

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: P190973

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190973
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
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31221.5 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

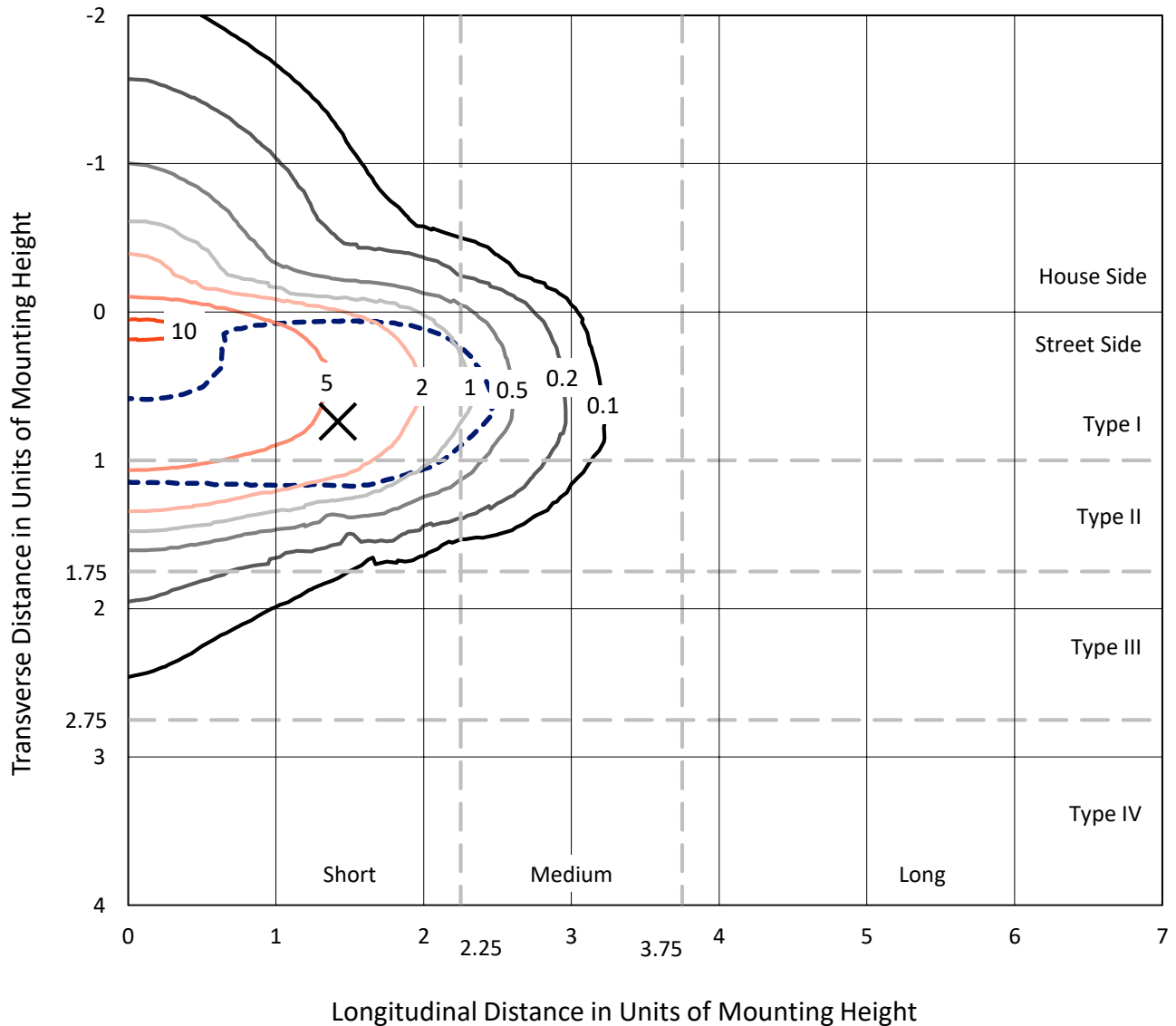
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

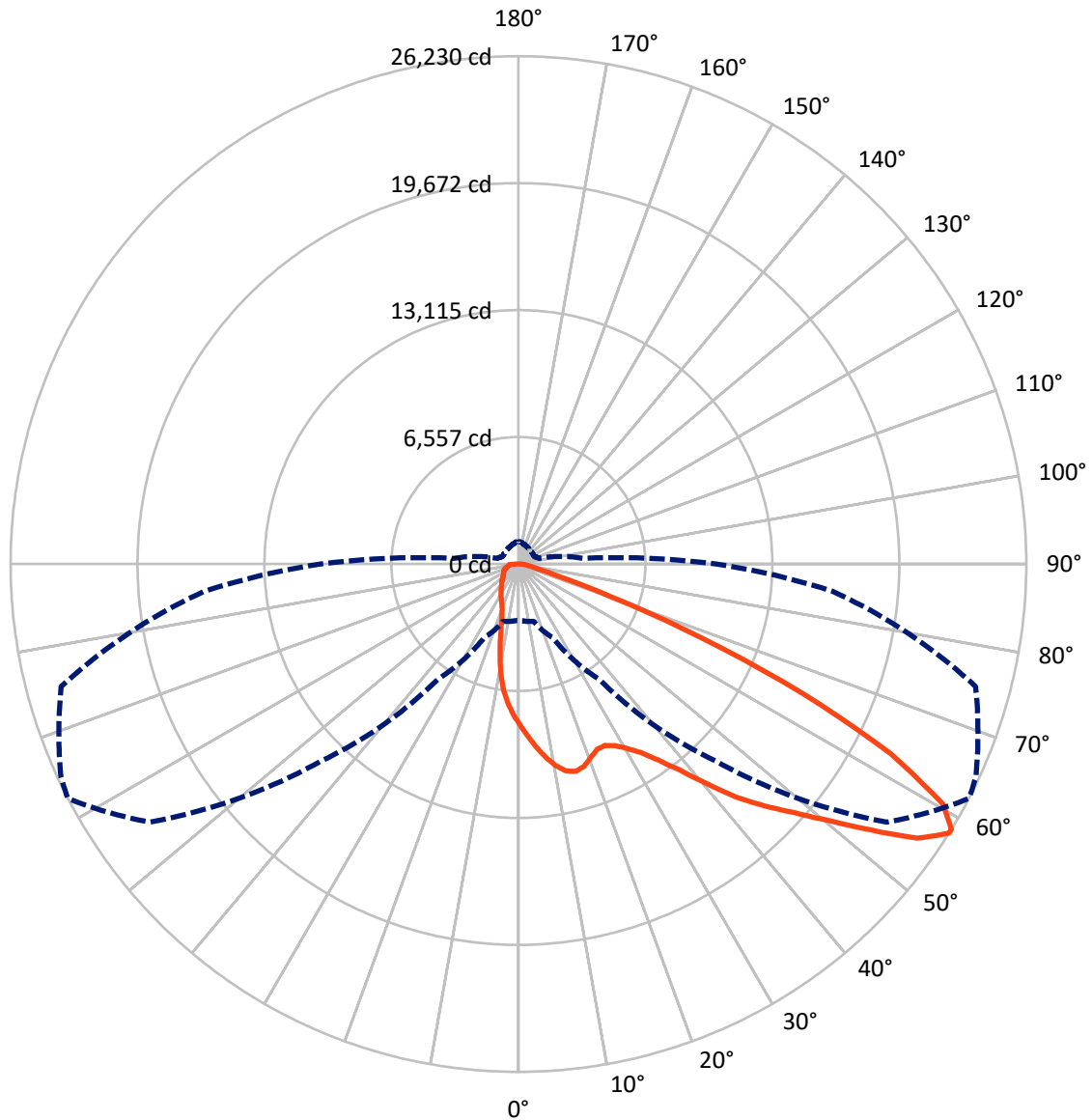


Based on 30 foot mounting height. Maximum calculated value = 11.2 fc
 Type II - Short - Full Cutoff

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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 | 4761.4 | 0.0 | 4761.4 |
| | % Fixture | 15.3 | 0.0 | 15.3 |
| Street Side | Lumens | 26460.1 | 0.0 | 26460.1 |
| | % Fixture | 84.7 | 0.0 | 84.7 |
| Total | Lumens | 31221.5 | 0.0 | 31221.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 741.7 | 2.4 |
| 10°-20° | 1895.9 | 6.1 |
| 20°-30° | 3064.9 | 9.8 |
| 30°-40° | 4865.4 | 15.6 |
| 40°-50° | 7119.2 | 22.8 |
| 50°-60° | 7446.0 | 23.8 |
| 60°-70° | 4399.1 | 14.1 |
| 70°-80° | 1239.3 | 4.0 |
| 80°-90° | 449.9 | 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° | 31221.5 | 100.0 |
| 0°-180° | 31221.5 | 100.0 |

Coefficient of Utilization



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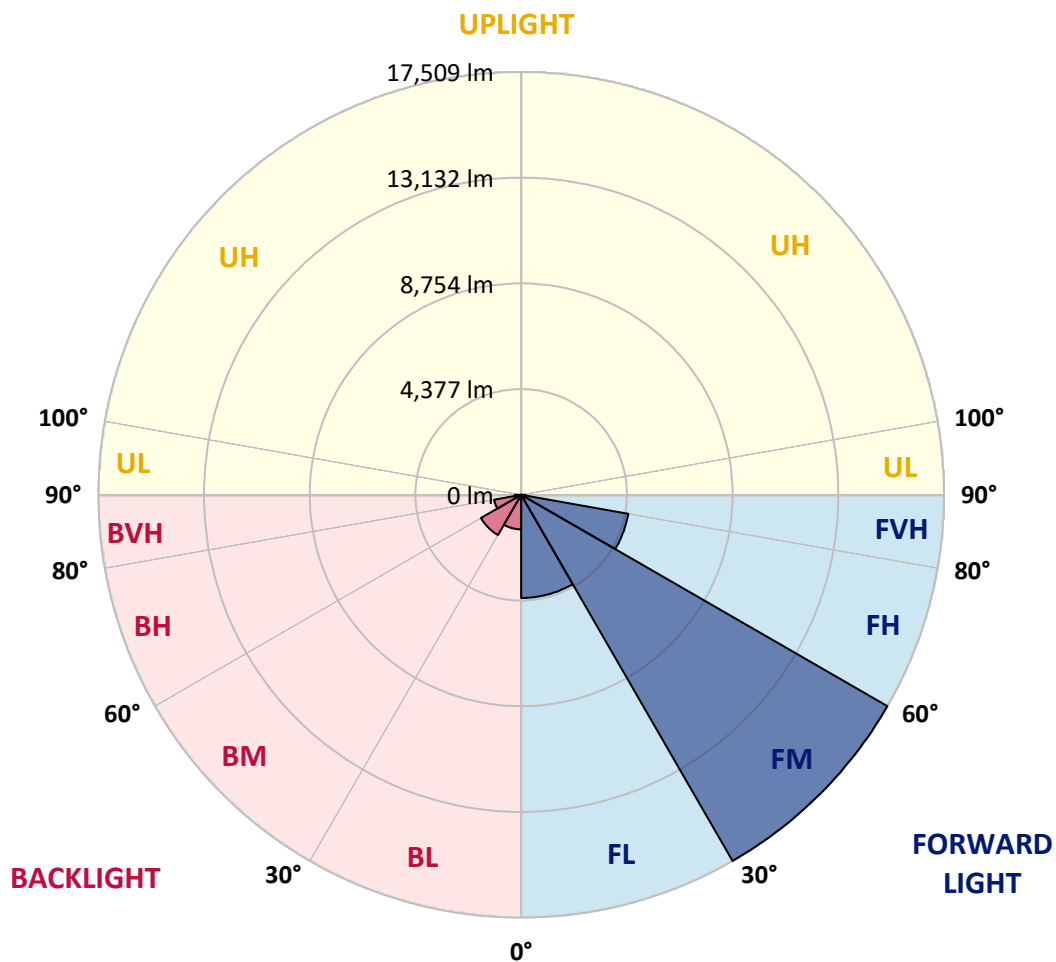
CATALOG NUMBER: GAN-AF-05-LED-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 4271.5 | 13.7 | | | |
| FM (30°-60°) | 17508.8 | 56.1 | | | |
| FH (60°-80°) | 4502.3 | 14.4 | | | G2/5000 |
| FVH (80°-90°) | 177.5 | 0.6 | | | G2/225 |
| BL (0°-30°) | 1431.0 | 4.6 | B3/2500 | | |
| BM (30°-60°) | 1921.8 | 6.2 | B2/2500 | | |
| BH (60°-80°) | 1136.1 | 3.6 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 272.4 | 0.9 | | | G3/500 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 62.5° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 8293.4 | 8293.4 | 8293.4 | 8293.4 | 8293.4 | 8293.4 | 8293.4 | 8293.4 | 8293.4 | 8293.4 | 8293.4 |
| 2.5° | 9476.8 | 9400.4 | 9351.9 | 9309.3 | 9253.4 | 9134.3 | 8974.0 | 8872.6 | 8821.1 | 8646.2 | 8438.9 |
| 5° | 10406.0 | 10338.4 | 10288.4 | 10231.0 | 10131.1 | 9944.4 | 9685.6 | 9479.8 | 9378.3 | 9028.5 | 8613.9 |
| 7.5° | 10188.4 | 10216.3 | 10303.1 | 10454.6 | 10583.9 | 10558.9 | 10328.1 | 10066.4 | 9932.6 | 9446.0 | 8816.7 |
| 10° | 8877.1 | 8925.6 | 9075.5 | 9429.8 | 10003.2 | 10591.2 | 10770.6 | 10589.8 | 10454.6 | 9859.1 | 9025.5 |
| 12.5° | 8613.9 | 8612.4 | 8624.2 | 8718.2 | 9059.4 | 9887.0 | 10785.3 | 10967.7 | 10886.8 | 10253.1 | 9238.7 |
| 15° | 8721.2 | 8724.1 | 8715.3 | 8755.0 | 8860.8 | 9188.7 | 10335.5 | 11113.1 | 11170.5 | 10650.0 | 9459.2 |
| 17.5° | 9003.5 | 8996.1 | 8962.3 | 8962.3 | 9000.5 | 9128.4 | 9806.2 | 10977.9 | 11242.5 | 11001.4 | 9653.3 |
| 20° | 9476.8 | 9443.1 | 9353.4 | 9271.0 | 9229.9 | 9298.9 | 9588.6 | 10666.2 | 11117.6 | 11308.7 | 9813.6 |
| 22.5° | 10050.2 | 10023.8 | 9878.2 | 9701.8 | 9559.2 | 9557.7 | 9700.3 | 10394.3 | 10901.5 | 11598.3 | 9948.8 |
| 25° | 10791.2 | 10748.6 | 10532.4 | 10250.2 | 10000.3 | 9904.7 | 9944.4 | 10381.0 | 10783.8 | 11913.0 | 10069.3 |
| 27.5° | 11661.5 | 11583.7 | 11327.9 | 10920.6 | 10553.1 | 10360.4 | 10303.1 | 10620.7 | 10891.2 | 12302.5 | 10237.0 |
| 30° | 12717.1 | 12627.5 | 12299.7 | 11768.8 | 11249.9 | 10933.8 | 10811.8 | 11045.5 | 11246.9 | 12777.5 | 10506.0 |
| 32.5° | 13918.3 | 13789.0 | 13409.7 | 12824.5 | 12142.3 | 11660.1 | 11461.7 | 11607.1 | 11767.4 | 13349.3 | 10842.7 |
| 35° | 15578.1 | 15423.7 | 14875.4 | 14068.2 | 13297.8 | 12634.9 | 12317.2 | 12423.1 | 12578.9 | 14202.0 | 11329.3 |
| 37.5° | 16710.2 | 16641.1 | 16276.5 | 15517.9 | 14679.9 | 13916.8 | 13425.8 | 13487.5 | 13575.8 | 15268.0 | 11952.7 |
| 40° | 16699.9 | 16727.8 | 16735.2 | 16742.5 | 16172.1 | 15441.4 | 14913.6 | 14848.9 | 14831.3 | 16438.2 | 12661.3 |
| 42.5° | 15863.4 | 15978.1 | 16348.5 | 17099.7 | 17446.7 | 17111.5 | 16627.9 | 16441.2 | 16348.5 | 17817.2 | 13412.5 |
| 45° | 14582.9 | 14644.6 | 15338.5 | 16805.8 | 18099.5 | 18765.5 | 18399.4 | 17811.4 | 17643.8 | 19084.6 | 14035.9 |
| 47.5° | 13922.7 | 13990.4 | 14427.0 | 16026.6 | 18092.2 | 20101.9 | 20313.7 | 19193.3 | 18893.4 | 20187.2 | 14574.0 |
| 50° | 12351.1 | 12492.2 | 13042.1 | 14671.1 | 17432.1 | 20716.5 | 22314.5 | 20840.0 | 20219.5 | 21260.4 | 15113.6 |
| 52.5° | 9465.1 | 9682.6 | 10298.7 | 12442.3 | 15757.5 | 20412.2 | 23915.6 | 22836.5 | 21960.3 | 22371.9 | 15576.7 |
| 55° | 5970.5 | 6132.2 | 6649.7 | 8787.4 | 12605.4 | 18828.7 | 24522.8 | 24996.2 | 24217.0 | 23424.6 | 15978.1 |
| 57.5° | 3246.2 | 3318.2 | 3512.3 | 4851.7 | 8199.3 | 15328.2 | 23637.7 | 26225.3 | 25901.8 | 24318.4 | 16280.9 |
| 58° | 2905.1 | 2953.6 | 3074.2 | 4204.7 | 7271.5 | 14371.1 | 23245.2 | 26229.7 | 26068.0 | 24449.2 | 16304.4 |
| 60° | 2155.3 | 2130.3 | 2023.0 | 2399.3 | 4047.4 | 9928.2 | 20872.3 | 25179.9 | 25654.9 | 24609.5 | 16189.7 |
| 62.5° | 1893.6 | 1833.3 | 1614.3 | 1589.3 | 1968.6 | 4573.7 | 15970.7 | 21569.2 | 22690.9 | 23695.1 | 15492.9 |
| 65° | 1778.9 | 1714.3 | 1431.9 | 1340.8 | 1420.2 | 1934.8 | 9407.8 | 16176.5 | 17583.5 | 20922.3 | 13711.0 |
| 67.5° | 1693.7 | 1609.8 | 1315.8 | 1190.8 | 1196.8 | 1279.1 | 3771.0 | 10188.4 | 11771.8 | 15885.4 | 10664.8 |
| 70° | 1611.4 | 1520.2 | 1217.3 | 1073.3 | 1039.4 | 1011.5 | 1499.6 | 5100.1 | 6536.5 | 10034.0 | 6799.7 |
| 72.5° | 1523.1 | 1433.5 | 1130.6 | 980.6 | 914.4 | 821.8 | 979.2 | 2086.2 | 2913.9 | 4747.2 | 3084.5 |
| 75° | 1395.2 | 1314.4 | 1043.8 | 898.3 | 804.2 | 680.7 | 739.5 | 1089.4 | 1307.0 | 1890.6 | 1486.3 |
| 77.5° | 1237.9 | 1171.8 | 946.8 | 830.6 | 713.0 | 552.8 | 569.0 | 755.7 | 838.0 | 1082.1 | 883.6 |
| 80° | 889.5 | 913.0 | 842.4 | 746.9 | 635.2 | 448.4 | 436.7 | 551.4 | 595.5 | 695.4 | 574.8 |
| 82.5° | 624.8 | 638.0 | 696.8 | 610.1 | 524.9 | 352.8 | 321.9 | 388.1 | 414.6 | 457.3 | 310.3 |
| 85° | 430.8 | 416.0 | 477.8 | 424.9 | 379.3 | 235.3 | 220.5 | 263.2 | 279.4 | 283.8 | 160.3 |
| 87.5° | 258.7 | 258.7 | 276.4 | 227.9 | 204.4 | 122.0 | 119.1 | 150.0 | 160.3 | 152.9 | 88.2 |
| 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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CATALOG NUMBER: GAN-AF-05-LED-U-AFL

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 8293.4 | 8293.4 | 8293.4 | 8293.4 | 8293.4 | 8293.4 | 8293.4 | 8293.4 | 8293.4 | 8293.4 | 8293.4 |
| 2.5° | 8315.4 | 8211.0 | 7989.0 | 7811.2 | 7586.2 | 7352.5 | 7221.6 | 7081.9 | 6986.3 | 6917.3 | 7027.5 |
| 5° | 8378.6 | 8165.4 | 7706.7 | 7271.5 | 6790.9 | 6290.9 | 5911.6 | 5558.8 | 5313.3 | 5160.4 | 5304.4 |
| 7.5° | 8478.6 | 8150.8 | 7420.1 | 6676.2 | 5813.1 | 4981.1 | 4237.1 | 3771.0 | 3499.1 | 3365.3 | 3449.1 |
| 10° | 8593.3 | 8127.2 | 7083.4 | 5869.0 | 4634.1 | 3585.7 | 3030.1 | 2841.9 | 2780.2 | 2755.1 | 2766.9 |
| 12.5° | 8688.8 | 8077.2 | 6670.3 | 4892.8 | 3480.0 | 2831.6 | 2671.3 | 2666.9 | 2680.1 | 2683.1 | 2687.5 |
| 15° | 8756.5 | 8003.8 | 6057.2 | 3875.4 | 2783.0 | 2580.2 | 2571.4 | 2597.8 | 2622.8 | 2633.1 | 2639.0 |
| 17.5° | 8802.1 | 7852.3 | 5364.8 | 3063.8 | 2493.4 | 2458.2 | 2478.7 | 2512.6 | 2539.1 | 2546.3 | 2552.3 |
| 20° | 8797.6 | 7630.3 | 4540.0 | 2555.2 | 2336.1 | 2336.1 | 2371.4 | 2397.9 | 2399.3 | 2390.5 | 2394.9 |
| 22.5° | 8752.1 | 7326.0 | 3740.2 | 2284.7 | 2196.5 | 2221.4 | 2256.7 | 2231.8 | 2128.9 | 2061.2 | 2065.6 |
| 25° | 8675.6 | 6962.8 | 3055.0 | 2112.7 | 2067.1 | 2111.2 | 2100.9 | 1912.7 | 1765.7 | 1699.5 | 1699.5 |
| 27.5° | 8607.9 | 6533.5 | 2528.7 | 1962.7 | 1937.7 | 1992.1 | 1809.8 | 1639.3 | 1577.5 | 1546.6 | 1536.4 |
| 30° | 8559.4 | 6070.4 | 2177.4 | 1818.6 | 1815.7 | 1775.9 | 1570.1 | 1523.1 | 1512.8 | 1487.9 | 1479.0 |
| 32.5° | 8571.2 | 5601.5 | 1952.4 | 1692.2 | 1702.5 | 1520.2 | 1455.5 | 1465.8 | 1457.0 | 1430.5 | 1418.7 |
| 35° | 8668.3 | 5156.0 | 1805.4 | 1577.5 | 1546.6 | 1373.2 | 1387.8 | 1407.0 | 1404.0 | 1367.3 | 1355.5 |
| 37.5° | 8841.8 | 4734.0 | 1708.3 | 1481.9 | 1349.7 | 1299.7 | 1323.2 | 1352.5 | 1345.2 | 1320.2 | 1311.4 |
| 40° | 9024.1 | 4337.1 | 1628.9 | 1407.0 | 1233.5 | 1249.6 | 1270.2 | 1286.5 | 1293.7 | 1301.1 | 1295.3 |
| 42.5° | 9202.0 | 3922.5 | 1532.0 | 1330.6 | 1185.0 | 1202.6 | 1211.5 | 1227.6 | 1267.3 | 1295.3 | 1293.7 |
| 45° | 9307.8 | 3532.9 | 1431.9 | 1221.7 | 1146.7 | 1157.1 | 1151.1 | 1183.6 | 1232.0 | 1277.6 | 1279.1 |
| 47.5° | 9425.4 | 3230.0 | 1352.5 | 1121.8 | 1110.0 | 1117.4 | 1099.7 | 1132.0 | 1176.2 | 1232.0 | 1237.9 |
| 50° | 9568.0 | 3049.2 | 1289.3 | 1042.4 | 1060.0 | 1060.0 | 1055.6 | 1085.0 | 1146.7 | 1211.5 | 1223.2 |
| 52.5° | 9729.7 | 3013.9 | 1236.4 | 985.0 | 1010.1 | 1008.5 | 1012.9 | 1057.1 | 1124.7 | 1188.0 | 1198.2 |
| 55° | 9926.7 | 3109.5 | 1179.1 | 942.3 | 961.5 | 967.4 | 982.1 | 1032.1 | 1089.4 | 1161.5 | 1165.9 |
| 57.5° | 10156.1 | 3303.5 | 1133.5 | 908.6 | 917.4 | 936.5 | 960.0 | 1005.6 | 1067.3 | 1146.7 | 1151.1 |
| 58° | 10194.3 | 3344.6 | 1126.2 | 905.6 | 908.6 | 930.7 | 957.1 | 1001.2 | 1062.9 | 1149.7 | 1154.1 |
| 60° | 10195.8 | 3481.4 | 1110.0 | 892.4 | 874.7 | 911.6 | 940.9 | 985.0 | 1055.6 | 1160.0 | 1170.3 |
| 62.5° | 9834.1 | 3480.0 | 1098.2 | 873.3 | 839.4 | 885.1 | 918.9 | 970.4 | 1048.2 | 1185.0 | 1205.5 |
| 65° | 8659.4 | 3162.4 | 1042.4 | 843.9 | 811.5 | 861.5 | 899.8 | 960.0 | 1068.8 | 1293.7 | 1307.0 |
| 67.5° | 6773.2 | 2592.0 | 937.9 | 802.7 | 774.8 | 838.0 | 888.0 | 958.6 | 1090.9 | 1318.8 | 1327.6 |
| 70° | 4478.2 | 1939.2 | 823.3 | 755.7 | 736.5 | 810.1 | 893.9 | 1008.5 | 1065.9 | 1265.8 | 1242.3 |
| 72.5° | 2324.3 | 1361.4 | 730.7 | 696.8 | 692.4 | 785.1 | 979.2 | 1002.7 | 1040.9 | 1190.8 | 1161.5 |
| 75° | 1220.3 | 945.3 | 649.8 | 632.2 | 639.5 | 779.2 | 1155.5 | 976.2 | 1008.5 | 1139.4 | 1195.2 |
| 77.5° | 746.9 | 763.0 | 580.7 | 573.4 | 588.1 | 761.6 | 1154.1 | 942.3 | 961.5 | 1048.2 | 1110.0 |
| 80° | 499.9 | 619.0 | 527.8 | 529.3 | 539.6 | 696.8 | 1036.5 | 889.5 | 904.2 | 990.9 | 1054.2 |
| 82.5° | 316.1 | 366.1 | 479.3 | 504.3 | 491.0 | 574.8 | 880.7 | 810.1 | 830.6 | 1133.5 | 1198.2 |
| 85° | 160.3 | 229.3 | 416.0 | 485.2 | 442.5 | 402.8 | 714.5 | 710.1 | 720.4 | 817.4 | 854.2 |
| 87.5° | 73.6 | 126.4 | 324.9 | 423.4 | 333.7 | 251.4 | 518.9 | 526.3 | 567.5 | 580.7 | 580.7 |
| 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)