

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: P636785

Luminaire Tested: **IFLD-M-SA4E-935-U-77-VI**

Issue Date: 01/17/2023

Test Information

Test Method: LM-79-08
Report Number: P636785
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-935-U-77-VI
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens and Visor
Light Source: (64) 3500K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18491.1 lumens
Efficiency: N/A
Efficacy: 58.7 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 0.5' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G2

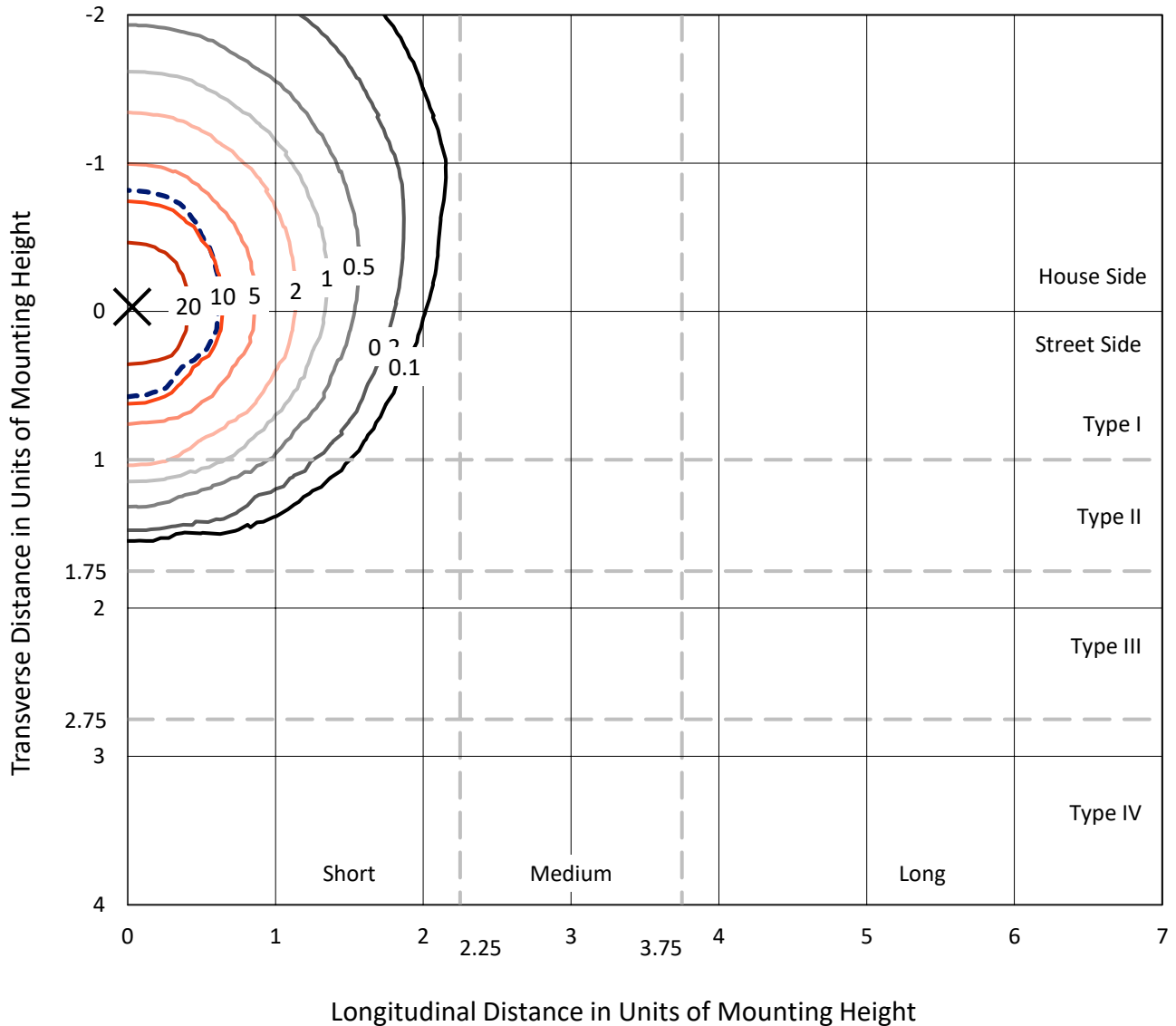
Input Watts (W): 314.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

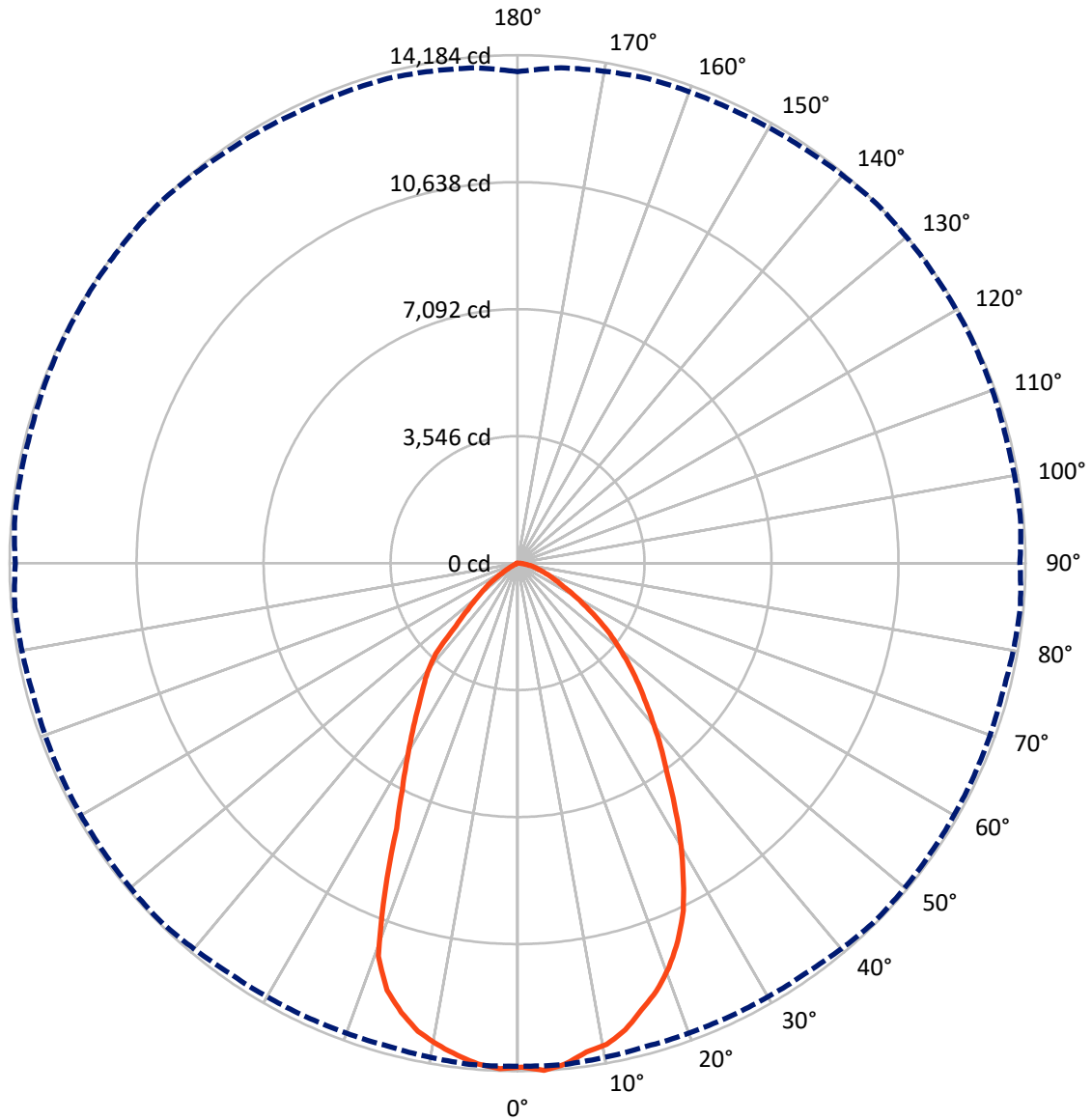
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 35.2 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 135-Deg Lateral - - - Horizontal Cone Through 2.5-Deg Vertical

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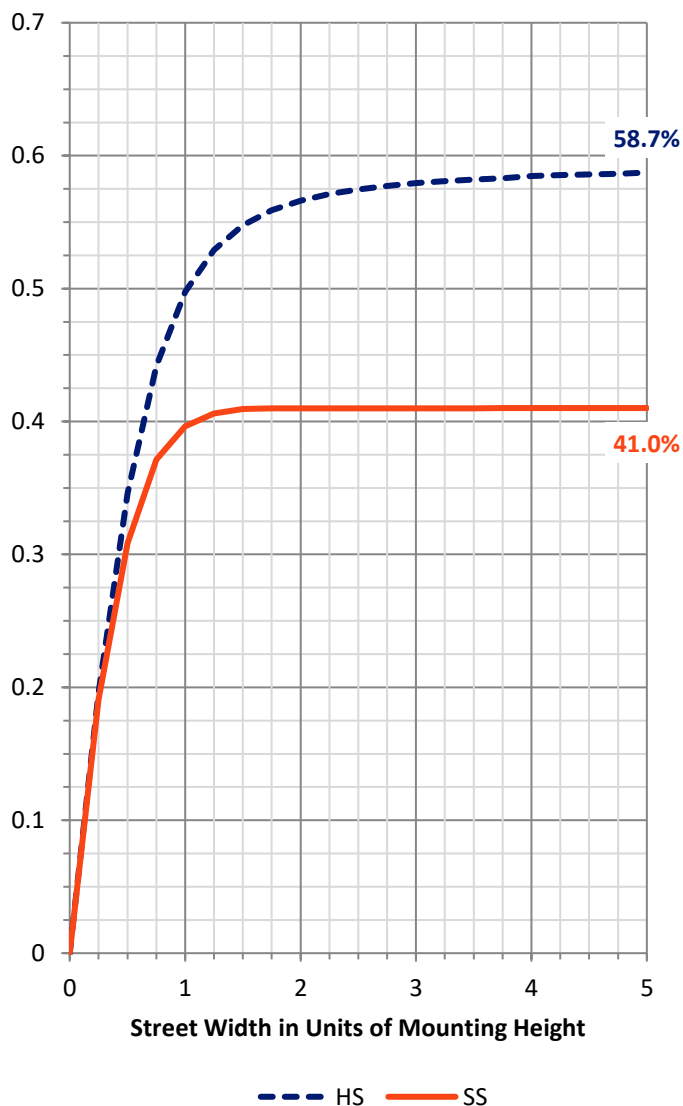
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 10951.4 | 0.0 | 10951.4 |
| | % Fixture | 59.2 | 0.0 | 59.2 |
| Street Side | Lumens | 7539.7 | 0.0 | 7539.7 |
| | % Fixture | 40.8 | 0.0 | 40.8 |
| Total | Lumens | 18491.1 | 0.0 | 18491.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1319.7 | 7.1 |
| 10°-20° | 3538.9 | 19.1 |
| 20°-30° | 4315.8 | 23.3 |
| 30°-40° | 3940.3 | 21.3 |
| 40°-50° | 2847.6 | 15.4 |
| 50°-60° | 1554.8 | 8.4 |
| 60°-70° | 642.8 | 3.5 |
| 70°-80° | 260.4 | 1.4 |
| 80°-90° | 70.8 | 0.4 |
| 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° | 18491.1 | 100.0 |
| 0°-180° | 18491.1 | 100.0 |



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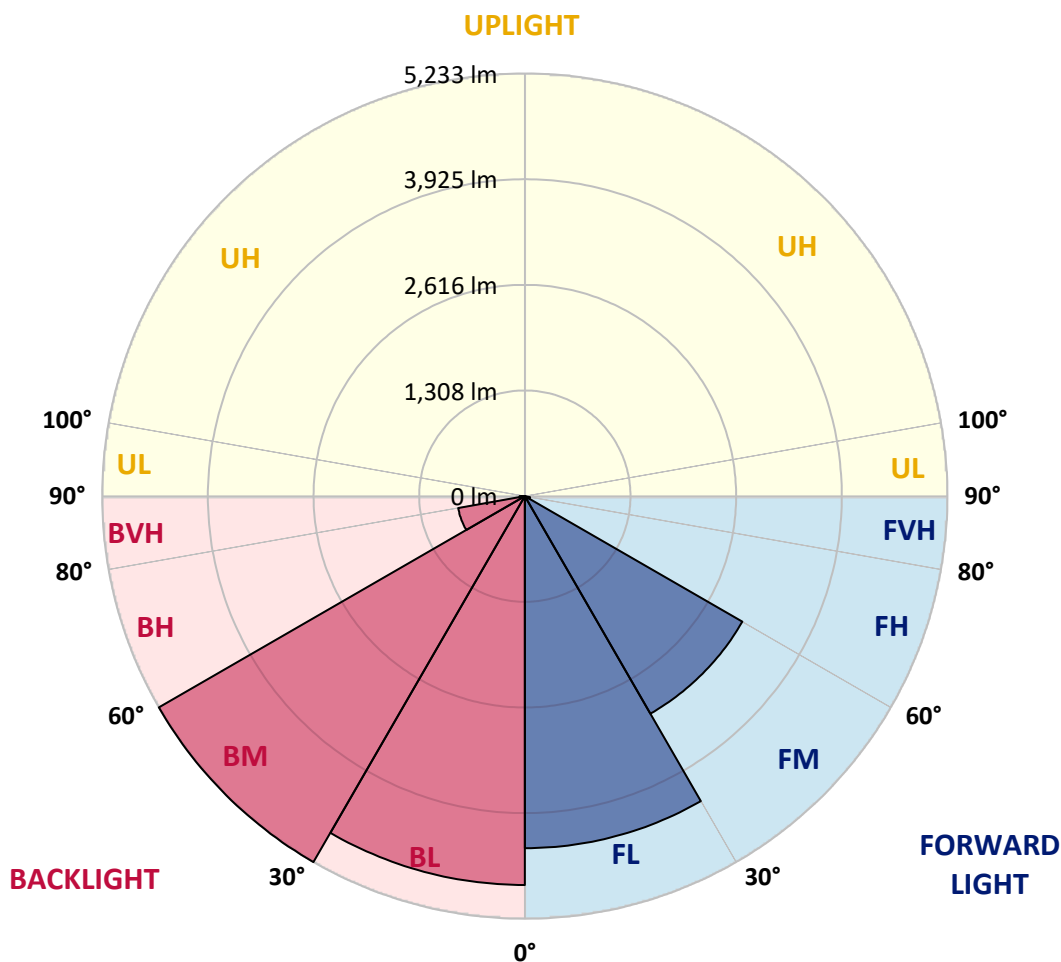
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 4359.0 | 23.6 | | | |
| FM (30°-60°) | 3109.8 | 16.8 | | | |
| FH (60°-80°) | 65.1 | 0.4 | | | G0/660 |
| FVH (80°-90°) | 5.7 | 0.0 | | | G0/10 |
| BL (0°-30°) | 4815.3 | 26.0 | B4/5000 | | |
| BM (30°-60°) | 5232.8 | 28.3 | B4/8500 | | |
| BH (60°-80°) | 838.1 | 4.5 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 65.2 | 0.4 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G2

Type I Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 14071.6 | 14071.6 | 14071.6 | 14071.6 | 14071.6 | 14071.6 | 14071.6 | 14071.6 | 14071.6 | 14071.6 |
| 2.5° | 14045.6 | 14063.8 | 13964.9 | 13975.3 | 13993.5 | 14126.3 | 14092.5 | 14061.2 | 14017.0 | 14092.5 |
| 5° | 14027.4 | 14037.8 | 13933.6 | 13897.2 | 13912.8 | 14032.6 | 13923.2 | 13923.2 | 13912.8 | 13899.8 |
| 7.5° | 13886.8 | 13892.0 | 13811.3 | 13746.2 | 13787.8 | 13842.5 | 13761.8 | 13800.8 | 13743.6 | 13787.8 |
| 10° | 13675.9 | 13642.0 | 13545.7 | 13527.4 | 13574.3 | 13626.4 | 13571.7 | 13608.1 | 13556.1 | 13589.9 |
| 12.5° | 13366.0 | 13313.9 | 13235.8 | 13212.4 | 13293.1 | 13363.4 | 13319.1 | 13298.3 | 13230.6 | 13313.9 |
| 15° | 12170.8 | 12131.7 | 12308.8 | 12618.7 | 12897.3 | 12957.2 | 12910.3 | 12931.1 | 12790.5 | 12814.0 |
| 17.5° | 10017.3 | 9944.4 | 10134.5 | 10868.8 | 11915.6 | 12467.6 | 12426.0 | 12290.6 | 12082.2 | 12129.1 |
| 20° | 9103.3 | 9082.5 | 9061.7 | 9236.1 | 9967.9 | 11642.2 | 11699.5 | 11355.7 | 11058.9 | 10993.8 |
| 22.5° | 8587.8 | 8580.0 | 8559.1 | 8598.2 | 8790.9 | 9866.3 | 10522.5 | 10204.8 | 10006.9 | 9988.7 |
| 25° | 8116.5 | 8103.4 | 8040.9 | 8090.4 | 8090.4 | 8152.9 | 8994.0 | 9186.7 | 9012.2 | 8991.4 |
| 27.5° | 7637.3 | 7613.9 | 7603.5 | 7626.9 | 7507.1 | 7085.3 | 7298.8 | 8238.8 | 8147.7 | 8152.9 |
| 30° | 7119.2 | 7111.3 | 7082.7 | 7132.2 | 6762.4 | 6239.0 | 6103.6 | 7379.5 | 7397.8 | 7392.6 |
| 32.5° | 6348.4 | 6382.2 | 6512.4 | 6567.1 | 5957.8 | 5525.5 | 5299.0 | 6384.8 | 6757.2 | 6749.4 |
| 35° | 4611.6 | 4611.6 | 5036.0 | 5825.0 | 5220.9 | 4895.4 | 4773.0 | 5413.6 | 6124.4 | 6150.5 |
| 37.5° | 3791.3 | 3804.3 | 3887.7 | 4247.0 | 4504.8 | 4390.2 | 4353.8 | 4556.9 | 5312.0 | 5353.7 |
| 40° | 3411.2 | 3411.2 | 3411.2 | 3262.7 | 3254.9 | 3955.4 | 3934.5 | 3869.4 | 4588.1 | 4679.3 |
| 42.5° | 3064.8 | 3072.6 | 3077.8 | 2702.9 | 2494.6 | 3419.0 | 3372.1 | 3273.1 | 3939.7 | 4046.5 |
| 45° | 2708.1 | 2721.1 | 2736.7 | 2260.2 | 2169.1 | 2460.7 | 2853.9 | 2744.5 | 3299.2 | 3437.2 |
| 47.5° | 1653.5 | 1674.3 | 2028.5 | 1916.5 | 1926.9 | 1898.3 | 2327.9 | 2309.7 | 2705.5 | 2900.8 |
| 50° | 1117.1 | 1124.9 | 1158.7 | 1216.0 | 1653.5 | 1492.1 | 1648.3 | 1911.3 | 2054.5 | 2351.4 |
| 52.5° | 937.4 | 950.4 | 867.1 | 789.0 | 1085.8 | 1166.6 | 1150.9 | 1419.1 | 1476.4 | 1843.6 |
| 55° | 658.8 | 700.5 | 661.4 | 653.6 | 617.1 | 906.2 | 872.3 | 1091.0 | 1127.5 | 1400.9 |
| 57.5° | 67.7 | 78.1 | 135.4 | 486.9 | 403.6 | 513.0 | 622.3 | 799.4 | 835.9 | 1033.8 |
| 60° | 5.2 | 5.2 | 13.0 | 67.7 | 294.2 | 307.3 | 429.6 | 492.1 | 562.4 | 721.3 |
| 62.5° | 0.0 | 2.6 | 5.2 | 10.4 | 46.9 | 164.0 | 216.1 | 257.8 | 338.5 | 466.1 |
| 65° | 0.0 | 0.0 | 2.6 | 7.8 | 10.4 | 62.5 | 83.3 | 135.4 | 184.9 | 289.0 |
| 67.5° | 0.0 | 0.0 | 2.6 | 5.2 | 7.8 | 15.6 | 28.6 | 49.5 | 98.9 | 164.0 |
| 70° | 0.0 | 0.0 | 2.6 | 5.2 | 7.8 | 13.0 | 20.8 | 31.2 | 44.3 | 88.5 |
| 72.5° | 0.0 | 0.0 | 2.6 | 2.6 | 5.2 | 13.0 | 15.6 | 20.8 | 31.2 | 44.3 |
| 75° | 0.0 | 0.0 | 2.6 | 2.6 | 7.8 | 15.6 | 13.0 | 15.6 | 20.8 | 28.6 |
| 77.5° | 0.0 | 0.0 | 2.6 | 5.2 | 7.8 | 15.6 | 13.0 | 15.6 | 15.6 | 18.2 |
| 80° | 0.0 | 0.0 | 2.6 | 5.2 | 10.4 | 18.2 | 15.6 | 15.6 | 13.0 | 13.0 |
| 82.5° | 0.0 | 0.0 | 2.6 | 7.8 | 10.4 | 23.4 | 23.4 | 20.8 | 10.4 | 7.8 |
| 85° | 0.0 | 0.0 | 5.2 | 10.4 | 15.6 | 26.0 | 26.0 | 20.8 | 7.8 | 5.2 |
| 87.5° | 0.0 | 0.0 | 5.2 | 7.8 | 13.0 | 18.2 | 26.0 | 20.8 | 7.8 | 2.6 |
| 90° | 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° |
|---------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 14071.6 | 0° | 14071.6 | 14071.6 | 14071.6 | 14071.6 | 14071.6 | 14071.6 | 14071.6 | 14071.6 | 14071.6 |
| 14027.4 | 2.5° | 14097.7 | 14082.1 | 14134.1 | 14155.0 | 14183.6 | 14074.3 | 14006.6 | 14009.2 | 13884.2 |
| 13868.5 | 5° | 13951.9 | 13954.5 | 14022.2 | 14017.0 | 14045.6 | 13985.7 | 13959.7 | 13915.4 | 13806.0 |
| 13668.0 | 7.5° | 13767.0 | 13743.6 | 13808.7 | 13858.1 | 13785.2 | 13826.9 | 13767.0 | 13787.8 | 13722.7 |
| 13491.0 | 10° | 13623.8 | 13569.1 | 13629.0 | 13662.8 | 13665.4 | 13623.8 | 13566.5 | 13511.8 | 13488.4 |
| 13215.0 | 12.5° | 13306.1 | 13235.8 | 13337.3 | 13384.2 | 13376.4 | 13295.7 | 13230.6 | 13243.6 | 13168.1 |
| 12730.6 | 15° | 12868.6 | 12871.2 | 12944.1 | 12988.4 | 12946.8 | 12928.5 | 12933.7 | 12902.5 | 12837.4 |
| 12061.4 | 17.5° | 12199.4 | 12238.5 | 12431.2 | 12537.9 | 12561.4 | 12524.9 | 12506.7 | 12470.2 | 12405.1 |
| 10993.8 | 20° | 11084.9 | 11319.3 | 11663.0 | 11993.7 | 12058.8 | 12048.4 | 11983.3 | 11967.7 | 11931.2 |
| 9936.6 | 22.5° | 10105.9 | 10280.3 | 10678.7 | 11194.3 | 11459.9 | 11485.9 | 11407.8 | 11384.4 | 11345.3 |
| 8991.4 | 25° | 9092.9 | 9280.4 | 9639.8 | 10199.6 | 10749.0 | 10861.0 | 10848.0 | 10777.7 | 10736.0 |
| 8152.9 | 27.5° | 8238.8 | 8426.3 | 8751.8 | 9257.0 | 9845.5 | 10204.8 | 10238.7 | 10126.7 | 10124.1 |
| 7405.6 | 30° | 7468.1 | 7725.9 | 7973.2 | 8384.7 | 8954.9 | 9493.9 | 9551.2 | 9473.1 | 9480.9 |
| 6720.7 | 32.5° | 6864.0 | 7077.5 | 7288.4 | 7564.4 | 8038.3 | 8665.9 | 8889.8 | 8816.9 | 8788.3 |
| 6150.5 | 35° | 6246.8 | 6392.7 | 6608.8 | 6861.4 | 7184.2 | 7806.6 | 8194.6 | 8139.9 | 8111.2 |
| 5379.7 | 37.5° | 5543.8 | 5793.7 | 5950.0 | 6233.8 | 6486.4 | 6981.1 | 7528.0 | 7520.2 | 7460.3 |
| 4723.5 | 40° | 4822.5 | 5085.5 | 5322.4 | 5608.9 | 5804.2 | 6197.4 | 6804.1 | 6801.5 | 6809.3 |
| 4043.9 | 42.5° | 4168.9 | 4411.1 | 4697.5 | 5010.0 | 5197.4 | 5483.9 | 6134.9 | 6171.3 | 6215.6 |
| 3484.1 | 45° | 3577.8 | 3796.5 | 4062.1 | 4442.3 | 4668.9 | 4832.9 | 5411.0 | 5577.6 | 5575.0 |
| 2984.1 | 47.5° | 3046.6 | 3252.3 | 3476.2 | 3846.0 | 4135.0 | 4283.5 | 4762.6 | 4999.5 | 4983.9 |
| 2447.7 | 50° | 2557.1 | 2739.3 | 2973.7 | 3241.9 | 3629.9 | 3760.1 | 4116.8 | 4429.3 | 4405.9 |
| 1950.3 | 52.5° | 2057.1 | 2309.7 | 2507.6 | 2752.4 | 3161.2 | 3288.8 | 3564.8 | 3869.4 | 3851.2 |
| 1463.4 | 55° | 1604.0 | 1848.8 | 2088.4 | 2299.3 | 2643.0 | 2833.1 | 3031.0 | 3343.4 | 3338.2 |
| 1145.7 | 57.5° | 1213.4 | 1481.6 | 1708.2 | 1908.7 | 2182.1 | 2416.4 | 2575.3 | 2859.1 | 2895.6 |
| 783.8 | 60° | 898.4 | 1104.1 | 1348.8 | 1572.8 | 1788.9 | 2031.1 | 2137.8 | 2416.4 | 2432.1 |
| 536.4 | 62.5° | 611.9 | 838.5 | 1078.0 | 1281.1 | 1442.6 | 1692.6 | 1788.9 | 2018.0 | 2046.7 |
| 343.7 | 65° | 424.4 | 570.3 | 843.7 | 989.5 | 1187.4 | 1400.9 | 1497.3 | 1679.5 | 1736.8 |
| 197.9 | 67.5° | 281.2 | 406.2 | 658.8 | 791.6 | 986.9 | 1132.7 | 1255.1 | 1403.5 | 1466.0 |
| 125.0 | 70° | 153.6 | 299.5 | 471.3 | 624.9 | 794.2 | 934.8 | 1054.6 | 1174.4 | 1229.1 |
| 57.3 | 72.5° | 104.2 | 200.5 | 328.1 | 494.7 | 640.6 | 778.6 | 885.3 | 973.9 | 976.5 |
| 33.9 | 75° | 52.1 | 135.4 | 250.0 | 382.8 | 500.0 | 635.4 | 731.7 | 783.8 | 721.3 |
| 20.8 | 77.5° | 31.2 | 98.9 | 203.1 | 307.3 | 406.2 | 513.0 | 567.7 | 596.3 | 494.7 |
| 15.6 | 80° | 18.2 | 70.3 | 158.8 | 244.8 | 281.2 | 377.6 | 429.6 | 437.5 | 330.7 |
| 10.4 | 82.5° | 13.0 | 52.1 | 125.0 | 179.7 | 171.9 | 265.6 | 322.9 | 312.5 | 210.9 |
| 7.8 | 85° | 7.8 | 36.5 | 78.1 | 112.0 | 104.2 | 174.5 | 187.5 | 192.7 | 122.4 |
| 5.2 | 87.5° | 5.2 | 20.8 | 41.7 | 59.9 | 49.5 | 75.5 | 75.5 | 91.1 | 59.9 |
| 0.0 | 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



180°
14071.6
13722.7
13780.0
13613.4
13384.2
13103.0
12772.3
12376.5
11847.9
11334.9
10691.7
10118.9
9441.9
8790.9
8072.2
7509.7
6809.3
6192.2
5580.2
4989.1
4426.7
3890.3
3351.3
2879.9
2455.5
2051.9
1723.8
1458.2
1208.2
953.0
674.4
476.5
309.9
195.3
112.0
52.1
0.0

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