

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: P639949

Luminaire Tested: GWS-SA5C-830-U-AFL-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P639949
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-48)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5C-830-U-AFL-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND
AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15863.2 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

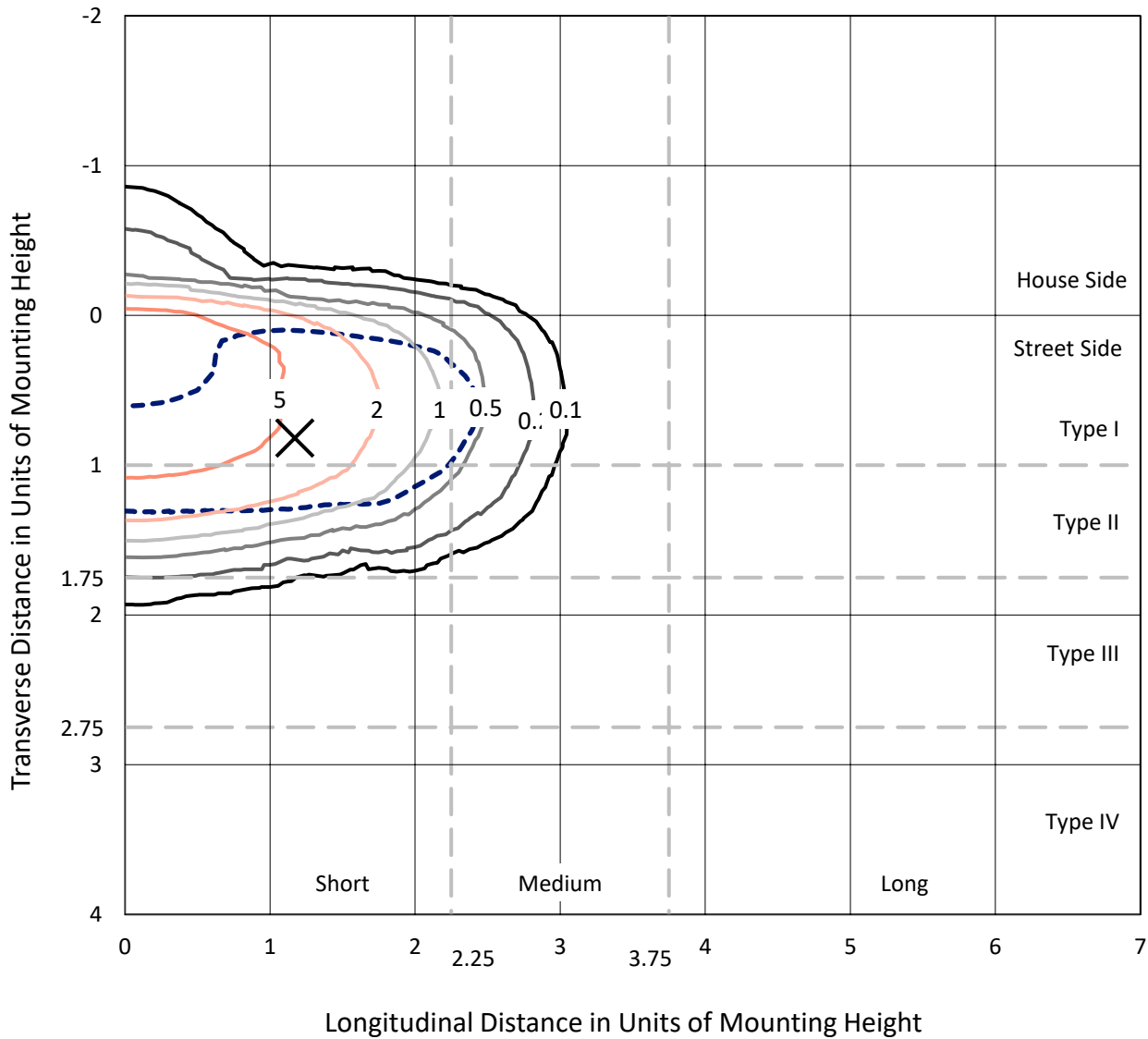
Input Watts (W): 157.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

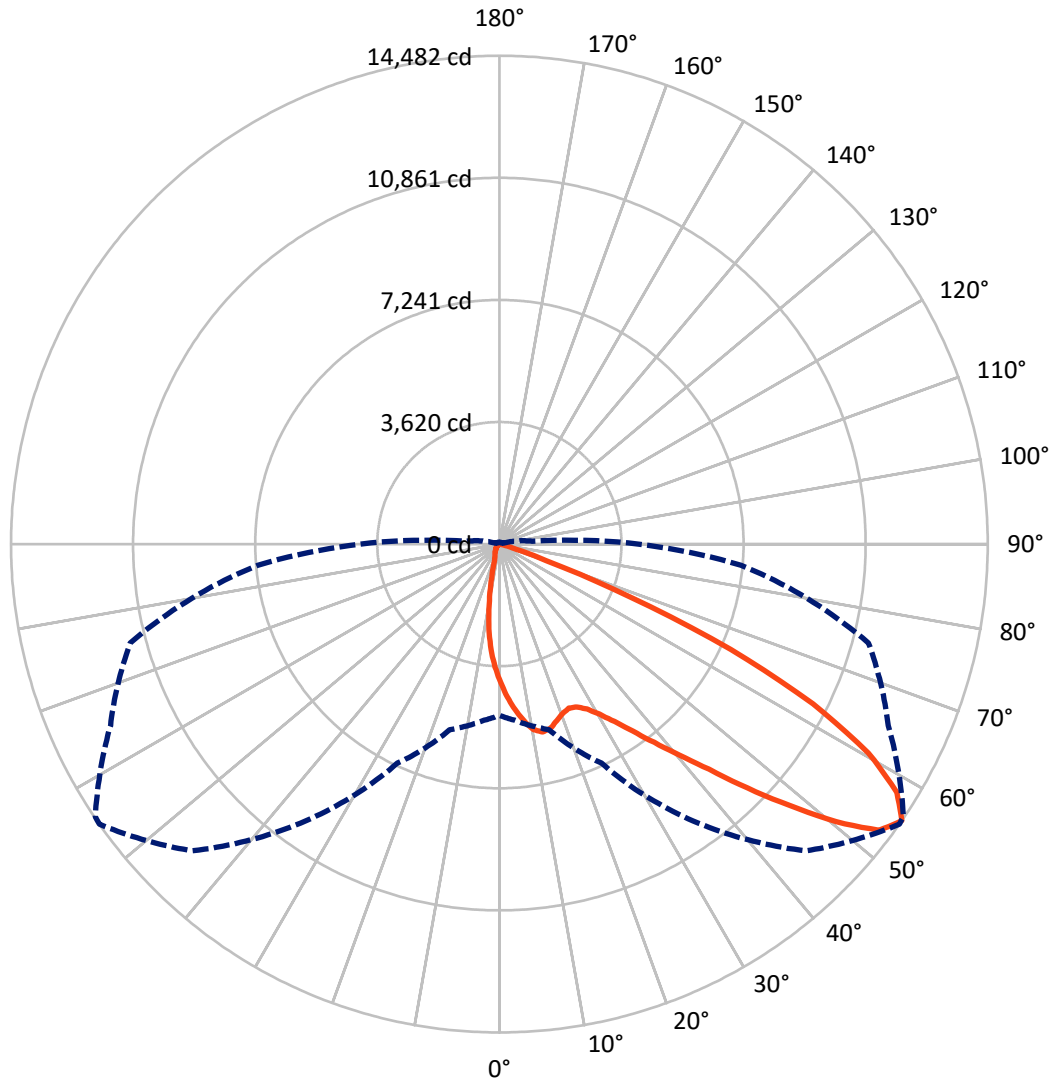
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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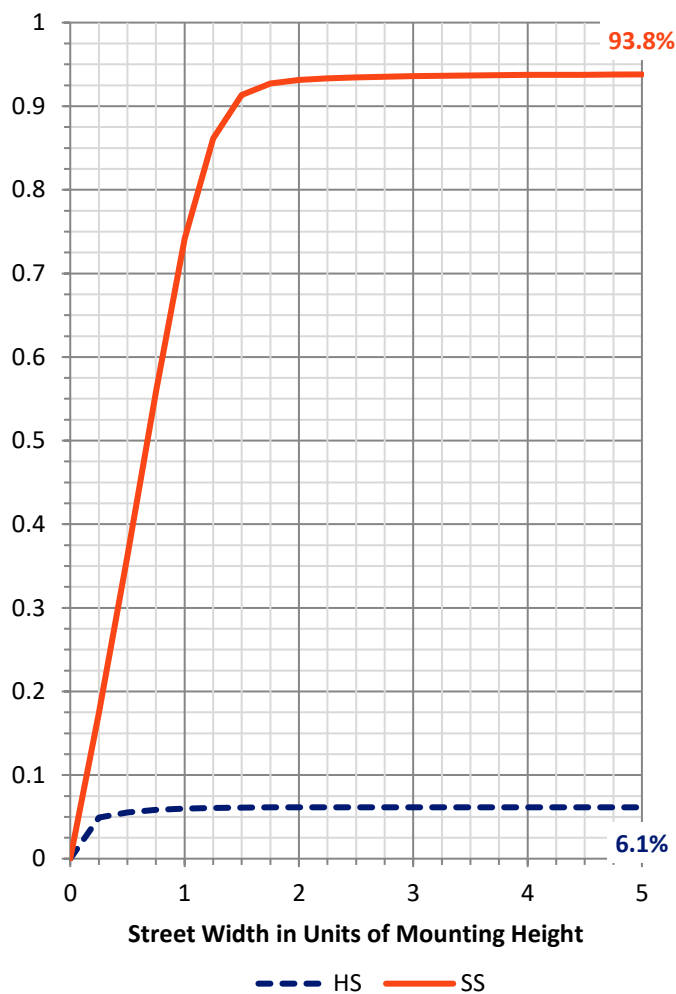
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 978.8 | 0.0 | 978.8 |
| | % Fixture | 6.2 | 0.0 | 6.2 |
| Street Side | Lumens | 14884.4 | 0.0 | 14884.4 |
| | % Fixture | 93.8 | 0.0 | 93.8 |
| Total | Lumens | 15863.2 | 0.0 | 15863.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 362.2 | 2.3 |
| 10°-20° | 873.2 | 5.5 |
| 20°-30° | 1454.2 | 9.2 |
| 30°-40° | 2478.0 | 15.6 |
| 40°-50° | 4044.9 | 25.5 |
| 50°-60° | 4234.8 | 26.7 |
| 60°-70° | 2136.0 | 13.5 |
| 70°-80° | 269.8 | 1.7 |
| 80°-90° | 10.3 | 0.1 |
| 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° | 15863.2 | 100.0 |
| 0°-180° | 15863.2 | 100.0 |

Coefficient of Utilization



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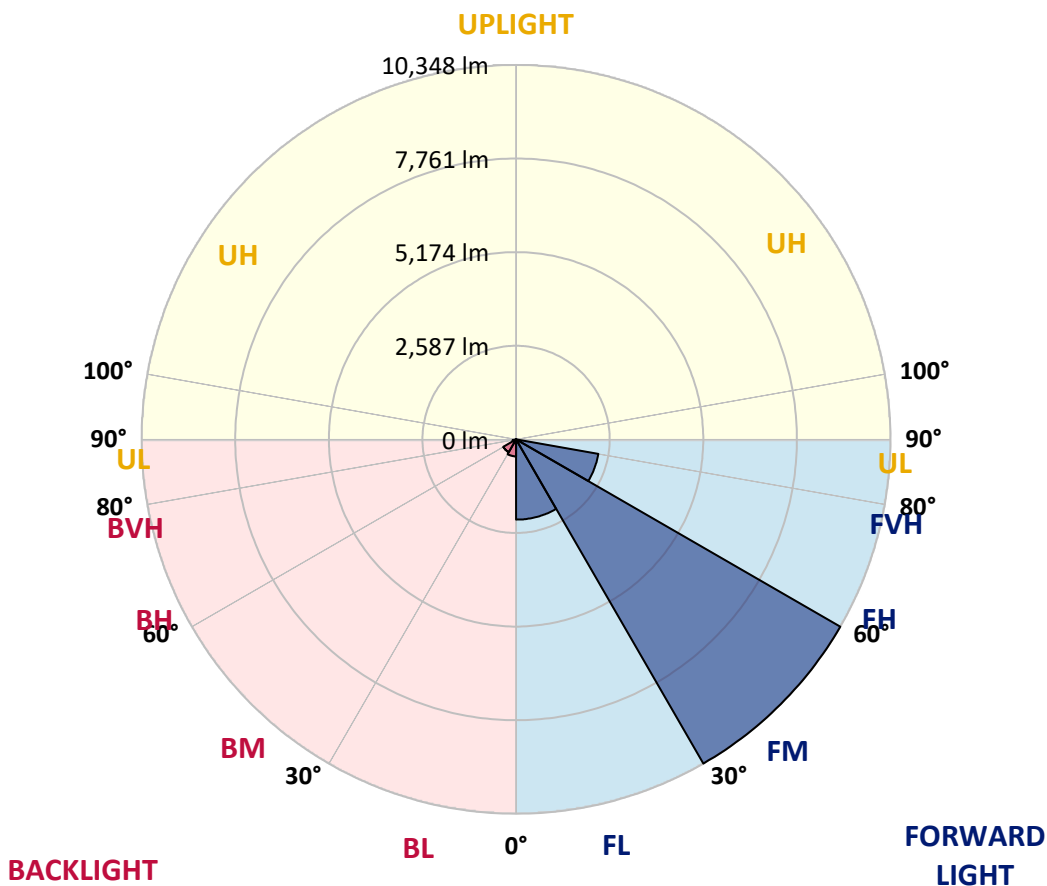
CATALOG NUMBER: GWS-SA5C-830-U-AFL-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2219.0 | 14.0 | | | |
| FM (30°-60°) | 10348.4 | 65.2 | | | |
| FH (60°-80°) | 2307.6 | 14.5 | | | G2/5000 |
| FVH (80°-90°) | 9.3 | 0.1 | | | G0/10 |
| BL (0°-30°) | 470.5 | 3.0 | B1/500 | | |
| BM (30°-60°) | 409.2 | 2.6 | B1/1000 | | |
| BH (60°-80°) | 98.2 | 0.6 | B0/110 | | G0/110 |
| BVH (80°-90°) | 0.9 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 56° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0° | 4098.1 | 4098.1 | 4098.1 | 4098.1 | 4098.1 | 4098.1 | 4098.1 | 4098.1 | 4098.1 | 4098.1 | 4098.1 |
| 2.5° | 4777.5 | 4754.5 | 4789.7 | 4749.0 | 4679.9 | 4621.6 | 4545.6 | 4518.5 | 4396.5 | 4281.2 | 4170.0 |
| 5° | 5357.9 | 5364.7 | 5353.9 | 5296.9 | 5199.3 | 5090.8 | 4937.5 | 4903.6 | 4690.7 | 4471.0 | 4233.7 |
| 7.5° | 5501.7 | 5497.6 | 5520.7 | 5542.4 | 5526.1 | 5471.8 | 5305.0 | 5271.1 | 5006.7 | 4677.2 | 4331.4 |
| 10° | 5058.2 | 5060.9 | 5108.4 | 5254.9 | 5436.6 | 5625.1 | 5599.3 | 5580.3 | 5321.3 | 4910.4 | 4439.9 |
| 12.5° | 4431.7 | 4456.1 | 4506.3 | 4715.1 | 5023.0 | 5451.5 | 5717.3 | 5736.3 | 5610.2 | 5166.7 | 4567.3 |
| 15° | 4160.5 | 4165.9 | 4206.6 | 4332.7 | 4561.9 | 5090.8 | 5667.1 | 5720.0 | 5851.6 | 5424.4 | 4705.7 |
| 17.5° | 4153.7 | 4160.5 | 4178.1 | 4233.7 | 4382.9 | 4807.4 | 5505.7 | 5598.0 | 6033.3 | 5701.0 | 4871.1 |
| 20° | 4408.7 | 4404.6 | 4392.4 | 4362.6 | 4427.7 | 4713.8 | 5356.6 | 5458.3 | 6132.3 | 5970.9 | 5037.9 |
| 22.5° | 4871.1 | 4865.7 | 4811.4 | 4688.0 | 4635.1 | 4799.2 | 5283.3 | 5375.6 | 6191.9 | 6210.9 | 5174.9 |
| 25° | 5404.0 | 5442.0 | 5340.3 | 5153.2 | 5023.0 | 5017.6 | 5348.4 | 5413.5 | 6243.5 | 6423.8 | 5268.4 |
| 27.5° | 5988.5 | 6000.7 | 5913.9 | 5703.7 | 5515.2 | 5367.4 | 5536.9 | 5585.8 | 6300.4 | 6613.7 | 5321.3 |
| 30° | 6630.0 | 6625.9 | 6526.9 | 6282.8 | 6053.6 | 5840.7 | 5854.3 | 5873.3 | 6433.3 | 6830.7 | 5379.6 |
| 32.5° | 7431.4 | 7449.0 | 7272.7 | 6940.5 | 6665.2 | 6370.9 | 6269.2 | 6271.9 | 6673.3 | 7110.0 | 5467.8 |
| 35° | 8520.4 | 8477.0 | 8243.7 | 7770.4 | 7301.2 | 6983.9 | 6810.3 | 6795.4 | 7043.6 | 7485.6 | 5621.0 |
| 37.5° | 9557.8 | 9561.8 | 9317.7 | 8797.0 | 8204.4 | 7704.0 | 7458.5 | 7417.8 | 7564.3 | 8006.4 | 5876.0 |
| 40° | 10277.9 | 10291.4 | 10189.7 | 9917.1 | 9289.3 | 8581.4 | 8220.7 | 8178.6 | 8239.6 | 8665.5 | 6209.6 |
| 42.5° | 10658.9 | 10696.9 | 10725.4 | 10789.1 | 10313.1 | 9677.1 | 9122.5 | 9118.4 | 9054.7 | 9416.7 | 6596.1 |
| 45° | 10673.8 | 10730.8 | 10904.4 | 11339.7 | 11393.9 | 10927.4 | 10324.0 | 10233.1 | 9987.6 | 10220.9 | 6941.9 |
| 47.5° | 10083.9 | 10215.5 | 10584.3 | 11446.8 | 12016.4 | 12171.0 | 11572.9 | 11517.3 | 10828.4 | 10856.9 | 7200.9 |
| 50° | 8708.8 | 8845.8 | 9525.2 | 10897.6 | 12173.7 | 13158.2 | 12943.9 | 12828.7 | 11530.9 | 11277.3 | 7325.6 |
| 52.5° | 7298.5 | 7423.3 | 7884.3 | 9590.3 | 11521.4 | 13468.7 | 14099.3 | 13962.4 | 12161.5 | 11423.8 | 7274.1 |
| 55° | 5078.6 | 5245.4 | 5695.6 | 7168.3 | 10018.8 | 12863.9 | 14481.7 | 14453.3 | 12724.2 | 11331.5 | 7194.1 |
| 57.5° | 2489.8 | 2655.2 | 3104.1 | 4419.5 | 7421.9 | 11231.2 | 13897.3 | 14047.8 | 13060.6 | 11232.5 | 7129.0 |
| 60° | 1040.1 | 1107.9 | 1262.5 | 1939.2 | 4152.4 | 8487.8 | 12577.8 | 12786.6 | 12854.4 | 11098.3 | 7122.2 |
| 62.5° | 603.5 | 614.3 | 630.6 | 804.2 | 1615.1 | 4865.7 | 10433.8 | 10730.8 | 11770.9 | 10920.6 | 7015.1 |
| 65° | 455.6 | 459.7 | 452.9 | 493.6 | 667.2 | 1845.6 | 7538.5 | 7942.7 | 9824.9 | 10226.3 | 6592.0 |
| 67.5° | 374.3 | 374.3 | 356.7 | 364.8 | 419.0 | 691.6 | 4161.9 | 4726.0 | 7270.0 | 8405.1 | 5443.4 |
| 70° | 298.3 | 305.1 | 297.0 | 286.1 | 299.7 | 382.4 | 1480.9 | 1836.2 | 4233.7 | 4963.3 | 3174.6 |
| 72.5° | 226.5 | 226.5 | 240.0 | 231.9 | 222.4 | 240.0 | 516.7 | 580.4 | 1699.2 | 2069.4 | 1145.9 |
| 75° | 174.9 | 180.4 | 189.9 | 181.7 | 168.2 | 142.4 | 248.2 | 263.1 | 512.6 | 481.4 | 256.3 |
| 77.5° | 89.5 | 90.9 | 120.7 | 132.9 | 124.8 | 86.8 | 108.5 | 119.3 | 166.8 | 149.2 | 94.9 |
| 80° | 54.2 | 57.0 | 67.8 | 104.4 | 82.7 | 46.1 | 44.8 | 47.5 | 78.7 | 67.8 | 39.3 |
| 82.5° | 23.1 | 24.4 | 38.0 | 38.0 | 33.9 | 17.6 | 17.6 | 17.6 | 38.0 | 35.3 | 16.3 |
| 85° | 0.0 | 0.0 | 6.8 | 5.4 | 5.4 | 6.8 | 6.8 | 6.8 | 9.5 | 13.6 | 8.1 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 4.1 | 4.1 |
| 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° | 4098.1 | 4098.1 | 4098.1 | 4098.1 | 4098.1 | 4098.1 | 4098.1 | 4098.1 | 4098.1 | 4098.1 | 4098.1 |
| 2.5° | 4098.1 | 4011.3 | 3894.7 | 3788.9 | 3646.5 | 3566.5 | 3455.3 | 3364.5 | 3287.2 | 3262.8 | 3251.9 |
| 5° | 4099.5 | 3950.3 | 3700.8 | 3451.3 | 3144.8 | 2903.4 | 2655.2 | 2458.6 | 2297.2 | 2245.7 | 2232.1 |
| 7.5° | 4126.6 | 3906.9 | 3502.8 | 3049.9 | 2537.3 | 2114.2 | 1735.8 | 1396.8 | 1239.5 | 1186.6 | 1175.7 |
| 10° | 4163.2 | 3870.3 | 3273.6 | 2568.4 | 1832.1 | 1288.3 | 912.7 | 695.7 | 592.6 | 535.7 | 543.8 |
| 12.5° | 4210.7 | 3840.5 | 3020.0 | 2047.7 | 1212.3 | 707.9 | 501.8 | 420.4 | 398.7 | 387.8 | 382.4 |
| 15° | 4274.4 | 3805.2 | 2705.4 | 1531.0 | 743.1 | 455.6 | 386.5 | 364.8 | 356.7 | 351.2 | 349.9 |
| 17.5° | 4339.5 | 3764.5 | 2385.4 | 1076.7 | 493.6 | 378.4 | 347.2 | 336.3 | 330.9 | 326.8 | 325.5 |
| 20° | 4408.7 | 3695.4 | 2009.7 | 741.8 | 389.2 | 340.4 | 320.0 | 307.8 | 301.1 | 294.3 | 292.9 |
| 22.5° | 4438.5 | 3584.2 | 1650.4 | 519.4 | 345.8 | 313.3 | 287.5 | 272.6 | 264.4 | 259.0 | 259.0 |
| 25° | 4410.0 | 3403.8 | 1278.8 | 394.6 | 314.6 | 283.4 | 257.7 | 241.4 | 234.6 | 229.2 | 229.2 |
| 27.5° | 4334.1 | 3171.9 | 933.0 | 326.8 | 280.7 | 252.2 | 227.8 | 212.9 | 207.5 | 204.8 | 204.8 |
| 30° | 4250.0 | 2879.0 | 657.7 | 280.7 | 242.7 | 219.7 | 199.3 | 189.9 | 188.5 | 185.8 | 185.8 |
| 32.5° | 4178.1 | 2605.1 | 452.9 | 246.8 | 214.3 | 191.2 | 177.6 | 173.6 | 174.9 | 172.2 | 173.6 |
| 35° | 4138.8 | 2336.6 | 336.3 | 219.7 | 191.2 | 169.5 | 162.7 | 162.7 | 162.7 | 161.4 | 161.4 |
| 37.5° | 4155.1 | 2072.1 | 273.9 | 200.7 | 170.9 | 154.6 | 147.8 | 150.5 | 153.2 | 153.2 | 153.2 |
| 40° | 4236.4 | 1837.5 | 242.7 | 183.1 | 153.2 | 141.0 | 135.6 | 139.7 | 143.7 | 146.5 | 146.5 |
| 42.5° | 4339.5 | 1647.7 | 219.7 | 168.2 | 141.0 | 127.5 | 124.8 | 128.8 | 132.9 | 135.6 | 135.6 |
| 45° | 4404.6 | 1456.4 | 196.6 | 149.2 | 128.8 | 112.6 | 112.6 | 118.0 | 116.6 | 118.0 | 118.0 |
| 47.5° | 4434.4 | 1304.6 | 173.6 | 128.8 | 109.8 | 97.6 | 99.0 | 101.7 | 99.0 | 101.7 | 101.7 |
| 50° | 4361.2 | 1151.3 | 153.2 | 107.1 | 90.9 | 85.4 | 88.1 | 86.8 | 86.8 | 92.2 | 92.2 |
| 52.5° | 4227.0 | 1037.4 | 135.6 | 90.9 | 77.3 | 75.9 | 78.7 | 73.2 | 74.6 | 74.6 | 73.2 |
| 55° | 4128.0 | 972.3 | 120.7 | 78.7 | 66.4 | 67.8 | 66.4 | 57.0 | 51.5 | 46.1 | 44.8 |
| 57.5° | 4079.1 | 946.6 | 109.8 | 70.5 | 59.7 | 59.7 | 54.2 | 39.3 | 29.8 | 23.1 | 20.3 |
| 60° | 4068.3 | 915.4 | 99.0 | 61.0 | 52.9 | 50.2 | 39.3 | 23.1 | 14.9 | 10.8 | 9.5 |
| 62.5° | 3965.2 | 839.4 | 89.5 | 48.8 | 46.1 | 40.7 | 24.4 | 13.6 | 8.1 | 5.4 | 4.1 |
| 65° | 3627.6 | 690.3 | 80.0 | 38.0 | 35.3 | 29.8 | 14.9 | 8.1 | 4.1 | 1.4 | 0.0 |
| 67.5° | 2885.8 | 489.6 | 70.5 | 28.5 | 24.4 | 19.0 | 9.5 | 5.4 | 1.4 | 0.0 | 0.0 |
| 70° | 1663.9 | 264.4 | 58.3 | 20.3 | 16.3 | 12.2 | 6.8 | 2.7 | 0.0 | 0.0 | 0.0 |
| 72.5° | 556.0 | 123.4 | 44.8 | 13.6 | 12.2 | 9.5 | 4.1 | 1.4 | 0.0 | 0.0 | 0.0 |
| 75° | 122.0 | 73.2 | 29.8 | 9.5 | 8.1 | 6.8 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 46.1 | 51.5 | 14.9 | 6.8 | 5.4 | 4.1 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 17.6 | 33.9 | 6.8 | 4.1 | 4.1 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 9.5 | 13.6 | 4.1 | 2.7 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 5.4 | 6.8 | 2.7 | 1.4 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 2.7 | 1.4 | 1.4 | 1.4 | 0.0 | 0.0 | 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)