

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: STREETWORKS

Report Number: P320152

Luminaire Tested: **GAN-SA8A-830-U-SL4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P320152  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA8A-830-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28202 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

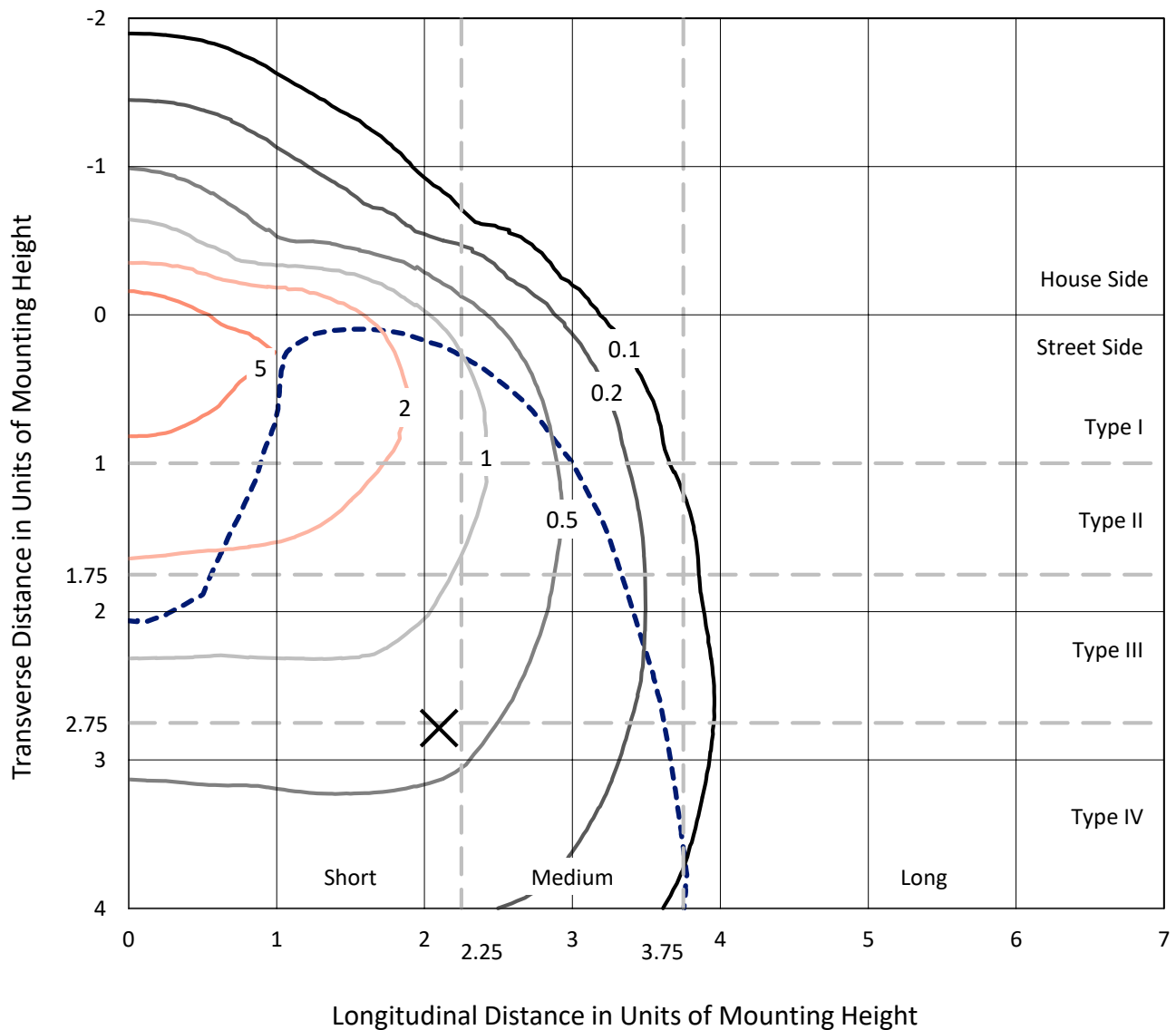
Input Watts (W): 257  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

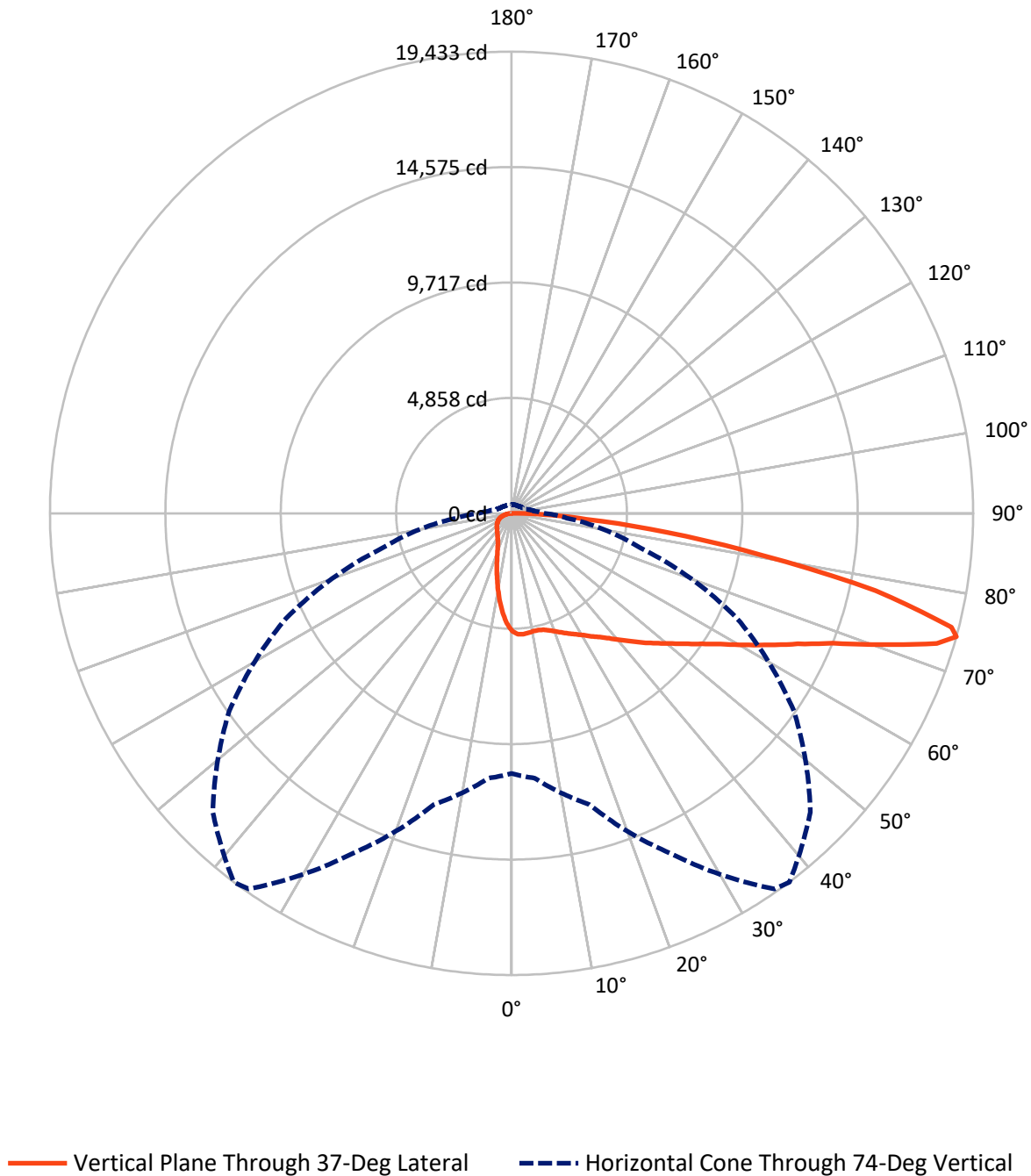
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc  
 Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3880.4   | 0.0    | 3880.4  |
|                    | % Fixture | 13.8     | 0.0    | 13.8    |
| <b>Street Side</b> | Lumens    | 24321.6  | 0.0    | 24321.6 |
|                    | % Fixture | 86.2     | 0.0    | 86.2    |
| <b>Total</b>       | Lumens    | 28202.0  | 0.0    | 28202.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 437.6   | 1.6       |
| 10°-20°   | 1121.6  | 4.0       |
| 20°-30°   | 1728.2  | 6.1       |
| 30°-40°   | 2513.1  | 8.9       |
| 40°-50°   | 3698.9  | 13.1      |
| 50°-60°   | 5194.4  | 18.4      |
| 60°-70°   | 6574.5  | 23.3      |
| 70°-80°   | 5789.1  | 20.5      |
| 80°-90°   | 1144.6  | 4.1       |
| 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°    | 28202.0 | 100.0     |
| 0°-180°   | 28202.0 | 100.0     |

**Coefficient of Utilization**



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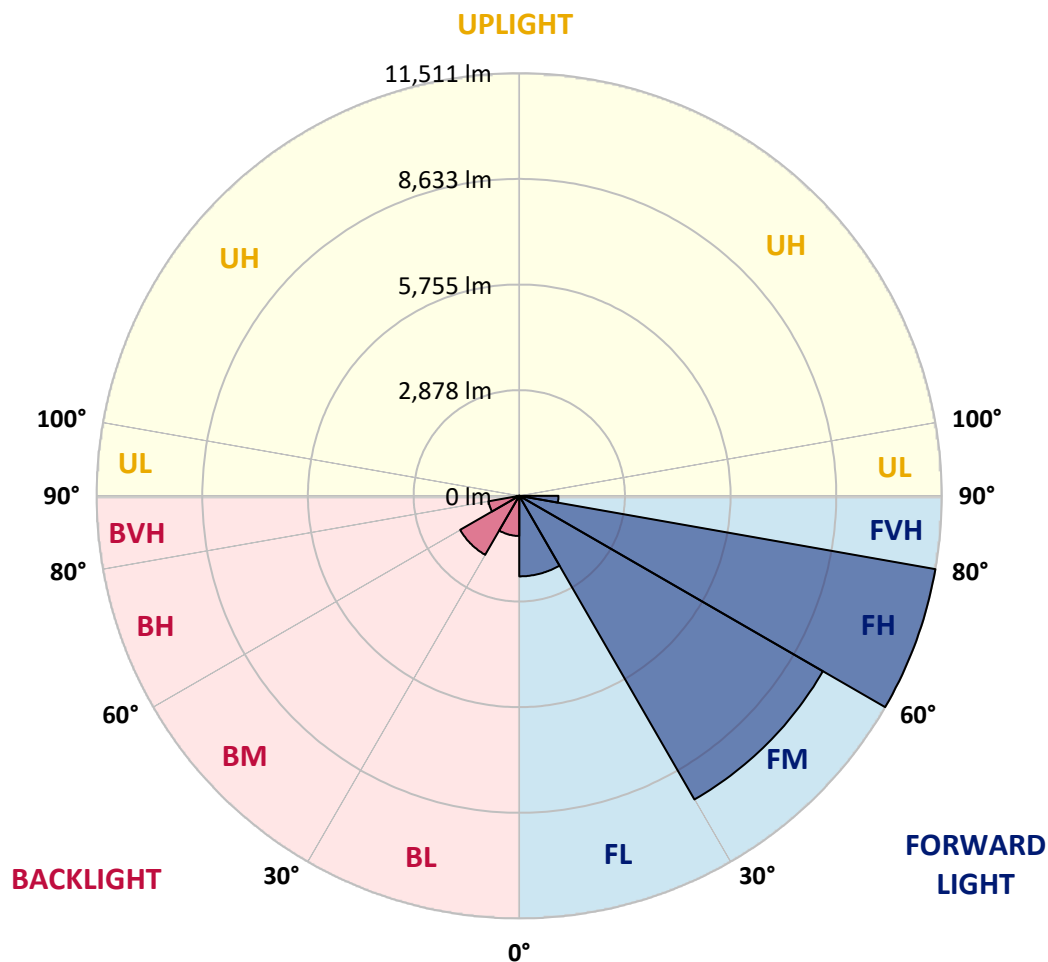
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2194.4  | 7.8       |                         |      |          |
| FM   | (30°-60°)   | 9549.4  | 33.9      |                         |      |          |
| FH   | (60°-80°)   | 11510.6 | 40.8      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 1067.1  | 3.8       |                         |      | G5       |
| BL   | (0°-30°)    | 1093.0  | 3.9       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 1856.9  | 6.6       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 853.0   | 3.0       | B2/1000                 |      | G2/1000  |
| BVH  | (80°-90°)   | 77.5    | 0.3       |                         |      | G1/100   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 37°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4969.1  | 4969.1  | 4969.1  | 4969.1  | 4969.1  | 4969.1  | 4969.1  | 4969.1  | 4969.1  | 4969.1  | 4969.1  |
| 2.5°  | 5139.0  | 5140.0  | 5139.0  | 5131.0  | 5112.1  | 5096.2  | 5083.3  | 5064.5  | 5022.7  | 4990.9  | 4943.3  |
| 5°    | 5187.6  | 5181.7  | 5177.7  | 5162.8  | 5133.0  | 5115.1  | 5090.3  | 5054.5  | 4986.0  | 4922.4  | 4844.9  |
| 7.5°  | 5164.8  | 5157.8  | 5148.9  | 5131.0  | 5097.2  | 5082.3  | 5047.6  | 5000.9  | 4918.4  | 4835.0  | 4723.7  |
| 10°   | 5094.3  | 5092.3  | 5088.3  | 5084.3  | 5055.5  | 5043.6  | 5011.8  | 4962.1  | 4880.7  | 4779.3  | 4649.2  |
| 12.5° | 5015.8  | 5020.7  | 5036.6  | 5057.5  | 5044.6  | 5038.6  | 5018.8  | 4985.0  | 4901.5  | 4792.3  | 4635.3  |
| 15°   | 4966.1  | 4980.0  | 5022.7  | 5077.4  | 5088.3  | 5086.3  | 5081.3  | 5059.5  | 4971.1  | 4849.9  | 4667.1  |
| 17.5° | 4949.2  | 4972.1  | 5053.5  | 5143.9  | 5175.7  | 5182.7  | 5184.7  | 5146.9  | 5048.6  | 4920.4  | 4699.9  |
| 20°   | 4980.0  | 5008.8  | 5128.0  | 5252.2  | 5302.9  | 5306.8  | 5297.9  | 5232.3  | 5122.1  | 4981.0  | 4717.7  |
| 22.5° | 5073.4  | 5099.2  | 5248.2  | 5388.3  | 5445.9  | 5451.9  | 5425.1  | 5325.7  | 5199.6  | 5052.5  | 4742.6  |
| 25°   | 5253.2  | 5285.0  | 5434.0  | 5574.1  | 5603.9  | 5604.9  | 5566.1  | 5442.9  | 5300.9  | 5152.9  | 4796.2  |
| 27.5° | 5487.6  | 5519.4  | 5653.5  | 5790.6  | 5774.7  | 5765.8  | 5713.2  | 5590.0  | 5433.0  | 5291.0  | 4891.6  |
| 30°   | 5748.9  | 5783.7  | 5910.8  | 6008.2  | 5970.4  | 5952.6  | 5909.9  | 5750.9  | 5616.8  | 5479.7  | 5037.6  |
| 32.5° | 6019.1  | 6050.9  | 6162.2  | 6228.7  | 6181.1  | 6173.1  | 6108.5  | 5963.5  | 5856.2  | 5767.8  | 5274.1  |
| 35°   | 6296.3  | 6319.1  | 6428.4  | 6466.2  | 6402.6  | 6400.6  | 6382.7  | 6249.6  | 6182.0  | 6223.8  | 5617.8  |
| 37.5° | 6579.4  | 6585.4  | 6678.8  | 6680.7  | 6661.9  | 6669.8  | 6688.7  | 6605.2  | 6624.1  | 6754.3  | 6064.8  |
| 40°   | 6831.7  | 6847.6  | 6915.2  | 6936.1  | 6968.8  | 6996.7  | 7091.0  | 7036.4  | 7182.4  | 7412.9  | 6621.1  |
| 42.5° | 7018.5  | 7049.3  | 7157.6  | 7211.2  | 7317.5  | 7361.2  | 7494.4  | 7545.0  | 7839.1  | 8184.8  | 7282.8  |
| 45°   | 7176.5  | 7224.1  | 7398.0  | 7508.3  | 7688.1  | 7764.6  | 7955.3  | 8125.2  | 8581.2  | 9022.2  | 7979.1  |
| 47.5° | 7347.3  | 7407.9  | 7625.5  | 7836.1  | 8080.5  | 8166.9  | 8513.6  | 8767.9  | 9372.9  | 9864.7  | 8635.8  |
| 50°   | 7598.7  | 7645.4  | 7857.9  | 8188.8  | 8493.7  | 8605.0  | 9084.8  | 9449.4  | 10177.6 | 10667.3 | 9205.0  |
| 52.5° | 7949.3  | 7931.5  | 8111.3  | 8575.2  | 8984.5  | 9121.6  | 9694.8  | 10174.6 | 10993.2 | 11393.5 | 9685.8  |
| 55°   | 8302.0  | 8272.2  | 8398.4  | 8979.5  | 9556.7  | 9700.7  | 10366.3 | 10902.8 | 11769.0 | 12047.2 | 10054.4 |
| 57.5° | 8694.4  | 8637.8  | 8744.1  | 9435.5  | 10208.4 | 10380.2 | 11118.3 | 11676.6 | 12532.0 | 12575.7 | 10288.8 |
| 60°   | 9098.7  | 9022.2  | 9141.4  | 10000.8 | 11035.9 | 11238.6 | 11998.5 | 12431.6 | 13251.2 | 12998.9 | 10364.3 |
| 62.5° | 9452.4  | 9398.7  | 9582.5  | 10631.6 | 11968.7 | 12191.2 | 12862.8 | 13234.3 | 13960.5 | 13174.7 | 10092.1 |
| 65°   | 9761.3  | 9770.3  | 10088.2 | 11340.9 | 13008.8 | 13246.3 | 13854.2 | 14223.8 | 14518.8 | 13070.4 | 9455.4  |
| 67.5° | 10129.9 | 10180.6 | 10723.0 | 12274.7 | 14318.2 | 14578.4 | 15296.7 | 15302.6 | 14830.8 | 12458.5 | 8201.7  |
| 70°   | 10667.3 | 10771.6 | 11596.2 | 13570.1 | 16179.8 | 16537.5 | 17091.8 | 15936.4 | 14392.7 | 10799.5 | 6453.3  |
| 72.5° | 11144.2 | 11338.9 | 12525.0 | 15052.3 | 18448.8 | 18720.0 | 18141.8 | 15570.9 | 12561.8 | 8093.4  | 4020.4  |
| 74°   | 10950.5 | 11191.9 | 12693.9 | 15782.5 | 19303.1 | 19433.3 | 17787.2 | 14503.9 | 10473.6 | 5604.9  | 2336.5  |
| 75°   | 10533.2 | 10795.5 | 12447.5 | 15775.5 | 19194.8 | 19122.3 | 16930.8 | 13285.0 | 8625.9  | 3822.7  | 1554.7  |
| 77.5° | 8500.7  | 8777.9  | 10488.5 | 13520.4 | 15738.7 | 15670.2 | 13005.8 | 8912.0  | 3778.0  | 1253.7  | 789.8   |
| 80°   | 4942.3  | 5153.9  | 6510.9  | 8586.1  | 10612.7 | 10736.9 | 8553.3  | 4409.8  | 1486.2  | 704.3   | 535.5   |
| 82.5° | 2195.5  | 2341.5  | 3145.2  | 4383.0  | 6404.6  | 6564.5  | 4479.3  | 2310.7  | 917.9   | 428.2   | 321.9   |
| 85°   | 1440.5  | 1548.7  | 1909.4  | 2087.2  | 3049.8  | 3159.1  | 2192.5  | 1799.1  | 606.0   | 235.4   | 236.4   |
| 87.5° | 1036.1  | 1140.4  | 1418.6  | 1238.8  | 1399.7  | 1325.2  | 1193.1  | 1665.0  | 243.4   | 134.1   | 79.5    |
| 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°    | 4969.1 | 4969.1 | 4969.1 | 4969.1 | 4969.1 | 4969.1 | 4969.1 | 4969.1 | 4969.1 | 4969.1 | 4969.1 |
| 2.5°  | 4922.4 | 4906.5 | 4870.7 | 4803.2 | 4765.4 | 4733.6 | 4681.0 | 4650.2 | 4636.3 | 4635.3 | 4641.3 |
| 5°    | 4800.2 | 4763.4 | 4671.1 | 4557.8 | 4467.4 | 4385.0 | 4282.6 | 4221.0 | 4177.3 | 4151.5 | 4158.5 |
| 7.5°  | 4658.1 | 4600.5 | 4455.5 | 4274.7 | 4129.6 | 3969.7 | 3811.7 | 3717.4 | 3643.9 | 3589.2 | 3599.2 |
| 10°   | 4560.8 | 4481.3 | 4269.7 | 4009.4 | 3768.0 | 3535.6 | 3318.0 | 3187.9 | 3084.6 | 3005.1 | 3011.1 |
| 12.5° | 4528.0 | 4420.7 | 4127.7 | 3780.0 | 3441.2 | 3123.3 | 2839.2 | 2639.5 | 2533.2 | 2442.8 | 2449.8 |
| 15°   | 4533.0 | 4388.9 | 4008.4 | 3573.3 | 3147.2 | 2746.8 | 2402.1 | 2168.6 | 2024.6 | 1962.0 | 1963.0 |
| 17.5° | 4536.9 | 4352.2 | 3883.3 | 3351.8 | 2856.1 | 2395.1 | 2020.6 | 1784.2 | 1648.1 | 1590.5 | 1591.5 |
| 20°   | 4524.0 | 4292.6 | 3728.3 | 3097.5 | 2552.1 | 2072.3 | 1709.7 | 1509.0 | 1405.7 | 1361.0 | 1361.0 |
| 22.5° | 4507.1 | 4222.0 | 3553.5 | 2842.2 | 2252.1 | 1792.1 | 1487.1 | 1334.2 | 1274.6 | 1244.8 | 1243.8 |
| 25°   | 4515.1 | 4169.4 | 3374.6 | 2579.9 | 1975.9 | 1568.6 | 1339.1 | 1237.8 | 1198.1 | 1179.2 | 1178.2 |
| 27.5° | 4557.8 | 4144.5 | 3209.7 | 2318.6 | 1734.5 | 1400.7 | 1239.8 | 1168.3 | 1142.4 | 1130.5 | 1130.5 |
| 30°   | 4635.3 | 4144.5 | 3037.9 | 2096.1 | 1533.8 | 1276.5 | 1163.3 | 1114.6 | 1096.7 | 1088.8 | 1088.8 |
| 32.5° | 4770.4 | 4167.4 | 2872.0 | 1875.6 | 1373.9 | 1179.2 | 1099.7 | 1066.9 | 1053.0 | 1049.1 | 1049.1 |
| 35°   | 5002.9 | 4244.9 | 2710.0 | 1667.0 | 1244.8 | 1099.7 | 1039.1 | 1020.2 | 1010.3 | 1009.3 | 1012.3 |
| 37.5° | 5329.7 | 4402.8 | 2558.1 | 1513.0 | 1153.4 | 1035.1 | 988.5  | 973.6  | 967.6  | 972.6  | 976.5  |
| 40°   | 5741.0 | 4617.4 | 2420.0 | 1373.9 | 1083.8 | 983.5  | 941.8  | 931.8  | 928.8  | 935.8  | 941.8  |
| 42.5° | 6237.7 | 4907.5 | 2306.7 | 1273.6 | 1030.2 | 939.8  | 902.0  | 890.1  | 887.1  | 895.1  | 903.0  |
| 45°   | 6775.1 | 5219.4 | 2227.2 | 1199.1 | 988.5  | 907.0  | 867.3  | 854.3  | 848.4  | 852.4  | 861.3  |
| 47.5° | 7263.9 | 5514.5 | 2195.5 | 1146.4 | 948.7  | 879.2  | 836.5  | 820.6  | 810.6  | 808.6  | 815.6  |
| 50°   | 7676.2 | 5734.0 | 2210.4 | 1114.6 | 916.9  | 848.4  | 806.7  | 788.8  | 773.9  | 764.9  | 769.9  |
| 52.5° | 7976.2 | 5872.1 | 2224.3 | 1100.7 | 892.1  | 814.6  | 773.9  | 757.0  | 737.1  | 722.2  | 722.2  |
| 55°   | 8193.7 | 5903.9 | 2193.5 | 1089.8 | 873.2  | 777.8  | 737.1  | 721.2  | 701.4  | 684.5  | 682.5  |
| 57.5° | 8279.2 | 5814.5 | 2079.2 | 1073.9 | 860.3  | 743.1  | 698.4  | 686.5  | 669.6  | 649.7  | 648.7  |
| 60°   | 8163.9 | 5538.3 | 1858.7 | 1040.1 | 843.4  | 714.3  | 659.6  | 651.7  | 643.7  | 624.9  | 623.9  |
| 62.5° | 7701.0 | 4932.3 | 1573.6 | 971.6  | 809.6  | 683.5  | 623.9  | 627.8  | 628.8  | 615.9  | 613.9  |
| 65°   | 6861.5 | 4099.8 | 1295.4 | 882.2  | 759.0  | 646.7  | 587.1  | 606.0  | 616.9  | 614.9  | 611.9  |
| 67.5° | 5641.6 | 3190.9 | 1097.7 | 787.8  | 692.4  | 596.1  | 547.4  | 569.2  | 578.2  | 585.1  | 583.1  |
| 70°   | 4187.3 | 2250.1 | 908.0  | 688.4  | 611.9  | 536.4  | 495.7  | 506.6  | 500.7  | 508.6  | 511.6  |
| 72.5° | 2334.5 | 1350.1 | 740.1  | 589.1  | 528.5  | 466.9  | 438.1  | 436.1  | 423.2  | 423.2  | 423.2  |
| 74°   | 1400.7 | 990.4  | 650.7  | 527.5  | 477.8  | 421.2  | 396.4  | 387.4  | 375.5  | 376.5  | 375.5  |
| 75°   | 1126.5 | 851.4  | 597.0  | 486.8  | 442.1  | 394.4  | 369.6  | 357.6  | 348.7  | 348.7  | 347.7  |
| 77.5° | 711.3  | 646.7  | 480.8  | 387.4  | 353.7  | 324.8  | 308.0  | 292.1  | 292.1  | 291.1  | 290.1  |
| 80°   | 537.4  | 514.6  | 374.5  | 293.1  | 271.2  | 249.3  | 238.4  | 231.5  | 231.5  | 234.4  | 233.5  |
| 82.5° | 368.6  | 387.4  | 263.3  | 204.6  | 193.7  | 177.8  | 175.8  | 176.8  | 173.8  | 169.9  | 168.9  |
| 85°   | 269.2  | 291.1  | 177.8  | 129.1  | 118.2  | 108.3  | 116.2  | 120.2  | 115.2  | 106.3  | 102.3  |
| 87.5° | 103.3  | 190.7  | 95.4   | 53.6   | 49.7   | 42.7   | 49.7   | 51.7   | 55.6   | 43.7   | 44.7   |
| 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)