

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: P481023

Luminaire Tested: **IFLD-M-SA4A-827-U-SL4**

Issue Date: 02/26/2021



**Test Information**

Test Method: LM-79-08  
Report Number: P481023  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 02/26/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: IFLD-M-SA4A-827-U-SL4  
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ SL4 distribution lens  
Light Source: (64) 2700K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

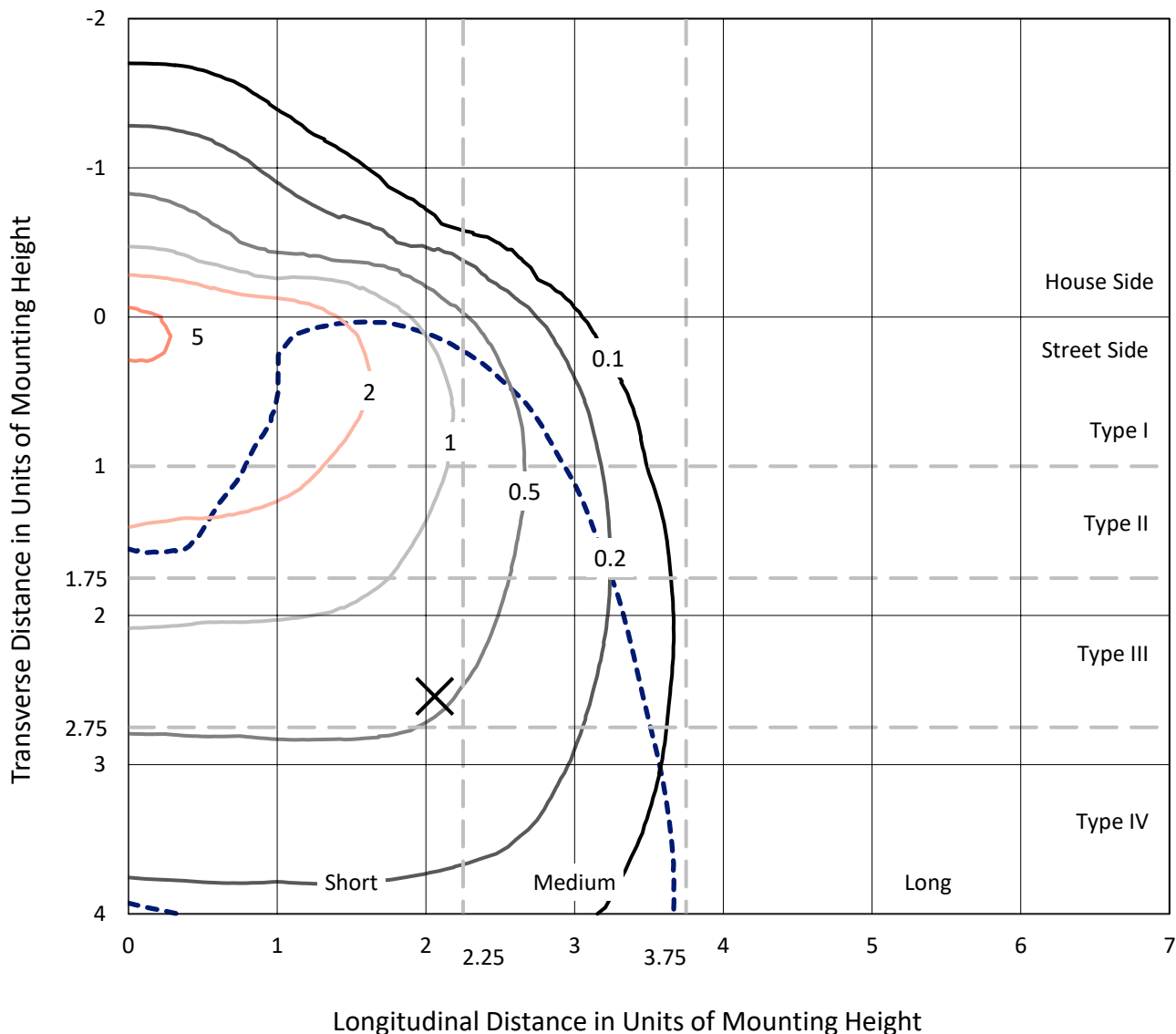
Lumens per Lamp: N/A  
Luminaire Lumens: 13131.2 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G3

Input Watts (W): 128.6  
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

REPORT NUMBER: P481023  
 CATALOG NUMBER: IFLD-M-SA4A-827-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

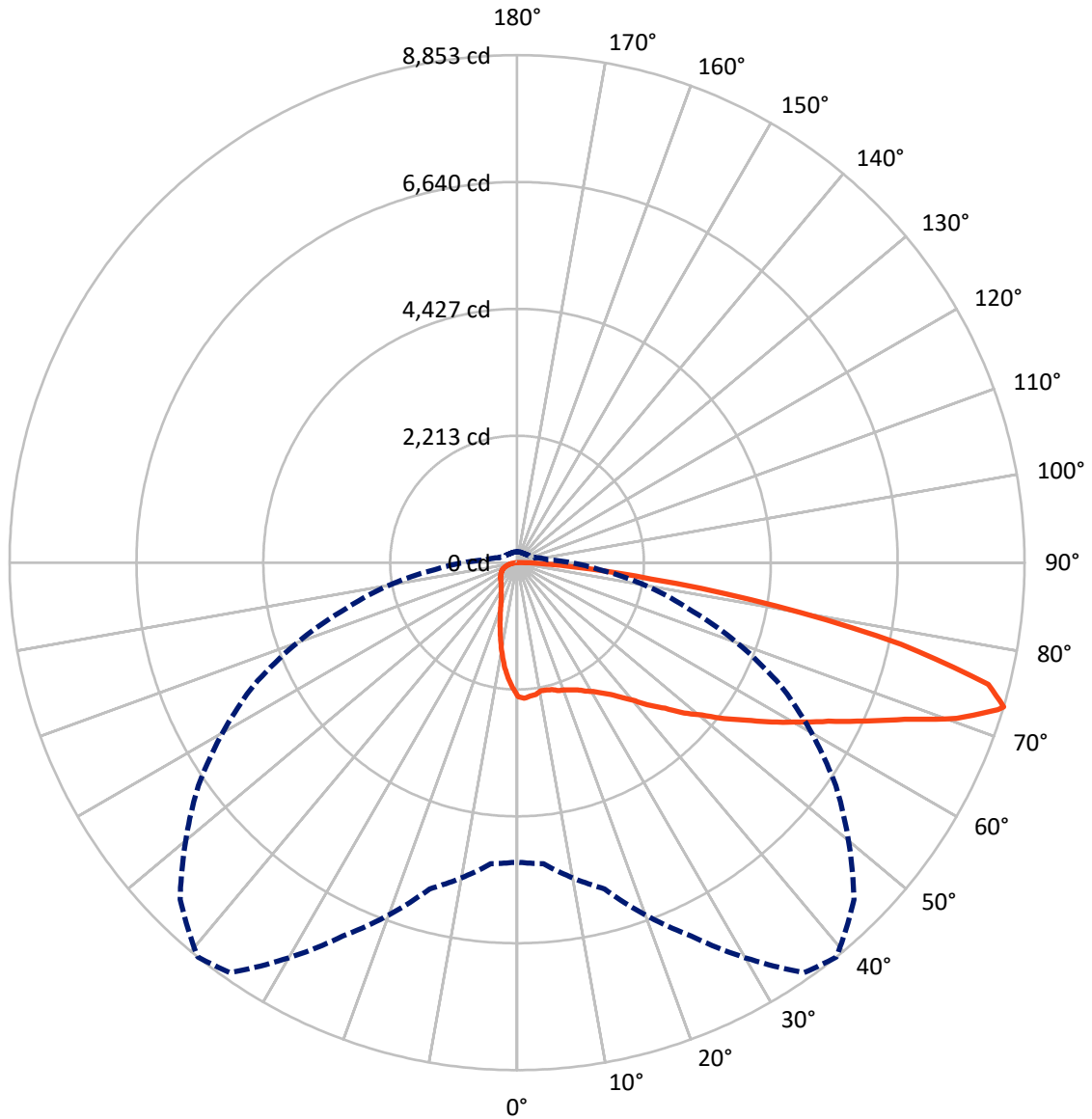
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.8 fc  
 Type IV - Short - N/A

REPORT NUMBER: P481023  
CATALOG NUMBER: IFLD-M-SA4A-827-U-SL4

### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical



REPORT NUMBER: P481023  
 CATALOG NUMBER: IFLD-M-SA4A-827-U-SL4

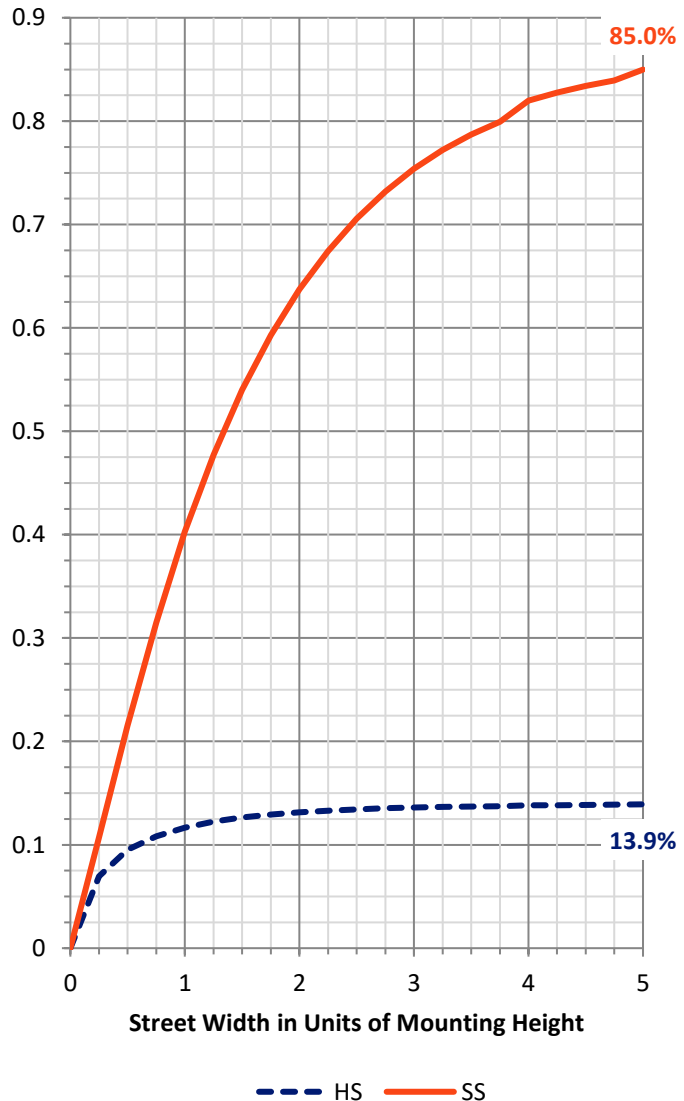
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1845.9   | 0.0    | 1845.9  |
|                    | % Fixture | 14.1     | 0.0    | 14.1    |
| <b>Street Side</b> | Lumens    | 11285.3  | 0.0    | 11285.3 |
|                    | % Fixture | 85.9     | 0.0    | 85.9    |
| <b>Total</b>       | Lumens    | 13131.2  | 0.0    | 13131.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 202.9   | 1.5       |
| 10°-20°   | 515.8   | 3.9       |
| 20°-30°   | 788.2   | 6.0       |
| 30°-40°   | 1149.3  | 8.8       |
| 40°-50°   | 1736.7  | 13.2      |
| 50°-60°   | 2514.8  | 19.2      |
| 60°-70°   | 3195.1  | 24.3      |
| 70°-80°   | 2590.2  | 19.7      |
| 80°-90°   | 438.2   | 3.3       |
| 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°    | 13131.2 | 100.0     |
| 0°-180°   | 13131.2 | 100.0     |

**Coefficient of Utilization**



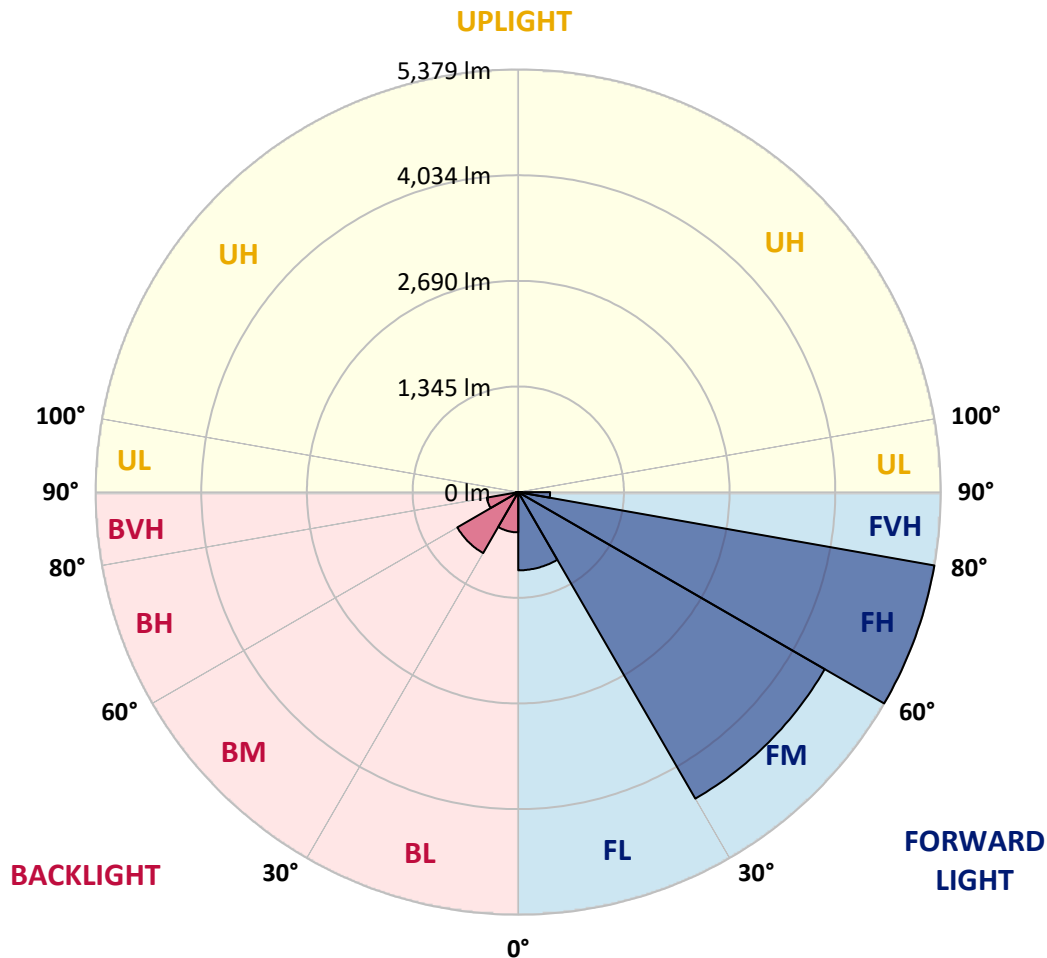
REPORT NUMBER: P481023  
 CATALOG NUMBER: IFLD-M-SA4A-827-U-SL4

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 995.1  | 7.6       |                         |      |         |
| FM (30°-60°)   | 4504.8 | 34.3      |                         |      |         |
| FH (60°-80°)   | 5379.3 | 41.0      |                         |      | G3/7500 |
| FVH (80°-90°)  | 406.1  | 3.1       |                         |      | G3/500  |
| BL (0°-30°)    | 511.9  | 3.9       | B2/1000                 |      |         |
| BM (30°-60°)   | 895.8  | 6.8       | B1/1000                 |      |         |
| BH (60°-80°)   | 406.0  | 3.1       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 32.2   | 0.2       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G3**

Type IV Short





REPORT NUMBER: P481023  
 CATALOG NUMBER: IFLD-M-SA4A-827-U-SL4

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 39°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2337.4 | 2337.4 | 2337.4 | 2337.4 | 2337.4 | 2337.4 | 2337.4 | 2337.4 | 2337.4 | 2337.4 | 2337.4 |
| 2.5°  | 2393.3 | 2368.3 | 2372.7 | 2363.9 | 2372.7 | 2369.8 | 2365.3 | 2343.3 | 2365.3 | 2343.3 | 2337.4 |
| 5°    | 2360.9 | 2360.9 | 2375.6 | 2353.6 | 2356.5 | 2341.8 | 2356.5 | 2340.4 | 2325.7 | 2288.9 | 2278.7 |
| 7.5°  | 2350.7 | 2349.2 | 2350.7 | 2319.8 | 2334.5 | 2325.7 | 2311.0 | 2293.4 | 2264.0 | 2240.5 | 2206.7 |
| 10°   | 2280.1 | 2294.8 | 2278.7 | 2287.5 | 2299.2 | 2272.8 | 2271.3 | 2266.9 | 2253.7 | 2222.8 | 2202.3 |
| 12.5° | 2241.9 | 2266.9 | 2275.7 | 2268.4 | 2278.7 | 2281.6 | 2272.8 | 2266.9 | 2250.7 | 2230.2 | 2171.4 |
| 15°   | 2258.1 | 2228.7 | 2253.7 | 2302.2 | 2291.9 | 2299.2 | 2300.7 | 2294.8 | 2287.5 | 2249.3 | 2211.1 |
| 17.5° | 2262.5 | 2244.9 | 2297.8 | 2308.0 | 2321.3 | 2347.7 | 2330.1 | 2328.6 | 2300.7 | 2274.3 | 2218.4 |
| 20°   | 2272.8 | 2265.4 | 2308.0 | 2362.4 | 2363.9 | 2368.3 | 2377.1 | 2355.1 | 2340.4 | 2294.8 | 2209.6 |
| 22.5° | 2311.0 | 2336.0 | 2375.6 | 2399.1 | 2412.4 | 2415.3 | 2415.3 | 2371.2 | 2355.1 | 2318.3 | 2250.7 |
| 25°   | 2425.6 | 2399.1 | 2455.0 | 2482.9 | 2463.8 | 2459.4 | 2449.1 | 2409.4 | 2391.8 | 2359.5 | 2269.8 |
| 27.5° | 2509.3 | 2507.9 | 2540.2 | 2578.4 | 2527.0 | 2537.2 | 2500.5 | 2488.8 | 2449.1 | 2431.5 | 2303.6 |
| 30°   | 2623.9 | 2656.2 | 2654.8 | 2666.5 | 2598.9 | 2610.7 | 2563.7 | 2541.6 | 2519.6 | 2529.9 | 2403.5 |
| 32.5° | 2770.8 | 2759.1 | 2778.2 | 2769.4 | 2701.8 | 2712.1 | 2656.2 | 2622.4 | 2629.8 | 2660.6 | 2540.2 |
| 35°   | 2864.9 | 2853.1 | 2860.4 | 2860.4 | 2839.9 | 2828.1 | 2804.6 | 2760.5 | 2795.8 | 2853.1 | 2693.0 |
| 37.5° | 2966.2 | 2980.9 | 3023.5 | 3014.7 | 2988.3 | 2988.3 | 2985.3 | 2954.5 | 3000.0 | 3141.1 | 2936.8 |
| 40°   | 3055.8 | 3095.5 | 3122.0 | 3139.6 | 3170.4 | 3170.4 | 3195.4 | 3177.8 | 3260.1 | 3486.3 | 3235.1 |
| 42.5° | 3149.9 | 3151.3 | 3295.3 | 3308.5 | 3377.6 | 3407.0 | 3426.1 | 3440.8 | 3595.0 | 3847.7 | 3553.9 |
| 45°   | 3270.3 | 3277.7 | 3404.0 | 3505.4 | 3612.7 | 3622.9 | 3694.9 | 3743.4 | 3932.9 | 4242.9 | 3900.6 |
| 47.5° | 3429.0 | 3420.2 | 3555.4 | 3717.0 | 3850.7 | 3921.2 | 4007.9 | 4060.8 | 4294.3 | 4671.9 | 4279.7 |
| 50°   | 3637.6 | 3611.2 | 3689.1 | 3943.2 | 4100.4 | 4178.3 | 4332.5 | 4420.7 | 4694.0 | 5081.8 | 4539.7 |
| 52.5° | 3891.8 | 3847.7 | 3909.4 | 4187.1 | 4363.4 | 4520.6 | 4667.5 | 4765.9 | 5051.0 | 5399.2 | 4732.2 |
| 55°   | 4160.7 | 4069.6 | 4087.2 | 4445.7 | 4699.8 | 4848.2 | 5049.5 | 5152.3 | 5443.2 | 5684.2 | 4924.6 |
| 57.5° | 4426.6 | 4369.3 | 4334.0 | 4694.0 | 5100.9 | 5243.4 | 5428.5 | 5562.2 | 5809.0 | 5936.9 | 5087.7 |
| 60°   | 4649.9 | 4635.2 | 4577.9 | 5078.9 | 5525.5 | 5647.4 | 5841.4 | 5923.6 | 6110.2 | 6170.5 | 5090.6 |
| 62.5° | 4833.5 | 4783.6 | 4874.7 | 5388.9 | 5957.4 | 6095.5 | 6308.6 | 6315.9 | 6448.1 | 6315.9 | 4940.8 |
| 65°   | 4977.5 | 4980.4 | 5125.9 | 5763.5 | 6456.9 | 6661.2 | 6833.0 | 6814.0 | 6728.7 | 6229.2 | 4586.7 |
| 67.5° | 5108.3 | 5164.1 | 5377.1 | 6174.9 | 7099.0 | 7291.4 | 7482.4 | 7229.7 | 6805.1 | 5823.7 | 3894.7 |
| 70°   | 5211.1 | 5266.9 | 5716.5 | 6675.8 | 7855.6 | 8137.7 | 8180.3 | 7394.3 | 6454.0 | 4933.4 | 2938.3 |
| 72.5° | 5199.3 | 5300.7 | 5908.9 | 7075.5 | 8527.0 | 8770.9 | 8427.1 | 6931.5 | 5377.1 | 3439.3 | 1714.5 |
| 73°   | 5224.3 | 5274.3 | 5892.8 | 7187.1 | 8731.2 | 8853.1 | 8312.5 | 6786.0 | 5071.5 | 3085.2 | 1450.1 |
| 75°   | 4742.4 | 4911.4 | 5600.4 | 7004.9 | 8512.3 | 8490.3 | 7654.3 | 5654.8 | 3605.3 | 1620.5 | 702.3  |
| 77.5° | 3508.3 | 3615.6 | 4413.3 | 5760.6 | 6987.3 | 6846.3 | 5773.8 | 3614.1 | 1711.6 | 600.9  | 379.0  |
| 80°   | 1714.5 | 1798.2 | 2338.9 | 3326.2 | 4569.1 | 4580.8 | 3583.3 | 1880.5 | 733.1  | 339.4  | 258.6  |
| 82.5° | 856.5  | 906.5  | 1123.9 | 1461.8 | 2247.8 | 2355.1 | 1817.3 | 1069.5 | 454.0  | 192.5  | 146.9  |
| 85°   | 559.7  | 595.0  | 692.0  | 715.5  | 953.5  | 1006.4 | 846.2  | 834.5  | 295.3  | 104.3  | 119.0  |
| 87.5° | 371.7  | 377.6  | 424.6  | 361.4  | 382.0  | 367.3  | 408.4  | 526.0  | 86.7   | 44.1   | 32.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P481023  
 CATALOG NUMBER: IFLD-M-SA4A-827-U-SL4

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2337.4 | 2337.4 | 2337.4 | 2337.4 | 2337.4 | 2337.4 | 2337.4 | 2337.4 | 2337.4 | 2337.4 | 2337.4 |
| 2.5°  | 2330.1 | 2309.5 | 2287.5 | 2256.6 | 2234.6 | 2200.8 | 2169.9 | 2156.7 | 2153.8 | 2155.3 | 2140.6 |
| 5°    | 2269.8 | 2240.5 | 2196.4 | 2133.2 | 2096.5 | 2040.7 | 1993.6 | 1968.7 | 1942.2 | 1946.6 | 1934.9 |
| 7.5°  | 2186.1 | 2153.8 | 2086.2 | 2012.7 | 1921.7 | 1842.3 | 1798.2 | 1736.5 | 1701.3 | 1674.8 | 1689.5 |
| 10°   | 2159.7 | 2103.8 | 2002.5 | 1901.1 | 1760.1 | 1655.7 | 1554.4 | 1483.8 | 1435.4 | 1388.4 | 1408.9 |
| 12.5° | 2146.4 | 2090.6 | 1949.6 | 1799.7 | 1617.5 | 1458.9 | 1316.4 | 1229.7 | 1160.6 | 1119.5 | 1135.7 |
| 15°   | 2134.7 | 2065.6 | 1899.6 | 1688.1 | 1483.8 | 1275.2 | 1115.1 | 1000.5 | 934.4  | 894.7  | 899.1  |
| 17.5° | 2150.8 | 2052.4 | 1826.2 | 1579.3 | 1336.9 | 1113.6 | 935.9  | 816.9  | 749.3  | 724.3  | 718.4  |
| 20°   | 2134.7 | 2037.7 | 1754.2 | 1470.6 | 1190.0 | 959.4  | 788.9  | 690.5  | 643.5  | 622.9  | 618.5  |
| 22.5° | 2140.6 | 2002.5 | 1679.2 | 1350.2 | 1053.4 | 830.1  | 690.5  | 615.6  | 578.8  | 568.6  | 571.5  |
| 25°   | 2168.5 | 1981.9 | 1604.3 | 1217.9 | 918.2  | 734.6  | 627.3  | 570.0  | 543.6  | 533.3  | 536.2  |
| 27.5° | 2189.0 | 1999.5 | 1536.7 | 1093.1 | 803.6  | 649.4  | 574.4  | 536.2  | 518.6  | 511.3  | 509.8  |
| 30°   | 2240.5 | 2009.8 | 1470.6 | 981.4  | 709.6  | 593.5  | 537.7  | 506.9  | 495.1  | 490.7  | 489.2  |
| 32.5° | 2316.9 | 2028.9 | 1394.2 | 878.6  | 640.6  | 540.6  | 508.3  | 481.9  | 478.9  | 474.5  | 476.0  |
| 35°   | 2441.7 | 2095.0 | 1309.0 | 790.4  | 574.4  | 505.4  | 477.5  | 459.8  | 459.8  | 459.8  | 464.3  |
| 37.5° | 2621.0 | 2187.6 | 1232.6 | 706.7  | 531.8  | 474.5  | 451.0  | 445.2  | 442.2  | 446.6  | 449.6  |
| 40°   | 2851.6 | 2299.2 | 1170.9 | 640.6  | 495.1  | 454.0  | 433.4  | 430.5  | 429.0  | 427.5  | 430.5  |
| 42.5° | 3104.3 | 2441.7 | 1118.0 | 589.1  | 468.7  | 431.9  | 417.2  | 414.3  | 408.4  | 411.4  | 415.8  |
| 45°   | 3355.6 | 2618.0 | 1071.0 | 548.0  | 451.0  | 420.2  | 399.6  | 398.1  | 395.2  | 393.7  | 401.1  |
| 47.5° | 3634.7 | 2791.4 | 1056.3 | 523.0  | 437.8  | 402.5  | 387.9  | 386.4  | 377.6  | 376.1  | 382.0  |
| 50°   | 3852.1 | 2919.2 | 1072.5 | 511.3  | 418.7  | 389.3  | 379.0  | 371.7  | 364.4  | 357.0  | 357.0  |
| 52.5° | 4002.0 | 3007.4 | 1084.2 | 502.5  | 408.4  | 371.7  | 358.5  | 355.5  | 348.2  | 340.8  | 337.9  |
| 55°   | 4137.1 | 3060.3 | 1087.2 | 503.9  | 398.1  | 351.1  | 342.3  | 340.8  | 336.4  | 324.7  | 321.7  |
| 57.5° | 4182.7 | 3038.2 | 1028.4 | 490.7  | 392.3  | 337.9  | 326.2  | 329.1  | 323.2  | 312.9  | 311.5  |
| 60°   | 4178.3 | 2885.4 | 894.7  | 473.1  | 379.0  | 323.2  | 308.5  | 317.3  | 317.3  | 305.6  | 304.1  |
| 62.5° | 3924.1 | 2532.8 | 731.6  | 439.3  | 364.4  | 308.5  | 292.4  | 305.6  | 310.0  | 302.6  | 301.2  |
| 65°   | 3396.7 | 2062.7 | 611.2  | 405.5  | 342.3  | 292.4  | 276.2  | 290.9  | 298.2  | 295.3  | 293.8  |
| 67.5° | 2810.5 | 1577.9 | 508.3  | 361.4  | 314.4  | 270.3  | 257.1  | 267.4  | 271.8  | 273.3  | 274.7  |
| 70°   | 1986.3 | 1050.4 | 424.6  | 312.9  | 276.2  | 246.8  | 232.1  | 233.6  | 232.1  | 236.5  | 236.5  |
| 72.5° | 1079.8 | 605.3  | 345.3  | 265.9  | 238.0  | 214.5  | 204.2  | 196.9  | 196.9  | 195.4  | 195.4  |
| 73°   | 924.1  | 543.6  | 329.1  | 258.6  | 227.7  | 208.6  | 196.9  | 191.0  | 191.0  | 189.5  | 188.1  |
| 75°   | 518.6  | 398.1  | 282.1  | 221.8  | 196.9  | 182.2  | 173.4  | 164.5  | 163.1  | 163.1  | 163.1  |
| 77.5° | 340.8  | 310.0  | 224.8  | 177.8  | 158.7  | 145.4  | 142.5  | 133.7  | 133.7  | 133.7  | 132.2  |
| 80°   | 255.6  | 243.9  | 173.4  | 135.2  | 121.9  | 111.7  | 108.7  | 102.8  | 101.4  | 95.5   | 97.0   |
| 82.5° | 170.4  | 192.5  | 126.3  | 95.5   | 82.3   | 76.4   | 76.4   | 74.9   | 70.5   | 63.2   | 63.2   |
| 85°   | 135.2  | 157.2  | 91.1   | 58.8   | 48.5   | 41.1   | 42.6   | 41.1   | 39.7   | 32.3   | 30.9   |
| 87.5° | 25.0   | 63.2   | 26.4   | 16.2   | 11.8   | 7.3    | 7.3    | 4.4    | 2.9    | 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)