

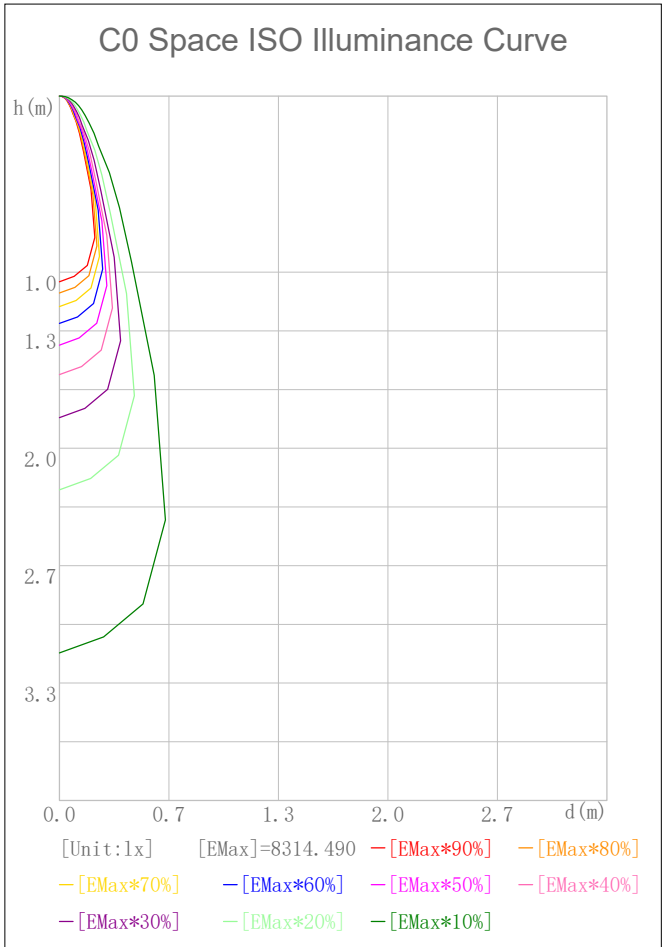
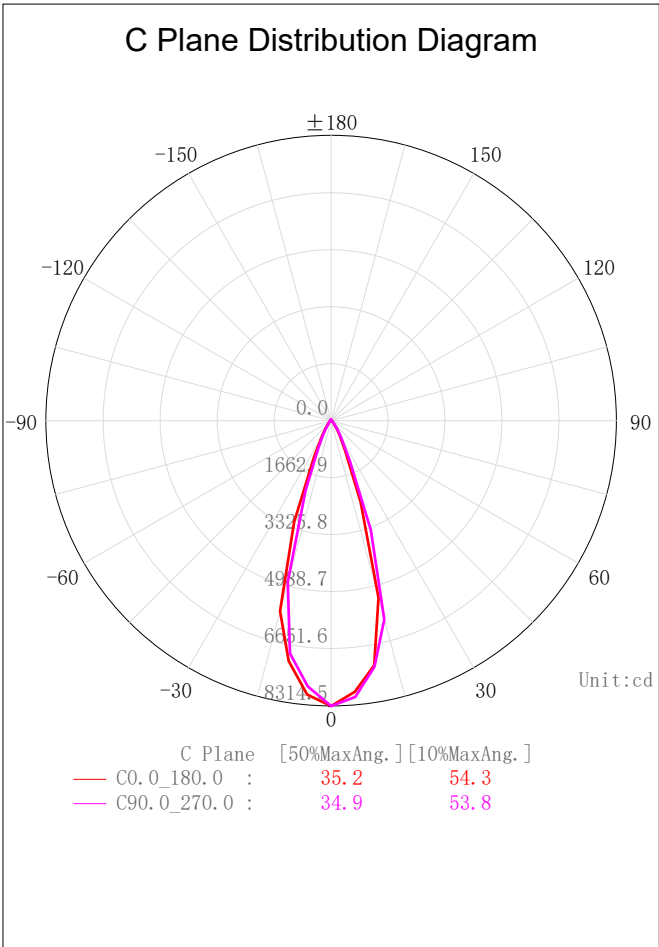
Indoor Luminaire Photometric Data

Description Information

| | | |
|--|-------------------------|-----------------------|
| Luminary Name: DL51-35-XX-01 4000K RA90 36D 白色 | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Date: 2022/08/11 |
| 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): 0.110m*0.110m*0.000m | Lum. Area (m2): 0.012 | Lum. W (kg): 0.000 |
| Test System: C, γ | Test Step: C=90.0 γ=5.0 | Temp. (°C): 25 |
| | | Humidity(%): 50.0 |

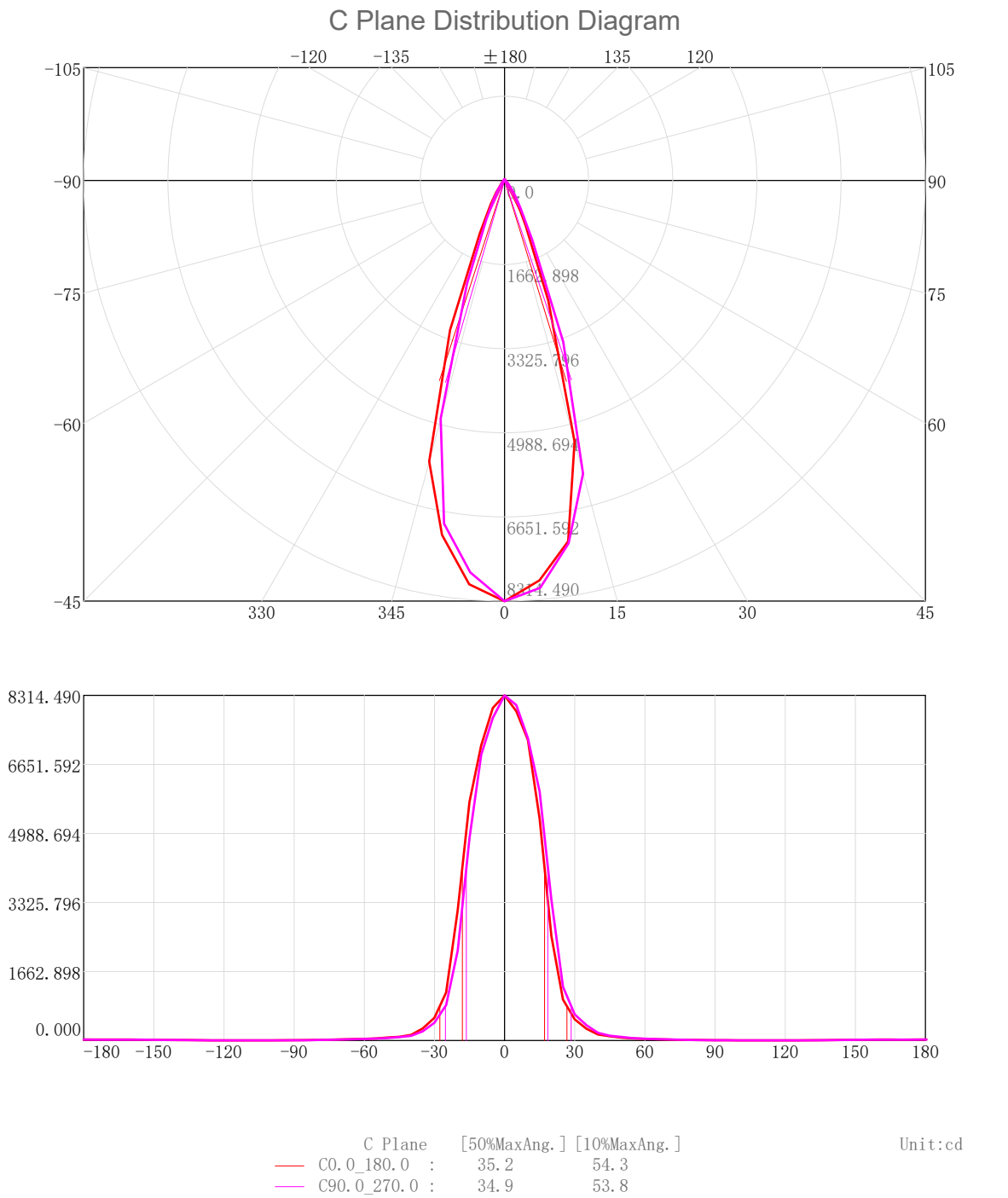
Character Parameter

| Lamp Speciality Parameter | Luminaire Speciality Parameter | |
|--|--------------------------------|--|
| Rated Flux(lm): 3241.640 | Luminary Flux(lm): 3241.645 | Field Angle(10%Imax): 54.3(°) |
| Rated Power(W): | Luminary Efficiency: 100.00% | Down Lumens&Percent: 3173.768lm 97.91% |
| Rated Voltage(V): | Luminary EER(lm/W): 96.306 | Up Lumens&Percent: 67.877lm 2.09% |
| Tested Power(W): 33.660 | Max. Candela(cd): 8314.490 | S/MH: C0_a180=0.596 C90_270=0.590 |
| Lamps' Inside: 1 | Max Cand@Ang. (°): C=0.0 γ=0.0 | CIE Type: Semi-Direct |
| Tested Electrics (V, A, pf): 239.6, 0.146, 0.960 | Beam Angle(50%Imax): 35.2(°) | ErP Φ use(90°): 3091.870lm |
| Lamp Size (W*L*H): 0.110m*0.110m*0.000m | Left=-18.1°, Right=17.1° | IRF(%): 574.724 |



2D Plane Light Intensity Distribution Curve

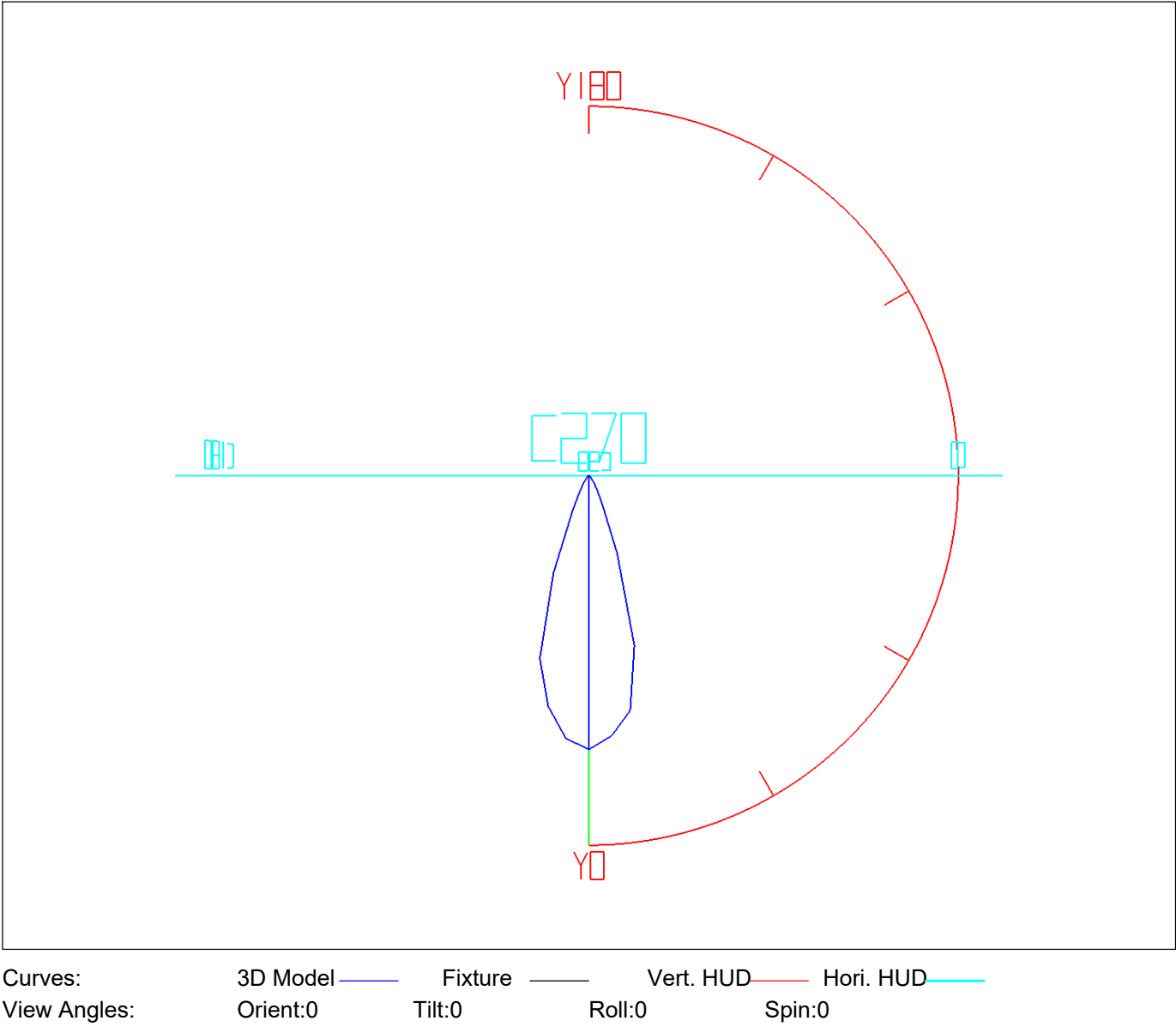
| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-35-XX-01 4000K RA90 36D 白色 | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date:2022/08/11 |



3D Light Intensity Distribution Modal

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-35-XX-01 4000K RA90 36D 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:2022/08/11 |

3D Light Intensity Distribution Modal

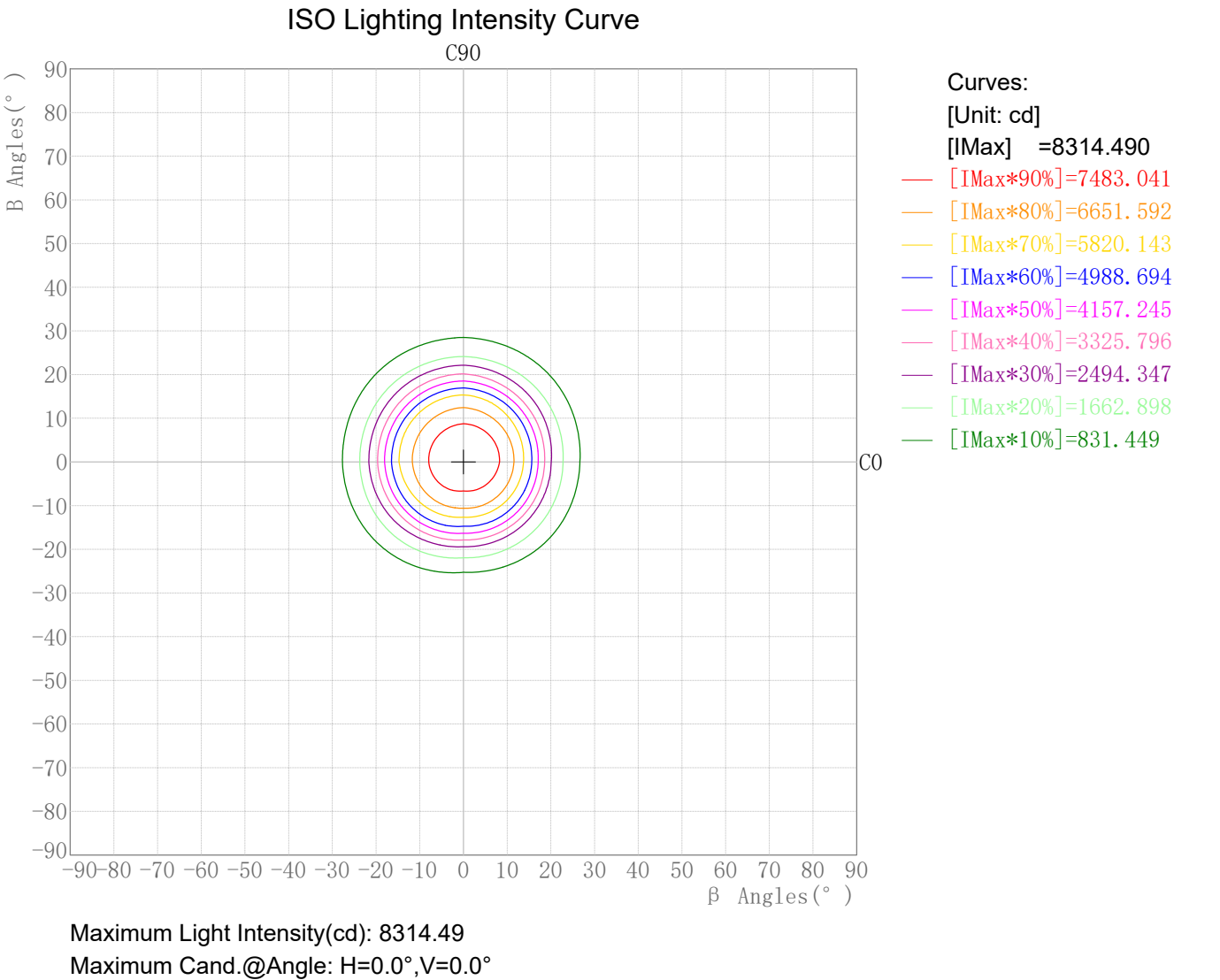


Zonal Flux Tabulation

| Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp |
|-------------|-------------------|-------------------|-----------|-----------|
| 0.0-5.0 | 194.44 | 194.44 | 6.00 | 6.00 |
| 5.0-10.0 | 539.48 | 733.91 | 16.64 | 22.64 |
| 10.0-15.0 | 748.66 | 1482.58 | 23.10 | 45.74 |
| 15.0-20.0 | 683.80 | 2166.37 | 21.09 | 66.83 |
| 20.0-25.0 | 407.18 | 2573.55 | 12.56 | 79.39 |
| 25.0-30.0 | 203.33 | 2776.88 | 6.27 | 85.66 |
| 30.0-35.0 | 121.52 | 2898.40 | 3.75 | 89.41 |
| 35.0-40.0 | 73.64 | 2972.04 | 2.27 | 91.68 |
| 40.0-45.0 | 45.79 | 3017.83 | 1.41 | 93.10 |
| 45.0-50.0 | 35.26 | 3053.09 | 1.09 | 94.18 |
| 50.0-55.0 | 27.90 | 3080.99 | 0.86 | 95.04 |
| 55.0-60.0 | 22.34 | 3103.33 | 0.69 | 95.73 |
| 60.0-65.0 | 18.75 | 3122.08 | 0.58 | 96.31 |
| 65.0-70.0 | 15.45 | 3137.53 | 0.48 | 96.79 |
| 70.0-75.0 | 12.50 | 3150.03 | 0.39 | 97.17 |
| 75.0-80.0 | 9.97 | 3160.00 | 0.31 | 97.48 |
| 80.0-85.0 | 7.77 | 3167.77 | 0.24 | 97.72 |
| 85.0-90.0 | 5.99 | 3173.77 | 0.18 | 97.91 |
| 90.0-95.0 | 4.83 | 3178.60 | 0.15 | 98.06 |
| 95.0-100.0 | 4.18 | 3182.78 | 0.13 | 98.18 |
| 100.0-105.0 | 3.75 | 3186.53 | 0.12 | 98.30 |
| 105.0-110.0 | 3.41 | 3189.94 | 0.11 | 98.41 |
| 110.0-115.0 | 3.17 | 3193.11 | 0.10 | 98.50 |
| 115.0-120.0 | 3.06 | 3196.17 | 0.09 | 98.60 |
| 120.0-125.0 | 3.12 | 3199.30 | 0.10 | 98.69 |
| 125.0-130.0 | 3.45 | 3202.74 | 0.11 | 98.80 |
| 130.0-135.0 | 4.03 | 3206.77 | 0.12 | 98.92 |
| 135.0-140.0 | 4.67 | 3211.44 | 0.14 | 99.07 |
| 140.0-145.0 | 5.20 | 3216.63 | 0.16 | 99.23 |
| 145.0-150.0 | 5.48 | 3222.11 | 0.17 | 99.40 |
| 150.0-155.0 | 5.37 | 3227.48 | 0.17 | 99.56 |
| 155.0-160.0 | 4.89 | 3232.38 | 0.15 | 99.71 |
| 160.0-165.0 | 4.02 | 3236.39 | 0.12 | 99.84 |
| 165.0-170.0 | 2.90 | 3239.30 | 0.09 | 99.93 |
| 170.0-175.0 | 1.76 | 3241.05 | 0.05 | 99.98 |
| 175.0-180.0 | 0.59 | 3241.64 | 0.02 | 100.00 |

Rectangle ISO Lighting Intensity Diagram

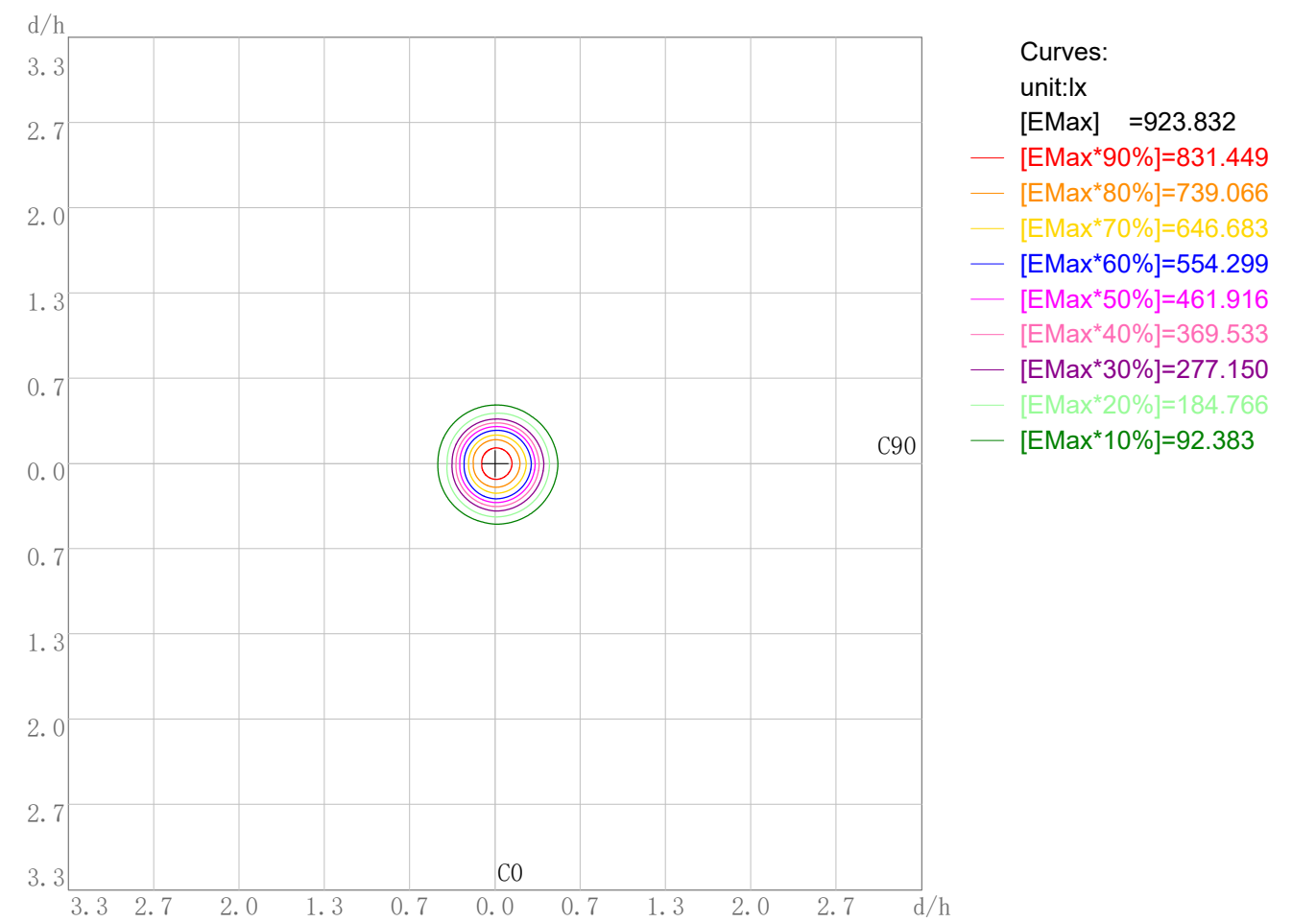
| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-35-XX-01 4000K RA90 36D 白色 | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date:2022/08/11 |



Plane ISO-Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name:DL51-35-XX-01 4000K RA90 36D 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: 2022/08/11 |

Plane ISO-Illuminance Curve

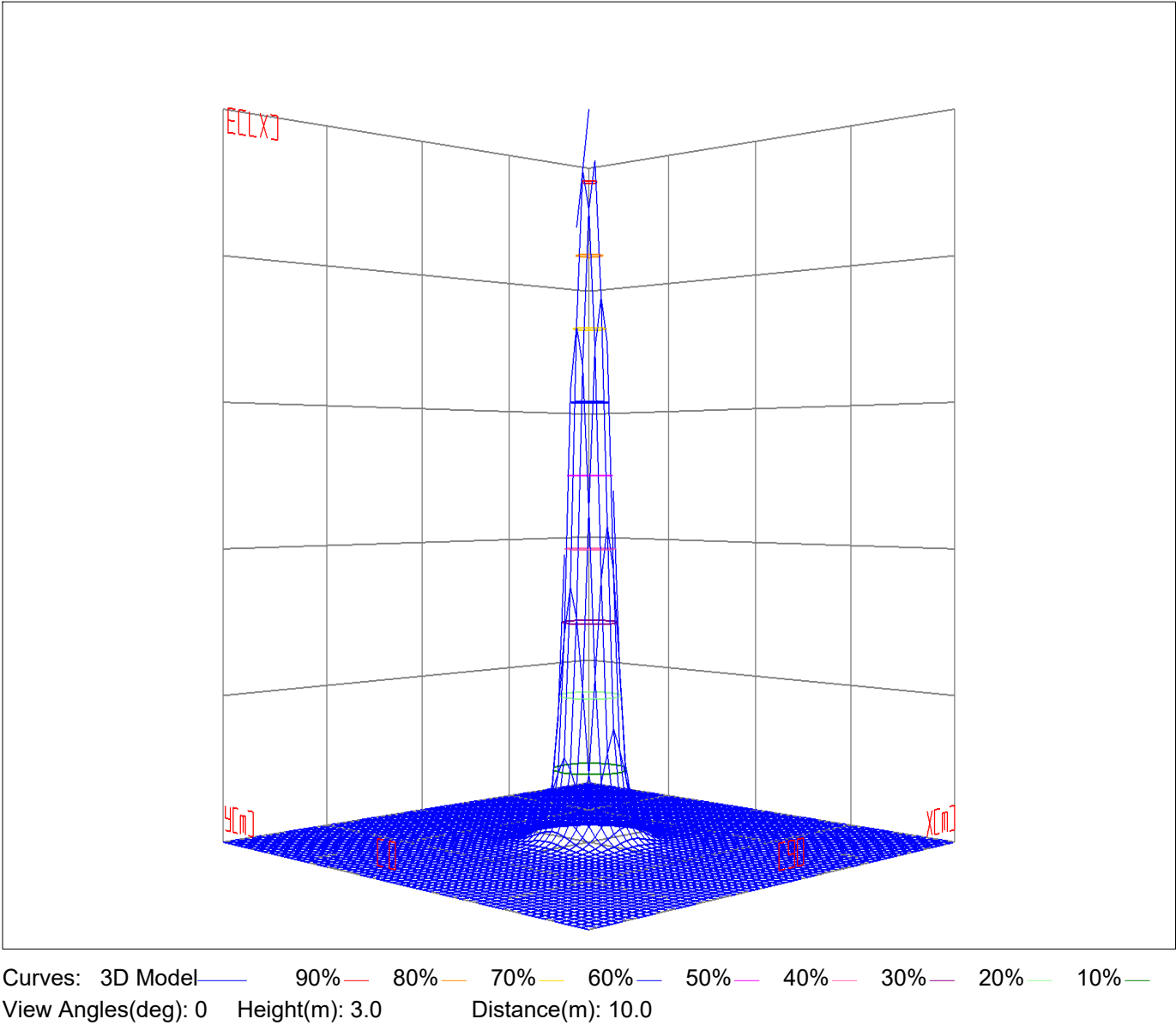


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 923.83
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-35-XX-01 4000K RA90 36D 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:2022/08/11 |

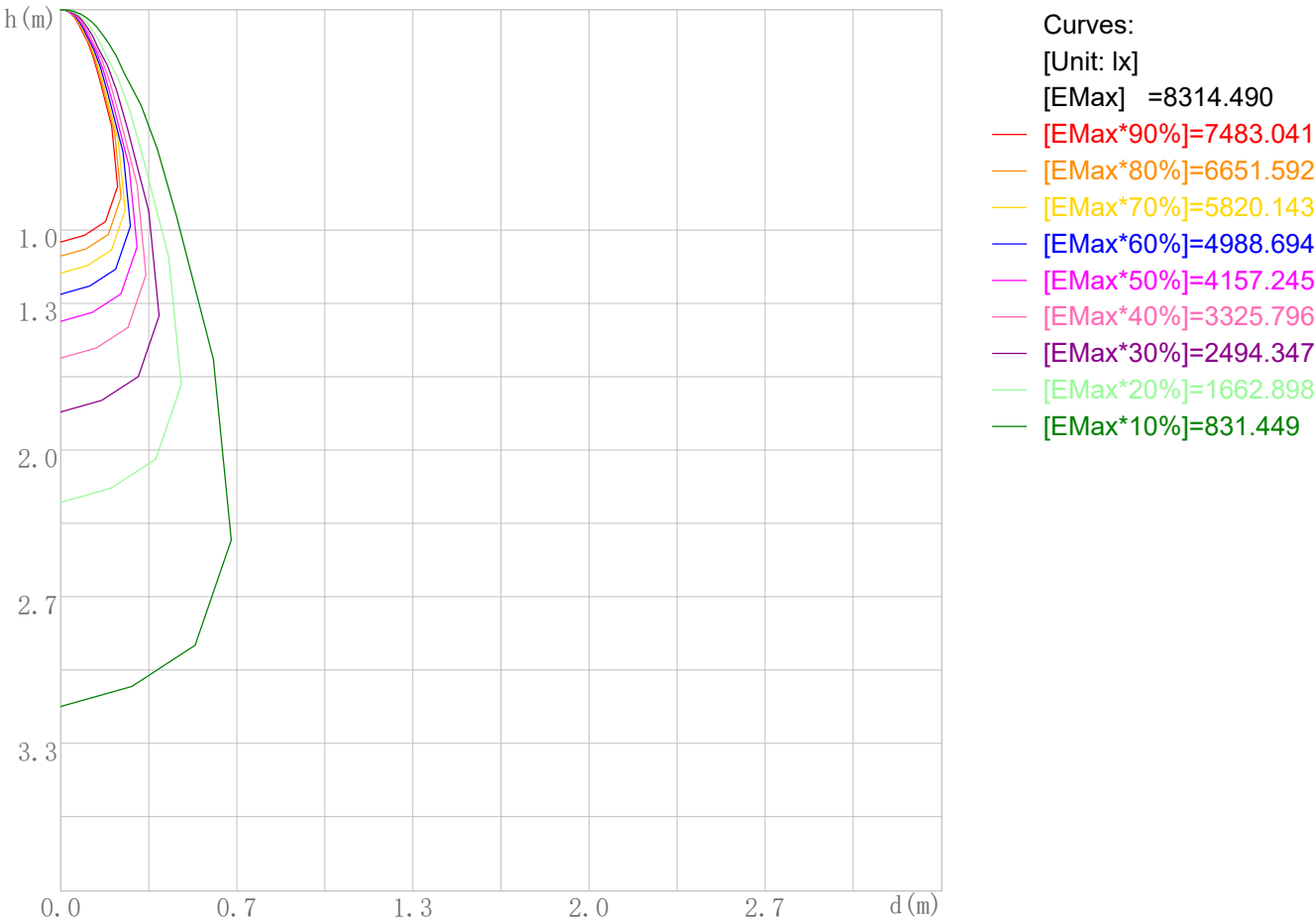
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-35-XX-01 4000K RA90 36D 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:2022/08/11 |

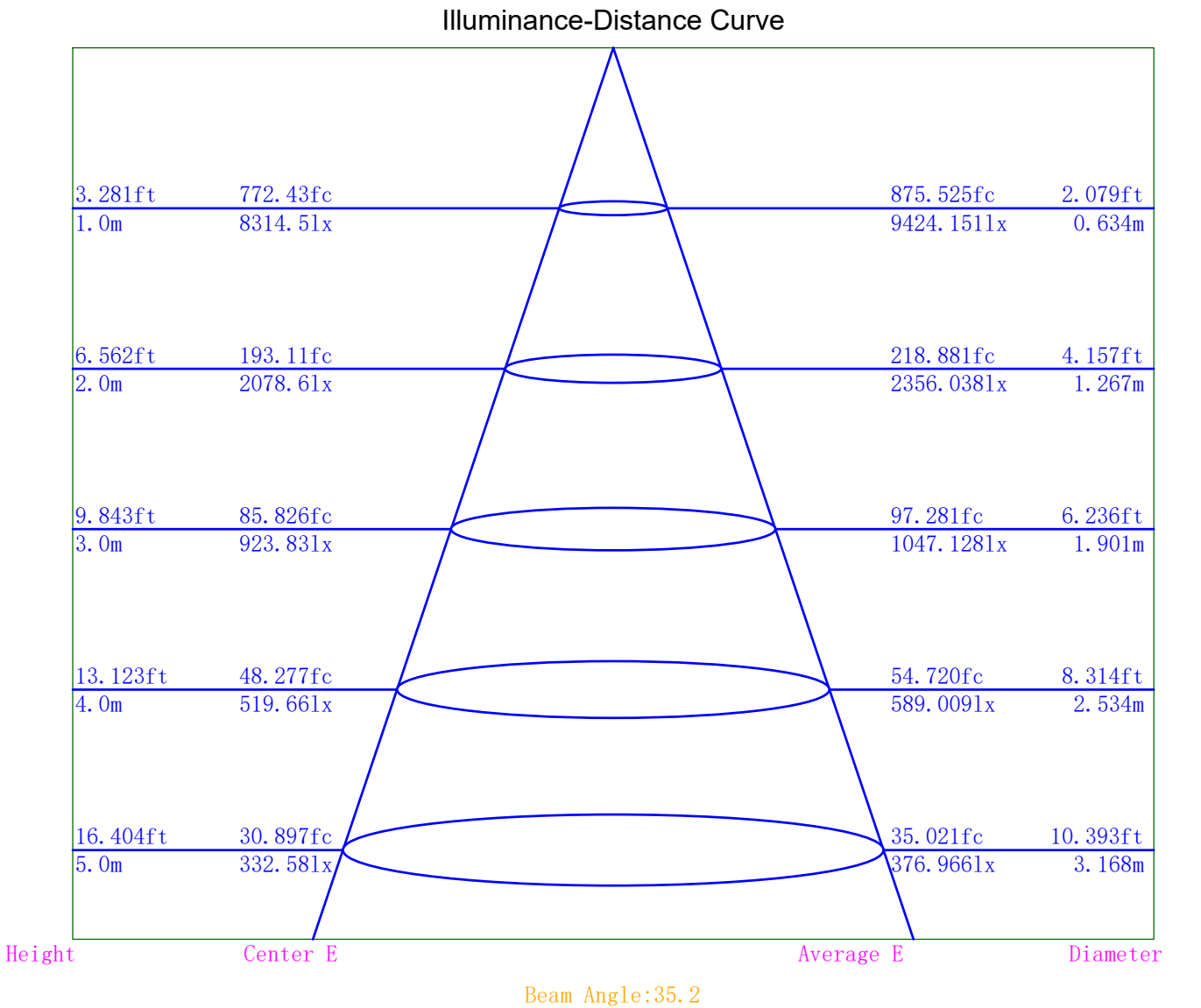
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:8314.49lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:8314.490cd,0deg

Illuminance-Distance Diagram

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-35-XX-01 4000K RA90 36D 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:2022/08/11 |



Indoor Luminance Limiting Curves

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-35-XX-01 4000K RA90 36D 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:2022/08/11 |

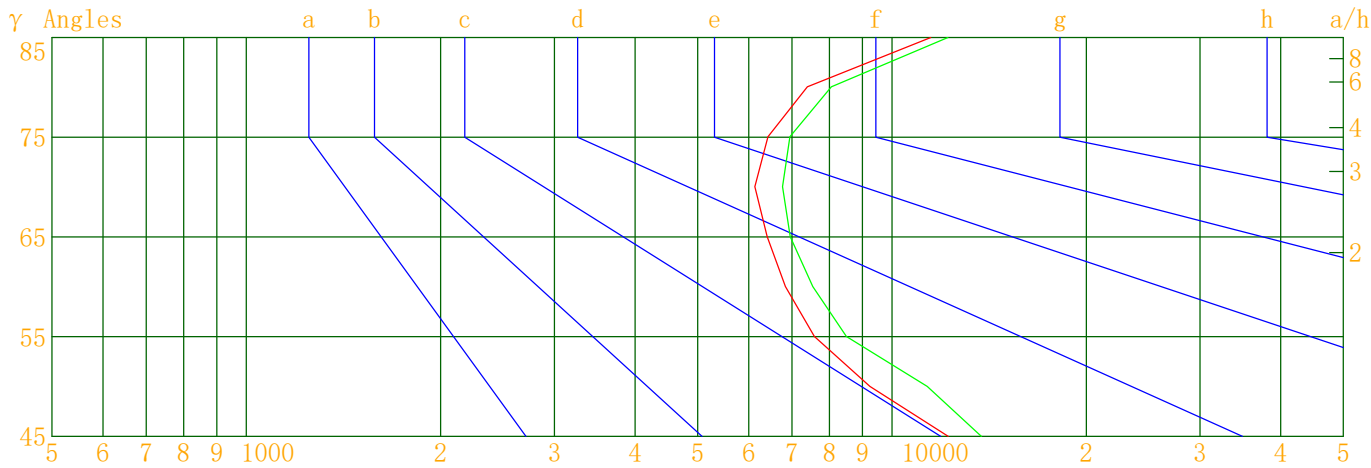
Glare Grade Table

| 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 | 12222 | 9243 | 7582 | 6838 | 6409 | 6132 | 6426 | 7396 | 11482 |
| C90 | 13756 | 11341 | 8498 | 7540 | 6957 | 6768 | 6947 | 8057 | 12207 |

Luminance Limiting Curve



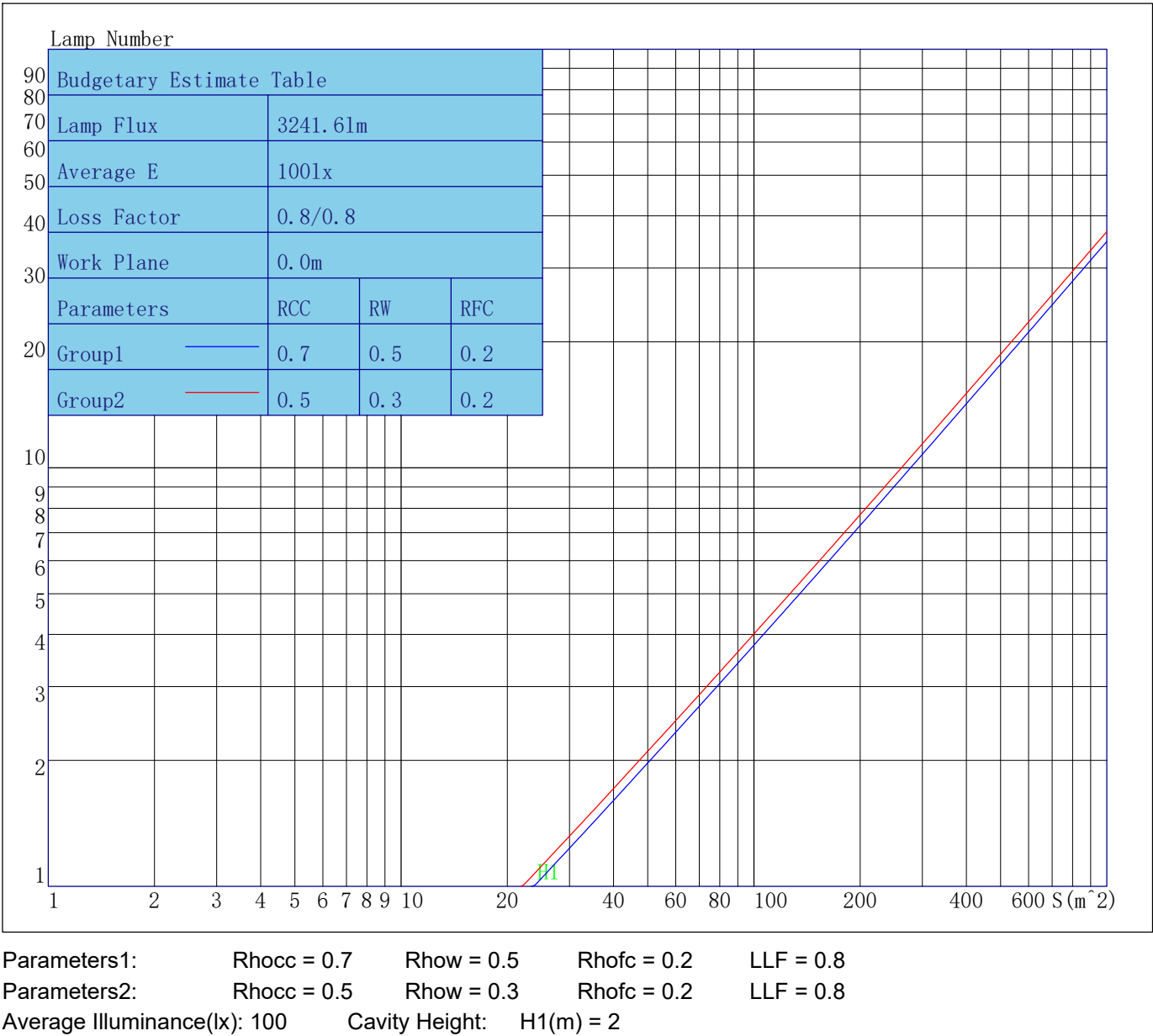
Luminous Size:Length(m)=0.110Width(m)=0.110Height(m)=0.000Area(m^2)=0.012100

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name:DL51-35-XX-01 4000K RA90 36D 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: 2022/08/11 |



Indoor Coefficient of Utilization Table

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-35-XX-01 4000K RA90 36D 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:2022/08/11 |

| 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 | 104 | 103 | 101 | 100 | 99 | 98 | 96 | 95 | 95 | 93 |
| 2 | 109 | 104 | 101 | 98 | 106 | 103 | 99 | 97 | 99 | 96 | 94 | 96 | 94 | 92 | 93 | 91 | 90 | 88 |
| 3 | 104 | 99 | 95 | 91 | 102 | 97 | 93 | 90 | 94 | 91 | 89 | 92 | 89 | 87 | 89 | 87 | 85 | 84 |
| 4 | 100 | 94 | 89 | 86 | 98 | 93 | 88 | 85 | 90 | 87 | 84 | 88 | 85 | 83 | 86 | 84 | 81 | 80 |
| 5 | 97 | 89 | 85 | 81 | 95 | 88 | 84 | 80 | 87 | 83 | 80 | 85 | 81 | 79 | 83 | 80 | 78 | 77 |
| 6 | 93 | 86 | 81 | 77 | 92 | 85 | 80 | 77 | 83 | 79 | 76 | 82 | 78 | 75 | 80 | 77 | 75 | 73 |
| 7 | 90 | 82 | 77 | 73 | 88 | 81 | 77 | 73 | 80 | 76 | 73 | 79 | 75 | 72 | 77 | 74 | 72 | 71 |
| 8 | 87 | 79 | 74 | 70 | 85 | 78 | 73 | 70 | 77 | 73 | 70 | 76 | 72 | 69 | 75 | 71 | 69 | 68 |
| 9 | 84 | 76 | 71 | 68 | 83 | 75 | 71 | 67 | 74 | 70 | 67 | 73 | 70 | 67 | 72 | 69 | 67 | 65 |
| 10 | 81 | 73 | 68 | 65 | 80 | 73 | 68 | 65 | 72 | 68 | 65 | 71 | 67 | 64 | 70 | 67 | 64 | 63 |

Unified Glare Rating Table

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name:DL51-35-XX-01 4000K RA90 36D 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:2022/08/11 |

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 | 14.0 | 15.0 | 14.5 | 15.3 | 15.7 | 15.0 | 15.9 | 15.4 | 16.3 | 16.6 |
| | 14.7 | 15.5 | 15.2 | 15.9 | 16.3 | 15.6 | 16.4 | 16.0 | 16.8 | 17.2 |
| | 15.1 | 15.9 | 15.6 | 16.3 | 16.7 | 16.0 | 16.7 | 16.4 | 17.1 | 17.5 |
| | 15.6 | 16.3 | 16.1 | 16.7 | 17.1 | 16.4 | 17.1 | 16.8 | 17.5 | 17.9 |
| | 15.9 | 16.5 | 16.4 | 16.9 | 17.4 | 16.6 | 17.3 | 17.1 | 17.7 | 18.2 |
| | 16.2 | 16.8 | 16.7 | 17.2 | 17.7 | 16.9 | 17.5 | 17.4 | 17.9 | 18.4 |
| X=4H Y=2H | 14.2 | 15.0 | 14.7 | 15.4 | 15.8 | 15.1 | 15.8 | 15.5 | 16.2 | 16.7 |
| | 15.2 | 15.7 | 15.6 | 16.2 | 16.7 | 15.9 | 16.5 | 16.4 | 17.0 | 17.4 |
| | 15.7 | 16.2 | 16.2 | 16.7 | 17.2 | 16.4 | 17.0 | 16.9 | 17.4 | 17.9 |
| | 16.4 | 16.8 | 16.9 | 17.3 | 17.8 | 17.1 | 17.5 | 17.6 | 18.0 | 18.5 |
| | 16.7 | 17.1 | 17.3 | 17.6 | 18.2 | 17.4 | 17.8 | 17.9 | 18.3 | 18.8 |
| | 17.2 | 17.5 | 17.7 | 18.1 | 18.6 | 17.8 | 18.2 | 18.4 | 18.7 | 19.2 |
| X=8H Y=4H | 15.9 | 16.3 | 16.4 | 16.8 | 17.3 | 16.6 | 17.0 | 17.1 | 17.5 | 18.0 |
| | 16.8 | 17.1 | 17.3 | 17.6 | 18.2 | 17.4 | 17.7 | 18.0 | 18.3 | 18.8 |
| | 17.3 | 17.6 | 17.9 | 18.1 | 18.7 | 17.9 | 18.2 | 18.5 | 18.7 | 19.3 |
| | 18.0 | 18.2 | 18.5 | 18.7 | 19.4 | 18.5 | 18.8 | 19.1 | 19.3 | 19.9 |
| X=12H Y=4H | 15.9 | 16.3 | 16.5 | 16.8 | 17.3 | 16.6 | 17.0 | 17.1 | 17.5 | 18.0 |
| | 16.9 | 17.1 | 17.5 | 17.7 | 18.3 | 17.5 | 17.8 | 18.1 | 18.3 | 18.9 |
| | 17.5 | 17.7 | 18.1 | 18.3 | 18.9 | 18.1 | 18.3 | 18.7 | 18.9 | 19.5 |
| Variations with the objerver position at spacings | | | | | | | | | | |
| S=1.0H | 0.2/-0.2 | | | | | 0.2/-0.2 | | | | |
| S=1.5H | 0.3/-0.4 | | | | | 0.4/-0.4 | | | | |
| S=2.0H | 0.4/-0.4 | | | | | 0.4/-0.5 | | | | |
| Reduced UGR Table: | | | | | | | | | | |
| Nordic Standard Table: | BK0 | | | | | BK0 | | | | |
| Correction Value | 2.7 | | | | | 2.5 | | | | |

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 | 8314.49 | 8314.49 | 8314.49 | 8314.49 |
| γ 5.0 | 7933.24 | 8080.84 | 8011.60 | 7773.74 |
| γ 10.0 | 7241.57 | 7282.15 | 7112.71 | 6886.27 |
| γ 15.0 | 5344.11 | 5996.27 | 5747.41 | 4873.09 |
| γ 20.0 | 2519.58 | 3394.32 | 3143.56 | 2170.07 |
| γ 25.0 | 988.50 | 1298.52 | 1161.46 | 853.07 |
| γ 30.0 | 513.48 | 632.46 | 547.68 | 431.74 |
| γ 35.0 | 286.07 | 372.23 | 292.33 | 224.92 |
| γ 40.0 | 149.30 | 187.28 | 139.53 | 113.76 |
| γ 45.0 | 104.57 | 117.70 | 92.94 | 84.09 |
| γ 50.0 | 71.89 | 88.20 | 75.95 | 62.58 |
| γ 55.0 | 52.62 | 58.98 | 53.67 | 49.45 |
| γ 60.0 | 41.37 | 45.62 | 44.17 | 40.67 |
| γ 65.0 | 32.78 | 35.58 | 35.56 | 32.77 |
| γ 70.0 | 25.38 | 28.01 | 28.20 | 25.81 |
| γ 75.0 | 20.12 | 21.76 | 22.13 | 19.94 |
| γ 80.0 | 15.54 | 16.93 | 17.17 | 15.47 |
| γ 85.0 | 12.11 | 12.87 | 13.03 | 11.32 |
| γ 90.0 | 9.45 | 10.55 | 9.77 | 8.45 |
| γ 95.0 | 8.31 | 8.43 | 8.25 | 7.38 |
| γ 100.0 | 7.60 | 7.68 | 7.06 | 6.86 |
| γ 105.0 | 7.12 | 6.85 | 6.37 | 6.52 |
| γ 110.0 | 6.61 | 6.30 | 6.25 | 6.23 |
| γ 115.0 | 6.13 | 6.07 | 6.21 | 6.29 |
| γ 120.0 | 6.49 | 5.90 | 6.51 | 6.75 |
| γ 125.0 | 7.32 | 6.46 | 6.94 | 7.67 |
| γ 130.0 | 8.88 | 7.90 | 8.70 | 9.51 |
| γ 135.0 | 11.24 | 9.84 | 11.68 | 12.00 |
| γ 140.0 | 14.23 | 12.57 | 14.02 | 15.20 |
| γ 145.0 | 17.25 | 15.65 | 17.59 | 18.07 |
| γ 150.0 | 20.47 | 18.80 | 20.26 | 20.66 |
| γ 155.0 | 22.67 | 21.45 | 22.89 | 22.69 |
| γ 160.0 | 24.71 | 23.24 | 24.68 | 24.22 |
| γ 165.0 | 24.82 | 24.12 | 25.19 | 23.97 |
| γ 170.0 | 24.63 | 24.44 | 24.74 | 23.88 |
| γ 175.0 | 24.80 | 24.65 | 24.75 | 24.50 |
| γ 180.0 | 24.94 | 24.94 | 24.94 | 24.94 |