

## R852 WWL (CRI90 700mA 20D)

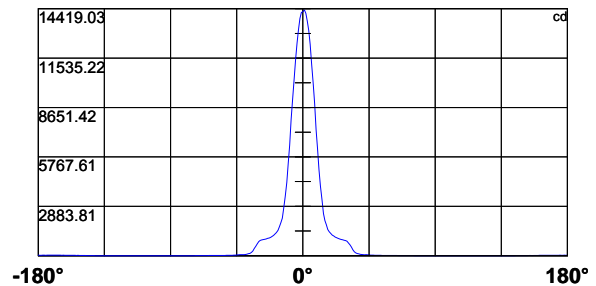
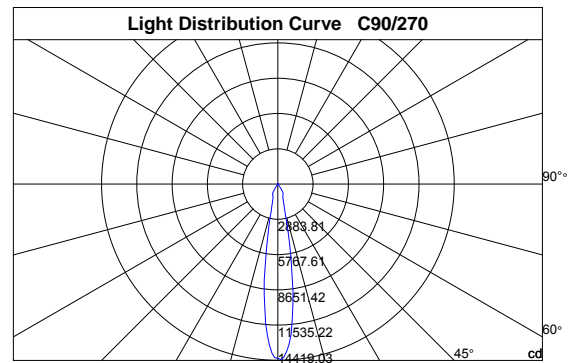
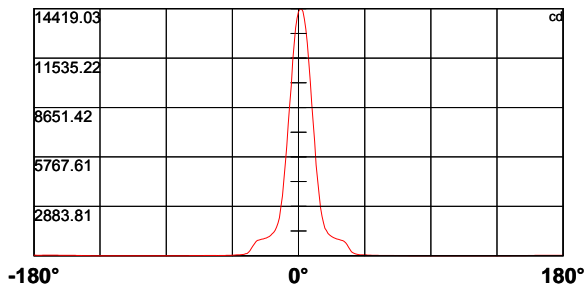
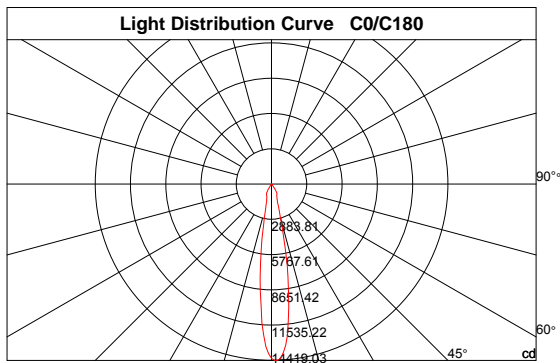
Luminaire Name: R852 WWL (CRI90 700mA 20D)  
 Report NO.: 01313217052512A  
 Test NO.:  
 Lamp: CITIZEN CLU028-1204C4-303H5M3 700mA  
 Sum Lumens: 2710.3 lm  
 Number of Lamps: 1  
 Diameter: 115mm  
 Length: -115mm  
 Photometric Type: Type C

Voltage: 230.19 V  
 Current: 0.1359 A  
 Power: 30.079 W  
 Power Factor: 0.9617  
 Ballast Type: PHILIPS XITANIUM 32W 0.7 0.75A 42 I 230V  
 Width: -115mm  
 Height: 72mm  
 Optical Component: 20D Reflector DC(V:36.59V I:0.698A P:25.54W)

## Photometric Results

Lumens: 2315.22 lm  
 Efficiency: 85.42%  
 Central Intensity: 14245.03cd  
 Maximum Intensity: 14419.03cd  
 Beam Angle(10%): Left: -17.3 Right:18.1  
 Maximum s/h: C0\_180: 0.17 C90\_270: 0.16  
 Effective Luminous Flux: 1489.30 lm

Angle of maximum intensity: C:0.0 G:1.0  
 Half Peak Side Angle(50%): Left: -8.4 Right:9.5  
 Up Flux Rate: 0.64%  
 Down Flux Rate: 84.79%  
 CIE Classification: Direct



## R852 WWL (CRI90 700mA 20D)

### Intensity Data [cd]

Page2

| C\γ   | 0.0     | 1.0     | 2.0     | 3.0     | 4.0     | 5.0     | 6.0     | 7.0     | 8.0     | 9.0    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0.0   | 14245.0 | 14419.0 | 14410.5 | 14252.9 | 13805.6 | 13217.8 | 12408.5 | 11232.8 | 10138.0 | 8843.1 |
| 30.0  | 14245.0 | 14402.0 | 14367.9 | 14167.7 | 13758.8 | 12966.5 | 12106.0 | 11245.6 | 9737.6  | 8596.0 |
| 60.0  | 14245.0 | 14372.2 | 14257.2 | 13954.7 | 13498.9 | 12583.1 | 11650.2 | 10542.7 | 9183.9  | 8033.8 |
| 90.0  | 14245.0 | 14350.9 | 14150.7 | 13694.9 | 13145.4 | 12340.3 | 11190.2 | 10044.3 | 8872.9  | 7348.0 |
| 120.0 | 14245.0 | 13886.6 | 13247.6 | 12489.4 | 11718.4 | 10287.1 | 9166.8  | 7867.6  | 6777.2  | 5733.5 |
| 150.0 | 14245.0 | 13856.8 | 13149.6 | 12327.5 | 11335.0 | 10031.5 | 8928.3  | 7837.8  | 6479.0  | 5460.9 |
| 180.0 | 14245.0 | 13865.3 | 13294.5 | 12353.1 | 11369.1 | 9925.1  | 8804.8  | 7693.0  | 6423.6  | 5401.3 |
| 210.0 | 14245.0 | 13826.9 | 13264.7 | 12485.1 | 11684.3 | 10287.1 | 9179.6  | 7880.4  | 6794.2  | 5725.0 |
| 240.0 | 14245.0 | 14057.0 | 13618.2 | 12987.8 | 11833.4 | 10811.1 | 9533.2  | 8400.1  | 7292.6  | 5844.3 |
| 270.0 | 14245.0 | 14197.5 | 13852.5 | 13196.5 | 12408.5 | 11458.5 | 10206.2 | 9090.2  | 7957.1  | 6461.9 |
| 300.0 | 14245.0 | 14350.9 | 14312.5 | 14082.5 | 13516.0 | 12847.2 | 11956.9 | 11122.0 | 9661.0  | 8536.4 |
| 330.0 | 14245.0 | 14397.7 | 14380.7 | 14189.0 | 13763.0 | 13183.7 | 12399.9 | 11079.4 | 9997.5  | 8702.5 |
| 360.0 | 14245.0 | 14419.0 | 14410.5 | 14252.9 | 13805.6 | 13217.8 | 12408.5 | 11232.8 | 10138.0 | 8843.1 |

| C\γ   | 10.0   | 11.0   | 12.0   | 13.0   | 14.0   | 15.0   | 16.0   | 17.0   | 18.0   | 19.0   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0.0   | 7739.8 | 6666.4 | 5303.3 | 4374.7 | 3561.1 | 2794.4 | 2300.2 | 1929.6 | 1597.4 | 1461.1 |
| 30.0  | 7309.6 | 6244.7 | 5226.6 | 3982.8 | 3203.3 | 2598.4 | 2074.5 | 1763.5 | 1546.3 | 1380.1 |
| 60.0  | 6922.0 | 5673.9 | 4660.1 | 3744.3 | 2773.1 | 2261.9 | 1844.4 | 1610.2 | 1448.3 | 1303.5 |
| 90.0  | 6244.7 | 5022.2 | 4068.0 | 3262.9 | 2457.8 | 2053.2 | 1801.8 | 1533.5 | 1397.2 | 1294.9 |
| 120.0 | 4442.8 | 3603.7 | 2922.1 | 2330.0 | 1985.0 | 1695.4 | 1520.7 | 1392.9 | 1265.1 | 1188.5 |
| 150.0 | 4357.7 | 3539.8 | 2879.5 | 2308.7 | 1959.5 | 1644.2 | 1486.6 | 1363.1 | 1260.9 | 1188.5 |
| 180.0 | 4459.9 | 3497.2 | 2849.7 | 2215.0 | 1895.6 | 1669.8 | 1478.1 | 1363.1 | 1273.6 | 1179.9 |
| 210.0 | 4421.6 | 3586.7 | 2909.4 | 2317.3 | 1955.2 | 1674.1 | 1503.7 | 1380.1 | 1265.1 | 1192.7 |
| 240.0 | 4979.6 | 4042.4 | 3032.9 | 2474.9 | 2074.5 | 1746.5 | 1554.8 | 1375.9 | 1282.2 | 1209.8 |
| 270.0 | 5405.5 | 4268.2 | 3446.1 | 2798.6 | 2193.7 | 1925.4 | 1695.4 | 1473.8 | 1354.6 | 1265.1 |
| 300.0 | 7250.0 | 6172.3 | 5137.2 | 4051.0 | 3156.4 | 2572.8 | 2087.2 | 1789.1 | 1580.3 | 1388.7 |
| 330.0 | 7612.1 | 6534.4 | 5512.0 | 4408.8 | 3590.9 | 2721.9 | 2253.4 | 1904.1 | 1622.9 | 1456.8 |
| 360.0 | 7739.8 | 6666.4 | 5303.3 | 4374.7 | 3561.1 | 2794.4 | 2300.2 | 1929.6 | 1597.4 | 1461.1 |

| C\γ   | 20.0   | 21.0   | 22.0   | 23.0   | 24.0   | 25.0   | 26.0  | 27.0  | 28.0  | 29.0  |
|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 0.0   | 1303.5 | 1218.3 | 1158.6 | 1094.7 | 1052.1 | 1013.8 | 975.5 | 954.2 | 928.6 | 903.1 |
| 30.0  | 1277.9 | 1184.2 | 1128.8 | 1077.7 | 1035.1 | 1005.3 | 975.5 | 941.4 | 915.8 | 903.1 |
| 60.0  | 1235.3 | 1171.4 | 1103.3 | 1064.9 | 1022.3 | 996.8  | 966.9 | 932.9 | 907.3 | 890.3 |
| 90.0  | 1205.5 | 1145.9 | 1086.2 | 1052.1 | 1013.8 | 979.7  | 949.9 | 928.6 | 903.1 | 881.8 |
| 120.0 | 1128.8 | 1073.4 | 1039.4 | 1009.5 | 984.0  | 962.7  | 941.4 | 911.6 | 886.0 | 822.1 |
| 150.0 | 1128.8 | 1060.7 | 1026.6 | 1005.3 | 975.5  | 949.9  | 924.4 | 903.1 | 877.5 | 783.8 |
| 180.0 | 1120.3 | 1082.0 | 1035.1 | 1009.5 | 979.7  | 962.7  | 941.4 | 911.6 | 890.3 | 813.6 |
| 210.0 | 1133.1 | 1077.7 | 1043.6 | 1013.8 | 988.2  | 962.7  | 932.9 | 920.1 | 898.8 | 830.6 |
| 240.0 | 1141.6 | 1094.7 | 1056.4 | 1022.3 | 1001.0 | 975.5  | 945.6 | 928.6 | 907.3 | 869.0 |
| 270.0 | 1184.2 | 1124.6 | 1069.2 | 1035.1 | 1009.5 | 979.7  | 958.4 | 937.1 | 915.8 | 890.3 |
| 300.0 | 1290.7 | 1209.8 | 1137.3 | 1090.5 | 1035.1 | 1009.5 | 979.7 | 941.4 | 920.1 | 898.8 |
| 330.0 | 1333.3 | 1231.0 | 1158.6 | 1111.8 | 1052.1 | 1009.5 | 975.5 | 945.6 | 920.1 | 898.8 |
| 360.0 | 1303.5 | 1218.3 | 1158.6 | 1094.7 | 1052.1 | 1013.8 | 975.5 | 954.2 | 928.6 | 903.1 |

**R852 WWL (CRI90 700mA 20D)**

Page3

**Intensity Data [cd]**

| C\γ   | 30.0  | 31.0  | 32.0  | 33.0  | 34.0  | 35.0  | 36.0  | 37.0  | 38.0  | 39.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 0.0   | 881.8 | 834.9 | 749.7 | 639.0 | 489.9 | 366.3 | 234.3 | 166.1 | 119.3 | 98.0 |
| 30.0  | 869.0 | 822.1 | 728.4 | 587.8 | 460.0 | 285.4 | 195.9 | 132.1 | 115.0 | 93.7 |
| 60.0  | 856.2 | 788.0 | 681.5 | 528.2 | 400.4 | 276.9 | 161.9 | 123.5 | 106.5 | 85.2 |
| 90.0  | 843.4 | 745.4 | 630.4 | 494.1 | 340.8 | 234.3 | 157.6 | 127.8 | 106.5 | 80.9 |
| 120.0 | 702.8 | 570.8 | 391.9 | 281.1 | 183.2 | 106.5 | 89.5  | 72.4  | 59.6  | 51.1 |
| 150.0 | 673.0 | 545.2 | 396.2 | 272.6 | 157.6 | 106.5 | 89.5  | 68.2  | 55.4  | 51.1 |
| 180.0 | 694.3 | 562.3 | 434.5 | 293.9 | 200.2 | 132.1 | 115.0 | 85.2  | 63.9  | 59.6 |
| 210.0 | 724.1 | 604.9 | 451.5 | 319.5 | 191.7 | 132.1 | 115.0 | 89.5  | 68.2  | 59.6 |
| 240.0 | 779.5 | 643.2 | 502.6 | 370.6 | 213.0 | 153.3 | 119.3 | 93.7  | 72.4  | 63.9 |
| 270.0 | 830.6 | 690.1 | 553.8 | 421.7 | 276.9 | 191.7 | 136.3 | 115.0 | 89.5  | 68.2 |
| 300.0 | 873.2 | 834.9 | 758.2 | 604.9 | 494.1 | 357.8 | 200.2 | 132.1 | 89.5  | 68.2 |
| 330.0 | 869.0 | 834.9 | 758.2 | 626.2 | 494.1 | 370.6 | 213.0 | 136.3 | 93.7  | 76.7 |
| 360.0 | 881.8 | 834.9 | 749.7 | 639.0 | 489.9 | 366.3 | 234.3 | 166.1 | 119.3 | 98.0 |

| C\γ   | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 | 45.0 | 46.0 | 47.0 | 48.0 | 49.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 0.0   | 76.7 | 59.6 | 55.4 | 55.4 | 55.4 | 55.4 | 51.1 | 34.1 | 25.6 | 25.6 |
| 30.0  | 76.7 | 59.6 | 55.4 | 55.4 | 55.4 | 55.4 | 51.1 | 29.8 | 25.6 | 25.6 |
| 60.0  | 68.2 | 59.6 | 51.1 | 51.1 | 51.1 | 46.9 | 42.6 | 29.8 | 25.6 | 21.3 |
| 90.0  | 63.9 | 59.6 | 55.4 | 59.6 | 55.4 | 51.1 | 38.3 | 29.8 | 25.6 | 21.3 |
| 120.0 | 46.9 | 42.6 | 42.6 | 38.3 | 38.3 | 29.8 | 25.6 | 25.6 | 21.3 | 17.0 |
| 150.0 | 42.6 | 42.6 | 42.6 | 34.1 | 34.1 | 25.6 | 25.6 | 21.3 | 17.0 | 17.0 |
| 180.0 | 55.4 | 51.1 | 51.1 | 46.9 | 34.1 | 25.6 | 21.3 | 21.3 | 17.0 | 17.0 |
| 210.0 | 55.4 | 55.4 | 55.4 | 51.1 | 42.6 | 29.8 | 25.6 | 21.3 | 17.0 | 17.0 |
| 240.0 | 59.6 | 59.6 | 55.4 | 55.4 | 46.9 | 29.8 | 25.6 | 25.6 | 21.3 | 17.0 |
| 270.0 | 59.6 | 59.6 | 59.6 | 59.6 | 55.4 | 42.6 | 25.6 | 25.6 | 21.3 | 21.3 |
| 300.0 | 55.4 | 46.9 | 42.6 | 42.6 | 38.3 | 38.3 | 38.3 | 34.1 | 25.6 | 25.6 |
| 330.0 | 59.6 | 51.1 | 46.9 | 38.3 | 38.3 | 38.3 | 38.3 | 34.1 | 25.6 | 25.6 |
| 360.0 | 76.7 | 59.6 | 55.4 | 55.4 | 55.4 | 55.4 | 51.1 | 34.1 | 25.6 | 25.6 |

| C\γ   | 50.0 | 51.0 | 52.0 | 53.0 | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 0.0   | 21.3 | 17.0 | 17.0 | 17.0 | 17.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |
| 30.0  | 21.3 | 17.0 | 17.0 | 17.0 | 17.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |
| 60.0  | 21.3 | 17.0 | 17.0 | 17.0 | 17.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |
| 90.0  | 21.3 | 17.0 | 17.0 | 17.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |
| 120.0 | 17.0 | 17.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |
| 150.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |
| 180.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 12.8 | 12.8 | 12.8 | 12.8 |
| 210.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 12.8 |
| 240.0 | 17.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |
| 270.0 | 17.0 | 17.0 | 17.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |
| 300.0 | 17.0 | 17.0 | 17.0 | 17.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |
| 330.0 | 21.3 | 17.0 | 17.0 | 17.0 | 17.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |
| 360.0 | 21.3 | 17.0 | 17.0 | 17.0 | 17.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |

**R852 WWL (CRI90 700mA 20D)****Intensity Data [cd]****Page4**

| C\γ   | 60.0 | 61.0 | 62.0 | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 0.0   | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 12.8 | 8.5  | 8.5  |
| 30.0  | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 8.5  | 8.5  |
| 60.0  | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 8.5  | 8.5  | 8.5  | 4.3  |
| 90.0  | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 8.5  | 8.5  | 8.5  | 8.5  |
| 120.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 8.5  | 8.5  | 8.5  | 4.3  |
| 150.0 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 8.5  | 8.5  | 4.3  | 4.3  | 4.3  |
| 180.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 8.5  | 8.5  | 4.3  | 4.3  |
| 210.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 8.5  | 8.5  | 8.5  | 4.3  |
| 240.0 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 8.5  | 8.5  | 8.5  | 8.5  | 4.3  |
| 270.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 8.5  | 8.5  | 8.5  | 4.3  |
| 300.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 8.5  | 8.5  | 8.5  | 8.5  |
| 330.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 8.5  | 8.5  | 8.5  | 8.5  |
| 360.0 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 8.5  | 12.8 | 8.5  | 8.5  |

| C\γ   | 70.0 | 71.0 | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 0.0   | 8.5  | 4.3  | 4.3  | 4.3  | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 30.0  | 4.3  | 8.5  | 4.3  | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 60.0  | 4.3  | 4.3  | 4.3  | 4.3  | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 90.0  | 4.3  | 4.3  | 4.3  | 4.3  | 4.3  | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  |
| 120.0 | 8.5  | 4.3  | 4.3  | 4.3  | 4.3  | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  |
| 150.0 | 4.3  | 4.3  | 4.3  | 4.3  | 4.3  | 0.0  | 4.3  | 0.0  | 0.0  | 0.0  |
| 180.0 | 4.3  | 4.3  | 4.3  | 4.3  | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 210.0 | 4.3  | 4.3  | 4.3  | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 240.0 | 4.3  | 4.3  | 4.3  | 4.3  | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 270.0 | 4.3  | 4.3  | 4.3  | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 300.0 | 8.5  | 4.3  | 4.3  | 4.3  | 4.3  | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  |
| 330.0 | 8.5  | 4.3  | 4.3  | 4.3  | 4.3  | 0.0  | 4.3  | 0.0  | 0.0  | 0.0  |
| 360.0 | 8.5  | 4.3  | 4.3  | 4.3  | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |

| C\γ   | 80.0 | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 30.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 60.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 90.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 120.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 150.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 180.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 210.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 240.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 270.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 300.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 330.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 360.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |

## R852 WWL (CRI90 700mA 20D)

### Intensity Data [cd]

Page5

| C\γ   | 90.0 | 91.0 | 92.0 | 93.0 | 94.0 | 95.0 | 96.0 | 97.0 | 98.0 | 99.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 30.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 60.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 90.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 120.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 150.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 180.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 210.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 240.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 270.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 300.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 330.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 360.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |

| C\γ   | 100.0 | 101.0 | 102.0 | 103.0 | 104.0 | 105.0 | 106.0 | 107.0 | 108.0 | 109.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 30.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 90.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 120.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 150.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 180.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 210.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 240.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 270.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 300.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 330.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 360.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

| C\γ   | 110.0 | 111.0 | 112.0 | 113.0 | 114.0 | 115.0 | 116.0 | 117.0 | 118.0 | 119.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 30.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 90.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 120.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 150.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 180.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 210.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 240.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 270.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 300.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 330.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 360.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

**R852 WWL (CRI90 700mA 20D)****Intensity Data [cd]****Page6**

| C\γ   | 120.0 | 121.0 | 122.0 | 123.0 | 124.0 | 125.0 | 126.0 | 127.0 | 128.0 | 129.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 30.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 90.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 120.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 150.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 180.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 210.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 240.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 270.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 300.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 330.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 360.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

| C\γ   | 130.0 | 131.0 | 132.0 | 133.0 | 134.0 | 135.0 | 136.0 | 137.0 | 138.0 | 139.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 30.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 90.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 120.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 150.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 180.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 210.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 240.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 270.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 300.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 330.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 360.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

| C\γ   | 140.0 | 141.0 | 142.0 | 143.0 | 144.0 | 145.0 | 146.0 | 147.0 | 148.0 | 149.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 4.3   | 4.3   | 4.3   | 4.3   | 4.3   |
| 30.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 4.3   | 4.3   | 4.3   | 4.3   | 4.3   |
| 60.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 4.3   | 0.0   | 4.3   | 4.3   | 4.3   |
| 90.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 4.3   | 4.3   | 4.3   | 4.3   | 4.3   |
| 120.0 | 0.0   | 0.0   | 4.3   | 4.3   | 8.5   | 8.5   | 8.5   | 8.5   | 12.8  | 12.8  |
| 150.0 | 0.0   | 4.3   | 4.3   | 4.3   | 4.3   | 8.5   | 8.5   | 8.5   | 12.8  | 12.8  |
| 180.0 | 0.0   | 0.0   | 4.3   | 4.3   | 8.5   | 8.5   | 8.5   | 8.5   | 12.8  | 12.8  |
| 210.0 | 0.0   | 4.3   | 4.3   | 4.3   | 4.3   | 8.5   | 8.5   | 8.5   | 8.5   | 12.8  |
| 240.0 | 0.0   | 4.3   | 4.3   | 4.3   | 4.3   | 8.5   | 8.5   | 8.5   | 8.5   | 12.8  |
| 270.0 | 0.0   | 0.0   | 4.3   | 4.3   | 4.3   | 8.5   | 8.5   | 8.5   | 12.8  | 12.8  |
| 300.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 4.3   | 4.3   | 8.5   |
| 330.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 4.3   | 4.3   | 4.3   | 4.3   |
| 360.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 4.3   | 4.3   | 4.3   | 4.3   | 4.3   |

**R852 WWL (CRI90 700mA 20D)****Intensity Data [cd]****Page7**

| C\γ   | 150.0 | 151.0 | 152.0 | 153.0 | 154.0 | 155.0 | 156.0 | 157.0 | 158.0 | 159.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.0   | 4.3   | 8.5   | 8.5   | 8.5   | 8.5   | 8.5   | 12.8  | 12.8  | 12.8  | 12.8  |
| 30.0  | 8.5   | 8.5   | 8.5   | 8.5   | 8.5   | 8.5   | 12.8  | 12.8  | 12.8  | 12.8  |
| 60.0  | 8.5   | 8.5   | 8.5   | 8.5   | 8.5   | 12.8  | 12.8  | 12.8  | 12.8  | 12.8  |
| 90.0  | 8.5   | 8.5   | 8.5   | 8.5   | 12.8  | 12.8  | 8.5   | 12.8  | 12.8  | 12.8  |
| 120.0 | 12.8  | 12.8  | 12.8  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 21.3  | 21.3  |
| 150.0 | 12.8  | 12.8  | 12.8  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 21.3  | 21.3  |
| 180.0 | 12.8  | 12.8  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 21.3  | 21.3  |
| 210.0 | 12.8  | 12.8  | 12.8  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 21.3  |
| 240.0 | 12.8  | 12.8  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 21.3  |
| 270.0 | 12.8  | 12.8  | 12.8  | 17.0  | 12.8  | 17.0  | 17.0  | 17.0  | 17.0  | 21.3  |
| 300.0 | 8.5   | 8.5   | 8.5   | 8.5   | 8.5   | 12.8  | 8.5   | 12.8  | 12.8  | 12.8  |
| 330.0 | 8.5   | 8.5   | 8.5   | 8.5   | 8.5   | 12.8  | 12.8  | 12.8  | 12.8  | 12.8  |
| 360.0 | 4.3   | 8.5   | 8.5   | 8.5   | 8.5   | 8.5   | 12.8  | 12.8  | 12.8  | 12.8  |

| C\γ   | 160.0 | 161.0 | 162.0 | 163.0 | 164.0 | 165.0 | 166.0 | 167.0 | 168.0 | 169.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.0   | 12.8  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 21.3  | 21.3  |
| 30.0  | 12.8  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 21.3  | 21.3  |
| 60.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  |
| 90.0  | 12.8  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 21.3  | 21.3  |
| 120.0 | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  |
| 150.0 | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  |
| 180.0 | 21.3  | 21.3  | 21.3  | 21.3  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  |
| 210.0 | 21.3  | 21.3  | 21.3  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  |
| 240.0 | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  |
| 270.0 | 21.3  | 21.3  | 21.3  | 25.6  | 21.3  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  |
| 300.0 | 12.8  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 21.3  | 21.3  | 21.3  |
| 330.0 | 12.8  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 21.3  | 21.3  | 21.3  |
| 360.0 | 12.8  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 21.3  | 21.3  |

| C\γ   | 170.0 | 171.0 | 172.0 | 173.0 | 174.0 | 175.0 | 176.0 | 177.0 | 178.0 | 179.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.0   | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  |
| 30.0  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  |
| 60.0  | 21.3  | 21.3  | 21.3  | 25.6  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 25.6  |
| 90.0  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 25.6  | 21.3  | 21.3  | 25.6  | 21.3  |
| 120.0 | 29.8  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  | 21.3  | 21.3  | 21.3  |
| 150.0 | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  | 21.3  | 25.6  | 21.3  |
| 180.0 | 25.6  | 29.8  | 25.6  | 25.6  | 25.6  | 21.3  | 21.3  | 21.3  | 21.3  | 25.6  |
| 210.0 | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  | 21.3  | 21.3  | 21.3  | 25.6  |
| 240.0 | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  | 21.3  | 21.3  | 25.6  | 21.3  | 21.3  |
| 270.0 | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  | 21.3  | 25.6  | 25.6  | 21.3  | 21.3  |
| 300.0 | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 25.6  | 21.3  | 21.3  |
| 330.0 | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 25.6  | 21.3  | 21.3  | 21.3  | 21.3  |
| 360.0 | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  |

Intensity Data [cd]

Page8

|       |       |
|-------|-------|
| C\γ   | 180.0 |
| 0.0   | 25.6  |
| 30.0  | 21.3  |
| 60.0  | 21.3  |
| 90.0  | 25.6  |
| 120.0 | 21.3  |
| 150.0 | 21.3  |
| 180.0 | 25.6  |
| 210.0 | 21.3  |
| 240.0 | 21.3  |
| 270.0 | 25.6  |
| 300.0 | 21.3  |
| 330.0 | 21.3  |
| 360.0 | 25.6  |



**R852 WWL (CRI90 700mA 20D)**

Zonal flux distribution table

Page9

| Gamma<br>[°] | Average I<br>[cd] | Zonal Flux<br>[lm] | Sum Flux<br>[lm] | Effective Flux<br>[lm] | Effective Sum<br>[lm] |
|--------------|-------------------|--------------------|------------------|------------------------|-----------------------|
| 0            | 14245.03          | 0.00               | 0.00             | 0.00                   | 0.00                  |
| 1            | 14165.22          | 13.59              | 13.59            | 13.59                  | 13.59                 |
| 2            | 13858.88          | 40.22              | 53.82            | 40.22                  | 53.82                 |
| 3            | 13348.43          | 65.07              | 118.89           | 65.07                  | 118.89                |
| 4            | 12653.04          | 87.04              | 205.92           | 87.04                  | 205.92                |
| 5            | 11661.59          | 104.60             | 310.52           | 104.60                 | 310.52                |
| 6            | 10627.56          | 117.14             | 427.66           | 117.14                 | 427.66                |
| 7            | 9503.00           | 124.95             | 552.61           | 124.95                 | 552.61                |
| 8            | 8276.21           | 127.24             | 679.85           | 127.24                 | 679.85                |
| 9            | 7057.23           | 124.27             | 804.12           | 124.27                 | 804.12                |
| 10           | 5928.77           | 117.52             | 921.64           | 117.52                 | 921.64                |
| 11           | 4904.32           | 108.24             | 1029.88          | 108.24                 | 1029.88               |
| 12           | 3995.58           | 97.29              | 1127.17          | 97.29                  | 1127.17               |
| 13           | 3189.08           | 85.26              | 1212.44          | 85.26                  | 1212.44               |
| 14           | 2567.17           | 73.68              | 1286.12          | 73.68                  | 1286.12               |
| 15           | 2113.16           | 64.25              | 1350.37          | 64.25                  | 1350.37               |
| 16           | 1800.07           | 57.34              | 1407.71          | 57.34                  | 1407.71               |
| 17           | 1573.24           | 52.53              | 1460.24          | 41.38                  | 1449.09               |
| 18           | 1407.83           | 49.15              | 1509.39          | 27.03                  | 1476.12               |
| 19           | 1292.46           | 46.98              | 1556.37          | 13.17                  | 1489.30               |
| 20           | 1206.91           | 45.75              | 1602.12          | 0.00                   | 1489.30               |
| 21           | 1139.47           | 45.06              | 1647.17          | 0.00                   | 1489.30               |
| 22           | 1086.93           | 44.74              | 1691.91          | 0.00                   | 1489.30               |
| 23           | 1048.95           | 44.82              | 1736.73          | 0.00                   | 1489.30               |
| 24           | 1012.39           | 45.07              | 1781.80          | 0.00                   | 1489.30               |
| 25           | 983.99            | 45.39              | 1827.19          | 0.00                   | 1489.30               |
| 26           | 955.59            | 45.78              | 1872.98          | 0.00                   | 1489.30               |
| 27           | 929.68            | 46.12              | 1919.10          | 0.00                   | 1489.30               |
| 28           | 905.89            | 46.47              | 1965.57          | 0.00                   | 1489.30               |
| 29           | 865.43            | 46.34              | 2011.91          | 0.00                   | 1489.30               |
| 30           | 799.76            | 44.96              | 2056.87          | 0.00                   | 1489.30               |
| 31           | 706.40            | 41.91              | 2098.79          | 0.00                   | 1489.30               |
| 32           | 586.42            | 37.04              | 2135.82          | 0.00                   | 1489.30               |
| 33           | 453.30            | 30.63              | 2166.46          | 0.00                   | 1489.30               |
| 34           | 325.16            | 23.56              | 2190.01          | 0.00                   | 1489.30               |
| 35           | 226.12            | 17.12              | 2207.13          | 0.00                   | 1489.30               |
| 36           | 152.28            | 12.05              | 2219.18          | 0.00                   | 1489.30               |
| 37           | 111.82            | 8.61               | 2227.80          | 0.00                   | 1489.30               |
| 38           | 86.61             | 6.62               | 2234.42          | 0.00                   | 1489.30               |
| 39           | 71.35             | 5.39               | 2239.81          | 0.00                   | 1489.30               |
| 40           | 59.99             | 4.58               | 2244.39          | 0.00                   | 1489.30               |

**R852 WWL (CRI90 700mA 20D)**

Zonal flux distribution table

Page10

| Gamma<br>[°] | Average I<br>[cd] | Zonal Flux<br>[lm] | Sum Flux<br>[lm] | Effective Flux<br>[lm] | Effective Sum<br>[lm] |
|--------------|-------------------|--------------------|------------------|------------------------|-----------------------|
| 41           | 53.96             | 4.06               | 2248.45          | 0.00                   | 1489.30               |
| 42           | 51.12             | 3.82               | 2252.27          | 0.00                   | 1489.30               |
| 43           | 48.99             | 3.71               | 2255.97          | 0.00                   | 1489.30               |
| 44           | 45.44             | 3.56               | 2259.54          | 0.00                   | 1489.30               |
| 45           | 39.05             | 3.25               | 2262.78          | 0.00                   | 1489.30               |
| 46           | 34.08             | 2.86               | 2265.64          | 0.00                   | 1489.30               |
| 47           | 27.69             | 2.46               | 2268.10          | 0.00                   | 1489.30               |
| 48           | 22.36             | 2.02               | 2270.12          | 0.00                   | 1489.30               |
| 49           | 20.94             | 1.78               | 2271.90          | 0.00                   | 1489.30               |
| 50           | 17.75             | 1.61               | 2273.52          | 0.00                   | 1489.30               |
| 51           | 15.62             | 1.41               | 2274.93          | 0.00                   | 1489.30               |
| 52           | 15.26             | 1.33               | 2276.25          | 0.00                   | 1489.30               |
| 53           | 14.91             | 1.31               | 2277.56          | 0.00                   | 1489.30               |
| 54           | 14.20             | 1.28               | 2278.85          | 0.00                   | 1489.30               |
| 55           | 12.42             | 1.19               | 2280.04          | 0.00                   | 1489.30               |
| 56           | 12.78             | 1.14               | 2281.17          | 0.00                   | 1489.30               |
| 57           | 12.78             | 1.17               | 2282.34          | 0.00                   | 1489.30               |
| 58           | 12.42             | 1.17               | 2283.51          | 0.00                   | 1489.30               |
| 59           | 12.78             | 1.18               | 2284.69          | 0.00                   | 1489.30               |
| 60           | 12.78             | 1.21               | 2285.89          | 0.00                   | 1489.30               |
| 61           | 12.78             | 1.22               | 2287.11          | 0.00                   | 1489.30               |
| 62           | 12.78             | 1.23               | 2288.34          | 0.00                   | 1489.30               |
| 63           | 12.78             | 1.24               | 2289.59          | 0.00                   | 1489.30               |
| 64           | 12.07             | 1.22               | 2290.80          | 0.00                   | 1489.30               |
| 65           | 9.23              | 1.05               | 2291.86          | 0.00                   | 1489.30               |
| 66           | 8.87              | 0.90               | 2292.76          | 0.00                   | 1489.30               |
| 67           | 8.52              | 0.87               | 2293.64          | 0.00                   | 1489.30               |
| 68           | 7.81              | 0.83               | 2294.46          | 0.00                   | 1489.30               |
| 69           | 6.03              | 0.71               | 2295.17          | 0.00                   | 1489.30               |
| 70           | 5.68              | 0.60               | 2295.77          | 0.00                   | 1489.30               |
| 71           | 4.61              | 0.53               | 2296.30          | 0.00                   | 1489.30               |
| 72           | 4.26              | 0.46               | 2296.76          | 0.00                   | 1489.30               |
| 73           | 4.26              | 0.45               | 2297.21          | 0.00                   | 1489.30               |
| 74           | 3.19              | 0.39               | 2297.60          | 0.00                   | 1489.30               |
| 75           | 1.06              | 0.23               | 2297.83          | 0.00                   | 1489.30               |
| 76           | 0.71              | 0.09               | 2297.92          | 0.00                   | 1489.30               |
| 77           | 0.00              | 0.04               | 2297.96          | 0.00                   | 1489.30               |
| 78           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 79           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 80           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 81           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |

**R852 WWL (CRI90 700mA 20D)**

Zonal flux distribution table

Page11

| Gamma<br>[°] | Average I<br>[cd] | Zonal Flux<br>[lm] | Sum Flux<br>[lm] | Effective Flux<br>[lm] | Effective Sum<br>[lm] |
|--------------|-------------------|--------------------|------------------|------------------------|-----------------------|
| 82           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 83           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 84           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 85           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 86           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 87           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 88           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 89           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 90           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 91           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 92           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 93           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 94           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 95           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 96           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 97           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 98           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 99           | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 100          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 101          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 102          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 103          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 104          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 105          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 106          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 107          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 108          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 109          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 110          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 111          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 112          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 113          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 114          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 115          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 116          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 117          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 118          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 119          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 120          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 121          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 122          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |

**R852 WWL (CRI90 700mA 20D)**

Zonal flux distribution table

Page12

| Gamma<br>[°] | Average I<br>[cd] | Zonal Flux<br>[lm] | Sum Flux<br>[lm] | Effective Flux<br>[lm] | Effective Sum<br>[lm] |
|--------------|-------------------|--------------------|------------------|------------------------|-----------------------|
| 123          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 124          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 125          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 126          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 127          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 128          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 129          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 130          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 131          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 132          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 133          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 134          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 135          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 136          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 137          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 138          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 139          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 140          | 0.00              | 0.00               | 2297.96          | 0.00                   | 1489.30               |
| 141          | 1.06              | 0.04               | 2298.00          | 0.00                   | 1489.30               |
| 142          | 2.13              | 0.11               | 2298.10          | 0.00                   | 1489.30               |
| 143          | 2.13              | 0.14               | 2298.25          | 0.00                   | 1489.30               |
| 144          | 2.84              | 0.16               | 2298.41          | 0.00                   | 1489.30               |
| 145          | 5.68              | 0.27               | 2298.68          | 0.00                   | 1489.30               |
| 146          | 5.68              | 0.35               | 2299.03          | 0.00                   | 1489.30               |
| 147          | 6.39              | 0.37               | 2299.40          | 0.00                   | 1489.30               |
| 148          | 7.81              | 0.42               | 2299.82          | 0.00                   | 1489.30               |
| 149          | 8.87              | 0.48               | 2300.30          | 0.00                   | 1489.30               |
| 150          | 10.29             | 0.53               | 2300.83          | 0.00                   | 1489.30               |
| 151          | 10.65             | 0.57               | 2301.39          | 0.00                   | 1489.30               |
| 152          | 11.36             | 0.58               | 2301.97          | 0.00                   | 1489.30               |
| 153          | 12.78             | 0.61               | 2302.58          | 0.00                   | 1489.30               |
| 154          | 12.78             | 0.63               | 2303.21          | 0.00                   | 1489.30               |
| 155          | 14.20             | 0.64               | 2303.84          | 0.00                   | 1489.30               |
| 156          | 14.20             | 0.65               | 2304.49          | 0.00                   | 1489.30               |
| 157          | 14.91             | 0.64               | 2305.12          | 0.00                   | 1489.30               |
| 158          | 15.97             | 0.65               | 2305.77          | 0.00                   | 1489.30               |
| 159          | 17.04             | 0.66               | 2306.44          | 0.00                   | 1489.30               |
| 160          | 17.39             | 0.66               | 2307.10          | 0.00                   | 1489.30               |
| 161          | 19.17             | 0.67               | 2307.77          | 0.00                   | 1489.30               |
| 162          | 19.17             | 0.67               | 2308.43          | 0.00                   | 1489.30               |
| 163          | 19.88             | 0.64               | 2309.08          | 0.00                   | 1489.30               |

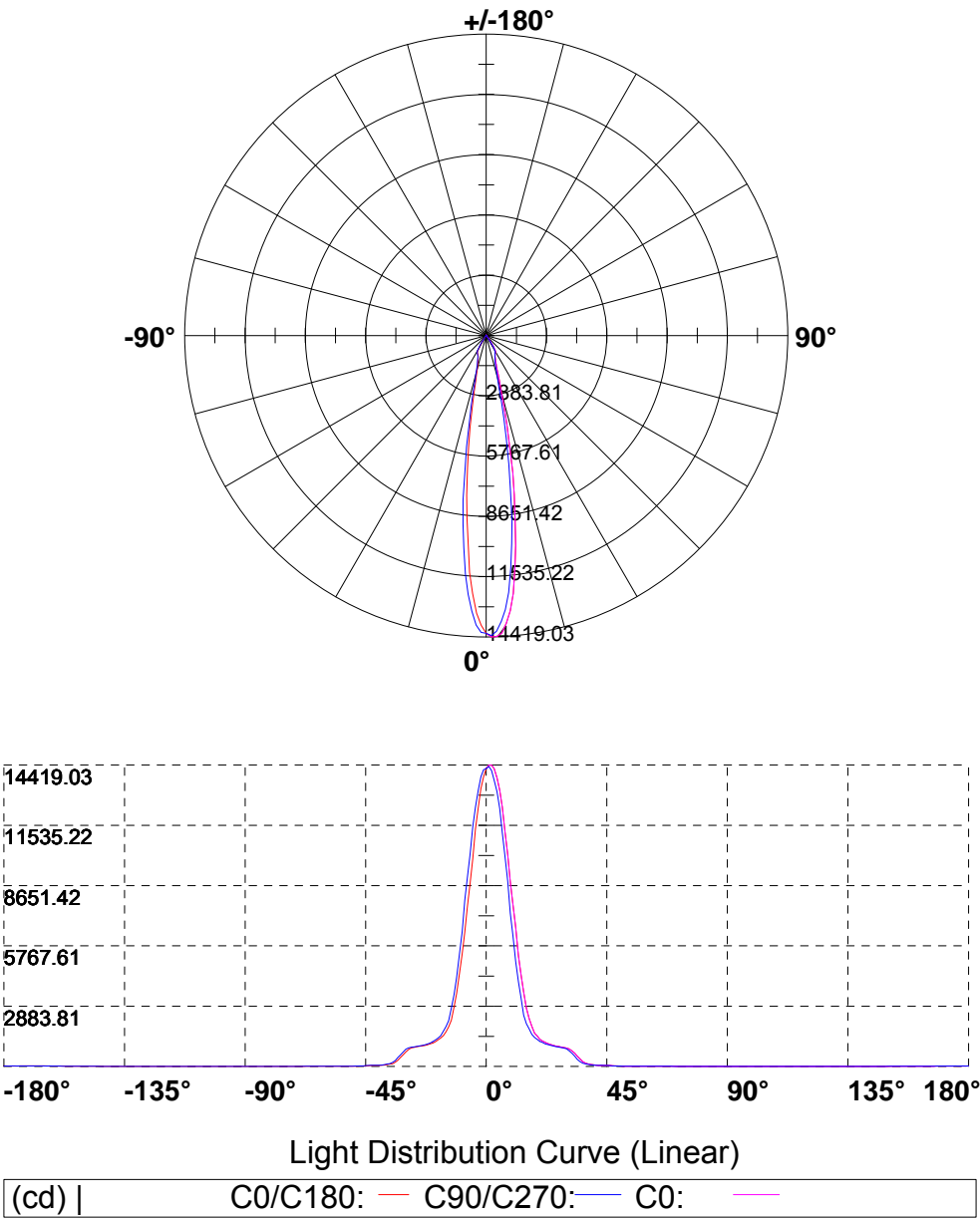
### R852 WWL (CRI90 700mA 20D)

### Zonal flux distribution table

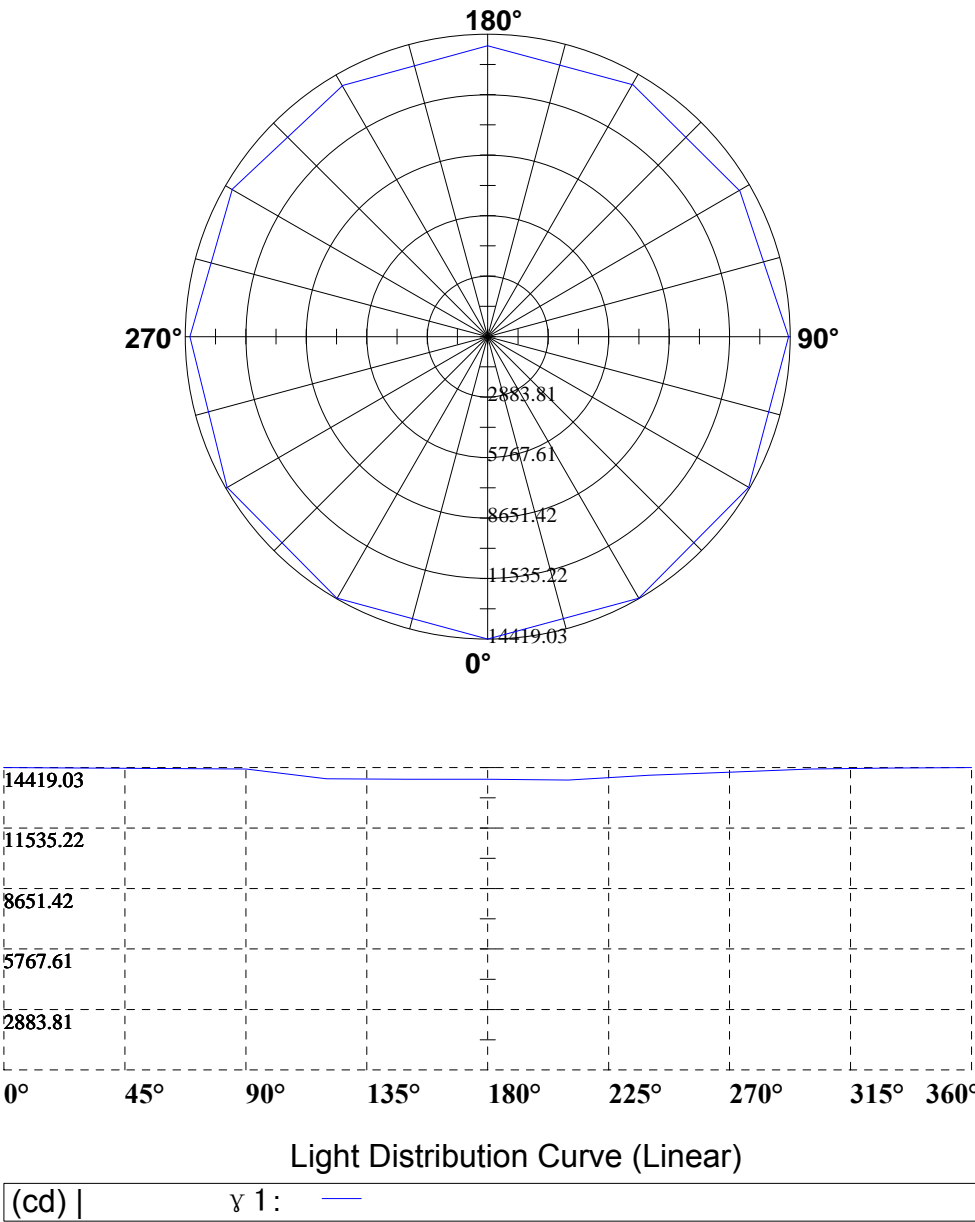
Page13

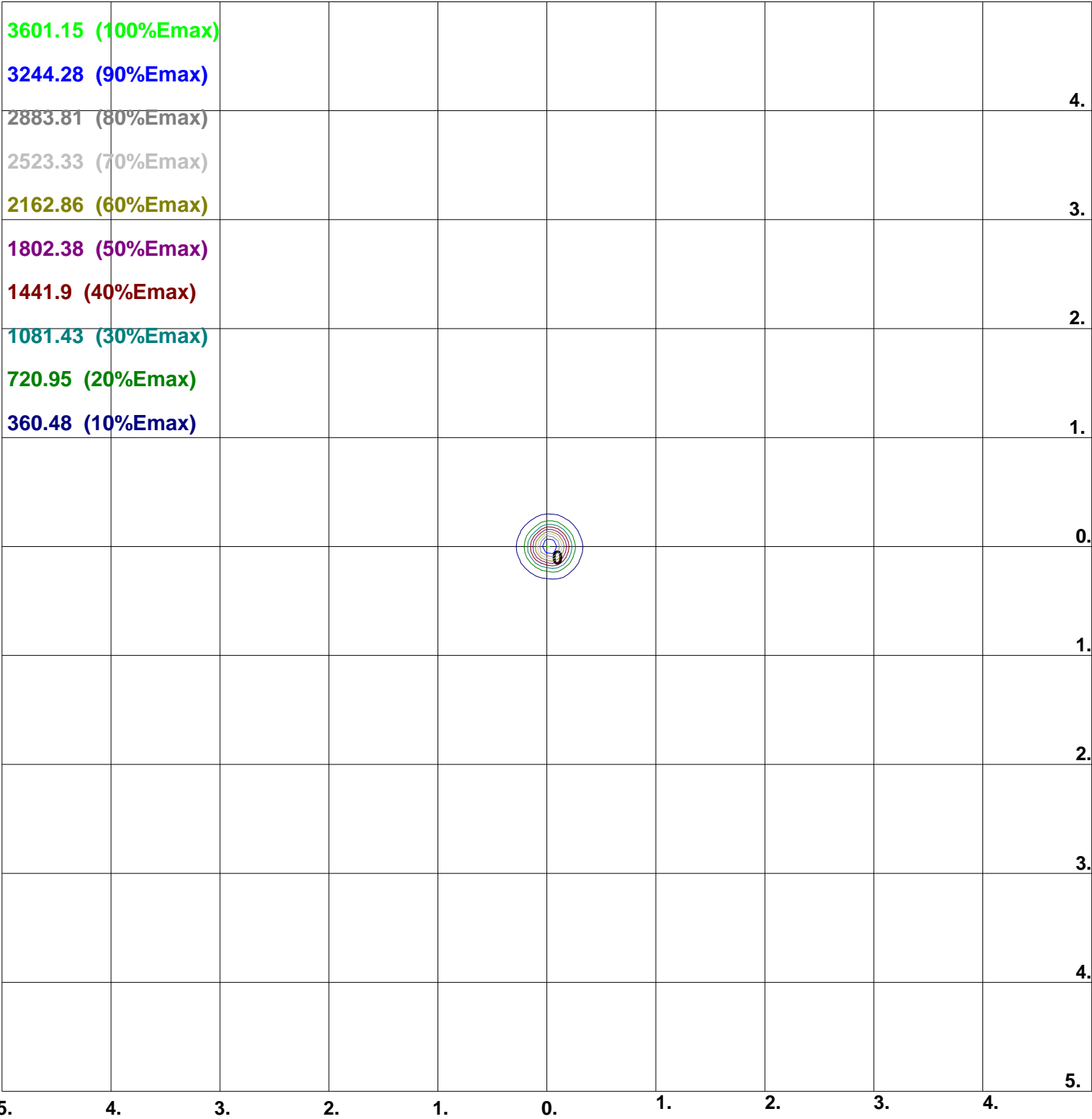
[illegible]

Light Distribution Curve [Unit: cd]



Horizontal cone through Max.cd [Unit: cd]





Coordinate Scale: d/h  
Height: 2 m  
Max Illuminance : 3604.76lx



## Luminance Limiting Curve (There is not luminous side)

Diameter: 115mm

Length: -115mm

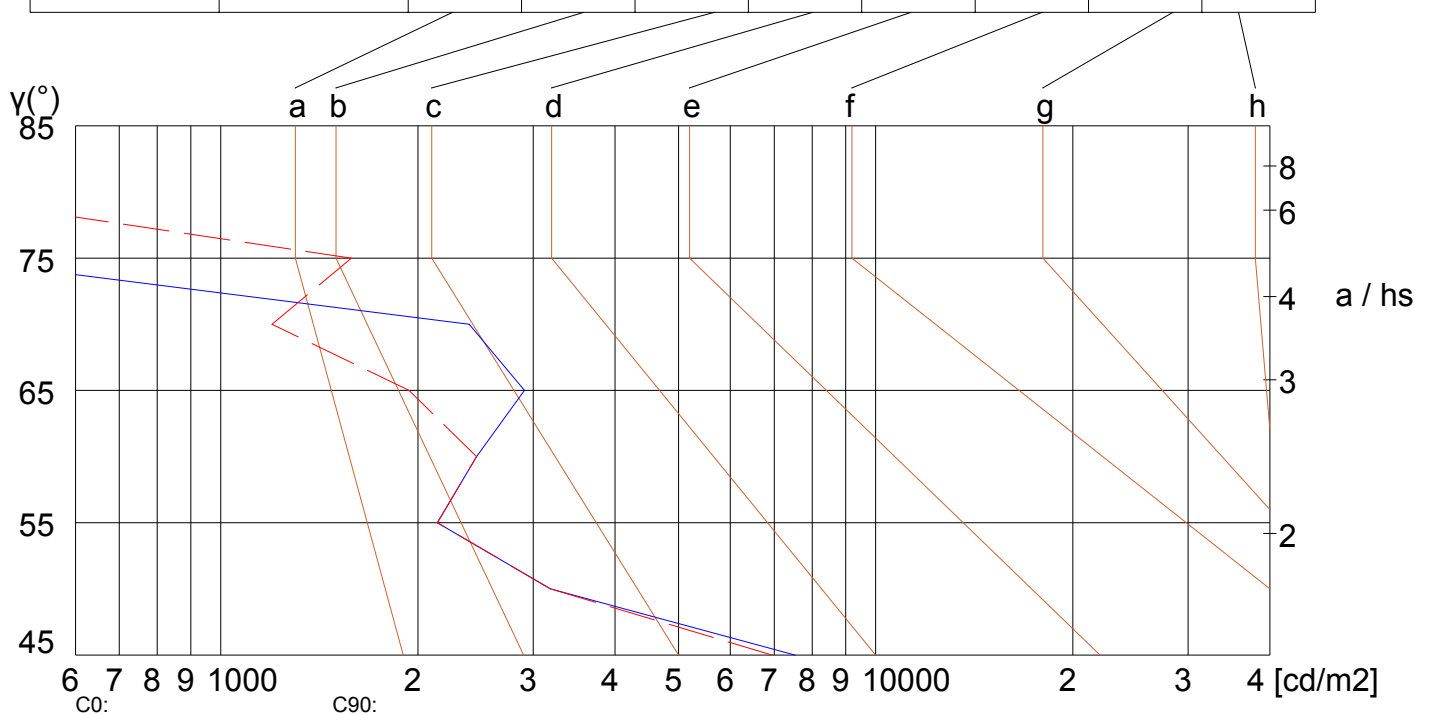
Width: -115mm

Height: 72mm

(cd/m<sup>2</sup>)

| $\gamma$ | 45°  | 50°  | 55°  | 60°  | 65°  | 70°  | 75° | 80° | 85° |
|----------|------|------|------|------|------|------|-----|-----|-----|
| C0       | 6951 | 3186 | 2142 | 2458 | 1938 | 1198 |     |     |     |
| C90      | 7530 | 3186 | 2142 | 2458 | 2907 | 2395 |     |     |     |

| Glare | Quality | Service Values Illuminance (lx) |      |      |      |      |      |      |      |
|-------|---------|---------------------------------|------|------|------|------|------|------|------|
| 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       |                                 |      |      |      | 2000 | 1000 | 500  | ≤300 |



Luminance Limiting Curve (C0/C90)

**R852 WWL (CRI90 700mA 20D)**

utilization factor table for indoor luminaire

Page18

| RHOCC | 80                                       |      |      | 70   |      |      | 50   |      |      | 30   |      |      | 10   |      |      | 0    |
|-------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| RHOW  | 50                                       | 30   | 10   | 50   | 30   | 10   | 50   | 30   | 10   | 50   | 30   | 10   | 50   | 30   | 10   | 0    |
| RCR   | COEFFICIENTS OF UTILIZATION FOR RHOFC=20 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0     | 1.02                                     | 1.02 | 1.02 | 0.99 | 0.99 | 0.99 | 0.95 | 0.95 | 0.95 | 0.91 | 0.91 | 0.91 | 0.87 | 0.87 | 0.87 | 0.85 |
| 1     | 1.00                                     | 0.99 | 0.99 | 0.98 | 0.98 | 0.97 | 0.94 | 0.94 | 0.93 | 0.89 | 0.89 | 0.88 | 0.83 | 0.82 | 0.81 | 0.77 |
| 2     | 0.96                                     | 0.95 | 0.95 | 0.94 | 0.93 | 0.93 | 0.91 | 0.90 | 0.89 | 0.86 | 0.85 | 0.84 | 0.81 | 0.79 | 0.78 | 0.74 |
| 3     | 0.92                                     | 0.92 | 0.91 | 0.91 | 0.90 | 0.89 | 0.88 | 0.86 | 0.85 | 0.84 | 0.82 | 0.80 | 0.79 | 0.77 | 0.75 | 0.71 |
| 4     | 0.89                                     | 0.88 | 0.88 | 0.88 | 0.87 | 0.86 | 0.85 | 0.83 | 0.82 | 0.81 | 0.79 | 0.77 | 0.77 | 0.74 | 0.73 | 0.69 |
| 5     | 0.86                                     | 0.85 | 0.85 | 0.85 | 0.84 | 0.83 | 0.82 | 0.80 | 0.79 | 0.78 | 0.76 | 0.75 | 0.75 | 0.72 | 0.70 | 0.67 |
| 6     | 0.83                                     | 0.83 | 0.82 | 0.82 | 0.81 | 0.80 | 0.79 | 0.77 | 0.76 | 0.76 | 0.74 | 0.72 | 0.73 | 0.70 | 0.68 | 0.64 |
| 7     | 0.81                                     | 0.80 | 0.79 | 0.80 | 0.78 | 0.78 | 0.77 | 0.75 | 0.74 | 0.74 | 0.71 | 0.70 | 0.71 | 0.68 | 0.66 | 0.63 |
| 8     | 0.78                                     | 0.78 | 0.77 | 0.77 | 0.76 | 0.75 | 0.75 | 0.73 | 0.71 | 0.72 | 0.69 | 0.68 | 0.69 | 0.66 | 0.64 | 0.61 |
| 9     | 0.76                                     | 0.75 | 0.75 | 0.75 | 0.74 | 0.73 | 0.73 | 0.71 | 0.69 | 0.70 | 0.67 | 0.66 | 0.67 | 0.64 | 0.62 | 0.59 |
| 10    | 0.74                                     | 0.73 | 0.73 | 0.73 | 0.72 | 0.71 | 0.71 | 0.69 | 0.68 | 0.68 | 0.66 | 0.64 | 0.65 | 0.62 | 0.60 | 0.57 |

