

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: P318852

Luminaire Tested: **GLEON-SA8C-827-U-T4FT**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P318852  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA8C-827-U-T4FT  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 41922 lumens  
Efficiency: N/A  
Efficacy: 94.2 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

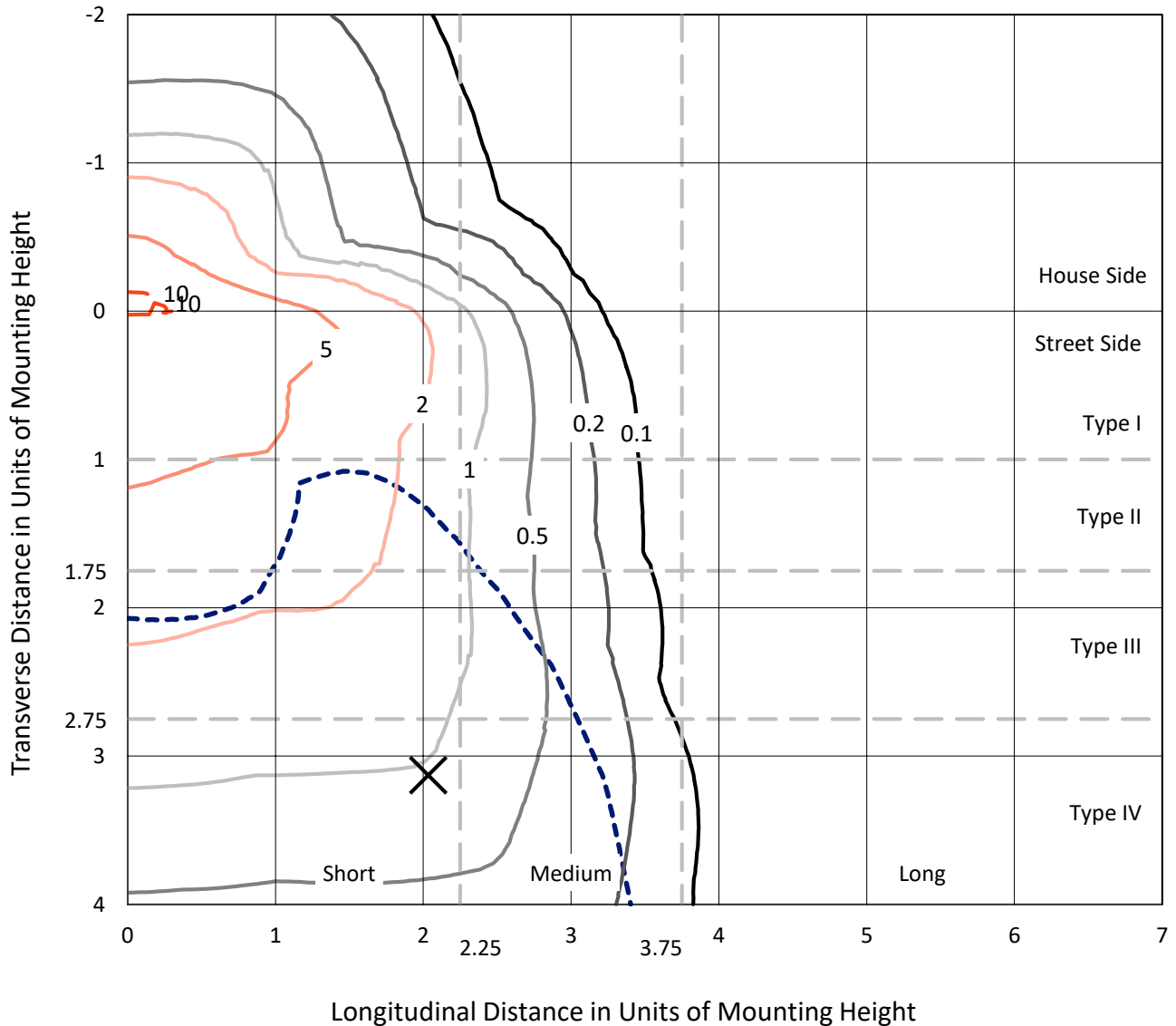
Input Watts (W): 445  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

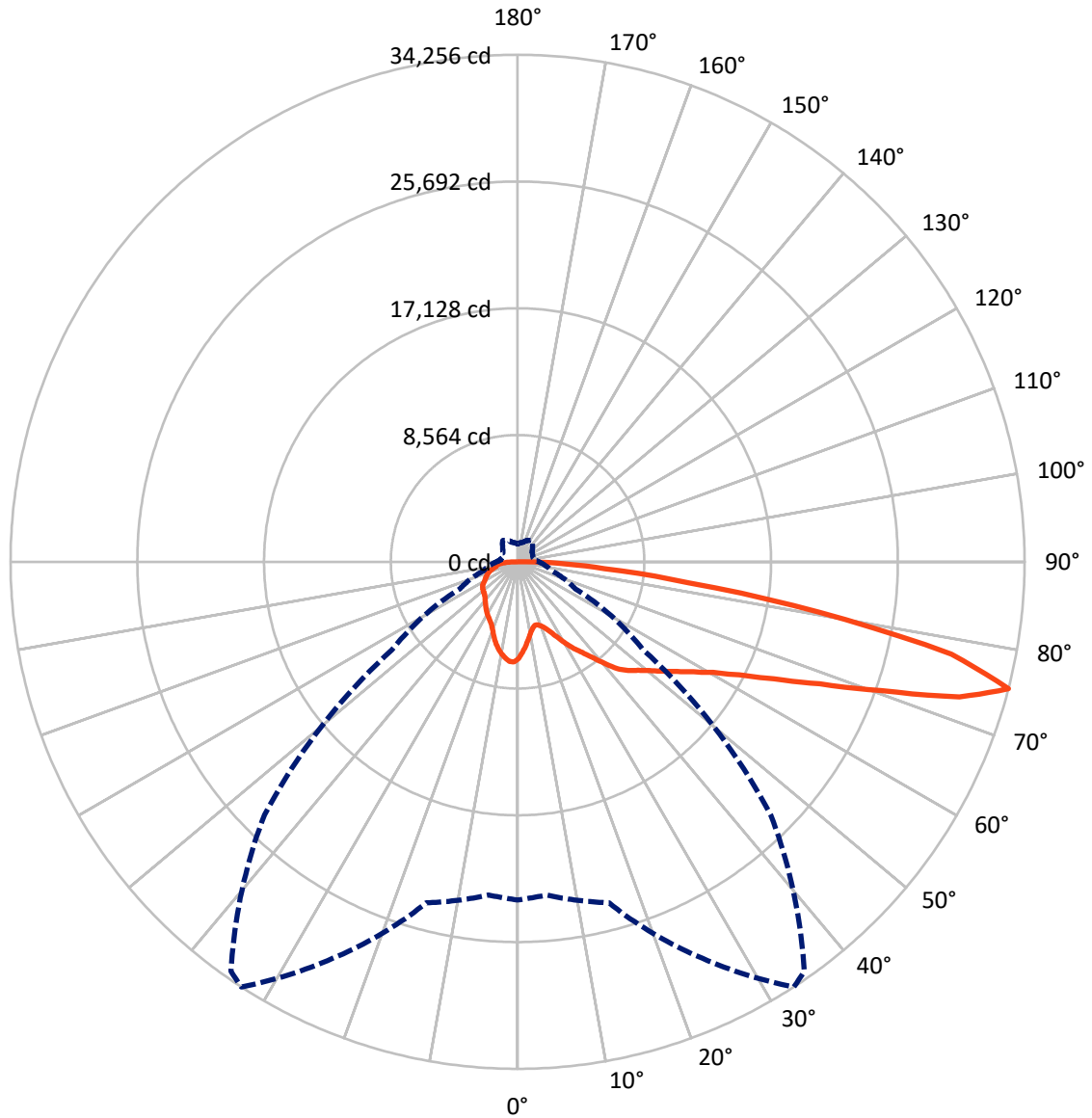
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 33-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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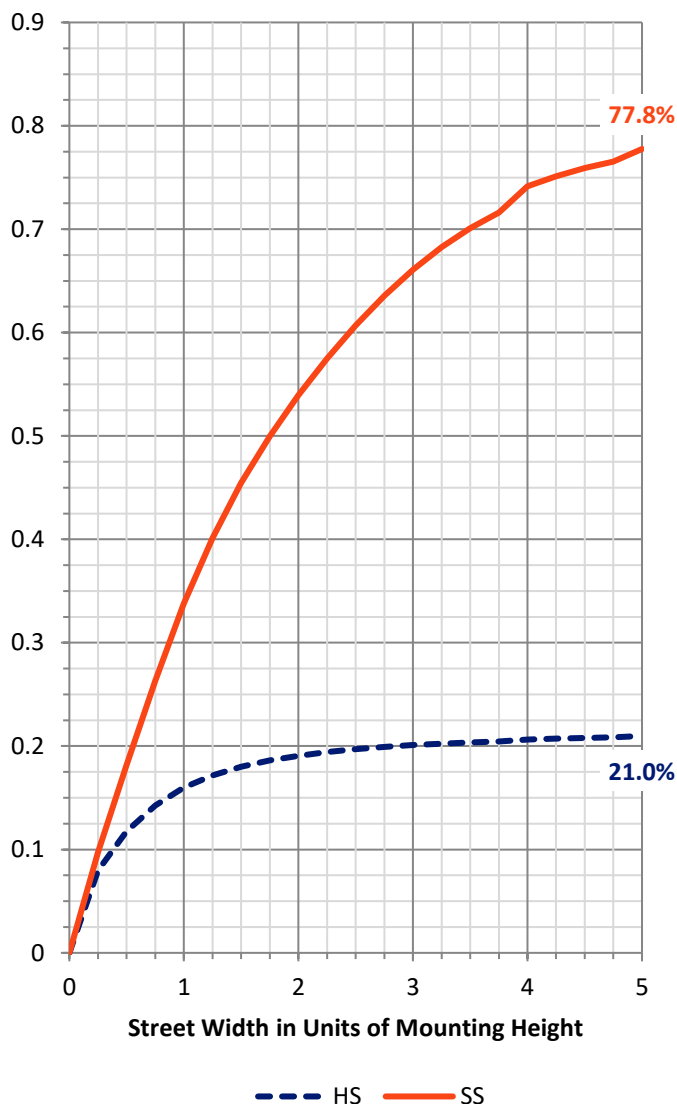
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9001.8   | 0.0    | 9001.8  |
|                    | % Fixture | 21.5     | 0.0    | 21.5    |
| <b>Street Side</b> | Lumens    | 32920.2  | 0.0    | 32920.2 |
|                    | % Fixture | 78.5     | 0.0    | 78.5    |
| <b>Total</b>       | Lumens    | 41922.0  | 0.0    | 41922.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 592.6   | 1.4       |
| 10°-20°   | 1605.0  | 3.8       |
| 20°-30°   | 2621.2  | 6.3       |
| 30°-40°   | 3903.6  | 9.3       |
| 40°-50°   | 5598.9  | 13.4      |
| 50°-60°   | 7686.4  | 18.3      |
| 60°-70°   | 9623.0  | 23.0      |
| 70°-80°   | 8705.5  | 20.8      |
| 80°-90°   | 1585.8  | 3.8       |
| 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°    | 41922.0 | 100.0     |
| 0°-180°   | 41922.0 | 100.0     |

**Coefficient of Utilization**



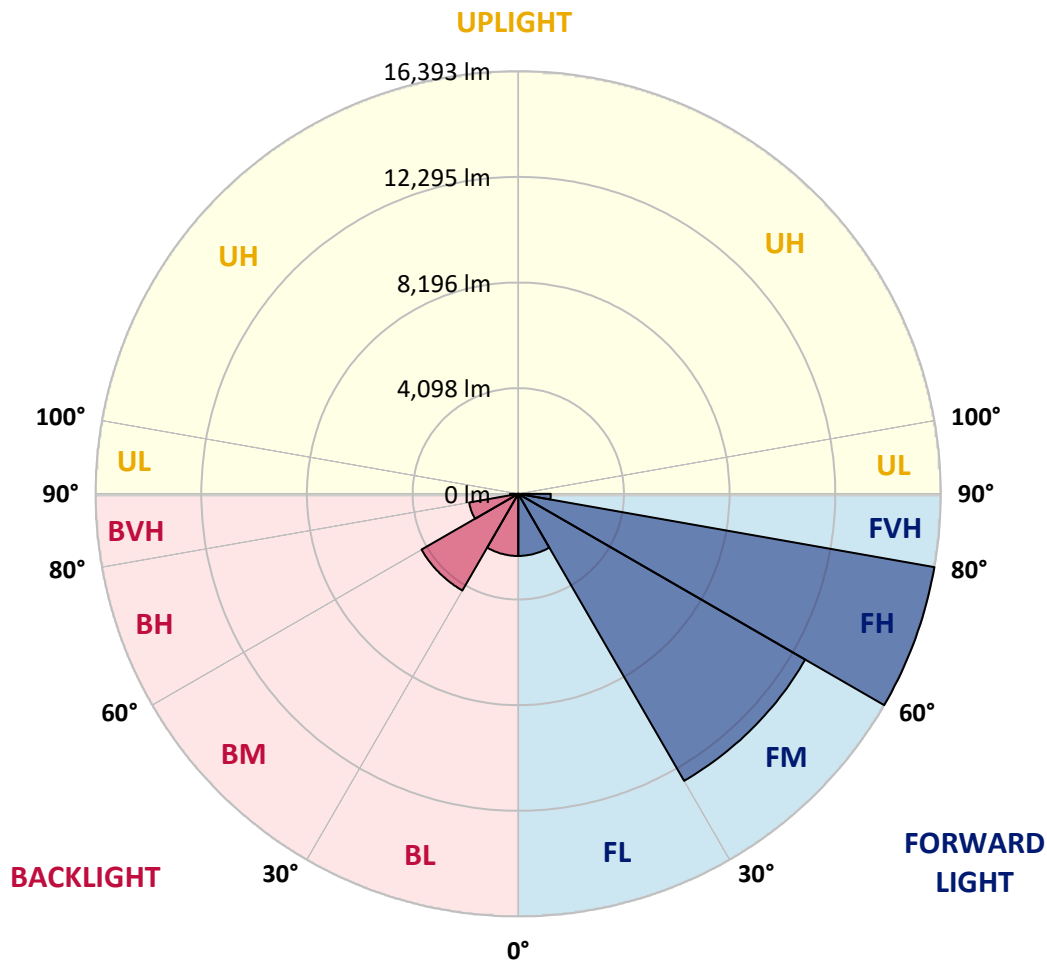
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 2407.8  | 5.7       |                         |      |         |
| FM (30°-60°)   | 12856.6 | 30.7      |                         |      |         |
| FH (60°-80°)   | 16393.0 | 39.1      |                         |      | G5      |
| FVH (80°-90°)  | 1262.9  | 3.0       |                         |      | G5      |
| BL (0°-30°)    | 2411.1  | 5.8       | B3/2500                 |      |         |
| BM (30°-60°)   | 4332.3  | 10.3      | B3/5000                 |      |         |
| BH (60°-80°)   | 1935.5  | 4.6       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 322.8   | 0.8       |                         |      | G3/500  |
| 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°     | 33°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 6552.6  | 6552.6  | 6552.6  | 6552.6  | 6552.6  | 6552.6  | 6552.6  | 6552.6  | 6552.6  | 6552.6  | 6552.6  |
| 2.5°  | 6084.9  | 6061.7  | 6105.2  | 6111.0  | 6148.6  | 6163.1  | 6215.2  | 6296.3  | 6362.9  | 6439.7  | 6509.2  |
| 5°    | 5533.2  | 5517.3  | 5578.1  | 5621.5  | 5704.1  | 5738.8  | 5861.9  | 6034.2  | 6187.7  | 6361.5  | 6519.3  |
| 7.5°  | 5009.0  | 5000.3  | 5068.3  | 5166.8  | 5262.4  | 5310.2  | 5523.0  | 5773.6  | 6029.9  | 6310.8  | 6552.6  |
| 10°   | 4567.3  | 4564.4  | 4629.6  | 4726.6  | 4867.1  | 4920.6  | 5195.8  | 5525.9  | 5885.1  | 6271.7  | 6609.1  |
| 12.5° | 4319.7  | 4329.8  | 4360.2  | 4441.3  | 4571.6  | 4625.2  | 4930.8  | 5318.9  | 5763.4  | 6258.7  | 6691.7  |
| 15°   | 4380.5  | 4396.4  | 4344.3  | 4341.4  | 4434.1  | 4476.1  | 4762.8  | 5171.2  | 5676.5  | 6280.4  | 6811.9  |
| 17.5° | 4639.7  | 4642.6  | 4505.0  | 4418.1  | 4474.6  | 4496.3  | 4710.7  | 5087.2  | 5625.9  | 6329.6  | 6962.5  |
| 20°   | 5004.6  | 4997.4  | 4754.1  | 4609.3  | 4639.7  | 4645.5  | 4784.5  | 5088.6  | 5621.5  | 6415.1  | 7157.9  |
| 22.5° | 5488.3  | 5434.7  | 5107.4  | 4910.5  | 4903.3  | 4894.6  | 4974.2  | 5195.8  | 5685.2  | 6554.1  | 7391.1  |
| 25°   | 6119.7  | 6069.0  | 5618.6  | 5349.3  | 5291.4  | 5269.6  | 5281.2  | 5424.6  | 5811.2  | 6703.2  | 7651.8  |
| 27.5° | 6822.0  | 6733.7  | 6299.2  | 5918.4  | 5798.2  | 5767.8  | 5698.3  | 5747.5  | 5948.8  | 6846.6  | 7961.6  |
| 30°   | 7409.9  | 7362.1  | 6982.7  | 6530.9  | 6389.0  | 6345.6  | 6163.1  | 6109.5  | 6147.2  | 7042.1  | 8352.6  |
| 32.5° | 7738.6  | 7706.8  | 7476.5  | 7111.6  | 6979.8  | 6919.0  | 6661.3  | 6554.1  | 6465.8  | 7350.5  | 8882.6  |
| 35°   | 8136.9  | 8116.6  | 7977.6  | 7712.6  | 7517.1  | 7453.4  | 7253.5  | 7142.0  | 6914.7  | 7774.8  | 9567.6  |
| 37.5° | 8643.7  | 8622.0  | 8624.9  | 8410.6  | 8177.4  | 8118.0  | 7986.3  | 7869.0  | 7496.8  | 8332.4  | 10311.9 |
| 40°   | 9217.1  | 9175.1  | 9159.2  | 9149.1  | 9001.4  | 8968.1  | 8898.6  | 8739.3  | 8226.6  | 8998.5  | 11046.1 |
| 42.5° | 10080.2 | 9931.1  | 9612.5  | 9732.7  | 9878.9  | 9861.5  | 9918.0  | 9689.2  | 9037.6  | 9786.2  | 11762.9 |
| 45°   | 10912.9 | 10668.1 | 10117.9 | 10143.9 | 10464.0 | 10561.0 | 10983.8 | 10821.6 | 9916.6  | 10649.3 | 12504.3 |
| 47.5° | 11292.3 | 11106.9 | 10639.2 | 10640.6 | 10957.8 | 11159.0 | 12085.8 | 11970.0 | 10840.5 | 11629.7 | 13409.4 |
| 50°   | 11716.6 | 11531.2 | 11111.3 | 11269.1 | 11545.7 | 11760.0 | 13150.2 | 13090.8 | 11719.5 | 12702.7 | 14494.0 |
| 52.5° | 12180.0 | 11865.7 | 11599.3 | 11881.6 | 12269.7 | 12518.8 | 14216.0 | 14053.8 | 12526.0 | 13783.0 | 15740.8 |
| 55°   | 12185.7 | 12100.3 | 12303.0 | 12510.1 | 13090.8 | 13396.4 | 15332.5 | 14903.8 | 13183.5 | 14844.5 | 16755.9 |
| 57.5° | 12879.4 | 12740.4 | 13170.5 | 13266.0 | 14024.8 | 14369.5 | 16443.2 | 15643.8 | 13852.5 | 15658.3 | 17303.3 |
| 60°   | 13797.5 | 13678.7 | 14030.6 | 14282.6 | 15180.4 | 15640.9 | 17629.1 | 16404.1 | 14378.2 | 16272.3 | 17277.3 |
| 62.5° | 15383.1 | 15248.5 | 15244.1 | 15597.5 | 16806.6 | 17342.4 | 18959.9 | 17149.8 | 14586.7 | 16393.9 | 16540.2 |
| 65°   | 17704.4 | 17490.1 | 17086.1 | 17254.1 | 19052.6 | 19587.0 | 20447.1 | 17690.0 | 14311.6 | 15742.3 | 14641.7 |
| 67.5° | 19963.5 | 19956.2 | 19459.5 | 19804.2 | 22018.3 | 22447.0 | 22141.4 | 17743.5 | 13452.8 | 13473.1 | 11273.4 |
| 70°   | 22215.3 | 22244.2 | 22160.2 | 23359.3 | 26025.2 | 26471.2 | 23945.7 | 17023.8 | 11522.5 | 9729.8  | 6753.9  |
| 72.5° | 23999.3 | 23992.1 | 24414.9 | 27506.6 | 31225.3 | 31125.4 | 25466.3 | 14843.0 | 8273.0  | 5252.3  | 3227.8  |
| 75°   | 22843.7 | 22591.8 | 23851.6 | 29560.0 | 34256.2 | 33768.2 | 24173.1 | 10353.9 | 4293.6  | 2390.8  | 1737.7  |
| 77.5° | 14899.5 | 15138.4 | 16987.6 | 24419.3 | 29964.0 | 29370.3 | 17734.9 | 4830.9  | 2023.0  | 1568.3  | 1259.8  |
| 80°   | 5395.6  | 5647.6  | 7954.4  | 13832.2 | 20644.1 | 20547.1 | 8733.5  | 1985.3  | 1368.5  | 1184.5  | 918.1   |
| 82.5° | 1856.5  | 1949.1  | 3138.0  | 6142.8  | 11655.7 | 12090.2 | 3285.7  | 1128.1  | 994.8   | 839.9   | 628.5   |
| 85°   | 728.4   | 834.1   | 1435.1  | 2955.6  | 5879.3  | 5922.7  | 1330.8  | 674.8   | 692.2   | 550.3   | 344.6   |
| 87.5° | 276.6   | 336.0   | 686.4   | 1372.8  | 2684.8  | 2466.1  | 476.4   | 321.5   | 393.9   | 327.3   | 163.6   |
| 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°    | 6552.6  | 6552.6 | 6552.6 | 6552.6 | 6552.6 | 6552.6 | 6552.6 | 6552.6 | 6552.6 | 6552.6 | 6552.6 |
| 2.5°  | 6562.8  | 6593.2 | 6656.9 | 6700.3 | 6746.7 | 6759.7 | 6765.5 | 6777.1 | 6788.7 | 6784.3 | 6785.8 |
| 5°    | 6603.3  | 6662.7 | 6765.5 | 6809.0 | 6829.2 | 6806.1 | 6761.2 | 6725.0 | 6698.9 | 6684.4 | 6680.1 |
| 7.5°  | 6669.9  | 6753.9 | 6864.0 | 6856.7 | 6810.4 | 6707.6 | 6591.7 | 6504.9 | 6432.5 | 6406.4 | 6391.9 |
| 10°   | 6758.3  | 6856.7 | 6933.5 | 6851.0 | 6716.3 | 6538.2 | 6364.4 | 6229.7 | 6121.1 | 6079.1 | 6071.9 |
| 12.5° | 6871.2  | 6971.1 | 6985.6 | 6810.4 | 6587.4 | 6344.1 | 6108.1 | 5930.0 | 5767.8 | 5715.6 | 5704.1 |
| 15°   | 7017.5  | 7111.6 | 7021.8 | 6739.4 | 6428.1 | 6100.8 | 5795.3 | 5553.5 | 5382.6 | 5318.9 | 5295.7 |
| 17.5° | 7171.0  | 7260.8 | 7029.1 | 6622.2 | 6219.6 | 5812.7 | 5428.9 | 5181.3 | 4985.8 | 4911.9 | 4903.3 |
| 20°   | 7354.9  | 7395.4 | 6998.7 | 6454.2 | 5932.9 | 5439.1 | 5035.0 | 4801.9 | 4697.6 | 4645.5 | 4639.7 |
| 22.5° | 7582.2  | 7538.8 | 6929.1 | 6226.8 | 5569.4 | 5007.5 | 4678.8 | 4570.2 | 4544.1 | 4532.5 | 4536.9 |
| 25°   | 7822.6  | 7689.4 | 6826.3 | 5930.0 | 5110.3 | 4576.0 | 4418.1 | 4448.6 | 4483.3 | 4479.0 | 4479.0 |
| 27.5° | 8087.6  | 7842.9 | 6668.5 | 5536.1 | 4602.1 | 4222.7 | 4241.5 | 4353.0 | 4405.1 | 4403.7 | 4402.2 |
| 30°   | 8427.9  | 8016.7 | 6467.2 | 5062.6 | 4127.1 | 3973.6 | 4088.0 | 4224.1 | 4295.1 | 4292.2 | 4293.6 |
| 32.5° | 8846.4  | 8207.8 | 6193.5 | 4534.0 | 3783.9 | 3789.7 | 3921.4 | 4056.1 | 4138.7 | 4131.4 | 4132.9 |
| 35°   | 9335.9  | 8422.1 | 5822.8 | 4012.7 | 3556.5 | 3643.4 | 3747.7 | 3841.8 | 3920.0 | 3909.9 | 3899.7 |
| 37.5° | 9868.8  | 8632.1 | 5330.4 | 3546.4 | 3371.2 | 3507.3 | 3594.2 | 3610.1 | 3646.3 | 3620.2 | 3601.4 |
| 40°   | 10375.6 | 8792.9 | 4696.2 | 3164.1 | 3184.4 | 3391.4 | 3447.9 | 3384.2 | 3319.0 | 3310.4 | 3284.3 |
| 42.5° | 10817.3 | 8846.4 | 4054.7 | 2858.5 | 2987.4 | 3269.8 | 3304.6 | 3171.3 | 3054.0 | 2999.0 | 2975.8 |
| 45°   | 11283.6 | 8865.3 | 3456.6 | 2602.2 | 2797.7 | 3161.2 | 3198.8 | 3020.7 | 2855.6 | 2736.9 | 2697.8 |
| 47.5° | 11893.2 | 9001.4 | 2991.8 | 2412.5 | 2652.9 | 3088.8 | 3142.4 | 2900.5 | 2686.2 | 2516.8 | 2480.6 |
| 50°   | 12691.1 | 9270.7 | 2613.8 | 2267.7 | 2558.8 | 3041.0 | 3101.8 | 2783.2 | 2547.2 | 2343.0 | 2306.8 |
| 52.5° | 13577.4 | 9518.3 | 2308.3 | 2150.4 | 2467.6 | 2957.0 | 3049.7 | 2699.3 | 2416.9 | 2182.3 | 2143.2 |
| 55°   | 14197.2 | 9328.6 | 2062.1 | 2028.8 | 2348.8 | 2836.8 | 2977.3 | 2628.3 | 2230.1 | 2025.9 | 1991.1 |
| 57.5° | 14315.9 | 8679.9 | 1875.3 | 1902.8 | 2205.5 | 2686.2 | 2865.8 | 2470.5 | 2128.7 | 1957.8 | 1921.6 |
| 60°   | 13991.5 | 7776.3 | 1736.3 | 1787.0 | 2052.0 | 2496.5 | 2657.3 | 2359.0 | 2031.7 | 1885.4 | 1855.0 |
| 62.5° | 13176.2 | 6851.0 | 1633.5 | 1682.7 | 1908.6 | 2303.9 | 2526.9 | 2241.7 | 1933.2 | 1802.9 | 1772.5 |
| 65°   | 11529.8 | 5751.8 | 1535.0 | 1590.0 | 1775.4 | 2137.4 | 2409.6 | 2133.0 | 1836.2 | 1736.3 | 1707.3 |
| 67.5° | 8703.1  | 4308.1 | 1442.3 | 1491.5 | 1656.6 | 1992.6 | 2282.2 | 2025.9 | 1742.1 | 1678.3 | 1643.6 |
| 70°   | 5124.8  | 2697.8 | 1336.6 | 1388.7 | 1532.1 | 1842.0 | 2146.1 | 1908.6 | 1624.8 | 1595.8 | 1550.9 |
| 72.5° | 2385.0  | 1623.3 | 1216.4 | 1267.1 | 1375.7 | 1640.7 | 1970.9 | 1755.1 | 1485.7 | 1422.0 | 1361.2 |
| 75°   | 1423.5  | 1187.4 | 1074.5 | 1119.4 | 1196.1 | 1426.4 | 1750.8 | 1598.7 | 1354.0 | 1270.0 | 1206.3 |
| 77.5° | 1064.4  | 908.0  | 918.1  | 965.9  | 1028.1 | 1248.3 | 1550.9 | 1475.6 | 1252.6 | 1187.4 | 1144.0 |
| 80°   | 766.0   | 689.3  | 748.7  | 800.8  | 866.0  | 1135.3 | 1485.7 | 1364.1 | 1132.4 | 1045.5 | 1005.0 |
| 82.5° | 511.2   | 495.2  | 563.3  | 616.9  | 680.6  | 993.4  | 1396.0 | 1194.7 | 967.3  | 857.3  | 767.5  |
| 85°   | 282.4   | 298.3  | 379.4  | 402.6  | 457.6  | 699.4  | 1144.0 | 960.1  | 728.4  | 586.5  | 560.4  |
| 87.5° | 117.3   | 137.6  | 204.2  | 196.9  | 243.3  | 417.1  | 753.0  | 579.2  | 463.4  | 346.1  | 269.3  |
| 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)