

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P242573

Luminaire Tested: **S123RDR-S1165D835-X4F0-XX-UDD-A-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242573
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-30)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123RDR-S1165D835-X4F0-XX-UDD-A-W
Description: DEFINE 3 REGRESSED DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4310.4 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.35
Luminous Opening: Rectangular (W 3.88' x L: 0.23' x H: 0')
CIE Type: Direct

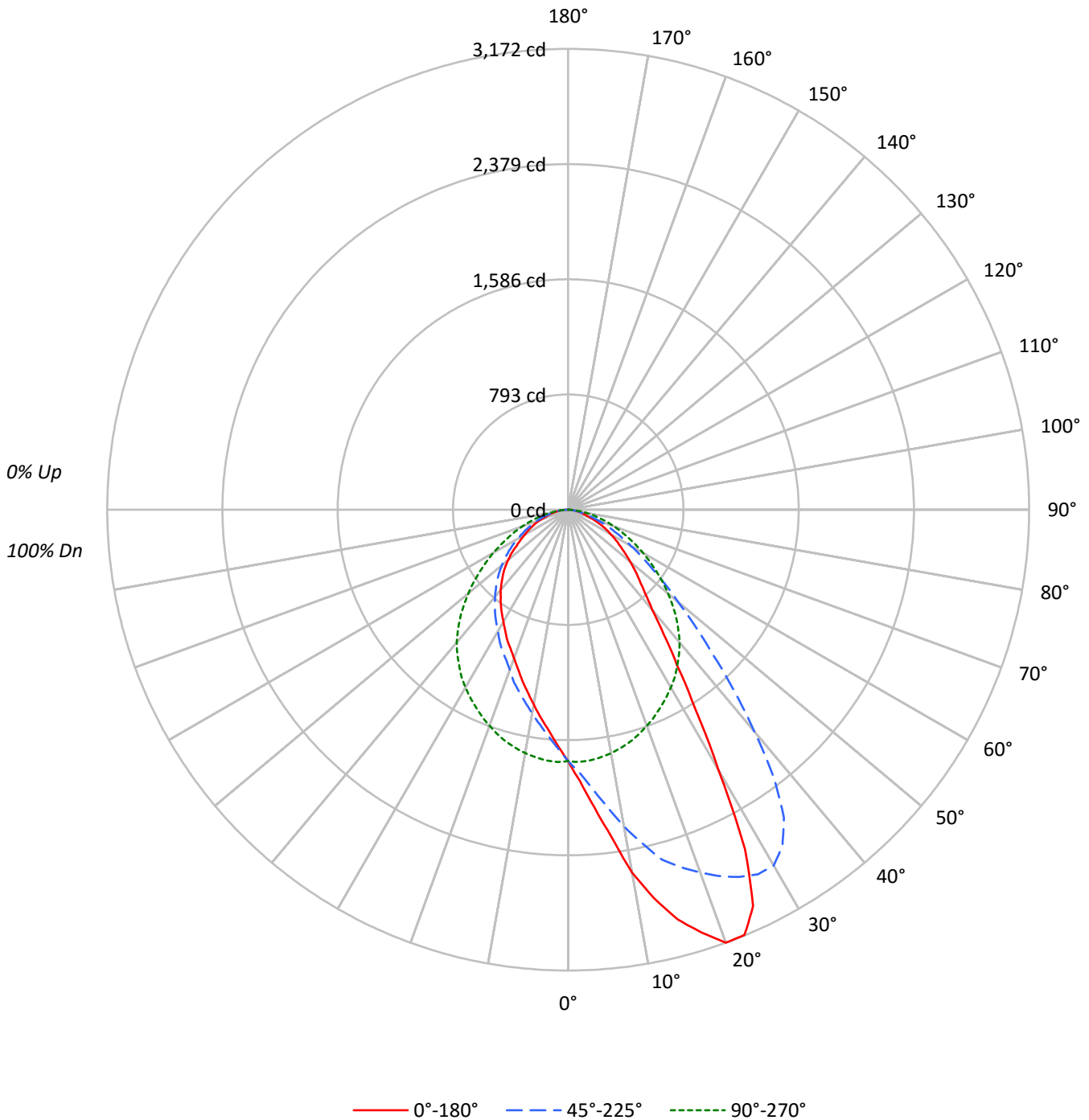
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P242573

CATALOG NUMBER: S123RDR-S1165D835-X4F0-XX-UDD-A-W

Luminous Intensity Polar Plot





TEST NUMBER: P242573

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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 110 | 106 | 102 | 99 | 108 | 104 | 100 | 97 | 100 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 89 | 87 |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | 86 | 82 | 78 | 83 | 79 | 77 | 74 |
| 3 | 93 | 84 | 76 | 71 | 91 | 82 | 75 | 70 | 79 | 74 | 69 | 77 | 72 | 68 | 74 | 70 | 66 | 64 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 61 | 71 | 65 | 60 | 69 | 64 | 59 | 67 | 62 | 58 | 56 |
| 5 | 80 | 68 | 60 | 53 | 78 | 67 | 59 | 53 | 65 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 52 | 50 |
| 6 | 74 | 62 | 53 | 47 | 72 | 61 | 53 | 47 | 59 | 52 | 47 | 57 | 51 | 46 | 56 | 50 | 46 | 44 |
| 7 | 69 | 56 | 48 | 42 | 67 | 55 | 48 | 42 | 54 | 47 | 42 | 53 | 46 | 42 | 51 | 46 | 41 | 39 |
| 8 | 64 | 52 | 44 | 38 | 63 | 51 | 43 | 38 | 50 | 43 | 38 | 48 | 42 | 38 | 47 | 42 | 37 | 36 |
| 9 | 60 | 48 | 40 | 35 | 59 | 47 | 40 | 35 | 46 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 34 | 32 |
| 10 | 57 | 44 | 37 | 32 | 55 | 44 | 36 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 29 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 20983 | 20983 | 20983 |
| 5° | 25013 | 21072 | 18557 |
| 10° | 31231 | 20951 | 16765 |
| 15° | 36658 | 20737 | 15288 |
| 20° | 40912 | 20418 | 14033 |
| 25° | 40259 | 20080 | 13261 |
| 30° | 28938 | 19768 | 12467 |
| 35° | 19321 | 19365 | 11952 |
| 40° | 14234 | 18879 | 11421 |
| 45° | 11941 | 18027 | 10899 |
| 50° | 10537 | 16909 | 10174 |
| 55° | 9239 | 15630 | 9178 |
| 60° | 8228 | 14407 | 8407 |
| 65° | 7228 | 13093 | 7821 |
| 70° | 5674 | 11922 | 7145 |
| 75° | 4997 | 10411 | 6524 |
| 80° | 4342 | 8844 | 6415 |
| 85° | 3505 | 7107 | 6801 |



TEST NUMBER: P242573

CATALOG NUMBER: S123RDR-S1165D835-X4F0-XX-UDD-A-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 170.0 | 3.9 |
| 10°-20° | 532.2 | 12.3 |
| 20°-30° | 838.2 | 19.4 |
| 30°-40° | 871.6 | 20.2 |
| 40°-50° | 745.7 | 17.3 |
| 50°-60° | 568.3 | 13.2 |
| 60°-70° | 364.1 | 8.4 |
| 70°-80° | 174.4 | 4.0 |
| 80°-90° | 45.9 | 1.1 |
| 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° | 1540.3 | 35.7 |
| 0°-40° | 2412.0 | 56.0 |
| 0°-60° | 3726.0 | 86.4 |
| 0°-90° | 4310.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4310.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 1731 | 1731 | 1731 | 1731 | 1731 | |
| 5° | 2056 | 1928 | 1732 | 1564 | 1525 | 211 |
| 15° | 2921 | 2494 | 1652 | 1299 | 1218 | 829 |
| 25° | 3010 | 2789 | 1501 | 1073 | 992 | 1308 |
| 35° | 1306 | 2588 | 1309 | 876 | 808 | 849 |
| 45° | 697 | 1405 | 1052 | 692 | 636 | 546 |
| 55° | 437 | 701 | 740 | 500 | 434 | 395 |
| 65° | 252 | 345 | 456 | 312 | 273 | 248 |
| 75° | 107 | 125 | 222 | 159 | 139 | 114 |
| 85° | 25 | 27 | 51 | 47 | 49 | 29 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P242573

CATALOG NUMBER: S123RDR-S1165D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 |
| 2.5° | 1871.9 | 1874.9 | 1865.2 | 1863.7 | 1852.6 | 1849.7 | 1849.7 | 1834.1 | 1824.5 | 1811.9 | 1804.5 |
| 5° | 2055.7 | 2067.5 | 2061.6 | 2048.3 | 2026.0 | 2020.9 | 2006.8 | 1984.5 | 1959.3 | 1928.2 | 1913.4 |
| 7.5° | 2266.1 | 2290.6 | 2286.2 | 2265.4 | 2241.7 | 2226.9 | 2187.6 | 2155.7 | 2107.6 | 2063.8 | 2029.7 |
| 10° | 2537.4 | 2520.3 | 2507.0 | 2487.0 | 2465.5 | 2430.7 | 2389.2 | 2332.1 | 2266.1 | 2214.3 | 2156.5 |
| 12.5° | 2740.4 | 2741.2 | 2723.4 | 2702.6 | 2670.0 | 2637.4 | 2584.1 | 2511.4 | 2432.1 | 2351.4 | 2283.2 |
| 15° | 2921.2 | 2925.7 | 2914.6 | 2893.1 | 2850.1 | 2791.5 | 2714.5 | 2685.6 | 2575.9 | 2494.4 | 2412.9 |
| 17.5° | 3050.2 | 3050.9 | 3048.7 | 3019.8 | 2973.1 | 2933.1 | 2861.2 | 2793.8 | 2690.0 | 2579.6 | 2470.7 |
| 20° | 3171.7 | 3164.3 | 3165.8 | 3132.4 | 3099.8 | 3051.7 | 2982.0 | 2871.6 | 2790.1 | 2657.4 | 2544.0 |
| 22.5° | 3168.7 | 3168.7 | 3175.4 | 3169.5 | 3148.0 | 3113.9 | 3062.8 | 2973.8 | 2864.2 | 2730.0 | 2598.9 |
| 25° | 3010.2 | 3004.2 | 3039.1 | 3048.7 | 3086.5 | 3093.2 | 3076.9 | 3025.7 | 2927.2 | 2789.3 | 2631.5 |
| 27.5° | 2632.2 | 2610.7 | 2683.4 | 2755.2 | 2850.8 | 2911.6 | 2973.8 | 2987.9 | 2941.2 | 2828.6 | 2663.3 |
| 30° | 2067.5 | 2137.2 | 2169.8 | 2286.9 | 2417.3 | 2572.9 | 2709.3 | 2839.0 | 2870.8 | 2827.9 | 2698.2 |
| 32.5° | 1628.8 | 1687.4 | 1713.3 | 1809.7 | 1929.0 | 2117.9 | 2339.5 | 2536.6 | 2690.8 | 2742.6 | 2677.4 |
| 35° | 1305.7 | 1306.5 | 1368.7 | 1413.2 | 1525.8 | 1713.3 | 1911.9 | 2157.9 | 2402.5 | 2587.8 | 2607.0 |
| 37.5° | 1077.5 | 1080.5 | 1120.5 | 1164.9 | 1255.3 | 1360.6 | 1545.1 | 1752.6 | 2046.8 | 2323.2 | 2467.0 |
| 40° | 899.6 | 906.3 | 934.5 | 978.2 | 1039.0 | 1113.8 | 1250.2 | 1442.8 | 1678.5 | 1994.9 | 2253.5 |
| 42.5° | 785.5 | 797.4 | 808.5 | 839.6 | 871.5 | 940.4 | 1044.1 | 1182.0 | 1391.0 | 1685.9 | 1994.2 |
| 45° | 696.6 | 702.5 | 713.6 | 729.2 | 763.3 | 812.2 | 886.3 | 986.3 | 1164.2 | 1405.0 | 1703.7 |
| 47.5° | 628.4 | 624.7 | 637.3 | 650.6 | 673.6 | 709.2 | 761.1 | 847.8 | 981.2 | 1182.7 | 1441.3 |
| 50° | 558.8 | 558.0 | 566.2 | 575.8 | 597.3 | 621.7 | 662.5 | 724.0 | 824.8 | 984.9 | 1216.8 |
| 52.5° | 493.5 | 497.2 | 502.4 | 515.0 | 529.1 | 547.6 | 583.2 | 623.2 | 706.2 | 838.9 | 1022.7 |
| 55° | 437.2 | 439.4 | 447.6 | 454.3 | 465.4 | 485.4 | 508.4 | 545.4 | 604.7 | 701.0 | 860.4 |
| 57.5° | 388.3 | 387.6 | 395.7 | 396.5 | 410.5 | 427.6 | 446.1 | 475.0 | 520.2 | 596.5 | 707.7 |
| 60° | 339.4 | 337.2 | 343.8 | 349.0 | 355.7 | 369.0 | 383.9 | 412.0 | 446.1 | 498.7 | 590.6 |
| 62.5° | 294.9 | 294.2 | 298.6 | 303.8 | 309.0 | 320.9 | 332.7 | 352.7 | 377.9 | 420.2 | 488.4 |
| 65° | 252.0 | 254.2 | 256.4 | 258.6 | 261.6 | 269.0 | 280.9 | 295.7 | 314.2 | 345.3 | 397.9 |
| 67.5° | 207.5 | 210.5 | 211.2 | 216.4 | 222.3 | 226.0 | 232.7 | 246.8 | 260.9 | 289.0 | 320.1 |
| 70° | 160.1 | 159.3 | 160.1 | 162.3 | 170.4 | 178.6 | 188.2 | 197.9 | 206.0 | 224.5 | 249.7 |
| 72.5° | 131.9 | 130.4 | 132.6 | 132.6 | 135.6 | 136.4 | 141.5 | 150.4 | 161.5 | 172.7 | 189.0 |
| 75° | 106.7 | 106.7 | 106.7 | 106.7 | 109.7 | 111.2 | 113.4 | 115.6 | 119.3 | 125.2 | 138.6 |
| 77.5° | 83.0 | 83.0 | 84.5 | 85.2 | 86.0 | 86.7 | 88.2 | 90.4 | 91.9 | 94.9 | 101.5 |
| 80° | 62.2 | 63.0 | 62.2 | 63.0 | 63.0 | 64.5 | 65.2 | 67.4 | 68.2 | 71.9 | 74.1 |
| 82.5° | 43.0 | 42.2 | 43.0 | 43.7 | 43.7 | 45.2 | 45.2 | 46.7 | 46.7 | 48.2 | 50.4 |
| 85° | 25.2 | 23.7 | 25.2 | 24.5 | 25.9 | 24.5 | 25.2 | 26.7 | 26.7 | 27.4 | 30.4 |
| 87.5° | 7.4 | 8.9 | 7.4 | 8.2 | 8.2 | 8.9 | 8.9 | 8.9 | 10.4 | 9.6 | 10.4 |
| 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: P242573

CATALOG NUMBER: S123RDR-S1165D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 |
| 2.5° | 1801.5 | 1799.3 | 1788.9 | 1777.0 | 1761.5 | 1751.1 | 1743.0 | 1738.5 | 1725.2 | 1708.9 | 1697.8 |
| 5° | 1897.8 | 1875.6 | 1851.9 | 1823.0 | 1796.3 | 1768.9 | 1751.9 | 1731.8 | 1707.4 | 1680.0 | 1660.7 |
| 7.5° | 1993.4 | 1954.9 | 1912.7 | 1868.9 | 1824.5 | 1785.2 | 1748.9 | 1719.2 | 1682.2 | 1644.4 | 1618.5 |
| 10° | 2106.8 | 2043.1 | 1977.1 | 1909.7 | 1848.2 | 1790.4 | 1745.9 | 1702.2 | 1655.5 | 1610.3 | 1576.2 |
| 12.5° | 2209.8 | 2120.9 | 2042.3 | 1955.6 | 1872.6 | 1800.8 | 1731.8 | 1678.5 | 1619.9 | 1571.0 | 1531.0 |
| 15° | 2293.6 | 2207.6 | 2115.7 | 1989.7 | 1885.2 | 1797.8 | 1720.0 | 1652.5 | 1584.4 | 1525.1 | 1487.3 |
| 17.5° | 2381.0 | 2250.6 | 2129.8 | 2032.0 | 1895.6 | 1789.6 | 1698.5 | 1619.9 | 1545.8 | 1485.1 | 1437.6 |
| 20° | 2431.4 | 2306.2 | 2172.0 | 2037.9 | 1904.5 | 1782.2 | 1671.8 | 1582.9 | 1505.1 | 1433.9 | 1391.0 |
| 22.5° | 2461.8 | 2315.8 | 2172.8 | 2026.0 | 1882.3 | 1754.1 | 1645.1 | 1545.1 | 1459.1 | 1392.4 | 1336.9 |
| 25° | 2484.0 | 2315.1 | 2159.4 | 2017.1 | 1872.6 | 1734.8 | 1605.1 | 1501.4 | 1410.2 | 1338.3 | 1282.0 |
| 27.5° | 2501.8 | 2306.2 | 2127.6 | 1972.7 | 1826.7 | 1686.6 | 1569.6 | 1458.4 | 1367.2 | 1292.4 | 1230.9 |
| 30° | 2506.2 | 2295.0 | 2089.8 | 1918.6 | 1769.6 | 1643.7 | 1517.7 | 1412.4 | 1314.6 | 1233.9 | 1177.5 |
| 32.5° | 2512.2 | 2267.6 | 2038.6 | 1854.1 | 1700.7 | 1576.2 | 1465.1 | 1365.8 | 1265.0 | 1185.7 | 1127.9 |
| 35° | 2491.4 | 2261.0 | 1986.8 | 1777.8 | 1625.1 | 1504.3 | 1401.3 | 1308.7 | 1210.1 | 1133.1 | 1074.5 |
| 37.5° | 2428.4 | 2224.6 | 1934.9 | 1692.6 | 1534.7 | 1423.6 | 1337.6 | 1253.1 | 1162.0 | 1077.5 | 1023.4 |
| 40° | 2322.5 | 2165.4 | 1872.6 | 1616.2 | 1449.5 | 1334.6 | 1259.1 | 1193.1 | 1105.7 | 1027.8 | 968.6 |
| 42.5° | 2164.6 | 2084.6 | 1813.4 | 1536.2 | 1353.2 | 1243.5 | 1182.7 | 1122.0 | 1047.8 | 968.6 | 913.7 |
| 45° | 1964.5 | 1977.1 | 1728.1 | 1450.2 | 1265.7 | 1154.6 | 1094.5 | 1051.6 | 983.4 | 918.2 | 861.1 |
| 47.5° | 1721.5 | 1826.7 | 1637.0 | 1359.8 | 1170.9 | 1066.4 | 1013.8 | 974.5 | 927.1 | 859.6 | 807.0 |
| 50° | 1484.3 | 1652.5 | 1522.9 | 1268.7 | 1082.7 | 978.9 | 927.1 | 896.7 | 856.7 | 806.3 | 756.6 |
| 52.5° | 1265.7 | 1449.5 | 1385.0 | 1167.2 | 987.1 | 894.5 | 844.1 | 820.3 | 790.7 | 744.0 | 700.3 |
| 55° | 1067.9 | 1250.9 | 1233.1 | 1064.9 | 891.5 | 806.3 | 767.7 | 739.6 | 718.1 | 682.5 | 646.9 |
| 57.5° | 895.9 | 1073.0 | 1076.8 | 951.5 | 808.5 | 721.8 | 688.4 | 666.2 | 651.4 | 623.2 | 588.4 |
| 60° | 735.1 | 894.5 | 925.6 | 836.6 | 718.1 | 644.0 | 611.4 | 594.3 | 583.2 | 561.7 | 536.5 |
| 62.5° | 601.7 | 731.4 | 767.7 | 709.9 | 631.4 | 563.2 | 539.5 | 523.2 | 516.5 | 498.7 | 477.2 |
| 65° | 480.9 | 593.6 | 627.7 | 592.1 | 546.9 | 491.3 | 470.6 | 456.5 | 449.8 | 439.4 | 423.1 |
| 67.5° | 379.4 | 466.9 | 503.9 | 474.3 | 457.2 | 418.0 | 403.9 | 395.7 | 389.8 | 382.4 | 368.3 |
| 70° | 290.5 | 351.3 | 389.8 | 383.1 | 369.8 | 351.3 | 341.6 | 336.4 | 330.5 | 324.6 | 312.7 |
| 72.5° | 219.4 | 256.4 | 292.0 | 297.9 | 287.5 | 287.5 | 279.4 | 277.9 | 274.9 | 267.5 | 262.3 |
| 75° | 154.9 | 183.8 | 209.0 | 218.6 | 223.1 | 226.8 | 223.1 | 222.3 | 221.6 | 215.6 | 211.9 |
| 77.5° | 107.5 | 126.0 | 143.0 | 160.1 | 166.0 | 171.2 | 171.9 | 174.9 | 172.7 | 169.0 | 167.5 |
| 80° | 77.8 | 81.5 | 92.6 | 106.7 | 117.8 | 122.3 | 125.2 | 126.7 | 126.0 | 125.2 | 122.3 |
| 82.5° | 51.1 | 54.1 | 57.8 | 66.7 | 75.6 | 83.7 | 85.2 | 84.5 | 86.7 | 87.4 | 85.2 |
| 85° | 30.4 | 31.1 | 32.6 | 34.1 | 39.3 | 47.4 | 49.7 | 51.1 | 52.6 | 52.6 | 48.2 |
| 87.5° | 11.9 | 11.1 | 12.6 | 12.6 | 14.8 | 15.6 | 20.0 | 23.7 | 24.5 | 21.5 | 21.5 |
| 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: P242573

CATALOG NUMBER: S123RDR-S1165D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 | 1731.1 |
| 2.5° | 1694.0 | 1684.4 | 1677.7 | 1662.9 | 1653.3 | 1642.9 | 1632.5 | 1639.2 | 1638.5 | 1637.7 | 1637.7 |
| 5° | 1644.4 | 1627.4 | 1611.8 | 1591.8 | 1579.2 | 1563.6 | 1551.8 | 1550.3 | 1553.2 | 1542.9 | 1536.9 |
| 7.5° | 1597.7 | 1575.5 | 1553.2 | 1532.5 | 1509.5 | 1491.7 | 1480.6 | 1476.2 | 1468.0 | 1461.4 | 1455.4 |
| 10° | 1548.1 | 1520.6 | 1499.2 | 1471.7 | 1446.5 | 1424.3 | 1410.2 | 1400.6 | 1395.4 | 1390.2 | 1380.6 |
| 12.5° | 1496.9 | 1470.3 | 1441.3 | 1409.5 | 1385.8 | 1359.1 | 1349.5 | 1338.3 | 1327.2 | 1321.3 | 1307.2 |
| 15° | 1447.3 | 1412.4 | 1383.5 | 1350.9 | 1324.3 | 1299.1 | 1284.2 | 1262.8 | 1259.8 | 1252.4 | 1239.0 |
| 17.5° | 1399.1 | 1360.6 | 1318.3 | 1296.1 | 1269.4 | 1242.7 | 1219.0 | 1212.4 | 1190.1 | 1182.7 | 1170.1 |
| 20° | 1339.8 | 1305.0 | 1274.6 | 1242.7 | 1199.0 | 1174.6 | 1156.8 | 1147.2 | 1130.1 | 1119.7 | 1112.3 |
| 22.5° | 1288.7 | 1253.1 | 1216.8 | 1178.3 | 1144.2 | 1116.0 | 1104.2 | 1087.9 | 1080.5 | 1064.9 | 1056.7 |
| 25° | 1240.5 | 1202.0 | 1159.7 | 1119.7 | 1093.8 | 1073.0 | 1052.3 | 1039.0 | 1025.6 | 1018.9 | 1004.1 |
| 27.5° | 1182.0 | 1143.4 | 1102.7 | 1071.6 | 1041.9 | 1021.2 | 1001.2 | 990.0 | 973.0 | 961.9 | 953.7 |
| 30° | 1135.3 | 1087.9 | 1053.8 | 1026.4 | 985.6 | 966.3 | 952.3 | 937.4 | 925.6 | 913.7 | 905.6 |
| 32.5° | 1081.2 | 1039.0 | 1007.1 | 971.5 | 942.6 | 921.1 | 901.9 | 889.3 | 879.6 | 868.5 | 860.4 |
| 35° | 1024.1 | 987.8 | 954.5 | 920.4 | 897.4 | 875.9 | 854.4 | 843.3 | 833.7 | 823.3 | 815.9 |
| 37.5° | 972.3 | 938.2 | 907.0 | 874.4 | 846.3 | 827.8 | 810.0 | 802.6 | 789.2 | 781.8 | 774.4 |
| 40° | 924.8 | 891.5 | 857.4 | 826.3 | 796.6 | 783.3 | 767.7 | 755.1 | 743.3 | 738.1 | 729.9 |
| 42.5° | 873.0 | 839.6 | 812.2 | 778.1 | 755.1 | 735.9 | 721.8 | 707.7 | 699.6 | 691.4 | 687.7 |
| 45° | 821.8 | 792.2 | 764.0 | 730.7 | 707.7 | 692.1 | 675.8 | 663.2 | 655.1 | 649.9 | 641.8 |
| 47.5° | 772.9 | 742.5 | 714.4 | 684.7 | 662.5 | 644.7 | 627.7 | 619.5 | 608.4 | 602.5 | 596.5 |
| 50° | 718.8 | 692.1 | 661.8 | 635.1 | 612.9 | 595.1 | 581.7 | 570.6 | 561.0 | 552.8 | 549.1 |
| 52.5° | 669.2 | 640.3 | 615.1 | 590.6 | 566.9 | 546.2 | 534.3 | 522.4 | 515.8 | 506.1 | 501.7 |
| 55° | 613.6 | 586.2 | 563.9 | 539.5 | 516.5 | 499.5 | 484.6 | 474.3 | 466.9 | 456.5 | 450.6 |
| 57.5° | 562.5 | 538.7 | 511.3 | 489.8 | 465.4 | 452.0 | 439.4 | 424.6 | 415.7 | 407.6 | 401.7 |
| 60° | 510.6 | 482.4 | 459.5 | 439.4 | 418.7 | 400.2 | 389.1 | 377.9 | 368.3 | 360.2 | 355.0 |
| 62.5° | 456.5 | 432.8 | 411.3 | 389.1 | 370.5 | 355.0 | 341.6 | 332.7 | 324.6 | 320.1 | 314.9 |
| 65° | 400.9 | 381.6 | 359.4 | 341.6 | 323.8 | 312.0 | 301.6 | 293.5 | 287.5 | 283.8 | 279.4 |
| 67.5° | 349.8 | 331.3 | 311.2 | 292.7 | 280.9 | 271.2 | 263.8 | 256.4 | 253.4 | 249.0 | 246.0 |
| 70° | 300.1 | 280.9 | 263.8 | 250.5 | 238.6 | 231.9 | 227.5 | 222.3 | 219.4 | 213.4 | 210.5 |
| 72.5° | 246.0 | 233.4 | 222.3 | 211.9 | 203.0 | 197.1 | 191.2 | 184.5 | 179.3 | 172.7 | 169.7 |
| 75° | 202.3 | 189.7 | 180.1 | 172.7 | 166.7 | 158.6 | 150.4 | 143.8 | 141.5 | 139.3 | 138.6 |
| 77.5° | 157.8 | 149.7 | 142.3 | 136.4 | 128.2 | 120.8 | 118.6 | 117.1 | 116.3 | 114.9 | 114.9 |
| 80° | 117.8 | 110.4 | 105.2 | 97.8 | 93.4 | 93.4 | 93.4 | 91.9 | 92.6 | 92.6 | 92.6 |
| 82.5° | 80.0 | 73.4 | 71.1 | 69.7 | 69.7 | 70.4 | 70.4 | 71.1 | 70.4 | 71.9 | 71.1 |
| 85° | 45.2 | 45.9 | 47.4 | 46.7 | 47.4 | 47.4 | 48.9 | 48.2 | 48.9 | 47.4 | 48.9 |
| 87.5° | 20.7 | 23.0 | 23.7 | 24.5 | 25.2 | 24.5 | 25.2 | 25.2 | 25.9 | 25.9 | 25.9 |
| 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: P242573

CATALOG NUMBER: S123RDR-S1165D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|-------|--------|--------|--------|--------|
| 0° | 1731.1 | 1731.1 | 1731.1 | 1731.1 |
| 2.5° | 1628.8 | 1628.1 | 1628.8 | 1625.9 |
| 5° | 1534.7 | 1534.0 | 1531.8 | 1525.1 |
| 7.5° | 1449.5 | 1448.0 | 1442.1 | 1443.6 |
| 10° | 1375.4 | 1376.1 | 1367.2 | 1362.1 |
| 12.5° | 1303.5 | 1299.1 | 1292.4 | 1286.5 |
| 15° | 1242.0 | 1234.6 | 1216.8 | 1218.3 |
| 17.5° | 1165.7 | 1159.7 | 1159.0 | 1148.6 |
| 20° | 1100.5 | 1096.8 | 1098.2 | 1087.9 |
| 22.5° | 1049.3 | 1045.6 | 1037.5 | 1036.0 |
| 25° | 999.7 | 993.8 | 987.8 | 991.5 |
| 27.5° | 949.3 | 944.8 | 938.2 | 938.2 |
| 30° | 901.9 | 897.4 | 894.5 | 890.7 |
| 32.5° | 853.7 | 853.7 | 847.8 | 847.8 |
| 35° | 812.9 | 808.5 | 807.0 | 807.7 |
| 37.5° | 773.7 | 767.7 | 764.8 | 761.8 |
| 40° | 730.7 | 724.8 | 723.3 | 721.8 |
| 42.5° | 682.5 | 681.0 | 680.3 | 677.3 |
| 45° | 639.5 | 638.8 | 634.3 | 635.8 |
| 47.5° | 593.6 | 589.9 | 587.7 | 589.9 |
| 50° | 546.2 | 544.7 | 538.0 | 539.5 |
| 52.5° | 498.7 | 492.1 | 490.6 | 489.1 |
| 55° | 445.4 | 438.7 | 435.7 | 434.3 |
| 57.5° | 392.8 | 390.5 | 387.6 | 389.8 |
| 60° | 347.6 | 347.6 | 347.6 | 346.8 |
| 62.5° | 312.7 | 310.5 | 309.8 | 311.2 |
| 65° | 277.2 | 276.4 | 273.4 | 272.7 |
| 67.5° | 244.5 | 241.6 | 241.6 | 240.1 |
| 70° | 206.8 | 205.3 | 200.8 | 201.6 |
| 72.5° | 166.0 | 164.5 | 164.5 | 163.0 |
| 75° | 137.8 | 137.1 | 136.4 | 139.3 |
| 77.5° | 114.9 | 114.9 | 115.6 | 114.1 |
| 80° | 92.6 | 92.6 | 91.9 | 91.9 |
| 82.5° | 69.7 | 70.4 | 71.1 | 69.7 |
| 85° | 48.9 | 48.2 | 49.7 | 48.9 |
| 87.5° | 27.4 | 25.9 | 25.9 | 26.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)