

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: P243600

Luminaire Tested: S124RDRP-H1195D830-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243600
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-70)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-H1195D830-X4F0-XX-UDD-A-W
Description: DEFINE 4 REGRESSED DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

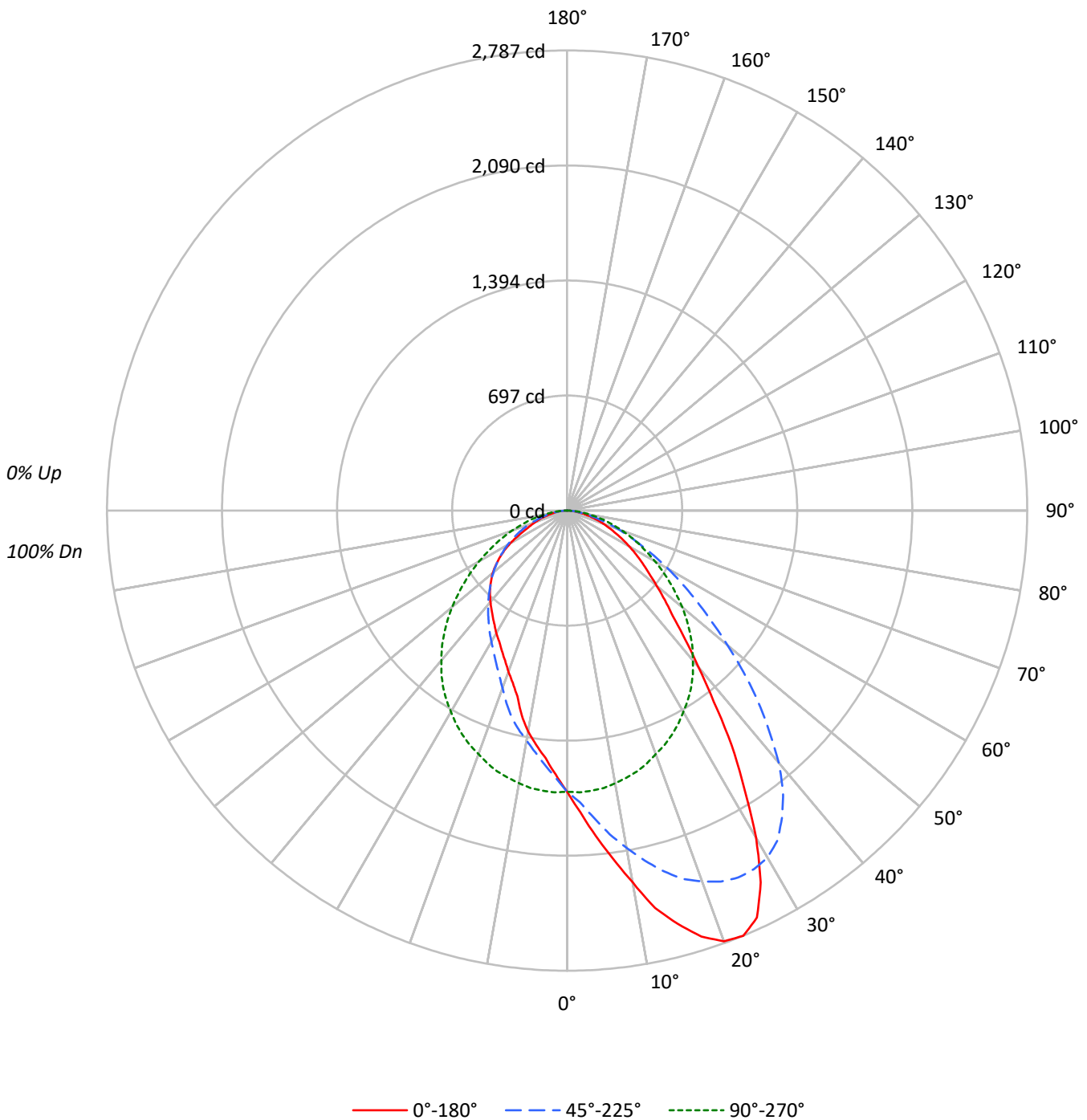
Lumens per Lamp: N/A
Luminaire Lumens: 4393.5 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.23 / 1.39
Luminous Opening: Rectangular (W 3.88' x L: 0.31' x H: 0')
CIE Type: Direct

Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (Ain): 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: P243600

CATALOG NUMBER: S124RDRP-H1195D830-X4F0-XX-UDD-A-W

Luminous Intensity Polar Plot





TEST NUMBER: P243600

CATALOG NUMBER: S124RDRP-H1195D830-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 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | 100 | | | |
| 1 | 110 | 105 | 102 | 98 | 107 | 103 | 100 | 97 | 99 | 96 | 93 | 95 | 93 | 91 | 92 | 90 | 88 | 86 | | | | | 86 | | | |
| 2 | 101 | 93 | 87 | 82 | 98 | 91 | 86 | 81 | 88 | 83 | 79 | 85 | 81 | 77 | 82 | 78 | 75 | 73 | | | | | 73 | | | |
| 3 | 92 | 83 | 75 | 69 | 90 | 81 | 74 | 68 | 78 | 72 | 67 | 76 | 70 | 66 | 73 | 69 | 65 | 63 | | | | | 63 | | | |
| 4 | 85 | 74 | 66 | 59 | 83 | 73 | 65 | 59 | 70 | 63 | 58 | 68 | 62 | 57 | 66 | 61 | 57 | 55 | | | | | 55 | | | |
| 5 | 79 | 66 | 58 | 52 | 77 | 65 | 57 | 51 | 63 | 56 | 51 | 61 | 55 | 50 | 60 | 54 | 50 | 48 | | | | | 48 | | | |
| 6 | 73 | 60 | 52 | 46 | 71 | 59 | 51 | 45 | 58 | 50 | 45 | 56 | 50 | 45 | 54 | 49 | 44 | 42 | | | | | 42 | | | |
| 7 | 68 | 55 | 46 | 41 | 66 | 54 | 46 | 40 | 53 | 45 | 40 | 51 | 45 | 40 | 50 | 44 | 40 | 38 | | | | | 38 | | | |
| 8 | 63 | 50 | 42 | 36 | 62 | 50 | 42 | 36 | 48 | 41 | 36 | 47 | 41 | 36 | 46 | 40 | 36 | 34 | | | | | 34 | | | |
| 9 | 59 | 46 | 38 | 33 | 58 | 46 | 38 | 33 | 45 | 38 | 33 | 43 | 37 | 33 | 42 | 37 | 32 | 31 | | | | | 31 | | | |
| 10 | 56 | 43 | 35 | 30 | 54 | 42 | 35 | 30 | 41 | 35 | 30 | 40 | 34 | 30 | 39 | 34 | 30 | 28 | | | | | 28 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|-------|-------|-------|-------|-------|
| 0° | 15132 | 15132 | 15132 | 15132 | 15132 |
| 5° | 17626 | 16674 | 15196 | 13794 | 13416 |
| 10° | 20643 | 18722 | 15132 | 12763 | 12265 |
| 15° | 23852 | 20814 | 15055 | 11926 | 10712 |
| 20° | 26261 | 22605 | 14843 | 10829 | 9820 |
| 25° | 26682 | 24050 | 14707 | 9993 | 9180 |
| 30° | 23487 | 24903 | 14445 | 9403 | 8804 |
| 35° | 18847 | 24623 | 14200 | 8985 | 8517 |
| 40° | 14337 | 23130 | 13746 | 8623 | 8385 |
| 45° | 11383 | 20550 | 13241 | 8324 | 8283 |
| 50° | 9771 | 17518 | 12587 | 8058 | 8141 |
| 55° | 8629 | 14876 | 11773 | 7777 | 7746 |
| 60° | 7732 | 12574 | 10924 | 7424 | 7095 |
| 65° | 6804 | 10346 | 10094 | 6916 | 5967 |
| 70° | 6063 | 8527 | 9166 | 6339 | 5375 |
| 75° | 5282 | 6694 | 8332 | 5577 | 4781 |
| 80° | 4479 | 5124 | 7161 | 4715 | 4413 |
| 85° | 3916 | 4192 | 6150 | 4600 | 4467 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 55°
 Vertical Angle: 45°
 Luminance: 22116 cd/sqm



TEST NUMBER: P243600

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 165.2 | 3.8 |
| 10°-20° | 500.9 | 11.4 |
| 20°-30° | 781.8 | 17.8 |
| 30°-40° | 871.7 | 19.8 |
| 40°-50° | 783.7 | 17.8 |
| 50°-60° | 619.2 | 14.1 |
| 60°-70° | 411.2 | 9.4 |
| 70°-80° | 206.2 | 4.7 |
| 80°-90° | 53.7 | 1.2 |
| 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° | 1447.8 | 33.0 |
| 0°-40° | 2319.6 | 52.8 |
| 0°-60° | 3722.4 | 84.7 |
| 0°-90° | 4393.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4393.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 1702 | 1702 | 1702 | 1702 | 1702 | |
| 5° | 1975 | 1869 | 1703 | 1546 | 1504 | 198 |
| 15° | 2592 | 2262 | 1636 | 1296 | 1164 | 737 |
| 25° | 2720 | 2452 | 1500 | 1019 | 936 | 1217 |
| 35° | 1737 | 2269 | 1309 | 828 | 785 | 1079 |
| 45° | 906 | 1635 | 1053 | 662 | 659 | 717 |
| 55° | 557 | 960 | 760 | 502 | 500 | 502 |
| 65° | 324 | 492 | 480 | 329 | 284 | 324 |
| 75° | 154 | 195 | 243 | 162 | 139 | 165 |
| 85° | 38 | 41 | 60 | 45 | 44 | 43 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P243600

CATALOG NUMBER: S124RDRP-H1195D830-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 |
| 2.5° | 1828.3 | 1821.6 | 1821.0 | 1812.4 | 1811.7 | 1803.1 | 1800.4 | 1793.1 | 1778.6 | 1767.3 | 1767.9 |
| 5° | 1975.4 | 1970.1 | 1969.5 | 1960.9 | 1958.2 | 1947.6 | 1931.0 | 1911.1 | 1887.9 | 1868.7 | 1856.1 |
| 7.5° | 2126.6 | 2135.9 | 2125.9 | 2125.9 | 2106.7 | 2094.1 | 2061.6 | 2045.0 | 2005.3 | 1977.4 | 1948.3 |
| 10° | 2287.0 | 2295.6 | 2291.6 | 2283.7 | 2258.5 | 2232.6 | 2198.8 | 2166.4 | 2118.0 | 2074.2 | 2045.0 |
| 12.5° | 2466.0 | 2440.1 | 2456.7 | 2432.2 | 2411.6 | 2370.5 | 2338.0 | 2273.1 | 2234.6 | 2171.0 | 2114.0 |
| 15° | 2591.9 | 2582.0 | 2581.3 | 2564.8 | 2542.2 | 2497.1 | 2462.0 | 2394.4 | 2328.8 | 2261.8 | 2197.5 |
| 17.5° | 2704.6 | 2705.9 | 2696.7 | 2670.2 | 2641.0 | 2597.2 | 2549.5 | 2489.2 | 2414.3 | 2340.0 | 2263.8 |
| 20° | 2776.2 | 2776.9 | 2770.3 | 2756.3 | 2724.5 | 2684.7 | 2635.7 | 2556.8 | 2471.9 | 2389.7 | 2313.5 |
| 22.5° | 2786.8 | 2788.8 | 2786.8 | 2778.2 | 2756.3 | 2723.8 | 2678.8 | 2611.8 | 2526.3 | 2432.2 | 2341.4 |
| 25° | 2720.5 | 2727.2 | 2727.8 | 2739.8 | 2728.5 | 2715.9 | 2682.7 | 2626.4 | 2547.5 | 2452.1 | 2353.3 |
| 27.5° | 2538.9 | 2557.5 | 2574.7 | 2595.9 | 2615.1 | 2632.4 | 2635.0 | 2605.2 | 2537.6 | 2448.7 | 2354.6 |
| 30° | 2288.3 | 2310.2 | 2344.7 | 2367.2 | 2426.9 | 2464.7 | 2515.7 | 2527.0 | 2494.5 | 2426.2 | 2335.4 |
| 32.5° | 1996.6 | 2019.9 | 2033.1 | 2107.4 | 2192.9 | 2254.5 | 2339.4 | 2389.7 | 2402.3 | 2369.9 | 2295.6 |
| 35° | 1736.8 | 1740.8 | 1750.7 | 1834.9 | 1919.8 | 2013.2 | 2118.6 | 2206.1 | 2265.8 | 2269.1 | 2232.6 |
| 37.5° | 1458.4 | 1463.0 | 1502.1 | 1566.4 | 1640.0 | 1742.8 | 1864.1 | 1988.7 | 2098.1 | 2148.5 | 2137.8 |
| 40° | 1235.6 | 1234.3 | 1276.1 | 1331.8 | 1403.4 | 1510.1 | 1635.4 | 1771.3 | 1887.9 | 1993.3 | 2018.5 |
| 42.5° | 1055.3 | 1060.0 | 1095.8 | 1128.3 | 1197.2 | 1272.1 | 1406.0 | 1547.2 | 1697.0 | 1812.4 | 1889.3 |
| 45° | 905.5 | 917.5 | 942.0 | 972.5 | 1024.2 | 1093.1 | 1202.5 | 1343.0 | 1496.2 | 1634.7 | 1726.8 |
| 47.5° | 802.1 | 805.4 | 818.0 | 855.8 | 890.3 | 946.0 | 1039.4 | 1158.7 | 1294.6 | 1449.8 | 1571.1 |
| 50° | 706.6 | 714.6 | 719.2 | 741.8 | 775.6 | 828.6 | 900.9 | 989.7 | 1124.3 | 1266.8 | 1418.6 |
| 52.5° | 624.4 | 629.1 | 637.7 | 658.3 | 684.8 | 721.9 | 778.9 | 857.1 | 969.2 | 1101.1 | 1244.3 |
| 55° | 556.8 | 557.5 | 566.1 | 580.7 | 601.2 | 629.8 | 684.1 | 740.5 | 839.9 | 959.9 | 1089.8 |
| 57.5° | 495.8 | 491.9 | 499.8 | 508.4 | 528.3 | 552.9 | 588.0 | 645.7 | 723.2 | 825.3 | 942.6 |
| 60° | 434.9 | 438.2 | 437.5 | 447.5 | 458.1 | 482.6 | 512.4 | 550.2 | 613.8 | 707.3 | 806.7 |
| 62.5° | 377.9 | 377.2 | 383.8 | 389.8 | 397.1 | 417.0 | 441.5 | 472.6 | 522.4 | 591.3 | 687.4 |
| 65° | 323.5 | 324.8 | 330.1 | 334.8 | 342.7 | 355.3 | 373.9 | 399.1 | 438.8 | 491.9 | 572.7 |
| 67.5° | 274.4 | 279.1 | 281.7 | 283.1 | 290.3 | 299.6 | 315.5 | 336.1 | 363.3 | 405.7 | 473.3 |
| 70° | 233.3 | 234.7 | 236.0 | 240.6 | 243.9 | 249.2 | 261.2 | 272.5 | 297.0 | 328.1 | 377.2 |
| 72.5° | 194.9 | 193.6 | 197.5 | 198.9 | 200.2 | 205.5 | 212.8 | 218.8 | 234.7 | 261.2 | 291.7 |
| 75° | 153.8 | 154.5 | 155.1 | 157.1 | 162.4 | 163.1 | 166.4 | 173.0 | 184.3 | 194.9 | 215.4 |
| 77.5° | 115.3 | 117.3 | 116.7 | 118.7 | 120.6 | 122.6 | 124.0 | 129.9 | 137.9 | 146.5 | 156.4 |
| 80° | 87.5 | 87.5 | 87.5 | 88.8 | 87.5 | 92.1 | 92.1 | 94.1 | 96.1 | 100.1 | 107.4 |
| 82.5° | 59.7 | 61.0 | 61.6 | 62.3 | 63.0 | 63.0 | 63.6 | 65.0 | 67.6 | 68.9 | 70.9 |
| 85° | 38.4 | 37.1 | 37.8 | 37.8 | 37.8 | 37.8 | 39.1 | 40.4 | 40.4 | 41.1 | 43.1 |
| 87.5° | 17.2 | 17.2 | 17.2 | 17.2 | 16.6 | 17.2 | 17.9 | 17.9 | 18.6 | 18.6 | 19.9 |
| 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: P243600

CATALOG NUMBER: S124RDRP-H1195D830-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 |
| 2.5° | 1764.0 | 1762.0 | 1752.0 | 1741.4 | 1731.5 | 1721.5 | 1718.2 | 1708.3 | 1696.4 | 1685.7 | 1673.8 |
| 5° | 1842.9 | 1826.9 | 1805.1 | 1782.5 | 1759.3 | 1738.1 | 1721.5 | 1703.0 | 1681.8 | 1656.6 | 1636.7 |
| 7.5° | 1922.4 | 1893.2 | 1857.4 | 1824.3 | 1784.5 | 1752.7 | 1720.9 | 1694.4 | 1663.9 | 1628.1 | 1600.9 |
| 10° | 2000.0 | 1951.6 | 1907.8 | 1855.5 | 1805.1 | 1761.3 | 1720.9 | 1676.5 | 1636.0 | 1597.6 | 1559.8 |
| 12.5° | 2061.6 | 2013.2 | 1950.2 | 1885.9 | 1821.0 | 1764.0 | 1709.6 | 1657.2 | 1606.9 | 1560.5 | 1518.7 |
| 15° | 2131.9 | 2062.3 | 1984.7 | 1913.8 | 1825.0 | 1754.7 | 1692.4 | 1636.0 | 1578.4 | 1522.0 | 1476.3 |
| 17.5° | 2183.6 | 2101.4 | 2005.3 | 1923.7 | 1838.2 | 1750.7 | 1675.8 | 1604.9 | 1538.6 | 1479.6 | 1432.5 |
| 20° | 2223.4 | 2125.9 | 2029.8 | 1926.4 | 1824.3 | 1734.8 | 1650.6 | 1569.1 | 1502.1 | 1437.8 | 1388.1 |
| 22.5° | 2240.6 | 2137.8 | 2031.1 | 1919.1 | 1810.4 | 1709.0 | 1621.4 | 1537.3 | 1461.7 | 1395.4 | 1337.7 |
| 25° | 2247.9 | 2135.2 | 2024.5 | 1897.2 | 1787.2 | 1683.8 | 1586.3 | 1499.5 | 1421.9 | 1347.0 | 1290.0 |
| 27.5° | 2241.9 | 2121.3 | 1994.0 | 1874.0 | 1749.4 | 1648.0 | 1544.6 | 1456.4 | 1375.5 | 1303.3 | 1239.6 |
| 30° | 2226.0 | 2089.5 | 1962.8 | 1828.3 | 1708.3 | 1601.6 | 1500.8 | 1407.3 | 1325.8 | 1252.2 | 1189.2 |
| 32.5° | 2184.9 | 2053.7 | 1909.8 | 1778.6 | 1649.3 | 1543.9 | 1452.4 | 1360.3 | 1277.4 | 1200.5 | 1139.5 |
| 35° | 2133.9 | 2005.3 | 1854.8 | 1717.6 | 1589.6 | 1482.9 | 1390.8 | 1308.6 | 1227.0 | 1145.5 | 1083.2 |
| 37.5° | 2069.6 | 1939.0 | 1793.8 | 1646.0 | 1520.7 | 1417.3 | 1333.1 | 1250.2 | 1169.4 | 1094.4 | 1024.8 |
| 40° | 1982.7 | 1863.4 | 1717.6 | 1569.1 | 1443.1 | 1343.7 | 1260.8 | 1184.6 | 1113.0 | 1039.4 | 964.5 |
| 42.5° | 1874.7 | 1783.9 | 1633.4 | 1486.9 | 1363.6 | 1264.8 | 1191.2 | 1122.9 | 1054.0 | 978.4 | 910.8 |
| 45° | 1759.3 | 1681.8 | 1545.2 | 1397.4 | 1280.1 | 1183.9 | 1113.7 | 1053.3 | 988.4 | 921.4 | 850.5 |
| 47.5° | 1629.4 | 1571.7 | 1453.7 | 1307.2 | 1183.9 | 1101.7 | 1036.8 | 981.8 | 922.8 | 863.1 | 794.2 |
| 50° | 1482.9 | 1447.8 | 1347.0 | 1213.8 | 1096.4 | 1012.9 | 959.2 | 910.2 | 859.8 | 800.1 | 741.1 |
| 52.5° | 1336.4 | 1329.8 | 1235.6 | 1118.3 | 1007.6 | 930.0 | 877.7 | 832.6 | 791.5 | 735.2 | 685.4 |
| 55° | 1182.6 | 1202.5 | 1124.3 | 1016.2 | 917.5 | 842.5 | 796.1 | 759.7 | 723.9 | 676.2 | 628.4 |
| 57.5° | 1046.1 | 1068.6 | 1014.9 | 915.5 | 823.3 | 759.7 | 719.9 | 686.8 | 655.6 | 611.9 | 580.0 |
| 60° | 894.9 | 936.0 | 907.5 | 816.7 | 735.2 | 678.1 | 641.0 | 614.5 | 588.7 | 550.9 | 523.0 |
| 62.5° | 775.6 | 804.1 | 787.5 | 719.9 | 647.7 | 601.2 | 568.1 | 543.6 | 523.0 | 493.9 | 466.7 |
| 65° | 647.7 | 683.4 | 674.8 | 630.4 | 566.8 | 524.4 | 499.2 | 479.9 | 458.7 | 435.5 | 413.0 |
| 67.5° | 532.3 | 569.4 | 567.4 | 536.9 | 489.9 | 454.7 | 430.9 | 417.0 | 399.7 | 377.2 | 363.3 |
| 70° | 428.2 | 462.7 | 464.0 | 448.8 | 415.6 | 382.5 | 365.3 | 352.7 | 339.4 | 322.8 | 312.9 |
| 72.5° | 332.8 | 363.9 | 369.2 | 361.9 | 340.7 | 318.9 | 303.6 | 295.0 | 283.7 | 269.8 | 261.2 |
| 75° | 248.6 | 271.1 | 283.7 | 280.4 | 271.8 | 257.2 | 248.6 | 242.6 | 231.4 | 221.4 | 214.1 |
| 77.5° | 177.0 | 194.9 | 207.5 | 212.8 | 208.8 | 202.8 | 194.9 | 190.3 | 178.3 | 173.7 | 169.7 |
| 80° | 118.7 | 134.6 | 145.8 | 149.2 | 151.1 | 149.8 | 142.5 | 139.9 | 133.9 | 131.9 | 127.9 |
| 82.5° | 72.9 | 81.5 | 89.5 | 98.1 | 102.1 | 102.1 | 98.1 | 98.8 | 93.5 | 90.8 | 89.5 |
| 85° | 44.4 | 46.4 | 47.7 | 54.4 | 59.7 | 61.6 | 59.7 | 60.3 | 58.3 | 56.3 | 54.4 |
| 87.5° | 20.5 | 20.5 | 21.2 | 22.5 | 23.9 | 27.8 | 29.2 | 31.2 | 28.5 | 28.5 | 23.9 |
| 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: P243600

CATALOG NUMBER: S124RDRP-H1195D830-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 | 1702.3 |
| 2.5° | 1666.5 | 1657.9 | 1651.3 | 1640.7 | 1632.1 | 1618.1 | 1613.5 | 1613.5 | 1616.1 | 1612.8 | 1616.1 |
| 5° | 1622.8 | 1606.9 | 1589.6 | 1574.4 | 1557.8 | 1545.9 | 1533.9 | 1531.3 | 1530.0 | 1522.0 | 1522.7 |
| 7.5° | 1579.0 | 1557.8 | 1535.9 | 1516.0 | 1495.5 | 1476.9 | 1464.3 | 1459.0 | 1454.4 | 1449.1 | 1443.1 |
| 10° | 1532.0 | 1507.4 | 1481.6 | 1459.0 | 1439.2 | 1414.0 | 1401.4 | 1397.4 | 1384.1 | 1381.5 | 1372.2 |
| 12.5° | 1482.2 | 1457.0 | 1431.2 | 1402.0 | 1382.8 | 1358.3 | 1339.7 | 1331.1 | 1318.5 | 1309.2 | 1295.3 |
| 15° | 1443.1 | 1411.3 | 1376.8 | 1348.3 | 1323.1 | 1296.0 | 1270.8 | 1254.2 | 1237.6 | 1211.8 | 1199.2 |
| 17.5° | 1394.7 | 1358.3 | 1328.4 | 1298.0 | 1261.5 | 1221.7 | 1191.9 | 1167.4 | 1149.5 | 1128.3 | 1115.7 |
| 20° | 1342.4 | 1308.6 | 1271.4 | 1228.4 | 1189.9 | 1144.8 | 1117.6 | 1097.1 | 1083.2 | 1070.6 | 1064.0 |
| 22.5° | 1296.0 | 1256.9 | 1205.8 | 1164.7 | 1111.0 | 1075.2 | 1053.3 | 1040.1 | 1026.8 | 1013.6 | 1006.9 |
| 25° | 1245.6 | 1199.8 | 1137.5 | 1087.2 | 1046.7 | 1018.9 | 997.7 | 985.1 | 971.1 | 963.2 | 953.2 |
| 27.5° | 1195.9 | 1136.9 | 1074.6 | 1028.8 | 997.0 | 964.5 | 946.6 | 936.7 | 926.1 | 914.8 | 906.8 |
| 30° | 1135.5 | 1068.6 | 1016.9 | 975.1 | 943.3 | 916.1 | 902.9 | 888.3 | 879.0 | 872.4 | 867.7 |
| 32.5° | 1072.6 | 1008.3 | 961.2 | 925.4 | 894.2 | 873.7 | 857.1 | 847.8 | 839.9 | 832.6 | 827.3 |
| 35° | 1013.6 | 951.3 | 911.5 | 877.0 | 851.2 | 828.0 | 815.4 | 806.7 | 800.1 | 794.2 | 791.5 |
| 37.5° | 955.2 | 902.2 | 859.1 | 831.9 | 804.8 | 786.2 | 774.3 | 766.3 | 762.3 | 756.4 | 757.0 |
| 40° | 897.6 | 849.8 | 815.4 | 784.2 | 759.0 | 743.1 | 733.8 | 730.5 | 724.5 | 722.6 | 724.5 |
| 42.5° | 845.9 | 802.1 | 769.0 | 739.8 | 717.9 | 702.7 | 695.4 | 690.7 | 688.8 | 688.1 | 688.8 |
| 45° | 795.5 | 754.4 | 722.6 | 698.7 | 676.2 | 662.2 | 656.3 | 653.0 | 651.0 | 654.3 | 654.9 |
| 47.5° | 745.1 | 708.0 | 679.5 | 651.6 | 633.1 | 623.1 | 617.2 | 614.5 | 616.5 | 617.8 | 622.5 |
| 50° | 695.4 | 660.9 | 631.1 | 606.6 | 592.0 | 582.7 | 580.7 | 576.1 | 579.4 | 581.4 | 584.7 |
| 52.5° | 645.0 | 613.8 | 587.3 | 564.1 | 548.9 | 542.9 | 538.3 | 536.3 | 540.9 | 540.9 | 544.2 |
| 55° | 594.0 | 566.8 | 542.3 | 521.0 | 509.1 | 501.8 | 498.5 | 495.8 | 498.5 | 499.2 | 498.5 |
| 57.5° | 546.2 | 520.4 | 494.5 | 476.6 | 466.7 | 458.7 | 455.4 | 454.1 | 453.4 | 456.1 | 455.4 |
| 60° | 495.8 | 471.3 | 450.8 | 432.2 | 422.3 | 417.6 | 410.3 | 411.7 | 411.7 | 411.7 | 405.0 |
| 62.5° | 445.5 | 420.9 | 403.0 | 390.4 | 378.5 | 370.6 | 369.2 | 367.2 | 363.3 | 362.6 | 354.0 |
| 65° | 393.8 | 375.2 | 360.0 | 347.4 | 335.4 | 328.8 | 326.8 | 320.8 | 316.2 | 307.6 | 301.6 |
| 67.5° | 346.0 | 332.8 | 314.9 | 304.3 | 294.3 | 286.4 | 279.1 | 274.4 | 265.2 | 256.5 | 251.2 |
| 70° | 298.3 | 284.4 | 272.5 | 261.2 | 251.2 | 243.9 | 235.3 | 226.7 | 220.7 | 215.4 | 211.5 |
| 72.5° | 250.6 | 238.6 | 228.7 | 218.1 | 207.5 | 200.2 | 193.6 | 186.9 | 184.3 | 181.6 | 179.6 |
| 75° | 206.2 | 194.9 | 185.6 | 177.0 | 171.0 | 162.4 | 159.1 | 156.4 | 153.8 | 150.5 | 146.5 |
| 77.5° | 163.1 | 154.5 | 147.2 | 139.9 | 134.6 | 129.9 | 127.3 | 119.3 | 112.7 | 111.4 | 110.0 |
| 80° | 121.3 | 114.7 | 110.0 | 104.7 | 98.8 | 92.1 | 90.2 | 87.5 | 86.2 | 86.2 | 86.8 |
| 82.5° | 84.9 | 80.9 | 75.6 | 70.9 | 68.9 | 66.3 | 66.3 | 65.6 | 65.0 | 65.6 | 65.6 |
| 85° | 51.7 | 46.4 | 45.1 | 44.4 | 45.1 | 45.1 | 45.1 | 45.1 | 44.4 | 45.1 | 43.8 |
| 87.5° | 22.5 | 24.5 | 25.2 | 23.2 | 23.9 | 22.5 | 23.2 | 23.2 | 23.2 | 23.9 | 23.2 |
| 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: P243600

CATALOG NUMBER: S124RDRP-H1195D830-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|-------|--------|--------|--------|--------|
| 0° | 1702.3 | 1702.3 | 1702.3 | 1702.3 |
| 2.5° | 1612.2 | 1612.2 | 1605.5 | 1600.2 |
| 5° | 1521.4 | 1512.7 | 1511.4 | 1503.5 |
| 7.5° | 1436.5 | 1435.2 | 1431.9 | 1431.9 |
| 10° | 1368.9 | 1364.2 | 1359.6 | 1358.9 |
| 12.5° | 1273.4 | 1280.1 | 1272.1 | 1270.1 |
| 15° | 1189.9 | 1184.6 | 1178.0 | 1164.0 |
| 17.5° | 1112.3 | 1102.4 | 1099.7 | 1093.8 |
| 20° | 1051.4 | 1044.1 | 1041.4 | 1038.1 |
| 22.5° | 993.7 | 992.4 | 984.4 | 982.4 |
| 25° | 951.3 | 944.6 | 939.3 | 936.0 |
| 27.5° | 904.9 | 900.2 | 897.6 | 892.3 |
| 30° | 862.4 | 861.1 | 857.8 | 857.8 |
| 32.5° | 824.0 | 820.0 | 820.0 | 819.3 |
| 35° | 788.8 | 790.2 | 786.2 | 784.9 |
| 37.5° | 755.7 | 753.7 | 754.4 | 753.1 |
| 40° | 723.2 | 721.9 | 721.9 | 722.6 |
| 42.5° | 690.1 | 690.7 | 692.1 | 692.1 |
| 45° | 656.9 | 657.6 | 658.9 | 658.9 |
| 47.5° | 625.8 | 624.4 | 625.8 | 624.4 |
| 50° | 586.0 | 590.0 | 589.3 | 588.7 |
| 52.5° | 545.6 | 544.2 | 546.9 | 546.2 |
| 55° | 501.8 | 499.8 | 502.5 | 499.8 |
| 57.5° | 452.8 | 453.4 | 453.4 | 452.1 |
| 60° | 403.7 | 401.7 | 399.1 | 399.1 |
| 62.5° | 346.7 | 340.7 | 336.8 | 339.4 |
| 65° | 291.7 | 287.0 | 285.7 | 283.7 |
| 67.5° | 247.9 | 242.6 | 240.6 | 240.0 |
| 70° | 210.1 | 207.5 | 206.8 | 206.8 |
| 72.5° | 178.3 | 178.3 | 176.3 | 175.0 |
| 75° | 145.2 | 142.5 | 139.2 | 139.2 |
| 77.5° | 108.7 | 108.1 | 107.4 | 107.4 |
| 80° | 84.9 | 84.9 | 85.5 | 86.2 |
| 82.5° | 63.6 | 64.3 | 65.0 | 65.0 |
| 85° | 43.1 | 43.1 | 43.8 | 43.8 |
| 87.5° | 23.2 | 23.2 | 23.2 | 22.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 |

TEST NUMBER: P243600

CATALOG NUMBER: S124RDRP-H1195D830-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 | 18.78 | 20.31 | 19.14 | 20.63 | 20.94 | 20.48 | 22.01 | 20.84 | 22.32 | 22.64 |
| | 3H | 20.01 | 21.39 | 20.39 | 21.72 | 22.08 | 21.96 | 23.34 | 22.34 | 23.66 | 24.03 |
| | 4H | 20.45 | 21.74 | 20.84 | 22.09 | 22.46 | 22.50 | 23.79 | 22.90 | 24.14 | 24.52 |
| | 6H | 20.72 | 21.92 | 21.14 | 22.28 | 22.68 | 22.89 | 24.08 | 23.30 | 24.45 | 24.84 |
| | 8H | 20.81 | 21.95 | 21.23 | 22.34 | 22.74 | 23.01 | 24.14 | 23.43 | 24.53 | 24.93 |
| | 12H | 20.86 | 21.95 | 21.29 | 22.33 | 22.76 | 23.08 | 24.17 | 23.51 | 24.55 | 24.98 |
| 4H | 2H | 19.99 | 21.28 | 20.39 | 21.63 | 22.01 | 21.00 | 22.30 | 21.40 | 22.64 | 23.02 |
| | 3H | 21.26 | 22.33 | 21.67 | 22.73 | 23.13 | 22.78 | 23.85 | 23.19 | 24.25 | 24.65 |
| | 4H | 21.73 | 22.69 | 22.16 | 23.11 | 23.55 | 23.44 | 24.40 | 23.87 | 24.82 | 25.26 |
| | 6H | 22.06 | 22.90 | 22.52 | 23.34 | 23.80 | 23.94 | 24.78 | 24.39 | 25.22 | 25.68 |
| | 8H | 22.16 | 22.95 | 22.63 | 23.39 | 23.86 | 24.09 | 24.88 | 24.55 | 25.32 | 25.79 |
| | 12H | 22.24 | 22.94 | 22.72 | 23.42 | 23.89 | 24.20 | 24.91 | 24.69 | 25.38 | 25.85 |
| 8H | 4H | 22.14 | 22.92 | 22.60 | 23.37 | 23.83 | 23.57 | 24.35 | 24.03 | 24.79 | 25.26 |
| | 6H | 22.54 | 23.19 | 23.03 | 23.68 | 24.15 | 24.16 | 24.81 | 24.66 | 25.30 | 25.78 |
| | 8H | 22.68 | 23.26 | 23.20 | 23.77 | 24.26 | 24.38 | 24.96 | 24.90 | 25.47 | 25.96 |
| | 12H | 22.80 | 23.32 | 23.31 | 23.81 | 24.37 | 24.56 | 25.08 | 25.07 | 25.57 | 26.13 |
| 12H | 4H | 22.18 | 22.88 | 22.66 | 23.36 | 23.83 | 23.56 | 24.26 | 24.04 | 24.74 | 25.21 |
| | 6H | 22.59 | 23.18 | 23.11 | 23.68 | 24.17 | 24.16 | 24.74 | 24.67 | 25.25 | 25.74 |
| | 8H | 22.78 | 23.30 | 23.29 | 23.79 | 24.36 | 24.42 | 24.93 | 24.93 | 25.42 | 25.99 |