

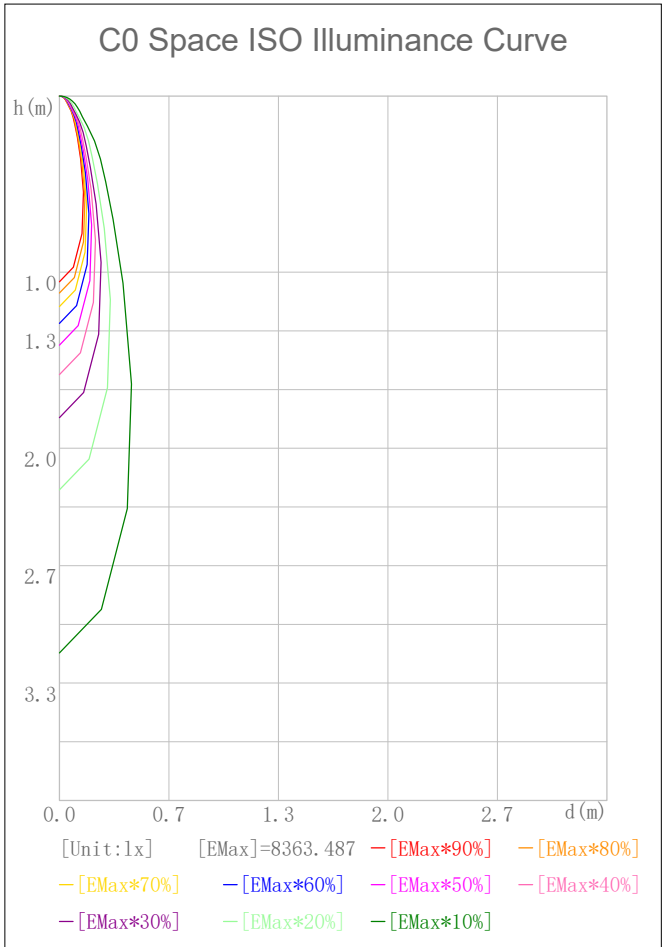
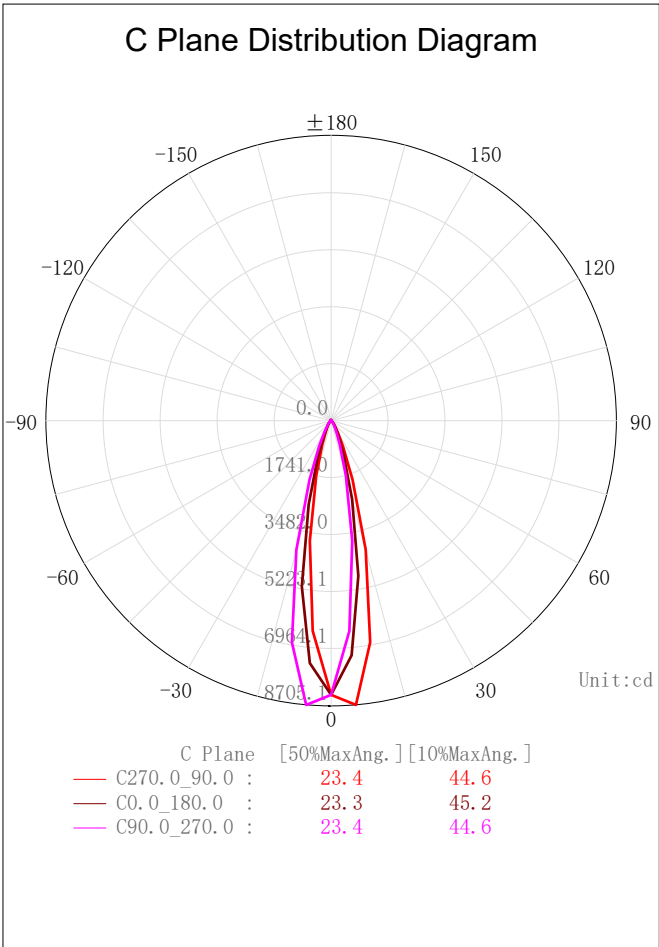
Indoor Luminaire Photometric Data

Description Information

| | | | |
|---|-------------------------|----------------------|-----------------------|
| Luminary Name: PD08-25-XX-01 2700K RA90 24D | | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | | Lamp Catalog: LED | Test Date: 2022/09/16 |
| 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 |

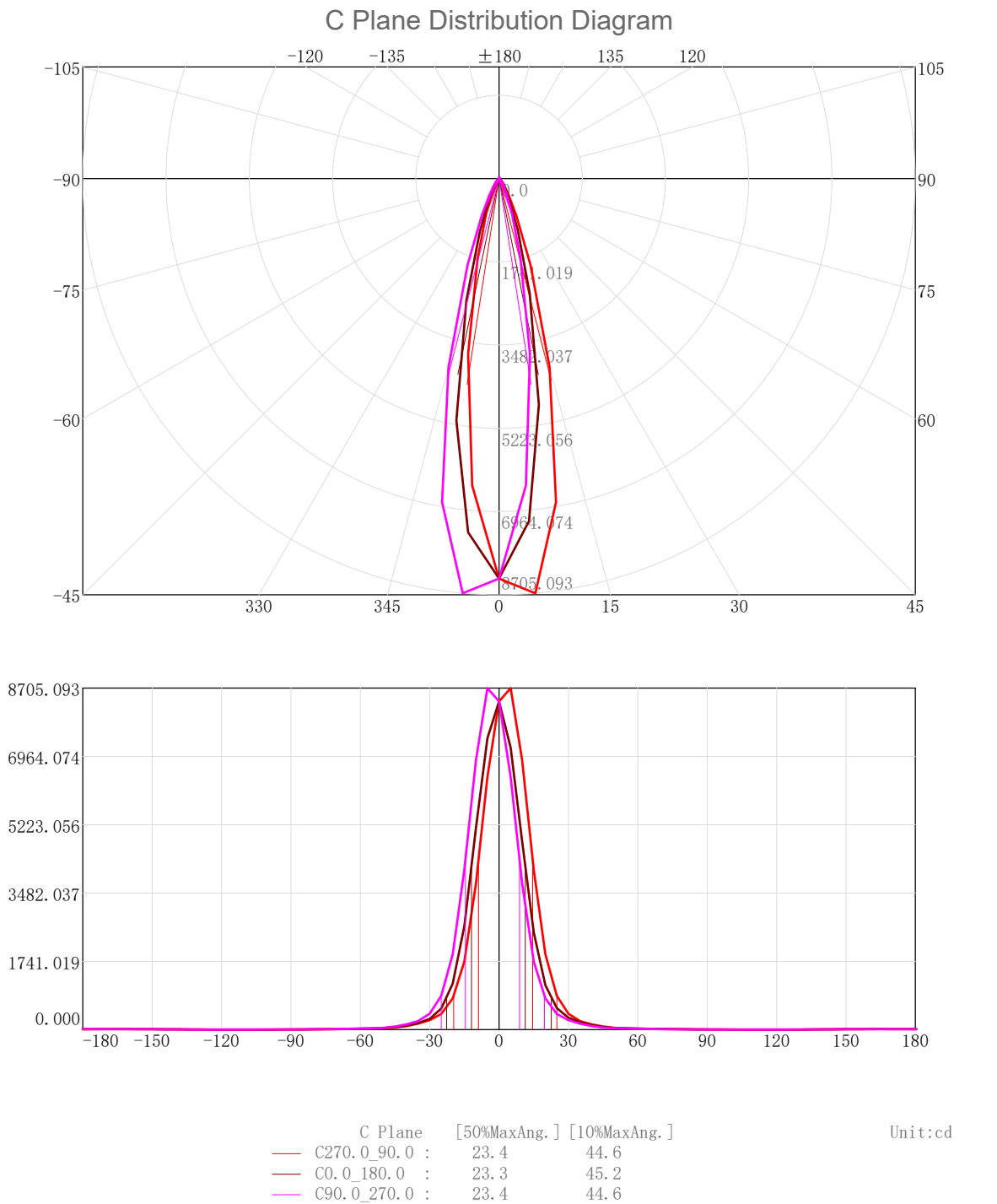
Character Parameter

| Lamp Speciality Parameter | | Luminaire Speciality Parameter | |
|---|----------------------------------|--|--|
| Rated Flux(lm): 2040.170 | Luminary Flux(lm): 2040.168 | Field Angle(10%Imax): 44.6(°) | |
| Rated Power(W): | Luminary Efficiency: 100.00% | Down Lumens&Percent: 1995.938lm 97.83% | |
| Rated Voltage(V): | Luminary EER(lm/W): 89.915 | Up Lumens&Percent: 44.230lm 2.17% | |
| Tested Power(W): 22.690 | Max. Candela(cd): 8705.093 | S/MH: C0_a180=0.394 C90_270=0.408 | |
| Lamps' Inside: 1 | Max Cand@Ang. (°): C=270.0 γ=5.0 | CIE Type: Semi-Direct | |
| Tested Electrics (V, A, pf):239.9, 0.098, 0.957 | Beam Angle(50%Imax): 23.4(°) | ErP ϕ use(90°): 1806.979lm | |
| Lamp Size (W*L*H):0.083m*0.083m*0.000m | Left=-8.8°, Right=14.5° | IRF(%): 951.404 | |



2D Plane Light Intensity Distribution Curve

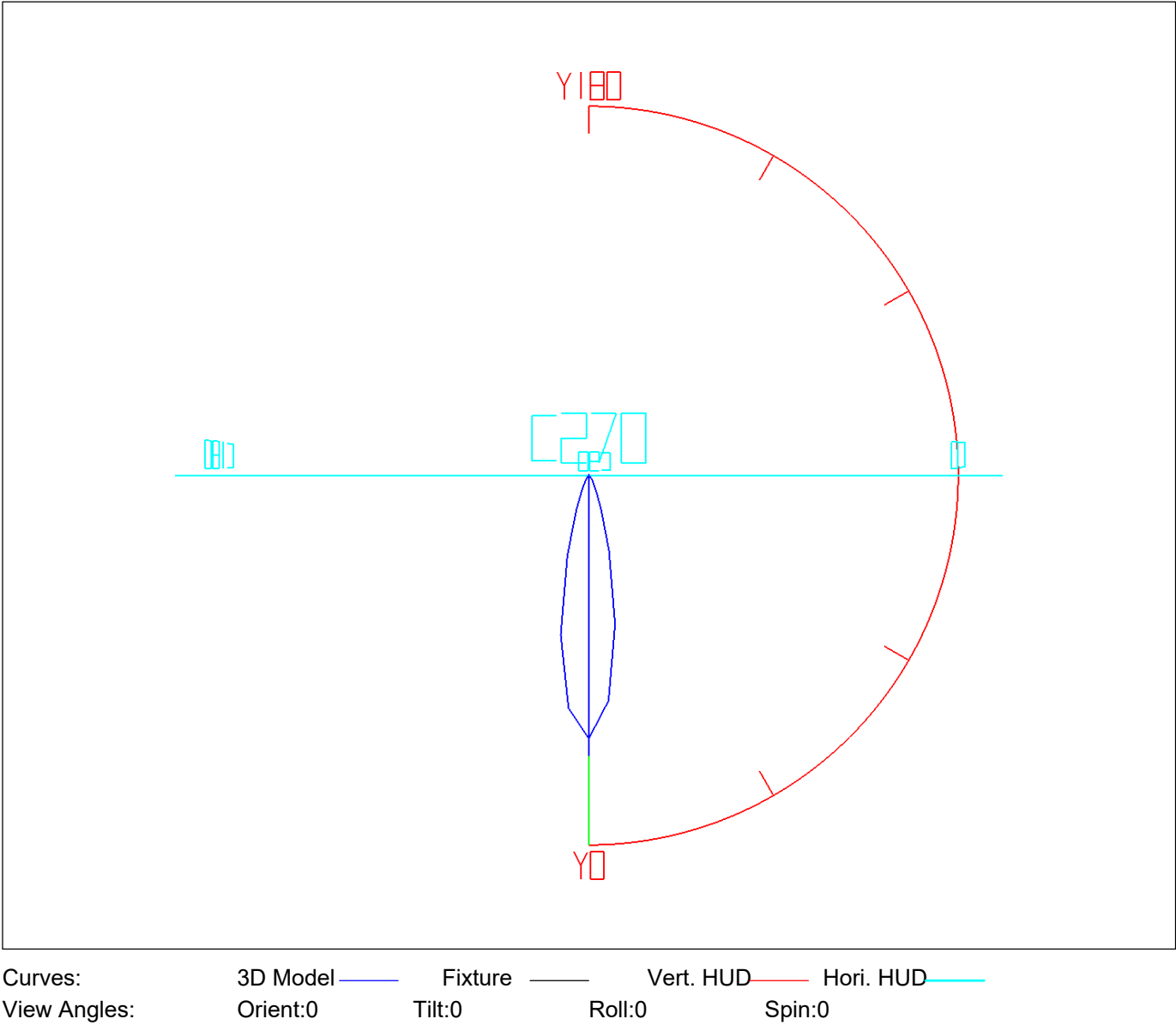
| | | |
|---|-----------------------|------------------------------|
| Lum. Name: PD08-25-XX-01 2700K RA90 24D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date: 2022/09/16 |



3D Light Intensity Distribution Modal

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: PD08-25-XX-01 2700K RA90 24D | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catelog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date: 2022/09/16 |

3D Light Intensity Distribution Modal

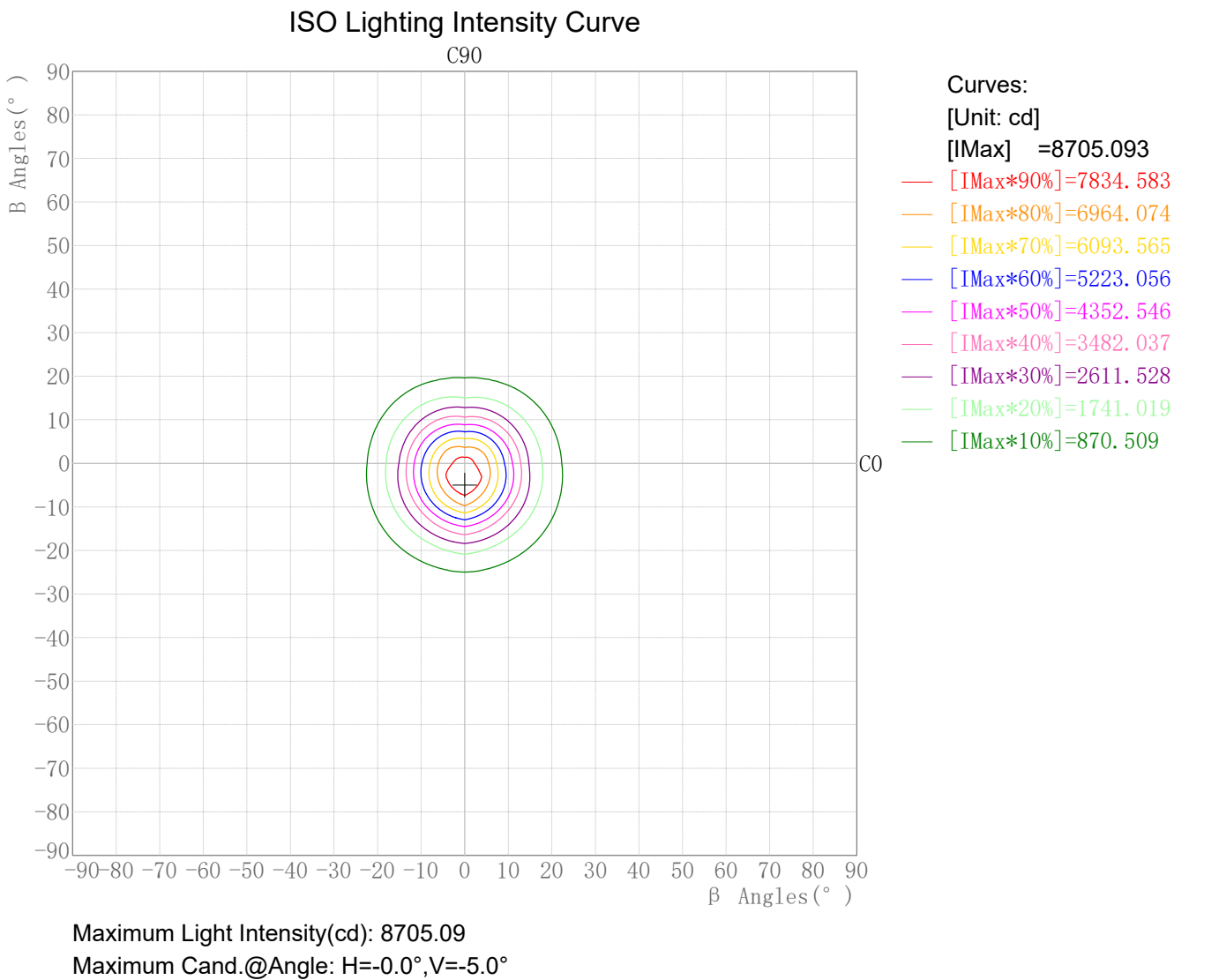


Zonal Flux Tabulation

| Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp |
|-------------|-------------------|-------------------|-----------|-----------|
| 0.0-5.0 | 188.93 | 188.93 | 9.26 | 9.26 |
| 5.0-10.0 | 449.84 | 638.78 | 22.05 | 31.31 |
| 10.0-15.0 | 466.76 | 1105.53 | 22.88 | 54.19 |
| 15.0-20.0 | 329.03 | 1434.56 | 16.13 | 70.32 |
| 20.0-25.0 | 193.82 | 1628.38 | 9.50 | 79.82 |
| 25.0-30.0 | 113.59 | 1741.97 | 5.57 | 85.38 |
| 30.0-35.0 | 72.49 | 1814.46 | 3.55 | 88.94 |
| 35.0-40.0 | 49.82 | 1864.28 | 2.44 | 91.38 |
| 40.0-45.0 | 33.73 | 1898.00 | 1.65 | 93.03 |
| 45.0-50.0 | 22.32 | 1920.33 | 1.09 | 94.13 |
| 50.0-55.0 | 16.24 | 1936.56 | 0.80 | 94.92 |
| 55.0-60.0 | 13.63 | 1950.19 | 0.67 | 95.59 |
| 60.0-65.0 | 11.73 | 1961.92 | 0.57 | 96.16 |
| 65.0-70.0 | 9.86 | 1971.77 | 0.48 | 96.65 |
| 70.0-75.0 | 8.16 | 1979.93 | 0.40 | 97.05 |
| 75.0-80.0 | 6.60 | 1986.53 | 0.32 | 97.37 |
| 80.0-85.0 | 5.24 | 1991.77 | 0.26 | 97.63 |
| 85.0-90.0 | 4.16 | 1995.94 | 0.20 | 97.83 |
| 90.0-95.0 | 3.40 | 1999.34 | 0.17 | 98.00 |
| 95.0-100.0 | 2.88 | 2002.22 | 0.14 | 98.14 |
| 100.0-105.0 | 2.54 | 2004.76 | 0.12 | 98.26 |
| 105.0-110.0 | 2.28 | 2007.04 | 0.11 | 98.38 |
| 110.0-115.0 | 2.09 | 2009.13 | 0.10 | 98.48 |
| 115.0-120.0 | 2.00 | 2011.13 | 0.10 | 98.58 |
| 120.0-125.0 | 1.97 | 2013.10 | 0.10 | 98.67 |
| 125.0-130.0 | 2.10 | 2015.20 | 0.10 | 98.78 |
| 130.0-135.0 | 2.43 | 2017.63 | 0.12 | 98.90 |
| 135.0-140.0 | 2.90 | 2020.53 | 0.14 | 99.04 |
| 140.0-145.0 | 3.38 | 2023.91 | 0.17 | 99.20 |
| 145.0-150.0 | 3.61 | 2027.52 | 0.18 | 99.38 |
| 150.0-155.0 | 3.53 | 2031.05 | 0.17 | 99.55 |
| 155.0-160.0 | 3.17 | 2034.22 | 0.16 | 99.71 |
| 160.0-165.0 | 2.60 | 2036.82 | 0.13 | 99.84 |
| 165.0-170.0 | 1.87 | 2038.69 | 0.09 | 99.93 |
| 170.0-175.0 | 1.11 | 2039.80 | 0.05 | 99.98 |
| 175.0-180.0 | 0.37 | 2040.17 | 0.02 | 100.00 |

Rectangle ISO Lighting Intensity Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: PD08-25-XX-01 2700K RA90 24D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date: 2022/09/16 |



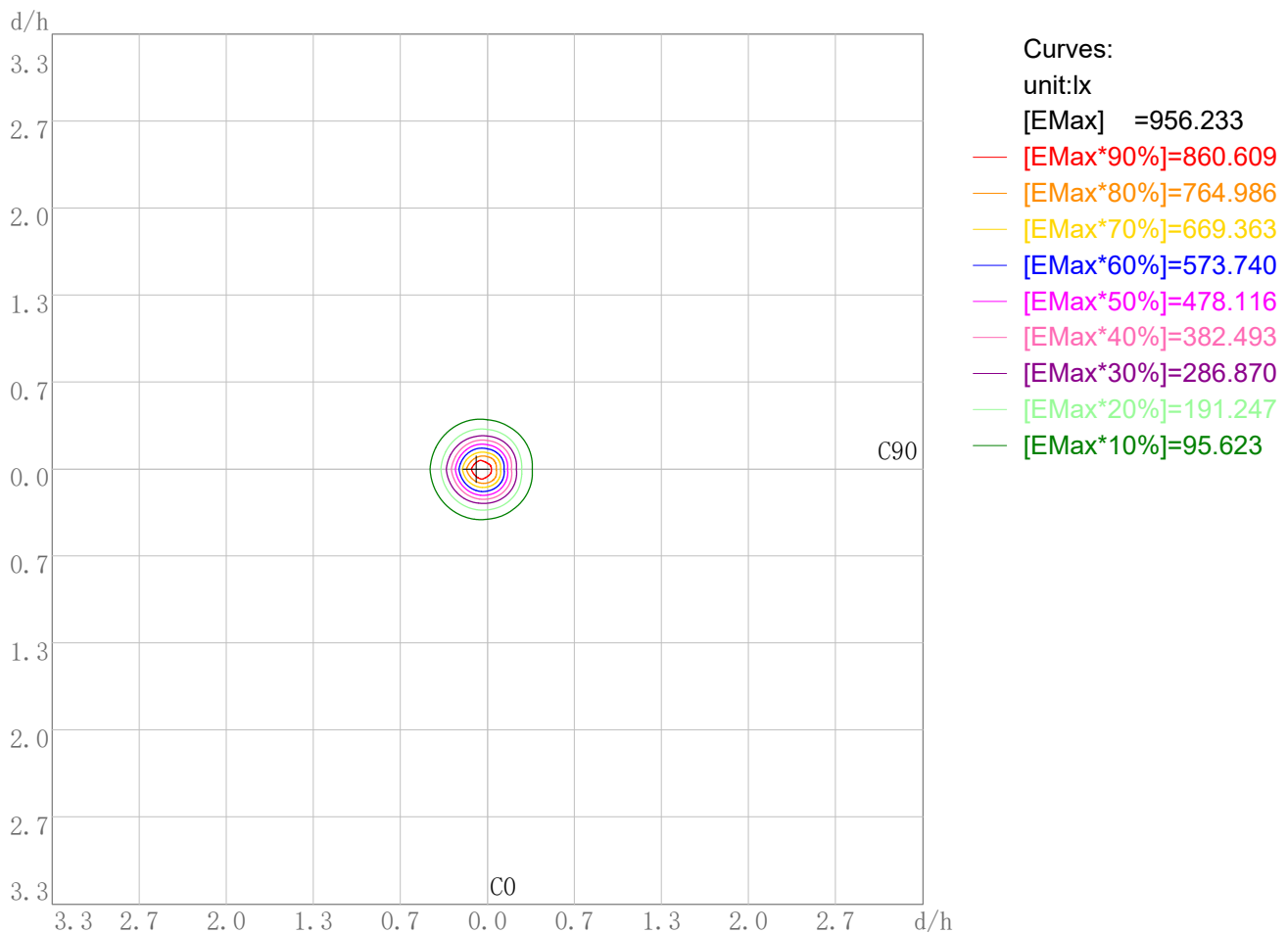
Photometric Filename:PD08-25-XX-01 2700K RA90 24D.IE

S

Plane ISO-Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: PD08-25-XX-01 2700K RA90 24D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date: 2022/09/16 |

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00

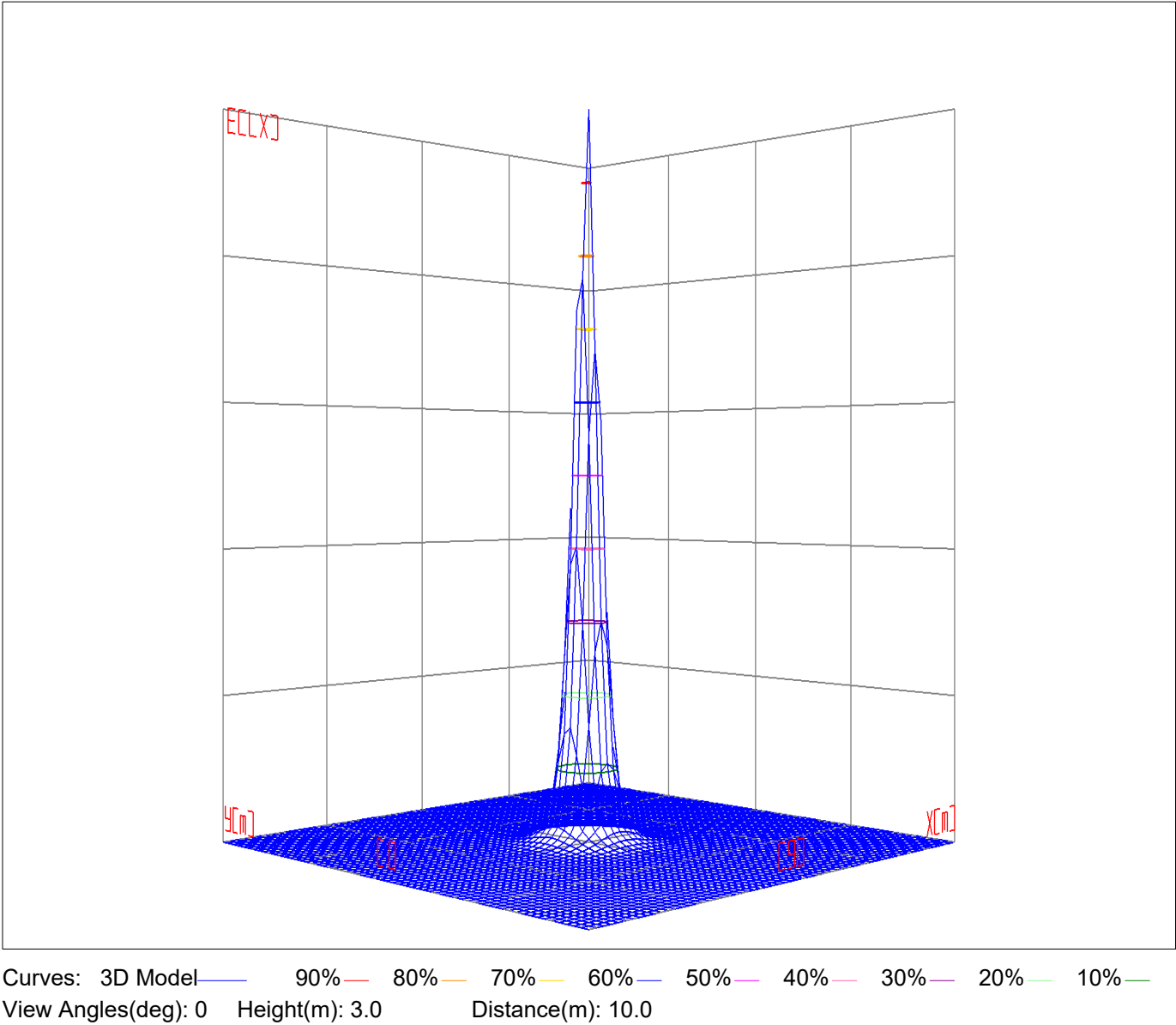
Working Plane Maximum Illuminance(lx): 956.23

Working Plane Maximum Illuminance Position(d/h):H-0.1 V-0.0

3D Plane ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: PD08-25-XX-01 2700K RA90 24D | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catelog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date: 2022/09/16 |

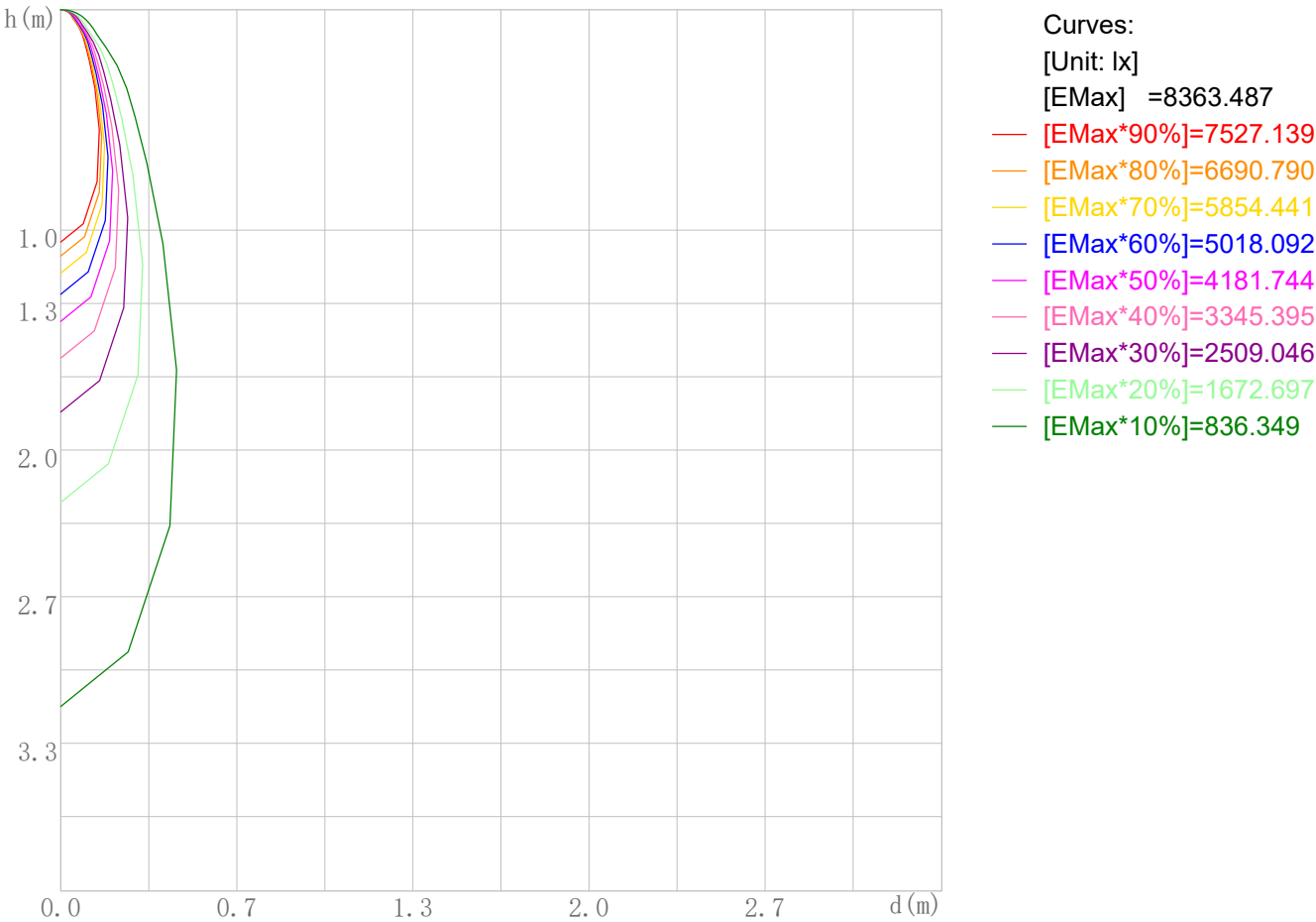
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: PD08-25-XX-01 2700K RA90 24D | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catelog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date: 2022/09/16 |

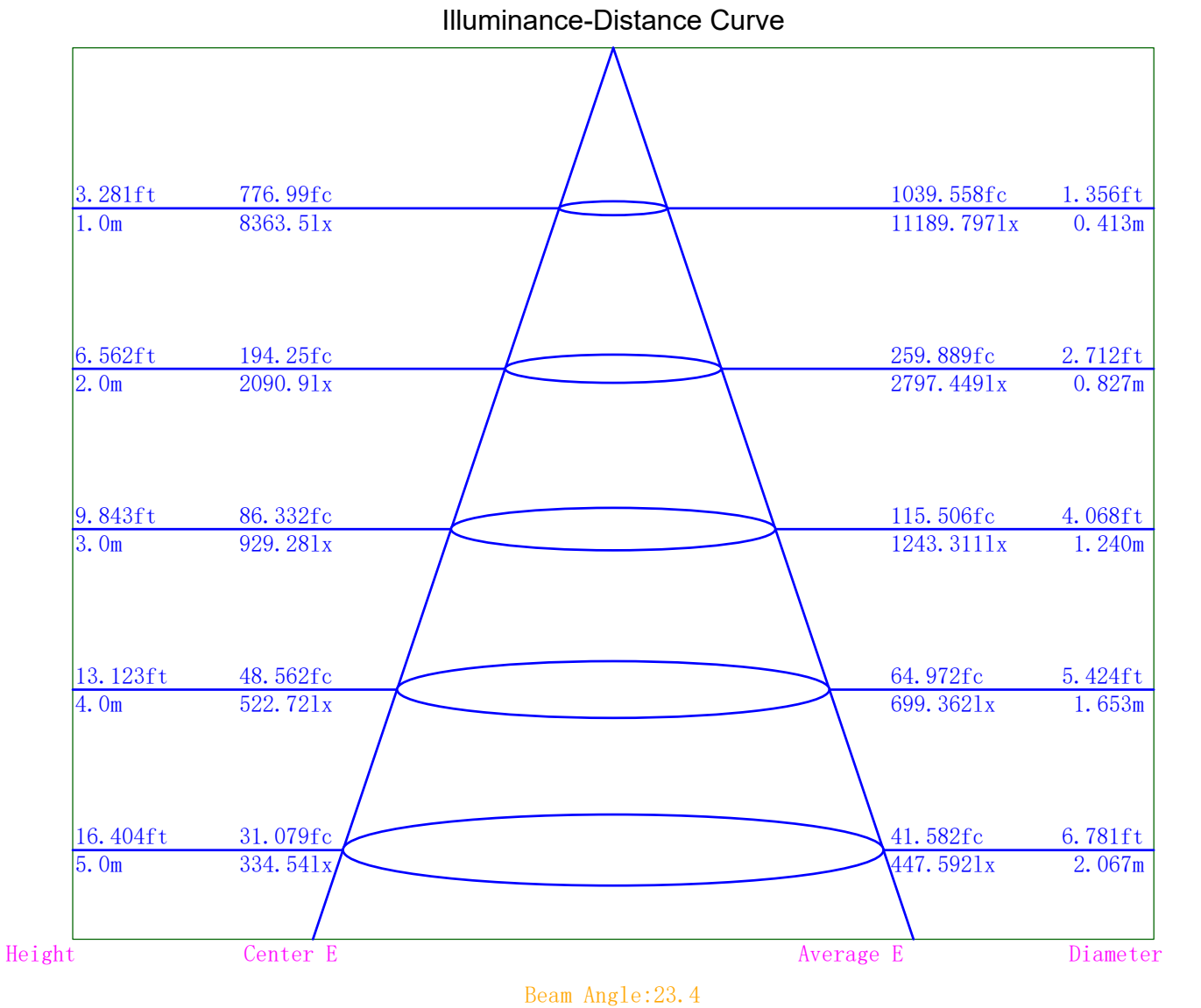
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:8363.49lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:8363.487cd,0deg

Illuminance-Distance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: PD08-25-XX-01 2700K RA90 24D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date: 2022/09/16 |



Indoor Luminance Limiting Curves

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: PD08-25-XX-01 2700K RA90 24D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date: 2022/09/16 |

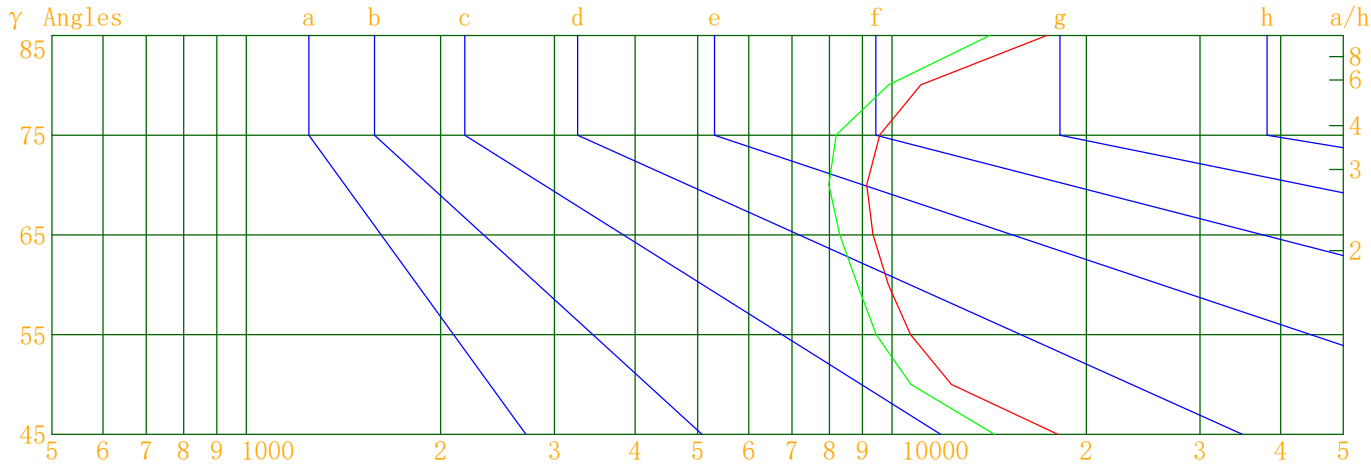
Glare Grade Table

| 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 | 18067 | 12359 | 10678 | 9874 | 9343 | 9138 | 9579 | 11084 | 17363 |
| C90 | 14415 | 10700 | 9451 | 8840 | 8298 | 7983 | 8201 | 9881 | 14166 |

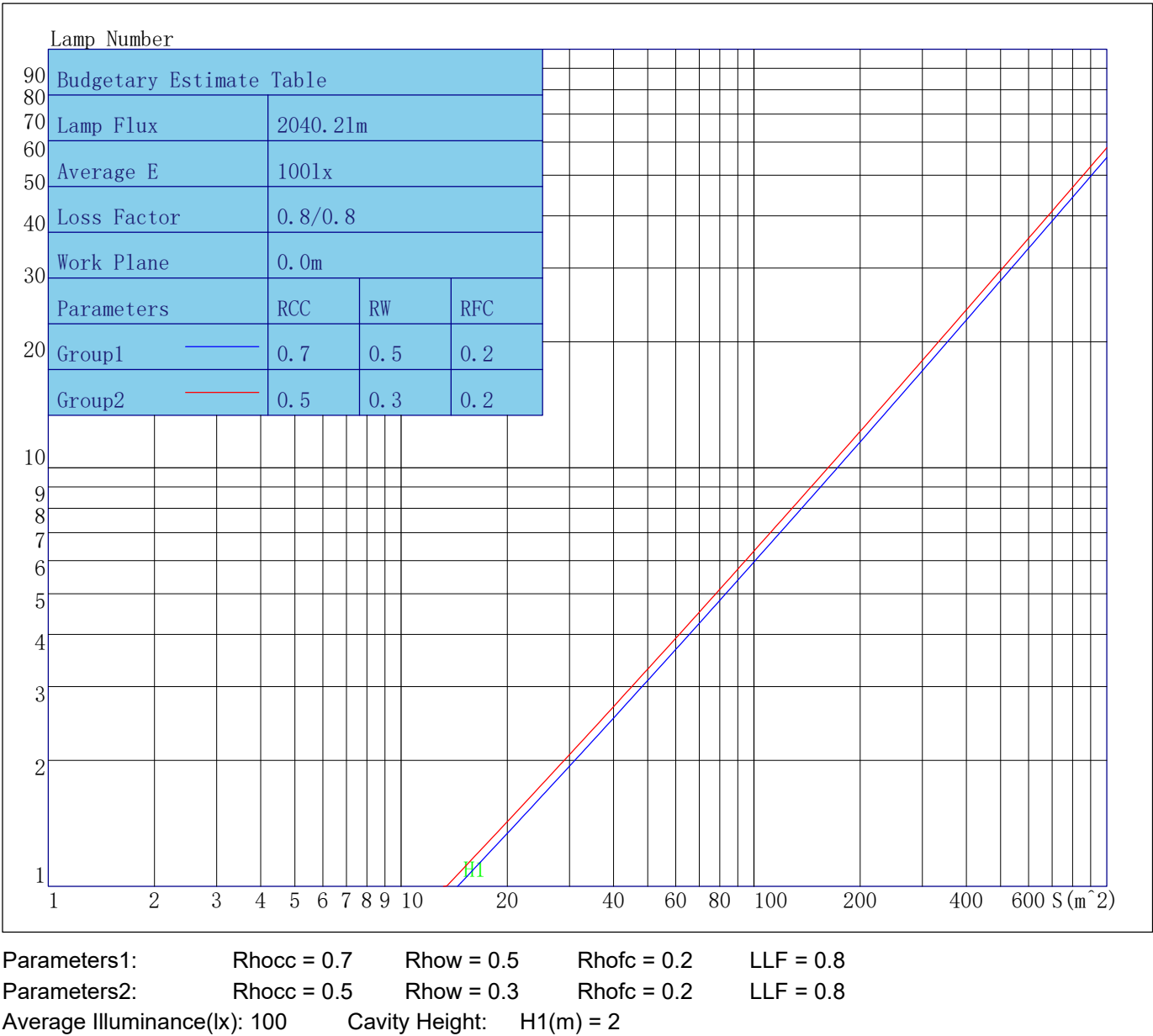
Luminance Limiting Curve



Luminous Size: Length(m)=-0.083 Width(m)=-0.083 Height(m)=0.000 Area(m^2)=0.005411
Luminous Type: Without Luminous Side
Luminous Curves: C0-C180 Color: C90-C270 Color:

Indoor Budgetary Estimate Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: PD08-25-XX-01 2700K RA90 24D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date: 2022/09/16 |



Indoor Coefficient of Utilization Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: PD08-25-XX-01 2700K RA90 24D | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catelog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date: 2022/09/16 |

| 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 | 97 | 96 | 95 | 93 |
| 2 | 109 | 105 | 102 | 99 | 107 | 103 | 100 | 97 | 100 | 97 | 95 | 96 | 94 | 93 | 93 | 92 | 90 | 89 |
| 3 | 105 | 100 | 96 | 92 | 103 | 98 | 94 | 91 | 95 | 92 | 90 | 93 | 90 | 88 | 90 | 88 | 86 | 85 |
| 4 | 101 | 95 | 91 | 87 | 99 | 94 | 90 | 86 | 92 | 88 | 85 | 89 | 86 | 84 | 87 | 85 | 83 | 82 |
| 5 | 98 | 91 | 86 | 83 | 96 | 90 | 86 | 82 | 88 | 84 | 81 | 86 | 83 | 81 | 85 | 82 | 80 | 78 |
| 6 | 94 | 87 | 83 | 79 | 93 | 87 | 82 | 79 | 85 | 81 | 78 | 83 | 80 | 78 | 82 | 79 | 77 | 76 |
| 7 | 91 | 84 | 79 | 76 | 90 | 83 | 79 | 76 | 82 | 78 | 75 | 81 | 77 | 75 | 80 | 77 | 74 | 73 |
| 8 | 89 | 81 | 76 | 73 | 87 | 81 | 76 | 73 | 79 | 75 | 73 | 78 | 75 | 72 | 77 | 74 | 72 | 71 |
| 9 | 86 | 78 | 74 | 71 | 85 | 78 | 74 | 71 | 77 | 73 | 70 | 76 | 72 | 70 | 75 | 72 | 70 | 69 |
| 10 | 83 | 76 | 71 | 69 | 82 | 76 | 71 | 68 | 75 | 71 | 68 | 74 | 70 | 68 | 73 | 70 | 68 | 67 |

Unified Glare Rating Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: PD08-25-XX-01 2700K RA90 24D | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catelog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting | Test Machine:GON-2000 | Test Date: 2022/09/16 |

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 | 16.3 | 15.7 | 16.7 | 17.1 | 14.3 | 15.3 | 14.7 | 15.7 | 16.1 |
| | Y=3H | 16.0 | 16.9 | 16.4 | 17.3 | 17.7 | 15.1 | 16.0 | 15.5 | 16.4 | 16.8 |
| | Y=4H | 16.4 | 17.3 | 16.9 | 17.7 | 18.2 | 15.5 | 16.3 | 15.9 | 16.7 | 17.2 |
| | Y=6H | 16.9 | 17.7 | 17.4 | 18.2 | 18.6 | 16.0 | 16.8 | 16.4 | 17.2 | 17.7 |
| | Y=8H | 17.2 | 18.0 | 17.7 | 18.4 | 18.9 | 16.3 | 17.0 | 16.7 | 17.5 | 17.9 |
| | Y=12H | 17.6 | 18.3 | 18.0 | 18.7 | 19.2 | 16.6 | 17.3 | 17.0 | 17.7 | 18.2 |
| X=4H | Y=2H | 15.5 | 16.3 | 15.9 | 16.7 | 17.2 | 14.5 | 15.4 | 15.0 | 15.8 | 16.2 |
| | Y=3H | 16.4 | 17.1 | 16.9 | 17.6 | 18.1 | 15.5 | 16.3 | 16.0 | 16.7 | 17.2 |
| | Y=4H | 17.0 | 17.7 | 17.5 | 18.1 | 18.6 | 16.1 | 16.8 | 16.6 | 17.2 | 17.7 |
| | Y=6H | 17.7 | 18.3 | 18.2 | 18.8 | 19.3 | 16.8 | 17.4 | 17.3 | 17.9 | 18.4 |
| | Y=8H | 18.1 | 18.6 | 18.6 | 19.1 | 19.7 | 17.2 | 17.8 | 17.7 | 18.2 | 18.8 |
| | Y=12H | 18.6 | 19.1 | 19.1 | 19.6 | 20.1 | 17.6 | 18.1 | 18.2 | 18.7 | 19.2 |
| X=8H | Y=4H | 17.2 | 17.8 | 17.7 | 18.3 | 18.8 | 16.4 | 16.9 | 16.9 | 17.4 | 17.9 |
| | Y=6H | 18.1 | 18.6 | 18.7 | 19.1 | 19.7 | 17.3 | 17.8 | 17.8 | 18.3 | 18.9 |
| | Y=8H | 18.7 | 19.1 | 19.2 | 19.7 | 20.2 | 17.8 | 18.2 | 18.4 | 18.8 | 19.3 |
| | Y=12H | 19.4 | 19.7 | 19.9 | 20.3 | 20.9 | 18.5 | 18.8 | 19.0 | 19.4 | 20.0 |
| X=12H | Y=4H | 17.3 | 17.7 | 17.8 | 18.3 | 18.8 | 16.4 | 16.9 | 16.9 | 17.4 | 17.9 |
| | Y=6H | 18.2 | 18.7 | 18.8 | 19.2 | 19.8 | 17.4 | 17.8 | 18.0 | 18.3 | 18.9 |
| | Y=8H | 18.9 | 19.3 | 19.4 | 19.8 | 20.4 | 18.0 | 18.4 | 18.6 | 19.0 | 19.6 |
| Variations with the objverver 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 | | 2.8 | | | | | 2.8 | | | | |

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

IES Indoor Report

Photometric Filename:PD08-25-XX-01 2700K RA90 24D.IE

S

Candela Tabulation

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|---------|---------|---------|---------|
| γ 0.0 | 8363.49 | 8363.49 | 8363.49 | 8363.49 |
| γ 5.0 | 7188.41 | 6441.46 | 7427.15 | 8705.09 |
| γ 10.0 | 4804.44 | 3725.57 | 5138.86 | 6868.75 |
| γ 15.0 | 2481.74 | 1736.12 | 2640.53 | 4078.06 |
| γ 20.0 | 1136.91 | 798.50 | 1175.33 | 1922.28 |
| γ 25.0 | 550.79 | 404.19 | 539.88 | 864.25 |
| γ 30.0 | 305.89 | 243.58 | 276.71 | 404.90 |
| γ 35.0 | 193.82 | 154.54 | 168.41 | 221.19 |
| γ 40.0 | 120.39 | 93.89 | 105.93 | 136.17 |
| γ 45.0 | 69.12 | 55.15 | 65.30 | 82.69 |
| γ 50.0 | 42.98 | 37.21 | 40.72 | 48.73 |
| γ 55.0 | 33.14 | 29.33 | 31.97 | 34.59 |
| γ 60.0 | 26.71 | 23.92 | 26.85 | 29.36 |
| γ 65.0 | 21.36 | 18.97 | 21.90 | 23.85 |
| γ 70.0 | 16.91 | 14.77 | 17.46 | 20.47 |
| γ 75.0 | 13.41 | 11.48 | 13.76 | 16.54 |
| γ 80.0 | 10.41 | 9.28 | 10.75 | 13.05 |
| γ 85.0 | 8.19 | 6.68 | 8.38 | 10.43 |
| γ 90.0 | 6.62 | 5.72 | 6.58 | 8.24 |
| γ 95.0 | 5.64 | 5.02 | 5.29 | 6.59 |
| γ 100.0 | 5.06 | 4.37 | 4.75 | 5.61 |
| γ 105.0 | 4.93 | 4.54 | 4.52 | 4.22 |
| γ 110.0 | 4.52 | 4.02 | 4.33 | 3.83 |
| γ 115.0 | 4.13 | 3.71 | 4.63 | 3.82 |
| γ 120.0 | 4.14 | 4.03 | 4.43 | 4.04 |
| γ 125.0 | 4.26 | 4.32 | 4.66 | 4.22 |
| γ 130.0 | 5.00 | 5.35 | 5.81 | 5.08 |
| γ 135.0 | 6.01 | 7.40 | 7.28 | 6.11 |
| γ 140.0 | 8.70 | 9.72 | 9.57 | 7.93 |
| γ 145.0 | 11.18 | 11.91 | 11.88 | 10.07 |
| γ 150.0 | 12.90 | 13.63 | 13.99 | 12.48 |
| γ 155.0 | 14.59 | 14.74 | 15.24 | 14.06 |
| γ 160.0 | 15.67 | 15.23 | 16.17 | 15.30 |
| γ 165.0 | 15.88 | 15.48 | 16.36 | 15.90 |
| γ 170.0 | 15.42 | 15.24 | 16.16 | 15.97 |
| γ 175.0 | 14.89 | 14.99 | 15.34 | 15.82 |
| γ 180.0 | 15.37 | 15.37 | 15.37 | 15.37 |