

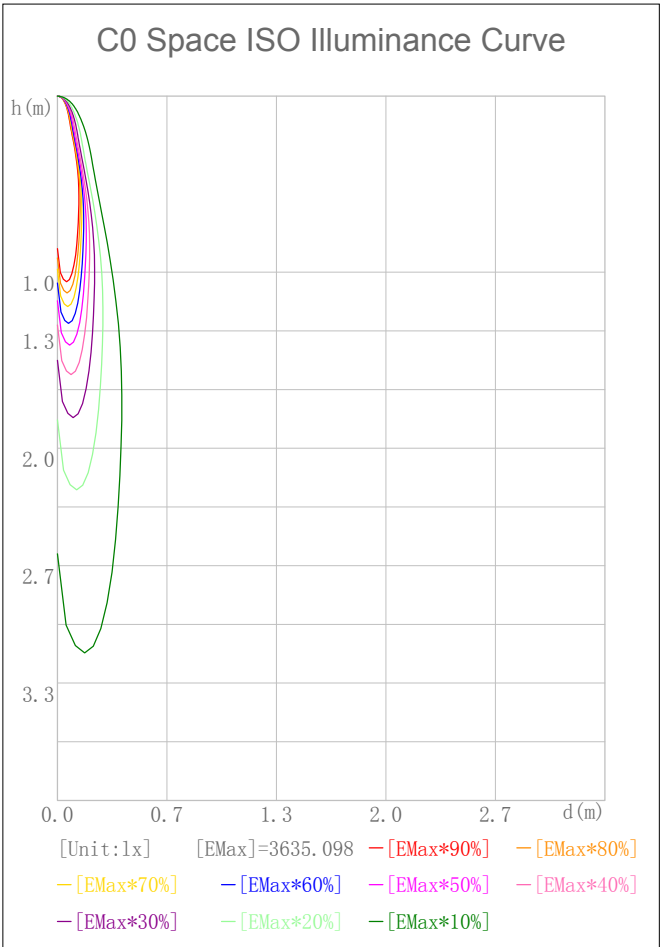
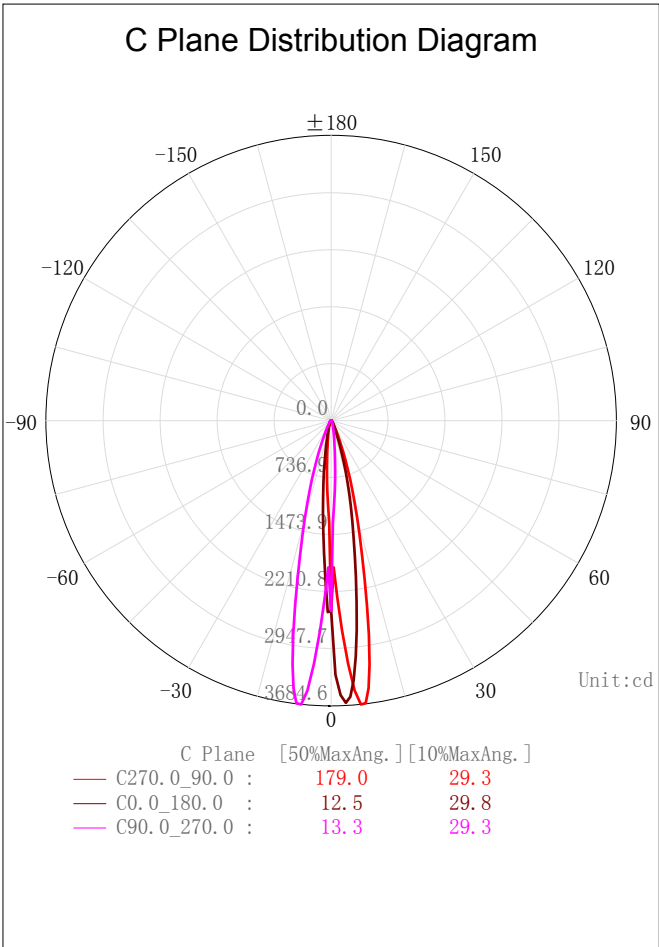
Indoor Luminaire Photometric Data

Description Information

| | | | |
|---|-------------------------|----------------------|-----------------------|
| Luminary Name:DL52-06-XX-01 2700K RA90 15D | | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | | Lamp Catalog: LED | Test Date: 2021/10/25 |
| 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):0.076m*0.076m*0.000m | | Lum. Area (m2):0.005 | Lum. W (kg): 0.000 |
| Test System: C, γ | Test Step: C=90.0 γ=1.0 | Temp. (°C): 25 | Humidity(%): 50.0 |

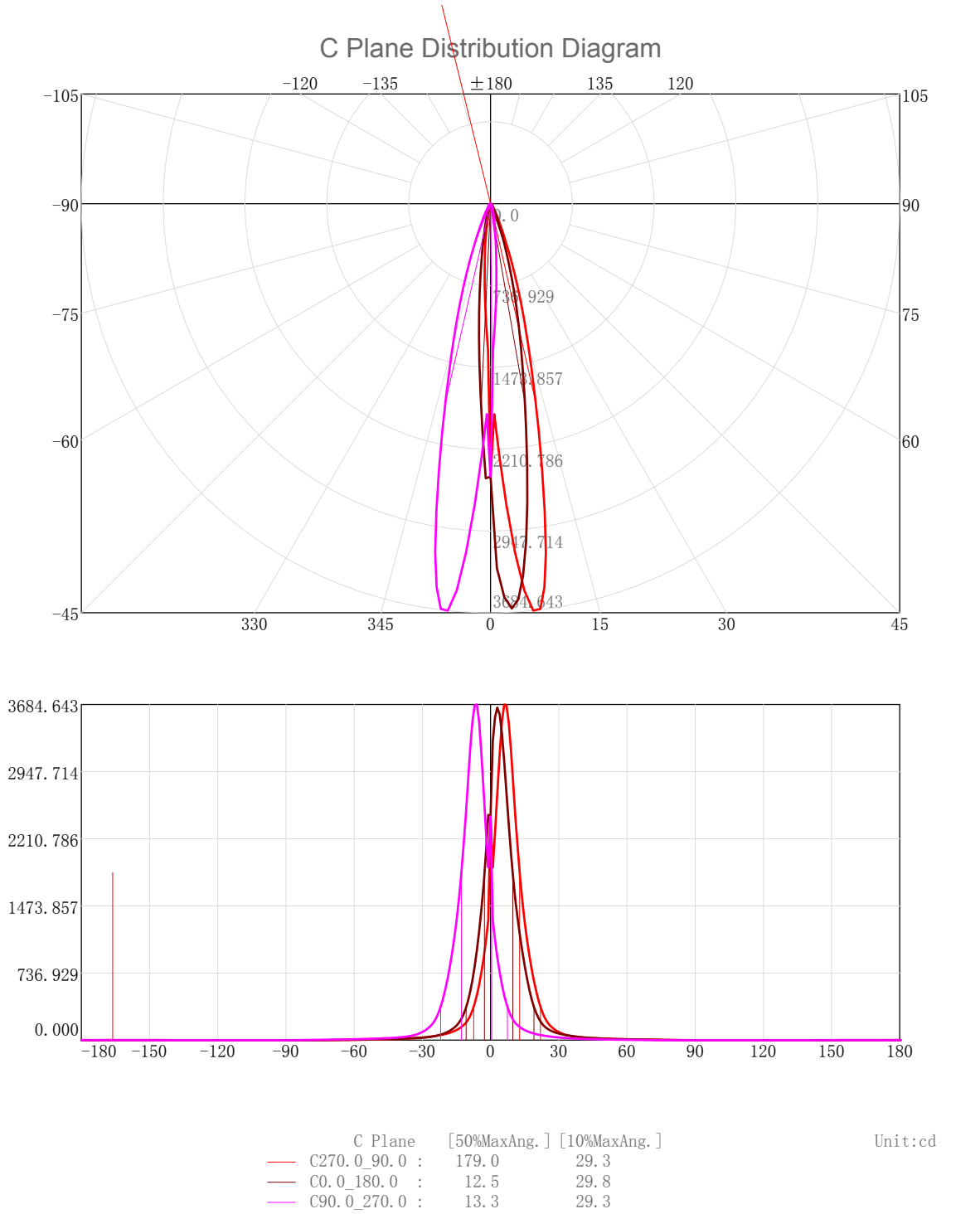
Character Parameter

| Lamp Speciality Parameter | | Luminaire Speciality Parameter | |
|---|----------------------------------|---------------------------------------|--|
| Rated Flux(lm): 457.110 | Luminary Flux(lm): 457.110 | Field Angle(10%Imax): 29.3(°) | |
| Rated Power(W): | Luminary Efficiency: 100.00% | Down Lumens&Percent: 455.797lm 99.71% | |
| Rated Voltage(V): | Luminary EER(lm/W): 73.526 | Up Lumens&Percent: 1.313lm 0.29% | |
| Tested Power(W): 6.217 | Max. Candela(cd): 3684.643 | S/MH: C0_a180=0.297 C90_270=0.288 | |
| Lamps' Inside: 1 | Max Cand@Ang. (°): C=270.0 γ=6.0 | CIE Type: Semi-Direct | |
| Tested Electrics (V, A, pf):240.9, 0.030, 0.845 | Beam Angle(50%Imax): 13.3(°) | ErP ϕ use(90°): 337.265lm | |
| Lamp Size(W*L*H):0.076m*0.076m*0.000m | Left=-0.5°, Right=12.8° | IRF(%): 1375.197 | |



2D Plane Light Intensity Distribution Curve

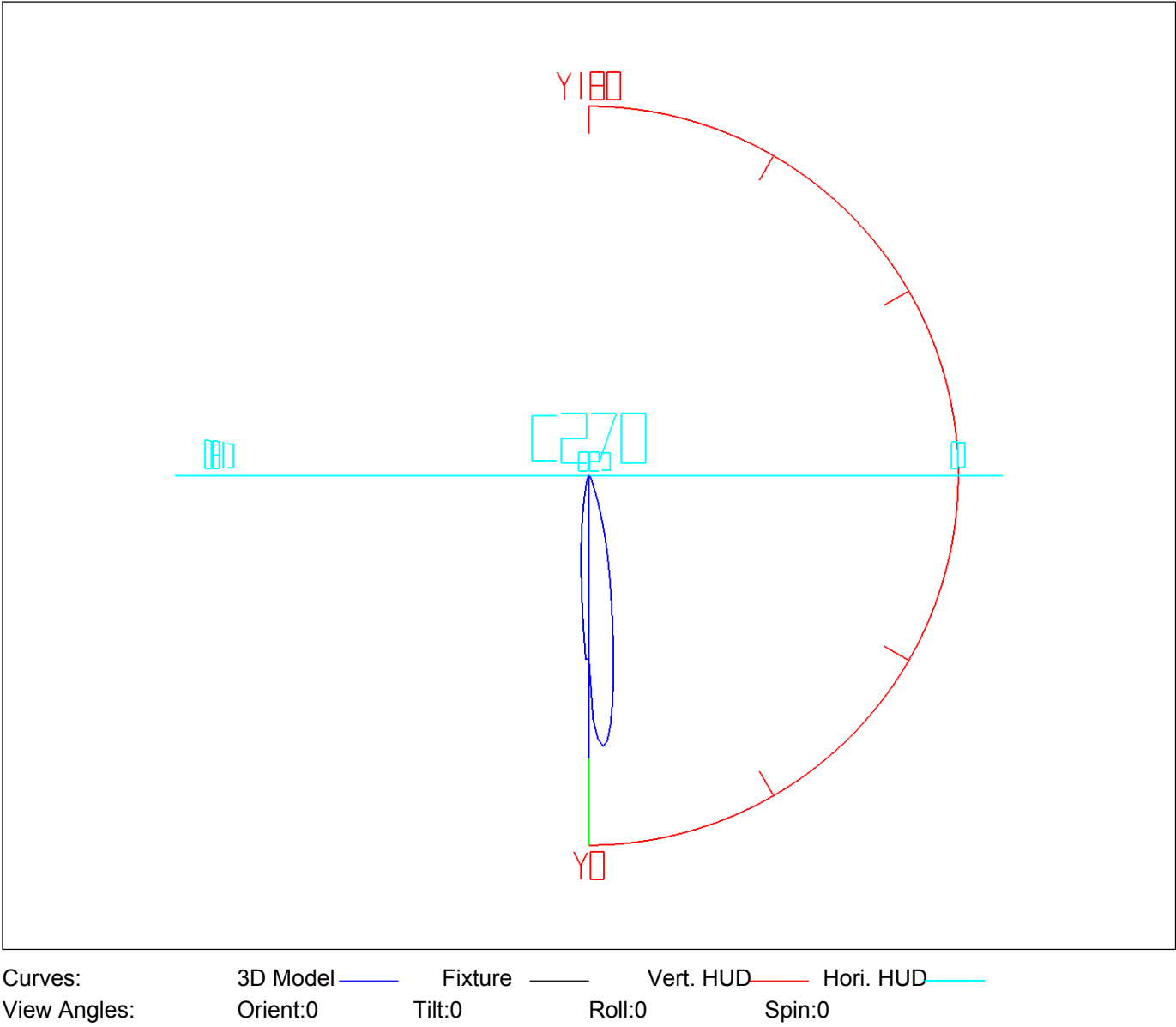
| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-01 2700K RA90 15D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/25 |



3D Light Intensity Distribution Modal

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-01 2700K RA90 15D | 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: 2021/10/25 |

3D Light Intensity Distribution Modal



IES Indoor Report

Photometric Filename:DL52-06-XX-01 2700K RA90 15D.IES

Zonal Flux Tabulation

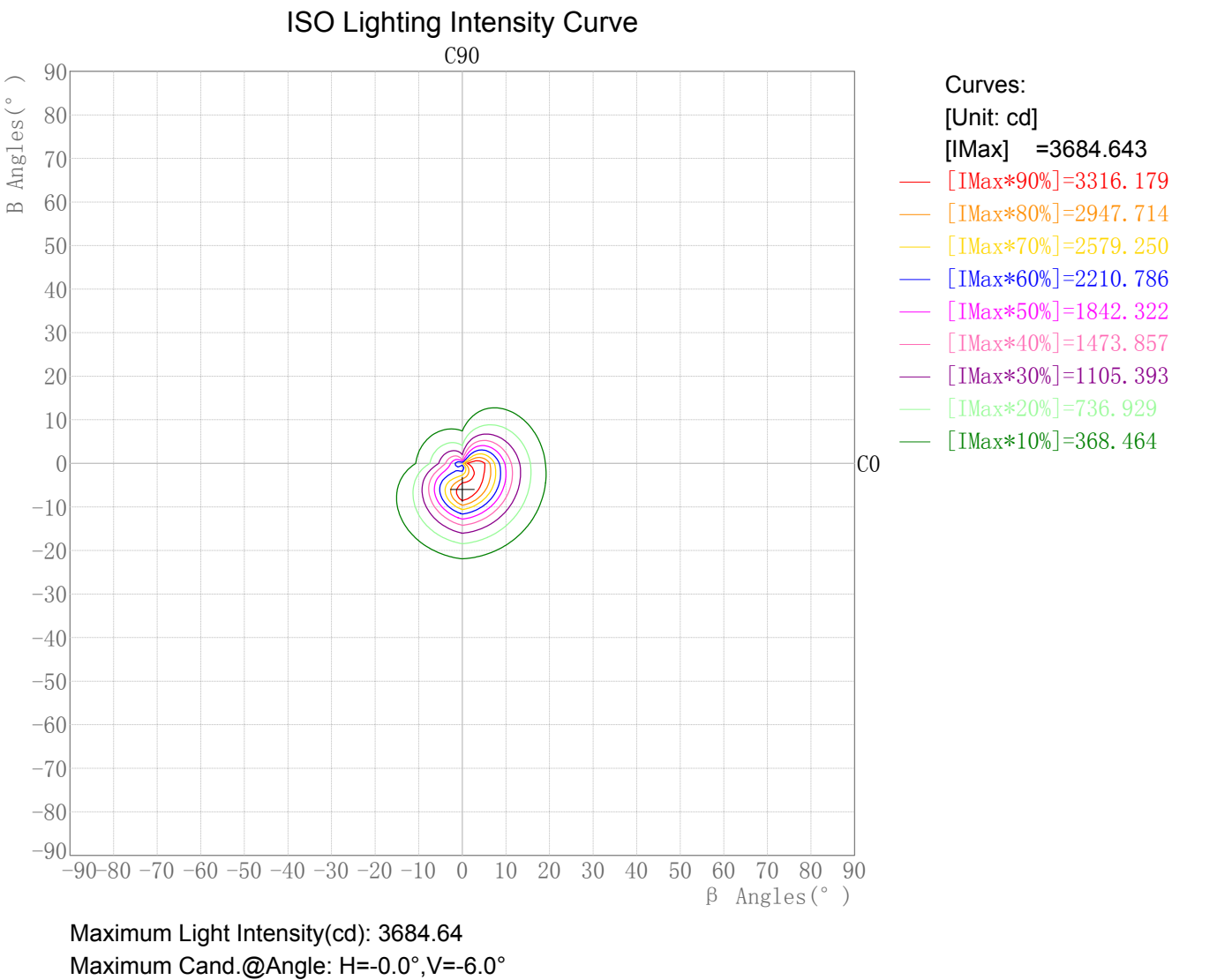
| Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp | Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp |
|-----------|-------------------|-------------------|-----------|-----------|-----------|-------------------|-------------------|-----------|-----------|
| 0.0-1.0 | 2.25 | 2.25 | 0.49 | 0.49 | 47.0-48.0 | 1.26 | 435.22 | 0.27 | 95.21 |
| 1.0-2.0 | 6.45 | 8.69 | 1.41 | 1.90 | 48.0-49.0 | 1.21 | 436.42 | 0.26 | 95.47 |
| 2.0-3.0 | 10.75 | 19.45 | 2.35 | 4.25 | 49.0-50.0 | 1.16 | 437.58 | 0.25 | 95.73 |
| 3.0-4.0 | 14.97 | 34.42 | 3.28 | 7.53 | 50.0-51.0 | 1.11 | 438.69 | 0.24 | 95.97 |
| 4.0-5.0 | 18.89 | 53.31 | 4.13 | 11.66 | 51.0-52.0 | 1.07 | 439.76 | 0.23 | 96.20 |
| 5.0-6.0 | 22.18 | 75.49 | 4.85 | 16.51 | 52.0-53.0 | 1.02 | 440.78 | 0.22 | 96.43 |
| 6.0-7.0 | 24.56 | 100.05 | 5.37 | 21.89 | 53.0-54.0 | 0.98 | 441.76 | 0.21 | 96.64 |
| 7.0-8.0 | 25.84 | 125.89 | 5.65 | 27.54 | 54.0-55.0 | 0.94 | 442.70 | 0.21 | 96.85 |
| 8.0-9.0 | 26.07 | 151.96 | 5.70 | 33.24 | 55.0-56.0 | 0.90 | 443.61 | 0.20 | 97.05 |
| 9.0-10.0 | 25.46 | 177.42 | 5.57 | 38.81 | 56.0-57.0 | 0.86 | 444.47 | 0.19 | 97.24 |
| 10.0-11.0 | 24.26 | 201.68 | 5.31 | 44.12 | 57.0-58.0 | 0.83 | 445.30 | 0.18 | 97.42 |
| 11.0-12.0 | 22.75 | 224.43 | 4.98 | 49.10 | 58.0-59.0 | 0.79 | 446.09 | 0.17 | 97.59 |
| 12.0-13.0 | 21.13 | 245.56 | 4.62 | 53.72 | 59.0-60.0 | 0.76 | 446.85 | 0.17 | 97.75 |
| 13.0-14.0 | 19.48 | 265.04 | 4.26 | 57.98 | 60.0-61.0 | 0.72 | 447.57 | 0.16 | 97.91 |
| 14.0-15.0 | 17.85 | 282.89 | 3.90 | 61.89 | 61.0-62.0 | 0.69 | 448.26 | 0.15 | 98.06 |
| 15.0-16.0 | 16.22 | 299.11 | 3.55 | 65.43 | 62.0-63.0 | 0.66 | 448.91 | 0.14 | 98.21 |
| 16.0-17.0 | 14.60 | 313.71 | 3.19 | 68.63 | 63.0-64.0 | 0.62 | 449.54 | 0.14 | 98.34 |
| 17.0-18.0 | 13.02 | 326.73 | 2.85 | 71.48 | 64.0-65.0 | 0.59 | 450.13 | 0.13 | 98.47 |
| 18.0-19.0 | 11.50 | 338.23 | 2.52 | 73.99 | 65.0-66.0 | 0.56 | 450.69 | 0.12 | 98.60 |
| 19.0-20.0 | 10.06 | 348.29 | 2.20 | 76.19 | 66.0-67.0 | 0.53 | 451.21 | 0.12 | 98.71 |
| 20.0-21.0 | 8.73 | 357.02 | 1.91 | 78.10 | 67.0-68.0 | 0.49 | 451.71 | 0.11 | 98.82 |
| 21.0-22.0 | 7.56 | 364.58 | 1.65 | 79.76 | 68.0-69.0 | 0.46 | 452.17 | 0.10 | 98.92 |
| 22.0-23.0 | 6.57 | 371.16 | 1.44 | 81.20 | 69.0-70.0 | 0.43 | 452.60 | 0.09 | 99.01 |
| 23.0-24.0 | 5.75 | 376.91 | 1.26 | 82.45 | 70.0-71.0 | 0.40 | 453.00 | 0.09 | 99.10 |
| 24.0-25.0 | 5.08 | 381.99 | 1.11 | 83.57 | 71.0-72.0 | 0.36 | 453.36 | 0.08 | 99.18 |
| 25.0-26.0 | 4.55 | 386.54 | 0.99 | 84.56 | 72.0-73.0 | 0.33 | 453.69 | 0.07 | 99.25 |
| 26.0-27.0 | 4.11 | 390.65 | 0.90 | 85.46 | 73.0-74.0 | 0.30 | 453.99 | 0.07 | 99.32 |
| 27.0-28.0 | 3.75 | 394.40 | 0.82 | 86.28 | 74.0-75.0 | 0.27 | 454.26 | 0.06 | 99.38 |
| 28.0-29.0 | 3.44 | 397.83 | 0.75 | 87.03 | 75.0-76.0 | 0.24 | 454.50 | 0.05 | 99.43 |
| 29.0-30.0 | 3.17 | 401.00 | 0.69 | 87.73 | 76.0-77.0 | 0.21 | 454.71 | 0.05 | 99.48 |
| 30.0-31.0 | 2.94 | 403.94 | 0.64 | 88.37 | 77.0-78.0 | 0.19 | 454.90 | 0.04 | 99.52 |
| 31.0-32.0 | 2.73 | 406.67 | 0.60 | 88.97 | 78.0-79.0 | 0.17 | 455.07 | 0.04 | 99.55 |
| 32.0-33.0 | 2.56 | 409.23 | 0.56 | 89.53 | 79.0-80.0 | 0.15 | 455.21 | 0.03 | 99.59 |
| 33.0-34.0 | 2.40 | 411.63 | 0.53 | 90.05 | 80.0-81.0 | 0.13 | 455.34 | 0.03 | 99.61 |
| 34.0-35.0 | 2.26 | 413.90 | 0.50 | 90.55 | 81.0-82.0 | 0.11 | 455.45 | 0.02 | 99.64 |
| 35.0-36.0 | 2.14 | 416.04 | 0.47 | 91.01 | 82.0-83.0 | 0.09 | 455.55 | 0.02 | 99.66 |
| 36.0-37.0 | 2.03 | 418.07 | 0.44 | 91.46 | 83.0-84.0 | 0.08 | 455.62 | 0.02 | 99.67 |
| 37.0-38.0 | 1.93 | 420.00 | 0.42 | 91.88 | 84.0-85.0 | 0.06 | 455.68 | 0.01 | 99.69 |
| 38.0-39.0 | 1.84 | 421.84 | 0.40 | 92.28 | 85.0-86.0 | 0.05 | 455.73 | 0.01 | 99.70 |
| 39.0-40.0 | 1.75 | 423.59 | 0.38 | 92.67 | 86.0-87.0 | 0.03 | 455.76 | 0.01 | 99.70 |
| 40.0-41.0 | 1.67 | 425.26 | 0.37 | 93.03 | 87.0-88.0 | 0.02 | 455.78 | 0.00 | 99.71 |
| 41.0-42.0 | 1.60 | 426.87 | 0.35 | 93.38 | 88.0-89.0 | 0.01 | 455.79 | 0.00 | 99.71 |
| 42.0-43.0 | 1.54 | 428.40 | 0.34 | 93.72 | 89.0-90.0 | 0.01 | 455.80 | 0.00 | 99.71 |
| 43.0-44.0 | 1.47 | 429.88 | 0.32 | 94.04 | 90.0-91.0 | 0.00 | 455.80 | 0.00 | 99.71 |
| 44.0-45.0 | 1.42 | 431.29 | 0.31 | 94.35 | 91.0-92.0 | 0.00 | 455.80 | 0.00 | 99.71 |
| 45.0-46.0 | 1.36 | 432.65 | 0.30 | 94.65 | 92.0-93.0 | 0.00 | 455.80 | 0.00 | 99.71 |
| 46.0-47.0 | 1.31 | 433.96 | 0.29 | 94.94 | 93.0-94.0 | 0.00 | 455.80 | 0.00 | 99.71 |

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 | 455.80 | 0.00 | 99.71 | 141.0-142.0 | 0.02 | 455.86 | 0.01 | 99.73 |
| 95.0-96.0 | 0.00 | 455.80 | 0.00 | 99.71 | 142.0-143.0 | 0.03 | 455.89 | 0.01 | 99.73 |
| 96.0-97.0 | 0.00 | 455.80 | 0.00 | 99.71 | 143.0-144.0 | 0.03 | 455.92 | 0.01 | 99.74 |
| 97.0-98.0 | 0.00 | 455.80 | 0.00 | 99.71 | 144.0-145.0 | 0.03 | 455.95 | 0.01 | 99.75 |
| 98.0-99.0 | 0.00 | 455.80 | 0.00 | 99.71 | 145.0-146.0 | 0.03 | 455.98 | 0.01 | 99.75 |
| 99.0-100.0 | 0.00 | 455.80 | 0.00 | 99.71 | 146.0-147.0 | 0.03 | 456.01 | 0.01 | 99.76 |
| 100.0-101.0 | 0.00 | 455.80 | 0.00 | 99.71 | 147.0-148.0 | 0.03 | 456.05 | 0.01 | 99.77 |
| 101.0-102.0 | 0.00 | 455.80 | 0.00 | 99.71 | 148.0-149.0 | 0.04 | 456.09 | 0.01 | 99.78 |
| 102.0-103.0 | 0.00 | 455.80 | 0.00 | 99.71 | 149.0-150.0 | 0.04 | 456.13 | 0.01 | 99.79 |
| 103.0-104.0 | 0.00 | 455.80 | 0.00 | 99.71 | 150.0-151.0 | 0.05 | 456.18 | 0.01 | 99.80 |
| 104.0-105.0 | 0.00 | 455.80 | 0.00 | 99.71 | 151.0-152.0 | 0.05 | 456.23 | 0.01 | 99.81 |
| 105.0-106.0 | 0.00 | 455.80 | 0.00 | 99.71 | 152.0-153.0 | 0.05 | 456.28 | 0.01 | 99.82 |
| 106.0-107.0 | 0.00 | 455.80 | 0.00 | 99.71 | 153.0-154.0 | 0.05 | 456.33 | 0.01 | 99.83 |
| 107.0-108.0 | 0.00 | 455.80 | 0.00 | 99.71 | 154.0-155.0 | 0.05 | 456.39 | 0.01 | 99.84 |
| 108.0-109.0 | 0.00 | 455.80 | 0.00 | 99.71 | 155.0-156.0 | 0.05 | 456.44 | 0.01 | 99.85 |
| 109.0-110.0 | 0.00 | 455.80 | 0.00 | 99.71 | 156.0-157.0 | 0.05 | 456.49 | 0.01 | 99.86 |
| 110.0-111.0 | 0.00 | 455.80 | 0.00 | 99.71 | 157.0-158.0 | 0.05 | 456.54 | 0.01 | 99.88 |
| 111.0-112.0 | 0.00 | 455.80 | 0.00 | 99.71 | 158.0-159.0 | 0.05 | 456.59 | 0.01 | 99.89 |
| 112.0-113.0 | 0.00 | 455.80 | 0.00 | 99.71 | 159.0-160.0 | 0.05 | 456.64 | 0.01 | 99.90 |
| 113.0-114.0 | 0.00 | 455.80 | 0.00 | 99.71 | 160.0-161.0 | 0.05 | 456.69 | 0.01 | 99.91 |
| 114.0-115.0 | 0.00 | 455.80 | 0.00 | 99.71 | 161.0-162.0 | 0.05 | 456.73 | 0.01 | 99.92 |
| 115.0-116.0 | 0.00 | 455.80 | 0.00 | 99.71 | 162.0-163.0 | 0.04 | 456.78 | 0.01 | 99.93 |
| 116.0-117.0 | 0.00 | 455.80 | 0.00 | 99.71 | 163.0-164.0 | 0.04 | 456.82 | 0.01 | 99.94 |
| 117.0-118.0 | 0.00 | 455.80 | 0.00 | 99.71 | 164.0-165.0 | 0.04 | 456.86 | 0.01 | 99.94 |
| 118.0-119.0 | 0.00 | 455.80 | 0.00 | 99.71 | 165.0-166.0 | 0.04 | 456.89 | 0.01 | 99.95 |
| 119.0-120.0 | 0.00 | 455.80 | 0.00 | 99.71 | 166.0-167.0 | 0.03 | 456.93 | 0.01 | 99.96 |
| 120.0-121.0 | 0.00 | 455.80 | 0.00 | 99.71 | 167.0-168.0 | 0.03 | 456.96 | 0.01 | 99.97 |
| 121.0-122.0 | 0.00 | 455.80 | 0.00 | 99.71 | 168.0-169.0 | 0.03 | 456.98 | 0.01 | 99.97 |
| 122.0-123.0 | 0.00 | 455.80 | 0.00 | 99.71 | 169.0-170.0 | 0.02 | 457.01 | 0.01 | 99.98 |
| 123.0-124.0 | 0.00 | 455.80 | 0.00 | 99.71 | 170.0-171.0 | 0.02 | 457.03 | 0.00 | 99.98 |
| 124.0-125.0 | 0.00 | 455.80 | 0.00 | 99.71 | 171.0-172.0 | 0.02 | 457.05 | 0.00 | 99.99 |
| 125.0-126.0 | 0.00 | 455.80 | 0.00 | 99.71 | 172.0-173.0 | 0.02 | 457.06 | 0.00 | 99.99 |
| 126.0-127.0 | 0.00 | 455.80 | 0.00 | 99.71 | 173.0-174.0 | 0.01 | 457.08 | 0.00 | 99.99 |
| 127.0-128.0 | 0.00 | 455.80 | 0.00 | 99.71 | 174.0-175.0 | 0.01 | 457.09 | 0.00 | 99.99 |
| 128.0-129.0 | 0.00 | 455.80 | 0.00 | 99.71 | 175.0-176.0 | 0.01 | 457.10 | 0.00 | 100.00 |
| 129.0-130.0 | 0.00 | 455.80 | 0.00 | 99.71 | 176.0-177.0 | 0.01 | 457.10 | 0.00 | 100.00 |
| 130.0-131.0 | 0.00 | 455.80 | 0.00 | 99.71 | 177.0-178.0 | 0.00 | 457.11 | 0.00 | 100.00 |
| 131.0-132.0 | 0.00 | 455.80 | 0.00 | 99.71 | 178.0-179.0 | 0.00 | 457.11 | 0.00 | 100.00 |
| 132.0-133.0 | 0.00 | 455.80 | 0.00 | 99.71 | 179.0-180.0 | 0.00 | 457.11 | 0.00 | 100.00 |
| 133.0-134.0 | 0.00 | 455.80 | 0.00 | 99.71 | | | | | |
| 134.0-135.0 | 0.00 | 455.80 | 0.00 | 99.71 | | | | | |
| 135.0-136.0 | 0.00 | 455.80 | 0.00 | 99.71 | | | | | |
| 136.0-137.0 | 0.00 | 455.80 | 0.00 | 99.71 | | | | | |
| 137.0-138.0 | 0.00 | 455.80 | 0.00 | 99.71 | | | | | |
| 138.0-139.0 | 0.01 | 455.80 | 0.00 | 99.71 | | | | | |
| 139.0-140.0 | 0.01 | 455.82 | 0.00 | 99.72 | | | | | |
| 140.0-141.0 | 0.02 | 455.84 | 0.00 | 99.72 | | | | | |

Rectangle ISO Lighting Intensity Diagram

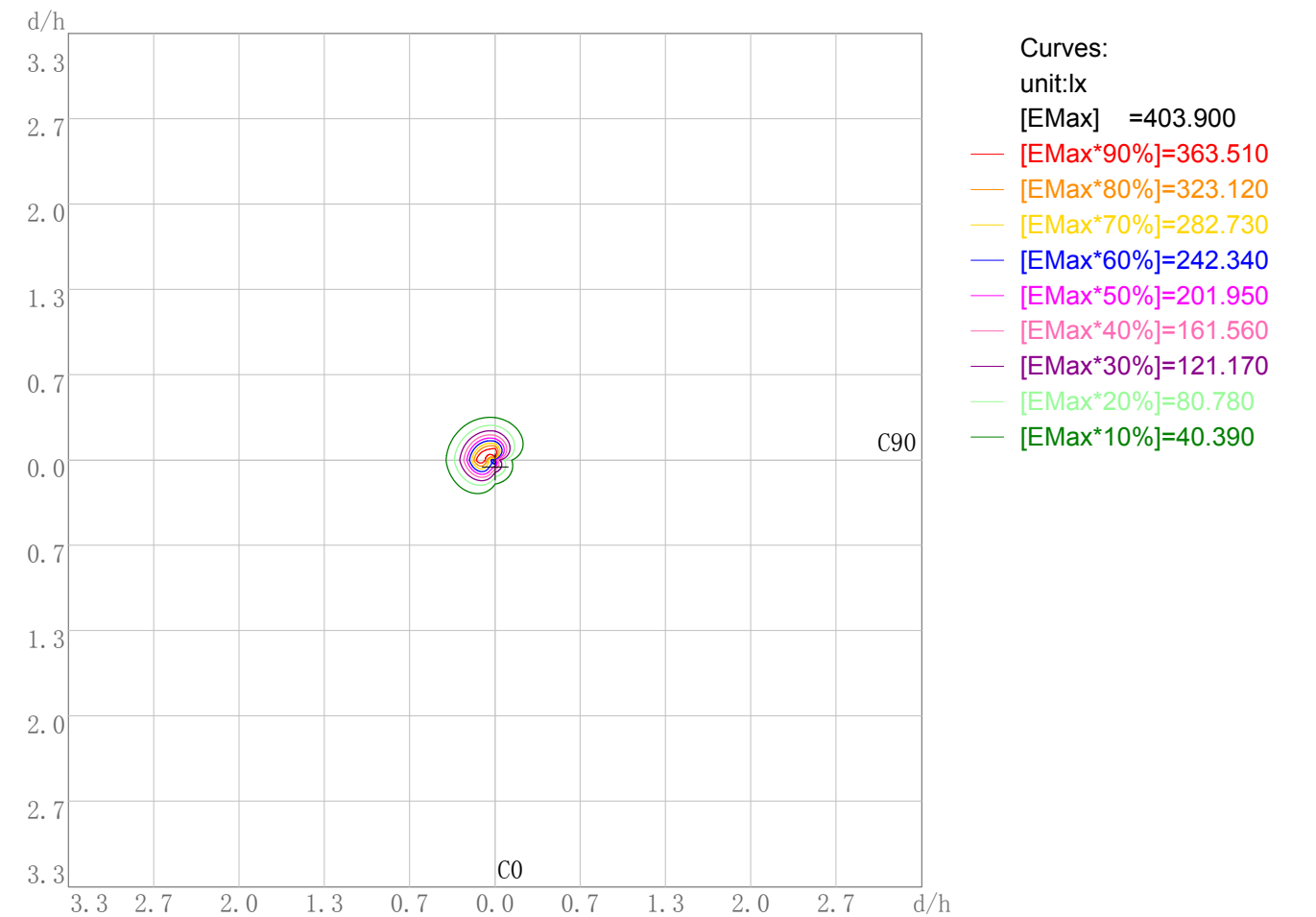
| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-01 2700K RA90 15D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/25 |



Plane ISO-Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-01 2700K RA90 15D | 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: 2021/10/25 |

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00

Working Plane Maximum Illuminance(lx): 403.90

Working Plane Maximum Illuminance Position(d/h):H0.0 V0.1

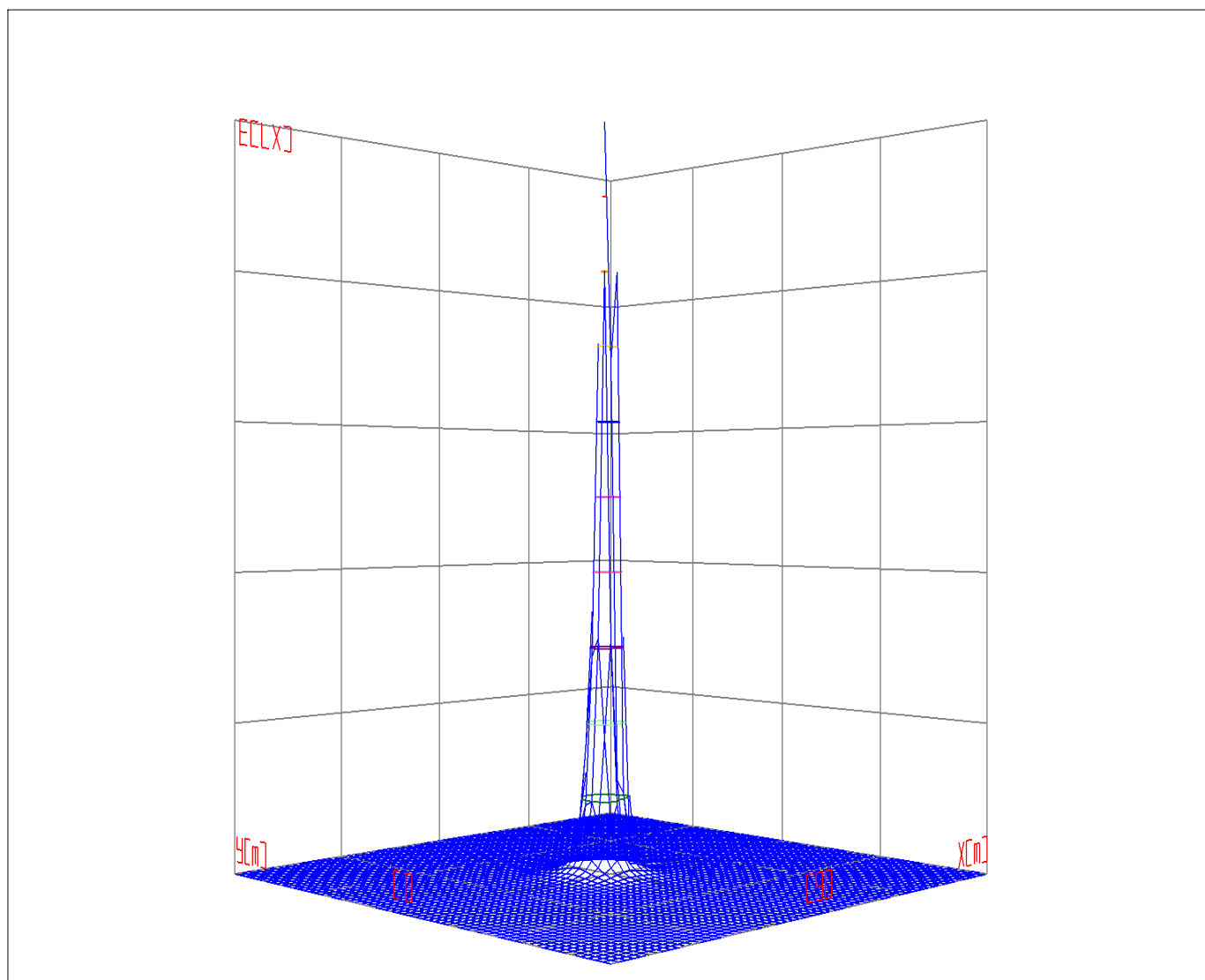
IES Indoor Report

Photometric Filename:DL52-06-XX-01 2700K RA90 15D.IES

3D Plane ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-01 2700K RA90 15D | 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: 2021/10/25 |

3D Plane Illuminance Modal

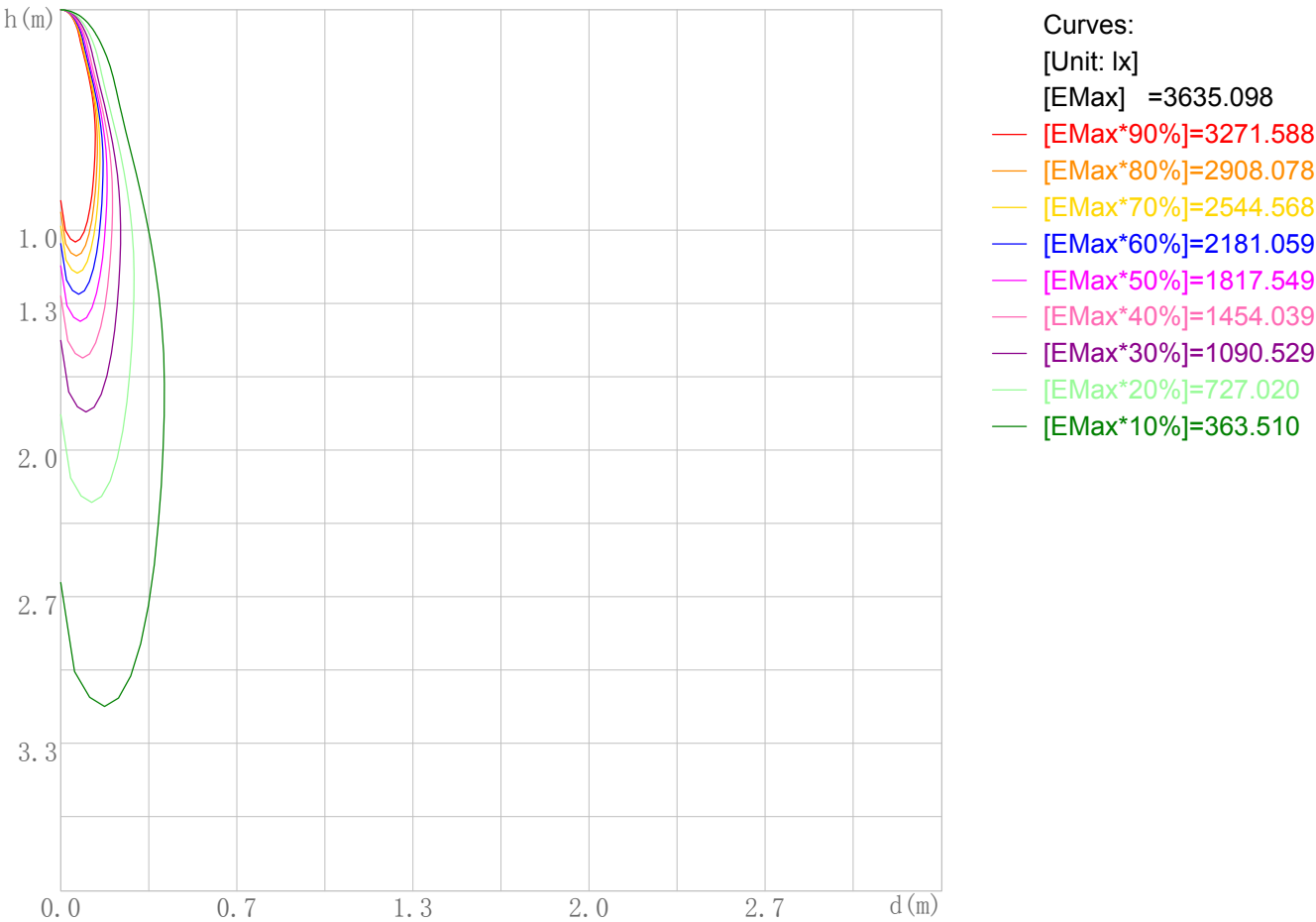


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-01 2700K RA90 15D | 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: 2021/10/25 |

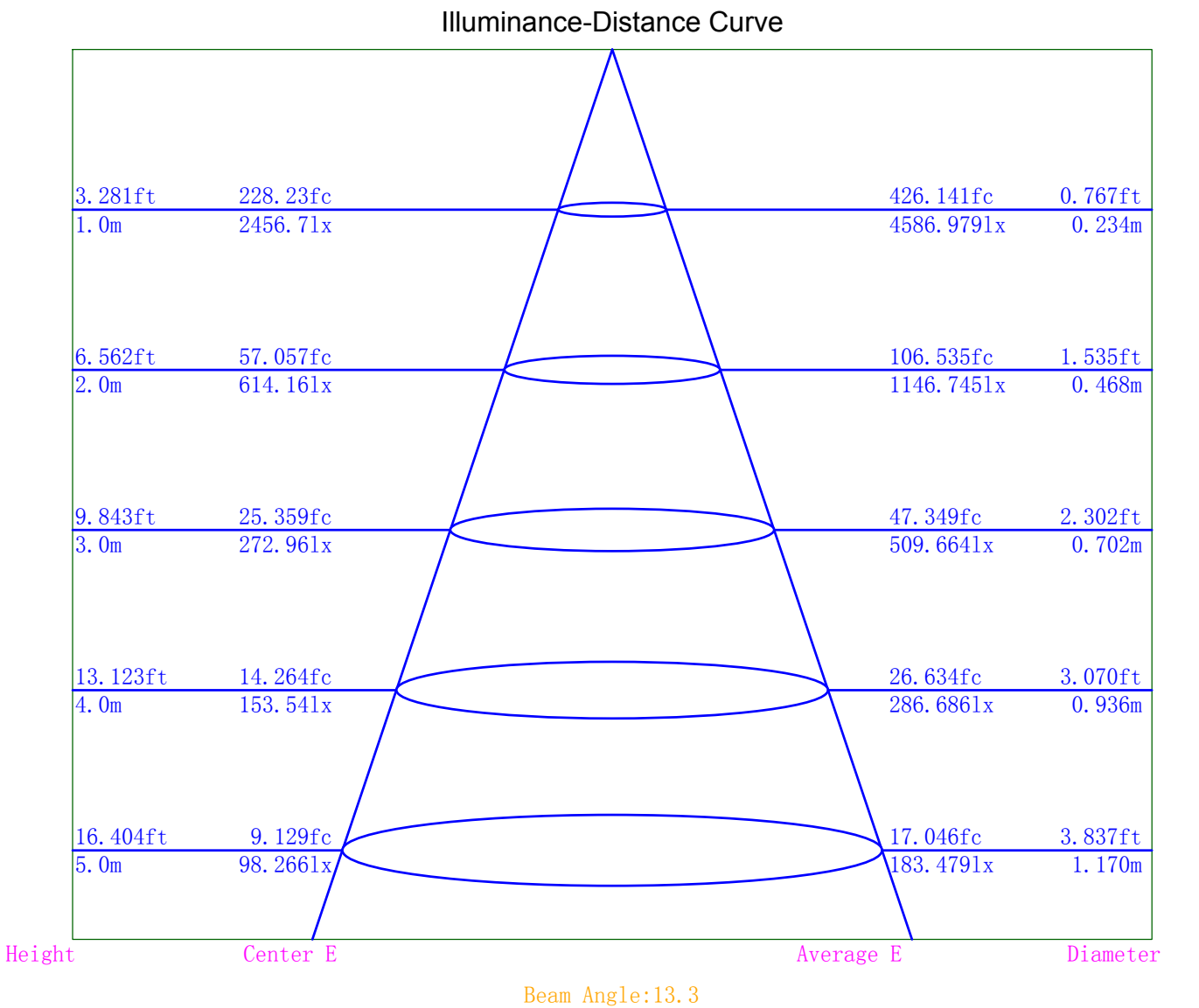
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:3635.10lx,3.0deg
Plane Maximum Lighting Intensity and @Angle:3650.084cd,0deg

Illuminance-Distance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-01 2700K RA90 15D | 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: 2021/10/25 |



Indoor Luminance Limiting Curves

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-01 2700K RA90 15D | 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: 2021/10/25 |

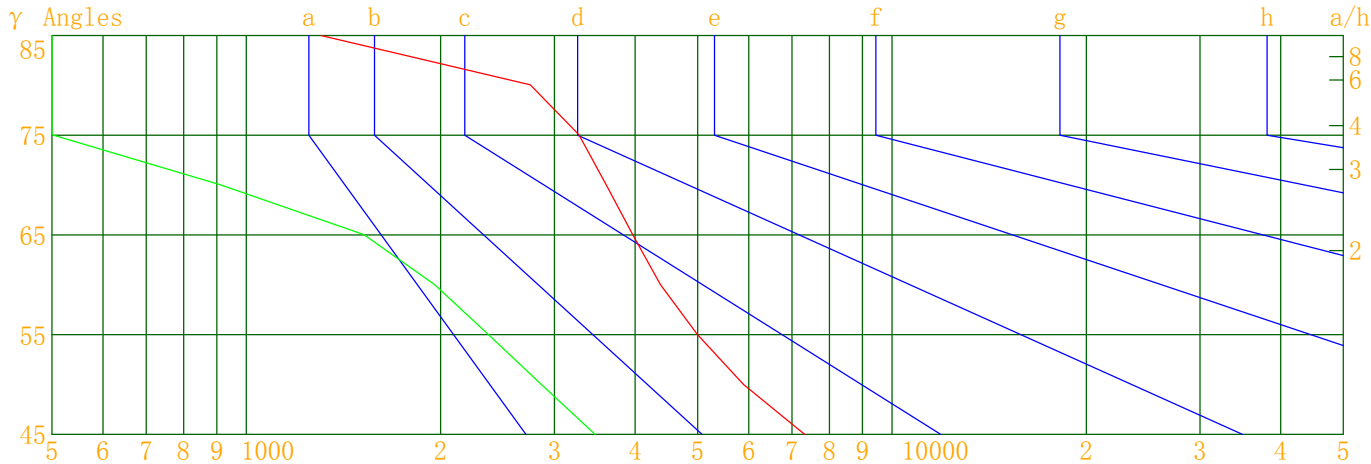
Glare Grade Table

| 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 | 7324 | 5889 | 4995 | 4377 | 3967 | 3609 | 3274 | 2753 | 1305 |
| C90 | 3469 | 2863 | 2370 | 1957 | 1521 | 911 | 0 | 0 | 0 |

Luminance Limiting Curve



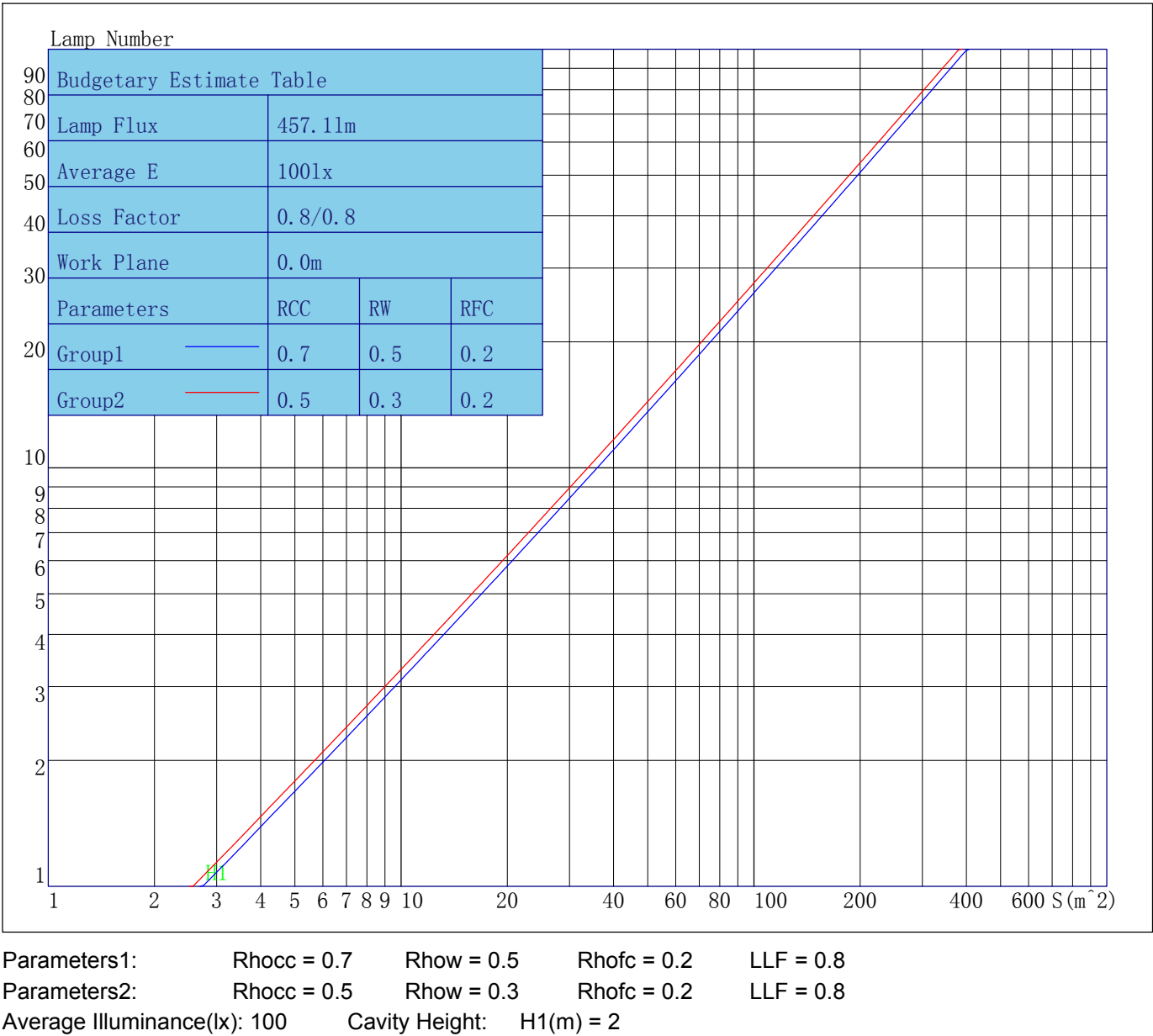
Luminous Size: Length(m)=-0.076 Width(m)=-0.076 Height(m)=0.000 Area(m^2)=0.004536

Luminous Type: Without Luminous Side

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

Indoor Budgetary Estimate Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-01 2700K RA90 15D | 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: 2021/10/25 |



Indoor Coefficient of Utilization Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-01 2700K RA90 15D | 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: 2021/10/25 |

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

Unified Glare Rating Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-01 2700K RA90 15D | 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: 2021/10/25 |

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 | 12.6 | 14.0 | 13.0 | 14.3 | 14.6 | 8.5 | 9.9 | 8.9 | 10.2 | 10.5 |
| | 13.4 | 14.7 | 13.8 | 15.0 | 15.4 | 8.8 | 10.1 | 9.2 | 10.4 | 10.8 |
| | 13.8 | 15.0 | 14.2 | 15.3 | 15.7 | 8.7 | 9.9 | 9.1 | 10.3 | 10.7 |
| | 14.0 | 15.1 | 14.4 | 15.5 | 15.9 | 8.6 | 9.8 | 9.1 | 10.1 | 10.5 |
| | 14.1 | 15.1 | 14.5 | 15.5 | 15.9 | 8.6 | 9.7 | 9.0 | 10.1 | 10.5 |
| | 14.1 | 15.1 | 14.5 | 15.5 | 15.9 | 8.5 | 9.6 | 9.0 | 10.0 | 10.4 |
| X=4H Y=2H | 12.8 | 14.0 | 13.2 | 14.4 | 14.8 | 8.9 | 10.1 | 9.3 | 10.5 | 10.9 |
| | 13.8 | 14.9 | 14.2 | 15.3 | 15.7 | 9.3 | 10.4 | 9.7 | 10.8 | 11.2 |
| | 14.3 | 15.3 | 14.7 | 15.7 | 16.1 | 9.2 | 10.3 | 9.7 | 10.7 | 11.1 |
| | 14.6 | 15.5 | 15.0 | 16.0 | 16.4 | 9.2 | 10.1 | 9.6 | 10.5 | 11.0 |
| | 14.7 | 15.5 | 15.1 | 16.0 | 16.5 | 9.1 | 10.0 | 9.6 | 10.4 | 10.9 |
| | 14.7 | 15.5 | 15.2 | 16.0 | 16.4 | 9.0 | 9.9 | 9.5 | 10.4 | 10.8 |
| X=8H Y=4H | 14.3 | 15.2 | 14.8 | 15.7 | 16.1 | 9.3 | 10.2 | 9.8 | 10.6 | 11.1 |
| | 14.7 | 15.5 | 15.2 | 16.0 | 16.6 | 9.2 | 10.0 | 9.7 | 10.5 | 11.1 |
| | 14.8 | 15.6 | 15.3 | 16.1 | 16.6 | 9.2 | 9.9 | 9.7 | 10.4 | 10.9 |
| | 14.9 | 15.6 | 15.4 | 16.1 | 16.6 | 9.1 | 9.8 | 9.6 | 10.3 | 10.9 |
| X=12H Y=4H | 14.3 | 15.1 | 14.8 | 15.6 | 16.1 | 9.3 | 10.1 | 9.8 | 10.6 | 11.1 |
| | 14.7 | 15.5 | 15.3 | 16.0 | 16.5 | 9.2 | 10.0 | 9.7 | 10.4 | 11.0 |
| | 14.9 | 15.6 | 15.4 | 16.1 | 16.6 | 9.2 | 9.9 | 9.7 | 10.4 | 10.9 |
| Variations with the objerver position at spacings | | | | | | | | | | |
| S=1.0H | 0.6/-0.7 | | | | | 1.2/-1.4 | | | | |
| S=1.5H | 1.0/-1.2 | | | | | 2.4/-2.7 | | | | |
| S=2.0H | 1.3/-1.5 | | | | | 3.5/-5.5 | | | | |
| Reduced UGR Table: | | | | | | | | | | |
| Nordic Standard Table: | BK0 | | | | | BK0 | | | | |
| Correction Value | 1.7 | | | | | 0.9 | | | | |

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

IES Indoor Report

Photometric Filename:DL52-06-XX-01 2700K RA90 15D.IES

Candela Tabulation

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|--------|---------|---------|---------|---------|
| γ 0.0 | 2456.65 | 2456.65 | 2456.65 | 2456.65 |
| γ 1.0 | 3282.15 | 1318.82 | 2473.12 | 1896.38 |
| γ 2.0 | 3546.02 | 1098.72 | 2069.11 | 2278.35 |
| γ 3.0 | 3650.08 | 909.09 | 1723.19 | 2712.10 |
| γ 4.0 | 3574.32 | 745.93 | 1433.47 | 3144.82 |
| γ 5.0 | 3362.41 | 607.50 | 1193.54 | 3497.75 |
| γ 6.0 | 3059.90 | 493.88 | 985.43 | 3684.64 |
| γ 7.0 | 2717.25 | 400.55 | 807.24 | 3676.63 |
| γ 8.0 | 2373.72 | 324.71 | 654.43 | 3488.29 |
| γ 9.0 | 2050.98 | 265.19 | 528.40 | 3182.73 |
| γ 10.0 | 1770.26 | 220.18 | 425.43 | 2809.51 |
| γ 11.0 | 1525.12 | 186.60 | 341.71 | 2432.54 |
| γ 12.0 | 1317.20 | 161.07 | 275.80 | 2086.40 |
| γ 13.0 | 1132.15 | 140.85 | 225.88 | 1781.70 |
| γ 14.0 | 969.72 | 124.53 | 188.77 | 1523.91 |
| γ 15.0 | 819.78 | 111.18 | 160.07 | 1301.78 |
| γ 16.0 | 684.90 | 99.77 | 137.54 | 1112.29 |
| γ 17.0 | 563.57 | 89.78 | 119.12 | 943.69 |
| γ 18.0 | 459.97 | 81.41 | 103.90 | 797.00 |
| γ 19.0 | 372.81 | 73.89 | 90.65 | 664.81 |
| γ 20.0 | 303.09 | 67.43 | 79.37 | 545.93 |
| γ 21.0 | 247.07 | 61.69 | 69.13 | 444.88 |
| γ 22.0 | 203.73 | 56.71 | 60.62 | 361.96 |
| γ 23.0 | 170.69 | 52.21 | 53.39 | 294.02 |
| γ 24.0 | 145.92 | 48.21 | 47.59 | 240.22 |
| γ 25.0 | 126.90 | 44.69 | 42.64 | 198.28 |
| γ 26.0 | 111.61 | 41.34 | 38.66 | 166.34 |
| γ 27.0 | 99.39 | 38.07 | 35.34 | 141.30 |
| γ 28.0 | 89.20 | 35.08 | 32.56 | 121.01 |
| γ 29.0 | 80.80 | 32.43 | 30.32 | 104.01 |
| γ 30.0 | 73.56 | 30.06 | 28.37 | 90.00 |
| γ 31.0 | 67.46 | 27.92 | 26.63 | 78.27 |
| γ 32.0 | 62.02 | 25.93 | 25.14 | 68.46 |
| γ 33.0 | 57.19 | 24.17 | 23.95 | 60.33 |
| γ 34.0 | 52.75 | 22.51 | 22.88 | 53.56 |
| γ 35.0 | 48.88 | 21.02 | 21.92 | 48.05 |
| γ 36.0 | 45.19 | 19.64 | 20.95 | 43.43 |
| γ 37.0 | 41.87 | 18.40 | 20.02 | 39.64 |
| γ 38.0 | 38.74 | 17.22 | 19.01 | 36.40 |
| γ 39.0 | 35.91 | 16.13 | 18.09 | 33.79 |
| γ 40.0 | 33.31 | 15.11 | 17.14 | 31.51 |
| γ 41.0 | 31.00 | 14.16 | 16.26 | 29.60 |
| γ 42.0 | 28.86 | 13.31 | 15.37 | 27.93 |
| γ 43.0 | 26.88 | 12.53 | 14.52 | 26.52 |
| γ 44.0 | 25.14 | 11.80 | 13.70 | 25.21 |
| γ 45.0 | 23.49 | 11.13 | 12.95 | 24.01 |
| γ 46.0 | 22.02 | 10.48 | 12.22 | 22.83 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|--------|-------|-------|--------|--------|
| γ 47.0 | 20.66 | 9.91 | 11.56 | 21.71 |
| γ 48.0 | 19.41 | 9.36 | 10.96 | 20.62 |
| γ 49.0 | 18.24 | 8.85 | 10.40 | 19.61 |
| γ 50.0 | 17.17 | 8.35 | 9.87 | 18.64 |
| γ 51.0 | 16.16 | 7.86 | 9.35 | 17.69 |
| γ 52.0 | 15.27 | 7.42 | 8.89 | 16.79 |
| γ 53.0 | 14.44 | 6.97 | 8.41 | 15.90 |
| γ 54.0 | 13.70 | 6.57 | 7.98 | 15.10 |
| γ 55.0 | 13.00 | 6.17 | 7.55 | 14.33 |
| γ 56.0 | 12.29 | 5.81 | 7.14 | 13.63 |
| γ 57.0 | 11.62 | 5.46 | 6.73 | 12.93 |
| γ 58.0 | 11.01 | 5.11 | 6.34 | 12.31 |
| γ 59.0 | 10.44 | 4.77 | 5.97 | 11.71 |
| γ 60.0 | 9.93 | 4.44 | 5.61 | 11.17 |
| γ 61.0 | 9.42 | 4.12 | 5.25 | 10.64 |
| γ 62.0 | 8.94 | 3.80 | 4.91 | 10.15 |
| γ 63.0 | 8.48 | 3.50 | 4.54 | 9.67 |
| γ 64.0 | 8.03 | 3.20 | 4.20 | 9.22 |
| γ 65.0 | 7.61 | 2.92 | 3.86 | 8.77 |
| γ 66.0 | 7.18 | 2.61 | 3.52 | 8.35 |
| γ 67.0 | 6.78 | 2.29 | 3.19 | 7.93 |
| γ 68.0 | 6.38 | 1.97 | 2.89 | 7.52 |
| γ 69.0 | 5.99 | 1.67 | 2.60 | 7.14 |
| γ 70.0 | 5.60 | 1.41 | 2.29 | 6.73 |
| γ 71.0 | 5.24 | 1.15 | 1.99 | 6.33 |
| γ 72.0 | 4.86 | 0.83 | 1.67 | 5.93 |
| γ 73.0 | 4.51 | 0.51 | 1.41 | 5.53 |
| γ 74.0 | 4.17 | 0.25 | 1.17 | 5.15 |
| γ 75.0 | 3.84 | 0.00 | 0.94 | 4.77 |
| γ 76.0 | 3.49 | 0.00 | 0.63 | 4.40 |
| γ 77.0 | 3.14 | 0.00 | 0.35 | 4.06 |
| γ 78.0 | 2.75 | 0.00 | 0.10 | 3.72 |
| γ 79.0 | 2.44 | 0.00 | 0.00 | 3.36 |
| γ 80.0 | 2.17 | 0.00 | 0.00 | 2.97 |
| γ 81.0 | 1.78 | 0.00 | 0.00 | 2.63 |
| γ 82.0 | 1.43 | 0.00 | 0.00 | 2.30 |
| γ 83.0 | 1.14 | 0.00 | 0.00 | 1.99 |
| γ 84.0 | 0.81 | 0.00 | 0.00 | 1.72 |
| γ 85.0 | 0.52 | 0.00 | 0.00 | 1.44 |
| γ 86.0 | 0.24 | 0.00 | 0.00 | 1.13 |
| γ 87.0 | 0.00 | 0.00 | 0.00 | 0.83 |
| γ 88.0 | 0.00 | 0.00 | 0.00 | 0.60 |
| γ 89.0 | 0.00 | 0.00 | 0.00 | 0.34 |
| γ 90.0 | 0.00 | 0.00 | 0.00 | 0.03 |
| 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 |

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 | 0.14 | 0.00 |
| γ 139.0 | 0.00 | 0.06 | 0.42 | 0.00 |
| γ 140.0 | 0.00 | 0.24 | 0.69 | 0.00 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 141.0 | 0.00 | 0.39 | 0.90 | 0.00 |
| γ 142.0 | 0.00 | 0.52 | 1.04 | 0.00 |
| γ 143.0 | 0.00 | 0.63 | 1.12 | 0.00 |
| γ 144.0 | 0.00 | 0.73 | 1.16 | 0.00 |
| γ 145.0 | 0.00 | 0.81 | 1.20 | 0.00 |
| γ 146.0 | 0.00 | 0.88 | 1.22 | 0.00 |
| γ 147.0 | 0.00 | 0.93 | 1.25 | 0.00 |
| γ 148.0 | 0.00 | 0.96 | 1.27 | 0.25 |
| γ 149.0 | 0.16 | 0.99 | 1.31 | 0.51 |
| γ 150.0 | 0.31 | 1.01 | 1.33 | 0.71 |
| γ 151.0 | 0.47 | 1.03 | 1.38 | 0.86 |
| γ 152.0 | 0.59 | 1.04 | 1.39 | 0.94 |
| γ 153.0 | 0.70 | 1.04 | 1.41 | 1.00 |
| γ 154.0 | 0.81 | 1.06 | 1.43 | 1.05 |
| γ 155.0 | 0.90 | 1.08 | 1.45 | 1.09 |
| γ 156.0 | 0.98 | 1.09 | 1.46 | 1.13 |
| γ 157.0 | 1.05 | 1.11 | 1.47 | 1.19 |
| γ 158.0 | 1.11 | 1.14 | 1.47 | 1.21 |
| γ 159.0 | 1.15 | 1.17 | 1.47 | 1.25 |
| γ 160.0 | 1.21 | 1.19 | 1.48 | 1.29 |
| γ 161.0 | 1.24 | 1.20 | 1.47 | 1.31 |
| γ 162.0 | 1.27 | 1.22 | 1.47 | 1.34 |
| γ 163.0 | 1.30 | 1.19 | 1.45 | 1.36 |
| γ 164.0 | 1.32 | 1.17 | 1.44 | 1.37 |
| γ 165.0 | 1.35 | 1.14 | 1.42 | 1.37 |
| γ 166.0 | 1.37 | 1.09 | 1.39 | 1.38 |
| γ 167.0 | 1.40 | 1.04 | 1.35 | 1.39 |
| γ 168.0 | 1.42 | 0.96 | 1.30 | 1.40 |
| γ 169.0 | 1.44 | 0.87 | 1.24 | 1.40 |
| γ 170.0 | 1.44 | 0.76 | 1.16 | 1.41 |
| γ 171.0 | 1.45 | 0.64 | 1.09 | 1.44 |
| γ 172.0 | 1.44 | 0.53 | 0.99 | 1.45 |
| γ 173.0 | 1.41 | 0.47 | 0.87 | 1.46 |
| γ 174.0 | 1.38 | 0.47 | 0.75 | 1.48 |
| γ 175.0 | 1.33 | 0.55 | 0.64 | 1.48 |
| γ 176.0 | 1.27 | 0.70 | 0.52 | 1.46 |
| γ 177.0 | 1.16 | 0.88 | 0.45 | 1.44 |
| γ 178.0 | 1.03 | 1.03 | 0.45 | 1.42 |
| γ 179.0 | 0.87 | 1.14 | 0.52 | 1.38 |
| γ 180.0 | 0.87 | 0.87 | 0.87 | 0.87 |
