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Client:

LumCAT: WAL-191

Luminaire: LED 灯具

Report No:

Ballast type:

Test No:

Voltage(V): 120.000

LampCAT:

Current(A): 0.396

Lamp flux(lm): 3467.4

Power (W): 47.430

Number of Lamps: 1

PF: 0.998

Length(mm): 870

Width(mm): 80

Phm Type: C

Height(mm): 50

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### Photometric Results

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Lumens(lm): 3467.42, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 73.11

Central intensity(cd): 991.270, Maximum intensity(cd): 994.319

Angle of maximum intensity: C=0.0  $\gamma$ =10.0

Beam Angle(50%Imax): [C0/180]Total=129.6

[C90/270]Total=95.8

Field angle(10%Imax): [C0/180]Total=209.4

[C90/270]Total=150.6

Maximum s/h(1/2): C0\_180=1.41 C90\_270=1.17

Maximum s/h(1/4): C0\_180=1.49 C90\_270=1.27

Up flux rate of lamp(%): 9.45%

Down flux rate of lamp(%): 90.55%

Up flux rate of LUM(%): 9.45%

Down flux rate of LUM(%): 90.55%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 66.494%

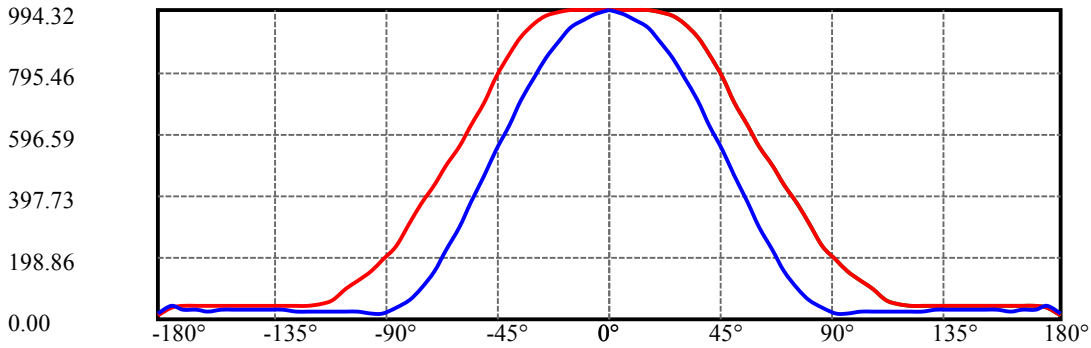
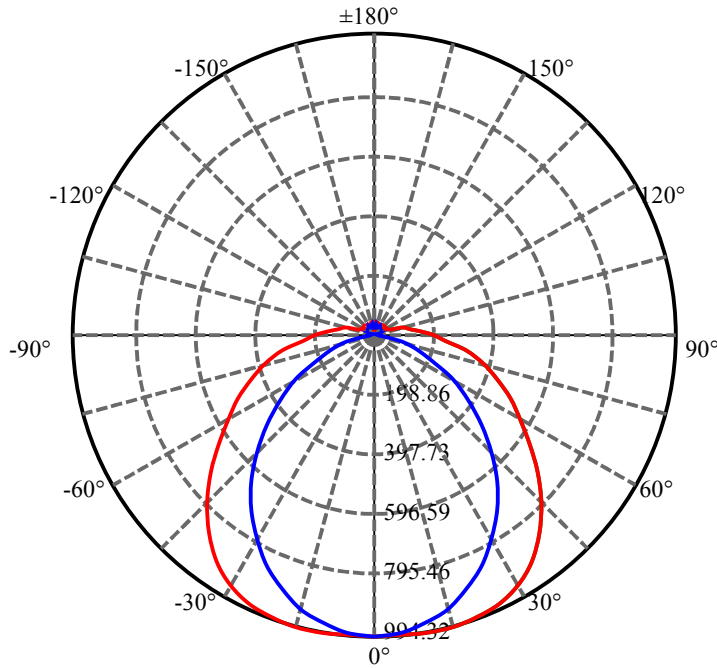
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0                | 991.270       | 0.000       | 0         | 0.00%       | 0.00%      |
| 5.0                | 988.526       | 23.668      | 23.668    | 0.68%       | 0.68%      |
| 10.0               | 979.886       | 70.416      | 94.084    | 2.03%       | 2.71%      |
| 15.0               | 964.363       | 115.332     | 209.416   | 3.33%       | 6.04%      |
| 20.0               | 941.631       | 157.081     | 366.496   | 4.53%       | 10.57%     |
| 25.0               | 911.113       | 194.319     | 560.815   | 5.60%       | 16.17%     |
| 30.0               | 871.353       | 225.573     | 786.388   | 6.51%       | 22.68%     |
| 35.0               | 819.261       | 248.955     | 1035.343  | 7.18%       | 29.86%     |
| 40.0               | 757.456       | 263.063     | 1298.406  | 7.59%       | 37.45%     |
| 45.0               | 688.223       | 267.679     | 1566.085  | 7.72%       | 45.17%     |
| 50.0               | 609.895       | 262.304     | 1828.389  | 7.56%       | 52.73%     |
| 55.0               | 532.326       | 248.357     | 2076.746  | 7.16%       | 59.89%     |
| 60.0               | 457.850       | 228.876     | 2305.622  | 6.60%       | 66.49%     |
| 65.0               | 385.267       | 204.963     | 2510.586  | 5.91%       | 72.41%     |
| 70.0               | 319.603       | 178.478     | 2689.063  | 5.15%       | 77.55%     |
| 75.0               | 260.876       | 151.728     | 2840.791  | 4.38%       | 81.93%     |
| 80.0               | 206.450       | 125.044     | 2965.835  | 3.61%       | 85.53%     |
| 85.0               | 156.315       | 98.572      | 3064.407  | 2.84%       | 88.38%     |
| 90.0               | 118.984       | 75.379      | 3139.786  | 2.17%       | 90.55%     |
| 95.0               | 96.355        | 58.962      | 3198.747  | 1.70%       | 92.25%     |
| 100.0              | 79.704        | 47.840      | 3246.587  | 1.38%       | 93.63%     |
| 105.0              | 57.684        | 36.761      | 3283.348  | 1.06%       | 94.69%     |
| 110.0              | 43.172        | 26.362      | 3309.71   | 0.76%       | 95.45%     |
| 115.0              | 38.601        | 20.705      | 3330.416  | 0.60%       | 96.05%     |
| 120.0              | 37.690        | 18.546      | 3348.962  | 0.53%       | 96.58%     |
| 125.0              | 37.842        | 17.459      | 3366.421  | 0.50%       | 97.09%     |
| 130.0              | 38.065        | 16.505      | 3382.926  | 0.48%       | 97.56%     |
| 135.0              | 38.068        | 15.384      | 3398.31   | 0.44%       | 98.01%     |
| 140.0              | 37.889        | 14.064      | 3412.374  | 0.41%       | 98.41%     |
| 145.0              | 38.042        | 12.669      | 3425.042  | 0.37%       | 98.78%     |
| 150.0              | 38.118        | 11.215      | 3436.258  | 0.32%       | 99.10%     |
| 155.0              | 37.785        | 9.606       | 3445.863  | 0.28%       | 99.38%     |
| 160.0              | 36.782        | 7.821       | 3453.684  | 0.23%       | 99.60%     |
| 165.0              | 36.191        | 6.014       | 3459.698  | 0.17%       | 99.78%     |
| 170.0              | 36.756        | 4.327       | 3464.025  | 0.12%       | 99.90%     |
| 175.0              | 38.584        | 2.695       | 3466.72   | 0.08%       | 99.98%     |
| 180.0              | 19.671        | 0.696       | 3467.417  | 0.02%       | 100.00%    |

## ZONAL LUMEN SUMMARY

| Zone    | Lumens  | %Lamp   | %Fixt   |
|---------|---------|---------|---------|
| 0-30    | 786.39  | 22.68%  | 22.68%  |
| 0-40    | 1298.41 | 37.45%  | 37.45%  |
| 0-60    | 2305.62 | 66.49%  | 66.49%  |
| 0-90    | 3139.79 | 90.55%  | 90.55%  |
| 0-120   | 3348.96 | 96.58%  | 96.58%  |
| 0-180   | 3467.42 | 100.00% | 100.00% |
| 60-90   | 834.16  | 24.06%  | 24.06%  |
| 90-120  | 209.18  | 6.03%   | 6.03%   |
| 90-130  | 243.14  | 7.01%   | 7.01%   |
| 90-150  | 296.47  | 8.55%   | 8.55%   |
| 90-180  | 326.93  | 9.43%   | 9.43%   |
| 0-72.80 | 2773.93 | 80.00%  | 80.00%  |

## ZONAL LUMEN SUMMARY

|         |        |
|---------|--------|
| 0-10    | 94.08  |
| 10-20   | 272.41 |
| 20-30   | 419.89 |
| 30-40   | 512.02 |
| 40-50   | 529.98 |
| 50-60   | 477.23 |
| 60-70   | 383.44 |
| 70-80   | 276.77 |
| 80-90   | 173.95 |
| 90-100  | 106.80 |
| 100-110 | 63.12  |
| 110-120 | 39.25  |
| 120-130 | 33.96  |
| 130-140 | 29.45  |
| 140-150 | 23.88  |
| 150-160 | 17.43  |
| 160-170 | 10.34  |
| 170-180 | 2.70   |



C0(Max): ———

C0/C180: ———

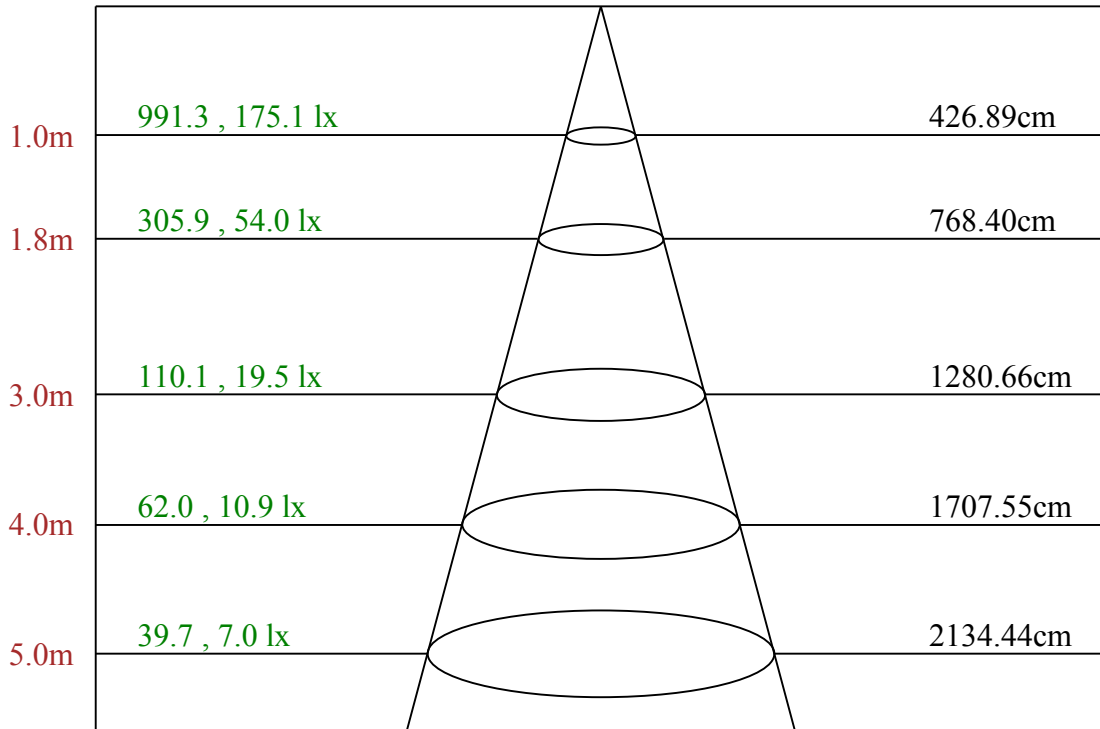
C90/C270: ———

Field angle(10%Imax):C0/180Left:119.7 Right:89.7

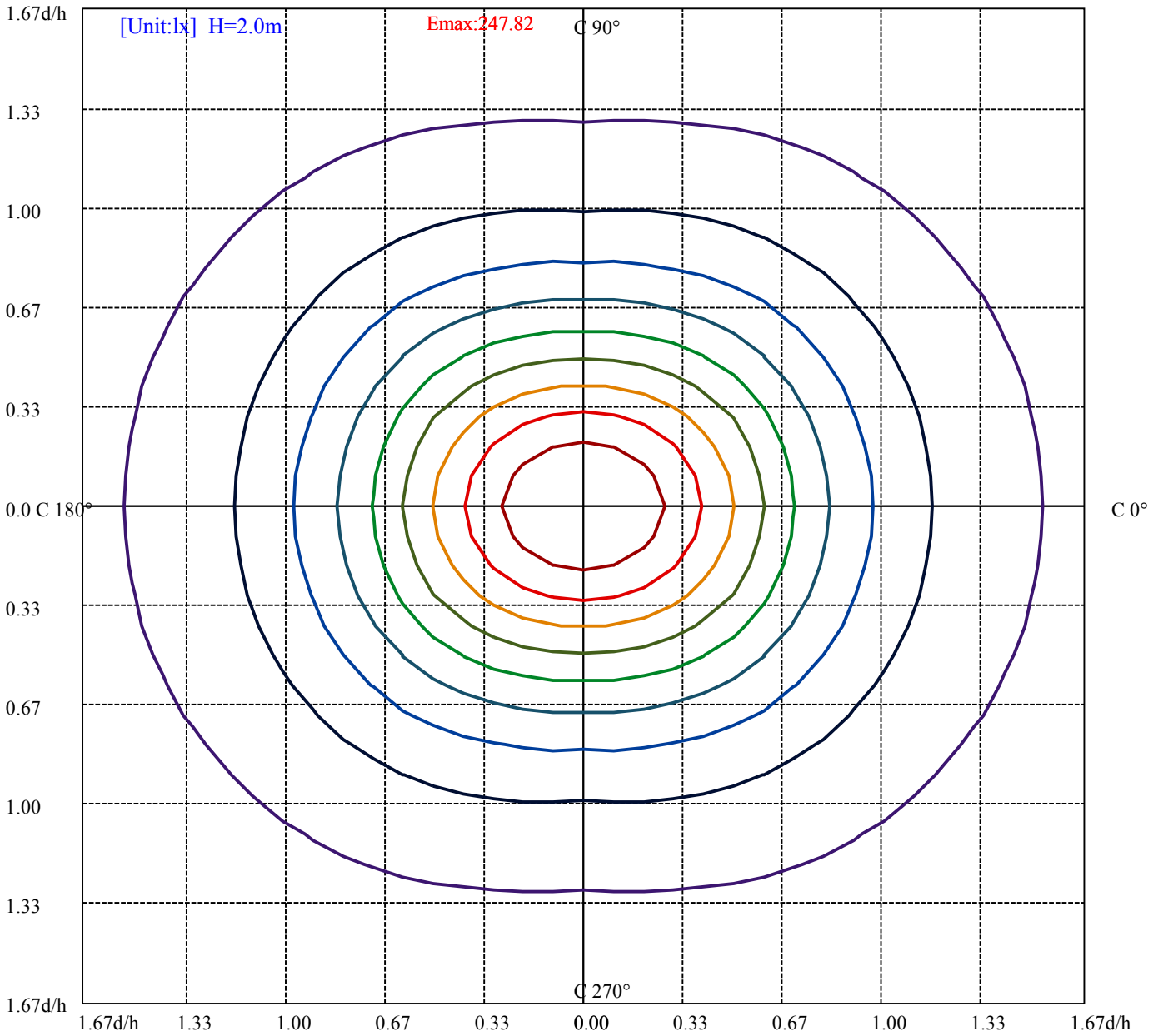
:C90/270Left:75.3 Right:75.3

Beam Angle(50%Imax):C0/180Left:79.8 Right:49.8

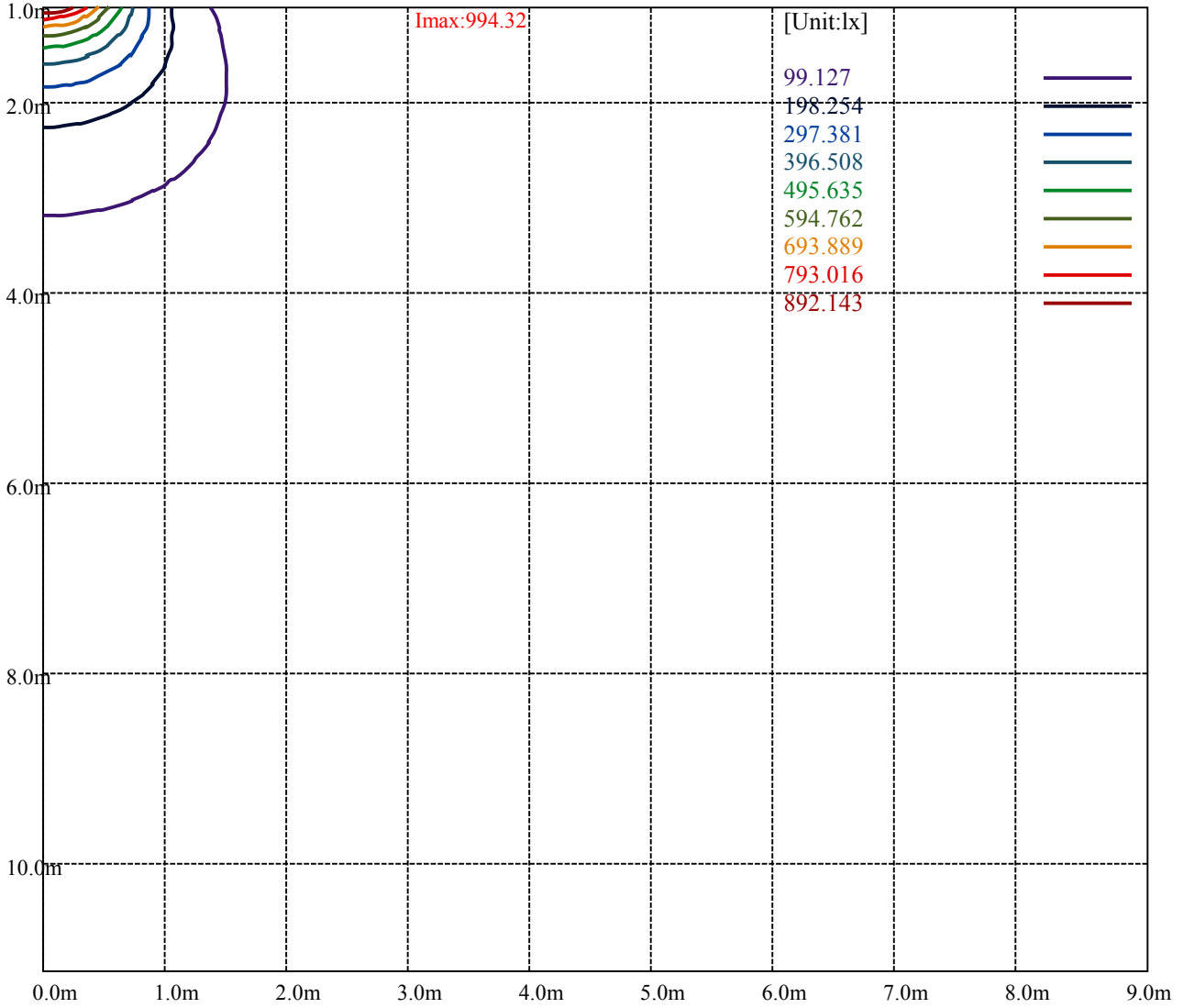
:C90/270Left:47.9 Right:47.9



Max , Ave      Beam angle of C0 plane 129.79



|                    |   |
|--------------------|---|
| (10%Emax) 24.78175 | — |
| (20%Emax) 49.5635  | — |
| (30%Emax) 74.34525 | — |
| (40%Emax) 99.127   | — |
| (50%Emax) 123.9088 | — |
| (60%Emax) 148.6905 | — |
| (70%Emax) 173.4722 | — |
| (80%Emax) 198.254  | — |
| (90%Emax) 223.0358 | — |



Luminance Table

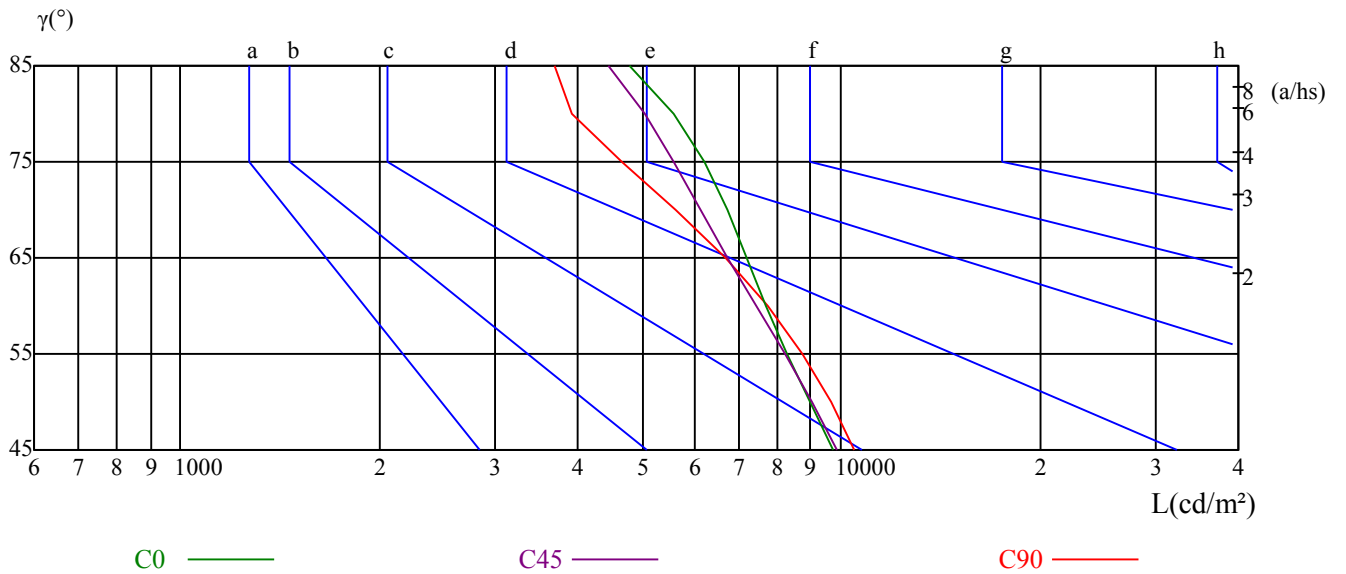
| $\gamma$ | 45    | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   |
|----------|-------|------|------|------|------|------|------|------|------|
| C0       | 9726  | 8955 | 8272 | 7698 | 7187 | 6720 | 6196 | 5582 | 4787 |
| C45      | 9849  | 9020 | 8240 | 7436 | 6741 | 6132 | 5579 | 5051 | 4460 |
| C90      | 10449 | 9650 | 8758 | 7776 | 6684 | 5632 | 4649 | 3925 | 3684 |

| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 16821      | 7508       | 13718   | 20648      | 5646       | 15627   | 38987      | 6104       | 29061   |

Glare Table

| 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 |
|       |         | a                              | b    | c    | d     | e     | f     | g     | h     |

Luminance Limiting Curve





| 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     | 1.17                                    | 1.17 | 1.17 | 1.13 | 1.13 | 1.13 | 1.06 | 1.06 | 1.06 | 0.99 | 0.99 | 0.99 | 0.93 | 0.93 | 0.93 | 0.91 |
| 1     | 1.00                                    | 0.95 | 0.90 | 0.96 | 0.92 | 0.88 | 0.90 | 0.87 | 0.84 | 0.85 | 0.82 | 0.79 | 0.80 | 0.77 | 0.75 | 0.73 |
| 2     | 0.86                                    | 0.79 | 0.73 | 0.83 | 0.77 | 0.71 | 0.78 | 0.73 | 0.68 | 0.74 | 0.69 | 0.65 | 0.69 | 0.66 | 0.62 | 0.59 |
| 3     | 0.75                                    | 0.67 | 0.60 | 0.73 | 0.65 | 0.59 | 0.69 | 0.62 | 0.57 | 0.65 | 0.59 | 0.54 | 0.61 | 0.56 | 0.52 | 0.50 |
| 4     | 0.67                                    | 0.57 | 0.51 | 0.65 | 0.56 | 0.50 | 0.61 | 0.54 | 0.48 | 0.57 | 0.51 | 0.46 | 0.54 | 0.49 | 0.45 | 0.42 |
| 5     | 0.59                                    | 0.50 | 0.43 | 0.58 | 0.49 | 0.43 | 0.54 | 0.47 | 0.41 | 0.51 | 0.45 | 0.40 | 0.49 | 0.43 | 0.39 | 0.36 |
| 6     | 0.53                                    | 0.44 | 0.38 | 0.52 | 0.43 | 0.37 | 0.49 | 0.42 | 0.36 | 0.46 | 0.40 | 0.35 | 0.44 | 0.38 | 0.34 | 0.32 |
| 7     | 0.48                                    | 0.39 | 0.33 | 0.47 | 0.39 | 0.33 | 0.45 | 0.37 | 0.32 | 0.42 | 0.36 | 0.31 | 0.40 | 0.34 | 0.30 | 0.28 |
| 8     | 0.44                                    | 0.35 | 0.29 | 0.43 | 0.35 | 0.29 | 0.41 | 0.33 | 0.28 | 0.39 | 0.32 | 0.28 | 0.37 | 0.31 | 0.27 | 0.25 |
| 9     | 0.40                                    | 0.32 | 0.26 | 0.39 | 0.31 | 0.26 | 0.37 | 0.30 | 0.25 | 0.36 | 0.29 | 0.25 | 0.34 | 0.28 | 0.24 | 0.22 |
| 10    | 0.37                                    | 0.29 | 0.24 | 0.36 | 0.29 | 0.24 | 0.35 | 0.28 | 0.23 | 0.33 | 0.27 | 0.23 | 0.32 | 0.26 | 0.22 | 0.20 |

## Intensity data(cd)

|                 |        |         |         |         |         |         |        |        |        |
|-----------------|--------|---------|---------|---------|---------|---------|--------|--------|--------|
| C/ $\gamma$ (°) | 0.0    | 5.0     | 10.0    | 15.0    | 20.0    | 25.0    | 30.0   | 35.0   | 40.0   |
| 0.0             | 991.27 | 999.98  | 1007.82 | 1014.79 | 1017.40 | 1011.30 | 991.27 | 950.33 | 892.84 |
| 15.0            | 991.27 | 1000.03 | 1007.92 | 1012.31 | 1012.31 | 1006.17 | 983.38 | 946.57 | 889.60 |
| 30.0            | 991.27 | 998.32  | 1004.49 | 1004.49 | 998.32  | 986.86  | 963.07 | 925.19 | 872.32 |
| 45.0            | 991.27 | 998.37  | 1000.14 | 993.05  | 978.85  | 958.43  | 929.15 | 888.33 | 837.74 |
| 60.0            | 991.27 | 995.70  | 991.27  | 977.10  | 954.06  | 921.29  | 880.54 | 830.93 | 772.46 |
| 75.0            | 991.27 | 993.94  | 984.14  | 964.53  | 932.44  | 892.32  | 837.05 | 778.22 | 710.47 |
| 90.0            | 991.27 | 990.38  | 977.89  | 954.69  | 918.11  | 869.93  | 811.93 | 744.12 | 670.96 |
| 105.0           | 991.27 | 989.48  | 975.20  | 948.40  | 913.58  | 868.92  | 812.66 | 751.04 | 679.60 |
| 120.0           | 991.27 | 987.71  | 975.24  | 951.19  | 921.80  | 882.61  | 836.30 | 785.53 | 727.64 |
| 135.0           | 991.27 | 984.20  | 973.58  | 957.67  | 935.56  | 906.38  | 871.89 | 830.33 | 780.81 |
| 150.0           | 991.27 | 984.18  | 976.20  | 963.78  | 948.71  | 930.98  | 906.15 | 873.35 | 825.47 |
| 165.0           | 991.27 | 984.22  | 975.41  | 967.48  | 959.55  | 946.33  | 926.07 | 894.35 | 845.88 |
| 180.0           | 991.27 | 984.30  | 980.82  | 973.85  | 963.40  | 945.97  | 914.62 | 866.71 | 806.60 |
| 195.0           | 991.27 | 982.51  | 975.49  | 968.48  | 957.09  | 939.56  | 907.13 | 859.80 | 801.96 |
| 210.0           | 991.27 | 981.58  | 970.12  | 957.79  | 940.16  | 917.26  | 883.77 | 836.19 | 779.80 |
| 225.0           | 991.27 | 980.62  | 963.76  | 941.57  | 914.95  | 881.23  | 842.18 | 795.15 | 735.69 |
| 240.0           | 991.27 | 976.21  | 955.84  | 924.83  | 884.97  | 839.79  | 789.30 | 732.60 | 667.93 |
| 255.0           | 991.27 | 977.90  | 952.94  | 918.17  | 870.93  | 815.66  | 754.15 | 683.73 | 608.85 |
| 270.0           | 991.27 | 978.78  | 953.80  | 917.21  | 867.25  | 807.47  | 739.66 | 665.61 | 582.63 |
| 285.0           | 991.27 | 982.34  | 961.80  | 928.76  | 883.21  | 829.63  | 768.01 | 695.68 | 618.87 |
| 300.0           | 991.27 | 986.82  | 971.68  | 946.74  | 912.89  | 870.14  | 818.49 | 756.14 | 692.02 |
| 315.0           | 991.27 | 990.39  | 982.43  | 966.51  | 943.52  | 909.92  | 869.24 | 819.72 | 756.05 |
| 330.0           | 991.27 | 996.59  | 995.70  | 988.61  | 974.42  | 952.26  | 935.41 | 864.48 | 801.53 |
| 345.0           | 991.27 | 1000.08 | 1003.61 | 1002.72 | 995.68  | 976.29  | 941.05 | 888.18 | 821.21 |
| 360.0           | 991.27 | 999.98  | 1007.82 | 1014.79 | 1017.40 | 1011.30 | 991.27 | 950.33 | 892.84 |
| C/ $\gamma$ (°) | 45.0   | 50.0    | 55.0    | 60.0    | 65.0    | 70.0    | 75.0   | 80.0   | 85.0   |
| 0.0             | 817.93 | 737.79  | 667.23  | 608.00  | 548.77  | 482.57  | 408.53 | 341.46 | 280.48 |
| 15.0            | 818.61 | 737.10  | 666.11  | 600.37  | 544.28  | 479.42  | 407.55 | 336.56 | 276.96 |
| 30.0            | 804.47 | 722.53  | 642.34  | 569.21  | 508.41  | 448.49  | 381.53 | 314.56 | 252.00 |
| 45.0            | 769.41 | 694.87  | 611.45  | 526.25  | 449.93  | 388.70  | 330.13 | 267.12 | 208.55 |
| 60.0            | 707.80 | 635.16  | 556.32  | 470.39  | 388.00  | 310.05  | 248.04 | 195.77 | 144.39 |
| 75.0            | 637.37 | 558.04  | 479.59  | 398.47  | 319.13  | 241.58  | 172.94 | 116.78 | 74.88  |
| 90.0            | 588.87 | 506.79  | 423.81  | 339.05  | 257.86  | 186.48  | 125.80 | 77.62  | 46.40  |
| 105.0           | 603.69 | 524.21  | 446.52  | 366.14  | 291.13  | 217.90  | 155.39 | 100.91 | 62.51  |
| 120.0           | 664.41 | 591.38  | 517.46  | 442.64  | 365.16  | 289.45  | 223.55 | 167.44 | 125.58 |
| 135.0           | 722.45 | 653.48  | 580.08  | 499.61  | 423.57  | 349.29  | 285.62 | 233.45 | 191.89 |
| 150.0           | 765.18 | 696.02  | 619.77  | 541.74  | 465.49  | 394.56  | 336.93 | 286.39 | 232.30 |
| 165.0           | 787.73 | 715.48  | 638.82  | 561.28  | 485.50  | 421.18  | 364.79 | 314.56 | 251.12 |
| 180.0           | 737.79 | 660.27  | 582.74  | 507.83  | 440.76  | 386.75  | 335.36 | 271.77 | 192.51 |
| 195.0           | 732.72 | 654.71  | 578.46  | 502.21  | 434.72  | 381.26  | 330.42 | 267.32 | 188.44 |
| 210.0           | 711.07 | 636.18  | 555.11  | 476.69  | 407.96  | 351.57  | 302.23 | 247.60 | 170.94 |
| 225.0           | 667.35 | 593.70  | 515.60  | 435.73  | 362.08  | 299.07  | 249.37 | 207.66 | 141.99 |
| 240.0           | 600.61 | 528.85  | 453.56  | 375.60  | 300.30  | 233.87  | 177.17 | 139.96 | 96.56  |
| 255.0           | 534.86 | 457.30  | 377.97  | 300.41  | 229.10  | 164.91  | 109.65 | 69.53  | 44.57  |
| 270.0           | 498.76 | 415.78  | 332.80  | 256.07  | 183.80  | 124.02  | 77.62  | 48.18  | 27.66  |
| 285.0           | 542.07 | 461.70  | 379.54  | 301.85  | 226.83  | 161.64  | 129.49 | 68.76  | 38.40  |
| 300.0           | 621.66 | 542.39  | 460.46  | 415.03  | 299.25  | 236.91  | 186.14 | 137.16 | 99.75  |
| 315.0           | 715.38 | 600.42  | 515.53  | 438.60  | 378.47  | 320.99  | 260.86 | 204.27 | 162.71 |
| 330.0           | 723.50 | 642.82  | 569.23  | 506.27  | 449.53  | 384.80  | 316.53 | 256.24 | 208.36 |
| 345.0           | 743.67 | 670.54  | 605.34  | 548.94  | 486.38  | 415.01  | 345.40 | 283.72 | 232.62 |
| 360.0           | 817.93 | 737.79  | 667.23  | 608.00  | 548.77  | 482.57  | 408.53 | 341.46 | 280.48 |

| 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                | 228.22 | 161.15 | 132.40 | 121.95 | 74.04 | 49.65 | 44.42 | 42.68 | 42.68 |
| 15.0               | 223.50 | 157.76 | 131.47 | 117.44 | 70.99 | 49.08 | 43.82 | 42.07 | 42.07 |
| 30.0               | 202.66 | 140.98 | 129.53 | 102.21 | 57.27 | 44.94 | 41.41 | 40.53 | 41.41 |
| 45.0               | 163.29 | 111.82 | 118.92 | 71.00  | 45.26 | 39.05 | 38.16 | 39.93 | 39.93 |
| 60.0               | 103.64 | 69.10  | 69.10  | 38.09  | 33.66 | 34.55 | 35.43 | 35.43 | 35.43 |
| 75.0               | 43.68  | 38.33  | 22.29  | 24.96  | 27.63 | 26.74 | 27.63 | 29.42 | 31.20 |
| 90.0               | 25.87  | 11.60  | 23.20  | 24.09  | 24.98 | 24.98 | 26.77 | 27.66 | 28.55 |
| 105.0              | 35.72  | 33.04  | 18.75  | 23.22  | 25.01 | 27.68 | 28.58 | 30.36 | 31.26 |
| 120.0              | 88.17  | 76.59  | 54.33  | 32.95  | 31.17 | 32.95 | 33.84 | 34.73 | 35.63 |
| 135.0              | 133.53 | 114.07 | 102.58 | 57.48  | 40.68 | 37.14 | 37.14 | 38.91 | 38.91 |
| 150.0              | 164.03 | 140.09 | 126.79 | 85.12  | 51.43 | 42.56 | 39.90 | 39.90 | 41.67 |
| 165.0              | 177.11 | 151.55 | 136.57 | 99.57  | 62.56 | 46.70 | 43.18 | 42.29 | 42.29 |
| 180.0              | 160.28 | 144.60 | 115.85 | 74.04  | 51.39 | 46.17 | 43.55 | 43.55 | 44.42 |
| 195.0              | 158.64 | 142.86 | 108.68 | 69.24  | 49.96 | 45.58 | 43.82 | 43.82 | 44.70 |
| 210.0              | 149.79 | 133.93 | 92.52  | 56.39  | 46.70 | 43.18 | 43.18 | 44.06 | 43.18 |
| 225.0              | 129.57 | 110.04 | 65.67  | 45.26  | 41.71 | 40.82 | 42.60 | 42.60 | 40.82 |
| 240.0              | 92.13  | 62.90  | 38.98  | 36.32  | 38.09 | 39.86 | 38.98 | 38.09 | 37.21 |
| 255.0              | 42.79  | 25.85  | 30.31  | 31.20  | 31.20 | 30.31 | 31.20 | 32.09 | 32.98 |
| 270.0              | 5.35   | 26.77  | 25.87  | 25.87  | 25.87 | 26.77 | 26.77 | 26.77 | 28.55 |
| 285.0              | 36.61  | 23.22  | 26.79  | 28.58  | 29.47 | 30.36 | 31.26 | 32.15 | 32.15 |
| 300.0              | 66.80  | 63.23  | 38.30  | 35.63  | 36.52 | 37.41 | 36.52 | 35.63 | 35.63 |
| 315.0              | 108.77 | 115.84 | 69.86  | 45.98  | 40.68 | 39.79 | 40.68 | 39.79 | 38.02 |
| 330.0              | 146.30 | 127.68 | 105.51 | 60.29  | 47.88 | 43.45 | 42.56 | 42.56 | 41.67 |
| 345.0              | 169.18 | 129.53 | 128.64 | 77.54  | 51.99 | 46.70 | 43.18 | 43.18 | 43.18 |
| 360.0              | 228.22 | 161.15 | 132.40 | 121.95 | 74.04 | 49.65 | 44.42 | 42.68 | 42.68 |
| C/γ(°)             | 135.0  | 140.0  | 145.0  | 150.0  | 155.0 | 160.0 | 165.0 | 170.0 | 175.0 |
| 0.0                | 42.68  | 42.68  | 40.94  | 40.07  | 40.07 | 40.07 | 40.94 | 41.81 | 41.81 |
| 15.0               | 42.95  | 42.07  | 40.32  | 40.32  | 39.44 | 39.44 | 41.19 | 41.19 | 42.07 |
| 30.0               | 41.41  | 39.65  | 39.65  | 39.65  | 38.77 | 39.65 | 40.53 | 41.41 | 42.29 |
| 45.0               | 38.16  | 38.16  | 38.16  | 38.16  | 39.05 | 39.93 | 40.82 | 41.71 | 42.60 |
| 60.0               | 35.43  | 35.43  | 36.32  | 38.09  | 38.98 | 39.86 | 40.75 | 40.75 | 40.75 |
| 75.0               | 32.98  | 33.87  | 35.66  | 36.55  | 37.44 | 36.55 | 36.55 | 37.44 | 40.11 |
| 90.0               | 29.44  | 31.23  | 32.12  | 33.90  | 33.90 | 31.23 | 28.55 | 31.23 | 38.37 |
| 105.0              | 33.04  | 33.94  | 34.83  | 34.83  | 35.72 | 32.15 | 28.58 | 30.36 | 37.51 |
| 120.0              | 35.63  | 36.52  | 36.52  | 38.30  | 39.19 | 37.41 | 31.17 | 29.39 | 35.63 |
| 135.0              | 38.02  | 38.02  | 38.02  | 38.91  | 39.79 | 39.79 | 35.37 | 29.18 | 33.60 |
| 150.0              | 41.67  | 40.79  | 40.79  | 40.79  | 40.79 | 40.79 | 40.79 | 33.69 | 29.26 |
| 165.0              | 44.06  | 42.29  | 41.41  | 41.41  | 40.53 | 41.41 | 41.41 | 41.41 | 32.60 |
| 180.0              | 43.55  | 41.81  | 41.81  | 40.94  | 40.94 | 40.94 | 40.94 | 41.81 | 33.10 |
| 195.0              | 42.95  | 42.07  | 41.19  | 40.32  | 40.32 | 40.32 | 40.32 | 32.43 | 25.42 |
| 210.0              | 41.41  | 40.53  | 40.53  | 39.65  | 39.65 | 39.65 | 32.60 | 25.55 | 36.13 |
| 225.0              | 39.93  | 39.05  | 39.05  | 39.05  | 39.93 | 33.72 | 25.74 | 31.06 | 39.93 |
| 240.0              | 37.21  | 37.21  | 38.09  | 38.09  | 35.43 | 28.35 | 27.46 | 34.55 | 41.64 |
| 255.0              | 33.87  | 34.77  | 36.55  | 36.55  | 30.31 | 24.96 | 28.53 | 36.55 | 41.90 |
| 270.0              | 30.34  | 32.12  | 33.01  | 32.12  | 27.66 | 24.09 | 29.44 | 36.58 | 41.93 |
| 285.0              | 33.94  | 34.83  | 35.72  | 34.83  | 33.04 | 33.04 | 34.83 | 39.29 | 41.97 |
| 300.0              | 35.63  | 35.63  | 36.52  | 37.41  | 39.19 | 40.08 | 40.08 | 40.08 | 41.86 |
| 315.0              | 37.14  | 37.14  | 37.14  | 38.02  | 38.91 | 39.79 | 40.68 | 41.56 | 41.56 |
| 330.0              | 39.90  | 39.01  | 39.01  | 38.13  | 39.01 | 39.90 | 40.79 | 41.67 | 42.56 |
| 345.0              | 42.29  | 40.53  | 39.65  | 38.77  | 38.77 | 39.65 | 40.53 | 41.41 | 41.41 |
| 360.0              | 42.68  | 42.68  | 40.94  | 40.07  | 40.07 | 40.07 | 40.94 | 41.81 | 41.81 |

Intensity data(cd)

|        |       |
|--------|-------|
| C/γ(°) | 180.0 |
| 0.0    | 24.39 |
| 15.0   | 40.32 |
| 30.0   | 42.29 |
| 45.0   | 42.60 |
| 60.0   | 42.52 |
| 75.0   | 42.79 |
| 90.0   | 42.83 |
| 105.0  | 42.87 |
| 120.0  | 41.86 |
| 135.0  | 40.68 |
| 150.0  | 38.13 |
| 165.0  | 30.84 |
| 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  | 24.39 |