

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: P193799

Luminaire Tested: **GLEON-AF-01-LED-E1-SL4-8030-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193799
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24294)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-01-LED-E1-SL4-8030-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(1) 80 CRI, 3000K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5301 lumens
Efficiency: N/A
Efficacy: 79.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 67
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

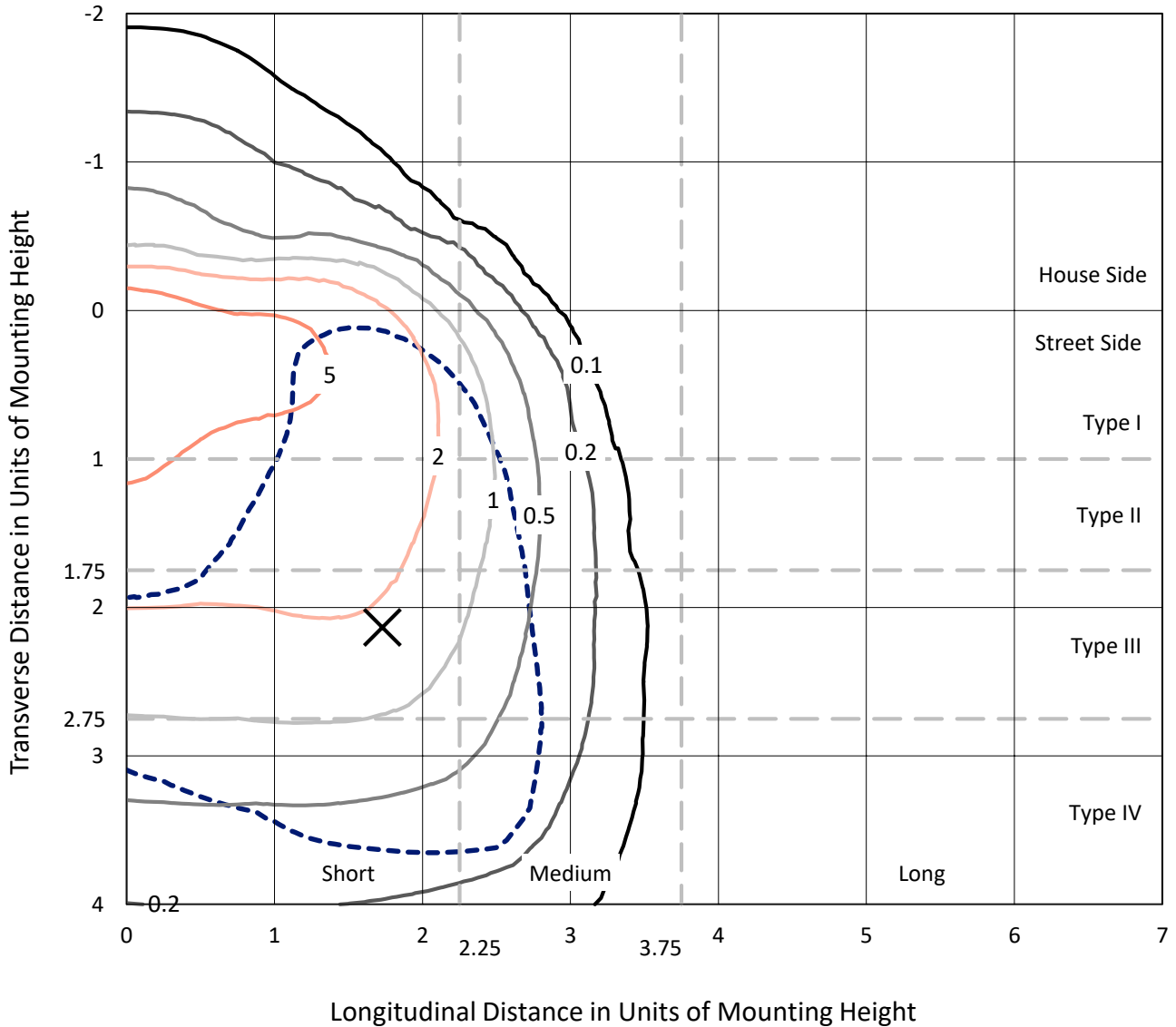


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

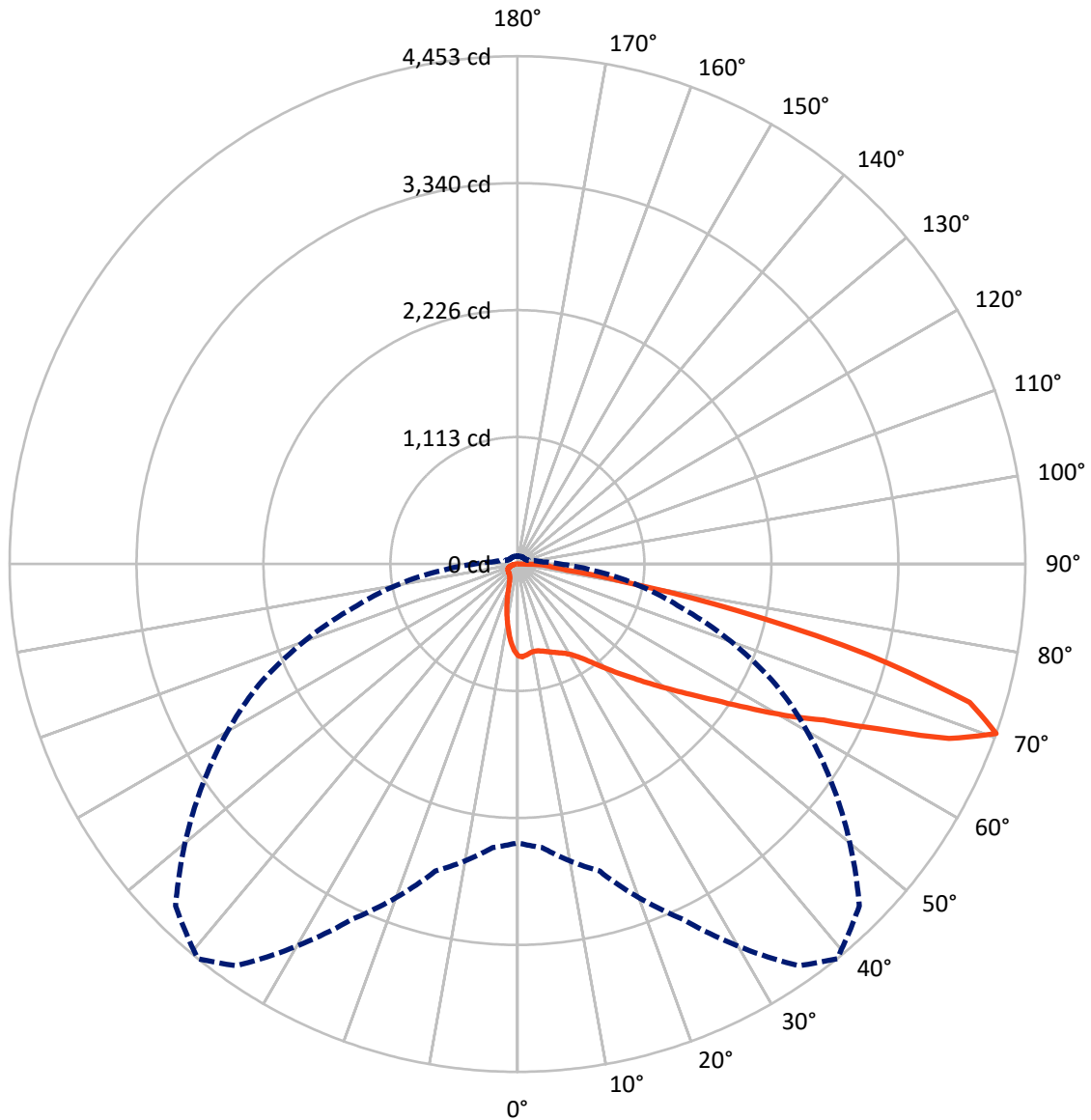


Based on 10 foot mounting height. Maximum calculated value = 8 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 602.9 | 0.0 | 602.9 |
| | % Fixture | 11.4 | 0.0 | 11.4 |
| Street Side | Lumens | 4698.1 | 0.0 | 4698.1 |
| | % Fixture | 88.6 | 0.0 | 88.6 |
| Total | Lumens | 5301.0 | 0.0 | 5301.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 69.1 | 1.3 |
| 10°-20° | 172.6 | 3.3 |
| 20°-30° | 268.8 | 5.1 |
| 30°-40° | 418.7 | 7.9 |
| 40°-50° | 703.0 | 13.3 |
| 50°-60° | 1116.8 | 21.1 |
| 60°-70° | 1489.6 | 28.1 |
| 70°-80° | 899.6 | 17.0 |
| 80°-90° | 162.8 | 3.1 |
| 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° | 5301.0 | 100.0 |
| 0°-180° | 5301.0 | 100.0 |



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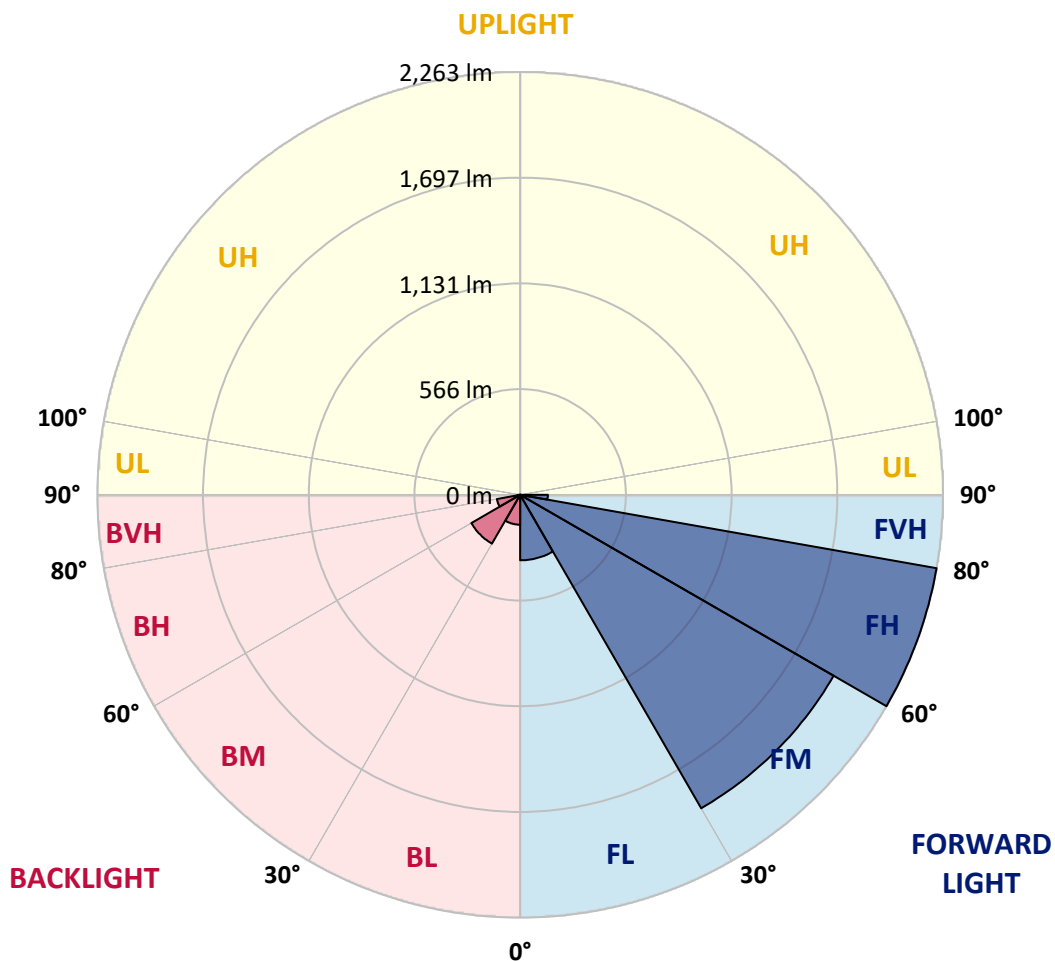
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 350.6 | 6.6 | | | |
| FM (30°-60°) | 1936.8 | 36.5 | | | |
| FH (60°-80°) | 2262.6 | 42.7 | | | G2/5000 |
| FVH (80°-90°) | 148.1 | 2.8 | | | G2/225 |
| BL (0°-30°) | 159.9 | 3.0 | B1/500 | | |
| BM (30°-60°) | 301.7 | 5.7 | B1/1000 | | |
| BH (60°-80°) | 126.6 | 2.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 14.7 | 0.3 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 39° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 804.8 | 804.8 | 804.8 | 804.8 | 804.8 | 804.8 | 804.8 | 804.8 | 804.8 | 804.8 | 804.8 |
| 2.5° | 820.4 | 820.1 | 818.0 | 816.4 | 815.0 | 814.5 | 815.6 | 811.5 | 808.0 | 803.7 | 799.1 |
| 5° | 814.2 | 813.9 | 810.4 | 807.2 | 804.0 | 802.9 | 802.6 | 795.3 | 791.0 | 784.6 | 775.9 |
| 7.5° | 807.5 | 806.1 | 801.5 | 796.1 | 790.5 | 787.8 | 785.1 | 775.7 | 770.8 | 764.3 | 754.4 |
| 10° | 800.5 | 798.8 | 794.5 | 789.1 | 783.8 | 779.7 | 775.1 | 766.0 | 760.8 | 756.0 | 744.4 |
| 12.5° | 793.2 | 791.8 | 790.8 | 788.3 | 784.6 | 781.1 | 777.6 | 769.7 | 764.3 | 758.7 | 745.2 |
| 15° | 792.1 | 791.6 | 794.0 | 795.6 | 793.5 | 791.3 | 787.5 | 780.8 | 775.1 | 769.5 | 751.9 |
| 17.5° | 800.7 | 800.5 | 806.7 | 811.0 | 809.9 | 806.1 | 801.0 | 793.5 | 788.9 | 784.0 | 762.2 |
| 20° | 819.6 | 820.9 | 828.5 | 834.2 | 828.8 | 823.4 | 815.0 | 804.5 | 802.1 | 799.9 | 772.7 |
| 22.5° | 855.2 | 856.5 | 861.9 | 864.1 | 850.1 | 842.2 | 830.6 | 817.2 | 815.6 | 817.2 | 785.4 |
| 25° | 910.7 | 909.3 | 908.5 | 900.5 | 874.8 | 862.7 | 847.9 | 833.9 | 834.7 | 842.0 | 803.2 |
| 27.5° | 984.3 | 977.0 | 965.7 | 941.4 | 900.7 | 887.2 | 869.2 | 856.3 | 861.4 | 875.4 | 829.8 |
| 30° | 1060.5 | 1052.5 | 1026.3 | 986.7 | 934.7 | 919.9 | 899.6 | 885.1 | 898.6 | 920.7 | 865.4 |
| 32.5° | 1131.2 | 1130.1 | 1091.8 | 1040.9 | 981.6 | 968.6 | 948.4 | 932.0 | 953.8 | 987.5 | 918.8 |
| 35° | 1208.2 | 1210.7 | 1164.8 | 1103.7 | 1044.9 | 1031.4 | 1016.9 | 1004.5 | 1033.6 | 1079.9 | 996.1 |
| 37.5° | 1290.7 | 1295.6 | 1241.4 | 1172.4 | 1117.1 | 1111.5 | 1102.9 | 1097.5 | 1142.5 | 1206.6 | 1104.2 |
| 40° | 1400.9 | 1396.1 | 1320.9 | 1250.0 | 1205.8 | 1205.5 | 1202.8 | 1209.3 | 1284.2 | 1372.1 | 1243.0 |
| 42.5° | 1519.0 | 1504.7 | 1405.3 | 1333.3 | 1303.1 | 1312.3 | 1317.7 | 1344.1 | 1454.8 | 1573.2 | 1412.3 |
| 45° | 1646.2 | 1614.1 | 1492.8 | 1421.4 | 1411.2 | 1430.6 | 1448.9 | 1506.3 | 1655.6 | 1802.0 | 1597.7 |
| 47.5° | 1747.8 | 1716.8 | 1583.4 | 1513.9 | 1536.2 | 1565.6 | 1600.9 | 1691.8 | 1880.4 | 2038.3 | 1780.7 |
| 50° | 1827.9 | 1807.6 | 1674.8 | 1621.7 | 1674.0 | 1719.2 | 1776.9 | 1901.7 | 2114.4 | 2268.5 | 1950.2 |
| 52.5° | 1905.5 | 1890.4 | 1766.9 | 1732.2 | 1835.7 | 1898.2 | 1976.6 | 2127.0 | 2354.2 | 2494.9 | 2092.8 |
| 55° | 1975.6 | 1964.8 | 1866.1 | 1869.9 | 2025.9 | 2107.3 | 2206.0 | 2383.6 | 2615.7 | 2696.8 | 2213.5 |
| 57.5° | 2054.5 | 2040.8 | 1979.3 | 2042.7 | 2270.4 | 2376.1 | 2504.3 | 2672.0 | 2860.9 | 2876.3 | 2305.4 |
| 60° | 2134.0 | 2122.2 | 2104.9 | 2242.1 | 2580.9 | 2691.9 | 2813.5 | 2951.5 | 3109.7 | 3015.6 | 2300.0 |
| 62.5° | 2203.0 | 2204.4 | 2234.8 | 2451.5 | 2884.9 | 3013.5 | 3161.7 | 3298.1 | 3334.7 | 3039.9 | 2130.0 |
| 65° | 2320.0 | 2341.3 | 2432.1 | 2748.0 | 3312.9 | 3484.8 | 3666.8 | 3644.9 | 3397.0 | 2813.2 | 1765.3 |
| 67.5° | 2459.1 | 2496.5 | 2680.6 | 3143.1 | 3853.8 | 4082.1 | 4152.4 | 3723.4 | 3147.7 | 2286.8 | 1258.4 |
| 70° | 2445.0 | 2496.5 | 2787.9 | 3437.7 | 4299.6 | 4452.7 | 4239.2 | 3369.8 | 2499.5 | 1493.9 | 668.4 |
| 72.5° | 2171.2 | 2244.8 | 2569.3 | 3302.6 | 4159.2 | 4145.7 | 3680.2 | 2512.2 | 1485.0 | 599.9 | 261.2 |
| 75° | 1654.8 | 1729.2 | 2008.4 | 2609.2 | 3287.3 | 3174.1 | 2611.3 | 1387.7 | 563.6 | 238.3 | 164.7 |
| 77.5° | 951.9 | 1009.6 | 1225.2 | 1600.1 | 2085.5 | 1969.4 | 1453.5 | 617.2 | 274.4 | 166.0 | 128.6 |
| 80° | 531.5 | 563.6 | 694.5 | 811.8 | 1022.0 | 936.8 | 650.3 | 383.5 | 204.8 | 120.5 | 99.2 |
| 82.5° | 420.2 | 448.7 | 561.7 | 512.1 | 466.8 | 430.7 | 373.5 | 341.5 | 163.6 | 76.0 | 59.3 |
| 85° | 367.1 | 394.3 | 475.4 | 403.2 | 318.8 | 292.4 | 303.5 | 336.1 | 127.2 | 45.8 | 50.7 |
| 87.5° | 340.1 | 376.5 | 423.7 | 310.8 | 248.2 | 219.9 | 280.0 | 368.4 | 41.0 | 28.6 | 20.5 |
| 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° | 804.8 | 804.8 | 804.8 | 804.8 | 804.8 | 804.8 | 804.8 | 804.8 | 804.8 | 804.8 | 804.8 |
| 2.5° | 795.1 | 790.8 | 783.8 | 777.6 | 767.9 | 762.7 | 757.1 | 753.0 | 749.8 | 747.1 | 751.4 |
| 5° | 770.5 | 762.5 | 747.6 | 731.7 | 712.9 | 698.0 | 685.6 | 674.1 | 666.0 | 660.6 | 664.4 |
| 7.5° | 747.4 | 734.2 | 711.0 | 682.1 | 649.8 | 622.3 | 599.7 | 579.7 | 566.0 | 557.1 | 560.6 |
| 10° | 734.2 | 717.7 | 681.9 | 636.6 | 588.9 | 546.0 | 510.5 | 479.7 | 458.4 | 446.3 | 448.2 |
| 12.5° | 730.9 | 709.6 | 660.0 | 597.8 | 532.6 | 473.0 | 422.9 | 380.3 | 350.4 | 334.7 | 335.3 |
| 15° | 733.4 | 706.1 | 639.6 | 560.6 | 478.1 | 402.9 | 340.4 | 288.7 | 253.9 | 236.1 | 235.8 |
| 17.5° | 737.4 | 703.4 | 618.0 | 520.4 | 422.9 | 335.5 | 265.7 | 215.1 | 184.3 | 170.1 | 169.0 |
| 20° | 741.7 | 699.1 | 593.7 | 477.0 | 365.5 | 273.0 | 208.1 | 168.4 | 149.0 | 141.2 | 140.7 |
| 22.5° | 747.9 | 695.4 | 568.7 | 431.2 | 309.1 | 222.4 | 171.1 | 144.5 | 134.2 | 130.2 | 129.6 |
| 25° | 757.9 | 693.5 | 542.0 | 383.5 | 258.5 | 186.0 | 149.0 | 132.6 | 126.7 | 124.0 | 123.7 |
| 27.5° | 774.6 | 696.2 | 516.9 | 337.2 | 217.2 | 161.4 | 136.6 | 126.7 | 122.4 | 119.9 | 119.7 |
| 30° | 796.1 | 704.5 | 490.5 | 293.2 | 185.2 | 144.7 | 129.1 | 122.6 | 119.1 | 116.7 | 116.7 |
| 32.5° | 832.0 | 718.5 | 462.8 | 255.2 | 162.2 | 133.1 | 123.4 | 119.1 | 116.2 | 114.3 | 114.0 |
| 35° | 884.8 | 744.9 | 436.9 | 223.7 | 145.8 | 124.8 | 118.6 | 115.4 | 113.2 | 112.1 | 112.1 |
| 37.5° | 961.6 | 786.7 | 414.0 | 201.1 | 135.8 | 119.1 | 114.0 | 111.6 | 110.2 | 110.2 | 110.2 |
| 40° | 1064.9 | 844.4 | 395.4 | 186.0 | 130.2 | 115.1 | 110.5 | 108.6 | 107.8 | 108.1 | 108.1 |
| 42.5° | 1192.3 | 919.3 | 383.0 | 175.5 | 127.5 | 112.7 | 108.1 | 106.5 | 105.7 | 105.4 | 105.7 |
| 45° | 1337.6 | 1004.5 | 381.6 | 167.6 | 124.8 | 111.0 | 106.5 | 104.8 | 103.2 | 102.1 | 102.1 |
| 47.5° | 1478.8 | 1091.0 | 392.7 | 164.9 | 121.8 | 109.2 | 105.1 | 103.5 | 101.1 | 98.6 | 98.6 |
| 50° | 1603.6 | 1164.6 | 407.5 | 166.0 | 120.7 | 106.5 | 103.0 | 102.1 | 98.4 | 95.7 | 95.4 |
| 52.5° | 1702.8 | 1221.2 | 419.6 | 169.3 | 121.8 | 104.6 | 100.3 | 100.5 | 96.5 | 93.5 | 93.3 |
| 55° | 1782.3 | 1258.4 | 416.4 | 172.5 | 124.2 | 103.5 | 97.8 | 98.4 | 95.1 | 92.2 | 92.2 |
| 57.5° | 1817.1 | 1244.6 | 380.6 | 169.8 | 126.1 | 103.8 | 95.9 | 98.1 | 95.4 | 92.7 | 92.7 |
| 60° | 1742.4 | 1122.5 | 313.4 | 157.9 | 123.7 | 103.0 | 95.1 | 99.2 | 98.9 | 96.2 | 95.9 |
| 62.5° | 1516.6 | 904.0 | 243.1 | 140.4 | 115.4 | 98.9 | 93.0 | 98.9 | 101.9 | 101.1 | 100.8 |
| 65° | 1168.9 | 643.9 | 185.7 | 121.6 | 104.0 | 92.2 | 87.3 | 92.7 | 96.8 | 97.8 | 97.6 |
| 67.5° | 758.7 | 394.6 | 143.1 | 103.8 | 91.4 | 84.4 | 80.0 | 82.5 | 83.3 | 83.3 | 82.7 |
| 70° | 373.0 | 212.4 | 114.0 | 87.3 | 78.4 | 76.0 | 73.6 | 72.2 | 70.9 | 69.8 | 69.8 |
| 72.5° | 184.1 | 138.8 | 93.8 | 73.8 | 67.6 | 66.6 | 66.0 | 64.4 | 63.3 | 62.0 | 61.4 |
| 75° | 136.1 | 112.9 | 79.8 | 62.3 | 58.2 | 57.1 | 58.2 | 56.9 | 56.6 | 55.5 | 55.0 |
| 77.5° | 111.8 | 96.2 | 68.7 | 53.4 | 49.9 | 48.0 | 49.6 | 49.9 | 50.1 | 48.5 | 48.0 |
| 80° | 90.8 | 81.4 | 57.4 | 44.2 | 41.0 | 39.6 | 40.7 | 42.9 | 43.4 | 41.0 | 39.9 |
| 82.5° | 65.5 | 66.6 | 46.4 | 34.5 | 31.8 | 30.7 | 32.9 | 35.6 | 36.1 | 32.6 | 31.8 |
| 85° | 55.0 | 55.5 | 35.6 | 24.5 | 21.8 | 20.2 | 23.7 | 26.4 | 28.3 | 24.8 | 24.0 |
| 87.5° | 22.9 | 32.6 | 20.5 | 13.7 | 12.1 | 10.5 | 12.7 | 14.0 | 17.0 | 15.6 | 15.4 |
| 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)