

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: INVUE

Report Number: P674497

Luminaire Tested: **CCP-SA-2A-850-U-AFL-HSS**

Issue Date: 04/16/2023



Test Information

Test Method: LM-79-08
Report Number: P674497
Test Lab: INNOVATION CENTER(G2)
Issue Date: 04/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCP-SA-2A-850-U-AFL-HSS
Description: INVUE CLEAR CURVE POLE MOUNT Light Square Luminaire @350mA w/ AFL distribution lens and House Side Shield
Light Source: (32) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3959.3 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B0 - U0 - G0

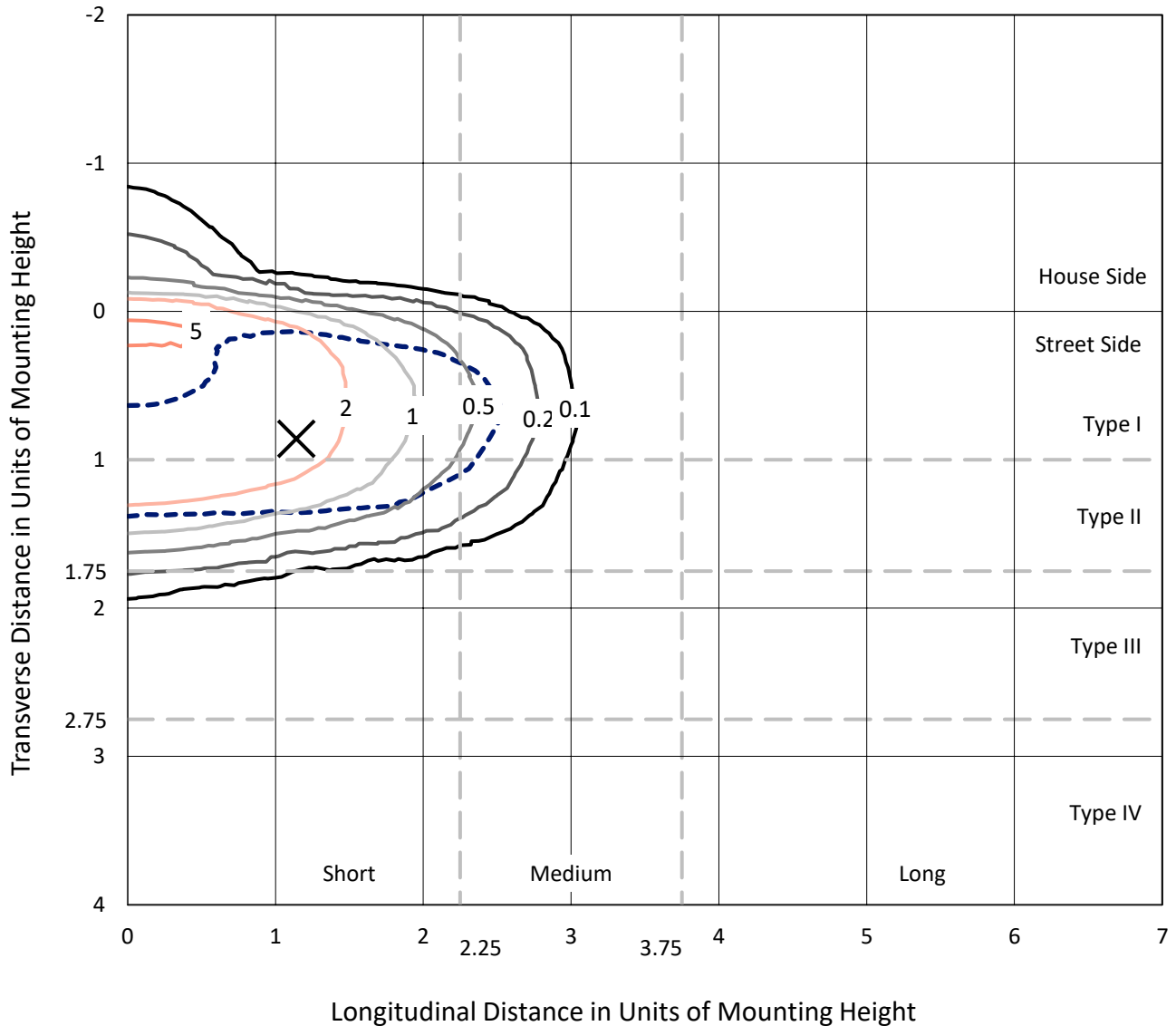
Input Watts (W): 36.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

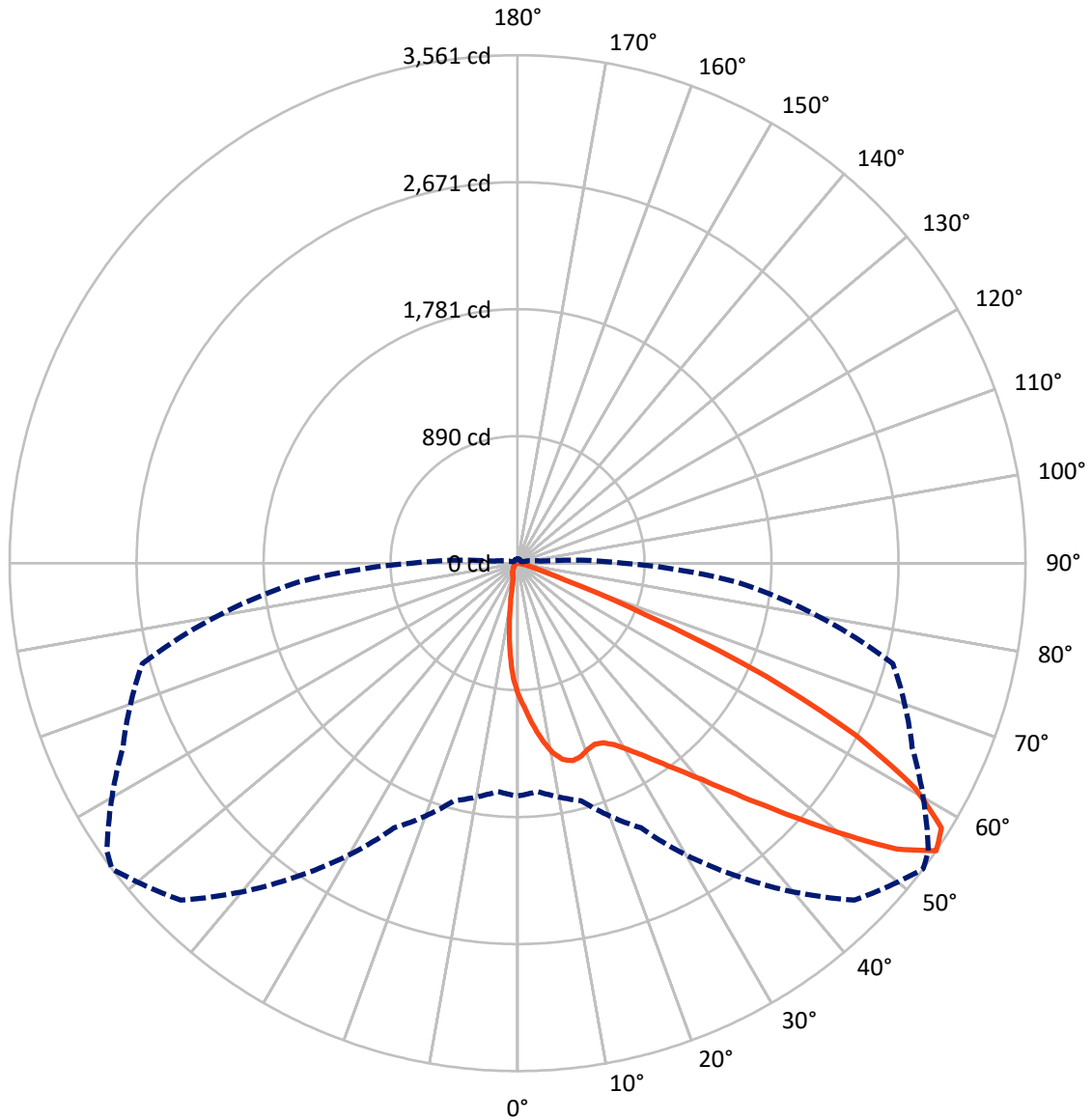
✕ Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 53-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical



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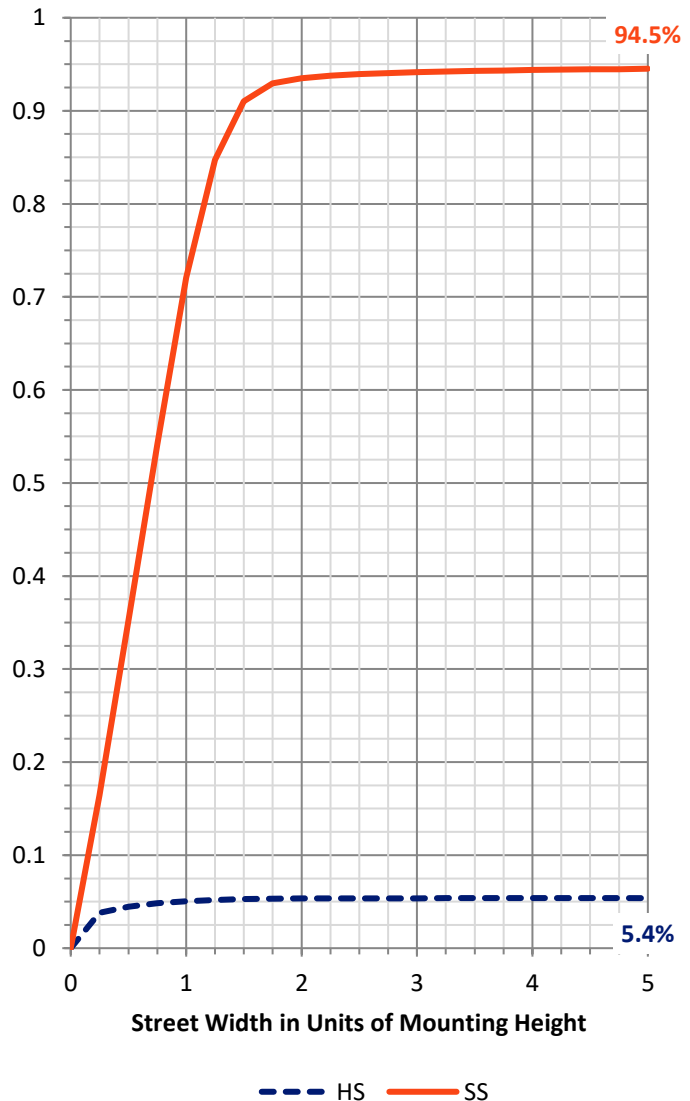
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 214.0 | 0.0 | 214.0 |
| | % Fixture | 5.4 | 0.0 | 5.4 |
| Street Side | Lumens | 3745.3 | 0.0 | 3745.3 |
| | % Fixture | 94.6 | 0.0 | 94.6 |
| Total | Lumens | 3959.3 | 0.0 | 3959.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 82.8 | 2.1 |
| 10°-20° | 216.5 | 5.5 |
| 20°-30° | 362.3 | 9.2 |
| 30°-40° | 592.7 | 15.0 |
| 40°-50° | 952.8 | 24.1 |
| 50°-60° | 1075.7 | 27.2 |
| 60°-70° | 573.8 | 14.5 |
| 70°-80° | 94.3 | 2.4 |
| 80°-90° | 8.4 | 0.2 |
| 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° | 3959.3 | 100.0 |
| 0°-180° | 3959.3 | 100.0 |

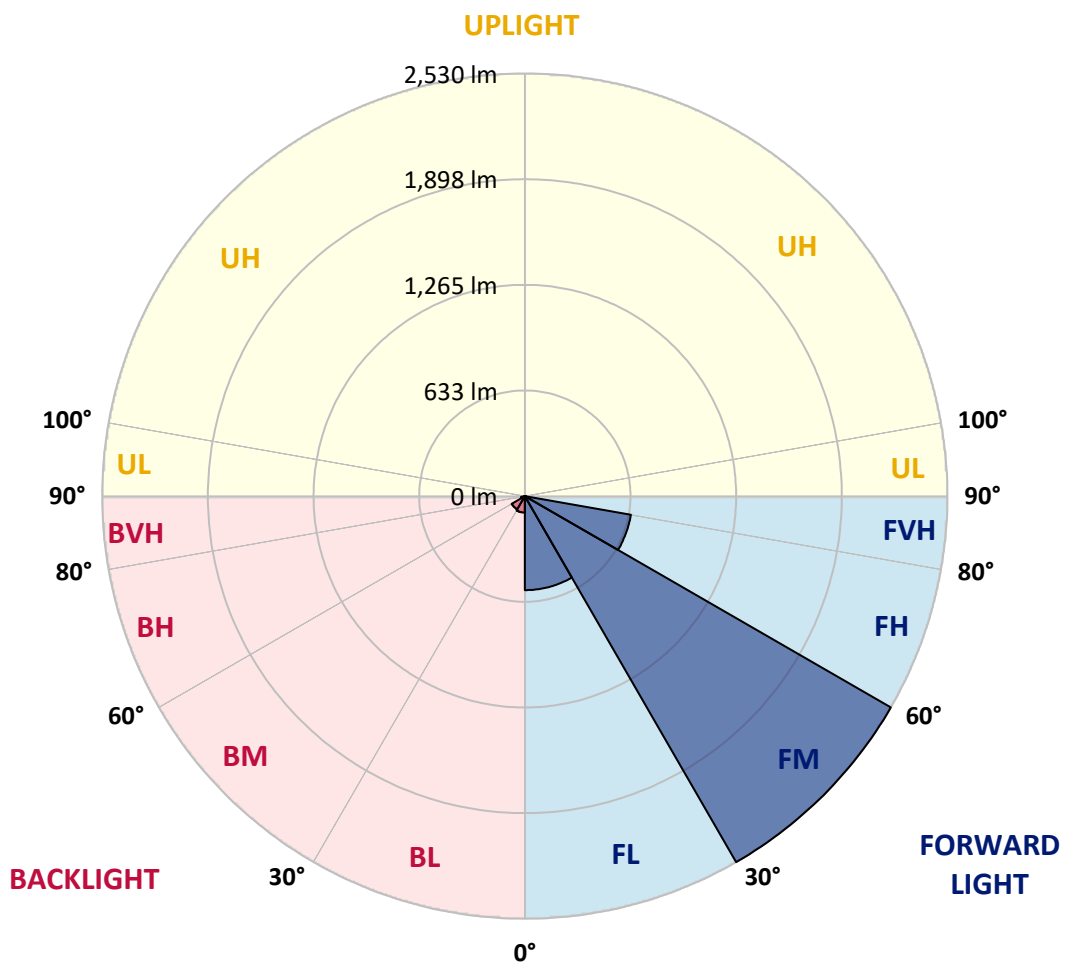


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|--------|
| | | | B | U | G |
| FL (0°-30°) | 562.8 | 14.2 | | | |
| FM (30°-60°) | 2530.0 | 63.9 | | | |
| FH (60°-80°) | 644.7 | 16.3 | | | G0/660 |
| FVH (80°-90°) | 7.8 | 0.2 | | | G0/10 |
| BL (0°-30°) | 98.8 | 2.5 | B0/110 | | |
| BM (30°-60°) | 91.2 | 2.3 | B0/220 | | |
| BH (60°-80°) | 23.4 | 0.6 | B0/110 | | G0/110 |
| BVH (80°-90°) | 0.7 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B0-U0-G0
 Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 53° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 926.6 | 926.6 | 926.6 | 926.6 | 926.6 | 926.6 | 926.6 | 926.6 | 926.6 | 926.6 | 926.6 |
| 2.5° | 1111.1 | 1104.5 | 1108.4 | 1098.3 | 1079.9 | 1057.0 | 1022.7 | 1024.4 | 997.3 | 973.8 | 941.1 |
| 5° | 1294.6 | 1287.7 | 1285.6 | 1259.9 | 1234.3 | 1193.0 | 1142.0 | 1133.7 | 1084.1 | 1024.1 | 955.7 |
| 7.5° | 1391.4 | 1385.5 | 1390.0 | 1380.7 | 1355.3 | 1317.9 | 1253.4 | 1247.1 | 1170.4 | 1079.6 | 979.0 |
| 10° | 1347.0 | 1344.9 | 1364.0 | 1386.2 | 1406.7 | 1402.2 | 1350.5 | 1340.8 | 1254.7 | 1140.6 | 1002.9 |
| 12.5° | 1227.7 | 1234.3 | 1258.6 | 1299.5 | 1362.6 | 1422.0 | 1413.6 | 1415.4 | 1340.8 | 1206.9 | 1029.3 |
| 15° | 1157.6 | 1165.6 | 1179.5 | 1200.6 | 1278.3 | 1383.8 | 1437.6 | 1454.9 | 1423.3 | 1280.8 | 1060.5 |
| 17.5° | 1151.7 | 1158.3 | 1160.4 | 1168.4 | 1213.8 | 1322.4 | 1427.8 | 1460.8 | 1496.9 | 1350.5 | 1095.5 |
| 20° | 1197.2 | 1199.9 | 1198.2 | 1192.3 | 1208.6 | 1289.1 | 1397.3 | 1444.5 | 1557.6 | 1424.7 | 1126.4 |
| 22.5° | 1282.8 | 1278.7 | 1273.5 | 1251.6 | 1250.6 | 1298.5 | 1380.7 | 1429.9 | 1593.7 | 1486.1 | 1146.9 |
| 25° | 1389.0 | 1380.3 | 1373.0 | 1342.2 | 1327.6 | 1347.4 | 1395.6 | 1435.1 | 1626.3 | 1545.8 | 1161.4 |
| 27.5° | 1504.9 | 1507.6 | 1489.6 | 1448.0 | 1425.1 | 1420.9 | 1441.7 | 1471.2 | 1657.8 | 1599.2 | 1169.4 |
| 30° | 1628.7 | 1630.1 | 1606.5 | 1563.5 | 1542.7 | 1516.0 | 1514.6 | 1532.3 | 1691.8 | 1660.6 | 1177.0 |
| 32.5° | 1769.9 | 1773.7 | 1735.2 | 1690.5 | 1654.0 | 1619.3 | 1602.3 | 1617.3 | 1752.9 | 1740.8 | 1192.6 |
| 35° | 1973.9 | 1957.2 | 1905.2 | 1837.5 | 1785.9 | 1740.4 | 1714.4 | 1724.1 | 1834.1 | 1836.8 | 1223.9 |
| 37.5° | 2184.1 | 2182.4 | 2124.8 | 2027.3 | 1942.7 | 1886.1 | 1841.7 | 1857.7 | 1948.2 | 1965.5 | 1273.8 |
| 40° | 2380.1 | 2384.6 | 2334.6 | 2249.7 | 2140.7 | 2043.6 | 1996.1 | 2006.8 | 2099.8 | 2121.7 | 1334.5 |
| 42.5° | 2508.1 | 2505.7 | 2509.5 | 2485.2 | 2375.9 | 2261.5 | 2190.0 | 2195.9 | 2276.0 | 2287.5 | 1410.5 |
| 45° | 2567.1 | 2557.7 | 2590.3 | 2667.3 | 2624.0 | 2503.6 | 2422.1 | 2414.8 | 2458.8 | 2455.7 | 1479.5 |
| 47.5° | 2516.1 | 2498.7 | 2573.7 | 2759.3 | 2843.2 | 2806.8 | 2690.2 | 2677.0 | 2639.6 | 2614.6 | 1551.3 |
| 50° | 2262.5 | 2254.9 | 2415.1 | 2715.5 | 2980.9 | 3087.1 | 3001.4 | 2952.5 | 2800.9 | 2731.9 | 1589.2 |
| 52.5° | 2021.4 | 2000.2 | 2108.5 | 2492.5 | 2919.5 | 3312.6 | 3330.3 | 3243.2 | 2934.8 | 2765.5 | 1576.3 |
| 55° | 1632.9 | 1606.8 | 1724.8 | 2047.8 | 2676.3 | 3341.4 | 3561.3 | 3515.9 | 3052.0 | 2723.9 | 1550.3 |
| 57.5° | 991.8 | 966.1 | 1139.6 | 1466.7 | 2140.4 | 3102.0 | 3504.4 | 3550.5 | 3142.2 | 2678.1 | 1533.3 |
| 60° | 417.0 | 400.7 | 468.7 | 700.0 | 1366.8 | 2549.4 | 3202.6 | 3317.8 | 3159.2 | 2615.3 | 1540.2 |
| 62.5° | 216.8 | 209.5 | 213.3 | 280.3 | 552.6 | 1678.7 | 2665.6 | 2866.1 | 2987.9 | 2587.5 | 1547.2 |
| 65° | 162.7 | 157.1 | 145.0 | 154.0 | 214.7 | 725.7 | 1915.6 | 2184.1 | 2616.3 | 2517.1 | 1500.4 |
| 67.5° | 133.6 | 128.4 | 119.7 | 116.9 | 126.6 | 251.9 | 977.9 | 1326.9 | 2050.2 | 2217.1 | 1332.5 |
| 70° | 106.5 | 104.8 | 102.0 | 96.8 | 95.1 | 122.1 | 350.7 | 540.8 | 1355.7 | 1563.5 | 965.8 |
| 72.5° | 88.8 | 89.2 | 86.0 | 81.5 | 75.3 | 78.7 | 139.8 | 184.9 | 656.0 | 749.7 | 404.5 |
| 75° | 74.2 | 74.2 | 75.3 | 69.0 | 62.8 | 54.1 | 77.7 | 90.2 | 210.6 | 173.1 | 86.4 |
| 77.5° | 58.3 | 59.0 | 63.5 | 58.3 | 50.3 | 34.0 | 42.3 | 48.2 | 62.4 | 50.0 | 31.6 |
| 80° | 46.5 | 45.8 | 44.1 | 52.4 | 45.1 | 23.9 | 20.1 | 22.2 | 29.1 | 23.9 | 15.6 |
| 82.5° | 32.6 | 32.3 | 30.9 | 35.4 | 35.0 | 17.7 | 13.2 | 13.5 | 17.7 | 15.3 | 9.7 |
| 85° | 8.0 | 9.4 | 19.8 | 16.7 | 14.6 | 10.4 | 8.0 | 8.7 | 11.4 | 10.1 | 5.2 |
| 87.5° | 3.5 | 3.5 | 9.0 | 10.8 | 6.9 | 4.5 | 3.5 | 3.8 | 5.9 | 5.9 | 3.1 |
| 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° | 926.6 | 926.6 | 926.6 | 926.6 | 926.6 | 926.6 | 926.6 | 926.6 | 926.6 | 926.6 | 926.6 |
| 2.5° | 929.7 | 907.1 | 878.7 | 848.5 | 817.6 | 780.5 | 756.9 | 737.5 | 722.2 | 710.5 | 706.3 |
| 5° | 933.2 | 889.8 | 825.3 | 745.1 | 663.6 | 587.3 | 528.3 | 484.6 | 448.5 | 428.8 | 420.1 |
| 7.5° | 932.8 | 875.2 | 758.7 | 624.4 | 491.9 | 381.9 | 303.9 | 255.7 | 223.4 | 210.2 | 202.2 |
| 10° | 932.5 | 856.2 | 682.7 | 490.5 | 328.9 | 221.3 | 163.0 | 136.0 | 124.2 | 119.7 | 119.0 |
| 12.5° | 942.5 | 834.3 | 597.7 | 361.1 | 206.4 | 137.7 | 113.4 | 107.2 | 104.4 | 103.0 | 102.7 |
| 15° | 948.1 | 814.2 | 508.2 | 255.0 | 139.1 | 108.9 | 101.3 | 98.5 | 97.5 | 96.8 | 96.4 |
| 17.5° | 954.0 | 783.0 | 423.2 | 184.6 | 111.4 | 98.9 | 94.4 | 92.6 | 91.9 | 91.9 | 91.9 |
| 20° | 955.0 | 749.3 | 338.9 | 136.0 | 98.9 | 92.3 | 87.8 | 86.0 | 85.0 | 84.3 | 84.3 |
| 22.5° | 947.4 | 709.4 | 266.4 | 110.3 | 91.6 | 86.0 | 81.2 | 78.4 | 76.7 | 76.3 | 76.3 |
| 25° | 928.3 | 652.9 | 204.3 | 96.8 | 85.7 | 79.8 | 73.9 | 70.8 | 69.4 | 69.4 | 69.4 |
| 27.5° | 900.9 | 586.3 | 157.8 | 86.0 | 78.1 | 72.2 | 67.0 | 64.2 | 63.8 | 63.5 | 63.8 |
| 30° | 869.7 | 522.1 | 120.7 | 76.3 | 69.0 | 64.2 | 60.0 | 58.6 | 59.3 | 59.3 | 59.7 |
| 32.5° | 838.5 | 457.9 | 94.4 | 68.7 | 61.1 | 56.9 | 54.8 | 54.8 | 55.9 | 55.9 | 55.9 |
| 35° | 811.8 | 395.1 | 79.1 | 62.4 | 55.5 | 52.0 | 51.0 | 52.0 | 52.7 | 53.1 | 53.1 |
| 37.5° | 796.8 | 341.0 | 69.7 | 56.9 | 51.0 | 48.2 | 47.9 | 48.9 | 50.3 | 51.3 | 51.7 |
| 40° | 791.3 | 299.4 | 64.2 | 52.7 | 46.8 | 45.1 | 44.8 | 46.1 | 48.6 | 50.3 | 50.6 |
| 42.5° | 791.6 | 262.6 | 59.3 | 48.6 | 44.1 | 41.6 | 41.6 | 43.7 | 46.1 | 47.9 | 47.9 |
| 45° | 794.1 | 231.0 | 54.5 | 44.4 | 41.6 | 37.5 | 37.8 | 40.6 | 42.3 | 44.1 | 44.1 |
| 47.5° | 796.1 | 205.7 | 49.3 | 39.9 | 36.1 | 34.0 | 34.7 | 36.8 | 39.2 | 42.0 | 42.0 |
| 50° | 784.0 | 187.7 | 44.1 | 35.0 | 31.6 | 30.9 | 32.3 | 34.0 | 37.5 | 40.2 | 40.6 |
| 52.5° | 754.9 | 171.4 | 39.5 | 31.2 | 28.4 | 28.8 | 30.5 | 31.6 | 34.3 | 34.7 | 35.0 |
| 55° | 742.0 | 163.0 | 36.1 | 28.4 | 26.0 | 27.1 | 28.1 | 28.4 | 27.8 | 26.0 | 26.0 |
| 57.5° | 739.2 | 157.5 | 32.6 | 25.7 | 23.9 | 25.3 | 25.0 | 22.9 | 20.8 | 18.7 | 18.4 |
| 60° | 742.0 | 149.9 | 29.8 | 22.2 | 21.9 | 22.2 | 21.2 | 17.3 | 14.6 | 13.2 | 12.5 |
| 62.5° | 726.1 | 138.8 | 27.4 | 19.1 | 19.1 | 18.7 | 16.0 | 11.8 | 9.4 | 8.3 | 8.0 |
| 65° | 673.3 | 116.9 | 25.0 | 16.0 | 15.6 | 14.9 | 10.8 | 8.0 | 6.2 | 5.2 | 4.9 |
| 67.5° | 569.6 | 90.5 | 22.5 | 13.2 | 12.5 | 10.4 | 6.9 | 5.2 | 3.5 | 3.1 | 2.8 |
| 70° | 388.5 | 56.2 | 19.1 | 10.4 | 9.4 | 6.6 | 4.2 | 3.1 | 2.1 | 1.7 | 1.4 |
| 72.5° | 140.8 | 32.6 | 16.0 | 8.0 | 6.2 | 4.2 | 2.4 | 1.4 | 1.0 | 1.0 | 0.7 |
| 75° | 33.3 | 22.9 | 12.1 | 5.9 | 4.2 | 2.4 | 1.4 | 1.0 | 0.7 | 0.7 | 0.3 |
| 77.5° | 15.3 | 17.7 | 8.0 | 3.5 | 2.8 | 1.7 | 1.0 | 0.7 | 0.3 | 0.3 | 0.0 |
| 80° | 8.7 | 12.5 | 3.8 | 2.4 | 2.1 | 1.4 | 0.7 | 0.3 | 0.3 | 0.0 | 0.0 |
| 82.5° | 4.5 | 6.9 | 2.8 | 2.1 | 1.7 | 1.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 3.1 | 3.5 | 2.1 | 1.7 | 1.4 | 1.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 2.4 | 2.4 | 2.1 | 1.7 | 1.4 | 1.0 | 0.3 | 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)