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Nata

LumCAT: 2-2321-M
Luminaire: 92.70.131.00
Report No: 210805-B006
Test No: 210805-C006
LampCAT: TRIDONIC SLE G7 15MM
Lamp flux(lm): 2910.0
Number of Lamps: 1
Length(mm): 570
Phm Type: C

Voltage(V): 34.4300
Current(A): 0.5200
Power (W): 17.9030
PF: 0.0000
Ballast type: DC
Width(mm): 45
Height(mm): 20

Photometric Results

Lumens(lm): 2796.53
Efficiency(%): 96.10%
Lumens(lm)/Power(W): 156.20
Central intensity(cd): 3986.116
Maximum intensity(cd): 4007.029
Angle of maximum intensity: C=135.0 γ =5.0
Beam Angle(50%Imax): [C0/180]Total=48.9
 [C90/270]Total=48.3
Field angle(10%Imax): [C0/180]Total=65.4
 [C90/270]Total=64.7
Maximum s/h(1/2): C0_180=0.82 C90_270=0.77
Maximum s/h(1/4): C0_180=0.71 C90_270=0.67
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 96.10%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.332%

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0 | 3979.543 | 0.000 | 0 | .000% | .000% |
| 1.0 | 3978.124 | 3.808 | 3.808 | .131% | .136% |
| 2.0 | 3973.717 | 11.413 | 15.221 | .392% | .544% |
| 3.0 | 3969.535 | 18.998 | 34.218 | .653% | 1.224% |
| 4.0 | 3961.468 | 26.548 | 60.766 | .912% | 2.173% |
| 5.0 | 3951.235 | 34.040 | 94.806 | 1.170% | 3.390% |
| 6.0 | 3938.575 | 41.463 | 136.269 | 1.425% | 4.873% |
| 7.0 | 3925.504 | 48.812 | 185.081 | 1.677% | 6.618% |
| 8.0 | 3909.894 | 56.076 | 241.158 | 1.927% | 8.623% |
| 9.0 | 3889.391 | 63.209 | 304.367 | 2.172% | 10.884% |
| 10.0 | 3858.992 | 70.120 | 374.487 | 2.410% | 13.391% |
| 11.0 | 3824.895 | 76.778 | 451.265 | 2.638% | 16.137% |
| 12.0 | 3783.292 | 83.168 | 534.433 | 2.858% | 19.111% |
| 13.0 | 3731.270 | 89.179 | 623.612 | 3.065% | 22.300% |
| 14.0 | 3671.069 | 94.749 | 718.361 | 3.256% | 25.688% |
| 15.0 | 3611.503 | 99.978 | 818.34 | 3.436% | 29.263% |
| 16.0 | 3544.654 | 104.858 | 923.197 | 3.603% | 33.012% |
| 17.0 | 3465.519 | 109.167 | 1032.365 | 3.752% | 36.916% |
| 18.0 | 3382.686 | 112.912 | 1145.277 | 3.880% | 40.954% |
| 19.0 | 3284.206 | 115.990 | 1261.267 | 3.986% | 45.101% |
| 20.0 | 3159.584 | 117.939 | 1379.206 | 4.053% | 49.319% |
| 21.0 | 3009.567 | 118.460 | 1497.666 | 4.071% | 53.555% |
| 22.0 | 2844.350 | 117.637 | 1615.303 | 4.043% | 57.761% |
| 23.0 | 2664.867 | 115.598 | 1730.902 | 3.973% | 61.895% |
| 24.0 | 2458.496 | 112.015 | 1842.917 | 3.849% | 65.900% |
| 25.0 | 2238.792 | 106.806 | 1949.723 | 3.670% | 69.719% |
| 26.0 | 2017.381 | 100.467 | 2050.19 | 3.453% | 73.312% |
| 27.0 | 1784.972 | 93.025 | 2143.216 | 3.197% | 76.638% |
| 28.0 | 1556.275 | 84.593 | 2227.809 | 2.907% | 79.663% |
| 29.0 | 1330.746 | 75.533 | 2303.341 | 2.596% | 82.364% |
| 30.0 | 1113.887 | 66.005 | 2369.346 | 2.268% | 84.725% |
| 31.0 | 930.786 | 56.900 | 2426.246 | 1.955% | 86.759% |
| 32.0 | 773.348 | 48.821 | 2475.068 | 1.678% | 88.505% |
| 33.0 | 634.848 | 41.486 | 2516.554 | 1.426% | 89.989% |
| 34.0 | 521.635 | 34.999 | 2551.552 | 1.203% | 91.240% |
| 35.0 | 420.070 | 29.246 | 2580.798 | 1.005% | 92.286% |
| 36.0 | 334.758 | 24.034 | 2604.832 | .826% | 93.145% |
| 37.0 | 277.000 | 19.952 | 2624.784 | .686% | 93.859% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 224.992 | 16.756 | 2641.54 | .576% | 94.458% |
| 39.0 | 188.707 | 14.121 | 2655.661 | .485% | 94.963% |
| 40.0 | 154.282 | 11.962 | 2667.623 | .411% | 95.391% |
| 41.0 | 127.692 | 10.041 | 2677.664 | .345% | 95.750% |
| 42.0 | 107.421 | 8.542 | 2686.206 | .294% | 96.055% |
| 43.0 | 92.027 | 7.388 | 2693.594 | .254% | 96.319% |
| 44.0 | 80.050 | 6.495 | 2700.089 | .223% | 96.552% |
| 45.0 | 69.933 | 5.764 | 2705.853 | .198% | 96.758% |
| 46.0 | 60.843 | 5.114 | 2710.967 | .176% | 96.941% |
| 47.0 | 53.613 | 4.552 | 2715.52 | .156% | 97.103% |
| 48.0 | 47.731 | 4.097 | 2719.616 | .141% | 97.250% |
| 49.0 | 42.488 | 3.705 | 2723.321 | .127% | 97.382% |
| 50.0 | 38.048 | 3.358 | 2726.679 | .115% | 97.502% |
| 51.0 | 34.485 | 3.069 | 2729.748 | .105% | 97.612% |
| 52.0 | 31.520 | 2.832 | 2732.58 | .097% | 97.713% |
| 53.0 | 28.857 | 2.626 | 2735.207 | .090% | 97.807% |
| 54.0 | 26.594 | 2.444 | 2737.651 | .084% | 97.895% |
| 55.0 | 24.805 | 2.294 | 2739.945 | .079% | 97.977% |
| 56.0 | 23.292 | 2.173 | 2742.118 | .075% | 98.054% |
| 57.0 | 21.851 | 2.064 | 2744.182 | .071% | 98.128% |
| 58.0 | 20.772 | 1.971 | 2746.153 | .068% | 98.199% |
| 59.0 | 19.845 | 1.899 | 2748.052 | .065% | 98.267% |
| 60.0 | 19.031 | 1.837 | 2749.889 | .063% | 98.332% |
| 61.0 | 18.329 | 1.783 | 2751.672 | .061% | 98.396% |
| 62.0 | 17.762 | 1.739 | 2753.411 | .060% | 98.458% |
| 63.0 | 17.298 | 1.705 | 2755.116 | .059% | 98.519% |
| 64.0 | 16.865 | 1.676 | 2756.792 | .058% | 98.579% |
| 65.0 | 16.510 | 1.652 | 2758.444 | .057% | 98.638% |
| 66.0 | 16.208 | 1.632 | 2760.077 | .056% | 98.697% |
| 67.0 | 15.939 | 1.616 | 2761.693 | .056% | 98.754% |
| 68.0 | 15.708 | 1.603 | 2763.296 | .055% | 98.812% |
| 69.0 | 15.521 | 1.593 | 2764.889 | .055% | 98.869% |
| 70.0 | 15.349 | 1.585 | 2766.475 | .054% | 98.925% |
| 71.0 | 15.226 | 1.580 | 2768.055 | .054% | 98.982% |
| 72.0 | 15.117 | 1.578 | 2769.633 | .054% | 99.038% |
| 73.0 | 15.032 | 1.577 | 2771.209 | .054% | 99.095% |
| 74.0 | 14.976 | 1.578 | 2772.787 | .054% | 99.151% |
| 75.0 | 14.905 | 1.579 | 2774.366 | .054% | 99.208% |

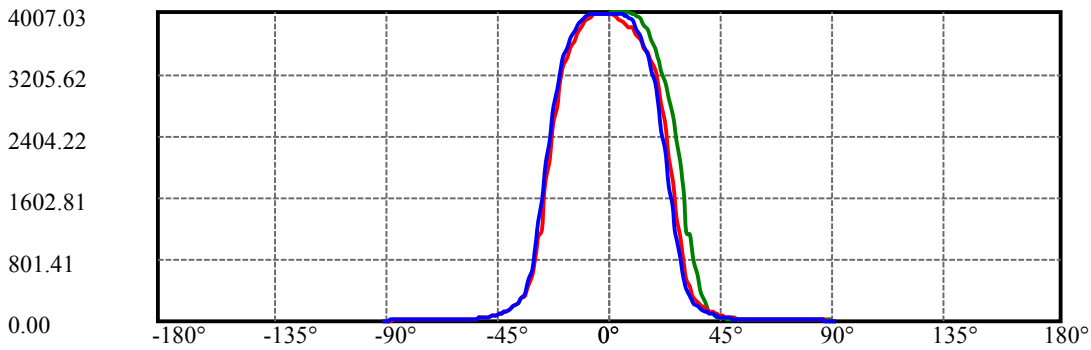
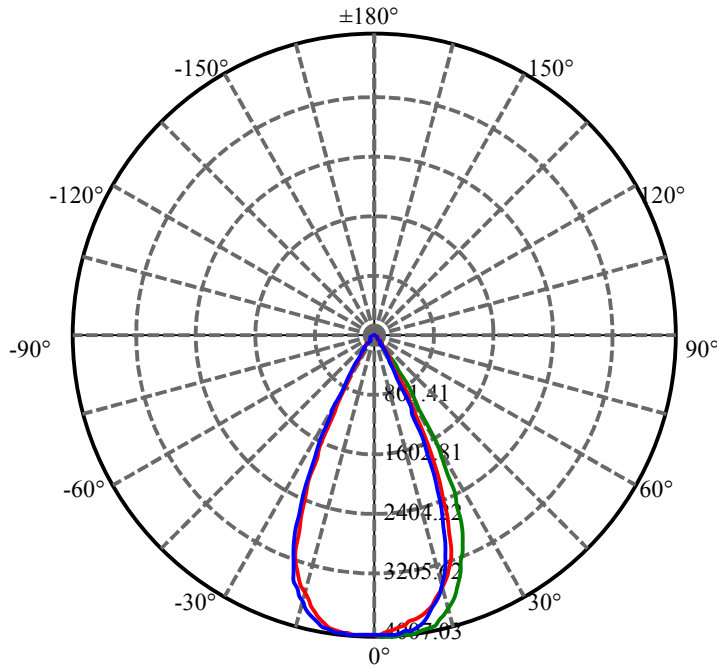
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 14.860 | 1.580 | 2775.946 | .054% | 99.264% |
| 77.0 | 14.830 | 1.583 | 2777.529 | .054% | 99.321% |
| 78.0 | 14.591 | 1.575 | 2779.104 | .054% | 99.377% |
| 79.0 | 14.475 | 1.562 | 2780.665 | .054% | 99.433% |
| 80.0 | 14.352 | 1.554 | 2782.219 | .053% | 99.488% |
| 81.0 | 14.128 | 1.540 | 2783.76 | .053% | 99.543% |
| 82.0 | 13.710 | 1.510 | 2785.269 | .052% | 99.597% |
| 83.0 | 13.508 | 1.480 | 2786.749 | .051% | 99.650% |
| 84.0 | 13.295 | 1.460 | 2788.209 | .050% | 99.703% |
| 85.0 | 13.134 | 1.442 | 2789.651 | .050% | 99.754% |
| 86.0 | 12.817 | 1.419 | 2791.07 | .049% | 99.805% |
| 87.0 | 12.608 | 1.391 | 2792.461 | .048% | 99.855% |
| 88.0 | 12.399 | 1.370 | 2793.831 | .047% | 99.904% |
| 89.0 | 12.283 | 1.353 | 2795.184 | .046% | 99.952% |
| 90.0 | 12.205 | 1.343 | 2796.527 | .046% | 100.000% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 2369.35 | 81.42% | 84.72% |
| 0-40 | 2667.62 | 91.67% | 95.39% |
| 0-60 | 2749.89 | 94.50% | 98.33% |
| 0-90 | 2795.18 | 96.06% | 99.95% |
| 0-120 | 2795.18 | 96.06% | 99.95% |
| 0-180 | 2796.53 | 96.10% | 100.00% |
| 60-90 | 47.13 | 1.62% | 1.69% |
| 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% |
| 0-28.12 | 2237.22 | 76.88% | 80.00% |

ZONAL LUMEN SUMMARY

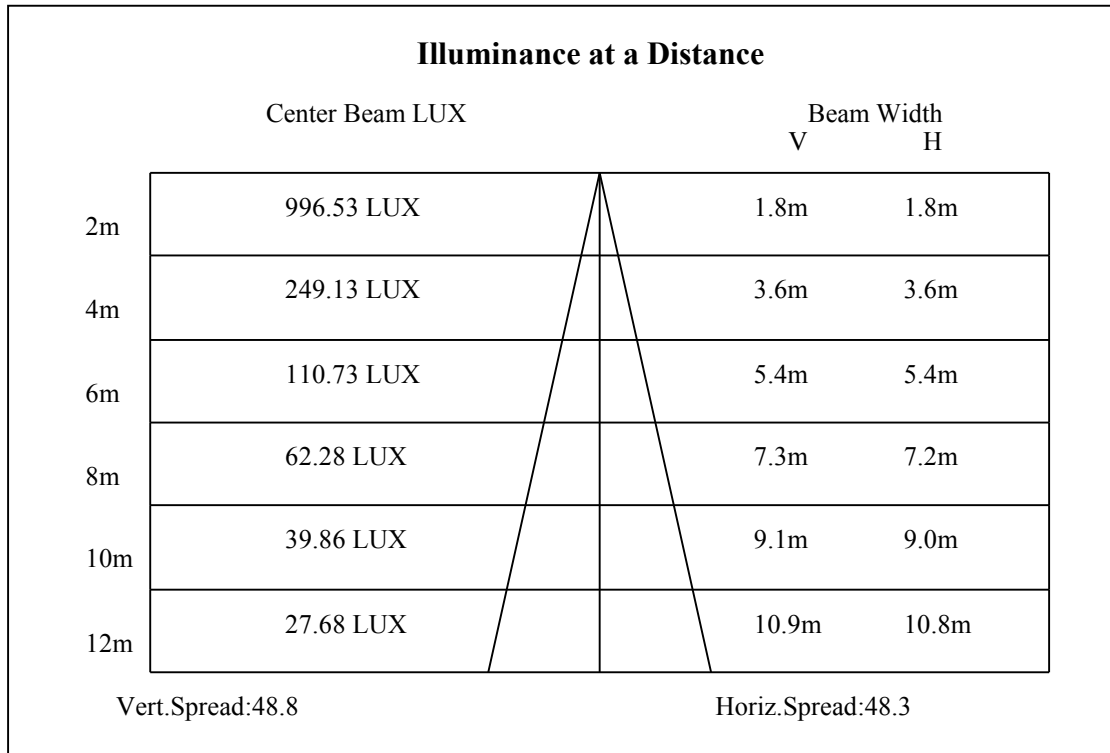
| | |
|---------|---------|
| 0-10 | 374.49 |
| 10-20 | 1004.72 |
| 20-30 | 990.14 |
| 30-40 | 298.28 |
| 40-50 | 59.06 |
| 50-60 | 23.21 |
| 60-70 | 16.59 |
| 70-80 | 15.74 |
| 80-90 | 12.96 |
| 90-100 | 0.00 |
| 100-110 | 0.00 |
| 110-120 | 0.00 |
| 120-130 | 0.00 |
| 130-140 | 0.00 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.00 |

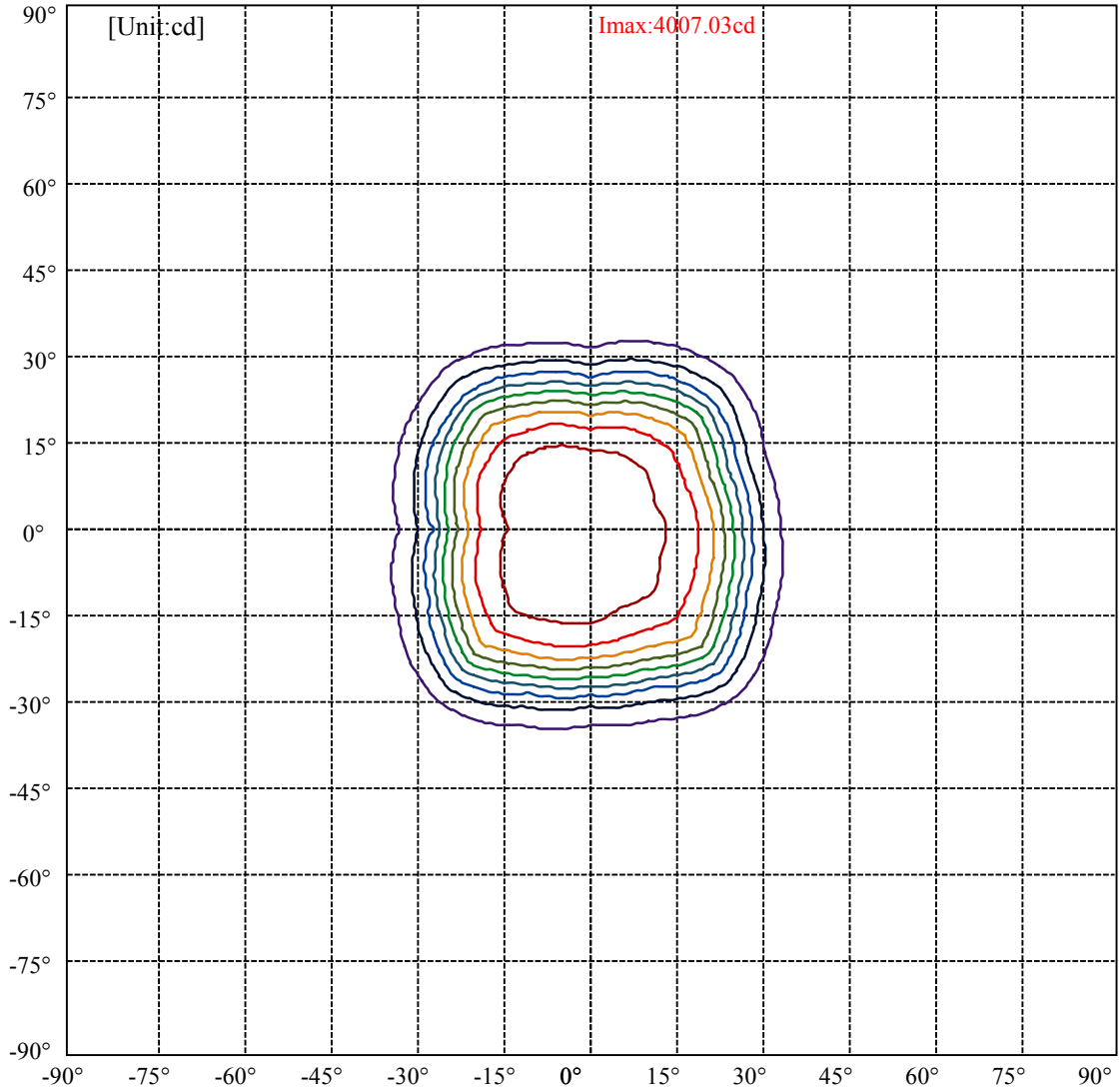


C135(Max): ———
C0/C180: ———
C90/C270: ———

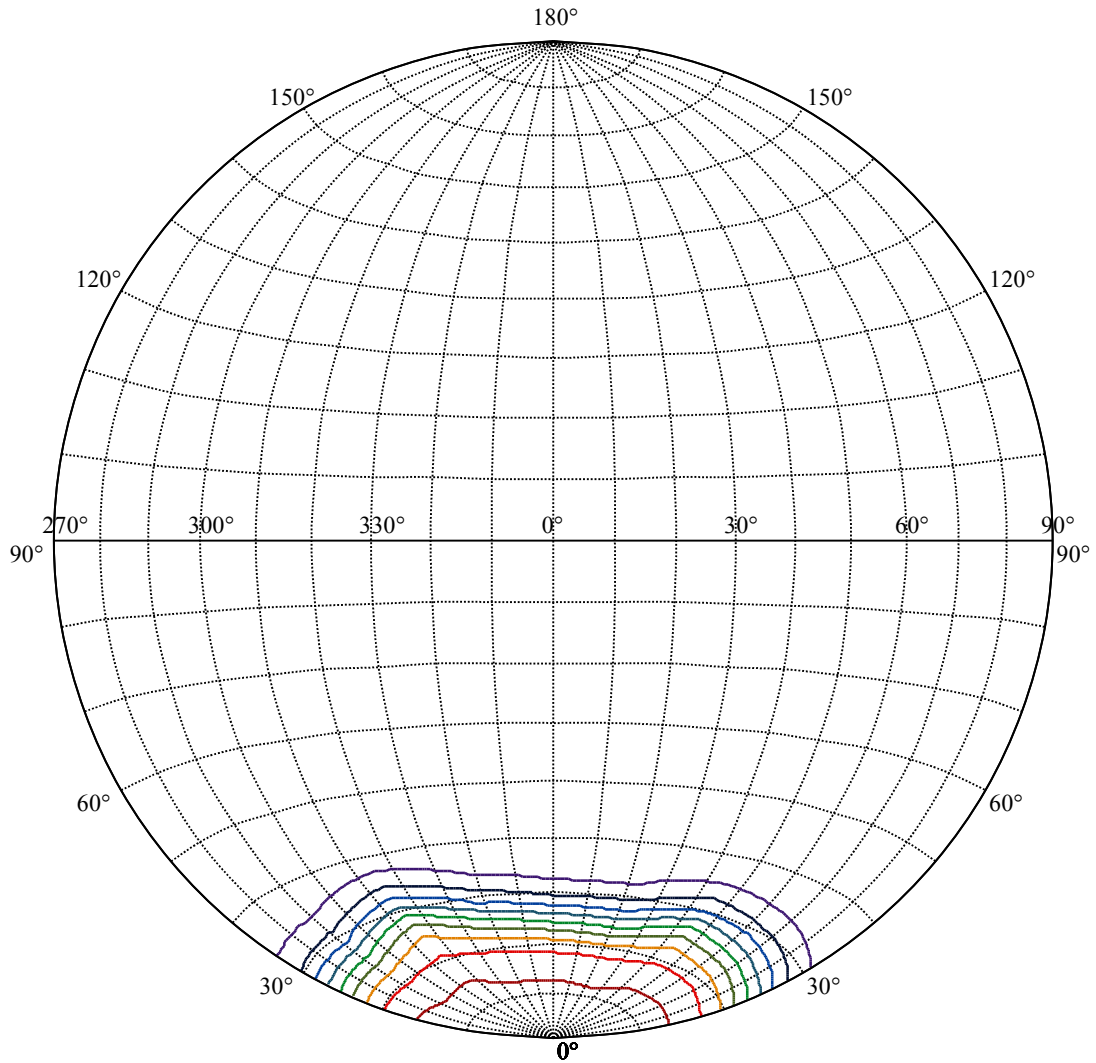
Field angle(10%Imax):C0/180Left:32.9 Right:32.5
:C90/270Left:28.6 Right:36.1

Beam Angle(50%Imax):C0/180Left:24.4 Right:24.5
:C90/270Left:20.3 Right:28.0





| | |
|-------------------|---|
| (10%Imax) 400.574 | — |
| (20%Imax) 801.148 | — |
| (30%Imax) 1201.72 | — |
| (40%Imax) 1602.3 | — |
| (50%Imax) 2002.87 | — |
| (60%Imax) 2403.44 | — |
| (70%Imax) 2804.02 | — |
| (80%Imax) 3204.59 | — |
| (90%Imax) 3605.17 | — |



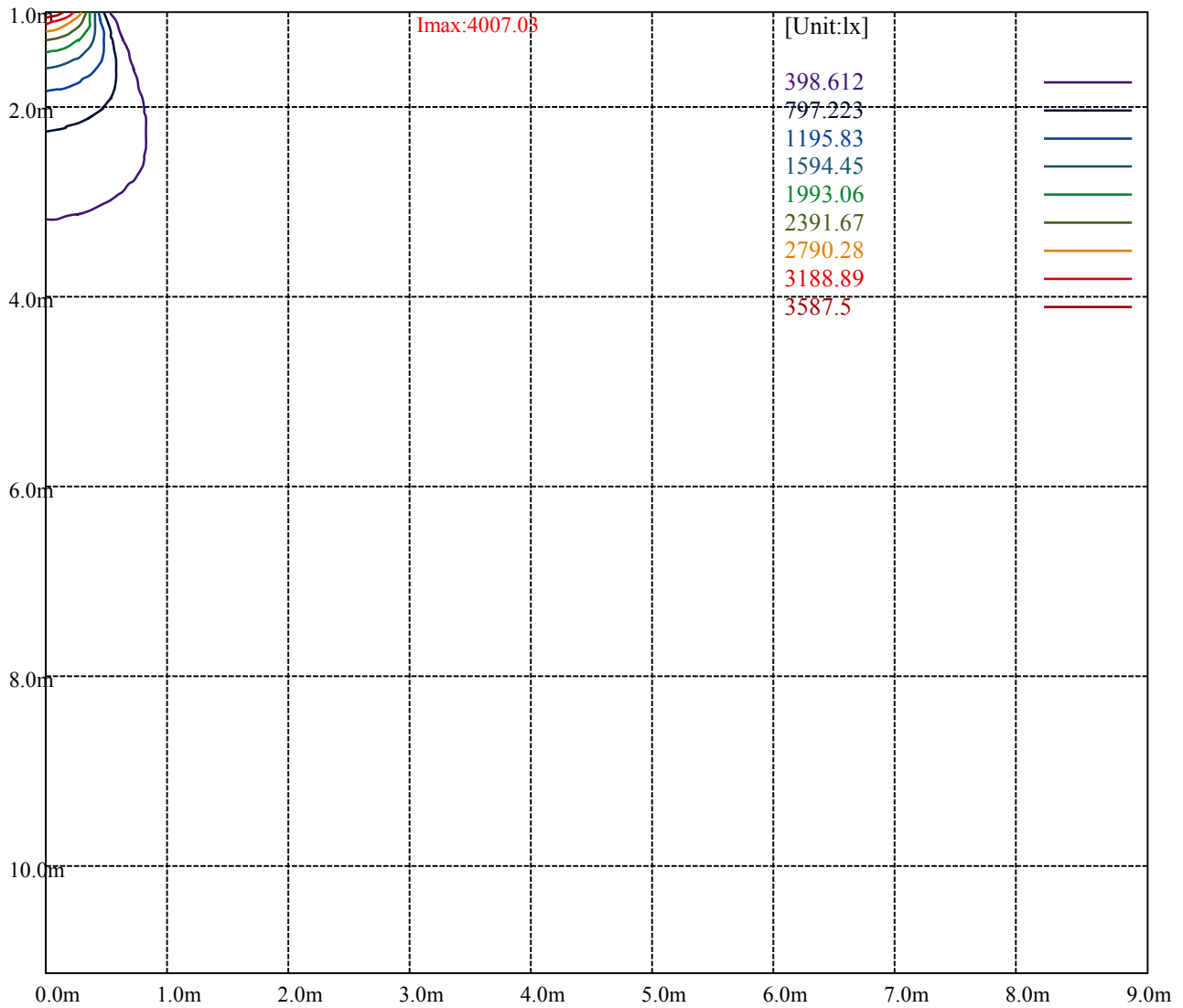
House

[Unit:cd]

Road

I_{max}:4007.03

| | |
|--------------------------------|---|
| (10%I _{max}) 400.703 | — |
| (20%I _{max}) 801.406 | — |
| (30%I _{max}) 1202.11 | — |
| (40%I _{max}) 1602.81 | — |
| (50%I _{max}) 2003.51 | — |
| (60%I _{max}) 2404.22 | — |
| (70%I _{max}) 2804.92 | — |
| (80%I _{max}) 3205.62 | — |
| (90%I _{max}) 3606.33 | — |



Luminance Table

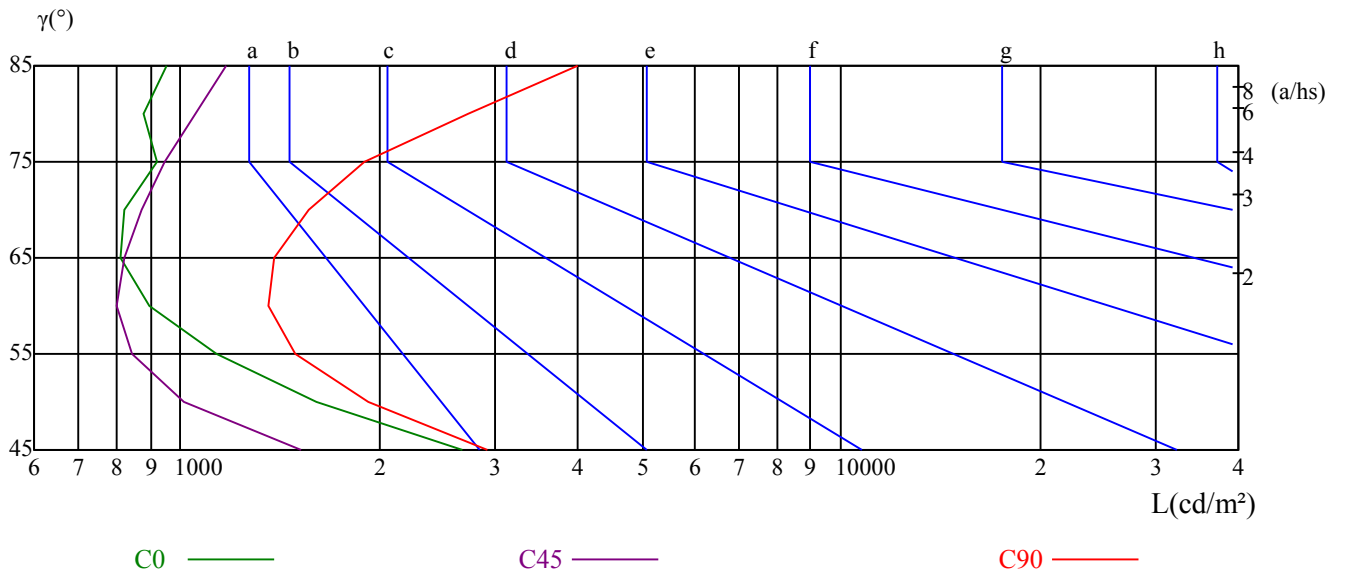
| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|------|------|------|------|------|------|------|------|------|
| C0 | 2664 | 1611 | 1133 | 898 | 813 | 822 | 924 | 880 | 954 |
| C45 | 1523 | 1009 | 846 | 801 | 820 | 871 | 946 | 1051 | 1173 |
| C90 | 2909 | 1927 | 1493 | 1357 | 1389 | 1559 | 1902 | 2719 | 4006 |

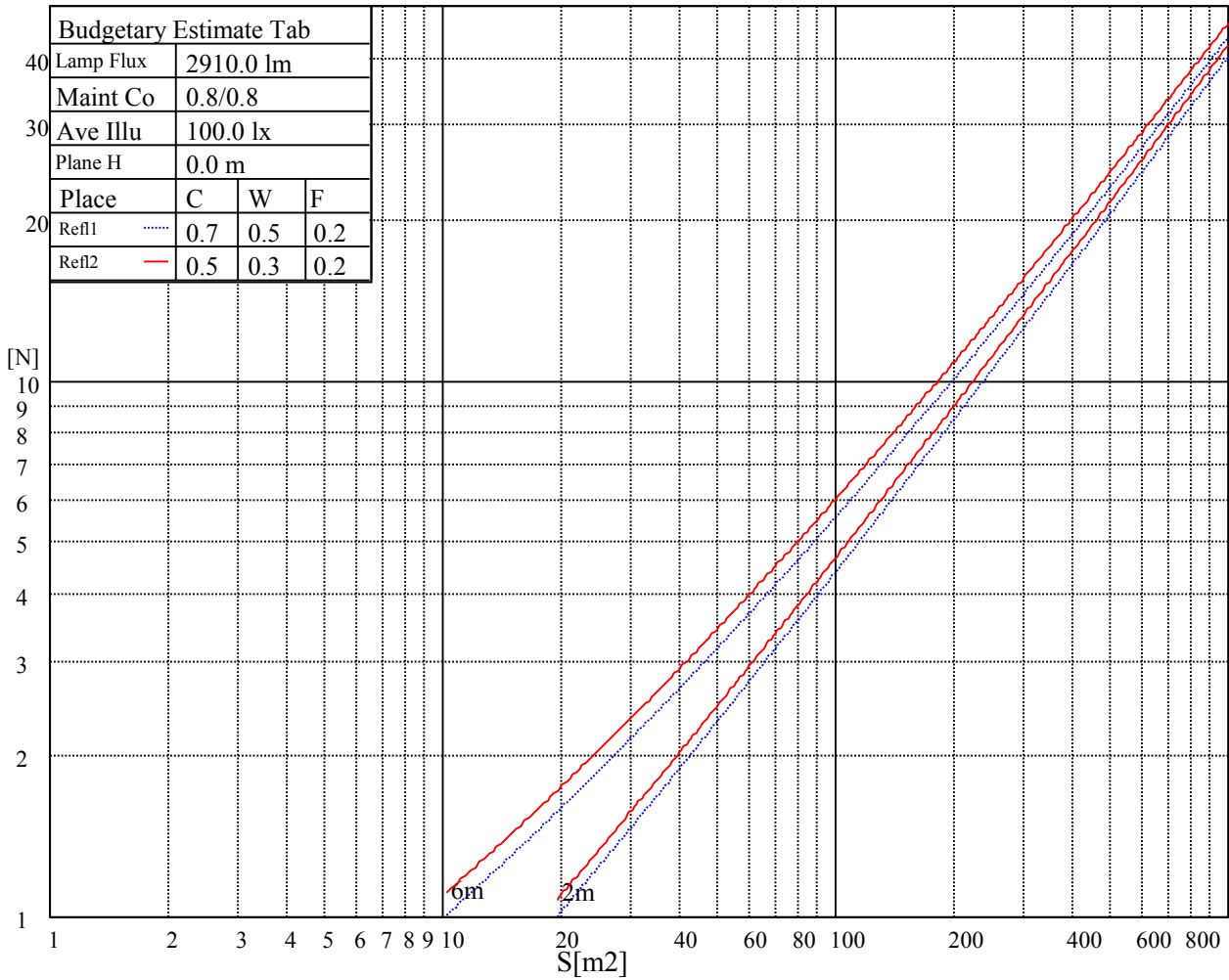
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 1621 | 1541 | 1447 | 2444 | 2169 | 2162 | 5894 | 5707 | 5900 |

Glare Table

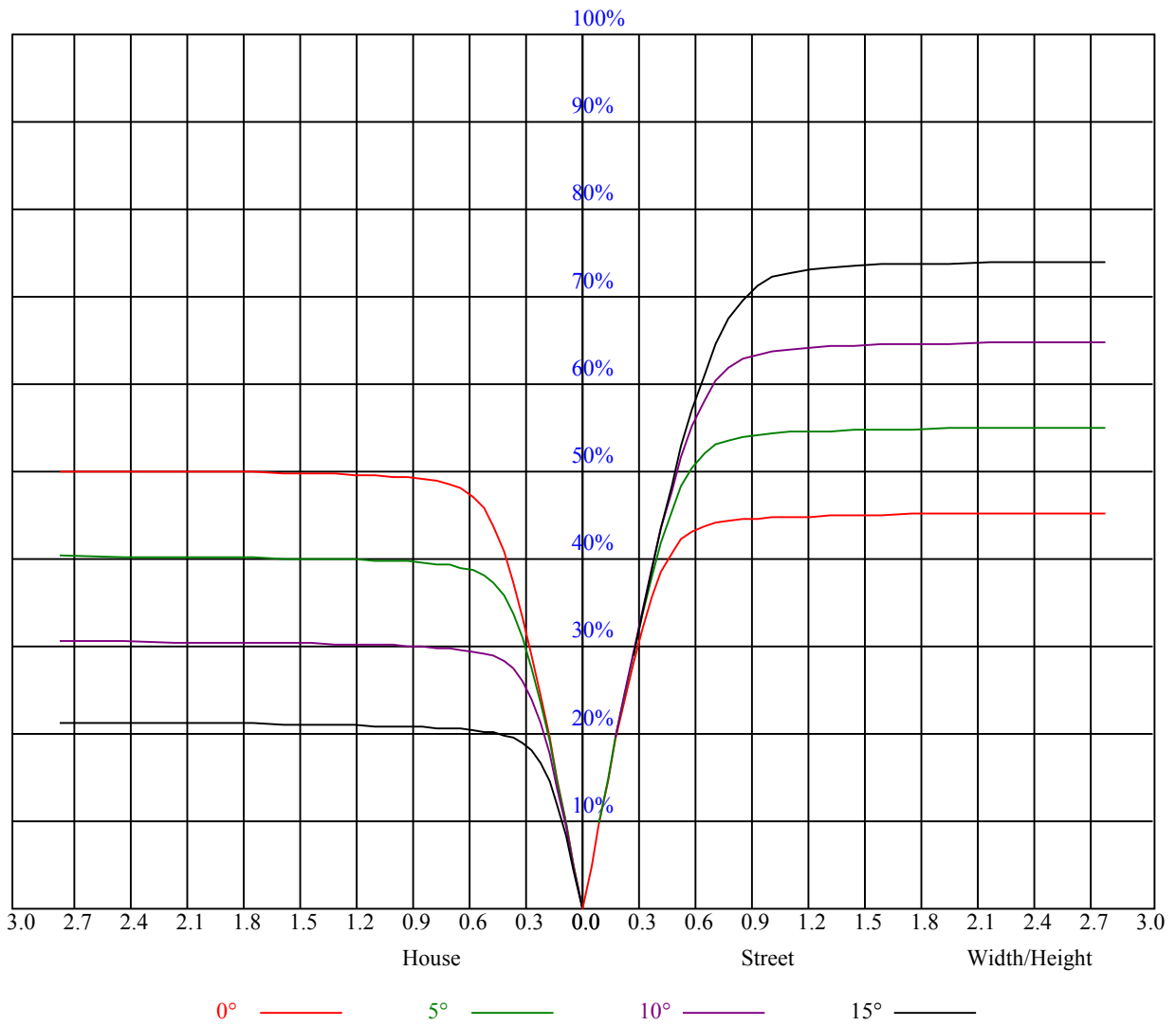
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 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 | 1.14 | 1.14 | 1.14 | 1.12 | 1.12 | 1.12 | 1.07 | 1.07 | 1.07 | 1.02 | 1.02 | 1.02 | 0.98 | 0.98 | 0.98 | 0.96 |
| 1 | 1.07 | 1.04 | 1.02 | 1.05 | 1.03 | 1.01 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.90 |
| 2 | 1.00 | 0.96 | 0.93 | 0.98 | 0.95 | 0.92 | 0.95 | 0.92 | 0.90 | 0.92 | 0.90 | 0.88 | 0.90 | 0.88 | 0.86 | 0.85 |
| 3 | 0.94 | 0.89 | 0.86 | 0.93 | 0.88 | 0.85 | 0.90 | 0.87 | 0.84 | 0.88 | 0.85 | 0.83 | 0.86 | 0.83 | 0.81 | 0.80 |
| 4 | 0.89 | 0.84 | 0.80 | 0.87 | 0.83 | 0.79 | 0.85 | 0.82 | 0.78 | 0.84 | 0.80 | 0.78 | 0.82 | 0.79 | 0.77 | 0.75 |
| 5 | 0.84 | 0.79 | 0.75 | 0.83 | 0.78 | 0.74 | 0.81 | 0.77 | 0.74 | 0.80 | 0.76 | 0.73 | 0.78 | 0.75 | 0.72 | 0.71 |
| 6 | 0.79 | 0.74 | 0.70 | 0.79 | 0.74 | 0.70 | 0.77 | 0.73 | 0.70 | 0.76 | 0.72 | 0.69 | 0.75 | 0.71 | 0.69 | 0.67 |
| 7 | 0.75 | 0.70 | 0.66 | 0.75 | 0.70 | 0.66 | 0.73 | 0.69 | 0.66 | 0.72 | 0.68 | 0.65 | 0.71 | 0.68 | 0.65 | 0.64 |
| 8 | 0.71 | 0.66 | 0.63 | 0.71 | 0.66 | 0.63 | 0.70 | 0.65 | 0.62 | 0.69 | 0.65 | 0.62 | 0.68 | 0.64 | 0.62 | 0.61 |
| 9 | 0.68 | 0.63 | 0.59 | 0.68 | 0.63 | 0.59 | 0.67 | 0.62 | 0.59 | 0.66 | 0.62 | 0.59 | 0.65 | 0.61 | 0.59 | 0.58 |
| 10 | 0.65 | 0.60 | 0.56 | 0.65 | 0.60 | 0.56 | 0.64 | 0.59 | 0.56 | 0.63 | 0.59 | 0.56 | 0.62 | 0.59 | 0.56 | 0.55 |



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 | 3986.12 | 3972.37 | 3949.67 | 3937.72 | 3908.44 | 3888.12 | 3864.22 | 3835.54 | 3816.42 |
| 22.5 | 3969.39 | 3949.07 | 3925.17 | 3909.63 | 3876.77 | 3853.46 | 3831.95 | 3807.45 | 3781.76 |
| 45.0 | 3961.02 | 3952.65 | 3930.55 | 3914.41 | 3897.68 | 3867.21 | 3843.31 | 3827.17 | 3811.64 |
| 67.5 | 3975.36 | 3968.79 | 3961.62 | 3954.45 | 3944.29 | 3928.16 | 3913.22 | 3901.27 | 3880.35 |
| 90.0 | 3987.31 | 3983.13 | 3986.71 | 3983.13 | 3978.95 | 3973.57 | 3964.60 | 3950.26 | 3931.14 |
| 112.5 | 3985.52 | 3987.31 | 3996.87 | 4004.04 | 4003.44 | 4003.44 | 4002.25 | 3996.87 | 3987.91 |
| 135.0 | 3989.70 | 3998.07 | 3997.47 | 4002.85 | 4005.24 | 4007.03 | 4003.44 | 4001.05 | 3995.68 |
| 157.5 | 3981.93 | 3992.09 | 3992.69 | 3995.68 | 3999.86 | 3995.08 | 3993.29 | 3990.30 | 3980.14 |
| 180.0 | 3986.12 | 3983.73 | 3983.73 | 3984.92 | 3983.73 | 3978.35 | 3970.58 | 3958.03 | 3943.09 |
| 202.5 | 3969.39 | 3984.32 | 3998.66 | 3998.07 | 3996.87 | 4000.46 | 3995.68 | 3987.91 | 3982.53 |
| 225.0 | 3961.02 | 3974.76 | 3990.90 | 3991.49 | 3996.27 | 3995.08 | 3992.09 | 3984.32 | 3975.36 |
| 247.5 | 3975.36 | 3985.52 | 3989.10 | 3996.27 | 3992.69 | 3993.29 | 3990.90 | 3984.32 | 3976.56 |
| 270.0 | 3987.31 | 3989.10 | 3987.31 | 3990.90 | 3987.91 | 3992.09 | 3988.51 | 3981.93 | 3974.17 |
| 292.5 | 3985.52 | 3980.74 | 3972.37 | 3964.60 | 3959.23 | 3946.68 | 3925.77 | 3908.44 | 3885.13 |
| 315.0 | 3989.70 | 3981.34 | 3968.79 | 3953.85 | 3938.31 | 3922.18 | 3889.32 | 3867.81 | 3840.32 |
| 337.5 | 3981.93 | 3967.00 | 3947.87 | 3930.55 | 3913.81 | 3875.57 | 3848.09 | 3825.38 | 3796.10 |
| 360.0 | 3986.12 | 3972.37 | 3949.67 | 3937.72 | 3908.44 | 3888.12 | 3864.22 | 3835.54 | 3816.42 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 3797.30 | 3751.88 | 3712.45 | 3666.44 | 3598.92 | 3534.98 | 3475.23 | 3411.29 | 3349.15 |
| 22.5 | 3750.69 | 3696.31 | 3653.29 | 3599.51 | 3529.60 | 3474.03 | 3432.80 | 3371.26 | 3295.97 |
| 45.0 | 3791.92 | 3764.43 | 3735.15 | 3694.52 | 3645.52 | 3586.37 | 3528.41 | 3459.69 | 3365.28 |
| 67.5 | 3847.49 | 3814.63 | 3776.38 | 3719.02 | 3657.48 | 3598.32 | 3522.43 | 3442.36 | 3365.88 |
| 90.0 | 3896.49 | 3851.67 | 3787.74 | 3710.06 | 3641.34 | 3554.70 | 3458.50 | 3367.67 | 3236.22 |
| 112.5 | 3968.19 | 3943.09 | 3898.88 | 3849.88 | 3793.71 | 3711.85 | 3644.93 | 3558.29 | 3468.66 |
| 135.0 | 3990.30 | 3971.18 | 3951.46 | 3928.75 | 3881.55 | 3837.33 | 3781.16 | 3706.47 | 3625.21 |
| 157.5 | 3969.39 | 3947.87 | 3924.57 | 3889.32 | 3837.93 | 3778.18 | 3722.61 | 3655.68 | 3579.20 |
| 180.0 | 3915.61 | 3877.37 | 3829.56 | 3768.62 | 3703.48 | 3627.60 | 3551.11 | 3488.97 | 3407.11 |
| 202.5 | 3969.98 | 3951.46 | 3928.75 | 3900.07 | 3858.24 | 3799.69 | 3736.35 | 3674.21 | 3598.92 |
| 225.0 | 3962.81 | 3956.84 | 3942.50 | 3924.57 | 3909.03 | 3873.78 | 3848.09 | 3806.86 | 3737.54 |
| 247.5 | 3967.59 | 3945.48 | 3919.19 | 3888.72 | 3840.32 | 3784.75 | 3731.57 | 3672.41 | 3601.31 |
| 270.0 | 3965.20 | 3932.94 | 3906.64 | 3864.82 | 3802.67 | 3747.10 | 3683.77 | 3603.10 | 3527.21 |
| 292.5 | 3857.65 | 3820.00 | 3781.16 | 3737.54 | 3686.75 | 3619.23 | 3557.09 | 3494.35 | 3409.50 |
| 315.0 | 3806.86 | 3779.97 | 3759.65 | 3738.14 | 3709.46 | 3674.21 | 3625.21 | 3568.44 | 3505.70 |
| 337.5 | 3772.80 | 3738.74 | 3690.94 | 3652.69 | 3604.29 | 3534.98 | 3484.79 | 3433.40 | 3375.44 |
| 360.0 | 3797.30 | 3751.88 | 3712.45 | 3666.44 | 3598.92 | 3534.98 | 3475.23 | 3411.29 | 3349.15 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 3258.33 | 3138.82 | 2987.05 | 2807.19 | 2584.91 | 2371.59 | 2115.85 | 1852.34 | 1616.91 |
| 22.5 | 3202.76 | 3065.92 | 2890.25 | 2708.60 | 2467.79 | 2256.27 | 2010.69 | 1746.58 | 1522.50 |
| 45.0 | 3300.75 | 3226.66 | 3131.65 | 3012.74 | 2901.60 | 2748.63 | 2597.46 | 2399.08 | 2185.16 |
| 67.5 | 3264.30 | 3156.15 | 3016.92 | 2845.43 | 2658.41 | 2476.76 | 2222.21 | 2004.71 | 1791.39 |
| 90.0 | 3076.08 | 2915.94 | 2722.34 | 2458.83 | 2236.55 | 2005.90 | 1749.56 | 1495.02 | 1192.25 |
| 112.5 | 3370.06 | 3256.53 | 3091.62 | 2930.28 | 2728.91 | 2497.67 | 2255.07 | 2035.18 | 1781.23 |
| 135.0 | 3543.35 | 3442.96 | 3350.35 | 3239.20 | 3121.49 | 3009.75 | 2883.67 | 2699.64 | 2528.74 |
| 157.5 | 3522.43 | 3453.12 | 3339.59 | 3219.49 | 3069.51 | 2873.52 | 2647.65 | 2432.54 | 2183.97 |
| 180.0 | 3302.54 | 3183.04 | 3031.26 | 2795.84 | 2583.72 | 2362.03 | 2102.11 | 1838.60 | 1606.16 |
| 202.5 | 3527.81 | 3468.06 | 3391.57 | 3266.09 | 3137.62 | 2978.08 | 2767.75 | 2531.73 | 2313.63 |
| 225.0 | 3679.58 | 3613.26 | 3524.82 | 3448.94 | 3361.70 | 3267.29 | 3181.84 | 3082.65 | 2947.01 |
| 247.5 | 3544.54 | 3463.28 | 3368.87 | 3242.79 | 3084.44 | 2909.97 | 2714.57 | 2450.47 | 2230.58 |
| 270.0 | 3443.56 | 3318.68 | 3171.09 | 3006.17 | 2791.66 | 2577.14 | 2330.96 | 2066.26 | 1827.24 |
| 292.5 | 3336.60 | 3246.97 | 3122.69 | 2982.86 | 2820.34 | 2618.97 | 2418.20 | 2179.79 | 1933.60 |
| 315.0 | 3437.58 | 3367.67 | 3287.01 | 3203.35 | 3134.64 | 3062.34 | 2941.64 | 2826.91 | 2689.48 |
| 337.5 | 3312.70 | 3230.24 | 3126.27 | 2985.25 | 2826.31 | 2621.96 | 2396.69 | 2179.19 | 1928.23 |
| 360.0 | 3258.33 | 3138.82 | 2987.05 | 2807.19 | 2584.91 | 2371.59 | 2115.85 | 1852.34 | 1616.91 |

Intensity data(cd)

| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0.0 | 1351.01 | 1097.66 | 889.72 | 716.44 | 552.71 | 445.16 | 356.13 | 301.75 | 249.41 |
| 22.5 | 1285.28 | 1051.65 | 864.03 | 694.93 | 531.80 | 428.43 | 342.98 | 304.14 | 238.18 |
| 45.0 | 1979.02 | 1729.85 | 1479.48 | 1188.72 | 1066.41 | 867.49 | 688.59 | 549.73 | 427.17 |
| 67.5 | 1535.65 | 1332.49 | 1135.90 | 926.17 | 745.72 | 608.28 | 480.41 | 383.61 | 311.31 |
| 90.0 | 1063.06 | 825.79 | 656.98 | 525.47 | 412.12 | 321.17 | 261.60 | 222.52 | 196.53 |
| 112.5 | 1538.04 | 1324.72 | 1094.08 | 898.68 | 715.24 | 558.69 | 457.11 | 362.10 | 307.13 |
| 135.0 | 2339.33 | 2073.43 | 1839.79 | 1610.34 | 1179.16 | 1129.03 | 940.21 | 768.12 | 599.02 |
| 157.5 | 1965.27 | 1718.49 | 1466.34 | 1250.63 | 1031.93 | 837.14 | 691.34 | 567.06 | 437.39 |
| 180.0 | 1185.50 | 1106.80 | 905.50 | 737.83 | 590.90 | 473.48 | 387.56 | 323.56 | 286.69 |
| 202.5 | 2063.27 | 1804.54 | 1579.27 | 1181.14 | 1131.96 | 923.06 | 762.33 | 609.18 | 496.91 |
| 225.0 | 2785.08 | 2618.97 | 2393.10 | 2170.23 | 1909.70 | 1653.36 | 1431.08 | 1220.75 | 980.55 |
| 247.5 | 2007.70 | 1723.87 | 1501.59 | 1185.08 | 1088.16 | 865.04 | 710.16 | 578.59 | 454.18 |
| 270.0 | 1557.76 | 1295.44 | 1079.73 | 882.55 | 679.99 | 558.09 | 454.12 | 359.71 | 302.95 |
| 292.5 | 1713.12 | 1466.34 | 1180.18 | 1032.65 | 856.92 | 686.14 | 545.13 | 440.26 | 355.47 |
| 315.0 | 2481.54 | 2269.42 | 2051.91 | 1791.99 | 1548.80 | 1340.26 | 1114.39 | 929.76 | 740.34 |
| 337.5 | 1708.93 | 1460.96 | 1174.32 | 1029.36 | 851.06 | 678.73 | 534.43 | 425.32 | 337.90 |
| 360.0 | 1351.01 | 1097.66 | 889.72 | 716.44 | 552.71 | 445.16 | 356.13 | 301.75 | 249.41 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 219.59 | 192.94 | 164.80 | 144.84 | 128.17 | 112.16 | 98.59 | 88.20 | 77.80 |
| 22.5 | 209.31 | 183.56 | 156.49 | 138.33 | 121.18 | 106.00 | 92.38 | 81.62 | 71.40 |
| 45.0 | 303.84 | 225.03 | 163.66 | 112.75 | 89.93 | 73.97 | 59.93 | 49.42 | 42.54 |
| 67.5 | 227.36 | 193.12 | 164.92 | 141.55 | 119.09 | 102.00 | 86.82 | 74.87 | 65.25 |
| 90.0 | 170.53 | 146.99 | 128.47 | 112.22 | 97.99 | 87.30 | 77.80 | 67.70 | 60.59 |
| 112.5 | 226.34 | 199.51 | 173.16 | 147.77 | 128.89 | 112.99 | 96.14 | 85.27 | 75.05 |
| 135.0 | 457.95 | 349.43 | 251.68 | 175.20 | 125.54 | 90.94 | 74.21 | 60.53 | 50.13 |
| 157.5 | 355.53 | 304.74 | 254.13 | 219.35 | 188.52 | 164.38 | 137.07 | 119.57 | 104.57 |
| 180.0 | 249.59 | 216.60 | 191.69 | 167.19 | 146.22 | 129.90 | 115.68 | 100.27 | 89.75 |
| 202.5 | 393.59 | 321.77 | 282.63 | 244.69 | 211.05 | 185.89 | 164.32 | 140.66 | 124.41 |
| 225.0 | 802.48 | 646.53 | 476.23 | 360.31 | 301.75 | 194.44 | 134.03 | 104.81 | 85.63 |
| 247.5 | 354.45 | 294.10 | 250.36 | 215.23 | 187.39 | 160.32 | 139.76 | 119.86 | 103.19 |
| 270.0 | 259.45 | 228.97 | 194.85 | 171.19 | 150.70 | 131.64 | 115.32 | 102.60 | 90.23 |
| 292.5 | 284.18 | 248.63 | 218.28 | 184.46 | 161.03 | 140.96 | 121.96 | 105.82 | 93.33 |
| 315.0 | 574.23 | 446.35 | 325.06 | 313.70 | 162.59 | 120.94 | 93.51 | 75.35 | 62.74 |
| 337.5 | 267.69 | 233.69 | 203.46 | 170.53 | 148.49 | 129.25 | 111.20 | 95.90 | 84.19 |
| 360.0 | 219.59 | 192.94 | 164.80 | 144.84 | 128.17 | 112.16 | 98.59 | 88.20 | 77.80 |
| C/γ(°) | 45.0 | 46.0 | 47.0 | 48.0 | 49.0 | 50.0 | 51.0 | 52.0 | 53.0 |
| 0.0 | 69.79 | 61.90 | 55.15 | 50.07 | 44.99 | 40.63 | 37.29 | 34.42 | 31.31 |
| 22.5 | 63.70 | 56.17 | 49.71 | 44.81 | 40.09 | 36.09 | 33.04 | 30.35 | 27.55 |
| 45.0 | 36.99 | 33.16 | 29.76 | 27.13 | 25.22 | 23.36 | 21.93 | 20.85 | 19.96 |
| 67.5 | 57.48 | 49.06 | 43.62 | 39.14 | 34.24 | 31.13 | 28.50 | 26.05 | 24.08 |
| 90.0 | 54.61 | 48.82 | 43.80 | 40.09 | 36.39 | 33.10 | 30.65 | 28.20 | 26.35 |
| 112.5 | 65.61 | 57.30 | 51.09 | 45.17 | 40.15 | 36.33 | 32.68 | 29.94 | 27.31 |
| 135.0 | 43.14 | 37.35 | 33.16 | 30.18 | 27.79 | 25.28 | 23.66 | 22.29 | 21.03 |
| 157.5 | 90.17 | 77.86 | 68.66 | 59.81 | 52.16 | 46.37 | 40.93 | 36.81 | 32.98 |
| 180.0 | 80.37 | 69.91 | 62.86 | 56.83 | 50.79 | 45.65 | 41.71 | 37.88 | 34.84 |
| 202.5 | 110.18 | 96.02 | 83.95 | 74.51 | 65.37 | 57.48 | 51.45 | 45.77 | 41.47 |
| 225.0 | 69.31 | 57.12 | 49.18 | 42.25 | 37.05 | 33.46 | 30.18 | 27.79 | 25.69 |
| 247.5 | 90.23 | 78.87 | 66.86 | 58.86 | 51.99 | 44.81 | 39.97 | 35.97 | 32.21 |
| 270.0 | 80.55 | 70.99 | 62.68 | 56.47 | 50.25 | 44.93 | 40.87 | 37.41 | 33.58 |
| 292.5 | 80.91 | 71.40 | 62.14 | 54.38 | 48.52 | 42.90 | 38.06 | 34.60 | 31.55 |
| 315.0 | 53.18 | 44.58 | 39.50 | 35.31 | 31.31 | 28.68 | 26.47 | 24.56 | 22.95 |
| 337.5 | 72.72 | 62.98 | 55.69 | 48.70 | 43.50 | 38.54 | 34.36 | 31.43 | 28.86 |
| 360.0 | 69.79 | 61.90 | 55.15 | 50.07 | 44.99 | 40.63 | 37.29 | 34.42 | 31.31 |

Intensity data(cd)

| | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 29.16 | 27.25 | 25.39 | 23.84 | 22.59 | 21.39 | 20.38 | 19.54 | 18.76 |
| 22.5 | 25.63 | 24.02 | 22.47 | 21.15 | 20.26 | 19.30 | 18.58 | 17.99 | 17.45 |
| 45.0 | 19.06 | 18.46 | 17.93 | 17.39 | 16.97 | 16.61 | 16.31 | 16.07 | 15.83 |
| 67.5 | 22.59 | 21.33 | 20.32 | 19.42 | 18.64 | 18.11 | 17.57 | 17.03 | 16.67 |
| 90.0 | 24.56 | 23.06 | 21.93 | 20.79 | 19.90 | 19.12 | 18.46 | 17.81 | 17.33 |
| 112.5 | 25.16 | 23.54 | 22.17 | 20.79 | 19.84 | 19.06 | 18.22 | 17.69 | 17.27 |
| 135.0 | 20.02 | 19.24 | 18.52 | 17.93 | 17.51 | 17.03 | 16.67 | 16.37 | 16.07 |
| 157.5 | 29.88 | 27.61 | 25.63 | 23.60 | 22.29 | 21.15 | 20.02 | 19.24 | 18.52 |
| 180.0 | 31.97 | 29.40 | 27.49 | 25.63 | 24.02 | 22.77 | 21.69 | 20.55 | 19.72 |
| 202.5 | 37.29 | 33.76 | 31.07 | 28.50 | 26.23 | 24.62 | 23.18 | 21.63 | 20.67 |
| 225.0 | 23.96 | 22.65 | 21.57 | 20.38 | 19.60 | 18.94 | 18.22 | 17.75 | 17.33 |
| 247.5 | 28.98 | 26.65 | 24.50 | 22.71 | 21.45 | 20.26 | 19.42 | 18.58 | 17.93 |
| 270.0 | 31.01 | 28.74 | 26.65 | 24.80 | 23.36 | 21.99 | 20.79 | 19.90 | 19.00 |
| 292.5 | 28.32 | 26.17 | 24.38 | 22.47 | 21.15 | 20.08 | 19.12 | 18.34 | 17.75 |
| 315.0 | 21.75 | 20.61 | 19.78 | 18.94 | 18.28 | 17.75 | 17.33 | 16.91 | 16.55 |
| 337.5 | 26.17 | 24.38 | 22.89 | 21.27 | 20.26 | 19.36 | 18.52 | 17.87 | 17.33 |
| 360.0 | 29.16 | 27.25 | 25.39 | 23.84 | 22.59 | 21.39 | 20.38 | 19.54 | 18.76 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 18.22 | 17.69 | 17.21 | 16.79 | 16.55 | 16.31 | 16.19 | 16.01 | 16.01 |
| 22.5 | 17.03 | 16.61 | 16.31 | 16.07 | 15.89 | 15.77 | 15.72 | 15.66 | 15.72 |
| 45.0 | 15.66 | 15.48 | 15.36 | 15.18 | 15.06 | 14.94 | 14.82 | 14.76 | 14.70 |
| 67.5 | 16.37 | 16.01 | 15.83 | 15.60 | 15.42 | 15.24 | 15.06 | 14.88 | 14.76 |
| 90.0 | 16.97 | 16.55 | 16.19 | 15.89 | 15.66 | 15.36 | 15.24 | 15.00 | 14.82 |
| 112.5 | 16.91 | 16.55 | 16.31 | 16.01 | 15.77 | 15.60 | 15.42 | 15.24 | 15.06 |
| 135.0 | 15.83 | 15.66 | 15.42 | 15.24 | 15.06 | 14.94 | 14.82 | 14.70 | 14.58 |
| 157.5 | 17.93 | 17.39 | 17.03 | 16.67 | 16.37 | 16.13 | 15.83 | 15.66 | 15.42 |
| 180.0 | 19.06 | 18.46 | 17.93 | 17.51 | 17.09 | 16.73 | 16.43 | 16.25 | 16.13 |
| 202.5 | 19.84 | 19.06 | 18.34 | 17.87 | 17.39 | 16.97 | 16.61 | 16.31 | 16.07 |
| 225.0 | 16.91 | 16.55 | 16.25 | 16.01 | 15.77 | 15.60 | 15.42 | 15.24 | 15.12 |
| 247.5 | 17.39 | 16.91 | 16.49 | 16.19 | 15.89 | 15.60 | 15.42 | 15.24 | 15.06 |
| 270.0 | 18.34 | 17.75 | 17.21 | 16.85 | 16.43 | 16.07 | 15.83 | 15.54 | 15.30 |
| 292.5 | 17.27 | 16.79 | 16.37 | 16.01 | 15.72 | 15.48 | 15.18 | 15.00 | 14.82 |
| 315.0 | 16.19 | 15.89 | 15.72 | 15.54 | 15.30 | 15.18 | 15.06 | 14.88 | 14.82 |
| 337.5 | 16.85 | 16.49 | 16.19 | 15.89 | 15.66 | 15.42 | 15.30 | 15.24 | 15.24 |
| 360.0 | 18.22 | 17.69 | 17.21 | 16.79 | 16.55 | 16.31 | 16.19 | 16.01 | 16.01 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 16.07 | 16.01 | 16.25 | 16.31 | 16.43 | 16.67 | 14.70 | 14.28 | 13.80 |
| 22.5 | 15.77 | 15.83 | 15.83 | 15.83 | 15.95 | 15.89 | 15.18 | 14.76 | 13.92 |
| 45.0 | 14.58 | 14.46 | 14.40 | 14.22 | 14.10 | 13.92 | 13.86 | 13.74 | 13.68 |
| 67.5 | 14.58 | 14.46 | 14.34 | 14.22 | 14.10 | 14.16 | 14.28 | 14.46 | 14.52 |
| 90.0 | 14.64 | 14.46 | 14.34 | 14.28 | 14.22 | 14.28 | 14.46 | 14.46 | 14.52 |
| 112.5 | 14.88 | 14.76 | 14.64 | 14.46 | 14.34 | 14.28 | 14.34 | 14.40 | 14.46 |
| 135.0 | 14.46 | 14.40 | 14.34 | 14.22 | 14.04 | 13.92 | 13.86 | 13.74 | 13.68 |
| 157.5 | 15.36 | 15.30 | 15.30 | 15.36 | 15.48 | 15.48 | 15.48 | 15.60 | 15.36 |
| 180.0 | 16.13 | 16.13 | 16.19 | 16.13 | 16.19 | 16.31 | 16.25 | 16.31 | 16.43 |
| 202.5 | 15.89 | 15.83 | 15.77 | 15.77 | 15.77 | 15.83 | 15.89 | 15.89 | 15.89 |
| 225.0 | 14.94 | 14.82 | 14.70 | 14.64 | 14.52 | 14.40 | 14.22 | 14.10 | 14.04 |
| 247.5 | 14.94 | 14.76 | 14.64 | 14.52 | 14.40 | 14.28 | 14.16 | 14.10 | 13.98 |
| 270.0 | 15.06 | 14.88 | 14.70 | 14.52 | 14.40 | 14.22 | 14.04 | 13.92 | 13.86 |
| 292.5 | 14.64 | 14.52 | 14.34 | 14.16 | 14.10 | 13.92 | 13.80 | 13.74 | 13.62 |
| 315.0 | 14.70 | 14.52 | 14.46 | 14.34 | 14.22 | 14.10 | 13.98 | 13.86 | 13.74 |
| 337.5 | 15.24 | 15.36 | 15.36 | 15.48 | 15.48 | 15.60 | 14.94 | 14.22 | 14.10 |
| 360.0 | 16.07 | 16.01 | 16.25 | 16.31 | 16.43 | 16.67 | 14.70 | 14.28 | 13.80 |

Intensity data(cd)

| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.0 | 13.62 | 13.44 | 13.32 | 13.15 | 12.97 | 12.61 | 12.43 | 12.13 | 11.95 |
| 22.5 | 13.62 | 13.50 | 13.38 | 13.09 | 12.73 | 12.55 | 12.25 | 12.19 | 12.19 |
| 45.0 | 13.56 | 13.50 | 13.44 | 12.91 | 12.79 | 12.61 | 12.43 | 12.37 | 12.37 |
| 67.5 | 14.28 | 13.50 | 13.38 | 13.21 | 12.79 | 12.61 | 12.49 | 12.31 | 12.31 |
| 90.0 | 14.40 | 13.38 | 13.03 | 12.79 | 12.55 | 12.37 | 12.25 | 12.13 | 12.07 |
| 112.5 | 14.22 | 13.80 | 13.44 | 13.32 | 13.21 | 12.73 | 12.55 | 12.43 | 12.25 |
| 135.0 | 13.62 | 13.56 | 13.44 | 13.32 | 13.15 | 12.79 | 12.61 | 12.49 | 12.31 |
| 157.5 | 14.76 | 13.98 | 13.74 | 13.62 | 13.50 | 12.79 | 12.55 | 12.31 | 12.13 |
| 180.0 | 15.77 | 13.86 | 13.68 | 13.50 | 13.38 | 12.55 | 12.31 | 11.95 | 12.07 |
| 202.5 | 15.77 | 15.18 | 14.34 | 13.98 | 13.92 | 13.80 | 13.32 | 12.79 | 12.55 |
| 225.0 | 13.92 | 13.86 | 13.74 | 13.62 | 13.56 | 13.50 | 13.38 | 12.91 | 12.73 |
| 247.5 | 13.92 | 13.80 | 13.68 | 13.44 | 13.27 | 13.15 | 12.79 | 12.67 | 12.55 |
| 270.0 | 13.74 | 13.62 | 13.44 | 13.15 | 12.97 | 12.79 | 12.55 | 12.43 | 12.25 |
| 292.5 | 13.44 | 13.32 | 13.27 | 13.09 | 13.03 | 12.73 | 12.61 | 12.49 | 12.31 |
| 315.0 | 13.68 | 13.56 | 13.44 | 13.32 | 13.27 | 12.85 | 12.73 | 12.61 | 12.43 |
| 337.5 | 13.68 | 13.44 | 13.32 | 13.21 | 13.09 | 12.67 | 12.49 | 12.19 | 12.07 |
| 360.0 | 13.62 | 13.44 | 13.32 | 13.15 | 12.97 | 12.61 | 12.43 | 12.13 | 11.95 |
| C/γ(°) | 90.0 | | | | | | | | |
| 0.0 | 11.89 | | | | | | | | |
| 22.5 | 12.19 | | | | | | | | |
| 45.0 | 12.37 | | | | | | | | |
| 67.5 | 12.25 | | | | | | | | |
| 90.0 | 12.07 | | | | | | | | |
| 112.5 | 12.19 | | | | | | | | |
| 135.0 | 12.31 | | | | | | | | |
| 157.5 | 12.13 | | | | | | | | |
| 180.0 | 11.89 | | | | | | | | |
| 202.5 | 12.37 | | | | | | | | |
| 225.0 | 12.55 | | | | | | | | |
| 247.5 | 12.37 | | | | | | | | |
| 270.0 | 12.13 | | | | | | | | |
| 292.5 | 12.19 | | | | | | | | |
| 315.0 | 12.31 | | | | | | | | |
| 337.5 | 12.07 | | | | | | | | |
| 360.0 | 11.89 | | | | | | | | |