

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: P529571

Luminaire Tested: **GALN-SA4D-727-U-T3R-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P529571  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4D-727-U-T3R-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15565 lumens  
Efficiency: N/A  
Efficacy: 63.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G1

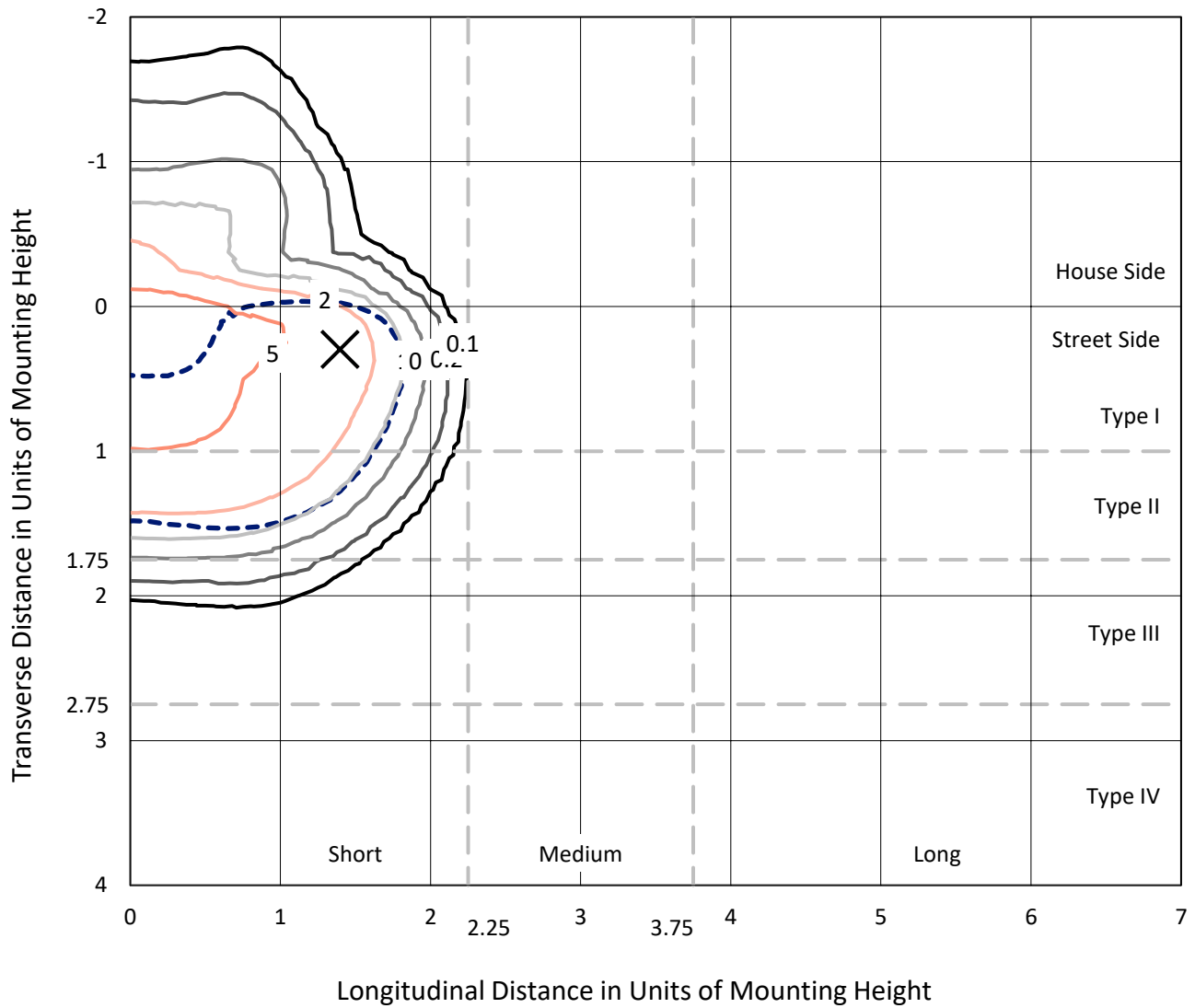
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

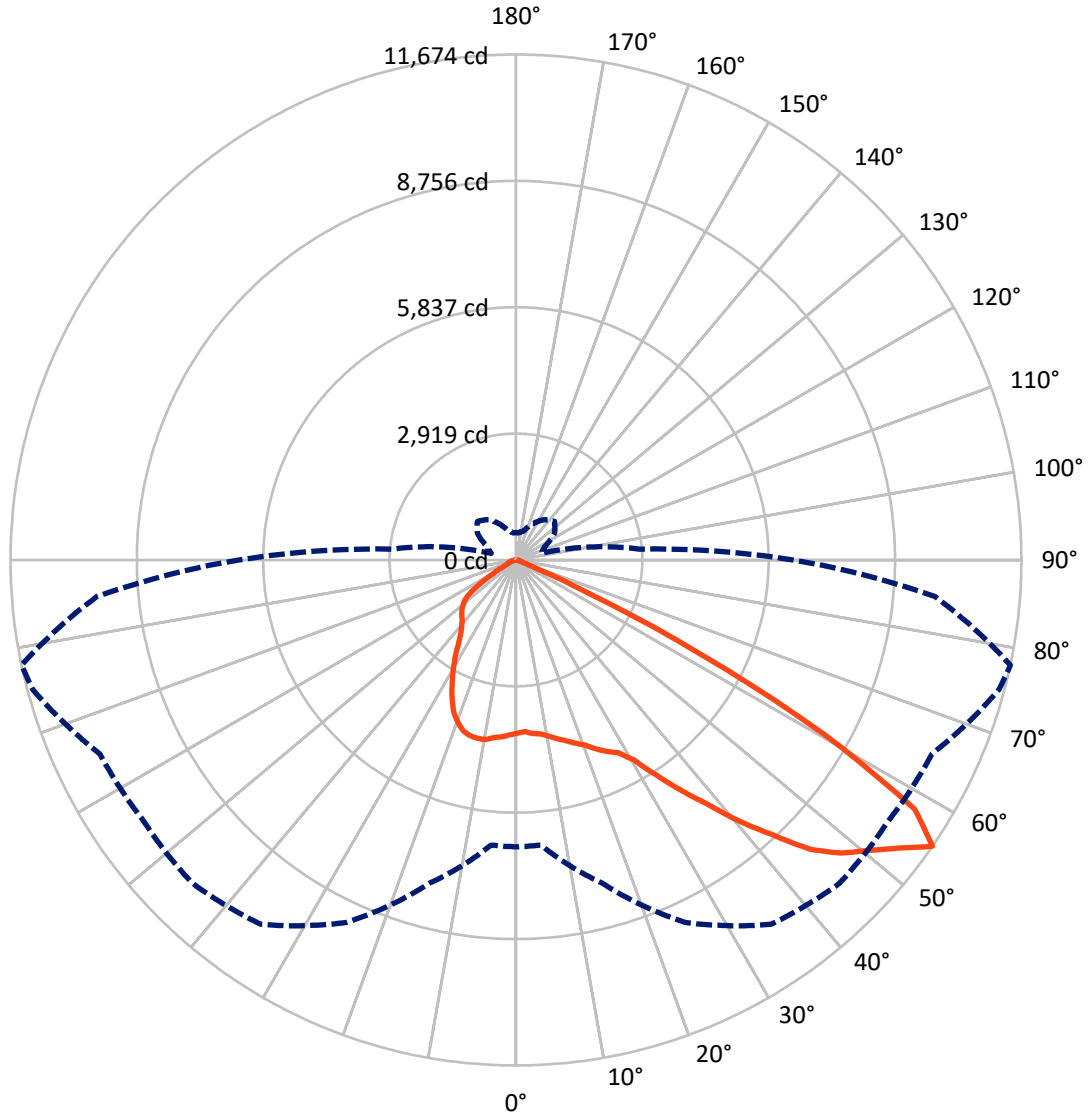
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral      - - - Horizontal Cone Through 55-Deg Vertical

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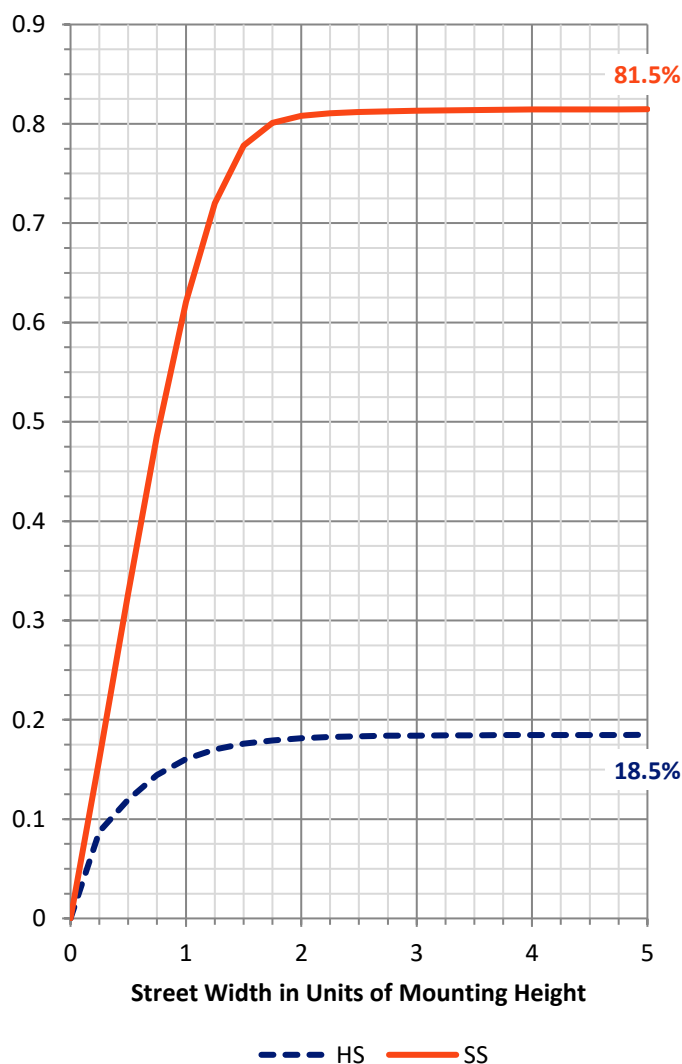
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2891.0   | 0.0    | 2891.0  |
|                    | % Fixture | 18.6     | 0.0    | 18.6    |
| <b>Street Side</b> | Lumens    | 12674.0  | 0.0    | 12674.0 |
|                    | % Fixture | 81.4     | 0.0    | 81.4    |
| <b>Total</b>       | Lumens    | 15565.0  | 0.0    | 15565.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 356.8   | 2.3       |
| 10°-20°   | 944.4   | 6.1       |
| 20°-30°   | 1655.3  | 10.6      |
| 30°-40°   | 2729.4  | 17.5      |
| 40°-50°   | 3971.6  | 25.5      |
| 50°-60°   | 4500.2  | 28.9      |
| 60°-70°   | 1286.7  | 8.3       |
| 70°-80°   | 99.9    | 0.6       |
| 80°-90°   | 20.8    | 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°    | 15565.0 | 100.0     |
| 0°-180°   | 15565.0 | 100.0     |

**Coefficient of Utilization**



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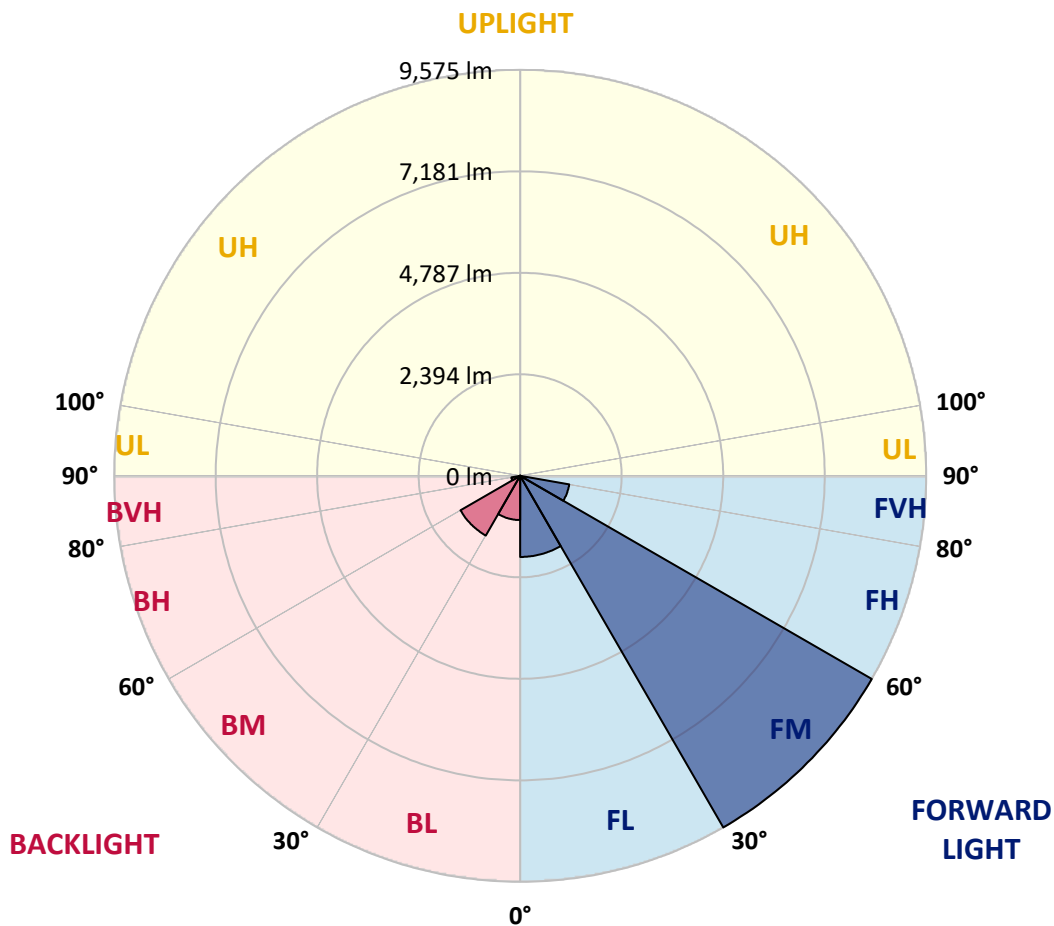
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1913.4 | 12.3      |                         |      |         |
| FM (30°-60°)   | 9574.9 | 61.5      |                         |      |         |
| FH (60°-80°)   | 1175.6 | 7.6       |                         |      | G1/1800 |
| FVH (80°-90°)  | 10.1   | 0.1       |                         |      | G1/100  |
| BL (0°-30°)    | 1043.1 | 6.7       | B3/2500                 |      |         |
| BM (30°-60°)   | 1626.2 | 10.4      | B2/2500                 |      |         |
| BH (60°-80°)   | 211.0  | 1.4       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 10.7   | 0.1       |                         |      | G1/100  |
| 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°     | 55°     | 65°     | 75°     | 78°     | 85°    |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 4001.8 | 4001.8 | 4001.8 | 4001.8 | 4001.8  | 4001.8  | 4001.8  | 4001.8  | 4001.8  | 4001.8  | 4001.8 |
| 2.5°  | 3762.4 | 3798.6 | 3804.2 | 3848.7 | 3845.9  | 3921.1  | 3943.3  | 3946.1  | 3996.2  | 3971.2  | 4035.2 |
| 5°    | 3656.7 | 3637.2 | 3628.9 | 3706.8 | 3729.0  | 3795.8  | 3851.5  | 3884.9  | 3987.9  | 4024.0  | 4090.8 |
| 7.5°  | 3562.1 | 3562.1 | 3567.6 | 3637.2 | 3628.9  | 3715.1  | 3773.6  | 3876.5  | 4026.8  | 4057.4  | 4138.1 |
| 10°   | 3470.2 | 3436.8 | 3478.6 | 3550.9 | 3612.2  | 3651.1  | 3773.6  | 3871.0  | 4046.3  | 4135.3  | 4246.7 |
| 12.5° | 3422.9 | 3439.6 | 3445.2 | 3498.1 | 3564.9  | 3681.7  | 3748.5  | 3909.9  | 4185.4  | 4238.3  | 4358.0 |
| 15°   | 3720.7 | 3687.3 | 3606.6 | 3559.3 | 3615.0  | 3670.6  | 3837.6  | 4001.8  | 4257.8  | 4332.9  | 4466.5 |
| 17.5° | 4065.8 | 4037.9 | 3971.2 | 3843.1 | 3717.9  | 3820.9  | 3951.7  | 4102.0  | 4335.7  | 4447.0  | 4644.6 |
| 20°   | 4516.6 | 4472.1 | 4405.3 | 4154.8 | 4046.3  | 3935.0  | 4074.1  | 4252.2  | 4463.7  | 4563.9  | 4767.1 |
| 22.5° | 5053.7 | 5053.7 | 4903.4 | 4600.1 | 4374.7  | 4268.9  | 4327.4  | 4430.3  | 4605.7  | 4742.0  | 4942.4 |
| 25°   | 5613.1 | 5596.4 | 5460.0 | 5145.5 | 4764.3  | 4639.0  | 4705.8  | 4778.2  | 4825.5  | 4900.6  | 5034.2 |
| 27.5° | 6253.1 | 6155.7 | 5983.2 | 5635.3 | 5298.6  | 5056.5  | 5128.8  | 5064.8  | 5006.4  | 5045.3  | 5237.4 |
| 30°   | 6687.2 | 6748.5 | 6528.6 | 6194.7 | 5877.4  | 5607.5  | 5621.4  | 5565.7  | 5298.6  | 5354.2  | 5468.3 |
| 32.5° | 7138.1 | 7177.0 | 7054.6 | 6870.9 | 6553.7  | 6239.2  | 6125.1  | 6077.8  | 5877.4  | 5902.5  | 5791.2 |
| 35°   | 7513.8 | 7588.9 | 7480.4 | 7399.7 | 7307.8  | 7054.6  | 6740.1  | 6893.2  | 6570.4  | 6509.1  | 6219.7 |
| 37.5° | 7858.8 | 7836.6 | 7964.6 | 7881.1 | 7861.6  | 7683.5  | 7338.4  | 7369.0  | 7152.0  | 7138.1  | 6804.1 |
| 40°   | 8167.7 | 8173.3 | 8348.6 | 8387.6 | 8309.7  | 7992.4  | 7491.5  | 7733.6  | 7908.9  | 7925.6  | 7497.1 |
| 42.5° | 8423.8 | 8498.9 | 8649.2 | 8963.6 | 8846.8  | 8318.0  | 7650.1  | 7914.5  | 8565.7  | 8668.6  | 8153.8 |
| 45°   | 8646.4 | 8799.4 | 8985.9 | 9267.0 | 9200.2  | 8780.0  | 8045.3  | 8287.4  | 9267.0  | 9536.9  | 8771.6 |
| 47.5° | 8660.3 | 8860.7 | 9063.8 | 9481.2 | 9564.7  | 9027.6  | 8454.4  | 8877.4  | 9823.5  | 10115.7 | 9222.4 |
| 50°   | 8604.6 | 8710.4 | 9116.7 | 9570.3 | 9759.5  | 9431.2  | 9027.6  | 9372.7  | 10363.4 | 10547.1 | 9450.6 |
| 52.5° | 7945.1 | 8025.8 | 8841.2 | 9653.8 | 10110.2 | 9887.5  | 9787.4  | 10062.9 | 10914.4 | 11050.8 | 9664.9 |
| 55°   | 6623.2 | 6609.3 | 7730.8 | 9233.6 | 10271.6 | 10563.8 | 10502.6 | 10600.0 | 11551.7 | 11674.2 | 9717.8 |
| 57.5° | 4530.5 | 4783.8 | 5752.2 | 7689.1 | 9283.7  | 10405.2 | 10469.2 | 10307.8 | 10808.7 | 10856.0 | 8471.1 |
| 60°   | 2443.4 | 2549.1 | 3328.3 | 5131.6 | 7068.5  | 8479.4  | 8646.4  | 8354.2  | 8315.2  | 8181.6  | 6047.2 |
| 62.5° | 971.2  | 1024.1 | 1466.6 | 2540.8 | 3851.5  | 5153.9  | 5512.9  | 5393.2  | 5137.2  | 4786.5  | 3130.7 |
| 65°   | 462.0  | 495.4  | 729.1  | 1188.3 | 1708.7  | 2148.4  | 2507.4  | 2618.7  | 1931.3  | 1739.3  | 1032.4 |
| 67.5° | 314.5  | 339.5  | 531.5  | 679.0  | 609.4   | 637.3   | 829.3   | 770.9   | 453.6   | 386.8   | 286.6  |
| 70°   | 239.3  | 256.0  | 425.8  | 462.0  | 272.7   | 192.0   | 214.3   | 200.4   | 186.5   | 189.2   | 186.5  |
| 72.5° | 169.8  | 183.7  | 311.7  | 272.7  | 119.7   | 89.1    | 114.1   | 136.4   | 136.4   | 136.4   | 133.6  |
| 75°   | 103.0  | 116.9  | 180.9  | 105.7  | 47.3    | 47.3    | 72.4    | 91.8    | 97.4    | 100.2   | 94.6   |
| 77.5° | 52.9   | 66.8   | 61.2   | 30.6   | 30.6    | 36.2    | 52.9    | 64.0    | 69.6    | 69.6    | 66.8   |
| 80°   | 11.1   | 11.1   | 11.1   | 16.7   | 30.6    | 39.0    | 52.9    | 58.4    | 66.8    | 66.8    | 61.2   |
| 82.5° | 0.0    | 2.8    | 8.3    | 16.7   | 27.8    | 36.2    | 50.1    | 58.4    | 66.8    | 69.6    | 64.0   |
| 85°   | 0.0    | 2.8    | 5.6    | 11.1   | 19.5    | 22.3    | 19.5    | 16.7    | 16.7    | 16.7    | 16.7   |
| 87.5° | 0.0    | 0.0    | 2.8    | 2.8    | 2.8     | 5.6     | 5.6     | 5.6     | 5.6     | 5.6     | 5.6    |
| 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°    | 4001.8 | 4001.8 | 4001.8 | 4001.8 | 4001.8 | 4001.8 | 4001.8 | 4001.8 | 4001.8 | 4001.8 | 4001.8 |
| 2.5°  | 4040.7 | 4049.1 | 4035.2 | 4032.4 | 4021.3 | 4054.6 | 3973.9 | 3954.5 | 4004.6 | 3957.2 | 3968.4 |
| 5°    | 4093.6 | 4113.1 | 4088.0 | 4046.3 | 3985.1 | 3890.5 | 3809.8 | 3704.0 | 3653.9 | 3617.7 | 3612.2 |
| 7.5°  | 4132.6 | 4146.5 | 4121.4 | 3987.9 | 3804.2 | 3564.9 | 3386.8 | 3256.0 | 3153.0 | 3122.4 | 3072.3 |
| 10°   | 4291.2 | 4294.0 | 4168.7 | 3873.8 | 3514.8 | 3200.3 | 2927.6 | 2727.2 | 2624.2 | 2560.2 | 2532.4 |
| 12.5° | 4396.9 | 4391.4 | 4138.1 | 3648.3 | 3169.7 | 2752.3 | 2440.6 | 2198.5 | 2103.9 | 2073.2 | 2053.8 |
| 15°   | 4530.5 | 4499.9 | 4065.8 | 3417.4 | 2724.4 | 2273.6 | 1992.5 | 1825.6 | 1817.2 | 1797.7 | 1817.2 |
| 17.5° | 4636.3 | 4550.0 | 3960.0 | 2997.2 | 2298.7 | 1872.9 | 1689.2 | 1700.3 | 1722.6 | 1742.1 | 1744.9 |
| 20°   | 4808.8 | 4630.7 | 3717.9 | 2629.8 | 1903.5 | 1605.7 | 1602.9 | 1653.0 | 1708.7 | 1730.9 | 1753.2 |
| 22.5° | 4939.6 | 4664.1 | 3459.1 | 2237.4 | 1580.7 | 1497.2 | 1544.5 | 1619.6 | 1661.4 | 1683.6 | 1717.0 |
| 25°   | 4986.9 | 4572.3 | 3114.0 | 1845.0 | 1424.8 | 1447.1 | 1519.4 | 1569.5 | 1622.4 | 1647.5 | 1633.5 |
| 27.5° | 5034.2 | 4525.0 | 2702.2 | 1519.4 | 1341.3 | 1413.7 | 1474.9 | 1525.0 | 1541.7 | 1575.1 | 1597.4 |
| 30°   | 5148.3 | 4360.8 | 2332.0 | 1313.5 | 1299.6 | 1391.4 | 1436.0 | 1452.7 | 1497.2 | 1516.7 | 1516.7 |
| 32.5° | 5240.1 | 4296.8 | 1939.7 | 1216.1 | 1294.0 | 1402.6 | 1408.1 | 1408.1 | 1413.7 | 1399.8 | 1394.2 |
| 35°   | 5429.4 | 4076.9 | 1589.0 | 1157.7 | 1291.3 | 1405.4 | 1419.3 | 1372.0 | 1243.9 | 1193.9 | 1179.9 |
| 37.5° | 5663.1 | 3935.0 | 1330.2 | 1143.8 | 1310.7 | 1438.7 | 1461.0 | 1282.9 | 1115.9 | 1035.2 | 1021.3 |
| 40°   | 5947.0 | 3834.8 | 1160.5 | 1138.2 | 1355.3 | 1516.7 | 1449.9 | 1213.3 | 996.3  | 879.4  | 873.8  |
| 42.5° | 6278.2 | 3743.0 | 1046.4 | 1135.4 | 1410.9 | 1597.4 | 1438.7 | 1154.9 | 873.8  | 795.9  | 807.0  |
| 45°   | 6542.5 | 3692.9 | 968.4  | 1115.9 | 1430.4 | 1644.7 | 1447.1 | 1051.9 | 823.7  | 773.6  | 779.2  |
| 47.5° | 6748.5 | 3587.1 | 904.4  | 1082.5 | 1427.6 | 1661.4 | 1372.0 | 1010.2 | 798.7  | 812.6  | 826.5  |
| 50°   | 6754.0 | 3445.2 | 823.7  | 1010.2 | 1385.9 | 1630.8 | 1285.7 | 971.2  | 793.1  | 851.6  | 879.4  |
| 52.5° | 6678.9 | 3244.8 | 737.5  | 907.2  | 1288.5 | 1525.0 | 1207.8 | 954.5  | 768.1  | 762.5  | 795.9  |
| 55°   | 6411.7 | 2869.1 | 592.8  | 734.7  | 1088.1 | 1257.9 | 1138.2 | 923.9  | 692.9  | 628.9  | 634.5  |
| 57.5° | 5181.7 | 2056.5 | 436.9  | 526.0  | 770.9  | 921.1  | 1026.9 | 910.0  | 623.4  | 534.3  | 537.1  |
| 60°   | 3208.7 | 1166.0 | 320.0  | 359.0  | 475.9  | 559.4  | 832.1  | 846.0  | 556.6  | 450.8  | 445.3  |
| 62.5° | 1647.5 | 576.1  | 247.7  | 253.2  | 292.2  | 328.4  | 570.5  | 709.6  | 503.7  | 428.6  | 428.6  |
| 65°   | 551.0  | 283.9  | 217.1  | 194.8  | 194.8  | 203.1  | 345.1  | 492.6  | 425.8  | 359.0  | 359.0  |
| 67.5° | 236.5  | 211.5  | 189.2  | 169.8  | 155.8  | 147.5  | 194.8  | 286.6  | 317.2  | 272.7  | 261.6  |
| 70°   | 183.7  | 178.1  | 164.2  | 141.9  | 122.4  | 111.3  | 114.1  | 147.5  | 180.9  | 175.3  | 169.8  |
| 72.5° | 136.4  | 136.4  | 130.8  | 111.3  | 94.6   | 80.7   | 75.1   | 77.9   | 86.3   | 89.1   | 91.8   |
| 75°   | 94.6   | 97.4   | 97.4   | 86.3   | 69.6   | 58.4   | 50.1   | 41.7   | 33.4   | 27.8   | 25.0   |
| 77.5° | 64.0   | 66.8   | 72.4   | 64.0   | 52.9   | 39.0   | 30.6   | 22.3   | 13.9   | 5.6    | 5.6    |
| 80°   | 55.7   | 64.0   | 69.6   | 64.0   | 55.7   | 41.7   | 30.6   | 16.7   | 8.3    | 0.0    | 0.0    |
| 82.5° | 58.4   | 64.0   | 72.4   | 61.2   | 52.9   | 39.0   | 30.6   | 19.5   | 8.3    | 2.8    | 0.0    |
| 85°   | 13.9   | 13.9   | 16.7   | 19.5   | 25.0   | 27.8   | 22.3   | 13.9   | 8.3    | 2.8    | 0.0    |
| 87.5° | 5.6    | 5.6    | 5.6    | 5.6    | 5.6    | 2.8    | 2.8    | 2.8    | 2.8    | 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)