

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: P193317

Luminaire Tested: **GAN-AF-09-LED-U-T4W-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193317
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24147)
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-T4W-7030
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 51108.2 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G5

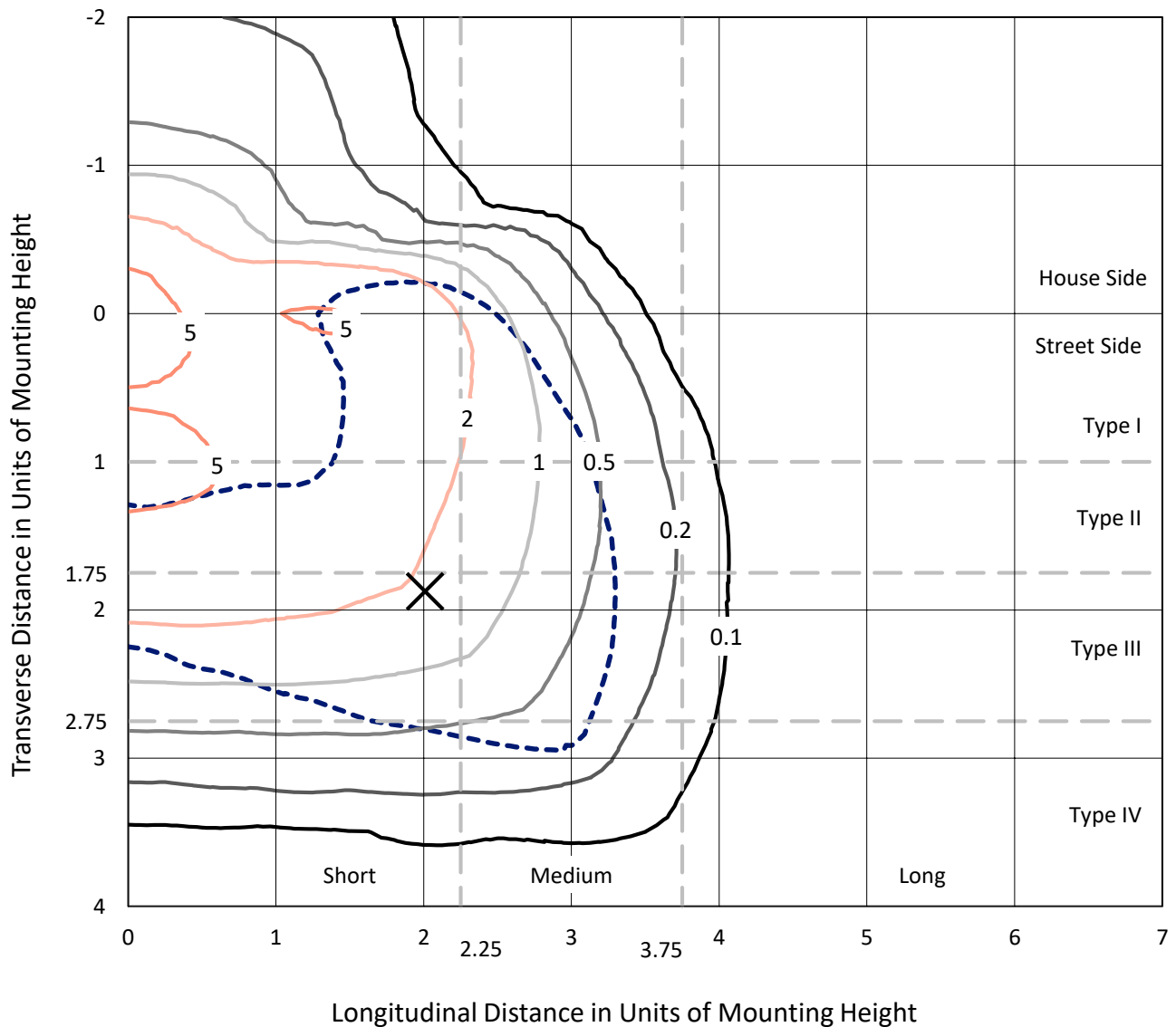
Input Watts (W): 501
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

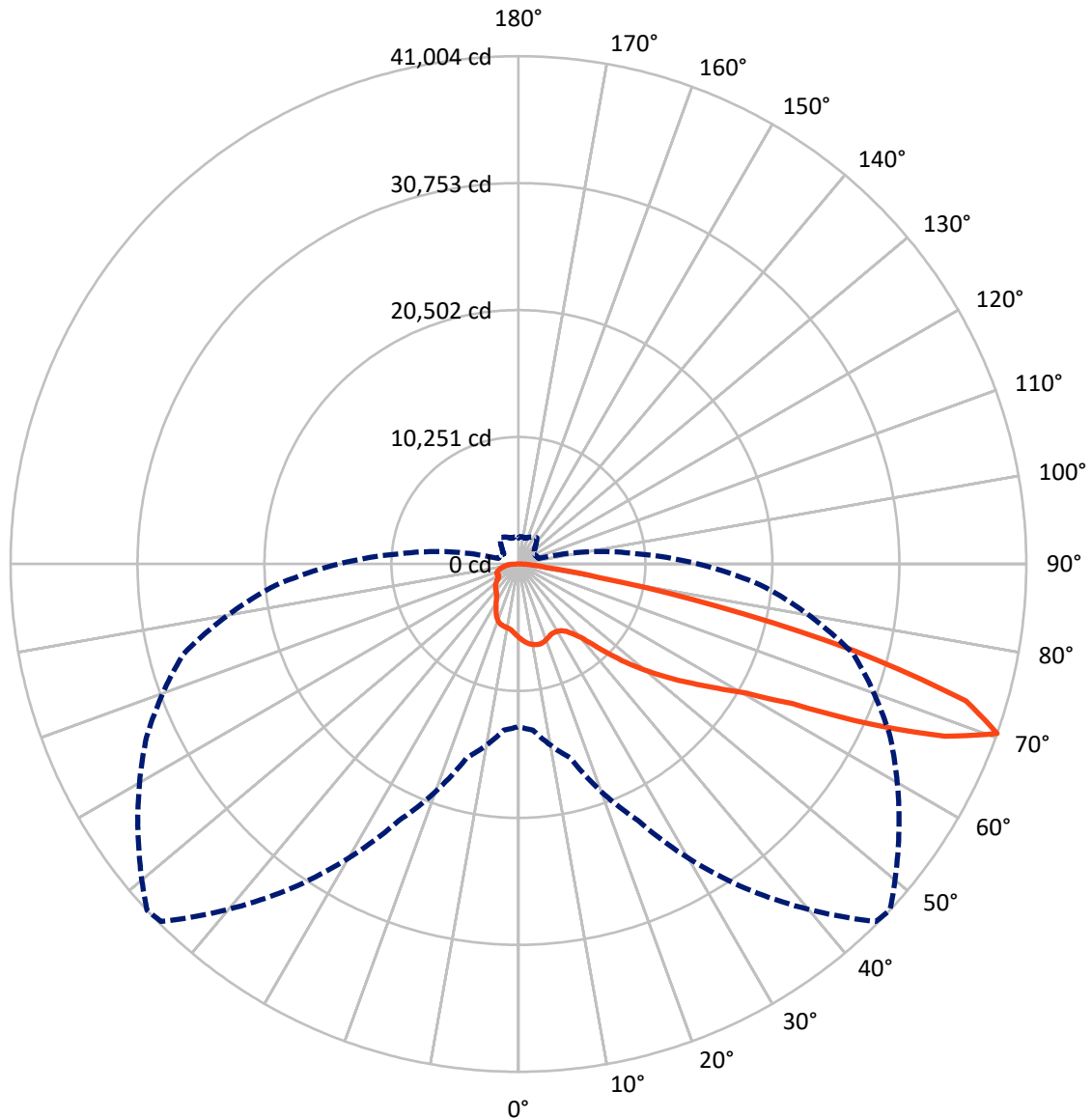
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.6 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 10662.2 | 0.0 | 10662.2 |
| | % Fixture | 20.9 | 0.0 | 20.9 |
| Street Side | Lumens | 40446.0 | 0.0 | 40446.0 |
| | % Fixture | 79.1 | 0.0 | 79.1 |
| Total | Lumens | 51108.2 | 0.0 | 51108.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 568.2 | 1.1 |
| 10°-20° | 1667.0 | 3.3 |
| 20°-30° | 2461.7 | 4.8 |
| 30°-40° | 3578.0 | 7.0 |
| 40°-50° | 6439.1 | 12.6 |
| 50°-60° | 11155.1 | 21.8 |
| 60°-70° | 15921.6 | 31.2 |
| 70°-80° | 8173.3 | 16.0 |
| 80°-90° | 1144.3 | 2.2 |
| 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° | 51108.2 | 100.0 |
| 0°-180° | 51108.2 | 100.0 |

Coefficient of Utilization



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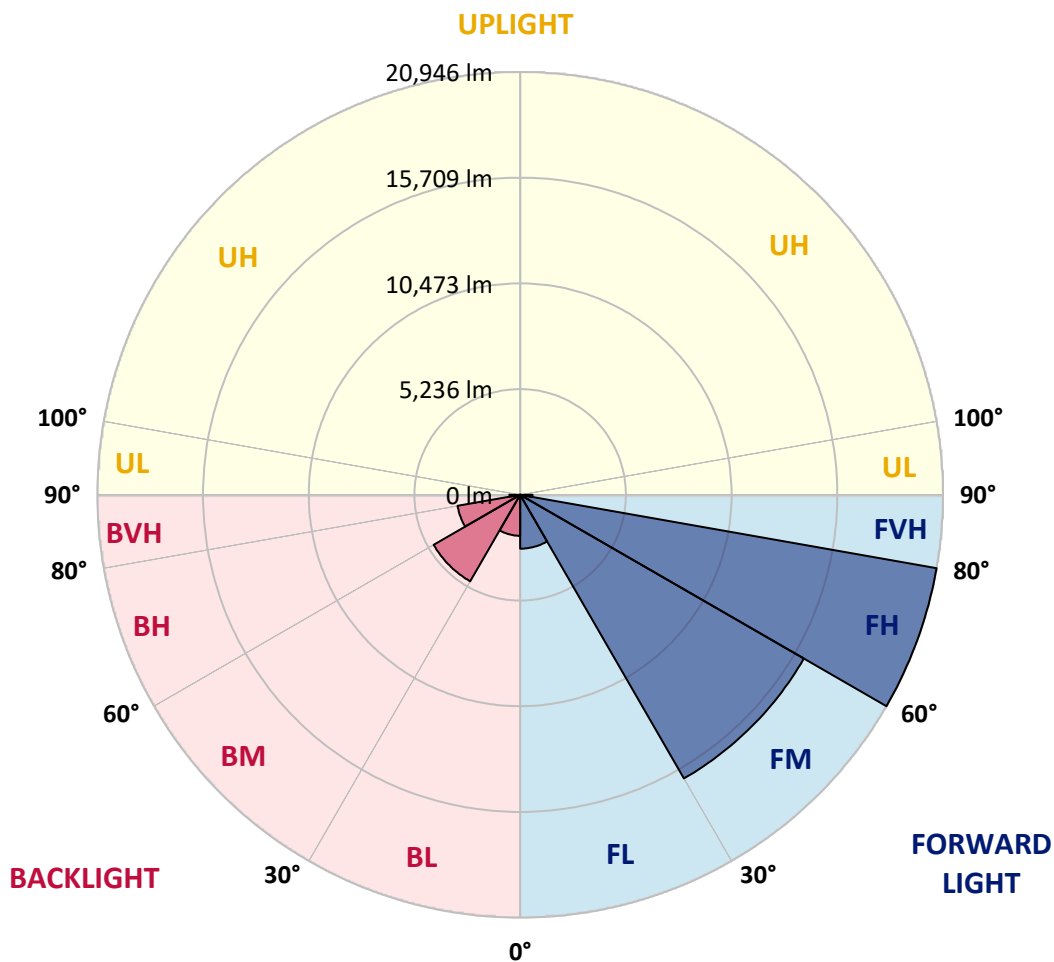
CATALOG NUMBER: GAN-AF-09-LED-U-T4W-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 2666.7 | 5.2 | | | |
| FM | (30°-60°) | 16223.2 | 31.7 | | | |
| FH | (60°-80°) | 20945.5 | 41.0 | | | G5 |
| FVH | (80°-90°) | 610.6 | 1.2 | | | G4/750 |
| BL | (0°-30°) | 2030.1 | 4.0 | B3/2500 | | |
| BM | (30°-60°) | 4949.1 | 9.7 | B3/5000 | | |
| BH | (60°-80°) | 3149.3 | 6.2 | B4/5000 | | G4/5000 |
| BVH | (80°-90°) | 533.7 | 1.0 | | | G4/750 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 47° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5930.1 | 5930.1 | 5930.1 | 5930.1 | 5930.1 | 5930.1 | 5930.1 | 5930.1 | 5930.1 | 5930.1 | 5930.1 |
| 2.5° | 6278.2 | 6265.8 | 6260.9 | 6250.9 | 6238.4 | 6176.3 | 6163.9 | 6119.1 | 6056.9 | 5992.4 | 5925.1 |
| 5° | 6691.0 | 6688.6 | 6661.1 | 6611.4 | 6531.8 | 6395.1 | 6362.8 | 6253.4 | 6106.7 | 5964.9 | 5823.2 |
| 7.5° | 7054.0 | 7031.6 | 6979.4 | 6879.9 | 6740.7 | 6554.3 | 6509.4 | 6357.8 | 6156.4 | 5962.5 | 5771.0 |
| 10° | 7320.1 | 7307.6 | 7193.3 | 7056.5 | 6875.0 | 6668.6 | 6616.4 | 6447.3 | 6226.0 | 5979.9 | 5741.1 |
| 12.5° | 7471.7 | 7446.9 | 7315.1 | 7151.0 | 6934.6 | 6733.2 | 6681.1 | 6509.4 | 6260.9 | 5979.9 | 5698.9 |
| 15° | 7461.8 | 7444.4 | 7312.6 | 7133.5 | 6914.8 | 6738.2 | 6691.0 | 6519.4 | 6253.4 | 5954.9 | 5644.3 |
| 17.5° | 7262.9 | 7270.3 | 7158.4 | 6981.8 | 6802.9 | 6668.6 | 6626.3 | 6467.2 | 6203.6 | 5905.3 | 5579.6 |
| 20° | 6914.8 | 6949.6 | 6875.0 | 6718.4 | 6618.9 | 6526.9 | 6499.5 | 6365.2 | 6126.6 | 5833.2 | 5510.0 |
| 22.5° | 6566.7 | 6599.0 | 6569.1 | 6437.3 | 6422.5 | 6367.7 | 6352.9 | 6255.8 | 6059.4 | 5788.4 | 5467.7 |
| 25° | 6310.6 | 6340.5 | 6335.4 | 6221.0 | 6265.8 | 6263.3 | 6250.9 | 6203.6 | 6044.6 | 5788.4 | 5475.1 |
| 27.5° | 6241.0 | 6250.9 | 6241.0 | 6136.5 | 6198.8 | 6248.4 | 6238.4 | 6231.0 | 6089.2 | 5860.5 | 5569.6 |
| 30° | 6479.6 | 6464.8 | 6387.7 | 6176.3 | 6233.5 | 6303.0 | 6293.2 | 6298.1 | 6223.5 | 6049.4 | 5780.9 |
| 32.5° | 7432.0 | 7364.8 | 7121.2 | 6526.9 | 6375.2 | 6412.5 | 6417.5 | 6499.5 | 6512.0 | 6340.5 | 6109.1 |
| 35° | 8856.7 | 8782.0 | 8466.3 | 7466.8 | 6815.3 | 6686.0 | 6686.0 | 6810.3 | 6885.0 | 6758.1 | 6618.9 |
| 37.5° | 10366.0 | 10283.9 | 10114.7 | 8769.7 | 7740.3 | 7161.0 | 7148.5 | 7235.4 | 7342.4 | 7372.3 | 7407.1 |
| 40° | 12081.6 | 11994.6 | 12041.8 | 10231.7 | 9030.8 | 7983.9 | 7807.4 | 7745.3 | 8033.7 | 8225.1 | 8503.6 |
| 42.5° | 13958.9 | 13919.1 | 13936.4 | 11860.3 | 10500.3 | 9214.7 | 8963.6 | 8642.9 | 8991.0 | 9331.7 | 9916.0 |
| 45° | 15696.8 | 15731.7 | 15714.2 | 13603.4 | 12136.3 | 10716.4 | 10450.4 | 9828.9 | 10169.6 | 10753.9 | 11706.1 |
| 47.5° | 17218.5 | 17074.4 | 17298.2 | 15507.9 | 13968.8 | 12397.3 | 12069.1 | 11236.2 | 11581.8 | 12302.9 | 13914.0 |
| 50° | 19066.0 | 19046.1 | 18717.9 | 18049.0 | 16184.2 | 14085.6 | 13655.4 | 12690.8 | 13227.8 | 14229.8 | 16696.4 |
| 52.5° | 21007.9 | 20647.4 | 20346.5 | 20025.7 | 18533.8 | 15816.2 | 15289.0 | 14140.4 | 15162.2 | 16422.9 | 20087.9 |
| 55° | 21405.7 | 21244.1 | 21617.1 | 22156.5 | 20799.0 | 17613.9 | 16999.7 | 15958.0 | 17340.4 | 18929.1 | 23999.1 |
| 57.5° | 22256.1 | 22253.6 | 23024.4 | 23986.7 | 23131.3 | 19521.1 | 18901.9 | 18153.4 | 19789.5 | 21801.0 | 28151.4 |
| 60° | 22830.4 | 22992.1 | 24424.3 | 26291.5 | 25421.3 | 21724.0 | 21154.6 | 20687.1 | 22574.3 | 25011.1 | 32020.3 |
| 62.5° | 23131.3 | 23350.2 | 25304.5 | 27226.5 | 28658.6 | 25391.5 | 24822.1 | 24148.3 | 26259.3 | 28531.9 | 34283.0 |
| 65° | 21880.6 | 22310.7 | 25167.7 | 28034.5 | 31493.1 | 31336.5 | 31080.4 | 29896.8 | 30866.7 | 31314.1 | 33464.9 |
| 67.5° | 18419.5 | 18859.6 | 22186.4 | 27281.2 | 33517.1 | 37070.2 | 37124.9 | 35103.5 | 33701.1 | 31552.9 | 28136.5 |
| 70° | 13123.3 | 13469.1 | 16221.5 | 22872.7 | 31975.5 | 40817.3 | 41003.8 | 37502.9 | 33136.7 | 27982.3 | 19657.7 |
| 72.5° | 6231.0 | 6442.4 | 9048.1 | 14886.2 | 25374.1 | 37398.5 | 37759.0 | 34439.6 | 28176.3 | 20716.9 | 10724.1 |
| 75° | 2290.0 | 2354.6 | 3058.2 | 6333.0 | 14717.2 | 27579.5 | 28004.7 | 24687.7 | 18678.1 | 10313.7 | 4085.2 |
| 77.5° | 1372.6 | 1414.8 | 1715.6 | 2672.9 | 5788.4 | 15764.0 | 16393.0 | 13426.8 | 8163.0 | 3839.1 | 2009.1 |
| 80° | 959.8 | 989.6 | 1230.8 | 1663.5 | 2735.1 | 6007.2 | 6566.7 | 5480.1 | 3252.2 | 2429.3 | 1462.0 |
| 82.5° | 649.0 | 663.9 | 865.3 | 1123.8 | 1817.6 | 2145.8 | 2314.8 | 2436.7 | 2193.1 | 1807.5 | 927.4 |
| 85° | 425.1 | 440.1 | 586.8 | 741.0 | 1156.2 | 1109.0 | 1133.8 | 1434.7 | 1601.3 | 1228.3 | 514.7 |
| 87.5° | 243.6 | 253.6 | 353.1 | 395.3 | 566.9 | 470.0 | 474.9 | 755.8 | 1024.5 | 827.9 | 313.2 |
| 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° | 5930.1 | 5930.1 | 5930.1 | 5930.1 | 5930.1 | 5930.1 | 5930.1 | 5930.1 | 5930.1 | 5930.1 | 5930.1 |
| 2.5° | 5907.7 | 5875.4 | 5803.3 | 5758.6 | 5716.3 | 5706.4 | 5688.9 | 5686.5 | 5684.0 | 5684.0 | 5676.6 |
| 5° | 5776.0 | 5721.3 | 5609.4 | 5547.2 | 5494.9 | 5490.1 | 5487.5 | 5500.0 | 5504.9 | 5510.0 | 5502.6 |
| 7.5° | 5691.5 | 5616.8 | 5477.6 | 5388.1 | 5326.0 | 5311.0 | 5335.9 | 5393.0 | 5430.4 | 5445.3 | 5437.9 |
| 10° | 5639.2 | 5547.2 | 5385.6 | 5288.7 | 5236.5 | 5228.9 | 5261.3 | 5328.5 | 5405.5 | 5435.3 | 5432.8 |
| 12.5° | 5579.6 | 5475.1 | 5303.6 | 5201.7 | 5171.8 | 5186.6 | 5228.9 | 5291.1 | 5370.7 | 5417.9 | 5420.5 |
| 15° | 5519.9 | 5398.1 | 5221.5 | 5132.0 | 5119.6 | 5139.4 | 5179.2 | 5226.5 | 5288.7 | 5335.9 | 5340.8 |
| 17.5° | 5447.7 | 5320.9 | 5144.5 | 5052.4 | 5042.6 | 5052.4 | 5054.9 | 5079.8 | 5119.6 | 5164.3 | 5176.7 |
| 20° | 5370.7 | 5241.3 | 5057.4 | 4965.4 | 4920.6 | 4880.8 | 4836.2 | 4841.1 | 4853.6 | 4898.3 | 4908.3 |
| 22.5° | 5316.0 | 5186.6 | 4990.3 | 4863.4 | 4744.1 | 4624.7 | 4535.3 | 4522.8 | 4527.8 | 4565.1 | 4577.5 |
| 25° | 5320.9 | 5184.3 | 4972.8 | 4754.1 | 4493.0 | 4301.5 | 4182.2 | 4162.3 | 4159.8 | 4187.2 | 4204.6 |
| 27.5° | 5417.9 | 5281.1 | 5037.5 | 4642.2 | 4219.5 | 3936.1 | 3809.3 | 3794.2 | 3774.4 | 3781.9 | 3801.7 |
| 30° | 5634.3 | 5507.4 | 5194.1 | 4527.8 | 3923.6 | 3578.0 | 3446.1 | 3431.3 | 3404.0 | 3391.5 | 3406.3 |
| 32.5° | 5987.3 | 5882.8 | 5422.9 | 4418.5 | 3627.7 | 3272.1 | 3137.9 | 3105.5 | 3088.1 | 3073.3 | 3085.7 |
| 35° | 6574.1 | 6529.4 | 5728.8 | 4299.1 | 3366.6 | 3036.0 | 2914.1 | 2864.3 | 2839.5 | 2866.9 | 2886.7 |
| 37.5° | 7494.1 | 7519.0 | 6129.0 | 4112.5 | 3165.2 | 2879.3 | 2777.4 | 2720.1 | 2682.9 | 2705.3 | 2727.6 |
| 40° | 8797.0 | 8814.4 | 6571.6 | 3848.9 | 2991.2 | 2787.3 | 2677.8 | 2625.7 | 2573.5 | 2533.7 | 2531.2 |
| 42.5° | 10507.7 | 10331.1 | 7006.8 | 3563.1 | 2789.8 | 2730.1 | 2608.2 | 2543.7 | 2464.1 | 2354.6 | 2332.2 |
| 45° | 12536.6 | 11917.5 | 7337.5 | 3234.8 | 2563.5 | 2660.5 | 2531.2 | 2441.7 | 2317.4 | 2198.0 | 2185.6 |
| 47.5° | 14873.8 | 13620.7 | 7499.1 | 2894.2 | 2352.2 | 2558.6 | 2436.7 | 2295.0 | 2138.3 | 2078.6 | 2071.2 |
| 50° | 17728.3 | 15642.1 | 7576.1 | 2563.5 | 2168.1 | 2424.3 | 2299.9 | 2133.4 | 2001.6 | 1989.2 | 1981.6 |
| 52.5° | 20978.0 | 18073.8 | 7601.0 | 2292.5 | 2016.5 | 2250.2 | 2188.0 | 2026.4 | 1922.0 | 1931.9 | 1931.9 |
| 55° | 24379.4 | 20585.2 | 7262.9 | 2096.0 | 1877.3 | 2071.2 | 2113.5 | 1984.1 | 1897.2 | 1936.9 | 1951.8 |
| 57.5° | 27502.4 | 22810.5 | 6198.8 | 1944.4 | 1745.5 | 1934.4 | 2086.1 | 2023.9 | 1964.3 | 2125.8 | 2135.8 |
| 60° | 29899.4 | 24125.9 | 4629.8 | 1807.5 | 1648.5 | 1887.2 | 2158.2 | 2175.7 | 2190.5 | 2575.9 | 2628.1 |
| 62.5° | 30401.6 | 23688.3 | 3182.6 | 1700.7 | 1603.7 | 1927.0 | 2290.0 | 2292.5 | 2275.1 | 2543.7 | 2575.9 |
| 65° | 28096.7 | 20920.9 | 2314.8 | 1641.1 | 1566.4 | 1999.1 | 2401.8 | 2349.7 | 2235.3 | 2439.2 | 2379.5 |
| 67.5° | 22313.3 | 15761.5 | 1927.0 | 1596.3 | 1511.7 | 1994.1 | 2521.2 | 2401.8 | 2212.9 | 2389.5 | 2292.5 |
| 70° | 14483.5 | 9530.4 | 1715.6 | 1559.0 | 1447.1 | 1899.6 | 2590.9 | 2396.9 | 2148.2 | 2222.9 | 2108.4 |
| 72.5° | 7066.5 | 4261.7 | 1573.9 | 1504.3 | 1380.0 | 1767.9 | 2588.4 | 2352.2 | 2081.2 | 2076.2 | 2013.9 |
| 75° | 2765.0 | 1951.8 | 1444.6 | 1422.2 | 1265.5 | 1618.6 | 2518.8 | 2287.6 | 2001.6 | 1922.0 | 1899.6 |
| 77.5° | 1618.6 | 1392.4 | 1280.5 | 1300.4 | 1128.8 | 1469.4 | 2416.9 | 2175.7 | 1892.2 | 1797.7 | 1772.8 |
| 80° | 1178.6 | 1041.8 | 1091.5 | 1123.8 | 964.8 | 1320.3 | 2280.0 | 2038.9 | 1770.3 | 1817.6 | 1782.8 |
| 82.5° | 755.8 | 671.3 | 885.2 | 917.4 | 803.2 | 1168.6 | 2130.9 | 1894.7 | 1598.8 | 1452.0 | 1417.3 |
| 85° | 385.3 | 425.1 | 659.0 | 698.7 | 619.2 | 959.8 | 1949.4 | 1703.3 | 1404.8 | 1208.4 | 1228.3 |
| 87.5° | 216.4 | 290.9 | 420.2 | 470.0 | 437.6 | 738.5 | 1581.4 | 1404.8 | 1146.2 | 932.4 | 820.5 |
| 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)