

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P638499

Luminaire Tested: GWS-SA4E-830-U-T3-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638499
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-23)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4E-830-U-T3-W
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24326.9 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

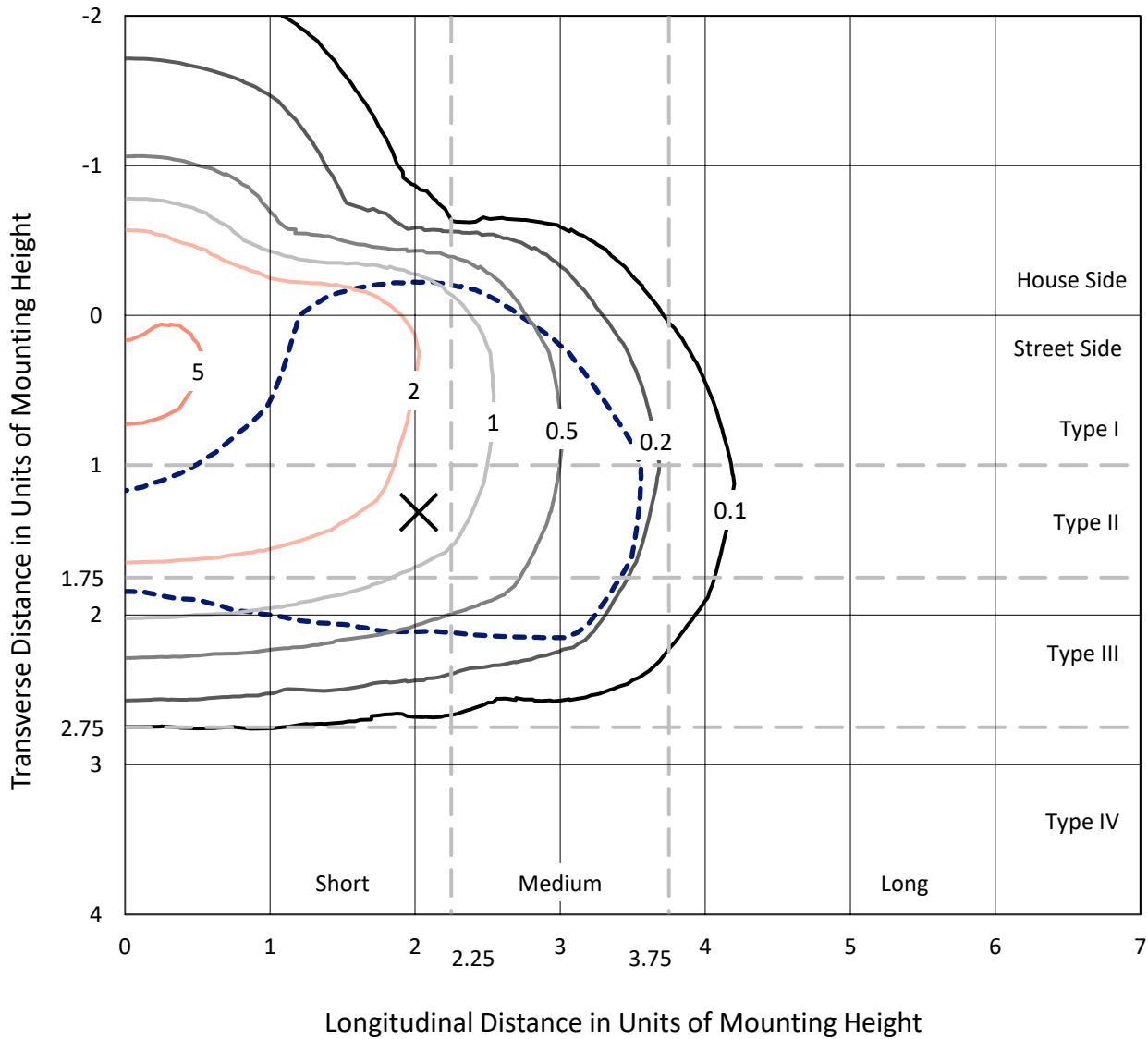
Input Watts (W): 202.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

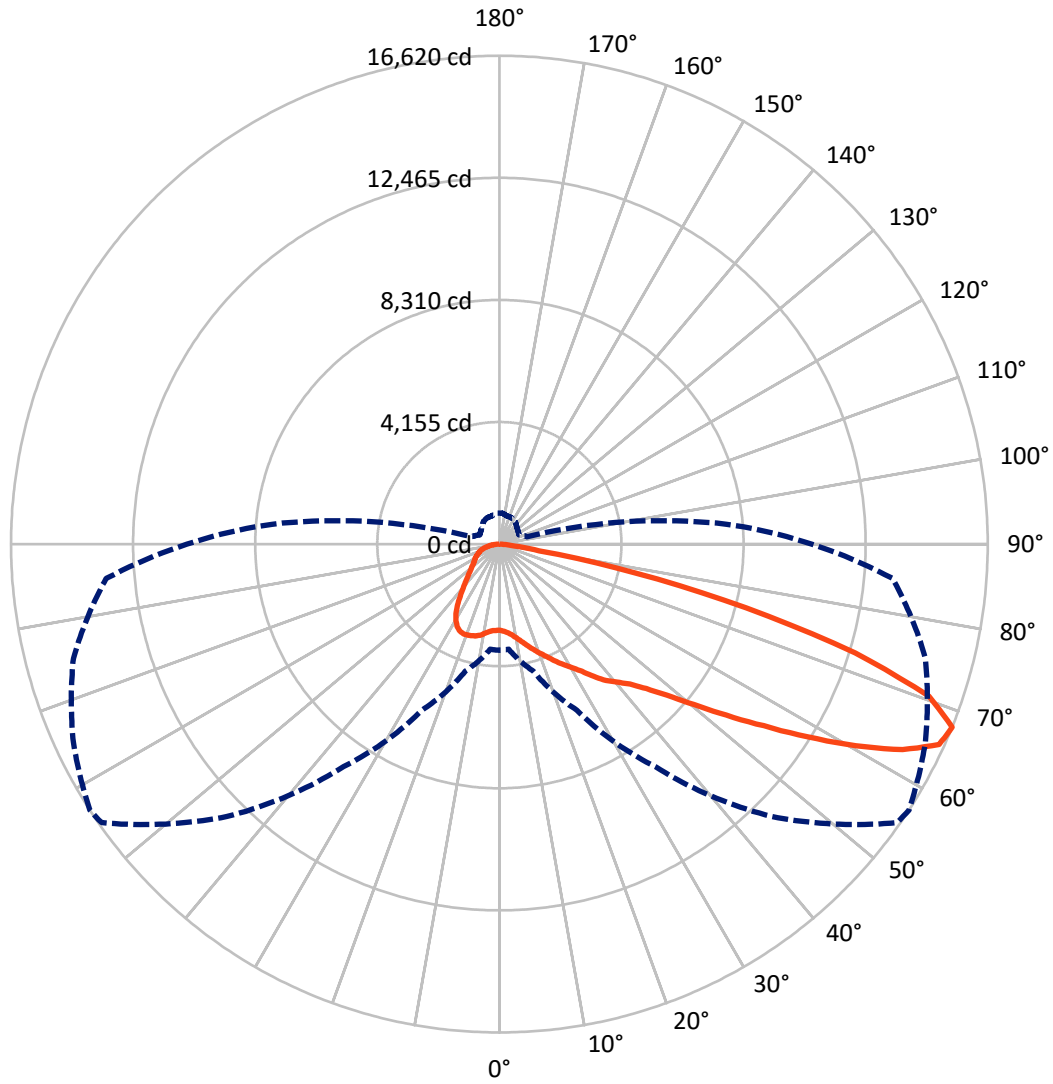
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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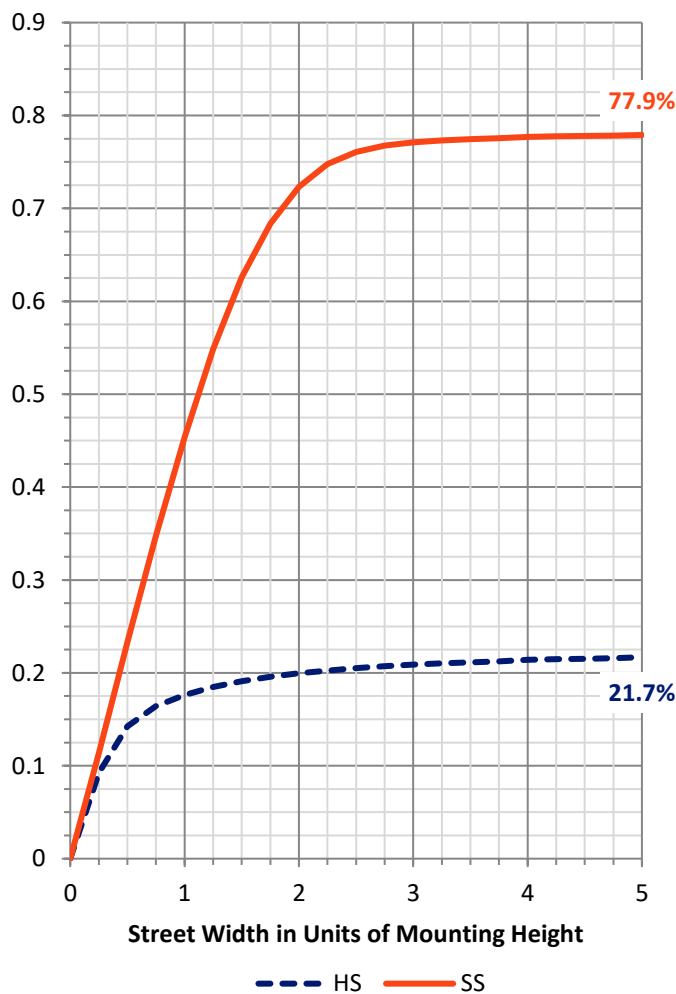
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5348.6 | 0.0 | 5348.6 |
| | % Fixture | 22.0 | 0.0 | 22.0 |
| Street Side | Lumens | 18978.3 | 0.0 | 18978.3 |
| | % Fixture | 78.0 | 0.0 | 78.0 |
| Total | Lumens | 24326.9 | 0.0 | 24326.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 290.7 | 1.2 |
| 10°-20° | 962.4 | 4.0 |
| 20°-30° | 1715.8 | 7.1 |
| 30°-40° | 2494.6 | 10.3 |
| 40°-50° | 3610.5 | 14.8 |
| 50°-60° | 5650.3 | 23.2 |
| 60°-70° | 6591.4 | 27.1 |
| 70°-80° | 2751.5 | 11.3 |
| 80°-90° | 259.7 | 1.1 |
| 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° | 24326.9 | 100.0 |
| 0°-180° | 24326.9 | 100.0 |

Coefficient of Utilization



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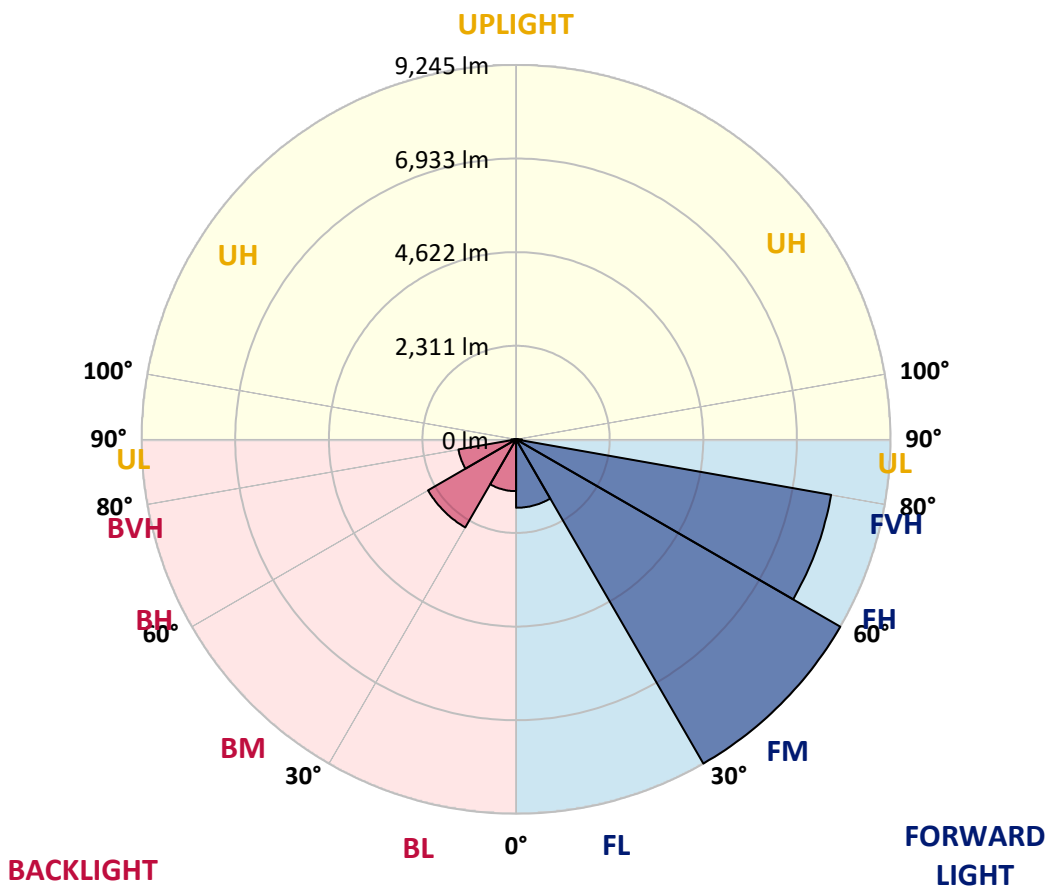
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1689.7 | 6.9 | | | |
| FM (30°-60°) | 9244.6 | 38.0 | | | |
| FH (60°-80°) | 7899.4 | 32.5 | | | G4/12000 |
| FVH (80°-90°) | 144.7 | 0.6 | | | G2/225 |
| BL (0°-30°) | 1279.2 | 5.3 | B3/2500 | | |
| BM (30°-60°) | 2510.8 | 10.3 | B3/5000 | | |
| BH (60°-80°) | 1443.6 | 5.9 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 115.0 | 0.5 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 57° | 65° | 75° | 85° |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2931.2 | 2931.2 | 2931.2 | 2931.2 | 2931.2 | 2931.2 | 2931.2 | 2931.2 | 2931.2 | 2931.2 | 2931.2 |
| 2.5° | 2973.1 | 2969.6 | 2967.8 | 2978.3 | 2974.8 | 2973.1 | 2973.1 | 2971.3 | 2967.8 | 2953.9 | 2934.7 |
| 5° | 3055.0 | 3048.0 | 3041.0 | 3049.7 | 3042.8 | 3035.8 | 3034.0 | 3030.6 | 3018.4 | 2997.4 | 2967.8 |
| 7.5° | 3140.4 | 3133.4 | 3135.1 | 3140.4 | 3135.1 | 3131.6 | 3126.4 | 3122.9 | 3103.8 | 3070.6 | 3030.6 |
| 10° | 3260.6 | 3260.6 | 3264.1 | 3269.3 | 3271.1 | 3265.8 | 3255.4 | 3250.1 | 3227.5 | 3185.7 | 3129.9 |
| 12.5° | 3434.9 | 3431.4 | 3431.4 | 3427.9 | 3433.1 | 3427.9 | 3417.4 | 3408.7 | 3380.8 | 3326.8 | 3246.7 |
| 15° | 3664.9 | 3651.0 | 3638.8 | 3616.1 | 3609.1 | 3590.0 | 3593.5 | 3588.2 | 3562.1 | 3488.9 | 3387.8 |
| 17.5° | 3910.6 | 3908.9 | 3889.7 | 3844.4 | 3799.1 | 3767.7 | 3774.7 | 3773.0 | 3759.0 | 3659.7 | 3530.7 |
| 20° | 4126.7 | 4135.4 | 4118.0 | 4083.2 | 4022.2 | 3962.9 | 3959.4 | 3968.1 | 3950.7 | 3851.4 | 3671.9 |
| 22.5° | 4369.0 | 4362.0 | 4344.6 | 4299.2 | 4253.9 | 4191.2 | 4170.3 | 4163.3 | 4156.3 | 4043.1 | 3816.5 |
| 25° | 4599.0 | 4619.9 | 4597.2 | 4555.4 | 4485.7 | 4417.8 | 4400.3 | 4407.3 | 4388.1 | 4238.3 | 3971.6 |
| 27.5° | 4890.0 | 4898.7 | 4884.8 | 4827.3 | 4768.0 | 4672.2 | 4639.1 | 4639.1 | 4632.1 | 4421.2 | 4093.6 |
| 30° | 5200.2 | 5224.6 | 5200.2 | 5153.2 | 5092.2 | 4954.5 | 4883.1 | 4876.1 | 4855.2 | 4609.4 | 4236.5 |
| 32.5° | 5512.2 | 5529.6 | 5512.2 | 5466.9 | 5397.2 | 5276.9 | 5174.1 | 5158.4 | 5130.5 | 4815.1 | 4382.9 |
| 35° | 5789.3 | 5804.9 | 5801.5 | 5811.9 | 5754.4 | 5602.8 | 5540.1 | 5533.1 | 5459.9 | 5083.5 | 4581.6 |
| 37.5° | 6092.5 | 6111.7 | 6085.5 | 6106.4 | 6083.8 | 5940.9 | 5921.7 | 5886.8 | 5782.3 | 5336.2 | 4790.7 |
| 40° | 6437.5 | 6455.0 | 6413.1 | 6421.9 | 6395.7 | 6315.6 | 6218.0 | 6170.9 | 6015.8 | 5609.8 | 5120.1 |
| 42.5° | 6807.0 | 6847.1 | 6866.2 | 6850.6 | 6789.6 | 6744.3 | 6573.5 | 6514.2 | 6385.3 | 6102.9 | 5662.0 |
| 45° | 7342.0 | 7401.3 | 7429.1 | 7389.1 | 7362.9 | 7298.4 | 7089.3 | 7017.9 | 6949.9 | 6798.3 | 6418.4 |
| 47.5° | 7918.8 | 7972.9 | 8061.7 | 8079.2 | 8100.1 | 8051.3 | 7756.8 | 7687.1 | 7699.3 | 7681.8 | 7349.0 |
| 50° | 8378.9 | 8424.2 | 8624.6 | 8839.0 | 9016.7 | 9030.7 | 8654.3 | 8579.3 | 8645.5 | 8701.3 | 8469.5 |
| 52.5° | 8713.5 | 8753.6 | 9018.5 | 9461.1 | 9863.7 | 10161.7 | 9755.6 | 9670.3 | 9724.3 | 9849.8 | 9743.5 |
| 55° | 8985.4 | 9041.1 | 9318.2 | 9997.9 | 10811.7 | 11282.3 | 11022.6 | 10914.5 | 10891.9 | 11047.0 | 11108.0 |
| 57.5° | 9128.3 | 9145.7 | 9534.3 | 10417.9 | 11507.1 | 12381.9 | 12495.2 | 12373.2 | 12157.1 | 12242.5 | 12559.7 |
| 60° | 8802.4 | 8832.0 | 9363.5 | 10525.9 | 12056.0 | 13472.8 | 14041.0 | 13939.9 | 13479.8 | 13526.9 | 13877.1 |
| 62.5° | 7901.4 | 7943.2 | 8582.8 | 10011.8 | 12101.3 | 14201.3 | 15468.2 | 15403.7 | 14786.8 | 14532.4 | 14637.0 |
| 65° | 6338.2 | 6352.2 | 7014.4 | 8739.7 | 11200.3 | 14291.9 | 16463.3 | 16447.6 | 15700.0 | 15104.0 | 14656.1 |
| 67.5° | 3614.4 | 3590.0 | 4475.3 | 6233.6 | 9243.3 | 13113.8 | 16527.8 | 16620.2 | 15996.3 | 15009.9 | 13436.2 |
| 70° | 1566.7 | 1570.2 | 1978.0 | 3075.9 | 5982.7 | 10599.1 | 15351.5 | 15510.1 | 15138.9 | 13443.2 | 10689.7 |
| 72.5° | 725.0 | 735.4 | 911.4 | 1331.4 | 2554.8 | 6575.2 | 12517.8 | 12660.7 | 12341.8 | 10759.4 | 7777.7 |
| 75° | 512.4 | 521.1 | 608.2 | 763.3 | 1174.6 | 2561.8 | 8373.7 | 8673.4 | 8828.5 | 8047.8 | 5125.3 |
| 77.5° | 388.6 | 400.8 | 444.4 | 529.8 | 725.0 | 907.9 | 4006.5 | 4721.0 | 5623.7 | 5006.8 | 2640.2 |
| 80° | 247.5 | 247.5 | 294.5 | 353.8 | 442.6 | 472.3 | 1157.2 | 1371.5 | 2751.7 | 2063.4 | 1036.9 |
| 82.5° | 167.3 | 172.5 | 200.4 | 224.8 | 254.4 | 268.4 | 496.7 | 529.8 | 794.7 | 702.3 | 427.0 |
| 85° | 88.9 | 92.4 | 104.6 | 102.8 | 122.0 | 106.3 | 209.1 | 207.4 | 291.0 | 318.9 | 162.1 |
| 87.5° | 0.0 | 0.0 | 1.7 | 1.7 | 3.5 | 5.2 | 22.7 | 24.4 | 61.0 | 97.6 | 54.0 |
| 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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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2931.2 | 2931.2 | 2931.2 | 2931.2 | 2931.2 | 2931.2 | 2931.2 | 2931.2 | 2931.2 | 2931.2 | 2931.2 |
| 2.5° | 2945.2 | 2924.3 | 2934.7 | 2931.2 | 2941.7 | 2941.7 | 2922.5 | 2917.3 | 2919.0 | 2898.1 | 2891.1 |
| 5° | 2971.3 | 2946.9 | 2952.1 | 2945.2 | 2955.6 | 2964.3 | 2955.6 | 2955.6 | 2966.1 | 2950.4 | 2941.7 |
| 7.5° | 3030.6 | 3002.7 | 3002.7 | 2994.0 | 3006.2 | 3013.1 | 3006.2 | 3016.6 | 3035.8 | 3020.1 | 3011.4 |
| 10° | 3124.7 | 3091.6 | 3093.3 | 3082.8 | 3088.1 | 3084.6 | 3056.7 | 3048.0 | 3053.2 | 3039.3 | 3032.3 |
| 12.5° | 3246.7 | 3201.3 | 3201.3 | 3180.4 | 3168.2 | 3131.6 | 3074.1 | 3053.2 | 3056.7 | 3044.5 | 3039.3 |
| 15° | 3363.4 | 3321.6 | 3312.9 | 3271.1 | 3215.3 | 3147.3 | 3095.0 | 3081.1 | 3084.6 | 3072.4 | 3063.7 |
| 17.5° | 3501.1 | 3447.1 | 3415.7 | 3339.0 | 3236.2 | 3166.5 | 3114.2 | 3081.1 | 3053.2 | 3025.3 | 3018.4 |
| 20° | 3628.3 | 3560.3 | 3502.8 | 3384.3 | 3258.9 | 3163.0 | 3065.4 | 2983.5 | 2915.5 | 2878.9 | 2870.2 |
| 22.5° | 3759.0 | 3671.9 | 3570.8 | 3415.7 | 3257.1 | 3100.3 | 2920.8 | 2797.0 | 2696.0 | 2641.9 | 2652.4 |
| 25° | 3882.7 | 3773.0 | 3635.3 | 3445.3 | 3201.3 | 2960.9 | 2716.9 | 2532.1 | 2417.1 | 2375.3 | 2363.1 |
| 27.5° | 3985.6 | 3849.6 | 3694.5 | 3431.4 | 3086.3 | 2760.4 | 2438.0 | 2232.4 | 2120.9 | 2073.8 | 2061.6 |
| 30° | 4100.6 | 3947.2 | 3779.9 | 3366.9 | 2905.1 | 2479.9 | 2122.6 | 1955.3 | 1875.1 | 1829.8 | 1831.6 |
| 32.5° | 4233.0 | 4072.7 | 3900.2 | 3243.2 | 2673.3 | 2176.6 | 1862.9 | 1747.9 | 1683.5 | 1638.1 | 1631.2 |
| 35° | 4410.8 | 4252.2 | 3980.3 | 3056.7 | 2378.8 | 1897.8 | 1685.2 | 1591.1 | 1510.9 | 1451.7 | 1439.5 |
| 37.5° | 4630.4 | 4522.3 | 3989.0 | 2807.5 | 2063.4 | 1706.1 | 1558.0 | 1456.9 | 1359.3 | 1280.9 | 1272.2 |
| 40° | 5006.8 | 4883.1 | 3917.6 | 2495.6 | 1795.0 | 1582.4 | 1451.7 | 1334.9 | 1221.6 | 1134.5 | 1122.3 |
| 42.5° | 5543.5 | 5289.1 | 3764.2 | 2143.5 | 1592.8 | 1484.8 | 1350.6 | 1202.5 | 1087.4 | 1026.5 | 1017.7 |
| 45° | 6226.7 | 5742.2 | 3534.2 | 1812.4 | 1443.0 | 1388.9 | 1244.3 | 1089.2 | 1028.2 | 984.6 | 975.9 |
| 47.5° | 7063.2 | 6270.2 | 3269.3 | 1554.5 | 1326.2 | 1301.8 | 1136.2 | 1050.8 | 996.8 | 960.2 | 951.5 |
| 50° | 8063.5 | 6942.9 | 3051.5 | 1352.3 | 1221.6 | 1200.7 | 1101.4 | 1028.2 | 984.6 | 955.0 | 948.0 |
| 52.5° | 9205.0 | 7690.5 | 2945.2 | 1207.7 | 1131.0 | 1110.1 | 1089.2 | 1023.0 | 986.4 | 963.7 | 955.0 |
| 55° | 10390.0 | 8478.2 | 2845.8 | 1096.2 | 1054.3 | 1066.5 | 1090.9 | 1040.4 | 1012.5 | 982.9 | 974.2 |
| 57.5° | 11534.9 | 9217.2 | 2601.9 | 1009.0 | 998.6 | 1045.6 | 1099.6 | 1057.8 | 1024.7 | 995.1 | 984.6 |
| 60° | 12324.4 | 9621.5 | 2188.8 | 939.3 | 956.7 | 1019.5 | 1077.0 | 1031.7 | 989.9 | 977.7 | 972.4 |
| 62.5° | 12537.0 | 9572.7 | 1699.1 | 867.9 | 906.2 | 962.0 | 1017.7 | 988.1 | 944.5 | 963.7 | 965.5 |
| 65° | 12040.3 | 9049.9 | 1275.7 | 798.2 | 840.0 | 887.0 | 956.7 | 944.5 | 928.9 | 981.1 | 982.9 |
| 67.5° | 10634.0 | 7765.5 | 972.4 | 737.2 | 772.0 | 829.5 | 937.6 | 988.1 | 991.6 | 1057.8 | 1050.8 |
| 70° | 8046.1 | 5801.5 | 761.6 | 679.7 | 719.7 | 829.5 | 998.6 | 1021.2 | 979.4 | 1040.4 | 1026.5 |
| 72.5° | 5562.7 | 3828.7 | 648.3 | 629.1 | 655.3 | 791.2 | 996.8 | 996.8 | 951.5 | 951.5 | 925.4 |
| 75° | 3455.8 | 2251.6 | 564.6 | 564.6 | 564.6 | 691.9 | 968.9 | 918.4 | 838.2 | 801.6 | 780.7 |
| 77.5° | 1706.1 | 1094.4 | 474.0 | 491.4 | 472.3 | 578.6 | 791.2 | 751.1 | 702.3 | 664.0 | 650.0 |
| 80° | 728.4 | 547.2 | 383.4 | 402.6 | 379.9 | 435.7 | 627.4 | 618.7 | 571.6 | 521.1 | 505.4 |
| 82.5° | 334.6 | 282.3 | 306.7 | 315.4 | 277.1 | 327.6 | 458.3 | 458.3 | 432.2 | 362.5 | 336.3 |
| 85° | 142.9 | 149.9 | 212.6 | 212.6 | 174.3 | 184.7 | 245.7 | 233.5 | 209.1 | 170.8 | 156.8 |
| 87.5° | 48.8 | 73.2 | 108.0 | 94.1 | 36.6 | 15.7 | 8.7 | 3.5 | 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)