

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: LUMARK

Report Number: P196201

Luminaire Tested: **NAV-AF-01-D-UNV-SLL-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196201  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24264)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-AF-01-D-UNV-SLL-600  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR LEFT OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3636.6 lumens  
Efficiency: N/A  
Efficacy: 107.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G1

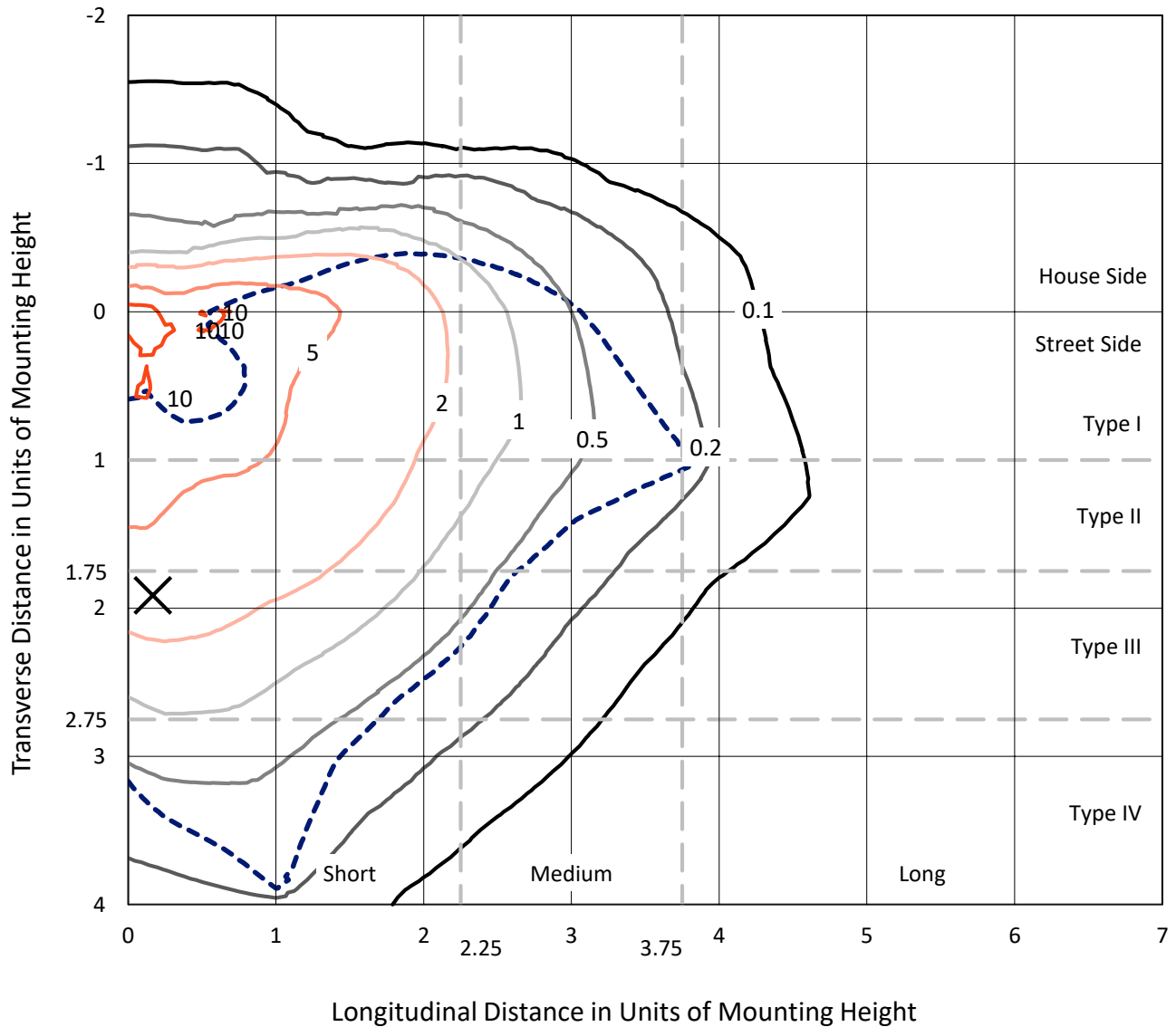
Input Watts (W): 34  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

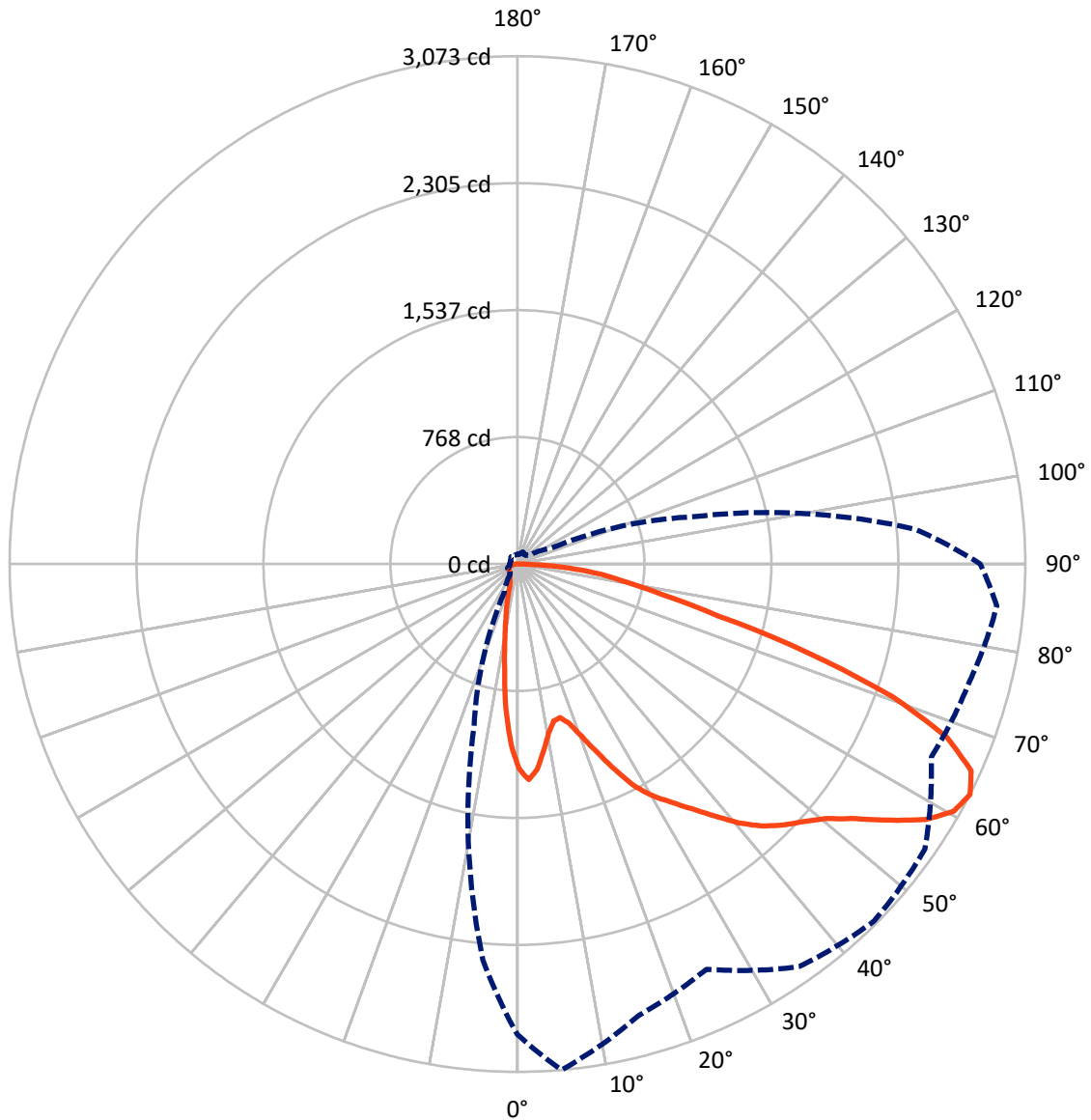
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.2 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 5-Deg Lateral      - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 644.2    | 0.0    | 644.2  |
|                    | % Fixture | 17.7     | 0.0    | 17.7   |
| <b>Street Side</b> | Lumens    | 2992.4   | 0.0    | 2992.4 |
|                    | % Fixture | 82.3     | 0.0    | 82.3   |
| <b>Total</b>       | Lumens    | 3636.6   | 0.0    | 3636.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 90.2   | 2.5       |
| 10°-20°   | 164.7  | 4.5       |
| 20°-30°   | 236.9  | 6.5       |
| 30°-40°   | 362.8  | 10.0      |
| 40°-50°   | 530.4  | 14.6      |
| 50°-60°   | 771.7  | 21.2      |
| 60°-70°   | 894.1  | 24.6      |
| 70°-80°   | 466.1  | 12.8      |
| 80°-90°   | 119.8  | 3.3       |
| 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°    | 3636.6 | 100.0     |
| 0°-180°   | 3636.6 | 100.0     |



REPORT NUMBER: P196201

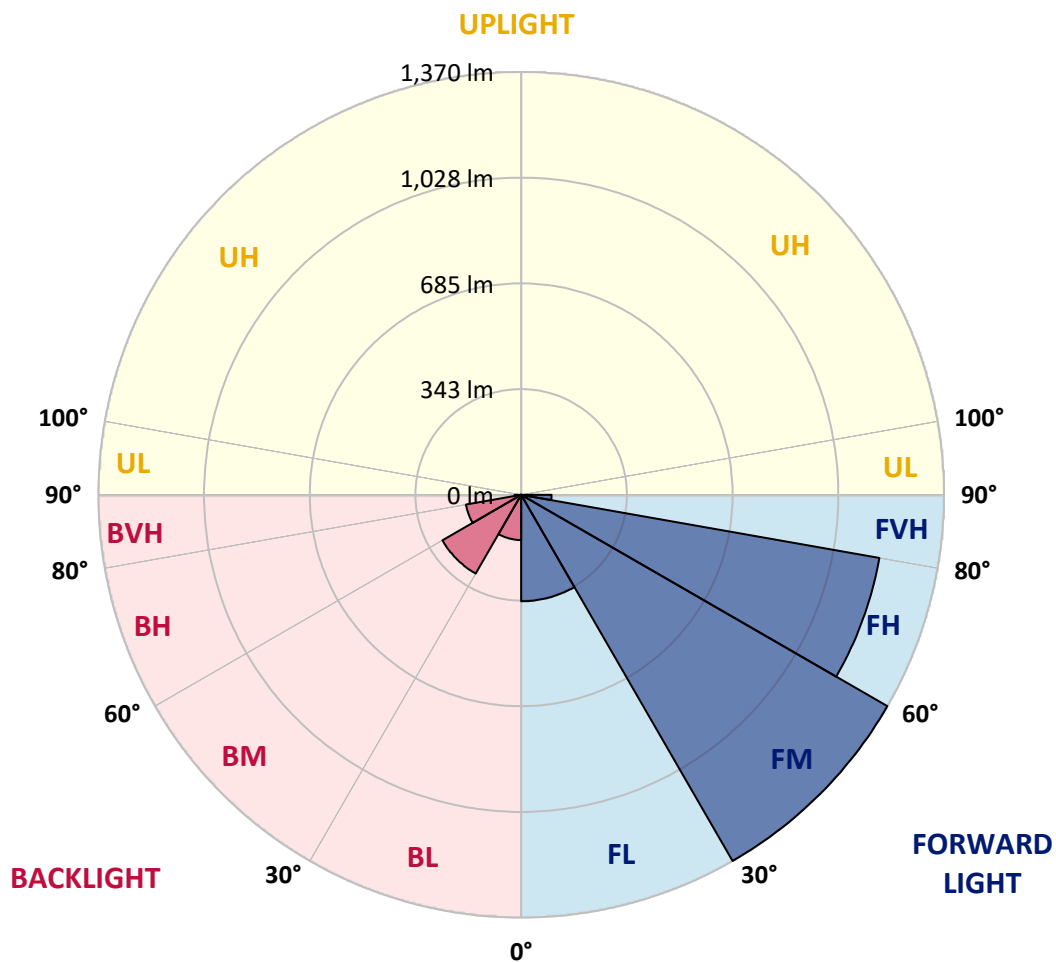
CATALOG NUMBER: NAV-AF-01-D-UNV-SLL-600

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 345.1  | 9.5       |                         |      |         |
| FM   | (30°-60°)   | 1370.1 | 37.7      |                         |      |         |
| FH   | (60°-80°)   | 1178.6 | 32.4      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 98.6   | 2.7       |                         |      | G1/100  |
| BL   | (0°-30°)    | 146.6  | 4.0       | B1/500                  |      |         |
| BM   | (30°-60°)   | 294.8  | 8.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 181.7  | 5.0       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 21.2   | 0.6       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type IV Short





REPORT NUMBER: P196201

CATALOG NUMBER: NAV-AF-01-D-UNV-SLL-600

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 |
| 2.5°  | 1279.8 | 1307.0 | 1338.1 | 1378.7 | 1406.5 | 1417.5 | 1426.7 | 1411.2 | 1396.1 | 1367.9 | 1357.9 |
| 5°    | 1195.5 | 1247.7 | 1333.4 | 1414.8 | 1486.6 | 1527.7 | 1540.4 | 1511.6 | 1460.5 | 1386.6 | 1347.6 |
| 7.5°  | 1070.2 | 1139.1 | 1259.6 | 1379.6 | 1482.4 | 1550.9 | 1555.9 | 1498.9 | 1398.3 | 1277.3 | 1213.9 |
| 10°   | 960.9  | 1038.6 | 1178.1 | 1312.3 | 1421.2 | 1491.4 | 1477.7 | 1397.8 | 1276.1 | 1138.5 | 1067.0 |
| 12.5° | 897.2  | 975.1  | 1117.2 | 1253.5 | 1356.0 | 1382.7 | 1354.8 | 1287.5 | 1172.3 | 1034.4 | 962.4  |
| 15°   | 883.8  | 964.0  | 1095.6 | 1210.6 | 1274.1 | 1256.9 | 1229.3 | 1195.2 | 1113.2 | 1000.3 | 930.8  |
| 17.5° | 924.4  | 1014.1 | 1124.3 | 1187.3 | 1184.7 | 1143.6 | 1120.3 | 1127.0 | 1113.0 | 1037.3 | 964.5  |
| 20°   | 1008.0 | 1114.0 | 1197.4 | 1181.0 | 1113.5 | 1055.8 | 1042.3 | 1093.9 | 1158.6 | 1129.8 | 1050.0 |
| 22.5° | 1118.0 | 1238.7 | 1297.0 | 1199.2 | 1076.3 | 1014.1 | 1011.5 | 1092.1 | 1241.7 | 1269.9 | 1172.5 |
| 25°   | 1242.2 | 1382.9 | 1397.5 | 1231.3 | 1072.4 | 1010.4 | 1008.0 | 1120.6 | 1341.6 | 1408.5 | 1309.9 |
| 27.5° | 1394.1 | 1528.5 | 1481.3 | 1274.3 | 1089.7 | 1021.2 | 1022.7 | 1169.1 | 1445.7 | 1545.7 | 1464.7 |
| 30°   | 1508.4 | 1631.9 | 1533.0 | 1316.5 | 1117.7 | 1040.1 | 1044.1 | 1221.6 | 1501.9 | 1640.8 | 1588.3 |
| 32.5° | 1615.5 | 1720.2 | 1582.6 | 1358.2 | 1158.6 | 1068.4 | 1082.1 | 1287.0 | 1569.4 | 1722.5 | 1705.2 |
| 35°   | 1733.9 | 1819.1 | 1637.6 | 1402.8 | 1217.1 | 1118.0 | 1137.7 | 1349.2 | 1636.3 | 1804.3 | 1821.0 |
| 37.5° | 1868.1 | 1932.1 | 1697.5 | 1465.8 | 1301.5 | 1209.7 | 1220.8 | 1412.8 | 1683.1 | 1894.7 | 1945.1 |
| 40°   | 2007.8 | 2059.0 | 1763.0 | 1549.9 | 1424.0 | 1333.6 | 1338.9 | 1494.2 | 1719.7 | 1988.3 | 2065.6 |
| 42.5° | 2127.8 | 2167.6 | 1828.5 | 1654.3 | 1564.9 | 1460.0 | 1464.5 | 1582.0 | 1754.8 | 2069.0 | 2162.1 |
| 45°   | 2223.8 | 2253.0 | 1890.5 | 1764.2 | 1715.2 | 1617.6 | 1616.6 | 1671.4 | 1801.6 | 2137.0 | 2236.2 |
| 47.5° | 2313.2 | 2328.7 | 1959.6 | 1871.3 | 1871.0 | 1820.6 | 1782.9 | 1776.9 | 1864.1 | 2194.2 | 2300.8 |
| 50°   | 2415.5 | 2421.3 | 2050.8 | 1979.4 | 2061.3 | 2053.5 | 1983.9 | 1910.9 | 1945.1 | 2258.6 | 2368.5 |
| 52.5° | 2557.9 | 2558.2 | 2164.0 | 2084.9 | 2271.6 | 2296.6 | 2215.6 | 2062.5 | 2064.8 | 2383.9 | 2485.7 |
| 55°   | 2725.3 | 2736.9 | 2311.4 | 2211.1 | 2491.4 | 2534.2 | 2457.9 | 2242.5 | 2236.7 | 2585.8 | 2675.5 |
| 57.5° | 2854.7 | 2916.2 | 2483.0 | 2369.1 | 2696.8 | 2752.5 | 2691.1 | 2429.2 | 2447.9 | 2794.1 | 2832.1 |
| 60°   | 2891.2 | 3034.9 | 2654.1 | 2546.3 | 2870.6 | 2954.2 | 2891.7 | 2630.9 | 2654.7 | 2929.4 | 2877.2 |
| 62.5° | 2847.7 | 3073.1 | 2828.5 | 2705.0 | 2973.7 | 3053.8 | 3009.0 | 2763.0 | 2823.1 | 2912.0 | 2800.9 |
| 65°   | 2718.7 | 3017.7 | 2979.8 | 2772.5 | 2914.4 | 2942.8 | 2931.0 | 2769.8 | 2914.6 | 2747.4 | 2590.3 |
| 67.5° | 2417.6 | 2804.1 | 2912.2 | 2628.3 | 2637.3 | 2606.7 | 2591.1 | 2581.6 | 2811.8 | 2482.0 | 2258.1 |
| 70°   | 1966.2 | 2409.5 | 2590.3 | 2199.5 | 2133.1 | 2103.6 | 2052.4 | 2179.0 | 2527.3 | 2114.6 | 1858.4 |
| 72.5° | 1514.6 | 1843.4 | 2124.7 | 1667.5 | 1529.3 | 1539.3 | 1481.3 | 1666.2 | 2093.6 | 1634.8 | 1418.8 |
| 75°   | 1075.5 | 1256.9 | 1696.0 | 1198.1 | 1015.2 | 1014.6 | 1010.2 | 1199.2 | 1651.9 | 1173.3 | 1038.1 |
| 77.5° | 775.2  | 904.9  | 1328.6 | 801.8  | 720.4  | 729.6  | 714.8  | 815.0  | 1287.8 | 844.0  | 769.2  |
| 80°   | 618.3  | 670.0  | 858.8  | 534.7  | 536.3  | 557.9  | 554.7  | 557.4  | 847.2  | 611.2  | 575.1  |
| 82.5° | 444.3  | 508.6  | 656.5  | 409.8  | 354.7  | 377.6  | 382.1  | 413.5  | 597.7  | 432.2  | 379.2  |
| 85°   | 227.8  | 310.1  | 604.1  | 354.9  | 221.8  | 183.8  | 211.4  | 326.1  | 519.1  | 258.9  | 184.8  |
| 87.5° | 44.3   | 85.9   | 442.7  | 197.2  | 99.6   | 50.3   | 83.1   | 138.2  | 301.9  | 47.0   | 22.9   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P196201

CATALOG NUMBER: NAV-AF-01-D-UNV-SLL-600

**CANDELA DISTRIBUTION (continued):**

|       | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   | 185°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 |
| 2.5°  | 1340.8 | 1307.0 | 1275.4 | 1242.7 | 1217.4 | 1186.5 | 1156.2 | 1129.8 | 1104.3 | 1087.4 | 1092.6 |
| 5°    | 1308.0 | 1225.8 | 1151.9 | 1083.4 | 1043.3 | 995.1  | 952.2  | 916.0  | 888.0  | 870.1  | 881.0  |
| 7.5°  | 1159.1 | 1047.8 | 950.5  | 860.1  | 803.1  | 740.6  | 690.6  | 655.2  | 633.6  | 621.4  | 639.1  |
| 10°   | 1006.7 | 881.7  | 772.5  | 678.4  | 622.3  | 569.3  | 524.0  | 486.5  | 457.5  | 443.8  | 450.9  |
| 12.5° | 897.5  | 758.6  | 644.2  | 580.8  | 532.7  | 485.2  | 438.2  | 394.4  | 357.5  | 340.6  | 337.3  |
| 15°   | 856.7  | 692.4  | 575.6  | 504.9  | 457.0  | 405.3  | 354.7  | 307.7  | 272.6  | 258.1  | 255.0  |
| 17.5° | 874.6  | 678.1  | 535.0  | 451.4  | 381.8  | 319.1  | 262.1  | 217.8  | 191.9  | 183.8  | 184.5  |
| 20°   | 937.6  | 683.4  | 502.3  | 396.3  | 310.4  | 236.0  | 179.0  | 148.4  | 137.4  | 135.5  | 137.6  |
| 22.5° | 1024.1 | 705.0  | 478.5  | 348.8  | 247.3  | 171.7  | 133.2  | 118.7  | 115.8  | 115.5  | 117.6  |
| 25°   | 1138.2 | 747.3  | 462.8  | 306.7  | 195.4  | 136.1  | 116.0  | 107.8  | 105.5  | 106.0  | 108.1  |
| 27.5° | 1272.8 | 800.8  | 452.5  | 270.3  | 160.6  | 121.3  | 108.3  | 101.3  | 98.9   | 99.4   | 101.0  |
| 30°   | 1395.6 | 847.7  | 437.2  | 242.8  | 144.2  | 116.0  | 104.1  | 97.1   | 93.9   | 93.9   | 94.9   |
| 32.5° | 1505.6 | 888.3  | 419.2  | 222.3  | 129.2  | 104.1  | 94.4   | 88.9   | 86.4   | 87.3   | 87.8   |
| 35°   | 1603.2 | 909.7  | 405.3  | 210.1  | 117.0  | 96.0   | 86.2   | 80.4   | 77.2   | 77.7   | 78.6   |
| 37.5° | 1699.1 | 917.8  | 396.1  | 203.6  | 108.3  | 90.9   | 82.0   | 77.2   | 73.9   | 73.3   | 73.0   |
| 40°   | 1790.4 | 916.0  | 387.3  | 201.7  | 102.6  | 87.3   | 79.4   | 75.2   | 71.7   | 70.9   | 70.7   |
| 42.5° | 1869.1 | 909.9  | 379.2  | 196.7  | 98.6   | 84.6   | 77.2   | 73.6   | 70.2   | 69.0   | 68.5   |
| 45°   | 1941.2 | 906.2  | 370.2  | 187.5  | 100.8  | 83.6   | 76.2   | 72.2   | 69.0   | 67.7   | 67.2   |
| 47.5° | 2021.0 | 919.4  | 360.2  | 177.5  | 100.1  | 83.9   | 76.2   | 71.7   | 68.5   | 67.2   | 66.7   |
| 50°   | 2116.3 | 964.0  | 347.8  | 163.8  | 95.4   | 89.6   | 75.9   | 70.9   | 68.0   | 67.2   | 66.2   |
| 52.5° | 2250.7 | 1036.2 | 330.6  | 146.1  | 91.8   | 95.7   | 75.7   | 69.6   | 67.2   | 65.9   | 64.7   |
| 55°   | 2435.0 | 1108.5 | 308.5  | 127.4  | 85.9   | 91.5   | 76.2   | 68.0   | 65.4   | 64.0   | 62.5   |
| 57.5° | 2586.1 | 1163.3 | 280.6  | 111.8  | 80.7   | 86.4   | 75.4   | 66.2   | 63.3   | 62.0   | 60.7   |
| 60°   | 2576.3 | 1168.6 | 253.9  | 101.8  | 77.5   | 77.7   | 77.2   | 64.9   | 61.5   | 60.4   | 59.3   |
| 62.5° | 2416.8 | 1103.5 | 229.1  | 96.8   | 75.2   | 70.9   | 78.9   | 63.3   | 59.6   | 58.5   | 57.7   |
| 65°   | 2151.3 | 951.9  | 215.9  | 96.8   | 73.0   | 67.2   | 68.8   | 61.2   | 57.7   | 56.7   | 56.2   |
| 67.5° | 1814.6 | 765.0  | 203.6  | 98.9   | 70.2   | 64.7   | 62.5   | 59.0   | 55.9   | 54.8   | 54.3   |
| 70°   | 1454.4 | 602.0  | 194.9  | 97.8   | 67.5   | 61.7   | 59.0   | 56.2   | 53.0   | 52.8   | 52.2   |
| 72.5° | 1140.9 | 483.5  | 190.9  | 97.8   | 63.5   | 58.3   | 55.6   | 53.5   | 50.3   | 50.1   | 49.3   |
| 75°   | 914.1  | 363.0  | 174.5  | 96.0   | 59.6   | 53.8   | 51.5   | 49.6   | 46.4   | 46.6   | 46.1   |
| 77.5° | 708.0  | 256.9  | 145.8  | 86.4   | 54.6   | 48.8   | 47.0   | 45.6   | 41.9   | 42.1   | 42.1   |
| 80°   | 553.7  | 167.2  | 113.1  | 71.7   | 48.8   | 43.0   | 41.6   | 40.6   | 36.6   | 37.1   | 37.1   |
| 82.5° | 379.4  | 99.4   | 82.0   | 57.7   | 41.9   | 36.6   | 36.4   | 34.8   | 30.6   | 30.9   | 31.4   |
| 85°   | 207.2  | 65.4   | 54.6   | 42.8   | 32.9   | 29.8   | 29.3   | 28.4   | 24.6   | 24.6   | 24.8   |
| 87.5° | 38.3   | 35.1   | 32.1   | 28.2   | 22.2   | 21.4   | 20.6   | 21.4   | 18.4   | 17.9   | 17.9   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |





REPORT NUMBER: P196201

CATALOG NUMBER: NAV-AF-01-D-UNV-SLL-600

**CANDELA DISTRIBUTION (continued):**

|       | 195°   | 205°   | 215°   | 225°   | 235°   | 245°   | 255°   | 265°   | 270°   | 275°   | 285°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 |
| 2.5°  | 1080.2 | 1062.0 | 1049.4 | 1038.3 | 1011.7 | 1013.5 | 1017.2 | 1022.5 | 1005.9 | 1014.6 | 1025.4 |
| 5°    | 870.1  | 855.1  | 843.7  | 826.1  | 788.9  | 775.7  | 767.3  | 763.6  | 738.8  | 744.1  | 755.7  |
| 7.5°  | 641.5  | 641.3  | 637.3  | 617.6  | 572.6  | 545.5  | 527.6  | 522.1  | 506.8  | 512.6  | 530.2  |
| 10°   | 451.6  | 456.4  | 454.6  | 436.9  | 396.8  | 377.3  | 373.4  | 384.4  | 384.7  | 396.1  | 426.4  |
| 12.5° | 326.4  | 323.8  | 321.4  | 306.9  | 276.8  | 273.7  | 282.6  | 298.0  | 301.7  | 313.7  | 345.5  |
| 15°   | 243.7  | 237.3  | 236.0  | 224.6  | 204.9  | 207.8  | 214.4  | 222.3  | 222.5  | 231.0  | 257.1  |
| 17.5° | 182.7  | 182.7  | 184.8  | 177.5  | 163.3  | 161.9  | 158.5  | 156.3  | 153.2  | 156.6  | 170.8  |
| 20°   | 141.9  | 148.4  | 153.7  | 149.5  | 136.6  | 130.2  | 123.7  | 119.5  | 117.0  | 117.3  | 121.5  |
| 22.5° | 121.5  | 126.8  | 133.7  | 131.6  | 120.8  | 112.6  | 108.3  | 105.5  | 103.6  | 103.6  | 106.0  |
| 25°   | 111.3  | 114.7  | 121.0  | 120.0  | 110.8  | 104.1  | 100.8  | 97.8   | 95.7   | 95.4   | 97.8   |
| 27.5° | 103.1  | 105.2  | 109.5  | 108.9  | 99.4   | 95.2   | 93.1   | 91.2   | 89.9   | 89.6   | 92.1   |
| 30°   | 95.7   | 96.8   | 98.9   | 98.1   | 90.9   | 86.7   | 85.9   | 85.2   | 84.4   | 84.6   | 88.1   |
| 32.5° | 89.1   | 89.9   | 91.2   | 90.2   | 83.4   | 79.6   | 78.4   | 77.2   | 76.4   | 77.2   | 81.2   |
| 35°   | 81.7   | 84.1   | 85.7   | 85.2   | 77.7   | 73.3   | 70.4   | 67.7   | 66.7   | 67.5   | 72.0   |
| 37.5° | 75.4   | 79.4   | 81.4   | 80.9   | 73.3   | 68.0   | 64.3   | 63.8   | 63.8   | 64.9   | 69.4   |
| 40°   | 73.0   | 75.9   | 77.7   | 77.0   | 69.4   | 64.0   | 62.0   | 61.2   | 61.5   | 62.5   | 67.2   |
| 42.5° | 70.9   | 73.6   | 74.1   | 72.5   | 64.9   | 61.5   | 60.1   | 59.0   | 59.6   | 60.9   | 65.7   |
| 45°   | 69.0   | 71.2   | 70.9   | 68.5   | 61.2   | 58.8   | 58.8   | 58.0   | 58.3   | 59.3   | 64.3   |
| 47.5° | 67.7   | 68.8   | 68.3   | 65.9   | 58.5   | 56.7   | 57.5   | 57.5   | 58.0   | 58.8   | 63.8   |
| 50°   | 65.7   | 66.5   | 65.9   | 63.8   | 56.5   | 54.8   | 55.6   | 56.7   | 57.2   | 58.0   | 62.5   |
| 52.5° | 63.5   | 64.0   | 63.8   | 61.7   | 54.3   | 53.3   | 53.3   | 54.3   | 55.3   | 56.5   | 60.4   |
| 55°   | 61.5   | 62.0   | 62.2   | 60.7   | 52.8   | 51.7   | 51.5   | 51.5   | 52.5   | 54.0   | 58.3   |
| 57.5° | 59.8   | 59.8   | 60.4   | 59.3   | 51.1   | 49.8   | 48.5   | 48.8   | 50.1   | 51.5   | 55.6   |
| 60°   | 58.0   | 58.3   | 59.0   | 58.0   | 49.0   | 47.0   | 45.8   | 47.2   | 47.8   | 49.0   | 53.5   |
| 62.5° | 56.5   | 56.5   | 57.0   | 56.2   | 47.2   | 45.1   | 44.3   | 45.6   | 45.6   | 47.0   | 51.5   |
| 65°   | 55.1   | 54.8   | 54.8   | 54.6   | 45.3   | 43.3   | 42.8   | 43.3   | 43.5   | 44.8   | 49.3   |
| 67.5° | 54.0   | 52.8   | 52.8   | 53.3   | 43.5   | 41.4   | 41.1   | 41.1   | 41.4   | 43.0   | 47.0   |
| 70°   | 51.7   | 50.6   | 50.3   | 52.2   | 41.6   | 39.0   | 39.0   | 38.5   | 39.0   | 39.8   | 44.0   |
| 72.5° | 49.0   | 48.3   | 48.0   | 50.6   | 39.8   | 36.4   | 35.9   | 35.6   | 35.9   | 36.6   | 40.6   |
| 75°   | 45.6   | 45.1   | 45.6   | 49.6   | 38.0   | 33.5   | 32.7   | 32.4   | 32.4   | 32.7   | 36.9   |
| 77.5° | 41.6   | 41.1   | 45.1   | 46.1   | 36.9   | 30.1   | 29.3   | 28.7   | 28.2   | 28.2   | 32.9   |
| 80°   | 36.9   | 36.6   | 43.5   | 39.0   | 35.3   | 26.4   | 25.1   | 24.2   | 23.7   | 23.4   | 28.2   |
| 82.5° | 32.1   | 31.6   | 37.1   | 30.6   | 29.3   | 21.6   | 19.7   | 18.2   | 17.4   | 17.4   | 21.6   |
| 85°   | 26.4   | 26.1   | 29.3   | 22.4   | 20.3   | 15.9   | 13.2   | 11.9   | 10.8   | 10.8   | 14.0   |
| 87.5° | 19.2   | 18.7   | 18.2   | 13.4   | 10.3   | 7.2    | 5.0    | 4.7    | 4.2    | 4.0    | 5.8    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P196201

CATALOG NUMBER: NAV-AF-01-D-UNV-SLL-600

**CANDELA DISTRIBUTION (continued):**

|       | 295°   | 305°   | 315°   | 325°   | 335°   | 345°   | 355°   | 360°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 | 1239.8 |
| 2.5°  | 1041.5 | 1063.4 | 1104.8 | 1138.7 | 1184.2 | 1220.6 | 1261.9 | 1279.8 |
| 5°    | 777.0  | 811.6  | 874.8  | 928.9  | 1003.8 | 1073.2 | 1152.3 | 1195.5 |
| 7.5°  | 557.4  | 608.6  | 656.5  | 724.0  | 817.6  | 910.7  | 1013.0 | 1070.2 |
| 10°   | 461.1  | 508.1  | 549.2  | 597.2  | 669.4  | 774.2  | 896.2  | 960.9  |
| 12.5° | 382.1  | 432.7  | 476.2  | 527.6  | 588.3  | 682.9  | 822.1  | 897.2  |
| 15°   | 293.0  | 348.0  | 400.3  | 462.2  | 536.5  | 644.7  | 799.9  | 883.8  |
| 17.5° | 200.7  | 259.7  | 324.1  | 399.8  | 489.4  | 628.6  | 821.1  | 924.4  |
| 20°   | 136.4  | 179.5  | 249.4  | 339.1  | 446.9  | 620.9  | 867.5  | 1008.0 |
| 22.5° | 112.0  | 131.6  | 184.0  | 282.1  | 412.1  | 629.4  | 942.9  | 1118.0 |
| 25°   | 102.8  | 113.3  | 143.2  | 232.0  | 385.4  | 651.8  | 1044.9 | 1242.2 |
| 27.5° | 97.1   | 106.0  | 125.5  | 196.2  | 361.0  | 682.4  | 1169.1 | 1394.1 |
| 30°   | 93.6   | 102.1  | 118.4  | 177.7  | 338.6  | 708.7  | 1275.9 | 1508.4 |
| 32.5° | 85.9   | 92.3   | 105.8  | 167.2  | 322.4  | 730.1  | 1370.0 | 1615.5 |
| 35°   | 76.7   | 84.4   | 95.4   | 160.3  | 321.9  | 740.1  | 1458.6 | 1733.9 |
| 37.5° | 73.3   | 80.7   | 88.9   | 156.6  | 325.1  | 748.6  | 1567.0 | 1868.1 |
| 40°   | 71.2   | 77.7   | 84.4   | 156.1  | 327.8  | 755.1  | 1673.0 | 2007.8 |
| 42.5° | 69.4   | 75.9   | 83.6   | 152.4  | 326.7  | 764.1  | 1766.8 | 2127.8 |
| 45°   | 68.8   | 75.4   | 85.4   | 146.9  | 326.4  | 778.1  | 1841.5 | 2223.8 |
| 47.5° | 68.3   | 78.4   | 84.9   | 140.8  | 325.4  | 807.6  | 1925.6 | 2313.2 |
| 50°   | 67.7   | 83.6   | 81.2   | 132.4  | 317.4  | 857.9  | 2038.7 | 2415.5 |
| 52.5° | 67.5   | 84.4   | 77.2   | 120.8  | 303.2  | 932.6  | 2204.3 | 2557.9 |
| 55°   | 66.5   | 80.2   | 70.4   | 105.5  | 282.6  | 1013.0 | 2381.7 | 2725.3 |
| 57.5° | 64.0   | 71.5   | 66.5   | 90.4   | 253.1  | 1069.2 | 2512.8 | 2854.7 |
| 60°   | 69.9   | 61.5   | 63.8   | 82.8   | 217.8  | 1079.2 | 2518.6 | 2891.2 |
| 62.5° | 66.7   | 55.9   | 61.2   | 80.2   | 193.0  | 1013.8 | 2403.3 | 2847.7 |
| 65°   | 53.3   | 53.0   | 58.8   | 82.8   | 189.3  | 867.5  | 2208.8 | 2718.7 |
| 67.5° | 48.5   | 50.8   | 56.5   | 85.9   | 191.7  | 683.4  | 1922.4 | 2417.6 |
| 70°   | 45.3   | 48.3   | 53.3   | 88.9   | 195.9  | 538.4  | 1547.7 | 1966.2 |
| 72.5° | 42.1   | 44.6   | 50.1   | 91.8   | 193.0  | 424.7  | 1238.7 | 1514.6 |
| 75°   | 38.3   | 40.3   | 45.6   | 84.1   | 165.6  | 312.2  | 984.3  | 1075.5 |
| 77.5° | 33.8   | 35.6   | 40.1   | 66.5   | 124.5  | 217.3  | 737.2  | 775.2  |
| 80°   | 29.1   | 29.8   | 33.2   | 48.5   | 81.2   | 130.0  | 561.1  | 618.3  |
| 82.5° | 22.9   | 23.2   | 25.3   | 35.6   | 50.6   | 83.1   | 389.1  | 444.3  |
| 85°   | 14.7   | 15.2   | 16.4   | 25.1   | 34.1   | 53.3   | 198.8  | 227.8  |
| 87.5° | 5.0    | 5.8    | 5.8    | 12.2   | 16.6   | 29.6   | 60.9   | 44.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)