

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: P961383

Luminaire Tested: **NAV-SB2A-730-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961383
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-SB2A-730-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9201.4 lumens
Efficiency: N/A
Efficacy: 160.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

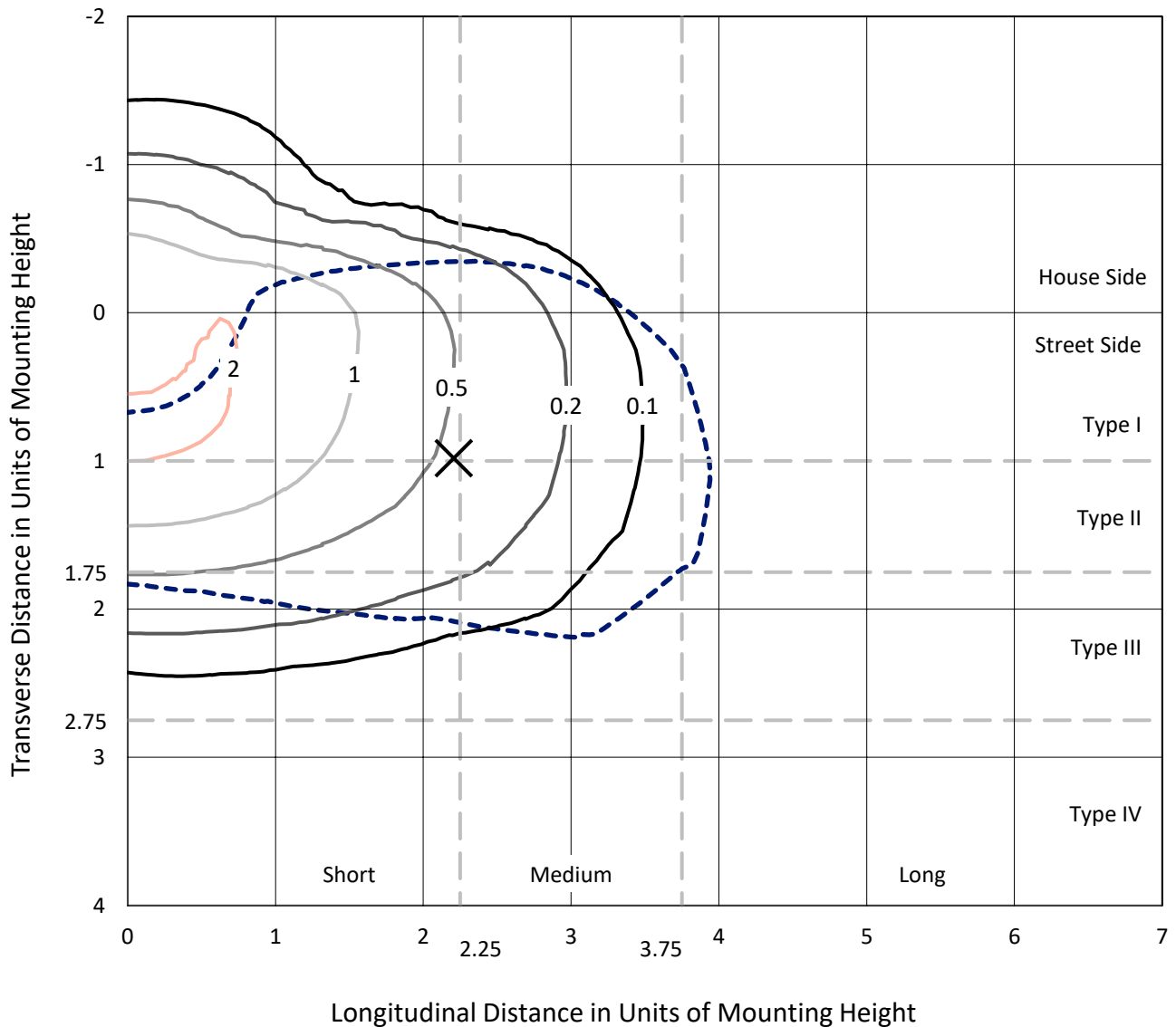
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P961383
 CATALOG NUMBER: NAV-SB2A-730-U-T3

Iso-Footcandle Lines of Horizontal Illumination

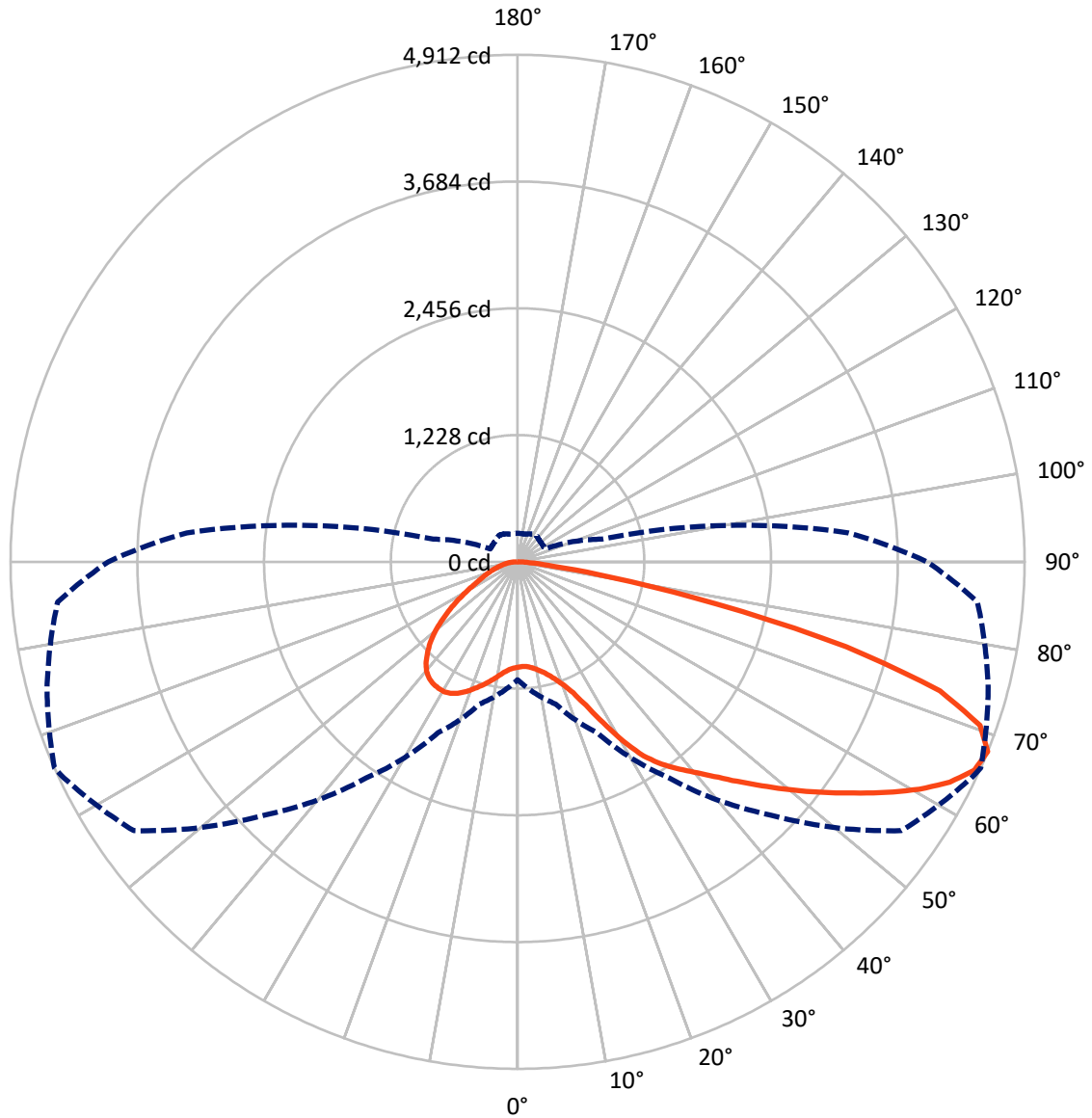
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type III - Short - N/A

REPORT NUMBER: P961383
CATALOG NUMBER: NAV-SB2A-730-U-T3

Luminous Intensity Polar Plot



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

REPORT NUMBER: P961383
 CATALOG NUMBER: NAV-SB2A-730-U-T3

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2287.9 | 0.0 | 2287.9 |
| | % Fixture | 24.9 | 0.0 | 24.9 |
| Street Side | Lumens | 6913.5 | 0.0 | 6913.5 |
| | % Fixture | 75.1 | 0.0 | 75.1 |
| Total | Lumens | 9201.4 | 0.0 | 9201.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 101.2 | 1.1 |
| 10°-20° | 334.3 | 3.6 |
| 20°-30° | 644.3 | 7.0 |
| 30°-40° | 1129.8 | 12.3 |
| 40°-50° | 1679.6 | 18.3 |
| 50°-60° | 2129.1 | 23.1 |
| 60°-70° | 2083.2 | 22.6 |
| 70°-80° | 993.7 | 10.8 |
| 80°-90° | 106.2 | 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° | 9201.4 | 100.0 |
| 0°-180° | 9201.4 | 100.0 |

Coefficient of Utilization



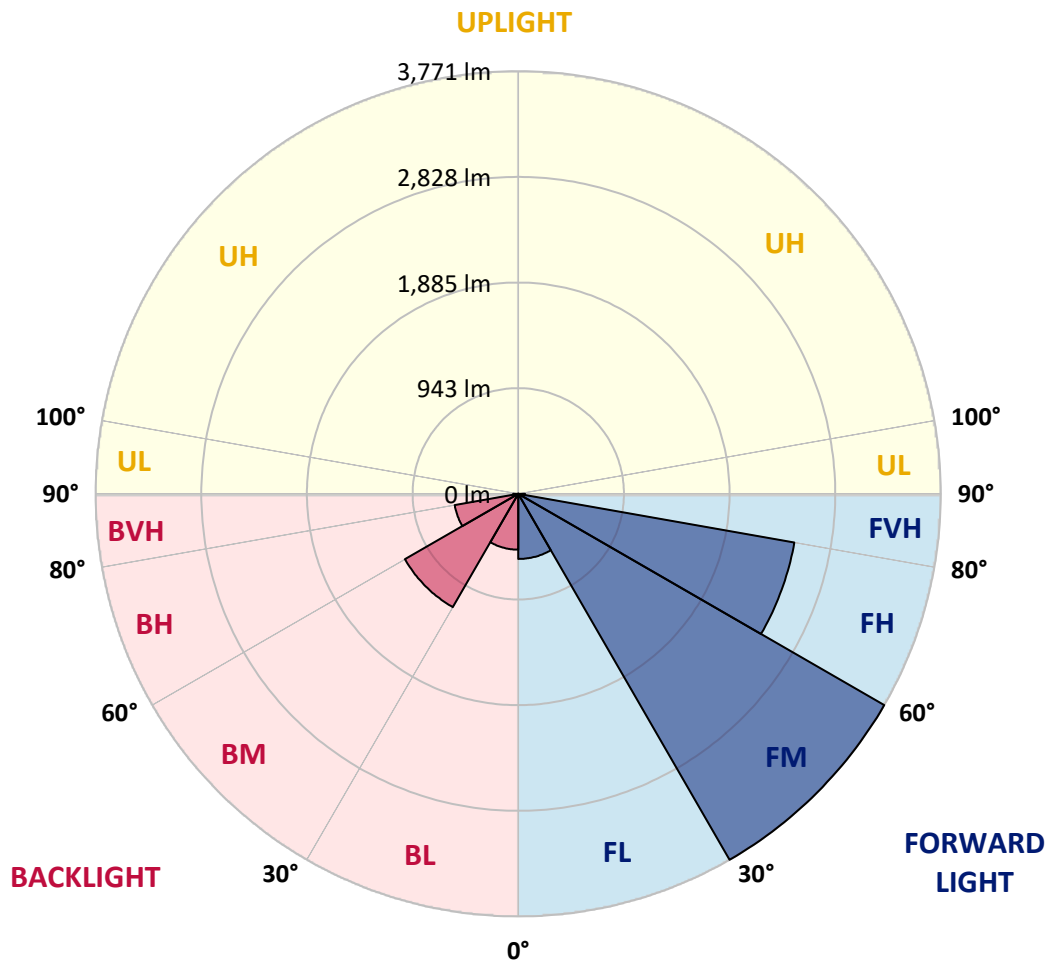
REPORT NUMBER: P961383
 CATALOG NUMBER: NAV-SB2A-730-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 581.4 | 6.3 | | | |
| FM (30°-60°) | 3770.7 | 41.0 | | | |
| FH (60°-80°) | 2501.2 | 27.2 | | | G2/5000 |
| FVH (80°-90°) | 60.2 | 0.7 | | | G1/100 |
| BL (0°-30°) | 498.4 | 5.4 | B1/500 | | |
| BM (30°-60°) | 1167.8 | 12.7 | B2/2500 | | |
| BH (60°-80°) | 575.7 | 6.3 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 46.0 | 0.5 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type III Short



REPORT NUMBER: P961383
 CATALOG NUMBER: NAV-SB2A-730-U-T3

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 66° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1020.6 | 1020.6 | 1020.6 | 1020.6 | 1020.6 | 1020.6 | 1020.6 | 1020.6 | 1020.6 | 1020.6 | 1020.6 |
| 2.5° | 1009.9 | 1015.8 | 1014.2 | 1011.9 | 1011.4 | 1012.3 | 1013.8 | 1015.3 | 1014.7 | 1017.2 | 1021.0 |
| 5° | 1007.1 | 1012.8 | 1012.3 | 1012.3 | 1014.2 | 1018.1 | 1020.6 | 1023.0 | 1020.6 | 1023.5 | 1028.8 |
| 7.5° | 1008.9 | 1013.3 | 1015.3 | 1017.2 | 1022.0 | 1029.3 | 1035.0 | 1040.4 | 1037.5 | 1040.9 | 1047.7 |
| 10° | 1033.6 | 1037.0 | 1038.9 | 1038.9 | 1042.3 | 1050.5 | 1056.4 | 1066.0 | 1063.5 | 1068.9 | 1077.6 |
| 12.5° | 1078.6 | 1082.0 | 1082.0 | 1080.0 | 1082.4 | 1087.7 | 1089.7 | 1100.3 | 1095.9 | 1104.6 | 1113.4 |
| 15° | 1133.6 | 1140.4 | 1135.2 | 1131.7 | 1132.7 | 1138.1 | 1137.5 | 1145.7 | 1141.4 | 1148.7 | 1156.4 |
| 17.5° | 1194.6 | 1203.4 | 1194.6 | 1194.1 | 1192.2 | 1198.0 | 1198.4 | 1205.7 | 1198.0 | 1203.4 | 1208.6 |
| 20° | 1266.6 | 1278.7 | 1271.5 | 1273.9 | 1269.6 | 1271.9 | 1274.4 | 1285.0 | 1272.9 | 1276.7 | 1275.3 |
| 22.5° | 1368.2 | 1382.6 | 1374.9 | 1384.2 | 1381.2 | 1379.2 | 1378.8 | 1397.7 | 1378.8 | 1380.3 | 1366.2 |
| 25° | 1516.1 | 1533.5 | 1520.0 | 1532.6 | 1532.6 | 1538.8 | 1546.1 | 1570.2 | 1538.8 | 1529.6 | 1493.3 |
| 27.5° | 1734.6 | 1752.0 | 1725.4 | 1733.2 | 1730.7 | 1746.2 | 1738.5 | 1798.5 | 1764.5 | 1749.6 | 1676.6 |
| 30° | 1997.6 | 2028.6 | 1978.2 | 1976.3 | 1973.9 | 1998.5 | 2009.7 | 2049.4 | 2015.0 | 2000.0 | 1912.0 |
| 32.5° | 2281.9 | 2314.2 | 2254.3 | 2237.0 | 2227.7 | 2242.7 | 2233.6 | 2265.5 | 2241.8 | 2218.5 | 2109.8 |
| 35° | 2582.6 | 2614.5 | 2557.5 | 2523.5 | 2486.9 | 2455.4 | 2422.6 | 2430.8 | 2408.5 | 2373.3 | 2260.6 |
| 37.5° | 2866.8 | 2925.4 | 2864.9 | 2828.7 | 2760.9 | 2699.5 | 2607.7 | 2569.6 | 2548.8 | 2516.4 | 2402.7 |
| 40° | 3156.4 | 3189.8 | 3143.9 | 3112.9 | 3039.4 | 2943.2 | 2796.3 | 2715.5 | 2687.4 | 2656.1 | 2559.8 |
| 42.5° | 3369.6 | 3401.6 | 3376.9 | 3355.6 | 3298.0 | 3186.4 | 2996.4 | 2895.4 | 2854.7 | 2819.5 | 2737.8 |
| 45° | 3538.8 | 3562.5 | 3547.0 | 3554.8 | 3530.1 | 3421.9 | 3203.8 | 3088.2 | 3046.2 | 3003.1 | 2938.9 |
| 47.5° | 3607.0 | 3632.2 | 3656.8 | 3702.7 | 3744.8 | 3665.0 | 3426.7 | 3297.1 | 3252.6 | 3208.7 | 3145.3 |
| 50° | 3599.3 | 3624.9 | 3696.5 | 3794.1 | 3924.6 | 3898.1 | 3661.6 | 3519.5 | 3478.4 | 3428.1 | 3369.6 |
| 52.5° | 3537.4 | 3566.4 | 3658.2 | 3820.7 | 4028.6 | 4072.5 | 3900.9 | 3749.1 | 3710.5 | 3650.5 | 3592.0 |
| 55° | 3374.9 | 3392.3 | 3530.1 | 3760.2 | 4053.3 | 4194.4 | 4135.5 | 3993.8 | 3955.1 | 3871.4 | 3807.7 |
| 57.5° | 3073.8 | 3098.9 | 3299.6 | 3597.3 | 3991.3 | 4277.0 | 4341.4 | 4251.0 | 4213.8 | 4093.3 | 4026.6 |
| 60° | 2680.7 | 2720.9 | 2950.5 | 3323.7 | 3833.7 | 4276.6 | 4528.4 | 4503.8 | 4472.9 | 4311.9 | 4242.3 |
| 62.5° | 2235.9 | 2282.4 | 2503.3 | 2936.9 | 3558.2 | 4155.2 | 4645.5 | 4715.5 | 4699.6 | 4513.5 | 4424.5 |
| 65° | 1717.2 | 1749.2 | 1969.1 | 2436.6 | 3129.3 | 3894.7 | 4659.0 | 4860.1 | 4863.0 | 4666.7 | 4519.7 |
| 67.5° | 1143.4 | 1235.2 | 1426.2 | 1828.4 | 2555.0 | 3468.7 | 4540.0 | 4883.8 | 4911.8 | 4719.4 | 4471.9 |
| 70° | 557.9 | 678.8 | 865.8 | 1188.3 | 1828.4 | 2815.6 | 4229.3 | 4689.5 | 4751.8 | 4565.7 | 4186.6 |
| 72.5° | 231.5 | 270.7 | 372.7 | 586.4 | 1049.6 | 1899.9 | 3604.6 | 4162.5 | 4278.0 | 4045.5 | 3520.0 |
| 75° | 156.1 | 169.2 | 213.2 | 300.7 | 478.2 | 937.0 | 2599.5 | 3103.7 | 3289.8 | 3055.4 | 2497.5 |
| 77.5° | 120.3 | 128.6 | 155.2 | 210.3 | 284.2 | 354.3 | 1391.3 | 1870.4 | 1966.7 | 1820.7 | 1299.5 |
| 80° | 94.7 | 101.1 | 116.0 | 153.2 | 201.6 | 189.5 | 474.3 | 847.5 | 903.1 | 757.6 | 417.7 |
| 82.5° | 82.2 | 84.6 | 83.1 | 103.9 | 133.9 | 110.7 | 155.7 | 312.8 | 345.2 | 250.4 | 136.3 |
| 85° | 59.4 | 66.2 | 69.1 | 64.3 | 71.0 | 56.1 | 63.9 | 110.7 | 121.9 | 108.8 | 76.9 |
| 87.5° | 24.2 | 35.8 | 44.0 | 41.6 | 26.1 | 16.0 | 19.8 | 32.4 | 37.2 | 40.6 | 25.1 |
| 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: P961383
 CATALOG NUMBER: NAV-SB2A-730-U-T3

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1020.6 | 1020.6 | 1020.6 | 1020.6 | 1020.6 | 1020.6 | 1020.6 | 1020.6 | 1020.6 | 1020.6 | 1020.6 |
| 2.5° | 1021.5 | 1024.9 | 1027.4 | 1030.2 | 1032.2 | 1035.0 | 1040.9 | 1044.3 | 1044.8 | 1047.1 | 1046.6 |
| 5° | 1030.7 | 1035.6 | 1040.9 | 1048.6 | 1057.3 | 1064.6 | 1075.6 | 1083.4 | 1086.3 | 1088.8 | 1088.2 |
| 7.5° | 1050.5 | 1057.3 | 1066.9 | 1080.6 | 1093.1 | 1102.7 | 1116.3 | 1125.4 | 1134.7 | 1138.1 | 1138.6 |
| 10° | 1080.0 | 1089.7 | 1103.7 | 1122.1 | 1135.6 | 1148.2 | 1162.2 | 1169.9 | 1179.2 | 1183.0 | 1184.9 |
| 12.5° | 1116.7 | 1126.9 | 1145.3 | 1171.0 | 1183.5 | 1192.2 | 1197.0 | 1195.0 | 1197.0 | 1200.4 | 1201.4 |
| 15° | 1158.9 | 1169.9 | 1190.7 | 1218.3 | 1227.0 | 1219.2 | 1208.6 | 1198.9 | 1197.5 | 1198.4 | 1201.8 |
| 17.5° | 1208.6 | 1216.9 | 1241.0 | 1264.2 | 1258.0 | 1226.0 | 1202.8 | 1187.4 | 1179.6 | 1177.2 | 1180.6 |
| 20° | 1278.3 | 1278.3 | 1298.1 | 1312.5 | 1270.5 | 1216.4 | 1180.1 | 1155.0 | 1139.0 | 1132.2 | 1130.8 |
| 22.5° | 1362.8 | 1355.2 | 1367.7 | 1357.5 | 1268.1 | 1189.3 | 1139.0 | 1095.5 | 1071.3 | 1061.7 | 1060.2 |
| 25° | 1470.2 | 1460.9 | 1457.6 | 1394.7 | 1250.7 | 1146.3 | 1064.6 | 1011.9 | 990.6 | 985.2 | 986.3 |
| 27.5° | 1632.1 | 1608.9 | 1565.0 | 1415.0 | 1218.7 | 1078.6 | 977.5 | 928.8 | 916.7 | 917.1 | 918.5 |
| 30° | 1847.8 | 1801.3 | 1693.5 | 1418.4 | 1166.6 | 982.9 | 888.6 | 853.7 | 848.0 | 850.3 | 858.6 |
| 32.5° | 2047.4 | 2003.4 | 1825.0 | 1402.9 | 1086.3 | 889.1 | 808.8 | 785.6 | 776.9 | 779.8 | 783.7 |
| 35° | 2204.1 | 2192.0 | 1946.9 | 1381.2 | 987.7 | 801.0 | 737.3 | 717.4 | 700.5 | 696.7 | 699.6 |
| 37.5° | 2352.0 | 2347.1 | 2038.2 | 1350.7 | 890.0 | 738.7 | 679.7 | 653.6 | 628.9 | 615.4 | 615.9 |
| 40° | 2514.4 | 2509.6 | 2098.2 | 1303.9 | 803.5 | 684.6 | 628.0 | 593.7 | 563.2 | 538.5 | 541.0 |
| 42.5° | 2697.2 | 2668.6 | 2126.7 | 1236.7 | 730.0 | 638.7 | 585.9 | 539.6 | 499.4 | 476.7 | 478.2 |
| 45° | 2896.9 | 2832.5 | 2126.2 | 1151.1 | 668.1 | 596.6 | 541.0 | 475.2 | 438.0 | 416.8 | 415.7 |
| 47.5° | 3108.6 | 2989.2 | 2100.1 | 1056.4 | 608.1 | 550.1 | 471.4 | 421.1 | 396.5 | 383.3 | 380.5 |
| 50° | 3327.0 | 3135.7 | 2055.6 | 947.5 | 546.7 | 497.4 | 427.8 | 393.5 | 374.6 | 362.5 | 358.2 |
| 52.5° | 3532.6 | 3268.6 | 2001.9 | 824.3 | 484.4 | 446.2 | 408.6 | 381.9 | 362.1 | 348.6 | 342.8 |
| 55° | 3723.5 | 3383.2 | 1926.1 | 698.1 | 433.7 | 411.9 | 399.3 | 377.1 | 354.3 | 338.5 | 332.1 |
| 57.5° | 3893.3 | 3457.6 | 1795.1 | 579.6 | 397.4 | 388.2 | 389.7 | 368.9 | 342.8 | 329.2 | 320.5 |
| 60° | 4034.4 | 3512.3 | 1601.2 | 470.0 | 367.9 | 365.0 | 374.6 | 353.4 | 323.0 | 307.5 | 300.7 |
| 62.5° | 4119.0 | 3511.2 | 1363.4 | 384.8 | 342.8 | 343.7 | 354.9 | 334.0 | 303.1 | 288.6 | 284.2 |
| 65° | 4111.7 | 3425.2 | 1102.3 | 329.2 | 318.6 | 319.6 | 334.0 | 312.8 | 286.7 | 278.0 | 277.5 |
| 67.5° | 3966.2 | 3215.4 | 845.5 | 292.9 | 292.0 | 296.3 | 313.2 | 298.3 | 276.5 | 275.5 | 277.1 |
| 70° | 3572.2 | 2779.8 | 609.2 | 263.9 | 264.4 | 270.7 | 292.9 | 289.2 | 271.2 | 273.2 | 272.6 |
| 72.5° | 2864.5 | 2119.4 | 409.0 | 233.5 | 234.0 | 244.2 | 273.7 | 281.9 | 265.9 | 291.5 | 295.4 |
| 75° | 1907.7 | 1321.7 | 263.0 | 201.1 | 201.6 | 214.6 | 256.7 | 267.8 | 251.4 | 290.6 | 292.9 |
| 77.5° | 916.7 | 594.2 | 190.4 | 169.2 | 169.2 | 181.3 | 221.9 | 239.7 | 214.1 | 225.8 | 206.9 |
| 80° | 316.6 | 223.3 | 149.9 | 136.3 | 133.5 | 141.7 | 187.1 | 207.9 | 184.7 | 170.1 | 159.5 |
| 82.5° | 124.7 | 116.0 | 120.3 | 105.9 | 96.2 | 101.5 | 145.5 | 171.6 | 135.8 | 122.8 | 122.3 |
| 85° | 71.5 | 75.4 | 85.1 | 70.1 | 55.6 | 62.3 | 106.8 | 123.3 | 102.5 | 90.4 | 92.4 |
| 87.5° | 19.4 | 26.5 | 39.2 | 36.3 | 25.1 | 26.5 | 50.7 | 68.2 | 58.9 | 45.4 | 46.9 |
| 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)