

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: P236853

Luminaire Tested: **ARCH-L-AF72-200-D-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236853
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-200-D-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 860mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25153.3 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B3 - U0 - G3

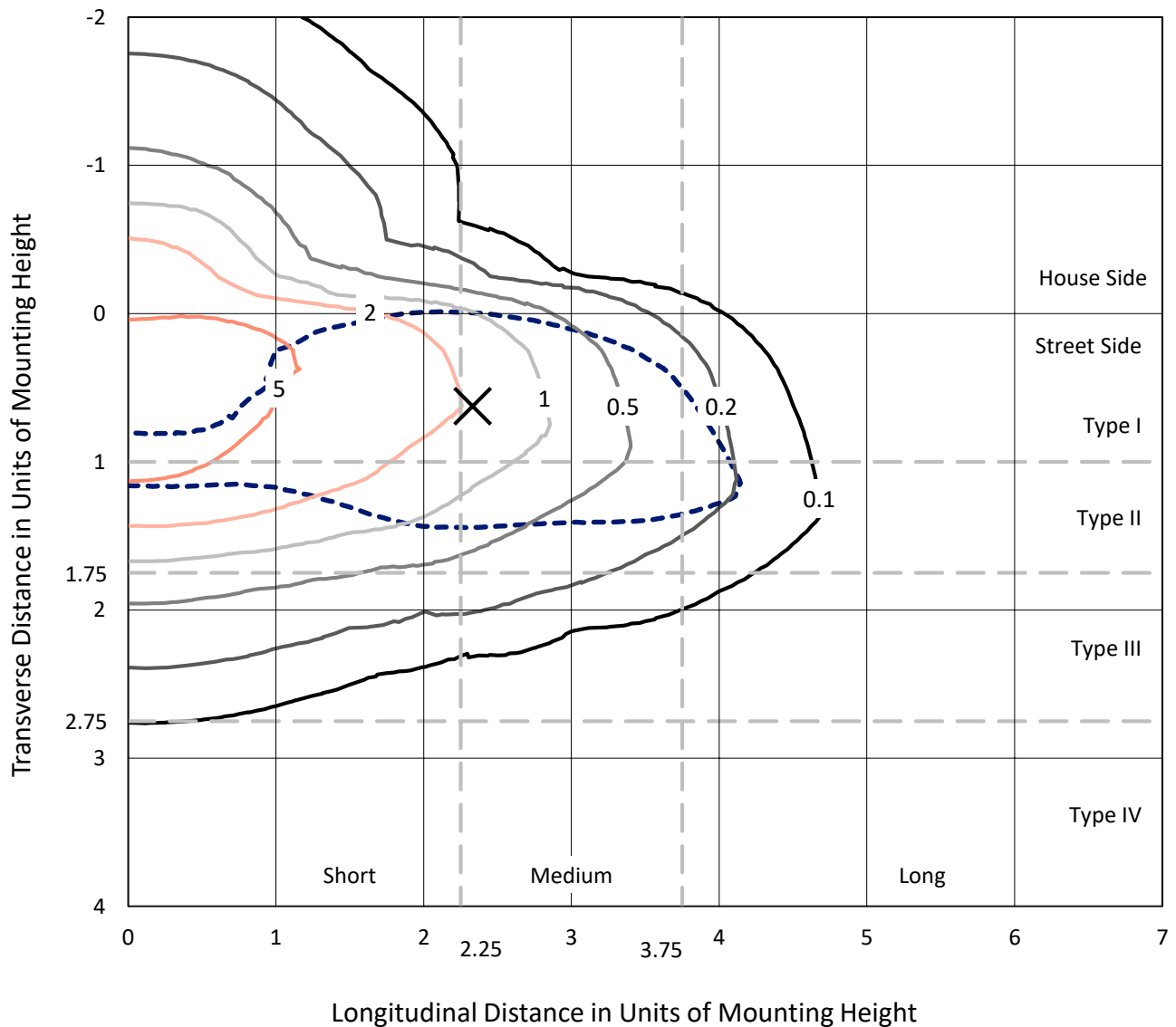
Input Watts (W): 201
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

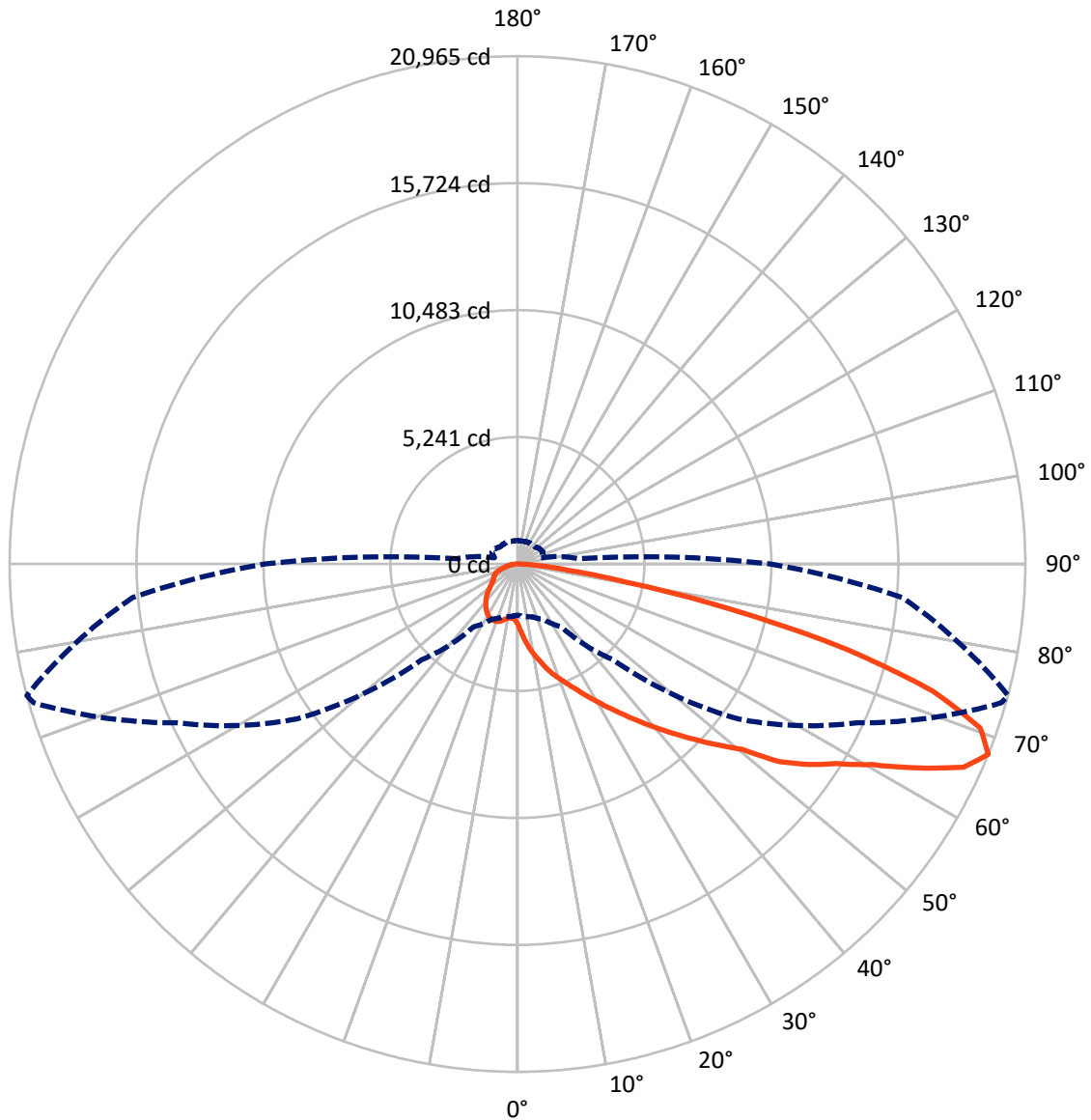


Based on 25 foot mounting height. Maximum calculated value = 8.3 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4295.3 | 0.0 | 4295.3 |
| | % Fixture | 17.1 | 0.0 | 17.1 |
| Street Side | Lumens | 20858.1 | 0.0 | 20858.1 |
| | % Fixture | 82.9 | 0.0 | 82.9 |
| Total | Lumens | 25153.3 | 0.0 | 25153.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 292.8 | 1.2 |
| 10°-20° | 1058.2 | 4.2 |
| 20°-30° | 1930.0 | 7.7 |
| 30°-40° | 3168.0 | 12.6 |
| 40°-50° | 4581.3 | 18.2 |
| 50°-60° | 5399.1 | 21.5 |
| 60°-70° | 5246.6 | 20.9 |
| 70°-80° | 2916.4 | 11.6 |
| 80°-90° | 560.8 | 2.2 |
| 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° | 25153.3 | 100.0 |
| 0°-180° | 25153.3 | 100.0 |



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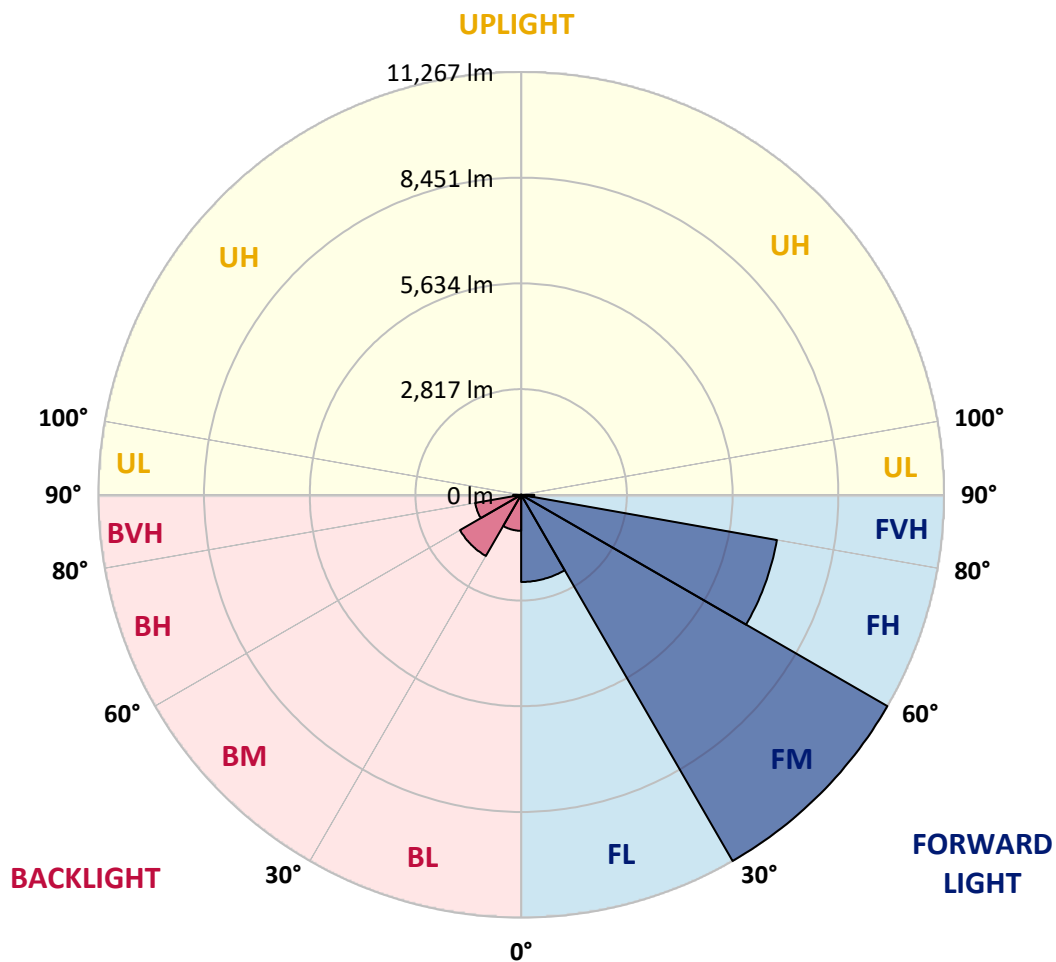
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2322.3 | 9.2 | | | |
| FM (30°-60°) | 11267.4 | 44.8 | | | |
| FH (60°-80°) | 6919.4 | 27.5 | | | G3/7500 |
| FVH (80°-90°) | 349.0 | 1.4 | | | G3/500 |
| BL (0°-30°) | 958.7 | 3.8 | B2/1000 | | |
| BM (30°-60°) | 1881.1 | 7.5 | B2/2500 | | |
| BH (60°-80°) | 1243.7 | 4.9 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 211.8 | 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° | 74° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2492.4 | 2492.4 | 2492.4 | 2492.4 | 2492.4 | 2492.4 | 2492.4 | 2492.4 | 2492.4 | 2492.4 | 2492.4 |
| 2.5° | 3533.6 | 3544.1 | 3523.0 | 3475.8 | 3407.4 | 3281.2 | 3170.7 | 2976.2 | 2802.7 | 2781.6 | 2597.6 |
| 5° | 4154.1 | 4164.6 | 4138.3 | 4080.4 | 4006.9 | 3870.1 | 3717.6 | 3465.2 | 3186.6 | 3134.0 | 2744.9 |
| 7.5° | 4580.1 | 4585.3 | 4553.7 | 4495.9 | 4438.1 | 4301.3 | 4148.8 | 3864.9 | 3523.0 | 3481.0 | 2934.1 |
| 10° | 4942.8 | 4953.3 | 4911.3 | 4874.5 | 4811.3 | 4674.7 | 4516.9 | 4217.2 | 3864.9 | 3807.0 | 3128.7 |
| 12.5° | 5279.3 | 5289.9 | 5263.6 | 5232.1 | 5211.0 | 5084.8 | 4911.3 | 4553.7 | 4175.1 | 4112.1 | 3360.1 |
| 15° | 5505.5 | 5516.0 | 5521.3 | 5563.3 | 5589.6 | 5500.2 | 5326.7 | 4937.6 | 4511.6 | 4453.8 | 3633.5 |
| 17.5° | 5442.4 | 5468.7 | 5547.6 | 5700.0 | 5863.0 | 5868.3 | 5726.3 | 5316.2 | 4843.0 | 4779.8 | 3912.2 |
| 20° | 5258.4 | 5279.3 | 5374.0 | 5605.4 | 5926.2 | 6110.2 | 6099.7 | 5700.0 | 5153.1 | 5084.8 | 4169.9 |
| 22.5° | 5410.8 | 5437.1 | 5437.1 | 5579.1 | 5894.5 | 6236.4 | 6373.1 | 6078.7 | 5463.4 | 5400.3 | 4427.5 |
| 25° | 6062.8 | 6078.7 | 5968.2 | 5910.4 | 6026.0 | 6341.6 | 6599.2 | 6488.8 | 5842.0 | 5768.4 | 4706.2 |
| 27.5° | 6972.5 | 6946.2 | 6809.6 | 6578.2 | 6452.0 | 6536.1 | 6799.0 | 6877.9 | 6278.5 | 6189.1 | 4995.4 |
| 30° | 7877.0 | 7861.2 | 7703.4 | 7393.2 | 7109.3 | 6930.5 | 7019.9 | 7224.9 | 6751.7 | 6646.5 | 5274.1 |
| 32.5° | 8723.6 | 8697.2 | 8523.7 | 8160.9 | 7840.2 | 7508.9 | 7335.4 | 7540.5 | 7256.5 | 7135.6 | 5584.4 |
| 35° | 9501.8 | 9433.4 | 9260.0 | 8881.4 | 8550.0 | 8234.5 | 7808.6 | 7840.2 | 7803.4 | 7677.1 | 5926.2 |
| 37.5° | 10132.8 | 10080.3 | 9890.9 | 9538.6 | 9186.3 | 8886.6 | 8439.7 | 8182.0 | 8392.3 | 8271.4 | 6320.5 |
| 40° | 10690.1 | 10632.3 | 10437.8 | 10085.5 | 9759.5 | 9475.5 | 9123.2 | 8597.4 | 9054.9 | 8918.1 | 6762.2 |
| 42.5° | 11110.9 | 11068.8 | 10911.0 | 10564.0 | 10248.5 | 9990.9 | 9817.3 | 9123.2 | 9743.7 | 9612.3 | 7246.0 |
| 45° | 11337.0 | 11294.9 | 11210.7 | 10932.1 | 10642.9 | 10443.0 | 10458.9 | 9748.9 | 10464.1 | 10353.7 | 7819.1 |
| 47.5° | 11058.3 | 11089.8 | 11163.5 | 11110.9 | 10932.1 | 10837.4 | 11032.0 | 10395.7 | 11268.6 | 11163.5 | 8439.7 |
| 50° | 10311.5 | 10343.2 | 10637.6 | 11000.4 | 11063.5 | 11179.2 | 11547.3 | 11142.4 | 12120.4 | 12036.3 | 9207.4 |
| 52.5° | 8476.5 | 8650.0 | 9465.0 | 10332.6 | 10926.9 | 11405.3 | 12120.4 | 12251.9 | 13555.9 | 13555.9 | 10564.0 |
| 55° | 6404.7 | 6557.1 | 7487.9 | 9002.3 | 10395.7 | 11426.4 | 12541.1 | 13003.9 | 14591.9 | 14613.0 | 11273.8 |
| 57.5° | 5189.9 | 5284.7 | 5742.1 | 7293.3 | 9280.9 | 11163.5 | 13040.7 | 13650.7 | 15454.2 | 15548.9 | 12188.8 |
| 60° | 4211.9 | 4264.5 | 4564.2 | 5642.2 | 7740.3 | 10453.5 | 13398.2 | 14576.1 | 16684.7 | 16816.2 | 13356.2 |
| 62.5° | 3386.4 | 3439.0 | 3638.7 | 4285.6 | 6073.4 | 9123.2 | 13335.1 | 15538.4 | 18325.2 | 18540.9 | 14886.3 |
| 65° | 2702.7 | 2760.6 | 2892.1 | 3291.8 | 4501.1 | 7472.0 | 12688.4 | 16032.6 | 20023.8 | 20234.1 | 15901.2 |
| 67.5° | 2108.6 | 2161.2 | 2250.6 | 2513.5 | 3170.7 | 5589.6 | 11158.1 | 15512.1 | 20786.2 | 20965.0 | 15953.7 |
| 70° | 1593.2 | 1619.5 | 1693.2 | 1861.5 | 2266.3 | 3712.4 | 8734.1 | 13766.4 | 20102.6 | 20265.6 | 14902.1 |
| 72.5° | 1235.7 | 1230.4 | 1272.6 | 1356.6 | 1582.7 | 2555.5 | 5789.4 | 11195.0 | 17773.2 | 17941.4 | 12714.7 |
| 75° | 1009.6 | 1004.3 | 1030.6 | 1056.9 | 1146.3 | 1714.3 | 3417.9 | 8429.1 | 14344.7 | 14023.9 | 9538.6 |
| 77.5° | 851.8 | 846.6 | 872.9 | 878.1 | 914.9 | 1183.1 | 1945.6 | 5547.6 | 9570.1 | 9018.0 | 5374.0 |
| 80° | 720.4 | 715.1 | 746.7 | 757.2 | 783.5 | 867.7 | 1120.0 | 3002.5 | 4806.1 | 4553.7 | 2566.1 |
| 82.5° | 541.7 | 562.6 | 620.5 | 646.8 | 678.3 | 641.5 | 694.1 | 1325.1 | 2229.5 | 2129.6 | 1114.8 |
| 85° | 262.9 | 310.3 | 468.0 | 520.6 | 557.4 | 404.9 | 473.2 | 625.7 | 1004.3 | 957.0 | 452.2 |
| 87.5° | 89.4 | 78.9 | 278.7 | 331.2 | 362.8 | 184.0 | 262.9 | 347.1 | 415.4 | 378.6 | 142.0 |
| 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: P236853

CATALOG NUMBER: ARCH-L-AF72-200-D-U-T2R

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2492.4 | 2492.4 | 2492.4 | 2492.4 | 2492.4 | 2492.4 | 2492.4 | 2492.4 | 2492.4 | 2492.4 | 2492.4 |
| 2.5° | 2518.7 | 2439.8 | 2324.1 | 2234.8 | 2176.9 | 2129.6 | 2108.6 | 2103.3 | 2092.9 | 2087.5 | 2087.5 |
| 5° | 2571.3 | 2429.3 | 2250.6 | 2155.9 | 2129.6 | 2108.6 | 2119.1 | 2124.4 | 2124.4 | 2124.4 | 2124.4 |
| 7.5° | 2650.2 | 2450.4 | 2234.8 | 2171.7 | 2166.4 | 2166.4 | 2198.0 | 2213.8 | 2224.3 | 2224.3 | 2224.3 |
| 10° | 2755.3 | 2487.2 | 2261.1 | 2208.4 | 2224.3 | 2234.8 | 2271.6 | 2292.6 | 2303.2 | 2308.4 | 2313.7 |
| 12.5° | 2897.3 | 2566.1 | 2313.7 | 2271.6 | 2292.6 | 2297.9 | 2324.1 | 2334.7 | 2345.2 | 2350.4 | 2350.4 |
| 15° | 3086.7 | 2681.8 | 2397.8 | 2345.2 | 2350.4 | 2345.2 | 2345.2 | 2334.7 | 2329.5 | 2329.5 | 2340.0 |
| 17.5° | 3281.2 | 2792.1 | 2471.4 | 2397.8 | 2376.7 | 2334.7 | 2303.2 | 2276.9 | 2261.1 | 2250.6 | 2255.8 |
| 20° | 3475.8 | 2892.1 | 2513.5 | 2408.3 | 2350.4 | 2282.1 | 2224.3 | 2187.5 | 2166.4 | 2145.4 | 2155.9 |
| 22.5° | 3670.3 | 2986.7 | 2529.2 | 2376.7 | 2292.6 | 2192.7 | 2129.6 | 2071.8 | 2024.4 | 1992.9 | 1998.1 |
| 25° | 3885.9 | 3091.9 | 2529.2 | 2340.0 | 2213.8 | 2108.6 | 2029.7 | 1935.1 | 1866.7 | 1840.4 | 1850.9 |
| 27.5° | 4101.5 | 3181.3 | 2503.0 | 2271.6 | 2124.4 | 2019.2 | 1903.5 | 1793.1 | 1751.0 | 1735.2 | 1740.6 |
| 30° | 4317.1 | 3249.6 | 2445.2 | 2187.5 | 2029.7 | 1914.0 | 1761.5 | 1688.0 | 1635.4 | 1593.2 | 1598.6 |
| 32.5° | 4532.7 | 3297.0 | 2366.3 | 2082.3 | 1929.8 | 1782.6 | 1656.4 | 1572.3 | 1477.6 | 1425.0 | 1430.3 |
| 35° | 4779.8 | 3333.8 | 2271.6 | 1977.2 | 1819.4 | 1666.9 | 1572.3 | 1435.5 | 1335.7 | 1293.5 | 1283.0 |
| 37.5° | 5037.5 | 3360.1 | 2171.7 | 1861.5 | 1708.9 | 1582.7 | 1488.1 | 1319.8 | 1225.2 | 1167.4 | 1162.1 |
| 40° | 5316.2 | 3370.6 | 2050.7 | 1740.6 | 1603.8 | 1530.1 | 1377.7 | 1251.5 | 1088.5 | 1051.7 | 1051.7 |
| 42.5° | 5647.4 | 3365.3 | 1929.8 | 1619.5 | 1488.1 | 1409.2 | 1298.8 | 1240.9 | 1099.0 | 1062.2 | 1041.2 |
| 45° | 6026.0 | 3365.3 | 1798.3 | 1477.6 | 1372.4 | 1256.7 | 1209.4 | 1172.6 | 1078.0 | 1093.7 | 1104.3 |
| 47.5° | 6457.3 | 3354.8 | 1640.6 | 1362.0 | 1277.8 | 1177.8 | 1151.5 | 1072.7 | 1035.9 | 1046.4 | 1056.9 |
| 50° | 7051.4 | 3370.6 | 1498.6 | 1267.2 | 1209.4 | 1125.2 | 1093.7 | 1051.7 | 1035.9 | 1041.2 | 1035.9 |
| 52.5° | 7877.0 | 3318.0 | 1362.0 | 1209.4 | 1156.9 | 1046.4 | 1046.4 | 1041.2 | 1046.4 | 1041.2 | 1041.2 |
| 55° | 8329.2 | 3202.3 | 1262.0 | 1177.8 | 1120.0 | 1009.6 | 1030.6 | 1041.2 | 1051.7 | 1046.4 | 1046.4 |
| 57.5° | 8970.7 | 3123.5 | 1183.1 | 1156.9 | 1099.0 | 999.1 | 1020.1 | 1041.2 | 1046.4 | 1041.2 | 1041.2 |
| 60° | 9728.0 | 3070.9 | 1130.6 | 1162.1 | 1083.2 | 999.1 | 1025.4 | 1041.2 | 1035.9 | 1030.6 | 1030.6 |
| 62.5° | 10606.1 | 3049.8 | 1093.7 | 1177.8 | 1067.4 | 1004.3 | 1025.4 | 1041.2 | 1020.1 | 1014.9 | 1014.9 |
| 65° | 10937.3 | 2860.6 | 1046.4 | 1188.4 | 1078.0 | 1004.3 | 1020.1 | 1025.4 | 999.1 | 993.8 | 988.6 |
| 67.5° | 10427.2 | 2534.6 | 978.0 | 1167.4 | 1109.5 | 1004.3 | 1004.3 | 999.1 | 967.5 | 962.3 | 951.8 |
| 70° | 9286.2 | 2103.3 | 872.9 | 1099.0 | 1130.6 | 1009.6 | 983.3 | 957.0 | 925.5 | 925.5 | 904.4 |
| 72.5° | 7603.6 | 1656.4 | 736.1 | 978.0 | 1114.8 | 1025.4 | 941.2 | 904.4 | 867.7 | 867.7 | 846.6 |
| 75° | 5479.2 | 1235.7 | 588.9 | 815.1 | 1046.4 | 1020.1 | 888.6 | 841.4 | 799.2 | 794.0 | 767.7 |
| 77.5° | 3123.5 | 867.7 | 478.5 | 636.3 | 930.7 | 993.8 | 841.4 | 767.7 | 720.4 | 704.6 | 688.9 |
| 80° | 1603.8 | 583.7 | 389.1 | 499.5 | 772.9 | 920.2 | 804.6 | 683.5 | 631.0 | 604.7 | 578.4 |
| 82.5° | 762.5 | 389.1 | 299.7 | 368.1 | 583.7 | 804.6 | 757.2 | 588.9 | 531.1 | 499.5 | 468.0 |
| 85° | 341.8 | 231.4 | 199.8 | 236.6 | 415.4 | 625.7 | 667.8 | 483.8 | 415.4 | 520.6 | 383.8 |
| 87.5° | 110.4 | 105.2 | 105.2 | 110.4 | 199.8 | 273.4 | 489.1 | 357.5 | 331.2 | 273.4 | 231.4 |
| 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)