

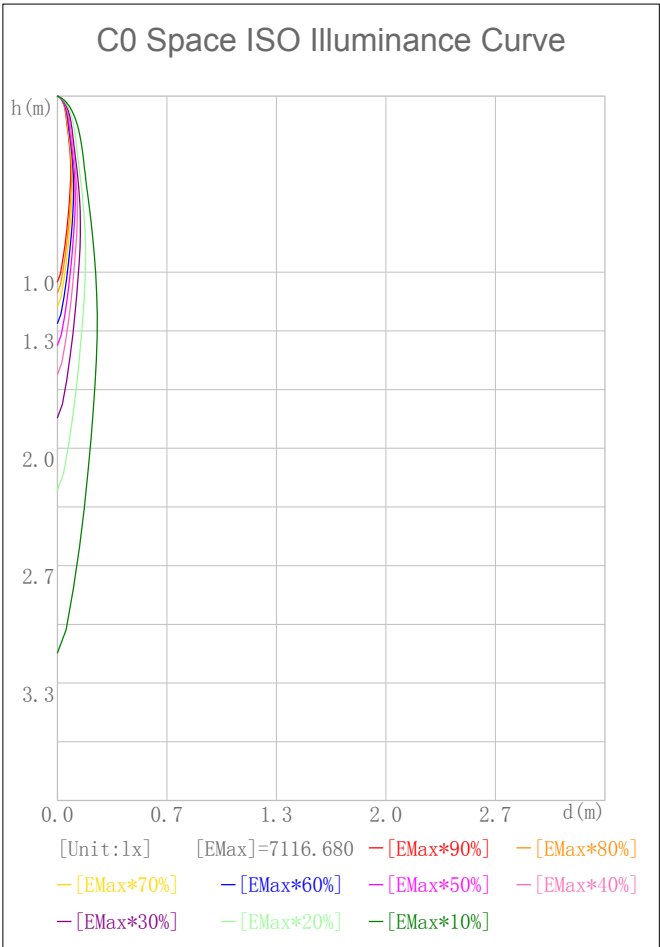
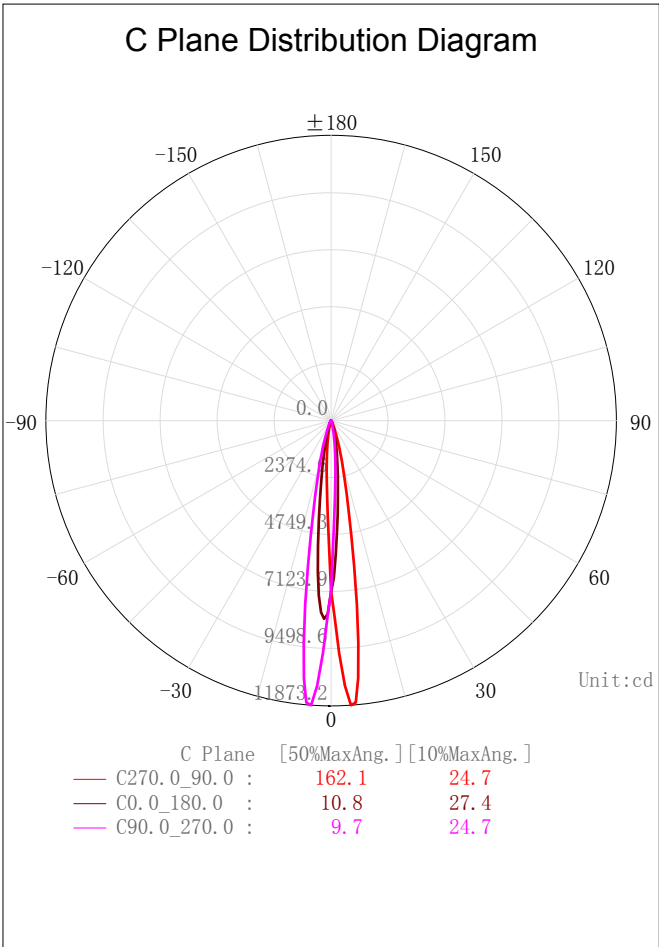
Indoor Luminaire Photometric Data

Description Information

| | | | |
|---|-------------------------|----------------------|-----------------------|
| Luminary Name:WL02-09-XX-01 3000K RA90 15D | | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | | Lamp Catalog: LED | Test Date: 2021/10/27 |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | | Shld.Ang(°): | Test Machine:GON-2000 |
| Test Lab: Quality Department | | Frequency (Hz): | Lamp CCT (K): Ra: |
| Lum. Size (W*L*H):0.076m*-0.076m*0.000m | | Lum. Area (m2):0.005 | Lum. W (kg): 0.000 |
| Test System: C, γ | Test Step: C=90.0 γ=1.0 | Temp. (°C): 25 | Humidity(%): 50.0 |

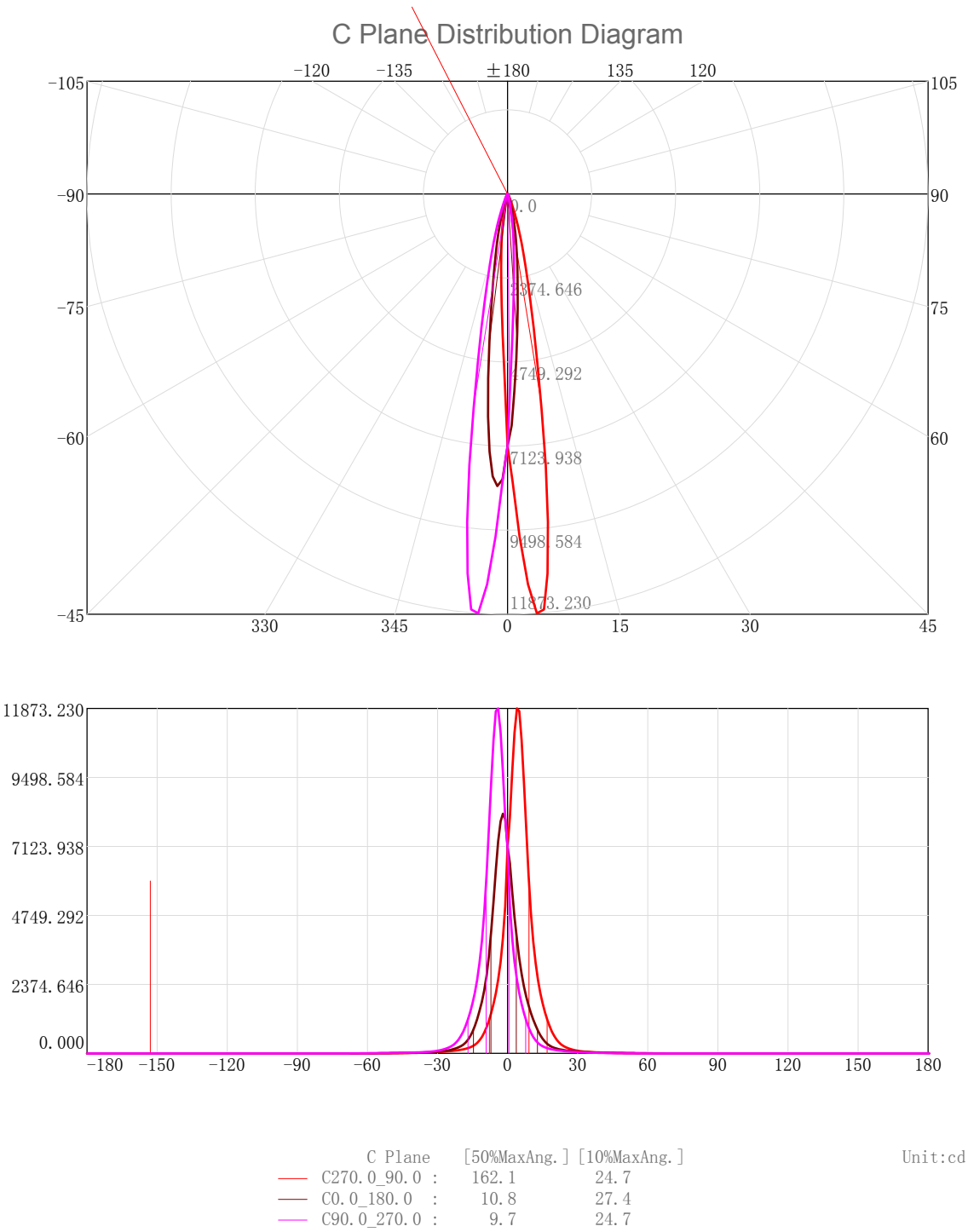
Character Parameter

| Lamp Speciality Parameter | | Luminaire Speciality Parameter | |
|---|----------------------------------|--|--|
| Rated Flux(lm): 781.270 | Luminary Flux(lm): 781.266 | Field Angle(10%Imax): 24.7(°) | |
| Rated Power(W): | Luminary Efficiency: 100.00% | Down Lumens&Percent: 781.266lm 100.00% | |
| Rated Voltage(V): | Luminary EER(lm/W): 88.139 | Up Lumens&Percent: 0.000lm 0.00% | |
| Tested Power(W): 8.864 | Max. Candela(cd): 11873.230 | S/MH: C0_a180=0.213 C90_270=0.240 | |
| Lamps' Inside: 1 | Max Cand@Ang. (°): C=270.0 γ=4.0 | CIE Type: Semi-Direct | |
| Tested Electrics (V, A, pf):240.9, 0.040, 0.899 | Beam Angle(50%Imax): 9.7(°) | ErP ϕ use(90°): 688.485lm | |
| Lamp Size (W*L*H):0.076m*-0.076m*0.000m | Left=-0.6°, Right=9.2° | IRF(%): 3452.301 | |



2D Plane Light Intensity Distribution Curve

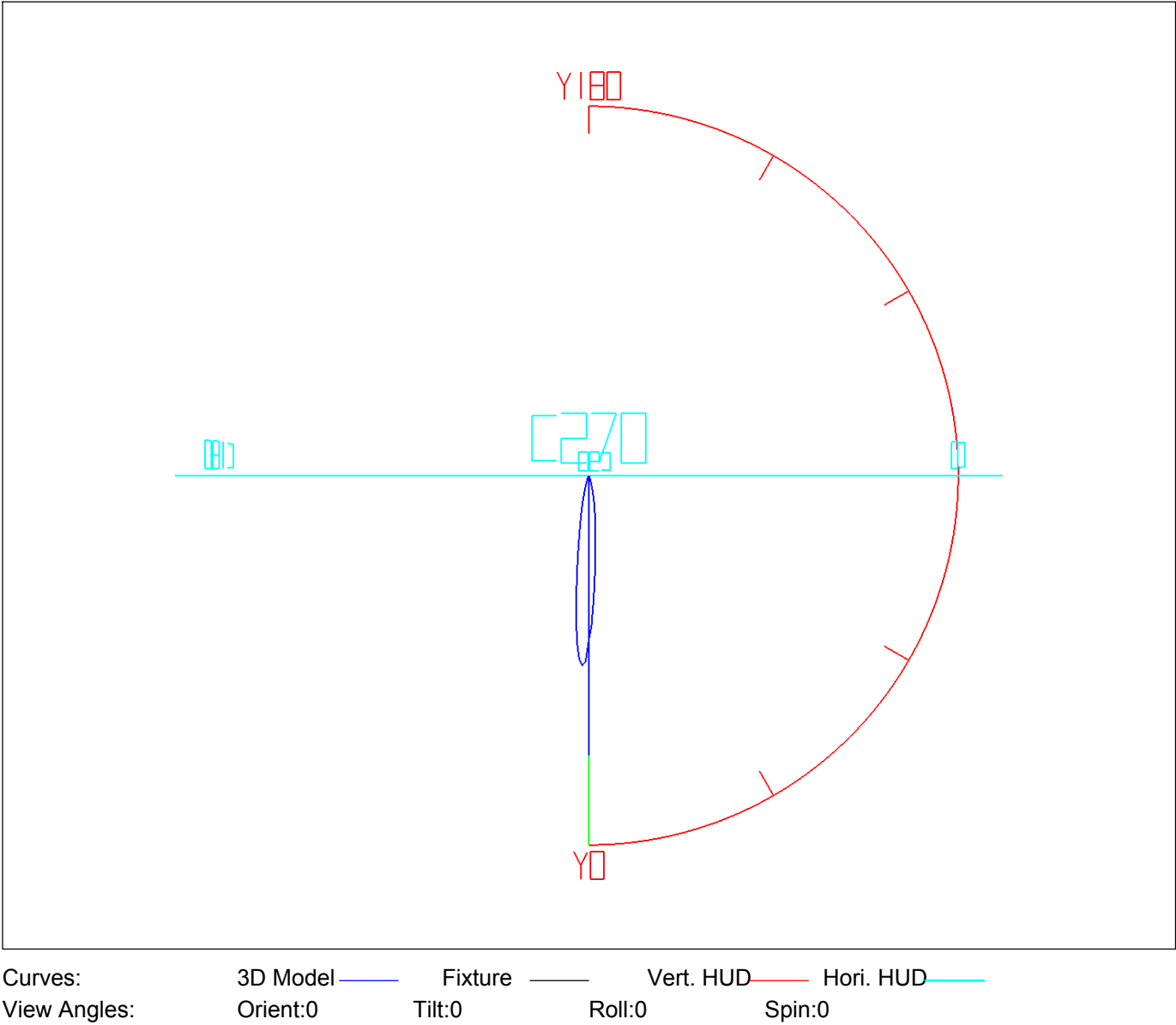
| | | |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-01 3000K RA90 15D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/27 |



3D Light Intensity Distribution Modal

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-01 3000K RA90 15D | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catelog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/27 |

3D Light Intensity Distribution Modal



IES Indoor Report

Photometric Filename:WL02-09-XX-01 3000K RA90 15D.IES

Zonal Flux Tabulation

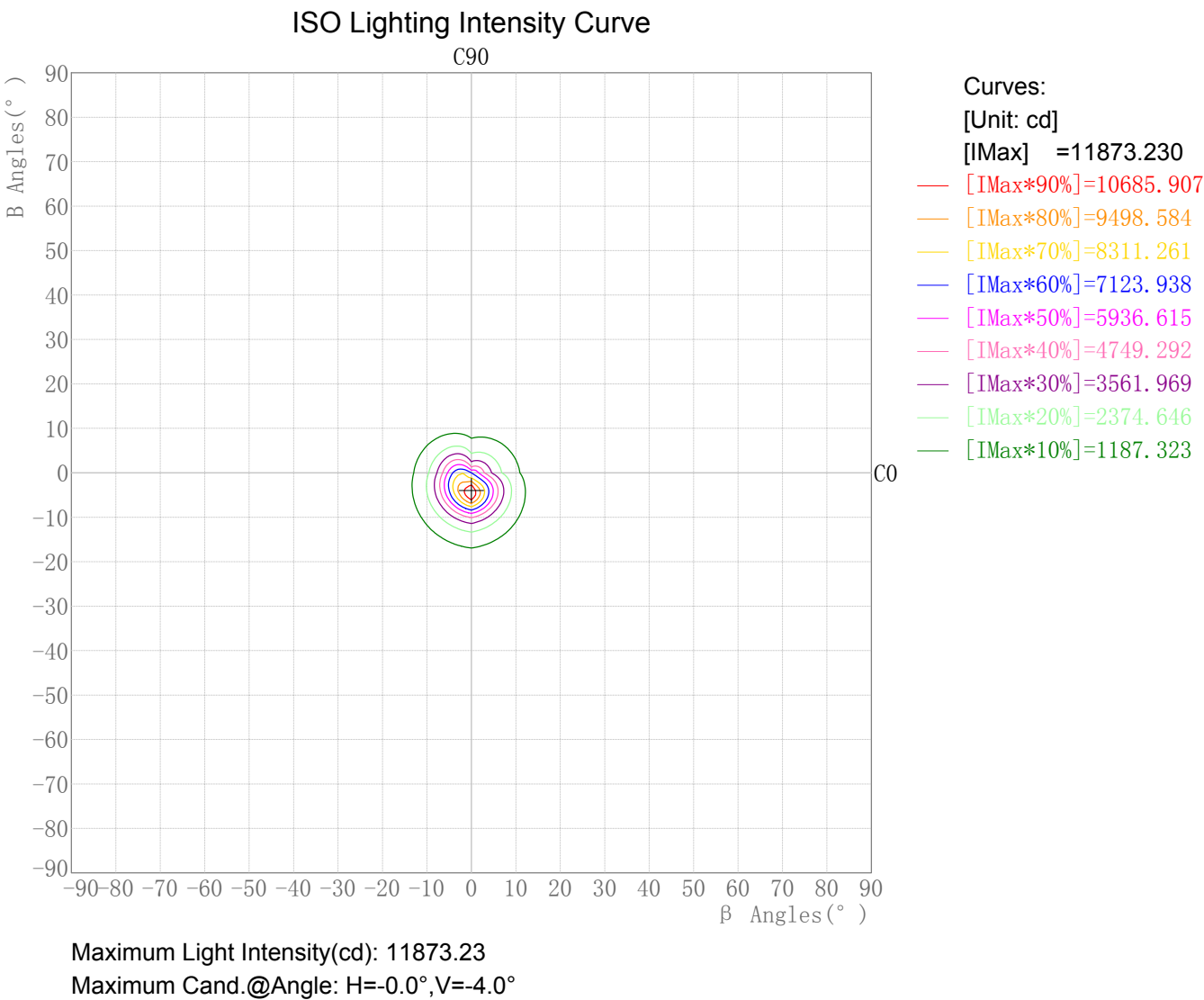
| Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp | Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp |
|-----------|-------------------|-------------------|-----------|-----------|-----------|-------------------|-------------------|-----------|-----------|
| 0.0-1.0 | 6.73 | 6.73 | 0.86 | 0.86 | 47.0-48.0 | 1.17 | 771.06 | 0.15 | 98.69 |
| 1.0-2.0 | 19.83 | 26.56 | 2.54 | 3.40 | 48.0-49.0 | 1.09 | 772.15 | 0.14 | 98.83 |
| 2.0-3.0 | 32.48 | 59.05 | 4.16 | 7.56 | 49.0-50.0 | 1.02 | 773.16 | 0.13 | 98.96 |
| 3.0-4.0 | 43.91 | 102.96 | 5.62 | 13.18 | 50.0-51.0 | 0.94 | 774.11 | 0.12 | 99.08 |
| 4.0-5.0 | 52.75 | 155.70 | 6.75 | 19.93 | 51.0-52.0 | 0.87 | 774.98 | 0.11 | 99.19 |
| 5.0-6.0 | 57.63 | 213.34 | 7.38 | 27.31 | 52.0-53.0 | 0.80 | 775.78 | 0.10 | 99.30 |
| 6.0-7.0 | 58.47 | 271.81 | 7.48 | 34.79 | 53.0-54.0 | 0.74 | 776.51 | 0.09 | 99.39 |
| 7.0-8.0 | 56.19 | 328.00 | 7.19 | 41.98 | 54.0-55.0 | 0.67 | 777.18 | 0.09 | 99.48 |
| 8.0-9.0 | 51.73 | 379.73 | 6.62 | 48.60 | 55.0-56.0 | 0.61 | 777.79 | 0.08 | 99.55 |
| 9.0-10.0 | 46.36 | 426.09 | 5.93 | 54.54 | 56.0-57.0 | 0.55 | 778.34 | 0.07 | 99.63 |
| 10.0-11.0 | 41.23 | 467.32 | 5.28 | 59.82 | 57.0-58.0 | 0.49 | 778.83 | 0.06 | 99.69 |
| 11.0-12.0 | 36.53 | 503.85 | 4.68 | 64.49 | 58.0-59.0 | 0.44 | 779.27 | 0.06 | 99.74 |
| 12.0-13.0 | 32.15 | 535.99 | 4.11 | 68.61 | 59.0-60.0 | 0.38 | 779.65 | 0.05 | 99.79 |
| 13.0-14.0 | 28.18 | 564.18 | 3.61 | 72.21 | 60.0-61.0 | 0.33 | 779.98 | 0.04 | 99.84 |
| 14.0-15.0 | 24.65 | 588.82 | 3.15 | 75.37 | 61.0-62.0 | 0.28 | 780.27 | 0.04 | 99.87 |
| 15.0-16.0 | 21.46 | 610.29 | 2.75 | 78.11 | 62.0-63.0 | 0.24 | 780.51 | 0.03 | 99.90 |
| 16.0-17.0 | 18.59 | 628.88 | 2.38 | 80.49 | 63.0-64.0 | 0.20 | 780.71 | 0.03 | 99.93 |
| 17.0-18.0 | 16.03 | 644.92 | 2.05 | 82.55 | 64.0-65.0 | 0.16 | 780.87 | 0.02 | 99.95 |
| 18.0-19.0 | 13.78 | 658.70 | 1.76 | 84.31 | 65.0-66.0 | 0.12 | 781.00 | 0.02 | 99.97 |
| 19.0-20.0 | 11.86 | 670.56 | 1.52 | 85.83 | 66.0-67.0 | 0.09 | 781.09 | 0.01 | 99.98 |
| 20.0-21.0 | 10.26 | 680.82 | 1.31 | 87.14 | 67.0-68.0 | 0.06 | 781.15 | 0.01 | 99.98 |
| 21.0-22.0 | 8.93 | 689.75 | 1.14 | 88.29 | 68.0-69.0 | 0.05 | 781.20 | 0.01 | 99.99 |
| 22.0-23.0 | 7.83 | 697.58 | 1.00 | 89.29 | 69.0-70.0 | 0.04 | 781.24 | 0.00 | 100.00 |
| 23.0-24.0 | 6.93 | 704.51 | 0.89 | 90.18 | 70.0-71.0 | 0.02 | 781.26 | 0.00 | 100.00 |
| 24.0-25.0 | 6.19 | 710.71 | 0.79 | 90.97 | 71.0-72.0 | 0.01 | 781.27 | 0.00 | 100.00 |
| 25.0-26.0 | 5.57 | 716.28 | 0.71 | 91.68 | 72.0-73.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 26.0-27.0 | 5.04 | 721.32 | 0.64 | 92.33 | 73.0-74.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 27.0-28.0 | 4.57 | 725.88 | 0.58 | 92.91 | 74.0-75.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 28.0-29.0 | 4.15 | 730.03 | 0.53 | 93.44 | 75.0-76.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 29.0-30.0 | 3.78 | 733.81 | 0.48 | 93.93 | 76.0-77.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 30.0-31.0 | 3.46 | 737.27 | 0.44 | 94.37 | 77.0-78.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 31.0-32.0 | 3.18 | 740.46 | 0.41 | 94.78 | 78.0-79.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 32.0-33.0 | 2.94 | 743.40 | 0.38 | 95.15 | 79.0-80.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 33.0-34.0 | 2.73 | 746.13 | 0.35 | 95.50 | 80.0-81.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 34.0-35.0 | 2.55 | 748.68 | 0.33 | 95.83 | 81.0-82.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 35.0-36.0 | 2.38 | 751.07 | 0.31 | 96.13 | 82.0-83.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 36.0-37.0 | 2.24 | 753.30 | 0.29 | 96.42 | 83.0-84.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 37.0-38.0 | 2.11 | 755.41 | 0.27 | 96.69 | 84.0-85.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 38.0-39.0 | 1.99 | 757.41 | 0.26 | 96.95 | 85.0-86.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 39.0-40.0 | 1.89 | 759.29 | 0.24 | 97.19 | 86.0-87.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 40.0-41.0 | 1.79 | 761.08 | 0.23 | 97.42 | 87.0-88.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 41.0-42.0 | 1.69 | 762.77 | 0.22 | 97.63 | 88.0-89.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 42.0-43.0 | 1.60 | 764.37 | 0.20 | 97.84 | 89.0-90.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 43.0-44.0 | 1.51 | 765.88 | 0.19 | 98.03 | 90.0-91.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 44.0-45.0 | 1.42 | 767.30 | 0.18 | 98.21 | 91.0-92.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 45.0-46.0 | 1.34 | 768.63 | 0.17 | 98.38 | 92.0-93.0 | 0.00 | 781.27 | 0.00 | 100.00 |
| 46.0-47.0 | 1.25 | 769.89 | 0.16 | 98.54 | 93.0-94.0 | 0.00 | 781.27 | 0.00 | 100.00 |

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 | 781. 27 | 0. 00 | 100. 00 | 141. 0-142. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 95. 0-96. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 142. 0-143. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 96. 0-97. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 143. 0-144. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 97. 0-98. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 144. 0-145. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 98. 0-99. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 145. 0-146. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 99. 0-100. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 146. 0-147. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 100. 0-101. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 147. 0-148. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 101. 0-102. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 148. 0-149. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 102. 0-103. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 149. 0-150. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 103. 0-104. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 150. 0-151. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 104. 0-105. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 151. 0-152. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 105. 0-106. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 152. 0-153. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 106. 0-107. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 153. 0-154. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 107. 0-108. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 154. 0-155. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 108. 0-109. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 155. 0-156. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 109. 0-110. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 156. 0-157. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 110. 0-111. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 157. 0-158. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 111. 0-112. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 158. 0-159. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 112. 0-113. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 159. 0-160. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 113. 0-114. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 160. 0-161. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 114. 0-115. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 161. 0-162. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 115. 0-116. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 162. 0-163. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 116. 0-117. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 163. 0-164. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 117. 0-118. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 164. 0-165. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 118. 0-119. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 165. 0-166. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 119. 0-120. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 166. 0-167. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 120. 0-121. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 167. 0-168. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 121. 0-122. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 168. 0-169. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 122. 0-123. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 169. 0-170. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 123. 0-124. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 170. 0-171. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 124. 0-125. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 171. 0-172. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 125. 0-126. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 172. 0-173. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 126. 0-127. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 173. 0-174. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 127. 0-128. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 174. 0-175. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 128. 0-129. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 175. 0-176. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 129. 0-130. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 176. 0-177. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 130. 0-131. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 177. 0-178. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 131. 0-132. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 178. 0-179. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 132. 0-133. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | 179. 0-180. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 |
| 133. 0-134. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | | | | | |
| 134. 0-135. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | | | | | |
| 135. 0-136. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | | | | | |
| 136. 0-137. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | | | | | |
| 137. 0-138. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | | | | | |
| 138. 0-139. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | | | | | |
| 139. 0-140. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | | | | | |
| 140. 0-141. 0 | 0. 00 | 781. 27 | 0. 00 | 100. 00 | | | | | |

Rectangle ISO Lighting Intensity Diagram

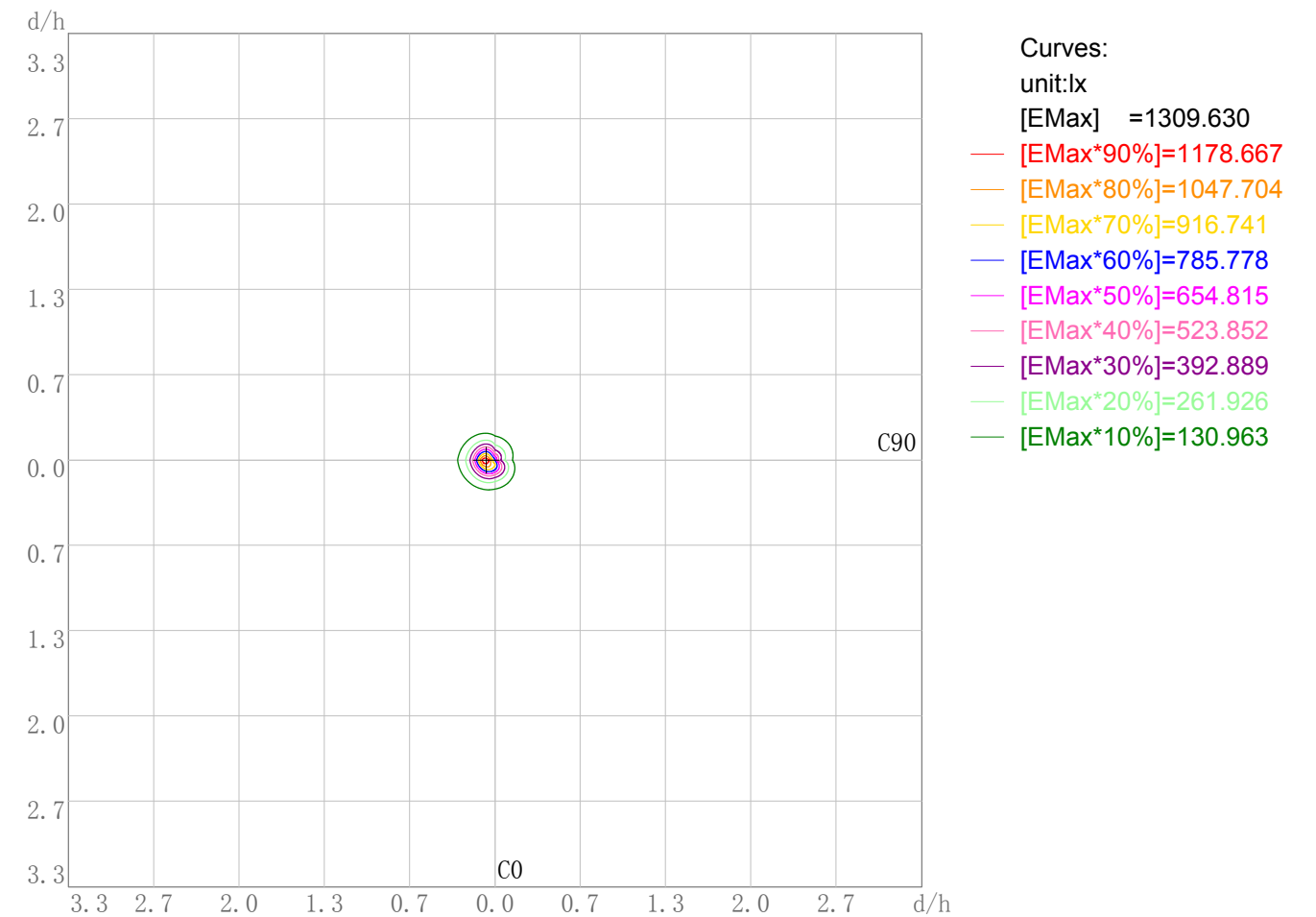
| | | |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-01 3000K RA90 15D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/27 |



Plane ISO-Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-01 3000K RA90 15D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/27 |

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 1309.63
Working Plane Maximum Illuminance Position(d/h):H-0.1 V-0.0

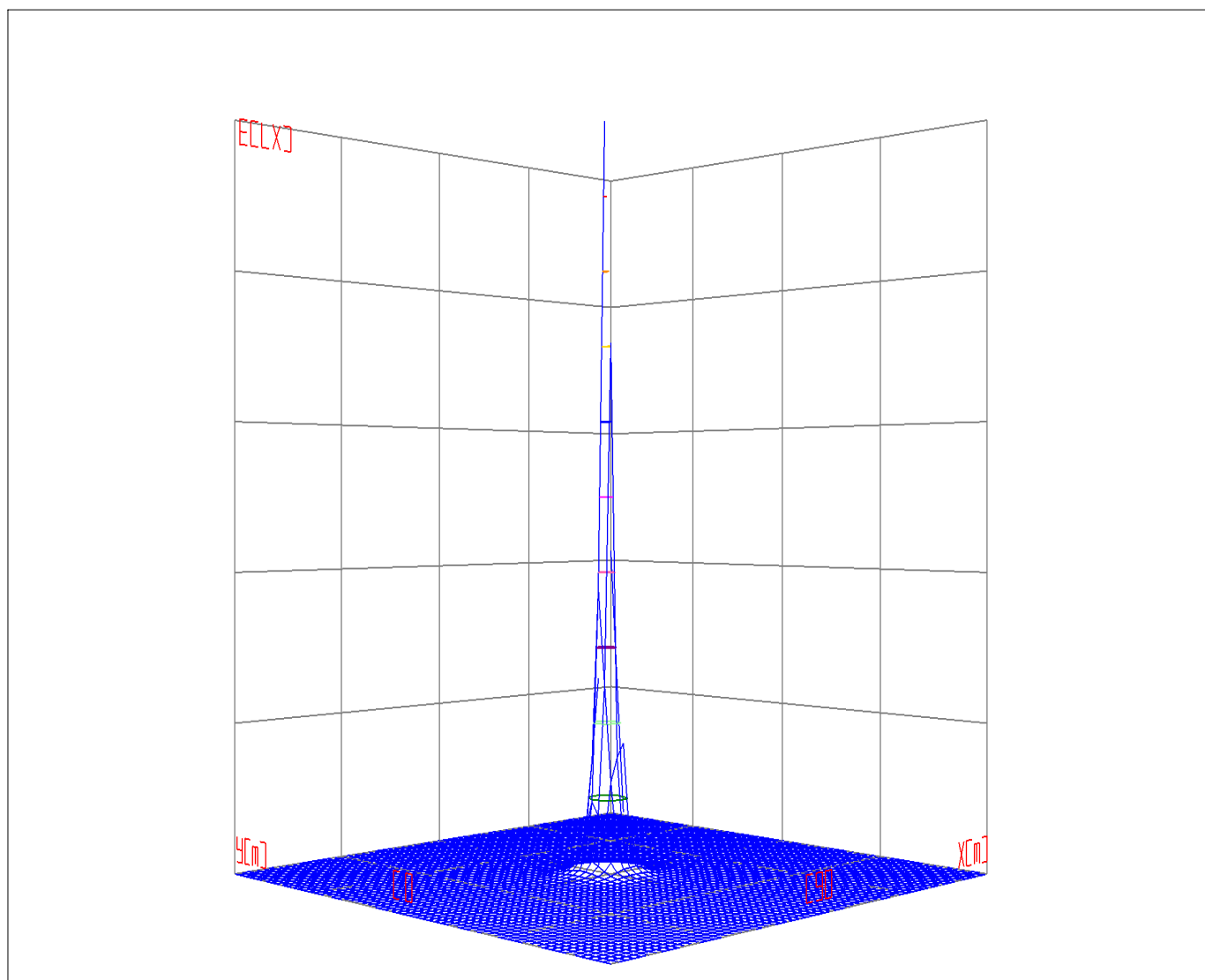
IES Indoor Report

Photometric Filename:WL02-09-XX-01 3000K RA90 15D.IES

3D Plane ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-01 3000K RA90 15D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/27 |

3D Plane Illuminance Modal

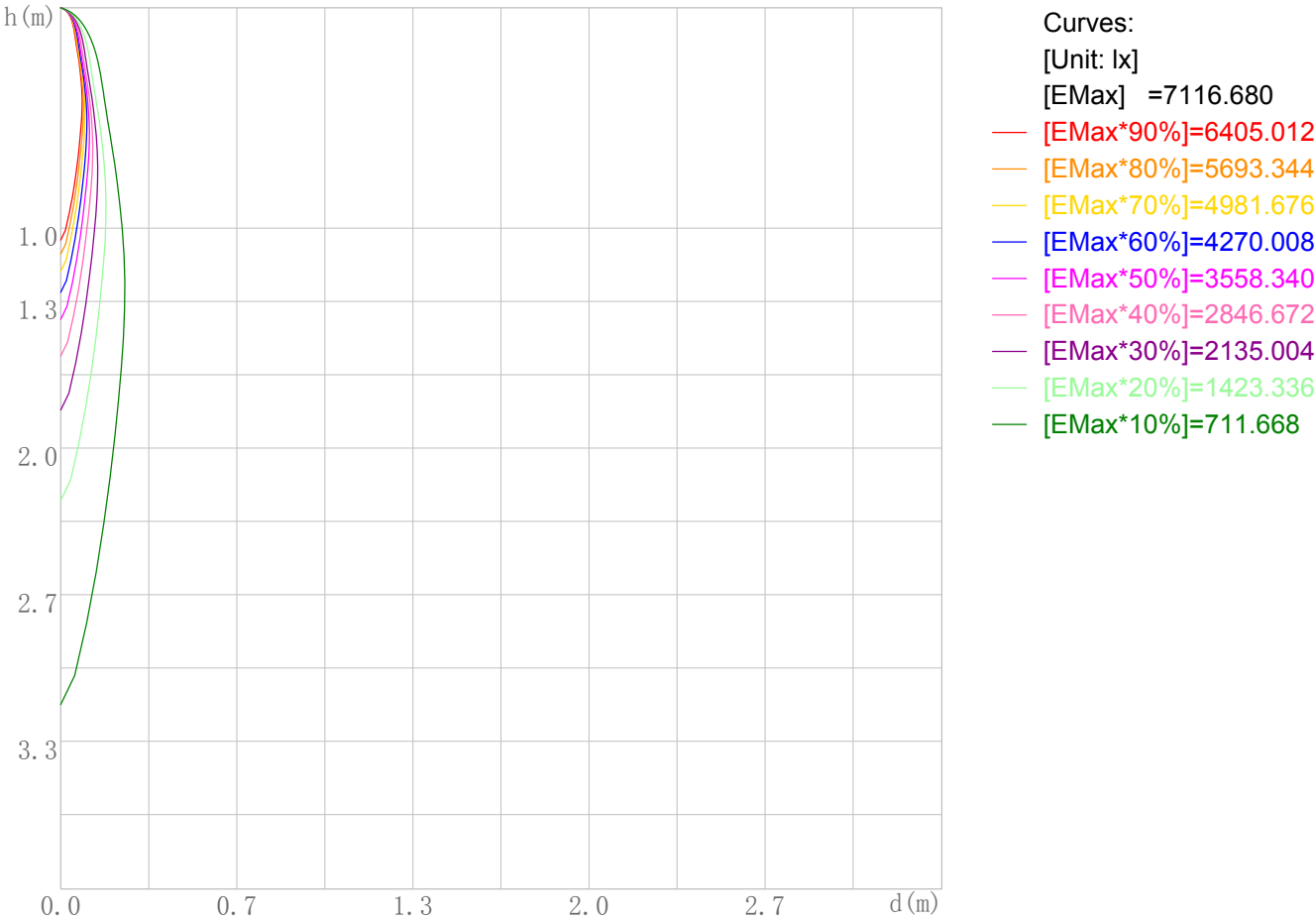


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-01 3000K RA90 15D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/27 |

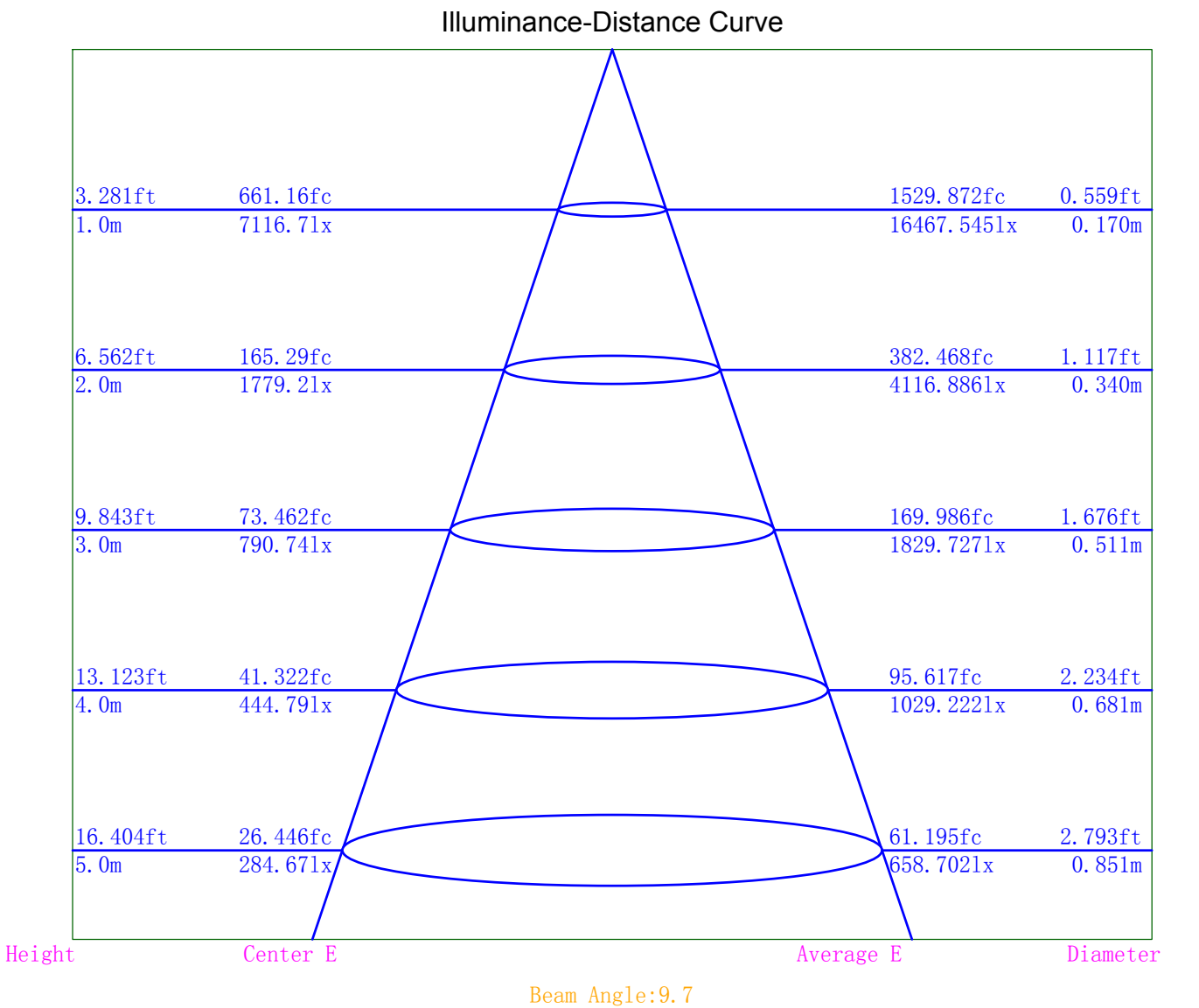
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:7116.68lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:7116.680cd,0deg

Illuminance-Distance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-01 3000K RA90 15D | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catelog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/27 |



Indoor Luminance Limiting Curves

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-01 3000K RA90 15D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/27 |

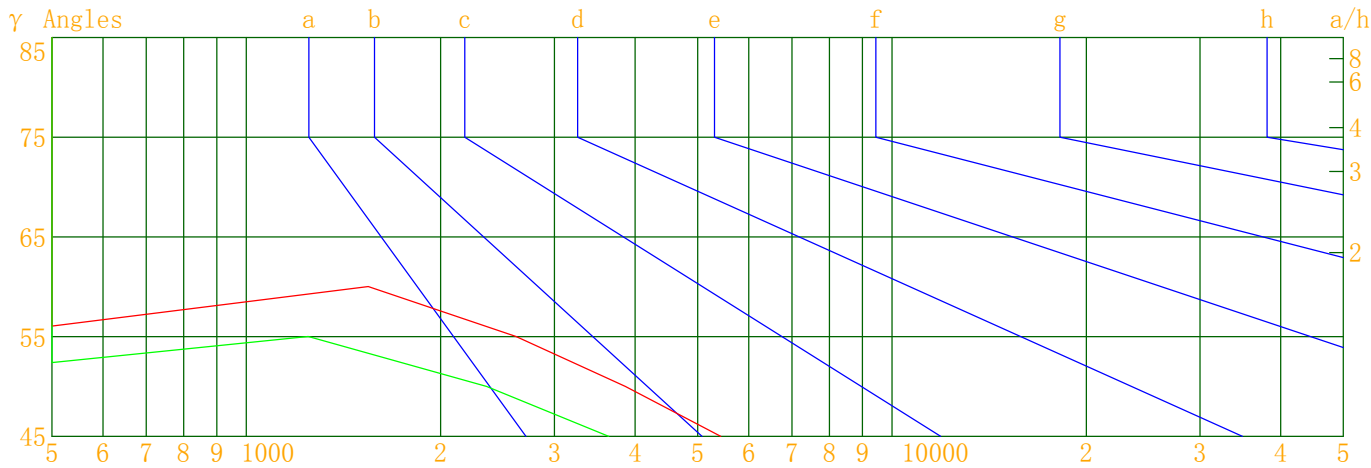
Glare Grade Table

| 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 | 5429 | 3865 | 2617 | 1544 | 373 | 0 | 0 | 0 | 0 |
| C90 | 3641 | 2356 | 1247 | 220 | 0 | 0 | 0 | 0 | 0 |

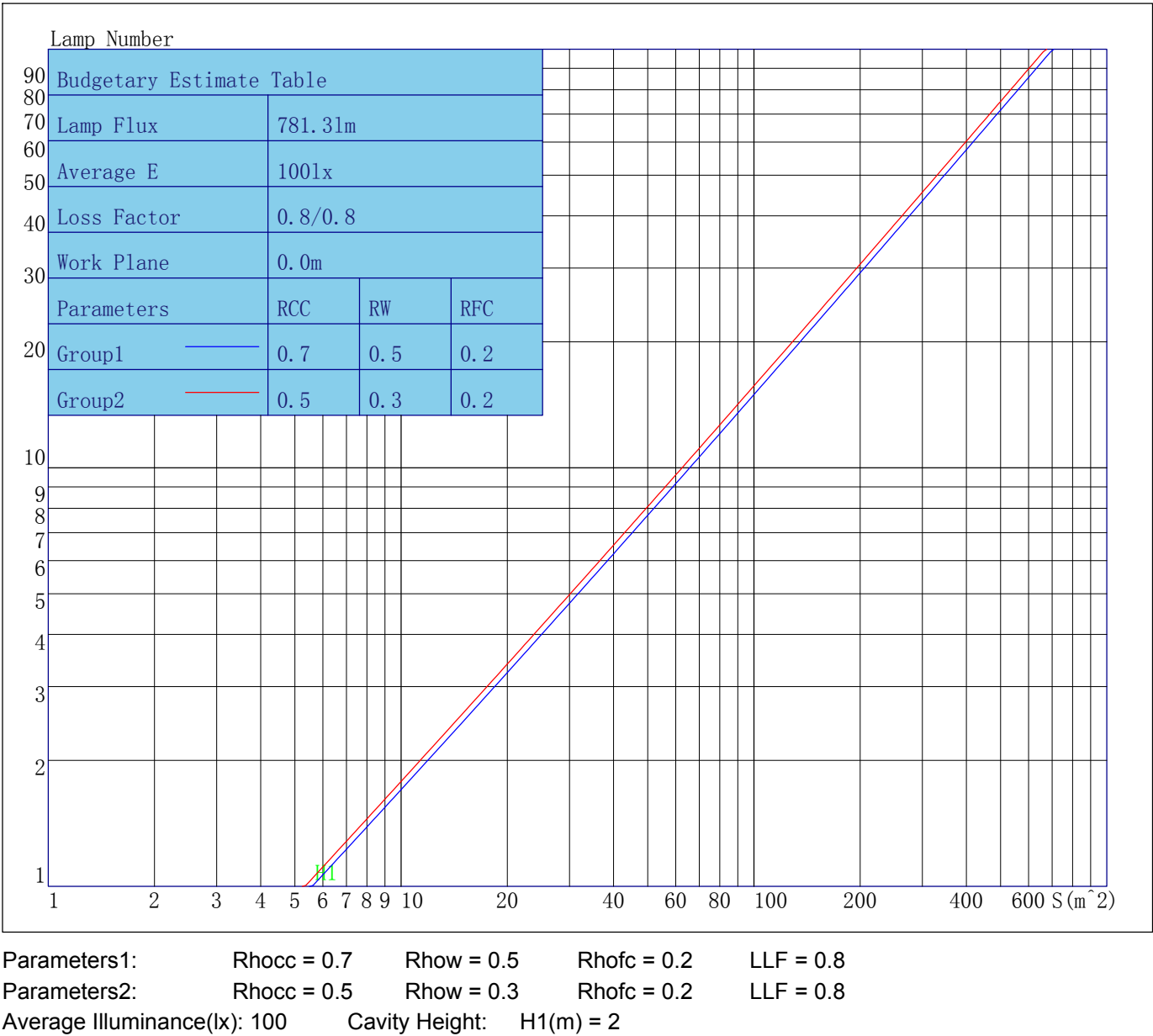
Luminance Limiting Curve



Luminous Size: Length(m)=-0.076 Width(m)=-0.076 Height(m)=0.000 Area(m^2)=0.004536
Luminous Type: Without Luminous Side
Luminous Curves: C0-C180 Color: C90-C270 Color:

Indoor Budgetary Estimate Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-01 3000K RA90 15D | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/27 |



Indoor Coefficient of Utilization Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-01 3000K RA90 15D | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catelog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/27 |

| Coefficients of Utilization - Zonal Cavity Method | | | | | | | | | | | | | | | | | | |
|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Coef. | Effective Floor Cavity Reflectance RFC=0.20 | | | | | | | | | | | | | | | | | |
| RhoCC (%) | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
| RhoW (%) | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | Coefficient of Utilization(%) | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 115 | 113 | 112 | 110 | 113 | 111 | 110 | 108 | 107 | 106 | 105 | 104 | 103 | 102 | 100 | 100 | 99 | 97 |
| 2 | 112 | 109 | 106 | 104 | 110 | 107 | 105 | 103 | 104 | 102 | 100 | 101 | 100 | 98 | 99 | 97 | 96 | 95 |
| 3 | 109 | 105 | 102 | 99 | 107 | 104 | 101 | 98 | 101 | 99 | 97 | 99 | 97 | 95 | 97 | 95 | 94 | 93 |
| 4 | 106 | 101 | 98 | 95 | 105 | 100 | 97 | 95 | 98 | 96 | 94 | 97 | 94 | 93 | 95 | 93 | 92 | 90 |
| 5 | 104 | 98 | 95 | 92 | 102 | 98 | 94 | 92 | 96 | 93 | 91 | 95 | 92 | 90 | 93 | 91 | 89 | 88 |
| 6 | 101 | 96 | 92 | 89 | 100 | 95 | 92 | 89 | 94 | 91 | 89 | 93 | 90 | 88 | 92 | 89 | 88 | 87 |
| 7 | 99 | 93 | 90 | 87 | 98 | 93 | 89 | 87 | 92 | 89 | 87 | 91 | 88 | 86 | 90 | 88 | 86 | 85 |
| 8 | 97 | 91 | 88 | 85 | 96 | 91 | 87 | 85 | 90 | 87 | 85 | 89 | 86 | 85 | 88 | 86 | 84 | 83 |
| 9 | 95 | 89 | 86 | 84 | 94 | 89 | 86 | 83 | 88 | 85 | 83 | 88 | 85 | 83 | 87 | 84 | 83 | 82 |
| 10 | 93 | 88 | 84 | 82 | 93 | 87 | 84 | 82 | 87 | 84 | 82 | 86 | 83 | 81 | 86 | 83 | 81 | 81 |

Unified Glare Rating Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-01 3000K RA90 15D | Lum. Catelog: | Test ID: 01 |
| Lamp Name: | Lamp Catelog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/27 |

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 | 8.4 | 9.5 | 8.7 | 9.8 | 10.1 | 6.0 | 7.1 | 6.4 | 7.4 | 7.7 |
| | 8.2 | 9.2 | 8.5 | 9.5 | 9.9 | 5.8 | 6.8 | 6.2 | 7.1 | 7.5 |
| | 8.0 | 9.0 | 8.4 | 9.3 | 9.7 | 5.7 | 6.6 | 6.1 | 7.0 | 7.4 |
| | 7.9 | 8.8 | 8.3 | 9.2 | 9.6 | 5.6 | 6.5 | 6.0 | 6.8 | 7.2 |
| | 7.9 | 8.7 | 8.3 | 9.1 | 9.5 | 5.5 | 6.4 | 5.9 | 6.7 | 7.2 |
| | 7.8 | 8.6 | 8.2 | 9.0 | 9.4 | 5.5 | 6.3 | 5.9 | 6.6 | 7.1 |
| X=4H Y=2H | 8.2 | 9.1 | 8.6 | 9.5 | 9.9 | 5.8 | 6.8 | 6.2 | 7.1 | 7.5 |
| | 8.0 | 8.8 | 8.4 | 9.2 | 9.6 | 5.6 | 6.4 | 6.0 | 6.8 | 7.2 |
| | 7.8 | 8.6 | 8.3 | 9.0 | 9.5 | 5.4 | 6.2 | 5.9 | 6.6 | 7.1 |
| | 7.7 | 8.4 | 8.2 | 8.8 | 9.3 | 5.3 | 6.0 | 5.8 | 6.4 | 6.9 |
| | 7.6 | 8.3 | 8.1 | 8.7 | 9.2 | 5.2 | 5.9 | 5.7 | 6.3 | 6.8 |
| | 7.6 | 8.2 | 8.1 | 8.7 | 9.1 | 5.2 | 5.8 | 5.7 | 6.3 | 6.7 |
| X=8H Y=4H | 7.6 | 8.3 | 8.1 | 8.7 | 9.2 | 5.2 | 5.9 | 5.7 | 6.3 | 6.8 |
| | 7.5 | 8.1 | 8.0 | 8.6 | 9.1 | 5.1 | 5.7 | 5.6 | 6.2 | 6.7 |
| | 7.4 | 8.0 | 8.0 | 8.5 | 9.0 | 5.0 | 5.6 | 5.6 | 6.1 | 6.6 |
| | 7.4 | 7.9 | 7.9 | 8.3 | 8.9 | 5.0 | 5.4 | 5.5 | 5.9 | 6.5 |
| X=12H Y=4H | 7.6 | 8.2 | 8.1 | 8.7 | 9.1 | 5.2 | 5.8 | 5.7 | 6.3 | 6.7 |
| | 7.4 | 8.0 | 8.0 | 8.4 | 9.0 | 5.0 | 5.6 | 5.6 | 6.0 | 6.6 |
| | 7.4 | 7.9 | 7.9 | 8.3 | 8.9 | 5.0 | 5.4 | 5.5 | 5.9 | 6.5 |
| Variations with the objverver 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 | 8.1/0.0 | | | | | 11.0/0.0 | | | | |
| Reduced UGR Table: | | | | | | | | | | |
| Nordic Standard Table: | BK0 | | | | | BK0 | | | | |
| Correction Value | 0.1 | | | | | 0.1 | | | | |

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

Candela Tabulation

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|--------|--------|--------|--------|---------|
| γ 0.0 | 7116.7 | 7116.7 | 7116.7 | 7116.7 |
| γ 1.0 | 6540.2 | 5071.1 | 8062.6 | 8126.0 |
| γ 2.0 | 5564.6 | 3972.0 | 8252.6 | 9679.9 |
| γ 3.0 | 4681.6 | 3146.7 | 7987.6 | 11041.7 |
| γ 4.0 | 3916.9 | 2532.3 | 7294.2 | 11873.2 |
| γ 5.0 | 3268.4 | 2071.0 | 6310.8 | 11778.1 |
| γ 6.0 | 2738.8 | 1703.4 | 5218.3 | 10778.6 |
| γ 7.0 | 2306.0 | 1392.0 | 4207.4 | 9338.5 |
| γ 8.0 | 1954.6 | 1126.9 | 3343.0 | 7736.3 |
| γ 9.0 | 1657.1 | 903.1 | 2673.5 | 6136.6 |
| γ 10.0 | 1395.7 | 717.0 | 2171.2 | 4837.0 |
| γ 11.0 | 1168.5 | 566.8 | 1782.5 | 3865.9 |
| γ 12.0 | 963.2 | 451.4 | 1458.9 | 3108.9 |
| γ 13.0 | 781.2 | 362.8 | 1179.3 | 2530.1 |
| γ 14.0 | 628.6 | 297.3 | 943.1 | 2085.0 |
| γ 15.0 | 505.5 | 248.7 | 747.9 | 1725.0 |
| γ 16.0 | 407.0 | 212.0 | 590.2 | 1422.9 |
| γ 17.0 | 330.0 | 184.1 | 465.9 | 1164.0 |
| γ 18.0 | 270.7 | 161.6 | 371.7 | 941.7 |
| γ 19.0 | 226.4 | 142.5 | 302.3 | 751.9 |
| γ 20.0 | 193.4 | 126.8 | 250.8 | 597.4 |
| γ 21.0 | 167.8 | 113.4 | 211.1 | 476.1 |
| γ 22.0 | 147.3 | 101.8 | 179.7 | 380.4 |
| γ 23.0 | 130.6 | 91.7 | 154.2 | 307.4 |
| γ 24.0 | 116.8 | 83.1 | 132.7 | 252.3 |
| γ 25.0 | 105.0 | 75.3 | 114.1 | 210.5 |
| γ 26.0 | 94.9 | 68.6 | 98.2 | 177.8 |
| γ 27.0 | 86.0 | 62.5 | 84.8 | 150.9 |
| γ 28.0 | 77.9 | 57.1 | 73.9 | 128.2 |
| γ 29.0 | 70.9 | 51.8 | 64.7 | 109.5 |
| γ 30.0 | 64.6 | 47.1 | 57.1 | 94.2 |
| γ 31.0 | 59.1 | 42.9 | 51.1 | 81.4 |
| γ 32.0 | 53.9 | 39.1 | 45.9 | 71.1 |
| γ 33.0 | 49.4 | 35.7 | 41.9 | 62.5 |
| γ 34.0 | 45.2 | 32.5 | 38.5 | 55.5 |
| γ 35.0 | 41.5 | 29.8 | 35.3 | 49.9 |
| γ 36.0 | 38.1 | 27.2 | 32.6 | 45.1 |
| γ 37.0 | 34.9 | 24.7 | 30.4 | 41.4 |
| γ 38.0 | 31.9 | 22.6 | 28.5 | 38.1 |
| γ 39.0 | 29.3 | 20.7 | 27.0 | 35.3 |
| γ 40.0 | 26.9 | 18.9 | 25.4 | 32.9 |
| γ 41.0 | 24.6 | 17.3 | 24.0 | 30.9 |
| γ 42.0 | 22.6 | 15.6 | 22.5 | 28.9 |
| γ 43.0 | 20.8 | 14.1 | 21.0 | 27.1 |
| γ 44.0 | 19.0 | 12.8 | 19.5 | 25.4 |
| γ 45.0 | 17.4 | 11.7 | 18.2 | 23.8 |
| γ 46.0 | 15.9 | 10.6 | 16.8 | 22.2 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|--------|------|-------|--------|--------|
| γ 47.0 | 14.7 | 9.4 | 15.5 | 20.8 |
| γ 48.0 | 13.3 | 8.5 | 14.3 | 19.3 |
| γ 49.0 | 12.2 | 7.7 | 13.1 | 17.9 |
| γ 50.0 | 11.3 | 6.9 | 12.0 | 16.5 |
| γ 51.0 | 10.2 | 6.0 | 10.9 | 15.2 |
| γ 52.0 | 9.4 | 5.3 | 10.0 | 13.9 |
| γ 53.0 | 8.5 | 4.6 | 9.0 | 12.9 |
| γ 54.0 | 7.7 | 4.0 | 8.3 | 11.9 |
| γ 55.0 | 6.8 | 3.2 | 7.4 | 10.9 |
| γ 56.0 | 6.2 | 2.7 | 6.7 | 10.0 |
| γ 57.0 | 5.4 | 2.0 | 6.0 | 9.2 |
| γ 58.0 | 4.7 | 1.6 | 5.3 | 8.4 |
| γ 59.0 | 4.1 | 1.0 | 4.7 | 7.6 |
| γ 60.0 | 3.5 | 0.5 | 4.0 | 6.9 |
| γ 61.0 | 2.9 | 0.0 | 3.4 | 6.3 |
| γ 62.0 | 2.4 | 0.0 | 2.9 | 5.6 |
| γ 63.0 | 1.8 | 0.0 | 2.4 | 5.0 |
| γ 64.0 | 1.3 | 0.0 | 1.7 | 4.3 |
| γ 65.0 | 0.7 | 0.0 | 1.2 | 3.8 |
| γ 66.0 | 0.2 | 0.0 | 0.8 | 3.3 |
| γ 67.0 | 0.0 | 0.0 | 0.2 | 2.7 |
| γ 68.0 | 0.0 | 0.0 | 0.0 | 2.2 |
| γ 69.0 | 0.0 | 0.0 | 0.0 | 1.7 |
| γ 70.0 | 0.0 | 0.0 | 0.0 | 1.1 |
| γ 71.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| γ 72.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 73.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 74.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 75.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 76.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 77.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 78.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 79.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 80.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 81.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 82.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 83.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 84.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 85.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 86.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 87.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 88.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 89.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 90.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 91.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 92.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 93.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 94.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 95.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 96.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 97.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 98.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 99.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 101.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 102.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 103.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 104.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 105.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 106.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 107.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 108.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 109.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 110.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 111.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 112.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 113.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 114.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 115.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 116.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 117.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 118.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 119.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 120.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 121.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 122.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 123.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 124.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 125.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 126.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 127.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 128.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 129.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 130.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 131.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 132.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 133.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 134.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 135.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 136.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 137.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 138.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 139.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 140.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 141.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 142.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 143.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 144.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 145.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 146.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 147.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 148.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 149.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 150.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 151.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 152.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 153.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 154.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 155.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 156.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 157.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 158.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 159.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 160.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 161.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 162.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 163.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 164.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 165.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 166.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 167.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 168.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 169.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 170.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 171.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 172.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 173.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 174.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 175.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 176.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 177.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 178.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 179.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| γ 180.0 | 0.0 | 0.0 | 0.0 | 0.0 |