

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: STREETWORKS

Report Number: P882450

Luminaire Tested: **NVN-SB2B-827-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882450
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB2B-827-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7060 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

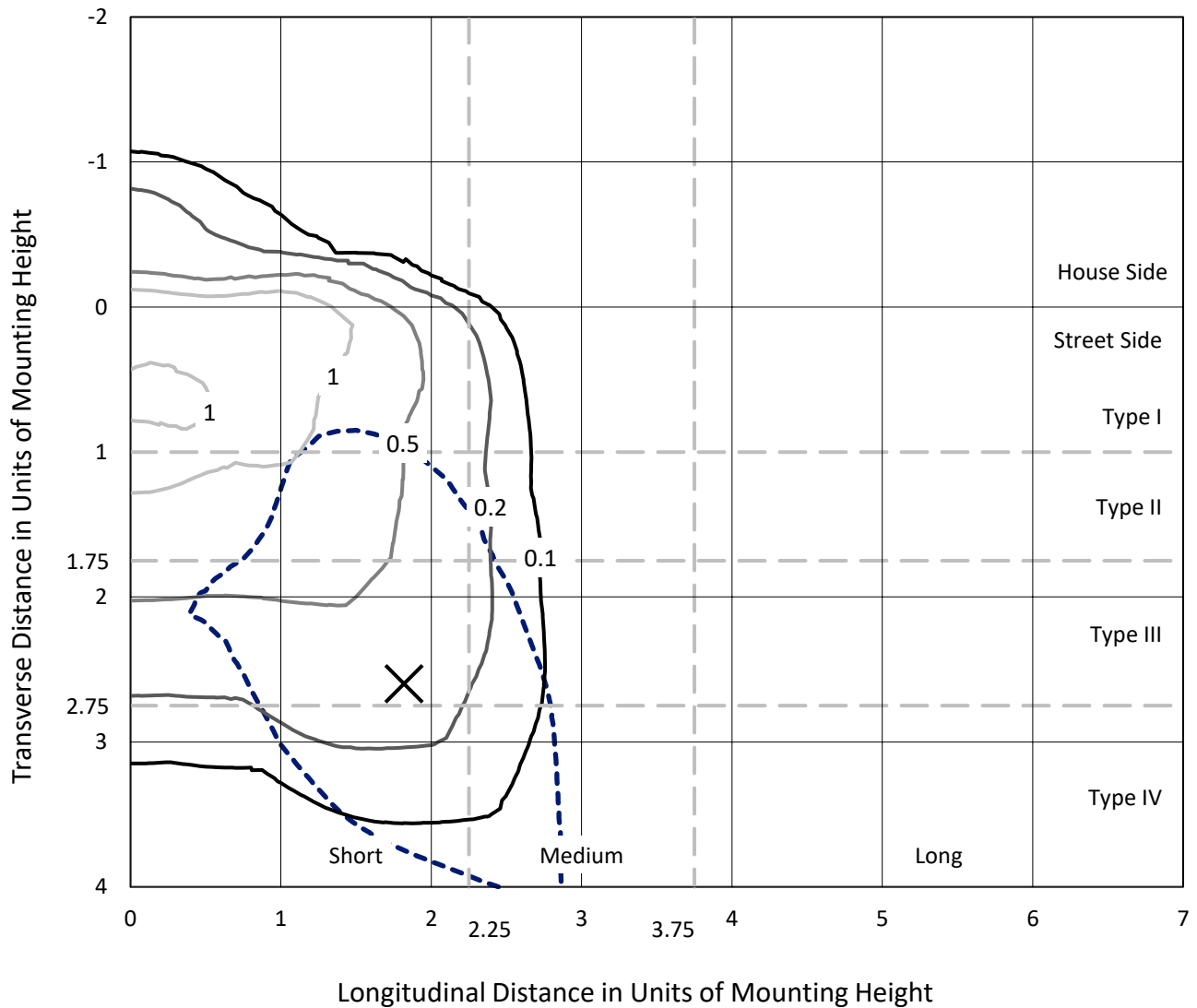
Input Watts (W): 73.9
Input Voltage (V): 120.0
Input Current (Ain): 0.627
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

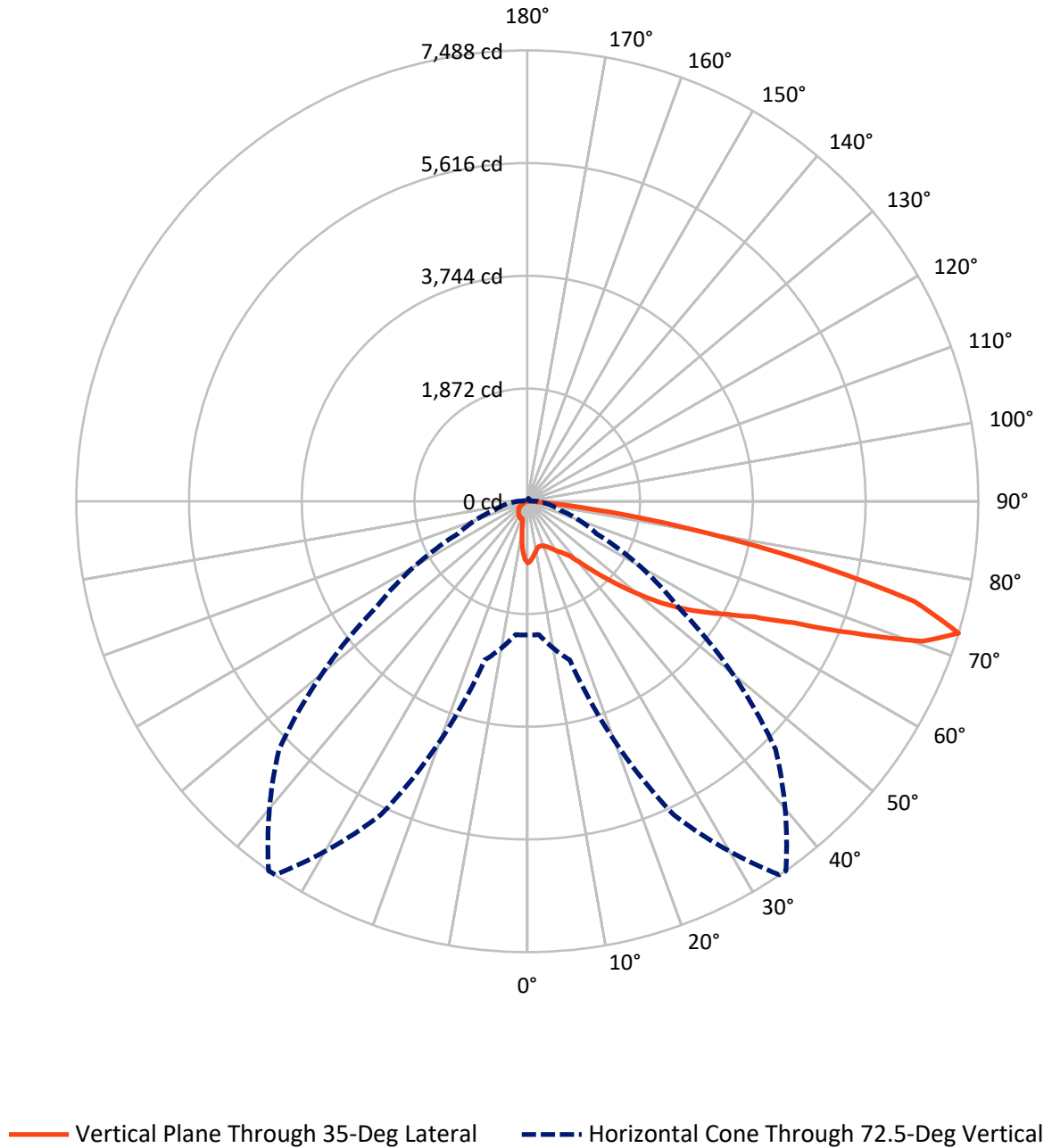
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 794.6 | 0.0 | 794.6 |
| | % Fixture | 11.3 | 0.0 | 11.3 |
| Street Side | Lumens | 6265.4 | 0.0 | 6265.4 |
| | % Fixture | 88.7 | 0.0 | 88.7 |
| Total | Lumens | 7060.0 | 0.0 | 7060.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 84.1 | 1.2 |
| 10°-20° | 196.7 | 2.8 |
| 20°-30° | 319.5 | 4.5 |
| 30°-40° | 533.1 | 7.6 |
| 40°-50° | 1008.7 | 14.3 |
| 50°-60° | 1602.8 | 22.7 |
| 60°-70° | 1982.8 | 28.1 |
| 70°-80° | 1232.5 | 17.5 |
| 80°-90° | 99.6 | 1.4 |
| 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° | 7060.0 | 100.0 |
| 0°-180° | 7060.0 | 100.0 |

Coefficient of Utilization



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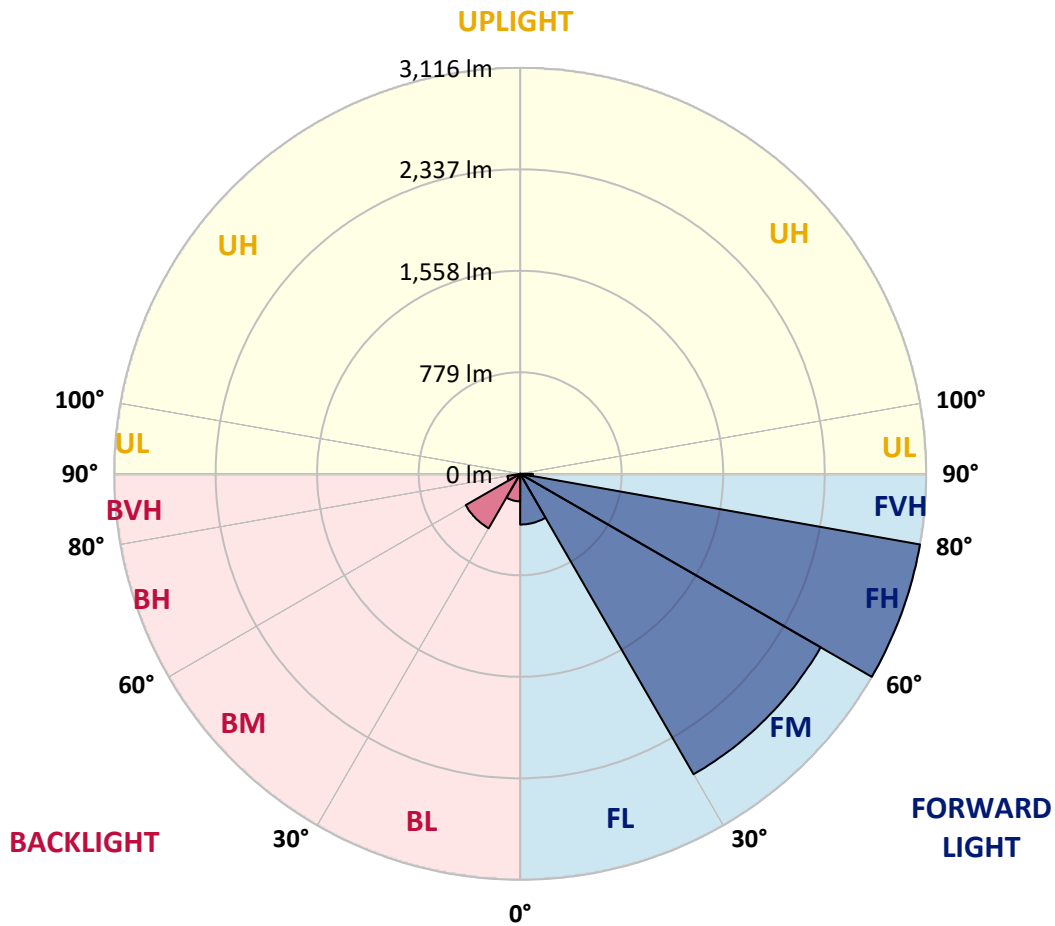
CATALOG NUMBER: NVN-SB2B-827-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 389.2 | 5.5 | | | |
| FM (30°-60°) | 2662.3 | 37.7 | | | |
| FH (60°-80°) | 3115.7 | 44.1 | | | G2/5000 |
| FVH (80°-90°) | 98.3 | 1.4 | | | G1/100 |
| BL (0°-30°) | 211.1 | 3.0 | B1/500 | | |
| BM (30°-60°) | 482.4 | 6.8 | B1/1000 | | |
| BH (60°-80°) | 99.7 | 1.4 | B0/110 | | G0/110 |
| BVH (80°-90°) | 1.4 | 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-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 34° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1023.2 | 1023.2 | 1023.2 | 1023.2 | 1023.2 | 1023.2 | 1023.2 | 1023.2 | 1023.2 | 1023.2 | 1023.2 |
| 2.5° | 977.7 | 986.0 | 987.5 | 990.1 | 990.1 | 993.2 | 998.4 | 1005.6 | 1017.5 | 1023.7 | 1027.9 |
| 5° | 901.1 | 907.4 | 915.1 | 921.3 | 933.2 | 934.8 | 954.9 | 974.6 | 1002.0 | 1022.7 | 1037.2 |
| 7.5° | 824.1 | 831.3 | 841.7 | 856.7 | 872.2 | 876.8 | 907.4 | 940.5 | 983.9 | 1022.7 | 1047.0 |
| 10° | 769.8 | 770.3 | 779.6 | 794.6 | 819.4 | 825.1 | 862.3 | 909.4 | 963.7 | 1016.5 | 1056.3 |
| 12.5° | 739.2 | 742.9 | 747.0 | 758.4 | 782.2 | 785.8 | 825.6 | 881.0 | 943.6 | 1012.9 | 1067.2 |
| 15° | 739.2 | 741.8 | 744.4 | 750.1 | 769.2 | 772.3 | 807.5 | 862.9 | 933.2 | 1014.4 | 1084.8 |
| 17.5° | 747.0 | 751.1 | 749.1 | 755.8 | 776.0 | 778.0 | 809.1 | 857.7 | 932.7 | 1024.3 | 1111.7 |
| 20° | 765.6 | 768.7 | 764.6 | 768.7 | 788.9 | 793.0 | 825.1 | 867.5 | 941.5 | 1041.3 | 1145.3 |
| 22.5° | 795.1 | 796.7 | 786.8 | 789.9 | 810.6 | 815.8 | 853.0 | 895.5 | 962.7 | 1068.8 | 1190.3 |
| 25° | 832.3 | 835.4 | 820.4 | 824.1 | 843.7 | 849.9 | 892.9 | 937.4 | 996.3 | 1106.5 | 1247.7 |
| 27.5° | 875.3 | 876.8 | 863.9 | 863.4 | 888.7 | 897.5 | 941.0 | 989.1 | 1041.3 | 1154.1 | 1320.2 |
| 30° | 924.4 | 929.1 | 916.7 | 914.6 | 946.7 | 953.9 | 996.8 | 1052.7 | 1107.6 | 1225.5 | 1423.1 |
| 32.5° | 963.2 | 966.8 | 959.6 | 964.8 | 997.4 | 1003.1 | 1064.6 | 1142.7 | 1211.5 | 1326.9 | 1563.3 |
| 35° | 1019.1 | 1021.2 | 1004.6 | 1013.9 | 1051.2 | 1065.6 | 1157.2 | 1269.0 | 1342.4 | 1454.1 | 1746.4 |
| 37.5° | 1221.4 | 1221.4 | 1151.0 | 1105.0 | 1140.7 | 1153.6 | 1284.0 | 1427.8 | 1503.8 | 1624.9 | 1977.1 |
| 40° | 1501.2 | 1496.6 | 1393.6 | 1299.5 | 1294.8 | 1320.2 | 1464.5 | 1628.0 | 1712.3 | 1829.7 | 2236.8 |
| 42.5° | 1799.7 | 1792.5 | 1652.3 | 1559.2 | 1543.6 | 1552.4 | 1673.0 | 1874.7 | 1960.6 | 2079.6 | 2516.2 |
| 45° | 2064.6 | 2062.5 | 1934.2 | 1809.0 | 1781.1 | 1809.0 | 1933.2 | 2163.4 | 2224.9 | 2350.1 | 2795.0 |
| 47.5° | 2286.5 | 2286.5 | 2192.9 | 2111.1 | 2096.6 | 2113.2 | 2285.5 | 2483.6 | 2477.9 | 2638.3 | 3066.6 |
| 50° | 2542.0 | 2540.0 | 2451.0 | 2415.8 | 2430.8 | 2454.1 | 2691.0 | 2820.9 | 2739.7 | 2921.2 | 3309.2 |
| 52.5° | 2721.0 | 2733.4 | 2702.9 | 2697.2 | 2773.8 | 2814.1 | 3102.8 | 3150.9 | 2974.0 | 3189.7 | 3490.8 |
| 55° | 2862.8 | 2877.3 | 2912.4 | 2952.3 | 3099.7 | 3152.5 | 3501.6 | 3463.9 | 3170.0 | 3422.5 | 3595.3 |
| 57.5° | 3063.5 | 3042.8 | 3097.1 | 3175.7 | 3414.2 | 3477.8 | 3888.1 | 3759.3 | 3327.8 | 3611.3 | 3606.7 |
| 60° | 3307.1 | 3310.2 | 3319.6 | 3418.9 | 3728.2 | 3810.0 | 4268.8 | 4038.6 | 3429.2 | 3727.2 | 3480.4 |
| 62.5° | 3599.9 | 3604.6 | 3623.7 | 3776.3 | 4149.8 | 4226.9 | 4674.4 | 4267.3 | 3475.8 | 3694.6 | 3154.5 |
| 65° | 3579.8 | 3599.4 | 3813.1 | 4335.0 | 4790.8 | 4866.8 | 5147.7 | 4427.6 | 3405.4 | 3396.6 | 2568.4 |
| 67.5° | 3261.1 | 3293.2 | 3650.6 | 5002.3 | 5757.1 | 5841.9 | 5719.8 | 4459.2 | 3101.8 | 2641.4 | 1675.6 |
| 70° | 2843.1 | 2854.5 | 3284.4 | 5602.4 | 6876.0 | 6961.9 | 6232.0 | 4112.1 | 2353.7 | 1473.3 | 750.6 |
| 72.5° | 2220.3 | 2222.9 | 2727.2 | 5741.6 | 7483.3 | 7488.0 | 5830.0 | 3052.6 | 1265.8 | 565.9 | 260.7 |
| 75° | 1586.1 | 1570.5 | 1826.6 | 4656.3 | 6583.7 | 6636.5 | 4370.7 | 1431.9 | 483.7 | 267.4 | 129.8 |
| 77.5° | 850.5 | 867.5 | 1033.6 | 2761.4 | 4548.2 | 4638.2 | 2384.8 | 412.8 | 246.2 | 182.1 | 85.9 |
| 80° | 262.8 | 277.3 | 423.7 | 1264.3 | 2576.2 | 2630.5 | 884.1 | 183.6 | 171.7 | 129.8 | 56.4 |
| 82.5° | 82.8 | 85.9 | 197.6 | 531.3 | 1069.3 | 1094.1 | 256.1 | 104.0 | 117.4 | 85.9 | 33.1 |
| 85° | 23.8 | 24.3 | 87.9 | 198.1 | 264.3 | 269.5 | 71.9 | 40.3 | 67.2 | 53.3 | 17.1 |
| 87.5° | 2.6 | 8.3 | 33.1 | 33.1 | 23.3 | 22.8 | 7.8 | 8.8 | 19.1 | 6.7 | 3.1 |
| 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° | 1023.2 | 1023.2 | 1023.2 | 1023.2 | 1023.2 | 1023.2 | 1023.2 | 1023.2 | 1023.2 | 1023.2 | 1023.2 |
| 2.5° | 1025.3 | 1025.8 | 1019.1 | 1007.7 | 995.3 | 985.0 | 972.0 | 961.7 | 954.4 | 952.4 | 956.0 |
| 5° | 1032.5 | 1028.9 | 1009.8 | 975.1 | 933.7 | 898.0 | 858.2 | 826.7 | 806.0 | 797.2 | 800.3 |
| 7.5° | 1043.4 | 1033.1 | 991.2 | 922.9 | 843.7 | 773.4 | 702.0 | 646.6 | 611.5 | 593.9 | 596.5 |
| 10° | 1052.7 | 1032.0 | 960.1 | 847.3 | 726.3 | 619.7 | 523.5 | 456.8 | 419.5 | 401.9 | 402.5 |
| 12.5° | 1061.5 | 1031.5 | 919.8 | 757.9 | 593.9 | 463.5 | 374.0 | 340.9 | 330.6 | 326.9 | 325.9 |
| 15° | 1078.1 | 1033.1 | 869.1 | 655.4 | 462.0 | 350.2 | 317.6 | 317.1 | 319.2 | 318.1 | 317.6 |
| 17.5° | 1100.8 | 1034.6 | 811.7 | 546.8 | 356.4 | 308.8 | 307.3 | 311.9 | 315.0 | 313.5 | 313.0 |
| 20° | 1130.3 | 1040.8 | 750.6 | 439.2 | 306.2 | 298.5 | 302.1 | 306.2 | 308.8 | 306.2 | 305.7 |
| 22.5° | 1171.7 | 1051.7 | 683.9 | 352.8 | 290.2 | 292.3 | 295.4 | 300.0 | 302.6 | 299.0 | 298.5 |
| 25° | 1222.4 | 1068.8 | 618.2 | 306.8 | 282.4 | 285.0 | 289.7 | 294.9 | 298.0 | 294.3 | 293.8 |
| 27.5° | 1288.1 | 1096.2 | 557.7 | 296.4 | 274.7 | 276.2 | 283.0 | 290.7 | 294.9 | 290.2 | 290.2 |
| 30° | 1383.3 | 1141.2 | 505.4 | 301.1 | 270.0 | 266.4 | 275.7 | 286.6 | 291.2 | 287.1 | 286.6 |
| 32.5° | 1509.5 | 1204.8 | 473.3 | 308.3 | 268.0 | 255.0 | 263.8 | 277.8 | 285.6 | 283.0 | 283.0 |
| 35° | 1675.0 | 1301.5 | 460.9 | 316.6 | 266.4 | 243.1 | 249.3 | 264.3 | 277.8 | 280.4 | 280.4 |
| 37.5° | 1875.8 | 1436.0 | 464.5 | 320.2 | 261.8 | 233.3 | 236.4 | 249.3 | 266.9 | 275.2 | 277.3 |
| 40° | 2103.9 | 1592.8 | 485.2 | 316.6 | 256.6 | 225.0 | 225.5 | 235.4 | 250.9 | 263.3 | 267.4 |
| 42.5° | 2339.3 | 1775.9 | 523.5 | 303.1 | 251.9 | 217.8 | 216.2 | 223.0 | 233.3 | 242.1 | 245.7 |
| 45° | 2563.2 | 1964.2 | 561.3 | 284.5 | 246.2 | 210.5 | 206.9 | 209.5 | 211.6 | 215.2 | 217.3 |
| 47.5° | 2758.8 | 2096.6 | 550.4 | 267.4 | 238.5 | 202.3 | 196.1 | 195.0 | 188.8 | 188.3 | 187.8 |
| 50° | 2893.8 | 2125.6 | 488.9 | 250.4 | 227.1 | 193.0 | 183.1 | 176.9 | 166.1 | 160.9 | 161.4 |
| 52.5° | 2936.7 | 2011.3 | 399.4 | 233.3 | 208.5 | 180.5 | 166.6 | 156.7 | 143.3 | 138.6 | 138.1 |
| 55° | 2879.8 | 1787.3 | 319.2 | 212.6 | 182.6 | 164.0 | 148.5 | 135.5 | 124.7 | 119.0 | 119.0 |
| 57.5° | 2740.7 | 1502.3 | 252.4 | 188.3 | 155.2 | 145.4 | 129.8 | 116.9 | 107.6 | 101.9 | 100.9 |
| 60° | 2510.0 | 1192.9 | 199.7 | 159.3 | 132.4 | 125.2 | 109.2 | 100.9 | 92.6 | 85.9 | 84.3 |
| 62.5° | 2159.8 | 851.5 | 156.7 | 126.2 | 110.7 | 102.4 | 93.1 | 86.9 | 77.1 | 67.8 | 66.2 |
| 65° | 1685.4 | 520.9 | 121.0 | 92.6 | 89.0 | 84.8 | 79.1 | 73.5 | 61.6 | 52.2 | 50.7 |
| 67.5° | 1063.1 | 246.8 | 86.4 | 69.8 | 70.4 | 68.3 | 65.7 | 61.0 | 52.2 | 44.0 | 42.9 |
| 70° | 468.2 | 119.5 | 56.9 | 53.3 | 52.2 | 52.2 | 54.3 | 52.8 | 44.5 | 36.7 | 35.2 |
| 72.5° | 159.3 | 64.1 | 42.4 | 40.3 | 37.8 | 37.2 | 45.5 | 44.0 | 35.7 | 28.5 | 26.9 |
| 75° | 83.3 | 42.9 | 31.0 | 29.0 | 22.8 | 27.4 | 36.2 | 34.1 | 25.3 | 18.6 | 17.1 |
| 77.5° | 54.3 | 30.5 | 21.2 | 18.6 | 12.9 | 18.1 | 26.9 | 23.8 | 15.0 | 9.3 | 8.3 |
| 80° | 34.1 | 20.2 | 12.4 | 8.8 | 6.2 | 9.8 | 14.5 | 10.3 | 5.7 | 2.1 | 1.6 |
| 82.5° | 18.1 | 10.3 | 4.7 | 3.1 | 2.6 | 3.1 | 3.6 | 2.6 | 1.0 | 0.0 | 0.0 |
| 85° | 7.2 | 3.6 | 1.6 | 1.0 | 0.5 | 0.0 | 1.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 87.5° | 2.6 | 0.5 | 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)