

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: P194317

Luminaire Tested: **GAN-AF-09-LED-U-AFL-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P194317
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-09-LED-U-AFL-7060
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54593 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 501
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

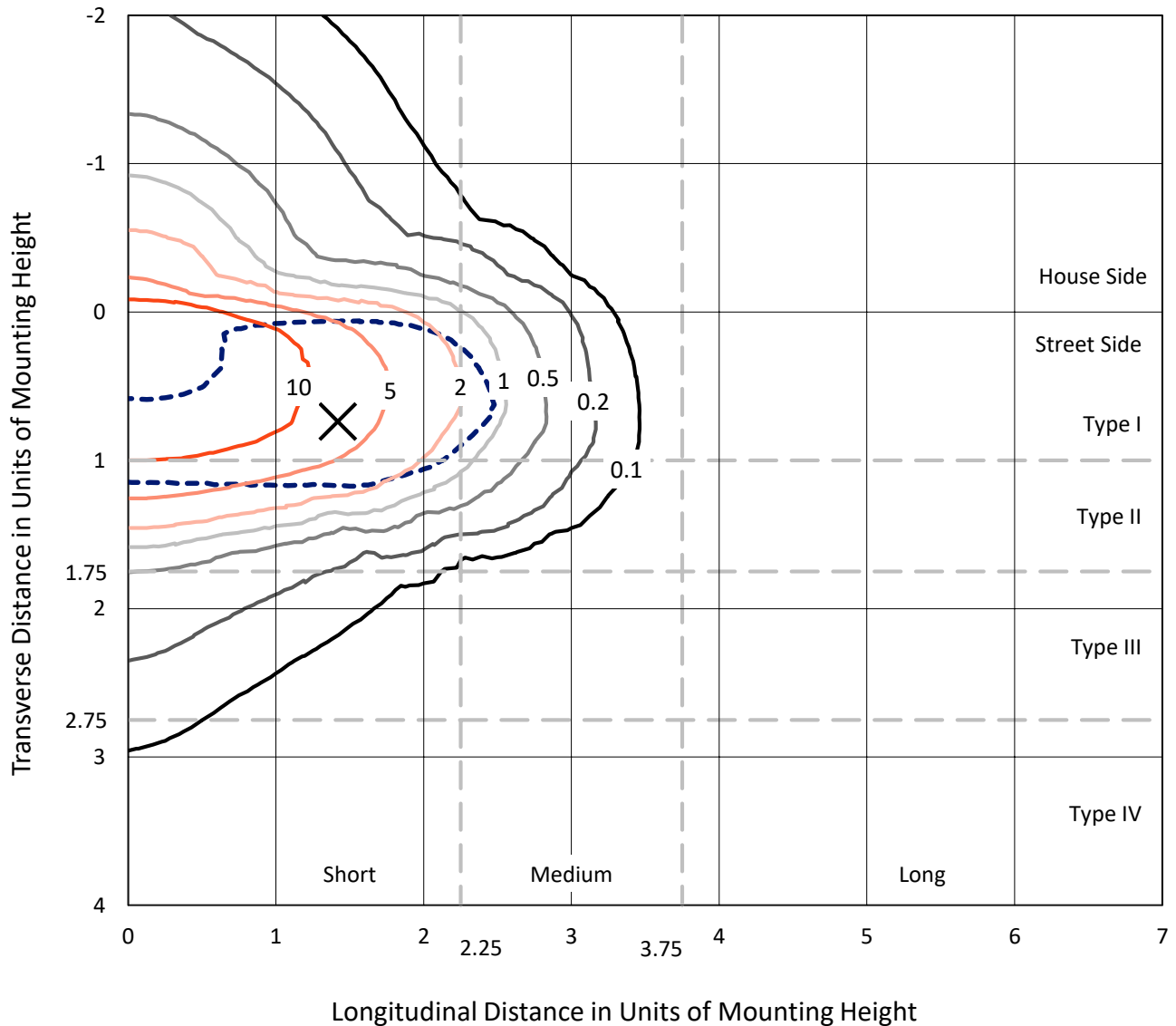


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

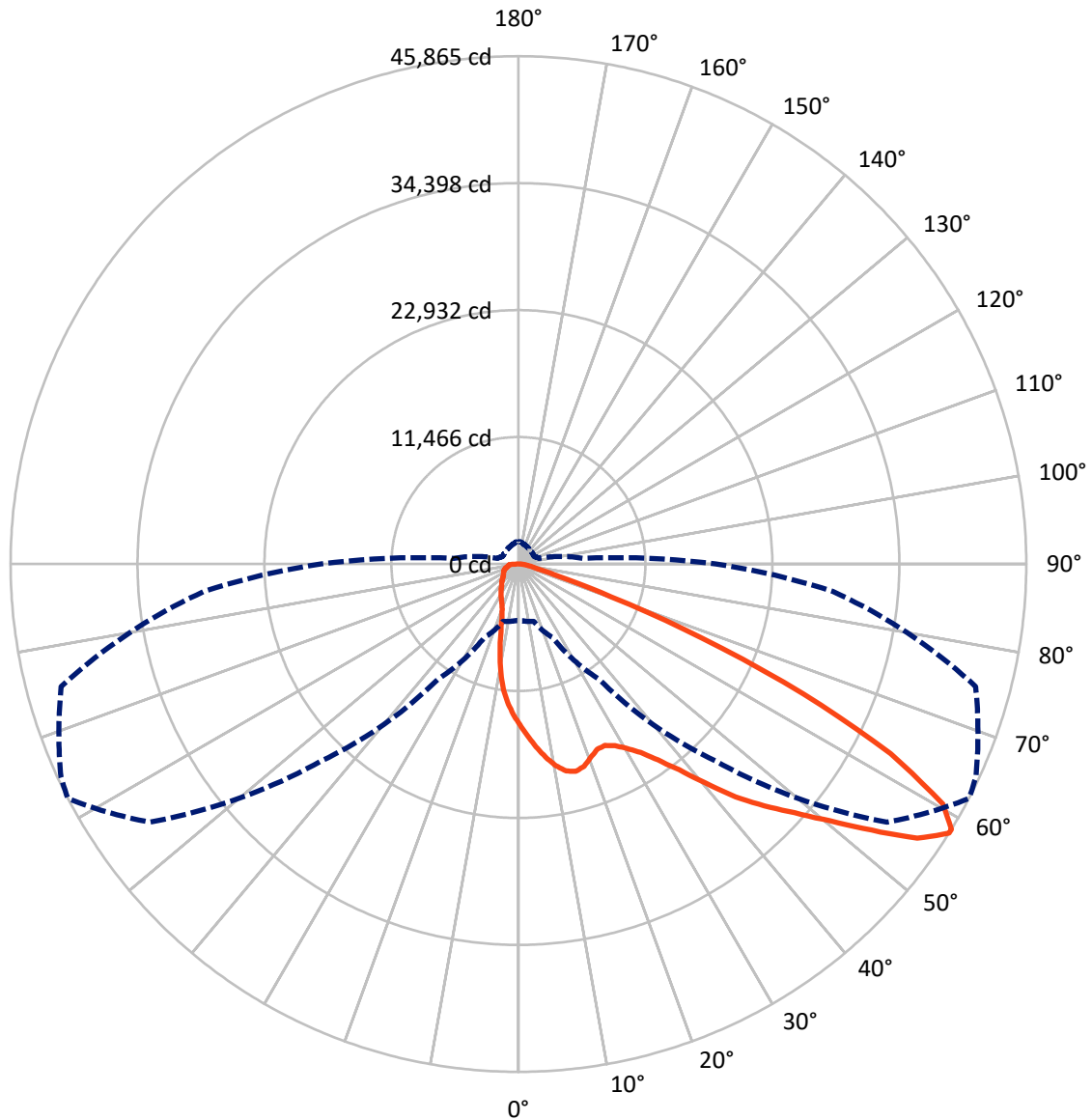


Based on 30 foot mounting height. Maximum calculated value = 19.6 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 8325.7 | 0.0 | 8325.7 |
| | % Fixture | 15.3 | 0.0 | 15.3 |
| Street Side | Lumens | 46267.4 | 0.0 | 46267.4 |
| | % Fixture | 84.7 | 0.0 | 84.7 |
| Total | Lumens | 54593.0 | 0.0 | 54593.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1297.0 | 2.4 |
| 10°-20° | 3315.2 | 6.1 |
| 20°-30° | 5359.1 | 9.8 |
| 30°-40° | 8507.6 | 15.6 |
| 40°-50° | 12448.4 | 22.8 |
| 50°-60° | 13019.9 | 23.8 |
| 60°-70° | 7692.2 | 14.1 |
| 70°-80° | 2166.9 | 4.0 |
| 80°-90° | 786.7 | 1.4 |
| 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° | 54593.0 | 100.0 |
| 0°-180° | 54593.0 | 100.0 |

Coefficient of Utilization



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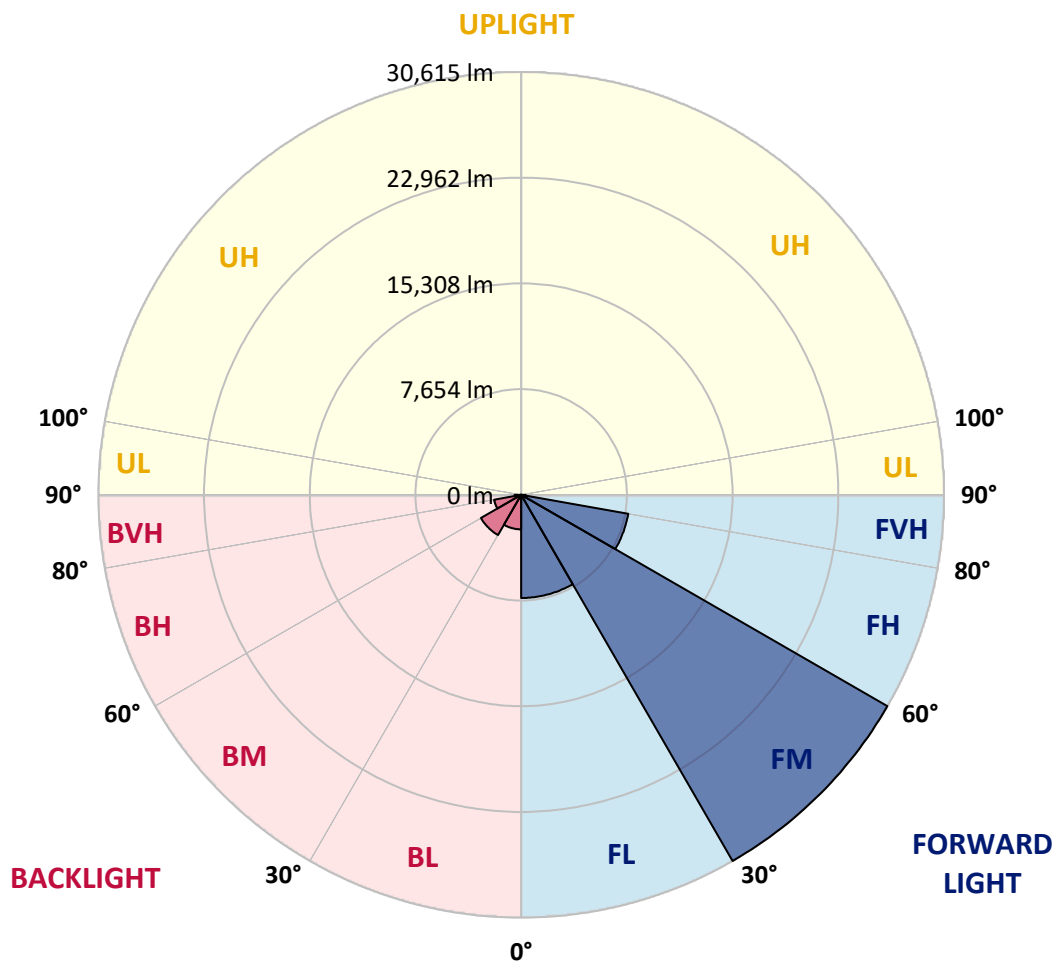
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 7469.0 | 13.7 | | | |
| FM | (30°-60°) | 30615.5 | 56.1 | | | |
| FH | (60°-80°) | 7872.5 | 14.4 | | | G4/12000 |
| FVH | (80°-90°) | 310.4 | 0.6 | | | G3/500 |
| BL | (0°-30°) | 2502.3 | 4.6 | B4/5000 | | |
| BM | (30°-60°) | 3360.4 | 6.2 | B3/5000 | | |
| BH | (60°-80°) | 1986.6 | 3.6 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 476.4 | 0.9 | | | G3/500 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 62.5° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 14501.5 | 14501.5 | 14501.5 | 14501.5 | 14501.5 | 14501.5 | 14501.5 | 14501.5 | 14501.5 | 14501.5 | 14501.5 |
| 2.5° | 16571.0 | 16437.3 | 16352.4 | 16277.9 | 16180.2 | 15972.0 | 15691.8 | 15514.4 | 15424.4 | 15118.5 | 14756.0 |
| 5° | 18195.7 | 18077.4 | 17990.0 | 17889.7 | 17714.9 | 17388.5 | 16936.0 | 16576.1 | 16398.7 | 15786.9 | 15061.9 |
| 7.5° | 17815.2 | 17864.0 | 18015.7 | 18280.5 | 18506.7 | 18463.0 | 18059.4 | 17601.8 | 17367.9 | 16517.0 | 15416.7 |
| 10° | 15522.1 | 15606.9 | 15869.1 | 16488.7 | 17491.3 | 18519.6 | 18833.2 | 18517.0 | 18280.5 | 17239.4 | 15781.7 |
| 12.5° | 15061.9 | 15059.4 | 15079.9 | 15244.5 | 15840.9 | 17288.2 | 18858.9 | 19177.7 | 19036.3 | 17928.3 | 16154.5 |
| 15° | 15249.6 | 15254.7 | 15239.3 | 15308.7 | 15493.8 | 16067.1 | 18072.3 | 19432.2 | 19532.4 | 18622.4 | 16540.1 |
| 17.5° | 15743.2 | 15730.3 | 15671.2 | 15671.2 | 15738.0 | 15961.7 | 17146.8 | 19195.7 | 19658.4 | 19236.8 | 16879.4 |
| 20° | 16571.0 | 16511.8 | 16355.0 | 16211.1 | 16139.1 | 16259.9 | 16766.3 | 18650.7 | 19439.9 | 19774.1 | 17159.7 |
| 22.5° | 17573.5 | 17527.3 | 17272.8 | 16964.3 | 16714.9 | 16712.4 | 16961.7 | 18175.1 | 19062.0 | 20280.5 | 17396.2 |
| 25° | 18869.2 | 18794.6 | 18416.7 | 17923.2 | 17486.1 | 17319.0 | 17388.5 | 18152.0 | 18856.3 | 20830.7 | 17607.0 |
| 27.5° | 20391.1 | 20254.8 | 19807.5 | 19095.4 | 18452.7 | 18116.0 | 18015.7 | 18571.0 | 19044.0 | 21511.9 | 17900.0 |
| 30° | 22236.9 | 22080.0 | 21506.8 | 20578.7 | 19671.3 | 19118.6 | 18905.2 | 19313.9 | 19666.1 | 22342.3 | 18370.5 |
| 32.5° | 24337.2 | 24110.9 | 23447.7 | 22424.5 | 21231.7 | 20388.5 | 20041.5 | 20296.0 | 20576.2 | 23342.3 | 18959.2 |
| 35° | 27239.5 | 26969.6 | 26010.7 | 24599.4 | 23252.3 | 22092.9 | 21537.6 | 21722.7 | 21995.2 | 24833.3 | 19810.1 |
| 37.5° | 29219.0 | 29098.2 | 28460.6 | 27134.1 | 25668.8 | 24334.6 | 23476.0 | 23583.9 | 23738.2 | 26697.1 | 20900.1 |
| 40° | 29201.0 | 29249.8 | 29262.7 | 29275.5 | 28278.1 | 27000.4 | 26077.5 | 25964.4 | 25933.6 | 28743.4 | 22139.2 |
| 42.5° | 27738.2 | 27938.8 | 28586.6 | 29900.2 | 30506.9 | 29920.8 | 29075.0 | 28748.5 | 28586.6 | 31154.7 | 23452.8 |
| 45° | 25499.1 | 25607.1 | 26820.5 | 29386.1 | 31648.3 | 32812.9 | 32172.8 | 31144.5 | 30851.4 | 33370.7 | 24542.8 |
| 47.5° | 24344.9 | 24463.1 | 25226.6 | 28023.6 | 31635.5 | 35149.7 | 35519.9 | 33561.0 | 33036.5 | 35298.8 | 25483.7 |
| 50° | 21596.7 | 21843.5 | 22805.0 | 25653.4 | 30481.2 | 36224.2 | 39018.6 | 36440.2 | 35355.3 | 37175.4 | 26427.2 |
| 52.5° | 16550.4 | 16930.9 | 18008.0 | 21756.1 | 27553.1 | 35692.1 | 41818.2 | 39931.2 | 38399.1 | 39118.9 | 27236.9 |
| 55° | 10439.8 | 10722.5 | 11627.4 | 15365.3 | 22041.5 | 32923.4 | 42879.9 | 43707.6 | 42345.2 | 40959.5 | 27938.8 |
| 57.5° | 5676.2 | 5802.1 | 6141.5 | 8483.4 | 14337.0 | 26802.5 | 41332.3 | 45856.8 | 45291.2 | 42522.5 | 28468.3 |
| 58° | 5079.8 | 5164.6 | 5375.4 | 7352.3 | 12714.9 | 25128.9 | 40645.9 | 45864.5 | 45581.7 | 42751.3 | 28509.5 |
| 60° | 3768.7 | 3725.0 | 3537.3 | 4195.4 | 7077.2 | 17360.2 | 36496.7 | 44029.0 | 44859.3 | 43031.5 | 28308.9 |
| 62.5° | 3311.1 | 3205.7 | 2822.7 | 2779.0 | 3442.2 | 7997.6 | 27925.9 | 37715.3 | 39676.7 | 41432.5 | 27090.4 |
| 65° | 3110.6 | 2997.5 | 2503.9 | 2344.5 | 2483.3 | 3383.1 | 16450.1 | 28285.8 | 30746.0 | 36584.1 | 23974.7 |
| 67.5° | 2961.5 | 2815.0 | 2300.8 | 2082.3 | 2092.6 | 2236.5 | 6593.9 | 17815.2 | 20583.9 | 27776.8 | 18648.1 |
| 70° | 2817.5 | 2658.1 | 2128.6 | 1876.6 | 1817.5 | 1768.7 | 2622.2 | 8917.9 | 11429.5 | 17545.3 | 11889.7 |
| 72.5° | 2663.3 | 2506.5 | 1976.9 | 1714.7 | 1599.0 | 1437.0 | 1712.1 | 3647.9 | 5095.2 | 8300.9 | 5393.4 |
| 75° | 2439.6 | 2298.2 | 1825.2 | 1570.7 | 1406.2 | 1190.3 | 1293.1 | 1904.9 | 2285.4 | 3306.0 | 2599.0 |
| 77.5° | 2164.6 | 2048.9 | 1655.6 | 1452.5 | 1246.8 | 966.6 | 994.9 | 1321.4 | 1465.3 | 1892.1 | 1545.0 |
| 80° | 1555.3 | 1596.4 | 1473.0 | 1305.9 | 1110.6 | 784.1 | 763.5 | 964.0 | 1041.1 | 1216.0 | 1005.2 |
| 82.5° | 1092.6 | 1115.7 | 1218.5 | 1066.9 | 917.8 | 617.0 | 563.0 | 678.7 | 724.9 | 799.5 | 542.4 |
| 85° | 753.2 | 727.5 | 835.5 | 742.9 | 663.2 | 411.3 | 385.6 | 460.2 | 488.4 | 496.2 | 280.2 |
| 87.5° | 452.4 | 452.4 | 483.3 | 398.5 | 357.3 | 213.4 | 208.2 | 262.2 | 280.2 | 267.4 | 154.2 |
| 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° | 14501.5 | 14501.5 | 14501.5 | 14501.5 | 14501.5 | 14501.5 | 14501.5 | 14501.5 | 14501.5 | 14501.5 | 14501.5 |
| 2.5° | 14540.1 | 14357.6 | 13969.4 | 13658.3 | 13265.0 | 12856.2 | 12627.5 | 12383.2 | 12216.1 | 12095.3 | 12288.1 |
| 5° | 14650.6 | 14277.9 | 13475.8 | 12714.9 | 11874.2 | 11000.2 | 10336.9 | 9720.0 | 9290.6 | 9023.3 | 9275.2 |
| 7.5° | 14825.4 | 14252.2 | 12974.5 | 11673.7 | 10164.7 | 8709.7 | 7408.9 | 6593.9 | 6118.4 | 5884.4 | 6030.9 |
| 10° | 15025.9 | 14211.0 | 12385.8 | 10262.4 | 8103.0 | 6270.0 | 5298.3 | 4969.2 | 4861.3 | 4817.6 | 4838.1 |
| 12.5° | 15193.0 | 14123.6 | 11663.4 | 8555.4 | 6084.9 | 4951.2 | 4671.0 | 4663.3 | 4686.5 | 4691.6 | 4699.3 |
| 15° | 15311.3 | 13995.1 | 10591.4 | 6776.5 | 4866.4 | 4511.6 | 4496.2 | 4542.5 | 4586.2 | 4604.2 | 4614.5 |
| 17.5° | 15391.0 | 13730.3 | 9380.6 | 5357.4 | 4360.0 | 4298.3 | 4334.3 | 4393.4 | 4439.7 | 4452.5 | 4462.8 |
| 20° | 15383.3 | 13342.1 | 7938.4 | 4467.9 | 4084.9 | 4084.9 | 4146.6 | 4192.9 | 4195.4 | 4180.0 | 4187.7 |
| 22.5° | 15303.6 | 12810.0 | 6540.0 | 3994.9 | 3840.7 | 3884.4 | 3946.1 | 3902.4 | 3722.4 | 3604.2 | 3611.9 |
| 25° | 15169.9 | 12175.0 | 5342.0 | 3694.1 | 3614.5 | 3691.6 | 3673.6 | 3344.5 | 3087.5 | 2971.8 | 2971.8 |
| 27.5° | 15051.7 | 11424.3 | 4421.7 | 3431.9 | 3388.2 | 3483.3 | 3164.6 | 2866.4 | 2758.4 | 2704.4 | 2686.4 |
| 30° | 14966.8 | 10614.6 | 3807.3 | 3180.0 | 3174.9 | 3105.4 | 2745.5 | 2663.3 | 2645.3 | 2601.6 | 2586.2 |
| 32.5° | 14987.4 | 9794.5 | 3413.9 | 2958.9 | 2976.9 | 2658.1 | 2545.0 | 2563.0 | 2547.6 | 2501.3 | 2480.8 |
| 35° | 15157.1 | 9015.6 | 3156.9 | 2758.4 | 2704.4 | 2401.1 | 2426.8 | 2460.2 | 2455.1 | 2390.8 | 2370.2 |
| 37.5° | 15460.4 | 8277.8 | 2987.2 | 2591.3 | 2359.9 | 2272.5 | 2313.7 | 2365.1 | 2352.2 | 2308.5 | 2293.1 |
| 40° | 15779.2 | 7583.7 | 2848.4 | 2460.2 | 2156.8 | 2185.1 | 2221.1 | 2249.4 | 2262.2 | 2275.1 | 2264.8 |
| 42.5° | 16090.2 | 6858.7 | 2678.7 | 2326.5 | 2072.0 | 2102.9 | 2118.3 | 2146.6 | 2216.0 | 2264.8 | 2262.2 |
| 45° | 16275.3 | 6177.5 | 2503.9 | 2136.3 | 2005.2 | 2023.2 | 2012.9 | 2069.4 | 2154.3 | 2234.0 | 2236.5 |
| 47.5° | 16481.0 | 5647.9 | 2365.1 | 1961.5 | 1940.9 | 1953.8 | 1922.9 | 1979.5 | 2056.6 | 2154.3 | 2164.6 |
| 50° | 16730.3 | 5331.7 | 2254.5 | 1822.7 | 1853.5 | 1853.5 | 1845.8 | 1897.2 | 2005.2 | 2118.3 | 2138.9 |
| 52.5° | 17013.1 | 5270.0 | 2162.0 | 1722.4 | 1766.1 | 1763.5 | 1771.2 | 1848.4 | 1966.6 | 2077.2 | 2095.1 |
| 55° | 17357.6 | 5437.1 | 2061.7 | 1647.8 | 1681.3 | 1691.5 | 1717.3 | 1804.7 | 1904.9 | 2030.9 | 2038.6 |
| 57.5° | 17758.6 | 5776.4 | 1982.0 | 1588.7 | 1604.1 | 1637.6 | 1678.7 | 1758.4 | 1866.4 | 2005.2 | 2012.9 |
| 58° | 17825.5 | 5848.4 | 1969.2 | 1583.6 | 1588.7 | 1627.3 | 1673.5 | 1750.7 | 1858.6 | 2010.3 | 2018.0 |
| 60° | 17828.1 | 6087.5 | 1940.9 | 1560.4 | 1529.6 | 1593.9 | 1645.3 | 1722.4 | 1845.8 | 2028.3 | 2046.3 |
| 62.5° | 17195.6 | 6084.9 | 1920.3 | 1527.0 | 1467.9 | 1547.6 | 1606.7 | 1696.7 | 1832.9 | 2072.0 | 2108.0 |
| 65° | 15141.6 | 5529.7 | 1822.7 | 1475.6 | 1419.0 | 1506.5 | 1573.3 | 1678.7 | 1868.9 | 2262.2 | 2285.4 |
| 67.5° | 11843.4 | 4532.2 | 1640.1 | 1403.6 | 1354.8 | 1465.3 | 1552.7 | 1676.1 | 1907.5 | 2305.9 | 2321.4 |
| 70° | 7830.5 | 3390.8 | 1439.6 | 1321.4 | 1287.9 | 1416.5 | 1563.0 | 1763.5 | 1863.8 | 2213.4 | 2172.3 |
| 72.5° | 4064.3 | 2380.5 | 1277.7 | 1218.5 | 1210.8 | 1372.8 | 1712.1 | 1753.2 | 1820.1 | 2082.3 | 2030.9 |
| 75° | 2133.7 | 1653.0 | 1136.3 | 1105.4 | 1118.3 | 1362.5 | 2020.6 | 1707.0 | 1763.5 | 1992.3 | 2090.0 |
| 77.5° | 1305.9 | 1334.2 | 1015.4 | 1002.6 | 1028.3 | 1331.6 | 2018.0 | 1647.8 | 1681.3 | 1832.9 | 1940.9 |
| 80° | 874.1 | 1082.3 | 922.9 | 925.5 | 943.5 | 1218.5 | 1812.4 | 1555.3 | 1581.0 | 1732.7 | 1843.2 |
| 82.5° | 552.7 | 640.1 | 838.1 | 881.8 | 858.6 | 1005.2 | 1539.9 | 1416.5 | 1452.5 | 1982.0 | 2095.1 |
| 85° | 280.2 | 401.0 | 727.5 | 848.3 | 773.8 | 704.4 | 1249.4 | 1241.7 | 1259.7 | 1429.3 | 1493.6 |
| 87.5° | 128.5 | 221.1 | 568.1 | 740.4 | 583.6 | 439.6 | 907.5 | 920.3 | 992.3 | 1015.4 | 1015.4 |
| 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)