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Nata

Client:

LumCAT: 2-2760-L

Luminaire: 92.70.411.00

Report No: 2024902-B017

Ballast type:

Test No: 2024902-C017

Voltage(V):

LampCAT: LUMILEDS LUXEON CoB 1208 Current(A):

Lamp flux(lm): 4053.0 Power (W): 32.800

Number of Lamps: 1 PF:

Length(mm): 0 Width(mm): 0

Phm Type: C Height(mm): 0

Photometric Results

Lumens(lm): 3760.11, Efficiency(%): 92.77% , Luminous Efficacy(lm/W): 114.64

Central intensity(cd): 5440.139, Maximum intensity(cd): 5444.397

Angle of maximum intensity: C=0.0 $\gamma=2.0$

Beam Angle(50%Imax): [C0/180]Total=51.2

[C90/270]Total=51.2

Field angle(10%Imax): [C0/180]Total=73.6

[C90/270]Total=73.6

Maximum s/h(1/2): C0_180=0.82 C90_270=0.82

Maximum s/h(1/4): C0_180=0.78 C90_270=0.78

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 92.77%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.264%

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0 | 5440.139 | 0.000 | 0 | 0.00% | 0.00% |
| 1.0 | 5439.588 | 5.206 | 5.206 | 0.13% | 0.14% |
| 2.0 | 5444.397 | 15.622 | 20.827 | 0.39% | 0.55% |
| 3.0 | 5441.757 | 26.036 | 46.864 | 0.64% | 1.25% |
| 4.0 | 5443.773 | 36.437 | 83.301 | 0.90% | 2.22% |
| 5.0 | 5432.972 | 46.791 | 130.092 | 1.15% | 3.46% |
| 6.0 | 5413.826 | 57.003 | 187.095 | 1.41% | 4.98% |
| 7.0 | 5393.701 | 67.082 | 254.177 | 1.66% | 6.76% |
| 8.0 | 5356.783 | 76.939 | 331.116 | 1.90% | 8.81% |
| 9.0 | 5304.141 | 86.401 | 417.517 | 2.13% | 11.10% |
| 10.0 | 5234.555 | 95.371 | 512.889 | 2.35% | 13.64% |
| 11.0 | 5150.915 | 103.772 | 616.661 | 2.56% | 16.40% |
| 12.0 | 5053.142 | 111.545 | 728.206 | 2.75% | 19.37% |
| 13.0 | 4942.386 | 118.622 | 846.827 | 2.93% | 22.52% |
| 14.0 | 4820.040 | 124.958 | 971.786 | 3.08% | 25.84% |
| 15.0 | 4687.366 | 130.522 | 1102.308 | 3.22% | 29.32% |
| 16.0 | 4530.717 | 135.071 | 1237.378 | 3.33% | 32.91% |
| 17.0 | 4365.171 | 138.533 | 1375.911 | 3.42% | 36.59% |
| 18.0 | 4207.576 | 141.346 | 1517.257 | 3.49% | 40.35% |
| 19.0 | 4029.619 | 143.310 | 1660.567 | 3.54% | 44.16% |
| 20.0 | 3846.038 | 144.146 | 1804.714 | 3.56% | 48.00% |
| 21.0 | 3658.002 | 144.093 | 1948.807 | 3.56% | 51.83% |
| 22.0 | 3475.945 | 143.360 | 2092.166 | 3.54% | 55.64% |
| 23.0 | 3265.209 | 141.448 | 2233.614 | 3.49% | 59.40% |
| 24.0 | 3072.975 | 138.575 | 2372.189 | 3.42% | 63.09% |
| 25.0 | 2867.173 | 135.066 | 2507.255 | 3.33% | 66.68% |
| 26.0 | 2639.853 | 129.994 | 2637.249 | 3.21% | 70.14% |
| 27.0 | 2443.453 | 124.364 | 2761.614 | 3.07% | 73.44% |
| 28.0 | 2222.671 | 118.136 | 2879.75 | 2.91% | 76.59% |
| 29.0 | 1983.932 | 110.057 | 2989.807 | 2.72% | 79.51% |
| 30.0 | 1757.289 | 101.012 | 3090.819 | 2.49% | 82.20% |
| 31.0 | 1505.929 | 90.811 | 3181.629 | 2.24% | 84.62% |
| 32.0 | 1285.987 | 79.985 | 3261.614 | 1.97% | 86.74% |
| 33.0 | 1065.619 | 69.279 | 3330.894 | 1.71% | 88.58% |
| 34.0 | 921.408 | 60.133 | 3391.027 | 1.48% | 90.18% |
| 35.0 | 765.744 | 52.397 | 3443.424 | 1.29% | 91.58% |
| 36.0 | 632.675 | 44.526 | 3487.95 | 1.10% | 92.76% |
| 37.0 | 521.867 | 37.655 | 3525.604 | 0.93% | 93.76% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 429.574 | 31.758 | 3557.362 | 0.78% | 94.61% |
| 39.0 | 359.777 | 26.943 | 3584.305 | 0.66% | 95.32% |
| 40.0 | 305.138 | 23.190 | 3607.495 | 0.57% | 95.94% |
| 41.0 | 254.757 | 19.938 | 3627.432 | 0.49% | 96.47% |
| 42.0 | 205.513 | 16.722 | 3644.155 | 0.41% | 96.92% |
| 43.0 | 163.745 | 13.678 | 3657.833 | 0.34% | 97.28% |
| 44.0 | 135.854 | 11.308 | 3669.141 | 0.28% | 97.58% |
| 45.0 | 102.602 | 9.164 | 3678.305 | 0.23% | 97.82% |
| 46.0 | 84.153 | 7.304 | 3685.608 | 0.18% | 98.02% |
| 47.0 | 70.269 | 6.142 | 3691.75 | 0.15% | 98.18% |
| 48.0 | 59.790 | 5.258 | 3697.008 | 0.13% | 98.32% |
| 49.0 | 51.958 | 4.589 | 3701.597 | 0.11% | 98.44% |
| 50.0 | 45.769 | 4.075 | 3705.671 | 0.10% | 98.55% |
| 51.0 | 40.940 | 3.669 | 3709.34 | 0.09% | 98.65% |
| 52.0 | 37.096 | 3.349 | 3712.689 | 0.08% | 98.74% |
| 53.0 | 33.752 | 3.082 | 3715.77 | 0.08% | 98.82% |
| 54.0 | 30.946 | 2.852 | 3718.622 | 0.07% | 98.90% |
| 55.0 | 28.587 | 2.657 | 3721.28 | 0.07% | 98.97% |
| 56.0 | 26.465 | 2.488 | 3723.767 | 0.06% | 99.03% |
| 57.0 | 24.862 | 2.347 | 3726.114 | 0.06% | 99.10% |
| 58.0 | 23.101 | 2.218 | 3728.332 | 0.05% | 99.15% |
| 59.0 | 21.715 | 2.095 | 3730.427 | 0.05% | 99.21% |
| 60.0 | 20.585 | 1.998 | 3732.426 | 0.05% | 99.26% |
| 61.0 | 19.520 | 1.914 | 3734.339 | 0.05% | 99.31% |
| 62.0 | 18.279 | 1.821 | 3736.161 | 0.04% | 99.36% |
| 63.0 | 17.424 | 1.736 | 3737.897 | 0.04% | 99.41% |
| 64.0 | 16.524 | 1.666 | 3739.563 | 0.04% | 99.45% |
| 65.0 | 15.565 | 1.588 | 3741.151 | 0.04% | 99.50% |
| 66.0 | 14.803 | 1.515 | 3742.666 | 0.04% | 99.54% |
| 67.0 | 14.014 | 1.449 | 3744.115 | 0.04% | 99.57% |
| 68.0 | 13.239 | 1.381 | 3745.496 | 0.03% | 99.61% |
| 69.0 | 12.510 | 1.314 | 3746.809 | 0.03% | 99.65% |
| 70.0 | 11.820 | 1.250 | 3748.059 | 0.03% | 99.68% |
| 71.0 | 11.124 | 1.186 | 3749.245 | 0.03% | 99.71% |
| 72.0 | 10.447 | 1.122 | 3750.366 | 0.03% | 99.74% |
| 73.0 | 9.777 | 1.058 | 3751.424 | 0.03% | 99.77% |
| 74.0 | 9.133 | 0.994 | 3752.418 | 0.02% | 99.80% |
| 75.0 | 8.541 | 0.934 | 3753.352 | 0.02% | 99.82% |

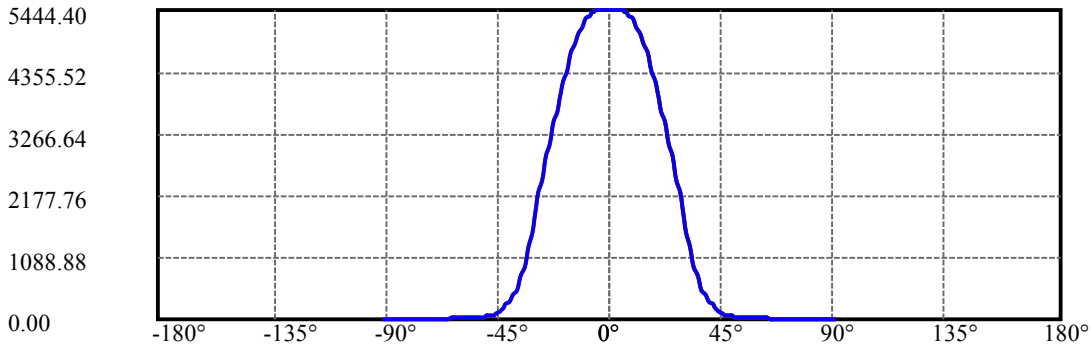
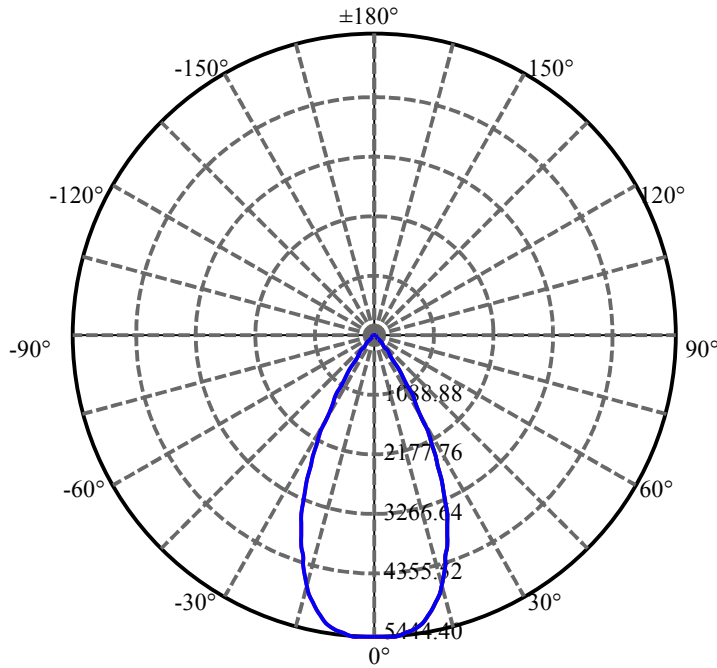
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 7.898 | 0.873 | 3754.225 | 0.02% | 99.84% |
| 77.0 | 7.280 | 0.809 | 3755.034 | 0.02% | 99.86% |
| 78.0 | 6.583 | 0.742 | 3755.776 | 0.02% | 99.88% |
| 79.0 | 6.005 | 0.676 | 3756.452 | 0.02% | 99.90% |
| 80.0 | 5.355 | 0.612 | 3757.065 | 0.02% | 99.92% |
| 81.0 | 4.724 | 0.545 | 3757.61 | 0.01% | 99.93% |
| 82.0 | 4.152 | 0.481 | 3758.091 | 0.01% | 99.95% |
| 83.0 | 3.568 | 0.420 | 3758.511 | 0.01% | 99.96% |
| 84.0 | 3.016 | 0.359 | 3758.869 | 0.01% | 99.97% |
| 85.0 | 2.582 | 0.306 | 3759.175 | 0.01% | 99.98% |
| 86.0 | 2.168 | 0.260 | 3759.435 | 0.01% | 99.98% |
| 87.0 | 1.827 | 0.219 | 3759.653 | 0.01% | 99.99% |
| 88.0 | 1.478 | 0.181 | 3759.834 | 0.00% | 99.99% |
| 89.0 | 1.242 | 0.149 | 3759.983 | 0.00% | 100.00% |
| 90.0 | 1.110 | 0.129 | 3760.112 | 0.00% | 100.00% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 3090.82 | 76.26% | 82.20% |
| 0-40 | 3607.49 | 89.01% | 95.94% |
| 0-60 | 3732.43 | 92.09% | 99.26% |
| 0-90 | 3759.98 | 92.77% | 100.00% |
| 0-120 | 3759.98 | 92.77% | 100.00% |
| 0-180 | 3760.11 | 92.77% | 100.00% |
| 60-90 | 27.56 | 0.68% | 0.73% |
| 90-120 | 0.00 | 0.00% | 0.00% |
| 90-130 | 0.00 | 0.00% | 0.00% |
| 90-150 | 0.00 | 0.00% | 0.00% |
| 90-180 | 0.00 | 0.00% | 0.00% |
| 0-29.18 | 3008.09 | 74.22% | 80.00% |

ZONAL LUMEN SUMMARY

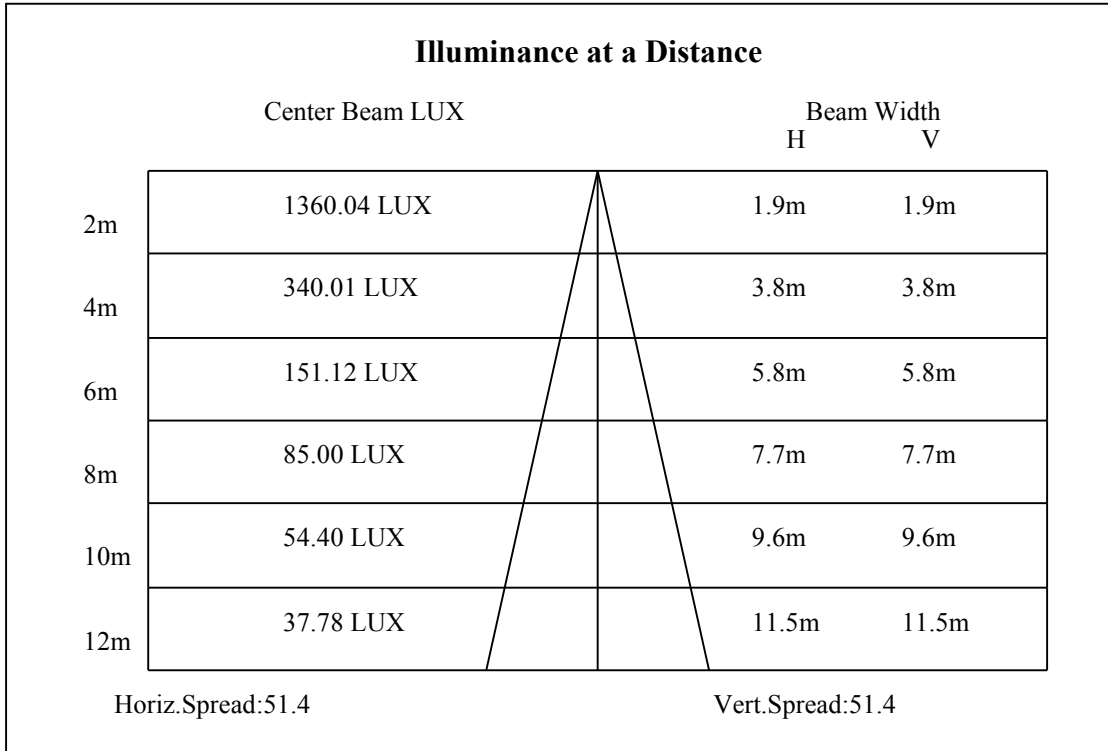
| | |
|---------|---------|
| 0-10 | 512.89 |
| 10-20 | 1291.83 |
| 20-30 | 1286.10 |
| 30-40 | 516.68 |
| 40-50 | 98.18 |
| 50-60 | 26.75 |
| 60-70 | 15.63 |
| 70-80 | 9.01 |
| 80-90 | 2.92 |
| 90-100 | 0.00 |
| 100-110 | 0.00 |
| 110-120 | 0.00 |
| 120-130 | 0.00 |
| 130-140 | 0.00 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.00 |

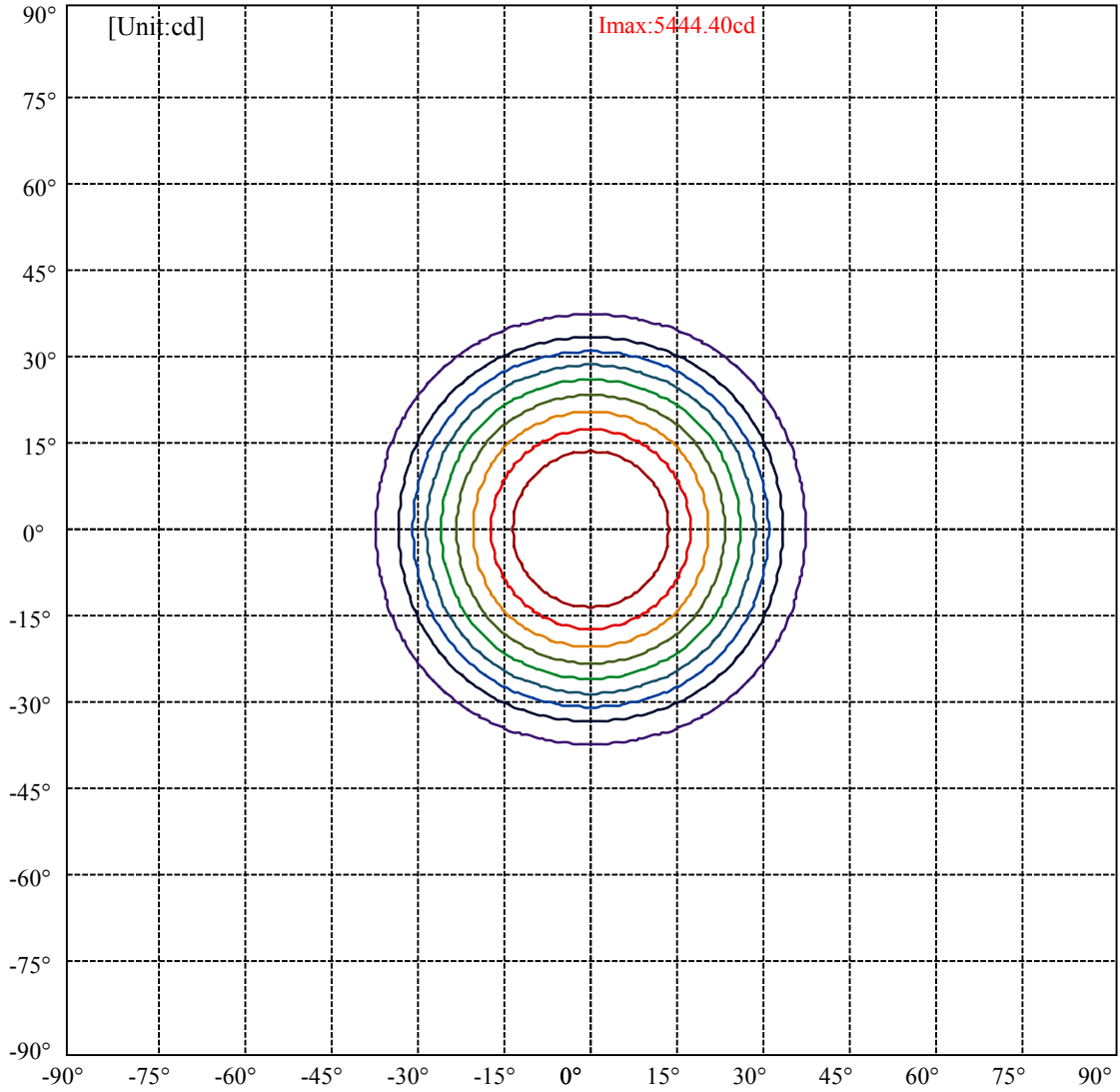


C0(Max): —————
C0/C180: —————
C90/C270: —————

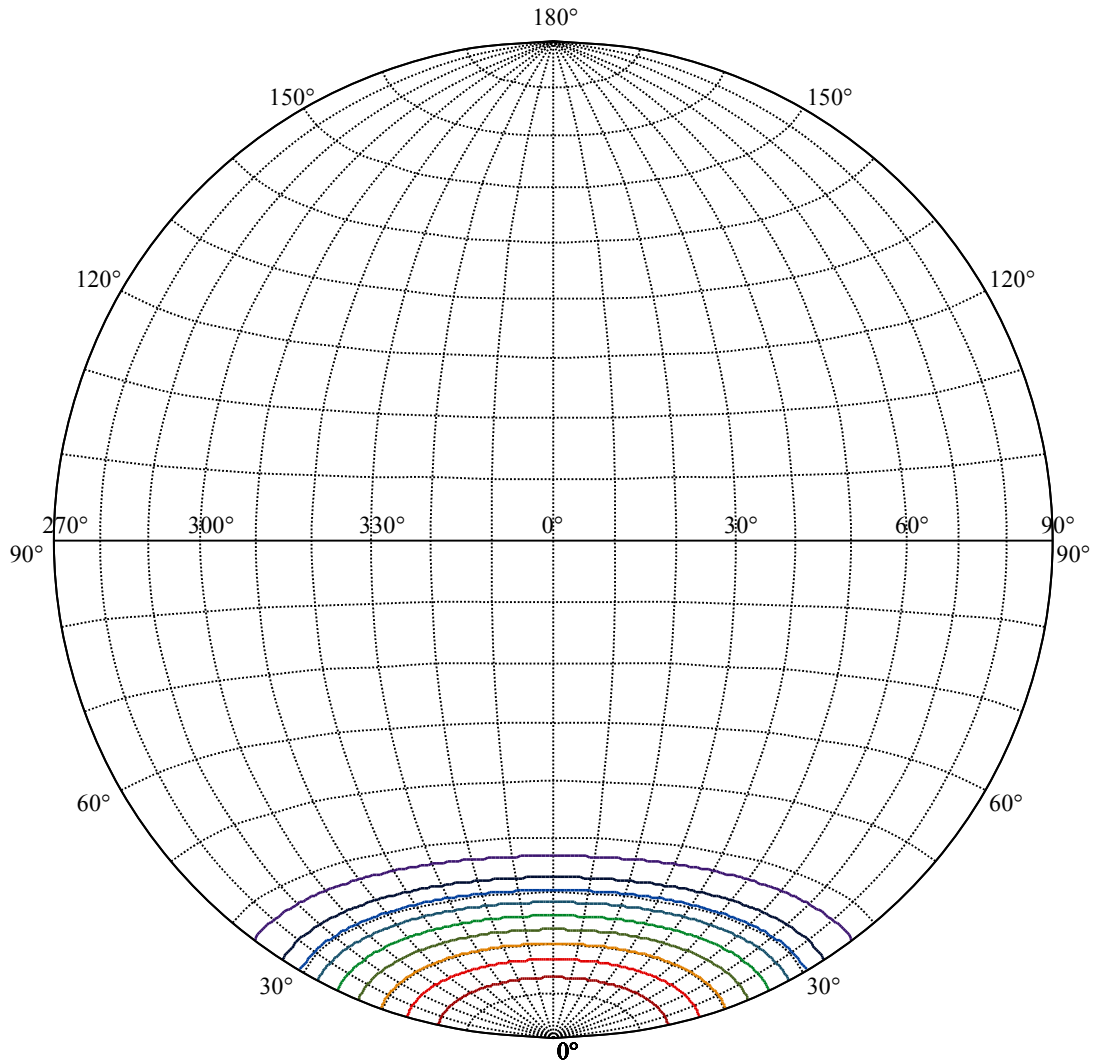
Field angle(10%Imax):C0/180Left:38.8 Right:34.8
:C90/270Left:38.8 Right:34.8

Beam Angle(50%Imax):C0/180Left:27.6 Right:23.6
:C90/270Left:27.6 Right:23.6





| | |
|-------------------|---|
| (10%Imax) 544.44 | — |
| (20%Imax) 1088.88 | — |
| (30%Imax) 1633.32 | — |
| (40%Imax) 2177.76 | — |
| (50%Imax) 2722.2 | — |
| (60%Imax) 3266.64 | — |
| (70%Imax) 3811.08 | — |
| (80%Imax) 4355.52 | — |
| (90%Imax) 4899.96 | — |



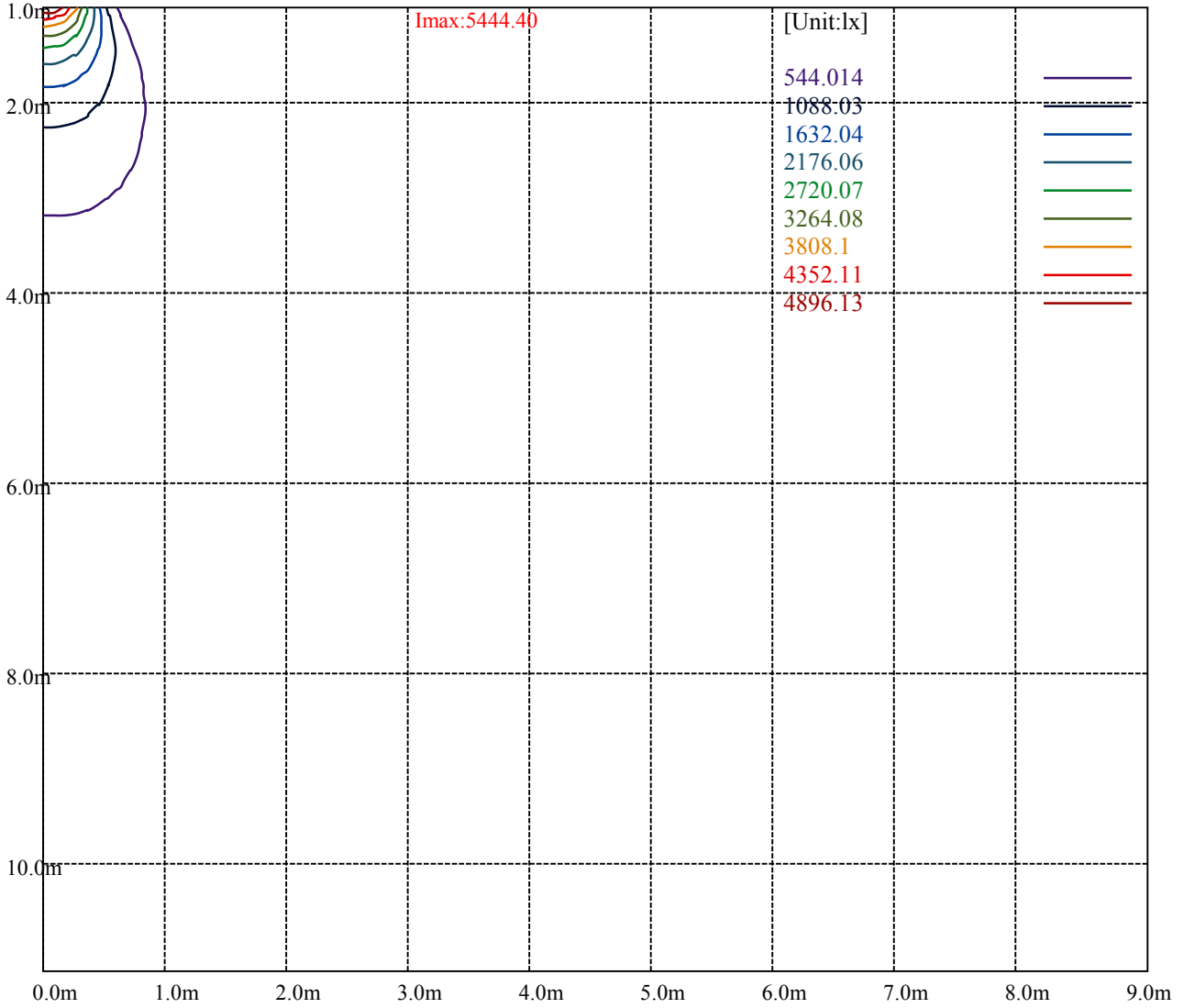
House

[Unit:cd]

Road

I_{max}:5444.40

| | |
|--------------------------------|---|
| (10%I _{max}) 544.44 | — |
| (20%I _{max}) 1088.88 | — |
| (30%I _{max}) 1633.32 | — |
| (40%I _{max}) 2177.76 | — |
| (50%I _{max}) 2722.2 | — |
| (60%I _{max}) 3266.64 | — |
| (70%I _{max}) 3811.08 | — |
| (80%I _{max}) 4355.52 | — |
| (90%I _{max}) 4899.96 | — |



Luminance Table

| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|----|----|----|----|----|----|----|----|----|
| C0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Glare Table

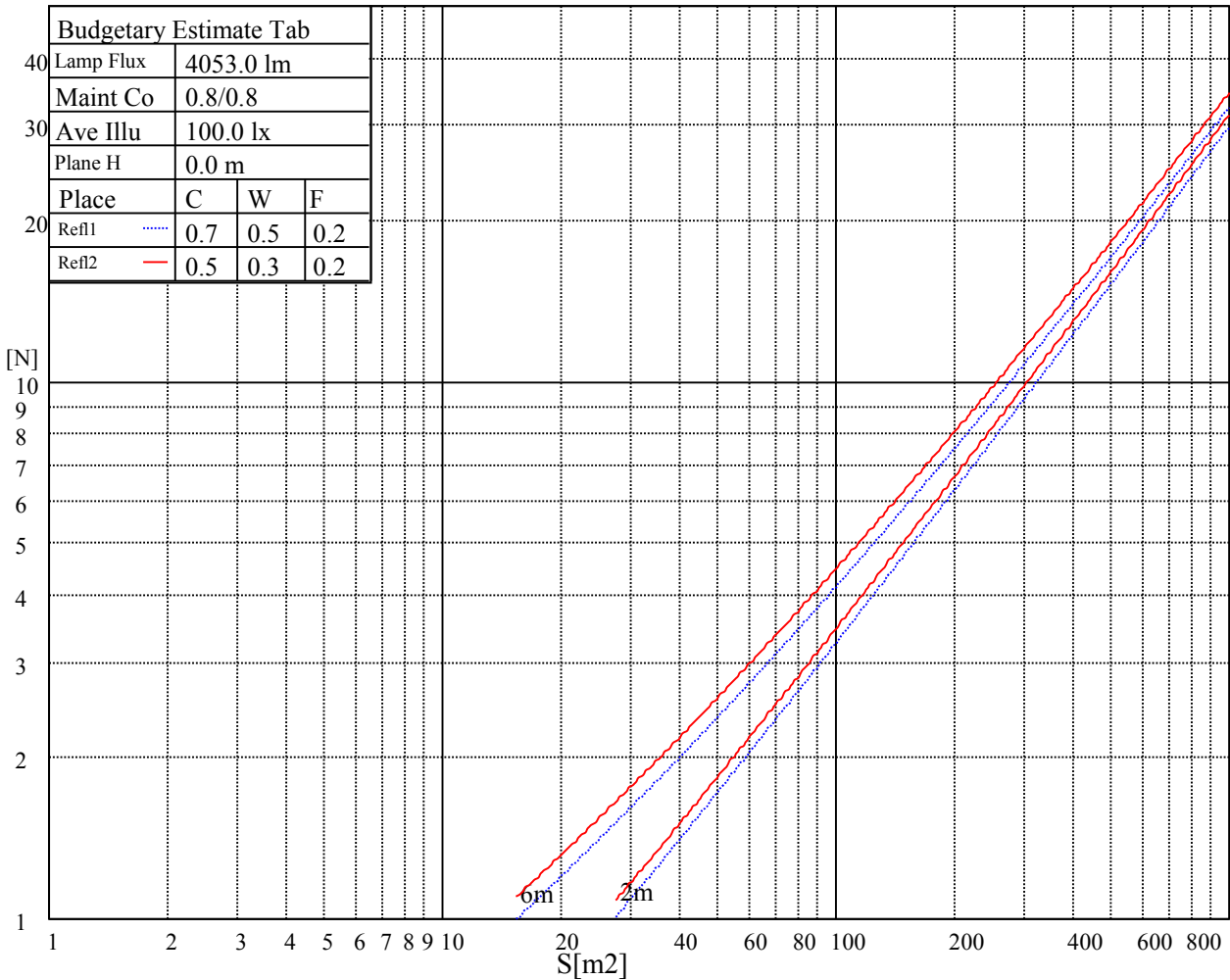
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 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

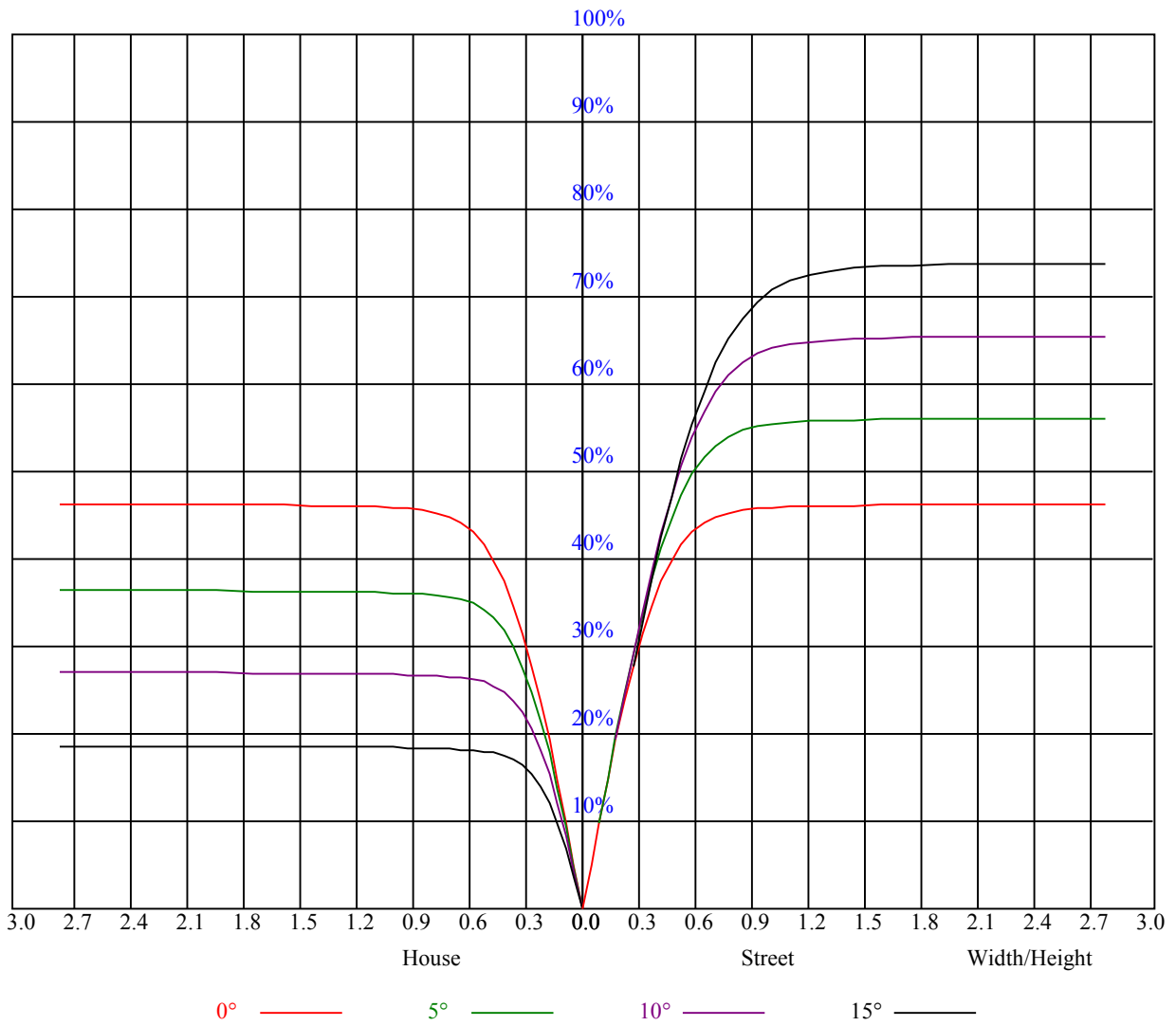


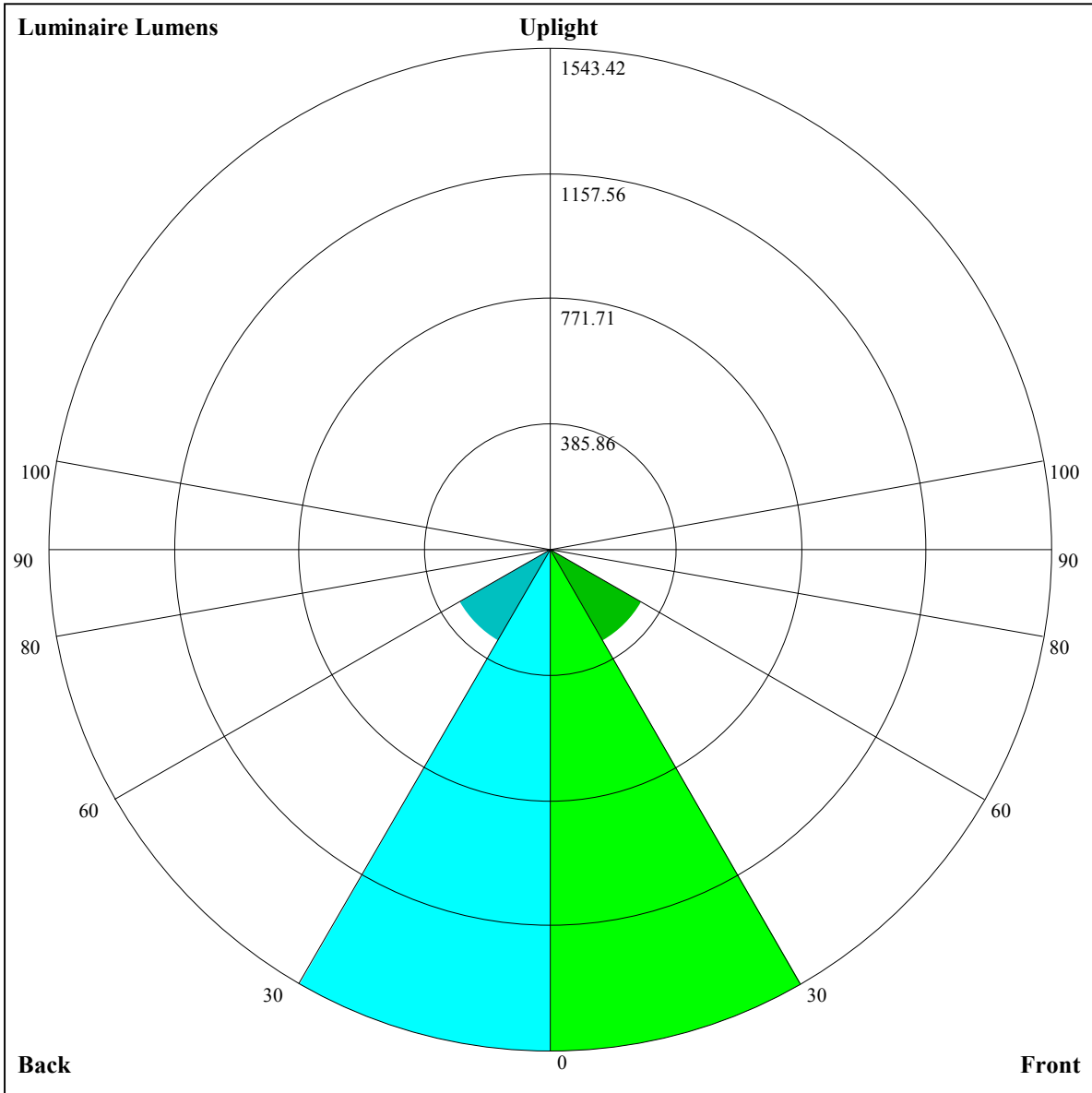
| Illumination assessment according UGR | | | | | | | | | | | |
|---|---------|------------------|-----|-----|-----|---------|----------------|-----|-----|-----|--|
| Rf of Ceiling | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 | |
| Rf of Wall | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 | |
| Rf of Floor | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X | Y | | | | | | | | | | |
| 2H | 2H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 3H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 4H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 6H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 8H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 12H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| 4H | 2H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 3H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 4H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 6H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 8H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 12H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| 8H | 4H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 6H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 8H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 12H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| 12H | 4H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 6H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| | 8H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| Variation with the observer position at spacings: | | | | | | | | | | | |
| S = 1.0H | 非数字/非数字 | | | | | 非数字/非数字 | | | | | |
| S = 1.5H | 非数字/非数字 | | | | | 非数字/非数字 | | | | | |
| S = 2.0H | 非数字/非数字 | | | | | 非数字/非数字 | | | | | |
| Standard tables: | BK0 | | | | | BK0 | | | | | |
| Uncorrected UGR | 负无穷大 | | | | | 负无穷大 | | | | | |

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



| 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 | 1.10 | 1.10 | 1.10 | 1.08 | 1.08 | 1.08 | 1.03 | 1.03 | 1.03 | 0.99 | 0.99 | 0.99 | 0.95 | 0.95 | 0.95 | 0.93 |
| 1 | 1.03 | 1.01 | 0.99 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.87 |
| 2 | 0.97 | 0.93 | 0.90 | 0.95 | 0.92 | 0.89 | 0.92 | 0.90 | 0.87 | 0.89 | 0.87 | 0.85 | 0.87 | 0.85 | 0.84 | 0.82 |
| 3 | 0.91 | 0.87 | 0.83 | 0.90 | 0.86 | 0.82 | 0.87 | 0.84 | 0.81 | 0.85 | 0.82 | 0.80 | 0.83 | 0.81 | 0.79 | 0.77 |
| 4 | 0.86 | 0.81 | 0.77 | 0.85 | 0.80 | 0.77 | 0.83 | 0.79 | 0.76 | 0.81 | 0.78 | 0.75 | 0.79 | 0.76 | 0.74 | 0.73 |
| 5 | 0.81 | 0.76 | 0.72 | 0.80 | 0.75 | 0.72 | 0.78 | 0.74 | 0.71 | 0.77 | 0.73 | 0.71 | 0.75 | 0.72 | 0.70 | 0.69 |
| 6 | 0.76 | 0.71 | 0.68 | 0.76 | 0.71 | 0.67 | 0.74 | 0.70 | 0.67 | 0.73 | 0.69 | 0.67 | 0.72 | 0.69 | 0.66 | 0.65 |
| 7 | 0.72 | 0.67 | 0.64 | 0.72 | 0.67 | 0.64 | 0.71 | 0.66 | 0.63 | 0.70 | 0.66 | 0.63 | 0.69 | 0.65 | 0.63 | 0.61 |
| 8 | 0.69 | 0.64 | 0.60 | 0.68 | 0.63 | 0.60 | 0.67 | 0.63 | 0.60 | 0.66 | 0.62 | 0.60 | 0.65 | 0.62 | 0.59 | 0.58 |
| 9 | 0.65 | 0.60 | 0.57 | 0.65 | 0.60 | 0.57 | 0.64 | 0.60 | 0.57 | 0.63 | 0.59 | 0.56 | 0.63 | 0.59 | 0.56 | 0.55 |
| 10 | 0.62 | 0.57 | 0.54 | 0.62 | 0.57 | 0.54 | 0.61 | 0.57 | 0.54 | 0.61 | 0.57 | 0.54 | 0.60 | 0.56 | 0.54 | 0.52 |





Luminaire Lumens:

FL=1543.42,FM=324.19,FH=12.32,FVH=1.54

BL=1543.42,BM=324.19,BH=12.32,BVH=1.54

UL=0,UH=0

BUG Rating:B3-U0-G0

Intensity data(cd)

| | | | | | | | | | |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| C/γ(°) | 0.0 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 |
| 0.0 | 5440.14 | 5439.59 | 5444.40 | 5441.76 | 5443.77 | 5432.97 | 5413.83 | 5393.70 | 5356.78 |
| 45.0 | 5440.14 | 5439.59 | 5444.40 | 5441.76 | 5443.77 | 5432.97 | 5413.83 | 5393.70 | 5356.78 |
| 90.0 | 5440.14 | 5439.59 | 5444.40 | 5441.76 | 5443.77 | 5432.97 | 5413.83 | 5393.70 | 5356.78 |
| 135.0 | 5440.14 | 5439.59 | 5444.40 | 5441.76 | 5443.77 | 5432.97 | 5413.83 | 5393.70 | 5356.78 |
| 180.0 | 5440.14 | 5439.59 | 5444.40 | 5441.76 | 5443.77 | 5432.97 | 5413.83 | 5393.70 | 5356.78 |
| 225.0 | 5440.14 | 5439.59 | 5444.40 | 5441.76 | 5443.77 | 5432.97 | 5413.83 | 5393.70 | 5356.78 |
| 270.0 | 5440.14 | 5439.59 | 5444.40 | 5441.76 | 5443.77 | 5432.97 | 5413.83 | 5393.70 | 5356.78 |
| 315.0 | 5440.14 | 5439.59 | 5444.40 | 5441.76 | 5443.77 | 5432.97 | 5413.83 | 5393.70 | 5356.78 |
| 360.0 | 5440.14 | 5439.59 | 5444.40 | 5441.76 | 5443.77 | 5432.97 | 5413.83 | 5393.70 | 5356.78 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 5304.14 | 5234.56 | 5150.92 | 5053.14 | 4942.39 | 4820.04 | 4687.37 | 4530.72 | 4365.17 |
| 45.0 | 5304.14 | 5234.56 | 5150.92 | 5053.14 | 4942.39 | 4820.04 | 4687.37 | 4530.72 | 4365.17 |
| 90.0 | 5304.14 | 5234.56 | 5150.92 | 5053.14 | 4942.39 | 4820.04 | 4687.37 | 4530.72 | 4365.17 |
| 135.0 | 5304.14 | 5234.56 | 5150.92 | 5053.14 | 4942.39 | 4820.04 | 4687.37 | 4530.72 | 4365.17 |
| 180.0 | 5304.14 | 5234.56 | 5150.92 | 5053.14 | 4942.39 | 4820.04 | 4687.37 | 4530.72 | 4365.17 |
| 225.0 | 5304.14 | 5234.56 | 5150.92 | 5053.14 | 4942.39 | 4820.04 | 4687.37 | 4530.72 | 4365.17 |
| 270.0 | 5304.14 | 5234.56 | 5150.92 | 5053.14 | 4942.39 | 4820.04 | 4687.37 | 4530.72 | 4365.17 |
| 315.0 | 5304.14 | 5234.56 | 5150.92 | 5053.14 | 4942.39 | 4820.04 | 4687.37 | 4530.72 | 4365.17 |
| 360.0 | 5304.14 | 5234.56 | 5150.92 | 5053.14 | 4942.39 | 4820.04 | 4687.37 | 4530.72 | 4365.17 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 4207.58 | 4029.62 | 3846.04 | 3658.00 | 3475.95 | 3265.21 | 3072.98 | 2867.17 | 2639.85 |
| 45.0 | 4207.58 | 4029.62 | 3846.04 | 3658.00 | 3475.95 | 3265.21 | 3072.98 | 2867.17 | 2639.85 |
| 90.0 | 4207.58 | 4029.62 | 3846.04 | 3658.00 | 3475.95 | 3265.21 | 3072.98 | 2867.17 | 2639.85 |
| 135.0 | 4207.58 | 4029.62 | 3846.04 | 3658.00 | 3475.95 | 3265.21 | 3072.98 | 2867.17 | 2639.85 |
| 180.0 | 4207.58 | 4029.62 | 3846.04 | 3658.00 | 3475.95 | 3265.21 | 3072.98 | 2867.17 | 2639.85 |
| 225.0 | 4207.58 | 4029.62 | 3846.04 | 3658.00 | 3475.95 | 3265.21 | 3072.98 | 2867.17 | 2639.85 |
| 270.0 | 4207.58 | 4029.62 | 3846.04 | 3658.00 | 3475.95 | 3265.21 | 3072.98 | 2867.17 | 2639.85 |
| 315.0 | 4207.58 | 4029.62 | 3846.04 | 3658.00 | 3475.95 | 3265.21 | 3072.98 | 2867.17 | 2639.85 |
| 360.0 | 4207.58 | 4029.62 | 3846.04 | 3658.00 | 3475.95 | 3265.21 | 3072.98 | 2867.17 | 2639.85 |
| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
| 0.0 | 2443.45 | 2222.67 | 1983.93 | 1757.29 | 1505.93 | 1285.99 | 1065.62 | 921.41 | 765.74 |
| 45.0 | 2443.45 | 2222.67 | 1983.93 | 1757.29 | 1505.93 | 1285.99 | 1065.62 | 921.41 | 765.74 |
| 90.0 | 2443.45 | 2222.67 | 1983.93 | 1757.29 | 1505.93 | 1285.99 | 1065.62 | 921.41 | 765.74 |
| 135.0 | 2443.45 | 2222.67 | 1983.93 | 1757.29 | 1505.93 | 1285.99 | 1065.62 | 921.41 | 765.74 |
| 180.0 | 2443.45 | 2222.67 | 1983.93 | 1757.29 | 1505.93 | 1285.99 | 1065.62 | 921.41 | 765.74 |
| 225.0 | 2443.45 | 2222.67 | 1983.93 | 1757.29 | 1505.93 | 1285.99 | 1065.62 | 921.41 | 765.74 |
| 270.0 | 2443.45 | 2222.67 | 1983.93 | 1757.29 | 1505.93 | 1285.99 | 1065.62 | 921.41 | 765.74 |
| 315.0 | 2443.45 | 2222.67 | 1983.93 | 1757.29 | 1505.93 | 1285.99 | 1065.62 | 921.41 | 765.74 |
| 360.0 | 2443.45 | 2222.67 | 1983.93 | 1757.29 | 1505.93 | 1285.99 | 1065.62 | 921.41 | 765.74 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 632.68 | 521.87 | 429.57 | 359.78 | 305.14 | 254.76 | 205.51 | 163.75 | 135.85 |
| 45.0 | 632.68 | 521.87 | 429.57 | 359.78 | 305.14 | 254.76 | 205.51 | 163.75 | 135.85 |
| 90.0 | 632.68 | 521.87 | 429.57 | 359.78 | 305.14 | 254.76 | 205.51 | 163.75 | 135.85 |
| 135.0 | 632.68 | 521.87 | 429.57 | 359.78 | 305.14 | 254.76 | 205.51 | 163.75 | 135.85 |
| 180.0 | 632.68 | 521.87 | 429.57 | 359.78 | 305.14 | 254.76 | 205.51 | 163.75 | 135.85 |
| 225.0 | 632.68 | 521.87 | 429.57 | 359.78 | 305.14 | 254.76 | 205.51 | 163.75 | 135.85 |
| 270.0 | 632.68 | 521.87 | 429.57 | 359.78 | 305.14 | 254.76 | 205.51 | 163.75 | 135.85 |
| 315.0 | 632.68 | 521.87 | 429.57 | 359.78 | 305.14 | 254.76 | 205.51 | 163.75 | 135.85 |
| 360.0 | 632.68 | 521.87 | 429.57 | 359.78 | 305.14 | 254.76 | 205.51 | 163.75 | 135.85 |

Intensity data(cd)

| | | | | | | | | | |
|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| C/γ(°) | 45.0 | 46.0 | 47.0 | 48.0 | 49.0 | 50.0 | 51.0 | 52.0 | 53.0 |
| 0.0 | 102.60 | 84.15 | 70.27 | 59.79 | 51.96 | 45.77 | 40.94 | 37.10 | 33.75 |
| 45.0 | 102.60 | 84.15 | 70.27 | 59.79 | 51.96 | 45.77 | 40.94 | 37.10 | 33.75 |
| 90.0 | 102.60 | 84.15 | 70.27 | 59.79 | 51.96 | 45.77 | 40.94 | 37.10 | 33.75 |
| 135.0 | 102.60 | 84.15 | 70.27 | 59.79 | 51.96 | 45.77 | 40.94 | 37.10 | 33.75 |
| 180.0 | 102.60 | 84.15 | 70.27 | 59.79 | 51.96 | 45.77 | 40.94 | 37.10 | 33.75 |
| 225.0 | 102.60 | 84.15 | 70.27 | 59.79 | 51.96 | 45.77 | 40.94 | 37.10 | 33.75 |
| 270.0 | 102.60 | 84.15 | 70.27 | 59.79 | 51.96 | 45.77 | 40.94 | 37.10 | 33.75 |
| 315.0 | 102.60 | 84.15 | 70.27 | 59.79 | 51.96 | 45.77 | 40.94 | 37.10 | 33.75 |
| 360.0 | 102.60 | 84.15 | 70.27 | 59.79 | 51.96 | 45.77 | 40.94 | 37.10 | 33.75 |
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 30.95 | 28.59 | 26.47 | 24.86 | 23.10 | 21.72 | 20.59 | 19.52 | 18.28 |
| 45.0 | 30.95 | 28.59 | 26.47 | 24.86 | 23.10 | 21.72 | 20.59 | 19.52 | 18.28 |
| 90.0 | 30.95 | 28.59 | 26.47 | 24.86 | 23.10 | 21.72 | 20.59 | 19.52 | 18.28 |
| 135.0 | 30.95 | 28.59 | 26.47 | 24.86 | 23.10 | 21.72 | 20.59 | 19.52 | 18.28 |
| 180.0 | 30.95 | 28.59 | 26.47 | 24.86 | 23.10 | 21.72 | 20.59 | 19.52 | 18.28 |
| 225.0 | 30.95 | 28.59 | 26.47 | 24.86 | 23.10 | 21.72 | 20.59 | 19.52 | 18.28 |
| 270.0 | 30.95 | 28.59 | 26.47 | 24.86 | 23.10 | 21.72 | 20.59 | 19.52 | 18.28 |
| 315.0 | 30.95 | 28.59 | 26.47 | 24.86 | 23.10 | 21.72 | 20.59 | 19.52 | 18.28 |
| 360.0 | 30.95 | 28.59 | 26.47 | 24.86 | 23.10 | 21.72 | 20.59 | 19.52 | 18.28 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 17.42 | 16.52 | 15.57 | 14.80 | 14.01 | 13.24 | 12.51 | 11.82 | 11.12 |
| 45.0 | 17.42 | 16.52 | 15.57 | 14.80 | 14.01 | 13.24 | 12.51 | 11.82 | 11.12 |
| 90.0 | 17.42 | 16.52 | 15.57 | 14.80 | 14.01 | 13.24 | 12.51 | 11.82 | 11.12 |
| 135.0 | 17.42 | 16.52 | 15.57 | 14.80 | 14.01 | 13.24 | 12.51 | 11.82 | 11.12 |
| 180.0 | 17.42 | 16.52 | 15.57 | 14.80 | 14.01 | 13.24 | 12.51 | 11.82 | 11.12 |
| 225.0 | 17.42 | 16.52 | 15.57 | 14.80 | 14.01 | 13.24 | 12.51 | 11.82 | 11.12 |
| 270.0 | 17.42 | 16.52 | 15.57 | 14.80 | 14.01 | 13.24 | 12.51 | 11.82 | 11.12 |
| 315.0 | 17.42 | 16.52 | 15.57 | 14.80 | 14.01 | 13.24 | 12.51 | 11.82 | 11.12 |
| 360.0 | 17.42 | 16.52 | 15.57 | 14.80 | 14.01 | 13.24 | 12.51 | 11.82 | 11.12 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 10.45 | 9.78 | 9.13 | 8.54 | 7.90 | 7.28 | 6.58 | 6.01 | 5.36 |
| 45.0 | 10.45 | 9.78 | 9.13 | 8.54 | 7.90 | 7.28 | 6.58 | 6.01 | 5.36 |
| 90.0 | 10.45 | 9.78 | 9.13 | 8.54 | 7.90 | 7.28 | 6.58 | 6.01 | 5.36 |
| 135.0 | 10.45 | 9.78 | 9.13 | 8.54 | 7.90 | 7.28 | 6.58 | 6.01 | 5.36 |
| 180.0 | 10.45 | 9.78 | 9.13 | 8.54 | 7.90 | 7.28 | 6.58 | 6.01 | 5.36 |
| 225.0 | 10.45 | 9.78 | 9.13 | 8.54 | 7.90 | 7.28 | 6.58 | 6.01 | 5.36 |
| 270.0 | 10.45 | 9.78 | 9.13 | 8.54 | 7.90 | 7.28 | 6.58 | 6.01 | 5.36 |
| 315.0 | 10.45 | 9.78 | 9.13 | 8.54 | 7.90 | 7.28 | 6.58 | 6.01 | 5.36 |
| 360.0 | 10.45 | 9.78 | 9.13 | 8.54 | 7.90 | 7.28 | 6.58 | 6.01 | 5.36 |
| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
| 0.0 | 4.72 | 4.15 | 3.57 | 3.02 | 2.58 | 2.17 | 1.83 | 1.48 | 1.24 |
| 45.0 | 4.72 | 4.15 | 3.57 | 3.02 | 2.58 | 2.17 | 1.83 | 1.48 | 1.24 |
| 90.0 | 4.72 | 4.15 | 3.57 | 3.02 | 2.58 | 2.17 | 1.83 | 1.48 | 1.24 |
| 135.0 | 4.72 | 4.15 | 3.57 | 3.02 | 2.58 | 2.17 | 1.83 | 1.48 | 1.24 |
| 180.0 | 4.72 | 4.15 | 3.57 | 3.02 | 2.58 | 2.17 | 1.83 | 1.48 | 1.24 |
| 225.0 | 4.72 | 4.15 | 3.57 | 3.02 | 2.58 | 2.17 | 1.83 | 1.48 | 1.24 |
| 270.0 | 4.72 | 4.15 | 3.57 | 3.02 | 2.58 | 2.17 | 1.83 | 1.48 | 1.24 |
| 315.0 | 4.72 | 4.15 | 3.57 | 3.02 | 2.58 | 2.17 | 1.83 | 1.48 | 1.24 |
| 360.0 | 4.72 | 4.15 | 3.57 | 3.02 | 2.58 | 2.17 | 1.83 | 1.48 | 1.24 |

Intensity data(cd)

| | |
|---------------|-------------|
| C/γ(°) | 90.0 |
| 0.0 | 1.11 |
| 45.0 | 1.11 |
| 90.0 | 1.11 |
| 135.0 | 1.11 |
| 180.0 | 1.11 |
| 225.0 | 1.11 |
| 270.0 | 1.11 |
| 315.0 | 1.11 |
| 360.0 | 1.11 |