

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: P509196

Luminaire Tested: **VERD-CA2-130-722-U-T2-HSS**

Issue Date: 3/4/2021

Test Information

Test Method: LM-79-08
Report Number: P509196
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-139-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-CA2-130-722-U-T2-HSS
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2200K, 1180mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13528 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

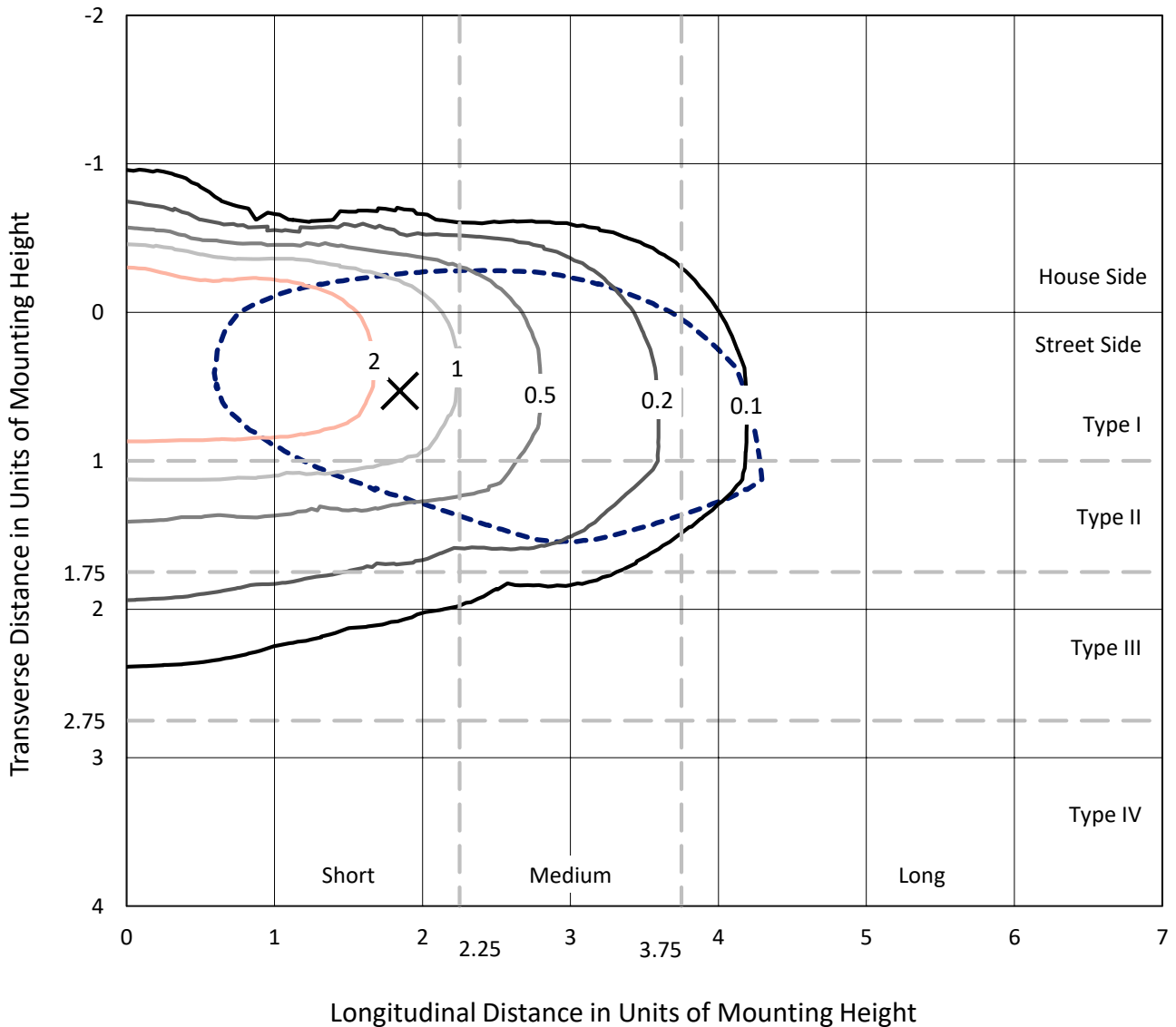
Input Watts (W): 131.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

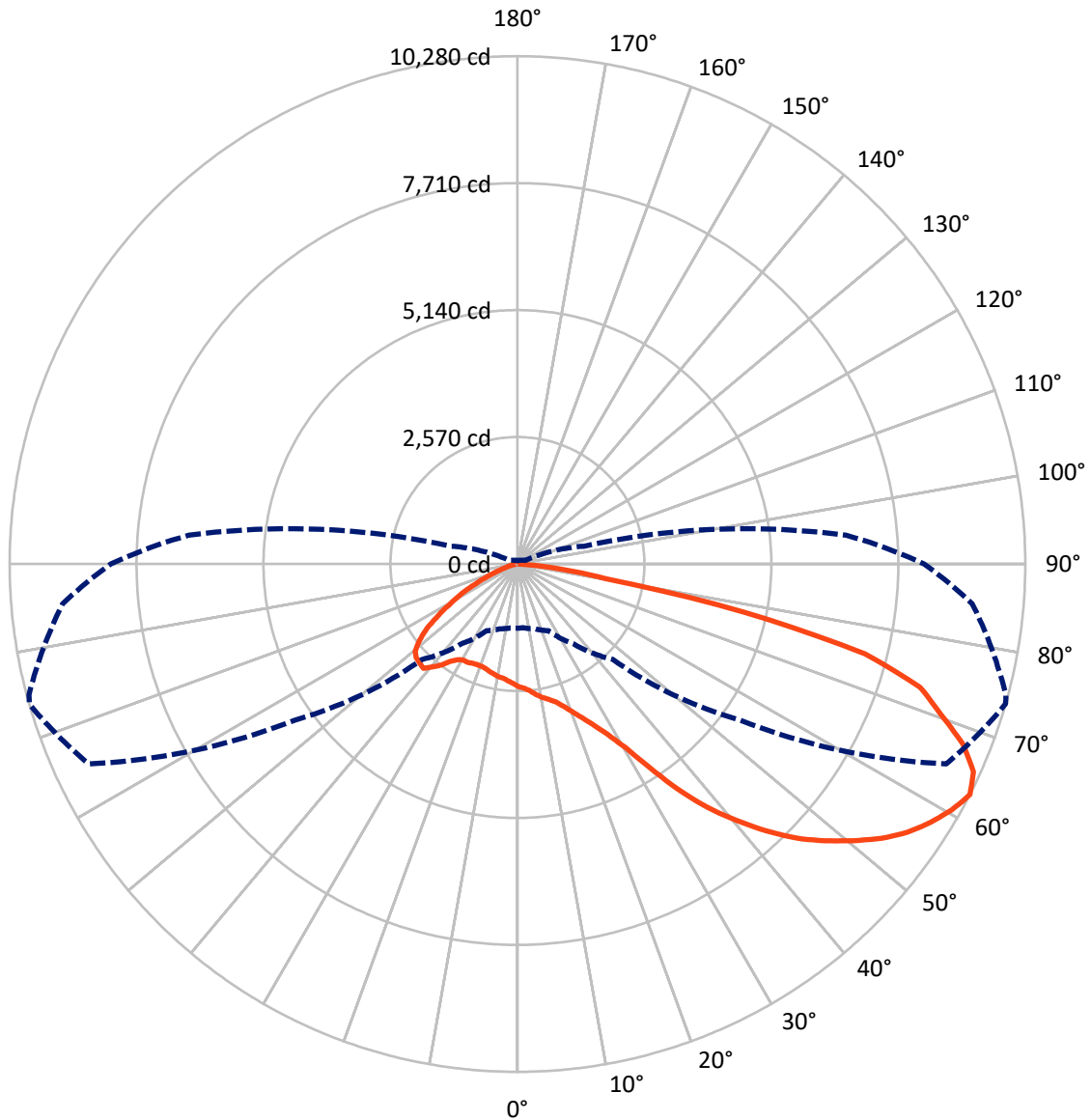
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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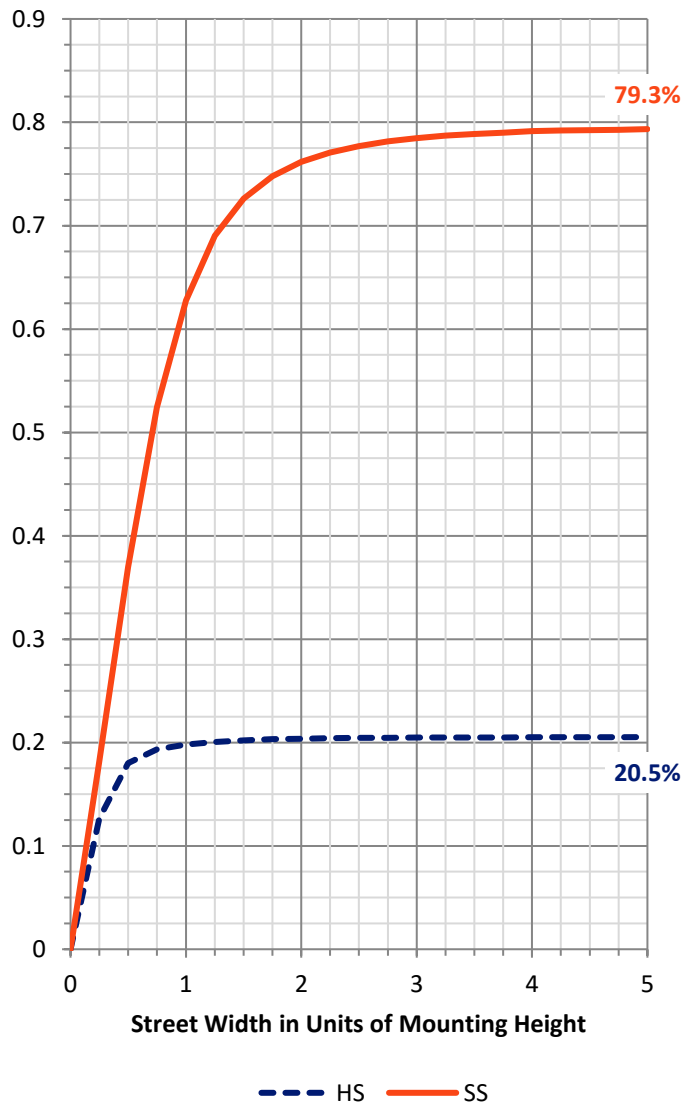
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2809.2 | 0.0 | 2809.2 |
| | % Fixture | 20.8 | 0.0 | 20.8 |
| Street Side | Lumens | 10718.8 | 0.0 | 10718.8 |
| | % Fixture | 79.2 | 0.0 | 79.2 |
| Total | Lumens | 13528.0 | 0.0 | 13528.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 236.4 | 1.7 |
| 10°-20° | 714.0 | 5.3 |
| 20°-30° | 1205.4 | 8.9 |
| 30°-40° | 1793.0 | 13.3 |
| 40°-50° | 2426.7 | 17.9 |
| 50°-60° | 2791.9 | 20.6 |
| 60°-70° | 2694.9 | 19.9 |
| 70°-80° | 1525.8 | 11.3 |
| 80°-90° | 140.0 | 1.0 |
| 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° | 13528.0 | 100.0 |
| 0°-180° | 13528.0 | 100.0 |



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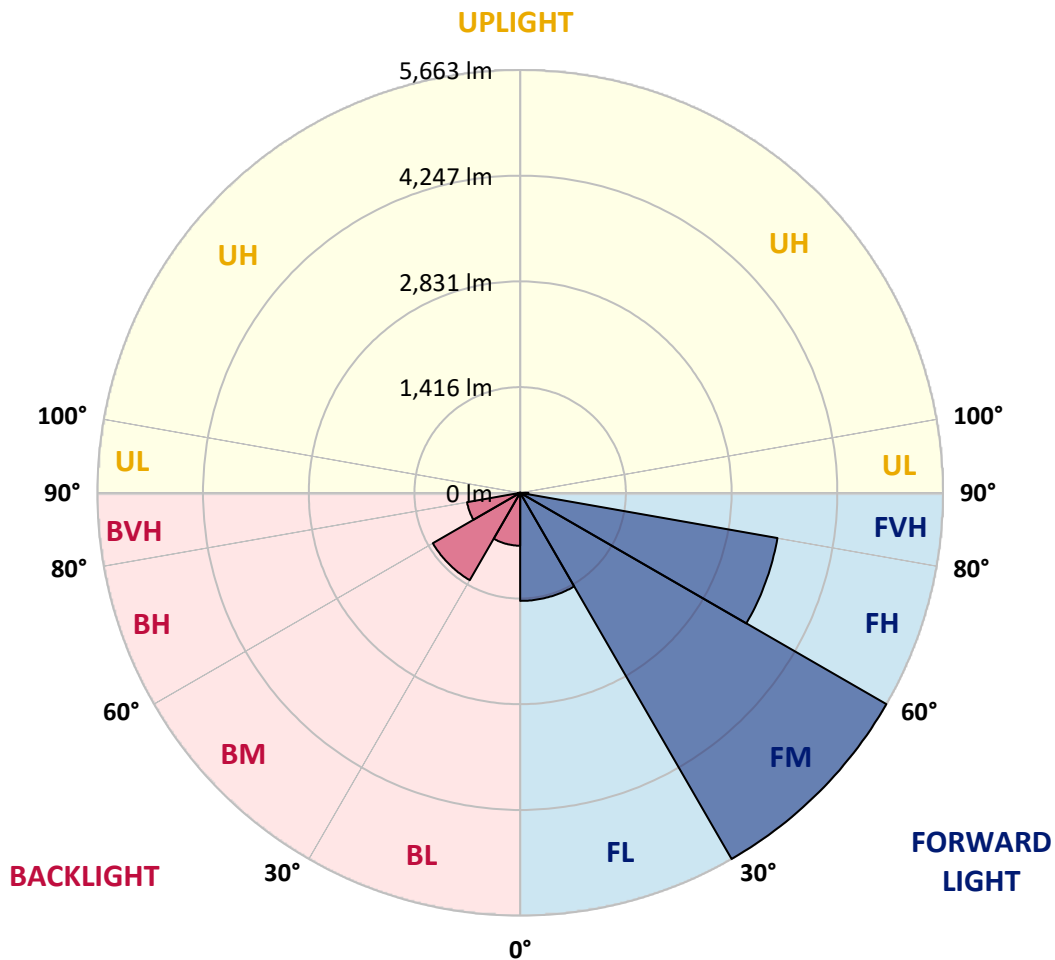
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1447.5 | 10.7 | | | |
| FM (30°-60°) | 5662.6 | 41.9 | | | |
| FH (60°-80°) | 3498.5 | 25.9 | | | G2/5000 |
| FVH (80°-90°) | 110.3 | 0.8 | | | G2/225 |
| BL (0°-30°) | 708.3 | 5.2 | B2/1000 | | |
| BM (30°-60°) | 1349.0 | 10.0 | B2/2500 | | |
| BH (60°-80°) | 722.2 | 5.3 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 29.7 | 0.2 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 74° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|
| 0° | 2479.6 | 2479.6 | 2479.6 | 2479.6 | 2479.6 | 2479.6 | 2479.6 | 2479.6 | 2479.6 | 2479.6 | 2479.6 |
| 2.5° | 2703.7 | 2686.0 | 2671.5 | 2663.4 | 2640.8 | 2621.5 | 2582.8 | 2542.5 | 2515.1 | 2513.5 | 2487.7 |
| 5° | 2816.6 | 2815.0 | 2782.7 | 2776.3 | 2745.6 | 2736.0 | 2697.3 | 2639.2 | 2571.5 | 2563.5 | 2494.1 |
| 7.5° | 2964.9 | 2947.2 | 2911.7 | 2897.2 | 2861.7 | 2835.9 | 2784.3 | 2729.5 | 2661.8 | 2653.7 | 2532.8 |
| 10° | 3108.4 | 3098.7 | 3077.8 | 3079.4 | 3029.4 | 2981.0 | 2903.6 | 2810.1 | 2745.6 | 2736.0 | 2587.6 |
| 12.5° | 3274.4 | 3243.8 | 3208.3 | 3189.0 | 3139.0 | 3108.4 | 3034.2 | 2911.7 | 2810.1 | 2800.4 | 2652.1 |
| 15° | 3388.9 | 3372.8 | 3340.5 | 3327.7 | 3279.3 | 3229.3 | 3143.9 | 3048.7 | 2895.6 | 2885.9 | 2718.2 |
| 17.5° | 3511.4 | 3503.4 | 3466.3 | 3458.2 | 3411.5 | 3351.8 | 3285.7 | 3161.6 | 3027.8 | 3011.7 | 2797.2 |
| 20° | 3593.7 | 3579.2 | 3574.3 | 3572.7 | 3559.8 | 3522.7 | 3438.9 | 3342.2 | 3193.8 | 3164.8 | 2898.8 |
| 22.5° | 3703.3 | 3688.8 | 3695.2 | 3701.7 | 3719.4 | 3703.3 | 3648.5 | 3534.0 | 3387.3 | 3361.5 | 3058.4 |
| 25° | 3714.6 | 3704.9 | 3748.4 | 3838.7 | 3874.2 | 3891.9 | 3850.0 | 3761.3 | 3619.5 | 3585.6 | 3248.7 |
| 27.5° | 3745.2 | 3730.7 | 3777.5 | 3872.6 | 4032.2 | 4059.6 | 4067.7 | 4025.7 | 3906.4 | 3887.1 | 3506.6 |
| 30° | 3690.4 | 3680.7 | 3753.3 | 3916.1 | 4095.1 | 4249.8 | 4309.5 | 4367.5 | 4312.7 | 4278.9 | 3866.1 |
| 32.5° | 3556.6 | 3563.0 | 3658.2 | 3874.2 | 4204.7 | 4443.3 | 4598.1 | 4802.8 | 4901.2 | 4894.7 | 4503.0 |
| 35° | 3361.5 | 3358.3 | 3517.9 | 3822.6 | 4214.4 | 4625.5 | 4914.1 | 5330.0 | 5605.7 | 5586.4 | 5172.0 |
| 37.5° | 3195.4 | 3187.4 | 3368.0 | 3692.0 | 4222.4 | 4770.6 | 5284.9 | 5905.6 | 6255.5 | 6236.1 | 5718.6 |
| 40° | 2992.3 | 3005.2 | 3166.4 | 3540.5 | 4154.7 | 4878.6 | 5607.3 | 6465.1 | 6823.0 | 6823.0 | 6284.5 |
| 42.5° | 2787.6 | 2798.8 | 2958.4 | 3329.3 | 4056.4 | 4957.6 | 5910.4 | 7022.9 | 7387.3 | 7395.3 | 6673.0 |
| 45° | 2608.6 | 2613.4 | 2758.5 | 3092.3 | 3879.0 | 4970.5 | 6189.4 | 7582.3 | 7916.1 | 7895.1 | 7116.4 |
| 47.5° | 2294.2 | 2347.4 | 2574.7 | 2879.4 | 3637.2 | 4914.1 | 6424.8 | 8080.5 | 8370.7 | 8327.2 | 7538.8 |
| 50° | 1828.3 | 1828.3 | 2142.7 | 2676.3 | 3359.9 | 4764.2 | 6610.2 | 8535.2 | 8802.8 | 8762.5 | 7908.0 |
| 52.5° | 1679.9 | 1683.2 | 1779.9 | 2390.9 | 3079.4 | 4506.2 | 6716.6 | 8986.6 | 9226.8 | 9199.4 | 8257.9 |
| 55° | 1600.9 | 1605.8 | 1650.9 | 1937.9 | 2824.6 | 4111.2 | 6719.8 | 9336.4 | 9586.3 | 9525.1 | 8552.9 |
| 57.5° | 1481.6 | 1473.6 | 1568.7 | 1726.7 | 2526.4 | 3601.7 | 6561.8 | 9607.3 | 9865.3 | 9818.5 | 8794.7 |
| 60° | 1397.8 | 1384.9 | 1449.4 | 1591.3 | 2205.5 | 3074.5 | 6141.0 | 9804.0 | 10103.9 | 10131.3 | 9031.7 |
| 62.5° | 1299.5 | 1294.6 | 1355.9 | 1489.7 | 1968.5 | 2729.5 | 5509.0 | 9575.1 | 10279.6 | 10236.1 | 9241.3 |
| 65° | 1201.1 | 1191.4 | 1249.5 | 1354.3 | 1739.6 | 2447.4 | 4872.2 | 9236.5 | 10144.2 | 10182.9 | 9283.2 |
| 67.5° | 1072.1 | 1070.5 | 1125.3 | 1202.7 | 1489.7 | 2131.4 | 3950.0 | 8791.5 | 9725.0 | 9697.6 | 8902.8 |
| 70° | 915.7 | 915.7 | 970.6 | 1038.3 | 1244.6 | 1818.6 | 3032.6 | 8028.9 | 9080.1 | 9239.7 | 8251.4 |
| 72.5° | 740.0 | 743.2 | 798.1 | 875.4 | 1027.0 | 1481.6 | 2236.2 | 6982.6 | 8520.7 | 8264.3 | 7332.4 |
| 75° | 395.0 | 354.7 | 625.5 | 704.5 | 828.7 | 1181.8 | 1530.0 | 4540.0 | 7266.3 | 7089.0 | 6083.0 |
| 77.5° | 95.1 | 100.0 | 196.7 | 366.0 | 441.8 | 654.6 | 752.9 | 2102.4 | 4685.2 | 4967.3 | 4338.5 |
| 80° | 62.9 | 69.3 | 106.4 | 259.6 | 295.0 | 348.2 | 298.3 | 915.7 | 1817.0 | 1936.3 | 2518.3 |
| 82.5° | 32.2 | 35.5 | 66.1 | 103.2 | 104.8 | 90.3 | 112.9 | 461.1 | 960.9 | 1041.5 | 1210.8 |
| 85° | 11.3 | 17.7 | 33.9 | 45.1 | 41.9 | 33.9 | 27.4 | 114.5 | 227.3 | 253.1 | 262.8 |
| 87.5° | 0.0 | 0.0 | 4.8 | 4.8 | 3.2 | 3.2 | 4.8 | 4.8 | 6.4 | 4.8 | 4.8 |
| 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° | 2479.6 | 2479.6 | 2479.6 | 2479.6 | 2479.6 | 2479.6 | 2479.6 | 2479.6 | 2479.6 | 2479.6 | 2479.6 |
| 2.5° | 2466.7 | 2449.0 | 2421.6 | 2392.6 | 2361.9 | 2336.1 | 2321.6 | 2329.7 | 2339.4 | 2308.7 | 2297.4 |
| 5° | 2461.9 | 2431.2 | 2379.7 | 2318.4 | 2271.6 | 2224.9 | 2170.1 | 2157.2 | 2144.3 | 2128.1 | 2110.4 |
| 7.5° | 2484.5 | 2439.3 | 2334.5 | 2278.1 | 2179.7 | 2092.7 | 2044.3 | 2008.8 | 1976.6 | 1947.6 | 1929.8 |
| 10° | 2526.4 | 2442.5 | 2324.8 | 2210.4 | 2102.4 | 1995.9 | 1891.1 | 1870.2 | 1863.7 | 1821.8 | 1791.2 |
| 12.5° | 2553.8 | 2450.6 | 2291.0 | 2152.3 | 1997.6 | 1883.1 | 1778.3 | 1718.6 | 1713.8 | 1694.5 | 1673.5 |
| 15° | 2597.3 | 2482.8 | 2268.4 | 2079.8 | 1891.1 | 1770.2 | 1673.5 | 1596.1 | 1557.4 | 1555.8 | 1539.7 |
| 17.5° | 2676.3 | 2519.9 | 2232.9 | 2005.6 | 1805.7 | 1670.3 | 1531.6 | 1502.6 | 1438.1 | 1401.0 | 1391.4 |
| 20° | 2756.9 | 2574.7 | 2223.3 | 1931.5 | 1694.5 | 1526.8 | 1420.4 | 1339.8 | 1288.2 | 1249.5 | 1225.3 |
| 22.5° | 2861.7 | 2653.7 | 2226.5 | 1887.9 | 1604.2 | 1418.8 | 1280.1 | 1160.8 | 1065.7 | 1018.9 | 996.4 |
| 25° | 3013.3 | 2745.6 | 2250.7 | 1821.8 | 1497.8 | 1302.7 | 1101.2 | 943.2 | 809.3 | 775.5 | 759.4 |
| 27.5° | 3206.7 | 2874.6 | 2284.5 | 1754.1 | 1399.4 | 1146.3 | 885.1 | 707.8 | 596.5 | 570.7 | 554.6 |
| 30° | 3503.4 | 3068.1 | 2289.4 | 1712.2 | 1310.7 | 943.2 | 662.6 | 524.0 | 436.9 | 409.5 | 412.7 |
| 32.5° | 4061.2 | 3482.4 | 2353.9 | 1625.1 | 1152.7 | 723.9 | 486.9 | 382.1 | 316.0 | 306.3 | 322.4 |
| 35° | 4709.3 | 3970.9 | 2478.0 | 1580.0 | 972.2 | 524.0 | 348.2 | 280.5 | 238.6 | 251.5 | 258.0 |
| 37.5° | 5126.9 | 4401.4 | 2676.3 | 1476.8 | 761.0 | 385.3 | 243.4 | 219.3 | 211.2 | 219.3 | 233.8 |
| 40° | 5613.8 | 4751.3 | 2845.6 | 1372.0 | 540.1 | 264.4 | 195.1 | 199.9 | 190.2 | 188.6 | 195.1 |
| 42.5° | 6008.8 | 5110.8 | 3026.2 | 1199.5 | 375.7 | 196.7 | 179.0 | 182.2 | 175.7 | 167.7 | 167.7 |
| 45° | 6384.4 | 5421.9 | 3024.6 | 967.3 | 248.3 | 174.1 | 164.4 | 170.9 | 169.3 | 158.0 | 156.4 |
| 47.5° | 6713.3 | 5736.3 | 3026.2 | 702.9 | 188.6 | 159.6 | 153.2 | 159.6 | 159.6 | 149.9 | 148.3 |
| 50° | 7121.2 | 5997.5 | 2977.8 | 449.8 | 172.5 | 148.3 | 146.7 | 145.1 | 151.5 | 138.7 | 135.4 |
| 52.5° | 7371.1 | 6187.8 | 2760.1 | 303.1 | 159.6 | 140.3 | 137.0 | 133.8 | 137.0 | 125.8 | 125.8 |
| 55° | 7645.2 | 6424.8 | 2476.4 | 240.2 | 151.5 | 130.6 | 129.0 | 125.8 | 125.8 | 112.9 | 114.5 |
| 57.5° | 7943.5 | 6618.2 | 2094.3 | 211.2 | 145.1 | 124.1 | 120.9 | 116.1 | 109.6 | 100.0 | 98.3 |
| 60° | 8159.5 | 6658.5 | 1713.8 | 191.9 | 140.3 | 120.9 | 108.0 | 101.6 | 90.3 | 83.8 | 82.2 |
| 62.5° | 8232.1 | 6679.5 | 1389.7 | 172.5 | 132.2 | 111.2 | 96.7 | 85.4 | 72.6 | 67.7 | 67.7 |
| 65° | 8172.4 | 6437.6 | 1041.5 | 156.4 | 122.5 | 103.2 | 85.4 | 69.3 | 56.4 | 51.6 | 50.0 |
| 67.5° | 7788.7 | 5992.7 | 757.7 | 140.3 | 108.0 | 93.5 | 74.2 | 56.4 | 45.1 | 40.3 | 40.3 |
| 70° | 7090.6 | 5468.7 | 512.7 | 117.7 | 93.5 | 82.2 | 69.3 | 45.1 | 37.1 | 32.2 | 30.6 |
| 72.5° | 6329.6 | 4636.8 | 327.3 | 95.1 | 72.6 | 64.5 | 50.0 | 38.7 | 30.6 | 24.2 | 24.2 |
| 75° | 5006.0 | 3642.0 | 227.3 | 69.3 | 51.6 | 48.4 | 38.7 | 32.2 | 25.8 | 19.3 | 19.3 |
| 77.5° | 3484.0 | 2366.8 | 179.0 | 53.2 | 35.5 | 32.2 | 29.0 | 24.2 | 21.0 | 16.1 | 14.5 |
| 80° | 2020.1 | 1423.6 | 108.0 | 35.5 | 24.2 | 21.0 | 19.3 | 19.3 | 16.1 | 11.3 | 11.3 |
| 82.5° | 1002.8 | 593.3 | 46.8 | 22.6 | 16.1 | 14.5 | 12.9 | 11.3 | 11.3 | 8.1 | 8.1 |
| 85° | 196.7 | 101.6 | 17.7 | 11.3 | 8.1 | 8.1 | 6.4 | 6.4 | 4.8 | 3.2 | 3.2 |
| 87.5° | 6.4 | 4.8 | 4.8 | 4.8 | 3.2 | 3.2 | 1.6 | 0.0 | 0.0 | 0.0 | 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)