

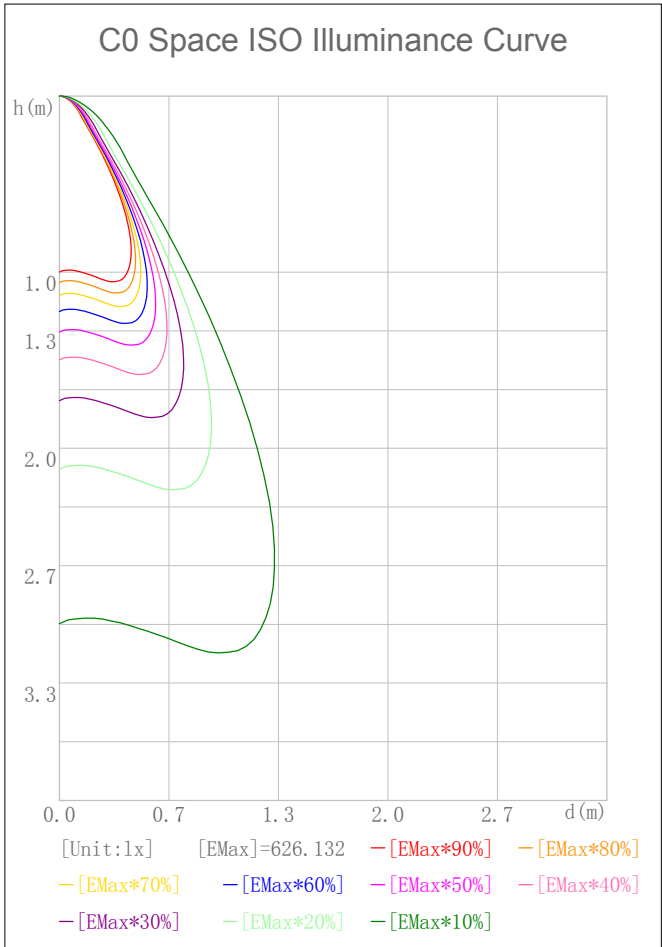
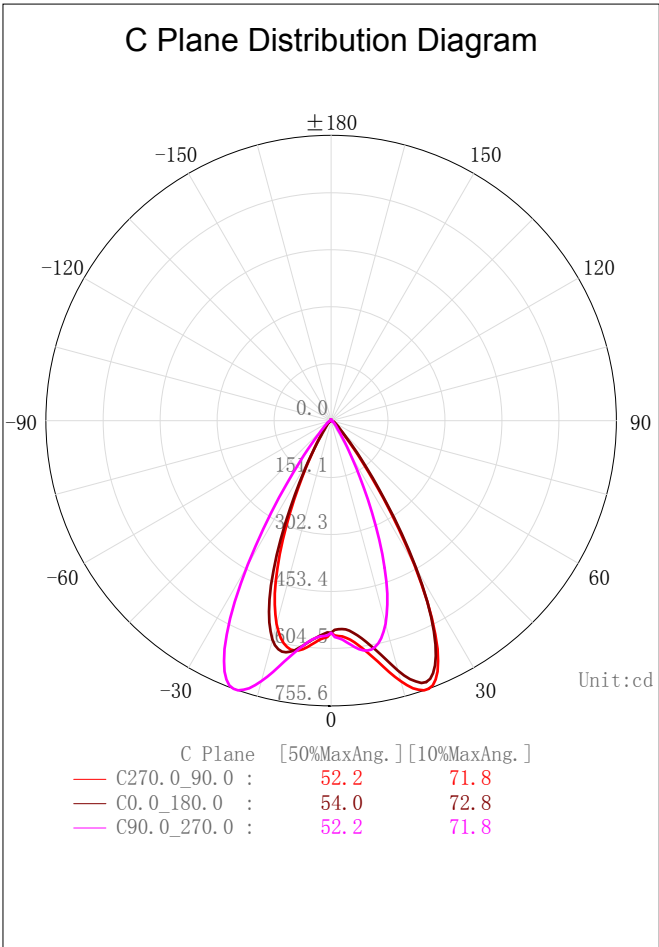
Indoor Luminaire Photometric Data

Description Information

| | | | |
|---|-------------------------|----------------------|-----------------------|
| Luminary Name:DL52-06-XX-02 4000K RA90 60D | | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | | Lamp Catalog: LED | Test Date: 2021/10/28 |
| 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 |

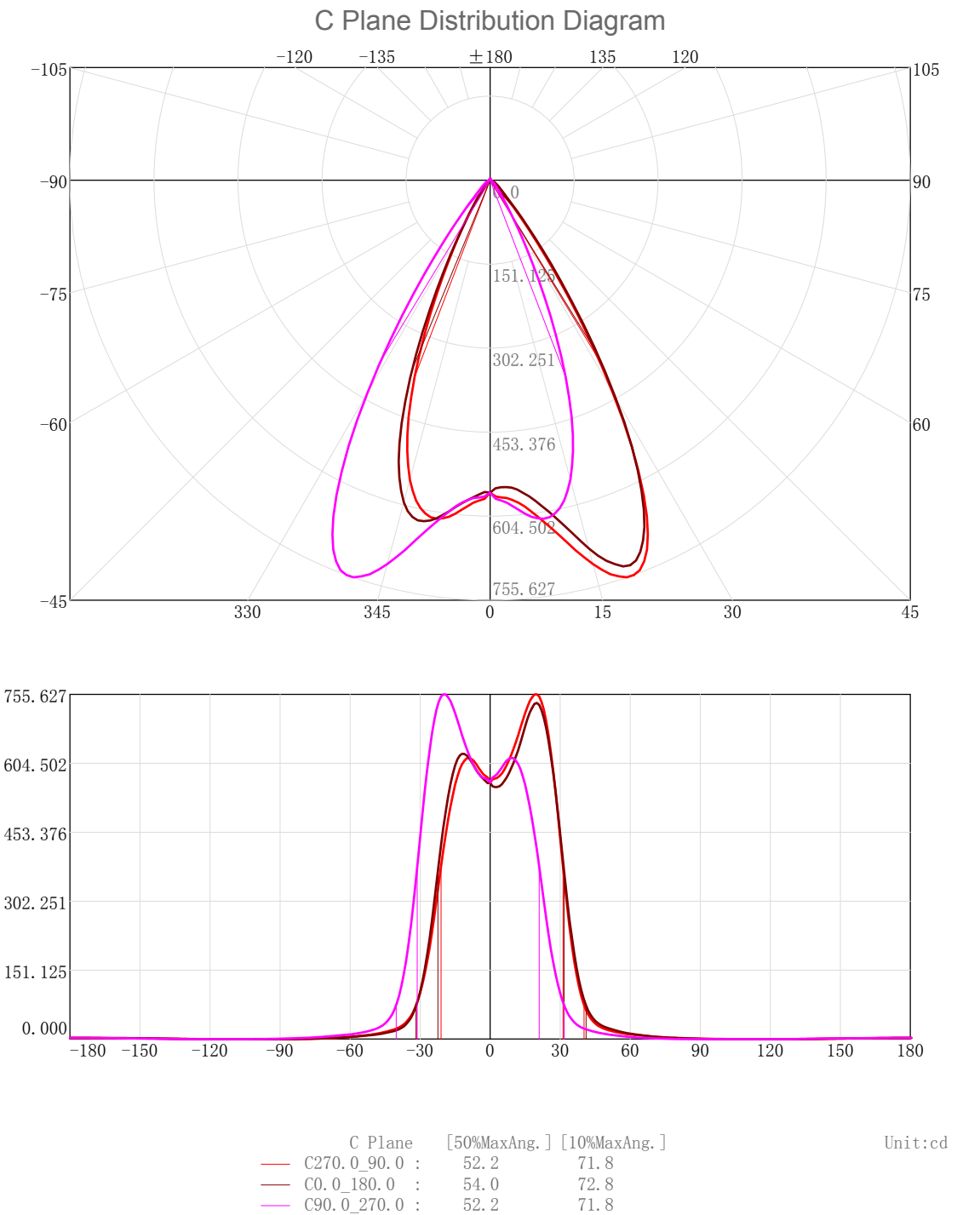
Character Parameter

| Lamp Speciality Parameter | | Luminaire Speciality Parameter | |
|---|-----------------------------------|---------------------------------------|--|
| Rated Flux(lm): 565.850 | Luminary Flux(lm): 565.852 | Field Angle(10%Imax): 71.8(°) | |
| Rated Power(W): | Luminary Efficiency: 100.00% | Down Lumens&Percent: 562.716lm 99.45% | |
| Rated Voltage(V): | Luminary EER(lm/W): 91.458 | Up Lumens&Percent: 3.136lm 0.55% | |
| Tested Power(W): 6.187 | Max. Candela(cd): 755.627 | S/MH: C0_a180=1.001 C90_270=0.979 | |
| Lamps' Inside: 1 | Max Cand@Ang. (°): C=270.0 γ=20.0 | CIE Type: Semi-Direct | |
| Tested Electrics (V, A, pf):241.1, 0.030, 0.844 | Beam Angle(50%Imax): 52.2(°) | ErP ϕ use(90°): 477.237lm | |
| Lamp Size (W*L*H):0.038m*-0.038m*0.000m | Left=-21.0°, Right=31.2° | IRF(%): 213.335 | |



2D Plane Light Intensity Distribution Curve

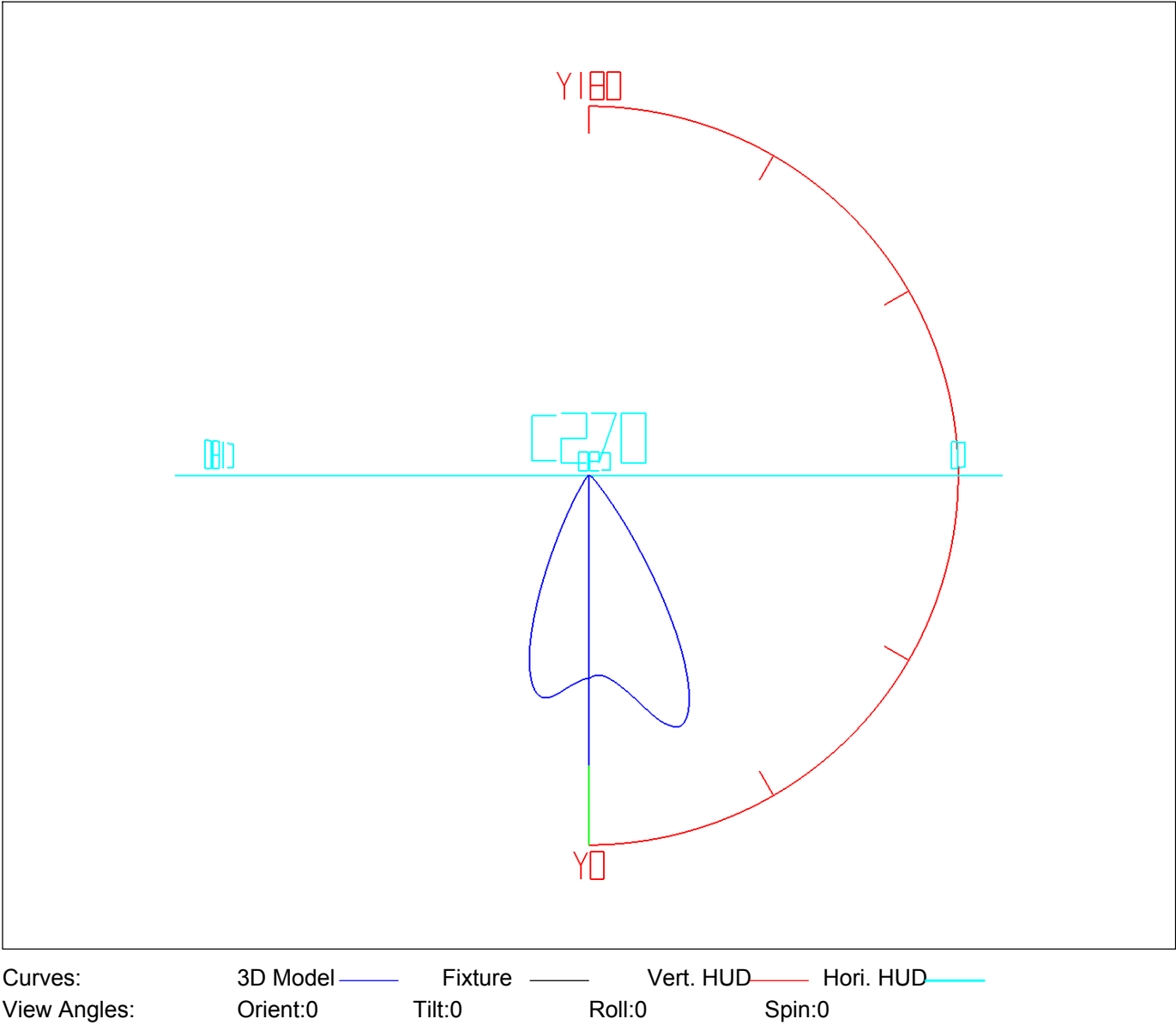
| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 4000K RA90 60D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/28 |



3D Light Intensity Distribution Modal

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 4000K 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: 2021/10/28 |

3D Light Intensity Distribution Modal



IES Indoor Report

Photometric Filename:DL52-06-XX-02 4000K 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 | 0.54 | 0.54 | 0.10 | 0.10 | 47.0-48.0 | 1.63 | 540.25 | 0.29 | 95.48 |
| 1.0-2.0 | 1.62 | 2.16 | 0.29 | 0.38 | 48.0-49.0 | 1.52 | 541.77 | 0.27 | 95.74 |
| 2.0-3.0 | 2.72 | 4.88 | 0.48 | 0.86 | 49.0-50.0 | 1.42 | 543.19 | 0.25 | 96.00 |
| 3.0-4.0 | 3.83 | 8.70 | 0.68 | 1.54 | 50.0-51.0 | 1.34 | 544.53 | 0.24 | 96.23 |
| 4.0-5.0 | 4.96 | 13.67 | 0.88 | 2.42 | 51.0-52.0 | 1.27 | 545.79 | 0.22 | 96.46 |
| 5.0-6.0 | 6.13 | 19.80 | 1.08 | 3.50 | 52.0-53.0 | 1.20 | 546.99 | 0.21 | 96.67 |
| 6.0-7.0 | 7.34 | 27.14 | 1.30 | 4.80 | 53.0-54.0 | 1.13 | 548.12 | 0.20 | 96.87 |
| 7.0-8.0 | 8.58 | 35.72 | 1.52 | 6.31 | 54.0-55.0 | 1.07 | 549.18 | 0.19 | 97.05 |
| 8.0-9.0 | 9.85 | 45.57 | 1.74 | 8.05 | 55.0-56.0 | 1.00 | 550.19 | 0.18 | 97.23 |
| 9.0-10.0 | 11.14 | 56.72 | 1.97 | 10.02 | 56.0-57.0 | 0.94 | 551.13 | 0.17 | 97.40 |
| 10.0-11.0 | 12.44 | 69.16 | 2.20 | 12.22 | 57.0-58.0 | 0.88 | 552.01 | 0.16 | 97.55 |
| 11.0-12.0 | 13.75 | 82.91 | 2.43 | 14.65 | 58.0-59.0 | 0.83 | 552.84 | 0.15 | 97.70 |
| 12.0-13.0 | 15.05 | 97.97 | 2.66 | 17.31 | 59.0-60.0 | 0.78 | 553.62 | 0.14 | 97.84 |
| 13.0-14.0 | 16.32 | 114.29 | 2.89 | 20.20 | 60.0-61.0 | 0.73 | 554.35 | 0.13 | 97.97 |
| 14.0-15.0 | 17.55 | 131.84 | 3.10 | 23.30 | 61.0-62.0 | 0.69 | 555.05 | 0.12 | 98.09 |
| 15.0-16.0 | 18.70 | 150.54 | 3.30 | 26.60 | 62.0-63.0 | 0.65 | 555.70 | 0.12 | 98.21 |
| 16.0-17.0 | 19.74 | 170.28 | 3.49 | 30.09 | 63.0-64.0 | 0.61 | 556.31 | 0.11 | 98.31 |
| 17.0-18.0 | 20.67 | 190.95 | 3.65 | 33.75 | 64.0-65.0 | 0.58 | 556.89 | 0.10 | 98.42 |
| 18.0-19.0 | 21.44 | 212.39 | 3.79 | 37.53 | 65.0-66.0 | 0.54 | 557.42 | 0.09 | 98.51 |
| 19.0-20.0 | 22.02 | 234.41 | 3.89 | 41.43 | 66.0-67.0 | 0.50 | 557.92 | 0.09 | 98.60 |
| 20.0-21.0 | 22.37 | 256.78 | 3.95 | 45.38 | 67.0-68.0 | 0.46 | 558.38 | 0.08 | 98.68 |
| 21.0-22.0 | 22.47 | 279.25 | 3.97 | 49.35 | 68.0-69.0 | 0.43 | 558.82 | 0.08 | 98.76 |
| 22.0-23.0 | 22.32 | 301.58 | 3.95 | 53.30 | 69.0-70.0 | 0.40 | 559.22 | 0.07 | 98.83 |
| 23.0-24.0 | 21.94 | 323.52 | 3.88 | 57.17 | 70.0-71.0 | 0.37 | 559.59 | 0.07 | 98.89 |
| 24.0-25.0 | 21.33 | 344.85 | 3.77 | 60.94 | 71.0-72.0 | 0.34 | 559.92 | 0.06 | 98.95 |
| 25.0-26.0 | 20.51 | 365.36 | 3.63 | 64.57 | 72.0-73.0 | 0.31 | 560.23 | 0.05 | 99.01 |
| 26.0-27.0 | 19.52 | 384.88 | 3.45 | 68.02 | 73.0-74.0 | 0.28 | 560.51 | 0.05 | 99.06 |
| 27.0-28.0 | 18.39 | 403.27 | 3.25 | 71.27 | 74.0-75.0 | 0.26 | 560.78 | 0.05 | 99.10 |
| 28.0-29.0 | 17.12 | 420.39 | 3.03 | 74.29 | 75.0-76.0 | 0.24 | 561.01 | 0.04 | 99.15 |
| 29.0-30.0 | 15.73 | 436.12 | 2.78 | 77.07 | 76.0-77.0 | 0.22 | 561.23 | 0.04 | 99.18 |
| 30.0-31.0 | 14.28 | 450.41 | 2.52 | 79.60 | 77.0-78.0 | 0.20 | 561.43 | 0.04 | 99.22 |
| 31.0-32.0 | 12.82 | 463.23 | 2.27 | 81.86 | 78.0-79.0 | 0.18 | 561.61 | 0.03 | 99.25 |
| 32.0-33.0 | 11.37 | 474.60 | 2.01 | 83.87 | 79.0-80.0 | 0.16 | 561.78 | 0.03 | 99.28 |
| 33.0-34.0 | 9.96 | 484.56 | 1.76 | 85.63 | 80.0-81.0 | 0.15 | 561.92 | 0.03 | 99.31 |
| 34.0-35.0 | 8.65 | 493.21 | 1.53 | 87.16 | 81.0-82.0 | 0.13 | 562.06 | 0.02 | 99.33 |
| 35.0-36.0 | 7.46 | 500.67 | 1.32 | 88.48 | 82.0-83.0 | 0.12 | 562.17 | 0.02 | 99.35 |
| 36.0-37.0 | 6.41 | 507.08 | 1.13 | 89.61 | 83.0-84.0 | 0.10 | 562.28 | 0.02 | 99.37 |
| 37.0-38.0 | 5.49 | 512.58 | 0.97 | 90.59 | 84.0-85.0 | 0.09 | 562.37 | 0.02 | 99.39 |
| 38.0-39.0 | 4.70 | 517.28 | 0.83 | 91.42 | 85.0-86.0 | 0.08 | 562.46 | 0.01 | 99.40 |
| 39.0-40.0 | 4.03 | 521.31 | 0.71 | 92.13 | 86.0-87.0 | 0.08 | 562.53 | 0.01 | 99.41 |
| 40.0-41.0 | 3.48 | 524.79 | 0.62 | 92.74 | 87.0-88.0 | 0.07 | 562.60 | 0.01 | 99.43 |
| 41.0-42.0 | 3.02 | 527.82 | 0.53 | 93.28 | 88.0-89.0 | 0.06 | 562.66 | 0.01 | 99.44 |
| 42.0-43.0 | 2.65 | 530.47 | 0.47 | 93.75 | 89.0-90.0 | 0.05 | 562.72 | 0.01 | 99.45 |
| 43.0-44.0 | 2.35 | 532.82 | 0.42 | 94.16 | 90.0-91.0 | 0.05 | 562.76 | 0.01 | 99.45 |
| 44.0-45.0 | 2.12 | 534.94 | 0.37 | 94.54 | 91.0-92.0 | 0.04 | 562.80 | 0.01 | 99.46 |
| 45.0-46.0 | 1.92 | 536.86 | 0.34 | 94.88 | 92.0-93.0 | 0.03 | 562.84 | 0.01 | 99.47 |
| 46.0-47.0 | 1.76 | 538.62 | 0.31 | 95.19 | 93.0-94.0 | 0.03 | 562.87 | 0.01 | 99.47 |

IES Indoor Report

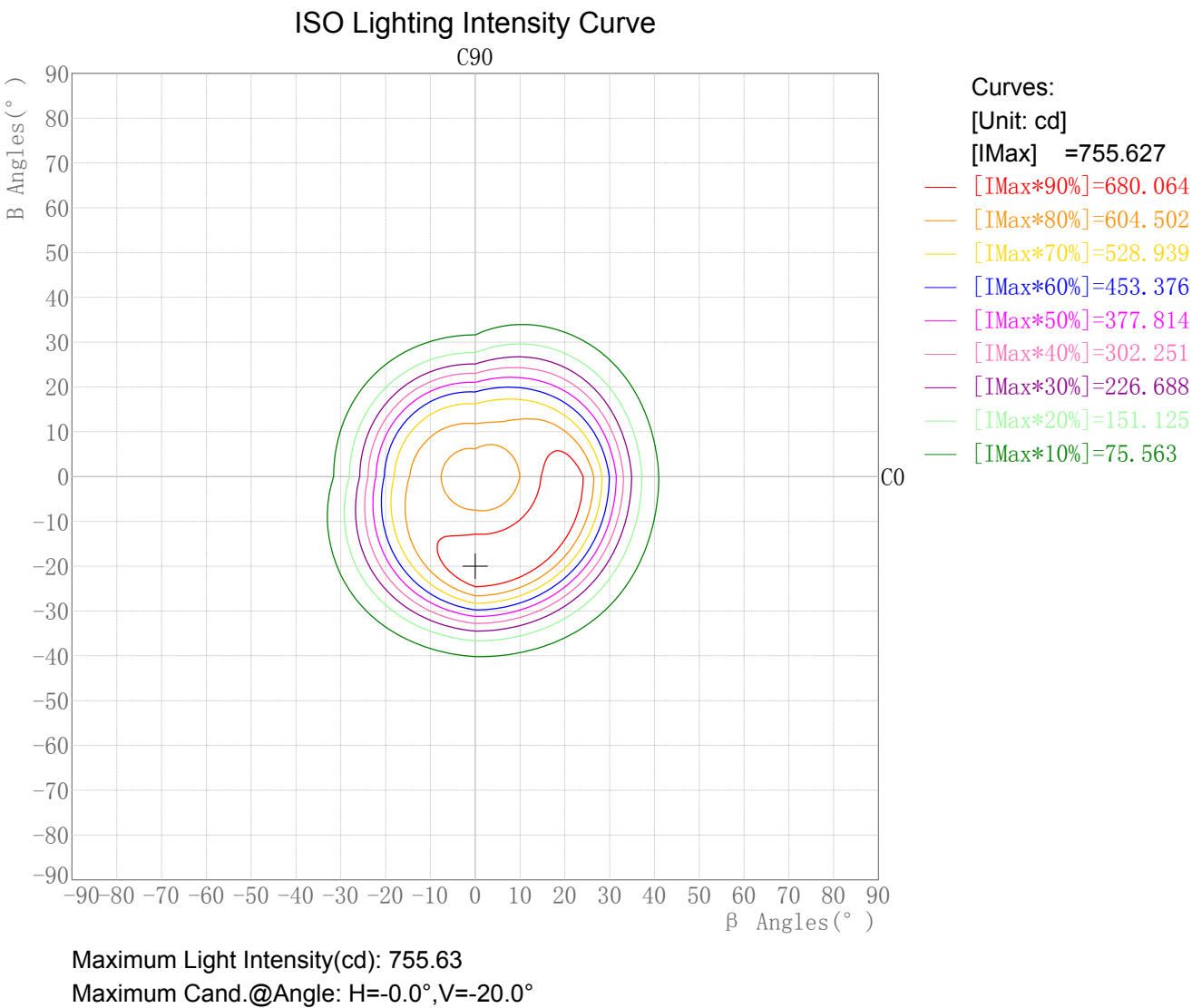
Photometric Filename:DL52-06-XX-02 4000K RA90 60D.IES

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 | 0.03 | 562.89 | 0.00 | 99.48 | 141.0-142.0 | 0.06 | 563.52 | 0.01 | 99.59 |
| 95.0-96.0 | 0.02 | 562.91 | 0.00 | 99.48 | 142.0-143.0 | 0.07 | 563.58 | 0.01 | 99.60 |
| 96.0-97.0 | 0.02 | 562.93 | 0.00 | 99.48 | 143.0-144.0 | 0.07 | 563.65 | 0.01 | 99.61 |
| 97.0-98.0 | 0.02 | 562.95 | 0.00 | 99.49 | 144.0-145.0 | 0.07 | 563.73 | 0.01 | 99.62 |
| 98.0-99.0 | 0.01 | 562.96 | 0.00 | 99.49 | 145.0-146.0 | 0.08 | 563.80 | 0.01 | 99.64 |
| 99.0-100.0 | 0.01 | 562.97 | 0.00 | 99.49 | 146.0-147.0 | 0.08 | 563.88 | 0.01 | 99.65 |
| 100.0-101.0 | 0.01 | 562.98 | 0.00 | 99.49 | 147.0-148.0 | 0.08 | 563.96 | 0.01 | 99.67 |
| 101.0-102.0 | 0.00 | 562.98 | 0.00 | 99.49 | 148.0-149.0 | 0.08 | 564.04 | 0.01 | 99.68 |
| 102.0-103.0 | 0.00 | 562.98 | 0.00 | 99.49 | 149.0-150.0 | 0.08 | 564.12 | 0.01 | 99.69 |
| 103.0-104.0 | 0.00 | 562.99 | 0.00 | 99.49 | 150.0-151.0 | 0.08 | 564.21 | 0.01 | 99.71 |
| 104.0-105.0 | 0.00 | 562.99 | 0.00 | 99.49 | 151.0-152.0 | 0.08 | 564.29 | 0.02 | 99.72 |
| 105.0-106.0 | 0.00 | 562.99 | 0.00 | 99.49 | 152.0-153.0 | 0.09 | 564.38 | 0.02 | 99.74 |
| 106.0-107.0 | 0.00 | 562.99 | 0.00 | 99.49 | 153.0-154.0 | 0.09 | 564.46 | 0.02 | 99.75 |
| 107.0-108.0 | 0.00 | 562.99 | 0.00 | 99.49 | 154.0-155.0 | 0.08 | 564.55 | 0.01 | 99.77 |
| 108.0-109.0 | 0.00 | 562.99 | 0.00 | 99.49 | 155.0-156.0 | 0.08 | 564.63 | 0.01 | 99.78 |
| 109.0-110.0 | 0.00 | 562.99 | 0.00 | 99.49 | 156.0-157.0 | 0.08 | 564.72 | 0.01 | 99.80 |
| 110.0-111.0 | 0.00 | 562.99 | 0.00 | 99.49 | 157.0-158.0 | 0.08 | 564.80 | 0.01 | 99.81 |
| 111.0-112.0 | 0.00 | 562.99 | 0.00 | 99.49 | 158.0-159.0 | 0.08 | 564.88 | 0.01 | 99.83 |
| 112.0-113.0 | 0.00 | 562.99 | 0.00 | 99.49 | 159.0-160.0 | 0.08 | 564.96 | 0.01 | 99.84 |
| 113.0-114.0 | 0.00 | 562.99 | 0.00 | 99.49 | 160.0-161.0 | 0.08 | 565.03 | 0.01 | 99.86 |
| 114.0-115.0 | 0.00 | 562.99 | 0.00 | 99.49 | 161.0-162.0 | 0.07 | 565.11 | 0.01 | 99.87 |
| 115.0-116.0 | 0.00 | 562.99 | 0.00 | 99.49 | 162.0-163.0 | 0.07 | 565.18 | 0.01 | 99.88 |
| 116.0-117.0 | 0.00 | 562.99 | 0.00 | 99.49 | 163.0-164.0 | 0.07 | 565.25 | 0.01 | 99.89 |
| 117.0-118.0 | 0.00 | 562.99 | 0.00 | 99.49 | 164.0-165.0 | 0.07 | 565.32 | 0.01 | 99.91 |
| 118.0-119.0 | 0.00 | 562.99 | 0.00 | 99.49 | 165.0-166.0 | 0.06 | 565.38 | 0.01 | 99.92 |
| 119.0-120.0 | 0.00 | 562.99 | 0.00 | 99.49 | 166.0-167.0 | 0.06 | 565.44 | 0.01 | 99.93 |
| 120.0-121.0 | 0.00 | 562.99 | 0.00 | 99.49 | 167.0-168.0 | 0.06 | 565.50 | 0.01 | 99.94 |
| 121.0-122.0 | 0.00 | 562.99 | 0.00 | 99.49 | 168.0-169.0 | 0.05 | 565.55 | 0.01 | 99.95 |
| 122.0-123.0 | 0.00 | 562.99 | 0.00 | 99.49 | 169.0-170.0 | 0.05 | 565.60 | 0.01 | 99.96 |
| 123.0-124.0 | 0.00 | 562.99 | 0.00 | 99.49 | 170.0-171.0 | 0.05 | 565.65 | 0.01 | 99.96 |
| 124.0-125.0 | 0.00 | 562.99 | 0.00 | 99.49 | 171.0-172.0 | 0.04 | 565.69 | 0.01 | 99.97 |
| 125.0-126.0 | 0.00 | 562.99 | 0.00 | 99.49 | 172.0-173.0 | 0.04 | 565.73 | 0.01 | 99.98 |
| 126.0-127.0 | 0.01 | 563.00 | 0.00 | 99.50 | 173.0-174.0 | 0.03 | 565.76 | 0.01 | 99.98 |
| 127.0-128.0 | 0.01 | 563.00 | 0.00 | 99.50 | 174.0-175.0 | 0.03 | 565.79 | 0.00 | 99.99 |
| 128.0-129.0 | 0.01 | 563.02 | 0.00 | 99.50 | 175.0-176.0 | 0.02 | 565.81 | 0.00 | 99.99 |
| 129.0-130.0 | 0.01 | 563.03 | 0.00 | 99.50 | 176.0-177.0 | 0.02 | 565.83 | 0.00 | 100.00 |
| 130.0-131.0 | 0.02 | 563.05 | 0.00 | 99.50 | 177.0-178.0 | 0.01 | 565.84 | 0.00 | 100.00 |
| 131.0-132.0 | 0.02 | 563.07 | 0.00 | 99.51 | 178.0-179.0 | 0.01 | 565.85 | 0.00 | 100.00 |
| 132.0-133.0 | 0.03 | 563.10 | 0.00 | 99.51 | 179.0-180.0 | 0.00 | 565.85 | 0.00 | 100.00 |
| 133.0-134.0 | 0.03 | 563.12 | 0.01 | 99.52 | | | | | |
| 134.0-135.0 | 0.03 | 563.16 | 0.01 | 99.52 | | | | | |
| 135.0-136.0 | 0.04 | 563.20 | 0.01 | 99.53 | | | | | |
| 136.0-137.0 | 0.04 | 563.24 | 0.01 | 99.54 | | | | | |
| 137.0-138.0 | 0.05 | 563.29 | 0.01 | 99.55 | | | | | |
| 138.0-139.0 | 0.05 | 563.34 | 0.01 | 99.56 | | | | | |
| 139.0-140.0 | 0.06 | 563.40 | 0.01 | 99.57 | | | | | |
| 140.0-141.0 | 0.06 | 563.45 | 0.01 | 99.58 | | | | | |

Rectangle ISO Lighting Intensity Diagram

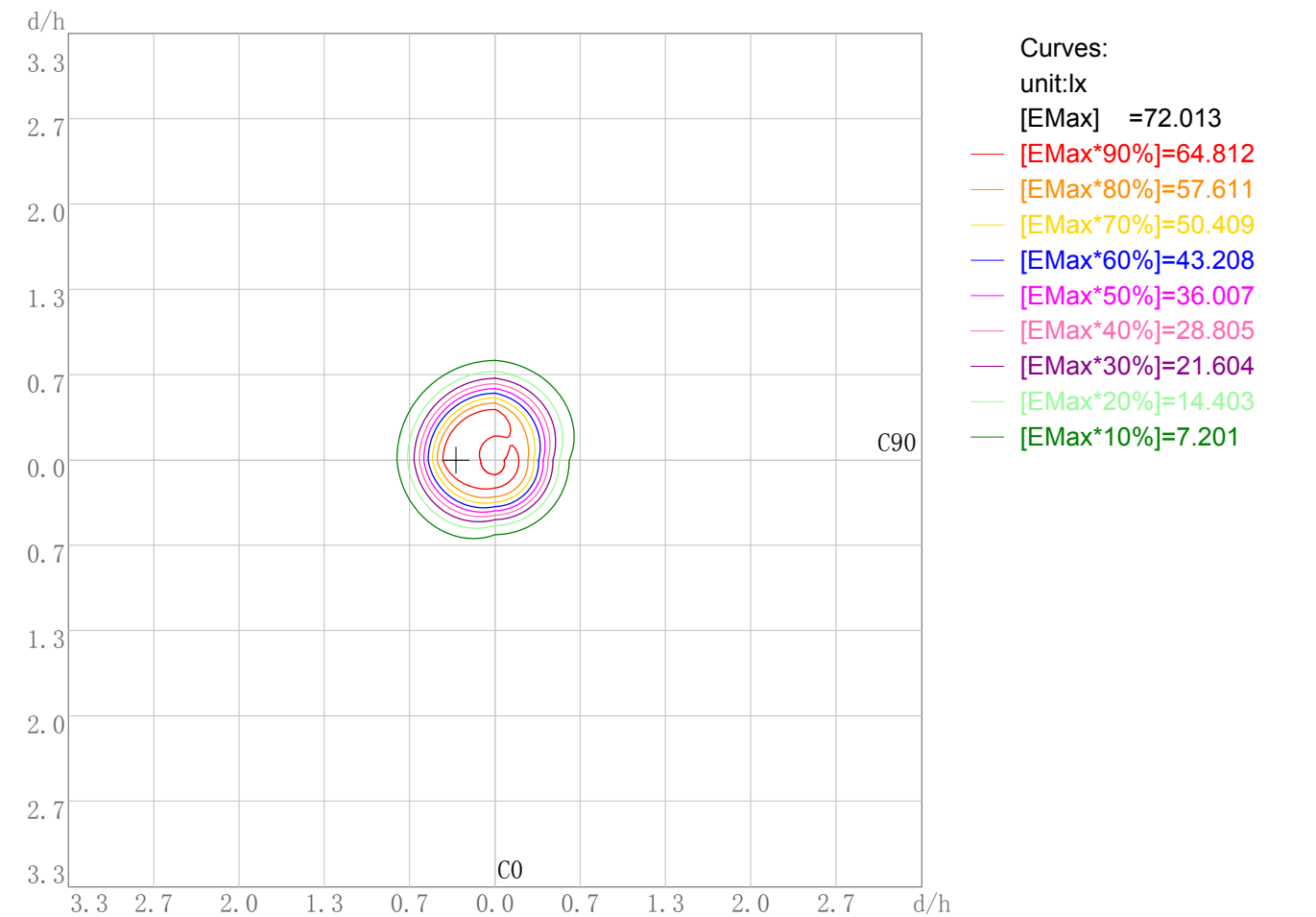
| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 4000K RA90 60D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/28 |



Plane ISO-Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 4000K 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: 2021/10/28 |

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00

Working Plane Maximum Illuminance(lx): 72.01

Working Plane Maximum Illuminance Position(d/h):H-0.3 V-0.0

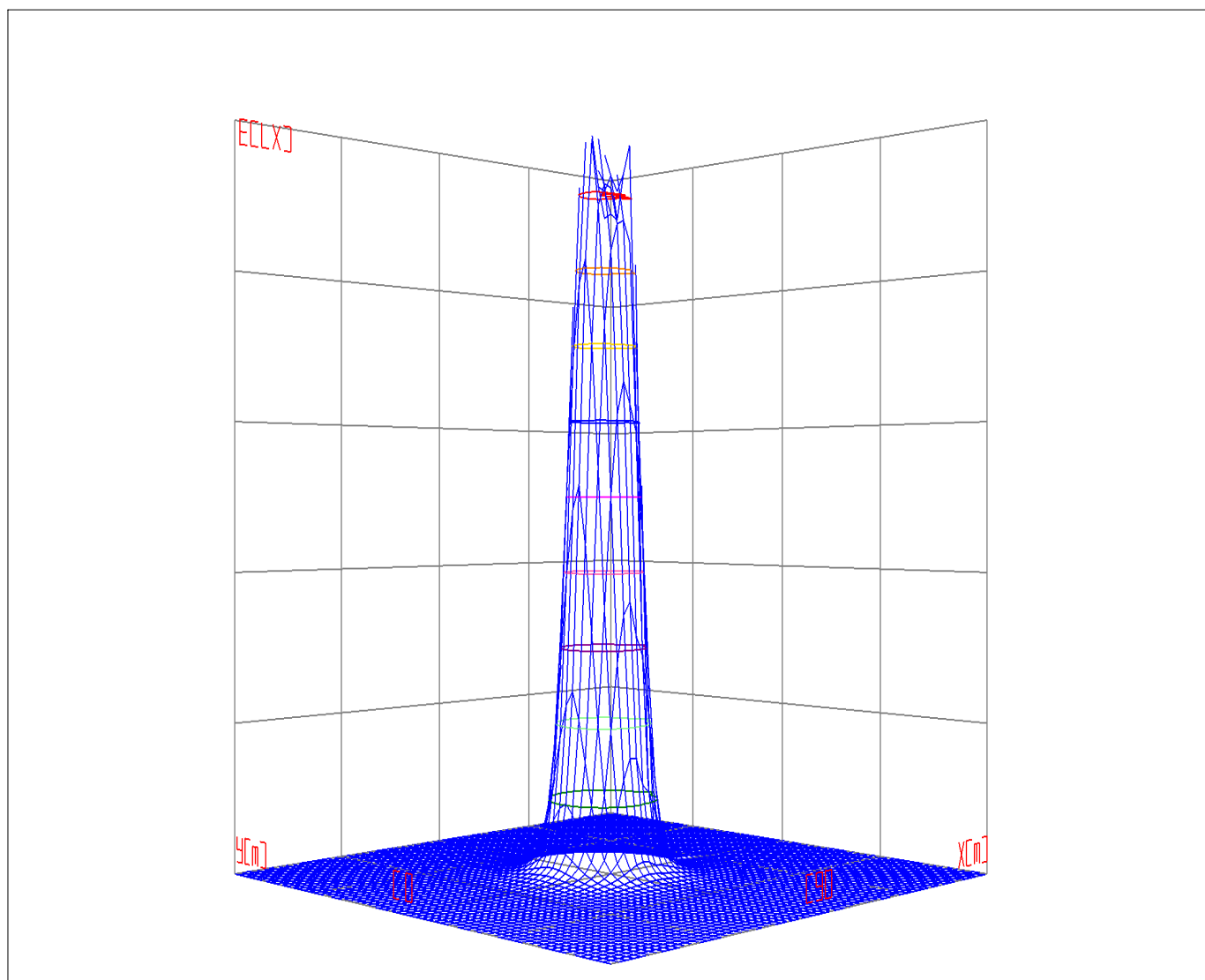
IES Indoor Report

Photometric Filename:DL52-06-XX-02 4000K RA90 60D.IES

3D Plane ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 4000K 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: 2021/10/28 |

3D Plane Illuminance Modal

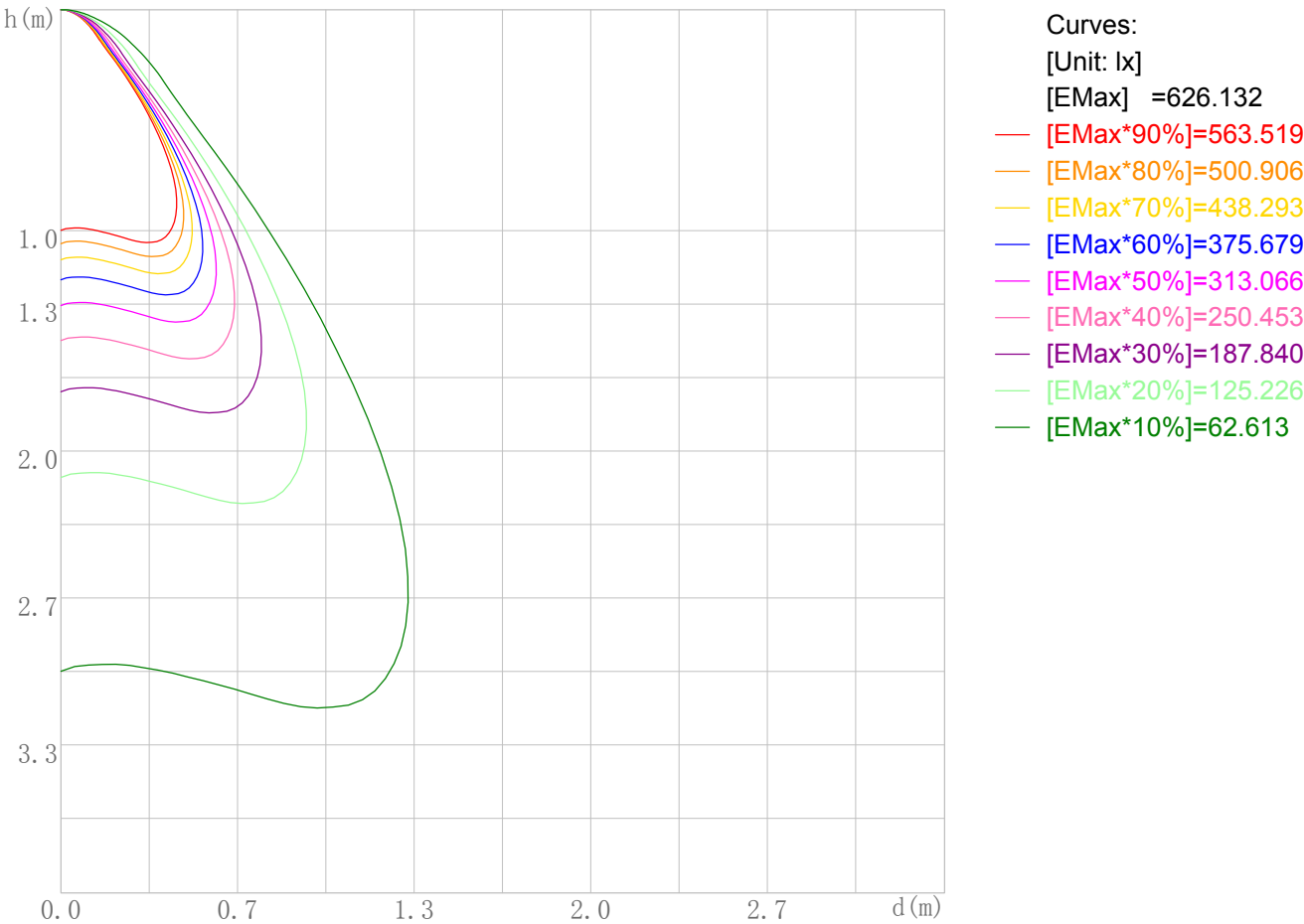


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 4000K 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: 2021/10/28 |

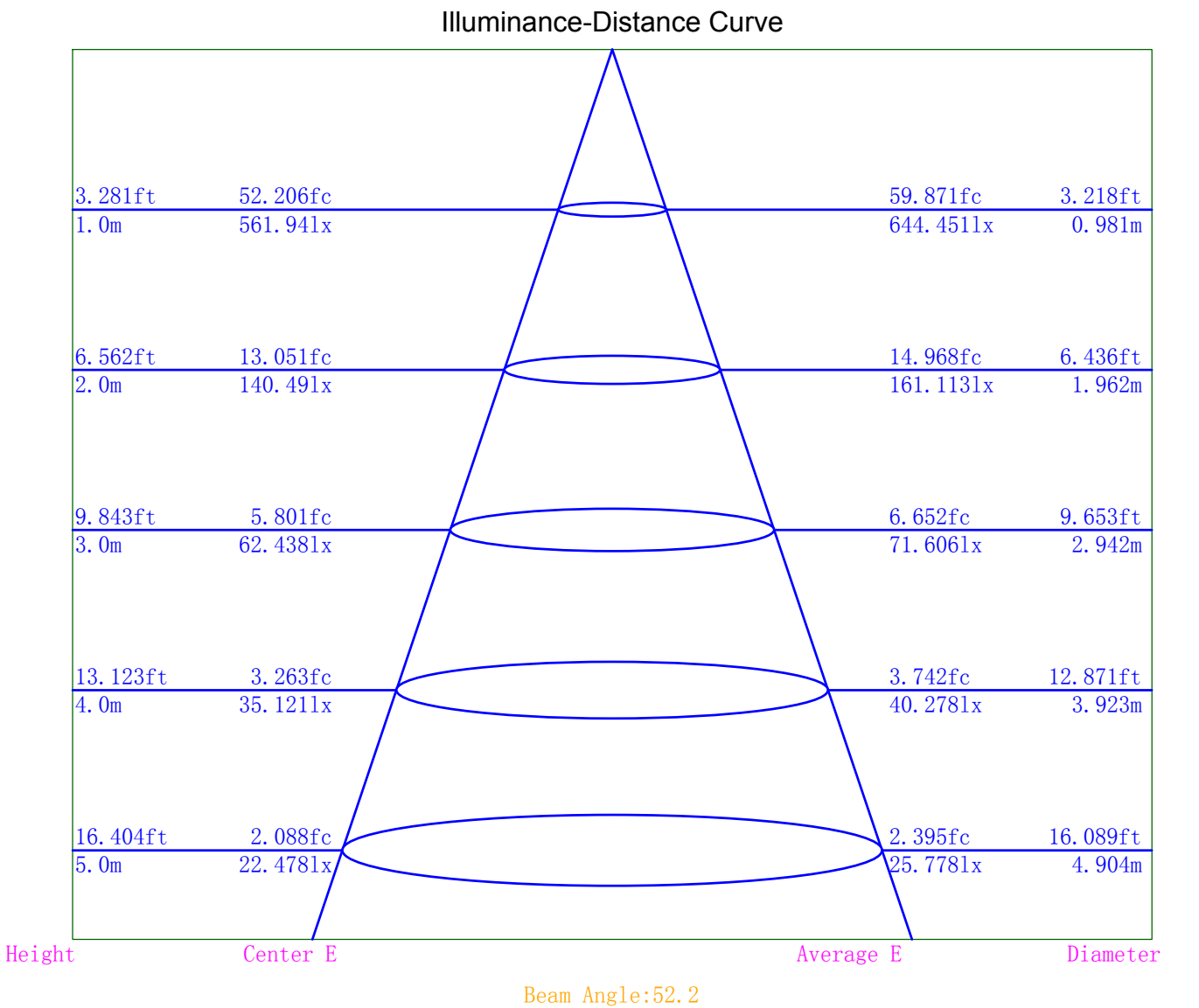
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:626.13lx,17.0deg
Plane Maximum Lighting Intensity and @Angle:736.771cd,0deg

Illuminance-Distance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 4000K 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: 2021/10/28 |



Indoor Luminance Limiting Curves

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 4000K 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: 2021/10/28 |

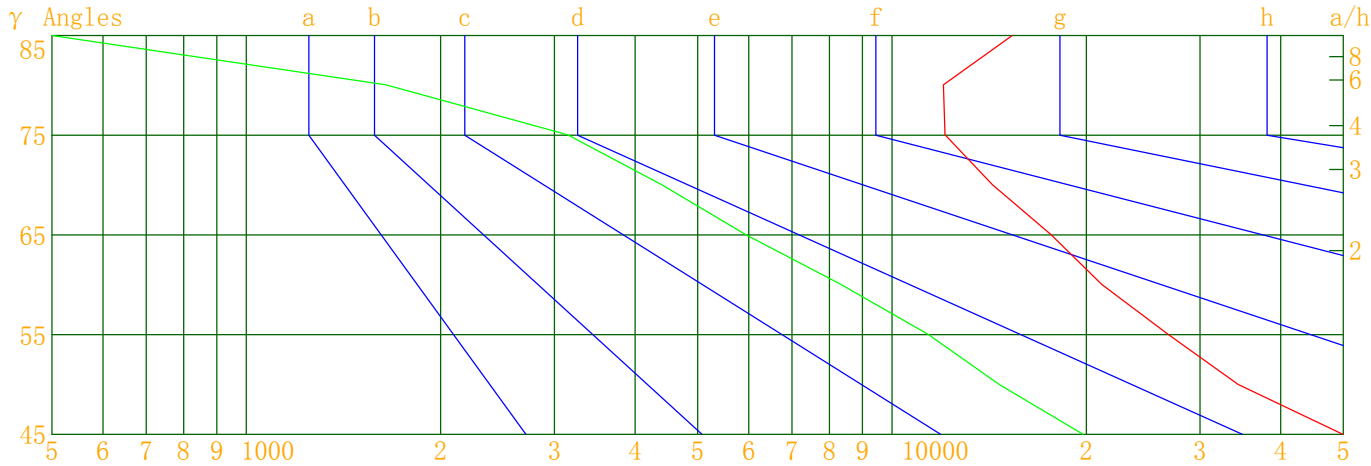
Glare Grade Table

| 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 | 49940 | 34361 | 26787 | 21139 | 17630 | 14308 | 12084 | 12014 | 15357 |
| C90 | 19775 | 14652 | 11385 | 8340 | 5936 | 4398 | 3144 | 1645 | 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

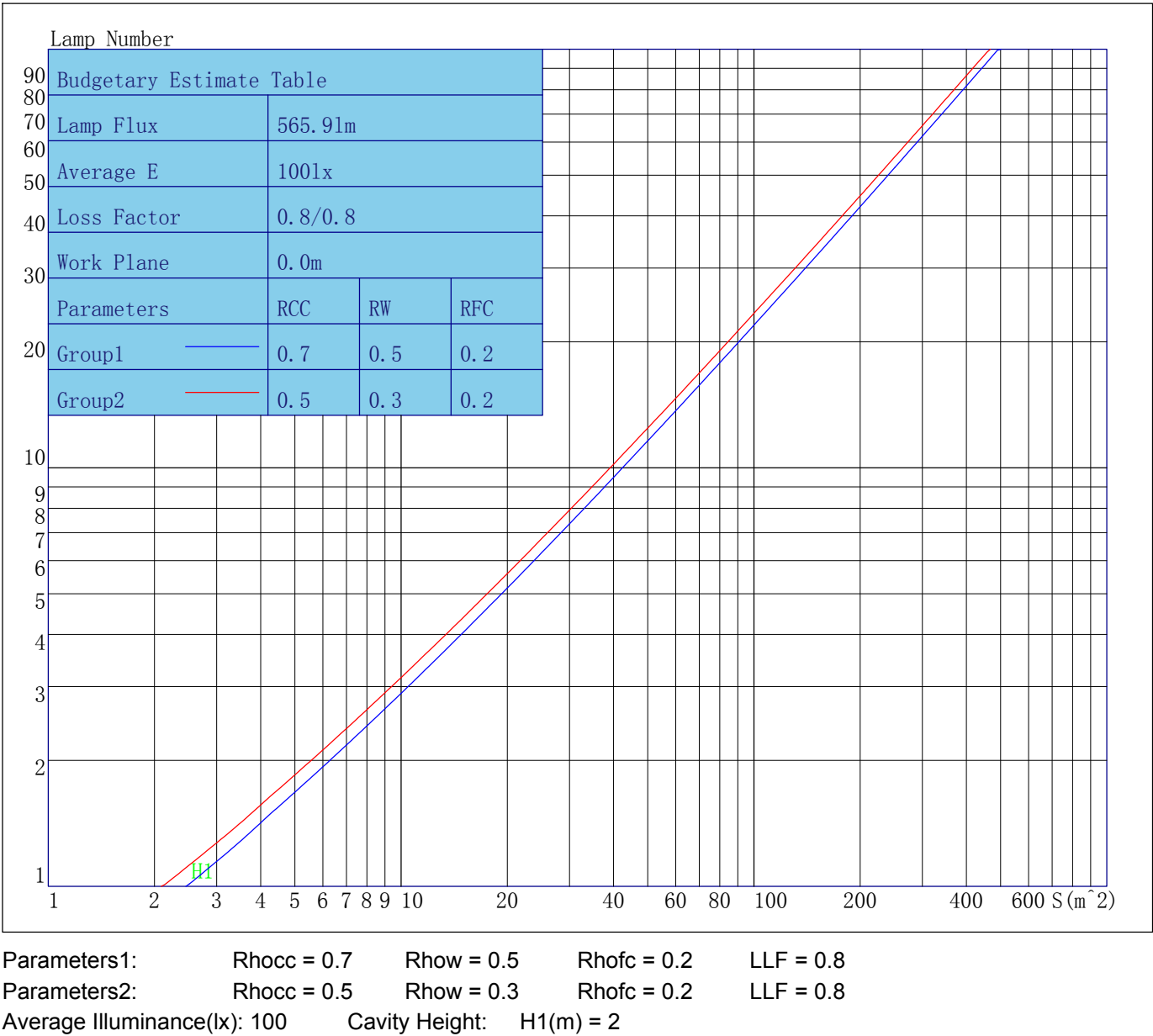
Luminous Curves:

C0-C180 Color: —

C90-C270 Color: —

Indoor Budgetary Estimate Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 4000K 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: 2021/10/28 |



Indoor Coefficient of Utilization Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 4000K 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: 2021/10/28 |

| 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 | 99 |
| 1 | 113 | 111 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 95 | 93 |
| 2 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 94 | 98 | 95 | 92 | 95 | 92 | 90 | 92 | 90 | 88 | 87 |
| 3 | 102 | 96 | 91 | 87 | 100 | 95 | 90 | 86 | 92 | 88 | 85 | 89 | 86 | 84 | 87 | 85 | 82 | 81 |
| 4 | 97 | 90 | 84 | 80 | 96 | 89 | 84 | 80 | 87 | 82 | 79 | 85 | 81 | 78 | 83 | 79 | 77 | 75 |
| 5 | 93 | 84 | 79 | 74 | 91 | 83 | 78 | 74 | 82 | 77 | 73 | 80 | 76 | 73 | 78 | 75 | 72 | 71 |
| 6 | 88 | 79 | 74 | 69 | 87 | 79 | 73 | 69 | 77 | 72 | 69 | 76 | 71 | 68 | 74 | 70 | 68 | 66 |
| 7 | 84 | 75 | 69 | 65 | 83 | 74 | 69 | 65 | 73 | 68 | 64 | 72 | 67 | 64 | 70 | 67 | 64 | 62 |
| 8 | 80 | 71 | 65 | 61 | 79 | 70 | 65 | 61 | 69 | 64 | 60 | 68 | 63 | 60 | 67 | 63 | 60 | 58 |
| 9 | 76 | 67 | 61 | 57 | 75 | 66 | 61 | 57 | 65 | 60 | 57 | 65 | 60 | 57 | 64 | 60 | 56 | 55 |
| 10 | 73 | 63 | 58 | 54 | 72 | 63 | 58 | 54 | 62 | 57 | 54 | 61 | 57 | 54 | 61 | 56 | 53 | 52 |

Unified Glare Rating Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: DL52-06-XX-02 4000K 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: 2021/10/28 |

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 | 23.3 | 24.5 | 23.7 | 24.8 | 25.2 | 16.4 | 17.6 | 16.8 | 17.9 | 18.2 |
| | 23.3 | 24.4 | 23.7 | 24.7 | 25.1 | 16.4 | 17.5 | 16.8 | 17.8 | 18.2 |
| | 23.3 | 24.3 | 23.7 | 24.7 | 25.1 | 16.4 | 17.4 | 16.8 | 17.7 | 18.1 |
| | 23.3 | 24.2 | 23.7 | 24.6 | 25.0 | 16.3 | 17.2 | 16.7 | 17.6 | 18.0 |
| | 23.3 | 24.1 | 23.7 | 24.5 | 25.0 | 16.2 | 17.1 | 16.7 | 17.5 | 17.9 |
| | 23.2 | 24.1 | 23.7 | 24.5 | 24.9 | 16.2 | 17.0 | 16.6 | 17.4 | 17.9 |
| X=4H Y=2H | 23.1 | 24.1 | 23.5 | 24.5 | 24.9 | 16.4 | 17.4 | 16.8 | 17.8 | 18.2 |
| | 23.2 | 24.0 | 23.6 | 24.4 | 24.9 | 16.5 | 17.3 | 16.9 | 17.8 | 18.2 |
| | 23.1 | 23.9 | 23.6 | 24.4 | 24.8 | 16.5 | 17.3 | 16.9 | 17.7 | 18.1 |
| | 23.2 | 23.9 | 23.6 | 24.3 | 24.8 | 16.4 | 17.1 | 16.9 | 17.6 | 18.1 |
| | 23.2 | 23.8 | 23.6 | 24.3 | 24.8 | 16.3 | 17.0 | 16.8 | 17.5 | 18.0 |
| | 23.2 | 23.8 | 23.7 | 24.3 | 24.8 | 16.3 | 16.9 | 16.8 | 17.4 | 17.9 |
| X=8H Y=4H | 23.0 | 23.7 | 23.5 | 24.2 | 24.6 | 16.4 | 17.1 | 16.9 | 17.5 | 18.0 |
| | 23.1 | 23.7 | 23.6 | 24.2 | 24.7 | 16.4 | 17.0 | 16.9 | 17.5 | 18.0 |
| | 23.1 | 23.6 | 23.6 | 24.2 | 24.7 | 16.3 | 16.9 | 16.8 | 17.4 | 17.9 |
| | 23.2 | 23.7 | 23.7 | 24.2 | 24.7 | 16.3 | 16.8 | 16.8 | 17.3 | 17.9 |
| X=12H Y=4H | 23.0 | 23.6 | 23.5 | 24.1 | 24.6 | 16.4 | 17.0 | 16.9 | 17.5 | 18.0 |
| | 23.0 | 23.6 | 23.6 | 24.0 | 24.6 | 16.3 | 16.9 | 16.9 | 17.4 | 17.9 |
| | 23.1 | 23.6 | 23.6 | 24.1 | 24.7 | 16.3 | 16.8 | 16.8 | 17.3 | 17.9 |
| Variations with the objverver position at spacings | | | | | | | | | | |
| S=1.0H | 0.3/-0.3 | | | | | 1.0/-1.3 | | | | |
| S=1.5H | 0.7/-0.7 | | | | | 1.5/-2.1 | | | | |
| S=2.0H | 1.3/-1.2 | | | | | 2.4/-2.7 | | | | |
| Reduced UGR Table: | | | | | | | | | | |
| Nordic Standard Table: | BK0 | | | | | BK0 | | | | |
| Correction Value | 0.5 | | | | | 0.5 | | | | |

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 4000K RA90 60D.IES

Candela Tabulation

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|--------|--------|--------|--------|--------|
| γ 0.0 | 561.94 | 561.94 | 561.94 | 561.94 |
| γ 1.0 | 554.24 | 573.07 | 560.80 | 569.03 |
| γ 2.0 | 552.57 | 576.61 | 565.63 | 570.97 |
| γ 3.0 | 552.61 | 580.95 | 570.76 | 572.46 |
| γ 4.0 | 554.37 | 588.03 | 576.52 | 576.72 |
| γ 5.0 | 558.44 | 595.36 | 583.04 | 582.09 |
| γ 6.0 | 565.26 | 603.21 | 590.62 | 589.81 |
| γ 7.0 | 572.72 | 609.97 | 599.52 | 599.50 |
| γ 8.0 | 582.23 | 614.16 | 607.68 | 610.48 |
| γ 9.0 | 593.37 | 616.42 | 615.76 | 622.56 |
| γ 10.0 | 605.12 | 615.41 | 621.38 | 635.86 |
| γ 11.0 | 618.63 | 610.60 | 624.82 | 650.06 |
| γ 12.0 | 633.41 | 602.85 | 625.54 | 665.93 |
| γ 13.0 | 650.05 | 591.36 | 621.53 | 683.18 |
| γ 14.0 | 667.71 | 575.61 | 613.22 | 698.91 |
| γ 15.0 | 685.53 | 557.59 | 599.85 | 714.71 |
| γ 16.0 | 702.30 | 534.40 | 581.06 | 728.60 |
| γ 17.0 | 715.94 | 509.60 | 558.72 | 741.08 |
| γ 18.0 | 725.96 | 481.39 | 531.88 | 749.15 |
| γ 19.0 | 734.66 | 449.88 | 500.34 | 755.38 |
| γ 20.0 | 736.77 | 415.01 | 464.77 | 755.63 |
| γ 21.0 | 732.54 | 378.77 | 425.68 | 751.25 |
| γ 22.0 | 720.96 | 340.81 | 383.89 | 739.30 |
| γ 23.0 | 703.99 | 303.27 | 341.42 | 721.85 |
| γ 24.0 | 682.15 | 266.14 | 298.46 | 697.05 |
| γ 25.0 | 654.41 | 230.93 | 256.56 | 666.92 |
| γ 26.0 | 621.42 | 197.91 | 218.15 | 629.97 |
| γ 27.0 | 583.89 | 168.54 | 183.18 | 588.16 |
| γ 28.0 | 542.99 | 142.67 | 152.38 | 542.91 |
| γ 29.0 | 497.72 | 120.23 | 125.97 | 492.94 |
| γ 30.0 | 449.69 | 100.59 | 103.17 | 440.80 |
| γ 31.0 | 401.10 | 83.95 | 84.73 | 388.93 |
| γ 32.0 | 352.89 | 70.43 | 69.24 | 338.70 |
| γ 33.0 | 306.01 | 59.17 | 56.26 | 291.20 |
| γ 34.0 | 261.39 | 50.24 | 46.10 | 246.36 |
| γ 35.0 | 223.12 | 42.86 | 38.44 | 205.35 |
| γ 36.0 | 187.86 | 37.07 | 32.51 | 170.57 |
| γ 37.0 | 156.77 | 32.26 | 27.88 | 141.44 |
| γ 38.0 | 130.23 | 28.64 | 24.42 | 116.43 |
| γ 39.0 | 108.45 | 25.83 | 21.81 | 95.09 |
| γ 40.0 | 90.01 | 23.54 | 19.73 | 78.23 |
| γ 41.0 | 75.14 | 21.55 | 18.06 | 64.68 |
| γ 42.0 | 62.81 | 19.89 | 16.66 | 54.16 |
| γ 43.0 | 53.14 | 18.42 | 15.44 | 45.79 |
| γ 44.0 | 45.94 | 17.14 | 14.37 | 39.28 |
| γ 45.0 | 40.05 | 15.86 | 13.34 | 34.28 |
| γ 46.0 | 35.75 | 14.69 | 12.38 | 30.30 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|--------|-------|-------|--------|--------|
| γ 47.0 | 32.12 | 13.58 | 11.50 | 27.11 |
| γ 48.0 | 29.23 | 12.52 | 10.69 | 24.52 |
| γ 49.0 | 26.97 | 11.50 | 9.88 | 22.34 |
| γ 50.0 | 25.05 | 10.68 | 9.17 | 20.54 |
| γ 51.0 | 23.41 | 9.99 | 8.67 | 19.00 |
| γ 52.0 | 21.82 | 9.31 | 8.22 | 17.60 |
| γ 53.0 | 20.21 | 8.68 | 7.79 | 16.38 |
| γ 54.0 | 18.74 | 8.04 | 7.36 | 15.24 |
| γ 55.0 | 17.42 | 7.41 | 6.94 | 14.28 |
| γ 56.0 | 16.17 | 6.79 | 6.50 | 13.36 |
| γ 57.0 | 15.02 | 6.21 | 6.05 | 12.49 |
| γ 58.0 | 13.86 | 5.67 | 5.60 | 11.58 |
| γ 59.0 | 12.81 | 5.20 | 5.22 | 10.81 |
| γ 60.0 | 11.99 | 4.73 | 4.84 | 10.29 |
| γ 61.0 | 11.23 | 4.26 | 4.46 | 9.78 |
| γ 62.0 | 10.50 | 3.82 | 4.09 | 9.31 |
| γ 63.0 | 9.81 | 3.43 | 3.71 | 8.86 |
| γ 64.0 | 9.15 | 3.14 | 3.42 | 8.40 |
| γ 65.0 | 8.45 | 2.85 | 3.16 | 7.92 |
| γ 66.0 | 7.79 | 2.54 | 2.89 | 7.43 |
| γ 67.0 | 7.16 | 2.30 | 2.60 | 6.95 |
| γ 68.0 | 6.60 | 2.10 | 2.37 | 6.53 |
| γ 69.0 | 6.06 | 1.89 | 2.18 | 6.11 |
| γ 70.0 | 5.55 | 1.71 | 1.98 | 5.70 |
| γ 71.0 | 5.05 | 1.53 | 1.79 | 5.29 |
| γ 72.0 | 4.55 | 1.36 | 1.61 | 4.80 |
| γ 73.0 | 4.16 | 1.20 | 1.44 | 4.42 |
| γ 74.0 | 3.86 | 1.06 | 1.28 | 4.14 |
| γ 75.0 | 3.55 | 0.92 | 1.12 | 3.83 |
| γ 76.0 | 3.25 | 0.78 | 0.98 | 3.54 |
| γ 77.0 | 3.00 | 0.65 | 0.84 | 3.28 |
| γ 78.0 | 2.77 | 0.54 | 0.70 | 3.07 |
| γ 79.0 | 2.56 | 0.42 | 0.58 | 2.84 |
| γ 80.0 | 2.37 | 0.32 | 0.45 | 2.63 |
| γ 81.0 | 2.17 | 0.22 | 0.35 | 2.43 |
| γ 82.0 | 2.00 | 0.13 | 0.23 | 2.25 |
| γ 83.0 | 1.83 | 0.04 | 0.13 | 2.06 |
| γ 84.0 | 1.66 | 0.00 | 0.05 | 1.90 |
| γ 85.0 | 1.52 | 0.00 | 0.00 | 1.73 |
| γ 86.0 | 1.38 | 0.00 | 0.00 | 1.56 |
| γ 87.0 | 1.23 | 0.00 | 0.00 | 1.41 |
| γ 88.0 | 1.10 | 0.00 | 0.00 | 1.26 |
| γ 89.0 | 0.97 | 0.00 | 0.00 | 1.13 |
| γ 90.0 | 0.85 | 0.00 | 0.00 | 1.00 |
| γ 91.0 | 0.74 | 0.00 | 0.00 | 0.87 |
| γ 92.0 | 0.62 | 0.00 | 0.00 | 0.73 |
| γ 93.0 | 0.52 | 0.00 | 0.00 | 0.62 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 94.0 | 0.44 | 0.00 | 0.00 | 0.54 |
| γ 95.0 | 0.39 | 0.00 | 0.00 | 0.48 |
| γ 96.0 | 0.32 | 0.00 | 0.00 | 0.42 |
| γ 97.0 | 0.27 | 0.00 | 0.00 | 0.35 |
| γ 98.0 | 0.22 | 0.00 | 0.00 | 0.30 |
| γ 99.0 | 0.16 | 0.00 | 0.00 | 0.25 |
| γ 100.0 | 0.11 | 0.00 | 0.00 | 0.20 |
| γ 101.0 | 0.06 | 0.00 | 0.00 | 0.15 |
| γ 102.0 | 0.01 | 0.00 | 0.00 | 0.11 |
| γ 103.0 | 0.00 | 0.00 | 0.00 | 0.06 |
| γ 104.0 | 0.00 | 0.00 | 0.00 | 0.03 |
| 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 | 0.04 | 0.00 |
| γ 125.0 | 0.00 | 0.00 | 0.10 | 0.00 |
| γ 126.0 | 0.00 | 0.00 | 0.18 | 0.00 |
| γ 127.0 | 0.00 | 0.08 | 0.24 | 0.00 |
| γ 128.0 | 0.00 | 0.15 | 0.31 | 0.00 |
| γ 129.0 | 0.00 | 0.22 | 0.39 | 0.00 |
| γ 130.0 | 0.00 | 0.29 | 0.46 | 0.00 |
| γ 131.0 | 0.00 | 0.37 | 0.54 | 0.04 |
| γ 132.0 | 0.00 | 0.45 | 0.62 | 0.09 |
| γ 133.0 | 0.00 | 0.51 | 0.69 | 0.15 |
| γ 134.0 | 0.03 | 0.60 | 0.77 | 0.21 |
| γ 135.0 | 0.09 | 0.68 | 0.85 | 0.26 |
| γ 136.0 | 0.15 | 0.76 | 0.92 | 0.31 |
| γ 137.0 | 0.22 | 0.83 | 1.01 | 0.37 |
| γ 138.0 | 0.27 | 0.90 | 1.09 | 0.44 |
| γ 139.0 | 0.34 | 0.99 | 1.17 | 0.49 |
| γ 140.0 | 0.40 | 1.07 | 1.24 | 0.55 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 141.0 | 0.47 | 1.14 | 1.32 | 0.62 |
| γ 142.0 | 0.54 | 1.21 | 1.40 | 0.68 |
| γ 143.0 | 0.62 | 1.29 | 1.48 | 0.75 |
| γ 144.0 | 0.69 | 1.37 | 1.56 | 0.81 |
| γ 145.0 | 0.77 | 1.43 | 1.63 | 0.88 |
| γ 146.0 | 0.84 | 1.50 | 1.70 | 0.95 |
| γ 147.0 | 0.92 | 1.57 | 1.76 | 1.02 |
| γ 148.0 | 1.00 | 1.64 | 1.83 | 1.09 |
| γ 149.0 | 1.07 | 1.70 | 1.90 | 1.15 |
| γ 150.0 | 1.15 | 1.74 | 1.96 | 1.25 |
| γ 151.0 | 1.24 | 1.79 | 2.03 | 1.32 |
| γ 152.0 | 1.32 | 1.84 | 2.07 | 1.39 |
| γ 153.0 | 1.39 | 1.88 | 2.13 | 1.45 |
| γ 154.0 | 1.48 | 1.91 | 2.17 | 1.54 |
| γ 155.0 | 1.54 | 1.94 | 2.20 | 1.60 |
| γ 156.0 | 1.62 | 1.98 | 2.24 | 1.68 |
| γ 157.0 | 1.69 | 2.01 | 2.27 | 1.76 |
| γ 158.0 | 1.77 | 2.04 | 2.30 | 1.82 |
| γ 159.0 | 1.83 | 2.06 | 2.34 | 1.89 |
| γ 160.0 | 1.88 | 2.10 | 2.36 | 1.96 |
| γ 161.0 | 1.95 | 2.15 | 2.39 | 2.01 |
| γ 162.0 | 2.01 | 2.18 | 2.41 | 2.07 |
| γ 163.0 | 2.07 | 2.22 | 2.45 | 2.13 |
| γ 164.0 | 2.12 | 2.27 | 2.46 | 2.18 |
| γ 165.0 | 2.18 | 2.31 | 2.50 | 2.23 |
| γ 166.0 | 2.23 | 2.36 | 2.52 | 2.28 |
| γ 167.0 | 2.29 | 2.40 | 2.55 | 2.34 |
| γ 168.0 | 2.33 | 2.43 | 2.58 | 2.38 |
| γ 169.0 | 2.39 | 2.48 | 2.60 | 2.43 |
| γ 170.0 | 2.42 | 2.51 | 2.62 | 2.47 |
| γ 171.0 | 2.48 | 2.55 | 2.65 | 2.51 |
| γ 172.0 | 2.53 | 2.57 | 2.66 | 2.55 |
| γ 173.0 | 2.56 | 2.60 | 2.68 | 2.59 |
| γ 174.0 | 2.61 | 2.63 | 2.69 | 2.61 |
| γ 175.0 | 2.64 | 2.65 | 2.70 | 2.65 |
| γ 176.0 | 2.67 | 2.67 | 2.72 | 2.68 |
| γ 177.0 | 2.70 | 2.67 | 2.72 | 2.70 |
| γ 178.0 | 2.71 | 2.68 | 2.73 | 2.73 |
| γ 179.0 | 2.73 | 2.68 | 2.73 | 2.73 |
| γ 180.0 | 2.72 | 2.72 | 2.72 | 2.72 |