

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: P966150

Luminaire Tested: **NVN-SB4B-735-U-T2R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P966150  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SB4B-735-U-T2R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23561.7 lumens  
Efficiency: N/A  
Efficacy: 160.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

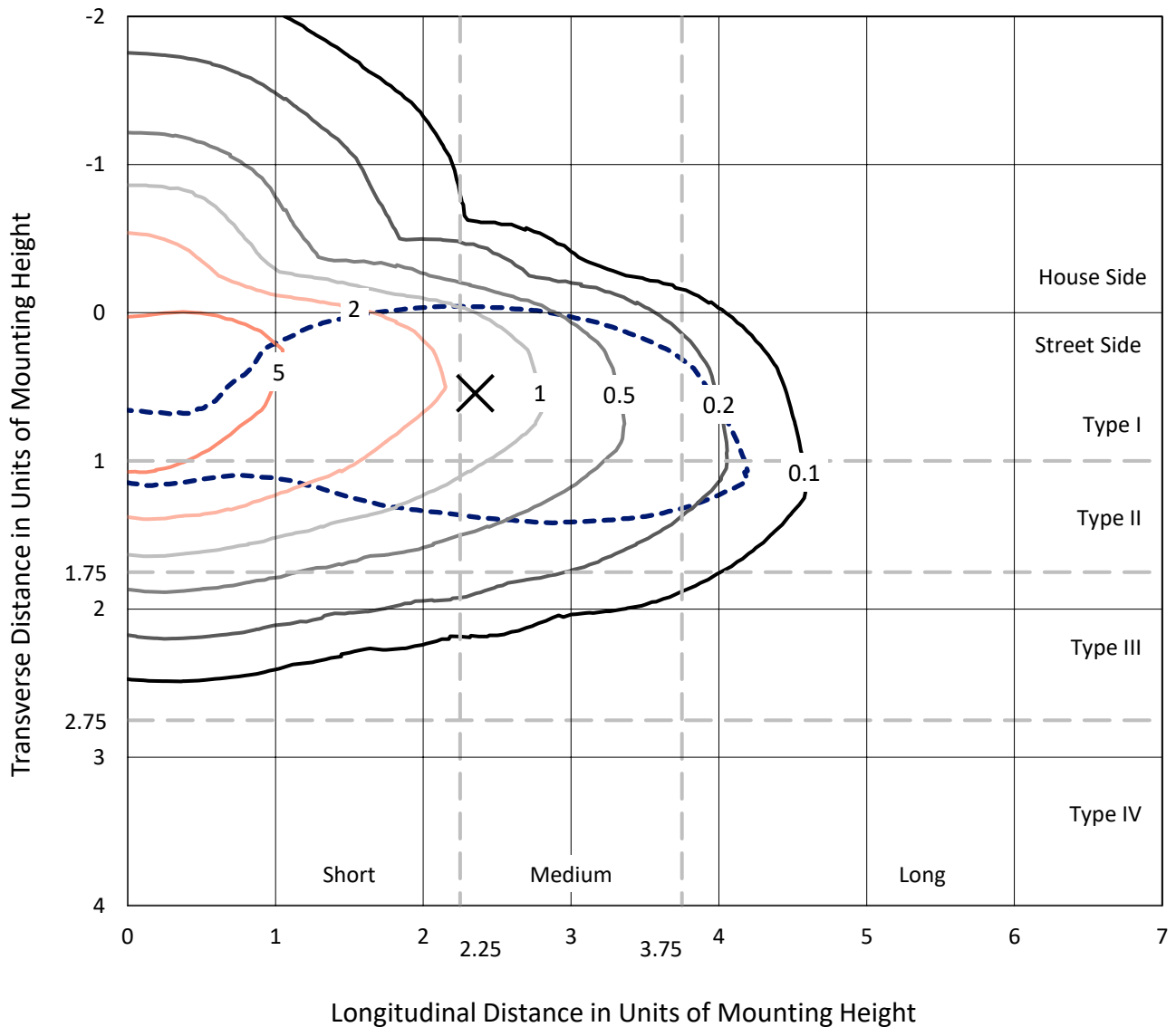
Input Watts (W): 147  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

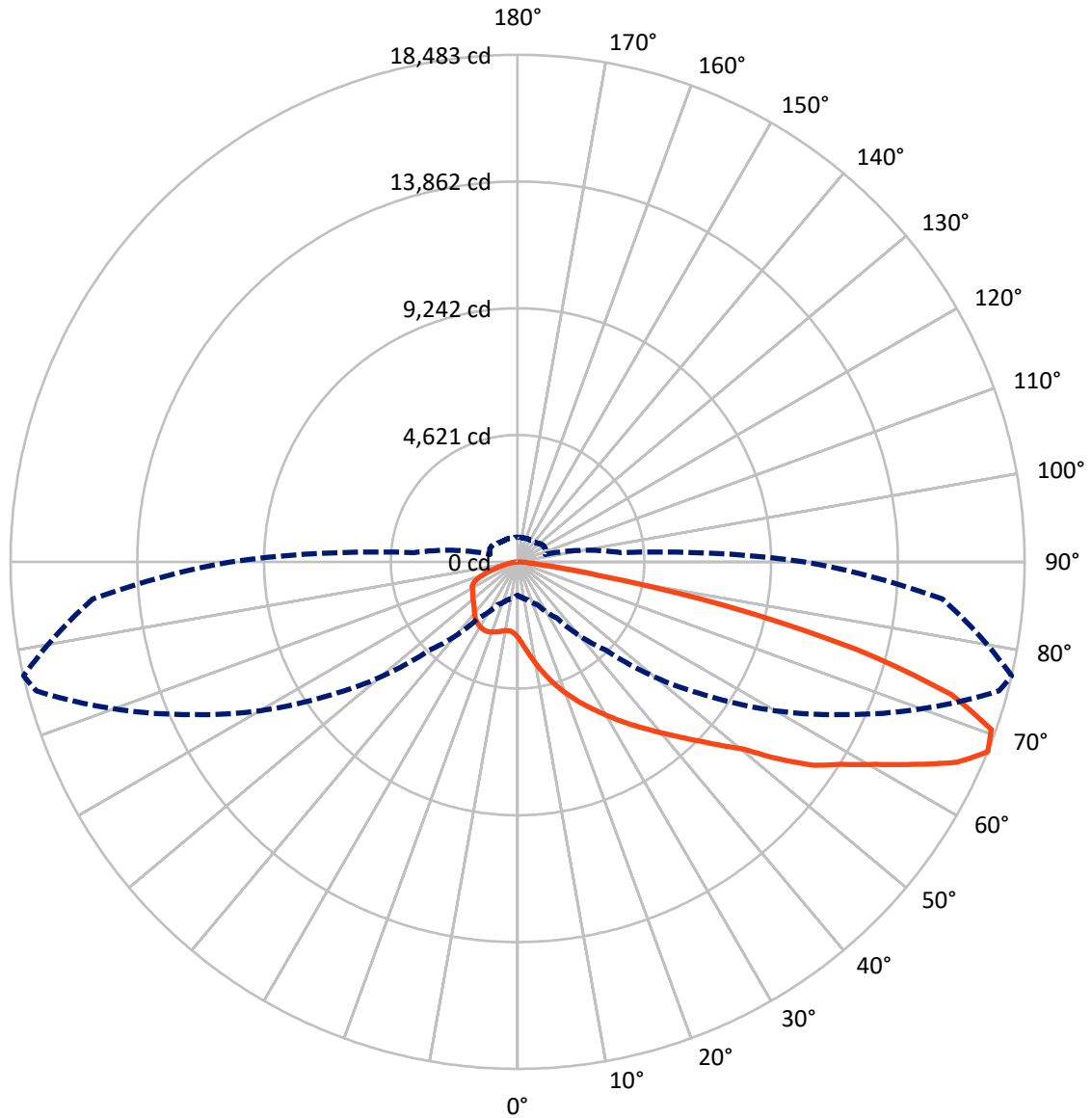
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 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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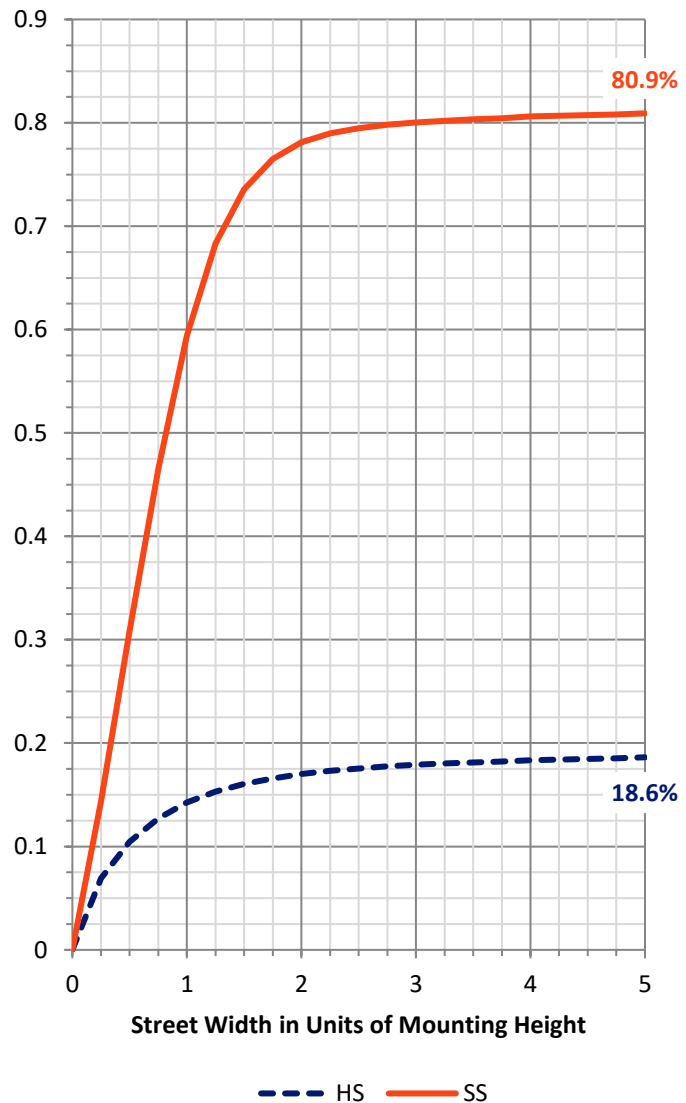
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4456.9   | 0.0    | 4456.9  |
|                    | % Fixture | 18.9     | 0.0    | 18.9    |
| <b>Street Side</b> | Lumens    | 19104.7  | 0.0    | 19104.7 |
|                    | % Fixture | 81.1     | 0.0    | 81.1    |
| <b>Total</b>       | Lumens    | 23561.7  | 0.0    | 23561.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 296.3   | 1.3       |
| 10°-20°   | 1064.6  | 4.5       |
| 20°-30°   | 2010.0  | 8.5       |
| 30°-40°   | 3238.1  | 13.7      |
| 40°-50°   | 4429.1  | 18.8      |
| 50°-60°   | 4996.0  | 21.2      |
| 60°-70°   | 4663.2  | 19.8      |
| 70°-80°   | 2556.2  | 10.8      |
| 80°-90°   | 308.3   | 1.3       |
| 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°    | 23561.7 | 100.0     |
| 0°-180°   | 23561.7 | 100.0     |

**Coefficient of Utilization**

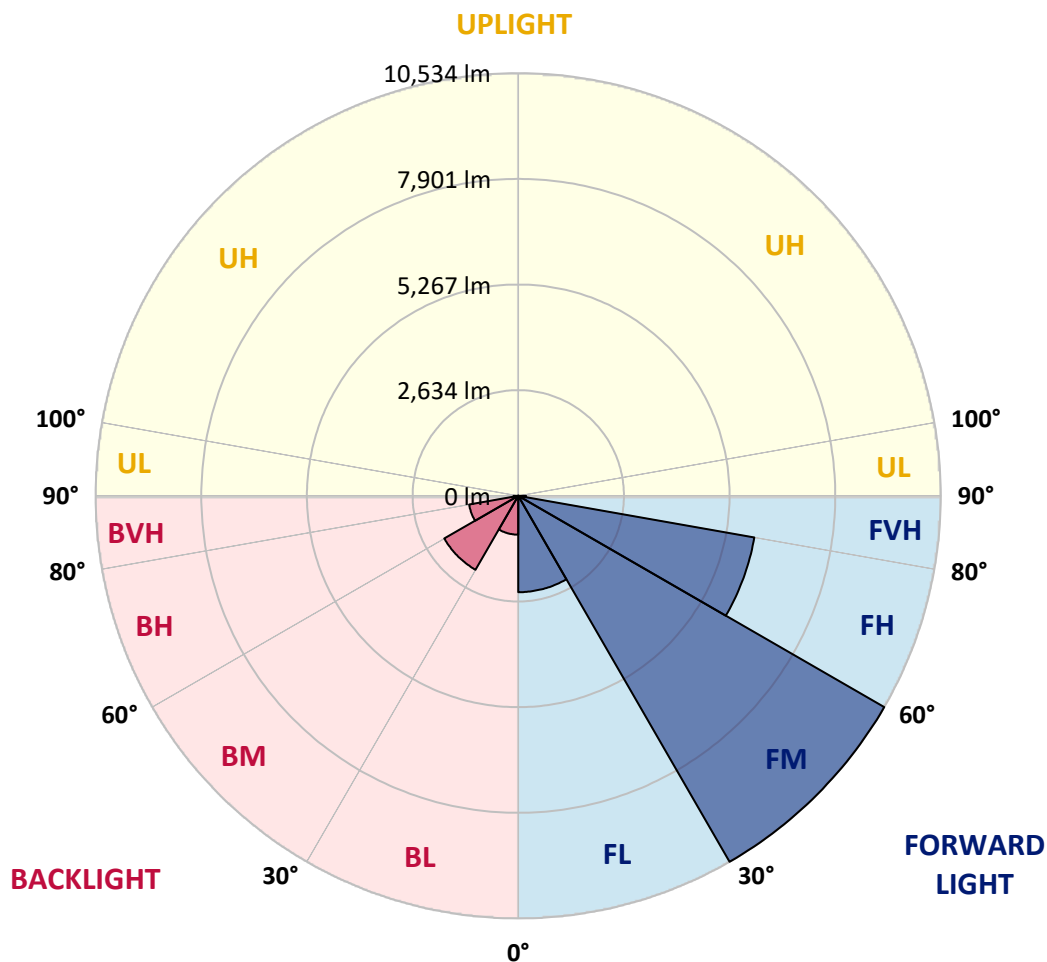


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 2401.8  | 10.2      |                         |      |         |
| FM (30°-60°)   | 10534.2 | 44.7      |                         |      |         |
| FH (60°-80°)   | 5975.9  | 25.4      |                         |      | G3/7500 |
| FVH (80°-90°)  | 192.8   | 0.8       |                         |      | G2/225  |
| BL (0°-30°)    | 969.0   | 4.1       | B2/1000                 |      |         |
| BM (30°-60°)   | 2128.9  | 9.0       | B2/2500                 |      |         |
| BH (60°-80°)   | 1243.4  | 5.3       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 115.5   | 0.5       |                         |      | G2/225  |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**  
 Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°    | 45°     | 55°     | 65°     | 75°     | 77°     | 85°     |
|-------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| 0°    | 2764.5  | 2764.5  | 2764.5  | 2764.5  | 2764.5 | 2764.5  | 2764.5  | 2764.5  | 2764.5  | 2764.5  | 2764.5  |
| 2.5°  | 3461.4  | 3485.7  | 3455.4  | 3455.4  | 3353.2 | 3299.7  | 3197.5  | 3119.7  | 2979.8  | 2955.5  | 2863.0  |
| 5°    | 4091.4  | 4121.8  | 4079.3  | 4061.0  | 3940.6 | 3829.9  | 3658.4  | 3489.4  | 3240.0  | 3214.5  | 2996.8  |
| 7.5°  | 4579.2  | 4618.0  | 4580.3  | 4560.9  | 4453.8 | 4329.8  | 4129.1  | 3893.2  | 3541.7  | 3491.9  | 3176.8  |
| 10°   | 4976.9  | 4982.9  | 4970.7  | 4978.1  | 4894.2 | 4792.0  | 4586.5  | 4311.6  | 3872.6  | 3804.4  | 3394.5  |
| 12.5° | 5201.9  | 5229.9  | 5254.2  | 5297.9  | 5283.4 | 5220.1  | 5035.2  | 4706.9  | 4222.8  | 4135.3  | 3631.7  |
| 15°   | 5307.7  | 5356.3  | 5411.1  | 5512.0  | 5593.5 | 5609.3  | 5468.2  | 5131.4  | 4579.2  | 4473.3  | 3871.3  |
| 17.5° | 5345.4  | 5391.6  | 5477.9  | 5623.9  | 5799.0 | 5917.0  | 5853.8  | 5543.6  | 4931.9  | 4810.2  | 4123.1  |
| 20°   | 5536.3  | 5549.8  | 5602.0  | 5740.6  | 5930.3 | 6126.2  | 6173.7  | 5940.1  | 5280.9  | 5143.4  | 4383.3  |
| 22.5° | 5945.0  | 5918.2  | 5932.8  | 5996.0  | 6132.3 | 6322.0  | 6430.2  | 6290.4  | 5639.8  | 5481.6  | 4646.0  |
| 25°   | 6620.0  | 6542.2  | 6464.4  | 6391.4  | 6460.7 | 6567.7  | 6690.6  | 6640.7  | 6015.5  | 5814.8  | 4911.2  |
| 27.5° | 7472.6  | 7377.7  | 7206.3  | 6966.6  | 6882.7 | 6920.4  | 6975.1  | 6965.4  | 6363.4  | 6160.2  | 5184.9  |
| 30°   | 8311.8  | 8201.1  | 7996.7  | 7650.2  | 7428.8 | 7329.1  | 7287.7  | 7259.8  | 6741.6  | 6525.2  | 5460.9  |
| 32.5° | 8982.0  | 8894.3  | 8693.7  | 8305.7  | 7984.6 | 7814.4  | 7676.9  | 7577.2  | 7136.9  | 6920.4  | 5752.8  |
| 35°   | 9568.2  | 9486.7  | 9256.8  | 8833.6  | 8484.5 | 8303.3  | 8123.2  | 7910.4  | 7548.0  | 7329.1  | 6066.6  |
| 37.5° | 10103.3 | 10021.8 | 9706.9  | 9266.5  | 8915.0 | 8789.8  | 8629.3  | 8268.0  | 7960.3  | 7753.5  | 6398.7  |
| 40°   | 10441.5 | 10423.2 | 10128.8 | 9630.2  | 9265.3 | 9203.3  | 9149.8  | 8682.8  | 8417.6  | 8225.4  | 6763.6  |
| 42.5° | 10527.8 | 10568.0 | 10334.4 | 9924.6  | 9576.7 | 9526.9  | 9652.1  | 9152.2  | 8930.8  | 8747.2  | 7177.0  |
| 45°   | 10319.8 | 10435.3 | 10282.1 | 10003.6 | 9798.1 | 9771.3  | 10097.3 | 9665.4  | 9498.9  | 9331.0  | 7675.7  |
| 47.5° | 9793.2  | 9989.0  | 9925.8  | 9886.8  | 9857.6 | 9973.1  | 10488.8 | 10210.3 | 10142.3 | 9996.3  | 8244.9  |
| 50°   | 8730.1  | 9101.2  | 9211.8  | 9457.5  | 9739.7 | 10130.1 | 10845.2 | 10805.0 | 10893.9 | 10746.7 | 8938.2  |
| 52.5° | 6892.4  | 7403.3  | 8045.4  | 8660.8  | 9377.2 | 10077.8 | 11236.9 | 11658.9 | 12033.5 | 11953.2 | 10040.1 |
| 55°   | 5689.6  | 5919.5  | 6413.2  | 7541.9  | 8674.3 | 9857.6  | 11413.2 | 12348.5 | 13164.6 | 13092.8 | 10875.7 |
| 57.5° | 4765.2  | 4970.7  | 5274.9  | 6217.4  | 7611.2 | 9357.7  | 11522.6 | 12769.3 | 13939.4 | 13932.0 | 11700.3 |
| 60°   | 3773.9  | 3991.7  | 4303.1  | 4970.7  | 6369.5 | 8494.3  | 11498.3 | 13248.5 | 14928.1 | 14989.0 | 12706.1 |
| 62.5° | 2655.1  | 2894.7  | 3240.0  | 3862.8  | 5100.9 | 7375.3  | 11002.1 | 13595.2 | 16092.1 | 16257.5 | 13916.2 |
| 65°   | 1745.3  | 1903.4  | 2163.7  | 2701.3  | 3800.8 | 5936.5  | 10054.6 | 13640.2 | 17337.6 | 17617.3 | 15052.2 |
| 67.5° | 1223.5  | 1284.3  | 1437.6  | 1729.5  | 2505.4 | 4552.4  | 8545.3  | 13174.3 | 18168.2 | 18483.2 | 15544.7 |
| 70°   | 954.8   | 985.1   | 1063.0  | 1179.8  | 1573.8 | 3061.3  | 6548.2  | 11963.0 | 17990.6 | 18319.0 | 15030.3 |
| 72.5° | 824.6   | 853.8   | 883.0   | 897.6   | 1055.6 | 1890.0  | 4435.6  | 10002.4 | 16318.3 | 16540.8 | 13068.5 |
| 75°   | 747.9   | 755.3   | 779.6   | 774.7   | 805.1  | 1226.0  | 2560.1  | 7287.7  | 12875.1 | 12798.5 | 9647.2  |
| 77.5° | 628.8   | 638.6   | 678.7   | 672.6   | 715.1  | 838.0   | 1329.3  | 4703.2  | 8347.1  | 7826.5  | 5369.7  |
| 80°   | 532.7   | 537.6   | 581.4   | 574.1   | 621.5  | 606.9   | 678.7   | 2397.2  | 3540.5  | 2999.3  | 1548.3  |
| 82.5° | 184.9   | 228.7   | 443.9   | 457.4   | 474.4  | 367.3   | 391.7   | 977.8   | 1081.3  | 828.3   | 324.7   |
| 85°   | 90.0    | 96.0    | 226.2   | 321.1   | 319.9  | 184.9   | 191.0   | 349.0   | 340.5   | 267.5   | 108.2   |
| 87.5° | 14.6    | 18.2    | 26.8    | 125.3   | 99.7   | 48.7    | 65.7    | 68.1    | 70.5    | 60.8    | 24.3    |
| 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°    | 2764.5  | 2764.5 | 2764.5 | 2764.5 | 2764.5 | 2764.5 | 2764.5 | 2764.5 | 2764.5 | 2764.5 | 2764.5 |
| 2.5°  | 2795.0  | 2734.1 | 2606.4 | 2488.4 | 2396.0 | 2307.2 | 2257.4 | 2214.8 | 2190.4 | 2185.6 | 2185.6 |
| 5°    | 2870.3  | 2745.1 | 2512.8 | 2316.9 | 2189.2 | 2094.4 | 2044.5 | 2012.9 | 1997.1 | 1987.4 | 1986.1 |
| 7.5°  | 2978.5  | 2795.0 | 2464.1 | 2241.6 | 2107.7 | 2039.6 | 2014.1 | 2009.2 | 2008.0 | 2009.2 | 2012.9 |
| 10°   | 3128.2  | 2876.5 | 2459.3 | 2223.3 | 2111.4 | 2073.7 | 2072.4 | 2073.7 | 2078.6 | 2079.7 | 2081.0 |
| 12.5° | 3289.9  | 2960.3 | 2478.7 | 2239.1 | 2157.6 | 2136.9 | 2133.3 | 2132.1 | 2135.7 | 2138.1 | 2139.4 |
| 15°   | 3466.2  | 3071.0 | 2511.6 | 2273.1 | 2208.7 | 2186.8 | 2183.1 | 2175.9 | 2174.6 | 2173.4 | 2172.2 |
| 17.5° | 3647.5  | 3180.5 | 2548.0 | 2309.6 | 2241.6 | 2211.1 | 2197.7 | 2180.7 | 2167.4 | 2163.7 | 2167.4 |
| 20°   | 3831.1  | 3288.7 | 2573.6 | 2327.9 | 2243.9 | 2201.4 | 2174.6 | 2145.4 | 2122.4 | 2108.9 | 2113.9 |
| 22.5° | 4027.0  | 3401.9 | 2589.4 | 2323.1 | 2222.1 | 2163.7 | 2115.1 | 2081.0 | 2045.7 | 2022.6 | 2023.9 |
| 25°   | 4217.9  | 3500.4 | 2588.1 | 2297.4 | 2179.5 | 2105.4 | 2043.2 | 1999.5 | 1950.9 | 1926.5 | 1926.5 |
| 27.5° | 4401.6  | 3589.1 | 2557.8 | 2252.4 | 2118.7 | 2036.0 | 1961.7 | 1909.5 | 1862.0 | 1839.0 | 1837.7 |
| 30°   | 4591.3  | 3663.4 | 2510.3 | 2186.8 | 2046.9 | 1955.7 | 1874.2 | 1829.2 | 1786.7 | 1764.7 | 1763.5 |
| 32.5° | 4779.8  | 3731.4 | 2443.4 | 2105.4 | 1964.2 | 1876.7 | 1796.4 | 1755.0 | 1729.5 | 1729.5 | 1730.7 |
| 35°   | 4979.2  | 3778.9 | 2354.6 | 2010.4 | 1876.7 | 1792.7 | 1729.5 | 1705.2 | 1702.7 | 1688.2 | 1684.5 |
| 37.5° | 5189.7  | 3809.3 | 2246.4 | 1913.2 | 1790.3 | 1711.2 | 1691.8 | 1662.7 | 1638.3 | 1606.7 | 1601.8 |
| 40°   | 5411.1  | 3839.6 | 2116.2 | 1812.2 | 1699.0 | 1655.3 | 1646.8 | 1607.9 | 1538.5 | 1460.7 | 1449.8 |
| 42.5° | 5679.8  | 3860.4 | 1981.2 | 1711.2 | 1603.0 | 1588.4 | 1600.5 | 1533.7 | 1423.0 | 1364.6 | 1365.8 |
| 45°   | 5991.2  | 3894.4 | 1857.2 | 1611.5 | 1504.5 | 1504.5 | 1555.5 | 1468.0 | 1376.8 | 1340.3 | 1346.3 |
| 47.5° | 6395.0  | 3973.4 | 1741.7 | 1502.0 | 1413.3 | 1437.6 | 1455.8 | 1389.0 | 1337.8 | 1292.8 | 1291.6 |
| 50°   | 6978.8  | 4163.2 | 1622.5 | 1391.3 | 1344.0 | 1392.6 | 1367.0 | 1328.1 | 1268.5 | 1232.0 | 1228.4 |
| 52.5° | 7703.7  | 4275.1 | 1516.7 | 1291.6 | 1284.3 | 1333.0 | 1296.5 | 1260.0 | 1215.0 | 1166.3 | 1156.6 |
| 55°   | 8197.4  | 4295.8 | 1427.8 | 1218.7 | 1244.2 | 1239.3 | 1226.0 | 1193.1 | 1168.8 | 1104.3 | 1105.6 |
| 57.5° | 8749.6  | 4337.1 | 1354.8 | 1174.9 | 1218.7 | 1165.1 | 1160.3 | 1132.3 | 1100.7 | 1056.9 | 1042.3 |
| 60°   | 9410.0  | 4401.6 | 1291.6 | 1157.8 | 1196.8 | 1116.5 | 1092.1 | 1081.3 | 1049.6 | 1027.8 | 1033.8 |
| 62.5° | 10130.1 | 4460.0 | 1227.2 | 1160.3 | 1171.3 | 1069.1 | 1032.6 | 1028.9 | 1009.5 | 1002.1 | 1002.1 |
| 65°   | 10621.5 | 4300.6 | 1146.9 | 1157.8 | 1131.1 | 1020.4 | 974.2  | 973.0  | 957.1  | 954.8  | 953.6  |
| 67.5° | 10450.0 | 3795.9 | 1038.6 | 1123.8 | 1089.8 | 971.8  | 920.7  | 915.8  | 895.1  | 896.4  | 896.4  |
| 70°   | 9591.2  | 3075.9 | 889.1  | 1039.9 | 1038.6 | 928.0  | 864.8  | 848.9  | 820.9  | 825.8  | 830.7  |
| 72.5° | 7981.0  | 2279.2 | 688.4  | 900.1  | 957.1  | 887.9  | 800.3  | 774.7  | 739.4  | 744.4  | 743.1  |
| 75°   | 5763.8  | 1549.5 | 501.1  | 684.7  | 833.1  | 840.4  | 737.1  | 693.2  | 650.7  | 657.9  | 660.4  |
| 77.5° | 2949.3  | 878.1  | 368.5  | 471.9  | 654.4  | 763.8  | 679.9  | 621.5  | 611.7  | 679.9  | 670.1  |
| 80°   | 962.1   | 440.2  | 255.4  | 330.8  | 429.4  | 625.1  | 595.9  | 529.1  | 526.6  | 542.4  | 465.9  |
| 82.5° | 287.0   | 186.0  | 164.2  | 217.7  | 237.2  | 479.2  | 514.4  | 400.2  | 344.2  | 362.4  | 374.6  |
| 85°   | 98.5    | 90.0   | 93.7   | 108.2  | 113.2  | 281.0  | 360.0  | 265.2  | 250.5  | 276.1  | 272.4  |
| 87.5° | 23.1    | 31.7   | 26.8   | 24.3   | 24.3   | 68.1   | 139.9  | 110.7  | 153.2  | 102.2  | 98.5   |
| 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)