

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: P453491

Luminaire Tested: **GALN-SA4C-730-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453491  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4C-730-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25920 lumens  
Efficiency: N/A  
Efficacy: 121.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

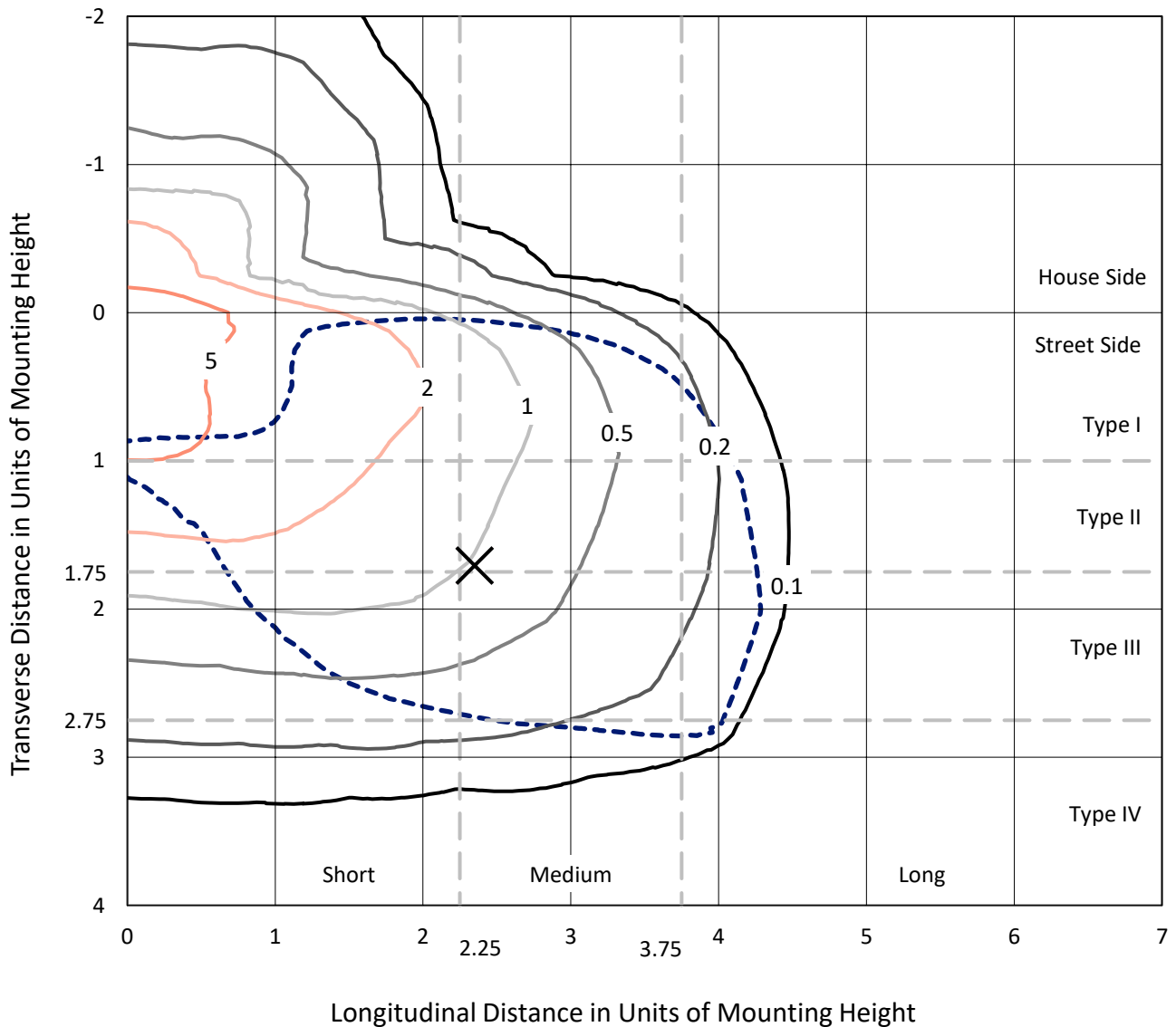
Input Watts (W): 213  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

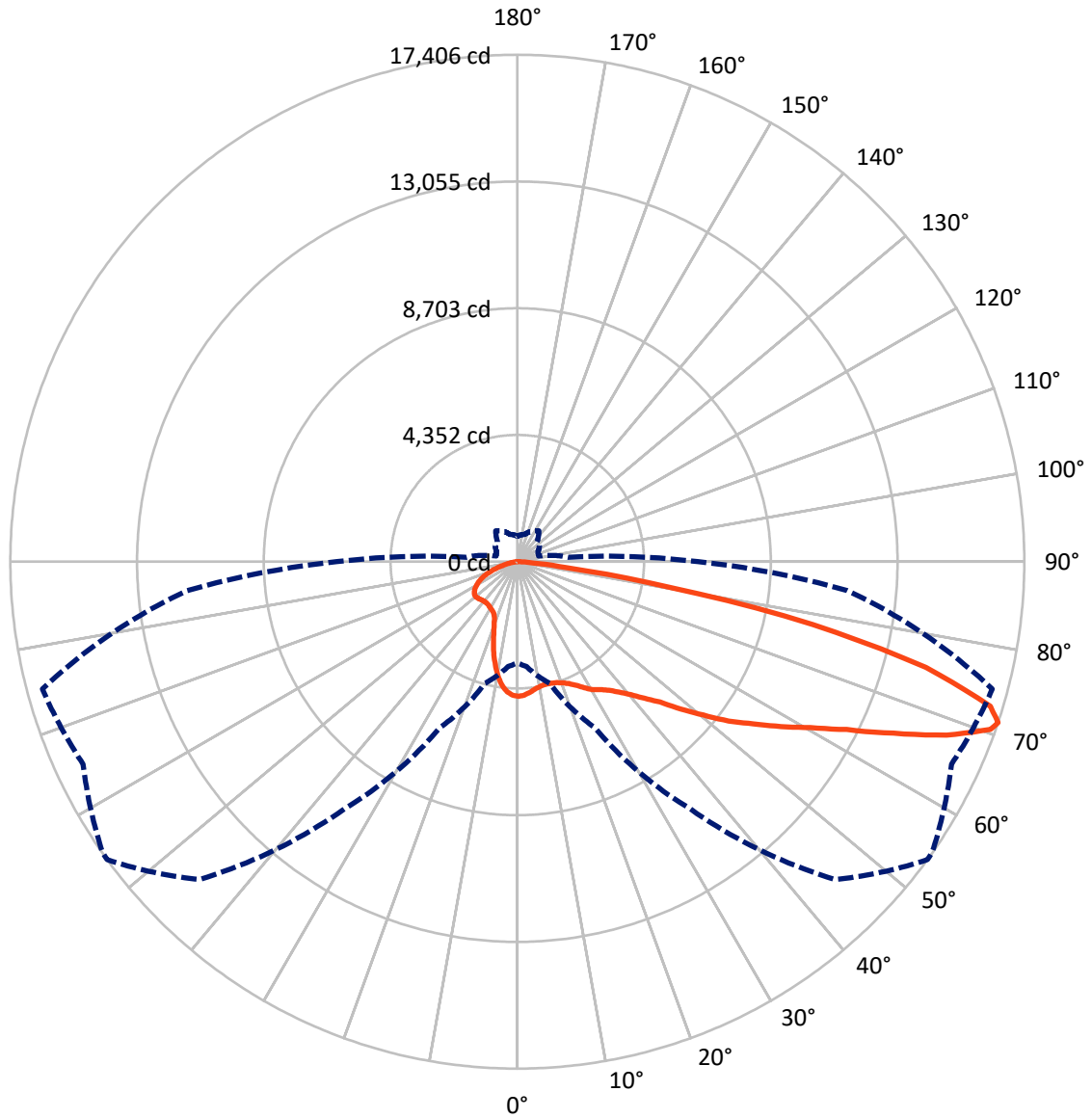
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4679.7   | 0.0    | 4679.7  |
|                    | % Fixture | 18.1     | 0.0    | 18.1    |
| <b>Street Side</b> | Lumens    | 21240.3  | 0.0    | 21240.3 |
|                    | % Fixture | 81.9     | 0.0    | 81.9    |
| <b>Total</b>       | Lumens    | 25920.0  | 0.0    | 25920.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 412.1   | 1.6       |
| 10°-20°   | 1088.2  | 4.2       |
| 20°-30°   | 1811.9  | 7.0       |
| 30°-40°   | 2679.2  | 10.3      |
| 40°-50°   | 3773.7  | 14.6      |
| 50°-60°   | 5053.2  | 19.5      |
| 60°-70°   | 6369.1  | 24.6      |
| 70°-80°   | 4350.1  | 16.8      |
| 80°-90°   | 382.5   | 1.5       |
| 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°    | 25920.0 | 100.0     |
| 0°-180°   | 25920.0 | 100.0     |

**Coefficient of Utilization**



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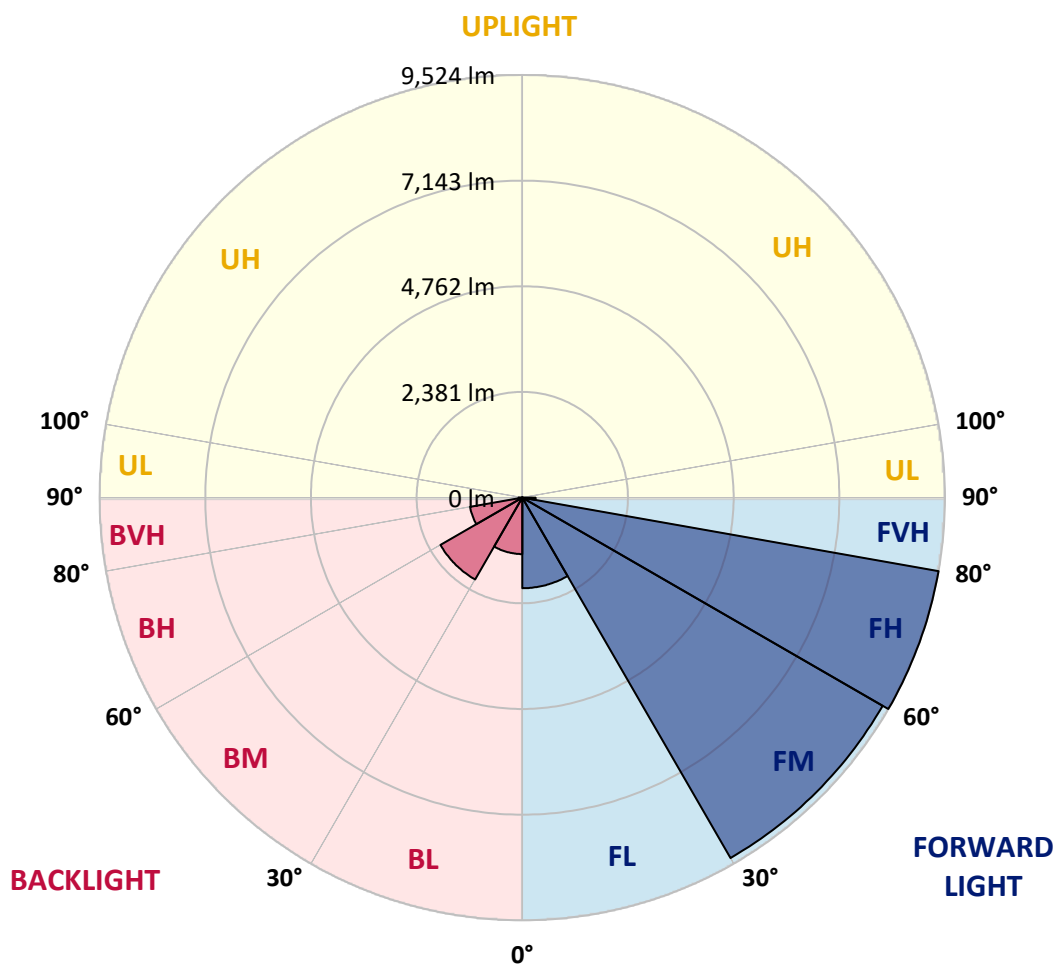
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2040.3 | 7.9       |                         |      |          |
| FM   | (30°-60°)   | 9376.9 | 36.2      |                         |      |          |
| FH   | (60°-80°)   | 9524.0 | 36.7      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 299.0  | 1.2       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1271.9 | 4.9       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 2129.1 | 8.2       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 1195.2 | 4.6       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 83.5   | 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-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°     | 45°     | 54°     | 55°     | 65°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4624.5 | 4624.5 | 4624.5 | 4624.5 | 4624.5  | 4624.5  | 4624.5  | 4624.5  | 4624.5  | 4624.5  | 4624.5  |
| 2.5°  | 4467.7 | 4488.7 | 4494.3 | 4508.3 | 4537.7  | 4561.5  | 4585.3  | 4582.5  | 4616.1  | 4630.1  | 4642.7  |
| 5°    | 4268.9 | 4274.5 | 4295.5 | 4323.5 | 4375.3  | 4441.1  | 4505.5  | 4506.9  | 4589.5  | 4655.3  | 4687.5  |
| 7.5°  | 4123.3 | 4141.5 | 4155.5 | 4184.9 | 4239.5  | 4310.9  | 4413.1  | 4421.5  | 4568.5  | 4698.7  | 4767.3  |
| 10°   | 4028.1 | 4049.1 | 4064.5 | 4100.9 | 4155.5  | 4235.3  | 4345.9  | 4361.3  | 4553.1  | 4767.3  | 4887.7  |
| 12.5° | 3941.3 | 3962.3 | 3976.3 | 4023.9 | 4095.3  | 4193.3  | 4317.9  | 4336.1  | 4558.7  | 4847.1  | 5019.3  |
| 15°   | 3994.5 | 4011.3 | 4005.7 | 4019.7 | 4067.3  | 4179.3  | 4329.1  | 4347.3  | 4579.7  | 4924.1  | 5149.5  |
| 17.5° | 4231.1 | 4245.1 | 4198.9 | 4145.7 | 4123.3  | 4205.9  | 4364.1  | 4383.7  | 4621.7  | 5003.9  | 5282.6  |
| 20°   | 4579.7 | 4617.5 | 4516.7 | 4397.7 | 4289.9  | 4301.1  | 4436.9  | 4457.9  | 4680.5  | 5083.7  | 5418.4  |
| 22.5° | 5033.3 | 5061.3 | 4938.1 | 4742.1 | 4543.3  | 4441.1  | 4546.1  | 4558.7  | 4768.7  | 5187.3  | 5566.8  |
| 25°   | 5566.8 | 5583.6 | 5412.8 | 5160.7 | 4873.7  | 4680.5  | 4695.9  | 4718.3  | 4914.3  | 5305.0  | 5698.4  |
| 27.5° | 6084.8 | 6138.0 | 5940.6 | 5632.6 | 5254.6  | 4932.5  | 4901.7  | 4915.7  | 5072.5  | 5370.8  | 5789.4  |
| 30°   | 6699.5 | 6695.3 | 6486.6 | 6129.6 | 5645.2  | 5207.0  | 5096.3  | 5093.5  | 5157.9  | 5403.0  | 5855.2  |
| 32.5° | 7189.5 | 7246.9 | 7042.5 | 6653.2 | 6091.8  | 5491.2  | 5230.8  | 5225.2  | 5223.8  | 5459.0  | 5953.2  |
| 35°   | 7746.7 | 7755.1 | 7567.5 | 7175.5 | 6574.8  | 5848.2  | 5418.4  | 5390.4  | 5358.2  | 5579.4  | 6086.2  |
| 37.5° | 8245.2 | 8284.4 | 8112.1 | 7672.5 | 7049.5  | 6219.2  | 5676.0  | 5657.8  | 5559.8  | 5788.0  | 6299.0  |
| 40°   | 8634.4 | 8663.8 | 8560.2 | 8141.5 | 7517.1  | 6619.6  | 6003.6  | 5970.0  | 5851.0  | 6129.6  | 6583.2  |
| 42.5° | 8761.8 | 8822.0 | 8862.6 | 8656.8 | 8054.7  | 7094.3  | 6406.8  | 6364.8  | 6273.8  | 6647.6  | 6910.9  |
| 45°   | 8771.6 | 8866.8 | 9081.0 | 9090.8 | 8595.2  | 7662.7  | 6877.3  | 6847.9  | 6840.9  | 7311.3  | 7371.5  |
| 47.5° | 8697.4 | 8794.0 | 9153.8 | 9348.4 | 9076.8  | 8236.8  | 7556.3  | 7510.1  | 7514.3  | 8131.7  | 7888.1  |
| 50°   | 8518.2 | 8633.0 | 9069.8 | 9513.6 | 9453.4  | 8833.2  | 8273.2  | 8257.8  | 8344.6  | 9068.4  | 8424.4  |
| 52.5° | 8180.8 | 8319.4 | 8983.0 | 9617.2 | 9733.5  | 9347.0  | 9088.0  | 9044.6  | 9264.4  | 10084.9 | 9011.0  |
| 55°   | 7246.9 | 7455.5 | 8665.2 | 9674.7 | 9999.5  | 9838.5  | 9821.7  | 9900.1  | 10191.3 | 11193.8 | 9656.5  |
| 57.5° | 6759.7 | 6916.5 | 7974.9 | 9684.5 | 10335.5 | 10409.7 | 10678.5 | 10698.1 | 11207.8 | 12371.2 | 10385.9 |
| 60°   | 6493.6 | 6632.2 | 7596.9 | 9620.0 | 10804.5 | 11116.7 | 11555.0 | 11625.0 | 12200.4 | 13646.7 | 11142.0 |
| 62.5° | 6261.2 | 6380.2 | 7370.1 | 9397.4 | 11333.8 | 12165.4 | 12690.5 | 12724.1 | 13327.5 | 15055.2 | 11888.2 |
| 65°   | 5713.8 | 5849.6 | 6913.7 | 9174.8 | 11790.2 | 13475.9 | 14197.0 | 14157.8 | 14527.4 | 16270.5 | 12355.8 |
| 67.5° | 4975.9 | 5148.1 | 6061.0 | 8406.2 | 12015.6 | 14908.2 | 15893.9 | 15844.9 | 15711.9 | 17067.2 | 12490.2 |
| 70°   | 4033.7 | 4126.1 | 4970.3 | 7077.5 | 11115.3 | 15660.1 | 17233.8 | 17182.0 | 16445.5 | 17172.2 | 11854.6 |
| 71°   | 3470.8 | 3615.0 | 4327.7 | 6286.4 | 10366.3 | 15430.4 | 17406.0 | 17392.0 | 16446.9 | 16882.3 | 11375.8 |
| 72.5° | 2709.2 | 2797.4 | 3427.4 | 4870.9 | 8810.8  | 14125.6 | 16980.3 | 17033.5 | 16089.9 | 16077.3 | 10388.7 |
| 75°   | 1713.7 | 1752.9 | 2150.5 | 2867.4 | 4834.5  | 10003.7 | 14495.2 | 14639.4 | 14286.6 | 13159.5 | 7725.7  |
| 77.5° | 995.5  | 1045.9 | 1288.1 | 1689.9 | 2088.9  | 5429.6  | 10371.9 | 10528.7 | 9926.7  | 7245.5  | 3162.8  |
| 80°   | 579.6  | 635.6  | 848.5  | 981.5  | 959.1   | 2014.7  | 5281.2  | 5548.6  | 4298.3  | 1829.9  | 887.7   |
| 82.5° | 322.0  | 359.8  | 596.4  | 597.8  | 511.0   | 658.0   | 1661.9  | 1738.9  | 1226.5  | 737.8   | 362.6   |
| 85°   | 233.8  | 264.6  | 385.0  | 348.6  | 245.0   | 282.8   | 578.2   | 606.2   | 495.6   | 310.8   | 117.6   |
| 87.5° | 82.6   | 117.6  | 211.4  | 168.0  | 67.2    | 58.8    | 166.6   | 135.8   | 126.0   | 86.8    | 26.6    |
| 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°    | 4624.5 | 4624.5 | 4624.5 | 4624.5 | 4624.5 | 4624.5 | 4624.5 | 4624.5 | 4624.5 | 4624.5 | 4624.5 |
| 2.5°  | 4649.7 | 4652.5 | 4638.5 | 4613.3 | 4588.1 | 4555.9 | 4519.5 | 4491.5 | 4478.9 | 4477.5 | 4476.1 |
| 5°    | 4700.1 | 4707.1 | 4653.9 | 4575.5 | 4488.7 | 4382.3 | 4291.3 | 4187.7 | 4161.1 | 4119.1 | 4131.7 |
| 7.5°  | 4781.3 | 4777.1 | 4672.1 | 4505.5 | 4302.5 | 4077.1 | 3886.7 | 3776.1 | 3661.2 | 3629.0 | 3630.4 |
| 10°   | 4897.5 | 4870.9 | 4672.1 | 4362.7 | 4023.9 | 3689.2 | 3423.2 | 3255.2 | 3164.2 | 3088.6 | 3060.6 |
| 12.5° | 5020.7 | 4953.5 | 4627.3 | 4162.5 | 3665.4 | 3255.2 | 2969.6 | 2742.8 | 2684.0 | 2622.4 | 2623.8 |
| 15°   | 5138.3 | 5026.3 | 4539.1 | 3881.1 | 3279.0 | 2791.8 | 2514.6 | 2378.8 | 2360.6 | 2367.6 | 2366.2 |
| 17.5° | 5244.8 | 5078.1 | 4404.7 | 3567.4 | 2828.2 | 2394.2 | 2247.2 | 2257.0 | 2306.0 | 2341.0 | 2345.2 |
| 20°   | 5352.6 | 5108.9 | 4204.5 | 3147.4 | 2402.6 | 2153.3 | 2158.9 | 2236.0 | 2310.2 | 2357.8 | 2364.8 |
| 22.5° | 5454.8 | 5122.9 | 3969.3 | 2741.4 | 2094.5 | 2051.1 | 2133.7 | 2216.3 | 2289.2 | 2335.4 | 2342.4 |
| 25°   | 5522.0 | 5090.7 | 3636.0 | 2317.2 | 1943.3 | 2014.7 | 2101.5 | 2171.5 | 2233.2 | 2280.8 | 2292.0 |
| 27.5° | 5540.2 | 4987.1 | 3223.0 | 1974.1 | 1873.3 | 1979.7 | 2059.5 | 2111.3 | 2158.9 | 2203.7 | 2212.1 |
| 30°   | 5530.4 | 4834.5 | 2769.4 | 1772.5 | 1832.7 | 1939.1 | 2000.7 | 2038.5 | 2095.9 | 2130.9 | 2137.9 |
| 32.5° | 5515.0 | 4656.7 | 2296.2 | 1664.7 | 1799.1 | 1901.3 | 1937.7 | 1971.3 | 1969.9 | 1955.9 | 1965.7 |
| 35°   | 5520.6 | 4443.9 | 1912.5 | 1600.3 | 1769.7 | 1873.3 | 1904.1 | 1862.1 | 1741.7 | 1736.1 | 1730.5 |
| 37.5° | 5550.0 | 4233.9 | 1633.9 | 1555.5 | 1754.3 | 1869.1 | 1885.9 | 1692.7 | 1586.3 | 1537.3 | 1524.7 |
| 40°   | 5625.6 | 3988.9 | 1450.5 | 1521.9 | 1752.9 | 1901.3 | 1803.3 | 1607.3 | 1402.9 | 1307.7 | 1300.7 |
| 42.5° | 5726.4 | 3748.1 | 1338.5 | 1500.9 | 1769.7 | 1950.3 | 1769.7 | 1486.9 | 1264.3 | 1208.3 | 1199.9 |
| 45°   | 5876.2 | 3472.2 | 1276.9 | 1491.1 | 1794.9 | 1968.5 | 1758.5 | 1398.7 | 1208.3 | 1163.5 | 1163.5 |
| 47.5° | 6045.6 | 3209.0 | 1243.3 | 1484.1 | 1827.1 | 1955.9 | 1659.1 | 1370.7 | 1181.7 | 1187.3 | 1213.9 |
| 50°   | 6213.6 | 2980.8 | 1218.1 | 1468.7 | 1855.1 | 1948.9 | 1618.5 | 1369.3 | 1188.7 | 1260.1 | 1307.7 |
| 52.5° | 6408.2 | 2819.8 | 1187.3 | 1443.5 | 1855.1 | 1904.1 | 1605.9 | 1397.3 | 1208.3 | 1229.3 | 1250.3 |
| 55°   | 6643.4 | 2769.4 | 1148.1 | 1388.9 | 1821.5 | 1792.1 | 1598.9 | 1437.9 | 1222.3 | 1173.3 | 1181.7 |
| 57.5° | 6954.3 | 2850.6 | 1110.3 | 1320.3 | 1744.5 | 1675.9 | 1596.1 | 1449.1 | 1190.1 | 1149.5 | 1141.1 |
| 60°   | 7315.5 | 3011.6 | 1099.1 | 1250.3 | 1639.5 | 1576.5 | 1579.3 | 1416.9 | 1145.3 | 1103.3 | 1110.3 |
| 62.5° | 7568.9 | 3108.2 | 1092.1 | 1197.1 | 1524.7 | 1467.3 | 1538.7 | 1377.7 | 1125.7 | 1089.3 | 1096.3 |
| 65°   | 7568.9 | 2990.6 | 1027.7 | 1115.9 | 1376.3 | 1335.7 | 1489.7 | 1328.7 | 1100.5 | 1058.5 | 1051.5 |
| 67.5° | 7281.9 | 2647.6 | 929.7  | 994.1  | 1212.5 | 1185.9 | 1421.1 | 1269.9 | 1062.7 | 1030.5 | 1013.7 |
| 70°   | 6534.2 | 2007.7 | 806.5  | 851.3  | 1005.3 | 1029.1 | 1332.9 | 1190.1 | 999.7  | 960.5  | 935.3  |
| 71°   | 6205.2 | 1748.7 | 754.7  | 778.5  | 925.5  | 960.5  | 1290.9 | 1156.5 | 971.7  | 915.7  | 870.9  |
| 72.5° | 5571.0 | 1472.9 | 676.2  | 686.0  | 791.1  | 854.1  | 1202.7 | 1092.1 | 918.5  | 838.7  | 788.3  |
| 75°   | 4232.5 | 1075.3 | 544.6  | 539.0  | 585.2  | 677.6  | 1017.9 | 973.1  | 805.1  | 697.2  | 667.8  |
| 77.5° | 1828.5 | 585.2  | 407.4  | 411.6  | 397.6  | 513.8  | 800.9  | 835.9  | 690.2  | 567.0  | 540.4  |
| 80°   | 554.4  | 337.4  | 278.6  | 284.2  | 266.0  | 344.4  | 564.2  | 655.2  | 554.4  | 441.0  | 404.6  |
| 82.5° | 284.2  | 201.6  | 190.4  | 187.6  | 169.4  | 194.6  | 341.6  | 448.0  | 396.2  | 275.8  | 243.6  |
| 85°   | 123.2  | 107.8  | 93.8   | 91.0   | 79.8   | 70.0   | 121.8  | 224.0  | 210.0  | 154.0  | 147.0  |
| 87.5° | 30.8   | 28.0   | 18.2   | 16.8   | 9.8    | 1.4    | 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)