

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: P233672

Luminaire Tested: **VERD-C02H8-D-U-T2-8027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233672
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1710-389-32)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-C02H8-D-U-T2-8027-HSS
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 960mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11143 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 110
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

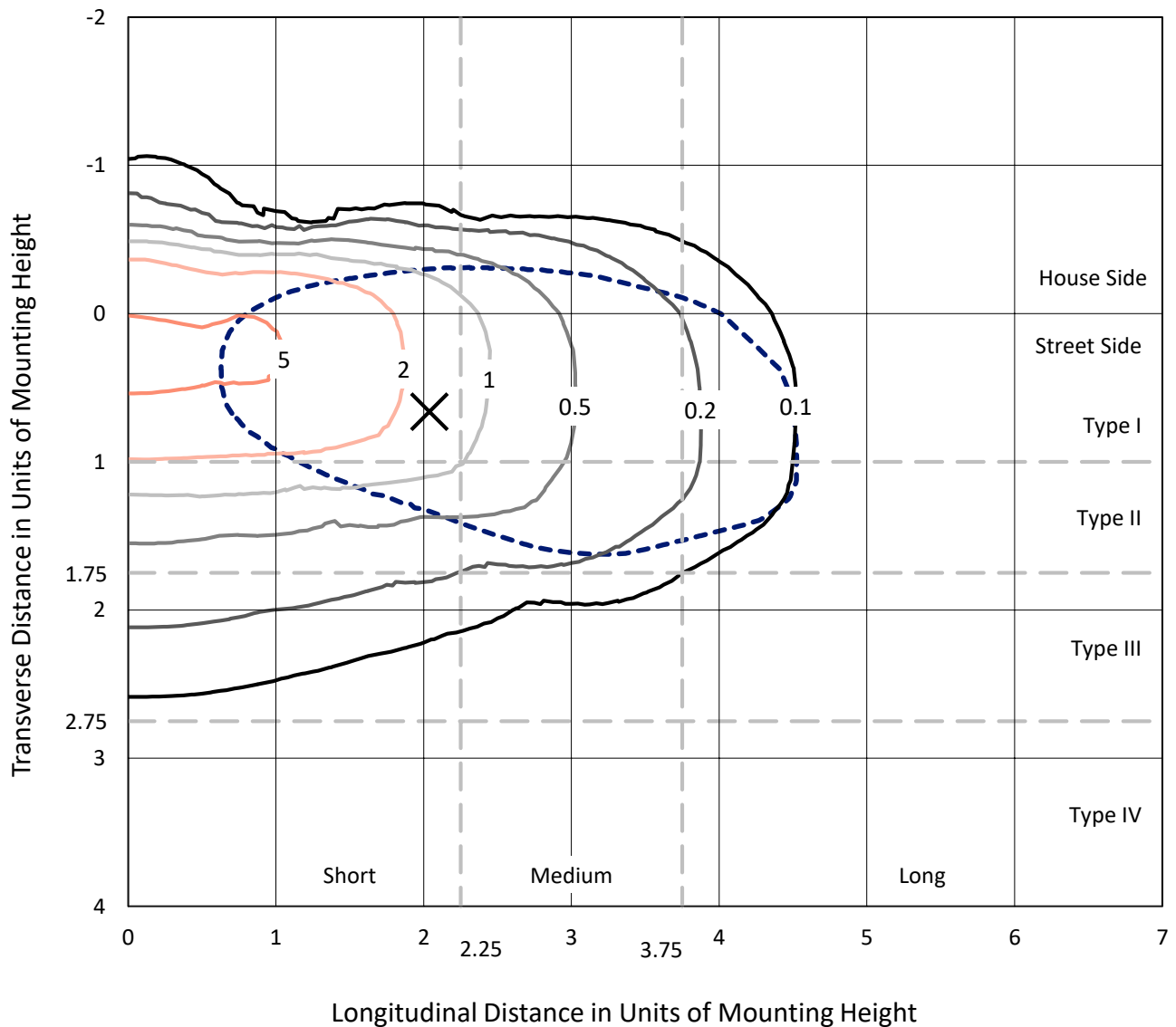


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

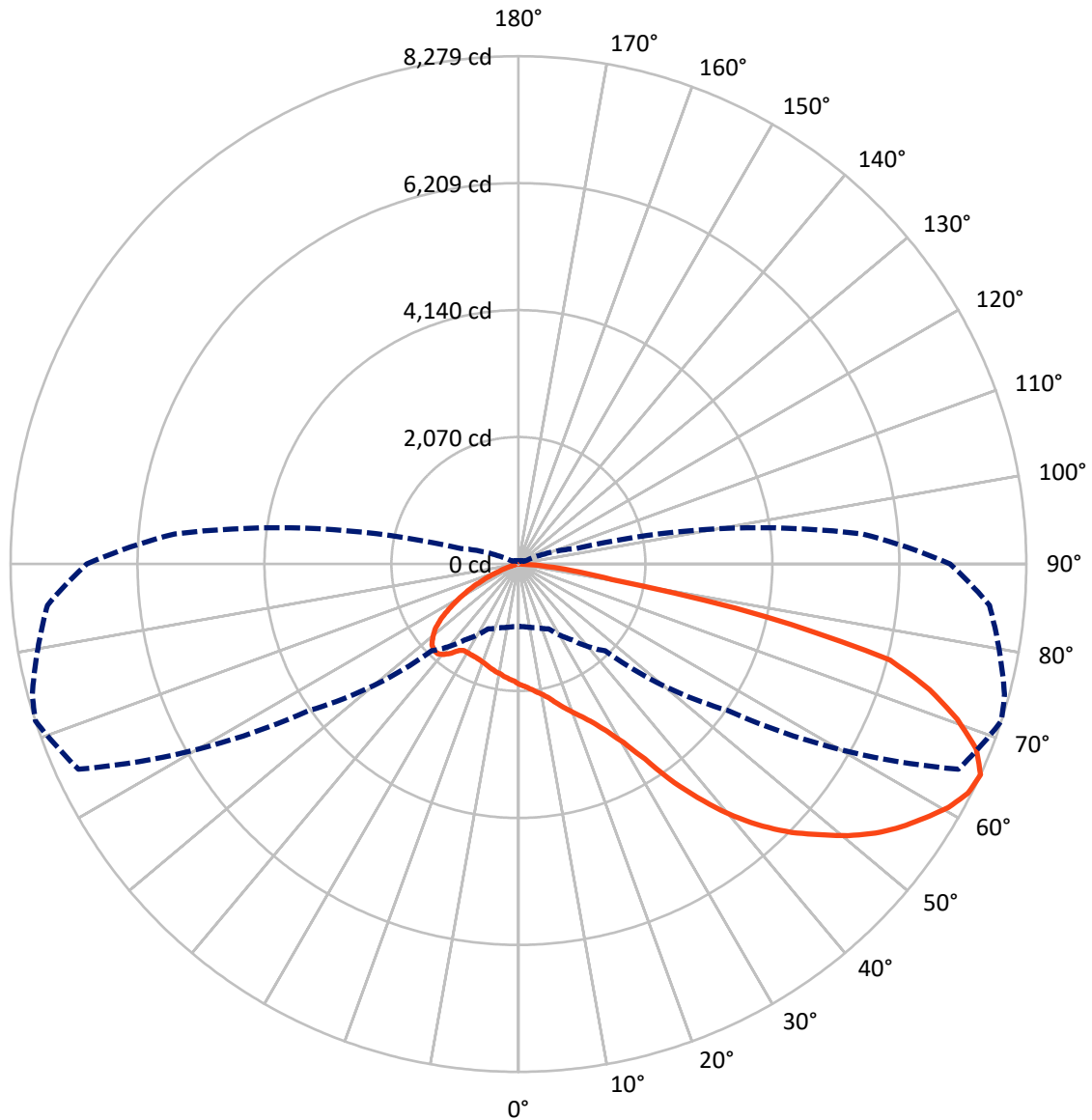


Based on 20 foot mounting height. Maximum calculated value = 6.1 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 72-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2315.6 | 0.0 | 2315.6 |
| | % Fixture | 20.8 | 0.0 | 20.8 |
| Street Side | Lumens | 8827.4 | 0.0 | 8827.4 |
| | % Fixture | 79.2 | 0.0 | 79.2 |
| Total | Lumens | 11143.0 | 0.0 | 11143.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 188.2 | 1.7 |
| 10°-20° | 571.4 | 5.1 |
| 20°-30° | 954.8 | 8.6 |
| 30°-40° | 1412.3 | 12.7 |
| 40°-50° | 1952.5 | 17.5 |
| 50°-60° | 2284.7 | 20.5 |
| 60°-70° | 2271.0 | 20.4 |
| 70°-80° | 1360.1 | 12.2 |
| 80°-90° | 148.0 | 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° | 11143.0 | 100.0 |
| 0°-180° | 11143.0 | 100.0 |



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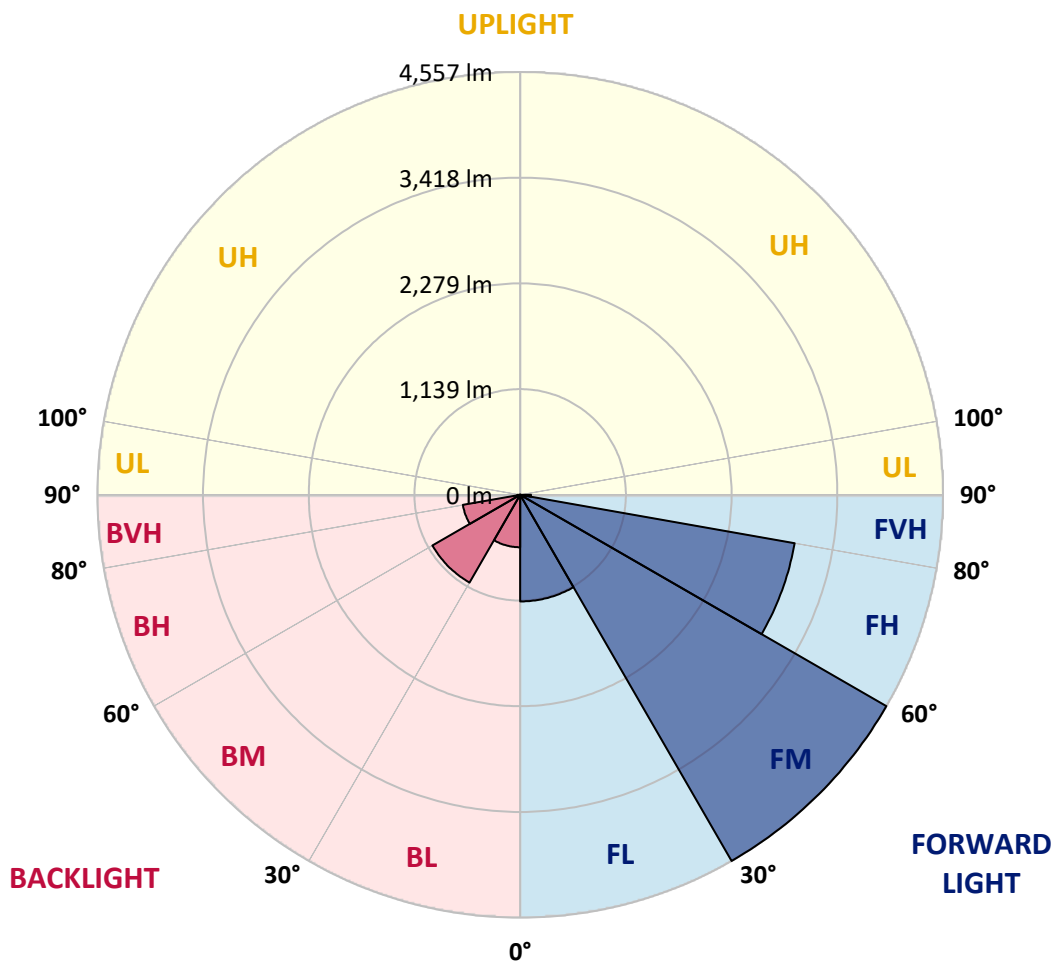
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1149.1 | 10.3 | | | |
| FM | (30°-60°) | 4557.2 | 40.9 | | | |
| FH | (60°-80°) | 3004.2 | 27.0 | | | G2/5000 |
| FVH | (80°-90°) | 117.0 | 1.1 | | | G2/225 |
| BL | (0°-30°) | 565.3 | 5.1 | B2/1000 | | |
| BM | (30°-60°) | 1092.3 | 9.8 | B2/2500 | | |
| BH | (60°-80°) | 626.9 | 5.6 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 31.0 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 72° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1963.8 | 1963.8 | 1963.8 | 1963.8 | 1963.8 | 1963.8 | 1963.8 | 1963.8 | 1963.8 | 1963.8 | 1963.8 |
| 2.5° | 2129.3 | 2131.1 | 2132.0 | 2098.4 | 2080.2 | 2059.3 | 2039.3 | 2017.5 | 1994.8 | 1986.6 | 1956.6 |
| 5° | 2260.2 | 2262.1 | 2256.6 | 2225.7 | 2192.1 | 2161.1 | 2123.0 | 2083.9 | 2045.7 | 2034.8 | 1983.9 |
| 7.5° | 2386.6 | 2385.7 | 2381.2 | 2342.1 | 2300.2 | 2259.3 | 2205.7 | 2153.0 | 2103.0 | 2085.7 | 2010.2 |
| 10° | 2491.2 | 2493.0 | 2495.7 | 2453.9 | 2413.0 | 2363.9 | 2298.4 | 2220.2 | 2163.0 | 2135.7 | 2037.5 |
| 12.5° | 2605.7 | 2600.3 | 2607.6 | 2566.6 | 2510.3 | 2465.7 | 2406.6 | 2314.8 | 2246.6 | 2212.1 | 2090.2 |
| 15° | 2736.7 | 2736.7 | 2726.7 | 2693.0 | 2635.7 | 2581.2 | 2522.1 | 2437.5 | 2355.7 | 2303.0 | 2161.1 |
| 17.5° | 2826.7 | 2821.2 | 2818.5 | 2789.4 | 2740.3 | 2693.0 | 2647.6 | 2561.2 | 2472.1 | 2407.5 | 2227.5 |
| 20° | 2864.9 | 2866.7 | 2879.4 | 2858.5 | 2832.1 | 2803.9 | 2753.9 | 2686.7 | 2588.5 | 2519.4 | 2298.4 |
| 22.5° | 2938.5 | 2940.3 | 2955.8 | 2941.2 | 2934.0 | 2926.7 | 2880.3 | 2821.2 | 2716.7 | 2650.3 | 2387.5 |
| 25° | 2943.0 | 2944.9 | 2986.7 | 3010.3 | 3047.6 | 3064.9 | 3033.1 | 2982.1 | 2875.8 | 2811.2 | 2520.3 |
| 27.5° | 2956.7 | 2962.1 | 3004.9 | 3070.3 | 3168.5 | 3203.1 | 3184.9 | 3183.1 | 3093.1 | 3024.9 | 2693.0 |
| 30° | 2944.9 | 2950.3 | 3012.1 | 3103.1 | 3239.4 | 3341.3 | 3362.2 | 3415.8 | 3379.5 | 3328.5 | 2933.0 |
| 32.5° | 2861.2 | 2881.2 | 2954.9 | 3099.4 | 3300.4 | 3484.9 | 3552.2 | 3735.9 | 3790.4 | 3795.9 | 3414.9 |
| 35° | 2709.4 | 2720.3 | 2853.9 | 3057.6 | 3341.3 | 3620.4 | 3805.9 | 4145.0 | 4375.9 | 4365.9 | 3948.6 |
| 37.5° | 2593.9 | 2597.6 | 2734.8 | 2986.7 | 3364.0 | 3765.9 | 4095.0 | 4637.8 | 4903.3 | 4915.1 | 4430.5 |
| 40° | 2445.7 | 2472.1 | 2603.9 | 2901.2 | 3351.3 | 3888.6 | 4382.3 | 5096.9 | 5406.0 | 5393.3 | 4853.3 |
| 42.5° | 2307.5 | 2323.0 | 2453.9 | 2767.6 | 3304.9 | 3982.2 | 4664.1 | 5541.5 | 5845.2 | 5803.4 | 5258.7 |
| 45° | 2163.9 | 2190.2 | 2310.2 | 2594.8 | 3213.1 | 4035.0 | 4919.6 | 5963.4 | 6241.6 | 6189.8 | 5616.1 |
| 47.5° | 2020.2 | 2039.3 | 2166.6 | 2436.6 | 3040.3 | 4033.2 | 5170.6 | 6358.9 | 6593.4 | 6557.1 | 5954.3 |
| 50° | 1537.4 | 1579.3 | 1913.8 | 2271.2 | 2797.6 | 3956.8 | 5373.3 | 6734.4 | 6962.6 | 6906.2 | 6284.3 |
| 52.5° | 1409.2 | 1422.9 | 1516.5 | 2079.3 | 2538.5 | 3775.0 | 5531.5 | 7087.1 | 7288.1 | 7223.5 | 6595.3 |
| 55° | 1332.0 | 1348.3 | 1386.5 | 1690.2 | 2325.7 | 3475.8 | 5597.0 | 7416.3 | 7566.3 | 7500.8 | 6872.6 |
| 57.5° | 1229.2 | 1245.6 | 1321.1 | 1455.6 | 2103.9 | 3020.3 | 5500.6 | 7708.1 | 7812.7 | 7740.8 | 7129.9 |
| 60° | 1158.3 | 1165.6 | 1238.3 | 1343.8 | 1861.1 | 2560.3 | 5178.7 | 7945.4 | 8054.5 | 7969.0 | 7384.4 |
| 62.5° | 1092.8 | 1101.0 | 1152.9 | 1257.4 | 1660.2 | 2223.0 | 4677.8 | 8003.6 | 8226.3 | 8160.0 | 7617.2 |
| 65° | 1017.4 | 1024.7 | 1071.9 | 1164.7 | 1504.7 | 2002.9 | 4161.4 | 7914.5 | 8279.1 | 8203.6 | 7707.2 |
| 67.5° | 917.4 | 927.4 | 964.6 | 1048.3 | 1301.0 | 1753.8 | 3393.1 | 7749.9 | 8048.1 | 7970.0 | 7522.6 |
| 70° | 793.7 | 798.3 | 842.8 | 918.3 | 1099.2 | 1522.0 | 2661.2 | 7164.4 | 7590.8 | 7504.4 | 7002.6 |
| 72.5° | 641.0 | 649.2 | 697.3 | 776.4 | 902.8 | 1253.8 | 1901.1 | 6190.7 | 7011.7 | 6978.9 | 6245.2 |
| 75° | 428.2 | 460.0 | 574.6 | 654.6 | 746.4 | 979.2 | 1276.5 | 4345.0 | 6259.8 | 6285.2 | 5335.1 |
| 77.5° | 81.8 | 84.6 | 240.9 | 358.2 | 436.4 | 598.2 | 790.1 | 2134.8 | 4125.9 | 4572.3 | 4023.2 |
| 80° | 53.6 | 58.2 | 102.7 | 250.9 | 289.1 | 296.4 | 405.5 | 935.6 | 1554.7 | 1966.6 | 2320.3 |
| 82.5° | 28.2 | 33.6 | 61.8 | 145.5 | 132.7 | 73.6 | 132.7 | 482.8 | 861.9 | 990.1 | 1170.1 |
| 85° | 11.8 | 13.6 | 30.0 | 50.0 | 37.3 | 30.9 | 30.9 | 192.7 | 381.9 | 441.9 | 459.1 |
| 87.5° | 1.8 | 1.8 | 6.4 | 9.1 | 5.5 | 3.6 | 2.7 | 0.9 | 0.9 | 0.9 | 0.9 |
| 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° | 1963.8 | 1963.8 | 1963.8 | 1963.8 | 1963.8 | 1963.8 | 1963.8 | 1963.8 | 1963.8 | 1963.8 | 1963.8 |
| 2.5° | 1956.6 | 1940.2 | 1917.5 | 1891.1 | 1872.0 | 1862.0 | 1853.8 | 1832.0 | 1824.7 | 1839.3 | 1835.7 |
| 5° | 1964.8 | 1945.7 | 1893.8 | 1851.1 | 1808.4 | 1782.0 | 1752.9 | 1714.7 | 1698.4 | 1707.5 | 1704.7 |
| 7.5° | 1970.2 | 1946.6 | 1869.3 | 1802.9 | 1731.1 | 1681.1 | 1642.9 | 1592.9 | 1568.4 | 1577.4 | 1566.5 |
| 10° | 1978.4 | 1942.9 | 1840.2 | 1752.0 | 1658.4 | 1585.6 | 1529.3 | 1471.1 | 1445.6 | 1452.9 | 1443.8 |
| 12.5° | 2012.9 | 1955.7 | 1826.6 | 1708.4 | 1593.8 | 1502.9 | 1432.0 | 1370.1 | 1333.8 | 1341.1 | 1333.8 |
| 15° | 2069.3 | 1981.1 | 1806.6 | 1652.9 | 1525.6 | 1422.0 | 1340.1 | 1269.2 | 1227.4 | 1237.4 | 1228.3 |
| 17.5° | 2128.4 | 2012.0 | 1788.4 | 1591.1 | 1452.9 | 1337.4 | 1252.0 | 1191.9 | 1124.7 | 1131.0 | 1117.4 |
| 20° | 2179.3 | 2041.1 | 1778.4 | 1532.9 | 1384.7 | 1247.4 | 1144.7 | 1103.8 | 1011.0 | 987.4 | 971.9 |
| 22.5° | 2250.2 | 2083.9 | 1770.2 | 1485.6 | 1300.1 | 1157.4 | 1035.6 | 959.2 | 859.2 | 809.2 | 804.6 |
| 25° | 2351.2 | 2147.5 | 1769.3 | 1448.3 | 1223.8 | 1062.8 | 892.8 | 764.6 | 676.4 | 617.3 | 609.2 |
| 27.5° | 2479.4 | 2232.1 | 1779.3 | 1411.1 | 1147.4 | 943.7 | 717.4 | 575.5 | 496.4 | 451.0 | 442.8 |
| 30° | 2663.9 | 2343.0 | 1792.0 | 1368.3 | 1061.9 | 789.2 | 534.6 | 423.7 | 358.2 | 325.5 | 319.1 |
| 32.5° | 3059.4 | 2627.6 | 1811.1 | 1323.8 | 959.2 | 594.6 | 388.2 | 307.3 | 257.3 | 237.3 | 247.3 |
| 35° | 3535.8 | 3014.0 | 1896.6 | 1266.5 | 824.6 | 423.7 | 280.0 | 219.1 | 184.6 | 189.1 | 194.6 |
| 37.5° | 3952.2 | 3383.1 | 2088.4 | 1192.9 | 644.6 | 310.9 | 192.7 | 163.7 | 163.7 | 178.2 | 190.9 |
| 40° | 4345.0 | 3715.9 | 2260.2 | 1092.8 | 451.9 | 214.6 | 149.1 | 151.8 | 149.1 | 158.2 | 155.5 |
| 42.5° | 4716.0 | 4031.3 | 2394.8 | 973.7 | 295.5 | 148.2 | 135.5 | 140.9 | 136.4 | 138.2 | 130.0 |
| 45° | 5066.9 | 4357.7 | 2469.4 | 798.3 | 196.4 | 129.1 | 124.6 | 133.7 | 132.7 | 130.9 | 122.7 |
| 47.5° | 5391.5 | 4645.0 | 2506.6 | 575.5 | 135.5 | 116.4 | 117.3 | 123.6 | 126.4 | 124.6 | 120.0 |
| 50° | 5709.7 | 4931.4 | 2473.0 | 344.6 | 121.8 | 106.4 | 112.7 | 112.7 | 118.2 | 108.2 | 104.6 |
| 52.5° | 6014.3 | 5218.7 | 2366.6 | 209.1 | 111.8 | 99.1 | 104.6 | 102.7 | 105.5 | 95.5 | 93.6 |
| 55° | 6300.7 | 5432.4 | 2156.6 | 164.6 | 105.5 | 94.6 | 95.5 | 97.3 | 92.7 | 81.8 | 85.5 |
| 57.5° | 6603.4 | 5614.2 | 1863.8 | 149.1 | 102.7 | 88.2 | 90.0 | 89.1 | 81.8 | 71.8 | 71.8 |
| 60° | 6852.6 | 5746.1 | 1570.2 | 135.5 | 100.9 | 86.4 | 80.0 | 78.2 | 67.3 | 61.8 | 60.9 |
| 62.5° | 7024.4 | 5783.4 | 1283.8 | 120.9 | 95.5 | 80.0 | 71.8 | 66.4 | 56.4 | 50.9 | 49.1 |
| 65° | 7038.0 | 5624.2 | 977.4 | 109.1 | 90.0 | 74.6 | 66.4 | 54.6 | 44.6 | 40.0 | 38.2 |
| 67.5° | 6758.9 | 5182.4 | 689.2 | 100.0 | 80.9 | 69.1 | 58.2 | 43.6 | 35.5 | 31.8 | 30.9 |
| 70° | 6175.2 | 4633.2 | 421.9 | 87.3 | 73.6 | 64.6 | 60.0 | 35.5 | 29.1 | 24.5 | 24.5 |
| 72.5° | 5418.8 | 4013.2 | 247.3 | 74.6 | 61.8 | 51.8 | 40.0 | 30.0 | 24.5 | 19.1 | 19.1 |
| 75° | 4644.1 | 3185.8 | 151.8 | 56.4 | 45.5 | 40.9 | 30.9 | 25.5 | 20.0 | 14.5 | 14.5 |
| 77.5° | 3344.0 | 2352.1 | 118.2 | 36.4 | 28.2 | 29.1 | 22.7 | 20.0 | 16.4 | 11.8 | 11.8 |
| 80° | 2052.0 | 1432.0 | 84.6 | 24.5 | 16.4 | 16.4 | 16.4 | 15.5 | 11.8 | 10.0 | 9.1 |
| 82.5° | 1040.1 | 654.6 | 41.8 | 14.5 | 10.0 | 10.0 | 10.0 | 10.9 | 9.1 | 7.3 | 7.3 |
| 85° | 365.5 | 183.7 | 12.7 | 7.3 | 6.4 | 6.4 | 5.5 | 5.5 | 4.5 | 3.6 | 3.6 |
| 87.5° | 0.9 | 1.8 | 1.8 | 2.7 | 3.6 | 3.6 | 2.7 | 1.8 | 0.9 | 0.0 | 0.0 |
| 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)