

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: P190883

Luminaire Tested: **GAN-AF-05-LED-U-5WQ-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190883
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-05-LED-U-5WQ-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25899.1 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G3

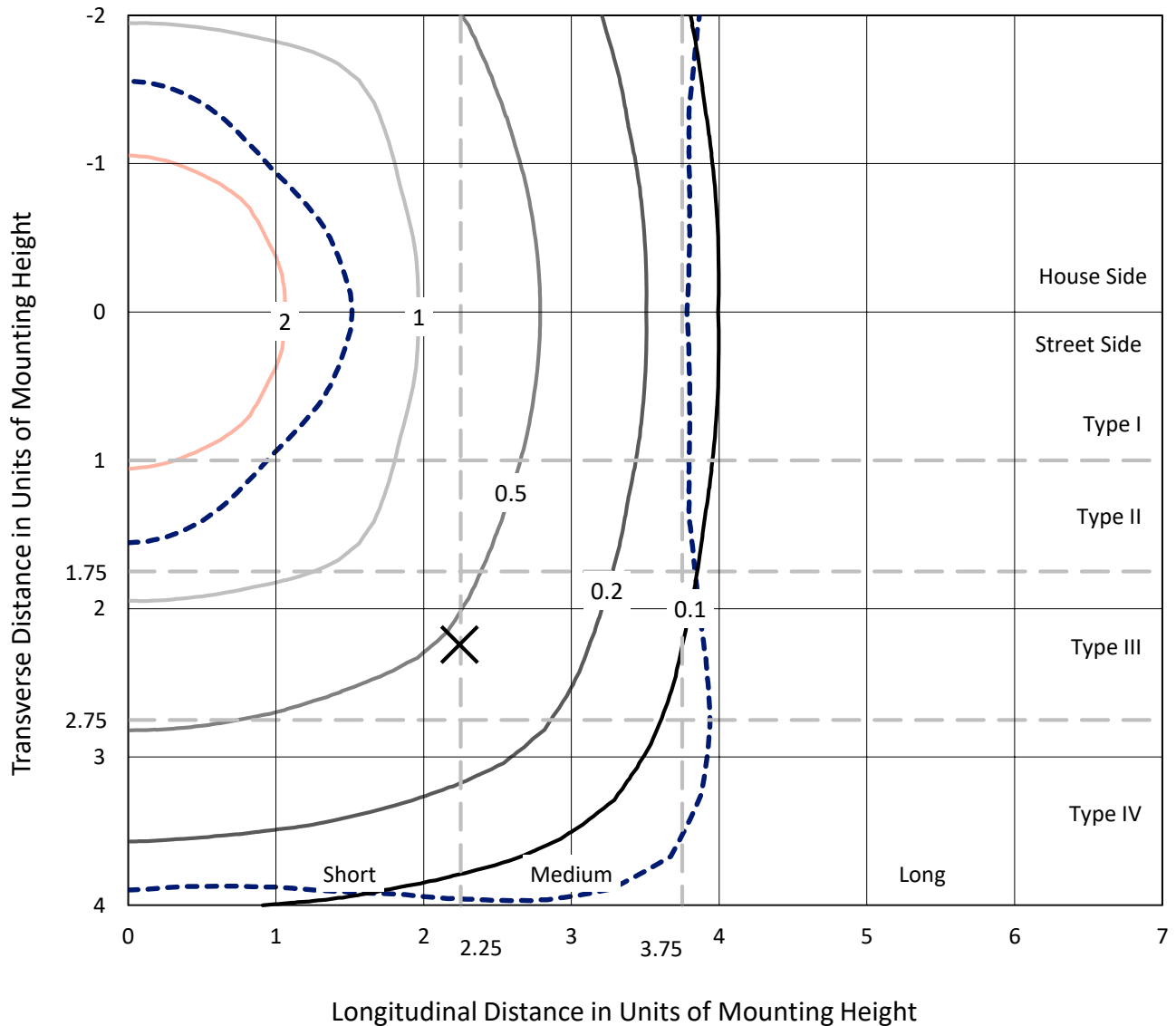
Input Watts (W): 210
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

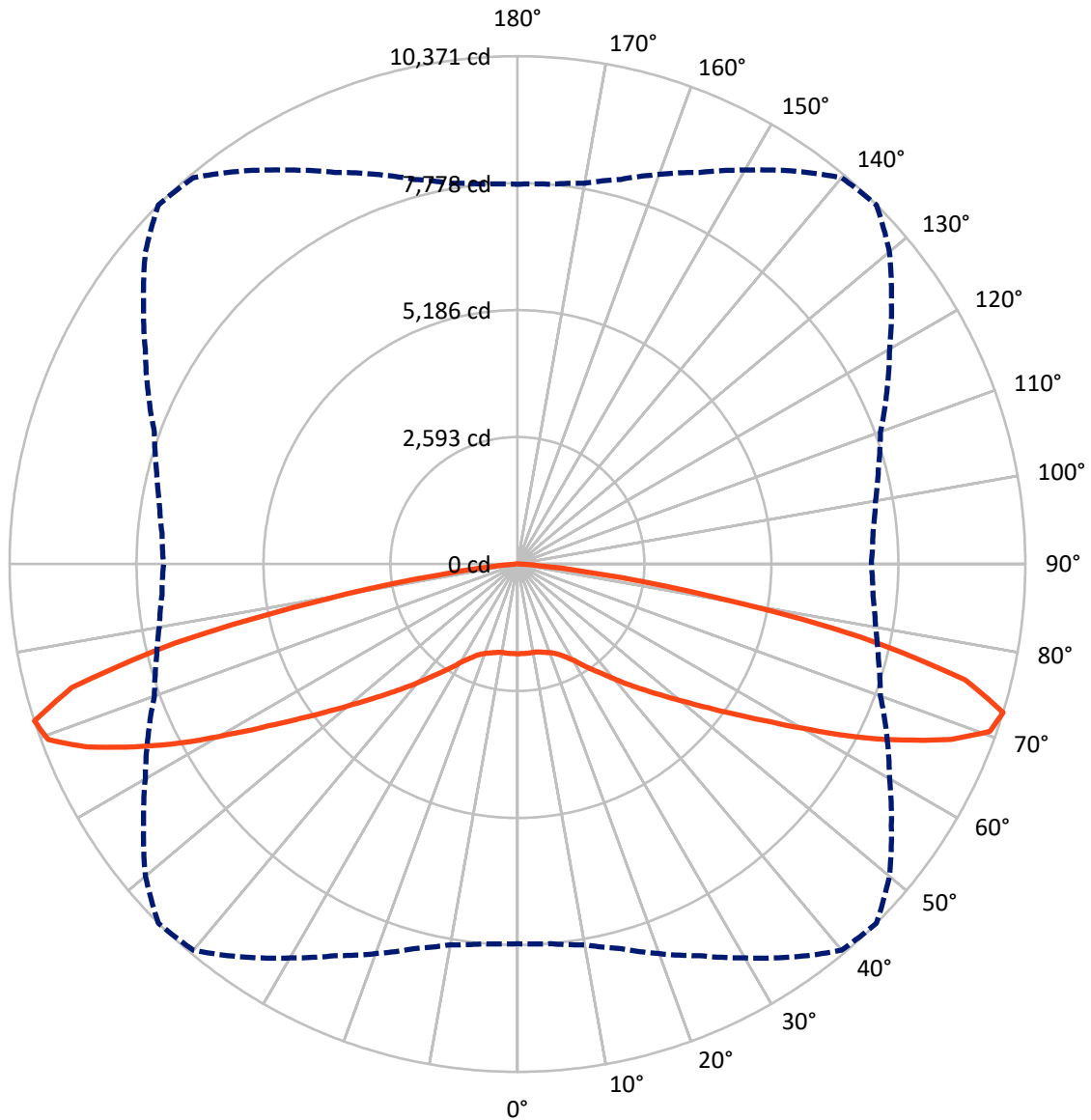
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 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 | 12949.5 | 0.0 | 12949.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 12949.5 | 0.0 | 12949.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 25899.1 | 0.0 | 25899.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 175.1 | 0.7 |
| 10°-20° | 531.9 | 2.1 |
| 20°-30° | 972.0 | 3.8 |
| 30°-40° | 1675.9 | 6.5 |
| 40°-50° | 2864.9 | 11.1 |
| 50°-60° | 4643.6 | 17.9 |
| 60°-70° | 7703.6 | 29.7 |
| 70°-80° | 6785.0 | 26.2 |
| 80°-90° | 547.1 | 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° | 25899.1 | 100.0 |
| 0°-180° | 25899.1 | 100.0 |



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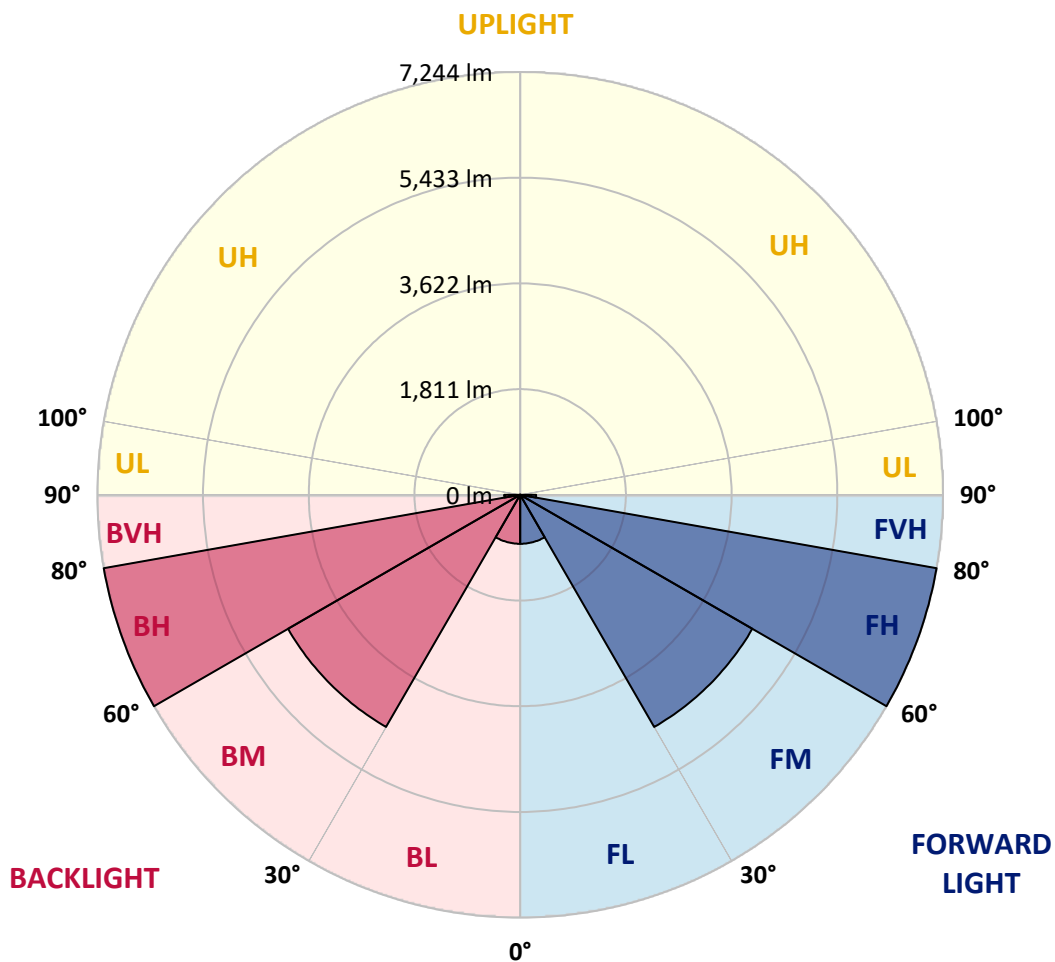
CATALOG NUMBER: GAN-AF-05-LED-U-5WQ-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 839.5 | 3.2 | | | |
| FM | (30°-60°) | 4592.2 | 17.7 | | | |
| FH | (60°-80°) | 7244.3 | 28.0 | | | G3/7500 |
| FVH | (80°-90°) | 273.5 | 1.1 | | | G3/500 |
| BL | (0°-30°) | 839.5 | 3.2 | B2/1000 | | |
| BM | (30°-60°) | 4592.2 | 17.7 | B3/5000 | | |
| BH | (60°-80°) | 7244.3 | 28.0 | B5 | | G3/7500 |
| BVH | (80°-90°) | 273.5 | 1.1 | | | G3/500 |
| 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° | 1834.0 | 1834.0 | 1834.0 | 1834.0 | 1834.0 | 1834.0 | 1834.0 | 1834.0 | 1834.0 | 1834.0 | 1834.0 |
| 2.5° | 1834.0 | 1835.3 | 1836.4 | 1835.3 | 1835.3 | 1834.0 | 1832.8 | 1834.0 | 1832.8 | 1830.5 | 1831.7 |
| 5° | 1840.0 | 1842.3 | 1842.3 | 1840.0 | 1841.2 | 1840.0 | 1837.6 | 1838.9 | 1836.4 | 1832.8 | 1832.8 |
| 7.5° | 1847.1 | 1848.3 | 1848.3 | 1845.9 | 1847.1 | 1844.8 | 1842.3 | 1841.2 | 1838.9 | 1834.0 | 1830.5 |
| 10° | 1857.8 | 1859.0 | 1857.8 | 1855.4 | 1855.4 | 1851.8 | 1845.9 | 1843.6 | 1838.9 | 1831.7 | 1828.1 |
| 12.5° | 1869.6 | 1870.9 | 1869.6 | 1867.3 | 1866.2 | 1860.2 | 1855.4 | 1851.8 | 1848.3 | 1842.3 | 1836.4 |
| 15° | 1886.3 | 1888.7 | 1886.3 | 1881.6 | 1878.0 | 1873.2 | 1870.9 | 1872.1 | 1873.2 | 1868.5 | 1862.6 |
| 17.5° | 1917.2 | 1918.4 | 1914.9 | 1904.1 | 1899.4 | 1894.6 | 1894.6 | 1897.1 | 1900.5 | 1898.2 | 1892.3 |
| 20° | 1974.2 | 1970.6 | 1962.3 | 1949.2 | 1943.3 | 1935.0 | 1933.8 | 1935.0 | 1935.0 | 1933.8 | 1929.1 |
| 22.5° | 2045.5 | 2043.1 | 2032.4 | 2015.8 | 2007.4 | 2002.7 | 1995.6 | 1989.6 | 1988.5 | 1984.9 | 1980.1 |
| 25° | 2131.0 | 2129.8 | 2116.8 | 2102.5 | 2096.5 | 2090.6 | 2084.7 | 2076.4 | 2069.2 | 2060.9 | 2056.2 |
| 27.5° | 2240.3 | 2235.6 | 2216.5 | 2209.4 | 2201.1 | 2197.5 | 2189.2 | 2179.7 | 2173.8 | 2163.1 | 2157.2 |
| 30° | 2360.3 | 2360.3 | 2344.8 | 2342.5 | 2342.5 | 2334.2 | 2324.7 | 2308.0 | 2297.3 | 2286.6 | 2283.0 |
| 32.5° | 2480.2 | 2481.5 | 2466.0 | 2470.7 | 2474.3 | 2480.2 | 2482.6 | 2476.7 | 2469.6 | 2468.4 | 2461.2 |
| 35° | 2653.6 | 2648.9 | 2633.5 | 2637.1 | 2635.8 | 2634.7 | 2634.7 | 2647.7 | 2650.2 | 2652.5 | 2638.2 |
| 37.5° | 2868.7 | 2868.7 | 2853.2 | 2853.2 | 2846.2 | 2839.0 | 2829.5 | 2837.8 | 2850.9 | 2854.4 | 2844.9 |
| 40° | 3114.6 | 3122.9 | 3103.8 | 3102.7 | 3105.1 | 3082.5 | 3071.8 | 3084.9 | 3093.2 | 3107.4 | 3096.8 |
| 42.5° | 3404.4 | 3398.4 | 3379.4 | 3377.1 | 3364.0 | 3356.9 | 3347.4 | 3358.0 | 3371.1 | 3380.6 | 3384.2 |
| 45° | 3682.3 | 3677.6 | 3656.2 | 3656.2 | 3643.1 | 3637.2 | 3642.0 | 3659.8 | 3665.7 | 3678.8 | 3691.8 |
| 47.5° | 3956.8 | 3950.8 | 3936.5 | 3942.6 | 3943.7 | 3954.4 | 3969.9 | 3986.4 | 4003.1 | 4020.9 | 4026.8 |
| 50° | 4237.1 | 4238.3 | 4222.8 | 4237.1 | 4255.0 | 4284.6 | 4326.2 | 4353.5 | 4387.9 | 4410.6 | 4417.6 |
| 52.5° | 4492.5 | 4497.2 | 4513.9 | 4547.1 | 4582.7 | 4640.9 | 4712.2 | 4778.7 | 4835.8 | 4873.7 | 4871.4 |
| 55° | 4799.0 | 4806.1 | 4846.4 | 4903.5 | 4961.7 | 5049.6 | 5155.3 | 5272.9 | 5367.9 | 5422.6 | 5388.1 |
| 57.5° | 5191.0 | 5206.4 | 5251.5 | 5328.8 | 5415.5 | 5529.5 | 5674.4 | 5851.4 | 5998.7 | 6072.3 | 6016.5 |
| 60° | 5729.0 | 5738.5 | 5793.2 | 5878.7 | 5983.2 | 6124.6 | 6318.3 | 6555.8 | 6763.6 | 6861.0 | 6796.9 |
| 62.5° | 6438.2 | 6456.0 | 6499.9 | 6586.7 | 6693.6 | 6854.0 | 7090.4 | 7387.3 | 7646.3 | 7781.7 | 7636.7 |
| 65° | 7285.1 | 7342.1 | 7379.0 | 7466.9 | 7566.7 | 7736.6 | 7983.6 | 8302.0 | 8579.9 | 8669.0 | 8501.5 |
| 67.5° | 8123.8 | 8173.7 | 8237.8 | 8338.8 | 8439.8 | 8630.9 | 8860.3 | 9169.1 | 9474.4 | 9555.2 | 9295.0 |
| 70° | 8490.8 | 8519.3 | 8619.1 | 8756.9 | 8950.5 | 9176.2 | 9441.1 | 9788.0 | 10165.7 | 10232.3 | 9902.0 |
| 72.5° | 7755.5 | 7784.0 | 7895.7 | 8129.7 | 8467.1 | 8825.8 | 9287.9 | 9797.5 | 10296.4 | 10371.2 | 9916.3 |
| 75° | 5865.7 | 5819.4 | 5984.5 | 6294.4 | 6749.4 | 7249.6 | 7895.7 | 8626.2 | 9347.3 | 9441.1 | 8898.2 |
| 77.5° | 3031.4 | 3025.5 | 3150.2 | 3535.1 | 4077.9 | 4647.0 | 5358.4 | 6184.0 | 6889.6 | 7174.7 | 6732.8 |
| 80° | 854.1 | 863.6 | 923.0 | 1114.2 | 1431.4 | 1842.3 | 2398.3 | 3171.6 | 3748.9 | 4043.5 | 3796.4 |
| 82.5° | 335.0 | 361.1 | 383.7 | 419.3 | 460.8 | 521.5 | 696.1 | 1035.8 | 1389.8 | 1660.7 | 1360.1 |
| 85° | 120.0 | 128.3 | 181.8 | 215.0 | 218.6 | 230.5 | 262.5 | 306.5 | 369.4 | 440.7 | 362.3 |
| 87.5° | 45.1 | 49.9 | 58.2 | 96.3 | 95.0 | 86.7 | 105.7 | 110.5 | 83.2 | 76.0 | 93.8 |
| 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° | 1834.0 | 1834.0 | 1834.0 | 1834.0 | 1834.0 | 1834.0 | 1834.0 | 1834.0 |
| 2.5° | 1829.3 | 1830.5 | 1830.5 | 1831.7 | 1832.8 | 1832.8 | 1835.3 | 1835.3 |
| 5° | 1830.5 | 1830.5 | 1828.1 | 1829.3 | 1828.1 | 1828.1 | 1829.3 | 1829.3 |
| 7.5° | 1828.1 | 1826.9 | 1824.5 | 1823.4 | 1821.0 | 1821.0 | 1821.0 | 1821.0 |
| 10° | 1824.5 | 1823.4 | 1821.0 | 1819.8 | 1818.6 | 1818.6 | 1818.6 | 1818.6 |
| 12.5° | 1834.0 | 1830.5 | 1828.1 | 1826.9 | 1826.9 | 1826.9 | 1826.9 | 1826.9 |
| 15° | 1859.0 | 1850.7 | 1844.8 | 1844.8 | 1845.9 | 1848.3 | 1848.3 | 1850.7 |
| 17.5° | 1889.9 | 1880.4 | 1874.5 | 1869.6 | 1872.1 | 1875.7 | 1878.0 | 1880.4 |
| 20° | 1926.7 | 1921.9 | 1913.6 | 1908.9 | 1908.9 | 1913.6 | 1916.0 | 1917.2 |
| 22.5° | 1977.8 | 1974.2 | 1970.6 | 1964.7 | 1964.7 | 1967.1 | 1971.8 | 1971.8 |
| 25° | 2053.8 | 2051.4 | 2049.1 | 2044.3 | 2043.1 | 2043.1 | 2045.5 | 2047.8 |
| 27.5° | 2148.8 | 2150.0 | 2147.7 | 2146.5 | 2142.9 | 2141.8 | 2145.2 | 2144.1 |
| 30° | 2276.0 | 2281.9 | 2287.8 | 2283.0 | 2277.1 | 2273.6 | 2270.0 | 2265.2 |
| 32.5° | 2448.2 | 2441.1 | 2436.3 | 2428.0 | 2417.3 | 2407.8 | 2400.7 | 2392.4 |
| 35° | 2610.9 | 2599.0 | 2594.3 | 2601.4 | 2600.2 | 2594.3 | 2586.0 | 2578.9 |
| 37.5° | 2810.5 | 2808.1 | 2810.5 | 2823.5 | 2821.2 | 2827.1 | 2810.5 | 2809.3 |
| 40° | 3062.3 | 3064.7 | 3081.3 | 3096.8 | 3105.1 | 3113.4 | 3103.8 | 3094.4 |
| 42.5° | 3354.6 | 3353.3 | 3359.3 | 3380.6 | 3394.9 | 3404.4 | 3384.2 | 3381.9 |
| 45° | 3663.4 | 3655.0 | 3659.8 | 3677.6 | 3691.8 | 3702.6 | 3680.0 | 3680.0 |
| 47.5° | 4003.1 | 3988.8 | 3973.3 | 3993.6 | 4001.9 | 4009.0 | 3991.2 | 3985.3 |
| 50° | 4382.0 | 4352.3 | 4319.1 | 4327.4 | 4327.4 | 4325.0 | 4302.4 | 4301.2 |
| 52.5° | 4816.8 | 4762.1 | 4701.6 | 4679.0 | 4665.9 | 4651.7 | 4612.5 | 4593.5 |
| 55° | 5316.9 | 5235.0 | 5139.9 | 5081.7 | 5050.8 | 5011.5 | 4946.3 | 4928.5 |
| 57.5° | 5901.3 | 5773.0 | 5609.0 | 5537.8 | 5468.9 | 5404.8 | 5332.3 | 5312.1 |
| 60° | 6593.8 | 6404.9 | 6187.5 | 6055.7 | 5980.9 | 5919.1 | 5844.3 | 5840.7 |
| 62.5° | 7366.0 | 7067.8 | 6821.9 | 6703.1 | 6648.5 | 6593.8 | 6522.5 | 6532.1 |
| 65° | 8151.1 | 7839.9 | 7609.4 | 7513.3 | 7462.1 | 7417.0 | 7345.7 | 7356.4 |
| 67.5° | 8925.6 | 8639.3 | 8386.3 | 8287.7 | 8230.7 | 8173.7 | 8109.5 | 8120.2 |
| 70° | 9481.5 | 9126.4 | 8841.3 | 8622.7 | 8486.1 | 8331.6 | 8231.9 | 8206.9 |
| 72.5° | 9322.4 | 8774.8 | 8322.1 | 7888.6 | 7634.4 | 7427.6 | 7287.5 | 7226.9 |
| 75° | 8067.9 | 7319.6 | 6737.6 | 6205.4 | 5906.0 | 5662.5 | 5485.6 | 5375.1 |
| 77.5° | 5991.5 | 5150.6 | 4462.8 | 3849.9 | 3365.2 | 3039.7 | 2810.5 | 2662.0 |
| 80° | 3279.7 | 2494.5 | 1823.4 | 1281.7 | 941.9 | 782.8 | 691.3 | 647.4 |
| 82.5° | 1021.5 | 659.3 | 485.8 | 419.3 | 389.6 | 373.0 | 345.7 | 301.7 |
| 85° | 325.5 | 285.1 | 264.8 | 253.0 | 241.1 | 210.2 | 145.0 | 131.9 |
| 87.5° | 125.9 | 129.5 | 128.3 | 121.1 | 123.6 | 89.1 | 71.3 | 62.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)