

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: P529475

Luminaire Tested: **GALN-SA4C-827-U-AFL-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P529475  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4C-827-U-AFL-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15251 lumens  
Efficiency: N/A  
Efficacy: 71.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G1

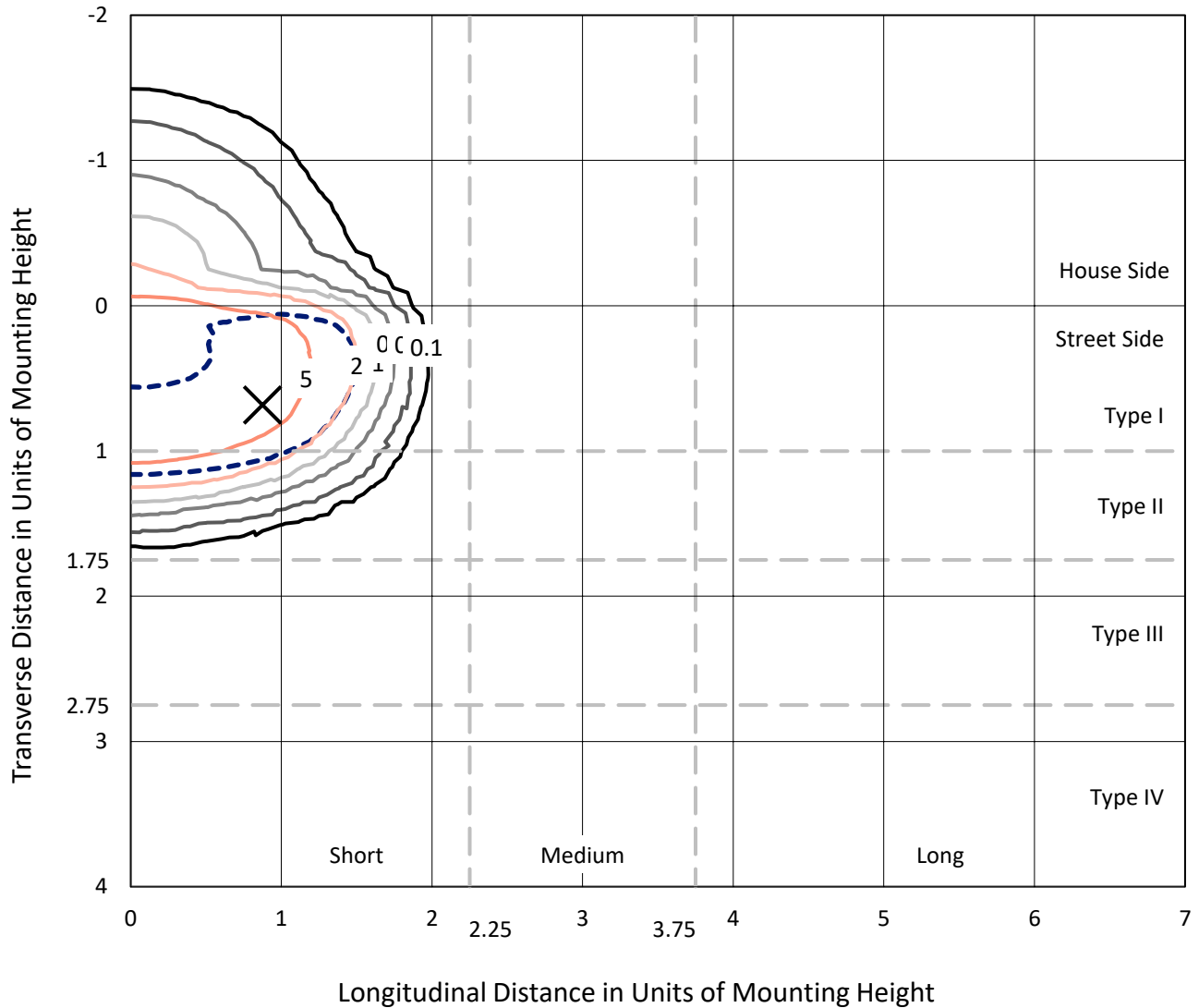
Input Watts (W): 213  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

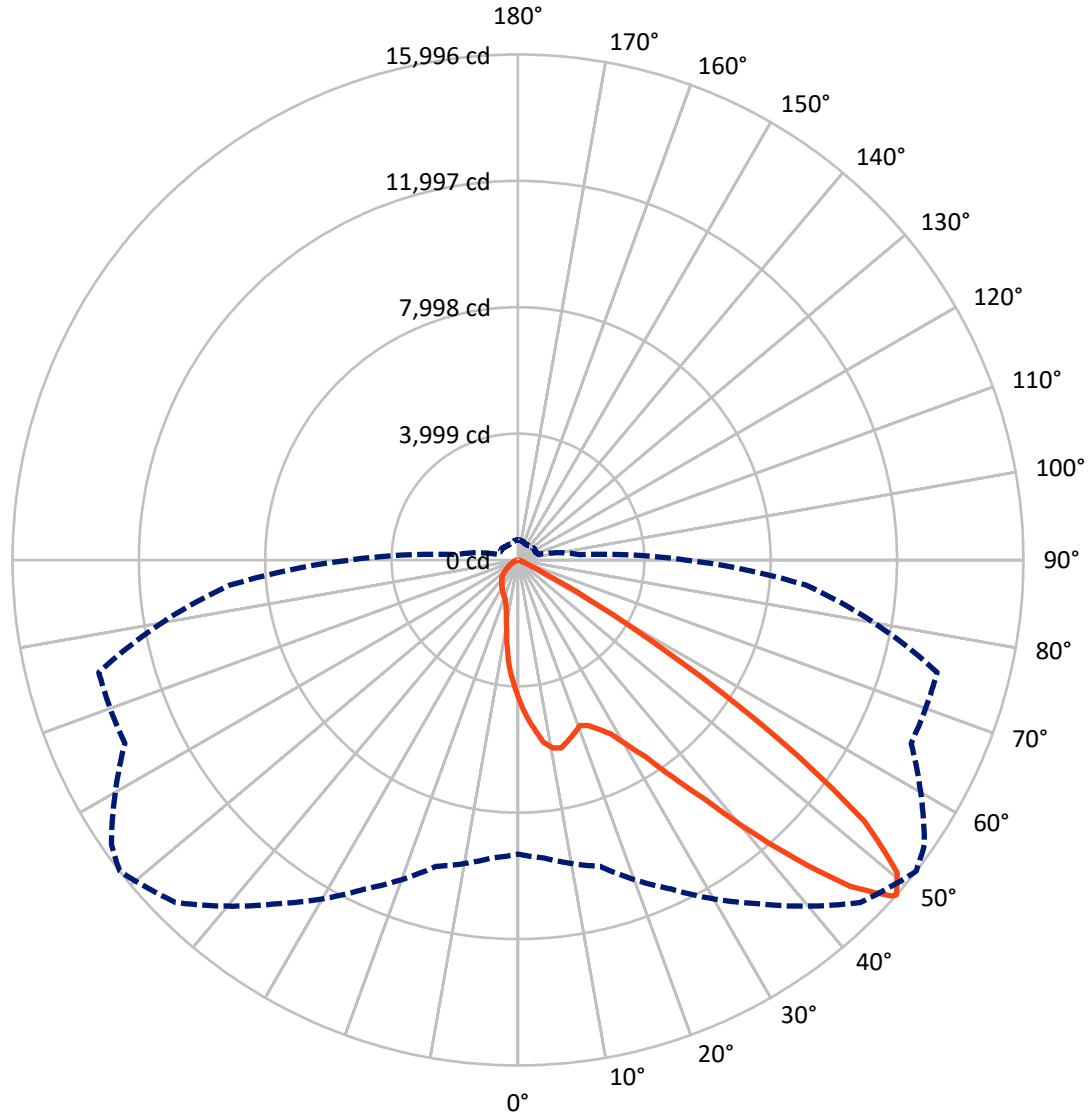
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 52-Deg Lateral    - - - Horizontal Cone Through 48-Deg Vertical

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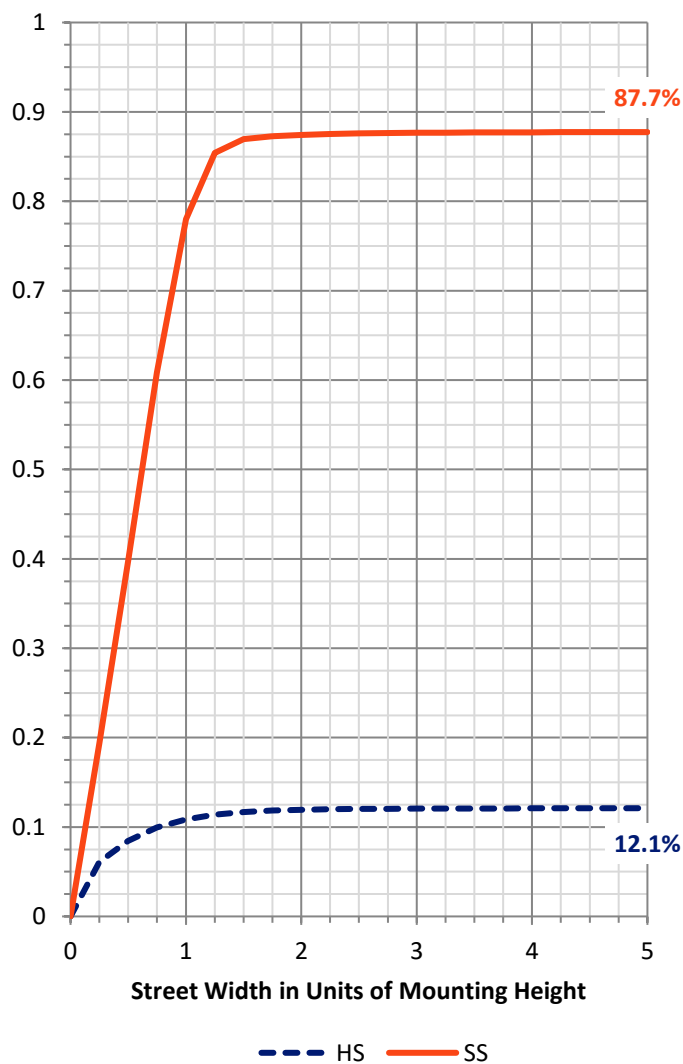
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1856.9   | 0.0    | 1856.9  |
|                    | % Fixture | 12.2     | 0.0    | 12.2    |
| <b>Street Side</b> | Lumens    | 13394.1  | 0.0    | 13394.1 |
|                    | % Fixture | 87.8     | 0.0    | 87.8    |
| <b>Total</b>       | Lumens    | 15251.0  | 0.0    | 15251.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 403.1   | 2.6       |
| 10°-20°   | 1053.5  | 6.9       |
| 20°-30°   | 1798.7  | 11.8      |
| 30°-40°   | 3312.3  | 21.7      |
| 40°-50°   | 5144.1  | 33.7      |
| 50°-60°   | 3095.9  | 20.3      |
| 60°-70°   | 358.1   | 2.3       |
| 70°-80°   | 69.3    | 0.5       |
| 80°-90°   | 16.0    | 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°    | 15251.0 | 100.0     |
| 0°-180°   | 15251.0 | 100.0     |

**Coefficient of Utilization**

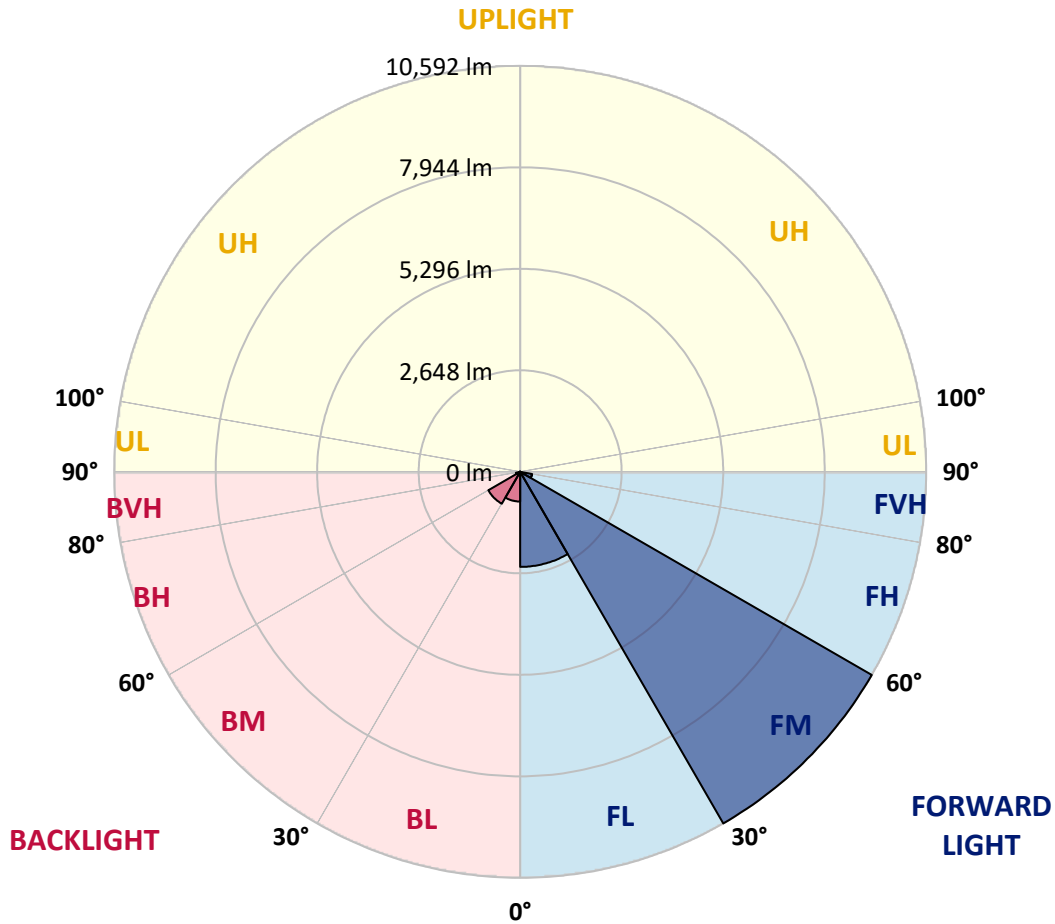


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |        |
|----------------|---------|-----------|-------------------------|------|--------|
|                |         |           | B                       | U    | G      |
| FL (0°-30°)    | 2479.6  | 16.3      |                         |      |        |
| FM (30°-60°)   | 10591.5 | 69.4      |                         |      |        |
| FH (60°-80°)   | 315.3   | 2.1       |                         |      | G0/660 |
| FVH (80°-90°)  | 7.6     | 0.1       |                         |      | G0/10  |
| BL (0°-30°)    | 775.7   | 5.1       | B2/1000                 |      |        |
| BM (30°-60°)   | 960.8   | 6.3       | B1/1000                 |      |        |
| BH (60°-80°)   | 112.1   | 0.7       | B1/500                  |      | G1/500 |
| BVH (80°-90°)  | 8.4     | 0.1       |                         |      | G0/10  |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |        |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |        |

**BUG Rating: B2-U0-G1**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 52°     | 55°     | 65°     | 75°     | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 4404.2  | 4404.2  | 4404.2  | 4404.2  | 4404.2  | 4404.2  | 4404.2  | 4404.2  | 4404.2  | 4404.2  | 4404.2 |
| 2.5°  | 5338.0  | 5215.7  | 5226.8  | 5146.8  | 5100.1  | 5024.5  | 4922.3  | 4902.2  | 4791.1  | 4639.9  | 4486.5 |
| 5°    | 5818.2  | 5789.3  | 5827.1  | 5711.5  | 5715.9  | 5591.4  | 5351.3  | 5355.8  | 5100.1  | 4853.3  | 4615.4 |
| 7.5°  | 5849.3  | 5782.6  | 5820.4  | 5922.7  | 5982.7  | 5960.5  | 5824.9  | 5707.1  | 5464.7  | 5102.3  | 4755.5 |
| 10°   | 5237.9  | 5364.7  | 5404.7  | 5573.7  | 5813.8  | 6067.2  | 6051.7  | 6058.3  | 5856.0  | 5382.5  | 4875.6 |
| 12.5° | 4871.1  | 4786.6  | 4922.3  | 5024.5  | 5386.9  | 5878.2  | 6102.8  | 6151.7  | 6167.3  | 5653.7  | 4995.6 |
| 15°   | 4704.4  | 4704.4  | 4726.6  | 4755.5  | 5017.8  | 5471.4  | 5929.4  | 6071.7  | 6407.4  | 6009.4  | 5184.6 |
| 17.5° | 4808.9  | 4804.4  | 4835.5  | 4775.5  | 4873.3  | 5222.4  | 5769.3  | 5931.6  | 6676.4  | 6358.5  | 5333.5 |
| 20°   | 5126.8  | 5142.4  | 5122.3  | 4948.9  | 4955.6  | 5217.9  | 5591.4  | 5847.1  | 6858.7  | 6660.8  | 5531.4 |
| 22.5° | 5569.2  | 5578.1  | 5464.7  | 5275.7  | 5220.2  | 5349.1  | 5693.7  | 5889.4  | 7005.4  | 7023.2  | 5591.4 |
| 25°   | 6080.6  | 6045.0  | 6022.8  | 5756.0  | 5587.0  | 5698.2  | 5924.9  | 6038.3  | 7096.6  | 7334.5  | 5762.6 |
| 27.5° | 6789.8  | 6718.6  | 6583.0  | 6345.1  | 6220.6  | 6062.8  | 6225.1  | 6411.8  | 7356.7  | 7770.2  | 5949.4 |
| 30°   | 7836.9  | 7774.7  | 7510.1  | 7203.3  | 6876.5  | 6720.9  | 6772.0  | 6874.3  | 7825.8  | 8274.9  | 6196.2 |
| 32.5° | 9413.2  | 9282.0  | 8899.6  | 8314.9  | 7870.3  | 7441.2  | 7427.8  | 7536.8  | 8246.0  | 8973.0  | 6489.6 |
| 35°   | 11149.5 | 11109.5 | 10547.0 | 9944.5  | 9084.2  | 8421.6  | 8432.7  | 8490.5  | 9050.8  | 9889.0  | 6874.3 |
| 37.5° | 12303.4 | 12523.5 | 12165.6 | 11518.6 | 10796.0 | 9848.9  | 9608.8  | 9628.8  | 10155.8 | 10973.9 | 7567.9 |
| 40°   | 13194.9 | 13008.2 | 13050.4 | 12899.2 | 12405.7 | 11760.9 | 11229.6 | 11125.1 | 11434.1 | 12174.5 | 8257.1 |
| 42.5° | 12805.9 | 12814.7 | 13074.9 | 13432.8 | 13555.1 | 13508.4 | 12965.9 | 12768.1 | 12527.9 | 13157.1 | 8913.0 |
| 45°   | 11707.6 | 11936.6 | 12274.5 | 13221.6 | 14053.1 | 14833.4 | 14726.7 | 14397.7 | 13283.9 | 13935.3 | 9290.9 |
| 47.5° | 9955.7  | 9946.8  | 10500.4 | 11732.0 | 13579.5 | 15407.0 | 15891.7 | 15660.5 | 13819.7 | 13848.6 | 9213.1 |
| 48°   | 9308.7  | 9468.8  | 10040.1 | 11489.7 | 13279.4 | 15322.6 | 15996.2 | 15705.0 | 13728.5 | 13732.9 | 9146.4 |
| 50°   | 6880.9  | 6852.0  | 7563.5  | 9342.0  | 11861.0 | 14397.7 | 15556.0 | 15782.8 | 13726.3 | 13148.2 | 8679.5 |
| 52.5° | 3635.0  | 3759.5  | 4277.5  | 5873.8  | 8386.1  | 11783.2 | 13721.8 | 14075.3 | 13241.6 | 12192.2 | 8008.1 |
| 55°   | 1545.2  | 1396.2  | 1794.2  | 2652.3  | 4717.7  | 7872.5  | 10066.8 | 10853.9 | 11196.2 | 10789.4 | 7005.4 |
| 57.5° | 551.4   | 602.5   | 693.7   | 998.2   | 1983.1  | 4308.6  | 6002.7  | 6614.1  | 7756.9  | 7917.0  | 4773.3 |
| 60°   | 353.5   | 360.2   | 389.1   | 458.0   | 744.8   | 1660.8  | 2848.0  | 3334.9  | 3852.9  | 3977.4  | 2227.7 |
| 62.5° | 273.5   | 275.7   | 289.0   | 300.1   | 353.5   | 644.7   | 1069.4  | 1267.2  | 1316.2  | 1131.6  | 584.7  |
| 65°   | 229.0   | 231.2   | 235.7   | 235.7   | 251.2   | 302.4   | 373.5   | 411.3   | 400.2   | 395.7   | 331.3  |
| 67.5° | 175.6   | 180.1   | 189.0   | 189.0   | 197.9   | 184.5   | 206.8   | 220.1   | 249.0   | 302.4   | 282.4  |
| 70°   | 137.8   | 140.1   | 146.7   | 151.2   | 151.2   | 133.4   | 149.0   | 162.3   | 182.3   | 224.5   | 222.3  |
| 72.5° | 106.7   | 111.2   | 115.6   | 115.6   | 108.9   | 91.2    | 106.7   | 117.8   | 131.2   | 155.6   | 151.2  |
| 75°   | 82.3    | 82.3    | 84.5    | 68.9    | 53.4    | 46.7    | 64.5    | 77.8    | 97.8    | 102.3   | 84.5   |
| 77.5° | 22.2    | 24.5    | 22.2    | 20.0    | 22.2    | 33.3    | 42.2    | 48.9    | 62.3    | 62.3    | 55.6   |
| 80°   | 0.0     | 2.2     | 6.7     | 13.3    | 22.2    | 31.1    | 37.8    | 42.2    | 48.9    | 53.4    | 51.1   |
| 82.5° | 0.0     | 2.2     | 6.7     | 13.3    | 20.0    | 24.5    | 33.3    | 35.6    | 40.0    | 46.7    | 46.7   |
| 85°   | 0.0     | 2.2     | 4.4     | 8.9     | 13.3    | 15.6    | 15.6    | 13.3    | 13.3    | 11.1    | 8.9    |
| 87.5° | 0.0     | 0.0     | 2.2     | 4.4     | 4.4     | 6.7     | 6.7     | 6.7     | 6.7     | 6.7     | 6.7    |
| 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°    | 4404.2 | 4404.2 | 4404.2 | 4404.2 | 4404.2 | 4404.2 | 4404.2 | 4404.2 | 4404.2 | 4404.2 | 4404.2 |
| 2.5°  | 4426.5 | 4357.5 | 4253.1 | 4088.5 | 3930.7 | 3828.4 | 3730.6 | 3621.7 | 3561.6 | 3557.2 | 3523.8 |
| 5°    | 4479.8 | 4324.2 | 4075.2 | 3792.8 | 3490.5 | 3230.4 | 2968.0 | 2796.8 | 2643.4 | 2558.9 | 2543.4 |
| 7.5°  | 4508.7 | 4306.4 | 3904.0 | 3430.5 | 2914.7 | 2490.0 | 2196.6 | 1980.9 | 1896.4 | 1834.2 | 1831.9 |
| 10°   | 4568.8 | 4275.3 | 3648.3 | 2950.2 | 2312.2 | 1883.1 | 1680.8 | 1582.9 | 1536.3 | 1518.5 | 1491.8 |
| 12.5° | 4613.2 | 4217.5 | 3386.0 | 2456.7 | 1827.5 | 1560.7 | 1471.8 | 1449.6 | 1451.8 | 1460.7 | 1449.6 |
| 15°   | 4675.5 | 4166.3 | 3032.5 | 2016.5 | 1534.0 | 1405.1 | 1405.1 | 1409.5 | 1440.7 | 1445.1 | 1442.9 |
| 17.5° | 4671.0 | 4066.3 | 2667.9 | 1660.8 | 1356.2 | 1338.4 | 1345.1 | 1387.3 | 1407.3 | 1414.0 | 1398.4 |
| 20°   | 4724.4 | 3972.9 | 2292.2 | 1418.4 | 1256.1 | 1282.8 | 1327.3 | 1338.4 | 1362.8 | 1367.3 | 1349.5 |
| 22.5° | 4708.8 | 3739.5 | 1943.1 | 1227.2 | 1180.5 | 1231.7 | 1276.1 | 1289.5 | 1282.8 | 1269.5 | 1267.2 |
| 25°   | 4679.9 | 3539.4 | 1623.0 | 1100.5 | 1125.0 | 1180.5 | 1222.8 | 1198.3 | 1185.0 | 1187.2 | 1189.4 |
| 27.5° | 4628.8 | 3285.9 | 1358.4 | 1011.6 | 1049.4 | 1131.6 | 1129.4 | 1120.5 | 1133.9 | 1122.7 | 1133.9 |
| 30°   | 4619.9 | 3032.5 | 1140.5 | 931.5  | 993.8  | 1053.8 | 1058.3 | 1073.8 | 1089.4 | 1069.4 | 1089.4 |
| 32.5° | 4633.2 | 2754.6 | 984.9  | 882.6  | 960.4  | 962.7  | 1011.6 | 1027.1 | 1016.0 | 971.6  | 976.0  |
| 35°   | 4735.5 | 2541.2 | 871.5  | 855.9  | 907.1  | 909.3  | 956.0  | 936.0  | 887.1  | 860.4  | 876.0  |
| 37.5° | 4951.2 | 2363.3 | 818.2  | 831.5  | 835.9  | 864.8  | 867.1  | 827.0  | 831.5  | 829.3  | 838.2  |
| 40°   | 5226.8 | 2227.7 | 780.4  | 809.3  | 804.8  | 824.8  | 744.8  | 767.0  | 787.0  | 793.7  | 798.1  |
| 42.5° | 5415.8 | 2129.9 | 755.9  | 773.7  | 764.8  | 729.2  | 684.8  | 707.0  | 722.6  | 747.0  | 751.5  |
| 45°   | 5500.3 | 2052.0 | 727.0  | 711.4  | 711.4  | 647.0  | 629.2  | 633.6  | 669.2  | 695.9  | 691.4  |
| 47.5° | 5362.5 | 1976.5 | 675.9  | 629.2  | 644.7  | 591.4  | 571.4  | 571.4  | 609.2  | 642.5  | 635.8  |
| 48°   | 5309.1 | 1945.3 | 678.1  | 611.4  | 622.5  | 582.5  | 562.5  | 558.0  | 600.3  | 631.4  | 631.4  |
| 50°   | 5044.5 | 1829.7 | 620.3  | 562.5  | 540.2  | 535.8  | 522.5  | 526.9  | 553.6  | 582.5  | 582.5  |
| 52.5° | 4528.7 | 1580.7 | 524.7  | 482.4  | 442.4  | 469.1  | 475.8  | 466.9  | 480.2  | 506.9  | 504.7  |
| 55°   | 3779.5 | 1213.9 | 420.2  | 400.2  | 369.1  | 398.0  | 411.3  | 400.2  | 386.8  | 406.9  | 406.9  |
| 57.5° | 2421.1 | 653.6  | 335.7  | 340.2  | 309.0  | 337.9  | 349.0  | 322.4  | 297.9  | 313.5  | 311.3  |
| 60°   | 1091.6 | 391.3  | 275.7  | 269.0  | 249.0  | 282.4  | 300.1  | 269.0  | 235.7  | 246.8  | 257.9  |
| 62.5° | 409.1  | 277.9  | 209.0  | 204.5  | 200.1  | 231.2  | 240.1  | 215.7  | 182.3  | 189.0  | 191.2  |
| 65°   | 300.1  | 244.6  | 166.7  | 151.2  | 160.1  | 182.3  | 177.9  | 153.4  | 131.2  | 131.2  | 135.6  |
| 67.5° | 255.7  | 213.4  | 135.6  | 117.8  | 117.8  | 120.1  | 111.2  | 97.8   | 91.2   | 95.6   | 100.0  |
| 70°   | 200.1  | 169.0  | 106.7  | 91.2   | 82.3   | 73.4   | 64.5   | 62.3   | 55.6   | 62.3   | 60.0   |
| 72.5° | 128.9  | 113.4  | 82.3   | 68.9   | 62.3   | 51.1   | 42.2   | 40.0   | 33.3   | 31.1   | 31.1   |
| 75°   | 68.9   | 68.9   | 64.5   | 55.6   | 48.9   | 40.0   | 33.3   | 26.7   | 17.8   | 13.3   | 13.3   |
| 77.5° | 48.9   | 53.4   | 57.8   | 53.4   | 44.5   | 33.3   | 26.7   | 17.8   | 8.9    | 4.4    | 4.4    |
| 80°   | 46.7   | 53.4   | 57.8   | 51.1   | 44.5   | 33.3   | 24.5   | 13.3   | 6.7    | 2.2    | 2.2    |
| 82.5° | 42.2   | 48.9   | 53.4   | 46.7   | 40.0   | 28.9   | 22.2   | 13.3   | 6.7    | 2.2    | 2.2    |
| 85°   | 8.9    | 11.1   | 13.3   | 13.3   | 15.6   | 20.0   | 15.6   | 11.1   | 4.4    | 2.2    | 2.2    |
| 87.5° | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 4.4    | 4.4    | 2.2    | 2.2    | 2.2    |
| 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)