

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: P967158

Luminaire Tested: **NVN-SB4D-730-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967158
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB4D-730-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42515 lumens
Efficiency: N/A
Efficacy: 144.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

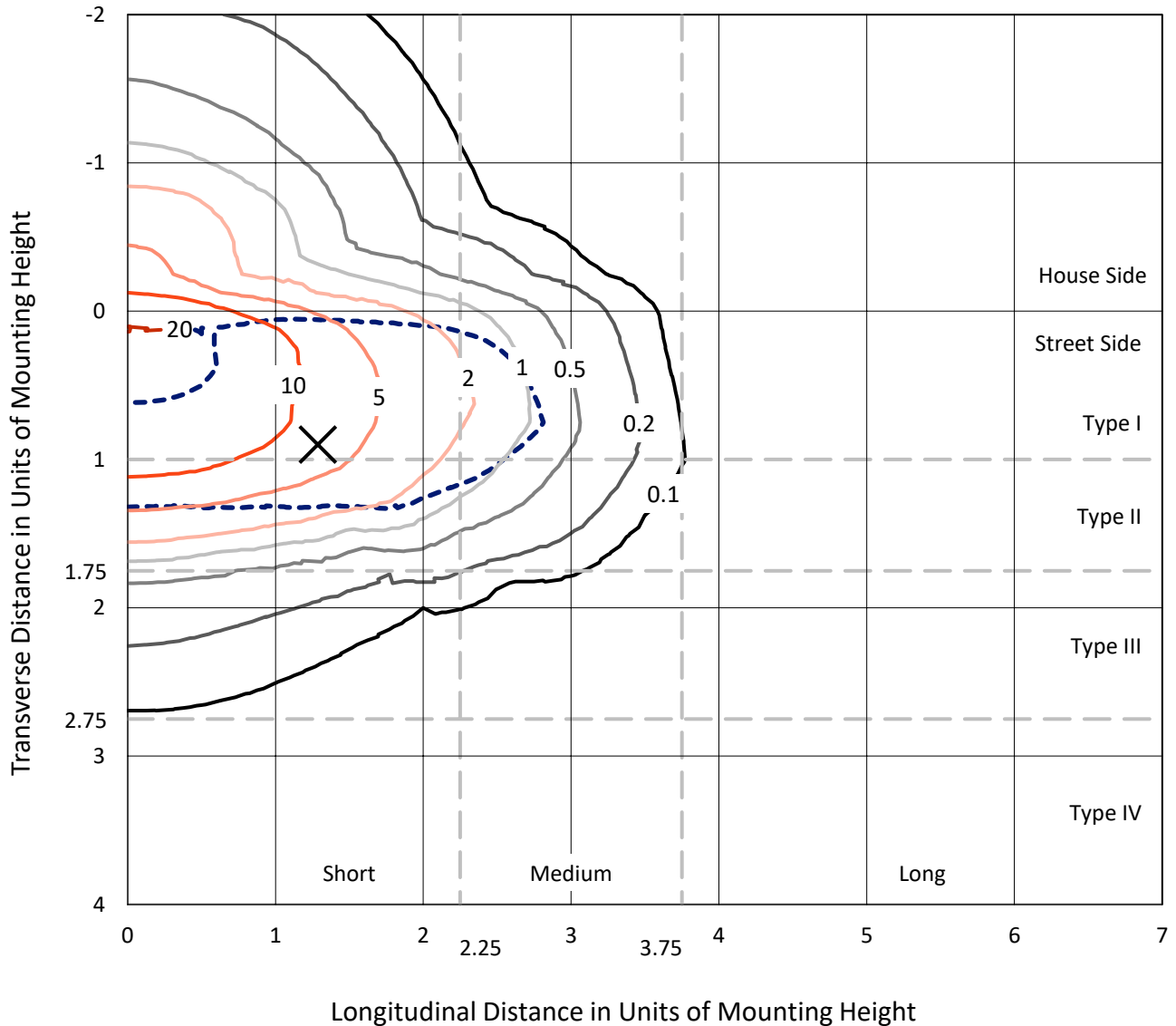
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

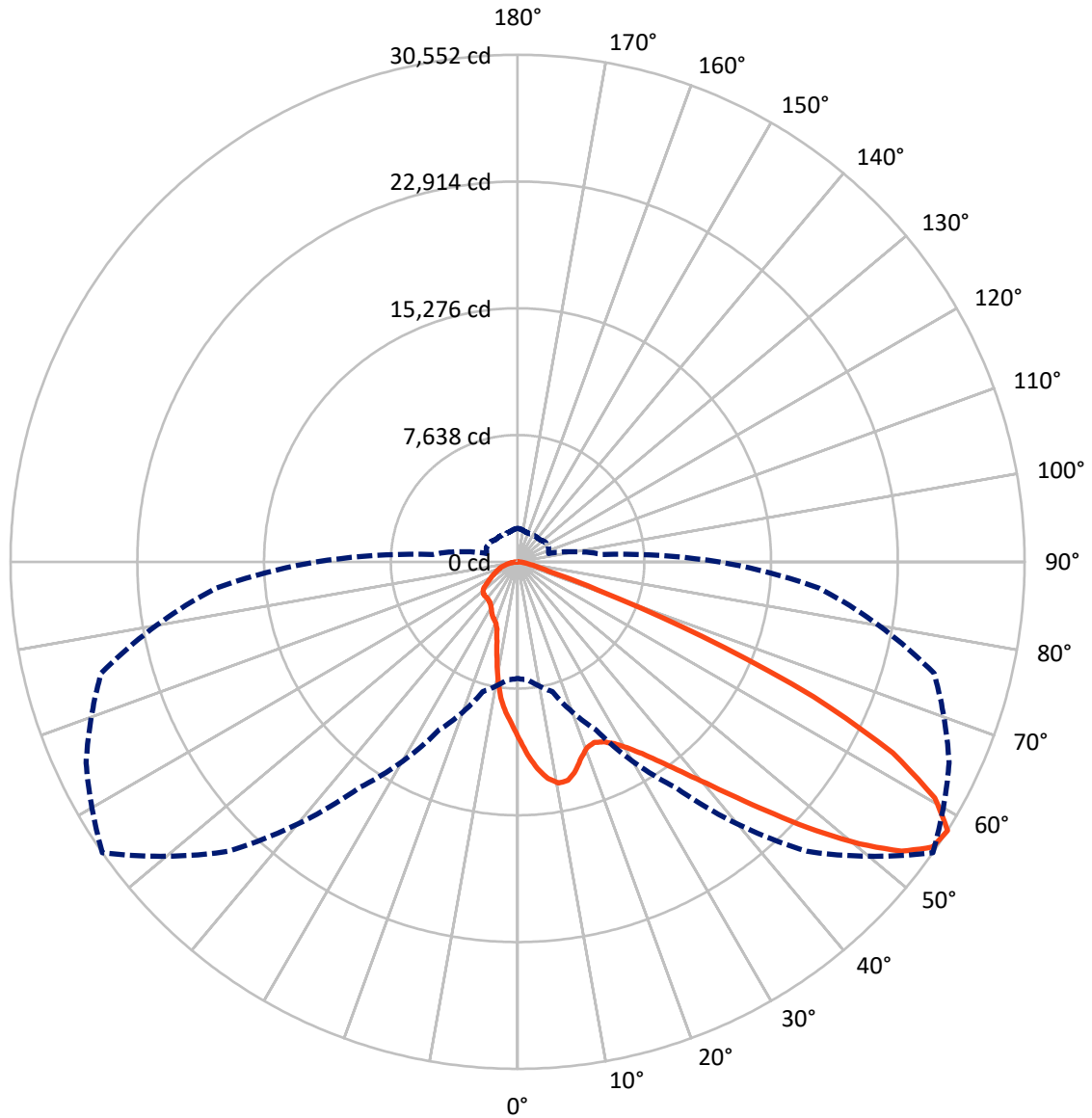
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 20.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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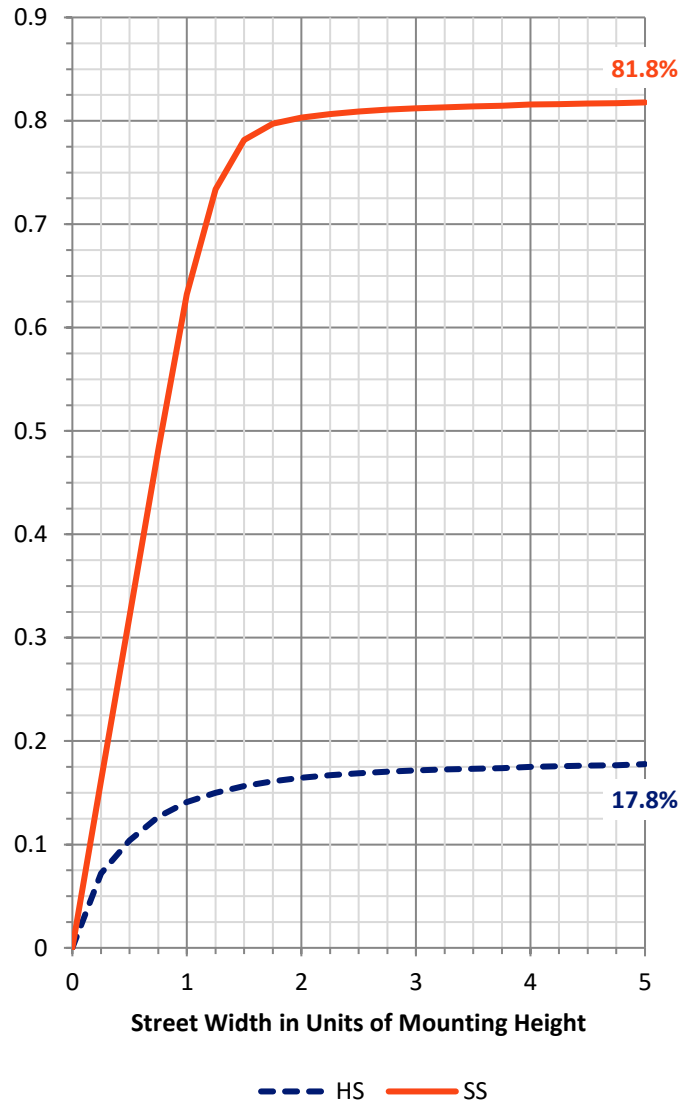
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 7692.9 | 0.0 | 7692.9 |
| | % Fixture | 18.1 | 0.0 | 18.1 |
| Street Side | Lumens | 34822.1 | 0.0 | 34822.1 |
| | % Fixture | 81.9 | 0.0 | 81.9 |
| Total | Lumens | 42515.0 | 0.0 | 42515.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 988.5 | 2.3 |
| 10°-20° | 2495.1 | 5.9 |
| 20°-30° | 3981.4 | 9.4 |
| 30°-40° | 6303.6 | 14.8 |
| 40°-50° | 9648.3 | 22.7 |
| 50°-60° | 10334.2 | 24.3 |
| 60°-70° | 6501.3 | 15.3 |
| 70°-80° | 1922.6 | 4.5 |
| 80°-90° | 339.9 | 0.8 |
| 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° | 42515.0 | 100.0 |
| 0°-180° | 42515.0 | 100.0 |

Coefficient of Utilization



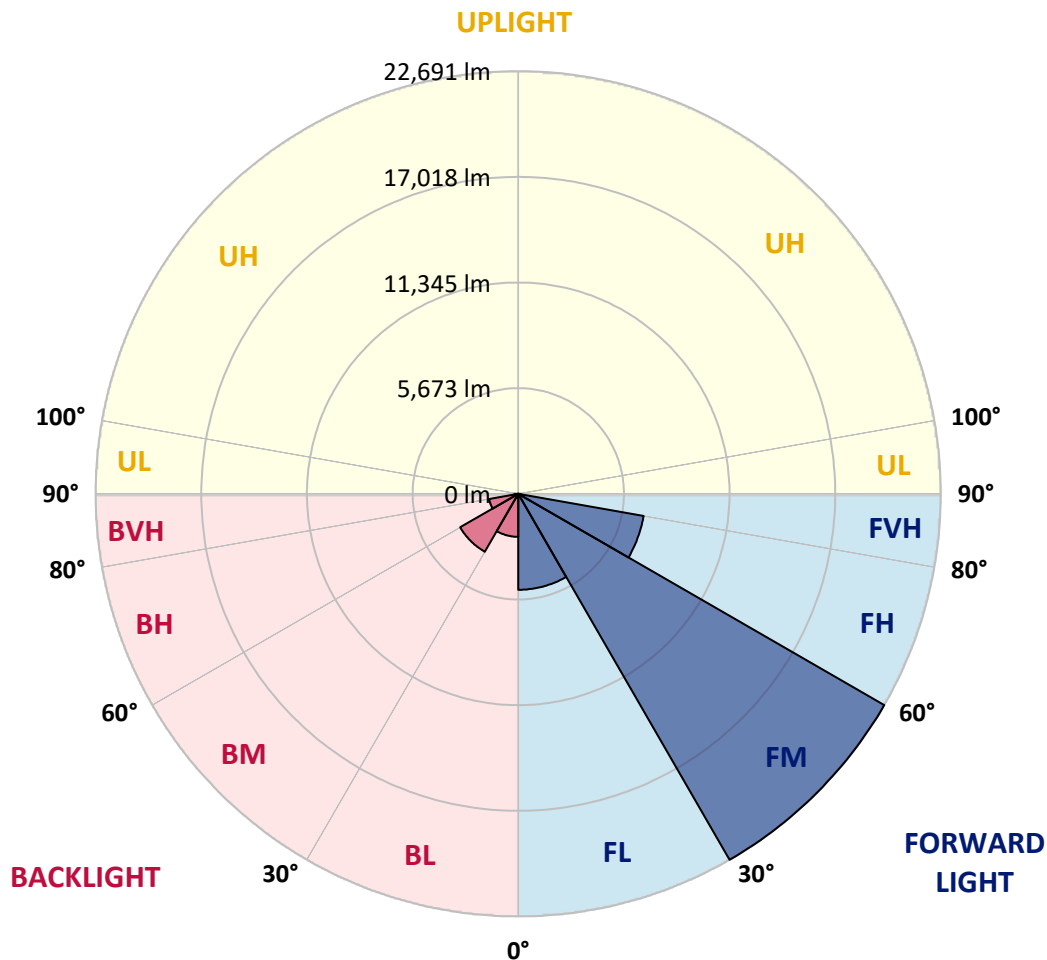
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 5152.8 | 12.1 | | | |
| FM (30°-60°) | 22690.5 | 53.4 | | | |
| FH (60°-80°) | 6835.1 | 16.1 | | | G3/7500 |
| FVH (80°-90°) | 143.6 | 0.3 | | | G2/225 |
| BL (0°-30°) | 2312.2 | 5.4 | B3/2500 | | |
| BM (30°-60°) | 3595.6 | 8.5 | B3/5000 | | |
| BH (60°-80°) | 1588.8 | 3.7 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 196.3 | 0.5 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 10652.8 | 10652.8 | 10652.8 | 10652.8 | 10652.8 | 10652.8 | 10652.8 | 10652.8 | 10652.8 | 10652.8 | 10652.8 |
| 2.5° | 12222.1 | 12213.3 | 12261.7 | 12096.8 | 11984.7 | 11833.1 | 11633.1 | 11378.1 | 11103.4 | 10813.3 | 10688.0 |
| 5° | 13323.3 | 13246.3 | 13296.8 | 13173.8 | 13050.7 | 12822.1 | 12525.4 | 12110.1 | 11602.3 | 11024.3 | 10716.6 |
| 7.5° | 13149.6 | 13096.8 | 13226.5 | 13336.4 | 13428.7 | 13400.1 | 13182.5 | 12747.4 | 12092.4 | 11252.9 | 10806.7 |
| 10° | 11749.6 | 11690.2 | 11872.7 | 12252.8 | 12811.2 | 13296.8 | 13560.5 | 13290.3 | 12593.6 | 11503.5 | 10894.6 |
| 12.5° | 10514.4 | 10485.9 | 10606.7 | 10914.4 | 11534.2 | 12466.0 | 13512.3 | 13765.0 | 13114.5 | 11800.1 | 11013.3 |
| 15° | 9986.9 | 9951.7 | 10028.7 | 10184.7 | 10580.4 | 11448.4 | 13072.6 | 14090.3 | 13626.6 | 12143.0 | 11202.3 |
| 17.5° | 9870.4 | 9830.9 | 9863.9 | 9945.2 | 10200.1 | 10861.6 | 12409.0 | 14250.7 | 14160.6 | 12525.4 | 11360.6 |
| 20° | 10085.8 | 10052.9 | 10057.3 | 10052.9 | 10230.8 | 10756.1 | 11947.4 | 14189.2 | 14626.5 | 12877.1 | 11514.4 |
| 22.5° | 10606.7 | 10551.8 | 10554.0 | 10437.5 | 10534.2 | 10940.7 | 11826.6 | 14024.4 | 15042.0 | 13184.8 | 11630.9 |
| 25° | 11455.1 | 11356.2 | 11376.0 | 11079.2 | 11052.9 | 11353.9 | 12015.6 | 13896.8 | 15455.2 | 13430.9 | 11652.9 |
| 27.5° | 12615.5 | 12503.5 | 12444.1 | 12002.3 | 11791.3 | 11940.8 | 12400.1 | 13940.8 | 15846.3 | 13644.1 | 11598.0 |
| 30° | 14066.1 | 13929.9 | 13808.9 | 13182.5 | 12800.1 | 12745.2 | 12997.9 | 14230.9 | 16307.9 | 13868.2 | 11503.5 |
| 32.5° | 15844.1 | 15685.9 | 15466.1 | 14635.4 | 14096.8 | 13808.9 | 13771.6 | 14747.4 | 16848.5 | 14154.0 | 11455.1 |
| 35° | 17960.7 | 17754.0 | 17441.9 | 16367.2 | 15685.9 | 15096.9 | 14791.4 | 15492.5 | 17589.2 | 14584.8 | 11510.0 |
| 37.5° | 20140.8 | 19908.0 | 19622.2 | 18343.1 | 17505.7 | 16637.6 | 16035.3 | 16503.5 | 18576.1 | 15169.4 | 11655.1 |
| 40° | 22151.9 | 21890.3 | 21624.4 | 20486.0 | 19587.0 | 18540.9 | 17558.5 | 17782.6 | 19782.6 | 15868.3 | 11901.3 |
| 42.5° | 23338.7 | 23145.3 | 23044.3 | 22428.8 | 21734.3 | 20672.7 | 19453.0 | 19299.1 | 21138.7 | 16672.8 | 12182.5 |
| 45° | 23285.9 | 23206.8 | 23518.9 | 23773.8 | 23609.0 | 23020.1 | 21672.8 | 20976.0 | 22499.2 | 17369.4 | 12441.9 |
| 47.5° | 22042.0 | 22094.8 | 22791.5 | 24224.4 | 24855.2 | 25162.9 | 24200.2 | 22622.3 | 23681.6 | 17890.4 | 12558.4 |
| 50° | 18657.4 | 18701.3 | 20314.5 | 23404.6 | 25176.2 | 26910.1 | 26708.0 | 24228.8 | 24598.1 | 18209.0 | 12532.0 |
| 52.5° | 15978.2 | 16006.8 | 16699.1 | 20973.9 | 24116.7 | 27789.3 | 28967.3 | 25743.2 | 25268.4 | 18296.9 | 12384.8 |
| 55° | 12035.3 | 12134.2 | 12910.1 | 16455.1 | 21360.7 | 27092.6 | 30343.2 | 27303.6 | 25692.5 | 18305.7 | 12230.9 |
| 57.5° | 7030.9 | 7138.5 | 8096.8 | 11169.3 | 16602.3 | 24664.1 | 30552.0 | 28688.2 | 25980.5 | 18235.4 | 12138.6 |
| 60° | 3444.0 | 3490.1 | 3907.7 | 5870.4 | 10237.5 | 19984.8 | 28872.8 | 29358.6 | 26141.0 | 18198.1 | 12134.2 |
| 62.5° | 2320.9 | 2314.3 | 2331.9 | 2896.8 | 5044.0 | 12839.7 | 25373.9 | 28184.9 | 26055.2 | 18055.2 | 12090.3 |
| 65° | 1995.7 | 1971.5 | 1905.5 | 2033.0 | 2613.2 | 5872.6 | 19604.7 | 24681.6 | 25402.5 | 17696.9 | 11789.1 |
| 67.5° | 1725.3 | 1727.5 | 1729.7 | 1690.1 | 1865.9 | 2709.9 | 11980.4 | 19442.0 | 23059.6 | 16000.1 | 10628.7 |
| 70° | 1428.5 | 1448.3 | 1457.1 | 1457.1 | 1520.9 | 1778.1 | 5114.3 | 13325.4 | 18189.2 | 12545.2 | 8560.5 |
| 72.5° | 1301.1 | 1259.3 | 1263.7 | 1241.8 | 1241.8 | 1353.8 | 2059.3 | 7553.9 | 11459.5 | 7057.2 | 5224.2 |
| 75° | 1061.6 | 1087.9 | 1092.3 | 1077.0 | 1026.4 | 1033.0 | 1222.0 | 3169.3 | 4903.4 | 2927.5 | 2582.5 |
| 77.5° | 916.5 | 916.5 | 925.3 | 914.3 | 874.7 | 773.7 | 815.4 | 1228.6 | 1668.2 | 1200.0 | 1290.2 |
| 80° | 736.3 | 734.1 | 771.4 | 793.5 | 731.8 | 571.4 | 520.9 | 679.2 | 740.7 | 527.5 | 670.3 |
| 82.5° | 358.2 | 380.3 | 529.7 | 604.4 | 556.1 | 413.2 | 318.7 | 422.0 | 395.6 | 233.0 | 301.1 |
| 85° | 208.8 | 197.8 | 237.4 | 336.3 | 318.7 | 228.6 | 153.9 | 219.8 | 206.6 | 118.7 | 120.8 |
| 87.5° | 65.9 | 61.5 | 48.4 | 114.3 | 92.4 | 63.8 | 41.7 | 63.8 | 57.1 | 26.3 | 26.3 |
| 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):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 10652.8 | 10652.8 | 10652.8 | 10652.8 | 10652.8 | 10652.8 | 10652.8 | 10652.8 | 10652.8 | 10652.8 |
| 2.5° | 10532.0 | 10272.7 | 10015.5 | 9780.3 | 9637.5 | 9545.2 | 9452.9 | 9349.5 | 9310.0 | 9250.6 |
| 5° | 10426.5 | 9925.4 | 9479.2 | 9094.6 | 8745.2 | 8470.4 | 8193.5 | 7969.3 | 7868.2 | 7936.4 |
| 7.5° | 10364.9 | 9639.7 | 8951.7 | 8246.2 | 7567.2 | 7024.2 | 6551.7 | 6219.8 | 6070.4 | 6107.8 |
| 10° | 10310.0 | 9316.6 | 8268.3 | 7153.9 | 6178.1 | 5505.6 | 5022.0 | 4769.3 | 4674.8 | 4694.6 |
| 12.5° | 10259.4 | 8954.0 | 7444.1 | 5978.1 | 4940.7 | 4496.8 | 4358.3 | 4360.5 | 4378.1 | 4391.3 |
| 15° | 10250.6 | 8516.6 | 6523.1 | 4949.5 | 4272.6 | 4244.0 | 4393.5 | 4488.0 | 4538.5 | 4553.9 |
| 17.5° | 10237.5 | 7993.5 | 5584.7 | 4248.4 | 4109.9 | 4303.4 | 4441.8 | 4503.3 | 4542.9 | 4545.1 |
| 20° | 10184.7 | 7329.8 | 4718.7 | 3914.4 | 4074.8 | 4241.8 | 4327.5 | 4375.8 | 4408.8 | 4419.8 |
| 22.5° | 10022.0 | 6591.3 | 4044.0 | 3764.9 | 3934.2 | 4068.2 | 4169.3 | 4224.2 | 4244.0 | 4257.2 |
| 25° | 9729.8 | 5764.9 | 3578.1 | 3622.0 | 3738.5 | 3907.7 | 3989.1 | 4000.1 | 3993.5 | 4013.2 |
| 27.5° | 9347.4 | 4879.2 | 3288.0 | 3428.6 | 3578.1 | 3723.1 | 3767.1 | 3760.5 | 3747.3 | 3769.2 |
| 30° | 8885.8 | 4083.6 | 3103.3 | 3211.0 | 3415.4 | 3547.3 | 3586.9 | 3571.5 | 3545.1 | 3569.3 |
| 32.5° | 8397.9 | 3433.0 | 2951.7 | 3059.4 | 3281.3 | 3411.0 | 3450.6 | 3435.2 | 3415.4 | 3435.2 |
| 35° | 7942.9 | 2978.0 | 2811.1 | 2958.3 | 3175.9 | 3303.4 | 3353.9 | 3356.1 | 3356.1 | 3380.2 |
| 37.5° | 7525.3 | 2712.1 | 2694.5 | 2894.5 | 3103.3 | 3217.6 | 3290.1 | 3294.6 | 3200.0 | 3206.6 |
| 40° | 7138.5 | 2600.0 | 2641.8 | 2852.8 | 3033.0 | 3142.9 | 3147.3 | 2901.2 | 2727.5 | 2723.1 |
| 42.5° | 6822.1 | 2578.1 | 2657.2 | 2848.4 | 2982.4 | 2986.8 | 2677.0 | 2485.7 | 2437.3 | 2439.6 |
| 45° | 6525.4 | 2571.4 | 2692.4 | 2848.4 | 2907.7 | 2580.2 | 2371.4 | 2320.9 | 2325.3 | 2342.8 |
| 47.5° | 6193.5 | 2545.1 | 2698.9 | 2808.8 | 2692.4 | 2294.6 | 2233.0 | 2211.0 | 2202.2 | 2206.6 |
| 50° | 5830.8 | 2450.6 | 2615.4 | 2729.7 | 2323.1 | 2171.5 | 2094.5 | 2087.9 | 2098.9 | 2105.6 |
| 52.5° | 5448.4 | 2296.7 | 2472.5 | 2586.8 | 2153.8 | 2063.7 | 1978.0 | 1993.4 | 2041.8 | 2057.2 |
| 55° | 5197.9 | 2116.5 | 2283.5 | 2301.1 | 2035.1 | 1962.7 | 1890.1 | 1925.3 | 2015.5 | 2044.0 |
| 57.5° | 5132.0 | 1925.3 | 2068.1 | 2048.4 | 1883.5 | 1874.7 | 1830.8 | 1861.6 | 1975.9 | 2017.6 |
| 60° | 5112.2 | 1753.9 | 1857.2 | 1841.8 | 1736.2 | 1778.1 | 1767.1 | 1782.5 | 1822.0 | 1835.2 |
| 62.5° | 4958.3 | 1617.6 | 1668.2 | 1646.2 | 1604.4 | 1676.9 | 1703.3 | 1670.3 | 1701.1 | 1716.5 |
| 65° | 4567.1 | 1507.7 | 1483.5 | 1468.1 | 1485.7 | 1551.6 | 1604.4 | 1538.5 | 1567.0 | 1611.0 |
| 67.5° | 3920.9 | 1358.2 | 1292.3 | 1309.9 | 1364.9 | 1400.0 | 1468.1 | 1393.4 | 1417.6 | 1492.3 |
| 70° | 3171.5 | 1169.2 | 1109.9 | 1160.4 | 1213.2 | 1285.8 | 1296.7 | 1246.2 | 1303.3 | 1386.8 |
| 72.5° | 2243.9 | 978.1 | 936.2 | 1039.6 | 1057.2 | 1151.7 | 1127.5 | 1103.3 | 1182.4 | 1211.0 |
| 75° | 1556.1 | 789.0 | 764.9 | 844.0 | 907.7 | 989.0 | 971.4 | 1000.0 | 1167.1 | 1180.2 |
| 77.5° | 984.6 | 613.2 | 597.8 | 648.3 | 736.3 | 826.4 | 855.0 | 1180.2 | 1993.4 | 2072.5 |
| 80° | 571.4 | 457.2 | 439.5 | 479.1 | 556.1 | 639.6 | 824.2 | 1448.3 | 1314.3 | 1298.9 |
| 82.5° | 318.7 | 314.3 | 292.3 | 303.3 | 371.5 | 461.6 | 1164.8 | 1019.8 | 828.6 | 855.0 |
| 85° | 149.4 | 184.6 | 158.3 | 151.7 | 208.8 | 540.7 | 778.1 | 582.4 | 386.8 | 378.0 |
| 87.5° | 39.6 | 35.2 | 35.2 | 39.6 | 87.9 | 466.0 | 309.9 | 248.4 | 147.3 | 142.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)