

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: P453152

Luminaire Tested: **GLAN-SA4A-830-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453152
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GLAN-SA4A-830-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14517 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

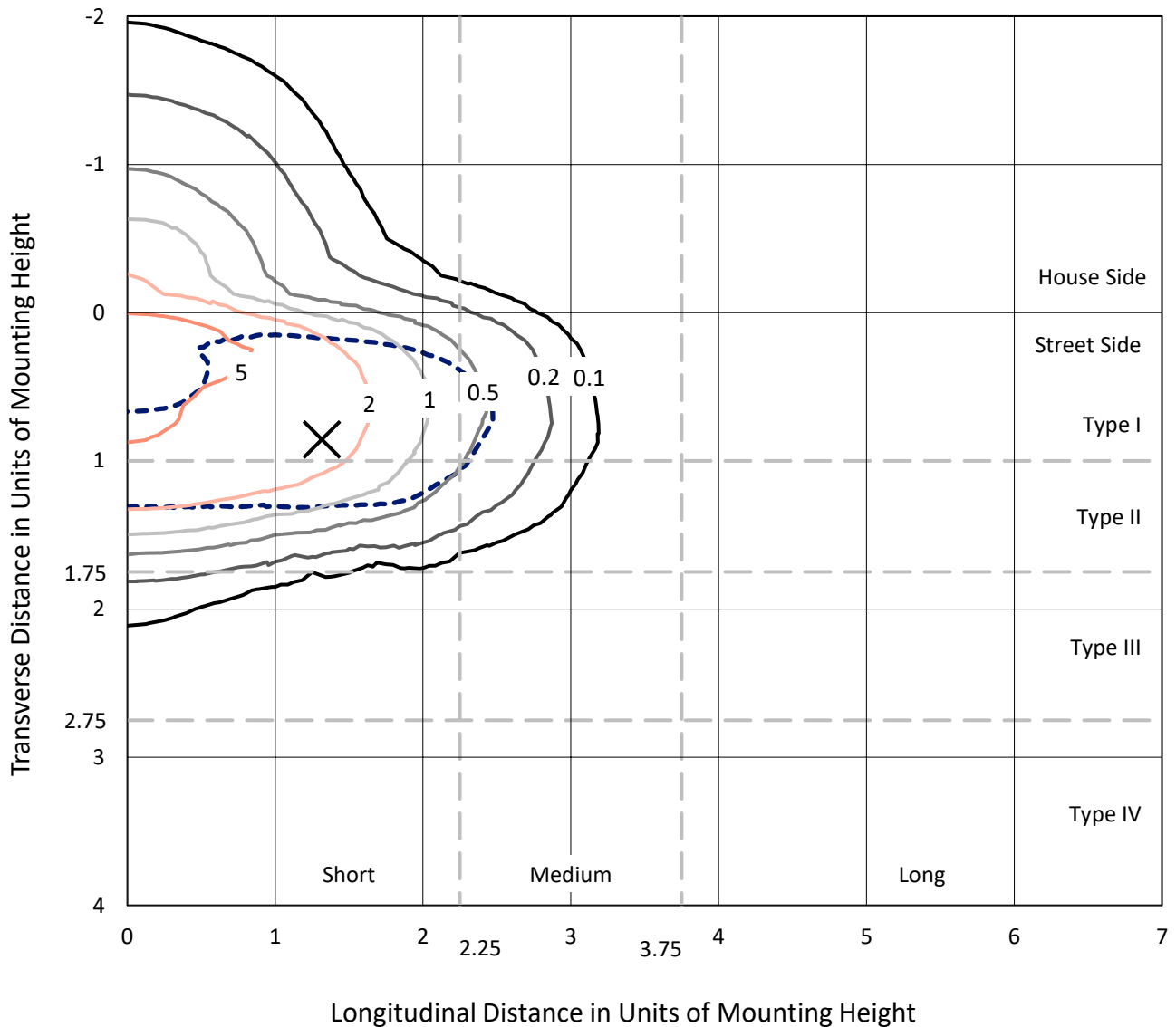
Input Watts (W): 121
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P453152
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Iso-Footcandle Lines of Horizontal Illumination

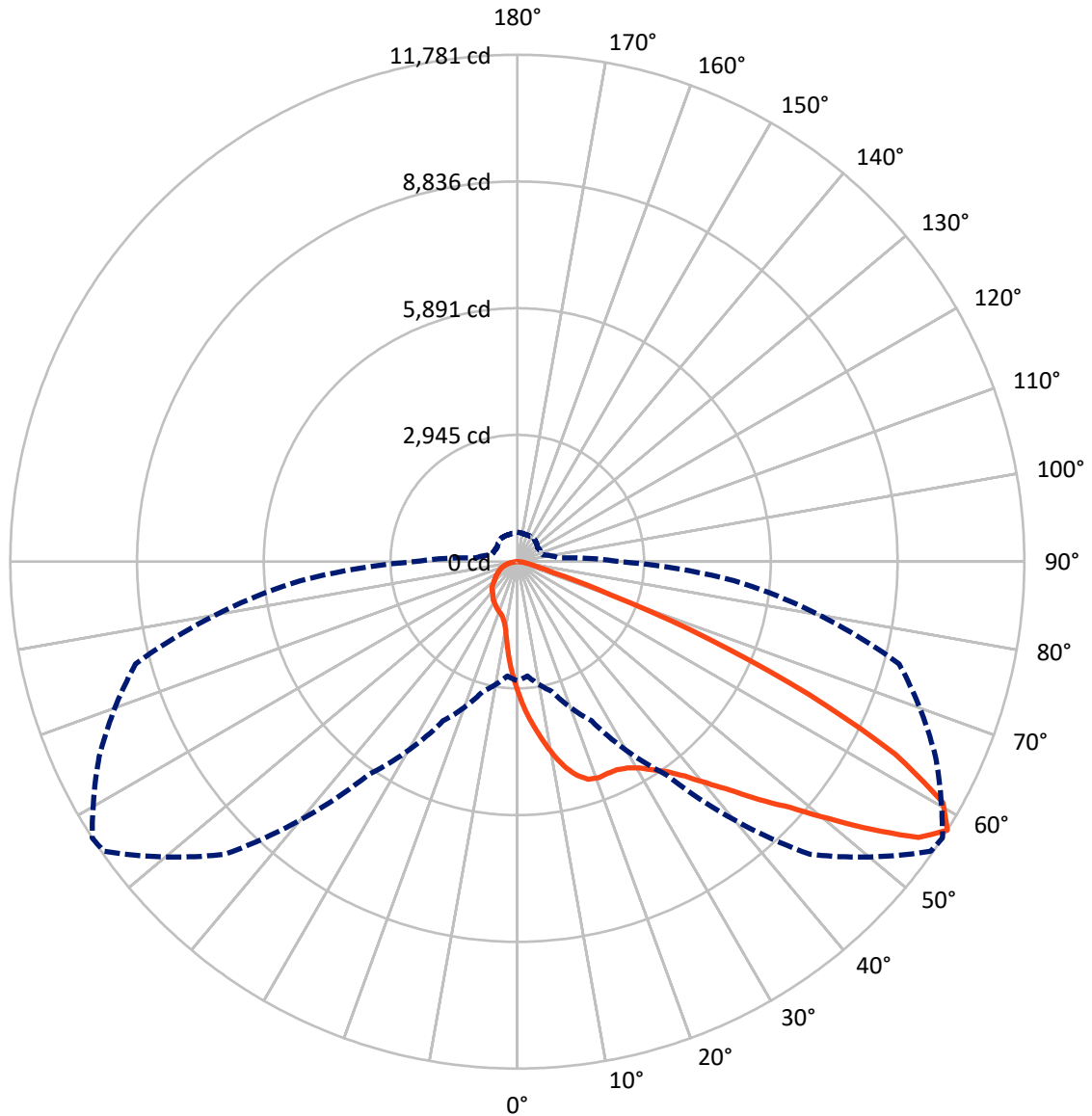
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2207.6 | 0.0 | 2207.6 |
| | % Fixture | 15.2 | 0.0 | 15.2 |
| Street Side | Lumens | 12309.4 | 0.0 | 12309.4 |
| | % Fixture | 84.8 | 0.0 | 84.8 |
| Total | Lumens | 14517.0 | 0.0 | 14517.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 293.1 | 2.0 |
| 10°-20° | 863.8 | 6.0 |
| 20°-30° | 1434.4 | 9.9 |
| 30°-40° | 2160.7 | 14.9 |
| 40°-50° | 3244.0 | 22.3 |
| 50°-60° | 3636.2 | 25.0 |
| 60°-70° | 2128.1 | 14.7 |
| 70°-80° | 629.5 | 4.3 |
| 80°-90° | 127.2 | 0.9 |
| 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° | 14517.0 | 100.0 |
| 0°-180° | 14517.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P453152

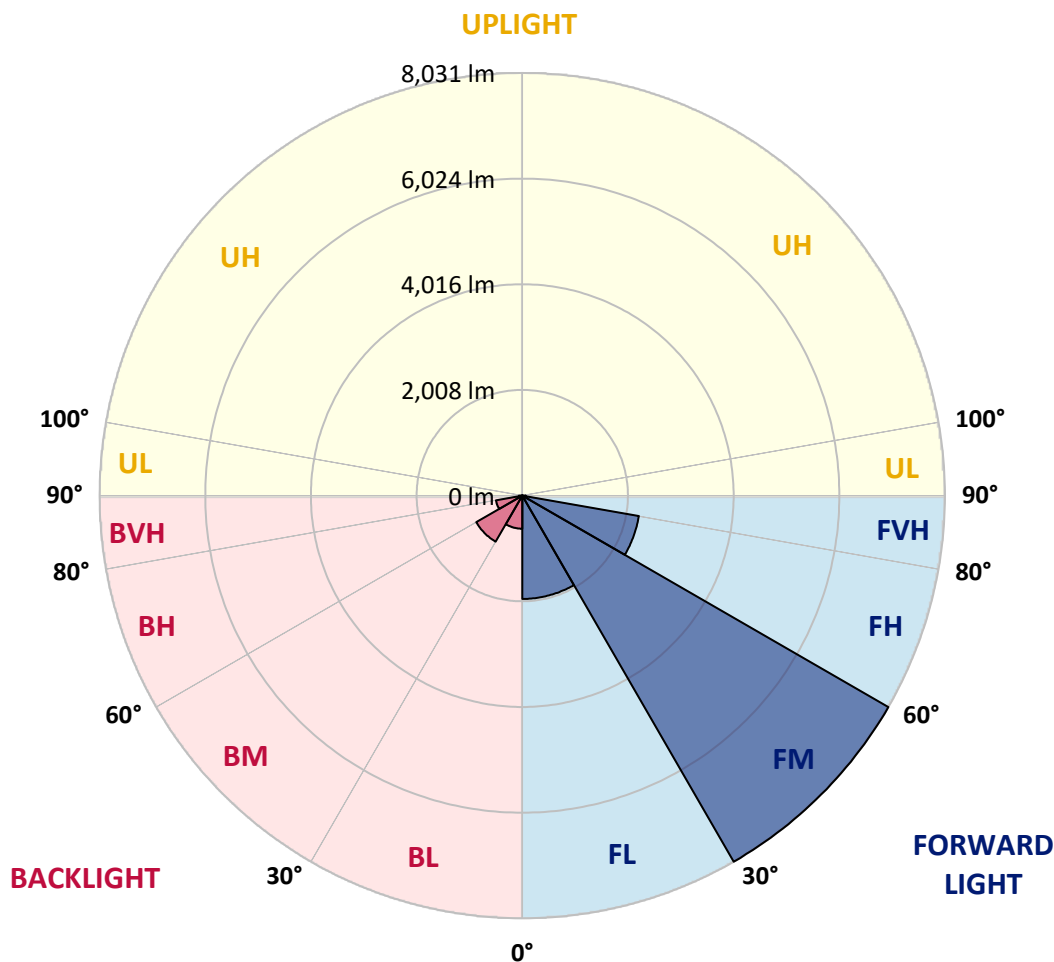
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1962.4 | 13.5 | | | |
| FM | (30°-60°) | 8031.4 | 55.3 | | | |
| FH | (60°-80°) | 2249.6 | 15.5 | | | G2/5000 |
| FVH | (80°-90°) | 66.0 | 0.5 | | | G1/100 |
| BL | (0°-30°) | 629.0 | 4.3 | B2/1000 | | |
| BM | (30°-60°) | 1009.4 | 7.0 | B2/2500 | | |
| BH | (60°-80°) | 508.0 | 3.5 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 61.2 | 0.4 | | | G1/100 |
| 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





REPORT NUMBER: P453152

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 57° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|--------|
| 0° | 3049.9 | 3049.9 | 3049.9 | 3049.9 | 3049.9 | 3049.9 | 3049.9 | 3049.9 | 3049.9 | 3049.9 | 3049.9 |
| 2.5° | 3789.7 | 3748.4 | 3715.8 | 3687.2 | 3649.8 | 3548.9 | 3448.0 | 3446.4 | 3366.1 | 3242.2 | 3115.0 |
| 5° | 4407.1 | 4351.5 | 4358.6 | 4269.6 | 4180.6 | 4034.4 | 3820.7 | 3809.5 | 3638.7 | 3406.7 | 3170.6 |
| 7.5° | 4809.2 | 4810.0 | 4787.7 | 4736.9 | 4640.7 | 4474.7 | 4232.3 | 4177.5 | 3939.9 | 3587.8 | 3234.2 |
| 10° | 4788.5 | 4810.0 | 4847.3 | 4891.1 | 4920.5 | 4838.6 | 4617.7 | 4550.9 | 4241.8 | 3807.2 | 3304.9 |
| 12.5° | 4513.6 | 4547.0 | 4600.2 | 4709.9 | 4887.1 | 5022.2 | 4946.7 | 4892.6 | 4591.5 | 4025.7 | 3382.8 |
| 15° | 4342.0 | 4361.8 | 4391.2 | 4465.1 | 4655.8 | 4979.3 | 5174.7 | 5146.1 | 4921.2 | 4272.8 | 3470.2 |
| 17.5° | 4289.5 | 4309.4 | 4318.9 | 4364.2 | 4500.1 | 4831.5 | 5264.5 | 5315.4 | 5213.7 | 4500.1 | 3558.4 |
| 20° | 4342.0 | 4351.5 | 4351.5 | 4378.5 | 4485.0 | 4744.8 | 5260.6 | 5363.1 | 5453.7 | 4772.7 | 3641.1 |
| 22.5° | 4479.4 | 4483.4 | 4477.8 | 4487.4 | 4566.8 | 4768.7 | 5223.2 | 5350.4 | 5647.6 | 5003.9 | 3705.4 |
| 25° | 4702.7 | 4709.1 | 4672.5 | 4650.3 | 4708.3 | 4873.6 | 5243.9 | 5360.7 | 5799.3 | 5224.8 | 3748.4 |
| 27.5° | 4956.2 | 4964.2 | 4919.7 | 4868.0 | 4895.0 | 5003.1 | 5324.9 | 5429.8 | 5913.0 | 5442.5 | 3775.4 |
| 30° | 5266.9 | 5270.1 | 5195.4 | 5133.4 | 5115.9 | 5196.2 | 5463.2 | 5560.9 | 6054.4 | 5699.2 | 3815.9 |
| 32.5° | 5584.8 | 5608.6 | 5512.5 | 5425.1 | 5395.7 | 5420.3 | 5667.4 | 5762.0 | 6222.9 | 5975.0 | 3881.1 |
| 35° | 6017.1 | 6021.0 | 5905.8 | 5799.3 | 5702.4 | 5734.2 | 5928.9 | 5997.2 | 6455.7 | 6293.6 | 3973.2 |
| 37.5° | 6556.6 | 6593.2 | 6434.3 | 6235.6 | 6116.4 | 6070.3 | 6245.1 | 6319.8 | 6782.3 | 6684.6 | 4112.3 |
| 40° | 7155.8 | 7169.3 | 7033.4 | 6909.5 | 6691.7 | 6558.2 | 6679.0 | 6760.1 | 7185.2 | 7151.0 | 4273.6 |
| 42.5° | 7532.5 | 7561.9 | 7572.2 | 7559.5 | 7395.8 | 7171.7 | 7217.8 | 7255.9 | 7662.0 | 7588.9 | 4438.9 |
| 45° | 7659.6 | 7703.3 | 7851.1 | 8164.2 | 8181.7 | 7960.8 | 7853.5 | 7890.1 | 8181.7 | 8030.7 | 4597.0 |
| 47.5° | 7449.0 | 7523.7 | 7796.3 | 8438.4 | 8919.1 | 8935.8 | 8612.4 | 8532.1 | 8655.3 | 8397.0 | 4711.5 |
| 50° | 6904.7 | 6920.6 | 7337.8 | 8267.5 | 9264.8 | 9867.9 | 9533.4 | 9384.0 | 9105.1 | 8668.0 | 4790.1 |
| 52.5° | 6062.4 | 6080.6 | 6430.3 | 7473.7 | 9051.8 | 10519.5 | 10610.9 | 10343.9 | 9562.0 | 8878.6 | 4841.8 |
| 55° | 4500.1 | 4605.8 | 4990.4 | 5998.8 | 8042.6 | 10458.4 | 11467.6 | 11315.8 | 10114.3 | 9045.5 | 4922.8 |
| 57.5° | 2767.0 | 2670.0 | 3126.1 | 4081.3 | 6048.9 | 9617.6 | 11732.2 | 11781.4 | 10722.2 | 9185.3 | 5058.7 |
| 60° | 1273.0 | 1292.1 | 1480.4 | 2105.0 | 3687.2 | 7523.7 | 11050.4 | 11361.9 | 11058.3 | 9180.6 | 5092.9 |
| 62.5° | 877.3 | 859.8 | 812.1 | 924.2 | 1681.5 | 4758.3 | 9333.9 | 9861.6 | 10384.4 | 8895.3 | 4957.0 |
| 65° | 784.3 | 766.8 | 674.7 | 643.7 | 772.4 | 2074.0 | 6785.5 | 7451.4 | 8743.5 | 8175.3 | 4618.5 |
| 67.5° | 732.7 | 708.8 | 613.5 | 553.1 | 551.5 | 825.6 | 4001.0 | 4802.8 | 6485.1 | 6911.8 | 4001.8 |
| 70° | 678.6 | 659.6 | 565.0 | 498.2 | 469.6 | 518.9 | 1758.6 | 2302.1 | 4210.8 | 4980.8 | 3117.4 |
| 72.5° | 624.6 | 602.3 | 517.3 | 445.8 | 408.4 | 388.6 | 673.9 | 876.5 | 2379.2 | 2986.3 | 1911.1 |
| 75° | 545.9 | 534.8 | 462.5 | 403.7 | 363.2 | 313.9 | 427.5 | 487.9 | 1137.9 | 1371.6 | 959.1 |
| 77.5° | 477.6 | 465.7 | 410.8 | 352.8 | 323.4 | 255.1 | 303.6 | 331.4 | 480.0 | 556.3 | 433.1 |
| 80° | 349.6 | 361.6 | 346.5 | 311.5 | 288.5 | 200.3 | 204.2 | 227.3 | 285.3 | 315.5 | 264.6 |
| 82.5° | 221.7 | 244.0 | 267.0 | 240.0 | 218.5 | 158.1 | 141.4 | 150.2 | 194.7 | 206.6 | 117.6 |
| 85° | 93.0 | 94.6 | 155.0 | 146.2 | 124.8 | 93.8 | 85.0 | 89.8 | 104.1 | 108.9 | 54.8 |
| 87.5° | 35.8 | 35.0 | 54.8 | 50.9 | 38.9 | 27.0 | 27.0 | 30.2 | 41.3 | 38.1 | 17.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P453152
 CATALOG NUMBER: GLAN-SA4A-830-U-AFL

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3049.9 | 3049.9 | 3049.9 | 3049.9 | 3049.9 | 3049.9 | 3049.9 | 3049.9 | 3049.9 | 3049.9 | 3049.9 |
| 2.5° | 3060.2 | 3003.8 | 2891.7 | 2752.7 | 2650.9 | 2536.5 | 2435.6 | 2363.3 | 2336.3 | 2323.5 | 2299.7 |
| 5° | 3057.8 | 2946.6 | 2714.5 | 2471.4 | 2275.9 | 2075.6 | 1906.4 | 1796.7 | 1787.2 | 1714.1 | 1706.9 |
| 7.5° | 3058.6 | 2888.5 | 2519.0 | 2161.4 | 1863.4 | 1658.4 | 1518.6 | 1482.0 | 1438.3 | 1427.2 | 1432.7 |
| 10° | 3061.0 | 2814.6 | 2309.2 | 1854.7 | 1566.2 | 1432.0 | 1379.5 | 1365.2 | 1366.8 | 1371.6 | 1372.4 |
| 12.5° | 3064.2 | 2743.1 | 2091.5 | 1621.9 | 1399.4 | 1343.7 | 1338.2 | 1350.9 | 1364.4 | 1374.7 | 1377.1 |
| 15° | 3068.1 | 2661.3 | 1879.3 | 1434.3 | 1315.9 | 1311.2 | 1329.4 | 1350.9 | 1370.0 | 1385.1 | 1387.5 |
| 17.5° | 3063.4 | 2565.9 | 1701.3 | 1319.1 | 1269.8 | 1292.9 | 1323.1 | 1350.1 | 1367.6 | 1381.9 | 1383.5 |
| 20° | 3052.2 | 2459.4 | 1529.7 | 1238.1 | 1241.2 | 1278.6 | 1311.2 | 1336.6 | 1355.7 | 1362.8 | 1368.4 |
| 22.5° | 3009.3 | 2332.3 | 1380.3 | 1175.3 | 1207.1 | 1258.7 | 1297.7 | 1312.8 | 1291.3 | 1276.2 | 1280.2 |
| 25° | 2936.2 | 2167.0 | 1241.2 | 1124.4 | 1176.1 | 1230.9 | 1270.6 | 1234.1 | 1216.6 | 1210.2 | 1213.4 |
| 27.5° | 2844.8 | 1985.8 | 1136.3 | 1071.2 | 1136.3 | 1199.9 | 1188.8 | 1182.4 | 1174.5 | 1164.2 | 1166.5 |
| 30° | 2746.3 | 1808.6 | 1047.3 | 1029.9 | 1093.4 | 1130.0 | 1134.8 | 1145.1 | 1136.3 | 1120.5 | 1126.8 |
| 32.5° | 2654.9 | 1641.7 | 979.8 | 994.9 | 1063.2 | 1057.7 | 1093.4 | 1105.4 | 1064.8 | 1011.6 | 1014.0 |
| 35° | 2577.0 | 1486.8 | 928.9 | 960.7 | 1011.6 | 1014.0 | 1049.7 | 1008.4 | 964.7 | 939.3 | 940.9 |
| 37.5° | 2518.2 | 1366.0 | 895.6 | 931.3 | 945.6 | 975.8 | 956.8 | 935.3 | 929.7 | 912.3 | 913.0 |
| 40° | 2483.3 | 1260.3 | 874.1 | 908.3 | 905.9 | 926.6 | 865.4 | 886.8 | 894.8 | 889.2 | 890.0 |
| 42.5° | 2448.3 | 1185.6 | 851.9 | 876.5 | 875.7 | 835.2 | 821.7 | 839.9 | 860.6 | 863.0 | 861.4 |
| 45° | 2420.5 | 1127.6 | 828.8 | 828.0 | 843.9 | 780.3 | 776.4 | 787.5 | 816.9 | 831.2 | 830.4 |
| 47.5° | 2389.5 | 1079.1 | 793.9 | 771.6 | 776.4 | 746.2 | 739.8 | 744.6 | 780.3 | 803.4 | 809.7 |
| 50° | 2350.6 | 1030.7 | 750.1 | 720.0 | 700.1 | 714.4 | 716.0 | 716.8 | 752.5 | 778.8 | 784.3 |
| 52.5° | 2319.6 | 994.1 | 700.1 | 677.8 | 654.0 | 685.8 | 697.7 | 699.3 | 720.7 | 742.2 | 746.2 |
| 55° | 2337.9 | 973.4 | 650.8 | 634.9 | 613.5 | 656.4 | 679.4 | 682.6 | 687.4 | 703.3 | 705.6 |
| 57.5° | 2392.7 | 978.2 | 611.1 | 590.4 | 574.5 | 621.4 | 660.4 | 662.7 | 659.6 | 678.6 | 681.8 |
| 60° | 2409.4 | 975.8 | 581.7 | 541.2 | 531.6 | 584.1 | 632.5 | 637.3 | 636.5 | 664.3 | 669.9 |
| 62.5° | 2339.4 | 945.6 | 552.3 | 499.8 | 493.5 | 545.9 | 593.6 | 612.7 | 616.6 | 656.4 | 663.5 |
| 65° | 2174.9 | 883.6 | 513.3 | 456.1 | 456.1 | 505.4 | 556.3 | 582.5 | 593.6 | 646.8 | 654.8 |
| 67.5° | 1958.0 | 810.5 | 473.6 | 418.8 | 417.2 | 466.5 | 516.5 | 543.5 | 561.0 | 633.3 | 638.1 |
| 70° | 1625.1 | 712.0 | 424.3 | 378.3 | 378.3 | 422.8 | 468.0 | 500.6 | 526.1 | 607.9 | 607.9 |
| 72.5° | 1113.3 | 592.0 | 364.7 | 332.2 | 333.0 | 374.3 | 420.4 | 456.9 | 487.1 | 557.0 | 558.6 |
| 75° | 704.1 | 462.5 | 299.6 | 282.9 | 286.1 | 325.0 | 372.7 | 410.8 | 471.2 | 550.7 | 553.1 |
| 77.5° | 374.3 | 325.0 | 238.4 | 234.4 | 238.4 | 274.2 | 327.4 | 379.8 | 472.8 | 477.6 | 469.6 |
| 80° | 242.4 | 230.4 | 188.3 | 180.4 | 182.0 | 220.9 | 291.6 | 360.8 | 379.8 | 384.6 | 367.1 |
| 82.5° | 131.9 | 146.2 | 133.5 | 125.6 | 125.6 | 172.4 | 248.7 | 286.9 | 272.6 | 226.5 | 216.1 |
| 85° | 56.4 | 68.3 | 69.1 | 60.4 | 58.0 | 106.5 | 166.9 | 156.5 | 145.4 | 139.1 | 137.5 |
| 87.5° | 15.9 | 22.3 | 22.3 | 16.7 | 12.7 | 29.4 | 33.4 | 9.5 | 0.0 | 0.8 | 1.6 |
| 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)