

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: STREETWORKS

Report Number: P478683

Luminaire Tested: **IFLD-M-SA4A-827-U-T4W**

Issue Date: 02/26/2021



Test Information

Test Method: LM-79-08
Report Number: P478683
Test Lab: INNOVATION CENTER(G2)
Issue Date: 02/26/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4A-827-U-T4W
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ T4W distribution lens
Light Source: (64) 2700K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

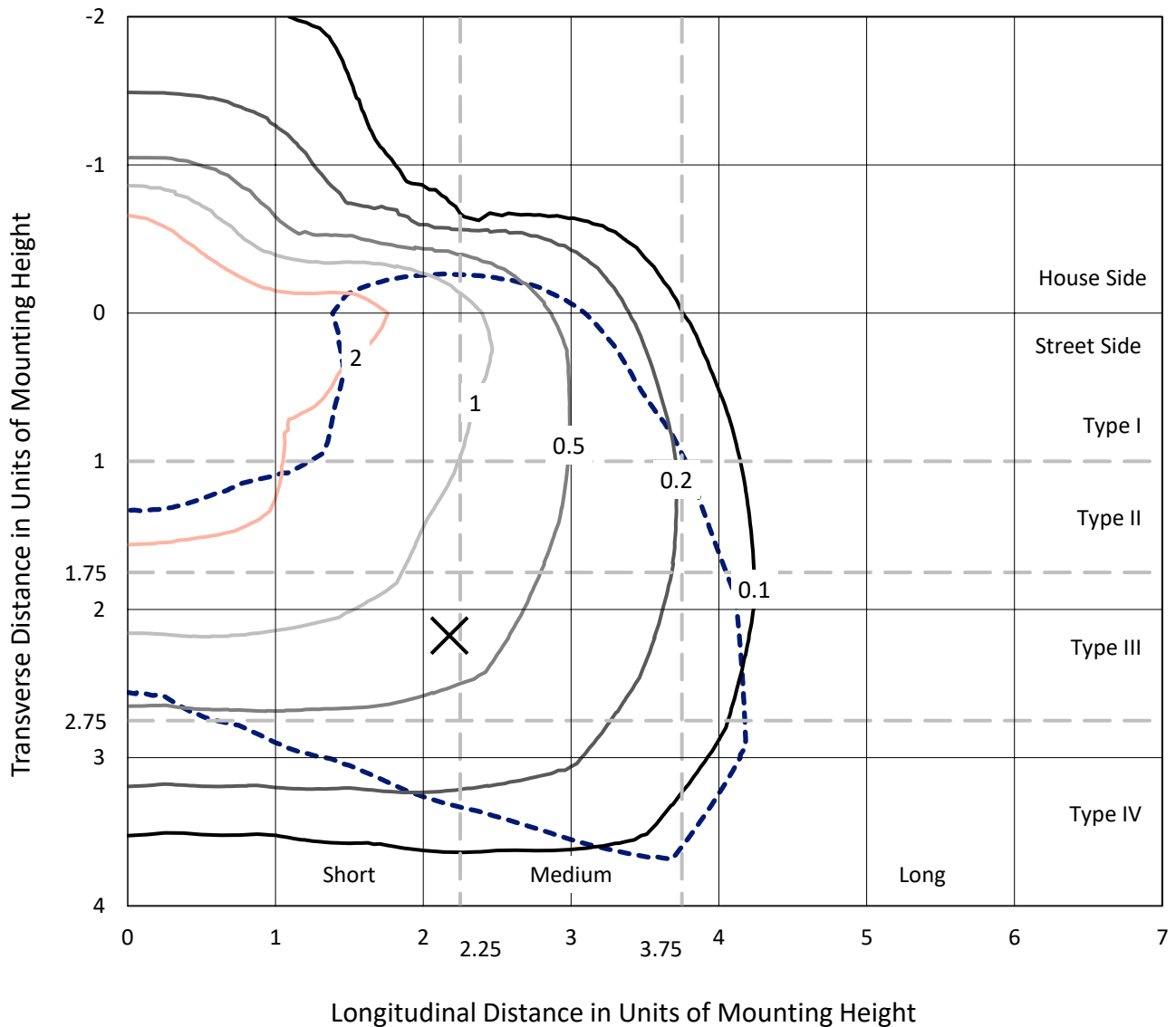
Lumens per Lamp: N/A
Luminaire Lumens: 13721.7 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 128.6
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

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Iso-Footcandle Lines of Horizontal Illumination

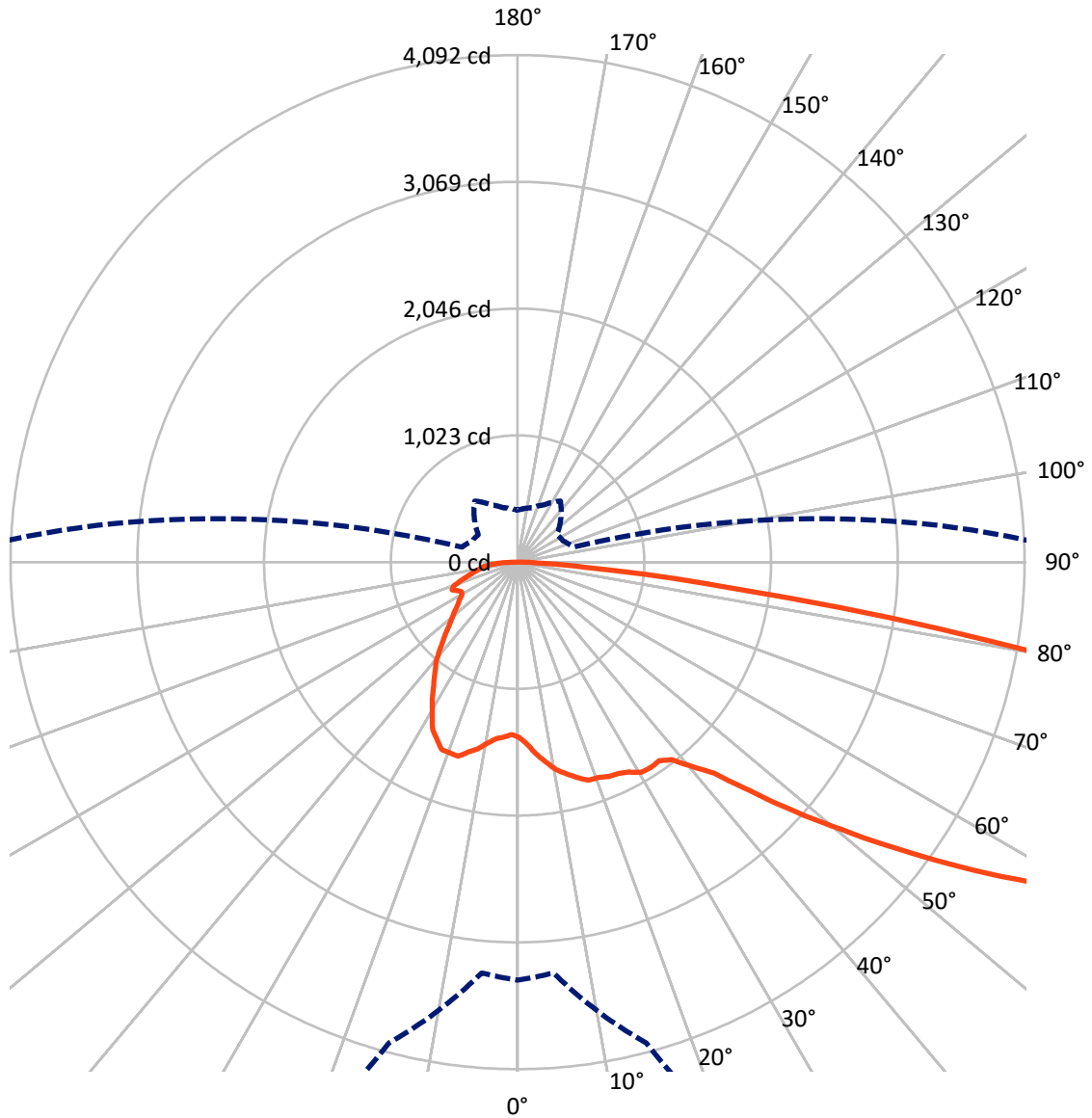
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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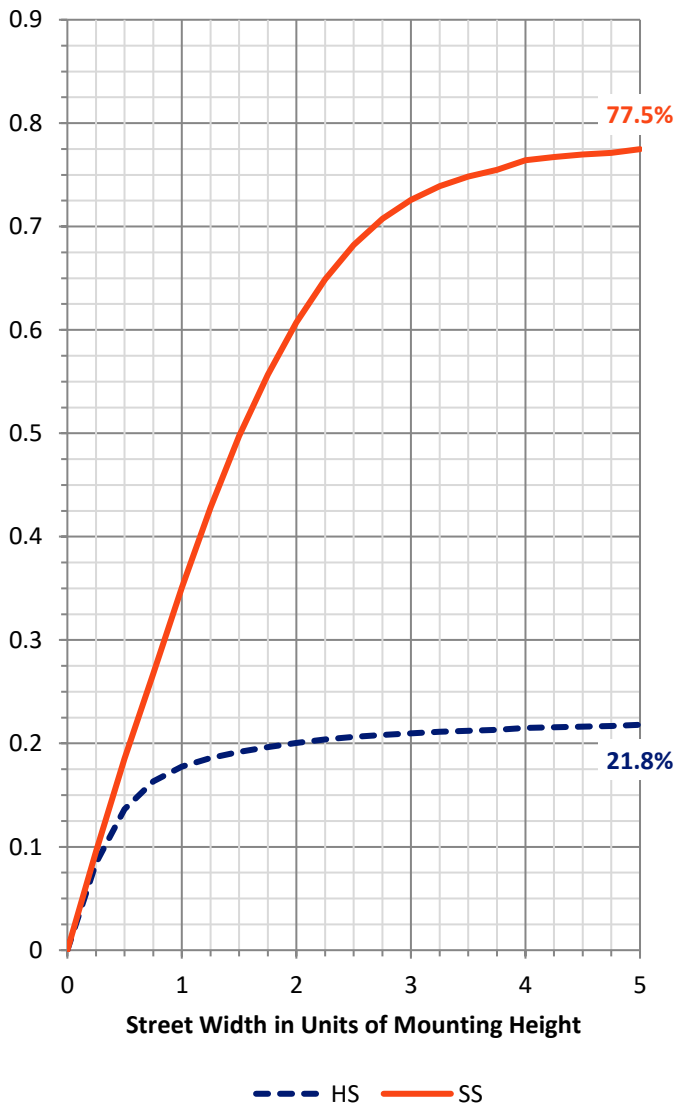
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3054.5 | 0.0 | 3054.5 |
| | % Fixture | 22.3 | 0.0 | 22.3 |
| Street Side | Lumens | 10667.2 | 0.0 | 10667.2 |
| | % Fixture | 77.7 | 0.0 | 77.7 |
| Total | Lumens | 13721.7 | 0.0 | 13721.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 144.6 | 1.1 |
| 10°-20° | 481.1 | 3.5 |
| 20°-30° | 812.4 | 5.9 |
| 30°-40° | 1124.3 | 8.2 |
| 40°-50° | 1608.1 | 11.7 |
| 50°-60° | 2593.8 | 18.9 |
| 60°-70° | 3825.4 | 27.9 |
| 70°-80° | 2777.9 | 20.2 |
| 80°-90° | 354.1 | 2.6 |
| 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°-90° | 13721.7 | 100.0 |
| 0°-180° | 13721.7 | 100.0 |



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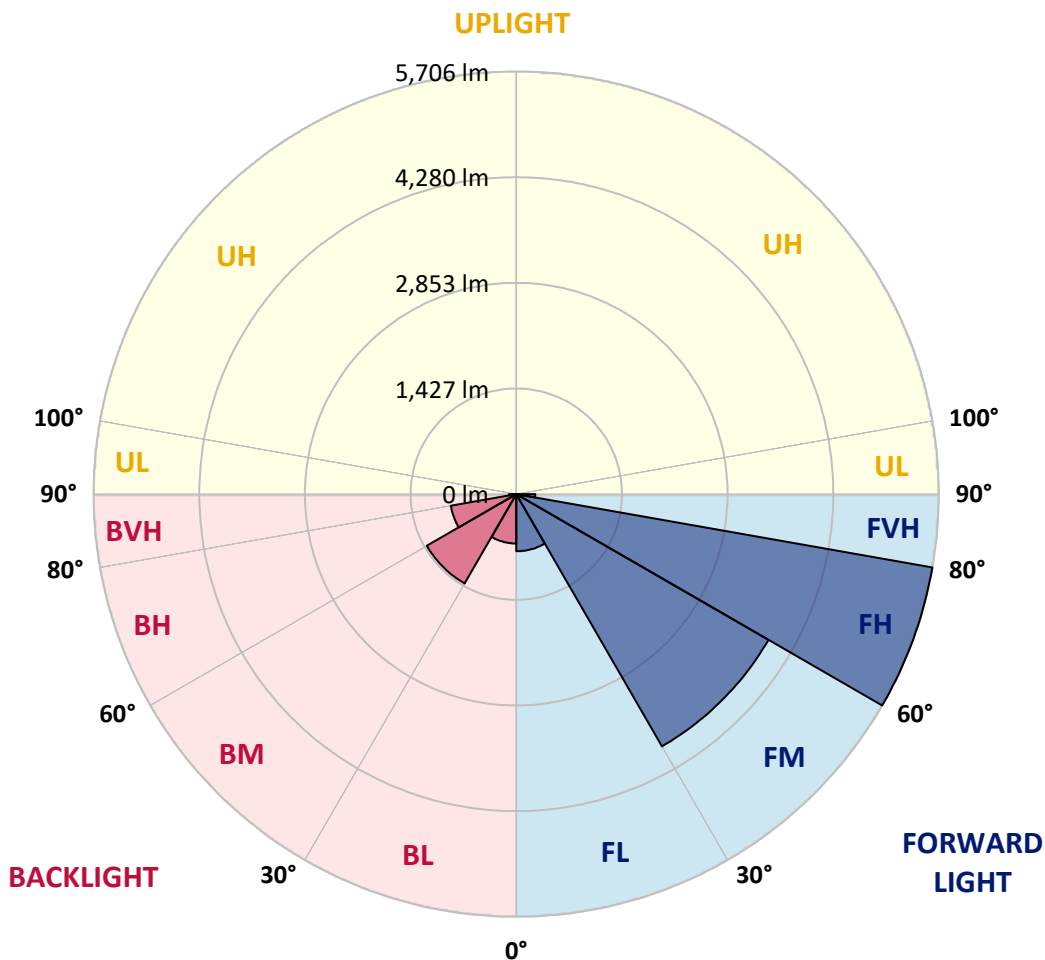
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 771.2 | 5.6 | | | |
| FM (30°-60°) | 3932.2 | 28.7 | | | |
| FH (60°-80°) | 5706.1 | 41.6 | | | G3/7500 |
| FVH (80°-90°) | 257.7 | 1.9 | | | G3/500 |
| BL (0°-30°) | 666.9 | 4.9 | B2/1000 | | |
| BM (30°-60°) | 1394.0 | 10.2 | B2/2500 | | |
| BH (60°-80°) | 897.2 | 6.5 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 96.4 | 0.7 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1413.1 | 1413.1 | 1413.1 | 1413.1 | 1413.1 | 1413.1 | 1413.1 | 1413.1 | 1413.1 | 1413.1 | 1413.1 |
| 2.5° | 1488.6 | 1497.4 | 1488.6 | 1487.1 | 1472.3 | 1461.9 | 1470.8 | 1457.5 | 1442.7 | 1436.8 | 1423.4 |
| 5° | 1624.7 | 1626.2 | 1609.9 | 1611.4 | 1580.3 | 1547.7 | 1553.7 | 1513.7 | 1470.8 | 1454.5 | 1427.9 |
| 7.5° | 1763.8 | 1747.5 | 1723.8 | 1716.4 | 1667.6 | 1632.1 | 1627.6 | 1592.1 | 1525.5 | 1488.6 | 1451.6 |
| 10° | 1854.0 | 1859.9 | 1821.5 | 1788.9 | 1747.5 | 1704.6 | 1703.1 | 1636.5 | 1598.0 | 1543.3 | 1495.9 |
| 12.5° | 1933.9 | 1935.4 | 1902.9 | 1851.1 | 1799.3 | 1746.0 | 1753.4 | 1723.8 | 1658.7 | 1606.9 | 1559.6 |
| 15° | 1996.1 | 1987.2 | 1951.7 | 1904.3 | 1849.6 | 1808.2 | 1803.7 | 1778.6 | 1723.8 | 1680.9 | 1602.5 |
| 17.5° | 2013.8 | 2009.4 | 1973.9 | 1923.6 | 1870.3 | 1839.2 | 1851.1 | 1809.6 | 1787.4 | 1749.0 | 1673.5 |
| 20° | 1979.8 | 1969.4 | 1963.5 | 1907.3 | 1868.8 | 1865.9 | 1855.5 | 1864.4 | 1827.4 | 1791.9 | 1737.1 |
| 22.5° | 1917.7 | 1913.2 | 1910.3 | 1865.9 | 1848.1 | 1861.4 | 1879.2 | 1892.5 | 1886.6 | 1852.5 | 1790.4 |
| 25° | 1854.0 | 1874.7 | 1855.5 | 1834.8 | 1859.9 | 1894.0 | 1889.5 | 1932.5 | 1932.5 | 1922.1 | 1870.3 |
| 27.5° | 1898.4 | 1885.1 | 1870.3 | 1859.9 | 1868.8 | 1922.1 | 1919.1 | 1970.9 | 1990.2 | 1970.9 | 1911.7 |
| 30° | 2009.4 | 1996.1 | 1953.2 | 1907.3 | 1895.5 | 1953.2 | 1968.0 | 2013.8 | 2022.7 | 1975.4 | 1925.1 |
| 32.5° | 2218.0 | 2210.6 | 2142.6 | 2007.9 | 1935.4 | 1968.0 | 1975.4 | 2027.2 | 2019.8 | 1990.2 | 1969.4 |
| 35° | 2527.3 | 2502.1 | 2407.4 | 2179.6 | 2019.8 | 1987.2 | 1968.0 | 2009.4 | 2037.5 | 2022.7 | 2003.5 |
| 37.5° | 2866.1 | 2838.0 | 2721.1 | 2432.6 | 2172.2 | 2039.0 | 2024.2 | 2058.2 | 2090.8 | 2083.4 | 2043.4 |
| 40° | 3190.2 | 3190.2 | 3085.1 | 2749.2 | 2398.5 | 2164.8 | 2167.7 | 2129.2 | 2158.8 | 2145.5 | 2152.9 |
| 42.5° | 3509.8 | 3497.9 | 3455.0 | 3120.6 | 2641.2 | 2374.9 | 2327.5 | 2231.3 | 2284.6 | 2280.2 | 2290.5 |
| 45° | 3833.8 | 3825.0 | 3813.1 | 3466.9 | 2988.9 | 2659.0 | 2633.8 | 2460.7 | 2509.5 | 2488.8 | 2533.2 |
| 47.5° | 4092.8 | 4103.1 | 4103.1 | 3853.1 | 3360.3 | 3037.8 | 3000.8 | 2727.0 | 2820.3 | 2830.6 | 2841.0 |
| 50° | 4313.2 | 4317.7 | 4313.2 | 4221.5 | 3774.6 | 3471.3 | 3395.8 | 3117.7 | 3210.9 | 3292.3 | 3387.0 |
| 52.5° | 4618.1 | 4624.0 | 4603.3 | 4567.7 | 4336.9 | 3927.0 | 3842.7 | 3533.5 | 3724.3 | 3810.2 | 3980.3 |
| 55° | 4993.9 | 4949.5 | 4911.0 | 4937.7 | 4877.0 | 4428.7 | 4341.4 | 3962.6 | 4249.6 | 4363.6 | 4703.9 |
| 57.5° | 5063.4 | 5101.9 | 5199.6 | 5411.2 | 5498.5 | 4917.0 | 4866.6 | 4489.3 | 4843.0 | 4942.1 | 5510.3 |
| 60° | 5309.1 | 5245.4 | 5485.1 | 5943.8 | 6041.5 | 5553.2 | 5501.4 | 5066.4 | 5433.4 | 5536.9 | 6254.6 |
| 62.5° | 5470.3 | 5467.4 | 5822.5 | 6367.0 | 6589.0 | 6213.1 | 6108.1 | 5816.6 | 6071.1 | 6171.7 | 7065.4 |
| 65° | 5423.0 | 5465.9 | 6096.2 | 6615.6 | 7046.2 | 6963.3 | 6902.7 | 6461.7 | 6797.6 | 6788.7 | 7593.7 |
| 67.5° | 4990.9 | 5112.3 | 5923.1 | 6794.7 | 7726.8 | 7877.8 | 7858.5 | 7368.8 | 7388.0 | 7200.1 | 7828.9 |
| 70° | 4391.7 | 4350.2 | 5190.7 | 6608.2 | 8067.2 | 8962.4 | 8957.9 | 8043.5 | 7919.2 | 7290.3 | 7154.2 |
| 72° | 3373.7 | 3327.8 | 4018.8 | 5674.5 | 7888.1 | 9395.9 | 9529.1 | 8511.1 | 7913.3 | 6916.0 | 5909.8 |
| 72.5° | 3062.9 | 3023.0 | 3711.0 | 5341.6 | 7689.9 | 9508.4 | 9446.2 | 8528.8 | 7851.1 | 6739.9 | 5520.7 |
| 75° | 1410.1 | 1364.3 | 1854.0 | 3270.1 | 5998.6 | 8425.3 | 8636.8 | 7981.4 | 6856.8 | 5365.3 | 3307.1 |
| 77.5° | 420.2 | 406.9 | 596.3 | 1319.9 | 3486.1 | 6207.2 | 6288.6 | 6022.3 | 4786.7 | 2938.6 | 1226.6 |
| 80° | 233.8 | 235.3 | 307.8 | 494.2 | 1532.9 | 3588.2 | 3881.2 | 3719.9 | 2348.2 | 970.7 | 408.4 |
| 82.5° | 130.2 | 137.6 | 192.4 | 293.0 | 704.3 | 1646.9 | 1772.6 | 1709.0 | 849.3 | 455.7 | 223.4 |
| 85° | 68.1 | 71.0 | 100.6 | 156.8 | 399.5 | 520.8 | 535.6 | 574.1 | 440.9 | 310.7 | 119.9 |
| 87.5° | 26.6 | 26.6 | 37.0 | 65.1 | 148.0 | 161.3 | 145.0 | 176.1 | 253.0 | 201.2 | 59.2 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1413.1 | 1413.1 | 1413.1 | 1413.1 | 1413.1 | 1413.1 | 1413.1 | 1413.1 | 1413.1 | 1413.1 | 1413.1 |
| 2.5° | 1435.3 | 1423.4 | 1422.0 | 1402.7 | 1408.6 | 1392.4 | 1393.9 | 1390.9 | 1392.4 | 1389.4 | 1382.0 |
| 5° | 1427.9 | 1419.0 | 1393.9 | 1410.1 | 1395.3 | 1416.0 | 1432.3 | 1426.4 | 1430.8 | 1429.4 | 1430.8 |
| 7.5° | 1438.2 | 1426.4 | 1423.4 | 1414.6 | 1427.9 | 1436.8 | 1450.1 | 1487.1 | 1484.1 | 1488.6 | 1497.4 |
| 10° | 1469.3 | 1456.0 | 1447.1 | 1460.4 | 1453.0 | 1481.2 | 1495.9 | 1515.2 | 1549.2 | 1550.7 | 1532.9 |
| 12.5° | 1530.0 | 1521.1 | 1503.3 | 1506.3 | 1531.5 | 1540.3 | 1549.2 | 1561.1 | 1583.2 | 1578.8 | 1595.1 |
| 15° | 1599.5 | 1580.3 | 1569.9 | 1567.0 | 1572.9 | 1583.2 | 1581.8 | 1593.6 | 1605.4 | 1615.8 | 1611.4 |
| 17.5° | 1649.8 | 1624.7 | 1627.6 | 1642.4 | 1641.0 | 1638.0 | 1618.8 | 1612.8 | 1618.8 | 1624.7 | 1621.7 |
| 20° | 1701.6 | 1704.6 | 1682.4 | 1669.1 | 1663.2 | 1633.6 | 1618.8 | 1601.0 | 1583.2 | 1592.1 | 1605.4 |
| 22.5° | 1766.7 | 1753.4 | 1720.9 | 1680.9 | 1651.3 | 1633.6 | 1587.7 | 1556.6 | 1556.6 | 1565.5 | 1561.1 |
| 25° | 1840.7 | 1812.6 | 1756.4 | 1683.9 | 1646.9 | 1571.4 | 1538.9 | 1534.4 | 1522.6 | 1535.9 | 1541.8 |
| 27.5° | 1898.4 | 1873.3 | 1796.3 | 1673.5 | 1571.4 | 1510.7 | 1491.5 | 1485.6 | 1504.8 | 1506.3 | 1530.0 |
| 30° | 1922.1 | 1914.7 | 1802.2 | 1646.9 | 1494.5 | 1396.8 | 1385.0 | 1411.6 | 1432.3 | 1463.4 | 1464.9 |
| 32.5° | 1953.2 | 1956.1 | 1811.1 | 1584.7 | 1393.9 | 1296.2 | 1278.4 | 1311.0 | 1370.2 | 1395.3 | 1414.6 |
| 35° | 2005.0 | 2019.8 | 1803.7 | 1507.8 | 1287.3 | 1194.1 | 1191.1 | 1200.0 | 1257.7 | 1302.1 | 1327.3 |
| 37.5° | 2095.2 | 2092.3 | 1802.2 | 1416.0 | 1203.0 | 1105.3 | 1081.6 | 1084.6 | 1123.1 | 1160.1 | 1155.6 |
| 40° | 2216.5 | 2204.7 | 1797.8 | 1296.2 | 1093.5 | 1029.9 | 989.9 | 975.1 | 972.1 | 961.8 | 964.7 |
| 42.5° | 2382.3 | 2358.6 | 1796.3 | 1174.9 | 994.3 | 926.3 | 898.2 | 859.7 | 831.6 | 778.3 | 781.3 |
| 45° | 2613.1 | 2571.7 | 1757.9 | 1060.9 | 896.7 | 840.5 | 797.5 | 769.4 | 708.8 | 642.2 | 642.2 |
| 47.5° | 2969.7 | 2835.1 | 1759.3 | 935.2 | 802.0 | 756.1 | 726.5 | 677.7 | 612.6 | 559.3 | 553.4 |
| 50° | 3495.0 | 3187.2 | 1709.0 | 836.0 | 725.0 | 694.0 | 662.9 | 606.7 | 544.5 | 507.5 | 512.0 |
| 52.5° | 4172.7 | 3712.5 | 1707.5 | 747.2 | 664.4 | 642.2 | 608.1 | 557.8 | 512.0 | 488.3 | 479.4 |
| 55° | 4980.6 | 4407.9 | 1760.8 | 674.7 | 602.2 | 590.4 | 575.6 | 534.2 | 489.8 | 469.1 | 467.6 |
| 57.5° | 5807.7 | 5087.1 | 1846.6 | 622.9 | 549.0 | 557.8 | 547.5 | 514.9 | 479.4 | 455.7 | 452.8 |
| 60° | 6543.1 | 5625.7 | 1673.5 | 560.8 | 501.6 | 520.8 | 535.6 | 507.5 | 488.3 | 486.8 | 476.5 |
| 62.5° | 7098.0 | 5856.5 | 1272.5 | 513.4 | 476.5 | 512.0 | 551.9 | 569.7 | 560.8 | 572.6 | 574.1 |
| 65° | 7300.7 | 5717.5 | 876.0 | 488.3 | 457.2 | 532.7 | 621.5 | 615.5 | 563.8 | 541.6 | 553.4 |
| 67.5° | 7016.6 | 5153.7 | 649.6 | 458.7 | 443.9 | 575.6 | 661.4 | 587.4 | 509.0 | 506.0 | 497.2 |
| 70° | 6034.1 | 4368.0 | 529.7 | 427.6 | 421.7 | 551.9 | 643.7 | 544.5 | 479.4 | 460.2 | 451.3 |
| 72° | 4807.5 | 3401.8 | 464.6 | 405.4 | 386.2 | 492.7 | 602.2 | 510.5 | 454.3 | 430.6 | 420.2 |
| 72.5° | 4388.7 | 3153.2 | 455.7 | 395.1 | 378.8 | 479.4 | 581.5 | 500.1 | 448.3 | 427.6 | 411.3 |
| 75° | 2407.4 | 1614.3 | 401.0 | 362.5 | 319.6 | 414.3 | 538.6 | 469.1 | 423.2 | 393.6 | 390.6 |
| 77.5° | 895.2 | 625.9 | 346.2 | 321.1 | 276.7 | 358.1 | 489.8 | 445.4 | 384.7 | 347.7 | 340.3 |
| 80° | 343.3 | 330.0 | 282.6 | 270.8 | 232.3 | 313.7 | 451.3 | 399.5 | 327.0 | 290.0 | 278.2 |
| 82.5° | 208.6 | 192.4 | 214.6 | 211.6 | 177.6 | 285.6 | 424.7 | 374.4 | 290.0 | 235.3 | 227.9 |
| 85° | 113.9 | 113.9 | 149.4 | 143.5 | 124.3 | 227.9 | 321.1 | 248.6 | 183.5 | 150.9 | 153.9 |
| 87.5° | 50.3 | 59.2 | 79.9 | 75.5 | 68.1 | 128.7 | 156.8 | 131.7 | 91.7 | 62.1 | 66.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)