

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: P194537

Luminaire Tested: **GAN-AF-09-LED-U-SL4-7060-600-HSS-ADJ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P194537
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
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-SL4-7060-600-HSS-ADJ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28456 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - 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

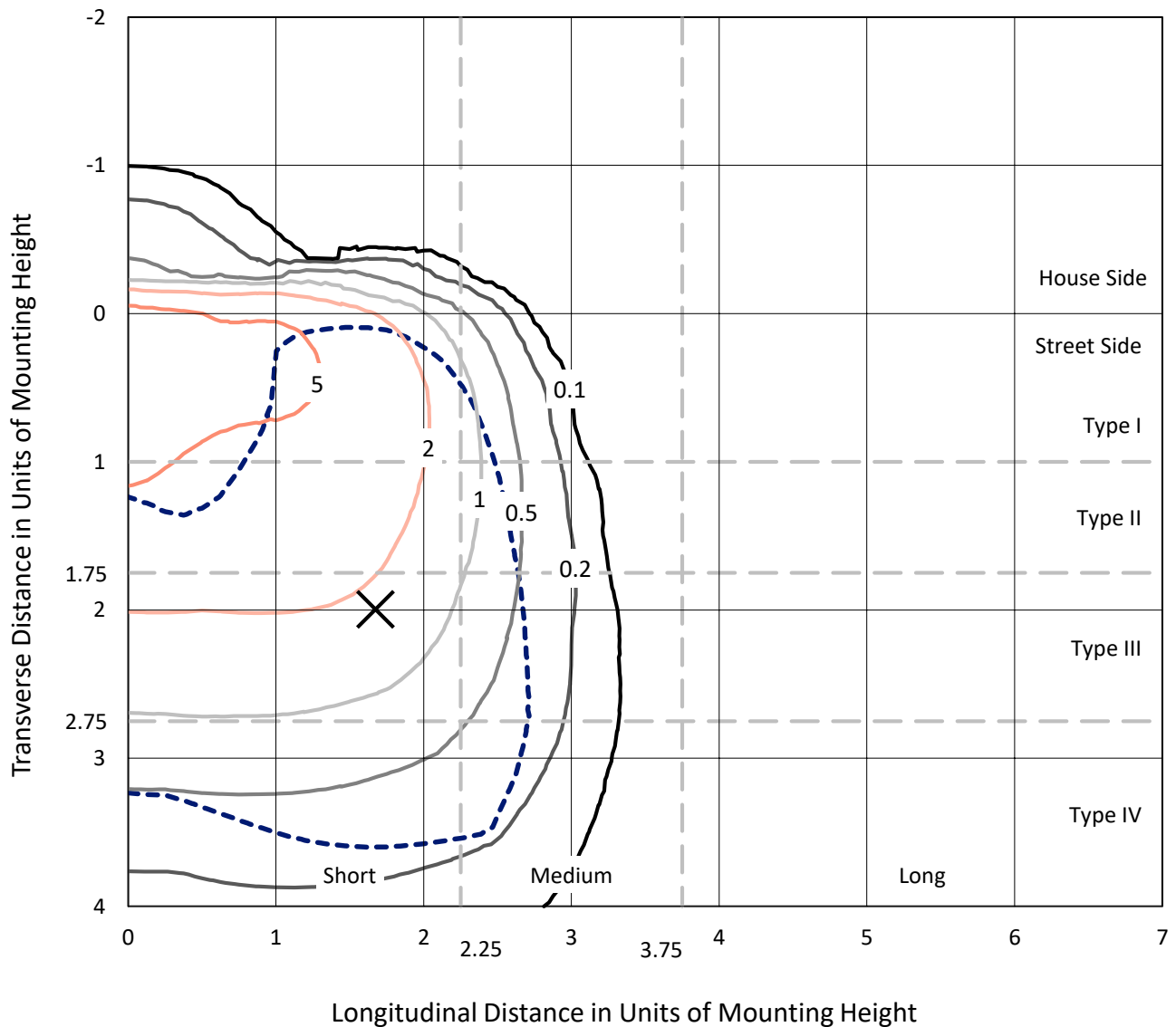


REPORT NUMBER: P194537

CATALOG NUMBER: GAN-AF-09-LED-U-SL4-7060-600-HSS-ADJ

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

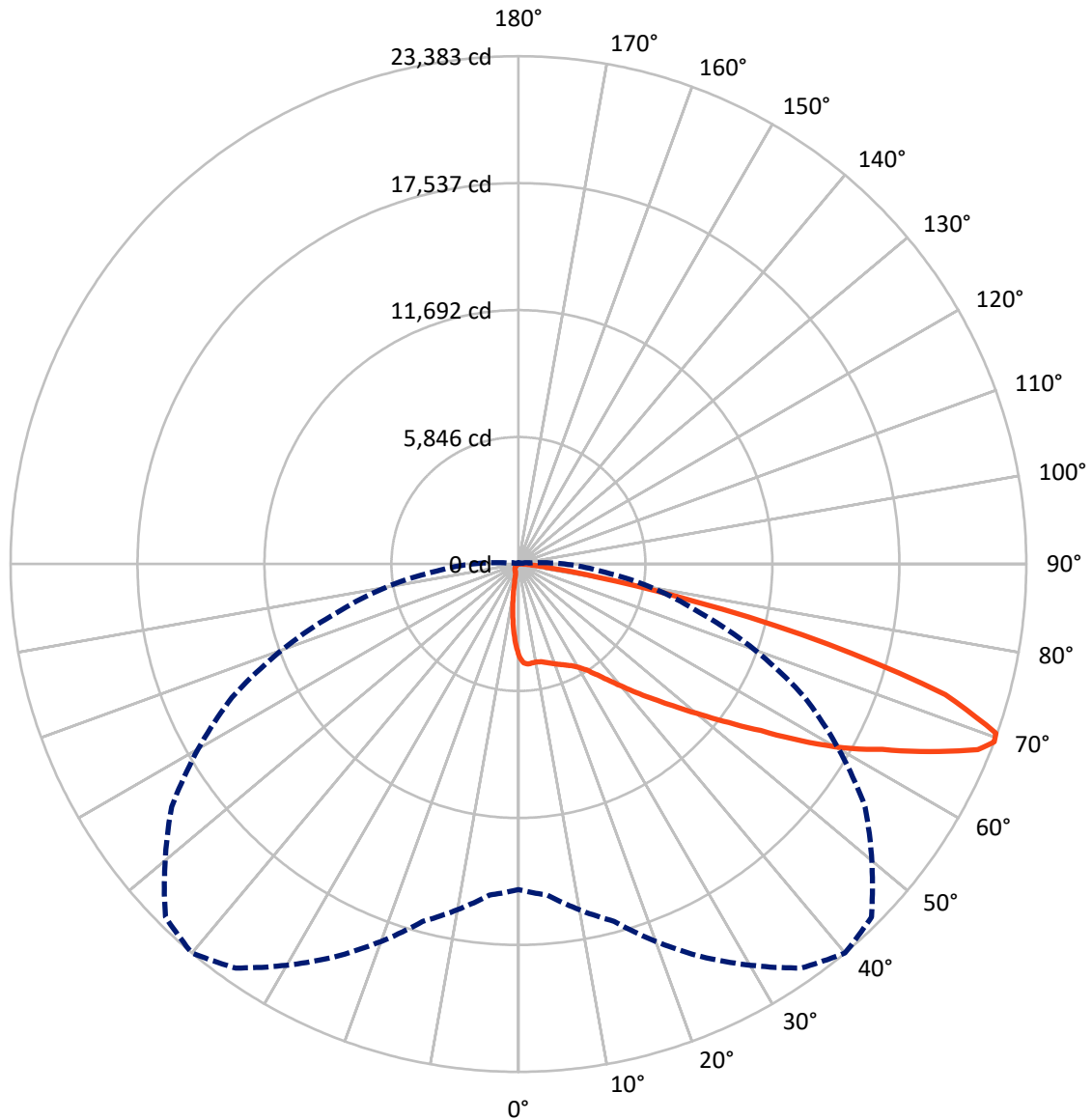


Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P194537

CATALOG NUMBER: GAN-AF-09-LED-U-SL4-7060-600-HSS-ADJ

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P194537

CATALOG NUMBER: GAN-AF-09-LED-U-SL4-7060-600-HSS-ADJ

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1664.8 | 0.0 | 1664.8 |
| | % Fixture | 5.9 | 0.0 | 5.9 |
| Street Side | Lumens | 26791.2 | 0.0 | 26791.2 |
| | % Fixture | 94.1 | 0.0 | 94.1 |
| Total | Lumens | 28456.0 | 0.0 | 28456.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 344.7 | 1.2 |
| 10°-20° | 847.7 | 3.0 |
| 20°-30° | 1427.8 | 5.0 |
| 30°-40° | 2337.4 | 8.2 |
| 40°-50° | 4047.1 | 14.2 |
| 50°-60° | 6374.6 | 22.4 |
| 60°-70° | 8325.0 | 29.3 |
| 70°-80° | 4287.8 | 15.1 |
| 80°-90° | 463.8 | 1.6 |
| 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° | 28456.0 | 100.0 |
| 0°-180° | 28456.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P194537

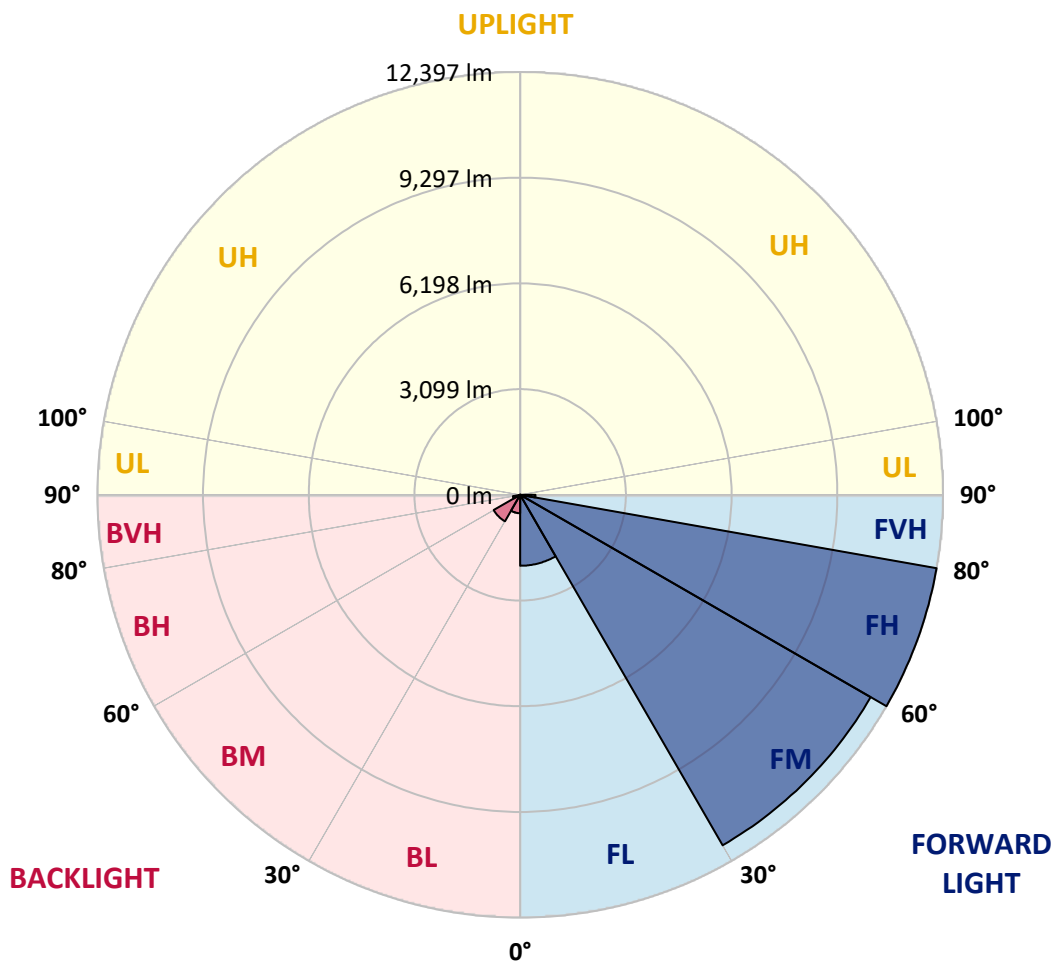
CATALOG NUMBER: GAN-AF-09-LED-U-SL4-7060-600-HSS-ADJ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|--------|
| | | | | B | U | G |
| FL | (0°-30°) | 2080.9 | 7.3 | | | |
| FM | (30°-60°) | 11864.4 | 41.7 | | | |
| FH | (60°-80°) | 12396.6 | 43.6 | | | G5 |
| FVH | (80°-90°) | 449.2 | 1.6 | | | G3/500 |
| BL | (0°-30°) | 539.3 | 1.9 | B2/1000 | | |
| BM | (30°-60°) | 894.8 | 3.1 | B1/1000 | | |
| BH | (60°-80°) | 216.2 | 0.8 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 14.6 | 0.1 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G5

Type IV Short





REPORT NUMBER: P194537

CATALOG NUMBER: GAN-AF-09-LED-U-SL4-7060-600-HSS-ADJ

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4251.5 | 4251.5 | 4251.5 | 4251.5 | 4251.5 | 4251.5 | 4251.5 | 4251.5 | 4251.5 | 4251.5 | 4251.5 |
| 2.5° | 4668.2 | 4642.7 | 4627.5 | 4607.2 | 4581.8 | 4559.7 | 4551.3 | 4488.6 | 4429.3 | 4348.0 | 4254.9 |
| 5° | 4754.5 | 4746.1 | 4719.0 | 4691.9 | 4661.4 | 4627.5 | 4608.9 | 4534.3 | 4449.6 | 4331.1 | 4168.5 |
| 7.5° | 4763.0 | 4752.8 | 4719.0 | 4681.7 | 4639.4 | 4598.7 | 4566.5 | 4492.0 | 4414.1 | 4293.8 | 4095.6 |
| 10° | 4749.5 | 4737.6 | 4712.2 | 4671.5 | 4619.0 | 4580.1 | 4547.9 | 4476.7 | 4410.7 | 4302.3 | 4082.1 |
| 12.5° | 4734.2 | 4722.4 | 4710.5 | 4690.2 | 4644.4 | 4617.3 | 4590.2 | 4522.5 | 4463.2 | 4371.7 | 4131.2 |
| 15° | 4749.5 | 4742.7 | 4756.2 | 4747.8 | 4722.4 | 4698.6 | 4671.5 | 4610.6 | 4556.4 | 4480.1 | 4221.0 |
| 17.5° | 4813.8 | 4813.8 | 4856.2 | 4861.2 | 4837.5 | 4803.7 | 4764.7 | 4703.7 | 4658.0 | 4593.6 | 4327.7 |
| 20° | 4964.6 | 4959.5 | 5013.7 | 5023.9 | 4966.3 | 4913.8 | 4856.2 | 4781.6 | 4746.1 | 4705.4 | 4432.7 |
| 22.5° | 5223.7 | 5200.0 | 5232.2 | 5222.0 | 5108.5 | 5027.2 | 4956.1 | 4864.6 | 4846.0 | 4827.4 | 4549.6 |
| 25° | 5560.8 | 5547.2 | 5569.3 | 5469.3 | 5269.5 | 5159.4 | 5074.7 | 4971.3 | 4971.3 | 4990.0 | 4681.7 |
| 27.5° | 6050.3 | 5999.5 | 5925.0 | 5748.8 | 5449.0 | 5308.4 | 5216.9 | 5106.8 | 5135.6 | 5205.1 | 4856.2 |
| 30° | 6551.7 | 6495.8 | 6324.7 | 6053.7 | 5667.5 | 5520.1 | 5413.4 | 5298.2 | 5366.0 | 5493.0 | 5089.9 |
| 32.5° | 7046.3 | 6983.6 | 6741.4 | 6399.2 | 5980.9 | 5833.5 | 5730.2 | 5603.1 | 5716.6 | 5930.0 | 5432.1 |
| 35° | 7525.6 | 7469.7 | 7190.2 | 6787.1 | 6397.5 | 6275.6 | 6180.7 | 6070.6 | 6216.3 | 6514.4 | 5914.8 |
| 37.5° | 8064.2 | 8003.3 | 7662.8 | 7225.8 | 6904.0 | 6815.9 | 6746.5 | 6636.4 | 6890.4 | 7327.4 | 6587.2 |
| 40° | 8726.5 | 8623.2 | 8164.2 | 7728.9 | 7490.0 | 7447.7 | 7400.3 | 7385.0 | 7779.7 | 8384.4 | 7483.3 |
| 42.5° | 9485.4 | 9316.0 | 8689.3 | 8259.0 | 8133.7 | 8164.2 | 8152.3 | 8220.1 | 8892.5 | 9698.8 | 8574.1 |
| 45° | 10244.2 | 10025.7 | 9273.6 | 8824.8 | 8841.7 | 8948.4 | 9014.5 | 9285.5 | 10286.5 | 11206.3 | 9747.9 |
| 47.5° | 10887.8 | 10672.7 | 9834.3 | 9436.2 | 9639.5 | 9849.5 | 10029.1 | 10542.3 | 11719.5 | 12690.1 | 10660.9 |
| 50° | 11438.3 | 11235.1 | 10428.8 | 10108.7 | 10566.0 | 10904.8 | 11196.1 | 11956.6 | 13260.9 | 13819.8 | 11301.1 |
| 52.5° | 11888.9 | 11753.4 | 11045.4 | 10879.4 | 11624.6 | 12120.9 | 12547.8 | 13459.0 | 14626.1 | 14737.9 | 11799.1 |
| 55° | 12327.6 | 12231.0 | 11707.6 | 11795.7 | 12867.9 | 13543.7 | 14084.1 | 15052.9 | 15801.6 | 15503.5 | 12276.8 |
| 57.5° | 12832.3 | 12744.3 | 12463.1 | 12957.7 | 14502.4 | 15352.7 | 15942.2 | 16465.6 | 16836.5 | 16286.0 | 12727.3 |
| 60° | 13347.3 | 13296.4 | 13303.2 | 14248.4 | 16379.2 | 17195.6 | 17520.8 | 17656.3 | 17852.8 | 17022.8 | 12752.7 |
| 62.5° | 13838.5 | 13935.0 | 14263.6 | 15684.7 | 18176.3 | 18803.0 | 18967.3 | 19101.1 | 18870.8 | 17139.7 | 11782.2 |
| 65° | 14670.1 | 14827.6 | 15611.9 | 17607.2 | 20153.0 | 20823.7 | 20993.1 | 20534.1 | 19031.7 | 15628.8 | 9583.6 |
| 67.5° | 15076.6 | 15364.6 | 16763.7 | 19399.2 | 22070.4 | 22815.7 | 22753.0 | 20627.3 | 17078.7 | 11917.7 | 6150.2 |
| 69° | 14991.9 | 15298.5 | 17029.6 | 19948.0 | 22707.3 | 23383.1 | 22985.1 | 19487.3 | 14549.9 | 8633.4 | 3775.5 |
| 70° | 14656.6 | 14966.5 | 16892.4 | 19927.7 | 22788.6 | 23323.8 | 22554.8 | 18079.8 | 12302.2 | 6312.8 | 2361.2 |
| 72.5° | 12239.5 | 12507.1 | 14997.0 | 18012.0 | 20993.1 | 20557.8 | 18869.1 | 12525.8 | 5994.4 | 1719.2 | 531.9 |
| 75° | 7534.1 | 7683.1 | 10760.8 | 13569.1 | 15855.8 | 14737.9 | 12571.5 | 6231.5 | 1787.0 | 486.1 | 294.7 |
| 77.5° | 3980.5 | 4048.2 | 5891.1 | 7998.2 | 10051.1 | 8316.6 | 6443.3 | 2430.6 | 823.2 | 304.9 | 213.4 |
| 80° | 2352.7 | 2403.5 | 3172.5 | 3656.9 | 4349.7 | 3633.2 | 2576.3 | 1492.2 | 589.4 | 191.4 | 189.7 |
| 82.5° | 1346.6 | 1378.8 | 2300.2 | 2032.6 | 1714.1 | 1463.5 | 1282.2 | 1414.3 | 354.0 | 128.7 | 196.5 |
| 85° | 494.6 | 501.4 | 1294.1 | 1546.5 | 1019.7 | 606.4 | 636.9 | 1172.1 | 94.9 | 81.3 | 154.1 |
| 87.5° | 230.4 | 225.3 | 665.7 | 946.8 | 596.2 | 384.5 | 496.3 | 257.5 | 37.3 | 52.5 | 42.3 |
| 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: P194537

CATALOG NUMBER: GAN-AF-09-LED-U-SL4-7060-600-HSS-ADJ

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4251.5 | 4251.5 | 4251.5 | 4251.5 | 4251.5 | 4251.5 | 4251.5 | 4251.5 | 4251.5 | 4251.5 | 4251.5 |
| 2.5° | 4200.7 | 4138.0 | 4024.5 | 3907.6 | 3789.1 | 3697.6 | 3607.8 | 3536.7 | 3513.0 | 3468.9 | 3472.3 |
| 5° | 4071.9 | 3956.7 | 3719.6 | 3479.1 | 3228.4 | 3021.8 | 2827.0 | 2669.5 | 2593.2 | 2515.3 | 2515.3 |
| 7.5° | 3960.1 | 3792.4 | 3421.5 | 3030.2 | 2625.4 | 2285.0 | 1978.4 | 1748.0 | 1621.0 | 1519.4 | 1517.7 |
| 10° | 3917.8 | 3690.8 | 3172.5 | 2611.9 | 2047.8 | 1583.7 | 1219.5 | 985.8 | 865.5 | 787.6 | 784.2 |
| 12.5° | 3936.4 | 3655.3 | 2981.1 | 2225.7 | 1517.7 | 1018.0 | 706.3 | 555.6 | 504.8 | 481.0 | 481.0 |
| 15° | 3990.6 | 3645.1 | 2789.7 | 1848.0 | 1072.2 | 636.9 | 469.2 | 428.5 | 425.1 | 425.1 | 425.1 |
| 17.5° | 4056.7 | 3648.5 | 2593.2 | 1480.4 | 730.0 | 455.6 | 404.8 | 399.7 | 403.1 | 403.1 | 403.1 |
| 20° | 4124.4 | 3650.2 | 2381.5 | 1139.9 | 514.9 | 396.4 | 381.1 | 379.4 | 382.8 | 382.8 | 384.5 |
| 22.5° | 4207.4 | 3658.6 | 2169.8 | 852.0 | 425.1 | 374.3 | 362.5 | 362.5 | 364.2 | 364.2 | 362.5 |
| 25° | 4302.3 | 3675.6 | 1949.6 | 631.8 | 387.9 | 359.1 | 348.9 | 347.2 | 348.9 | 347.2 | 345.5 |
| 27.5° | 4420.9 | 3699.3 | 1704.0 | 494.6 | 370.9 | 343.8 | 335.4 | 335.4 | 333.7 | 332.0 | 330.3 |
| 30° | 4569.9 | 3726.4 | 1427.9 | 420.1 | 354.0 | 330.3 | 321.8 | 320.1 | 318.4 | 315.0 | 315.0 |
| 32.5° | 4796.9 | 3785.7 | 1155.2 | 381.1 | 335.4 | 311.7 | 304.9 | 304.9 | 301.5 | 298.1 | 296.4 |
| 35° | 5145.8 | 3902.5 | 911.3 | 357.4 | 315.0 | 291.3 | 282.9 | 282.9 | 279.5 | 277.8 | 276.1 |
| 37.5° | 5628.5 | 4080.4 | 708.0 | 335.4 | 294.7 | 269.3 | 260.8 | 259.2 | 255.8 | 252.4 | 250.7 |
| 40° | 6270.5 | 4300.6 | 557.3 | 315.0 | 274.4 | 247.3 | 240.5 | 237.1 | 230.4 | 225.3 | 225.3 |
| 42.5° | 7076.8 | 4551.3 | 452.2 | 293.0 | 250.7 | 227.0 | 221.9 | 216.8 | 205.0 | 199.9 | 198.2 |
| 45° | 7920.3 | 4776.6 | 382.8 | 267.6 | 227.0 | 206.6 | 203.3 | 194.8 | 179.5 | 174.5 | 174.5 |
| 47.5° | 8528.4 | 4829.1 | 337.1 | 243.9 | 205.0 | 184.6 | 182.9 | 167.7 | 154.1 | 150.7 | 149.1 |
| 50° | 8907.8 | 4725.7 | 299.8 | 220.2 | 184.6 | 164.3 | 159.2 | 140.6 | 132.1 | 128.7 | 127.0 |
| 52.5° | 9163.5 | 4541.1 | 269.3 | 199.9 | 166.0 | 145.7 | 133.8 | 120.3 | 113.5 | 110.1 | 110.1 |
| 55° | 9368.5 | 4280.3 | 238.8 | 181.2 | 150.7 | 130.4 | 113.5 | 103.3 | 96.5 | 93.2 | 93.2 |
| 57.5° | 9426.1 | 3926.3 | 208.3 | 166.0 | 135.5 | 115.2 | 96.5 | 89.8 | 81.3 | 79.6 | 79.6 |
| 60° | 9007.7 | 3287.7 | 184.6 | 147.4 | 122.0 | 99.9 | 84.7 | 76.2 | 67.8 | 66.1 | 64.4 |
| 62.5° | 7905.0 | 2544.1 | 162.6 | 130.4 | 106.7 | 86.4 | 72.8 | 62.7 | 55.9 | 55.9 | 55.9 |
| 65° | 6030.0 | 1705.7 | 142.3 | 113.5 | 93.2 | 72.8 | 62.7 | 50.8 | 47.4 | 47.4 | 49.1 |
| 67.5° | 3609.5 | 928.2 | 122.0 | 96.5 | 79.6 | 61.0 | 52.5 | 44.0 | 42.3 | 44.0 | 44.0 |
| 69° | 2115.6 | 545.4 | 110.1 | 86.4 | 69.4 | 54.2 | 45.7 | 39.0 | 42.3 | 44.0 | 44.0 |
| 70° | 1305.9 | 367.6 | 101.6 | 77.9 | 62.7 | 49.1 | 42.3 | 37.3 | 40.7 | 42.3 | 42.3 |
| 72.5° | 364.2 | 189.7 | 81.3 | 61.0 | 50.8 | 40.7 | 33.9 | 33.9 | 39.0 | 40.7 | 40.7 |
| 75° | 237.1 | 140.6 | 62.7 | 45.7 | 39.0 | 32.2 | 28.8 | 32.2 | 37.3 | 39.0 | 39.0 |
| 77.5° | 196.5 | 115.2 | 50.8 | 37.3 | 32.2 | 30.5 | 27.1 | 28.8 | 33.9 | 35.6 | 35.6 |
| 80° | 179.5 | 81.3 | 40.7 | 33.9 | 28.8 | 27.1 | 25.4 | 23.7 | 30.5 | 32.2 | 32.2 |
| 82.5° | 171.1 | 64.4 | 35.6 | 30.5 | 27.1 | 23.7 | 22.0 | 23.7 | 27.1 | 28.8 | 30.5 |
| 85° | 106.7 | 42.3 | 32.2 | 28.8 | 23.7 | 22.0 | 22.0 | 22.0 | 25.4 | 27.1 | 27.1 |
| 87.5° | 39.0 | 33.9 | 28.8 | 23.7 | 20.3 | 20.3 | 20.3 | 20.3 | 22.0 | 25.4 | 25.4 |
| 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)