

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: P457090

Luminaire Tested: **GALN-SA8B-827-U-T4W-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P457090
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-27)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA8B-827-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24435 lumens
Efficiency: N/A
Efficacy: 75.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

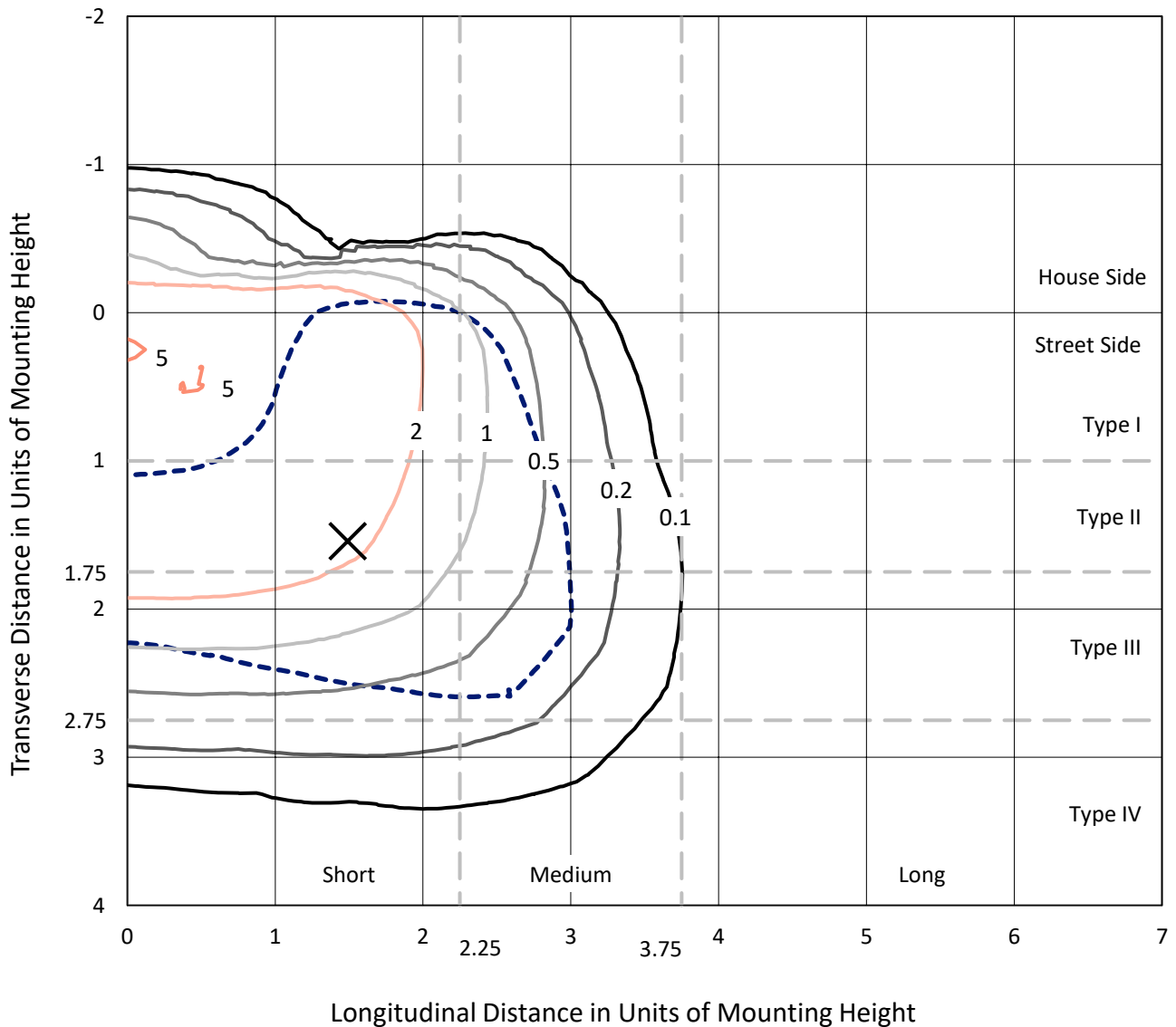
Input Watts (W): 325
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

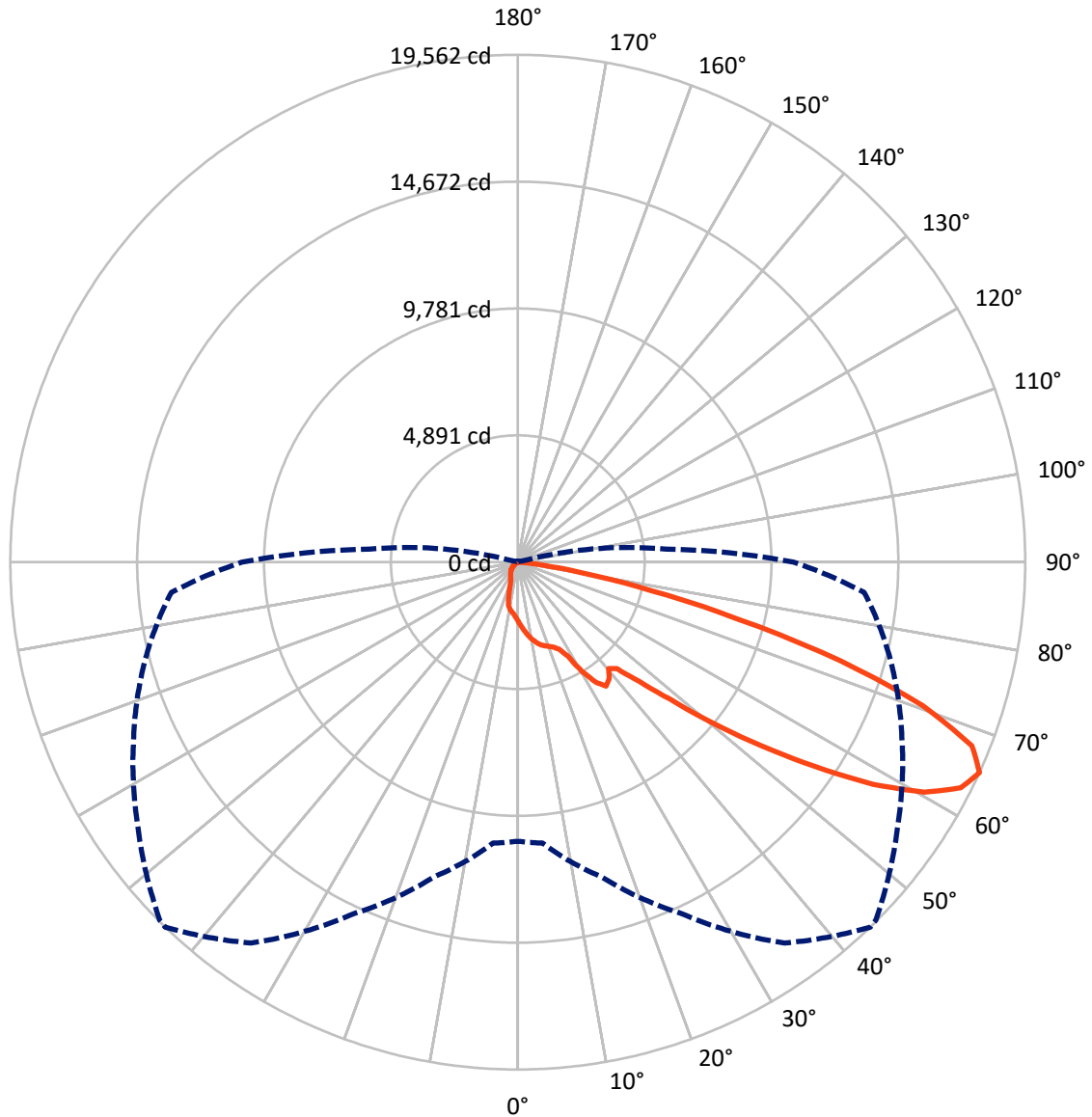
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2251.3 | 0.0 | 2251.3 |
| | % Fixture | 9.2 | 0.0 | 9.2 |
| Street Side | Lumens | 22183.7 | 0.0 | 22183.7 |
| | % Fixture | 90.8 | 0.0 | 90.8 |
| Total | Lumens | 24435.0 | 0.0 | 24435.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 226.2 | 0.9 |
| 10°-20° | 680.8 | 2.8 |
| 20°-30° | 1154.3 | 4.7 |
| 30°-40° | 1919.3 | 7.9 |
| 40°-50° | 3351.1 | 13.7 |
| 50°-60° | 6546.8 | 26.8 |
| 60°-70° | 7595.8 | 31.1 |
| 70°-80° | 2766.0 | 11.3 |
| 80°-90° | 194.9 | 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° | 24435.0 | 100.0 |
| 0°-180° | 24435.0 | 100.0 |

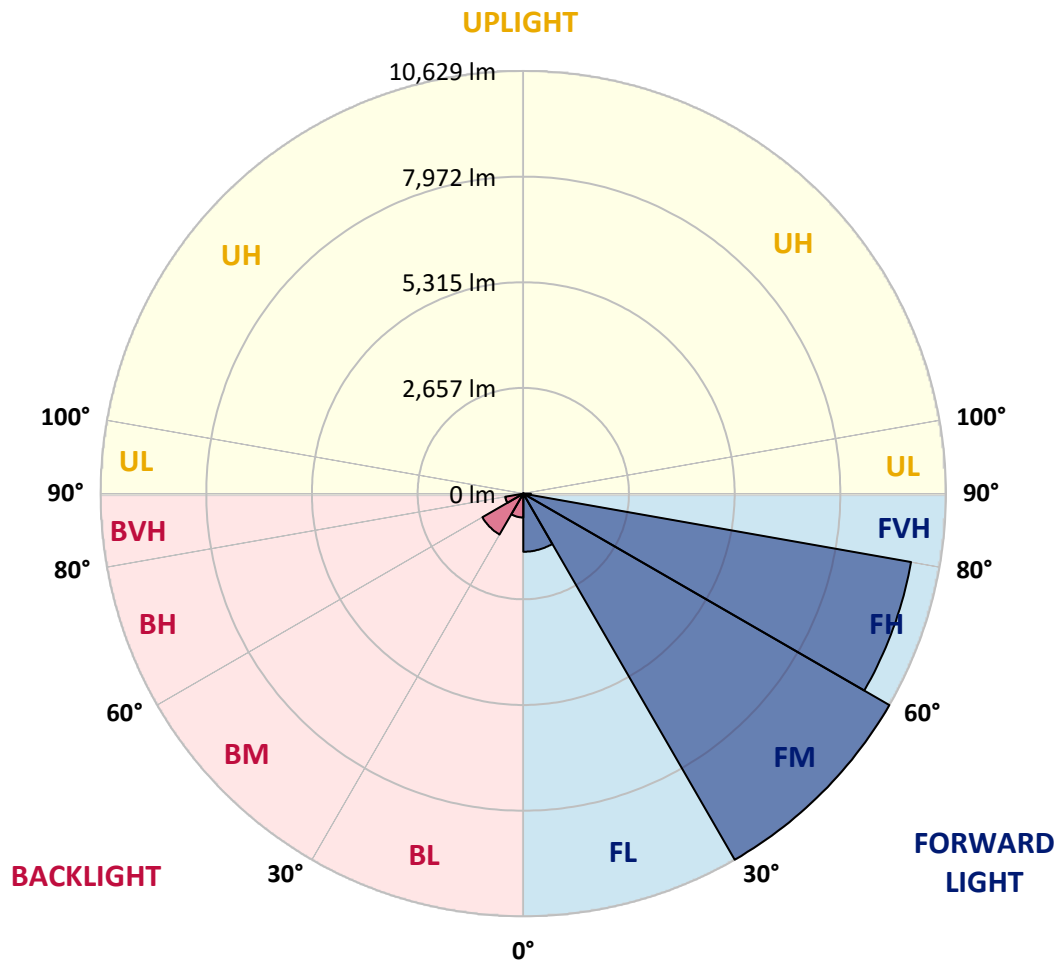


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1461.4 | 6.0 | | | |
| FM (30°-60°) | 10629.3 | 43.5 | | | |
| FH (60°-80°) | 9900.7 | 40.5 | | | G4/12000 |
| FVH (80°-90°) | 192.2 | 0.8 | | | G2/225 |
| BL (0°-30°) | 599.8 | 2.5 | B2/1000 | | |
| BM (30°-60°) | 1187.8 | 4.9 | B2/2500 | | |
| BH (60°-80°) | 461.0 | 1.9 | B1/500 | | G1/500 |
| BVH (80°-90°) | 2.6 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G4
 Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2274.2 | 2274.2 | 2274.2 | 2274.2 | 2274.2 | 2274.2 | 2274.2 | 2274.2 | 2274.2 | 2274.2 | 2274.2 |
| 2.5° | 2559.8 | 2548.6 | 2543.0 | 2513.2 | 2490.8 | 2462.8 | 2462.8 | 2427.3 | 2386.2 | 2341.4 | 2300.3 |
| 5° | 2845.5 | 2826.8 | 2802.6 | 2776.4 | 2724.1 | 2649.5 | 2649.5 | 2574.8 | 2488.9 | 2412.3 | 2328.3 |
| 7.5° | 3120.0 | 3103.2 | 3062.1 | 3011.7 | 2925.8 | 2847.4 | 2841.8 | 2733.5 | 2630.8 | 2515.0 | 2395.5 |
| 10° | 3360.8 | 3347.8 | 3312.3 | 3215.2 | 3125.6 | 3022.9 | 3021.0 | 2899.7 | 2780.2 | 2638.3 | 2490.8 |
| 12.5° | 3528.9 | 3530.8 | 3484.1 | 3390.7 | 3275.0 | 3177.9 | 3170.4 | 3050.9 | 2925.8 | 2772.7 | 2591.6 |
| 15° | 3648.4 | 3648.4 | 3599.8 | 3495.3 | 3390.7 | 3304.8 | 3297.4 | 3192.8 | 3064.0 | 2897.8 | 2701.7 |
| 17.5° | 3682.0 | 3693.2 | 3640.9 | 3547.6 | 3463.5 | 3388.8 | 3387.0 | 3299.2 | 3196.5 | 3036.0 | 2813.8 |
| 20° | 3668.9 | 3680.1 | 3639.0 | 3566.2 | 3508.3 | 3465.4 | 3459.8 | 3424.3 | 3329.1 | 3177.9 | 2933.3 |
| 22.5° | 3640.9 | 3652.1 | 3622.2 | 3579.3 | 3551.3 | 3564.4 | 3555.0 | 3584.9 | 3534.5 | 3351.5 | 3075.2 |
| 25° | 3646.5 | 3657.7 | 3635.3 | 3611.0 | 3635.3 | 3715.6 | 3739.9 | 3868.7 | 3823.9 | 3571.8 | 3228.3 |
| 27.5° | 3822.0 | 3844.4 | 3812.7 | 3823.9 | 3909.8 | 4096.5 | 4143.2 | 4365.4 | 4167.4 | 3851.9 | 3467.3 |
| 30° | 4212.3 | 4197.3 | 4137.6 | 4191.7 | 4490.5 | 4886.3 | 4873.2 | 4837.7 | 4527.8 | 4174.9 | 3751.1 |
| 32.5° | 4567.0 | 4553.9 | 4550.2 | 4783.6 | 5325.1 | 5517.4 | 5508.0 | 5164.5 | 4850.8 | 4544.6 | 4031.1 |
| 35° | 4710.8 | 4660.4 | 4649.2 | 5214.9 | 6120.5 | 5866.5 | 5808.7 | 5298.9 | 5242.9 | 4947.9 | 4316.8 |
| 37.5° | 5144.0 | 5108.5 | 4934.8 | 5285.9 | 5803.1 | 5719.0 | 5674.2 | 5530.5 | 5661.2 | 5304.5 | 4639.8 |
| 40° | 6036.4 | 5937.5 | 5780.6 | 5437.1 | 5353.1 | 5388.6 | 5433.4 | 5827.3 | 6155.9 | 5791.9 | 5071.1 |
| 42.5° | 7145.5 | 7123.1 | 6831.8 | 6191.4 | 5562.2 | 5610.7 | 5668.6 | 6447.2 | 6867.3 | 6525.6 | 5775.0 |
| 45° | 8476.8 | 8508.5 | 8088.4 | 7332.2 | 6507.0 | 6548.0 | 6632.1 | 7362.1 | 7830.8 | 7666.5 | 6882.3 |
| 47.5° | 9686.7 | 9662.4 | 9520.5 | 8734.5 | 7972.7 | 7881.2 | 8017.5 | 8536.5 | 9163.9 | 9190.0 | 8256.5 |
| 50° | 10904.1 | 11032.9 | 10821.9 | 10513.8 | 9948.1 | 9755.8 | 9705.4 | 9959.3 | 10915.3 | 10790.2 | 9907.0 |
| 52.5° | 12653.6 | 12720.8 | 12325.0 | 12246.5 | 12375.4 | 11751.7 | 11701.3 | 11762.9 | 12618.1 | 12188.7 | 11143.1 |
| 55° | 13753.3 | 13714.1 | 13566.6 | 14179.0 | 14688.7 | 13910.2 | 13846.7 | 13598.3 | 14031.5 | 13176.4 | 12332.4 |
| 57.5° | 14100.6 | 14156.6 | 14500.2 | 15607.4 | 16813.5 | 16152.6 | 16036.8 | 15331.0 | 15051.0 | 14096.9 | 13426.6 |
| 60° | 13945.6 | 14048.3 | 14789.6 | 16436.4 | 18109.3 | 18010.4 | 17911.4 | 16725.8 | 15782.9 | 14866.1 | 14194.0 |
| 62.5° | 12842.2 | 12985.9 | 14171.6 | 16288.9 | 18548.1 | 19166.1 | 19042.9 | 17595.9 | 16270.2 | 15239.6 | 14328.4 |
| 65° | 10762.2 | 10868.6 | 12571.4 | 14950.1 | 17924.5 | 19562.0 | 19517.2 | 17868.5 | 16346.8 | 14897.9 | 13407.9 |
| 67.5° | 7672.1 | 8034.3 | 9612.0 | 12599.4 | 16079.8 | 18886.1 | 18962.6 | 17541.7 | 15627.9 | 13421.0 | 11103.8 |
| 70° | 4822.8 | 5069.3 | 6200.8 | 9020.1 | 12890.7 | 16569.0 | 16821.0 | 16046.2 | 13562.9 | 10461.6 | 7433.1 |
| 72.5° | 2300.3 | 2483.3 | 3289.9 | 5709.7 | 9098.5 | 13036.3 | 13236.1 | 13172.6 | 10487.7 | 6591.0 | 3835.1 |
| 75° | 1025.1 | 1094.1 | 1570.3 | 2914.6 | 5874.0 | 8762.5 | 9279.7 | 9365.5 | 6553.6 | 3224.5 | 1491.8 |
| 77.5° | 522.8 | 524.7 | 735.7 | 1411.6 | 2933.3 | 5228.0 | 5330.7 | 5631.3 | 3553.2 | 1420.9 | 519.1 |
| 80° | 278.2 | 296.9 | 390.2 | 666.6 | 1521.7 | 2574.8 | 2561.7 | 2815.6 | 1575.9 | 696.4 | 173.6 |
| 82.5° | 125.1 | 138.2 | 220.3 | 349.2 | 743.1 | 976.5 | 1053.1 | 1152.0 | 675.9 | 444.4 | 76.6 |
| 85° | 37.3 | 44.8 | 108.3 | 175.5 | 268.9 | 281.9 | 315.5 | 407.0 | 382.8 | 315.5 | 39.2 |
| 87.5° | 5.6 | 5.6 | 44.8 | 48.5 | 39.2 | 50.4 | 52.3 | 57.9 | 123.2 | 115.8 | 20.5 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2274.2 | 2274.2 | 2274.2 | 2274.2 | 2274.2 | 2274.2 | 2274.2 | 2274.2 | 2274.2 | 2274.2 | 2274.2 |
| 2.5° | 2277.9 | 2264.8 | 2218.2 | 2178.9 | 2145.3 | 2124.8 | 2100.5 | 2085.6 | 2078.1 | 2072.5 | 2074.4 |
| 5° | 2287.2 | 2255.5 | 2175.2 | 2111.7 | 2063.2 | 2010.9 | 1975.4 | 1954.9 | 1945.6 | 1930.6 | 1930.6 |
| 7.5° | 2339.5 | 2289.1 | 2177.1 | 2080.0 | 1996.0 | 1925.0 | 1857.8 | 1833.5 | 1816.7 | 1813.0 | 1809.3 |
| 10° | 2414.2 | 2350.7 | 2197.6 | 2063.2 | 1943.7 | 1846.6 | 1751.4 | 1667.4 | 1602.0 | 1562.8 | 1557.2 |
| 12.5° | 2507.6 | 2416.1 | 2229.4 | 2052.0 | 1898.9 | 1727.1 | 1475.0 | 1305.1 | 1191.2 | 1155.8 | 1161.4 |
| 15° | 2593.4 | 2494.5 | 2261.1 | 2042.6 | 1816.7 | 1432.1 | 1146.4 | 952.2 | 894.4 | 888.8 | 890.6 |
| 17.5° | 2696.1 | 2578.5 | 2298.4 | 2029.6 | 1590.8 | 1094.1 | 851.4 | 799.1 | 810.3 | 829.0 | 827.1 |
| 20° | 2802.6 | 2668.1 | 2343.3 | 1951.2 | 1269.7 | 823.4 | 752.5 | 758.1 | 774.9 | 791.7 | 795.4 |
| 22.5° | 2916.5 | 2770.8 | 2395.5 | 1762.6 | 969.0 | 717.0 | 713.2 | 720.7 | 737.5 | 756.2 | 759.9 |
| 25° | 3073.3 | 2899.7 | 2434.7 | 1516.1 | 733.8 | 662.8 | 670.3 | 683.4 | 698.3 | 718.8 | 722.6 |
| 27.5° | 3275.0 | 3073.3 | 2455.3 | 1195.0 | 634.8 | 614.3 | 616.2 | 634.8 | 653.5 | 672.2 | 672.2 |
| 30° | 3536.4 | 3280.6 | 2414.2 | 903.7 | 586.3 | 567.6 | 560.1 | 571.3 | 595.6 | 614.3 | 616.2 |
| 32.5° | 3769.7 | 3476.6 | 2305.9 | 690.8 | 550.8 | 524.7 | 506.0 | 507.9 | 517.2 | 528.4 | 530.3 |
| 35° | 4003.1 | 3667.1 | 2121.1 | 580.7 | 513.5 | 483.6 | 455.6 | 440.6 | 433.2 | 427.6 | 433.2 |
| 37.5° | 4301.9 | 3904.2 | 1874.6 | 528.4 | 481.7 | 444.4 | 405.2 | 373.4 | 347.3 | 330.5 | 334.2 |
| 40° | 4686.5 | 4232.8 | 1583.3 | 494.8 | 451.8 | 407.0 | 354.8 | 313.7 | 268.9 | 253.9 | 246.5 |
| 42.5° | 5321.3 | 4731.3 | 1277.1 | 466.8 | 422.0 | 367.8 | 302.5 | 246.5 | 205.4 | 190.4 | 194.2 |
| 45° | 6324.0 | 5360.5 | 984.0 | 436.9 | 392.1 | 324.9 | 253.9 | 194.2 | 160.6 | 153.1 | 156.8 |
| 47.5° | 7653.4 | 6174.6 | 758.1 | 403.3 | 354.8 | 278.2 | 199.8 | 153.1 | 132.6 | 130.7 | 128.8 |
| 50° | 8904.4 | 6932.7 | 633.0 | 366.0 | 309.9 | 231.5 | 164.3 | 128.8 | 115.8 | 113.9 | 113.9 |
| 52.5° | 10035.8 | 7476.0 | 515.3 | 323.0 | 261.4 | 190.4 | 138.2 | 113.9 | 102.7 | 97.1 | 97.1 |
| 55° | 11042.2 | 7830.8 | 418.2 | 270.7 | 205.4 | 151.2 | 119.5 | 102.7 | 89.6 | 82.2 | 80.3 |
| 57.5° | 11802.2 | 7873.7 | 313.7 | 216.6 | 153.1 | 117.6 | 102.7 | 89.6 | 74.7 | 65.3 | 61.6 |
| 60° | 12127.0 | 7502.1 | 231.5 | 164.3 | 113.9 | 93.4 | 82.2 | 72.8 | 56.0 | 46.7 | 44.8 |
| 62.5° | 11800.3 | 6779.6 | 171.8 | 125.1 | 87.8 | 69.1 | 57.9 | 54.1 | 39.2 | 28.0 | 26.1 |
| 65° | 10629.6 | 5735.8 | 136.3 | 95.2 | 65.3 | 50.4 | 37.3 | 35.5 | 24.3 | 13.1 | 11.2 |
| 67.5° | 8516.0 | 4492.3 | 108.3 | 71.0 | 46.7 | 33.6 | 24.3 | 22.4 | 13.1 | 3.7 | 3.7 |
| 70° | 5537.9 | 2871.7 | 87.8 | 52.3 | 29.9 | 22.4 | 14.9 | 11.2 | 7.5 | 1.9 | 0.0 |
| 72.5° | 2739.1 | 1342.5 | 71.0 | 41.1 | 20.5 | 11.2 | 5.6 | 3.7 | 5.6 | 0.0 | 0.0 |
| 75° | 1062.4 | 478.0 | 52.3 | 28.0 | 11.2 | 5.6 | 3.7 | 0.0 | 1.9 | 0.0 | 0.0 |
| 77.5° | 352.9 | 158.7 | 31.7 | 14.9 | 7.5 | 3.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 130.7 | 61.6 | 16.8 | 9.3 | 3.7 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 52.3 | 24.3 | 11.2 | 7.5 | 3.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 26.1 | 14.9 | 7.5 | 5.6 | 3.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 18.7 | 11.2 | 7.5 | 5.6 | 3.7 | 1.9 | 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)