

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: P459387

Luminaire Tested: **GALN-SA8C-735-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459387
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA8C-735-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 3500K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53403 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

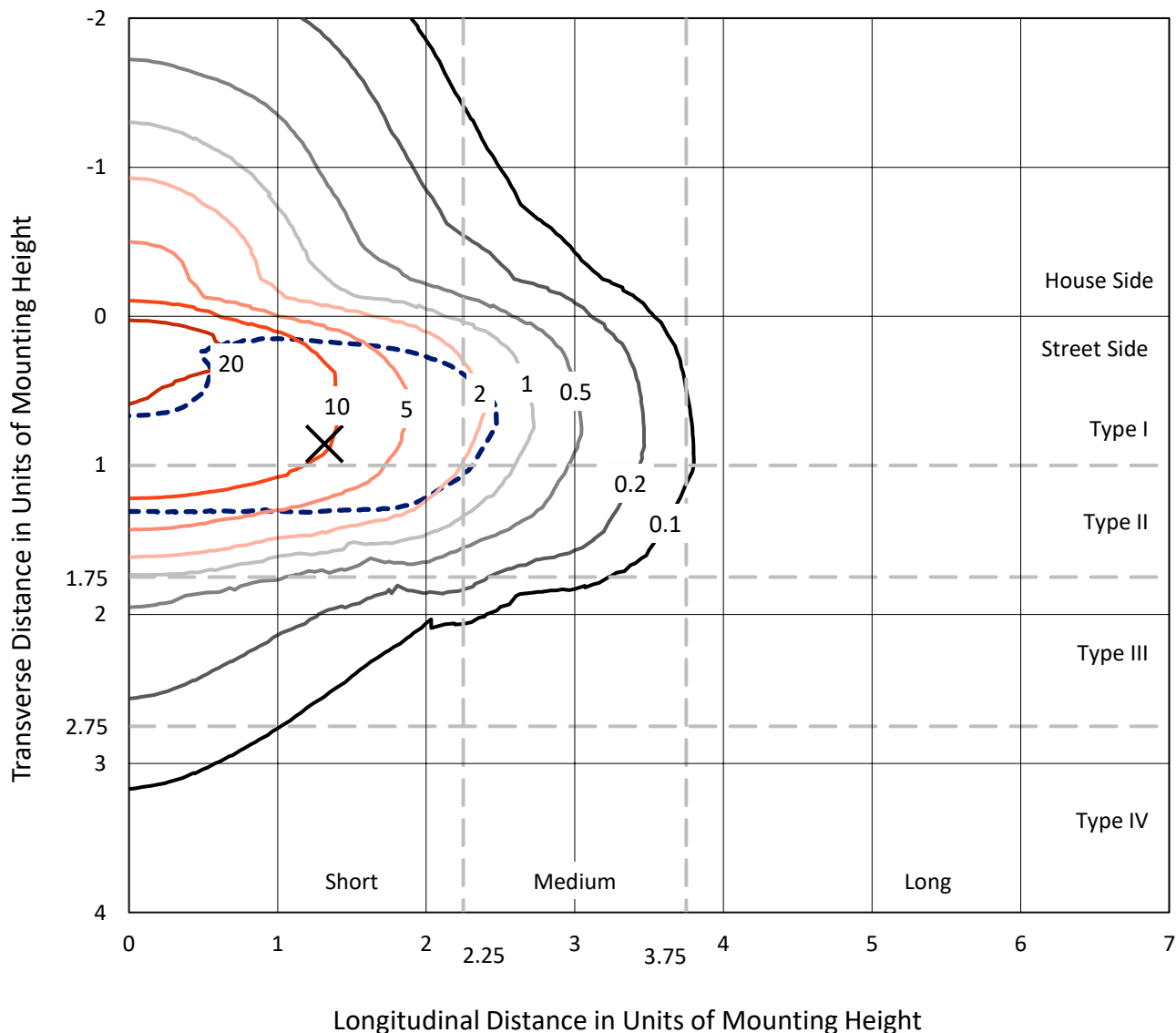
Input Watts (W): 429
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

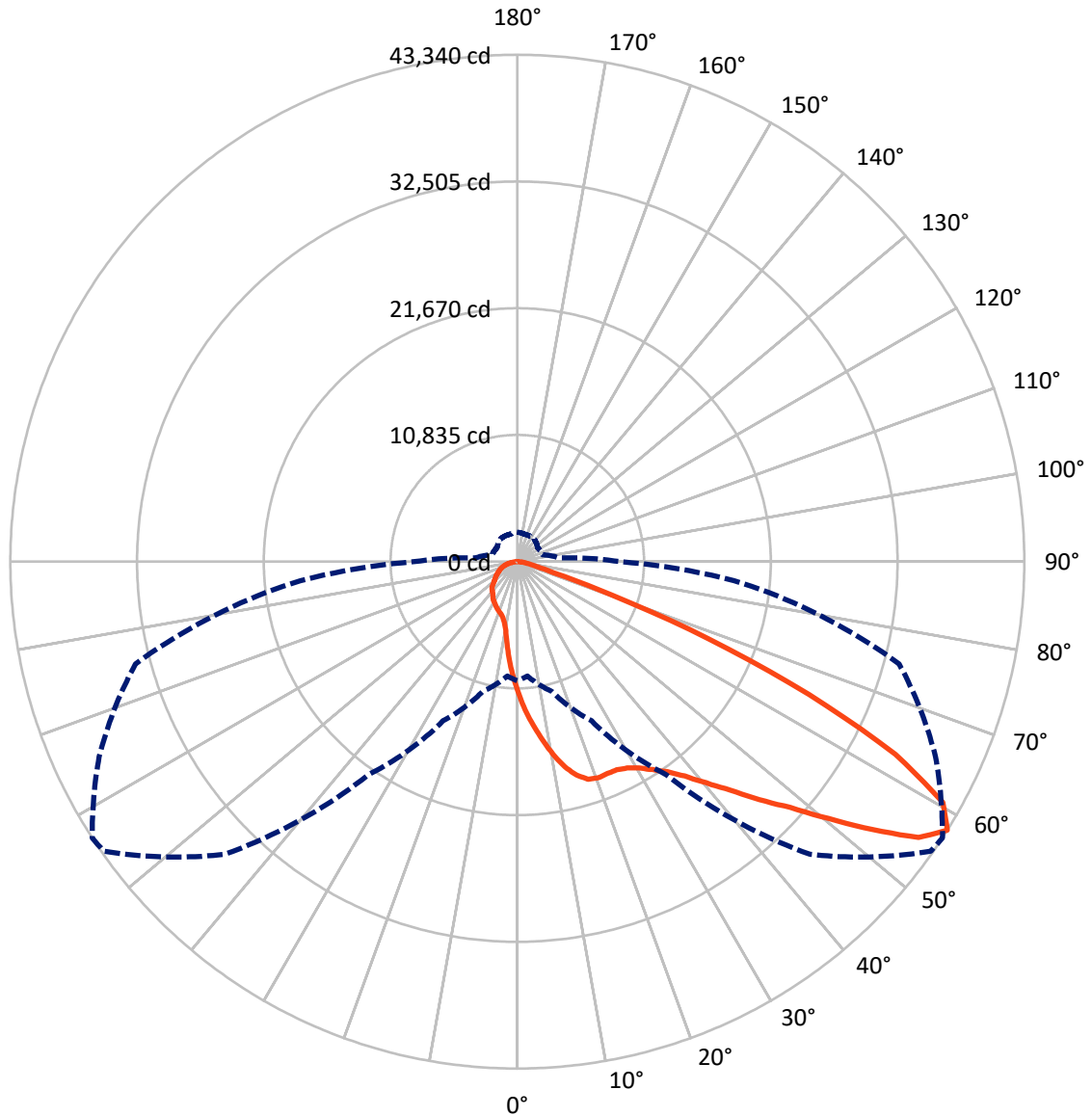
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 27.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 8121.1 | 0.0 | 8121.1 |
| | % Fixture | 15.2 | 0.0 | 15.2 |
| Street Side | Lumens | 45281.9 | 0.0 | 45281.9 |
| | % Fixture | 84.8 | 0.0 | 84.8 |
| Total | Lumens | 53403.0 | 0.0 | 53403.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1078.3 | 2.0 |
| 10°-20° | 3177.8 | 6.0 |
| 20°-30° | 5276.8 | 9.9 |
| 30°-40° | 7948.3 | 14.9 |
| 40°-50° | 11933.7 | 22.3 |
| 50°-60° | 13376.2 | 25.0 |
| 60°-70° | 7828.4 | 14.7 |
| 70°-80° | 2315.6 | 4.3 |
| 80°-90° | 468.0 | 0.9 |
| 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° | 53403.0 | 100.0 |
| 0°-180° | 53403.0 | 100.0 |

Coefficient of Utilization



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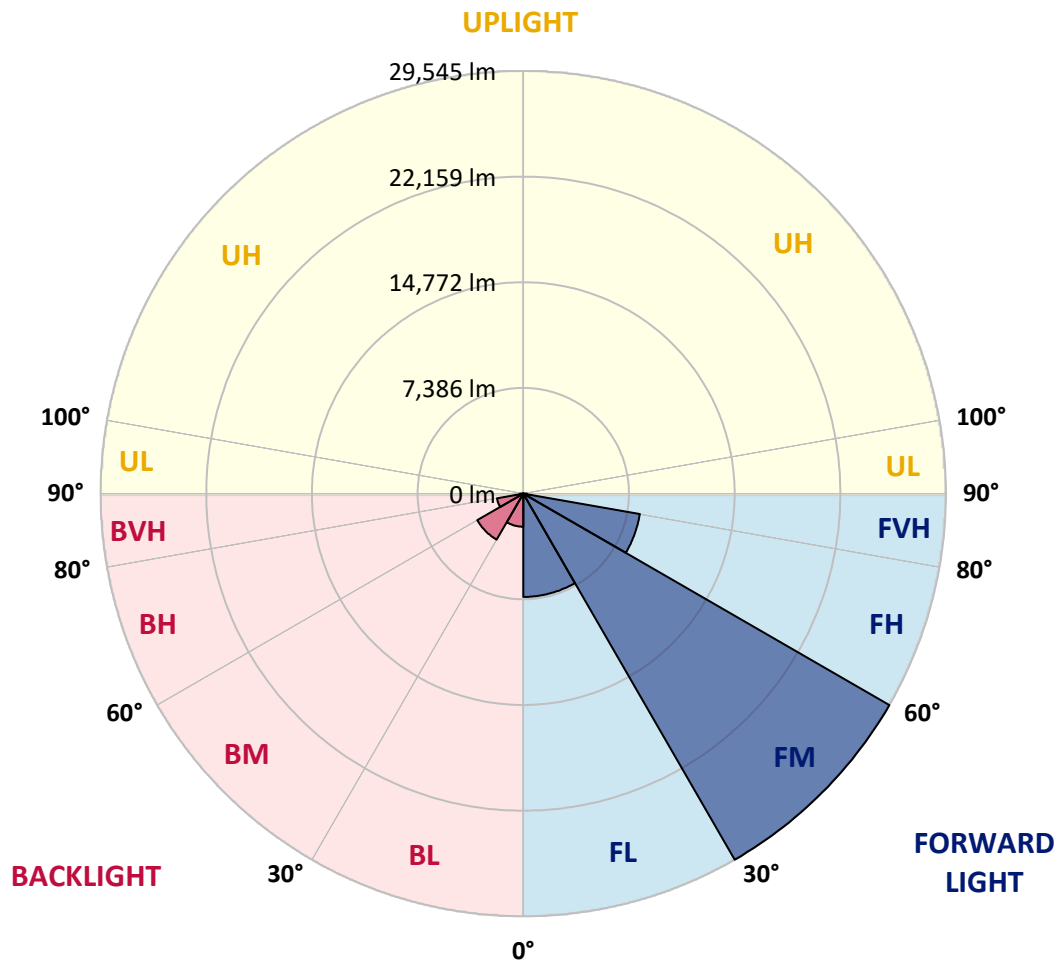
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 7218.9 | 13.5 | | | |
| FM | (30°-60°) | 29544.9 | 55.3 | | | |
| FH | (60°-80°) | 8275.3 | 15.5 | | | G4/12000 |
| FVH | (80°-90°) | 242.8 | 0.5 | | | G3/500 |
| BL | (0°-30°) | 2314.0 | 4.3 | B3/2500 | | |
| BM | (30°-60°) | 3713.3 | 7.0 | B3/5000 | | |
| BH | (60°-80°) | 1868.6 | 3.5 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 225.2 | 0.4 | | | G3/500 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 57° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 11219.4 | 11219.4 | 11219.4 | 11219.4 | 11219.4 | 11219.4 | 11219.4 | 11219.4 | 11219.4 | 11219.4 | 11219.4 |
| 2.5° | 13940.9 | 13788.9 | 13669.0 | 13563.8 | 13426.4 | 13055.1 | 12683.9 | 12678.1 | 12382.8 | 11926.8 | 11459.1 |
| 5° | 16212.2 | 16007.6 | 16033.9 | 15706.5 | 15379.1 | 14841.2 | 14054.9 | 14014.0 | 13385.5 | 12531.9 | 11663.7 |
| 7.5° | 17691.4 | 17694.3 | 17612.5 | 17425.4 | 17071.7 | 16460.7 | 15569.1 | 15367.4 | 14493.4 | 13198.4 | 11897.5 |
| 10° | 17615.4 | 17694.3 | 17831.7 | 17992.5 | 18100.6 | 17799.6 | 16986.9 | 16741.3 | 15604.2 | 14005.2 | 12157.7 |
| 12.5° | 16603.9 | 16726.7 | 16922.6 | 17326.0 | 17977.9 | 18474.8 | 18197.1 | 17998.3 | 16890.4 | 14809.1 | 12444.2 |
| 15° | 15972.5 | 16045.6 | 16153.8 | 16425.6 | 17127.2 | 18317.0 | 19036.1 | 18930.8 | 18103.6 | 15718.2 | 12765.7 |
| 17.5° | 15779.6 | 15852.7 | 15887.8 | 16054.4 | 16554.3 | 17773.2 | 19366.4 | 19553.5 | 19179.3 | 16554.3 | 13090.2 |
| 20° | 15972.5 | 16007.6 | 16007.6 | 16107.0 | 16498.7 | 17454.6 | 19351.8 | 19728.9 | 20062.1 | 17556.9 | 13394.2 |
| 22.5° | 16478.3 | 16492.9 | 16472.4 | 16507.5 | 16799.8 | 17542.3 | 19214.4 | 19682.1 | 20775.4 | 18407.6 | 13631.0 |
| 25° | 17299.7 | 17323.1 | 17188.6 | 17106.7 | 17320.1 | 17928.2 | 19290.4 | 19720.1 | 21333.7 | 19220.2 | 13788.9 |
| 27.5° | 18232.2 | 18261.4 | 18097.7 | 17907.7 | 18007.1 | 18404.7 | 19588.6 | 19974.4 | 21751.8 | 20021.2 | 13888.3 |
| 30° | 19375.2 | 19386.9 | 19112.1 | 18884.1 | 18819.8 | 19115.0 | 20097.2 | 20456.8 | 22272.1 | 20965.4 | 14037.4 |
| 32.5° | 20544.5 | 20632.2 | 20278.5 | 19956.9 | 19848.7 | 19939.4 | 20848.5 | 21196.3 | 22891.8 | 21979.8 | 14277.1 |
| 35° | 22134.7 | 22149.3 | 21725.4 | 21333.7 | 20977.1 | 21094.0 | 21810.2 | 22061.6 | 23748.3 | 23152.0 | 14616.2 |
| 37.5° | 24119.6 | 24254.0 | 23669.4 | 22938.6 | 22500.1 | 22330.6 | 22973.7 | 23248.5 | 24949.8 | 24590.2 | 15127.7 |
| 40° | 26323.7 | 26373.4 | 25873.5 | 25417.5 | 24616.5 | 24125.4 | 24569.8 | 24867.9 | 26431.9 | 26306.2 | 15721.1 |
| 42.5° | 27709.3 | 27817.5 | 27855.5 | 27808.7 | 27206.5 | 26382.2 | 26551.7 | 26692.0 | 28185.8 | 27916.9 | 16329.2 |
| 45° | 28177.0 | 28337.8 | 28881.5 | 30033.3 | 30097.6 | 29284.9 | 28890.3 | 29024.8 | 30097.6 | 29542.2 | 16910.9 |
| 47.5° | 27402.4 | 27677.1 | 28679.8 | 31041.8 | 32810.3 | 32871.7 | 31682.0 | 31386.7 | 31839.8 | 30889.8 | 17331.8 |
| 50° | 25400.0 | 25458.4 | 26993.1 | 30413.3 | 34081.9 | 36300.7 | 35070.0 | 34520.4 | 33494.4 | 31886.6 | 17621.2 |
| 52.5° | 22301.3 | 22368.6 | 23654.8 | 27493.0 | 33298.5 | 38697.7 | 39033.9 | 38051.7 | 35175.2 | 32661.3 | 17811.2 |
| 55° | 16554.3 | 16943.0 | 18357.9 | 22067.5 | 29586.0 | 38472.6 | 42185.1 | 41626.8 | 37206.9 | 33275.1 | 18109.4 |
| 57.5° | 10178.7 | 9822.1 | 11500.0 | 15013.7 | 22251.6 | 35379.9 | 43158.6 | 43339.8 | 39443.2 | 33789.6 | 18609.3 |
| 60° | 4683.0 | 4753.2 | 5446.0 | 7743.6 | 13563.8 | 27677.1 | 40650.4 | 41796.4 | 40679.7 | 33772.1 | 18735.0 |
| 62.5° | 3227.2 | 3162.9 | 2987.5 | 3399.7 | 6185.6 | 17504.3 | 34336.3 | 36277.3 | 38200.8 | 32722.6 | 18235.1 |
| 65° | 2885.2 | 2820.9 | 2481.8 | 2367.8 | 2841.4 | 7629.6 | 24961.5 | 27411.1 | 32164.3 | 30074.2 | 16989.8 |
| 67.5° | 2695.2 | 2607.5 | 2256.7 | 2034.6 | 2028.7 | 3037.2 | 14718.5 | 17668.0 | 23856.5 | 25426.3 | 14721.4 |
| 70° | 2496.4 | 2426.3 | 2078.4 | 1832.9 | 1727.6 | 1908.9 | 6469.1 | 8468.6 | 15490.2 | 18322.8 | 11467.8 |
| 72.5° | 2297.7 | 2215.8 | 1903.0 | 1639.9 | 1502.5 | 1429.5 | 2478.9 | 3224.3 | 8752.2 | 10985.5 | 7030.4 |
| 75° | 2008.3 | 1967.3 | 1701.3 | 1485.0 | 1335.9 | 1154.7 | 1572.7 | 1794.9 | 4186.1 | 5045.5 | 3528.3 |
| 77.5° | 1756.9 | 1713.0 | 1511.3 | 1297.9 | 1189.8 | 938.4 | 1116.7 | 1219.0 | 1765.6 | 2046.3 | 1593.2 |
| 80° | 1286.2 | 1330.1 | 1274.5 | 1145.9 | 1061.1 | 736.7 | 751.3 | 836.0 | 1049.4 | 1160.5 | 973.4 |
| 82.5° | 815.6 | 897.4 | 982.2 | 882.8 | 803.9 | 581.7 | 520.3 | 552.5 | 716.2 | 760.0 | 432.6 |
| 85° | 342.0 | 347.9 | 570.0 | 537.9 | 458.9 | 344.9 | 312.8 | 330.3 | 382.9 | 400.5 | 201.7 |
| 87.5° | 131.5 | 128.6 | 201.7 | 187.1 | 143.2 | 99.4 | 99.4 | 111.1 | 152.0 | 140.3 | 64.3 |
| 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° | 11219.4 | 11219.4 | 11219.4 | 11219.4 | 11219.4 | 11219.4 | 11219.4 | 11219.4 | 11219.4 | 11219.4 | 11219.4 |
| 2.5° | 11257.4 | 11049.8 | 10637.6 | 10126.1 | 9751.9 | 9331.0 | 8959.7 | 8693.7 | 8594.3 | 8547.5 | 8459.8 |
| 5° | 11248.6 | 10839.3 | 9985.8 | 9091.2 | 8372.1 | 7635.5 | 7012.8 | 6609.4 | 6574.3 | 6305.4 | 6279.1 |
| 7.5° | 11251.5 | 10625.9 | 9266.6 | 7951.2 | 6855.0 | 6100.8 | 5586.3 | 5451.8 | 5291.0 | 5250.1 | 5270.6 |
| 10° | 11260.3 | 10354.1 | 8494.9 | 6822.8 | 5761.7 | 5267.7 | 5074.7 | 5022.1 | 5028.0 | 5045.5 | 5048.4 |
| 12.5° | 11272.0 | 10091.0 | 7693.9 | 5966.3 | 5147.8 | 4943.2 | 4922.7 | 4969.5 | 5019.2 | 5057.2 | 5066.0 |
| 15° | 11286.6 | 9789.9 | 6913.4 | 5276.4 | 4840.9 | 4823.3 | 4890.6 | 4969.5 | 5039.6 | 5095.2 | 5104.0 |
| 17.5° | 11269.1 | 9439.1 | 6258.6 | 4852.6 | 4671.3 | 4756.1 | 4867.2 | 4966.6 | 5030.9 | 5083.5 | 5089.3 |
| 20° | 11228.1 | 9047.4 | 5627.2 | 4554.4 | 4566.1 | 4703.5 | 4823.3 | 4916.9 | 4987.0 | 5013.3 | 5033.8 |
| 22.5° | 11070.3 | 8579.7 | 5077.7 | 4323.5 | 4440.4 | 4630.4 | 4773.6 | 4829.2 | 4750.2 | 4694.7 | 4709.3 |
| 25° | 10801.3 | 7971.6 | 4566.1 | 4136.4 | 4326.4 | 4528.1 | 4674.2 | 4539.8 | 4475.5 | 4452.1 | 4463.8 |
| 27.5° | 10465.2 | 7305.2 | 4180.2 | 3940.5 | 4180.2 | 4414.1 | 4373.2 | 4349.8 | 4320.5 | 4282.5 | 4291.3 |
| 30° | 10102.7 | 6653.3 | 3852.8 | 3788.5 | 4022.4 | 4156.8 | 4174.4 | 4212.4 | 4180.2 | 4121.8 | 4145.1 |
| 32.5° | 9766.5 | 6039.4 | 3604.3 | 3659.9 | 3911.3 | 3890.8 | 4022.4 | 4066.2 | 3917.1 | 3721.3 | 3730.0 |
| 35° | 9480.0 | 5469.4 | 3417.3 | 3534.2 | 3721.3 | 3730.0 | 3861.6 | 3709.6 | 3548.8 | 3455.3 | 3461.1 |
| 37.5° | 9263.7 | 5025.0 | 3294.5 | 3426.0 | 3478.6 | 3589.7 | 3519.6 | 3440.6 | 3420.2 | 3355.9 | 3358.8 |
| 40° | 9135.1 | 4636.2 | 3215.6 | 3341.3 | 3332.5 | 3408.5 | 3183.4 | 3262.3 | 3291.6 | 3271.1 | 3274.0 |
| 42.5° | 9006.5 | 4361.5 | 3133.7 | 3224.3 | 3221.4 | 3072.3 | 3022.6 | 3089.9 | 3165.9 | 3174.6 | 3168.8 |
| 45° | 8904.2 | 4148.1 | 3048.9 | 3046.0 | 3104.5 | 2870.6 | 2856.0 | 2896.9 | 3005.1 | 3057.7 | 3054.8 |
| 47.5° | 8790.2 | 3969.7 | 2920.3 | 2838.5 | 2856.0 | 2744.9 | 2721.5 | 2739.1 | 2870.6 | 2955.4 | 2978.8 |
| 50° | 8646.9 | 3791.4 | 2759.5 | 2648.4 | 2575.4 | 2628.0 | 2633.8 | 2636.8 | 2768.3 | 2864.8 | 2885.2 |
| 52.5° | 8532.9 | 3657.0 | 2575.4 | 2493.5 | 2405.8 | 2522.7 | 2566.6 | 2572.4 | 2651.4 | 2730.3 | 2744.9 |
| 55° | 8600.1 | 3581.0 | 2394.1 | 2335.7 | 2256.7 | 2414.6 | 2499.4 | 2511.1 | 2528.6 | 2587.1 | 2595.8 |
| 57.5° | 8801.8 | 3598.5 | 2248.0 | 2172.0 | 2113.5 | 2286.0 | 2429.2 | 2438.0 | 2426.3 | 2496.4 | 2508.1 |
| 60° | 8863.2 | 3589.7 | 2139.8 | 1990.7 | 1955.6 | 2148.6 | 2326.9 | 2344.4 | 2341.5 | 2443.8 | 2464.3 |
| 62.5° | 8606.0 | 3478.6 | 2031.6 | 1838.7 | 1815.3 | 2008.3 | 2183.7 | 2253.8 | 2268.4 | 2414.6 | 2440.9 |
| 65° | 8000.9 | 3250.6 | 1888.4 | 1677.9 | 1677.9 | 1859.2 | 2046.3 | 2142.7 | 2183.7 | 2379.5 | 2408.7 |
| 67.5° | 7202.8 | 2981.7 | 1742.2 | 1540.5 | 1534.7 | 1715.9 | 1900.1 | 1999.5 | 2063.8 | 2329.8 | 2347.4 |
| 70° | 5978.0 | 2619.2 | 1561.0 | 1391.5 | 1391.5 | 1555.2 | 1721.8 | 1841.6 | 1935.2 | 2236.3 | 2236.3 |
| 72.5° | 4095.4 | 2177.8 | 1341.8 | 1221.9 | 1224.8 | 1376.8 | 1546.4 | 1680.9 | 1791.9 | 2049.2 | 2055.0 |
| 75° | 2590.0 | 1701.3 | 1102.1 | 1040.7 | 1052.4 | 1195.6 | 1371.0 | 1511.3 | 1733.5 | 2025.8 | 2034.6 |
| 77.5° | 1376.8 | 1195.6 | 877.0 | 862.4 | 877.0 | 1008.5 | 1204.4 | 1397.3 | 1739.3 | 1756.9 | 1727.6 |
| 80° | 891.6 | 847.7 | 692.8 | 663.6 | 669.4 | 812.7 | 1072.8 | 1327.1 | 1397.3 | 1414.8 | 1350.5 |
| 82.5° | 485.3 | 537.9 | 491.1 | 461.9 | 461.9 | 634.3 | 915.0 | 1055.3 | 1002.7 | 833.1 | 795.1 |
| 85° | 207.5 | 251.4 | 254.3 | 222.2 | 213.4 | 391.7 | 613.9 | 575.9 | 535.0 | 511.6 | 505.7 |
| 87.5° | 58.5 | 81.9 | 81.9 | 61.4 | 46.8 | 108.2 | 122.8 | 35.1 | 0.0 | 2.9 | 5.8 |
| 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)