

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: P478141

Luminaire Tested: **IFLD-M-SA4E-735-U-T4FT**

Issue Date: 02/26/2021



Test Information

Test Method: LM-79-08
Report Number: P478141
Test Lab: INNOVATION CENTER(G2)
Issue Date: 02/26/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-735-U-T4FT
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ T4FT distribution lens
Light Source: (64) 3500K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

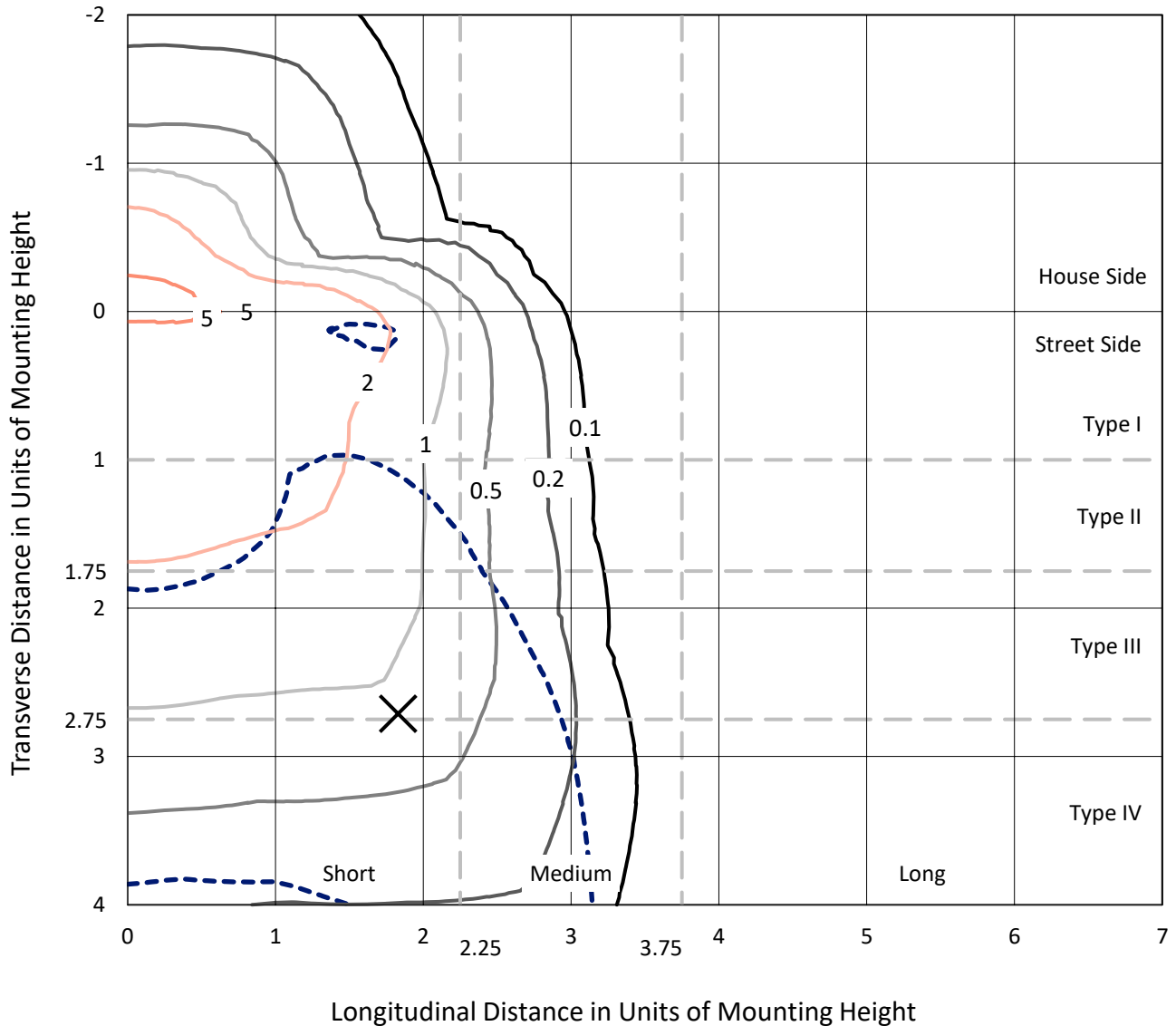
Lumens per Lamp: N/A
Luminaire Lumens: 36583.1 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

Input Watts (W): 314.8
Input Voltage (V): 120
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

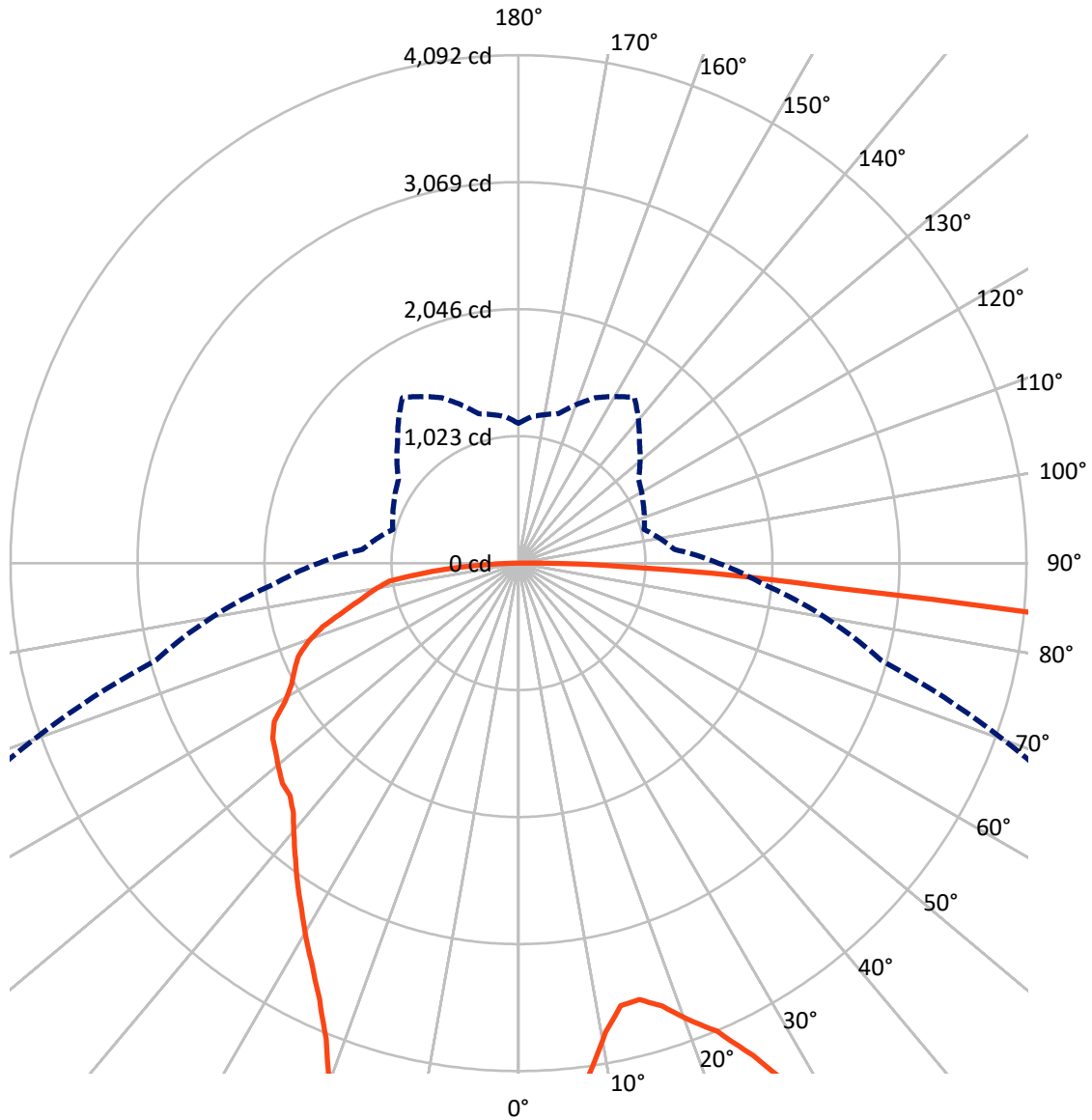
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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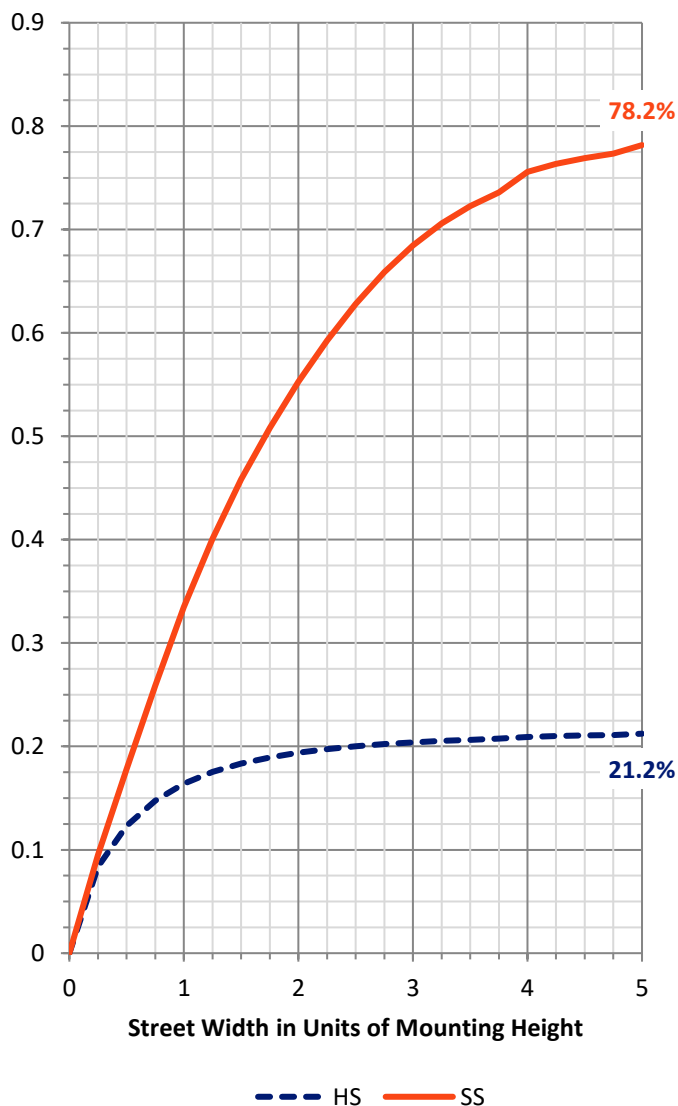
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 7902.4 | 0.0 | 7902.4 |
| | % Fixture | 21.6 | 0.0 | 21.6 |
| Street Side | Lumens | 28680.7 | 0.0 | 28680.7 |
| | % Fixture | 78.4 | 0.0 | 78.4 |
| Total | Lumens | 36583.1 | 0.0 | 36583.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 484.1 | 1.3 |
| 10°-20° | 1354.7 | 3.7 |
| 20°-30° | 2229.6 | 6.1 |
| 30°-40° | 3334.4 | 9.1 |
| 40°-50° | 4943.1 | 13.5 |
| 50°-60° | 7123.6 | 19.5 |
| 60°-70° | 9090.6 | 24.8 |
| 70°-80° | 7074.0 | 19.3 |
| 80°-90° | 949.0 | 2.6 |
| 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° | 36583.1 | 100.0 |
| 0°-180° | 36583.1 | 100.0 |

Coefficient of Utilization



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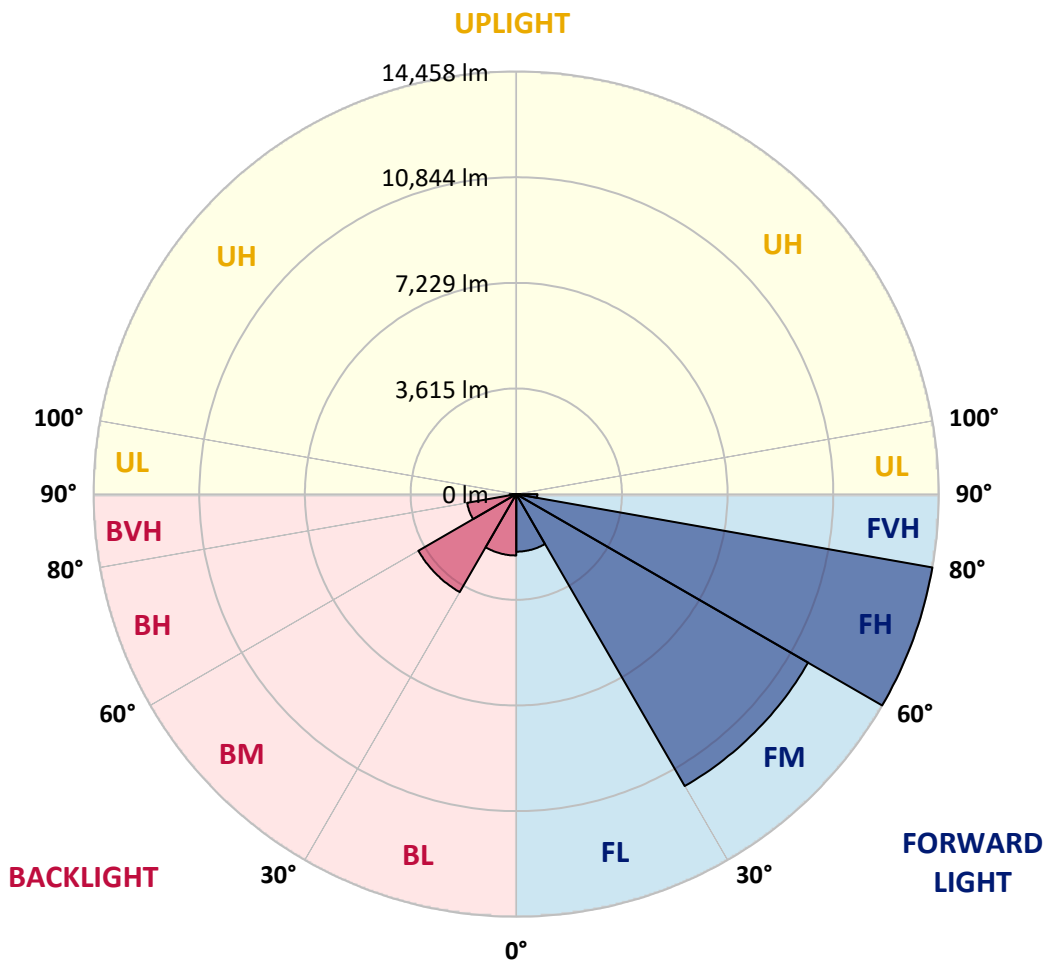
CATALOG NUMBER: IFLD-M-SA4E-735-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1968.8 | 5.4 | | | |
| FM (30°-60°) | 11531.2 | 31.5 | | | |
| FH (60°-80°) | 14458.3 | 39.5 | | | G5 |
| FVH (80°-90°) | 722.4 | 2.0 | | | G4/750 |
| BL (0°-30°) | 2099.6 | 5.7 | B3/2500 | | |
| BM (30°-60°) | 3869.8 | 10.6 | B3/5000 | | |
| BH (60°-80°) | 1706.3 | 4.7 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 226.7 | 0.6 | | | G3/500 |
| 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° | 34° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5244.8 | 5244.8 | 5244.8 | 5244.8 | 5244.8 | 5244.8 | 5244.8 | 5244.8 | 5244.8 | 5244.8 | 5244.8 |
| 2.5° | 4699.4 | 4714.9 | 4765.2 | 4776.8 | 4830.9 | 4800.0 | 4865.7 | 4981.8 | 5047.5 | 5144.2 | 5260.2 |
| 5° | 4328.1 | 4262.3 | 4293.3 | 4413.2 | 4475.1 | 4490.5 | 4560.2 | 4757.4 | 4881.2 | 5024.3 | 5240.9 |
| 7.5° | 3891.0 | 3879.4 | 3941.3 | 4018.7 | 4142.4 | 4154.0 | 4308.8 | 4482.8 | 4738.1 | 5055.2 | 5310.5 |
| 10° | 3593.2 | 3643.5 | 3678.3 | 3759.5 | 3844.6 | 3844.6 | 4041.9 | 4343.6 | 4633.7 | 4939.2 | 5326.0 |
| 12.5° | 3577.7 | 3546.8 | 3554.5 | 3597.1 | 3659.0 | 3736.3 | 3922.0 | 4192.7 | 4560.2 | 4916.0 | 5391.7 |
| 15° | 3628.0 | 3639.6 | 3570.0 | 3624.1 | 3647.4 | 3674.4 | 3879.4 | 4185.0 | 4513.7 | 4997.2 | 5503.9 |
| 17.5° | 3894.9 | 3829.1 | 3720.8 | 3670.6 | 3751.8 | 3751.8 | 3891.0 | 4130.8 | 4521.5 | 5039.8 | 5666.4 |
| 20° | 4103.8 | 4103.8 | 3925.8 | 3871.7 | 3929.7 | 3918.1 | 4014.8 | 4192.7 | 4560.2 | 5124.9 | 5848.1 |
| 22.5° | 4455.7 | 4506.0 | 4212.1 | 4099.9 | 4096.0 | 4127.0 | 4212.1 | 4362.9 | 4668.5 | 5244.8 | 6022.2 |
| 25° | 4962.4 | 4974.0 | 4633.7 | 4517.6 | 4393.8 | 4444.1 | 4459.6 | 4610.4 | 4765.2 | 5384.0 | 6219.5 |
| 27.5° | 5527.1 | 5519.4 | 5206.1 | 4916.0 | 4834.8 | 4846.4 | 4761.3 | 4861.9 | 4908.3 | 5426.6 | 6501.8 |
| 30° | 6153.7 | 6084.1 | 5848.1 | 5438.2 | 5372.4 | 5298.9 | 5113.3 | 5109.4 | 5206.1 | 5666.4 | 6892.5 |
| 32.5° | 6563.7 | 6474.7 | 6312.3 | 6018.3 | 5836.5 | 5844.3 | 5550.3 | 5546.5 | 5461.4 | 5929.4 | 7232.8 |
| 35° | 6965.9 | 6830.6 | 6788.0 | 6486.3 | 6304.6 | 6323.9 | 6088.0 | 6057.0 | 5902.3 | 6327.8 | 7793.7 |
| 37.5° | 7449.4 | 7329.5 | 7395.3 | 7167.1 | 6942.7 | 6849.9 | 6741.6 | 6702.9 | 6501.8 | 6888.6 | 8559.5 |
| 40° | 7983.2 | 7944.5 | 7902.0 | 7789.8 | 7654.4 | 7662.2 | 7546.1 | 7507.4 | 7209.6 | 7565.5 | 9294.4 |
| 42.5° | 8702.6 | 8555.6 | 8335.2 | 8408.6 | 8478.3 | 8551.8 | 8513.1 | 8412.5 | 8103.1 | 8253.9 | 10114.4 |
| 45° | 9371.7 | 9178.3 | 8772.2 | 8795.4 | 9081.6 | 9139.7 | 9607.7 | 9596.1 | 8973.3 | 9128.1 | 11046.5 |
| 47.5° | 9824.3 | 9735.3 | 9491.6 | 9464.6 | 9874.6 | 9870.7 | 10713.9 | 10713.9 | 9890.0 | 9998.3 | 12048.3 |
| 50° | 10497.3 | 10265.2 | 10160.8 | 10296.1 | 10505.0 | 10648.1 | 11843.3 | 11916.8 | 10791.2 | 10907.3 | 13359.5 |
| 52.5° | 11286.3 | 10996.2 | 10733.2 | 11081.3 | 11452.6 | 11545.5 | 12961.1 | 12930.1 | 11483.6 | 11963.2 | 14895.0 |
| 55° | 11940.0 | 11793.0 | 11611.2 | 11812.3 | 12419.6 | 12535.6 | 14082.7 | 13796.5 | 12175.9 | 12837.3 | 15633.7 |
| 57.5° | 12701.9 | 12790.9 | 12829.6 | 12779.3 | 13502.6 | 13684.4 | 15363.0 | 14543.0 | 12771.6 | 13425.2 | 16066.9 |
| 60° | 13850.7 | 13904.8 | 13955.1 | 14075.0 | 14840.8 | 15096.1 | 16376.4 | 15479.0 | 13146.7 | 13765.6 | 16101.7 |
| 62.5° | 15598.9 | 15390.1 | 15502.2 | 15916.1 | 16531.1 | 16821.2 | 17869.3 | 16136.6 | 13432.9 | 13970.6 | 14964.6 |
| 65° | 17598.6 | 17316.2 | 17200.2 | 17734.0 | 19327.5 | 19095.4 | 19733.6 | 16627.8 | 13019.1 | 13204.7 | 12690.3 |
| 67.5° | 19625.3 | 19656.3 | 19358.5 | 20429.8 | 22383.1 | 22383.1 | 21466.4 | 16863.7 | 11897.4 | 10702.3 | 8899.9 |
| 70° | 21234.3 | 21331.0 | 21493.5 | 23570.5 | 26664.8 | 27132.8 | 23613.1 | 15896.8 | 9611.5 | 7124.5 | 4865.7 |
| 72.5° | 21211.1 | 20921.1 | 21752.6 | 25577.9 | 30555.8 | 30165.1 | 24061.7 | 12570.4 | 5999.0 | 3488.8 | 2231.7 |
| 73° | 20735.4 | 20491.7 | 21400.7 | 25558.6 | 30714.4 | 30346.9 | 23733.0 | 11588.0 | 5291.2 | 3024.6 | 1984.2 |
| 75° | 16933.3 | 16492.4 | 18039.5 | 23148.9 | 28416.9 | 28699.2 | 20163.0 | 7557.7 | 2900.9 | 1864.3 | 1396.3 |
| 77.5° | 7720.2 | 7913.6 | 9928.7 | 15529.3 | 21899.6 | 22232.2 | 13255.0 | 3268.3 | 1589.7 | 1307.3 | 1028.8 |
| 80° | 2479.3 | 2603.0 | 3864.0 | 7720.2 | 13726.9 | 14326.4 | 6126.6 | 1485.2 | 1133.3 | 1001.8 | 769.7 |
| 82.5° | 947.6 | 943.7 | 1620.6 | 3210.3 | 6505.7 | 6888.6 | 2239.5 | 905.1 | 843.2 | 738.8 | 545.4 |
| 85° | 332.6 | 348.1 | 611.1 | 1268.6 | 2560.5 | 2680.4 | 777.4 | 502.8 | 584.0 | 495.1 | 313.3 |
| 87.5° | 116.0 | 119.9 | 216.6 | 460.3 | 881.9 | 932.1 | 216.6 | 201.1 | 290.1 | 286.2 | 158.6 |
| 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° | 5244.8 | 5244.8 | 5244.8 | 5244.8 | 5244.8 | 5244.8 | 5244.8 | 5244.8 | 5244.8 | 5244.8 | 5244.8 |
| 2.5° | 5298.9 | 5333.7 | 5345.3 | 5484.6 | 5484.6 | 5484.6 | 5538.7 | 5538.7 | 5523.3 | 5484.6 | 5577.4 |
| 5° | 5322.1 | 5384.0 | 5503.9 | 5623.8 | 5654.8 | 5681.8 | 5755.3 | 5693.4 | 5716.6 | 5678.0 | 5712.8 |
| 7.5° | 5387.9 | 5473.0 | 5697.3 | 5770.8 | 5720.5 | 5778.5 | 5701.2 | 5658.6 | 5616.1 | 5631.5 | 5577.4 |
| 10° | 5500.0 | 5608.3 | 5712.8 | 5848.1 | 5751.5 | 5693.4 | 5534.9 | 5496.2 | 5360.8 | 5314.4 | 5356.9 |
| 12.5° | 5639.3 | 5770.8 | 5948.7 | 5898.4 | 5712.8 | 5546.5 | 5376.3 | 5213.8 | 5132.6 | 5016.6 | 5047.5 |
| 15° | 5778.5 | 5929.4 | 5956.4 | 5871.4 | 5639.3 | 5430.4 | 5121.0 | 4892.8 | 4811.6 | 4707.1 | 4761.3 |
| 17.5° | 5929.4 | 6072.5 | 6026.1 | 5805.6 | 5492.3 | 5175.1 | 4823.2 | 4598.8 | 4428.7 | 4362.9 | 4362.9 |
| 20° | 6153.7 | 6223.3 | 6149.8 | 5697.3 | 5314.4 | 4896.7 | 4556.3 | 4301.0 | 4130.8 | 4103.8 | 4061.2 |
| 22.5° | 6327.8 | 6439.9 | 6111.2 | 5538.7 | 5055.2 | 4533.1 | 4142.4 | 4045.7 | 3995.5 | 3952.9 | 3898.8 |
| 25° | 6552.1 | 6548.2 | 6041.5 | 5391.7 | 4610.4 | 4099.9 | 3864.0 | 3856.2 | 3833.0 | 3817.5 | 3891.0 |
| 27.5° | 6764.8 | 6675.9 | 5960.3 | 5028.2 | 4150.2 | 3771.1 | 3643.5 | 3728.6 | 3763.4 | 3740.2 | 3771.1 |
| 30° | 7101.3 | 6954.3 | 5844.3 | 4641.4 | 3744.1 | 3438.5 | 3461.7 | 3577.7 | 3635.8 | 3670.6 | 3624.1 |
| 32.5° | 7457.2 | 7232.8 | 5604.5 | 4239.1 | 3384.3 | 3229.6 | 3283.8 | 3403.7 | 3473.3 | 3512.0 | 3554.5 |
| 35° | 7971.6 | 7449.4 | 5360.8 | 3713.1 | 3125.2 | 3102.0 | 3132.9 | 3198.7 | 3299.3 | 3326.3 | 3337.9 |
| 37.5° | 8605.9 | 7778.2 | 5032.0 | 3291.5 | 2924.1 | 2951.1 | 2982.1 | 3005.3 | 3009.2 | 3059.4 | 3040.1 |
| 40° | 9240.2 | 8056.7 | 4552.4 | 2889.3 | 2715.2 | 2862.2 | 2846.7 | 2804.2 | 2769.4 | 2722.9 | 2711.3 |
| 42.5° | 9797.2 | 8300.3 | 4018.7 | 2548.9 | 2529.6 | 2769.4 | 2719.1 | 2610.8 | 2529.6 | 2494.7 | 2436.7 |
| 45° | 10423.8 | 8644.6 | 3481.0 | 2336.2 | 2386.4 | 2657.2 | 2641.7 | 2475.4 | 2371.0 | 2247.2 | 2231.7 |
| 47.5° | 11236.0 | 9004.3 | 2966.6 | 2115.7 | 2251.1 | 2614.6 | 2622.4 | 2409.7 | 2258.8 | 2092.5 | 2069.3 |
| 50° | 12276.5 | 9522.6 | 2576.0 | 2022.9 | 2169.8 | 2552.8 | 2564.4 | 2320.7 | 2123.4 | 1953.3 | 1937.8 |
| 52.5° | 13274.4 | 10052.5 | 2251.1 | 1879.8 | 2115.7 | 2479.3 | 2506.3 | 2239.5 | 2011.3 | 1798.5 | 1810.1 |
| 55° | 13777.2 | 9859.1 | 1972.6 | 1775.3 | 1991.9 | 2359.4 | 2459.9 | 2181.5 | 1841.1 | 1694.1 | 1690.2 |
| 57.5° | 13889.4 | 9383.3 | 1752.1 | 1667.0 | 1887.5 | 2231.7 | 2382.6 | 2007.4 | 1763.7 | 1640.0 | 1624.5 |
| 60° | 13521.9 | 8551.8 | 1578.1 | 1551.0 | 1756.0 | 2100.2 | 2204.7 | 1914.6 | 1686.4 | 1585.8 | 1562.6 |
| 62.5° | 12616.8 | 7689.2 | 1458.2 | 1496.8 | 1643.8 | 1957.1 | 2092.5 | 1848.8 | 1612.9 | 1543.3 | 1493.0 |
| 65° | 10346.4 | 6323.9 | 1361.5 | 1392.4 | 1527.8 | 1817.9 | 2022.9 | 1775.3 | 1547.1 | 1481.4 | 1477.5 |
| 67.5° | 7167.1 | 4359.0 | 1284.1 | 1342.1 | 1435.0 | 1717.3 | 1953.3 | 1694.1 | 1462.0 | 1438.8 | 1407.9 |
| 70° | 3670.6 | 2324.6 | 1183.6 | 1230.0 | 1334.4 | 1589.7 | 1829.5 | 1609.0 | 1373.1 | 1369.2 | 1330.5 |
| 72.5° | 1860.4 | 1361.5 | 1067.5 | 1137.1 | 1210.6 | 1423.4 | 1674.8 | 1496.8 | 1260.9 | 1218.4 | 1156.5 |
| 73° | 1609.0 | 1260.9 | 1048.2 | 1110.1 | 1179.7 | 1376.9 | 1628.4 | 1469.8 | 1245.4 | 1183.6 | 1125.5 |
| 75° | 1172.0 | 994.0 | 939.9 | 1001.8 | 1055.9 | 1241.6 | 1473.6 | 1346.0 | 1144.9 | 1079.1 | 1025.0 |
| 77.5° | 878.0 | 765.8 | 781.3 | 850.9 | 897.3 | 1071.4 | 1311.2 | 1218.4 | 1036.6 | 947.6 | 924.4 |
| 80° | 645.9 | 584.0 | 645.9 | 711.7 | 746.5 | 943.7 | 1195.2 | 1055.9 | 874.1 | 773.6 | 754.2 |
| 82.5° | 460.3 | 425.5 | 498.9 | 541.5 | 557.0 | 781.3 | 1075.3 | 843.2 | 661.4 | 529.9 | 487.3 |
| 85° | 263.0 | 259.1 | 336.5 | 332.6 | 344.2 | 456.4 | 707.8 | 560.8 | 425.5 | 324.9 | 317.2 |
| 87.5° | 116.0 | 127.6 | 170.2 | 135.4 | 143.1 | 216.6 | 301.7 | 208.9 | 174.1 | 96.7 | 73.5 |
| 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)