

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: P674606

Luminaire Tested: **CCP-SA-1E-830-U-T2R-HSS**

Issue Date: 04/16/2023



Test Information

Test Method: LM-79-08
Report Number: P674606
Test Lab: INNOVATION CENTER(G2)
Issue Date: 04/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCP-SA-1E-830-U-T2R-HSS
Description: INVUE CLEAR CURVE POLE MOUNT Light Square Luminaire @1050mA w/ T2R distribution lens and House Side Shield
Light Source: (16) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

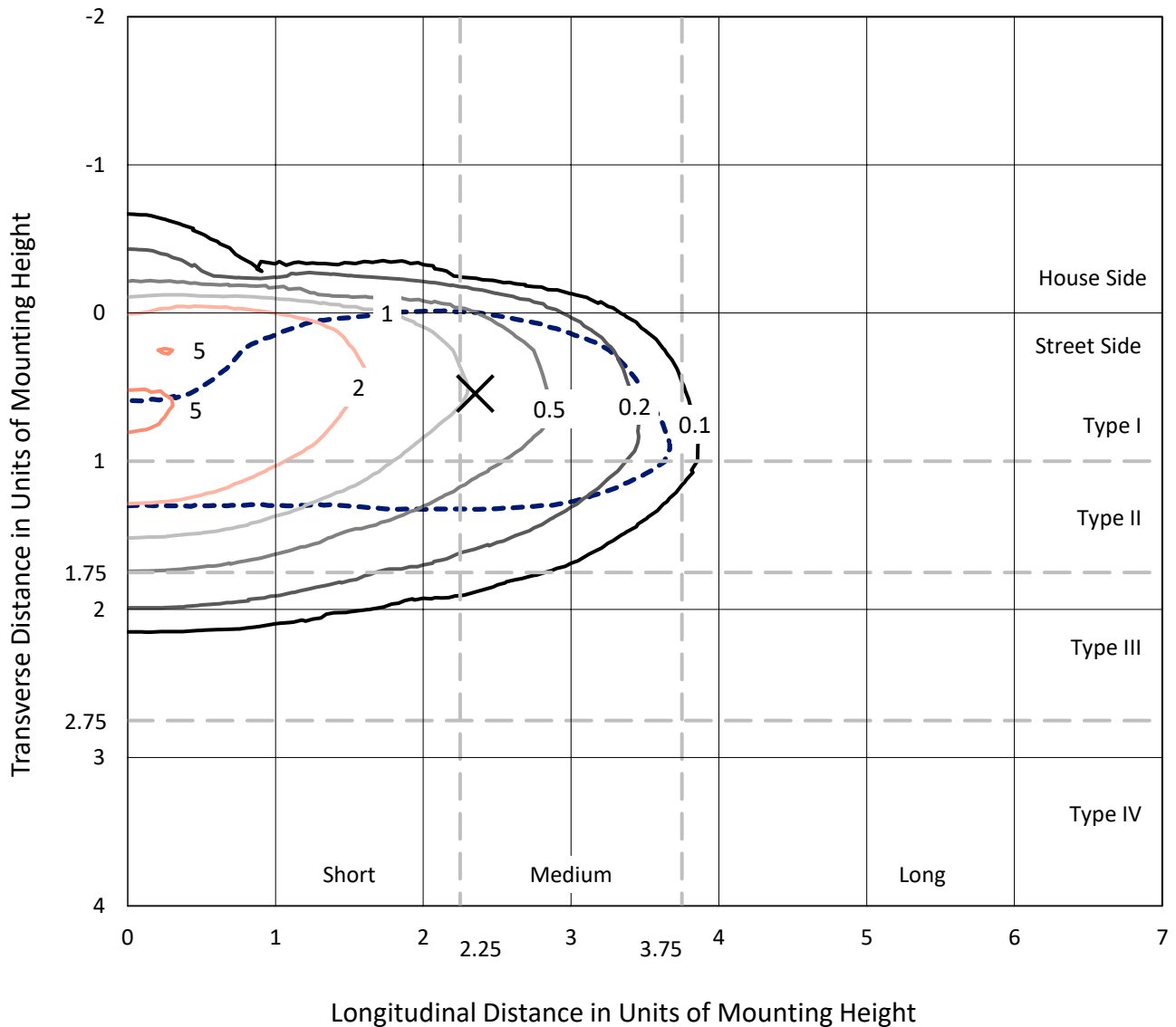
Lumens per Lamp: N/A
Luminaire Lumens: 4398.9 lumens
Efficiency: N/A
Efficacy: 78.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B0 - U0 - G1

Input Watts (W): 56.1
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

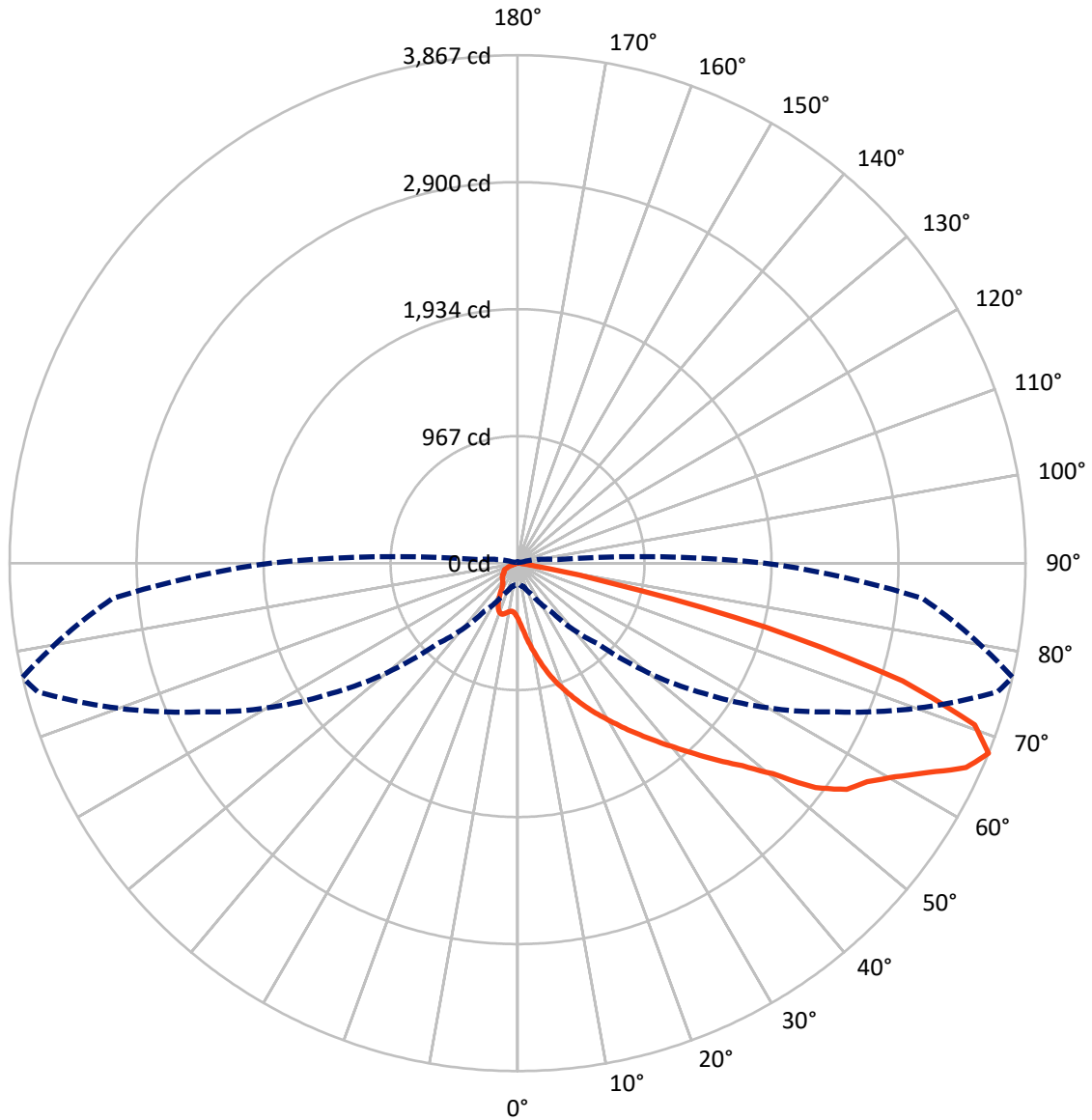
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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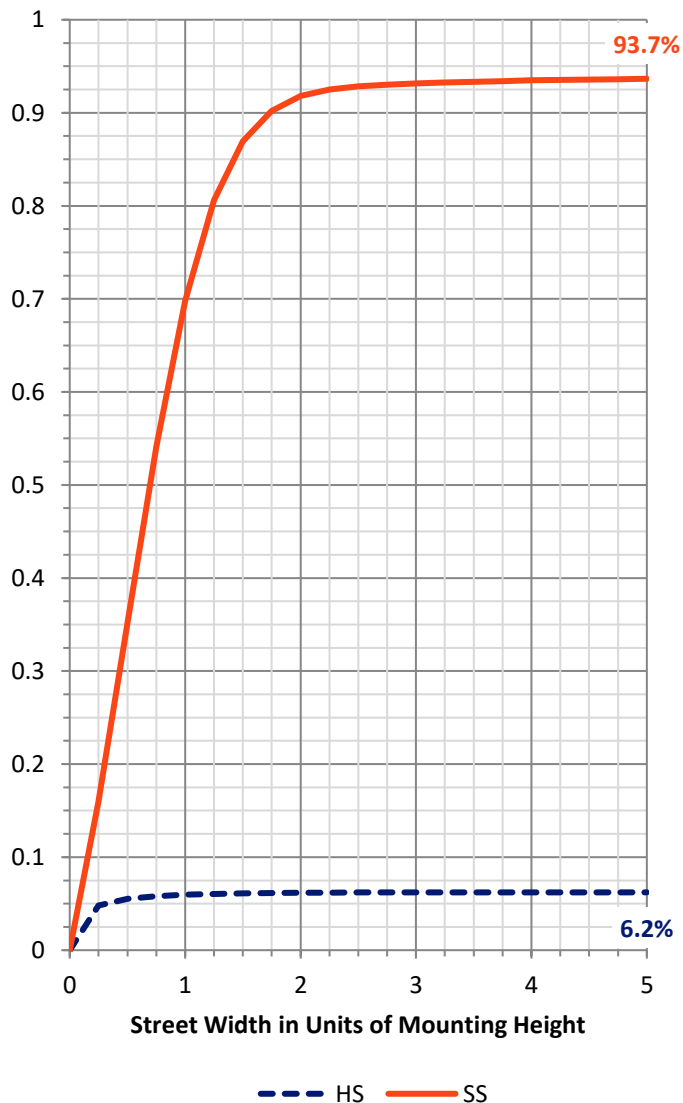
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 274.9 | 0.0 | 274.9 |
| | % Fixture | 6.2 | 0.0 | 6.2 |
| Street Side | Lumens | 4124.0 | 0.0 | 4124.0 |
| | % Fixture | 93.8 | 0.0 | 93.8 |
| Total | Lumens | 4398.9 | 0.0 | 4398.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 49.5 | 1.1 |
| 10°-20° | 183.1 | 4.2 |
| 20°-30° | 357.7 | 8.1 |
| 30°-40° | 625.5 | 14.2 |
| 40°-50° | 912.2 | 20.7 |
| 50°-60° | 1066.6 | 24.2 |
| 60°-70° | 864.7 | 19.7 |
| 70°-80° | 324.8 | 7.4 |
| 80°-90° | 14.8 | 0.3 |
| 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° | 4398.9 | 100.0 |
| 0°-180° | 4398.9 | 100.0 |

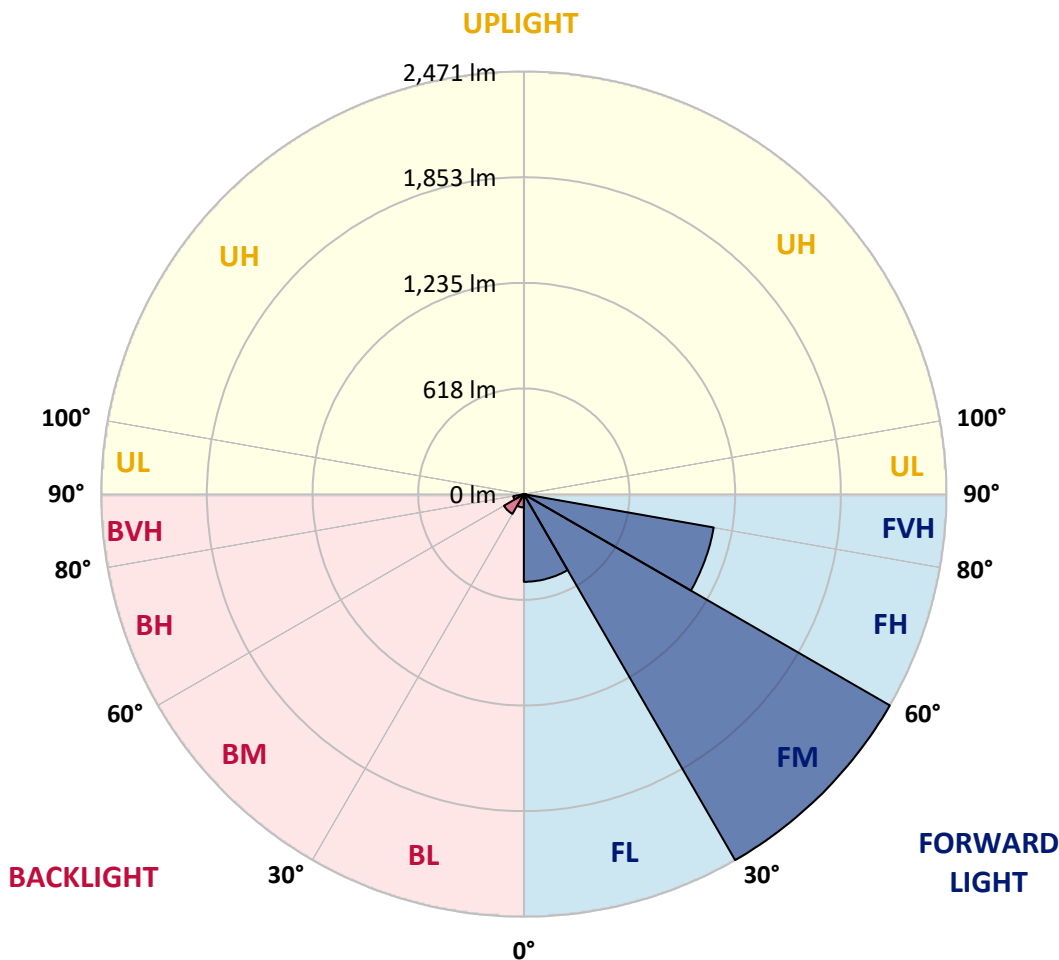


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 512.4 | 11.6 | | | |
| FM (30°-60°) | 2470.5 | 56.2 | | | |
| FH (60°-80°) | 1127.1 | 25.6 | | | G1/1800 |
| FVH (80°-90°) | 13.9 | 0.3 | | | G1/100 |
| BL (0°-30°) | 78.0 | 1.8 | B0/110 | | |
| BM (30°-60°) | 133.7 | 3.0 | B0/220 | | |
| BH (60°-80°) | 62.3 | 1.4 | B0/110 | | G0/110 |
| BVH (80°-90°) | 0.9 | 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-G1
 Type II Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 421.3 | 421.3 | 421.3 | 421.3 | 421.3 | 421.3 | 421.3 | 421.3 | 421.3 | 421.3 | 421.3 |
| 2.5° | 632.6 | 609.6 | 613.9 | 604.4 | 592.1 | 563.5 | 533.3 | 503.1 | 476.1 | 470.2 | 443.2 |
| 5° | 810.1 | 802.9 | 795.4 | 789.0 | 763.2 | 727.5 | 673.1 | 604.0 | 541.7 | 530.9 | 474.9 |
| 7.5° | 947.9 | 937.2 | 943.9 | 924.5 | 897.5 | 862.9 | 793.8 | 720.0 | 623.9 | 608.0 | 521.0 |
| 10° | 1049.6 | 1043.6 | 1046.8 | 1037.6 | 1024.5 | 990.0 | 921.7 | 829.2 | 718.0 | 687.8 | 572.6 |
| 12.5° | 1125.8 | 1127.0 | 1140.9 | 1141.7 | 1131.0 | 1102.8 | 1030.5 | 934.0 | 803.3 | 776.3 | 629.8 |
| 15° | 1181.4 | 1182.6 | 1199.7 | 1217.9 | 1230.2 | 1215.5 | 1150.0 | 1042.0 | 903.8 | 866.9 | 689.8 |
| 17.5° | 1190.5 | 1191.3 | 1221.5 | 1258.4 | 1296.6 | 1309.3 | 1258.8 | 1149.2 | 995.5 | 953.5 | 758.5 |
| 20° | 1196.5 | 1203.2 | 1230.2 | 1272.7 | 1333.1 | 1372.4 | 1345.0 | 1252.1 | 1084.5 | 1035.7 | 826.0 |
| 22.5° | 1268.8 | 1268.8 | 1284.6 | 1314.8 | 1362.9 | 1424.4 | 1418.9 | 1346.6 | 1171.1 | 1122.6 | 893.1 |
| 25° | 1422.0 | 1422.0 | 1406.5 | 1398.6 | 1424.4 | 1472.9 | 1486.8 | 1447.5 | 1269.9 | 1212.8 | 963.8 |
| 27.5° | 1625.0 | 1625.0 | 1600.7 | 1542.4 | 1520.1 | 1540.4 | 1555.1 | 1535.2 | 1361.3 | 1304.9 | 1038.4 |
| 30° | 1835.4 | 1842.6 | 1800.5 | 1726.2 | 1648.4 | 1632.9 | 1618.6 | 1614.2 | 1458.6 | 1395.0 | 1114.3 |
| 32.5° | 2046.7 | 2045.9 | 1993.5 | 1900.9 | 1799.3 | 1744.5 | 1698.0 | 1692.9 | 1561.8 | 1499.5 | 1186.2 |
| 35° | 2215.5 | 2215.9 | 2160.7 | 2065.7 | 1948.2 | 1878.3 | 1803.7 | 1779.4 | 1675.0 | 1605.5 | 1271.9 |
| 37.5° | 2361.6 | 2353.2 | 2293.7 | 2203.5 | 2093.9 | 2021.7 | 1928.7 | 1865.6 | 1792.1 | 1721.5 | 1357.7 |
| 40° | 2445.4 | 2434.3 | 2376.3 | 2290.5 | 2207.5 | 2152.3 | 2070.5 | 1969.6 | 1920.8 | 1844.6 | 1455.4 |
| 42.5° | 2457.7 | 2448.2 | 2409.6 | 2358.0 | 2290.1 | 2241.7 | 2219.8 | 2087.2 | 2055.8 | 1986.7 | 1572.1 |
| 45° | 2423.1 | 2407.7 | 2394.9 | 2367.9 | 2348.9 | 2325.5 | 2355.2 | 2212.3 | 2210.7 | 2142.0 | 1687.7 |
| 47.5° | 2337.4 | 2316.3 | 2319.5 | 2349.3 | 2370.7 | 2391.8 | 2484.7 | 2376.3 | 2366.8 | 2302.4 | 1839.4 |
| 50° | 2190.8 | 2180.5 | 2215.5 | 2274.2 | 2359.2 | 2443.4 | 2613.8 | 2543.9 | 2581.6 | 2521.2 | 2048.7 |
| 52.5° | 1893.0 | 1905.7 | 2010.2 | 2151.5 | 2298.4 | 2467.6 | 2734.9 | 2794.0 | 2890.5 | 2840.9 | 2259.1 |
| 55° | 1535.6 | 1530.8 | 1670.2 | 1921.2 | 2155.9 | 2452.1 | 2787.7 | 2941.4 | 3093.1 | 3041.0 | 2376.3 |
| 57.5° | 1237.0 | 1245.3 | 1339.4 | 1587.6 | 1914.1 | 2332.6 | 2800.0 | 3018.4 | 3174.5 | 3139.9 | 2484.7 |
| 60° | 928.4 | 936.4 | 1022.2 | 1238.2 | 1592.4 | 2083.2 | 2698.3 | 3045.4 | 3327.4 | 3301.1 | 2657.8 |
| 62.5° | 590.9 | 601.2 | 687.4 | 897.5 | 1217.1 | 1695.6 | 2470.0 | 3017.2 | 3487.0 | 3508.8 | 2894.1 |
| 65° | 290.7 | 299.8 | 363.4 | 524.2 | 813.7 | 1268.0 | 2151.5 | 2909.6 | 3690.3 | 3752.7 | 3083.5 |
| 67.5° | 160.8 | 165.2 | 187.0 | 266.9 | 453.9 | 869.7 | 1729.0 | 2679.7 | 3783.6 | 3867.0 | 3096.2 |
| 70° | 125.1 | 126.3 | 134.6 | 155.7 | 221.2 | 510.3 | 1229.8 | 2296.9 | 3590.2 | 3691.1 | 2838.5 |
| 72.5° | 105.2 | 106.8 | 110.8 | 117.9 | 138.2 | 265.7 | 772.8 | 1775.1 | 3020.8 | 3066.5 | 2196.0 |
| 75° | 77.0 | 79.4 | 90.5 | 96.9 | 109.2 | 161.2 | 340.7 | 1066.6 | 1996.3 | 1951.4 | 1228.6 |
| 77.5° | 64.7 | 66.7 | 69.5 | 78.6 | 90.1 | 110.0 | 119.5 | 447.1 | 812.5 | 706.5 | 322.4 |
| 80° | 44.1 | 46.5 | 54.0 | 58.8 | 76.2 | 72.7 | 49.6 | 119.9 | 163.2 | 133.0 | 61.9 |
| 82.5° | 31.4 | 33.4 | 37.3 | 48.0 | 55.2 | 38.5 | 27.0 | 36.5 | 39.3 | 37.3 | 20.3 |
| 85° | 9.9 | 12.7 | 27.0 | 39.7 | 29.8 | 13.1 | 17.1 | 13.9 | 12.3 | 11.9 | 7.9 |
| 87.5° | 2.0 | 2.0 | 13.5 | 15.9 | 11.9 | 6.8 | 6.0 | 4.4 | 5.6 | 5.6 | 4.4 |
| 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° | 421.3 | 421.3 | 421.3 | 421.3 | 421.3 | 421.3 | 421.3 | 421.3 | 421.3 | 421.3 | 421.3 |
| 2.5° | 430.5 | 412.6 | 386.8 | 362.6 | 337.9 | 320.5 | 308.2 | 295.8 | 291.1 | 289.1 | 283.9 |
| 5° | 449.5 | 415.4 | 364.1 | 322.8 | 292.7 | 273.6 | 262.1 | 252.2 | 245.8 | 243.8 | 241.0 |
| 7.5° | 476.9 | 427.7 | 354.2 | 306.6 | 276.4 | 255.7 | 237.1 | 215.6 | 198.6 | 191.8 | 189.0 |
| 10° | 506.7 | 446.3 | 355.8 | 303.4 | 263.3 | 218.0 | 176.3 | 141.8 | 126.7 | 121.1 | 117.1 |
| 12.5° | 550.4 | 467.0 | 362.6 | 299.8 | 224.0 | 155.7 | 112.8 | 98.5 | 94.9 | 94.1 | 93.3 |
| 15° | 594.1 | 496.0 | 373.7 | 276.0 | 167.2 | 106.0 | 93.7 | 88.6 | 86.6 | 84.6 | 84.6 |
| 17.5° | 638.1 | 523.8 | 378.0 | 229.5 | 115.6 | 91.7 | 85.4 | 81.0 | 77.8 | 76.2 | 75.1 |
| 20° | 687.8 | 553.2 | 365.3 | 172.7 | 92.5 | 83.8 | 76.6 | 71.5 | 68.7 | 67.1 | 65.9 |
| 22.5° | 741.4 | 582.2 | 337.5 | 120.3 | 84.2 | 75.5 | 68.7 | 63.5 | 60.8 | 59.2 | 58.8 |
| 25° | 791.8 | 607.2 | 293.1 | 90.5 | 75.8 | 67.5 | 61.2 | 56.8 | 54.8 | 53.2 | 52.8 |
| 27.5° | 843.9 | 628.6 | 235.1 | 79.8 | 69.1 | 61.2 | 54.8 | 51.2 | 49.2 | 48.0 | 47.7 |
| 30° | 894.7 | 643.3 | 175.1 | 73.1 | 63.1 | 55.2 | 49.6 | 46.9 | 44.9 | 43.7 | 43.3 |
| 32.5° | 947.1 | 651.7 | 118.3 | 67.1 | 57.2 | 50.0 | 45.3 | 42.5 | 41.3 | 40.1 | 40.1 |
| 35° | 997.5 | 650.5 | 85.4 | 61.6 | 52.4 | 45.3 | 40.9 | 38.9 | 38.5 | 37.3 | 37.3 |
| 37.5° | 1052.7 | 642.1 | 72.7 | 56.4 | 47.3 | 40.9 | 37.3 | 36.1 | 35.7 | 34.9 | 34.5 |
| 40° | 1115.5 | 623.5 | 66.3 | 52.4 | 42.9 | 37.3 | 34.2 | 33.4 | 33.0 | 32.2 | 32.2 |
| 42.5° | 1184.2 | 599.2 | 62.7 | 48.0 | 39.3 | 33.8 | 31.4 | 30.2 | 29.8 | 29.0 | 29.0 |
| 45° | 1264.0 | 576.2 | 60.4 | 43.7 | 36.1 | 31.0 | 28.6 | 27.4 | 27.0 | 26.2 | 26.2 |
| 47.5° | 1372.8 | 563.1 | 56.4 | 39.7 | 32.6 | 28.2 | 25.8 | 25.0 | 24.2 | 23.4 | 23.4 |
| 50° | 1522.5 | 547.6 | 51.2 | 35.7 | 29.8 | 25.4 | 23.8 | 22.6 | 22.2 | 21.4 | 21.4 |
| 52.5° | 1645.6 | 514.6 | 46.1 | 31.8 | 26.6 | 23.4 | 21.8 | 21.0 | 20.3 | 19.9 | 19.9 |
| 55° | 1688.9 | 476.1 | 40.9 | 28.6 | 24.2 | 21.8 | 20.3 | 19.5 | 19.1 | 18.7 | 18.7 |
| 57.5° | 1758.0 | 463.8 | 36.1 | 25.4 | 21.8 | 20.3 | 18.7 | 18.3 | 17.9 | 17.5 | 17.1 |
| 60° | 1875.9 | 471.0 | 31.8 | 22.6 | 19.9 | 18.3 | 17.1 | 16.7 | 15.9 | 15.1 | 15.1 |
| 62.5° | 1990.3 | 462.2 | 27.0 | 19.9 | 17.1 | 16.3 | 15.1 | 14.3 | 12.7 | 11.5 | 10.7 |
| 65° | 2018.1 | 403.9 | 23.4 | 16.7 | 14.3 | 13.5 | 12.3 | 10.7 | 8.3 | 6.8 | 6.8 |
| 67.5° | 1883.5 | 307.0 | 20.3 | 14.3 | 11.9 | 11.1 | 8.7 | 7.1 | 5.2 | 4.0 | 4.0 |
| 70° | 1554.3 | 194.6 | 16.7 | 11.1 | 9.9 | 7.5 | 5.6 | 5.2 | 3.6 | 3.2 | 2.8 |
| 72.5° | 1121.4 | 106.4 | 13.9 | 9.1 | 7.1 | 4.8 | 4.0 | 3.2 | 2.4 | 1.6 | 1.6 |
| 75° | 567.9 | 50.0 | 10.3 | 7.1 | 4.8 | 3.2 | 2.4 | 1.6 | 1.6 | 1.2 | 1.2 |
| 77.5° | 160.8 | 23.0 | 6.8 | 4.8 | 3.2 | 2.0 | 1.6 | 1.2 | 1.2 | 0.8 | 0.8 |
| 80° | 31.8 | 11.5 | 4.4 | 3.2 | 2.4 | 1.6 | 1.2 | 0.8 | 0.8 | 0.4 | 0.4 |
| 82.5° | 11.5 | 6.0 | 3.2 | 2.4 | 2.0 | 1.6 | 0.8 | 0.4 | 0.4 | 0.0 | 0.0 |
| 85° | 6.0 | 3.2 | 2.4 | 2.0 | 1.6 | 1.2 | 0.8 | 0.4 | 0.0 | 0.0 | 0.0 |
| 87.5° | 3.2 | 2.4 | 2.0 | 2.0 | 1.6 | 1.2 | 0.8 | 0.4 | 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)