

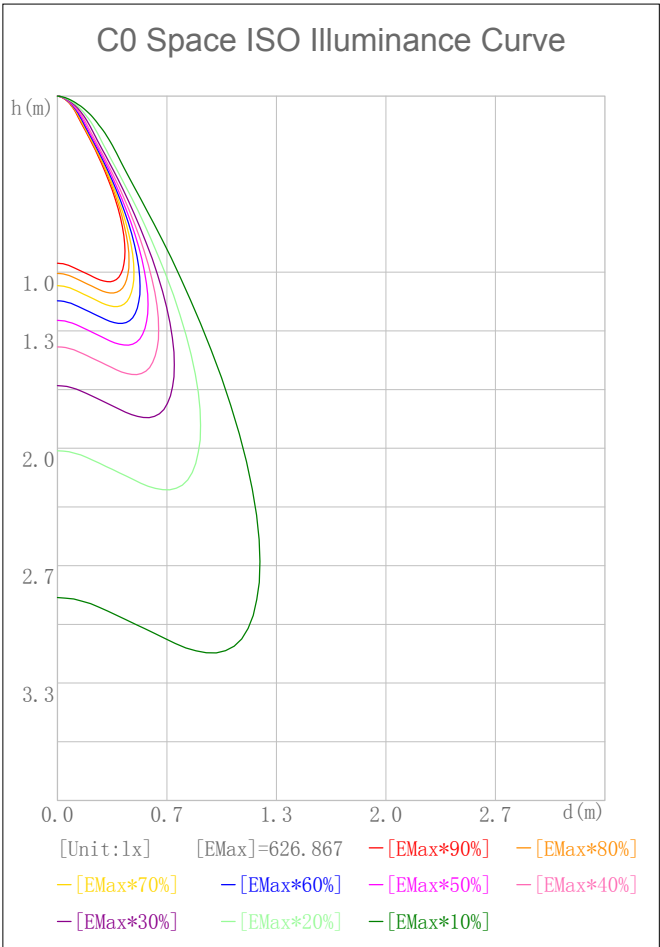
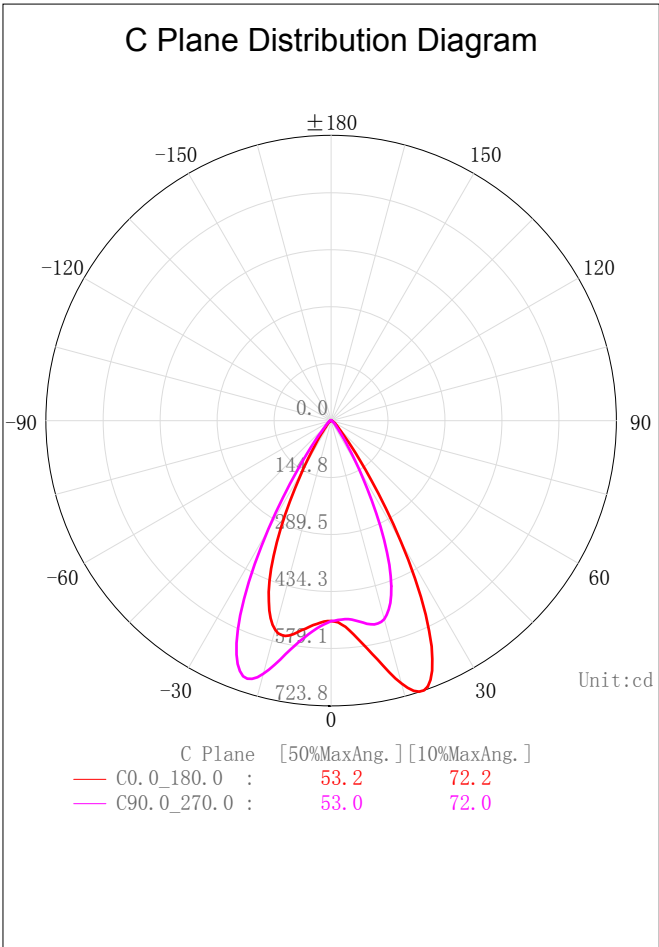
Indoor Luminaire Photometric Data

Description Information

| | | | |
|---|-------------------------|----------------------|-----------------------|
| Luminary Name: DL52-06-XX-02 2700K RA90 60D | | 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):0.038m*-0.038m*0.000m | | Lum. Area (m2):0.001 | Lum. W (kg): 0.000 |
| Test System: C, γ | Test Step: C=90.0 γ=1.0 | Temp. (°C): 25 | Humidity(%): 50.0 |

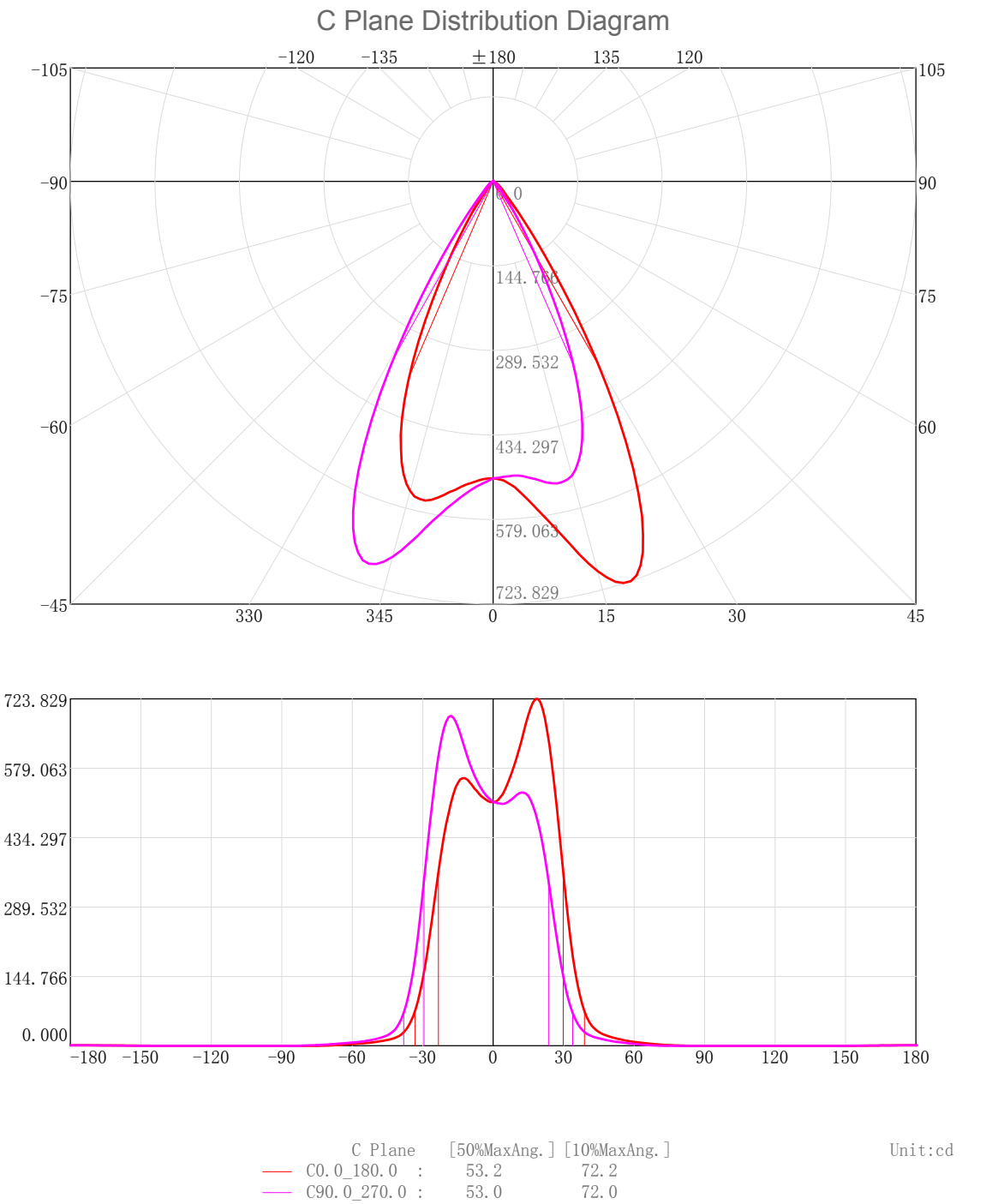
Character Parameter

| Lamp Speciality Parameter | | Luminaire Speciality Parameter | |
|---|---------------------------------|---------------------------------------|--|
| Rated Flux(lm): 507.790 | Luminary Flux(lm): 507.788 | Field Angle(10%Imax): 72.2(°) | |
| Rated Power(W): | Luminary Efficiency: 100.00% | Down Lumens&Percent: 507.279lm 99.90% | |
| Rated Voltage(V): | Luminary EER(lm/W): 81.638 | Up Lumens&Percent: 0.508lm 0.10% | |
| Tested Power(W): 6.220 | Max. Candela(cd): 723.829 | S/MH: C0_a180=1.011 C90_270=0.992 | |
| Lamps' Inside: 1 | Max Cand@Ang. (°): C=0.0 γ=19.0 | CIE Type: Semi-Direct | |
| Tested Electrics (V, A, pf):240.8, 0.030, 0.844 | Beam Angle(50%Imax): 53.2(°) | ErP ϕ use(90°): 450.288lm | |
| Lamp Size (W*L*H):0.038m*-0.038m*0.000m | Left=-23.3°, Right=29.9° | IRF(%): 232.618 | |



2D Plane Light Intensity Distribution Curve

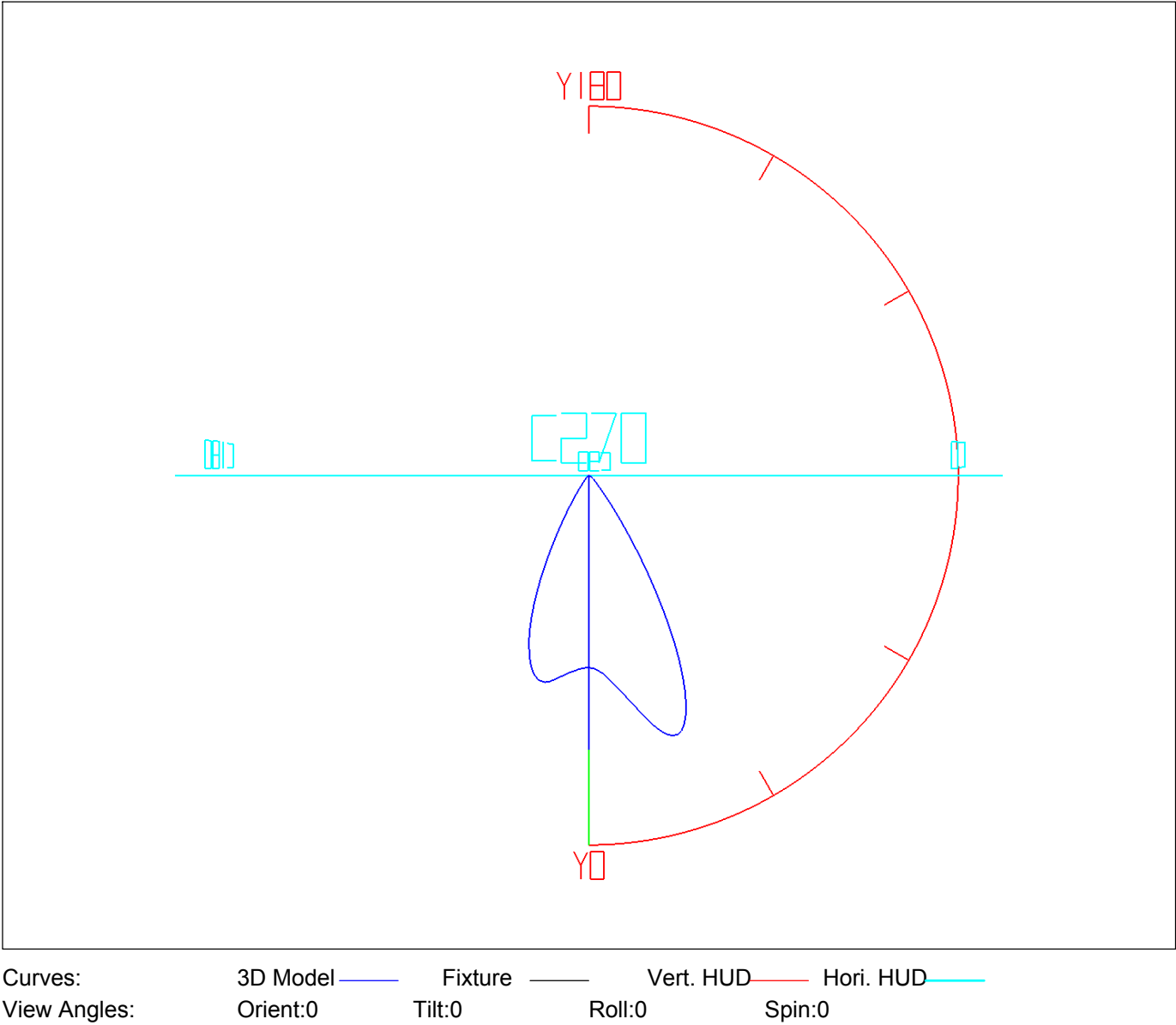
| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 2700K RA90 60D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/25 |



3D Light Intensity Distribution Modal

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 2700K RA90 60D | 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-02 2700K RA90 60D.IES

Zonal Flux Tabulation

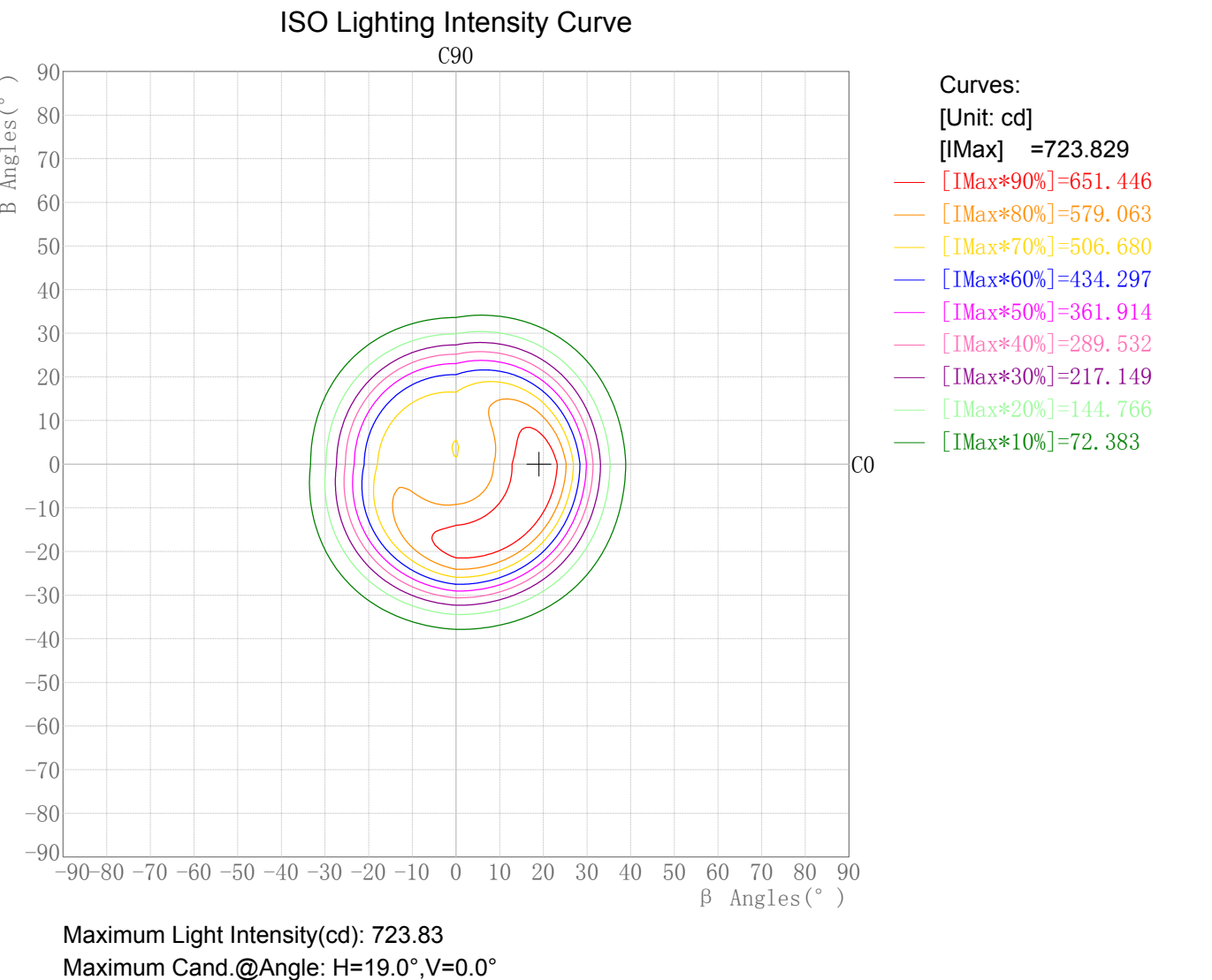
| Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp | Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp |
|-----------|-------------------|-------------------|-----------|-----------|-----------|-------------------|-------------------|-----------|-----------|
| 0.0-1.0 | 0.49 | 0.49 | 0.10 | 0.10 | 47.0-48.0 | 1.28 | 492.57 | 0.25 | 97.00 |
| 1.0-2.0 | 1.47 | 1.95 | 0.29 | 0.38 | 48.0-49.0 | 1.19 | 493.76 | 0.24 | 97.24 |
| 2.0-3.0 | 2.45 | 4.41 | 0.48 | 0.87 | 49.0-50.0 | 1.12 | 494.88 | 0.22 | 97.46 |
| 3.0-4.0 | 3.46 | 7.87 | 0.68 | 1.55 | 50.0-51.0 | 1.04 | 495.92 | 0.20 | 97.66 |
| 4.0-5.0 | 4.49 | 12.35 | 0.88 | 2.43 | 51.0-52.0 | 0.97 | 496.89 | 0.19 | 97.85 |
| 5.0-6.0 | 5.54 | 17.90 | 1.09 | 3.52 | 52.0-53.0 | 0.91 | 497.80 | 0.18 | 98.03 |
| 6.0-7.0 | 6.64 | 24.54 | 1.31 | 4.83 | 53.0-54.0 | 0.85 | 498.65 | 0.17 | 98.20 |
| 7.0-8.0 | 7.77 | 32.31 | 1.53 | 6.36 | 54.0-55.0 | 0.80 | 499.45 | 0.16 | 98.36 |
| 8.0-9.0 | 8.94 | 41.24 | 1.76 | 8.12 | 55.0-56.0 | 0.75 | 500.20 | 0.15 | 98.51 |
| 9.0-10.0 | 10.15 | 51.40 | 2.00 | 10.12 | 56.0-57.0 | 0.69 | 500.89 | 0.14 | 98.64 |
| 10.0-11.0 | 11.40 | 62.80 | 2.25 | 12.37 | 57.0-58.0 | 0.65 | 501.54 | 0.13 | 98.77 |
| 11.0-12.0 | 12.69 | 75.50 | 2.50 | 14.87 | 58.0-59.0 | 0.60 | 502.14 | 0.12 | 98.89 |
| 12.0-13.0 | 14.00 | 89.50 | 2.76 | 17.62 | 59.0-60.0 | 0.56 | 502.71 | 0.11 | 99.00 |
| 13.0-14.0 | 15.31 | 104.80 | 3.01 | 20.64 | 60.0-61.0 | 0.52 | 503.23 | 0.10 | 99.10 |
| 14.0-15.0 | 16.59 | 121.39 | 3.27 | 23.91 | 61.0-62.0 | 0.49 | 503.71 | 0.10 | 99.20 |
| 15.0-16.0 | 17.80 | 139.19 | 3.51 | 27.41 | 62.0-63.0 | 0.45 | 504.16 | 0.09 | 99.29 |
| 16.0-17.0 | 18.92 | 158.11 | 3.73 | 31.14 | 63.0-64.0 | 0.41 | 504.57 | 0.08 | 99.37 |
| 17.0-18.0 | 19.91 | 178.02 | 3.92 | 35.06 | 64.0-65.0 | 0.37 | 504.94 | 0.07 | 99.44 |
| 18.0-19.0 | 20.73 | 198.75 | 4.08 | 39.14 | 65.0-66.0 | 0.33 | 505.27 | 0.06 | 99.50 |
| 19.0-20.0 | 21.35 | 220.10 | 4.20 | 43.34 | 66.0-67.0 | 0.30 | 505.56 | 0.06 | 99.56 |
| 20.0-21.0 | 21.73 | 241.83 | 4.28 | 47.62 | 67.0-68.0 | 0.26 | 505.83 | 0.05 | 99.61 |
| 21.0-22.0 | 21.84 | 263.67 | 4.30 | 51.92 | 68.0-69.0 | 0.23 | 506.06 | 0.05 | 99.66 |
| 22.0-23.0 | 21.67 | 285.33 | 4.27 | 56.19 | 69.0-70.0 | 0.20 | 506.26 | 0.04 | 99.70 |
| 23.0-24.0 | 21.22 | 306.56 | 4.18 | 60.37 | 70.0-71.0 | 0.17 | 506.43 | 0.03 | 99.73 |
| 24.0-25.0 | 20.51 | 327.07 | 4.04 | 64.41 | 71.0-72.0 | 0.15 | 506.58 | 0.03 | 99.76 |
| 25.0-26.0 | 19.53 | 346.60 | 3.85 | 68.26 | 72.0-73.0 | 0.13 | 506.71 | 0.02 | 99.79 |
| 26.0-27.0 | 18.32 | 364.92 | 3.61 | 71.86 | 73.0-74.0 | 0.11 | 506.81 | 0.02 | 99.81 |
| 27.0-28.0 | 16.92 | 381.84 | 3.33 | 75.20 | 74.0-75.0 | 0.09 | 506.90 | 0.02 | 99.83 |
| 28.0-29.0 | 15.42 | 397.26 | 3.04 | 78.23 | 75.0-76.0 | 0.08 | 506.98 | 0.02 | 99.84 |
| 29.0-30.0 | 13.85 | 411.11 | 2.73 | 80.96 | 76.0-77.0 | 0.07 | 507.05 | 0.01 | 99.85 |
| 30.0-31.0 | 12.27 | 423.38 | 2.42 | 83.38 | 77.0-78.0 | 0.06 | 507.11 | 0.01 | 99.87 |
| 31.0-32.0 | 10.71 | 434.08 | 2.11 | 85.49 | 78.0-79.0 | 0.05 | 507.16 | 0.01 | 99.88 |
| 32.0-33.0 | 9.23 | 443.31 | 1.82 | 87.30 | 79.0-80.0 | 0.04 | 507.20 | 0.01 | 99.88 |
| 33.0-34.0 | 7.87 | 451.18 | 1.55 | 88.85 | 80.0-81.0 | 0.03 | 507.23 | 0.01 | 99.89 |
| 34.0-35.0 | 6.66 | 457.84 | 1.31 | 90.16 | 81.0-82.0 | 0.02 | 507.26 | 0.00 | 99.89 |
| 35.0-36.0 | 5.63 | 463.47 | 1.11 | 91.27 | 82.0-83.0 | 0.01 | 507.27 | 0.00 | 99.90 |
| 36.0-37.0 | 4.75 | 468.22 | 0.93 | 92.21 | 83.0-84.0 | 0.01 | 507.28 | 0.00 | 99.90 |
| 37.0-38.0 | 4.00 | 472.22 | 0.79 | 93.00 | 84.0-85.0 | 0.00 | 507.28 | 0.00 | 99.90 |
| 38.0-39.0 | 3.38 | 475.60 | 0.67 | 93.66 | 85.0-86.0 | 0.00 | 507.28 | 0.00 | 99.90 |
| 39.0-40.0 | 2.89 | 478.49 | 0.57 | 94.23 | 86.0-87.0 | 0.00 | 507.28 | 0.00 | 99.90 |
| 40.0-41.0 | 2.49 | 480.98 | 0.49 | 94.72 | 87.0-88.0 | 0.00 | 507.28 | 0.00 | 99.90 |
| 41.0-42.0 | 2.18 | 483.16 | 0.43 | 95.15 | 88.0-89.0 | 0.00 | 507.28 | 0.00 | 99.90 |
| 42.0-43.0 | 1.94 | 485.10 | 0.38 | 95.53 | 89.0-90.0 | 0.00 | 507.28 | 0.00 | 99.90 |
| 43.0-44.0 | 1.75 | 486.85 | 0.34 | 95.88 | 90.0-91.0 | 0.00 | 507.28 | 0.00 | 99.90 |
| 44.0-45.0 | 1.60 | 488.45 | 0.31 | 96.19 | 91.0-92.0 | 0.00 | 507.28 | 0.00 | 99.90 |
| 45.0-46.0 | 1.47 | 489.92 | 0.29 | 96.48 | 92.0-93.0 | 0.00 | 507.28 | 0.00 | 99.90 |
| 46.0-47.0 | 1.37 | 491.29 | 0.27 | 96.75 | 93.0-94.0 | 0.00 | 507.28 | 0.00 | 99.90 |

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 | 507.28 | 0.00 | 99.90 | 141.0-142.0 | 0.00 | 507.28 | 0.00 | 99.90 |
| 95.0-96.0 | 0.00 | 507.28 | 0.00 | 99.90 | 142.0-143.0 | 0.00 | 507.28 | 0.00 | 99.90 |
| 96.0-97.0 | 0.00 | 507.28 | 0.00 | 99.90 | 143.0-144.0 | 0.00 | 507.28 | 0.00 | 99.90 |
| 97.0-98.0 | 0.00 | 507.28 | 0.00 | 99.90 | 144.0-145.0 | 0.00 | 507.28 | 0.00 | 99.90 |
| 98.0-99.0 | 0.00 | 507.28 | 0.00 | 99.90 | 145.0-146.0 | 0.00 | 507.28 | 0.00 | 99.90 |
| 99.0-100.0 | 0.00 | 507.28 | 0.00 | 99.90 | 146.0-147.0 | 0.00 | 507.29 | 0.00 | 99.90 |
| 100.0-101.0 | 0.00 | 507.28 | 0.00 | 99.90 | 147.0-148.0 | 0.00 | 507.29 | 0.00 | 99.90 |
| 101.0-102.0 | 0.00 | 507.28 | 0.00 | 99.90 | 148.0-149.0 | 0.01 | 507.29 | 0.00 | 99.90 |
| 102.0-103.0 | 0.00 | 507.28 | 0.00 | 99.90 | 149.0-150.0 | 0.01 | 507.30 | 0.00 | 99.90 |
| 103.0-104.0 | 0.00 | 507.28 | 0.00 | 99.90 | 150.0-151.0 | 0.01 | 507.31 | 0.00 | 99.91 |
| 104.0-105.0 | 0.00 | 507.28 | 0.00 | 99.90 | 151.0-152.0 | 0.01 | 507.32 | 0.00 | 99.91 |
| 105.0-106.0 | 0.00 | 507.28 | 0.00 | 99.90 | 152.0-153.0 | 0.01 | 507.33 | 0.00 | 99.91 |
| 106.0-107.0 | 0.00 | 507.28 | 0.00 | 99.90 | 153.0-154.0 | 0.01 | 507.35 | 0.00 | 99.91 |
| 107.0-108.0 | 0.00 | 507.28 | 0.00 | 99.90 | 154.0-155.0 | 0.02 | 507.36 | 0.00 | 99.92 |
| 108.0-109.0 | 0.00 | 507.28 | 0.00 | 99.90 | 155.0-156.0 | 0.02 | 507.38 | 0.00 | 99.92 |
| 109.0-110.0 | 0.00 | 507.28 | 0.00 | 99.90 | 156.0-157.0 | 0.02 | 507.40 | 0.00 | 99.92 |
| 110.0-111.0 | 0.00 | 507.28 | 0.00 | 99.90 | 157.0-158.0 | 0.02 | 507.42 | 0.00 | 99.93 |
| 111.0-112.0 | 0.00 | 507.28 | 0.00 | 99.90 | 158.0-159.0 | 0.02 | 507.44 | 0.00 | 99.93 |
| 112.0-113.0 | 0.00 | 507.28 | 0.00 | 99.90 | 159.0-160.0 | 0.02 | 507.46 | 0.00 | 99.94 |
| 113.0-114.0 | 0.00 | 507.28 | 0.00 | 99.90 | 160.0-161.0 | 0.02 | 507.49 | 0.00 | 99.94 |
| 114.0-115.0 | 0.00 | 507.28 | 0.00 | 99.90 | 161.0-162.0 | 0.02 | 507.51 | 0.00 | 99.94 |
| 115.0-116.0 | 0.00 | 507.28 | 0.00 | 99.90 | 162.0-163.0 | 0.02 | 507.53 | 0.00 | 99.95 |
| 116.0-117.0 | 0.00 | 507.28 | 0.00 | 99.90 | 163.0-164.0 | 0.02 | 507.56 | 0.00 | 99.95 |
| 117.0-118.0 | 0.00 | 507.28 | 0.00 | 99.90 | 164.0-165.0 | 0.02 | 507.58 | 0.00 | 99.96 |
| 118.0-119.0 | 0.00 | 507.28 | 0.00 | 99.90 | 165.0-166.0 | 0.02 | 507.60 | 0.00 | 99.96 |
| 119.0-120.0 | 0.00 | 507.28 | 0.00 | 99.90 | 166.0-167.0 | 0.02 | 507.62 | 0.00 | 99.97 |
| 120.0-121.0 | 0.00 | 507.28 | 0.00 | 99.90 | 167.0-168.0 | 0.02 | 507.65 | 0.00 | 99.97 |
| 121.0-122.0 | 0.00 | 507.28 | 0.00 | 99.90 | 168.0-169.0 | 0.02 | 507.67 | 0.00 | 99.98 |
| 122.0-123.0 | 0.00 | 507.28 | 0.00 | 99.90 | 169.0-170.0 | 0.02 | 507.69 | 0.00 | 99.98 |
| 123.0-124.0 | 0.00 | 507.28 | 0.00 | 99.90 | 170.0-171.0 | 0.02 | 507.70 | 0.00 | 99.98 |
| 124.0-125.0 | 0.00 | 507.28 | 0.00 | 99.90 | 171.0-172.0 | 0.02 | 507.72 | 0.00 | 99.99 |
| 125.0-126.0 | 0.00 | 507.28 | 0.00 | 99.90 | 172.0-173.0 | 0.02 | 507.74 | 0.00 | 99.99 |
| 126.0-127.0 | 0.00 | 507.28 | 0.00 | 99.90 | 173.0-174.0 | 0.01 | 507.75 | 0.00 | 99.99 |
| 127.0-128.0 | 0.00 | 507.28 | 0.00 | 99.90 | 174.0-175.0 | 0.01 | 507.76 | 0.00 | 99.99 |
| 128.0-129.0 | 0.00 | 507.28 | 0.00 | 99.90 | 175.0-176.0 | 0.01 | 507.77 | 0.00 | 100.00 |
| 129.0-130.0 | 0.00 | 507.28 | 0.00 | 99.90 | 176.0-177.0 | 0.01 | 507.78 | 0.00 | 100.00 |
| 130.0-131.0 | 0.00 | 507.28 | 0.00 | 99.90 | 177.0-178.0 | 0.01 | 507.78 | 0.00 | 100.00 |
| 131.0-132.0 | 0.00 | 507.28 | 0.00 | 99.90 | 178.0-179.0 | 0.00 | 507.79 | 0.00 | 100.00 |
| 132.0-133.0 | 0.00 | 507.28 | 0.00 | 99.90 | 179.0-180.0 | 0.00 | 507.79 | 0.00 | 100.00 |
| 133.0-134.0 | 0.00 | 507.28 | 0.00 | 99.90 | | | | | |
| 134.0-135.0 | 0.00 | 507.28 | 0.00 | 99.90 | | | | | |
| 135.0-136.0 | 0.00 | 507.28 | 0.00 | 99.90 | | | | | |
| 136.0-137.0 | 0.00 | 507.28 | 0.00 | 99.90 | | | | | |
| 137.0-138.0 | 0.00 | 507.28 | 0.00 | 99.90 | | | | | |
| 138.0-139.0 | 0.00 | 507.28 | 0.00 | 99.90 | | | | | |
| 139.0-140.0 | 0.00 | 507.28 | 0.00 | 99.90 | | | | | |
| 140.0-141.0 | 0.00 | 507.28 | 0.00 | 99.90 | | | | | |

Rectangle ISO Lighting Intensity Diagram

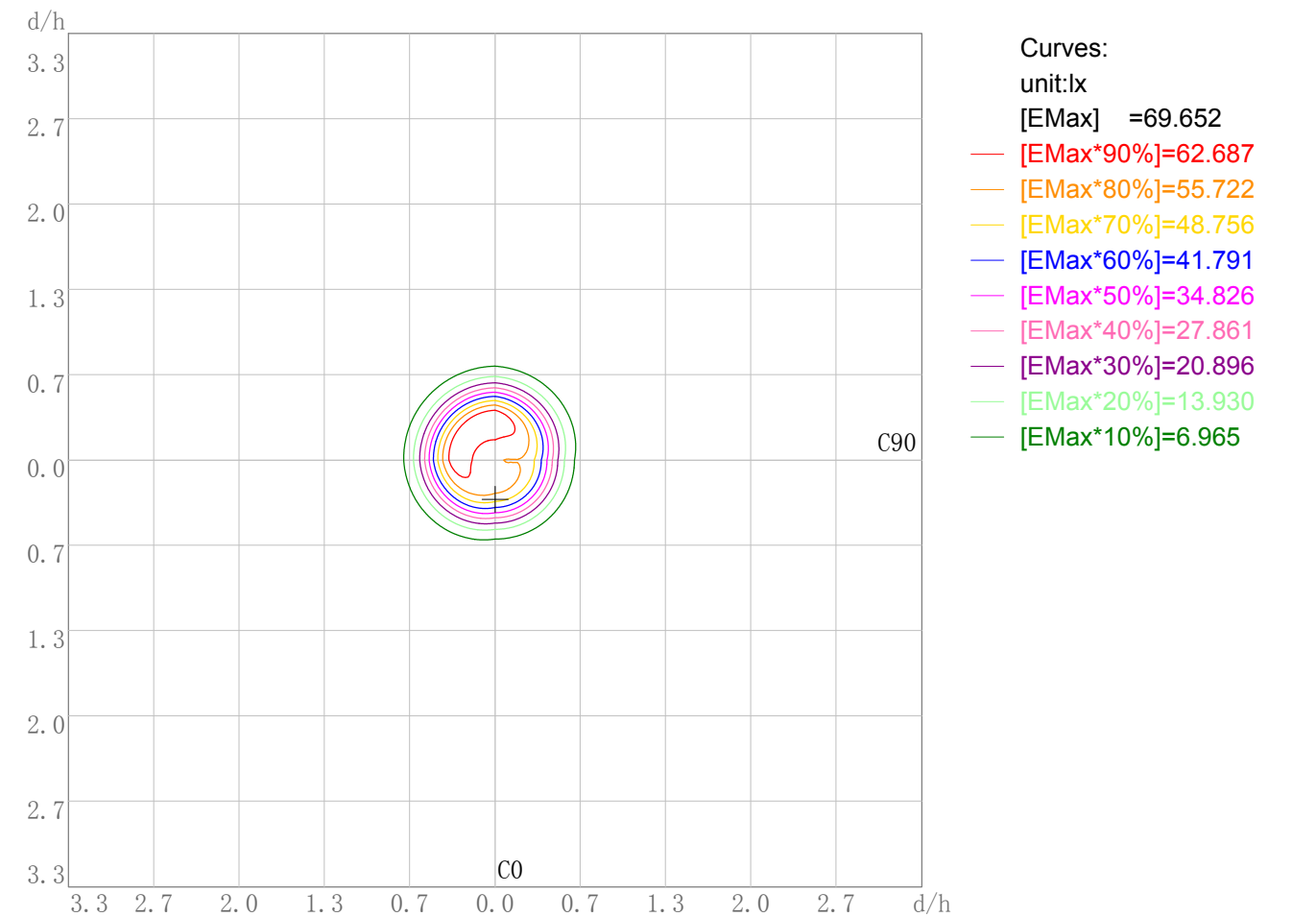
| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 2700K RA90 60D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/25 |



Plane ISO-Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name:DL52-06-XX-02 2700K RA90 60D | 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): 69.65
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.3

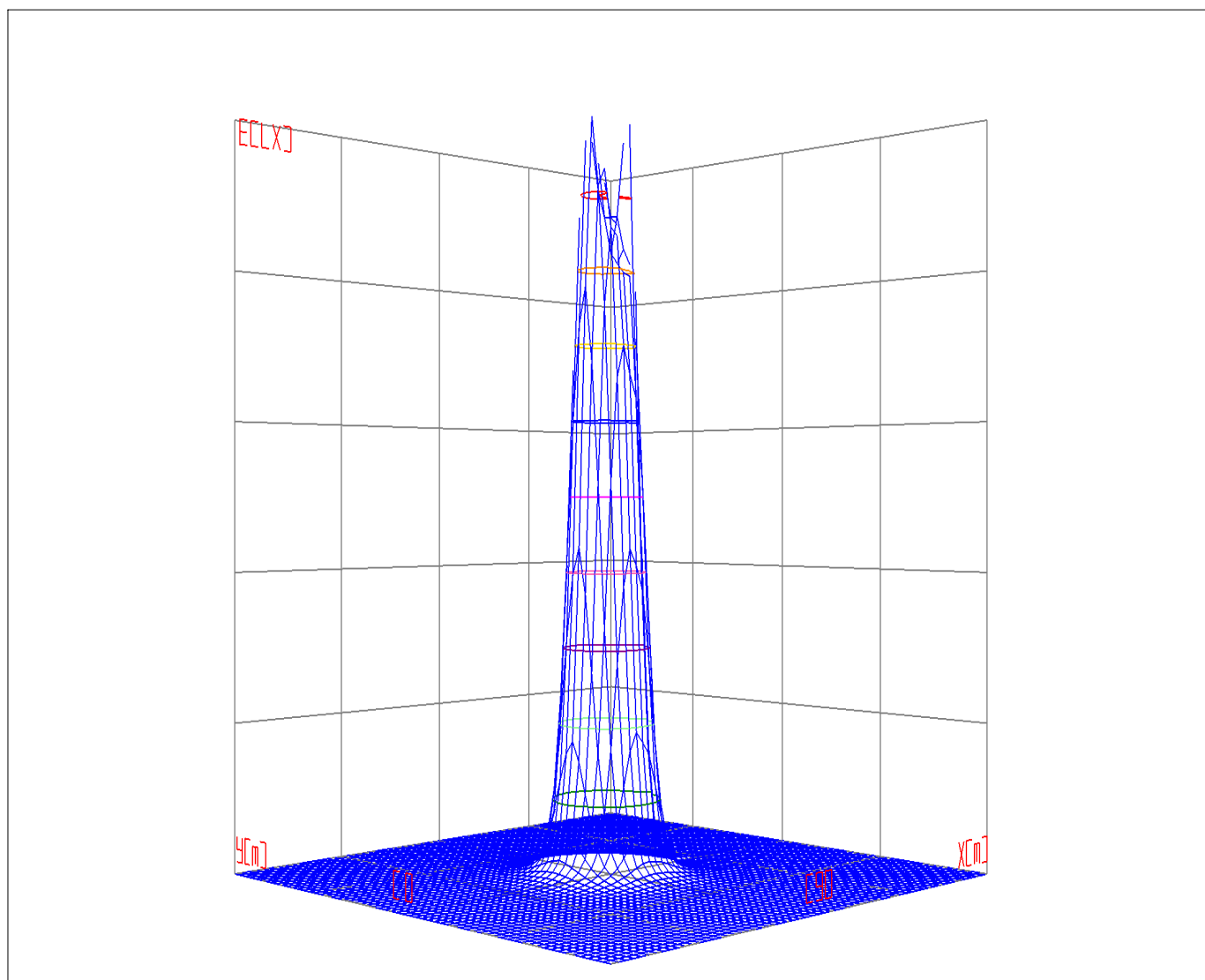
IES Indoor Report

Photometric Filename:DL52-06-XX-02 2700K RA90 60D.IES

3D Plane ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 2700K RA90 60D | 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

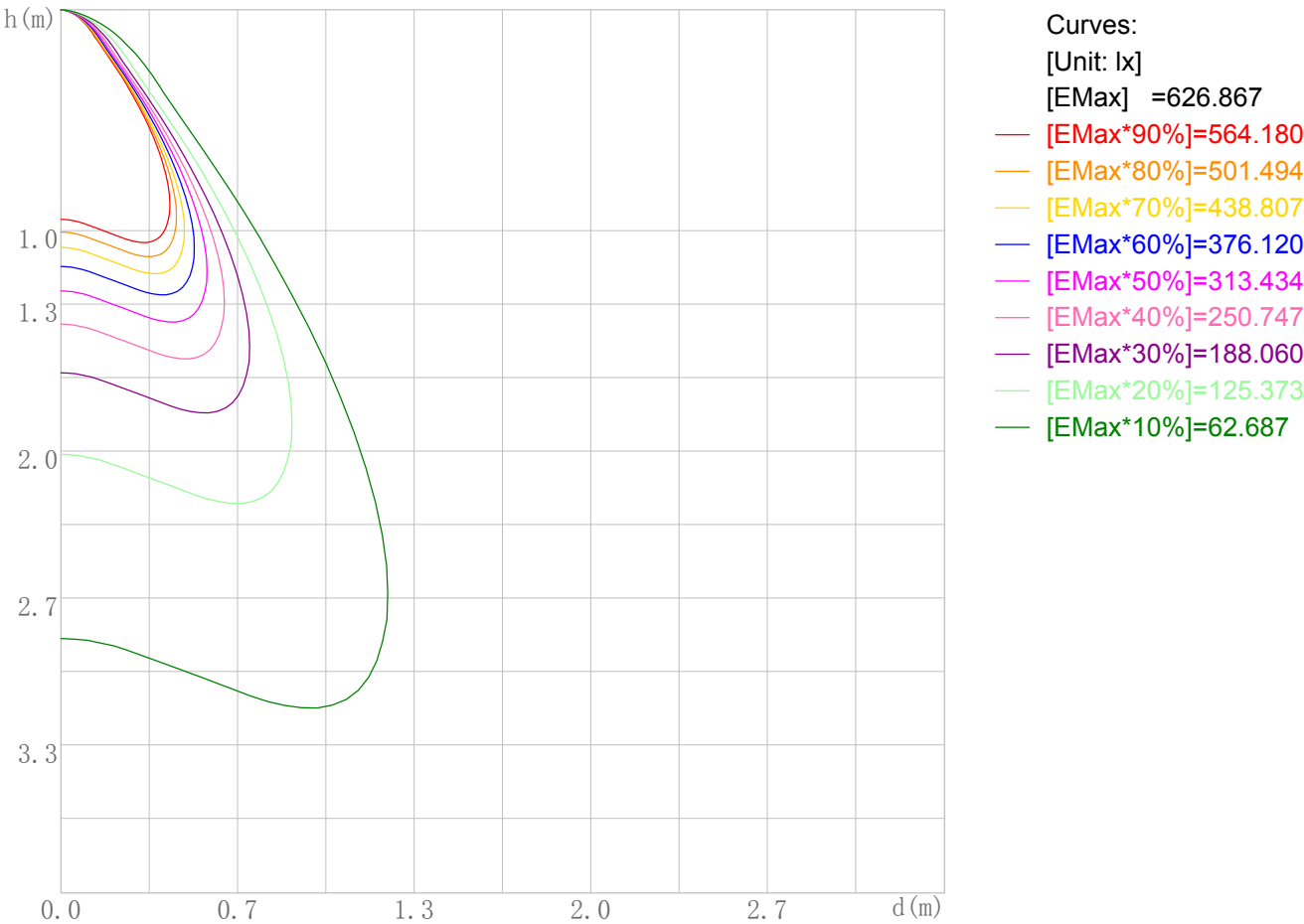


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 2700K RA90 60D | 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 |

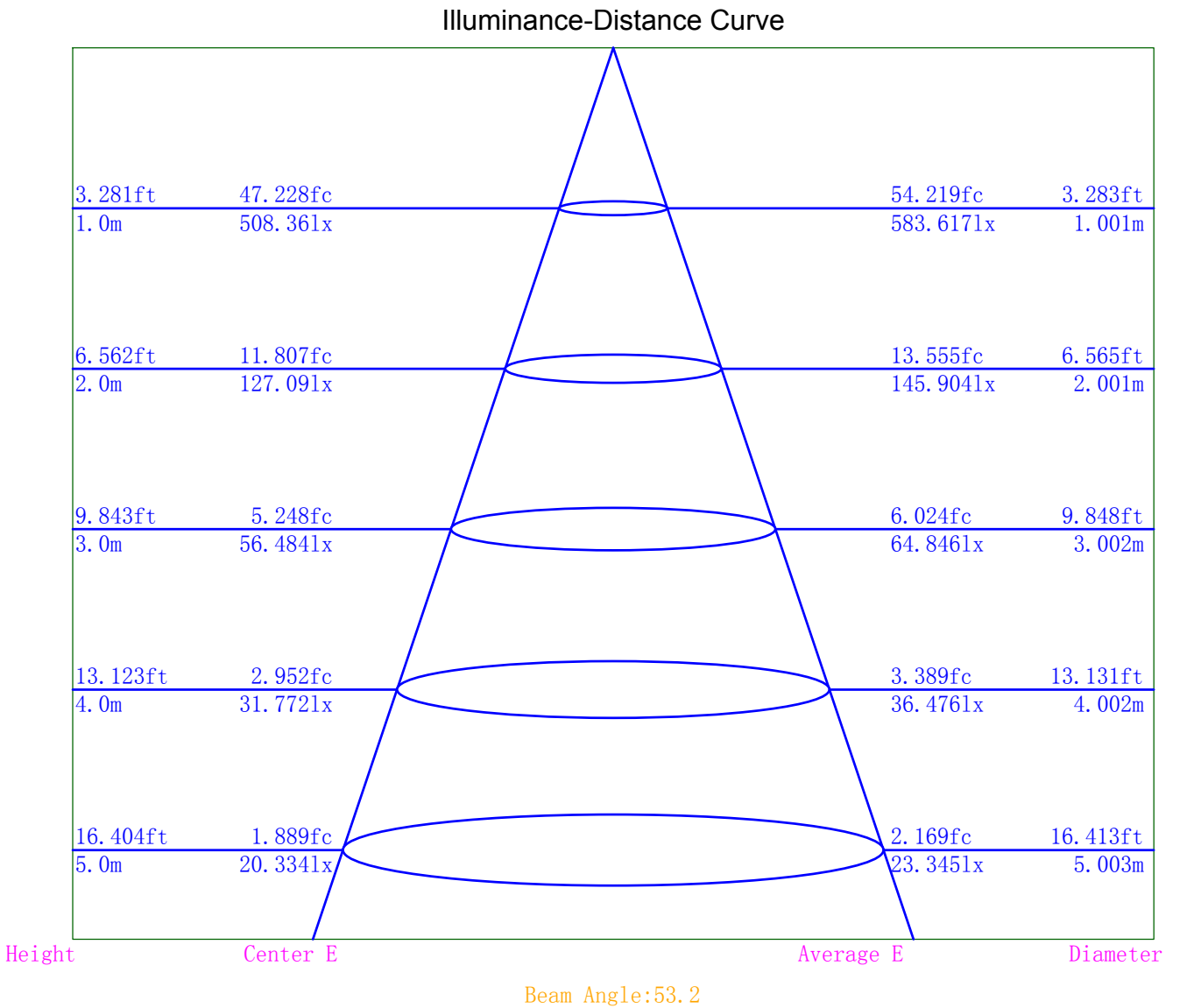
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:626.87lx,17.0deg
Plane Maximum Lighting Intensity and @Angle:723.829cd,0deg

Illuminance-Distance Diagram

| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:DL52-06-XX-02 2700K RA90 60D | 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 |



Indoor Luminance Limiting Curves

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 2700K RA90 60D | 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 |

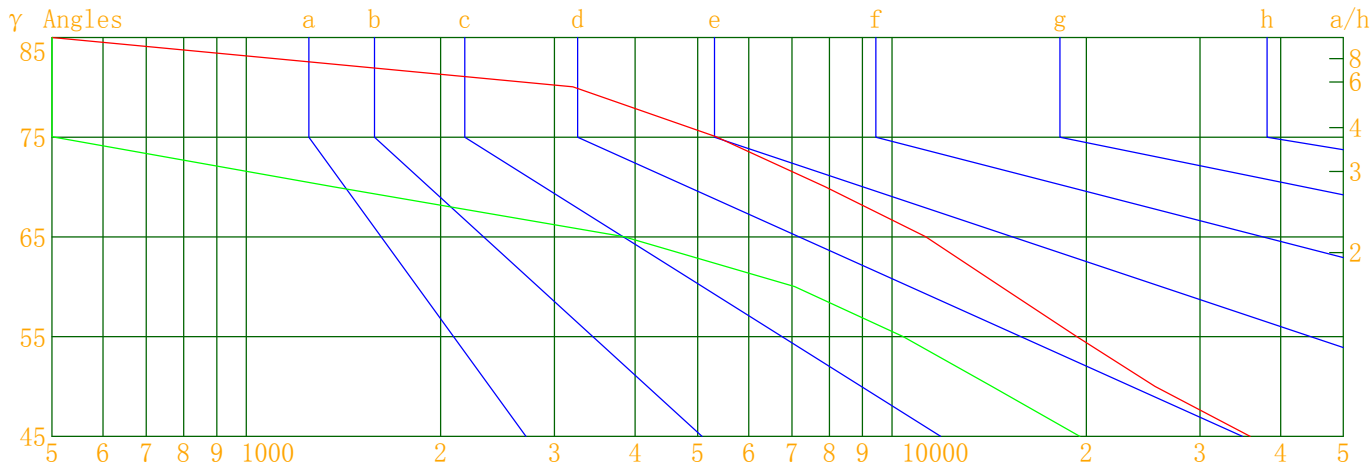
Glare Grade Table

| 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 | 35862 | 25554 | 19311 | 14743 | 11266 | 7873 | 5342 | 3204 | 0 |
| C90 | 19540 | 14285 | 10397 | 7063 | 3839 | 1361 | 0 | 0 | 0 |

Luminance Limiting Curve



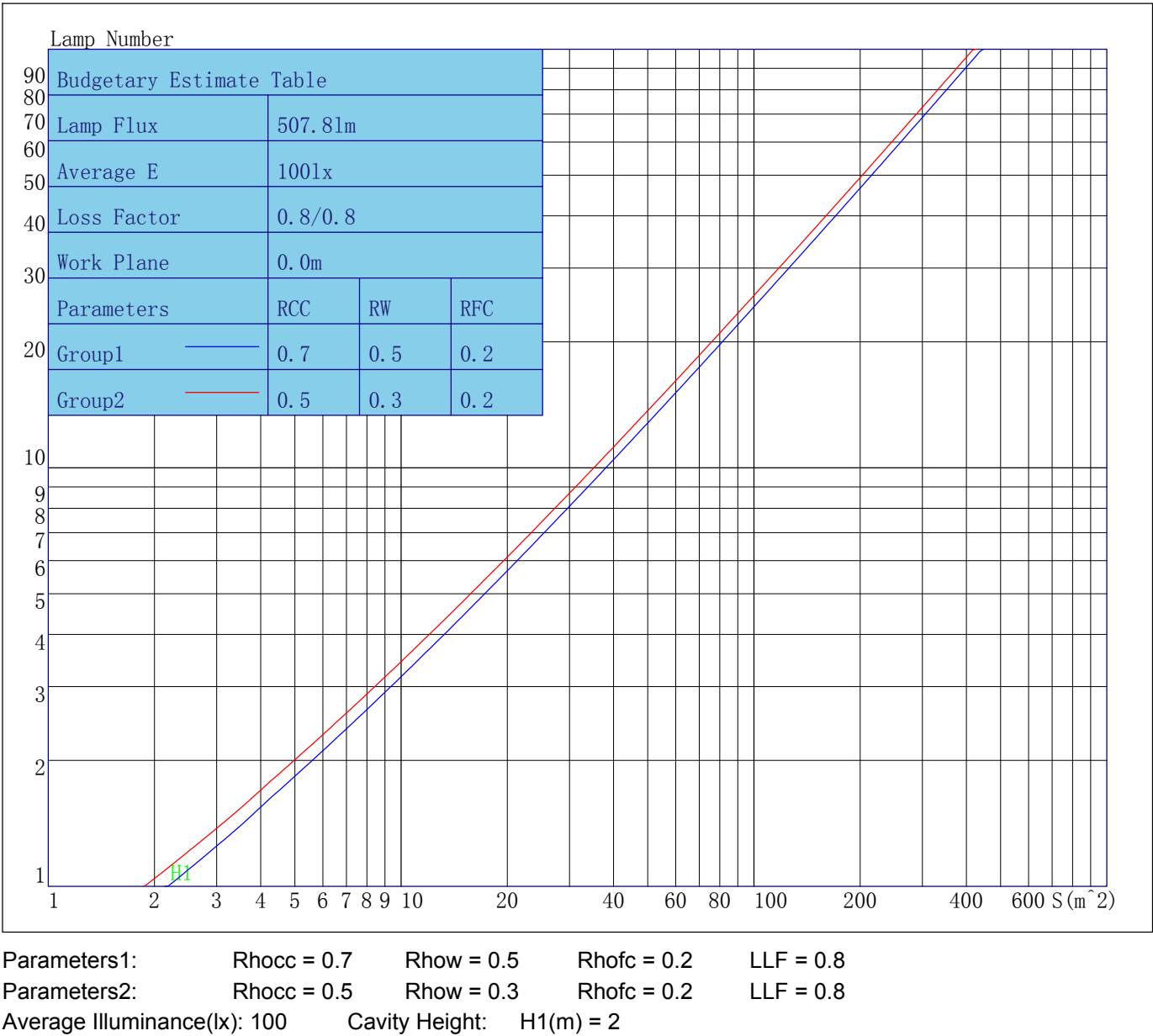
Luminous Size: Length(m)=-0.038 Width(m)=-0.038 Height(m)=0.000 Area(m^2)=0.001134

Luminous Type: Without Luminous Side

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

Indoor Budgetary Estimate Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name:DL52-06-XX-02 2700K RA90 60D | 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-02 2700K RA90 60D | 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 | 114 | 111 | 109 | 106 | 111 | 109 | 107 | 105 | 105 | 103 | 101 | 101 | 100 | 98 | 98 | 97 | 96 | 94 |
| 2 | 108 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 99 | 96 | 93 | 96 | 93 | 91 | 93 | 91 | 89 | 88 |
| 3 | 103 | 97 | 92 | 88 | 101 | 96 | 91 | 88 | 93 | 89 | 86 | 91 | 87 | 85 | 88 | 86 | 84 | 82 |
| 4 | 98 | 91 | 86 | 82 | 96 | 90 | 85 | 81 | 88 | 84 | 80 | 86 | 82 | 79 | 84 | 81 | 78 | 77 |
| 5 | 94 | 86 | 80 | 76 | 92 | 85 | 79 | 76 | 83 | 78 | 75 | 81 | 77 | 74 | 80 | 76 | 74 | 72 |
| 6 | 89 | 81 | 75 | 71 | 88 | 80 | 75 | 71 | 78 | 74 | 70 | 77 | 73 | 70 | 76 | 72 | 69 | 68 |
| 7 | 85 | 76 | 70 | 66 | 84 | 76 | 70 | 66 | 74 | 69 | 66 | 73 | 69 | 66 | 72 | 68 | 65 | 64 |
| 8 | 81 | 72 | 66 | 62 | 80 | 72 | 66 | 62 | 70 | 66 | 62 | 69 | 65 | 62 | 68 | 64 | 61 | 60 |
| 9 | 78 | 68 | 63 | 59 | 76 | 68 | 62 | 59 | 67 | 62 | 59 | 66 | 62 | 58 | 65 | 61 | 58 | 57 |
| 10 | 74 | 65 | 59 | 56 | 73 | 64 | 59 | 55 | 64 | 59 | 55 | 63 | 58 | 55 | 62 | 58 | 55 | 54 |

Unified Glare Rating Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 2700K RA90 60D | Lum. Catelog: | 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 |

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 | 21.5 | 22.6 | 21.9 | 22.9 | 23.3 | 16.7 | 17.8 | 17.1 | 18.2 | 18.5 |
| | 21.5 | 22.4 | 21.8 | 22.8 | 23.2 | 16.6 | 17.6 | 17.0 | 17.9 | 18.3 |
| | 21.4 | 22.3 | 21.8 | 22.7 | 23.1 | 16.5 | 17.4 | 16.9 | 17.8 | 18.2 |
| | 21.3 | 22.2 | 21.7 | 22.5 | 22.9 | 16.4 | 17.2 | 16.8 | 17.6 | 18.0 |
| | 21.2 | 22.1 | 21.7 | 22.5 | 22.9 | 16.3 | 17.1 | 16.8 | 17.5 | 17.9 |
| | 21.2 | 22.0 | 21.6 | 22.4 | 22.8 | 16.3 | 17.0 | 16.7 | 17.4 | 17.9 |
| X=4H Y=2H | 21.3 | 22.2 | 21.7 | 22.6 | 23.0 | 16.6 | 17.5 | 17.0 | 17.9 | 18.3 |
| | 21.2 | 22.0 | 21.7 | 22.4 | 22.9 | 16.4 | 17.2 | 16.9 | 17.6 | 18.1 |
| | 21.2 | 21.9 | 21.6 | 22.3 | 22.8 | 16.3 | 17.0 | 16.8 | 17.5 | 17.9 |
| | 21.1 | 21.7 | 21.5 | 22.2 | 22.6 | 16.2 | 16.9 | 16.7 | 17.3 | 17.8 |
| | 21.0 | 21.6 | 21.5 | 22.1 | 22.5 | 16.1 | 16.7 | 16.6 | 17.2 | 17.7 |
| | 21.0 | 21.5 | 21.4 | 22.0 | 22.5 | 16.1 | 16.6 | 16.6 | 17.1 | 17.6 |
| X=8H Y=4H | 21.0 | 21.6 | 21.5 | 22.1 | 22.5 | 16.2 | 16.8 | 16.6 | 17.2 | 17.7 |
| | 20.9 | 21.4 | 21.4 | 21.9 | 22.5 | 16.0 | 16.6 | 16.5 | 17.0 | 17.6 |
| | 20.8 | 21.3 | 21.4 | 21.8 | 22.3 | 16.0 | 16.4 | 16.5 | 16.9 | 17.4 |
| | 20.8 | 21.2 | 21.3 | 21.7 | 22.3 | 15.9 | 16.3 | 16.4 | 16.8 | 17.4 |
| X=12H Y=4H | 20.9 | 21.5 | 21.4 | 22.0 | 22.5 | 16.1 | 16.6 | 16.6 | 17.1 | 17.6 |
| | 20.8 | 21.3 | 21.4 | 21.8 | 22.3 | 16.0 | 16.4 | 16.5 | 16.9 | 17.5 |
| | 20.8 | 21.2 | 21.3 | 21.7 | 22.3 | 15.9 | 16.3 | 16.4 | 16.8 | 17.4 |
| Variations with the objerver position at spacings | | | | | | | | | | |
| S=1.0H | 1.0/-1.2 | | | | | 1.5/-1.9 | | | | |
| S=1.5H | 1.7/-2.2 | | | | | 2.3/-3.0 | | | | |
| S=2.0H | 3.0/-3.5 | | | | | 5.0/-7.7 | | | | |
| Reduced UGR Table: | | | | | | | | | | |
| Nordic Standard Table: | BK0 | | | | | BK0 | | | | |
| Correction Value | 0.2 | | | | | 0.1 | | | | |

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-02 2700K RA90 60D.IES

Candela Tabulation

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|--------|--------|--------|--------|--------|
| γ 0.0 | 508.36 | 508.36 | 508.36 | 508.36 |
| γ 1.0 | 509.67 | 507.55 | 508.50 | 513.00 |
| γ 2.0 | 512.19 | 506.07 | 510.18 | 517.43 |
| γ 3.0 | 518.01 | 505.48 | 513.17 | 522.48 |
| γ 4.0 | 524.40 | 504.81 | 517.02 | 528.87 |
| γ 5.0 | 534.23 | 505.54 | 520.70 | 536.41 |
| γ 6.0 | 545.32 | 507.68 | 525.82 | 544.78 |
| γ 7.0 | 557.54 | 511.23 | 532.03 | 554.57 |
| γ 8.0 | 570.86 | 514.51 | 536.97 | 564.47 |
| γ 9.0 | 585.17 | 518.66 | 543.78 | 576.62 |
| γ 10.0 | 600.65 | 523.27 | 550.00 | 589.15 |
| γ 11.0 | 617.30 | 526.32 | 555.41 | 603.27 |
| γ 12.0 | 635.44 | 528.54 | 558.61 | 620.01 |
| γ 13.0 | 654.91 | 528.03 | 558.12 | 635.46 |
| γ 14.0 | 673.75 | 526.05 | 556.00 | 651.39 |
| γ 15.0 | 690.44 | 521.39 | 548.52 | 665.29 |
| γ 16.0 | 705.24 | 512.47 | 538.61 | 677.04 |
| γ 17.0 | 716.78 | 500.54 | 524.02 | 684.93 |
| γ 18.0 | 722.93 | 486.41 | 506.39 | 688.29 |
| γ 19.0 | 723.83 | 468.10 | 484.79 | 685.78 |
| γ 20.0 | 717.89 | 446.77 | 462.39 | 675.98 |
| γ 21.0 | 704.14 | 422.36 | 435.59 | 661.14 |
| γ 22.0 | 684.10 | 394.51 | 405.39 | 639.93 |
| γ 23.0 | 656.96 | 363.34 | 372.46 | 613.40 |
| γ 24.0 | 626.97 | 330.78 | 337.45 | 581.68 |
| γ 25.0 | 588.38 | 295.97 | 301.98 | 544.92 |
| γ 26.0 | 547.58 | 261.85 | 265.12 | 503.40 |
| γ 27.0 | 501.70 | 227.47 | 229.32 | 458.81 |
| γ 28.0 | 453.43 | 196.04 | 195.05 | 411.89 |
| γ 29.0 | 403.78 | 167.16 | 164.87 | 364.85 |
| γ 30.0 | 354.80 | 141.36 | 138.10 | 317.65 |
| γ 31.0 | 306.72 | 117.76 | 114.77 | 272.11 |
| γ 32.0 | 262.57 | 97.56 | 93.85 | 229.59 |
| γ 33.0 | 220.77 | 81.01 | 76.71 | 190.82 |
| γ 34.0 | 183.57 | 67.06 | 62.44 | 157.53 |
| γ 35.0 | 152.33 | 55.47 | 50.99 | 129.05 |
| γ 36.0 | 126.13 | 46.08 | 41.51 | 105.44 |
| γ 37.0 | 104.00 | 38.71 | 34.23 | 85.93 |
| γ 38.0 | 85.46 | 32.91 | 28.50 | 69.83 |
| γ 39.0 | 70.34 | 28.45 | 24.13 | 56.88 |
| γ 40.0 | 58.67 | 24.90 | 20.72 | 46.83 |
| γ 41.0 | 49.35 | 22.27 | 18.24 | 38.85 |
| γ 42.0 | 42.14 | 20.19 | 16.26 | 32.75 |
| γ 43.0 | 36.60 | 18.42 | 14.68 | 28.30 |
| γ 44.0 | 32.24 | 16.96 | 13.36 | 24.84 |
| γ 45.0 | 28.76 | 15.67 | 12.27 | 22.13 |
| γ 46.0 | 26.00 | 14.53 | 11.33 | 19.95 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|--------|-------|-------|--------|--------|
| γ 47.0 | 23.84 | 13.42 | 10.44 | 18.25 |
| γ 48.0 | 21.94 | 12.35 | 9.60 | 16.74 |
| γ 49.0 | 20.23 | 11.35 | 8.80 | 15.36 |
| γ 50.0 | 18.63 | 10.41 | 8.10 | 14.12 |
| γ 51.0 | 17.22 | 9.52 | 7.39 | 13.02 |
| γ 52.0 | 15.94 | 8.66 | 6.80 | 12.03 |
| γ 53.0 | 14.73 | 7.97 | 6.35 | 11.19 |
| γ 54.0 | 13.62 | 7.36 | 5.94 | 10.36 |
| γ 55.0 | 12.56 | 6.76 | 5.53 | 9.58 |
| γ 56.0 | 11.50 | 6.18 | 5.14 | 8.78 |
| γ 57.0 | 10.47 | 5.62 | 4.76 | 8.20 |
| γ 58.0 | 9.69 | 5.05 | 4.34 | 7.76 |
| γ 59.0 | 8.99 | 4.52 | 3.93 | 7.34 |
| γ 60.0 | 8.36 | 4.01 | 3.57 | 6.93 |
| γ 61.0 | 7.74 | 3.52 | 3.24 | 6.54 |
| γ 62.0 | 7.16 | 3.09 | 2.90 | 6.14 |
| γ 63.0 | 6.55 | 2.67 | 2.56 | 5.70 |
| γ 64.0 | 5.97 | 2.25 | 2.21 | 5.26 |
| γ 65.0 | 5.40 | 1.84 | 1.85 | 4.85 |
| γ 66.0 | 4.89 | 1.51 | 1.59 | 4.47 |
| γ 67.0 | 4.40 | 1.25 | 1.36 | 4.11 |
| γ 68.0 | 3.94 | 1.00 | 1.09 | 3.71 |
| γ 69.0 | 3.48 | 0.73 | 0.86 | 3.34 |
| γ 70.0 | 3.05 | 0.53 | 0.67 | 2.96 |
| γ 71.0 | 2.66 | 0.36 | 0.49 | 2.66 |
| γ 72.0 | 2.38 | 0.18 | 0.32 | 2.40 |
| γ 73.0 | 2.10 | 0.03 | 0.16 | 2.12 |
| γ 74.0 | 1.81 | 0.00 | 0.00 | 1.85 |
| γ 75.0 | 1.57 | 0.00 | 0.00 | 1.64 |
| γ 76.0 | 1.36 | 0.00 | 0.00 | 1.42 |
| γ 77.0 | 1.17 | 0.00 | 0.00 | 1.24 |
| γ 78.0 | 0.97 | 0.00 | 0.00 | 1.05 |
| γ 79.0 | 0.80 | 0.00 | 0.00 | 0.88 |
| γ 80.0 | 0.63 | 0.00 | 0.00 | 0.70 |
| γ 81.0 | 0.47 | 0.00 | 0.00 | 0.54 |
| γ 82.0 | 0.32 | 0.00 | 0.00 | 0.37 |
| γ 83.0 | 0.18 | 0.00 | 0.00 | 0.22 |
| γ 84.0 | 0.03 | 0.00 | 0.00 | 0.09 |
| γ 85.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

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 | 0.00 | 0.00 |
| γ 140.0 | 0.00 | 0.00 | 0.00 | 0.00 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 141.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 142.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 143.0 | 0.00 | 0.00 | 0.00 | 0.00 |
| γ 144.0 | 0.00 | 0.00 | 0.02 | 0.00 |
| γ 145.0 | 0.00 | 0.00 | 0.10 | 0.00 |
| γ 146.0 | 0.00 | 0.00 | 0.16 | 0.00 |
| γ 147.0 | 0.00 | 0.00 | 0.22 | 0.00 |
| γ 148.0 | 0.00 | 0.02 | 0.29 | 0.00 |
| γ 149.0 | 0.00 | 0.09 | 0.35 | 0.00 |
| γ 150.0 | 0.00 | 0.14 | 0.41 | 0.00 |
| γ 151.0 | 0.00 | 0.20 | 0.47 | 0.02 |
| γ 152.0 | 0.00 | 0.25 | 0.52 | 0.09 |
| γ 153.0 | 0.04 | 0.29 | 0.57 | 0.16 |
| γ 154.0 | 0.11 | 0.33 | 0.62 | 0.23 |
| γ 155.0 | 0.18 | 0.36 | 0.65 | 0.29 |
| γ 156.0 | 0.23 | 0.41 | 0.69 | 0.34 |
| γ 157.0 | 0.29 | 0.44 | 0.73 | 0.41 |
| γ 158.0 | 0.36 | 0.46 | 0.75 | 0.47 |
| γ 159.0 | 0.42 | 0.49 | 0.79 | 0.53 |
| γ 160.0 | 0.48 | 0.53 | 0.82 | 0.58 |
| γ 161.0 | 0.53 | 0.56 | 0.83 | 0.63 |
| γ 162.0 | 0.58 | 0.60 | 0.86 | 0.68 |
| γ 163.0 | 0.65 | 0.63 | 0.88 | 0.73 |
| γ 164.0 | 0.69 | 0.68 | 0.91 | 0.78 |
| γ 165.0 | 0.74 | 0.73 | 0.94 | 0.81 |
| γ 166.0 | 0.80 | 0.76 | 0.95 | 0.87 |
| γ 167.0 | 0.85 | 0.81 | 0.97 | 0.90 |
| γ 168.0 | 0.89 | 0.85 | 1.00 | 0.94 |
| γ 169.0 | 0.94 | 0.88 | 1.02 | 0.97 |
| γ 170.0 | 0.98 | 0.92 | 1.05 | 1.00 |
| γ 171.0 | 1.01 | 0.95 | 1.07 | 1.04 |
| γ 172.0 | 1.04 | 0.98 | 1.10 | 1.06 |
| γ 173.0 | 1.07 | 1.01 | 1.13 | 1.10 |
| γ 174.0 | 1.10 | 1.04 | 1.14 | 1.11 |
| γ 175.0 | 1.13 | 1.06 | 1.15 | 1.14 |
| γ 176.0 | 1.15 | 1.09 | 1.16 | 1.14 |
| γ 177.0 | 1.16 | 1.10 | 1.16 | 1.17 |
| γ 178.0 | 1.18 | 1.11 | 1.18 | 1.17 |
| γ 179.0 | 1.19 | 1.11 | 1.19 | 1.19 |
| γ 180.0 | 1.18 | 1.18 | 1.18 | 1.18 |