

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: P481024

Luminaire Tested: **IFLD-M-SA4B-827-U-SL4**

Issue Date: 02/26/2021



Test Information

Test Method: LM-79-08
Report Number: P481024
Test Lab: INNOVATION CENTER(G2)
Issue Date: 02/26/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4B-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

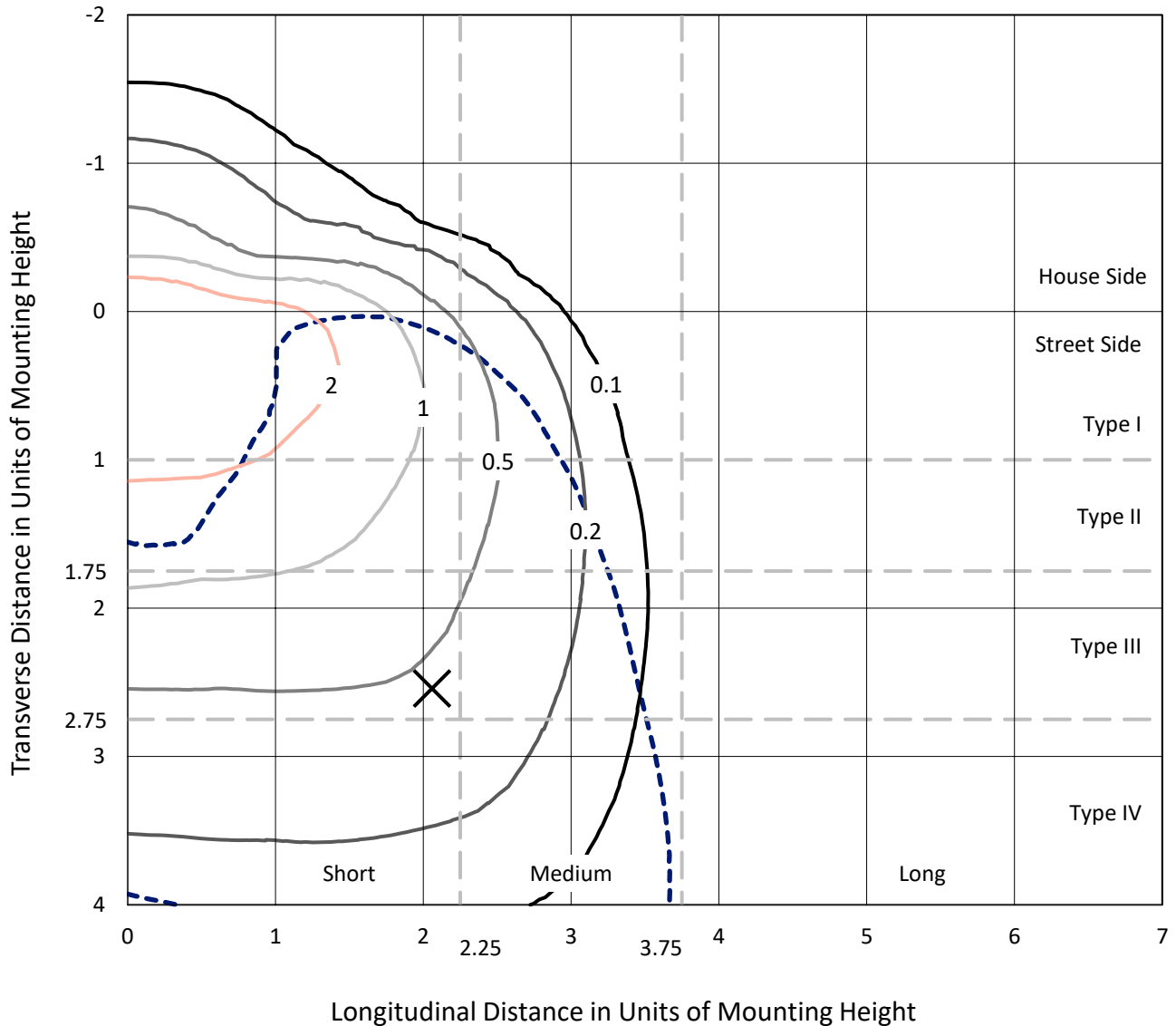
Lumens per Lamp: N/A
Luminaire Lumens: 16239.9 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

Input Watts (W): 166.1
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

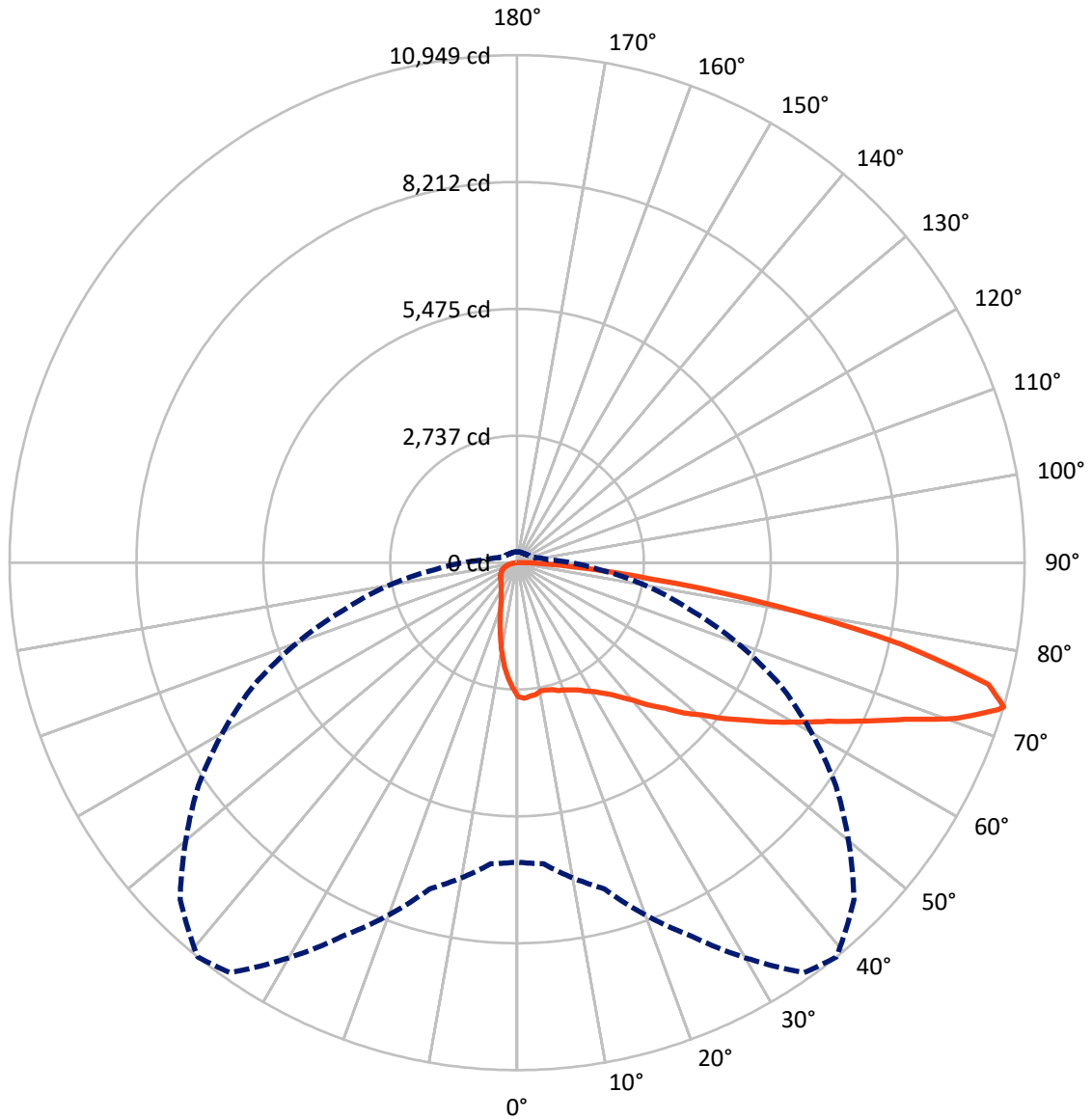
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2282.9 | 0.0 | 2282.9 |
| | % Fixture | 14.1 | 0.0 | 14.1 |
| Street Side | Lumens | 13957.0 | 0.0 | 13957.0 |
| | % Fixture | 85.9 | 0.0 | 85.9 |
| Total | Lumens | 16239.9 | 0.0 | 16239.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 250.9 | 1.5 |
| 10°-20° | 637.9 | 3.9 |
| 20°-30° | 974.8 | 6.0 |
| 30°-40° | 1421.3 | 8.8 |
| 40°-50° | 2147.8 | 13.2 |
| 50°-60° | 3110.1 | 19.2 |
| 60°-70° | 3951.6 | 24.3 |
| 70°-80° | 3203.4 | 19.7 |
| 80°-90° | 542.0 | 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° | 16239.9 | 100.0 |
| 0°-180° | 16239.9 | 100.0 |

Coefficient of Utilization



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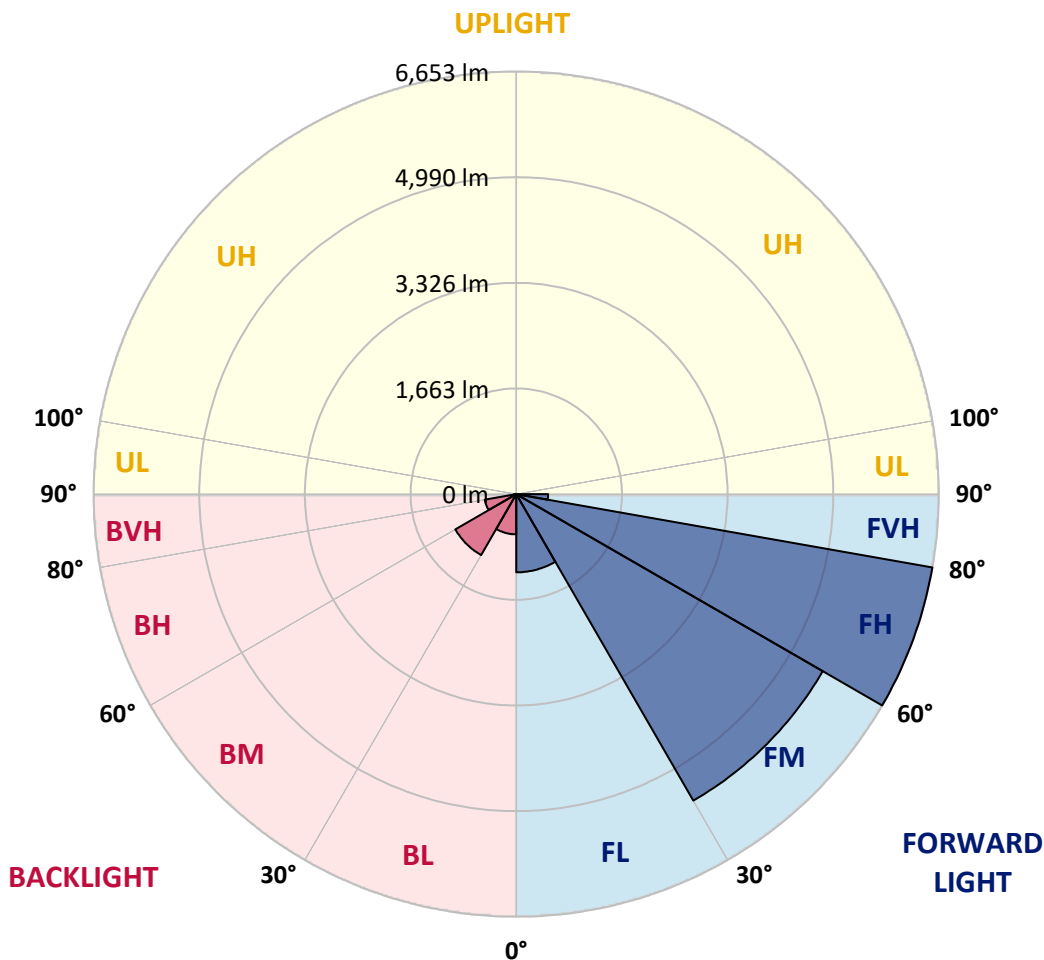
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1230.6 | 7.6 | | | |
| FM (30°-60°) | 5571.3 | 34.3 | | | |
| FH (60°-80°) | 6652.8 | 41.0 | | | G3/7500 |
| FVH (80°-90°) | 502.2 | 3.1 | | | G4/750 |
| BL (0°-30°) | 633.1 | 3.9 | B2/1000 | | |
| BM (30°-60°) | 1107.9 | 6.8 | B2/2500 | | |
| BH (60°-80°) | 502.1 | 3.1 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 39.8 | 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-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 39° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|---------|---------|---------|--------|--------|--------|--------|
| 0° | 2890.8 | 2890.8 | 2890.8 | 2890.8 | 2890.8 | 2890.8 | 2890.8 | 2890.8 | 2890.8 | 2890.8 | 2890.8 |
| 2.5° | 2959.9 | 2929.0 | 2934.4 | 2923.5 | 2934.4 | 2930.8 | 2925.3 | 2898.1 | 2925.3 | 2898.1 | 2890.8 |
| 5° | 2919.9 | 2919.9 | 2938.0 | 2910.8 | 2914.4 | 2896.3 | 2914.4 | 2894.4 | 2876.3 | 2830.8 | 2818.1 |
| 7.5° | 2907.2 | 2905.3 | 2907.2 | 2869.0 | 2887.2 | 2876.3 | 2858.1 | 2836.3 | 2800.0 | 2770.9 | 2729.1 |
| 10° | 2819.9 | 2838.1 | 2818.1 | 2829.0 | 2843.6 | 2810.9 | 2809.0 | 2803.6 | 2787.2 | 2749.1 | 2723.6 |
| 12.5° | 2772.7 | 2803.6 | 2814.5 | 2805.4 | 2818.1 | 2821.8 | 2810.9 | 2803.6 | 2783.6 | 2758.2 | 2685.5 |
| 15° | 2792.7 | 2756.4 | 2787.2 | 2847.2 | 2834.5 | 2843.6 | 2845.4 | 2838.1 | 2829.0 | 2781.8 | 2734.5 |
| 17.5° | 2798.1 | 2776.3 | 2841.7 | 2854.5 | 2870.8 | 2903.5 | 2881.7 | 2879.9 | 2845.4 | 2812.7 | 2743.6 |
| 20° | 2810.9 | 2801.8 | 2854.5 | 2921.7 | 2923.5 | 2929.0 | 2939.9 | 2912.6 | 2894.4 | 2838.1 | 2732.7 |
| 22.5° | 2858.1 | 2889.0 | 2938.0 | 2967.1 | 2983.5 | 2987.1 | 2987.1 | 2932.6 | 2912.6 | 2867.2 | 2783.6 |
| 25° | 2999.8 | 2967.1 | 3036.2 | 3070.7 | 3047.1 | 3041.6 | 3028.9 | 2979.8 | 2958.0 | 2918.1 | 2807.2 |
| 27.5° | 3103.4 | 3101.6 | 3141.5 | 3188.8 | 3125.2 | 3137.9 | 3092.5 | 3078.0 | 3028.9 | 3007.1 | 2849.0 |
| 30° | 3245.1 | 3285.1 | 3283.3 | 3297.8 | 3214.2 | 3228.8 | 3170.6 | 3143.4 | 3116.1 | 3128.8 | 2972.6 |
| 32.5° | 3426.8 | 3412.3 | 3435.9 | 3425.0 | 3341.4 | 3354.1 | 3285.1 | 3243.3 | 3252.4 | 3290.5 | 3141.5 |
| 35° | 3543.1 | 3528.6 | 3537.6 | 3537.6 | 3512.2 | 3497.7 | 3468.6 | 3414.1 | 3457.7 | 3528.6 | 3330.5 |
| 37.5° | 3668.5 | 3686.6 | 3739.3 | 3728.4 | 3695.7 | 3695.7 | 3692.1 | 3653.9 | 3710.3 | 3884.7 | 3632.1 |
| 40° | 3779.3 | 3828.4 | 3861.1 | 3882.9 | 3921.0 | 3921.0 | 3951.9 | 3930.1 | 4031.9 | 4311.7 | 4001.0 |
| 42.5° | 3895.6 | 3897.4 | 4075.5 | 4091.8 | 4177.2 | 4213.6 | 4237.2 | 4255.4 | 4446.1 | 4758.7 | 4395.3 |
| 45° | 4044.6 | 4053.7 | 4209.9 | 4335.3 | 4467.9 | 4480.7 | 4569.7 | 4629.7 | 4864.0 | 5247.4 | 4824.1 |
| 47.5° | 4240.8 | 4229.9 | 4397.1 | 4596.9 | 4762.3 | 4849.5 | 4956.7 | 5022.1 | 5311.0 | 5778.0 | 5292.8 |
| 50° | 4498.8 | 4466.1 | 4562.4 | 4876.8 | 5071.2 | 5167.5 | 5358.3 | 5467.3 | 5805.2 | 6284.9 | 5614.5 |
| 52.5° | 4813.2 | 4758.7 | 4835.0 | 5178.4 | 5396.4 | 5590.8 | 5772.5 | 5894.3 | 6246.8 | 6677.4 | 5852.5 |
| 55° | 5145.7 | 5033.0 | 5054.8 | 5498.2 | 5812.5 | 5996.0 | 6244.9 | 6372.1 | 6731.9 | 7029.9 | 6090.5 |
| 57.5° | 5474.5 | 5403.7 | 5360.1 | 5805.2 | 6308.5 | 6484.8 | 6713.7 | 6879.1 | 7184.3 | 7342.4 | 6292.2 |
| 60° | 5750.7 | 5732.6 | 5661.7 | 6281.3 | 6833.6 | 6984.4 | 7224.3 | 7326.0 | 7556.8 | 7631.3 | 6295.8 |
| 62.5° | 5977.8 | 5916.1 | 6028.7 | 6664.7 | 7367.8 | 7538.6 | 7802.1 | 7811.2 | 7974.7 | 7811.2 | 6110.5 |
| 65° | 6155.9 | 6159.5 | 6339.4 | 7128.0 | 7985.6 | 8238.2 | 8450.7 | 8427.1 | 8321.7 | 7704.0 | 5672.6 |
| 67.5° | 6317.6 | 6386.7 | 6650.1 | 7636.7 | 8779.6 | 9017.6 | 9253.9 | 8941.3 | 8416.2 | 7202.5 | 4816.8 |
| 70° | 6444.8 | 6513.9 | 7069.8 | 8256.3 | 9715.4 | 10064.2 | 10116.9 | 9144.8 | 7982.0 | 6101.4 | 3633.9 |
| 72.5° | 6430.3 | 6555.6 | 7307.9 | 8750.5 | 10545.7 | 10847.3 | 10422.2 | 8572.5 | 6650.1 | 4253.5 | 2120.4 |
| 73° | 6461.2 | 6522.9 | 7287.9 | 8888.6 | 10798.3 | 10949.1 | 10280.4 | 8392.6 | 6272.2 | 3815.6 | 1793.4 |
| 75° | 5865.2 | 6074.1 | 6926.3 | 8663.3 | 10527.5 | 10500.3 | 9466.4 | 6993.5 | 4458.9 | 2004.1 | 868.5 |
| 77.5° | 4338.9 | 4471.6 | 5458.2 | 7124.4 | 8641.5 | 8467.1 | 7140.7 | 4469.8 | 2116.8 | 743.1 | 468.8 |
| 80° | 2120.4 | 2224.0 | 2892.6 | 4113.6 | 5650.8 | 5665.3 | 4431.6 | 2325.7 | 906.7 | 419.7 | 319.8 |
| 82.5° | 1059.3 | 1121.1 | 1390.0 | 1807.9 | 2780.0 | 2912.6 | 2247.6 | 1322.8 | 561.4 | 238.0 | 181.7 |
| 85° | 692.3 | 735.9 | 855.8 | 884.9 | 1179.2 | 1244.6 | 1046.6 | 1032.0 | 365.2 | 129.0 | 147.2 |
| 87.5° | 459.7 | 467.0 | 525.1 | 447.0 | 472.4 | 454.2 | 505.1 | 650.5 | 107.2 | 54.5 | 40.0 |
| 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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 CATALOG NUMBER: IFLD-M-SA4B-827-U-SL4

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2890.8 | 2890.8 | 2890.8 | 2890.8 | 2890.8 | 2890.8 | 2890.8 | 2890.8 | 2890.8 | 2890.8 | 2890.8 |
| 2.5° | 2881.7 | 2856.3 | 2829.0 | 2790.9 | 2763.6 | 2721.8 | 2683.7 | 2667.3 | 2663.7 | 2665.5 | 2647.3 |
| 5° | 2807.2 | 2770.9 | 2716.4 | 2638.2 | 2592.8 | 2523.8 | 2465.6 | 2434.7 | 2402.0 | 2407.5 | 2393.0 |
| 7.5° | 2703.7 | 2663.7 | 2580.1 | 2489.3 | 2376.6 | 2278.5 | 2224.0 | 2147.7 | 2104.1 | 2071.4 | 2089.5 |
| 10° | 2671.0 | 2601.9 | 2476.5 | 2351.2 | 2176.7 | 2047.7 | 1922.4 | 1835.1 | 1775.2 | 1717.0 | 1742.5 |
| 12.5° | 2654.6 | 2585.6 | 2411.1 | 2225.8 | 2000.5 | 1804.3 | 1628.0 | 1520.8 | 1435.4 | 1384.5 | 1404.5 |
| 15° | 2640.1 | 2554.7 | 2349.3 | 2087.7 | 1835.1 | 1577.1 | 1379.1 | 1237.4 | 1155.6 | 1106.5 | 1112.0 |
| 17.5° | 2660.1 | 2538.3 | 2258.5 | 1953.2 | 1653.4 | 1377.3 | 1157.4 | 1010.2 | 926.7 | 895.8 | 888.5 |
| 20° | 2640.1 | 2520.1 | 2169.5 | 1818.8 | 1471.7 | 1186.5 | 975.7 | 854.0 | 795.8 | 770.4 | 764.9 |
| 22.5° | 2647.3 | 2476.5 | 2076.8 | 1669.8 | 1302.8 | 1026.6 | 854.0 | 761.3 | 715.9 | 703.2 | 706.8 |
| 25° | 2681.9 | 2451.1 | 1984.1 | 1506.3 | 1135.6 | 908.5 | 775.8 | 705.0 | 672.3 | 659.6 | 663.2 |
| 27.5° | 2707.3 | 2472.9 | 1900.6 | 1351.8 | 993.9 | 803.1 | 710.4 | 663.2 | 641.4 | 632.3 | 630.5 |
| 30° | 2770.9 | 2485.6 | 1818.8 | 1213.7 | 877.6 | 734.1 | 665.0 | 626.9 | 612.3 | 606.9 | 605.1 |
| 32.5° | 2865.4 | 2509.2 | 1724.3 | 1086.6 | 792.2 | 668.6 | 628.7 | 596.0 | 592.3 | 586.9 | 588.7 |
| 35° | 3019.8 | 2591.0 | 1618.9 | 977.5 | 710.4 | 625.0 | 590.5 | 568.7 | 568.7 | 568.7 | 574.2 |
| 37.5° | 3241.5 | 2705.5 | 1524.4 | 874.0 | 657.7 | 586.9 | 557.8 | 550.5 | 546.9 | 552.4 | 556.0 |
| 40° | 3526.7 | 2843.6 | 1448.1 | 792.2 | 612.3 | 561.4 | 536.0 | 532.4 | 530.6 | 528.7 | 532.4 |
| 42.5° | 3839.3 | 3019.8 | 1382.7 | 728.6 | 579.6 | 534.2 | 516.0 | 512.4 | 505.1 | 508.8 | 514.2 |
| 45° | 4150.0 | 3237.8 | 1324.6 | 677.7 | 557.8 | 519.7 | 494.2 | 492.4 | 488.8 | 486.9 | 496.0 |
| 47.5° | 4495.2 | 3452.3 | 1306.4 | 646.8 | 541.5 | 497.9 | 479.7 | 477.9 | 467.0 | 465.1 | 472.4 |
| 50° | 4764.1 | 3610.3 | 1326.4 | 632.3 | 517.8 | 481.5 | 468.8 | 459.7 | 450.6 | 441.5 | 441.5 |
| 52.5° | 4949.4 | 3719.3 | 1340.9 | 621.4 | 505.1 | 459.7 | 443.3 | 439.7 | 430.6 | 421.5 | 417.9 |
| 55° | 5116.6 | 3784.8 | 1344.6 | 623.2 | 492.4 | 434.3 | 423.4 | 421.5 | 416.1 | 401.6 | 397.9 |
| 57.5° | 5172.9 | 3757.5 | 1271.9 | 606.9 | 485.1 | 417.9 | 403.4 | 407.0 | 399.7 | 387.0 | 385.2 |
| 60° | 5167.5 | 3568.5 | 1106.5 | 585.1 | 468.8 | 399.7 | 381.6 | 392.5 | 392.5 | 377.9 | 376.1 |
| 62.5° | 4853.1 | 3132.5 | 904.9 | 543.3 | 450.6 | 381.6 | 361.6 | 377.9 | 383.4 | 374.3 | 372.5 |
| 65° | 4200.8 | 2551.0 | 755.9 | 501.5 | 423.4 | 361.6 | 341.6 | 359.8 | 368.8 | 365.2 | 363.4 |
| 67.5° | 3475.9 | 1951.4 | 628.7 | 447.0 | 388.8 | 334.3 | 318.0 | 330.7 | 336.1 | 338.0 | 339.8 |
| 70° | 2456.5 | 1299.1 | 525.1 | 387.0 | 341.6 | 305.3 | 287.1 | 288.9 | 287.1 | 292.5 | 292.5 |
| 72.5° | 1335.5 | 748.6 | 427.0 | 328.9 | 294.3 | 265.3 | 252.6 | 243.5 | 243.5 | 241.7 | 241.7 |
| 73° | 1142.9 | 672.3 | 407.0 | 319.8 | 281.6 | 258.0 | 243.5 | 236.2 | 236.2 | 234.4 | 232.6 |
| 75° | 641.4 | 492.4 | 348.9 | 274.4 | 243.5 | 225.3 | 214.4 | 203.5 | 201.7 | 201.7 | 201.7 |
| 77.5° | 421.5 | 383.4 | 278.0 | 219.9 | 196.2 | 179.9 | 176.2 | 165.3 | 165.3 | 165.3 | 163.5 |
| 80° | 316.2 | 301.6 | 214.4 | 167.2 | 150.8 | 138.1 | 134.5 | 127.2 | 125.4 | 118.1 | 119.9 |
| 82.5° | 210.8 | 238.0 | 156.3 | 118.1 | 101.8 | 94.5 | 94.5 | 92.7 | 87.2 | 78.1 | 78.1 |
| 85° | 167.2 | 194.4 | 112.7 | 72.7 | 60.0 | 50.9 | 52.7 | 50.9 | 49.1 | 40.0 | 38.2 |
| 87.5° | 30.9 | 78.1 | 32.7 | 20.0 | 14.5 | 9.1 | 9.1 | 5.5 | 3.6 | 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)