

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: P269677

Luminaire Tested: **GLEON-AF-09-LED-E1-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P269677
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24147)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-09-LED-E1-T4W-7027
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45910.8 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G5

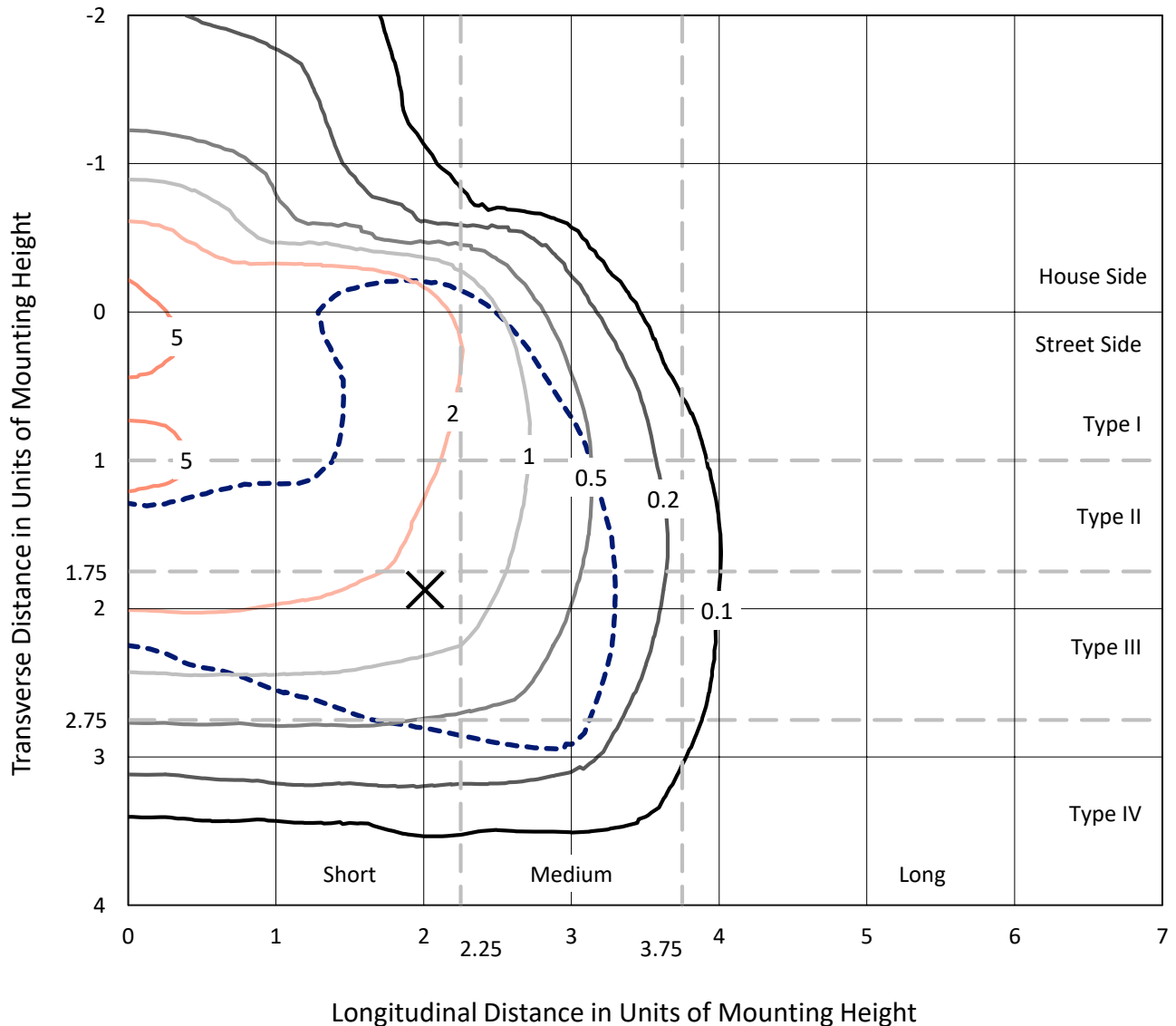
Input Watts (W): 501
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

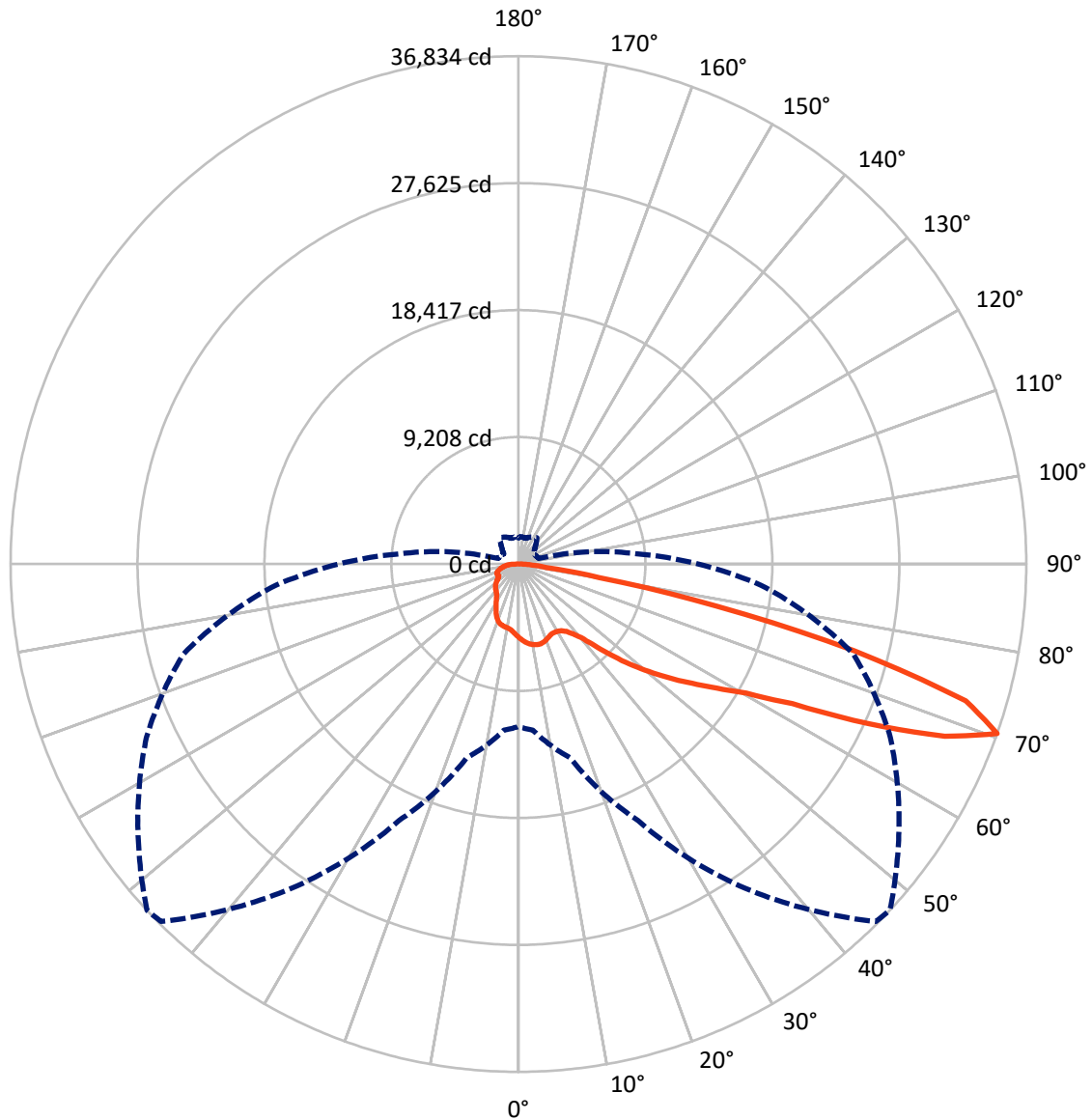
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.8 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9577.9 | 0.0 | 9577.9 |
| | % Fixture | 20.9 | 0.0 | 20.9 |
| Street Side | Lumens | 36332.9 | 0.0 | 36332.9 |
| | % Fixture | 79.1 | 0.0 | 79.1 |
| Total | Lumens | 45910.8 | 0.0 | 45910.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 510.4 | 1.1 |
| 10°-20° | 1497.5 | 3.3 |
| 20°-30° | 2211.3 | 4.8 |
| 30°-40° | 3214.1 | 7.0 |
| 40°-50° | 5784.3 | 12.6 |
| 50°-60° | 10020.7 | 21.8 |
| 60°-70° | 14302.4 | 31.2 |
| 70°-80° | 7342.1 | 16.0 |
| 80°-90° | 1027.9 | 2.2 |
| 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° | 45910.8 | 100.0 |
| 0°-180° | 45910.8 | 100.0 |

Coefficient of Utilization



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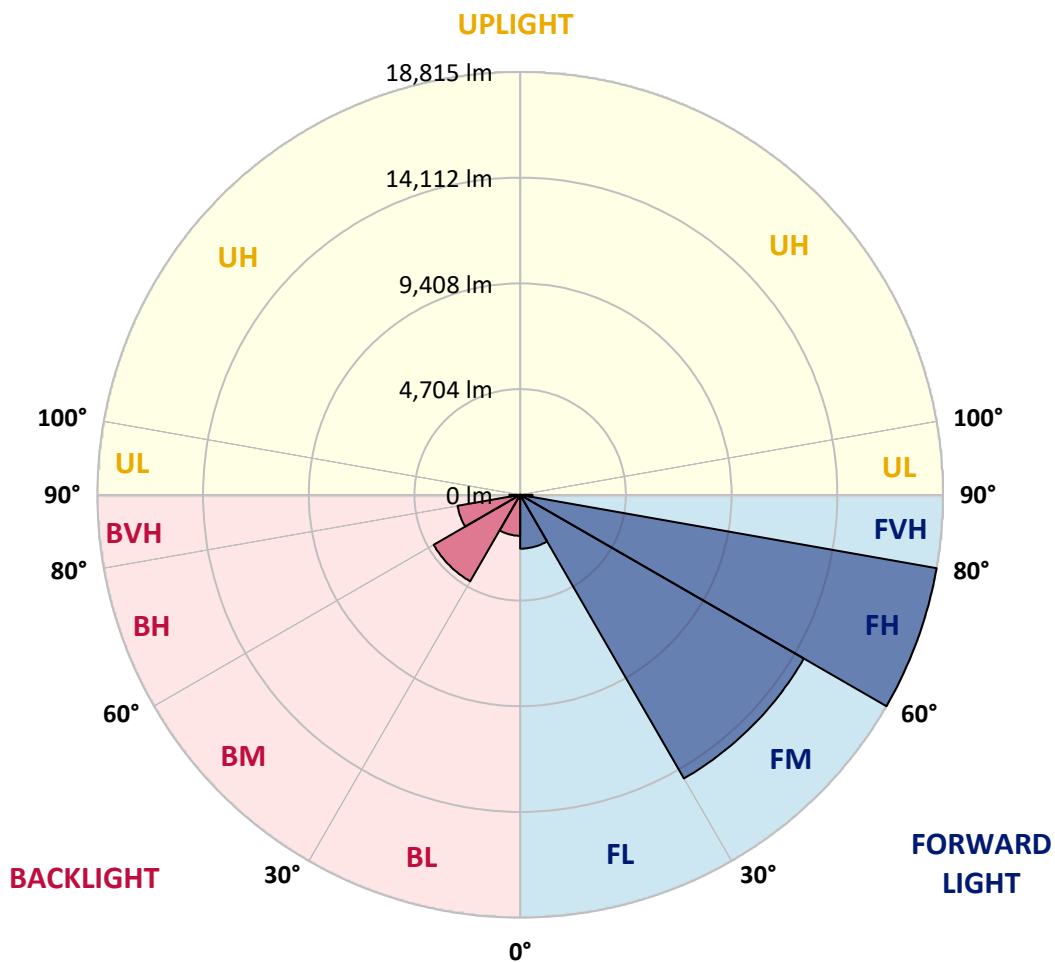
CATALOG NUMBER: GLEON-AF-09-LED-E1-T4W-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 2395.5 | 5.2 | | | |
| FM | (30°-60°) | 14573.4 | 31.7 | | | |
| FH | (60°-80°) | 18815.5 | 41.0 | | | G5 |
| FVH | (80°-90°) | 548.5 | 1.2 | | | G4/750 |
| BL | (0°-30°) | 1823.7 | 4.0 | B3/2500 | | |
| BM | (30°-60°) | 4445.8 | 9.7 | B3/5000 | | |
| BH | (60°-80°) | 2829.0 | 6.2 | B4/5000 | | G4/5000 |
| BVH | (80°-90°) | 479.4 | 1.0 | | | G3/500 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 47° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5327.0 | 5327.0 | 5327.0 | 5327.0 | 5327.0 | 5327.0 | 5327.0 | 5327.0 | 5327.0 | 5327.0 | 5327.0 |
| 2.5° | 5639.7 | 5628.6 | 5624.2 | 5615.2 | 5604.0 | 5548.2 | 5537.1 | 5496.8 | 5440.9 | 5383.0 | 5322.5 |
| 5° | 6010.6 | 6008.4 | 5983.7 | 5939.1 | 5867.5 | 5744.8 | 5715.7 | 5617.5 | 5485.7 | 5358.3 | 5231.0 |
| 7.5° | 6336.6 | 6316.5 | 6269.6 | 6180.2 | 6055.2 | 5887.8 | 5847.4 | 5711.2 | 5530.3 | 5356.1 | 5184.1 |
| 10° | 6575.7 | 6564.5 | 6461.8 | 6338.9 | 6175.8 | 5990.4 | 5943.5 | 5791.6 | 5592.8 | 5371.8 | 5157.3 |
| 12.5° | 6711.9 | 6689.6 | 6571.2 | 6423.8 | 6229.4 | 6048.5 | 6001.7 | 5847.4 | 5624.2 | 5371.8 | 5119.4 |
| 15° | 6703.0 | 6687.3 | 6568.9 | 6408.1 | 6211.6 | 6053.0 | 6010.6 | 5856.4 | 5617.5 | 5349.3 | 5070.3 |
| 17.5° | 6524.3 | 6530.9 | 6430.4 | 6271.8 | 6111.1 | 5990.4 | 5952.4 | 5809.5 | 5572.7 | 5304.8 | 5012.2 |
| 20° | 6211.6 | 6242.9 | 6175.8 | 6035.2 | 5945.8 | 5863.1 | 5838.5 | 5717.9 | 5503.6 | 5240.0 | 4949.7 |
| 22.5° | 5898.9 | 5927.9 | 5901.1 | 5782.7 | 5769.4 | 5720.1 | 5706.8 | 5619.6 | 5443.2 | 5199.7 | 4911.7 |
| 25° | 5668.8 | 5695.7 | 5691.1 | 5588.4 | 5628.6 | 5626.4 | 5615.2 | 5572.7 | 5429.9 | 5199.7 | 4918.3 |
| 27.5° | 5606.3 | 5615.2 | 5606.3 | 5512.4 | 5568.4 | 5613.0 | 5604.0 | 5597.3 | 5470.0 | 5264.5 | 5003.2 |
| 30° | 5820.7 | 5807.4 | 5738.1 | 5548.2 | 5599.6 | 5662.0 | 5653.2 | 5657.6 | 5590.6 | 5434.2 | 5193.0 |
| 32.5° | 6676.2 | 6615.8 | 6397.0 | 5863.1 | 5726.9 | 5760.4 | 5764.9 | 5838.5 | 5849.8 | 5695.7 | 5487.8 |
| 35° | 7956.0 | 7888.9 | 7605.3 | 6707.5 | 6122.2 | 6006.1 | 6006.1 | 6117.7 | 6184.8 | 6070.8 | 5945.8 |
| 37.5° | 9311.8 | 9238.1 | 9086.1 | 7877.9 | 6953.2 | 6432.8 | 6421.5 | 6499.6 | 6595.7 | 6622.6 | 6653.8 |
| 40° | 10853.0 | 10774.8 | 10817.2 | 9191.2 | 8112.4 | 7172.0 | 7013.4 | 6957.6 | 7216.7 | 7388.6 | 7638.8 |
| 42.5° | 12539.4 | 12503.6 | 12519.1 | 10654.2 | 9432.5 | 8277.6 | 8052.0 | 7764.0 | 8076.7 | 8382.7 | 8907.6 |
| 45° | 14100.5 | 14131.9 | 14116.1 | 12220.0 | 10902.1 | 9626.6 | 9387.6 | 8829.4 | 9135.4 | 9660.3 | 10515.6 |
| 47.5° | 15467.5 | 15338.0 | 15539.1 | 13930.8 | 12548.2 | 11136.6 | 10841.7 | 10093.5 | 10404.0 | 11051.8 | 12499.0 |
| 50° | 17127.1 | 17109.2 | 16814.4 | 16213.5 | 14538.3 | 12653.2 | 12266.7 | 11400.2 | 11882.6 | 12782.7 | 14998.5 |
| 52.5° | 18871.5 | 18547.7 | 18277.4 | 17989.2 | 16649.0 | 14207.8 | 13734.2 | 12702.4 | 13620.3 | 14752.8 | 18045.1 |
| 55° | 19228.8 | 19083.7 | 19418.8 | 19903.3 | 18683.8 | 15822.7 | 15270.9 | 14335.2 | 15577.0 | 17004.1 | 21558.5 |
| 57.5° | 19992.8 | 19990.5 | 20682.9 | 21547.4 | 20779.0 | 17535.9 | 16979.7 | 16307.3 | 17777.0 | 19583.9 | 25288.5 |
| 60° | 20508.7 | 20653.9 | 21940.5 | 23617.8 | 22836.1 | 19514.8 | 19003.3 | 18583.3 | 20278.6 | 22467.6 | 28764.0 |
| 62.5° | 20779.0 | 20975.6 | 22731.2 | 24457.7 | 25744.2 | 22809.3 | 22297.8 | 21692.5 | 23588.9 | 25630.4 | 30796.6 |
| 65° | 19655.5 | 20041.8 | 22608.3 | 25183.5 | 28290.4 | 28149.7 | 27919.7 | 26856.4 | 27727.7 | 28129.6 | 30061.7 |
| 67.5° | 16546.3 | 16941.7 | 19930.2 | 24506.8 | 30108.6 | 33300.3 | 33349.5 | 31533.7 | 30273.9 | 28344.1 | 25275.2 |
| 70° | 11788.7 | 12099.4 | 14571.9 | 20546.7 | 28723.8 | 36666.4 | 36833.9 | 33689.0 | 29766.9 | 25136.6 | 17658.6 |
| 72.5° | 5597.3 | 5787.2 | 8128.0 | 13372.3 | 22793.7 | 33595.3 | 33919.1 | 30937.3 | 25310.9 | 18610.1 | 9633.5 |
| 75° | 2057.1 | 2115.1 | 2747.2 | 5689.0 | 13220.5 | 24774.8 | 25156.8 | 22177.1 | 16778.6 | 9264.8 | 3669.8 |
| 77.5° | 1233.0 | 1270.9 | 1541.1 | 2401.1 | 5199.7 | 14160.9 | 14725.9 | 12061.4 | 7332.9 | 3448.7 | 1804.8 |
| 80° | 862.2 | 889.0 | 1105.6 | 1494.3 | 2457.0 | 5396.3 | 5898.9 | 4922.8 | 2921.5 | 2182.3 | 1313.3 |
| 82.5° | 583.0 | 596.4 | 777.3 | 1009.5 | 1632.8 | 1927.6 | 2079.4 | 2188.9 | 1970.1 | 1623.7 | 833.1 |
| 85° | 381.9 | 395.3 | 527.1 | 665.6 | 1038.6 | 996.2 | 1018.5 | 1288.8 | 1438.5 | 1103.4 | 462.4 |
| 87.5° | 218.8 | 227.8 | 317.2 | 355.1 | 509.2 | 422.2 | 426.6 | 678.9 | 920.3 | 743.7 | 281.3 |
| 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° | 5327.0 | 5327.0 | 5327.0 | 5327.0 | 5327.0 | 5327.0 | 5327.0 | 5327.0 | 5327.0 | 5327.0 | 5327.0 |
| 2.5° | 5306.9 | 5277.9 | 5213.1 | 5173.0 | 5135.0 | 5126.1 | 5110.4 | 5108.2 | 5106.0 | 5106.0 | 5099.3 |
| 5° | 5188.6 | 5139.5 | 5039.0 | 4983.1 | 4936.1 | 4931.8 | 4929.4 | 4940.7 | 4945.1 | 4949.7 | 4943.0 |
| 7.5° | 5112.7 | 5045.6 | 4920.6 | 4840.2 | 4784.4 | 4770.9 | 4793.3 | 4844.6 | 4878.2 | 4891.5 | 4884.9 |
| 10° | 5065.7 | 4983.1 | 4837.9 | 4750.9 | 4704.0 | 4697.1 | 4726.3 | 4786.6 | 4855.8 | 4882.6 | 4880.3 |
| 12.5° | 5012.2 | 4918.3 | 4764.3 | 4672.7 | 4645.9 | 4659.1 | 4697.1 | 4753.0 | 4824.5 | 4866.9 | 4869.3 |
| 15° | 4958.6 | 4849.1 | 4690.5 | 4610.1 | 4599.0 | 4616.7 | 4652.5 | 4695.0 | 4750.9 | 4793.3 | 4797.7 |
| 17.5° | 4893.7 | 4779.8 | 4621.3 | 4538.6 | 4529.8 | 4538.6 | 4540.8 | 4563.2 | 4599.0 | 4639.1 | 4650.3 |
| 20° | 4824.5 | 4708.3 | 4543.1 | 4460.4 | 4420.2 | 4384.4 | 4344.4 | 4348.8 | 4360.0 | 4400.2 | 4409.2 |
| 22.5° | 4775.4 | 4659.1 | 4482.8 | 4368.8 | 4261.6 | 4154.4 | 4074.1 | 4062.9 | 4067.3 | 4100.9 | 4112.0 |
| 25° | 4779.8 | 4657.1 | 4467.1 | 4270.6 | 4036.1 | 3864.1 | 3756.9 | 3739.0 | 3736.8 | 3761.4 | 3777.0 |
| 27.5° | 4866.9 | 4744.0 | 4525.2 | 4170.1 | 3790.4 | 3535.8 | 3421.9 | 3408.3 | 3390.6 | 3397.3 | 3415.1 |
| 30° | 5061.3 | 4947.3 | 4665.9 | 4067.3 | 3524.6 | 3214.1 | 3095.6 | 3082.4 | 3057.8 | 3046.6 | 3059.9 |
| 32.5° | 5378.4 | 5284.5 | 4871.4 | 3969.2 | 3258.8 | 2939.3 | 2818.8 | 2789.7 | 2774.1 | 2760.8 | 2771.9 |
| 35° | 5905.5 | 5865.4 | 5146.2 | 3861.9 | 3024.2 | 2727.3 | 2617.8 | 2573.0 | 2550.7 | 2575.4 | 2593.1 |
| 37.5° | 6732.0 | 6754.4 | 5505.7 | 3694.3 | 2843.3 | 2586.5 | 2495.0 | 2443.5 | 2410.1 | 2430.2 | 2450.2 |
| 40° | 7902.4 | 7918.0 | 5903.3 | 3457.5 | 2687.0 | 2503.8 | 2405.5 | 2358.7 | 2311.8 | 2276.0 | 2273.8 |
| 42.5° | 9439.1 | 9280.5 | 6294.2 | 3200.8 | 2506.1 | 2452.5 | 2343.0 | 2285.0 | 2213.5 | 2115.1 | 2095.0 |
| 45° | 11261.7 | 10705.6 | 6591.3 | 2905.8 | 2302.8 | 2389.9 | 2273.8 | 2193.4 | 2081.7 | 1974.5 | 1963.3 |
| 47.5° | 13361.2 | 12235.5 | 6736.5 | 2599.9 | 2113.0 | 2298.4 | 2188.9 | 2061.6 | 1920.8 | 1867.2 | 1860.6 |
| 50° | 15925.4 | 14051.4 | 6805.6 | 2302.8 | 1947.6 | 2177.8 | 2066.0 | 1916.4 | 1798.0 | 1786.9 | 1780.1 |
| 52.5° | 18844.6 | 16235.8 | 6828.0 | 2059.4 | 1811.4 | 2021.4 | 1965.5 | 1820.3 | 1726.5 | 1735.4 | 1735.4 |
| 55° | 21900.1 | 18491.8 | 6524.3 | 1882.8 | 1686.4 | 1860.6 | 1898.6 | 1782.3 | 1704.3 | 1739.9 | 1753.3 |
| 57.5° | 24705.5 | 20490.8 | 5568.4 | 1746.7 | 1568.0 | 1737.7 | 1874.0 | 1818.1 | 1764.5 | 1909.6 | 1918.6 |
| 60° | 26858.8 | 21672.4 | 4159.0 | 1623.7 | 1480.9 | 1695.3 | 1938.7 | 1954.4 | 1967.7 | 2313.9 | 2360.8 |
| 62.5° | 27309.9 | 21279.3 | 2858.9 | 1527.7 | 1440.6 | 1731.0 | 2057.1 | 2059.4 | 2043.7 | 2285.0 | 2313.9 |
| 65° | 25239.4 | 18793.4 | 2079.4 | 1474.2 | 1407.1 | 1795.8 | 2157.5 | 2110.7 | 2008.0 | 2191.1 | 2137.5 |
| 67.5° | 20044.2 | 14158.6 | 1731.0 | 1434.0 | 1358.0 | 1791.3 | 2264.8 | 2157.5 | 1987.9 | 2146.5 | 2059.4 |
| 70° | 13010.6 | 8561.2 | 1541.1 | 1400.5 | 1299.9 | 1706.4 | 2327.4 | 2153.1 | 1929.7 | 1996.8 | 1894.0 |
| 72.5° | 6347.9 | 3828.3 | 1413.8 | 1351.3 | 1239.7 | 1588.1 | 2325.2 | 2113.0 | 1869.6 | 1865.1 | 1809.1 |
| 75° | 2483.8 | 1753.3 | 1297.7 | 1277.6 | 1136.8 | 1454.0 | 2262.7 | 2055.0 | 1798.0 | 1726.5 | 1706.4 |
| 77.5° | 1454.0 | 1250.8 | 1150.3 | 1168.2 | 1014.0 | 1320.0 | 2171.1 | 1954.4 | 1699.8 | 1614.9 | 1592.5 |
| 80° | 1058.7 | 935.9 | 980.5 | 1009.5 | 866.7 | 1186.0 | 2048.1 | 1831.6 | 1590.3 | 1632.8 | 1601.5 |
| 82.5° | 678.9 | 603.0 | 795.2 | 824.1 | 721.5 | 1049.8 | 1914.2 | 1702.0 | 1436.2 | 1304.3 | 1273.2 |
| 85° | 346.1 | 381.9 | 592.0 | 627.6 | 556.2 | 862.2 | 1751.2 | 1530.1 | 1261.9 | 1085.5 | 1103.4 |
| 87.5° | 194.4 | 261.3 | 377.5 | 422.2 | 393.1 | 663.4 | 1420.6 | 1261.9 | 1029.6 | 837.6 | 737.1 |
| 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)