

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: P509078

Luminaire Tested: **VERD-CA2-100-740-U-T3-HSS**

Issue Date: 3/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P509078  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-139-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-CA2-100-740-U-T3-HSS  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 1370mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13059 lumens  
Efficiency: N/A  
Efficacy: 126.3 lumens/watt  
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

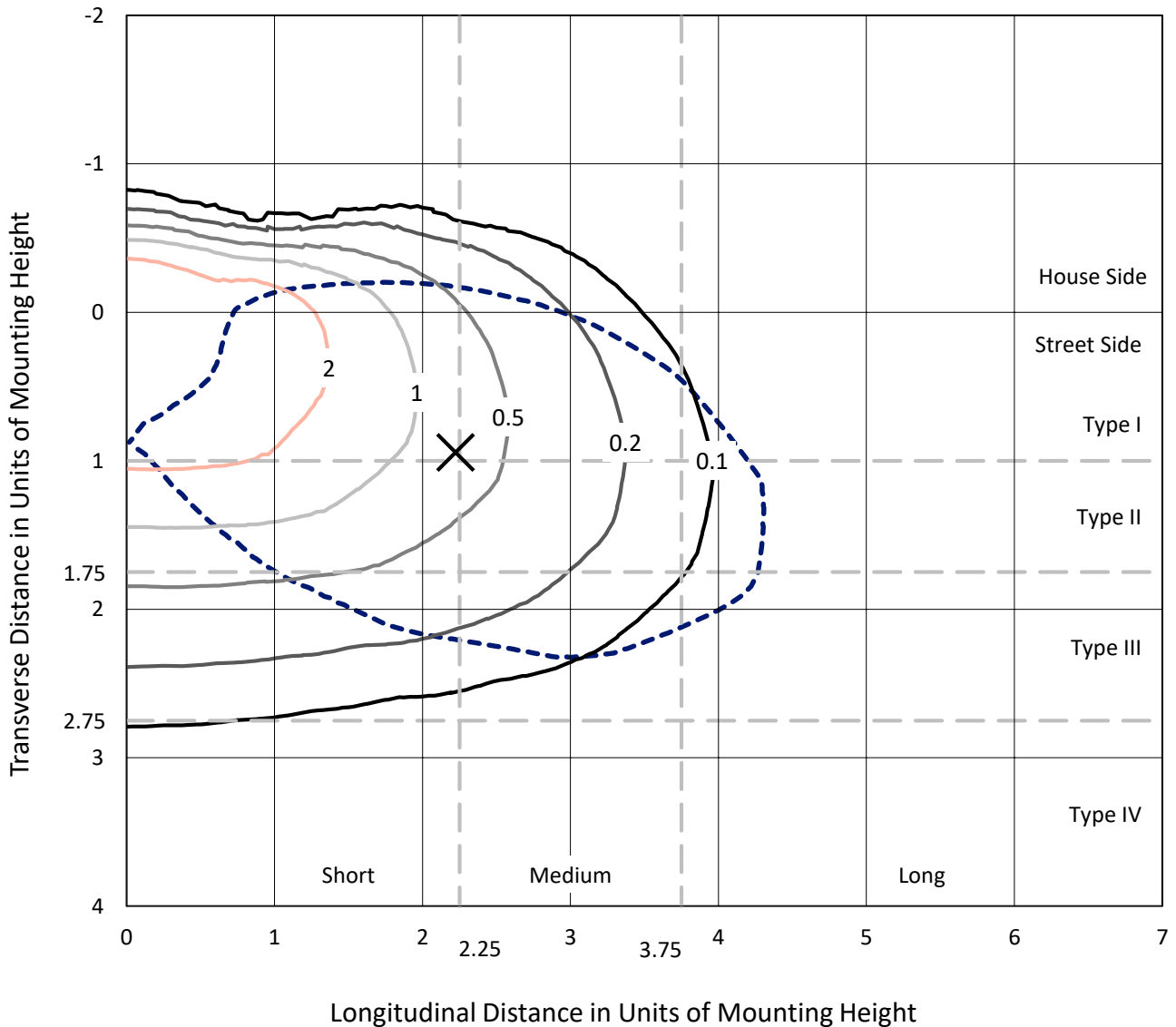
Input Watts (W): 103.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

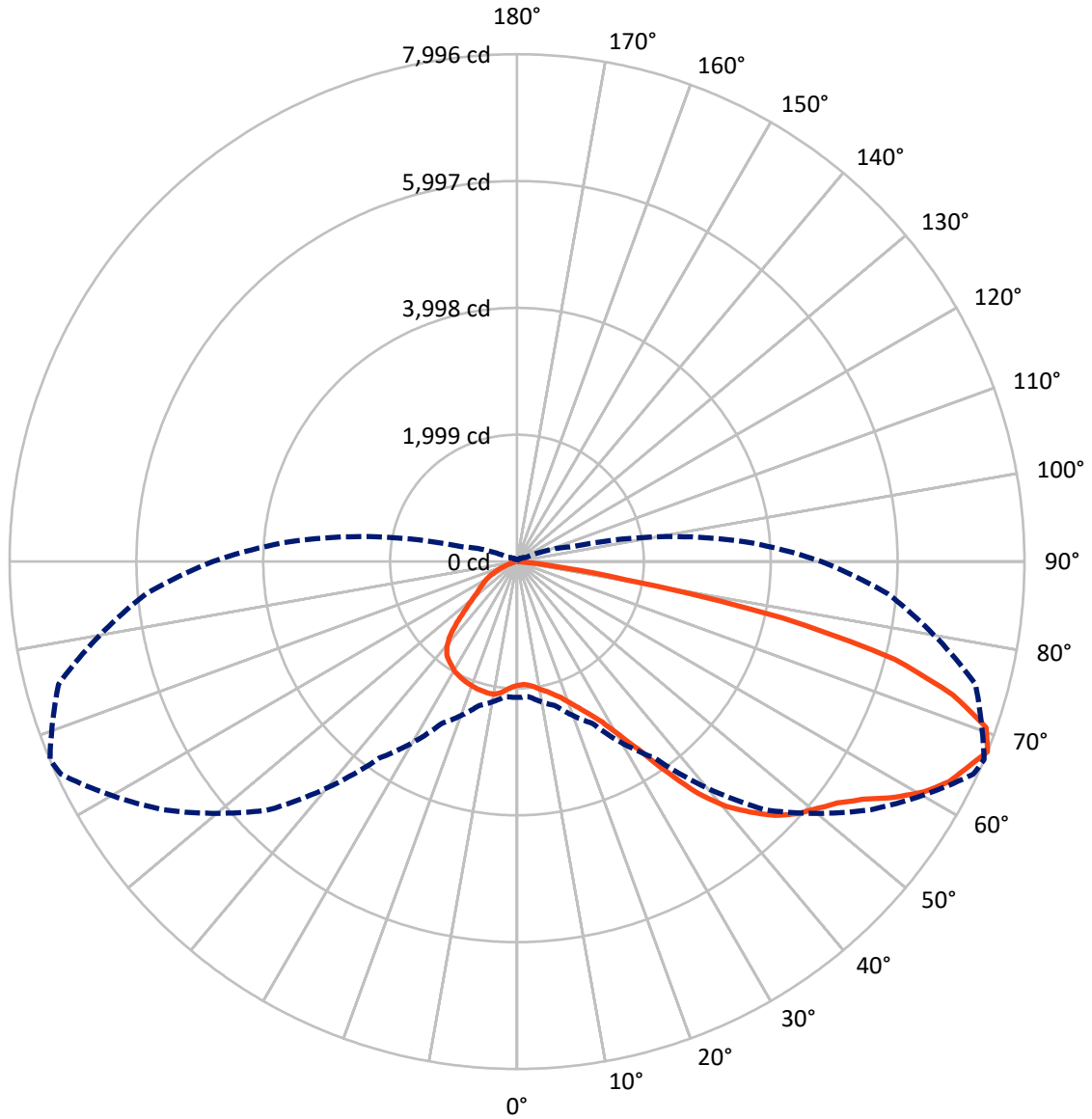
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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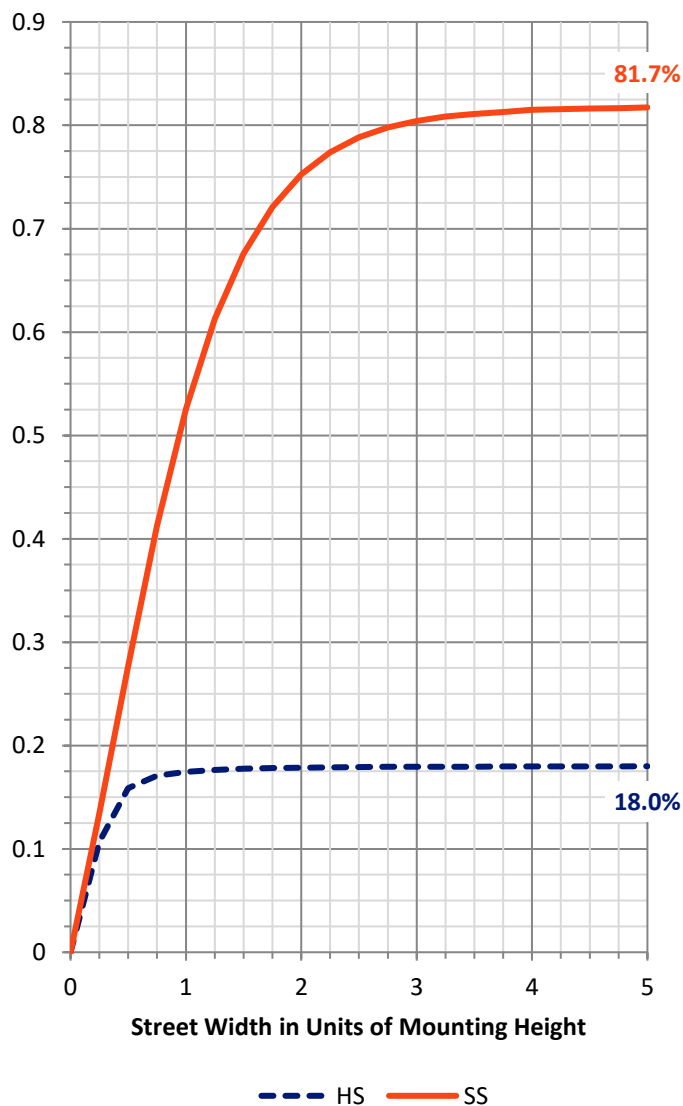
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2379.4   | 0.0    | 2379.4  |
|                    | % Fixture | 18.2     | 0.0    | 18.2    |
| <b>Street Side</b> | Lumens    | 10679.6  | 0.0    | 10679.6 |
|                    | % Fixture | 81.8     | 0.0    | 81.8    |
| <b>Total</b>       | Lumens    | 13059.0  | 0.0    | 13059.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 195.3   | 1.5       |
| 10°-20°   | 611.8   | 4.7       |
| 20°-30°   | 1044.0  | 8.0       |
| 30°-40°   | 1625.0  | 12.4      |
| 40°-50°   | 2293.9  | 17.6      |
| 50°-60°   | 2762.8  | 21.2      |
| 60°-70°   | 2855.2  | 21.9      |
| 70°-80°   | 1572.9  | 12.0      |
| 80°-90°   | 98.0    | 0.8       |
| 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°    | 13059.0 | 100.0     |
| 0°-180°   | 13059.0 | 100.0     |

**Coefficient of Utilization**



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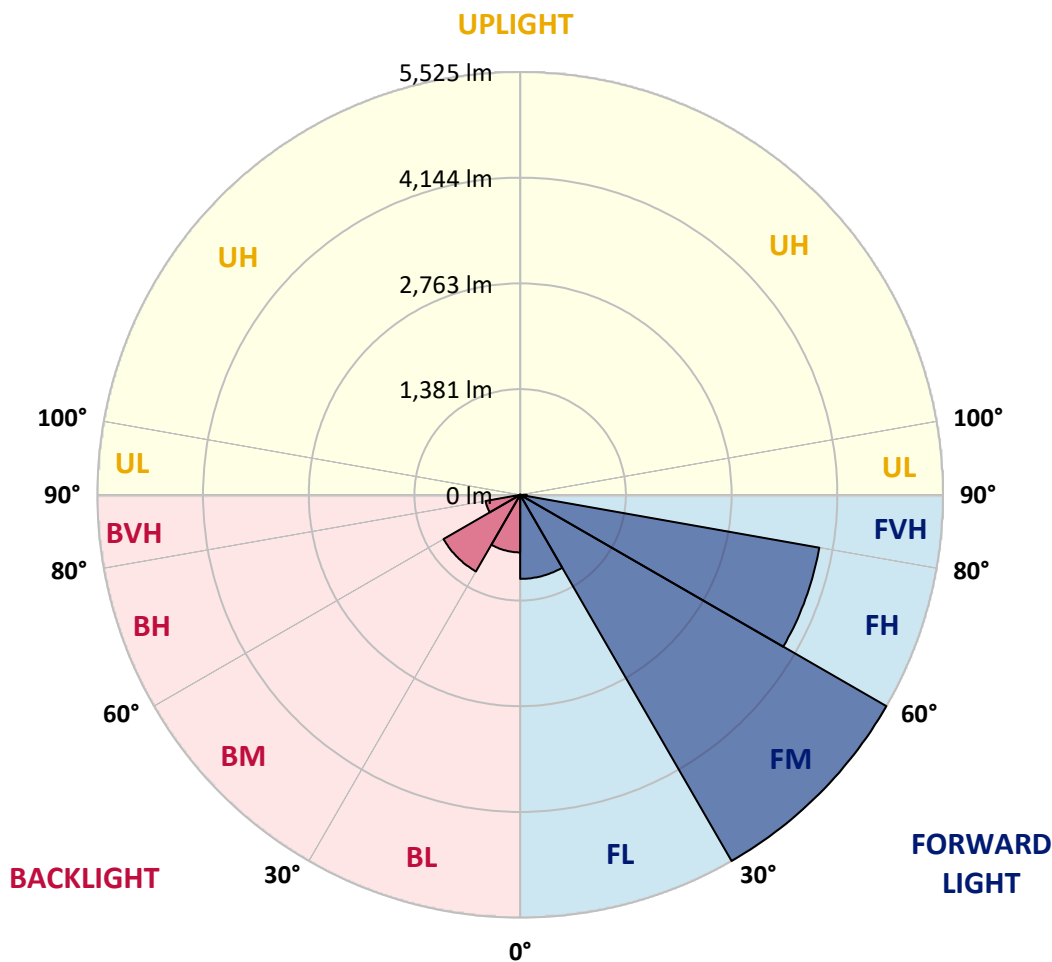
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1098.8 | 8.4       |                         |      |         |
| FM (30°-60°)   | 5525.1 | 42.3      |                         |      |         |
| FH (60°-80°)   | 3969.4 | 30.4      |                         |      | G2/5000 |
| FVH (80°-90°)  | 86.2   | 0.7       |                         |      | G1/100  |
| BL (0°-30°)    | 752.3  | 5.8       | B2/1000                 |      |         |
| BM (30°-60°)   | 1156.7 | 8.9       | B2/2500                 |      |         |
| BH (60°-80°)   | 458.6  | 3.5       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 11.8   | 0.1       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 67°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1949.9 | 1949.9 | 1949.9 | 1949.9 | 1949.9 | 1949.9 | 1949.9 | 1949.9 | 1949.9 | 1949.9 | 1949.9 |
| 2.5°  | 1931.7 | 1951.4 | 1951.4 | 1945.3 | 1948.3 | 1934.7 | 1925.7 | 1936.3 | 1939.3 | 1948.3 | 1960.4 |
| 5°    | 1969.5 | 1992.2 | 1990.7 | 1980.1 | 1971.0 | 1958.9 | 1946.8 | 1955.9 | 1957.4 | 1960.4 | 1975.6 |
| 7.5°  | 2049.6 | 2070.8 | 2061.7 | 2051.1 | 2046.6 | 2019.4 | 1993.7 | 1992.2 | 1995.2 | 2004.3 | 2020.9 |
| 10°   | 2153.9 | 2170.5 | 2167.5 | 2150.9 | 2138.8 | 2098.0 | 2061.7 | 2048.1 | 2049.6 | 2052.6 | 2081.4 |
| 12.5° | 2271.8 | 2294.5 | 2277.9 | 2255.2 | 2234.0 | 2175.1 | 2125.2 | 2105.5 | 2102.5 | 2110.1 | 2134.3 |
| 15°   | 2388.2 | 2412.4 | 2400.3 | 2386.7 | 2338.3 | 2273.3 | 2209.8 | 2178.1 | 2175.1 | 2175.1 | 2190.2 |
| 17.5° | 2540.9 | 2549.9 | 2542.4 | 2522.7 | 2468.3 | 2386.7 | 2311.1 | 2264.3 | 2256.7 | 2261.2 | 2264.3 |
| 20°   | 2710.2 | 2726.8 | 2717.7 | 2696.5 | 2617.9 | 2530.3 | 2435.1 | 2379.1 | 2374.6 | 2379.1 | 2350.4 |
| 22.5° | 2915.7 | 2921.8 | 2917.2 | 2882.5 | 2811.4 | 2695.0 | 2569.6 | 2506.1 | 2506.1 | 2510.6 | 2451.7 |
| 25°   | 3091.1 | 3127.3 | 3116.7 | 3074.4 | 2991.3 | 2890.0 | 2738.9 | 2660.3 | 2664.8 | 2667.8 | 2586.2 |
| 27.5° | 3295.1 | 3325.3 | 3317.8 | 3286.0 | 3231.6 | 3103.1 | 2921.8 | 2870.4 | 2865.8 | 2861.3 | 2734.3 |
| 30°   | 3490.1 | 3512.8 | 3527.9 | 3520.3 | 3476.5 | 3355.6 | 3193.8 | 3156.0 | 3168.1 | 3159.1 | 2939.9 |
| 32.5° | 3648.8 | 3688.1 | 3730.4 | 3739.5 | 3727.4 | 3620.1 | 3502.2 | 3521.8 | 3537.0 | 3644.3 | 3512.8 |
| 35°   | 3784.8 | 3827.2 | 3896.7 | 3969.2 | 3982.8 | 3940.5 | 3881.6 | 4025.2 | 4069.0 | 4288.2 | 4149.1 |
| 37.5° | 3926.9 | 3963.2 | 4032.7 | 4147.6 | 4223.2 | 4245.9 | 4303.3 | 4530.0 | 4635.8 | 4824.8 | 4566.3 |
| 40°   | 3991.9 | 4028.2 | 4149.1 | 4294.2 | 4451.4 | 4578.4 | 4693.3 | 4956.3 | 5074.2 | 5131.6 | 4796.0 |
| 42.5° | 3926.9 | 3961.7 | 4156.7 | 4430.3 | 4643.4 | 4924.5 | 5054.5 | 5317.5 | 5396.1 | 5390.1 | 5078.7 |
| 45°   | 3863.4 | 3896.7 | 4100.7 | 4465.0 | 4817.2 | 5243.5 | 5353.8 | 5648.5 | 5706.0 | 5633.4 | 5241.9 |
| 47.5° | 3781.8 | 3827.2 | 4038.8 | 4443.9 | 4972.9 | 5532.2 | 5633.4 | 5884.3 | 5935.7 | 5828.4 | 5429.4 |
| 50°   | 3682.1 | 3721.4 | 3967.7 | 4410.6 | 5075.7 | 5748.3 | 5855.6 | 6105.0 | 6118.6 | 6018.9 | 5598.7 |
| 52.5° | 3567.2 | 3588.3 | 3855.9 | 4344.1 | 5164.9 | 5907.0 | 6029.4 | 6290.9 | 6322.7 | 6295.5 | 5799.7 |
| 55°   | 3396.4 | 3434.2 | 3721.4 | 4239.8 | 5170.9 | 5990.1 | 6164.0 | 6553.9 | 6611.4 | 6547.9 | 5922.1 |
| 57.5° | 3216.5 | 3257.3 | 3555.1 | 4094.7 | 5081.7 | 6043.0 | 6408.8 | 6895.5 | 7008.9 | 6804.9 | 6021.9 |
| 60°   | 3018.5 | 3054.8 | 3348.0 | 3880.1 | 4923.0 | 6118.6 | 6661.3 | 7296.1 | 7367.1 | 7024.0 | 6088.4 |
| 62.5° | 2788.7 | 2817.5 | 3097.1 | 3620.1 | 4679.7 | 6099.0 | 6878.9 | 7618.0 | 7640.7 | 7220.5 | 6082.3 |
| 65°   | 2509.1 | 2507.6 | 2767.6 | 3257.3 | 4280.6 | 5941.8 | 6918.2 | 7779.8 | 7807.0 | 7347.5 | 6027.9 |
| 67.5° | 2140.3 | 2135.8 | 2353.4 | 2814.4 | 3777.3 | 5532.2 | 6813.9 | 7930.9 | 7995.9 | 7480.5 | 5869.2 |
| 70°   | 1677.8 | 1683.8 | 1848.6 | 2259.7 | 3065.4 | 4907.9 | 6538.8 | 7829.7 | 7843.3 | 7225.1 | 5458.1 |
| 72.5° | 1186.5 | 1183.5 | 1295.4 | 1573.5 | 2265.8 | 3831.7 | 5746.8 | 7138.9 | 7181.2 | 6593.2 | 4755.2 |
| 75°   | 544.1  | 566.8  | 846.4  | 961.3  | 1367.9 | 2608.9 | 4728.0 | 6065.7 | 6147.3 | 5675.7 | 3707.8 |
| 77.5° | 101.3  | 104.3  | 181.4  | 365.8  | 535.1  | 941.7  | 2825.0 | 4108.3 | 4279.1 | 3868.0 | 2088.9 |
| 80°   | 80.1   | 81.6   | 107.3  | 175.3  | 223.7  | 423.2  | 929.6  | 1692.9 | 1730.7 | 1508.5 | 752.7  |
| 82.5° | 58.9   | 60.5   | 80.1   | 113.4  | 104.3  | 182.9  | 386.9  | 492.8  | 523.0  | 486.7  | 299.3  |
| 85°   | 34.8   | 36.3   | 46.9   | 55.9   | 54.4   | 72.6   | 65.0   | 58.9   | 52.9   | 43.8   | 37.8   |
| 87.5° | 9.1    | 12.1   | 19.6   | 19.6   | 15.1   | 13.6   | 12.1   | 10.6   | 12.1   | 10.6   | 10.6   |
| 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°    | 1949.9 | 1949.9 | 1949.9 | 1949.9 | 1949.9 | 1949.9 | 1949.9 | 1949.9 | 1949.9 | 1949.9 | 1949.9 |
| 2.5°  | 1963.5 | 1961.9 | 1966.5 | 1978.6 | 1989.2 | 1990.7 | 2005.8 | 2025.4 | 2016.4 | 2042.1 | 2033.0 |
| 5°    | 1984.6 | 1989.2 | 2005.8 | 2025.4 | 2043.6 | 2058.7 | 2081.4 | 2114.6 | 2104.0 | 2128.2 | 2119.1 |
| 7.5°  | 2033.0 | 2040.5 | 2066.2 | 2085.9 | 2107.1 | 2102.5 | 2122.2 | 2141.8 | 2117.6 | 2143.3 | 2131.2 |
| 10°   | 2090.4 | 2099.5 | 2114.6 | 2122.2 | 2116.1 | 2113.1 | 2108.6 | 2105.5 | 2073.8 | 2091.9 | 2084.4 |
| 12.5° | 2141.8 | 2143.3 | 2138.8 | 2119.1 | 2105.5 | 2069.3 | 2052.6 | 2045.1 | 1996.7 | 2010.3 | 2001.2 |
| 15°   | 2191.7 | 2170.5 | 2147.9 | 2102.5 | 2064.7 | 2008.8 | 1972.5 | 1940.8 | 1895.4 | 1913.6 | 1895.4 |
| 17.5° | 2246.1 | 2214.4 | 2155.4 | 2088.9 | 2011.8 | 1930.2 | 1871.3 | 1819.9 | 1751.8 | 1748.8 | 1742.8 |
| 20°   | 2315.6 | 2268.8 | 2173.6 | 2064.7 | 1954.4 | 1832.0 | 1738.2 | 1652.1 | 1549.3 | 1535.7 | 1508.5 |
| 22.5° | 2403.3 | 2333.8 | 2200.8 | 2033.0 | 1883.4 | 1729.2 | 1570.5 | 1428.4 | 1298.4 | 1257.6 | 1242.5 |
| 25°   | 2504.6 | 2418.4 | 2215.9 | 2004.3 | 1815.3 | 1579.5 | 1363.4 | 1179.0 | 1026.3 | 982.5  | 970.4  |
| 27.5° | 2631.6 | 2525.7 | 2238.6 | 1961.9 | 1706.5 | 1396.6 | 1115.5 | 911.4  | 775.4  | 704.4  | 693.8  |
| 30°   | 2806.9 | 2645.2 | 2270.3 | 1919.6 | 1575.0 | 1182.0 | 864.6  | 627.3  | 498.8  | 456.5  | 448.9  |
| 32.5° | 3284.5 | 2929.3 | 2305.1 | 1844.1 | 1401.2 | 943.2  | 574.4  | 400.6  | 314.4  | 279.6  | 276.6  |
| 35°   | 3890.6 | 3449.3 | 2432.0 | 1757.9 | 1191.1 | 654.5  | 356.7  | 238.8  | 192.0  | 178.4  | 178.4  |
| 37.5° | 4282.1 | 3852.9 | 2643.6 | 1637.0 | 914.5  | 400.6  | 214.6  | 155.7  | 146.6  | 145.1  | 145.1  |
| 40°   | 4487.7 | 4031.2 | 2796.3 | 1470.7 | 612.2  | 232.8  | 151.2  | 134.5  | 131.5  | 128.5  | 128.5  |
| 42.5° | 4749.2 | 4183.9 | 2927.8 | 1245.5 | 355.2  | 163.2  | 133.0  | 122.4  | 117.9  | 114.9  | 114.9  |
| 45°   | 4894.3 | 4350.1 | 2844.7 | 978.0  | 202.5  | 146.6  | 122.4  | 110.3  | 105.8  | 105.8  | 105.8  |
| 47.5° | 5036.4 | 4508.9 | 2738.9 | 702.9  | 172.3  | 134.5  | 114.9  | 102.8  | 98.2   | 101.3  | 101.3  |
| 50°   | 5198.1 | 4616.2 | 2571.1 | 526.0  | 163.2  | 125.5  | 104.3  | 93.7   | 90.7   | 95.2   | 95.2   |
| 52.5° | 5349.3 | 4626.8 | 2302.0 | 420.2  | 151.2  | 116.4  | 96.7   | 86.2   | 83.1   | 86.2   | 86.2   |
| 55°   | 5393.1 | 4593.5 | 2225.0 | 334.0  | 143.6  | 107.3  | 90.7   | 80.1   | 72.6   | 72.6   | 71.0   |
| 57.5° | 5382.5 | 4528.5 | 2037.5 | 282.7  | 134.5  | 98.2   | 83.1   | 71.0   | 62.0   | 58.9   | 58.9   |
| 60°   | 5346.2 | 4437.8 | 1839.5 | 246.4  | 125.5  | 90.7   | 74.1   | 60.5   | 51.4   | 48.4   | 48.4   |
| 62.5° | 5300.9 | 4267.0 | 1559.9 | 214.6  | 116.4  | 87.7   | 62.0   | 49.9   | 43.8   | 40.8   | 40.8   |
| 65°   | 5110.4 | 4001.0 | 1248.5 | 182.9  | 107.3  | 77.1   | 54.4   | 43.8   | 37.8   | 34.8   | 34.8   |
| 67.5° | 4794.5 | 3595.9 | 902.4  | 155.7  | 99.8   | 65.0   | 48.4   | 37.8   | 31.7   | 30.2   | 28.7   |
| 70°   | 4322.9 | 3036.6 | 559.3  | 134.5  | 86.2   | 58.9   | 42.3   | 33.3   | 28.7   | 24.2   | 24.2   |
| 72.5° | 3603.5 | 2377.6 | 293.2  | 105.8  | 68.0   | 49.9   | 37.8   | 30.2   | 24.2   | 21.2   | 19.6   |
| 75°   | 2533.3 | 1466.2 | 211.6  | 81.6   | 46.9   | 40.8   | 31.7   | 25.7   | 21.2   | 18.1   | 16.6   |
| 77.5° | 1222.8 | 504.8  | 148.1  | 60.5   | 33.3   | 30.2   | 24.2   | 21.2   | 16.6   | 15.1   | 15.1   |
| 80°   | 447.4  | 287.2  | 105.8  | 43.8   | 27.2   | 24.2   | 18.1   | 16.6   | 13.6   | 12.1   | 12.1   |
| 82.5° | 201.0  | 136.0  | 60.5   | 28.7   | 19.6   | 18.1   | 13.6   | 10.6   | 10.6   | 10.6   | 10.6   |
| 85°   | 33.3   | 28.7   | 19.6   | 13.6   | 10.6   | 9.1    | 9.1    | 7.6    | 7.6    | 7.6    | 7.6    |
| 87.5° | 9.1    | 9.1    | 7.6    | 7.6    | 6.0    | 4.5    | 3.0    | 3.0    | 3.0    | 4.5    | 4.5    |
| 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)