

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: P242991

Luminaire Tested: **S121DR-H1025D840-X4F0-XX-UDD-A-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242991  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-57)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S121DR-H1025D840-X4F0-XX-UDD-A-W  
Description: DEFINE 1 DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4089.5 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.2 / 1.28  
Luminous Opening: Rectangular (W 3.88' x L: 0.09' x H: 0')  
CIE Type: Direct

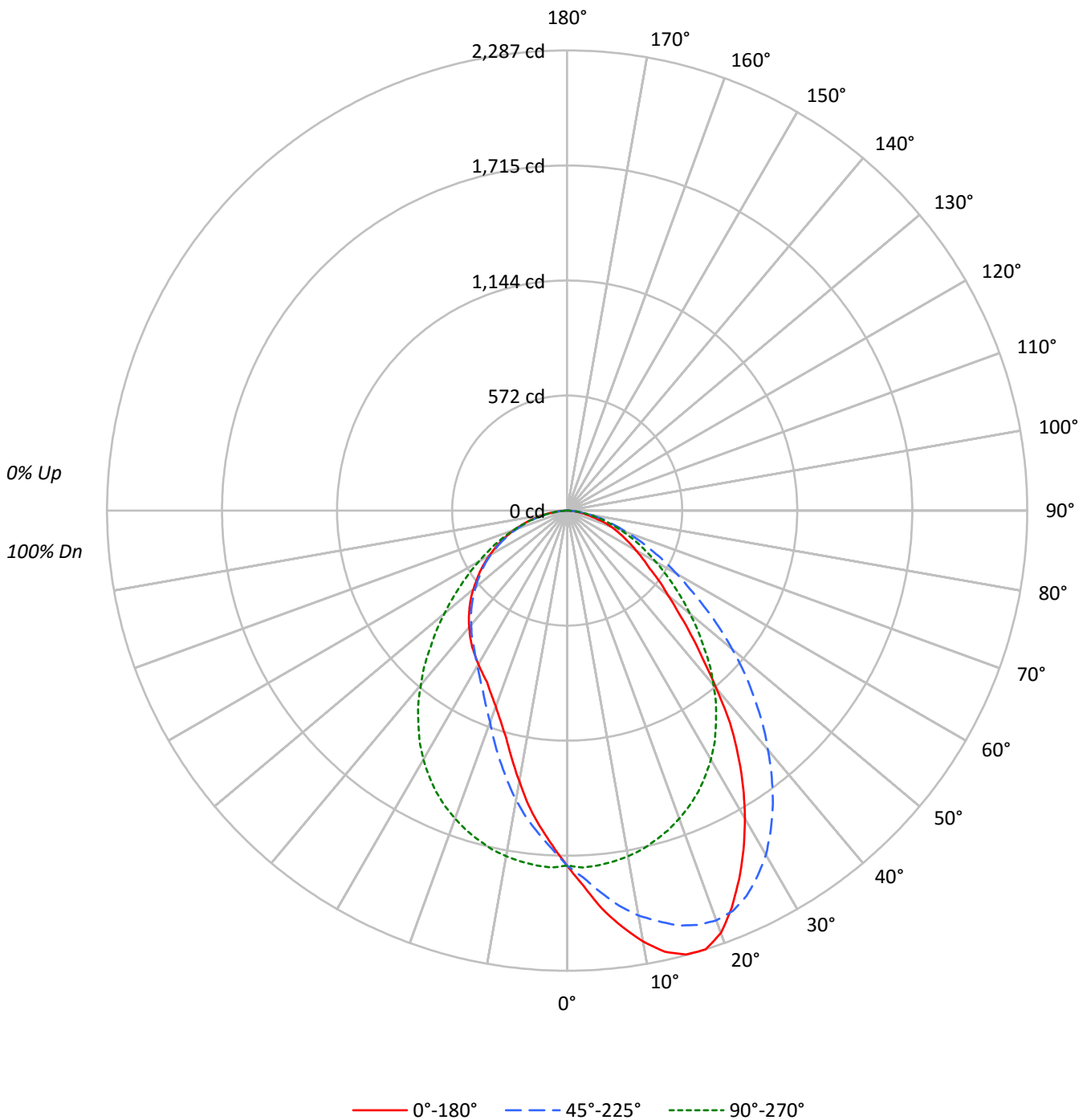
Input Watts (W): 37.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P242991

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### Luminous Intensity Polar Plot





TEST NUMBER: P242991

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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 | 105 | 102 | 98  | 107 | 103 | 100 | 96  | 99  | 96  | 93  | 95  | 93  | 91  | 92  | 90  | 88  | 86  |
| 2   | 101 | 93  | 87  | 81  | 98  | 91  | 85  | 80  | 88  | 83  | 79  | 84  | 80  | 77  | 81  | 78  | 75  | 73  |
| 3   | 92  | 83  | 75  | 69  | 90  | 81  | 74  | 68  | 78  | 72  | 67  | 75  | 70  | 66  | 73  | 69  | 65  | 63  |
| 4   | 85  | 74  | 66  | 59  | 83  | 72  | 65  | 59  | 70  | 63  | 58  | 68  | 62  | 57  | 66  | 61  | 57  | 54  |
| 5   | 79  | 66  | 58  | 52  | 77  | 65  | 57  | 51  | 63  | 56  | 51  | 61  | 55  | 50  | 60  | 54  | 50  | 48  |
| 6   | 73  | 60  | 52  | 46  | 71  | 59  | 51  | 45  | 57  | 50  | 45  | 56  | 49  | 45  | 54  | 49  | 44  | 42  |
| 7   | 68  | 55  | 46  | 41  | 66  | 54  | 46  | 40  | 53  | 45  | 40  | 51  | 45  | 40  | 50  | 44  | 40  | 38  |
| 8   | 63  | 50  | 42  | 37  | 62  | 50  | 42  | 36  | 48  | 41  | 36  | 47  | 41  | 36  | 46  | 40  | 36  | 34  |
| 9   | 59  | 46  | 38  | 33  | 58  | 46  | 38  | 33  | 45  | 38  | 33  | 44  | 37  | 33  | 43  | 37  | 33  | 31  |
| 10  | 56  | 43  | 35  | 30  | 54  | 42  | 35  | 30  | 41  | 35  | 30  | 41  | 34  | 30  | 40  | 34  | 30  | 28  |

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

|     | 0°    | 90°   | 180°  |
|-----|-------|-------|-------|
| 0°  | 52279 | 52279 | 52279 |
| 5°  | 59069 | 52648 | 46774 |
| 10° | 65439 | 52486 | 41117 |
| 15° | 70071 | 52031 | 35865 |
| 20° | 70460 | 51355 | 32654 |
| 25° | 66088 | 50393 | 30793 |
| 30° | 60462 | 48870 | 30183 |
| 35° | 53544 | 46632 | 29805 |
| 40° | 44616 | 43738 | 29288 |
| 45° | 36372 | 40239 | 28754 |
| 50° | 30188 | 36669 | 28026 |
| 55° | 25834 | 33242 | 27301 |
| 60° | 23402 | 30098 | 26436 |
| 65° | 21615 | 27392 | 25499 |
| 70° | 19934 | 24673 | 23997 |
| 75° | 16096 | 21877 | 22118 |
| 80° | 12848 | 17694 | 18906 |
| 85° | 9655  | 13055 | 15468 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 168.5  | 4.1       |
| 10°-20°   | 482.9  | 11.8      |
| 20°-30°   | 703.1  | 17.2      |
| 30°-40°   | 783.9  | 19.2      |
| 40°-50°   | 724.7  | 17.7      |
| 50°-60°   | 577.4  | 14.1      |
| 60°-70°   | 395.2  | 9.7       |
| 70°-80°   | 205.2  | 5.0       |
| 80°-90°   | 48.6   | 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°    | 1354.6 | 33.1      |
| 0°-40°    | 2138.4 | 52.3      |
| 0°-60°    | 3440.5 | 84.1      |
| 0°-90°    | 4089.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4089.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90°  | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 1764 | 1764 | 1764 | 1764 | 1764 |      |
| 5°  | 1986 | 1904 | 1770 | 1612 | 1573 | 195  |
| 15° | 2284 | 2134 | 1696 | 1288 | 1169 | 640  |
| 25° | 2022 | 2112 | 1541 | 991  | 942  | 926  |
| 35° | 1480 | 1783 | 1289 | 811  | 824  | 919  |
| 45° | 868  | 1313 | 960  | 670  | 686  | 676  |
| 55° | 500  | 830  | 644  | 516  | 528  | 457  |
| 65° | 308  | 458  | 391  | 354  | 364  | 306  |
| 75° | 141  | 206  | 191  | 180  | 193  | 154  |
| 85° | 28   | 39   | 38   | 40   | 46   | 35   |
| 90° | 0    | 0    | 0    | 0    | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 |
| 2.5°  | 1866.7 | 1866.7 | 1861.7 | 1863.8 | 1861.0 | 1856.0 | 1848.2 | 1839.7 | 1829.0 | 1824.8 | 1822.6 |
| 5°    | 1986.0 | 1988.9 | 1985.3 | 1978.2 | 1976.8 | 1971.1 | 1954.1 | 1944.1 | 1921.4 | 1903.6 | 1897.9 |
| 7.5°  | 2085.5 | 2090.4 | 2090.4 | 2077.6 | 2072.0 | 2057.8 | 2045.7 | 2029.3 | 2000.9 | 1981.0 | 1964.7 |
| 10°   | 2175.0 | 2177.1 | 2169.3 | 2162.2 | 2150.8 | 2139.4 | 2118.8 | 2098.2 | 2067.7 | 2043.5 | 2016.6 |
| 12.5° | 2246.0 | 2250.2 | 2244.6 | 2233.2 | 2219.7 | 2204.8 | 2179.2 | 2152.9 | 2123.1 | 2090.4 | 2061.3 |
| 15°   | 2284.3 | 2290.7 | 2291.4 | 2282.2 | 2272.3 | 2254.5 | 2236.0 | 2207.6 | 2175.0 | 2134.5 | 2086.9 |
| 17.5° | 2287.2 | 2290.0 | 2292.2 | 2285.1 | 2278.7 | 2272.3 | 2253.8 | 2230.4 | 2199.1 | 2159.3 | 2115.3 |
| 20°   | 2234.6 | 2241.0 | 2248.1 | 2241.7 | 2244.6 | 2244.6 | 2236.8 | 2224.7 | 2199.1 | 2167.1 | 2124.5 |
| 22.5° | 2136.6 | 2151.5 | 2160.8 | 2167.1 | 2173.5 | 2182.8 | 2192.0 | 2186.3 | 2176.4 | 2152.9 | 2114.6 |
| 25°   | 2021.5 | 2033.6 | 2051.4 | 2057.0 | 2062.0 | 2089.0 | 2105.3 | 2116.7 | 2116.7 | 2111.7 | 2086.2 |
| 27.5° | 1899.4 | 1907.2 | 1922.1 | 1942.0 | 1960.4 | 1976.8 | 2010.9 | 2032.2 | 2049.2 | 2049.2 | 2035.7 |
| 30°   | 1767.2 | 1778.6 | 1796.4 | 1809.9 | 1832.6 | 1866.0 | 1894.4 | 1920.0 | 1959.0 | 1976.1 | 1973.2 |
| 32.5° | 1628.0 | 1639.4 | 1657.9 | 1669.2 | 1701.9 | 1728.9 | 1772.9 | 1812.7 | 1857.4 | 1883.0 | 1898.6 |
| 35°   | 1480.3 | 1481.0 | 1512.2 | 1530.7 | 1559.1 | 1592.5 | 1646.5 | 1691.2 | 1740.2 | 1782.9 | 1816.3 |
| 37.5° | 1328.3 | 1327.6 | 1349.6 | 1382.3 | 1405.0 | 1451.9 | 1507.3 | 1557.0 | 1625.2 | 1670.6 | 1723.2 |
| 40°   | 1153.5 | 1168.5 | 1186.9 | 1216.8 | 1255.8 | 1311.2 | 1363.8 | 1428.4 | 1496.6 | 1553.4 | 1609.6 |
| 42.5° | 997.3  | 1009.3 | 1039.2 | 1072.6 | 1114.5 | 1161.3 | 1225.3 | 1297.0 | 1363.8 | 1437.7 | 1500.2 |
| 45°   | 868.0  | 874.4  | 892.1  | 919.1  | 963.2  | 1016.4 | 1083.2 | 1159.2 | 1238.1 | 1313.4 | 1383.0 |
| 47.5° | 748.7  | 767.8  | 777.1  | 801.9  | 833.9  | 883.6  | 953.2  | 1021.4 | 1112.3 | 1196.2 | 1272.2 |
| 50°   | 654.9  | 658.5  | 674.8  | 693.3  | 730.9  | 767.8  | 820.4  | 890.7  | 975.2  | 1069.7 | 1147.1 |
| 52.5° | 578.2  | 576.8  | 590.3  | 606.6  | 632.9  | 671.9  | 717.4  | 785.6  | 857.3  | 951.1  | 1035.6 |
| 55°   | 500.1  | 507.2  | 513.6  | 529.9  | 553.3  | 583.2  | 621.5  | 679.1  | 746.5  | 829.6  | 918.4  |
| 57.5° | 446.1  | 446.8  | 450.3  | 463.8  | 479.5  | 502.9  | 539.8  | 588.8  | 649.2  | 721.7  | 807.6  |
| 60°   | 394.9  | 395.6  | 402.0  | 406.3  | 416.9  | 436.8  | 465.3  | 505.7  | 559.0  | 628.6  | 703.9  |
| 62.5° | 350.9  | 351.6  | 355.2  | 359.4  | 369.4  | 377.2  | 401.3  | 436.1  | 479.5  | 541.3  | 605.9  |
| 65°   | 308.3  | 309.0  | 309.0  | 314.7  | 321.1  | 328.2  | 345.2  | 367.2  | 409.1  | 458.1  | 515.7  |
| 67.5° | 267.1  | 271.3  | 269.9  | 274.2  | 279.9  | 283.4  | 295.5  | 315.4  | 343.8  | 385.0  | 434.7  |
| 70°   | 230.1  | 229.4  | 231.6  | 233.7  | 235.8  | 241.5  | 249.3  | 262.8  | 287.0  | 316.1  | 360.1  |
| 72.5° | 190.4  | 186.1  | 188.9  | 191.8  | 195.3  | 199.6  | 206.0  | 215.9  | 234.4  | 257.8  | 290.5  |
| 75°   | 140.6  | 138.5  | 142.8  | 143.5  | 149.9  | 155.6  | 162.7  | 172.6  | 186.1  | 206.0  | 227.3  |
| 77.5° | 102.3  | 105.1  | 106.5  | 108.0  | 108.7  | 115.1  | 122.9  | 131.4  | 139.2  | 157.7  | 174.0  |
| 80°   | 75.3   | 75.3   | 76.0   | 77.4   | 78.8   | 80.3   | 85.2   | 90.9   | 97.3   | 108.7  | 125.0  |
| 82.5° | 52.6   | 51.9   | 51.9   | 52.6   | 53.3   | 54.7   | 56.8   | 59.0   | 64.6   | 70.3   | 78.8   |
| 85°   | 28.4   | 29.1   | 29.8   | 28.4   | 29.1   | 29.8   | 31.3   | 33.4   | 34.8   | 39.1   | 42.6   |
| 87.5° | 9.9    | 12.1   | 11.4   | 11.4   | 12.1   | 12.1   | 12.1   | 13.5   | 13.5   | 13.5   | 15.6   |
| 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°    | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 |
| 2.5°  | 1820.5 | 1818.4 | 1812.7 | 1801.3 | 1793.5 | 1779.3 | 1776.5 | 1775.8 | 1763.0 | 1743.8 | 1742.4 |
| 5°    | 1888.0 | 1871.7 | 1858.2 | 1838.3 | 1818.4 | 1794.2 | 1780.0 | 1770.1 | 1747.4 | 1718.9 | 1706.2 |
| 7.5°  | 1949.8 | 1926.3 | 1898.6 | 1867.4 | 1838.3 | 1804.2 | 1779.3 | 1759.4 | 1726.0 | 1689.8 | 1667.8 |
| 10°   | 1999.5 | 1970.4 | 1935.6 | 1893.7 | 1853.9 | 1809.1 | 1774.3 | 1744.5 | 1700.5 | 1655.7 | 1625.9 |
| 12.5° | 2033.6 | 2000.9 | 1961.2 | 1912.1 | 1863.8 | 1812.7 | 1762.3 | 1724.6 | 1669.2 | 1617.4 | 1579.0 |
| 15°   | 2072.0 | 2018.0 | 1976.8 | 1921.4 | 1864.6 | 1803.5 | 1750.2 | 1696.2 | 1632.3 | 1574.0 | 1524.3 |
| 17.5° | 2081.2 | 2031.5 | 1982.5 | 1921.4 | 1862.4 | 1787.8 | 1726.0 | 1666.4 | 1595.3 | 1523.6 | 1475.3 |
| 20°   | 2089.7 | 2032.9 | 1972.5 | 1906.5 | 1844.7 | 1768.0 | 1698.3 | 1628.7 | 1546.3 | 1468.9 | 1408.5 |
| 22.5° | 2083.3 | 2027.9 | 1960.4 | 1885.9 | 1819.1 | 1740.2 | 1665.0 | 1588.2 | 1495.9 | 1414.9 | 1346.7 |
| 25°   | 2064.9 | 2013.7 | 1944.1 | 1862.4 | 1782.2 | 1701.9 | 1623.0 | 1541.4 | 1441.2 | 1347.5 | 1272.2 |
| 27.5° | 2027.2 | 1981.8 | 1915.0 | 1828.3 | 1743.8 | 1655.0 | 1572.6 | 1487.4 | 1380.1 | 1284.2 | 1204.0 |
| 30°   | 1976.8 | 1940.6 | 1873.1 | 1786.4 | 1694.8 | 1599.6 | 1515.1 | 1428.4 | 1316.9 | 1212.5 | 1127.3 |
| 32.5° | 1907.2 | 1881.6 | 1823.4 | 1738.8 | 1640.1 | 1539.2 | 1452.6 | 1364.5 | 1245.2 | 1145.7 | 1059.1 |
| 35°   | 1829.0 | 1817.0 | 1765.1 | 1680.6 | 1578.3 | 1472.5 | 1379.4 | 1289.2 | 1179.1 | 1074.0 | 990.9  |
| 37.5° | 1737.4 | 1745.9 | 1699.1 | 1615.2 | 1509.4 | 1401.4 | 1303.4 | 1216.0 | 1104.5 | 1003.7 | 922.0  |
| 40°   | 1646.5 | 1659.3 | 1623.8 | 1545.6 | 1435.5 | 1324.0 | 1224.6 | 1130.8 | 1027.1 | 938.3  | 857.3  |
| 42.5° | 1545.6 | 1571.2 | 1543.5 | 1467.5 | 1360.2 | 1242.3 | 1138.6 | 1051.3 | 952.5  | 870.8  | 799.8  |
| 45°   | 1438.4 | 1471.0 | 1459.7 | 1382.3 | 1276.4 | 1160.6 | 1051.3 | 960.3  | 880.8  | 808.3  | 743.7  |
| 47.5° | 1329.7 | 1367.3 | 1362.4 | 1297.7 | 1196.2 | 1077.5 | 969.6  | 880.1  | 806.9  | 748.7  | 694.7  |
| 50°   | 1218.2 | 1256.5 | 1257.2 | 1199.7 | 1105.2 | 992.3  | 876.5  | 795.5  | 737.3  | 686.2  | 642.1  |
| 52.5° | 1109.5 | 1147.9 | 1148.6 | 1103.8 | 1009.3 | 899.2  | 792.7  | 718.8  | 669.1  | 629.3  | 592.4  |
| 55°   | 995.8  | 1040.6 | 1044.9 | 1001.5 | 917.7  | 811.9  | 713.9  | 643.5  | 599.5  | 573.9  | 542.0  |
| 57.5° | 880.8  | 929.1  | 937.6  | 902.8  | 821.8  | 723.1  | 640.7  | 573.2  | 537.7  | 519.9  | 495.8  |
| 60°   | 773.5  | 821.1  | 834.6  | 794.8  | 728.1  | 643.5  | 564.7  | 507.9  | 479.5  | 465.3  | 448.2  |
| 62.5° | 674.8  | 722.4  | 729.5  | 695.4  | 629.3  | 558.3  | 498.6  | 446.8  | 423.3  | 412.7  | 399.2  |
| 65°   | 578.2  | 620.8  | 630.0  | 599.5  | 539.8  | 480.9  | 428.3  | 390.7  | 370.1  | 360.8  | 352.3  |
| 67.5° | 489.4  | 529.2  | 535.6  | 507.9  | 458.1  | 407.7  | 369.4  | 336.7  | 322.5  | 310.4  | 306.9  |
| 70°   | 405.6  | 441.8  | 447.5  | 419.8  | 380.7  | 339.5  | 307.6  | 284.8  | 271.3  | 264.2  | 259.3  |
| 72.5° | 328.2  | 356.6  | 361.5  | 344.5  | 314.0  | 277.7  | 252.9  | 233.7  | 225.2  | 218.8  | 216.6  |
| 75°   | 256.4  | 284.1  | 284.8  | 269.9  | 245.1  | 220.2  | 201.0  | 191.1  | 181.1  | 174.7  | 173.3  |
| 77.5° | 196.8  | 212.4  | 214.5  | 206.7  | 182.5  | 166.9  | 152.0  | 144.9  | 141.4  | 135.0  | 135.0  |
| 80°   | 140.6  | 149.9  | 153.4  | 142.1  | 130.7  | 117.2  | 109.4  | 103.7  | 100.9  | 96.6   | 96.6   |
| 82.5° | 87.4   | 95.2   | 99.4   | 90.9   | 85.2   | 78.1   | 72.5   | 68.9   | 66.8   | 64.6   | 63.9   |
| 85°   | 47.6   | 53.3   | 53.3   | 50.4   | 45.5   | 41.9   | 39.8   | 38.4   | 37.6   | 36.9   | 36.2   |
| 87.5° | 17.0   | 21.3   | 19.2   | 19.9   | 17.8   | 17.0   | 16.3   | 16.3   | 17.0   | 15.6   | 15.6   |
| 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):**

|       | 110°   | 115°   | 120°   | 125°   | 130°   | 135°   | 140°   | 145°   | 150°   | 155°   | 160°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 | 1764.4 |
| 2.5°  | 1733.1 | 1729.6 | 1718.9 | 1709.0 | 1701.2 | 1684.1 | 1680.6 | 1682.0 | 1682.0 | 1682.7 | 1674.9 |
| 5°    | 1691.2 | 1676.3 | 1659.3 | 1643.6 | 1631.6 | 1612.4 | 1601.7 | 1598.9 | 1596.8 | 1592.5 | 1584.7 |
| 7.5°  | 1643.6 | 1626.6 | 1602.4 | 1588.2 | 1562.7 | 1541.4 | 1526.4 | 1516.5 | 1510.1 | 1500.9 | 1488.1 |
| 10°   | 1595.3 | 1570.5 | 1543.5 | 1515.1 | 1489.5 | 1461.1 | 1437.7 | 1426.3 | 1412.8 | 1403.6 | 1389.4 |
| 12.5° | 1547.0 | 1512.2 | 1475.3 | 1442.6 | 1407.8 | 1374.4 | 1350.3 | 1334.7 | 1310.5 | 1297.0 | 1282.1 |
| 15°   | 1483.8 | 1441.2 | 1410.0 | 1353.1 | 1336.1 | 1287.8 | 1258.7 | 1246.6 | 1223.1 | 1218.9 | 1195.4 |
| 17.5° | 1424.2 | 1375.2 | 1329.0 | 1281.4 | 1235.9 | 1202.5 | 1177.7 | 1162.1 | 1143.6 | 1132.2 | 1116.6 |
| 20°   | 1349.6 | 1298.4 | 1243.0 | 1193.3 | 1155.0 | 1119.4 | 1103.8 | 1083.9 | 1073.3 | 1061.9 | 1050.5 |
| 22.5° | 1278.6 | 1216.0 | 1160.6 | 1120.2 | 1081.1 | 1052.0 | 1034.9 | 1021.4 | 1012.2 | 1000.8 | 993.0  |
| 25°   | 1202.5 | 1144.3 | 1093.2 | 1051.3 | 1013.6 | 990.9  | 976.7  | 968.9  | 963.2  | 954.7  | 949.7  |
| 27.5° | 1130.1 | 1071.1 | 1020.7 | 988.7  | 958.2  | 938.3  | 931.2  | 924.1  | 917.0  | 914.2  | 913.5  |
| 30°   | 1052.7 | 998.7  | 957.5  | 929.8  | 902.1  | 891.4  | 887.9  | 880.8  | 882.2  | 882.9  | 880.8  |
| 32.5° | 987.3  | 934.8  | 903.5  | 880.1  | 858.8  | 850.9  | 850.2  | 847.4  | 848.1  | 851.7  | 850.2  |
| 35°   | 919.8  | 880.8  | 849.5  | 830.3  | 816.9  | 811.2  | 811.9  | 812.6  | 816.9  | 817.6  | 820.4  |
| 37.5° | 862.3  | 824.7  | 804.1  | 785.6  | 779.2  | 779.2  | 779.9  | 780.6  | 784.2  | 788.4  | 789.9  |
| 40°   | 805.5  | 774.9  | 757.2  | 745.1  | 741.6  | 741.6  | 744.4  | 748.0  | 750.1  | 754.3  | 755.1  |
| 42.5° | 754.3  | 728.8  | 715.3  | 703.2  | 704.6  | 708.2  | 708.9  | 711.0  | 716.7  | 717.4  | 718.8  |
| 45°   | 703.9  | 684.7  | 671.2  | 667.7  | 667.7  | 670.5  | 674.1  | 675.5  | 679.8  | 680.5  | 681.9  |
| 47.5° | 660.6  | 640.7  | 630.8  | 627.2  | 629.3  | 632.9  | 637.9  | 640.0  | 643.5  | 642.8  | 646.4  |
| 50°   | 612.3  | 595.9  | 588.1  | 586.7  | 588.1  | 594.5  | 596.7  | 601.6  | 605.2  | 607.3  | 608.7  |
| 52.5° | 566.1  | 553.3  | 549.8  | 549.1  | 551.9  | 556.2  | 559.0  | 564.0  | 568.2  | 568.2  | 567.5  |
| 55°   | 522.1  | 510.7  | 506.4  | 510.0  | 513.6  | 515.7  | 521.4  | 524.2  | 528.5  | 529.2  | 528.5  |
| 57.5° | 477.3  | 467.4  | 466.0  | 467.4  | 474.5  | 478.7  | 482.3  | 482.3  | 484.4  | 485.1  | 487.3  |
| 60°   | 431.2  | 424.8  | 423.3  | 426.9  | 434.7  | 437.5  | 439.7  | 440.4  | 443.2  | 441.8  | 446.1  |
| 62.5° | 387.8  | 381.4  | 384.3  | 387.8  | 390.7  | 394.9  | 396.4  | 399.9  | 399.2  | 400.6  | 402.7  |
| 65°   | 343.1  | 339.5  | 340.2  | 344.5  | 348.0  | 353.7  | 353.7  | 353.7  | 357.3  | 357.3  | 358.7  |
| 67.5° | 299.7  | 297.6  | 300.5  | 304.0  | 304.7  | 308.3  | 307.6  | 311.8  | 314.7  | 316.1  | 317.5  |
| 70°   | 257.8  | 256.4  | 256.4  | 260.0  | 263.5  | 264.9  | 266.4  | 269.2  | 269.9  | 272.0  | 275.6  |
| 72.5° | 218.1  | 213.8  | 214.5  | 219.5  | 219.5  | 222.3  | 225.9  | 225.9  | 230.1  | 230.8  | 234.4  |
| 75°   | 174.7  | 173.3  | 174.7  | 177.6  | 181.1  | 180.4  | 184.7  | 184.0  | 185.4  | 190.4  | 191.1  |
| 77.5° | 136.4  | 134.2  | 137.8  | 139.2  | 139.9  | 140.6  | 142.1  | 145.6  | 148.5  | 150.6  | 151.3  |
| 80°   | 98.0   | 97.3   | 100.9  | 102.3  | 101.6  | 103.0  | 105.1  | 108.7  | 108.7  | 110.1  | 112.2  |
| 82.5° | 66.1   | 64.6   | 66.8   | 68.9   | 70.3   | 71.0   | 71.0   | 72.5   | 73.2   | 74.6   | 74.6   |
| 85°   | 37.6   | 37.6   | 39.1   | 39.8   | 41.2   | 40.5   | 41.9   | 41.2   | 42.6   | 44.0   | 43.3   |
| 87.5° | 16.3   | 16.3   | 16.3   | 16.3   | 17.0   | 17.0   | 17.8   | 17.8   | 17.0   | 17.8   | 16.3   |
| 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: P242991

CATALOG NUMBER: S121DR-H1025D840-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

|       | 165°   | 170°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|
| 0°    | 1764.4 | 1764.4 | 1764.4 | 1764.4 |
| 2.5°  | 1672.1 | 1673.5 | 1669.9 | 1666.4 |
| 5°    | 1584.0 | 1579.0 | 1574.0 | 1572.6 |
| 7.5°  | 1485.2 | 1485.2 | 1473.2 | 1476.0 |
| 10°   | 1379.4 | 1375.2 | 1365.9 | 1366.6 |
| 12.5° | 1276.4 | 1272.9 | 1267.9 | 1265.8 |
| 15°   | 1183.4 | 1185.5 | 1189.1 | 1169.2 |
| 17.5° | 1110.2 | 1104.5 | 1101.7 | 1098.1 |
| 20°   | 1044.9 | 1042.0 | 1036.3 | 1035.6 |
| 22.5° | 994.4  | 988.0  | 986.6  | 987.3  |
| 25°   | 946.1  | 946.1  | 946.1  | 941.9  |
| 27.5° | 912.0  | 912.0  | 909.9  | 910.6  |
| 30°   | 882.2  | 883.6  | 881.5  | 882.2  |
| 32.5° | 853.8  | 854.5  | 853.1  | 852.4  |
| 35°   | 821.8  | 824.0  | 823.2  | 824.0  |
| 37.5° | 791.3  | 792.7  | 791.3  | 791.3  |
| 40°   | 756.5  | 760.0  | 759.3  | 757.2  |
| 42.5° | 721.7  | 721.7  | 723.8  | 723.1  |
| 45°   | 685.4  | 684.0  | 684.0  | 686.2  |
| 47.5° | 647.1  | 649.9  | 648.5  | 649.2  |
| 50°   | 611.6  | 610.9  | 608.7  | 608.0  |
| 52.5° | 569.7  | 571.1  | 570.4  | 566.8  |
| 55°   | 529.2  | 529.2  | 528.5  | 528.5  |
| 57.5° | 485.8  | 488.0  | 487.3  | 487.3  |
| 60°   | 444.7  | 446.1  | 446.8  | 446.1  |
| 62.5° | 402.7  | 403.5  | 402.7  | 403.5  |
| 65°   | 362.3  | 362.3  | 361.5  | 363.7  |
| 67.5° | 318.2  | 318.9  | 318.2  | 319.6  |
| 70°   | 276.3  | 277.7  | 278.4  | 277.0  |
| 72.5° | 236.5  | 235.1  | 235.8  | 234.4  |
| 75°   | 192.5  | 193.2  | 192.5  | 193.2  |
| 77.5° | 151.3  | 152.0  | 151.3  | 152.0  |
| 80°   | 111.5  | 111.5  | 112.2  | 110.8  |
| 82.5° | 75.3   | 75.3   | 77.4   | 75.3   |
| 85°   | 44.0   | 44.0   | 42.6   | 45.5   |
| 87.5° | 17.0   | 17.0   | 17.0   | 17.0   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)