

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: P969467

Luminaire Tested: **NVN-SB5D-830-U-T2R**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P969467  
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-SB5D-830-U-T2R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 48222.1 lumens  
Efficiency: N/A  
Efficacy: 132.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 364.9  
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



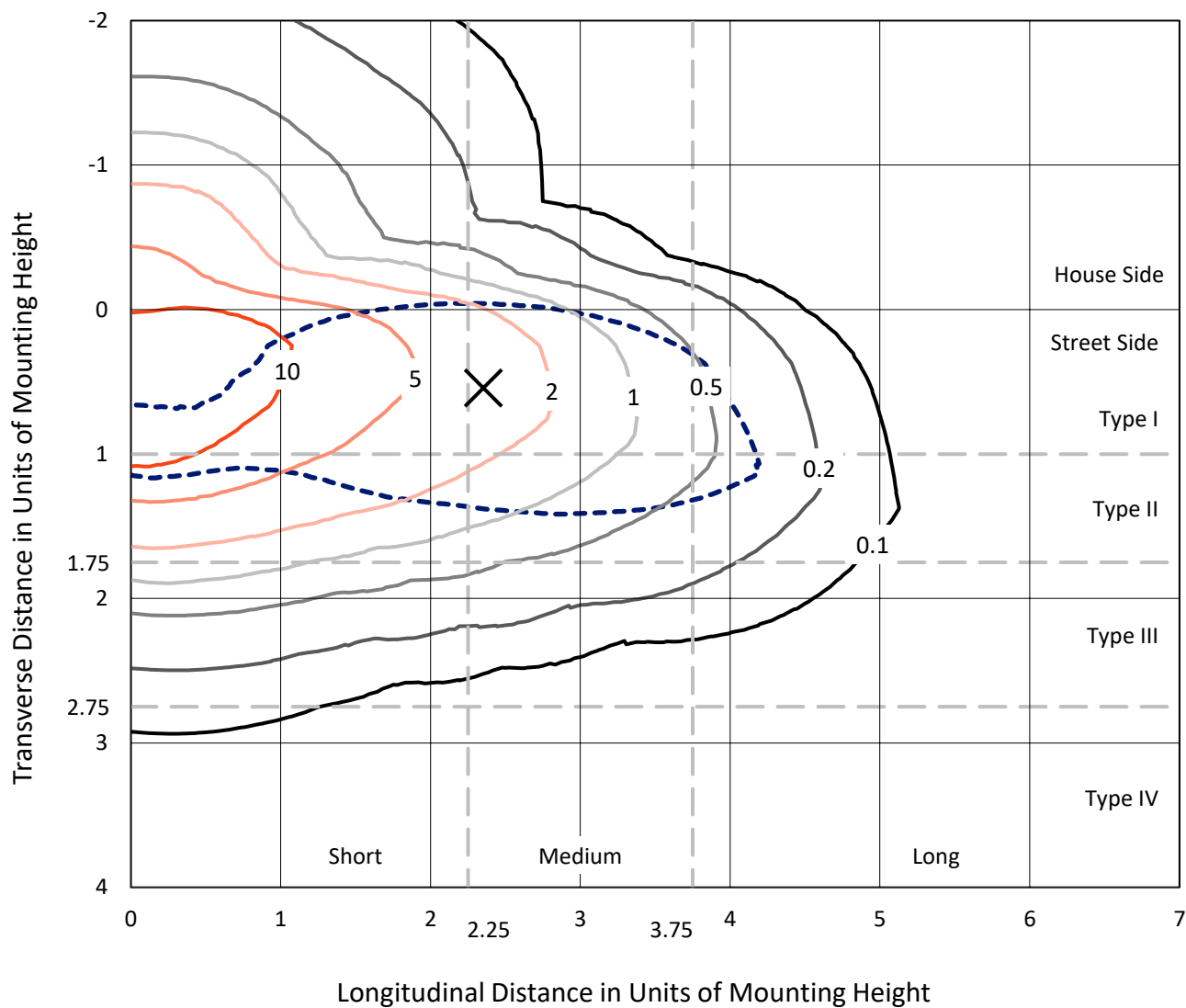
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## Iso-Footcandle Lines of Horizontal Illumination

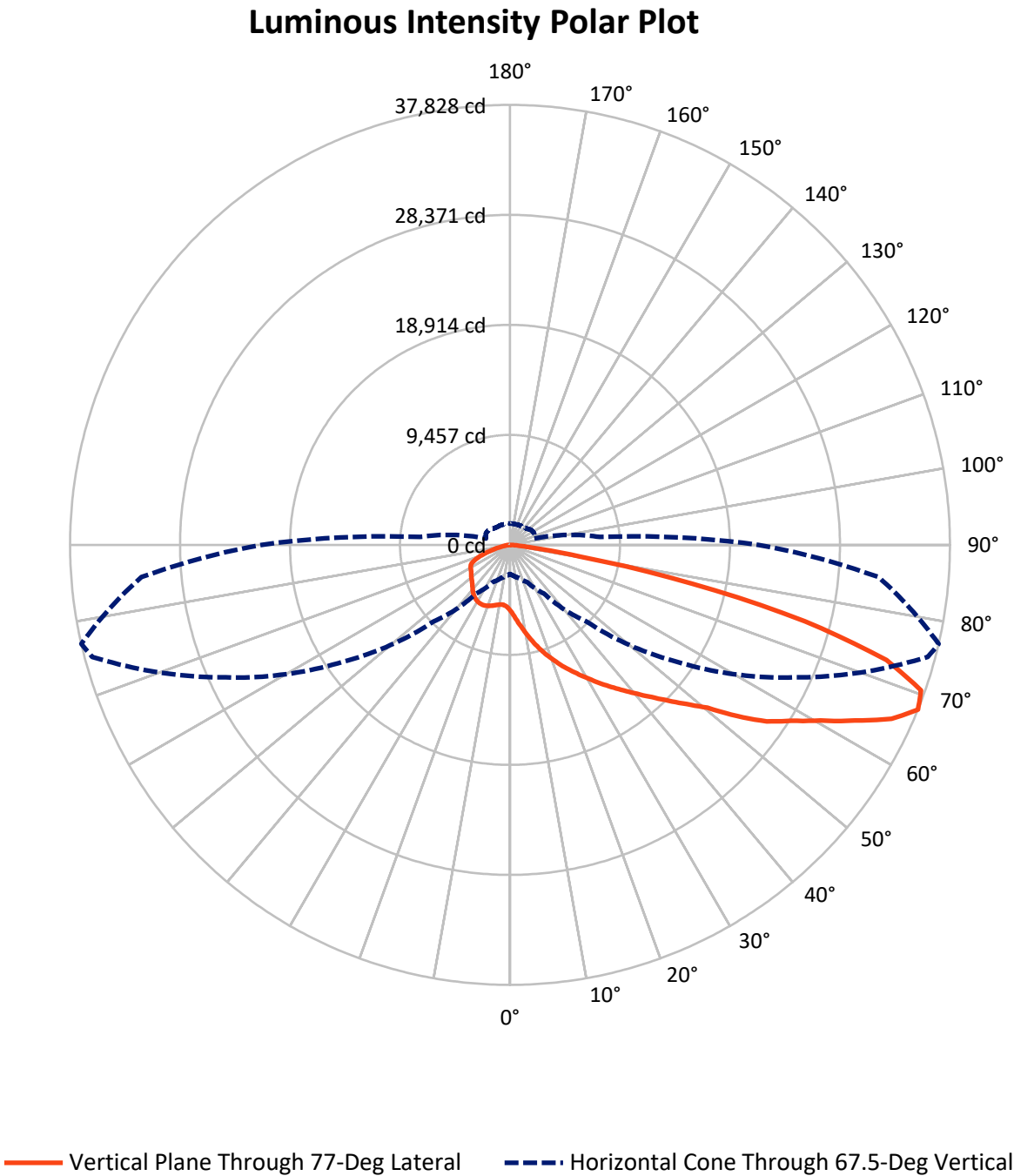
✕ Max cd

--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.7 fc  
Type II - Medium - N/A

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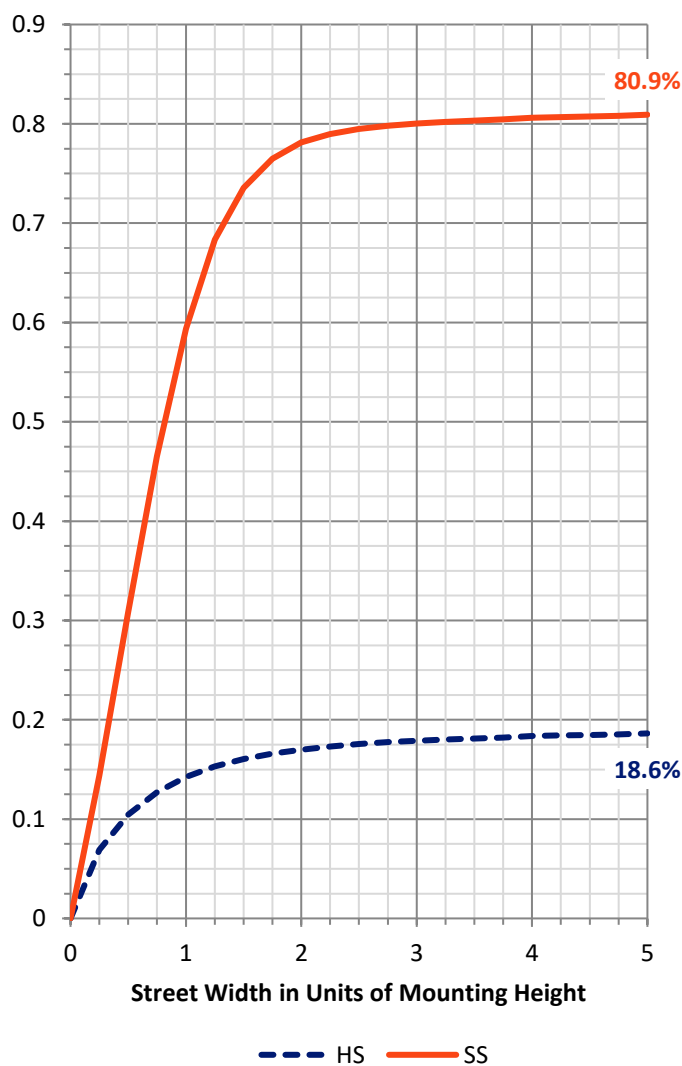
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9121.7   | 0.0    | 9121.7  |
|                    | % Fixture | 18.9     | 0.0    | 18.9    |
| <b>Street Side</b> | Lumens    | 39100.5  | 0.0    | 39100.5 |
|                    | % Fixture | 81.1     | 0.0    | 81.1    |
| <b>Total</b>       | Lumens    | 48222.1  | 0.0    | 48222.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 606.5   | 1.3       |
| 10°-20°   | 2178.8  | 4.5       |
| 20°-30°   | 4113.7  | 8.5       |
| 30°-40°   | 6627.1  | 13.7      |
| 40°-50°   | 9064.7  | 18.8      |
| 50°-60°   | 10225.0 | 21.2      |
| 60°-70°   | 9543.8  | 19.8      |
| 70°-80°   | 5231.6  | 10.8      |
| 80°-90°   | 631.0   | 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°    | 48222.1 | 100.0     |
| 0°-180°   | 48222.1 | 100.0     |

**Coefficient of Utilization**



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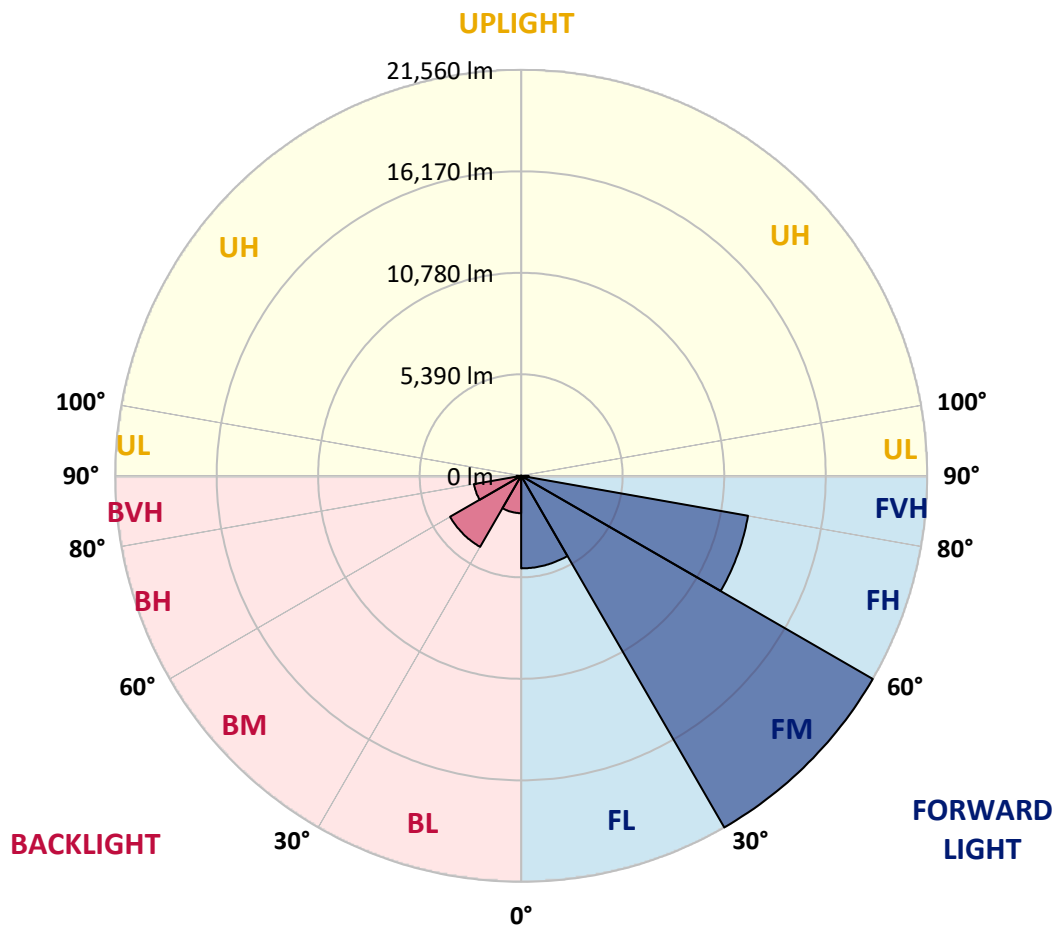
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 4915.6  | 10.2      |                         |      |         |
| FM   | (30°-60°)   | 21559.6 | 44.7      |                         |      |         |
| FH   | (60°-80°)   | 12230.6 | 25.4      |                         |      | G5      |
| FVH  | (80°-90°)   | 394.6   | 0.8       |                         |      | G3/500  |
| BL   | (0°-30°)    | 1983.3  | 4.1       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 4357.2  | 9.0       | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2544.8  | 5.3       | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 236.4   | 0.5       |                         |      | G3/500  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G5**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 77°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5658.0  | 5658.0  | 5658.0  | 5658.0  | 5658.0  | 5658.0  | 5658.0  | 5658.0  | 5658.0  | 5658.0  | 5658.0  |
| 2.5°  | 7084.3  | 7134.1  | 7071.8  | 7071.8  | 6862.7  | 6753.2  | 6544.1  | 6384.8  | 6098.5  | 6048.7  | 5859.6  |
| 5°    | 8373.6  | 8436.0  | 8348.8  | 8311.4  | 8065.0  | 7838.5  | 7487.5  | 7141.5  | 6631.2  | 6579.0  | 6133.4  |
| 7.5°  | 9371.9  | 9451.5  | 9374.3  | 9334.5  | 9115.4  | 8861.5  | 8450.8  | 7967.9  | 7248.6  | 7146.5  | 6501.8  |
| 10°   | 10185.8 | 10198.2 | 10173.3 | 10188.3 | 10016.5 | 9807.4  | 9386.7  | 8824.2  | 7925.6  | 7786.2  | 6947.3  |
| 12.5° | 10646.4 | 10703.6 | 10753.4 | 10843.0 | 10813.1 | 10683.7 | 10305.2 | 9633.3  | 8642.5  | 8463.3  | 7432.8  |
| 15°   | 10862.8 | 10962.5 | 11074.5 | 11281.0 | 11447.8 | 11480.2 | 11191.5 | 10501.9 | 9371.9  | 9155.3  | 7923.1  |
| 17.5° | 10940.0 | 11034.6 | 11211.3 | 11510.0 | 11868.5 | 12110.0 | 11980.5 | 11345.8 | 10093.7 | 9844.8  | 8438.4  |
| 20°   | 11330.9 | 11358.2 | 11465.2 | 11749.1 | 12137.3 | 12538.1 | 12635.2 | 12157.2 | 10808.1 | 10526.9 | 8971.1  |
| 22.5° | 12167.3 | 12112.4 | 12142.4 | 12271.8 | 12550.5 | 12938.9 | 13160.4 | 12874.1 | 11542.4 | 11218.8 | 9508.7  |
| 25°   | 13548.8 | 13389.4 | 13230.1 | 13080.7 | 13222.6 | 13441.6 | 13693.1 | 13591.1 | 12311.6 | 11900.9 | 10051.4 |
| 27.5° | 15293.6 | 15099.5 | 14748.5 | 14258.2 | 14086.4 | 14163.6 | 14275.6 | 14255.7 | 13023.5 | 12607.8 | 10611.5 |
| 30°   | 17011.2 | 16784.7 | 16366.5 | 15657.1 | 15204.0 | 15000.0 | 14915.3 | 14858.1 | 13797.6 | 13354.5 | 11176.5 |
| 32.5° | 18382.8 | 18203.5 | 17792.8 | 16998.8 | 16341.6 | 15993.1 | 15711.8 | 15507.7 | 14606.7 | 14163.6 | 11774.0 |
| 35°   | 19582.5 | 19415.8 | 18945.3 | 18079.1 | 17364.6 | 16993.8 | 16625.4 | 16189.8 | 15448.0 | 15000.0 | 12416.1 |
| 37.5° | 20677.8 | 20511.1 | 19866.3 | 18965.3 | 18245.8 | 17989.5 | 17660.9 | 16921.6 | 16291.9 | 15868.6 | 13095.7 |
| 40°   | 21369.8 | 21332.5 | 20730.1 | 19709.5 | 18962.7 | 18835.8 | 18726.2 | 17770.4 | 17227.8 | 16834.5 | 13842.4 |
| 42.5° | 21546.5 | 21628.6 | 21150.8 | 20311.9 | 19599.9 | 19498.0 | 19754.3 | 18731.3 | 18278.2 | 17902.3 | 14688.8 |
| 45°   | 21120.8 | 21357.3 | 21043.8 | 20473.7 | 20053.0 | 19998.3 | 20665.3 | 19781.7 | 19440.7 | 19097.2 | 15709.4 |
| 47.5° | 20043.1 | 20443.8 | 20314.4 | 20234.7 | 20175.0 | 20411.4 | 21466.9 | 20896.9 | 20757.5 | 20458.8 | 16874.3 |
| 50°   | 17867.5 | 18626.7 | 18853.2 | 19356.0 | 19933.5 | 20732.6 | 22196.2 | 22114.1 | 22295.8 | 21994.6 | 18293.2 |
| 52.5° | 14106.4 | 15151.8 | 16466.1 | 17725.6 | 19191.8 | 20625.6 | 22997.7 | 23861.5 | 24628.2 | 24463.9 | 20548.4 |
| 55°   | 11644.5 | 12115.0 | 13125.5 | 15435.6 | 17753.0 | 20175.0 | 23358.6 | 25272.9 | 26943.2 | 26796.3 | 22258.5 |
| 57.5° | 9752.7  | 10173.3 | 10795.7 | 12724.8 | 15577.4 | 19151.9 | 23582.7 | 26134.1 | 28528.7 | 28513.9 | 23946.2 |
| 60°   | 7724.0  | 8169.6  | 8806.8  | 10173.3 | 13035.9 | 17384.6 | 23532.9 | 27114.8 | 30552.5 | 30676.9 | 26004.7 |
| 62.5° | 5433.9  | 5924.3  | 6631.2  | 7905.7  | 10439.7 | 15094.6 | 22517.3 | 27824.3 | 32934.6 | 33273.1 | 28481.5 |
| 65°   | 3572.0  | 3895.6  | 4428.3  | 5528.5  | 7778.7  | 12149.8 | 20578.2 | 27916.4 | 35483.6 | 36056.1 | 30806.4 |
| 67.5° | 2504.2  | 2628.6  | 2942.3  | 3539.6  | 5127.8  | 9317.0  | 17489.2 | 26963.0 | 37183.7 | 37828.4 | 31814.5 |
| 70°   | 1954.1  | 2016.3  | 2175.6  | 2414.5  | 3221.1  | 6265.3  | 13401.9 | 24483.8 | 36820.3 | 37492.3 | 30761.6 |
| 72.5° | 1687.7  | 1747.4  | 1807.2  | 1837.0  | 2160.6  | 3868.2  | 9078.1  | 20471.2 | 33397.6 | 33853.2 | 26746.5 |
| 75°   | 1530.8  | 1545.8  | 1595.6  | 1585.6  | 1647.9  | 2509.1  | 5239.8  | 14915.3 | 26350.7 | 26193.9 | 19744.4 |
| 77.5° | 1286.9  | 1306.9  | 1389.0  | 1376.6  | 1463.7  | 1715.0  | 2720.7  | 9625.8  | 17083.4 | 16018.0 | 10989.8 |
| 80°   | 1090.3  | 1100.2  | 1189.8  | 1174.9  | 1272.0  | 1242.1  | 1389.0  | 4906.3  | 7246.0  | 6138.4  | 3168.8  |
| 82.5° | 378.3   | 468.0   | 908.6   | 935.9   | 970.8   | 751.7   | 801.6   | 2001.3  | 2212.9  | 1695.1  | 664.6   |
| 85°   | 184.2   | 196.7   | 463.0   | 657.1   | 654.7   | 378.3   | 390.8   | 714.4   | 697.0   | 547.7   | 221.5   |
| 87.5° | 29.8    | 37.3    | 54.7    | 256.4   | 204.1   | 99.5    | 134.4   | 139.4   | 144.4   | 124.4   | 49.8    |
| 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°    | 5658.0  | 5658.0 | 5658.0 | 5658.0 | 5658.0 | 5658.0 | 5658.0 | 5658.0 | 5658.0 | 5658.0 | 5658.0 |
| 2.5°  | 5720.2  | 5595.7 | 5334.4 | 5092.9 | 4903.7 | 4722.0 | 4620.0 | 4532.9 | 4483.0 | 4473.1 | 4473.1 |
| 5°    | 5874.5  | 5618.1 | 5142.7 | 4742.0 | 4480.6 | 4286.4 | 4184.4 | 4119.7 | 4087.3 | 4067.4 | 4064.8 |
| 7.5°  | 6096.1  | 5720.2 | 5043.1 | 4587.6 | 4313.8 | 4174.4 | 4122.1 | 4112.2 | 4109.6 | 4112.2 | 4119.7 |
| 10°   | 6402.3  | 5887.0 | 5033.2 | 4550.3 | 4321.3 | 4244.1 | 4241.6 | 4244.1 | 4254.1 | 4256.5 | 4259.0 |
| 12.5° | 6733.3  | 6058.7 | 5073.0 | 4582.6 | 4415.8 | 4373.6 | 4366.1 | 4363.5 | 4371.0 | 4376.0 | 4378.5 |
| 15°   | 7094.2  | 6285.2 | 5140.2 | 4652.3 | 4520.4 | 4475.6 | 4468.1 | 4453.2 | 4450.7 | 4448.2 | 4445.7 |
| 17.5° | 7465.1  | 6509.3 | 5214.9 | 4727.0 | 4587.6 | 4525.4 | 4498.0 | 4463.2 | 4435.8 | 4428.3 | 4435.8 |
| 20°   | 7840.9  | 6730.8 | 5267.2 | 4764.3 | 4592.6 | 4505.5 | 4450.7 | 4391.0 | 4343.6 | 4316.3 | 4326.2 |
| 22.5° | 8241.7  | 6962.3 | 5299.6 | 4754.4 | 4547.8 | 4428.3 | 4328.7 | 4259.0 | 4186.8 | 4139.6 | 4142.0 |
| 25°   | 8632.6  | 7163.9 | 5297.0 | 4702.1 | 4460.7 | 4308.8 | 4181.9 | 4092.2 | 3992.7 | 3942.9 | 3942.9 |
| 27.5° | 9008.4  | 7345.7 | 5234.8 | 4610.0 | 4336.2 | 4166.9 | 4015.1 | 3908.0 | 3811.0 | 3763.7 | 3761.1 |
| 30°   | 9396.7  | 7497.5 | 5137.7 | 4475.6 | 4189.3 | 4002.6 | 3835.9 | 3743.7 | 3656.7 | 3611.8 | 3609.3 |
| 32.5° | 9782.6  | 7636.9 | 5000.8 | 4308.8 | 4020.0 | 3840.9 | 3676.6 | 3591.9 | 3539.6 | 3539.6 | 3542.1 |
| 35°   | 10190.8 | 7733.9 | 4819.1 | 4114.7 | 3840.9 | 3669.1 | 3539.6 | 3489.8 | 3484.9 | 3455.0 | 3447.6 |
| 37.5° | 10621.5 | 7796.2 | 4597.5 | 3915.5 | 3664.1 | 3502.3 | 3462.4 | 3402.7 | 3353.0 | 3288.2 | 3278.3 |
| 40°   | 11074.5 | 7858.4 | 4331.2 | 3708.9 | 3477.4 | 3387.8 | 3370.4 | 3290.8 | 3148.8 | 2989.5 | 2967.2 |
| 42.5° | 11624.5 | 7900.7 | 4054.9 | 3502.3 | 3280.7 | 3250.9 | 3275.8 | 3138.9 | 2912.3 | 2792.9 | 2795.4 |
| 45°   | 12261.8 | 7970.4 | 3801.0 | 3298.1 | 3079.1 | 3079.1 | 3183.6 | 3004.5 | 2817.8 | 2743.1 | 2755.5 |
| 47.5° | 13088.2 | 8132.2 | 3564.5 | 3074.2 | 2892.4 | 2942.3 | 2979.6 | 2842.6 | 2738.1 | 2646.0 | 2643.6 |
| 50°   | 14283.1 | 8520.5 | 3320.6 | 2847.7 | 2750.6 | 2850.1 | 2797.8 | 2718.2 | 2596.2 | 2521.6 | 2514.1 |
| 52.5° | 15766.7 | 8749.5 | 3104.0 | 2643.6 | 2628.6 | 2728.1 | 2653.5 | 2578.8 | 2486.8 | 2387.1 | 2367.2 |
| 55°   | 16777.2 | 8791.8 | 2922.3 | 2494.1 | 2546.4 | 2536.5 | 2509.1 | 2441.9 | 2392.1 | 2260.2 | 2262.7 |
| 57.5° | 17907.4 | 8876.5 | 2772.9 | 2404.5 | 2494.1 | 2384.7 | 2374.7 | 2317.4 | 2252.7 | 2163.2 | 2133.2 |
| 60°   | 19258.9 | 9008.4 | 2643.6 | 2369.7 | 2449.3 | 2285.1 | 2235.3 | 2212.9 | 2148.2 | 2103.4 | 2115.8 |
| 62.5° | 20732.6 | 9127.9 | 2511.6 | 2374.7 | 2397.1 | 2188.0 | 2113.3 | 2105.9 | 2066.0 | 2051.1 | 2051.1 |
| 65°   | 21738.2 | 8801.8 | 2347.4 | 2369.7 | 2315.0 | 2088.4 | 1993.8 | 1991.4 | 1959.0 | 1954.1 | 1951.5 |
| 67.5° | 21387.2 | 7768.8 | 2125.7 | 2300.0 | 2230.3 | 1988.9 | 1884.4 | 1874.4 | 1832.1 | 1834.5 | 1834.5 |
| 70°   | 19629.9 | 6295.2 | 1819.6 | 2128.3 | 2125.7 | 1899.2 | 1769.9 | 1737.5 | 1680.2 | 1690.1 | 1700.2 |
| 72.5° | 16334.2 | 4664.8 | 1408.9 | 1842.0 | 1959.0 | 1817.1 | 1637.8 | 1585.6 | 1513.4 | 1523.4 | 1520.9 |
| 75°   | 11796.3 | 3171.2 | 1025.5 | 1401.4 | 1705.1 | 1720.1 | 1508.5 | 1418.8 | 1331.7 | 1346.6 | 1351.7 |
| 77.5° | 6036.3  | 1797.2 | 754.2  | 965.9  | 1339.2 | 1563.2 | 1391.4 | 1272.0 | 1252.0 | 1391.4 | 1371.6 |
| 80°   | 1968.9  | 901.1  | 522.8  | 677.0  | 878.7  | 1279.4 | 1219.8 | 1082.8 | 1077.8 | 1110.2 | 953.4  |
| 82.5° | 587.4   | 380.9  | 336.0  | 445.6  | 485.4  | 980.7  | 1053.0 | 819.0  | 704.5  | 741.8  | 766.7  |
| 85°   | 201.6   | 184.2  | 191.7  | 221.5  | 231.4  | 575.0  | 736.8  | 542.6  | 512.8  | 565.1  | 557.6  |
| 87.5° | 47.3    | 64.7   | 54.7   | 49.8   | 49.8   | 139.4  | 286.3  | 226.5  | 313.6  | 209.1  | 201.6  |
| 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)