

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: P883654

Luminaire Tested: **NVN-SB4A-835-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883654
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB4A-835-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15205 lumens
Efficiency: N/A
Efficacy: 133.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G3

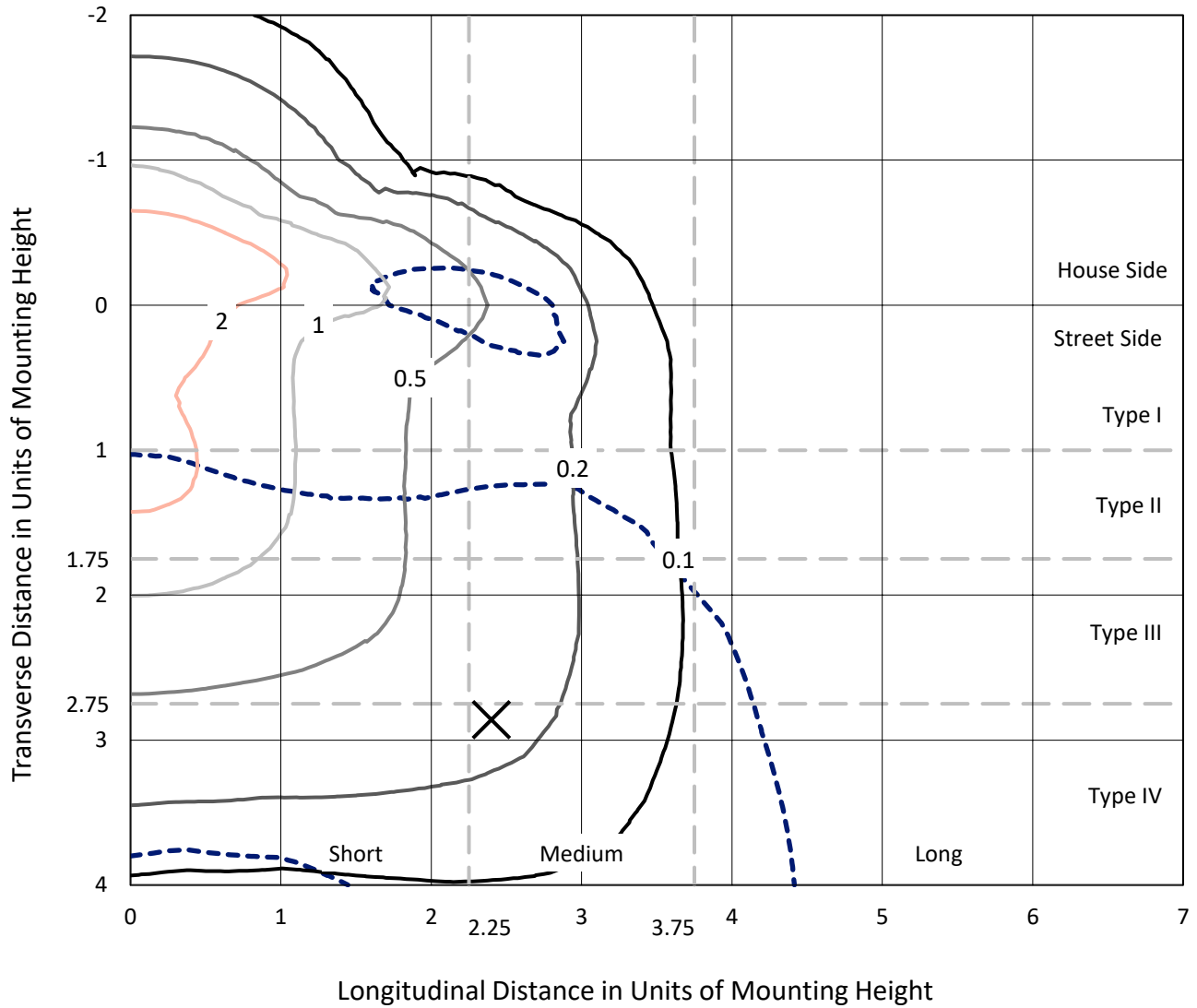
Input Watts (W): 114
Input Voltage (V): 120.0
Input Current (Ain): 0.952
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.206
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

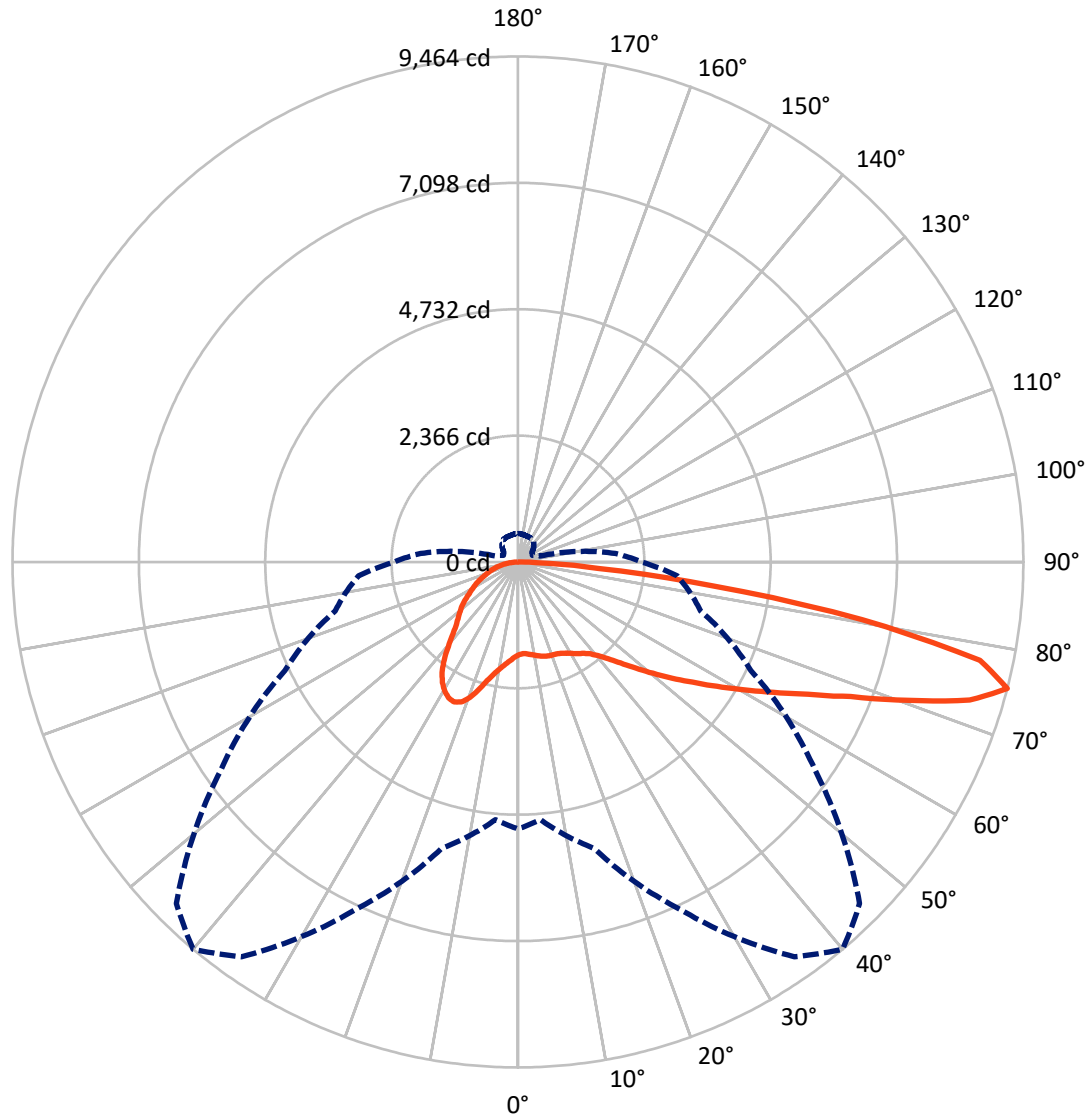
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4711.0 | 0.0 | 4711.0 |
| | % Fixture | 31.0 | 0.0 | 31.0 |
| Street Side | Lumens | 10494.0 | 0.0 | 10494.0 |
| | % Fixture | 69.0 | 0.0 | 69.0 |
| Total | Lumens | 15205.0 | 0.0 | 15205.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 173.6 | 1.1 |
| 10°-20° | 582.7 | 3.8 |
| 20°-30° | 1064.0 | 7.0 |
| 30°-40° | 1509.0 | 9.9 |
| 40°-50° | 2037.6 | 13.4 |
| 50°-60° | 2741.1 | 18.0 |
| 60°-70° | 3479.2 | 22.9 |
| 70°-80° | 3157.5 | 20.8 |
| 80°-90° | 460.3 | 3.0 |
| 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° | 15205.0 | 100.0 |
| 0°-180° | 15205.0 | 100.0 |

Coefficient of Utilization



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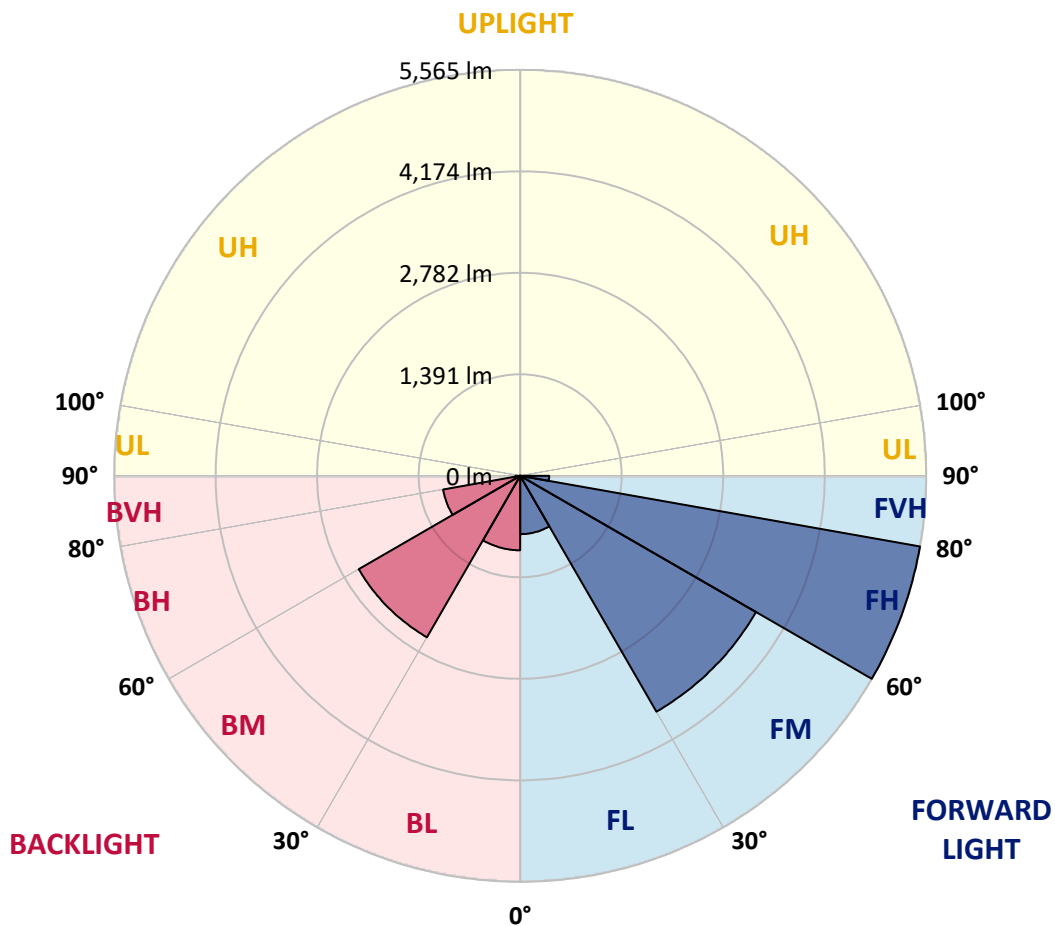
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 799.8 | 5.3 | | | |
| FM (30°-60°) | 3732.5 | 24.5 | | | |
| FH (60°-80°) | 5564.8 | 36.6 | | | G3/7500 |
| FVH (80°-90°) | 396.9 | 2.6 | | | G3/500 |
| BL (0°-30°) | 1020.5 | 6.7 | B3/2500 | | |
| BM (30°-60°) | 2555.3 | 16.8 | B3/5000 | | |
| BH (60°-80°) | 1071.9 | 7.0 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 63.4 | 0.4 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1738.7 | 1738.7 | 1738.7 | 1738.7 | 1738.7 | 1738.7 | 1738.7 | 1738.7 | 1738.7 | 1738.7 | 1738.7 |
| 2.5° | 1712.1 | 1721.8 | 1719.4 | 1716.1 | 1716.1 | 1716.9 | 1716.1 | 1721.8 | 1727.4 | 1733.1 | 1741.9 |
| 5° | 1729.8 | 1739.5 | 1734.7 | 1730.6 | 1727.4 | 1726.6 | 1724.2 | 1723.4 | 1726.6 | 1733.9 | 1746.0 |
| 7.5° | 1764.5 | 1774.2 | 1766.9 | 1759.7 | 1753.2 | 1750.0 | 1746.8 | 1741.9 | 1739.5 | 1743.6 | 1760.5 |
| 10° | 1803.2 | 1812.9 | 1804.0 | 1791.1 | 1780.6 | 1776.6 | 1773.4 | 1768.6 | 1765.3 | 1767.7 | 1786.3 |
| 12.5° | 1841.9 | 1851.6 | 1839.5 | 1821.8 | 1808.1 | 1805.6 | 1801.6 | 1800.0 | 1799.2 | 1798.4 | 1816.9 |
| 15° | 1878.2 | 1886.3 | 1871.0 | 1850.0 | 1835.5 | 1831.5 | 1827.4 | 1829.8 | 1833.9 | 1838.7 | 1859.7 |
| 17.5° | 1906.5 | 1914.5 | 1891.9 | 1864.5 | 1850.8 | 1849.2 | 1846.8 | 1854.8 | 1866.1 | 1878.2 | 1904.0 |
| 20° | 1932.3 | 1940.3 | 1911.3 | 1874.2 | 1858.1 | 1858.1 | 1858.9 | 1875.8 | 1891.9 | 1909.7 | 1945.2 |
| 22.5° | 1968.6 | 1975.0 | 1939.5 | 1888.7 | 1865.3 | 1866.9 | 1873.4 | 1890.3 | 1910.5 | 1934.7 | 1983.9 |
| 25° | 2022.6 | 2027.4 | 1983.9 | 1916.1 | 1889.5 | 1894.4 | 1900.0 | 1908.1 | 1927.4 | 1955.6 | 2021.8 |
| 27.5° | 2109.7 | 2113.7 | 2056.5 | 1964.5 | 1924.2 | 1932.3 | 1940.3 | 1934.7 | 1943.6 | 1967.7 | 2052.4 |
| 30° | 2232.3 | 2234.7 | 2162.1 | 2040.3 | 1983.1 | 1987.1 | 1988.7 | 1965.3 | 1948.4 | 1967.7 | 2074.2 |
| 32.5° | 2377.4 | 2376.6 | 2290.3 | 2132.3 | 2050.0 | 2046.0 | 2032.3 | 1986.3 | 1946.8 | 1963.7 | 2093.6 |
| 35° | 2602.4 | 2593.6 | 2482.3 | 2261.3 | 2125.8 | 2100.8 | 2068.6 | 2009.7 | 1954.8 | 1959.7 | 2110.5 |
| 37.5° | 2975.0 | 2947.6 | 2793.6 | 2472.6 | 2238.7 | 2175.0 | 2127.4 | 2047.6 | 1972.6 | 1958.1 | 2130.6 |
| 40° | 3395.2 | 3360.5 | 3191.1 | 2762.1 | 2408.1 | 2305.6 | 2229.0 | 2101.6 | 2001.6 | 1965.3 | 2160.5 |
| 42.5° | 3893.6 | 3844.4 | 3662.1 | 3103.2 | 2622.6 | 2474.2 | 2358.9 | 2170.2 | 2044.4 | 1988.7 | 2200.8 |
| 45° | 4505.7 | 4440.3 | 4182.3 | 3487.9 | 2892.7 | 2695.2 | 2541.1 | 2274.2 | 2109.7 | 2033.9 | 2261.3 |
| 47.5° | 5124.2 | 5140.3 | 4773.4 | 3928.2 | 3216.9 | 2967.7 | 2769.4 | 2430.6 | 2204.8 | 2106.5 | 2358.9 |
| 50° | 5781.5 | 5792.7 | 5361.3 | 4416.1 | 3584.7 | 3275.8 | 3025.8 | 2605.6 | 2337.1 | 2209.7 | 2504.8 |
| 52.5° | 6294.4 | 6296.0 | 5895.2 | 4926.6 | 3967.7 | 3614.5 | 3302.4 | 2805.6 | 2490.3 | 2346.8 | 2699.2 |
| 55° | 6615.3 | 6611.3 | 6269.4 | 5409.7 | 4408.1 | 3970.2 | 3608.9 | 3033.1 | 2677.4 | 2508.1 | 2943.6 |
| 57.5° | 6848.4 | 6836.3 | 6527.4 | 5825.0 | 4877.4 | 4390.3 | 3955.7 | 3291.1 | 2898.4 | 2700.0 | 3265.3 |
| 60° | 6937.1 | 6929.8 | 6702.4 | 6183.9 | 5371.0 | 4854.8 | 4355.7 | 3579.8 | 3149.2 | 2926.6 | 3679.0 |
| 62.5° | 6971.0 | 6984.7 | 6874.2 | 6531.5 | 5899.2 | 5369.4 | 4795.2 | 3925.0 | 3431.5 | 3183.1 | 4115.3 |
| 65° | 7090.3 | 7115.3 | 7092.8 | 6986.3 | 6496.0 | 5971.8 | 5378.2 | 4335.5 | 3739.5 | 3458.1 | 4571.0 |
| 67.5° | 7326.6 | 7351.6 | 7361.3 | 7530.7 | 7225.0 | 6722.6 | 6105.7 | 4846.8 | 4100.0 | 3743.6 | 4913.7 |
| 70° | 7321.0 | 7313.7 | 7484.7 | 7963.7 | 8137.9 | 7762.1 | 7086.3 | 5475.8 | 4529.8 | 3980.7 | 4957.3 |
| 72.5° | 6663.7 | 6605.7 | 7009.7 | 7958.9 | 8897.6 | 8847.6 | 8283.9 | 6287.1 | 4900.8 | 4009.7 | 4301.6 |
| 75° | 4999.2 | 4844.4 | 5558.1 | 7172.6 | 9024.2 | 9463.7 | 9045.2 | 6790.3 | 4812.9 | 3542.7 | 2993.6 |
| 77.5° | 2137.9 | 1982.3 | 2823.4 | 5309.7 | 8076.6 | 8846.8 | 8346.8 | 5924.2 | 3841.9 | 2342.7 | 1470.2 |
| 80° | 559.7 | 558.9 | 853.2 | 2407.3 | 5492.7 | 6533.1 | 5731.5 | 3825.8 | 2195.2 | 837.1 | 405.6 |
| 82.5° | 231.5 | 225.8 | 313.7 | 936.3 | 2683.9 | 3666.1 | 2991.9 | 1706.5 | 792.7 | 226.6 | 134.7 |
| 85° | 86.3 | 85.5 | 152.4 | 323.4 | 946.8 | 1512.1 | 1094.4 | 436.3 | 197.6 | 110.5 | 60.5 |
| 87.5° | 24.2 | 23.4 | 33.1 | 112.1 | 230.6 | 350.0 | 187.1 | 71.8 | 55.6 | 43.5 | 17.7 |
| 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° | 1738.7 | 1738.7 | 1738.7 | 1738.7 | 1738.7 | 1738.7 | 1738.7 | 1738.7 | 1738.7 | 1738.7 | 1738.7 |
| 2.5° | 1744.4 | 1748.4 | 1755.6 | 1761.3 | 1768.6 | 1776.6 | 1787.9 | 1795.2 | 1802.4 | 1807.3 | 1804.0 |
| 5° | 1751.6 | 1760.5 | 1779.0 | 1797.6 | 1819.4 | 1839.5 | 1862.9 | 1879.8 | 1893.6 | 1897.6 | 1899.2 |
| 7.5° | 1767.7 | 1782.3 | 1813.7 | 1845.2 | 1879.8 | 1912.9 | 1946.8 | 1975.8 | 1999.2 | 2008.1 | 2008.9 |
| 10° | 1796.0 | 1815.3 | 1859.7 | 1904.0 | 1950.0 | 2000.8 | 2044.4 | 2086.3 | 2119.4 | 2133.1 | 2133.9 |
| 12.5° | 1831.5 | 1855.6 | 1913.7 | 1975.0 | 2038.7 | 2108.9 | 2165.3 | 2216.9 | 2258.1 | 2276.6 | 2276.6 |
| 15° | 1877.4 | 1908.9 | 1983.1 | 2065.3 | 2158.9 | 2256.5 | 2328.2 | 2385.5 | 2431.5 | 2454.0 | 2452.4 |
| 17.5° | 1927.4 | 1969.4 | 2062.9 | 2187.1 | 2321.0 | 2449.2 | 2533.1 | 2575.0 | 2622.6 | 2644.4 | 2643.6 |
| 20° | 1975.8 | 2027.4 | 2161.3 | 2341.9 | 2520.2 | 2656.5 | 2724.2 | 2735.5 | 2738.7 | 2741.1 | 2747.6 |
| 22.5° | 2025.8 | 2095.2 | 2284.7 | 2537.1 | 2728.2 | 2822.6 | 2832.3 | 2783.9 | 2716.1 | 2684.7 | 2693.6 |
| 25° | 2080.6 | 2172.6 | 2446.0 | 2752.4 | 2907.3 | 2918.6 | 2844.4 | 2726.6 | 2598.4 | 2539.5 | 2548.4 |
| 27.5° | 2133.9 | 2262.1 | 2639.5 | 2958.1 | 3036.3 | 2937.1 | 2777.4 | 2610.5 | 2455.6 | 2393.6 | 2400.8 |
| 30° | 2187.1 | 2364.5 | 2853.2 | 3137.9 | 3095.2 | 2891.1 | 2671.8 | 2485.5 | 2329.8 | 2264.5 | 2271.8 |
| 32.5° | 2241.1 | 2483.9 | 3099.2 | 3267.7 | 3084.7 | 2793.6 | 2540.3 | 2345.2 | 2208.1 | 2139.5 | 2148.4 |
| 35° | 2302.4 | 2630.6 | 3332.3 | 3338.7 | 3014.5 | 2650.0 | 2366.9 | 2177.4 | 2058.1 | 2003.2 | 2015.3 |
| 37.5° | 2382.3 | 2816.9 | 3537.9 | 3356.5 | 2891.9 | 2439.5 | 2151.6 | 1979.0 | 1880.6 | 1855.6 | 1873.4 |
| 40° | 2481.5 | 3041.1 | 3695.2 | 3328.2 | 2710.5 | 2183.9 | 1916.1 | 1778.2 | 1722.6 | 1728.2 | 1747.6 |
| 42.5° | 2610.5 | 3291.9 | 3805.7 | 3255.6 | 2458.1 | 1920.2 | 1709.7 | 1648.4 | 1675.0 | 1697.6 | 1718.6 |
| 45° | 2778.2 | 3552.4 | 3874.2 | 3132.3 | 2172.6 | 1696.8 | 1587.9 | 1602.4 | 1622.6 | 1625.0 | 1641.1 |
| 47.5° | 2992.7 | 3816.1 | 3919.4 | 2946.0 | 1881.5 | 1539.5 | 1510.5 | 1513.7 | 1509.7 | 1492.7 | 1505.6 |
| 50° | 3260.5 | 4072.6 | 3959.7 | 2699.2 | 1633.9 | 1441.1 | 1402.4 | 1391.1 | 1335.5 | 1280.6 | 1287.9 |
| 52.5° | 3565.3 | 4308.1 | 3976.6 | 2392.7 | 1441.1 | 1358.9 | 1296.0 | 1225.0 | 1121.0 | 1104.0 | 1109.7 |
| 55° | 3904.0 | 4525.8 | 3933.1 | 2016.1 | 1279.0 | 1253.2 | 1158.1 | 1072.6 | 1061.3 | 1046.8 | 1049.2 |
| 57.5° | 4308.9 | 4760.5 | 3844.4 | 1596.0 | 1112.9 | 1129.8 | 1037.1 | 1046.8 | 1026.6 | 1004.0 | 1000.0 |
| 60° | 4751.6 | 5003.2 | 3688.7 | 1212.9 | 941.1 | 975.8 | 1005.6 | 1004.8 | 999.2 | 980.6 | 974.2 |
| 62.5° | 5150.0 | 5162.9 | 3382.3 | 929.0 | 790.3 | 856.5 | 937.9 | 937.1 | 932.3 | 921.8 | 917.7 |
| 65° | 5387.1 | 5138.7 | 2871.0 | 731.5 | 666.1 | 758.1 | 846.0 | 852.4 | 853.2 | 852.4 | 852.4 |
| 67.5° | 5345.2 | 4855.7 | 2169.4 | 582.3 | 563.7 | 658.1 | 754.8 | 763.7 | 770.2 | 771.8 | 773.4 |
| 70° | 4871.0 | 4233.9 | 1414.5 | 464.5 | 472.6 | 570.2 | 668.5 | 677.4 | 683.1 | 689.5 | 692.7 |
| 72.5° | 3796.8 | 3112.9 | 809.7 | 375.8 | 392.7 | 494.4 | 583.1 | 593.5 | 596.8 | 608.9 | 613.7 |
| 75° | 2313.7 | 1830.6 | 437.1 | 296.0 | 322.6 | 422.6 | 498.4 | 510.5 | 516.1 | 530.6 | 532.3 |
| 77.5° | 1100.0 | 792.7 | 249.2 | 230.6 | 259.7 | 345.2 | 421.0 | 434.7 | 419.4 | 427.4 | 421.0 |
| 80° | 371.8 | 294.4 | 157.3 | 175.8 | 198.4 | 269.4 | 337.1 | 350.8 | 318.5 | 316.9 | 313.7 |
| 82.5° | 129.8 | 119.4 | 100.0 | 116.9 | 128.2 | 192.7 | 254.8 | 272.6 | 237.1 | 236.3 | 225.0 |
| 85° | 50.8 | 48.4 | 55.6 | 63.7 | 76.6 | 118.5 | 167.7 | 176.6 | 146.0 | 117.7 | 116.1 |
| 87.5° | 10.5 | 11.3 | 13.7 | 14.5 | 23.4 | 41.1 | 60.5 | 74.2 | 58.9 | 50.0 | 46.0 |
| 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)