

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: P193421

Luminaire Tested: **GLEON-AF-03-LED-E1-5WQ-8030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193421
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)
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-E1-5WQ-8030-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12619 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 124
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

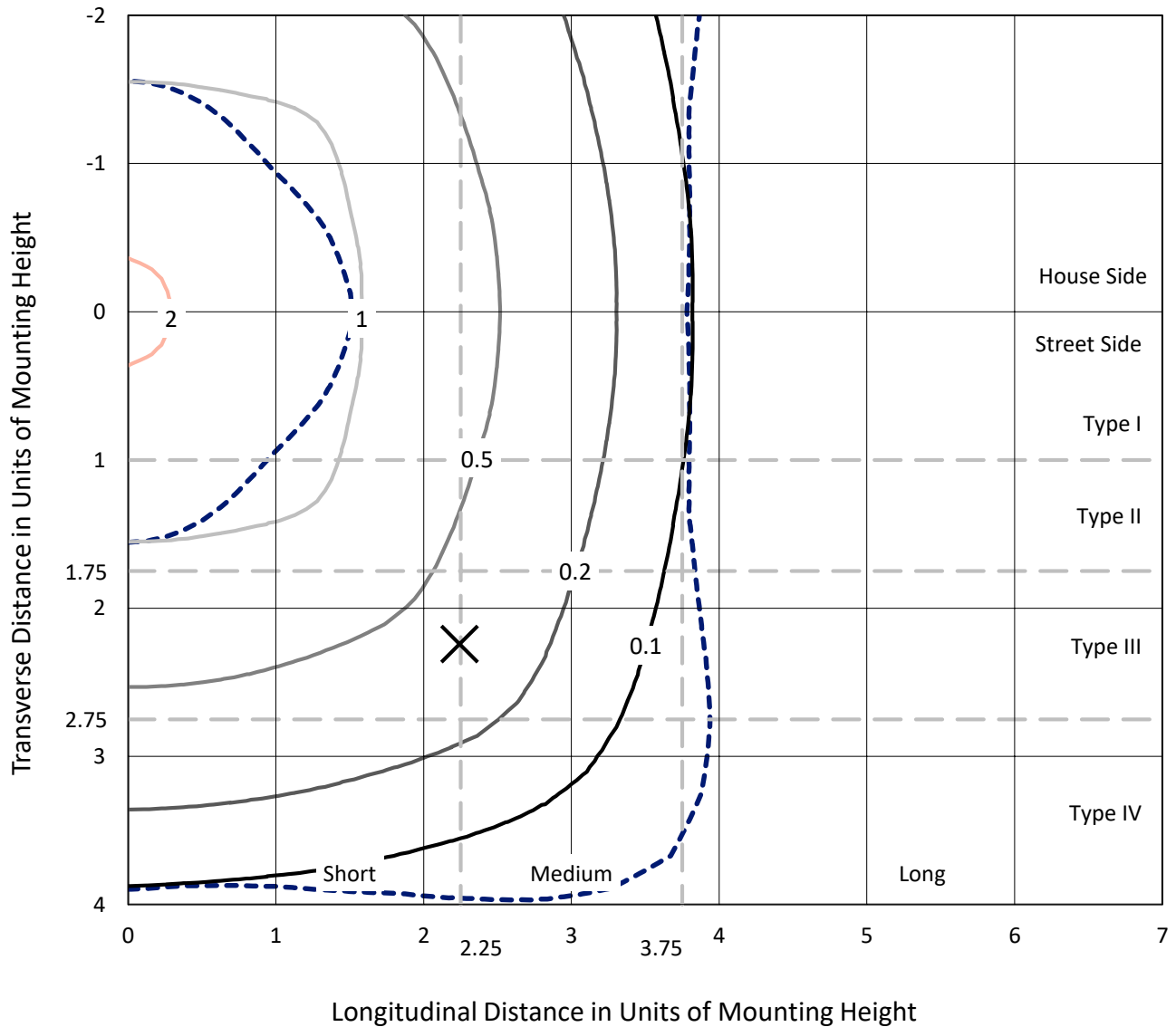


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

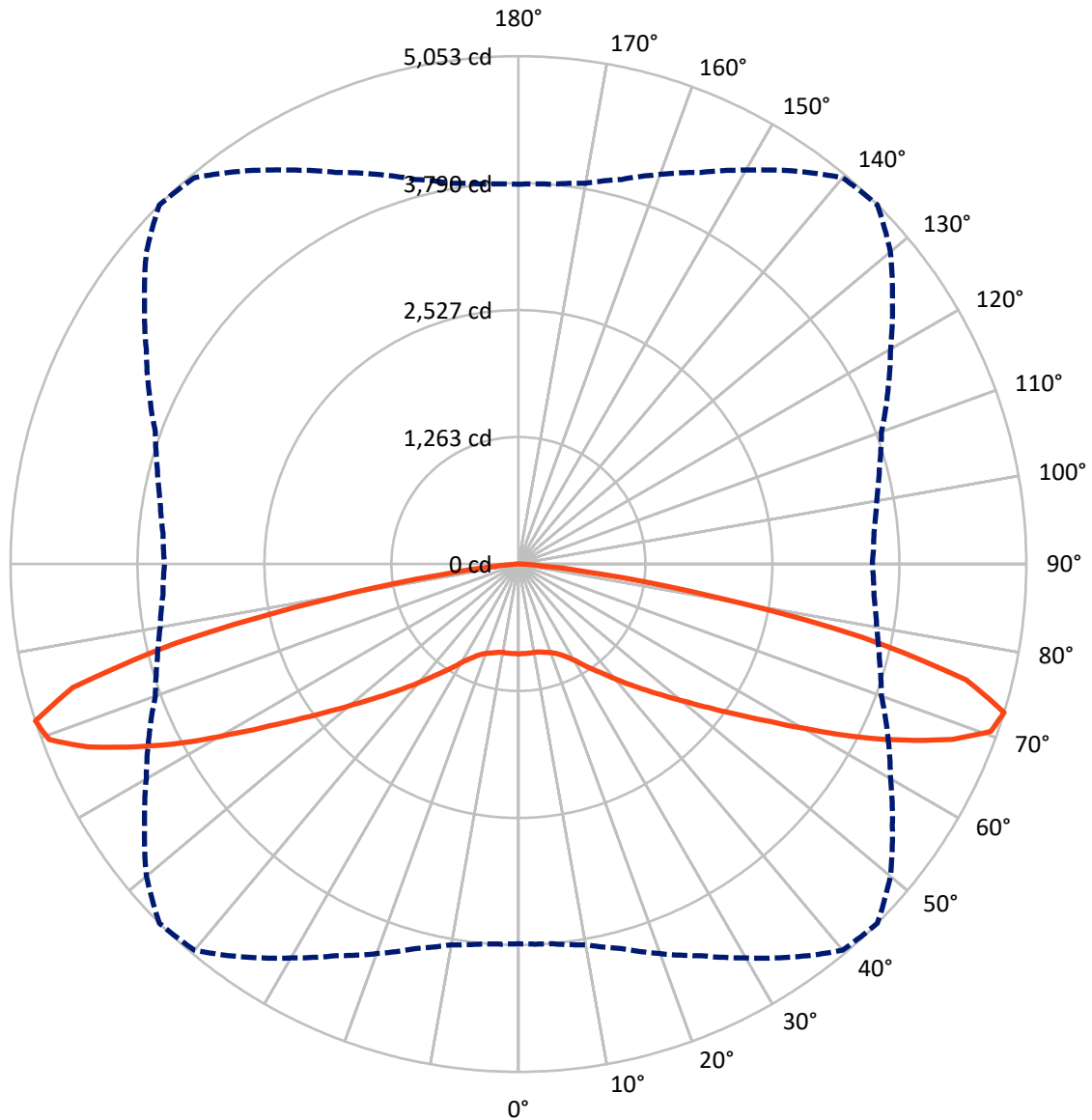


Based on 20 foot mounting height. Maximum calculated value = 2.2 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 6309.5 | 0.0 | 6309.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 6309.5 | 0.0 | 6309.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 12619.0 | 0.0 | 12619.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 85.3 | 0.7 |
| 10°-20° | 259.2 | 2.1 |
| 20°-30° | 473.6 | 3.8 |
| 30°-40° | 816.5 | 6.5 |
| 40°-50° | 1395.9 | 11.1 |
| 50°-60° | 2262.5 | 17.9 |
| 60°-70° | 3753.5 | 29.7 |
| 70°-80° | 3305.9 | 26.2 |
| 80°-90° | 266.5 | 2.1 |
| 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° | 12619.0 | 100.0 |
| 0°-180° | 12619.0 | 100.0 |



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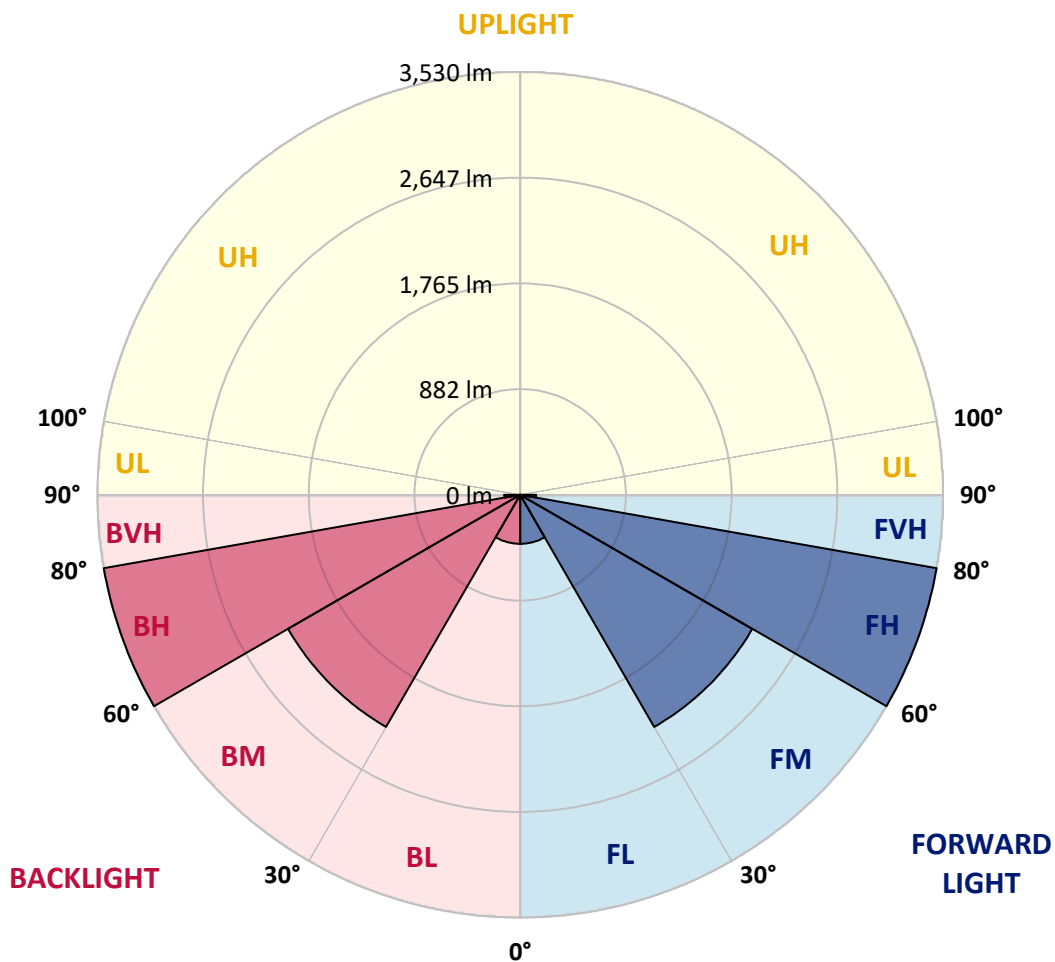
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 409.0 | 3.2 | | | |
| FM (30°-60°) | 2237.5 | 17.7 | | | |
| FH (60°-80°) | 3529.7 | 28.0 | | | G2/5000 |
| FVH (80°-90°) | 133.3 | 1.1 | | | G2/225 |
| BL (0°-30°) | 409.0 | 3.2 | B1/500 | | |
| BM (30°-60°) | 2237.5 | 17.7 | B2/2500 | | |
| BH (60°-80°) | 3529.7 | 28.0 | B4/5000 | | G2/5000 |
| BVH (80°-90°) | 133.3 | 1.1 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 893.6 | 893.6 | 893.6 | 893.6 | 893.6 | 893.6 | 893.6 | 893.6 | 893.6 | 893.6 | 893.6 |
| 2.5° | 893.6 | 894.2 | 894.8 | 894.2 | 894.2 | 893.6 | 893.0 | 893.6 | 893.0 | 891.9 | 892.5 |
| 5° | 896.5 | 897.7 | 897.7 | 896.5 | 897.1 | 896.5 | 895.4 | 895.9 | 894.8 | 893.0 | 893.0 |
| 7.5° | 900.0 | 900.6 | 900.6 | 899.4 | 900.0 | 898.8 | 897.7 | 897.1 | 895.9 | 893.6 | 891.9 |
| 10° | 905.2 | 905.8 | 905.2 | 904.0 | 904.0 | 902.3 | 899.4 | 898.3 | 895.9 | 892.5 | 890.7 |
| 12.5° | 911.0 | 911.6 | 911.0 | 909.8 | 909.2 | 906.4 | 904.0 | 902.3 | 900.6 | 897.7 | 894.8 |
| 15° | 919.1 | 920.2 | 919.1 | 916.8 | 915.0 | 912.7 | 911.6 | 912.1 | 912.7 | 910.4 | 907.5 |
| 17.5° | 934.1 | 934.7 | 933.0 | 927.8 | 925.5 | 923.1 | 923.1 | 924.3 | 926.0 | 924.9 | 922.0 |
| 20° | 961.9 | 960.2 | 956.1 | 949.8 | 946.9 | 942.8 | 942.2 | 942.8 | 942.8 | 942.2 | 939.9 |
| 22.5° | 996.6 | 995.5 | 990.3 | 982.2 | 978.1 | 975.8 | 972.3 | 969.4 | 968.9 | 967.1 | 964.8 |
| 25° | 1038.3 | 1037.7 | 1031.4 | 1024.4 | 1021.5 | 1018.6 | 1015.7 | 1011.7 | 1008.2 | 1004.2 | 1001.9 |
| 27.5° | 1091.6 | 1089.2 | 1080.0 | 1076.5 | 1072.5 | 1070.7 | 1066.7 | 1062.0 | 1059.1 | 1053.9 | 1051.0 |
| 30° | 1150.0 | 1150.0 | 1142.5 | 1141.3 | 1141.3 | 1137.3 | 1132.7 | 1124.6 | 1119.3 | 1114.1 | 1112.4 |
| 32.5° | 1208.5 | 1209.1 | 1201.5 | 1203.8 | 1205.6 | 1208.5 | 1209.6 | 1206.7 | 1203.3 | 1202.7 | 1199.2 |
| 35° | 1293.0 | 1290.7 | 1283.1 | 1284.9 | 1284.3 | 1283.7 | 1283.7 | 1290.1 | 1291.2 | 1292.4 | 1285.4 |
| 37.5° | 1397.7 | 1397.7 | 1390.2 | 1390.2 | 1386.7 | 1383.3 | 1378.6 | 1382.7 | 1389.0 | 1390.8 | 1386.2 |
| 40° | 1517.5 | 1521.6 | 1512.3 | 1511.7 | 1512.9 | 1501.9 | 1496.7 | 1503.1 | 1507.1 | 1514.1 | 1508.9 |
| 42.5° | 1658.8 | 1655.9 | 1646.6 | 1645.4 | 1639.1 | 1635.6 | 1631.0 | 1636.2 | 1642.5 | 1647.2 | 1648.9 |
| 45° | 1794.2 | 1791.9 | 1781.5 | 1781.5 | 1775.1 | 1772.2 | 1774.5 | 1783.2 | 1786.1 | 1792.5 | 1798.8 |
| 47.5° | 1927.9 | 1925.0 | 1918.0 | 1920.9 | 1921.5 | 1926.7 | 1934.3 | 1942.4 | 1950.5 | 1959.1 | 1962.0 |
| 50° | 2064.5 | 2065.1 | 2057.5 | 2064.5 | 2073.2 | 2087.6 | 2107.9 | 2121.2 | 2138.0 | 2149.0 | 2152.4 |
| 52.5° | 2188.9 | 2191.2 | 2199.3 | 2215.5 | 2232.9 | 2261.3 | 2296.0 | 2328.4 | 2356.2 | 2374.7 | 2373.5 |
| 55° | 2338.2 | 2341.7 | 2361.4 | 2389.2 | 2417.5 | 2460.4 | 2511.9 | 2569.2 | 2615.5 | 2642.1 | 2625.3 |
| 57.5° | 2529.2 | 2536.7 | 2558.7 | 2596.4 | 2638.6 | 2694.2 | 2764.8 | 2851.0 | 2922.8 | 2958.7 | 2931.5 |
| 60° | 2791.4 | 2796.0 | 2822.7 | 2864.3 | 2915.3 | 2984.1 | 3078.5 | 3194.2 | 3295.5 | 3343.0 | 3311.7 |
| 62.5° | 3136.9 | 3145.6 | 3167.0 | 3209.3 | 3261.4 | 3339.5 | 3454.7 | 3599.4 | 3725.5 | 3791.5 | 3720.9 |
| 65° | 3549.6 | 3577.4 | 3595.3 | 3638.1 | 3686.8 | 3769.5 | 3889.9 | 4045.0 | 4180.5 | 4223.9 | 4142.3 |
| 67.5° | 3958.2 | 3982.5 | 4013.8 | 4063.0 | 4112.2 | 4205.3 | 4317.0 | 4467.5 | 4616.3 | 4655.6 | 4528.9 |
| 70° | 4137.0 | 4150.9 | 4199.6 | 4266.7 | 4361.0 | 4471.0 | 4600.1 | 4769.1 | 4953.1 | 4985.5 | 4824.6 |
| 72.5° | 3778.8 | 3792.7 | 3847.1 | 3961.1 | 4125.5 | 4300.3 | 4525.4 | 4773.7 | 5016.8 | 5053.2 | 4831.6 |
| 75° | 2858.0 | 2835.4 | 2915.8 | 3066.9 | 3288.6 | 3532.2 | 3847.1 | 4203.0 | 4554.3 | 4600.1 | 4335.6 |
| 77.5° | 1477.0 | 1474.1 | 1534.9 | 1722.4 | 1986.9 | 2264.1 | 2610.8 | 3013.1 | 3356.9 | 3495.8 | 3280.5 |
| 80° | 416.1 | 420.8 | 449.7 | 542.9 | 697.4 | 897.7 | 1168.5 | 1545.3 | 1826.6 | 1970.1 | 1849.7 |
| 82.5° | 163.2 | 175.9 | 186.9 | 204.3 | 224.6 | 254.1 | 339.2 | 504.7 | 677.2 | 809.1 | 662.7 |
| 85° | 58.5 | 62.5 | 88.6 | 104.8 | 106.5 | 112.3 | 127.9 | 149.3 | 180.0 | 214.7 | 176.5 |
| 87.5° | 22.0 | 24.3 | 28.4 | 46.9 | 46.3 | 42.3 | 51.5 | 53.8 | 40.5 | 37.0 | 45.7 |
| 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):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 893.6 | 893.6 | 893.6 | 893.6 | 893.6 | 893.6 | 893.6 | 893.6 |
| 2.5° | 891.3 | 891.9 | 891.9 | 892.5 | 893.0 | 893.0 | 894.2 | 894.2 |
| 5° | 891.9 | 891.9 | 890.7 | 891.3 | 890.7 | 890.7 | 891.3 | 891.3 |
| 7.5° | 890.7 | 890.1 | 889.0 | 888.4 | 887.3 | 887.3 | 887.3 | 887.3 |
| 10° | 889.0 | 888.4 | 887.3 | 886.7 | 886.1 | 886.1 | 886.1 | 886.1 |
| 12.5° | 893.6 | 891.9 | 890.7 | 890.1 | 890.1 | 890.1 | 890.1 | 890.1 |
| 15° | 905.8 | 901.7 | 898.8 | 898.8 | 899.4 | 900.6 | 900.6 | 901.7 |
| 17.5° | 920.8 | 916.2 | 913.3 | 911.0 | 912.1 | 913.9 | 915.0 | 916.2 |
| 20° | 938.8 | 936.5 | 932.4 | 930.1 | 930.1 | 932.4 | 933.6 | 934.1 |
| 22.5° | 963.7 | 961.9 | 960.2 | 957.3 | 957.3 | 958.4 | 960.8 | 960.8 |
| 25° | 1000.7 | 999.5 | 998.4 | 996.1 | 995.5 | 995.5 | 996.6 | 997.8 |
| 27.5° | 1047.0 | 1047.6 | 1046.4 | 1045.8 | 1044.1 | 1043.5 | 1045.3 | 1044.7 |
| 30° | 1108.9 | 1111.8 | 1114.7 | 1112.4 | 1109.5 | 1107.8 | 1106.0 | 1103.7 |
| 32.5° | 1192.8 | 1189.4 | 1187.1 | 1183.0 | 1177.8 | 1173.2 | 1169.7 | 1165.6 |
| 35° | 1272.1 | 1266.3 | 1264.0 | 1267.5 | 1266.9 | 1264.0 | 1260.0 | 1256.5 |
| 37.5° | 1369.4 | 1368.2 | 1369.4 | 1375.7 | 1374.6 | 1377.5 | 1369.4 | 1368.8 |
| 40° | 1492.1 | 1493.2 | 1501.3 | 1508.9 | 1512.9 | 1517.0 | 1512.3 | 1507.7 |
| 42.5° | 1634.4 | 1633.9 | 1636.8 | 1647.2 | 1654.1 | 1658.8 | 1648.9 | 1647.8 |
| 45° | 1784.9 | 1780.9 | 1783.2 | 1791.9 | 1798.8 | 1804.0 | 1793.0 | 1793.0 |
| 47.5° | 1950.5 | 1943.5 | 1936.0 | 1945.8 | 1949.9 | 1953.3 | 1944.7 | 1941.8 |
| 50° | 2135.1 | 2120.6 | 2104.4 | 2108.5 | 2108.5 | 2107.3 | 2096.3 | 2095.7 |
| 52.5° | 2346.9 | 2320.3 | 2290.8 | 2279.8 | 2273.4 | 2266.5 | 2247.4 | 2238.1 |
| 55° | 2590.6 | 2550.6 | 2504.3 | 2476.0 | 2460.9 | 2441.8 | 2410.0 | 2401.3 |
| 57.5° | 2875.3 | 2812.8 | 2733.0 | 2698.2 | 2664.7 | 2633.4 | 2598.1 | 2588.3 |
| 60° | 3212.8 | 3120.7 | 3014.8 | 2950.6 | 2914.1 | 2884.0 | 2847.5 | 2845.8 |
| 62.5° | 3589.0 | 3443.7 | 3323.9 | 3266.0 | 3239.4 | 3212.8 | 3178.0 | 3182.7 |
| 65° | 3971.5 | 3819.9 | 3707.6 | 3660.7 | 3635.8 | 3613.8 | 3579.1 | 3584.3 |
| 67.5° | 4348.9 | 4209.4 | 4086.1 | 4038.1 | 4010.3 | 3982.5 | 3951.3 | 3956.5 |
| 70° | 4619.7 | 4446.7 | 4307.8 | 4201.3 | 4134.7 | 4059.5 | 4010.9 | 3998.7 |
| 72.5° | 4542.2 | 4275.4 | 4054.9 | 3843.6 | 3719.8 | 3619.1 | 3550.8 | 3521.2 |
| 75° | 3931.0 | 3566.4 | 3282.8 | 3023.5 | 2877.6 | 2759.0 | 2672.8 | 2618.9 |
| 77.5° | 2919.3 | 2509.5 | 2174.4 | 1875.8 | 1639.7 | 1481.1 | 1369.4 | 1297.0 |
| 80° | 1598.0 | 1215.4 | 888.4 | 624.5 | 459.0 | 381.4 | 336.8 | 315.4 |
| 82.5° | 497.7 | 321.2 | 236.7 | 204.3 | 189.8 | 181.7 | 168.4 | 147.0 |
| 85° | 158.6 | 138.9 | 129.1 | 123.3 | 117.5 | 102.4 | 70.6 | 64.2 |
| 87.5° | 61.3 | 63.1 | 62.5 | 59.0 | 60.2 | 43.4 | 34.7 | 30.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)