

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: P969455

Luminaire Tested: **NVN-SB5D-830-U-SL2**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P969455  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SB5D-830-U-SL2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 47056.7 lumens  
Efficiency: N/A  
Efficacy: 129.0 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

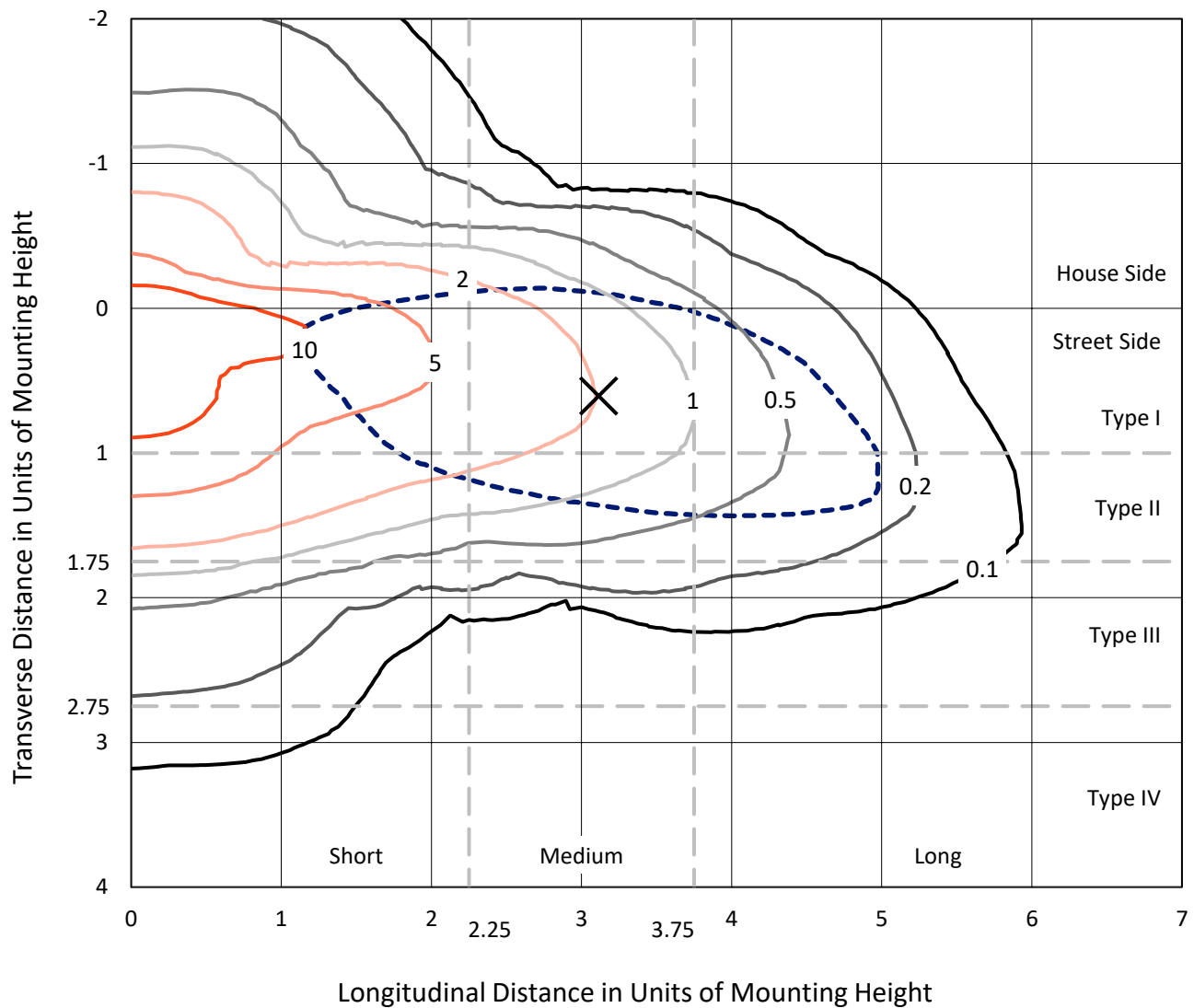


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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
- - - 1/2 Max cd

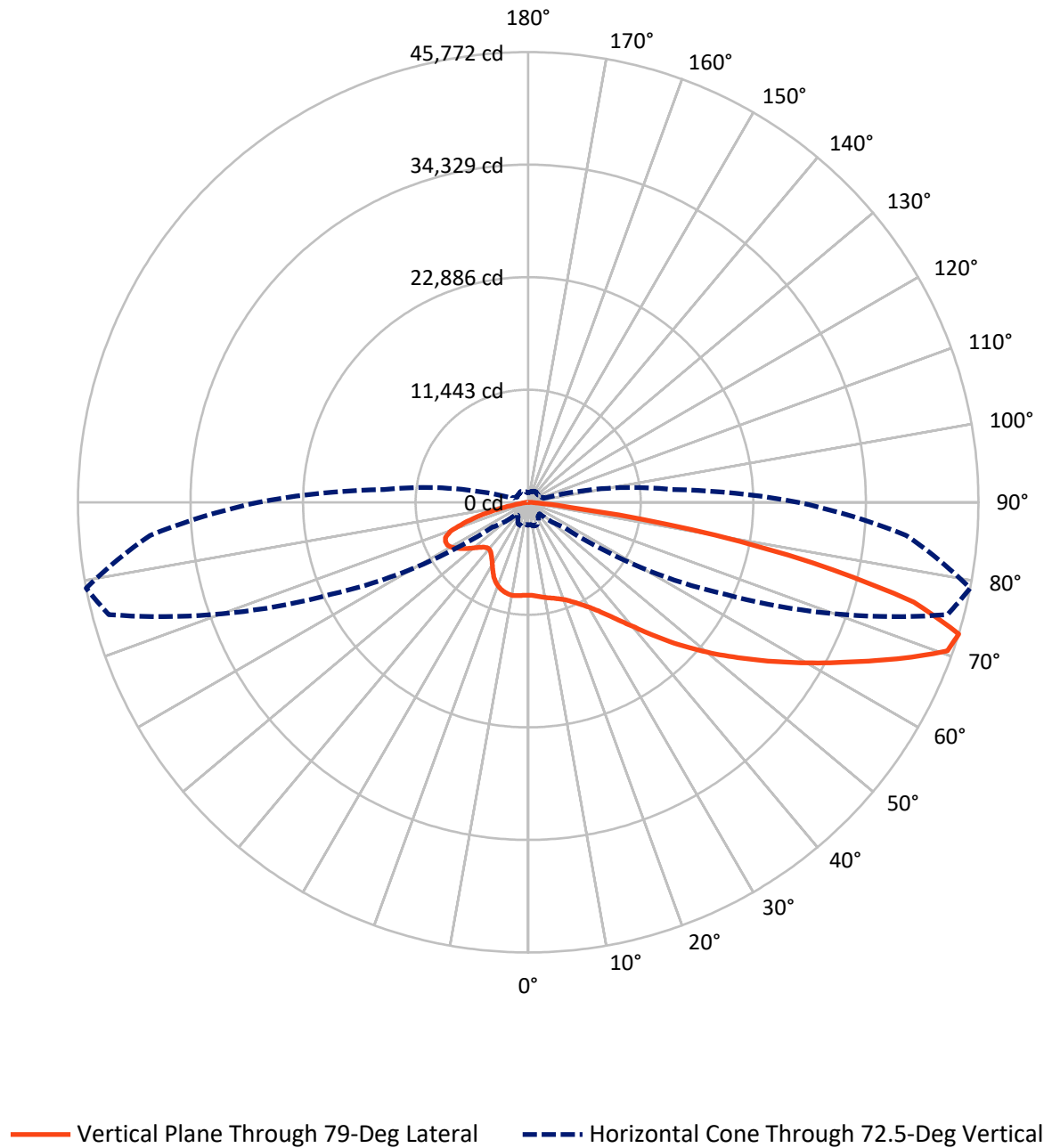


Based on 25 foot mounting height. Maximum calculated value = 15.2 fc  
Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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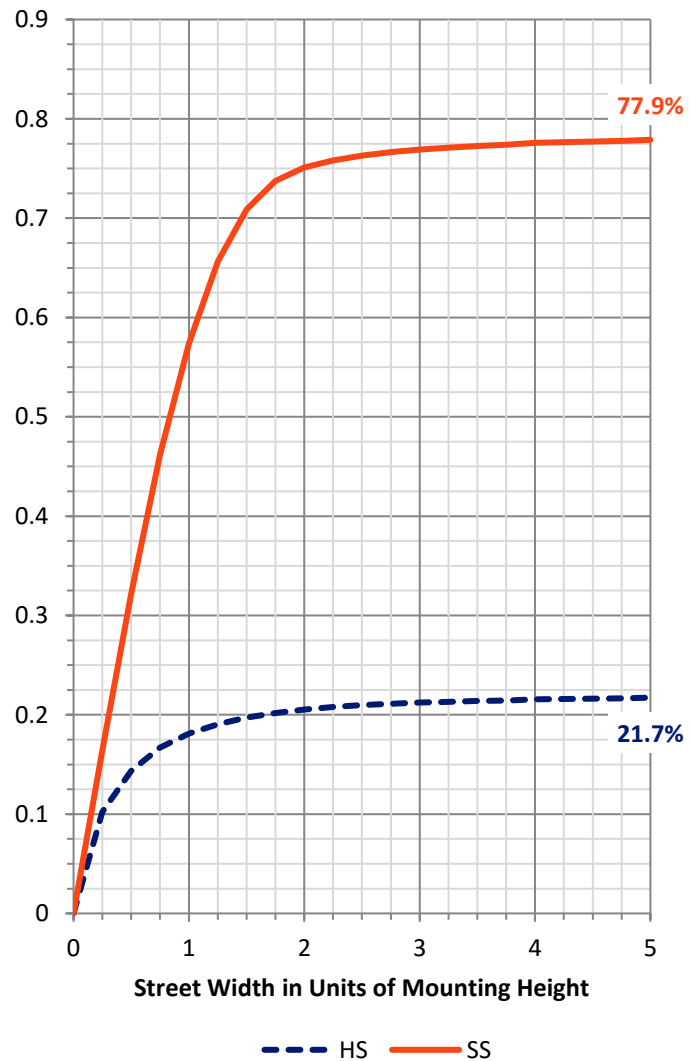
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 10355.1  | 0.0    | 10355.1 |
|                    | % Fixture | 22.0     | 0.0    | 22.0    |
| <b>Street Side</b> | Lumens    | 36701.6  | 0.0    | 36701.6 |
|                    | % Fixture | 78.0     | 0.0    | 78.0    |
| <b>Total</b>       | Lumens    | 47056.7  | 0.0    | 47056.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 857.4   | 1.8       |
| 10°-20°   | 2241.8  | 4.8       |
| 20°-30°   | 3617.3  | 7.7       |
| 30°-40°   | 5429.1  | 11.5      |
| 40°-50°   | 7701.5  | 16.4      |
| 50°-60°   | 9725.9  | 20.7      |
| 60°-70°   | 9878.0  | 21.0      |
| 70°-80°   | 6732.3  | 14.3      |
| 80°-90°   | 873.5   | 1.9       |
| 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°    | 47056.7 | 100.0     |
| 0°-180°   | 47056.7 | 100.0     |

**Coefficient of Utilization**



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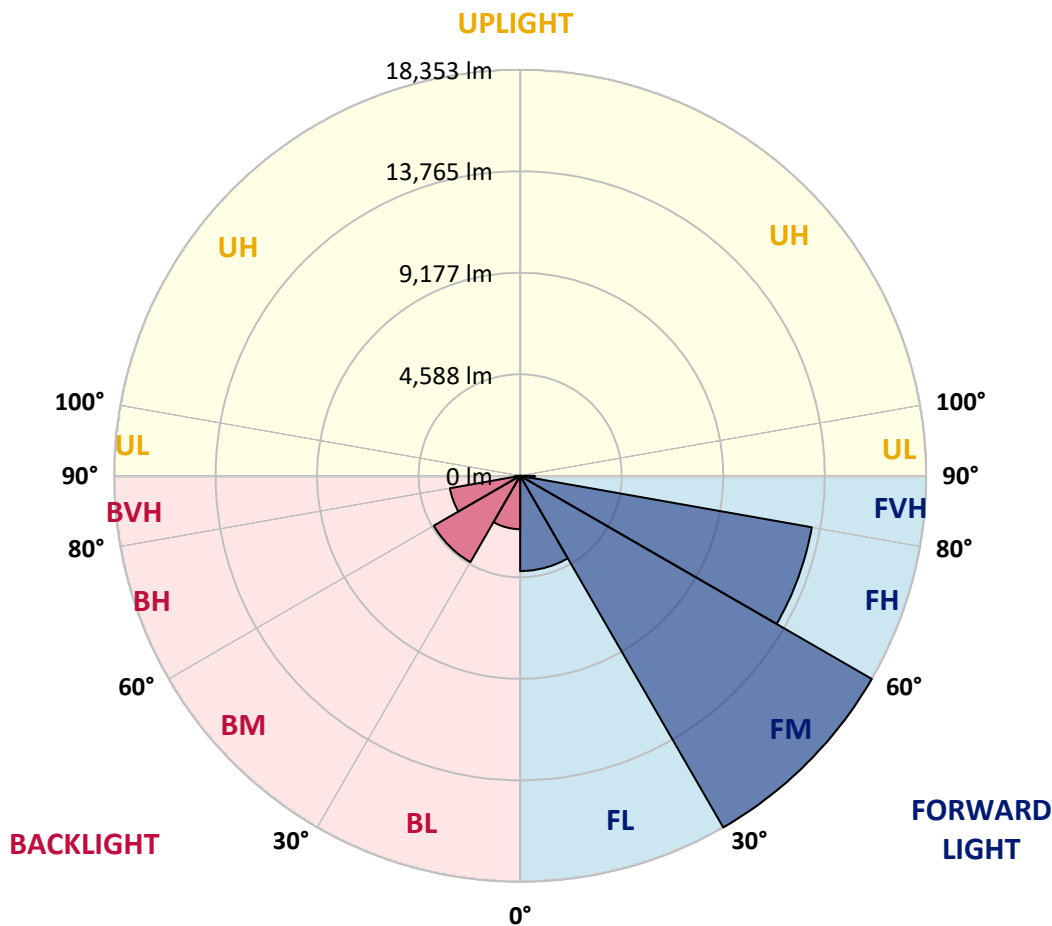
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 4304.5  | 9.1       |                         |      |         |
| FM   | (30°-60°)   | 18353.1 | 39.0      |                         |      |         |
| FH   | (60°-80°)   | 13386.0 | 28.4      |                         |      | G5      |
| FVH  | (80°-90°)   | 658.0   | 1.4       |                         |      | G4/750  |
| BL   | (0°-30°)    | 2412.0  | 5.1       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 4503.4  | 9.6       | B3/5000                 |      |         |
| BH   | (60°-80°)   | 3224.2  | 6.9       | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 215.5   | 0.5       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

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

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 79°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 9446.2  | 9446.2  | 9446.2  | 9446.2  | 9446.2  | 9446.2  | 9446.2  | 9446.2  | 9446.2  | 9446.2  | 9446.2  |
| 2.5°  | 9451.2  | 9406.3  | 9433.8  | 9423.7  | 9436.3  | 9451.2  | 9456.1  | 9463.6  | 9488.5  | 9486.0  | 9483.5  |
| 5°    | 9431.2  | 9386.4  | 9423.7  | 9411.3  | 9443.7  | 9478.6  | 9508.4  | 9535.8  | 9575.7  | 9593.1  | 9568.2  |
| 7.5°  | 9388.9  | 9359.1  | 9396.4  | 9433.8  | 9493.4  | 9545.7  | 9588.1  | 9650.3  | 9707.6  | 9717.5  | 9734.9  |
| 10°   | 9142.5  | 9120.1  | 9207.3  | 9304.3  | 9468.6  | 9610.5  | 9702.5  | 9774.7  | 9837.0  | 9847.0  | 9871.9  |
| 12.5° | 8886.1  | 8858.8  | 8955.8  | 9087.8  | 9354.0  | 9610.5  | 9804.6  | 9899.2  | 9954.0  | 9986.4  | 10023.7 |
| 15°   | 8843.8  | 8821.5  | 8876.2  | 8990.7  | 9212.2  | 9543.3  | 9874.3  | 10048.6 | 10095.8 | 10133.2 | 10148.1 |
| 17.5° | 9048.0  | 9005.6  | 9028.0  | 9067.9  | 9197.3  | 9481.0  | 9929.1  | 10217.8 | 10290.0 | 10329.8 | 10329.8 |
| 20°   | 9520.8  | 9461.2  | 9426.3  | 9346.7  | 9324.2  | 9491.0  | 9924.0  | 10421.9 | 10516.5 | 10566.3 | 10578.7 |
| 22.5° | 10150.6 | 10110.8 | 10036.1 | 9834.5  | 9615.4  | 9613.0  | 10018.7 | 10683.3 | 10860.0 | 10907.3 | 10877.4 |
| 25°   | 10912.3 | 10852.5 | 10758.0 | 10484.1 | 10063.4 | 9854.5  | 10177.9 | 11016.8 | 11313.0 | 11325.4 | 11238.3 |
| 27.5° | 11788.4 | 11698.8 | 11569.4 | 11208.5 | 10640.9 | 10232.8 | 10421.9 | 11400.2 | 11833.2 | 11828.3 | 11649.0 |
| 30°   | 12711.9 | 12622.3 | 12485.4 | 12047.3 | 11332.9 | 10743.0 | 10760.4 | 11813.3 | 12450.6 | 12423.2 | 12117.0 |
| 32.5° | 13386.5 | 13319.3 | 13291.9 | 12953.3 | 12129.4 | 11345.4 | 11148.7 | 12271.3 | 13212.2 | 13187.3 | 12759.2 |
| 35°   | 13904.2 | 13817.1 | 13849.4 | 13677.7 | 12998.1 | 12020.0 | 11624.1 | 12816.5 | 14138.1 | 14135.7 | 13603.0 |
| 37.5° | 14416.9 | 14339.7 | 14367.2 | 14252.6 | 13802.1 | 12876.2 | 12204.2 | 13483.6 | 15285.6 | 15340.5 | 14623.6 |
| 40°   | 14884.9 | 14802.7 | 14912.3 | 14805.3 | 14426.9 | 13787.2 | 12863.7 | 14237.8 | 16614.8 | 16719.4 | 15858.2 |
| 42.5° | 15166.2 | 15101.4 | 15283.2 | 15285.6 | 14969.5 | 14556.3 | 13588.1 | 15069.1 | 18153.2 | 18387.1 | 17376.5 |
| 45°   | 15263.3 | 15240.8 | 15514.6 | 15571.9 | 15449.9 | 15001.9 | 14240.2 | 15975.1 | 19810.9 | 20229.0 | 19106.4 |
| 47.5° | 15158.7 | 15116.4 | 15494.7 | 15706.3 | 15803.3 | 15211.0 | 14780.4 | 16955.9 | 21503.5 | 22115.8 | 20993.2 |
| 50°   | 14631.1 | 14548.8 | 15111.4 | 15556.9 | 15903.0 | 15347.8 | 15325.5 | 18088.4 | 23427.5 | 24097.1 | 22889.9 |
| 52.5° | 13682.6 | 13620.4 | 14260.1 | 15034.3 | 15683.9 | 15415.1 | 15937.8 | 19325.5 | 25254.6 | 26120.8 | 24833.9 |
| 55°   | 12470.5 | 12388.4 | 13092.7 | 14103.3 | 15138.8 | 15392.7 | 16550.2 | 20709.4 | 27410.1 | 28288.8 | 26842.6 |
| 57.5° | 10548.9 | 10384.6 | 11275.7 | 12470.5 | 14250.2 | 15365.3 | 17187.3 | 22085.9 | 29600.6 | 30653.4 | 28985.8 |
| 60°   | 7746.1  | 7502.2  | 8594.9  | 10011.2 | 12512.8 | 15099.0 | 17976.3 | 23629.1 | 32229.1 | 33177.4 | 31325.5 |
| 62.5° | 4510.3  | 4368.3  | 5082.8  | 6404.5  | 9431.2  | 13530.8 | 18419.5 | 25423.8 | 34812.8 | 35808.4 | 33625.4 |
| 65°   | 3502.2  | 3462.3  | 3524.6  | 3626.7  | 5249.5  | 10130.7 | 17052.9 | 27173.7 | 38098.4 | 38795.3 | 36022.5 |
| 67.5° | 3203.5  | 3173.6  | 3201.0  | 3009.3  | 2663.4  | 5642.8  | 13491.0 | 27616.7 | 41618.0 | 42041.2 | 38120.8 |
| 70°   | 2847.6  | 2812.7  | 2902.3  | 2738.0  | 2095.8  | 2566.3  | 8716.9  | 26008.8 | 44418.3 | 45212.2 | 39716.3 |
| 72.5° | 2319.9  | 2280.0  | 2489.1  | 2414.5  | 1764.7  | 1647.8  | 4378.4  | 22188.0 | 44124.5 | 45772.3 | 38573.8 |
| 75°   | 1782.2  | 1759.8  | 2008.7  | 2070.9  | 1438.7  | 1296.8  | 2100.8  | 16492.9 | 38830.2 | 40490.5 | 33244.6 |
| 77.5° | 1384.0  | 1366.5  | 1493.4  | 1720.0  | 1159.9  | 1005.6  | 1291.8  | 10461.8 | 29262.0 | 29553.2 | 22909.8 |
| 80°   | 1037.9  | 988.2   | 1105.2  | 1331.7  | 903.5   | 734.3   | 876.2   | 6100.8  | 18496.6 | 16766.6 | 9971.4  |
| 82.5° | 649.6   | 624.7   | 721.8   | 888.6   | 637.2   | 505.3   | 570.0   | 3370.3  | 7412.6  | 4365.9  | 1924.1  |
| 85°   | 370.8   | 360.9   | 393.3   | 507.8   | 345.9   | 291.2   | 326.1   | 1488.5  | 1354.1  | 930.9   | 579.9   |
| 87.5° | 149.3   | 144.3   | 179.2   | 226.5   | 126.9   | 107.0   | 114.5   | 358.4   | 298.7   | 276.3   | 191.7   |
| 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°    | 9446.2  | 9446.2  | 9446.2 | 9446.2 | 9446.2 | 9446.2 | 9446.2 | 9446.2 | 9446.2 | 9446.2 | 9446.2 |
| 2.5°  | 9473.6  | 9473.6  | 9438.7 | 9384.0 | 9321.8 | 9281.9 | 9217.2 | 9199.8 | 9132.5 | 9112.7 | 9145.0 |
| 5°    | 9588.1  | 9568.2  | 9461.2 | 9306.8 | 9095.2 | 8901.1 | 8687.0 | 8552.6 | 8363.4 | 8296.2 | 8346.0 |
| 7.5°  | 9732.5  | 9677.6  | 9493.4 | 9155.0 | 8711.9 | 8276.3 | 7823.3 | 7479.8 | 7151.2 | 7034.3 | 7049.1 |
| 10°   | 9864.4  | 9787.2  | 9473.6 | 8881.1 | 8114.5 | 7360.3 | 6638.5 | 6133.2 | 5749.8 | 5593.0 | 5627.9 |
| 12.5° | 9996.3  | 9854.5  | 9341.6 | 8425.6 | 7265.7 | 6242.7 | 5473.6 | 5080.3 | 4843.8 | 4654.6 | 4716.8 |
| 15°   | 10120.7 | 9921.6  | 9137.6 | 7815.8 | 6334.8 | 5296.8 | 4729.3 | 4415.7 | 4226.5 | 4102.0 | 4124.5 |
| 17.5° | 10265.1 | 9978.9  | 8831.4 | 7041.7 | 5448.7 | 4642.2 | 4179.2 | 3990.0 | 3952.7 | 3937.7 | 3947.7 |
| 20°   | 10466.7 | 10031.2 | 8428.2 | 6175.5 | 4796.5 | 4119.5 | 3880.5 | 3863.1 | 3860.7 | 3853.2 | 3878.1 |
| 22.5° | 10683.3 | 10093.4 | 7895.5 | 5388.9 | 4241.4 | 3793.4 | 3751.1 | 3716.2 | 3693.9 | 3691.3 | 3718.7 |
| 25°   | 10939.6 | 10113.3 | 7228.4 | 4744.2 | 3768.5 | 3639.1 | 3589.3 | 3537.1 | 3522.1 | 3522.1 | 3537.1 |
| 27.5° | 11188.6 | 10046.0 | 6451.8 | 4184.2 | 3502.2 | 3497.2 | 3432.5 | 3415.1 | 3412.5 | 3420.0 | 3440.0 |
| 30°   | 11437.5 | 9919.1  | 5680.1 | 3666.4 | 3347.9 | 3347.9 | 3325.4 | 3337.9 | 3347.9 | 3372.8 | 3390.2 |
| 32.5° | 11773.6 | 9784.8  | 5035.5 | 3283.2 | 3213.5 | 3188.6 | 3210.9 | 3235.8 | 3245.8 | 3278.2 | 3305.5 |
| 35°   | 12266.4 | 9690.1  | 4522.7 | 3074.1 | 3074.1 | 3041.7 | 3054.2 | 3049.2 | 3026.7 | 3011.9 | 3046.7 |
| 37.5° | 12918.5 | 9685.1  | 4099.6 | 2977.0 | 2957.0 | 2952.1 | 2954.6 | 2922.2 | 2835.1 | 2730.6 | 2733.1 |
| 40°   | 13702.6 | 9819.6  | 3773.5 | 2909.8 | 2894.8 | 2924.7 | 2909.8 | 2822.6 | 2583.7 | 2402.0 | 2397.1 |
| 42.5° | 14755.5 | 10202.8 | 3564.4 | 2827.7 | 2872.5 | 2909.8 | 2850.0 | 2548.9 | 2387.0 | 2265.0 | 2260.1 |
| 45°   | 15995.0 | 10825.1 | 3457.4 | 2740.5 | 2830.1 | 2874.9 | 2586.2 | 2454.3 | 2324.8 | 2178.0 | 2168.0 |
| 47.5° | 17398.9 | 11609.3 | 3432.5 | 2658.3 | 2735.5 | 2762.9 | 2474.1 | 2414.5 | 2267.6 | 2108.3 | 2095.8 |
| 50°   | 18927.2 | 12537.7 | 3499.7 | 2561.3 | 2598.7 | 2504.1 | 2436.8 | 2382.1 | 2230.3 | 2073.5 | 2056.0 |
| 52.5° | 20507.8 | 13560.6 | 3634.1 | 2429.4 | 2461.7 | 2357.2 | 2421.9 | 2374.6 | 2207.8 | 1996.3 | 1981.3 |
| 55°   | 22061.0 | 14591.2 | 3763.5 | 2275.1 | 2322.3 | 2225.3 | 2379.6 | 2344.8 | 2105.8 | 1866.8 | 1854.4 |
| 57.5° | 23639.2 | 15616.7 | 3890.5 | 2138.1 | 2188.0 | 2098.3 | 2312.4 | 2265.0 | 1991.3 | 1747.3 | 1742.4 |
| 60°   | 25279.5 | 16612.4 | 3950.2 | 2006.2 | 2041.1 | 1981.3 | 2210.3 | 2128.2 | 1861.8 | 1625.3 | 1618.0 |
| 62.5° | 26815.2 | 17441.2 | 3853.2 | 1874.3 | 1896.7 | 1871.9 | 2075.9 | 1966.4 | 1732.5 | 1488.5 | 1486.0 |
| 65°   | 28356.0 | 17934.1 | 3554.5 | 1744.9 | 1749.9 | 1737.4 | 1886.7 | 1792.2 | 1580.6 | 1369.0 | 1354.1 |
| 67.5° | 29752.4 | 18210.4 | 3079.0 | 1605.5 | 1593.1 | 1588.0 | 1710.0 | 1603.0 | 1433.8 | 1249.6 | 1234.6 |
| 70°   | 30048.6 | 17508.4 | 2352.2 | 1441.1 | 1441.1 | 1428.7 | 1515.9 | 1406.3 | 1271.9 | 1122.6 | 1117.7 |
| 72.5° | 27445.0 | 14728.1 | 1670.2 | 1254.5 | 1274.4 | 1249.6 | 1321.7 | 1229.6 | 1107.6 | 1008.1 | 978.3  |
| 75°   | 22130.7 | 10800.2 | 1214.7 | 1062.8 | 1097.7 | 1055.3 | 1122.6 | 1057.9 | 953.4  | 950.9  | 856.3  |
| 77.5° | 15206.0 | 6678.3  | 881.2  | 876.2  | 901.1  | 846.3  | 923.4  | 888.6  | 794.1  | 751.7  | 704.4  |
| 80°   | 6489.2  | 2663.4  | 642.2  | 677.0  | 677.0  | 627.3  | 716.9  | 726.8  | 644.7  | 624.7  | 624.7  |
| 82.5° | 1291.8  | 756.7   | 450.5  | 465.5  | 438.1  | 423.1  | 507.8  | 562.5  | 776.6  | 863.8  | 866.2  |
| 85°   | 388.3   | 278.8   | 271.3  | 253.9  | 224.1  | 226.5  | 298.7  | 565.0  | 697.0  | 398.2  | 343.5  |
| 87.5° | 107.0   | 69.7    | 72.2   | 57.3   | 47.3   | 62.2   | 102.1  | 428.1  | 234.0  | 99.5   | 84.7   |
| 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)