

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: P479247

Luminaire Tested: **IFLD-S-SA2E-730-U-5MQ**

Issue Date: 02/26/2021



**Test Information**

Test Method: LM-79-08  
Report Number: P479247  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 02/26/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: IFLD-S-SA2E-730-U-5MQ  
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ 5MQ distribution lens  
Light Source: (32) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

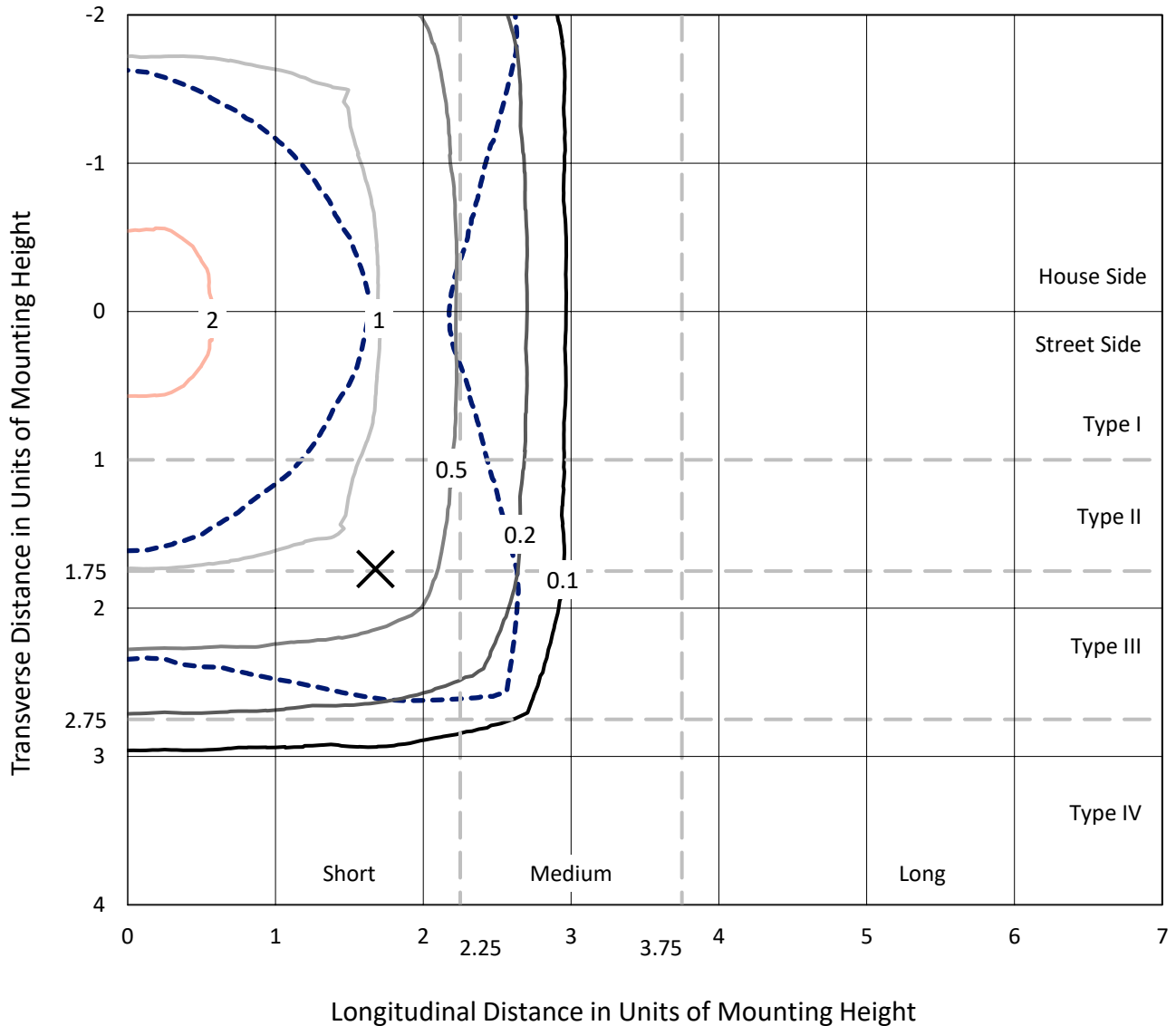
Lumens per Lamp: N/A  
Luminaire Lumens: 16636.4 lumens  
Efficiency: N/A  
Efficacy: 106.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2

Input Watts (W): 156.2  
Input Voltage (V): 120  
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

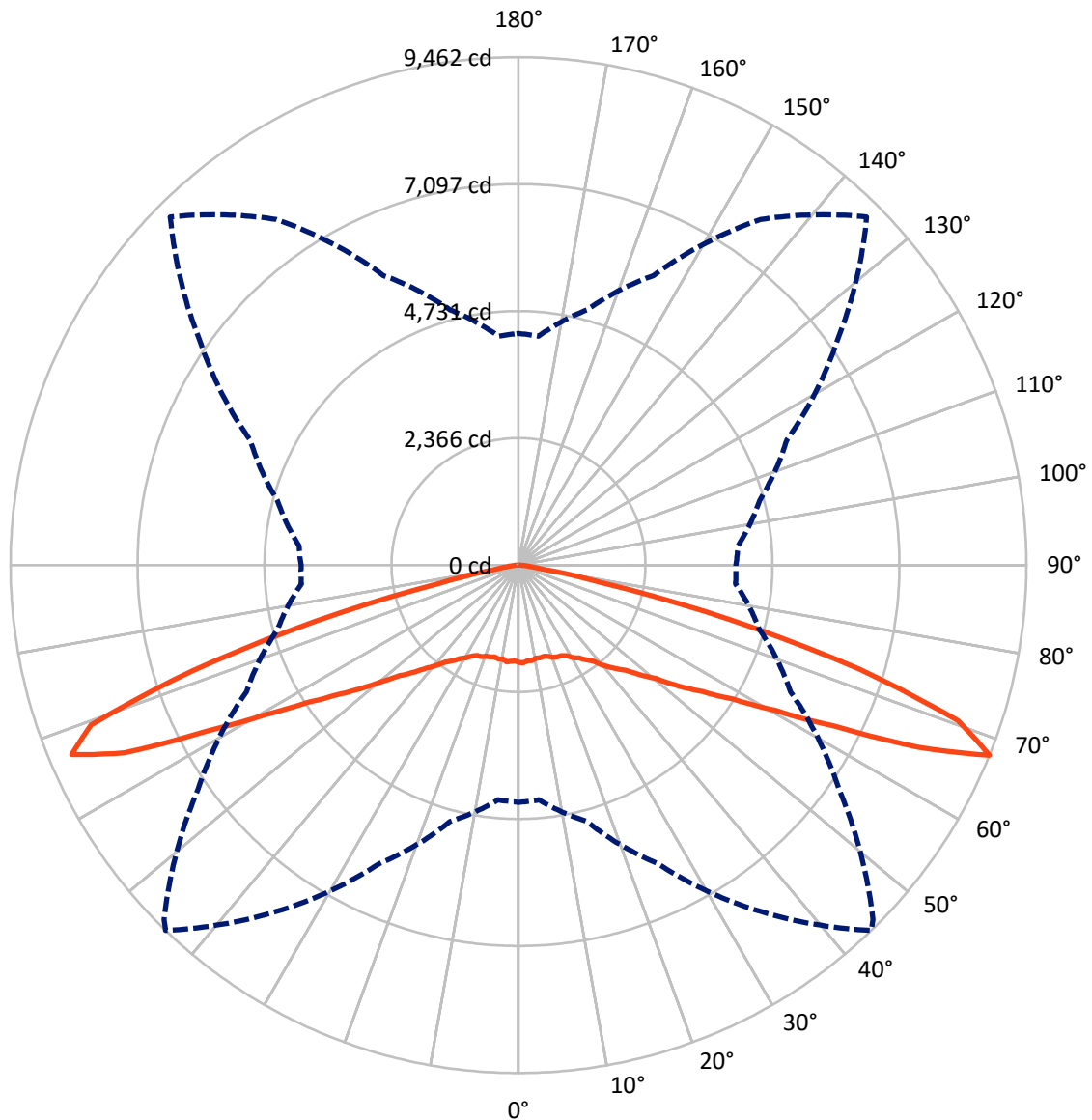
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 8296.9   | 0.0    | 8296.9  |
|                    | % Fixture | 49.9     | 0.0    | 49.9    |
| <b>Street Side</b> | Lumens    | 8339.5   | 0.0    | 8339.5  |
|                    | % Fixture | 50.1     | 0.0    | 50.1    |
| <b>Total</b>       | Lumens    | 16636.4  | 0.0    | 16636.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 172.0   | 1.0       |
| 10°-20°   | 502.4   | 3.0       |
| 20°-30°   | 854.3   | 5.1       |
| 30°-40°   | 1354.6  | 8.1       |
| 40°-50°   | 2208.8  | 13.3      |
| 50°-60°   | 3772.3  | 22.7      |
| 60°-70°   | 5737.6  | 34.5      |
| 70°-80°   | 1933.9  | 11.6      |
| 80°-90°   | 100.4   | 0.6       |
| 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°    | 16636.4 | 100.0     |
| 0°-180°   | 16636.4 | 100.0     |

**Coefficient of Utilization**



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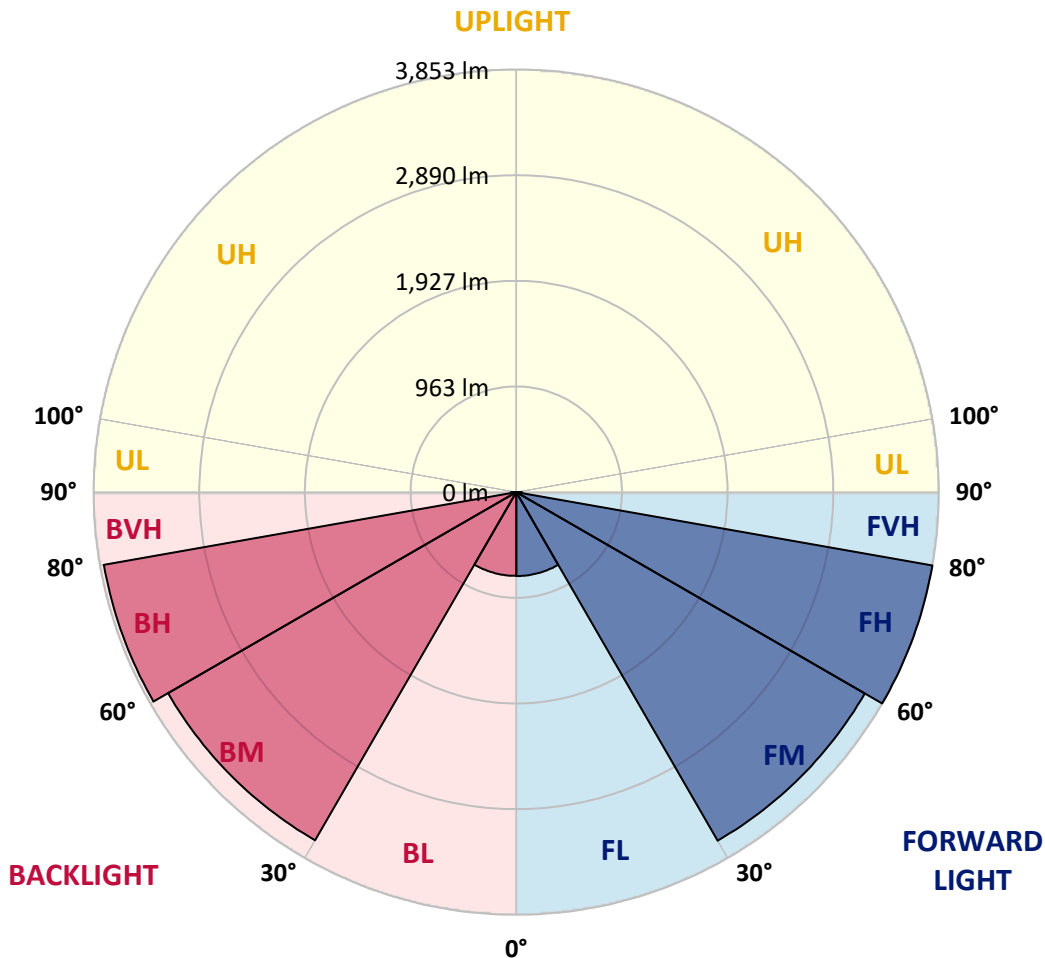
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 765.1  | 4.6       |                         |      |         |
| FM (30°-60°)   | 3669.8 | 22.1      |                         |      |         |
| FH (60°-80°)   | 3853.2 | 23.2      |                         |      | G2/5000 |
| FVH (80°-90°)  | 51.4   | 0.3       |                         |      | G1/100  |
| BL (0°-30°)    | 763.6  | 4.6       | B2/1000                 |      |         |
| BM (30°-60°)   | 3665.9 | 22.0      | B3/5000                 |      |         |
| BH (60°-80°)   | 3818.4 | 23.0      | B4/5000                 |      | G2/5000 |
| BVH (80°-90°)  | 49.0   | 0.3       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 44°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1817.2 | 1817.2 | 1817.2 | 1817.2 | 1817.2 | 1817.2 | 1817.2 | 1817.2 | 1817.2 | 1817.2 | 1817.2 |
| 2.5°  | 1775.5 | 1796.3 | 1811.5 | 1809.6 | 1815.3 | 1821.0 | 1813.4 | 1824.8 | 1817.2 | 1830.5 | 1838.1 |
| 5°    | 1809.6 | 1803.9 | 1805.8 | 1794.4 | 1821.0 | 1790.7 | 1790.7 | 1805.8 | 1824.8 | 1802.0 | 1815.3 |
| 7.5°  | 1788.8 | 1785.0 | 1775.5 | 1792.5 | 1798.2 | 1798.2 | 1813.4 | 1785.0 | 1817.2 | 1824.8 | 1826.7 |
| 10°   | 1766.0 | 1745.1 | 1773.6 | 1790.7 | 1794.4 | 1764.1 | 1777.4 | 1785.0 | 1775.5 | 1785.0 | 1790.7 |
| 12.5° | 1747.0 | 1758.4 | 1758.4 | 1758.4 | 1752.7 | 1773.6 | 1786.9 | 1785.0 | 1766.0 | 1783.1 | 1752.7 |
| 15°   | 1745.1 | 1739.4 | 1756.5 | 1771.7 | 1762.2 | 1766.0 | 1771.7 | 1788.8 | 1752.7 | 1760.3 | 1760.3 |
| 17.5° | 1743.2 | 1750.8 | 1756.5 | 1754.6 | 1786.9 | 1786.9 | 1781.2 | 1769.8 | 1798.2 | 1783.1 | 1762.2 |
| 20°   | 1750.8 | 1745.1 | 1760.3 | 1766.0 | 1788.8 | 1834.3 | 1817.2 | 1807.7 | 1792.5 | 1773.6 | 1773.6 |
| 22.5° | 1760.3 | 1756.5 | 1777.4 | 1802.0 | 1845.7 | 1857.1 | 1855.2 | 1843.8 | 1817.2 | 1794.4 | 1790.7 |
| 25°   | 1794.4 | 1760.3 | 1783.1 | 1830.5 | 1845.7 | 1868.5 | 1883.7 | 1868.5 | 1832.4 | 1838.1 | 1803.9 |
| 27.5° | 1845.7 | 1840.0 | 1870.4 | 1902.7 | 1889.4 | 1910.3 | 1897.0 | 1908.4 | 1910.3 | 1881.8 | 1847.6 |
| 30°   | 1906.5 | 1889.4 | 1908.4 | 1971.0 | 1976.7 | 1999.5 | 1976.7 | 1946.4 | 1955.9 | 1931.2 | 1914.1 |
| 32.5° | 1993.8 | 1988.1 | 2024.2 | 2066.0 | 2073.6 | 2062.2 | 2050.8 | 2067.9 | 2028.0 | 2009.0 | 1978.6 |
| 35°   | 2050.8 | 2075.5 | 2119.2 | 2151.4 | 2176.1 | 2164.7 | 2170.4 | 2153.3 | 2162.8 | 2123.0 | 2109.7 |
| 37.5° | 2219.8 | 2210.3 | 2219.8 | 2274.9 | 2280.6 | 2274.9 | 2280.6 | 2299.6 | 2286.3 | 2252.1 | 2217.9 |
| 40°   | 2379.3 | 2364.1 | 2386.9 | 2449.6 | 2445.8 | 2464.8 | 2426.8 | 2447.7 | 2447.7 | 2383.1 | 2369.8 |
| 42.5° | 2498.9 | 2550.2 | 2576.8 | 2628.1 | 2647.0 | 2630.0 | 2622.4 | 2626.2 | 2667.9 | 2592.0 | 2563.5 |
| 45°   | 2745.8 | 2743.9 | 2823.6 | 2852.1 | 2799.0 | 2795.2 | 2780.0 | 2825.5 | 2854.0 | 2810.4 | 2799.0 |
| 47.5° | 3013.5 | 3026.8 | 3072.4 | 3083.8 | 3116.1 | 3057.2 | 3057.2 | 3062.9 | 3163.5 | 3061.0 | 3007.8 |
| 50°   | 3254.7 | 3271.8 | 3362.9 | 3452.2 | 3391.4 | 3328.7 | 3353.4 | 3383.8 | 3438.9 | 3342.0 | 3296.5 |
| 52.5° | 3547.1 | 3640.2 | 3700.9 | 3748.4 | 3792.1 | 3748.4 | 3691.4 | 3725.6 | 3833.9 | 3704.7 | 3647.8 |
| 55°   | 3968.7 | 4042.7 | 4099.7 | 4187.0 | 4223.1 | 4164.3 | 4158.6 | 4154.8 | 4215.5 | 4078.8 | 4001.0 |
| 57.5° | 4439.6 | 4409.2 | 4500.4 | 4635.2 | 4766.2 | 4709.2 | 4692.1 | 4695.9 | 4711.1 | 4517.5 | 4458.6 |
| 60°   | 5024.5 | 5058.6 | 5166.9 | 5284.6 | 5423.2 | 5503.0 | 5390.9 | 5326.4 | 5339.7 | 5075.7 | 4984.6 |
| 62.5° | 5358.7 | 5434.6 | 5679.6 | 6084.0 | 6363.2 | 6611.9 | 6629.0 | 6209.4 | 5928.3 | 5415.6 | 5028.3 |
| 65°   | 5197.3 | 5185.9 | 5647.3 | 6395.5 | 7453.1 | 8176.6 | 8068.4 | 7050.6 | 6068.8 | 5254.2 | 4733.9 |
| 67.5° | 4420.6 | 4390.2 | 4948.5 | 6135.3 | 7882.3 | 9462.2 | 9338.7 | 7287.9 | 5594.1 | 4648.5 | 4059.8 |
| 70°   | 2848.3 | 2840.7 | 3446.5 | 4677.0 | 7037.3 | 8687.4 | 8733.0 | 6619.5 | 4553.5 | 3404.7 | 2821.7 |
| 72.5° | 1034.9 | 1097.6 | 1448.9 | 2514.1 | 4779.5 | 6646.1 | 6674.6 | 4901.0 | 2618.6 | 1574.2 | 1160.2 |
| 75°   | 381.7  | 393.1  | 457.6  | 816.5  | 2178.0 | 4080.7 | 4187.0 | 2377.4 | 930.5  | 512.7  | 417.8  |
| 77.5° | 220.3  | 222.2  | 245.0  | 303.8  | 645.6  | 1593.2 | 1657.7 | 721.6  | 360.8  | 273.4  | 252.6  |
| 80°   | 150.0  | 148.1  | 172.8  | 197.5  | 258.2  | 451.9  | 480.4  | 301.9  | 227.9  | 189.9  | 159.5  |
| 82.5° | 87.3   | 93.0   | 127.2  | 140.5  | 157.6  | 199.4  | 203.2  | 188.0  | 170.9  | 140.5  | 104.4  |
| 85°   | 53.2   | 43.7   | 70.3   | 77.9   | 91.1   | 89.2   | 89.2   | 102.5  | 110.1  | 98.7   | 58.9   |
| 87.5° | 13.3   | 13.3   | 17.1   | 19.0   | 24.7   | 19.0   | 20.9   | 39.9   | 53.2   | 49.4   | 30.4   |
| 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°    | 1817.2 | 1817.2 | 1817.2 | 1817.2 | 1817.2 | 1817.2 | 1817.2 | 1817.2 | 1817.2 | 1817.2 | 1817.2 |
| 2.5°  | 1821.0 | 1815.3 | 1819.1 | 1840.0 | 1826.7 | 1786.9 | 1796.3 | 1817.2 | 1800.1 | 1790.7 | 1788.8 |
| 5°    | 1813.4 | 1824.8 | 1811.5 | 1815.3 | 1828.6 | 1796.3 | 1802.0 | 1828.6 | 1817.2 | 1821.0 | 1800.1 |
| 7.5°  | 1815.3 | 1821.0 | 1809.6 | 1792.5 | 1792.5 | 1819.1 | 1803.9 | 1807.7 | 1790.7 | 1819.1 | 1781.2 |
| 10°   | 1803.9 | 1788.8 | 1775.5 | 1785.0 | 1781.2 | 1773.6 | 1767.9 | 1779.3 | 1762.2 | 1786.9 | 1760.3 |
| 12.5° | 1769.8 | 1773.6 | 1769.8 | 1766.0 | 1773.6 | 1792.5 | 1762.2 | 1766.0 | 1739.4 | 1743.2 | 1756.5 |
| 15°   | 1756.5 | 1767.9 | 1764.1 | 1785.0 | 1794.4 | 1766.0 | 1788.8 | 1766.0 | 1745.1 | 1733.7 | 1754.6 |
| 17.5° | 1762.2 | 1779.3 | 1773.6 | 1788.8 | 1771.7 | 1792.5 | 1796.3 | 1786.9 | 1762.2 | 1752.7 | 1762.2 |
| 20°   | 1767.9 | 1762.2 | 1769.8 | 1796.3 | 1821.0 | 1800.1 | 1800.1 | 1794.4 | 1771.7 | 1758.4 | 1758.4 |
| 22.5° | 1781.2 | 1771.7 | 1783.1 | 1803.9 | 1811.5 | 1843.8 | 1815.3 | 1802.0 | 1764.1 | 1729.9 | 1762.2 |
| 25°   | 1807.7 | 1813.4 | 1821.0 | 1813.4 | 1855.2 | 1851.4 | 1847.6 | 1838.1 | 1779.3 | 1781.2 | 1775.5 |
| 27.5° | 1859.0 | 1826.7 | 1836.2 | 1881.8 | 1887.5 | 1902.7 | 1883.7 | 1900.8 | 1838.1 | 1840.0 | 1802.0 |
| 30°   | 1921.7 | 1887.5 | 1917.9 | 1957.8 | 1955.9 | 1984.3 | 1974.8 | 1978.6 | 1935.0 | 1910.3 | 1859.0 |
| 32.5° | 1990.0 | 1986.2 | 2005.2 | 2029.9 | 2039.4 | 2054.6 | 2052.7 | 2052.7 | 2026.1 | 1961.5 | 1971.0 |
| 35°   | 2066.0 | 2092.6 | 2115.4 | 2141.9 | 2145.7 | 2164.7 | 2138.1 | 2141.9 | 2115.4 | 2067.9 | 2083.1 |
| 37.5° | 2216.0 | 2214.1 | 2238.8 | 2271.1 | 2274.9 | 2259.7 | 2280.6 | 2271.1 | 2235.0 | 2202.7 | 2178.0 |
| 40°   | 2390.7 | 2352.7 | 2375.5 | 2451.5 | 2457.2 | 2430.6 | 2428.7 | 2426.8 | 2400.2 | 2329.9 | 2314.7 |
| 42.5° | 2542.6 | 2592.0 | 2588.2 | 2612.9 | 2595.8 | 2582.5 | 2630.0 | 2603.4 | 2582.5 | 2508.4 | 2495.1 |
| 45°   | 2738.2 | 2753.4 | 2802.8 | 2882.5 | 2800.9 | 2800.9 | 2833.1 | 2812.3 | 2800.9 | 2745.8 | 2694.5 |
| 47.5° | 2981.3 | 2994.5 | 3093.3 | 3099.0 | 3045.8 | 3009.7 | 3110.4 | 3114.2 | 3066.7 | 3024.9 | 2962.3 |
| 50°   | 3266.1 | 3271.8 | 3361.0 | 3452.2 | 3393.3 | 3325.0 | 3427.5 | 3467.4 | 3361.0 | 3304.1 | 3226.2 |
| 52.5° | 3579.4 | 3562.3 | 3636.4 | 3807.3 | 3750.3 | 3729.4 | 3839.5 | 3849.0 | 3704.7 | 3615.5 | 3636.4 |
| 55°   | 3940.2 | 3917.4 | 4118.7 | 4234.5 | 4198.4 | 4160.5 | 4209.8 | 4232.6 | 4116.8 | 3970.6 | 4021.8 |
| 57.5° | 4407.3 | 4418.7 | 4519.4 | 4633.3 | 4692.1 | 4701.6 | 4724.4 | 4701.6 | 4583.9 | 4435.8 | 4388.3 |
| 60°   | 4874.4 | 4908.6 | 5104.2 | 5318.8 | 5337.8 | 5504.9 | 5474.5 | 5360.6 | 5193.5 | 4982.7 | 4992.2 |
| 62.5° | 5047.2 | 5018.8 | 5334.0 | 5858.1 | 6304.3 | 6610.0 | 6475.2 | 6070.7 | 5683.4 | 5299.8 | 5328.3 |
| 65°   | 4699.7 | 4770.0 | 5199.2 | 6019.5 | 6987.9 | 8197.5 | 7479.7 | 6361.3 | 5578.9 | 5083.3 | 5028.3 |
| 67.5° | 4050.3 | 4103.5 | 4648.5 | 5514.4 | 7232.9 | 9173.5 | 7859.5 | 5951.1 | 4920.0 | 4278.2 | 4312.4 |
| 70°   | 2821.7 | 2848.3 | 3381.9 | 4517.5 | 6558.8 | 8657.0 | 7090.4 | 4570.6 | 3397.1 | 2707.8 | 2745.8 |
| 72.5° | 1135.5 | 1200.1 | 1551.4 | 2721.1 | 4842.2 | 6577.7 | 4773.8 | 2398.3 | 1409.0 | 1048.2 | 951.3  |
| 75°   | 419.7  | 421.6  | 495.6  | 936.2  | 2299.6 | 4133.9 | 2153.3 | 770.9  | 450.0  | 368.4  | 351.3  |
| 77.5° | 243.1  | 241.2  | 258.2  | 338.0  | 666.5  | 1614.1 | 611.4  | 301.9  | 245.0  | 220.3  | 210.8  |
| 80°   | 151.9  | 150.0  | 176.6  | 224.1  | 292.4  | 442.4  | 258.2  | 188.0  | 165.2  | 142.4  | 142.4  |
| 82.5° | 96.8   | 98.7   | 138.6  | 165.2  | 178.5  | 195.6  | 150.0  | 132.9  | 123.4  | 81.7   | 79.8   |
| 85°   | 62.7   | 57.0   | 96.8   | 110.1  | 98.7   | 87.3   | 83.6   | 70.3   | 64.6   | 39.9   | 43.7   |
| 87.5° | 28.5   | 30.4   | 49.4   | 55.1   | 36.1   | 20.9   | 20.9   | 15.2   | 15.2   | 9.5    | 9.5    |
| 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)