

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: P191555

Luminaire Tested: **GLEON-AF-07-LED-E1-T4W-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191555
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-07-LED-E1-T4W-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28178.2 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

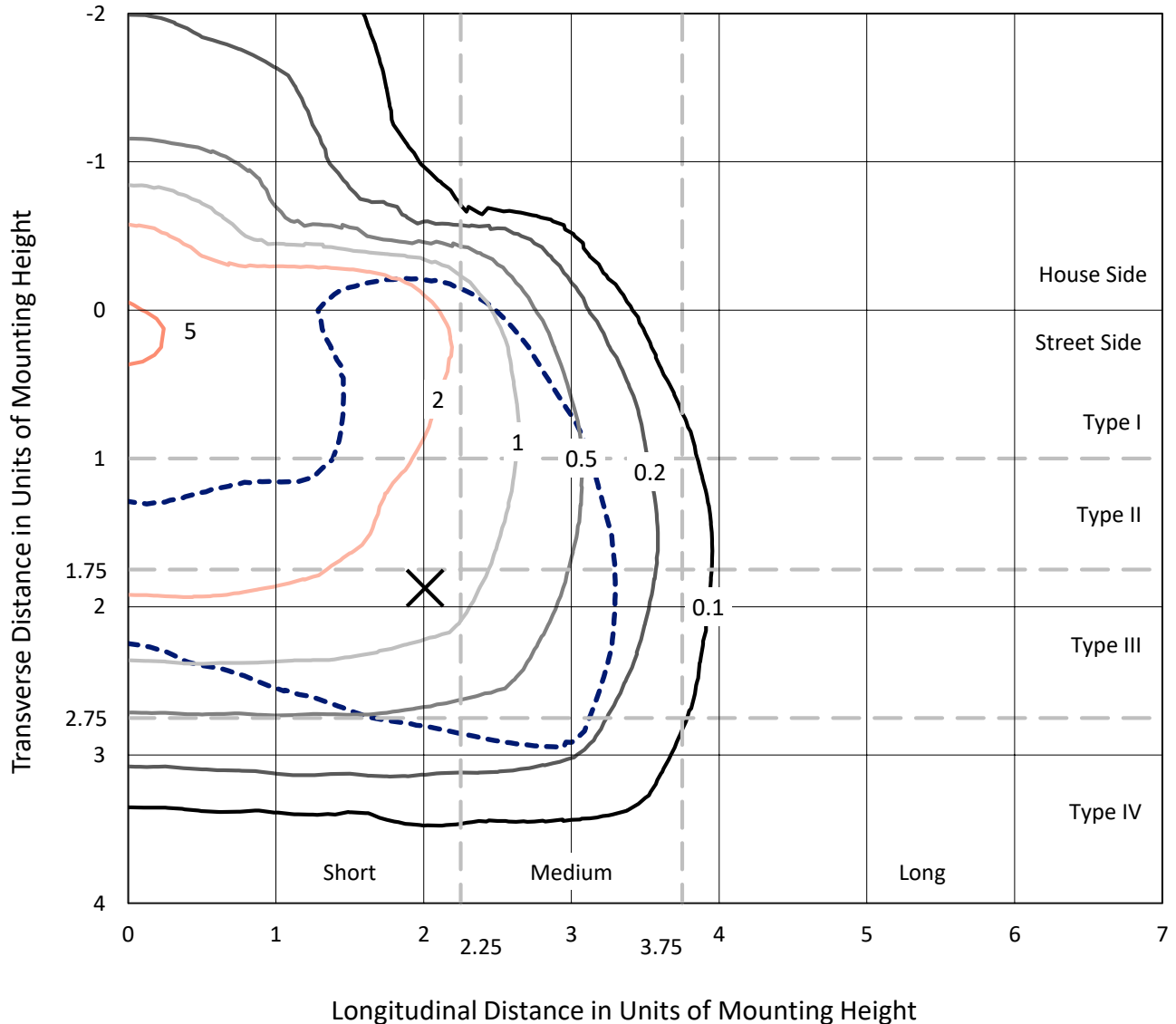
Input Watts (W): 226
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

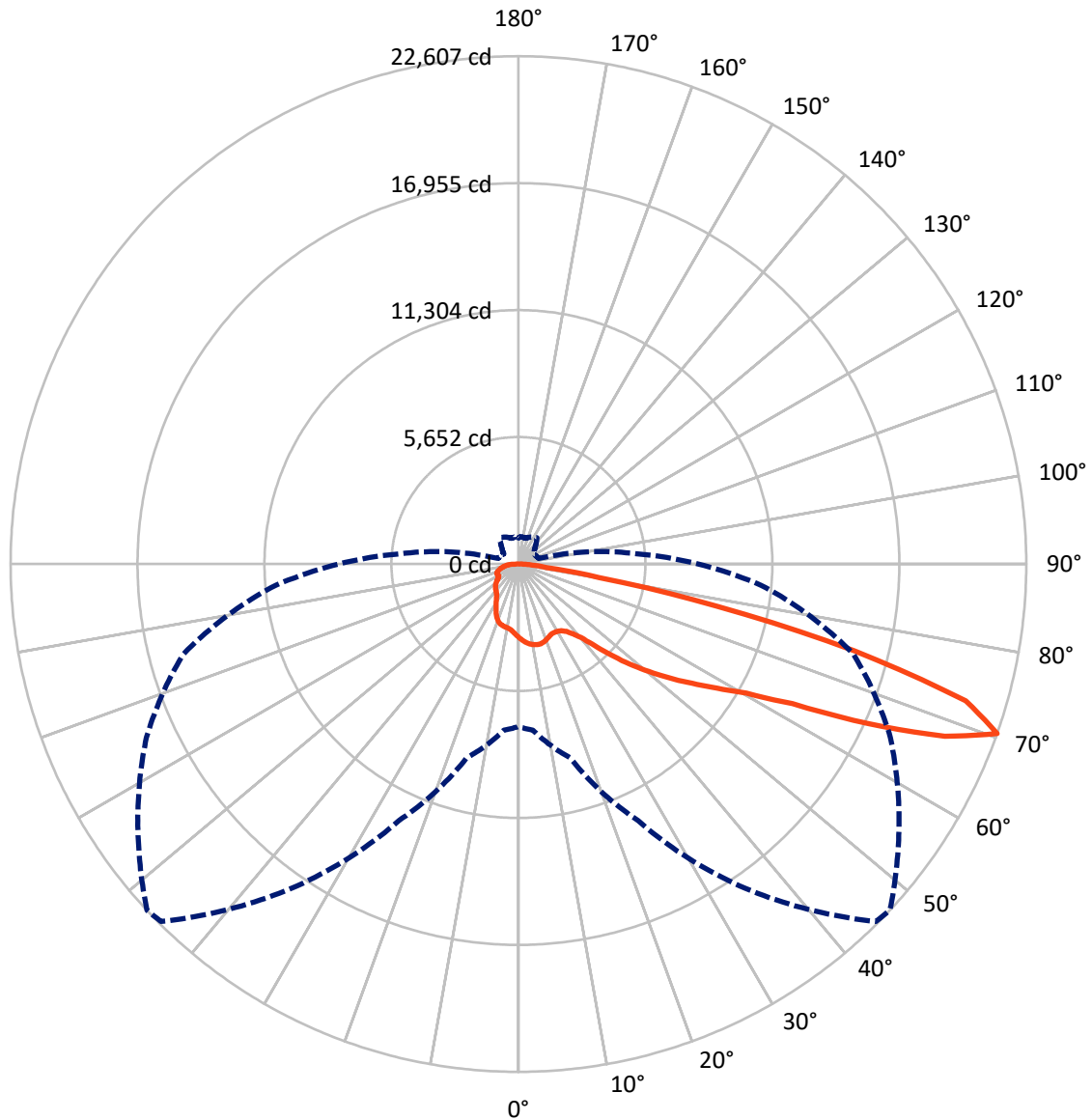
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 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 | 5878.5 | 0.0 | 5878.5 |
| | % Fixture | 20.9 | 0.0 | 20.9 |
| Street Side | Lumens | 22299.7 | 0.0 | 22299.7 |
| | % Fixture | 79.1 | 0.0 | 79.1 |
| Total | Lumens | 28178.2 | 0.0 | 28178.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 313.3 | 1.1 |
| 10°-20° | 919.1 | 3.3 |
| 20°-30° | 1357.2 | 4.8 |
| 30°-40° | 1972.7 | 7.0 |
| 40°-50° | 3550.2 | 12.6 |
| 50°-60° | 6150.3 | 21.8 |
| 60°-70° | 8778.3 | 31.2 |
| 70°-80° | 4506.3 | 16.0 |
| 80°-90° | 630.9 | 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° | 28178.2 | 100.0 |
| 0°-180° | 28178.2 | 100.0 |

Coefficient of Utilization



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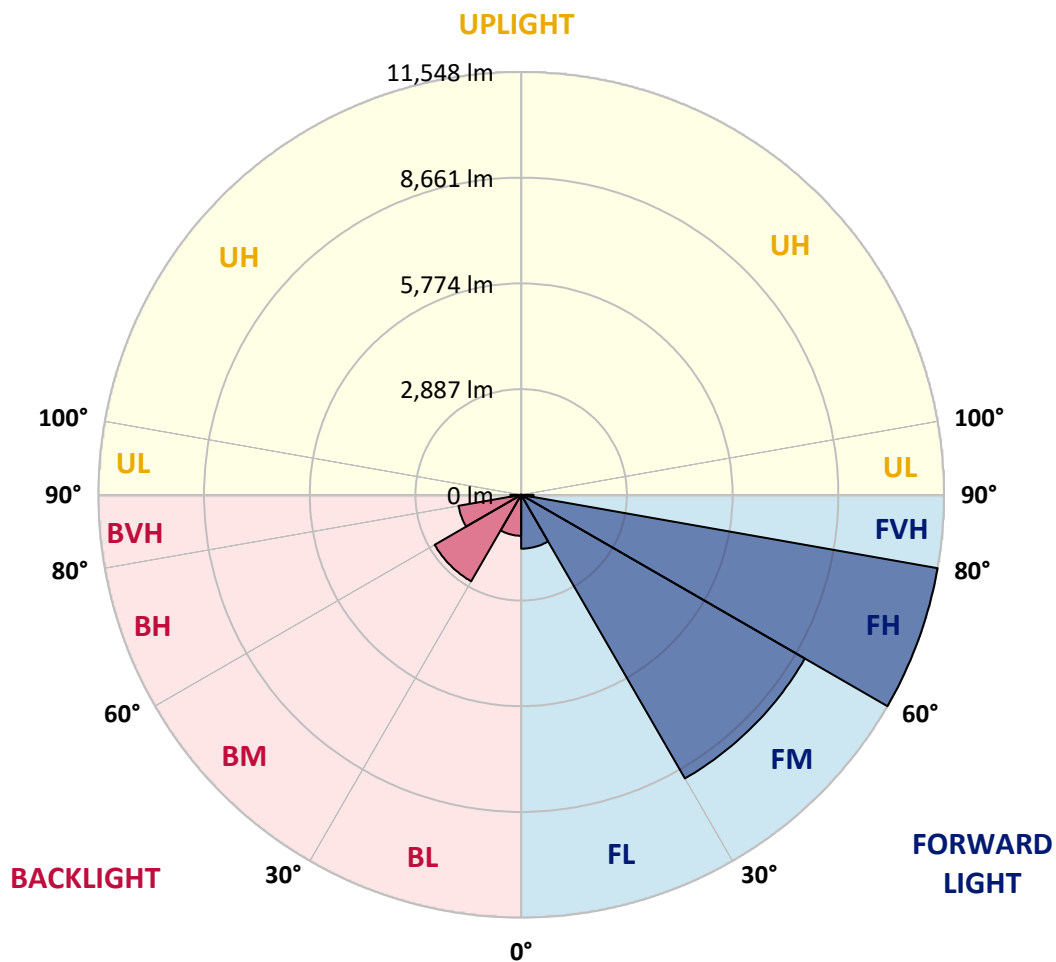
CATALOG NUMBER: GLEON-AF-07-LED-E1-T4W-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 1470.3 | 5.2 | | | |
| FM | (30°-60°) | 8944.6 | 31.7 | | | |
| FH | (60°-80°) | 11548.2 | 41.0 | | | G4/12000 |
| FVH | (80°-90°) | 336.7 | 1.2 | | | G3/500 |
| BL | (0°-30°) | 1119.3 | 4.0 | B3/2500 | | |
| BM | (30°-60°) | 2728.6 | 9.7 | B3/5000 | | |
| BH | (60°-80°) | 1736.4 | 6.2 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 294.2 | 1.0 | | | G3/500 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 47° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3269.6 | 3269.6 | 3269.6 | 3269.6 | 3269.6 | 3269.6 | 3269.6 | 3269.6 | 3269.6 | 3269.6 | 3269.6 |
| 2.5° | 3461.5 | 3454.6 | 3451.8 | 3446.4 | 3439.6 | 3405.3 | 3398.4 | 3373.7 | 3339.4 | 3303.8 | 3266.8 |
| 5° | 3689.1 | 3687.6 | 3672.6 | 3645.2 | 3601.3 | 3525.9 | 3508.1 | 3447.8 | 3366.8 | 3288.8 | 3210.6 |
| 7.5° | 3889.2 | 3876.9 | 3848.0 | 3793.2 | 3716.5 | 3613.7 | 3588.9 | 3505.3 | 3394.3 | 3287.4 | 3181.8 |
| 10° | 4035.8 | 4029.0 | 3966.0 | 3890.6 | 3790.4 | 3676.7 | 3647.9 | 3554.7 | 3432.7 | 3297.0 | 3165.3 |
| 12.5° | 4119.5 | 4105.8 | 4033.1 | 3942.7 | 3823.4 | 3712.4 | 3683.5 | 3588.9 | 3451.8 | 3297.0 | 3142.1 |
| 15° | 4114.0 | 4104.4 | 4031.8 | 3933.0 | 3812.4 | 3715.1 | 3689.1 | 3594.4 | 3447.8 | 3283.3 | 3111.9 |
| 17.5° | 4004.3 | 4008.4 | 3946.7 | 3849.5 | 3750.8 | 3676.7 | 3653.4 | 3565.7 | 3420.3 | 3255.8 | 3076.2 |
| 20° | 3812.4 | 3831.6 | 3790.4 | 3704.1 | 3649.3 | 3598.5 | 3583.5 | 3509.4 | 3377.9 | 3216.1 | 3037.9 |
| 22.5° | 3620.5 | 3638.3 | 3621.9 | 3549.2 | 3540.9 | 3510.9 | 3502.6 | 3449.1 | 3340.9 | 3191.4 | 3014.5 |
| 25° | 3479.3 | 3495.7 | 3493.0 | 3430.0 | 3454.6 | 3453.3 | 3446.4 | 3420.3 | 3332.6 | 3191.4 | 3018.7 |
| 27.5° | 3440.9 | 3446.4 | 3440.9 | 3383.3 | 3417.6 | 3445.0 | 3439.6 | 3435.4 | 3357.3 | 3231.2 | 3070.8 |
| 30° | 3572.6 | 3564.3 | 3521.8 | 3405.3 | 3436.8 | 3475.2 | 3469.7 | 3472.4 | 3431.3 | 3335.3 | 3187.3 |
| 32.5° | 4097.5 | 4060.5 | 3926.2 | 3598.5 | 3515.0 | 3535.5 | 3538.3 | 3583.5 | 3590.4 | 3495.7 | 3368.3 |
| 35° | 4883.1 | 4841.9 | 4667.8 | 4116.8 | 3757.6 | 3686.3 | 3686.3 | 3754.8 | 3796.0 | 3726.1 | 3649.3 |
| 37.5° | 5715.2 | 5669.9 | 5576.7 | 4835.1 | 4267.5 | 3948.2 | 3941.3 | 3989.3 | 4048.2 | 4064.7 | 4083.8 |
| 40° | 6661.1 | 6613.2 | 6639.2 | 5641.2 | 4979.0 | 4401.9 | 4304.6 | 4270.3 | 4429.3 | 4534.8 | 4688.4 |
| 42.5° | 7696.2 | 7674.2 | 7683.8 | 6539.1 | 5789.2 | 5080.5 | 4942.0 | 4765.2 | 4957.1 | 5144.9 | 5467.1 |
| 45° | 8654.4 | 8673.6 | 8664.0 | 7500.1 | 6691.2 | 5908.5 | 5761.8 | 5419.1 | 5606.9 | 5929.0 | 6454.1 |
| 47.5° | 9493.4 | 9413.8 | 9537.2 | 8550.1 | 7701.6 | 6835.3 | 6654.3 | 6195.0 | 6385.6 | 6783.1 | 7671.4 |
| 50° | 10511.9 | 10500.9 | 10319.9 | 9951.3 | 8923.1 | 7766.0 | 7528.9 | 6997.0 | 7293.1 | 7845.5 | 9205.4 |
| 52.5° | 11582.6 | 11383.8 | 11217.9 | 11041.1 | 10218.6 | 8720.1 | 8429.5 | 7796.2 | 8359.7 | 9054.6 | 11075.4 |
| 55° | 11801.9 | 11712.8 | 11918.4 | 12215.9 | 11467.4 | 9711.3 | 9372.7 | 8798.3 | 9560.5 | 10436.6 | 13231.8 |
| 57.5° | 12270.7 | 12269.4 | 12694.3 | 13224.9 | 12753.3 | 10762.8 | 10421.4 | 10008.8 | 10910.8 | 12019.9 | 15521.1 |
| 60° | 12587.4 | 12676.5 | 13466.1 | 14495.7 | 14015.9 | 11977.4 | 11663.5 | 11405.7 | 12446.2 | 13789.7 | 17654.2 |
| 62.5° | 12753.3 | 12873.9 | 13951.4 | 15011.1 | 15800.8 | 13999.4 | 13685.4 | 13314.0 | 14477.8 | 15730.8 | 18901.7 |
| 65° | 12063.8 | 12300.9 | 13876.0 | 15456.7 | 17363.6 | 17277.2 | 17136.0 | 16483.4 | 17018.1 | 17264.9 | 18450.7 |
| 67.5° | 10155.4 | 10398.1 | 12232.3 | 15041.3 | 18479.5 | 20438.5 | 20468.6 | 19354.1 | 18580.9 | 17396.5 | 15512.8 |
| 70° | 7235.5 | 7426.0 | 8943.7 | 12610.7 | 17629.5 | 22504.4 | 22607.2 | 20677.0 | 18269.7 | 15427.8 | 10838.2 |
| 72.5° | 3435.4 | 3552.0 | 4988.6 | 8207.4 | 13989.9 | 20619.4 | 20818.2 | 18988.0 | 15534.8 | 11422.2 | 5912.7 |
| 75° | 1262.6 | 1298.2 | 1686.2 | 3491.6 | 8114.3 | 15205.8 | 15440.2 | 13611.5 | 10298.0 | 5686.4 | 2252.3 |
| 77.5° | 756.7 | 780.0 | 945.9 | 1473.7 | 3191.4 | 8691.4 | 9038.2 | 7402.8 | 4500.6 | 2116.7 | 1107.7 |
| 80° | 529.2 | 545.6 | 678.6 | 917.1 | 1507.9 | 3312.0 | 3620.5 | 3021.4 | 1793.1 | 1339.3 | 806.1 |
| 82.5° | 357.8 | 366.0 | 477.1 | 619.6 | 1002.1 | 1183.0 | 1276.3 | 1343.4 | 1209.1 | 996.7 | 511.4 |
| 85° | 234.5 | 242.6 | 323.6 | 408.6 | 637.5 | 611.4 | 625.1 | 791.0 | 882.8 | 677.2 | 283.8 |
| 87.5° | 134.3 | 139.8 | 194.7 | 218.0 | 312.5 | 259.1 | 261.9 | 416.8 | 564.8 | 456.5 | 172.8 |
| 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° | 3269.6 | 3269.6 | 3269.6 | 3269.6 | 3269.6 | 3269.6 | 3269.6 | 3269.6 | 3269.6 | 3269.6 | 3269.6 |
| 2.5° | 3257.2 | 3239.4 | 3199.6 | 3174.9 | 3151.6 | 3146.2 | 3136.6 | 3135.2 | 3133.8 | 3133.8 | 3129.7 |
| 5° | 3184.5 | 3154.4 | 3092.7 | 3058.4 | 3029.7 | 3026.9 | 3025.6 | 3032.4 | 3035.1 | 3037.9 | 3033.8 |
| 7.5° | 3137.9 | 3096.8 | 3020.1 | 2970.6 | 2936.4 | 2928.2 | 2941.9 | 2973.4 | 2994.0 | 3002.3 | 2998.1 |
| 10° | 3109.2 | 3058.4 | 2969.3 | 2915.8 | 2887.1 | 2883.0 | 2900.8 | 2937.8 | 2980.3 | 2996.7 | 2995.4 |
| 12.5° | 3076.2 | 3018.7 | 2924.1 | 2867.8 | 2851.5 | 2859.7 | 2883.0 | 2917.3 | 2961.1 | 2987.1 | 2988.6 |
| 15° | 3043.4 | 2976.2 | 2878.9 | 2829.5 | 2822.6 | 2833.6 | 2855.6 | 2881.6 | 2915.8 | 2941.9 | 2944.7 |
| 17.5° | 3003.6 | 2933.7 | 2836.3 | 2785.6 | 2780.2 | 2785.6 | 2787.0 | 2800.7 | 2822.6 | 2847.3 | 2854.1 |
| 20° | 2961.1 | 2889.8 | 2788.4 | 2737.6 | 2713.0 | 2691.1 | 2666.3 | 2669.1 | 2675.9 | 2700.6 | 2706.1 |
| 22.5° | 2931.0 | 2859.7 | 2751.3 | 2681.5 | 2615.7 | 2549.8 | 2500.5 | 2493.6 | 2496.4 | 2517.0 | 2523.8 |
| 25° | 2933.7 | 2858.3 | 2741.7 | 2621.1 | 2477.2 | 2371.6 | 2305.8 | 2294.9 | 2293.5 | 2308.6 | 2318.1 |
| 27.5° | 2987.1 | 2911.7 | 2777.4 | 2559.4 | 2326.4 | 2170.1 | 2100.2 | 2091.9 | 2081.0 | 2085.1 | 2096.0 |
| 30° | 3106.4 | 3036.5 | 2863.8 | 2496.4 | 2163.2 | 1972.7 | 1900.0 | 1891.8 | 1876.7 | 1869.9 | 1878.1 |
| 32.5° | 3301.1 | 3243.5 | 2989.9 | 2436.1 | 2000.1 | 1804.1 | 1730.0 | 1712.2 | 1702.6 | 1694.4 | 1701.3 |
| 35° | 3624.6 | 3600.0 | 3158.5 | 2370.3 | 1856.1 | 1673.9 | 1606.6 | 1579.2 | 1565.5 | 1580.7 | 1591.6 |
| 37.5° | 4131.8 | 4145.5 | 3379.2 | 2267.5 | 1745.2 | 1587.5 | 1531.3 | 1499.7 | 1479.2 | 1491.6 | 1503.8 |
| 40° | 4850.2 | 4859.7 | 3623.2 | 2122.1 | 1649.2 | 1536.8 | 1476.4 | 1447.7 | 1418.8 | 1396.9 | 1395.5 |
| 42.5° | 5793.4 | 5696.0 | 3863.2 | 1964.5 | 1538.1 | 1505.3 | 1438.1 | 1402.4 | 1358.6 | 1298.2 | 1285.8 |
| 45° | 6912.0 | 6570.6 | 4045.5 | 1783.5 | 1413.4 | 1466.8 | 1395.5 | 1346.2 | 1277.7 | 1211.9 | 1205.0 |
| 47.5° | 8200.6 | 7509.7 | 4134.6 | 1595.7 | 1296.9 | 1410.6 | 1343.4 | 1265.3 | 1179.0 | 1146.0 | 1141.9 |
| 50° | 9774.4 | 8624.2 | 4177.1 | 1413.4 | 1195.4 | 1336.6 | 1268.0 | 1176.2 | 1103.6 | 1096.7 | 1092.6 |
| 52.5° | 11566.1 | 9965.0 | 4190.8 | 1264.0 | 1111.7 | 1240.6 | 1206.4 | 1117.3 | 1059.7 | 1065.2 | 1065.2 |
| 55° | 13441.5 | 11349.5 | 4004.3 | 1155.6 | 1035.0 | 1141.9 | 1165.2 | 1093.9 | 1046.0 | 1068.0 | 1076.1 |
| 57.5° | 15163.3 | 12576.5 | 3417.6 | 1072.1 | 962.4 | 1066.5 | 1150.2 | 1115.9 | 1083.0 | 1172.1 | 1177.6 |
| 60° | 16484.9 | 13301.6 | 2552.6 | 996.7 | 908.9 | 1040.5 | 1189.9 | 1199.5 | 1207.7 | 1420.3 | 1449.0 |
| 62.5° | 16761.8 | 13060.4 | 1754.8 | 937.6 | 884.2 | 1062.4 | 1262.6 | 1264.0 | 1254.3 | 1402.4 | 1420.3 |
| 65° | 15491.0 | 11534.6 | 1276.3 | 904.8 | 863.7 | 1102.2 | 1324.3 | 1295.5 | 1232.5 | 1344.9 | 1311.9 |
| 67.5° | 12302.3 | 8690.0 | 1062.4 | 880.1 | 833.5 | 1099.5 | 1390.1 | 1324.3 | 1220.1 | 1317.5 | 1264.0 |
| 70° | 7985.4 | 5254.6 | 945.9 | 859.6 | 797.9 | 1047.4 | 1428.4 | 1321.6 | 1184.5 | 1225.6 | 1162.5 |
| 72.5° | 3896.0 | 2349.7 | 867.8 | 829.4 | 760.9 | 974.7 | 1427.1 | 1296.9 | 1147.4 | 1144.7 | 1110.4 |
| 75° | 1524.4 | 1076.1 | 796.5 | 784.2 | 697.8 | 892.4 | 1388.7 | 1261.2 | 1103.6 | 1059.7 | 1047.4 |
| 77.5° | 892.4 | 767.7 | 706.0 | 717.0 | 622.4 | 810.2 | 1332.5 | 1199.5 | 1043.2 | 991.1 | 977.4 |
| 80° | 649.8 | 574.4 | 601.8 | 619.6 | 531.9 | 727.9 | 1257.1 | 1124.1 | 976.1 | 1002.1 | 983.0 |
| 82.5° | 416.8 | 370.1 | 488.0 | 505.8 | 442.8 | 644.4 | 1174.9 | 1044.6 | 881.5 | 800.6 | 781.4 |
| 85° | 212.5 | 234.5 | 363.2 | 385.2 | 341.4 | 529.2 | 1074.8 | 939.1 | 774.6 | 666.2 | 677.2 |
| 87.5° | 119.3 | 160.4 | 231.7 | 259.1 | 241.3 | 407.1 | 871.9 | 774.6 | 632.0 | 514.0 | 452.3 |
| 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)