

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: LUMARK

Report Number: P381187

Luminaire Tested: **PRV-XL-PA4B-730-U-T2R-HSS**

Issue Date: 1/15/2020

Test Information

Test Method: LM-79-08
Report Number: P381187
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)
Test Lab: INNOVATIONS CENTER
Issue Date: 1/15/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: PRV-XL-PA4B-730-U-T2R-HSS
Description: PREVAIL AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 3000K, 970mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28545 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Luminous Opening: Rectangular (W 1.42' x L: 1.79' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G4

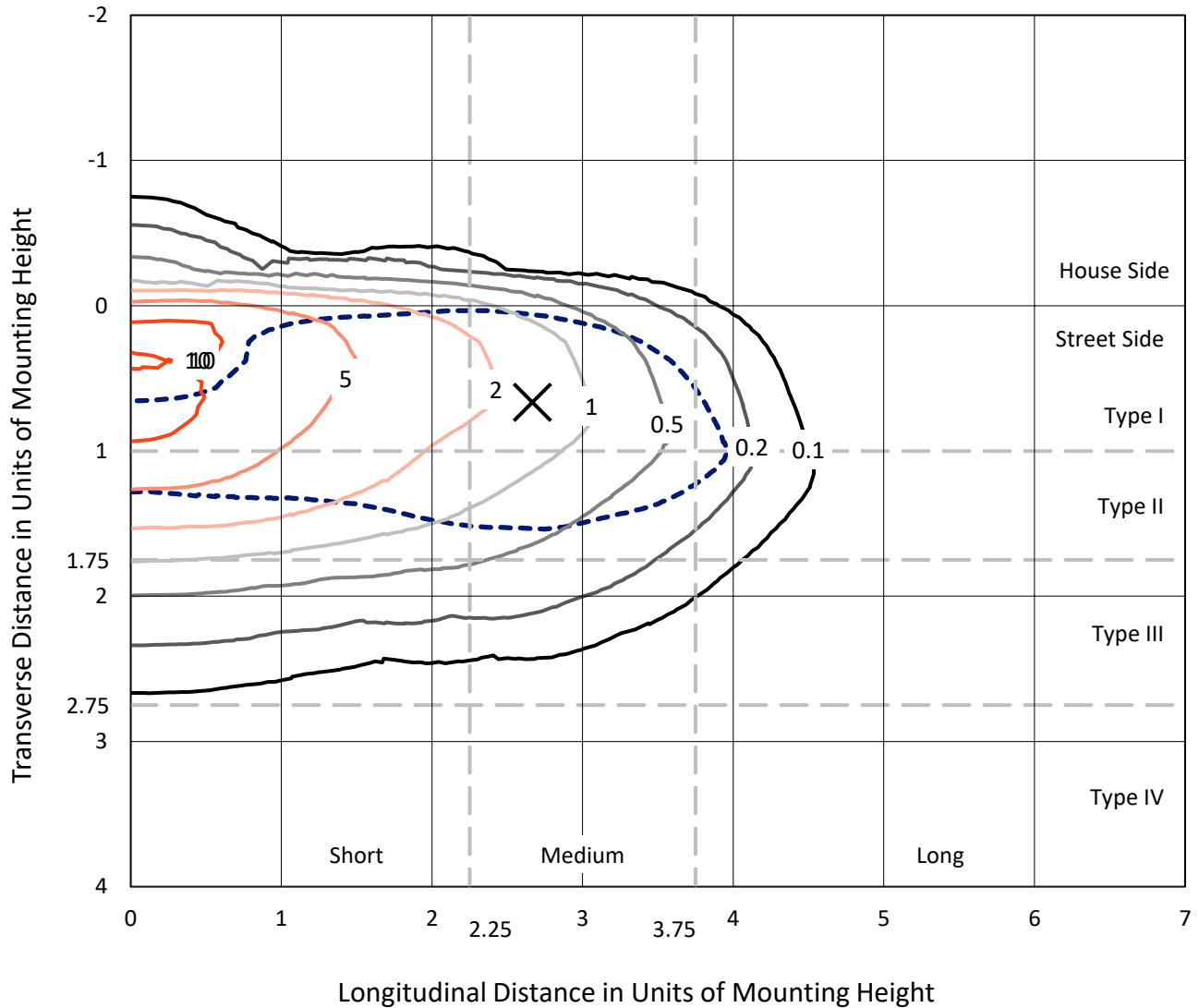
Input Watts (W): 303
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P381187
 CATALOG NUMBER: PRV-XL-PA4B-730-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

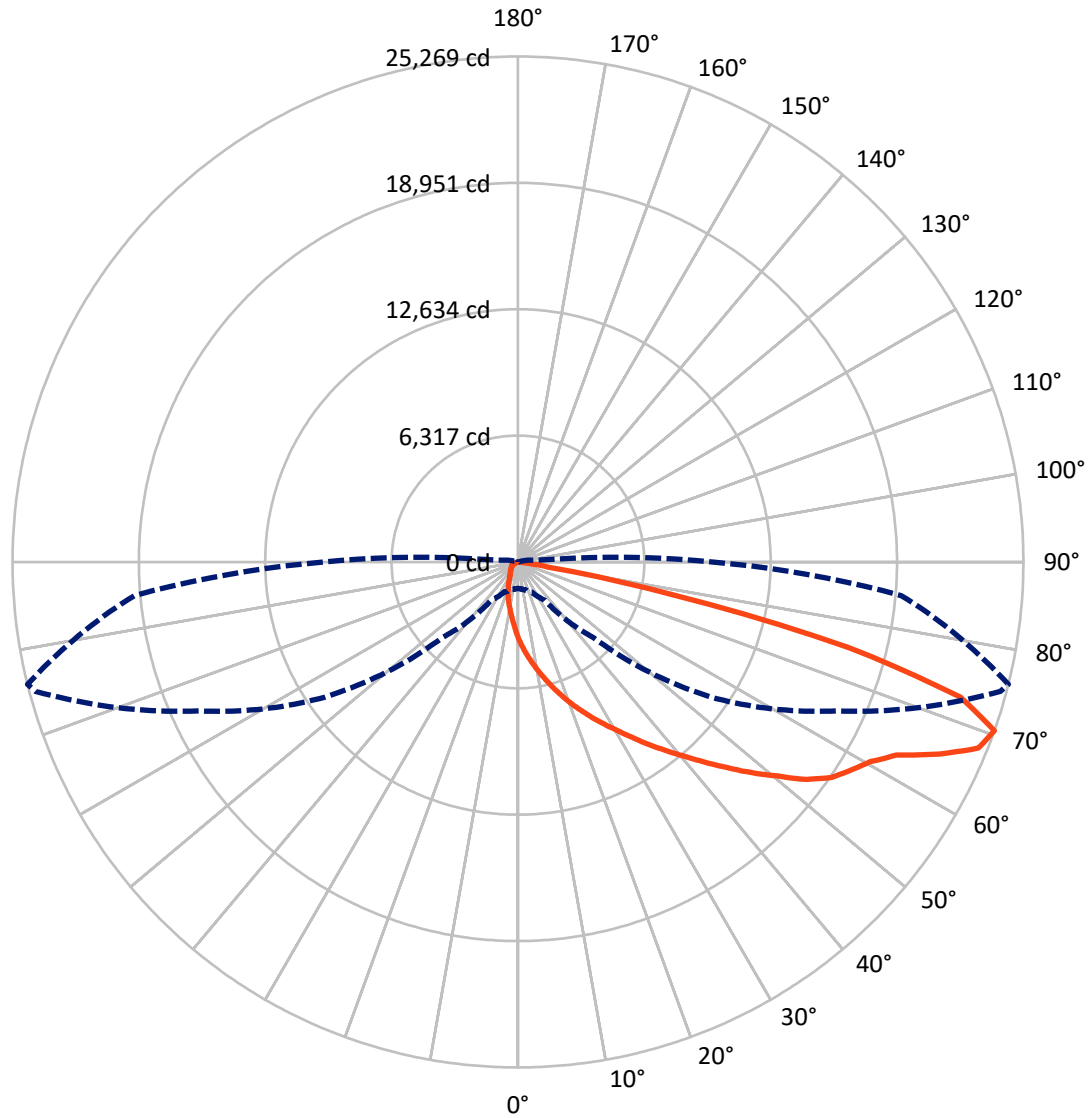
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.7 fc
 Type II - Medium - N/A

REPORT NUMBER: P381187
CATALOG NUMBER: PRV-XL-PA4B-730-U-T2R-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P381187
 CATALOG NUMBER: PRV-XL-PA4B-730-U-T2R-HSS

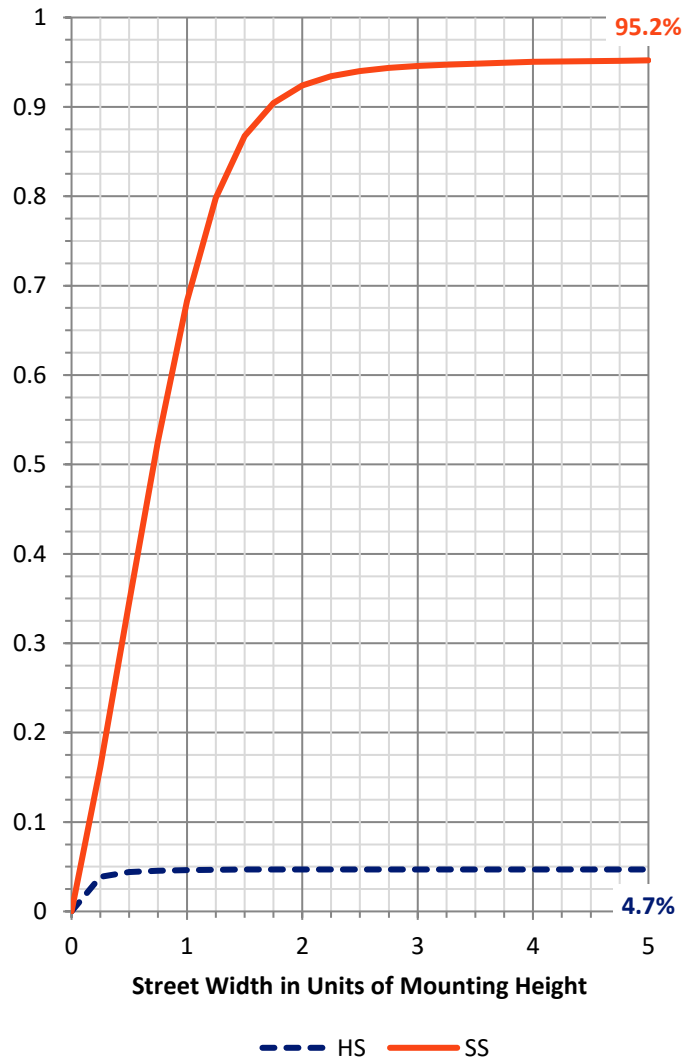
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1346.3 | 0.0 | 1346.3 |
| | % Fixture | 4.7 | 0.0 | 4.7 |
| Street Side | Lumens | 27198.7 | 0.0 | 27198.7 |
| | % Fixture | 95.3 | 0.0 | 95.3 |
| Total | Lumens | 28545.0 | 0.0 | 28545.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 359.9 | 1.3 |
| 10°-20° | 1161.8 | 4.1 |
| 20°-30° | 2163.6 | 7.6 |
| 30°-40° | 3827.0 | 13.4 |
| 40°-50° | 5852.4 | 20.5 |
| 50°-60° | 6635.2 | 23.2 |
| 60°-70° | 5688.0 | 19.9 |
| 70°-80° | 2754.9 | 9.7 |
| 80°-90° | 102.2 | 0.4 |
| 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° | 28545.0 | 100.0 |
| 0°-180° | 28545.0 | 100.0 |

Coefficient of Utilization

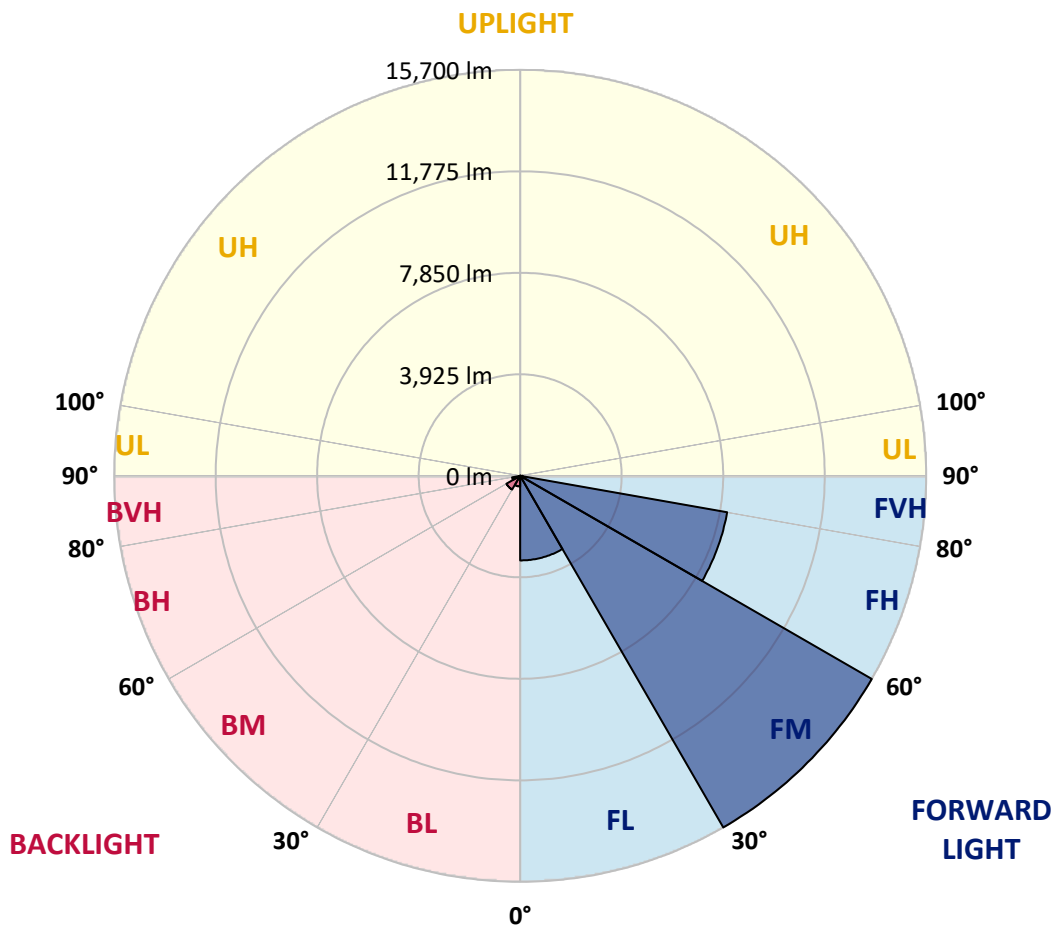


REPORT NUMBER: P381187
 CATALOG NUMBER: PRV-XL-PA4B-730-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 3272.4 | 11.5 | | | |
| FM (30°-60°) | 15700.0 | 55.0 | | | |
| FH (60°-80°) | 8125.9 | 28.5 | | | G4/12000 |
| FVH (80°-90°) | 100.4 | 0.4 | | | G2/225 |
| BL (0°-30°) | 413.0 | 1.4 | B1/500 | | |
| BM (30°-60°) | 614.5 | 2.2 | B1/1000 | | |
| BH (60°-80°) | 317.0 | 1.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.8 | 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 II Medium





REPORT NUMBER: P381187

CATALOG NUMBER: PRV-XL-PA4B-730-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3820.9 | 3820.9 | 3820.9 | 3820.9 | 3820.9 | 3820.9 | 3820.9 | 3820.9 | 3820.9 | 3820.9 | 3820.9 |
| 2.5° | 5222.9 | 5194.4 | 5165.9 | 5056.6 | 4956.8 | 4866.5 | 4695.4 | 4472.0 | 4272.4 | 4229.6 | 3996.8 |
| 5° | 6135.4 | 6102.1 | 6059.3 | 5950.0 | 5821.7 | 5669.6 | 5417.7 | 5075.6 | 4723.9 | 4647.8 | 4215.4 |
| 7.5° | 6753.2 | 6724.6 | 6662.9 | 6610.6 | 6482.3 | 6335.0 | 6054.6 | 5655.4 | 5170.6 | 5075.6 | 4467.3 |
| 10° | 7176.1 | 7157.1 | 7147.6 | 7104.8 | 7009.8 | 6891.0 | 6610.6 | 6192.4 | 5622.1 | 5512.8 | 4733.4 |
| 12.5° | 7328.2 | 7328.2 | 7375.7 | 7447.0 | 7461.3 | 7423.3 | 7166.6 | 6748.4 | 6097.3 | 5983.3 | 5047.1 |
| 15° | 7123.9 | 7147.6 | 7252.2 | 7480.3 | 7717.9 | 7874.7 | 7713.1 | 7323.5 | 6620.1 | 6496.5 | 5417.7 |
| 17.5° | 7066.8 | 7090.6 | 7161.9 | 7361.5 | 7679.9 | 8098.1 | 8178.9 | 7879.5 | 7114.3 | 7009.8 | 5797.9 |
| 20° | 7228.4 | 7252.2 | 7313.9 | 7485.0 | 7727.4 | 8150.4 | 8487.8 | 8416.5 | 7637.1 | 7527.8 | 6182.9 |
| 22.5° | 7613.3 | 7627.6 | 7627.6 | 7760.7 | 7974.5 | 8288.2 | 8682.6 | 8925.0 | 8174.1 | 8055.3 | 6563.1 |
| 25° | 8440.3 | 8411.8 | 8297.7 | 8231.2 | 8369.0 | 8625.6 | 8929.8 | 9371.7 | 8772.9 | 8611.4 | 6971.8 |
| 27.5° | 9523.8 | 9618.9 | 9343.2 | 9024.8 | 8920.3 | 9067.6 | 9276.7 | 9766.2 | 9352.7 | 9181.6 | 7342.5 |
| 30° | 10992.3 | 10954.3 | 10593.1 | 10136.9 | 9685.4 | 9633.1 | 9704.4 | 10103.6 | 9932.5 | 9770.9 | 7755.9 |
| 32.5° | 12199.4 | 12270.7 | 11890.5 | 11334.5 | 10659.6 | 10341.2 | 10265.2 | 10507.6 | 10550.3 | 10445.8 | 8245.4 |
| 35° | 13439.8 | 13515.8 | 13145.1 | 12527.3 | 11724.2 | 11191.9 | 10973.3 | 11006.6 | 11315.5 | 11182.4 | 8758.7 |
| 37.5° | 14551.9 | 14618.4 | 14252.5 | 13620.4 | 12817.2 | 12166.2 | 11852.5 | 11595.9 | 12056.8 | 11938.0 | 9300.5 |
| 40° | 15397.8 | 15407.3 | 15160.2 | 14594.6 | 13834.2 | 13159.4 | 12803.0 | 12299.2 | 12841.0 | 12760.2 | 9866.0 |
| 42.5° | 15996.6 | 16015.6 | 15835.0 | 15350.3 | 14646.9 | 14019.6 | 13729.7 | 13130.9 | 13743.9 | 13672.7 | 10521.8 |
| 45° | 16277.0 | 16310.2 | 16291.2 | 15844.5 | 15260.0 | 14718.2 | 14623.1 | 14014.8 | 14732.4 | 14665.9 | 11277.5 |
| 47.5° | 16010.8 | 16010.8 | 16253.2 | 16191.4 | 15654.4 | 15293.2 | 15402.5 | 14936.8 | 15806.5 | 15744.7 | 12047.3 |
| 50° | 14903.5 | 14917.8 | 15412.0 | 16120.1 | 15806.5 | 15725.7 | 16067.9 | 15839.8 | 16780.7 | 16818.8 | 12969.3 |
| 52.5° | 11995.1 | 11971.3 | 13639.4 | 14998.6 | 15701.9 | 15920.5 | 16680.9 | 16761.7 | 17949.8 | 18063.9 | 13886.5 |
| 55° | 8963.0 | 8948.8 | 10545.6 | 13012.1 | 14970.1 | 15820.7 | 17023.1 | 17583.9 | 18947.8 | 19019.1 | 14570.9 |
| 57.5° | 7095.3 | 7057.3 | 7936.5 | 10488.6 | 13316.2 | 15374.0 | 17037.4 | 17740.7 | 19503.9 | 19627.4 | 15236.2 |
| 60° | 5455.8 | 5422.5 | 6078.3 | 7803.4 | 10973.3 | 14185.9 | 16628.7 | 17750.2 | 20040.9 | 20259.5 | 16129.7 |
| 62.5° | 3901.7 | 3939.7 | 4443.5 | 5598.3 | 8440.3 | 12508.3 | 16096.4 | 17883.3 | 20996.1 | 21243.2 | 17398.5 |
| 65° | 2632.8 | 2613.8 | 3032.0 | 3811.4 | 6002.3 | 10250.9 | 15279.0 | 18163.7 | 22716.5 | 23149.0 | 18919.3 |
| 67.5° | 1829.7 | 1843.9 | 2034.0 | 2480.8 | 3811.4 | 7870.0 | 13919.8 | 18320.5 | 24493.9 | 24831.3 | 19983.9 |
| 70° | 1321.2 | 1340.2 | 1444.7 | 1668.1 | 2328.7 | 5336.9 | 11766.9 | 17602.9 | 24973.9 | 25268.5 | 19242.5 |
| 72.5° | 869.7 | 907.7 | 1064.5 | 1183.3 | 1487.5 | 3340.9 | 8668.4 | 15164.9 | 22906.6 | 23125.2 | 16143.9 |
| 75° | 470.5 | 480.0 | 684.3 | 883.9 | 1059.8 | 2081.6 | 5170.6 | 10227.2 | 17137.2 | 17065.9 | 10645.4 |
| 77.5° | 365.9 | 380.2 | 423.0 | 632.1 | 712.9 | 1145.3 | 2043.5 | 4619.3 | 8117.1 | 7898.5 | 3630.8 |
| 80° | 223.4 | 232.9 | 294.6 | 375.4 | 499.0 | 665.3 | 598.8 | 1254.6 | 1649.1 | 1544.5 | 532.3 |
| 82.5° | 133.1 | 142.6 | 175.8 | 313.7 | 394.4 | 313.7 | 209.1 | 304.2 | 308.9 | 304.2 | 133.1 |
| 85° | 23.8 | 23.8 | 123.6 | 218.6 | 209.1 | 90.3 | 123.6 | 99.8 | 90.3 | 95.0 | 28.5 |
| 87.5° | 0.0 | 0.0 | 47.5 | 66.5 | 95.0 | 33.3 | 47.5 | 23.8 | 23.8 | 23.8 | 14.3 |
| 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: P381187

CATALOG NUMBER: PRV-XL-PA4B-730-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3820.9 | 3820.9 | 3820.9 | 3820.9 | 3820.9 | 3820.9 | 3820.9 | 3820.9 | 3820.9 | 3820.9 | 3820.9 |
| 2.5° | 3854.2 | 3692.6 | 3359.9 | 3070.1 | 2780.2 | 2566.3 | 2404.7 | 2238.4 | 2181.4 | 2110.1 | 2072.0 |
| 5° | 3920.7 | 3602.3 | 2941.7 | 2414.2 | 1967.5 | 1625.3 | 1406.7 | 1273.6 | 1188.1 | 1126.3 | 1112.1 |
| 7.5° | 4020.5 | 3531.0 | 2604.3 | 1891.5 | 1402.0 | 1059.8 | 879.2 | 788.9 | 741.4 | 712.9 | 703.4 |
| 10° | 4139.3 | 3469.3 | 2271.6 | 1473.2 | 988.5 | 746.1 | 646.3 | 608.3 | 589.3 | 579.8 | 575.0 |
| 12.5° | 4305.7 | 3445.5 | 1991.3 | 1135.8 | 746.1 | 613.1 | 560.8 | 537.0 | 522.8 | 508.5 | 503.8 |
| 15° | 4524.3 | 3455.0 | 1734.6 | 879.2 | 617.8 | 546.5 | 503.8 | 480.0 | 461.0 | 446.7 | 446.7 |
| 17.5° | 4752.4 | 3469.3 | 1482.7 | 712.9 | 560.8 | 499.0 | 451.5 | 418.2 | 404.0 | 389.7 | 384.9 |
| 20° | 4966.3 | 3464.5 | 1240.4 | 608.3 | 508.5 | 446.7 | 399.2 | 365.9 | 342.2 | 327.9 | 327.9 |
| 22.5° | 5170.6 | 3436.0 | 1012.3 | 546.5 | 465.7 | 394.4 | 342.2 | 308.9 | 289.9 | 275.6 | 275.6 |
| 25° | 5389.2 | 3379.0 | 826.9 | 499.0 | 413.5 | 346.9 | 294.6 | 261.4 | 247.1 | 232.9 | 232.9 |
| 27.5° | 5560.3 | 3283.9 | 674.8 | 456.2 | 365.9 | 299.4 | 251.9 | 223.4 | 209.1 | 199.6 | 199.6 |
| 30° | 5745.7 | 3146.1 | 560.8 | 408.7 | 318.4 | 256.6 | 213.9 | 190.1 | 175.8 | 171.1 | 171.1 |
| 32.5° | 5950.0 | 2994.0 | 480.0 | 361.2 | 270.9 | 218.6 | 180.6 | 166.3 | 152.1 | 147.3 | 147.3 |
| 35° | 6187.6 | 2860.9 | 432.5 | 313.7 | 237.6 | 185.3 | 156.8 | 142.6 | 133.1 | 133.1 | 133.1 |
| 37.5° | 6458.5 | 2723.1 | 389.7 | 275.6 | 204.4 | 156.8 | 133.1 | 128.3 | 123.6 | 118.8 | 118.8 |
| 40° | 6753.2 | 2575.8 | 351.7 | 242.4 | 175.8 | 133.1 | 114.1 | 114.1 | 109.3 | 109.3 | 109.3 |
| 42.5° | 7085.8 | 2447.5 | 318.4 | 213.9 | 152.1 | 114.1 | 99.8 | 99.8 | 95.0 | 95.0 | 95.0 |
| 45° | 7447.0 | 2328.7 | 289.9 | 190.1 | 133.1 | 99.8 | 90.3 | 85.5 | 80.8 | 80.8 | 80.8 |
| 47.5° | 7874.7 | 2262.1 | 266.1 | 166.3 | 114.1 | 85.5 | 76.0 | 71.3 | 66.5 | 61.8 | 61.8 |
| 50° | 8421.3 | 2290.7 | 242.4 | 137.8 | 99.8 | 71.3 | 61.8 | 57.0 | 52.3 | 47.5 | 47.5 |
| 52.5° | 8853.7 | 2276.4 | 209.1 | 118.8 | 80.8 | 57.0 | 47.5 | 42.8 | 38.0 | 33.3 | 33.3 |
| 55° | 9167.4 | 2219.4 | 180.6 | 99.8 | 61.8 | 47.5 | 38.0 | 28.5 | 23.8 | 23.8 | 23.8 |
| 57.5° | 9476.3 | 2162.3 | 152.1 | 80.8 | 47.5 | 33.3 | 23.8 | 19.0 | 19.0 | 19.0 | 19.0 |
| 60° | 9956.3 | 2081.6 | 133.1 | 66.5 | 38.0 | 23.8 | 14.3 | 14.3 | 9.5 | 9.5 | 9.5 |
| 62.5° | 10540.8 | 1981.8 | 109.3 | 57.0 | 28.5 | 19.0 | 9.5 | 9.5 | 0.0 | 0.0 | 0.0 |
| 65° | 11182.4 | 1805.9 | 90.3 | 42.8 | 23.8 | 14.3 | 9.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 11035.1 | 1449.5 | 76.0 | 28.5 | 19.0 | 9.5 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 9761.4 | 979.0 | 61.8 | 23.8 | 14.3 | 9.5 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 7646.6 | 579.8 | 42.8 | 19.0 | 9.5 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 4895.0 | 289.9 | 28.5 | 14.3 | 9.5 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 1639.6 | 142.6 | 19.0 | 9.5 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 232.9 | 47.5 | 9.5 | 4.8 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 52.3 | 19.0 | 4.8 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 19.0 | 9.5 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 9.5 | 4.8 | 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)