

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: P299842

Luminaire Tested: **GAA-AF-05-LED-U-SL3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299842
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-05-LED-U-SL3
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Medium OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29650 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

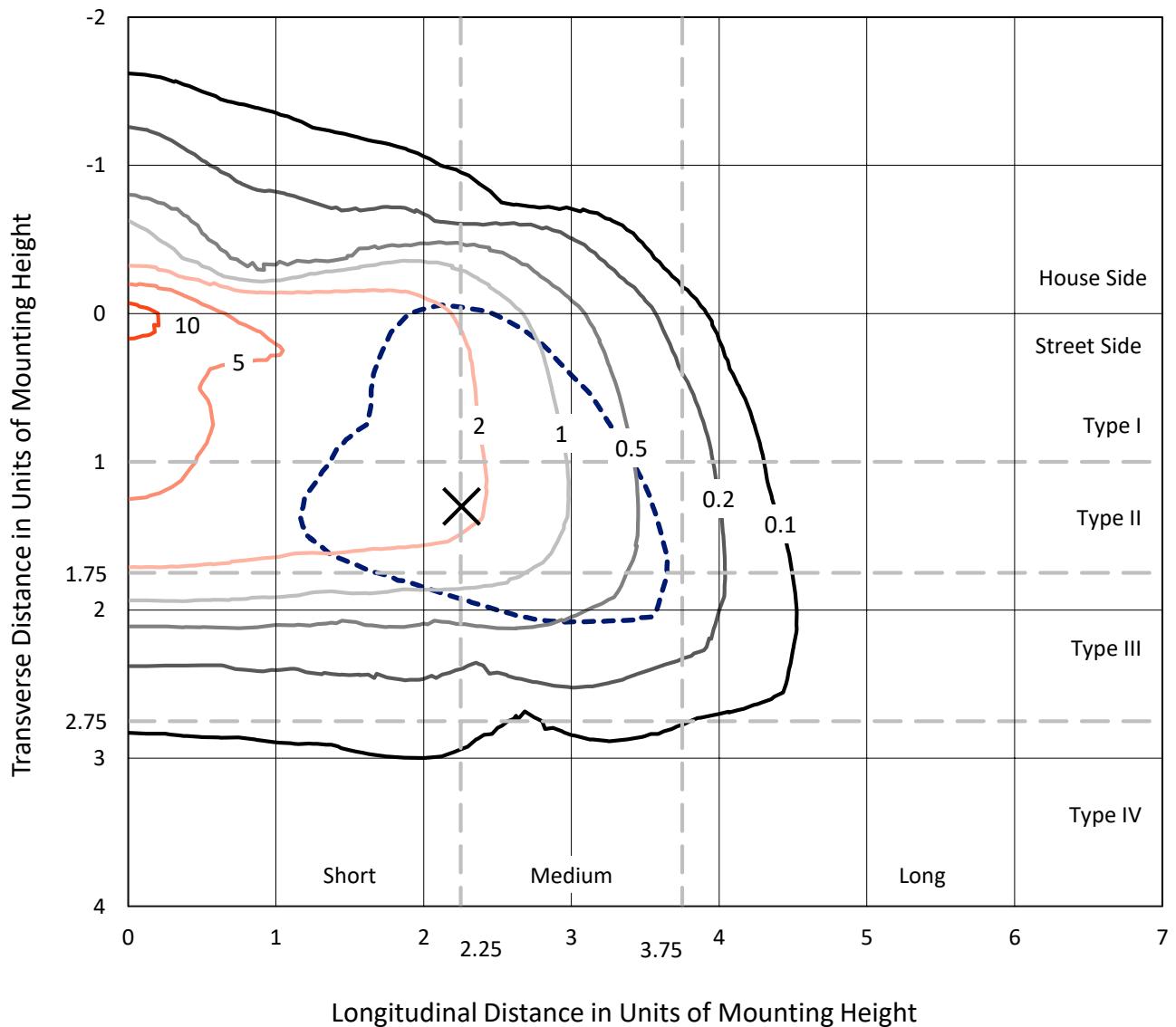
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

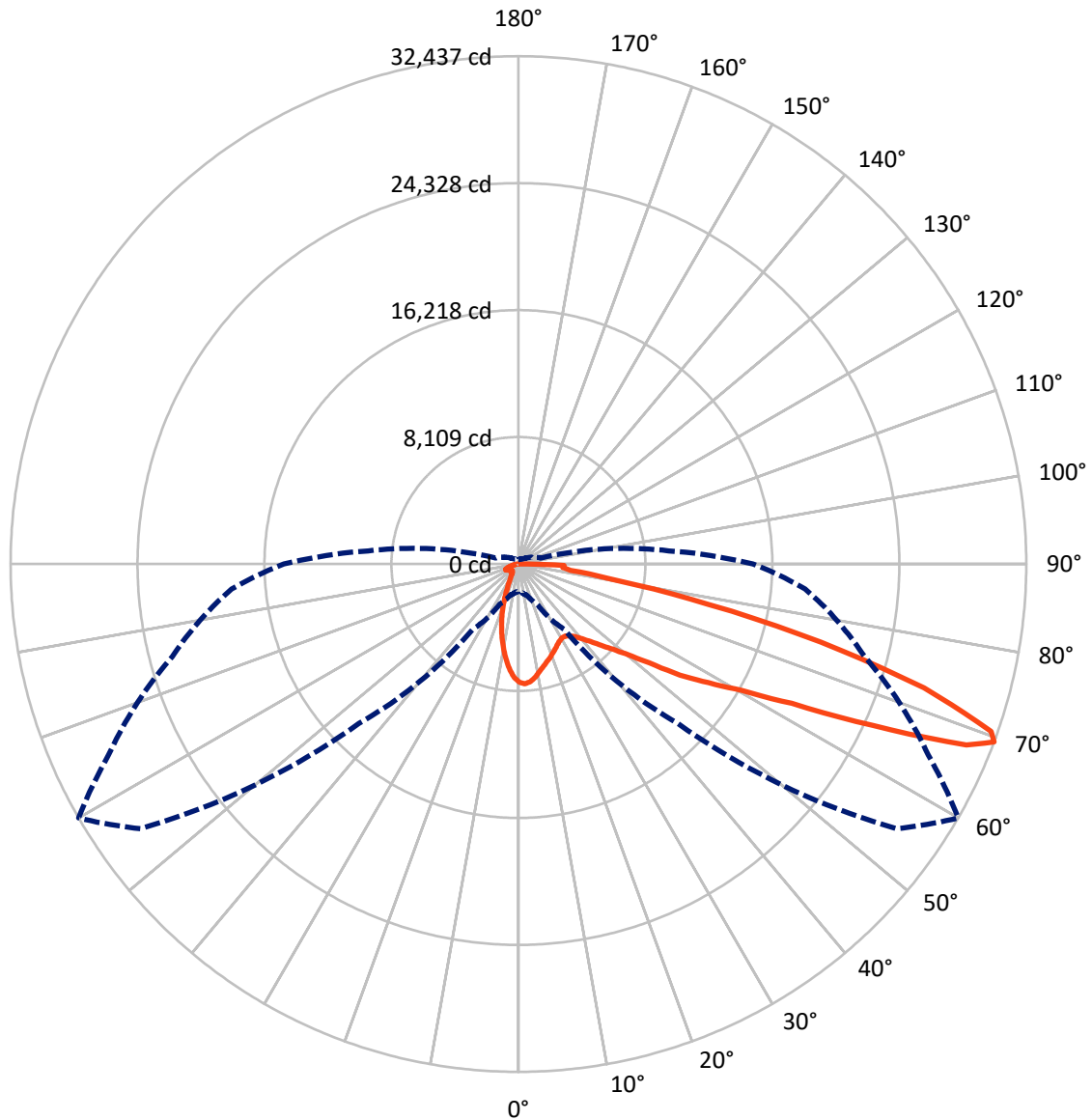


Based on 25 foot mounting height. Maximum calculated value = 12.1 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4218.3 | 0.0 | 4218.3 |
| | % Fixture | 14.2 | 0.0 | 14.2 |
| Street Side | Lumens | 25431.7 | 0.0 | 25431.7 |
| | % Fixture | 85.8 | 0.0 | 85.8 |
| Total | Lumens | 29650.0 | 0.0 | 29650.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 638.8 | 2.2 |
| 10°-20° | 1361.1 | 4.6 |
| 20°-30° | 1734.2 | 5.8 |
| 30°-40° | 2384.1 | 8.0 |
| 40°-50° | 3868.5 | 13.0 |
| 50°-60° | 6204.0 | 20.9 |
| 60°-70° | 8257.1 | 27.8 |
| 70°-80° | 4458.2 | 15.0 |
| 80°-90° | 743.9 | 2.5 |
| 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° | 29650.0 | 100.0 |
| 0°-180° | 29650.0 | 100.0 |

Coefficient of Utilization



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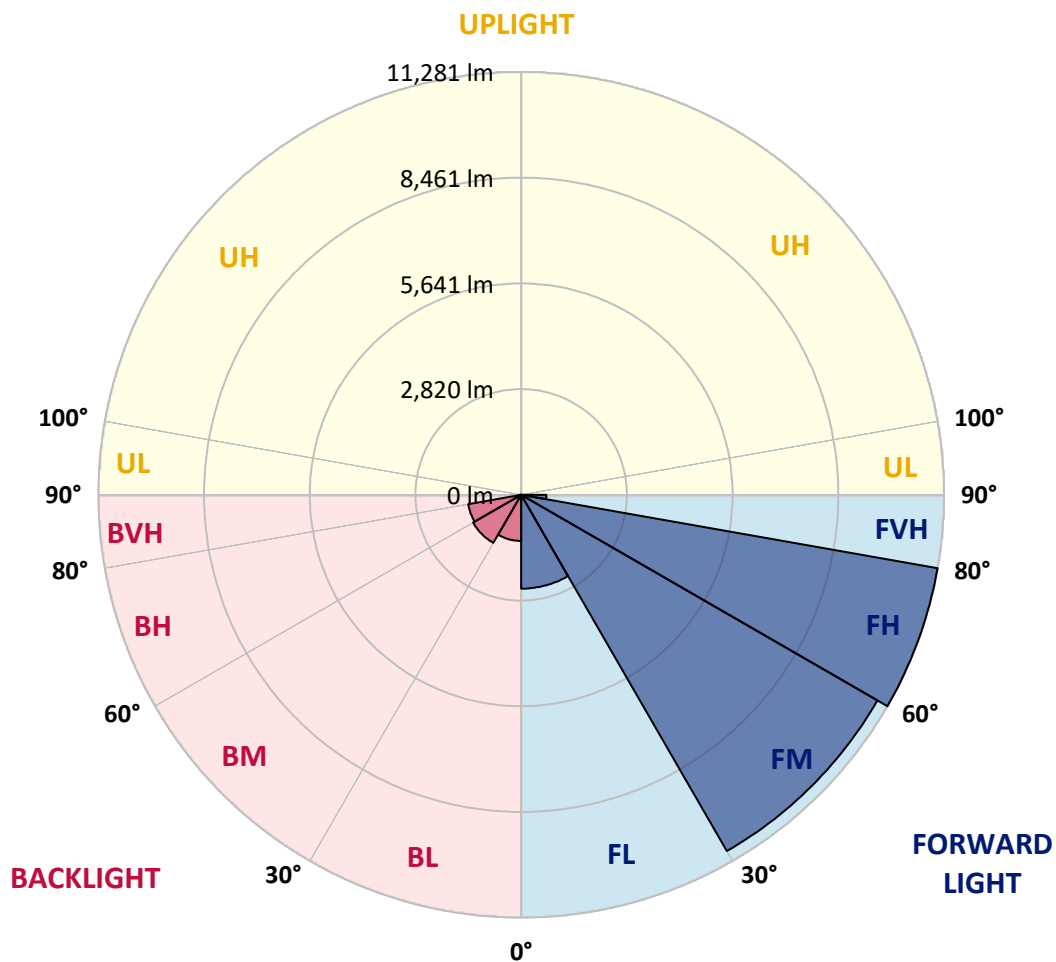
CATALOG NUMBER: GAA-AF-05-LED-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 2503.5 | 8.4 | | | |
| FM (30°-60°) | 10974.7 | 37.0 | | | |
| FH (60°-80°) | 11281.2 | 38.0 | | | G4/12000 |
| FVH (80°-90°) | 672.3 | 2.3 | | | G4/750 |
| BL (0°-30°) | 1230.6 | 4.2 | B3/2500 | | |
| BM (30°-60°) | 1482.0 | 5.0 | B2/2500 | | |
| BH (60°-80°) | 1434.1 | 4.8 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 71.6 | 0.2 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 60° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 7555.3 | 7555.3 | 7555.3 | 7555.3 | 7555.3 | 7555.3 | 7555.3 | 7555.3 | 7555.3 | 7555.3 | 7555.3 |
| 2.5° | 7710.0 | 7727.1 | 7720.0 | 7715.7 | 7728.6 | 7708.5 | 7667.0 | 7654.1 | 7634.0 | 7586.8 | 7506.6 |
| 5° | 7420.6 | 7472.2 | 7469.3 | 7508.0 | 7572.5 | 7589.6 | 7571.0 | 7573.9 | 7536.6 | 7477.9 | 7344.7 |
| 7.5° | 6920.8 | 6942.3 | 6953.7 | 7038.2 | 7155.7 | 7250.2 | 7330.4 | 7356.2 | 7339.0 | 7288.9 | 7117.0 |
| 10° | 6405.1 | 6422.3 | 6449.5 | 6548.4 | 6697.3 | 6827.7 | 6979.5 | 7066.9 | 7104.1 | 7095.5 | 6903.6 |
| 12.5° | 5962.6 | 5979.8 | 6015.6 | 6127.3 | 6304.9 | 6465.3 | 6685.9 | 6794.7 | 6883.5 | 6936.5 | 6730.3 |
| 15° | 5565.8 | 5603.1 | 5637.4 | 5766.4 | 5965.4 | 6176.0 | 6425.2 | 6562.7 | 6700.2 | 6819.1 | 6577.0 |
| 17.5° | 5256.5 | 5293.7 | 5313.8 | 5431.2 | 5643.2 | 5901.0 | 6193.2 | 6355.0 | 6526.9 | 6721.7 | 6425.2 |
| 20° | 5077.4 | 5094.6 | 5086.0 | 5151.9 | 5342.4 | 5616.0 | 5962.6 | 6150.2 | 6357.9 | 6630.0 | 6273.4 |
| 22.5° | 5027.3 | 5028.7 | 4997.2 | 4990.1 | 5113.2 | 5343.8 | 5716.2 | 5944.0 | 6198.9 | 6569.9 | 6143.0 |
| 25° | 5149.0 | 5144.7 | 5058.8 | 4988.6 | 5001.5 | 5136.1 | 5478.5 | 5743.4 | 6065.7 | 6557.0 | 6042.8 |
| 27.5° | 5419.7 | 5432.6 | 5305.2 | 5173.4 | 5043.1 | 5038.8 | 5298.0 | 5577.3 | 5956.8 | 6615.7 | 5999.8 |
| 30° | 5799.3 | 5820.8 | 5684.7 | 5517.1 | 5272.2 | 5070.3 | 5227.8 | 5478.5 | 5889.5 | 6737.4 | 5992.7 |
| 32.5° | 6214.7 | 6237.6 | 6134.4 | 5958.3 | 5637.4 | 5265.1 | 5276.5 | 5487.1 | 5886.7 | 6907.9 | 6041.3 |
| 35° | 6657.2 | 6683.0 | 6630.0 | 6481.1 | 6124.4 | 5624.6 | 5462.7 | 5626.0 | 5979.8 | 7168.6 | 6171.7 |
| 37.5° | 7151.4 | 7191.5 | 7205.8 | 7064.0 | 6683.0 | 6098.6 | 5767.8 | 5889.5 | 6190.3 | 7530.9 | 6410.9 |
| 40° | 7863.2 | 7919.1 | 7914.8 | 7711.4 | 7323.2 | 6738.9 | 6239.0 | 6270.5 | 6518.3 | 8015.0 | 6793.3 |
| 42.5° | 9226.7 | 9238.2 | 8881.6 | 8439.0 | 8027.9 | 7412.0 | 6794.7 | 6768.9 | 6970.9 | 8628.0 | 7356.2 |
| 45° | 10961.2 | 10914.0 | 10120.5 | 9265.4 | 8764.1 | 8185.5 | 7518.0 | 7392.0 | 7545.2 | 9375.7 | 8060.9 |
| 47.5° | 12400.7 | 12291.8 | 11289.2 | 10109.0 | 9543.3 | 9026.2 | 8367.4 | 8146.8 | 8231.3 | 10223.6 | 8971.8 |
| 50° | 12900.5 | 12818.9 | 11988.2 | 10810.8 | 10280.9 | 10051.7 | 9412.9 | 9100.7 | 9123.6 | 11234.8 | 10038.8 |
| 52.5° | 12793.1 | 12781.6 | 12227.4 | 11273.5 | 10971.2 | 11128.8 | 10893.9 | 10471.4 | 10247.9 | 12357.7 | 11190.4 |
| 55° | 12539.6 | 12563.9 | 12363.4 | 11812.0 | 11760.4 | 12168.6 | 12828.9 | 12516.7 | 11822.0 | 13490.6 | 12380.6 |
| 57.5° | 11658.7 | 11721.8 | 12162.9 | 12489.5 | 13030.9 | 13638.1 | 14387.2 | 14298.4 | 13516.4 | 14715.2 | 13795.7 |
| 60° | 9392.9 | 9539.0 | 10722.0 | 12357.7 | 14338.5 | 16237.7 | 16572.9 | 16366.6 | 15263.8 | 16234.9 | 15664.8 |
| 62.5° | 6581.3 | 6733.1 | 8139.6 | 10699.1 | 14123.7 | 19173.9 | 20480.1 | 19590.7 | 17773.1 | 18473.5 | 18083.9 |
| 65° | 3523.4 | 3596.4 | 4670.7 | 7423.5 | 11923.7 | 19779.8 | 26190.6 | 24837.1 | 21746.3 | 21233.5 | 20153.6 |
| 67.5° | 1943.6 | 1983.7 | 2394.8 | 3748.3 | 7636.9 | 17417.9 | 29828.6 | 30851.3 | 26712.0 | 23071.1 | 19776.9 |
| 69° | 1757.4 | 1794.6 | 2063.9 | 2838.8 | 5110.4 | 14401.6 | 29473.4 | 32436.8 | 28889.0 | 22889.2 | 18384.7 |
| 70° | 1718.7 | 1753.1 | 1995.2 | 2616.8 | 4136.4 | 11870.7 | 28283.2 | 32031.5 | 29407.5 | 22237.5 | 17170.1 |
| 72.5° | 1546.9 | 1584.1 | 1819.0 | 2350.4 | 3534.9 | 5918.2 | 22403.7 | 27082.9 | 26699.1 | 19281.3 | 13023.7 |
| 75° | 1442.3 | 1476.7 | 1874.9 | 2301.7 | 3384.5 | 3745.4 | 14769.6 | 19960.2 | 19626.5 | 13487.8 | 7022.5 |
| 77.5° | 617.3 | 614.4 | 869.4 | 1947.9 | 3434.6 | 3626.5 | 7936.3 | 12469.4 | 11376.6 | 5764.9 | 2016.6 |
| 80° | 412.5 | 405.3 | 412.5 | 572.9 | 3149.6 | 3646.6 | 4157.9 | 6329.2 | 4780.9 | 1469.5 | 994.0 |
| 82.5° | 355.2 | 349.5 | 362.4 | 349.5 | 1107.2 | 4162.2 | 3534.9 | 3365.9 | 2273.0 | 835.0 | 492.7 |
| 85° | 239.2 | 229.2 | 312.2 | 313.7 | 522.8 | 3698.1 | 3981.7 | 2843.1 | 1839.0 | 495.6 | 243.5 |
| 87.5° | 114.6 | 111.7 | 181.9 | 222.0 | 306.5 | 1502.5 | 4467.3 | 2913.3 | 1854.8 | 253.5 | 116.0 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 7555.3 | 7555.3 | 7555.3 | 7555.3 | 7555.3 | 7555.3 | 7555.3 | 7555.3 | 7555.3 | 7555.3 | 7555.3 |
| 2.5° | 7482.2 | 7423.5 | 7366.2 | 7297.5 | 7225.8 | 7145.6 | 7105.5 | 7065.4 | 7055.4 | 7043.9 | 7003.8 |
| 5° | 7276.0 | 7192.9 | 7049.7 | 6892.1 | 6726.0 | 6564.1 | 6441.0 | 6363.6 | 6304.9 | 6274.8 | 6221.8 |
| 7.5° | 7009.6 | 6887.8 | 6637.2 | 6365.0 | 6085.7 | 5830.8 | 5610.2 | 5471.3 | 5339.5 | 5277.9 | 5207.8 |
| 10° | 6756.1 | 6574.2 | 6184.6 | 5783.5 | 5382.5 | 4997.2 | 4634.9 | 4378.5 | 4150.7 | 4023.3 | 3933.0 |
| 12.5° | 6538.3 | 6289.1 | 5749.2 | 5206.3 | 4656.3 | 4107.8 | 3564.9 | 3138.1 | 2781.5 | 2593.9 | 2497.9 |
| 15° | 6326.4 | 6025.6 | 5335.2 | 4646.3 | 3940.2 | 3194.0 | 2480.7 | 1996.6 | 1701.5 | 1584.1 | 1544.0 |
| 17.5° | 6134.4 | 5749.2 | 4919.9 | 4082.0 | 3201.1 | 2298.8 | 1667.2 | 1400.8 | 1287.6 | 1248.9 | 1236.1 |
| 20° | 5926.8 | 5469.9 | 4488.8 | 3491.9 | 2430.6 | 1607.0 | 1301.9 | 1184.5 | 1138.7 | 1127.2 | 1121.5 |
| 22.5° | 5726.2 | 5194.9 | 4076.3 | 2860.3 | 1745.9 | 1240.4 | 1118.6 | 1069.9 | 1062.8 | 1072.8 | 1072.8 |
| 25° | 5555.8 | 4948.5 | 3630.8 | 2200.0 | 1281.9 | 1044.1 | 1001.2 | 989.7 | 1016.9 | 1054.2 | 1061.3 |
| 27.5° | 5428.3 | 4746.6 | 3156.7 | 1624.2 | 1021.2 | 908.1 | 906.6 | 925.3 | 992.6 | 1064.2 | 1078.5 |
| 30° | 5341.0 | 4554.6 | 2649.7 | 1171.6 | 856.5 | 799.2 | 822.1 | 862.2 | 961.1 | 1062.8 | 1090.0 |
| 32.5° | 5296.6 | 4412.8 | 2121.2 | 906.6 | 733.3 | 701.8 | 740.5 | 789.2 | 886.6 | 981.1 | 1016.9 |
| 35° | 5330.9 | 4308.3 | 1622.8 | 756.2 | 647.4 | 623.0 | 663.1 | 710.4 | 767.7 | 807.8 | 835.0 |
| 37.5° | 5459.8 | 4266.8 | 1224.6 | 677.5 | 588.7 | 565.7 | 597.3 | 624.5 | 647.4 | 658.8 | 671.7 |
| 40° | 5737.7 | 4311.2 | 981.1 | 637.4 | 555.7 | 527.1 | 540.0 | 550.0 | 564.3 | 575.8 | 581.5 |
| 42.5° | 6147.3 | 4444.4 | 879.4 | 621.6 | 538.5 | 497.0 | 494.1 | 498.4 | 517.1 | 538.5 | 542.8 |
| 45° | 6720.2 | 4679.3 | 872.3 | 631.6 | 529.9 | 472.7 | 459.8 | 465.5 | 494.1 | 527.1 | 532.8 |
| 47.5° | 7452.1 | 5037.3 | 929.5 | 661.7 | 537.1 | 459.8 | 438.3 | 445.4 | 481.2 | 525.6 | 532.8 |
| 50° | 8338.7 | 5537.2 | 1025.5 | 706.1 | 568.6 | 462.6 | 431.1 | 435.4 | 472.7 | 521.3 | 528.5 |
| 52.5° | 9385.7 | 6246.2 | 1130.1 | 749.1 | 601.6 | 481.2 | 436.8 | 426.8 | 461.2 | 504.2 | 512.8 |
| 55° | 10550.2 | 7155.7 | 1237.5 | 787.8 | 618.7 | 504.2 | 448.3 | 415.4 | 439.7 | 475.5 | 482.7 |
| 57.5° | 11979.6 | 8427.5 | 1423.7 | 825.0 | 630.2 | 519.9 | 459.8 | 403.9 | 412.5 | 438.3 | 444.0 |
| 60° | 13914.6 | 10226.5 | 1751.7 | 886.6 | 656.0 | 525.6 | 458.3 | 393.9 | 385.3 | 399.6 | 402.5 |
| 62.5° | 16233.4 | 12180.1 | 2025.2 | 963.9 | 699.0 | 529.9 | 449.7 | 386.7 | 362.4 | 362.4 | 365.2 |
| 65° | 17609.9 | 12702.9 | 1873.4 | 1028.4 | 734.8 | 525.6 | 439.7 | 379.6 | 345.2 | 329.4 | 330.9 |
| 67.5° | 16442.6 | 11171.8 | 1605.6 | 1041.3 | 733.3 | 505.6 | 424.0 | 366.7 | 328.0 | 303.6 | 302.2 |
| 69° | 14980.2 | 9639.2 | 1485.3 | 1006.9 | 699.0 | 479.8 | 403.9 | 352.3 | 315.1 | 289.3 | 287.9 |
| 70° | 13801.4 | 8704.0 | 1406.5 | 969.7 | 661.7 | 461.2 | 388.1 | 339.4 | 305.1 | 280.7 | 277.9 |
| 72.5° | 10034.5 | 5703.3 | 1201.7 | 833.6 | 545.7 | 386.7 | 335.2 | 297.9 | 272.1 | 257.8 | 254.9 |
| 75° | 5014.4 | 2719.9 | 975.4 | 676.0 | 418.2 | 309.4 | 275.0 | 249.2 | 236.3 | 233.5 | 232.0 |
| 77.5° | 1647.1 | 1246.1 | 697.5 | 504.2 | 310.8 | 242.1 | 222.0 | 203.4 | 200.5 | 209.1 | 206.2 |
| 80° | 905.2 | 724.7 | 442.6 | 333.7 | 212.0 | 177.6 | 174.7 | 164.7 | 169.0 | 183.3 | 180.5 |
| 82.5° | 461.2 | 376.7 | 273.6 | 200.5 | 143.2 | 127.5 | 138.9 | 133.2 | 138.9 | 151.8 | 150.4 |
| 85° | 227.7 | 206.2 | 173.3 | 121.7 | 94.5 | 81.6 | 98.8 | 103.1 | 106.0 | 116.0 | 116.0 |
| 87.5° | 131.8 | 121.7 | 91.7 | 57.3 | 47.3 | 43.0 | 57.3 | 55.9 | 65.9 | 71.6 | 70.2 |
| 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)