

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: P233842

Luminaire Tested: **VERD-G-C029-D-U-T2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233842
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1710-389-10)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-G-C029-D-U-T2
Description: VERDEON-G ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1040mA LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15520 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 121
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

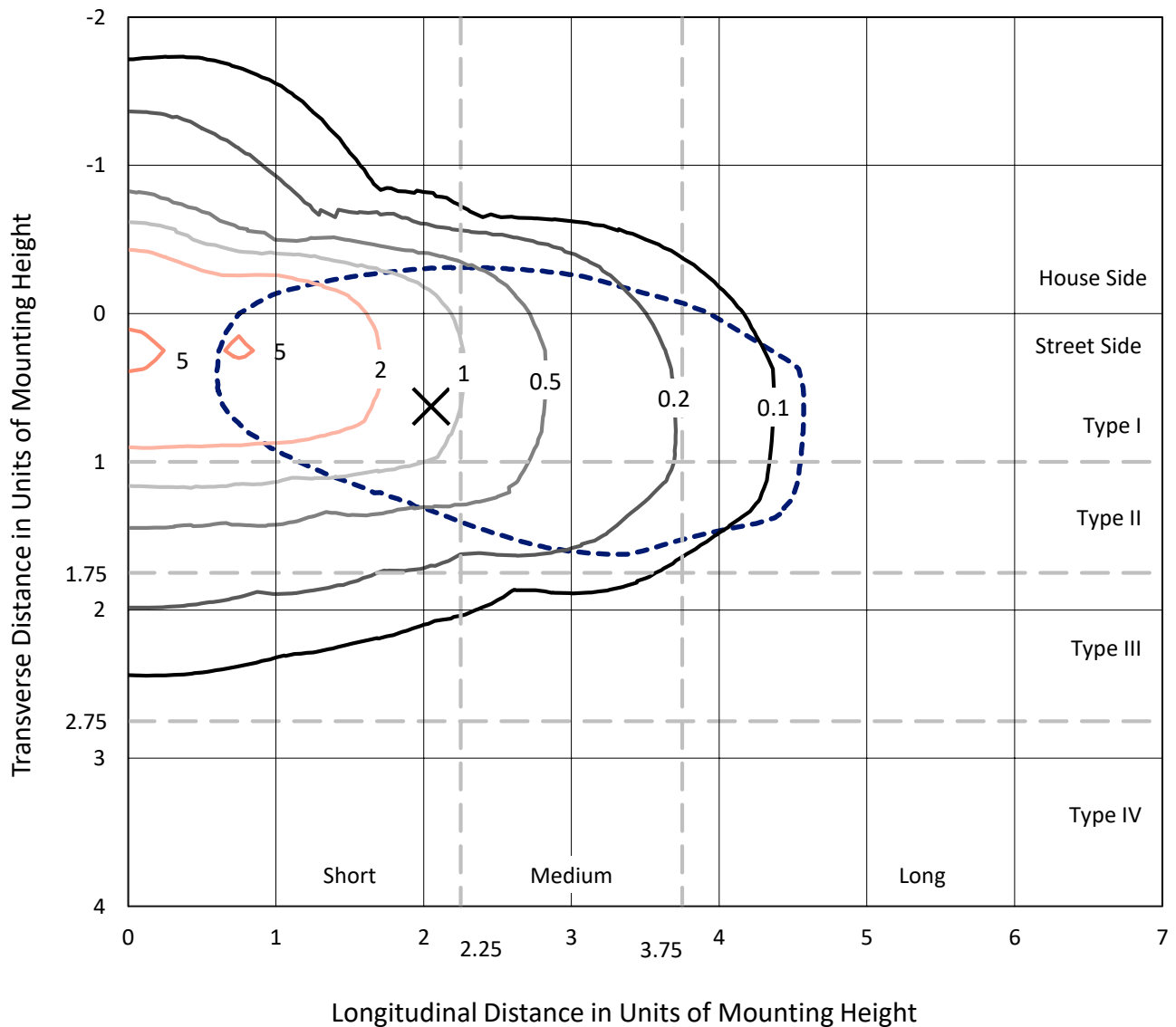


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

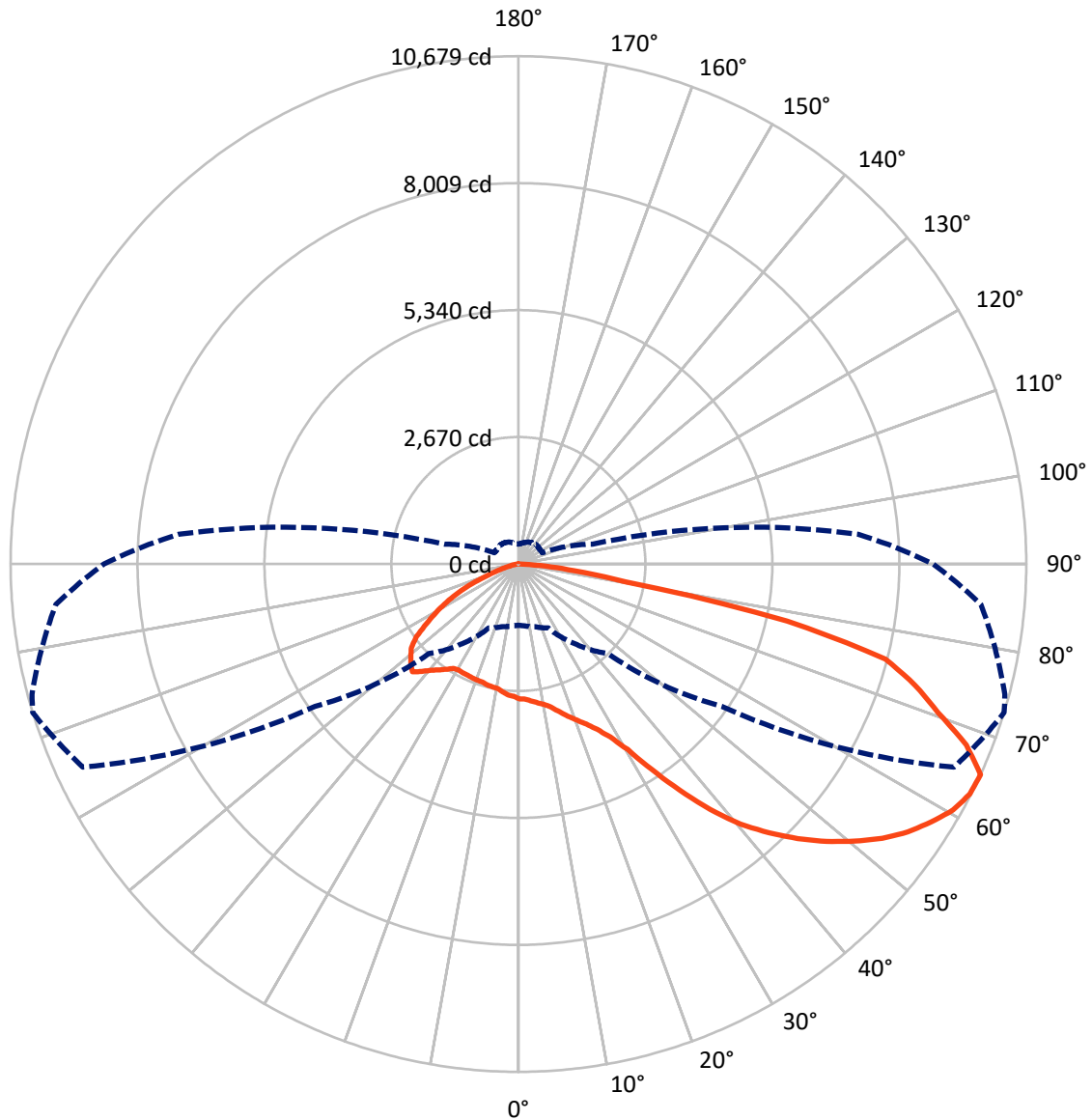


Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3978.5 | 0.0 | 3978.5 |
| | % Fixture | 25.6 | 0.0 | 25.6 |
| Street Side | Lumens | 11541.5 | 0.0 | 11541.5 |
| | % Fixture | 74.4 | 0.0 | 74.4 |
| Total | Lumens | 15520.0 | 0.0 | 15520.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 270.8 | 1.7 |
| 10°-20° | 818.8 | 5.3 |
| 20°-30° | 1373.5 | 8.8 |
| 30°-40° | 2014.2 | 13.0 |
| 40°-50° | 2722.2 | 17.5 |
| 50°-60° | 3153.5 | 20.3 |
| 60°-70° | 3080.4 | 19.8 |
| 70°-80° | 1849.8 | 11.9 |
| 80°-90° | 236.9 | 1.5 |
| 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° | 15520.0 | 100.0 |
| 0°-180° | 15520.0 | 100.0 |



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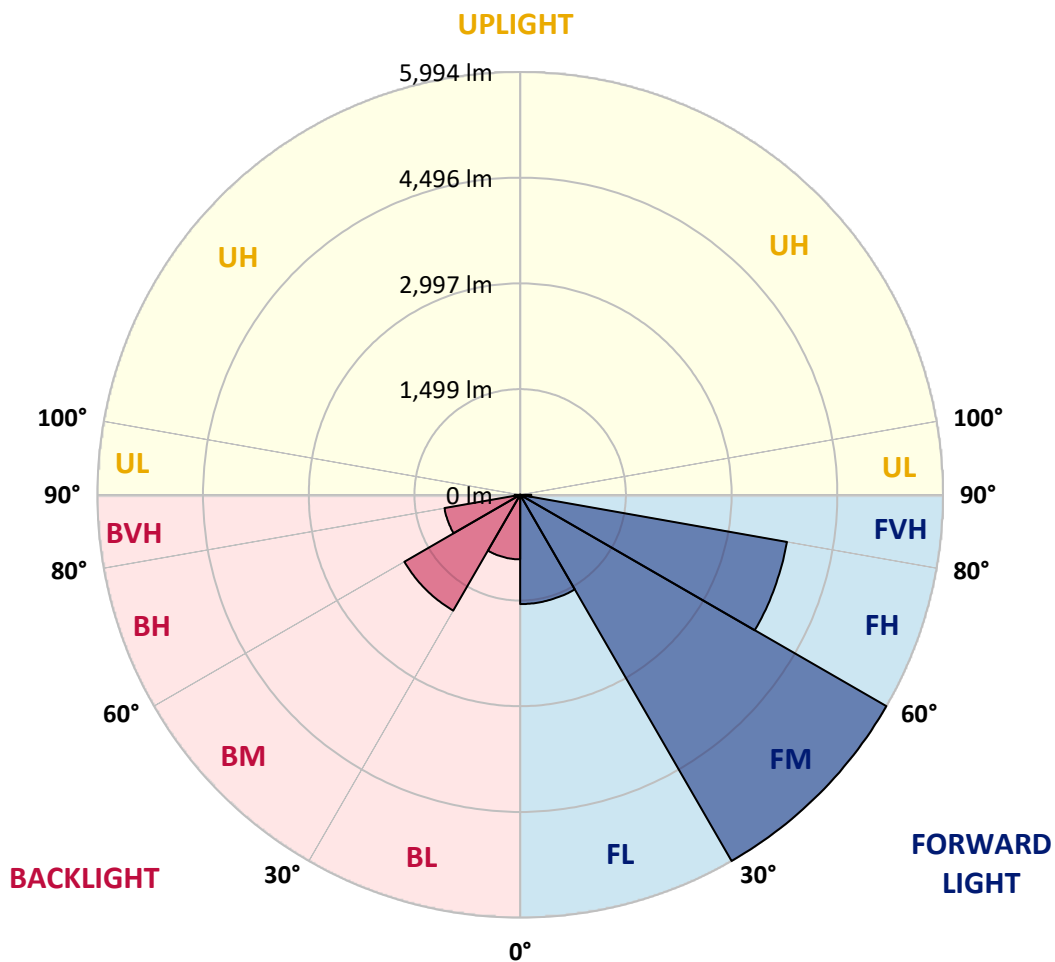
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1548.6 | 10.0 | | | |
| FM | (30°-60°) | 5994.3 | 38.6 | | | |
| FH | (60°-80°) | 3840.9 | 24.7 | | | G2/5000 |
| FVH | (80°-90°) | 157.7 | 1.0 | | | G2/225 |
| BL | (0°-30°) | 914.4 | 5.9 | B2/1000 | | |
| BM | (30°-60°) | 1895.6 | 12.2 | B2/2500 | | |
| BH | (60°-80°) | 1089.3 | 7.0 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 79.2 | 0.5 | | | G1/100 |
| 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 Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 73° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|--------|
| 0° | 2837.8 | 2837.8 | 2837.8 | 2837.8 | 2837.8 | 2837.8 | 2837.8 | 2837.8 | 2837.8 | 2837.8 | 2837.8 |
| 2.5° | 3012.5 | 3023.8 | 3011.1 | 2974.5 | 2956.2 | 2943.5 | 2905.5 | 2871.6 | 2844.9 | 2842.0 | 2816.7 |
| 5° | 3128.1 | 3145.0 | 3123.9 | 3077.4 | 3059.0 | 3032.3 | 2990.0 | 2943.5 | 2895.6 | 2885.7 | 2835.0 |
| 7.5° | 3274.6 | 3277.4 | 3266.2 | 3219.7 | 3181.6 | 3125.3 | 3052.0 | 3002.7 | 2947.7 | 2932.2 | 2851.9 |
| 10° | 3398.6 | 3397.2 | 3383.1 | 3338.0 | 3300.0 | 3250.7 | 3147.8 | 3067.5 | 3002.7 | 2983.0 | 2871.6 |
| 12.5° | 3517.0 | 3514.2 | 3500.1 | 3453.6 | 3405.7 | 3364.8 | 3287.3 | 3178.8 | 3091.4 | 3066.1 | 2928.0 |
| 15° | 3663.5 | 3656.5 | 3633.9 | 3571.9 | 3533.9 | 3486.0 | 3429.6 | 3321.1 | 3221.1 | 3185.9 | 3009.7 |
| 17.5° | 3776.2 | 3774.8 | 3757.9 | 3705.8 | 3660.7 | 3608.6 | 3556.4 | 3471.9 | 3363.4 | 3323.9 | 3090.0 |
| 20° | 3841.1 | 3835.4 | 3831.2 | 3790.3 | 3779.1 | 3750.9 | 3676.2 | 3611.4 | 3502.9 | 3462.0 | 3180.2 |
| 22.5° | 3910.1 | 3911.5 | 3912.9 | 3891.8 | 3924.2 | 3900.2 | 3845.3 | 3766.4 | 3656.5 | 3610.0 | 3307.0 |
| 25° | 3925.6 | 3928.4 | 3956.6 | 4003.1 | 4042.6 | 4086.2 | 4046.8 | 3969.3 | 3850.9 | 3801.6 | 3480.3 |
| 27.5° | 3881.9 | 3893.2 | 3977.7 | 4056.6 | 4196.1 | 4252.5 | 4245.5 | 4241.2 | 4120.1 | 4070.7 | 3718.5 |
| 30° | 3921.4 | 3921.4 | 3979.1 | 4114.4 | 4290.5 | 4438.5 | 4470.9 | 4561.1 | 4524.5 | 4489.2 | 4118.6 |
| 32.5° | 3803.0 | 3824.2 | 3927.0 | 4115.8 | 4394.8 | 4610.4 | 4756.9 | 5007.8 | 5152.9 | 5123.3 | 4685.1 |
| 35° | 3580.4 | 3608.6 | 3759.3 | 4048.2 | 4447.0 | 4813.3 | 5075.4 | 5558.7 | 5839.1 | 5874.3 | 5367.1 |
| 37.5° | 3408.5 | 3432.4 | 3621.3 | 3942.5 | 4466.7 | 5003.5 | 5443.2 | 6178.7 | 6540.8 | 6522.5 | 5944.8 |
| 40° | 3198.5 | 3240.8 | 3431.0 | 3817.1 | 4420.2 | 5165.6 | 5841.9 | 6747.9 | 7193.2 | 7108.6 | 6494.3 |
| 42.5° | 3009.7 | 3046.4 | 3205.6 | 3617.0 | 4355.4 | 5257.2 | 6202.6 | 7334.1 | 7724.4 | 7656.8 | 7014.2 |
| 45° | 2809.6 | 2842.0 | 2990.0 | 3377.5 | 4204.6 | 5302.2 | 6540.8 | 7894.9 | 8234.5 | 8158.4 | 7496.1 |
| 47.5° | 2580.0 | 2623.6 | 2799.8 | 3152.0 | 3983.4 | 5274.1 | 6787.4 | 8382.4 | 8719.2 | 8662.8 | 7894.9 |
| 50° | 2000.8 | 2045.9 | 2506.7 | 2940.7 | 3676.2 | 5157.1 | 7008.6 | 8870.0 | 9157.4 | 9103.9 | 8247.2 |
| 52.5° | 1816.3 | 1836.0 | 1979.7 | 2698.3 | 3356.4 | 4926.0 | 7146.7 | 9271.5 | 9584.3 | 9530.8 | 8579.7 |
| 55° | 1703.5 | 1717.6 | 1797.9 | 2203.8 | 3084.4 | 4554.0 | 7163.6 | 9688.6 | 9943.6 | 9873.2 | 8933.4 |
| 57.5° | 1588.0 | 1603.5 | 1692.3 | 1900.8 | 2811.0 | 3972.1 | 6984.6 | 10042.3 | 10235.3 | 10159.2 | 9271.5 |
| 60° | 1490.8 | 1499.2 | 1586.6 | 1730.3 | 2502.5 | 3394.4 | 6523.9 | 10283.2 | 10504.4 | 10405.8 | 9602.7 |
| 62.5° | 1402.0 | 1413.3 | 1476.7 | 1607.7 | 2243.2 | 2961.8 | 5881.4 | 10284.6 | 10652.4 | 10591.8 | 9770.3 |
| 65° | 1286.5 | 1303.4 | 1365.4 | 1483.7 | 2033.3 | 2665.9 | 5216.3 | 10105.7 | 10679.2 | 10589.0 | 9761.9 |
| 67.5° | 1152.6 | 1173.7 | 1230.1 | 1324.5 | 1754.3 | 2350.3 | 4289.1 | 9870.4 | 10156.4 | 10140.9 | 9358.9 |
| 70° | 1018.7 | 1018.7 | 1082.1 | 1158.2 | 1455.5 | 2012.1 | 3388.8 | 9032.0 | 9358.9 | 9382.8 | 8636.1 |
| 72.5° | 859.5 | 862.3 | 911.7 | 977.9 | 1172.3 | 1651.4 | 2468.7 | 7721.6 | 8724.8 | 8434.6 | 7789.2 |
| 75° | 721.4 | 718.6 | 769.3 | 824.3 | 953.9 | 1300.6 | 1610.5 | 5672.8 | 7973.8 | 8038.6 | 6855.0 |
| 77.5° | 383.3 | 369.2 | 434.0 | 477.7 | 559.4 | 722.8 | 893.3 | 2844.9 | 5774.3 | 5901.1 | 5488.2 |
| 80° | 108.5 | 109.9 | 287.4 | 321.3 | 367.8 | 357.9 | 414.3 | 1085.0 | 2284.1 | 2574.3 | 3199.9 |
| 82.5° | 64.8 | 74.7 | 163.4 | 191.6 | 143.7 | 93.0 | 157.8 | 603.1 | 1182.2 | 1324.5 | 1588.0 |
| 85° | 33.8 | 36.6 | 57.8 | 71.9 | 55.0 | 46.5 | 47.9 | 253.6 | 574.9 | 584.8 | 634.1 |
| 87.5° | 15.5 | 15.5 | 21.1 | 22.5 | 14.1 | 8.5 | 5.6 | 4.2 | 4.2 | 2.8 | 2.8 |
| 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° | 2837.8 | 2837.8 | 2837.8 | 2837.8 | 2837.8 | 2837.8 | 2837.8 | 2837.8 | 2837.8 | 2837.8 | 2837.8 |
| 2.5° | 2797.0 | 2811.0 | 2787.1 | 2768.8 | 2754.7 | 2746.2 | 2736.4 | 2712.4 | 2719.5 | 2729.3 | 2727.9 |
| 5° | 2811.0 | 2818.1 | 2775.8 | 2718.1 | 2664.5 | 2626.5 | 2601.1 | 2563.1 | 2563.1 | 2578.6 | 2578.6 |
| 7.5° | 2823.7 | 2813.9 | 2727.9 | 2630.7 | 2570.1 | 2539.1 | 2498.2 | 2457.4 | 2450.3 | 2461.6 | 2463.0 |
| 10° | 2830.8 | 2788.5 | 2668.7 | 2578.6 | 2499.7 | 2436.2 | 2384.1 | 2337.6 | 2336.2 | 2351.7 | 2354.5 |
| 12.5° | 2861.8 | 2780.1 | 2664.5 | 2540.5 | 2422.2 | 2354.5 | 2292.5 | 2240.4 | 2222.1 | 2223.5 | 2226.3 |
| 15° | 2909.7 | 2813.9 | 2658.9 | 2488.4 | 2360.2 | 2270.0 | 2179.8 | 2113.6 | 2096.7 | 2119.2 | 2127.7 |
| 17.5° | 2967.5 | 2868.8 | 2632.1 | 2440.5 | 2284.1 | 2175.6 | 2085.4 | 2026.2 | 1972.7 | 1948.7 | 1944.5 |
| 20° | 3043.5 | 2915.3 | 2646.2 | 2370.0 | 2210.8 | 2065.7 | 1952.9 | 1881.1 | 1836.0 | 1833.2 | 1830.4 |
| 22.5° | 3143.6 | 2967.5 | 2649.0 | 2323.5 | 2095.3 | 1944.5 | 1805.0 | 1764.1 | 1683.8 | 1654.2 | 1666.9 |
| 25° | 3276.0 | 3046.4 | 2642.0 | 2274.2 | 2006.5 | 1803.6 | 1635.9 | 1561.2 | 1531.6 | 1497.8 | 1500.6 |
| 27.5° | 3446.5 | 3171.8 | 2660.3 | 2209.4 | 1861.4 | 1631.7 | 1444.3 | 1364.0 | 1318.9 | 1290.7 | 1294.9 |
| 30° | 3793.2 | 3362.0 | 2658.9 | 2147.4 | 1727.5 | 1454.1 | 1242.8 | 1189.2 | 1144.1 | 1118.8 | 1131.5 |
| 32.5° | 4286.3 | 3774.8 | 2718.1 | 2064.3 | 1575.3 | 1216.0 | 1073.7 | 1013.1 | 975.1 | 946.9 | 953.9 |
| 35° | 4896.4 | 4224.3 | 2870.2 | 1951.5 | 1402.0 | 1034.2 | 937.0 | 862.3 | 815.8 | 804.6 | 800.3 |
| 37.5° | 5462.9 | 4621.7 | 3014.0 | 1876.9 | 1203.3 | 934.2 | 811.6 | 736.9 | 696.1 | 710.2 | 710.2 |
| 40° | 5968.7 | 5148.7 | 3176.0 | 1757.1 | 1023.0 | 820.1 | 672.1 | 638.3 | 617.2 | 641.1 | 649.6 |
| 42.5° | 6350.6 | 5654.5 | 3395.8 | 1599.3 | 876.4 | 684.8 | 574.9 | 598.8 | 607.3 | 624.2 | 620.0 |
| 45° | 6824.0 | 5943.4 | 3612.8 | 1452.7 | 748.2 | 570.7 | 555.2 | 604.5 | 624.2 | 639.7 | 632.7 |
| 47.5° | 7259.4 | 6167.4 | 3569.1 | 1182.2 | 629.8 | 552.3 | 565.0 | 604.5 | 638.3 | 663.7 | 659.4 |
| 50° | 7634.2 | 6447.8 | 3486.0 | 918.7 | 604.5 | 569.3 | 574.9 | 589.0 | 639.7 | 656.6 | 656.6 |
| 52.5° | 7868.1 | 6725.4 | 3383.1 | 742.6 | 622.8 | 590.4 | 580.5 | 579.1 | 612.9 | 625.6 | 614.3 |
| 55° | 8149.9 | 7012.8 | 3116.8 | 689.0 | 629.8 | 604.5 | 596.0 | 583.3 | 593.2 | 583.3 | 589.0 |
| 57.5° | 8462.7 | 7296.0 | 2708.2 | 673.5 | 625.6 | 600.3 | 645.3 | 577.7 | 572.1 | 536.8 | 528.4 |
| 60° | 8737.5 | 7407.4 | 2350.3 | 638.3 | 603.1 | 589.0 | 600.3 | 570.7 | 542.5 | 496.0 | 477.7 |
| 62.5° | 8840.4 | 7397.5 | 1986.8 | 601.7 | 569.3 | 572.1 | 570.7 | 549.5 | 524.2 | 477.7 | 466.4 |
| 65° | 8716.4 | 7172.1 | 1610.5 | 558.0 | 542.5 | 553.8 | 539.7 | 508.7 | 466.4 | 428.4 | 418.5 |
| 67.5° | 8296.5 | 6597.2 | 1196.3 | 500.2 | 498.8 | 519.9 | 510.1 | 467.8 | 421.3 | 391.7 | 391.7 |
| 70° | 7493.3 | 5889.8 | 775.0 | 415.7 | 446.7 | 483.3 | 483.3 | 438.2 | 377.6 | 352.3 | 359.3 |
| 72.5° | 6614.1 | 5068.3 | 501.6 | 308.6 | 352.3 | 438.2 | 435.4 | 404.4 | 348.0 | 315.6 | 317.0 |
| 75° | 5729.2 | 4021.4 | 324.1 | 212.8 | 228.3 | 373.4 | 386.1 | 329.7 | 270.5 | 231.1 | 224.0 |
| 77.5° | 4355.4 | 3025.2 | 205.7 | 124.0 | 145.1 | 228.3 | 293.1 | 274.8 | 276.2 | 336.8 | 333.9 |
| 80° | 2678.6 | 1823.3 | 149.4 | 60.6 | 71.9 | 149.4 | 236.7 | 262.1 | 367.8 | 242.4 | 222.6 |
| 82.5° | 1341.4 | 852.5 | 78.9 | 36.6 | 40.9 | 66.2 | 140.9 | 314.2 | 267.7 | 160.6 | 152.2 |
| 85° | 501.6 | 229.7 | 24.0 | 18.3 | 22.5 | 33.8 | 57.8 | 287.4 | 170.5 | 128.2 | 125.4 |
| 87.5° | 2.8 | 4.2 | 4.2 | 5.6 | 8.5 | 9.9 | 21.1 | 136.7 | 86.0 | 62.0 | 59.2 |
| 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)