

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: STREETWORKS

Report Number: P399571

Luminaire Tested: **ARCH-L-PA3-160-740-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399571
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-160-740-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25098 lumens
Efficiency: N/A
Efficacy: 154.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

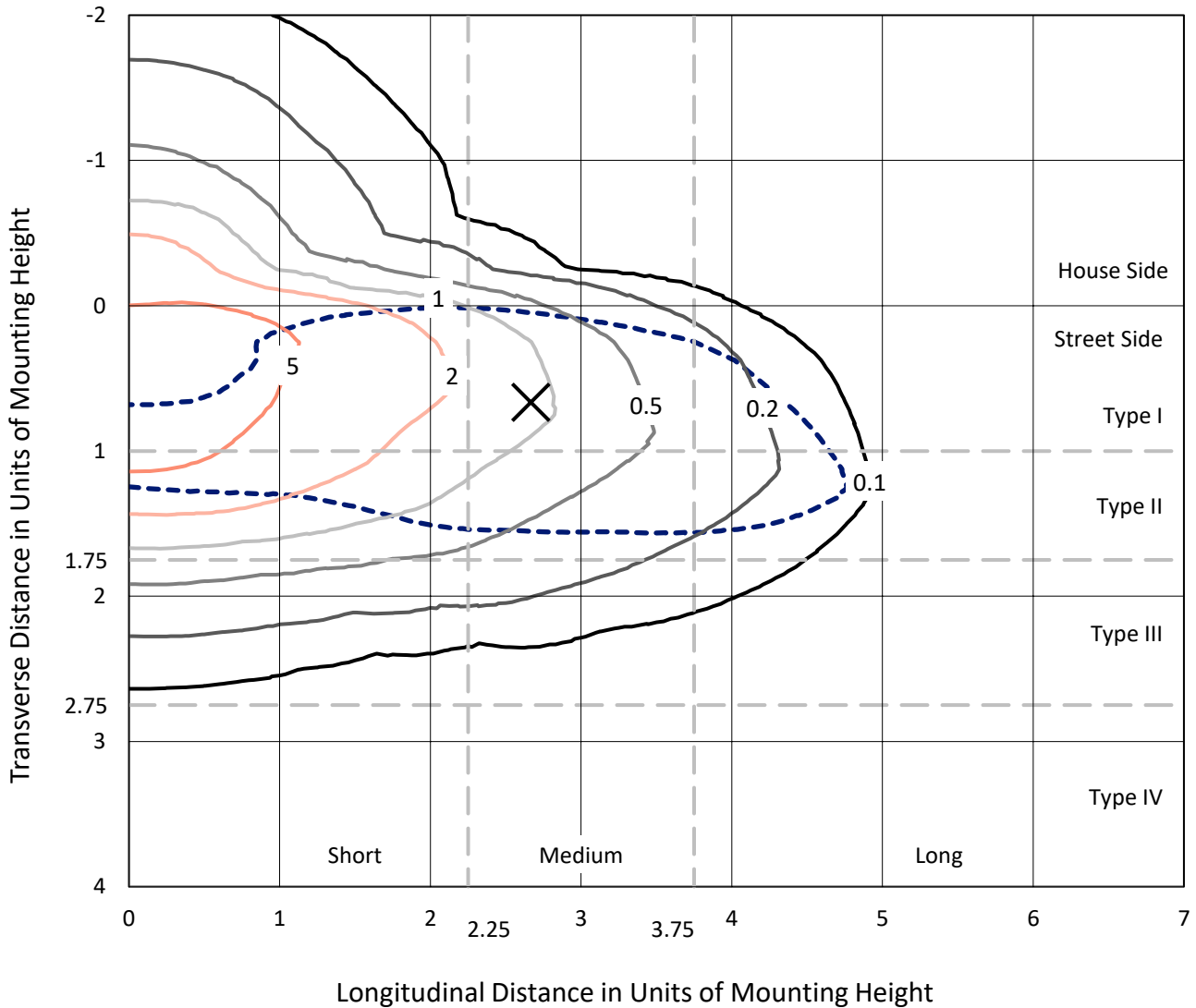
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

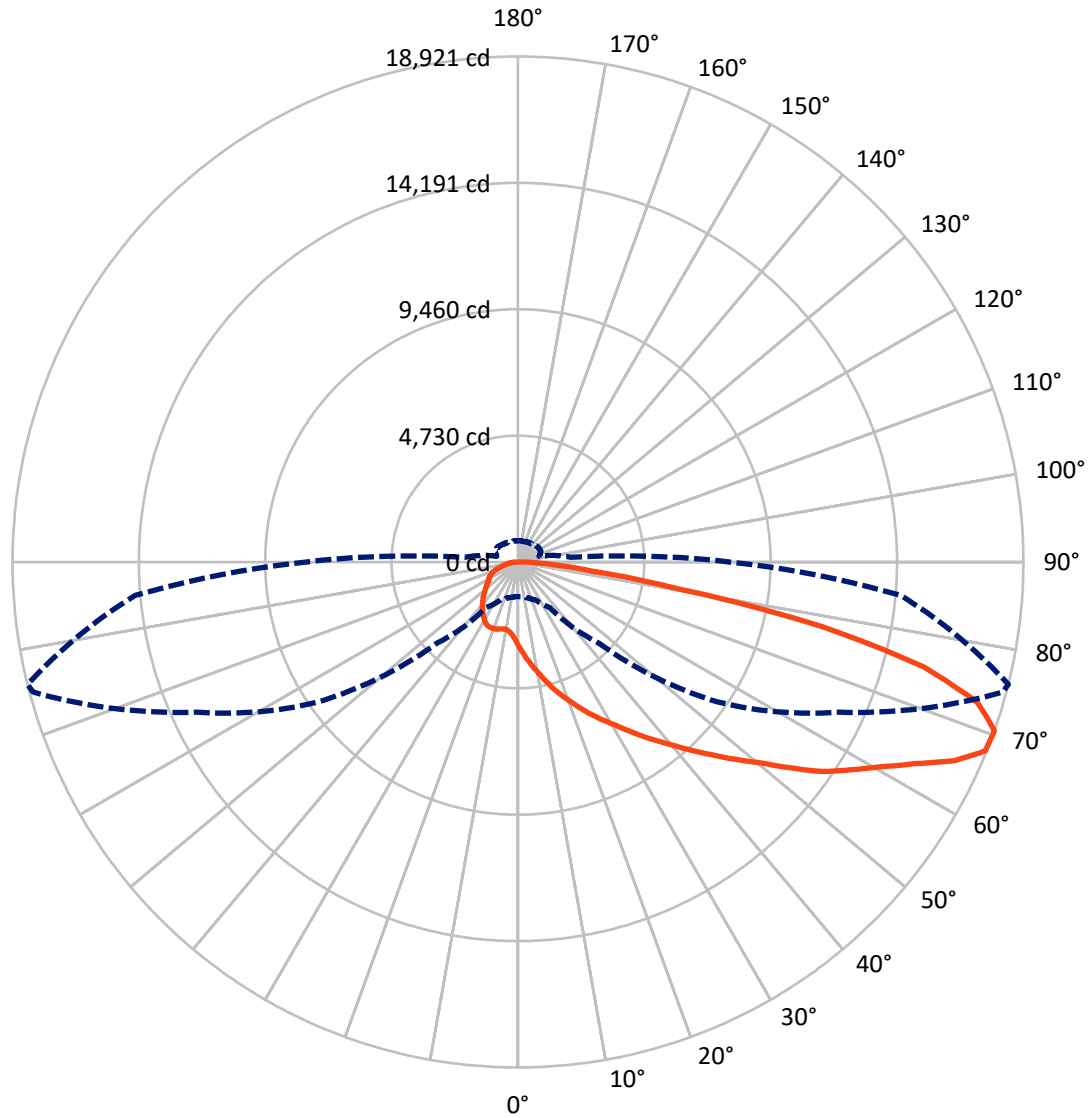
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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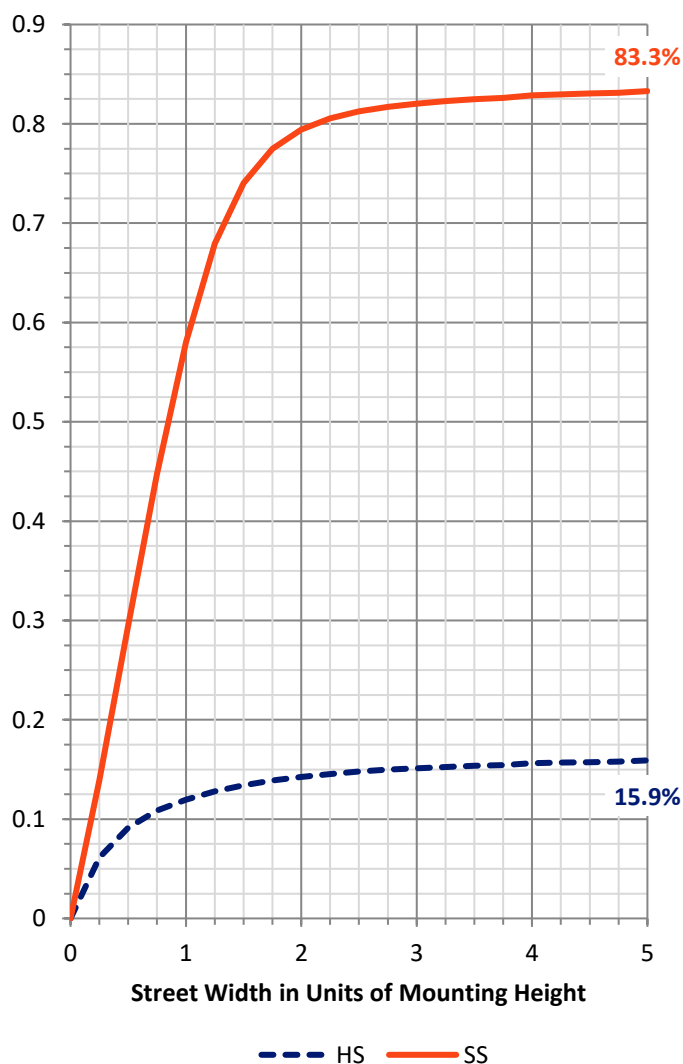
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4097.5 | 0.0 | 4097.5 |
| | % Fixture | 16.3 | 0.0 | 16.3 |
| Street Side | Lumens | 21000.5 | 0.0 | 21000.5 |
| | % Fixture | 83.7 | 0.0 | 83.7 |
| Total | Lumens | 25098.0 | 0.0 | 25098.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 326.1 | 1.3 |
| 10°-20° | 1108.4 | 4.4 |
| 20°-30° | 1983.0 | 7.9 |
| 30°-40° | 3207.8 | 12.8 |
| 40°-50° | 4640.6 | 18.5 |
| 50°-60° | 5311.4 | 21.2 |
| 60°-70° | 4885.9 | 19.5 |
| 70°-80° | 3021.4 | 12.0 |
| 80°-90° | 613.5 | 2.4 |
| 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° | 25098.0 | 100.0 |
| 0°-180° | 25098.0 | 100.0 |

Coefficient of Utilization



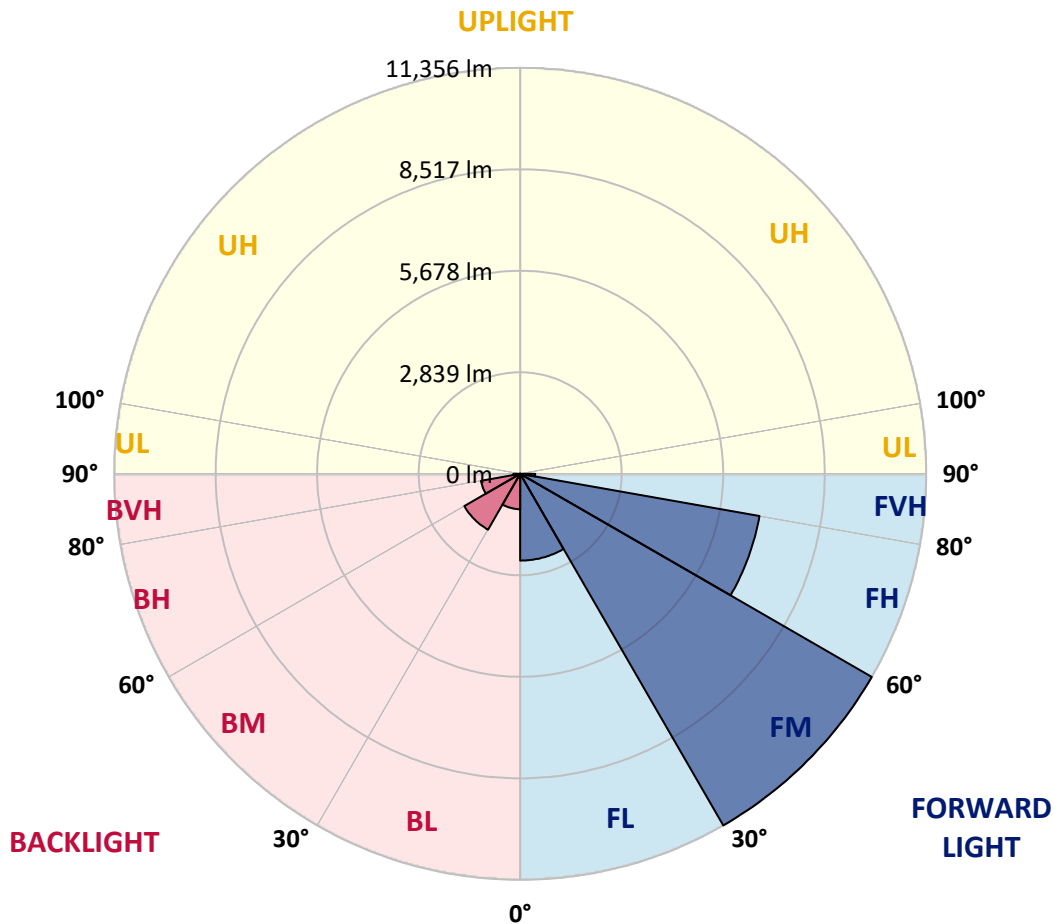
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2427.8 | 9.7 | | | |
| FM (30°-60°) | 11355.7 | 45.2 | | | |
| FH (60°-80°) | 6795.9 | 27.1 | | | G3/7500 |
| FVH (80°-90°) | 421.2 | 1.7 | | | G3/500 |
| BL (0°-30°) | 989.7 | 3.9 | B2/1000 | | |
| BM (30°-60°) | 1804.1 | 7.2 | B2/2500 | | |
| BH (60°-80°) | 1111.4 | 4.4 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 192.3 | 0.8 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3138.6 | 3138.6 | 3138.6 | 3138.6 | 3138.6 | 3138.6 | 3138.6 | 3138.6 | 3138.6 | 3138.6 | 3138.6 |
| 2.5° | 4000.0 | 3970.3 | 3967.0 | 3920.8 | 3877.9 | 3762.4 | 3679.9 | 3534.7 | 3389.4 | 3386.1 | 3240.9 |
| 5° | 4623.8 | 4594.1 | 4577.6 | 4521.4 | 4448.8 | 4297.0 | 4148.5 | 3924.1 | 3676.6 | 3660.1 | 3386.1 |
| 7.5° | 5046.2 | 5019.8 | 4986.8 | 4963.7 | 4894.4 | 4759.1 | 4577.6 | 4310.2 | 3970.3 | 3937.3 | 3554.5 |
| 10° | 5330.0 | 5313.5 | 5306.9 | 5290.4 | 5247.5 | 5138.6 | 4963.7 | 4679.9 | 4264.0 | 4227.7 | 3732.7 |
| 12.5° | 5452.1 | 5445.5 | 5475.2 | 5521.4 | 5538.0 | 5495.0 | 5326.7 | 5059.4 | 4587.5 | 4547.9 | 3947.2 |
| 15° | 5310.2 | 5316.8 | 5392.7 | 5551.2 | 5719.5 | 5811.9 | 5712.9 | 5452.1 | 4953.8 | 4897.7 | 4198.0 |
| 17.5° | 5244.2 | 5254.1 | 5306.9 | 5458.7 | 5696.4 | 5983.5 | 6029.7 | 5825.1 | 5306.9 | 5227.7 | 4462.0 |
| 20° | 5359.7 | 5372.9 | 5412.5 | 5531.4 | 5696.4 | 6003.3 | 6244.2 | 6181.5 | 5653.5 | 5571.0 | 4716.2 |
| 22.5° | 5653.5 | 5670.0 | 5666.7 | 5742.6 | 5854.8 | 6066.0 | 6363.0 | 6518.1 | 6016.5 | 5924.1 | 4980.2 |
| 25° | 6280.5 | 6267.3 | 6155.1 | 6118.8 | 6148.5 | 6283.8 | 6521.4 | 6841.6 | 6396.0 | 6303.6 | 5257.4 |
| 27.5° | 7132.0 | 7115.5 | 6910.9 | 6726.1 | 6561.1 | 6620.5 | 6745.9 | 7102.3 | 6782.2 | 6676.6 | 5521.4 |
| 30° | 8042.9 | 8023.1 | 7785.5 | 7485.1 | 7118.8 | 7033.0 | 7016.5 | 7330.0 | 7171.6 | 7059.4 | 5802.0 |
| 32.5° | 8930.7 | 8914.2 | 8660.1 | 8310.2 | 7805.3 | 7547.9 | 7389.4 | 7584.2 | 7613.9 | 7504.9 | 6108.9 |
| 35° | 9739.3 | 9739.3 | 9521.4 | 9105.6 | 8534.6 | 8145.2 | 7884.5 | 7897.7 | 8122.1 | 7996.7 | 6458.7 |
| 37.5° | 10458.7 | 10455.4 | 10217.8 | 9808.6 | 9260.7 | 8815.2 | 8491.7 | 8277.2 | 8607.3 | 8498.3 | 6825.1 |
| 40° | 11029.7 | 11006.6 | 10831.7 | 10475.2 | 9924.1 | 9481.8 | 9155.1 | 8722.8 | 9148.5 | 9049.5 | 7214.5 |
| 42.5° | 11445.5 | 11432.3 | 11313.5 | 11003.3 | 10478.5 | 10062.7 | 9838.3 | 9283.8 | 9762.4 | 9663.4 | 7670.0 |
| 45° | 11607.3 | 11633.7 | 11633.7 | 11339.9 | 10924.1 | 10544.5 | 10445.5 | 9901.0 | 10425.7 | 10326.7 | 8158.4 |
| 47.5° | 11346.5 | 11415.8 | 11557.7 | 11577.6 | 11211.2 | 10953.8 | 10986.8 | 10521.4 | 11108.9 | 11056.1 | 8693.1 |
| 50° | 10531.3 | 10660.1 | 10970.3 | 11531.3 | 11326.7 | 11267.3 | 11448.8 | 11155.1 | 11841.6 | 11825.1 | 9343.2 |
| 52.5° | 8429.0 | 8742.6 | 9709.6 | 10716.2 | 11247.5 | 11412.5 | 11907.6 | 11868.0 | 12785.5 | 12811.9 | 10191.4 |
| 55° | 6465.3 | 6584.2 | 7703.0 | 9415.8 | 10762.4 | 11366.3 | 12214.5 | 12564.4 | 13808.6 | 13841.6 | 10970.3 |
| 57.5° | 5227.7 | 5306.9 | 5917.5 | 7703.0 | 9656.8 | 11115.5 | 12455.4 | 12970.3 | 14594.1 | 14679.9 | 11663.4 |
| 60° | 4141.9 | 4257.4 | 4666.7 | 5894.4 | 8108.9 | 10511.5 | 12623.8 | 13422.4 | 15438.9 | 15567.6 | 12491.7 |
| 62.5° | 3079.2 | 3135.3 | 3521.5 | 4366.3 | 6419.1 | 9425.7 | 12534.6 | 13914.2 | 16475.2 | 16630.4 | 13488.4 |
| 65° | 2191.4 | 2240.9 | 2514.9 | 3105.6 | 4745.9 | 7957.1 | 12016.5 | 14280.5 | 17775.6 | 17934.0 | 14491.7 |
| 67.5° | 1640.3 | 1660.1 | 1815.2 | 2171.6 | 3198.0 | 6181.5 | 10967.0 | 14217.8 | 18726.1 | 18868.0 | 14894.4 |
| 70° | 1297.0 | 1303.6 | 1379.5 | 1571.0 | 2079.2 | 4303.6 | 9128.7 | 13297.0 | 18795.4 | 18920.8 | 14386.1 |
| 72.5° | 1075.9 | 1072.6 | 1115.5 | 1207.9 | 1448.8 | 2722.8 | 6762.4 | 11587.5 | 17904.3 | 17990.1 | 12967.0 |
| 75° | 887.8 | 894.4 | 924.1 | 976.9 | 1105.6 | 1795.4 | 4382.8 | 9244.2 | 15795.4 | 15703.0 | 10881.2 |
| 77.5° | 745.9 | 742.6 | 755.8 | 802.0 | 894.4 | 1290.4 | 2567.7 | 6679.9 | 11706.3 | 11660.1 | 7141.9 |
| 80° | 600.7 | 607.3 | 627.1 | 666.7 | 752.5 | 983.5 | 1518.2 | 4168.3 | 6280.5 | 6112.2 | 3412.5 |
| 82.5° | 402.6 | 465.3 | 505.0 | 551.2 | 650.2 | 726.1 | 963.7 | 2118.8 | 2808.6 | 2765.7 | 1547.9 |
| 85° | 191.4 | 254.1 | 376.2 | 429.0 | 528.1 | 455.4 | 653.5 | 1009.9 | 1405.9 | 1389.4 | 557.8 |
| 87.5° | 39.6 | 39.6 | 201.3 | 240.9 | 326.7 | 194.7 | 363.0 | 438.9 | 679.9 | 637.0 | 227.7 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3138.6 | 3138.6 | 3138.6 | 3138.6 | 3138.6 | 3138.6 | 3138.6 | 3138.6 | 3138.6 | 3138.6 | 3138.6 |
| 2.5° | 3155.1 | 3066.0 | 2887.8 | 2745.9 | 2600.7 | 2518.2 | 2415.8 | 2366.3 | 2356.4 | 2330.0 | 2349.8 |
| 5° | 3211.2 | 3036.3 | 2699.7 | 2478.5 | 2330.0 | 2257.4 | 2221.1 | 2207.9 | 2204.6 | 2198.0 | 2198.0 |
| 7.5° | 3287.1 | 3019.8 | 2580.9 | 2356.4 | 2260.7 | 2237.6 | 2247.5 | 2267.3 | 2270.6 | 2277.2 | 2273.9 |
| 10° | 3379.5 | 3023.1 | 2514.9 | 2326.7 | 2280.5 | 2283.8 | 2316.8 | 2343.2 | 2356.4 | 2366.3 | 2363.0 |
| 12.5° | 3508.2 | 3062.7 | 2504.9 | 2346.5 | 2326.7 | 2339.9 | 2372.9 | 2399.3 | 2412.5 | 2415.8 | 2415.8 |
| 15° | 3676.6 | 3145.2 | 2528.1 | 2389.4 | 2372.9 | 2382.8 | 2402.6 | 2412.5 | 2415.8 | 2412.5 | 2412.5 |
| 17.5° | 3861.4 | 3244.2 | 2561.1 | 2415.8 | 2389.4 | 2379.5 | 2372.9 | 2363.0 | 2343.2 | 2330.0 | 2330.0 |
| 20° | 4039.6 | 3333.3 | 2577.6 | 2412.5 | 2366.3 | 2326.7 | 2287.1 | 2237.6 | 2204.6 | 2178.2 | 2178.2 |
| 22.5° | 4217.8 | 3415.8 | 2577.6 | 2376.2 | 2303.6 | 2227.7 | 2145.2 | 2066.0 | 2016.5 | 1983.5 | 1983.5 |
| 25° | 4405.9 | 3495.0 | 2557.8 | 2313.5 | 2204.6 | 2095.7 | 1983.5 | 1884.5 | 1835.0 | 1802.0 | 1795.4 |
| 27.5° | 4564.4 | 3541.3 | 2504.9 | 2224.4 | 2082.5 | 1943.9 | 1815.2 | 1712.9 | 1676.6 | 1646.9 | 1646.9 |
| 30° | 4732.7 | 3571.0 | 2405.9 | 2108.9 | 1943.9 | 1785.5 | 1653.5 | 1571.0 | 1531.4 | 1488.4 | 1485.1 |
| 32.5° | 4920.8 | 3590.8 | 2293.7 | 1986.8 | 1802.0 | 1633.7 | 1521.5 | 1455.4 | 1369.6 | 1323.4 | 1316.8 |
| 35° | 5138.6 | 3617.2 | 2174.9 | 1848.2 | 1660.1 | 1508.3 | 1442.2 | 1333.3 | 1250.8 | 1211.2 | 1207.9 |
| 37.5° | 5369.6 | 3637.0 | 2046.2 | 1726.1 | 1531.4 | 1425.7 | 1359.7 | 1231.0 | 1158.4 | 1099.0 | 1092.4 |
| 40° | 5613.9 | 3637.0 | 1914.2 | 1607.3 | 1429.0 | 1389.4 | 1264.0 | 1148.5 | 1026.4 | 996.7 | 990.1 |
| 42.5° | 5884.5 | 3630.4 | 1782.2 | 1491.7 | 1333.3 | 1306.9 | 1207.9 | 1085.8 | 1023.1 | 996.7 | 990.1 |
| 45° | 6171.6 | 3607.3 | 1656.8 | 1359.7 | 1234.3 | 1181.5 | 1105.6 | 1072.6 | 1046.2 | 1046.2 | 1046.2 |
| 47.5° | 6498.3 | 3587.5 | 1514.9 | 1240.9 | 1161.7 | 1102.3 | 1046.2 | 1026.4 | 1023.1 | 1033.0 | 1042.9 |
| 50° | 6917.5 | 3580.9 | 1396.0 | 1155.1 | 1105.6 | 1036.3 | 1029.7 | 1013.2 | 1016.5 | 1016.5 | 1016.5 |
| 52.5° | 7425.7 | 3521.5 | 1283.8 | 1092.4 | 1049.5 | 967.0 | 986.8 | 1003.3 | 1009.9 | 1006.6 | 1003.3 |
| 55° | 7798.7 | 3415.8 | 1188.1 | 1049.5 | 1009.9 | 940.6 | 967.0 | 993.4 | 1000.0 | 990.1 | 990.1 |
| 57.5° | 8135.3 | 3267.3 | 1112.2 | 1016.5 | 983.5 | 924.1 | 953.8 | 980.2 | 973.6 | 970.3 | 967.0 |
| 60° | 8521.4 | 3125.4 | 1052.8 | 1000.0 | 957.1 | 917.5 | 943.9 | 960.4 | 950.5 | 943.9 | 940.6 |
| 62.5° | 8940.6 | 2986.8 | 1009.9 | 1000.0 | 937.3 | 914.2 | 934.0 | 940.6 | 920.8 | 914.2 | 914.2 |
| 65° | 9135.3 | 2769.0 | 963.7 | 1000.0 | 927.4 | 907.6 | 914.2 | 907.6 | 887.8 | 887.8 | 884.5 |
| 67.5° | 8815.2 | 2409.2 | 904.3 | 986.8 | 940.6 | 897.7 | 884.5 | 874.6 | 851.5 | 851.5 | 844.9 |
| 70° | 7930.7 | 1980.2 | 818.5 | 943.9 | 943.9 | 894.4 | 844.9 | 821.8 | 795.4 | 805.3 | 792.1 |
| 72.5° | 6775.6 | 1571.0 | 712.9 | 871.3 | 924.1 | 891.1 | 802.0 | 765.7 | 742.6 | 752.5 | 732.7 |
| 75° | 5488.4 | 1217.8 | 587.5 | 755.8 | 874.6 | 874.6 | 759.1 | 709.6 | 683.2 | 683.2 | 660.1 |
| 77.5° | 3498.3 | 901.0 | 478.5 | 627.1 | 785.5 | 851.5 | 722.8 | 646.9 | 607.3 | 597.4 | 580.9 |
| 80° | 1732.7 | 633.7 | 392.7 | 498.3 | 670.0 | 798.7 | 696.4 | 574.3 | 518.2 | 498.3 | 468.6 |
| 82.5° | 920.8 | 438.9 | 313.5 | 389.4 | 534.7 | 719.5 | 663.4 | 495.0 | 425.7 | 396.0 | 363.0 |
| 85° | 412.5 | 270.6 | 250.8 | 297.0 | 405.9 | 590.8 | 597.4 | 405.9 | 326.7 | 389.4 | 287.1 |
| 87.5° | 151.8 | 122.1 | 122.1 | 151.8 | 234.3 | 247.5 | 422.4 | 260.7 | 207.9 | 141.9 | 112.2 |
| 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)