

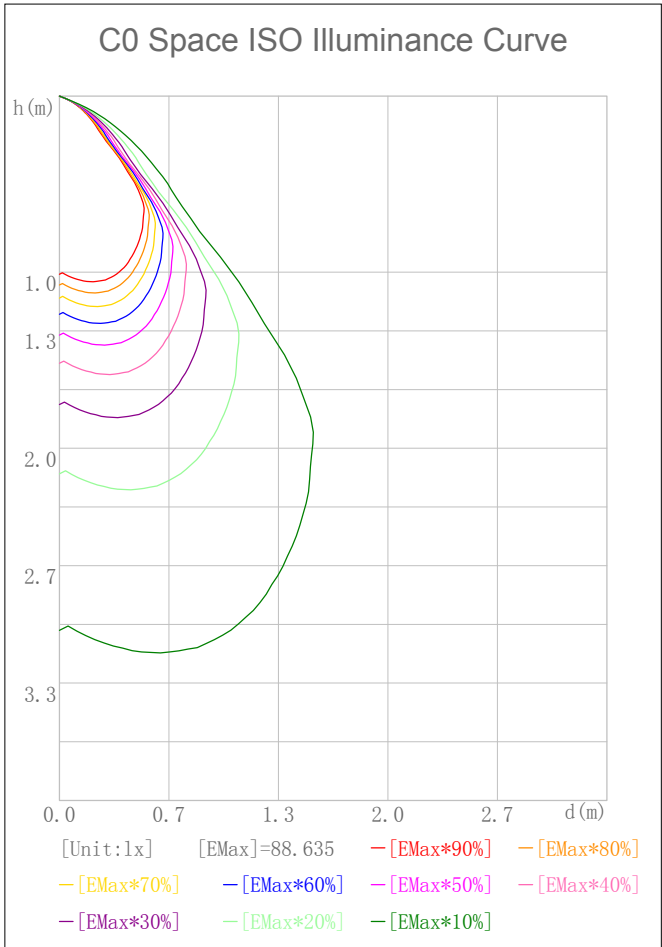
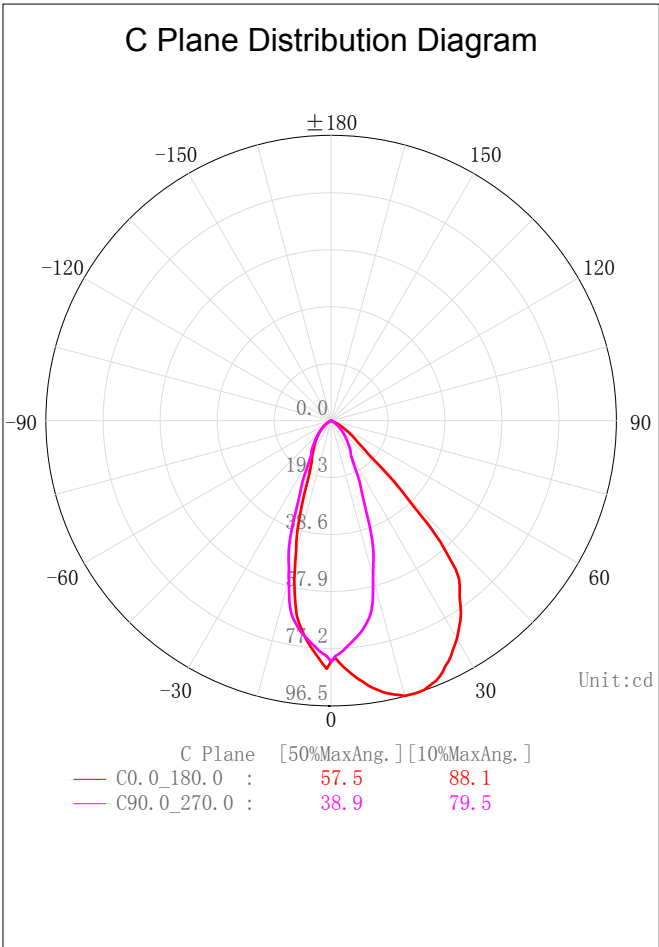
Indoor Luminaire Photometric Data

Description Information

| | | | |
|---|-------------------------|----------------------|-----------------------|
| Luminary Name:ST02-03-PR-03 RA90 5000K | | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | | Lamp Catalog: LED | Test Date: 2020/12/23 |
| 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):0.000m*0.000m*0.000m | | Lum. Area (m2):0.000 | Lum. W (kg): 0.000 |
| Test System: C, γ | Test Step: C=30.0 γ=1.0 | Temp. (°C): 25 | Humidity(%): 50.0 |

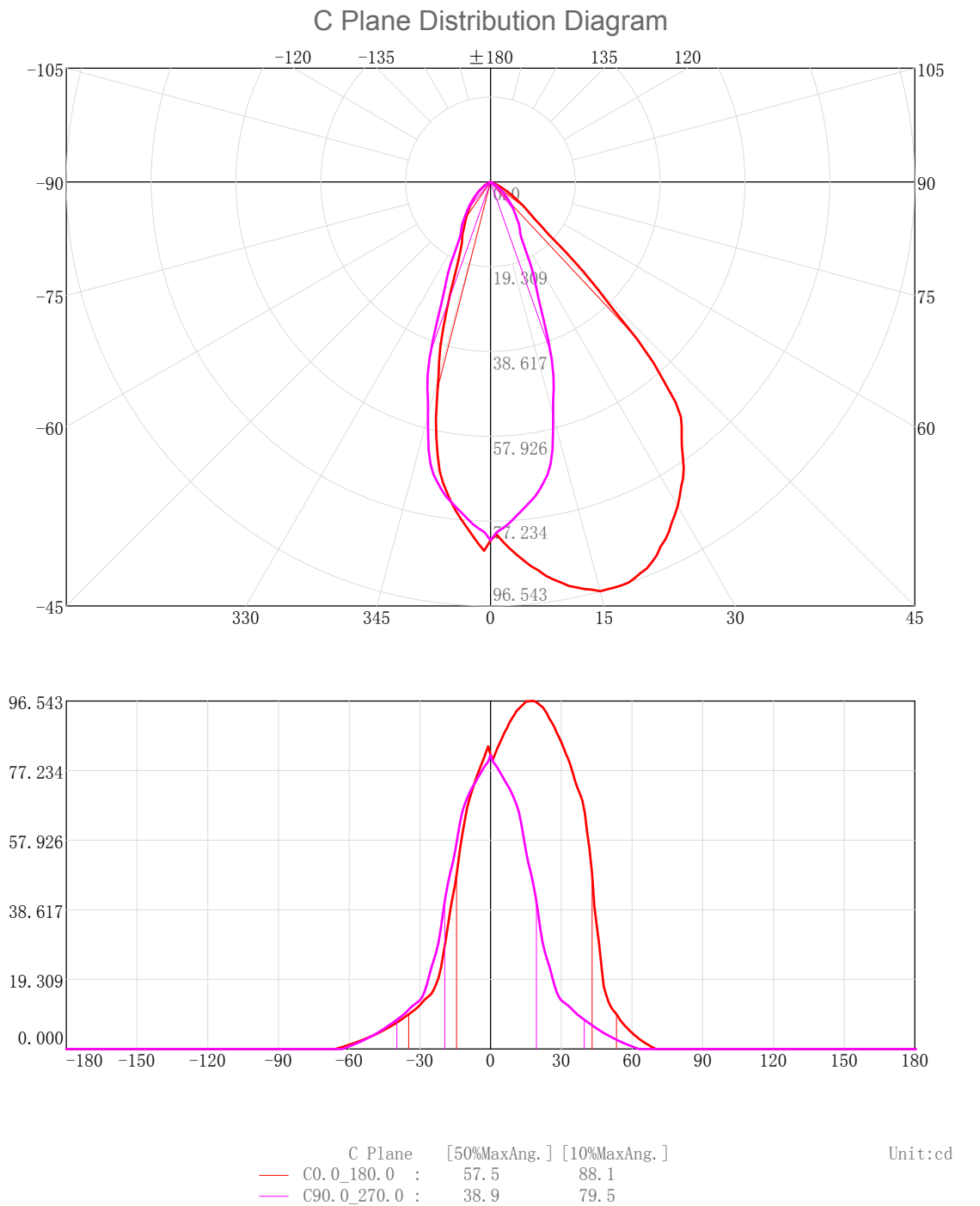
Character Parameter

| Lamp Speciality Parameter | | Luminaire Speciality Parameter | |
|---|---------------------------------|---------------------------------------|--|
| Rated Flux(lm): 66.670 | Luminary Flux(lm): 66.670 | Field Angle(10%Imax): 88.1(°) | |
| Rated Power(W): | Luminary Efficiency: 100.00% | Down Lumens&Percent: 66.670lm 100.00% | |
| Rated Voltage(V): | Luminary EER(lm/W): 22.388 | Up Lumens&Percent: 0.000lm 0.00% | |
| Tested Power(W): 2.978 | Max. Candela(cd): 96.543 | S/MH: C0_a180=0.982 C90_270=0.638 | |
| Lamps' Inside: 1 | Max Cand@Ang. (°): C=0.0 γ=17.0 | CIE Type: Semi-Direct | |
| Tested Electrics (V, A, pf):240.4, 0.014, 0.852 | Beam Angle(50%Imax): 57.5(°) | ErP ϕ use(90°): 60.379lm | |
| Lamp Size (W*L*H):0.000m*0.000m*0.000m | Left=-14.4°, Right=43.1° | IRF(%): 203.620 | |



2D Plane Light Intensity Distribution Curve

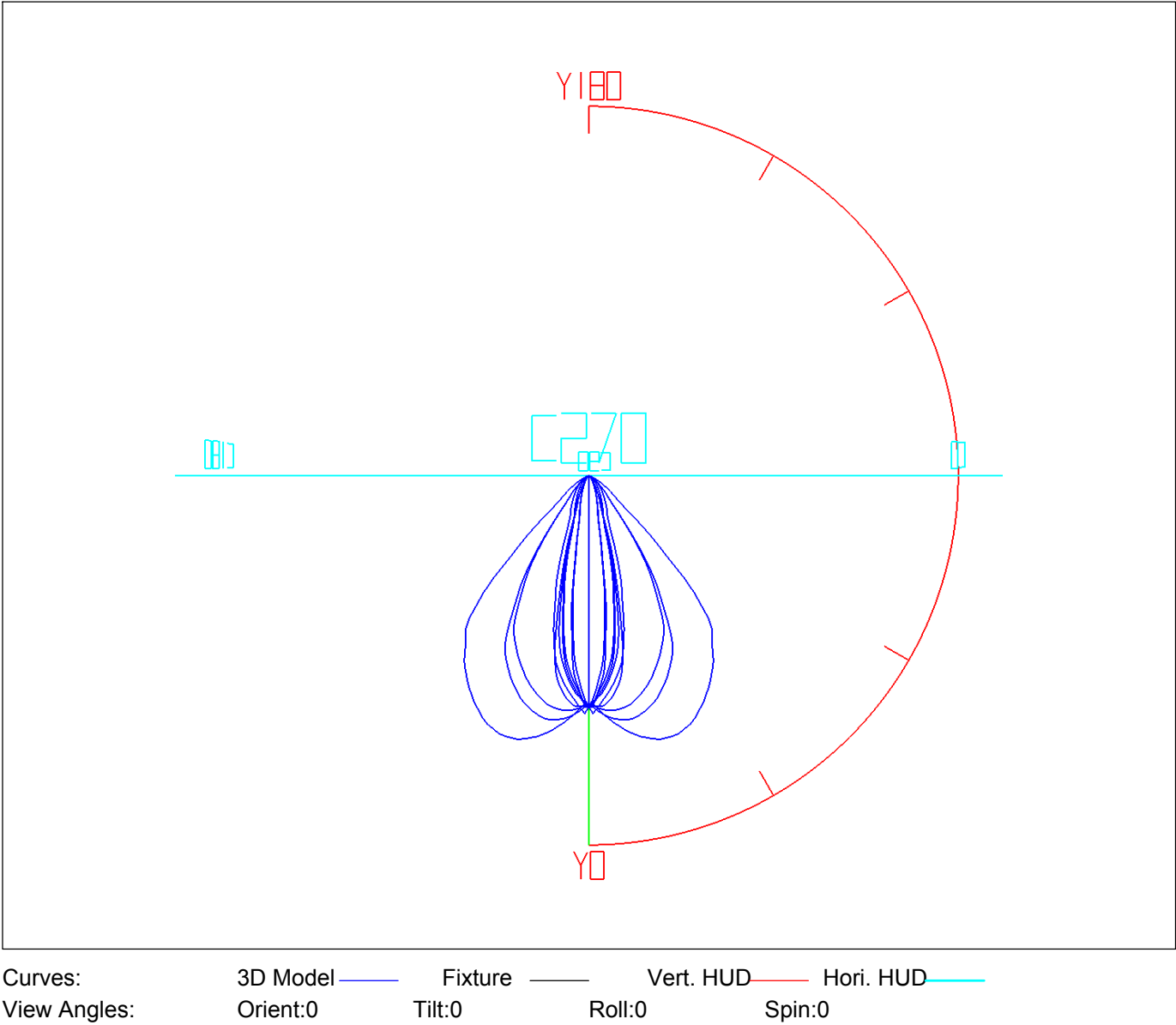
| | | |
|---|-----------------------|-----------------------------|
| Lum. Name: ST02-03-PR-03 RA90 5000K | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catelog: LED | Test Lab: Quality Deparment |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date: 2020/12/23 |



3D Light Intensity Distribution Modal

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name: ST02-03-PR-03 RA90 5000K | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catelog: LED | Test Lab: Quality Deparment |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date: 2020/12/23 |

3D Light Intensity Distribution Modal



IES Indoor Report

Photometric Filename:ST02-03-PR-03 RA90 5000K.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 | 0.08 | 0.08 | 0.12 | 0.12 | 47.0-48.0 | 0.57 | 62.28 | 0.86 | 93.41 |
| 1.0-2.0 | 0.23 | 0.31 | 0.35 | 0.46 | 48.0-49.0 | 0.52 | 62.80 | 0.78 | 94.19 |
| 2.0-3.0 | 0.38 | 0.69 | 0.57 | 1.04 | 49.0-50.0 | 0.48 | 63.27 | 0.72 | 94.91 |
| 3.0-4.0 | 0.53 | 1.22 | 0.80 | 1.84 | 50.0-51.0 | 0.44 | 63.71 | 0.66 | 95.56 |
| 4.0-5.0 | 0.68 | 1.90 | 1.02 | 2.85 | 51.0-52.0 | 0.40 | 64.11 | 0.60 | 96.17 |
| 5.0-6.0 | 0.82 | 2.72 | 1.23 | 4.08 | 52.0-53.0 | 0.37 | 64.49 | 0.56 | 96.72 |
| 6.0-7.0 | 0.96 | 3.68 | 1.43 | 5.51 | 53.0-54.0 | 0.34 | 64.82 | 0.51 | 97.23 |
| 7.0-8.0 | 1.09 | 4.76 | 1.63 | 7.15 | 54.0-55.0 | 0.31 | 65.13 | 0.46 | 97.69 |
| 8.0-9.0 | 1.21 | 5.98 | 1.82 | 8.97 | 55.0-56.0 | 0.28 | 65.41 | 0.41 | 98.11 |
| 9.0-10.0 | 1.33 | 7.31 | 1.99 | 10.96 | 56.0-57.0 | 0.25 | 65.65 | 0.37 | 98.47 |
| 10.0-11.0 | 1.43 | 8.73 | 2.14 | 13.10 | 57.0-58.0 | 0.22 | 65.87 | 0.32 | 98.80 |
| 11.0-12.0 | 1.52 | 10.25 | 2.27 | 15.38 | 58.0-59.0 | 0.19 | 66.06 | 0.28 | 99.08 |
| 12.0-13.0 | 1.59 | 11.84 | 2.38 | 17.76 | 59.0-60.0 | 0.16 | 66.21 | 0.24 | 99.32 |
| 13.0-14.0 | 1.65 | 13.49 | 2.48 | 20.24 | 60.0-61.0 | 0.13 | 66.34 | 0.20 | 99.51 |
| 14.0-15.0 | 1.71 | 15.20 | 2.56 | 22.80 | 61.0-62.0 | 0.10 | 66.45 | 0.16 | 99.67 |
| 15.0-16.0 | 1.75 | 16.95 | 2.62 | 25.42 | 62.0-63.0 | 0.08 | 66.53 | 0.12 | 99.79 |
| 16.0-17.0 | 1.78 | 18.72 | 2.66 | 28.08 | 63.0-64.0 | 0.06 | 66.58 | 0.08 | 99.87 |
| 17.0-18.0 | 1.79 | 20.52 | 2.69 | 30.77 | 64.0-65.0 | 0.04 | 66.62 | 0.06 | 99.93 |
| 18.0-19.0 | 1.80 | 22.32 | 2.70 | 33.47 | 65.0-66.0 | 0.02 | 66.64 | 0.03 | 99.96 |
| 19.0-20.0 | 1.80 | 24.12 | 2.70 | 36.18 | 66.0-67.0 | 0.01 | 66.66 | 0.02 | 99.98 |
| 20.0-21.0 | 1.79 | 25.91 | 2.69 | 38.87 | 67.0-68.0 | 0.01 | 66.66 | 0.01 | 99.99 |
| 21.0-22.0 | 1.78 | 27.69 | 2.66 | 41.53 | 68.0-69.0 | 0.00 | 66.67 | 0.01 | 100.00 |
| 22.0-23.0 | 1.76 | 29.45 | 2.64 | 44.17 | 69.0-70.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 23.0-24.0 | 1.75 | 31.21 | 2.63 | 46.81 | 70.0-71.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 24.0-25.0 | 1.75 | 32.95 | 2.62 | 49.43 | 71.0-72.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 25.0-26.0 | 1.74 | 34.69 | 2.61 | 52.03 | 72.0-73.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 26.0-27.0 | 1.73 | 36.42 | 2.59 | 54.62 | 73.0-74.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 27.0-28.0 | 1.71 | 38.13 | 2.57 | 57.19 | 74.0-75.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 28.0-29.0 | 1.69 | 39.82 | 2.54 | 59.73 | 75.0-76.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 29.0-30.0 | 1.67 | 41.49 | 2.51 | 62.23 | 76.0-77.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 30.0-31.0 | 1.64 | 43.13 | 2.46 | 64.70 | 77.0-78.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 31.0-32.0 | 1.61 | 44.74 | 2.41 | 67.10 | 78.0-79.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 32.0-33.0 | 1.56 | 46.30 | 2.34 | 69.44 | 79.0-80.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 33.0-34.0 | 1.51 | 47.80 | 2.26 | 71.70 | 80.0-81.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 34.0-35.0 | 1.45 | 49.26 | 2.18 | 73.88 | 81.0-82.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 35.0-36.0 | 1.40 | 50.66 | 2.10 | 75.98 | 82.0-83.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 36.0-37.0 | 1.35 | 52.01 | 2.03 | 78.01 | 83.0-84.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 37.0-38.0 | 1.30 | 53.31 | 1.95 | 79.96 | 84.0-85.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 38.0-39.0 | 1.24 | 54.55 | 1.86 | 81.82 | 85.0-86.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 39.0-40.0 | 1.18 | 55.73 | 1.77 | 83.59 | 86.0-87.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 40.0-41.0 | 1.10 | 56.83 | 1.65 | 85.24 | 87.0-88.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 41.0-42.0 | 1.02 | 57.84 | 1.53 | 86.76 | 88.0-89.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 42.0-43.0 | 0.93 | 58.78 | 1.40 | 88.16 | 89.0-90.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 43.0-44.0 | 0.84 | 59.62 | 1.26 | 89.42 | 90.0-91.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 44.0-45.0 | 0.76 | 60.38 | 1.14 | 90.56 | 91.0-92.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 45.0-46.0 | 0.70 | 61.07 | 1.04 | 91.61 | 92.0-93.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 46.0-47.0 | 0.63 | 61.71 | 0.95 | 92.56 | 93.0-94.0 | 0.00 | 66.67 | 0.00 | 100.00 |

IES Indoor Report

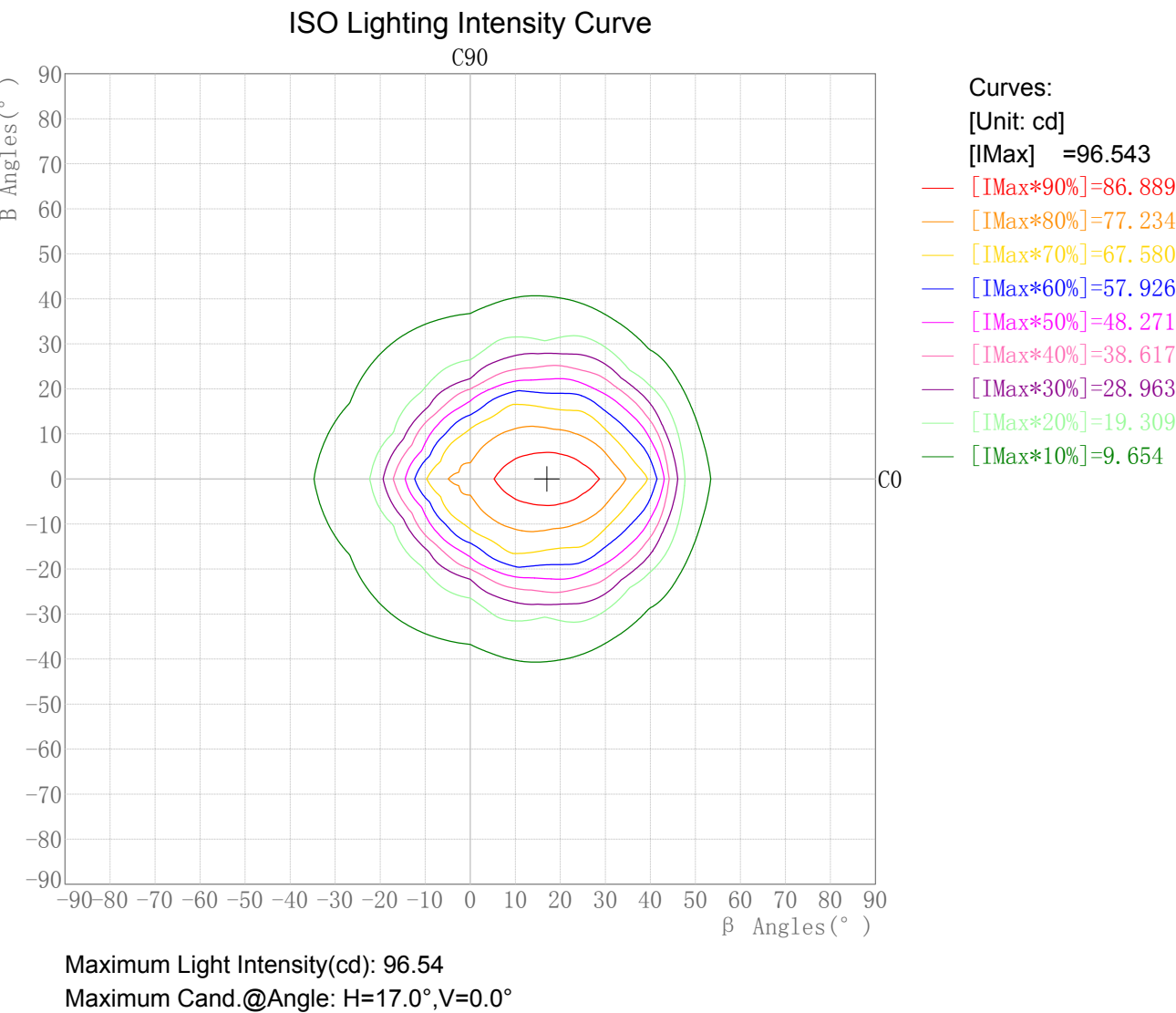
Photometric Filename:ST02-03-PR-03 RA90 5000K.IES

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 | 66.67 | 0.00 | 100.00 | 141.0-142.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 95.0-96.0 | 0.00 | 66.67 | 0.00 | 100.00 | 142.0-143.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 96.0-97.0 | 0.00 | 66.67 | 0.00 | 100.00 | 143.0-144.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 97.0-98.0 | 0.00 | 66.67 | 0.00 | 100.00 | 144.0-145.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 98.0-99.0 | 0.00 | 66.67 | 0.00 | 100.00 | 145.0-146.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 99.0-100.0 | 0.00 | 66.67 | 0.00 | 100.00 | 146.0-147.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 100.0-101.0 | 0.00 | 66.67 | 0.00 | 100.00 | 147.0-148.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 101.0-102.0 | 0.00 | 66.67 | 0.00 | 100.00 | 148.0-149.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 102.0-103.0 | 0.00 | 66.67 | 0.00 | 100.00 | 149.0-150.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 103.0-104.0 | 0.00 | 66.67 | 0.00 | 100.00 | 150.0-151.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 104.0-105.0 | 0.00 | 66.67 | 0.00 | 100.00 | 151.0-152.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 105.0-106.0 | 0.00 | 66.67 | 0.00 | 100.00 | 152.0-153.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 106.0-107.0 | 0.00 | 66.67 | 0.00 | 100.00 | 153.0-154.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 107.0-108.0 | 0.00 | 66.67 | 0.00 | 100.00 | 154.0-155.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 108.0-109.0 | 0.00 | 66.67 | 0.00 | 100.00 | 155.0-156.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 109.0-110.0 | 0.00 | 66.67 | 0.00 | 100.00 | 156.0-157.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 110.0-111.0 | 0.00 | 66.67 | 0.00 | 100.00 | 157.0-158.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 111.0-112.0 | 0.00 | 66.67 | 0.00 | 100.00 | 158.0-159.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 112.0-113.0 | 0.00 | 66.67 | 0.00 | 100.00 | 159.0-160.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 113.0-114.0 | 0.00 | 66.67 | 0.00 | 100.00 | 160.0-161.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 114.0-115.0 | 0.00 | 66.67 | 0.00 | 100.00 | 161.0-162.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 115.0-116.0 | 0.00 | 66.67 | 0.00 | 100.00 | 162.0-163.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 116.0-117.0 | 0.00 | 66.67 | 0.00 | 100.00 | 163.0-164.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 117.0-118.0 | 0.00 | 66.67 | 0.00 | 100.00 | 164.0-165.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 118.0-119.0 | 0.00 | 66.67 | 0.00 | 100.00 | 165.0-166.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 119.0-120.0 | 0.00 | 66.67 | 0.00 | 100.00 | 166.0-167.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 120.0-121.0 | 0.00 | 66.67 | 0.00 | 100.00 | 167.0-168.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 121.0-122.0 | 0.00 | 66.67 | 0.00 | 100.00 | 168.0-169.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 122.0-123.0 | 0.00 | 66.67 | 0.00 | 100.00 | 169.0-170.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 123.0-124.0 | 0.00 | 66.67 | 0.00 | 100.00 | 170.0-171.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 124.0-125.0 | 0.00 | 66.67 | 0.00 | 100.00 | 171.0-172.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 125.0-126.0 | 0.00 | 66.67 | 0.00 | 100.00 | 172.0-173.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 126.0-127.0 | 0.00 | 66.67 | 0.00 | 100.00 | 173.0-174.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 127.0-128.0 | 0.00 | 66.67 | 0.00 | 100.00 | 174.0-175.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 128.0-129.0 | 0.00 | 66.67 | 0.00 | 100.00 | 175.0-176.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 129.0-130.0 | 0.00 | 66.67 | 0.00 | 100.00 | 176.0-177.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 130.0-131.0 | 0.00 | 66.67 | 0.00 | 100.00 | 177.0-178.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 131.0-132.0 | 0.00 | 66.67 | 0.00 | 100.00 | 178.0-179.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 132.0-133.0 | 0.00 | 66.67 | 0.00 | 100.00 | 179.0-180.0 | 0.00 | 66.67 | 0.00 | 100.00 |
| 133.0-134.0 | 0.00 | 66.67 | 0.00 | 100.00 | | | | | |
| 134.0-135.0 | 0.00 | 66.67 | 0.00 | 100.00 | | | | | |
| 135.0-136.0 | 0.00 | 66.67 | 0.00 | 100.00 | | | | | |
| 136.0-137.0 | 0.00 | 66.67 | 0.00 | 100.00 | | | | | |
| 137.0-138.0 | 0.00 | 66.67 | 0.00 | 100.00 | | | | | |
| 138.0-139.0 | 0.00 | 66.67 | 0.00 | 100.00 | | | | | |
| 139.0-140.0 | 0.00 | 66.67 | 0.00 | 100.00 | | | | | |
| 140.0-141.0 | 0.00 | 66.67 | 0.00 | 100.00 | | | | | |

Rectangle ISO Lighting Intensity Diagram

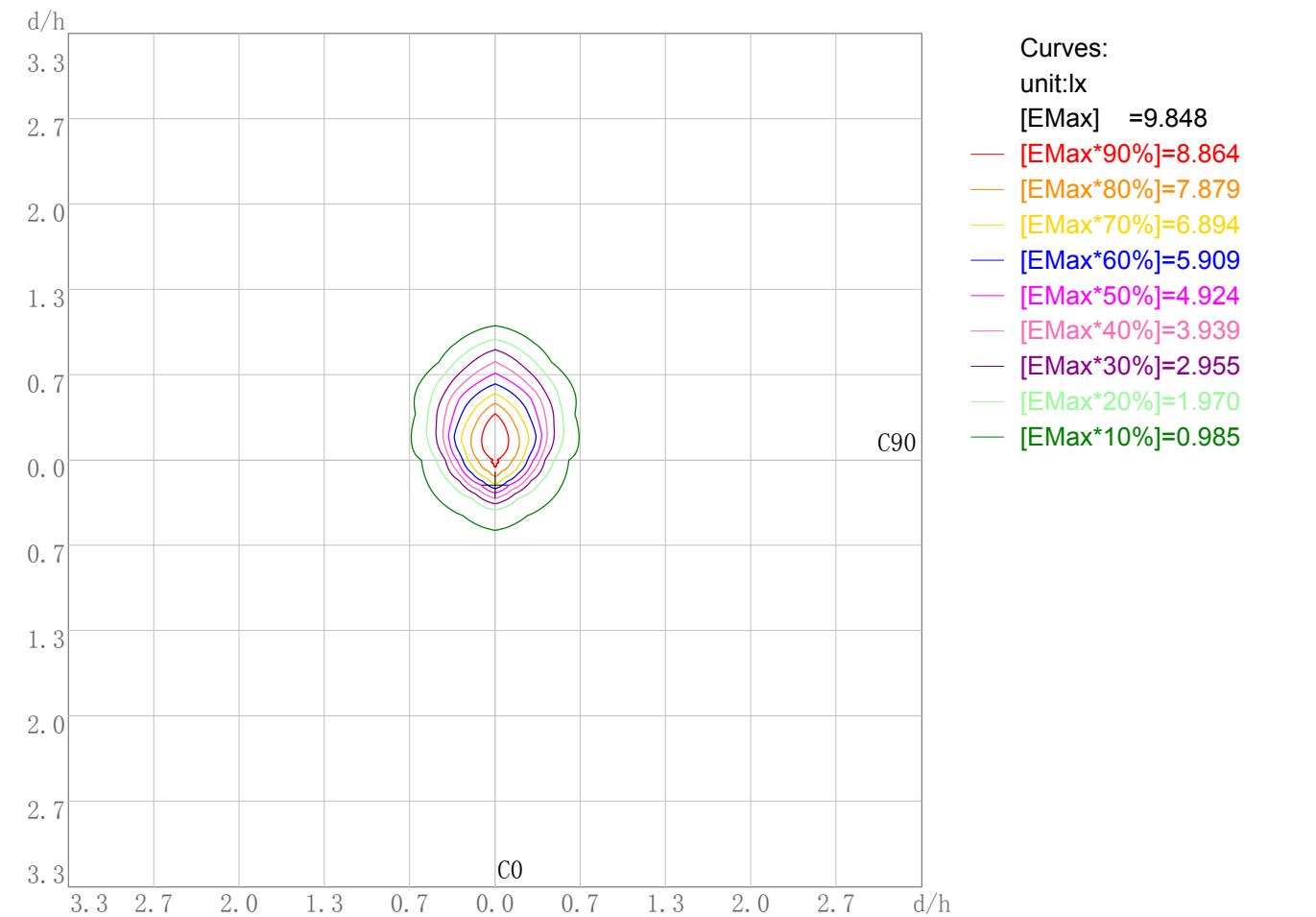
| | | |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-03 RA90 5000K | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date: 2020/12/23 |



Plane ISO-Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-03 RA90 5000K | 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: 2020/12/23 |

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 9.85
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.2

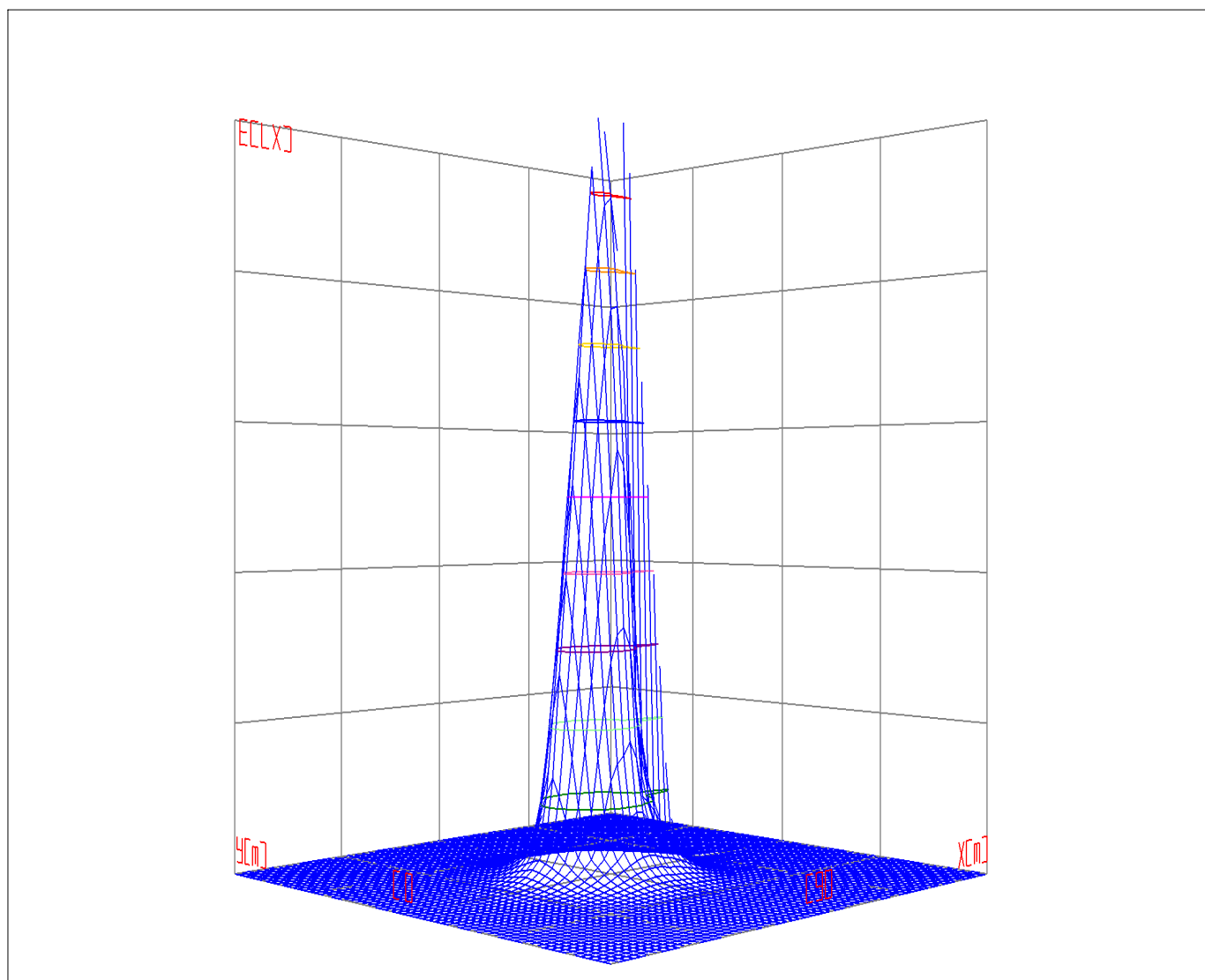
IES Indoor Report

Photometric Filename:ST02-03-PR-03 RA90 5000K.IES

3D Plane ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-03 RA90 5000K | 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: 2020/12/23 |

3D Plane Illuminance Modal

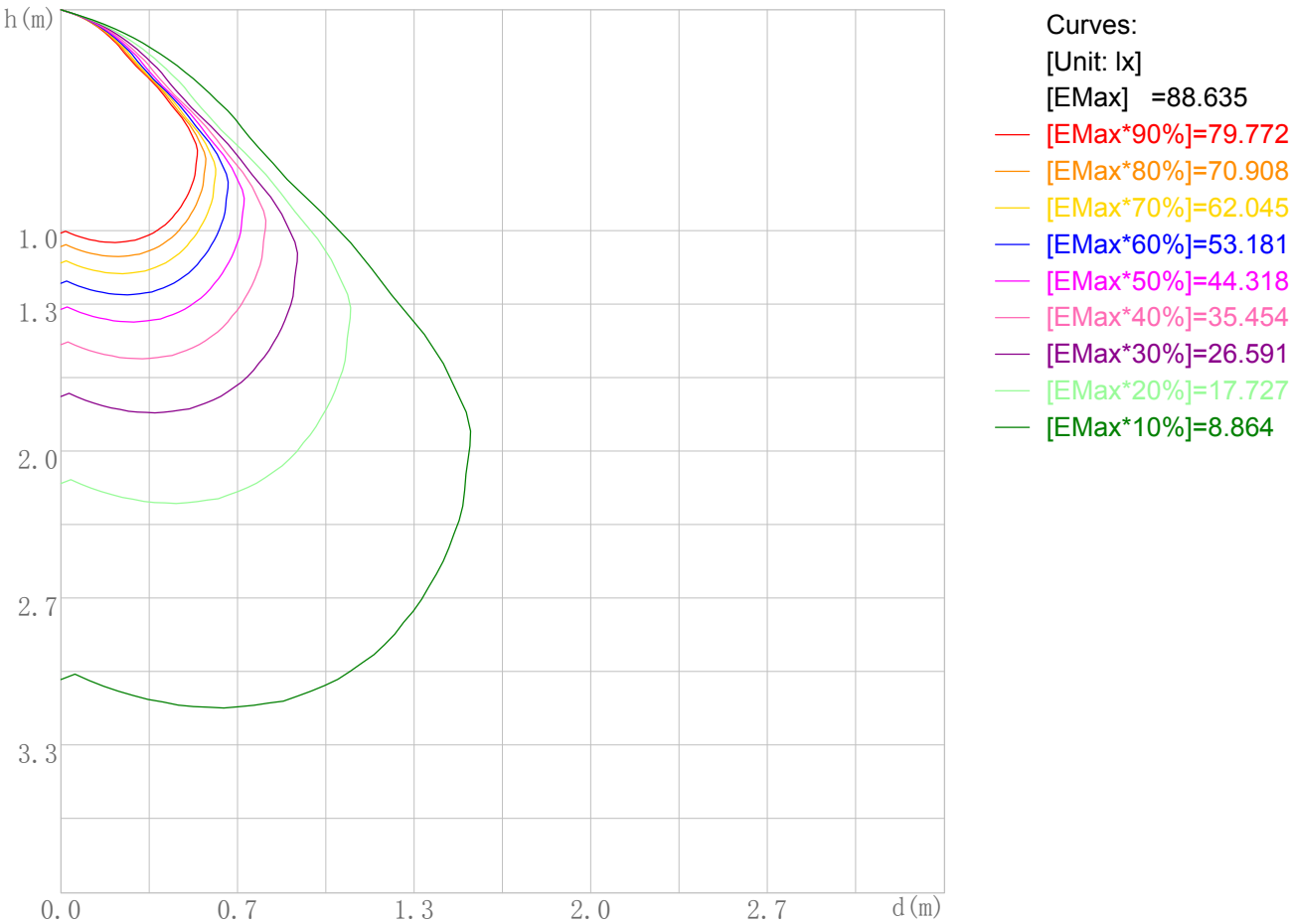


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-03 RA90 5000K | 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: 2020/12/23 |

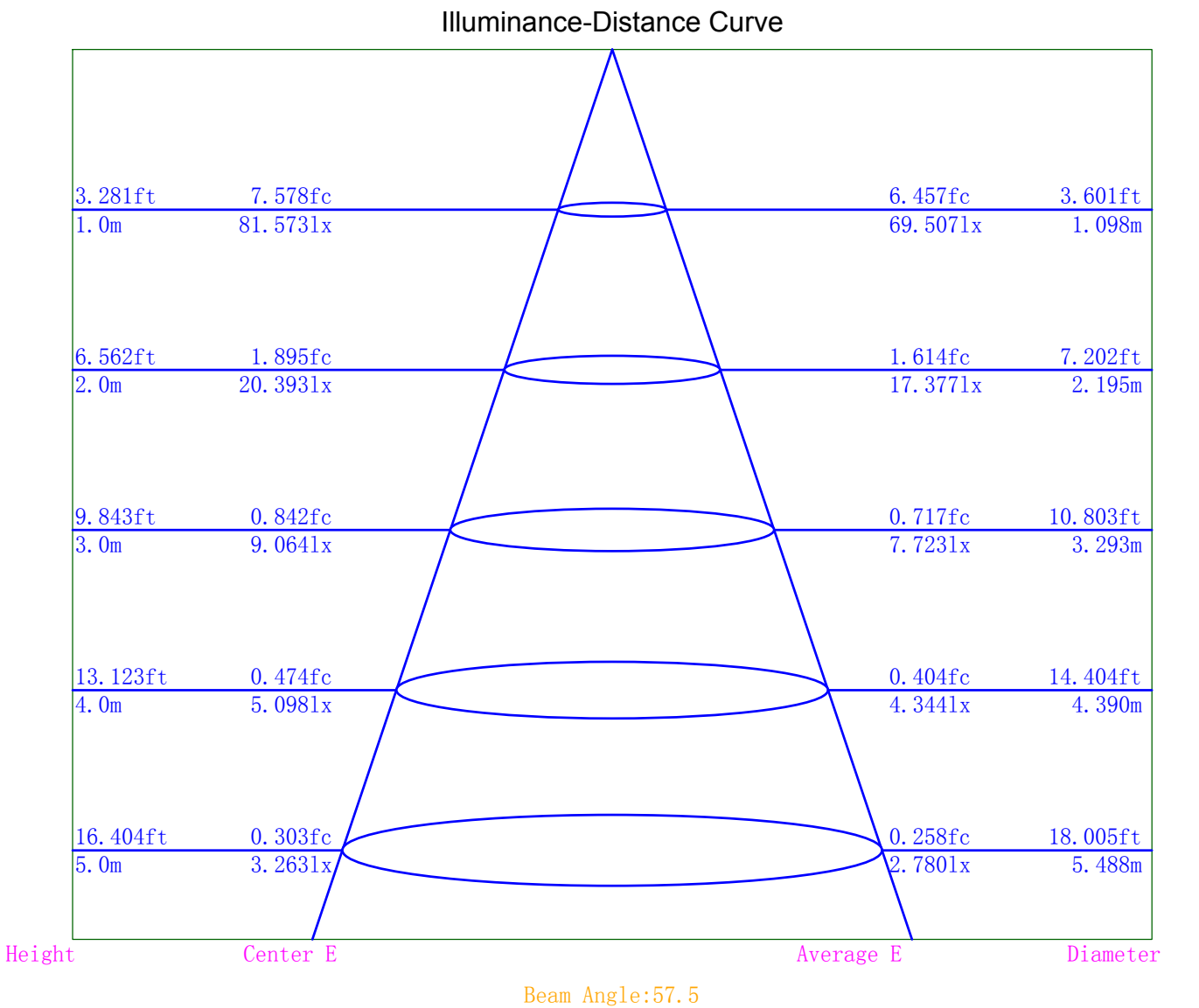
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:88.64lx,11.0deg
Plane Maximum Lighting Intensity and @Angle:96.543cd,0deg

Illuminance-Distance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-03 RA90 5000K | 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: 2020/12/23 |



Indoor Luminance Limiting Curves

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-03 RA90 5000K | 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: 2020/12/23 |

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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Luminance Limiting Curve



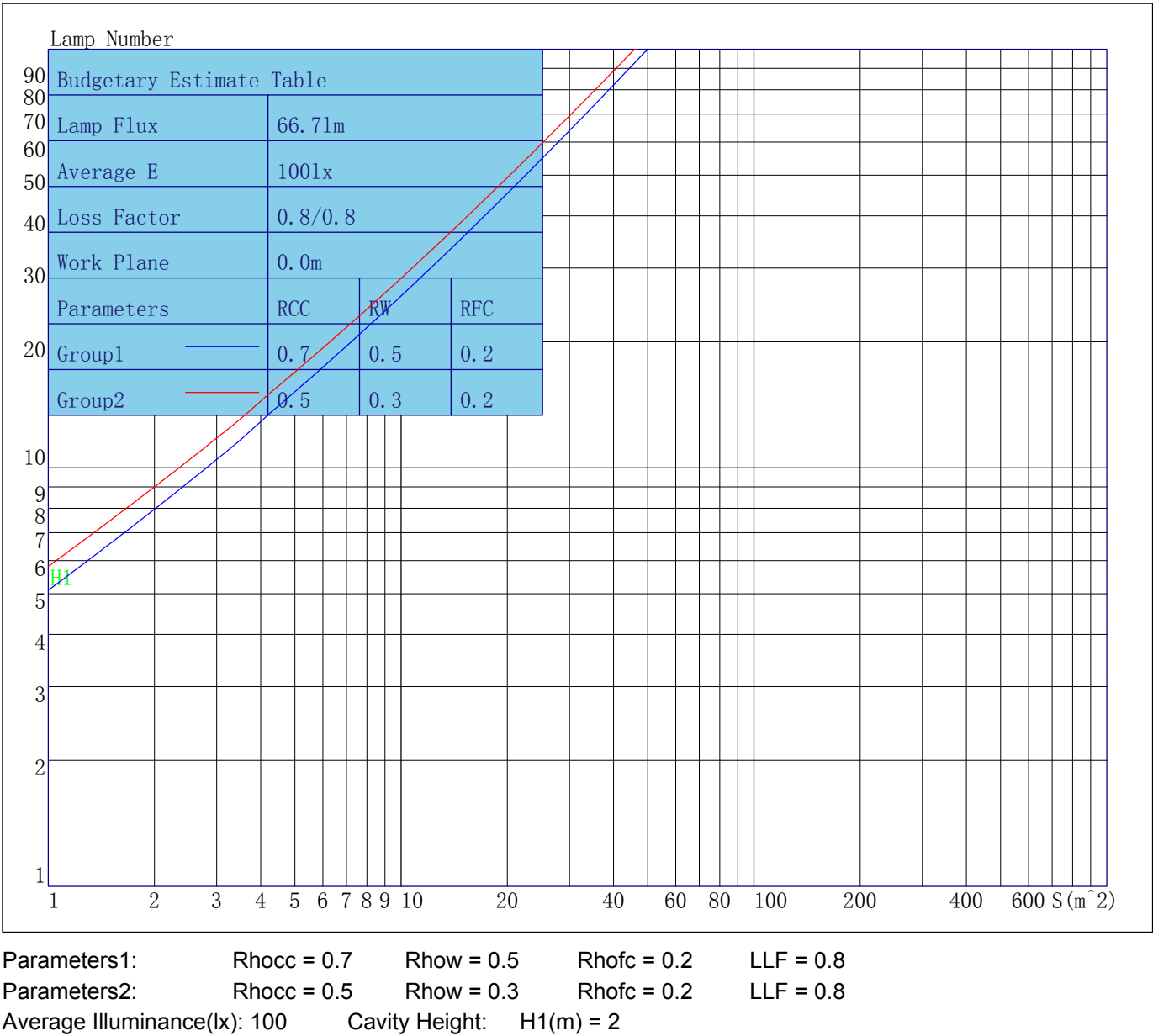
Luminous Size: Length(m)=0.000 Width(m)=0.000 Height(m)=0.000 Area(m^2)=0.000000

Luminous Type: Without Luminous Side

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

Indoor Budgetary Estimate Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-03 RA90 5000K | 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: 2020/12/23 |



Indoor Coefficient of Utilization Table

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name: ST02-03-PR-03 RA90 5000K | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catelog: LED | Test Lab: Quality Deparment |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date: 2020/12/23 |

| 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 | 113 | 110 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 100 | 100 | 99 | 97 | 97 | 96 | 95 | 93 |
| 2 | 107 | 102 | 98 | 94 | 105 | 100 | 96 | 93 | 97 | 94 | 91 | 94 | 91 | 89 | 91 | 89 | 87 | 85 |
| 3 | 101 | 94 | 89 | 85 | 99 | 93 | 88 | 84 | 90 | 86 | 83 | 88 | 84 | 81 | 86 | 83 | 80 | 79 |
| 4 | 96 | 88 | 82 | 77 | 94 | 86 | 81 | 77 | 84 | 80 | 76 | 82 | 78 | 75 | 80 | 77 | 74 | 72 |
| 5 | 90 | 81 | 75 | 71 | 89 | 81 | 75 | 70 | 79 | 74 | 70 | 77 | 73 | 69 | 75 | 72 | 68 | 67 |
| 6 | 86 | 76 | 70 | 65 | 84 | 75 | 69 | 65 | 74 | 68 | 64 | 72 | 68 | 64 | 71 | 67 | 64 | 62 |
| 7 | 81 | 71 | 65 | 60 | 80 | 70 | 64 | 60 | 69 | 64 | 60 | 68 | 63 | 60 | 67 | 62 | 59 | 58 |
| 8 | 77 | 67 | 60 | 56 | 76 | 66 | 60 | 56 | 65 | 60 | 56 | 64 | 59 | 56 | 63 | 59 | 55 | 54 |
| 9 | 73 | 63 | 57 | 52 | 72 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 56 | 52 | 60 | 55 | 52 | 50 |
| 10 | 69 | 59 | 53 | 49 | 68 | 59 | 53 | 49 | 58 | 53 | 49 | 57 | 52 | 49 | 56 | 52 | 49 | 47 |

Unified Glare Rating Table

| | | |
|---|-----------------------|-----------------------------|
| Lum. Name: ST02-03-PR-03 RA90 5000K | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Deparment |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date: 2020/12/23 |

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 | -10.4 | -9.3 | -10.0 | -9.0 | -8.7 | -10.4 | -9.3 | -10.0 | -9.0 | -8.7 | |
| | Y=3H | -10.6 | -9.6 | -10.2 | -9.3 | -8.9 | -10.6 | -9.6 | -10.2 | -9.3 | -8.9 |
| | Y=4H | -10.7 | -9.8 | -10.3 | -9.4 | -9.1 | -10.7 | -9.8 | -10.3 | -9.4 | -9.1 |
| | Y=6H | -10.8 | -10.0 | -10.4 | -9.6 | -9.2 | -10.8 | -10.0 | -10.4 | -9.6 | -9.2 |
| | Y=8H | -10.8 | -10.1 | -10.4 | -9.7 | -9.3 | -10.8 | -10.1 | -10.4 | -9.7 | -9.3 |
| | Y=12H | -10.9 | -10.2 | -10.5 | -9.8 | -9.4 | -10.9 | -10.2 | -10.5 | -9.8 | -9.4 |
| X=4H Y=2H | -10.7 | -9.8 | -10.3 | -9.4 | -9.1 | -10.7 | -9.8 | -10.3 | -9.4 | -9.1 | |
| | Y=3H | -10.9 | -10.2 | -10.5 | -9.8 | -9.3 | -10.9 | -10.2 | -10.5 | -9.8 | -9.3 |
| | Y=4H | -11.0 | -10.4 | -10.5 | -9.9 | -9.5 | -11.0 | -10.4 | -10.5 | -9.9 | -9.5 |
| | Y=6H | -11.1 | -10.5 | -10.6 | -10.1 | -9.6 | -11.1 | -10.5 | -10.6 | -10.1 | -9.6 |
| | Y=8H | -11.2 | -10.7 | -10.7 | -10.2 | -9.7 | -11.2 | -10.7 | -10.7 | -10.2 | -9.7 |
| | Y=12H | -11.2 | -10.8 | -10.7 | -10.3 | -9.8 | -11.2 | -10.8 | -10.7 | -10.3 | -9.8 |
| X=8H Y=4H | -11.2 | -10.7 | -10.7 | -10.2 | -9.7 | -11.2 | -10.7 | -10.7 | -10.2 | -9.7 | |
| | Y=6H | -11.3 | -10.9 | -10.8 | -10.4 | -9.8 | -11.3 | -10.9 | -10.8 | -10.4 | -9.8 |
| | Y=8H | -11.4 | -11.0 | -10.8 | -10.5 | -10.0 | -11.4 | -11.0 | -10.8 | -10.5 | -10.0 |
| | Y=12H | -11.4 | -11.1 | -10.9 | -10.6 | -10.0 | -11.4 | -11.1 | -10.9 | -10.6 | -10.0 |
| X=12H Y=4H | -11.2 | -10.8 | -10.7 | -10.3 | -9.8 | -11.2 | -10.8 | -10.7 | -10.3 | -9.8 | |
| | Y=6H | -11.3 | -11.0 | -10.8 | -10.5 | -10.0 | -11.3 | -11.0 | -10.8 | -10.5 | -10.0 |
| | Y=8H | -11.4 | -11.1 | -10.9 | -10.6 | -10.0 | -11.4 | -11.1 | -10.9 | -10.6 | -10.0 |
| Variations with the objerver position at spacings | | | | | | | | | | | |
| S=1.0H | 0.0/0.0 | | | | | 0.0/0.0 | | | | | |
| S=1.5H | 0.0/0.0 | | | | | 0.0/0.0 | | | | | |
| S=2.0H | 0.0/0.0 | | | | | 0.0/0.0 | | | | | |
| Reduced UGR Table: | | | | | | | | | | | |
| Nordic Standard Table: | BK0 | | | | | BK0 | | | | | |
| Correction Value | 0.0 | | | | | 0.0 | | | | | |

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

IES Indoor Report

Photometric Filename:ST02-03-PR-03 RA90 5000K.IES

Candela Tabulation

| V/H | C0. 0 | C30. 0 | C60. 0 | C90. 0 | C120. 0 | C150. 0 | C180. 0 |
|---------|--------|--------|--------|--------|---------|---------|---------|
| γ 0. 0 | 81. 57 | 81. 57 | 81. 57 | 81. 57 | 81. 57 | 81. 57 | 81. 57 |
| γ 1. 0 | 80. 31 | 81. 37 | 80. 37 | 79. 74 | 81. 28 | 80. 96 | 83. 98 |
| γ 2. 0 | 81. 96 | 82. 11 | 80. 40 | 78. 90 | 79. 80 | 79. 01 | 82. 25 |
| γ 3. 0 | 83. 56 | 82. 93 | 80. 30 | 77. 96 | 78. 22 | 77. 10 | 80. 46 |
| γ 4. 0 | 85. 05 | 83. 56 | 80. 14 | 76. 75 | 76. 67 | 75. 25 | 78. 71 |
| γ 5. 0 | 86. 48 | 84. 13 | 79. 98 | 75. 61 | 74. 87 | 73. 39 | 77. 04 |
| γ 6. 0 | 87. 90 | 84. 58 | 79. 76 | 74. 50 | 73. 05 | 71. 28 | 75. 34 |
| γ 7. 0 | 89. 07 | 84. 93 | 79. 48 | 73. 40 | 71. 40 | 68. 99 | 73. 44 |
| γ 8. 0 | 90. 54 | 85. 06 | 78. 93 | 72. 35 | 69. 64 | 66. 64 | 71. 34 |
| γ 9. 0 | 91. 64 | 85. 15 | 78. 25 | 70. 98 | 67. 24 | 63. 31 | 69. 27 |
| γ 10. 0 | 92. 60 | 85. 15 | 77. 56 | 69. 49 | 63. 78 | 59. 20 | 66. 81 |
| γ 11. 0 | 93. 71 | 85. 14 | 76. 84 | 67. 87 | 59. 42 | 55. 14 | 63. 22 |
| γ 12. 0 | 94. 39 | 84. 93 | 75. 99 | 65. 71 | 55. 32 | 50. 31 | 59. 37 |
| γ 13. 0 | 95. 09 | 84. 43 | 75. 08 | 62. 63 | 51. 86 | 45. 53 | 55. 23 |
| γ 14. 0 | 95. 66 | 83. 81 | 74. 04 | 58. 82 | 48. 68 | 41. 82 | 50. 25 |
| γ 15. 0 | 96. 45 | 83. 16 | 73. 05 | 54. 99 | 44. 75 | 38. 48 | 45. 77 |
| γ 16. 0 | 96. 44 | 82. 52 | 71. 96 | 51. 74 | 40. 04 | 34. 24 | 42. 52 |
| γ 17. 0 | 96. 54 | 81. 74 | 70. 82 | 49. 17 | 34. 81 | 29. 99 | 38. 97 |
| γ 18. 0 | 96. 53 | 80. 94 | 69. 37 | 46. 28 | 30. 50 | 25. 63 | 34. 68 |
| γ 19. 0 | 96. 43 | 79. 96 | 67. 44 | 42. 80 | 27. 66 | 21. 55 | 30. 40 |
| γ 20. 0 | 95. 93 | 78. 98 | 65. 12 | 38. 48 | 25. 29 | 18. 85 | 26. 45 |
| γ 21. 0 | 95. 34 | 77. 69 | 62. 45 | 33. 81 | 22. 27 | 17. 12 | 22. 61 |
| γ 22. 0 | 94. 90 | 76. 46 | 59. 33 | 29. 82 | 19. 42 | 15. 66 | 19. 87 |
| γ 23. 0 | 94. 00 | 75. 33 | 55. 47 | 26. 97 | 17. 59 | 14. 48 | 18. 13 |
| γ 24. 0 | 92. 99 | 74. 07 | 51. 69 | 24. 87 | 16. 20 | 13. 78 | 16. 65 |
| γ 25. 0 | 91. 58 | 72. 63 | 48. 03 | 22. 86 | 15. 18 | 13. 28 | 15. 46 |
| γ 26. 0 | 90. 63 | 71. 18 | 44. 64 | 20. 47 | 14. 58 | 12. 75 | 14. 77 |
| γ 27. 0 | 89. 37 | 69. 76 | 41. 55 | 17. 88 | 14. 05 | 12. 13 | 14. 23 |
| γ 28. 0 | 87. 82 | 68. 26 | 38. 39 | 15. 86 | 13. 47 | 11. 41 | 13. 66 |
| γ 29. 0 | 86. 54 | 66. 60 | 35. 36 | 14. 41 | 12. 83 | 10. 83 | 12. 93 |
| γ 30. 0 | 85. 14 | 64. 40 | 32. 52 | 13. 50 | 12. 09 | 10. 28 | 12. 18 |
| γ 31. 0 | 83. 54 | 61. 09 | 29. 87 | 13. 00 | 11. 47 | 9. 79 | 11. 56 |
| γ 32. 0 | 81. 86 | 57. 44 | 26. 90 | 12. 50 | 10. 95 | 9. 31 | 11. 01 |
| γ 33. 0 | 80. 42 | 53. 62 | 23. 50 | 12. 02 | 10. 41 | 8. 86 | 10. 48 |
| γ 34. 0 | 78. 61 | 50. 23 | 20. 31 | 11. 45 | 9. 92 | 8. 43 | 9. 99 |
| γ 35. 0 | 76. 28 | 47. 26 | 17. 82 | 10. 73 | 9. 44 | 7. 99 | 9. 52 |
| γ 36. 0 | 74. 03 | 44. 09 | 16. 04 | 10. 07 | 8. 98 | 7. 56 | 9. 05 |
| γ 37. 0 | 72. 25 | 40. 13 | 14. 67 | 9. 51 | 8. 57 | 7. 13 | 8. 58 |
| γ 38. 0 | 70. 67 | 35. 94 | 13. 67 | 9. 00 | 8. 12 | 6. 73 | 8. 11 |
| γ 39. 0 | 68. 79 | 31. 56 | 13. 07 | 8. 50 | 7. 66 | 6. 33 | 7. 68 |
| γ 40. 0 | 65. 50 | 27. 00 | 12. 56 | 8. 05 | 7. 23 | 5. 94 | 7. 25 |
| γ 41. 0 | 60. 13 | 22. 69 | 12. 00 | 7. 56 | 6. 82 | 5. 58 | 6. 84 |
| γ 42. 0 | 55. 47 | 18. 99 | 11. 35 | 7. 09 | 6. 40 | 5. 21 | 6. 44 |
| γ 43. 0 | 48. 96 | 15. 72 | 10. 60 | 6. 63 | 6. 01 | 4. 87 | 6. 05 |
| γ 44. 0 | 39. 72 | 13. 50 | 9. 80 | 6. 17 | 5. 63 | 4. 54 | 5. 68 |
| γ 45. 0 | 34. 40 | 12. 00 | 9. 11 | 5. 74 | 5. 27 | 4. 23 | 5. 33 |
| γ 46. 0 | 29. 45 | 10. 77 | 8. 46 | 5. 31 | 4. 93 | 3. 92 | 4. 98 |

Photometric Filename:ST02-03-PR-03 RA90 5000K.IES

Candela Tabulation - (Cont.)

[illegible]

Photometric Filename:ST02-03-PR-03 RA90 5000K.IES

Candela Tabulation - (Cont.)

[illegible]