

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: P509175

Luminaire Tested: **VERD-CA2-120-740-U-T3**

Issue Date: 3/4/2021

Test Information

Test Method: LM-79-08
Report Number: P509175
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-139-4)
Test Lab: INNOVATION CENTER
Issue Date: 3/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-CA2-120-740-U-T3
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1120mA LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17167 lumens
Efficiency: N/A
Efficacy: 139.9 lumens/watt
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G2

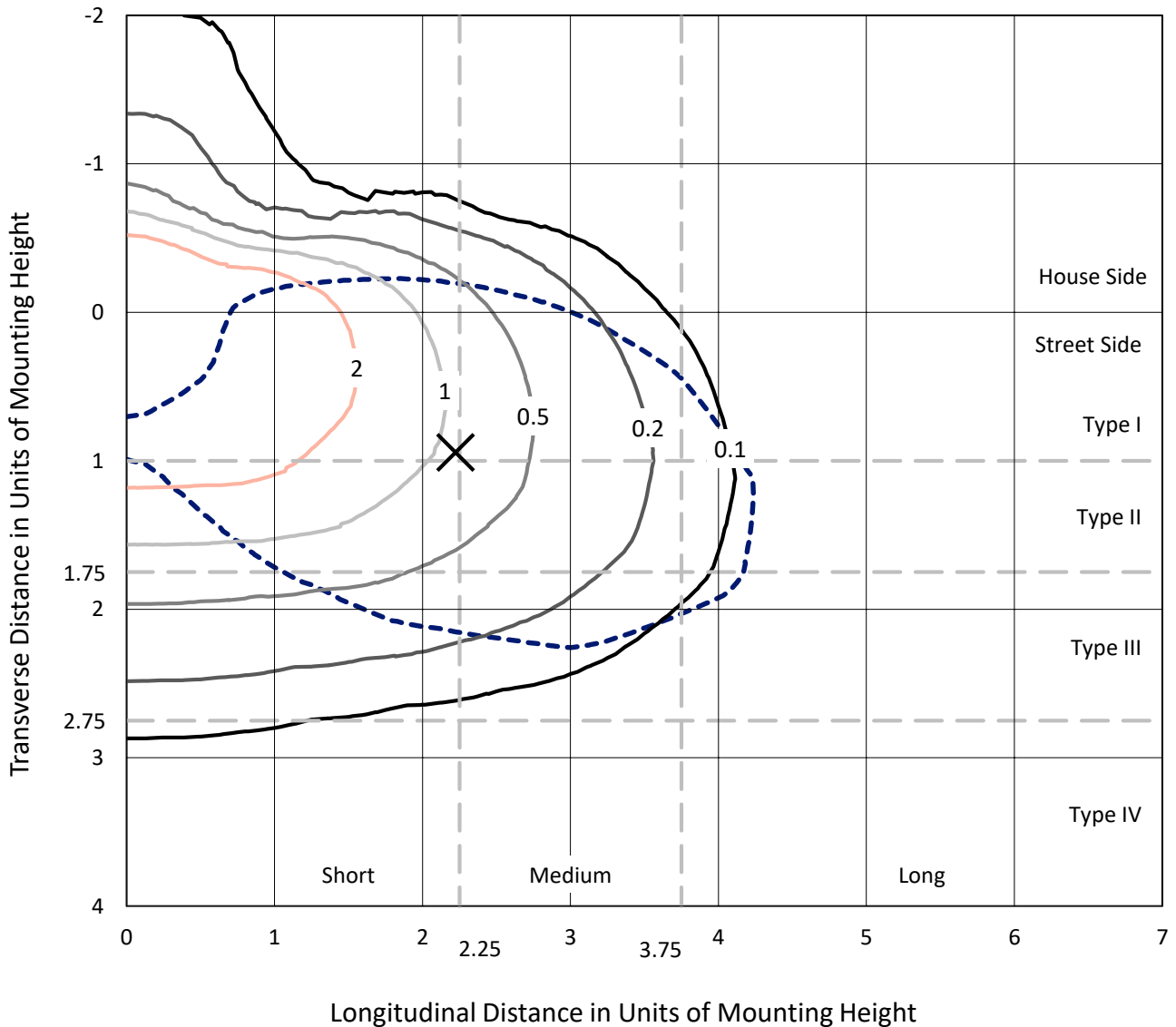
Input Watts (W): 122.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

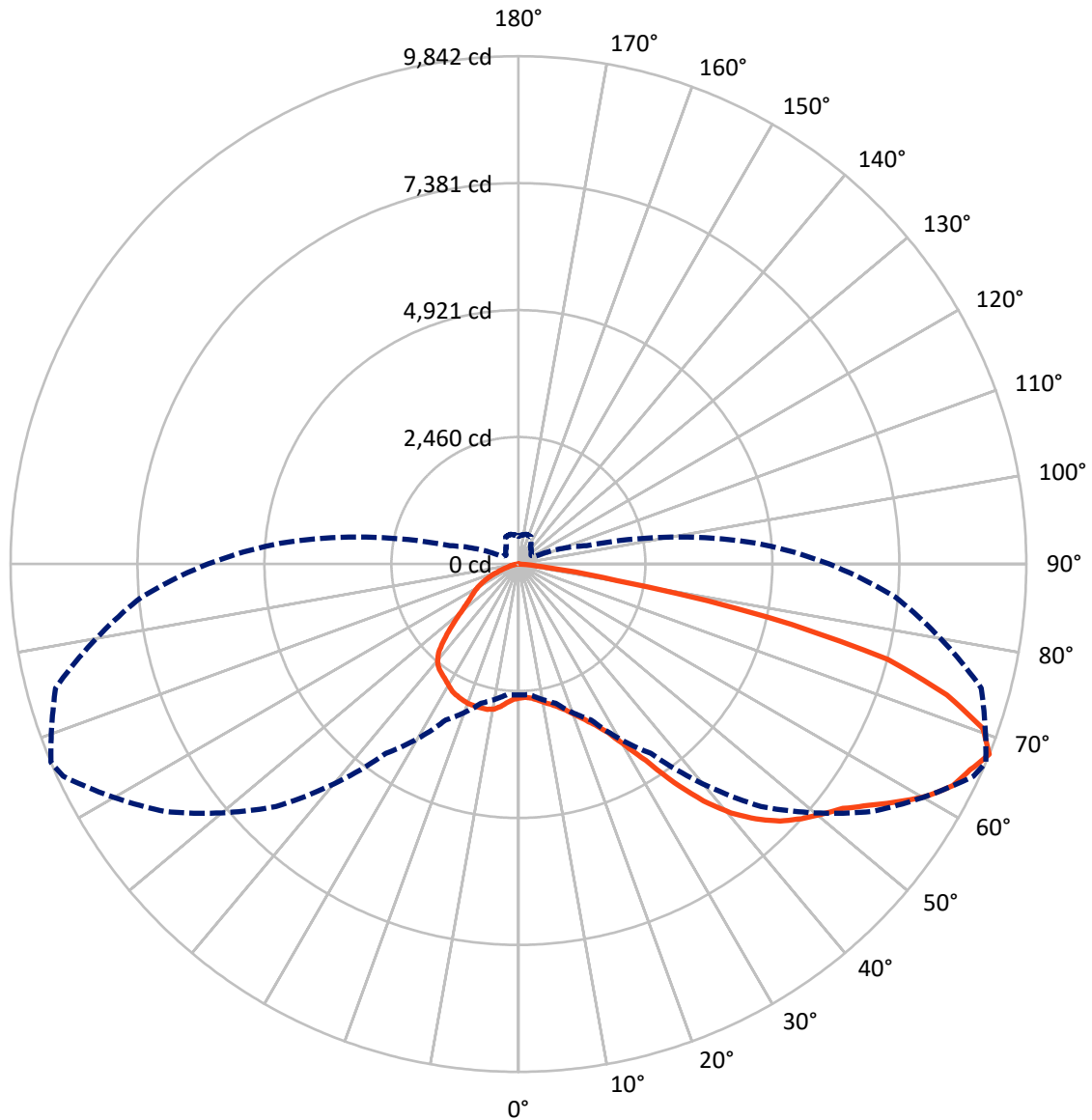
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3925.3 | 0.0 | 3925.3 |
| | % Fixture | 22.9 | 0.0 | 22.9 |
| Street Side | Lumens | 13241.7 | 0.0 | 13241.7 |
| | % Fixture | 77.1 | 0.0 | 77.1 |
| Total | Lumens | 17167.0 | 0.0 | 17167.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 263.0 | 1.5 |
| 10°-20° | 841.8 | 4.9 |
| 20°-30° | 1454.5 | 8.5 |
| 30°-40° | 2207.7 | 12.9 |
| 40°-50° | 2999.9 | 17.5 |
| 50°-60° | 3567.8 | 20.8 |
| 60°-70° | 3670.8 | 21.4 |
| 70°-80° | 2002.4 | 11.7 |
| 80°-90° | 159.1 | 0.9 |
| 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° | 17167.0 | 100.0 |
| 0°-180° | 17167.0 | 100.0 |

Coefficient of Utilization



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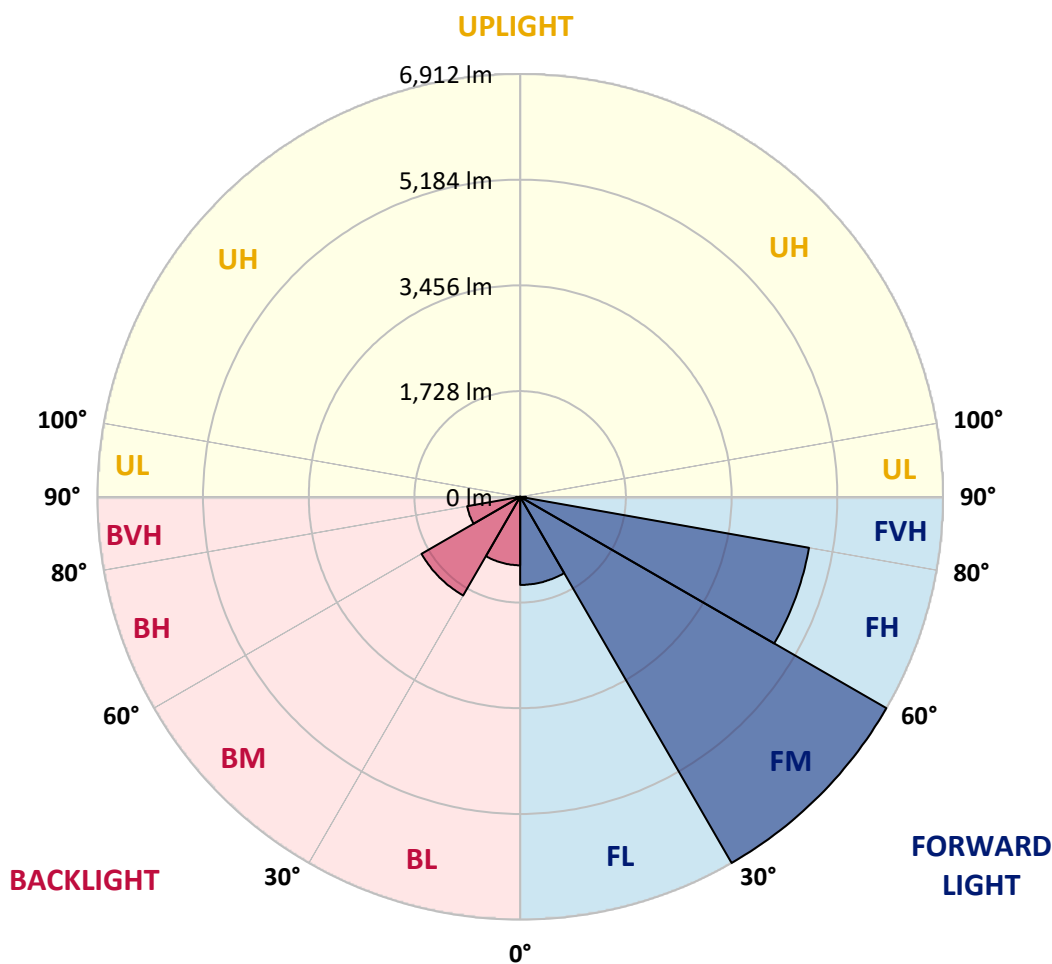
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1439.9 | 8.4 | | | |
| FM (30°-60°) | 6912.1 | 40.3 | | | |
| FH (60°-80°) | 4794.4 | 27.9 | | | G2/5000 |
| FVH (80°-90°) | 95.2 | 0.6 | | | G1/100 |
| BL (0°-30°) | 1119.3 | 6.5 | B3/2500 | | |
| BM (30°-60°) | 1863.3 | 10.9 | B2/2500 | | |
| BH (60°-80°) | 878.8 | 5.1 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 63.9 | 0.4 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 67° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2597.1 | 2597.1 | 2597.1 | 2597.1 | 2597.1 | 2597.1 | 2597.1 | 2597.1 | 2597.1 | 2597.1 | 2597.1 |
| 2.5° | 2612.0 | 2600.8 | 2585.9 | 2591.5 | 2580.4 | 2598.9 | 2591.5 | 2587.8 | 2587.8 | 2589.6 | 2598.9 |
| 5° | 2671.4 | 2660.3 | 2649.1 | 2647.3 | 2625.0 | 2632.4 | 2621.3 | 2610.1 | 2610.1 | 2608.2 | 2612.0 |
| 7.5° | 2775.6 | 2760.7 | 2747.7 | 2745.8 | 2717.9 | 2714.2 | 2680.7 | 2658.4 | 2658.4 | 2656.6 | 2662.2 |
| 10° | 2913.1 | 2907.5 | 2881.5 | 2864.8 | 2831.3 | 2809.0 | 2768.1 | 2732.8 | 2725.4 | 2714.2 | 2729.1 |
| 12.5° | 3045.1 | 3043.3 | 3019.1 | 3000.5 | 2954.0 | 2915.0 | 2848.1 | 2799.7 | 2790.4 | 2777.4 | 2788.6 |
| 15° | 3210.6 | 3193.8 | 3167.8 | 3156.7 | 3089.7 | 3030.2 | 2954.0 | 2881.5 | 2872.2 | 2857.4 | 2866.6 |
| 17.5° | 3392.8 | 3383.5 | 3342.6 | 3329.5 | 3245.9 | 3177.1 | 3082.3 | 2989.3 | 2974.5 | 2954.0 | 2952.2 |
| 20° | 3612.1 | 3595.4 | 3563.8 | 3526.6 | 3444.8 | 3346.3 | 3236.6 | 3130.6 | 3117.6 | 3100.9 | 3065.6 |
| 22.5° | 3848.2 | 3829.6 | 3798.0 | 3759.0 | 3654.9 | 3550.8 | 3413.2 | 3279.4 | 3271.9 | 3260.8 | 3195.7 |
| 25° | 4073.2 | 4041.6 | 4045.3 | 4008.1 | 3915.1 | 3783.2 | 3621.4 | 3461.5 | 3457.8 | 3456.0 | 3351.9 |
| 27.5° | 4313.0 | 4279.5 | 4268.4 | 4255.4 | 4168.0 | 4043.4 | 3861.2 | 3708.8 | 3695.8 | 3697.6 | 3539.6 |
| 30° | 4537.9 | 4523.1 | 4513.8 | 4504.5 | 4461.7 | 4350.2 | 4175.4 | 4039.7 | 4080.6 | 4076.9 | 3859.4 |
| 32.5° | 4712.7 | 4701.5 | 4740.6 | 4785.2 | 4774.0 | 4681.1 | 4560.2 | 4498.9 | 4539.8 | 4671.8 | 4482.2 |
| 35° | 4867.0 | 4861.4 | 4935.8 | 5030.6 | 5097.5 | 5030.6 | 5017.6 | 5112.4 | 5207.2 | 5426.6 | 5316.9 |
| 37.5° | 5034.3 | 5026.9 | 5090.1 | 5251.8 | 5368.9 | 5389.4 | 5487.9 | 5731.4 | 5822.5 | 6041.9 | 5811.4 |
| 40° | 5032.4 | 5041.7 | 5194.2 | 5400.5 | 5614.3 | 5787.2 | 5989.8 | 6225.9 | 6343.1 | 6447.2 | 6090.2 |
| 42.5° | 4950.6 | 4956.2 | 5147.7 | 5540.0 | 5850.4 | 6190.6 | 6370.9 | 6674.0 | 6753.9 | 6774.4 | 6419.3 |
| 45° | 4867.0 | 4870.7 | 5078.9 | 5519.5 | 6047.5 | 6568.0 | 6768.8 | 7045.8 | 7107.1 | 7036.5 | 6642.4 |
| 47.5° | 4746.1 | 4770.3 | 4995.3 | 5499.1 | 6216.6 | 6915.6 | 7077.4 | 7352.5 | 7376.7 | 7287.5 | 6828.3 |
| 50° | 4603.0 | 4616.0 | 4874.4 | 5432.1 | 6328.2 | 7131.3 | 7322.8 | 7571.9 | 7618.4 | 7518.0 | 7058.8 |
| 52.5° | 4428.2 | 4439.4 | 4720.1 | 5342.9 | 6389.5 | 7296.8 | 7510.5 | 7808.0 | 7871.2 | 7826.6 | 7261.4 |
| 55° | 4227.5 | 4233.0 | 4519.3 | 5197.9 | 6372.8 | 7369.3 | 7674.1 | 8142.6 | 8248.6 | 8138.9 | 7430.6 |
| 57.5° | 3976.5 | 3996.9 | 4322.3 | 4980.4 | 6246.4 | 7460.3 | 7969.7 | 8555.3 | 8691.0 | 8456.8 | 7557.0 |
| 60° | 3718.1 | 3738.5 | 4034.1 | 4727.6 | 6034.5 | 7501.2 | 8274.6 | 8999.6 | 9118.6 | 8758.0 | 7635.1 |
| 62.5° | 3428.1 | 3456.0 | 3701.4 | 4346.4 | 5655.2 | 7447.3 | 8499.6 | 9388.2 | 9455.1 | 8938.3 | 7614.6 |
| 65° | 3006.1 | 3020.9 | 3288.6 | 3887.3 | 5160.7 | 7166.6 | 8490.3 | 9596.4 | 9618.7 | 9137.2 | 7525.4 |
| 67.5° | 2537.6 | 2539.5 | 2792.3 | 3333.3 | 4480.3 | 6642.4 | 8360.1 | 9732.1 | 9841.8 | 9284.1 | 7330.2 |
| 70° | 1929.7 | 1955.7 | 2152.8 | 2554.3 | 3662.3 | 5746.3 | 7930.7 | 9598.2 | 9546.2 | 8882.5 | 6770.6 |
| 72.5° | 1377.6 | 1362.7 | 1463.1 | 1734.5 | 2563.6 | 4433.8 | 6837.6 | 8672.4 | 8683.6 | 8090.6 | 5891.3 |
| 75° | 732.5 | 736.2 | 821.7 | 1050.4 | 1308.8 | 2885.2 | 5469.3 | 7326.5 | 7393.4 | 6938.0 | 4610.4 |
| 77.5° | 163.6 | 185.9 | 282.6 | 401.6 | 568.9 | 923.9 | 2967.0 | 4805.6 | 4932.0 | 4565.8 | 2526.4 |
| 80° | 126.4 | 128.3 | 185.9 | 228.7 | 251.0 | 442.5 | 942.5 | 1743.8 | 1935.3 | 1827.4 | 950.0 |
| 82.5° | 83.7 | 85.5 | 122.7 | 126.4 | 120.8 | 202.6 | 427.6 | 522.4 | 574.4 | 501.9 | 353.2 |
| 85° | 44.6 | 46.5 | 55.8 | 61.3 | 48.3 | 59.5 | 55.8 | 44.6 | 46.5 | 40.9 | 40.9 |
| 87.5° | 9.3 | 5.6 | 7.4 | 5.6 | 5.6 | 3.7 | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 |
| 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° | 2597.1 | 2597.1 | 2597.1 | 2597.1 | 2597.1 | 2597.1 | 2597.1 | 2597.1 | 2597.1 | 2597.1 | 2597.1 |
| 2.5° | 2598.9 | 2602.7 | 2612.0 | 2626.8 | 2634.3 | 2651.0 | 2662.2 | 2690.0 | 2729.1 | 2716.1 | 2699.3 |
| 5° | 2613.8 | 2625.0 | 2656.6 | 2695.6 | 2725.4 | 2770.0 | 2792.3 | 2846.2 | 2890.8 | 2887.1 | 2857.4 |
| 7.5° | 2669.6 | 2693.8 | 2732.8 | 2790.4 | 2840.6 | 2885.2 | 2916.8 | 2974.5 | 3015.4 | 2998.6 | 2970.8 |
| 10° | 2740.2 | 2764.4 | 2807.2 | 2859.2 | 2896.4 | 2944.7 | 2965.2 | 3011.7 | 3037.7 | 3017.2 | 2993.1 |
| 12.5° | 2805.3 | 2818.3 | 2848.1 | 2887.1 | 2907.5 | 2939.1 | 2948.4 | 2981.9 | 3006.1 | 2996.8 | 2967.0 |
| 15° | 2868.5 | 2866.6 | 2872.2 | 2883.4 | 2890.8 | 2898.3 | 2900.1 | 2924.3 | 2941.0 | 2922.4 | 2902.0 |
| 17.5° | 2939.1 | 2920.6 | 2896.4 | 2877.8 | 2849.9 | 2836.9 | 2812.7 | 2823.9 | 2822.0 | 2807.2 | 2790.4 |
| 20° | 3028.4 | 2994.9 | 2920.6 | 2862.9 | 2790.4 | 2732.8 | 2682.6 | 2673.3 | 2673.3 | 2632.4 | 2630.5 |
| 22.5° | 3134.3 | 3078.6 | 2954.0 | 2827.6 | 2710.5 | 2619.4 | 2526.4 | 2472.5 | 2433.5 | 2403.7 | 2390.7 |
| 25° | 3271.9 | 3169.7 | 2983.8 | 2779.3 | 2606.4 | 2440.9 | 2301.5 | 2227.1 | 2152.8 | 2104.4 | 2097.0 |
| 27.5° | 3418.8 | 3307.2 | 3002.4 | 2736.5 | 2463.2 | 2236.4 | 2043.1 | 1890.6 | 1821.9 | 1790.3 | 1760.5 |
| 30° | 3658.6 | 3461.5 | 3035.8 | 2645.4 | 2282.9 | 1985.5 | 1728.9 | 1550.4 | 1483.5 | 1461.2 | 1442.6 |
| 32.5° | 4240.5 | 3861.2 | 3067.4 | 2552.5 | 2089.6 | 1708.5 | 1370.1 | 1219.5 | 1161.9 | 1184.2 | 1191.6 |
| 35° | 4969.2 | 4456.1 | 3218.0 | 2444.6 | 1888.8 | 1394.3 | 1054.1 | 953.7 | 957.4 | 990.9 | 1002.0 |
| 37.5° | 5463.7 | 4980.4 | 3524.7 | 2308.9 | 1600.6 | 1033.6 | 816.1 | 784.5 | 812.4 | 842.1 | 847.7 |
| 40° | 5753.7 | 5220.2 | 3740.4 | 2141.6 | 1260.4 | 773.4 | 613.5 | 591.2 | 650.7 | 717.6 | 758.5 |
| 42.5° | 6062.3 | 5424.7 | 3851.9 | 1924.1 | 884.9 | 559.6 | 470.3 | 487.1 | 581.9 | 639.5 | 665.5 |
| 45° | 6227.8 | 5584.6 | 3801.7 | 1613.7 | 602.3 | 435.0 | 422.0 | 468.5 | 563.3 | 615.3 | 622.8 |
| 47.5° | 6406.3 | 5744.4 | 3680.9 | 1290.2 | 461.0 | 412.7 | 414.6 | 470.3 | 567.0 | 622.8 | 622.8 |
| 50° | 6560.6 | 5876.4 | 3465.3 | 1011.3 | 438.7 | 397.8 | 416.4 | 479.6 | 572.6 | 620.9 | 619.1 |
| 52.5° | 6739.0 | 5935.9 | 3158.5 | 818.0 | 416.4 | 384.8 | 418.3 | 487.1 | 563.3 | 591.2 | 587.5 |
| 55° | 6794.8 | 5893.2 | 3011.7 | 684.1 | 399.7 | 377.4 | 425.7 | 498.2 | 559.6 | 565.1 | 555.9 |
| 57.5° | 6794.8 | 5777.9 | 2844.3 | 583.7 | 384.8 | 377.4 | 429.4 | 496.4 | 580.0 | 615.3 | 611.6 |
| 60° | 6765.1 | 5657.1 | 2587.8 | 522.4 | 364.4 | 373.7 | 431.3 | 524.3 | 689.7 | 728.7 | 726.9 |
| 62.5° | 6670.3 | 5461.9 | 2271.8 | 461.0 | 343.9 | 375.5 | 425.7 | 563.3 | 788.2 | 771.5 | 730.6 |
| 65° | 6445.3 | 5093.8 | 1842.3 | 405.3 | 321.6 | 375.5 | 418.3 | 619.1 | 700.9 | 669.3 | 654.4 |
| 67.5° | 6021.4 | 4630.9 | 1370.1 | 347.6 | 295.6 | 351.4 | 407.1 | 580.0 | 594.9 | 559.6 | 537.3 |
| 70° | 5461.9 | 3922.6 | 879.3 | 293.7 | 267.7 | 330.9 | 399.7 | 544.7 | 574.4 | 531.7 | 503.8 |
| 72.5° | 4550.9 | 3115.8 | 509.4 | 239.8 | 226.8 | 304.9 | 384.8 | 528.0 | 565.1 | 507.5 | 468.5 |
| 75° | 3210.6 | 1966.9 | 334.6 | 176.6 | 182.2 | 260.3 | 356.9 | 494.5 | 529.8 | 459.2 | 403.4 |
| 77.5° | 1636.0 | 738.0 | 238.0 | 130.1 | 122.7 | 198.9 | 308.6 | 455.5 | 522.4 | 462.9 | 396.0 |
| 80° | 578.2 | 371.8 | 156.2 | 85.5 | 79.9 | 122.7 | 236.1 | 386.7 | 490.8 | 451.7 | 438.7 |
| 82.5° | 247.3 | 185.9 | 85.5 | 53.9 | 48.3 | 61.3 | 133.9 | 304.9 | 431.3 | 409.0 | 494.5 |
| 85° | 35.3 | 31.6 | 24.2 | 20.4 | 20.4 | 27.9 | 42.8 | 150.6 | 291.9 | 332.8 | 403.4 |
| 87.5° | 5.6 | 5.6 | 5.6 | 3.7 | 3.7 | 3.7 | 1.9 | 22.3 | 96.7 | 145.0 | 200.8 |
| 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)