

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: P268841

Luminaire Tested: **GAN-AF-09-LED-U-SL4-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P268841
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24294)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-09-LED-U-SL4-7027
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43932.1 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 501
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

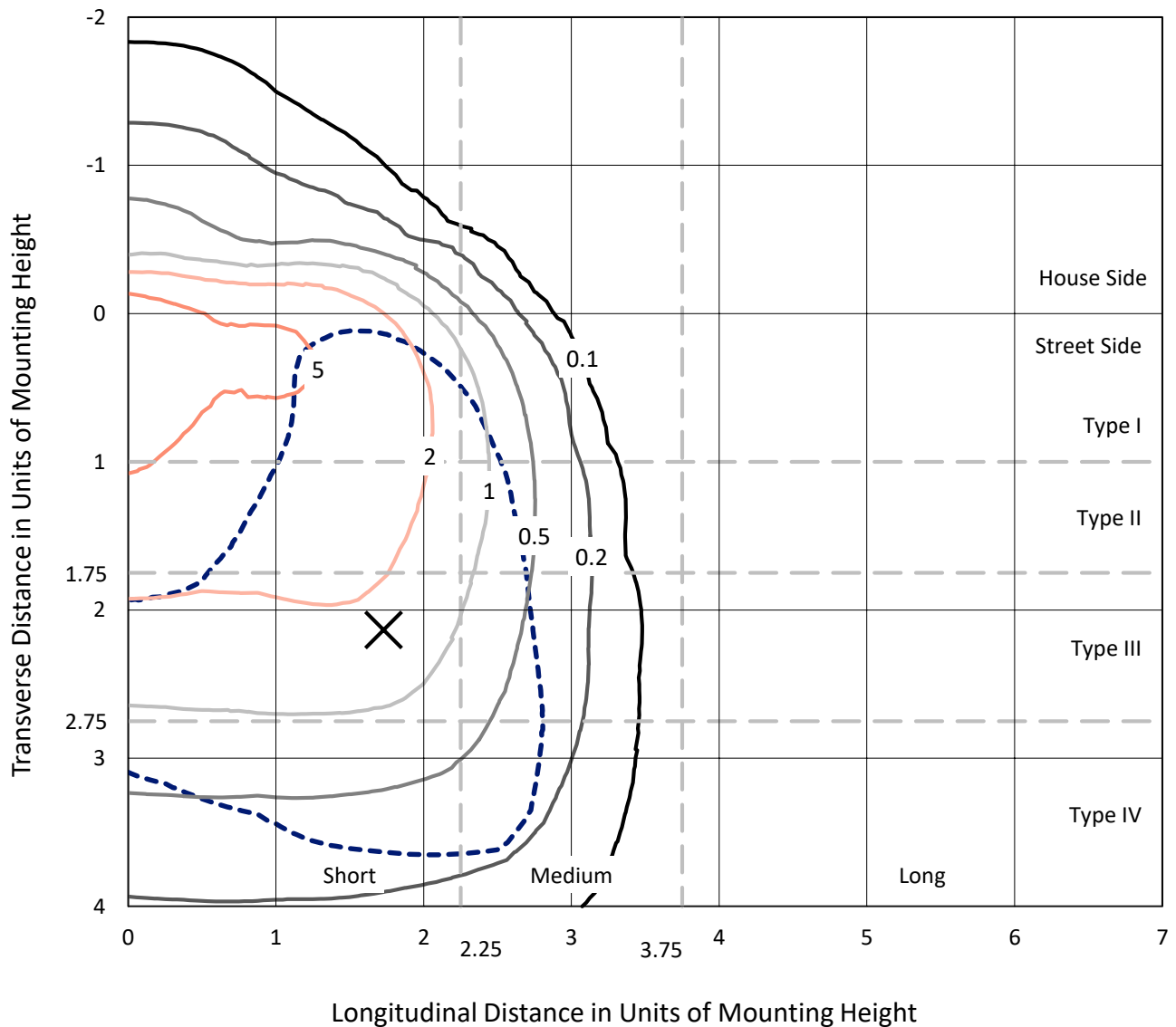


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Iso-Footcandle Lines of Horizontal Illumination

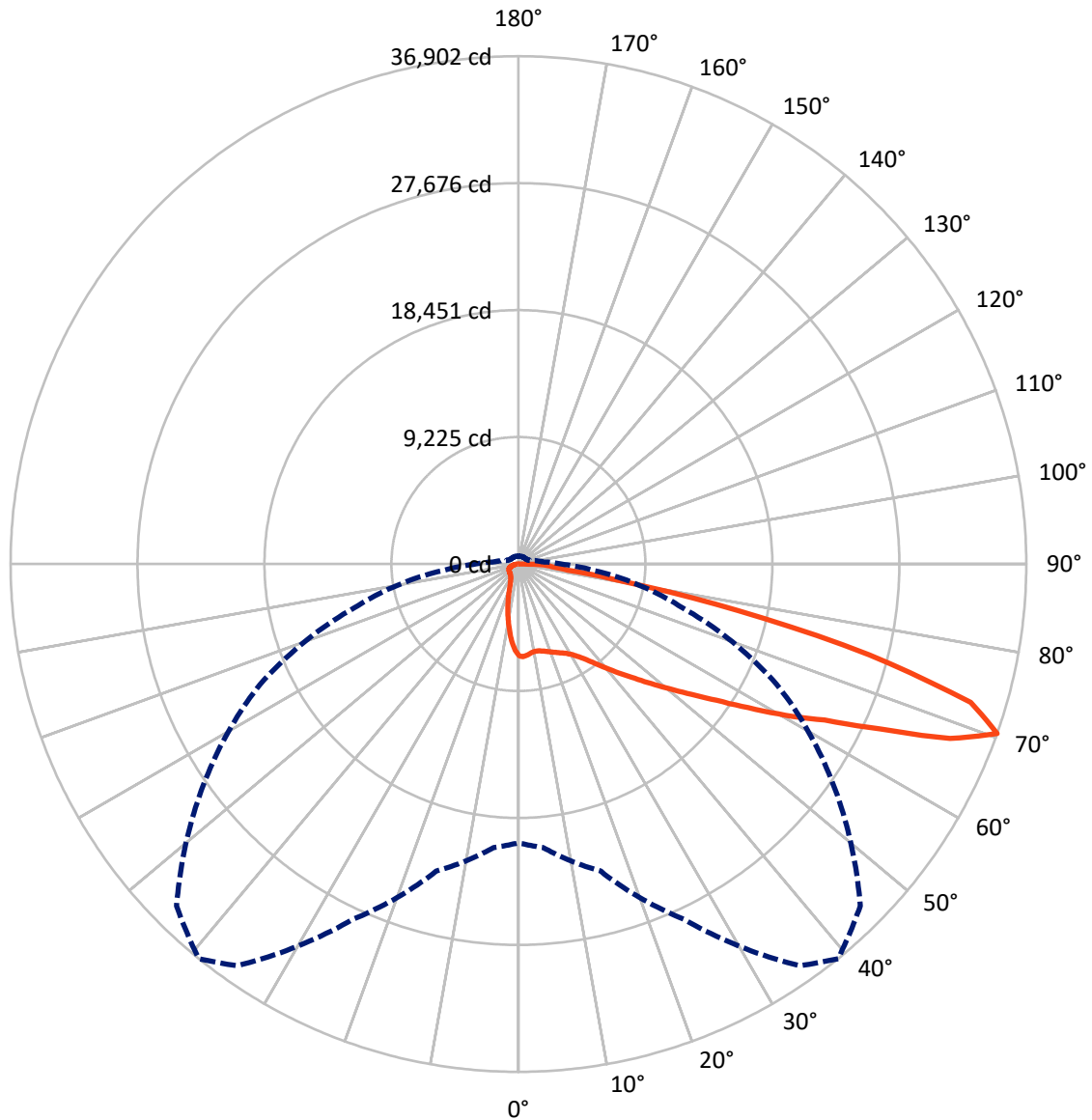
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4996.5 | 0.0 | 4996.5 |
| | % Fixture | 11.4 | 0.0 | 11.4 |
| Street Side | Lumens | 38935.5 | 0.0 | 38935.5 |
| | % Fixture | 88.6 | 0.0 | 88.6 |
| Total | Lumens | 43932.1 | 0.0 | 43932.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 572.4 | 1.3 |
| 10°-20° | 1430.7 | 3.3 |
| 20°-30° | 2227.7 | 5.1 |
| 30°-40° | 3470.3 | 7.9 |
| 40°-50° | 5826.1 | 13.3 |
| 50°-60° | 9255.2 | 21.1 |
| 60°-70° | 12345.4 | 28.1 |
| 70°-80° | 7455.1 | 17.0 |
| 80°-90° | 1349.3 | 3.1 |
| 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° | 43932.1 | 100.0 |
| 0°-180° | 43932.1 | 100.0 |

Coefficient of Utilization



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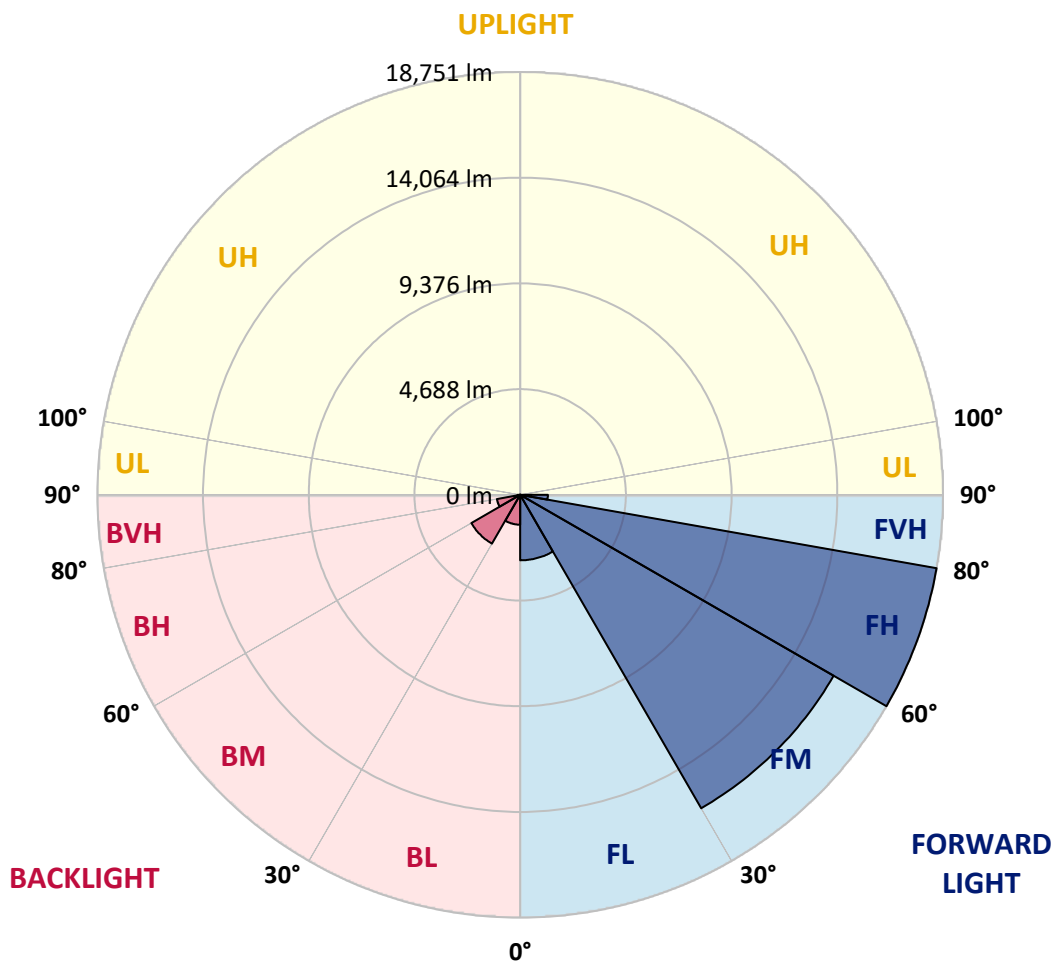
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 2905.3 | 6.6 | | | |
| FM | (30°-60°) | 16051.1 | 36.5 | | | |
| FH | (60°-80°) | 18751.5 | 42.7 | | | G5 |
| FVH | (80°-90°) | 1227.7 | 2.8 | | | G5 |
| BL | (0°-30°) | 1325.5 | 3.0 | B3/2500 | | |
| BM | (30°-60°) | 2500.5 | 5.7 | B3/5000 | | |
| BH | (60°-80°) | 1049.0 | 2.4 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 121.6 | 0.3 | | | G2/225 |
| 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° | 35° | 39° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 6669.6 | 6669.6 | 6669.6 | 6669.6 | 6669.6 | 6669.6 | 6669.6 | 6669.6 | 6669.6 | 6669.6 | 6669.6 |
| 2.5° | 6799.1 | 6796.8 | 6779.0 | 6765.7 | 6754.4 | 6750.0 | 6758.8 | 6725.4 | 6696.3 | 6660.7 | 6622.7 |
| 5° | 6747.8 | 6745.6 | 6716.4 | 6689.7 | 6662.9 | 6653.9 | 6651.7 | 6591.5 | 6555.7 | 6502.0 | 6430.5 |
| 7.5° | 6692.0 | 6680.8 | 6642.7 | 6598.1 | 6551.2 | 6528.8 | 6506.6 | 6428.4 | 6388.1 | 6334.5 | 6251.8 |
| 10° | 6633.9 | 6620.4 | 6584.7 | 6540.0 | 6495.4 | 6461.9 | 6423.9 | 6348.0 | 6305.6 | 6265.3 | 6169.2 |
| 12.5° | 6573.5 | 6562.4 | 6553.5 | 6533.4 | 6502.0 | 6472.9 | 6444.0 | 6379.3 | 6334.5 | 6287.6 | 6175.9 |
| 15° | 6564.6 | 6560.1 | 6580.3 | 6593.6 | 6575.8 | 6557.8 | 6526.6 | 6470.9 | 6423.9 | 6377.0 | 6231.8 |
| 17.5° | 6636.0 | 6633.9 | 6685.1 | 6720.9 | 6712.0 | 6680.8 | 6638.4 | 6575.8 | 6537.8 | 6497.6 | 6316.6 |
| 20° | 6792.4 | 6803.7 | 6866.1 | 6913.0 | 6868.4 | 6823.6 | 6754.4 | 6667.3 | 6647.3 | 6629.3 | 6403.7 |
| 22.5° | 7087.3 | 7098.4 | 7143.1 | 7161.0 | 7044.8 | 6980.0 | 6884.0 | 6772.3 | 6758.8 | 6772.3 | 6508.8 |
| 25° | 7547.4 | 7536.2 | 7529.6 | 7462.5 | 7250.3 | 7149.8 | 7026.9 | 6910.8 | 6917.5 | 6977.9 | 6656.3 |
| 27.5° | 8157.1 | 8096.9 | 8003.0 | 7802.0 | 7464.7 | 7353.0 | 7203.4 | 7096.3 | 7138.7 | 7254.8 | 6877.3 |
| 30° | 8789.2 | 8722.3 | 8505.6 | 8177.4 | 7746.2 | 7623.3 | 7455.8 | 7335.2 | 7446.9 | 7630.1 | 7172.2 |
| 32.5° | 9374.5 | 9365.5 | 9048.4 | 8626.2 | 8134.8 | 8027.7 | 7860.1 | 7723.8 | 7904.7 | 8184.0 | 7614.5 |
| 35° | 10013.2 | 10033.3 | 9653.6 | 9146.6 | 8659.8 | 8548.0 | 8427.4 | 8324.8 | 8565.9 | 8950.2 | 8255.5 |
| 37.5° | 10696.7 | 10737.0 | 10288.0 | 9716.2 | 9258.3 | 9211.4 | 9140.0 | 9095.2 | 9468.2 | 9999.9 | 9151.2 |
| 40° | 11610.4 | 11570.1 | 10946.9 | 10359.6 | 9993.1 | 9990.9 | 9968.6 | 10022.2 | 10643.2 | 11371.4 | 10301.5 |
| 42.5° | 12588.7 | 12470.4 | 11646.0 | 11049.7 | 10799.6 | 10875.5 | 10920.2 | 11139.1 | 12057.1 | 13037.6 | 11704.1 |
| 45° | 13642.9 | 13377.1 | 12371.9 | 11780.1 | 11695.3 | 11856.0 | 12008.0 | 12483.7 | 13721.2 | 14934.0 | 13240.8 |
| 47.5° | 14485.0 | 14228.2 | 13122.5 | 12546.2 | 12731.6 | 12975.1 | 13267.6 | 14020.3 | 15583.9 | 16892.8 | 14757.4 |
| 50° | 15148.4 | 14980.9 | 13879.7 | 13439.6 | 13873.0 | 14248.2 | 14726.3 | 15760.4 | 17522.7 | 18800.4 | 16162.5 |
| 52.5° | 15791.7 | 15666.6 | 14643.6 | 14355.5 | 15213.2 | 15731.4 | 16381.3 | 17627.7 | 19510.6 | 20676.6 | 17344.0 |
| 55° | 16372.4 | 16283.0 | 15465.5 | 15496.8 | 16790.1 | 17464.7 | 18282.1 | 19754.1 | 21677.2 | 22349.6 | 18344.6 |
| 57.5° | 17026.8 | 16912.8 | 16403.7 | 16928.6 | 18816.0 | 19691.6 | 20754.7 | 22144.1 | 23709.9 | 23837.2 | 19106.3 |
| 60° | 17685.8 | 17587.5 | 17444.5 | 18581.4 | 21389.2 | 22309.3 | 23316.6 | 24460.3 | 25771.5 | 24991.9 | 19061.7 |
| 62.5° | 18257.5 | 18268.7 | 18521.2 | 20317.0 | 23908.6 | 24974.0 | 26202.5 | 27332.8 | 27636.5 | 25193.0 | 17652.2 |
| 65° | 19227.0 | 19403.4 | 20156.1 | 22773.9 | 27455.5 | 28880.7 | 30388.4 | 30207.5 | 28152.5 | 23314.5 | 14630.2 |
| 67.5° | 20379.5 | 20689.9 | 22215.5 | 26048.4 | 31938.5 | 33830.3 | 34413.3 | 30857.4 | 26086.4 | 18952.3 | 10428.8 |
| 70° | 20263.3 | 20689.9 | 23104.4 | 28489.7 | 35632.9 | 36901.6 | 35132.5 | 27926.9 | 20714.6 | 12380.9 | 5539.4 |
| 72.5° | 17993.9 | 18603.8 | 21293.1 | 27370.6 | 34469.1 | 34357.5 | 30500.1 | 20819.5 | 12307.1 | 4971.9 | 2164.3 |
| 75° | 13714.5 | 14330.9 | 16644.9 | 21623.6 | 27243.3 | 26305.2 | 21641.4 | 11500.9 | 4670.5 | 1974.6 | 1364.7 |
| 77.5° | 7889.2 | 8367.2 | 10154.0 | 13261.0 | 17283.7 | 16321.0 | 12045.9 | 5114.9 | 2273.8 | 1375.9 | 1065.4 |
| 80° | 4404.7 | 4670.5 | 5756.0 | 6727.6 | 8469.8 | 7764.1 | 5389.7 | 3178.5 | 1697.5 | 998.5 | 821.9 |
| 82.5° | 3482.2 | 3719.0 | 4654.8 | 4243.9 | 3868.6 | 3569.3 | 3095.7 | 2830.0 | 1355.8 | 629.9 | 491.5 |
| 85° | 3042.2 | 3267.8 | 3940.1 | 3341.4 | 2642.4 | 2423.4 | 2515.1 | 2785.4 | 1054.3 | 379.8 | 419.9 |
| 87.5° | 2818.8 | 3120.4 | 3511.2 | 2575.4 | 2057.2 | 1822.7 | 2320.7 | 3053.3 | 339.5 | 236.8 | 169.8 |
| 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° | 6669.6 | 6669.6 | 6669.6 | 6669.6 | 6669.6 | 6669.6 | 6669.6 | 6669.6 | 6669.6 | 6669.6 | 6669.6 |
| 2.5° | 6589.2 | 6553.5 | 6495.4 | 6444.0 | 6363.6 | 6321.2 | 6274.2 | 6240.7 | 6213.9 | 6191.6 | 6227.3 |
| 5° | 6386.0 | 6318.9 | 6196.1 | 6064.3 | 5908.0 | 5785.1 | 5682.3 | 5586.3 | 5519.2 | 5474.6 | 5505.8 |
| 7.5° | 6193.9 | 6084.4 | 5892.3 | 5653.3 | 5385.2 | 5157.3 | 4969.9 | 4804.6 | 4690.6 | 4616.8 | 4645.9 |
| 10° | 6084.4 | 5948.0 | 5651.1 | 5275.7 | 4880.4 | 4525.3 | 4230.5 | 3975.8 | 3799.4 | 3699.0 | 3714.5 |
| 12.5° | 6057.6 | 5881.2 | 5470.0 | 4954.2 | 4413.6 | 3920.1 | 3504.6 | 3151.7 | 2903.7 | 2774.1 | 2778.5 |
| 15° | 6077.7 | 5852.1 | 5300.4 | 4645.9 | 3962.5 | 3339.3 | 2821.0 | 2392.1 | 2104.1 | 1956.7 | 1954.4 |
| 17.5° | 6111.2 | 5829.7 | 5121.6 | 4313.1 | 3504.6 | 2780.9 | 2202.4 | 1782.4 | 1527.7 | 1409.4 | 1400.5 |
| 20° | 6146.9 | 5794.0 | 4920.6 | 3953.5 | 3028.7 | 2262.7 | 1724.3 | 1396.0 | 1235.2 | 1170.4 | 1165.9 |
| 22.5° | 6198.2 | 5762.7 | 4712.9 | 3573.7 | 2562.0 | 1842.8 | 1418.3 | 1197.3 | 1112.3 | 1078.9 | 1074.4 |
| 25° | 6280.9 | 5747.0 | 4491.7 | 3178.5 | 2142.1 | 1541.2 | 1235.2 | 1098.9 | 1049.8 | 1027.4 | 1025.2 |
| 27.5° | 6419.4 | 5769.5 | 4284.0 | 2794.3 | 1800.4 | 1337.9 | 1132.5 | 1049.8 | 1014.0 | 994.0 | 991.6 |
| 30° | 6598.1 | 5838.7 | 4065.2 | 2430.2 | 1534.5 | 1199.4 | 1069.9 | 1016.3 | 987.2 | 967.1 | 967.1 |
| 32.5° | 6895.2 | 5954.9 | 3835.1 | 2115.1 | 1344.7 | 1103.4 | 1023.0 | 987.2 | 962.8 | 947.1 | 944.7 |
| 35° | 7333.0 | 6173.7 | 3620.7 | 1853.9 | 1208.4 | 1034.2 | 982.7 | 955.9 | 938.1 | 929.1 | 929.1 |
| 37.5° | 7969.6 | 6519.9 | 3430.8 | 1666.3 | 1125.8 | 987.2 | 944.7 | 924.7 | 913.5 | 913.5 | 913.5 |
| 40° | 8824.9 | 6997.8 | 3276.7 | 1541.2 | 1078.9 | 953.7 | 915.8 | 900.1 | 893.5 | 895.7 | 895.7 |
| 42.5° | 9881.5 | 7618.9 | 3174.0 | 1454.0 | 1056.4 | 933.7 | 895.7 | 882.2 | 875.6 | 873.3 | 875.6 |
| 45° | 11085.4 | 8324.8 | 3162.8 | 1389.3 | 1034.2 | 920.3 | 882.2 | 868.9 | 855.5 | 846.6 | 846.6 |
| 47.5° | 12255.8 | 9041.7 | 3254.4 | 1367.0 | 1009.5 | 904.7 | 871.0 | 857.7 | 837.6 | 817.5 | 817.5 |
| 50° | 13290.1 | 9651.5 | 3377.2 | 1375.9 | 1000.6 | 882.2 | 853.2 | 846.6 | 815.3 | 792.9 | 790.7 |
| 52.5° | 14112.0 | 10120.6 | 3477.8 | 1402.8 | 1009.5 | 866.7 | 830.9 | 833.2 | 799.6 | 775.1 | 772.8 |
| 55° | 14770.9 | 10428.8 | 3450.8 | 1429.6 | 1029.6 | 857.7 | 810.8 | 815.3 | 788.4 | 763.9 | 763.9 |
| 57.5° | 15059.0 | 10314.9 | 3153.9 | 1407.1 | 1045.4 | 859.9 | 795.2 | 813.1 | 790.7 | 768.4 | 768.4 |
| 60° | 14440.3 | 9302.9 | 2597.7 | 1308.9 | 1025.2 | 853.2 | 788.4 | 821.9 | 819.8 | 797.3 | 795.2 |
| 62.5° | 12568.5 | 7491.5 | 2014.7 | 1163.8 | 955.9 | 819.8 | 770.6 | 819.8 | 844.2 | 837.6 | 835.3 |
| 65° | 9687.2 | 5336.1 | 1538.9 | 1007.4 | 862.2 | 763.9 | 723.7 | 768.4 | 801.8 | 810.8 | 808.6 |
| 67.5° | 6287.6 | 3270.0 | 1186.0 | 859.9 | 757.2 | 699.2 | 663.4 | 683.5 | 690.2 | 690.2 | 685.8 |
| 70° | 3091.2 | 1760.0 | 944.7 | 723.7 | 650.0 | 629.9 | 609.8 | 598.6 | 587.4 | 578.5 | 578.5 |
| 72.5° | 1525.5 | 1150.3 | 777.4 | 612.0 | 560.6 | 551.6 | 547.2 | 533.9 | 524.9 | 513.7 | 509.2 |
| 75° | 1128.0 | 935.9 | 661.2 | 515.9 | 482.5 | 473.5 | 482.5 | 471.3 | 469.0 | 460.1 | 455.7 |
| 77.5° | 927.0 | 797.3 | 569.5 | 442.2 | 413.2 | 397.6 | 411.0 | 413.2 | 415.5 | 402.0 | 397.6 |
| 80° | 752.7 | 674.5 | 475.7 | 366.2 | 339.5 | 328.3 | 337.3 | 355.1 | 359.6 | 339.5 | 330.5 |
| 82.5° | 542.8 | 551.6 | 384.1 | 285.9 | 263.6 | 254.6 | 272.5 | 294.9 | 299.3 | 270.3 | 263.6 |
| 85° | 455.7 | 460.1 | 294.9 | 203.2 | 180.9 | 167.5 | 196.5 | 218.8 | 234.5 | 205.5 | 198.7 |
| 87.5° | 189.8 | 270.3 | 169.8 | 113.9 | 100.5 | 87.1 | 105.0 | 116.2 | 140.8 | 129.5 | 127.3 |
| 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)