

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: P233876

Luminaire Tested: **VERD-G-C02H-D-U-T4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233876
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1710-389-15)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-G-C02H-D-U-T4
Description: VERDEON-G ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1370mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18788 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 155
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: 28.75 FT

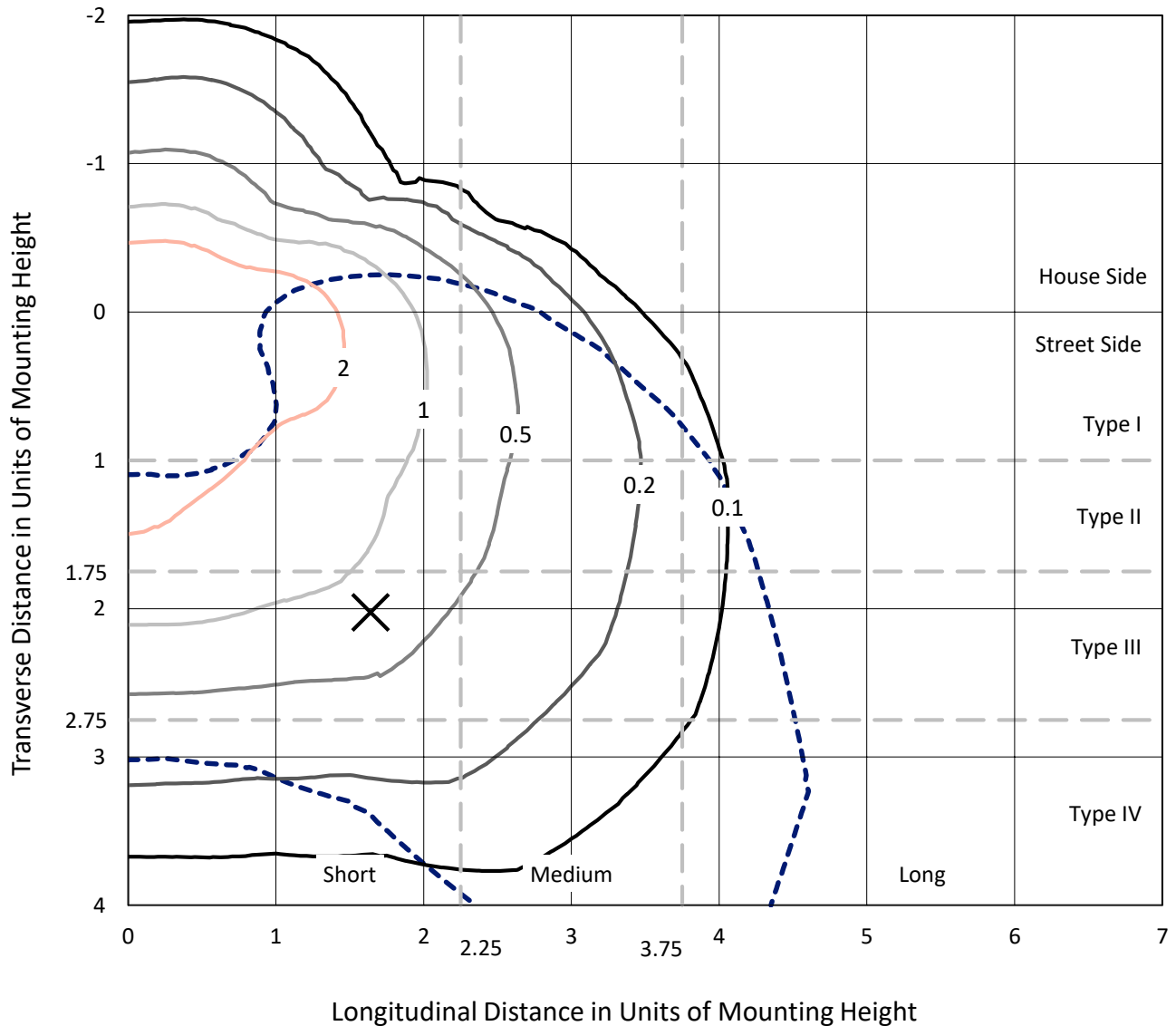


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

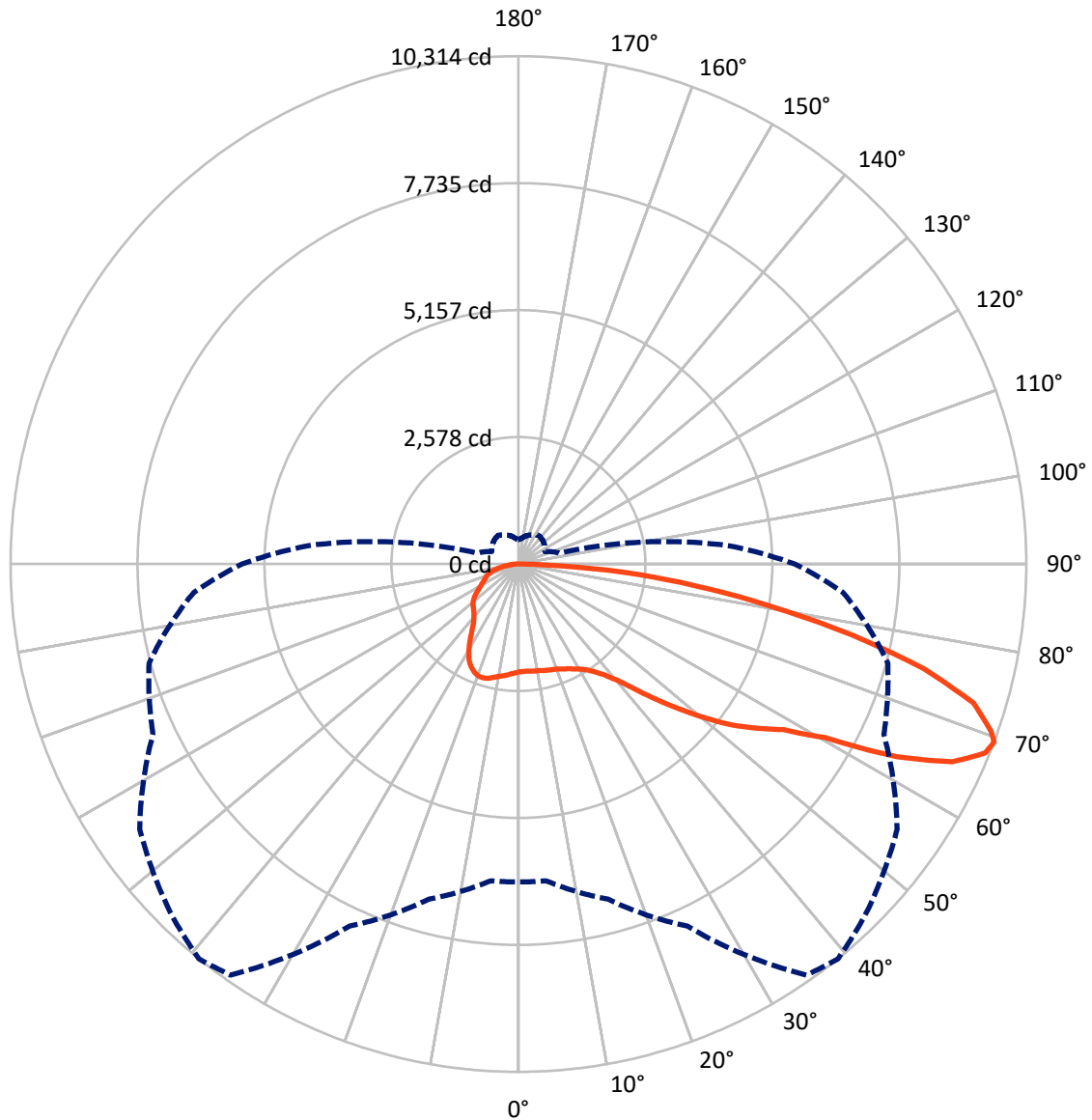


Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4404.3 | 0.0 | 4404.3 |
| | % Fixture | 23.4 | 0.0 | 23.4 |
| Street Side | Lumens | 14383.7 | 0.0 | 14383.7 |
| | % Fixture | 76.6 | 0.0 | 76.6 |
| Total | Lumens | 18788.0 | 0.0 | 18788.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 212.6 | 1.1 |
| 10°-20° | 657.3 | 3.5 |
| 20°-30° | 1106.5 | 5.9 |
| 30°-40° | 1603.1 | 8.5 |
| 40°-50° | 2591.3 | 13.8 |
| 50°-60° | 3793.7 | 20.2 |
| 60°-70° | 4748.3 | 25.3 |
| 70°-80° | 3394.5 | 18.1 |
| 80°-90° | 680.6 | 3.6 |
| 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° | 18788.0 | 100.0 |
| 0°-180° | 18788.0 | 100.0 |



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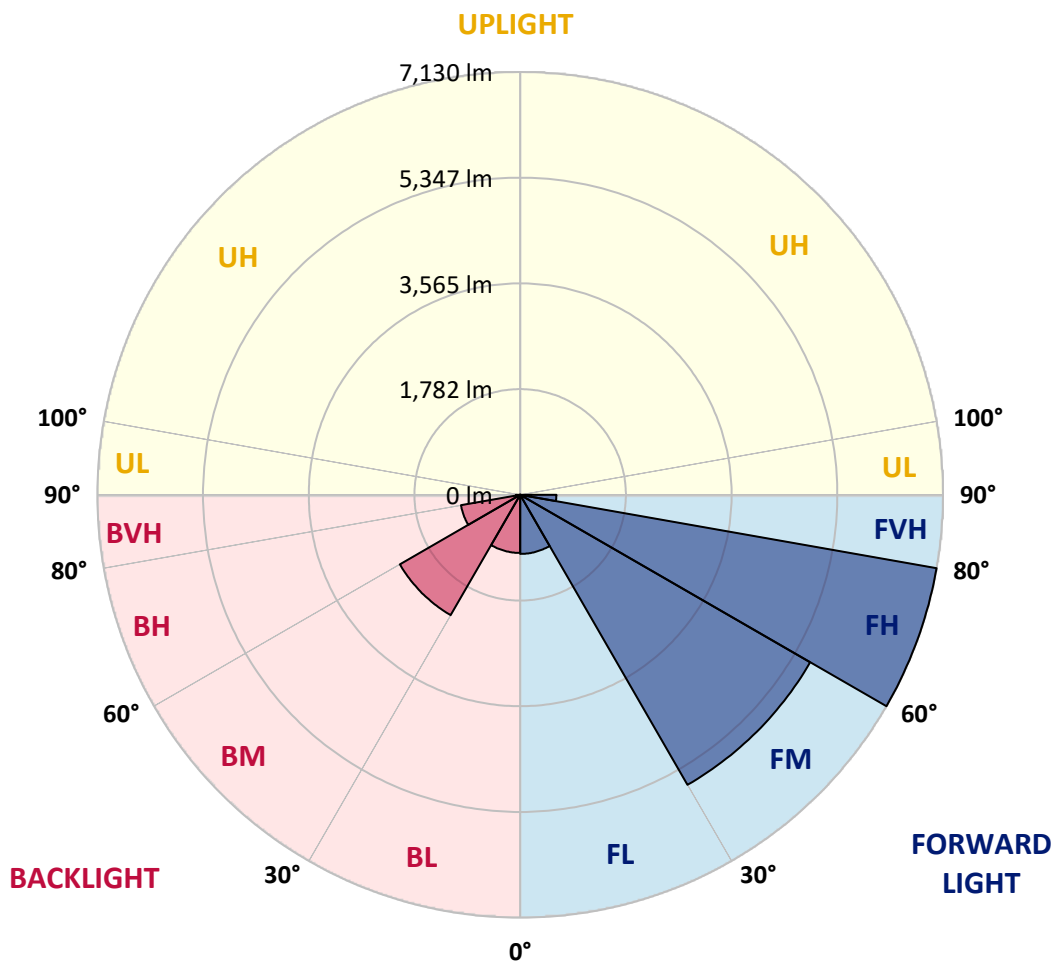
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 996.7 | 5.3 | | | |
| FM | (30°-60°) | 5646.0 | 30.1 | | | |
| FH | (60°-80°) | 7129.9 | 37.9 | | | G3/7500 |
| FVH | (80°-90°) | 611.0 | 3.3 | | | G4/750 |
| BL | (0°-30°) | 979.8 | 5.2 | B2/1000 | | |
| BM | (30°-60°) | 2342.1 | 12.5 | B2/2500 | | |
| BH | (60°-80°) | 1012.8 | 5.4 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 69.6 | 0.4 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 39° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|---------|---------|---------|--------|--------|--------|--------|
| 0° | 2188.4 | 2188.4 | 2188.4 | 2188.4 | 2188.4 | 2188.4 | 2188.4 | 2188.4 | 2188.4 | 2188.4 | 2188.4 |
| 2.5° | 2226.5 | 2223.1 | 2216.1 | 2188.4 | 2185.0 | 2183.2 | 2186.7 | 2176.3 | 2174.6 | 2178.0 | 2174.6 |
| 5° | 2228.3 | 2224.8 | 2216.1 | 2191.9 | 2188.4 | 2185.0 | 2186.7 | 2178.0 | 2179.8 | 2188.4 | 2188.4 |
| 7.5° | 2231.7 | 2228.3 | 2219.6 | 2193.6 | 2200.6 | 2197.1 | 2204.0 | 2191.9 | 2191.9 | 2198.8 | 2200.6 |
| 10° | 2223.1 | 2221.3 | 2216.1 | 2197.1 | 2207.5 | 2200.6 | 2207.5 | 2209.2 | 2216.1 | 2221.3 | 2219.6 |
| 12.5° | 2200.6 | 2200.6 | 2200.6 | 2191.9 | 2221.3 | 2219.6 | 2231.7 | 2243.8 | 2261.2 | 2269.8 | 2275.0 |
| 15° | 2186.7 | 2185.0 | 2197.1 | 2195.4 | 2231.7 | 2236.9 | 2257.7 | 2288.9 | 2314.8 | 2337.3 | 2344.3 |
| 17.5° | 2200.6 | 2200.6 | 2216.1 | 2212.7 | 2249.0 | 2252.5 | 2275.0 | 2320.0 | 2363.3 | 2406.6 | 2425.6 |
| 20° | 2216.1 | 2217.9 | 2236.9 | 2242.1 | 2276.7 | 2275.0 | 2297.5 | 2352.9 | 2411.8 | 2475.8 | 2508.7 |
| 22.5° | 2264.6 | 2262.9 | 2278.5 | 2268.1 | 2307.9 | 2314.8 | 2333.9 | 2382.3 | 2465.5 | 2546.8 | 2600.5 |
| 25° | 2301.0 | 2306.2 | 2321.8 | 2314.8 | 2347.7 | 2356.4 | 2387.5 | 2434.3 | 2533.0 | 2629.9 | 2725.2 |
| 27.5° | 2335.6 | 2346.0 | 2358.1 | 2356.4 | 2401.4 | 2411.8 | 2436.0 | 2508.7 | 2623.0 | 2739.0 | 2872.3 |
| 30° | 2387.5 | 2384.1 | 2392.7 | 2408.3 | 2467.2 | 2474.1 | 2503.5 | 2591.8 | 2730.4 | 2881.0 | 3059.3 |
| 32.5° | 2456.8 | 2453.3 | 2462.0 | 2475.8 | 2546.8 | 2564.1 | 2604.0 | 2699.2 | 2874.1 | 3055.8 | 3274.0 |
| 35° | 2565.9 | 2574.5 | 2581.5 | 2598.8 | 2668.0 | 2692.3 | 2745.9 | 2867.1 | 3069.7 | 3360.6 | 3672.2 |
| 37.5° | 2945.0 | 2926.0 | 2887.9 | 2818.7 | 2837.7 | 2865.4 | 2941.6 | 3114.7 | 3409.0 | 3902.5 | 4188.2 |
| 40° | 3537.2 | 3514.7 | 3395.2 | 3192.6 | 3100.9 | 3107.8 | 3182.2 | 3417.7 | 3819.4 | 4539.6 | 4802.8 |
| 42.5° | 4094.7 | 4067.0 | 3925.0 | 3672.2 | 3490.4 | 3469.6 | 3476.6 | 3748.4 | 4269.5 | 5176.8 | 5317.0 |
| 45° | 4621.0 | 4634.8 | 4418.4 | 4224.5 | 4016.8 | 3921.5 | 3892.1 | 4094.7 | 4769.9 | 5729.1 | 5772.3 |
| 47.5° | 5124.8 | 5135.2 | 4891.1 | 4704.1 | 4503.3 | 4392.5 | 4335.3 | 4492.9 | 5230.4 | 6175.8 | 6135.9 |
| 50° | 5639.0 | 5666.7 | 5332.6 | 5173.3 | 4988.0 | 4908.4 | 4853.0 | 4956.9 | 5739.5 | 6603.4 | 6480.5 |
| 52.5° | 6364.5 | 6248.5 | 5810.4 | 5585.4 | 5453.8 | 5429.5 | 5372.4 | 5457.2 | 6279.6 | 6980.8 | 6724.6 |
| 55° | 7171.3 | 6923.7 | 6463.2 | 6070.1 | 5888.4 | 5888.4 | 5838.1 | 5936.8 | 6837.1 | 7263.0 | 6923.7 |
| 57.5° | 7432.7 | 7457.0 | 7297.7 | 6870.0 | 6381.8 | 6343.7 | 6295.2 | 6430.3 | 7315.0 | 7515.8 | 6998.2 |
| 60° | 7889.8 | 7957.3 | 8080.3 | 7723.6 | 7482.9 | 7159.2 | 6864.8 | 6937.6 | 7727.1 | 7723.6 | 7077.8 |
| 62.5° | 8116.6 | 8180.7 | 8565.0 | 8372.8 | 8599.7 | 8622.2 | 8071.6 | 7510.6 | 8031.8 | 7827.5 | 7115.9 |
| 65° | 7901.9 | 7946.9 | 8459.4 | 8712.2 | 9370.1 | 9683.5 | 9411.7 | 8281.1 | 8192.8 | 7784.2 | 6973.9 |
| 67.5° | 7197.3 | 7282.1 | 7706.3 | 8476.7 | 10057.5 | 10232.3 | 9977.8 | 9338.9 | 8262.0 | 7798.0 | 6859.6 |
| 69° | 6456.2 | 6458.0 | 7046.6 | 8114.9 | 10192.5 | 10313.7 | 10002.1 | 9389.2 | 8189.3 | 7765.1 | 6615.5 |
| 70° | 6039.0 | 6082.3 | 6518.6 | 7801.5 | 10142.3 | 10182.1 | 9943.2 | 9387.4 | 8139.1 | 7754.8 | 6383.5 |
| 72.5° | 4712.8 | 4690.3 | 5124.8 | 6523.8 | 9574.4 | 9662.7 | 9399.5 | 9122.5 | 8097.6 | 7308.1 | 5400.1 |
| 75° | 3294.8 | 3364.0 | 3789.9 | 4943.0 | 8249.9 | 8514.8 | 8514.8 | 8764.1 | 7453.5 | 6245.0 | 3904.2 |
| 77.5° | 2451.6 | 2462.0 | 2803.1 | 3776.1 | 6638.0 | 6913.3 | 7166.1 | 7375.6 | 5826.0 | 4278.2 | 1745.2 |
| 80° | 1660.4 | 1676.0 | 1987.6 | 2785.8 | 4918.8 | 5171.6 | 5571.5 | 5074.6 | 3466.2 | 1480.3 | 199.1 |
| 82.5° | 1045.7 | 1066.5 | 1314.1 | 1956.4 | 3506.0 | 3620.3 | 3743.2 | 2865.4 | 1154.8 | 171.4 | 126.4 |
| 85° | 621.6 | 625.0 | 793.0 | 1250.0 | 2138.2 | 2145.2 | 2013.6 | 1319.3 | 309.9 | 102.2 | 79.6 |
| 87.5° | 259.7 | 273.6 | 346.3 | 554.0 | 626.8 | 495.2 | 308.2 | 105.6 | 46.7 | 41.6 | 27.7 |
| 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° | 2188.4 | 2188.4 | 2188.4 | 2188.4 | 2188.4 | 2188.4 | 2188.4 | 2188.4 | 2188.4 | 2188.4 | 2188.4 |
| 2.5° | 2164.2 | 2183.2 | 2179.8 | 2185.0 | 2191.9 | 2205.8 | 2221.3 | 2214.4 | 2223.1 | 2242.1 | 2242.1 |
| 5° | 2183.2 | 2198.8 | 2204.0 | 2214.4 | 2223.1 | 2236.9 | 2247.3 | 2243.8 | 2262.9 | 2290.6 | 2290.6 |
| 7.5° | 2198.8 | 2210.9 | 2228.3 | 2240.4 | 2249.0 | 2276.7 | 2287.1 | 2280.2 | 2294.1 | 2326.9 | 2328.7 |
| 10° | 2221.3 | 2233.5 | 2259.4 | 2271.5 | 2288.9 | 2302.7 | 2316.6 | 2314.8 | 2328.7 | 2358.1 | 2363.3 |
| 12.5° | 2276.7 | 2285.4 | 2321.8 | 2339.1 | 2339.1 | 2356.4 | 2346.0 | 2328.7 | 2335.6 | 2352.9 | 2356.4 |
| 15° | 2349.5 | 2361.6 | 2408.3 | 2417.0 | 2408.3 | 2411.8 | 2387.5 | 2332.1 | 2304.4 | 2309.6 | 2311.4 |
| 17.5° | 2432.6 | 2453.3 | 2507.0 | 2494.9 | 2484.5 | 2458.5 | 2396.2 | 2313.1 | 2230.0 | 2198.8 | 2204.0 |
| 20° | 2520.9 | 2546.8 | 2609.2 | 2583.2 | 2545.1 | 2477.6 | 2377.2 | 2235.2 | 2107.1 | 2032.6 | 2029.2 |
| 22.5° | 2623.0 | 2655.9 | 2714.8 | 2669.8 | 2584.9 | 2467.2 | 2313.1 | 2140.0 | 1977.2 | 1861.2 | 1854.3 |
| 25° | 2763.2 | 2799.6 | 2820.4 | 2730.4 | 2591.8 | 2429.1 | 2221.3 | 2010.1 | 1805.8 | 1667.3 | 1656.9 |
| 27.5° | 2922.5 | 2941.6 | 2900.0 | 2765.0 | 2558.9 | 2347.7 | 2107.1 | 1845.6 | 1620.6 | 1506.3 | 1490.7 |
| 30° | 3099.1 | 3083.5 | 2953.7 | 2747.7 | 2474.1 | 2219.6 | 1928.7 | 1636.1 | 1456.1 | 1364.3 | 1350.5 |
| 32.5° | 3303.4 | 3255.0 | 2995.3 | 2699.2 | 2361.6 | 2051.7 | 1734.8 | 1502.8 | 1359.1 | 1267.4 | 1260.4 |
| 35° | 3639.3 | 3500.8 | 3062.8 | 2624.7 | 2212.7 | 1854.3 | 1556.5 | 1388.5 | 1276.0 | 1161.7 | 1144.4 |
| 37.5° | 4125.8 | 3864.4 | 3161.5 | 2555.5 | 2051.7 | 1663.8 | 1421.4 | 1296.8 | 1198.1 | 1070.0 | 1045.7 |
| 40° | 4631.4 | 4292.0 | 3324.2 | 2479.3 | 1901.0 | 1523.6 | 1347.0 | 1258.7 | 1161.7 | 1040.5 | 1007.7 |
| 42.5° | 5093.7 | 4698.9 | 3514.7 | 2384.1 | 1743.5 | 1411.1 | 1310.6 | 1248.3 | 1151.4 | 1037.1 | 1011.1 |
| 45° | 5512.6 | 5081.5 | 3710.3 | 2275.0 | 1570.3 | 1321.0 | 1281.2 | 1229.3 | 1130.6 | 1021.5 | 1000.7 |
| 47.5° | 5865.8 | 5407.0 | 3907.7 | 2148.6 | 1404.1 | 1265.6 | 1250.0 | 1194.6 | 1102.9 | 997.3 | 979.9 |
| 50° | 6158.4 | 5640.8 | 4020.2 | 2015.3 | 1267.4 | 1224.1 | 1205.0 | 1135.8 | 1042.3 | 943.6 | 933.2 |
| 52.5° | 6374.9 | 5786.2 | 4122.4 | 1944.3 | 1160.0 | 1156.5 | 1144.4 | 1076.9 | 986.9 | 884.7 | 863.9 |
| 55° | 6525.5 | 5905.7 | 4077.3 | 1888.9 | 1045.7 | 1071.7 | 1064.8 | 1023.2 | 947.1 | 827.6 | 810.3 |
| 57.5° | 6534.1 | 5916.1 | 3980.4 | 1560.0 | 933.2 | 969.6 | 981.7 | 988.6 | 903.8 | 798.2 | 777.4 |
| 60° | 6525.5 | 5839.9 | 3800.3 | 1144.4 | 824.1 | 867.4 | 912.4 | 912.4 | 853.6 | 749.7 | 734.1 |
| 62.5° | 6485.7 | 5689.2 | 3381.3 | 815.5 | 737.6 | 794.7 | 853.6 | 827.6 | 777.4 | 694.3 | 678.7 |
| 65° | 6303.9 | 5438.2 | 2645.5 | 664.8 | 701.2 | 753.1 | 780.8 | 744.5 | 680.4 | 593.9 | 586.9 |
| 67.5° | 5973.2 | 4863.4 | 1530.5 | 609.4 | 670.0 | 716.8 | 739.3 | 683.9 | 623.3 | 540.2 | 536.7 |
| 69° | 5609.6 | 4281.6 | 862.2 | 595.6 | 651.0 | 692.5 | 711.6 | 651.0 | 592.1 | 512.5 | 496.9 |
| 70° | 5284.1 | 3762.2 | 561.0 | 583.5 | 631.9 | 677.0 | 690.8 | 628.5 | 573.1 | 491.7 | 481.3 |
| 72.5° | 4002.9 | 2266.3 | 377.4 | 533.3 | 580.0 | 614.6 | 635.4 | 576.5 | 514.2 | 432.8 | 412.1 |
| 75° | 2186.7 | 616.4 | 332.4 | 457.1 | 515.9 | 562.7 | 567.9 | 493.4 | 403.4 | 320.3 | 311.6 |
| 77.5° | 425.9 | 211.2 | 285.7 | 377.4 | 410.3 | 465.7 | 462.3 | 412.1 | 349.7 | 271.8 | 261.4 |
| 80° | 161.0 | 152.4 | 238.9 | 270.1 | 289.1 | 348.0 | 368.8 | 332.4 | 290.9 | 185.3 | 159.3 |
| 82.5° | 109.1 | 112.5 | 178.3 | 159.3 | 176.6 | 206.0 | 259.7 | 252.8 | 230.3 | 126.4 | 112.5 |
| 85° | 76.2 | 88.3 | 98.7 | 67.5 | 86.6 | 129.9 | 171.4 | 166.2 | 142.0 | 88.3 | 79.6 |
| 87.5° | 22.5 | 24.2 | 27.7 | 34.6 | 53.7 | 97.0 | 140.2 | 116.0 | 77.9 | 65.8 | 57.1 |
| 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)