |

Glare Table

| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| | | a | b | c | d | e | f | g | h |
| 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 |
| | | a | b | c | d | e | f | g | h |

Luminance Limiting Curve



Utilization factor table for indoor luminaire

| 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 RHOFC=20 CU | | | | | | | | | | | | | | | |
| 0 | 1.07 | 1.07 | 1.07 | 0.99 | 0.99 | 0.99 | 0.84 | 0.84 | 0.84 | 0.70 | 0.70 | 0.70 | 0.57 | 0.57 | 0.57 | 0.51 |
| 1 | 0.87 | 0.82 | 0.77 | 0.80 | 0.75 | 0.71 | 0.67 | 0.63 | 0.60 | 0.55 | 0.52 | 0.49 | 0.44 | 0.41 | 0.39 | 0.34 |
| 2 | 0.74 | 0.66 | 0.59 | 0.68 | 0.61 | 0.55 | 0.56 | 0.51 | 0.46 | 0.46 | 0.41 | 0.38 | 0.36 | 0.33 | 0.30 | 0.25 |
| 3 | 0.63 | 0.54 | 0.47 | 0.58 | 0.50 | 0.44 | 0.48 | 0.42 | 0.37 | 0.39 | 0.34 | 0.30 | 0.30 | 0.27 | 0.24 | 0.19 |
| 4 | 0.55 | 0.46 | 0.39 | 0.51 | 0.42 | 0.36 | 0.42 | 0.35 | 0.30 | 0.34 | 0.29 | 0.25 | 0.26 | 0.22 | 0.19 | 0.15 |
| 5 | 0.49 | 0.39 | 0.32 | 0.45 | 0.36 | 0.30 | 0.37 | 0.30 | 0.25 | 0.30 | 0.25 | 0.21 | 0.23 | 0.19 | 0.16 | 0.13 |
| 6 | 0.43 | 0.34 | 0.28 | 0.40 | 0.31 | 0.25 | 0.33 | 0.26 | 0.21 | 0.27 | 0.21 | 0.17 | 0.21 | 0.17 | 0.14 | 0.10 |
| 7 | 0.39 | 0.30 | 0.24 | 0.36 | 0.28 | 0.22 | 0.30 | 0.23 | 0.18 | 0.24 | 0.19 | 0.15 | 0.19 | 0.15 | 0.12 | 0.09 |
| 8 | 0.35 | 0.26 | 0.21 | 0.32 | 0.24 | 0.19 | 0.27 | 0.21 | 0.16 | 0.22 | 0.17 | 0.13 | 0.17 | 0.13 | 0.10 | 0.08 |
| 9 | 0.32 | 0.24 | 0.18 | 0.29 | 0.22 | 0.17 | 0.24 | 0.18 | 0.14 | 0.20 | 0.15 | 0.12 | 0.16 | 0.12 | 0.09 | 0.07 |
| 10 | 0.29 | 0.21 | 0.16 | 0.27 | 0.20 | 0.15 | 0.22 | 0.17 | 0.12 | 0.18 | 0.14 | 0.10 | 0.14 | 0.11 | 0.08 | 0.06 |

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 | 51.83 | 52.18 | 53.59 | 55.27 | 57.12 | 58.97 | 60.64 | 61.88 | 62.85 |
| 15.0 | 51.83 | 53.25 | 55.64 | 58.30 | 61.40 | 64.68 | 67.95 | 70.88 | 73.45 |
| 30.0 | 51.83 | 54.06 | 57.73 | 62.11 | 67.73 | 74.17 | 81.05 | 87.30 | 93.02 |
| 45.0 | 51.83 | 54.90 | 59.96 | 66.91 | 75.67 | 85.51 | 95.08 | 104.38 | 112.42 |
| 60.0 | 51.83 | 55.39 | 61.96 | 71.54 | 82.76 | 94.81 | 106.12 | 116.34 | 125.28 |
| 75.0 | 51.83 | 55.77 | 63.02 | 73.94 | 86.60 | 99.62 | 111.82 | 122.28 | 131.36 |
| 90.0 | 51.83 | 55.97 | 63.80 | 74.94 | 88.47 | 101.26 | 112.86 | 123.08 | 131.64 |
| 105.0 | 51.83 | 56.16 | 63.54 | 74.79 | 87.52 | 100.52 | 112.33 | 123.02 | 131.88 |
| 120.0 | 51.83 | 55.98 | 62.71 | 72.21 | 84.11 | 96.00 | 107.72 | 118.23 | 127.82 |
| 135.0 | 51.83 | 55.31 | 60.73 | 68.07 | 77.61 | 87.70 | 97.69 | 107.33 | 115.58 |
| 150.0 | 51.83 | 54.85 | 58.41 | 63.44 | 69.74 | 76.87 | 84.10 | 91.04 | 97.35 |
| 165.0 | 51.83 | 53.73 | 56.45 | 59.35 | 62.88 | 66.51 | 70.31 | 73.48 | 76.47 |
| 180.0 | 51.83 | 53.42 | 55.09 | 57.12 | 59.23 | 61.35 | 62.93 | 64.08 | 65.05 |
| 195.0 | 51.83 | 52.36 | 53.16 | 54.22 | 55.20 | 56.08 | 56.70 | 56.97 | 56.70 |
| 210.0 | 51.83 | 51.65 | 51.20 | 50.40 | 49.77 | 49.06 | 47.99 | 46.74 | 45.13 |
| 225.0 | 51.83 | 51.02 | 49.03 | 46.77 | 44.33 | 41.81 | 39.10 | 36.48 | 33.59 |
| 240.0 | 51.83 | 50.19 | 47.36 | 43.89 | 40.24 | 36.32 | 32.30 | 28.20 | 24.27 |
| 255.0 | 51.83 | 49.26 | 45.87 | 41.92 | 37.79 | 33.48 | 29.08 | 24.68 | 20.27 |
| 270.0 | 51.83 | 48.88 | 44.92 | 40.87 | 36.64 | 32.31 | 27.99 | 23.66 | 19.24 |
| 285.0 | 51.83 | 49.15 | 45.47 | 41.50 | 37.44 | 33.20 | 28.77 | 24.44 | 20.10 |
| 300.0 | 51.83 | 49.80 | 47.03 | 43.44 | 39.75 | 35.69 | 31.72 | 27.76 | 23.70 |
| 315.0 | 51.83 | 50.64 | 48.80 | 46.32 | 43.66 | 41.10 | 38.44 | 35.59 | 32.84 |
| 330.0 | 51.83 | 51.65 | 51.01 | 50.09 | 49.18 | 48.17 | 47.72 | 45.80 | 44.24 |
| 345.0 | 51.83 | 52.19 | 52.83 | 53.55 | 54.37 | 55.00 | 55.54 | 55.63 | 55.36 |
| 360.0 | 51.83 | 52.18 | 53.59 | 55.27 | 57.12 | 58.97 | 60.64 | 61.88 | 62.85 |
| C/ γ (°) | 45.0 | 50.0 | 55.0 | 60.0 | 65.0 | 70.0 | 75.0 | 80.0 | 85.0 |
| 0.0 | 63.20 | 63.11 | 62.41 | 60.91 | 59.32 | 57.29 | 55.27 | 53.33 | 51.83 |
| 15.0 | 75.57 | 77.43 | 78.32 | 78.23 | 77.96 | 77.17 | 76.02 | 74.60 | 73.18 |
| 30.0 | 98.39 | 103.12 | 106.70 | 109.20 | 110.72 | 111.61 | 111.70 | 111.16 | 110.09 |
| 45.0 | 119.64 | 125.51 | 130.75 | 134.36 | 136.80 | 138.15 | 138.69 | 138.51 | 136.98 |
| 60.0 | 133.31 | 139.88 | 144.99 | 149.28 | 151.93 | 153.57 | 154.12 | 152.93 | 151.11 |
| 75.0 | 138.97 | 145.40 | 150.35 | 154.39 | 156.86 | 158.15 | 158.15 | 156.50 | 154.66 |
| 90.0 | 138.55 | 144.35 | 148.58 | 151.62 | 153.37 | 154.01 | 153.37 | 151.07 | 148.86 |
| 105.0 | 139.53 | 145.99 | 150.97 | 154.84 | 157.42 | 158.62 | 158.71 | 156.87 | 155.03 |
| 120.0 | 135.47 | 142.30 | 147.56 | 151.71 | 154.47 | 156.32 | 156.69 | 155.49 | 153.92 |
| 135.0 | 123.01 | 129.71 | 134.66 | 138.42 | 140.90 | 142.55 | 143.29 | 142.83 | 141.45 |
| 150.0 | 103.02 | 107.95 | 111.70 | 114.35 | 116.27 | 117.55 | 117.83 | 117.55 | 116.64 |
| 165.0 | 79.10 | 81.01 | 82.09 | 82.64 | 82.73 | 82.18 | 81.46 | 80.28 | 79.10 |
| 180.0 | 65.14 | 64.61 | 63.46 | 62.23 | 60.56 | 58.53 | 56.68 | 55.09 | 53.59 |
| 195.0 | 55.99 | 54.58 | 52.80 | 50.68 | 48.46 | 46.42 | 44.65 | 43.77 | 42.97 |
| 210.0 | 43.52 | 41.28 | 38.60 | 36.01 | 33.51 | 31.54 | 30.56 | 30.29 | 30.11 |
| 225.0 | 30.70 | 27.54 | 24.56 | 21.58 | 19.05 | 17.34 | 17.16 | 17.43 | 17.34 |
| 240.0 | 20.07 | 16.15 | 12.41 | 8.94 | 6.11 | 5.20 | 5.29 | 5.47 | 5.47 |
| 255.0 | 15.96 | 11.74 | 7.71 | 4.22 | 1.56 | 1.19 | 1.38 | 1.47 | 1.56 |
| 270.0 | 15.01 | 11.05 | 7.27 | 3.96 | 1.47 | 1.29 | 1.38 | 1.47 | 1.56 |
| 285.0 | 15.86 | 11.62 | 7.75 | 4.24 | 1.57 | 1.29 | 1.29 | 1.48 | 1.66 |
| 300.0 | 19.74 | 15.77 | 11.99 | 10.05 | 5.72 | 4.89 | 4.98 | 5.16 | 5.35 |
| 315.0 | 31.37 | 26.97 | 24.03 | 21.01 | 18.62 | 16.88 | 16.79 | 17.06 | 17.15 |
| 330.0 | 42.51 | 40.49 | 38.03 | 35.56 | 33.27 | 31.35 | 30.26 | 30.07 | 29.98 |
| 345.0 | 54.64 | 53.55 | 51.83 | 49.74 | 47.66 | 45.49 | 43.86 | 42.95 | 42.22 |
| 360.0 | 63.20 | 63.11 | 62.41 | 60.91 | 59.32 | 57.29 | 55.27 | 53.33 | 51.83 |

Intensity data(cd)

| | | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| C/γ(°) | 90.0 | 95.0 | 100.0 | 105.0 | 110.0 | 115.0 | 120.0 | 125.0 | 130.0 |
| 0.0 | 50.42 | 50.77 | 52.18 | 53.50 | 55.18 | 56.94 | 58.44 | 59.41 | 59.94 |
| 15.0 | 71.85 | 72.03 | 73.27 | 74.42 | 75.40 | 76.02 | 76.37 | 76.02 | 75.22 |
| 30.0 | 109.02 | 109.20 | 110.00 | 110.90 | 110.99 | 110.00 | 108.39 | 106.25 | 103.12 |
| 45.0 | 135.89 | 136.34 | 137.43 | 138.60 | 139.23 | 138.24 | 135.98 | 132.55 | 128.13 |
| 60.0 | 150.01 | 150.74 | 152.02 | 153.30 | 154.21 | 153.84 | 151.75 | 148.46 | 143.53 |
| 75.0 | 153.38 | 154.39 | 155.58 | 157.32 | 158.61 | 158.51 | 156.77 | 153.93 | 149.71 |
| 90.0 | 147.57 | 148.58 | 150.05 | 152.36 | 154.29 | 154.93 | 153.83 | 151.53 | 148.31 |
| 105.0 | 154.01 | 154.84 | 156.32 | 157.98 | 159.27 | 159.08 | 157.42 | 154.47 | 150.41 |
| 120.0 | 152.72 | 153.64 | 155.12 | 156.50 | 157.42 | 156.69 | 154.47 | 151.15 | 146.45 |
| 135.0 | 140.53 | 141.27 | 142.55 | 143.74 | 144.20 | 143.19 | 140.63 | 137.32 | 132.83 |
| 150.0 | 115.63 | 116.36 | 117.46 | 118.37 | 118.19 | 117.19 | 115.36 | 112.89 | 109.42 |
| 165.0 | 77.92 | 78.74 | 80.01 | 81.19 | 82.00 | 82.36 | 82.18 | 81.55 | 80.46 |
| 180.0 | 53.06 | 54.47 | 55.71 | 57.21 | 58.62 | 59.94 | 60.82 | 61.44 | 61.44 |
| 195.0 | 42.53 | 43.41 | 43.94 | 44.92 | 46.16 | 47.40 | 48.02 | 48.37 | 48.46 |
| 210.0 | 29.94 | 30.11 | 30.11 | 30.56 | 31.37 | 32.53 | 33.60 | 34.67 | 34.94 |
| 225.0 | 17.25 | 17.16 | 16.98 | 16.70 | 16.98 | 17.70 | 18.60 | 19.50 | 20.50 |
| 240.0 | 5.47 | 5.38 | 5.20 | 5.02 | 4.84 | 5.47 | 5.93 | 7.76 | 9.12 |
| 255.0 | 1.47 | 1.47 | 1.38 | 1.38 | 1.19 | 1.65 | 2.66 | 3.85 | 5.14 |
| 270.0 | 1.66 | 1.66 | 1.47 | 1.29 | 1.20 | 1.47 | 1.93 | 2.76 | 4.60 |
| 285.0 | 1.57 | 1.57 | 1.57 | 1.38 | 1.38 | 1.84 | 2.67 | 3.14 | 4.06 |
| 300.0 | 5.35 | 5.26 | 5.16 | 4.98 | 4.98 | 5.72 | 6.46 | 7.47 | 8.30 |
| 315.0 | 17.06 | 17.06 | 16.97 | 16.70 | 17.15 | 17.80 | 18.62 | 19.54 | 20.55 |
| 330.0 | 29.80 | 29.98 | 30.07 | 30.44 | 31.26 | 32.27 | 33.36 | 34.55 | 35.56 |
| 345.0 | 41.59 | 42.31 | 43.04 | 44.13 | 45.30 | 46.66 | 47.84 | 48.75 | 49.29 |
| 360.0 | 50.42 | 50.77 | 52.18 | 53.50 | 55.18 | 56.94 | 58.44 | 59.41 | 59.94 |
| C/γ(°) | 135.0 | 140.0 | 145.0 | 150.0 | 155.0 | 160.0 | 165.0 | 170.0 | 175.0 |
| 0.0 | 60.11 | 59.85 | 58.62 | 56.68 | 54.21 | 49.10 | 38.52 | 25.65 | 13.49 |
| 15.0 | 74.07 | 72.29 | 69.64 | 66.62 | 63.17 | 58.38 | 49.26 | 34.55 | 17.90 |
| 30.0 | 99.10 | 94.10 | 88.29 | 81.76 | 74.97 | 67.91 | 58.98 | 43.25 | 24.48 |
| 45.0 | 122.35 | 115.49 | 107.45 | 98.33 | 88.58 | 78.47 | 68.26 | 52.28 | 29.26 |
| 60.0 | 137.60 | 130.30 | 121.18 | 110.96 | 99.28 | 87.14 | 74.82 | 59.22 | 33.85 |
| 75.0 | 143.65 | 136.41 | 127.60 | 117.33 | 105.58 | 92.10 | 78.61 | 63.48 | 35.96 |
| 90.0 | 143.15 | 136.80 | 128.70 | 118.57 | 106.88 | 93.53 | 79.54 | 65.45 | 36.73 |
| 105.0 | 144.51 | 137.41 | 128.65 | 118.51 | 106.24 | 93.14 | 79.50 | 64.65 | 35.87 |
| 120.0 | 140.45 | 132.80 | 123.85 | 113.43 | 101.54 | 88.99 | 76.08 | 60.87 | 34.40 |
| 135.0 | 126.77 | 119.71 | 111.55 | 102.01 | 91.82 | 80.72 | 70.08 | 53.76 | 30.46 |
| 150.0 | 104.85 | 99.45 | 93.05 | 86.38 | 78.61 | 71.02 | 61.88 | 45.61 | 25.69 |
| 165.0 | 78.65 | 76.20 | 73.21 | 69.59 | 65.69 | 60.35 | 50.56 | 35.52 | 20.30 |
| 180.0 | 60.91 | 59.50 | 57.29 | 54.74 | 51.12 | 42.49 | 30.50 | 17.98 | 7.49 |
| 195.0 | 48.11 | 47.13 | 45.27 | 43.41 | 39.25 | 31.81 | 26.58 | 13.02 | 5.32 |
| 210.0 | 34.58 | 34.14 | 33.51 | 32.88 | 28.33 | 22.52 | 15.01 | 8.94 | 2.14 |
| 225.0 | 20.77 | 20.86 | 20.41 | 20.68 | 19.23 | 14.99 | 9.48 | 5.42 | 0.54 |
| 240.0 | 10.58 | 11.59 | 12.04 | 11.86 | 11.68 | 8.49 | 4.56 | 2.19 | 0.36 |
| 255.0 | 6.70 | 7.98 | 8.62 | 9.17 | 7.25 | 3.21 | 0.73 | 0.46 | 0.37 |
| 270.0 | 6.44 | 7.36 | 7.64 | 7.73 | 5.25 | 0.92 | 0.28 | 0.37 | 0.37 |
| 285.0 | 5.81 | 5.99 | 6.55 | 8.21 | 7.84 | 3.97 | 1.48 | 0.74 | 1.29 |
| 300.0 | 9.04 | 10.79 | 12.08 | 13.10 | 13.19 | 10.14 | 6.09 | 3.32 | 2.49 |
| 315.0 | 21.74 | 22.66 | 23.30 | 23.39 | 21.92 | 17.52 | 11.37 | 6.97 | 4.13 |
| 330.0 | 36.20 | 36.29 | 35.56 | 34.28 | 31.17 | 25.87 | 17.92 | 10.88 | 5.85 |
| 345.0 | 49.56 | 48.84 | 47.30 | 45.67 | 41.95 | 34.70 | 25.19 | 15.31 | 7.79 |
| 360.0 | 60.11 | 59.85 | 58.62 | 56.68 | 54.21 | 49.10 | 38.52 | 25.65 | 13.49 |

Intensity data(cd)

| | |
|---------------|--------------|
| C/γ(°) | 180.0 |
| 0.0 | 1.50 |
| 15.0 | 4.61 |
| 30.0 | 5.63 |
| 45.0 | 6.14 |
| 60.0 | 6.84 |
| 75.0 | 9.63 |
| 90.0 | 10.95 |
| 105.0 | 10.88 |
| 120.0 | 10.79 |
| 135.0 | 9.08 |
| 150.0 | 7.68 |
| 165.0 | 6.34 |
| 180.0 | 0.00 |
| 195.0 | 0.00 |
| 210.0 | 0.00 |
| 225.0 | 0.00 |
| 240.0 | 0.00 |
| 255.0 | 0.00 |
| 270.0 | 0.00 |
| 285.0 | 0.00 |
| 300.0 | 0.00 |
| 315.0 | 0.00 |
| 330.0 | 0.00 |
| 345.0 | 0.00 |
| 360.0 | 1.50 |