

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P368709

Luminaire Tested: **PMM-SA4D-830-U-T4W-HSS**

Issue Date: 12/2/2019

Report Generated By 670245982

Test Information

Test Method: LM-79-08
Report Number: P368709
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-15)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: PMM-SA4D-830-U-T4W-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15760 lumens
Efficiency: N/A
Efficacy: 60.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

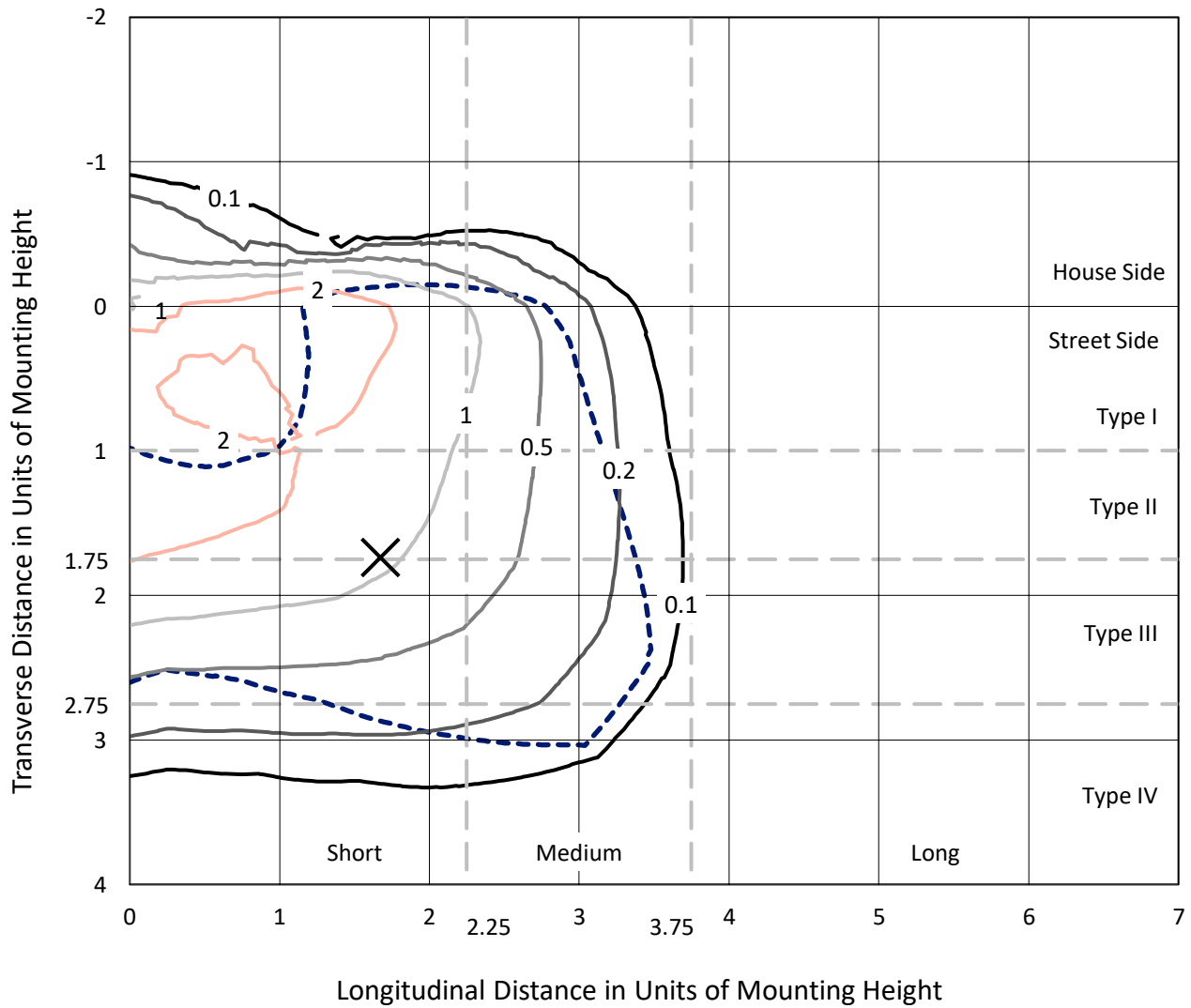
Input Watts (W): 259
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

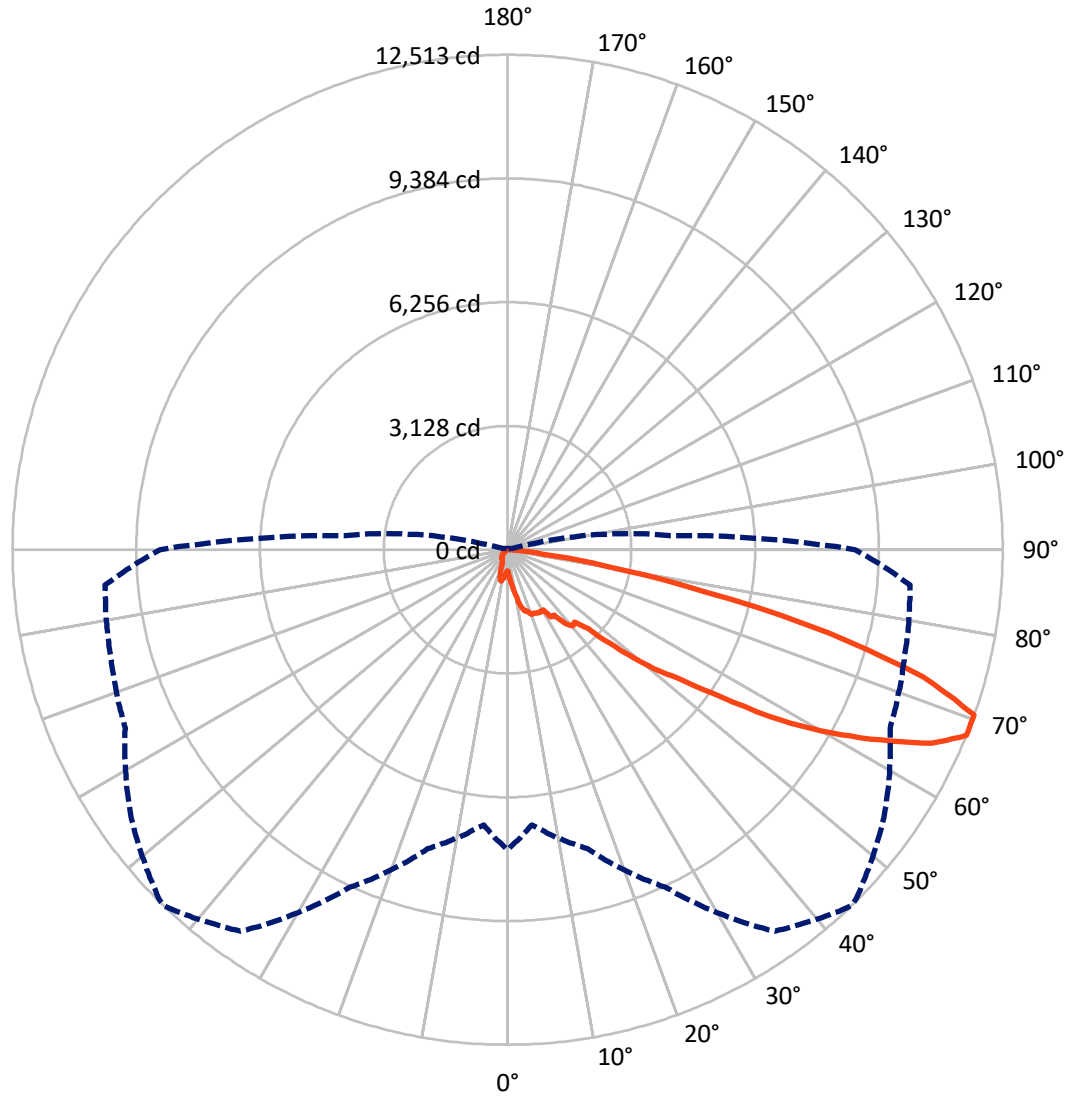
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - 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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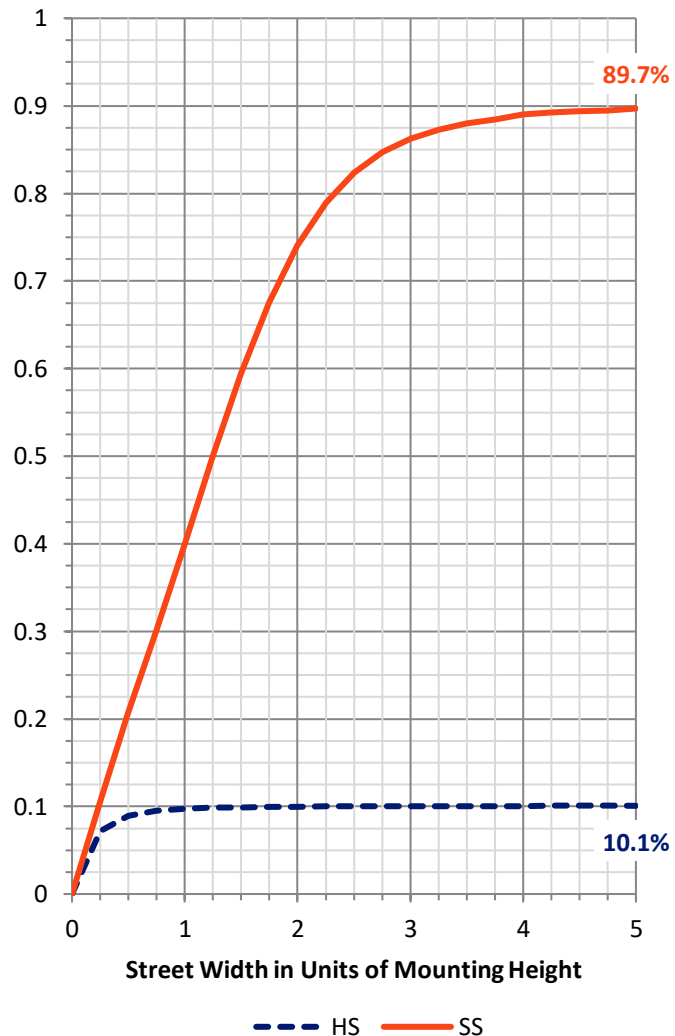
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1600.9 | 0.0 | 1600.9 |
| | % Fixture | 10.2 | 0.0 | 10.2 |
| Street Side | Lumens | 14159.1 | 0.0 | 14159.1 |
| | % Fixture | 89.8 | 0.0 | 89.8 |
| Total | Lumens | 15760.0 | 0.0 | 15760.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 78.7 | 0.5 |
| 10°-20° | 329.5 | 2.1 |
| 20°-30° | 583.7 | 3.7 |
| 30°-40° | 948.7 | 6.0 |
| 40°-50° | 1898.5 | 12.0 |
| 50°-60° | 3894.8 | 24.7 |
| 60°-70° | 5350.3 | 33.9 |
| 70°-80° | 2514.7 | 16.0 |
| 80°-90° | 161.1 | 1.0 |
| 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° | 15760.0 | 100.0 |
| 0°-180° | 15760.0 | 100.0 |

Coefficient of Utilization

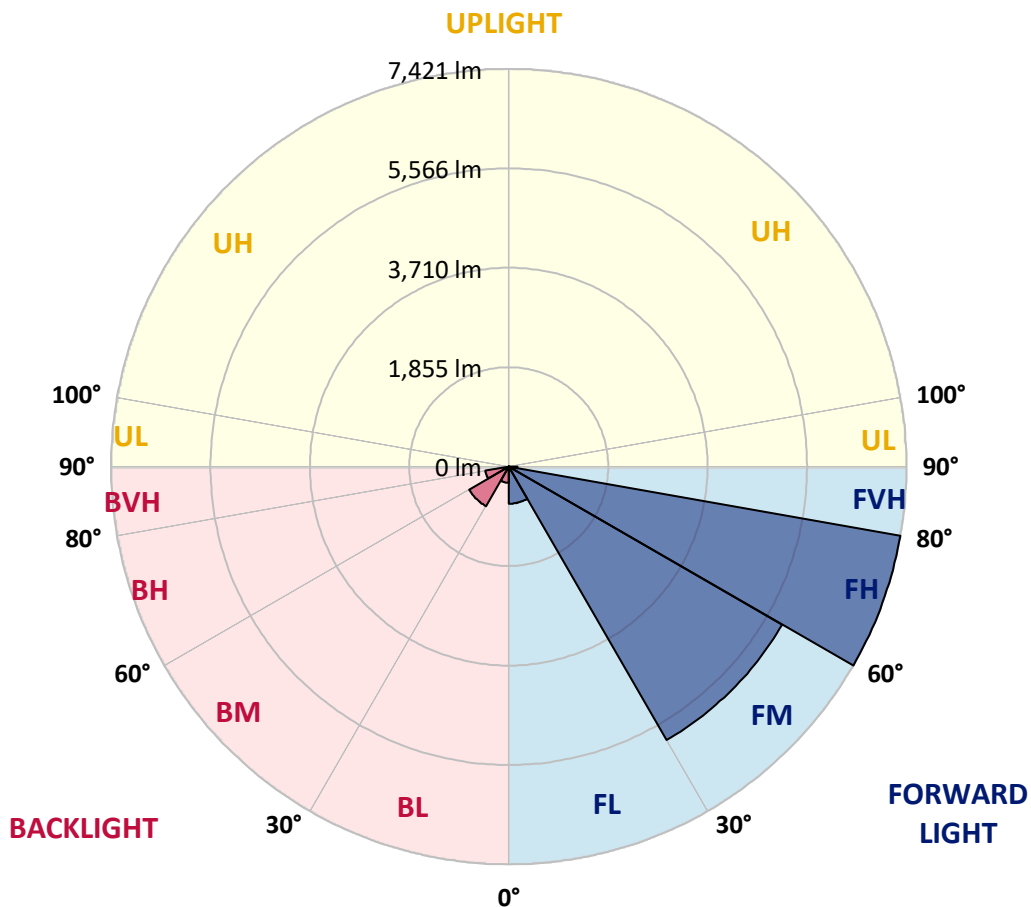


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 691.3 | 4.4 | | | |
| FM (30°-60°) | 5889.3 | 37.4 | | | |
| FH (60°-80°) | 7420.8 | 47.1 | | | G3/7500 |
| FVH (80°-90°) | 157.8 | 1.0 | | | G2/225 |
| BL (0°-30°) | 300.6 | 1.9 | B1/500 | | |
| BM (30°-60°) | 852.8 | 5.4 | B1/1000 | | |
| BH (60°-80°) | 444.2 | 2.8 | B1/500 | | G1/500 |
| BVH (80°-90°) | 3.3 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G3
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 531.0 | 531.0 | 531.0 | 531.0 | 531.0 | 531.0 | 531.0 | 531.0 | 531.0 | 531.0 | 531.0 |
| 2.5° | 675.2 | 653.5 | 622.2 | 629.2 | 632.7 | 642.2 | 643.1 | 630.9 | 596.2 | 586.6 | 629.2 |
| 5° | 946.4 | 893.4 | 883.8 | 863.8 | 823.9 | 802.1 | 796.9 | 818.6 | 790.8 | 782.1 | 793.4 |
| 7.5° | 1208.8 | 1163.6 | 1114.1 | 1087.2 | 1003.7 | 952.5 | 949.9 | 958.6 | 963.8 | 933.4 | 949.0 |
| 10° | 1383.5 | 1334.0 | 1323.6 | 1260.1 | 1188.0 | 1175.8 | 1170.6 | 1137.6 | 1110.6 | 1088.0 | 1012.4 |
| 12.5° | 1541.7 | 1540.8 | 1559.9 | 1468.7 | 1457.4 | 1469.6 | 1465.2 | 1347.0 | 1320.1 | 1225.4 | 1203.6 |
| 15° | 1752.0 | 1804.1 | 1721.6 | 1645.1 | 1547.8 | 1589.5 | 1578.2 | 1502.6 | 1484.3 | 1420.0 | 1327.0 |
| 17.5° | 1970.1 | 1984.0 | 1845.8 | 1728.5 | 1703.3 | 1648.6 | 1659.9 | 1632.9 | 1540.8 | 1592.1 | 1500.0 |
| 20° | 1975.3 | 2005.8 | 1858.0 | 1664.2 | 1741.6 | 1739.0 | 1739.8 | 1713.8 | 1592.1 | 1712.0 | 1627.7 |
| 22.5° | 2048.3 | 1973.6 | 1836.3 | 1712.9 | 1726.8 | 1739.8 | 1753.7 | 1721.6 | 1695.5 | 1725.1 | 1740.7 |
| 25° | 2018.8 | 1989.2 | 1857.1 | 1775.5 | 1762.4 | 1772.8 | 1776.3 | 1817.2 | 1800.7 | 1871.9 | 1832.8 |
| 27.5° | 2095.3 | 2052.7 | 1816.3 | 1831.1 | 1785.0 | 1772.8 | 1752.0 | 1888.4 | 1937.1 | 1880.6 | 1984.9 |
| 30° | 2226.5 | 2220.4 | 1886.7 | 1908.4 | 1872.8 | 1765.9 | 1821.5 | 1999.7 | 2060.5 | 2025.7 | 2152.6 |
| 32.5° | 2431.6 | 2452.4 | 2092.7 | 1951.9 | 1970.1 | 2017.9 | 1997.1 | 1999.7 | 2153.5 | 2230.8 | 2331.6 |
| 35° | 2722.7 | 2711.4 | 2293.4 | 2117.0 | 2021.4 | 2029.2 | 2058.8 | 2200.4 | 2399.4 | 2394.2 | 2501.1 |
| 37.5° | 3294.5 | 3171.1 | 2648.8 | 2285.6 | 2314.3 | 2353.4 | 2331.6 | 2522.0 | 2541.1 | 2548.0 | 2803.5 |
| 40° | 4137.5 | 3973.3 | 3209.4 | 2641.0 | 2364.7 | 2537.6 | 2527.2 | 2574.1 | 2701.9 | 2749.7 | 3122.5 |
| 42.5° | 5248.2 | 5027.4 | 4195.7 | 3294.5 | 2608.0 | 2488.9 | 2553.2 | 2641.9 | 3071.2 | 3207.6 | 3616.1 |
| 45° | 6475.2 | 6028.6 | 5179.5 | 4226.2 | 3218.1 | 2848.7 | 2897.4 | 3062.5 | 3657.8 | 3883.8 | 4334.8 |
| 47.5° | 7270.4 | 6877.6 | 6153.7 | 5051.7 | 3854.2 | 3660.4 | 3664.8 | 3700.4 | 4347.0 | 4765.8 | 5370.7 |
| 50° | 7961.3 | 7543.3 | 6871.5 | 5914.7 | 4979.6 | 4612.9 | 4529.5 | 4365.2 | 5224.7 | 5797.4 | 6468.3 |
| 52.5° | 8936.4 | 8448.0 | 7589.4 | 6927.1 | 6263.2 | 5399.4 | 5369.8 | 5425.4 | 6259.7 | 6862.0 | 7593.7 |
| 55° | 9815.8 | 9222.3 | 8402.8 | 7985.6 | 7726.7 | 6555.2 | 6580.4 | 6673.4 | 7588.5 | 7907.4 | 8594.8 |
| 57.5° | 10204.3 | 9561.2 | 9139.7 | 8952.0 | 8813.8 | 8134.2 | 8049.1 | 7993.5 | 8636.6 | 8758.2 | 9643.8 |
| 60° | 10458.9 | 9847.1 | 9655.9 | 9699.4 | 10118.3 | 9397.0 | 9319.6 | 8996.3 | 9503.9 | 9603.8 | 10584.1 |
| 62.5° | 10298.2 | 9740.2 | 9781.1 | 10143.5 | 11073.3 | 10598.9 | 10375.5 | 9835.0 | 10213.0 | 10293.8 | 11259.3 |
| 65° | 9285.7 | 8704.3 | 9229.2 | 10106.1 | 11801.6 | 11790.3 | 11686.9 | 10609.3 | 10605.8 | 10709.2 | 11311.5 |
| 67.5° | 7585.0 | 6974.9 | 7824.0 | 9405.7 | 11771.2 | 12512.5 | 12463.8 | 11636.5 | 10662.3 | 10385.9 | 10207.8 |
| 70° | 5273.4 | 4744.1 | 5707.0 | 7767.5 | 10722.3 | 12507.3 | 12429.1 | 12326.5 | 10215.6 | 8939.8 | 7914.4 |
| 72.5° | 2740.1 | 2449.0 | 3345.8 | 5352.4 | 8547.0 | 10989.1 | 11247.2 | 11078.6 | 8722.6 | 6495.2 | 4660.7 |
| 75° | 930.7 | 835.2 | 1380.0 | 2840.9 | 5681.8 | 8391.5 | 8693.9 | 8522.7 | 5924.3 | 3484.9 | 1843.2 |
| 77.5° | 360.7 | 335.5 | 494.5 | 1153.2 | 2850.5 | 5113.5 | 5441.9 | 5267.3 | 3177.2 | 1276.6 | 433.7 |
| 80° | 205.1 | 198.1 | 272.9 | 519.7 | 1256.6 | 2543.7 | 2774.9 | 2516.7 | 1145.4 | 430.2 | 113.0 |
| 82.5° | 86.9 | 89.5 | 152.1 | 280.7 | 631.8 | 897.7 | 1001.1 | 913.4 | 479.7 | 294.6 | 41.7 |
| 85° | 19.1 | 23.5 | 72.1 | 156.4 | 265.1 | 256.4 | 268.5 | 298.1 | 294.6 | 216.4 | 18.2 |
| 87.5° | 0.0 | 0.0 | 22.6 | 42.6 | 63.4 | 41.7 | 33.0 | 58.2 | 90.4 | 86.9 | 7.8 |
| 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° | 531.0 | 531.0 | 531.0 | 531.0 | 531.0 | 531.0 | 531.0 | 531.0 | 531.0 | 531.0 | 531.0 |
| 2.5° | 637.0 | 628.3 | 573.6 | 570.1 | 573.6 | 564.0 | 563.1 | 543.2 | 544.9 | 590.1 | 593.6 |
| 5° | 793.4 | 750.0 | 703.1 | 688.3 | 674.4 | 643.1 | 660.5 | 660.5 | 660.5 | 689.2 | 697.8 |
| 7.5° | 935.1 | 876.9 | 810.8 | 755.2 | 701.3 | 662.2 | 689.2 | 708.3 | 719.6 | 756.9 | 774.3 |
| 10° | 999.4 | 942.0 | 882.9 | 803.9 | 762.2 | 747.4 | 716.1 | 699.6 | 719.6 | 711.7 | 721.3 |
| 12.5° | 1136.7 | 1084.6 | 982.9 | 901.2 | 869.9 | 819.5 | 727.4 | 663.1 | 620.5 | 613.5 | 611.8 |
| 15° | 1270.5 | 1238.4 | 1101.9 | 992.4 | 883.8 | 767.4 | 610.1 | 524.9 | 479.7 | 471.9 | 472.8 |
| 17.5° | 1440.0 | 1393.9 | 1193.2 | 1035.9 | 851.7 | 642.2 | 471.0 | 398.0 | 394.5 | 413.7 | 415.4 |
| 20° | 1553.0 | 1477.4 | 1239.3 | 1000.3 | 745.6 | 485.8 | 368.5 | 351.1 | 378.9 | 413.7 | 410.2 |
| 22.5° | 1660.7 | 1579.1 | 1300.1 | 969.0 | 577.9 | 368.5 | 338.9 | 340.7 | 364.1 | 401.5 | 411.1 |
| 25° | 1732.0 | 1702.5 | 1374.8 | 896.0 | 440.6 | 318.9 | 324.2 | 337.2 | 357.2 | 392.8 | 392.8 |
| 27.5° | 1946.7 | 1808.5 | 1366.1 | 754.3 | 338.9 | 297.2 | 309.4 | 325.9 | 336.3 | 378.9 | 383.2 |
| 30° | 2077.0 | 2031.8 | 1411.3 | 610.1 | 297.2 | 269.4 | 292.9 | 307.6 | 314.6 | 363.3 | 365.0 |
| 32.5° | 2236.9 | 2137.0 | 1466.1 | 450.2 | 276.4 | 267.7 | 262.5 | 273.7 | 293.7 | 336.3 | 338.9 |
| 35° | 2431.6 | 2402.0 | 1387.9 | 353.7 | 269.4 | 250.3 | 239.9 | 245.9 | 259.0 | 287.7 | 293.7 |
| 37.5° | 2828.7 | 2653.2 | 1340.9 | 303.3 | 269.4 | 244.2 | 232.9 | 217.3 | 219.0 | 239.0 | 250.3 |
| 40° | 3163.3 | 3109.4 | 1209.7 | 294.6 | 257.2 | 235.5 | 207.7 | 188.6 | 175.5 | 181.6 | 186.0 |
| 42.5° | 3777.7 | 3528.3 | 1040.2 | 290.3 | 245.9 | 212.9 | 176.4 | 156.4 | 136.4 | 138.2 | 145.1 |
| 45° | 4523.4 | 3985.4 | 889.0 | 285.9 | 238.1 | 190.3 | 148.6 | 125.1 | 104.3 | 105.2 | 112.1 |
| 47.5° | 5519.3 | 4652.0 | 705.7 | 272.9 | 224.2 | 169.5 | 119.9 | 95.6 | 83.4 | 86.0 | 92.1 |
| 50° | 6650.8 | 5236.9 | 557.9 | 252.9 | 207.7 | 149.5 | 97.3 | 77.3 | 73.0 | 75.6 | 82.6 |
| 52.5° | 7661.5 | 5667.9 | 460.6 | 234.6 | 184.2 | 121.7 | 81.7 | 68.7 | 66.9 | 68.7 | 73.9 |
| 55° | 8560.1 | 5918.2 | 385.0 | 213.8 | 158.2 | 98.2 | 73.9 | 63.4 | 62.6 | 61.7 | 65.2 |
| 57.5° | 9403.0 | 5990.3 | 300.7 | 180.8 | 128.6 | 85.2 | 68.7 | 59.1 | 57.4 | 54.7 | 57.4 |
| 60° | 10017.5 | 5866.9 | 220.7 | 145.1 | 105.2 | 77.3 | 64.3 | 53.0 | 50.4 | 46.1 | 47.8 |
| 62.5° | 10313.8 | 5528.9 | 166.9 | 116.5 | 89.5 | 70.4 | 57.4 | 46.1 | 42.6 | 37.4 | 38.2 |
| 65° | 10032.2 | 4971.8 | 131.2 | 98.2 | 76.5 | 59.1 | 48.7 | 39.1 | 34.8 | 29.5 | 29.5 |
| 67.5° | 8785.2 | 4124.5 | 111.2 | 85.2 | 64.3 | 50.4 | 40.0 | 35.6 | 28.7 | 24.3 | 23.5 |
| 70° | 6448.3 | 2966.9 | 95.6 | 74.7 | 55.6 | 43.5 | 33.9 | 32.2 | 27.8 | 23.5 | 21.7 |
| 72.5° | 3639.6 | 1679.0 | 81.7 | 66.0 | 46.9 | 36.5 | 28.7 | 29.5 | 26.9 | 21.7 | 20.0 |
| 75° | 1388.7 | 565.7 | 67.8 | 54.7 | 38.2 | 27.8 | 24.3 | 24.3 | 24.3 | 18.2 | 15.6 |
| 77.5° | 344.1 | 144.3 | 53.9 | 44.3 | 30.4 | 18.2 | 20.0 | 20.9 | 20.9 | 15.6 | 11.3 |
| 80° | 94.7 | 48.7 | 32.2 | 32.2 | 21.7 | 10.4 | 13.9 | 13.9 | 11.3 | 5.2 | 0.0 |
| 82.5° | 34.8 | 18.2 | 11.3 | 13.9 | 9.6 | 3.5 | 5.2 | 3.5 | 2.6 | 0.0 | 0.0 |
| 85° | 14.8 | 9.6 | 7.0 | 7.8 | 4.3 | 0.0 | 0.9 | 1.7 | 0.0 | 0.0 | 0.0 |
| 87.5° | 6.1 | 4.3 | 3.5 | 3.5 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 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)