

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: P970272

Luminaire Tested: **NAV-SB6B-722-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P970272
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6B-722-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24481.1 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

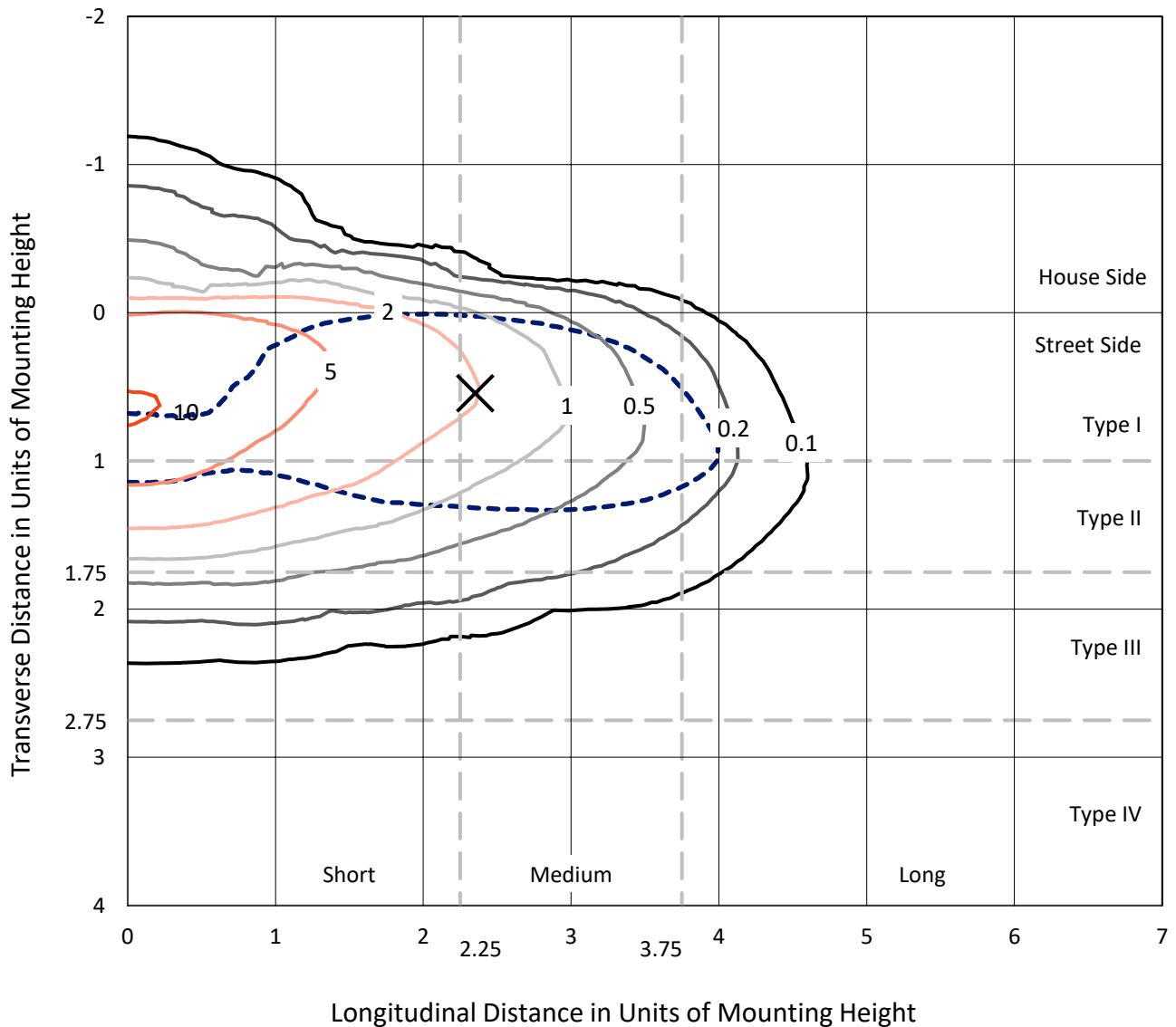
Input Watts (W): 220.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

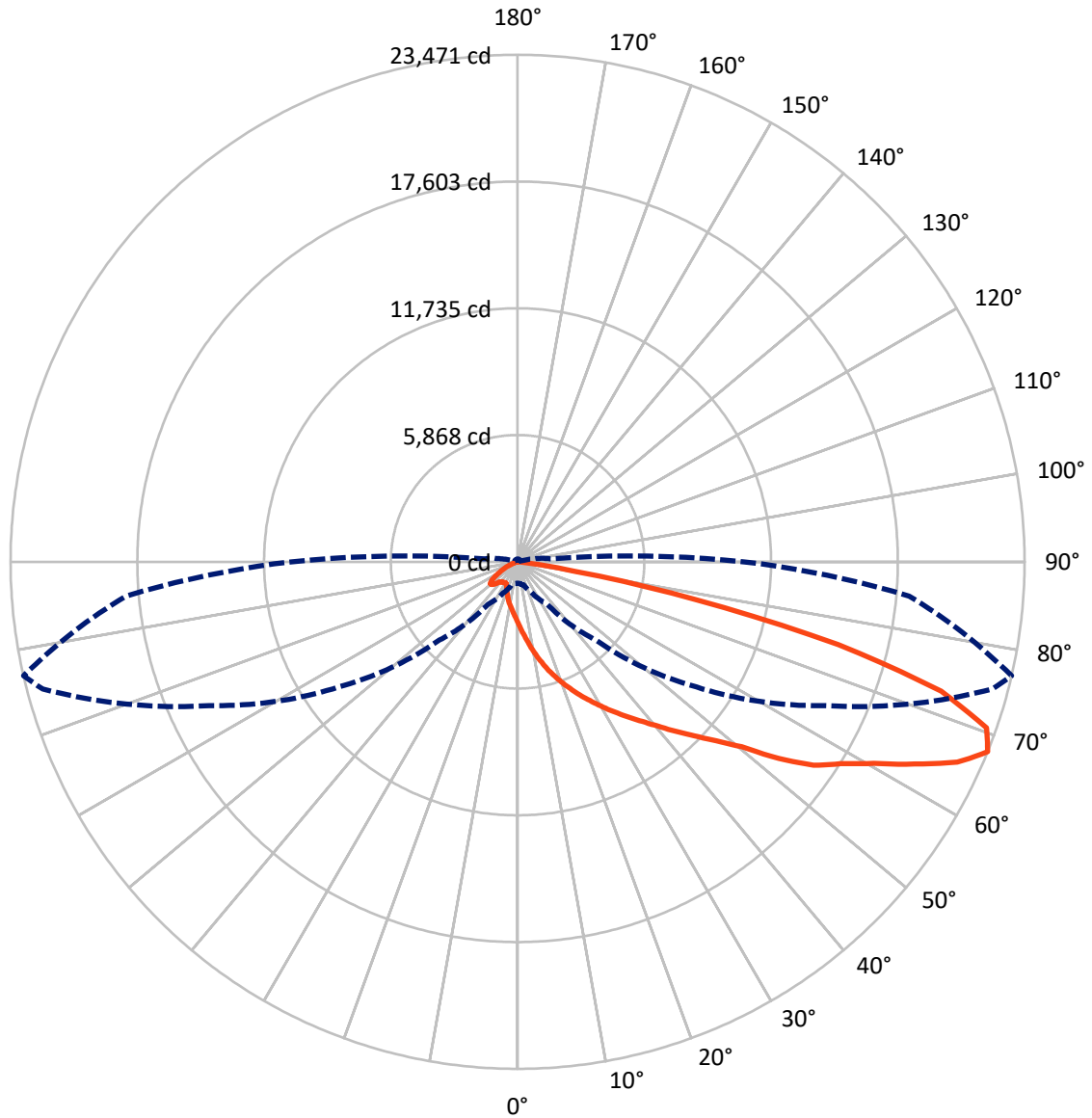
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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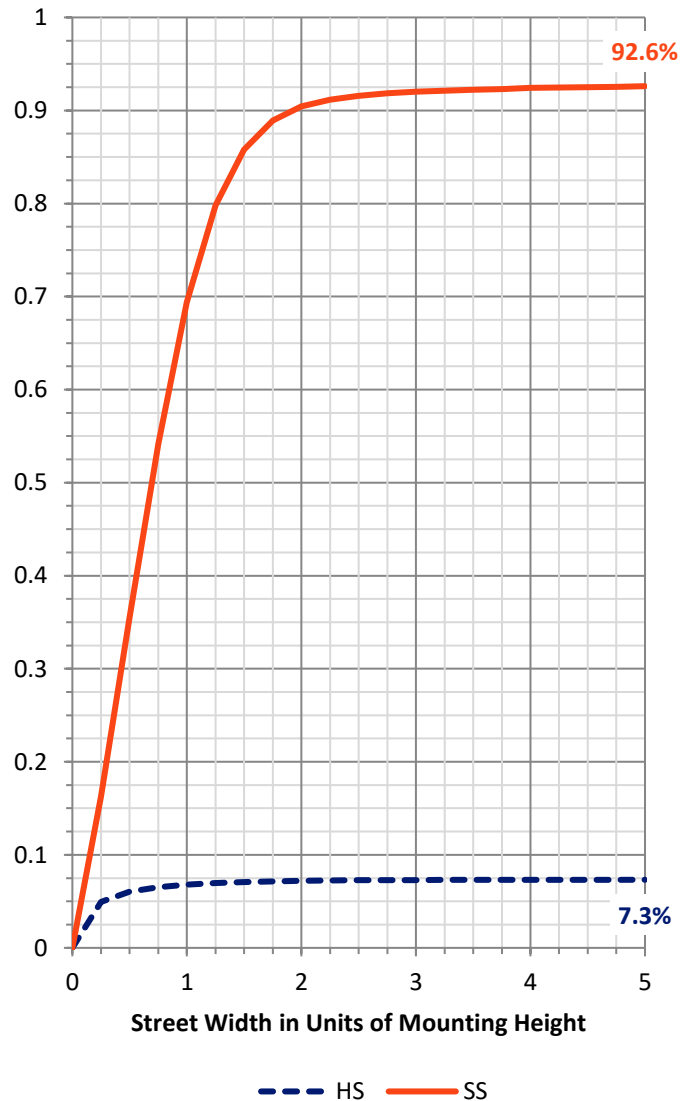
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1801.1 | 0.0 | 1801.1 |
| | % Fixture | 7.4 | 0.0 | 7.4 |
| Street Side | Lumens | 22680.0 | 0.0 | 22680.0 |
| | % Fixture | 92.6 | 0.0 | 92.6 |
| Total | Lumens | 24481.1 | 0.0 | 24481.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 288.1 | 1.2 |
| 10°-20° | 1009.0 | 4.1 |
| 20°-30° | 1947.1 | 8.0 |
| 30°-40° | 3380.3 | 13.8 |
| 40°-50° | 4908.1 | 20.0 |
| 50°-60° | 5636.3 | 23.0 |
| 60°-70° | 4893.3 | 20.0 |
| 70°-80° | 2304.8 | 9.4 |
| 80°-90° | 114.0 | 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° | 24481.1 | 100.0 |
| 0°-180° | 24481.1 | 100.0 |

Coefficient of Utilization

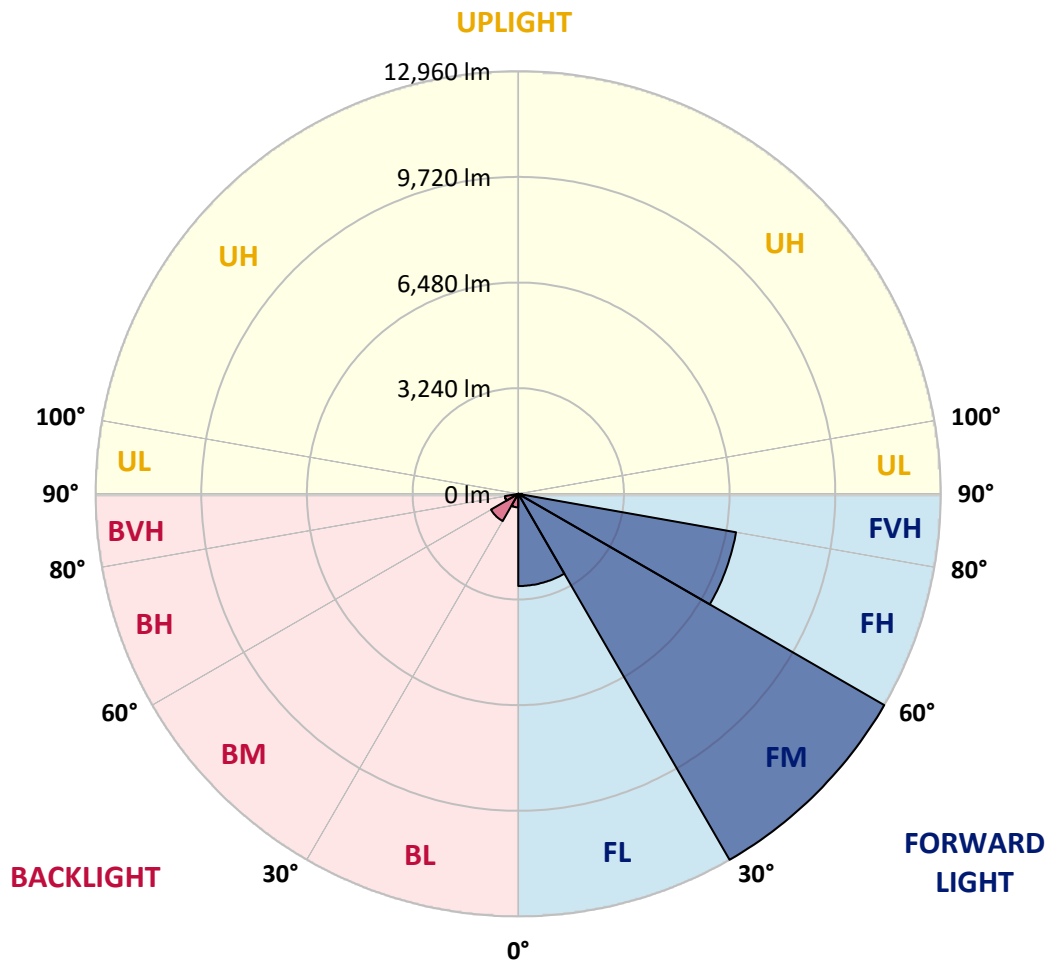


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2827.3 | 11.5 | | | |
| FM (30°-60°) | 12959.6 | 52.9 | | | |
| FH (60°-80°) | 6781.2 | 27.7 | | | G3/7500 |
| FVH (80°-90°) | 111.9 | 0.5 | | | G2/225 |
| BL (0°-30°) | 417.0 | 1.7 | B1/500 | | |
| BM (30°-60°) | 965.0 | 3.9 | B1/1000 | | |
| BH (60°-80°) | 417.0 | 1.7 | B1/500 | | G1/500 |
| BVH (80°-90°) | 2.1 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G3
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2823.1 | 2823.1 | 2823.1 | 2823.1 | 2823.1 | 2823.1 | 2823.1 | 2823.1 | 2823.1 | 2823.1 | 2823.1 |
| 2.5° | 3908.4 | 3932.8 | 3897.9 | 3830.9 | 3730.6 | 3665.2 | 3505.6 | 3355.1 | 3187.9 | 3134.7 | 2967.5 |
| 5° | 4764.3 | 4785.6 | 4746.1 | 4673.1 | 4539.3 | 4411.6 | 4201.9 | 3887.2 | 3560.3 | 3455.5 | 3158.9 |
| 7.5° | 5398.3 | 5410.5 | 5395.2 | 5328.4 | 5200.6 | 5056.2 | 4822.1 | 4449.6 | 3964.7 | 3849.2 | 3394.6 |
| 10° | 5854.3 | 5893.9 | 5889.3 | 5863.4 | 5778.3 | 5661.3 | 5412.0 | 4987.9 | 4417.8 | 4268.7 | 3660.7 |
| 12.5° | 6156.9 | 6200.9 | 6226.8 | 6284.6 | 6280.0 | 6205.5 | 5986.6 | 5538.2 | 4869.3 | 4694.4 | 3960.2 |
| 15° | 6245.0 | 6292.2 | 6391.0 | 6524.7 | 6643.3 | 6681.4 | 6527.8 | 6077.8 | 5366.4 | 5142.8 | 4267.3 |
| 17.5° | 6194.9 | 6267.9 | 6386.4 | 6597.7 | 6857.7 | 7029.4 | 7012.7 | 6599.3 | 5817.8 | 5562.5 | 4568.2 |
| 20° | 6305.8 | 6375.8 | 6468.5 | 6646.4 | 6948.9 | 7260.5 | 7385.2 | 7097.8 | 6266.3 | 5998.7 | 4884.4 |
| 22.5° | 6920.0 | 6907.9 | 6917.0 | 6945.8 | 7126.7 | 7435.4 | 7692.2 | 7550.9 | 6710.2 | 6436.6 | 5218.9 |
| 25° | 7892.9 | 7838.2 | 7745.5 | 7588.9 | 7543.3 | 7692.2 | 7959.8 | 7952.3 | 7178.4 | 6885.0 | 5560.9 |
| 27.5° | 9008.7 | 8999.6 | 8782.3 | 8405.2 | 8192.4 | 8134.6 | 8262.3 | 8342.9 | 7642.1 | 7329.0 | 5904.5 |
| 30° | 10077.5 | 10101.8 | 9808.4 | 9388.8 | 8998.2 | 8771.6 | 8656.1 | 8713.8 | 8113.4 | 7807.8 | 6258.8 |
| 32.5° | 11007.9 | 11033.7 | 10714.4 | 10223.5 | 9740.0 | 9466.4 | 9223.2 | 9080.2 | 8627.2 | 8294.3 | 6647.8 |
| 35° | 11793.8 | 11819.7 | 11453.2 | 10910.5 | 10395.2 | 10147.4 | 9872.3 | 9481.6 | 9144.0 | 8834.0 | 7081.1 |
| 37.5° | 12496.1 | 12488.5 | 11997.5 | 11450.3 | 10944.0 | 10747.8 | 10603.4 | 9975.6 | 9676.1 | 9376.7 | 7561.5 |
| 40° | 12911.1 | 12943.1 | 12523.4 | 11919.9 | 11429.0 | 11286.1 | 11276.9 | 10588.2 | 10290.3 | 9999.9 | 8087.6 |
| 42.5° | 13032.8 | 13089.0 | 12784.9 | 12289.3 | 11844.0 | 11688.9 | 11927.6 | 11251.1 | 11004.8 | 10722.0 | 8682.0 |
| 45° | 12813.8 | 12868.6 | 12730.2 | 12386.7 | 12126.7 | 12026.4 | 12487.0 | 11938.2 | 11767.9 | 11488.2 | 9352.3 |
| 47.5° | 12175.4 | 12243.7 | 12277.2 | 12204.3 | 12201.2 | 12303.1 | 12988.7 | 12661.8 | 12674.0 | 12388.2 | 10129.2 |
| 50° | 10939.4 | 11054.9 | 11362.0 | 11620.5 | 12020.3 | 12522.0 | 13476.7 | 13446.3 | 13695.5 | 13449.3 | 11141.6 |
| 52.5° | 8692.5 | 8856.7 | 9914.8 | 10621.7 | 11520.2 | 12480.9 | 14013.3 | 14705.0 | 15487.9 | 15127.6 | 12569.1 |
| 55° | 6985.4 | 6985.4 | 7845.8 | 9168.4 | 10544.2 | 12210.3 | 14247.4 | 15522.9 | 16708.6 | 16623.4 | 13574.0 |
| 57.5° | 5694.7 | 5763.2 | 6312.0 | 7481.0 | 9131.9 | 11565.8 | 14391.8 | 16036.7 | 17692.2 | 17629.9 | 14556.0 |
| 60° | 3514.7 | 3662.2 | 4699.0 | 5852.9 | 7525.0 | 10418.0 | 14300.6 | 16556.6 | 18885.5 | 18935.7 | 15738.8 |
| 62.5° | 1979.3 | 2034.0 | 2496.2 | 4211.0 | 5851.3 | 8875.0 | 13602.9 | 16847.0 | 20411.8 | 20624.7 | 16957.9 |
| 65° | 1366.6 | 1394.0 | 1571.9 | 2620.8 | 4055.9 | 7065.9 | 12239.2 | 16666.1 | 21941.1 | 22371.4 | 17991.7 |
| 67.5° | 992.7 | 1006.3 | 1117.4 | 1600.7 | 2406.5 | 5123.2 | 10101.8 | 15753.9 | 22751.5 | 23470.6 | 18189.3 |
| 70° | 763.1 | 772.2 | 852.8 | 1052.0 | 1421.4 | 3162.0 | 7336.5 | 13940.3 | 22164.7 | 23023.6 | 17176.8 |
| 72.5° | 620.2 | 629.3 | 691.7 | 778.4 | 942.5 | 1869.9 | 4446.7 | 11321.0 | 19574.2 | 20501.5 | 14622.9 |
| 75° | 523.0 | 535.2 | 591.3 | 647.6 | 738.8 | 1201.0 | 2085.8 | 7883.8 | 14720.2 | 15328.3 | 10168.7 |
| 77.5° | 290.4 | 267.5 | 480.4 | 536.6 | 623.3 | 760.1 | 976.0 | 4639.7 | 8244.1 | 8412.9 | 4511.9 |
| 80° | 180.9 | 187.0 | 381.6 | 431.7 | 478.9 | 383.0 | 446.9 | 1786.3 | 2858.0 | 2715.1 | 874.1 |
| 82.5° | 10.7 | 24.3 | 293.4 | 311.6 | 328.4 | 164.2 | 168.7 | 606.6 | 688.7 | 632.4 | 155.1 |
| 85° | 0.0 | 0.0 | 133.8 | 107.9 | 114.0 | 47.2 | 48.7 | 141.3 | 92.8 | 100.3 | 30.4 |
| 87.5° | 0.0 | 0.0 | 0.0 | 3.1 | 0.0 | 4.5 | 9.1 | 12.2 | 4.5 | 6.0 | 10.7 |
| 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° | 2823.1 | 2823.1 | 2823.1 | 2823.1 | 2823.1 | 2823.1 | 2823.1 | 2823.1 | 2823.1 | 2823.1 | 2823.1 |
| 2.5° | 2861.1 | 2754.6 | 2538.7 | 2327.5 | 2155.7 | 1996.1 | 1882.0 | 1774.1 | 1719.3 | 1716.4 | 1713.3 |
| 5° | 2947.7 | 2724.2 | 2292.5 | 1910.9 | 1603.8 | 1357.5 | 1197.9 | 1083.9 | 1026.1 | 1006.3 | 1003.4 |
| 7.5° | 3069.3 | 2733.4 | 2076.6 | 1546.0 | 1184.3 | 972.9 | 881.7 | 845.2 | 833.1 | 819.4 | 816.3 |
| 10° | 3222.8 | 2754.6 | 1883.5 | 1245.1 | 933.4 | 827.0 | 790.5 | 775.3 | 766.2 | 757.1 | 754.0 |
| 12.5° | 3394.6 | 2774.4 | 1692.0 | 1033.7 | 820.9 | 766.2 | 740.4 | 722.1 | 709.9 | 699.3 | 696.3 |
| 15° | 3561.9 | 2786.6 | 1492.8 | 886.3 | 763.1 | 719.0 | 691.7 | 671.9 | 655.2 | 643.1 | 641.5 |
| 17.5° | 3727.5 | 2803.3 | 1305.8 | 798.1 | 716.1 | 671.9 | 644.5 | 620.2 | 606.6 | 592.9 | 591.3 |
| 20° | 3911.5 | 2800.2 | 1129.6 | 735.7 | 668.9 | 624.8 | 595.9 | 573.1 | 559.4 | 544.3 | 542.7 |
| 22.5° | 4081.8 | 2785.0 | 974.5 | 682.5 | 620.2 | 577.7 | 545.7 | 523.0 | 509.2 | 497.1 | 495.6 |
| 25° | 4277.8 | 2772.8 | 845.2 | 634.0 | 574.6 | 532.1 | 497.1 | 475.8 | 460.6 | 450.0 | 448.4 |
| 27.5° | 4466.3 | 2754.6 | 751.0 | 589.9 | 530.5 | 489.5 | 456.0 | 431.7 | 418.1 | 410.4 | 410.4 |
| 30° | 4651.9 | 2750.1 | 716.1 | 547.2 | 491.1 | 450.0 | 416.6 | 393.7 | 383.0 | 380.1 | 378.5 |
| 32.5° | 4875.3 | 2762.3 | 731.2 | 532.1 | 454.6 | 413.5 | 381.6 | 364.9 | 354.2 | 354.2 | 354.2 |
| 35° | 5114.0 | 2759.2 | 754.0 | 545.7 | 430.2 | 377.0 | 352.7 | 342.0 | 331.4 | 331.4 | 331.4 |
| 37.5° | 5413.4 | 2763.7 | 772.2 | 568.6 | 421.1 | 346.7 | 332.9 | 319.3 | 313.1 | 313.1 | 313.1 |
| 40° | 5860.4 | 2914.3 | 763.1 | 588.3 | 418.1 | 325.3 | 298.0 | 293.4 | 288.8 | 288.8 | 288.8 |
| 42.5° | 6407.7 | 3241.0 | 775.3 | 589.9 | 416.6 | 310.2 | 273.7 | 282.8 | 272.1 | 270.6 | 269.1 |
| 45° | 7006.7 | 3598.4 | 852.8 | 557.9 | 415.0 | 302.5 | 261.5 | 272.1 | 255.4 | 255.4 | 255.4 |
| 47.5° | 7601.1 | 3952.5 | 931.9 | 512.3 | 410.4 | 301.0 | 250.8 | 244.8 | 240.2 | 241.7 | 241.7 |
| 50° | 8420.5 | 4241.3 | 962.3 | 450.0 | 399.9 | 298.0 | 231.0 | 232.6 | 229.6 | 232.6 | 232.6 |
| 52.5° | 9312.8 | 4302.2 | 925.8 | 380.1 | 369.4 | 288.8 | 217.4 | 223.4 | 221.9 | 225.0 | 225.0 |
| 55° | 9869.2 | 4236.8 | 764.6 | 316.2 | 322.3 | 252.4 | 203.7 | 215.9 | 215.9 | 215.9 | 215.9 |
| 57.5° | 10443.8 | 3958.7 | 542.7 | 256.9 | 267.5 | 206.7 | 191.6 | 208.3 | 206.7 | 205.2 | 205.2 |
| 60° | 10857.3 | 3508.7 | 357.2 | 211.4 | 212.8 | 170.3 | 177.8 | 196.1 | 194.5 | 187.0 | 187.0 |
| 62.5° | 11165.9 | 3011.6 | 229.6 | 179.4 | 162.7 | 153.5 | 162.7 | 177.8 | 171.8 | 155.1 | 152.0 |
| 65° | 11131.0 | 2322.9 | 176.3 | 153.5 | 133.8 | 133.8 | 141.3 | 155.1 | 136.8 | 109.5 | 106.4 |
| 67.5° | 10481.9 | 1571.9 | 146.0 | 129.3 | 112.5 | 111.0 | 117.1 | 129.3 | 117.1 | 92.8 | 89.7 |
| 70° | 9322.0 | 1027.7 | 117.1 | 100.3 | 89.7 | 82.1 | 94.3 | 111.0 | 98.8 | 74.5 | 71.4 |
| 72.5° | 7566.0 | 626.4 | 88.1 | 73.0 | 65.4 | 53.2 | 74.5 | 91.2 | 79.0 | 54.7 | 51.7 |
| 75° | 4895.1 | 319.3 | 60.8 | 47.2 | 35.0 | 31.9 | 54.7 | 68.4 | 54.7 | 33.4 | 28.9 |
| 77.5° | 1872.9 | 133.8 | 33.4 | 21.3 | 18.2 | 15.2 | 30.4 | 41.0 | 22.8 | 7.6 | 6.0 |
| 80° | 360.3 | 56.3 | 16.7 | 10.7 | 9.1 | 6.0 | 4.5 | 3.1 | 0.0 | 0.0 | 0.0 |
| 82.5° | 62.3 | 18.2 | 6.0 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 21.3 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 7.6 | 0.0 | 0.0 | 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)