

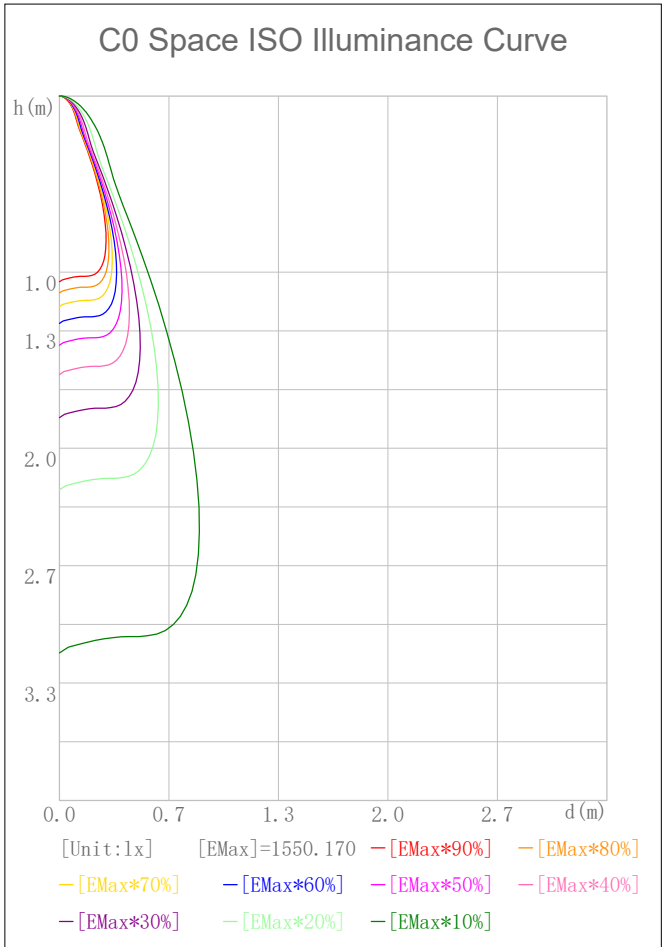
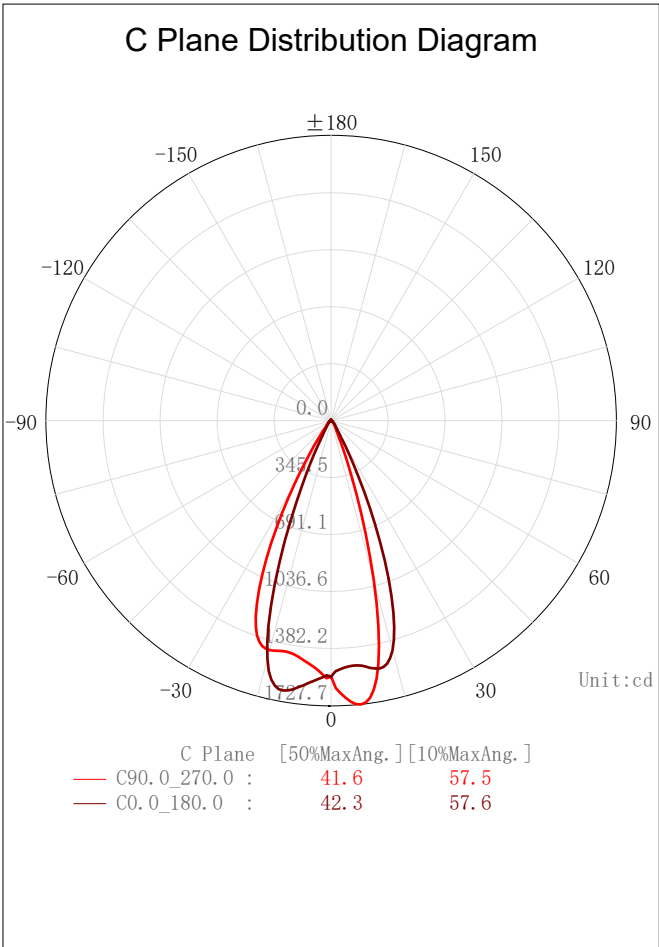
Indoor Luminaire Photometric Data

Description Information

| | | | |
|---|-------------------------|----------------------|-----------------------|
| Luminary Name: TR08-06-XX-02 4000K RA90 36D | | 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 |

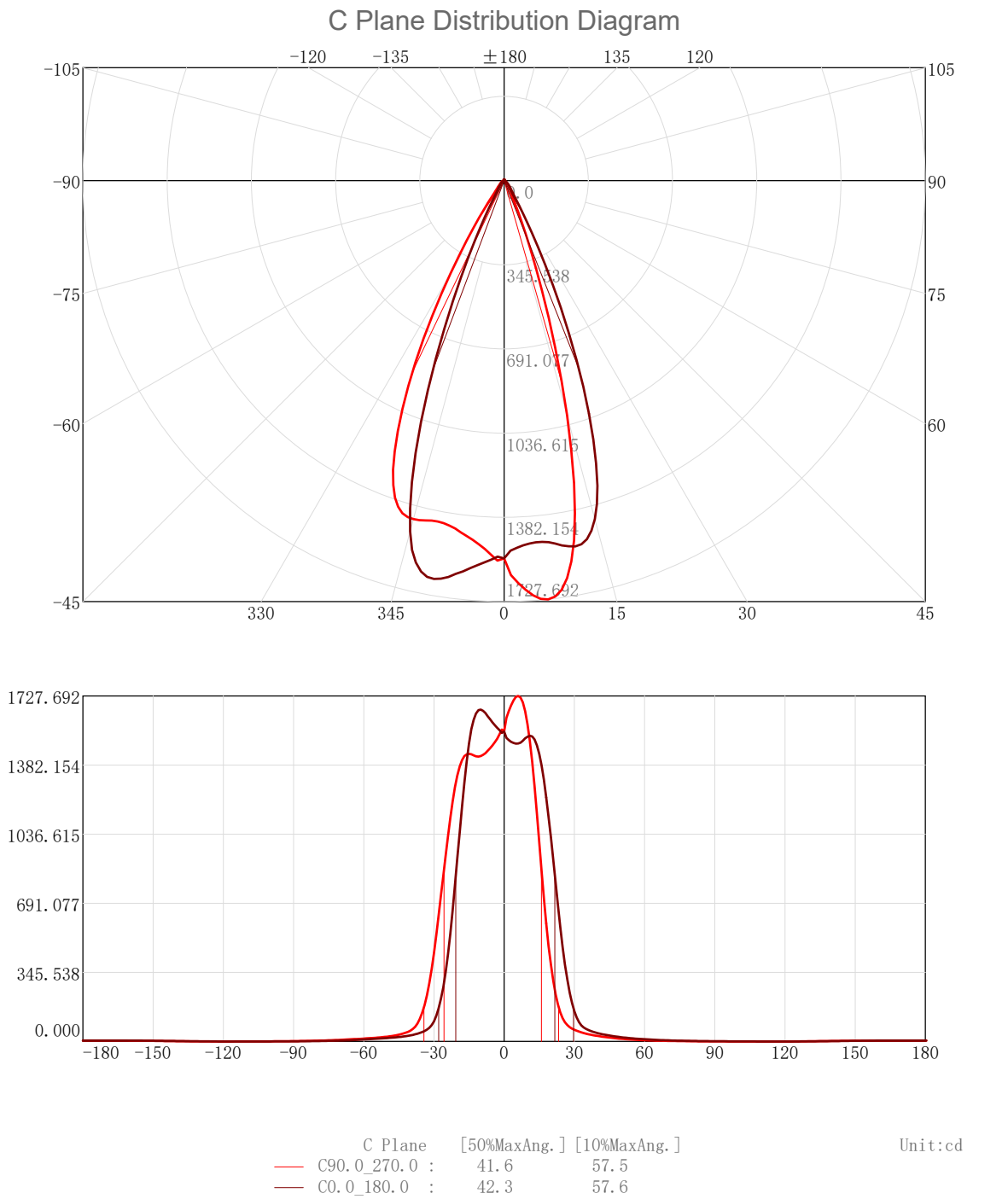
Character Parameter

| Lamp Speciality Parameter | | Luminaire Speciality Parameter | |
|---|---------------------------------|---------------------------------------|--|
| Rated Flux(lm): 835.980 | Luminary Flux(lm): 835.975 | Field Angle(10%Imax): 57.5(°) | |
| Rated Power(W): | Luminary Efficiency: 100.00% | Down Lumens&Percent: 827.640lm 99.00% | |
| Rated Voltage(V): | Luminary EER(lm/W): 94.664 | Up Lumens&Percent: 8.336lm 1.00% | |
| Tested Power(W): 8.831 | Max. Candela(cd): 1727.692 | S/MH: C0_a180=0.738 C90_270=0.731 | |
| Lamps' Inside: 1 | Max Cand@Ang. (°): C=90.0 γ=6.0 | CIE Type: Semi-Direct | |
| Tested Electrics (V, A, pf):240.8, 0.040, 0.900 | Beam Angle(50%Imax): 41.6(°) | ErP Φ use(90°): 741.832lm | |
| Lamp Size (W*L*H):0.038m*0.038m*0.000m | Left=-25.7°, Right=15.9° | IRF(%): 434.077 | |



2D Plane Light Intensity Distribution Curve

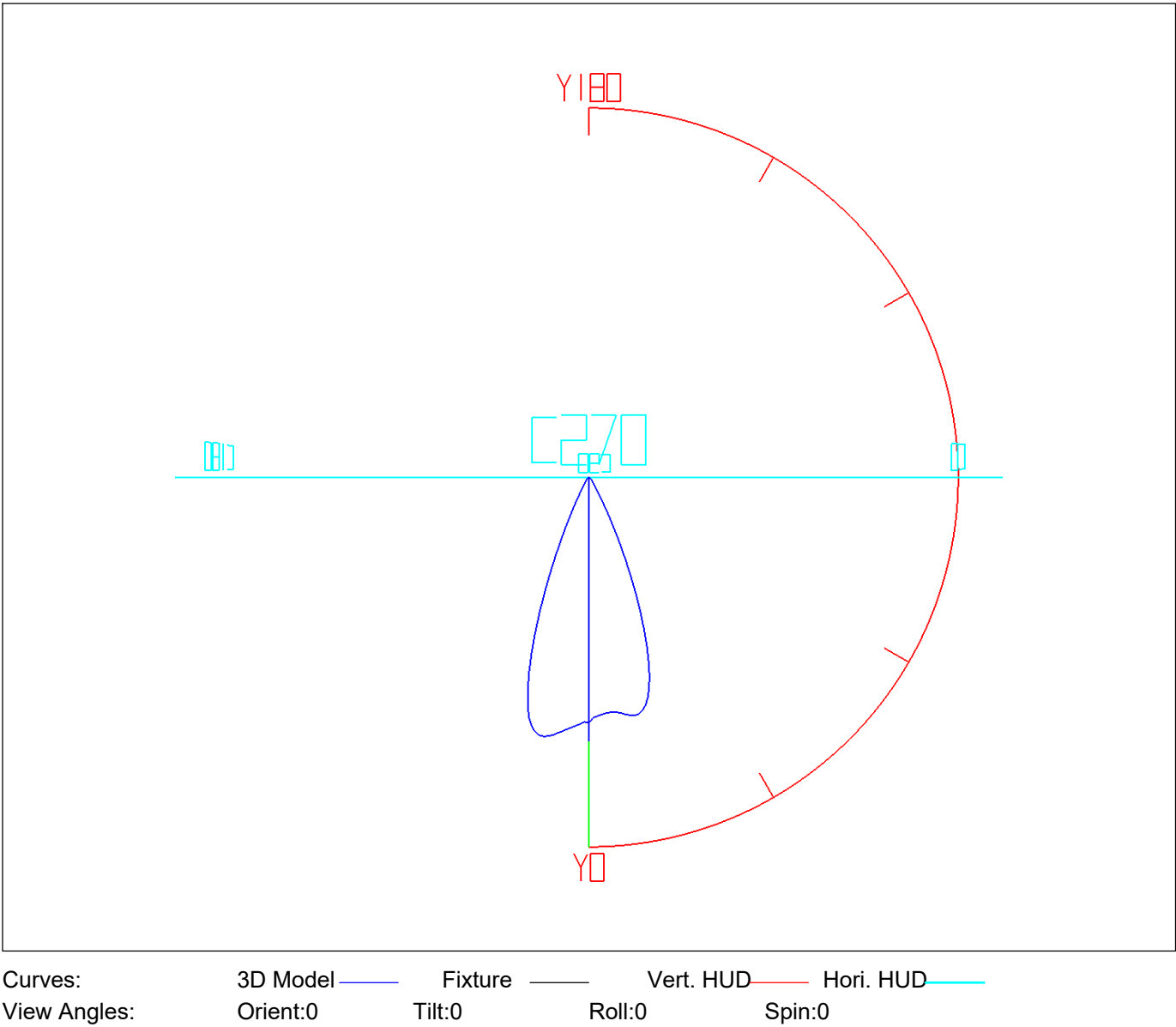
| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:TR08-06-XX-02 4000K RA90 36D | Lum. Catalog: | Test ID:01 |
| Lamp Name: | Lamp Catalog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date:2021/10/28 |



3D Light Intensity Distribution Modal

| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:TR08-06-XX-02 4000K RA90 36D | 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:TR08-06-XX-02 4000K RA90 36D.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 | 1.49 | 1.49 | 0.18 | 0.18 | 47.0-48.0 | 1.81 | 797.53 | 0.22 | 95.40 |
| 1.0-2.0 | 4.48 | 5.97 | 0.54 | 0.71 | 48.0-49.0 | 1.73 | 799.26 | 0.21 | 95.61 |
| 2.0-3.0 | 7.48 | 13.45 | 0.89 | 1.61 | 49.0-50.0 | 1.65 | 800.91 | 0.20 | 95.80 |
| 3.0-4.0 | 10.49 | 23.94 | 1.26 | 2.86 | 50.0-51.0 | 1.58 | 802.48 | 0.19 | 95.99 |
| 4.0-5.0 | 13.51 | 37.46 | 1.62 | 4.48 | 51.0-52.0 | 1.51 | 803.99 | 0.18 | 96.17 |
| 5.0-6.0 | 16.53 | 53.99 | 1.98 | 6.46 | 52.0-53.0 | 1.44 | 805.43 | 0.17 | 96.35 |
| 6.0-7.0 | 19.54 | 73.52 | 2.34 | 8.80 | 53.0-54.0 | 1.38 | 806.80 | 0.16 | 96.51 |
| 7.0-8.0 | 22.50 | 96.03 | 2.69 | 11.49 | 54.0-55.0 | 1.31 | 808.12 | 0.16 | 96.67 |
| 8.0-9.0 | 25.40 | 121.43 | 3.04 | 14.53 | 55.0-56.0 | 1.25 | 809.37 | 0.15 | 96.82 |
| 9.0-10.0 | 28.17 | 149.59 | 3.37 | 17.89 | 56.0-57.0 | 1.20 | 810.57 | 0.14 | 96.96 |
| 10.0-11.0 | 30.75 | 180.34 | 3.68 | 21.57 | 57.0-58.0 | 1.14 | 811.71 | 0.14 | 97.10 |
| 11.0-12.0 | 33.07 | 213.41 | 3.96 | 25.53 | 58.0-59.0 | 1.09 | 812.80 | 0.13 | 97.23 |
| 12.0-13.0 | 35.04 | 248.44 | 4.19 | 29.72 | 59.0-60.0 | 1.04 | 813.84 | 0.12 | 97.35 |
| 13.0-14.0 | 36.61 | 285.05 | 4.38 | 34.10 | 60.0-61.0 | 0.99 | 814.83 | 0.12 | 97.47 |
| 14.0-15.0 | 37.68 | 322.73 | 4.51 | 38.61 | 61.0-62.0 | 0.93 | 815.76 | 0.11 | 97.58 |
| 15.0-16.0 | 38.22 | 360.95 | 4.57 | 43.18 | 62.0-63.0 | 0.88 | 816.64 | 0.11 | 97.69 |
| 16.0-17.0 | 38.22 | 399.16 | 4.57 | 47.75 | 63.0-64.0 | 0.83 | 817.48 | 0.10 | 97.79 |
| 17.0-18.0 | 37.67 | 436.83 | 4.51 | 52.25 | 64.0-65.0 | 0.79 | 818.27 | 0.09 | 97.88 |
| 18.0-19.0 | 36.60 | 473.43 | 4.38 | 56.63 | 65.0-66.0 | 0.74 | 819.01 | 0.09 | 97.97 |
| 19.0-20.0 | 35.08 | 508.51 | 4.20 | 60.83 | 66.0-67.0 | 0.70 | 819.71 | 0.08 | 98.05 |
| 20.0-21.0 | 33.15 | 541.66 | 3.97 | 64.79 | 67.0-68.0 | 0.66 | 820.36 | 0.08 | 98.13 |
| 21.0-22.0 | 30.86 | 572.53 | 3.69 | 68.49 | 68.0-69.0 | 0.62 | 820.98 | 0.07 | 98.21 |
| 22.0-23.0 | 28.33 | 600.86 | 3.39 | 71.87 | 69.0-70.0 | 0.58 | 821.56 | 0.07 | 98.28 |
| 23.0-24.0 | 25.67 | 626.53 | 3.07 | 74.95 | 70.0-71.0 | 0.54 | 822.11 | 0.07 | 98.34 |
| 24.0-25.0 | 22.99 | 649.51 | 2.75 | 77.69 | 71.0-72.0 | 0.51 | 822.62 | 0.06 | 98.40 |
| 25.0-26.0 | 20.35 | 669.86 | 2.43 | 80.13 | 72.0-73.0 | 0.48 | 823.09 | 0.06 | 98.46 |
| 26.0-27.0 | 17.81 | 687.67 | 2.13 | 82.26 | 73.0-74.0 | 0.45 | 823.54 | 0.05 | 98.51 |
| 27.0-28.0 | 15.43 | 703.11 | 1.85 | 84.11 | 74.0-75.0 | 0.42 | 823.96 | 0.05 | 98.56 |
| 28.0-29.0 | 13.22 | 716.33 | 1.58 | 85.69 | 75.0-76.0 | 0.39 | 824.35 | 0.05 | 98.61 |
| 29.0-30.0 | 11.23 | 727.56 | 1.34 | 87.03 | 76.0-77.0 | 0.37 | 824.71 | 0.04 | 98.65 |
| 30.0-31.0 | 9.49 | 737.05 | 1.14 | 88.17 | 77.0-78.0 | 0.34 | 825.05 | 0.04 | 98.69 |
| 31.0-32.0 | 8.02 | 745.07 | 0.96 | 89.13 | 78.0-79.0 | 0.32 | 825.37 | 0.04 | 98.73 |
| 32.0-33.0 | 6.79 | 751.86 | 0.81 | 89.94 | 79.0-80.0 | 0.30 | 825.67 | 0.04 | 98.77 |
| 33.0-34.0 | 5.78 | 757.64 | 0.69 | 90.63 | 80.0-81.0 | 0.27 | 825.94 | 0.03 | 98.80 |
| 34.0-35.0 | 4.96 | 762.60 | 0.59 | 91.22 | 81.0-82.0 | 0.25 | 826.20 | 0.03 | 98.83 |
| 35.0-36.0 | 4.31 | 766.91 | 0.52 | 91.74 | 82.0-83.0 | 0.24 | 826.43 | 0.03 | 98.86 |
| 36.0-37.0 | 3.80 | 770.71 | 0.45 | 92.19 | 83.0-84.0 | 0.22 | 826.65 | 0.03 | 98.88 |
| 37.0-38.0 | 3.39 | 774.10 | 0.41 | 92.60 | 84.0-85.0 | 0.20 | 826.85 | 0.02 | 98.91 |
| 38.0-39.0 | 3.08 | 777.18 | 0.37 | 92.97 | 85.0-86.0 | 0.19 | 827.04 | 0.02 | 98.93 |
| 39.0-40.0 | 2.84 | 780.01 | 0.34 | 93.31 | 86.0-87.0 | 0.17 | 827.21 | 0.02 | 98.95 |
| 40.0-41.0 | 2.64 | 782.66 | 0.32 | 93.62 | 87.0-88.0 | 0.16 | 827.36 | 0.02 | 98.97 |
| 41.0-42.0 | 2.48 | 785.14 | 0.30 | 93.92 | 88.0-89.0 | 0.14 | 827.51 | 0.02 | 98.99 |
| 42.0-43.0 | 2.34 | 787.49 | 0.28 | 94.20 | 89.0-90.0 | 0.13 | 827.64 | 0.02 | 99.00 |
| 43.0-44.0 | 2.22 | 789.70 | 0.27 | 94.46 | 90.0-91.0 | 0.12 | 827.76 | 0.01 | 99.02 |
| 44.0-45.0 | 2.11 | 791.81 | 0.25 | 94.72 | 91.0-92.0 | 0.11 | 827.87 | 0.01 | 99.03 |
| 45.0-46.0 | 2.00 | 793.81 | 0.24 | 94.96 | 92.0-93.0 | 0.10 | 827.98 | 0.01 | 99.04 |
| 46.0-47.0 | 1.90 | 795.71 | 0.23 | 95.18 | 93.0-94.0 | 0.10 | 828.07 | 0.01 | 99.05 |

IES Indoor Report

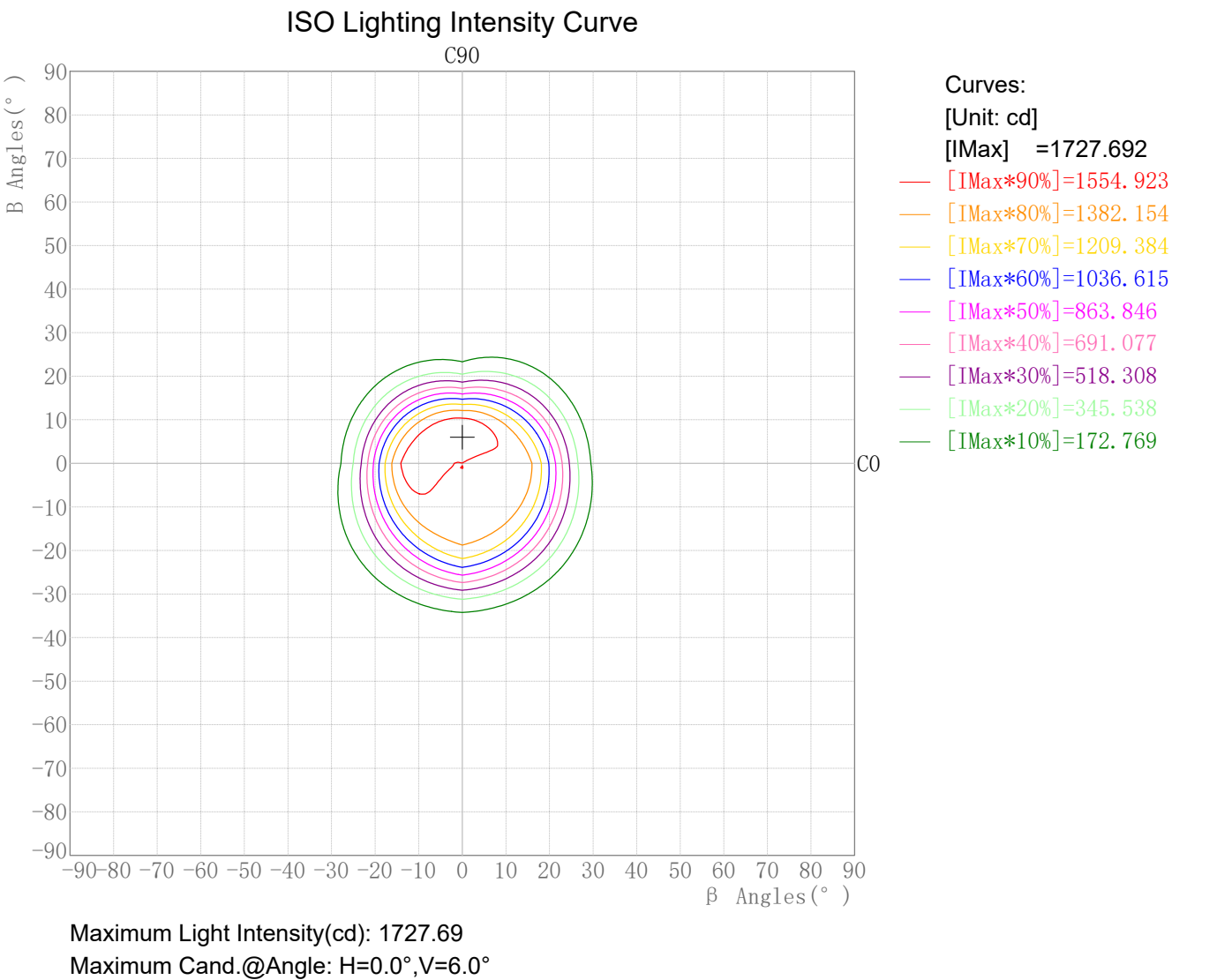
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Zonal Flux Tabulation - (Cont.)

| 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. 09 | 828. 16 | 0. 01 | 99. 06 | 141. 0-142. 0 | 0. 16 | 830. 79 | 0. 02 | 99. 38 |
| 95. 0-96. 0 | 0. 08 | 828. 24 | 0. 01 | 99. 07 | 142. 0-143. 0 | 0. 16 | 830. 96 | 0. 02 | 99. 40 |
| 96. 0-97. 0 | 0. 08 | 828. 32 | 0. 01 | 99. 08 | 143. 0-144. 0 | 0. 17 | 831. 13 | 0. 02 | 99. 42 |
| 97. 0-98. 0 | 0. 07 | 828. 39 | 0. 01 | 99. 09 | 144. 0-145. 0 | 0. 18 | 831. 30 | 0. 02 | 99. 44 |
| 98. 0-99. 0 | 0. 06 | 828. 46 | 0. 01 | 99. 10 | 145. 0-146. 0 | 0. 18 | 831. 48 | 0. 02 | 99. 46 |
| 99. 0-100. 0 | 0. 06 | 828. 52 | 0. 01 | 99. 11 | 146. 0-147. 0 | 0. 19 | 831. 67 | 0. 02 | 99. 48 |
| 100. 0-101. 0 | 0. 05 | 828. 57 | 0. 01 | 99. 11 | 147. 0-148. 0 | 0. 19 | 831. 86 | 0. 02 | 99. 51 |
| 101. 0-102. 0 | 0. 05 | 828. 62 | 0. 01 | 99. 12 | 148. 0-149. 0 | 0. 19 | 832. 05 | 0. 02 | 99. 53 |
| 102. 0-103. 0 | 0. 04 | 828. 66 | 0. 01 | 99. 12 | 149. 0-150. 0 | 0. 19 | 832. 25 | 0. 02 | 99. 55 |
| 103. 0-104. 0 | 0. 04 | 828. 71 | 0. 00 | 99. 13 | 150. 0-151. 0 | 0. 20 | 832. 44 | 0. 02 | 99. 58 |
| 104. 0-105. 0 | 0. 04 | 828. 74 | 0. 00 | 99. 13 | 151. 0-152. 0 | 0. 20 | 832. 64 | 0. 02 | 99. 60 |
| 105. 0-106. 0 | 0. 03 | 828. 78 | 0. 00 | 99. 14 | 152. 0-153. 0 | 0. 20 | 832. 84 | 0. 02 | 99. 62 |
| 106. 0-107. 0 | 0. 03 | 828. 81 | 0. 00 | 99. 14 | 153. 0-154. 0 | 0. 20 | 833. 04 | 0. 02 | 99. 65 |
| 107. 0-108. 0 | 0. 03 | 828. 83 | 0. 00 | 99. 15 | 154. 0-155. 0 | 0. 20 | 833. 23 | 0. 02 | 99. 67 |
| 108. 0-109. 0 | 0. 02 | 828. 86 | 0. 00 | 99. 15 | 155. 0-156. 0 | 0. 19 | 833. 42 | 0. 02 | 99. 69 |
| 109. 0-110. 0 | 0. 02 | 828. 88 | 0. 00 | 99. 15 | 156. 0-157. 0 | 0. 19 | 833. 61 | 0. 02 | 99. 72 |
| 110. 0-111. 0 | 0. 02 | 828. 90 | 0. 00 | 99. 15 | 157. 0-158. 0 | 0. 19 | 833. 80 | 0. 02 | 99. 74 |
| 111. 0-112. 0 | 0. 02 | 828. 92 | 0. 00 | 99. 16 | 158. 0-159. 0 | 0. 18 | 833. 98 | 0. 02 | 99. 76 |
| 112. 0-113. 0 | 0. 02 | 828. 93 | 0. 00 | 99. 16 | 159. 0-160. 0 | 0. 18 | 834. 16 | 0. 02 | 99. 78 |
| 113. 0-114. 0 | 0. 01 | 828. 95 | 0. 00 | 99. 16 | 160. 0-161. 0 | 0. 17 | 834. 33 | 0. 02 | 99. 80 |
| 114. 0-115. 0 | 0. 01 | 828. 96 | 0. 00 | 99. 16 | 161. 0-162. 0 | 0. 16 | 834. 49 | 0. 02 | 99. 82 |
| 115. 0-116. 0 | 0. 01 | 828. 97 | 0. 00 | 99. 16 | 162. 0-163. 0 | 0. 16 | 834. 65 | 0. 02 | 99. 84 |
| 116. 0-117. 0 | 0. 01 | 828. 99 | 0. 00 | 99. 16 | 163. 0-164. 0 | 0. 15 | 834. 80 | 0. 02 | 99. 86 |
| 117. 0-118. 0 | 0. 01 | 829. 00 | 0. 00 | 99. 16 | 164. 0-165. 0 | 0. 14 | 834. 94 | 0. 02 | 99. 88 |
| 118. 0-119. 0 | 0. 01 | 829. 01 | 0. 00 | 99. 17 | 165. 0-166. 0 | 0. 13 | 835. 07 | 0. 02 | 99. 89 |
| 119. 0-120. 0 | 0. 02 | 829. 03 | 0. 00 | 99. 17 | 166. 0-167. 0 | 0. 12 | 835. 19 | 0. 01 | 99. 91 |
| 120. 0-121. 0 | 0. 02 | 829. 04 | 0. 00 | 99. 17 | 167. 0-168. 0 | 0. 11 | 835. 30 | 0. 01 | 99. 92 |
| 121. 0-122. 0 | 0. 02 | 829. 06 | 0. 00 | 99. 17 | 168. 0-169. 0 | 0. 11 | 835. 41 | 0. 01 | 99. 93 |
| 122. 0-123. 0 | 0. 02 | 829. 09 | 0. 00 | 99. 18 | 169. 0-170. 0 | 0. 10 | 835. 51 | 0. 01 | 99. 94 |
| 123. 0-124. 0 | 0. 03 | 829. 12 | 0. 00 | 99. 18 | 170. 0-171. 0 | 0. 09 | 835. 59 | 0. 01 | 99. 95 |
| 124. 0-125. 0 | 0. 03 | 829. 15 | 0. 00 | 99. 18 | 171. 0-172. 0 | 0. 08 | 835. 67 | 0. 01 | 99. 96 |
| 125. 0-126. 0 | 0. 04 | 829. 19 | 0. 00 | 99. 19 | 172. 0-173. 0 | 0. 07 | 835. 74 | 0. 01 | 99. 97 |
| 126. 0-127. 0 | 0. 04 | 829. 23 | 0. 01 | 99. 19 | 173. 0-174. 0 | 0. 06 | 835. 80 | 0. 01 | 99. 98 |
| 127. 0-128. 0 | 0. 05 | 829. 28 | 0. 01 | 99. 20 | 174. 0-175. 0 | 0. 05 | 835. 86 | 0. 01 | 99. 99 |
| 128. 0-129. 0 | 0. 06 | 829. 34 | 0. 01 | 99. 21 | 175. 0-176. 0 | 0. 04 | 835. 90 | 0. 01 | 99. 99 |
| 129. 0-130. 0 | 0. 06 | 829. 40 | 0. 01 | 99. 21 | 176. 0-177. 0 | 0. 03 | 835. 93 | 0. 00 | 99. 99 |
| 130. 0-131. 0 | 0. 07 | 829. 47 | 0. 01 | 99. 22 | 177. 0-178. 0 | 0. 02 | 835. 96 | 0. 00 | 100. 00 |
| 131. 0-132. 0 | 0. 08 | 829. 55 | 0. 01 | 99. 23 | 178. 0-179. 0 | 0. 01 | 835. 97 | 0. 00 | 100. 00 |
| 132. 0-133. 0 | 0. 09 | 829. 64 | 0. 01 | 99. 24 | 179. 0-180. 0 | 0. 00 | 835. 98 | 0. 00 | 100. 00 |
| 133. 0-134. 0 | 0. 10 | 829. 74 | 0. 01 | 99. 25 | | | | | |
| 134. 0-135. 0 | 0. 10 | 829. 84 | 0. 01 | 99. 27 | | | | | |
| 135. 0-136. 0 | 0. 11 | 829. 95 | 0. 01 | 99. 28 | | | | | |
| 136. 0-137. 0 | 0. 12 | 830. 07 | 0. 01 | 99. 29 | | | | | |
| 137. 0-138. 0 | 0. 13 | 830. 20 | 0. 02 | 99. 31 | | | | | |
| 138. 0-139. 0 | 0. 14 | 830. 34 | 0. 02 | 99. 33 | | | | | |
| 139. 0-140. 0 | 0. 14 | 830. 48 | 0. 02 | 99. 34 | | | | | |
| 140. 0-141. 0 | 0. 15 | 830. 63 | 0. 02 | 99. 36 | | | | | |

Rectangle ISO Lighting Intensity Diagram

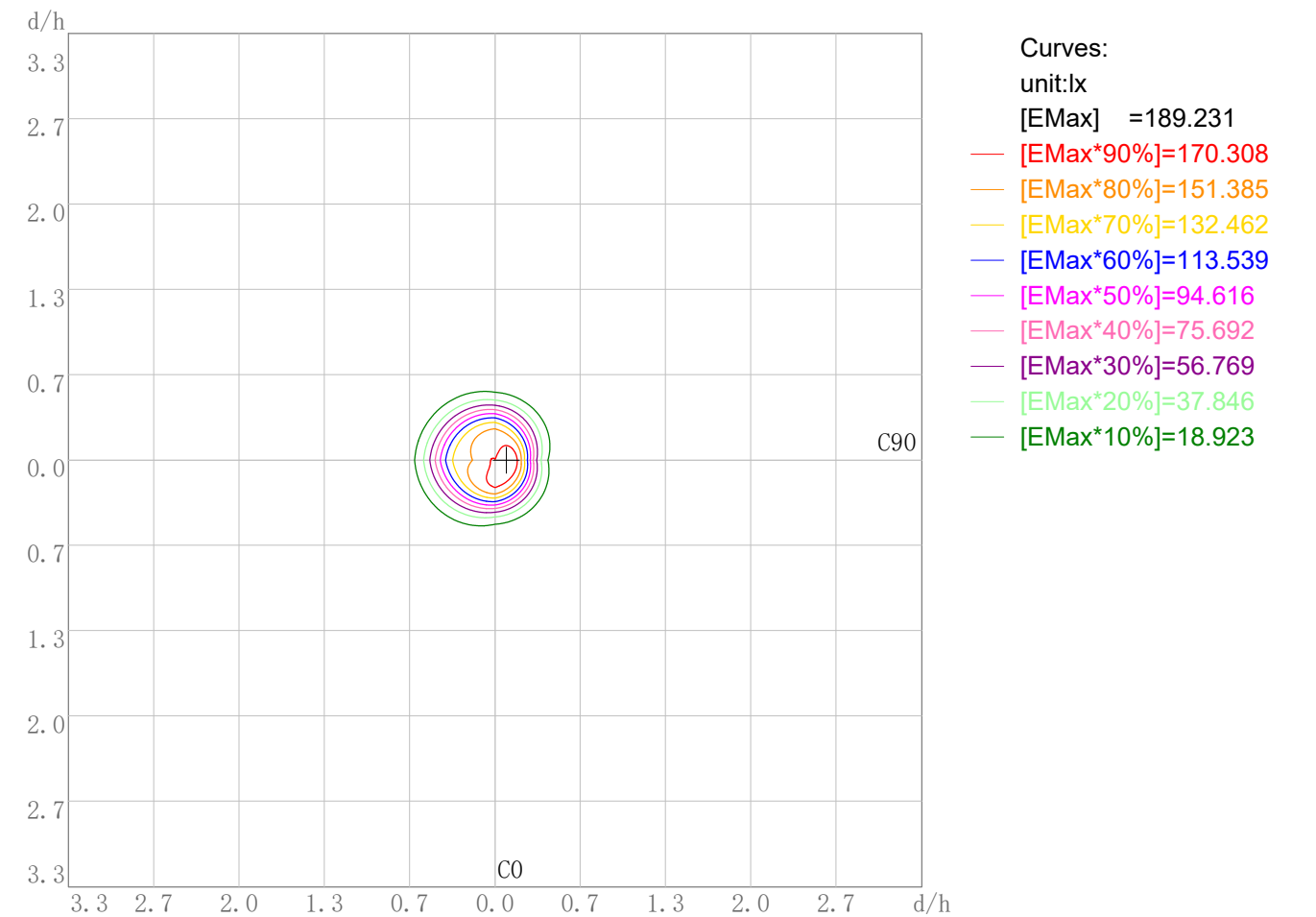
| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:TR08-06-XX-02 4000K RA90 36D | Lum. Catalog: | Test ID:01 |
| Lamp Name: | Lamp Catalog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date:2021/10/28 |



Plane ISO-Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name:TR08-06-XX-02 4000K RA90 36D | 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



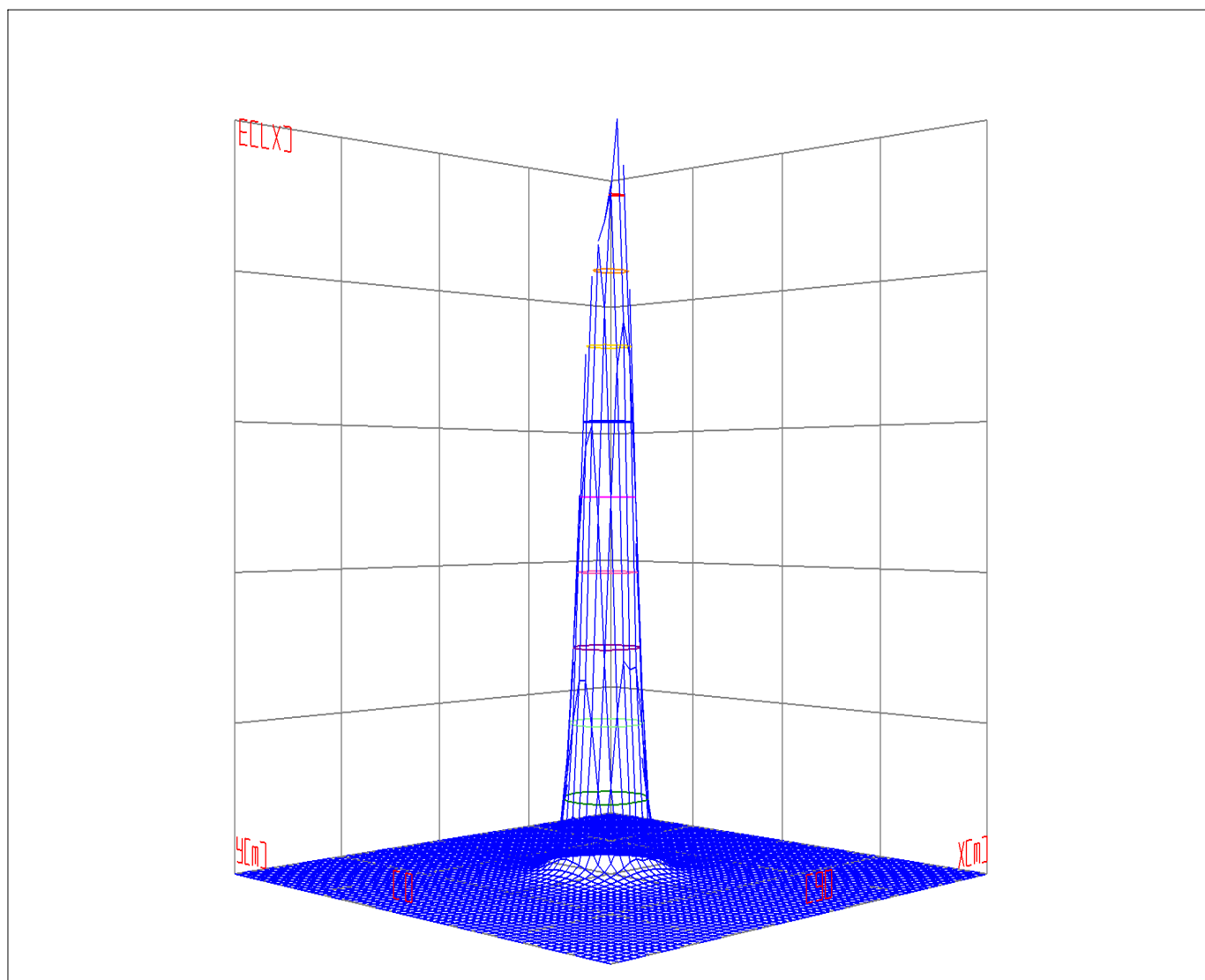
IES Indoor Report

Photometric Filename:TR08-06-XX-02 4000K RA90 36D.IES

3D Plane ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: TR08-06-XX-02 4000K RA90 36D | 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

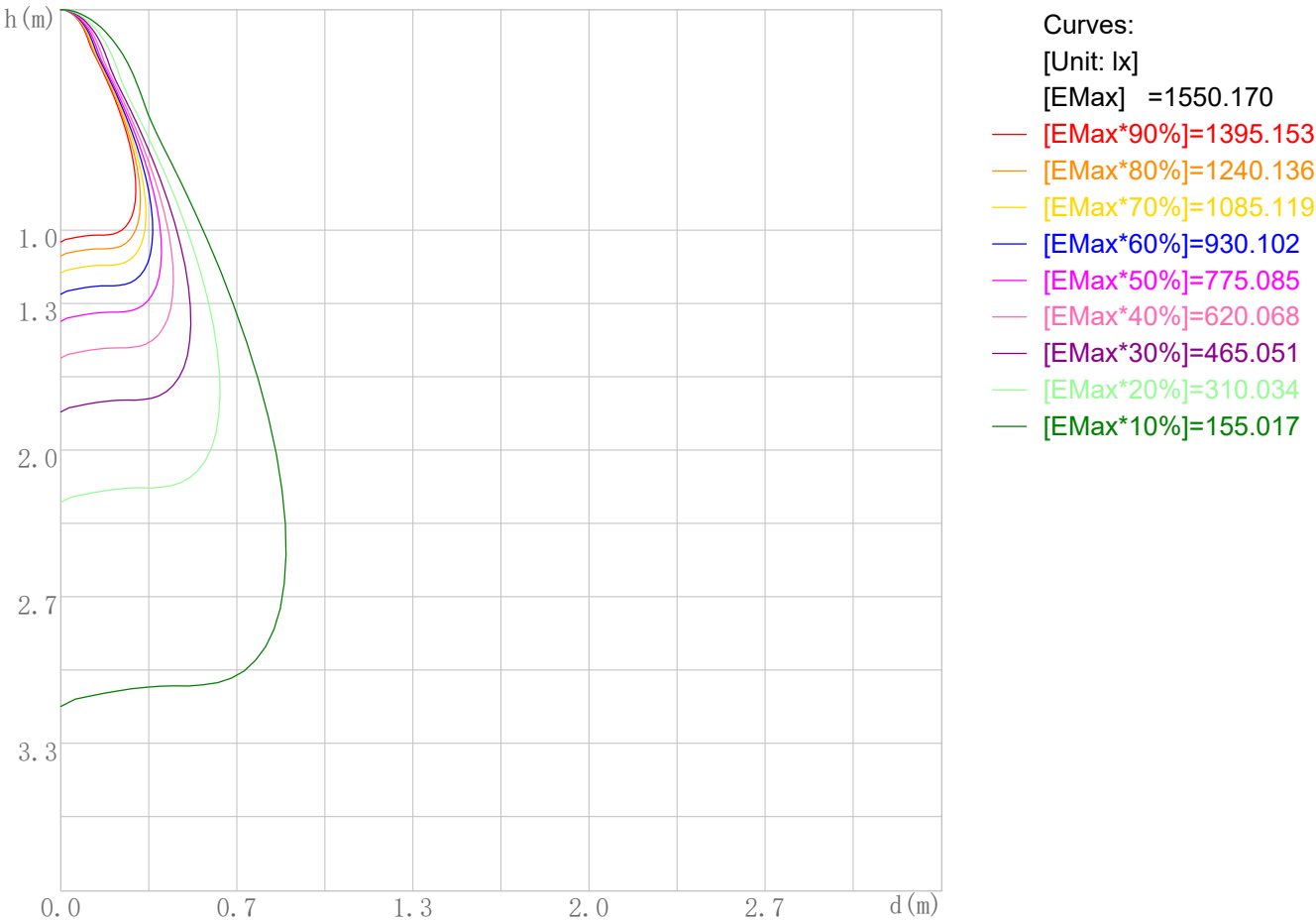


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:TR08-06-XX-02 4000K RA90 36D | 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 |

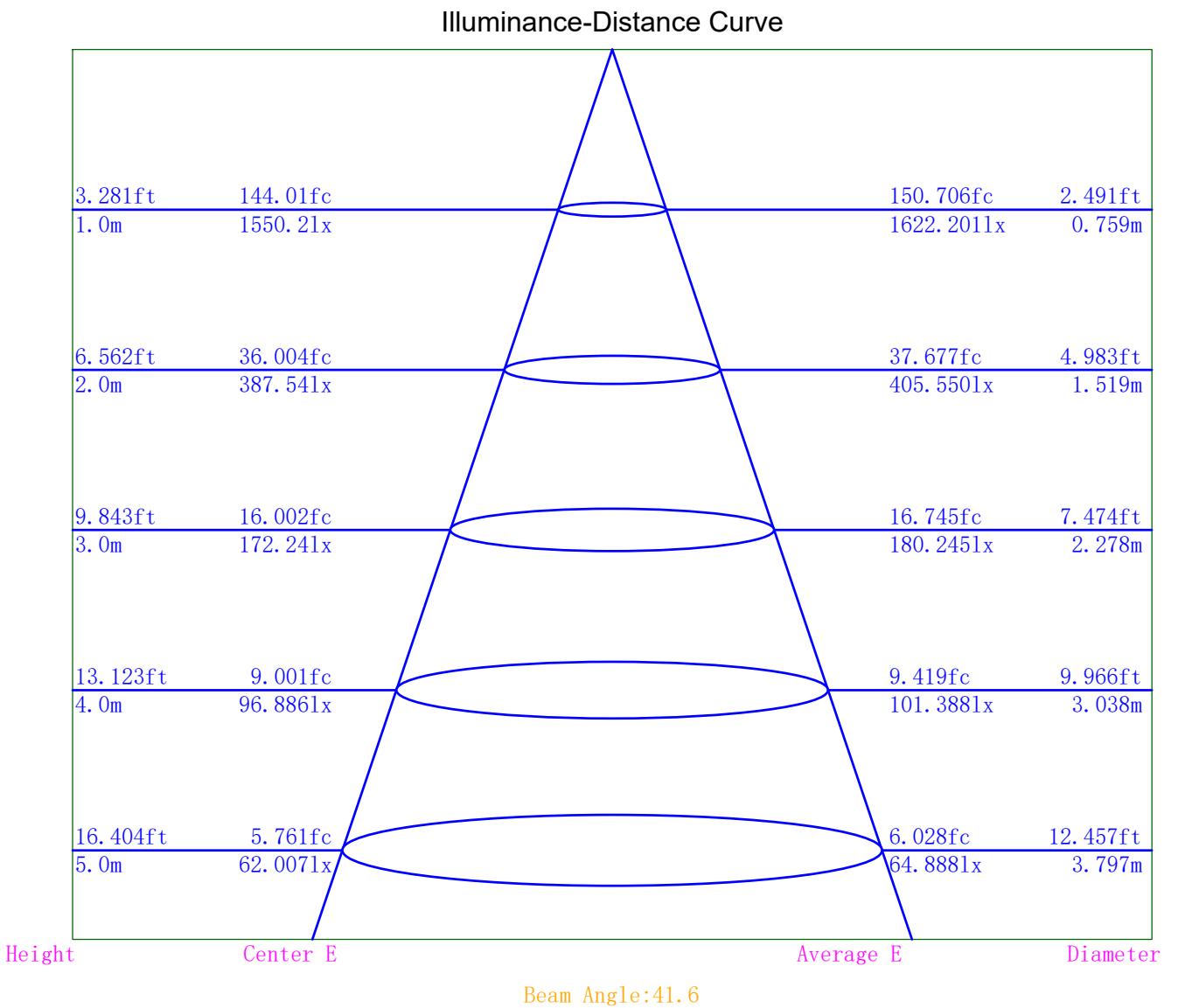
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:1550.17lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:1550.170cd,0deg

Illuminance-Distance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name:TR08-06-XX-02 4000K RA90 36D | 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:TR08-06-XX-02 4000K RA90 36D | 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 |

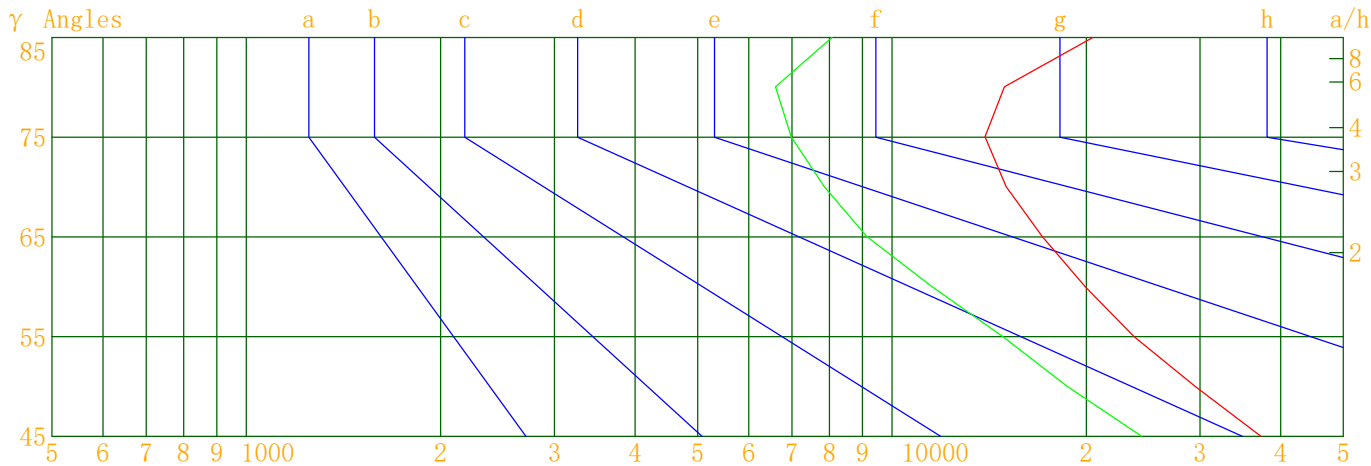
Glare Grade Table

| 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 | 37280 | 29495 | 23694 | 19913 | 17100 | 15022 | 13937 | 14929 | 20466 |
| C90 | 24371 | 18685 | 14842 | 11531 | 9143 | 7855 | 6981 | 6601 | 8073 |

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

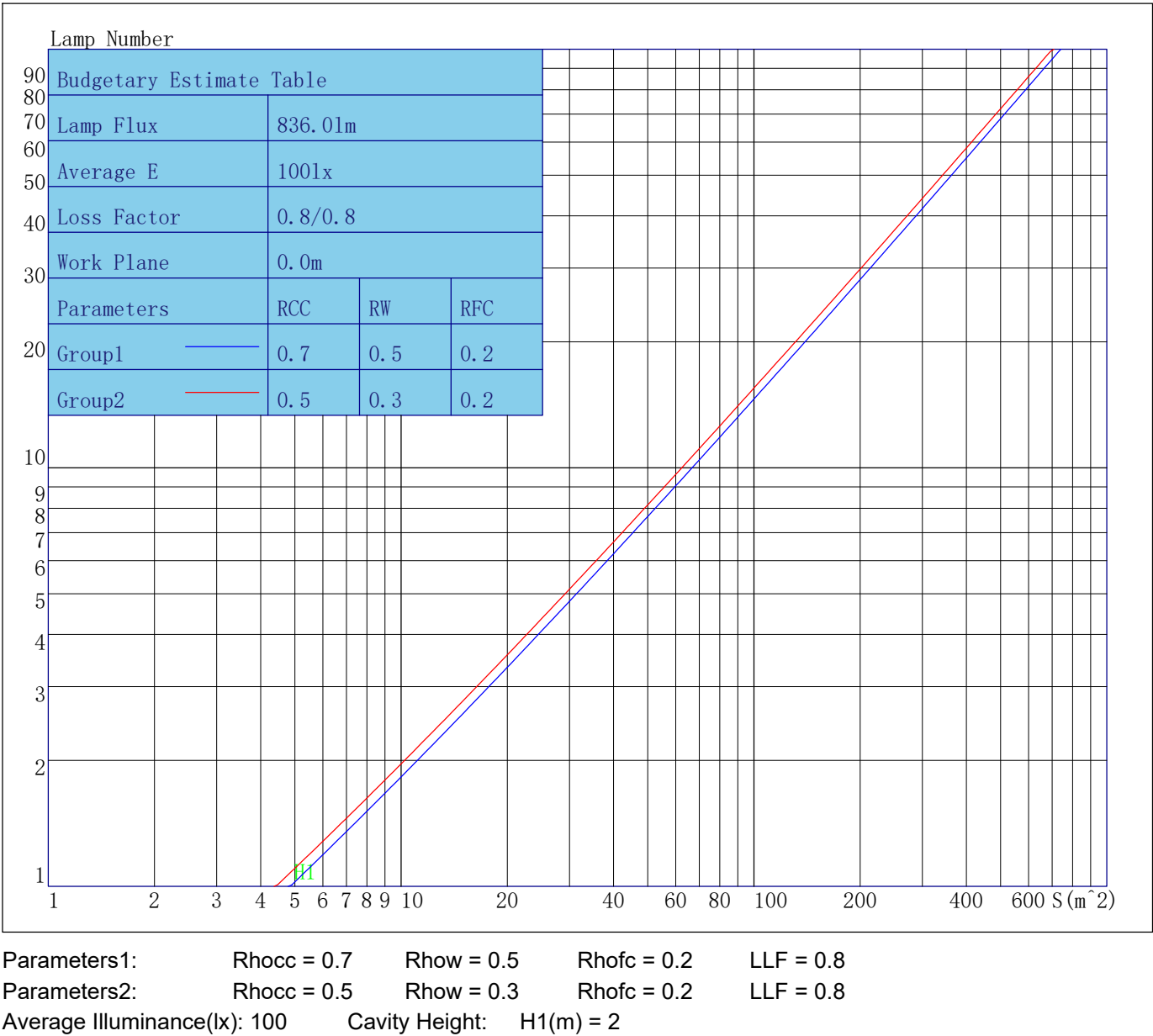
Luminous Curves:

C0-C180 Color: ———

C90-C270 Color: ———

Indoor Budgetary Estimate Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name:TR08-06-XX-02 4000K RA90 36D | 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:TR08-06-XX-02 4000K RA90 36D | 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 | 101 | 101 | 101 | 99 |
| 1 | 114 | 111 | 109 | 107 | 111 | 109 | 107 | 105 | 105 | 103 | 102 | 101 | 100 | 98 | 97 | 96 | 95 | 94 |
| 2 | 109 | 105 | 101 | 98 | 107 | 103 | 99 | 97 | 99 | 97 | 94 | 96 | 94 | 92 | 93 | 92 | 90 | 89 |
| 3 | 104 | 99 | 94 | 91 | 102 | 97 | 93 | 90 | 95 | 91 | 88 | 92 | 89 | 87 | 90 | 87 | 85 | 84 |
| 4 | 100 | 93 | 89 | 85 | 98 | 92 | 88 | 84 | 90 | 86 | 83 | 88 | 85 | 82 | 86 | 83 | 81 | 80 |
| 5 | 96 | 89 | 84 | 80 | 94 | 88 | 83 | 80 | 86 | 82 | 79 | 84 | 81 | 78 | 83 | 80 | 77 | 76 |
| 6 | 92 | 85 | 79 | 76 | 91 | 84 | 79 | 75 | 82 | 78 | 75 | 81 | 77 | 74 | 79 | 76 | 74 | 72 |
| 7 | 89 | 81 | 76 | 72 | 87 | 80 | 75 | 72 | 79 | 74 | 71 | 78 | 74 | 71 | 76 | 73 | 70 | 69 |
| 8 | 85 | 77 | 72 | 69 | 84 | 77 | 72 | 68 | 76 | 71 | 68 | 75 | 71 | 68 | 74 | 70 | 67 | 66 |
| 9 | 82 | 74 | 69 | 66 | 81 | 74 | 69 | 65 | 73 | 68 | 65 | 72 | 68 | 65 | 71 | 67 | 65 | 63 |
| 10 | 79 | 71 | 66 | 63 | 78 | 71 | 66 | 63 | 70 | 65 | 62 | 69 | 65 | 62 | 68 | 65 | 62 | 61 |

Unified Glare Rating Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: TR08-06-XX-02 4000K RA90 36D | 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 |

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 | 17.6 | 18.7 | 18.0 | 19.0 | 19.4 | 14.7 | 15.8 | 15.1 | 16.1 | 16.5 |
| | 18.1 | 19.1 | 18.5 | 19.4 | 19.8 | 15.1 | 16.0 | 15.5 | 16.4 | 16.8 |
| | 18.4 | 19.3 | 18.8 | 19.6 | 20.0 | 15.2 | 16.1 | 15.6 | 16.5 | 16.9 |
| | 18.6 | 19.4 | 19.0 | 19.8 | 20.2 | 15.3 | 16.1 | 15.8 | 16.5 | 17.0 |
| | 18.7 | 19.5 | 19.2 | 19.9 | 20.3 | 15.3 | 16.1 | 15.8 | 16.6 | 17.0 |
| | 18.9 | 19.6 | 19.3 | 20.0 | 20.5 | 15.4 | 16.1 | 15.8 | 16.5 | 17.0 |
| X=4H Y=2H | 17.7 | 18.6 | 18.2 | 19.0 | 19.4 | 15.0 | 15.9 | 15.4 | 16.3 | 16.7 |
| | 18.4 | 19.2 | 18.9 | 19.6 | 20.0 | 15.5 | 16.3 | 15.9 | 16.7 | 17.1 |
| | 18.8 | 19.4 | 19.2 | 19.9 | 20.4 | 15.7 | 16.4 | 16.2 | 16.8 | 17.3 |
| | 19.1 | 19.7 | 19.6 | 20.2 | 20.7 | 15.9 | 16.5 | 16.4 | 17.0 | 17.5 |
| | 19.3 | 19.9 | 19.8 | 20.4 | 20.9 | 16.0 | 16.6 | 16.5 | 17.0 | 17.5 |
| | 19.5 | 20.1 | 20.0 | 20.6 | 21.1 | 16.1 | 16.6 | 16.6 | 17.1 | 17.6 |
| X=8H Y=4H | 18.8 | 19.4 | 19.3 | 19.9 | 20.4 | 15.8 | 16.4 | 16.3 | 16.9 | 17.4 |
| | 19.3 | 19.8 | 19.9 | 20.3 | 20.9 | 16.1 | 16.6 | 16.7 | 17.1 | 17.7 |
| | 19.6 | 20.1 | 20.2 | 20.6 | 21.1 | 16.3 | 16.7 | 16.8 | 17.3 | 17.8 |
| | 20.0 | 20.4 | 20.5 | 20.9 | 21.5 | 16.5 | 16.9 | 17.0 | 17.4 | 18.0 |
| X=12H Y=4H | 18.8 | 19.3 | 19.3 | 19.8 | 20.3 | 15.8 | 16.3 | 16.3 | 16.8 | 17.3 |
| | 19.4 | 19.8 | 19.9 | 20.3 | 20.9 | 16.2 | 16.6 | 16.7 | 17.1 | 17.7 |
| | 19.7 | 20.1 | 20.3 | 20.6 | 21.2 | 16.4 | 16.8 | 16.9 | 17.3 | 17.9 |
| Variations with the objerver position at spacings | | | | | | | | | | |
| S=1.0H | 0.2/-0.3 | | | | | 0.4/-0.5 | | | | |
| S=1.5H | 0.5/-0.6 | | | | | 0.8/-0.8 | | | | |
| S=2.0H | 0.9/-0.8 | | | | | 1.2/-1.2 | | | | |
| Reduced UGR Table: | | | | | | | | | | |
| Nordic Standard Table: | BK0 | | | | | BK0 | | | | |
| Correction Value | 1.9 | | | | | 1.5 | | | | |

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

IES Indoor Report

Photometric Filename:TR08-06-XX-02 4000K RA90 36D.IES

Candela Tabulation

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|--------|---------|---------|---------|---------|
| γ 0.0 | 1550.17 | 1550.17 | 1550.17 | 1550.17 |
| γ 1.0 | 1518.34 | 1618.52 | 1542.81 | 1559.47 |
| γ 2.0 | 1507.38 | 1651.99 | 1556.85 | 1535.64 |
| γ 3.0 | 1498.49 | 1680.45 | 1568.89 | 1513.54 |
| γ 4.0 | 1492.50 | 1705.68 | 1582.14 | 1495.61 |
| γ 5.0 | 1489.42 | 1722.67 | 1595.65 | 1479.54 |
| γ 6.0 | 1490.39 | 1727.69 | 1611.88 | 1466.45 |
| γ 7.0 | 1494.47 | 1719.49 | 1625.62 | 1454.14 |
| γ 8.0 | 1503.51 | 1695.53 | 1642.35 | 1441.60 |
| γ 9.0 | 1515.75 | 1651.00 | 1653.30 | 1433.21 |
| γ 10.0 | 1523.55 | 1586.34 | 1659.29 | 1427.00 |
| γ 11.0 | 1529.05 | 1502.89 | 1656.40 | 1424.73 |
| γ 12.0 | 1525.21 | 1395.72 | 1639.91 | 1425.74 |
| γ 13.0 | 1509.68 | 1274.37 | 1608.18 | 1430.68 |
| γ 14.0 | 1480.47 | 1138.32 | 1561.72 | 1435.81 |
| γ 15.0 | 1437.91 | 997.10 | 1489.84 | 1437.93 |
| γ 16.0 | 1380.84 | 853.25 | 1399.74 | 1435.58 |
| γ 17.0 | 1308.97 | 717.08 | 1293.65 | 1427.01 |
| γ 18.0 | 1220.47 | 590.36 | 1174.81 | 1406.40 |
| γ 19.0 | 1123.48 | 477.40 | 1046.37 | 1375.22 |
| γ 20.0 | 1018.04 | 382.10 | 914.90 | 1329.22 |
| γ 21.0 | 906.25 | 301.75 | 781.88 | 1271.59 |
| γ 22.0 | 793.31 | 235.79 | 653.98 | 1198.87 |
| γ 23.0 | 680.33 | 184.92 | 537.14 | 1116.23 |
| γ 24.0 | 572.57 | 145.38 | 434.88 | 1025.10 |
| γ 25.0 | 472.89 | 116.60 | 346.79 | 929.50 |
| γ 26.0 | 384.44 | 96.13 | 271.99 | 829.46 |
| γ 27.0 | 308.77 | 81.83 | 212.20 | 727.79 |
| γ 28.0 | 244.03 | 71.89 | 164.69 | 627.10 |
| γ 29.0 | 192.32 | 64.46 | 127.91 | 529.49 |
| γ 30.0 | 151.57 | 58.66 | 99.98 | 439.32 |
| γ 31.0 | 120.25 | 53.76 | 81.06 | 359.51 |
| γ 32.0 | 97.06 | 49.56 | 68.09 | 290.44 |
| γ 33.0 | 80.82 | 45.82 | 59.12 | 230.76 |
| γ 34.0 | 70.28 | 42.40 | 52.51 | 182.00 |
| γ 35.0 | 62.54 | 39.26 | 47.21 | 143.12 |
| γ 36.0 | 57.03 | 36.51 | 42.97 | 113.06 |
| γ 37.0 | 52.40 | 34.00 | 39.16 | 90.46 |
| γ 38.0 | 48.44 | 31.73 | 36.03 | 74.08 |
| γ 39.0 | 44.93 | 29.59 | 33.11 | 62.72 |
| γ 40.0 | 41.82 | 27.68 | 30.65 | 54.84 |
| γ 41.0 | 39.01 | 25.82 | 28.48 | 48.71 |
| γ 42.0 | 36.47 | 24.12 | 26.58 | 44.14 |
| γ 43.0 | 34.09 | 22.49 | 24.94 | 40.28 |
| γ 44.0 | 31.89 | 20.98 | 23.52 | 36.90 |
| γ 45.0 | 29.90 | 19.54 | 22.23 | 34.15 |
| γ 46.0 | 28.00 | 18.22 | 21.07 | 31.60 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|--------|-------|-------|--------|--------|
| γ 47.0 | 26.23 | 16.99 | 20.03 | 29.37 |
| γ 48.0 | 24.58 | 15.79 | 19.07 | 27.40 |
| γ 49.0 | 23.02 | 14.64 | 18.15 | 25.73 |
| γ 50.0 | 21.50 | 13.62 | 17.34 | 24.23 |
| γ 51.0 | 20.12 | 12.75 | 16.54 | 22.88 |
| γ 52.0 | 18.83 | 11.91 | 15.76 | 21.65 |
| γ 53.0 | 17.64 | 11.13 | 14.98 | 20.54 |
| γ 54.0 | 16.48 | 10.37 | 14.22 | 19.54 |
| γ 55.0 | 15.41 | 9.65 | 13.51 | 18.58 |
| γ 56.0 | 14.41 | 8.95 | 12.85 | 17.70 |
| γ 57.0 | 13.53 | 8.29 | 12.18 | 16.89 |
| γ 58.0 | 12.74 | 7.66 | 11.49 | 16.11 |
| γ 59.0 | 11.97 | 7.07 | 10.83 | 15.39 |
| γ 60.0 | 11.29 | 6.54 | 10.12 | 14.64 |
| γ 61.0 | 10.61 | 6.03 | 9.42 | 13.93 |
| γ 62.0 | 9.98 | 5.59 | 8.69 | 13.25 |
| γ 63.0 | 9.37 | 5.15 | 8.01 | 12.63 |
| γ 64.0 | 8.79 | 4.78 | 7.35 | 11.95 |
| γ 65.0 | 8.20 | 4.38 | 6.80 | 11.34 |
| γ 66.0 | 7.65 | 4.03 | 6.31 | 10.71 |
| γ 67.0 | 7.16 | 3.76 | 5.83 | 10.10 |
| γ 68.0 | 6.70 | 3.50 | 5.39 | 9.51 |
| γ 69.0 | 6.25 | 3.27 | 5.01 | 8.90 |
| γ 70.0 | 5.83 | 3.05 | 4.61 | 8.33 |
| γ 71.0 | 5.41 | 2.82 | 4.26 | 7.80 |
| γ 72.0 | 5.01 | 2.61 | 3.97 | 7.31 |
| γ 73.0 | 4.65 | 2.41 | 3.70 | 6.82 |
| γ 74.0 | 4.36 | 2.23 | 3.45 | 6.35 |
| γ 75.0 | 4.09 | 2.05 | 3.21 | 5.95 |
| γ 76.0 | 3.82 | 1.88 | 2.99 | 5.52 |
| γ 77.0 | 3.58 | 1.73 | 2.75 | 5.11 |
| γ 78.0 | 3.36 | 1.57 | 2.54 | 4.77 |
| γ 79.0 | 3.14 | 1.43 | 2.33 | 4.47 |
| γ 80.0 | 2.94 | 1.30 | 2.14 | 4.18 |
| γ 81.0 | 2.73 | 1.17 | 1.96 | 3.91 |
| γ 82.0 | 2.54 | 1.04 | 1.78 | 3.65 |
| γ 83.0 | 2.35 | 0.93 | 1.60 | 3.41 |
| γ 84.0 | 2.19 | 0.86 | 1.45 | 3.18 |
| γ 85.0 | 2.02 | 0.80 | 1.30 | 2.95 |
| γ 86.0 | 1.88 | 0.74 | 1.17 | 2.73 |
| γ 87.0 | 1.73 | 0.69 | 1.03 | 2.53 |
| γ 88.0 | 1.58 | 0.63 | 0.91 | 2.34 |
| γ 89.0 | 1.44 | 0.59 | 0.84 | 2.14 |
| γ 90.0 | 1.35 | 0.54 | 0.78 | 1.97 |
| γ 91.0 | 1.28 | 0.50 | 0.72 | 1.79 |
| γ 92.0 | 1.21 | 0.45 | 0.66 | 1.63 |
| γ 93.0 | 1.15 | 0.41 | 0.61 | 1.46 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 94.0 | 1.08 | 0.36 | 0.56 | 1.34 |
| γ 95.0 | 1.03 | 0.31 | 0.52 | 1.25 |
| γ 96.0 | 0.98 | 0.28 | 0.46 | 1.17 |
| γ 97.0 | 0.93 | 0.23 | 0.44 | 1.10 |
| γ 98.0 | 0.88 | 0.19 | 0.39 | 1.04 |
| γ 99.0 | 0.82 | 0.15 | 0.37 | 0.97 |
| γ 100.0 | 0.76 | 0.11 | 0.32 | 0.92 |
| γ 101.0 | 0.70 | 0.06 | 0.29 | 0.87 |
| γ 102.0 | 0.65 | 0.03 | 0.26 | 0.82 |
| γ 103.0 | 0.60 | 0.00 | 0.23 | 0.78 |
| γ 104.0 | 0.53 | 0.00 | 0.20 | 0.72 |
| γ 105.0 | 0.48 | 0.00 | 0.17 | 0.69 |
| γ 106.0 | 0.43 | 0.00 | 0.14 | 0.65 |
| γ 107.0 | 0.38 | 0.00 | 0.12 | 0.60 |
| γ 108.0 | 0.34 | 0.00 | 0.09 | 0.57 |
| γ 109.0 | 0.29 | 0.00 | 0.08 | 0.53 |
| γ 110.0 | 0.26 | 0.00 | 0.06 | 0.50 |
| γ 111.0 | 0.22 | 0.00 | 0.05 | 0.46 |
| γ 112.0 | 0.19 | 0.00 | 0.05 | 0.42 |
| γ 113.0 | 0.16 | 0.00 | 0.03 | 0.39 |
| γ 114.0 | 0.14 | 0.00 | 0.05 | 0.36 |
| γ 115.0 | 0.12 | 0.00 | 0.05 | 0.35 |
| γ 116.0 | 0.09 | 0.00 | 0.07 | 0.32 |
| γ 117.0 | 0.10 | 0.00 | 0.08 | 0.29 |
| γ 118.0 | 0.09 | 0.02 | 0.11 | 0.28 |
| γ 119.0 | 0.09 | 0.06 | 0.15 | 0.28 |
| γ 120.0 | 0.11 | 0.12 | 0.19 | 0.26 |
| γ 121.0 | 0.12 | 0.18 | 0.24 | 0.26 |
| γ 122.0 | 0.15 | 0.25 | 0.29 | 0.27 |
| γ 123.0 | 0.18 | 0.32 | 0.35 | 0.27 |
| γ 124.0 | 0.22 | 0.40 | 0.42 | 0.30 |
| γ 125.0 | 0.26 | 0.49 | 0.49 | 0.32 |
| γ 126.0 | 0.32 | 0.59 | 0.58 | 0.35 |
| γ 127.0 | 0.39 | 0.70 | 0.67 | 0.40 |
| γ 128.0 | 0.47 | 0.81 | 0.77 | 0.45 |
| γ 129.0 | 0.55 | 0.93 | 0.86 | 0.50 |
| γ 130.0 | 0.64 | 1.05 | 0.97 | 0.57 |
| γ 131.0 | 0.75 | 1.18 | 1.08 | 0.65 |
| γ 132.0 | 0.85 | 1.32 | 1.19 | 0.74 |
| γ 133.0 | 0.98 | 1.45 | 1.31 | 0.84 |
| γ 134.0 | 1.09 | 1.60 | 1.43 | 0.94 |
| γ 135.0 | 1.21 | 1.75 | 1.56 | 1.04 |
| γ 136.0 | 1.35 | 1.90 | 1.71 | 1.16 |
| γ 137.0 | 1.48 | 2.05 | 1.85 | 1.28 |
| γ 138.0 | 1.62 | 2.19 | 1.99 | 1.40 |
| γ 139.0 | 1.77 | 2.36 | 2.14 | 1.52 |
| γ 140.0 | 1.92 | 2.50 | 2.28 | 1.66 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 141.0 | 2.07 | 2.66 | 2.43 | 1.79 |
| γ 142.0 | 2.23 | 2.82 | 2.60 | 1.94 |
| γ 143.0 | 2.38 | 2.97 | 2.75 | 2.07 |
| γ 144.0 | 2.53 | 3.13 | 2.91 | 2.21 |
| γ 145.0 | 2.69 | 3.27 | 3.07 | 2.35 |
| γ 146.0 | 2.84 | 3.42 | 3.21 | 2.50 |
| γ 147.0 | 2.99 | 3.56 | 3.38 | 2.63 |
| γ 148.0 | 3.15 | 3.70 | 3.52 | 2.78 |
| γ 149.0 | 3.30 | 3.83 | 3.67 | 2.93 |
| γ 150.0 | 3.44 | 3.96 | 3.82 | 3.08 |
| γ 151.0 | 3.58 | 4.08 | 3.97 | 3.20 |
| γ 152.0 | 3.72 | 4.18 | 4.12 | 3.34 |
| γ 153.0 | 3.85 | 4.28 | 4.27 | 3.47 |
| γ 154.0 | 3.99 | 4.35 | 4.39 | 3.62 |
| γ 155.0 | 4.11 | 4.41 | 4.51 | 3.76 |
| γ 156.0 | 4.23 | 4.46 | 4.63 | 3.90 |
| γ 157.0 | 4.33 | 4.49 | 4.73 | 4.04 |
| γ 158.0 | 4.42 | 4.53 | 4.81 | 4.16 |
| γ 159.0 | 4.51 | 4.53 | 4.89 | 4.29 |
| γ 160.0 | 4.58 | 4.54 | 4.93 | 4.41 |
| γ 161.0 | 4.63 | 4.56 | 4.95 | 4.52 |
| γ 162.0 | 4.68 | 4.57 | 4.97 | 4.62 |
| γ 163.0 | 4.70 | 4.58 | 4.97 | 4.71 |
| γ 164.0 | 4.73 | 4.59 | 4.98 | 4.77 |
| γ 165.0 | 4.74 | 4.61 | 4.96 | 4.82 |
| γ 166.0 | 4.75 | 4.65 | 4.95 | 4.86 |
| γ 167.0 | 4.78 | 4.67 | 4.93 | 4.88 |
| γ 168.0 | 4.78 | 4.70 | 4.91 | 4.88 |
| γ 169.0 | 4.80 | 4.75 | 4.91 | 4.88 |
| γ 170.0 | 4.82 | 4.78 | 4.91 | 4.88 |
| γ 171.0 | 4.84 | 4.82 | 4.93 | 4.87 |
| γ 172.0 | 4.87 | 4.85 | 4.94 | 4.87 |
| γ 173.0 | 4.91 | 4.90 | 4.97 | 4.87 |
| γ 174.0 | 4.93 | 4.93 | 4.97 | 4.88 |
| γ 175.0 | 4.97 | 4.96 | 4.98 | 4.90 |
| γ 176.0 | 4.99 | 4.99 | 5.00 | 4.93 |
| γ 177.0 | 5.01 | 5.00 | 5.01 | 4.96 |
| γ 178.0 | 5.02 | 5.01 | 5.02 | 4.99 |
| γ 179.0 | 5.03 | 5.01 | 5.03 | 5.03 |
| γ 180.0 | 5.02 | 5.02 | 5.02 | 5.02 |