

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



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P242634

Luminaire Tested: S124DRP-S575D830-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2024  
Report Number: P242634  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-21)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124DRP-S575D830-X4F0-XX-UDD-A-W  
Description: DEFINE 4 DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

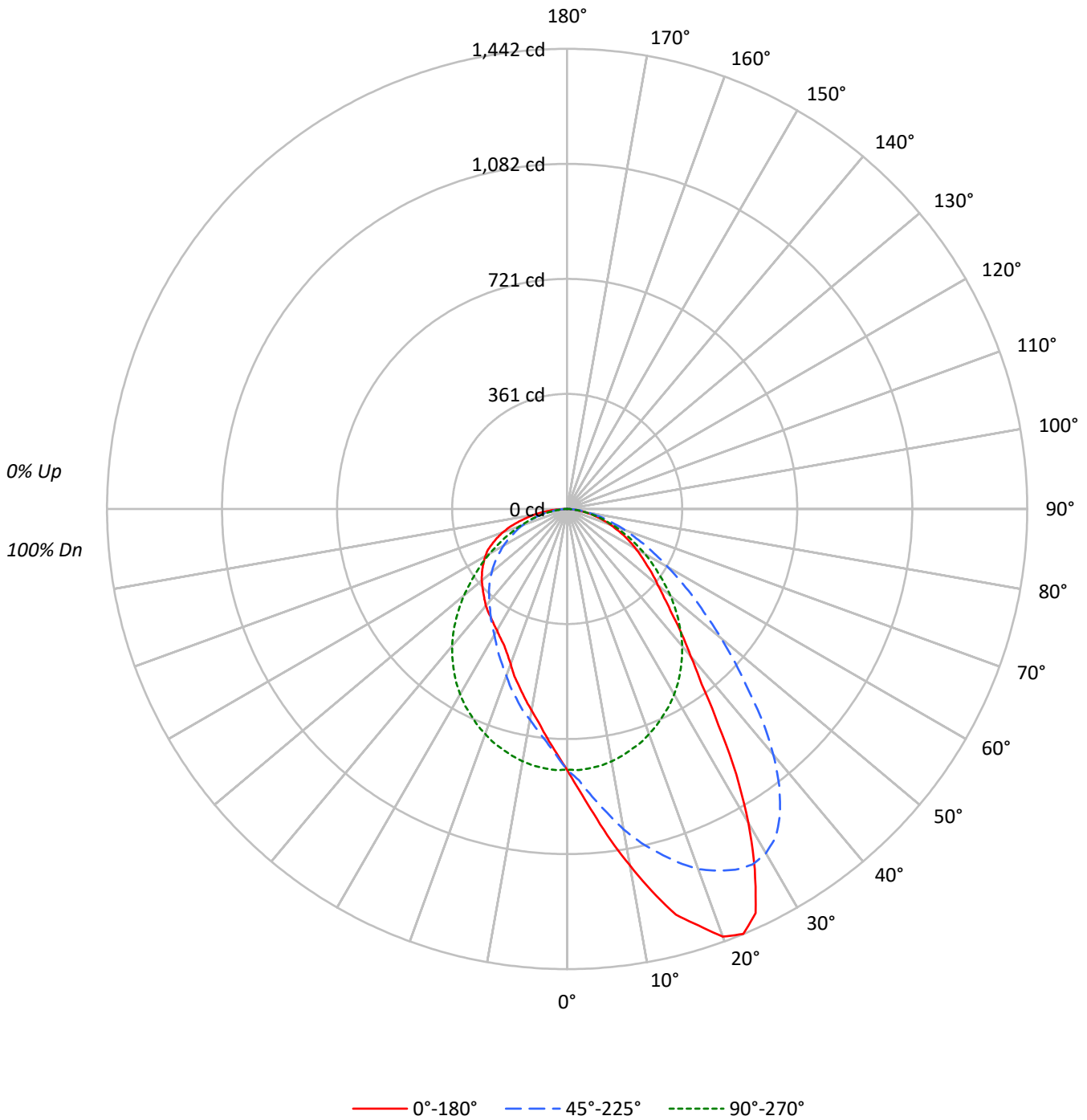
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2254.1 lumens  
Efficiency: N/A  
Efficacy: 119.9 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.22 / 1.41  
Luminous Opening: Rectangular (W 3.88' x L: 0.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 18.8  
Input Voltage (V): 120  
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: 24 FT

TEST NUMBER: P242634

CATALOG NUMBER: S124DRP-S575D830-X4F0-XX-UDD-A-W

### Luminous Intensity Polar Plot



TEST NUMBER: P242634

CATALOG NUMBER: S124DRP-S575D830-X4F0-XX-UDD-A-W

**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 | 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 |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 109 | 105 | 101 | 97  | 107 | 103 | 99  | 96  | 98  | 95  | 93  | 95  | 92  | 90  | 91  | 89  | 87  | 85  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 100 | 92  | 86  | 80  | 98  | 90  | 84  | 79  | 87  | 82  | 78  | 84  | 79  | 76  | 81  | 77  | 74  | 72  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 92  | 82  | 74  | 68  | 89  | 80  | 73  | 67  | 77  | 71  | 66  | 74  | 69  | 65  | 72  | 67  | 64  | 62  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 84  | 73  | 64  | 58  | 82  | 72  | 64  | 58  | 69  | 62  | 57  | 67  | 61  | 56  | 65  | 60  | 55  | 53  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 78  | 65  | 57  | 50  | 76  | 64  | 56  | 50  | 62  | 55  | 50  | 60  | 54  | 49  | 58  | 53  | 49  | 46  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 72  | 59  | 51  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 44  | 55  | 48  | 43  | 53  | 47  | 43  | 41  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 67  | 54  | 45  | 39  | 65  | 53  | 45  | 39  | 52  | 44  | 39  | 50  | 44  | 39  | 49  | 43  | 38  | 36  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 62  | 49  | 41  | 35  | 61  | 49  | 41  | 35  | 47  | 40  | 35  | 46  | 40  | 35  | 45  | 39  | 35  | 33  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 58  | 45  | 37  | 32  | 57  | 45  | 37  | 32  | 44  | 37  | 32  | 43  | 36  | 32  | 42  | 36  | 31  | 30  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 55  | 42  | 34  | 29  | 54  | 41  | 34  | 29  | 40  | 34  | 29  | 39  | 33  | 29  | 39  | 33  | 29  | 27  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°    | 45°   | 90°  | 135° | 180° |
|-----|-------|-------|------|------|------|
| 0°  | 7261  | 7261  | 7261 | 7261 | 7261 |
| 5°  | 8551  | 8077  | 7280 | 6543 | 6425 |
| 10° | 10238 | 9203  | 7248 | 6054 | 5785 |
| 15° | 12113 | 10279 | 7174 | 5655 | 5313 |
| 20° | 13489 | 11364 | 7099 | 5262 | 4891 |
| 25° | 13706 | 12236 | 6989 | 4955 | 4600 |
| 30° | 11663 | 12788 | 6884 | 4678 | 4508 |
| 35° | 8966  | 12628 | 6713 | 4527 | 4509 |
| 40° | 6989  | 11670 | 6510 | 4401 | 4594 |
| 45° | 5828  | 10098 | 6206 | 4347 | 4670 |
| 50° | 5129  | 8708  | 5836 | 4268 | 4829 |
| 55° | 4699  | 7495  | 5392 | 4190 | 5024 |
| 60° | 4404  | 6485  | 4994 | 4085 | 5259 |
| 65° | 4099  | 5666  | 4547 | 3950 | 5452 |
| 70° | 3748  | 5003  | 4106 | 3844 | 5575 |
| 75° | 3349  | 4310  | 3613 | 3592 | 5509 |
| 80° | 2805  | 3501  | 2964 | 3276 | 5334 |
| 85° | 2070  | 2662  | 2142 | 3039 | 5110 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 55°  
 Vertical Angle: 45°  
 Luminance: 11149 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 79.5   | 3.5       |
| 10°-20°   | 245.4  | 10.9      |
| 20°-30°   | 389.8  | 17.3      |
| 30°-40°   | 433.1  | 19.2      |
| 40°-50°   | 393.9  | 17.5      |
| 50°-60°   | 321.9  | 14.3      |
| 60°-70°   | 229.8  | 10.2      |
| 70°-80°   | 126.4  | 5.6       |
| 80°-90°   | 34.2   | 1.5       |
| 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°    | 714.7  | 31.7      |
| 0°-40°    | 1147.9 | 50.9      |
| 0°-60°    | 1863.7 | 82.7      |
| 0°-90°    | 2254.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2254.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0°  | 817  | 817  | 817 | 817  | 817  |      |
| 5°  | 958  | 905  | 816 | 733  | 720  | 97   |
| 15° | 1316 | 1117 | 780 | 614  | 577  | 372  |
| 25° | 1398 | 1248 | 713 | 505  | 469  | 620  |
| 35° | 826  | 1164 | 619 | 417  | 416  | 523  |
| 45° | 464  | 803  | 494 | 346  | 372  | 364  |
| 55° | 303  | 484  | 348 | 270  | 324  | 274  |
| 65° | 195  | 269  | 216 | 188  | 259  | 193  |
| 75° | 98   | 126  | 105 | 105  | 160  | 103  |
| 85° | 20   | 26   | 21  | 30   | 50   | 25   |
| 90° | 0    | 0    | 0   | 0    | 0    |      |



TEST NUMBER: P242634

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 816.9  | 816.9  | 816.9  | 816.9  | 816.9  | 816.9  | 816.9  | 816.9  | 816.9  | 816.9  | 816.9  |
| 2.5°  | 882.5  | 882.2  | 878.8  | 878.1  | 875.7  | 872.7  | 872.0  | 866.6  | 855.8  | 850.7  | 849.4  |
| 5°    | 958.3  | 965.1  | 956.3  | 954.6  | 953.6  | 942.4  | 936.7  | 929.9  | 914.3  | 905.2  | 898.1  |
| 7.5°  | 1047.0 | 1047.3 | 1043.6 | 1039.9 | 1033.4 | 1024.0 | 1011.1 | 996.2  | 978.3  | 960.0  | 947.1  |
| 10°   | 1134.3 | 1137.0 | 1132.6 | 1131.9 | 1114.6 | 1103.8 | 1082.2 | 1063.9 | 1042.9 | 1019.6 | 998.2  |
| 12.5° | 1226.3 | 1220.9 | 1219.2 | 1201.3 | 1201.6 | 1179.6 | 1153.6 | 1134.6 | 1099.4 | 1071.7 | 1041.6 |
| 15°   | 1316.3 | 1308.9 | 1304.1 | 1284.2 | 1274.4 | 1247.0 | 1220.2 | 1199.6 | 1157.3 | 1117.0 | 1086.6 |
| 17.5° | 1368.4 | 1377.6 | 1365.4 | 1357.3 | 1330.5 | 1312.6 | 1285.9 | 1243.6 | 1212.1 | 1162.0 | 1127.2 |
| 20°   | 1426.0 | 1426.6 | 1420.5 | 1412.1 | 1392.1 | 1367.8 | 1338.0 | 1290.6 | 1251.0 | 1201.3 | 1148.5 |
| 22.5° | 1441.5 | 1441.5 | 1439.8 | 1432.1 | 1418.2 | 1399.6 | 1369.5 | 1331.9 | 1281.8 | 1226.7 | 1173.9 |
| 25°   | 1397.5 | 1396.2 | 1399.2 | 1408.0 | 1402.3 | 1396.2 | 1378.9 | 1349.5 | 1304.8 | 1247.6 | 1190.8 |
| 27.5° | 1273.0 | 1281.8 | 1300.1 | 1321.7 | 1337.3 | 1351.2 | 1350.2 | 1337.6 | 1305.8 | 1256.4 | 1195.9 |
| 30°   | 1136.3 | 1147.8 | 1160.7 | 1182.3 | 1224.3 | 1248.3 | 1274.7 | 1294.7 | 1283.5 | 1245.9 | 1190.4 |
| 32.5° | 986.1  | 986.7  | 1007.4 | 1032.8 | 1070.3 | 1122.1 | 1167.8 | 1213.5 | 1233.1 | 1217.9 | 1173.9 |
| 35°   | 826.3  | 831.1  | 851.7  | 876.1  | 923.1  | 979.6  | 1042.6 | 1098.7 | 1145.1 | 1163.7 | 1140.0 |
| 37.5° | 692.3  | 707.2  | 722.8  | 750.5  | 793.5  | 844.6  | 912.3  | 982.3  | 1050.4 | 1091.6 | 1096.0 |
| 40°   | 602.3  | 610.8  | 621.3  | 641.2  | 676.4  | 726.5  | 782.7  | 865.9  | 939.4  | 1005.7 | 1027.3 |
| 42.5° | 531.3  | 535.3  | 540.7  | 558.3  | 583.0  | 632.8  | 682.9  | 753.6  | 827.4  | 909.9  | 949.9  |
| 45°   | 463.6  | 468.7  | 479.5  | 490.0  | 510.3  | 544.8  | 592.5  | 652.7  | 726.9  | 803.3  | 870.3  |
| 47.5° | 412.8  | 416.2  | 423.0  | 434.5  | 452.8  | 476.1  | 516.7  | 567.8  | 640.2  | 714.3  | 786.1  |
| 50°   | 370.9  | 373.6  | 378.7  | 388.8  | 402.0  | 422.3  | 454.1  | 501.2  | 555.0  | 629.7  | 699.8  |
| 52.5° | 337.7  | 338.4  | 341.8  | 347.9  | 357.7  | 373.9  | 398.6  | 435.5  | 484.6  | 549.2  | 618.9  |
| 55°   | 303.2  | 304.5  | 307.9  | 313.0  | 322.1  | 333.0  | 352.9  | 382.0  | 425.7  | 483.6  | 544.1  |
| 57.5° | 274.8  | 276.1  | 278.8  | 280.9  | 289.0  | 298.1  | 314.4  | 335.3  | 369.5  | 421.0  | 476.1  |
| 60°   | 247.7  | 247.0  | 250.4  | 252.1  | 257.2  | 264.6  | 276.5  | 296.4  | 325.2  | 364.8  | 414.5  |
| 62.5° | 221.3  | 220.3  | 223.0  | 225.4  | 227.7  | 233.8  | 243.0  | 257.5  | 279.5  | 314.4  | 355.6  |
| 65°   | 194.9  | 193.6  | 195.2  | 198.0  | 200.7  | 204.0  | 211.2  | 225.0  | 243.6  | 269.4  | 302.2  |
| 67.5° | 167.8  | 169.5  | 169.5  | 171.2  | 172.9  | 177.7  | 182.7  | 193.6  | 206.8  | 227.7  | 256.8  |
| 70°   | 144.2  | 144.5  | 145.8  | 145.8  | 146.9  | 150.9  | 155.0  | 160.7  | 173.6  | 192.5  | 215.2  |
| 72.5° | 120.5  | 122.2  | 121.1  | 122.5  | 123.2  | 125.5  | 128.2  | 133.7  | 144.2  | 157.0  | 175.3  |
| 75°   | 97.5   | 98.5   | 98.5   | 98.8   | 99.8   | 100.8  | 103.2  | 107.3  | 115.1  | 125.5  | 138.7  |
| 77.5° | 75.1   | 75.1   | 75.8   | 77.2   | 77.2   | 78.8   | 80.9   | 83.9   | 88.3   | 96.1   | 104.6  |
| 80°   | 54.8   | 55.5   | 55.2   | 55.8   | 55.8   | 57.2   | 57.9   | 61.9   | 63.6   | 68.4   | 74.8   |
| 82.5° | 36.5   | 37.2   | 37.2   | 38.2   | 38.9   | 38.9   | 39.9   | 40.9   | 42.6   | 46.7   | 48.4   |
| 85°   | 20.3   | 21.0   | 20.3   | 21.0   | 22.0   | 22.3   | 23.3   | 23.7   | 25.0   | 26.1   | 28.4   |
| 87.5° | 7.4    | 8.5    | 8.5    | 8.8    | 9.5    | 9.8    | 10.2   | 9.8    | 11.2   | 11.5   | 12.9   |
| 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):**

|       | 55°    | 60°    | 65°    | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   | 100°  | 105°  |
|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 816.9  | 816.9  | 816.9  | 816.9 | 816.9 | 816.9 | 816.9 | 816.9 | 816.9 | 816.9 | 816.9 |
| 2.5°  | 849.7  | 845.0  | 841.6  | 838.9 | 831.4 | 827.0 | 823.6 | 818.9 | 813.5 | 807.7 | 800.6 |
| 5°    | 891.0  | 879.5  | 871.0  | 858.1 | 846.0 | 835.8 | 825.3 | 815.9 | 804.3 | 791.8 | 782.7 |
| 7.5°  | 933.3  | 917.4  | 896.0  | 879.5 | 859.5 | 842.2 | 827.0 | 811.1 | 794.2 | 778.0 | 762.7 |
| 10°   | 973.2  | 951.2  | 926.8  | 898.1 | 871.0 | 847.0 | 824.6 | 803.0 | 782.0 | 761.0 | 743.1 |
| 12.5° | 1016.2 | 987.4  | 948.5  | 913.6 | 882.5 | 848.3 | 820.3 | 792.5 | 766.1 | 743.8 | 722.1 |
| 15°   | 1053.7 | 1014.1 | 972.5  | 927.5 | 887.6 | 850.0 | 813.1 | 779.6 | 751.2 | 722.1 | 701.8 |
| 17.5° | 1077.4 | 1028.4 | 983.7  | 936.7 | 890.6 | 843.6 | 805.4 | 767.8 | 732.6 | 704.2 | 678.8 |
| 20°   | 1100.8 | 1052.0 | 992.8  | 945.8 | 888.3 | 839.5 | 793.5 | 750.5 | 713.3 | 682.5 | 656.1 |
| 22.5° | 1121.1 | 1062.9 | 1003.7 | 938.0 | 880.8 | 828.4 | 776.9 | 733.6 | 695.4 | 662.6 | 637.5 |
| 25°   | 1125.8 | 1061.2 | 996.9  | 935.3 | 870.3 | 809.1 | 763.4 | 712.6 | 672.0 | 637.9 | 610.8 |
| 27.5° | 1127.5 | 1059.2 | 987.8  | 920.8 | 853.8 | 797.9 | 738.4 | 694.0 | 652.1 | 615.9 | 590.1 |
| 30°   | 1123.8 | 1051.7 | 973.5  | 899.4 | 832.1 | 770.2 | 720.1 | 670.7 | 627.7 | 591.8 | 564.8 |
| 32.5° | 1111.9 | 1036.1 | 955.3  | 875.7 | 805.4 | 745.1 | 693.0 | 646.7 | 605.0 | 569.8 | 541.1 |
| 35°   | 1086.9 | 1012.8 | 927.2  | 845.6 | 774.2 | 713.0 | 666.3 | 618.6 | 576.6 | 543.1 | 515.7 |
| 37.5° | 1053.4 | 984.4  | 897.4  | 812.5 | 743.8 | 681.5 | 634.5 | 590.5 | 552.6 | 518.1 | 489.6 |
| 40°   | 1006.7 | 947.8  | 860.5  | 778.3 | 702.5 | 644.0 | 600.6 | 561.0 | 523.5 | 491.3 | 464.6 |
| 42.5° | 952.9  | 903.5  | 824.6  | 736.3 | 663.9 | 605.0 | 563.1 | 528.6 | 493.7 | 464.6 | 437.9 |
| 45°   | 886.9  | 853.1  | 777.3  | 696.7 | 620.6 | 565.1 | 524.8 | 493.7 | 463.9 | 434.8 | 412.5 |
| 47.5° | 813.5  | 794.5  | 728.5  | 651.4 | 578.3 | 522.8 | 488.0 | 458.2 | 431.1 | 405.7 | 385.8 |
| 50°   | 739.4  | 731.3  | 676.1  | 602.3 | 533.3 | 481.9 | 446.7 | 422.0 | 399.6 | 378.0 | 359.4 |
| 52.5° | 666.3  | 668.0  | 619.6  | 553.6 | 491.0 | 441.9 | 407.1 | 384.4 | 365.8 | 349.2 | 333.0 |
| 55°   | 591.5  | 601.0  | 562.1  | 501.8 | 444.6 | 400.0 | 368.5 | 347.9 | 334.3 | 319.8 | 307.3 |
| 57.5° | 522.8  | 538.7  | 504.9  | 449.7 | 401.3 | 358.7 | 330.9 | 315.0 | 300.1 | 290.7 | 280.9 |
| 60°   | 455.8  | 470.7  | 445.7  | 401.0 | 356.0 | 320.8 | 294.7 | 280.9 | 268.3 | 262.3 | 255.8 |
| 62.5° | 396.3  | 409.1  | 392.2  | 351.6 | 314.0 | 280.5 | 259.5 | 246.3 | 238.9 | 232.1 | 228.4 |
| 65°   | 340.1  | 351.2  | 335.3  | 305.2 | 271.7 | 244.7 | 226.7 | 216.2 | 208.1 | 205.4 | 200.7 |
| 67.5° | 284.6  | 294.7  | 286.3  | 259.9 | 231.5 | 210.1 | 195.9 | 184.8 | 180.0 | 177.3 | 174.3 |
| 70°   | 236.2  | 246.3  | 237.2  | 214.9 | 194.2 | 177.0 | 163.8 | 158.0 | 153.0 | 151.9 | 147.2 |
| 72.5° | 195.2  | 201.3  | 192.2  | 176.0 | 159.0 | 145.2 | 135.7 | 129.6 | 127.6 | 125.5 | 123.5 |
| 75°   | 152.6  | 158.7  | 152.6  | 139.1 | 126.6 | 116.4 | 107.6 | 105.2 | 102.2 | 101.2 | 99.5  |
| 77.5° | 114.4  | 120.1  | 115.4  | 106.3 | 96.4  | 88.0  | 82.9  | 79.5  | 79.2  | 77.2  | 77.8  |
| 80°   | 82.6   | 86.0   | 81.6   | 75.8  | 68.4  | 62.9  | 59.6  | 57.9  | 55.8  | 55.2  | 56.5  |
| 82.5° | 53.5   | 54.5   | 52.8   | 49.4  | 44.3  | 41.3  | 39.3  | 37.2  | 37.2  | 37.6  | 37.2  |
| 85°   | 30.8   | 30.5   | 30.1   | 26.7  | 25.0  | 22.7  | 21.3  | 21.0  | 20.6  | 21.3  | 22.0  |
| 87.5° | 12.9   | 13.2   | 12.9   | 11.5  | 10.5  | 9.5   | 9.1   | 8.8   | 9.1   | 9.5   | 9.8   |
| 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: P242634

CATALOG NUMBER: S124DRP-S575D830-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

|       | 110°  | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  | 150°  | 155°  | 160°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 816.9 | 816.9 | 816.9 | 816.9 | 816.9 | 816.9 | 816.9 | 816.9 | 816.9 | 816.9 | 816.9 |
| 2.5°  | 797.2 | 794.2 | 789.8 | 783.7 | 778.6 | 773.2 | 771.9 | 769.8 | 773.9 | 770.5 | 769.5 |
| 5°    | 774.9 | 767.8 | 758.7 | 748.2 | 742.1 | 733.3 | 731.6 | 728.2 | 724.8 | 724.5 | 721.1 |
| 7.5°  | 751.6 | 741.7 | 730.2 | 719.4 | 709.9 | 700.5 | 694.4 | 693.7 | 688.3 | 685.6 | 682.2 |
| 10°   | 729.2 | 716.4 | 702.5 | 692.3 | 680.8 | 670.7 | 663.6 | 659.5 | 656.1 | 652.4 | 649.0 |
| 12.5° | 702.8 | 689.0 | 678.1 | 667.0 | 652.7 | 645.6 | 632.8 | 625.0 | 625.0 | 626.0 | 615.9 |
| 15°   | 683.5 | 670.0 | 652.4 | 636.8 | 629.4 | 614.5 | 608.1 | 600.0 | 594.9 | 589.8 | 585.7 |
| 17.5° | 659.9 | 643.3 | 629.7 | 612.1 | 598.3 | 587.1 | 578.3 | 573.9 | 565.8 | 558.3 | 553.3 |
| 20°   | 637.9 | 619.9 | 605.4 | 586.4 | 570.9 | 556.3 | 549.2 | 542.4 | 536.7 | 530.6 | 524.8 |
| 22.5° | 615.5 | 596.6 | 578.0 | 559.7 | 545.5 | 529.9 | 523.1 | 513.3 | 507.9 | 505.2 | 499.5 |
| 25°   | 591.8 | 571.5 | 551.2 | 533.6 | 518.7 | 505.2 | 496.1 | 489.0 | 482.9 | 480.2 | 476.4 |
| 27.5° | 566.1 | 546.2 | 526.9 | 506.6 | 489.3 | 479.5 | 472.1 | 466.3 | 462.6 | 458.5 | 456.8 |
| 30°   | 541.8 | 520.8 | 499.8 | 481.2 | 465.6 | 455.8 | 449.0 | 445.3 | 442.6 | 440.9 | 439.2 |
| 32.5° | 517.1 | 496.4 | 474.1 | 457.5 | 444.0 | 435.5 | 430.8 | 427.0 | 426.0 | 425.7 | 425.4 |
| 35°   | 490.3 | 469.3 | 449.0 | 433.8 | 420.6 | 417.2 | 412.8 | 410.8 | 410.1 | 412.5 | 413.5 |
| 37.5° | 464.6 | 445.0 | 426.0 | 410.8 | 402.0 | 396.6 | 394.9 | 394.6 | 396.9 | 399.0 | 401.3 |
| 40°   | 439.9 | 421.0 | 403.4 | 390.5 | 382.4 | 379.3 | 378.7 | 380.3 | 383.1 | 385.4 | 388.1 |
| 42.5° | 415.9 | 397.3 | 381.7 | 369.9 | 364.8 | 362.1 | 362.8 | 364.4 | 368.5 | 371.5 | 375.9 |
| 45°   | 390.8 | 375.3 | 359.7 | 349.9 | 345.2 | 345.8 | 345.8 | 348.9 | 352.6 | 357.0 | 361.4 |
| 47.5° | 367.5 | 351.6 | 338.4 | 329.9 | 327.6 | 326.5 | 328.2 | 332.3 | 337.4 | 342.4 | 348.5 |
| 50°   | 343.8 | 328.9 | 317.7 | 310.3 | 307.6 | 308.6 | 311.3 | 315.0 | 321.5 | 328.2 | 334.7 |
| 52.5° | 319.8 | 306.6 | 296.4 | 289.7 | 288.0 | 290.0 | 292.7 | 299.1 | 304.5 | 312.0 | 320.1 |
| 55°   | 294.7 | 283.2 | 275.1 | 270.0 | 269.4 | 270.4 | 273.4 | 279.8 | 288.0 | 297.1 | 304.5 |
| 57.5° | 270.0 | 260.2 | 252.4 | 248.7 | 249.1 | 249.7 | 254.5 | 262.3 | 270.4 | 280.2 | 289.7 |
| 60°   | 245.0 | 236.2 | 230.1 | 227.4 | 227.7 | 229.8 | 235.9 | 243.0 | 253.8 | 263.3 | 273.4 |
| 62.5° | 221.3 | 213.9 | 208.1 | 205.7 | 205.1 | 210.1 | 215.9 | 223.3 | 234.2 | 245.0 | 256.2 |
| 65°   | 195.6 | 189.5 | 184.8 | 183.4 | 184.4 | 187.8 | 195.2 | 205.1 | 214.2 | 225.4 | 236.9 |
| 67.5° | 170.5 | 165.5 | 162.1 | 162.8 | 163.8 | 168.5 | 174.9 | 183.4 | 193.6 | 205.1 | 216.9 |
| 70°   | 146.9 | 142.1 | 139.4 | 139.8 | 141.8 | 147.9 | 153.3 | 161.7 | 172.9 | 184.8 | 194.2 |
| 72.5° | 122.5 | 119.8 | 117.4 | 119.1 | 121.1 | 124.9 | 132.0 | 140.4 | 149.9 | 160.7 | 170.9 |
| 75°   | 97.8  | 97.8  | 96.4  | 97.5  | 100.5 | 104.6 | 109.6 | 118.4 | 128.2 | 137.0 | 145.2 |
| 77.5° | 76.8  | 75.8  | 76.5  | 77.5  | 79.5  | 84.6  | 90.3  | 96.8  | 104.6 | 113.7 | 120.5 |
| 80°   | 55.5  | 55.8  | 57.5  | 59.6  | 60.2  | 64.0  | 70.0  | 75.8  | 81.6  | 89.0  | 95.4  |
| 82.5° | 38.2  | 38.6  | 39.3  | 42.0  | 42.6  | 46.7  | 50.1  | 55.8  | 60.9  | 65.3  | 70.4  |
| 85°   | 22.7  | 22.7  | 24.4  | 25.4  | 27.1  | 29.8  | 32.1  | 35.5  | 40.3  | 43.7  | 48.7  |
| 87.5° | 10.8  | 10.8  | 12.2  | 12.9  | 13.9  | 15.6  | 16.2  | 20.0  | 21.3  | 23.0  | 26.1  |
| 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: P242634

CATALOG NUMBER: S124DRP-S575D830-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

|       | 165°  | 170°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|
| 0°    | 816.9 | 816.9 | 816.9 | 816.9 |
| 2.5°  | 768.8 | 768.1 | 765.8 | 765.4 |
| 5°    | 719.1 | 717.4 | 716.4 | 720.1 |
| 7.5°  | 681.5 | 680.2 | 677.1 | 676.1 |
| 10°   | 645.6 | 644.3 | 641.6 | 640.9 |
| 12.5° | 611.1 | 608.1 | 608.1 | 609.1 |
| 15°   | 581.3 | 580.0 | 576.3 | 577.3 |
| 17.5° | 550.9 | 549.5 | 544.5 | 549.5 |
| 20°   | 522.5 | 519.8 | 517.4 | 517.1 |
| 22.5° | 495.4 | 493.0 | 493.4 | 490.7 |
| 25°   | 473.7 | 471.4 | 470.7 | 469.0 |
| 27.5° | 456.1 | 454.8 | 453.4 | 454.1 |
| 30°   | 440.2 | 439.9 | 439.2 | 439.2 |
| 32.5° | 427.0 | 427.0 | 427.7 | 427.7 |
| 35°   | 414.9 | 415.9 | 416.6 | 415.5 |
| 37.5° | 404.0 | 404.7 | 405.7 | 406.7 |
| 40°   | 391.2 | 393.5 | 394.2 | 395.9 |
| 42.5° | 379.0 | 381.7 | 383.7 | 383.7 |
| 45°   | 366.5 | 369.2 | 371.5 | 371.5 |
| 47.5° | 353.6 | 357.3 | 359.7 | 360.0 |
| 50°   | 340.4 | 345.2 | 347.5 | 349.2 |
| 52.5° | 327.6 | 332.3 | 335.7 | 336.4 |
| 55°   | 312.3 | 319.1 | 322.8 | 324.2 |
| 57.5° | 298.8 | 304.9 | 308.9 | 310.0 |
| 60°   | 282.6 | 289.3 | 294.7 | 295.8 |
| 62.5° | 266.0 | 273.1 | 277.8 | 280.9 |
| 65°   | 246.3 | 253.5 | 258.2 | 259.2 |
| 67.5° | 225.7 | 233.1 | 236.2 | 238.2 |
| 70°   | 203.7 | 209.5 | 212.8 | 214.5 |
| 72.5° | 178.7 | 184.8 | 188.8 | 188.8 |
| 75°   | 153.0 | 158.4 | 160.4 | 160.4 |
| 77.5° | 126.2 | 129.3 | 132.0 | 132.6 |
| 80°   | 100.5 | 102.2 | 104.2 | 104.2 |
| 82.5° | 74.1  | 75.5  | 77.5  | 77.2  |
| 85°   | 48.1  | 51.1  | 50.8  | 50.1  |
| 87.5° | 27.1  | 27.4  | 28.4  | 29.1  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   |



TEST NUMBER: P242634  
 CATALOG NUMBER: S124DRP-S575D830-X4F0-XX-UDD-A-W

**CIE UGR TABLE:**

| Reflectances:   |      |                  |       |       |       |       |                |       |       |       |       |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling         |      | 0.7              | 0.7   | 0.5   | 0.5   | 0.3   | 0.7            | 0.7   | 0.5   | 0.5   | 0.3   |
| Wall            |      | 0.5              | 0.3   | 0.5   | 0.3   | 0.3   | 0.5            | 0.3   | 0.5   | 0.3   | 0.3   |
| Reference plane |      | 0.2              | 0.2   | 0.2   | 0.2   | 0.2   | 0.2            | 0.2   | 0.2   | 0.2   | 0.2   |
| Room dimensions |      | Viewed crosswise |       |       |       |       | Viewed endwise |       |       |       |       |
| X=2H            | Y=2H | 16.85            | 18.42 | 17.22 | 18.73 | 19.05 | 17.77          | 19.33 | 18.13 | 19.64 | 19.96 |
|                 | 3H   | 18.34            | 19.74 | 18.72 | 20.07 | 20.43 | 19.13          | 20.54 | 19.51 | 20.87 | 21.23 |
|                 | 4H   | 18.88            | 20.20 | 19.28 | 20.55 | 20.92 | 19.60          | 20.93 | 20.00 | 21.27 | 21.65 |
|                 | 6H   | 19.24            | 20.46 | 19.65 | 20.83 | 21.22 | 19.91          | 21.14 | 20.32 | 21.50 | 21.89 |
|                 | 8H   | 19.34            | 20.50 | 19.76 | 20.89 | 21.29 | 19.99          | 21.16 | 20.42 | 21.55 | 21.95 |
|                 | 12H  | 19.39            | 20.51 | 19.82 | 20.89 | 21.32 | 20.03          | 21.15 | 20.46 | 21.53 | 21.96 |
| 4H              | 2H   | 18.02            | 19.34 | 18.42 | 19.69 | 20.06 | 18.45          | 19.77 | 18.85 | 20.12 | 20.50 |
|                 | 3H   | 19.55            | 20.65 | 19.96 | 21.05 | 21.45 | 20.16          | 21.26 | 20.57 | 21.66 | 22.06 |
|                 | 4H   | 20.13            | 21.13 | 20.56 | 21.54 | 21.98 | 20.75          | 21.74 | 21.18 | 22.16 | 22.60 |
|                 | 6H   | 20.56            | 21.43 | 21.02 | 21.87 | 22.33 | 21.15          | 22.01 | 21.60 | 22.46 | 22.91 |
|                 | 8H   | 20.68            | 21.49 | 21.15 | 21.94 | 22.40 | 21.25          | 22.06 | 21.71 | 22.51 | 22.97 |
|                 | 12H  | 20.76            | 21.49 | 21.24 | 21.96 | 22.43 | 21.31          | 22.04 | 21.80 | 22.52 | 22.99 |
| 8H              | 4H   | 20.59            | 21.40 | 21.05 | 21.84 | 22.31 | 21.06          | 21.87 | 21.52 | 22.32 | 22.78 |
|                 | 6H   | 21.09            | 21.77 | 21.59 | 22.26 | 22.73 | 21.59          | 22.26 | 22.09 | 22.75 | 23.23 |
|                 | 8H   | 21.26            | 21.87 | 21.78 | 22.38 | 22.86 | 21.75          | 22.36 | 22.27 | 22.87 | 23.35 |
|                 | 12H  | 21.39            | 21.92 | 21.90 | 22.41 | 22.97 | 21.87          | 22.40 | 22.38 | 22.89 | 23.46 |
| 12H             | 4H   | 20.64            | 21.36 | 21.12 | 21.84 | 22.31 | 21.09          | 21.82 | 21.58 | 22.30 | 22.77 |
|                 | 6H   | 21.17            | 21.77 | 21.68 | 22.28 | 22.77 | 21.65          | 22.25 | 22.16 | 22.76 | 23.25 |
|                 | 8H   | 21.39            | 21.92 | 21.90 | 22.41 | 22.98 | 21.87          | 22.40 | 22.38 | 22.89 | 23.46 |