

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: P400188

Luminaire Tested: **ARCH-L-PA3-240-830-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400188
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-PA3-240-830-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 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: 18792 lumens
Efficiency: N/A
Efficacy: 77.7 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

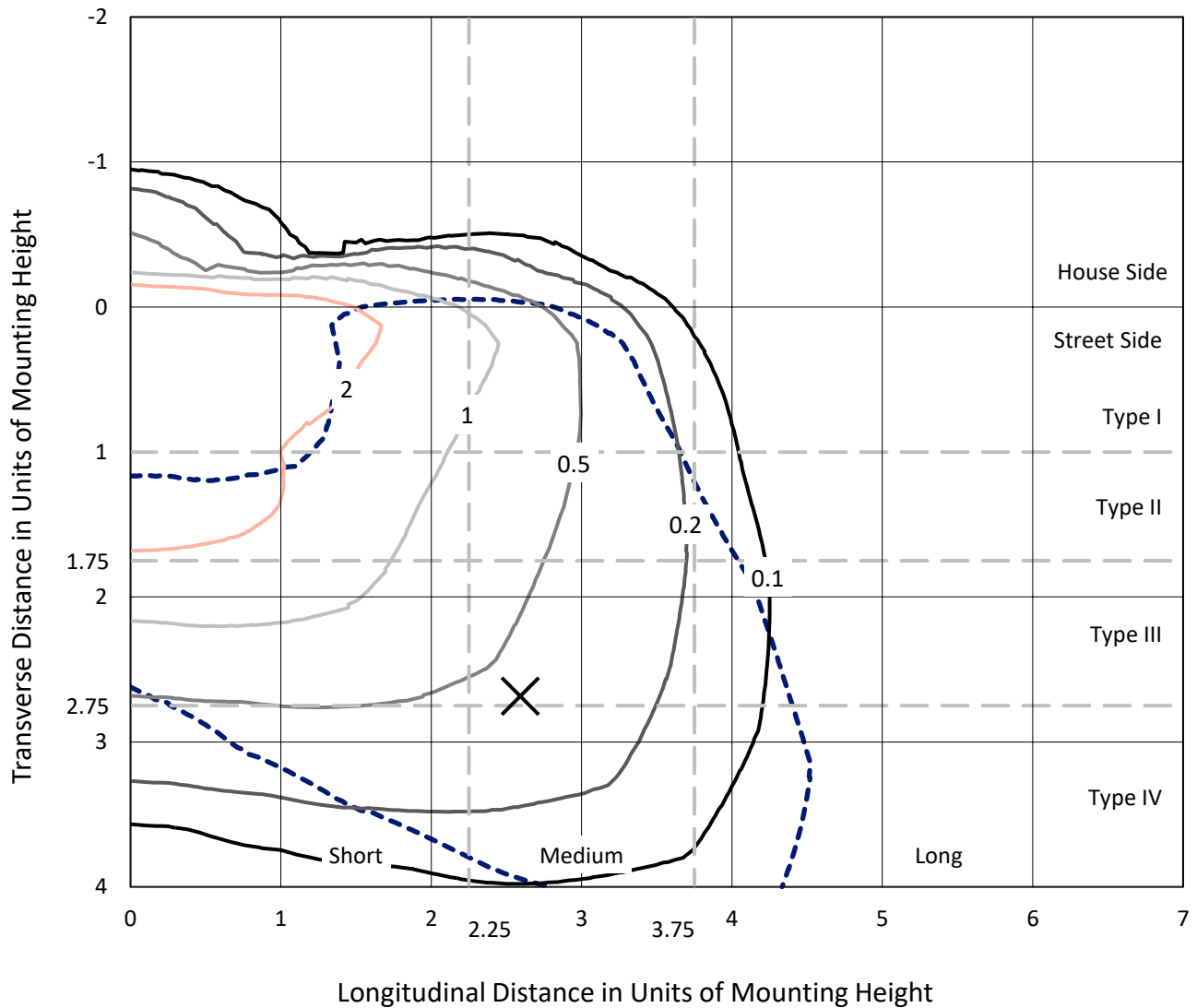
Input Watts (W): 242
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P400188
 CATALOG NUMBER: ARCH-L-PA3-240-830-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

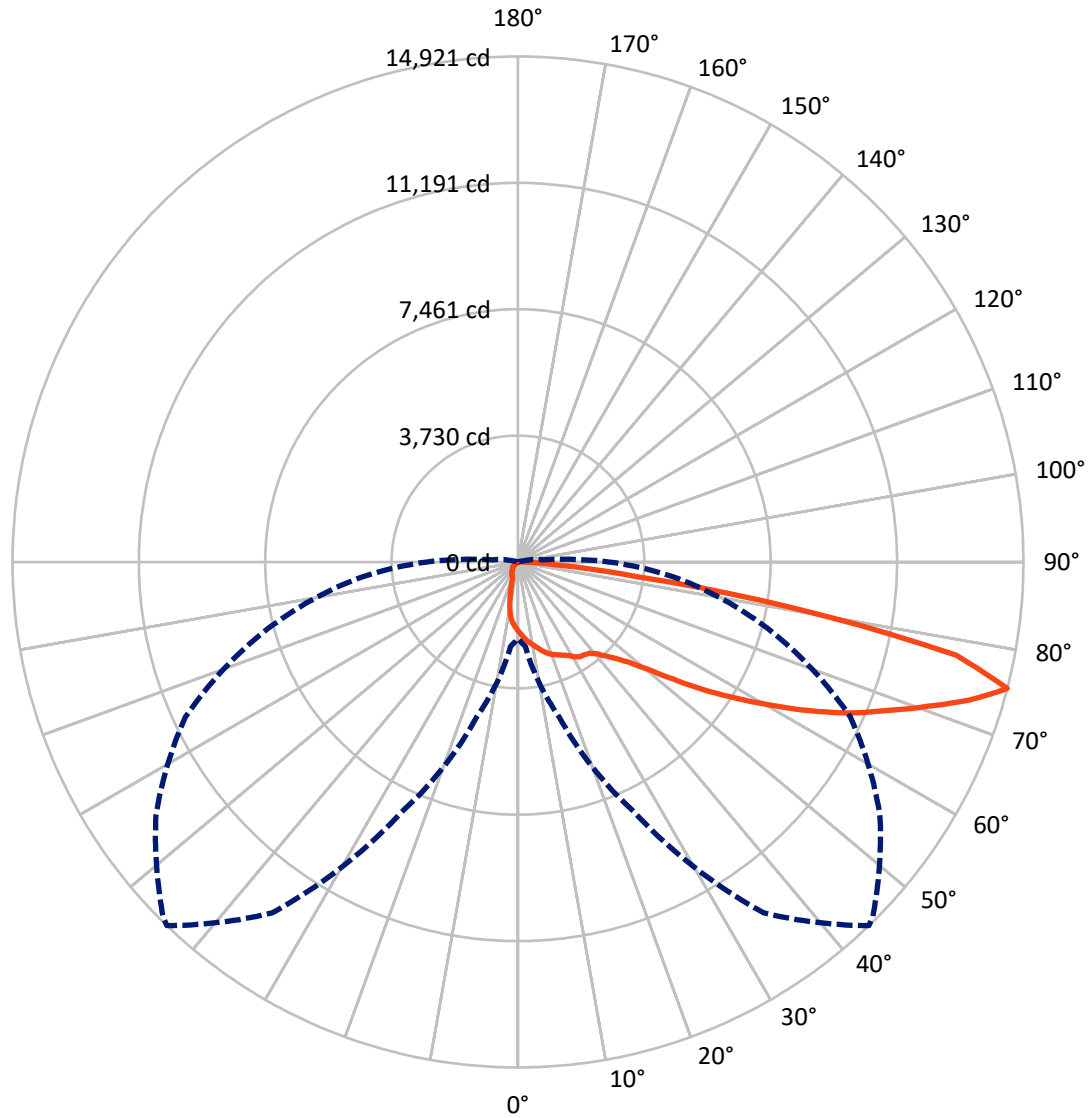
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Medium - N/A

REPORT NUMBER: P400188
CATALOG NUMBER: ARCH-L-PA3-240-830-U-T4W-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P400188

CATALOG NUMBER: ARCH-L-PA3-240-830-U-T4W-HSS

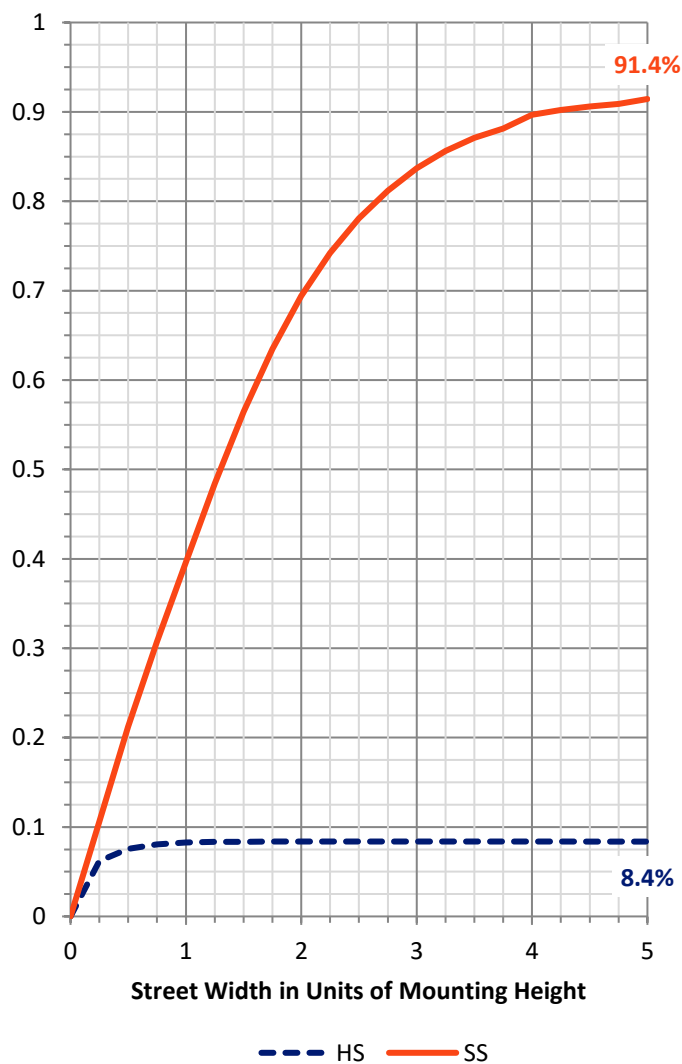
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1584.8 | 0.0 | 1584.8 |
| | % Fixture | 8.4 | 0.0 | 8.4 |
| Street Side | Lumens | 17207.2 | 0.0 | 17207.2 |
| | % Fixture | 91.6 | 0.0 | 91.6 |
| Total | Lumens | 18792.0 | 0.0 | 18792.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 192.9 | 1.0 |
| 10°-20° | 540.5 | 2.9 |
| 20°-30° | 892.0 | 4.7 |
| 30°-40° | 1294.7 | 6.9 |
| 40°-50° | 2104.6 | 11.2 |
| 50°-60° | 3710.1 | 19.7 |
| 60°-70° | 5332.3 | 28.4 |
| 70°-80° | 4269.9 | 22.7 |
| 80°-90° | 454.9 | 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° | 18792.0 | 100.0 |
| 0°-180° | 18792.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P400188

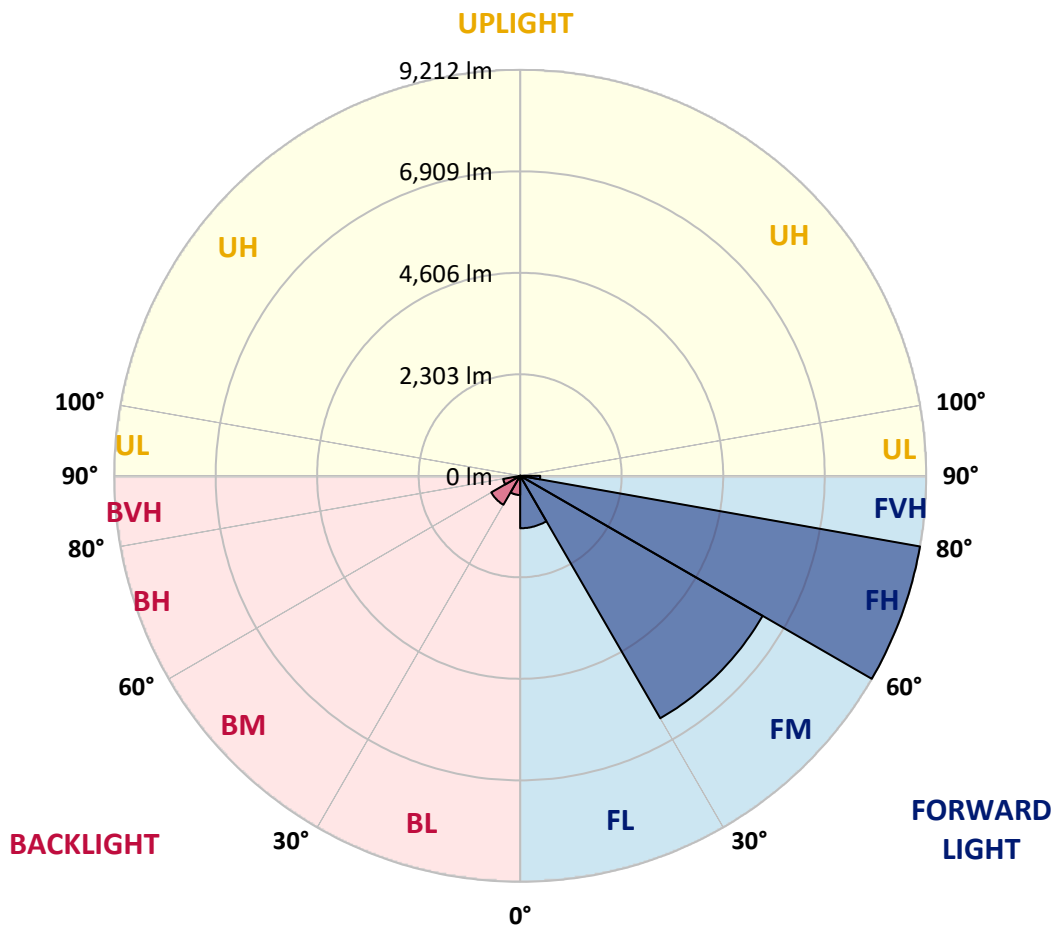
CATALOG NUMBER: ARCH-L-PA3-240-830-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1190.1 | 6.3 | | | |
| FM (30°-60°) | 6351.9 | 33.8 | | | |
| FH (60°-80°) | 9211.5 | 49.0 | | | G4/12000 |
| FVH (80°-90°) | 453.8 | 2.4 | | | G3/500 |
| BL (0°-30°) | 435.4 | 2.3 | B1/500 | | |
| BM (30°-60°) | 757.5 | 4.0 | B1/1000 | | |
| BH (60°-80°) | 390.7 | 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: P400188

CATALOG NUMBER: ARCH-L-PA3-240-830-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2045.4 | 2045.4 | 2045.4 | 2045.4 | 2045.4 | 2045.4 | 2045.4 | 2045.4 | 2045.4 | 2045.4 | 2045.4 |
| 2.5° | 2229.2 | 2225.7 | 2215.3 | 2198.0 | 2180.6 | 2163.3 | 2159.8 | 2132.1 | 2100.9 | 2076.6 | 2055.8 |
| 5° | 2426.8 | 2423.3 | 2406.0 | 2367.9 | 2329.7 | 2284.7 | 2281.2 | 2215.3 | 2156.4 | 2090.5 | 2035.0 |
| 7.5° | 2631.3 | 2624.4 | 2593.2 | 2534.3 | 2468.4 | 2399.1 | 2392.1 | 2295.1 | 2208.4 | 2121.7 | 2042.0 |
| 10° | 2790.8 | 2783.9 | 2738.8 | 2669.5 | 2579.3 | 2492.7 | 2482.3 | 2381.7 | 2295.1 | 2184.1 | 2076.6 |
| 12.5° | 2946.8 | 2933.0 | 2874.0 | 2797.7 | 2686.8 | 2603.6 | 2593.2 | 2489.2 | 2385.2 | 2270.8 | 2139.0 |
| 15° | 3092.4 | 3075.1 | 3019.6 | 2922.5 | 2804.7 | 2724.9 | 2718.0 | 2607.1 | 2499.6 | 2367.9 | 2222.2 |
| 17.5° | 3193.0 | 3186.0 | 3120.2 | 3012.7 | 2898.3 | 2832.4 | 2825.5 | 2711.1 | 2603.6 | 2464.9 | 2308.9 |
| 20° | 3245.0 | 3245.0 | 3182.6 | 3064.7 | 2960.7 | 2915.6 | 2905.2 | 2797.7 | 2693.7 | 2562.0 | 2399.1 |
| 22.5° | 3255.4 | 3265.8 | 3217.2 | 3089.0 | 3012.7 | 2974.6 | 2967.6 | 2874.0 | 2773.5 | 2652.1 | 2499.6 |
| 25° | 3276.2 | 3276.2 | 3251.9 | 3113.2 | 3057.8 | 3047.4 | 3043.9 | 2960.7 | 2870.5 | 2749.2 | 2600.1 |
| 27.5° | 3300.4 | 3300.4 | 3283.1 | 3147.9 | 3127.1 | 3123.6 | 3120.2 | 3082.0 | 3009.2 | 2867.1 | 2718.0 |
| 30° | 3362.8 | 3366.3 | 3352.4 | 3217.2 | 3203.4 | 3241.5 | 3248.4 | 3227.6 | 3137.5 | 2960.7 | 2839.3 |
| 32.5° | 3518.8 | 3487.6 | 3449.5 | 3265.8 | 3290.0 | 3338.6 | 3342.0 | 3300.4 | 3203.4 | 3061.2 | 2985.0 |
| 35° | 3910.6 | 3726.9 | 3553.5 | 3307.4 | 3317.8 | 3366.3 | 3373.2 | 3369.8 | 3310.8 | 3189.5 | 3151.4 |
| 37.5° | 4274.6 | 4014.6 | 3768.5 | 3404.4 | 3369.8 | 3421.8 | 3435.6 | 3494.6 | 3449.5 | 3366.3 | 3376.7 |
| 40° | 4486.1 | 4385.6 | 4212.2 | 3671.4 | 3473.8 | 3553.5 | 3567.4 | 3657.5 | 3640.2 | 3605.5 | 3671.4 |
| 42.5° | 5137.9 | 5144.8 | 4957.6 | 4070.1 | 3664.5 | 3792.7 | 3810.1 | 3882.9 | 3907.1 | 3924.5 | 4083.9 |
| 45° | 5893.6 | 5917.9 | 5872.8 | 4787.7 | 4025.0 | 4066.6 | 4090.9 | 4187.9 | 4278.1 | 4389.0 | 4680.2 |
| 47.5° | 6801.9 | 6781.1 | 6614.7 | 5664.8 | 4652.5 | 4420.2 | 4437.6 | 4624.8 | 4780.8 | 5023.5 | 5439.5 |
| 50° | 7606.3 | 7658.3 | 7342.8 | 6483.0 | 5536.5 | 4978.4 | 4961.1 | 5144.8 | 5425.6 | 5765.4 | 6288.9 |
| 52.5° | 8417.5 | 8341.2 | 7914.8 | 7294.2 | 6583.5 | 5737.6 | 5685.6 | 5786.2 | 6181.4 | 6583.5 | 7120.9 |
| 55° | 8632.4 | 8639.4 | 8493.8 | 8181.8 | 7457.2 | 6659.8 | 6573.1 | 6566.2 | 7058.5 | 7332.4 | 7994.5 |
| 57.5° | 9055.4 | 9072.7 | 9107.4 | 9169.8 | 8826.6 | 7582.0 | 7491.8 | 7394.8 | 7873.2 | 8032.7 | 8871.7 |
| 60° | 9485.3 | 9506.1 | 9717.6 | 10053.8 | 9825.0 | 8577.0 | 8479.9 | 8251.1 | 8518.0 | 8733.0 | 9793.8 |
| 62.5° | 9429.8 | 9575.4 | 10189.1 | 10858.2 | 10830.4 | 9669.0 | 9547.7 | 8996.5 | 9166.3 | 9353.5 | 10639.7 |
| 65° | 8514.6 | 8670.6 | 10050.4 | 11080.0 | 11839.3 | 10747.2 | 10549.6 | 9766.1 | 9776.5 | 10001.8 | 11454.5 |
| 67.5° | 7696.4 | 7866.3 | 9183.7 | 10986.4 | 12504.9 | 11714.5 | 11509.9 | 10539.2 | 10376.3 | 10750.7 | 11891.3 |
| 70° | 7224.9 | 7394.8 | 8493.8 | 10695.2 | 12692.1 | 12785.7 | 12608.9 | 11423.3 | 11090.4 | 11433.7 | 11402.4 |
| 72.5° | 5654.4 | 5921.4 | 7613.2 | 10140.5 | 12893.2 | 13933.2 | 13794.6 | 12543.0 | 11697.1 | 10719.5 | 8681.0 |
| 75° | 2253.4 | 2499.6 | 4753.0 | 8161.0 | 12640.1 | 14921.3 | 14813.8 | 13045.7 | 10827.0 | 7654.8 | 4444.5 |
| 77.5° | 679.5 | 728.0 | 1320.9 | 4035.4 | 9266.9 | 13229.5 | 13194.8 | 10969.1 | 7661.7 | 3553.5 | 1213.4 |
| 80° | 225.3 | 249.6 | 405.6 | 1112.9 | 4229.5 | 8265.0 | 8421.0 | 6989.2 | 3480.7 | 814.7 | 246.1 |
| 82.5° | 93.6 | 104.0 | 204.5 | 447.2 | 1497.7 | 3560.4 | 3508.4 | 3130.6 | 1213.4 | 506.2 | 90.1 |
| 85° | 24.3 | 31.2 | 93.6 | 256.5 | 547.8 | 1227.3 | 1289.7 | 1050.5 | 686.4 | 419.5 | 27.7 |
| 87.5° | 0.0 | 0.0 | 45.1 | 104.0 | 246.1 | 371.0 | 388.3 | 318.9 | 388.3 | 315.5 | 13.9 |
| 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: P400188

CATALOG NUMBER: ARCH-L-PA3-240-830-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2045.4 | 2045.4 | 2045.4 | 2045.4 | 2045.4 | 2045.4 | 2045.4 | 2045.4 | 2045.4 | 2045.4 | 2045.4 |
| 2.5° | 2038.5 | 2021.2 | 1990.0 | 1969.2 | 1941.4 | 1934.5 | 1920.6 | 1903.3 | 1899.8 | 1882.5 | 1886.0 |
| 5° | 2003.8 | 1976.1 | 1920.6 | 1882.5 | 1837.4 | 1823.6 | 1799.3 | 1782.0 | 1768.1 | 1743.8 | 1747.3 |
| 7.5° | 1996.9 | 1955.3 | 1879.0 | 1806.2 | 1733.4 | 1681.4 | 1608.6 | 1549.7 | 1501.1 | 1449.1 | 1459.5 |
| 10° | 2021.2 | 1969.2 | 1861.7 | 1761.2 | 1629.4 | 1463.0 | 1272.3 | 1147.5 | 1085.1 | 1022.7 | 1029.7 |
| 12.5° | 2069.7 | 2007.3 | 1868.6 | 1716.1 | 1449.1 | 1164.9 | 901.4 | 731.5 | 686.4 | 658.7 | 662.2 |
| 15° | 2142.5 | 2066.2 | 1889.4 | 1629.4 | 1206.5 | 842.4 | 599.8 | 527.0 | 544.3 | 554.7 | 554.7 |
| 17.5° | 2218.8 | 2132.1 | 1906.8 | 1473.4 | 932.6 | 589.4 | 488.8 | 481.9 | 506.2 | 530.4 | 530.4 |
| 20° | 2312.4 | 2201.4 | 1910.2 | 1275.8 | 672.6 | 478.4 | 461.1 | 461.1 | 478.4 | 506.2 | 506.2 |
| 22.5° | 2402.5 | 2277.7 | 1879.0 | 1050.5 | 513.1 | 443.8 | 443.8 | 443.8 | 454.2 | 481.9 | 485.4 |
| 25° | 2510.0 | 2371.3 | 1813.2 | 811.2 | 440.3 | 423.0 | 423.0 | 426.4 | 433.4 | 457.6 | 461.1 |
| 27.5° | 2624.4 | 2468.4 | 1702.2 | 592.8 | 402.2 | 398.7 | 402.2 | 405.6 | 409.1 | 433.4 | 440.3 |
| 30° | 2756.1 | 2575.9 | 1560.1 | 443.8 | 367.5 | 367.5 | 377.9 | 384.8 | 384.8 | 405.6 | 412.6 |
| 32.5° | 2908.7 | 2718.0 | 1390.2 | 367.5 | 332.8 | 329.4 | 346.7 | 357.1 | 357.1 | 374.4 | 381.4 |
| 35° | 3099.4 | 2863.6 | 1185.7 | 325.9 | 305.1 | 298.1 | 305.1 | 322.4 | 329.4 | 343.2 | 346.7 |
| 37.5° | 3352.4 | 3037.0 | 967.2 | 301.6 | 284.3 | 270.4 | 270.4 | 273.9 | 287.7 | 301.6 | 305.1 |
| 40° | 3674.9 | 3227.6 | 752.3 | 284.3 | 263.5 | 249.6 | 239.2 | 235.7 | 232.3 | 242.7 | 249.6 |
| 42.5° | 4080.5 | 3442.6 | 561.6 | 266.9 | 246.1 | 225.3 | 211.5 | 197.6 | 180.3 | 176.8 | 180.3 |
| 45° | 4600.5 | 3706.1 | 416.0 | 253.1 | 235.7 | 204.5 | 180.3 | 156.0 | 124.8 | 114.4 | 117.9 |
| 47.5° | 5214.1 | 3979.9 | 325.9 | 239.2 | 228.8 | 180.3 | 149.1 | 107.5 | 76.3 | 69.3 | 72.8 |
| 50° | 5865.9 | 4243.4 | 277.3 | 221.9 | 214.9 | 156.0 | 107.5 | 65.9 | 45.1 | 45.1 | 48.5 |
| 52.5° | 6420.6 | 4392.5 | 253.1 | 208.0 | 194.1 | 128.3 | 69.3 | 38.1 | 27.7 | 27.7 | 31.2 |
| 55° | 6958.0 | 4472.2 | 235.7 | 194.1 | 166.4 | 90.1 | 38.1 | 24.3 | 17.3 | 17.3 | 17.3 |
| 57.5° | 7512.7 | 4506.9 | 214.9 | 176.8 | 131.7 | 55.5 | 20.8 | 13.9 | 10.4 | 10.4 | 10.4 |
| 60° | 8004.9 | 4441.0 | 183.7 | 145.6 | 86.7 | 27.7 | 10.4 | 10.4 | 6.9 | 3.5 | 3.5 |
| 62.5° | 8417.5 | 4316.2 | 128.3 | 104.0 | 52.0 | 13.9 | 6.9 | 3.5 | 0.0 | 0.0 | 0.0 |
| 65° | 8670.6 | 4115.1 | 83.2 | 69.3 | 31.2 | 10.4 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 8597.8 | 3737.3 | 52.0 | 45.1 | 13.9 | 6.9 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 7758.8 | 3064.7 | 38.1 | 27.7 | 10.4 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 5592.0 | 2073.2 | 27.7 | 17.3 | 6.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 2690.3 | 738.4 | 17.3 | 13.9 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 658.7 | 162.9 | 10.4 | 6.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 145.6 | 31.2 | 6.9 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 48.5 | 13.9 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 17.3 | 6.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 10.4 | 3.5 | 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)