

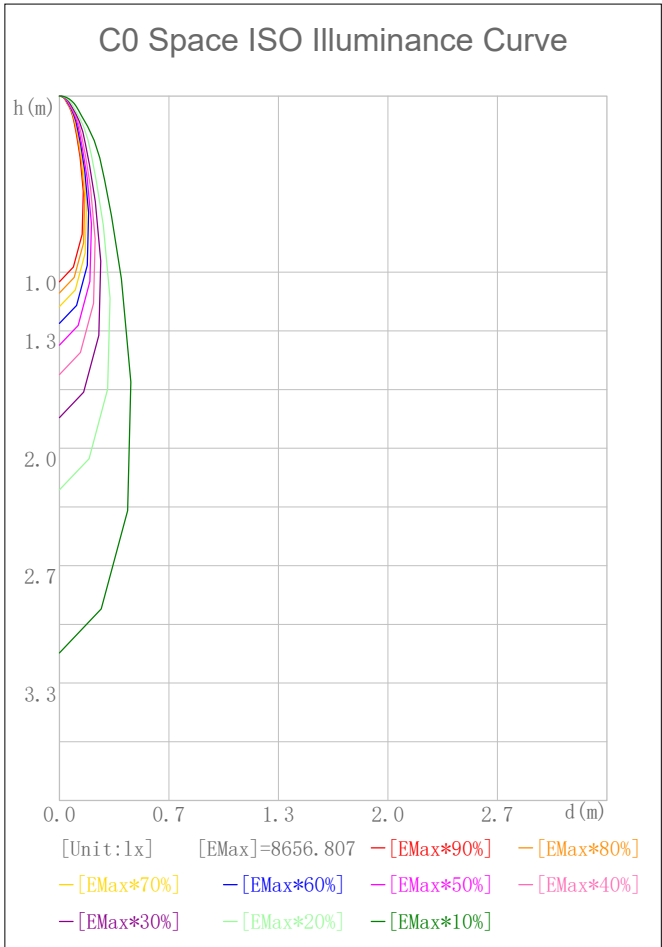
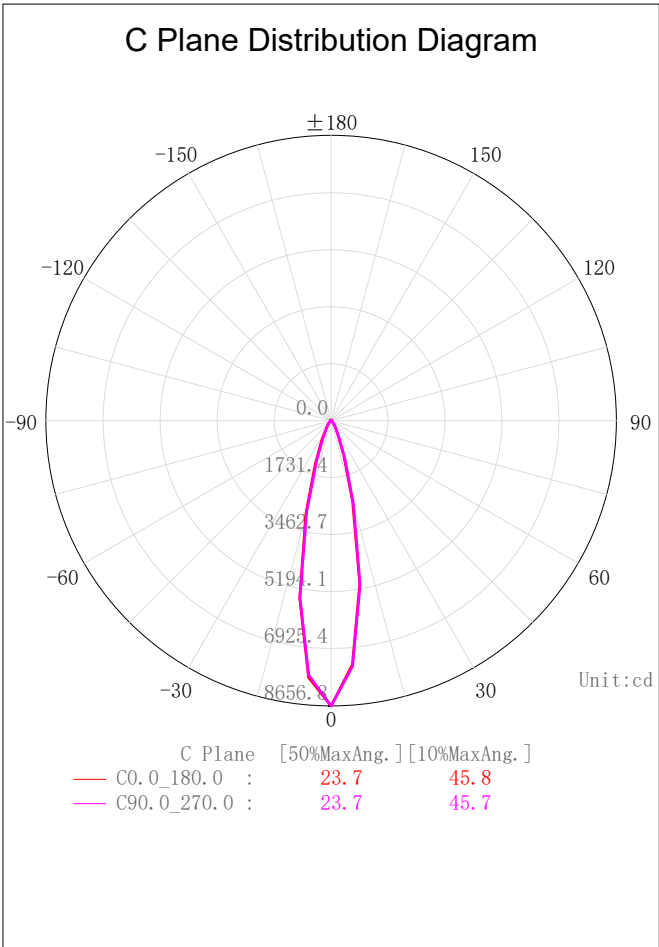
Indoor Luminaire Photometric Data

Description Information

| | | | |
|--|-------------------------|----------------------|-----------------------|
| Luminary Name: DL51-25-XX-01 2700K RA90 24D 白色 | | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | | Lamp Catalog: LED | Test Date: 2022/08/04 |
| Manufacture: Shenzhen Norming Lighting | | Shld. Ang(°): | Test Machine:GON-2000 |
| Test Lab: Quality Department | | Frequency (Hz): | Lamp CCT (K): Ra: |
| Lum. Size (W*L*H):0.083m*0.083m*0.000m | | Lum. Area (m2):0.005 | Lum. W (kg): 0.000 |
| Test System: C, γ | Test Step: C=90.0 γ=5.0 | Temp. (°C): 25 | Humidity(%): 50.0 |

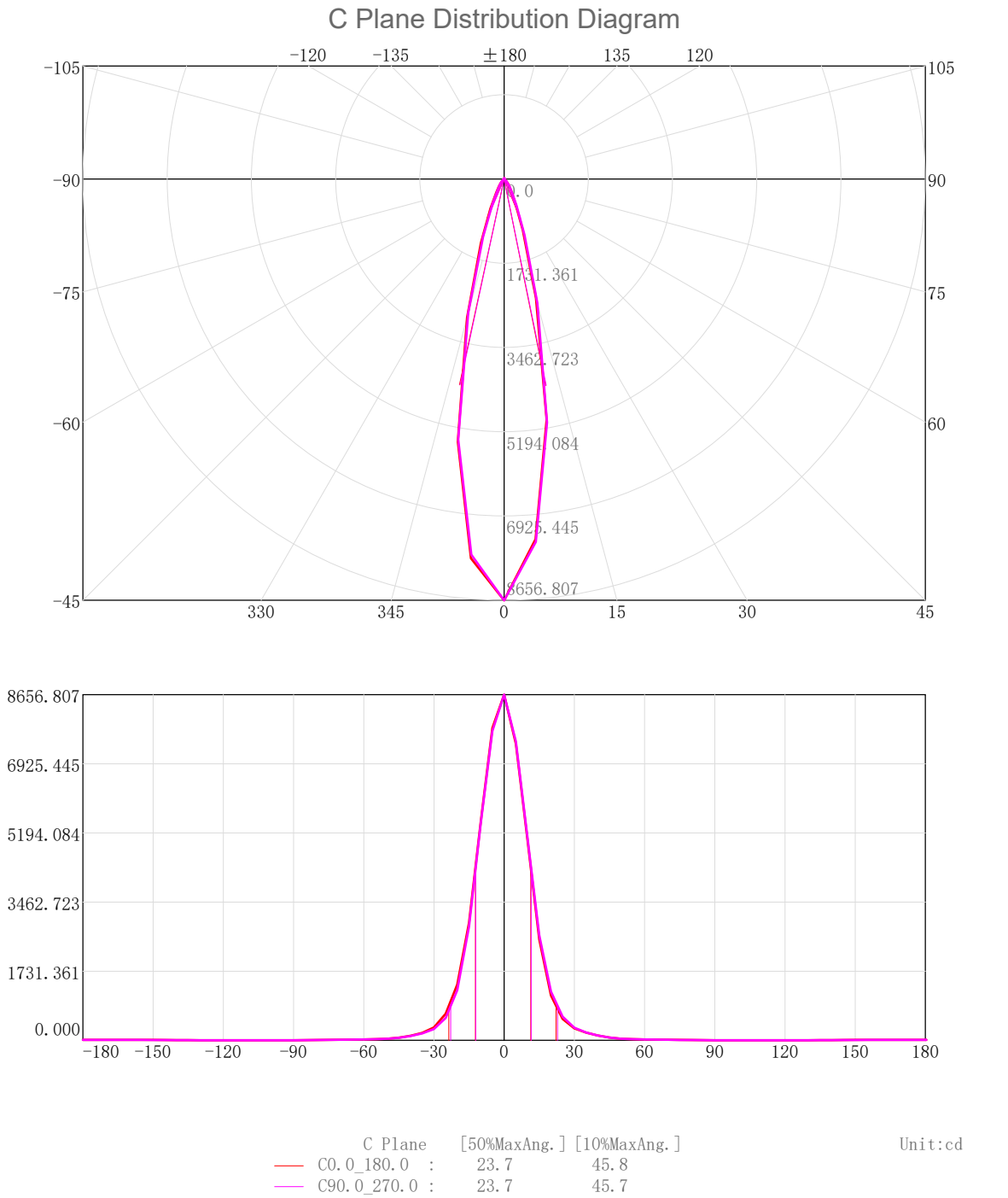
Character Parameter

| Lamp Speciality Parameter | | Luminaire Speciality Parameter | |
|---|--------------------------------|--|--|
| Rated Flux(lm): 2050.860 | Luminary Flux(lm): 2050.861 | Field Angle(10%Imax): 45.8(°) | |
| Rated Power(W): | Luminary Efficiency: 100.00% | Down Lumens&Percent: 2015.285lm 98.27% | |
| Rated Voltage(V): | Luminary EER(lm/W): 84.641 | Up Lumens&Percent: 35.576lm 1.73% | |
| Tested Power(W): 24.230 | Max. Candela(cd): 8656.807 | S/MH: C0_a180=0.401 C90_270=0.401 | |
| Lamps' Inside: 1 | Max Cand@Ang. (°): C=0.0 γ=0.0 | CIE Type: Semi-Direct | |
| Tested Electrics (V, A, pf):239.7, 0.104, 0.967 | Beam Angle(50%Imax): 23.7(°) | ErP Φ use(90°): 1936.424lm | |
| Lamp Size (W*L*H):0.083m*0.083m*0.000m | Left=-12.3°, Right=11.4° | IRF(%): 928.645 | |



2D Plane Light Intensity Distribution Curve

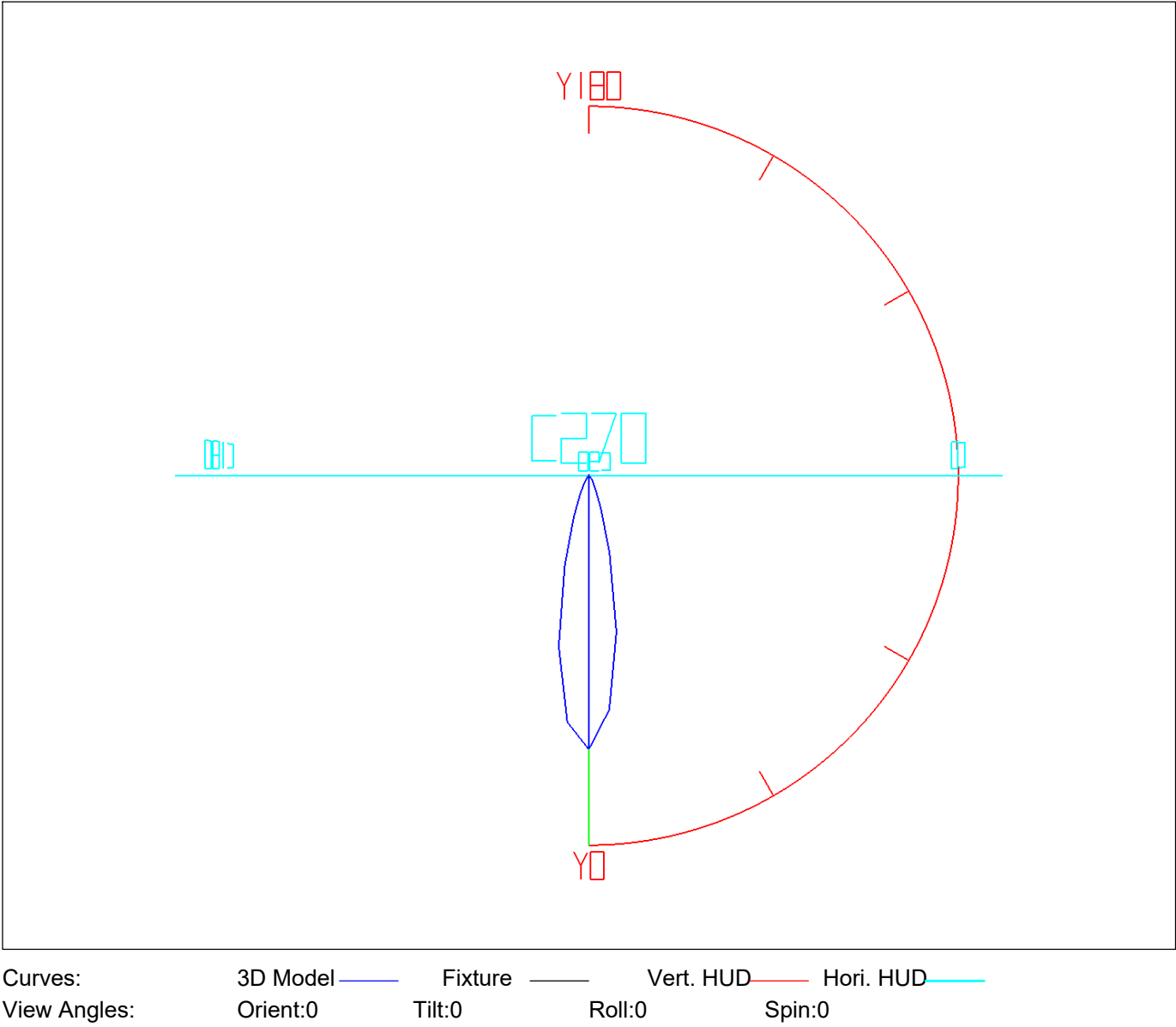
| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-25-XX-01 2700K RA90 24D 白色 | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date:2022/08/04 |



3D Light Intensity Distribution Modal

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-25-XX-01 2700K RA90 24D 白色 | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date:2022/08/04 |

3D Light Intensity Distribution Modal

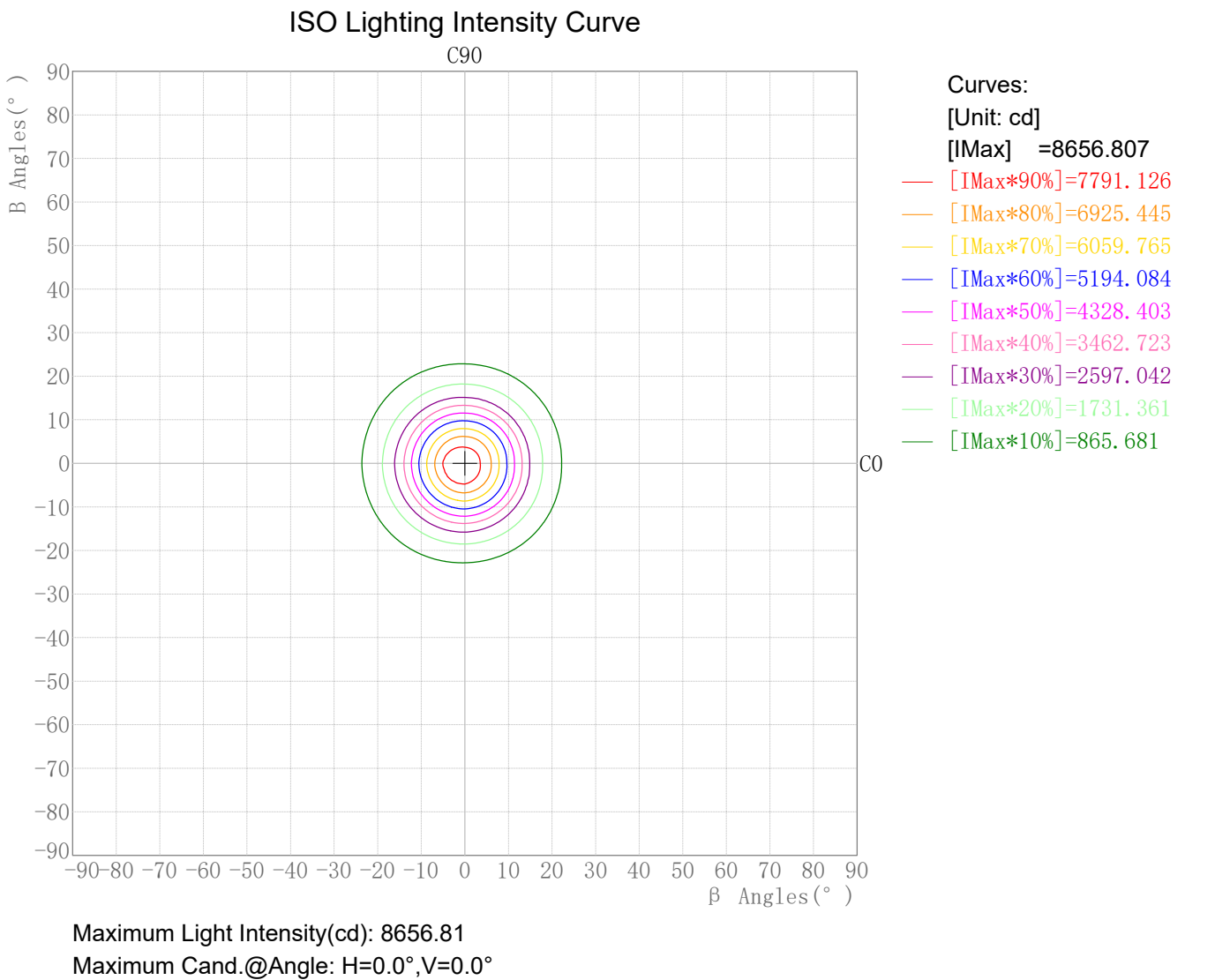


Zonal Flux Tabulation

| Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp |
|-------------|-------------------|-------------------|-----------|-----------|
| 0.0-5.0 | 194.58 | 194.58 | 9.49 | 9.49 |
| 5.0-10.0 | 460.49 | 655.07 | 22.45 | 31.94 |
| 10.0-15.0 | 474.13 | 1129.20 | 23.12 | 55.06 |
| 15.0-20.0 | 328.93 | 1458.12 | 16.04 | 71.10 |
| 20.0-25.0 | 193.14 | 1651.26 | 9.42 | 80.52 |
| 25.0-30.0 | 113.63 | 1764.89 | 5.54 | 86.06 |
| 30.0-35.0 | 73.08 | 1837.97 | 3.56 | 89.62 |
| 35.0-40.0 | 51.08 | 1889.06 | 2.49 | 92.11 |
| 40.0-45.0 | 34.66 | 1923.72 | 1.69 | 93.80 |
| 45.0-50.0 | 22.43 | 1946.15 | 1.09 | 94.89 |
| 50.0-55.0 | 15.67 | 1961.82 | 0.76 | 95.66 |
| 55.0-60.0 | 12.83 | 1974.65 | 0.63 | 96.28 |
| 60.0-65.0 | 10.95 | 1985.60 | 0.53 | 96.82 |
| 65.0-70.0 | 9.15 | 1994.75 | 0.45 | 97.26 |
| 70.0-75.0 | 7.36 | 2002.11 | 0.36 | 97.62 |
| 75.0-80.0 | 5.77 | 2007.87 | 0.28 | 97.90 |
| 80.0-85.0 | 4.32 | 2012.19 | 0.21 | 98.11 |
| 85.0-90.0 | 3.09 | 2015.28 | 0.15 | 98.27 |
| 90.0-95.0 | 2.35 | 2017.63 | 0.11 | 98.38 |
| 95.0-100.0 | 2.00 | 2019.63 | 0.10 | 98.48 |
| 100.0-105.0 | 1.75 | 2021.38 | 0.09 | 98.56 |
| 105.0-110.0 | 1.56 | 2022.94 | 0.08 | 98.64 |
| 110.0-115.0 | 1.48 | 2024.42 | 0.07 | 98.71 |
| 115.0-120.0 | 1.41 | 2025.83 | 0.07 | 98.78 |
| 120.0-125.0 | 1.38 | 2027.21 | 0.07 | 98.85 |
| 125.0-130.0 | 1.53 | 2028.74 | 0.07 | 98.92 |
| 130.0-135.0 | 1.91 | 2030.65 | 0.09 | 99.01 |
| 135.0-140.0 | 2.42 | 2033.07 | 0.12 | 99.13 |
| 140.0-145.0 | 2.93 | 2036.01 | 0.14 | 99.28 |
| 145.0-150.0 | 3.24 | 2039.25 | 0.16 | 99.43 |
| 150.0-155.0 | 3.24 | 2042.48 | 0.16 | 99.59 |
| 155.0-160.0 | 2.92 | 2045.41 | 0.14 | 99.73 |
| 160.0-165.0 | 2.38 | 2047.78 | 0.12 | 99.85 |
| 165.0-170.0 | 1.72 | 2049.50 | 0.08 | 99.93 |
| 170.0-175.0 | 1.02 | 2050.52 | 0.05 | 99.98 |
| 175.0-180.0 | 0.34 | 2050.86 | 0.02 | 100.00 |

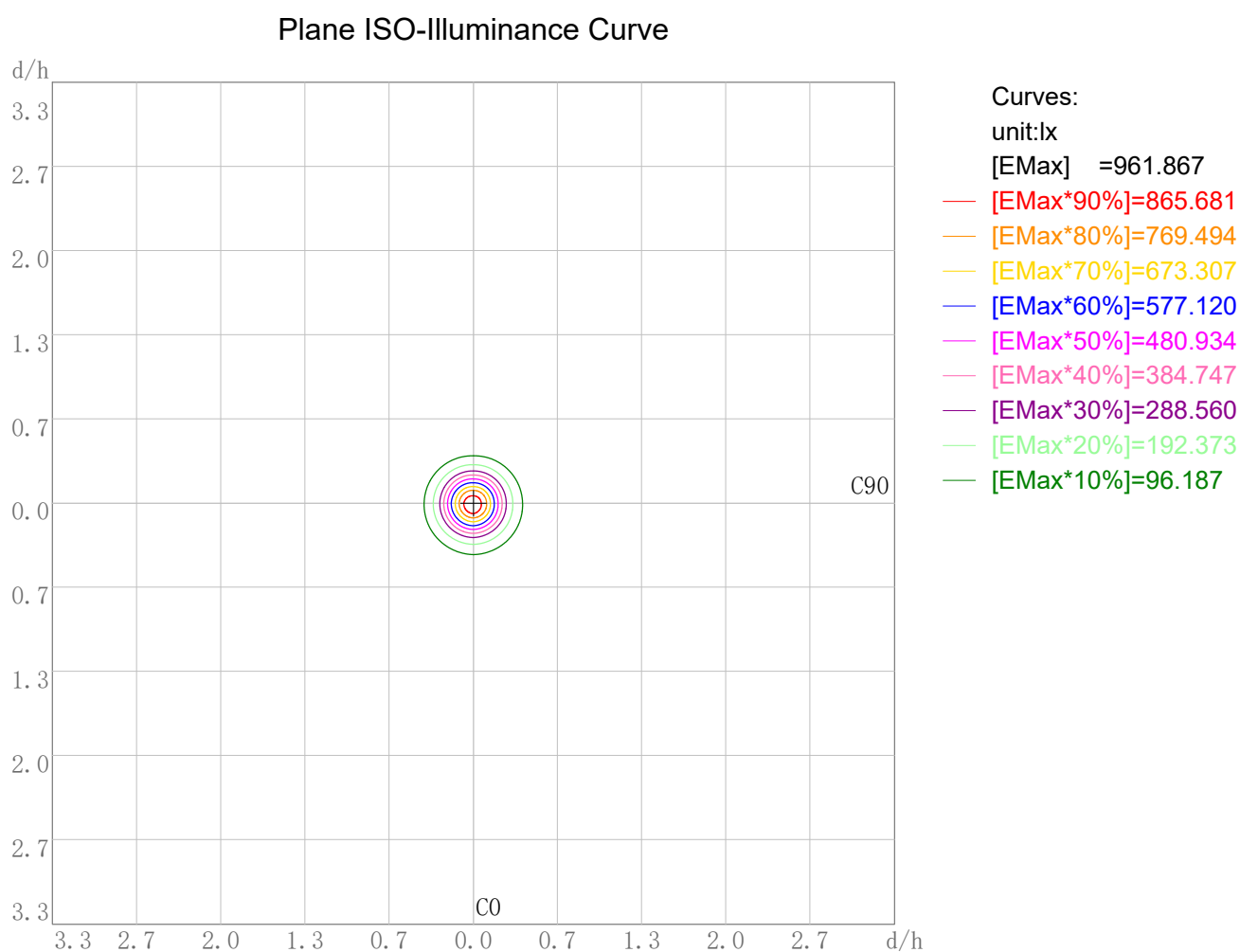
Rectangle ISO Lighting Intensity Diagram

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-25-XX-01 2700K RA90 24D 白色 | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date:2022/08/04 |



Photometric Filename:DL51-25-XX-01 2700K RA90 24D 白色.IES

| | | |
|--|-----------------------|------------------------------|
| Lum. Name: DL51-25-XX-01 2700K RA90 24D 白色 | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date: 2022/08/04 |

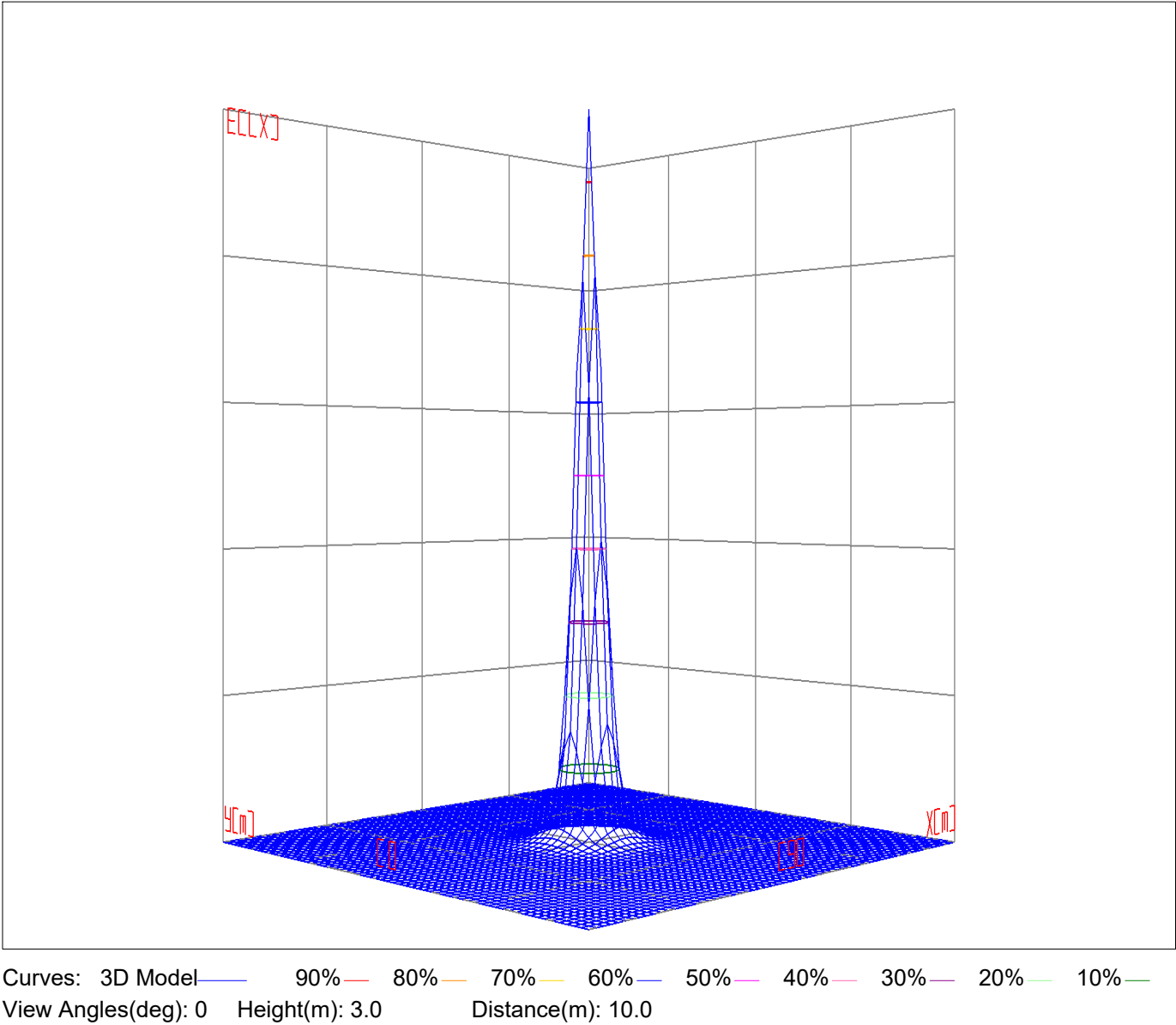


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 961.87
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-25-XX-01 2700K RA90 24D 白色 | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date:2022/08/04 |

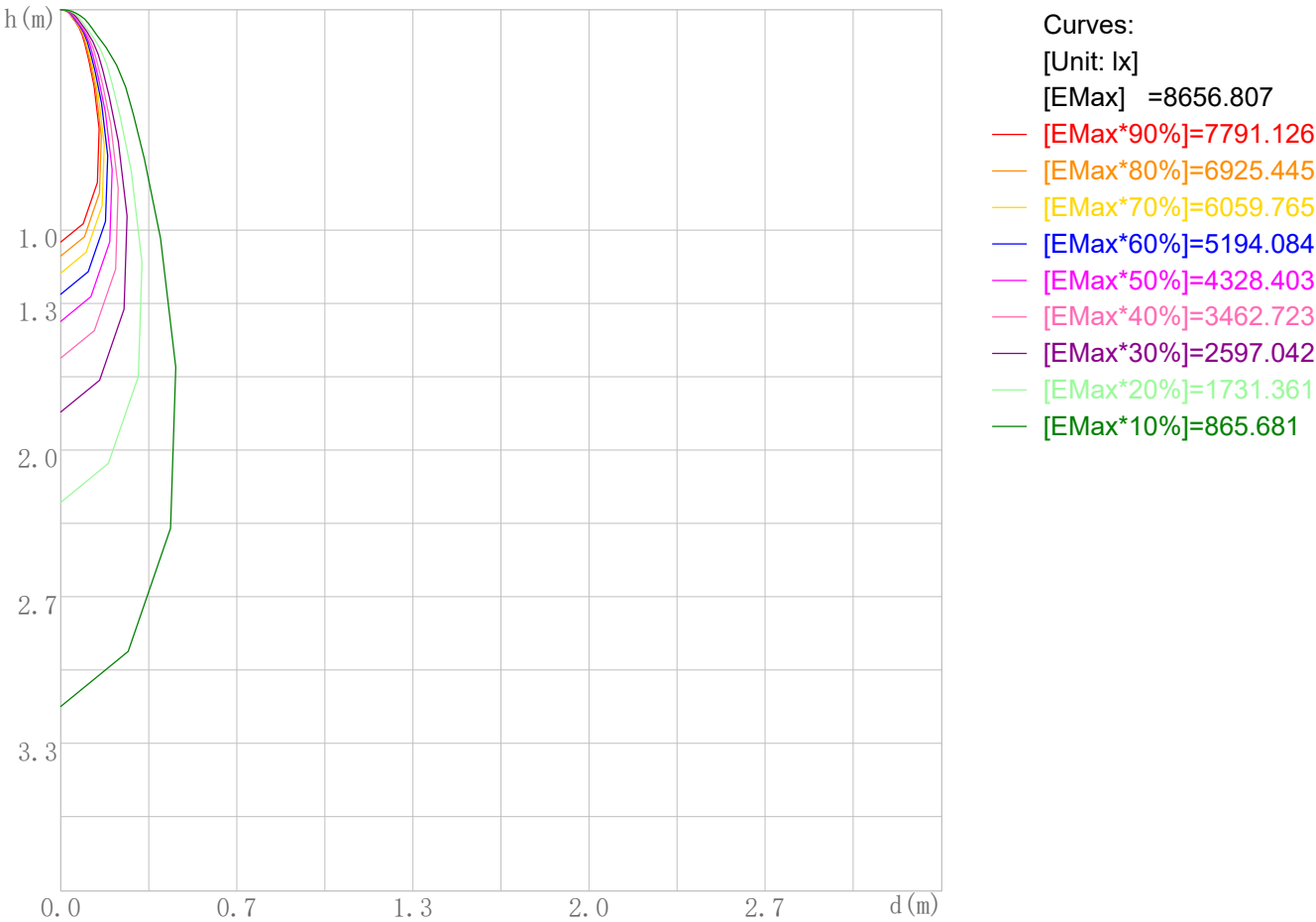
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-25-XX-01 2700K RA90 24D 白色 | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date:2022/08/04 |

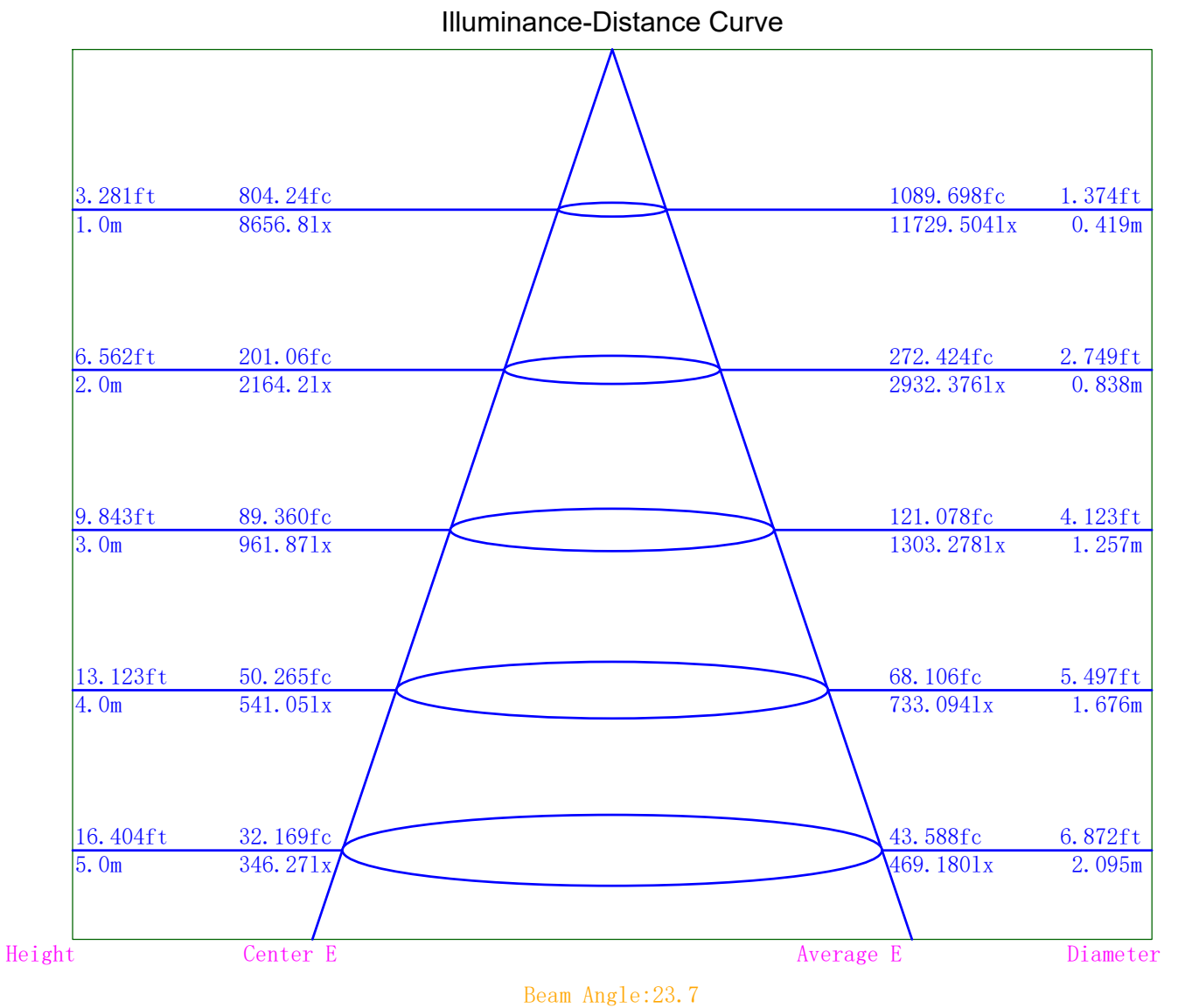
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:8656.81lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:8656.807cd,0deg

Illuminance-Distance Diagram

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-25-XX-01 2700K RA90 24D 白色 | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date:2022/08/04 |



Indoor Luminance Limiting Curves

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-25-XX-01 2700K RA90 24D 白色 | Lum. Catalog: | Test ID:01 |
| Lamp Name: | Lamp Catalog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date:2022/08/04 |

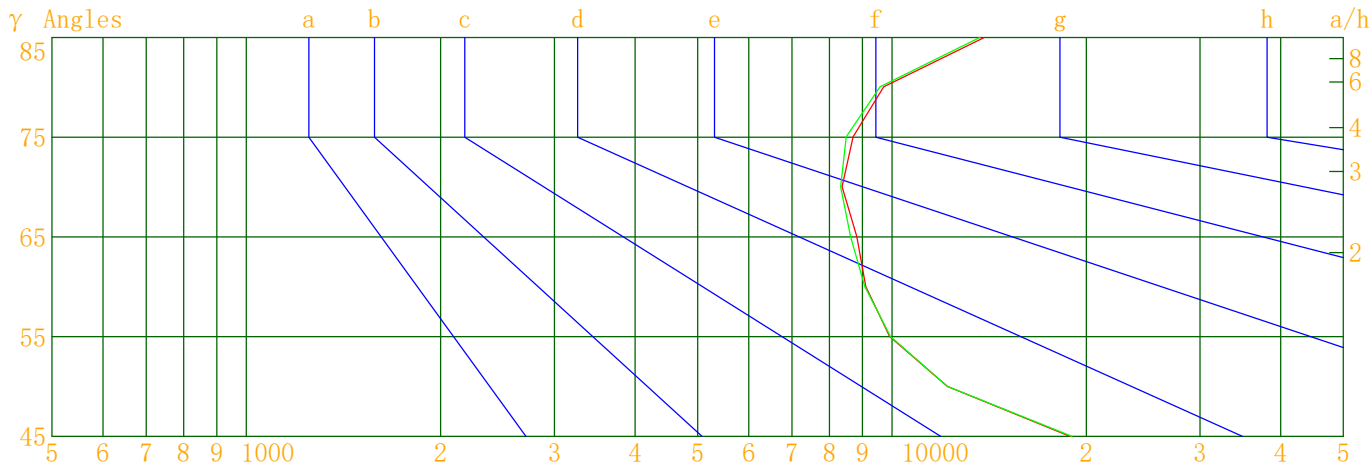
Glare Grade Table

| GI | Quality | Using Illuminance | | | | | | | |
|------|---------|-------------------|------|------|-------|-------|-------|-------|-------|
| 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 | a | | | | 2000 | 1000 | 500 | <=300 |
| | | | b | c | d | e | f | g | h |

Luminance Table

| Gama(deg) | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|-----------|-------|-------|------|------|------|------|------|------|-------|
| C0 | 18873 | 12188 | 9919 | 9107 | 8819 | 8370 | 8704 | 9710 | 13896 |
| C90 | 19001 | 12184 | 9943 | 9076 | 8626 | 8329 | 8493 | 9580 | 13676 |

Luminance Limiting Curve



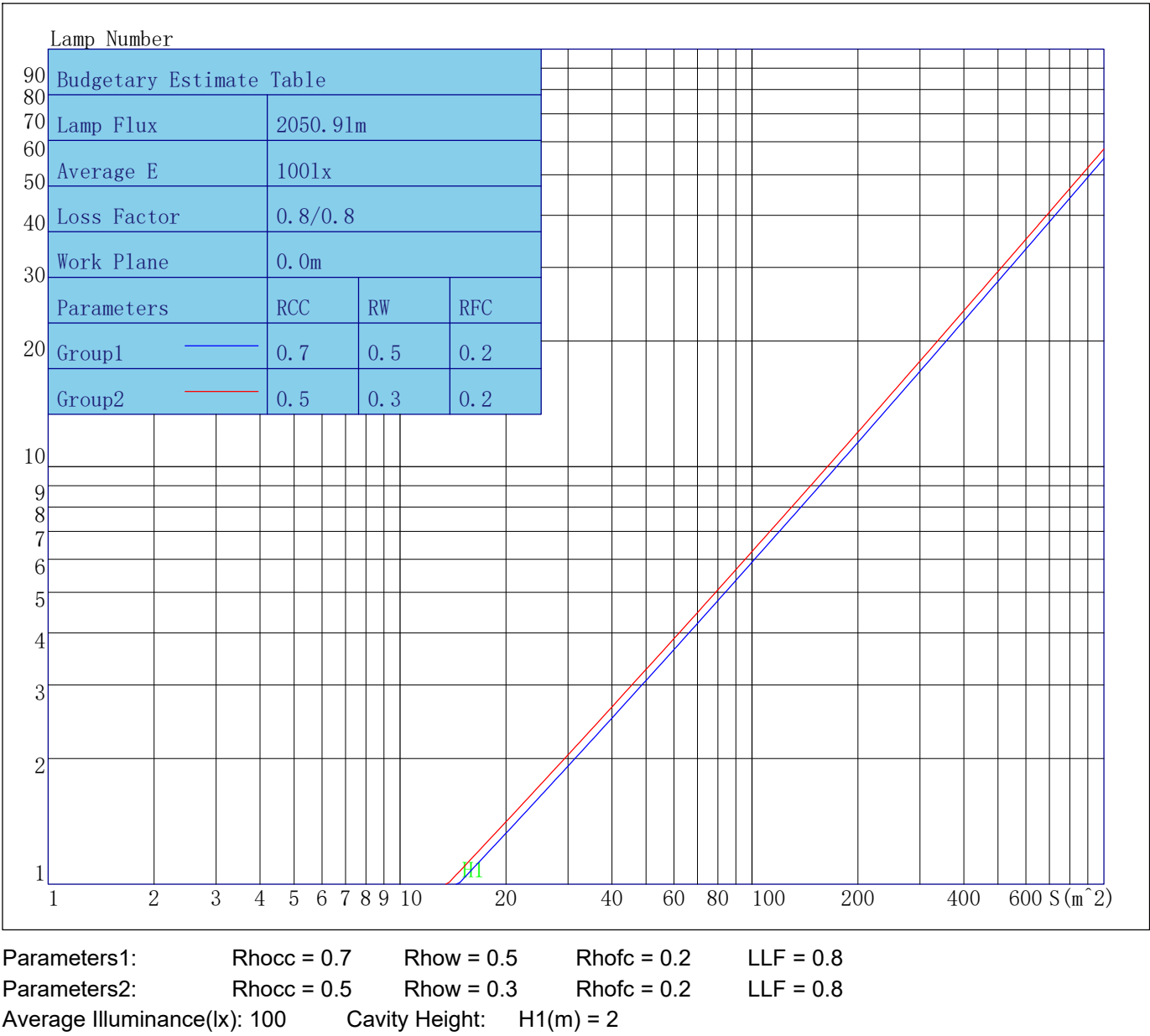
Luminous Size:Length(m)=-0.083Width(m)=-0.083Height(m)=0.000Area(m^2)=0.005411

Luminous Type:Without Luminous Side

Luminous Curves:C0-C180 Color: C90-C270 Color:

Indoor Budgetary Estimate Table

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-25-XX-01 2700K RA90 24D 白色 | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date:2022/08/04 |



Indoor Coefficient of Utilization Table

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-25-XX-01 2700K RA90 24D 白色 | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date:2022/08/04 |

| Coefficients of Utilization - Zonal Cavity Method | | | | | | | | | | | | | | | | | | |
|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| Coef. | Effective Floor Cavity Reflectance RFC=0.20 | | | | | | | | | | | | | | | | | |
| RhoCC (%) | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
| RhoW (%) | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | Coefficient of Utilization(%) | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |
| 1 | 114 | 111 | 109 | 107 | 111 | 109 | 107 | 105 | 105 | 103 | 102 | 101 | 100 | 99 | 97 | 96 | 95 | 94 |
| 2 | 109 | 105 | 102 | 99 | 107 | 104 | 100 | 98 | 100 | 98 | 95 | 97 | 95 | 93 | 94 | 92 | 91 | 89 |
| 3 | 105 | 100 | 96 | 93 | 103 | 99 | 95 | 92 | 96 | 93 | 90 | 93 | 91 | 89 | 91 | 89 | 87 | 86 |
| 4 | 102 | 96 | 91 | 88 | 100 | 94 | 90 | 87 | 92 | 89 | 86 | 90 | 87 | 85 | 88 | 86 | 84 | 82 |
| 5 | 98 | 91 | 87 | 83 | 97 | 90 | 86 | 83 | 89 | 85 | 82 | 87 | 84 | 81 | 85 | 83 | 80 | 79 |
| 6 | 95 | 88 | 83 | 80 | 93 | 87 | 83 | 79 | 85 | 82 | 79 | 84 | 81 | 78 | 83 | 80 | 78 | 76 |
| 7 | 92 | 85 | 80 | 77 | 91 | 84 | 80 | 76 | 83 | 79 | 76 | 81 | 78 | 75 | 80 | 77 | 75 | 74 |
| 8 | 89 | 82 | 77 | 74 | 88 | 81 | 77 | 74 | 80 | 76 | 73 | 79 | 75 | 73 | 78 | 75 | 73 | 71 |
| 9 | 86 | 79 | 74 | 71 | 85 | 78 | 74 | 71 | 78 | 74 | 71 | 77 | 73 | 71 | 76 | 73 | 70 | 69 |
| 10 | 84 | 77 | 72 | 69 | 83 | 76 | 72 | 69 | 75 | 71 | 69 | 74 | 71 | 69 | 74 | 71 | 68 | 67 |

Unified Glare Rating Table

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-25-XX-01 2700K RA90 24D 白色 | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date:2022/08/04 |

Unified Glare Rating Table

| | | | | | | | | | | | |
|--|-------|-----------------|------|------|------|------|---------------|------|------|------|------|
| Ceiling RCC | | 0.70 | 0.70 | 0.50 | 0.50 | 0.30 | 0.70 | 0.70 | 0.50 | 0.50 | 0.30 |
| Wall RW | | 0.50 | 0.30 | 0.50 | 0.30 | 0.30 | 0.50 | 0.30 | 0.50 | 0.30 | 0.30 |
| Floor RFC | | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| Room Size | | Vewed crosswise | | | | | Vewed endwise | | | | |
| X=2H | Y=2H | 15.3 | 16.2 | 15.7 | 16.6 | 16.9 | 15.4 | 16.3 | 15.8 | 16.7 | 17.1 |
| | Y=3H | 15.9 | 16.7 | 16.3 | 17.1 | 17.5 | 16.0 | 16.8 | 16.4 | 17.2 | 17.6 |
| | Y=4H | 16.3 | 17.0 | 16.7 | 17.4 | 17.9 | 16.3 | 17.1 | 16.8 | 17.5 | 17.9 |
| | Y=6H | 16.7 | 17.4 | 17.1 | 17.8 | 18.2 | 16.7 | 17.4 | 17.2 | 17.8 | 18.3 |
| | Y=8H | 16.9 | 17.6 | 17.4 | 18.0 | 18.4 | 16.9 | 17.6 | 17.4 | 18.0 | 18.5 |
| | Y=12H | 17.1 | 17.8 | 17.6 | 18.2 | 18.7 | 17.2 | 17.8 | 17.6 | 18.2 | 18.7 |
| X=4H | Y=2H | 15.4 | 16.2 | 15.8 | 16.6 | 17.0 | 15.5 | 16.3 | 15.9 | 16.7 | 17.1 |
| | Y=3H | 16.3 | 16.9 | 16.7 | 17.3 | 17.8 | 16.3 | 16.9 | 16.8 | 17.4 | 17.8 |
| | Y=4H | 16.8 | 17.3 | 17.2 | 17.8 | 18.3 | 16.8 | 17.4 | 17.3 | 17.8 | 18.3 |
| | Y=6H | 17.4 | 17.8 | 17.9 | 18.3 | 18.8 | 17.4 | 17.8 | 17.9 | 18.3 | 18.8 |
| | Y=8H | 17.7 | 18.1 | 18.2 | 18.6 | 19.1 | 17.7 | 18.1 | 18.2 | 18.6 | 19.1 |
| | Y=12H | 18.0 | 18.4 | 18.6 | 18.9 | 19.4 | 18.0 | 18.4 | 18.5 | 18.9 | 19.4 |
| X=8H | Y=4H | 16.9 | 17.4 | 17.4 | 17.9 | 18.4 | 17.0 | 17.4 | 17.5 | 17.9 | 18.4 |
| | Y=6H | 17.7 | 18.1 | 18.3 | 18.6 | 19.2 | 17.7 | 18.1 | 18.3 | 18.6 | 19.2 |
| | Y=8H | 18.2 | 18.5 | 18.7 | 19.0 | 19.6 | 18.2 | 18.5 | 18.7 | 19.0 | 19.6 |
| | Y=12H | 18.7 | 19.0 | 19.3 | 19.5 | 20.1 | 18.7 | 18.9 | 19.2 | 19.5 | 20.1 |
| X=12H | Y=4H | 16.9 | 17.3 | 17.5 | 17.8 | 18.4 | 17.0 | 17.3 | 17.5 | 17.9 | 18.4 |
| | Y=6H | 17.8 | 18.1 | 18.4 | 18.6 | 19.2 | 17.8 | 18.1 | 18.4 | 18.6 | 19.2 |
| | Y=8H | 18.3 | 18.6 | 18.9 | 19.1 | 19.7 | 18.3 | 18.6 | 18.9 | 19.1 | 19.7 |
| Variations with the objverver position at spacings | | | | | | | | | | | |
| S=1.0H | | 0.2/-0.2 | | | | | 0.2/-0.2 | | | | |
| S=1.5H | | 0.4/-0.4 | | | | | 0.4/-0.4 | | | | |
| S=2.0H | | 0.5/-0.5 | | | | | 0.5/-0.5 | | | | |
| Reduced UGR Table: | | | | | | | | | | | |
| Nordic Standard Table: | | BK0 | | | | | BK0 | | | | |
| Correction Value | | 2.4 | | | | | 2.4 | | | | |

o the CIE Pub.117,data has been corrected,refers to the lamp's lumens 8.2flm.

Candela Tabulation

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|---------|---------|---------|---------|
| γ 0.0 | 8656.81 | 8656.81 | 8656.81 | 8656.81 |
| γ 5.0 | 7425.99 | 7482.33 | 7821.84 | 7748.01 |
| γ 10.0 | 5021.27 | 5077.90 | 5476.77 | 5435.49 |
| γ 15.0 | 2530.94 | 2634.20 | 2945.41 | 2849.43 |
| γ 20.0 | 1123.26 | 1221.94 | 1398.56 | 1260.80 |
| γ 25.0 | 537.44 | 595.11 | 666.85 | 561.88 |
| γ 30.0 | 302.36 | 319.01 | 325.48 | 283.59 |
| γ 35.0 | 193.98 | 198.96 | 188.84 | 172.99 |
| γ 40.0 | 121.86 | 124.21 | 115.90 | 108.00 |
| γ 45.0 | 72.21 | 72.70 | 68.36 | 65.46 |
| γ 50.0 | 42.39 | 42.38 | 40.23 | 40.33 |
| γ 55.0 | 30.78 | 30.86 | 30.86 | 30.42 |
| γ 60.0 | 24.64 | 24.55 | 25.14 | 24.80 |
| γ 65.0 | 20.17 | 19.73 | 21.02 | 20.21 |
| γ 70.0 | 15.49 | 15.41 | 16.24 | 16.30 |
| γ 75.0 | 12.19 | 11.89 | 12.48 | 12.55 |
| γ 80.0 | 9.12 | 9.00 | 9.66 | 9.30 |
| γ 85.0 | 6.55 | 6.45 | 6.89 | 6.60 |
| γ 90.0 | 4.69 | 4.79 | 4.81 | 4.42 |
| γ 95.0 | 4.12 | 4.12 | 3.85 | 3.47 |
| γ 100.0 | 3.48 | 3.65 | 3.61 | 3.12 |
| γ 105.0 | 3.15 | 3.30 | 3.10 | 2.77 |
| γ 110.0 | 2.85 | 3.37 | 2.81 | 2.52 |
| γ 115.0 | 2.74 | 3.03 | 3.07 | 2.95 |
| γ 120.0 | 2.62 | 2.71 | 2.93 | 3.11 |
| γ 125.0 | 2.97 | 2.88 | 3.36 | 3.27 |
| γ 130.0 | 3.72 | 3.86 | 4.10 | 4.07 |
| γ 135.0 | 5.46 | 5.32 | 5.63 | 5.64 |
| γ 140.0 | 7.58 | 7.51 | 7.56 | 7.65 |
| γ 145.0 | 10.05 | 9.77 | 10.15 | 10.06 |
| γ 150.0 | 12.08 | 11.78 | 12.30 | 11.87 |
| γ 155.0 | 13.91 | 13.19 | 13.76 | 13.38 |
| γ 160.0 | 14.48 | 14.10 | 14.66 | 13.99 |
| γ 165.0 | 14.62 | 14.26 | 14.69 | 14.56 |
| γ 170.0 | 14.39 | 14.26 | 14.93 | 14.02 |
| γ 175.0 | 14.12 | 14.18 | 14.47 | 13.73 |
| γ 180.0 | 14.32 | 14.32 | 14.32 | 14.32 |