

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: P193360

Luminaire Tested: **GLEON-AF-02-LED-E1-5MQ-8030-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193360
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-02-LED-E1-5MQ-8030-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11452 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 129
Input Voltage (V): NR
Input Current (A_{in}): 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

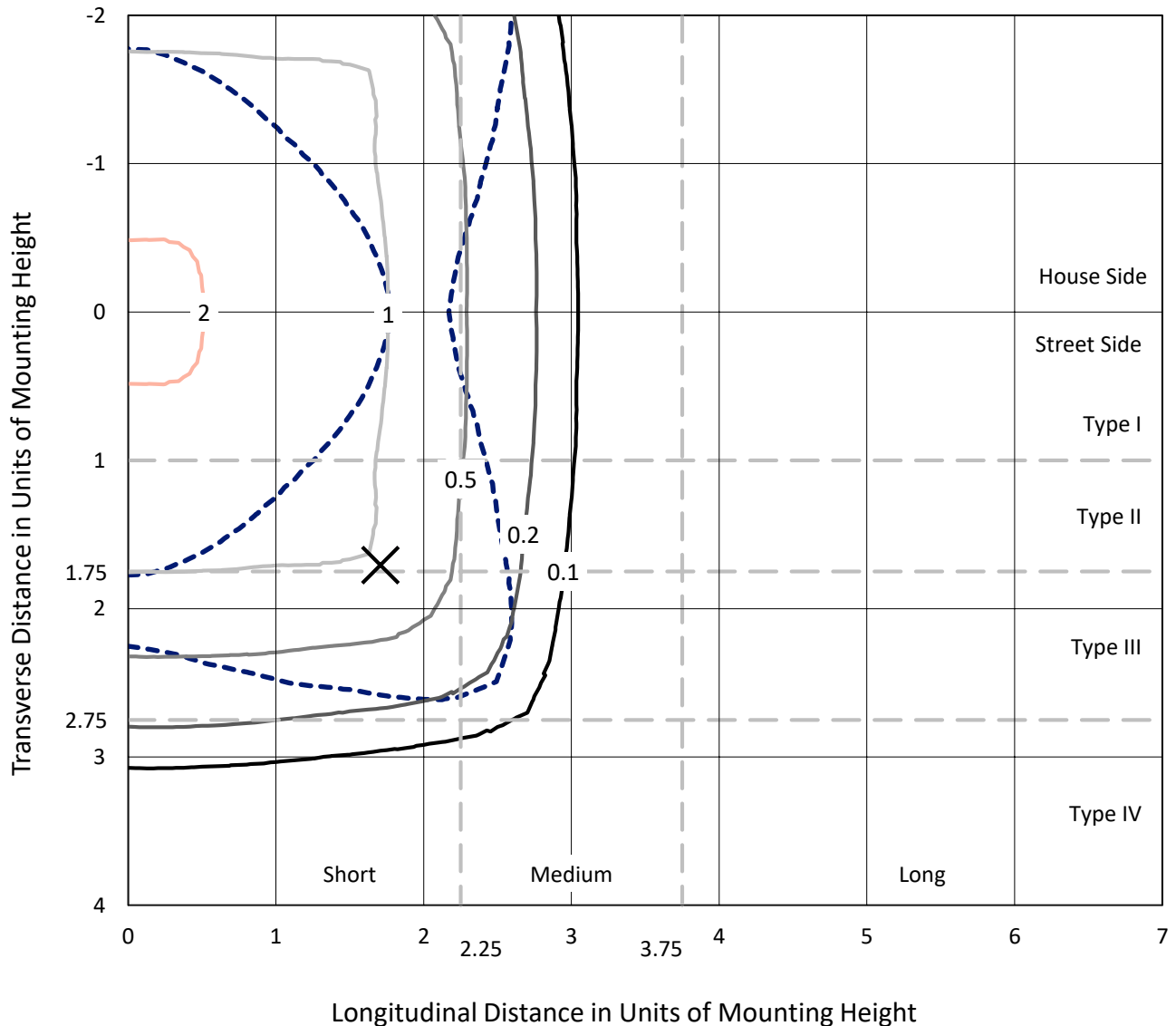


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Iso-Footcandle Lines of Horizontal Illumination

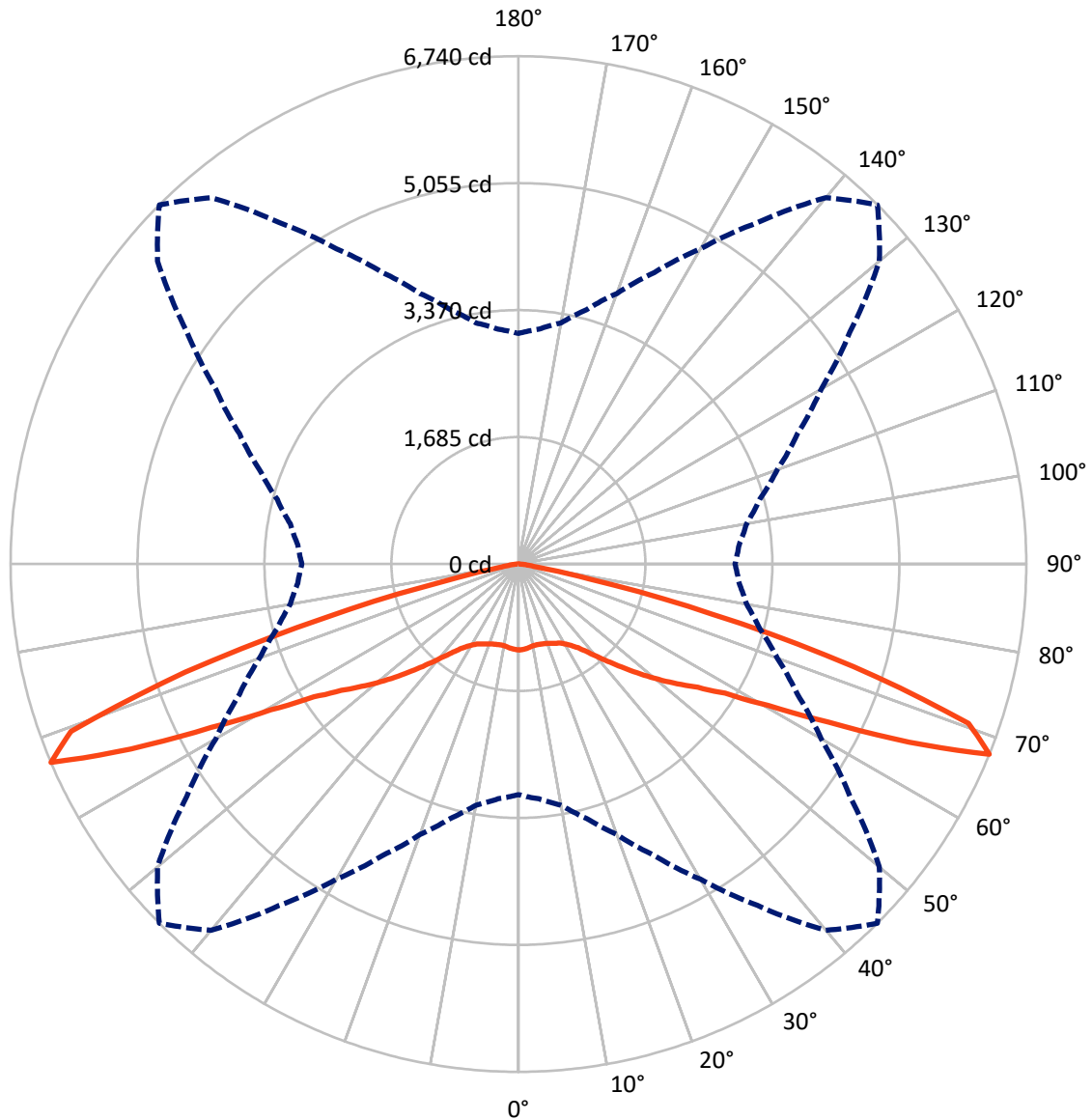
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.9 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5726.0 | 0.0 | 5726.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 5726.0 | 0.0 | 5726.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 11452.0 | 0.0 | 11452.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 106.8 | 0.9 |
| 10°-20° | 310.0 | 2.7 |
| 20°-30° | 526.9 | 4.6 |
| 30°-40° | 861.4 | 7.5 |
| 40°-50° | 1537.7 | 13.4 |
| 50°-60° | 2592.5 | 22.6 |
| 60°-70° | 4023.3 | 35.1 |
| 70°-80° | 1413.6 | 12.3 |
| 80°-90° | 79.9 | 0.7 |
| 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° | 11452.0 | 100.0 |
| 0°-180° | 11452.0 | 100.0 |



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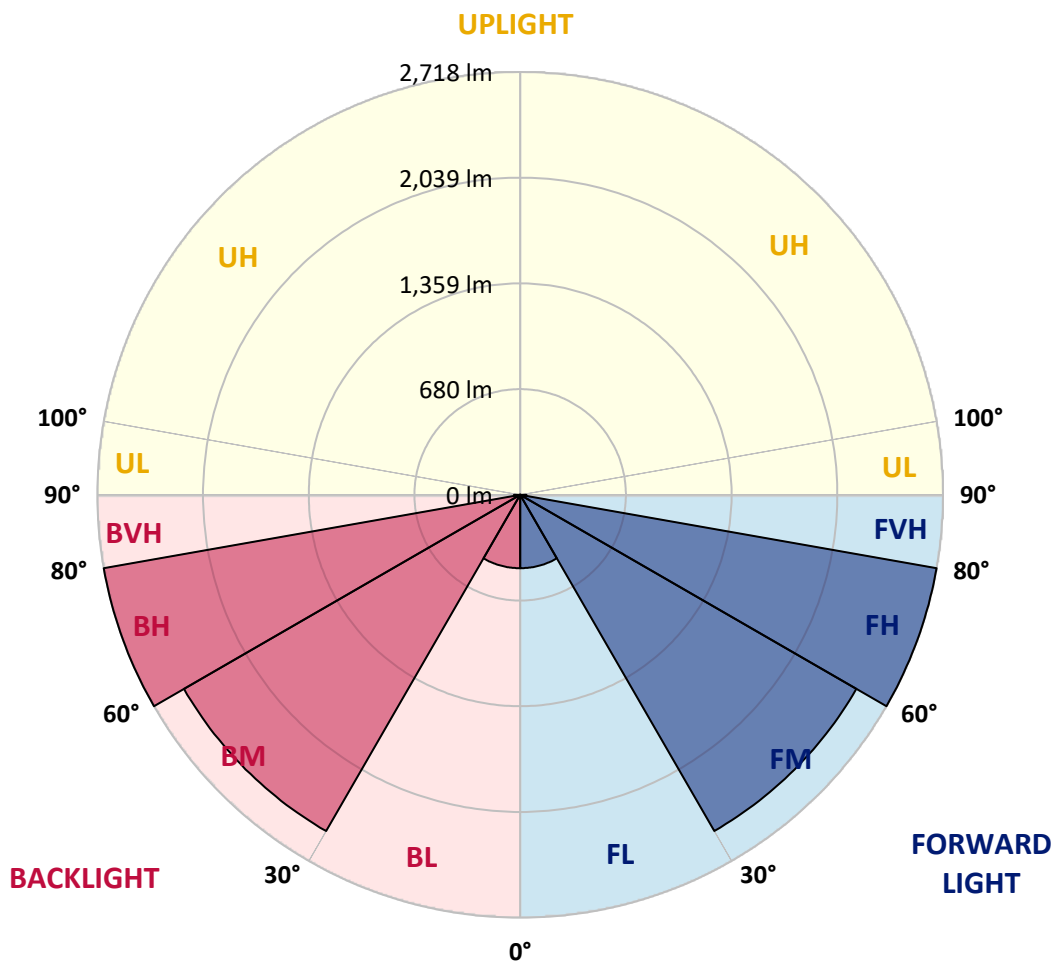
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 471.8 | 4.1 | | | |
| FM | (30°-60°) | 2495.8 | 21.8 | | | |
| FH | (60°-80°) | 2718.4 | 23.7 | | | G2/5000 |
| FVH | (80°-90°) | 39.9 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 471.8 | 4.1 | B1/500 | | |
| BM | (30°-60°) | 2495.8 | 21.8 | B2/2500 | | |
| BH | (60°-80°) | 2718.4 | 23.7 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 39.9 | 0.3 | | | G1/100 |
| 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° | 1141.2 | 1141.2 | 1141.2 | 1141.2 | 1141.2 | 1141.2 | 1141.2 | 1141.2 | 1141.2 | 1141.2 | 1141.2 |
| 2.5° | 1137.0 | 1138.1 | 1138.1 | 1138.1 | 1137.6 | 1137.6 | 1136.5 | 1137.6 | 1137.0 | 1135.4 | 1136.0 |
| 5° | 1127.5 | 1128.6 | 1128.6 | 1128.1 | 1129.7 | 1129.1 | 1127.5 | 1128.6 | 1128.1 | 1127.0 | 1127.5 |
| 7.5° | 1113.9 | 1115.4 | 1115.4 | 1114.9 | 1116.5 | 1116.0 | 1114.9 | 1115.4 | 1115.4 | 1113.9 | 1113.9 |
| 10° | 1098.6 | 1099.6 | 1099.6 | 1099.1 | 1101.7 | 1101.7 | 1101.2 | 1102.8 | 1103.3 | 1101.7 | 1100.7 |
| 12.5° | 1084.4 | 1085.9 | 1085.9 | 1088.0 | 1090.7 | 1091.7 | 1094.4 | 1096.5 | 1098.6 | 1098.1 | 1095.9 |
| 15° | 1075.9 | 1077.0 | 1079.1 | 1081.7 | 1085.9 | 1089.6 | 1093.8 | 1098.6 | 1102.8 | 1103.8 | 1100.7 |
| 17.5° | 1070.7 | 1072.2 | 1075.4 | 1079.1 | 1084.9 | 1091.2 | 1097.5 | 1103.8 | 1109.6 | 1111.7 | 1108.1 |
| 20° | 1069.1 | 1070.1 | 1073.3 | 1079.6 | 1087.5 | 1097.0 | 1106.0 | 1113.3 | 1121.2 | 1123.9 | 1121.2 |
| 22.5° | 1072.2 | 1074.4 | 1078.0 | 1085.4 | 1095.9 | 1108.1 | 1118.6 | 1128.6 | 1138.6 | 1143.3 | 1139.7 |
| 25° | 1086.5 | 1088.6 | 1093.3 | 1102.8 | 1114.4 | 1127.0 | 1139.1 | 1150.7 | 1159.7 | 1164.4 | 1161.8 |
| 27.5° | 1112.8 | 1115.4 | 1121.2 | 1130.7 | 1143.3 | 1157.0 | 1170.2 | 1179.7 | 1187.1 | 1188.6 | 1185.5 |
| 30° | 1152.3 | 1158.1 | 1164.9 | 1175.5 | 1190.2 | 1201.8 | 1215.0 | 1223.4 | 1232.3 | 1232.3 | 1229.7 |
| 32.5° | 1213.9 | 1219.7 | 1227.1 | 1237.1 | 1248.7 | 1261.3 | 1272.9 | 1280.3 | 1289.8 | 1290.3 | 1284.0 |
| 35° | 1306.1 | 1308.7 | 1315.0 | 1321.4 | 1331.9 | 1342.9 | 1353.0 | 1357.7 | 1365.6 | 1366.1 | 1360.3 |
| 37.5° | 1427.7 | 1428.3 | 1432.5 | 1434.6 | 1444.1 | 1456.2 | 1465.7 | 1468.8 | 1476.2 | 1475.1 | 1469.3 |
| 40° | 1569.4 | 1572.0 | 1573.6 | 1576.8 | 1586.8 | 1598.4 | 1608.4 | 1610.0 | 1617.9 | 1616.3 | 1608.9 |
| 42.5° | 1733.2 | 1734.2 | 1743.2 | 1747.9 | 1757.4 | 1763.2 | 1775.8 | 1777.4 | 1786.9 | 1782.7 | 1774.3 |
| 45° | 1917.0 | 1926.5 | 1934.9 | 1944.4 | 1954.4 | 1961.2 | 1971.2 | 1969.1 | 1975.4 | 1969.1 | 1964.4 |
| 47.5° | 2110.3 | 2117.1 | 2136.1 | 2150.8 | 2167.1 | 2172.9 | 2187.2 | 2180.8 | 2187.2 | 2178.2 | 2176.6 |
| 50° | 2323.0 | 2335.1 | 2351.5 | 2368.3 | 2385.7 | 2395.2 | 2413.6 | 2405.7 | 2414.1 | 2405.7 | 2401.0 |
| 52.5° | 2532.6 | 2535.8 | 2571.6 | 2596.4 | 2620.6 | 2631.6 | 2642.7 | 2639.0 | 2639.5 | 2639.0 | 2634.3 |
| 55° | 2731.7 | 2739.1 | 2774.9 | 2808.6 | 2850.7 | 2881.8 | 2900.8 | 2898.7 | 2893.9 | 2889.2 | 2881.3 |
| 57.5° | 2956.1 | 2963.4 | 3004.5 | 3046.1 | 3094.0 | 3138.3 | 3176.7 | 3216.2 | 3231.5 | 3235.7 | 3218.3 |
| 60° | 3259.4 | 3258.9 | 3313.7 | 3364.2 | 3432.7 | 3498.5 | 3582.8 | 3668.6 | 3767.1 | 3812.9 | 3752.3 |
| 62.5° | 3568.0 | 3580.7 | 3659.7 | 3749.2 | 3890.3 | 4027.8 | 4183.1 | 4335.9 | 4491.8 | 4618.7 | 4483.9 |
| 65° | 3531.2 | 3579.6 | 3697.0 | 3899.8 | 4160.5 | 4470.2 | 4805.1 | 5159.5 | 5479.7 | 5699.9 | 5452.9 |
| 67.5° | 3060.3 | 3129.3 | 3248.9 | 3495.3 | 3821.3 | 4267.9 | 4830.4 | 5531.4 | 6346.1 | 6740.0 | 6251.8 |
| 70° | 2218.2 | 2296.2 | 2421.5 | 2662.2 | 2985.0 | 3409.5 | 4020.4 | 4862.0 | 5940.6 | 6337.6 | 5799.9 |
| 72.5° | 1103.8 | 1146.0 | 1223.4 | 1376.7 | 1621.0 | 1965.4 | 2519.5 | 3328.4 | 4282.7 | 4647.1 | 4155.8 |
| 75° | 375.0 | 394.5 | 407.6 | 457.7 | 535.1 | 670.4 | 945.9 | 1455.1 | 2219.8 | 2661.1 | 2188.2 |
| 77.5° | 216.5 | 217.0 | 225.9 | 234.9 | 248.0 | 262.8 | 299.7 | 393.4 | 680.4 | 966.4 | 704.1 |
| 80° | 140.1 | 139.6 | 146.9 | 153.8 | 162.7 | 170.1 | 172.2 | 182.2 | 210.1 | 249.1 | 222.8 |
| 82.5° | 72.7 | 81.6 | 98.0 | 106.9 | 123.8 | 126.9 | 122.7 | 119.0 | 125.9 | 130.6 | 133.8 |
| 85° | 40.0 | 34.8 | 52.1 | 67.4 | 74.8 | 75.8 | 75.8 | 71.6 | 74.3 | 72.7 | 79.0 |
| 87.5° | 18.4 | 16.9 | 20.5 | 33.2 | 35.3 | 30.0 | 31.6 | 27.9 | 20.0 | 19.5 | 22.1 |
| 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° | 1141.2 | 1141.2 | 1141.2 | 1141.2 | 1141.2 | 1141.2 | 1141.2 | 1141.2 |
| 2.5° | 1136.0 | 1136.5 | 1136.5 | 1138.1 | 1138.6 | 1139.7 | 1140.7 | 1141.2 |
| 5° | 1127.0 | 1128.6 | 1127.5 | 1129.1 | 1129.1 | 1130.2 | 1130.2 | 1130.7 |
| 7.5° | 1113.9 | 1115.4 | 1115.4 | 1115.4 | 1114.9 | 1116.5 | 1116.5 | 1116.5 |
| 10° | 1100.2 | 1101.2 | 1100.7 | 1099.6 | 1098.6 | 1100.2 | 1099.6 | 1099.1 |
| 12.5° | 1095.9 | 1093.3 | 1091.2 | 1090.2 | 1088.0 | 1088.6 | 1087.0 | 1087.0 |
| 15° | 1098.6 | 1093.8 | 1090.2 | 1088.6 | 1086.5 | 1085.4 | 1084.4 | 1084.9 |
| 17.5° | 1105.4 | 1099.6 | 1094.9 | 1092.3 | 1089.6 | 1088.0 | 1085.9 | 1086.5 |
| 20° | 1117.5 | 1110.7 | 1103.8 | 1098.6 | 1093.8 | 1091.2 | 1089.6 | 1089.1 |
| 22.5° | 1135.4 | 1125.4 | 1115.4 | 1107.5 | 1101.2 | 1097.5 | 1095.9 | 1094.9 |
| 25° | 1156.0 | 1144.9 | 1133.3 | 1124.4 | 1118.1 | 1113.3 | 1110.2 | 1110.2 |
| 27.5° | 1181.8 | 1172.8 | 1162.3 | 1151.8 | 1146.0 | 1141.2 | 1139.1 | 1138.1 |
| 30° | 1225.0 | 1216.6 | 1208.1 | 1198.1 | 1190.7 | 1186.0 | 1182.3 | 1179.2 |
| 32.5° | 1280.3 | 1273.4 | 1266.6 | 1259.2 | 1252.4 | 1246.0 | 1240.2 | 1237.6 |
| 35° | 1358.2 | 1353.0 | 1348.2 | 1339.8 | 1337.2 | 1333.5 | 1330.3 | 1327.7 |
| 37.5° | 1465.7 | 1463.5 | 1463.5 | 1454.6 | 1452.5 | 1450.9 | 1447.7 | 1448.3 |
| 40° | 1606.8 | 1608.9 | 1606.3 | 1603.1 | 1601.5 | 1597.3 | 1597.3 | 1601.0 |
| 42.5° | 1773.7 | 1775.3 | 1781.1 | 1775.8 | 1781.6 | 1776.4 | 1773.2 | 1775.8 |
| 45° | 1967.5 | 1973.3 | 1984.9 | 1979.7 | 1983.3 | 1974.4 | 1963.3 | 1963.9 |
| 47.5° | 2185.1 | 2190.3 | 2195.1 | 2191.4 | 2191.9 | 2177.2 | 2162.4 | 2158.7 |
| 50° | 2411.0 | 2413.1 | 2415.7 | 2410.5 | 2411.5 | 2395.2 | 2378.3 | 2378.9 |
| 52.5° | 2634.3 | 2644.3 | 2654.8 | 2640.6 | 2637.4 | 2619.0 | 2595.3 | 2585.8 |
| 55° | 2889.7 | 2903.9 | 2891.8 | 2867.1 | 2842.3 | 2817.6 | 2786.5 | 2781.2 |
| 57.5° | 3204.6 | 3180.4 | 3142.5 | 3095.6 | 3061.4 | 3026.6 | 2995.0 | 2981.9 |
| 60° | 3642.8 | 3551.7 | 3483.2 | 3413.7 | 3370.0 | 3327.3 | 3285.7 | 3279.4 |
| 62.5° | 4262.1 | 4104.7 | 3968.3 | 3824.5 | 3707.1 | 3615.4 | 3542.2 | 3521.7 |
| 65° | 5038.4 | 4666.1 | 4343.2 | 4042.0 | 3780.3 | 3582.8 | 3458.5 | 3403.7 |
| 67.5° | 5372.3 | 4637.1 | 4083.6 | 3656.0 | 3313.7 | 3074.6 | 2940.3 | 2873.4 |
| 70° | 4720.8 | 3845.6 | 3243.6 | 2815.4 | 2503.7 | 2248.8 | 2127.1 | 2055.5 |
| 72.5° | 3247.8 | 2446.3 | 1934.4 | 1578.9 | 1329.8 | 1116.5 | 1032.2 | 1025.9 |
| 75° | 1458.3 | 965.9 | 665.7 | 513.0 | 431.8 | 375.5 | 358.1 | 345.0 |
| 77.5° | 408.2 | 301.8 | 269.1 | 251.7 | 234.9 | 215.4 | 208.0 | 209.6 |
| 80° | 198.5 | 187.5 | 180.1 | 169.1 | 153.8 | 137.5 | 130.1 | 133.2 |
| 82.5° | 131.7 | 130.1 | 134.8 | 126.9 | 104.8 | 89.0 | 74.8 | 68.5 |
| 85° | 80.1 | 81.1 | 82.7 | 83.2 | 70.6 | 49.5 | 33.7 | 37.9 |
| 87.5° | 31.6 | 36.3 | 39.5 | 41.1 | 38.4 | 23.7 | 19.0 | 19.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)