

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: P595196

Luminaire Tested: **IST-PA1D-727-U-T4W-HSS**

Issue Date: 3/22/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P595196  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2201-510-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/22/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: IST-PA1D-727-U-T4W-HSS  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE  
(1) 70 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5001 lumens  
Efficiency: N/A  
Efficacy: 80.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G2

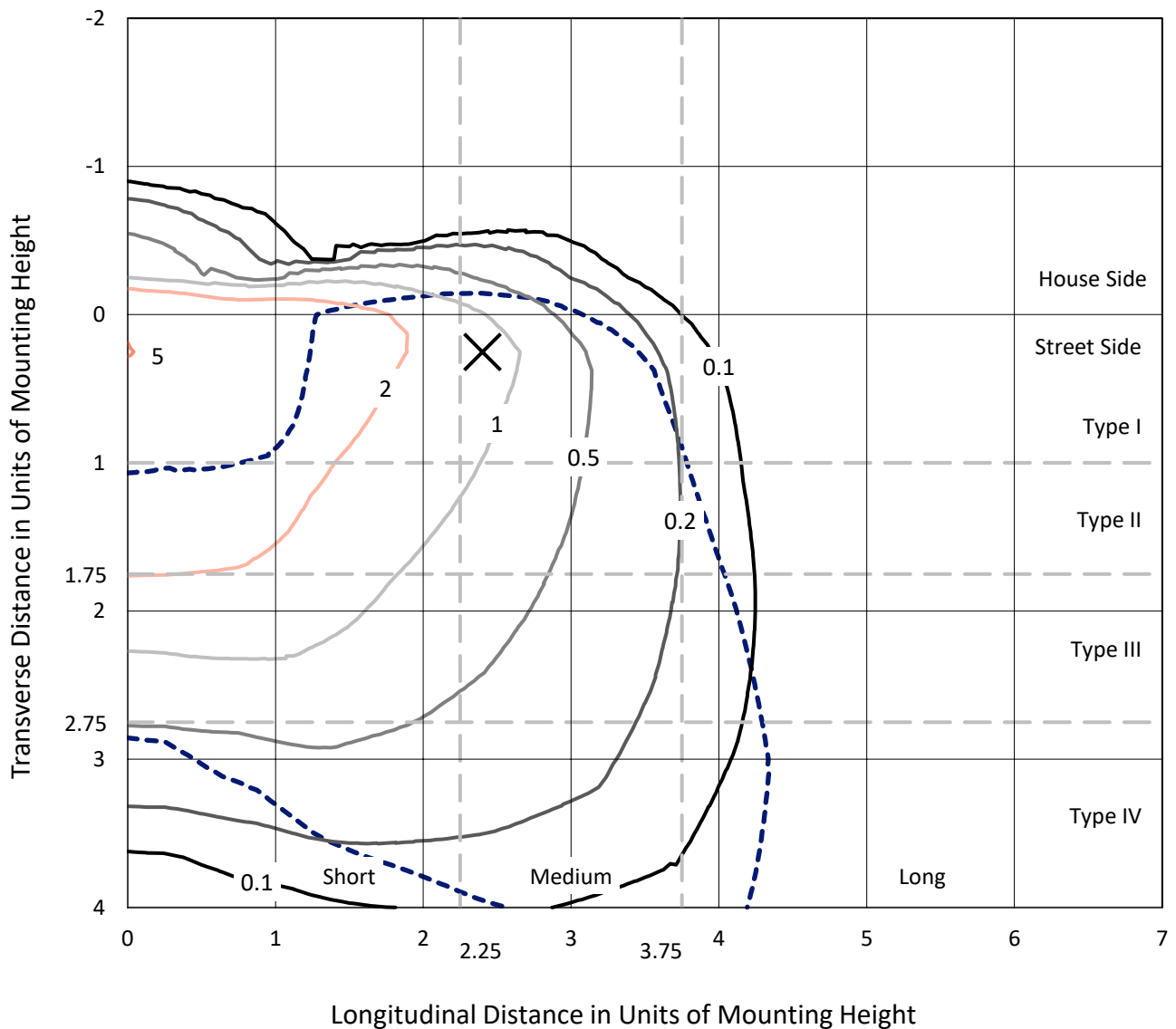
Input Watts (W): 62.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

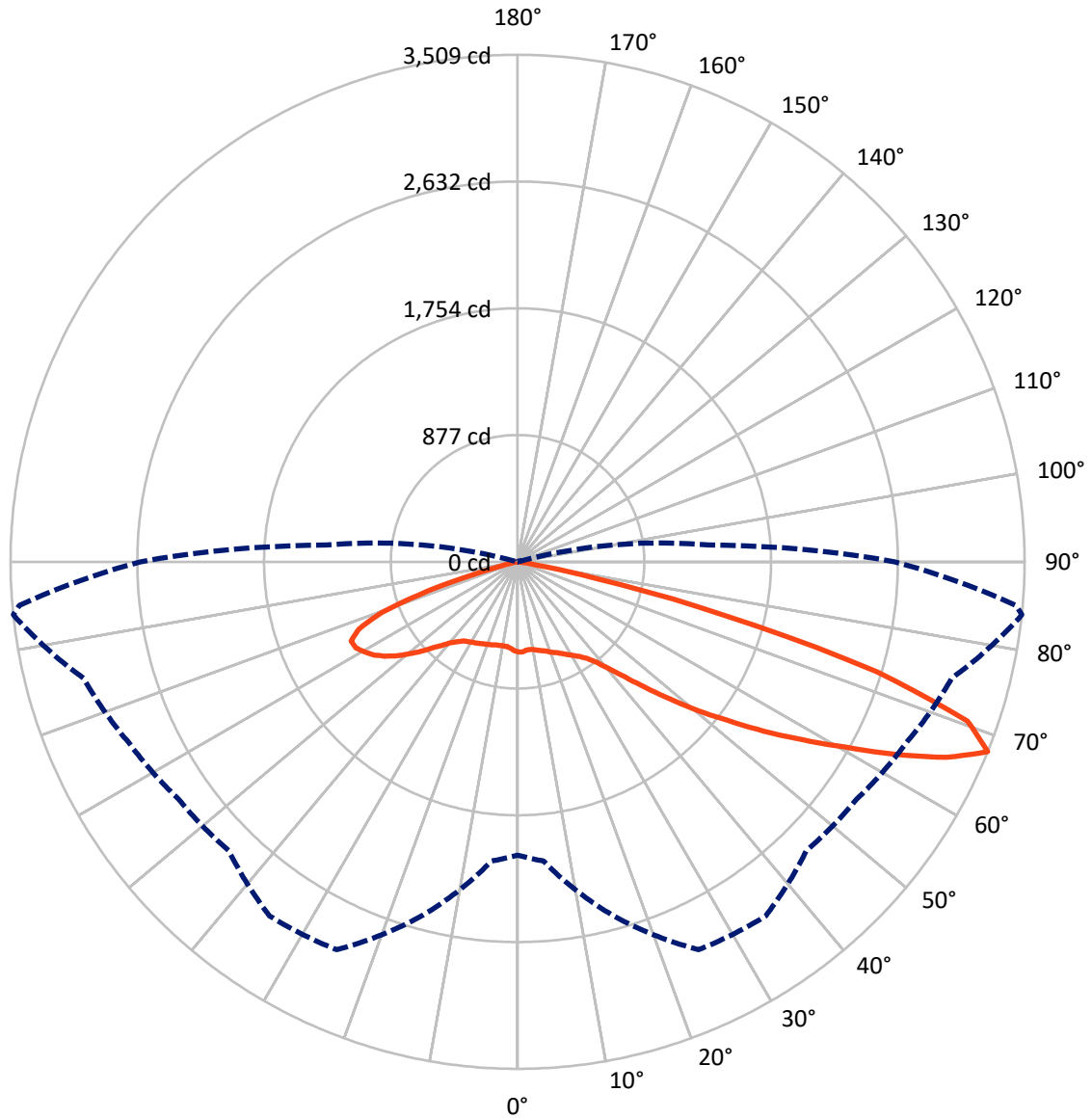
× Max cd  
 - - - 1/2 Max cd



Based on 12 foot mounting height. Maximum calculated value = 5.1 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 84-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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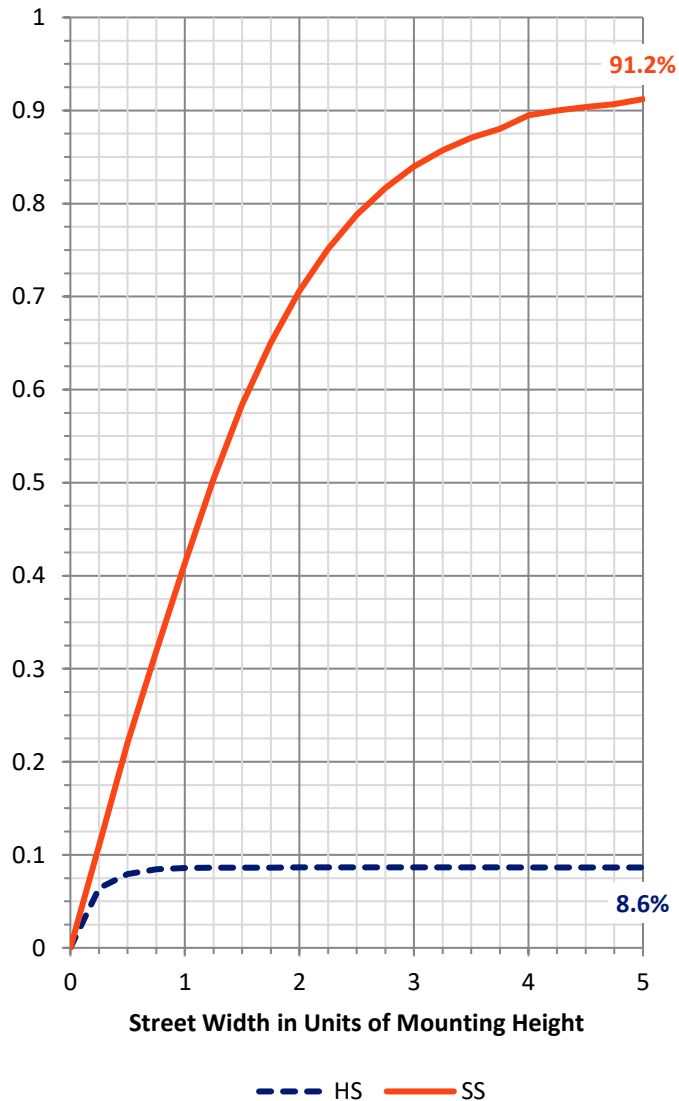
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 435.4    | 0.0    | 435.4  |
|                    | % Fixture | 8.7      | 0.0    | 8.7    |
| <b>Street Side</b> | Lumens    | 4565.6   | 0.0    | 4565.6 |
|                    | % Fixture | 91.3     | 0.0    | 91.3   |
| <b>Total</b>       | Lumens    | 5001.0   | 0.0    | 5001.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 55.9   | 1.1       |
| 10°-20°   | 146.1  | 2.9       |
| 20°-30°   | 234.0  | 4.7       |
| 30°-40°   | 336.8  | 6.7       |
| 40°-50°   | 578.1  | 11.6      |
| 50°-60°   | 1010.0 | 20.2      |
| 60°-70°   | 1446.3 | 28.9      |
| 70°-80°   | 1087.1 | 21.7      |
| 80°-90°   | 106.7  | 2.1       |
| 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°    | 5001.0 | 100.0     |
| 0°-180°   | 5001.0 | 100.0     |

**Coefficient of Utilization**

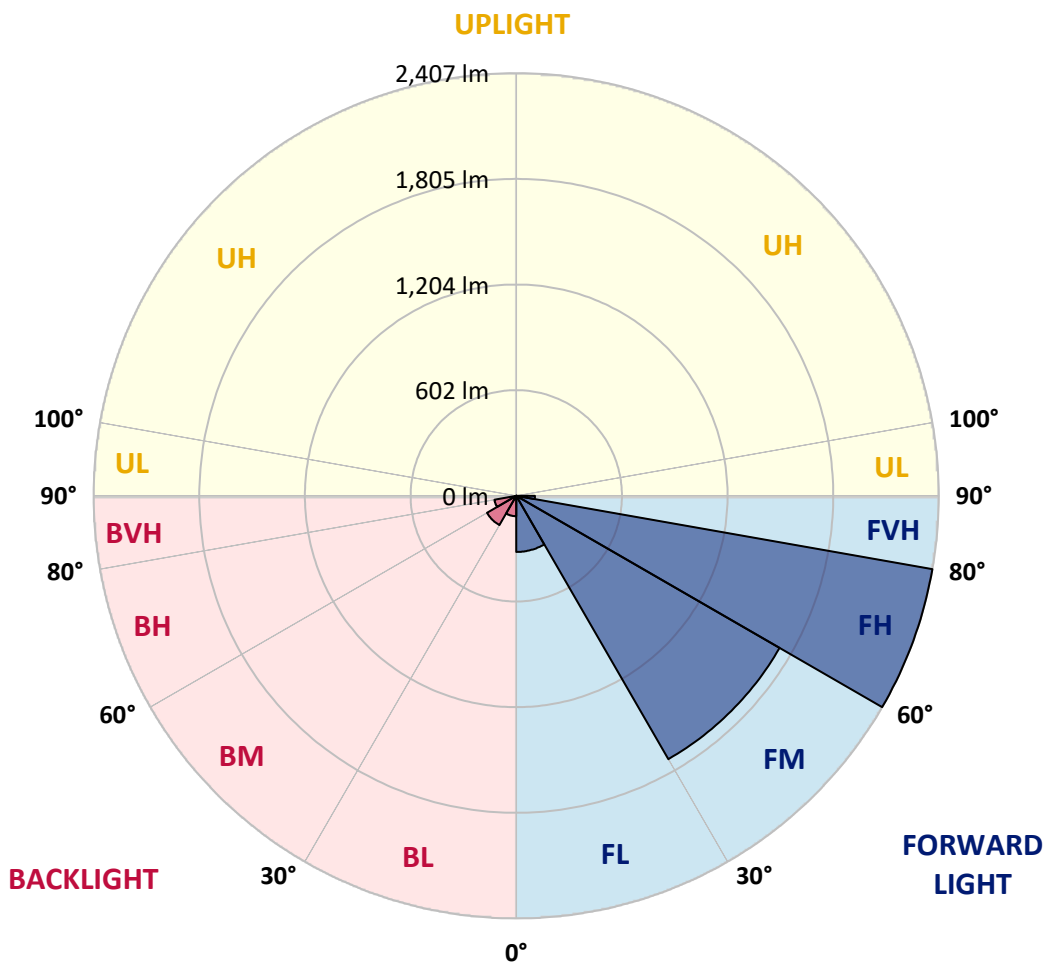


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 319.7  | 6.4       |                         |      |         |
| FM (30°-60°)   | 1732.3 | 34.6      |                         |      |         |
| FH (60°-80°)   | 2407.2 | 48.1      |                         |      | G2/5000 |
| FVH (80°-90°)  | 106.4  | 2.1       |                         |      | G2/225  |
| BL (0°-30°)    | 116.3  | 2.3       | B1/500                  |      |         |
| BM (30°-60°)   | 192.6  | 3.9       | B0/220                  |      |         |
| BH (60°-80°)   | 126.2  | 2.5       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 0.3    | 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-G2**  
 Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 84°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 623.1  | 623.1  | 623.1  | 623.1  | 623.1  | 623.1  | 623.1  | 623.1  | 623.1  | 623.1  | 623.1  |
| 2.5°  | 658.5  | 661.9  | 663.6  | 655.1  | 655.1  | 648.4  | 638.3  | 634.9  | 629.8  | 624.8  | 623.1  |
| 5°    | 692.3  | 697.4  | 695.7  | 685.5  | 680.5  | 667.0  | 653.5  | 639.9  | 626.4  | 614.6  | 614.6  |
| 7.5°  | 731.1  | 732.8  | 727.8  | 710.9  | 700.7  | 682.2  | 661.9  | 646.7  | 629.8  | 612.9  | 609.6  |
| 10°   | 764.9  | 763.2  | 756.5  | 739.6  | 721.0  | 697.4  | 675.4  | 658.5  | 638.3  | 618.0  | 616.3  |
| 12.5° | 788.5  | 790.2  | 781.8  | 758.1  | 739.6  | 712.6  | 690.6  | 673.7  | 650.1  | 628.1  | 623.1  |
| 15°   | 808.8  | 813.9  | 803.7  | 780.1  | 753.1  | 729.4  | 712.6  | 690.6  | 663.6  | 638.3  | 634.9  |
| 17.5° | 827.4  | 829.1  | 820.6  | 793.6  | 768.3  | 748.0  | 729.4  | 709.2  | 682.2  | 650.1  | 646.7  |
| 20°   | 837.5  | 842.6  | 837.5  | 803.7  | 780.1  | 764.9  | 749.7  | 729.4  | 699.0  | 668.7  | 665.3  |
| 22.5° | 844.3  | 849.3  | 847.6  | 810.5  | 790.2  | 778.4  | 764.9  | 746.3  | 717.6  | 682.2  | 678.8  |
| 25°   | 847.6  | 851.0  | 854.4  | 817.2  | 800.4  | 795.3  | 783.5  | 766.6  | 739.6  | 702.4  | 699.0  |
| 27.5° | 852.7  | 856.1  | 859.5  | 825.7  | 818.9  | 813.9  | 810.5  | 797.0  | 764.9  | 726.1  | 721.0  |
| 30°   | 861.1  | 866.2  | 869.6  | 840.9  | 840.9  | 845.9  | 845.9  | 827.4  | 791.9  | 751.4  | 748.0  |
| 32.5° | 871.3  | 873.0  | 879.7  | 856.1  | 864.5  | 876.3  | 873.0  | 854.4  | 817.2  | 780.1  | 775.0  |
| 35°   | 898.3  | 898.3  | 910.1  | 879.7  | 889.9  | 900.0  | 903.4  | 889.9  | 856.1  | 818.9  | 817.2  |
| 37.5° | 964.1  | 964.1  | 974.3  | 925.3  | 923.6  | 933.8  | 945.6  | 945.6  | 911.8  | 878.0  | 874.7  |
| 40°   | 1112.7 | 1112.7 | 1112.7 | 999.6  | 981.0  | 992.9  | 1011.4 | 1021.6 | 992.9  | 969.2  | 969.2  |
| 42.5° | 1360.9 | 1362.6 | 1337.3 | 1136.4 | 1057.0 | 1077.3 | 1097.5 | 1119.5 | 1104.3 | 1087.4 | 1084.0 |
| 45°   | 1617.6 | 1609.2 | 1605.8 | 1337.3 | 1192.1 | 1182.0 | 1207.3 | 1244.4 | 1249.5 | 1239.4 | 1246.1 |
| 47.5° | 1793.2 | 1801.7 | 1806.7 | 1587.2 | 1381.2 | 1312.0 | 1335.6 | 1388.0 | 1418.4 | 1416.7 | 1426.8 |
| 50°   | 1963.8 | 1968.8 | 1973.9 | 1862.4 | 1631.1 | 1475.8 | 1491.0 | 1561.9 | 1604.1 | 1617.6 | 1624.4 |
| 52.5° | 2112.3 | 2098.8 | 2120.8 | 2105.6 | 1896.2 | 1663.2 | 1663.2 | 1744.2 | 1820.2 | 1825.3 | 1823.6 |
| 55°   | 2156.2 | 2164.7 | 2230.5 | 2276.1 | 2168.1 | 1892.8 | 1859.1 | 1945.2 | 2026.2 | 2068.4 | 2068.4 |
| 57.5° | 2254.2 | 2262.6 | 2342.0 | 2445.0 | 2365.6 | 2119.1 | 2068.4 | 2152.9 | 2240.7 | 2321.7 | 2333.5 |
| 60°   | 2382.5 | 2384.2 | 2468.6 | 2625.7 | 2515.9 | 2323.4 | 2281.2 | 2377.4 | 2465.2 | 2603.7 | 2642.5 |
| 62.5° | 2451.7 | 2458.5 | 2575.0 | 2781.0 | 2705.0 | 2502.4 | 2492.3 | 2580.1 | 2693.2 | 2936.3 | 2971.8 |
| 65°   | 2345.4 | 2389.3 | 2642.5 | 2873.9 | 2858.7 | 2669.6 | 2705.0 | 2775.9 | 2905.9 | 3262.2 | 3296.0 |
| 67.5° | 2029.6 | 2078.6 | 2531.1 | 2961.7 | 2992.1 | 2826.6 | 2863.7 | 2966.7 | 3110.3 | 3508.7 | 3461.5 |
| 70°   | 1869.2 | 1909.7 | 2260.9 | 3010.6 | 3103.5 | 3002.2 | 3019.1 | 3115.3 | 3157.5 | 3302.7 | 3252.1 |
| 72.5° | 1416.7 | 1458.9 | 1913.1 | 2843.5 | 3199.7 | 3186.2 | 3144.0 | 3064.7 | 2814.8 | 2598.6 | 2475.4 |
| 75°   | 626.4  | 675.4  | 1273.1 | 2222.1 | 2961.7 | 3290.9 | 3068.0 | 2624.0 | 2021.2 | 1475.8 | 1367.7 |
| 77.5° | 276.9  | 305.6  | 493.0  | 1234.3 | 2225.5 | 2848.5 | 2426.4 | 1749.3 | 1014.8 | 548.8  | 509.9  |
| 80°   | 89.5   | 92.9   | 155.3  | 432.3  | 1138.1 | 1886.1 | 1485.9 | 840.9  | 312.4  | 128.3  | 119.9  |
| 82.5° | 35.5   | 38.8   | 74.3   | 182.4  | 471.1  | 749.7  | 729.4  | 303.9  | 91.2   | 33.8   | 33.8   |
| 85°   | 10.1   | 11.8   | 37.1   | 96.2   | 167.2  | 211.1  | 258.3  | 101.3  | 49.0   | 10.1   | 10.1   |
| 87.5° | 3.4    | 3.4    | 13.5   | 30.4   | 32.1   | 22.0   | 49.0   | 38.8   | 30.4   | 3.4    | 3.4    |
| 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°    | 623.1  | 623.1  | 623.1 | 623.1 | 623.1 | 623.1 | 623.1 | 623.1 | 623.1 | 623.1 | 623.1 |
| 2.5°  | 619.7  | 616.3  | 607.9 | 601.1 | 597.7 | 592.7 | 585.9 | 582.5 | 582.5 | 580.9 | 575.8 |
| 5°    | 607.9  | 602.8  | 587.6 | 577.5 | 569.0 | 550.5 | 536.9 | 520.1 | 503.2 | 498.1 | 503.2 |
| 7.5°  | 602.8  | 592.7  | 572.4 | 552.1 | 516.7 | 467.7 | 435.6 | 400.2 | 388.4 | 373.2 | 374.9 |
| 10°   | 604.5  | 592.7  | 564.0 | 518.4 | 449.1 | 376.5 | 325.9 | 278.6 | 255.0 | 243.1 | 244.8 |
| 12.5° | 609.6  | 596.0  | 555.5 | 472.8 | 373.2 | 285.4 | 207.7 | 170.5 | 163.8 | 163.8 | 163.8 |
| 15°   | 619.7  | 599.4  | 542.0 | 418.8 | 292.1 | 189.1 | 146.9 | 143.5 | 148.6 | 153.7 | 155.3 |
| 17.5° | 629.8  | 609.6  | 521.8 | 363.0 | 212.8 | 141.8 | 136.8 | 136.8 | 141.8 | 146.9 | 148.6 |
| 20°   | 641.6  | 619.7  | 493.0 | 303.9 | 152.0 | 133.4 | 131.7 | 130.0 | 133.4 | 138.5 | 140.1 |
| 22.5° | 660.2  | 629.8  | 459.3 | 234.7 | 131.7 | 128.3 | 125.0 | 123.3 | 125.0 | 130.0 | 131.7 |
| 25°   | 677.1  | 643.3  | 423.8 | 173.9 | 123.3 | 119.9 | 118.2 | 116.5 | 116.5 | 119.9 | 121.6 |
| 27.5° | 697.4  | 658.5  | 385.0 | 130.0 | 113.1 | 111.4 | 109.8 | 108.1 | 106.4 | 109.8 | 111.4 |
| 30°   | 722.7  | 672.0  | 342.8 | 109.8 | 103.0 | 101.3 | 99.6  | 97.9  | 96.2  | 97.9  | 99.6  |
| 32.5° | 754.8  | 690.6  | 293.8 | 99.6  | 94.6  | 89.5  | 87.8  | 87.8  | 86.1  | 86.1  | 87.8  |
| 35°   | 797.0  | 710.9  | 241.5 | 92.9  | 86.1  | 81.0  | 76.0  | 74.3  | 74.3  | 74.3  | 76.0  |
| 37.5° | 859.5  | 748.0  | 190.8 | 86.1  | 79.4  | 70.9  | 65.9  | 60.8  | 60.8  | 60.8  | 60.8  |
| 40°   | 945.6  | 788.5  | 148.6 | 81.0  | 74.3  | 62.5  | 55.7  | 49.0  | 45.6  | 43.9  | 45.6  |
| 42.5° | 1079.0 | 849.3  | 114.8 | 74.3  | 70.9  | 55.7  | 45.6  | 37.1  | 30.4  | 28.7  | 30.4  |
| 45°   | 1225.9 | 915.2  | 91.2  | 69.2  | 64.2  | 47.3  | 35.5  | 25.3  | 18.6  | 16.9  | 18.6  |
| 47.5° | 1411.6 | 997.9  | 77.7  | 62.5  | 55.7  | 38.8  | 25.3  | 13.5  | 8.4   | 10.1  | 10.1  |
| 50°   | 1590.6 | 1079.0 | 70.9  | 57.4  | 49.0  | 32.1  | 15.2  | 6.8   | 3.4   | 5.1   | 5.1   |
| 52.5° | 1788.1 | 1165.1 | 65.9  | 50.7  | 42.2  | 23.6  | 8.4   | 1.7   | 0.0   | 1.7   | 1.7   |
| 55°   | 1987.4 | 1242.8 | 60.8  | 45.6  | 33.8  | 16.9  | 3.4   | 0.0   | 0.0   | 0.0   | 1.7   |
| 57.5° | 2203.5 | 1308.6 | 55.7  | 38.8  | 25.3  | 10.1  | 1.7   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60°   | 2384.2 | 1359.3 | 50.7  | 33.8  | 16.9  | 5.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 62.5° | 2549.7 | 1404.8 | 38.8  | 25.3  | 10.1  | 3.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 65°   | 2659.4 | 1415.0 | 27.0  | 16.9  | 6.8   | 1.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 67.5° | 2610.5 | 1327.2 | 16.9  | 11.8  | 3.4   | 1.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 70°   | 2294.7 | 1114.4 | 11.8  | 6.8   | 1.7   | 1.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 1605.8 | 719.3  | 10.1  | 5.1   | 1.7   | 1.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 847.6  | 260.0  | 6.8   | 3.4   | 1.7   | 1.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 300.6  | 57.4   | 3.4   | 1.7   | 0.0   | 1.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 65.9   | 11.8   | 1.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 18.6   | 3.4    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 5.1    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 1.7    | 0.0    | 0.0   | 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)