

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: P267217

Luminaire Tested: **GAN-AF-09-LED-U-AFL-7027-1200-ADJ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P267217
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
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-AFL-7027-1200-ADJ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52031.3 lumens
Efficiency: N/A
Efficacy: 90.5 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 575
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

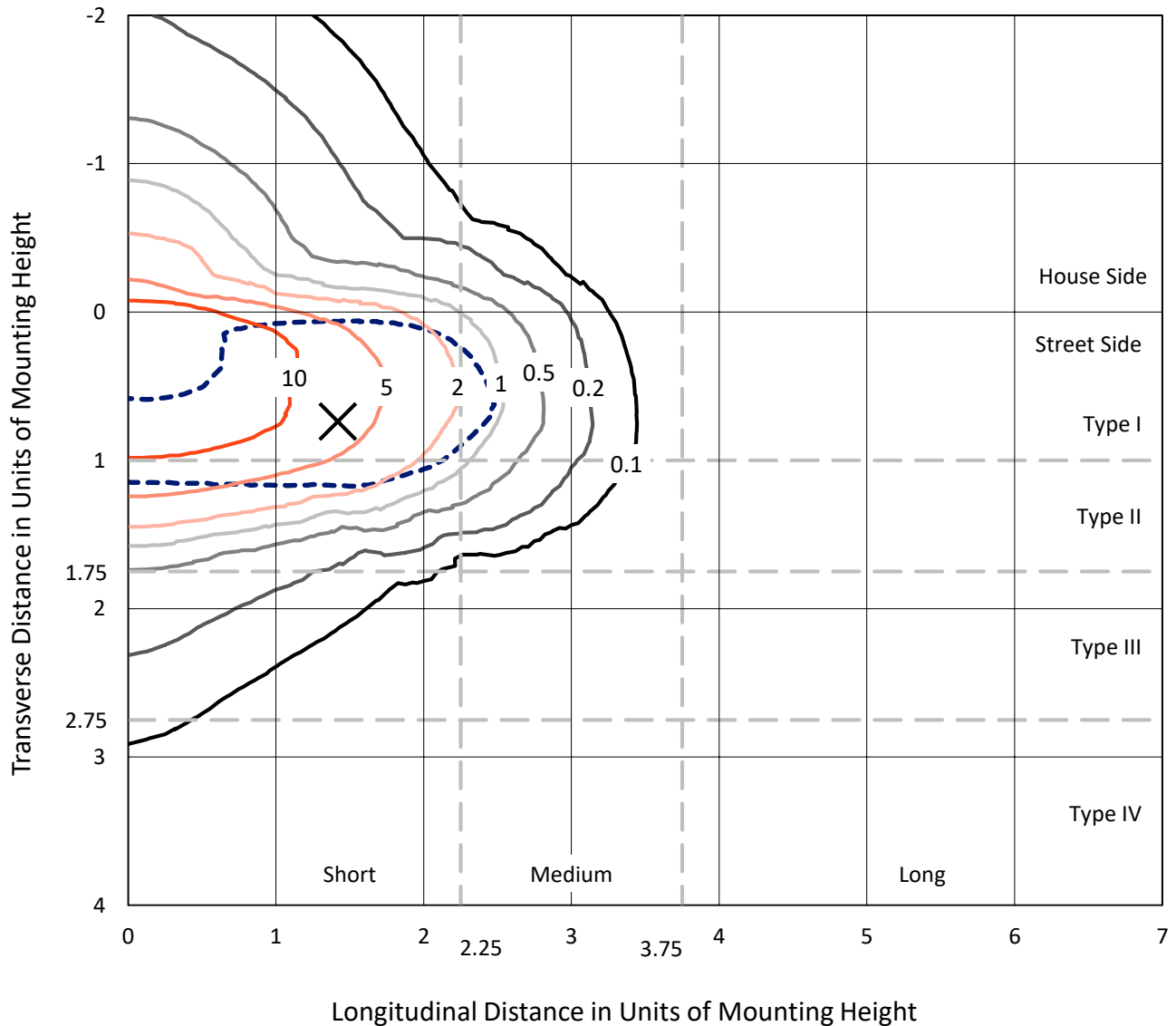


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

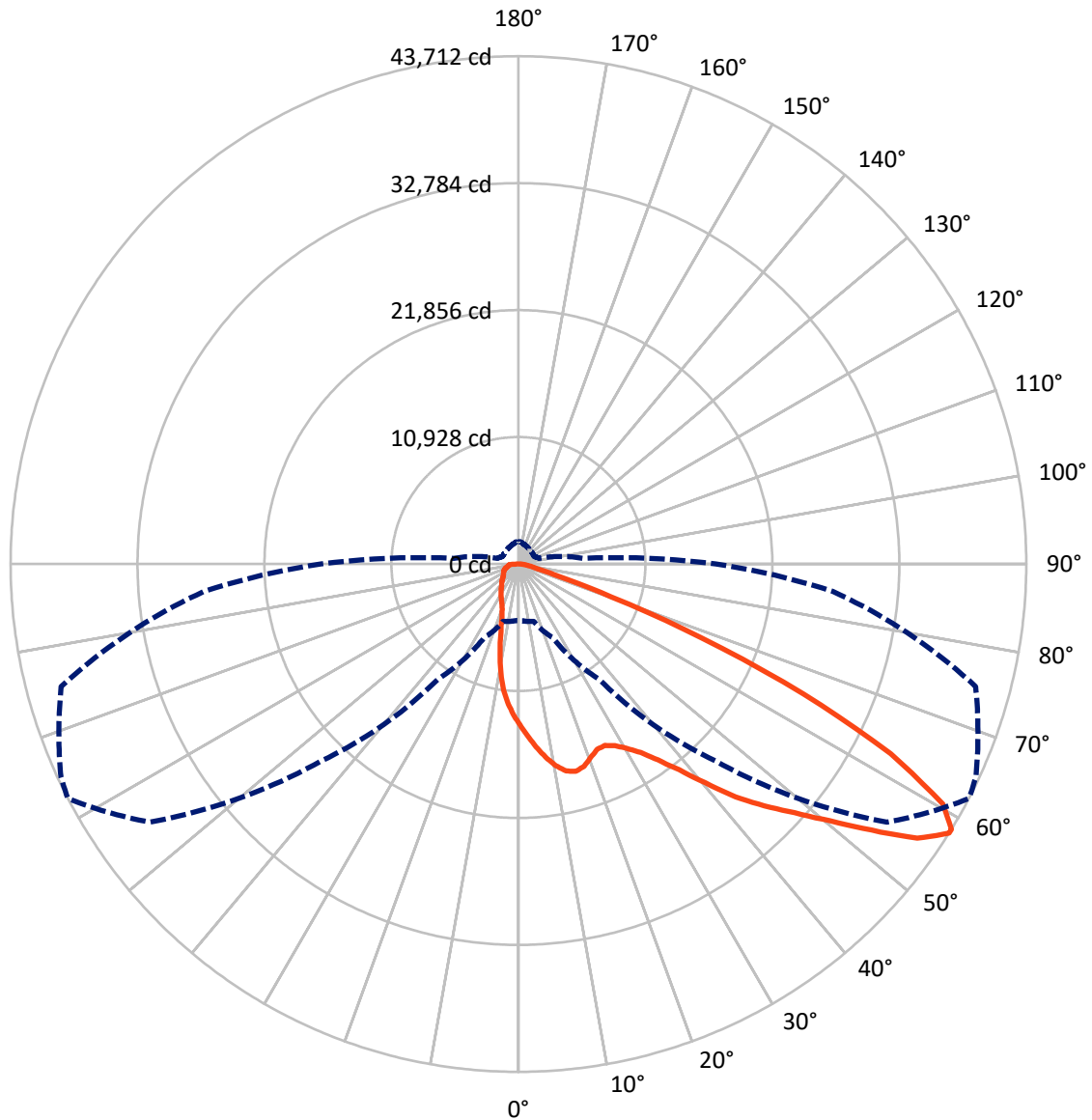


Based on 30 foot mounting height. Maximum calculated value = 18.7 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 7935.0 | 0.0 | 7935.0 |
| | % Fixture | 15.3 | 0.0 | 15.3 |
| Street Side | Lumens | 44096.3 | 0.0 | 44096.3 |
| | % Fixture | 84.7 | 0.0 | 84.7 |
| Total | Lumens | 52031.3 | 0.0 | 52031.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1236.1 | 2.4 |
| 10°-20° | 3159.6 | 6.1 |
| 20°-30° | 5107.7 | 9.8 |
| 30°-40° | 8108.4 | 15.6 |
| 40°-50° | 11864.2 | 22.8 |
| 50°-60° | 12409.0 | 23.8 |
| 60°-70° | 7331.2 | 14.1 |
| 70°-80° | 2065.3 | 4.0 |
| 80°-90° | 749.8 | 1.4 |
| 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° | 52031.3 | 100.0 |
| 0°-180° | 52031.3 | 100.0 |



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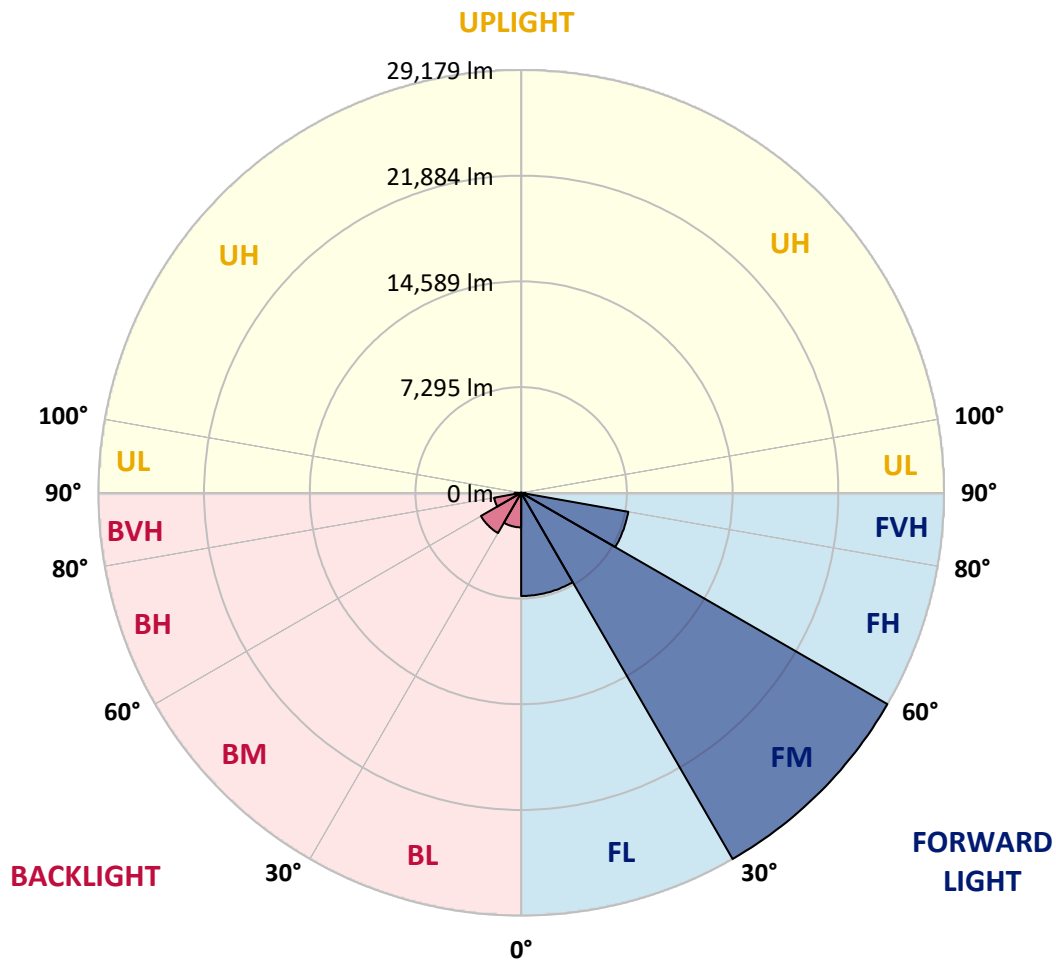
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 7118.5 | 13.7 | | | |
| FM (30°-60°) | 29178.8 | 56.1 | | | |
| FH (60°-80°) | 7503.1 | 14.4 | | | G4/12000 |
| FVH (80°-90°) | 295.8 | 0.6 | | | G3/500 |
| BL (0°-30°) | 2384.9 | 4.6 | B3/2500 | | |
| BM (30°-60°) | 3202.7 | 6.2 | B3/5000 | | |
| BH (60°-80°) | 1893.4 | 3.6 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 454.0 | 0.9 | | | G3/500 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 62.5° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 13821.1 | 13821.1 | 13821.1 | 13821.1 | 13821.1 | 13821.1 | 13821.1 | 13821.1 | 13821.1 | 13821.1 | 13821.1 |
| 2.5° | 15793.5 | 15666.0 | 15585.1 | 15514.1 | 15420.9 | 15222.5 | 14955.4 | 14786.5 | 14700.7 | 14409.1 | 14063.7 |
| 5° | 17341.9 | 17229.1 | 17145.8 | 17050.3 | 16883.6 | 16572.6 | 16141.4 | 15798.3 | 15629.3 | 15046.2 | 14355.2 |
| 7.5° | 16979.3 | 17025.8 | 17170.4 | 17422.6 | 17638.3 | 17596.7 | 17212.1 | 16775.8 | 16552.9 | 15742.0 | 14693.2 |
| 10° | 14793.7 | 14874.6 | 15124.6 | 15714.9 | 16670.6 | 17650.5 | 17949.5 | 17648.1 | 17422.6 | 16430.4 | 15041.2 |
| 12.5° | 14355.2 | 14352.7 | 14372.3 | 14529.1 | 15097.5 | 16477.0 | 17973.9 | 18277.9 | 18143.1 | 17087.0 | 15396.5 |
| 15° | 14534.0 | 14538.9 | 14524.2 | 14590.5 | 14766.8 | 15313.1 | 17224.2 | 18520.4 | 18615.9 | 17748.5 | 15763.9 |
| 17.5° | 15004.5 | 14992.3 | 14935.8 | 14935.8 | 14999.5 | 15212.6 | 16342.2 | 18294.9 | 18735.9 | 18334.1 | 16087.3 |
| 20° | 15793.5 | 15737.0 | 15587.6 | 15450.4 | 15381.8 | 15496.9 | 15979.6 | 17775.5 | 18527.7 | 18846.3 | 16354.5 |
| 22.5° | 16748.9 | 16704.8 | 16462.2 | 16168.2 | 15930.6 | 15928.1 | 16165.8 | 17322.2 | 18167.5 | 19328.9 | 16579.8 |
| 25° | 17983.8 | 17912.7 | 17552.5 | 17082.1 | 16665.6 | 16506.4 | 16572.6 | 17300.2 | 17971.5 | 19853.3 | 16780.8 |
| 27.5° | 19434.2 | 19304.3 | 18878.2 | 18199.4 | 17586.8 | 17266.0 | 17170.4 | 17699.6 | 18150.3 | 20502.5 | 17060.2 |
| 30° | 21193.4 | 21044.0 | 20497.5 | 19613.1 | 18748.3 | 18221.4 | 18018.1 | 18407.7 | 18743.3 | 21293.9 | 17508.4 |
| 32.5° | 23195.1 | 22979.5 | 22347.5 | 21372.3 | 20235.4 | 19431.7 | 19101.0 | 19343.7 | 19610.7 | 22247.0 | 18069.5 |
| 35° | 25961.3 | 25704.0 | 24790.2 | 23445.0 | 22161.1 | 21056.2 | 20527.0 | 20703.3 | 20963.0 | 23668.1 | 18880.5 |
| 37.5° | 27847.8 | 27732.7 | 27125.1 | 25860.9 | 24464.4 | 23192.7 | 22374.4 | 22477.3 | 22624.4 | 25444.3 | 19919.3 |
| 40° | 27830.7 | 27877.3 | 27889.6 | 27901.8 | 26951.2 | 25733.4 | 24853.9 | 24746.1 | 24716.7 | 27394.6 | 21100.3 |
| 42.5° | 26436.7 | 26627.7 | 27245.1 | 28497.2 | 29075.4 | 28516.8 | 27710.6 | 27399.6 | 27245.1 | 29692.8 | 22352.3 |
| 45° | 24302.6 | 24405.5 | 25562.0 | 28007.1 | 30163.3 | 31273.1 | 30663.0 | 29683.1 | 29403.7 | 31804.9 | 23391.1 |
| 47.5° | 23202.5 | 23315.1 | 24042.9 | 26708.5 | 30151.0 | 33500.3 | 33853.2 | 31986.0 | 31486.3 | 33642.5 | 24288.0 |
| 50° | 20583.4 | 20818.6 | 21734.9 | 24449.6 | 29050.8 | 34524.5 | 37187.8 | 34730.2 | 33696.3 | 35430.9 | 25187.0 |
| 52.5° | 15773.8 | 16136.4 | 17162.9 | 20735.2 | 26260.2 | 34017.2 | 39855.9 | 38057.6 | 36597.3 | 37283.3 | 25959.0 |
| 55° | 9949.8 | 10219.4 | 11081.9 | 14644.3 | 21007.3 | 31378.5 | 40867.9 | 41656.7 | 40358.2 | 39037.6 | 26627.7 |
| 57.5° | 5409.9 | 5529.8 | 5853.3 | 8085.4 | 13664.3 | 25544.8 | 39392.8 | 43705.0 | 43166.0 | 40527.3 | 27132.4 |
| 58° | 4841.4 | 4922.3 | 5123.2 | 7007.3 | 12118.2 | 23949.8 | 38738.6 | 43712.3 | 43442.8 | 40745.2 | 27171.8 |
| 60° | 3591.9 | 3550.2 | 3371.3 | 3998.5 | 6745.2 | 16545.5 | 34784.2 | 41963.0 | 42754.3 | 41012.3 | 26980.6 |
| 62.5° | 3155.7 | 3055.2 | 2690.2 | 2648.6 | 3280.7 | 7622.3 | 26615.5 | 35945.5 | 37815.0 | 39488.4 | 25819.3 |
| 65° | 2964.6 | 2856.8 | 2386.3 | 2234.5 | 2366.9 | 3224.3 | 15678.2 | 26958.6 | 29303.3 | 34867.4 | 22849.6 |
| 67.5° | 2822.6 | 2682.9 | 2192.9 | 1984.5 | 1994.3 | 2131.6 | 6284.5 | 16979.3 | 19618.1 | 26473.4 | 17773.1 |
| 70° | 2685.4 | 2533.4 | 2028.7 | 1788.5 | 1732.2 | 1685.7 | 2499.2 | 8499.5 | 10893.1 | 16721.9 | 11331.7 |
| 72.5° | 2538.3 | 2388.9 | 1884.1 | 1634.2 | 1524.0 | 1369.6 | 1631.9 | 3476.7 | 4856.1 | 7911.5 | 5140.3 |
| 75° | 2325.2 | 2190.3 | 1739.6 | 1497.0 | 1340.2 | 1134.4 | 1232.5 | 1815.6 | 2178.1 | 3150.9 | 2477.0 |
| 77.5° | 2063.0 | 1952.7 | 1577.9 | 1384.3 | 1188.3 | 921.2 | 948.3 | 1259.3 | 1396.5 | 1803.3 | 1472.5 |
| 80° | 1482.4 | 1521.5 | 1404.0 | 1244.6 | 1058.5 | 747.3 | 727.6 | 918.7 | 992.3 | 1159.0 | 958.0 |
| 82.5° | 1041.2 | 1063.4 | 1161.4 | 1016.8 | 874.7 | 588.0 | 536.6 | 646.8 | 690.9 | 762.0 | 517.0 |
| 85° | 717.8 | 693.4 | 796.3 | 708.0 | 632.1 | 392.0 | 367.5 | 438.6 | 465.5 | 472.9 | 267.1 |
| 87.5° | 431.2 | 431.2 | 460.7 | 379.8 | 340.5 | 203.3 | 198.4 | 249.9 | 267.1 | 254.8 | 147.1 |
| 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° | 13821.1 | 13821.1 | 13821.1 | 13821.1 | 13821.1 | 13821.1 | 13821.1 | 13821.1 | 13821.1 | 13821.1 | 13821.1 |
| 2.5° | 13857.9 | 13683.8 | 13313.9 | 13017.3 | 12642.6 | 12253.1 | 12035.0 | 11802.1 | 11642.9 | 11527.8 | 11711.6 |
| 5° | 13963.2 | 13607.9 | 12843.4 | 12118.2 | 11317.0 | 10483.9 | 9851.9 | 9263.9 | 8854.8 | 8599.8 | 8840.0 |
| 7.5° | 14129.8 | 13583.5 | 12365.7 | 11126.0 | 9687.7 | 8301.0 | 7061.1 | 6284.5 | 5831.3 | 5608.3 | 5748.0 |
| 10° | 14320.9 | 13544.1 | 11804.5 | 9780.8 | 7722.6 | 5975.9 | 5049.6 | 4736.0 | 4633.2 | 4591.4 | 4611.1 |
| 12.5° | 14480.0 | 13460.9 | 11116.2 | 8153.9 | 5799.4 | 4718.8 | 4451.8 | 4444.5 | 4466.6 | 4471.5 | 4478.8 |
| 15° | 14592.8 | 13338.4 | 10094.4 | 6458.5 | 4638.0 | 4299.9 | 4285.3 | 4329.3 | 4371.1 | 4388.1 | 4397.9 |
| 17.5° | 14668.9 | 13086.0 | 8940.4 | 5106.1 | 4155.4 | 4096.6 | 4130.9 | 4187.2 | 4231.3 | 4243.7 | 4253.4 |
| 20° | 14661.4 | 12716.0 | 7566.0 | 4258.2 | 3893.3 | 3893.3 | 3952.1 | 3996.1 | 3998.5 | 3983.9 | 3991.2 |
| 22.5° | 14585.5 | 12208.9 | 6233.1 | 3807.5 | 3660.5 | 3702.2 | 3760.9 | 3719.3 | 3547.8 | 3435.1 | 3442.5 |
| 25° | 14458.1 | 11603.6 | 5091.4 | 3520.7 | 3444.8 | 3518.3 | 3501.2 | 3187.5 | 2942.6 | 2832.4 | 2832.4 |
| 27.5° | 14345.4 | 10888.3 | 4214.2 | 3270.9 | 3229.2 | 3319.9 | 3016.1 | 2731.8 | 2629.0 | 2577.4 | 2560.3 |
| 30° | 14264.5 | 10116.5 | 3628.7 | 3030.8 | 3025.9 | 2959.7 | 2616.8 | 2538.3 | 2521.2 | 2479.5 | 2464.8 |
| 32.5° | 14284.0 | 9334.8 | 3253.8 | 2820.0 | 2837.2 | 2533.4 | 2425.7 | 2442.8 | 2428.1 | 2383.9 | 2364.3 |
| 35° | 14445.9 | 8592.5 | 3008.8 | 2629.0 | 2577.4 | 2288.4 | 2312.9 | 2344.8 | 2339.8 | 2278.6 | 2259.0 |
| 37.5° | 14735.0 | 7889.4 | 2847.0 | 2469.7 | 2249.1 | 2166.0 | 2205.1 | 2254.0 | 2241.8 | 2200.2 | 2185.4 |
| 40° | 15038.7 | 7227.9 | 2714.7 | 2344.8 | 2055.6 | 2082.6 | 2116.9 | 2143.8 | 2156.1 | 2168.4 | 2158.5 |
| 42.5° | 15335.2 | 6536.8 | 2553.1 | 2217.3 | 1974.7 | 2004.2 | 2018.9 | 2045.8 | 2111.9 | 2158.5 | 2156.1 |
| 45° | 15511.7 | 5887.6 | 2386.3 | 2036.1 | 1911.1 | 1928.2 | 1918.4 | 1972.3 | 2053.2 | 2129.2 | 2131.6 |
| 47.5° | 15707.7 | 5382.9 | 2254.0 | 1869.5 | 1849.8 | 1862.0 | 1832.7 | 1886.6 | 1960.1 | 2053.2 | 2063.0 |
| 50° | 15945.3 | 5081.5 | 2148.7 | 1737.1 | 1766.5 | 1766.5 | 1759.2 | 1808.2 | 1911.1 | 2018.9 | 2038.6 |
| 52.5° | 16214.8 | 5022.8 | 2060.5 | 1641.6 | 1683.2 | 1680.8 | 1688.2 | 1761.7 | 1874.4 | 1979.7 | 1996.8 |
| 55° | 16543.1 | 5182.0 | 1965.0 | 1570.5 | 1602.3 | 1612.2 | 1636.7 | 1720.0 | 1815.6 | 1935.6 | 1942.9 |
| 57.5° | 16925.3 | 5505.4 | 1889.0 | 1514.2 | 1528.8 | 1560.7 | 1599.9 | 1675.9 | 1778.7 | 1911.1 | 1918.4 |
| 58° | 16989.0 | 5574.1 | 1876.7 | 1509.2 | 1514.2 | 1551.0 | 1595.0 | 1668.5 | 1771.4 | 1915.9 | 1923.4 |
| 60° | 16991.5 | 5801.9 | 1849.8 | 1487.2 | 1457.8 | 1519.0 | 1568.1 | 1641.6 | 1759.2 | 1933.2 | 1950.3 |
| 62.5° | 16388.8 | 5799.4 | 1830.2 | 1455.3 | 1399.0 | 1474.9 | 1531.3 | 1617.0 | 1746.9 | 1974.7 | 2009.1 |
| 65° | 14431.1 | 5270.1 | 1737.1 | 1406.3 | 1352.5 | 1435.9 | 1499.5 | 1599.9 | 1781.2 | 2156.1 | 2178.1 |
| 67.5° | 11287.7 | 4319.5 | 1563.2 | 1337.8 | 1291.3 | 1396.5 | 1479.9 | 1597.5 | 1818.0 | 2197.8 | 2212.4 |
| 70° | 7462.9 | 3231.7 | 1372.0 | 1259.3 | 1227.5 | 1350.1 | 1489.7 | 1680.8 | 1776.3 | 2109.5 | 2070.4 |
| 72.5° | 3873.6 | 2268.8 | 1217.7 | 1161.4 | 1154.1 | 1308.3 | 1631.9 | 1670.9 | 1734.6 | 1984.5 | 1935.6 |
| 75° | 2033.7 | 1575.4 | 1082.9 | 1053.5 | 1065.7 | 1298.6 | 1925.7 | 1626.9 | 1680.8 | 1898.8 | 1991.9 |
| 77.5° | 1244.6 | 1271.6 | 967.8 | 955.5 | 980.1 | 1269.1 | 1923.4 | 1570.5 | 1602.3 | 1746.9 | 1849.8 |
| 80° | 833.1 | 1031.6 | 879.6 | 882.0 | 899.3 | 1161.4 | 1727.4 | 1482.4 | 1506.7 | 1651.4 | 1756.7 |
| 82.5° | 526.8 | 610.0 | 798.8 | 840.4 | 818.4 | 958.0 | 1467.7 | 1350.1 | 1384.3 | 1889.0 | 1996.8 |
| 85° | 267.1 | 382.1 | 693.4 | 808.6 | 737.5 | 671.4 | 1190.8 | 1183.3 | 1200.6 | 1362.3 | 1423.5 |
| 87.5° | 122.4 | 210.7 | 541.5 | 705.6 | 556.2 | 419.0 | 864.9 | 877.1 | 945.7 | 967.8 | 967.8 |
| 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)