

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: STREETWORKS

Report Number: P482168

Luminaire Tested: **IFLD-S-SA2A-827-U-T2R-HSS**

Issue Date: 02/26/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P482168  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 02/26/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: IFLD-S-SA2A-827-U-T2R-HSS  
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ T2R distribution lens with House Side Shield  
Light Source: (32) 2700K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

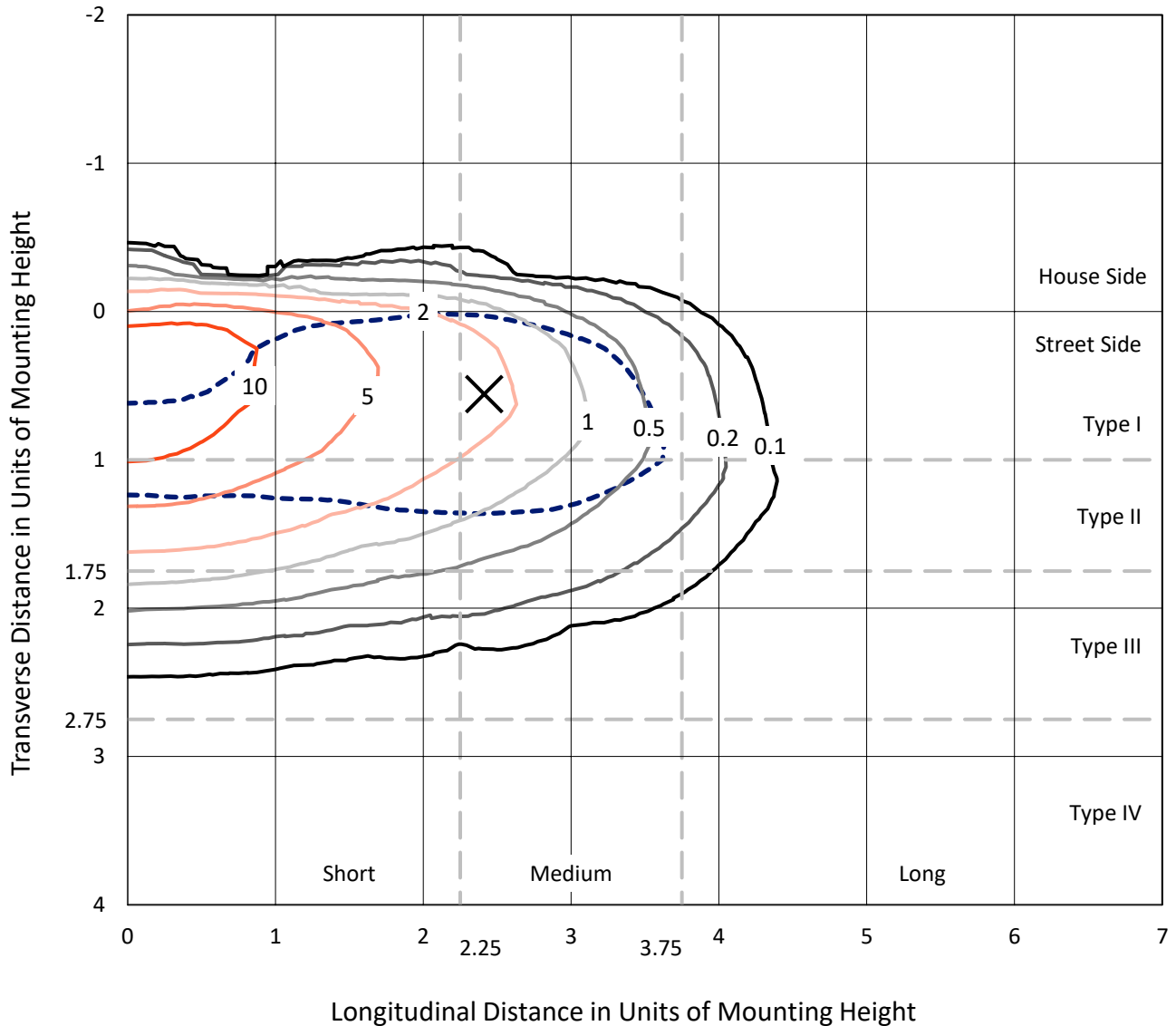
Lumens per Lamp: N/A  
Luminaire Lumens: 5335.7 lumens  
Efficiency: N/A  
Efficacy: 83.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B0 - U0 - G1

Input Watts (W): 63.8  
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: 24 FT

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### Iso-Footcandle Lines of Horizontal Illumination

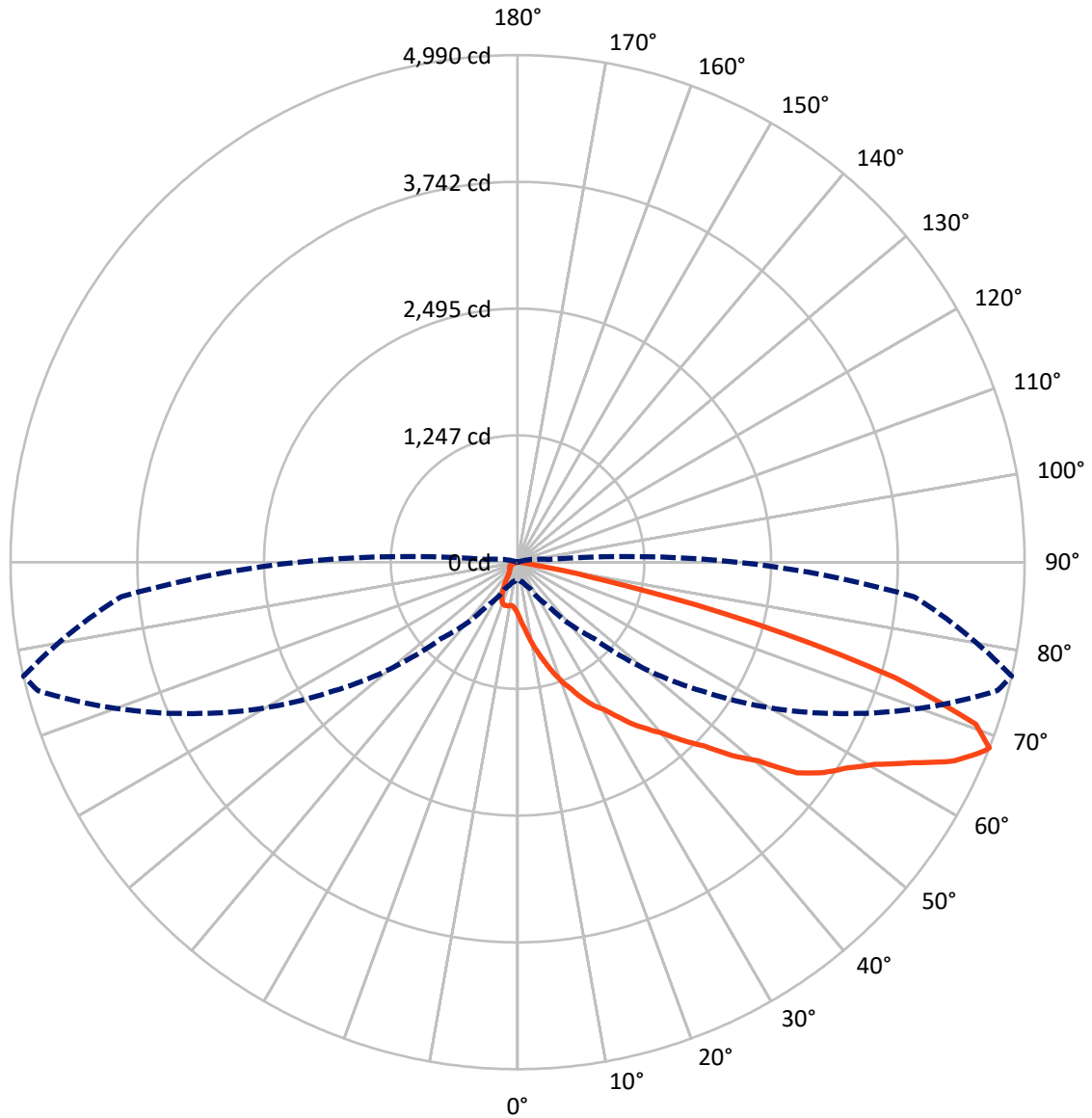
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.1 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 242.0    | 0.0    | 242.0  |
|                    | % Fixture | 4.5      | 0.0    | 4.5    |
| <b>Street Side</b> | Lumens    | 5093.7   | 0.0    | 5093.7 |
|                    | % Fixture | 95.5     | 0.0    | 95.5   |
| <b>Total</b>       | Lumens    | 5335.7   | 0.0    | 5335.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 59.7   | 1.1       |
| 10°-20°   | 220.1  | 4.1       |
| 20°-30°   | 426.6  | 8.0       |
| 30°-40°   | 743.7  | 13.9      |
| 40°-50°   | 1089.3 | 20.4      |
| 50°-60°   | 1279.7 | 24.0      |
| 60°-70°   | 1080.6 | 20.3      |
| 70°-80°   | 418.9  | 7.9       |
| 80°-90°   | 17.0   | 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°    | 5335.7 | 100.0     |
| 0°-180°   | 5335.7 | 100.0     |

**Coefficient of Utilization**



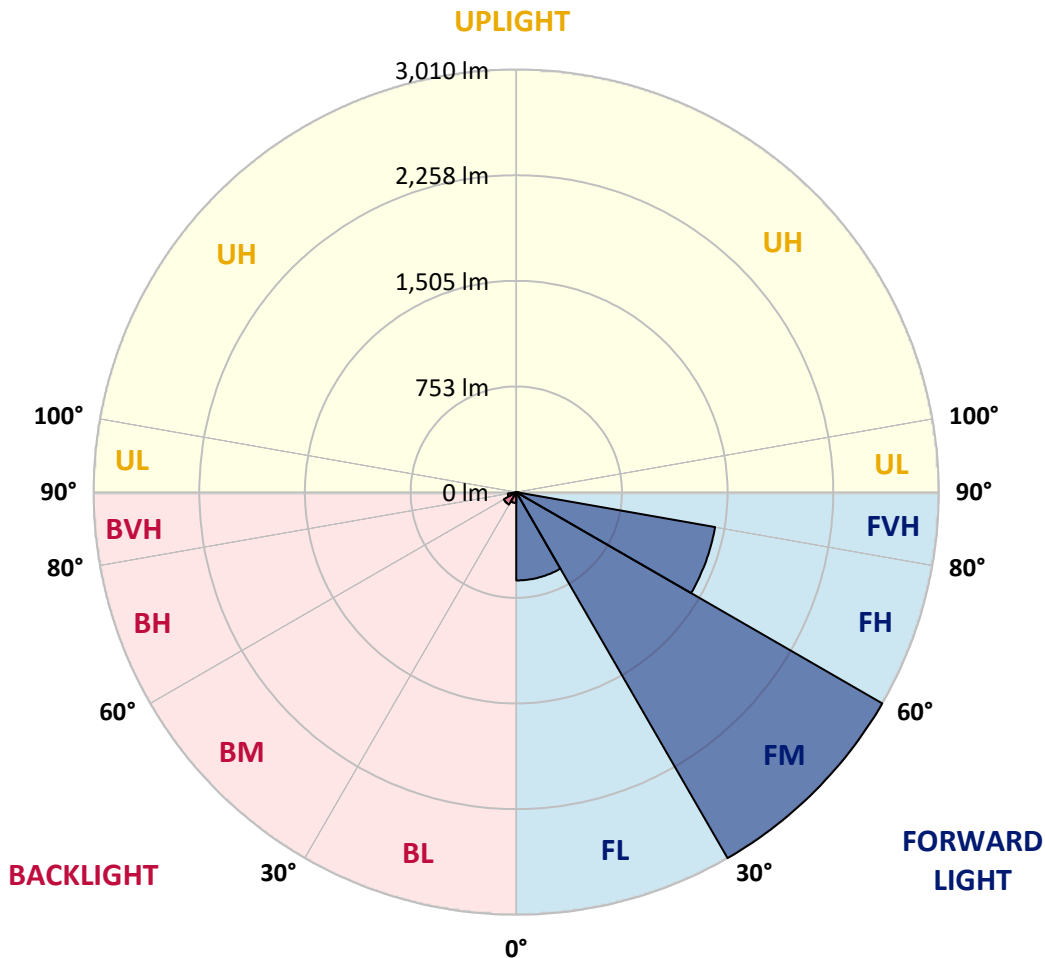
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 629.1  | 11.8      |                         |      |         |
| FM (30°-60°)   | 3010.5 | 56.4      |                         |      |         |
| FH (60°-80°)   | 1438.4 | 27.0      |                         |      | G1/1800 |
| FVH (80°-90°)  | 15.7   | 0.3       |                         |      | G1/100  |
| BL (0°-30°)    | 77.3   | 1.4       | B0/110                  |      |         |
| BM (30°-60°)   | 102.2  | 1.9       | B0/220                  |      |         |
| BH (60°-80°)   | 61.1   | 1.1       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 1.3    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: 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°    | 510.9  | 510.9  | 510.9  | 510.9  | 510.9  | 510.9  | 510.9  | 510.9  | 510.9  | 510.9  | 510.9  |
| 2.5°  | 776.3  | 761.6  | 746.1  | 741.7  | 713.1  | 680.7  | 650.6  | 621.2  | 571.9  | 572.6  | 538.8  |
| 5°    | 1000.5 | 982.1  | 969.6  | 966.7  | 921.8  | 866.0  | 820.4  | 737.3  | 655.7  | 637.3  | 575.6  |
| 7.5°  | 1185.0 | 1179.1 | 1160.7 | 1145.3 | 1112.2 | 1043.9 | 990.2  | 871.1  | 746.9  | 726.3  | 620.4  |
| 10°   | 1296.7 | 1305.6 | 1313.6 | 1293.8 | 1268.1 | 1218.8 | 1145.3 | 1016.7 | 850.5  | 824.8  | 678.5  |
| 12.5° | 1415.8 | 1401.1 | 1406.3 | 1422.4 | 1388.6 | 1377.6 | 1286.4 | 1166.6 | 971.8  | 922.6  | 752.0  |
| 15°   | 1446.7 | 1452.6 | 1465.1 | 1512.1 | 1534.9 | 1503.3 | 1424.6 | 1287.9 | 1097.5 | 1029.1 | 820.4  |
| 17.5° | 1467.3 | 1464.3 | 1479.8 | 1550.3 | 1584.9 | 1615.0 | 1565.8 | 1423.2 | 1207.0 | 1146.0 | 905.7  |
| 20°   | 1493.0 | 1476.8 | 1510.6 | 1555.5 | 1635.6 | 1698.8 | 1696.6 | 1559.2 | 1321.7 | 1257.0 | 990.2  |
| 22.5° | 1588.6 | 1576.1 | 1603.3 | 1607.7 | 1663.5 | 1751.8 | 1773.1 | 1670.2 | 1439.3 | 1359.9 | 1081.3 |
| 25°   | 1765.0 | 1787.8 | 1755.4 | 1727.5 | 1744.4 | 1802.5 | 1817.9 | 1768.7 | 1557.7 | 1484.9 | 1172.5 |
| 27.5° | 2023.0 | 2020.1 | 1956.1 | 1920.1 | 1879.7 | 1872.3 | 1883.3 | 1860.6 | 1651.1 | 1598.9 | 1247.5 |
| 30°   | 2300.1 | 2275.9 | 2217.1 | 2130.3 | 2041.4 | 1986.3 | 1970.8 | 1947.3 | 1760.6 | 1684.9 | 1321.7 |
| 32.5° | 2520.7 | 2533.9 | 2468.5 | 2355.3 | 2207.5 | 2133.3 | 2059.0 | 2033.3 | 1881.1 | 1814.2 | 1407.0 |
| 35°   | 2723.6 | 2705.9 | 2653.7 | 2558.2 | 2425.9 | 2306.0 | 2189.9 | 2134.8 | 2026.0 | 1959.8 | 1501.1 |
| 37.5° | 2873.5 | 2895.6 | 2796.3 | 2705.2 | 2573.6 | 2474.4 | 2360.4 | 2239.9 | 2175.2 | 2087.0 | 1615.8 |
| 40°   | 3015.4 | 2980.9 | 2914.0 | 2830.2 | 2708.1 | 2632.4 | 2557.4 | 2369.2 | 2334.0 | 2220.0 | 1745.1 |
| 42.5° | 2990.4 | 2992.6 | 2955.9 | 2888.2 | 2800.0 | 2756.7 | 2730.9 | 2526.6 | 2478.0 | 2405.3 | 1871.6 |
| 45°   | 2888.2 | 2897.1 | 2909.6 | 2876.5 | 2883.8 | 2840.5 | 2909.6 | 2707.4 | 2659.6 | 2582.4 | 2017.1 |
| 47.5° | 2775.8 | 2790.5 | 2787.5 | 2847.8 | 2916.2 | 2930.9 | 3103.6 | 2908.1 | 2887.5 | 2844.9 | 2218.6 |
| 50°   | 2589.0 | 2594.9 | 2651.5 | 2761.1 | 2854.4 | 3008.1 | 3249.2 | 3127.1 | 3158.8 | 3075.0 | 2458.2 |
| 52.5° | 2270.0 | 2291.3 | 2436.9 | 2593.5 | 2781.6 | 3047.0 | 3347.7 | 3452.8 | 3532.9 | 3446.9 | 2688.3 |
| 55°   | 1866.4 | 1895.8 | 2039.2 | 2332.5 | 2608.2 | 2988.2 | 3437.4 | 3624.8 | 3787.3 | 3657.2 | 2828.0 |
| 57.5° | 1501.8 | 1504.8 | 1633.4 | 1936.3 | 2361.9 | 2872.8 | 3482.9 | 3708.6 | 3926.9 | 3822.6 | 2998.5 |
| 60°   | 1144.6 | 1132.8 | 1248.2 | 1510.6 | 1947.3 | 2589.0 | 3369.0 | 3751.3 | 4101.2 | 4040.9 | 3203.6 |
| 62.5° | 736.6  | 718.2  | 843.9  | 1099.7 | 1520.9 | 2116.4 | 3141.1 | 3752.0 | 4373.2 | 4350.4 | 3546.9 |
| 65°   | 364.6  | 352.1  | 460.2  | 674.1  | 1052.7 | 1618.7 | 2816.2 | 3738.0 | 4705.4 | 4720.1 | 3881.4 |
| 67.5° | 192.6  | 197.0  | 231.6  | 341.8  | 607.2  | 1143.8 | 2326.6 | 3574.1 | 4875.2 | 4957.6 | 3962.2 |
| 68°   | 177.2  | 178.6  | 205.8  | 284.5  | 527.1  | 1060.8 | 2210.5 | 3526.3 | 4888.5 | 4989.9 | 3917.4 |
| 70°   | 144.1  | 146.3  | 155.8  | 178.6  | 285.2  | 690.3  | 1705.4 | 3120.5 | 4689.2 | 4781.9 | 3546.2 |
| 72.5° | 114.7  | 121.3  | 127.2  | 136.7  | 167.6  | 362.4  | 1060.8 | 2431.7 | 3874.0 | 3884.3 | 2760.3 |
| 75°   | 87.5   | 92.6   | 104.4  | 112.5  | 130.8  | 199.2  | 505.0  | 1482.7 | 2542.0 | 2417.0 | 1626.1 |
| 77.5° | 67.6   | 72.0   | 77.2   | 88.2   | 109.5  | 134.5  | 154.4  | 629.3  | 1079.9 | 888.7  | 459.4  |
| 80°   | 40.4   | 43.4   | 60.3   | 69.1   | 95.6   | 91.2   | 61.0   | 175.0  | 219.1  | 172.8  | 83.8   |
| 82.5° | 23.5   | 25.7   | 34.6   | 52.9   | 66.9   | 49.3   | 36.0   | 54.4   | 53.7   | 47.0   | 27.9   |
| 85°   | 0.7    | 1.5    | 19.1   | 31.6   | 23.5   | 13.2   | 22.1   | 22.8   | 19.1   | 17.6   | 12.5   |
| 87.5° | 0.0    | 0.7    | 5.1    | 4.4    | 5.1    | 2.9    | 4.4    | 5.9    | 7.4    | 6.6    | 5.1    |
| 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°    | 510.9  | 510.9 | 510.9 | 510.9 | 510.9 | 510.9 | 510.9 | 510.9 | 510.9 | 510.9 | 510.9 |
| 2.5°  | 516.0  | 499.9 | 463.9 | 436.7 | 407.2 | 389.6 | 372.0 | 360.9 | 355.1 | 351.4 | 354.3 |
| 5°    | 529.3  | 495.5 | 437.4 | 385.9 | 352.1 | 329.3 | 306.5 | 294.8 | 283.8 | 277.9 | 281.5 |
| 7.5°  | 558.7  | 508.0 | 411.7 | 355.8 | 316.1 | 280.8 | 252.1 | 229.4 | 216.1 | 204.4 | 206.6 |
| 10°   | 594.7  | 515.3 | 412.4 | 338.1 | 280.8 | 224.9 | 184.5 | 155.8 | 139.7 | 129.4 | 128.6 |
| 12.5° | 631.5  | 544.0 | 415.3 | 320.5 | 237.4 | 169.1 | 121.3 | 100.0 | 90.4  | 85.3  | 85.3  |
| 15°   | 687.3  | 569.7 | 408.0 | 288.2 | 180.1 | 110.3 | 83.1  | 75.7  | 72.0  | 67.6  | 68.4  |
| 17.5° | 735.8  | 610.9 | 404.3 | 239.6 | 123.5 | 79.4  | 69.1  | 61.0  | 57.3  | 52.9  | 52.9  |
| 20°   | 801.3  | 636.6 | 384.5 | 185.2 | 85.3  | 66.2  | 55.9  | 48.5  | 42.6  | 39.0  | 39.7  |
| 22.5° | 860.8  | 656.5 | 349.2 | 126.4 | 65.4  | 52.2  | 41.2  | 33.8  | 28.7  | 24.3  | 25.0  |
| 25°   | 925.5  | 676.3 | 297.7 | 77.9  | 46.3  | 32.3  | 22.1  | 16.2  | 11.0  | 8.1   | 8.1   |
| 27.5° | 971.8  | 682.2 | 230.8 | 46.3  | 27.9  | 14.7  | 5.1   | 0.7   | 0.0   | 0.0   | 0.0   |
| 30°   | 1018.9 | 684.4 | 159.5 | 25.0  | 11.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 32.5° | 1072.5 | 683.6 | 100.0 | 13.2  | 0.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 35°   | 1113.7 | 671.2 | 47.8  | 1.5   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 37.5° | 1176.2 | 652.8 | 14.7  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 40°   | 1247.5 | 619.7 | 2.9   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 42.5° | 1311.4 | 585.9 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 45°   | 1384.2 | 544.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 47.5° | 1512.1 | 526.3 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 50°   | 1679.0 | 512.4 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 52.5° | 1781.9 | 471.2 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 55°   | 1835.6 | 428.6 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 57.5° | 1915.0 | 408.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60°   | 2032.6 | 409.5 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 62.5° | 2216.3 | 430.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 65°   | 2317.8 | 409.5 | 2.9   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 67.5° | 2231.8 | 327.9 | 14.0  | 3.7   | 0.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 68°   | 2157.5 | 301.4 | 14.0  | 3.7   | 0.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 70°   | 1783.4 | 196.3 | 13.2  | 3.7   | 1.5   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 1298.9 | 108.8 | 11.0  | 2.9   | 1.5   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 755.7  | 54.4  | 8.1   | 2.9   | 1.5   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 197.0  | 27.2  | 6.6   | 3.7   | 2.2   | 0.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 39.0   | 17.6  | 5.9   | 4.4   | 2.9   | 1.5   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 18.4   | 12.5  | 5.9   | 4.4   | 3.7   | 2.2   | 0.7   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 9.6    | 5.9   | 5.9   | 4.4   | 4.4   | 2.9   | 1.5   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 4.4    | 2.2   | 2.2   | 2.2   | 2.2   | 1.5   | 0.7   | 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)