

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: P481180

Luminaire Tested: **IFLD-M-SA4B-727-U-RW**

Issue Date: 02/26/2021



Test Information

Test Method: LM-79-08
Report Number: P481180
Test Lab: INNOVATION CENTER(G2)
Issue Date: 02/26/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4B-727-U-RW
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ RW distribution lens
Light Source: (64) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

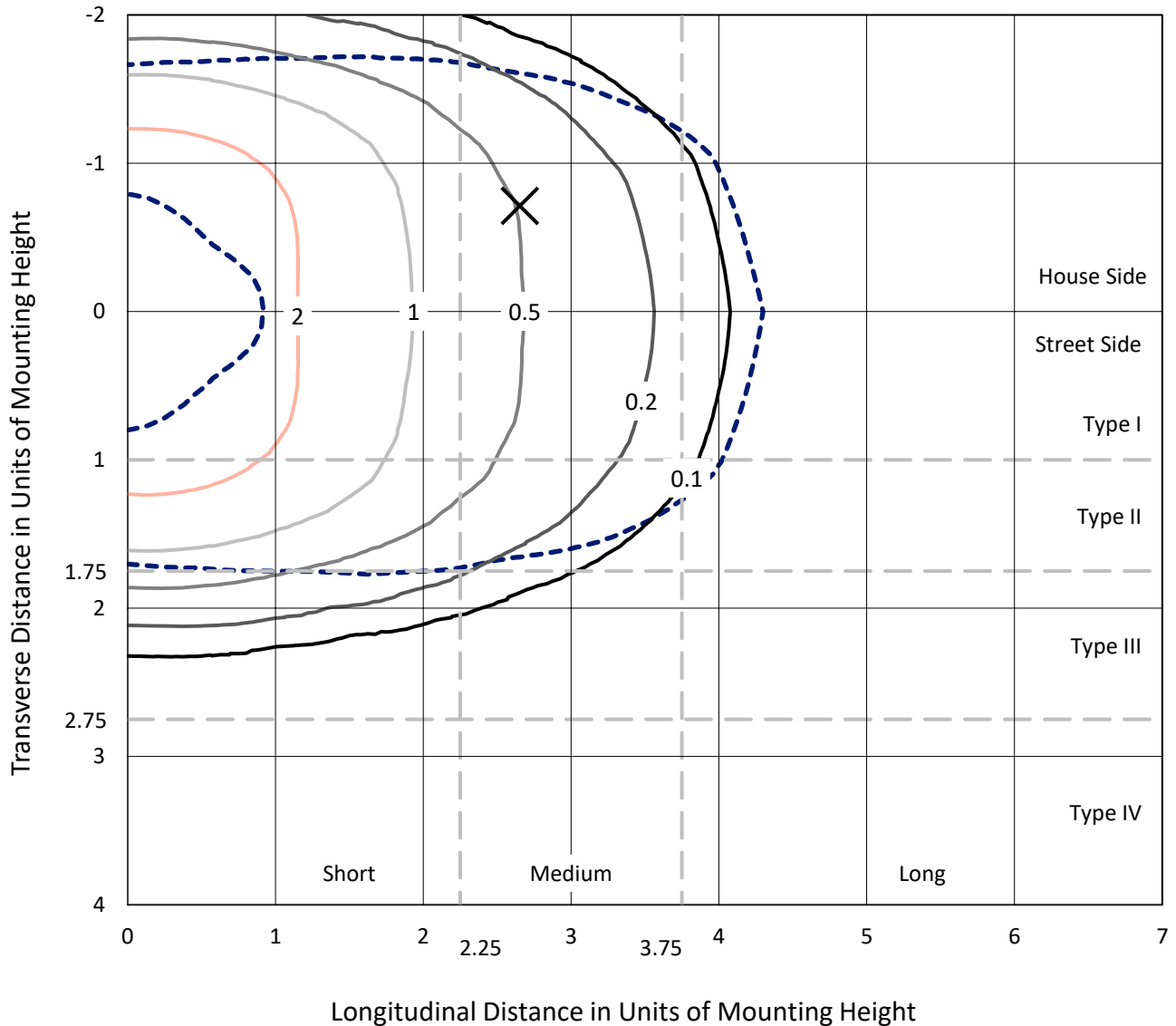
Lumens per Lamp: N/A
Luminaire Lumens: 19674.2 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

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

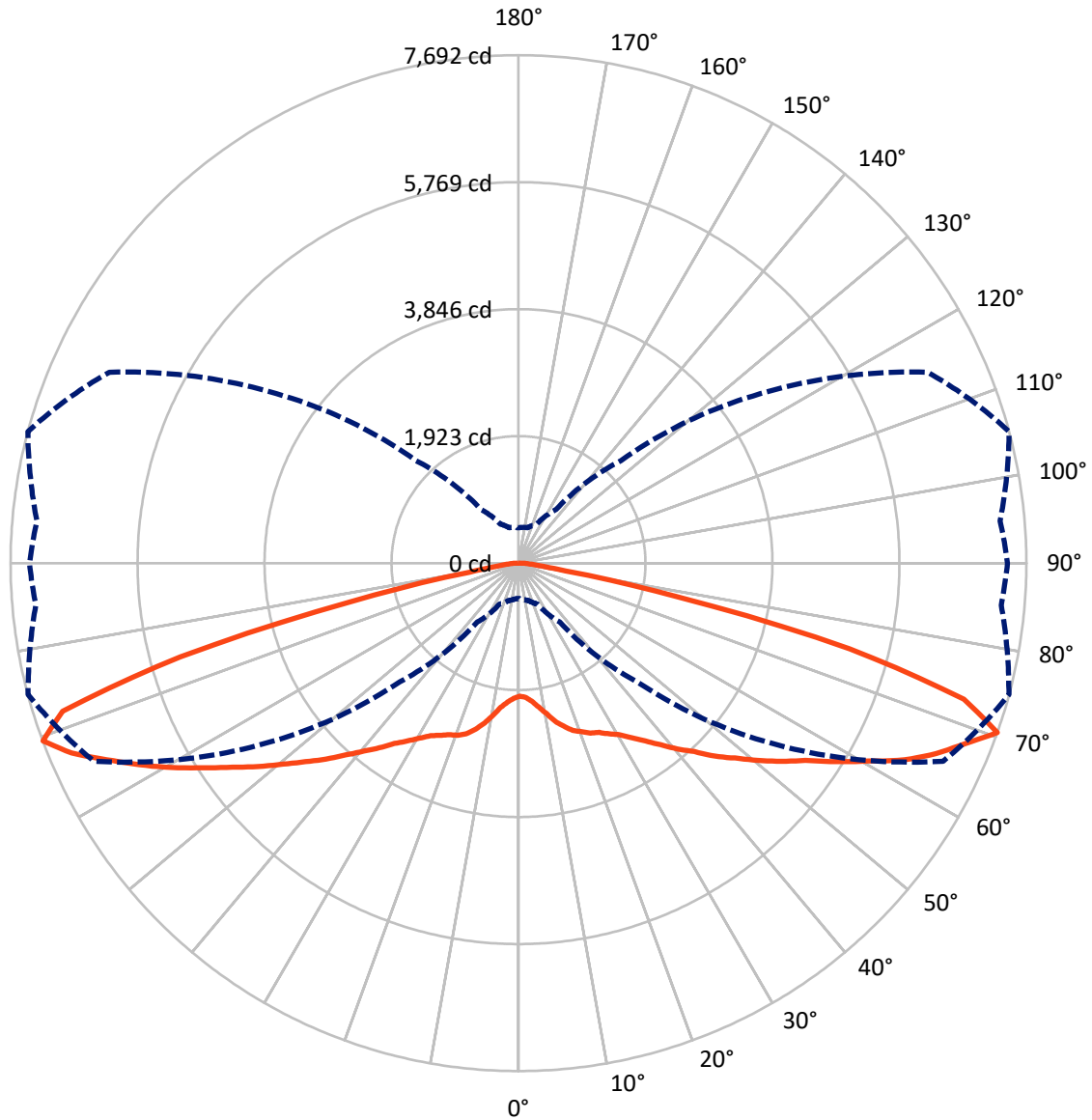
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 105-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9767.1 | 0.0 | 9767.1 |
| | % Fixture | 49.6 | 0.0 | 49.6 |
| Street Side | Lumens | 9907.1 | 0.0 | 9907.1 |
| | % Fixture | 50.4 | 0.0 | 50.4 |
| Total | Lumens | 19674.2 | 0.0 | 19674.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 200.5 | 1.0 |
| 10°-20° | 682.8 | 3.5 |
| 20°-30° | 1322.1 | 6.7 |
| 30°-40° | 2236.1 | 11.4 |
| 40°-50° | 3567.3 | 18.1 |
| 50°-60° | 4882.9 | 24.8 |
| 60°-70° | 4602.4 | 23.4 |
| 70°-80° | 2027.5 | 10.3 |
| 80°-90° | 152.6 | 0.8 |
| 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° | 19674.2 | 100.0 |
| 0°-180° | 19674.2 | 100.0 |

Coefficient of Utilization

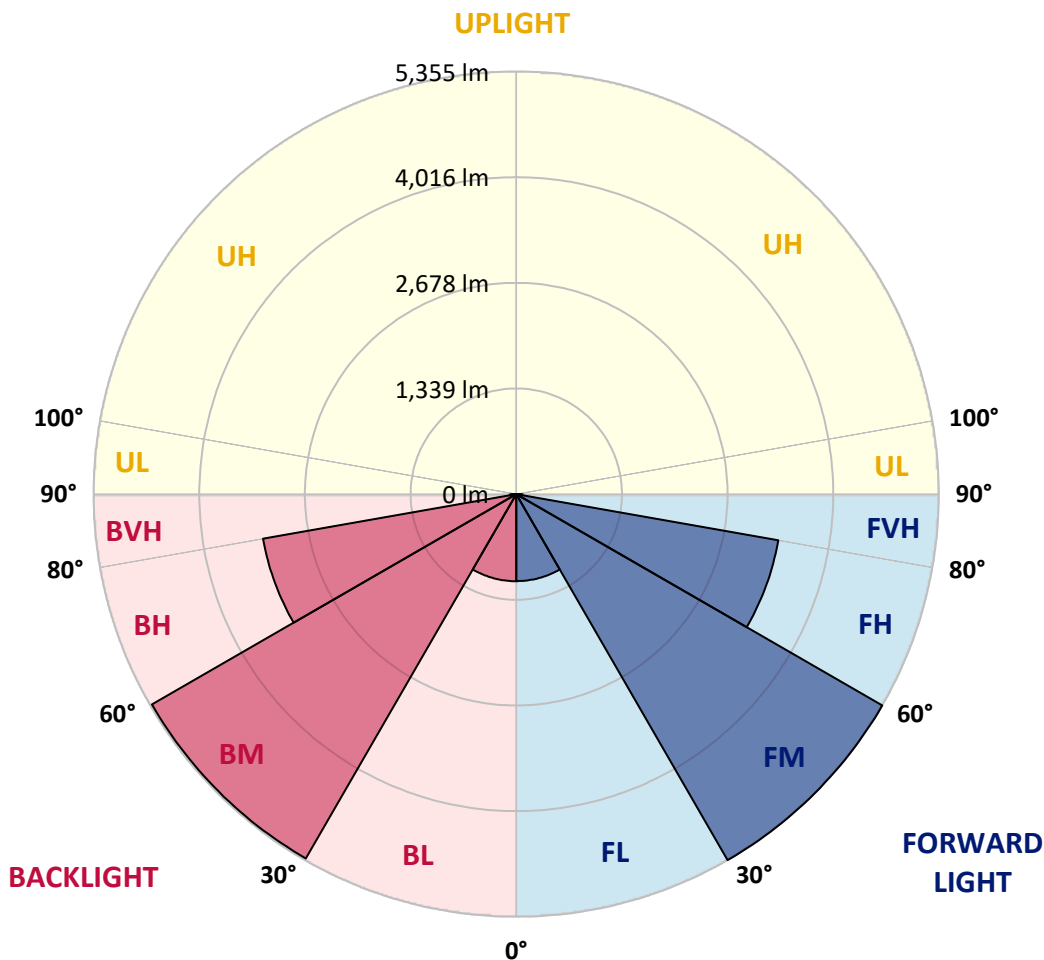


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1102.1 | 5.6 | | | |
| FM (30°-60°) | 5355.1 | 27.2 | | | |
| FH (60°-80°) | 3371.9 | 17.1 | | | G2/5000 |
| FVH (80°-90°) | 77.9 | 0.4 | | | G1/100 |
| BL (0°-30°) | 1103.3 | 5.6 | B3/2500 | | |
| BM (30°-60°) | 5331.2 | 27.1 | B4/8500 | | |
| BH (60°-80°) | 3258.0 | 16.6 | B4/5000 | | G4/5000 |
| BVH (80°-90°) | 74.6 | 0.4 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2014.6 | 2014.6 | 2014.6 | 2014.6 | 2014.6 | 2014.6 | 2014.6 | 2014.6 | 2014.6 | 2014.6 | 2014.6 |
| 2.5° | 2001.9 | 2001.9 | 1999.8 | 2010.4 | 2021.0 | 2025.2 | 2033.7 | 2035.8 | 2048.5 | 2037.9 | 2059.1 |
| 5° | 1995.5 | 1993.4 | 2010.4 | 2035.8 | 2035.8 | 2063.4 | 2080.4 | 2103.7 | 2110.0 | 2122.8 | 2127.0 |
| 7.5° | 2040.1 | 2035.8 | 2027.3 | 2054.9 | 2078.2 | 2120.6 | 2144.0 | 2184.3 | 2199.1 | 2216.1 | 2235.2 |
| 10° | 2067.6 | 2067.6 | 2059.1 | 2107.9 | 2129.1 | 2186.4 | 2237.3 | 2277.6 | 2334.8 | 2353.9 | 2356.0 |
| 12.5° | 2071.9 | 2078.2 | 2103.7 | 2167.3 | 2226.7 | 2300.9 | 2339.1 | 2415.4 | 2472.7 | 2508.7 | 2521.5 |
| 15° | 2135.5 | 2122.8 | 2150.3 | 2237.3 | 2324.2 | 2390.0 | 2457.8 | 2513.0 | 2595.7 | 2642.3 | 2672.0 |
| 17.5° | 2192.7 | 2180.0 | 2230.9 | 2334.8 | 2423.9 | 2525.7 | 2585.1 | 2644.4 | 2703.8 | 2746.2 | 2748.4 |
| 20° | 2283.9 | 2294.5 | 2339.1 | 2451.5 | 2568.1 | 2657.2 | 2725.0 | 2735.6 | 2765.3 | 2826.8 | 2816.2 |
| 22.5° | 2396.3 | 2387.8 | 2481.2 | 2604.2 | 2731.4 | 2805.6 | 2843.8 | 2816.2 | 2801.4 | 2867.1 | 2882.0 |
| 25° | 2508.7 | 2534.2 | 2619.0 | 2733.5 | 2886.2 | 2985.9 | 2996.5 | 2920.1 | 2865.0 | 2888.3 | 2882.0 |
| 27.5° | 2680.5 | 2684.7 | 2773.8 | 2909.5 | 3064.3 | 3151.3 | 3144.9 | 3036.8 | 2930.7 | 2932.9 | 2937.1 |
| 30° | 2901.0 | 2879.8 | 2977.4 | 3100.4 | 3253.1 | 3331.5 | 3342.1 | 3187.3 | 3045.3 | 3002.8 | 3013.4 |
| 32.5° | 3113.1 | 3138.6 | 3223.4 | 3363.3 | 3475.7 | 3520.3 | 3496.9 | 3359.1 | 3174.6 | 3117.4 | 3123.7 |
| 35° | 3384.6 | 3380.3 | 3496.9 | 3615.7 | 3700.5 | 3709.0 | 3689.9 | 3488.5 | 3314.6 | 3240.3 | 3210.7 |
| 37.5° | 3675.1 | 3713.3 | 3789.6 | 3887.1 | 3976.2 | 3980.5 | 3876.5 | 3715.4 | 3501.2 | 3378.2 | 3414.2 |
| 40° | 3999.5 | 4042.0 | 4097.1 | 4239.2 | 4304.9 | 4237.1 | 4131.0 | 3912.6 | 3689.9 | 3581.8 | 3598.7 |
| 42.5° | 4285.8 | 4304.9 | 4417.3 | 4584.8 | 4616.7 | 4587.0 | 4430.0 | 4165.0 | 3906.2 | 3787.5 | 3796.0 |
| 45° | 4548.8 | 4574.2 | 4720.6 | 4871.1 | 4945.4 | 4894.5 | 4712.1 | 4459.7 | 4158.6 | 4056.8 | 4016.5 |
| 47.5° | 4790.5 | 4841.4 | 4983.5 | 5138.3 | 5252.8 | 5257.1 | 5032.3 | 4726.9 | 4408.8 | 4275.2 | 4273.1 |
| 50° | 4953.8 | 5028.1 | 5168.0 | 5344.0 | 5511.6 | 5577.3 | 5352.5 | 5023.8 | 4682.4 | 4540.3 | 4525.5 |
| 52.5° | 5042.9 | 5119.2 | 5259.2 | 5532.8 | 5719.4 | 5821.2 | 5715.1 | 5301.6 | 5002.6 | 4854.2 | 4830.8 |
| 55° | 4934.7 | 4985.6 | 5214.7 | 5598.5 | 5886.9 | 6054.4 | 5984.5 | 5685.5 | 5320.7 | 5199.8 | 5221.0 |
| 57.5° | 4474.6 | 4580.6 | 4862.6 | 5341.9 | 5882.7 | 6294.1 | 6287.7 | 6048.1 | 5687.6 | 5573.1 | 5577.3 |
| 60° | 3683.6 | 3772.6 | 4120.4 | 4790.5 | 5645.2 | 6391.6 | 6616.4 | 6400.1 | 6099.0 | 5965.4 | 5961.1 |
| 62.5° | 2599.9 | 2712.3 | 3115.2 | 3846.9 | 4945.4 | 6255.9 | 6993.9 | 6843.3 | 6501.9 | 6404.4 | 6440.4 |
| 65° | 1454.8 | 1522.6 | 1895.9 | 2557.5 | 3768.4 | 5509.4 | 7061.8 | 7303.5 | 6911.2 | 6762.7 | 6769.1 |
| 67.5° | 778.3 | 803.7 | 977.6 | 1342.4 | 2305.1 | 4247.7 | 6376.8 | 7568.6 | 7354.4 | 7097.8 | 7057.5 |
| 70° | 534.4 | 542.9 | 587.4 | 687.1 | 1090.0 | 2540.5 | 4809.6 | 7095.7 | 7687.3 | 7337.4 | 7405.3 |
| 72.5° | 451.7 | 447.5 | 458.1 | 468.7 | 570.5 | 1136.7 | 2822.6 | 5460.7 | 7256.9 | 7125.4 | 7099.9 |
| 75° | 392.3 | 390.2 | 394.4 | 383.8 | 396.6 | 500.5 | 1249.1 | 3403.6 | 5312.2 | 5929.3 | 6024.8 |
| 77.5° | 324.5 | 326.6 | 328.7 | 318.1 | 313.9 | 330.8 | 502.6 | 1495.1 | 2614.8 | 2886.2 | 3113.1 |
| 80° | 246.0 | 250.2 | 267.2 | 256.6 | 239.6 | 241.8 | 296.9 | 500.5 | 750.7 | 680.7 | 701.9 |
| 82.5° | 167.5 | 169.7 | 205.7 | 193.0 | 180.3 | 163.3 | 190.9 | 258.7 | 292.6 | 222.7 | 195.1 |
| 85° | 118.8 | 116.6 | 133.6 | 123.0 | 114.5 | 82.7 | 114.5 | 146.3 | 176.0 | 110.3 | 99.7 |
| 87.5° | 27.6 | 27.6 | 55.1 | 44.5 | 42.4 | 33.9 | 44.5 | 57.3 | 76.3 | 48.8 | 44.5 |
| 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):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2014.6 | 2014.6 | 2014.6 | 2014.6 | 2014.6 | 2014.6 | 2014.6 | 2014.6 | 2014.6 | 2014.6 |
| 2.5° | 2052.8 | 2033.7 | 2033.7 | 2029.5 | 2012.5 | 2008.3 | 1993.4 | 1997.7 | 1987.0 | 1976.4 |
| 5° | 2124.9 | 2099.4 | 2099.4 | 2063.4 | 2029.5 | 2025.2 | 2008.3 | 2008.3 | 1991.3 | 1995.5 |
| 7.5° | 2224.6 | 2201.2 | 2163.1 | 2131.3 | 2084.6 | 2065.5 | 2033.7 | 2029.5 | 2025.2 | 2016.7 |
| 10° | 2343.3 | 2313.6 | 2275.5 | 2209.7 | 2171.5 | 2135.5 | 2103.7 | 2059.1 | 2048.5 | 2050.7 |
| 12.5° | 2504.5 | 2457.8 | 2375.1 | 2317.9 | 2269.1 | 2222.4 | 2175.8 | 2110.0 | 2095.2 | 2101.6 |
| 15° | 2619.0 | 2559.6 | 2476.9 | 2455.7 | 2390.0 | 2332.7 | 2256.4 | 2182.1 | 2156.7 | 2150.3 |
| 17.5° | 2712.3 | 2663.5 | 2614.8 | 2582.9 | 2529.9 | 2460.0 | 2353.9 | 2269.1 | 2211.8 | 2205.5 |
| 20° | 2788.7 | 2725.0 | 2714.4 | 2733.5 | 2667.8 | 2621.1 | 2491.8 | 2387.8 | 2311.5 | 2279.7 |
| 22.5° | 2835.3 | 2795.0 | 2824.7 | 2841.7 | 2837.4 | 2759.0 | 2625.4 | 2504.5 | 2409.1 | 2379.4 |
| 25° | 2886.2 | 2839.5 | 2945.6 | 3002.8 | 3017.7 | 2888.3 | 2784.4 | 2625.4 | 2532.1 | 2513.0 |
| 27.5° | 2911.6 | 2928.6 | 3051.6 | 3172.5 | 3161.9 | 3062.2 | 2922.3 | 2780.2 | 2705.9 | 2672.0 |
| 30° | 2985.9 | 3013.4 | 3200.1 | 3335.8 | 3337.9 | 3240.3 | 3134.3 | 2973.1 | 2890.4 | 2875.6 |
| 32.5° | 3119.5 | 3153.4 | 3352.7 | 3496.9 | 3522.4 | 3448.2 | 3342.1 | 3242.5 | 3157.6 | 3123.7 |
| 35° | 3221.3 | 3308.2 | 3533.0 | 3664.5 | 3732.3 | 3687.8 | 3628.4 | 3524.5 | 3435.4 | 3405.8 |
| 37.5° | 3367.6 | 3488.5 | 3704.8 | 3882.9 | 3959.2 | 3955.0 | 3910.5 | 3798.1 | 3723.9 | 3698.4 |
| 40° | 3577.5 | 3698.4 | 3895.6 | 4131.0 | 4273.1 | 4266.7 | 4241.3 | 4154.3 | 4044.1 | 4031.4 |
| 42.5° | 3800.2 | 3899.9 | 4156.5 | 4425.8 | 4629.4 | 4608.2 | 4540.3 | 4438.5 | 4362.2 | 4345.2 |
| 45° | 4016.5 | 4171.3 | 4408.8 | 4754.5 | 4907.2 | 4960.2 | 4879.6 | 4705.7 | 4618.8 | 4608.2 |
| 47.5° | 4287.9 | 4410.9 | 4707.8 | 5017.5 | 5244.4 | 5252.8 | 5115.0 | 4953.8 | 4794.8 | 4828.7 |
| 50° | 4529.7 | 4693.0 | 4994.1 | 5333.4 | 5604.9 | 5507.3 | 5331.3 | 5129.8 | 5015.3 | 4970.8 |
| 52.5° | 4788.4 | 4987.8 | 5337.7 | 5683.3 | 5833.9 | 5736.4 | 5450.1 | 5225.3 | 5051.4 | 5032.3 |
| 55° | 5165.9 | 5269.8 | 5727.9 | 5993.0 | 6041.7 | 5836.0 | 5414.0 | 5095.9 | 4871.1 | 4816.0 |
| 57.5° | 5549.7 | 5670.6 | 6071.4 | 6300.4 | 6249.5 | 5780.9 | 5180.7 | 4688.8 | 4394.0 | 4315.5 |
| 60° | 5937.8 | 6086.3 | 6423.4 | 6633.4 | 6370.4 | 5401.3 | 4521.2 | 3887.1 | 3543.6 | 3473.6 |
| 62.5° | 6370.4 | 6563.4 | 6864.5 | 6938.8 | 6012.0 | 4650.6 | 3588.1 | 2805.6 | 2457.8 | 2341.2 |
| 65° | 6754.3 | 6951.5 | 7322.6 | 6875.1 | 5250.7 | 3469.4 | 2320.0 | 1603.2 | 1346.6 | 1253.3 |
| 67.5° | 7070.2 | 7292.9 | 7475.3 | 6084.1 | 3844.7 | 2031.6 | 1208.8 | 844.0 | 748.6 | 714.7 |
| 70° | 7320.5 | 7691.6 | 6839.1 | 4472.4 | 2197.0 | 990.3 | 653.2 | 555.6 | 542.9 | 534.4 |
| 72.5° | 7102.0 | 7053.3 | 5106.5 | 2580.8 | 962.8 | 545.0 | 472.9 | 458.1 | 455.9 | 458.1 |
| 75° | 5808.5 | 5180.7 | 3053.7 | 1121.8 | 483.5 | 394.4 | 392.3 | 386.0 | 396.6 | 396.6 |
| 77.5° | 2818.3 | 2464.2 | 1276.6 | 481.4 | 318.1 | 309.6 | 320.2 | 320.2 | 320.2 | 320.2 |
| 80° | 653.2 | 723.1 | 455.9 | 292.6 | 231.2 | 231.2 | 254.5 | 256.6 | 246.0 | 241.8 |
| 82.5° | 222.7 | 296.9 | 250.2 | 184.5 | 152.7 | 171.8 | 193.0 | 197.2 | 163.3 | 165.4 |
| 85° | 110.3 | 173.9 | 135.7 | 106.0 | 78.5 | 106.0 | 125.1 | 131.5 | 112.4 | 108.2 |
| 87.5° | 50.9 | 76.3 | 50.9 | 36.1 | 27.6 | 38.2 | 36.1 | 29.7 | 17.0 | 17.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)