

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: P194001

Luminaire Tested: **GLEON-AF-03-LED-E1-T3-8030-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P194001
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-03-LED-E1-T3-8030-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16270 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B2 - U0 - G3

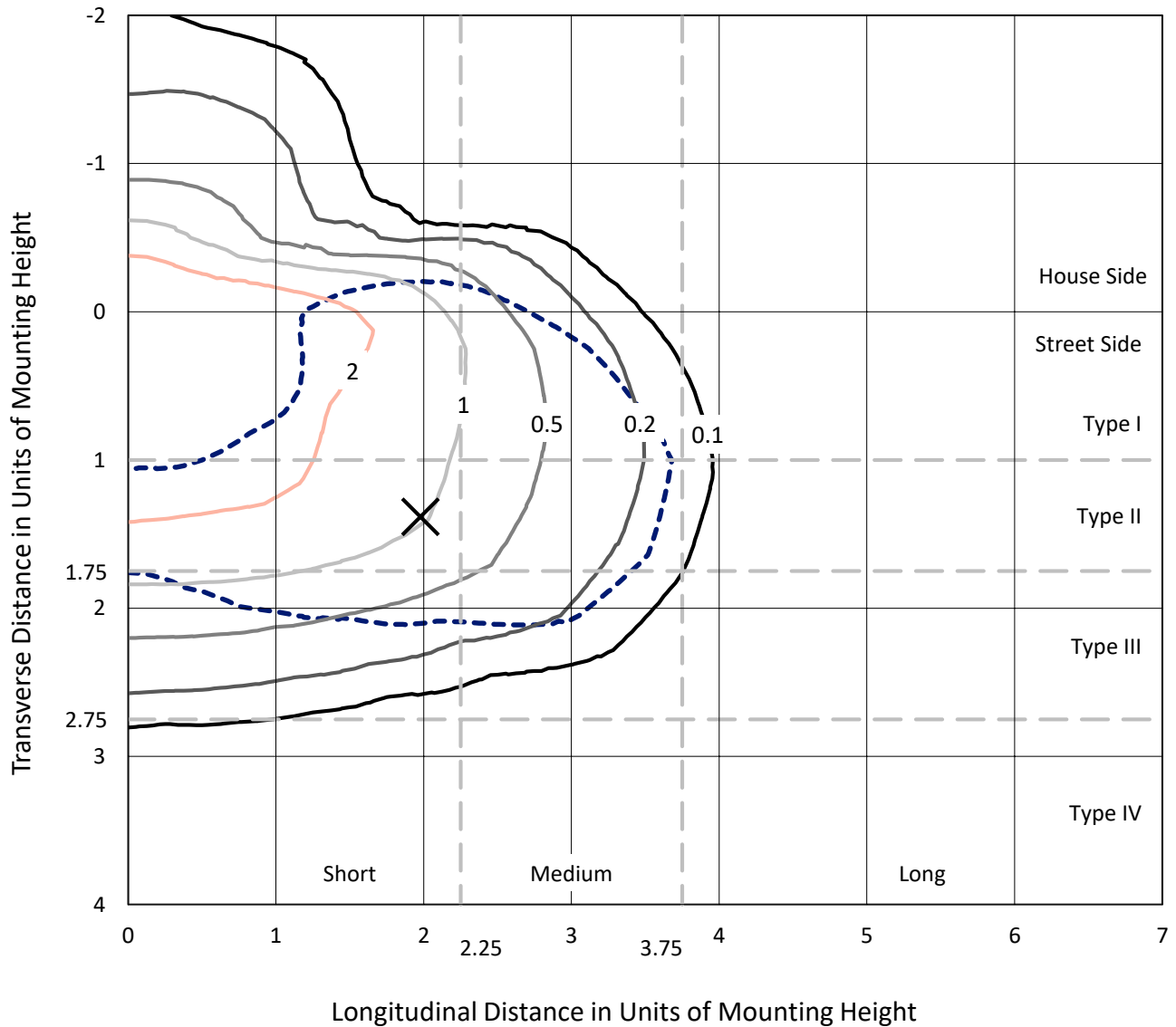
Input Watts (W): 191
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

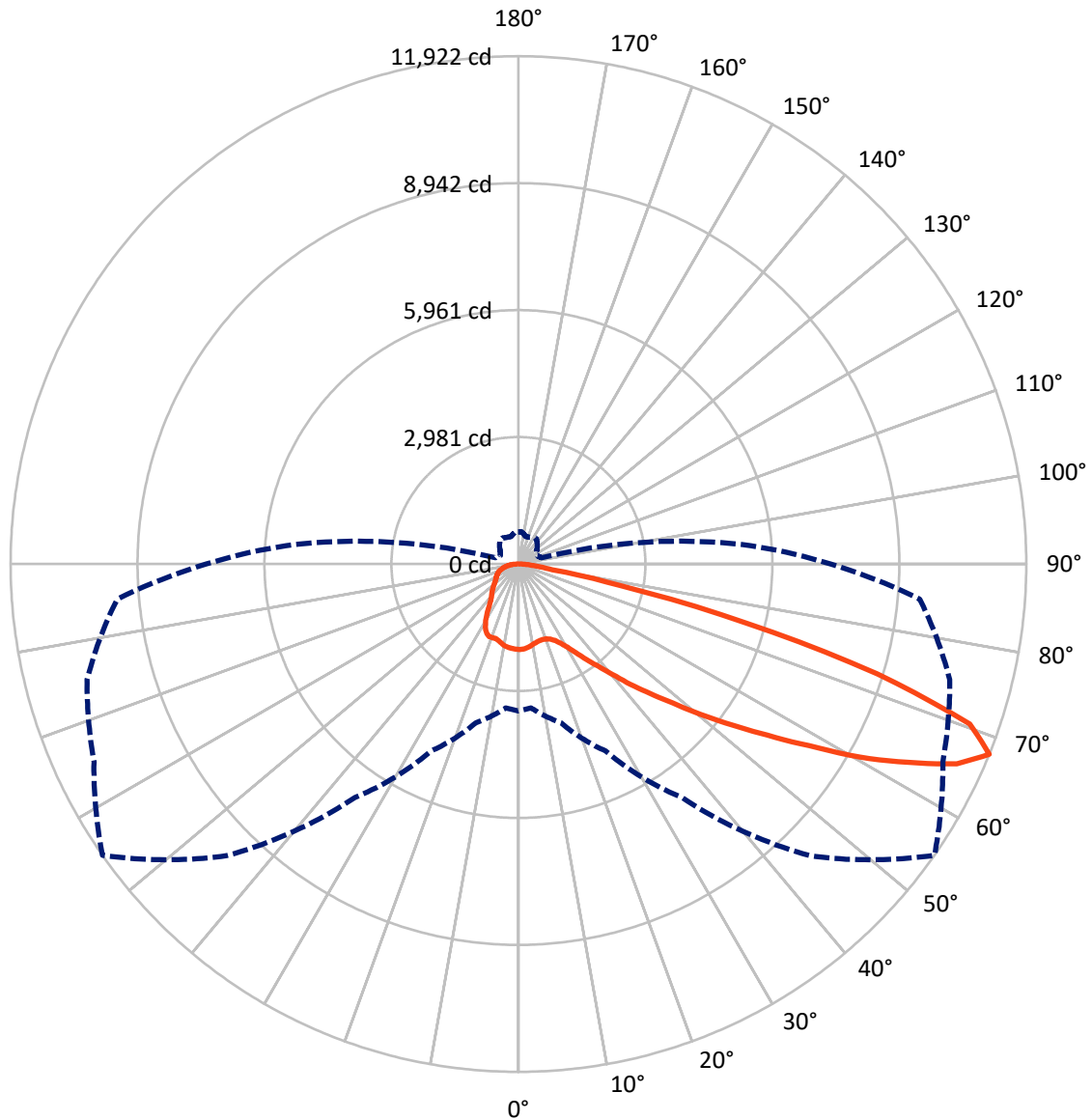
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3514.7 | 0.0 | 3514.7 |
| | % Fixture | 21.6 | 0.0 | 21.6 |
| Street Side | Lumens | 12755.3 | 0.0 | 12755.3 |
| | % Fixture | 78.4 | 0.0 | 78.4 |
| Total | Lumens | 16270.0 | 0.0 | 16270.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 187.3 | 1.2 |
| 10°-20° | 530.4 | 3.3 |
| 20°-30° | 888.4 | 5.5 |
| 30°-40° | 1460.9 | 9.0 |
| 40°-50° | 2459.2 | 15.1 |
| 50°-60° | 3870.6 | 23.8 |
| 60°-70° | 4619.2 | 28.4 |
| 70°-80° | 1983.6 | 12.2 |
| 80°-90° | 270.4 | 1.7 |
| 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° | 16270.0 | 100.0 |
| 0°-180° | 16270.0 | 100.0 |



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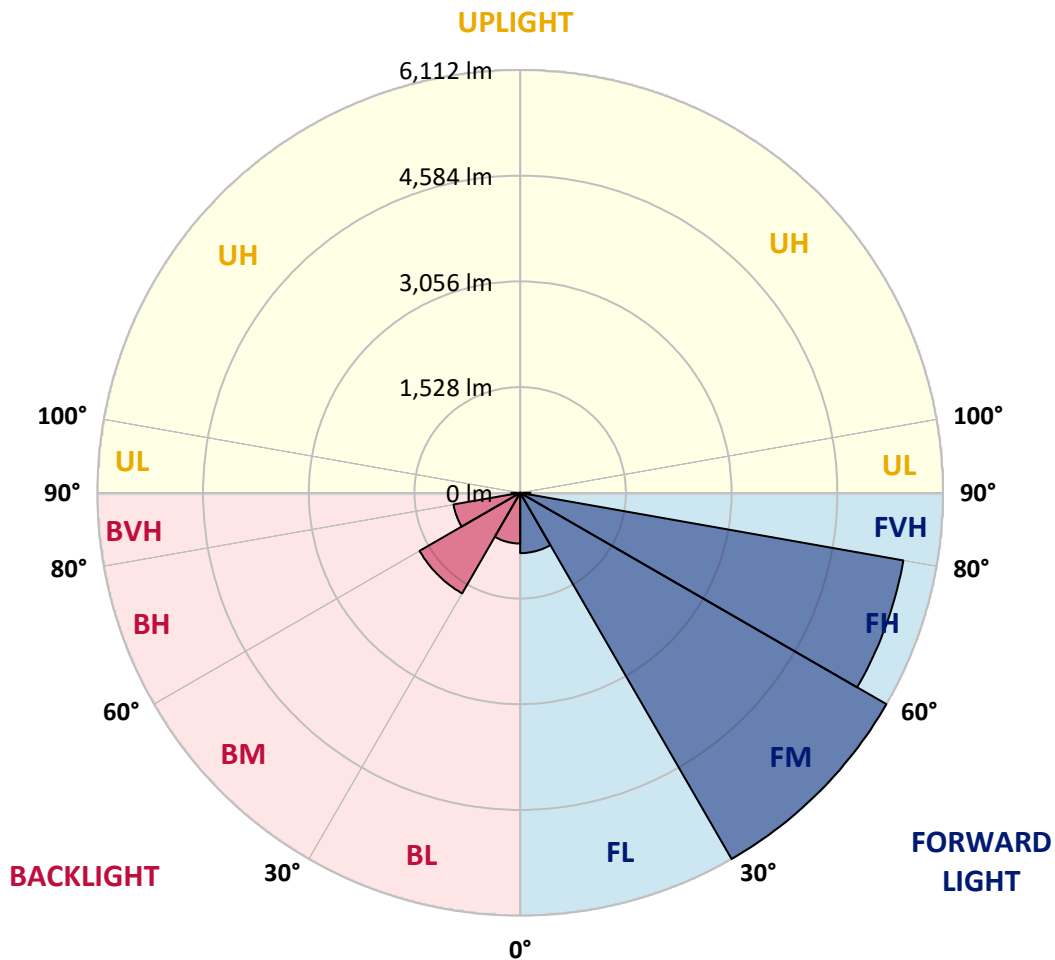
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 872.1 | 5.4 | | | |
| FM (30°-60°) | 6112.2 | 37.6 | | | |
| FH (60°-80°) | 5624.6 | 34.6 | | | G3/7500 |
| FVH (80°-90°) | 146.4 | 0.9 | | | G2/225 |
| BL (0°-30°) | 733.9 | 4.5 | B2/1000 | | |
| BM (30°-60°) | 1678.6 | 10.3 | B2/2500 | | |
| BH (60°-80°) | 978.1 | 6.0 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 124.1 | 0.8 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|--------|
| 0° | 2006.3 | 2006.3 | 2006.3 | 2006.3 | 2006.3 | 2006.3 | 2006.3 | 2006.3 | 2006.3 | 2006.3 | 2006.3 |
| 2.5° | 1989.0 | 1989.8 | 1991.3 | 1997.6 | 2003.1 | 2001.6 | 2002.3 | 1999.2 | 1998.4 | 1993.7 | 1998.4 |
| 5° | 1963.8 | 1966.2 | 1967.0 | 1977.2 | 1983.5 | 1985.1 | 1982.7 | 1978.8 | 1974.0 | 1969.3 | 1971.7 |
| 7.5° | 1906.5 | 1912.8 | 1913.5 | 1927.7 | 1937.9 | 1951.3 | 1952.0 | 1952.8 | 1950.5 | 1947.3 | 1952.0 |
| 10° | 1870.3 | 1871.9 | 1871.1 | 1881.3 | 1889.2 | 1904.1 | 1912.8 | 1927.7 | 1934.0 | 1935.5 | 1938.7 |
| 12.5° | 1868.0 | 1866.4 | 1864.0 | 1864.0 | 1861.7 | 1868.0 | 1883.7 | 1904.9 | 1919.8 | 1924.5 | 1928.5 |
| 15° | 1893.1 | 1892.3 | 1884.5 | 1872.7 | 1857.7 | 1853.0 | 1866.4 | 1890.0 | 1909.6 | 1919.8 | 1923.8 |
| 17.5° | 1949.7 | 1945.0 | 1932.4 | 1905.7 | 1873.5 | 1860.9 | 1862.5 | 1882.1 | 1904.9 | 1918.3 | 1922.2 |
| 20° | 2053.4 | 2053.4 | 2026.7 | 1976.4 | 1919.0 | 1889.2 | 1875.0 | 1886.8 | 1908.8 | 1926.9 | 1932.4 |
| 22.5° | 2232.6 | 2234.2 | 2189.4 | 2106.9 | 2010.2 | 1946.5 | 1911.2 | 1908.8 | 1934.8 | 1955.2 | 1961.5 |
| 25° | 2486.4 | 2480.1 | 2417.3 | 2299.4 | 2152.4 | 2047.1 | 1985.8 | 1971.7 | 1993.7 | 2016.5 | 2024.3 |
| 27.5° | 2781.9 | 2759.1 | 2684.5 | 2542.2 | 2352.0 | 2198.0 | 2103.7 | 2080.9 | 2102.1 | 2128.1 | 2135.9 |
| 30° | 3074.2 | 3050.7 | 2961.9 | 2806.3 | 2594.9 | 2400.0 | 2264.8 | 2227.9 | 2257.7 | 2294.7 | 2299.4 |
| 32.5° | 3366.6 | 3366.6 | 3267.6 | 3086.0 | 2855.8 | 2641.2 | 2479.3 | 2435.3 | 2484.8 | 2529.6 | 2539.9 |
| 35° | 3716.3 | 3717.8 | 3622.0 | 3403.5 | 3156.0 | 2928.9 | 2750.5 | 2718.2 | 2792.9 | 2824.3 | 2848.7 |
| 37.5° | 4146.1 | 4154.8 | 4031.4 | 3767.4 | 3496.2 | 3257.3 | 3045.2 | 3001.2 | 3075.8 | 3161.5 | 3240.0 |
| 40° | 4610.6 | 4621.6 | 4485.6 | 4160.3 | 3889.2 | 3639.3 | 3409.8 | 3330.4 | 3454.6 | 3618.0 | 3719.4 |
| 42.5° | 5053.8 | 5110.4 | 4979.1 | 4644.4 | 4352.8 | 4094.3 | 3861.7 | 3746.1 | 3901.7 | 4148.5 | 4236.5 |
| 45° | 5694.3 | 5735.1 | 5506.4 | 5203.1 | 4928.8 | 4639.6 | 4331.6 | 4209.8 | 4427.5 | 4738.7 | 4756.7 |
| 47.5° | 6121.0 | 6090.3 | 5974.0 | 5785.4 | 5611.7 | 5341.4 | 4877.8 | 4744.2 | 5033.4 | 5399.6 | 5298.2 |
| 50° | 6348.1 | 6357.5 | 6341.8 | 6352.8 | 6359.1 | 6189.3 | 5547.3 | 5364.2 | 5709.2 | 6151.6 | 5918.2 |
| 52.5° | 6560.3 | 6497.4 | 6549.3 | 6807.0 | 7118.2 | 7055.3 | 6275.8 | 6084.8 | 6433.7 | 6986.2 | 6573.6 |
| 55° | 6555.5 | 6459.7 | 6628.6 | 7083.6 | 7758.7 | 7831.0 | 7093.8 | 6873.8 | 7199.9 | 7881.3 | 7268.3 |
| 57.5° | 6323.7 | 6328.4 | 6588.5 | 7184.2 | 8205.0 | 8560.2 | 8043.1 | 7713.1 | 8012.5 | 8788.1 | 7902.5 |
| 60° | 6004.7 | 6047.9 | 6422.7 | 7167.7 | 8562.6 | 9158.3 | 9207.8 | 8617.6 | 8808.6 | 9612.5 | 8427.4 |
| 62.5° | 5489.9 | 5535.5 | 6052.6 | 6996.4 | 8508.4 | 9734.3 | 10260.8 | 9643.9 | 9640.8 | 10112.3 | 8581.5 |
| 65° | 4678.2 | 4664.8 | 5207.8 | 6355.9 | 8053.4 | 10160.2 | 11306.8 | 10531.1 | 10267.9 | 10120.1 | 8271.8 |
| 67.5° | 3449.9 | 3390.1 | 3856.2 | 4840.8 | 6693.8 | 9683.2 | 11922.1 | 10993.2 | 10481.6 | 9454.5 | 7325.7 |
| 70° | 1790.2 | 1730.4 | 2107.6 | 2826.7 | 4402.3 | 7557.5 | 11240.8 | 10754.3 | 10009.3 | 7925.3 | 5739.0 |
| 72.5° | 765.4 | 755.2 | 908.4 | 1240.1 | 2129.6 | 4359.1 | 8814.1 | 9308.4 | 8588.5 | 5904.9 | 3945.7 |
| 75° | 514.7 | 511.6 | 569.0 | 675.8 | 957.9 | 1768.9 | 5515.9 | 6607.4 | 6283.6 | 3661.3 | 2219.2 |
| 77.5° | 403.9 | 400.0 | 433.8 | 485.7 | 620.8 | 697.8 | 2447.9 | 3547.3 | 3283.3 | 1593.7 | 971.3 |
| 80° | 315.9 | 312.8 | 334.0 | 362.3 | 446.4 | 440.1 | 805.5 | 1411.4 | 1092.3 | 610.6 | 472.3 |
| 82.5° | 249.1 | 249.1 | 266.4 | 267.2 | 316.7 | 300.2 | 420.4 | 621.6 | 545.4 | 356.0 | 289.2 |
| 85° | 227.9 | 227.9 | 246.0 | 199.6 | 206.7 | 189.4 | 260.9 | 368.6 | 345.8 | 146.2 | 125.7 |
| 87.5° | 114.7 | 111.6 | 206.7 | 176.8 | 112.4 | 100.6 | 127.3 | 178.4 | 191.7 | 80.9 | 62.9 |
| 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):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2006.3 | 2006.3 | 2006.3 | 2006.3 | 2006.3 | 2006.3 | 2006.3 | 2006.3 | 2006.3 | 2006.3 |
| 2.5° | 1996.8 | 1996.1 | 1997.6 | 1998.4 | 2004.7 | 2013.3 | 2017.3 | 2022.8 | 2025.9 | 2024.3 |
| 5° | 1973.3 | 1974.8 | 1981.1 | 1985.8 | 1996.8 | 2011.0 | 2018.8 | 2025.1 | 2030.6 | 2028.3 |
| 7.5° | 1953.6 | 1957.5 | 1967.0 | 1970.9 | 1977.2 | 1981.1 | 1980.3 | 1982.7 | 1987.4 | 1981.9 |
| 10° | 1942.6 | 1947.3 | 1954.4 | 1948.9 | 1934.0 | 1912.8 | 1893.1 | 1882.9 | 1886.0 | 1882.1 |
| 12.5° | 1931.6 | 1937.9 | 1932.4 | 1906.5 | 1864.8 | 1837.3 | 1822.4 | 1824.0 | 1831.0 | 1832.6 |
| 15° | 1925.3 | 1927.7 | 1904.1 | 1855.4 | 1813.0 | 1809.0 | 1816.9 | 1815.3 | 1816.1 | 1816.1 |
| 17.5° | 1925.3 | 1919.0 | 1875.0 | 1826.3 | 1808.2 | 1801.2 | 1776.8 | 1746.2 | 1732.8 | 1728.1 |
| 20° | 1935.5 | 1919.0 | 1865.6 | 1833.4 | 1794.1 | 1733.6 | 1669.1 | 1612.6 | 1587.4 | 1580.3 |
| 22.5° | 1966.2 | 1937.9 | 1892.3 | 1836.5 | 1724.9 | 1623.6 | 1521.4 | 1453.8 | 1408.2 | 1400.4 |
| 25° | 2028.3 | 1996.8 | 1945.0 | 1794.9 | 1614.9 | 1470.3 | 1354.0 | 1278.6 | 1233.0 | 1226.7 |
| 27.5° | 2136.7 | 2116.3 | 1973.3 | 1702.9 | 1468.7 | 1313.9 | 1206.3 | 1148.1 | 1114.3 | 1112.0 |
| 30° | 2300.2 | 2290.0 | 1959.1 | 1567.0 | 1288.8 | 1162.3 | 1110.4 | 1076.6 | 1051.5 | 1050.7 |
| 32.5° | 2561.1 | 2478.6 | 1912.8 | 1401.2 | 1124.5 | 1054.6 | 1033.4 | 1013.0 | 993.3 | 993.3 |
| 35° | 2896.6 | 2631.0 | 1824.7 | 1223.6 | 1024.7 | 994.9 | 968.2 | 935.9 | 910.0 | 908.4 |
| 37.5° | 3291.1 | 2725.3 | 1666.8 | 1080.5 | 977.6 | 954.8 | 915.5 | 867.6 | 822.0 | 814.1 |
| 40° | 3689.6 | 2753.6 | 1444.4 | 992.5 | 947.7 | 914.7 | 866.8 | 810.2 | 766.2 | 763.8 |
| 42.5° | 4055.0 | 2699.4 | 1208.6 | 932.0 | 917.9 | 873.9 | 823.6 | 773.3 | 738.7 | 737.9 |
| 45° | 4361.5 | 2558.7 | 1010.6 | 874.6 | 886.4 | 836.9 | 792.1 | 751.3 | 724.6 | 719.1 |
| 47.5° | 4649.9 | 2359.9 | 871.5 | 814.1 | 855.0 | 816.5 | 778.8 | 740.3 | 714.3 | 710.4 |
| 50° | 4984.6 | 2145.4 | 774.1 | 755.2 | 827.5 | 809.4 | 789.8 | 749.7 | 706.5 | 701.8 |
| 52.5° | 5390.1 | 1959.9 | 697.8 | 703.3 | 806.3 | 818.9 | 818.1 | 776.4 | 701.0 | 694.7 |
| 55° | 5842.8 | 1754.0 | 640.5 | 660.9 | 797.6 | 836.1 | 825.1 | 801.6 | 705.7 | 696.3 |
| 57.5° | 6288.4 | 1513.5 | 600.4 | 628.7 | 785.1 | 834.6 | 791.3 | 757.6 | 716.7 | 703.3 |
| 60° | 6622.3 | 1190.6 | 569.7 | 600.4 | 757.6 | 808.6 | 754.4 | 709.6 | 714.3 | 704.1 |
| 62.5° | 6644.3 | 920.2 | 532.8 | 576.0 | 715.9 | 782.7 | 730.1 | 688.4 | 724.6 | 715.1 |
| 65° | 6253.8 | 695.5 | 497.4 | 546.9 | 671.1 | 766.2 | 706.5 | 676.6 | 745.8 | 735.6 |
| 67.5° | 5265.2 | 559.5 | 467.6 | 517.1 | 626.3 | 731.6 | 685.3 | 665.6 | 764.6 | 746.6 |
| 70° | 3801.1 | 477.0 | 438.5 | 480.9 | 586.2 | 692.3 | 666.4 | 646.0 | 713.5 | 685.3 |
| 72.5° | 2340.3 | 413.4 | 405.5 | 433.0 | 555.6 | 651.5 | 638.1 | 609.0 | 642.8 | 620.0 |
| 75° | 1168.6 | 358.3 | 368.6 | 385.9 | 512.4 | 605.1 | 591.0 | 561.9 | 566.6 | 561.9 |
| 77.5° | 559.5 | 306.5 | 325.3 | 338.7 | 456.6 | 552.5 | 537.5 | 507.7 | 502.2 | 502.9 |
| 80° | 354.4 | 256.2 | 274.3 | 283.7 | 407.9 | 491.2 | 476.2 | 446.4 | 509.2 | 472.3 |
| 82.5° | 221.6 | 208.2 | 213.0 | 230.3 | 355.2 | 427.5 | 407.9 | 381.1 | 458.9 | 363.1 |
| 85° | 122.6 | 145.4 | 151.7 | 166.6 | 273.5 | 357.6 | 337.9 | 304.1 | 272.7 | 268.0 |
| 87.5° | 73.1 | 86.4 | 88.8 | 99.8 | 183.9 | 258.5 | 228.7 | 216.9 | 180.0 | 179.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)