

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: P964015

Luminaire Tested: **NAV-SB3B-730-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964015
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-730-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13581.2 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

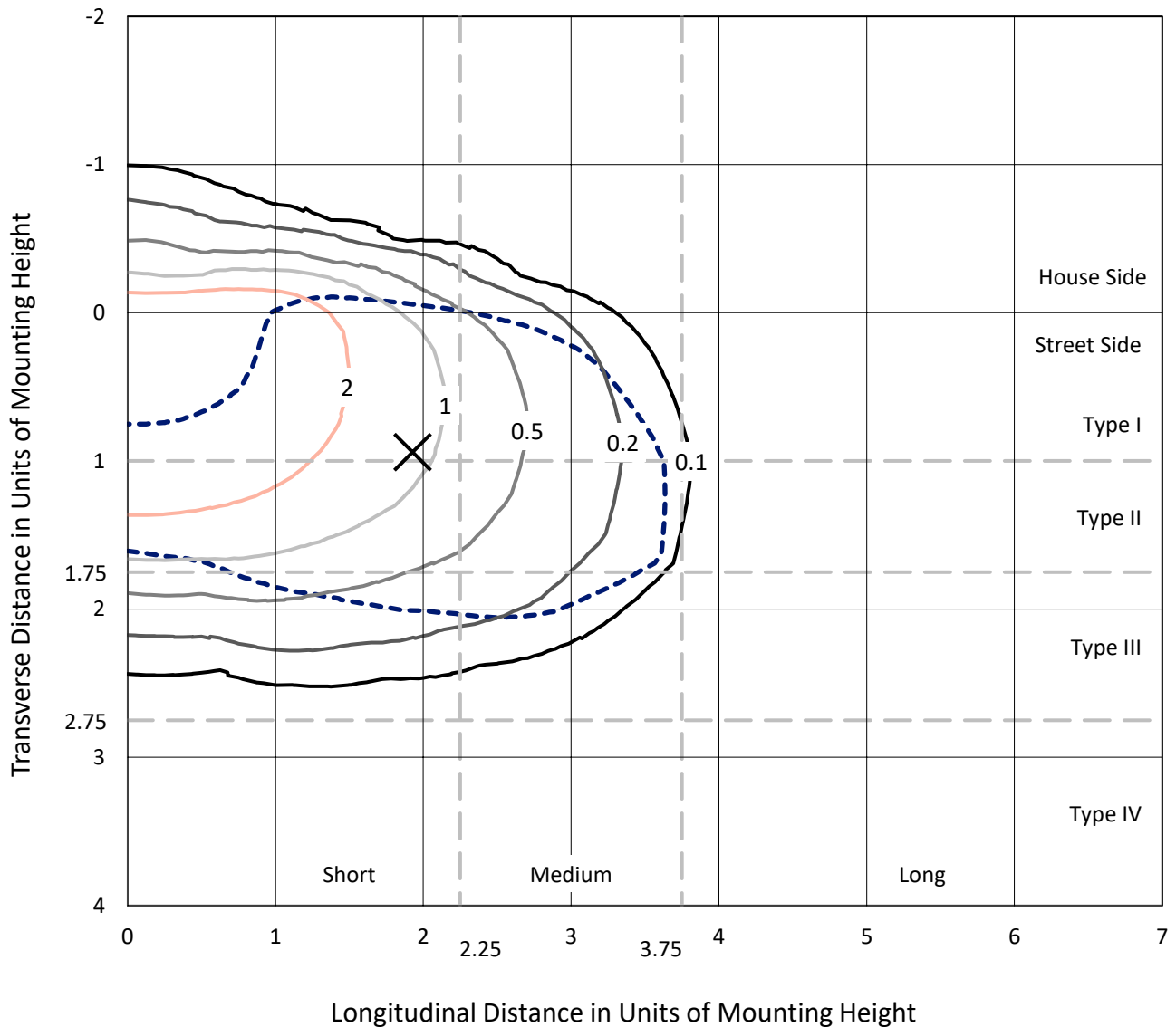
Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

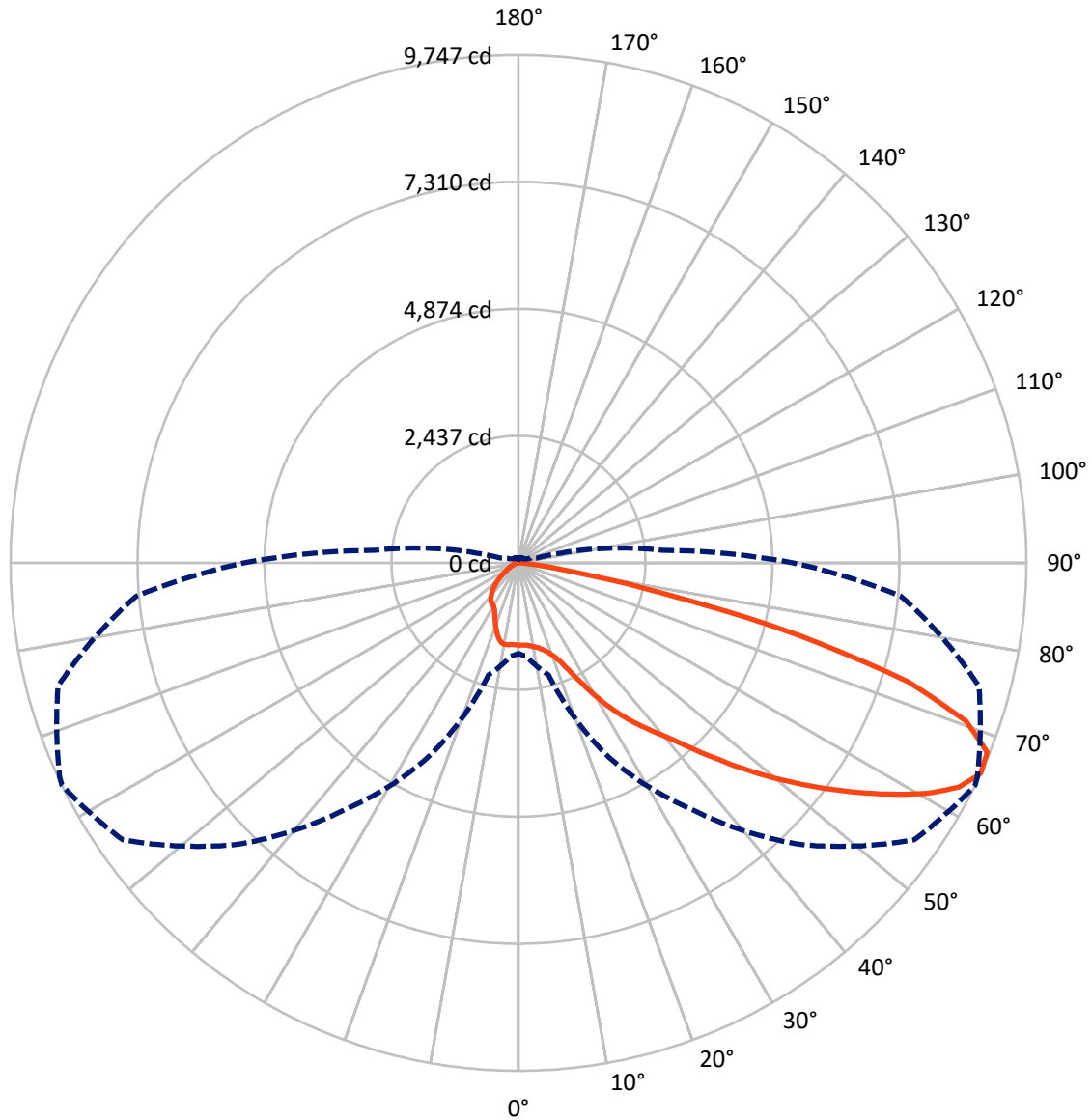
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1816.2 | 0.0 | 1816.2 |
| | % Fixture | 13.4 | 0.0 | 13.4 |
| Street Side | Lumens | 11765.0 | 0.0 | 11765.0 |
| | % Fixture | 86.6 | 0.0 | 86.6 |
| Total | Lumens | 13581.2 | 0.0 | 13581.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 145.7 | 1.1 |
| 10°-20° | 395.3 | 2.9 |
| 20°-30° | 749.0 | 5.5 |
| 30°-40° | 1515.7 | 11.2 |
| 40°-50° | 2582.0 | 19.0 |
| 50°-60° | 3511.3 | 25.9 |
| 60°-70° | 3297.3 | 24.3 |
| 70°-80° | 1321.0 | 9.7 |
| 80°-90° | 64.0 | 0.5 |
| 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° | 13581.2 | 100.0 |
| 0°-180° | 13581.2 | 100.0 |

Coefficient of Utilization



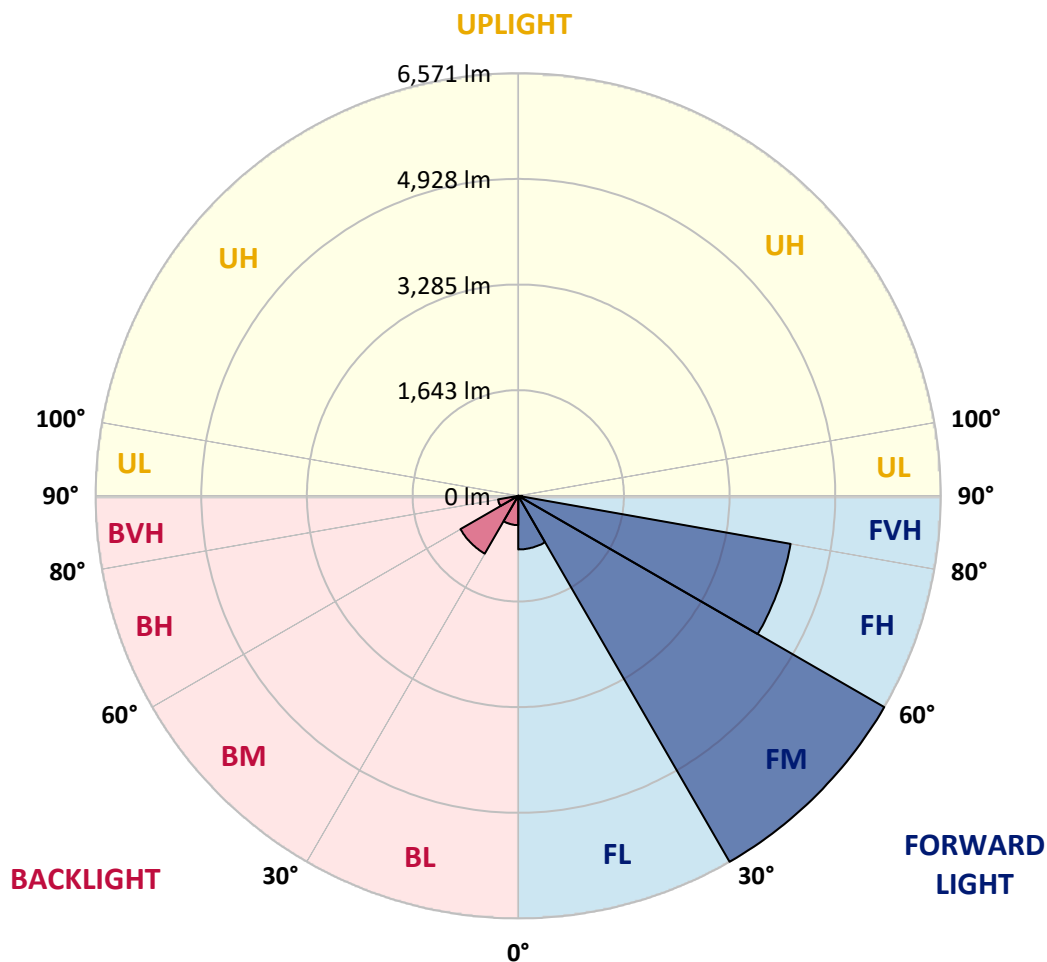
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 CATALOG NUMBER: NAV-SB3B-730-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 834.0 | 6.1 | | | |
| FM (30°-60°) | 6570.6 | 48.4 | | | |
| FH (60°-80°) | 4299.5 | 31.7 | | | G2/5000 |
| FVH (80°-90°) | 60.9 | 0.4 | | | G1/100 |
| BL (0°-30°) | 456.0 | 3.4 | B1/500 | | |
| BM (30°-60°) | 1038.3 | 7.6 | B2/2500 | | |
| BH (60°-80°) | 318.8 | 2.3 | B1/500 | | G1/500 |
| BVH (80°-90°) | 3.1 | 0.0 | | | G0/10 |
| 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



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 64° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1579.6 | 1579.6 | 1579.6 | 1579.6 | 1579.6 | 1579.6 | 1579.6 | 1579.6 | 1579.6 | 1579.6 | 1579.6 |
| 2.5° | 1574.2 | 1585.1 | 1582.4 | 1579.6 | 1578.7 | 1580.6 | 1581.5 | 1580.6 | 1580.6 | 1580.6 | 1581.5 |
| 5° | 1544.2 | 1553.3 | 1553.3 | 1559.6 | 1568.8 | 1579.6 | 1587.8 | 1589.7 | 1591.5 | 1594.2 | 1593.3 |
| 7.5° | 1486.8 | 1494.0 | 1499.5 | 1520.5 | 1543.2 | 1572.4 | 1596.9 | 1609.7 | 1611.5 | 1621.6 | 1625.1 |
| 10° | 1447.6 | 1456.7 | 1465.9 | 1487.7 | 1520.5 | 1564.1 | 1606.1 | 1637.0 | 1641.5 | 1665.2 | 1676.2 |
| 12.5° | 1445.8 | 1454.9 | 1466.8 | 1490.5 | 1528.7 | 1575.1 | 1626.1 | 1670.6 | 1678.8 | 1713.5 | 1736.2 |
| 15° | 1464.9 | 1475.9 | 1486.8 | 1515.9 | 1556.9 | 1613.4 | 1668.0 | 1723.5 | 1731.7 | 1780.8 | 1805.4 |
| 17.5° | 1504.1 | 1518.6 | 1526.8 | 1555.9 | 1599.7 | 1662.4 | 1734.4 | 1798.2 | 1805.4 | 1862.8 | 1893.8 |
| 20° | 1581.5 | 1598.8 | 1601.5 | 1625.1 | 1668.0 | 1735.3 | 1820.9 | 1900.1 | 1909.3 | 1974.8 | 2009.4 |
| 22.5° | 1741.7 | 1766.3 | 1744.4 | 1756.2 | 1794.5 | 1861.9 | 1954.8 | 2054.9 | 2067.6 | 2142.4 | 2173.3 |
| 25° | 2024.0 | 2058.5 | 2002.1 | 1982.0 | 1998.4 | 2068.6 | 2185.1 | 2311.7 | 2326.2 | 2386.3 | 2401.8 |
| 27.5° | 2578.4 | 2533.8 | 2448.2 | 2364.5 | 2315.3 | 2355.3 | 2486.4 | 2643.1 | 2661.3 | 2719.5 | 2701.3 |
| 30° | 3187.5 | 3148.4 | 3032.8 | 2847.0 | 2730.5 | 2724.0 | 2845.2 | 3020.0 | 3041.0 | 3096.4 | 3041.0 |
| 32.5° | 3797.5 | 3760.2 | 3634.5 | 3406.0 | 3203.8 | 3103.7 | 3187.5 | 3381.5 | 3392.3 | 3427.9 | 3345.9 |
| 35° | 4397.5 | 4359.2 | 4233.7 | 3999.7 | 3751.1 | 3523.4 | 3507.0 | 3725.6 | 3729.3 | 3766.6 | 3644.6 |
| 37.5° | 5001.2 | 4969.3 | 4835.4 | 4606.0 | 4361.1 | 4047.0 | 3894.9 | 4051.5 | 4056.1 | 4092.5 | 3965.9 |
| 40° | 5431.8 | 5445.4 | 5353.5 | 5175.9 | 4965.6 | 4622.3 | 4330.1 | 4398.4 | 4371.1 | 4432.1 | 4356.6 |
| 42.5° | 5801.4 | 5828.8 | 5748.6 | 5659.4 | 5537.4 | 5235.1 | 4869.2 | 4857.3 | 4813.6 | 4846.4 | 4768.1 |
| 45° | 6121.0 | 6143.7 | 6071.8 | 6050.9 | 6048.1 | 5836.0 | 5458.2 | 5387.2 | 5326.2 | 5319.7 | 5226.1 |
| 47.5° | 6238.5 | 6282.1 | 6313.1 | 6383.2 | 6519.8 | 6430.5 | 6067.3 | 5957.1 | 5888.8 | 5838.7 | 5690.4 |
| 50° | 6283.0 | 6329.5 | 6435.1 | 6639.0 | 6962.2 | 7000.4 | 6673.7 | 6549.9 | 6466.0 | 6375.0 | 6156.5 |
| 52.5° | 6223.0 | 6305.8 | 6447.9 | 6791.1 | 7260.0 | 7457.6 | 7255.5 | 7147.1 | 7051.5 | 6903.1 | 6579.0 |
| 55° | 5868.8 | 5951.7 | 6242.0 | 6789.3 | 7408.4 | 7778.0 | 7805.4 | 7757.1 | 7649.7 | 7415.7 | 6920.4 |
| 57.5° | 5122.2 | 5245.1 | 5704.9 | 6558.1 | 7405.6 | 8053.9 | 8344.3 | 8379.0 | 8258.7 | 7923.7 | 7188.9 |
| 60° | 4087.9 | 4254.6 | 4815.4 | 6045.4 | 7177.2 | 8203.2 | 8816.8 | 8989.9 | 8862.4 | 8424.5 | 7406.5 |
| 62.5° | 2852.5 | 3045.5 | 3576.2 | 5242.4 | 6654.5 | 8095.8 | 9162.0 | 9481.5 | 9385.0 | 8872.4 | 7490.3 |
| 65° | 1739.8 | 1801.7 | 2229.7 | 4125.3 | 5765.9 | 7646.0 | 9268.5 | 9747.3 | 9715.5 | 9146.5 | 7366.5 |
| 67.5° | 1159.0 | 1210.9 | 1333.8 | 2828.8 | 4475.8 | 6747.4 | 9013.5 | 9700.9 | 9710.0 | 9101.8 | 6913.1 |
| 70° | 698.3 | 742.9 | 823.1 | 1645.2 | 2900.7 | 5340.8 | 8224.2 | 9109.1 | 9162.0 | 8505.4 | 6053.6 |
| 72.5° | 287.7 | 317.8 | 390.6 | 745.7 | 1502.2 | 3389.7 | 6548.9 | 7820.9 | 7943.7 | 7151.6 | 4646.0 |
| 75° | 163.0 | 178.5 | 229.4 | 374.2 | 651.9 | 1579.6 | 3966.9 | 5551.9 | 5733.1 | 4929.2 | 2795.1 |
| 77.5° | 108.3 | 115.6 | 148.4 | 242.2 | 367.0 | 538.9 | 1695.2 | 2892.5 | 3238.5 | 2692.3 | 1210.0 |
| 80° | 72.9 | 79.2 | 102.0 | 162.1 | 238.5 | 231.2 | 539.9 | 1071.6 | 1318.4 | 925.1 | 295.0 |
| 82.5° | 49.2 | 50.1 | 72.9 | 106.5 | 151.1 | 112.0 | 159.3 | 333.2 | 418.8 | 267.6 | 112.0 |
| 85° | 28.2 | 27.3 | 53.7 | 61.9 | 67.3 | 46.4 | 48.3 | 100.1 | 131.1 | 112.9 | 63.8 |
| 87.5° | 3.7 | 5.4 | 20.9 | 16.4 | 9.1 | 10.0 | 10.0 | 17.3 | 25.5 | 27.3 | 13.6 |
| 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° | 1579.6 | 1579.6 | 1579.6 | 1579.6 | 1579.6 | 1579.6 | 1579.6 | 1579.6 | 1579.6 | 1579.6 | 1579.6 |
| 2.5° | 1581.5 | 1580.6 | 1577.8 | 1575.1 | 1568.8 | 1565.1 | 1566.9 | 1565.1 | 1564.1 | 1565.1 | 1568.8 |
| 5° | 1593.3 | 1590.6 | 1583.3 | 1574.2 | 1561.4 | 1545.9 | 1536.0 | 1521.4 | 1507.7 | 1499.5 | 1501.3 |
| 7.5° | 1625.1 | 1622.5 | 1612.4 | 1586.9 | 1545.9 | 1481.3 | 1422.1 | 1370.2 | 1331.1 | 1308.3 | 1309.2 |
| 10° | 1676.2 | 1671.6 | 1656.1 | 1599.7 | 1492.2 | 1351.2 | 1233.7 | 1136.2 | 1072.6 | 1042.4 | 1039.8 |
| 12.5° | 1736.2 | 1730.8 | 1703.4 | 1587.8 | 1390.3 | 1169.9 | 1007.9 | 899.5 | 840.4 | 814.0 | 811.2 |
| 15° | 1807.3 | 1800.0 | 1746.3 | 1531.4 | 1241.9 | 969.6 | 821.2 | 740.2 | 701.9 | 678.2 | 679.2 |
| 17.5° | 1895.5 | 1882.8 | 1778.2 | 1446.7 | 1080.8 | 816.7 | 706.5 | 645.5 | 611.8 | 589.1 | 587.2 |
| 20° | 2010.3 | 1989.3 | 1803.6 | 1345.6 | 932.3 | 720.2 | 629.1 | 578.1 | 552.7 | 532.6 | 529.0 |
| 22.5° | 2170.5 | 2140.5 | 1834.5 | 1236.4 | 827.6 | 653.7 | 571.7 | 534.4 | 513.5 | 490.8 | 487.1 |
| 25° | 2369.0 | 2333.5 | 1872.8 | 1135.3 | 755.6 | 596.3 | 529.9 | 499.0 | 474.4 | 447.9 | 445.3 |
| 27.5° | 2646.7 | 2583.0 | 1918.3 | 1052.5 | 693.7 | 547.1 | 491.7 | 457.0 | 428.9 | 406.9 | 402.4 |
| 30° | 2956.2 | 2851.5 | 1958.4 | 1002.4 | 637.3 | 501.6 | 441.6 | 406.9 | 380.6 | 365.1 | 362.3 |
| 32.5° | 3249.5 | 3107.4 | 1984.8 | 980.5 | 586.3 | 449.8 | 386.9 | 349.6 | 329.5 | 325.0 | 327.8 |
| 35° | 3526.2 | 3338.6 | 1982.0 | 959.6 | 540.8 | 397.9 | 333.2 | 295.0 | 279.5 | 282.3 | 282.3 |
| 37.5° | 3844.9 | 3585.3 | 1963.0 | 926.8 | 503.5 | 350.5 | 286.8 | 253.1 | 239.4 | 240.4 | 244.1 |
| 40° | 4215.4 | 3870.3 | 1951.1 | 864.9 | 462.5 | 306.8 | 248.6 | 221.2 | 211.3 | 207.6 | 206.6 |
| 42.5° | 4610.6 | 4146.2 | 1952.9 | 794.8 | 411.5 | 267.6 | 222.1 | 199.4 | 190.2 | 187.6 | 186.7 |
| 45° | 5007.5 | 4409.3 | 1955.7 | 722.0 | 357.8 | 237.6 | 203.1 | 183.9 | 178.5 | 174.8 | 174.8 |
| 47.5° | 5380.8 | 4633.3 | 1904.7 | 643.7 | 305.0 | 214.8 | 187.6 | 174.8 | 170.3 | 165.7 | 165.7 |
| 50° | 5728.6 | 4782.6 | 1781.8 | 552.7 | 263.1 | 196.7 | 175.7 | 166.6 | 162.1 | 157.5 | 157.5 |
| 52.5° | 5999.0 | 4806.3 | 1578.7 | 458.9 | 234.0 | 183.0 | 168.4 | 160.2 | 154.8 | 150.3 | 149.3 |
| 55° | 6119.1 | 4657.9 | 1290.1 | 371.5 | 211.3 | 171.2 | 161.1 | 152.9 | 146.6 | 142.1 | 141.1 |
| 57.5° | 6088.2 | 4345.6 | 1006.0 | 298.6 | 189.4 | 159.3 | 152.0 | 146.6 | 139.3 | 132.0 | 131.1 |
| 60° | 5936.2 | 3927.7 | 758.4 | 248.6 | 169.3 | 146.6 | 142.1 | 137.5 | 127.5 | 116.5 | 114.7 |
| 62.5° | 5673.1 | 3402.4 | 540.8 | 205.7 | 147.5 | 132.0 | 130.2 | 126.6 | 112.0 | 91.9 | 90.1 |
| 65° | 5270.7 | 2764.1 | 364.2 | 171.2 | 126.6 | 115.6 | 116.5 | 110.2 | 91.0 | 68.3 | 66.4 |
| 67.5° | 4682.5 | 2021.2 | 233.1 | 140.2 | 105.6 | 96.6 | 97.4 | 93.8 | 77.4 | 58.2 | 55.6 |
| 70° | 3933.1 | 1338.3 | 152.0 | 106.5 | 84.7 | 74.6 | 80.2 | 81.1 | 65.6 | 47.4 | 45.5 |
| 72.5° | 2883.4 | 790.3 | 106.5 | 79.2 | 61.9 | 51.9 | 65.6 | 67.3 | 52.8 | 35.5 | 33.7 |
| 75° | 1643.4 | 375.2 | 80.2 | 57.4 | 38.2 | 36.4 | 50.9 | 50.9 | 36.4 | 23.7 | 21.8 |
| 77.5° | 690.1 | 156.6 | 56.5 | 37.3 | 21.8 | 20.9 | 34.6 | 31.9 | 18.2 | 11.0 | 11.0 |
| 80° | 199.4 | 70.1 | 30.0 | 18.2 | 9.1 | 8.2 | 13.6 | 10.0 | 4.5 | 1.8 | 1.8 |
| 82.5° | 78.3 | 31.0 | 11.8 | 7.3 | 3.7 | 3.7 | 1.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 46.4 | 12.7 | 5.4 | 2.8 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 11.8 | 2.8 | 1.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)