

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: P190953

Luminaire Tested: **GAN-AF-05-LED-U-AFL-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190953
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-05-LED-U-AFL-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20570.5 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

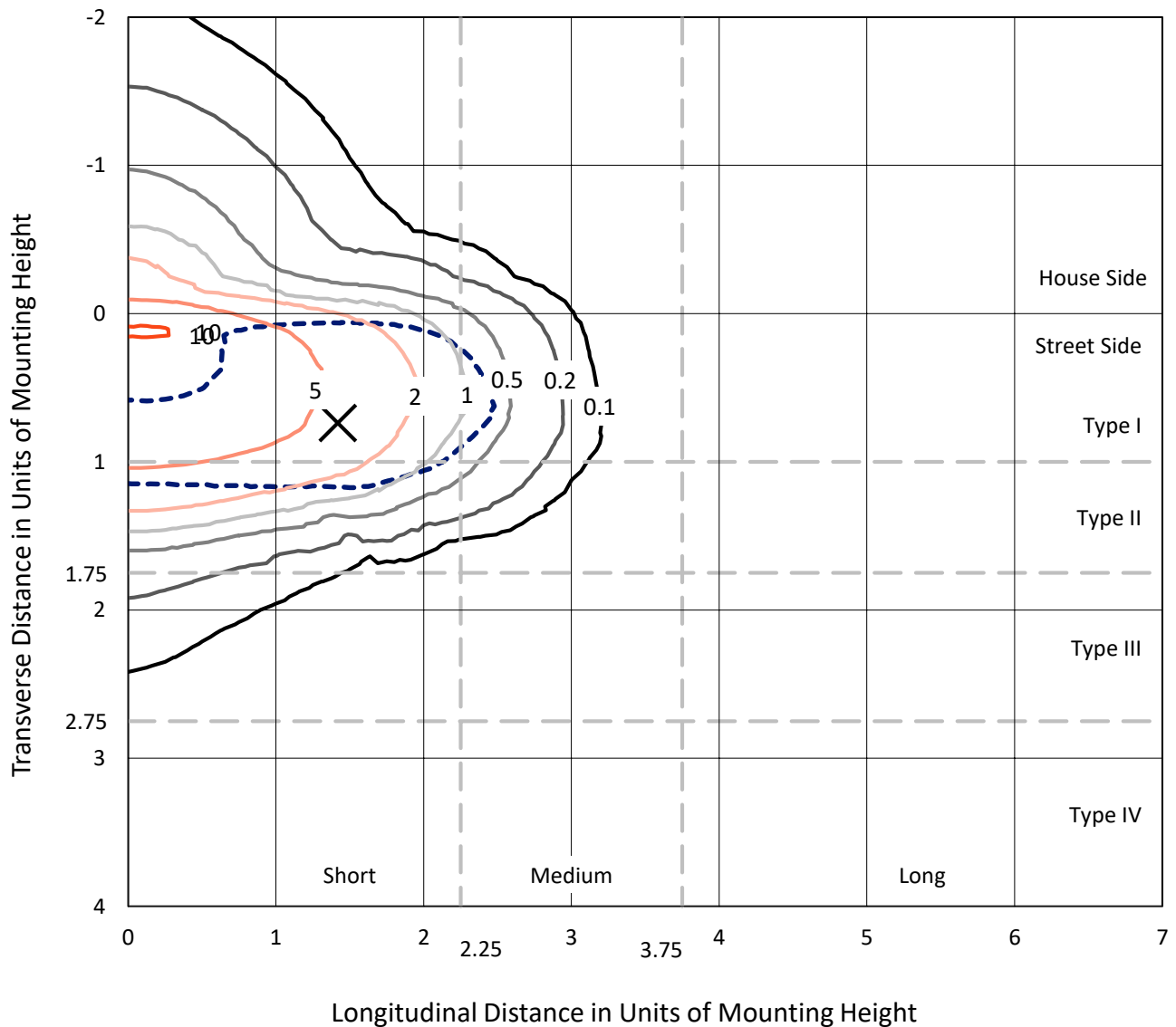
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

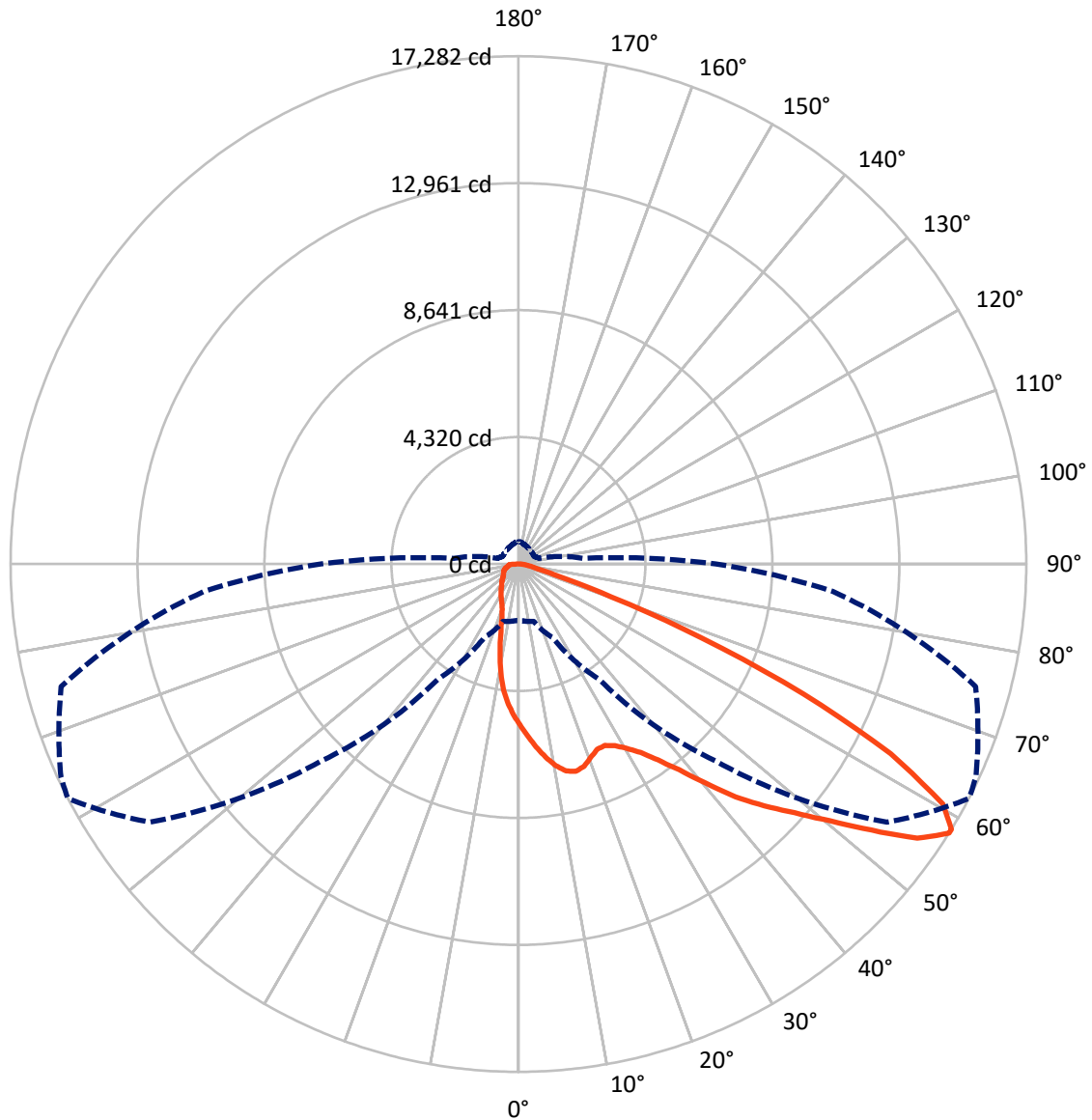
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.7 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 | 3137.1 | 0.0 | 3137.1 |
| | % Fixture | 15.3 | 0.0 | 15.3 |
| Street Side | Lumens | 17433.4 | 0.0 | 17433.4 |
| | % Fixture | 84.7 | 0.0 | 84.7 |
| Total | Lumens | 20570.5 | 0.0 | 20570.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 488.7 | 2.4 |
| 10°-20° | 1249.2 | 6.1 |
| 20°-30° | 2019.3 | 9.8 |
| 30°-40° | 3205.6 | 15.6 |
| 40°-50° | 4690.5 | 22.8 |
| 50°-60° | 4905.9 | 23.8 |
| 60°-70° | 2898.4 | 14.1 |
| 70°-80° | 816.5 | 4.0 |
| 80°-90° | 296.4 | 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° | 20570.5 | 100.0 |
| 0°-180° | 20570.5 | 100.0 |



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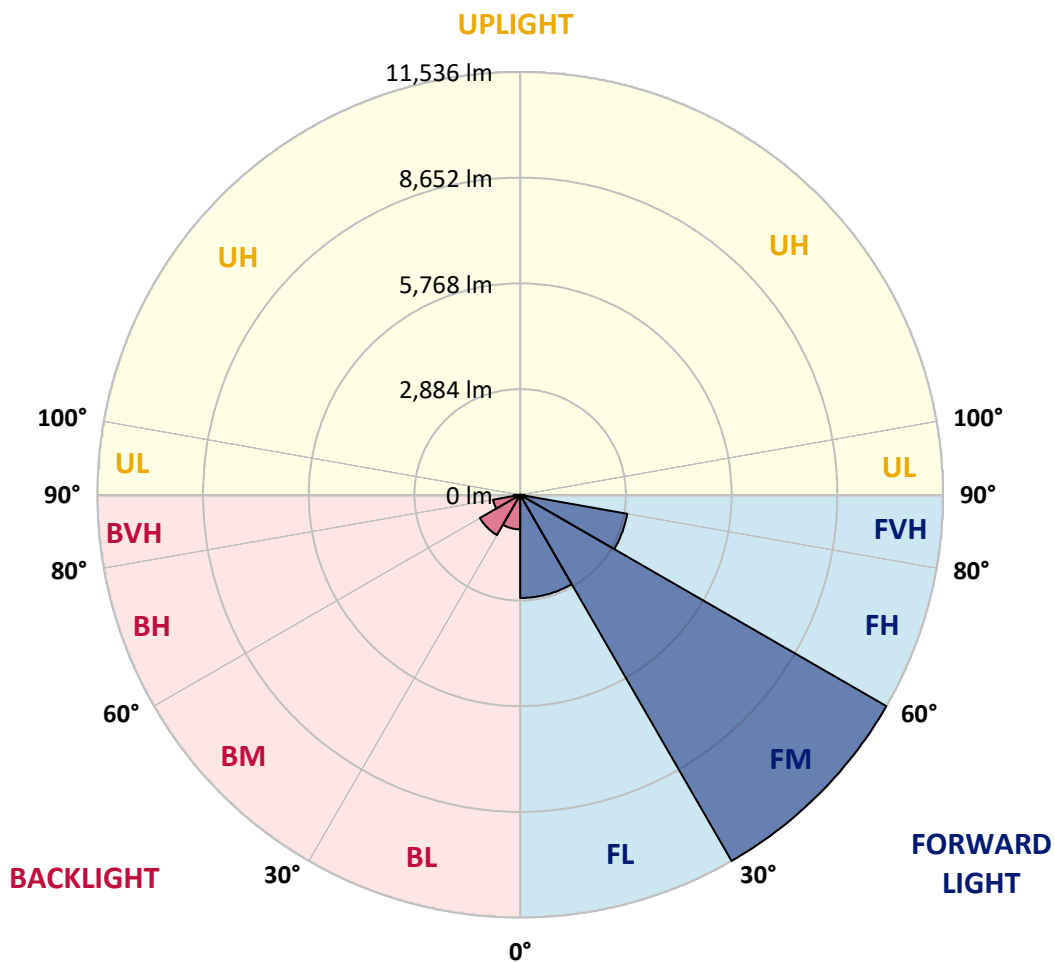
CATALOG NUMBER: GAN-AF-05-LED-U-AFL-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 2814.3 | 13.7 | | | |
| FM | (30°-60°) | 11535.8 | 56.1 | | | |
| FH | (60°-80°) | 2966.4 | 14.4 | | | G2/5000 |
| FVH | (80°-90°) | 116.9 | 0.6 | | | G2/225 |
| BL | (0°-30°) | 942.9 | 4.6 | B2/1000 | | |
| BM | (30°-60°) | 1266.2 | 6.2 | B2/2500 | | |
| BH | (60°-80°) | 748.5 | 3.6 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 179.5 | 0.9 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 62.5° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5464.1 | 5464.1 | 5464.1 | 5464.1 | 5464.1 | 5464.1 | 5464.1 | 5464.1 | 5464.1 | 5464.1 | 5464.1 |
| 2.5° | 6243.9 | 6193.6 | 6161.5 | 6133.5 | 6096.7 | 6018.2 | 5912.7 | 5845.8 | 5811.9 | 5696.6 | 5560.0 |
| 5° | 6856.1 | 6811.5 | 6778.6 | 6740.8 | 6675.0 | 6551.9 | 6381.5 | 6245.8 | 6179.0 | 5948.5 | 5675.3 |
| 7.5° | 6712.7 | 6731.1 | 6788.3 | 6888.0 | 6973.3 | 6956.8 | 6804.8 | 6632.3 | 6544.2 | 6223.5 | 5808.9 |
| 10° | 5848.7 | 5880.6 | 5979.5 | 6212.9 | 6590.7 | 6978.2 | 7096.3 | 6977.1 | 6888.0 | 6495.7 | 5946.5 |
| 12.5° | 5675.3 | 5674.3 | 5682.1 | 5744.1 | 5968.8 | 6514.2 | 7106.0 | 7226.1 | 7172.8 | 6755.4 | 6087.0 |
| 15° | 5746.0 | 5748.0 | 5742.1 | 5768.3 | 5838.1 | 6054.0 | 6809.6 | 7322.0 | 7359.8 | 7016.9 | 6232.2 |
| 17.5° | 5932.0 | 5927.2 | 5904.9 | 5904.9 | 5930.0 | 6014.3 | 6460.9 | 7232.9 | 7407.3 | 7248.4 | 6360.1 |
| 20° | 6243.9 | 6221.6 | 6162.6 | 6108.2 | 6081.1 | 6126.7 | 6317.5 | 7027.6 | 7324.9 | 7450.9 | 6465.8 |
| 22.5° | 6621.7 | 6604.3 | 6508.3 | 6392.1 | 6298.1 | 6297.2 | 6391.1 | 6848.3 | 7182.5 | 7641.6 | 6554.9 |
| 25° | 7109.9 | 7081.8 | 6939.4 | 6753.4 | 6588.7 | 6525.8 | 6551.9 | 6839.7 | 7105.0 | 7849.0 | 6634.2 |
| 27.5° | 7683.3 | 7631.9 | 7463.4 | 7195.1 | 6953.0 | 6826.0 | 6788.3 | 6997.5 | 7175.7 | 8105.7 | 6744.7 |
| 30° | 8378.8 | 8319.8 | 8103.7 | 7754.1 | 7412.1 | 7203.8 | 7123.4 | 7277.5 | 7410.2 | 8418.5 | 6922.0 |
| 32.5° | 9170.1 | 9084.9 | 8835.0 | 8449.5 | 8000.1 | 7682.4 | 7551.5 | 7647.5 | 7753.0 | 8795.3 | 7143.8 |
| 35° | 10263.8 | 10162.1 | 9800.8 | 9269.0 | 8761.4 | 8324.6 | 8115.4 | 8185.0 | 8287.7 | 9357.1 | 7464.4 |
| 37.5° | 11009.6 | 10964.1 | 10723.9 | 10224.1 | 9671.9 | 9169.2 | 8845.7 | 8886.4 | 8944.5 | 10059.4 | 7875.1 |
| 40° | 11002.9 | 11021.3 | 11026.1 | 11031.0 | 10655.2 | 10173.7 | 9826.0 | 9783.3 | 9771.7 | 10830.5 | 8342.0 |
| 42.5° | 10451.7 | 10527.3 | 10771.4 | 11266.4 | 11494.9 | 11274.0 | 10955.4 | 10832.3 | 10771.4 | 11739.1 | 8837.0 |
| 45° | 9608.0 | 9648.7 | 10105.9 | 11072.6 | 11925.0 | 12363.8 | 12122.6 | 11735.2 | 11624.7 | 12574.0 | 9247.7 |
| 47.5° | 9173.1 | 9217.6 | 9505.4 | 10559.2 | 11920.1 | 13244.3 | 13383.8 | 12645.7 | 12448.1 | 13300.5 | 9602.2 |
| 50° | 8137.6 | 8230.6 | 8592.9 | 9666.2 | 11485.3 | 13649.2 | 14702.2 | 13730.6 | 13321.8 | 14007.6 | 9957.7 |
| 52.5° | 6236.1 | 6379.5 | 6785.3 | 8197.6 | 10381.9 | 13448.7 | 15757.0 | 15046.0 | 14468.7 | 14739.9 | 10262.9 |
| 55° | 3933.7 | 4040.2 | 4381.2 | 5789.6 | 8305.1 | 12405.4 | 16157.0 | 16468.9 | 15955.6 | 15433.5 | 10527.3 |
| 57.5° | 2138.8 | 2186.3 | 2314.1 | 3196.5 | 5402.1 | 10099.1 | 15573.9 | 17278.8 | 17065.6 | 16022.4 | 10726.8 |
| 58° | 1914.0 | 1946.1 | 2025.4 | 2770.4 | 4790.9 | 9468.5 | 15315.3 | 17281.6 | 17175.0 | 16108.6 | 10742.3 |
| 60° | 1420.1 | 1403.6 | 1332.9 | 1580.9 | 2666.7 | 6541.3 | 13751.8 | 16590.0 | 16902.9 | 16214.2 | 10666.7 |
| 62.5° | 1247.6 | 1207.9 | 1063.6 | 1047.1 | 1297.0 | 3013.5 | 10522.4 | 14211.0 | 14950.1 | 15611.7 | 10207.6 |
| 65° | 1172.1 | 1129.4 | 943.5 | 883.4 | 935.7 | 1274.7 | 6198.4 | 10658.0 | 11585.0 | 13784.8 | 9033.6 |
| 67.5° | 1115.8 | 1060.7 | 867.0 | 784.6 | 788.5 | 842.7 | 2484.5 | 6712.7 | 7755.9 | 10466.2 | 7026.5 |
| 70° | 1061.6 | 1001.6 | 802.0 | 707.1 | 684.9 | 666.5 | 988.1 | 3360.2 | 4306.6 | 6611.0 | 4480.0 |
| 72.5° | 1003.5 | 944.4 | 744.9 | 646.1 | 602.5 | 541.4 | 645.1 | 1374.5 | 1919.9 | 3127.8 | 2032.2 |
| 75° | 919.2 | 865.9 | 687.7 | 591.9 | 529.9 | 448.5 | 487.2 | 717.8 | 861.1 | 1245.6 | 979.3 |
| 77.5° | 815.6 | 772.0 | 623.8 | 547.3 | 469.8 | 364.2 | 374.9 | 497.9 | 552.1 | 712.9 | 582.2 |
| 80° | 586.0 | 601.5 | 555.1 | 492.0 | 418.5 | 295.4 | 287.7 | 363.2 | 392.3 | 458.2 | 378.7 |
| 82.5° | 411.6 | 420.4 | 459.1 | 402.0 | 345.8 | 232.5 | 212.2 | 255.7 | 273.1 | 301.3 | 204.4 |
| 85° | 283.8 | 274.2 | 314.8 | 280.0 | 249.9 | 155.0 | 145.3 | 173.4 | 184.0 | 187.0 | 105.6 |
| 87.5° | 170.5 | 170.5 | 182.1 | 150.2 | 134.6 | 80.4 | 78.5 | 98.8 | 105.6 | 100.8 | 58.1 |
| 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° | 5464.1 | 5464.1 | 5464.1 | 5464.1 | 5464.1 | 5464.1 | 5464.1 | 5464.1 | 5464.1 | 5464.1 | 5464.1 |
| 2.5° | 5478.7 | 5409.9 | 5263.6 | 5146.5 | 4998.2 | 4844.2 | 4757.9 | 4666.0 | 4603.0 | 4557.5 | 4630.2 |
| 5° | 5520.4 | 5379.9 | 5077.6 | 4790.9 | 4474.2 | 4144.8 | 3894.9 | 3662.5 | 3500.7 | 3400.0 | 3494.9 |
| 7.5° | 5586.2 | 5370.2 | 4888.8 | 4398.6 | 3830.0 | 3281.7 | 2791.6 | 2484.5 | 2305.4 | 2217.2 | 2272.5 |
| 10° | 5661.7 | 5354.6 | 4666.9 | 3866.9 | 3053.2 | 2362.5 | 1996.4 | 1872.4 | 1831.7 | 1815.2 | 1823.0 |
| 12.5° | 5724.7 | 5321.7 | 4394.8 | 3223.6 | 2292.7 | 1865.7 | 1760.0 | 1757.1 | 1765.8 | 1767.8 | 1770.7 |
| 15° | 5769.2 | 5273.3 | 3990.8 | 2553.4 | 1833.6 | 1699.9 | 1694.2 | 1711.6 | 1728.1 | 1734.8 | 1738.7 |
| 17.5° | 5799.3 | 5173.6 | 3534.6 | 2018.7 | 1642.9 | 1619.5 | 1633.1 | 1655.4 | 1672.8 | 1677.7 | 1681.5 |
| 20° | 5796.3 | 5027.3 | 2991.2 | 1683.5 | 1539.1 | 1539.1 | 1562.5 | 1579.8 | 1580.9 | 1575.0 | 1577.9 |
| 22.5° | 5766.4 | 4826.8 | 2464.3 | 1505.3 | 1447.2 | 1463.6 | 1486.9 | 1470.4 | 1402.6 | 1358.1 | 1360.9 |
| 25° | 5715.9 | 4587.5 | 2012.9 | 1391.9 | 1362.0 | 1391.0 | 1384.2 | 1260.2 | 1163.3 | 1119.7 | 1119.7 |
| 27.5° | 5671.4 | 4304.7 | 1666.1 | 1293.1 | 1276.6 | 1312.5 | 1192.5 | 1080.0 | 1039.3 | 1019.1 | 1012.2 |
| 30° | 5639.4 | 3999.5 | 1434.6 | 1198.2 | 1196.2 | 1170.2 | 1034.5 | 1003.5 | 996.8 | 980.3 | 974.5 |
| 32.5° | 5647.2 | 3690.5 | 1286.4 | 1114.9 | 1121.7 | 1001.6 | 958.9 | 965.8 | 959.9 | 942.4 | 934.8 |
| 35° | 5711.1 | 3397.0 | 1189.5 | 1039.3 | 1019.1 | 904.7 | 914.4 | 927.0 | 925.1 | 900.8 | 893.1 |
| 37.5° | 5825.4 | 3119.1 | 1125.6 | 976.4 | 889.3 | 856.3 | 871.8 | 891.2 | 886.3 | 869.8 | 864.0 |
| 40° | 5945.6 | 2857.5 | 1073.3 | 927.0 | 812.7 | 823.4 | 836.9 | 847.6 | 852.4 | 857.2 | 853.3 |
| 42.5° | 6062.7 | 2584.4 | 1009.3 | 876.7 | 780.7 | 792.4 | 798.2 | 808.8 | 834.9 | 853.3 | 852.4 |
| 45° | 6132.5 | 2327.6 | 943.5 | 805.0 | 755.6 | 762.3 | 758.4 | 779.8 | 811.7 | 841.8 | 842.7 |
| 47.5° | 6210.0 | 2128.1 | 891.2 | 739.1 | 731.3 | 736.2 | 724.6 | 745.8 | 774.9 | 811.7 | 815.6 |
| 50° | 6303.9 | 2009.0 | 849.5 | 686.8 | 698.4 | 698.4 | 695.5 | 714.8 | 755.6 | 798.2 | 805.9 |
| 52.5° | 6410.5 | 1985.8 | 814.7 | 649.0 | 665.4 | 664.5 | 667.4 | 696.4 | 741.0 | 782.7 | 789.4 |
| 55° | 6540.3 | 2048.7 | 776.8 | 620.9 | 633.5 | 637.4 | 647.0 | 680.0 | 717.8 | 765.3 | 768.1 |
| 57.5° | 6691.4 | 2176.5 | 746.9 | 598.6 | 604.5 | 617.0 | 632.5 | 662.6 | 703.3 | 755.6 | 758.4 |
| 58° | 6716.6 | 2203.6 | 741.9 | 596.7 | 598.6 | 613.2 | 630.5 | 659.6 | 700.3 | 757.5 | 760.4 |
| 60° | 6717.6 | 2293.8 | 731.3 | 588.0 | 576.3 | 600.6 | 619.9 | 649.0 | 695.5 | 764.2 | 771.0 |
| 62.5° | 6479.3 | 2292.7 | 723.5 | 575.4 | 553.1 | 583.1 | 605.4 | 639.3 | 690.7 | 780.7 | 794.3 |
| 65° | 5705.3 | 2083.5 | 686.8 | 556.0 | 534.7 | 567.6 | 592.8 | 632.5 | 704.2 | 852.4 | 861.1 |
| 67.5° | 4462.5 | 1707.7 | 618.0 | 528.9 | 510.5 | 552.1 | 585.0 | 631.6 | 718.7 | 868.9 | 874.7 |
| 70° | 2950.5 | 1277.7 | 542.5 | 497.9 | 485.3 | 533.8 | 588.9 | 664.5 | 702.3 | 834.0 | 818.5 |
| 72.5° | 1531.5 | 896.9 | 481.4 | 459.1 | 456.2 | 517.3 | 645.1 | 660.6 | 685.8 | 784.6 | 765.3 |
| 75° | 803.9 | 622.9 | 428.1 | 416.5 | 421.4 | 513.4 | 761.4 | 643.2 | 664.5 | 750.7 | 787.5 |
| 77.5° | 492.0 | 502.7 | 382.6 | 377.8 | 387.5 | 501.8 | 760.4 | 620.9 | 633.5 | 690.7 | 731.3 |
| 80° | 329.4 | 407.9 | 347.7 | 348.7 | 355.5 | 459.1 | 682.9 | 586.0 | 595.8 | 652.8 | 694.5 |
| 82.5° | 208.3 | 241.2 | 315.8 | 332.3 | 323.6 | 378.7 | 580.2 | 533.8 | 547.3 | 746.9 | 789.4 |
| 85° | 105.6 | 151.1 | 274.2 | 319.7 | 291.5 | 265.5 | 470.8 | 467.9 | 474.6 | 538.6 | 562.8 |
| 87.5° | 48.4 | 83.3 | 214.1 | 279.0 | 219.8 | 165.6 | 342.0 | 346.8 | 373.9 | 382.6 | 382.6 |
| 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)