

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: P299368

Luminaire Tested: **GAA-AF-06-LED-U-5NQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299368
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-06-LED-U-5NQ
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36597.6 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 333
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

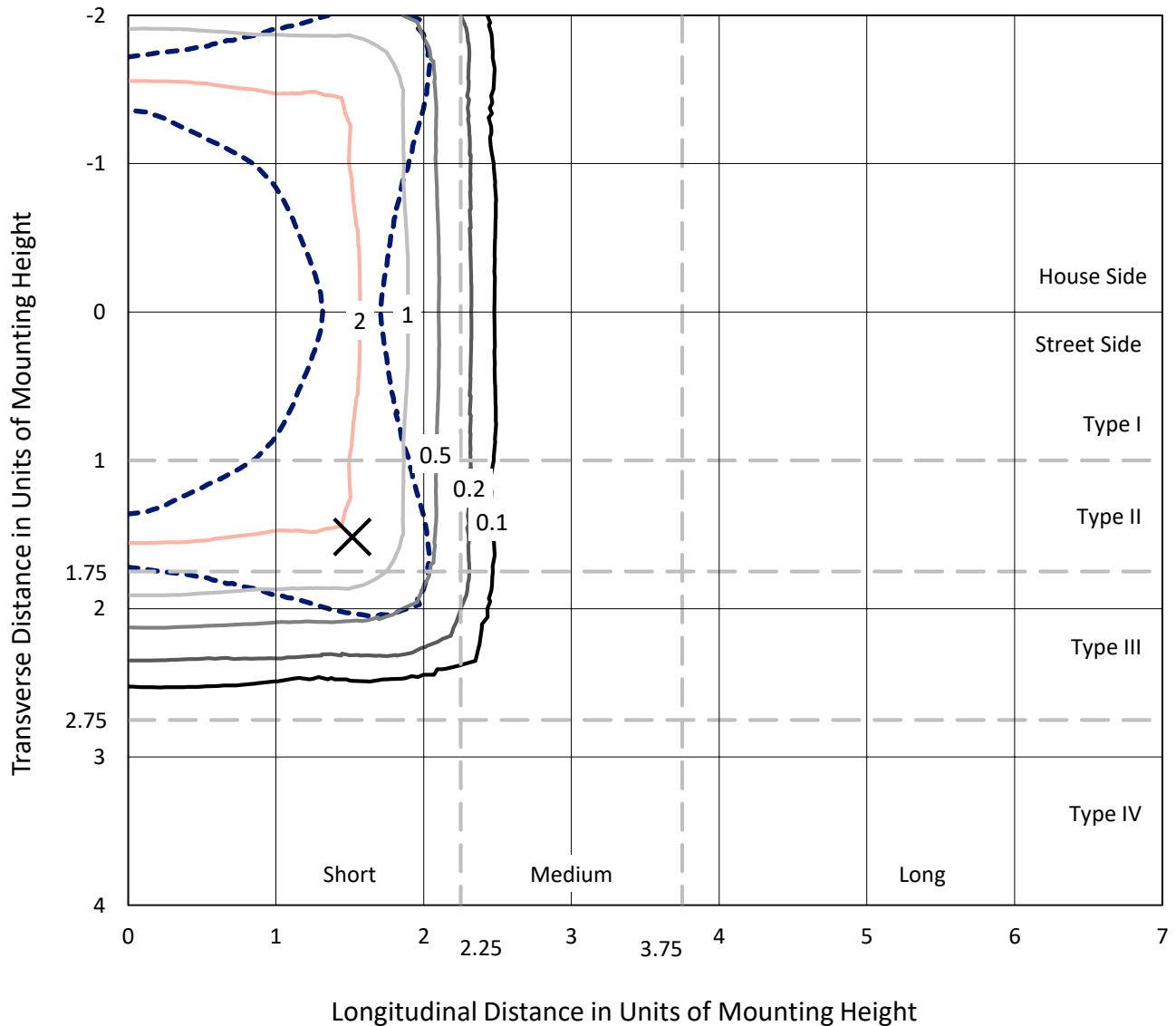


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

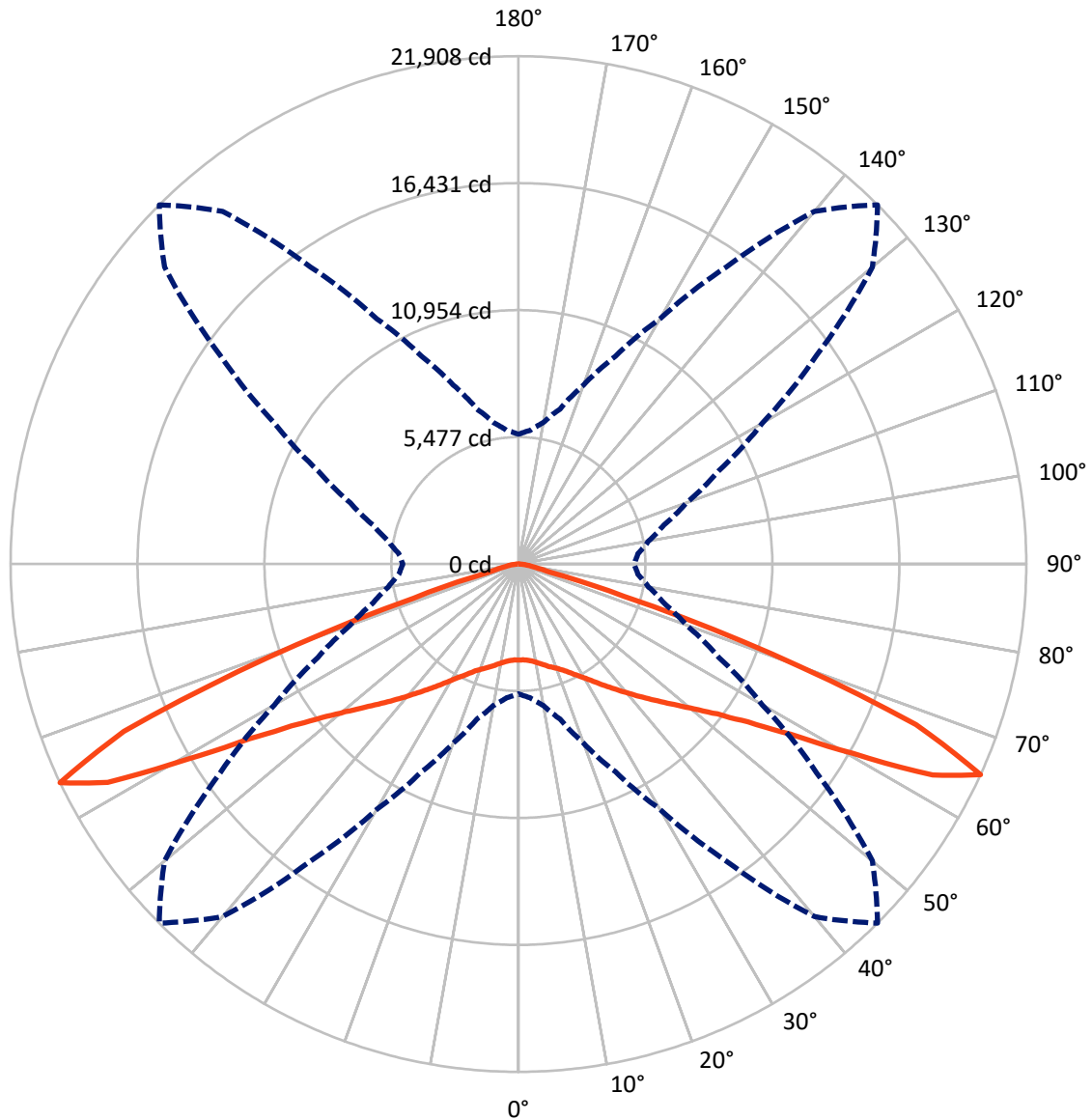


Based on 30 foot mounting height. Maximum calculated value = 4.6 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 18298.8 | 0.0 | 18298.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 18298.8 | 0.0 | 18298.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 36597.6 | 0.0 | 36597.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 403.6 | 1.1 |
| 10°-20° | 1294.5 | 3.5 |
| 20°-30° | 2420.4 | 6.6 |
| 30°-40° | 4093.6 | 11.2 |
| 40°-50° | 6693.5 | 18.3 |
| 50°-60° | 10643.7 | 29.1 |
| 60°-70° | 9621.2 | 26.3 |
| 70°-80° | 1217.6 | 3.3 |
| 80°-90° | 209.5 | 0.6 |
| 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° | 36597.6 | 100.0 |
| 0°-180° | 36597.6 | 100.0 |



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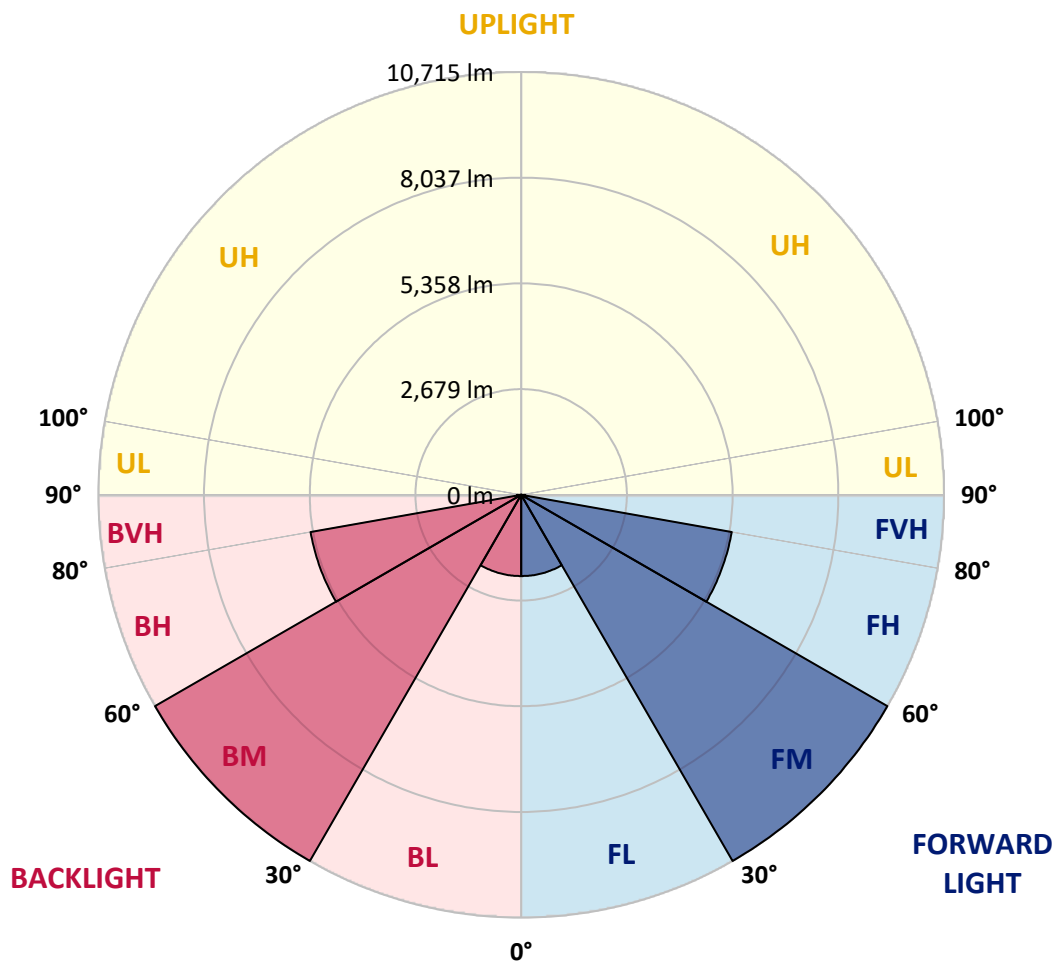
CATALOG NUMBER: GAA-AF-06-LED-U-5NQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 2059.3 | 5.6 | | | |
| FM | (30°-60°) | 10715.4 | 29.3 | | | |
| FH | (60°-80°) | 5419.4 | 14.8 | | | G3/7500 |
| FVH | (80°-90°) | 104.7 | 0.3 | | | G2/225 |
| BL | (0°-30°) | 2059.3 | 5.6 | B3/2500 | | |
| BM | (30°-60°) | 10715.4 | 29.3 | B5 | | |
| BH | (60°-80°) | 5419.4 | 14.8 | B5 | | G3/7500 |
| BVH | (80°-90°) | 104.7 | 0.3 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4141.0 | 4141.0 | 4141.0 | 4141.0 | 4141.0 | 4141.0 | 4141.0 | 4141.0 | 4141.0 | 4141.0 | 4141.0 |
| 2.5° | 4144.5 | 4147.9 | 4151.3 | 4147.9 | 4151.3 | 4146.2 | 4142.7 | 4147.9 | 4142.7 | 4137.6 | 4141.0 |
| 5° | 4180.5 | 4182.2 | 4182.2 | 4177.0 | 4182.2 | 4178.7 | 4173.6 | 4180.5 | 4175.3 | 4170.2 | 4173.6 |
| 7.5° | 4240.4 | 4247.3 | 4242.2 | 4237.0 | 4240.4 | 4237.0 | 4233.6 | 4235.3 | 4233.6 | 4228.4 | 4230.2 |
| 10° | 4321.0 | 4326.1 | 4322.7 | 4321.0 | 4324.4 | 4322.7 | 4319.3 | 4317.6 | 4319.3 | 4314.1 | 4314.1 |
| 12.5° | 4418.7 | 4417.0 | 4415.3 | 4417.0 | 4422.1 | 4422.1 | 4420.4 | 4422.1 | 4425.6 | 4427.3 | 4423.8 |
| 15° | 4514.7 | 4518.1 | 4518.1 | 4518.1 | 4528.4 | 4537.0 | 4542.1 | 4545.5 | 4552.4 | 4554.1 | 4547.3 |
| 17.5° | 4634.7 | 4634.7 | 4633.0 | 4634.7 | 4645.0 | 4658.7 | 4663.8 | 4670.7 | 4677.5 | 4682.7 | 4674.1 |
| 20° | 4768.4 | 4771.8 | 4771.8 | 4775.2 | 4788.9 | 4804.4 | 4804.4 | 4807.8 | 4804.4 | 4807.8 | 4802.6 |
| 22.5° | 4931.2 | 4941.5 | 4941.5 | 4943.2 | 4956.9 | 4975.8 | 4970.6 | 4975.8 | 4967.2 | 4974.0 | 4967.2 |
| 25° | 5143.7 | 5159.2 | 5155.7 | 5155.7 | 5166.0 | 5178.0 | 5179.7 | 5190.0 | 5188.3 | 5196.9 | 5191.7 |
| 27.5° | 5383.7 | 5407.7 | 5414.5 | 5412.8 | 5419.7 | 5431.7 | 5435.1 | 5447.1 | 5440.2 | 5447.1 | 5443.7 |
| 30° | 5671.6 | 5681.9 | 5695.6 | 5700.8 | 5709.3 | 5721.3 | 5721.3 | 5723.1 | 5714.5 | 5724.8 | 5729.9 |
| 32.5° | 5969.9 | 5988.7 | 6002.4 | 6033.3 | 6048.7 | 6057.3 | 6055.6 | 6059.0 | 6050.4 | 6064.1 | 6074.4 |
| 35° | 6364.1 | 6377.8 | 6400.1 | 6424.1 | 6444.7 | 6442.9 | 6437.8 | 6439.5 | 6439.5 | 6451.5 | 6461.8 |
| 37.5° | 6838.9 | 6842.3 | 6871.4 | 6905.7 | 6916.0 | 6905.7 | 6874.9 | 6868.0 | 6852.6 | 6868.0 | 6885.2 |
| 40° | 7341.1 | 7353.1 | 7411.4 | 7433.6 | 7438.8 | 7419.9 | 7375.4 | 7349.6 | 7315.4 | 7334.2 | 7358.2 |
| 42.5° | 7867.3 | 7891.3 | 7944.4 | 7983.8 | 8001.0 | 7989.0 | 7927.3 | 7887.8 | 7843.3 | 7853.6 | 7877.6 |
| 45° | 8450.0 | 8479.2 | 8554.6 | 8592.3 | 8624.9 | 8606.0 | 8546.0 | 8486.0 | 8415.8 | 8420.9 | 8458.6 |
| 47.5° | 9101.4 | 9130.5 | 9228.2 | 9291.6 | 9308.8 | 9305.3 | 9238.5 | 9156.2 | 9060.2 | 9056.8 | 9089.4 |
| 50° | 9831.5 | 9860.7 | 9982.4 | 10080.1 | 10129.8 | 10124.6 | 10045.8 | 9929.2 | 9812.7 | 9814.4 | 9855.5 |
| 52.5° | 10544.6 | 10580.5 | 10707.4 | 10875.4 | 10973.1 | 11043.3 | 10995.3 | 10885.6 | 10743.4 | 10746.8 | 10784.5 |
| 55° | 11213.0 | 11273.0 | 11418.7 | 11646.7 | 11828.3 | 12025.5 | 12082.0 | 12078.6 | 11992.9 | 12016.9 | 12054.6 |
| 57.5° | 11537.0 | 11626.1 | 11850.6 | 12210.6 | 12580.8 | 12981.9 | 13321.2 | 13574.9 | 13682.9 | 13845.7 | 13808.0 |
| 60° | 10923.3 | 11065.6 | 11396.4 | 11926.0 | 12657.9 | 13494.4 | 14390.8 | 15266.6 | 16013.9 | 16577.8 | 16253.9 |
| 62.5° | 8943.7 | 9128.8 | 9529.9 | 10208.6 | 11315.9 | 12654.5 | 14370.2 | 16440.7 | 18696.4 | 20057.3 | 19085.4 |
| 65° | 5596.2 | 5788.2 | 6196.1 | 6922.9 | 8218.6 | 9882.9 | 12210.6 | 15642.0 | 19856.7 | 21908.4 | 19930.4 |
| 67.5° | 2181.9 | 2286.5 | 2507.6 | 2972.1 | 3945.6 | 5426.5 | 7762.7 | 11656.9 | 16697.8 | 18495.8 | 16387.6 |
| 70° | 1093.5 | 1103.8 | 1145.0 | 1230.7 | 1439.8 | 1870.0 | 2845.2 | 5404.3 | 9576.1 | 11566.1 | 9231.6 |
| 72.5° | 790.2 | 791.9 | 812.4 | 850.1 | 917.0 | 1013.0 | 1198.1 | 1654.0 | 3114.3 | 4759.8 | 2918.9 |
| 75° | 605.0 | 611.9 | 623.9 | 644.5 | 680.5 | 728.5 | 795.3 | 953.0 | 1180.9 | 1369.5 | 1151.8 |
| 77.5° | 466.2 | 479.9 | 488.5 | 507.3 | 529.6 | 562.2 | 581.0 | 641.0 | 745.6 | 785.0 | 773.0 |
| 80° | 354.8 | 366.8 | 385.7 | 401.1 | 416.5 | 431.9 | 425.1 | 452.5 | 507.3 | 539.9 | 522.8 |
| 82.5° | 226.2 | 240.0 | 294.8 | 308.5 | 315.4 | 325.7 | 313.7 | 315.4 | 339.4 | 359.9 | 339.4 |
| 85° | 145.7 | 154.3 | 186.8 | 204.0 | 205.7 | 212.5 | 207.4 | 195.4 | 195.4 | 178.3 | 200.5 |
| 87.5° | 66.8 | 68.6 | 84.0 | 99.4 | 102.8 | 92.6 | 90.8 | 87.4 | 70.3 | 66.8 | 72.0 |
| 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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CATALOG NUMBER: GAA-AF-06-LED-U-5NQ

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4141.0 | 4141.0 | 4141.0 | 4141.0 | 4141.0 | 4141.0 | 4141.0 | 4141.0 |
| 2.5° | 4139.3 | 4142.7 | 4144.5 | 4149.6 | 4151.3 | 4151.3 | 4153.0 | 4156.5 |
| 5° | 4171.9 | 4177.0 | 4178.7 | 4185.6 | 4187.3 | 4185.6 | 4189.0 | 4190.7 |
| 7.5° | 4230.2 | 4238.7 | 4242.2 | 4249.0 | 4243.9 | 4250.7 | 4252.4 | 4252.4 |
| 10° | 4315.9 | 4324.4 | 4326.1 | 4333.0 | 4329.6 | 4333.0 | 4333.0 | 4329.6 |
| 12.5° | 4429.0 | 4430.7 | 4425.6 | 4430.7 | 4423.8 | 4427.3 | 4422.1 | 4418.7 |
| 15° | 4554.1 | 4549.0 | 4537.0 | 4537.0 | 4526.7 | 4528.4 | 4526.7 | 4525.0 |
| 17.5° | 4675.8 | 4665.5 | 4656.9 | 4653.5 | 4645.0 | 4643.2 | 4638.1 | 4638.1 |
| 20° | 4809.5 | 4804.4 | 4799.2 | 4792.4 | 4783.8 | 4775.2 | 4773.5 | 4776.9 |
| 22.5° | 4970.6 | 4968.9 | 4968.9 | 4965.5 | 4953.5 | 4944.9 | 4939.8 | 4939.8 |
| 25° | 5186.6 | 5171.1 | 5171.1 | 5169.4 | 5164.3 | 5159.2 | 5148.9 | 5154.0 |
| 27.5° | 5430.0 | 5421.4 | 5428.2 | 5426.5 | 5421.4 | 5421.4 | 5414.5 | 5414.5 |
| 30° | 5729.9 | 5726.5 | 5736.8 | 5728.2 | 5711.1 | 5709.3 | 5702.5 | 5693.9 |
| 32.5° | 6076.1 | 6072.7 | 6088.1 | 6077.9 | 6050.4 | 6035.0 | 6021.3 | 6014.4 |
| 35° | 6461.8 | 6463.5 | 6482.4 | 6475.5 | 6444.7 | 6434.4 | 6410.4 | 6406.9 |
| 37.5° | 6883.4 | 6910.9 | 6943.4 | 6950.3 | 6924.6 | 6917.7 | 6892.0 | 6878.3 |
| 40° | 7378.8 | 7414.8 | 7464.5 | 7476.5 | 7449.1 | 7443.9 | 7407.9 | 7389.1 |
| 42.5° | 7906.7 | 7968.4 | 8030.1 | 8040.4 | 8013.0 | 7985.5 | 7951.3 | 7937.6 |
| 45° | 8496.3 | 8570.0 | 8650.6 | 8671.1 | 8630.0 | 8597.4 | 8552.9 | 8552.9 |
| 47.5° | 9157.9 | 9250.5 | 9341.3 | 9397.9 | 9360.2 | 9325.9 | 9272.8 | 9238.5 |
| 50° | 9939.5 | 10066.3 | 10184.6 | 10242.9 | 10182.9 | 10117.8 | 10025.2 | 9994.4 |
| 52.5° | 10919.9 | 11057.0 | 11159.9 | 11129.0 | 11036.5 | 10945.6 | 10844.5 | 10803.4 |
| 55° | 12171.1 | 12217.4 | 12217.4 | 12100.9 | 11915.8 | 11763.2 | 11603.8 | 11550.7 |
| 57.5° | 13736.0 | 13557.8 | 13283.5 | 12935.6 | 12498.5 | 12118.0 | 11860.9 | 11739.2 |
| 60° | 15575.2 | 14718.2 | 13749.7 | 12798.5 | 12016.9 | 11372.4 | 10990.2 | 10815.4 |
| 62.5° | 16800.7 | 14558.7 | 12618.5 | 11091.3 | 9966.9 | 9190.5 | 8662.6 | 8456.9 |
| 65° | 15702.0 | 12142.0 | 9543.6 | 7716.4 | 6490.9 | 5700.8 | 5178.0 | 4986.0 |
| 67.5° | 11501.0 | 7608.5 | 5082.0 | 3642.3 | 2668.7 | 2128.8 | 1914.5 | 1825.4 |
| 70° | 5162.6 | 2679.0 | 1642.0 | 1282.1 | 1105.5 | 1014.7 | 975.3 | 961.6 |
| 72.5° | 1556.3 | 1126.1 | 949.6 | 857.0 | 786.7 | 742.2 | 709.6 | 706.2 |
| 75° | 939.3 | 781.6 | 694.2 | 639.3 | 594.8 | 558.8 | 541.6 | 536.5 |
| 77.5° | 656.5 | 574.2 | 533.1 | 493.6 | 459.4 | 431.9 | 416.5 | 404.5 |
| 80° | 461.1 | 421.6 | 402.8 | 380.5 | 358.2 | 332.5 | 310.2 | 300.0 |
| 82.5° | 308.5 | 300.0 | 300.0 | 286.2 | 267.4 | 243.4 | 198.8 | 188.5 |
| 85° | 198.8 | 197.1 | 200.5 | 195.4 | 181.7 | 156.0 | 128.6 | 121.7 |
| 87.5° | 92.6 | 94.3 | 104.6 | 102.8 | 99.4 | 82.3 | 65.1 | 61.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)