

Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P593596

Luminaire Tested: **HCC8W20D010BZ-HM80520850-81RWWC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593596  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-14)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC8W20D010BZ-HM80520850-81RWWC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

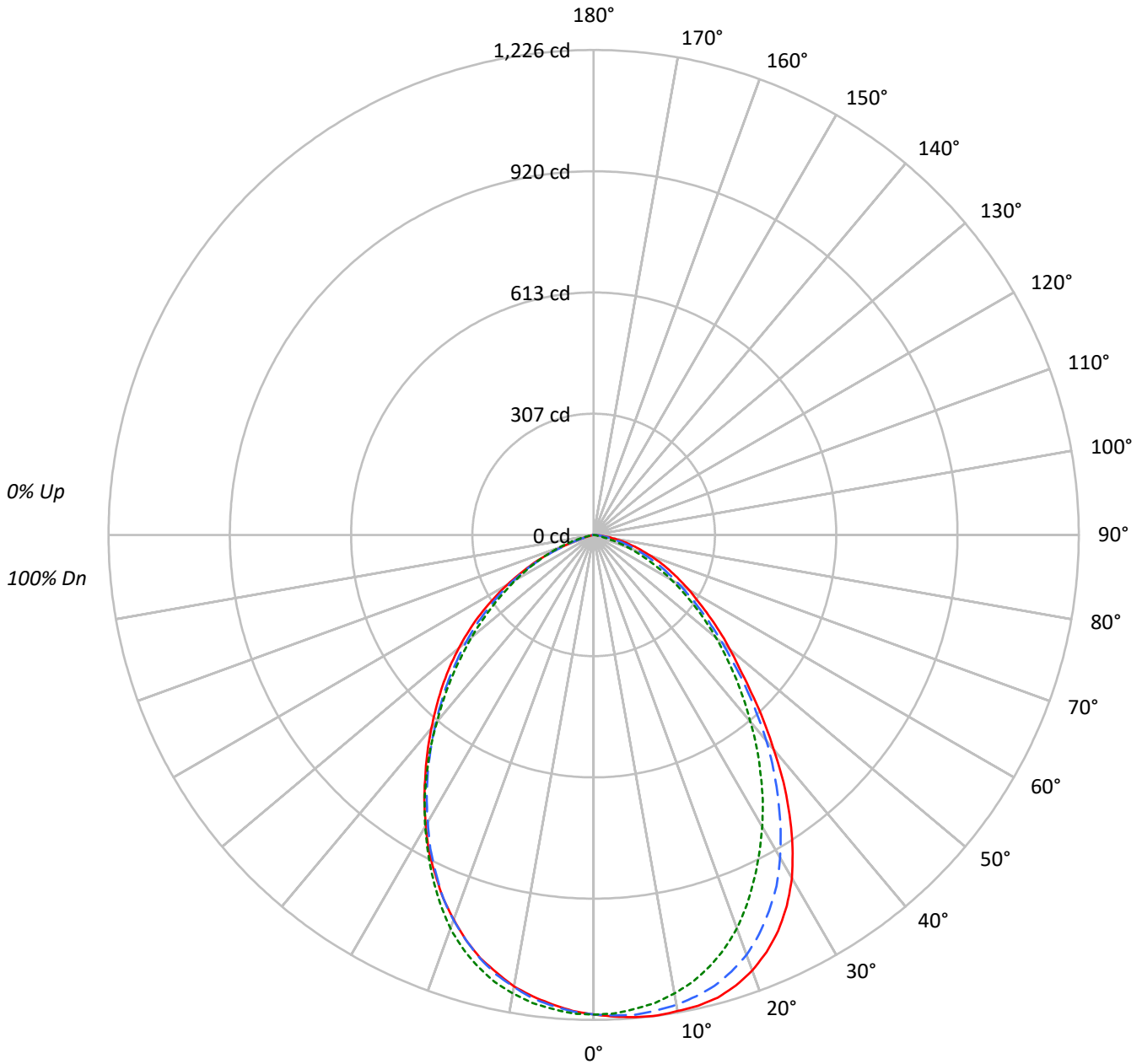
Lumens per Lamp: N/A  
Luminaire Lumens: 2304.5 lumens  
Efficiency: N/A  
Efficacy: 115.2 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.08 / 1.17  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |     |   |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|---|--|---|
| RF  | 20  |     |     |     |     | 20  |     |     |     |     | 20  |     |     |     |     | 20  |     |     |    |    | 20 |    |     |   |  |   |
| RC  | 80  |     |     |     |     | 70  |     |     |     |     | 50  |     |     |     |     | 30  |     |     |    |    | 10 |    |     |   |  | 0 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30 | 10 | 50 | 30 | 10  | 0 |  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |     |   |  |   |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |    |    | 100 |   |  |   |
| 1   | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99  | 101 | 98  | 96  | 97  | 95  | 93  | 93  | 92  | 90  | 88  |    |    |    |    | 88  |   |  |   |
| 2   | 103 | 96  | 90  | 85  | 100 | 94  | 89  | 84  | 91  | 86  | 82  | 87  | 84  | 81  | 85  | 82  | 79  | 77  |    |    |    |    | 77  |   |  |   |
| 3   | 95  | 86  | 79  | 73  | 93  | 84  | 78  | 73  | 82  | 76  | 72  | 79  | 74  | 70  | 76  | 73  | 69  | 67  |    |    |    |    | 67  |   |  |   |
| 4   | 88  | 77  | 70  | 64  | 86  | 76  | 69  | 64  | 74  | 68  | 63  | 72  | 66  | 62  | 69  | 65  | 61  | 59  |    |    |    |    | 59  |   |  |   |
| 5   | 81  | 70  | 62  | 56  | 80  | 69  | 62  | 56  | 67  | 61  | 56  | 65  | 59  | 55  | 63  | 58  | 54  | 52  |    |    |    |    | 52  |   |  |   |
| 6   | 76  | 64  | 56  | 50  | 74  | 63  | 55  | 50  | 61  | 55  | 50  | 60  | 54  | 49  | 58  | 53  | 49  | 47  |    |    |    |    | 47  |   |  |   |
| 7   | 71  | 59  | 51  | 45  | 69  | 58  | 50  | 45  | 56  | 50  | 45  | 55  | 49  | 44  | 54  | 48  | 44  | 42  |    |    |    |    | 42  |   |  |   |
| 8   | 66  | 54  | 46  | 41  | 65  | 53  | 46  | 41  | 52  | 45  | 40  | 51  | 45  | 40  | 50  | 44  | 40  | 38  |    |    |    |    | 38  |   |  |   |
| 9   | 62  | 50  | 42  | 37  | 61  | 49  | 42  | 37  | 48  | 42  | 37  | 47  | 41  | 37  | 46  | 41  | 37  | 35  |    |    |    |    | 35  |   |  |   |
| 10  | 58  | 46  | 39  | 34  | 57  | 46  | 39  | 34  | 45  | 38  | 34  | 44  | 38  | 34  | 43  | 38  | 34  | 32  |    |    |    |    | 32  |   |  |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 90°   | 180°  |
|-----|-------|-------|-------|
| 0°  | 37389 | 37389 | 37389 |
| 5°  | 37882 | 37232 | 36882 |
| 10° | 38273 | 36851 | 36294 |
| 15° | 38660 | 36074 | 35350 |
| 20° | 38463 | 34742 | 33947 |
| 25° | 37566 | 32663 | 32221 |
| 30° | 35681 | 30319 | 30205 |
| 35° | 32483 | 27668 | 27913 |
| 40° | 28476 | 24764 | 25674 |
| 45° | 24565 | 22027 | 23584 |
| 50° | 21516 | 19338 | 21353 |
| 55° | 19058 | 16623 | 18795 |
| 60° | 17176 | 13975 | 15579 |
| 65° | 15476 | 11222 | 11930 |
| 70° | 13578 | 8177  | 6564  |
| 75° | 11581 | 4241  | 1728  |
| 80° | 8914  | 1154  | 302   |
| 85° | 5732  | 0     | 0     |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 114.4  | 5.0       |
| 10°-20°   | 321.6  | 14.0      |
| 20°-30°   | 456.5  | 19.8      |
| 30°-40°   | 480.5  | 20.9      |
| 40°-50°   | 408.8  | 17.7      |
| 50°-60°   | 295.4  | 12.8      |
| 60°-70°   | 168.0  | 7.3       |
| 70°-80°   | 52.9   | 2.3       |
| 80°-90°   | 6.4    | 0.3       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 892.5  | 38.7      |
| 0°-40°    | 1373.0 | 59.6      |
| 0°-60°    | 2077.1 | 90.1      |
| 0°-90°    | 2304.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2304.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90°  | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 1212 | 1212 | 1212 | 1212 | 1212 |      |
| 5°  | 1224 | 1218 | 1203 | 1195 | 1192 | 117  |
| 15° | 1211 | 1180 | 1130 | 1109 | 1107 | 341  |
| 25° | 1104 | 1049 | 960  | 944  | 947  | 506  |
| 35° | 863  | 813  | 735  | 730  | 742  | 537  |
| 45° | 563  | 542  | 505  | 518  | 541  | 438  |
| 55° | 354  | 329  | 309  | 327  | 350  | 320  |
| 65° | 212  | 183  | 154  | 152  | 164  | 210  |
| 75° | 97   | 74   | 36   | 16   | 14   | 105  |
| 85° | 16   | 10   | 0    | 0    | 0    | 21   |
| 90° | 0    | 0    | 0    | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 25°    | 30°    | 35°    | 40°    | 45°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 |
| 2.5°  | 1219.0 | 1220.7 | 1217.5 | 1217.5 | 1220.7 | 1217.5 | 1219.0 | 1219.0 | 1217.5 | 1217.5 | 1215.8 |
| 5°    | 1223.8 | 1222.3 | 1222.3 | 1222.3 | 1223.8 | 1220.7 | 1219.0 | 1220.7 | 1217.5 | 1217.5 | 1217.5 |
| 7.5°  | 1225.5 | 1225.5 | 1223.8 | 1222.3 | 1222.3 | 1222.3 | 1220.7 | 1219.0 | 1217.5 | 1214.2 | 1212.5 |
| 10°   | 1222.3 | 1222.3 | 1223.8 | 1220.7 | 1220.7 | 1217.5 | 1217.5 | 1214.2 | 1214.2 | 1211.0 | 1206.1 |
| 12.5° | 1219.0 | 1217.5 | 1217.5 | 1214.2 | 1214.2 | 1211.0 | 1211.0 | 1206.1 | 1204.5 | 1199.6 | 1194.8 |
| 15°   | 1211.0 | 1209.3 | 1206.1 | 1204.5 | 1202.8 | 1201.3 | 1198.0 | 1196.3 | 1191.5 | 1185.1 | 1180.2 |
| 17.5° | 1194.8 | 1193.1 | 1191.5 | 1188.3 | 1185.1 | 1183.4 | 1181.8 | 1176.9 | 1170.4 | 1165.6 | 1157.5 |
| 20°   | 1172.1 | 1170.4 | 1170.4 | 1165.6 | 1164.0 | 1159.1 | 1157.5 | 1151.0 | 1146.2 | 1136.5 | 1130.0 |
| 22.5° | 1141.3 | 1143.0 | 1139.7 | 1136.5 | 1133.2 | 1128.3 | 1125.1 | 1118.6 | 1110.6 | 1100.8 | 1092.8 |
| 25°   | 1104.1 | 1105.6 | 1102.5 | 1099.3 | 1094.4 | 1091.1 | 1087.9 | 1078.2 | 1070.1 | 1058.7 | 1049.0 |
| 27.5° | 1057.2 | 1057.2 | 1057.2 | 1053.9 | 1045.8 | 1044.2 | 1041.0 | 1031.2 | 1019.9 | 1010.1 | 1000.4 |
| 30°   | 1002.1 | 1000.4 | 1000.4 | 995.6  | 992.4  | 985.9  | 981.1  | 972.9  | 964.9  | 953.5  | 942.2  |
| 32.5° | 935.7  | 937.3  | 932.5  | 929.3  | 924.4  | 924.4  | 917.9  | 911.4  | 901.7  | 890.4  | 879.1  |
| 35°   | 862.9  | 864.5  | 861.2  | 859.7  | 851.5  | 849.9  | 848.3  | 840.2  | 833.8  | 825.6  | 812.6  |
| 37.5° | 788.4  | 786.7  | 785.2  | 785.2  | 780.4  | 777.0  | 773.9  | 769.0  | 759.3  | 752.8  | 746.3  |
| 40°   | 707.4  | 707.4  | 707.4  | 705.9  | 704.2  | 700.9  | 699.4  | 696.1  | 689.7  | 683.2  | 678.3  |
| 42.5° | 634.6  | 634.6  | 633.0  | 631.4  | 628.1  | 629.8  | 626.5  | 623.3  | 616.8  | 611.9  | 608.7  |
| 45°   | 563.3  | 563.3  | 563.3  | 565.0  | 561.8  | 556.8  | 556.8  | 553.6  | 550.5  | 547.1  | 542.3  |
| 47.5° | 500.2  | 505.1  | 501.9  | 500.2  | 501.9  | 495.4  | 495.4  | 492.2  | 488.9  | 485.7  | 479.2  |
| 50°   | 448.5  | 448.5  | 448.5  | 445.1  | 443.6  | 443.6  | 438.8  | 435.4  | 433.9  | 430.6  | 424.1  |
| 52.5° | 401.5  | 398.2  | 398.2  | 396.7  | 395.0  | 391.7  | 391.7  | 388.5  | 382.0  | 378.8  | 374.0  |
| 55°   | 354.5  | 354.5  | 352.9  | 351.3  | 349.6  | 348.1  | 346.4  | 341.6  | 338.4  | 333.4  | 328.6  |
| 57.5° | 312.4  | 315.7  | 314.1  | 310.9  | 307.6  | 307.6  | 304.4  | 301.1  | 296.2  | 291.4  | 286.5  |
| 60°   | 278.5  | 276.8  | 276.8  | 275.2  | 272.0  | 270.3  | 268.8  | 263.8  | 259.0  | 254.1  | 249.3  |
| 62.5° | 242.8  | 242.8  | 242.8  | 239.6  | 236.4  | 234.7  | 233.1  | 229.9  | 223.4  | 218.6  | 215.4  |
| 65°   | 212.1  | 210.5  | 208.9  | 207.2  | 205.5  | 202.4  | 200.7  | 197.5  | 192.7  | 187.8  | 183.0  |
| 67.5° | 181.3  | 179.7  | 179.7  | 178.1  | 173.2  | 171.6  | 171.6  | 166.8  | 161.9  | 157.1  | 152.1  |
| 70°   | 150.6  | 150.6  | 150.6  | 147.3  | 145.7  | 144.1  | 142.4  | 139.2  | 134.4  | 129.5  | 124.7  |
| 72.5° | 124.7  | 123.0  | 123.0  | 121.4  | 116.5  | 114.9  | 113.4  | 110.0  | 105.2  | 102.0  | 98.7   |
| 75°   | 97.2   | 97.2   | 95.5   | 93.9   | 92.3   | 90.7   | 89.0   | 85.8   | 81.0   | 76.1   | 74.5   |
| 77.5° | 74.5   | 72.8   | 72.8   | 71.3   | 68.0   | 66.4   | 66.4   | 63.1   | 58.3   | 55.1   | 51.8   |
| 80°   | 50.2   | 51.8   | 50.2   | 48.6   | 46.9   | 45.3   | 43.7   | 42.1   | 38.9   | 35.6   | 32.4   |
| 82.5° | 30.7   | 32.4   | 30.7   | 30.7   | 29.2   | 27.5   | 27.5   | 24.2   | 22.7   | 21.0   | 19.4   |
| 85°   | 16.2   | 16.2   | 16.2   | 16.2   | 14.5   | 14.5   | 14.5   | 13.0   | 11.3   | 9.7    | 9.7    |
| 87.5° | 4.8    | 6.5    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 3.2    | 3.2    | 3.2    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 50°    | 55°    | 60°    | 65°    | 67.5°  | 70°    | 75°    | 80°    | 85°    | 90°    | 95°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 |
| 2.5°  | 1217.5 | 1215.8 | 1214.2 | 1214.2 | 1214.2 | 1214.2 | 1214.2 | 1212.5 | 1211.0 | 1211.0 | 1211.0 |
| 5°    | 1214.2 | 1214.2 | 1214.2 | 1212.5 | 1211.0 | 1211.0 | 1207.6 | 1206.1 | 1204.5 | 1202.8 | 1201.3 |
| 7.5°  | 1211.0 | 1207.6 | 1206.1 | 1204.5 | 1202.8 | 1202.8 | 1199.6 | 1196.3 | 1196.3 | 1193.1 | 1189.9 |
| 10°   | 1201.3 | 1199.6 | 1196.3 | 1193.1 | 1191.5 | 1189.9 | 1186.6 | 1181.8 | 1180.2 | 1176.9 | 1173.7 |
| 12.5° | 1189.9 | 1186.6 | 1183.4 | 1176.9 | 1175.3 | 1173.7 | 1167.2 | 1162.4 | 1159.1 | 1157.5 | 1149.4 |
| 15°   | 1175.3 | 1168.9 | 1164.0 | 1155.9 | 1154.2 | 1151.0 | 1146.2 | 1141.3 | 1134.8 | 1130.0 | 1126.8 |
| 17.5° | 1149.4 | 1143.0 | 1134.8 | 1126.8 | 1123.5 | 1123.5 | 1115.5 | 1109.0 | 1100.8 | 1097.6 | 1091.1 |
| 20°   | 1118.6 | 1110.6 | 1104.1 | 1094.4 | 1089.6 | 1084.6 | 1079.8 | 1070.1 | 1063.6 | 1058.7 | 1050.7 |
| 22.5° | 1083.1 | 1071.7 | 1063.6 | 1053.9 | 1045.8 | 1041.0 | 1032.8 | 1024.8 | 1016.6 | 1011.8 | 1005.3 |
| 25°   | 1037.7 | 1028.0 | 1015.1 | 1005.3 | 1000.4 | 993.9  | 984.3  | 976.2  | 968.1  | 960.0  | 956.7  |
| 27.5° | 987.6  | 974.6  | 963.2  | 951.9  | 947.0  | 942.2  | 930.8  | 921.1  | 914.6  | 906.6  | 903.3  |
| 30°   | 932.5  | 919.5  | 906.6  | 896.9  | 892.1  | 883.9  | 877.4  | 866.1  | 858.0  | 851.5  | 843.5  |
| 32.5° | 869.4  | 859.7  | 848.3  | 833.8  | 830.5  | 824.0  | 814.3  | 809.4  | 799.7  | 794.9  | 788.4  |
| 35°   | 801.4  | 794.9  | 783.5  | 772.2  | 767.4  | 764.2  | 756.0  | 746.3  | 739.8  | 735.0  | 731.8  |
| 37.5° | 736.6  | 728.5  | 717.1  | 709.1  | 705.9  | 700.9  | 691.2  | 686.4  | 679.9  | 676.7  | 670.2  |
| 40°   | 667.0  | 658.8  | 650.8  | 646.0  | 641.1  | 637.8  | 631.4  | 626.5  | 620.1  | 615.2  | 613.6  |
| 42.5° | 599.0  | 594.1  | 587.7  | 581.2  | 579.5  | 574.7  | 571.5  | 566.7  | 561.8  | 560.1  | 555.3  |
| 45°   | 537.5  | 532.6  | 526.1  | 519.6  | 518.1  | 514.8  | 513.2  | 508.4  | 505.1  | 505.1  | 505.1  |
| 47.5° | 476.0  | 471.1  | 464.6  | 461.3  | 463.0  | 456.5  | 456.5  | 455.0  | 451.6  | 451.6  | 453.3  |
| 50°   | 420.9  | 414.4  | 412.9  | 409.6  | 406.4  | 403.1  | 404.7  | 399.9  | 399.9  | 403.1  | 401.5  |
| 52.5° | 369.1  | 362.6  | 361.0  | 357.8  | 356.1  | 356.1  | 354.5  | 354.5  | 352.9  | 354.5  | 354.5  |
| 55°   | 322.2  | 317.2  | 314.1  | 310.9  | 309.2  | 309.2  | 309.2  | 307.6  | 306.0  | 309.2  | 310.9  |
| 57.5° | 280.0  | 278.5  | 275.2  | 270.3  | 268.8  | 267.1  | 265.5  | 265.5  | 265.5  | 265.5  | 267.1  |
| 60°   | 242.8  | 239.6  | 236.4  | 231.6  | 231.6  | 229.9  | 228.2  | 226.6  | 226.6  | 226.6  | 226.6  |
| 62.5° | 210.5  | 205.5  | 200.7  | 197.5  | 195.9  | 194.3  | 192.7  | 189.4  | 189.4  | 189.4  | 189.4  |
| 65°   | 178.1  | 173.2  | 170.0  | 166.8  | 163.5  | 163.5  | 160.3  | 158.6  | 155.4  | 153.8  | 150.6  |
| 67.5° | 147.3  | 144.1  | 140.9  | 135.9  | 134.4  | 132.7  | 129.5  | 127.9  | 123.0  | 121.4  | 119.9  |
| 70°   | 119.9  | 114.9  | 111.7  | 108.5  | 106.9  | 103.7  | 100.4  | 97.2   | 93.9   | 90.7   | 87.5   |
| 72.5° | 93.9   | 89.0   | 85.8   | 82.6   | 79.3   | 79.3   | 74.5   | 71.3   | 66.4   | 63.1   | 58.3   |
| 75°   | 69.6   | 64.8   | 61.5   | 56.6   | 55.1   | 53.4   | 48.6   | 45.3   | 40.4   | 35.6   | 32.4   |
| 77.5° | 46.9   | 43.7   | 40.4   | 35.6   | 32.4   | 32.4   | 27.5   | 24.2   | 21.0   | 16.2   | 14.5   |
| 80°   | 29.2   | 25.9   | 22.7   | 19.4   | 19.4   | 16.2   | 14.5   | 11.3   | 8.0    | 6.5    | 4.8    |
| 82.5° | 16.2   | 14.5   | 13.0   | 9.7    | 9.7    | 8.0    | 6.5    | 4.8    | 3.2    | 1.7    | 1.7    |
| 85°   | 8.0    | 6.5    | 4.8    | 4.8    | 3.2    | 3.2    | 3.2    | 1.7    | 1.7    | 0.0    | 0.0    |
| 87.5° | 3.2    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 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    | 0.0    |

Cooper Lighting Solutions Photometric Lab  
 1121 Highway 74 South  
 Peachtree City, GA 30269



TEST NUMBER: P593596

CATALOG NUMBER: HCC8W20D010BZ-HM80520850-81RWWC

**CANDELA DISTRIBUTION (continued):**

|       | 100°   | 105°   | 110°   | 112.5° | 115°   | 120°   | 125°   | 130°   | 135°   | 140°   | 145°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 |
| 2.5°  | 1209.3 | 1209.3 | 1207.6 | 1207.6 | 1207.6 | 1206.1 | 1207.6 | 1206.1 | 1206.1 | 1206.1 | 1207.6 |
| 5°    | 1202.8 | 1199.6 | 1199.6 | 1198.0 | 1198.0 | 1196.3 | 1198.0 | 1196.3 | 1194.8 | 1193.1 | 1194.8 |
| 7.5°  | 1189.9 | 1186.6 | 1185.1 | 1183.4 | 1183.4 | 1183.4 | 1181.8 | 1180.2 | 1181.8 | 1176.9 | 1180.2 |
| 10°   | 1172.1 | 1170.4 | 1167.2 | 1165.6 | 1164.0 | 1165.6 | 1164.0 | 1160.7 | 1160.7 | 1160.7 | 1159.1 |
| 12.5° | 1149.4 | 1146.2 | 1144.5 | 1143.0 | 1139.7 | 1139.7 | 1141.3 | 1138.0 | 1138.0 | 1134.8 | 1134.8 |
| 15°   | 1121.8 | 1118.6 | 1115.5 | 1115.5 | 1112.1 | 1112.1 | 1110.6 | 1110.6 | 1109.0 | 1107.3 | 1107.3 |
| 17.5° | 1087.9 | 1083.1 | 1079.8 | 1081.4 | 1079.8 | 1078.2 | 1078.2 | 1074.9 | 1073.4 | 1074.9 | 1074.9 |
| 20°   | 1047.4 | 1044.2 | 1041.0 | 1042.5 | 1039.3 | 1037.7 | 1039.3 | 1034.5 | 1036.1 | 1036.1 | 1036.1 |
| 22.5° | 1002.1 | 1000.4 | 995.6  | 995.6  | 992.4  | 990.8  | 992.4  | 992.4  | 993.9  | 992.4  | 992.4  |
| 25°   | 951.9  | 948.7  | 945.5  | 945.5  | 943.8  | 942.2  | 943.8  | 945.5  | 943.8  | 945.5  | 945.5  |
| 27.5° | 898.4  | 893.6  | 893.6  | 890.4  | 890.4  | 892.1  | 890.4  | 892.1  | 893.6  | 893.6  | 896.9  |
| 30°   | 840.2  | 838.6  | 837.0  | 835.3  | 835.3  | 837.0  | 837.0  | 837.0  | 838.6  | 841.8  | 841.8  |
| 32.5° | 785.2  | 781.9  | 778.7  | 778.7  | 781.9  | 780.4  | 781.9  | 781.9  | 785.2  | 785.2  | 788.4  |
| 35°   | 725.3  | 725.3  | 722.0  | 723.6  | 723.6  | 723.6  | 723.6  | 726.9  | 730.1  | 731.8  | 735.0  |
| 37.5° | 670.2  | 665.3  | 667.0  | 667.0  | 668.7  | 667.0  | 671.8  | 671.8  | 675.0  | 675.0  | 678.3  |
| 40°   | 610.3  | 610.3  | 611.9  | 610.3  | 611.9  | 611.9  | 615.2  | 618.4  | 620.1  | 623.3  | 624.9  |
| 42.5° | 553.6  | 556.8  | 553.6  | 555.3  | 556.8  | 558.5  | 560.1  | 561.8  | 568.2  | 571.5  | 576.3  |
| 45°   | 501.9  | 503.5  | 505.1  | 506.7  | 505.1  | 508.4  | 509.9  | 513.2  | 518.1  | 519.6  | 521.3  |
| 47.5° | 451.6  | 453.3  | 455.0  | 456.5  | 456.5  | 459.8  | 461.3  | 464.6  | 467.8  | 469.5  | 471.1  |
| 50°   | 403.1  | 406.4  | 407.9  | 407.9  | 409.6  | 412.9  | 416.1  | 416.1  | 419.3  | 424.1  | 425.8  |
| 52.5° | 359.4  | 359.4  | 362.6  | 364.3  | 365.8  | 365.8  | 370.7  | 372.3  | 374.0  | 377.2  | 380.5  |
| 55°   | 310.9  | 315.7  | 317.2  | 317.2  | 320.6  | 323.7  | 325.4  | 327.1  | 327.1  | 333.4  | 333.4  |
| 57.5° | 268.8  | 270.3  | 273.6  | 273.6  | 273.6  | 278.5  | 278.5  | 281.7  | 283.3  | 285.0  | 288.2  |
| 60°   | 226.6  | 229.9  | 229.9  | 231.6  | 229.9  | 233.1  | 234.7  | 237.9  | 239.6  | 241.2  | 242.8  |
| 62.5° | 187.8  | 187.8  | 189.4  | 189.4  | 189.4  | 189.4  | 192.7  | 192.7  | 195.9  | 197.5  | 199.2  |
| 65°   | 150.6  | 150.6  | 150.6  | 150.6  | 150.6  | 150.6  | 150.6  | 150.6  | 152.1  | 152.1  | 155.4  |
| 67.5° | 116.5  | 114.9  | 111.7  | 113.4  | 111.7  | 111.7  | 110.0  | 110.0  | 111.7  | 111.7  | 114.9  |
| 70°   | 84.2   | 82.6   | 79.3   | 79.3   | 77.7   | 76.1   | 74.5   | 72.8   | 71.3   | 71.3   | 71.3   |
| 72.5° | 55.1   | 51.8   | 46.9   | 45.3   | 45.3   | 42.1   | 38.9   | 37.2   | 37.2   | 37.2   | 37.2   |
| 75°   | 27.5   | 24.2   | 21.0   | 19.4   | 19.4   | 16.2   | 17.8   | 16.2   | 16.2   | 16.2   | 16.2   |
| 77.5° | 11.3   | 8.0    | 6.5    | 6.5    | 6.5    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    |
| 80°   | 3.2    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    |
| 82.5° | 1.7    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 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    | 0.0    |





TEST NUMBER: P593596

CATALOG NUMBER: HCC8W20D010BZ-HM80520850-81RWWC

**CANDELA DISTRIBUTION (continued):**

|       | 150°   | 155°   | 157.5° | 160°   | 165°   | 170°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 | 1212.5 |
| 2.5°  | 1206.1 | 1206.1 | 1202.8 | 1204.5 | 1204.5 | 1204.5 | 1204.5 | 1204.5 |
| 5°    | 1191.5 | 1193.1 | 1191.5 | 1193.1 | 1193.1 | 1191.5 | 1191.5 | 1191.5 |
| 7.5°  | 1176.9 | 1178.6 | 1176.9 | 1178.6 | 1178.6 | 1178.6 | 1176.9 | 1176.9 |
| 10°   | 1159.1 | 1159.1 | 1159.1 | 1159.1 | 1159.1 | 1157.5 | 1159.1 | 1159.1 |
| 12.5° | 1134.8 | 1134.8 | 1134.8 | 1136.5 | 1136.5 | 1134.8 | 1134.8 | 1133.2 |
| 15°   | 1109.0 | 1105.6 | 1107.3 | 1109.0 | 1107.3 | 1107.3 | 1107.3 | 1107.3 |
| 17.5° | 1073.4 | 1074.9 | 1073.4 | 1073.4 | 1073.4 | 1073.4 | 1074.9 | 1073.4 |
| 20°   | 1036.1 | 1036.1 | 1037.7 | 1036.1 | 1036.1 | 1036.1 | 1036.1 | 1034.5 |
| 22.5° | 993.9  | 992.4  | 992.4  | 993.9  | 993.9  | 992.4  | 993.9  | 993.9  |
| 25°   | 947.0  | 948.7  | 947.0  | 947.0  | 948.7  | 948.7  | 948.7  | 947.0  |
| 27.5° | 896.9  | 898.4  | 900.1  | 898.4  | 898.4  | 898.4  | 900.1  | 901.7  |
| 30°   | 845.0  | 848.3  | 845.0  | 845.0  | 848.3  | 846.7  | 848.3  | 848.3  |
| 32.5° | 790.0  | 794.9  | 791.6  | 794.9  | 794.9  | 796.5  | 794.9  | 796.5  |
| 35°   | 735.0  | 739.8  | 739.8  | 739.8  | 741.5  | 743.1  | 743.1  | 741.5  |
| 37.5° | 683.2  | 684.7  | 684.7  | 688.0  | 689.7  | 691.2  | 691.2  | 689.7  |
| 40°   | 629.8  | 633.0  | 634.6  | 634.6  | 634.6  | 637.8  | 641.1  | 637.8  |
| 42.5° | 578.0  | 579.5  | 581.2  | 581.2  | 584.4  | 586.0  | 587.7  | 587.7  |
| 45°   | 527.8  | 531.0  | 532.6  | 534.3  | 535.8  | 539.1  | 537.5  | 540.8  |
| 47.5° | 476.0  | 480.8  | 482.4  | 484.0  | 487.3  | 488.9  | 490.5  | 492.2  |
| 50°   | 428.9  | 432.3  | 432.3  | 435.4  | 440.3  | 440.3  | 443.6  | 445.1  |
| 52.5° | 382.0  | 383.7  | 385.3  | 386.9  | 390.2  | 393.4  | 393.4  | 396.7  |
| 55°   | 336.8  | 338.4  | 338.4  | 339.9  | 341.6  | 348.1  | 349.6  | 349.6  |
| 57.5° | 289.8  | 289.8  | 293.0  | 294.7  | 296.2  | 299.5  | 299.5  | 299.5  |
| 60°   | 244.4  | 246.1  | 246.1  | 247.7  | 249.3  | 252.6  | 254.1  | 252.6  |
| 62.5° | 199.2  | 200.7  | 200.7  | 202.4  | 205.5  | 207.2  | 205.5  | 205.5  |
| 65°   | 157.1  | 158.6  | 158.6  | 160.3  | 163.5  | 163.5  | 161.9  | 163.5  |
| 67.5° | 114.9  | 114.9  | 114.9  | 114.9  | 114.9  | 114.9  | 114.9  | 114.9  |
| 70°   | 72.8   | 71.3   | 69.6   | 71.3   | 71.3   | 71.3   | 69.6   | 72.8   |
| 72.5° | 35.6   | 37.2   | 37.2   | 37.2   | 37.2   | 37.2   | 37.2   | 35.6   |
| 75°   | 16.2   | 16.2   | 14.5   | 14.5   | 14.5   | 16.2   | 16.2   | 14.5   |
| 77.5° | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    |
| 80°   | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    |
| 82.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 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    |

Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



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1121 Highway 74 South  
Peachtree City, GA 30269

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1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°    - - 45°-225°    - - - - 90°-270°

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