

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: P594260

Luminaire Tested: **ISC-PA1D-827-U-T4W-HSS**

Issue Date: 3/22/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P594260  
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: ISC-PA1D-827-U-T4W-HSS  
Description: IMPACT ELITE LED CYLINDER LUMINAIRE  
(1) 80 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: 4730 lumens  
Efficiency: N/A  
Efficacy: 75.1 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

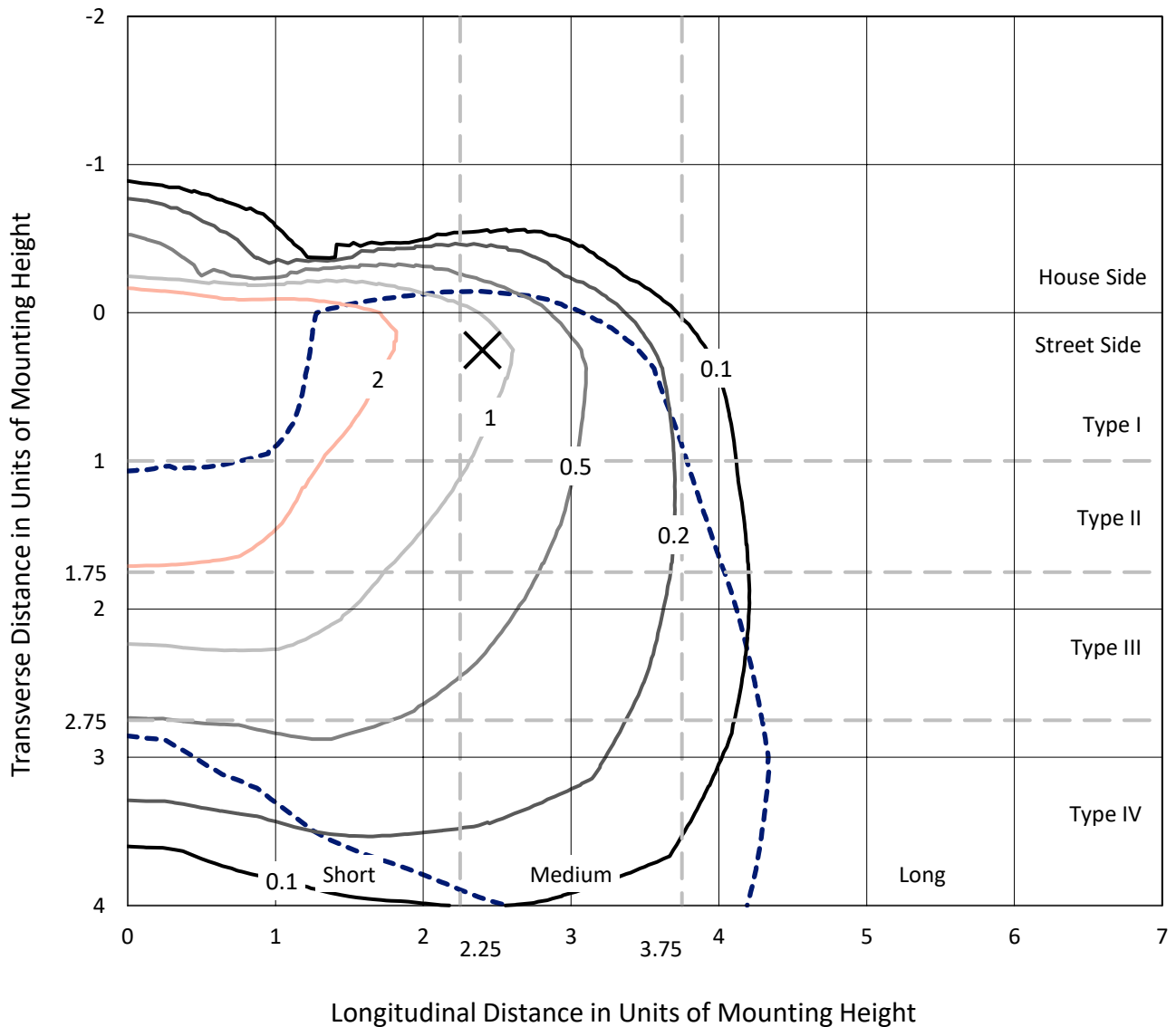
Input Watts (W): 63  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

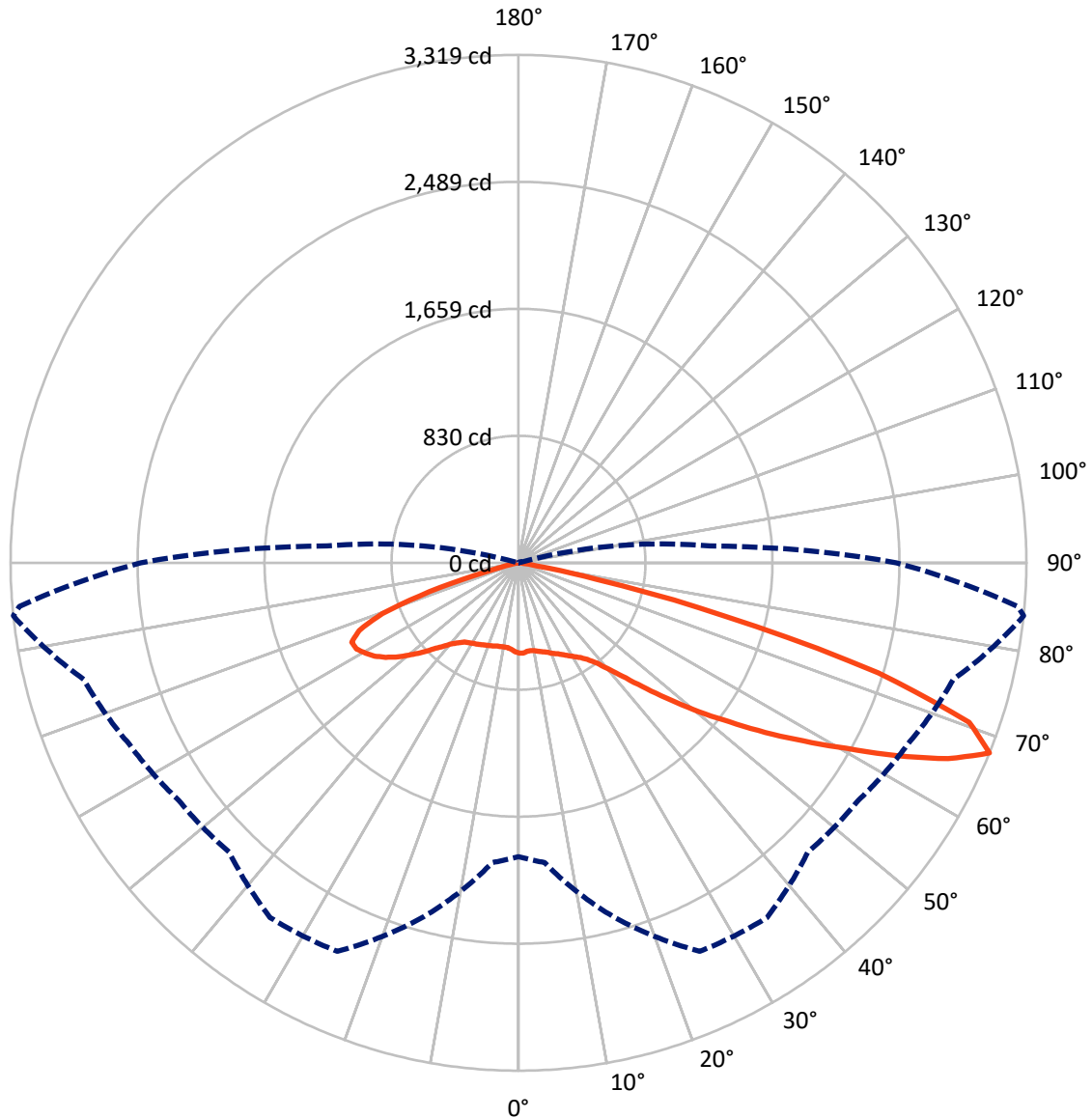
× Max cd  
 - - - 1/2 Max cd



Based on 12 foot mounting height. Maximum calculated value = 4.8 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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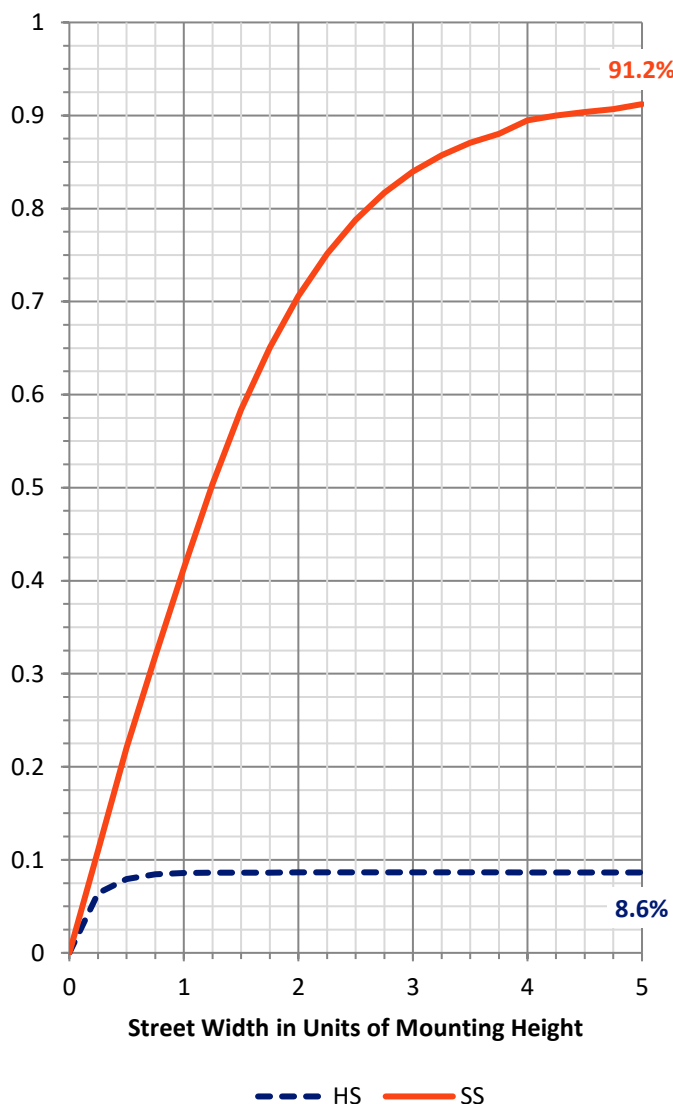
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 411.8    | 0.0    | 411.8  |
|                    | % Fixture | 8.7      | 0.0    | 8.7    |
| <b>Street Side</b> | Lumens    | 4318.2   | 0.0    | 4318.2 |
|                    | % Fixture | 91.3     | 0.0    | 91.3   |
| <b>Total</b>       | Lumens    | 4730.0   | 0.0    | 4730.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 52.8   | 1.1       |
| 10°-20°   | 138.2  | 2.9       |
| 20°-30°   | 221.4  | 4.7       |
| 30°-40°   | 318.5  | 6.7       |
| 40°-50°   | 546.8  | 11.6      |
| 50°-60°   | 955.3  | 20.2      |
| 60°-70°   | 1368.0 | 28.9      |
| 70°-80°   | 1028.2 | 21.7      |
| 80°-90°   | 100.9  | 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°    | 4730.0 | 100.0     |
| 0°-180°   | 4730.0 | 100.0     |

**Coefficient of Utilization**

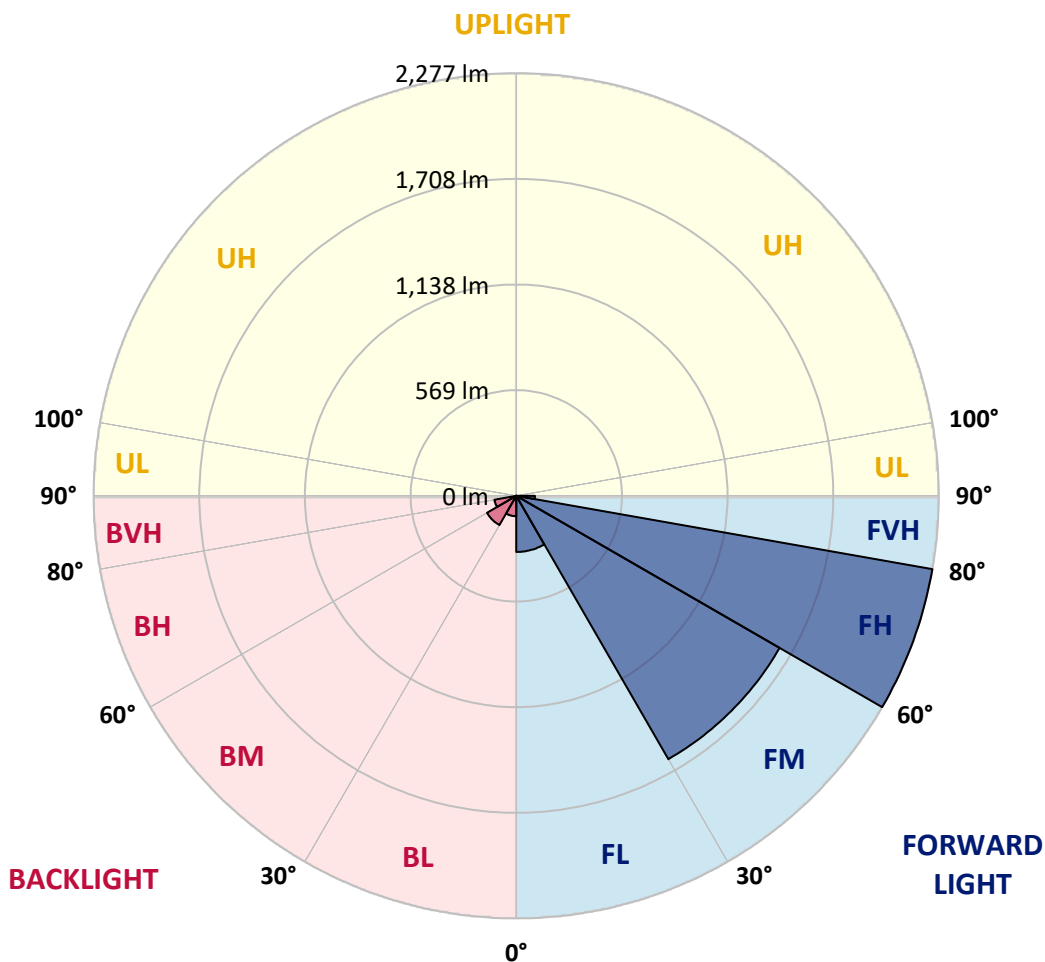


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 302.4  | 6.4       |                         |      |         |
| FM (30°-60°)   | 1638.4 | 34.6      |                         |      |         |
| FH (60°-80°)   | 2276.8 | 48.1      |                         |      | G2/5000 |
| FVH (80°-90°)  | 100.6  | 2.1       |                         |      | G2/225  |
| BL (0°-30°)    | 110.0  | 2.3       | B0/110                  |      |         |
| BM (30°-60°)   | 182.1  | 3.9       | B0/220                  |      |         |
| BH (60°-80°)   | 119.4  | 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°    | 589.3  | 589.3  | 589.3  | 589.3  | 589.3  | 589.3  | 589.3  | 589.3  | 589.3  | 589.3  | 589.3  |
| 2.5°  | 622.8  | 626.0  | 627.6  | 619.6  | 619.6  | 613.3  | 603.7  | 600.5  | 595.7  | 590.9  | 589.3  |
| 5°    | 654.8  | 659.6  | 658.0  | 648.4  | 643.6  | 630.8  | 618.0  | 605.3  | 592.5  | 581.3  | 581.3  |
| 7.5°  | 691.5  | 693.1  | 688.3  | 672.3  | 662.8  | 645.2  | 626.0  | 611.7  | 595.7  | 579.7  | 576.5  |
| 10°   | 723.5  | 721.9  | 715.5  | 699.5  | 681.9  | 659.6  | 638.8  | 622.8  | 603.7  | 584.5  | 582.9  |
| 12.5° | 745.8  | 747.4  | 739.4  | 717.1  | 699.5  | 673.9  | 653.2  | 637.2  | 614.9  | 594.1  | 589.3  |
| 15°   | 765.0  | 769.8  | 760.2  | 737.8  | 712.3  | 689.9  | 673.9  | 653.2  | 627.6  | 603.7  | 600.5  |
| 17.5° | 782.5  | 784.1  | 776.2  | 750.6  | 726.6  | 707.5  | 689.9  | 670.7  | 645.2  | 614.9  | 611.7  |
| 20°   | 792.1  | 796.9  | 792.1  | 760.2  | 737.8  | 723.5  | 709.1  | 689.9  | 661.2  | 632.4  | 629.2  |
| 22.5° | 798.5  | 803.3  | 801.7  | 766.6  | 747.4  | 736.2  | 723.5  | 705.9  | 678.7  | 645.2  | 642.0  |
| 25°   | 801.7  | 804.9  | 808.1  | 773.0  | 757.0  | 752.2  | 741.0  | 725.0  | 699.5  | 664.4  | 661.2  |
| 27.5° | 806.5  | 809.7  | 812.9  | 780.9  | 774.6  | 769.8  | 766.6  | 753.8  | 723.5  | 686.7  | 681.9  |
| 30°   | 814.5  | 819.3  | 822.5  | 795.3  | 795.3  | 800.1  | 800.1  | 782.5  | 749.0  | 710.7  | 707.5  |
| 32.5° | 824.1  | 825.7  | 832.0  | 809.7  | 817.7  | 828.9  | 825.7  | 808.1  | 773.0  | 737.8  | 733.0  |
| 35°   | 849.6  | 849.6  | 860.8  | 832.0  | 841.6  | 851.2  | 854.4  | 841.6  | 809.7  | 774.6  | 773.0  |
| 37.5° | 911.9  | 911.9  | 921.5  | 875.2  | 873.6  | 883.2  | 894.3  | 894.3  | 862.4  | 830.5  | 827.3  |
| 40°   | 1052.4 | 1052.4 | 1052.4 | 945.4  | 927.9  | 939.0  | 956.6  | 966.2  | 939.0  | 916.7  | 916.7  |
| 42.5° | 1287.2 | 1288.8 | 1264.8 | 1074.8 | 999.7  | 1018.9 | 1038.1 | 1058.8 | 1044.5 | 1028.5 | 1025.3 |
| 45°   | 1529.9 | 1522.0 | 1518.8 | 1264.8 | 1127.5 | 1117.9 | 1141.9 | 1177.0 | 1181.8 | 1172.2 | 1178.6 |
| 47.5° | 1696.0 | 1704.0 | 1708.8 | 1501.2 | 1306.4 | 1240.9 | 1263.2 | 1312.8 | 1341.5 | 1339.9 | 1349.5 |
| 50°   | 1857.3 | 1862.1 | 1866.9 | 1761.5 | 1542.7 | 1395.8 | 1410.2 | 1477.2 | 1517.2 | 1529.9 | 1536.3 |
| 52.5° | 1997.9 | 1985.1 | 2005.9 | 1991.5 | 1793.5 | 1573.1 | 1573.1 | 1649.7 | 1721.6 | 1726.4 | 1724.8 |
| 55°   | 2039.4 | 2047.4 | 2109.7 | 2152.8 | 2050.6 | 1790.3 | 1758.3 | 1839.8 | 1916.4 | 1956.4 | 1956.4 |
| 57.5° | 2132.0 | 2140.0 | 2215.1 | 2312.5 | 2237.4 | 2004.3 | 1956.4 | 2036.2 | 2119.2 | 2195.9 | 2207.1 |
| 60°   | 2253.4 | 2255.0 | 2334.8 | 2483.4 | 2379.6 | 2197.5 | 2157.6 | 2248.6 | 2331.7 | 2462.6 | 2499.3 |
| 62.5° | 2318.9 | 2325.3 | 2435.5 | 2630.3 | 2558.4 | 2366.8 | 2357.2 | 2440.2 | 2547.2 | 2777.2 | 2810.8 |
| 65°   | 2218.3 | 2259.8 | 2499.3 | 2718.1 | 2703.8 | 2524.9 | 2558.4 | 2625.5 | 2748.5 | 3085.4 | 3117.4 |
| 67.5° | 1919.6 | 1965.9 | 2393.9 | 2801.2 | 2829.9 | 2673.4 | 2708.5 | 2806.0 | 2941.7 | 3318.6 | 3273.9 |
| 70°   | 1767.9 | 1806.2 | 2138.4 | 2847.5 | 2935.3 | 2839.5 | 2855.5 | 2946.5 | 2986.4 | 3123.8 | 3075.9 |
| 72.5° | 1339.9 | 1379.8 | 1809.4 | 2689.4 | 3026.4 | 3013.6 | 2973.7 | 2898.6 | 2662.2 | 2457.8 | 2341.2 |
| 75°   | 592.5  | 638.8  | 1204.2 | 2101.7 | 2801.2 | 3112.6 | 2901.8 | 2481.8 | 1911.6 | 1395.8 | 1293.6 |
| 77.5° | 261.9  | 289.1  | 466.3  | 1167.4 | 2104.9 | 2694.2 | 2294.9 | 1654.5 | 959.8  | 519.0  | 482.3  |
| 80°   | 84.6   | 87.8   | 146.9  | 408.8  | 1076.4 | 1783.9 | 1405.4 | 795.3  | 295.4  | 121.4  | 113.4  |
| 82.5° | 33.5   | 36.7   | 70.3   | 172.5  | 445.6  | 709.1  | 689.9  | 287.5  | 86.2   | 31.9   | 31.9   |
| 85°   | 9.6    | 11.2   | 35.1   | 91.0   | 158.1  | 199.6  | 244.3  | 95.8   | 46.3   | 9.6    | 9.6    |
| 87.5° | 3.2    | 3.2    | 12.8   | 28.7   | 30.3   | 20.8   | 46.3   | 36.7   | 28.7   | 3.2    | 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°    | 589.3  | 589.3  | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 |
| 2.5°  | 586.1  | 582.9  | 574.9 | 568.5 | 565.3 | 560.6 | 554.2 | 551.0 | 551.0 | 549.4 | 544.6 |
| 5°    | 574.9  | 570.1  | 555.8 | 546.2 | 538.2 | 520.6 | 507.9 | 491.9 | 475.9 | 471.1 | 475.9 |
| 7.5°  | 570.1  | 560.6  | 541.4 | 522.2 | 488.7 | 442.4 | 412.0 | 378.5 | 367.3 | 352.9 | 354.5 |
| 10°   | 571.7  | 560.6  | 533.4 | 490.3 | 424.8 | 356.1 | 308.2 | 263.5 | 241.2 | 230.0 | 231.6 |
| 12.5° | 576.5  | 563.7  | 525.4 | 447.2 | 352.9 | 269.9 | 196.4 | 161.3 | 154.9 | 154.9 | 154.9 |
| 15°   | 586.1  | 566.9  | 512.6 | 396.1 | 276.3 | 178.9 | 138.9 | 135.7 | 140.5 | 145.3 | 146.9 |
| 17.5° | 595.7  | 576.5  | 493.5 | 343.4 | 201.2 | 134.1 | 129.4 | 129.4 | 134.1 | 138.9 | 140.5 |
| 20°   | 606.9  | 586.1  | 466.3 | 287.5 | 143.7 | 126.2 | 124.6 | 123.0 | 126.2 | 131.0 | 132.6 |
| 22.5° | 624.4  | 595.7  | 434.4 | 222.0 | 124.6 | 121.4 | 118.2 | 116.6 | 118.2 | 123.0 | 124.6 |
| 25°   | 640.4  | 608.5  | 400.9 | 164.5 | 116.6 | 113.4 | 111.8 | 110.2 | 110.2 | 113.4 | 115.0 |
| 27.5° | 659.6  | 622.8  | 364.1 | 123.0 | 107.0 | 105.4 | 103.8 | 102.2 | 100.6 | 103.8 | 105.4 |
| 30°   | 683.5  | 635.6  | 324.2 | 103.8 | 97.4  | 95.8  | 94.2  | 92.6  | 91.0  | 92.6  | 94.2  |
| 32.5° | 713.9  | 653.2  | 277.9 | 94.2  | 89.4  | 84.6  | 83.0  | 83.0  | 81.4  | 81.4  | 83.0  |
| 35°   | 753.8  | 672.3  | 228.4 | 87.8  | 81.4  | 76.7  | 71.9  | 70.3  | 70.3  | 70.3  | 71.9  |
| 37.5° | 812.9  | 707.5  | 180.5 | 81.4  | 75.1  | 67.1  | 62.3  | 57.5  | 57.5  | 57.5  | 57.5  |
| 40°   | 894.3  | 745.8  | 140.5 | 76.7  | 70.3  | 59.1  | 52.7  | 46.3  | 43.1  | 41.5  | 43.1  |
| 42.5° | 1020.5 | 803.3  | 108.6 | 70.3  | 67.1  | 52.7  | 43.1  | 35.1  | 28.7  | 27.1  | 28.7  |
| 45°   | 1159.4 | 865.6  | 86.2  | 65.5  | 60.7  | 44.7  | 33.5  | 24.0  | 17.6  | 16.0  | 17.6  |
| 47.5° | 1335.1 | 943.8  | 73.5  | 59.1  | 52.7  | 36.7  | 24.0  | 12.8  | 8.0   | 9.6   | 9.6   |
| 50°   | 1504.4 | 1020.5 | 67.1  | 54.3  | 46.3  | 30.3  | 14.4  | 6.4   | 3.2   | 4.8   | 4.8   |
| 52.5° | 1691.2 | 1101.9 | 62.3  | 47.9  | 39.9  | 22.4  | 8.0   | 1.6   | 0.0   | 1.6   | 1.6   |
| 55°   | 1879.7 | 1175.4 | 57.5  | 43.1  | 31.9  | 16.0  | 3.2   | 0.0   | 0.0   | 0.0   | 1.6   |
| 57.5° | 2084.1 | 1237.7 | 52.7  | 36.7  | 24.0  | 9.6   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60°   | 2255.0 | 1285.6 | 47.9  | 31.9  | 16.0  | 4.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 62.5° | 2411.5 | 1328.7 | 36.7  | 24.0  | 9.6   | 3.2   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 65°   | 2515.3 | 1338.3 | 25.6  | 16.0  | 6.4   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 67.5° | 2469.0 | 1255.3 | 16.0  | 11.2  | 3.2   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 70°   | 2170.4 | 1054.0 | 11.2  | 6.4   | 1.6   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 1518.8 | 680.3  | 9.6   | 4.8   | 1.6   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 801.7  | 245.9  | 6.4   | 3.2   | 1.6   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 284.3  | 54.3   | 3.2   | 1.6   | 0.0   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 62.3   | 11.2   | 1.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 17.6   | 3.2    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 4.8    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 1.6    | 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)