

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: P269272

Luminaire Tested: **GLEON-AF-04-LED-E1-T3R-7027-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P269272
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P40129)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-04-LED-E1-T3R-7027-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23397.6 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 258
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

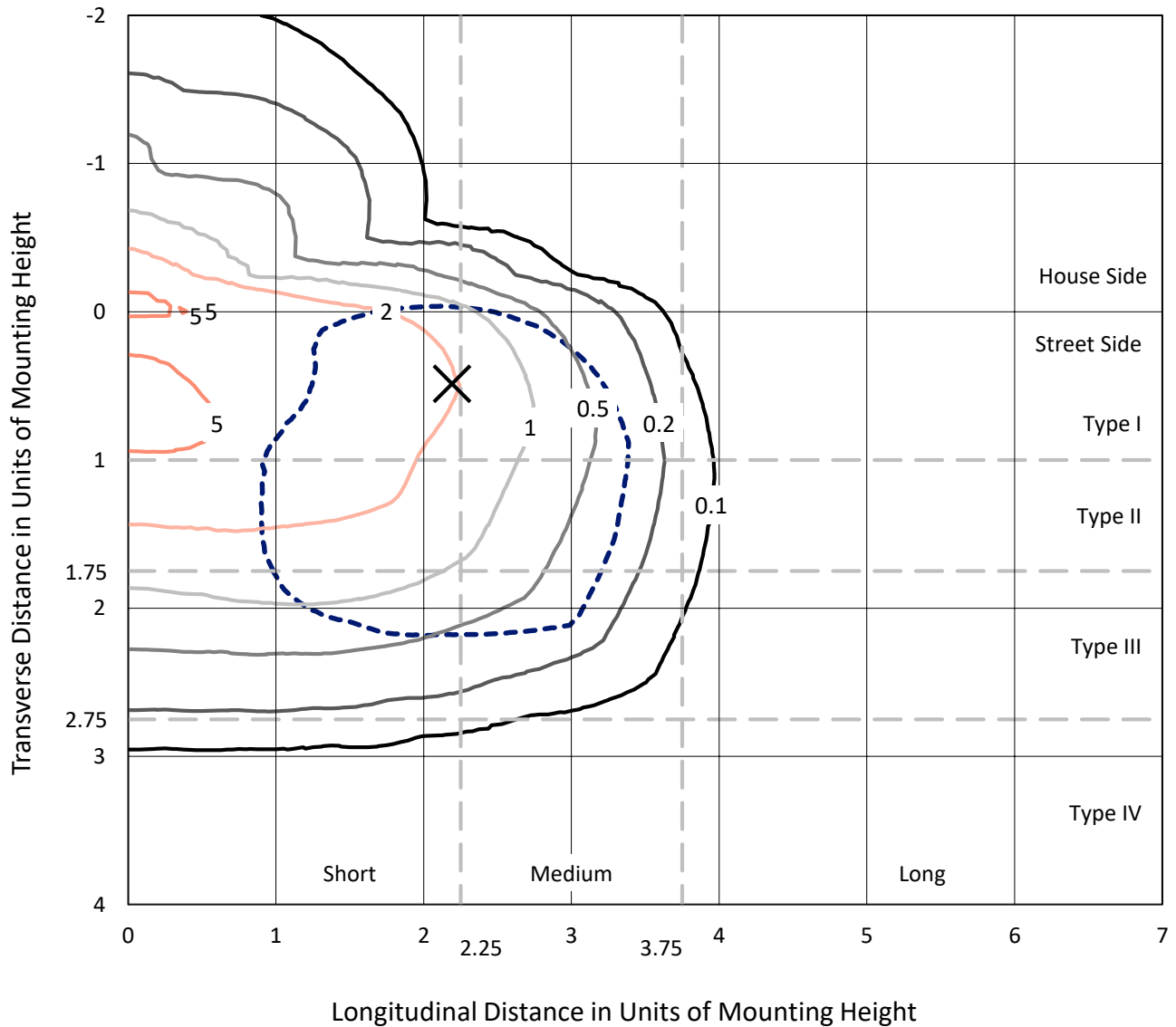


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

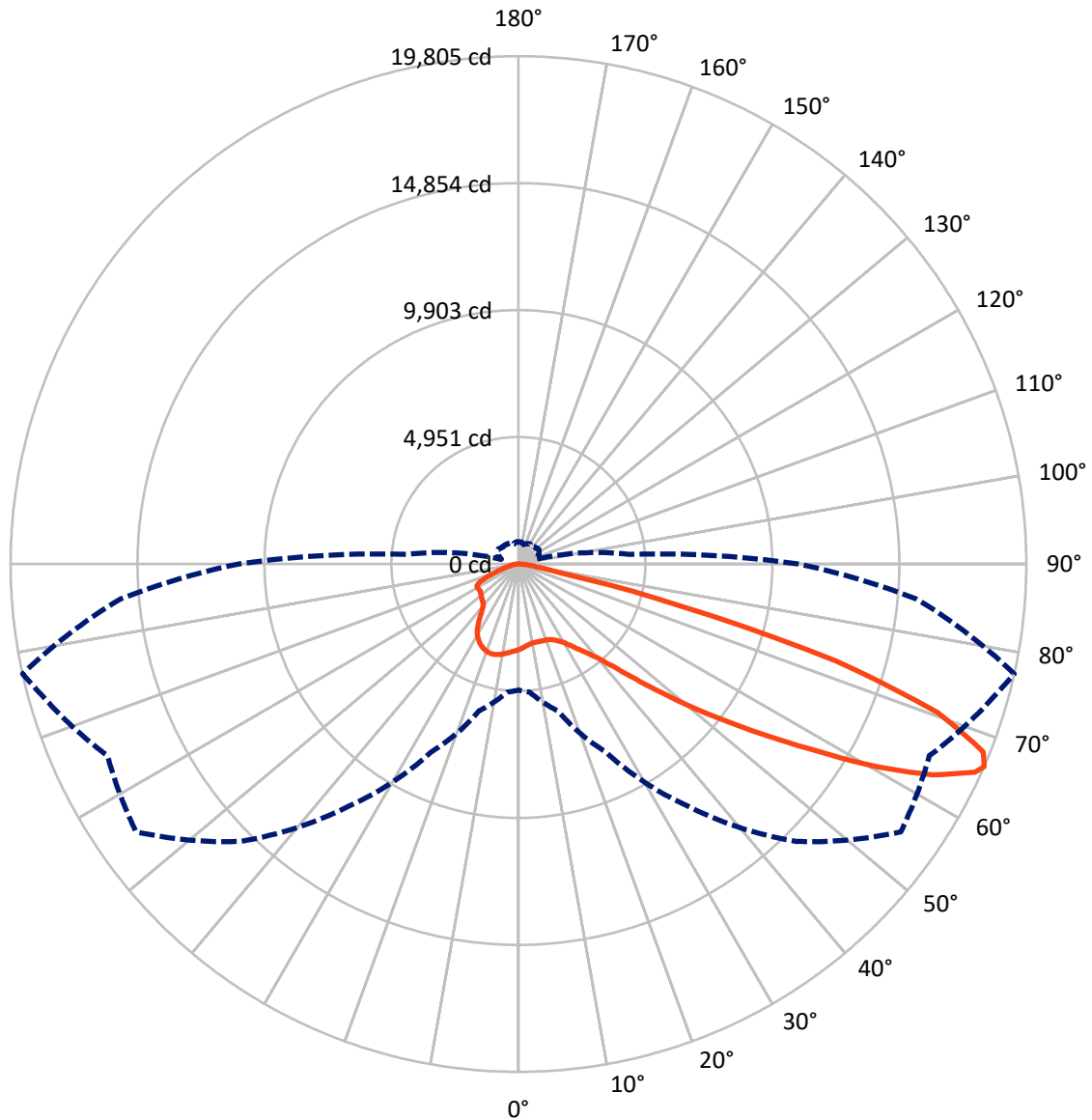


Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3997.3 | 0.0 | 3997.3 |
| | % Fixture | 17.1 | 0.0 | 17.1 |
| Street Side | Lumens | 19400.2 | 0.0 | 19400.2 |
| | % Fixture | 82.9 | 0.0 | 82.9 |
| Total | Lumens | 23397.6 | 0.0 | 23397.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 297.9 | 1.3 |
| 10°-20° | 840.4 | 3.6 |
| 20°-30° | 1434.3 | 6.1 |
| 30°-40° | 2296.0 | 9.8 |
| 40°-50° | 3547.1 | 15.2 |
| 50°-60° | 5031.0 | 21.5 |
| 60°-70° | 6730.1 | 28.8 |
| 70°-80° | 2922.8 | 12.5 |
| 80°-90° | 298.0 | 1.3 |
| 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° | 23397.6 | 100.0 |
| 0°-180° | 23397.6 | 100.0 |



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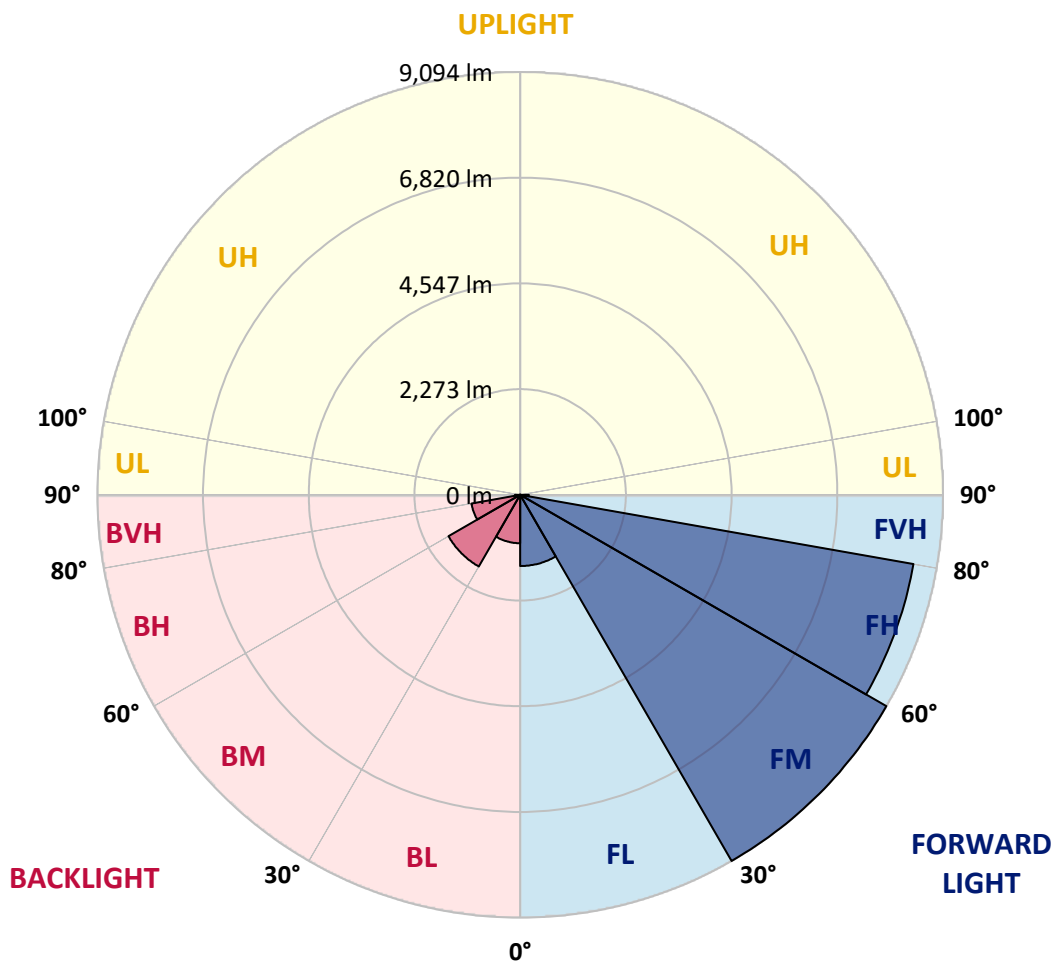
CATALOG NUMBER: GLEON-AF-04-LED-E1-T3R-7027-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 1531.5 | 6.5 | | | |
| FM | (30°-60°) | 9093.5 | 38.9 | | | |
| FH | (60°-80°) | 8588.3 | 36.7 | | | G4/12000 |
| FVH | (80°-90°) | 186.9 | 0.8 | | | G2/225 |
| BL | (0°-30°) | 1041.1 | 4.4 | B3/2500 | | |
| BM | (30°-60°) | 1780.6 | 7.6 | B2/2500 | | |
| BH | (60°-80°) | 1064.6 | 4.5 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 111.1 | 0.5 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77.5° | 85° |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3334.2 | 3334.2 | 3334.2 | 3334.2 | 3334.2 | 3334.2 | 3334.2 | 3334.2 | 3334.2 | 3334.2 | 3334.2 |
| 2.5° | 2949.6 | 2969.4 | 2986.1 | 3001.4 | 3032.5 | 3083.3 | 3141.9 | 3189.4 | 3258.1 | 3271.3 | 3307.6 |
| 5° | 2678.7 | 2678.7 | 2692.0 | 2715.1 | 2757.2 | 2833.4 | 2913.1 | 3019.3 | 3168.4 | 3203.9 | 3301.1 |
| 7.5° | 2547.1 | 2548.2 | 2555.9 | 2575.9 | 2612.4 | 2682.0 | 2769.4 | 2894.2 | 3096.5 | 3155.1 | 3321.0 |
| 10° | 2595.7 | 2584.8 | 2568.2 | 2558.3 | 2563.8 | 2604.6 | 2687.5 | 2826.8 | 3052.4 | 3127.4 | 3365.2 |
| 12.5° | 2867.7 | 2846.6 | 2789.2 | 2712.9 | 2639.9 | 2610.1 | 2658.9 | 2794.7 | 3033.5 | 3120.9 | 3423.8 |
| 15° | 3312.1 | 3303.2 | 3196.1 | 3038.0 | 2861.1 | 2712.9 | 2679.9 | 2782.6 | 3035.7 | 3128.6 | 3493.5 |
| 17.5° | 3869.3 | 3857.1 | 3715.7 | 3485.8 | 3197.2 | 2908.6 | 2753.8 | 2792.6 | 3043.5 | 3141.9 | 3560.9 |
| 20° | 4432.1 | 4394.5 | 4241.8 | 3967.8 | 3597.4 | 3175.1 | 2876.6 | 2818.0 | 3053.5 | 3156.3 | 3631.7 |
| 22.5° | 4852.1 | 4821.3 | 4684.1 | 4417.7 | 3990.9 | 3483.4 | 3041.3 | 2862.2 | 3085.5 | 3198.2 | 3719.1 |
| 25° | 5221.4 | 5223.6 | 5087.6 | 4830.0 | 4388.8 | 3810.7 | 3253.5 | 2980.4 | 3167.3 | 3284.6 | 3838.4 |
| 27.5° | 5677.9 | 5651.4 | 5524.2 | 5268.9 | 4782.4 | 4141.2 | 3510.0 | 3143.0 | 3289.0 | 3407.2 | 3995.3 |
| 30° | 6224.0 | 6205.3 | 6058.3 | 5768.6 | 5219.2 | 4496.1 | 3803.1 | 3332.1 | 3445.9 | 3568.6 | 4201.1 |
| 32.5° | 6866.5 | 6857.7 | 6704.9 | 6332.4 | 5723.3 | 4914.1 | 4146.8 | 3581.9 | 3680.3 | 3807.5 | 4496.1 |
| 35° | 7620.4 | 7621.5 | 7441.3 | 6993.6 | 6274.9 | 5400.5 | 4537.1 | 3903.7 | 3965.5 | 4098.2 | 4847.8 |
| 37.5° | 8084.7 | 8141.1 | 8073.6 | 7617.1 | 6899.6 | 5944.4 | 5043.4 | 4330.3 | 4290.6 | 4424.3 | 5224.7 |
| 40° | 8184.2 | 8252.6 | 8466.0 | 8234.0 | 7598.3 | 6543.7 | 5492.2 | 4740.4 | 4690.7 | 4854.4 | 5710.0 |
| 42.5° | 8045.0 | 8140.0 | 8591.0 | 8754.6 | 8340.0 | 7282.1 | 6095.9 | 5349.6 | 5286.6 | 5506.6 | 6313.6 |
| 45° | 7961.9 | 8032.7 | 8554.6 | 9025.5 | 8983.5 | 8116.7 | 6864.2 | 6114.7 | 6091.4 | 6380.0 | 7010.2 |
| 47.5° | 7818.3 | 7882.4 | 8384.3 | 9088.5 | 9361.5 | 8881.8 | 7787.2 | 7049.9 | 7095.3 | 7473.3 | 7796.2 |
| 50° | 7895.7 | 7922.2 | 8194.2 | 8928.3 | 9471.0 | 9442.3 | 8818.8 | 8133.3 | 8288.1 | 8760.2 | 8686.2 |
| 52.5° | 7884.7 | 7953.1 | 8172.1 | 8665.1 | 9485.5 | 9788.3 | 9834.7 | 9341.7 | 9667.7 | 10209.4 | 9673.4 |
| 55° | 6374.5 | 6500.5 | 7912.2 | 8598.8 | 9536.2 | 10127.8 | 10739.1 | 10615.2 | 11223.2 | 11854.6 | 10787.7 |
| 57.5° | 6087.1 | 6166.7 | 6949.3 | 8738.1 | 9806.0 | 10775.6 | 11745.1 | 12017.0 | 13034.1 | 13767.1 | 12145.3 |
| 60° | 6030.6 | 6129.0 | 6939.3 | 8908.3 | 10353.2 | 11831.2 | 13236.4 | 13714.1 | 15237.4 | 16040.0 | 13719.5 |
| 62.5° | 5854.9 | 5961.1 | 6874.1 | 8886.3 | 11130.4 | 13291.7 | 15145.7 | 15518.2 | 17326.9 | 18107.3 | 15036.2 |
| 65° | 5297.7 | 5397.1 | 6342.5 | 8529.0 | 11654.4 | 14850.5 | 17405.4 | 17172.1 | 18976.3 | 19563.4 | 15692.9 |
| 66° | 4916.2 | 5013.5 | 5923.5 | 8109.0 | 11532.8 | 15292.7 | 18205.8 | 17683.9 | 19345.5 | 19805.4 | 15564.7 |
| 67.5° | 4218.7 | 4294.9 | 5109.6 | 7168.2 | 10886.1 | 15416.5 | 18879.0 | 18068.7 | 19384.3 | 19546.8 | 14831.7 |
| 70° | 2665.5 | 2687.5 | 3321.0 | 4948.4 | 8240.6 | 13370.3 | 17854.3 | 17113.5 | 17785.6 | 17345.6 | 12433.8 |
| 72.5° | 1156.4 | 1148.7 | 1594.1 | 2517.3 | 4665.3 | 8971.4 | 14442.6 | 14120.8 | 13951.8 | 12947.9 | 8703.8 |
| 75° | 643.5 | 652.3 | 828.1 | 1168.5 | 1896.0 | 4406.6 | 9447.8 | 9041.0 | 7633.6 | 6513.7 | 3946.8 |
| 77.5° | 516.3 | 528.5 | 686.6 | 829.1 | 851.2 | 1536.7 | 4421.0 | 3597.4 | 2165.8 | 1738.0 | 1096.7 |
| 80° | 407.9 | 430.1 | 599.2 | 645.6 | 573.7 | 633.5 | 1428.3 | 1142.0 | 856.8 | 786.0 | 568.3 |
| 82.5° | 322.9 | 338.3 | 514.1 | 488.7 | 401.4 | 426.8 | 684.2 | 666.6 | 557.2 | 507.5 | 328.3 |
| 85° | 232.1 | 260.9 | 422.4 | 368.1 | 263.2 | 287.5 | 454.4 | 435.6 | 319.4 | 260.9 | 144.8 |
| 87.5° | 95.1 | 123.8 | 298.4 | 244.2 | 147.1 | 133.8 | 226.6 | 213.3 | 151.5 | 110.5 | 71.9 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3334.2 | 3334.2 | 3334.2 | 3334.2 | 3334.2 | 3334.2 | 3334.2 | 3334.2 | 3334.2 | 3334.2 | 3334.2 |
| 2.5° | 3330.9 | 3357.4 | 3391.7 | 3412.8 | 3423.8 | 3431.5 | 3443.7 | 3442.7 | 3445.9 | 3447.1 | 3451.5 |
| 5° | 3353.1 | 3397.3 | 3447.1 | 3460.4 | 3460.4 | 3448.1 | 3435.9 | 3416.1 | 3408.3 | 3406.2 | 3408.3 |
| 7.5° | 3410.5 | 3459.3 | 3502.3 | 3486.9 | 3453.7 | 3405.0 | 3342.1 | 3286.7 | 3256.9 | 3247.0 | 3244.7 |
| 10° | 3483.4 | 3542.0 | 3559.9 | 3501.2 | 3403.9 | 3286.7 | 3161.9 | 3071.1 | 3019.3 | 3004.8 | 3000.3 |
| 12.5° | 3571.9 | 3627.3 | 3602.9 | 3479.0 | 3298.8 | 3109.8 | 2937.4 | 2792.6 | 2684.2 | 2649.9 | 2647.8 |
| 15° | 3669.2 | 3712.3 | 3627.3 | 3410.5 | 3141.9 | 2863.3 | 2555.9 | 2306.0 | 2171.3 | 2128.2 | 2124.9 |
| 17.5° | 3759.9 | 3782.0 | 3612.9 | 3291.1 | 2910.9 | 2459.7 | 2051.9 | 1859.5 | 1813.0 | 1824.1 | 1826.3 |
| 20° | 3837.3 | 3837.3 | 3564.2 | 3119.9 | 2547.1 | 1928.0 | 1670.5 | 1667.2 | 1700.3 | 1733.5 | 1740.0 |
| 22.5° | 3922.4 | 3871.5 | 3479.0 | 2877.7 | 2032.0 | 1577.6 | 1540.1 | 1571.0 | 1608.5 | 1645.1 | 1650.5 |
| 25° | 4027.5 | 3899.3 | 3360.7 | 2510.7 | 1597.5 | 1432.7 | 1447.1 | 1472.5 | 1491.4 | 1514.5 | 1517.9 |
| 27.5° | 4144.6 | 3934.5 | 3205.0 | 2005.5 | 1386.4 | 1342.1 | 1353.1 | 1362.0 | 1359.9 | 1368.7 | 1370.9 |
| 30° | 4285.1 | 3975.4 | 2991.5 | 1567.6 | 1298.9 | 1264.8 | 1244.8 | 1237.1 | 1237.1 | 1251.5 | 1257.0 |
| 32.5° | 4472.9 | 4036.3 | 2685.4 | 1343.2 | 1257.0 | 1209.5 | 1145.2 | 1116.6 | 1127.6 | 1176.3 | 1187.3 |
| 35° | 4679.7 | 4101.5 | 2270.7 | 1266.9 | 1248.1 | 1184.1 | 1084.6 | 1031.4 | 1032.5 | 1077.8 | 1092.2 |
| 37.5° | 4905.3 | 4184.5 | 1816.4 | 1252.5 | 1268.0 | 1185.1 | 1052.5 | 979.5 | 949.7 | 949.7 | 955.2 |
| 40° | 5193.7 | 4269.6 | 1470.3 | 1262.5 | 1310.1 | 1198.3 | 1035.8 | 938.5 | 854.6 | 856.8 | 861.2 |
| 42.5° | 5569.6 | 4342.4 | 1284.7 | 1283.5 | 1360.9 | 1216.0 | 1034.8 | 884.4 | 811.4 | 861.2 | 906.5 |
| 45° | 5987.6 | 4379.0 | 1202.8 | 1302.4 | 1401.8 | 1227.2 | 1017.2 | 875.6 | 817.0 | 965.0 | 1051.3 |
| 47.5° | 6468.4 | 4357.9 | 1157.5 | 1308.9 | 1411.7 | 1227.2 | 997.2 | 896.6 | 855.6 | 1117.8 | 1218.3 |
| 50° | 6995.8 | 4297.2 | 1113.3 | 1295.6 | 1408.5 | 1224.8 | 1016.0 | 917.6 | 870.1 | 1144.3 | 1213.9 |
| 52.5° | 7616.0 | 4246.3 | 1066.8 | 1266.9 | 1385.2 | 1212.7 | 1038.1 | 908.7 | 824.7 | 1040.2 | 1088.9 |
| 55° | 8323.4 | 4260.8 | 1014.8 | 1226.0 | 1348.7 | 1189.5 | 1030.4 | 873.3 | 777.2 | 916.5 | 946.4 |
| 57.5° | 9227.7 | 4432.1 | 952.9 | 1174.1 | 1298.9 | 1150.9 | 1002.7 | 856.8 | 762.8 | 831.3 | 849.1 |
| 60° | 10237.2 | 4730.6 | 875.6 | 1122.2 | 1237.1 | 1088.9 | 981.7 | 864.4 | 769.5 | 824.7 | 833.5 |
| 62.5° | 10977.8 | 4904.0 | 809.3 | 1045.8 | 1153.1 | 1020.5 | 955.2 | 874.5 | 787.2 | 847.9 | 845.8 |
| 65° | 11179.0 | 4618.8 | 726.3 | 934.1 | 1039.2 | 948.5 | 922.0 | 885.5 | 794.9 | 866.8 | 856.8 |
| 66° | 10897.2 | 4311.5 | 689.9 | 882.2 | 981.7 | 913.1 | 905.4 | 884.4 | 791.5 | 868.9 | 852.3 |
| 67.5° | 10212.8 | 3681.4 | 626.8 | 805.9 | 890.0 | 860.0 | 878.9 | 874.5 | 782.8 | 866.8 | 843.5 |
| 70° | 8329.1 | 2511.8 | 536.2 | 671.0 | 740.7 | 757.4 | 828.1 | 839.0 | 753.9 | 828.1 | 777.2 |
| 72.5° | 5819.5 | 1530.1 | 474.2 | 520.7 | 599.2 | 645.6 | 758.3 | 790.5 | 715.3 | 723.0 | 674.4 |
| 75° | 2812.5 | 812.5 | 430.1 | 403.5 | 465.4 | 539.5 | 674.4 | 724.2 | 654.4 | 604.6 | 587.0 |
| 77.5° | 876.7 | 496.4 | 364.8 | 325.0 | 364.8 | 435.6 | 563.9 | 634.6 | 582.6 | 506.4 | 499.6 |
| 80° | 470.9 | 364.8 | 280.8 | 260.9 | 288.5 | 341.6 | 443.4 | 529.6 | 500.9 | 454.4 | 405.8 |
| 82.5° | 310.6 | 236.6 | 207.9 | 202.3 | 220.1 | 260.9 | 329.5 | 438.9 | 438.9 | 389.1 | 283.1 |
| 85° | 160.3 | 144.8 | 142.7 | 142.7 | 153.7 | 173.6 | 224.4 | 338.3 | 360.4 | 205.6 | 170.3 |
| 87.5° | 79.6 | 83.0 | 77.3 | 80.7 | 86.2 | 85.1 | 107.3 | 170.3 | 203.5 | 125.0 | 103.9 |
| 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)