

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: P960298

Luminaire Tested: **NAV-SB1C-727-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960298
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-727-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7126.8 lumens
Efficiency: N/A
Efficacy: 131.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

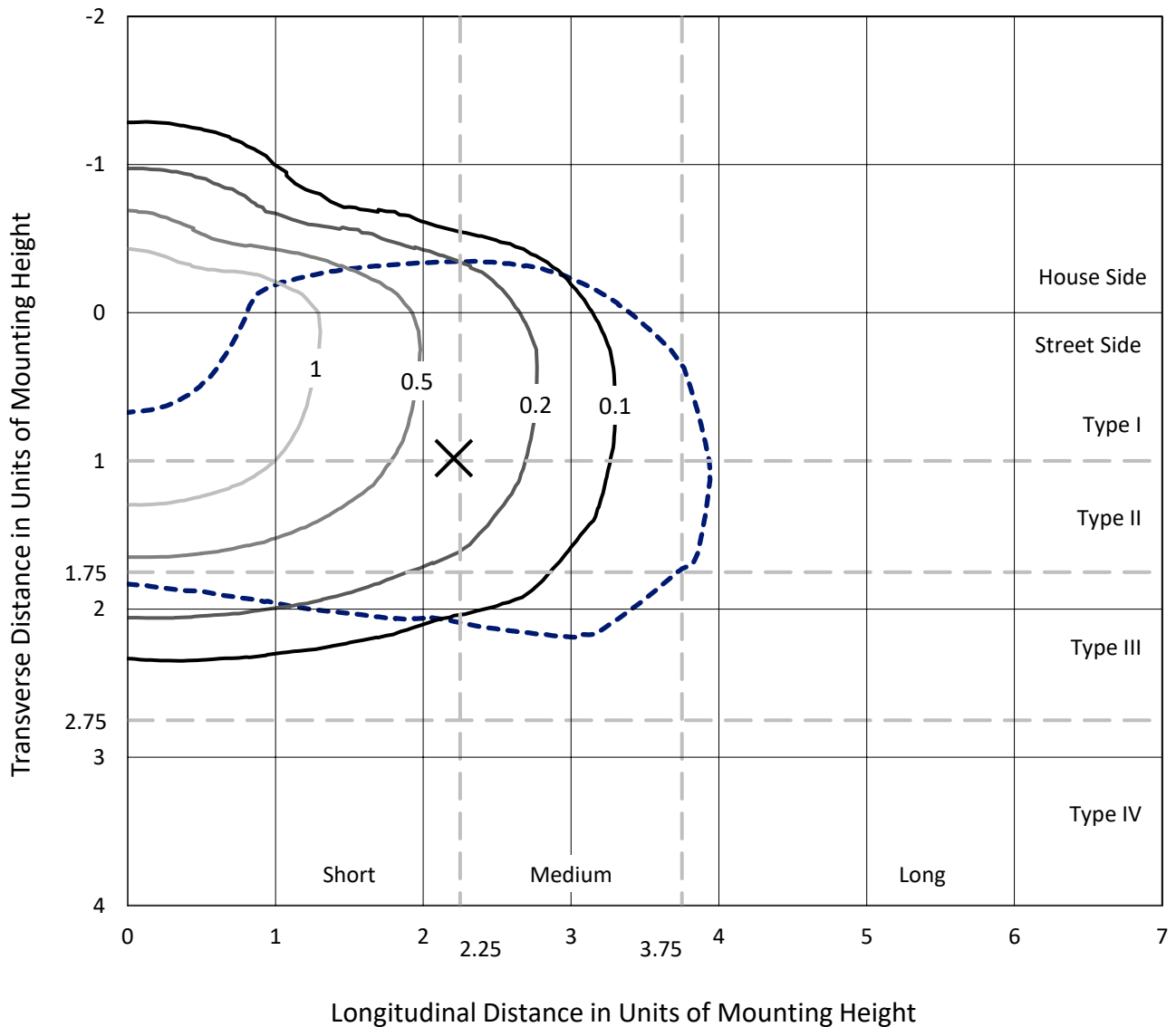
Input Watts (W): 54.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

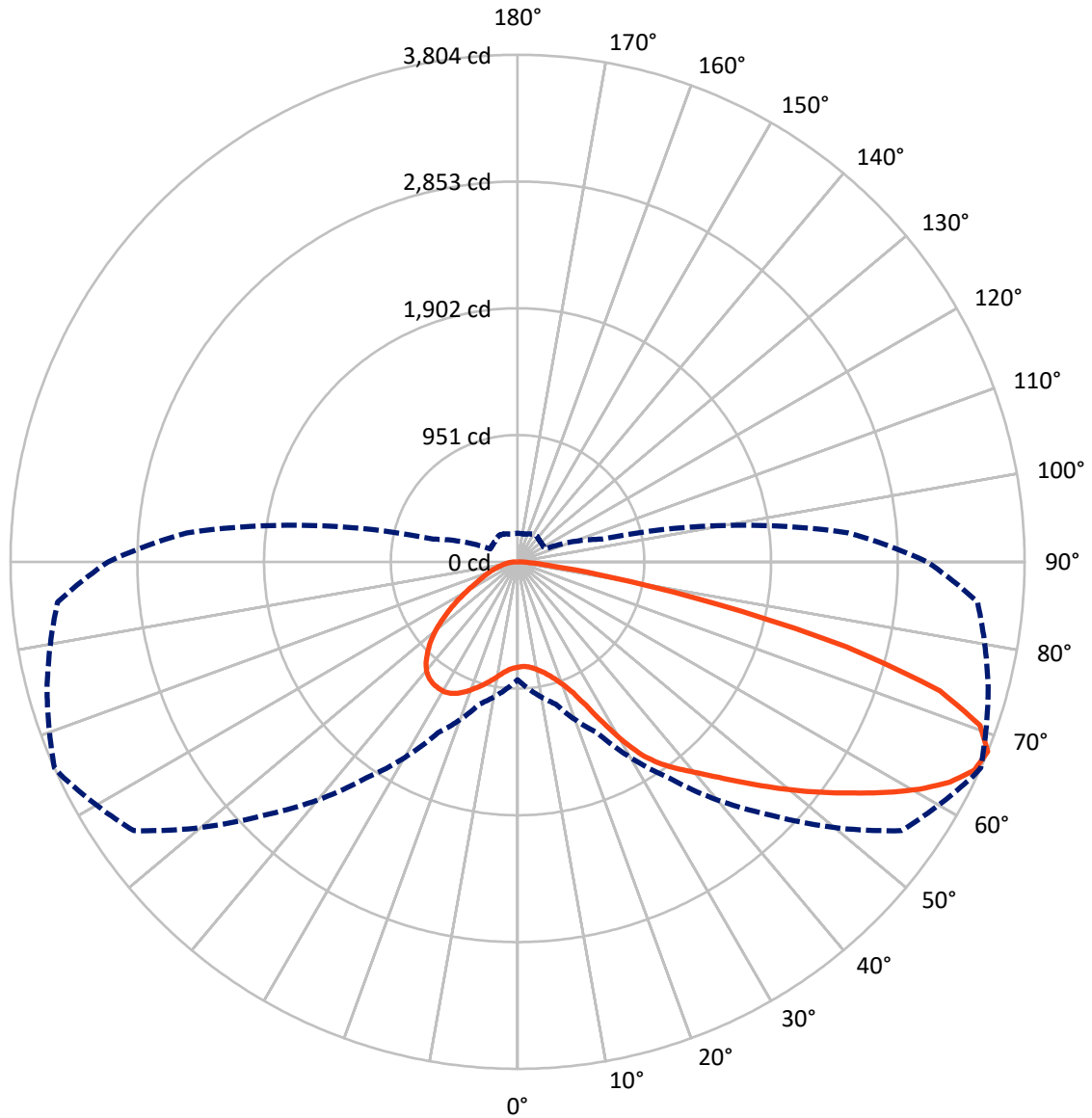
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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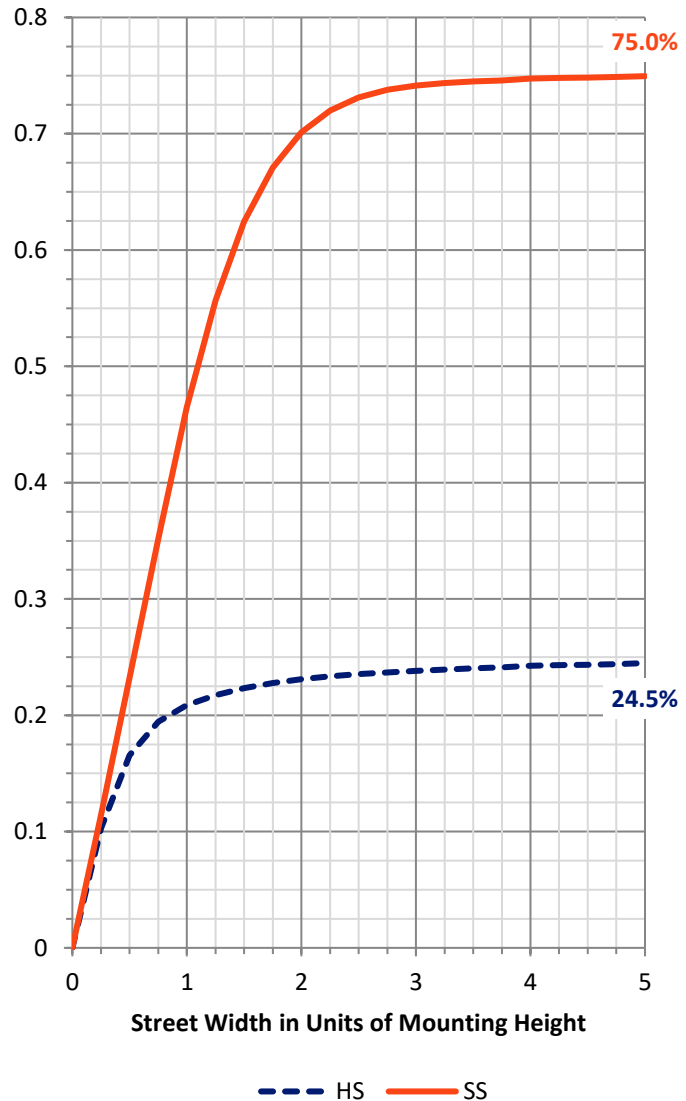
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1772.1 | 0.0 | 1772.1 |
| | % Fixture | 24.9 | 0.0 | 24.9 |
| Street Side | Lumens | 5354.8 | 0.0 | 5354.8 |
| | % Fixture | 75.1 | 0.0 | 75.1 |
| Total | Lumens | 7126.8 | 0.0 | 7126.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 78.4 | 1.1 |
| 10°-20° | 258.9 | 3.6 |
| 20°-30° | 499.1 | 7.0 |
| 30°-40° | 875.0 | 12.3 |
| 40°-50° | 1300.9 | 18.3 |
| 50°-60° | 1649.0 | 23.1 |
| 60°-70° | 1613.5 | 22.6 |
| 70°-80° | 769.7 | 10.8 |
| 80°-90° | 82.3 | 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°-90° | 7126.8 | 100.0 |
| 0°-180° | 7126.8 | 100.0 |

Coefficient of Utilization



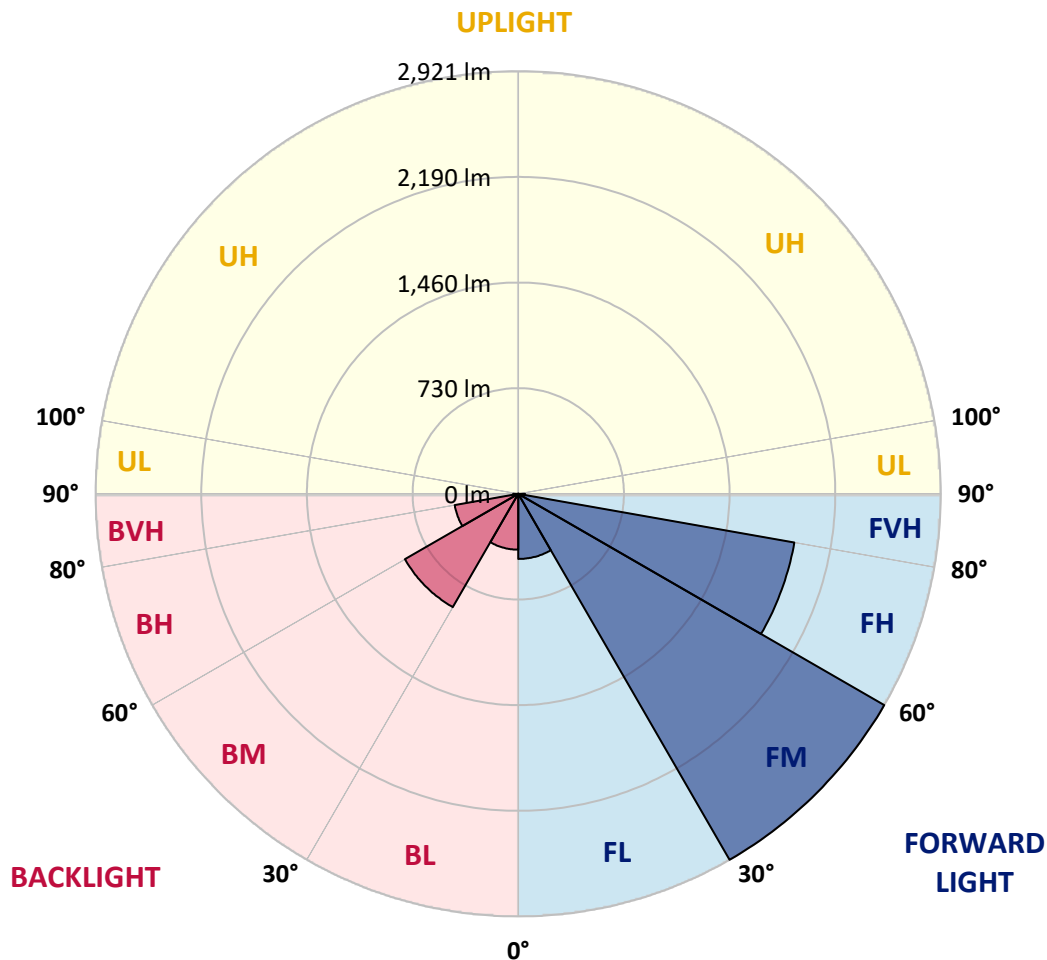
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 CATALOG NUMBER: NAV-SB1C-727-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 450.3 | 6.3 | | | |
| FM (30°-60°) | 2920.5 | 41.0 | | | |
| FH (60°-80°) | 1937.3 | 27.2 | | | G2/5000 |
| FVH (80°-90°) | 46.6 | 0.7 | | | G1/100 |
| BL (0°-30°) | 386.0 | 5.4 | B1/500 | | |
| BM (30°-60°) | 904.5 | 12.7 | B1/1000 | | |
| BH (60°-80°) | 445.9 | 6.3 | B1/500 | | G1/500 |
| BVH (80°-90°) | 35.6 | 0.5 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 66° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 790.5 | 790.5 | 790.5 | 790.5 | 790.5 | 790.5 | 790.5 | 790.5 | 790.5 | 790.5 | 790.5 |
| 2.5° | 782.2 | 786.7 | 785.6 | 783.7 | 783.3 | 784.1 | 785.3 | 786.4 | 786.0 | 787.8 | 790.8 |
| 5° | 780.0 | 784.4 | 784.1 | 784.1 | 785.6 | 788.6 | 790.5 | 792.3 | 790.5 | 792.7 | 796.8 |
| 7.5° | 781.5 | 784.8 | 786.4 | 787.8 | 791.6 | 797.2 | 801.7 | 805.9 | 803.6 | 806.2 | 811.4 |
| 10° | 800.5 | 803.2 | 804.7 | 804.7 | 807.3 | 813.6 | 818.2 | 825.6 | 823.8 | 827.9 | 834.7 |
| 12.5° | 835.4 | 838.0 | 838.0 | 836.5 | 838.3 | 842.6 | 844.0 | 852.3 | 848.9 | 855.6 | 862.3 |
| 15° | 878.1 | 883.3 | 879.2 | 876.6 | 877.3 | 881.5 | 881.1 | 887.4 | 884.1 | 889.7 | 895.6 |
| 17.5° | 925.3 | 932.0 | 925.3 | 924.9 | 923.4 | 927.9 | 928.2 | 933.9 | 927.9 | 932.0 | 936.1 |
| 20° | 981.0 | 990.5 | 984.8 | 986.7 | 983.3 | 985.1 | 987.1 | 995.3 | 985.9 | 988.9 | 987.8 |
| 22.5° | 1059.6 | 1070.9 | 1065.0 | 1072.0 | 1069.8 | 1068.3 | 1067.9 | 1082.5 | 1067.9 | 1069.1 | 1058.2 |
| 25° | 1174.2 | 1187.8 | 1177.2 | 1186.9 | 1186.9 | 1191.9 | 1197.5 | 1216.2 | 1191.9 | 1184.8 | 1156.7 |
| 27.5° | 1343.5 | 1357.0 | 1336.4 | 1342.4 | 1340.5 | 1352.5 | 1346.5 | 1393.0 | 1366.7 | 1355.2 | 1298.6 |
| 30° | 1547.2 | 1571.2 | 1532.3 | 1530.7 | 1528.9 | 1548.0 | 1556.6 | 1587.3 | 1560.7 | 1549.1 | 1480.9 |
| 32.5° | 1767.4 | 1792.5 | 1746.1 | 1732.6 | 1725.5 | 1737.1 | 1730.0 | 1754.7 | 1736.4 | 1718.3 | 1634.1 |
| 35° | 2000.3 | 2025.0 | 1980.8 | 1954.6 | 1926.2 | 1901.8 | 1876.4 | 1882.7 | 1865.5 | 1838.1 | 1750.9 |
| 37.5° | 2220.5 | 2265.8 | 2219.0 | 2190.9 | 2138.5 | 2090.9 | 2019.8 | 1990.1 | 1974.0 | 1949.0 | 1861.0 |
| 40° | 2444.7 | 2470.6 | 2435.0 | 2411.1 | 2354.1 | 2279.6 | 2165.8 | 2103.3 | 2081.6 | 2057.2 | 1982.7 |
| 42.5° | 2609.9 | 2634.7 | 2615.5 | 2599.1 | 2554.5 | 2468.0 | 2320.8 | 2242.6 | 2211.1 | 2183.8 | 2120.5 |
| 45° | 2741.0 | 2759.3 | 2747.3 | 2753.4 | 2734.2 | 2650.3 | 2481.4 | 2391.9 | 2359.3 | 2326.0 | 2276.2 |
| 47.5° | 2793.7 | 2813.2 | 2832.3 | 2867.8 | 2900.4 | 2838.7 | 2654.1 | 2553.7 | 2519.2 | 2485.2 | 2436.1 |
| 50° | 2787.8 | 2807.6 | 2863.0 | 2938.7 | 3039.7 | 3019.1 | 2836.1 | 2726.0 | 2694.1 | 2655.2 | 2609.9 |
| 52.5° | 2739.8 | 2762.3 | 2833.4 | 2959.3 | 3120.3 | 3154.3 | 3021.4 | 2903.8 | 2873.9 | 2827.5 | 2782.2 |
| 55° | 2614.1 | 2627.5 | 2734.2 | 2912.4 | 3139.4 | 3248.7 | 3203.0 | 3093.3 | 3063.3 | 2998.5 | 2949.1 |
| 57.5° | 2380.8 | 2400.2 | 2555.6 | 2786.3 | 3091.4 | 3312.7 | 3362.5 | 3292.5 | 3263.7 | 3170.4 | 3118.8 |
| 60° | 2076.3 | 2107.4 | 2285.2 | 2574.3 | 2969.3 | 3312.4 | 3507.4 | 3488.4 | 3464.4 | 3339.7 | 3285.7 |
| 62.5° | 1731.8 | 1767.8 | 1938.9 | 2274.8 | 2755.9 | 3218.4 | 3598.1 | 3652.4 | 3640.0 | 3495.9 | 3427.0 |
| 65° | 1330.0 | 1354.7 | 1525.1 | 1887.2 | 2423.8 | 3016.6 | 3608.5 | 3764.3 | 3766.6 | 3614.6 | 3500.7 |
| 67.5° | 885.6 | 956.7 | 1104.6 | 1416.1 | 1979.0 | 2686.6 | 3516.5 | 3782.7 | 3804.4 | 3655.4 | 3463.7 |
| 70° | 432.1 | 525.7 | 670.7 | 920.3 | 1416.1 | 2180.8 | 3275.7 | 3632.2 | 3680.5 | 3536.2 | 3242.7 |
| 72.5° | 179.4 | 209.7 | 288.7 | 454.2 | 812.9 | 1471.6 | 2791.9 | 3224.0 | 3313.5 | 3133.4 | 2726.4 |
| 75° | 121.0 | 131.1 | 165.1 | 232.9 | 370.3 | 725.7 | 2013.4 | 2403.9 | 2548.1 | 2366.5 | 1934.4 |
| 77.5° | 93.3 | 99.6 | 120.2 | 162.9 | 220.2 | 274.5 | 1077.7 | 1448.7 | 1523.3 | 1410.2 | 1006.6 |
| 80° | 73.4 | 78.3 | 89.9 | 118.7 | 156.1 | 146.8 | 367.4 | 656.4 | 699.5 | 586.7 | 323.5 |
| 82.5° | 63.7 | 65.5 | 64.4 | 80.5 | 103.7 | 85.8 | 120.5 | 242.3 | 267.3 | 193.9 | 105.6 |
| 85° | 46.0 | 51.2 | 53.5 | 49.8 | 55.0 | 43.5 | 49.4 | 85.8 | 94.4 | 84.3 | 59.6 |
| 87.5° | 18.8 | 27.7 | 34.0 | 32.2 | 20.2 | 12.4 | 15.4 | 25.1 | 28.8 | 31.5 | 19.5 |
| 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: P960298
 CATALOG NUMBER: NAV-SB1C-727-U-T3

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 790.5 | 790.5 | 790.5 | 790.5 | 790.5 | 790.5 | 790.5 | 790.5 | 790.5 | 790.5 | 790.5 |
| 2.5° | 791.2 | 793.9 | 795.7 | 798.0 | 799.4 | 801.7 | 806.2 | 808.8 | 809.1 | 811.1 | 810.7 |
| 5° | 798.4 | 802.1 | 806.2 | 812.2 | 818.9 | 824.5 | 833.1 | 839.2 | 841.4 | 843.3 | 842.9 |
| 7.5° | 813.6 | 818.9 | 826.4 | 836.9 | 846.6 | 854.1 | 864.6 | 871.8 | 878.8 | 881.5 | 881.8 |
| 10° | 836.5 | 844.0 | 854.8 | 869.1 | 879.6 | 889.3 | 900.2 | 906.2 | 913.3 | 916.2 | 917.8 |
| 12.5° | 865.0 | 872.8 | 887.0 | 906.9 | 916.7 | 923.4 | 927.1 | 925.7 | 927.1 | 929.8 | 930.5 |
| 15° | 897.6 | 906.2 | 922.3 | 943.6 | 950.4 | 944.3 | 936.1 | 928.6 | 927.5 | 928.2 | 930.9 |
| 17.5° | 936.1 | 942.5 | 961.2 | 979.2 | 974.3 | 949.6 | 931.6 | 919.6 | 913.7 | 911.7 | 914.4 |
| 20° | 990.0 | 990.0 | 1005.4 | 1016.6 | 984.0 | 942.1 | 914.0 | 894.5 | 882.2 | 877.0 | 875.9 |
| 22.5° | 1055.5 | 1049.6 | 1059.3 | 1051.4 | 982.2 | 921.2 | 882.2 | 848.5 | 829.7 | 822.3 | 821.1 |
| 25° | 1138.7 | 1131.6 | 1128.9 | 1080.2 | 968.7 | 887.9 | 824.5 | 783.7 | 767.2 | 763.1 | 763.8 |
| 27.5° | 1264.1 | 1246.2 | 1212.1 | 1096.0 | 944.0 | 835.4 | 757.2 | 719.3 | 709.9 | 710.3 | 711.5 |
| 30° | 1431.1 | 1395.2 | 1311.7 | 1098.6 | 903.5 | 761.3 | 688.2 | 661.2 | 656.8 | 658.7 | 665.0 |
| 32.5° | 1585.8 | 1551.7 | 1413.6 | 1086.6 | 841.4 | 688.6 | 626.5 | 608.4 | 601.8 | 604.0 | 607.0 |
| 35° | 1707.1 | 1697.7 | 1507.9 | 1069.8 | 765.0 | 620.4 | 571.0 | 555.7 | 542.5 | 539.6 | 541.8 |
| 37.5° | 1821.7 | 1817.9 | 1578.7 | 1046.2 | 689.3 | 572.2 | 526.4 | 506.2 | 487.2 | 476.6 | 477.0 |
| 40° | 1947.5 | 1943.7 | 1625.1 | 1009.9 | 622.4 | 530.2 | 486.4 | 459.8 | 436.2 | 417.2 | 419.0 |
| 42.5° | 2089.1 | 2066.9 | 1647.2 | 957.9 | 565.4 | 494.7 | 453.9 | 417.9 | 386.8 | 369.2 | 370.3 |
| 45° | 2243.7 | 2193.9 | 1646.9 | 891.5 | 517.5 | 462.1 | 419.0 | 368.1 | 339.3 | 322.8 | 322.1 |
| 47.5° | 2407.7 | 2315.2 | 1626.6 | 818.2 | 471.1 | 426.1 | 365.1 | 326.2 | 307.1 | 296.9 | 294.7 |
| 50° | 2577.0 | 2428.6 | 1592.1 | 733.9 | 423.5 | 385.3 | 331.4 | 304.8 | 290.2 | 280.8 | 277.5 |
| 52.5° | 2736.1 | 2531.6 | 1550.6 | 638.5 | 375.2 | 345.6 | 316.4 | 295.8 | 280.4 | 270.0 | 265.5 |
| 55° | 2884.0 | 2620.4 | 1491.8 | 540.7 | 335.9 | 319.0 | 309.3 | 292.0 | 274.5 | 262.1 | 257.3 |
| 57.5° | 3015.4 | 2678.0 | 1390.3 | 449.0 | 307.8 | 300.6 | 301.8 | 285.7 | 265.5 | 255.0 | 248.3 |
| 60° | 3124.8 | 2720.4 | 1240.1 | 364.0 | 285.0 | 282.7 | 290.2 | 273.7 | 250.1 | 238.1 | 232.9 |
| 62.5° | 3190.3 | 2719.6 | 1056.0 | 298.1 | 265.5 | 266.2 | 274.8 | 258.7 | 234.8 | 223.6 | 220.2 |
| 65° | 3184.7 | 2653.0 | 853.7 | 255.0 | 246.7 | 247.5 | 258.7 | 242.3 | 222.0 | 215.4 | 214.9 |
| 67.5° | 3071.9 | 2490.4 | 654.9 | 226.9 | 226.2 | 229.5 | 242.6 | 231.0 | 214.2 | 213.4 | 214.5 |
| 70° | 2766.8 | 2153.1 | 471.8 | 204.5 | 204.8 | 209.7 | 226.9 | 224.0 | 210.0 | 211.6 | 211.2 |
| 72.5° | 2218.6 | 1641.5 | 316.8 | 180.8 | 181.2 | 189.1 | 212.0 | 218.3 | 205.9 | 225.8 | 228.8 |
| 75° | 1477.5 | 1023.8 | 203.7 | 155.8 | 156.1 | 166.3 | 198.8 | 207.5 | 194.7 | 225.1 | 226.9 |
| 77.5° | 709.9 | 460.2 | 147.5 | 131.1 | 131.1 | 140.4 | 171.9 | 185.7 | 165.8 | 174.9 | 160.3 |
| 80° | 245.3 | 173.0 | 116.0 | 105.6 | 103.3 | 109.7 | 144.9 | 161.0 | 143.1 | 131.8 | 123.6 |
| 82.5° | 96.7 | 89.9 | 93.3 | 82.0 | 74.5 | 78.6 | 112.7 | 132.9 | 105.3 | 95.1 | 94.7 |
| 85° | 55.5 | 58.4 | 65.9 | 54.3 | 43.0 | 48.3 | 82.7 | 95.5 | 79.3 | 70.0 | 71.5 |
| 87.5° | 15.0 | 20.6 | 30.3 | 28.1 | 19.5 | 20.6 | 39.4 | 52.8 | 45.7 | 35.2 | 36.3 |
| 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)