

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: McGRAW-EDISON

Report Number: P595255

Luminaire Tested: **IST-PA1D-830-U-T2U-HSS**

Issue Date: 3/22/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P595255  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2201-510-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/22/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: IST-PA1D-830-U-T2U-HSS  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE  
(1) 80 CRI, 3000K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4667 lumens  
Efficiency: N/A  
Efficacy: 74.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

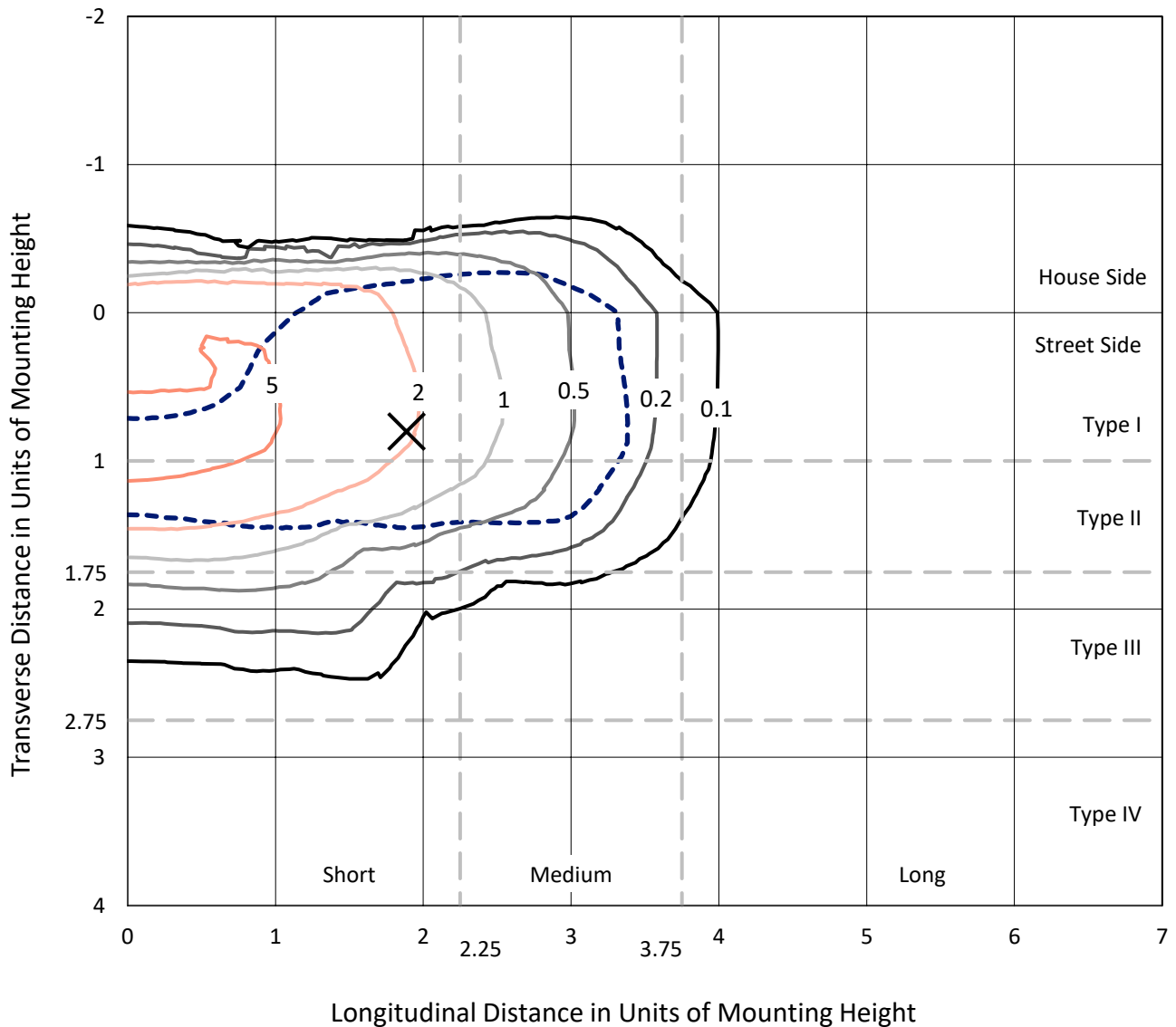
Input Watts (W): 62.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

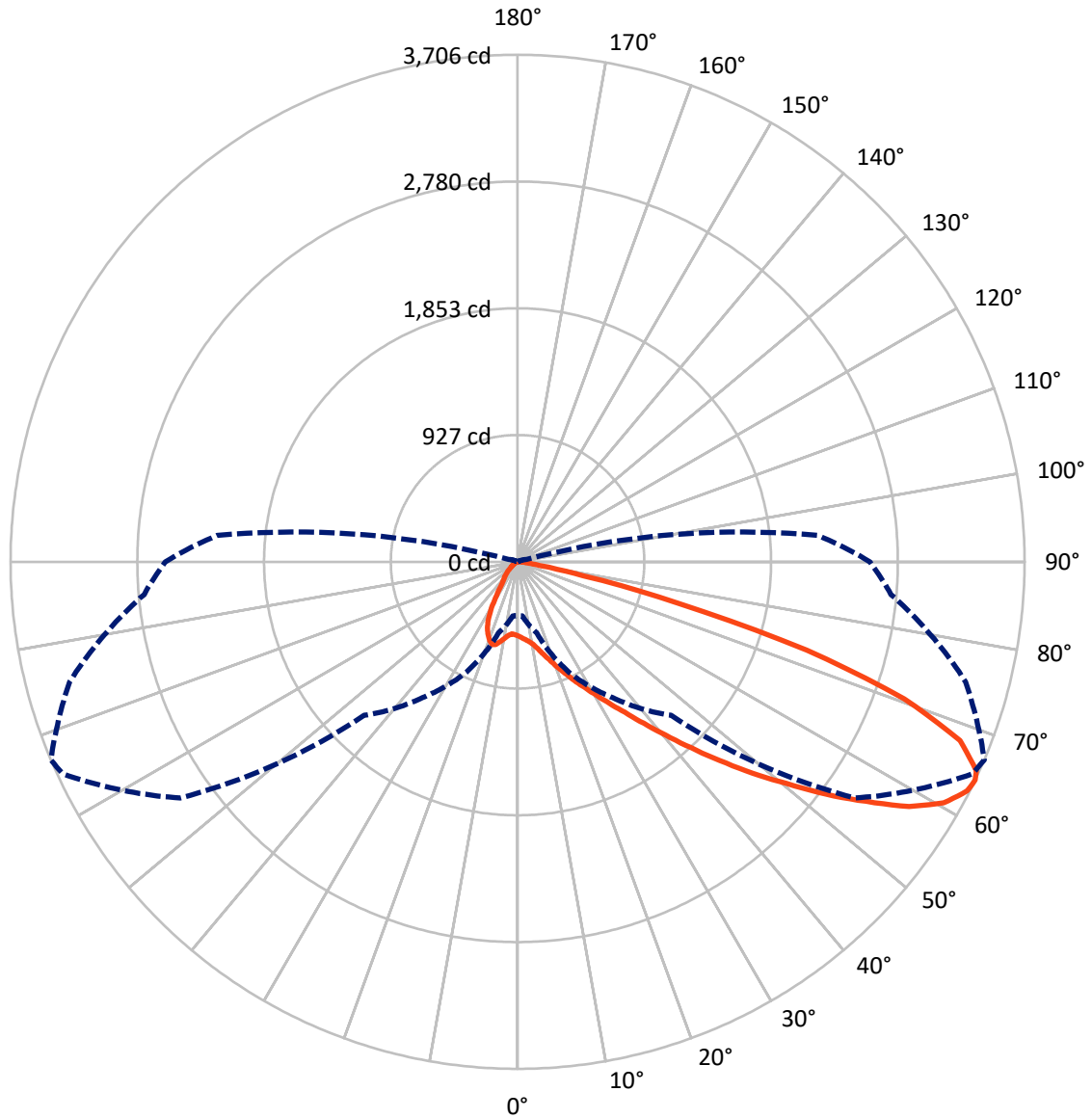
✕ Max cd  
 - - - 1/2 Max cd



Based on 12 foot mounting height. Maximum calculated value = 7.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 64-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 597.0    | 0.0    | 597.0  |
|                    | % Fixture | 12.8     | 0.0    | 12.8   |
| <b>Street Side</b> | Lumens    | 4070.0   | 0.0    | 4070.0 |
|                    | % Fixture | 87.2     | 0.0    | 87.2   |
| <b>Total</b>       | Lumens    | 4667.0   | 0.0    | 4667.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 51.4   | 1.1       |
| 10°-20°   | 151.8  | 3.3       |
| 20°-30°   | 275.5  | 5.9       |
| 30°-40°   | 527.7  | 11.3      |
| 40°-50°   | 972.6  | 20.8      |
| 50°-60°   | 1256.2 | 26.9      |
| 60°-70°   | 1029.0 | 22.0      |
| 70°-80°   | 378.3  | 8.1       |
| 80°-90°   | 24.4   | 0.5       |
| 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°    | 4667.0 | 100.0     |
| 0°-180°   | 4667.0 | 100.0     |

**Coefficient of Utilization**

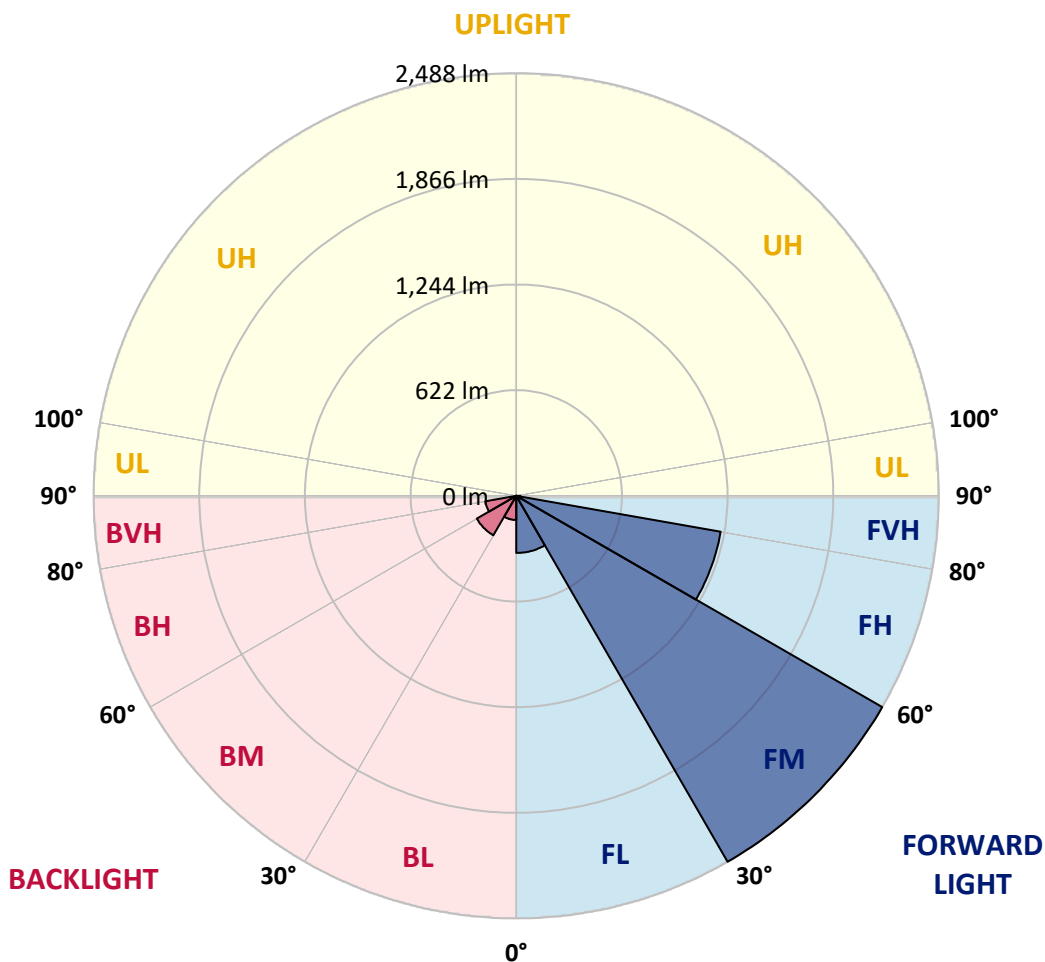


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 336.5  | 7.2       |                         |      |         |
| FM (30°-60°)   | 2488.2 | 53.3      |                         |      |         |
| FH (60°-80°)   | 1222.0 | 26.2      |                         |      | G1/1800 |
| FVH (80°-90°)  | 23.3   | 0.5       |                         |      | G1/100  |
| BL (0°-30°)    | 142.3  | 3.0       | B1/500                  |      |         |
| BM (30°-60°)   | 268.4  | 5.8       | B1/1000                 |      |         |
| BH (60°-80°)   | 185.2  | 4.0       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 1.1    | 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-G1**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 67°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 542.3  | 542.3  | 542.3  | 542.3  | 542.3  | 542.3  | 542.3  | 542.3  | 542.3  | 542.3  | 542.3  |
| 2.5°  | 561.5  | 561.5  | 564.7  | 563.1  | 563.1  | 559.9  | 555.1  | 556.7  | 555.1  | 553.5  | 548.7  |
| 5°    | 551.9  | 553.5  | 555.1  | 558.3  | 564.7  | 568.0  | 568.0  | 569.6  | 569.6  | 568.0  | 561.5  |
| 7.5°  | 547.1  | 550.3  | 553.5  | 556.7  | 564.7  | 569.6  | 577.6  | 587.2  | 587.2  | 588.8  | 582.4  |
| 10°   | 564.7  | 568.0  | 572.8  | 577.6  | 585.6  | 593.6  | 600.0  | 611.3  | 611.3  | 614.5  | 612.9  |
| 12.5° | 601.6  | 601.6  | 603.2  | 606.5  | 617.7  | 627.3  | 638.5  | 648.2  | 649.8  | 651.4  | 646.6  |
| 15°   | 646.6  | 646.6  | 648.2  | 648.2  | 654.6  | 669.0  | 689.9  | 699.5  | 697.9  | 696.3  | 686.7  |
| 17.5° | 697.9  | 697.9  | 697.9  | 699.5  | 702.7  | 710.7  | 734.8  | 754.1  | 752.5  | 750.9  | 731.6  |
| 20°   | 746.0  | 749.2  | 752.5  | 754.1  | 757.3  | 763.7  | 789.4  | 811.8  | 816.6  | 810.2  | 776.5  |
| 22.5° | 800.6  | 802.2  | 803.8  | 808.6  | 816.6  | 819.8  | 845.5  | 879.2  | 884.0  | 876.0  | 831.1  |
| 25°   | 855.1  | 858.3  | 863.2  | 869.6  | 877.6  | 893.6  | 911.3  | 956.2  | 961.0  | 951.4  | 890.4  |
| 27.5° | 975.5  | 973.9  | 959.4  | 948.2  | 949.8  | 961.0  | 985.1  | 1033.2 | 1038.0 | 1028.4 | 949.8  |
| 30°   | 1180.8 | 1161.6 | 1134.3 | 1084.6 | 1036.4 | 1041.2 | 1074.9 | 1121.5 | 1129.5 | 1116.7 | 1015.6 |
| 32.5° | 1472.8 | 1453.6 | 1386.2 | 1277.1 | 1171.2 | 1135.9 | 1179.2 | 1224.1 | 1233.8 | 1219.3 | 1092.6 |
| 35°   | 1756.8 | 1752.0 | 1687.8 | 1556.3 | 1376.6 | 1278.7 | 1289.9 | 1347.7 | 1350.9 | 1333.2 | 1188.8 |
| 37.5° | 2108.2 | 2090.5 | 2002.3 | 1854.7 | 1642.9 | 1468.0 | 1435.9 | 1490.5 | 1498.5 | 1477.6 | 1306.0 |
| 40°   | 2340.8 | 2334.4 | 2281.4 | 2177.2 | 1949.3 | 1729.5 | 1614.0 | 1667.0 | 1665.4 | 1634.9 | 1440.7 |
| 42.5° | 2475.6 | 2478.8 | 2475.6 | 2425.8 | 2295.9 | 2044.0 | 1849.9 | 1853.1 | 1857.9 | 1825.8 | 1596.4 |
| 45°   | 2567.0 | 2567.0 | 2571.8 | 2611.9 | 2562.2 | 2419.4 | 2137.0 | 2064.8 | 2071.3 | 2021.5 | 1758.4 |
| 47.5° | 2565.4 | 2575.0 | 2600.7 | 2693.8 | 2761.1 | 2769.2 | 2496.4 | 2311.9 | 2308.7 | 2233.3 | 1925.3 |
| 50°   | 2392.1 | 2385.7 | 2491.6 | 2700.2 | 2902.3 | 3058.0 | 2836.6 | 2573.4 | 2546.2 | 2453.1 | 2098.5 |
| 52.5° | 2002.3 | 2023.1 | 2199.6 | 2506.1 | 2936.0 | 3253.7 | 3130.2 | 2859.0 | 2823.7 | 2671.3 | 2251.0 |
| 55°   | 1662.1 | 1684.6 | 1856.3 | 2156.3 | 2753.1 | 3322.7 | 3327.5 | 3162.2 | 3091.7 | 2860.6 | 2408.2 |
| 57.5° | 1248.2 | 1291.5 | 1545.0 | 1827.4 | 2352.0 | 3151.0 | 3398.1 | 3452.6 | 3375.6 | 3043.5 | 2536.5 |
| 60°   | 797.4  | 823.0  | 1107.0 | 1455.2 | 1906.0 | 2701.8 | 3383.6 | 3621.1 | 3579.4 | 3210.4 | 2644.0 |
| 62.5° | 521.4  | 535.9  | 731.6  | 1095.8 | 1452.0 | 2036.0 | 3212.0 | 3688.5 | 3688.5 | 3322.7 | 2724.2 |
| 64°   | 393.1  | 396.3  | 535.9  | 890.4  | 1211.3 | 1586.7 | 3009.8 | 3667.6 | 3706.1 | 3390.1 | 2740.3 |
| 65°   | 311.3  | 312.9  | 418.7  | 739.6  | 1087.8 | 1301.2 | 2833.3 | 3622.7 | 3685.3 | 3415.7 | 2749.9 |
| 67.5° | 218.2  | 223.0  | 271.1  | 426.8  | 779.7  | 750.9  | 2100.1 | 3410.9 | 3487.9 | 3423.8 | 2737.1 |
| 70°   | 189.3  | 195.7  | 227.8  | 279.2  | 556.7  | 436.4  | 1116.7 | 2907.1 | 2998.6 | 3189.5 | 2547.8 |
| 72.5° | 144.4  | 152.4  | 190.9  | 235.8  | 391.5  | 295.2  | 431.6  | 2064.8 | 2209.2 | 2465.9 | 2103.3 |
| 75°   | 104.3  | 107.5  | 141.2  | 192.5  | 274.3  | 227.8  | 186.1  | 1065.3 | 1211.3 | 1455.2 | 1307.6 |
| 77.5° | 65.8   | 70.6   | 96.3   | 144.4  | 245.5  | 173.3  | 110.7  | 388.3  | 489.3  | 633.7  | 571.2  |
| 80°   | 38.5   | 40.1   | 57.8   | 99.5   | 165.3  | 128.4  | 70.6   | 138.0  | 166.9  | 235.8  | 152.4  |
| 82.5° | 22.5   | 24.1   | 36.9   | 67.4   | 107.5  | 99.5   | 44.9   | 70.6   | 78.6   | 89.8   | 32.1   |
| 85°   | 8.0    | 8.0    | 25.7   | 40.1   | 57.8   | 49.7   | 25.7   | 36.9   | 40.1   | 49.7   | 9.6    |
| 87.5° | 1.6    | 1.6    | 12.8   | 20.9   | 20.9   | 8.0    | 12.8   | 16.0   | 19.3   | 27.3   | 3.2    |
| 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°    | 542.3  | 542.3  | 542.3 | 542.3 | 542.3 | 542.3 | 542.3 | 542.3 | 542.3 | 542.3 | 542.3 |
| 2.5°  | 547.1  | 542.3  | 537.5 | 531.1 | 526.2 | 516.6 | 511.8 | 505.4 | 503.8 | 500.6 | 499.0 |
| 5°    | 559.9  | 551.9  | 540.7 | 524.6 | 515.0 | 500.6 | 490.9 | 481.3 | 479.7 | 476.5 | 474.9 |
| 7.5°  | 577.6  | 569.6  | 555.1 | 537.5 | 521.4 | 507.0 | 495.8 | 481.3 | 466.9 | 455.6 | 455.6 |
| 10°   | 606.5  | 596.8  | 577.6 | 561.5 | 542.3 | 511.8 | 458.9 | 410.7 | 380.2 | 361.0 | 354.6 |
| 12.5° | 641.8  | 628.9  | 608.1 | 588.8 | 551.9 | 455.6 | 373.8 | 311.3 | 259.9 | 235.8 | 231.0 |
| 15°   | 678.7  | 667.4  | 646.6 | 617.7 | 507.0 | 380.2 | 272.7 | 176.5 | 126.7 | 104.3 | 107.5 |
| 17.5° | 718.8  | 702.7  | 678.7 | 620.9 | 446.0 | 284.0 | 146.0 | 89.8  | 77.0  | 73.8  | 73.8  |
| 20°   | 760.5  | 739.6  | 715.6 | 585.6 | 367.4 | 163.6 | 83.4  | 67.4  | 62.6  | 57.8  | 59.4  |
| 22.5° | 805.4  | 779.7  | 742.8 | 532.7 | 263.1 | 88.2  | 64.2  | 54.5  | 48.1  | 46.5  | 46.5  |
| 25°   | 853.5  | 816.6  | 770.1 | 471.7 | 152.4 | 67.4  | 52.9  | 43.3  | 38.5  | 36.9  | 35.3  |
| 27.5° | 904.9  | 858.3  | 776.5 | 391.5 | 86.6  | 56.2  | 41.7  | 33.7  | 28.9  | 27.3  | 27.3  |
| 30°   | 951.4  | 900.1  | 762.1 | 290.4 | 65.8  | 46.5  | 33.7  | 25.7  | 22.5  | 22.5  | 22.5  |
| 32.5° | 1014.0 | 946.6  | 717.2 | 181.3 | 52.9  | 36.9  | 25.7  | 20.9  | 17.6  | 17.6  | 17.6  |
| 35°   | 1095.8 | 1015.6 | 672.2 | 96.3  | 43.3  | 30.5  | 20.9  | 16.0  | 14.4  | 14.4  | 14.4  |
| 37.5° | 1208.1 | 1107.0 | 632.1 | 61.0  | 35.3  | 24.1  | 16.0  | 12.8  | 11.2  | 11.2  | 11.2  |
| 40°   | 1323.6 | 1216.1 | 576.0 | 46.5  | 28.9  | 19.3  | 12.8  | 9.6   | 8.0   | 8.0   | 9.6   |
| 42.5° | 1468.0 | 1342.9 | 511.8 | 40.1  | 24.1  | 16.0  | 9.6   | 6.4   | 4.8   | 6.4   | 6.4   |
| 45°   | 1614.0 | 1476.0 | 422.0 | 33.7  | 20.9  | 12.8  | 6.4   | 3.2   | 3.2   | 4.8   | 4.8   |
| 47.5° | 1764.8 | 1617.2 | 327.3 | 28.9  | 17.6  | 9.6   | 4.8   | 1.6   | 1.6   | 3.2   | 3.2   |
| 50°   | 1920.4 | 1756.8 | 243.9 | 25.7  | 14.4  | 8.0   | 3.2   | 1.6   | 0.0   | 1.6   | 1.6   |
| 52.5° | 2076.1 | 1891.6 | 189.3 | 22.5  | 12.8  | 6.4   | 1.6   | 0.0   | 0.0   | 0.0   | 1.6   |
| 55°   | 2220.5 | 2013.5 | 150.8 | 19.3  | 11.2  | 4.8   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   |
| 57.5° | 2342.4 | 2103.3 | 120.3 | 17.6  | 9.6   | 3.2   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60°   | 2457.9 | 2173.9 | 93.1  | 14.4  | 8.0   | 3.2   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   |
| 62.5° | 2539.7 | 2201.2 | 75.4  | 12.8  | 6.4   | 3.2   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 64°   | 2575.0 | 2204.4 | 65.8  | 11.2  | 6.4   | 3.2   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   |
| 65°   | 2595.9 | 2194.8 | 61.0  | 11.2  | 6.4   | 3.2   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   |
| 67.5° | 2600.7 | 2141.9 | 46.5  | 9.6   | 4.8   | 1.6   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   |
| 70°   | 2459.5 | 1957.4 | 33.7  | 6.4   | 3.2   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 2055.2 | 1495.3 | 22.5  | 4.8   | 3.2   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 1283.5 | 646.6  | 12.8  | 4.8   | 1.6   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 531.1  | 195.7  | 8.0   | 3.2   | 1.6   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 121.9  | 46.5   | 3.2   | 1.6   | 1.6   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 28.9   | 8.0    | 1.6   | 1.6   | 1.6   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 6.4    | 1.6    | 1.6   | 1.6   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 3.2    | 1.6    | 1.6   | 1.6   | 1.6   | 1.6   | 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)