

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: P265747

Luminaire Tested: **ARCH-L-AF72-280-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265747
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-280-D-U-T3-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26188.9 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

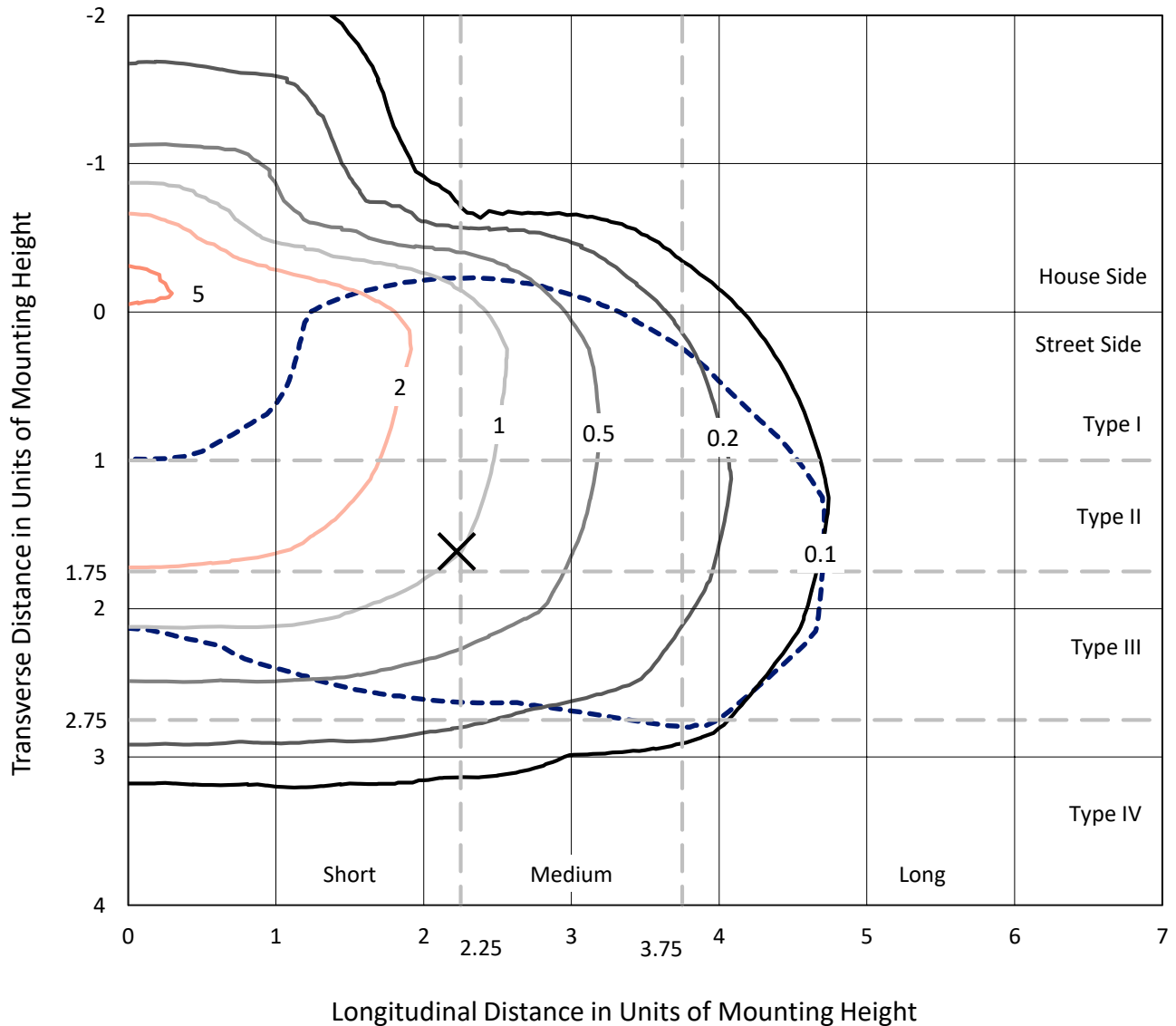
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

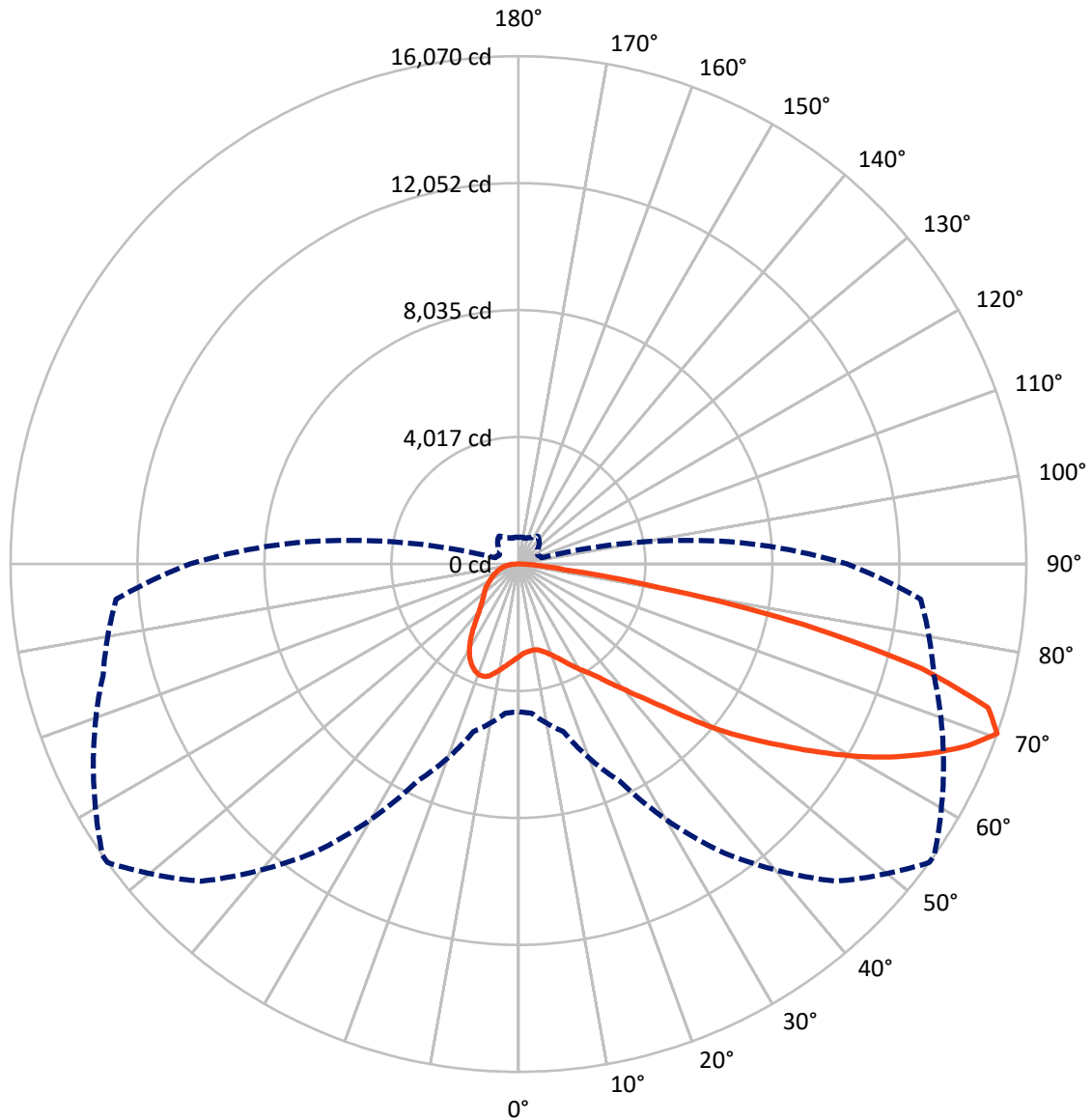
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5939.6 | 0.0 | 5939.6 |
| | % Fixture | 22.7 | 0.0 | 22.7 |
| Street Side | Lumens | 20249.3 | 0.0 | 20249.3 |
| | % Fixture | 77.3 | 0.0 | 77.3 |
| Total | Lumens | 26188.9 | 0.0 | 26188.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 287.5 | 1.1 |
| 10°-20° | 918.8 | 3.5 |
| 20°-30° | 1596.2 | 6.1 |
| 30°-40° | 2332.7 | 8.9 |
| 40°-50° | 3661.1 | 14.0 |
| 50°-60° | 5629.9 | 21.5 |
| 60°-70° | 6878.4 | 26.3 |
| 70°-80° | 4264.6 | 16.3 |
| 80°-90° | 619.5 | 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° | 26188.9 | 100.0 |
| 0°-180° | 26188.9 | 100.0 |

Coefficient of Utilization



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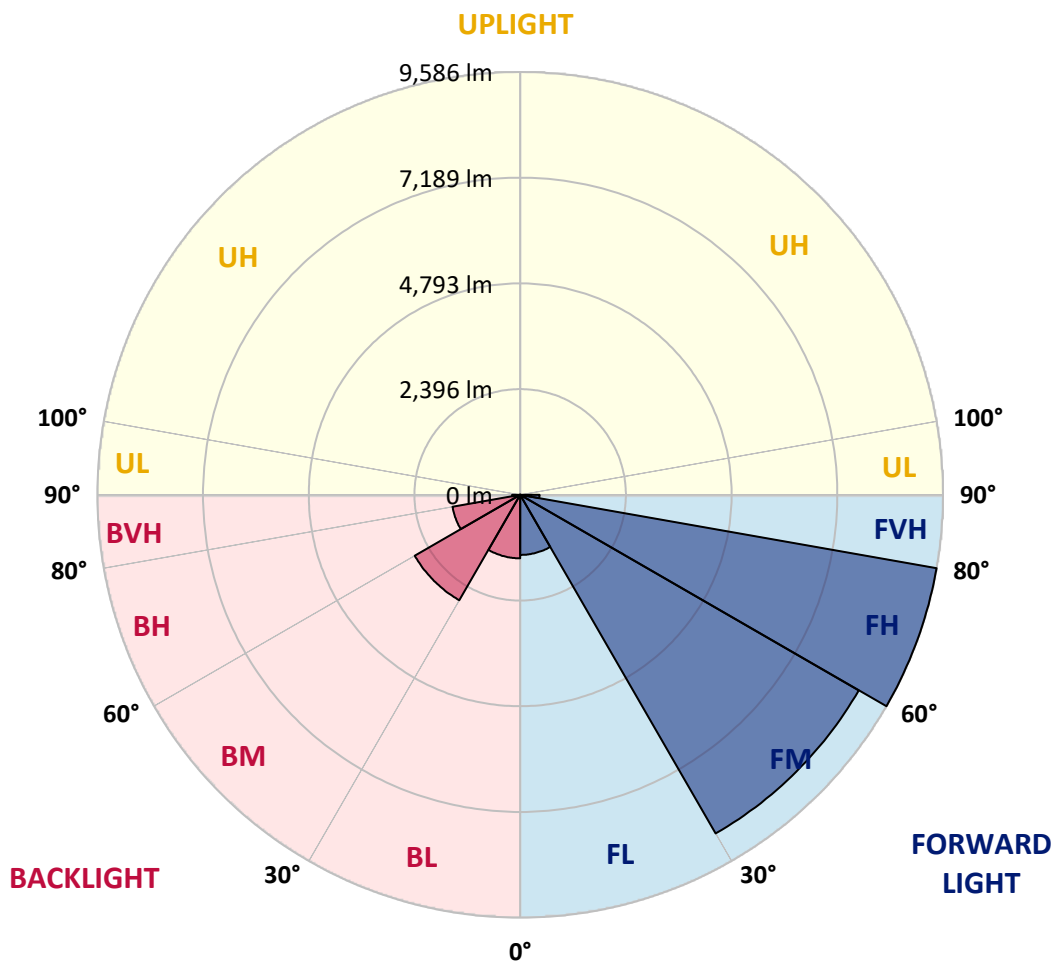
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 1362.6 | 5.2 | | | |
| FM | (30°-60°) | 8863.7 | 33.8 | | | |
| FH | (60°-80°) | 9585.5 | 36.6 | | | G4/12000 |
| FVH | (80°-90°) | 437.5 | 1.7 | | | G3/500 |
| BL | (0°-30°) | 1440.0 | 5.5 | B3/2500 | | |
| BM | (30°-60°) | 2760.0 | 10.5 | B3/5000 | | |
| BH | (60°-80°) | 1557.5 | 5.9 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 182.1 | 0.7 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 54° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2930.0 | 2930.0 | 2930.0 | 2930.0 | 2930.0 | 2930.0 | 2930.0 | 2930.0 | 2930.0 | 2930.0 | 2930.0 |
| 2.5° | 2814.8 | 2805.3 | 2805.3 | 2819.7 | 2824.5 | 2839.0 | 2839.0 | 2843.7 | 2858.0 | 2882.0 | 2910.8 |
| 5° | 2728.6 | 2723.8 | 2728.6 | 2747.7 | 2757.3 | 2786.2 | 2795.7 | 2800.6 | 2829.3 | 2867.7 | 2910.8 |
| 7.5° | 2642.3 | 2637.5 | 2647.0 | 2675.8 | 2704.6 | 2747.7 | 2771.8 | 2776.5 | 2819.7 | 2872.5 | 2930.0 |
| 10° | 2613.4 | 2608.7 | 2623.1 | 2647.0 | 2675.8 | 2723.8 | 2762.2 | 2767.0 | 2829.3 | 2891.6 | 2973.2 |
| 12.5° | 2651.8 | 2647.0 | 2661.5 | 2685.5 | 2714.1 | 2747.7 | 2790.9 | 2795.7 | 2877.2 | 2958.7 | 3045.2 |
| 15° | 2747.7 | 2747.7 | 2752.5 | 2767.0 | 2795.7 | 2824.5 | 2862.9 | 2867.7 | 2953.9 | 3049.8 | 3136.3 |
| 17.5° | 2896.4 | 2886.9 | 2886.9 | 2882.0 | 2901.3 | 2915.5 | 2963.6 | 2968.4 | 3059.4 | 3145.9 | 3232.1 |
| 20° | 3078.8 | 3073.9 | 3054.6 | 3030.7 | 3025.9 | 3035.6 | 3083.4 | 3088.3 | 3179.5 | 3251.2 | 3332.8 |
| 22.5° | 3299.2 | 3304.1 | 3260.8 | 3208.1 | 3184.1 | 3198.5 | 3241.8 | 3246.6 | 3313.7 | 3376.0 | 3448.0 |
| 25° | 3591.8 | 3577.4 | 3515.1 | 3438.4 | 3390.4 | 3390.4 | 3433.5 | 3433.5 | 3495.8 | 3534.2 | 3582.3 |
| 27.5° | 3869.9 | 3841.2 | 3783.7 | 3673.3 | 3596.5 | 3610.9 | 3654.1 | 3654.1 | 3711.6 | 3726.0 | 3750.1 |
| 30° | 4172.0 | 4143.3 | 4071.3 | 3932.2 | 3831.5 | 3822.0 | 3874.7 | 3869.9 | 3946.7 | 3941.9 | 3922.7 |
| 32.5° | 4541.3 | 4526.9 | 4406.9 | 4229.6 | 4095.4 | 4061.7 | 4109.7 | 4114.4 | 4162.4 | 4148.1 | 4085.8 |
| 35° | 5059.2 | 5054.4 | 4944.1 | 4632.4 | 4455.0 | 4392.6 | 4421.4 | 4421.4 | 4455.0 | 4416.5 | 4311.1 |
| 37.5° | 5711.3 | 5720.9 | 5625.0 | 5164.6 | 4915.3 | 4809.9 | 4814.6 | 4809.9 | 4819.3 | 4776.3 | 4665.9 |
| 40° | 6363.6 | 6387.5 | 6382.6 | 5826.4 | 5509.9 | 5327.7 | 5260.6 | 5251.0 | 5274.9 | 5255.9 | 5150.3 |
| 42.5° | 7222.0 | 7279.4 | 7145.2 | 6641.7 | 6286.8 | 5979.8 | 5797.8 | 5773.6 | 5826.4 | 5850.4 | 5749.7 |
| 45° | 8113.9 | 8094.6 | 7883.6 | 7519.3 | 7197.8 | 6804.8 | 6459.4 | 6421.1 | 6459.4 | 6531.3 | 6425.8 |
| 47.5° | 8579.1 | 8564.6 | 8511.9 | 8329.7 | 8281.7 | 7831.0 | 7308.3 | 7274.7 | 7202.7 | 7303.4 | 7178.7 |
| 50° | 9346.2 | 9360.7 | 9144.8 | 9125.7 | 9327.1 | 9077.7 | 8267.3 | 8190.6 | 8061.1 | 8142.6 | 8037.1 |
| 52.5° | 9902.6 | 9840.3 | 9705.9 | 9873.8 | 10501.9 | 10367.7 | 9168.9 | 9135.4 | 9015.4 | 8996.3 | 8948.2 |
| 55° | 10127.9 | 10127.9 | 10151.9 | 10540.4 | 11437.1 | 11259.6 | 10147.2 | 10180.8 | 10017.7 | 9883.4 | 9945.8 |
| 57.5° | 10195.0 | 10223.9 | 10430.0 | 11072.7 | 12535.3 | 11955.1 | 11226.1 | 11274.1 | 11039.1 | 10770.5 | 10967.1 |
| 60° | 9864.2 | 9950.5 | 10444.5 | 11374.8 | 13153.8 | 12693.5 | 12362.7 | 12376.9 | 12036.5 | 11643.3 | 11988.6 |
| 62.5° | 9015.4 | 9120.9 | 10003.3 | 11499.5 | 13053.1 | 13451.2 | 13436.8 | 13470.4 | 13005.2 | 12516.1 | 12947.6 |
| 65° | 7974.9 | 8080.3 | 9020.2 | 11149.4 | 12976.5 | 13993.1 | 14419.9 | 14511.0 | 13911.5 | 13254.5 | 13547.1 |
| 67.5° | 6445.1 | 6584.0 | 7476.1 | 9969.7 | 12602.4 | 14439.0 | 15340.5 | 15436.5 | 14611.7 | 13638.2 | 13494.2 |
| 70° | 4670.7 | 4737.9 | 5485.9 | 7576.8 | 11077.4 | 14194.5 | 16069.5 | 16064.7 | 14841.8 | 13609.4 | 12775.1 |
| 72.5° | 2249.0 | 2301.7 | 2949.1 | 4704.3 | 7922.1 | 12046.1 | 15541.9 | 15633.2 | 14525.4 | 13192.1 | 11130.2 |
| 75° | 925.6 | 978.3 | 1194.0 | 1985.3 | 4157.6 | 7960.4 | 13173.0 | 13388.9 | 13192.1 | 11839.9 | 8708.4 |
| 77.5° | 575.5 | 594.7 | 700.0 | 1026.3 | 1898.9 | 3716.5 | 9221.6 | 9514.0 | 10454.0 | 9485.4 | 5749.7 |
| 80° | 431.5 | 446.0 | 522.8 | 719.4 | 1198.9 | 1371.5 | 4579.6 | 4948.9 | 6334.8 | 5442.8 | 2603.8 |
| 82.5° | 359.6 | 364.4 | 417.3 | 522.8 | 815.2 | 786.5 | 1467.4 | 1635.3 | 2953.9 | 2076.4 | 896.8 |
| 85° | 335.6 | 345.3 | 374.1 | 374.1 | 518.0 | 493.9 | 609.1 | 637.7 | 858.4 | 709.8 | 311.7 |
| 87.5° | 172.7 | 163.0 | 330.8 | 292.5 | 268.6 | 239.8 | 258.9 | 278.1 | 321.4 | 340.5 | 139.1 |
| 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° | 2930.0 | 2930.0 | 2930.0 | 2930.0 | 2930.0 | 2930.0 | 2930.0 | 2930.0 | 2930.0 | 2930.0 | 2930.0 |
| 2.5° | 2920.4 | 2934.9 | 2958.7 | 2982.7 | 3011.5 | 3045.2 | 3064.3 | 3088.3 | 3107.4 | 3097.9 | 3093.0 |
| 5° | 2934.9 | 2958.7 | 3011.5 | 3059.4 | 3116.9 | 3184.1 | 3227.3 | 3275.3 | 3313.7 | 3323.2 | 3308.8 |
| 7.5° | 2958.7 | 3002.0 | 3073.9 | 3160.1 | 3237.0 | 3323.2 | 3390.4 | 3457.4 | 3505.5 | 3515.1 | 3515.1 |
| 10° | 3016.2 | 3064.3 | 3160.1 | 3275.3 | 3366.4 | 3457.4 | 3534.2 | 3587.0 | 3630.1 | 3649.4 | 3649.4 |
| 12.5° | 3097.9 | 3155.3 | 3270.5 | 3409.5 | 3510.2 | 3596.5 | 3639.8 | 3663.6 | 3683.0 | 3702.1 | 3706.9 |
| 15° | 3193.7 | 3256.0 | 3395.1 | 3543.9 | 3649.4 | 3692.5 | 3692.5 | 3687.7 | 3687.7 | 3697.2 | 3706.9 |
| 17.5° | 3289.7 | 3356.7 | 3500.7 | 3658.8 | 3726.0 | 3702.1 | 3668.5 | 3654.1 | 3644.6 | 3639.8 | 3654.1 |
| 20° | 3390.4 | 3457.4 | 3601.3 | 3750.1 | 3730.8 | 3630.1 | 3582.3 | 3548.7 | 3519.9 | 3505.5 | 3524.6 |
| 22.5° | 3500.7 | 3562.9 | 3711.6 | 3812.3 | 3668.5 | 3515.1 | 3423.9 | 3371.2 | 3323.2 | 3294.4 | 3313.7 |
| 25° | 3630.1 | 3692.5 | 3836.3 | 3831.5 | 3558.1 | 3342.5 | 3198.5 | 3112.3 | 3059.4 | 3030.7 | 3030.7 |
| 27.5° | 3783.7 | 3836.3 | 3975.4 | 3783.7 | 3404.8 | 3112.3 | 2901.3 | 2819.7 | 2805.3 | 2781.3 | 2781.3 |
| 30° | 3941.9 | 3985.1 | 4104.9 | 3673.3 | 3193.7 | 2810.1 | 2579.9 | 2541.6 | 2546.3 | 2522.4 | 2527.2 |
| 32.5° | 4104.9 | 4148.1 | 4181.6 | 3510.2 | 2920.4 | 2469.6 | 2316.2 | 2287.4 | 2282.7 | 2263.4 | 2244.2 |
| 35° | 4335.1 | 4397.5 | 4191.2 | 3289.7 | 2589.5 | 2186.7 | 2076.4 | 2047.6 | 2018.9 | 1951.7 | 1951.7 |
| 37.5° | 4685.1 | 4752.3 | 4167.2 | 3016.2 | 2249.0 | 1966.1 | 1865.4 | 1827.1 | 1779.2 | 1712.0 | 1687.9 |
| 40° | 5164.6 | 5164.6 | 4114.4 | 2709.4 | 1975.7 | 1788.6 | 1692.8 | 1644.8 | 1592.1 | 1525.0 | 1510.6 |
| 42.5° | 5730.6 | 5596.4 | 4032.9 | 2397.8 | 1774.3 | 1668.8 | 1582.5 | 1529.8 | 1467.4 | 1390.7 | 1381.1 |
| 45° | 6392.2 | 6027.8 | 3917.9 | 2119.6 | 1625.7 | 1596.8 | 1544.1 | 1453.0 | 1347.5 | 1266.0 | 1251.6 |
| 47.5° | 7034.8 | 6416.2 | 3807.6 | 1922.9 | 1501.0 | 1568.1 | 1525.0 | 1371.5 | 1227.7 | 1112.6 | 1098.2 |
| 50° | 7739.8 | 6761.5 | 3678.1 | 1759.9 | 1405.0 | 1548.9 | 1501.0 | 1251.6 | 1093.3 | 1011.9 | 1002.2 |
| 52.5° | 8444.7 | 7111.6 | 3539.1 | 1587.2 | 1323.6 | 1510.6 | 1443.4 | 1165.3 | 1088.6 | 978.3 | 963.9 |
| 55° | 9188.0 | 7519.3 | 3376.0 | 1395.4 | 1227.7 | 1433.9 | 1366.7 | 1160.5 | 1122.2 | 978.3 | 944.7 |
| 57.5° | 9912.2 | 7970.0 | 3112.3 | 1208.4 | 1122.2 | 1318.7 | 1337.9 | 1131.8 | 1050.2 | 968.7 | 930.4 |
| 60° | 10712.9 | 8449.5 | 2675.8 | 1050.2 | 1031.1 | 1222.9 | 1299.6 | 1069.4 | 968.7 | 939.8 | 920.8 |
| 62.5° | 11355.6 | 8881.2 | 2090.8 | 939.8 | 954.3 | 1146.1 | 1251.6 | 1031.1 | 935.1 | 911.2 | 906.3 |
| 65° | 11633.7 | 8890.7 | 1501.0 | 844.0 | 877.6 | 1074.2 | 1203.6 | 997.5 | 906.3 | 896.8 | 891.9 |
| 67.5° | 11341.2 | 8401.6 | 1055.0 | 752.9 | 796.1 | 1007.0 | 1141.2 | 963.9 | 877.6 | 882.3 | 872.8 |
| 70° | 10396.4 | 7370.6 | 772.1 | 666.5 | 719.4 | 935.1 | 1074.2 | 920.8 | 844.0 | 853.6 | 839.1 |
| 72.5° | 8698.8 | 5744.9 | 618.7 | 594.7 | 657.0 | 858.4 | 1007.0 | 872.8 | 791.2 | 796.1 | 767.2 |
| 75° | 6425.8 | 3807.6 | 518.0 | 532.2 | 585.1 | 786.5 | 920.8 | 810.5 | 733.6 | 714.5 | 695.4 |
| 77.5° | 3822.0 | 1956.5 | 426.8 | 465.1 | 522.8 | 700.0 | 824.9 | 733.6 | 671.4 | 637.7 | 623.5 |
| 80° | 1577.8 | 791.2 | 350.1 | 393.2 | 455.6 | 623.5 | 729.0 | 642.6 | 599.3 | 565.8 | 546.7 |
| 82.5° | 628.3 | 388.4 | 278.1 | 321.4 | 383.7 | 541.9 | 637.7 | 565.8 | 522.8 | 498.6 | 446.0 |
| 85° | 239.8 | 191.8 | 187.0 | 225.4 | 287.7 | 417.3 | 527.5 | 474.8 | 441.2 | 378.8 | 364.4 |
| 87.5° | 95.8 | 86.2 | 86.2 | 110.3 | 163.0 | 263.7 | 378.8 | 330.8 | 345.3 | 273.4 | 278.1 |
| 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)