

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: P400179

Luminaire Tested: **ARCH-L-PA3-240-827-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400179
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-240-827-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17384 lumens
Efficiency: N/A
Efficacy: 71.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G4

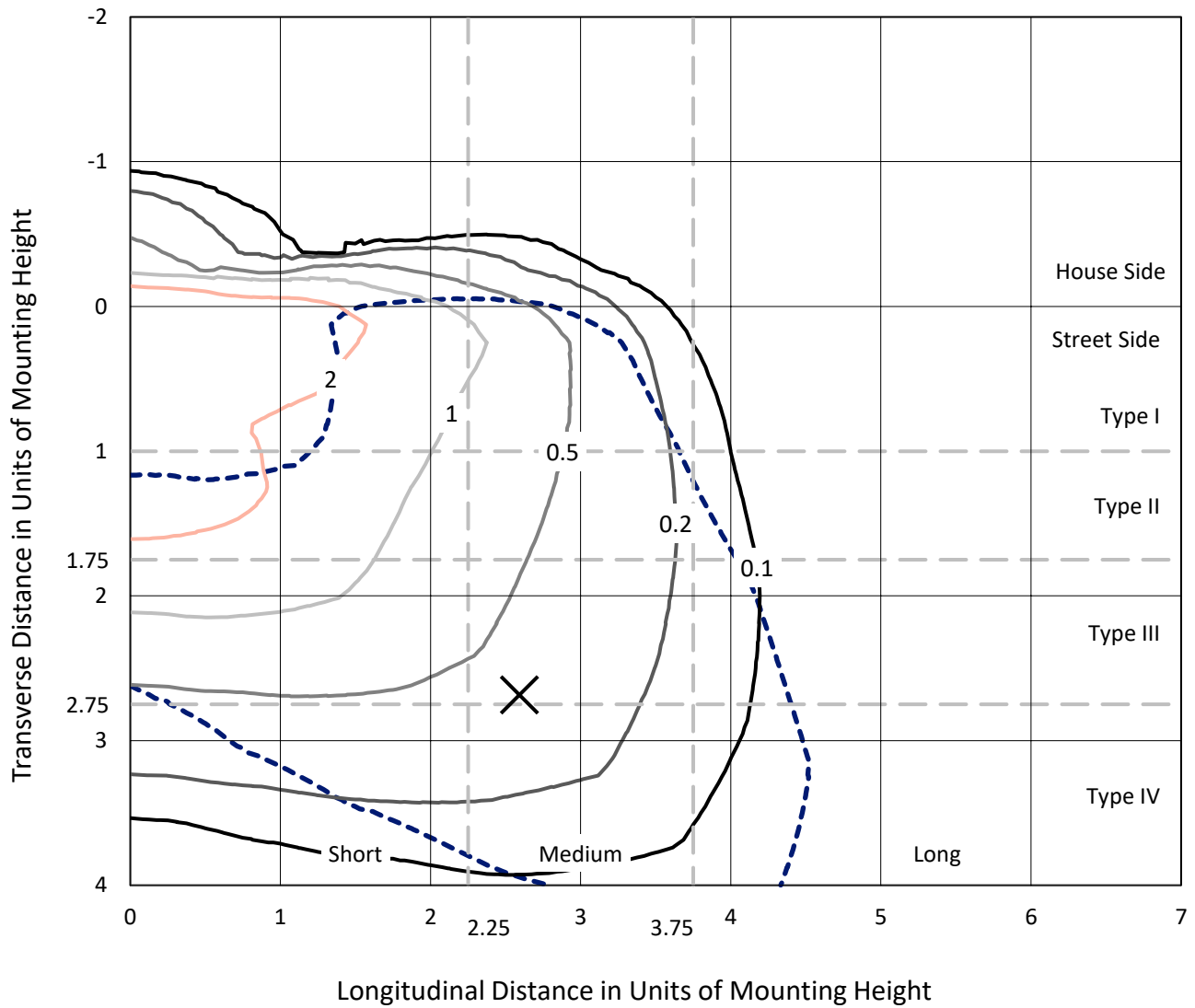
Input Watts (W): 242
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P400179
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Iso-Footcandle Lines of Horizontal Illumination

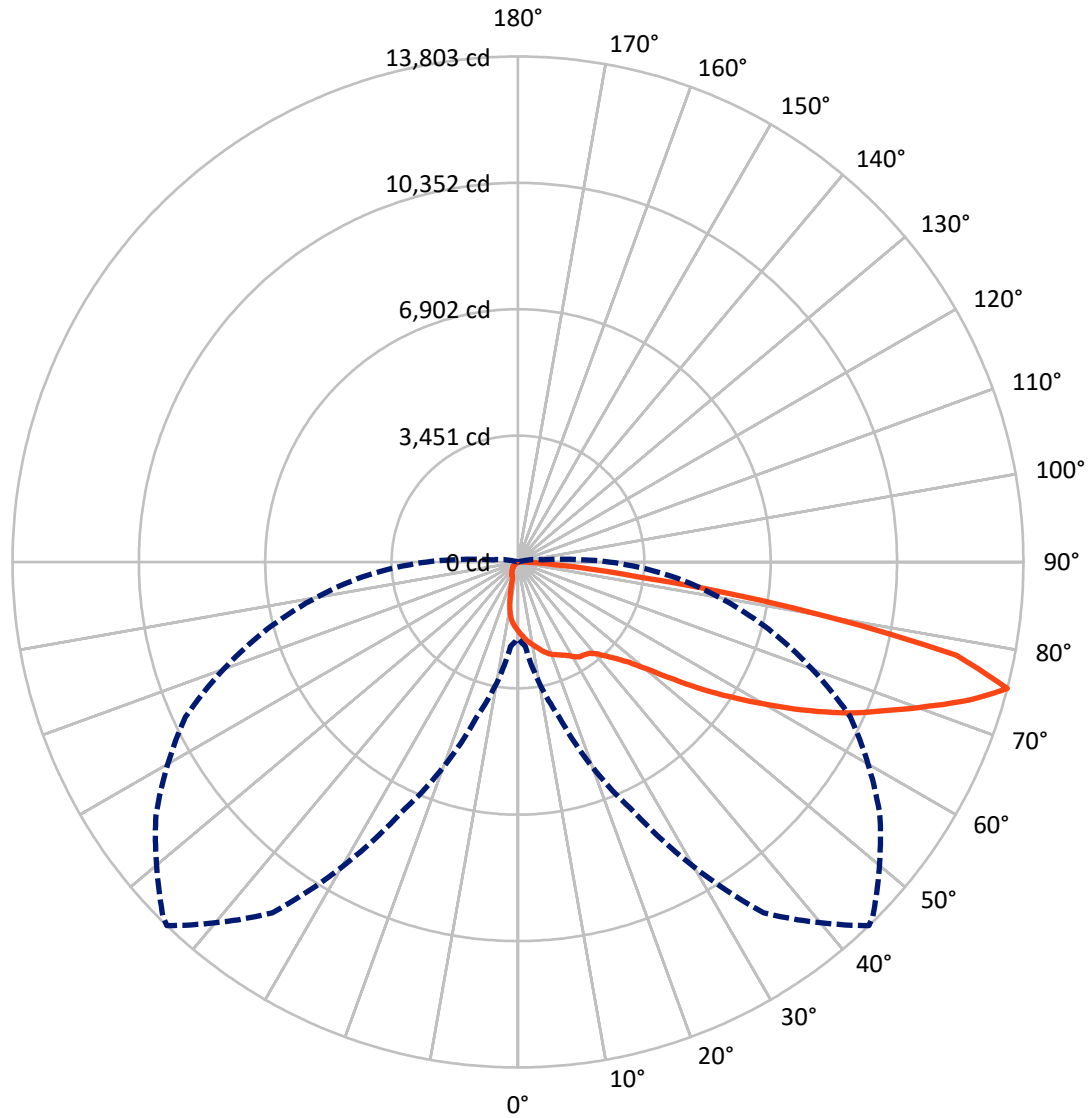
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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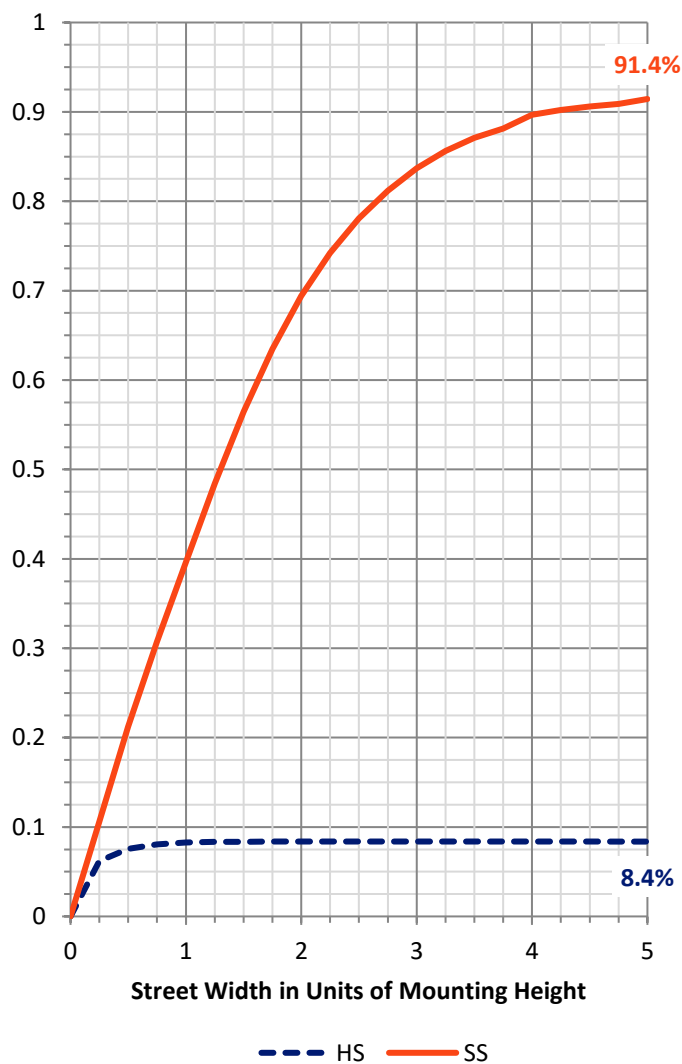
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1466.0 | 0.0 | 1466.0 |
| | % Fixture | 8.4 | 0.0 | 8.4 |
| Street Side | Lumens | 15918.0 | 0.0 | 15918.0 |
| | % Fixture | 91.6 | 0.0 | 91.6 |
| Total | Lumens | 17384.0 | 0.0 | 17384.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 178.4 | 1.0 |
| 10°-20° | 500.0 | 2.9 |
| 20°-30° | 825.2 | 4.7 |
| 30°-40° | 1197.7 | 6.9 |
| 40°-50° | 1946.9 | 11.2 |
| 50°-60° | 3432.2 | 19.7 |
| 60°-70° | 4932.7 | 28.4 |
| 70°-80° | 3950.0 | 22.7 |
| 80°-90° | 420.8 | 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° | 17384.0 | 100.0 |
| 0°-180° | 17384.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P400179

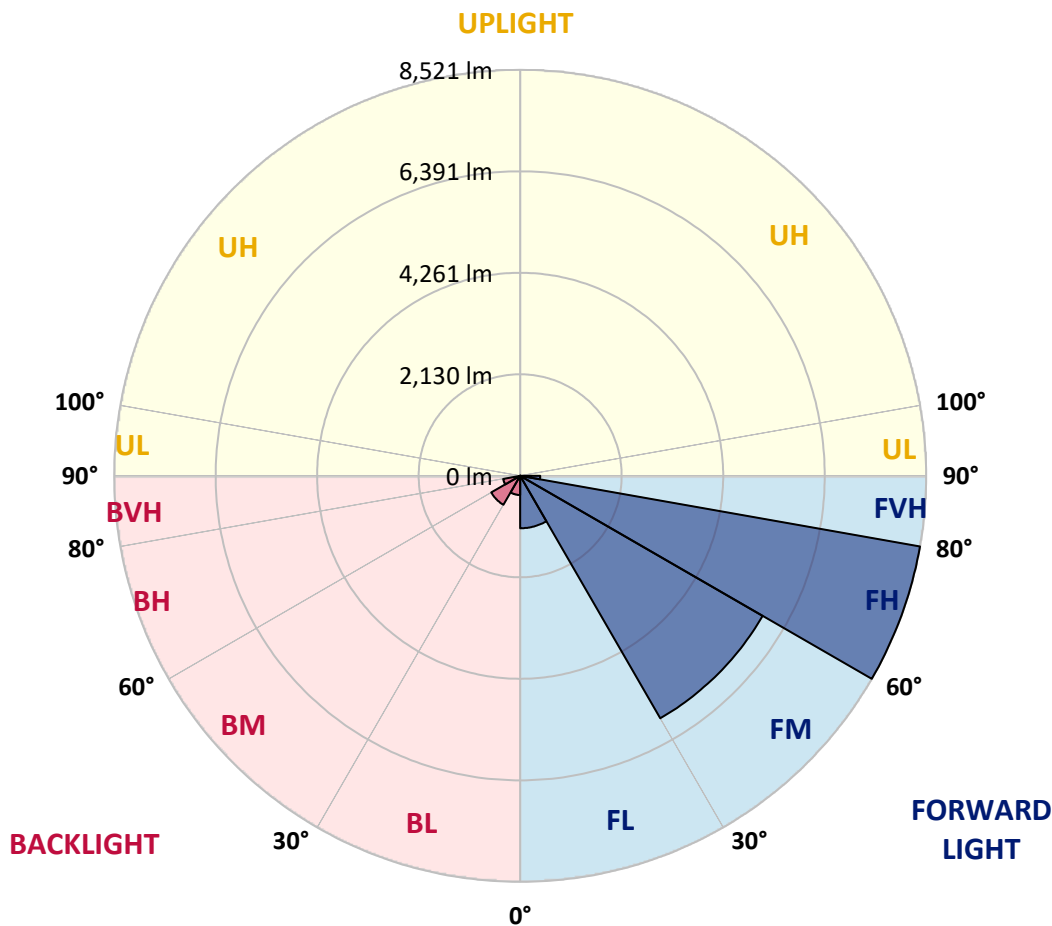
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1100.9 | 6.3 | | | |
| FM (30°-60°) | 5875.9 | 33.8 | | | |
| FH (60°-80°) | 8521.3 | 49.0 | | | G4/12000 |
| FVH (80°-90°) | 419.8 | 2.4 | | | G3/500 |
| BL (0°-30°) | 402.8 | 2.3 | B1/500 | | |
| BM (30°-60°) | 700.8 | 4.0 | B1/1000 | | |
| BH (60°-80°) | 361.4 | 2.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.1 | 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-G4

Type IV Medium





REPORT NUMBER: P400179

CATALOG NUMBER: ARCH-L-PA3-240-827-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 1892.2 | 1892.2 | 1892.2 | 1892.2 | 1892.2 | 1892.2 | 1892.2 | 1892.2 | 1892.2 | 1892.2 | 1892.2 |
| 2.5° | 2062.2 | 2059.0 | 2049.3 | 2033.3 | 2017.3 | 2001.2 | 1998.0 | 1972.4 | 1943.5 | 1921.0 | 1901.8 |
| 5° | 2245.0 | 2241.8 | 2225.7 | 2190.4 | 2155.2 | 2113.5 | 2110.3 | 2049.3 | 1994.8 | 1933.9 | 1882.6 |
| 7.5° | 2434.2 | 2427.8 | 2398.9 | 2344.4 | 2283.4 | 2219.3 | 2212.9 | 2123.1 | 2042.9 | 1962.7 | 1889.0 |
| 10° | 2581.7 | 2575.3 | 2533.6 | 2469.5 | 2386.1 | 2305.9 | 2296.3 | 2203.3 | 2123.1 | 2020.5 | 1921.0 |
| 12.5° | 2726.0 | 2713.2 | 2658.7 | 2588.1 | 2485.5 | 2408.5 | 2398.9 | 2302.7 | 2206.5 | 2100.6 | 1978.8 |
| 15° | 2860.7 | 2844.7 | 2793.4 | 2703.6 | 2594.5 | 2520.8 | 2514.4 | 2411.7 | 2312.3 | 2190.4 | 2055.7 |
| 17.5° | 2953.7 | 2947.3 | 2886.4 | 2787.0 | 2681.1 | 2620.2 | 2613.8 | 2507.9 | 2408.5 | 2280.2 | 2135.9 |
| 20° | 3001.8 | 3001.8 | 2944.1 | 2835.1 | 2738.9 | 2697.2 | 2687.5 | 2588.1 | 2491.9 | 2370.0 | 2219.3 |
| 22.5° | 3011.5 | 3021.1 | 2976.2 | 2857.5 | 2787.0 | 2751.7 | 2745.3 | 2658.7 | 2565.7 | 2453.4 | 2312.3 |
| 25° | 3030.7 | 3030.7 | 3008.2 | 2880.0 | 2828.7 | 2819.0 | 2815.8 | 2738.9 | 2655.5 | 2543.2 | 2405.3 |
| 27.5° | 3053.1 | 3053.1 | 3037.1 | 2912.0 | 2892.8 | 2889.6 | 2886.4 | 2851.1 | 2783.8 | 2652.3 | 2514.4 |
| 30° | 3110.9 | 3114.1 | 3101.3 | 2976.2 | 2963.4 | 2998.6 | 3005.0 | 2985.8 | 2902.4 | 2738.9 | 2626.6 |
| 32.5° | 3255.2 | 3226.3 | 3191.1 | 3021.1 | 3043.5 | 3088.4 | 3091.6 | 3053.1 | 2963.4 | 2831.9 | 2761.3 |
| 35° | 3617.6 | 3447.6 | 3287.3 | 3059.6 | 3069.2 | 3114.1 | 3120.5 | 3117.3 | 3062.8 | 2950.5 | 2915.2 |
| 37.5° | 3954.3 | 3713.8 | 3486.1 | 3149.4 | 3117.3 | 3165.4 | 3178.2 | 3232.7 | 3191.1 | 3114.1 | 3123.7 |
| 40° | 4150.0 | 4057.0 | 3896.6 | 3396.3 | 3213.5 | 3287.3 | 3300.1 | 3383.5 | 3367.4 | 3335.4 | 3396.3 |
| 42.5° | 4752.9 | 4759.3 | 4586.1 | 3765.1 | 3389.9 | 3508.6 | 3524.6 | 3591.9 | 3614.4 | 3630.4 | 3778.0 |
| 45° | 5452.1 | 5474.5 | 5432.8 | 4429.0 | 3723.4 | 3761.9 | 3784.4 | 3874.2 | 3957.5 | 4060.2 | 4329.6 |
| 47.5° | 6292.3 | 6273.1 | 6119.1 | 5240.4 | 4303.9 | 4089.0 | 4105.1 | 4278.3 | 4422.6 | 4647.1 | 5031.9 |
| 50° | 7036.4 | 7084.5 | 6792.6 | 5997.3 | 5121.7 | 4605.4 | 4589.3 | 4759.3 | 5019.1 | 5333.4 | 5817.7 |
| 52.5° | 7786.8 | 7716.3 | 7321.8 | 6747.7 | 6090.3 | 5307.7 | 5259.6 | 5352.6 | 5718.2 | 6090.3 | 6587.4 |
| 55° | 7985.7 | 7992.1 | 7857.4 | 7568.7 | 6898.4 | 6160.8 | 6080.6 | 6074.2 | 6529.6 | 6783.0 | 7395.5 |
| 57.5° | 8376.9 | 8393.0 | 8425.0 | 8482.8 | 8165.2 | 7013.9 | 6930.5 | 6840.7 | 7283.3 | 7430.8 | 8206.9 |
| 60° | 8774.6 | 8793.8 | 8989.5 | 9300.6 | 9088.9 | 7934.3 | 7844.5 | 7632.9 | 7879.8 | 8078.7 | 9060.0 |
| 62.5° | 8723.3 | 8858.0 | 9425.6 | 10044.6 | 10018.9 | 8944.6 | 8832.3 | 8322.4 | 8479.5 | 8652.7 | 9842.6 |
| 65° | 7876.6 | 8020.9 | 9297.4 | 10249.9 | 10952.2 | 9942.0 | 9759.2 | 9034.4 | 9044.0 | 9252.5 | 10596.2 |
| 67.5° | 7119.7 | 7276.9 | 8495.6 | 10163.3 | 11568.0 | 10836.8 | 10647.5 | 9749.6 | 9598.8 | 9945.2 | 11000.3 |
| 70° | 6683.6 | 6840.7 | 7857.4 | 9893.9 | 11741.2 | 11827.7 | 11664.2 | 10567.4 | 10259.5 | 10577.0 | 10548.1 |
| 72.5° | 5230.8 | 5477.7 | 7042.8 | 9380.7 | 11927.2 | 12889.3 | 12761.0 | 11603.2 | 10820.7 | 9916.3 | 8030.6 |
| 75° | 2084.6 | 2312.3 | 4396.9 | 7549.5 | 11693.0 | 13803.3 | 13703.9 | 12068.3 | 10015.7 | 7081.3 | 4111.5 |
| 77.5° | 628.6 | 673.5 | 1221.9 | 3733.1 | 8572.5 | 12238.3 | 12206.2 | 10147.2 | 7087.7 | 3287.3 | 1122.5 |
| 80° | 208.5 | 230.9 | 375.2 | 1029.5 | 3912.6 | 7645.7 | 7790.0 | 6465.5 | 3219.9 | 753.7 | 227.7 |
| 82.5° | 86.6 | 96.2 | 189.2 | 413.7 | 1385.5 | 3293.7 | 3245.6 | 2896.0 | 1122.5 | 468.2 | 83.4 |
| 85° | 22.4 | 28.9 | 86.6 | 237.3 | 506.7 | 1135.3 | 1193.0 | 971.7 | 635.0 | 388.1 | 25.7 |
| 87.5° | 0.0 | 0.0 | 41.7 | 96.2 | 227.7 | 343.2 | 359.2 | 295.1 | 359.2 | 291.8 | 12.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P400179

CATALOG NUMBER: ARCH-L-PA3-240-827-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1892.2 | 1892.2 | 1892.2 | 1892.2 | 1892.2 | 1892.2 | 1892.2 | 1892.2 | 1892.2 | 1892.2 | 1892.2 |
| 2.5° | 1885.8 | 1869.7 | 1840.9 | 1821.6 | 1796.0 | 1789.6 | 1776.7 | 1760.7 | 1757.5 | 1741.4 | 1744.7 |
| 5° | 1853.7 | 1828.0 | 1776.7 | 1741.4 | 1699.8 | 1686.9 | 1664.5 | 1648.4 | 1635.6 | 1613.2 | 1616.4 |
| 7.5° | 1847.3 | 1808.8 | 1738.2 | 1670.9 | 1603.5 | 1555.4 | 1488.1 | 1433.6 | 1388.7 | 1340.6 | 1350.2 |
| 10° | 1869.7 | 1821.6 | 1722.2 | 1629.2 | 1507.3 | 1353.4 | 1177.0 | 1061.5 | 1003.8 | 946.1 | 952.5 |
| 12.5° | 1914.6 | 1856.9 | 1728.6 | 1587.5 | 1340.6 | 1077.6 | 833.8 | 676.7 | 635.0 | 609.3 | 612.6 |
| 15° | 1982.0 | 1911.4 | 1747.9 | 1507.3 | 1116.1 | 779.3 | 554.8 | 487.5 | 503.5 | 513.1 | 513.1 |
| 17.5° | 2052.5 | 1972.4 | 1763.9 | 1363.0 | 862.7 | 545.2 | 452.2 | 445.8 | 468.2 | 490.7 | 490.7 |
| 20° | 2139.1 | 2036.5 | 1767.1 | 1180.2 | 622.2 | 442.6 | 426.5 | 426.5 | 442.6 | 468.2 | 468.2 |
| 22.5° | 2222.5 | 2107.1 | 1738.2 | 971.7 | 474.6 | 410.5 | 410.5 | 410.5 | 420.1 | 445.8 | 449.0 |
| 25° | 2321.9 | 2193.6 | 1677.3 | 750.5 | 407.3 | 391.3 | 391.3 | 394.5 | 400.9 | 423.3 | 426.5 |
| 27.5° | 2427.8 | 2283.4 | 1574.7 | 548.4 | 372.0 | 368.8 | 372.0 | 375.2 | 378.4 | 400.9 | 407.3 |
| 30° | 2549.6 | 2382.9 | 1443.2 | 410.5 | 340.0 | 340.0 | 349.6 | 356.0 | 356.0 | 375.2 | 381.6 |
| 32.5° | 2690.7 | 2514.4 | 1286.0 | 340.0 | 307.9 | 304.7 | 320.7 | 330.3 | 330.3 | 346.4 | 352.8 |
| 35° | 2867.1 | 2649.1 | 1096.8 | 301.5 | 282.2 | 275.8 | 282.2 | 298.3 | 304.7 | 317.5 | 320.7 |
| 37.5° | 3101.3 | 2809.4 | 894.8 | 279.0 | 263.0 | 250.2 | 250.2 | 253.4 | 266.2 | 279.0 | 282.2 |
| 40° | 3399.5 | 2985.8 | 695.9 | 263.0 | 243.7 | 230.9 | 221.3 | 218.1 | 214.9 | 224.5 | 230.9 |
| 42.5° | 3774.7 | 3184.6 | 519.5 | 246.9 | 227.7 | 208.5 | 195.6 | 182.8 | 166.8 | 163.6 | 166.8 |
| 45° | 4255.8 | 3428.4 | 384.9 | 234.1 | 218.1 | 189.2 | 166.8 | 144.3 | 115.5 | 105.8 | 109.0 |
| 47.5° | 4823.5 | 3681.7 | 301.5 | 221.3 | 211.7 | 166.8 | 137.9 | 99.4 | 70.6 | 64.1 | 67.3 |
| 50° | 5426.4 | 3925.5 | 256.6 | 205.3 | 198.8 | 144.3 | 99.4 | 60.9 | 41.7 | 41.7 | 44.9 |
| 52.5° | 5939.5 | 4063.4 | 234.1 | 192.4 | 179.6 | 118.7 | 64.1 | 35.3 | 25.7 | 25.7 | 28.9 |
| 55° | 6436.6 | 4137.1 | 218.1 | 179.6 | 153.9 | 83.4 | 35.3 | 22.4 | 16.0 | 16.0 | 16.0 |
| 57.5° | 6949.8 | 4169.2 | 198.8 | 163.6 | 121.9 | 51.3 | 19.2 | 12.8 | 9.6 | 9.6 | 9.6 |
| 60° | 7405.2 | 4108.3 | 170.0 | 134.7 | 80.2 | 25.7 | 9.6 | 9.6 | 6.4 | 3.2 | 3.2 |
| 62.5° | 7786.8 | 3992.8 | 118.7 | 96.2 | 48.1 | 12.8 | 6.4 | 3.2 | 0.0 | 0.0 | 0.0 |
| 65° | 8020.9 | 3806.8 | 77.0 | 64.1 | 28.9 | 9.6 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 7953.6 | 3457.2 | 48.1 | 41.7 | 12.8 | 6.4 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 7177.5 | 2835.1 | 35.3 | 25.7 | 9.6 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 5173.0 | 1917.8 | 25.7 | 16.0 | 6.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 2488.7 | 683.1 | 16.0 | 12.8 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 609.3 | 150.7 | 9.6 | 6.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 134.7 | 28.9 | 6.4 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 44.9 | 12.8 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 16.0 | 6.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 9.6 | 3.2 | 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)