

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: P479503

Luminaire Tested: **IFLD-M-SA4B-830-U-5MQ**

Issue Date: 02/26/2021



Test Information

Test Method: LM-79-08
Report Number: P479503
Test Lab: INNOVATION CENTER(G2)
Issue Date: 02/26/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4B-830-U-5MQ
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ 5MQ distribution lens
Light Source: (64) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

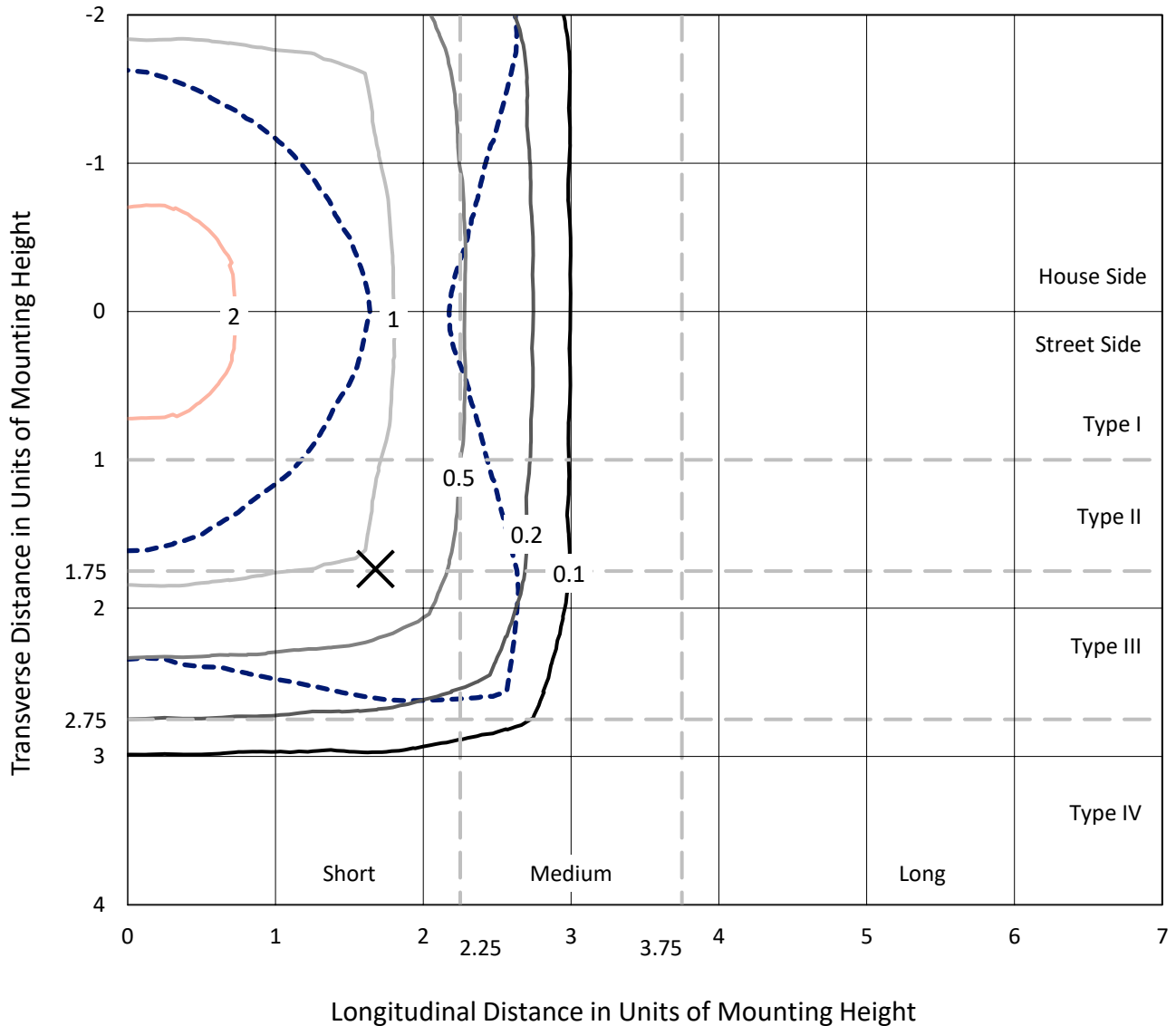
Lumens per Lamp: N/A
Luminaire Lumens: 18319 lumens
Efficiency: N/A
Efficacy: 110.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

Input Watts (W): 166.1
Input Voltage (V): 120
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: 24 FT

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Iso-Footcandle Lines of Horizontal Illumination

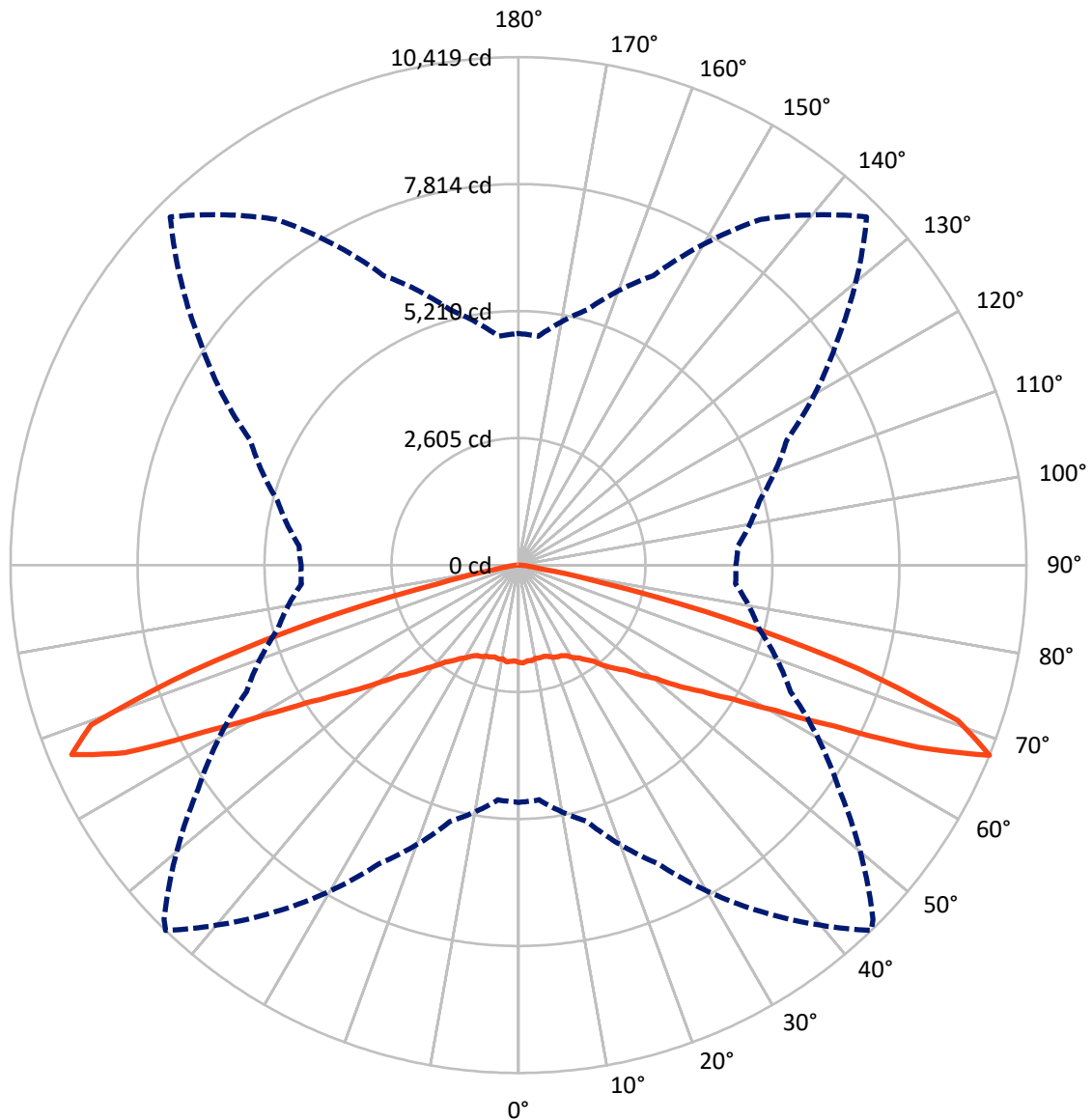
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9136.0 | 0.0 | 9136.0 |
| | % Fixture | 49.9 | 0.0 | 49.9 |
| Street Side | Lumens | 9182.9 | 0.0 | 9182.9 |
| | % Fixture | 50.1 | 0.0 | 50.1 |
| Total | Lumens | 18319.0 | 0.0 | 18319.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 189.4 | 1.0 |
| 10°-20° | 553.2 | 3.0 |
| 20°-30° | 940.8 | 5.1 |
| 30°-40° | 1491.6 | 8.1 |
| 40°-50° | 2432.2 | 13.3 |
| 50°-60° | 4153.8 | 22.7 |
| 60°-70° | 6317.9 | 34.5 |
| 70°-80° | 2129.5 | 11.6 |
| 80°-90° | 110.6 | 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° | 18319.0 | 100.0 |
| 0°-180° | 18319.0 | 100.0 |

Coefficient of Utilization



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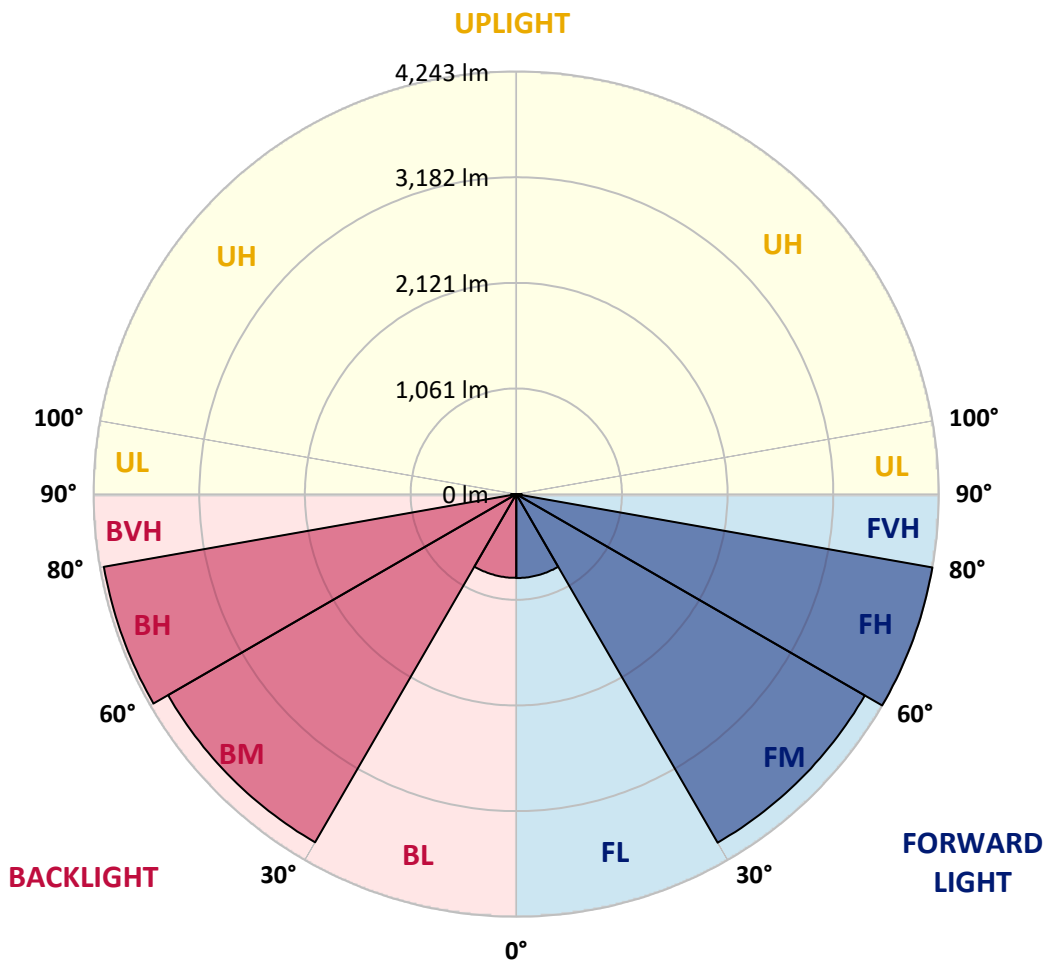
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 842.5 | 4.6 | | | |
| FM (30°-60°) | 4041.0 | 22.1 | | | |
| FH (60°-80°) | 4242.9 | 23.2 | | | G2/5000 |
| FVH (80°-90°) | 56.6 | 0.3 | | | G1/100 |
| BL (0°-30°) | 840.8 | 4.6 | B2/1000 | | |
| BM (30°-60°) | 4036.6 | 22.0 | B3/5000 | | |
| BH (60°-80°) | 4204.6 | 23.0 | B4/5000 | | G2/5000 |
| BVH (80°-90°) | 54.0 | 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° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|---------|---------|--------|--------|--------|--------|
| 0° | 2001.0 | 2001.0 | 2001.0 | 2001.0 | 2001.0 | 2001.0 | 2001.0 | 2001.0 | 2001.0 | 2001.0 | 2001.0 |
| 2.5° | 1955.0 | 1978.0 | 1994.8 | 1992.7 | 1998.9 | 2005.2 | 1996.9 | 2009.4 | 2001.0 | 2015.7 | 2024.0 |
| 5° | 1992.7 | 1986.4 | 1988.5 | 1975.9 | 2005.2 | 1971.8 | 1971.8 | 1988.5 | 2009.4 | 1984.3 | 1998.9 |
| 7.5° | 1969.7 | 1965.5 | 1955.0 | 1973.8 | 1980.1 | 1980.1 | 1996.9 | 1965.5 | 2001.0 | 2009.4 | 2011.5 |
| 10° | 1944.6 | 1921.6 | 1952.9 | 1971.8 | 1975.9 | 1942.5 | 1957.1 | 1965.5 | 1955.0 | 1965.5 | 1971.8 |
| 12.5° | 1923.7 | 1936.2 | 1936.2 | 1936.2 | 1929.9 | 1952.9 | 1967.6 | 1965.5 | 1944.6 | 1963.4 | 1929.9 |
| 15° | 1921.6 | 1915.3 | 1934.1 | 1950.8 | 1940.4 | 1944.6 | 1950.8 | 1969.7 | 1929.9 | 1938.3 | 1938.3 |
| 17.5° | 1919.5 | 1927.8 | 1934.1 | 1932.0 | 1967.6 | 1967.6 | 1961.3 | 1948.8 | 1980.1 | 1963.4 | 1940.4 |
| 20° | 1927.8 | 1921.6 | 1938.3 | 1944.6 | 1969.7 | 2019.9 | 2001.0 | 1990.6 | 1973.8 | 1952.9 | 1952.9 |
| 22.5° | 1938.3 | 1934.1 | 1957.1 | 1984.3 | 2032.4 | 2044.9 | 2042.9 | 2030.3 | 2001.0 | 1975.9 | 1971.8 |
| 25° | 1975.9 | 1938.3 | 1963.4 | 2015.7 | 2032.4 | 2057.5 | 2074.2 | 2057.5 | 2017.8 | 2024.0 | 1986.4 |
| 27.5° | 2032.4 | 2026.1 | 2059.6 | 2095.1 | 2080.5 | 2103.5 | 2088.9 | 2101.4 | 2103.5 | 2072.1 | 2034.5 |
| 30° | 2099.3 | 2080.5 | 2101.4 | 2170.4 | 2176.7 | 2201.8 | 2176.7 | 2143.2 | 2153.7 | 2126.5 | 2107.7 |
| 32.5° | 2195.5 | 2189.2 | 2228.9 | 2274.9 | 2283.3 | 2270.8 | 2258.2 | 2277.0 | 2233.1 | 2212.2 | 2178.8 |
| 35° | 2258.2 | 2285.4 | 2333.5 | 2369.0 | 2396.2 | 2383.7 | 2389.9 | 2371.1 | 2381.6 | 2337.7 | 2323.0 |
| 37.5° | 2444.3 | 2433.9 | 2444.3 | 2504.9 | 2511.2 | 2504.9 | 2511.2 | 2532.1 | 2517.5 | 2479.9 | 2442.2 |
| 40° | 2620.0 | 2603.2 | 2628.3 | 2697.3 | 2693.1 | 2714.0 | 2672.2 | 2695.2 | 2695.2 | 2624.1 | 2609.5 |
| 42.5° | 2751.7 | 2808.1 | 2837.4 | 2893.9 | 2914.8 | 2896.0 | 2887.6 | 2891.8 | 2937.8 | 2854.1 | 2822.8 |
| 45° | 3023.5 | 3021.4 | 3109.2 | 3140.6 | 3082.0 | 3077.9 | 3061.1 | 3111.3 | 3142.7 | 3094.6 | 3082.0 |
| 47.5° | 3318.3 | 3333.0 | 3383.1 | 3395.7 | 3431.2 | 3366.4 | 3366.4 | 3372.7 | 3483.5 | 3370.6 | 3312.1 |
| 50° | 3583.9 | 3602.7 | 3703.1 | 3801.3 | 3734.4 | 3665.4 | 3692.6 | 3726.1 | 3786.7 | 3680.1 | 3629.9 |
| 52.5° | 3905.9 | 4008.3 | 4075.2 | 4127.5 | 4175.6 | 4127.5 | 4064.8 | 4102.4 | 4221.6 | 4079.4 | 4016.7 |
| 55° | 4370.1 | 4451.6 | 4514.3 | 4610.5 | 4650.3 | 4585.4 | 4579.2 | 4575.0 | 4641.9 | 4491.3 | 4405.6 |
| 57.5° | 4888.6 | 4855.2 | 4955.5 | 5104.0 | 5248.3 | 5185.5 | 5166.7 | 5170.9 | 5187.6 | 4974.4 | 4909.5 |
| 60° | 5532.6 | 5570.3 | 5689.5 | 5819.1 | 5971.7 | 6059.6 | 5936.2 | 5865.1 | 5879.7 | 5589.1 | 5488.7 |
| 62.5° | 5900.6 | 5984.3 | 6254.0 | 6699.4 | 7006.7 | 7280.7 | 7299.5 | 6837.4 | 6527.9 | 5963.4 | 5536.8 |
| 65° | 5722.9 | 5710.4 | 6218.5 | 7042.3 | 8206.9 | 9003.6 | 8884.4 | 7763.7 | 6682.7 | 5785.6 | 5212.7 |
| 67.5° | 4867.7 | 4834.3 | 5449.0 | 6755.8 | 8679.5 | 10419.2 | 10283.3 | 8025.0 | 6159.9 | 5118.6 | 4470.4 |
| 70° | 3136.4 | 3128.1 | 3795.1 | 5150.0 | 7749.0 | 9566.1 | 9616.2 | 7289.0 | 5014.1 | 3749.1 | 3107.1 |
| 72.5° | 1139.6 | 1208.6 | 1595.4 | 2768.4 | 5262.9 | 7318.3 | 7349.7 | 5396.7 | 2883.4 | 1733.4 | 1277.6 |
| 75° | 420.3 | 432.8 | 503.9 | 899.1 | 2398.3 | 4493.4 | 4610.5 | 2617.9 | 1024.6 | 564.6 | 460.0 |
| 77.5° | 242.5 | 244.6 | 269.7 | 334.6 | 710.9 | 1754.3 | 1825.4 | 794.6 | 397.3 | 301.1 | 278.1 |
| 80° | 165.2 | 163.1 | 190.3 | 217.5 | 284.4 | 497.6 | 529.0 | 332.5 | 250.9 | 209.1 | 175.6 |
| 82.5° | 96.2 | 102.5 | 140.1 | 154.7 | 173.5 | 219.5 | 223.7 | 207.0 | 188.2 | 154.7 | 115.0 |
| 85° | 58.5 | 48.1 | 77.4 | 85.7 | 100.4 | 98.3 | 98.3 | 112.9 | 121.3 | 108.7 | 64.8 |
| 87.5° | 14.6 | 14.6 | 18.8 | 20.9 | 27.2 | 20.9 | 23.0 | 43.9 | 58.5 | 54.4 | 33.5 |
| 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° | 2001.0 | 2001.0 | 2001.0 | 2001.0 | 2001.0 | 2001.0 | 2001.0 | 2001.0 | 2001.0 | 2001.0 | 2001.0 |
| 2.5° | 2005.2 | 1998.9 | 2003.1 | 2026.1 | 2011.5 | 1967.6 | 1978.0 | 2001.0 | 1982.2 | 1971.8 | 1969.7 |
| 5° | 1996.9 | 2009.4 | 1994.8 | 1998.9 | 2013.6 | 1978.0 | 1984.3 | 2013.6 | 2001.0 | 2005.2 | 1982.2 |
| 7.5° | 1998.9 | 2005.2 | 1992.7 | 1973.8 | 1973.8 | 2003.1 | 1986.4 | 1990.6 | 1971.8 | 2003.1 | 1961.3 |
| 10° | 1986.4 | 1969.7 | 1955.0 | 1965.5 | 1961.3 | 1952.9 | 1946.7 | 1959.2 | 1940.4 | 1967.6 | 1938.3 |
| 12.5° | 1948.8 | 1952.9 | 1948.8 | 1944.6 | 1952.9 | 1973.8 | 1940.4 | 1944.6 | 1915.3 | 1919.5 | 1934.1 |
| 15° | 1934.1 | 1946.7 | 1942.5 | 1965.5 | 1975.9 | 1944.6 | 1969.7 | 1944.6 | 1921.6 | 1909.0 | 1932.0 |
| 17.5° | 1940.4 | 1959.2 | 1952.9 | 1969.7 | 1950.8 | 1973.8 | 1978.0 | 1967.6 | 1940.4 | 1929.9 | 1940.4 |
| 20° | 1946.7 | 1940.4 | 1948.8 | 1978.0 | 2005.2 | 1982.2 | 1982.2 | 1975.9 | 1950.8 | 1936.2 | 1936.2 |
| 22.5° | 1961.3 | 1950.8 | 1963.4 | 1986.4 | 1994.8 | 2030.3 | 1998.9 | 1984.3 | 1942.5 | 1904.8 | 1940.4 |
| 25° | 1990.6 | 1996.9 | 2005.2 | 1996.9 | 2042.9 | 2038.7 | 2034.5 | 2024.0 | 1959.2 | 1961.3 | 1955.0 |
| 27.5° | 2047.0 | 2011.5 | 2021.9 | 2072.1 | 2078.4 | 2095.1 | 2074.2 | 2093.0 | 2024.0 | 2026.1 | 1984.3 |
| 30° | 2116.0 | 2078.4 | 2111.9 | 2155.8 | 2153.7 | 2185.0 | 2174.6 | 2178.8 | 2130.7 | 2103.5 | 2047.0 |
| 32.5° | 2191.3 | 2187.1 | 2208.0 | 2235.2 | 2245.7 | 2262.4 | 2260.3 | 2260.3 | 2231.0 | 2159.9 | 2170.4 |
| 35° | 2274.9 | 2304.2 | 2329.3 | 2358.6 | 2362.8 | 2383.7 | 2354.4 | 2358.6 | 2329.3 | 2277.0 | 2293.8 |
| 37.5° | 2440.1 | 2438.0 | 2465.2 | 2500.8 | 2504.9 | 2488.2 | 2511.2 | 2500.8 | 2461.0 | 2425.5 | 2398.3 |
| 40° | 2632.5 | 2590.7 | 2615.8 | 2699.4 | 2705.7 | 2676.4 | 2674.3 | 2672.2 | 2643.0 | 2565.6 | 2548.9 |
| 42.5° | 2799.8 | 2854.1 | 2850.0 | 2877.1 | 2858.3 | 2843.7 | 2896.0 | 2866.7 | 2843.7 | 2762.1 | 2747.5 |
| 45° | 3015.1 | 3031.9 | 3086.2 | 3174.1 | 3084.1 | 3084.1 | 3119.7 | 3096.7 | 3084.1 | 3023.5 | 2967.0 |
| 47.5° | 3282.8 | 3297.4 | 3406.1 | 3412.4 | 3353.9 | 3314.1 | 3425.0 | 3429.1 | 3376.9 | 3330.9 | 3261.9 |
| 50° | 3596.4 | 3602.7 | 3701.0 | 3801.3 | 3736.5 | 3661.2 | 3774.2 | 3818.1 | 3701.0 | 3638.2 | 3552.5 |
| 52.5° | 3941.4 | 3922.6 | 4004.2 | 4192.3 | 4129.6 | 4106.6 | 4227.9 | 4238.3 | 4079.4 | 3981.2 | 4004.2 |
| 55° | 4338.7 | 4313.6 | 4535.3 | 4662.8 | 4623.1 | 4581.3 | 4635.6 | 4660.7 | 4533.2 | 4372.2 | 4428.6 |
| 57.5° | 4853.1 | 4865.6 | 4976.4 | 5101.9 | 5166.7 | 5177.2 | 5202.3 | 5177.2 | 5047.5 | 4884.4 | 4832.2 |
| 60° | 5367.4 | 5405.1 | 5620.5 | 5856.7 | 5877.6 | 6061.6 | 6028.2 | 5902.7 | 5718.7 | 5486.6 | 5497.1 |
| 62.5° | 5557.7 | 5526.4 | 5873.5 | 6450.6 | 6941.9 | 7278.6 | 7130.1 | 6684.7 | 6258.2 | 5835.8 | 5867.2 |
| 65° | 5175.1 | 5252.4 | 5725.0 | 6628.3 | 7694.7 | 9026.6 | 8236.2 | 7004.7 | 6143.2 | 5597.5 | 5536.8 |
| 67.5° | 4460.0 | 4518.5 | 5118.6 | 6072.1 | 7964.4 | 10101.3 | 8654.4 | 6553.0 | 5417.6 | 4710.9 | 4748.5 |
| 70° | 3107.1 | 3136.4 | 3724.0 | 4974.4 | 7222.1 | 9532.6 | 7807.6 | 5032.9 | 3740.7 | 2981.7 | 3023.5 |
| 72.5° | 1250.4 | 1321.5 | 1708.3 | 2996.3 | 5331.9 | 7243.0 | 5256.6 | 2640.9 | 1551.5 | 1154.2 | 1047.6 |
| 75° | 462.1 | 464.2 | 545.7 | 1030.8 | 2532.1 | 4552.0 | 2371.1 | 848.9 | 495.6 | 405.6 | 386.8 |
| 77.5° | 267.6 | 265.5 | 284.4 | 372.2 | 733.9 | 1777.3 | 673.3 | 332.5 | 269.7 | 242.5 | 232.1 |
| 80° | 167.3 | 165.2 | 194.5 | 246.7 | 322.0 | 487.2 | 284.4 | 207.0 | 181.9 | 156.8 | 156.8 |
| 82.5° | 106.6 | 108.7 | 152.6 | 181.9 | 196.5 | 215.4 | 165.2 | 146.4 | 135.9 | 89.9 | 87.8 |
| 85° | 69.0 | 62.7 | 106.6 | 121.3 | 108.7 | 96.2 | 92.0 | 77.4 | 71.1 | 43.9 | 48.1 |
| 87.5° | 31.4 | 33.5 | 54.4 | 60.6 | 39.7 | 23.0 | 23.0 | 16.7 | 16.7 | 10.5 | 10.5 |
| 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)