

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: P676493

Luminaire Tested: **CCW-SA-2D-840-U-T3-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676493
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2D-840-U-T3-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/
T3 distribution lens and House Side Shield
Light Source: (32) 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

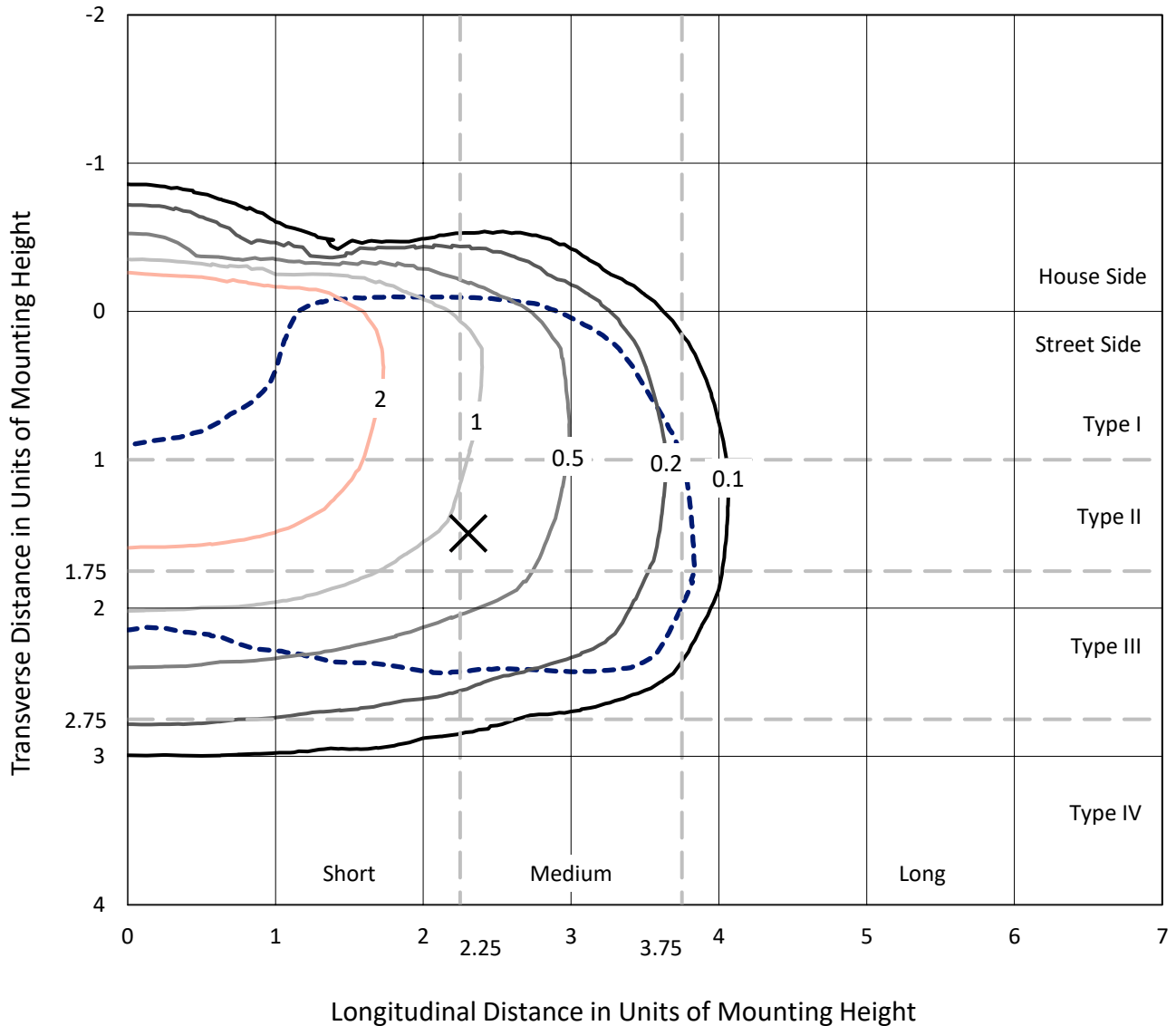
Lumens per Lamp: N/A
Luminaire Lumens: 6850.2 lumens
Efficiency: N/A
Efficacy: 84.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 80.8
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

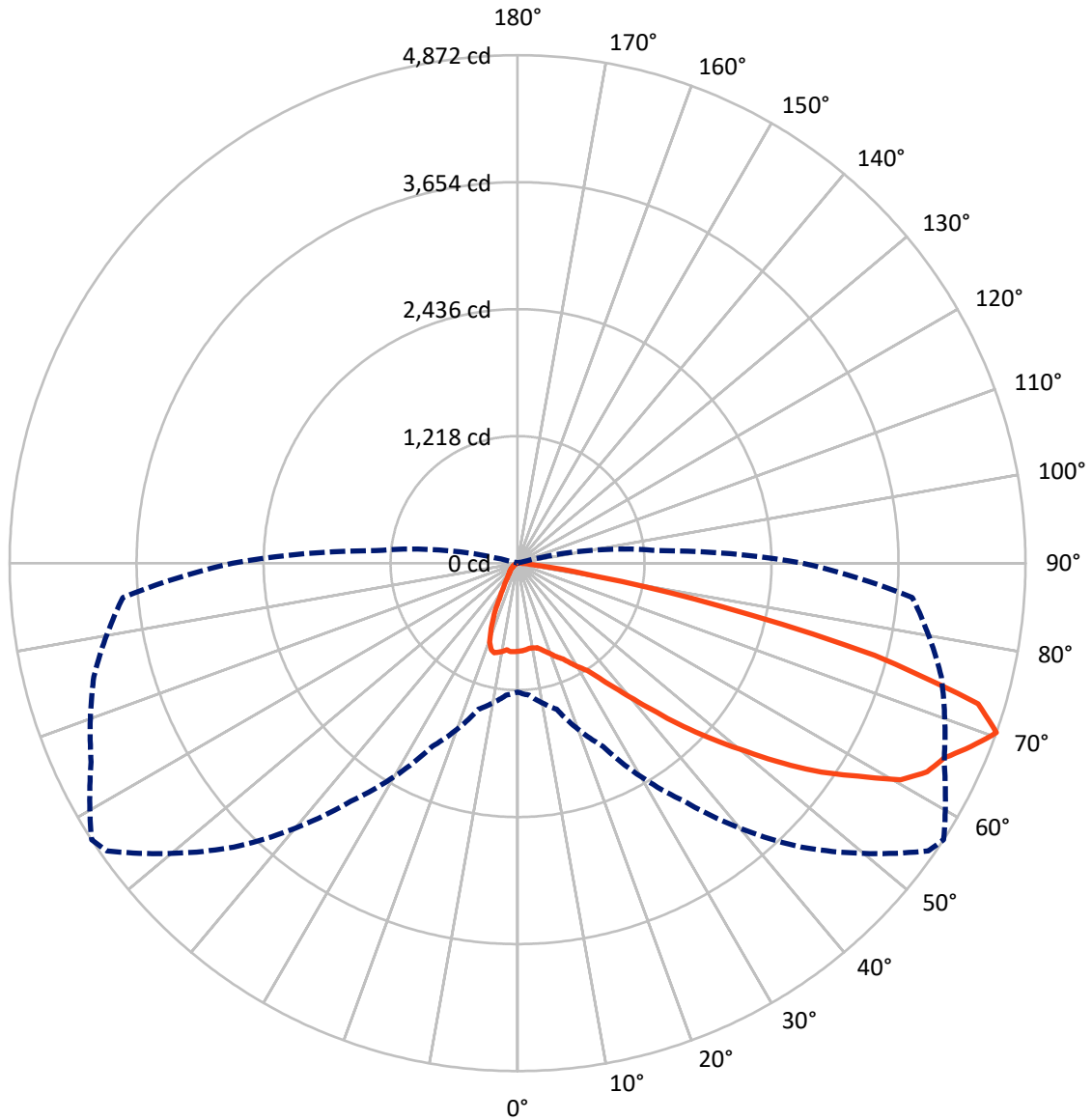
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 4.8 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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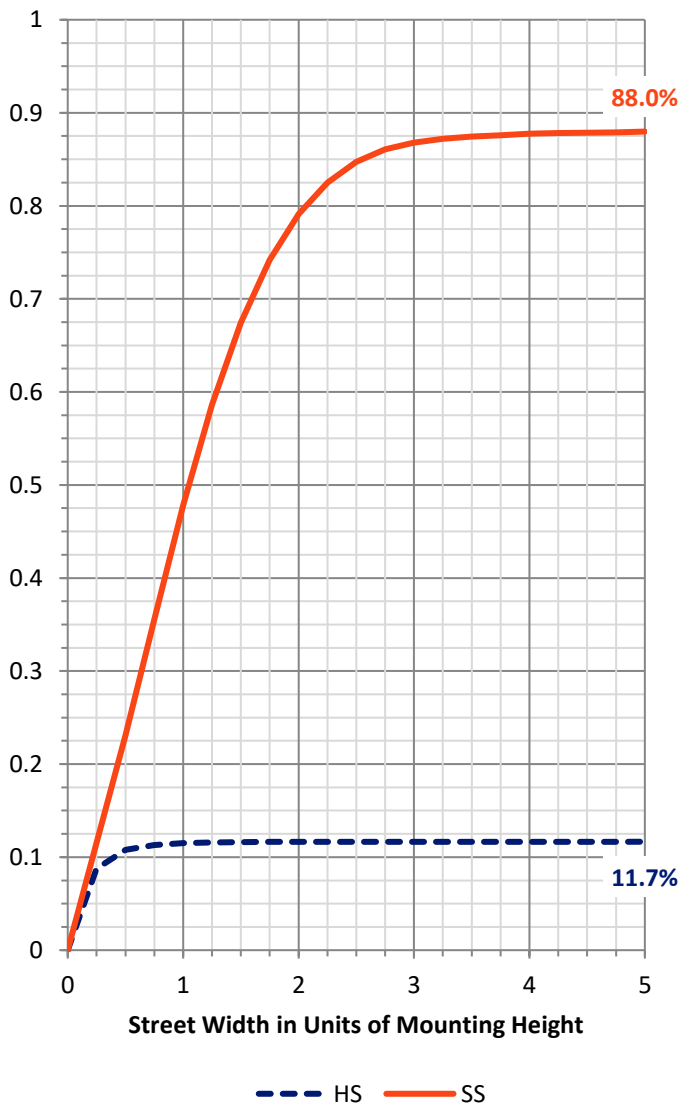
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 807.4 | 0.0 | 807.4 |
| | % Fixture | 11.8 | 0.0 | 11.8 |
| Street Side | Lumens | 6042.8 | 0.0 | 6042.8 |
| | % Fixture | 88.2 | 0.0 | 88.2 |
| Total | Lumens | 6850.2 | 0.0 | 6850.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 79.0 | 1.2 |
| 10°-20° | 220.8 | 3.2 |
| 20°-30° | 372.0 | 5.4 |
| 30°-40° | 636.6 | 9.3 |
| 40°-50° | 1069.0 | 15.6 |
| 50°-60° | 1640.9 | 24.0 |
| 60°-70° | 1894.5 | 27.7 |
| 70°-80° | 894.9 | 13.1 |
| 80°-90° | 42.4 | 0.6 |
| 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° | 6850.2 | 100.0 |
| 0°-180° | 6850.2 | 100.0 |

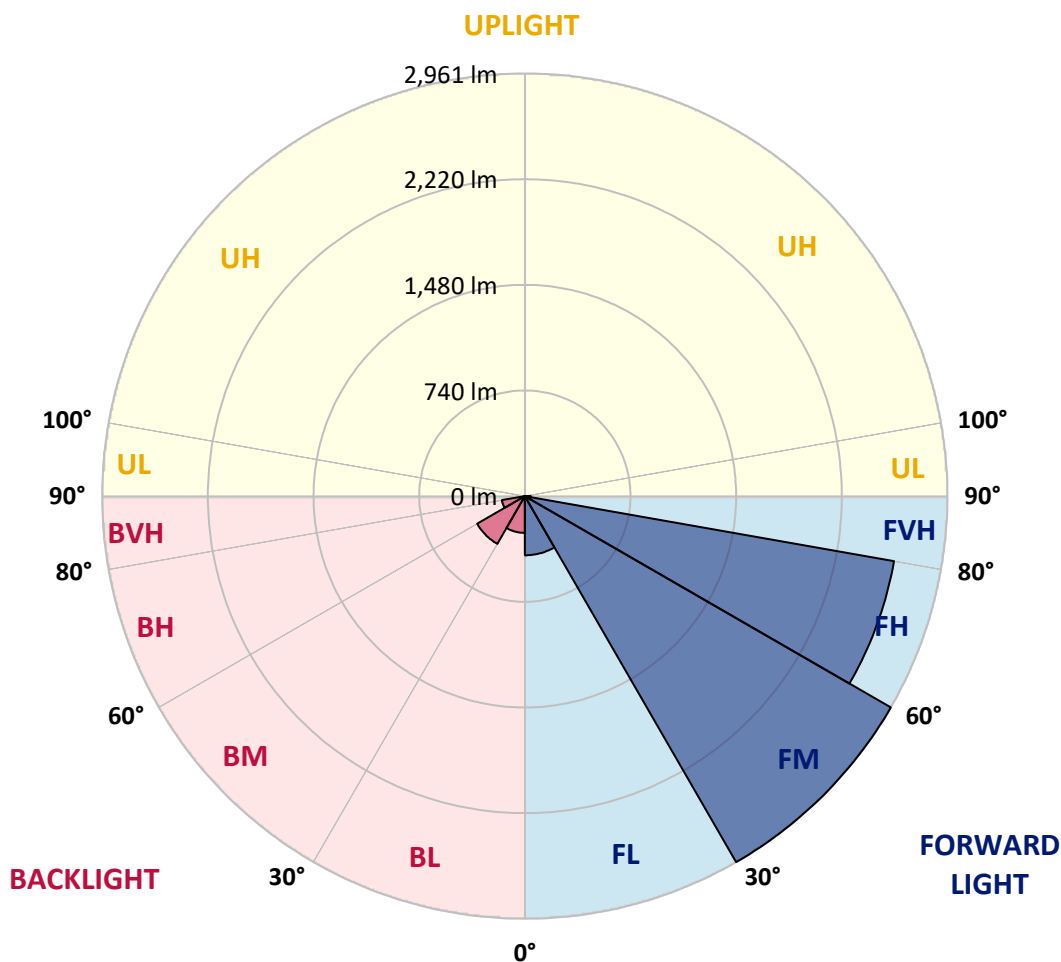


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 414.4 | 6.0 | | | |
| FM (30°-60°) | 2960.6 | 43.2 | | | |
| FH (60°-80°) | 2626.1 | 38.3 | | | G2/5000 |
| FVH (80°-90°) | 41.7 | 0.6 | | | G1/100 |
| BL (0°-30°) | 257.4 | 3.8 | B1/500 | | |
| BM (30°-60°) | 385.9 | 5.6 | B1/1000 | | |
| BH (60°-80°) | 163.3 | 2.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 0.8 | 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-G2
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 57° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 845.2 | 845.2 | 845.2 | 845.2 | 845.2 | 845.2 | 845.2 | 845.2 | 845.2 | 845.2 | 845.2 |
| 2.5° | 833.0 | 827.7 | 833.0 | 840.0 | 833.0 | 838.2 | 836.5 | 841.7 | 834.7 | 834.7 | 840.0 |
| 5° | 778.7 | 787.5 | 791.0 | 799.7 | 808.5 | 824.2 | 834.7 | 834.7 | 845.2 | 850.5 | 857.5 |
| 7.5° | 759.5 | 745.5 | 759.5 | 766.5 | 775.2 | 801.5 | 817.2 | 824.2 | 838.2 | 857.5 | 868.0 |
| 10° | 731.5 | 742.0 | 742.0 | 764.7 | 777.0 | 792.7 | 820.7 | 826.0 | 857.5 | 876.7 | 887.2 |
| 12.5° | 729.7 | 729.7 | 738.5 | 754.2 | 778.7 | 808.5 | 843.5 | 833.0 | 866.2 | 901.2 | 918.7 |
| 15° | 735.0 | 747.2 | 747.2 | 768.2 | 787.5 | 829.5 | 859.2 | 861.0 | 908.2 | 943.2 | 959.0 |
| 17.5° | 757.7 | 752.5 | 759.5 | 771.7 | 801.5 | 841.7 | 890.7 | 896.0 | 950.2 | 997.5 | 1020.2 |
| 20° | 805.0 | 813.7 | 803.2 | 796.2 | 808.5 | 861.0 | 924.0 | 934.5 | 995.7 | 1041.2 | 1064.0 |
| 22.5° | 981.7 | 974.7 | 932.7 | 883.7 | 862.7 | 887.2 | 955.5 | 980.0 | 1051.7 | 1106.0 | 1125.2 |
| 25° | 1181.2 | 1169.0 | 1120.0 | 1046.5 | 950.2 | 939.7 | 1018.5 | 1018.5 | 1121.7 | 1181.2 | 1176.0 |
| 27.5° | 1370.2 | 1366.7 | 1309.0 | 1232.0 | 1095.5 | 1020.2 | 1069.2 | 1088.5 | 1200.5 | 1249.5 | 1226.7 |
| 30° | 1562.7 | 1566.2 | 1513.7 | 1421.0 | 1277.5 | 1149.7 | 1141.0 | 1156.7 | 1260.0 | 1337.0 | 1289.7 |
| 32.5° | 1786.7 | 1755.2 | 1718.5 | 1590.7 | 1459.5 | 1316.0 | 1233.7 | 1226.7 | 1326.5 | 1396.5 | 1333.5 |
| 35° | 1986.2 | 1967.0 | 1926.7 | 1811.2 | 1660.7 | 1489.2 | 1373.7 | 1356.2 | 1410.5 | 1503.2 | 1435.0 |
| 37.5° | 2161.2 | 2142.0 | 2089.5 | 2012.5 | 1895.2 | 1704.5 | 1541.7 | 1515.5 | 1538.2 | 1636.2 | 1554.0 |
| 40° | 2311.7 | 2317.0 | 2303.0 | 2227.7 | 2119.2 | 1946.0 | 1758.7 | 1716.7 | 1697.5 | 1785.0 | 1692.2 |
| 42.5° | 2420.2 | 2471.0 | 2474.5 | 2381.7 | 2294.2 | 2199.7 | 1989.7 | 1956.5 | 1911.0 | 1984.5 | 1919.7 |
| 45° | 2647.7 | 2619.7 | 2637.2 | 2604.0 | 2507.7 | 2493.7 | 2255.7 | 2236.5 | 2173.5 | 2198.0 | 2129.7 |
| 47.5° | 2826.2 | 2821.0 | 2854.2 | 2800.0 | 2773.7 | 2775.5 | 2558.5 | 2525.2 | 2436.0 | 2481.5 | 2404.5 |
| 50° | 2929.5 | 2901.5 | 3022.2 | 3064.2 | 3059.0 | 3080.0 | 2864.7 | 2836.7 | 2751.0 | 2817.5 | 2653.0 |
| 52.5° | 2954.0 | 3004.7 | 3118.5 | 3270.7 | 3335.4 | 3379.2 | 3198.9 | 3188.4 | 3095.7 | 3137.7 | 2910.2 |
| 55° | 3015.2 | 3064.2 | 3130.7 | 3380.9 | 3620.7 | 3631.2 | 3527.9 | 3538.4 | 3456.2 | 3445.7 | 3155.2 |
| 57.5° | 3013.5 | 3003.0 | 3186.7 | 3477.2 | 3809.7 | 3960.2 | 3904.2 | 3853.4 | 3764.2 | 3660.9 | 3312.7 |
| 60° | 2903.2 | 2898.0 | 3088.7 | 3489.4 | 3912.9 | 4257.7 | 4280.4 | 4220.9 | 3996.9 | 3844.7 | 3498.2 |
| 62.5° | 2684.5 | 2705.5 | 2898.0 | 3384.4 | 4010.9 | 4364.4 | 4448.4 | 4408.2 | 4129.9 | 3967.2 | 3716.9 |
| 65° | 2434.2 | 2390.5 | 2614.5 | 3122.0 | 3790.4 | 4332.9 | 4514.9 | 4500.9 | 4287.4 | 4100.2 | 3918.2 |
| 67.5° | 1953.0 | 1972.2 | 2143.7 | 2686.2 | 3414.2 | 4217.4 | 4670.7 | 4691.7 | 4413.4 | 4217.4 | 3979.4 |
| 70° | 1237.2 | 1272.2 | 1450.7 | 1940.7 | 2787.7 | 3853.4 | 4810.7 | 4871.9 | 4513.2 | 4206.9 | 3800.9 |
| 72.5° | 360.5 | 374.5 | 617.7 | 967.7 | 1776.2 | 3090.5 | 4586.7 | 4618.2 | 4318.9 | 3818.4 | 2940.0 |
| 75° | 119.0 | 126.0 | 182.0 | 315.0 | 696.5 | 1597.7 | 3387.9 | 3536.7 | 3436.9 | 2768.5 | 1681.7 |
| 77.5° | 78.7 | 82.2 | 99.7 | 150.5 | 264.2 | 500.5 | 1816.5 | 1975.7 | 1937.2 | 1296.7 | 542.5 |
| 80° | 57.7 | 59.5 | 73.5 | 101.5 | 161.0 | 180.2 | 670.2 | 775.2 | 749.0 | 297.5 | 108.5 |
| 82.5° | 36.7 | 36.7 | 54.2 | 71.7 | 101.5 | 89.2 | 194.2 | 215.2 | 210.0 | 113.7 | 42.0 |
| 85° | 24.5 | 26.2 | 40.2 | 56.0 | 56.0 | 42.0 | 56.0 | 64.7 | 70.0 | 61.2 | 19.2 |
| 87.5° | 7.0 | 8.7 | 22.7 | 38.5 | 22.7 | 21.0 | 19.2 | 21.0 | 24.5 | 33.2 | 10.5 |
| 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° | 845.2 | 845.2 | 845.2 | 845.2 | 845.2 | 845.2 | 845.2 | 845.2 | 845.2 | 845.2 | 845.2 |
| 2.5° | 845.2 | 852.2 | 850.5 | 854.0 | 848.7 | 843.5 | 848.7 | 848.7 | 848.7 | 843.5 | 840.0 |
| 5° | 852.2 | 848.7 | 852.2 | 845.2 | 852.2 | 845.2 | 841.7 | 831.2 | 829.5 | 829.5 | 836.5 |
| 7.5° | 862.7 | 866.2 | 850.5 | 850.5 | 834.7 | 838.2 | 829.5 | 831.2 | 827.7 | 822.5 | 819.0 |
| 10° | 878.5 | 892.5 | 876.7 | 871.5 | 854.0 | 840.0 | 819.0 | 808.5 | 808.5 | 801.5 | 808.5 |
| 12.5° | 922.2 | 917.0 | 908.2 | 890.7 | 869.7 | 841.7 | 791.0 | 740.2 | 698.2 | 666.7 | 682.5 |
| 15° | 957.2 | 955.5 | 943.2 | 910.0 | 882.0 | 796.2 | 668.5 | 537.2 | 467.2 | 435.7 | 430.5 |
| 17.5° | 1011.5 | 1006.2 | 985.2 | 941.5 | 848.7 | 659.7 | 458.5 | 348.2 | 280.0 | 264.2 | 259.0 |
| 20° | 1062.2 | 1060.5 | 1015.0 | 959.0 | 764.7 | 481.2 | 299.2 | 229.2 | 210.0 | 211.7 | 208.2 |
| 22.5° | 1116.5 | 1107.7 | 1053.5 | 938.0 | 609.0 | 320.2 | 213.5 | 204.7 | 197.7 | 196.0 | 199.5 |
| 25° | 1177.7 | 1146.2 | 1092.0 | 890.7 | 448.0 | 220.5 | 201.2 | 194.2 | 187.2 | 185.5 | 185.5 |
| 27.5° | 1202.2 | 1181.2 | 1109.5 | 777.0 | 283.5 | 192.5 | 189.0 | 180.2 | 171.5 | 166.2 | 164.5 |
| 30° | 1258.2 | 1223.2 | 1127.0 | 610.7 | 201.2 | 176.7 | 171.5 | 161.0 | 148.7 | 140.0 | 140.0 |
| 32.5° | 1314.2 | 1272.2 | 1128.7 | 427.0 | 168.0 | 159.2 | 150.5 | 136.5 | 120.7 | 112.0 | 113.7 |
| 35° | 1384.2 | 1326.5 | 1109.5 | 276.5 | 150.5 | 140.0 | 122.5 | 106.7 | 92.7 | 85.7 | 85.7 |
| 37.5° | 1503.2 | 1449.0 | 1030.7 | 182.0 | 136.5 | 119.0 | 101.5 | 84.0 | 71.7 | 66.5 | 66.5 |
| 40° | 1653.7 | 1583.7 | 922.2 | 143.5 | 120.7 | 101.5 | 80.5 | 64.7 | 57.7 | 52.5 | 52.5 |
| 42.5° | 1834.0 | 1746.5 | 761.2 | 127.7 | 106.7 | 84.0 | 63.0 | 50.7 | 43.7 | 43.7 | 42.0 |
| 45° | 2014.2 | 1870.7 | 596.7 | 117.2 | 94.5 | 70.0 | 49.0 | 40.2 | 36.7 | 35.0 | 35.0 |
| 47.5° | 2271.5 | 2021.2 | 427.0 | 106.7 | 82.2 | 54.2 | 40.2 | 33.2 | 29.7 | 28.0 | 29.7 |
| 50° | 2518.2 | 2163.0 | 302.7 | 96.2 | 68.2 | 43.7 | 33.2 | 29.7 | 26.2 | 24.5 | 24.5 |
| 52.5° | 2735.2 | 2261.0 | 211.7 | 84.0 | 57.7 | 36.7 | 29.7 | 26.2 | 24.5 | 22.7 | 22.7 |
| 55° | 2854.2 | 2227.7 | 145.2 | 71.7 | 47.2 | 31.5 | 26.2 | 22.7 | 21.0 | 19.2 | 19.2 |
| 57.5° | 2976.7 | 2135.0 | 110.2 | 59.5 | 38.5 | 29.7 | 24.5 | 21.0 | 19.2 | 17.5 | 17.5 |
| 60° | 3080.0 | 2066.7 | 85.7 | 47.2 | 31.5 | 24.5 | 21.0 | 17.5 | 15.7 | 14.0 | 12.2 |
| 62.5° | 3085.2 | 1930.2 | 63.0 | 35.0 | 24.5 | 21.0 | 17.5 | 14.0 | 8.7 | 7.0 | 5.2 |
| 65° | 3106.2 | 1786.7 | 45.5 | 26.2 | 17.5 | 15.7 | 12.2 | 7.0 | 3.5 | 0.0 | 0.0 |
| 67.5° | 3032.7 | 1617.0 | 36.7 | 19.2 | 12.2 | 8.7 | 5.2 | 1.7 | 0.0 | 0.0 | 0.0 |
| 70° | 2733.5 | 1365.0 | 28.0 | 14.0 | 8.7 | 5.2 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 1956.5 | 887.2 | 19.2 | 10.5 | 3.5 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 1043.0 | 378.0 | 14.0 | 7.0 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 327.2 | 96.2 | 8.7 | 3.5 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 71.7 | 26.2 | 5.2 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 24.5 | 10.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 8.7 | 3.5 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 3.5 | 1.7 | 1.7 | 0.0 | 0.0 | 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)