

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: P285826

Luminaire Tested: **PRV-XL-C100-D-UNV-T4-BZ-7030**

Issue Date: 2/13/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P285826  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1902-125-9)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 2/13/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: PRV-XL-C100-D-UNV-T4-BZ-7030  
Description: PREVAIL XL AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3000K LEDS AND TYPE IV OPTICS, BRONZE PAINTED FINISH  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30471 lumens  
Efficiency: N/A  
Efficacy: 140.4 lumens/watt  
Luminous Opening: Rectangular (W 1.29' x L: 1.79' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

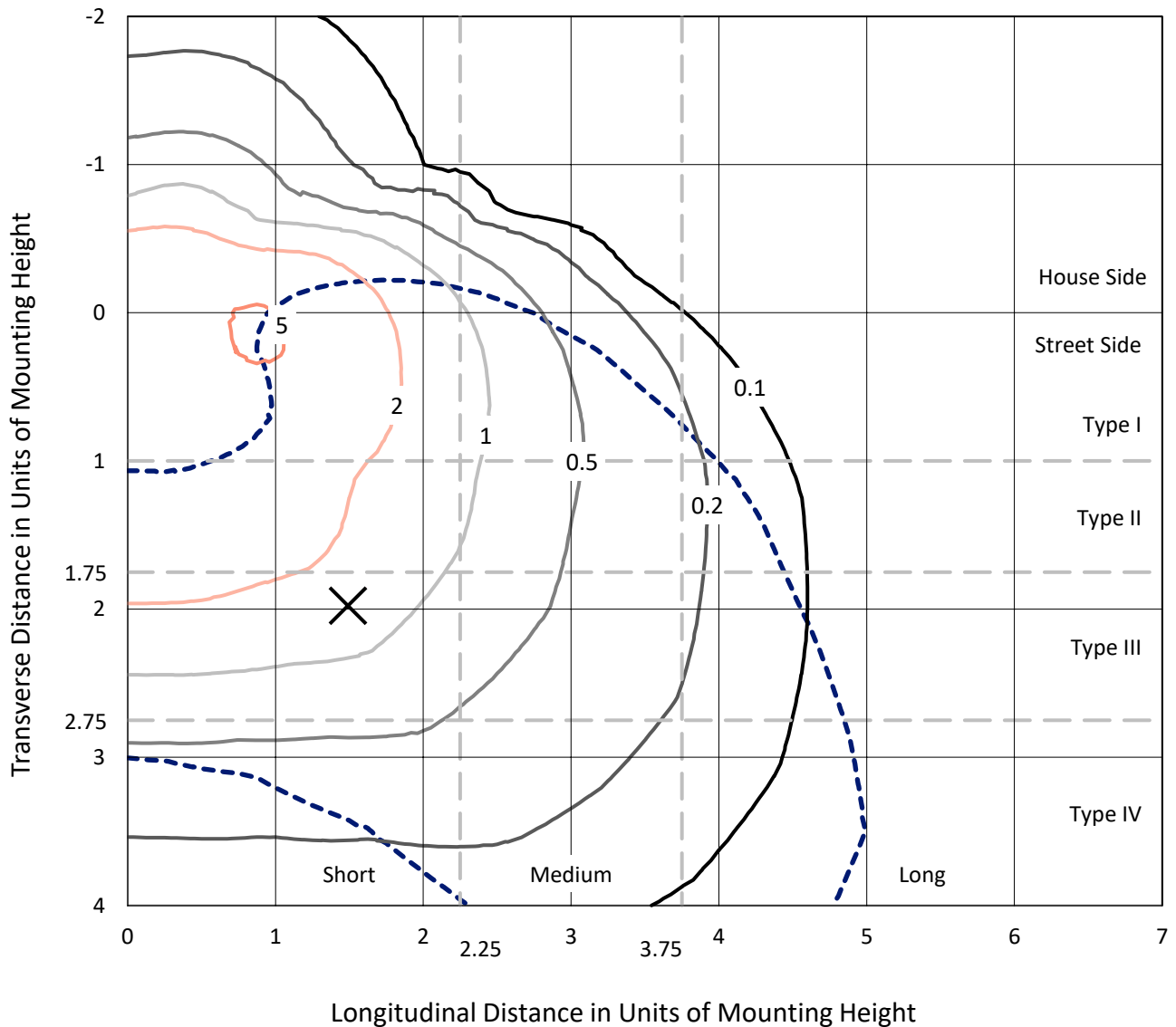
Input Watts (W): 217  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

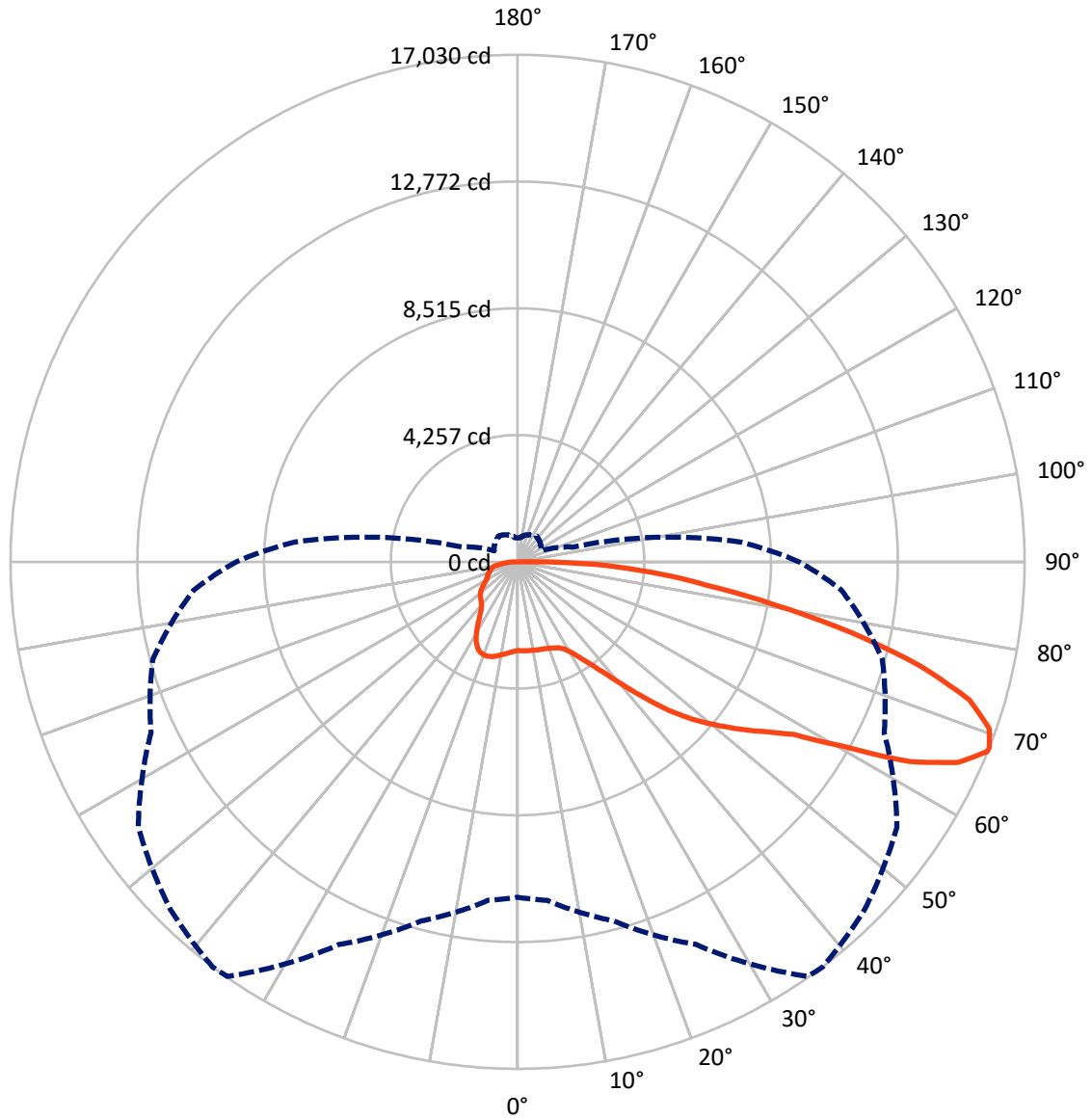
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 37-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

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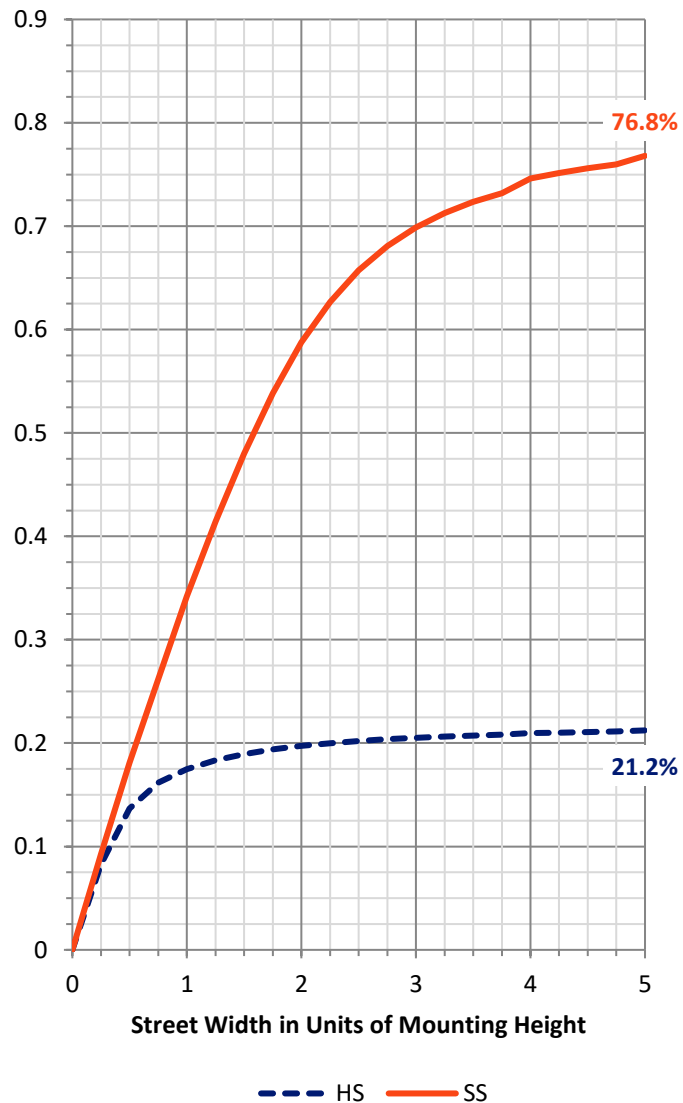
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6579.6   | 0.0    | 6579.6  |
|                    | % Fixture | 21.6     | 0.0    | 21.6    |
| <b>Street Side</b> | Lumens    | 23891.4  | 0.0    | 23891.4 |
|                    | % Fixture | 78.4     | 0.0    | 78.4    |
| <b>Total</b>       | Lumens    | 30471.0  | 0.0    | 30471.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 289.4   | 0.9       |
| 10°-20°   | 899.4   | 3.0       |
| 20°-30°   | 1536.2  | 5.0       |
| 30°-40°   | 2447.4  | 8.0       |
| 40°-50°   | 4244.7  | 13.9      |
| 50°-60°   | 6152.9  | 20.2      |
| 60°-70°   | 7759.5  | 25.5      |
| 70°-80°   | 5749.8  | 18.9      |
| 80°-90°   | 1391.7  | 4.6       |
| 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°    | 30471.0 | 100.0     |
| 0°-180°   | 30471.0 | 100.0     |

**Coefficient of Utilization**

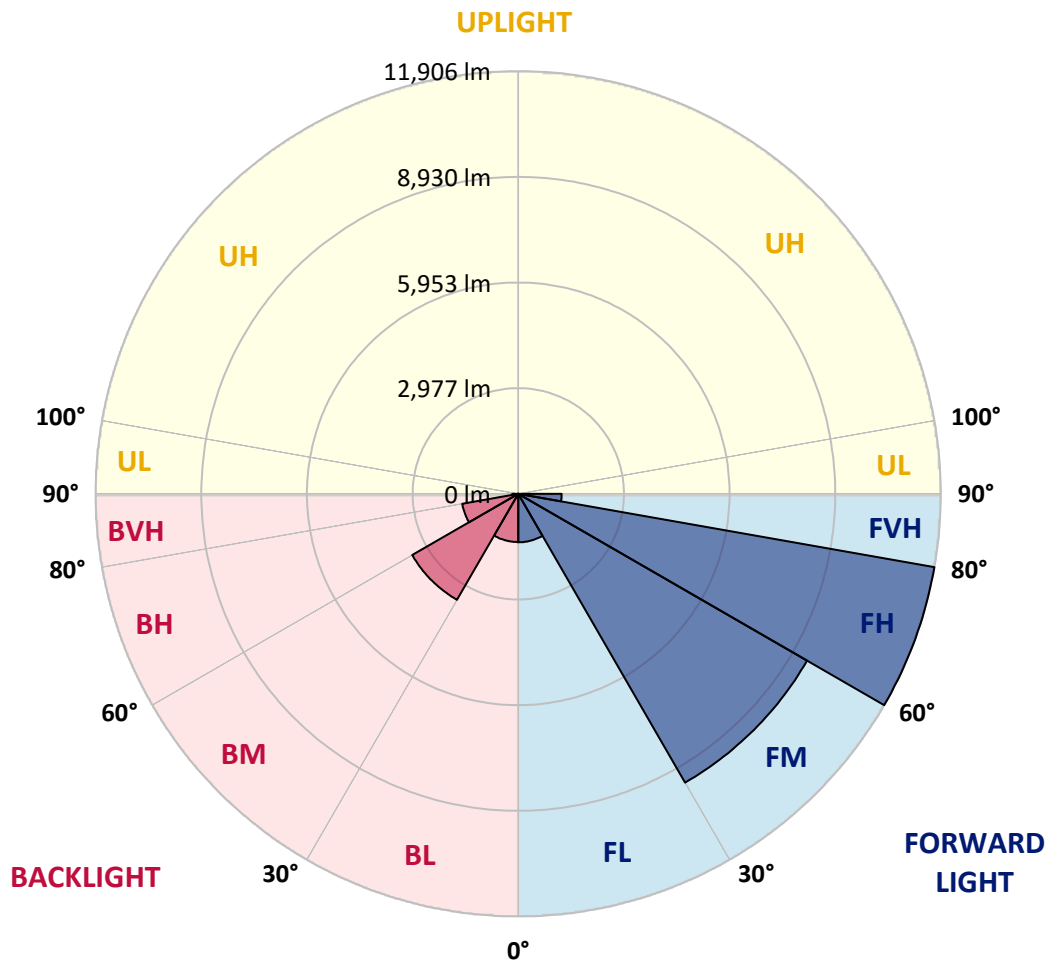


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|---------|-----------|-------------------------|------|----------|
|                |         |           | B                       | U    | G        |
| FL (0°-30°)    | 1366.0  | 4.5       |                         |      |          |
| FM (30°-60°)   | 9395.9  | 30.8      |                         |      |          |
| FH (60°-80°)   | 11906.5 | 39.1      |                         |      | G4/12000 |
| FVH (80°-90°)  | 1223.0  | 4.0       |                         |      | G5       |
| BL (0°-30°)    | 1358.9  | 4.5       | B3/2500                 |      |          |
| BM (30°-60°)   | 3449.2  | 11.3      | B3/5000                 |      |          |
| BH (60°-80°)   | 1602.8  | 5.3       | B3/2500                 |      | G3/2500  |
| BVH (80°-90°)  | 168.7   | 0.6       |                         |      | G2/225   |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G5**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 37°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2977.3  | 2977.3  | 2977.3  | 2977.3  | 2977.3  | 2977.3  | 2977.3  | 2977.3  | 2977.3  | 2977.3  | 2977.3  |
| 2.5°  | 2978.4  | 2986.6  | 2988.9  | 2984.3  | 2988.9  | 2993.6  | 2983.1  | 2981.9  | 2977.3  | 2958.6  | 2960.9  |
| 5°    | 2979.6  | 2990.1  | 2991.3  | 2987.8  | 2995.9  | 3000.6  | 2995.9  | 2991.3  | 2986.6  | 2959.7  | 2965.6  |
| 7.5°  | 2979.6  | 2987.8  | 2990.1  | 2987.8  | 2999.4  | 3007.6  | 3007.6  | 3011.1  | 3011.1  | 2980.8  | 2985.4  |
| 10°   | 2969.1  | 2976.1  | 2979.6  | 2985.4  | 3005.3  | 3017.0  | 3024.0  | 3040.3  | 3049.6  | 3028.6  | 3029.8  |
| 12.5° | 2921.2  | 2927.1  | 2938.7  | 2972.6  | 3019.3  | 3033.3  | 3053.1  | 3082.3  | 3105.7  | 3105.7  | 3108.0  |
| 15°   | 2883.9  | 2889.7  | 2911.9  | 2957.4  | 3028.6  | 3047.3  | 3085.8  | 3134.9  | 3178.1  | 3201.4  | 3220.1  |
| 17.5° | 2893.2  | 2900.2  | 2932.9  | 2971.4  | 3042.6  | 3061.3  | 3116.2  | 3187.4  | 3258.6  | 3308.8  | 3346.2  |
| 20°   | 2922.4  | 2927.1  | 2964.4  | 3008.8  | 3084.7  | 3097.5  | 3151.2  | 3238.8  | 3338.0  | 3420.9  | 3481.6  |
| 22.5° | 3005.3  | 3002.9  | 3033.3  | 3050.8  | 3129.0  | 3140.7  | 3202.6  | 3292.5  | 3420.9  | 3545.9  | 3634.6  |
| 25°   | 3074.2  | 3084.7  | 3109.2  | 3123.2  | 3187.4  | 3197.9  | 3275.0  | 3374.2  | 3522.5  | 3683.6  | 3826.1  |
| 27.5° | 3150.1  | 3159.4  | 3183.9  | 3215.4  | 3305.3  | 3311.2  | 3364.9  | 3487.5  | 3652.1  | 3849.4  | 4077.1  |
| 30°   | 3321.7  | 3320.5  | 3345.0  | 3378.9  | 3500.3  | 3510.8  | 3561.0  | 3687.1  | 3840.1  | 4086.4  | 4360.8  |
| 32.5° | 3618.2  | 3615.9  | 3619.4  | 3666.1  | 3798.0  | 3822.6  | 3886.8  | 4053.7  | 4245.2  | 4483.4  | 4788.1  |
| 35°   | 4226.5  | 4202.0  | 4155.3  | 4118.0  | 4192.7  | 4220.7  | 4360.8  | 4567.5  | 4909.6  | 5377.7  | 5754.9  |
| 37.5° | 5231.8  | 5193.3  | 5035.6  | 4822.0  | 4735.6  | 4732.1  | 4830.2  | 5144.2  | 5676.6  | 6615.3  | 6956.3  |
| 40°   | 6195.0  | 6196.2  | 5982.5  | 5693.0  | 5423.3  | 5409.3  | 5353.2  | 5742.0  | 6506.8  | 7777.1  | 7937.0  |
| 42.5° | 7108.1  | 7102.2  | 6853.5  | 6588.5  | 6266.2  | 6224.2  | 6060.8  | 6359.7  | 7335.7  | 8733.3  | 8764.8  |
| 45°   | 7931.2  | 7912.5  | 7645.1  | 7474.7  | 7198.0  | 7113.9  | 6896.7  | 6991.3  | 8112.1  | 9500.4  | 9389.4  |
| 47.5° | 8726.3  | 8707.6  | 8373.7  | 8209.1  | 7966.2  | 7896.1  | 7666.1  | 7708.2  | 8854.7  | 10139.0 | 9895.0  |
| 50°   | 9547.1  | 9541.2  | 9057.9  | 8897.9  | 8639.9  | 8610.7  | 8471.8  | 8502.1  | 9630.0  | 10670.2 | 10365.5 |
| 52.5° | 10519.6 | 10369.0 | 9826.1  | 9520.2  | 9336.9  | 9335.7  | 9180.5  | 9258.7  | 10486.9 | 11144.3 | 10692.4 |
| 55°   | 11563.4 | 11373.1 | 10817.4 | 10377.2 | 10062.0 | 10066.6 | 9824.9  | 9951.0  | 11240.0 | 11568.1 | 11005.3 |
| 57.5° | 12308.3 | 12268.6 | 12102.8 | 11662.7 | 11011.2 | 10934.1 | 10562.8 | 10662.1 | 11900.8 | 12007.1 | 11230.7 |
| 60°   | 13003.0 | 13172.3 | 13283.2 | 13143.1 | 12815.0 | 12592.0 | 11562.3 | 11414.0 | 12483.5 | 12393.6 | 11348.6 |
| 62.5° | 13440.8 | 13528.4 | 14045.6 | 14238.3 | 14753.2 | 14770.7 | 13538.9 | 12324.7 | 12979.7 | 12636.4 | 11401.1 |
| 65°   | 12958.6 | 13088.2 | 13945.2 | 14698.3 | 16167.1 | 16251.1 | 15731.6 | 13843.7 | 13375.5 | 12720.5 | 11301.9 |
| 67.5° | 11613.6 | 11749.1 | 12778.8 | 14323.5 | 16949.3 | 17006.5 | 16467.1 | 15419.8 | 13572.8 | 12703.0 | 11011.2 |
| 68°   | 11269.2 | 11414.0 | 12488.1 | 14182.2 | 17003.0 | 17029.9 | 16496.3 | 15550.6 | 13585.6 | 12683.1 | 10916.6 |
| 70°   | 9843.6  | 9986.1  | 11074.2 | 13298.4 | 16790.6 | 16808.1 | 16311.9 | 15688.4 | 13519.1 | 12512.6 | 10294.3 |
| 72.5° | 7732.7  | 7876.3  | 8734.4  | 11280.9 | 15723.4 | 15876.4 | 15623.0 | 15296.1 | 13237.7 | 11848.3 | 8826.7  |
| 75°   | 5479.3  | 5626.4  | 6519.6  | 8829.0  | 13555.3 | 13980.3 | 14485.8 | 14544.2 | 12184.6 | 10175.2 | 6575.6  |
| 77.5° | 3863.4  | 3983.7  | 4756.6  | 6600.2  | 10940.0 | 11489.9 | 12543.0 | 12629.4 | 10204.4 | 7764.2  | 3468.8  |
| 80°   | 2507.9  | 2610.6  | 3303.0  | 4837.2  | 8269.8  | 8745.0  | 9902.0  | 9544.7  | 7251.7  | 4221.9  | 603.6   |
| 82.5° | 1514.3  | 1591.4  | 2103.9  | 3346.2  | 6051.4  | 6367.8  | 6839.5  | 5730.3  | 3364.9  | 596.6   | 211.3   |
| 85°   | 868.7   | 921.2   | 1299.5  | 2149.5  | 4263.9  | 4533.6  | 4599.0  | 2876.8  | 632.8   | 164.6   | 119.1   |
| 87.5° | 444.8   | 471.7   | 697.0   | 1320.5  | 2519.6  | 2635.2  | 2307.1  | 1029.8  | 126.1   | 73.6    | 59.5    |
| 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°    | 2977.3  | 2977.3 | 2977.3 | 2977.3 | 2977.3 | 2977.3 | 2977.3 | 2977.3 | 2977.3 | 2977.3 | 2977.3 |
| 2.5°  | 2949.2  | 2957.4 | 2963.2 | 2983.1 | 3004.1 | 3014.6 | 3004.1 | 3020.5 | 3026.3 | 3021.6 | 3014.6 |
| 5°    | 2956.2  | 2969.1 | 2978.4 | 3018.1 | 3041.5 | 3059.0 | 3047.3 | 3070.7 | 3078.8 | 3069.5 | 3069.5 |
| 7.5°  | 2976.1  | 2993.6 | 3008.8 | 3061.3 | 3088.2 | 3111.5 | 3104.5 | 3120.9 | 3127.9 | 3116.2 | 3123.2 |
| 10°   | 3028.6  | 3046.1 | 3066.0 | 3131.4 | 3148.9 | 3171.1 | 3158.2 | 3171.1 | 3173.4 | 3165.2 | 3171.1 |
| 12.5° | 3119.7  | 3131.4 | 3169.9 | 3236.5 | 3238.8 | 3244.6 | 3217.8 | 3193.3 | 3182.7 | 3167.6 | 3178.1 |
| 15°   | 3236.5  | 3257.5 | 3310.0 | 3366.0 | 3350.9 | 3338.0 | 3271.5 | 3192.1 | 3141.9 | 3104.5 | 3102.2 |
| 17.5° | 3366.0  | 3403.4 | 3468.8 | 3505.0 | 3470.0 | 3411.6 | 3299.5 | 3165.2 | 3043.8 | 2977.3 | 2956.2 |
| 20°   | 3499.2  | 3557.5 | 3629.9 | 3636.9 | 3577.4 | 3465.3 | 3294.8 | 3096.3 | 2895.5 | 2771.8 | 2741.4 |
| 22.5° | 3661.4  | 3737.3 | 3802.7 | 3767.7 | 3648.6 | 3484.0 | 3251.6 | 2974.9 | 2699.4 | 2511.4 | 2483.4 |
| 25°   | 3876.3  | 3951.0 | 3962.7 | 3859.9 | 3675.5 | 3448.9 | 3152.4 | 2793.9 | 2444.9 | 2211.3 | 2189.2 |
| 27.5° | 4135.5  | 4175.2 | 4099.3 | 3907.8 | 3642.8 | 3343.9 | 2983.1 | 2542.9 | 2161.1 | 1958.0 | 1924.1 |
| 30°   | 4422.7  | 4408.7 | 4199.7 | 3909.0 | 3547.0 | 3165.2 | 2726.2 | 2258.0 | 1937.0 | 1761.8 | 1729.1 |
| 32.5° | 4787.0  | 4694.7 | 4301.3 | 3856.4 | 3389.4 | 2924.7 | 2423.8 | 2030.4 | 1782.9 | 1604.2 | 1572.7 |
| 35°   | 5510.8  | 5230.6 | 4439.0 | 3773.5 | 3180.4 | 2636.3 | 2158.8 | 1865.7 | 1650.9 | 1445.4 | 1416.2 |
| 37.5° | 6611.8  | 6031.6 | 4687.7 | 3682.5 | 2948.1 | 2340.9 | 1955.6 | 1737.3 | 1547.0 | 1327.5 | 1282.0 |
| 40°   | 7577.4  | 6916.6 | 5084.7 | 3597.2 | 2711.1 | 2116.8 | 1838.9 | 1675.4 | 1489.8 | 1268.0 | 1221.3 |
| 42.5° | 8318.8  | 7625.3 | 5538.9 | 3495.6 | 2463.5 | 1951.0 | 1789.9 | 1667.3 | 1482.8 | 1268.0 | 1224.8 |
| 45°   | 8917.8  | 8210.2 | 5942.8 | 3384.7 | 2224.2 | 1820.2 | 1745.5 | 1652.1 | 1468.8 | 1261.0 | 1220.1 |
| 47.5° | 9390.6  | 8646.9 | 6261.6 | 3257.5 | 1975.5 | 1731.5 | 1700.0 | 1599.5 | 1432.6 | 1239.9 | 1199.1 |
| 50°   | 9800.4  | 8959.8 | 6440.2 | 3108.0 | 1754.8 | 1661.4 | 1635.7 | 1515.5 | 1360.2 | 1178.1 | 1151.2 |
| 52.5° | 10086.5 | 9214.3 | 6507.9 | 3046.1 | 1597.2 | 1582.0 | 1548.2 | 1430.3 | 1282.0 | 1104.5 | 1074.1 |
| 55°   | 10301.3 | 9345.1 | 6451.9 | 2904.9 | 1439.6 | 1459.4 | 1444.3 | 1364.9 | 1227.1 | 1059.0 | 1028.6 |
| 57.5° | 10411.1 | 9388.3 | 6291.9 | 2372.5 | 1290.1 | 1313.5 | 1324.0 | 1328.7 | 1218.9 | 1071.8 | 1043.8 |
| 60°   | 10449.6 | 9320.6 | 5942.8 | 1694.1 | 1130.2 | 1176.9 | 1235.3 | 1252.8 | 1182.7 | 1022.8 | 999.4  |
| 62.5° | 10391.2 | 9144.3 | 5258.7 | 1171.1 | 1008.8 | 1091.7 | 1168.7 | 1164.0 | 1089.3 | 950.4  | 918.9  |
| 65°   | 10163.5 | 8712.3 | 3998.9 | 944.5  | 967.9  | 1053.1 | 1138.4 | 1081.2 | 1008.8 | 880.3  | 864.0  |
| 67.5° | 9612.4  | 7802.7 | 2242.9 | 872.2  | 955.1  | 1030.9 | 1085.8 | 1016.9 | 936.4  | 815.0  | 807.9  |
| 68°   | 9449.0  | 7535.4 | 1914.8 | 867.5  | 952.7  | 1023.9 | 1071.8 | 1000.6 | 922.4  | 804.4  | 799.8  |
| 70°   | 8496.3  | 6157.7 | 864.0  | 852.3  | 938.7  | 998.3  | 1033.3 | 955.1  | 871.0  | 768.2  | 761.2  |
| 72.5° | 6565.1  | 3813.2 | 580.3  | 810.3  | 903.7  | 959.7  | 981.9  | 908.4  | 838.3  | 723.9  | 714.5  |
| 75°   | 3891.4  | 1048.5 | 549.9  | 737.9  | 844.1  | 922.4  | 945.7  | 872.2  | 789.3  | 657.3  | 642.2  |
| 77.5° | 957.4   | 378.3  | 532.4  | 656.2  | 782.3  | 860.5  | 897.8  | 847.6  | 747.2  | 591.9  | 576.8  |
| 80°   | 290.7   | 301.2  | 506.7  | 567.4  | 704.0  | 768.2  | 790.4  | 790.4  | 691.2  | 416.8  | 439.0  |
| 82.5° | 191.5   | 241.7  | 432.0  | 426.2  | 559.3  | 636.3  | 594.3  | 596.6  | 542.9  | 185.6  | 217.2  |
| 85°   | 120.3   | 197.3  | 291.9  | 279.0  | 356.1  | 390.0  | 422.7  | 434.3  | 381.8  | 53.7   | 3.5    |
| 87.5° | 61.9    | 84.1   | 102.7  | 109.7  | 141.3  | 202.0  | 270.9  | 266.2  | 196.1  | 47.9   | 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)