

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: P191701

Luminaire Tested: **GAN-AF-03-LED-U-5WQ-7050-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191701
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-03-LED-U-5WQ-7050-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20998 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 191
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

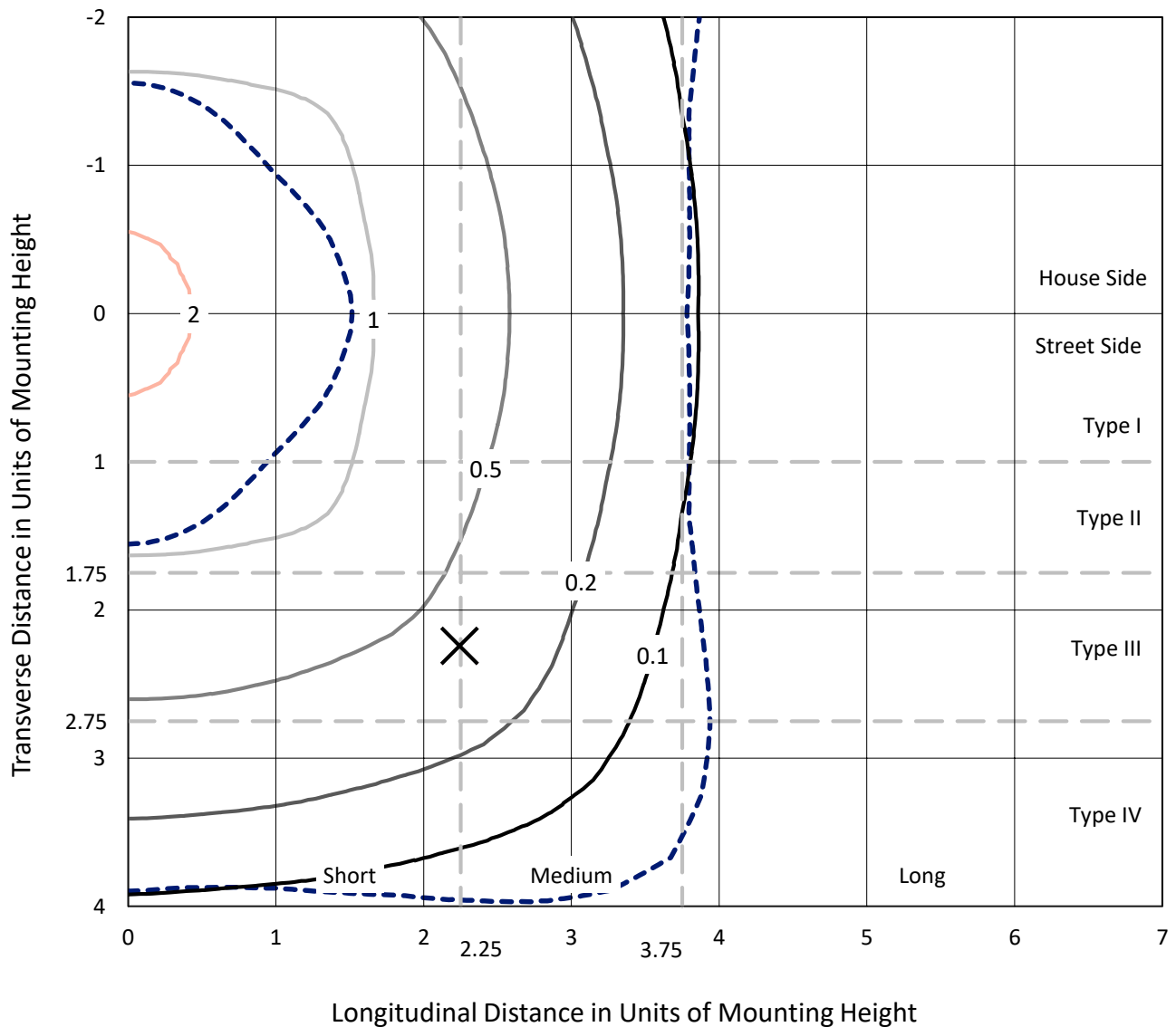


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Iso-Footcandle Lines of Horizontal Illumination

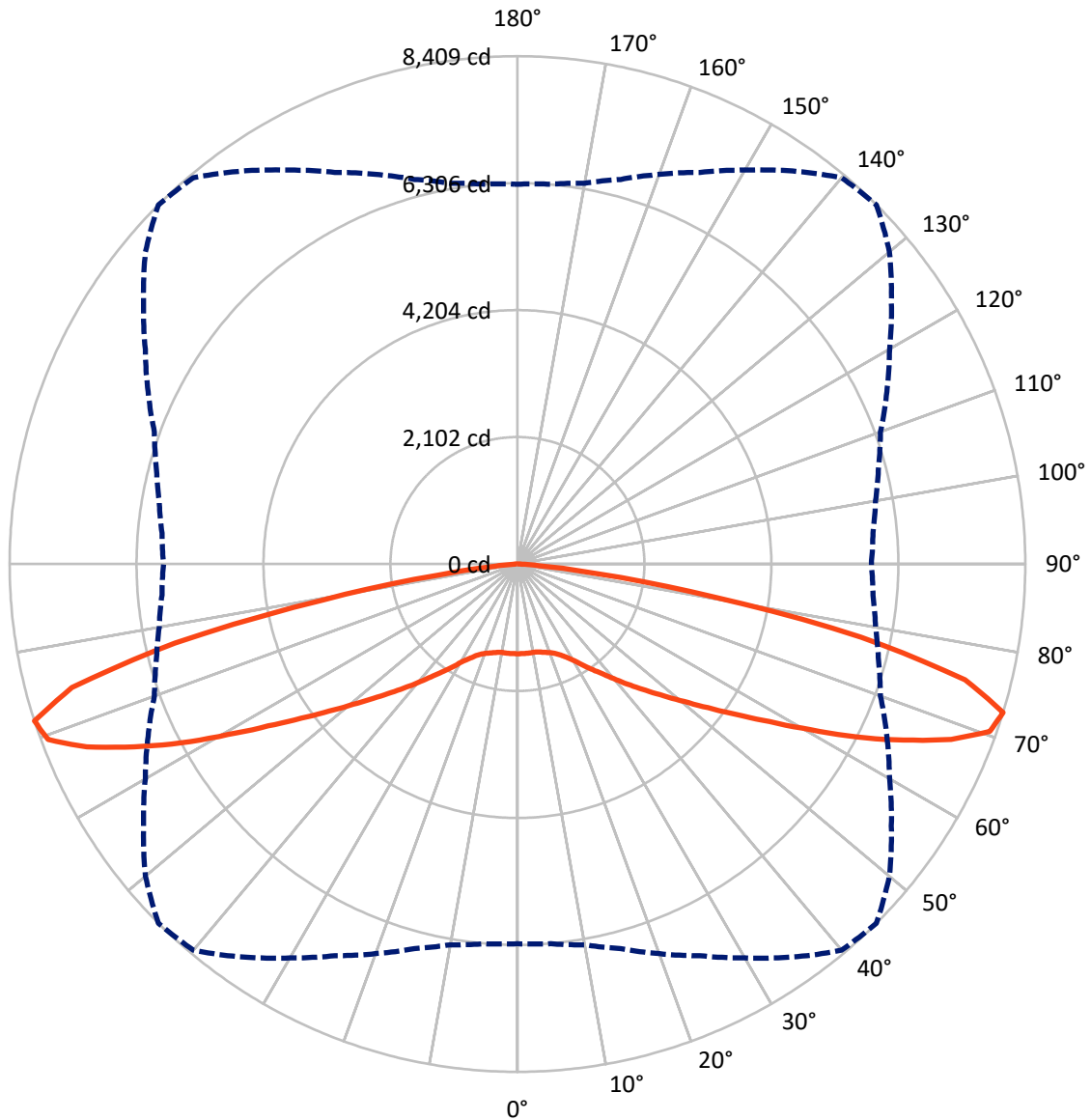
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 10499.0 | 0.0 | 10499.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 10499.0 | 0.0 | 10499.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 20998.0 | 0.0 | 20998.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 142.0 | 0.7 |
| 10°-20° | 431.2 | 2.1 |
| 20°-30° | 788.0 | 3.8 |
| 30°-40° | 1358.7 | 6.5 |
| 40°-50° | 2322.7 | 11.1 |
| 50°-60° | 3764.9 | 17.9 |
| 60°-70° | 6245.8 | 29.7 |
| 70°-80° | 5501.1 | 26.2 |
| 80°-90° | 443.5 | 2.1 |
| 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° | 20998.0 | 100.0 |
| 0°-180° | 20998.0 | 100.0 |



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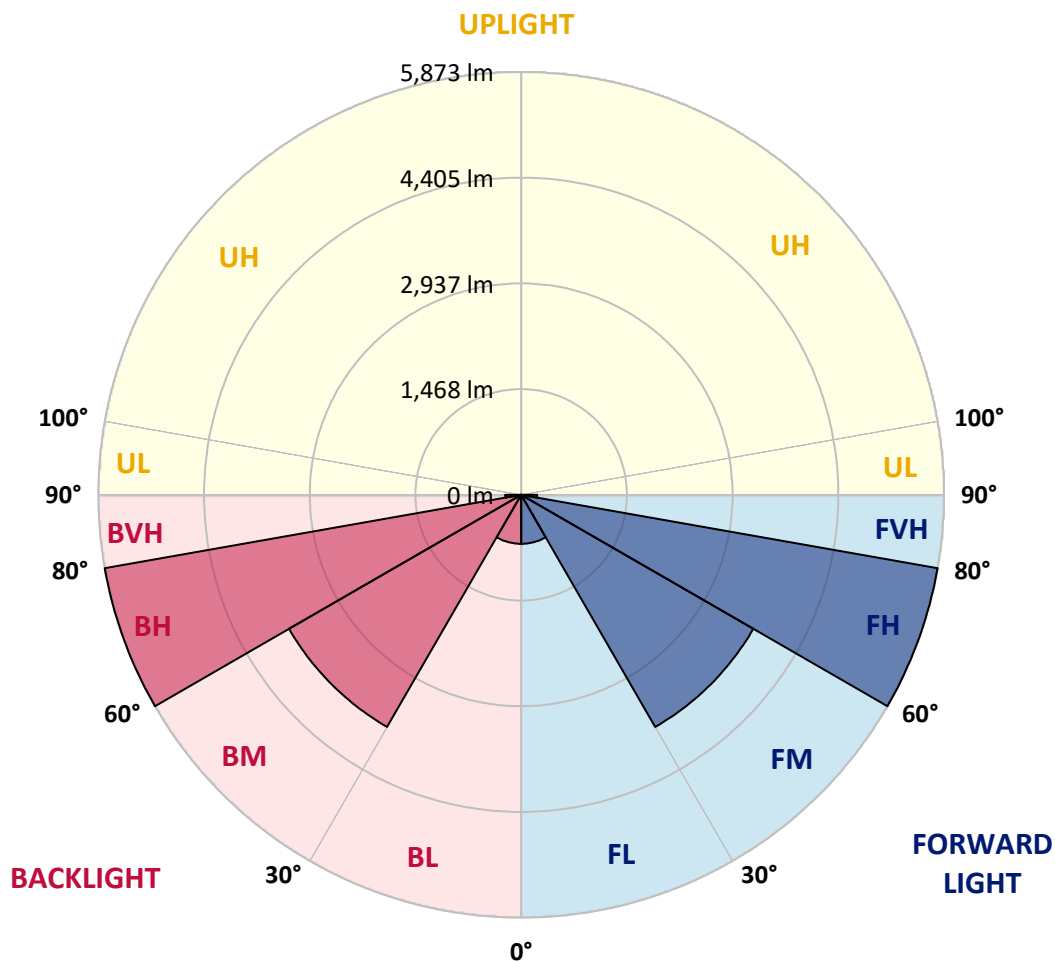
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 680.6 | 3.2 | | | |
| FM | (30°-60°) | 3723.2 | 17.7 | | | |
| FH | (60°-80°) | 5873.4 | 28.0 | | | G3/7500 |
| FVH | (80°-90°) | 221.8 | 1.1 | | | G2/225 |
| BL | (0°-30°) | 680.6 | 3.2 | B2/1000 | | |
| BM | (30°-60°) | 3723.2 | 17.7 | B3/5000 | | |
| BH | (60°-80°) | 5873.4 | 28.0 | B5 | | G3/7500 |
| BVH | (80°-90°) | 221.8 | 1.1 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1487.0 | 1487.0 | 1487.0 | 1487.0 | 1487.0 | 1487.0 | 1487.0 | 1487.0 | 1487.0 | 1487.0 | 1487.0 |
| 2.5° | 1487.0 | 1487.9 | 1488.9 | 1487.9 | 1487.9 | 1487.0 | 1486.0 | 1487.0 | 1486.0 | 1484.1 | 1485.1 |
| 5° | 1491.8 | 1493.7 | 1493.7 | 1491.8 | 1492.8 | 1491.8 | 1489.9 | 1490.8 | 1488.9 | 1486.0 | 1486.0 |
| 7.5° | 1497.6 | 1498.5 | 1498.5 | 1496.6 | 1497.6 | 1495.7 | 1493.7 | 1492.8 | 1490.8 | 1487.0 | 1484.1 |
| 10° | 1506.2 | 1507.2 | 1506.2 | 1504.3 | 1504.3 | 1501.4 | 1496.6 | 1494.7 | 1490.8 | 1485.1 | 1482.2 |
| 12.5° | 1515.9 | 1516.8 | 1515.9 | 1514.0 | 1513.0 | 1508.2 | 1504.3 | 1501.4 | 1498.5 | 1493.7 | 1488.9 |
| 15° | 1529.4 | 1531.3 | 1529.4 | 1525.5 | 1522.6 | 1518.8 | 1516.8 | 1517.8 | 1518.8 | 1514.9 | 1510.1 |
| 17.5° | 1554.4 | 1555.4 | 1552.5 | 1543.8 | 1540.0 | 1536.1 | 1536.1 | 1538.0 | 1540.9 | 1539.0 | 1534.2 |
| 20° | 1600.6 | 1597.7 | 1591.0 | 1580.4 | 1575.6 | 1568.8 | 1567.9 | 1568.8 | 1568.8 | 1567.9 | 1564.0 |
| 22.5° | 1658.4 | 1656.5 | 1647.8 | 1634.3 | 1627.6 | 1623.7 | 1618.0 | 1613.1 | 1612.2 | 1609.3 | 1605.4 |
| 25° | 1727.8 | 1726.8 | 1716.2 | 1704.6 | 1699.8 | 1695.0 | 1690.2 | 1683.5 | 1677.7 | 1670.9 | 1667.1 |
| 27.5° | 1816.4 | 1812.5 | 1797.1 | 1791.3 | 1784.6 | 1781.7 | 1774.9 | 1767.2 | 1762.4 | 1753.8 | 1748.9 |
| 30° | 1913.6 | 1913.6 | 1901.1 | 1899.2 | 1899.2 | 1892.4 | 1884.7 | 1871.3 | 1862.6 | 1853.9 | 1851.0 |
| 32.5° | 2010.9 | 2011.9 | 1999.3 | 2003.2 | 2006.1 | 2010.9 | 2012.8 | 2008.0 | 2002.2 | 2001.3 | 1995.5 |
| 35° | 2151.5 | 2147.7 | 2135.1 | 2138.0 | 2137.1 | 2136.1 | 2136.1 | 2146.7 | 2148.6 | 2150.5 | 2139.0 |
| 37.5° | 2325.8 | 2325.8 | 2313.3 | 2313.3 | 2307.5 | 2301.7 | 2294.0 | 2300.8 | 2311.4 | 2314.3 | 2306.6 |
| 40° | 2525.2 | 2531.9 | 2516.5 | 2515.5 | 2517.5 | 2499.2 | 2490.5 | 2501.1 | 2507.8 | 2519.4 | 2510.7 |
| 42.5° | 2760.2 | 2755.4 | 2739.9 | 2738.0 | 2727.4 | 2721.6 | 2713.9 | 2722.6 | 2733.2 | 2740.9 | 2743.8 |
| 45° | 2985.5 | 2981.7 | 2964.3 | 2964.3 | 2953.7 | 2948.9 | 2952.8 | 2967.2 | 2972.0 | 2982.6 | 2993.2 |
| 47.5° | 3208.0 | 3203.2 | 3191.6 | 3196.4 | 3197.4 | 3206.1 | 3218.6 | 3232.1 | 3245.6 | 3260.0 | 3264.8 |
| 50° | 3435.3 | 3436.2 | 3423.7 | 3435.3 | 3449.7 | 3473.8 | 3507.5 | 3529.7 | 3557.6 | 3575.9 | 3581.7 |
| 52.5° | 3642.3 | 3646.2 | 3659.7 | 3686.6 | 3715.5 | 3762.7 | 3820.5 | 3874.4 | 3920.7 | 3951.5 | 3949.6 |
| 55° | 3890.8 | 3896.6 | 3929.3 | 3975.6 | 4022.8 | 4094.0 | 4179.7 | 4275.1 | 4352.1 | 4396.4 | 4368.5 |
| 57.5° | 4208.6 | 4221.1 | 4257.7 | 4320.3 | 4390.6 | 4483.1 | 4600.6 | 4744.1 | 4863.5 | 4923.2 | 4878.0 |
| 60° | 4644.9 | 4652.6 | 4696.9 | 4766.2 | 4851.0 | 4965.6 | 5122.6 | 5315.2 | 5483.7 | 5562.7 | 5510.7 |
| 62.5° | 5219.9 | 5234.3 | 5269.9 | 5340.2 | 5426.9 | 5556.9 | 5748.6 | 5989.4 | 6199.3 | 6309.1 | 6191.6 |
| 65° | 5906.5 | 5952.8 | 5982.6 | 6053.9 | 6134.8 | 6272.5 | 6472.8 | 6730.9 | 6956.3 | 7028.5 | 6892.7 |
| 67.5° | 6586.5 | 6626.9 | 6678.9 | 6760.8 | 6842.6 | 6997.7 | 7183.6 | 7434.0 | 7681.5 | 7747.0 | 7536.0 |
| 70° | 6884.0 | 6907.2 | 6988.1 | 7099.8 | 7256.8 | 7439.7 | 7654.5 | 7935.7 | 8242.0 | 8295.9 | 8028.2 |
| 72.5° | 6287.9 | 6311.0 | 6401.5 | 6591.3 | 6864.8 | 7155.6 | 7530.3 | 7943.4 | 8347.9 | 8408.6 | 8039.7 |
| 75° | 4755.7 | 4718.1 | 4852.0 | 5103.3 | 5472.2 | 5877.6 | 6401.5 | 6993.8 | 7578.4 | 7654.5 | 7214.4 |
| 77.5° | 2457.8 | 2452.9 | 2554.1 | 2866.1 | 3306.2 | 3767.5 | 4344.4 | 5013.8 | 5585.8 | 5817.0 | 5458.7 |
| 80° | 692.4 | 700.2 | 748.3 | 903.4 | 1160.5 | 1493.7 | 1944.4 | 2571.4 | 3039.5 | 3278.3 | 3078.0 |
| 82.5° | 271.6 | 292.8 | 311.1 | 340.0 | 373.7 | 422.8 | 564.4 | 839.8 | 1126.8 | 1346.4 | 1102.7 |
| 85° | 97.3 | 104.0 | 147.4 | 174.3 | 177.2 | 186.8 | 212.8 | 248.5 | 299.5 | 357.3 | 293.7 |
| 87.5° | 36.6 | 40.4 | 47.2 | 78.0 | 77.0 | 70.3 | 85.7 | 89.6 | 67.4 | 61.6 | 76.1 |
| 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):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1487.0 | 1487.0 | 1487.0 | 1487.0 | 1487.0 | 1487.0 | 1487.0 | 1487.0 |
| 2.5° | 1483.1 | 1484.1 | 1484.1 | 1485.1 | 1486.0 | 1486.0 | 1487.9 | 1487.9 |
| 5° | 1484.1 | 1484.1 | 1482.2 | 1483.1 | 1482.2 | 1482.2 | 1483.1 | 1483.1 |
| 7.5° | 1482.2 | 1481.2 | 1479.3 | 1478.3 | 1476.4 | 1476.4 | 1476.4 | 1476.4 |
| 10° | 1479.3 | 1478.3 | 1476.4 | 1475.4 | 1474.5 | 1474.5 | 1474.5 | 1474.5 |
| 12.5° | 1487.0 | 1484.1 | 1482.2 | 1481.2 | 1481.2 | 1481.2 | 1481.2 | 1481.2 |
| 15° | 1507.2 | 1500.5 | 1495.7 | 1495.7 | 1496.6 | 1498.5 | 1498.5 | 1500.5 |
| 17.5° | 1532.2 | 1524.5 | 1519.7 | 1515.9 | 1517.8 | 1520.7 | 1522.6 | 1524.5 |
| 20° | 1562.1 | 1558.3 | 1551.5 | 1547.7 | 1547.7 | 1551.5 | 1553.4 | 1554.4 |
| 22.5° | 1603.5 | 1600.6 | 1597.7 | 1592.9 | 1592.9 | 1594.8 | 1598.7 | 1598.7 |
| 25° | 1665.2 | 1663.2 | 1661.3 | 1657.4 | 1656.5 | 1656.5 | 1658.4 | 1660.3 |
| 27.5° | 1742.2 | 1743.2 | 1741.2 | 1740.3 | 1737.4 | 1736.4 | 1739.3 | 1738.3 |
| 30° | 1845.2 | 1850.1 | 1854.9 | 1851.0 | 1846.2 | 1843.3 | 1840.4 | 1836.6 |
| 32.5° | 1984.9 | 1979.1 | 1975.3 | 1968.5 | 1959.9 | 1952.1 | 1946.4 | 1939.6 |
| 35° | 2116.8 | 2107.2 | 2103.4 | 2109.1 | 2108.2 | 2103.4 | 2096.6 | 2090.8 |
| 37.5° | 2278.6 | 2276.7 | 2278.6 | 2289.2 | 2287.3 | 2292.1 | 2278.6 | 2277.7 |
| 40° | 2482.8 | 2484.7 | 2498.2 | 2510.7 | 2517.5 | 2524.2 | 2516.5 | 2508.8 |
| 42.5° | 2719.7 | 2718.8 | 2723.6 | 2740.9 | 2752.5 | 2760.2 | 2743.8 | 2741.9 |
| 45° | 2970.1 | 2963.4 | 2967.2 | 2981.7 | 2993.2 | 3001.9 | 2983.6 | 2983.6 |
| 47.5° | 3245.6 | 3234.0 | 3221.5 | 3237.9 | 3244.6 | 3250.4 | 3235.9 | 3231.1 |
| 50° | 3552.8 | 3528.7 | 3501.7 | 3508.5 | 3508.5 | 3506.5 | 3488.3 | 3487.3 |
| 52.5° | 3905.3 | 3861.0 | 3811.8 | 3793.5 | 3783.0 | 3771.4 | 3739.6 | 3724.2 |
| 55° | 4310.7 | 4244.3 | 4167.2 | 4120.0 | 4095.0 | 4063.2 | 4010.2 | 3995.8 |
| 57.5° | 4784.5 | 4680.5 | 4547.6 | 4489.8 | 4434.0 | 4382.0 | 4323.2 | 4306.9 |
| 60° | 5346.0 | 5192.9 | 5016.6 | 4909.7 | 4849.1 | 4799.0 | 4738.3 | 4735.4 |
| 62.5° | 5972.0 | 5730.3 | 5530.9 | 5434.6 | 5390.3 | 5346.0 | 5288.2 | 5295.9 |
| 65° | 6608.6 | 6356.3 | 6169.4 | 6091.4 | 6050.0 | 6013.4 | 5955.6 | 5964.3 |
| 67.5° | 7236.5 | 7004.4 | 6799.3 | 6719.4 | 6673.1 | 6626.9 | 6574.9 | 6583.6 |
| 70° | 7687.2 | 7399.3 | 7168.2 | 6990.9 | 6880.2 | 6755.0 | 6674.1 | 6653.9 |
| 72.5° | 7558.2 | 7114.2 | 6747.3 | 6395.8 | 6189.7 | 6022.1 | 5908.5 | 5859.3 |
| 75° | 6541.2 | 5934.5 | 5462.5 | 5031.1 | 4788.4 | 4591.0 | 4447.5 | 4357.9 |
| 77.5° | 4857.7 | 4175.9 | 3618.3 | 3121.3 | 2728.4 | 2464.5 | 2278.6 | 2158.2 |
| 80° | 2659.0 | 2022.5 | 1478.3 | 1039.2 | 763.7 | 634.7 | 560.5 | 524.9 |
| 82.5° | 828.2 | 534.5 | 393.9 | 340.0 | 315.9 | 302.4 | 280.3 | 244.6 |
| 85° | 263.9 | 231.1 | 214.8 | 205.1 | 195.5 | 170.5 | 117.5 | 106.9 |
| 87.5° | 102.1 | 105.0 | 104.0 | 98.2 | 100.2 | 72.2 | 57.8 | 51.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)