

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: P323006

Luminaire Tested: **GLEON-SA2C-827-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P323006
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA2C-827-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7711 lumens
Efficiency: N/A
Efficacy: 68.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

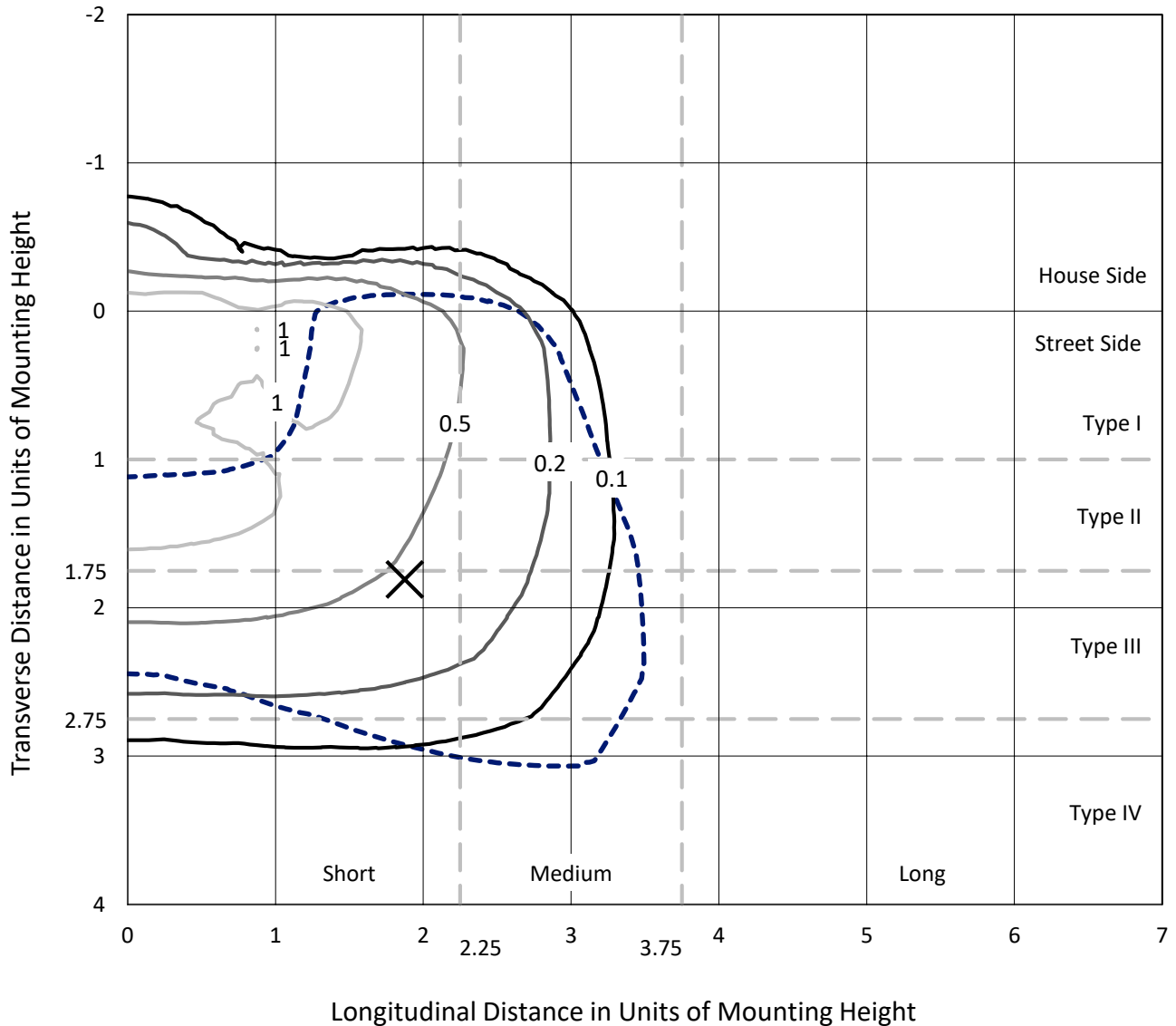
Input Watts (W): 113
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

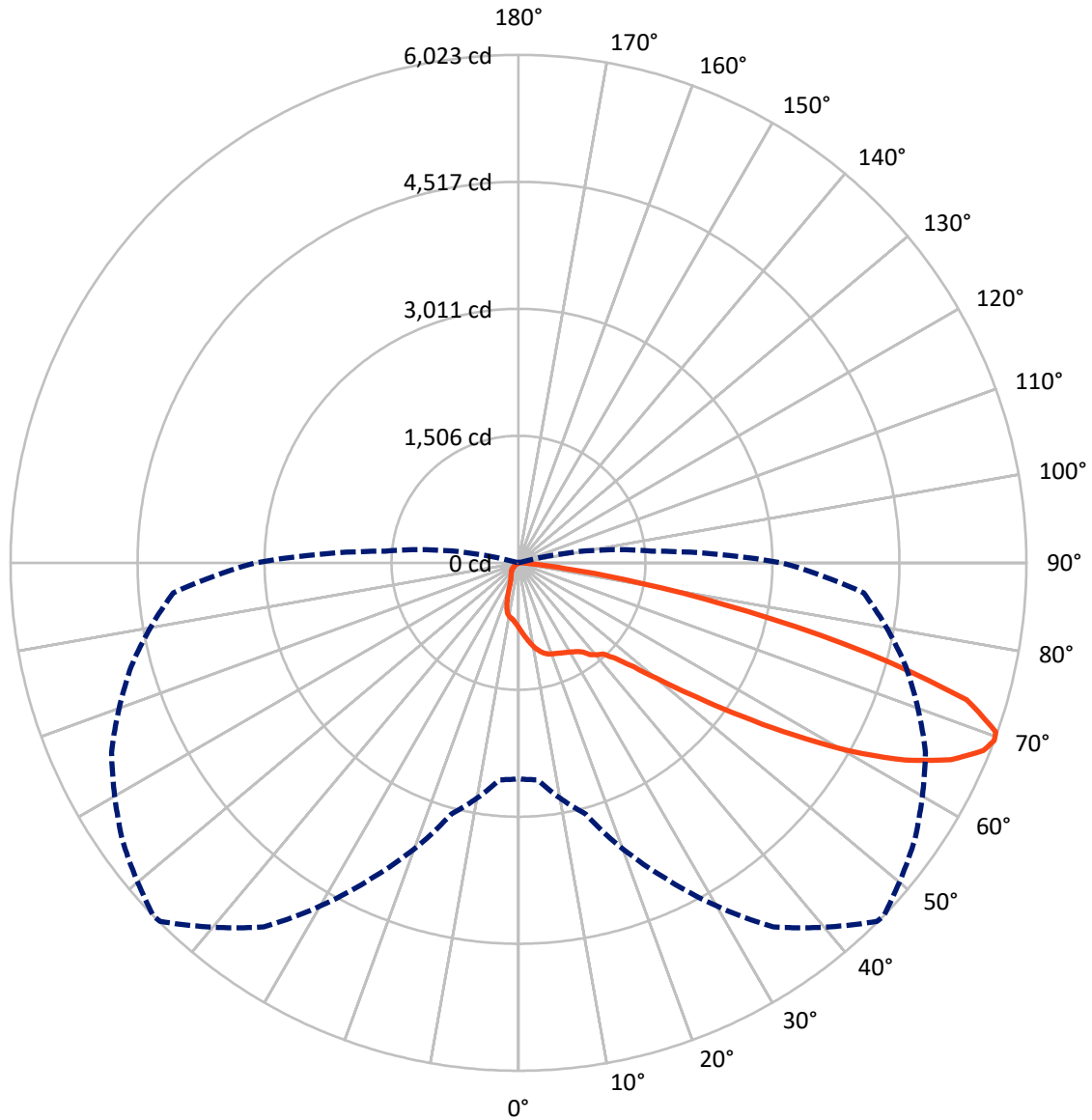
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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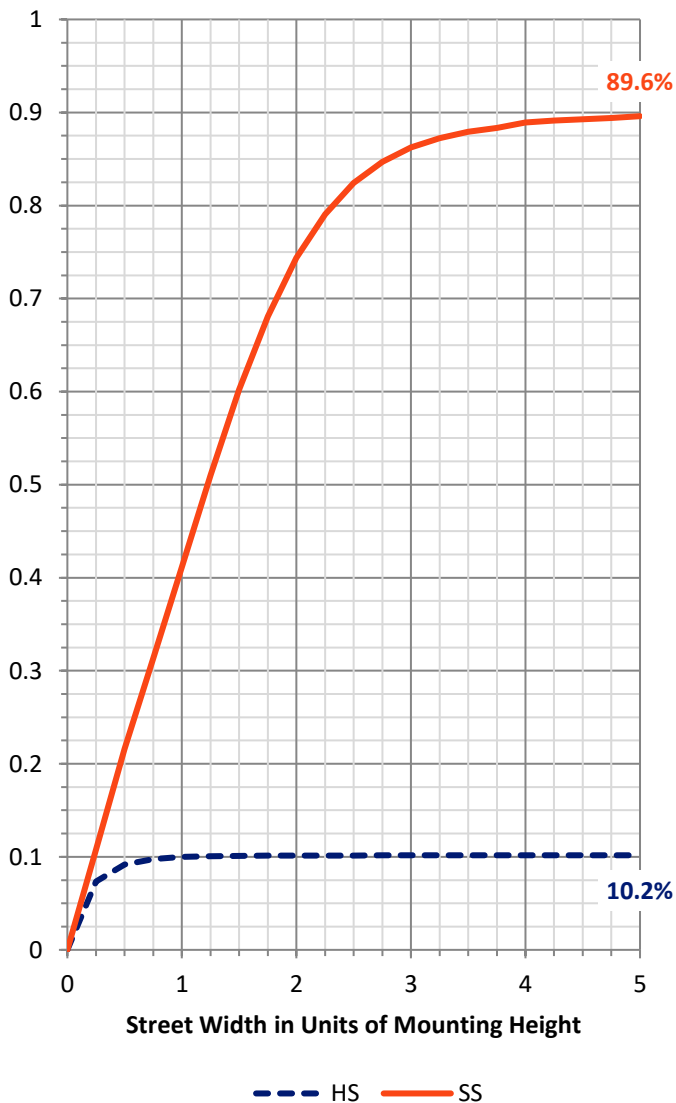
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 791.4 | 0.0 | 791.4 |
| | % Fixture | 10.3 | 0.0 | 10.3 |
| Street Side | Lumens | 6919.7 | 0.0 | 6919.7 |
| | % Fixture | 89.7 | 0.0 | 89.7 |
| Total | Lumens | 7711.0 | 0.0 | 7711.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 76.9 | 1.0 |
| 10°-20° | 233.3 | 3.0 |
| 20°-30° | 366.9 | 4.8 |
| 30°-40° | 526.1 | 6.8 |
| 40°-50° | 909.4 | 11.8 |
| 50°-60° | 1796.6 | 23.3 |
| 60°-70° | 2510.8 | 32.6 |
| 70°-80° | 1213.0 | 15.7 |
| 80°-90° | 78.0 | 1.0 |
| 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° | 7711.0 | 100.0 |
| 0°-180° | 7711.0 | 100.0 |

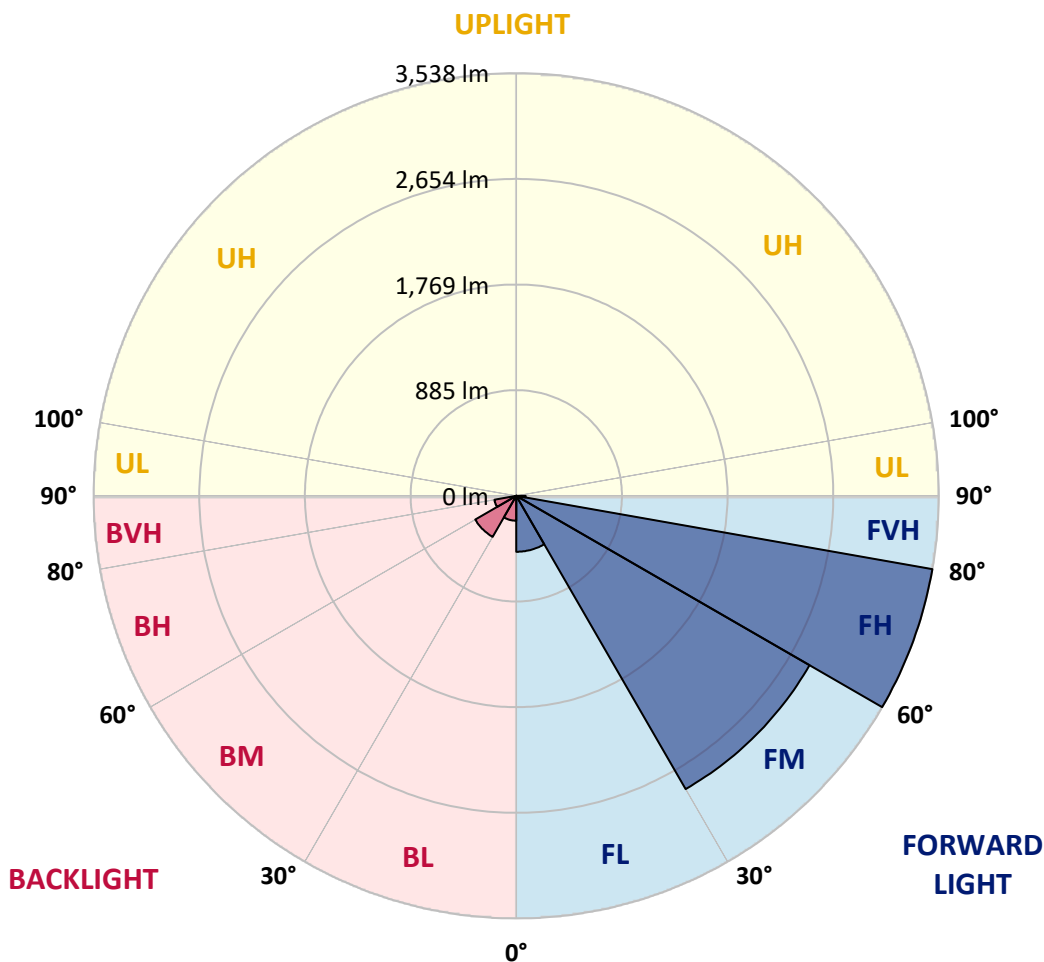


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 468.5 | 6.1 | | | |
| FM (30°-60°) | 2835.5 | 36.8 | | | |
| FH (60°-80°) | 3538.3 | 45.9 | | | G2/5000 |
| FVH (80°-90°) | 77.3 | 1.0 | | | G1/100 |
| BL (0°-30°) | 208.6 | 2.7 | B1/500 | | |
| BM (30°-60°) | 396.6 | 5.1 | B1/1000 | | |
| BH (60°-80°) | 185.6 | 2.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 0.7 | 0.0 | | | G0/10 |
| 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° | 45° | 46° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 772.6 | 772.6 | 772.6 | 772.6 | 772.6 | 772.6 | 772.6 | 772.6 | 772.6 | 772.6 | 772.6 |
| 2.5° | 858.3 | 857.2 | 852.2 | 850.0 | 837.7 | 830.5 | 827.6 | 818.5 | 805.5 | 792.5 | 778.0 |
| 5° | 955.9 | 955.6 | 946.2 | 937.1 | 914.0 | 892.3 | 888.3 | 867.3 | 838.1 | 810.6 | 783.1 |
| 7.5° | 1055.7 | 1051.0 | 1041.6 | 1024.2 | 990.6 | 955.9 | 952.7 | 923.0 | 881.4 | 841.7 | 802.3 |
| 10° | 1140.3 | 1137.4 | 1125.1 | 1098.7 | 1059.3 | 1019.9 | 1015.9 | 979.4 | 932.4 | 883.6 | 833.4 |
| 12.5° | 1206.1 | 1203.9 | 1187.7 | 1154.8 | 1112.8 | 1072.0 | 1066.5 | 1034.0 | 983.8 | 929.2 | 869.9 |
| 15° | 1246.2 | 1245.1 | 1225.3 | 1190.2 | 1149.0 | 1113.5 | 1108.8 | 1080.3 | 1033.6 | 976.5 | 909.6 |
| 17.5° | 1255.6 | 1256.0 | 1235.4 | 1200.0 | 1166.0 | 1140.7 | 1137.0 | 1115.4 | 1076.3 | 1019.5 | 949.4 |
| 20° | 1234.7 | 1239.0 | 1220.6 | 1189.8 | 1168.9 | 1155.5 | 1152.6 | 1139.6 | 1106.7 | 1053.2 | 981.2 |
| 22.5° | 1205.0 | 1207.2 | 1194.5 | 1173.9 | 1165.2 | 1167.8 | 1166.3 | 1159.1 | 1131.3 | 1082.1 | 1012.7 |
| 25° | 1186.9 | 1186.9 | 1179.3 | 1162.0 | 1167.8 | 1183.3 | 1183.7 | 1182.2 | 1160.2 | 1117.5 | 1051.0 |
| 27.5° | 1186.2 | 1184.0 | 1175.4 | 1162.4 | 1178.3 | 1202.1 | 1203.6 | 1213.3 | 1199.6 | 1160.5 | 1098.7 |
| 30° | 1215.1 | 1212.6 | 1194.2 | 1177.2 | 1197.4 | 1223.1 | 1226.7 | 1248.0 | 1241.2 | 1207.2 | 1151.9 |
| 32.5° | 1282.7 | 1273.7 | 1232.9 | 1205.0 | 1220.2 | 1250.9 | 1255.6 | 1289.6 | 1300.5 | 1264.7 | 1203.2 |
| 35° | 1375.3 | 1346.7 | 1287.8 | 1257.8 | 1259.2 | 1291.4 | 1295.8 | 1345.7 | 1377.8 | 1317.5 | 1243.0 |
| 37.5° | 1502.9 | 1488.8 | 1393.0 | 1312.8 | 1319.3 | 1368.1 | 1380.7 | 1435.0 | 1425.9 | 1346.4 | 1288.2 |
| 40° | 1782.8 | 1760.7 | 1658.8 | 1466.8 | 1376.7 | 1430.3 | 1434.2 | 1463.2 | 1463.9 | 1411.8 | 1382.2 |
| 42.5° | 2163.8 | 2154.8 | 2047.4 | 1746.2 | 1489.9 | 1471.8 | 1479.1 | 1527.9 | 1582.5 | 1549.9 | 1548.5 |
| 45° | 2585.7 | 2581.0 | 2467.2 | 2117.2 | 1718.8 | 1608.1 | 1617.2 | 1682.6 | 1787.1 | 1794.3 | 1840.2 |
| 47.5° | 2925.2 | 2923.1 | 2857.6 | 2531.1 | 2069.1 | 1839.2 | 1842.1 | 1911.5 | 2095.1 | 2185.9 | 2259.3 |
| 50° | 3234.7 | 3245.2 | 3193.5 | 2979.1 | 2546.3 | 2201.1 | 2194.2 | 2240.5 | 2535.5 | 2684.1 | 2775.2 |
| 52.5° | 3664.9 | 3679.8 | 3534.8 | 3397.0 | 3047.1 | 2650.1 | 2644.7 | 2693.1 | 3064.8 | 3176.1 | 3192.4 |
| 55° | 4044.9 | 4019.6 | 3905.0 | 3865.2 | 3657.7 | 3204.7 | 3203.3 | 3245.9 | 3576.7 | 3624.1 | 3654.1 |
| 57.5° | 4212.7 | 4202.9 | 4258.2 | 4349.3 | 4297.3 | 3860.2 | 3856.9 | 3824.4 | 4034.8 | 4039.9 | 4132.1 |
| 60° | 4318.6 | 4330.5 | 4500.1 | 4781.0 | 4910.8 | 4565.5 | 4544.6 | 4346.1 | 4472.3 | 4461.1 | 4559.8 |
| 62.5° | 4239.1 | 4262.6 | 4567.7 | 5035.9 | 5370.0 | 5181.2 | 5151.6 | 4824.0 | 4846.1 | 4807.4 | 4899.2 |
| 65° | 3816.8 | 3853.3 | 4353.3 | 4987.8 | 5597.7 | 5662.5 | 5632.4 | 5246.0 | 5142.9 | 5079.3 | 5028.3 |
| 67.5° | 3099.1 | 3120.8 | 3642.9 | 4569.5 | 5495.1 | 5949.5 | 5943.4 | 5615.8 | 5367.1 | 5033.4 | 4637.8 |
| 69° | 2561.2 | 2582.5 | 3085.0 | 4129.2 | 5269.1 | 6011.0 | 6022.9 | 5734.4 | 5324.4 | 4754.3 | 4109.3 |
| 70° | 2169.2 | 2192.0 | 2660.2 | 3751.7 | 5007.0 | 5982.4 | 6003.8 | 5723.2 | 5202.2 | 4431.0 | 3645.4 |
| 72.5° | 1137.8 | 1157.3 | 1637.8 | 2584.7 | 4081.8 | 5493.3 | 5558.0 | 5239.5 | 4409.7 | 3218.1 | 2155.5 |
| 75° | 357.6 | 368.8 | 639.6 | 1351.1 | 2794.7 | 4271.2 | 4286.1 | 4110.0 | 3131.3 | 1770.1 | 897.7 |
| 77.5° | 136.3 | 133.0 | 212.9 | 497.8 | 1412.9 | 2689.5 | 2780.3 | 2568.4 | 1643.2 | 625.8 | 207.2 |
| 80° | 73.4 | 73.8 | 110.6 | 206.1 | 604.5 | 1382.2 | 1458.8 | 1244.8 | 583.9 | 195.2 | 47.7 |
| 82.5° | 31.8 | 33.3 | 62.2 | 109.2 | 277.7 | 509.8 | 548.1 | 456.3 | 223.1 | 131.2 | 17.7 |
| 85° | 6.9 | 7.6 | 30.0 | 59.3 | 113.2 | 143.2 | 150.0 | 147.9 | 142.1 | 102.0 | 6.9 |
| 87.5° | 0.0 | 0.0 | 13.4 | 21.3 | 28.6 | 32.5 | 28.6 | 37.2 | 78.5 | 68.7 | 3.6 |
| 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° | 772.6 | 772.6 | 772.6 | 772.6 | 772.6 | 772.6 | 772.6 | 772.6 | 772.6 | 772.6 | 772.6 |
| 2.5° | 773.3 | 766.8 | 755.6 | 743.3 | 734.7 | 725.6 | 718.4 | 715.1 | 711.5 | 709.0 | 712.2 |
| 5° | 771.9 | 759.2 | 737.5 | 716.6 | 701.4 | 689.1 | 679.0 | 675.0 | 671.0 | 668.1 | 667.8 |
| 7.5° | 784.5 | 766.8 | 733.6 | 702.8 | 679.3 | 662.7 | 649.0 | 643.2 | 638.5 | 636.3 | 634.5 |
| 10° | 808.8 | 786.0 | 741.5 | 701.4 | 671.0 | 642.8 | 613.2 | 590.4 | 575.6 | 568.7 | 566.2 |
| 12.5° | 840.2 | 811.7 | 756.7 | 709.0 | 664.9 | 610.6 | 547.7 | 493.5 | 458.4 | 446.9 | 440.0 |
| 15° | 877.1 | 841.7 | 776.6 | 718.7 | 642.5 | 543.4 | 436.7 | 365.9 | 333.3 | 326.8 | 319.6 |
| 17.5° | 912.5 | 873.5 | 800.5 | 720.6 | 593.3 | 434.2 | 320.0 | 271.9 | 259.2 | 263.6 | 264.6 |
| 20° | 943.6 | 904.9 | 824.0 | 704.6 | 504.0 | 325.7 | 247.7 | 235.7 | 240.4 | 248.7 | 250.2 |
| 22.5° | 975.1 | 935.3 | 845.6 | 662.7 | 389.7 | 247.3 | 223.1 | 226.0 | 230.7 | 239.0 | 240.4 |
| 25° | 1013.4 | 972.2 | 865.9 | 585.7 | 292.5 | 210.4 | 211.9 | 216.2 | 220.9 | 228.5 | 229.2 |
| 27.5° | 1057.5 | 1018.8 | 879.3 | 485.5 | 216.9 | 193.4 | 198.1 | 204.6 | 209.3 | 216.6 | 218.0 |
| 30° | 1116.1 | 1080.3 | 883.6 | 381.8 | 181.9 | 178.2 | 180.4 | 188.4 | 195.2 | 201.7 | 202.8 |
| 32.5° | 1171.0 | 1141.0 | 869.1 | 288.1 | 168.5 | 164.1 | 164.1 | 168.8 | 176.8 | 182.9 | 184.4 |
| 35° | 1221.6 | 1202.1 | 822.9 | 210.8 | 158.4 | 151.1 | 147.5 | 147.5 | 152.6 | 157.6 | 159.1 |
| 37.5° | 1288.5 | 1287.8 | 748.0 | 168.1 | 148.6 | 140.3 | 132.7 | 126.9 | 125.1 | 126.2 | 126.9 |
| 40° | 1403.1 | 1404.2 | 650.4 | 150.8 | 140.3 | 129.1 | 117.5 | 107.0 | 97.3 | 94.0 | 93.6 |
| 42.5° | 1582.1 | 1565.8 | 548.1 | 142.4 | 133.0 | 117.5 | 100.1 | 86.0 | 70.9 | 66.2 | 65.8 |
| 45° | 1866.3 | 1769.7 | 439.6 | 134.9 | 125.5 | 104.5 | 82.8 | 63.6 | 51.3 | 47.7 | 47.7 |
| 47.5° | 2280.2 | 2037.6 | 340.6 | 126.5 | 115.3 | 89.7 | 62.5 | 45.9 | 37.6 | 35.8 | 36.2 |
| 50° | 2708.3 | 2300.1 | 261.0 | 116.1 | 103.0 | 74.1 | 46.3 | 33.3 | 28.6 | 28.6 | 28.9 |
| 52.5° | 3087.9 | 2492.5 | 203.5 | 104.8 | 87.9 | 58.2 | 35.1 | 26.0 | 23.9 | 23.5 | 23.9 |
| 55° | 3443.3 | 2616.5 | 155.8 | 91.8 | 69.8 | 43.4 | 26.8 | 21.3 | 19.9 | 19.2 | 18.8 |
| 57.5° | 3786.1 | 2677.9 | 116.8 | 74.1 | 50.6 | 31.5 | 21.3 | 18.1 | 16.6 | 15.5 | 15.2 |
| 60° | 4014.2 | 2628.0 | 80.3 | 54.6 | 35.1 | 22.8 | 17.7 | 15.5 | 13.7 | 12.7 | 12.3 |
| 62.5° | 4142.9 | 2491.7 | 51.7 | 39.4 | 24.9 | 17.0 | 14.1 | 13.0 | 10.5 | 9.4 | 9.4 |
| 65° | 4090.8 | 2266.9 | 36.2 | 28.2 | 18.1 | 12.7 | 10.5 | 10.5 | 7.6 | 6.1 | 5.8 |
| 67.5° | 3625.2 | 1915.1 | 27.5 | 21.0 | 13.0 | 9.4 | 8.0 | 9.0 | 4.7 | 2.9 | 2.9 |
| 69° | 3119.0 | 1587.2 | 23.5 | 17.4 | 10.8 | 7.6 | 6.9 | 8.3 | 3.3 | 2.2 | 1.8 |
| 70° | 2710.8 | 1369.2 | 21.3 | 15.2 | 9.0 | 6.5 | 6.1 | 8.0 | 3.3 | 1.8 | 1.4 |
| 72.5° | 1621.9 | 763.6 | 16.3 | 10.8 | 5.8 | 5.1 | 5.1 | 9.0 | 3.3 | 1.8 | 1.4 |
| 75° | 655.5 | 269.0 | 11.9 | 7.6 | 4.3 | 4.3 | 6.1 | 11.6 | 2.9 | 1.4 | 1.1 |
| 77.5° | 148.6 | 58.9 | 6.9 | 4.7 | 2.9 | 4.3 | 7.2 | 9.0 | 1.8 | 0.7 | 0.0 |
| 80° | 36.2 | 14.5 | 4.3 | 2.9 | 1.8 | 3.3 | 5.4 | 5.1 | 0.4 | 0.0 | 0.0 |
| 82.5° | 11.9 | 5.1 | 1.8 | 1.4 | 0.4 | 1.1 | 2.5 | 1.4 | 0.0 | 0.0 | 0.0 |
| 85° | 5.1 | 2.9 | 0.7 | 0.4 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 3.3 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)