

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: P640449

Luminaire Tested: GWS-SA5D-830-U-SL2-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640449
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-28)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5D-830-U-SL2-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14012.8 lumens
Efficiency: N/A
Efficacy: 68.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G1

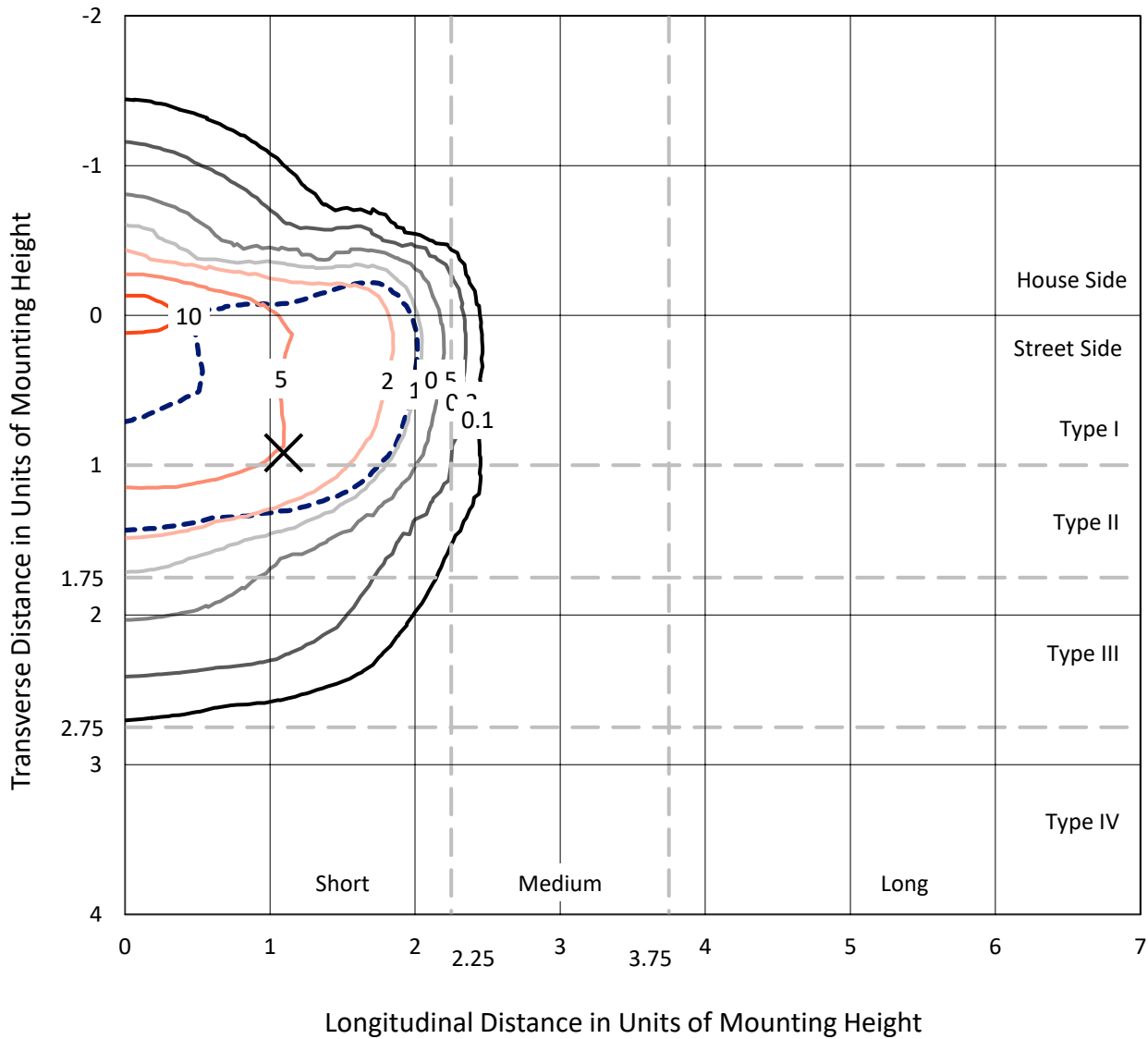
Input Watts (W): 204.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

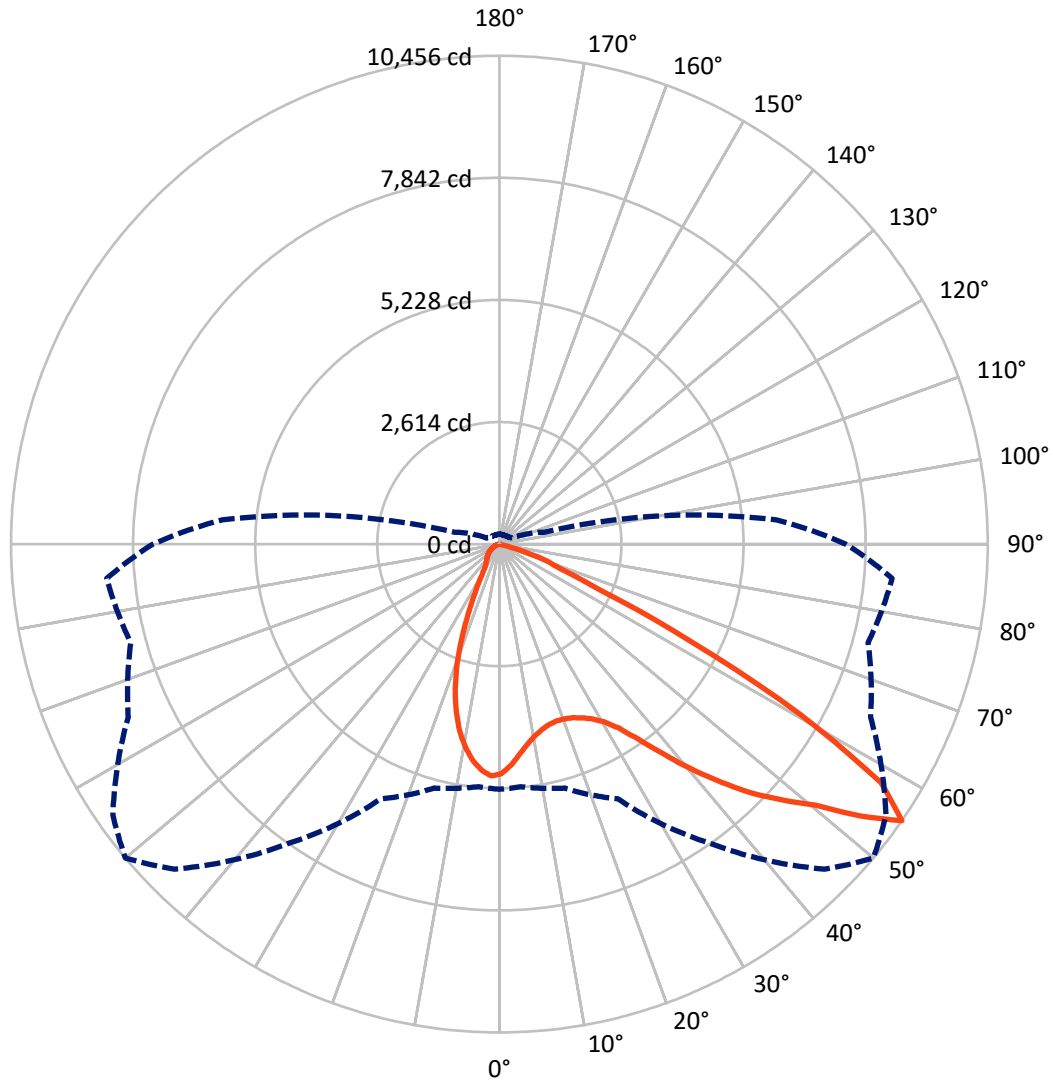
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 12.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 50-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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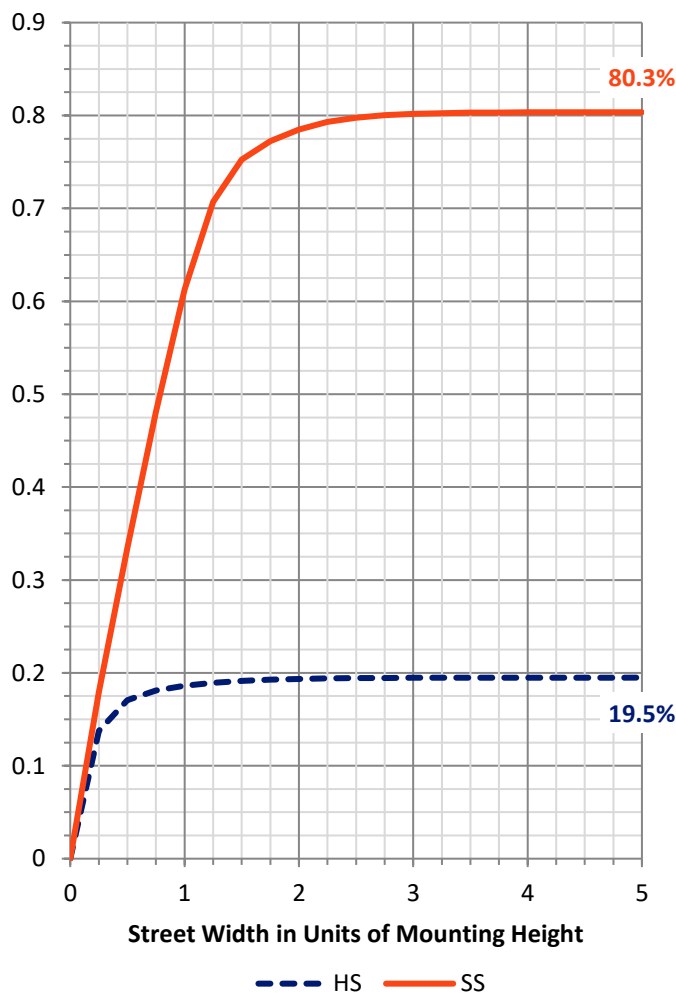
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2761.2 | 0.0 | 2761.2 |
| | % Fixture | 19.7 | 0.0 | 19.7 |
| Street Side | Lumens | 11251.6 | 0.0 | 11251.6 |
| | % Fixture | 80.3 | 0.0 | 80.3 |
| Total | Lumens | 14012.8 | 0.0 | 14012.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 431.8 | 3.1 |
| 10°-20° | 1062.5 | 7.6 |
| 20°-30° | 1498.7 | 10.7 |
| 30°-40° | 2217.8 | 15.8 |
| 40°-50° | 3199.6 | 22.8 |
| 50°-60° | 3774.1 | 26.9 |
| 60°-70° | 1683.6 | 12.0 |
| 70°-80° | 144.7 | 1.0 |
| 80°-90° | 0.1 | 0.0 |
| 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° | 14012.8 | 100.0 |
| 0°-180° | 14012.8 | 100.0 |

Coefficient of Utilization



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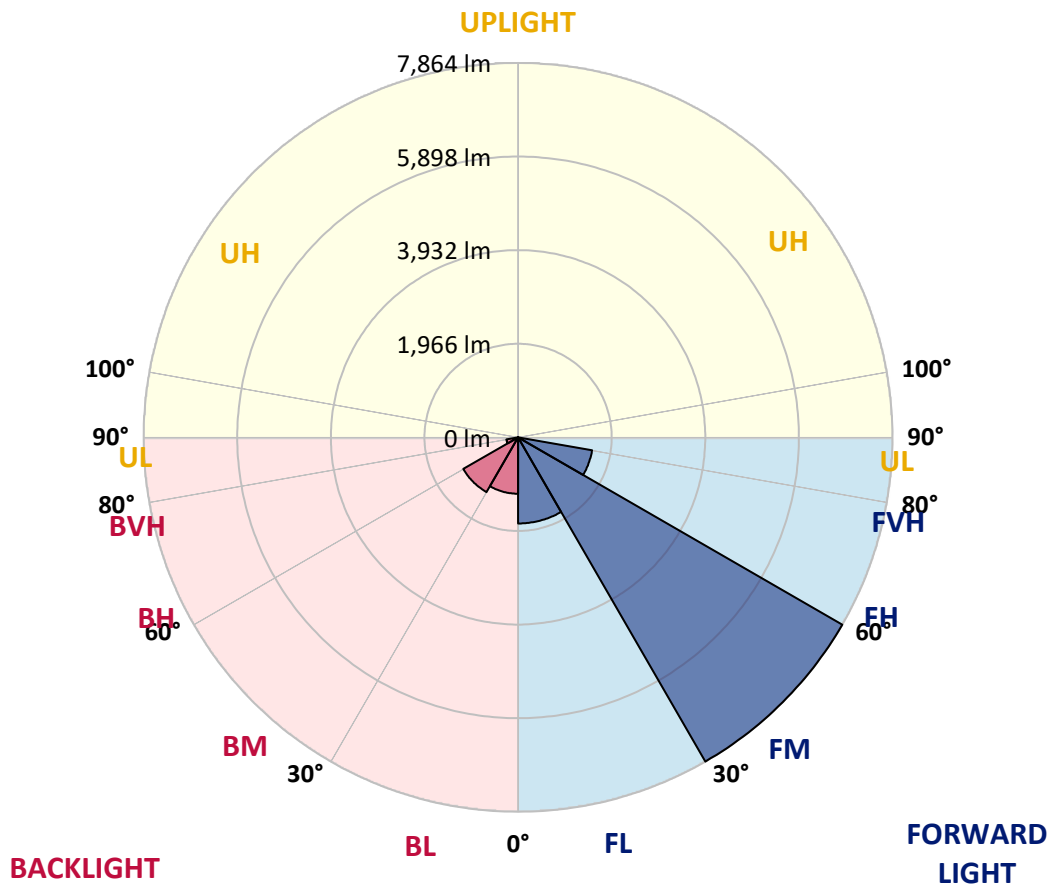
CATALOG NUMBER: GWS-SA5D-830-U-SL2-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1809.1 | 12.9 | | | |
| FM (30°-60°) | 7863.5 | 56.1 | | | |
| FH (60°-80°) | 1579.0 | 11.3 | | | G1/1800 |
| FVH (80°-90°) | 0.0 | 0.0 | | | G0/10 |
| BL (0°-30°) | 1183.9 | 8.4 | B3/2500 | | |
| BM (30°-60°) | 1327.9 | 9.5 | B2/2500 | | |
| BH (60°-80°) | 249.3 | 1.8 | B1/500 | | G1/500 |
| BVH (80°-90°) | 0.1 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 50° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|--------|--------|--------|
| 0° | 4916.5 | 4916.5 | 4916.5 | 4916.5 | 4916.5 | 4916.5 | 4916.5 | 4916.5 | 4916.5 | 4916.5 | 4916.5 |
| 2.5° | 4567.5 | 4570.9 | 4572.6 | 4618.8 | 4635.9 | 4704.3 | 4740.3 | 4759.1 | 4808.7 | 4866.9 | 4914.8 |
| 5° | 4261.3 | 4256.2 | 4264.7 | 4322.9 | 4360.5 | 4461.4 | 4516.2 | 4553.8 | 4663.3 | 4800.1 | 4914.8 |
| 7.5° | 3994.4 | 4004.7 | 4014.9 | 4078.2 | 4134.7 | 4244.2 | 4322.9 | 4379.3 | 4531.6 | 4735.1 | 4928.4 |
| 10° | 3806.2 | 3806.2 | 3821.6 | 3893.5 | 3960.2 | 4095.3 | 4174.0 | 4245.9 | 4427.2 | 4677.0 | 4943.8 |
| 12.5° | 3667.7 | 3669.4 | 3688.2 | 3770.3 | 3847.3 | 3987.6 | 4069.7 | 4139.8 | 4340.0 | 4618.8 | 4947.3 |
| 15° | 3602.7 | 3597.5 | 3612.9 | 3700.2 | 3785.7 | 3917.4 | 4003.0 | 4071.4 | 4278.4 | 4586.3 | 4964.4 |
| 17.5° | 3585.6 | 3582.1 | 3594.1 | 3679.7 | 3766.9 | 3895.2 | 3979.0 | 4047.4 | 4269.8 | 4596.6 | 5015.7 |
| 20° | 3635.2 | 3628.3 | 3623.2 | 3696.8 | 3778.9 | 3905.5 | 3992.7 | 4069.7 | 4310.9 | 4653.0 | 5094.4 |
| 22.5° | 3753.2 | 3753.2 | 3741.2 | 3777.2 | 3831.9 | 3946.5 | 4037.2 | 4138.1 | 4418.7 | 4765.9 | 5210.7 |
| 25° | 3970.5 | 3953.4 | 3931.1 | 3946.5 | 3939.7 | 4011.5 | 4119.3 | 4259.6 | 4622.2 | 4952.4 | 5352.7 |
| 27.5° | 4218.5 | 4233.9 | 4196.3 | 4198.0 | 4138.1 | 4112.5 | 4237.3 | 4449.5 | 4925.0 | 5215.8 | 5563.1 |
| 30° | 4555.5 | 4543.5 | 4545.3 | 4540.1 | 4401.6 | 4280.1 | 4415.2 | 4697.5 | 5306.5 | 5617.8 | 5836.8 |
| 32.5° | 4819.0 | 4836.1 | 4892.5 | 4925.0 | 4743.7 | 4548.7 | 4692.4 | 5034.5 | 5741.0 | 6076.3 | 6172.1 |
| 35° | 5097.8 | 5128.6 | 5243.2 | 5349.3 | 5197.0 | 4972.9 | 5126.9 | 5481.0 | 6149.9 | 6529.6 | 6557.0 |
| 37.5° | 5392.0 | 5453.6 | 5590.5 | 5776.9 | 5753.0 | 5554.5 | 5694.8 | 6006.2 | 6471.5 | 6803.3 | 6875.2 |
| 40° | 5729.0 | 5788.9 | 6013.0 | 6281.6 | 6338.0 | 6293.6 | 6339.7 | 6521.1 | 6683.6 | 6815.3 | 7012.0 |
| 42.5° | 6098.5 | 6180.7 | 6464.6 | 6823.9 | 7036.0 | 7075.3 | 6967.6 | 6948.7 | 6776.0 | 6678.5 | 6983.0 |
| 45° | 6534.8 | 6630.6 | 6952.2 | 7417.5 | 7754.5 | 7807.5 | 7621.0 | 7379.8 | 6834.1 | 6577.5 | 6895.7 |
| 47.5° | 7024.0 | 7114.7 | 7434.6 | 7994.0 | 8495.2 | 8515.7 | 8190.7 | 7802.4 | 7006.9 | 6693.9 | 6962.4 |
| 50° | 7188.2 | 7244.7 | 7521.8 | 8178.7 | 9102.5 | 9259.9 | 8789.4 | 8277.9 | 7354.2 | 7036.0 | 7287.5 |
| 52.5° | 6623.7 | 6646.0 | 6887.2 | 7550.9 | 8979.3 | 9990.3 | 9663.6 | 8987.9 | 7971.7 | 7557.7 | 7788.7 |
| 55° | 5248.3 | 5212.4 | 5407.4 | 6016.4 | 7804.1 | 9841.5 | 10455.6 | 10103.2 | 8767.2 | 8170.2 | 8440.5 |
| 57.5° | 3671.1 | 3628.3 | 3583.9 | 3996.1 | 5823.1 | 8342.9 | 9634.5 | 10258.9 | 9525.0 | 8777.5 | 9143.5 |
| 60° | 3017.6 | 2976.6 | 2761.0 | 2571.1 | 3520.6 | 5990.8 | 7400.4 | 8575.6 | 9463.4 | 8746.7 | 9121.3 |
| 62.5° | 2607.1 | 2583.1 | 2495.9 | 2237.6 | 2071.6 | 3419.6 | 4634.2 | 5759.8 | 7261.8 | 6868.3 | 6888.9 |
| 65° | 2047.7 | 2040.8 | 2100.7 | 2128.1 | 1832.1 | 1892.0 | 2364.1 | 2993.7 | 3926.0 | 3701.9 | 3510.3 |
| 67.5° | 1399.3 | 1383.9 | 1496.8 | 1840.7 | 1762.0 | 1493.4 | 1383.9 | 1395.9 | 1698.7 | 1038.4 | 824.5 |
| 70° | 889.5 | 853.6 | 855.3 | 1141.0 | 1433.5 | 1178.7 | 1067.5 | 939.2 | 845.1 | 154.0 | 174.5 |
| 72.5° | 569.7 | 547.4 | 470.4 | 514.9 | 663.7 | 574.8 | 579.9 | 499.5 | 333.6 | 82.1 | 95.8 |
| 75° | 239.5 | 220.7 | 169.4 | 135.1 | 133.4 | 83.8 | 73.6 | 68.4 | 46.2 | 46.2 | 49.6 |
| 77.5° | 1.7 | 0.0 | 0.0 | 1.7 | 3.4 | 1.7 | 1.7 | 3.4 | 6.8 | 10.3 | 12.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 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 |



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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4916.5 | 4916.5 | 4916.5 | 4916.5 | 4916.5 | 4916.5 | 4916.5 | 4916.5 | 4916.5 | 4916.5 | 4916.5 |
| 2.5° | 4943.8 | 4902.8 | 4949.0 | 4966.1 | 4964.4 | 4966.1 | 4916.5 | 4882.3 | 4880.5 | 4837.8 | 4817.3 |
| 5° | 4962.7 | 4930.2 | 4964.4 | 4942.1 | 4889.1 | 4822.4 | 4733.4 | 4656.4 | 4622.2 | 4572.6 | 4548.7 |
| 7.5° | 4998.6 | 4964.4 | 4959.2 | 4870.3 | 4738.6 | 4598.3 | 4440.9 | 4300.6 | 4225.4 | 4134.7 | 4139.8 |
| 10° | 5024.2 | 4984.9 | 4918.2 | 4736.8 | 4517.9 | 4293.8 | 4059.4 | 3850.7 | 3719.0 | 3597.5 | 3577.0 |
| 12.5° | 5034.5 | 4976.3 | 4820.7 | 4547.0 | 4239.0 | 3946.5 | 3602.7 | 3305.0 | 3099.7 | 2940.6 | 2918.4 |
| 15° | 5053.3 | 4959.2 | 4695.8 | 4317.7 | 3895.2 | 3481.2 | 3043.3 | 2636.1 | 2364.1 | 2181.1 | 2196.5 |
| 17.5° | 5082.4 | 4940.4 | 4555.5 | 4061.1 | 3525.7 | 2940.6 | 2348.8 | 1881.7 | 1632.0 | 1525.9 | 1527.6 |
| 20° | 5123.5 | 4918.2 | 4401.6 | 3778.9 | 3082.6 | 2329.9 | 1642.2 | 1289.8 | 1219.7 | 1216.3 | 1211.2 |
| 22.5° | 5178.2 | 4895.9 | 4237.3 | 3469.2 | 2557.5 | 1632.0 | 1093.1 | 983.6 | 1012.7 | 1069.2 | 1079.4 |
| 25° | 5243.2 | 4868.6 | 4054.3 | 3120.3 | 1984.4 | 1070.9 | 819.4 | 802.3 | 872.4 | 947.7 | 964.8 |
| 27.5° | 5344.1 | 4854.9 | 3845.6 | 2723.4 | 1392.5 | 768.1 | 670.6 | 680.8 | 744.1 | 807.4 | 822.8 |
| 30° | 5515.2 | 4880.5 | 3618.1 | 2278.6 | 894.7 | 612.4 | 581.6 | 597.0 | 631.2 | 663.7 | 677.4 |
| 32.5° | 5747.9 | 4955.8 | 3397.4 | 1792.8 | 638.1 | 532.0 | 525.2 | 533.7 | 547.4 | 566.2 | 571.4 |
| 35° | 6019.9 | 5085.8 | 3169.9 | 1283.0 | 526.9 | 485.8 | 479.0 | 479.0 | 485.8 | 489.3 | 491.0 |
| 37.5° | 6244.0 | 5222.7 | 2956.0 | 853.6 | 472.1 | 449.9 | 439.6 | 434.5 | 432.8 | 436.2 | 437.9 |
| 40° | 6341.5 | 5279.1 | 2723.4 | 621.0 | 432.8 | 417.4 | 402.0 | 386.6 | 386.6 | 398.6 | 400.3 |
| 42.5° | 6273.0 | 5215.8 | 2454.8 | 513.2 | 405.4 | 383.2 | 359.2 | 345.6 | 352.4 | 364.4 | 367.8 |
| 45° | 6127.6 | 5060.2 | 2158.9 | 453.3 | 378.1 | 349.0 | 321.6 | 313.1 | 319.9 | 335.3 | 338.7 |
| 47.5° | 6103.7 | 4957.5 | 1804.8 | 414.0 | 349.0 | 319.9 | 290.8 | 282.3 | 290.8 | 302.8 | 306.2 |
| 50° | 6341.5 | 5046.5 | 1411.3 | 379.8 | 321.6 | 289.1 | 265.2 | 256.6 | 261.7 | 268.6 | 272.0 |
| 52.5° | 6776.0 | 5376.6 | 1139.3 | 347.3 | 289.1 | 258.3 | 242.9 | 232.7 | 232.7 | 239.5 | 241.2 |
| 55° | 7417.5 | 5953.1 | 983.6 | 309.6 | 251.5 | 234.4 | 220.7 | 210.4 | 210.4 | 213.8 | 215.5 |
| 57.5° | 8156.5 | 6651.1 | 1019.6 | 260.0 | 220.7 | 212.1 | 200.1 | 191.6 | 195.0 | 195.0 | 195.0 |
| 60° | 8053.8 | 6599.8 | 1091.4 | 219.0 | 195.0 | 191.6 | 181.3 | 177.9 | 186.5 | 179.6 | 176.2 |
| 62.5° | 5932.6 | 4558.9 | 571.4 | 179.6 | 167.6 | 164.2 | 157.4 | 164.2 | 176.2 | 157.4 | 150.5 |
| 65° | 2880.8 | 2206.8 | 229.2 | 147.1 | 142.0 | 138.6 | 135.1 | 145.4 | 152.2 | 123.2 | 116.3 |
| 67.5° | 677.4 | 550.8 | 148.8 | 124.9 | 118.0 | 111.2 | 114.6 | 116.3 | 111.2 | 83.8 | 80.4 |
| 70° | 176.2 | 172.8 | 116.3 | 104.4 | 94.1 | 87.2 | 87.2 | 85.5 | 73.6 | 53.0 | 49.6 |
| 72.5° | 95.8 | 94.1 | 83.8 | 78.7 | 65.0 | 58.2 | 59.9 | 53.0 | 41.1 | 30.8 | 29.1 |
| 75° | 47.9 | 51.3 | 47.9 | 44.5 | 35.9 | 32.5 | 32.5 | 29.1 | 20.5 | 12.0 | 12.0 |
| 77.5° | 10.3 | 12.0 | 12.0 | 10.3 | 8.6 | 6.8 | 6.8 | 8.6 | 3.4 | 0.0 | 0.0 |
| 80° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 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)