

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: P191077

Luminaire Tested: **GAN-AF-09-LED-U-SL2-600-ADJ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191077
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)
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-SL2-600-ADJ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35135.3 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G5

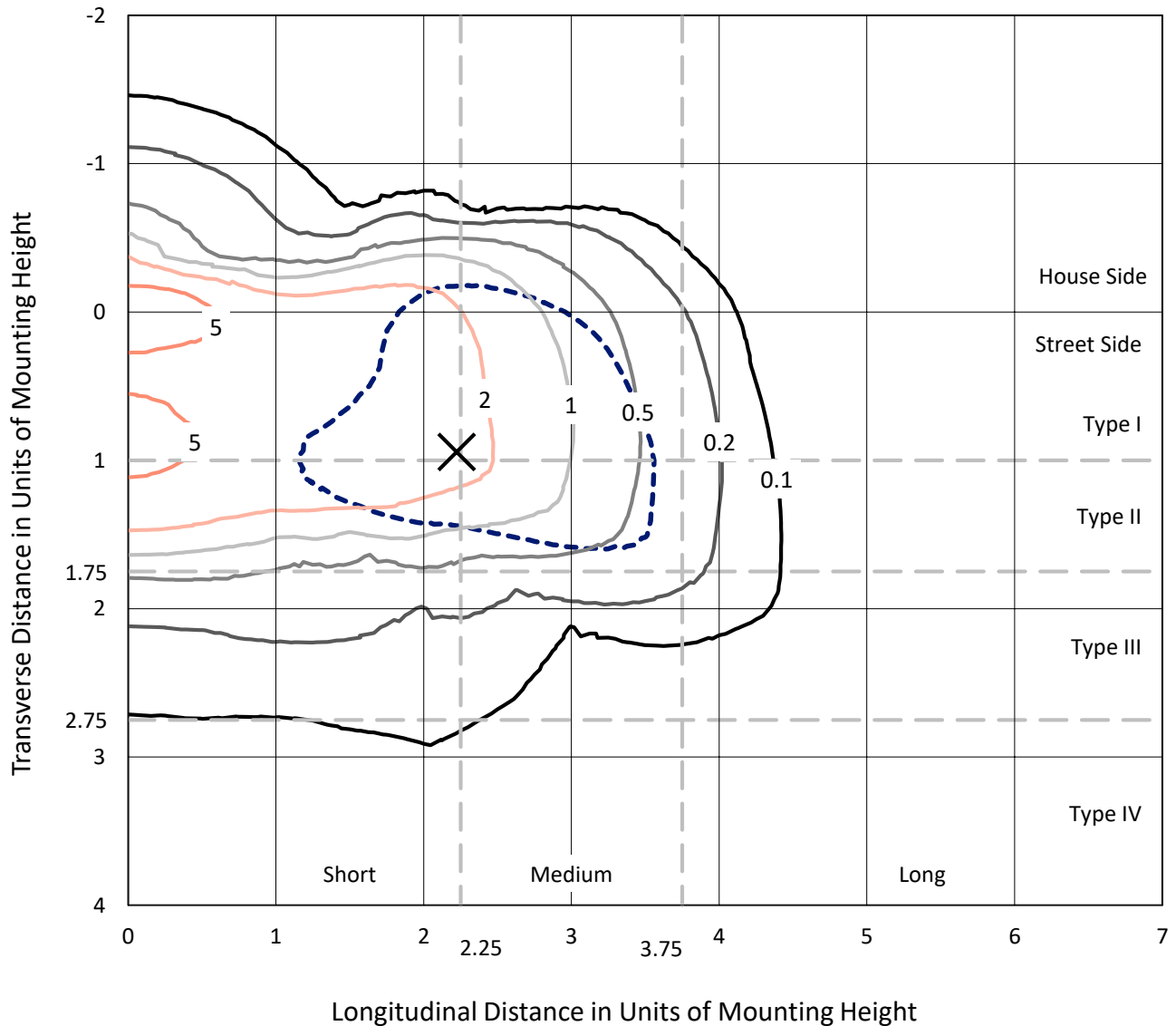
Input Watts (W): 290
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

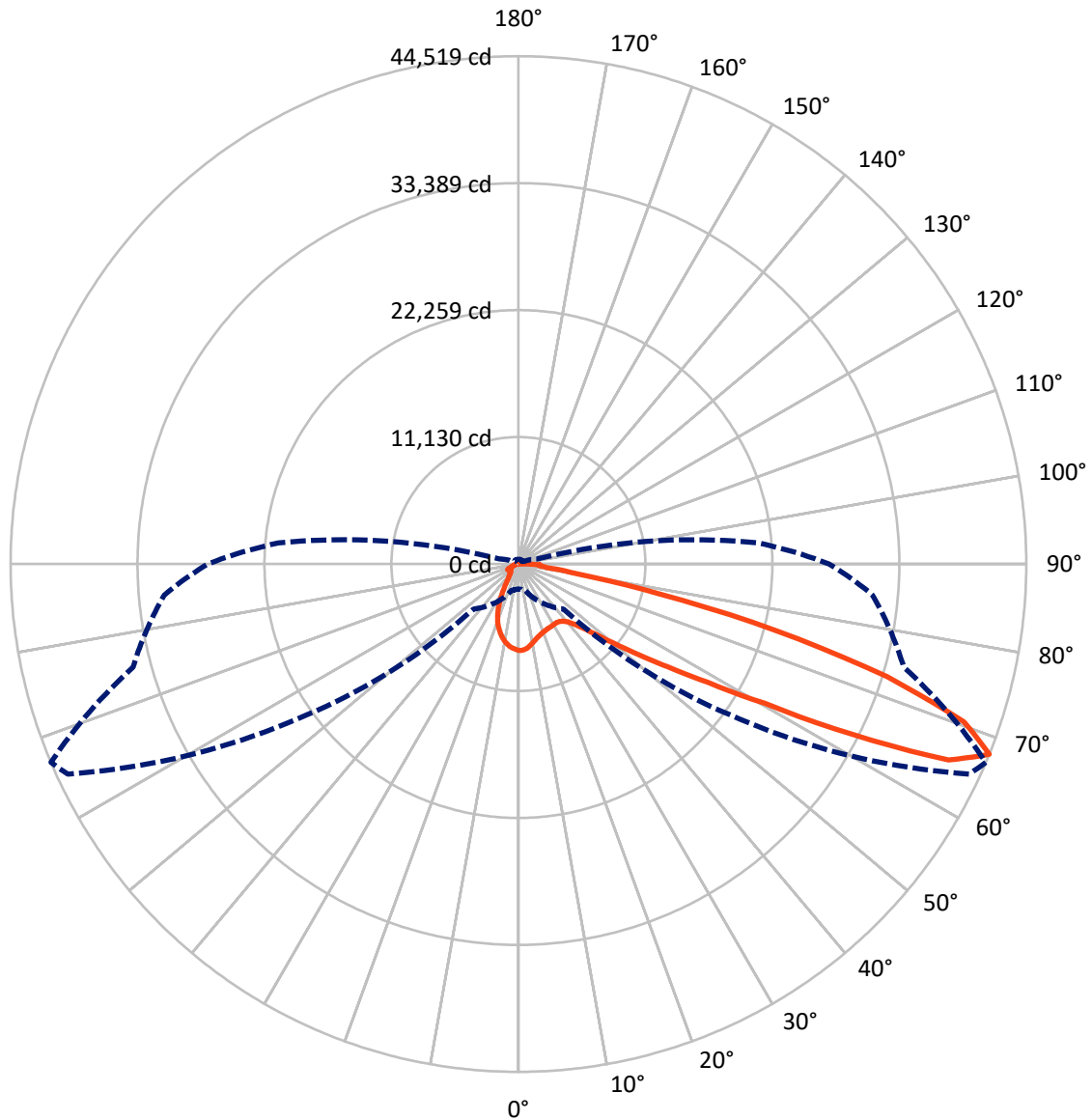
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.4 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5821.5 | 0.0 | 5821.5 |
| | % Fixture | 16.6 | 0.0 | 16.6 |
| Street Side | Lumens | 29313.8 | 0.0 | 29313.8 |
| | % Fixture | 83.4 | 0.0 | 83.4 |
| Total | Lumens | 35135.3 | 0.0 | 35135.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 646.6 | 1.8 |
| 10°-20° | 1496.1 | 4.3 |
| 20°-30° | 2027.9 | 5.8 |
| 30°-40° | 2882.9 | 8.2 |
| 40°-50° | 4823.2 | 13.7 |
| 50°-60° | 7630.3 | 21.7 |
| 60°-70° | 9720.3 | 27.7 |
| 70°-80° | 5091.5 | 14.5 |
| 80°-90° | 816.6 | 2.3 |
| 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° | 35135.3 | 100.0 |
| 0°-180° | 35135.3 | 100.0 |

Coefficient of Utilization



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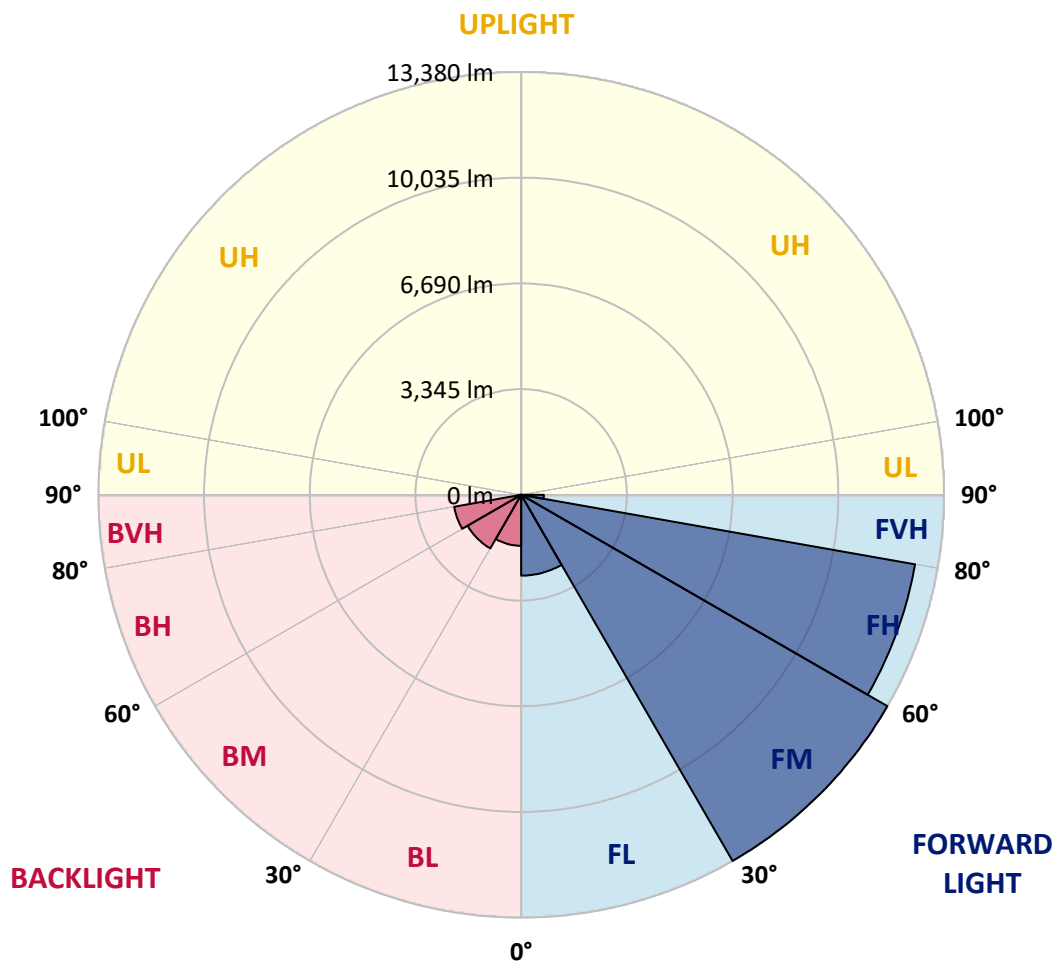
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 2557.0 | 7.3 | | | |
| FM | (30°-60°) | 13380.3 | 38.1 | | | |
| FH | (60°-80°) | 12658.5 | 36.0 | | | G5 |
| FVH | (80°-90°) | 718.0 | 2.0 | | | G4/750 |
| BL | (0°-30°) | 1613.6 | 4.6 | B3/2500 | | |
| BM | (30°-60°) | 1956.2 | 5.6 | B2/2500 | | |
| BH | (60°-80°) | 2153.2 | 6.1 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 98.6 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G5

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 67° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 7578.6 | 7578.6 | 7578.6 | 7578.6 | 7578.6 | 7578.6 | 7578.6 | 7578.6 | 7578.6 | 7578.6 | 7578.6 |
| 2.5° | 7266.7 | 7278.8 | 7317.0 | 7341.2 | 7450.4 | 7497.2 | 7530.0 | 7563.0 | 7568.2 | 7583.7 | 7568.2 |
| 5° | 6504.3 | 6530.3 | 6601.4 | 6681.1 | 6892.4 | 7058.8 | 7233.8 | 7415.7 | 7448.6 | 7566.5 | 7599.4 |
| 7.5° | 5913.5 | 5906.6 | 5965.5 | 6060.8 | 6277.3 | 6507.8 | 6814.5 | 7176.6 | 7247.7 | 7512.8 | 7640.9 |
| 10° | 5482.1 | 5476.9 | 5539.3 | 5638.0 | 5844.2 | 6062.5 | 6409.1 | 6904.6 | 7005.1 | 7427.9 | 7680.8 |
| 12.5° | 5163.2 | 5165.0 | 5227.4 | 5336.5 | 5546.2 | 5766.3 | 6118.0 | 6641.2 | 6769.5 | 7329.1 | 7722.4 |
| 15° | 4951.9 | 4965.8 | 5016.0 | 5132.1 | 5336.5 | 5556.6 | 5901.4 | 6443.7 | 6587.5 | 7251.1 | 7769.2 |
| 17.5° | 4880.9 | 4903.4 | 4920.7 | 5005.6 | 5180.6 | 5400.7 | 5738.5 | 6298.2 | 6450.6 | 7197.4 | 7810.7 |
| 20° | 4946.7 | 4972.7 | 4939.7 | 4969.2 | 5080.1 | 5274.1 | 5610.3 | 6183.8 | 6339.7 | 7136.8 | 7816.0 |
| 22.5° | 5229.1 | 5253.4 | 5156.4 | 5071.5 | 5064.5 | 5182.4 | 5504.6 | 6093.7 | 6254.8 | 7091.7 | 7817.7 |
| 25° | 5726.4 | 5742.0 | 5579.1 | 5381.6 | 5189.3 | 5149.4 | 5430.1 | 6031.3 | 6202.9 | 7051.9 | 7784.8 |
| 27.5° | 6336.3 | 6348.4 | 6161.3 | 5870.2 | 5483.8 | 5227.4 | 5404.1 | 5995.0 | 6173.4 | 7017.2 | 7729.3 |
| 30° | 7077.9 | 7135.1 | 6883.8 | 6516.5 | 5953.4 | 5457.9 | 5456.1 | 5975.9 | 6140.5 | 6958.3 | 7620.2 |
| 32.5° | 7836.7 | 7861.0 | 7687.8 | 7315.2 | 6585.8 | 5863.2 | 5601.7 | 5989.8 | 6131.9 | 6887.2 | 7481.6 |
| 35° | 8606.1 | 8637.3 | 8524.7 | 8224.8 | 7450.4 | 6457.6 | 5885.8 | 6071.2 | 6185.6 | 6863.0 | 7384.6 |
| 37.5° | 9602.3 | 9643.9 | 9488.0 | 9141.4 | 8502.1 | 7263.3 | 6358.8 | 6275.6 | 6350.2 | 6932.3 | 7355.1 |
| 40° | 11177.3 | 11158.2 | 10702.5 | 10186.2 | 9652.6 | 8294.2 | 7034.5 | 6622.2 | 6665.4 | 7155.8 | 7445.1 |
| 42.5° | 13010.4 | 12963.7 | 12178.7 | 11367.8 | 10917.4 | 9541.7 | 7928.6 | 7223.4 | 7214.8 | 7595.9 | 7762.3 |
| 45° | 14472.8 | 14434.7 | 13727.8 | 12728.1 | 12367.7 | 10962.5 | 9084.3 | 8119.2 | 8055.1 | 8294.2 | 8347.9 |
| 47.5° | 15264.6 | 15266.3 | 14859.2 | 14043.1 | 14034.5 | 12767.9 | 10569.1 | 9415.2 | 9304.4 | 9417.0 | 9359.8 |
| 50° | 14987.4 | 15023.8 | 14980.5 | 14720.6 | 15555.7 | 15134.7 | 12507.9 | 11222.4 | 10998.9 | 11109.8 | 10889.7 |
| 52.5° | 13646.4 | 13693.1 | 13949.6 | 14348.0 | 16195.1 | 17995.2 | 15356.4 | 13467.9 | 13207.9 | 13168.1 | 12923.9 |
| 55° | 11269.1 | 11326.3 | 11849.6 | 12932.5 | 15663.1 | 19916.8 | 19851.0 | 16330.2 | 15916.1 | 15540.2 | 15436.1 |
| 57.5° | 7767.5 | 7862.7 | 8704.8 | 10312.7 | 13942.6 | 20497.2 | 25203.1 | 20410.5 | 19568.5 | 18255.2 | 18279.4 |
| 60° | 4378.4 | 4489.3 | 5482.1 | 6942.7 | 10470.4 | 19866.5 | 29274.8 | 26590.9 | 24813.2 | 21434.6 | 21614.7 |
| 62.5° | 2784.4 | 2904.0 | 3657.7 | 4823.7 | 6282.6 | 16470.5 | 30943.3 | 35183.2 | 32925.5 | 25353.8 | 25530.5 |
| 65° | 2254.2 | 2306.1 | 2661.3 | 3981.6 | 4562.1 | 9922.8 | 29676.7 | 42261.0 | 41418.9 | 30328.2 | 29503.5 |
| 67.5° | 2200.5 | 2217.8 | 2401.5 | 3342.3 | 4375.0 | 5577.4 | 23671.4 | 43584.8 | 44518.6 | 34973.5 | 31158.2 |
| 70° | 2174.5 | 2235.1 | 2706.4 | 3189.8 | 4189.5 | 4704.1 | 14225.1 | 39956.6 | 41431.0 | 36188.0 | 28956.0 |
| 72.5° | 1055.2 | 1051.7 | 1361.9 | 2884.8 | 4719.7 | 4879.2 | 7308.3 | 32329.4 | 33809.1 | 31352.2 | 23794.4 |
| 75° | 850.7 | 778.0 | 743.3 | 1056.9 | 4537.8 | 5038.5 | 4657.4 | 22245.5 | 23316.2 | 21020.5 | 14627.0 |
| 77.5° | 807.4 | 720.8 | 660.1 | 661.8 | 1918.0 | 5343.5 | 3945.2 | 12312.2 | 12624.0 | 9494.9 | 4007.6 |
| 80° | 668.8 | 589.1 | 545.7 | 615.1 | 928.7 | 5088.8 | 4265.8 | 5572.2 | 5113.0 | 2332.1 | 1334.1 |
| 82.5° | 464.3 | 422.8 | 410.6 | 516.3 | 743.3 | 3626.5 | 4960.6 | 2994.0 | 2510.6 | 1167.8 | 823.0 |
| 85° | 296.2 | 253.0 | 280.7 | 375.9 | 578.7 | 1673.8 | 5109.5 | 2333.9 | 1855.6 | 741.5 | 464.3 |
| 87.5° | 136.9 | 110.9 | 138.6 | 208.0 | 377.7 | 576.9 | 4861.8 | 2621.5 | 1911.1 | 391.6 | 292.8 |
| 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-09-LED-U-SL2-600-ADJ

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 7578.6 | 7578.6 | 7578.6 | 7578.6 | 7578.6 | 7578.6 | 7578.6 | 7578.6 | 7578.6 | 7578.6 | 7578.6 |
| 2.5° | 7582.1 | 7549.2 | 7523.2 | 7474.6 | 7420.9 | 7368.9 | 7322.2 | 7263.3 | 7246.0 | 7230.3 | 7254.6 |
| 5° | 7606.4 | 7573.4 | 7478.1 | 7329.1 | 7164.5 | 7010.3 | 6856.1 | 6724.4 | 6642.9 | 6597.9 | 6623.9 |
| 7.5° | 7642.7 | 7595.9 | 7398.4 | 7124.6 | 6828.4 | 6558.0 | 6279.1 | 6055.6 | 5891.0 | 5813.0 | 5835.5 |
| 10° | 7675.6 | 7585.5 | 7263.3 | 6852.6 | 6419.4 | 6017.5 | 5577.4 | 5213.6 | 4943.2 | 4801.1 | 4835.8 |
| 12.5° | 7689.5 | 7545.7 | 7074.4 | 6513.0 | 5918.7 | 5329.6 | 4681.6 | 4137.5 | 3749.4 | 3607.3 | 3577.9 |
| 15° | 7703.3 | 7500.6 | 6866.5 | 6126.7 | 5314.0 | 4480.6 | 3572.8 | 2921.2 | 2599.0 | 2527.9 | 2512.4 |
| 17.5° | 7706.8 | 7422.6 | 6630.9 | 5707.3 | 4605.3 | 3470.5 | 2443.0 | 2028.9 | 2030.7 | 2145.0 | 2158.8 |
| 20° | 7670.4 | 7306.5 | 6345.0 | 5185.8 | 3756.4 | 2399.7 | 1677.2 | 1606.1 | 1867.8 | 2153.7 | 2188.3 |
| 22.5° | 7587.2 | 7152.4 | 6021.0 | 4577.6 | 2784.4 | 1580.2 | 1297.7 | 1375.8 | 1713.5 | 2063.6 | 2103.4 |
| 25° | 7481.6 | 6965.3 | 5638.0 | 3872.5 | 1843.6 | 1129.6 | 1088.1 | 1183.3 | 1412.1 | 1646.0 | 1668.5 |
| 27.5° | 7337.7 | 6743.5 | 5208.4 | 3065.1 | 1197.3 | 930.5 | 958.2 | 1022.2 | 1115.8 | 1219.8 | 1230.2 |
| 30° | 7152.4 | 6478.3 | 4749.2 | 2235.1 | 904.4 | 836.9 | 876.7 | 911.3 | 951.2 | 1010.2 | 1015.4 |
| 32.5° | 6939.3 | 6223.6 | 4277.9 | 1543.8 | 802.2 | 788.4 | 819.6 | 836.9 | 868.1 | 904.4 | 907.9 |
| 35° | 6760.8 | 5981.1 | 3789.3 | 1091.6 | 758.9 | 752.0 | 772.7 | 779.7 | 809.2 | 848.9 | 852.4 |
| 37.5° | 6658.6 | 5783.6 | 3285.1 | 880.1 | 729.5 | 719.0 | 731.2 | 731.2 | 772.7 | 831.7 | 840.4 |
| 40° | 6665.4 | 5674.4 | 2780.9 | 795.2 | 705.2 | 691.3 | 693.0 | 693.0 | 746.8 | 810.9 | 816.1 |
| 42.5° | 6854.4 | 5702.1 | 2333.9 | 762.4 | 686.1 | 670.5 | 661.8 | 667.1 | 712.1 | 753.7 | 757.2 |
| 45° | 7297.9 | 5897.9 | 1914.6 | 741.5 | 667.1 | 661.8 | 642.8 | 641.1 | 658.4 | 677.5 | 677.5 |
| 47.5° | 8025.7 | 6284.3 | 1630.4 | 727.7 | 651.5 | 649.8 | 627.2 | 604.7 | 602.9 | 609.9 | 609.9 |
| 50° | 9209.0 | 6949.6 | 1439.8 | 712.1 | 641.1 | 627.2 | 601.2 | 566.6 | 554.4 | 559.7 | 559.7 |
| 52.5° | 10983.2 | 8136.6 | 1367.1 | 691.3 | 618.6 | 596.1 | 566.6 | 531.9 | 521.5 | 523.2 | 523.2 |
| 55° | 13310.2 | 9959.2 | 1356.6 | 667.1 | 594.3 | 557.9 | 533.7 | 507.7 | 495.5 | 499.0 | 499.0 |
| 57.5° | 16153.4 | 12480.2 | 1542.1 | 628.9 | 561.4 | 519.8 | 506.0 | 488.6 | 480.0 | 485.2 | 483.4 |
| 60° | 19610.1 | 15779.2 | 2287.1 | 589.1 | 528.5 | 485.2 | 485.2 | 471.3 | 464.3 | 469.5 | 467.8 |
| 62.5° | 23591.7 | 19568.5 | 3215.7 | 559.7 | 493.8 | 457.5 | 464.3 | 457.5 | 450.5 | 454.0 | 452.2 |
| 65° | 27122.8 | 22037.5 | 3011.4 | 537.2 | 459.1 | 431.4 | 443.6 | 440.1 | 434.9 | 438.3 | 436.6 |
| 67.5° | 27225.1 | 21122.7 | 1691.0 | 512.9 | 426.3 | 405.4 | 422.8 | 421.0 | 417.6 | 421.0 | 419.3 |
| 70° | 24296.9 | 17835.9 | 953.0 | 467.8 | 391.6 | 374.3 | 398.5 | 396.8 | 393.3 | 400.3 | 398.5 |
| 72.5° | 19466.2 | 12942.9 | 696.5 | 412.4 | 356.9 | 341.4 | 369.1 | 367.3 | 367.3 | 377.7 | 372.6 |
| 75° | 11201.5 | 6660.3 | 556.2 | 353.4 | 320.5 | 308.4 | 332.7 | 334.4 | 337.9 | 351.7 | 341.4 |
| 77.5° | 3193.2 | 2075.7 | 454.0 | 299.7 | 275.5 | 270.3 | 294.5 | 298.0 | 299.7 | 315.4 | 301.5 |
| 80° | 1186.8 | 956.5 | 374.3 | 251.2 | 225.3 | 227.0 | 249.5 | 254.7 | 256.5 | 272.0 | 254.7 |
| 82.5° | 757.2 | 630.6 | 303.2 | 194.1 | 176.8 | 175.0 | 202.7 | 209.6 | 209.6 | 211.3 | 201.0 |
| 85° | 441.8 | 377.7 | 228.7 | 140.3 | 124.8 | 119.6 | 150.8 | 162.9 | 157.6 | 154.2 | 147.3 |
| 87.5° | 296.2 | 259.9 | 140.3 | 77.9 | 67.6 | 64.1 | 88.4 | 97.1 | 93.6 | 88.4 | 83.2 |
| 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)