

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: P268406

Luminaire Tested: **GAN-AF-04-LED-U-5NQ-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P268406
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-04-LED-U-5NQ-7027-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14178.5 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 - Full Cutoff
BUG Rating: B3 - U0 - G2

Input Watts (W): 129
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

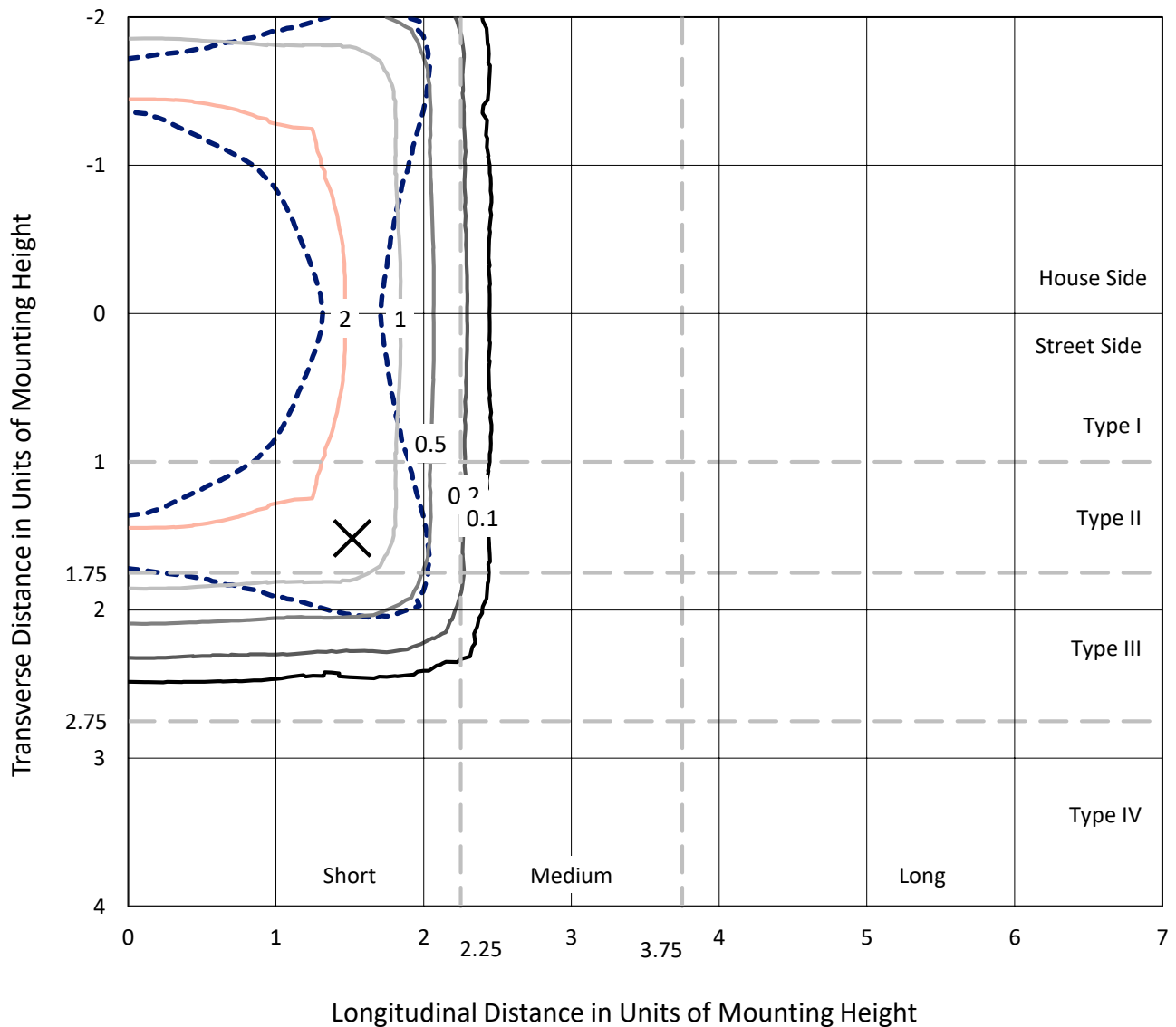


REPORT NUMBER: P268406

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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

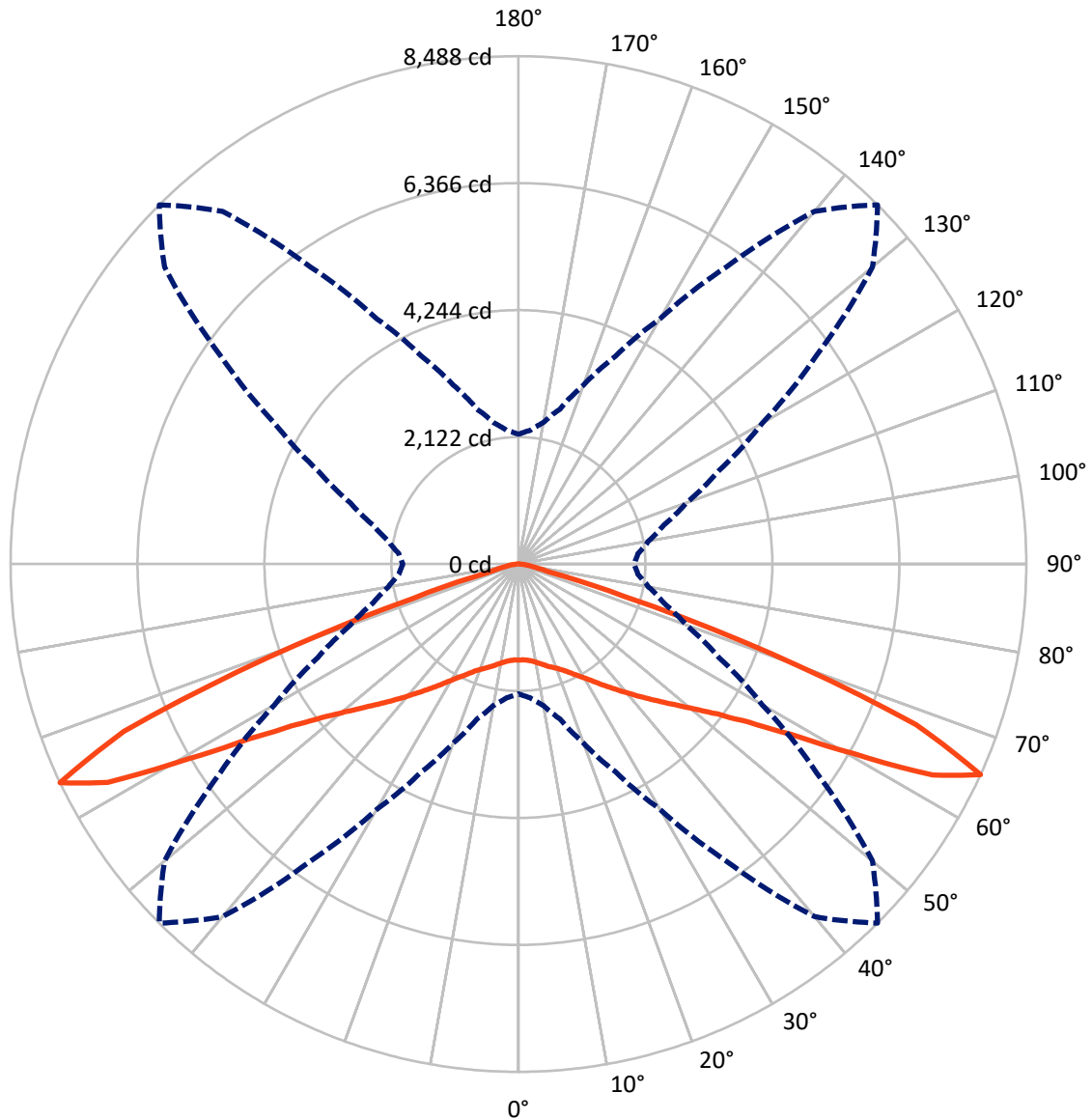


Based on 20 foot mounting height. Maximum calculated value = 4 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P268406

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 7089.2 | 0.0 | 7089.2 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 7089.2 | 0.0 | 7089.2 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 14178.5 | 0.0 | 14178.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 156.4 | 1.1 |
| 10°-20° | 501.5 | 3.5 |
| 20°-30° | 937.7 | 6.6 |
| 30°-40° | 1585.9 | 11.2 |
| 40°-50° | 2593.2 | 18.3 |
| 50°-60° | 4123.5 | 29.1 |
| 60°-70° | 3727.4 | 26.3 |
| 70°-80° | 471.7 | 3.3 |
| 80°-90° | 81.2 | 0.6 |
| 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° | 14178.5 | 100.0 |
| 0°-180° | 14178.5 | 100.0 |



REPORT NUMBER: P268406

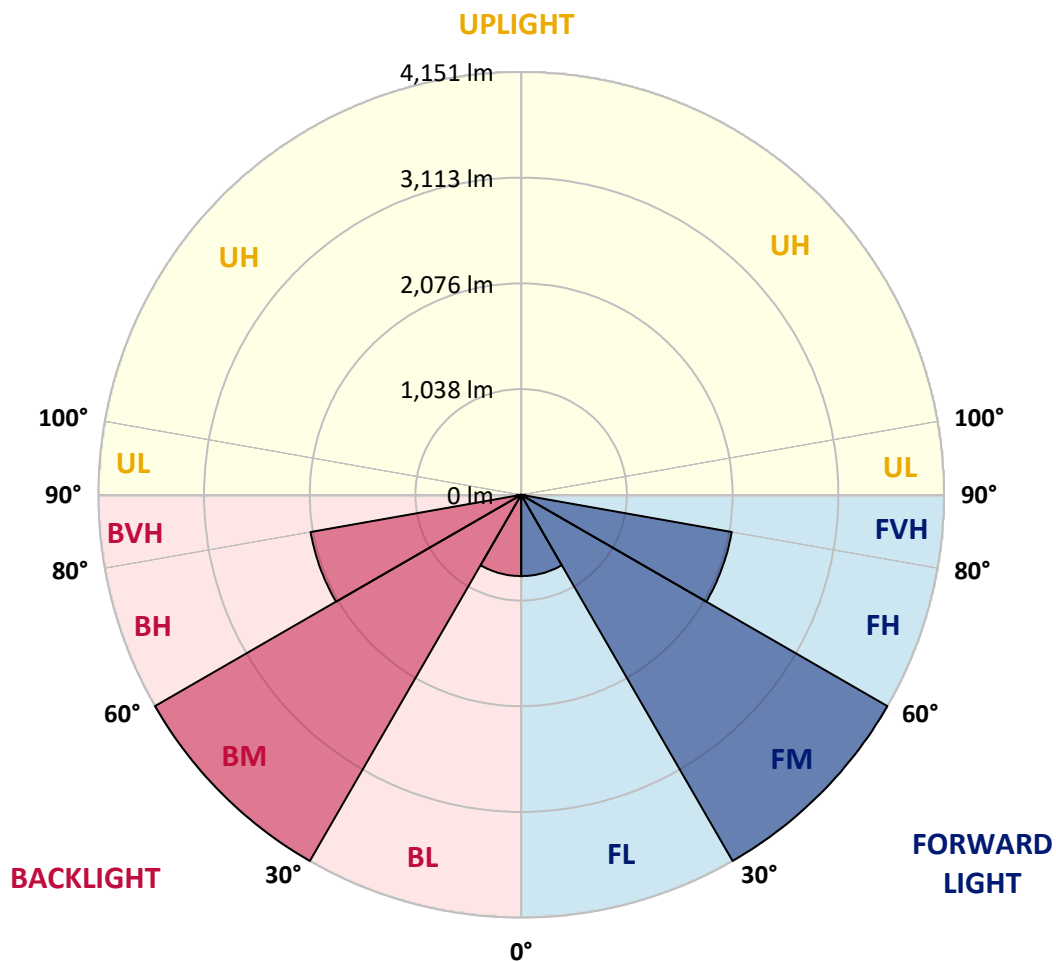
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 797.8 | 5.6 | | | |
| FM | (30°-60°) | 4151.3 | 29.3 | | | |
| FH | (60°-80°) | 2099.6 | 14.8 | | | G2/5000 |
| FVH | (80°-90°) | 40.6 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 797.8 | 5.6 | B2/1000 | | |
| BM | (30°-60°) | 4151.3 | 29.3 | B3/5000 | | |
| BH | (60°-80°) | 2099.6 | 14.8 | B3/2500 | | G2/5000 |
| BVH | (80°-90°) | 40.6 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G2

Type V Short





REPORT NUMBER: P268406

CATALOG NUMBER: GAN-AF-04-LED-U-5NQ-7027-600

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1604.4 | 1604.4 | 1604.4 | 1604.4 | 1604.4 | 1604.4 | 1604.4 | 1604.4 | 1604.4 | 1604.4 | 1604.4 |
| 2.5° | 1605.6 | 1607.0 | 1608.2 | 1607.0 | 1608.2 | 1606.3 | 1604.9 | 1607.0 | 1604.9 | 1602.9 | 1604.4 |
| 5° | 1619.6 | 1620.3 | 1620.3 | 1618.2 | 1620.3 | 1618.9 | 1616.9 | 1619.6 | 1617.6 | 1615.6 | 1616.9 |
| 7.5° | 1642.8 | 1645.4 | 1643.4 | 1641.6 | 1642.8 | 1641.6 | 1640.1 | 1640.8 | 1640.1 | 1638.1 | 1638.9 |
| 10° | 1674.0 | 1676.0 | 1674.7 | 1674.0 | 1675.3 | 1674.7 | 1673.4 | 1672.7 | 1673.4 | 1671.3 | 1671.3 |
| 12.5° | 1711.9 | 1711.2 | 1710.6 | 1711.2 | 1713.2 | 1713.2 | 1712.6 | 1713.2 | 1714.5 | 1715.3 | 1713.8 |
| 15° | 1749.1 | 1750.3 | 1750.3 | 1750.3 | 1754.4 | 1757.8 | 1759.7 | 1760.9 | 1763.6 | 1764.4 | 1761.7 |
| 17.5° | 1795.5 | 1795.5 | 1794.9 | 1795.5 | 1799.6 | 1804.9 | 1806.9 | 1809.5 | 1812.2 | 1814.1 | 1810.9 |
| 20° | 1847.4 | 1848.6 | 1848.6 | 1850.0 | 1855.3 | 1861.3 | 1861.3 | 1862.6 | 1861.3 | 1862.6 | 1860.6 |
| 22.5° | 1910.4 | 1914.4 | 1914.4 | 1915.0 | 1920.3 | 1927.8 | 1925.6 | 1927.8 | 1924.3 | 1927.0 | 1924.3 |
| 25° | 1992.8 | 1998.8 | 1997.4 | 1997.4 | 2001.5 | 2006.1 | 2006.8 | 2010.6 | 2010.0 | 2013.3 | 2011.3 |
| 27.5° | 2085.8 | 2095.0 | 2097.7 | 2097.1 | 2099.7 | 2104.3 | 2105.6 | 2110.3 | 2107.7 | 2110.3 | 2109.0 |
| 30° | 2197.3 | 2201.2 | 2206.5 | 2208.6 | 2211.8 | 2216.6 | 2216.6 | 2217.1 | 2214.0 | 2217.8 | 2219.8 |
| 32.5° | 2312.9 | 2320.1 | 2325.4 | 2337.4 | 2343.4 | 2346.7 | 2346.1 | 2347.4 | 2344.0 | 2349.3 | 2353.3 |
| 35° | 2465.6 | 2470.9 | 2479.5 | 2488.8 | 2496.7 | 2496.1 | 2494.1 | 2494.8 | 2494.8 | 2499.4 | 2503.3 |
| 37.5° | 2649.6 | 2650.8 | 2662.0 | 2675.4 | 2679.4 | 2675.4 | 2663.5 | 2660.8 | 2654.9 | 2660.8 | 2667.3 |
| 40° | 2844.0 | 2848.6 | 2871.3 | 2879.8 | 2881.9 | 2874.5 | 2857.2 | 2847.4 | 2834.2 | 2841.3 | 2850.7 |
| 42.5° | 3047.9 | 3057.2 | 3077.9 | 3093.0 | 3099.7 | 3095.1 | 3071.1 | 3055.9 | 3038.5 | 3042.6 | 3051.9 |
| 45° | 3273.7 | 3284.9 | 3314.1 | 3328.8 | 3341.4 | 3334.1 | 3310.9 | 3287.6 | 3260.4 | 3262.4 | 3276.9 |
| 47.5° | 3525.9 | 3537.3 | 3575.2 | 3599.7 | 3606.3 | 3605.1 | 3579.1 | 3547.2 | 3510.0 | 3508.8 | 3521.4 |
| 50° | 3809.0 | 3820.2 | 3867.4 | 3905.2 | 3924.4 | 3922.4 | 3891.8 | 3846.7 | 3801.5 | 3802.3 | 3818.2 |
| 52.5° | 4085.1 | 4099.1 | 4148.3 | 4213.3 | 4251.0 | 4278.4 | 4259.8 | 4217.3 | 4162.1 | 4163.5 | 4178.0 |
| 55° | 4344.2 | 4367.3 | 4423.9 | 4512.0 | 4582.6 | 4658.9 | 4680.8 | 4679.5 | 4646.3 | 4655.6 | 4670.2 |
| 57.5° | 4469.5 | 4504.1 | 4591.1 | 4730.6 | 4874.1 | 5029.4 | 5160.9 | 5259.1 | 5301.0 | 5364.0 | 5349.4 |
| 60° | 4231.8 | 4287.0 | 4415.2 | 4620.3 | 4903.8 | 5228.0 | 5575.2 | 5914.5 | 6204.1 | 6422.5 | 6296.9 |
| 62.5° | 3464.9 | 3536.6 | 3692.0 | 3955.0 | 4384.0 | 4902.6 | 5567.2 | 6369.4 | 7243.3 | 7770.5 | 7393.9 |
| 65° | 2168.1 | 2242.3 | 2400.5 | 2682.0 | 3184.0 | 3828.8 | 4730.6 | 6060.0 | 7692.8 | 8487.6 | 7721.4 |
| 67.5° | 845.3 | 885.8 | 971.4 | 1151.4 | 1528.6 | 2102.4 | 3007.3 | 4516.0 | 6469.1 | 7165.6 | 6348.9 |
| 70° | 423.6 | 427.7 | 443.6 | 476.8 | 557.8 | 724.5 | 1102.3 | 2093.7 | 3709.9 | 4480.8 | 3576.5 |
| 72.5° | 306.1 | 306.9 | 314.8 | 329.4 | 355.3 | 392.4 | 464.2 | 640.9 | 1206.6 | 1844.0 | 1130.8 |
| 75° | 234.4 | 237.1 | 241.7 | 249.6 | 263.7 | 282.2 | 308.1 | 369.3 | 457.5 | 530.5 | 446.2 |
| 77.5° | 180.6 | 185.9 | 189.3 | 196.5 | 205.3 | 217.7 | 225.1 | 248.3 | 288.9 | 304.2 | 299.4 |
| 80° | 137.4 | 142.1 | 149.4 | 155.3 | 161.3 | 167.4 | 164.7 | 175.3 | 196.5 | 209.1 | 202.6 |
| 82.5° | 87.7 | 93.0 | 114.3 | 119.6 | 122.2 | 126.1 | 121.5 | 122.2 | 131.5 | 139.4 | 131.5 |
| 85° | 56.5 | 59.7 | 72.4 | 79.1 | 79.7 | 82.4 | 80.4 | 75.6 | 75.6 | 69.1 | 77.8 |
| 87.5° | 26.0 | 26.6 | 32.6 | 38.4 | 39.9 | 35.8 | 35.3 | 33.9 | 27.2 | 26.0 | 27.8 |
| 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):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1604.4 | 1604.4 | 1604.4 | 1604.4 | 1604.4 | 1604.4 | 1604.4 | 1604.4 |
| 2.5° | 1603.7 | 1604.9 | 1605.6 | 1607.6 | 1608.2 | 1608.2 | 1609.0 | 1610.3 |
| 5° | 1616.3 | 1618.2 | 1618.9 | 1621.6 | 1622.2 | 1621.6 | 1622.9 | 1623.5 |
| 7.5° | 1638.9 | 1642.1 | 1643.4 | 1646.1 | 1644.2 | 1646.9 | 1647.4 | 1647.4 |
| 10° | 1672.0 | 1675.3 | 1676.0 | 1678.7 | 1677.3 | 1678.7 | 1678.7 | 1677.3 |
| 12.5° | 1715.9 | 1716.5 | 1714.5 | 1716.5 | 1713.8 | 1715.3 | 1713.2 | 1711.9 |
| 15° | 1764.4 | 1762.4 | 1757.8 | 1757.8 | 1753.8 | 1754.4 | 1753.8 | 1753.0 |
| 17.5° | 1811.5 | 1807.5 | 1804.2 | 1802.9 | 1799.6 | 1798.9 | 1796.9 | 1796.9 |
| 20° | 1863.3 | 1861.3 | 1859.3 | 1856.6 | 1853.4 | 1850.0 | 1849.3 | 1850.7 |
| 22.5° | 1925.6 | 1925.1 | 1925.1 | 1923.7 | 1919.0 | 1915.7 | 1913.7 | 1913.7 |
| 25° | 2009.4 | 2003.4 | 2003.4 | 2002.7 | 2000.7 | 1998.8 | 1994.7 | 1996.8 |
| 27.5° | 2103.7 | 2100.3 | 2103.0 | 2102.4 | 2100.3 | 2100.3 | 2097.7 | 2097.7 |
| 30° | 2219.8 | 2218.5 | 2222.5 | 2219.3 | 2212.5 | 2211.8 | 2209.2 | 2205.9 |
| 32.5° | 2354.0 | 2352.8 | 2358.6 | 2354.6 | 2344.0 | 2338.1 | 2332.8 | 2330.2 |
| 35° | 2503.3 | 2504.0 | 2511.4 | 2508.6 | 2496.7 | 2492.7 | 2483.5 | 2482.1 |
| 37.5° | 2666.8 | 2677.4 | 2690.1 | 2692.7 | 2682.7 | 2680.1 | 2670.1 | 2664.7 |
| 40° | 2858.6 | 2872.6 | 2891.9 | 2896.6 | 2885.8 | 2883.9 | 2869.9 | 2862.7 |
| 42.5° | 3063.2 | 3087.0 | 3111.0 | 3115.1 | 3104.4 | 3093.8 | 3080.5 | 3075.2 |
| 45° | 3291.6 | 3320.1 | 3351.3 | 3359.3 | 3343.4 | 3330.7 | 3313.5 | 3313.5 |
| 47.5° | 3547.9 | 3583.8 | 3619.0 | 3640.9 | 3626.3 | 3613.1 | 3592.4 | 3579.1 |
| 50° | 3850.8 | 3899.8 | 3945.6 | 3968.3 | 3945.0 | 3919.8 | 3883.9 | 3872.0 |
| 52.5° | 4230.6 | 4283.7 | 4323.5 | 4311.5 | 4275.8 | 4240.4 | 4201.4 | 4185.5 |
| 55° | 4715.4 | 4733.2 | 4733.2 | 4688.1 | 4616.4 | 4557.2 | 4495.5 | 4474.8 |
| 57.5° | 5321.6 | 5252.5 | 5146.3 | 5011.5 | 4842.1 | 4694.7 | 4595.1 | 4547.9 |
| 60° | 6034.1 | 5702.0 | 5326.9 | 4958.4 | 4655.6 | 4405.8 | 4257.7 | 4190.1 |
| 62.5° | 6508.8 | 5640.3 | 4888.5 | 4297.0 | 3861.4 | 3560.5 | 3356.0 | 3276.4 |
| 65° | 6083.2 | 4704.1 | 3697.3 | 2989.5 | 2514.6 | 2208.6 | 2006.1 | 1931.6 |
| 67.5° | 4455.7 | 2947.7 | 1968.8 | 1411.1 | 1033.9 | 824.7 | 741.7 | 707.1 |
| 70° | 2000.0 | 1037.9 | 636.1 | 496.8 | 428.3 | 393.1 | 377.8 | 372.5 |
| 72.5° | 602.9 | 436.2 | 367.9 | 332.1 | 304.7 | 287.5 | 274.9 | 273.5 |
| 75° | 364.0 | 302.8 | 269.0 | 247.8 | 230.4 | 216.5 | 209.8 | 207.9 |
| 77.5° | 254.3 | 222.4 | 206.5 | 191.2 | 178.0 | 167.4 | 161.3 | 156.8 |
| 80° | 178.7 | 163.3 | 156.0 | 147.4 | 138.8 | 128.8 | 120.3 | 116.2 |
| 82.5° | 119.6 | 116.2 | 116.2 | 110.9 | 103.6 | 94.3 | 77.1 | 73.0 |
| 85° | 77.1 | 76.4 | 77.8 | 75.6 | 70.3 | 60.5 | 49.8 | 47.2 |
| 87.5° | 35.8 | 36.6 | 40.6 | 39.9 | 38.4 | 31.9 | 25.2 | 24.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)