

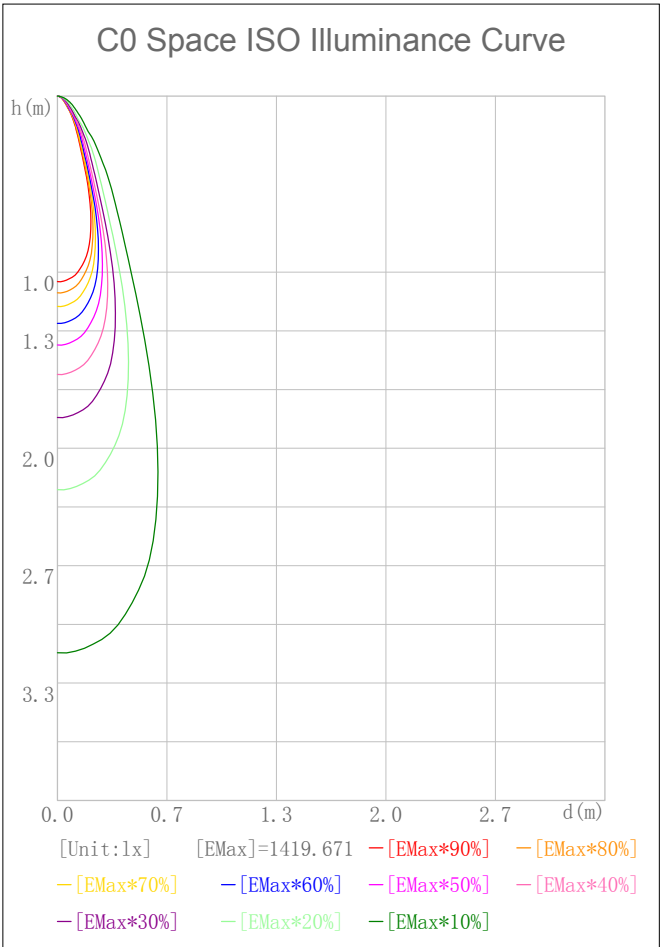
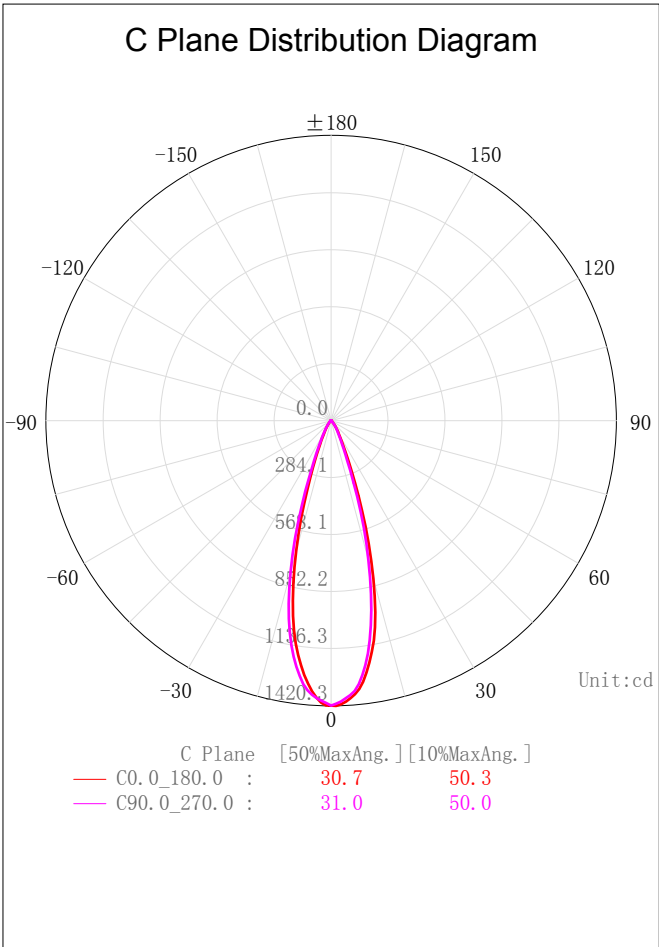
Indoor Luminaire Photometric Data

Description Information

| | | | |
|---|-------------------------|----------------------|-----------------------|
| Luminary Name: SD05-06-XX-01 4000K RA90 36D | | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | | Lamp Catalog: LED | Test Date: 2021/04/16 |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | | Shld.Ang(°): | Test Machine:GON-2000 |
| Test Lab: Quality Department | | Frequency (Hz): | Lamp CCT (K): Ra: |
| Lum. Size (W*L*H):0.050m*0.000m*0.000m | | Lum. Area (m2):0.002 | Lum. W (kg): 0.000 |
| Test System: C, γ | Test Step: C=90.0 γ=1.0 | Temp. (°C): 25 | Humidity(%): 50.0 |

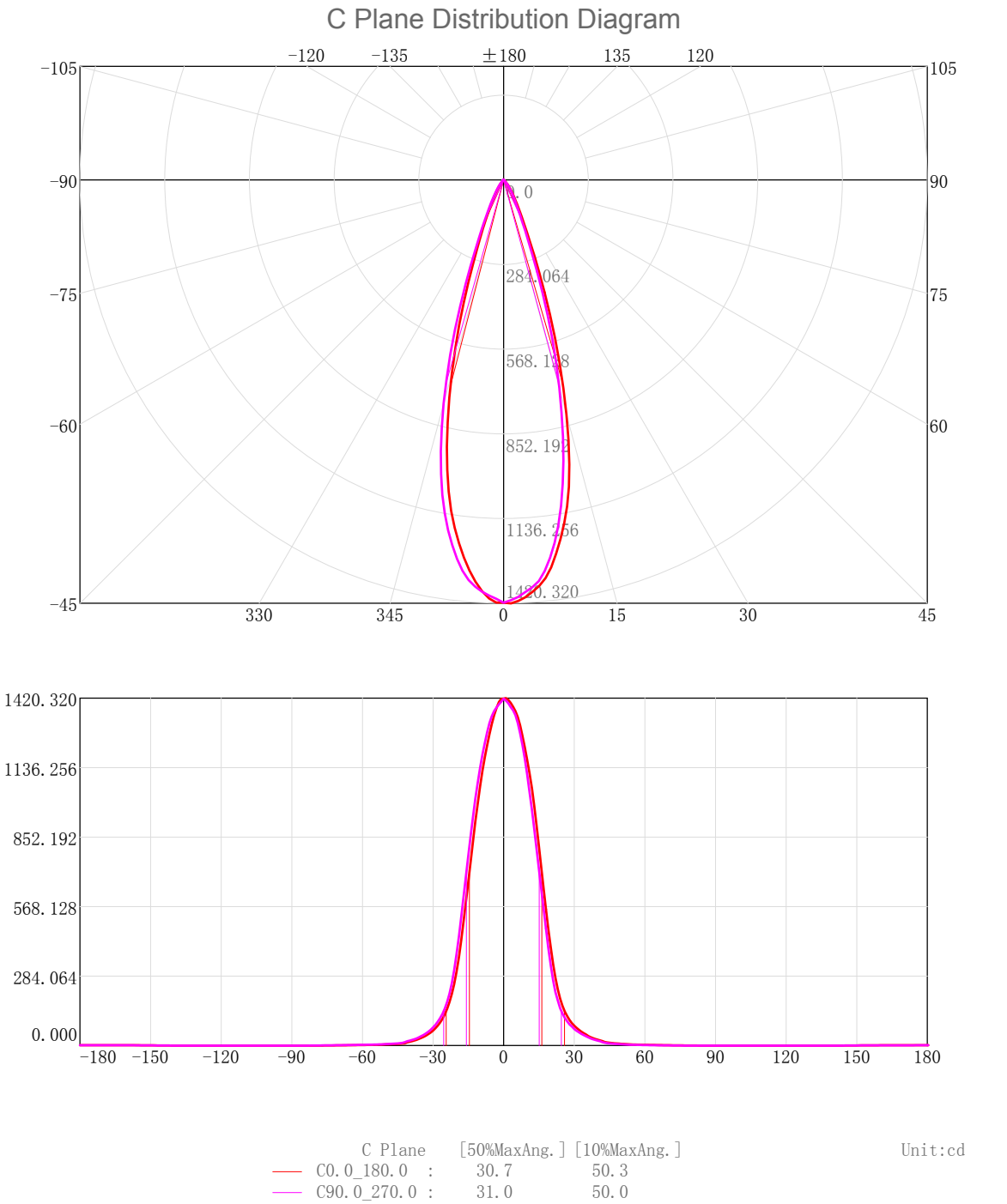
Character Parameter

| Lamp Speciality Parameter | | Luminaire Speciality Parameter | |
|---|--------------------------------|---------------------------------------|--|
| Rated Flux(lm): 433.200 | Luminary Flux(lm): 433.196 | Field Angle(10%Imax): 50.3(°) | |
| Rated Power(W): | Luminary Efficiency: 100.00% | Down Lumens&Percent: 431.789lm 99.68% | |
| Rated Voltage(V): | Luminary EER(lm/W): 77.523 | Up Lumens&Percent: 1.408lm 0.32% | |
| Tested Power(W): 5.588 | Max. Candela(cd): 1420.320 | S/MH: C0_a180=0.518 C90_270=0.521 | |
| Lamps' Inside: 1 | Max Cand@Ang. (°): C=0.0 γ=1.0 | CIE Type: Semi-Direct | |
| Tested Electrics (V, A, pf):240.2, 0.029, 0.788 | Beam Angle(50%Imax): 30.7(°) | ErP Φ use(90°): 414.027lm | |
| Lamp Size (W*L*H):0.050m*0.000m*0.000m | Left=-14.5°, Right=16.2° | IRF(%): 660.643 | |



2D Plane Light Intensity Distribution Curve

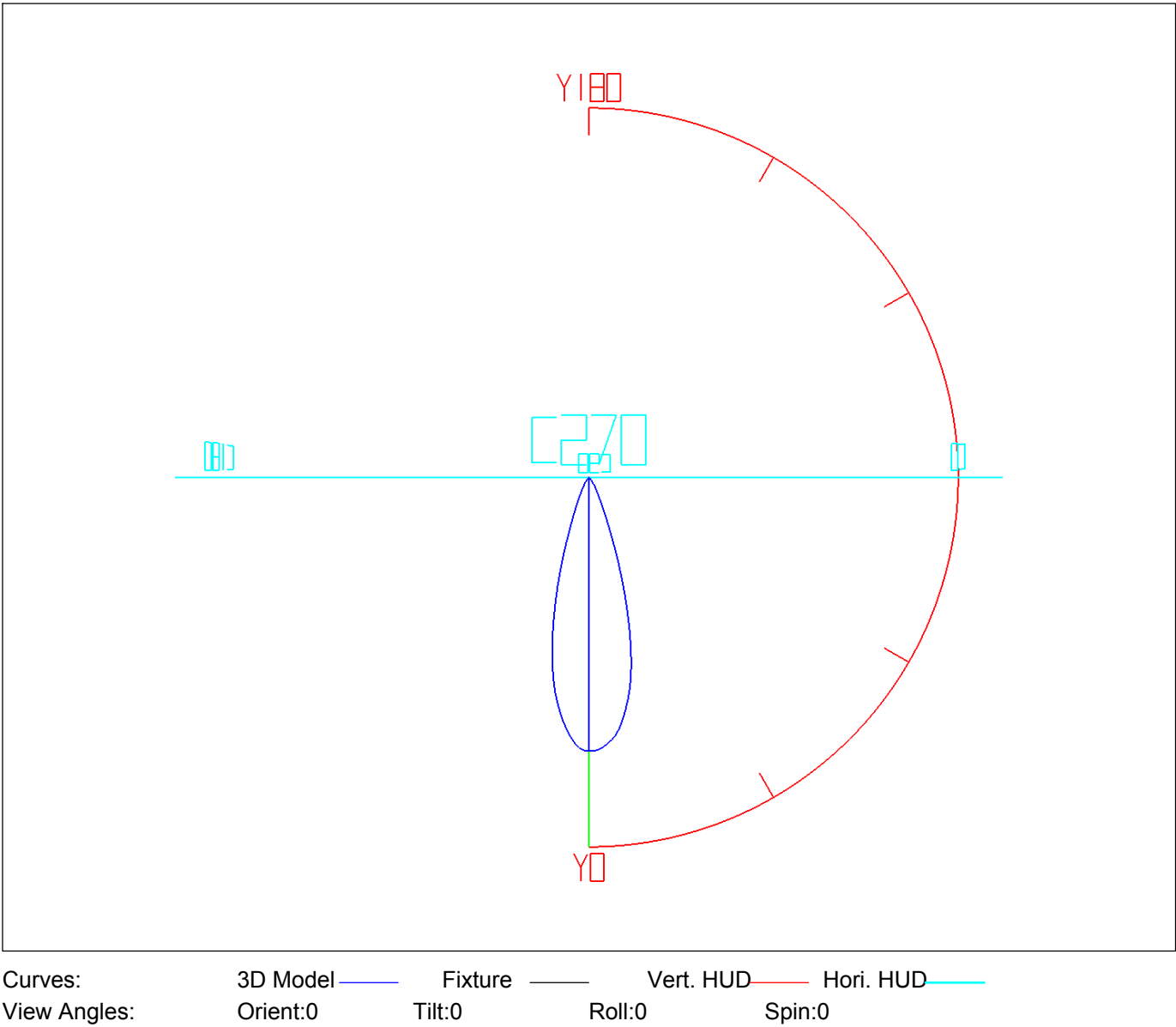
| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:SD05-06-XX-01 4000K RA90 36D | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date:2021/04/16 |



3D Light Intensity Distribution Modal

| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:SD05-06-XX-01 4000K RA90 36D | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date:2021/04/16 |

3D Light Intensity Distribution Modal



IES Indoor Report

Photometric Filename:SD05-06-XX-01 4000K RA90 36D.IES

Zonal Flux Tabulation

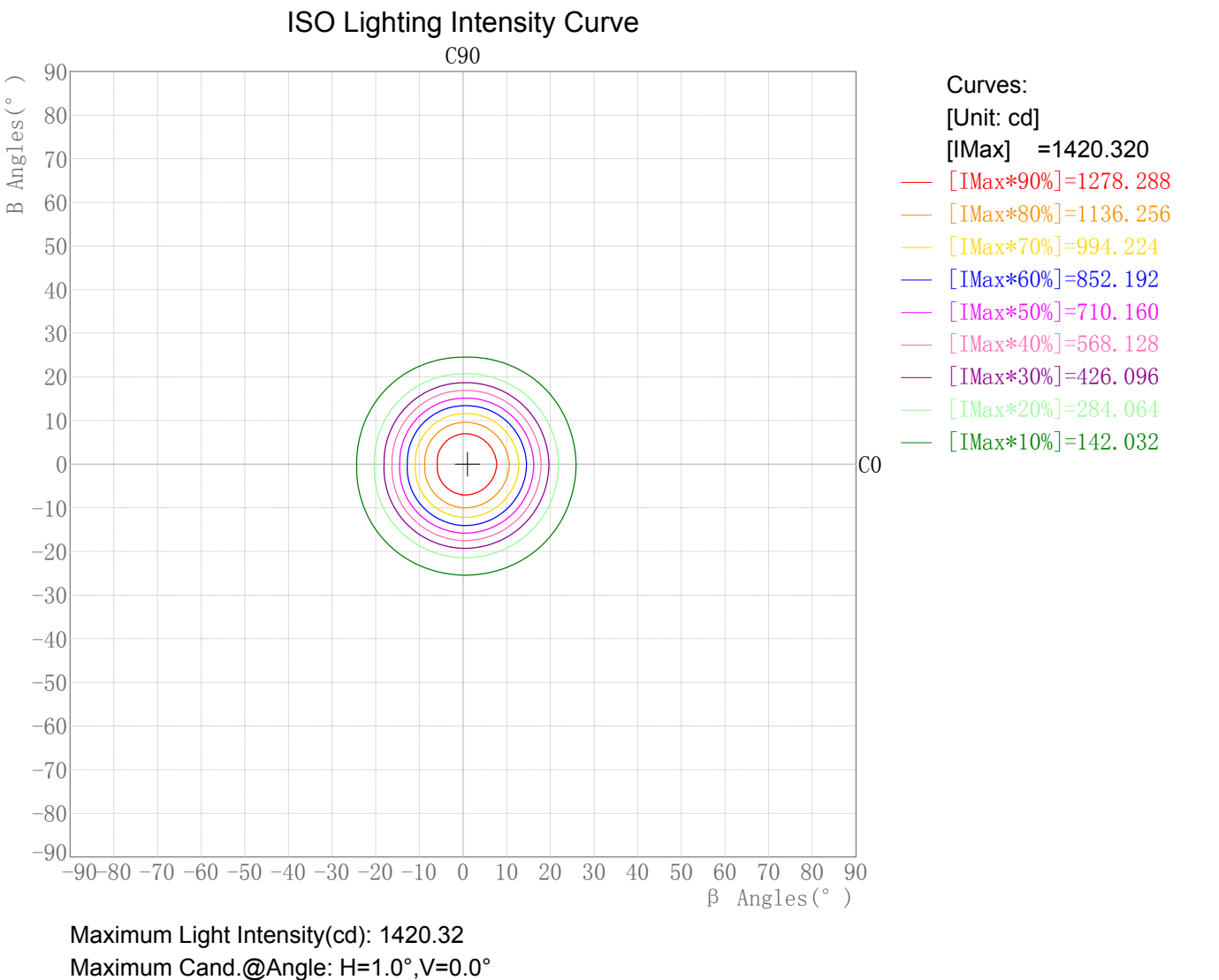
| Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp | Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp |
|-----------|-------------------|-------------------|-----------|-----------|-----------|-------------------|-------------------|-----------|-----------|
| 0.0-1.0 | 1.35 | 1.35 | 0.31 | 0.31 | 47.0-48.0 | 0.60 | 424.19 | 0.14 | 97.92 |
| 1.0-2.0 | 4.04 | 5.40 | 0.93 | 1.25 | 48.0-49.0 | 0.57 | 424.76 | 0.13 | 98.05 |
| 2.0-3.0 | 6.67 | 12.07 | 1.54 | 2.79 | 49.0-50.0 | 0.53 | 425.29 | 0.12 | 98.17 |
| 3.0-4.0 | 9.22 | 21.30 | 2.13 | 4.92 | 50.0-51.0 | 0.49 | 425.78 | 0.11 | 98.29 |
| 4.0-5.0 | 11.67 | 32.97 | 2.69 | 7.61 | 51.0-52.0 | 0.45 | 426.23 | 0.10 | 98.39 |
| 5.0-6.0 | 13.97 | 46.94 | 3.22 | 10.83 | 52.0-53.0 | 0.41 | 426.64 | 0.10 | 98.49 |
| 6.0-7.0 | 16.06 | 62.99 | 3.71 | 14.54 | 53.0-54.0 | 0.39 | 427.03 | 0.09 | 98.58 |
| 7.0-8.0 | 17.90 | 80.89 | 4.13 | 18.67 | 54.0-55.0 | 0.36 | 427.39 | 0.08 | 98.66 |
| 8.0-9.0 | 19.48 | 100.38 | 4.50 | 23.17 | 55.0-56.0 | 0.34 | 427.73 | 0.08 | 98.74 |
| 9.0-10.0 | 20.77 | 121.15 | 4.80 | 27.97 | 56.0-57.0 | 0.33 | 428.06 | 0.08 | 98.81 |
| 10.0-11.0 | 21.72 | 142.87 | 5.01 | 32.98 | 57.0-58.0 | 0.31 | 428.37 | 0.07 | 98.88 |
| 11.0-12.0 | 22.30 | 165.17 | 5.15 | 38.13 | 58.0-59.0 | 0.29 | 428.66 | 0.07 | 98.95 |
| 12.0-13.0 | 22.47 | 187.64 | 5.19 | 43.31 | 59.0-60.0 | 0.28 | 428.94 | 0.06 | 99.02 |
| 13.0-14.0 | 22.22 | 209.85 | 5.13 | 48.44 | 60.0-61.0 | 0.26 | 429.20 | 0.06 | 99.08 |
| 14.0-15.0 | 21.59 | 231.44 | 4.98 | 53.43 | 61.0-62.0 | 0.25 | 429.45 | 0.06 | 99.13 |
| 15.0-16.0 | 20.63 | 252.07 | 4.76 | 58.19 | 62.0-63.0 | 0.23 | 429.68 | 0.05 | 99.19 |
| 16.0-17.0 | 19.36 | 271.44 | 4.47 | 62.66 | 63.0-64.0 | 0.22 | 429.90 | 0.05 | 99.24 |
| 17.0-18.0 | 17.81 | 289.24 | 4.11 | 66.77 | 64.0-65.0 | 0.21 | 430.11 | 0.05 | 99.29 |
| 18.0-19.0 | 16.02 | 305.26 | 3.70 | 70.47 | 65.0-66.0 | 0.19 | 430.30 | 0.04 | 99.33 |
| 19.0-20.0 | 14.14 | 319.40 | 3.26 | 73.73 | 66.0-67.0 | 0.18 | 430.49 | 0.04 | 99.37 |
| 20.0-21.0 | 12.31 | 331.71 | 2.84 | 76.57 | 67.0-68.0 | 0.17 | 430.66 | 0.04 | 99.41 |
| 21.0-22.0 | 10.66 | 342.37 | 2.46 | 79.03 | 68.0-69.0 | 0.16 | 430.81 | 0.04 | 99.45 |
| 22.0-23.0 | 9.27 | 351.64 | 2.14 | 81.17 | 69.0-70.0 | 0.14 | 430.96 | 0.03 | 99.48 |
| 23.0-24.0 | 8.09 | 359.74 | 1.87 | 83.04 | 70.0-71.0 | 0.13 | 431.09 | 0.03 | 99.51 |
| 24.0-25.0 | 7.10 | 366.84 | 1.64 | 84.68 | 71.0-72.0 | 0.12 | 431.21 | 0.03 | 99.54 |
| 25.0-26.0 | 6.29 | 373.12 | 1.45 | 86.13 | 72.0-73.0 | 0.11 | 431.31 | 0.02 | 99.56 |
| 26.0-27.0 | 5.61 | 378.73 | 1.29 | 87.43 | 73.0-74.0 | 0.09 | 431.40 | 0.02 | 99.59 |
| 27.0-28.0 | 5.03 | 383.76 | 1.16 | 88.59 | 74.0-75.0 | 0.08 | 431.48 | 0.02 | 99.60 |
| 28.0-29.0 | 4.54 | 388.30 | 1.05 | 89.63 | 75.0-76.0 | 0.07 | 431.55 | 0.02 | 99.62 |
| 29.0-30.0 | 4.11 | 392.41 | 0.95 | 90.58 | 76.0-77.0 | 0.06 | 431.61 | 0.01 | 99.63 |
| 30.0-31.0 | 3.73 | 396.14 | 0.86 | 91.44 | 77.0-78.0 | 0.05 | 431.66 | 0.01 | 99.64 |
| 31.0-32.0 | 3.40 | 399.54 | 0.78 | 92.23 | 78.0-79.0 | 0.04 | 431.69 | 0.01 | 99.65 |
| 32.0-33.0 | 3.09 | 402.63 | 0.71 | 92.94 | 79.0-80.0 | 0.03 | 431.72 | 0.01 | 99.66 |
| 33.0-34.0 | 2.80 | 405.43 | 0.65 | 93.59 | 80.0-81.0 | 0.02 | 431.74 | 0.01 | 99.66 |
| 34.0-35.0 | 2.55 | 407.98 | 0.59 | 94.18 | 81.0-82.0 | 0.02 | 431.76 | 0.00 | 99.67 |
| 35.0-36.0 | 2.29 | 410.26 | 0.53 | 94.71 | 82.0-83.0 | 0.01 | 431.78 | 0.00 | 99.67 |
| 36.0-37.0 | 2.04 | 412.31 | 0.47 | 95.18 | 83.0-84.0 | 0.01 | 431.78 | 0.00 | 99.67 |
| 37.0-38.0 | 1.83 | 414.14 | 0.42 | 95.60 | 84.0-85.0 | 0.00 | 431.79 | 0.00 | 99.67 |
| 38.0-39.0 | 1.65 | 415.79 | 0.38 | 95.98 | 85.0-86.0 | 0.00 | 431.79 | 0.00 | 99.67 |
| 39.0-40.0 | 1.49 | 417.28 | 0.34 | 96.32 | 86.0-87.0 | 0.00 | 431.79 | 0.00 | 99.67 |
| 40.0-41.0 | 1.34 | 418.62 | 0.31 | 96.63 | 87.0-88.0 | 0.00 | 431.79 | 0.00 | 99.67 |
| 41.0-42.0 | 1.15 | 419.77 | 0.27 | 96.90 | 88.0-89.0 | 0.00 | 431.79 | 0.00 | 99.67 |
| 42.0-43.0 | 0.94 | 420.71 | 0.22 | 97.12 | 89.0-90.0 | 0.00 | 431.79 | 0.00 | 99.67 |
| 43.0-44.0 | 0.81 | 421.52 | 0.19 | 97.30 | 90.0-91.0 | 0.00 | 431.79 | 0.00 | 99.67 |
| 44.0-45.0 | 0.74 | 422.26 | 0.17 | 97.48 | 91.0-92.0 | 0.00 | 431.79 | 0.00 | 99.67 |
| 45.0-46.0 | 0.69 | 422.95 | 0.16 | 97.63 | 92.0-93.0 | 0.00 | 431.79 | 0.00 | 99.67 |
| 46.0-47.0 | 0.64 | 423.59 | 0.15 | 97.78 | 93.0-94.0 | 0.00 | 431.79 | 0.00 | 99.67 |

Zonal Flux Tabulation - (Cont.)

| Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp | Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp |
|-------------|-------------------|-------------------|-----------|-----------|-------------|-------------------|-------------------|-----------|-----------|
| 94.0-95.0 | 0.00 | 431.79 | 0.00 | 99.67 | 141.0-142.0 | 0.01 | 431.81 | 0.00 | 99.68 |
| 95.0-96.0 | 0.00 | 431.79 | 0.00 | 99.67 | 142.0-143.0 | 0.01 | 431.82 | 0.00 | 99.68 |
| 96.0-97.0 | 0.00 | 431.79 | 0.00 | 99.67 | 143.0-144.0 | 0.02 | 431.84 | 0.00 | 99.69 |
| 97.0-98.0 | 0.00 | 431.79 | 0.00 | 99.67 | 144.0-145.0 | 0.03 | 431.87 | 0.01 | 99.69 |
| 98.0-99.0 | 0.00 | 431.79 | 0.00 | 99.67 | 145.0-146.0 | 0.03 | 431.90 | 0.01 | 99.70 |
| 99.0-100.0 | 0.00 | 431.79 | 0.00 | 99.67 | 146.0-147.0 | 0.04 | 431.93 | 0.01 | 99.71 |
| 100.0-101.0 | 0.00 | 431.79 | 0.00 | 99.67 | 147.0-148.0 | 0.04 | 431.97 | 0.01 | 99.72 |
| 101.0-102.0 | 0.00 | 431.79 | 0.00 | 99.67 | 148.0-149.0 | 0.04 | 432.02 | 0.01 | 99.73 |
| 102.0-103.0 | 0.00 | 431.79 | 0.00 | 99.67 | 149.0-150.0 | 0.05 | 432.07 | 0.01 | 99.74 |
| 103.0-104.0 | 0.00 | 431.79 | 0.00 | 99.67 | 150.0-151.0 | 0.05 | 432.12 | 0.01 | 99.75 |
| 104.0-105.0 | 0.00 | 431.79 | 0.00 | 99.67 | 151.0-152.0 | 0.05 | 432.17 | 0.01 | 99.76 |
| 105.0-106.0 | 0.00 | 431.79 | 0.00 | 99.67 | 152.0-153.0 | 0.05 | 432.22 | 0.01 | 99.77 |
| 106.0-107.0 | 0.00 | 431.79 | 0.00 | 99.67 | 153.0-154.0 | 0.06 | 432.28 | 0.01 | 99.79 |
| 107.0-108.0 | 0.00 | 431.79 | 0.00 | 99.67 | 154.0-155.0 | 0.06 | 432.34 | 0.01 | 99.80 |
| 108.0-109.0 | 0.00 | 431.79 | 0.00 | 99.67 | 155.0-156.0 | 0.06 | 432.39 | 0.01 | 99.81 |
| 109.0-110.0 | 0.00 | 431.79 | 0.00 | 99.67 | 156.0-157.0 | 0.06 | 432.45 | 0.01 | 99.83 |
| 110.0-111.0 | 0.00 | 431.79 | 0.00 | 99.67 | 157.0-158.0 | 0.06 | 432.51 | 0.01 | 99.84 |
| 111.0-112.0 | 0.00 | 431.79 | 0.00 | 99.67 | 158.0-159.0 | 0.06 | 432.57 | 0.01 | 99.85 |
| 112.0-113.0 | 0.00 | 431.79 | 0.00 | 99.67 | 159.0-160.0 | 0.06 | 432.62 | 0.01 | 99.87 |
| 113.0-114.0 | 0.00 | 431.79 | 0.00 | 99.67 | 160.0-161.0 | 0.05 | 432.68 | 0.01 | 99.88 |
| 114.0-115.0 | 0.00 | 431.79 | 0.00 | 99.67 | 161.0-162.0 | 0.05 | 432.73 | 0.01 | 99.89 |
| 115.0-116.0 | 0.00 | 431.79 | 0.00 | 99.67 | 162.0-163.0 | 0.05 | 432.78 | 0.01 | 99.90 |
| 116.0-117.0 | 0.00 | 431.79 | 0.00 | 99.67 | 163.0-164.0 | 0.05 | 432.83 | 0.01 | 99.91 |
| 117.0-118.0 | 0.00 | 431.79 | 0.00 | 99.67 | 164.0-165.0 | 0.05 | 432.87 | 0.01 | 99.92 |
| 118.0-119.0 | 0.00 | 431.79 | 0.00 | 99.67 | 165.0-166.0 | 0.04 | 432.91 | 0.01 | 99.93 |
| 119.0-120.0 | 0.00 | 431.79 | 0.00 | 99.67 | 166.0-167.0 | 0.04 | 432.95 | 0.01 | 99.94 |
| 120.0-121.0 | 0.00 | 431.79 | 0.00 | 99.67 | 167.0-168.0 | 0.04 | 432.99 | 0.01 | 99.95 |
| 121.0-122.0 | 0.00 | 431.79 | 0.00 | 99.67 | 168.0-169.0 | 0.03 | 433.02 | 0.01 | 99.96 |
| 122.0-123.0 | 0.00 | 431.79 | 0.00 | 99.67 | 169.0-170.0 | 0.03 | 433.05 | 0.01 | 99.97 |
| 123.0-124.0 | 0.00 | 431.79 | 0.00 | 99.67 | 170.0-171.0 | 0.03 | 433.08 | 0.01 | 99.97 |
| 124.0-125.0 | 0.00 | 431.79 | 0.00 | 99.67 | 171.0-172.0 | 0.02 | 433.10 | 0.01 | 99.98 |
| 125.0-126.0 | 0.00 | 431.79 | 0.00 | 99.67 | 172.0-173.0 | 0.02 | 433.13 | 0.00 | 99.98 |
| 126.0-127.0 | 0.00 | 431.79 | 0.00 | 99.67 | 173.0-174.0 | 0.02 | 433.14 | 0.00 | 99.99 |
| 127.0-128.0 | 0.00 | 431.79 | 0.00 | 99.67 | 174.0-175.0 | 0.02 | 433.16 | 0.00 | 99.99 |
| 128.0-129.0 | 0.00 | 431.79 | 0.00 | 99.67 | 175.0-176.0 | 0.01 | 433.17 | 0.00 | 99.99 |
| 129.0-130.0 | 0.00 | 431.79 | 0.00 | 99.67 | 176.0-177.0 | 0.01 | 433.18 | 0.00 | 100.00 |
| 130.0-131.0 | 0.00 | 431.79 | 0.00 | 99.67 | 177.0-178.0 | 0.01 | 433.19 | 0.00 | 100.00 |
| 131.0-132.0 | 0.00 | 431.79 | 0.00 | 99.67 | 178.0-179.0 | 0.00 | 433.19 | 0.00 | 100.00 |
| 132.0-133.0 | 0.00 | 431.79 | 0.00 | 99.67 | 179.0-180.0 | 0.00 | 433.20 | 0.00 | 100.00 |
| 133.0-134.0 | 0.00 | 431.79 | 0.00 | 99.67 | | | | | |
| 134.0-135.0 | 0.00 | 431.79 | 0.00 | 99.67 | | | | | |
| 135.0-136.0 | 0.00 | 431.79 | 0.00 | 99.67 | | | | | |
| 136.0-137.0 | 0.00 | 431.79 | 0.00 | 99.67 | | | | | |
| 137.0-138.0 | 0.00 | 431.79 | 0.00 | 99.67 | | | | | |
| 138.0-139.0 | 0.00 | 431.79 | 0.00 | 99.67 | | | | | |
| 139.0-140.0 | 0.00 | 431.79 | 0.00 | 99.67 | | | | | |
| 140.0-141.0 | 0.01 | 431.80 | 0.00 | 99.68 | | | | | |

Rectangle ISO Lighting Intensity Diagram

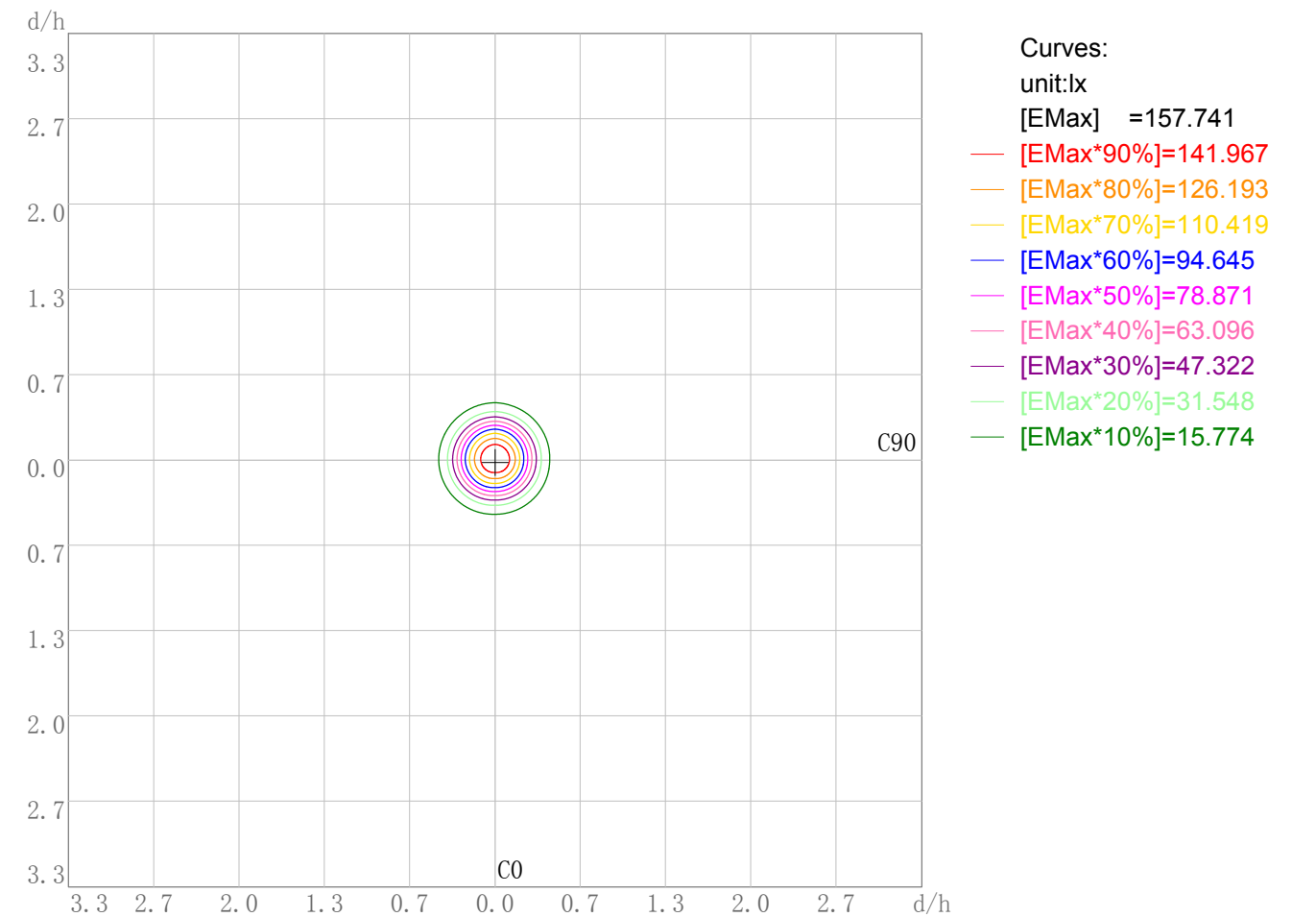
| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:SD05-06-XX-01 4000K RA90 36D | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date:2021/04/16 |



Plane ISO-Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name:SD05-06-XX-01 4000K RA90 36D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date: 2021/04/16 |

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00

Working Plane Maximum Illuminance(lx): 157.74

Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

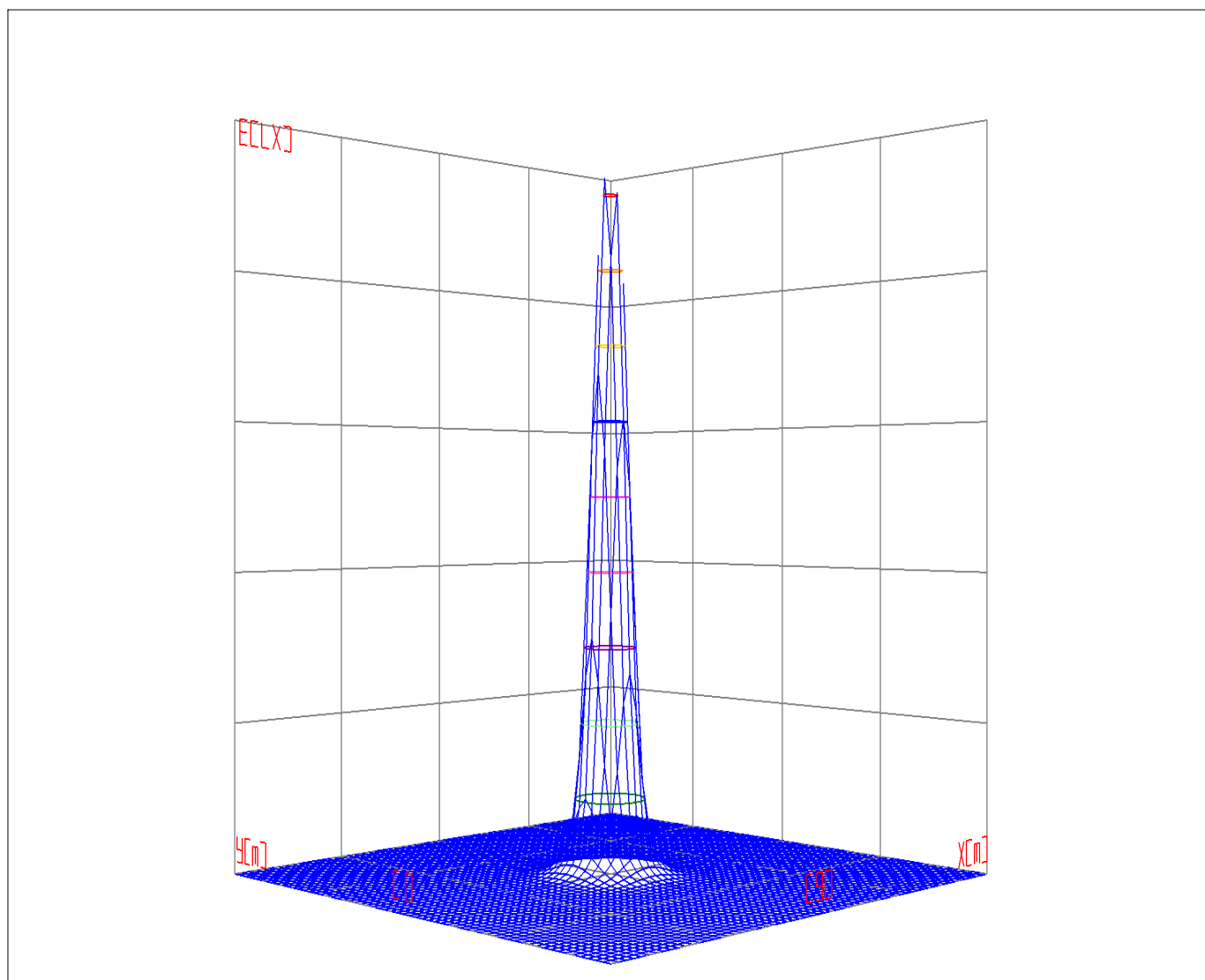
IES Indoor Report

Photometric Filename:SD05-06-XX-01 4000K RA90 36D.IES

3D Plane ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: SD05-06-XX-01 4000K RA90 36D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date: 2021/04/16 |

3D Plane Illuminance Modal

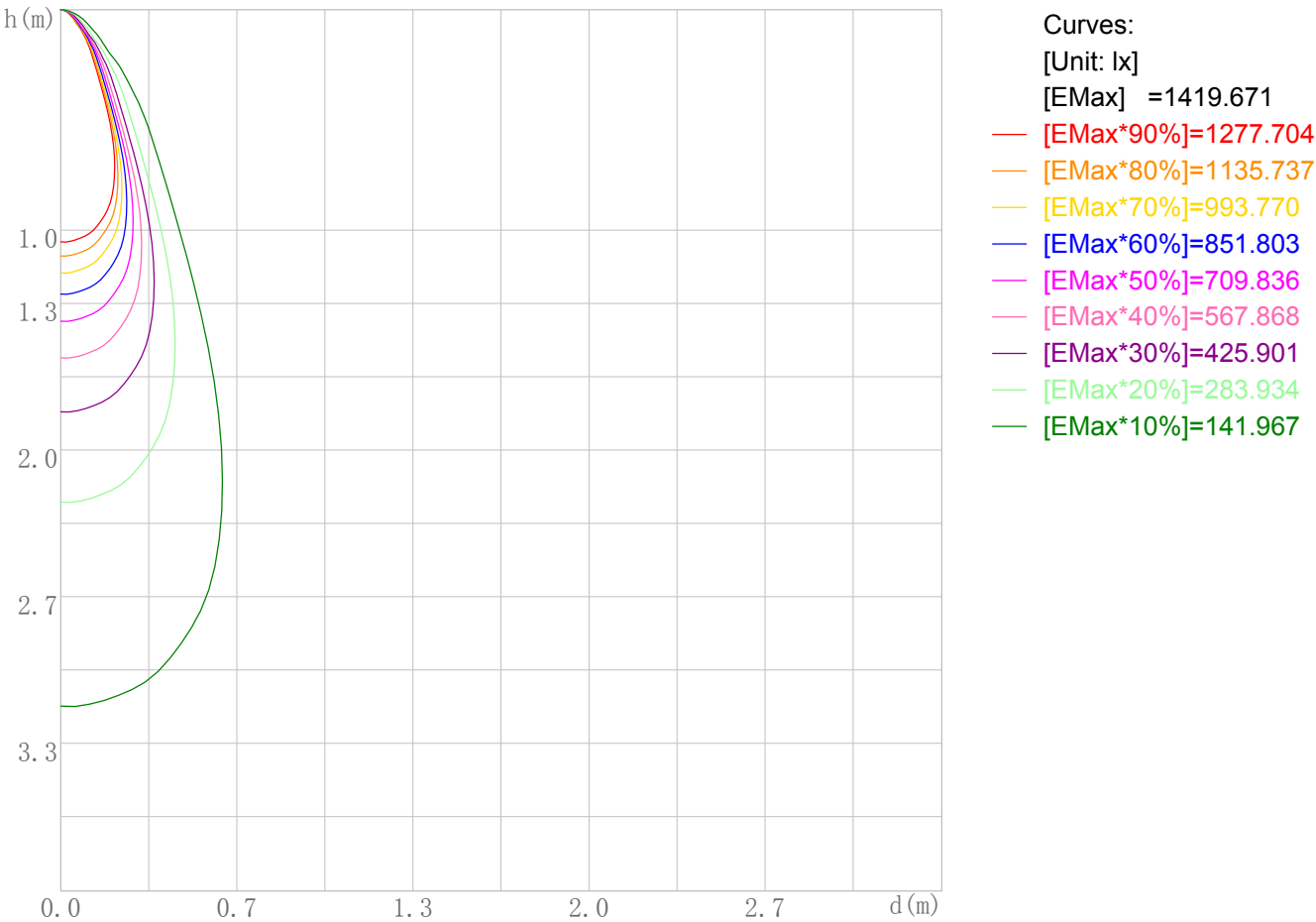


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: SD05-06-XX-01 4000K RA90 36D | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catelog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date: 2021/04/16 |

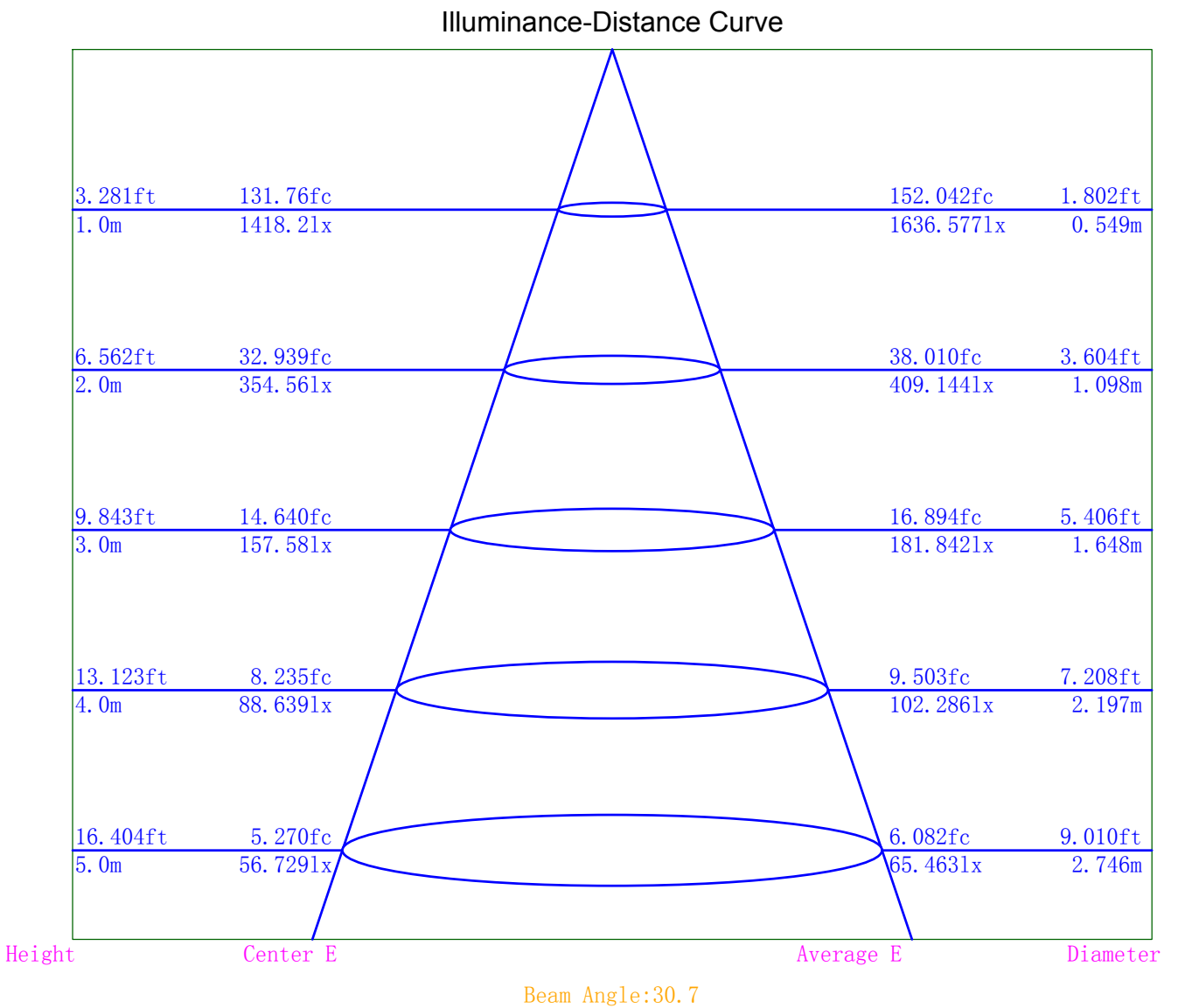
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:1419.67lx,1.0deg
Plane Maximum Lighting Intensity and @Angle:1420.320cd,0deg

Illuminance-Distance Diagram

| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:SD05-06-XX-01 4000K RA90 36D | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date:2021/04/16 |



Indoor Luminance Limiting Curves

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: SD05-06-XX-01 4000K RA90 36D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date: 2021/04/16 |

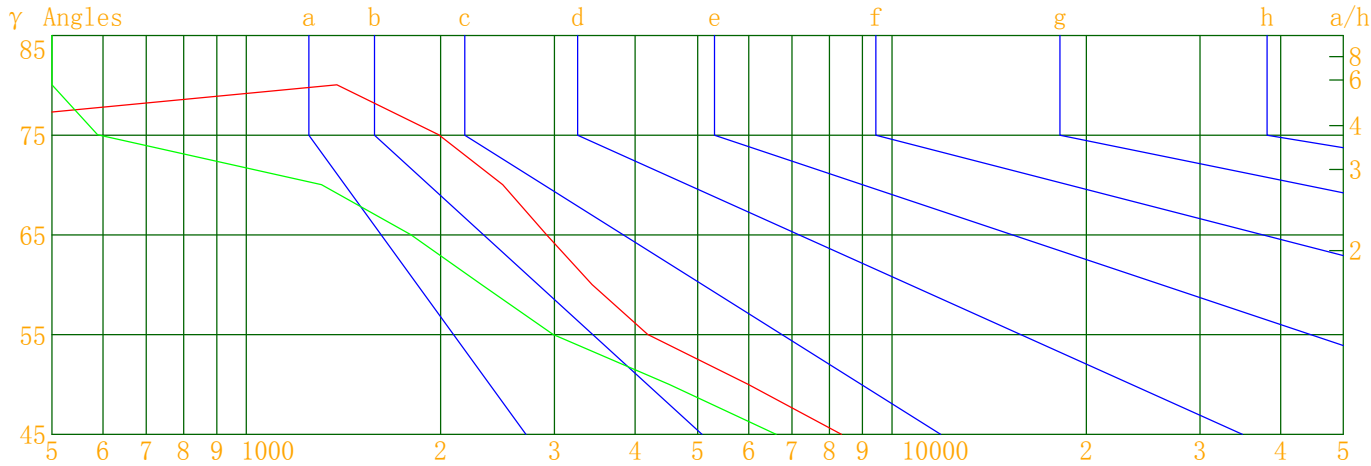
Glare Grade Table

| 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 | 8349 | 5992 | 4185 | 3432 | 2916 | 2496 | 1985 | 1381 | 222 |
| C90 | 6616 | 4519 | 2986 | 2312 | 1797 | 1307 | 588 | 0 | 0 |

Luminance Limiting Curve



Luminous Size:

Length(m)=0.000

Width(m)=-0.050

Height(m)=0.000

Area(m^2)=0.001963

Luminous Type:

Without Luminous Side

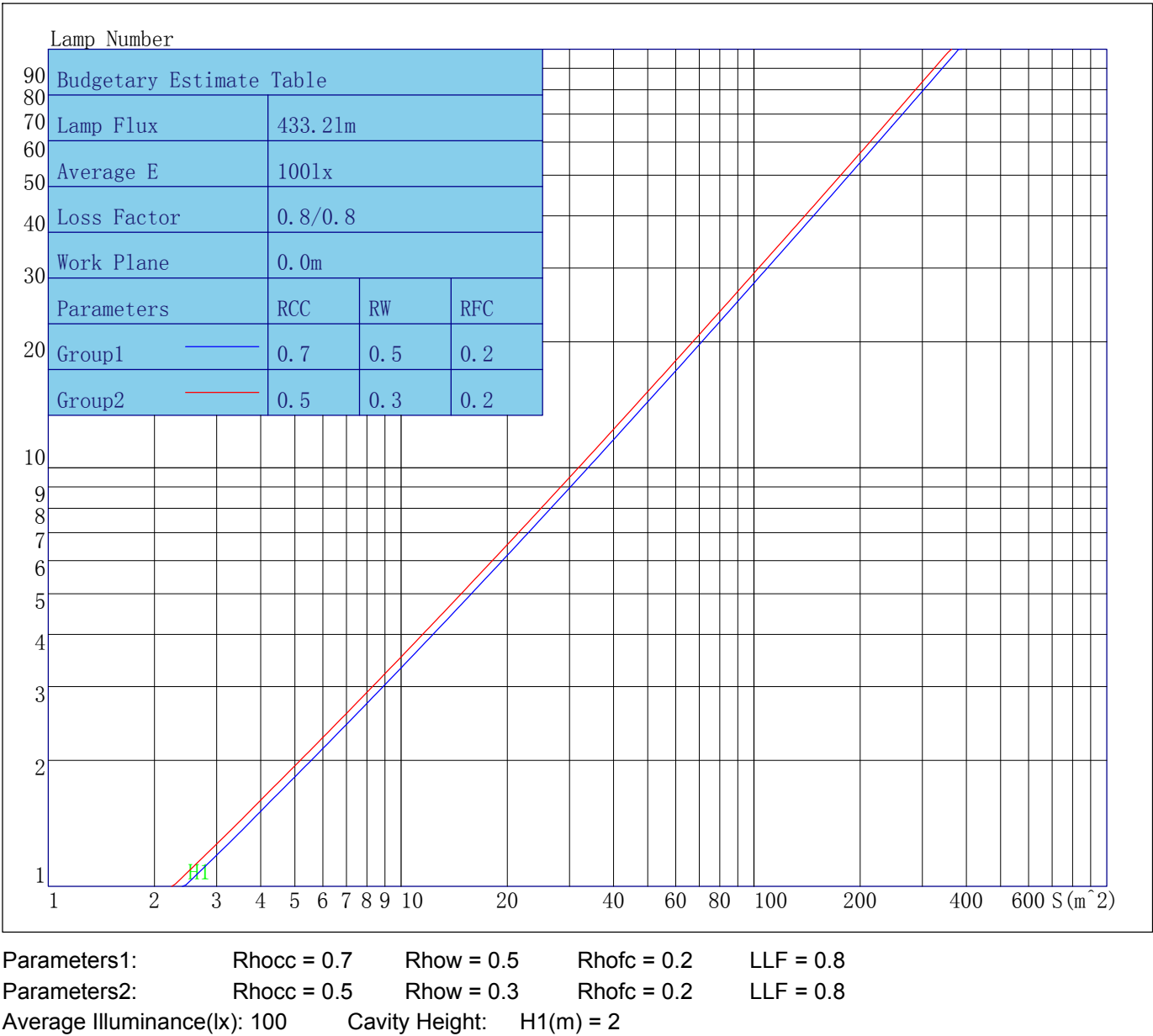
Luminous Curves:

C0-C180 Color: —

C90-C270 Color: —

Indoor Budgetary Estimate Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name:SD05-06-XX-01 4000K RA90 36D | Lum. Catalog: | Test ID:01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date: 2021/04/16 |



Indoor Coefficient of Utilization Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: SD05-06-XX-01 4000K RA90 36D | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catelog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date: 2021/04/16 |

| 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 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 115 | 112 | 110 | 108 | 112 | 110 | 108 | 107 | 106 | 105 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 96 |
| 2 | 110 | 106 | 103 | 100 | 108 | 105 | 102 | 99 | 102 | 99 | 97 | 99 | 97 | 95 | 96 | 94 | 93 | 92 |
| 3 | 106 | 101 | 97 | 94 | 105 | 100 | 96 | 94 | 97 | 94 | 92 | 95 | 93 | 91 | 93 | 91 | 89 | 88 |
| 4 | 103 | 97 | 92 | 89 | 101 | 96 | 92 | 89 | 94 | 90 | 88 | 92 | 89 | 87 | 90 | 88 | 86 | 84 |
| 5 | 99 | 93 | 88 | 85 | 98 | 92 | 88 | 85 | 90 | 87 | 84 | 89 | 86 | 83 | 87 | 85 | 82 | 81 |
| 6 | 96 | 89 | 85 | 81 | 95 | 88 | 84 | 81 | 87 | 83 | 80 | 86 | 82 | 80 | 84 | 82 | 79 | 78 |
| 7 | 93 | 86 | 81 | 78 | 92 | 85 | 81 | 78 | 84 | 80 | 77 | 83 | 80 | 77 | 82 | 79 | 77 | 75 |
| 8 | 90 | 83 | 78 | 75 | 89 | 82 | 78 | 75 | 81 | 77 | 75 | 80 | 77 | 74 | 79 | 76 | 74 | 73 |
| 9 | 87 | 80 | 75 | 72 | 86 | 79 | 75 | 72 | 79 | 75 | 72 | 78 | 74 | 72 | 77 | 74 | 72 | 71 |
| 10 | 85 | 77 | 73 | 70 | 84 | 77 | 73 | 70 | 76 | 72 | 70 | 76 | 72 | 70 | 75 | 72 | 69 | 68 |

Unified Glare Rating Table

| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:SD05-06-XX-01 4000K RA90 36D | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date:2021/04/16 |

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 | 12.5 | 13.5 | 12.9 | 13.8 | 14.1 | 11.3 | 12.3 | 11.7 | 12.6 | 12.9 |
| | 12.6 | 13.5 | 13.0 | 13.8 | 14.2 | 11.3 | 12.1 | 11.6 | 12.4 | 12.8 |
| | 12.6 | 13.4 | 13.0 | 13.8 | 14.2 | 11.2 | 12.0 | 11.6 | 12.3 | 12.7 |
| | 12.6 | 13.3 | 13.0 | 13.7 | 14.1 | 11.1 | 11.8 | 11.5 | 12.2 | 12.6 |
| | 12.5 | 13.2 | 13.0 | 13.6 | 14.0 | 11.0 | 11.7 | 11.4 | 12.1 | 12.5 |
| | 12.5 | 13.1 | 12.9 | 13.5 | 14.0 | 10.9 | 11.6 | 11.4 | 12.0 | 12.4 |
| X=4H Y=2H | 12.4 | 13.1 | 12.8 | 13.5 | 13.9 | 11.1 | 11.9 | 11.6 | 12.3 | 12.7 |
| | 12.5 | 13.2 | 13.0 | 13.6 | 14.0 | 11.1 | 11.8 | 11.6 | 12.2 | 12.6 |
| | 12.6 | 13.2 | 13.0 | 13.6 | 14.1 | 11.1 | 11.7 | 11.5 | 12.1 | 12.5 |
| | 12.6 | 13.1 | 13.1 | 13.6 | 14.0 | 11.0 | 11.5 | 11.4 | 11.9 | 12.4 |
| | 12.5 | 13.0 | 13.0 | 13.5 | 14.0 | 10.9 | 11.4 | 11.4 | 11.8 | 12.3 |
| | 12.5 | 12.9 | 13.0 | 13.4 | 13.9 | 10.8 | 11.2 | 11.3 | 11.7 | 12.2 |
| X=8H Y=4H | 12.5 | 13.0 | 13.0 | 13.4 | 13.9 | 10.9 | 11.4 | 11.4 | 11.9 | 12.3 |
| | 12.5 | 12.9 | 13.0 | 13.4 | 13.9 | 10.8 | 11.2 | 11.3 | 11.7 | 12.2 |
| | 12.5 | 12.8 | 13.0 | 13.3 | 13.8 | 10.7 | 11.1 | 11.3 | 11.6 | 12.1 |
| | 12.4 | 12.7 | 12.9 | 13.2 | 13.8 | 10.7 | 11.0 | 11.2 | 11.5 | 12.1 |
| X=12H Y=4H | 12.4 | 12.8 | 12.9 | 13.3 | 13.8 | 10.9 | 11.3 | 11.4 | 11.8 | 12.3 |
| | 12.4 | 12.8 | 13.0 | 13.3 | 13.8 | 10.7 | 11.1 | 11.3 | 11.6 | 12.1 |
| | 12.4 | 12.7 | 12.9 | 13.2 | 13.8 | 10.7 | 11.0 | 11.2 | 11.5 | 12.1 |
| Variations with the objerver position at spacings | | | | | | | | | | |
| S=1.0H | 0.8/-1.0 | | | | | 2.1/-2.7 | | | | |
| S=1.5H | 1.4/-1.8 | | | | | 3.1/-6.2 | | | | |
| S=2.0H | 1.9/-2.5 | | | | | 3.2/-6.6 | | | | |
| Reduced UGR Table: | | | | | | | | | | |
| Nordic Standard Table: | BK0 | | | | | BK0 | | | | |
| Correction Value | 0.5 | | | | | 0.3 | | | | |

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 | 1418.23 | 1418.23 | 1418.23 | 1418.23 |
| γ 1.0 | 1420.32 | 1410.09 | 1417.79 | 1405.47 |
| γ 2.0 | 1412.98 | 1399.62 | 1404.70 | 1394.82 |
| γ 3.0 | 1401.33 | 1384.34 | 1381.25 | 1382.84 |
| γ 4.0 | 1384.97 | 1370.10 | 1350.80 | 1367.52 |
| γ 5.0 | 1366.88 | 1350.63 | 1314.57 | 1347.00 |
| γ 6.0 | 1343.01 | 1318.93 | 1273.41 | 1318.53 |
| γ 7.0 | 1309.23 | 1276.69 | 1227.09 | 1280.53 |
| γ 8.0 | 1266.06 | 1228.93 | 1178.34 | 1236.71 |
| γ 9.0 | 1219.17 | 1173.21 | 1123.76 | 1190.01 |
| γ 10.0 | 1169.03 | 1109.70 | 1060.40 | 1136.43 |
| γ 11.0 | 1115.00 | 1038.36 | 990.70 | 1075.93 |
| γ 12.0 | 1052.14 | 963.67 | 915.58 | 1008.55 |
| γ 13.0 | 979.08 | 884.35 | 834.06 | 934.99 |
| γ 14.0 | 898.41 | 802.55 | 751.80 | 857.01 |
| γ 15.0 | 814.18 | 720.06 | 669.80 | 777.01 |
| γ 16.0 | 727.74 | 639.76 | 589.16 | 694.32 |
| γ 17.0 | 641.72 | 559.26 | 510.32 | 611.10 |
| γ 18.0 | 557.60 | 478.67 | 432.78 | 528.18 |
| γ 19.0 | 477.05 | 399.93 | 362.05 | 447.67 |
| γ 20.0 | 401.59 | 328.13 | 300.96 | 372.81 |
| γ 21.0 | 334.00 | 267.04 | 251.18 | 308.17 |
| γ 22.0 | 277.49 | 218.53 | 210.89 | 254.88 |
| γ 23.0 | 230.49 | 184.85 | 177.84 | 212.29 |
| γ 24.0 | 192.51 | 153.42 | 150.61 | 178.54 |
| γ 25.0 | 162.90 | 131.42 | 127.81 | 151.67 |
| γ 26.0 | 139.34 | 113.44 | 109.33 | 129.78 |
| γ 27.0 | 120.29 | 98.62 | 93.99 | 111.90 |
| γ 28.0 | 104.69 | 86.51 | 81.24 | 97.01 |
| γ 29.0 | 91.78 | 77.80 | 70.57 | 84.47 |
| γ 30.0 | 81.13 | 68.08 | 61.41 | 73.92 |
| γ 31.0 | 72.30 | 60.82 | 53.58 | 64.72 |
| γ 32.0 | 64.66 | 54.42 | 47.03 | 56.80 |
| γ 33.0 | 57.25 | 48.29 | 41.19 | 49.82 |
| γ 34.0 | 50.98 | 43.07 | 36.16 | 43.80 |
| γ 35.0 | 45.37 | 38.38 | 31.65 | 38.65 |
| γ 36.0 | 38.97 | 33.45 | 27.38 | 33.60 |
| γ 37.0 | 34.47 | 29.33 | 23.71 | 29.40 |
| γ 38.0 | 30.58 | 25.91 | 20.58 | 25.87 |
| γ 39.0 | 27.13 | 22.78 | 17.86 | 22.82 |
| γ 40.0 | 24.14 | 20.08 | 15.58 | 20.17 |
| γ 41.0 | 21.55 | 17.75 | 13.41 | 17.97 |
| γ 42.0 | 18.34 | 14.23 | 9.68 | 13.95 |
| γ 43.0 | 14.45 | 11.57 | 8.21 | 11.14 |
| γ 44.0 | 12.82 | 10.27 | 7.42 | 9.98 |
| γ 45.0 | 11.59 | 9.19 | 6.83 | 9.10 |
| γ 46.0 | 10.55 | 8.22 | 6.36 | 8.33 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|--------|------|-------|--------|--------|
| γ 47.0 | 9.65 | 7.47 | 5.95 | 7.75 |
| γ 48.0 | 8.90 | 6.84 | 5.59 | 7.28 |
| γ 49.0 | 8.22 | 6.25 | 5.24 | 6.86 |
| γ 50.0 | 7.56 | 5.70 | 4.87 | 6.43 |
| γ 51.0 | 6.85 | 5.03 | 4.32 | 5.81 |
| γ 52.0 | 6.09 | 4.43 | 3.99 | 5.30 |
| γ 53.0 | 5.56 | 4.01 | 3.70 | 4.91 |
| γ 54.0 | 5.09 | 3.63 | 3.41 | 4.63 |
| γ 55.0 | 4.71 | 3.36 | 3.22 | 4.38 |
| γ 56.0 | 4.40 | 3.12 | 3.04 | 4.15 |
| γ 57.0 | 4.11 | 2.88 | 2.86 | 3.93 |
| γ 58.0 | 3.85 | 2.67 | 2.68 | 3.72 |
| γ 59.0 | 3.59 | 2.45 | 2.52 | 3.52 |
| γ 60.0 | 3.37 | 2.27 | 2.36 | 3.35 |
| γ 61.0 | 3.16 | 2.10 | 2.21 | 3.17 |
| γ 62.0 | 2.97 | 1.95 | 2.07 | 3.00 |
| γ 63.0 | 2.78 | 1.78 | 1.92 | 2.83 |
| γ 64.0 | 2.59 | 1.63 | 1.78 | 2.66 |
| γ 65.0 | 2.42 | 1.49 | 1.65 | 2.50 |
| γ 66.0 | 2.26 | 1.36 | 1.52 | 2.36 |
| γ 67.0 | 2.11 | 1.23 | 1.39 | 2.20 |
| γ 68.0 | 1.96 | 1.12 | 1.27 | 2.07 |
| γ 69.0 | 1.81 | 1.00 | 1.15 | 1.93 |
| γ 70.0 | 1.68 | 0.88 | 1.02 | 1.78 |
| γ 71.0 | 1.54 | 0.76 | 0.89 | 1.64 |
| γ 72.0 | 1.40 | 0.63 | 0.77 | 1.49 |
| γ 73.0 | 1.27 | 0.52 | 0.63 | 1.35 |
| γ 74.0 | 1.14 | 0.40 | 0.51 | 1.22 |
| γ 75.0 | 1.01 | 0.30 | 0.40 | 1.09 |
| γ 76.0 | 0.90 | 0.20 | 0.30 | 0.96 |
| γ 77.0 | 0.78 | 0.10 | 0.19 | 0.85 |
| γ 78.0 | 0.67 | 0.01 | 0.09 | 0.72 |
| γ 79.0 | 0.56 | 0.00 | 0.00 | 0.61 |
| γ 80.0 | 0.47 | 0.00 | 0.00 | 0.50 |
| γ 81.0 | 0.37 | 0.00 | 0.00 | 0.40 |
| γ 82.0 | 0.28 | 0.00 | 0.00 | 0.30 |
| γ 83.0 | 0.19 | 0.00 | 0.00 | 0.20 |
| γ 84.0 | 0.11 | 0.00 | 0.00 | 0.11 |
| γ 85.0 | 0.04 | 0.00 | 0.00 | 0.03 |
| γ 86.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 87.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 88.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 89.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 90.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 91.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 92.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 93.0 | 0.00 | 0.00 | 0.00 | 0.00 |

IES Indoor Report

Photometric Filename:SD05-06-XX-01 4000K RA90 36D.IES

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 94.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 95.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 96.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 97.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 98.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 99.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 100.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 101.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 102.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 103.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 104.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 105.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 106.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 107.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 108.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 109.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 110.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 111.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 112.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 113.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 114.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 115.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 116.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 117.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 118.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 119.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 120.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 121.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 122.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 123.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 124.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 125.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 126.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 127.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 128.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 129.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 130.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 131.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 132.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 133.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 134.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 135.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 136.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 137.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 138.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 139.0 | 0.00 | 0.00 | 0.03 | 0.01 |
| γ 140.0 | 0.00 | 0.00 | 0.13 | 0.09 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 141.0 | 0.00 | 0.00 | 0.23 | 0.18 |
| γ 142.0 | 0.04 | 0.01 | 0.33 | 0.29 |
| γ 143.0 | 0.14 | 0.10 | 0.42 | 0.37 |
| γ 144.0 | 0.25 | 0.20 | 0.52 | 0.47 |
| γ 145.0 | 0.34 | 0.29 | 0.62 | 0.56 |
| γ 146.0 | 0.44 | 0.38 | 0.72 | 0.65 |
| γ 147.0 | 0.53 | 0.47 | 0.81 | 0.75 |
| γ 148.0 | 0.62 | 0.56 | 0.90 | 0.82 |
| γ 149.0 | 0.71 | 0.64 | 1.00 | 0.91 |
| γ 150.0 | 0.80 | 0.72 | 1.07 | 0.99 |
| γ 151.0 | 0.89 | 0.80 | 1.14 | 1.05 |
| γ 152.0 | 0.96 | 0.88 | 1.22 | 1.13 |
| γ 153.0 | 1.04 | 0.95 | 1.28 | 1.20 |
| γ 154.0 | 1.12 | 1.01 | 1.35 | 1.26 |
| γ 155.0 | 1.19 | 1.08 | 1.41 | 1.31 |
| γ 156.0 | 1.25 | 1.13 | 1.46 | 1.37 |
| γ 157.0 | 1.31 | 1.19 | 1.50 | 1.41 |
| γ 158.0 | 1.36 | 1.23 | 1.53 | 1.46 |
| γ 159.0 | 1.40 | 1.28 | 1.57 | 1.49 |
| γ 160.0 | 1.45 | 1.31 | 1.60 | 1.52 |
| γ 161.0 | 1.48 | 1.34 | 1.62 | 1.54 |
| γ 162.0 | 1.50 | 1.36 | 1.63 | 1.55 |
| γ 163.0 | 1.53 | 1.37 | 1.63 | 1.57 |
| γ 164.0 | 1.54 | 1.39 | 1.64 | 1.57 |
| γ 165.0 | 1.56 | 1.39 | 1.63 | 1.57 |
| γ 166.0 | 1.55 | 1.40 | 1.62 | 1.57 |
| γ 167.0 | 1.55 | 1.40 | 1.61 | 1.55 |
| γ 168.0 | 1.55 | 1.39 | 1.59 | 1.54 |
| γ 169.0 | 1.54 | 1.38 | 1.58 | 1.54 |
| γ 170.0 | 1.54 | 1.38 | 1.57 | 1.53 |
| γ 171.0 | 1.53 | 1.38 | 1.55 | 1.51 |
| γ 172.0 | 1.53 | 1.39 | 1.55 | 1.51 |
| γ 173.0 | 1.52 | 1.39 | 1.54 | 1.51 |
| γ 174.0 | 1.53 | 1.40 | 1.54 | 1.52 |
| γ 175.0 | 1.53 | 1.41 | 1.54 | 1.52 |
| γ 176.0 | 1.53 | 1.42 | 1.53 | 1.53 |
| γ 177.0 | 1.53 | 1.44 | 1.54 | 1.53 |
| γ 178.0 | 1.54 | 1.46 | 1.55 | 1.55 |
| γ 179.0 | 1.54 | 1.47 | 1.56 | 1.56 |
| γ 180.0 | 1.55 | 1.55 | 1.55 | 1.55 |