

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: P192542

Luminaire Tested: **GAN-AF-04-LED-U-5MQ-7030-800**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P192542  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)  
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-5MQ-7030-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 19710.4 lumens  
Efficiency: N/A  
Efficacy: 115.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B4 - U0 - G2

Input Watts (W): 171  
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

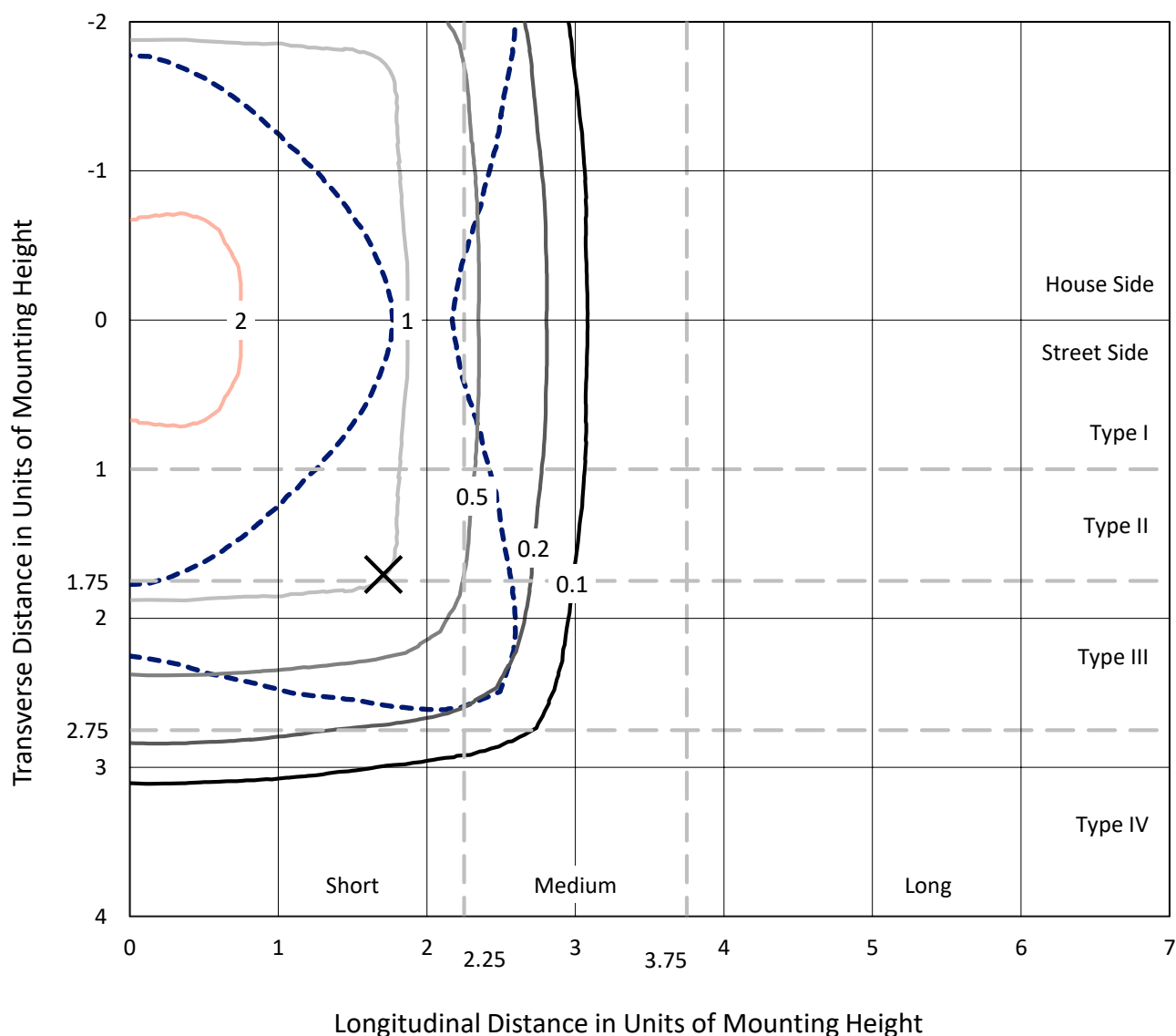


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 --- 1/2 Max cd

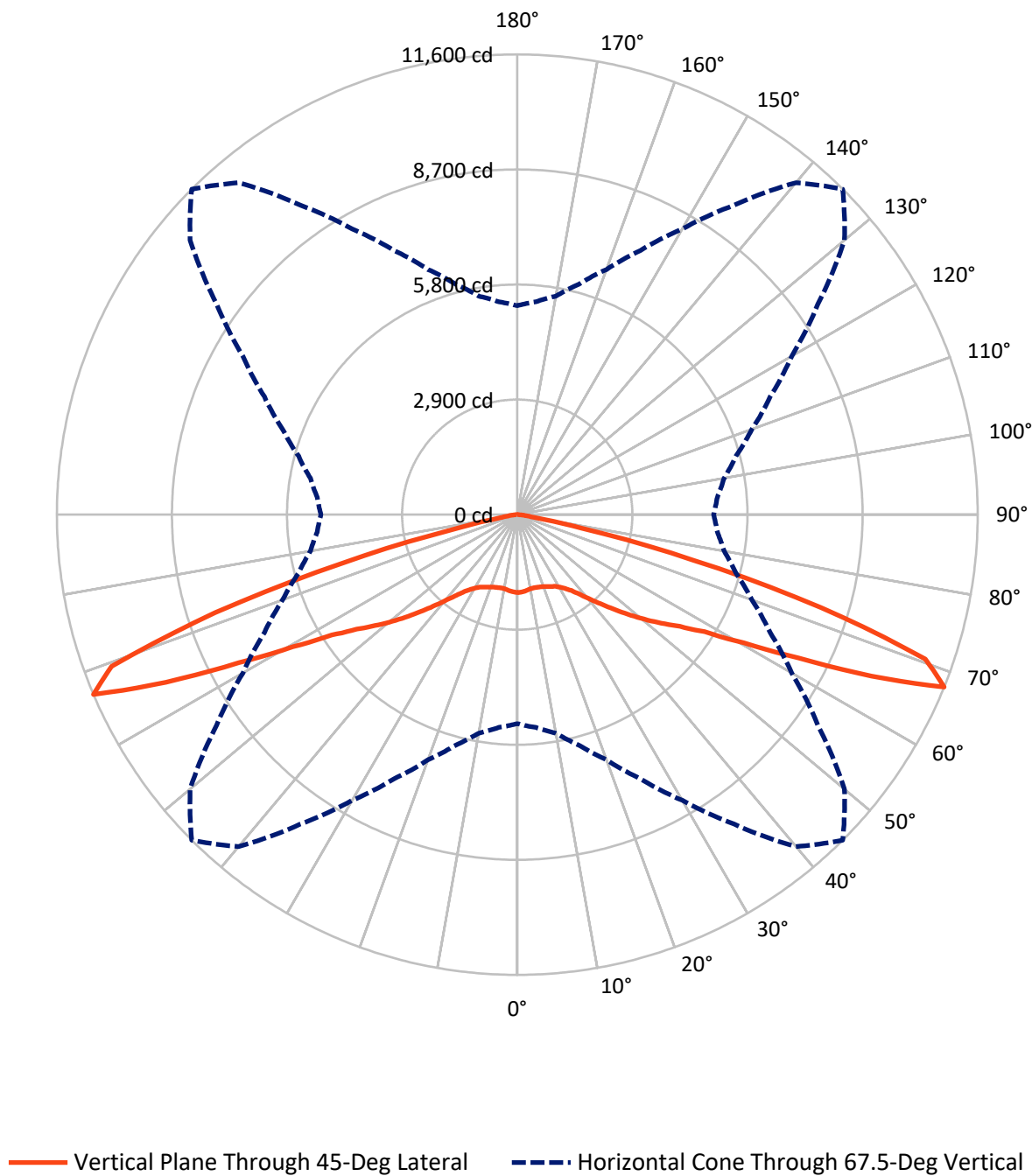


Based on 25 foot mounting height. Maximum calculated value = 3.1 fc  
 Type V - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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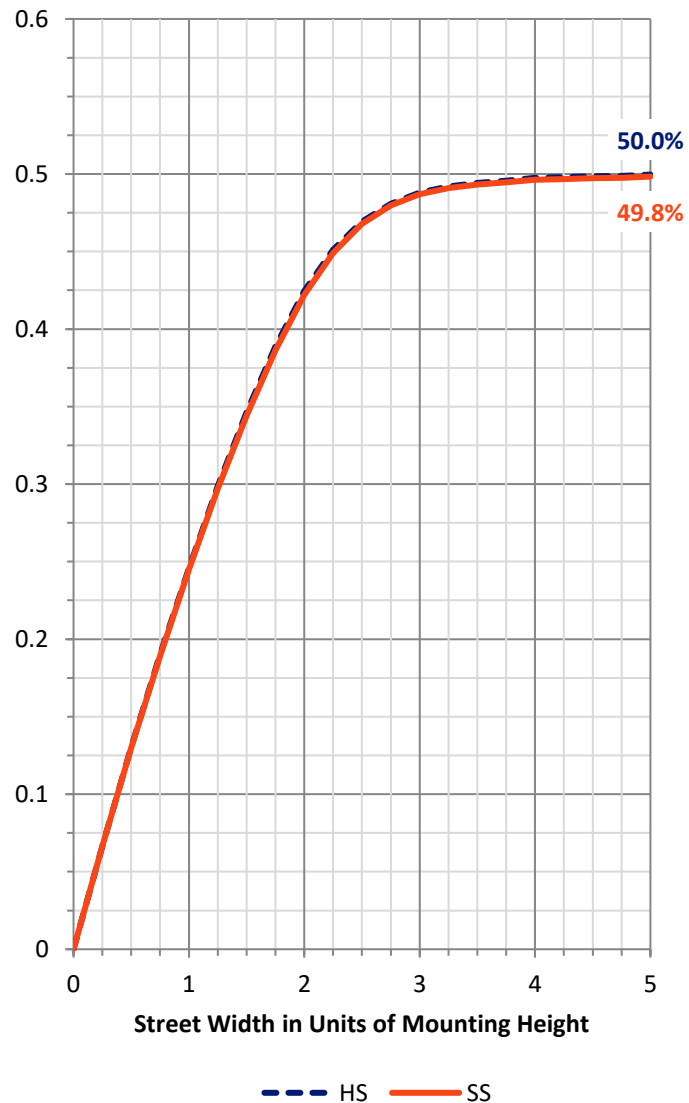
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9855.2   | 0.0    | 9855.2  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 9855.2   | 0.0    | 9855.2  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 19710.4  | 0.0    | 19710.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 183.8   | 0.9       |
| 10°-20°   | 533.5   | 2.7       |
| 20°-30°   | 906.9   | 4.6       |
| 30°-40°   | 1482.5  | 7.5       |
| 40°-50°   | 2646.5  | 13.4      |
| 50°-60°   | 4462.1  | 22.6      |
| 60°-70°   | 6924.5  | 35.1      |
| 70°-80°   | 2433.0  | 12.3      |
| 80°-90°   | 137.5   | 0.7       |
| 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°    | 19710.4 | 100.0     |
| 0°-180°   | 19710.4 | 100.0     |

**Coefficient of Utilization**



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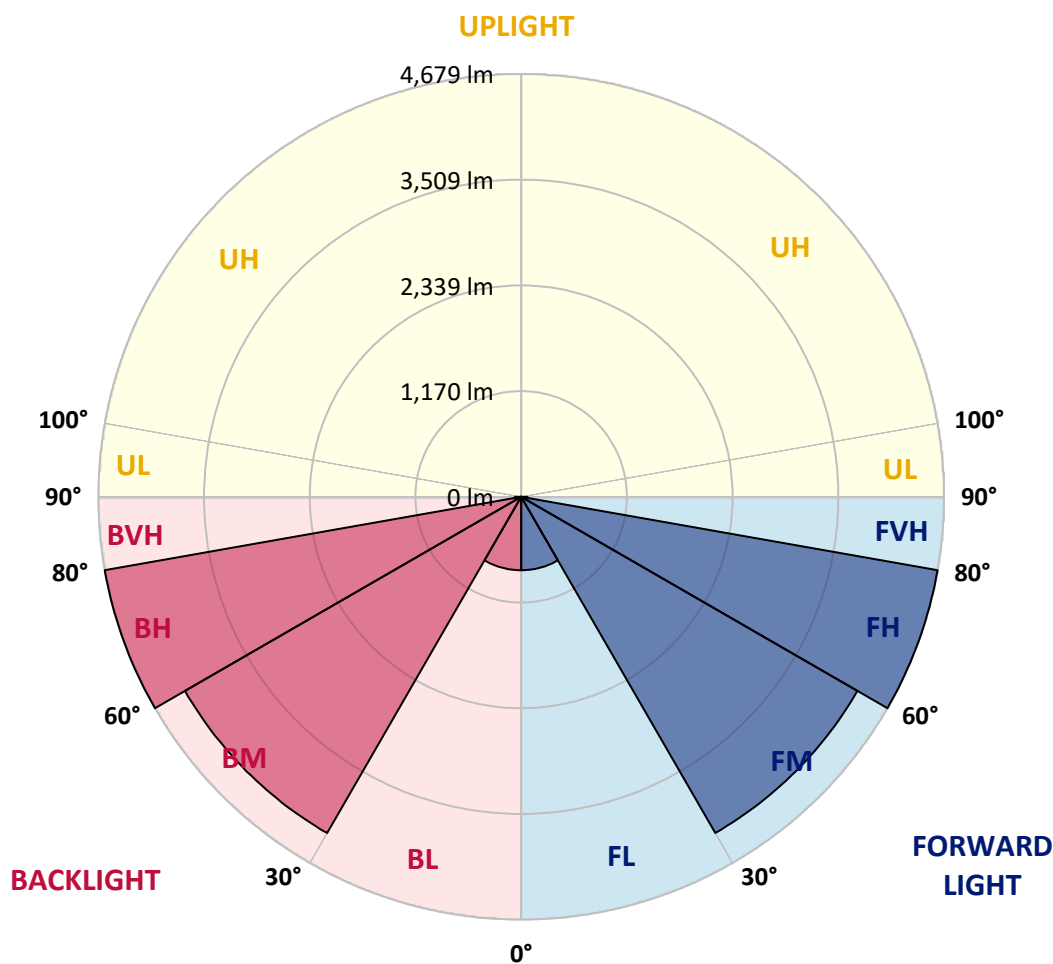
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 812.1  | 4.1       |                         |      |         |
| FM   | (30°-60°)   | 4295.6 | 21.8      |                         |      |         |
| FH   | (60°-80°)   | 4678.8 | 23.7      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 68.8   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 812.1  | 4.1       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 4295.6 | 21.8      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 4678.8 | 23.7      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 68.8   | 0.3       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°     | 45°     | 50°     |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0°    | 1964.3 | 1964.3 | 1964.3 | 1964.3 | 1964.3 | 1964.3 | 1964.3 | 1964.3 | 1964.3  | 1964.3  | 1964.3  |
| 2.5°  | 1957.0 | 1958.8 | 1958.8 | 1958.8 | 1957.9 | 1957.9 | 1956.1 | 1957.9 | 1957.0  | 1954.2  | 1955.2  |
| 5°    | 1940.7 | 1942.5 | 1942.5 | 1941.5 | 1944.3 | 1943.4 | 1940.7 | 1942.5 | 1941.5  | 1939.8  | 1940.7  |
| 7.5°  | 1917.1 | 1919.8 | 1919.8 | 1918.9 | 1921.7 | 1920.7 | 1918.9 | 1919.8 | 1919.8  | 1917.1  | 1917.1  |
| 10°   | 1890.8 | 1892.6 | 1892.6 | 1891.8 | 1896.2 | 1896.2 | 1895.3 | 1898.1 | 1898.9  | 1896.2  | 1894.4  |
| 12.5° | 1866.3 | 1869.1 | 1869.1 | 1872.7 | 1877.2 | 1879.0 | 1883.5 | 1887.1 | 1890.8  | 1889.8  | 1886.3  |
| 15°   | 1851.8 | 1853.6 | 1857.3 | 1861.8 | 1869.1 | 1875.4 | 1882.6 | 1890.8 | 1898.1  | 1899.9  | 1894.4  |
| 17.5° | 1842.7 | 1845.5 | 1851.0 | 1857.3 | 1867.2 | 1878.0 | 1889.0 | 1899.9 | 1909.9  | 1913.4  | 1907.1  |
| 20°   | 1840.0 | 1841.9 | 1847.2 | 1858.2 | 1871.7 | 1888.1 | 1903.6 | 1916.2 | 1929.7  | 1934.3  | 1929.7  |
| 22.5° | 1845.5 | 1849.1 | 1855.4 | 1868.2 | 1886.3 | 1907.1 | 1925.2 | 1942.5 | 1959.7  | 1967.9  | 1961.5  |
| 25°   | 1870.0 | 1873.6 | 1881.8 | 1898.1 | 1918.0 | 1939.8 | 1960.5 | 1980.6 | 1995.9  | 2004.2  | 1999.6  |
| 27.5° | 1915.4 | 1919.8 | 1929.7 | 1946.1 | 1967.9 | 1991.5 | 2014.0 | 2030.4 | 2043.0  | 2045.8  | 2040.3  |
| 30°   | 1983.3 | 1993.2 | 2005.0 | 2023.2 | 2048.5 | 2068.5 | 2091.1 | 2105.7 | 2121.0  | 2121.0  | 2116.5  |
| 32.5° | 2089.2 | 2099.3 | 2112.0 | 2129.3 | 2149.1 | 2170.9 | 2190.8 | 2203.5 | 2219.8  | 2220.7  | 2209.9  |
| 35°   | 2247.9 | 2252.5 | 2263.3 | 2274.2 | 2292.4 | 2311.4 | 2328.7 | 2336.7 | 2350.3  | 2351.3  | 2341.3  |
| 37.5° | 2457.3 | 2458.3 | 2465.4 | 2469.2 | 2485.4 | 2506.3 | 2522.6 | 2528.0 | 2540.8  | 2538.8  | 2529.0  |
| 40°   | 2701.1 | 2705.7 | 2708.4 | 2713.8 | 2731.1 | 2751.0 | 2768.2 | 2771.0 | 2784.6  | 2781.8  | 2769.1  |
| 42.5° | 2983.0 | 2984.9 | 3000.3 | 3008.5 | 3024.8 | 3034.6 | 3056.4 | 3059.2 | 3075.5  | 3068.2  | 3053.8  |
| 45°   | 3299.4 | 3315.7 | 3330.2 | 3346.5 | 3363.8 | 3375.6 | 3392.7 | 3389.1 | 3400.0  | 3389.1  | 3380.9  |
| 47.5° | 3632.0 | 3643.8 | 3676.5 | 3701.8 | 3729.9 | 3740.0 | 3764.4 | 3753.5 | 3764.4  | 3749.0  | 3746.3  |
| 50°   | 3998.3 | 4019.1 | 4047.2 | 4076.3 | 4106.1 | 4122.5 | 4154.1 | 4140.6 | 4155.0  | 4140.6  | 4132.4  |
| 52.5° | 4359.0 | 4364.5 | 4426.1 | 4468.7 | 4510.3 | 4529.5 | 4548.5 | 4542.1 | 4543.0  | 4542.1  | 4533.9  |
| 55°   | 4701.7 | 4714.3 | 4775.9 | 4833.9 | 4906.5 | 4960.0 | 4992.6 | 4989.0 | 4980.8  | 4972.6  | 4959.1  |
| 57.5° | 5087.7 | 5100.4 | 5171.1 | 5242.8 | 5325.3 | 5401.3 | 5467.6 | 5535.5 | 5561.9  | 5569.1  | 5539.1  |
| 60°   | 5609.8 | 5609.0 | 5703.3 | 5790.2 | 5908.0 | 6021.4 | 6166.4 | 6314.2 | 6483.7  | 6562.5  | 6458.4  |
| 62.5° | 6141.0 | 6162.8 | 6298.8 | 6452.9 | 6695.7 | 6932.3 | 7199.7 | 7462.6 | 7730.8  | 7949.3  | 7717.3  |
| 65°   | 6077.5 | 6161.0 | 6363.2 | 6712.2 | 7160.8 | 7693.7 | 8270.2 | 8880.3 | 9431.4  | 9810.3  | 9385.2  |
| 67.5° | 5267.3 | 5385.9 | 5591.8 | 6016.0 | 6577.0 | 7345.6 | 8313.7 | 9520.2 | 10922.4 | 11600.4 | 10760.2 |
| 70°   | 3817.8 | 3952.0 | 4167.7 | 4582.0 | 5137.6 | 5868.2 | 6919.6 | 8368.0 | 10224.5 | 10907.9 | 9982.5  |
| 72.5° | 1899.9 | 1972.3 | 2105.7 | 2369.4 | 2789.9 | 3382.7 | 4336.3 | 5728.6 | 7371.0  | 7998.4  | 7152.5  |
| 75°   | 645.4  | 678.9  | 701.6  | 787.6  | 920.9  | 1153.9 | 1628.0 | 2504.4 | 3820.6  | 4580.1  | 3766.1  |
| 77.5° | 372.6  | 373.4  | 388.9  | 404.3  | 426.8  | 452.4  | 515.7  | 677.1  | 1171.1  | 1663.3  | 1211.9  |
| 80°   | 241.1  | 240.2  | 252.9  | 264.6  | 280.0  | 292.9  | 296.4  | 313.6  | 361.6   | 428.8   | 383.4   |
| 82.5° | 125.1  | 140.5  | 168.6  | 184.0  | 213.0  | 218.4  | 211.2  | 204.9  | 216.7   | 224.7   | 230.2   |
| 85°   | 69.0   | 59.9   | 89.7   | 116.1  | 128.7  | 130.6  | 130.6  | 123.3  | 127.9   | 125.1   | 135.9   |
| 87.5° | 31.6   | 29.0   | 35.4   | 57.2   | 60.7   | 51.7   | 54.4   | 48.1   | 34.4    | 33.6    | 38.0    |
| 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°    | 1964.3 | 1964.3 | 1964.3 | 1964.3 | 1964.3 | 1964.3 | 1964.3 | 1964.3 |
| 2.5°  | 1955.2 | 1956.1 | 1956.1 | 1958.8 | 1959.7 | 1961.5 | 1963.3 | 1964.3 |
| 5°    | 1939.8 | 1942.5 | 1940.7 | 1943.4 | 1943.4 | 1945.2 | 1945.2 | 1946.1 |
| 7.5°  | 1917.1 | 1919.8 | 1919.8 | 1919.8 | 1918.9 | 1921.7 | 1921.7 | 1921.7 |
| 10°   | 1893.6 | 1895.3 | 1894.4 | 1892.6 | 1890.8 | 1893.6 | 1892.6 | 1891.8 |
| 12.5° | 1886.3 | 1881.8 | 1878.0 | 1876.3 | 1872.7 | 1873.6 | 1870.8 | 1870.8 |
| 15°   | 1890.8 | 1882.6 | 1876.3 | 1873.6 | 1870.0 | 1868.2 | 1866.3 | 1867.2 |
| 17.5° | 1902.5 | 1892.6 | 1884.5 | 1880.0 | 1875.4 | 1872.7 | 1869.1 | 1870.0 |
| 20°   | 1923.4 | 1911.6 | 1899.9 | 1890.8 | 1882.6 | 1878.0 | 1875.4 | 1874.5 |
| 22.5° | 1954.2 | 1937.0 | 1919.8 | 1906.2 | 1895.3 | 1889.0 | 1886.3 | 1884.5 |
| 25°   | 1989.6 | 1970.6 | 1950.6 | 1935.2 | 1924.4 | 1916.2 | 1910.7 | 1910.7 |
| 27.5° | 2034.0 | 2018.6 | 2000.4 | 1982.4 | 1972.3 | 1964.3 | 1960.5 | 1958.8 |
| 30°   | 2108.3 | 2093.9 | 2079.3 | 2062.2 | 2049.3 | 2041.3 | 2035.0 | 2029.5 |
| 32.5° | 2203.5 | 2191.7 | 2179.9 | 2167.2 | 2155.4 | 2144.6 | 2134.6 | 2130.1 |
| 35°   | 2337.7 | 2328.7 | 2320.4 | 2305.9 | 2301.4 | 2295.1 | 2289.6 | 2285.0 |
| 37.5° | 2522.6 | 2519.0 | 2519.0 | 2503.5 | 2500.0 | 2497.2 | 2491.7 | 2492.6 |
| 40°   | 2765.5 | 2769.1 | 2764.6 | 2759.2 | 2756.4 | 2749.2 | 2749.2 | 2755.5 |
| 42.5° | 3052.8 | 3055.6 | 3065.5 | 3056.4 | 3066.5 | 3057.4 | 3051.9 | 3056.4 |
| 45°   | 3386.4 | 3396.4 | 3416.3 | 3407.2 | 3413.6 | 3398.2 | 3379.2 | 3380.1 |
| 47.5° | 3760.7 | 3769.8 | 3777.9 | 3771.6 | 3772.5 | 3747.1 | 3721.8 | 3715.5 |
| 50°   | 4149.5 | 4153.3 | 4157.8 | 4148.7 | 4150.5 | 4122.5 | 4093.4 | 4094.3 |
| 52.5° | 4533.9 | 4551.2 | 4569.3 | 4544.8 | 4539.4 | 4507.6 | 4466.8 | 4450.5 |
| 55°   | 4973.6 | 4998.1 | 4977.2 | 4934.5 | 4892.0 | 4849.4 | 4795.9 | 4786.8 |
| 57.5° | 5515.6 | 5473.9 | 5408.7 | 5327.9 | 5269.0 | 5209.3 | 5154.9 | 5132.1 |
| 60°   | 6269.8 | 6112.9 | 5995.0 | 5875.4 | 5800.2 | 5726.9 | 5655.2 | 5644.4 |
| 62.5° | 7335.6 | 7064.7 | 6829.9 | 6582.5 | 6380.3 | 6222.7 | 6096.5 | 6061.2 |
| 65°   | 8671.8 | 8030.9 | 7475.3 | 6956.7 | 6506.3 | 6166.4 | 5952.5 | 5858.3 |
| 67.5° | 9246.4 | 7981.1 | 7028.4 | 6292.3 | 5703.3 | 5291.8 | 5060.6 | 4945.4 |
| 70°   | 8125.2 | 6618.7 | 5582.7 | 4845.7 | 4309.1 | 3870.4 | 3661.1 | 3537.9 |
| 72.5° | 5589.9 | 4210.3 | 3329.3 | 2717.5 | 2288.8 | 1921.7 | 1776.5 | 1765.7 |
| 75°   | 2509.9 | 1662.4 | 1145.7 | 882.9  | 743.3  | 646.3  | 616.3  | 593.8  |
| 77.5° | 702.4  | 519.4  | 463.2  | 433.3  | 404.3  | 370.7  | 358.1  | 360.8  |
| 80°   | 341.8  | 322.7  | 310.0  | 290.9  | 264.6  | 236.5  | 223.9  | 229.3  |
| 82.5° | 226.6  | 223.9  | 232.0  | 218.4  | 180.4  | 153.2  | 128.7  | 117.8  |
| 85°   | 137.7  | 139.7  | 142.2  | 143.2  | 121.5  | 85.2   | 58.0   | 65.2   |
| 87.5° | 54.4   | 62.5   | 68.0   | 70.7   | 66.2   | 40.8   | 32.7   | 33.6   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)