

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: P479051

Luminaire Tested: **IFLD-S-SA2D-827-U-5NQ**

Issue Date: 02/26/2021



Test Information

Test Method: LM-79-08
Report Number: P479051
Test Lab: INNOVATION CENTER(G2)
Issue Date: 02/26/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2D-827-U-5NQ
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ 5NQ distribution lens
Light Source: (32) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

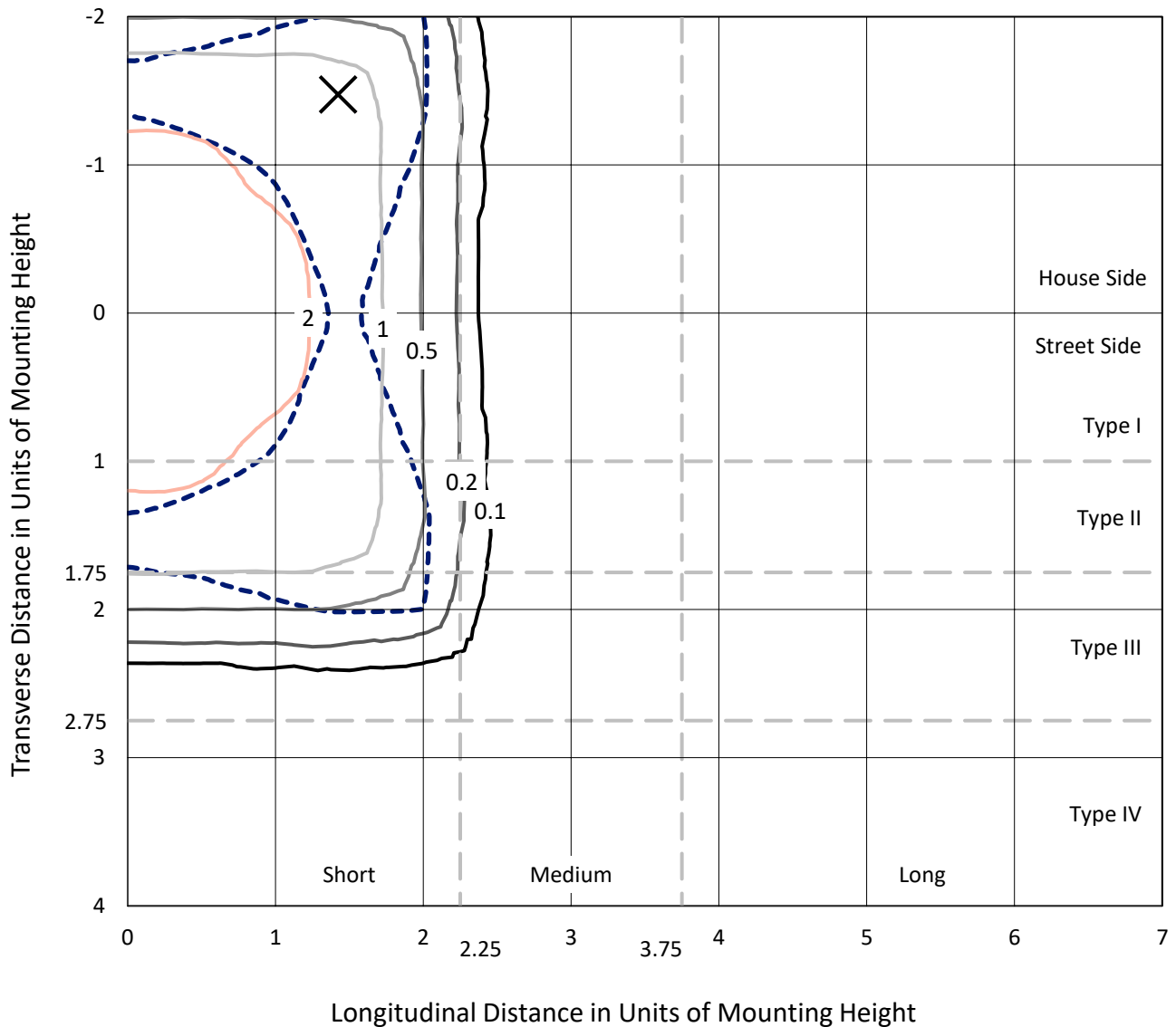
Lumens per Lamp: N/A
Luminaire Lumens: 11466.4 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

Input Watts (W): 123.9
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

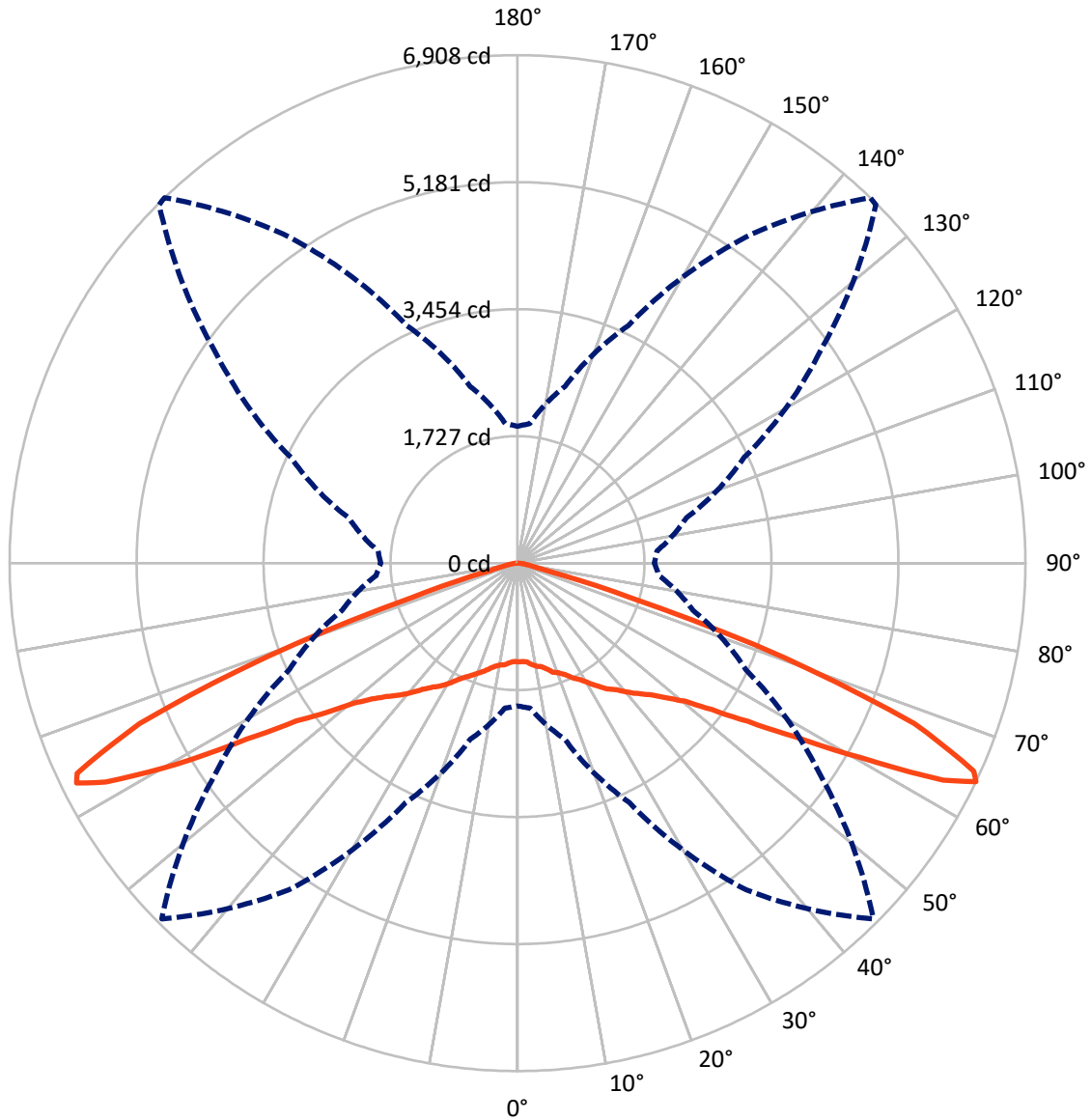
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.4 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 136-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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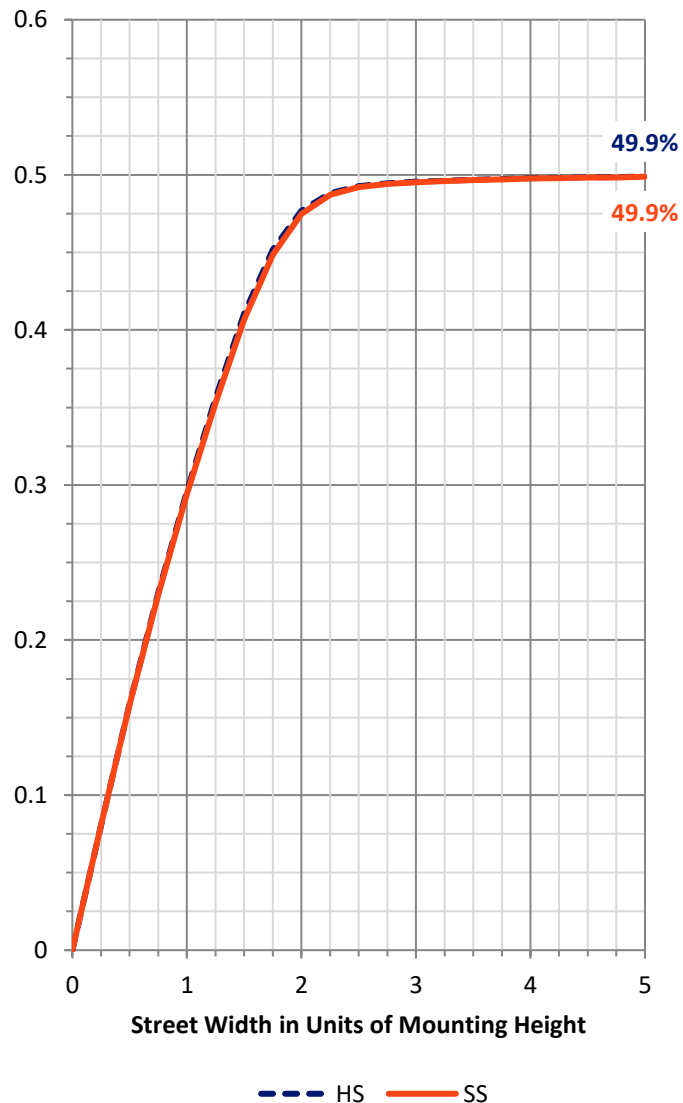
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5738.7 | 0.0 | 5738.7 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 5727.7 | 0.0 | 5727.7 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 11466.4 | 0.0 | 11466.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 131.9 | 1.2 |
| 10°-20° | 425.1 | 3.7 |
| 20°-30° | 799.0 | 7.0 |
| 30°-40° | 1317.7 | 11.5 |
| 40°-50° | 2060.8 | 18.0 |
| 50°-60° | 3329.8 | 29.0 |
| 60°-70° | 2998.3 | 26.1 |
| 70°-80° | 355.2 | 3.1 |
| 80°-90° | 48.6 | 0.4 |
| 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° | 11466.4 | 100.0 |
| 0°-180° | 11466.4 | 100.0 |

Coefficient of Utilization



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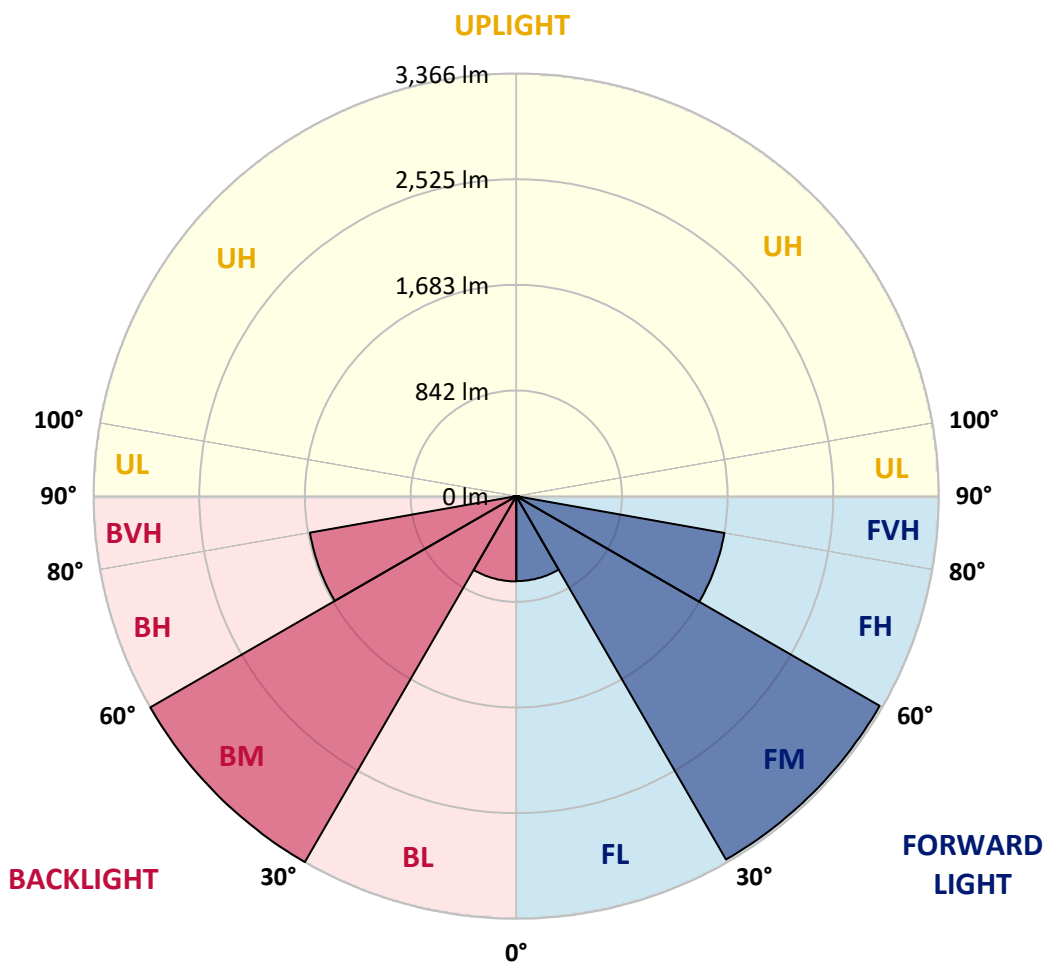
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 676.7 | 5.9 | | | |
| FM (30°-60°) | 3342.1 | 29.1 | | | |
| FH (60°-80°) | 1684.0 | 14.7 | | | G1/1800 |
| FVH (80°-90°) | 24.9 | 0.2 | | | G1/100 |
| BL (0°-30°) | 679.3 | 5.9 | B2/1000 | | |
| BM (30°-60°) | 3366.2 | 29.4 | B3/5000 | | |
| BH (60°-80°) | 1669.4 | 14.6 | B3/2500 | | G1/1800 |
| BVH (80°-90°) | 23.7 | 0.2 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1342.5 | 1342.5 | 1342.5 | 1342.5 | 1342.5 | 1342.5 | 1342.5 | 1342.5 | 1342.5 | 1342.5 | 1342.5 |
| 2.5° | 1326.7 | 1329.3 | 1353.0 | 1343.8 | 1351.7 | 1337.2 | 1347.7 | 1370.1 | 1343.8 | 1363.5 | 1370.1 |
| 5° | 1341.2 | 1345.1 | 1345.1 | 1354.3 | 1359.6 | 1356.9 | 1363.5 | 1354.3 | 1379.3 | 1368.8 | 1384.6 |
| 7.5° | 1393.8 | 1387.2 | 1376.7 | 1384.6 | 1385.9 | 1392.4 | 1399.0 | 1410.9 | 1406.9 | 1397.7 | 1413.5 |
| 10° | 1403.0 | 1397.7 | 1413.5 | 1414.8 | 1408.2 | 1403.0 | 1409.5 | 1409.5 | 1421.4 | 1424.0 | 1424.0 |
| 12.5° | 1418.7 | 1424.0 | 1422.7 | 1433.2 | 1434.5 | 1430.6 | 1441.1 | 1460.8 | 1455.6 | 1459.5 | 1450.3 |
| 15° | 1479.2 | 1472.7 | 1471.3 | 1481.9 | 1499.0 | 1474.0 | 1492.4 | 1491.1 | 1485.8 | 1493.7 | 1472.7 |
| 17.5° | 1531.8 | 1510.8 | 1520.0 | 1537.1 | 1530.5 | 1535.8 | 1559.4 | 1538.4 | 1543.7 | 1534.5 | 1527.9 |
| 20° | 1577.8 | 1560.7 | 1562.1 | 1568.6 | 1568.6 | 1584.4 | 1593.6 | 1585.7 | 1580.5 | 1579.2 | 1581.8 |
| 22.5° | 1629.1 | 1609.4 | 1610.7 | 1638.3 | 1647.5 | 1642.3 | 1635.7 | 1648.8 | 1651.5 | 1641.0 | 1652.8 |
| 25° | 1667.3 | 1688.3 | 1694.9 | 1708.0 | 1688.3 | 1702.8 | 1697.5 | 1722.5 | 1738.3 | 1717.2 | 1731.7 |
| 27.5° | 1767.2 | 1758.0 | 1775.1 | 1773.8 | 1789.5 | 1775.1 | 1784.3 | 1792.2 | 1798.7 | 1800.1 | 1793.5 |
| 30° | 1856.6 | 1860.5 | 1843.4 | 1889.5 | 1852.7 | 1876.3 | 1892.1 | 1896.0 | 1903.9 | 1903.9 | 1884.2 |
| 32.5° | 1951.3 | 1943.4 | 1971.0 | 1960.5 | 1953.9 | 1972.3 | 1955.2 | 2009.1 | 1977.6 | 1996.0 | 1973.6 |
| 35° | 2057.8 | 2057.8 | 2068.3 | 2097.2 | 2057.8 | 2045.9 | 2077.5 | 2099.8 | 2099.8 | 2067.0 | 2074.9 |
| 37.5° | 2177.4 | 2166.9 | 2180.1 | 2216.9 | 2186.6 | 2147.2 | 2205.0 | 2214.2 | 2207.7 | 2198.5 | 2182.7 |
| 40° | 2261.6 | 2258.9 | 2285.2 | 2333.9 | 2290.5 | 2282.6 | 2293.1 | 2318.1 | 2326.0 | 2335.2 | 2314.2 |
| 42.5° | 2403.6 | 2415.4 | 2491.7 | 2479.8 | 2444.3 | 2416.7 | 2414.1 | 2507.5 | 2485.1 | 2461.4 | 2449.6 |
| 45° | 2614.0 | 2603.4 | 2642.9 | 2644.2 | 2598.2 | 2537.7 | 2550.8 | 2636.3 | 2674.4 | 2621.8 | 2641.6 |
| 47.5° | 2780.9 | 2786.2 | 2813.8 | 2870.4 | 2763.9 | 2700.7 | 2749.4 | 2887.5 | 2875.6 | 2855.9 | 2874.3 |
| 50° | 3004.5 | 3028.1 | 3114.9 | 3095.2 | 3000.5 | 2923.0 | 3029.5 | 3159.6 | 3174.1 | 3101.8 | 3088.6 |
| 52.5° | 3313.5 | 3350.3 | 3397.6 | 3413.4 | 3322.7 | 3295.1 | 3301.6 | 3463.4 | 3427.9 | 3358.2 | 3313.5 |
| 55° | 3584.3 | 3601.4 | 3688.2 | 3818.4 | 3811.8 | 3679.0 | 3755.3 | 3815.8 | 3671.1 | 3527.8 | 3539.6 |
| 57.5° | 3700.0 | 3707.9 | 3949.9 | 4210.2 | 4365.4 | 4395.6 | 4308.8 | 4105.0 | 3760.5 | 3484.4 | 3467.3 |
| 60° | 3412.1 | 3487.0 | 3778.9 | 4366.7 | 5075.4 | 5425.2 | 4847.9 | 4137.9 | 3551.5 | 3216.2 | 3191.2 |
| 62.5° | 2727.0 | 2731.0 | 3164.9 | 4056.4 | 5517.2 | 6433.7 | 5054.4 | 3828.9 | 2994.0 | 2614.0 | 2514.0 |
| 64° | 1942.1 | 1978.9 | 2477.2 | 3590.9 | 5425.2 | 6843.9 | 5029.4 | 3425.2 | 2468.0 | 1928.9 | 1859.2 |
| 65° | 1393.8 | 1445.0 | 1926.3 | 3117.6 | 5209.5 | 6795.2 | 4954.4 | 3078.1 | 1996.0 | 1472.7 | 1401.7 |
| 67.5° | 512.8 | 533.8 | 756.0 | 1559.4 | 3740.8 | 5790.7 | 3926.2 | 1692.2 | 877.0 | 624.6 | 561.4 |
| 70° | 238.0 | 239.3 | 280.1 | 515.4 | 1635.7 | 3872.3 | 1873.7 | 635.1 | 330.0 | 261.7 | 243.3 |
| 72.5° | 174.9 | 178.8 | 195.9 | 238.0 | 481.2 | 1639.6 | 615.4 | 260.3 | 193.3 | 170.9 | 167.0 |
| 75° | 142.0 | 144.6 | 149.9 | 172.2 | 222.2 | 439.2 | 249.8 | 180.1 | 153.8 | 138.1 | 132.8 |
| 77.5° | 109.1 | 109.1 | 121.0 | 131.5 | 147.3 | 205.1 | 165.7 | 143.3 | 124.9 | 109.1 | 105.2 |
| 80° | 78.9 | 80.2 | 94.7 | 102.6 | 99.9 | 135.4 | 119.7 | 118.3 | 102.6 | 85.5 | 78.9 |
| 82.5° | 46.0 | 50.0 | 68.4 | 73.6 | 71.0 | 80.2 | 86.8 | 92.0 | 80.2 | 59.2 | 53.9 |
| 85° | 26.3 | 27.6 | 39.4 | 40.8 | 40.8 | 38.1 | 50.0 | 55.2 | 53.9 | 36.8 | 32.9 |
| 87.5° | 7.9 | 7.9 | 10.5 | 10.5 | 11.8 | 13.1 | 19.7 | 23.7 | 26.3 | 18.4 | 17.1 |
| 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):

| | 95° | 105° | 115° | 125° | 135° | 136° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1342.5 | 1342.5 | 1342.5 | 1342.5 | 1342.5 | 1342.5 | 1342.5 | 1342.5 | 1342.5 | 1342.5 | 1342.5 |
| 2.5° | 1363.5 | 1343.8 | 1345.1 | 1350.4 | 1333.3 | 1339.9 | 1359.6 | 1345.1 | 1341.2 | 1333.3 | 1329.3 |
| 5° | 1356.9 | 1378.0 | 1370.1 | 1372.7 | 1368.8 | 1350.4 | 1347.7 | 1359.6 | 1366.1 | 1354.3 | 1378.0 |
| 7.5° | 1403.0 | 1393.8 | 1383.2 | 1387.2 | 1378.0 | 1393.8 | 1404.3 | 1380.6 | 1392.4 | 1385.9 | 1372.7 |
| 10° | 1429.3 | 1412.2 | 1420.1 | 1417.4 | 1410.9 | 1426.6 | 1416.1 | 1413.5 | 1403.0 | 1388.5 | 1409.5 |
| 12.5° | 1438.5 | 1458.2 | 1471.3 | 1449.0 | 1452.9 | 1445.0 | 1438.5 | 1438.5 | 1426.6 | 1422.7 | 1426.6 |
| 15° | 1479.2 | 1496.3 | 1491.1 | 1508.2 | 1485.8 | 1493.7 | 1501.6 | 1481.9 | 1492.4 | 1463.4 | 1485.8 |
| 17.5° | 1554.2 | 1539.7 | 1558.1 | 1535.8 | 1543.7 | 1559.4 | 1534.5 | 1534.5 | 1542.3 | 1526.6 | 1506.8 |
| 20° | 1601.5 | 1594.9 | 1588.4 | 1589.7 | 1576.5 | 1591.0 | 1583.1 | 1579.2 | 1567.3 | 1572.6 | 1583.1 |
| 22.5° | 1646.2 | 1637.0 | 1639.6 | 1643.6 | 1652.8 | 1646.2 | 1642.3 | 1646.2 | 1617.3 | 1643.6 | 1606.8 |
| 25° | 1701.4 | 1726.4 | 1718.5 | 1735.6 | 1709.3 | 1726.4 | 1725.1 | 1700.1 | 1715.9 | 1705.4 | 1697.5 |
| 27.5° | 1793.5 | 1780.3 | 1792.2 | 1771.1 | 1789.5 | 1790.9 | 1775.1 | 1817.1 | 1798.7 | 1796.1 | 1790.9 |
| 30° | 1911.8 | 1902.6 | 1894.7 | 1882.9 | 1897.4 | 1885.5 | 1898.7 | 1902.6 | 1885.5 | 1872.4 | 1847.4 |
| 32.5° | 1978.9 | 2003.9 | 2013.1 | 1984.1 | 1985.5 | 1992.0 | 1980.2 | 1968.4 | 1978.9 | 1982.8 | 1978.9 |
| 35° | 2073.5 | 2097.2 | 2102.5 | 2080.1 | 2068.3 | 2101.2 | 2077.5 | 2116.9 | 2082.8 | 2084.1 | 2048.6 |
| 37.5° | 2184.0 | 2190.6 | 2235.3 | 2210.3 | 2199.8 | 2184.0 | 2227.4 | 2222.1 | 2230.0 | 2166.9 | 2198.5 |
| 40° | 2308.9 | 2332.6 | 2357.6 | 2294.4 | 2293.1 | 2307.6 | 2305.0 | 2335.2 | 2320.7 | 2311.5 | 2289.2 |
| 42.5° | 2445.7 | 2495.6 | 2499.6 | 2457.5 | 2431.2 | 2428.6 | 2441.7 | 2508.8 | 2510.1 | 2449.6 | 2423.3 |
| 45° | 2627.1 | 2682.3 | 2667.9 | 2586.3 | 2557.4 | 2553.5 | 2617.9 | 2646.8 | 2671.8 | 2648.1 | 2625.8 |
| 47.5° | 2853.3 | 2890.1 | 2879.6 | 2804.6 | 2711.3 | 2737.6 | 2800.7 | 2891.4 | 2865.1 | 2833.5 | 2807.2 |
| 50° | 3095.2 | 3138.6 | 3116.2 | 3041.3 | 2951.9 | 2951.9 | 3029.5 | 3145.2 | 3137.3 | 3075.5 | 3051.8 |
| 52.5° | 3363.4 | 3426.5 | 3477.8 | 3371.3 | 3296.4 | 3308.2 | 3430.5 | 3472.6 | 3452.8 | 3409.5 | 3389.7 |
| 55° | 3563.3 | 3684.3 | 3789.5 | 3794.7 | 3798.7 | 3797.3 | 3828.9 | 3871.0 | 3730.3 | 3660.6 | 3589.6 |
| 57.5° | 3514.6 | 3743.4 | 4103.7 | 4348.3 | 4420.6 | 4458.7 | 4448.2 | 4253.6 | 3920.9 | 3692.2 | 3715.8 |
| 60° | 3167.5 | 3540.9 | 4122.1 | 4907.1 | 5433.0 | 5380.4 | 5188.5 | 4419.3 | 3815.8 | 3429.2 | 3380.5 |
| 62.5° | 2527.2 | 2976.9 | 3813.1 | 5064.9 | 6513.9 | 6498.1 | 5493.5 | 4036.6 | 3179.4 | 2690.2 | 2660.0 |
| 64° | 1903.9 | 2377.3 | 3401.6 | 5024.1 | 6892.5 | 6908.3 | 5415.9 | 3565.9 | 2487.7 | 1903.9 | 1857.9 |
| 65° | 1456.9 | 1896.0 | 2997.9 | 4940.0 | 6811.0 | 6820.2 | 5200.3 | 3079.4 | 1890.8 | 1351.7 | 1301.7 |
| 67.5° | 579.9 | 807.3 | 1626.5 | 3746.1 | 5848.5 | 5823.6 | 3710.6 | 1489.7 | 723.2 | 470.7 | 461.5 |
| 70° | 247.2 | 307.7 | 570.7 | 1775.1 | 3915.7 | 3843.4 | 1597.6 | 483.9 | 268.2 | 224.8 | 223.5 |
| 72.5° | 169.6 | 188.0 | 244.6 | 548.3 | 1627.8 | 1589.7 | 454.9 | 224.8 | 182.8 | 168.3 | 168.3 |
| 75° | 136.7 | 149.9 | 177.5 | 230.1 | 431.3 | 415.5 | 214.3 | 165.7 | 146.0 | 135.4 | 134.1 |
| 77.5° | 106.5 | 119.7 | 139.4 | 159.1 | 197.2 | 195.9 | 143.3 | 124.9 | 113.1 | 105.2 | 102.6 |
| 80° | 84.2 | 97.3 | 110.4 | 113.1 | 128.9 | 126.2 | 97.3 | 98.6 | 92.0 | 76.3 | 74.9 |
| 82.5° | 57.9 | 78.9 | 88.1 | 80.2 | 76.3 | 76.3 | 69.7 | 69.7 | 64.4 | 47.3 | 43.4 |
| 85° | 35.5 | 52.6 | 55.2 | 47.3 | 35.5 | 35.5 | 38.1 | 36.8 | 34.2 | 25.0 | 23.7 |
| 87.5° | 18.4 | 25.0 | 22.4 | 18.4 | 11.8 | 11.8 | 10.5 | 7.9 | 7.9 | 6.6 | 6.6 |
| 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)