

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: P191763

Luminaire Tested: **GLEON-AF-05-LED-E1-AFL-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191763
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-05-LED-E1-AFL-7050-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 5000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24659 lumens
Efficiency: N/A
Efficacy: 117.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G2

Input Watts (W): 210
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

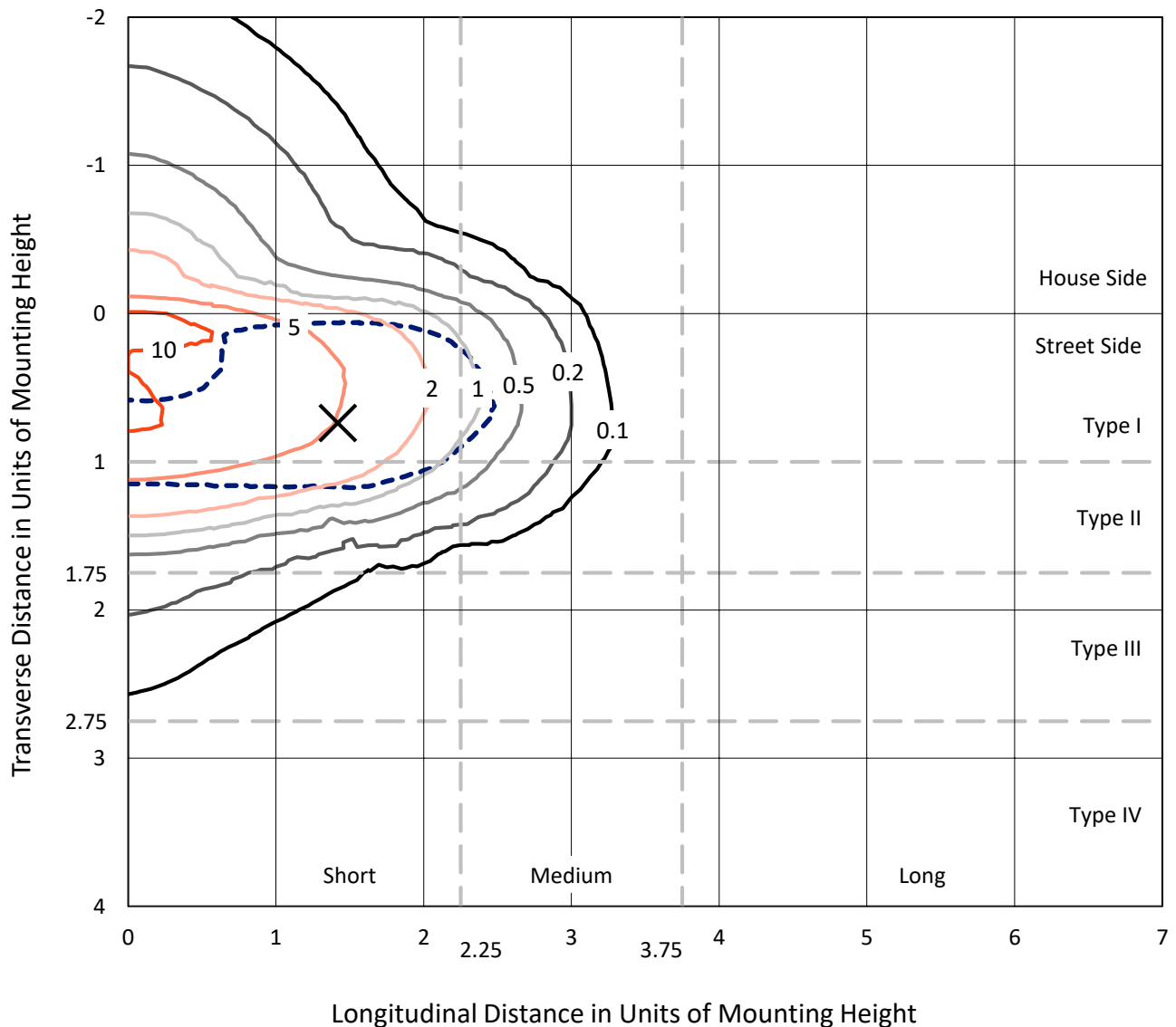


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Iso-Footcandle Lines of Horizontal Illumination

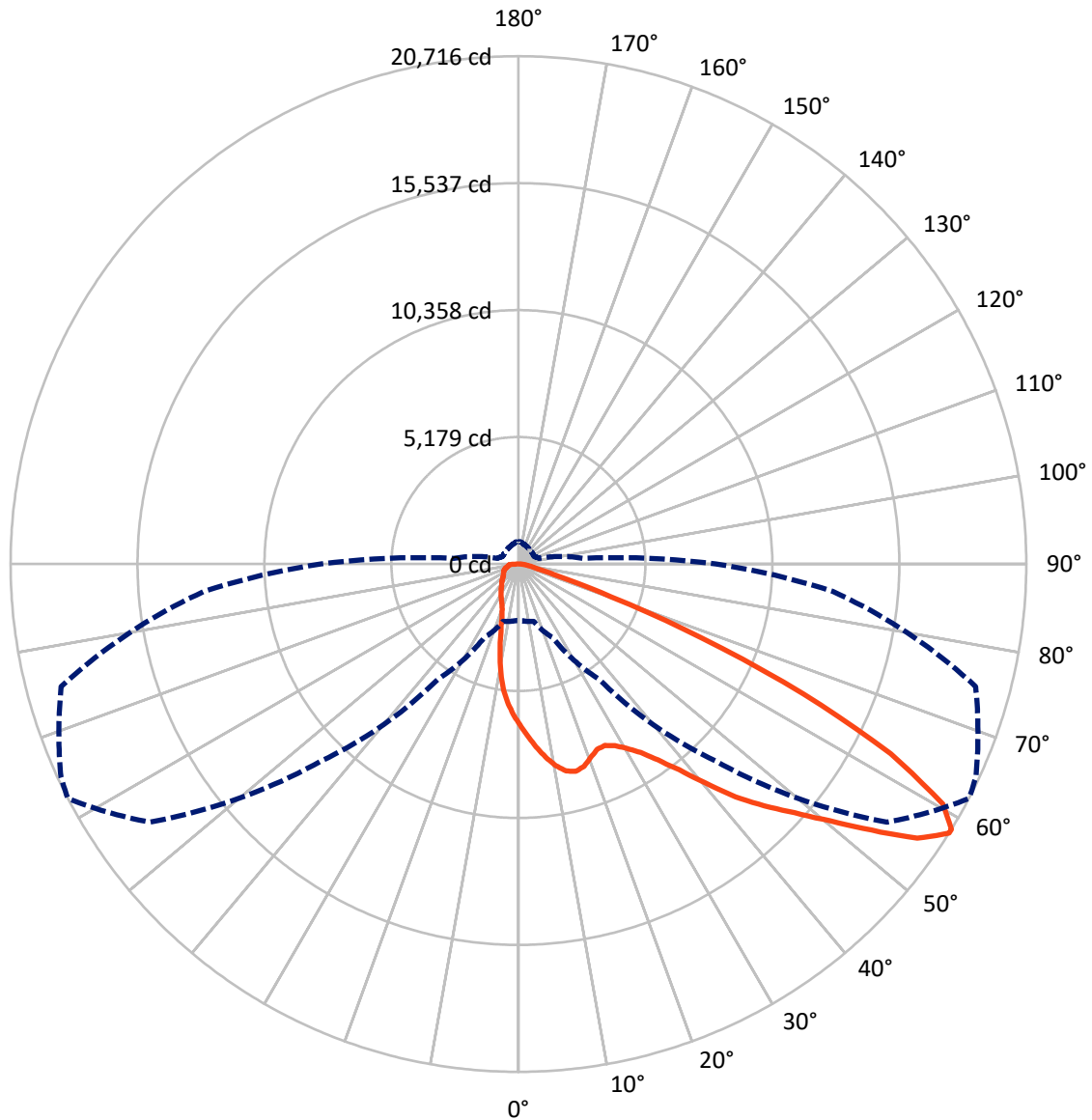
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.8 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3760.6 | 0.0 | 3760.6 |
| | % Fixture | 15.3 | 0.0 | 15.3 |
| Street Side | Lumens | 20898.4 | 0.0 | 20898.4 |
| | % Fixture | 84.7 | 0.0 | 84.7 |
| Total | Lumens | 24659.0 | 0.0 | 24659.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 585.8 | 2.4 |
| 10°-20° | 1497.4 | 6.1 |
| 20°-30° | 2420.7 | 9.8 |
| 30°-40° | 3842.8 | 15.6 |
| 40°-50° | 5622.8 | 22.8 |
| 50°-60° | 5880.9 | 23.8 |
| 60°-70° | 3474.5 | 14.1 |
| 70°-80° | 978.8 | 4.0 |
| 80°-90° | 355.4 | 1.4 |
| 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° | 24659.0 | 100.0 |
| 0°-180° | 24659.0 | 100.0 |



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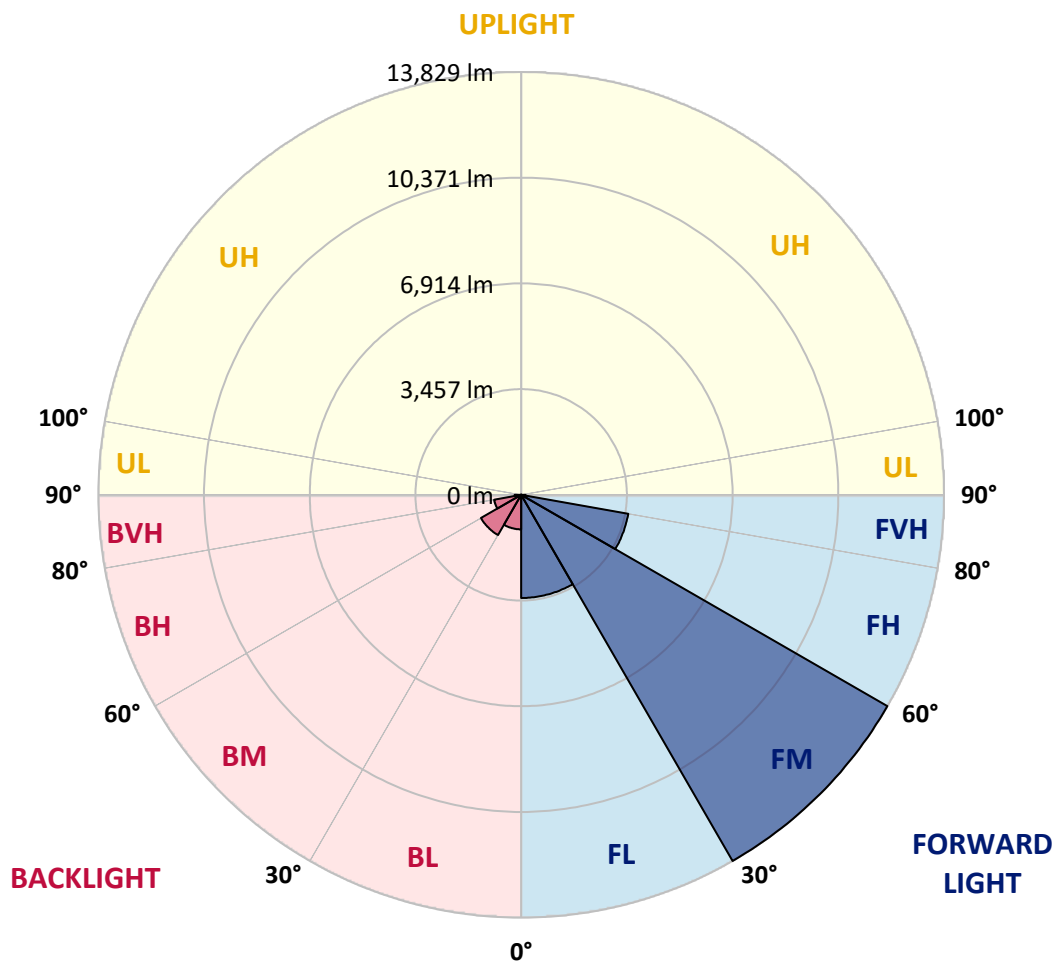
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 3373.7 | 13.7 | | | |
| FM (30°-60°) | 13828.6 | 56.1 | | | |
| FH (60°-80°) | 3555.9 | 14.4 | | | G2/5000 |
| FVH (80°-90°) | 140.2 | 0.6 | | | G2/225 |
| BL (0°-30°) | 1130.2 | 4.6 | B3/2500 | | |
| BM (30°-60°) | 1517.9 | 6.2 | B2/2500 | | |
| BH (60°-80°) | 897.3 | 3.6 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 215.2 | 0.9 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 62.5° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 6550.2 | 6550.2 | 6550.2 | 6550.2 | 6550.2 | 6550.2 | 6550.2 | 6550.2 | 6550.2 | 6550.2 | 6550.2 |
| 2.5° | 7484.9 | 7424.5 | 7386.2 | 7352.5 | 7308.4 | 7214.4 | 7087.8 | 7007.7 | 6967.0 | 6828.8 | 6665.1 |
| 5° | 8218.8 | 8165.3 | 8125.9 | 8080.6 | 8001.6 | 7854.2 | 7649.8 | 7487.2 | 7407.1 | 7130.7 | 6803.3 |
| 7.5° | 8046.9 | 8069.0 | 8137.5 | 8257.1 | 8359.3 | 8339.5 | 8157.2 | 7950.5 | 7844.9 | 7460.5 | 6963.5 |
| 10° | 7011.1 | 7049.5 | 7167.9 | 7447.7 | 7900.6 | 8365.1 | 8506.7 | 8363.9 | 8257.1 | 7786.8 | 7128.4 |
| 12.5° | 6803.3 | 6802.1 | 6811.4 | 6885.7 | 7155.1 | 7808.9 | 8518.3 | 8662.3 | 8598.5 | 8098.0 | 7296.8 |
| 15° | 6888.1 | 6890.4 | 6883.4 | 6914.8 | 6998.4 | 7257.3 | 8163.0 | 8777.3 | 8822.6 | 8411.5 | 7471.0 |
| 17.5° | 7111.0 | 7105.2 | 7078.5 | 7078.5 | 7108.7 | 7209.7 | 7745.0 | 8670.5 | 8879.5 | 8689.0 | 7624.2 |
| 20° | 7484.9 | 7458.2 | 7387.4 | 7322.3 | 7289.8 | 7344.4 | 7573.2 | 8424.3 | 8780.8 | 8931.7 | 7750.8 |
| 22.5° | 7937.8 | 7916.9 | 7801.9 | 7662.6 | 7549.9 | 7548.8 | 7661.4 | 8209.5 | 8610.1 | 9160.5 | 7857.6 |
| 25° | 8523.0 | 8489.3 | 8318.6 | 8095.7 | 7898.3 | 7822.8 | 7854.2 | 8199.0 | 8517.2 | 9409.0 | 7952.9 |
| 27.5° | 9210.4 | 9148.9 | 8946.8 | 8625.2 | 8334.9 | 8182.8 | 8137.5 | 8388.3 | 8601.9 | 9716.7 | 8085.2 |
| 30° | 10044.1 | 9973.3 | 9714.3 | 9295.2 | 8885.3 | 8635.6 | 8539.2 | 8723.9 | 8883.0 | 10091.7 | 8297.7 |
| 32.5° | 10992.8 | 10890.6 | 10591.0 | 10128.9 | 9590.1 | 9209.2 | 9052.5 | 9167.4 | 9294.0 | 10543.4 | 8563.6 |
| 35° | 12303.8 | 12181.8 | 11748.7 | 11111.2 | 10502.8 | 9979.1 | 9728.3 | 9811.9 | 9935.0 | 11216.9 | 8948.0 |
| 37.5° | 13197.9 | 13143.3 | 12855.3 | 12256.2 | 11594.3 | 10991.6 | 10603.8 | 10652.6 | 10722.2 | 12058.8 | 9440.3 |
| 40° | 13189.7 | 13211.8 | 13217.6 | 13223.4 | 12772.9 | 12195.8 | 11778.9 | 11727.8 | 11713.9 | 12983.0 | 10000.0 |
| 42.5° | 12529.0 | 12619.6 | 12912.2 | 13505.6 | 13779.6 | 13514.9 | 13132.8 | 12985.4 | 12912.2 | 14072.2 | 10593.4 |
| 45° | 11517.6 | 11566.4 | 12114.5 | 13273.3 | 14295.2 | 14821.2 | 14532.0 | 14067.6 | 13935.2 | 15073.2 | 11085.7 |
| 47.5° | 10996.3 | 11049.7 | 11394.6 | 12657.9 | 14289.4 | 15876.7 | 16043.9 | 15159.1 | 14922.2 | 15944.0 | 11510.7 |
| 50° | 9755.0 | 9866.5 | 10300.7 | 11587.3 | 13768.0 | 16362.0 | 17624.2 | 16459.6 | 15969.6 | 16791.7 | 11936.8 |
| 52.5° | 7475.6 | 7647.5 | 8134.0 | 9827.0 | 12445.4 | 16121.7 | 18888.8 | 18036.5 | 17344.4 | 17669.5 | 12302.6 |
| 55° | 4715.5 | 4843.2 | 5252.0 | 6940.3 | 9955.9 | 14871.1 | 19368.3 | 19742.2 | 19126.8 | 18500.9 | 12619.6 |
| 57.5° | 2563.9 | 2620.8 | 2774.0 | 3831.9 | 6475.8 | 12106.4 | 18669.3 | 20713.0 | 20457.5 | 19206.9 | 12858.8 |
| 58° | 2294.5 | 2332.8 | 2428.0 | 3320.9 | 5743.1 | 11350.4 | 18359.3 | 20716.4 | 20588.7 | 19310.3 | 12877.4 |
| 60° | 1702.3 | 1682.5 | 1597.8 | 1895.0 | 3196.7 | 7841.4 | 16485.1 | 19887.4 | 20262.4 | 19436.8 | 12786.8 |
| 62.5° | 1495.6 | 1448.0 | 1275.0 | 1255.2 | 1554.8 | 3612.4 | 12613.8 | 17035.5 | 17921.5 | 18714.6 | 12236.4 |
| 65° | 1405.0 | 1353.9 | 1131.0 | 1059.0 | 1121.7 | 1528.1 | 7430.3 | 12776.4 | 13887.6 | 16524.6 | 10829.1 |
| 67.5° | 1337.7 | 1271.5 | 1039.2 | 940.5 | 945.2 | 1010.2 | 2978.4 | 8046.9 | 9297.5 | 12546.4 | 8423.1 |
| 70° | 1272.6 | 1200.6 | 961.4 | 847.7 | 820.9 | 798.9 | 1184.4 | 4028.1 | 5162.6 | 7925.0 | 5370.4 |
| 72.5° | 1203.0 | 1132.1 | 892.9 | 774.5 | 722.2 | 649.1 | 773.3 | 1647.7 | 2301.4 | 3749.4 | 2436.1 |
| 75° | 1102.0 | 1038.1 | 824.4 | 709.5 | 635.2 | 537.6 | 584.1 | 860.4 | 1032.3 | 1493.3 | 1173.9 |
| 77.5° | 977.7 | 925.5 | 747.8 | 656.1 | 563.2 | 436.6 | 449.4 | 596.8 | 661.9 | 854.6 | 697.9 |
| 80° | 702.5 | 721.1 | 665.4 | 589.9 | 501.6 | 354.2 | 344.9 | 435.4 | 470.3 | 549.2 | 454.0 |
| 82.5° | 493.5 | 503.9 | 550.4 | 481.9 | 414.5 | 278.7 | 254.3 | 306.5 | 327.4 | 361.1 | 245.0 |
| 85° | 340.2 | 328.6 | 377.4 | 335.6 | 299.6 | 185.8 | 174.2 | 207.8 | 220.6 | 224.1 | 126.6 |
| 87.5° | 204.4 | 204.4 | 218.3 | 180.0 | 161.4 | 96.4 | 94.1 | 118.4 | 126.6 | 120.8 | 69.7 |
| 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° | 6550.2 | 6550.2 | 6550.2 | 6550.2 | 6550.2 | 6550.2 | 6550.2 | 6550.2 | 6550.2 | 6550.2 | 6550.2 |
| 2.5° | 6567.6 | 6485.1 | 6309.8 | 6169.3 | 5991.6 | 5807.0 | 5703.7 | 5593.4 | 5517.9 | 5463.3 | 5550.4 |
| 5° | 6617.5 | 6449.1 | 6086.9 | 5743.1 | 5363.4 | 4968.6 | 4669.1 | 4390.4 | 4196.5 | 4075.7 | 4189.5 |
| 7.5° | 6696.5 | 6437.5 | 5860.4 | 5272.9 | 4591.3 | 3934.0 | 3346.5 | 2978.4 | 2763.6 | 2657.9 | 2724.1 |
| 10° | 6787.0 | 6418.9 | 5594.5 | 4635.4 | 3660.0 | 2832.1 | 2393.2 | 2244.5 | 2195.8 | 2176.0 | 2185.3 |
| 12.5° | 6862.5 | 6379.5 | 5268.2 | 3864.4 | 2748.5 | 2236.4 | 2109.8 | 2106.4 | 2116.8 | 2119.1 | 2122.6 |
| 15° | 6915.9 | 6321.4 | 4784.0 | 3060.8 | 2198.1 | 2037.9 | 2030.9 | 2051.8 | 2071.5 | 2079.7 | 2084.3 |
| 17.5° | 6951.9 | 6201.8 | 4237.1 | 2419.9 | 1969.3 | 1941.5 | 1957.7 | 1984.4 | 2005.3 | 2011.1 | 2015.8 |
| 20° | 6948.4 | 6026.5 | 3585.7 | 2018.1 | 1845.1 | 1845.1 | 1873.0 | 1893.9 | 1895.0 | 1888.1 | 1891.5 |
| 22.5° | 6912.4 | 5786.1 | 2954.0 | 1804.5 | 1734.8 | 1754.5 | 1782.4 | 1762.7 | 1681.4 | 1628.0 | 1631.4 |
| 25° | 6852.1 | 5499.3 | 2412.9 | 1668.6 | 1632.6 | 1667.4 | 1659.3 | 1510.7 | 1394.6 | 1342.3 | 1342.3 |
| 27.5° | 6798.7 | 5160.2 | 1997.2 | 1550.2 | 1530.4 | 1573.4 | 1429.4 | 1294.7 | 1245.9 | 1221.6 | 1213.4 |
| 30° | 6760.3 | 4794.5 | 1719.7 | 1436.4 | 1434.0 | 1402.7 | 1240.1 | 1203.0 | 1194.8 | 1175.1 | 1168.1 |
| 32.5° | 6769.6 | 4424.1 | 1542.0 | 1336.5 | 1344.6 | 1200.6 | 1149.6 | 1157.7 | 1150.7 | 1129.8 | 1120.5 |
| 35° | 6846.3 | 4072.2 | 1425.9 | 1245.9 | 1221.6 | 1084.5 | 1096.1 | 1111.2 | 1108.9 | 1079.9 | 1070.6 |
| 37.5° | 6983.3 | 3739.0 | 1349.3 | 1170.5 | 1066.0 | 1026.5 | 1045.1 | 1068.3 | 1062.5 | 1042.7 | 1035.8 |
| 40° | 7127.3 | 3425.5 | 1286.6 | 1111.2 | 974.2 | 987.0 | 1003.3 | 1016.0 | 1021.8 | 1027.6 | 1023.0 |
| 42.5° | 7267.8 | 3098.0 | 1209.9 | 1050.9 | 935.9 | 949.8 | 956.8 | 969.6 | 1000.9 | 1023.0 | 1021.8 |
| 45° | 7351.4 | 2790.3 | 1131.0 | 964.9 | 905.7 | 913.8 | 909.2 | 934.7 | 973.1 | 1009.1 | 1010.2 |
| 47.5° | 7444.3 | 2551.1 | 1068.3 | 886.0 | 876.7 | 882.5 | 868.6 | 894.1 | 928.9 | 973.1 | 977.7 |
| 50° | 7556.9 | 2408.3 | 1018.3 | 823.3 | 837.2 | 837.2 | 833.7 | 856.9 | 905.7 | 956.8 | 966.1 |
| 52.5° | 7684.6 | 2380.4 | 976.5 | 778.0 | 797.7 | 796.6 | 800.0 | 834.9 | 888.3 | 938.2 | 946.4 |
| 55° | 7840.2 | 2455.9 | 931.3 | 744.3 | 759.4 | 764.0 | 775.7 | 815.1 | 860.4 | 917.3 | 920.8 |
| 57.5° | 8021.4 | 2609.1 | 895.3 | 717.6 | 724.6 | 739.7 | 758.2 | 794.2 | 843.0 | 905.7 | 909.2 |
| 58° | 8051.6 | 2641.7 | 889.5 | 715.3 | 717.6 | 735.0 | 755.9 | 790.8 | 839.5 | 908.0 | 911.5 |
| 60° | 8052.7 | 2749.7 | 876.7 | 704.8 | 690.9 | 719.9 | 743.1 | 778.0 | 833.7 | 916.2 | 924.3 |
| 62.5° | 7767.1 | 2748.5 | 867.4 | 689.7 | 663.0 | 699.0 | 725.7 | 766.4 | 827.9 | 935.9 | 952.2 |
| 65° | 6839.3 | 2497.7 | 823.3 | 666.5 | 641.0 | 680.4 | 710.6 | 758.2 | 844.2 | 1021.8 | 1032.3 |
| 67.5° | 5349.5 | 2047.1 | 740.8 | 634.0 | 611.9 | 661.9 | 701.3 | 757.1 | 861.6 | 1041.6 | 1048.5 |
| 70° | 3536.9 | 1531.6 | 650.3 | 596.8 | 581.7 | 639.8 | 706.0 | 796.6 | 841.8 | 999.8 | 981.2 |
| 72.5° | 1835.8 | 1075.2 | 577.1 | 550.4 | 546.9 | 620.1 | 773.3 | 791.9 | 822.1 | 940.5 | 917.3 |
| 75° | 963.8 | 746.6 | 513.2 | 499.3 | 505.1 | 615.4 | 912.7 | 771.0 | 796.6 | 899.9 | 944.0 |
| 77.5° | 589.9 | 602.6 | 458.7 | 452.9 | 464.5 | 601.5 | 911.5 | 744.3 | 759.4 | 827.9 | 876.7 |
| 80° | 394.8 | 488.9 | 416.9 | 418.0 | 426.1 | 550.4 | 818.6 | 702.5 | 714.1 | 782.6 | 832.6 |
| 82.5° | 249.7 | 289.1 | 378.5 | 398.3 | 387.8 | 454.0 | 695.5 | 639.8 | 656.1 | 895.3 | 946.4 |
| 85° | 126.6 | 181.1 | 328.6 | 383.2 | 349.5 | 318.2 | 564.3 | 560.8 | 569.0 | 645.6 | 674.6 |
| 87.5° | 58.1 | 99.9 | 256.6 | 334.4 | 263.6 | 198.6 | 409.9 | 415.7 | 448.2 | 458.7 | 458.7 |
| 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)