

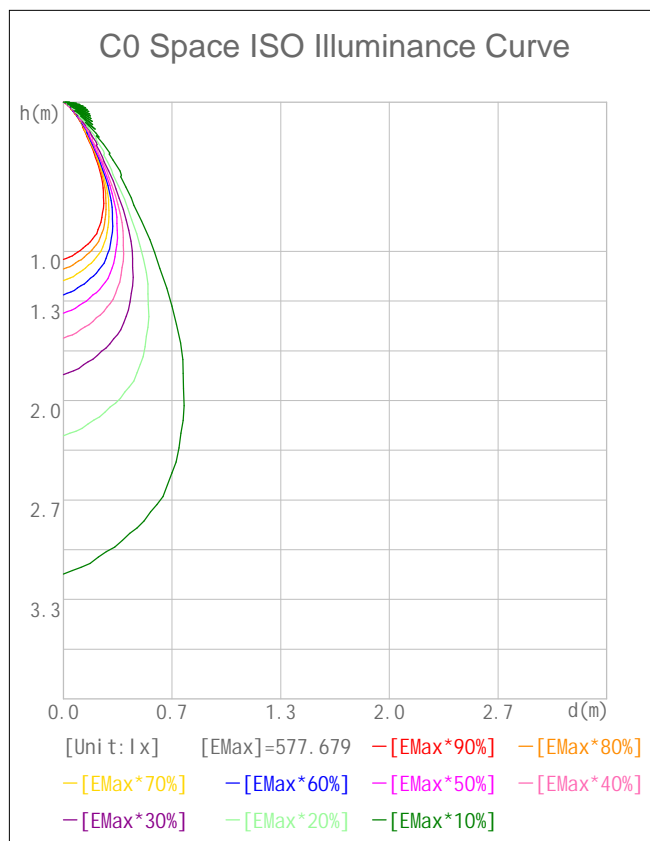
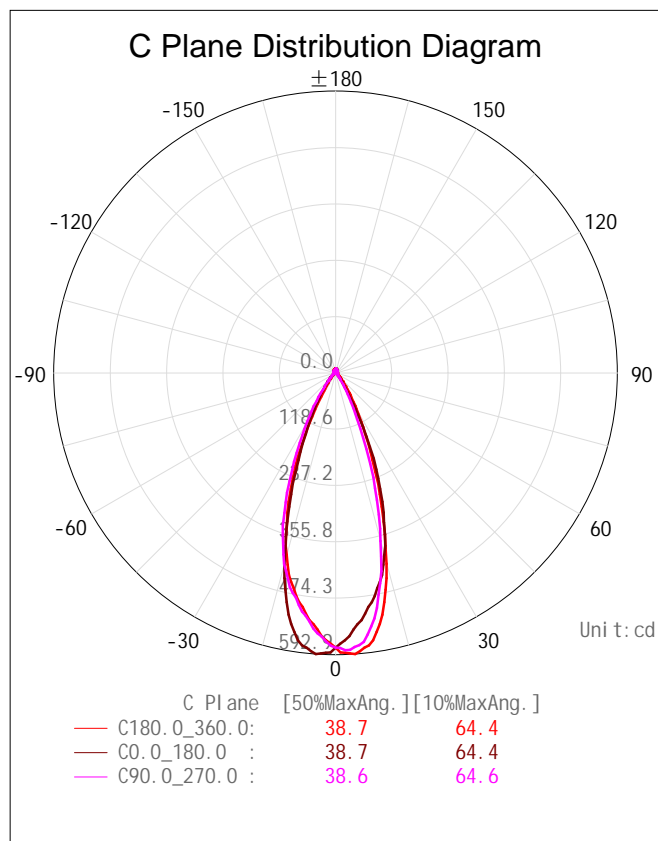
Indoor Luminaire Photometric Data

Description Information

| | | | |
|--|-------------------------|----------------------|------------------------|
| Luminary Name: | | Lum. Catalog: | Test ID: |
| Lamp Name: LED | | Lamp Catalog: 1 | Test Date: 2020/06/24 |
| Manufacture: | | Shld. Ang(°): | Test Machine: GON-2000 |
| Test Lab: | | 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): |
| Test System: C, γ | Test Step: C=30.0 γ=1.0 | Temp. (°C): 25 | Humidity(%): 50.0 |

Character Parameter

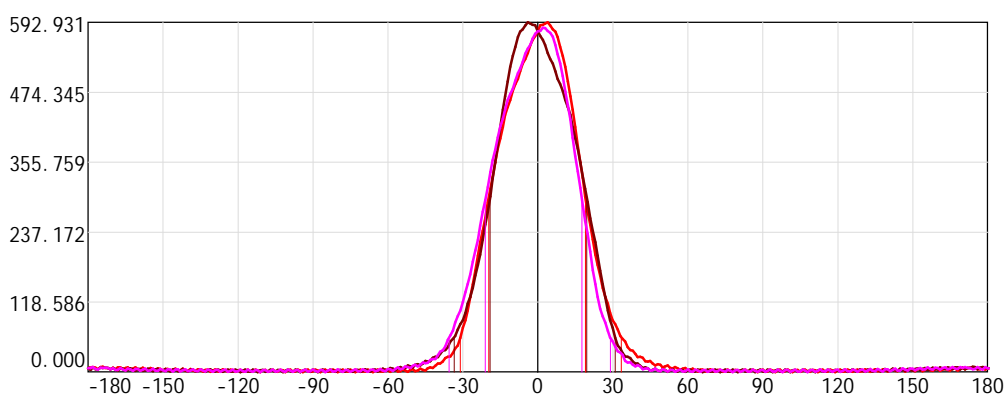
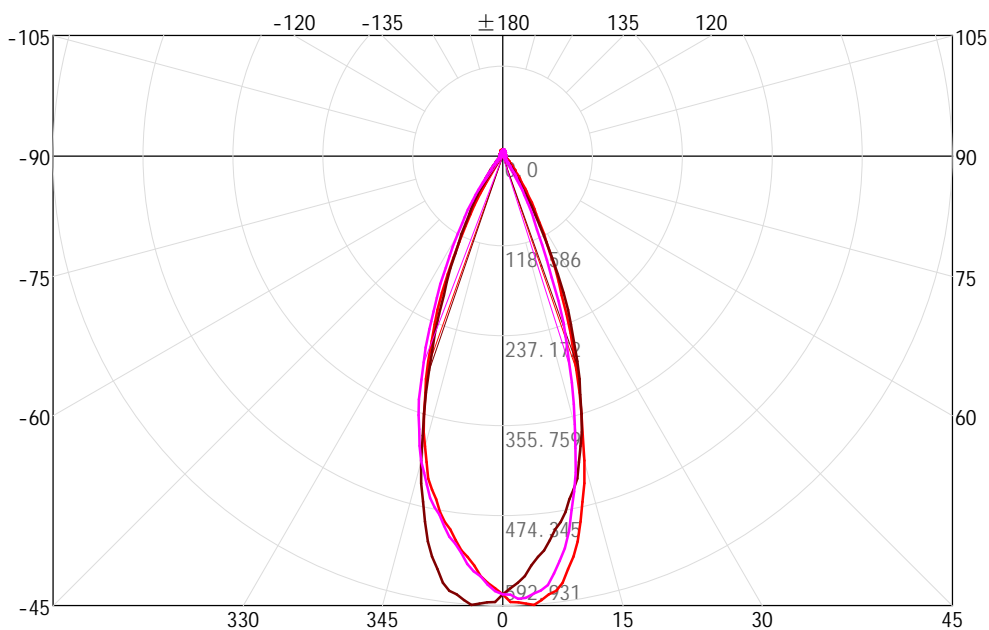
| Lamp Speciality Parameter | | Luminaire Speciality Parameter | |
|--|--|----------------------------------|---------------------------------------|
| Rated Flux(lm): 1.000 | | Luminary Flux(lm): 302.681 | Field Angle(10%Imax): 64.4(°) |
| Rated Power(W): | | Luminary Efficiency: 30268.07% | Down Lumens&Percent: 283.576lm 93.69% |
| Rated Voltage(V): | | Luminary EER(lm/W): 77.970 | Up Lumens&Percent: 19.105lm 6.31% |
| Tested Power(W): 3.882 | | Max. Candela(cd): 592.931 | S/MH: C0_a180=0.642 C90_270=0.638 |
| Lamps' Inside: 1 | | Max Cand@Ang. (°): C=180.0 γ=4.0 | CIE Type: Semi-Direct |
| Tested Electrics(V, A, pf): 12.8, 0.387, 0.780 | | Beam Angle(50%Imax): 38.7(°) | ErP Φuse(90°): 267.396lm |
| Lamp Size(W*L*H): 0.000m*0.000m*0.000m | | Left=-19.6°, Right=19.1° | IRF(%): 461.100 |



2D Plane Light Intensity Distribution Curve

| | | |
|----------------|------------------------|-----------------------|
| Lum. Name: | Lum. Catalog: | Test ID: |
| Lamp Name: LED | Lamp Catalog: 1 | Test Lab: |
| Manufacture: | Test Machine: GON-2000 | Test Date: 2020/06/24 |

C Plane Distribution Diagram

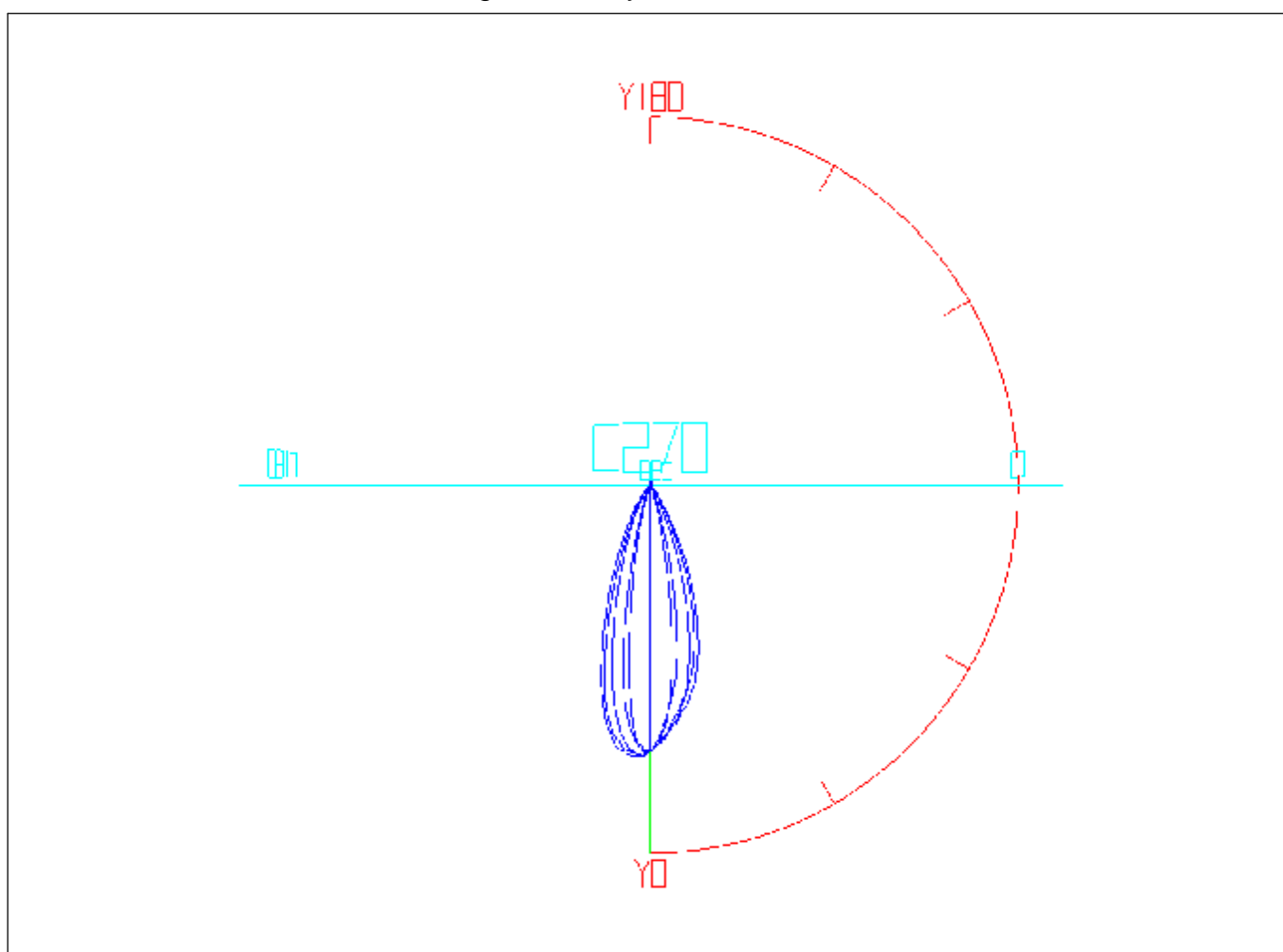


| | C Plane | [50%MaxAng.] | [10%MaxAng.] | Unit: cd |
|---|---------------|--------------|--------------|----------|
| — | C180.0_360.0: | 38.7 | 64.4 | |
| — | C0.0_180.0 : | 38.7 | 64.4 | |
| — | C90.0_270.0 : | 38.6 | 64.6 | |

3D Light Intensity Distribution Modal

| | | |
|----------------|------------------------|-----------------------|
| Lum. Name: | Lum. Catalog: | Test ID: |
| Lamp Name: LED | Lamp Catalog: 1 | Test Lab: |
| Manufacture: | Test Machine: GON-2000 | Test Date: 2020/06/24 |

3D Light Intensity Distribution Modal



Curves: 3D Model ——— Fixture ——— Vert. HUD ——— Hori. HUD ———
View Angles: Orient:0 Tilt:0 Roll:0 Spin:0

IES Indoor Report
Photometric Filename:IWH2301LM-5.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 | 0.55 | 0.55 | 55.24 | 55.24 | 44.0-45.0 | 0.86 | 0.86 | 86.39 | 86.39 |
| 1.0-2.0 | 1.65 | 2.21 | 165.27 | 220.51 | 45.0-46.0 | 0.82 | 1.68 | 81.67 | 168.06 |
| 2.0-3.0 | 2.74 | 4.94 | 273.81 | 494.32 | 46.0-47.0 | 0.75 | 2.43 | 75.16 | 243.22 |
| 3.0-4.0 | 3.80 | 8.74 | 379.93 | 874.25 | 47.0-48.0 | 0.66 | 3.09 | 65.69 | 308.91 |
| 4.0-5.0 | 4.83 | 13.57 | 482.90 | 1357.15 | 48.0-49.0 | 0.62 | 3.71 | 62.37 | 371.28 |
| 5.0-6.0 | 5.81 | 19.39 | 581.43 | 1938.59 | 49.0-50.0 | 0.60 | 4.31 | 59.81 | 431.09 |
| 6.0-7.0 | 6.75 | 26.14 | 675.05 | 2613.64 | 50.0-51.0 | 0.52 | 4.83 | 52.40 | 483.49 |
| 7.0-8.0 | 7.63 | 33.77 | 763.01 | 3376.66 | 51.0-52.0 | 0.49 | 5.32 | 48.84 | 532.33 |
| 8.0-9.0 | 8.43 | 42.20 | 843.11 | 4219.77 | 52.0-53.0 | 0.49 | 5.82 | 49.21 | 581.54 |
| 9.0-10.0 | 9.15 | 51.35 | 914.92 | 5134.69 | 53.0-54.0 | 0.45 | 6.26 | 44.94 | 626.48 |
| 10.0-11.0 | 9.79 | 61.13 | 978.53 | 6113.22 | 54.0-55.0 | 0.41 | 6.67 | 40.65 | 667.13 |
| 11.0-12.0 | 10.32 | 71.45 | 1031.64 | 7144.86 | 55.0-56.0 | 0.41 | 7.08 | 41.05 | 708.19 |
| 12.0-13.0 | 10.73 | 82.18 | 1073.46 | 8218.32 | 56.0-57.0 | 0.39 | 7.47 | 38.83 | 747.02 |
| 13.0-14.0 | 11.05 | 93.23 | 1104.64 | 9322.96 | 57.0-58.0 | 0.34 | 7.81 | 34.47 | 781.48 |
| 14.0-15.0 | 11.23 | 104.46 | 1122.95 | 10445.91 | 58.0-59.0 | 0.35 | 8.16 | 34.73 | 816.22 |
| 15.0-16.0 | 11.28 | 115.74 | 1128.42 | 11574.33 | 59.0-60.0 | 0.34 | 8.51 | 34.47 | 850.69 |
| 16.0-17.0 | 11.25 | 126.99 | 1124.89 | 12699.21 | 60.0-61.0 | 0.30 | 8.81 | 30.45 | 881.14 |
| 17.0-18.0 | 11.12 | 138.11 | 1111.63 | 13810.85 | 61.0-62.0 | 0.31 | 9.12 | 30.54 | 911.68 |
| 18.0-19.0 | 10.87 | 148.98 | 1087.43 | 14898.28 | 62.0-63.0 | 0.32 | 9.44 | 32.40 | 944.08 |
| 19.0-20.0 | 10.56 | 159.54 | 1055.95 | 15954.23 | 63.0-64.0 | 0.29 | 9.73 | 29.00 | 973.08 |
| 20.0-21.0 | 10.16 | 169.70 | 1016.05 | 16970.29 | 64.0-65.0 | 0.27 | 10.01 | 27.49 | 1000.57 |
| 21.0-22.0 | 9.64 | 179.34 | 964.09 | 17934.38 | 65.0-66.0 | 0.30 | 10.31 | 30.45 | 1031.02 |
| 22.0-23.0 | 9.07 | 188.41 | 907.10 | 18841.48 | 66.0-67.0 | 0.28 | 10.59 | 28.43 | 1059.45 |
| 23.0-24.0 | 8.51 | 196.92 | 850.77 | 19692.25 | 67.0-68.0 | 0.25 | 10.84 | 25.00 | 1084.44 |
| 24.0-25.0 | 7.91 | 204.83 | 790.61 | 20482.85 | 68.0-69.0 | 0.28 | 11.13 | 28.49 | 1112.94 |
| 25.0-26.0 | 7.28 | 212.11 | 727.80 | 21210.65 | 69.0-70.0 | 0.30 | 11.43 | 29.62 | 1142.55 |
| 26.0-27.0 | 6.66 | 218.76 | 665.64 | 21876.29 | 70.0-71.0 | 0.24 | 11.67 | 24.30 | 1166.85 |
| 27.0-28.0 | 6.01 | 224.77 | 601.20 | 22477.49 | 71.0-72.0 | 0.26 | 11.93 | 25.87 | 1192.72 |
| 28.0-29.0 | 5.39 | 230.17 | 539.21 | 23016.70 | 72.0-73.0 | 0.31 | 12.24 | 30.80 | 1223.52 |
| 29.0-30.0 | 4.87 | 235.03 | 486.79 | 23503.48 | 73.0-74.0 | 0.26 | 12.49 | 25.93 | 1249.45 |
| 30.0-31.0 | 4.36 | 239.39 | 435.77 | 23939.25 | 74.0-75.0 | 0.23 | 12.73 | 23.08 | 1272.53 |
| 31.0-32.0 | 3.85 | 243.24 | 384.80 | 24324.05 | 75.0-76.0 | 0.30 | 13.02 | 29.67 | 1302.20 |
| 32.0-33.0 | 3.44 | 246.68 | 343.83 | 24667.88 | 76.0-77.0 | 0.29 | 13.31 | 28.63 | 1330.84 |
| 33.0-34.0 | 3.08 | 249.75 | 307.61 | 24975.49 | 77.0-78.0 | 0.22 | 13.53 | 21.75 | 1352.59 |
| 34.0-35.0 | 2.70 | 252.46 | 270.46 | 25245.95 | 78.0-79.0 | 0.26 | 13.79 | 26.45 | 1379.03 |
| 35.0-36.0 | 2.41 | 254.87 | 240.84 | 25486.79 | 79.0-80.0 | 0.31 | 14.10 | 31.07 | 1410.10 |
| 36.0-37.0 | 2.16 | 257.03 | 216.33 | 25703.12 | 80.0-81.0 | 0.24 | 14.34 | 23.59 | 1433.70 |
| 37.0-38.0 | 1.90 | 258.94 | 190.50 | 25893.62 | 81.0-82.0 | 0.23 | 14.57 | 22.82 | 1456.52 |
| 38.0-39.0 | 1.71 | 260.65 | 171.13 | 26064.75 | 82.0-83.0 | 0.31 | 14.88 | 31.39 | 1487.91 |
| 39.0-40.0 | 1.56 | 262.21 | 156.14 | 26220.89 | 83.0-84.0 | 0.28 | 15.16 | 27.94 | 1515.85 |
| 40.0-41.0 | 1.36 | 263.57 | 135.86 | 26356.75 | 84.0-85.0 | 0.21 | 15.37 | 21.03 | 1536.88 |
| 41.0-42.0 | 1.19 | 264.75 | 118.52 | 26475.27 | 85.0-86.0 | 0.28 | 15.65 | 28.47 | 1565.35 |
| 42.0-43.0 | 1.09 | 265.85 | 109.40 | 26584.67 | 86.0-87.0 | 0.32 | 15.97 | 31.62 | 1596.97 |
| 43.0-44.0 | 0.98 | 266.83 | 97.96 | 26682.63 | 87.0-88.0 | 0.22 | 16.19 | 22.07 | 1619.04 |

IES Indoor Report
Photometric Filename:IWH2301LM-5.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 |
|-------------|-------------------|-------------------|-----------|-----------|-------------|-------------------|-------------------|-----------|-----------|
| 88.0-89.0 | 0.23 | 0.23 | 23.48 | 23.48 | 132.0-133.0 | 0.22 | 0.22 | 22.14 | 22.14 |
| 89.0-90.0 | 0.32 | 0.56 | 32.42 | 55.90 | 133.0-134.0 | 0.22 | 0.44 | 21.58 | 43.72 |
| 90.0-91.0 | 0.26 | 0.82 | 26.39 | 82.29 | 134.0-135.0 | 0.26 | 0.70 | 25.96 | 69.68 |
| 91.0-92.0 | 0.20 | 1.03 | 20.40 | 102.69 | 135.0-136.0 | 0.24 | 0.94 | 24.34 | 94.02 |
| 92.0-93.0 | 0.30 | 1.32 | 29.69 | 132.38 | 136.0-137.0 | 0.21 | 1.15 | 20.91 | 114.93 |
| 93.0-94.0 | 0.31 | 1.63 | 30.81 | 163.20 | 137.0-138.0 | 0.24 | 1.39 | 24.46 | 139.39 |
| 94.0-95.0 | 0.21 | 1.84 | 20.54 | 183.73 | 138.0-139.0 | 0.26 | 1.65 | 25.98 | 165.37 |
| 95.0-96.0 | 0.24 | 2.08 | 24.41 | 208.14 | 139.0-140.0 | 0.22 | 1.87 | 21.77 | 187.14 |
| 96.0-97.0 | 0.33 | 2.41 | 32.55 | 240.69 | 140.0-141.0 | 0.23 | 2.10 | 22.67 | 209.81 |
| 97.0-98.0 | 0.24 | 2.65 | 24.36 | 265.05 | 141.0-142.0 | 0.26 | 2.36 | 26.28 | 236.09 |
| 98.0-99.0 | 0.21 | 2.86 | 20.73 | 285.78 | 142.0-143.0 | 0.24 | 2.60 | 23.62 | 259.71 |
| 99.0-100.0 | 0.31 | 3.17 | 30.97 | 316.75 | 143.0-144.0 | 0.22 | 2.81 | 21.76 | 281.47 |
| 100.0-101.0 | 0.29 | 3.46 | 28.92 | 345.68 | 144.0-145.0 | 0.25 | 3.06 | 24.93 | 306.40 |
| 101.0-102.0 | 0.19 | 3.65 | 19.50 | 365.17 | 145.0-146.0 | 0.25 | 3.31 | 24.68 | 331.07 |
| 102.0-103.0 | 0.26 | 3.91 | 26.16 | 391.34 | 146.0-147.0 | 0.22 | 3.53 | 21.96 | 353.03 |
| 103.0-104.0 | 0.31 | 4.23 | 31.33 | 422.66 | 147.0-148.0 | 0.24 | 3.77 | 23.53 | 376.56 |
| 104.0-105.0 | 0.22 | 4.45 | 21.97 | 444.63 | 148.0-149.0 | 0.25 | 4.01 | 24.87 | 401.43 |
| 105.0-106.0 | 0.22 | 4.67 | 22.05 | 466.67 | 149.0-150.0 | 0.23 | 4.24 | 22.93 | 424.36 |
| 106.0-107.0 | 0.31 | 4.98 | 30.92 | 497.60 | 150.0-151.0 | 0.23 | 4.47 | 22.81 | 447.17 |
| 107.0-108.0 | 0.26 | 5.24 | 26.05 | 523.65 | 151.0-152.0 | 0.24 | 4.71 | 23.95 | 471.11 |
| 108.0-109.0 | 0.20 | 5.44 | 20.09 | 543.74 | 152.0-153.0 | 0.23 | 4.94 | 23.03 | 494.14 |
| 109.0-110.0 | 0.27 | 5.71 | 27.11 | 570.85 | 153.0-154.0 | 0.22 | 5.16 | 22.33 | 516.47 |
| 110.0-111.0 | 0.28 | 5.99 | 28.29 | 599.14 | 154.0-155.0 | 0.23 | 5.39 | 22.66 | 539.13 |
| 111.0-112.0 | 0.21 | 6.20 | 21.10 | 620.24 | 155.0-156.0 | 0.22 | 5.61 | 22.20 | 561.33 |
| 112.0-113.0 | 0.24 | 6.44 | 23.57 | 643.81 | 156.0-157.0 | 0.22 | 5.83 | 21.77 | 583.10 |
| 113.0-114.0 | 0.29 | 6.72 | 28.62 | 672.43 | 157.0-158.0 | 0.21 | 6.04 | 21.31 | 604.41 |
| 114.0-115.0 | 0.24 | 6.96 | 23.78 | 696.21 | 158.0-159.0 | 0.20 | 6.25 | 20.47 | 624.88 |
| 115.0-116.0 | 0.21 | 7.18 | 21.45 | 717.66 | 159.0-160.0 | 0.20 | 6.45 | 20.34 | 645.22 |
| 116.0-117.0 | 0.26 | 7.44 | 26.20 | 743.87 | 160.0-161.0 | 0.20 | 6.65 | 19.78 | 665.01 |
| 117.0-118.0 | 0.26 | 7.70 | 25.78 | 769.64 | 161.0-162.0 | 0.18 | 6.83 | 18.34 | 683.35 |
| 118.0-119.0 | 0.22 | 7.91 | 21.84 | 791.48 | 162.0-163.0 | 0.18 | 7.01 | 18.10 | 701.45 |
| 119.0-120.0 | 0.23 | 8.15 | 23.48 | 814.96 | 163.0-164.0 | 0.18 | 7.19 | 17.90 | 719.35 |
| 120.0-121.0 | 0.26 | 8.41 | 25.98 | 840.94 | 164.0-165.0 | 0.16 | 7.35 | 16.09 | 735.44 |
| 121.0-122.0 | 0.24 | 8.65 | 23.78 | 864.72 | 165.0-166.0 | 0.15 | 7.51 | 15.25 | 750.69 |
| 122.0-123.0 | 0.22 | 8.87 | 22.19 | 886.91 | 166.0-167.0 | 0.15 | 7.66 | 15.31 | 766.00 |
| 123.0-124.0 | 0.24 | 9.11 | 24.33 | 911.24 | 167.0-168.0 | 0.14 | 7.80 | 13.68 | 779.68 |
| 124.0-125.0 | 0.25 | 9.37 | 25.32 | 936.56 | 168.0-169.0 | 0.12 | 7.92 | 12.22 | 791.90 |
| 125.0-126.0 | 0.23 | 9.59 | 22.79 | 959.35 | 169.0-170.0 | 0.12 | 8.04 | 12.14 | 804.04 |
| 126.0-127.0 | 0.22 | 9.82 | 22.16 | 981.51 | 170.0-171.0 | 0.11 | 8.15 | 11.19 | 815.24 |
| 127.0-128.0 | 0.25 | 10.07 | 25.04 | 1006.55 | 171.0-172.0 | 0.10 | 8.25 | 10.13 | 825.36 |
| 128.0-129.0 | 0.25 | 10.31 | 24.55 | 1031.10 | 172.0-173.0 | 0.09 | 8.35 | 9.37 | 834.73 |
| 129.0-130.0 | 0.21 | 10.53 | 21.46 | 1052.56 | 173.0-174.0 | 0.08 | 8.43 | 8.03 | 842.76 |
| 130.0-131.0 | 0.23 | 10.76 | 23.45 | 1076.01 | 174.0-175.0 | 0.07 | 8.50 | 6.78 | 849.54 |
| 131.0-132.0 | 0.26 | 11.02 | 25.79 | 1101.80 | 175.0-176.0 | 0.06 | 8.55 | 5.50 | 855.04 |

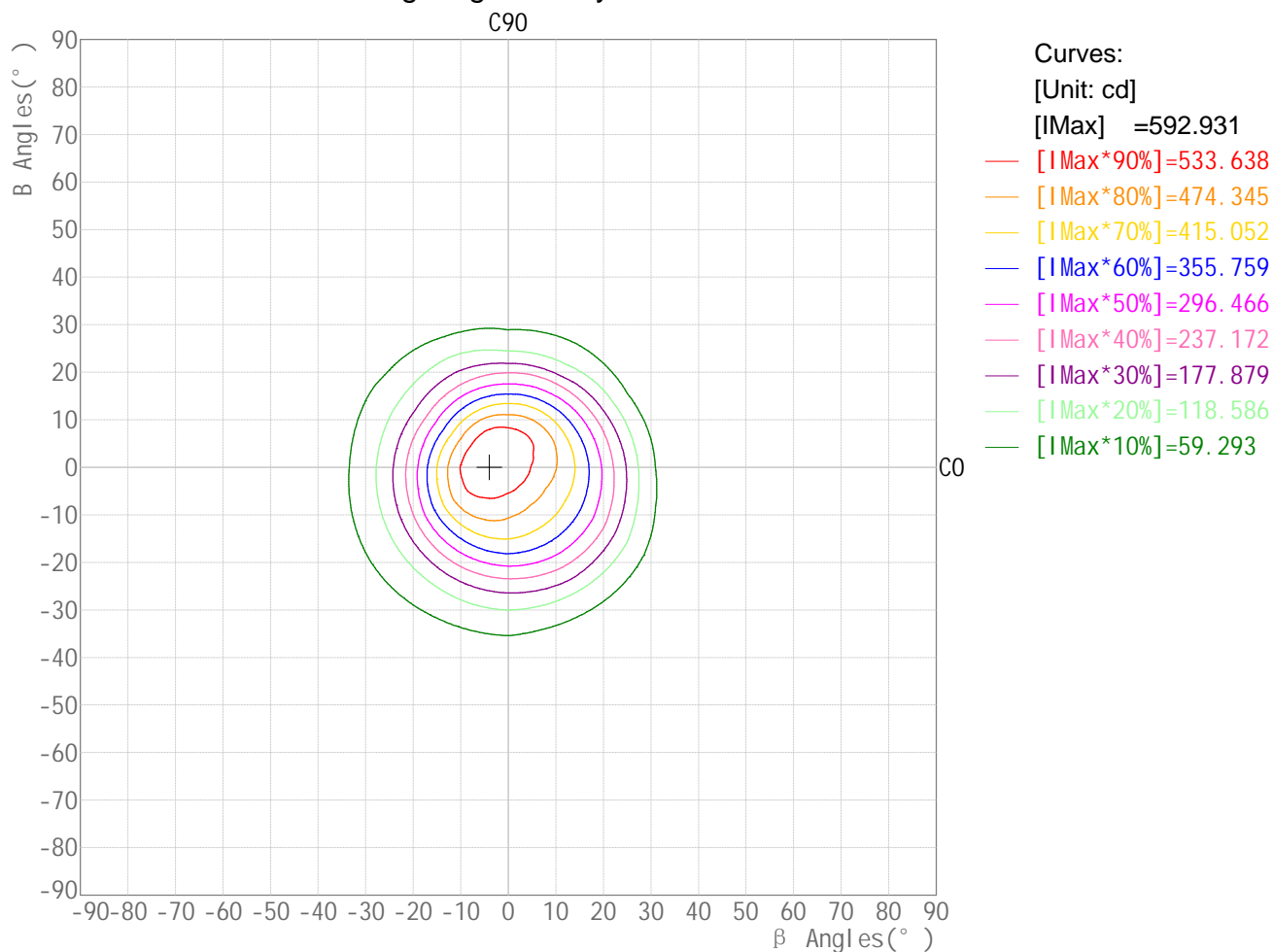
Zonal Flux Tabulation - (Cont.)

| Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp |
|-------------|-------------------|-------------------|-----------|-----------|
| 176.0-177.0 | 0.04 | 0.04 | 4.07 | 4.07 |
| 177.0-178.0 | 0.03 | 0.07 | 3.01 | 7.09 |
| 178.0-179.0 | 0.02 | 0.09 | 1.87 | 8.95 |
| 179.0-180.0 | 0.01 | 0.10 | 0.61 | 9.57 |

Rectangle ISO Lighting Intensity Diagram

| | | |
|----------------|------------------------|-----------------------|
| Lum. Name: | Lum. Catalog: | Test ID: |
| Lamp Name: LED | Lamp Catalog: 1 | Test Lab: |
| Manufacture: | Test Machine: GON-2000 | Test Date: 2020/06/24 |

ISO Lighting Intensity Curve

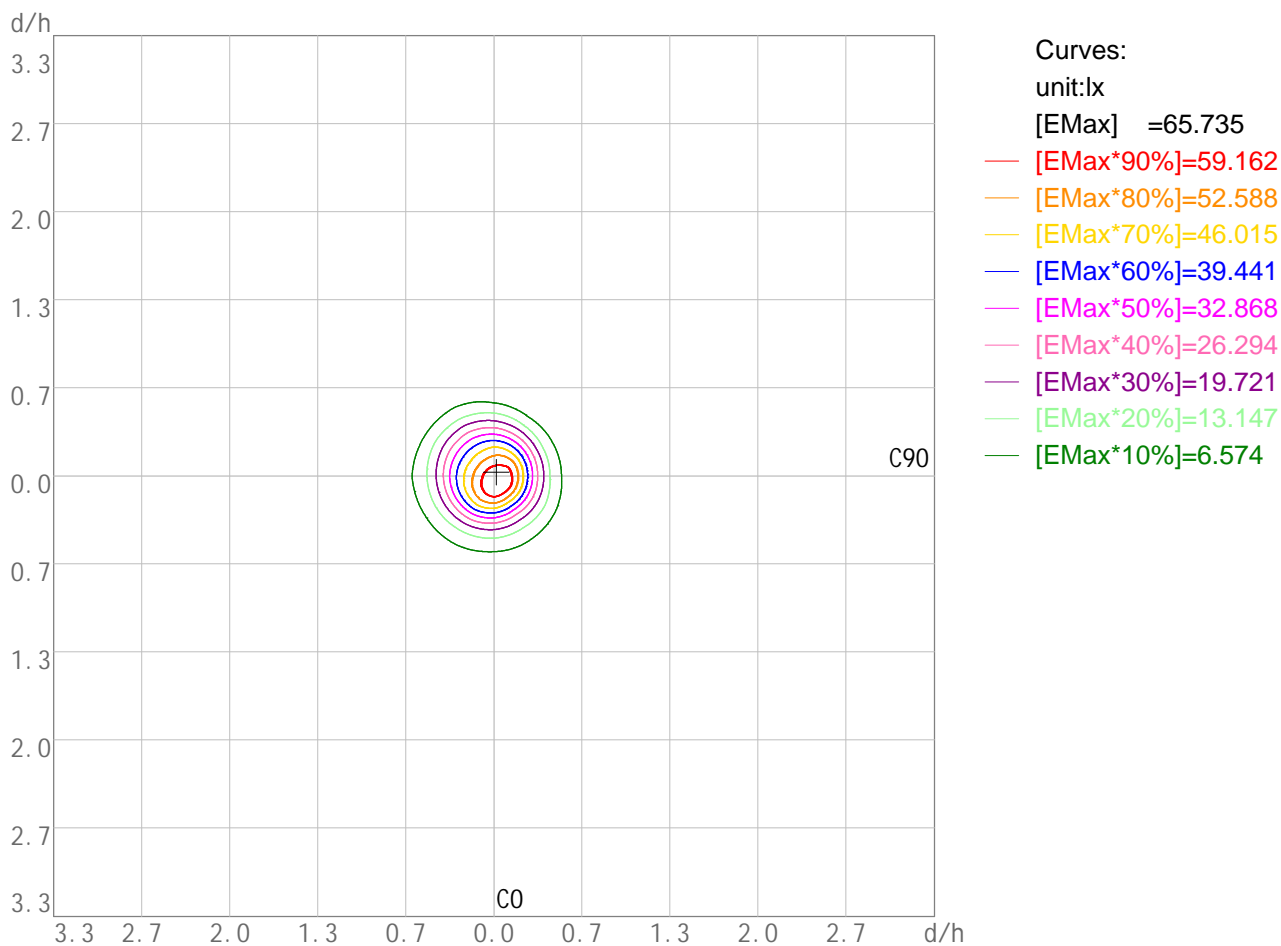


Maximum Light Intensity(cd): 592.93
 Maximum Cand.@Angle: H=-4.0°,V=0.0°

Plane ISO-Illuminance Diagram

| | | |
|----------------|------------------------|-----------------------|
| Lum. Name: | Lum. Catalog: | Test ID: |
| Lamp Name: LED | Lamp Catalog: 1 | Test Lab: |
| Manufacture: | Test Machine: GON-2000 | Test Date: 2020/06/24 |

Plane ISO-Illuminance Curve

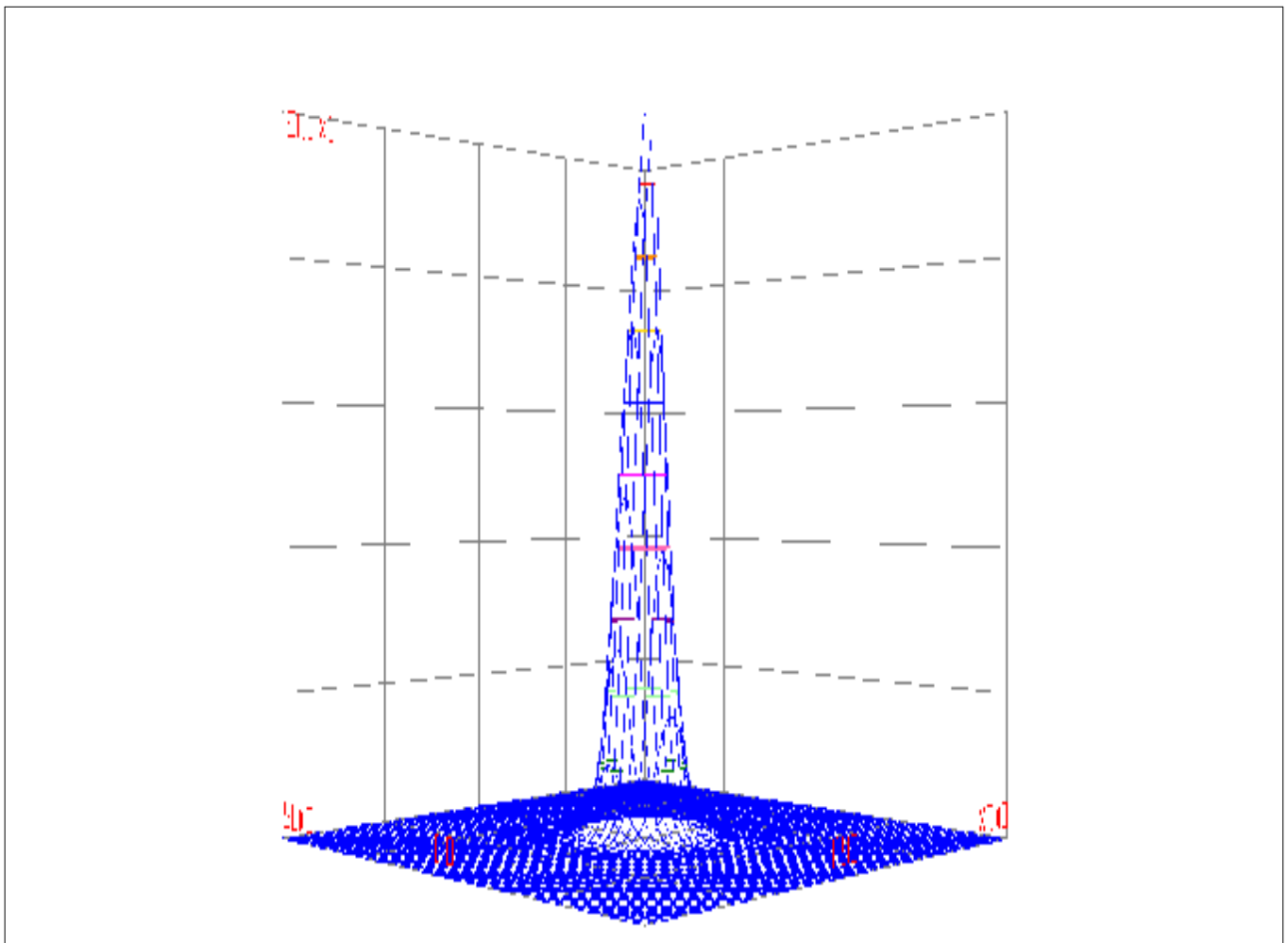


Working Plane Luminaire Mounting Height(m): 3.00
 Working Plane Maximum Illuminance(lx): 65.74
 Working Plane Maximum Illuminance Position(d/h):H0.0 V-0.0

3D Plane ISO Illuminance Diagram

| | | |
|----------------|------------------------|-----------------------|
| Lum. Name: | Lum. Catalog: | Test ID: |
| Lamp Name: LED | Lamp Catalog: 1 | Test Lab: |
| Manufacture: | Test Machine: GON-2000 | Test Date: 2020/06/24 |

3D Plane Illuminance Modal

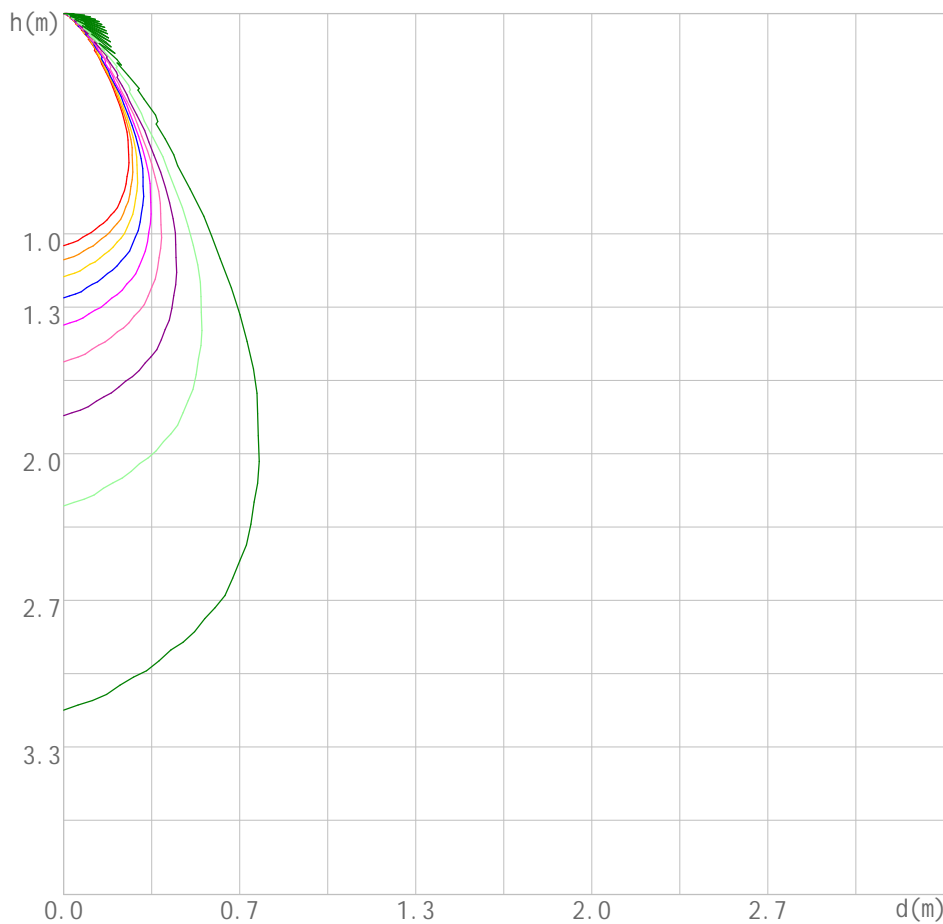


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

| | | |
|----------------|------------------------|-----------------------|
| Lum. Name: | Lum. Catalog: | Test ID: |
| Lamp Name: LED | Lamp Catalog: 1 | Test Lab: |
| Manufacture: | Test Machine: GON-2000 | Test Date: 2020/06/24 |

Space ISO Illuminance Curve



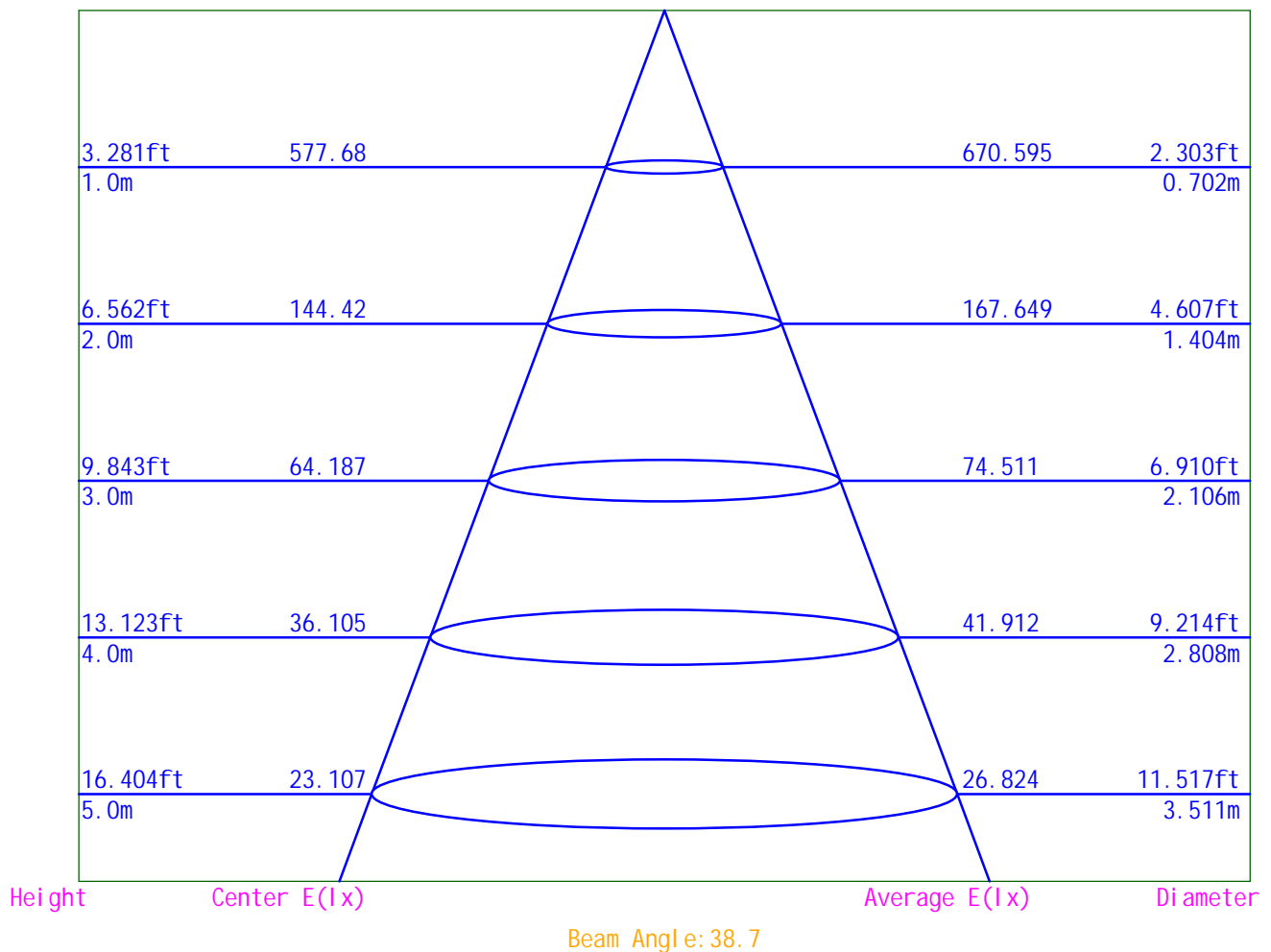
- Curves:
 [Unit: lx]
 [EMax] =577.679
- [EMax*90%]=519.911
 - [EMax*80%]=462.143
 - [EMax*70%]=404.375
 - [EMax*60%]=346.607
 - [EMax*50%]=288.840
 - [EMax*40%]=231.072
 - [EMax*30%]=173.304
 - [EMax*20%]=115.536
 - [EMax*10%]=57.768

Space Plane Maximum Illuminance and @Angle:577.68lx,0.0deg
 Plane Maximum Lighting Intensity and @Angle:577.679cd,0deg

Illuminance-Distance Diagram

| | | |
|----------------|------------------------|-----------------------|
| Lum. Name: | Lum. Catalog: | Test ID: |
| Lamp Name: LED | Lamp Catalog: 1 | Test Lab: |
| Manufacture: | Test Machine: GON-2000 | Test Date: 2020/06/24 |

Illuminance-Distance Curve



Indoor Luminance Limiting Curves

| | | |
|----------------|------------------------|-----------------------|
| Lum. Name: | Lum. Catalog: | Test ID: |
| Lamp Name: LED | Lamp Catalog: 1 | Test Lab: |
| Manufacture: | Test Machine: GON-2000 | Test Date: 2020/06/24 |

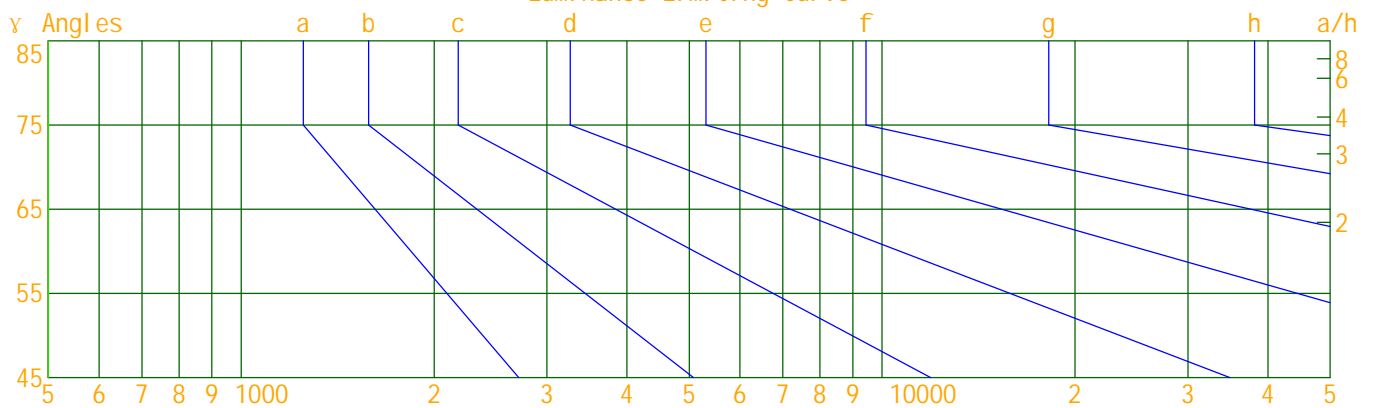
Glare Grade Table

| Gl | Quality | Using Illuminance | | | | | | | |
|------|---------|-------------------|------|------|-------|-------|-------|-------|-------|
| | | a | b | c | d | e | f | g | h |
| 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 |

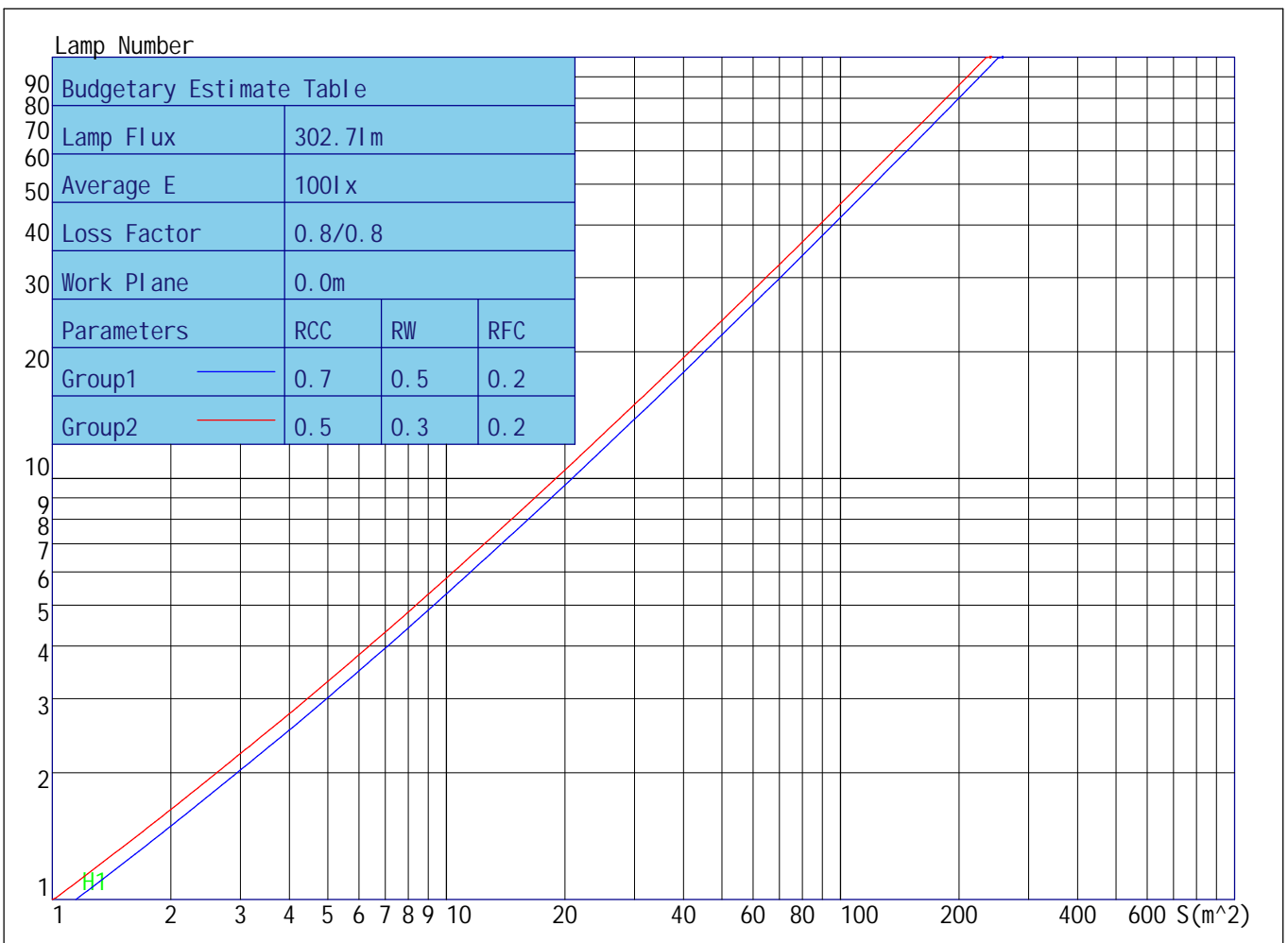
Luminance Limiting Curve



Luminous Size: Length(m)=0.000 Width(m)=0.000 Height(m)=0.000 Area(m²)=0.000000
 Luminous Type: Without Luminous Side
 Luminous Curves: C0-C180 Color: — C90-C270 Color: —

Indoor Budgetary Estimate Table

| | | |
|----------------|------------------------|-----------------------|
| Lum. Name: | Lum. Catalog: | Test ID: |
| Lamp Name: LED | Lamp Catalog: 1 | Test Lab: |
| Manufacture: | Test Machine: GON-2000 | Test Date: 2020/06/24 |



Parameters1: Rhocc = 0.7 Rhow = 0.5 Rhofc = 0.2 LLF = 0.8
 Parameters2: Rhocc = 0.5 Rhow = 0.3 Rhofc = 0.2 LLF = 0.8
 Average Illuminance(lx): 100 Cavity Height: H1(m) = 2

Indoor Coefficient of Utilization Table

| | | |
|----------------|------------------------|-----------------------|
| Lum. Name: | Lum. Catalog: | Test ID: |
| Lamp Name: LED | Lamp Catalog: 1 | Test Lab: |
| Manufacture: | Test Machine: GON-2000 | Test Date: 2020/06/24 |

| 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 | 3557 | 3557 | 3557 | 3557 | 3452 | 3452 | 3452 | 3452 | 3257 | 3257 | 3257 | 3077 | 3077 | 3077 | 2913 | 2913 | 2913 | 2835 |
| 1 | 3385 | 3299 | 3222 | 3153 | 3290 | 3215 | 3146 | 3085 | 3057 | 3004 | 2955 | 2913 | 2872 | 2834 | 2780 | 2748 | 2719 | 2653 |
| 2 | 3226 | 3080 | 2960 | 2859 | 3141 | 3012 | 2904 | 2813 | 2884 | 2798 | 2723 | 2766 | 2697 | 2637 | 2657 | 2603 | 2555 | 2496 |
| 3 | 3077 | 2891 | 2747 | 2632 | 3002 | 2835 | 2704 | 2598 | 2729 | 2622 | 2533 | 2631 | 2544 | 2470 | 2541 | 2470 | 2410 | 2359 |
| 4 | 2939 | 2724 | 2566 | 2446 | 2871 | 2677 | 2533 | 2421 | 2589 | 2468 | 2373 | 2507 | 2407 | 2325 | 2431 | 2348 | 2280 | 2229 |
| 5 | 2810 | 2575 | 2411 | 2290 | 2749 | 2536 | 2384 | 2271 | 2462 | 2333 | 2234 | 2393 | 2283 | 2198 | 2328 | 2236 | 2162 | 2116 |
| 6 | 2690 | 2442 | 2275 | 2156 | 2635 | 2409 | 2254 | 2141 | 2346 | 2212 | 2112 | 2287 | 2171 | 2084 | 2231 | 2133 | 2056 | 2011 |
| 7 | 2578 | 2322 | 2155 | 2039 | 2529 | 2293 | 2138 | 2027 | 2239 | 2103 | 2004 | 2188 | 2069 | 1981 | 2140 | 2037 | 1958 | 1916 |
| 8 | 2474 | 2212 | 2048 | 1935 | 2429 | 2188 | 2033 | 1925 | 2140 | 2004 | 1906 | 2096 | 1976 | 1888 | 2054 | 1948 | 1869 | 1829 |
| 9 | 2377 | 2113 | 1951 | 1842 | 2336 | 2091 | 1938 | 1834 | 2050 | 1914 | 1818 | 2011 | 1890 | 1803 | 1974 | 1867 | 1787 | 1749 |
| 10 | 2286 | 2021 | 1863 | 1758 | 2248 | 2002 | 1852 | 1751 | 1966 | 1831 | 1738 | 1932 | 1811 | 1725 | 1899 | 1791 | 1712 | 1675 |

Unified Glare Rating Table

| | | |
|----------------|------------------------|-----------------------|
| Lum. Name: | Lum. Catalog: | Test ID: |
| Lamp Name: LED | Lamp Catalog: 1 | Test Lab: |
| Manufacture: | Test Machine: GON-2000 | Test Date: 2020/06/24 |

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 | Viewed crosswise | | | | | Viewed endwise | | | | | |
| X=2H | Y=2H | -20.6 | -19.9 | -21.0 | -20.3 | -20.0 | -20.6 | -19.9 | -21.0 | -20.3 | -20.0 |
| | Y=3H | -20.8 | -20.2 | -21.1 | -20.5 | -20.1 | -20.8 | -20.2 | -21.1 | -20.5 | -20.1 |
| | Y=4H | -20.9 | -20.3 | -21.2 | -20.6 | -20.2 | -20.9 | -20.3 | -21.2 | -20.6 | -20.2 |
| | Y=6H | -21.1 | -20.5 | -21.2 | -20.7 | -20.3 | -21.1 | -20.5 | -21.2 | -20.7 | -20.3 |
| | Y=8H | -21.1 | -20.6 | -21.3 | -20.7 | -20.3 | -21.1 | -20.6 | -21.3 | -20.7 | -20.3 |
| | Y=12H | -21.2 | -20.7 | -21.3 | -20.8 | -20.4 | -21.2 | -20.7 | -21.3 | -20.8 | -20.4 |
| X=4H | Y=2H | -20.9 | -20.3 | -21.2 | -20.6 | -20.2 | -20.9 | -20.3 | -21.2 | -20.6 | -20.2 |
| | Y=3H | -21.2 | -20.7 | -21.3 | -20.8 | -20.4 | -21.2 | -20.7 | -21.3 | -20.8 | -20.4 |
| | Y=4H | -21.4 | -20.9 | -21.4 | -20.9 | -20.4 | -21.4 | -20.9 | -21.4 | -20.9 | -20.4 |
| | Y=6H | -21.5 | -21.1 | -21.5 | -21.1 | -20.5 | -21.5 | -21.1 | -21.5 | -21.1 | -20.5 |
| | Y=8H | -21.6 | -21.2 | -21.5 | -21.1 | -20.6 | -21.6 | -21.2 | -21.5 | -21.1 | -20.6 |
| | Y=12H | -21.7 | -21.4 | -21.5 | -21.2 | -20.6 | -21.7 | -21.4 | -21.5 | -21.2 | -20.6 |
| X=8H | Y=4H | -21.6 | -21.2 | -21.5 | -21.1 | -20.6 | -21.6 | -21.2 | -21.5 | -21.1 | -20.6 |
| | Y=6H | -21.8 | -21.5 | -21.6 | -21.3 | -20.7 | -21.8 | -21.5 | -21.6 | -21.3 | -20.7 |
| | Y=8H | -21.9 | -21.6 | -21.6 | -21.3 | -20.7 | -21.9 | -21.6 | -21.6 | -21.3 | -20.7 |
| | Y=12H | -22.0 | -21.7 | -21.6 | -21.4 | -20.8 | -22.0 | -21.7 | -21.6 | -21.4 | -20.8 |
| X=12H | Y=4H | -21.7 | -21.4 | -21.5 | -21.2 | -20.6 | -21.7 | -21.4 | -21.5 | -21.2 | -20.6 |
| | Y=6H | -21.9 | -21.6 | -21.6 | -21.3 | -20.7 | -21.9 | -21.6 | -21.6 | -21.3 | -20.7 |
| | Y=8H | -22.0 | -21.7 | -21.6 | -21.4 | -20.8 | -22.0 | -21.7 | -21.6 | -21.4 | -20.8 |
| Variations with the observer 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: | BKO | | | | | BKO | | | | | |
| Correction Value | 0.0 | | | | | 0.0 | | | | | |

s calculated according to the document STD.CIE 117-1995

IES Indoor Report
Photometric Filename:IWH2301LM-5.IES

Candela Tabulation

| V/H | C0.0 | C30.0 | C60.0 | C90.0 | C120.0 | C150.0 | C180.0 | C210.0 | C240.0 | C270.0 | C300.0 | C330.0 |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Y 0.0 | 577.68 | 577.68 | 577.68 | 577.68 | 577.68 | 577.68 | 577.68 | 577.68 | 577.68 | 577.68 | 577.68 | 577.68 |
| Y 1.0 | 569.63 | 573.03 | 575.79 | 578.32 | 583.01 | 586.82 | 587.93 | 578.11 | 573.08 | 573.64 | 571.34 | 571.37 |
| Y 2.0 | 562.91 | 565.01 | 572.28 | 583.84 | 590.39 | 592.70 | 588.79 | 580.58 | 571.43 | 565.35 | 560.81 | 561.48 |
| Y 3.0 | 554.65 | 559.25 | 572.17 | 583.25 | 590.06 | 591.49 | 590.77 | 581.65 | 568.82 | 555.01 | 548.37 | 547.25 |
| Y 4.0 | 541.03 | 554.19 | 569.24 | 578.10 | 589.09 | 592.40 | 592.93 | 575.84 | 558.90 | 548.61 | 539.61 | 537.66 |
| Y 5.0 | 530.44 | 543.74 | 560.56 | 574.85 | 588.38 | 590.07 | 587.56 | 570.92 | 551.84 | 539.63 | 527.56 | 527.03 |
| Y 6.0 | 522.76 | 533.50 | 553.82 | 568.57 | 579.00 | 578.68 | 580.99 | 569.67 | 549.04 | 525.70 | 511.71 | 510.59 |
| Y 7.0 | 510.11 | 527.07 | 546.59 | 554.53 | 565.16 | 567.51 | 577.32 | 563.42 | 539.62 | 514.52 | 502.27 | 498.73 |
| Y 8.0 | 496.85 | 516.81 | 530.51 | 538.55 | 552.63 | 555.77 | 567.99 | 551.79 | 528.26 | 506.83 | 491.77 | 489.06 |
| Y 9.0 | 488.35 | 501.01 | 514.42 | 523.28 | 533.58 | 535.66 | 551.30 | 543.21 | 520.44 | 494.10 | 476.78 | 474.76 |
| Y 10.0 | 476.59 | 488.29 | 500.67 | 502.04 | 508.55 | 513.57 | 536.07 | 532.96 | 508.74 | 480.02 | 465.80 | 461.87 |
| Y 11.0 | 460.98 | 474.51 | 478.75 | 475.57 | 487.28 | 492.82 | 517.79 | 516.06 | 491.59 | 471.45 | 456.33 | 453.39 |
| Y 12.0 | 449.36 | 452.64 | 454.61 | 452.16 | 463.01 | 465.15 | 492.71 | 498.74 | 478.40 | 460.88 | 441.45 | 439.25 |
| Y 13.0 | 436.21 | 428.79 | 432.50 | 427.89 | 431.70 | 434.98 | 467.83 | 482.80 | 465.27 | 444.65 | 429.22 | 424.26 |
| Y 14.0 | 415.79 | 409.26 | 404.20 | 396.84 | 402.22 | 409.44 | 444.65 | 460.90 | 443.95 | 429.82 | 419.40 | 413.51 |
| Y 15.0 | 395.78 | 386.77 | 372.52 | 366.13 | 374.99 | 379.60 | 415.67 | 433.49 | 423.65 | 416.49 | 402.98 | 397.61 |
| Y 16.0 | 378.47 | 359.61 | 347.32 | 340.27 | 343.46 | 346.95 | 383.30 | 408.89 | 405.01 | 397.39 | 385.96 | 378.90 |
| Y 17.0 | 355.11 | 335.60 | 321.44 | 312.32 | 314.15 | 320.66 | 355.52 | 383.55 | 380.58 | 376.33 | 372.21 | 365.16 |
| Y 18.0 | 330.50 | 312.59 | 291.53 | 281.56 | 291.30 | 294.07 | 328.13 | 352.79 | 354.92 | 359.11 | 353.49 | 347.96 |
| Y 19.0 | 310.63 | 284.86 | 266.77 | 256.32 | 264.83 | 264.46 | 298.08 | 324.21 | 333.98 | 339.28 | 332.54 | 326.52 |
| Y 20.0 | 288.02 | 257.19 | 242.85 | 234.09 | 236.33 | 241.25 | 271.66 | 300.47 | 310.20 | 313.56 | 315.56 | 309.56 |
| Y 21.0 | 261.12 | 235.40 | 209.47 | 204.54 | 215.33 | 219.78 | 250.15 | 273.77 | 282.45 | 291.33 | 295.00 | 290.56 |
| Y 22.0 | 239.43 | 211.79 | 178.11 | 172.74 | 194.65 | 194.41 | 224.44 | 245.12 | 258.62 | 272.03 | 270.64 | 266.19 |
| Y 23.0 | 220.24 | 181.59 | 154.81 | 148.92 | 171.48 | 175.33 | 199.23 | 223.32 | 237.51 | 247.72 | 251.92 | 247.49 |
| Y 24.0 | 197.30 | 154.72 | 131.58 | 127.75 | 154.68 | 159.56 | 181.46 | 202.69 | 213.23 | 224.01 | 233.33 | 229.65 |
| Y 25.0 | 171.87 | 134.52 | 112.56 | 107.26 | 140.97 | 139.67 | 163.58 | 178.68 | 190.96 | 206.16 | 210.30 | 205.96 |
| Y 26.0 | 148.73 | 113.26 | 99.63 | 94.36 | 120.89 | 124.48 | 142.64 | 158.18 | 174.18 | 187.26 | 191.82 | 181.92 |
| Y 27.0 | 126.79 | 89.86 | 83.81 | 84.17 | 101.26 | 114.55 | 127.66 | 143.65 | 155.24 | 165.40 | 174.66 | 160.53 |
| Y 28.0 | 104.04 | 74.05 | 70.01 | 69.88 | 89.09 | 100.12 | 115.95 | 126.76 | 134.49 | 148.98 | 150.10 | 138.45 |
| Y 29.0 | 87.82 | 61.92 | 64.33 | 58.54 | 75.74 | 88.47 | 100.21 | 109.56 | 119.83 | 135.85 | 127.41 | 121.53 |
| Y 30.0 | 75.23 | 48.46 | 52.48 | 52.17 | 63.14 | 82.70 | 87.69 | 99.24 | 108.87 | 118.85 | 113.75 | 109.72 |
| Y 31.0 | 58.17 | 41.75 | 35.35 | 43.25 | 56.00 | 71.77 | 81.41 | 90.21 | 94.20 | 103.96 | 98.15 | 92.58 |
| Y 32.0 | 45.09 | 38.49 | 30.19 | 35.01 | 48.74 | 61.08 | 72.38 | 77.34 | 82.29 | 95.12 | 84.18 | 75.10 |
| Y 33.0 | 40.20 | 30.74 | 25.88 | 33.15 | 38.07 | 57.33 | 61.51 | 68.28 | 76.06 | 84.22 | 75.88 | 64.21 |
| Y 34.0 | 32.80 | 24.93 | 18.78 | 29.25 | 33.19 | 49.65 | 56.63 | 63.81 | 66.79 | 70.79 | 62.57 | 55.04 |
| Y 35.0 | 26.35 | 24.90 | 17.82 | 19.21 | 32.26 | 41.25 | 51.82 | 56.02 | 56.29 | 62.35 | 49.36 | 43.18 |
| Y 36.0 | 26.13 | 21.87 | 16.33 | 16.27 | 27.03 | 40.09 | 42.56 | 47.34 | 51.97 | 54.90 | 45.20 | 37.15 |
| Y 37.0 | 24.07 | 14.72 | 11.23 | 16.80 | 22.51 | 35.79 | 37.64 | 44.25 | 48.26 | 43.52 | 39.18 | 31.17 |
| Y 38.0 | 17.83 | 13.04 | 11.46 | 12.29 | 23.17 | 29.32 | 36.26 | 41.41 | 40.04 | 36.74 | 30.80 | 23.37 |
| Y 39.0 | 14.83 | 14.35 | 12.76 | 9.64 | 21.09 | 28.83 | 30.91 | 34.08 | 35.09 | 34.51 | 28.84 | 20.97 |
| Y 40.0 | 14.88 | 10.51 | 8.09 | 11.81 | 15.98 | 26.12 | 25.40 | 29.71 | 34.18 | 28.58 | 26.92 | 19.13 |
| Y 41.0 | 10.66 | 5.56 | 6.26 | 9.60 | 16.18 | 19.25 | 25.81 | 29.32 | 29.17 | 22.24 | 19.66 | 12.80 |
| Y 42.0 | 7.10 | 6.71 | 7.62 | 4.61 | 17.13 | 18.68 | 24.33 | 25.28 | 23.69 | 22.10 | 17.00 | 10.69 |
| Y 43.0 | 8.11 | 6.81 | 4.07 | 6.09 | 12.57 | 18.14 | 18.70 | 19.76 | 24.11 | 20.86 | 17.25 | 12.99 |

IES Indoor Report
Photometric Filename:IWH2301LM-5.IES

Candela Tabulation - (Cont.)

| V/H | C0.0 | C30.0 | C60.0 | C90.0 | C120.0 | C150.0 | C180.0 | C210.0 | C240.0 | C270.0 | C300.0 | C330.0 |
|--------|------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| Y 44.0 | 6.73 | 2.91 | 3.06 | 6.35 | 10.31 | 13.07 | 17.67 | 20.11 | 23.44 | 15.69 | 12.58 | 10.04 |
| Y 45.0 | 2.97 | 2.91 | 6.06 | 2.46 | 11.72 | 12.92 | 18.73 | 19.66 | 18.16 | 15.01 | 10.15 | 7.01 |
| Y 46.0 | 3.98 | 5.59 | 3.61 | 3.47 | 8.99 | 14.48 | 14.51 | 14.72 | 16.71 | 16.33 | 11.89 | 8.56 |
| Y 47.0 | 5.95 | 3.46 | 1.55 | 5.77 | 5.54 | 10.29 | 11.59 | 13.06 | 18.24 | 12.49 | 8.81 | 7.19 |
| Y 48.0 | 2.82 | 1.06 | 4.90 | 2.52 | 7.70 | 9.25 | 13.79 | 15.23 | 15.04 | 9.86 | 5.53 | 3.36 |
| Y 49.0 | 1.76 | 3.65 | 3.66 | 1.75 | 7.77 | 11.58 | 12.41 | 12.67 | 11.12 | 12.24 | 7.50 | 5.09 |
| Y 50.0 | 4.94 | 4.81 | 0.83 | 4.95 | 3.50 | 8.18 | 8.35 | 9.10 | 12.35 | 11.01 | 6.52 | 6.38 |
| Y 51.0 | 3.91 | 1.49 | 3.81 | 3.15 | 3.97 | 5.72 | 9.93 | 10.80 | 12.43 | 7.04 | 2.71 | 2.71 |
| Y 52.0 | 0.77 | 1.35 | 3.92 | 0.84 | 6.47 | 8.53 | 11.20 | 11.45 | 8.14 | 8.58 | 4.69 | 2.95 |
| Y 53.0 | 2.85 | 4.41 | 0.51 | 3.95 | 3.49 | 7.38 | 7.24 | 7.50 | 7.86 | 9.84 | 5.89 | 5.93 |
| Y 54.0 | 4.69 | 3.17 | 2.75 | 3.97 | 1.93 | 4.05 | 6.31 | 7.11 | 10.12 | 5.95 | 2.17 | 3.28 |
| Y 55.0 | 1.46 | 0.32 | 4.39 | 0.63 | 5.16 | 6.43 | 8.74 | 9.80 | 7.42 | 5.14 | 2.84 | 1.48 |
| Y 56.0 | 1.03 | 2.63 | 0.74 | 2.85 | 4.07 | 7.05 | 6.66 | 7.66 | 4.45 | 7.92 | 5.47 | 4.70 |
| Y 57.0 | 4.35 | 4.45 | 1.87 | 4.59 | 1.05 | 3.06 | 3.60 | 4.74 | 6.94 | 5.49 | 2.60 | 3.95 |
| Y 58.0 | 3.04 | 1.40 | 4.58 | 1.10 | 3.44 | 3.93 | 6.08 | 6.93 | 7.50 | 2.41 | 1.46 | 0.88 |
| Y 59.0 | 0.29 | 0.71 | 1.42 | 1.66 | 4.82 | 6.20 | 6.85 | 7.43 | 3.95 | 4.97 | 4.76 | 3.35 |
| Y 60.0 | 2.70 | 4.02 | 1.09 | 4.64 | 1.40 | 3.09 | 3.10 | 3.67 | 4.04 | 5.40 | 3.34 | 4.67 |
| Y 61.0 | 4.27 | 3.10 | 4.44 | 1.87 | 1.99 | 2.11 | 3.26 | 3.70 | 6.87 | 1.87 | 0.69 | 1.25 |
| Y 62.0 | 1.07 | 0.21 | 2.16 | 0.78 | 4.98 | 5.41 | 5.93 | 6.56 | 4.94 | 2.92 | 3.72 | 1.97 |
| Y 63.0 | 1.02 | 2.38 | 0.49 | 4.21 | 2.44 | 3.90 | 3.47 | 4.53 | 2.19 | 5.50 | 4.22 | 4.94 |
| Y 64.0 | 4.24 | 4.45 | 3.98 | 2.89 | 0.92 | 1.24 | 1.33 | 1.89 | 4.70 | 2.68 | 0.89 | 2.41 |
| Y 65.0 | 2.87 | 1.32 | 3.12 | 0.39 | 4.26 | 4.02 | 4.31 | 4.43 | 5.63 | 1.36 | 2.41 | 0.92 |
| Y 66.0 | 0.13 | 0.64 | 0.12 | 3.39 | 3.58 | 4.83 | 4.59 | 5.12 | 2.26 | 4.57 | 4.72 | 4.24 |
| Y 67.0 | 2.65 | 3.96 | 2.98 | 3.88 | 0.48 | 1.44 | 1.22 | 1.66 | 2.28 | 3.85 | 1.63 | 3.63 |
| Y 68.0 | 4.34 | 3.09 | 3.96 | 0.46 | 3.05 | 2.43 | 2.41 | 2.17 | 5.26 | 0.72 | 1.06 | 0.61 |
| Y 69.0 | 1.11 | 0.14 | 0.37 | 2.46 | 4.35 | 5.12 | 4.97 | 5.09 | 3.61 | 2.90 | 4.35 | 3.02 |
| Y 70.0 | 0.87 | 2.54 | 2.12 | 4.45 | 0.90 | 2.45 | 2.35 | 2.92 | 0.96 | 4.66 | 2.99 | 4.52 |
| Y 71.0 | 4.16 | 4.29 | 4.42 | 1.03 | 1.79 | 1.08 | 0.79 | 0.74 | 3.39 | 1.46 | 0.39 | 1.16 |
| Y 72.0 | 2.90 | 1.14 | 1.14 | 1.44 | 4.73 | 4.42 | 3.98 | 3.74 | 4.86 | 1.42 | 3.46 | 1.75 |
| Y 73.0 | 0.15 | 0.84 | 1.24 | 4.51 | 1.89 | 3.80 | 3.74 | 4.31 | 1.63 | 4.64 | 4.17 | 4.79 |
| Y 74.0 | 2.62 | 4.20 | 4.38 | 1.98 | 0.95 | 0.78 | 0.56 | 0.91 | 1.26 | 2.66 | 0.77 | 2.43 |
| Y 75.0 | 4.33 | 2.59 | 2.20 | 0.52 | 4.42 | 3.02 | 2.44 | 1.73 | 4.47 | 0.45 | 1.93 | 0.85 |
| Y 76.0 | 1.06 | 0.11 | 0.38 | 4.04 | 2.81 | 4.82 | 4.61 | 4.73 | 3.28 | 3.43 | 4.71 | 4.17 |
| Y 77.0 | 0.89 | 2.96 | 3.71 | 2.93 | 0.41 | 1.64 | 1.60 | 2.39 | 0.37 | 3.96 | 1.88 | 3.54 |
| Y 78.0 | 4.21 | 4.13 | 3.21 | 0.26 | 3.66 | 1.38 | 0.70 | 0.43 | 2.69 | 0.55 | 0.72 | 0.52 |
| Y 79.0 | 2.92 | 0.71 | 0.10 | 3.16 | 3.66 | 4.70 | 4.06 | 3.50 | 4.53 | 2.07 | 4.08 | 3.12 |
| Y 80.0 | 0.16 | 1.23 | 2.69 | 3.92 | 0.41 | 3.13 | 3.26 | 3.96 | 1.53 | 4.62 | 3.20 | 4.45 |
| Y 81.0 | 2.50 | 4.37 | 4.17 | 0.55 | 2.73 | 0.66 | 0.33 | 0.59 | 0.87 | 1.72 | 0.28 | 1.04 |
| Y 82.0 | 4.33 | 1.99 | 0.64 | 2.08 | 4.28 | 3.45 | 2.51 | 1.66 | 4.12 | 0.87 | 2.89 | 1.90 |
| Y 83.0 | 1.18 | 0.25 | 1.52 | 4.55 | 0.81 | 4.62 | 4.45 | 4.52 | 3.25 | 4.25 | 4.35 | 4.84 |
| Y 84.0 | 0.86 | 3.53 | 4.46 | 1.27 | 1.83 | 1.22 | 1.37 | 2.19 | 0.43 | 2.85 | 0.88 | 2.06 |
| Y 85.0 | 4.11 | 3.51 | 1.82 | 0.90 | 4.61 | 1.79 | 0.96 | 0.36 | 2.41 | 0.26 | 1.50 | 1.04 |
| Y 86.0 | 3.04 | 0.35 | 0.62 | 4.37 | 1.66 | 4.81 | 4.10 | 3.62 | 4.50 | 3.21 | 4.45 | 4.48 |
| Y 87.0 | 0.14 | 2.24 | 4.03 | 2.37 | 1.08 | 2.69 | 2.87 | 3.80 | 1.50 | 4.02 | 2.19 | 3.18 |

IES Indoor Report
Photometric Filename:IWH2301LM-5.IES

Candela Tabulation - (Cont.)

| V/H | C0.0 | C30.0 | C60.0 | C90.0 | C120.0 | C150.0 | C180.0 | C210.0 | C240.0 | C270.0 | C300.0 | C330.0 |
|---------|------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| Y 88.0 | 2.45 | 4.39 | 2.99 | 0.30 | 4.47 | 0.67 | 0.25 | 0.50 | 0.68 | 0.56 | 0.41 | 0.57 |
| Y 89.0 | 4.24 | 1.27 | 0.25 | 3.48 | 2.39 | 3.78 | 2.81 | 1.84 | 3.98 | 1.95 | 3.56 | 3.61 |
| Y 90.0 | 1.17 | 0.71 | 3.03 | 3.63 | 0.59 | 4.27 | 4.27 | 4.43 | 3.36 | 4.50 | 3.64 | 4.18 |
| Y 91.0 | 0.77 | 4.11 | 4.01 | 0.28 | 4.04 | 0.89 | 1.08 | 1.83 | 0.30 | 1.49 | 0.42 | 0.74 |
| Y 92.0 | 4.13 | 2.74 | 0.56 | 2.30 | 3.24 | 2.12 | 1.09 | 0.51 | 2.22 | 0.91 | 2.37 | 2.52 |
| Y 93.0 | 2.91 | 0.10 | 1.74 | 4.45 | 0.25 | 4.76 | 4.27 | 3.90 | 4.53 | 4.28 | 4.38 | 4.76 |
| Y 94.0 | 0.10 | 3.02 | 4.51 | 1.08 | 3.28 | 2.27 | 2.55 | 3.43 | 1.71 | 2.59 | 1.35 | 1.36 |
| Y 95.0 | 2.64 | 3.94 | 1.71 | 1.01 | 3.86 | 0.83 | 0.15 | 0.30 | 0.53 | 0.31 | 0.91 | 1.66 |
| Y 96.0 | 4.18 | 0.61 | 0.61 | 4.34 | 0.47 | 4.09 | 2.98 | 2.15 | 3.77 | 3.57 | 4.25 | 4.80 |
| Y 97.0 | 1.08 | 1.69 | 4.05 | 2.32 | 2.47 | 3.66 | 4.09 | 4.34 | 3.54 | 3.45 | 2.73 | 2.46 |
| Y 98.0 | 1.09 | 4.41 | 3.04 | 0.27 | 4.43 | 0.69 | 0.69 | 1.42 | 0.44 | 0.29 | 0.30 | 0.85 |
| Y 99.0 | 4.31 | 1.63 | 0.17 | 3.54 | 1.04 | 2.83 | 1.41 | 0.79 | 2.10 | 2.58 | 3.24 | 4.34 |
| Y 100.0 | 2.64 | 0.54 | 2.92 | 3.72 | 1.69 | 4.69 | 4.39 | 4.11 | 4.49 | 4.16 | 3.93 | 3.47 |
| Y 101.0 | 0.15 | 4.02 | 4.12 | 0.33 | 4.69 | 1.53 | 2.07 | 2.98 | 1.79 | 0.69 | 0.62 | 0.63 |
| Y 102.0 | 3.11 | 2.90 | 0.68 | 2.19 | 1.85 | 1.40 | 0.25 | 0.19 | 0.35 | 1.67 | 1.90 | 3.42 |
| Y 103.0 | 4.01 | 0.15 | 1.51 | 4.46 | 0.93 | 4.66 | 3.52 | 2.66 | 3.63 | 4.46 | 4.56 | 4.19 |
| Y 104.0 | 0.66 | 2.96 | 4.48 | 1.28 | 4.43 | 2.71 | 3.62 | 4.18 | 3.55 | 1.48 | 1.71 | 0.72 |
| Y 105.0 | 1.57 | 4.05 | 2.04 | 0.90 | 2.83 | 0.66 | 0.32 | 0.96 | 0.47 | 0.84 | 0.70 | 2.54 |
| Y 106.0 | 4.49 | 0.60 | 0.55 | 4.21 | 0.51 | 3.78 | 1.93 | 1.07 | 1.85 | 4.32 | 4.14 | 4.73 |
| Y 107.0 | 2.08 | 1.86 | 3.86 | 2.73 | 3.75 | 4.06 | 4.41 | 4.38 | 4.43 | 2.32 | 3.11 | 1.41 |
| Y 108.0 | 0.50 | 4.49 | 3.36 | 0.25 | 3.63 | 0.78 | 1.55 | 2.48 | 1.90 | 0.40 | 0.32 | 1.75 |
| Y 109.0 | 3.84 | 1.63 | 0.20 | 3.24 | 0.46 | 2.71 | 0.52 | 0.17 | 0.39 | 3.93 | 3.01 | 4.88 |
| Y 110.0 | 3.34 | 0.68 | 2.40 | 3.91 | 2.79 | 4.78 | 3.80 | 3.15 | 3.44 | 3.07 | 4.23 | 2.37 |
| Y 111.0 | 0.20 | 4.16 | 4.40 | 0.59 | 4.35 | 1.51 | 3.15 | 3.87 | 3.73 | 0.20 | 0.93 | 1.04 |
| Y 112.0 | 2.55 | 2.82 | 1.22 | 1.99 | 0.86 | 1.54 | 0.14 | 0.55 | 0.48 | 3.14 | 1.64 | 4.56 |
| Y 113.0 | 4.30 | 0.33 | 1.04 | 4.64 | 1.75 | 4.79 | 2.44 | 1.63 | 1.76 | 3.79 | 4.54 | 3.33 |
| Y 114.0 | 0.96 | 3.40 | 4.35 | 1.66 | 4.68 | 2.59 | 4.37 | 4.43 | 4.46 | 0.40 | 2.00 | 0.65 |
| Y 115.0 | 1.35 | 3.89 | 2.76 | 0.82 | 1.82 | 0.80 | 1.18 | 1.90 | 2.00 | 2.44 | 0.54 | 3.75 |
| Y 116.0 | 4.48 | 0.59 | 0.29 | 4.19 | 0.94 | 4.11 | 0.94 | 0.54 | 0.36 | 4.20 | 3.99 | 4.13 |
| Y 117.0 | 2.15 | 2.16 | 3.22 | 2.97 | 4.41 | 3.69 | 4.24 | 3.87 | 3.56 | 0.78 | 3.47 | 0.78 |
| Y 118.0 | 0.49 | 4.57 | 4.11 | 0.39 | 3.01 | 0.65 | 2.86 | 3.30 | 3.83 | 1.75 | 0.40 | 2.95 |
| Y 119.0 | 3.86 | 1.45 | 0.81 | 3.30 | 0.53 | 3.25 | 0.18 | 0.26 | 0.50 | 4.58 | 2.69 | 4.69 |
| Y 120.0 | 3.32 | 1.05 | 1.72 | 4.15 | 3.65 | 4.54 | 2.93 | 2.62 | 1.86 | 1.40 | 4.45 | 1.24 |
| Y 121.0 | 0.32 | 4.43 | 4.66 | 0.76 | 4.13 | 1.13 | 4.26 | 4.33 | 4.58 | 1.12 | 1.16 | 2.18 |
| Y 122.0 | 3.01 | 2.69 | 2.34 | 2.21 | 0.68 | 2.43 | 0.85 | 1.02 | 1.89 | 4.53 | 1.39 | 4.95 |
| Y 123.0 | 4.21 | 0.48 | 0.67 | 4.83 | 2.43 | 4.97 | 1.21 | 1.34 | 0.47 | 2.35 | 4.60 | 2.03 |
| Y 124.0 | 0.76 | 3.80 | 3.99 | 1.78 | 4.73 | 1.90 | 4.35 | 4.57 | 3.69 | 0.66 | 2.51 | 1.53 |
| Y 125.0 | 2.02 | 3.88 | 3.95 | 1.10 | 1.76 | 1.62 | 2.73 | 2.35 | 3.80 | 4.13 | 0.67 | 4.95 |
| Y 126.0 | 4.78 | 0.65 | 0.73 | 4.53 | 1.42 | 5.00 | 0.36 | 0.50 | 0.49 | 3.03 | 3.96 | 2.87 |
| Y 127.0 | 1.81 | 2.75 | 2.42 | 3.07 | 4.75 | 2.82 | 3.13 | 3.98 | 2.12 | 0.44 | 3.81 | 0.94 |
| Y 128.0 | 1.27 | 4.76 | 4.92 | 0.68 | 3.12 | 1.06 | 4.40 | 3.48 | 4.62 | 3.61 | 0.66 | 4.47 |
| Y 129.0 | 4.73 | 1.53 | 2.14 | 3.78 | 0.85 | 4.60 | 1.17 | 0.46 | 1.99 | 3.77 | 2.76 | 3.84 |
| Y 130.0 | 2.95 | 1.71 | 1.18 | 4.43 | 3.92 | 3.71 | 1.45 | 2.96 | 0.74 | 0.51 | 4.78 | 0.89 |
| Y 131.0 | 0.74 | 5.00 | 4.45 | 1.03 | 4.48 | 1.06 | 4.62 | 4.42 | 3.98 | 3.06 | 1.60 | 3.80 |

IES Indoor Report
Photometric Filename:IWH2301LM-5.IES

Candela Tabulation - (Cont.)

| V/H | C0.0 | C30.0 | C60.0 | C90.0 | C120.0 | C150.0 | C180.0 | C210.0 | C240.0 | C270.0 | C300.0 | C330.0 |
|---------|------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| Y 132.0 | 4.17 | 2.72 | 3.95 | 2.78 | 1.16 | 4.00 | 2.97 | 0.99 | 3.80 | 4.37 | 1.51 | 4.72 |
| Y 133.0 | 3.92 | 1.06 | 0.90 | 5.25 | 2.76 | 4.70 | 0.55 | 1.94 | 0.66 | 0.87 | 4.80 | 1.18 |
| Y 134.0 | 0.91 | 4.53 | 3.10 | 2.08 | 5.36 | 1.36 | 3.34 | 4.83 | 2.63 | 2.45 | 2.96 | 2.98 |
| Y 135.0 | 3.44 | 4.01 | 5.22 | 1.71 | 2.48 | 3.55 | 4.82 | 2.06 | 4.88 | 4.78 | 0.87 | 5.30 |
| Y 136.0 | 4.80 | 1.05 | 2.36 | 5.16 | 1.80 | 5.39 | 1.51 | 1.25 | 1.99 | 1.47 | 4.08 | 2.02 |
| Y 137.0 | 1.43 | 3.78 | 1.78 | 3.50 | 5.30 | 1.97 | 1.60 | 4.72 | 1.14 | 1.90 | 4.34 | 2.17 |
| Y 138.0 | 2.74 | 5.11 | 5.14 | 1.31 | 4.22 | 2.98 | 4.74 | 3.31 | 4.51 | 5.08 | 1.10 | 5.38 |
| Y 139.0 | 5.45 | 1.73 | 4.46 | 4.61 | 1.50 | 5.73 | 3.55 | 0.90 | 3.78 | 2.45 | 2.96 | 3.10 |
| Y 140.0 | 2.31 | 3.01 | 1.54 | 4.97 | 4.18 | 2.82 | 0.93 | 4.21 | 0.79 | 1.57 | 5.21 | 1.63 |
| Y 141.0 | 2.31 | 5.81 | 3.56 | 1.69 | 5.68 | 2.59 | 3.35 | 4.21 | 3.35 | 5.02 | 2.15 | 5.14 |
| Y 142.0 | 5.74 | 2.76 | 5.92 | 3.78 | 2.45 | 5.99 | 5.19 | 1.01 | 5.13 | 3.31 | 1.84 | 4.40 |
| Y 143.0 | 3.43 | 2.35 | 3.26 | 6.00 | 2.99 | 3.84 | 2.13 | 3.48 | 1.98 | 1.24 | 5.19 | 1.48 |
| Y 144.0 | 2.06 | 5.84 | 2.24 | 2.87 | 6.26 | 2.42 | 1.70 | 4.95 | 1.88 | 4.67 | 3.60 | 4.20 |
| Y 145.0 | 5.76 | 3.99 | 5.58 | 2.93 | 4.46 | 6.05 | 5.02 | 1.40 | 5.10 | 4.19 | 1.31 | 5.48 |
| Y 146.0 | 4.53 | 2.12 | 5.59 | 6.43 | 2.34 | 4.97 | 4.10 | 2.77 | 3.61 | 1.16 | 4.35 | 2.11 |
| Y 147.0 | 2.13 | 5.58 | 2.44 | 4.49 | 5.35 | 2.53 | 1.33 | 5.47 | 1.24 | 4.09 | 5.18 | 3.18 |
| Y 148.0 | 5.58 | 5.40 | 3.99 | 2.58 | 6.42 | 5.93 | 3.49 | 2.41 | 4.20 | 4.96 | 1.80 | 6.09 |
| Y 149.0 | 5.51 | 2.42 | 6.89 | 6.01 | 3.32 | 5.99 | 5.61 | 2.30 | 5.20 | 1.55 | 3.13 | 3.40 |
| Y 150.0 | 2.44 | 5.16 | 4.65 | 6.24 | 4.08 | 3.04 | 2.74 | 5.60 | 1.89 | 3.47 | 5.84 | 2.40 |
| Y 151.0 | 5.35 | 6.64 | 3.02 | 3.01 | 7.30 | 5.88 | 1.83 | 3.28 | 2.96 | 5.59 | 3.13 | 5.82 |
| Y 152.0 | 6.38 | 3.24 | 6.10 | 5.44 | 5.62 | 7.09 | 5.23 | 1.92 | 5.82 | 2.34 | 2.05 | 4.81 |
| Y 153.0 | 3.03 | 4.69 | 6.93 | 7.31 | 3.39 | 3.72 | 4.81 | 5.53 | 3.22 | 2.89 | 5.47 | 2.12 |
| Y 154.0 | 5.18 | 7.47 | 3.85 | 4.18 | 6.29 | 5.66 | 1.85 | 4.15 | 2.00 | 6.01 | 4.80 | 4.95 |
| Y 155.0 | 7.22 | 4.40 | 4.59 | 4.76 | 7.72 | 7.77 | 3.69 | 1.76 | 5.52 | 3.26 | 2.05 | 6.07 |
| Y 156.0 | 3.82 | 4.35 | 7.86 | 7.88 | 4.62 | 4.47 | 6.11 | 5.13 | 4.57 | 2.39 | 4.46 | 2.72 |
| Y 157.0 | 5.04 | 7.87 | 6.14 | 5.68 | 4.77 | 5.39 | 3.31 | 5.03 | 1.92 | 6.01 | 6.19 | 3.76 |
| Y 158.0 | 7.84 | 5.58 | 3.99 | 4.32 | 8.05 | 8.26 | 2.26 | 1.80 | 4.71 | 4.37 | 2.97 | 6.63 |
| Y 159.0 | 4.77 | 4.18 | 6.77 | 7.86 | 7.01 | 5.27 | 5.54 | 4.72 | 5.87 | 2.15 | 3.00 | 4.32 |
| Y 160.0 | 4.86 | 7.90 | 8.16 | 7.09 | 4.21 | 5.17 | 5.34 | 5.68 | 2.50 | 5.59 | 6.35 | 2.82 |
| Y 161.0 | 8.29 | 6.78 | 5.09 | 4.28 | 6.72 | 8.55 | 2.25 | 2.20 | 3.74 | 5.36 | 4.60 | 6.17 |
| Y 162.0 | 5.99 | 4.32 | 5.18 | 7.17 | 8.55 | 6.04 | 4.09 | 4.20 | 6.42 | 2.29 | 2.32 | 5.89 |
| Y 163.0 | 4.68 | 7.57 | 8.44 | 8.28 | 5.62 | 4.93 | 6.64 | 6.27 | 3.62 | 4.97 | 5.41 | 2.83 |
| Y 164.0 | 8.36 | 7.77 | 7.23 | 4.92 | 5.05 | 8.48 | 3.81 | 2.83 | 2.81 | 6.20 | 6.22 | 4.96 |
| Y 165.0 | 7.06 | 4.56 | 4.53 | 6.20 | 8.43 | 6.86 | 2.67 | 3.65 | 6.34 | 2.83 | 2.94 | 7.08 |
| Y 166.0 | 4.66 | 7.26 | 6.84 | 8.92 | 7.64 | 4.76 | 6.07 | 6.64 | 4.71 | 4.36 | 4.04 | 4.24 |
| Y 167.0 | 8.16 | 8.52 | 8.69 | 5.82 | 4.63 | 8.36 | 5.86 | 3.47 | 2.55 | 6.85 | 6.96 | 3.56 |
| Y 168.0 | 7.93 | 4.87 | 5.80 | 5.26 | 6.59 | 7.57 | 2.76 | 3.21 | 5.88 | 3.62 | 4.38 | 6.99 |
| Y 169.0 | 4.83 | 6.62 | 5.00 | 8.67 | 8.85 | 4.85 | 4.68 | 6.75 | 5.97 | 3.92 | 3.00 | 6.15 |
| Y 170.0 | 7.64 | 8.86 | 8.25 | 7.04 | 6.08 | 8.00 | 7.08 | 4.33 | 2.71 | 7.09 | 6.23 | 3.24 |
| Y 171.0 | 4.96 | 7.61 | 5.00 | 8.90 | 8.87 | 5.20 | 5.07 | 6.90 | 5.28 | 4.70 | 3.35 | 6.03 |
| Y 172.0 | 7.25 | 8.82 | 6.99 | 7.30 | 7.38 | 7.94 | 7.19 | 5.06 | 3.04 | 7.25 | 5.89 | 3.92 |
| Y 173.0 | 7.30 | 8.68 | 6.49 | 7.28 | 7.59 | 8.23 | 7.35 | 5.18 | 3.20 | 7.44 | 5.96 | 4.35 |
| Y 174.0 | 9.07 | 6.04 | 8.35 | 4.89 | 5.60 | 8.99 | 7.03 | 3.21 | 4.54 | 7.14 | 7.57 | 3.67 |
| Y 175.0 | 8.84 | 6.25 | 7.18 | 5.25 | 6.83 | 9.16 | 7.71 | 3.67 | 4.35 | 7.83 | 7.61 | 4.01 |

IES Indoor Report
Photometric Filename:IWH2301LM-5.IES

Candela Tabulation - (Cont.)

| V/H | C0.0 | C30.0 | C60.0 | C90.0 | C120.0 | C150.0 | C180.0 | C210.0 | C240.0 | C270.0 | C300.0 | C330.0 |
|---------|------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| Y 176.0 | 4.75 | 8.27 | 5.50 | 8.76 | 7.19 | 6.03 | 4.64 | 7.78 | 5.51 | 4.54 | 3.62 | 8.16 |
| Y 177.0 | 7.53 | 5.34 | 8.45 | 6.00 | 4.89 | 5.16 | 4.98 | 4.83 | 7.99 | 5.64 | 6.01 | 4.44 |
| Y 178.0 | 8.58 | 4.38 | 4.84 | 4.50 | 8.59 | 6.96 | 8.01 | 4.24 | 6.85 | 8.45 | 8.21 | 6.36 |
| Y 179.0 | 7.93 | 8.44 | 6.44 | 8.61 | 6.83 | 6.73 | 4.32 | 4.78 | 5.64 | 7.03 | 4.34 | 4.96 |
| Y 180.0 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 |