

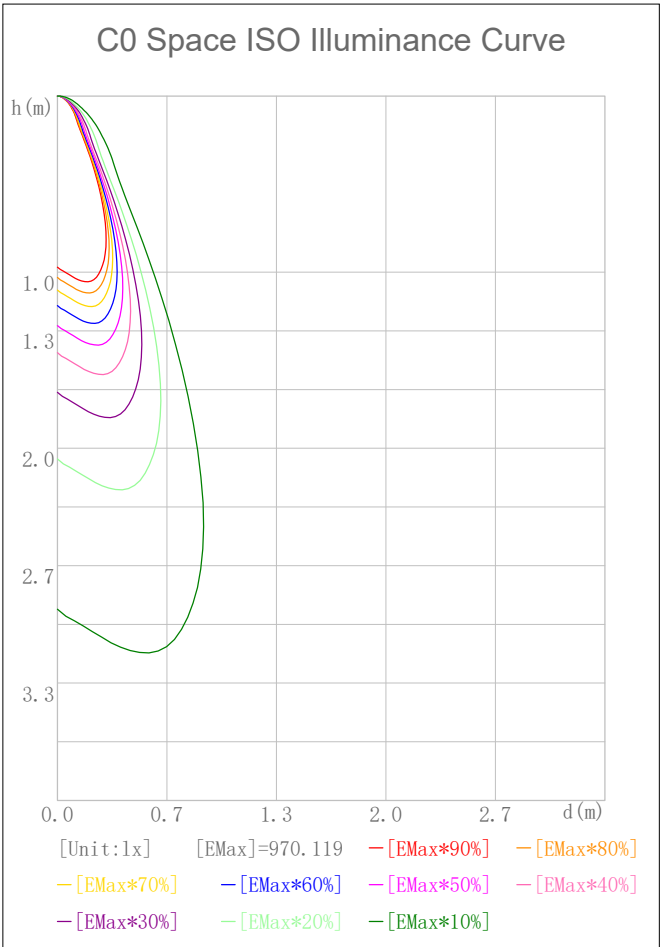
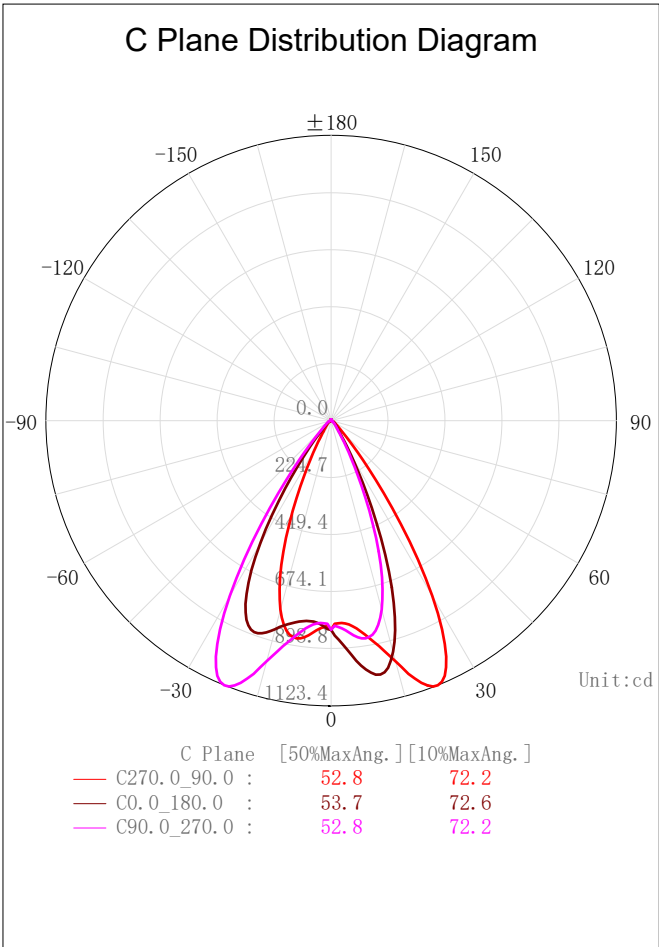
Indoor Luminaire Photometric Data

Description Information

|   |                         |                      |                       |
|---|-------------------------|----------------------|-----------------------|
| Luminary Name: TR08-09-XX-02 4000K RA90 60D     |                         | Lum. Catalog:        | Test ID: 01           |
| Lamp Name:                                      |                         | Lamp Catalog: LED    | Test Date: 2021/10/28 |
| Manufacture: Shenzhen Norming Lighting Co., Ltd |                         | Shld.Ang(°):         | Test Machine:GON-2000 |
| Test Lab: Quality Department                    |                         | Frequency (Hz):      | Lamp CCT (K): Ra:     |
| Lum. Size (W*L*H):0.038m*0.038m*0.000m          |                         | Lum. Area (m2):0.001 | Lum. W (kg): 0.000    |
| Test System: C, γ                               | Test Step: C=90.0 γ=1.0 | Temp. (°C): 25       | Humidity(%): 50.0     |

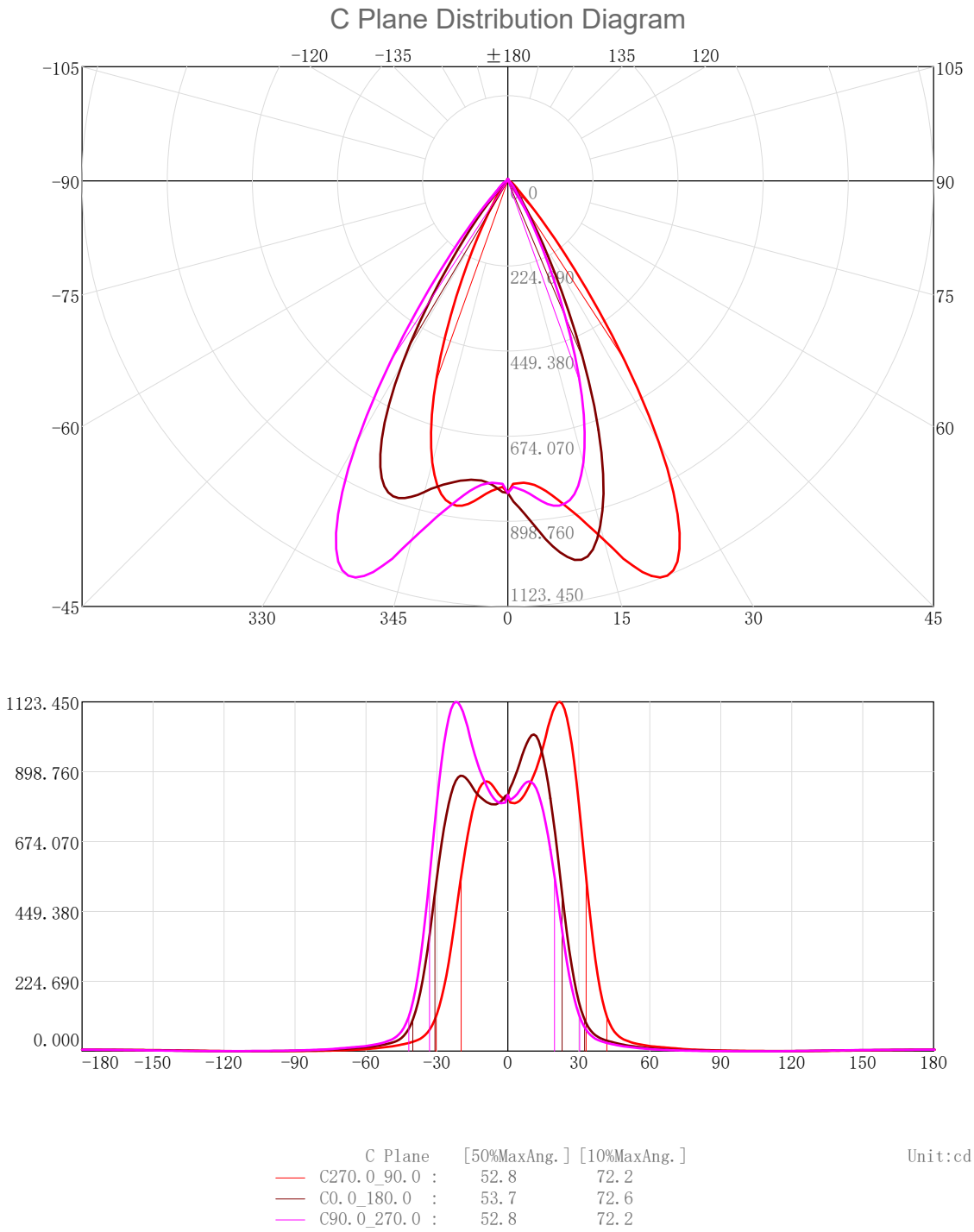
Character Parameter

| Lamp Speciality Parameter                       |                                   | Luminaire Speciality Parameter        |  |
|---|-----------------------------------|---------------------------------------|--|
| Rated Flux(lm): 816.950                         | Luminary Flux(lm): 816.954        | Field Angle(10%Imax): 72.2(°)         |  |
| Rated Power(W):                                 | Luminary Efficiency: 100.00%      | Down Lumens&Percent: 808.499lm 98.97% |  |
| Rated Voltage(V):                               | Luminary EER(lm/W): 92.416        | Up Lumens&Percent: 8.455lm 1.03%      |  |
| Tested Power(W): 8.840                          | Max. Candela(cd): 1123.450        | S/MH: C0_a180=0.972 C90_270=0.998     |  |
| Lamps' Inside: 1                                | Max Cand@Ang. (°): C=270.0 γ=22.0 | CIE Type: Semi-Direct                 |  |
| Tested Electrics (V, A, pf):241.4, 0.040, 0.898 | Beam Angle(50%Imax): 52.8(°)      | ErP Φ use(90°): 734.641lm             |  |
| Lamp Size (W*L*H):0.038m*0.038m*0.000m          | Left=-19.7°, Right=33.1°          | IRF(%): 285.440                       |  |



2D Plane Light Intensity Distribution Curve

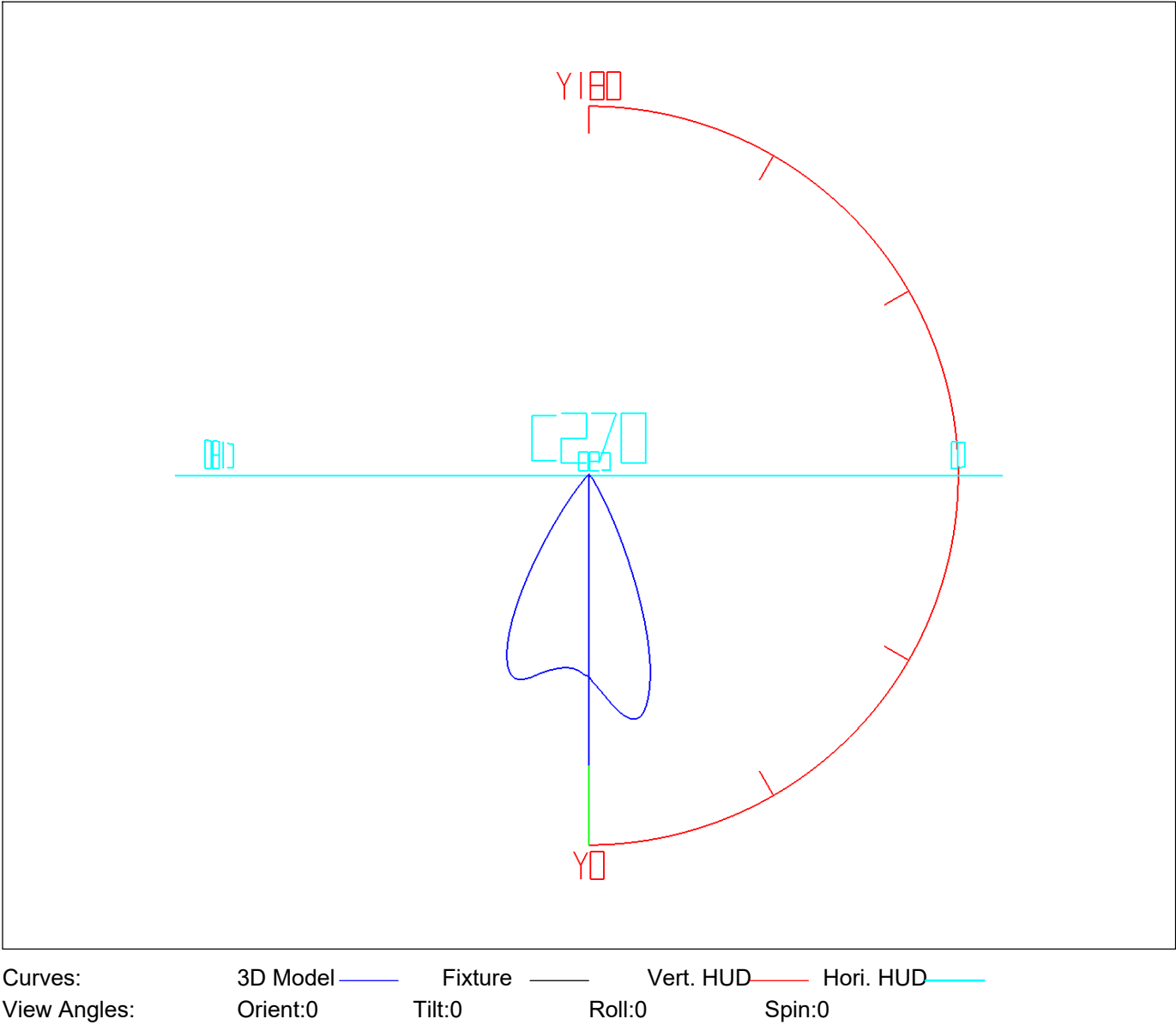
|  |                       |                             |
|--|-----------------------|-----------------------------|
| Lum. Name:TR08-09-XX-02 4000K RA90 60D         | Lum. Catalog:         | Test ID:01                  |
| Lamp Name:                                     | Lamp Catalog:LED      | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date:2021/10/28        |



3D Light Intensity Distribution Modal

|  |                       |                             |
|--|-----------------------|-----------------------------|
| Lum. Name:TR08-09-XX-02 4000K RA90 60D         | Lum. Catelog:         | Test ID:01                  |
| Lamp Name:                                     | Lamp Catelog:LED      | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date:2021/10/28        |

3D Light Intensity Distribution Modal



IES Indoor Report

Photometric Filename:TR08-09-XX-02 4000K RA90 60D.IES

Zonal Flux Tabulation

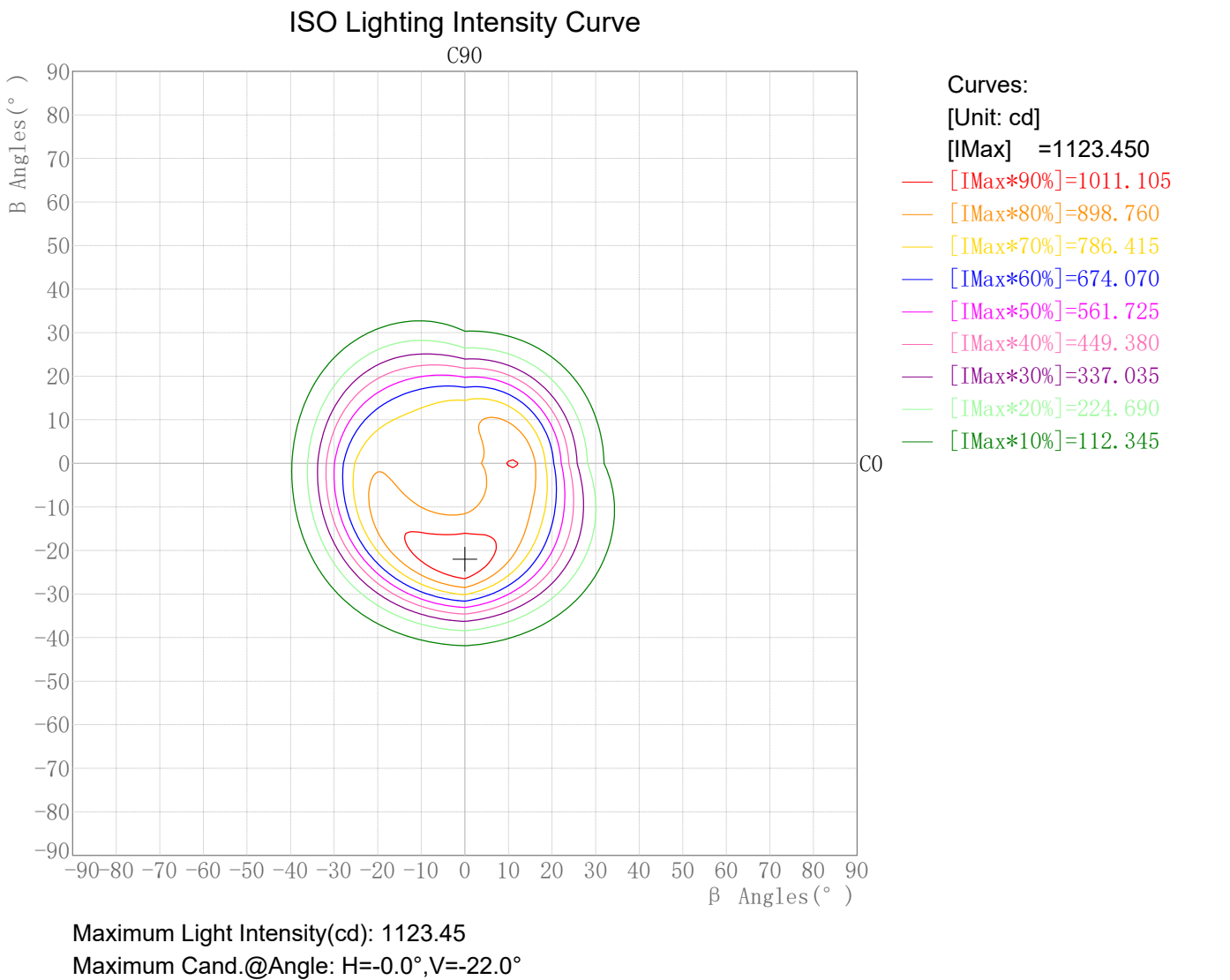
| Zone(γ)   | Zone Flux<br>(lm) | Sums Flux<br>(lm) | Zone%Lamp | Sums%Lamp | Zone(γ)   | Zone Flux<br>(lm) | Sums Flux<br>(lm) | Zone%Lamp | Sums%Lamp |
|-----------|-------------------|-------------------|-----------|-----------|-----------|-------------------|-------------------|-----------|-----------|
| 0.0-1.0   | 0.79              | 0.79              | 0.10      | 0.10      | 47.0-48.0 | 2.36              | 774.24            | 0.29      | 94.77     |
| 1.0-2.0   | 2.35              | 3.14              | 0.29      | 0.38      | 48.0-49.0 | 2.18              | 776.42            | 0.27      | 95.04     |
| 2.0-3.0   | 3.94              | 7.08              | 0.48      | 0.87      | 49.0-50.0 | 2.03              | 778.46            | 0.25      | 95.29     |
| 3.0-4.0   | 5.55              | 12.63             | 0.68      | 1.55      | 50.0-51.0 | 1.91              | 780.37            | 0.23      | 95.52     |
| 4.0-5.0   | 7.20              | 19.83             | 0.88      | 2.43      | 51.0-52.0 | 1.80              | 782.17            | 0.22      | 95.74     |
| 5.0-6.0   | 8.90              | 28.73             | 1.09      | 3.52      | 52.0-53.0 | 1.69              | 783.86            | 0.21      | 95.95     |
| 6.0-7.0   | 10.64             | 39.37             | 1.30      | 4.82      | 53.0-54.0 | 1.59              | 785.45            | 0.20      | 96.14     |
| 7.0-8.0   | 12.42             | 51.79             | 1.52      | 6.34      | 54.0-55.0 | 1.50              | 786.95            | 0.18      | 96.33     |
| 8.0-9.0   | 14.22             | 66.01             | 1.74      | 8.08      | 55.0-56.0 | 1.42              | 788.37            | 0.17      | 96.50     |
| 9.0-10.0  | 16.03             | 82.03             | 1.96      | 10.04     | 56.0-57.0 | 1.34              | 789.71            | 0.16      | 96.67     |
| 10.0-11.0 | 17.82             | 99.85             | 2.18      | 12.22     | 57.0-58.0 | 1.26              | 790.97            | 0.15      | 96.82     |
| 11.0-12.0 | 19.58             | 119.43            | 2.40      | 14.62     | 58.0-59.0 | 1.19              | 792.16            | 0.15      | 96.97     |
| 12.0-13.0 | 21.27             | 140.70            | 2.60      | 17.22     | 59.0-60.0 | 1.12              | 793.28            | 0.14      | 97.10     |
| 13.0-14.0 | 22.88             | 163.58            | 2.80      | 20.02     | 60.0-61.0 | 1.06              | 794.34            | 0.13      | 97.23     |
| 14.0-15.0 | 24.40             | 187.98            | 2.99      | 23.01     | 61.0-62.0 | 1.01              | 795.34            | 0.12      | 97.36     |
| 15.0-16.0 | 25.84             | 213.82            | 3.16      | 26.17     | 62.0-63.0 | 0.96              | 796.30            | 0.12      | 97.47     |
| 16.0-17.0 | 27.18             | 241.00            | 3.33      | 29.50     | 63.0-64.0 | 0.91              | 797.21            | 0.11      | 97.58     |
| 17.0-18.0 | 28.36             | 269.36            | 3.47      | 32.97     | 64.0-65.0 | 0.86              | 798.07            | 0.11      | 97.69     |
| 18.0-19.0 | 29.34             | 298.70            | 3.59      | 36.56     | 65.0-66.0 | 0.81              | 798.88            | 0.10      | 97.79     |
| 19.0-20.0 | 30.10             | 328.80            | 3.68      | 40.25     | 66.0-67.0 | 0.77              | 799.65            | 0.09      | 97.88     |
| 20.0-21.0 | 30.60             | 359.40            | 3.75      | 43.99     | 67.0-68.0 | 0.73              | 800.38            | 0.09      | 97.97     |
| 21.0-22.0 | 30.81             | 390.21            | 3.77      | 47.76     | 68.0-69.0 | 0.69              | 801.06            | 0.08      | 98.06     |
| 22.0-23.0 | 30.73             | 420.94            | 3.76      | 51.53     | 69.0-70.0 | 0.65              | 801.71            | 0.08      | 98.13     |
| 23.0-24.0 | 30.38             | 451.32            | 3.72      | 55.24     | 70.0-71.0 | 0.61              | 802.31            | 0.07      | 98.21     |
| 24.0-25.0 | 29.74             | 481.06            | 3.64      | 58.89     | 71.0-72.0 | 0.57              | 802.88            | 0.07      | 98.28     |
| 25.0-26.0 | 28.86             | 509.93            | 3.53      | 62.42     | 72.0-73.0 | 0.53              | 803.41            | 0.06      | 98.34     |
| 26.0-27.0 | 27.77             | 537.69            | 3.40      | 65.82     | 73.0-74.0 | 0.49              | 803.91            | 0.06      | 98.40     |
| 27.0-28.0 | 26.46             | 564.15            | 3.24      | 69.06     | 74.0-75.0 | 0.46              | 804.37            | 0.06      | 98.46     |
| 28.0-29.0 | 24.96             | 589.11            | 3.06      | 72.11     | 75.0-76.0 | 0.43              | 804.80            | 0.05      | 98.51     |
| 29.0-30.0 | 23.28             | 612.39            | 2.85      | 74.96     | 76.0-77.0 | 0.40              | 805.20            | 0.05      | 98.56     |
| 30.0-31.0 | 21.46             | 633.85            | 2.63      | 77.59     | 77.0-78.0 | 0.38              | 805.58            | 0.05      | 98.61     |
| 31.0-32.0 | 19.55             | 653.40            | 2.39      | 79.98     | 78.0-79.0 | 0.35              | 805.93            | 0.04      | 98.65     |
| 32.0-33.0 | 17.58             | 670.98            | 2.15      | 82.13     | 79.0-80.0 | 0.33              | 806.26            | 0.04      | 98.69     |
| 33.0-34.0 | 15.61             | 686.59            | 1.91      | 84.04     | 80.0-81.0 | 0.31              | 806.56            | 0.04      | 98.73     |
| 34.0-35.0 | 13.70             | 700.28            | 1.68      | 85.72     | 81.0-82.0 | 0.28              | 806.85            | 0.03      | 98.76     |
| 35.0-36.0 | 11.90             | 712.19            | 1.46      | 87.18     | 82.0-83.0 | 0.26              | 807.11            | 0.03      | 98.80     |
| 36.0-37.0 | 10.27             | 722.45            | 1.26      | 88.43     | 83.0-84.0 | 0.24              | 807.36            | 0.03      | 98.83     |
| 37.0-38.0 | 8.82              | 731.27            | 1.08      | 89.51     | 84.0-85.0 | 0.23              | 807.58            | 0.03      | 98.85     |
| 38.0-39.0 | 7.56              | 738.83            | 0.92      | 90.44     | 85.0-86.0 | 0.21              | 807.80            | 0.03      | 98.88     |
| 39.0-40.0 | 6.47              | 745.29            | 0.79      | 91.23     | 86.0-87.0 | 0.20              | 807.99            | 0.02      | 98.90     |
| 40.0-41.0 | 5.53              | 750.83            | 0.68      | 91.91     | 87.0-88.0 | 0.18              | 808.18            | 0.02      | 98.93     |
| 41.0-42.0 | 4.75              | 755.57            | 0.58      | 92.49     | 88.0-89.0 | 0.17              | 808.34            | 0.02      | 98.95     |
| 42.0-43.0 | 4.11              | 759.69            | 0.50      | 92.99     | 89.0-90.0 | 0.16              | 808.50            | 0.02      | 98.97     |
| 43.0-44.0 | 3.59              | 763.28            | 0.44      | 93.43     | 90.0-91.0 | 0.14              | 808.64            | 0.02      | 98.98     |
| 44.0-45.0 | 3.18              | 766.46            | 0.39      | 93.82     | 91.0-92.0 | 0.13              | 808.77            | 0.02      | 99.00     |
| 45.0-46.0 | 2.84              | 769.30            | 0.35      | 94.17     | 92.0-93.0 | 0.12              | 808.89            | 0.01      | 99.01     |
| 46.0-47.0 | 2.58              | 771.88            | 0.32      | 94.48     | 93.0-94.0 | 0.11              | 809.00            | 0.01      | 99.03     |

Zonal Flux Tabulation - (Cont.)

| Zone ( γ )    | Zone Flux<br>(lm) | Sums Flux<br>(lm) | Zone%Lamp | Sums%Lamp | Zone ( γ )    | Zone Flux<br>(lm) | Sums Flux<br>(lm) | Zone%Lamp | Sums%Lamp |
|---------------|-------------------|-------------------|-----------|-----------|---------------|-------------------|-------------------|-----------|-----------|
| 94. 0-95. 0   | 0. 10             | 809. 09           | 0. 01     | 99. 04    | 141. 0-142. 0 | 0. 15             | 812. 37           | 0. 02     | 99. 44    |
| 95. 0-96. 0   | 0. 09             | 809. 18           | 0. 01     | 99. 05    | 142. 0-143. 0 | 0. 16             | 812. 53           | 0. 02     | 99. 46    |
| 96. 0-97. 0   | 0. 08             | 809. 27           | 0. 01     | 99. 06    | 143. 0-144. 0 | 0. 16             | 812. 69           | 0. 02     | 99. 48    |
| 97. 0-98. 0   | 0. 08             | 809. 35           | 0. 01     | 99. 07    | 144. 0-145. 0 | 0. 16             | 812. 85           | 0. 02     | 99. 50    |
| 98. 0-99. 0   | 0. 07             | 809. 42           | 0. 01     | 99. 08    | 145. 0-146. 0 | 0. 17             | 813. 02           | 0. 02     | 99. 52    |
| 99. 0-100. 0  | 0. 07             | 809. 48           | 0. 01     | 99. 09    | 146. 0-147. 0 | 0. 17             | 813. 19           | 0. 02     | 99. 54    |
| 100. 0-101. 0 | 0. 06             | 809. 54           | 0. 01     | 99. 09    | 147. 0-148. 0 | 0. 17             | 813. 35           | 0. 02     | 99. 56    |
| 101. 0-102. 0 | 0. 05             | 809. 60           | 0. 01     | 99. 10    | 148. 0-149. 0 | 0. 17             | 813. 52           | 0. 02     | 99. 58    |
| 102. 0-103. 0 | 0. 05             | 809. 65           | 0. 01     | 99. 11    | 149. 0-150. 0 | 0. 17             | 813. 69           | 0. 02     | 99. 60    |
| 103. 0-104. 0 | 0. 05             | 809. 69           | 0. 01     | 99. 11    | 150. 0-151. 0 | 0. 17             | 813. 86           | 0. 02     | 99. 62    |
| 104. 0-105. 0 | 0. 04             | 809. 74           | 0. 01     | 99. 12    | 151. 0-152. 0 | 0. 17             | 814. 03           | 0. 02     | 99. 64    |
| 105. 0-106. 0 | 0. 04             | 809. 78           | 0. 00     | 99. 12    | 152. 0-153. 0 | 0. 17             | 814. 20           | 0. 02     | 99. 66    |
| 106. 0-107. 0 | 0. 04             | 809. 82           | 0. 00     | 99. 13    | 153. 0-154. 0 | 0. 17             | 814. 37           | 0. 02     | 99. 68    |
| 107. 0-108. 0 | 0. 03             | 809. 85           | 0. 00     | 99. 13    | 154. 0-155. 0 | 0. 17             | 814. 53           | 0. 02     | 99. 70    |
| 108. 0-109. 0 | 0. 03             | 809. 88           | 0. 00     | 99. 13    | 155. 0-156. 0 | 0. 16             | 814. 70           | 0. 02     | 99. 72    |
| 109. 0-110. 0 | 0. 03             | 809. 91           | 0. 00     | 99. 14    | 156. 0-157. 0 | 0. 16             | 814. 86           | 0. 02     | 99. 74    |
| 110. 0-111. 0 | 0. 03             | 809. 94           | 0. 00     | 99. 14    | 157. 0-158. 0 | 0. 16             | 815. 01           | 0. 02     | 99. 76    |
| 111. 0-112. 0 | 0. 03             | 809. 97           | 0. 00     | 99. 15    | 158. 0-159. 0 | 0. 15             | 815. 17           | 0. 02     | 99. 78    |
| 112. 0-113. 0 | 0. 03             | 809. 99           | 0. 00     | 99. 15    | 159. 0-160. 0 | 0. 15             | 815. 32           | 0. 02     | 99. 80    |
| 113. 0-114. 0 | 0. 03             | 810. 02           | 0. 00     | 99. 15    | 160. 0-161. 0 | 0. 14             | 815. 46           | 0. 02     | 99. 82    |
| 114. 0-115. 0 | 0. 03             | 810. 04           | 0. 00     | 99. 15    | 161. 0-162. 0 | 0. 14             | 815. 60           | 0. 02     | 99. 83    |
| 115. 0-116. 0 | 0. 03             | 810. 07           | 0. 00     | 99. 16    | 162. 0-163. 0 | 0. 13             | 815. 74           | 0. 02     | 99. 85    |
| 116. 0-117. 0 | 0. 03             | 810. 10           | 0. 00     | 99. 16    | 163. 0-164. 0 | 0. 13             | 815. 86           | 0. 02     | 99. 87    |
| 117. 0-118. 0 | 0. 03             | 810. 13           | 0. 00     | 99. 17    | 164. 0-165. 0 | 0. 12             | 815. 99           | 0. 02     | 99. 88    |
| 118. 0-119. 0 | 0. 03             | 810. 17           | 0. 00     | 99. 17    | 165. 0-166. 0 | 0. 12             | 816. 11           | 0. 01     | 99. 90    |
| 119. 0-120. 0 | 0. 04             | 810. 21           | 0. 00     | 99. 17    | 166. 0-167. 0 | 0. 11             | 816. 22           | 0. 01     | 99. 91    |
| 120. 0-121. 0 | 0. 04             | 810. 25           | 0. 01     | 99. 18    | 167. 0-168. 0 | 0. 10             | 816. 32           | 0. 01     | 99. 92    |
| 121. 0-122. 0 | 0. 05             | 810. 29           | 0. 01     | 99. 19    | 168. 0-169. 0 | 0. 10             | 816. 42           | 0. 01     | 99. 94    |
| 122. 0-123. 0 | 0. 05             | 810. 35           | 0. 01     | 99. 19    | 169. 0-170. 0 | 0. 09             | 816. 51           | 0. 01     | 99. 95    |
| 123. 0-124. 0 | 0. 06             | 810. 40           | 0. 01     | 99. 20    | 170. 0-171. 0 | 0. 08             | 816. 59           | 0. 01     | 99. 96    |
| 124. 0-125. 0 | 0. 06             | 810. 46           | 0. 01     | 99. 21    | 171. 0-172. 0 | 0. 07             | 816. 67           | 0. 01     | 99. 97    |
| 125. 0-126. 0 | 0. 07             | 810. 53           | 0. 01     | 99. 21    | 172. 0-173. 0 | 0. 07             | 816. 73           | 0. 01     | 99. 97    |
| 126. 0-127. 0 | 0. 07             | 810. 60           | 0. 01     | 99. 22    | 173. 0-174. 0 | 0. 06             | 816. 79           | 0. 01     | 99. 98    |
| 127. 0-128. 0 | 0. 08             | 810. 68           | 0. 01     | 99. 23    | 174. 0-175. 0 | 0. 05             | 816. 84           | 0. 01     | 99. 99    |
| 128. 0-129. 0 | 0. 08             | 810. 76           | 0. 01     | 99. 24    | 175. 0-176. 0 | 0. 04             | 816. 88           | 0. 01     | 99. 99    |
| 129. 0-130. 0 | 0. 09             | 810. 85           | 0. 01     | 99. 25    | 176. 0-177. 0 | 0. 03             | 816. 91           | 0. 00     | 100. 00   |
| 130. 0-131. 0 | 0. 10             | 810. 95           | 0. 01     | 99. 27    | 177. 0-178. 0 | 0. 02             | 816. 94           | 0. 00     | 100. 00   |
| 131. 0-132. 0 | 0. 10             | 811. 05           | 0. 01     | 99. 28    | 178. 0-179. 0 | 0. 01             | 816. 95           | 0. 00     | 100. 00   |
| 132. 0-133. 0 | 0. 11             | 811. 16           | 0. 01     | 99. 29    | 179. 0-180. 0 | 0. 00             | 816. 95           | 0. 00     | 100. 00   |
| 133. 0-134. 0 | 0. 11             | 811. 28           | 0. 01     | 99. 31    |               |                   |                   |           |           |
| 134. 0-135. 0 | 0. 12             | 811. 39           | 0. 01     | 99. 32    |               |                   |                   |           |           |
| 135. 0-136. 0 | 0. 12             | 811. 52           | 0. 02     | 99. 34    |               |                   |                   |           |           |
| 136. 0-137. 0 | 0. 13             | 811. 65           | 0. 02     | 99. 35    |               |                   |                   |           |           |
| 137. 0-138. 0 | 0. 14             | 811. 79           | 0. 02     | 99. 37    |               |                   |                   |           |           |
| 138. 0-139. 0 | 0. 14             | 811. 93           | 0. 02     | 99. 38    |               |                   |                   |           |           |
| 139. 0-140. 0 | 0. 14             | 812. 07           | 0. 02     | 99. 40    |               |                   |                   |           |           |
| 140. 0-141. 0 | 0. 15             | 812. 22           | 0. 02     | 99. 42    |               |                   |                   |           |           |

Rectangle ISO Lighting Intensity Diagram

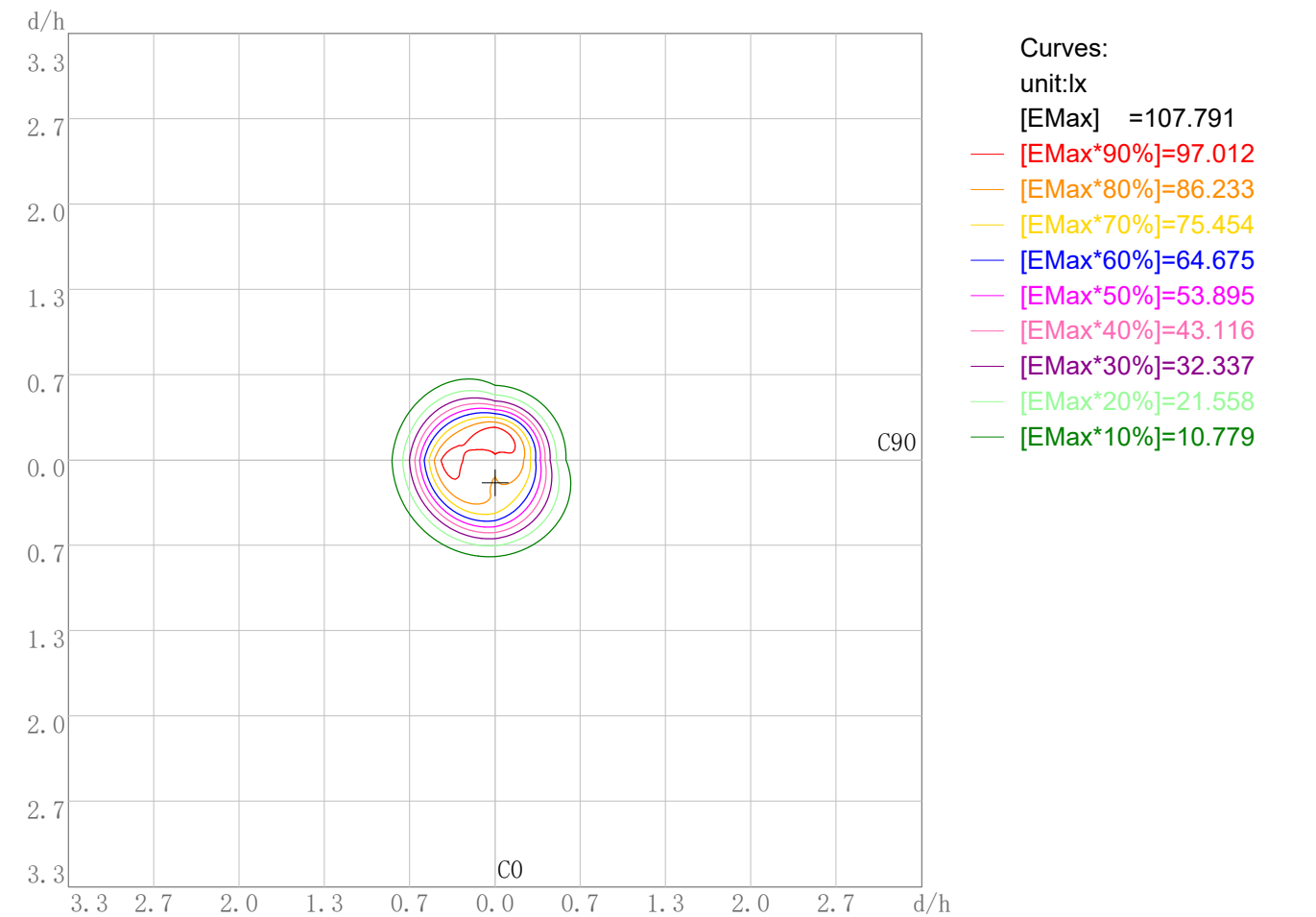
|  |                       |                             |
|--|-----------------------|-----------------------------|
| Lum. Name:TR08-09-XX-02 4000K RA90 60D         | Lum. Catalog:         | Test ID:01                  |
| Lamp Name:                                     | Lamp Catalog:LED      | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date:2021/10/28        |



Plane ISO-Illuminance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name:TR08-09-XX-02 4000K RA90 60D          | Lum. Catalog:         | Test ID:01                   |
| Lamp Name:                                      | Lamp Catalog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/28        |

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00  
Working Plane Maximum Illuminance(lx): 107.79  
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.2

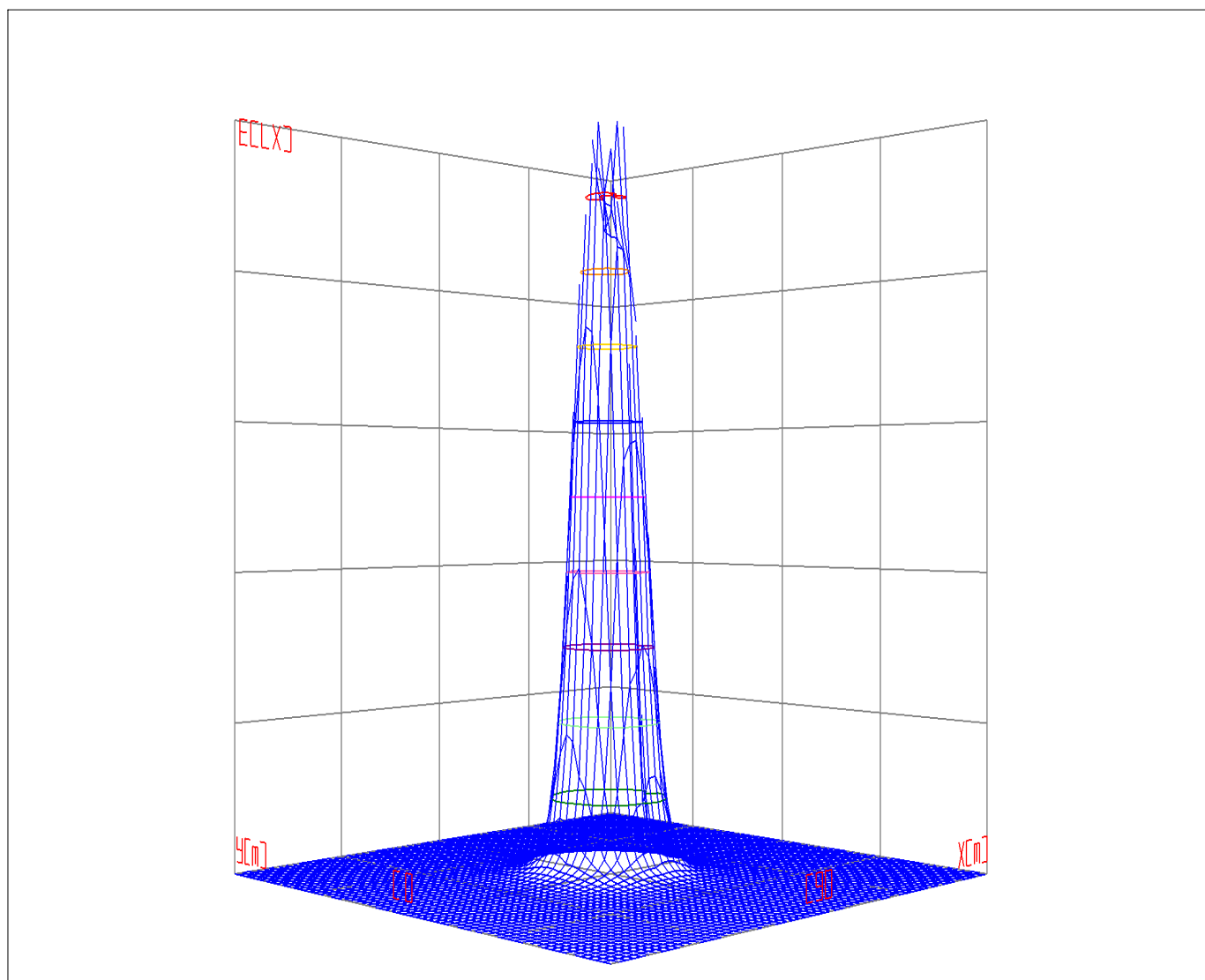
## IES Indoor Report

Photometric Filename:TR08-09-XX-02 4000K RA90 60D.IES

### 3D Plane ISO Illuminance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: TR08-09-XX-02 4000K RA90 60D         | Lum. Catalog:         | Test ID: 01                  |
| Lamp Name:                                      | Lamp Catalog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/28        |

### 3D Plane Illuminance Modal



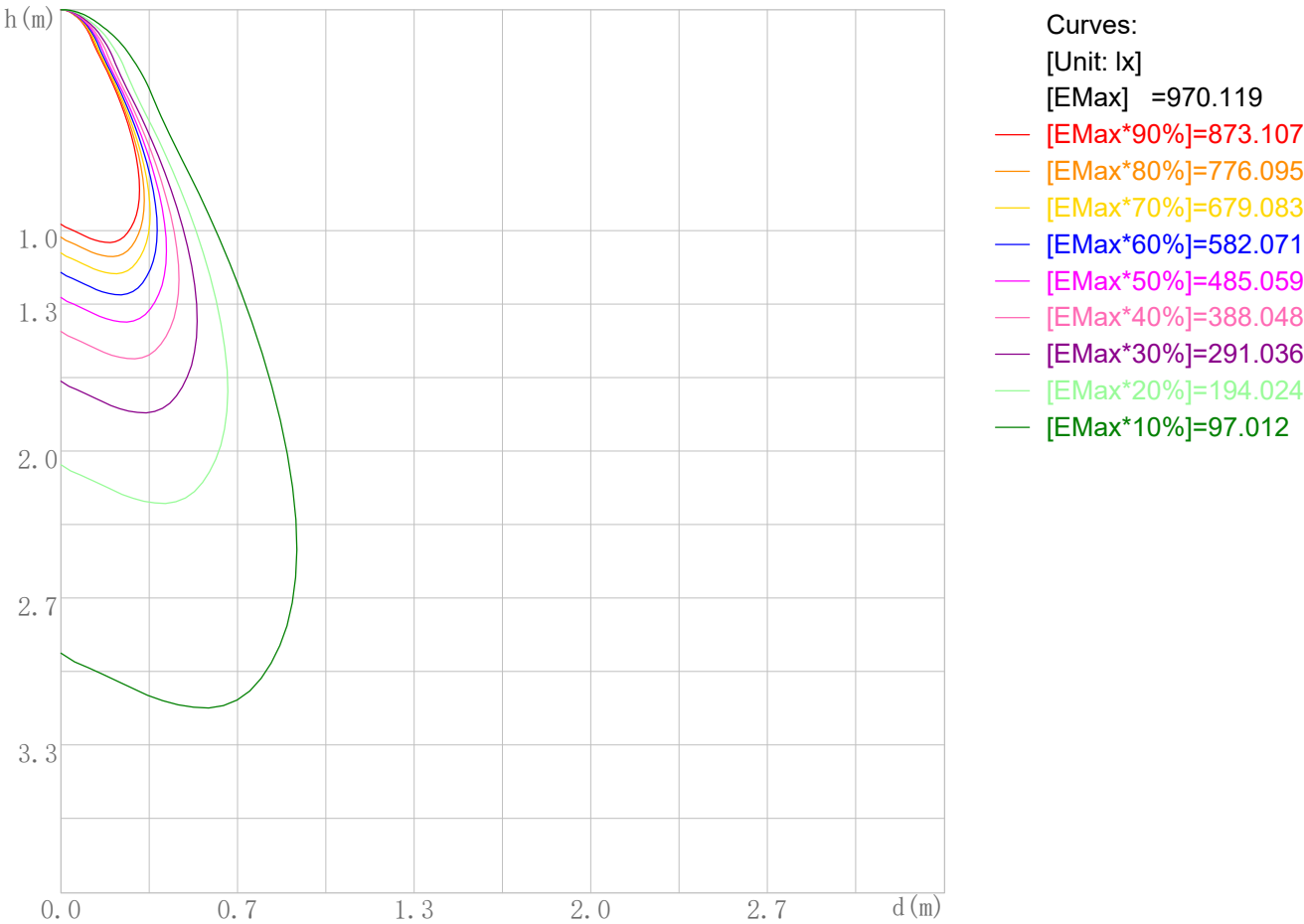
Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —  
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0



Space ISO Illuminance Diagram

|  |                       |                             |
|--|-----------------------|-----------------------------|
| Lum. Name:TR08-09-XX-02 4000K RA90 60D         | Lum. Catelog:         | Test ID:01                  |
| Lamp Name:                                     | Lamp Catelog:LED      | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date:2021/10/28        |

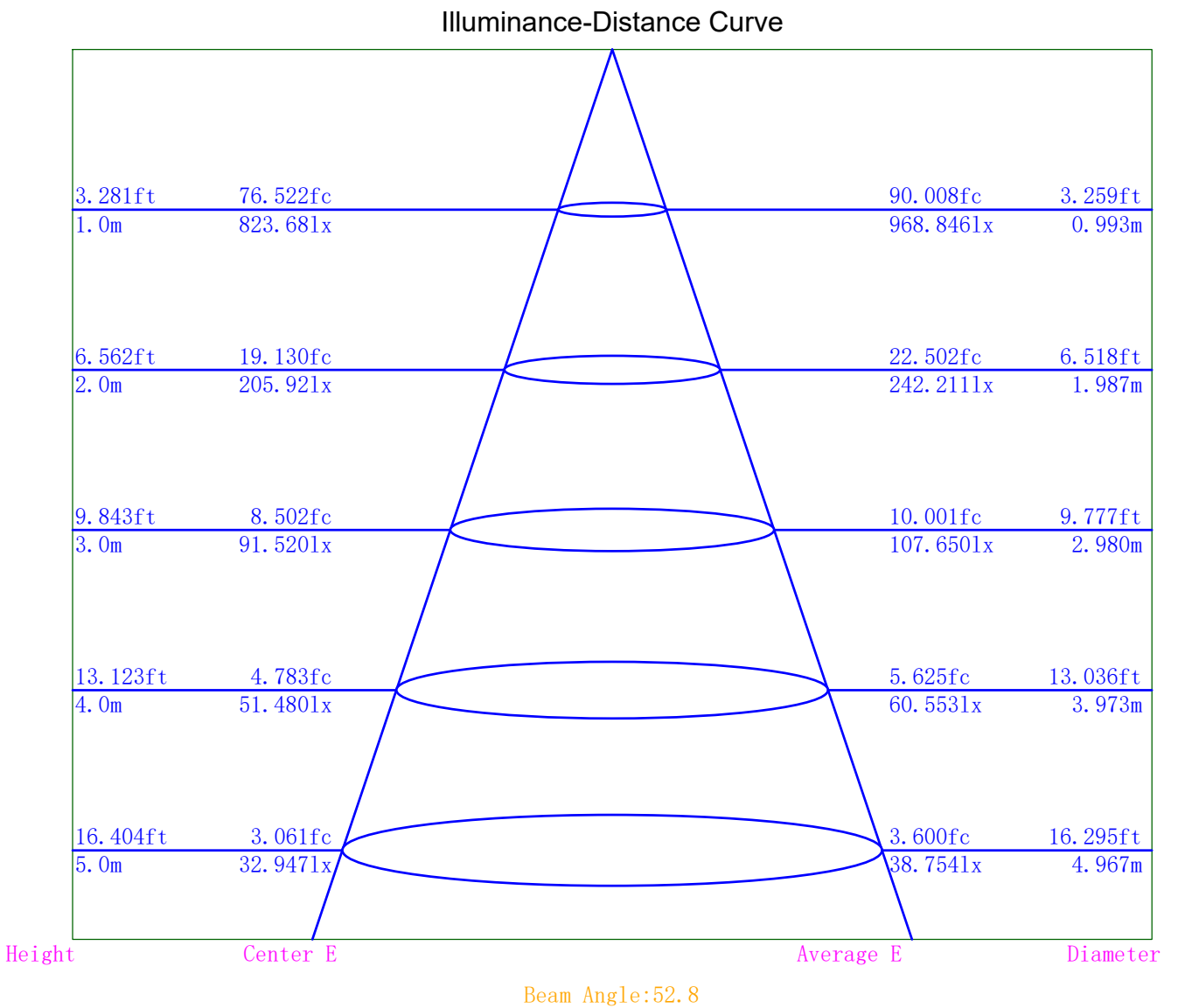
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:970.12lx,10.0deg  
Plane Maximum Lighting Intensity and @Angle:1018.589cd,0deg

Illuminance-Distance Diagram

|  |                       |                             |
|--|-----------------------|-----------------------------|
| Lum. Name:TR08-09-XX-02 4000K RA90 60D         | Lum. Catelog:         | Test ID:01                  |
| Lamp Name:                                     | Lamp Catelog:LED      | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date:2021/10/28        |



Indoor Luminance Limiting Curves

|  |                       |                             |
|--|-----------------------|-----------------------------|
| Lum. Name:TR08-09-XX-02 4000K RA90 60D         | Lum. Catalog:         | Test ID:01                  |
| Lamp Name:                                     | Lamp Catalog:LED      | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date:2021/10/28        |

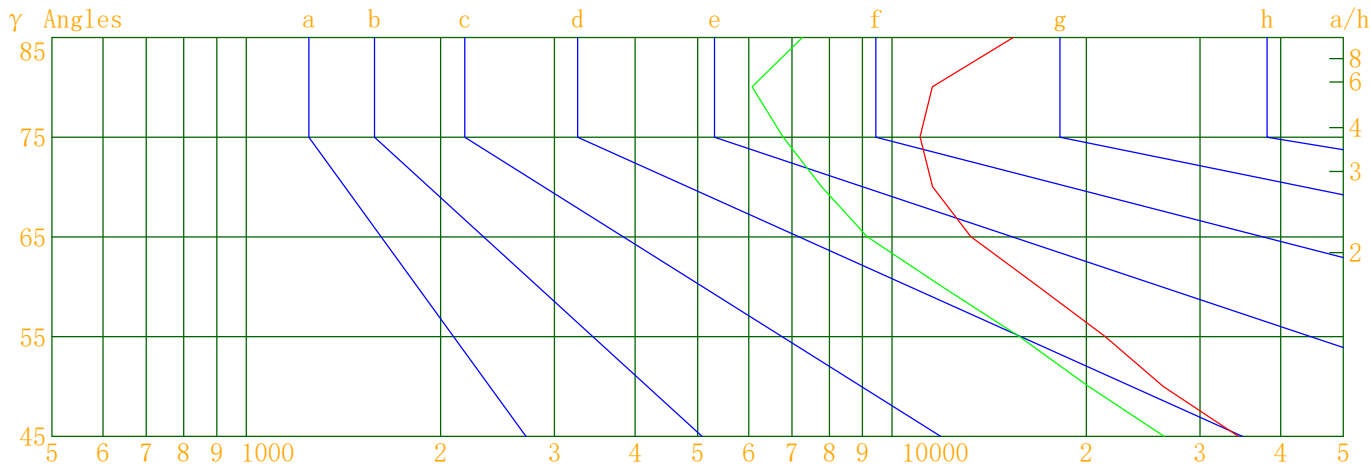
Glare Grade Table

| GI   | Quality | Using Illuminance |      |      |       |       |       |       |       |
|------|---------|-------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A       | 2000              | 1000 | 500  | <=300 |       |       |       |       |
| 1.5  | B       |                   | 2000 | 1000 | 500   | <=300 |       |       |       |
| 1.85 | C       |                   |      | 2000 | 1000  | 500   | <=300 |       |       |
| 2.2  | D       |                   |      |      | 2000  | 1000  | 500   | <=300 |       |
| 2.55 | E       | a                 |      |      |       | 2000  | 1000  | 500   | <=300 |
|      |         |                   | b    | c    | d     | e     | f     | g     | h     |

Luminance Table

| Gama(deg) | 45    | 50    | 55    | 60    | 65    | 70    | 75    | 80    | 85    |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C0        | 34400 | 26307 | 21380 | 16850 | 13249 | 11555 | 11055 | 11547 | 15408 |
| C90       | 26396 | 20158 | 15748 | 11949 | 9151  | 7781  | 6776  | 6073  | 7264  |

Luminance Limiting Curve



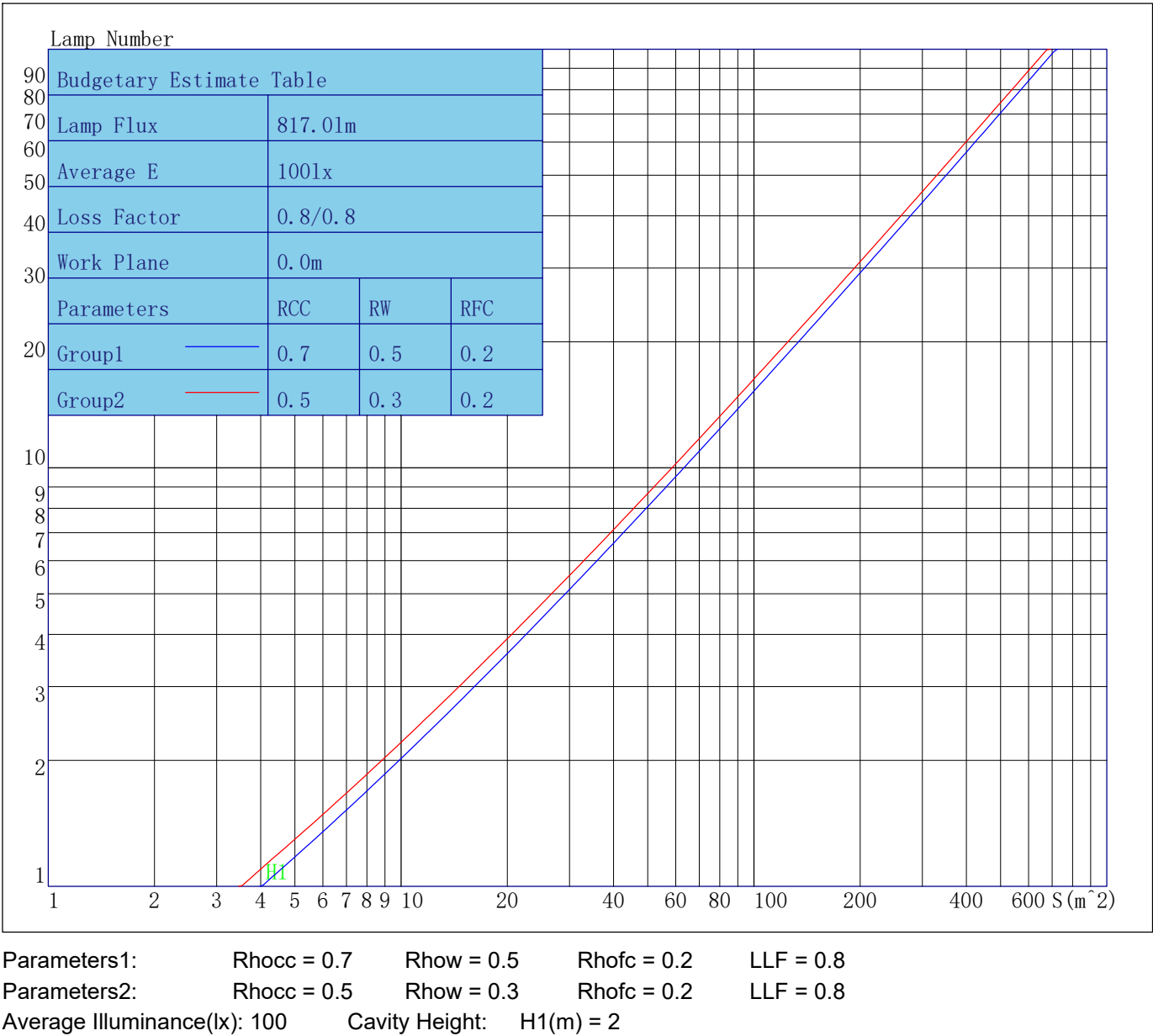
Luminous Size:Length(m)=-0.038Width(m)=-0.038Height(m)=0.000Area(m^2)=0.001134

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name:TR08-09-XX-02 4000K RA90 60D          | Lum. Catalog:         | Test ID:01                   |
| Lamp Name:                                      | Lamp Catalog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/28        |



Indoor Coefficient of Utilization Table

|  |                       |                             |
|--|-----------------------|-----------------------------|
| Lum. Name:TR08-09-XX-02 4000K RA90 60D         | Lum. Catelog:         | Test ID:01                  |
| Lamp Name:                                     | Lamp Catelog:LED      | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date:2021/10/28        |

| Coefficients of Utilization - Zonal Cavity Method |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| Coef.   | Effective Floor Cavity Reflectance RFC=0.20 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
| RhoCC (%)   | 80  |     |     |     | 70  |     |     |     | 50  |     |     | 30  |     |     | 10  |     |     | 0  |
| RhoW (%)  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 0  |
| RCR   | Coefficient of Utilization(%)               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
| 0   | 119   | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 101 | 101 | 101 | 99 |
| 1   | 113   | 110 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 100 | 100 | 98  | 97  | 96  | 95  | 94  | 92 |
| 2   | 107   | 103 | 98  | 95  | 105 | 101 | 97  | 94  | 97  | 94  | 92  | 94  | 92  | 90  | 91  | 89  | 87  | 86 |
| 3   | 102   | 96  | 91  | 87  | 100 | 94  | 90  | 86  | 91  | 88  | 84  | 89  | 86  | 83  | 86  | 84  | 81  | 80 |
| 4   | 97  | 89  | 84  | 80  | 95  | 88  | 83  | 79  | 86  | 82  | 78  | 84  | 80  | 77  | 82  | 79  | 76  | 75 |
| 5   | 92  | 84  | 78  | 74  | 90  | 83  | 77  | 73  | 81  | 76  | 73  | 79  | 75  | 72  | 78  | 74  | 71  | 70 |
| 6   | 88  | 79  | 73  | 69  | 86  | 78  | 72  | 68  | 76  | 71  | 68  | 75  | 71  | 67  | 73  | 70  | 67  | 65 |
| 7   | 83  | 74  | 68  | 64  | 82  | 74  | 68  | 64  | 72  | 67  | 63  | 71  | 66  | 63  | 70  | 66  | 63  | 61 |
| 8   | 79  | 70  | 64  | 60  | 78  | 69  | 64  | 60  | 68  | 63  | 60  | 67  | 63  | 59  | 66  | 62  | 59  | 58 |
| 9   | 76  | 66  | 60  | 56  | 75  | 66  | 60  | 56  | 65  | 60  | 56  | 64  | 59  | 56  | 63  | 59  | 56  | 54 |
| 10  | 72  | 63  | 57  | 53  | 71  | 62  | 57  | 53  | 61  | 56  | 53  | 61  | 56  | 53  | 60  | 56  | 53  | 51 |

Unified Glare Rating Table

|  |                       |                             |
|--|-----------------------|-----------------------------|
| Lum. Name:TR08-09-XX-02 4000K RA90 60D         | Lum. Catelog:         | Test ID:01                  |
| Lamp Name:                                     | Lamp Catelog:LED      | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date:2021/10/28        |

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                                       | 19.0            | 20.0 | 19.3 | 20.3 | 20.7 | 17.0          | 18.0 | 17.3 | 18.3 | 18.7 |
|  | 19.1            | 20.0 | 19.5 | 20.4 | 20.8 | 17.1          | 18.0 | 17.5 | 18.4 | 18.8 |
|  | 19.2            | 20.1 | 19.6 | 20.4 | 20.8 | 17.1          | 18.0 | 17.5 | 18.4 | 18.8 |
|  | 19.3            | 20.1 | 19.7 | 20.5 | 20.9 | 17.1          | 17.9 | 17.6 | 18.3 | 18.7 |
|  | 19.3            | 20.1 | 19.7 | 20.5 | 20.9 | 17.1          | 17.9 | 17.6 | 18.3 | 18.7 |
|  | 19.3            | 20.1 | 19.8 | 20.5 | 20.9 | 17.1          | 17.8 | 17.6 | 18.2 | 18.7 |
| X=4H    Y=2H                                       | 18.9            | 19.8 | 19.4 | 20.2 | 20.6 | 17.0          | 17.9 | 17.4 | 18.3 | 18.7 |
|  | 19.2            | 20.0 | 19.7 | 20.4 | 20.8 | 17.3          | 18.0 | 17.7 | 18.4 | 18.8 |
|  | 19.4            | 20.0 | 19.8 | 20.5 | 21.0 | 17.3          | 18.0 | 17.8 | 18.5 | 18.9 |
|  | 19.5            | 20.1 | 20.0 | 20.6 | 21.1 | 17.4          | 18.0 | 17.9 | 18.5 | 19.0 |
|  | 19.6            | 20.2 | 20.1 | 20.6 | 21.1 | 17.4          | 18.0 | 17.9 | 18.5 | 19.0 |
|  | 19.7            | 20.2 | 20.2 | 20.7 | 21.2 | 17.5          | 17.9 | 18.0 | 18.5 | 19.0 |
| X=8H    Y=4H                                       | 19.4            | 20.0 | 19.9 | 20.4 | 20.9 | 17.4          | 17.9 | 17.9 | 18.4 | 18.9 |
|  | 19.7            | 20.1 | 20.2 | 20.7 | 21.2 | 17.6          | 18.0 | 18.1 | 18.5 | 19.1 |
|  | 19.8            | 20.3 | 20.4 | 20.8 | 21.3 | 17.6          | 18.0 | 18.2 | 18.6 | 19.1 |
|  | 20.1            | 20.4 | 20.6 | 20.9 | 21.5 | 17.7          | 18.1 | 18.3 | 18.6 | 19.2 |
| X=12H    Y=4H                                      | 19.4            | 19.9 | 19.9 | 20.4 | 20.9 | 17.4          | 17.9 | 17.9 | 18.4 | 18.9 |
|  | 19.7            | 20.1 | 20.3 | 20.6 | 21.2 | 17.6          | 18.0 | 18.1 | 18.5 | 19.1 |
|  | 19.9            | 20.3 | 20.5 | 20.8 | 21.4 | 17.7          | 18.1 | 18.2 | 18.6 | 19.2 |
| Variations with the objverver position at spacings |                 |      |      |      |      |               |      |      |      |      |
| S=1.0H   | 0.3/-0.3        |      |      |      |      | 0.5/-0.5      |      |      |      |      |
| S=1.5H   | 0.6/-0.7        |      |      |      |      | 0.8/-0.9      |      |      |      |      |
| S=2.0H   | 1.0/-0.9        |      |      |      |      | 1.3/-1.3      |      |      |      |      |
| Reduced UGR Table:                                 |                 |      |      |      |      |               |      |      |      |      |
| Nordic Standard Table:                             | BK0             |      |      |      |      | BK0           |      |      |      |      |
| Correction Value                                   | 1.2             |      |      |      |      | 1.0           |      |      |      |      |

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

IES Indoor Report

Photometric Filename:TR08-09-XX-02 4000K RA90 60D.IES

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Candela Tabulation

| V/H    | C0.0    | C90.0  | C180.0 | C270.0  |
|--------|---------|--------|--------|---------|
| γ 0.0  | 823.68  | 823.68 | 823.68 | 823.68  |
| γ 1.0  | 846.63  | 807.58 | 820.99 | 799.76  |
| γ 2.0  | 862.99  | 813.07 | 811.26 | 798.41  |
| γ 3.0  | 882.38  | 819.36 | 802.66 | 797.70  |
| γ 4.0  | 903.54  | 827.92 | 797.41 | 800.68  |
| γ 5.0  | 926.18  | 838.88 | 793.90 | 805.60  |
| γ 6.0  | 950.53  | 849.84 | 793.87 | 814.17  |
| γ 7.0  | 971.54  | 859.23 | 794.32 | 824.48  |
| γ 8.0  | 989.98  | 865.64 | 797.71 | 837.98  |
| γ 9.0  | 1004.71 | 867.63 | 801.10 | 852.92  |
| γ 10.0 | 1015.71 | 864.80 | 806.65 | 869.81  |
| γ 11.0 | 1018.59 | 858.35 | 812.99 | 887.82  |
| γ 12.0 | 1013.23 | 845.23 | 819.55 | 907.61  |
| γ 13.0 | 998.48  | 825.69 | 828.25 | 930.82  |
| γ 14.0 | 973.88  | 799.89 | 837.32 | 954.83  |
| γ 15.0 | 942.56  | 769.85 | 850.09 | 981.42  |
| γ 16.0 | 905.33  | 733.25 | 861.94 | 1010.07 |
| γ 17.0 | 863.36  | 693.49 | 872.02 | 1042.55 |
| γ 18.0 | 813.49  | 648.59 | 880.02 | 1067.34 |
| γ 19.0 | 758.60  | 600.03 | 885.21 | 1091.80 |
| γ 20.0 | 699.21  | 548.14 | 885.78 | 1109.43 |
| γ 21.0 | 636.05  | 494.09 | 880.77 | 1121.16 |
| γ 22.0 | 569.22  | 438.58 | 869.29 | 1123.45 |
| γ 23.0 | 503.72  | 385.46 | 851.78 | 1116.81 |
| γ 24.0 | 439.82  | 333.89 | 826.48 | 1100.05 |
| γ 25.0 | 378.77  | 285.41 | 796.18 | 1071.35 |
| γ 26.0 | 323.55  | 242.64 | 758.85 | 1033.88 |
| γ 27.0 | 273.62  | 204.45 | 715.85 | 986.79  |
| γ 28.0 | 229.83  | 171.65 | 667.12 | 930.86  |
| γ 29.0 | 191.32  | 143.11 | 614.22 | 868.05  |
| γ 30.0 | 158.99  | 118.96 | 556.91 | 797.34  |
| γ 31.0 | 132.34  | 99.13  | 498.03 | 722.92  |
| γ 32.0 | 110.86  | 82.98  | 437.62 | 645.70  |
| γ 33.0 | 92.25   | 70.30  | 378.74 | 568.34  |
| γ 34.0 | 77.53   | 59.85  | 323.58 | 492.35  |
| γ 35.0 | 66.49   | 51.63  | 272.72 | 420.13  |
| γ 36.0 | 58.21   | 45.08  | 227.63 | 353.35  |
| γ 37.0 | 51.62   | 40.07  | 189.04 | 294.08  |
| γ 38.0 | 46.47   | 36.31  | 156.04 | 243.27  |
| γ 39.0 | 42.36   | 33.14  | 128.48 | 199.50  |
| γ 40.0 | 39.06   | 30.53  | 105.04 | 163.45  |
| γ 41.0 | 36.19   | 28.25  | 85.75  | 133.15  |
| γ 42.0 | 33.79   | 26.28  | 70.49  | 108.93  |
| γ 43.0 | 31.68   | 24.49  | 58.59  | 89.74   |
| γ 44.0 | 29.62   | 22.78  | 49.28  | 74.66   |
| γ 45.0 | 27.59   | 21.17  | 42.21  | 63.25   |
| γ 46.0 | 25.70   | 19.61  | 36.96  | 54.43   |

Candela Tabulation - (Cont.)

| V/H    | C0.0  | C90.0 | C180.0 | C270.0 |
|--------|-------|-------|--------|--------|
| γ 47.0 | 23.95 | 18.18 | 32.96  | 47.55  |
| γ 48.0 | 22.29 | 16.75 | 29.85  | 42.15  |
| γ 49.0 | 20.72 | 15.66 | 27.35  | 37.85  |
| γ 50.0 | 19.18 | 14.69 | 25.28  | 34.47  |
| γ 51.0 | 17.97 | 13.75 | 23.48  | 31.75  |
| γ 52.0 | 16.89 | 12.85 | 21.86  | 29.03  |
| γ 53.0 | 15.85 | 11.99 | 20.36  | 26.73  |
| γ 54.0 | 14.87 | 11.09 | 19.00  | 24.74  |
| γ 55.0 | 13.91 | 10.24 | 17.76  | 23.09  |
| γ 56.0 | 12.95 | 9.44  | 16.60  | 21.58  |
| γ 57.0 | 12.01 | 8.73  | 15.47  | 20.24  |
| γ 58.0 | 11.13 | 8.06  | 14.39  | 19.00  |
| γ 59.0 | 10.31 | 7.40  | 13.58  | 17.78  |
| γ 60.0 | 9.56  | 6.78  | 12.95  | 16.55  |
| γ 61.0 | 8.85  | 6.18  | 12.34  | 15.64  |
| γ 62.0 | 8.12  | 5.62  | 11.73  | 14.95  |
| γ 63.0 | 7.43  | 5.22  | 11.16  | 14.31  |
| γ 64.0 | 6.79  | 4.81  | 10.53  | 13.67  |
| γ 65.0 | 6.35  | 4.39  | 9.90   | 13.02  |
| γ 66.0 | 5.92  | 4.07  | 9.25   | 12.37  |
| γ 67.0 | 5.48  | 3.79  | 8.68   | 11.67  |
| γ 68.0 | 5.10  | 3.52  | 8.15   | 10.99  |
| γ 69.0 | 4.79  | 3.27  | 7.61   | 10.33  |
| γ 70.0 | 4.48  | 3.02  | 7.07   | 9.71   |
| γ 71.0 | 4.21  | 2.79  | 6.56   | 9.11   |
| γ 72.0 | 3.94  | 2.57  | 6.05   | 8.50   |
| γ 73.0 | 3.69  | 2.36  | 5.65   | 7.84   |
| γ 74.0 | 3.46  | 2.17  | 5.28   | 7.16   |
| γ 75.0 | 3.24  | 1.99  | 4.89   | 6.70   |
| γ 76.0 | 3.04  | 1.81  | 4.52   | 6.32   |
| γ 77.0 | 2.83  | 1.64  | 4.23   | 5.88   |
| γ 78.0 | 2.63  | 1.48  | 3.95   | 5.47   |
| γ 79.0 | 2.44  | 1.34  | 3.68   | 5.14   |
| γ 80.0 | 2.27  | 1.20  | 3.41   | 4.84   |
| γ 81.0 | 2.10  | 1.05  | 3.19   | 4.52   |
| γ 82.0 | 1.93  | 0.93  | 2.95   | 4.26   |
| γ 83.0 | 1.78  | 0.84  | 2.72   | 3.98   |
| γ 84.0 | 1.63  | 0.77  | 2.52   | 3.73   |
| γ 85.0 | 1.52  | 0.72  | 2.31   | 3.49   |
| γ 86.0 | 1.44  | 0.65  | 2.12   | 3.27   |
| γ 87.0 | 1.36  | 0.61  | 1.93   | 3.03   |
| γ 88.0 | 1.28  | 0.54  | 1.76   | 2.82   |
| γ 89.0 | 1.21  | 0.49  | 1.59   | 2.61   |
| γ 90.0 | 1.13  | 0.44  | 1.44   | 2.41   |
| γ 91.0 | 1.07  | 0.39  | 1.29   | 2.22   |
| γ 92.0 | 1.00  | 0.34  | 1.15   | 2.01   |
| γ 93.0 | 0.92  | 0.29  | 1.04   | 1.85   |

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Candela Tabulation - (Cont.)

| V/H     | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 94.0  | 0.86 | 0.25  | 0.96   | 1.65   |
| γ 95.0  | 0.80 | 0.21  | 0.90   | 1.55   |
| γ 96.0  | 0.73 | 0.17  | 0.83   | 1.46   |
| γ 97.0  | 0.68 | 0.13  | 0.77   | 1.38   |
| γ 98.0  | 0.62 | 0.09  | 0.72   | 1.29   |
| γ 99.0  | 0.56 | 0.06  | 0.67   | 1.22   |
| γ 100.0 | 0.51 | 0.02  | 0.62   | 1.15   |
| γ 101.0 | 0.47 | 0.00  | 0.57   | 1.08   |
| γ 102.0 | 0.43 | 0.00  | 0.52   | 1.01   |
| γ 103.0 | 0.38 | 0.00  | 0.49   | 0.96   |
| γ 104.0 | 0.35 | 0.00  | 0.45   | 0.90   |
| γ 105.0 | 0.31 | 0.00  | 0.41   | 0.85   |
| γ 106.0 | 0.29 | 0.00  | 0.38   | 0.80   |
| γ 107.0 | 0.27 | 0.00  | 0.34   | 0.75   |
| γ 108.0 | 0.25 | 0.00  | 0.32   | 0.70   |
| γ 109.0 | 0.24 | 0.00  | 0.29   | 0.65   |
| γ 110.0 | 0.24 | 0.00  | 0.27   | 0.62   |
| γ 111.0 | 0.24 | 0.00  | 0.23   | 0.57   |
| γ 112.0 | 0.24 | 0.02  | 0.22   | 0.55   |
| γ 113.0 | 0.26 | 0.06  | 0.21   | 0.50   |
| γ 114.0 | 0.28 | 0.10  | 0.19   | 0.47   |
| γ 115.0 | 0.31 | 0.15  | 0.18   | 0.46   |
| γ 116.0 | 0.35 | 0.21  | 0.17   | 0.43   |
| γ 117.0 | 0.38 | 0.28  | 0.18   | 0.41   |
| γ 118.0 | 0.44 | 0.34  | 0.19   | 0.41   |
| γ 119.0 | 0.50 | 0.42  | 0.21   | 0.38   |
| γ 120.0 | 0.55 | 0.50  | 0.23   | 0.39   |
| γ 121.0 | 0.62 | 0.59  | 0.26   | 0.39   |
| γ 122.0 | 0.69 | 0.70  | 0.29   | 0.40   |
| γ 123.0 | 0.77 | 0.79  | 0.35   | 0.41   |
| γ 124.0 | 0.85 | 0.88  | 0.40   | 0.44   |
| γ 125.0 | 0.93 | 0.99  | 0.46   | 0.47   |
| γ 126.0 | 1.01 | 1.09  | 0.52   | 0.51   |
| γ 127.0 | 1.09 | 1.20  | 0.60   | 0.55   |
| γ 128.0 | 1.18 | 1.31  | 0.67   | 0.60   |
| γ 129.0 | 1.27 | 1.41  | 0.76   | 0.66   |
| γ 130.0 | 1.37 | 1.52  | 0.85   | 0.71   |
| γ 131.0 | 1.46 | 1.64  | 0.93   | 0.77   |
| γ 132.0 | 1.55 | 1.74  | 1.02   | 0.85   |
| γ 133.0 | 1.65 | 1.86  | 1.12   | 0.92   |
| γ 134.0 | 1.75 | 1.96  | 1.21   | 0.99   |
| γ 135.0 | 1.85 | 2.07  | 1.32   | 1.06   |
| γ 136.0 | 1.96 | 2.19  | 1.41   | 1.14   |
| γ 137.0 | 2.06 | 2.30  | 1.51   | 1.23   |
| γ 138.0 | 2.17 | 2.41  | 1.62   | 1.30   |
| γ 139.0 | 2.29 | 2.52  | 1.72   | 1.39   |
| γ 140.0 | 2.40 | 2.64  | 1.83   | 1.48   |

Candela Tabulation - (Cont.)

| V/H     | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 141.0 | 2.50 | 2.75  | 1.94   | 1.57   |
| γ 142.0 | 2.62 | 2.86  | 2.04   | 1.67   |
| γ 143.0 | 2.74 | 2.97  | 2.14   | 1.76   |
| γ 144.0 | 2.85 | 3.07  | 2.25   | 1.86   |
| γ 145.0 | 2.96 | 3.17  | 2.35   | 1.96   |
| γ 146.0 | 3.07 | 3.26  | 2.47   | 2.07   |
| γ 147.0 | 3.17 | 3.35  | 2.58   | 2.15   |
| γ 148.0 | 3.27 | 3.43  | 2.70   | 2.27   |
| γ 149.0 | 3.37 | 3.51  | 2.81   | 2.37   |
| γ 150.0 | 3.44 | 3.57  | 2.93   | 2.48   |
| γ 151.0 | 3.52 | 3.63  | 3.03   | 2.59   |
| γ 152.0 | 3.60 | 3.70  | 3.15   | 2.70   |
| γ 153.0 | 3.69 | 3.75  | 3.24   | 2.82   |
| γ 154.0 | 3.76 | 3.81  | 3.35   | 2.93   |
| γ 155.0 | 3.81 | 3.87  | 3.44   | 3.04   |
| γ 156.0 | 3.89 | 3.91  | 3.54   | 3.14   |
| γ 157.0 | 3.94 | 3.96  | 3.63   | 3.25   |
| γ 158.0 | 4.01 | 4.00  | 3.72   | 3.35   |
| γ 159.0 | 4.07 | 4.05  | 3.81   | 3.46   |
| γ 160.0 | 4.13 | 4.09  | 3.88   | 3.56   |
| γ 161.0 | 4.18 | 4.16  | 3.95   | 3.64   |
| γ 162.0 | 4.25 | 4.20  | 4.03   | 3.74   |
| γ 163.0 | 4.31 | 4.26  | 4.09   | 3.83   |
| γ 164.0 | 4.36 | 4.31  | 4.15   | 3.92   |
| γ 165.0 | 4.43 | 4.38  | 4.20   | 4.01   |
| γ 166.0 | 4.47 | 4.43  | 4.25   | 4.09   |
| γ 167.0 | 4.54 | 4.48  | 4.30   | 4.18   |
| γ 168.0 | 4.58 | 4.53  | 4.36   | 4.24   |
| γ 169.0 | 4.63 | 4.58  | 4.41   | 4.30   |
| γ 170.0 | 4.67 | 4.60  | 4.46   | 4.37   |
| γ 171.0 | 4.70 | 4.66  | 4.51   | 4.45   |
| γ 172.0 | 4.73 | 4.69  | 4.56   | 4.50   |
| γ 173.0 | 4.78 | 4.71  | 4.61   | 4.56   |
| γ 174.0 | 4.78 | 4.74  | 4.65   | 4.61   |
| γ 175.0 | 4.80 | 4.76  | 4.69   | 4.68   |
| γ 176.0 | 4.83 | 4.79  | 4.74   | 4.71   |
| γ 177.0 | 4.84 | 4.80  | 4.77   | 4.76   |
| γ 178.0 | 4.84 | 4.81  | 4.79   | 4.79   |
| γ 179.0 | 4.84 | 4.79  | 4.82   | 4.82   |
| γ 180.0 | 4.82 | 4.82  | 4.82   | 4.82   |