

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: P299366

Luminaire Tested: **GAA-AF-06-LED-U-5NQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299366
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-7030
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 3000K 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: 35400.1 lumens
Efficiency: N/A
Efficacy: 106.3 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

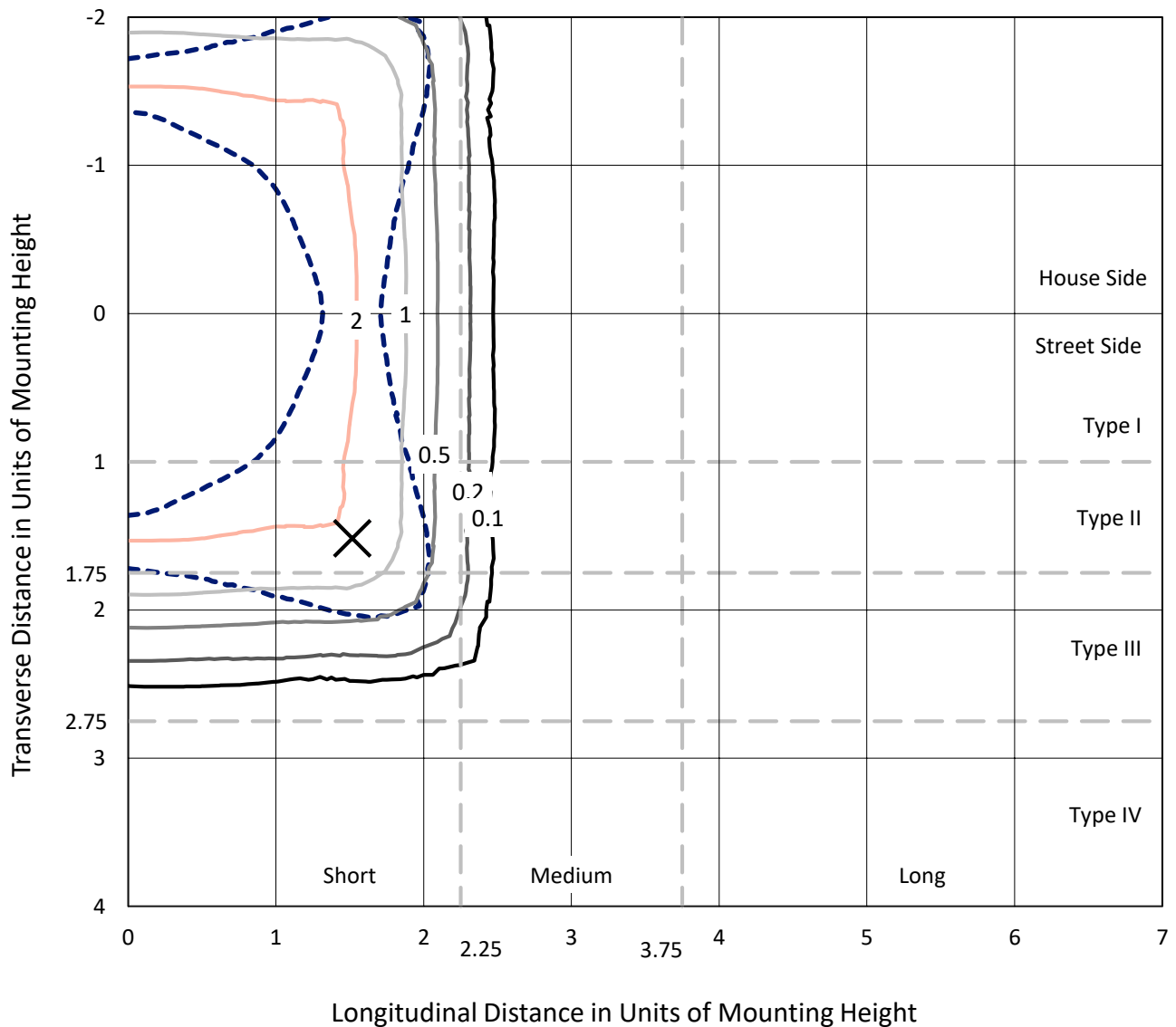
Input Watts (W): 333
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

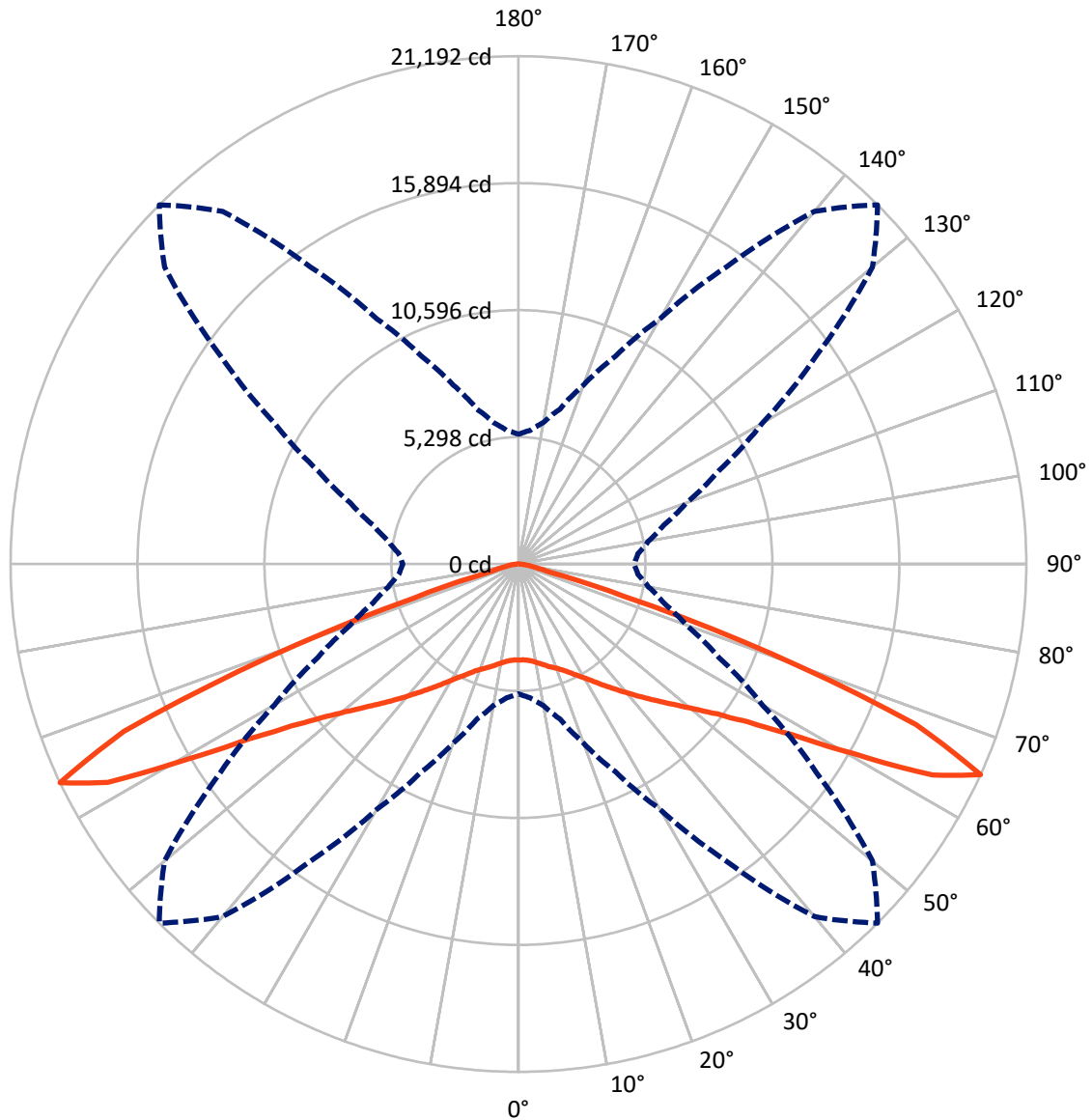
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.5 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 | 17700.0 | 0.0 | 17700.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 17700.0 | 0.0 | 17700.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 35400.1 | 0.0 | 35400.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 390.4 | 1.1 |
| 10°-20° | 1252.1 | 3.5 |
| 20°-30° | 2341.2 | 6.6 |
| 30°-40° | 3959.7 | 11.2 |
| 40°-50° | 6474.5 | 18.3 |
| 50°-60° | 10295.4 | 29.1 |
| 60°-70° | 9306.4 | 26.3 |
| 70°-80° | 1177.8 | 3.3 |
| 80°-90° | 202.6 | 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° | 35400.1 | 100.0 |
| 0°-180° | 35400.1 | 100.0 |

Coefficient of Utilization



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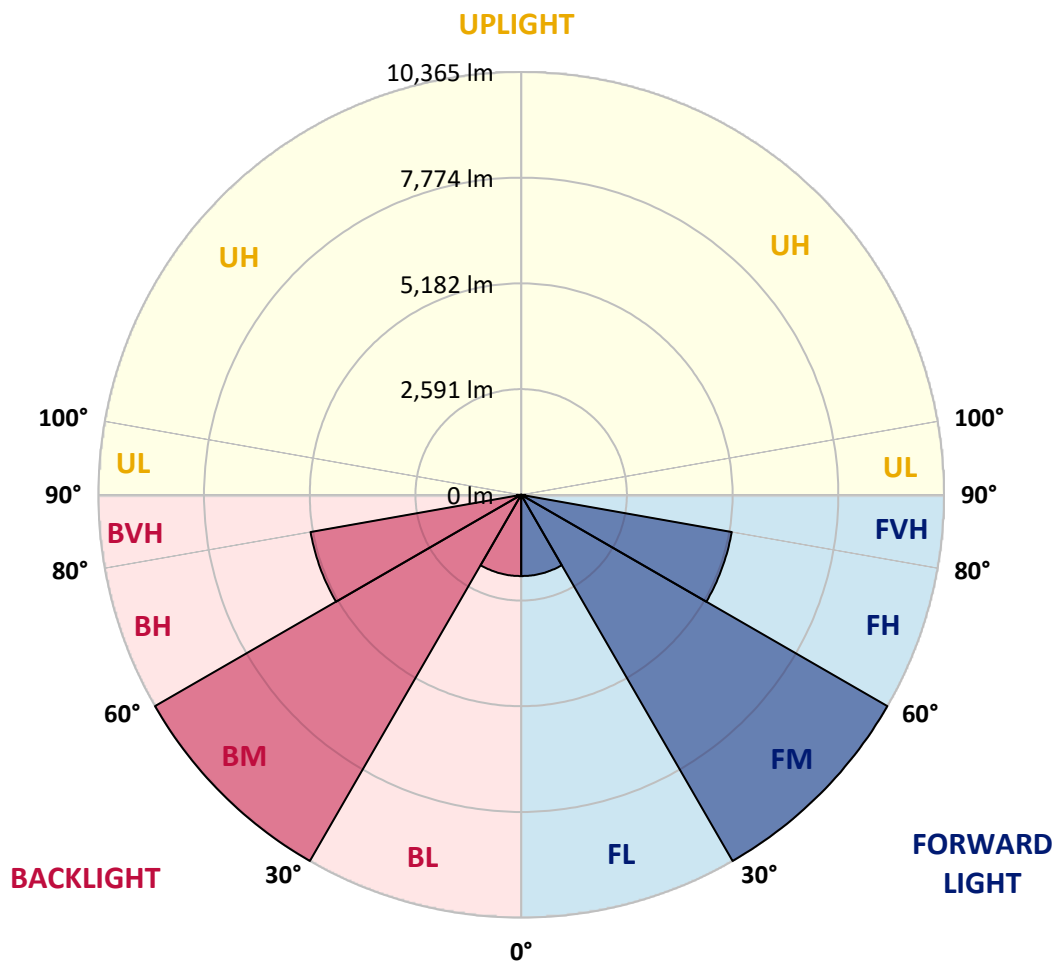
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1991.9 | 5.6 | | | |
| FM (30°-60°) | 10364.8 | 29.3 | | | |
| FH (60°-80°) | 5242.1 | 14.8 | | | G3/7500 |
| FVH (80°-90°) | 101.3 | 0.3 | | | G2/225 |
| BL (0°-30°) | 1991.9 | 5.6 | B3/2500 | | |
| BM (30°-60°) | 10364.8 | 29.3 | B5 | | |
| BH (60°-80°) | 5242.1 | 14.8 | B5 | | G3/7500 |
| BVH (80°-90°) | 101.3 | 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° | 4005.5 | 4005.5 | 4005.5 | 4005.5 | 4005.5 | 4005.5 | 4005.5 | 4005.5 | 4005.5 | 4005.5 | 4005.5 |
| 2.5° | 4008.9 | 4012.2 | 4015.5 | 4012.2 | 4015.5 | 4010.5 | 4007.2 | 4012.2 | 4007.2 | 4002.2 | 4005.5 |
| 5° | 4043.7 | 4045.3 | 4045.3 | 4040.4 | 4045.3 | 4042.0 | 4037.0 | 4043.7 | 4038.7 | 4033.7 | 4037.0 |
| 7.5° | 4101.7 | 4108.3 | 4103.4 | 4098.4 | 4101.7 | 4098.4 | 4095.1 | 4096.7 | 4095.1 | 4090.1 | 4091.7 |
| 10° | 4179.6 | 4184.6 | 4181.3 | 4179.6 | 4182.9 | 4181.3 | 4178.0 | 4176.3 | 4178.0 | 4173.0 | 4173.0 |
| 12.5° | 4274.1 | 4272.5 | 4270.8 | 4272.5 | 4277.4 | 4277.4 | 4275.8 | 4277.4 | 4280.8 | 4282.4 | 4279.1 |
| 15° | 4367.0 | 4370.3 | 4370.3 | 4370.3 | 4380.2 | 4388.5 | 4393.5 | 4396.8 | 4403.4 | 4405.1 | 4398.5 |
| 17.5° | 4483.0 | 4483.0 | 4481.4 | 4483.0 | 4493.0 | 4506.2 | 4511.2 | 4517.8 | 4524.5 | 4529.4 | 4521.1 |
| 20° | 4612.3 | 4615.7 | 4615.7 | 4619.0 | 4632.2 | 4647.2 | 4647.2 | 4650.5 | 4647.2 | 4650.5 | 4645.5 |
| 22.5° | 4769.8 | 4779.8 | 4779.8 | 4781.4 | 4794.7 | 4812.9 | 4808.0 | 4812.9 | 4804.7 | 4811.3 | 4804.7 |
| 25° | 4975.4 | 4990.3 | 4987.0 | 4987.0 | 4997.0 | 5008.6 | 5010.2 | 5020.2 | 5018.5 | 5026.8 | 5021.8 |
| 27.5° | 5207.5 | 5230.7 | 5237.4 | 5235.7 | 5242.3 | 5253.9 | 5257.3 | 5268.9 | 5262.2 | 5268.9 | 5265.6 |
| 30° | 5486.1 | 5496.0 | 5509.3 | 5514.2 | 5522.5 | 5534.1 | 5534.1 | 5535.8 | 5527.5 | 5537.5 | 5542.4 |
| 32.5° | 5774.5 | 5792.8 | 5806.0 | 5835.9 | 5850.8 | 5859.1 | 5857.4 | 5860.7 | 5852.5 | 5865.7 | 5875.7 |
| 35° | 6155.9 | 6169.1 | 6190.7 | 6213.9 | 6233.8 | 6232.1 | 6227.1 | 6228.8 | 6228.8 | 6240.4 | 6250.4 |
| 37.5° | 6615.1 | 6618.4 | 6646.6 | 6679.8 | 6689.7 | 6679.8 | 6649.9 | 6643.3 | 6628.4 | 6643.3 | 6659.9 |
| 40° | 7100.9 | 7112.5 | 7168.8 | 7190.4 | 7195.4 | 7177.1 | 7134.0 | 7109.2 | 7076.0 | 7094.2 | 7117.5 |
| 42.5° | 7609.9 | 7633.1 | 7684.5 | 7722.6 | 7739.2 | 7727.6 | 7667.9 | 7629.7 | 7586.6 | 7596.6 | 7619.8 |
| 45° | 8173.5 | 8201.7 | 8274.7 | 8311.2 | 8342.7 | 8324.4 | 8266.4 | 8208.4 | 8140.4 | 8145.4 | 8181.8 |
| 47.5° | 8803.6 | 8831.7 | 8926.2 | 8987.6 | 9004.2 | 9000.8 | 8936.2 | 8856.6 | 8763.8 | 8760.5 | 8792.0 |
| 50° | 9509.8 | 9538.0 | 9655.7 | 9750.2 | 9798.3 | 9793.3 | 9717.1 | 9604.3 | 9491.6 | 9493.3 | 9533.0 |
| 52.5° | 10199.5 | 10234.3 | 10357.0 | 10519.5 | 10614.0 | 10682.0 | 10635.6 | 10529.5 | 10391.8 | 10395.2 | 10431.6 |
| 55° | 10846.1 | 10904.1 | 11045.1 | 11265.6 | 11441.3 | 11632.0 | 11686.7 | 11683.4 | 11600.5 | 11623.7 | 11660.2 |
| 57.5° | 11159.5 | 11245.7 | 11462.9 | 11811.0 | 12169.1 | 12557.1 | 12885.4 | 13130.7 | 13235.2 | 13392.7 | 13356.2 |
| 60° | 10565.9 | 10703.5 | 11023.5 | 11535.8 | 12243.7 | 13052.8 | 13919.9 | 14767.1 | 15489.9 | 16035.4 | 15722.1 |
| 62.5° | 8651.0 | 8830.1 | 9218.0 | 9874.6 | 10945.6 | 12240.4 | 13900.0 | 15902.8 | 18084.6 | 19401.0 | 18460.9 |
| 65° | 5413.1 | 5598.8 | 5993.4 | 6696.3 | 7949.7 | 9559.6 | 11811.0 | 15130.2 | 19207.0 | 21191.5 | 19278.3 |
| 67.5° | 2110.5 | 2211.7 | 2425.5 | 2874.8 | 3816.5 | 5249.0 | 7508.7 | 11275.5 | 16151.5 | 17890.6 | 15851.4 |
| 70° | 1057.8 | 1067.7 | 1107.5 | 1190.4 | 1392.7 | 1808.8 | 2752.1 | 5227.4 | 9262.8 | 11187.6 | 8929.6 |
| 72.5° | 764.3 | 766.0 | 785.9 | 822.3 | 887.0 | 979.8 | 1158.9 | 1599.9 | 3012.4 | 4604.0 | 2823.4 |
| 75° | 585.2 | 591.9 | 603.5 | 623.4 | 658.2 | 704.6 | 769.3 | 921.8 | 1142.3 | 1324.7 | 1114.1 |
| 77.5° | 451.0 | 464.2 | 472.5 | 490.7 | 512.3 | 543.8 | 562.0 | 620.1 | 721.2 | 759.3 | 747.7 |
| 80° | 343.2 | 354.8 | 373.0 | 388.0 | 402.9 | 417.8 | 411.2 | 437.7 | 490.7 | 522.2 | 505.7 |
| 82.5° | 218.8 | 232.1 | 285.2 | 298.4 | 305.1 | 315.0 | 303.4 | 305.1 | 328.3 | 348.2 | 328.3 |
| 85° | 140.9 | 149.2 | 180.7 | 197.3 | 199.0 | 205.6 | 200.6 | 189.0 | 189.0 | 172.4 | 194.0 |
| 87.5° | 64.7 | 66.3 | 81.2 | 96.2 | 99.5 | 89.5 | 87.9 | 84.6 | 68.0 | 64.7 | 69.6 |
| 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-7030

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4005.5 | 4005.5 | 4005.5 | 4005.5 | 4005.5 | 4005.5 | 4005.5 | 4005.5 |
| 2.5° | 4003.9 | 4007.2 | 4008.9 | 4013.8 | 4015.5 | 4015.5 | 4017.1 | 4020.5 |
| 5° | 4035.4 | 4040.4 | 4042.0 | 4048.6 | 4050.3 | 4048.6 | 4052.0 | 4053.6 |
| 7.5° | 4091.7 | 4100.0 | 4103.4 | 4110.0 | 4105.0 | 4111.6 | 4113.3 | 4113.3 |
| 10° | 4174.6 | 4182.9 | 4184.6 | 4191.2 | 4187.9 | 4191.2 | 4191.2 | 4187.9 |
| 12.5° | 4284.1 | 4285.7 | 4280.8 | 4285.7 | 4279.1 | 4282.4 | 4277.4 | 4274.1 |
| 15° | 4405.1 | 4400.1 | 4388.5 | 4388.5 | 4378.6 | 4380.2 | 4378.6 | 4376.9 |
| 17.5° | 4522.8 | 4512.9 | 4504.6 | 4501.3 | 4493.0 | 4491.3 | 4486.3 | 4486.3 |
| 20° | 4652.1 | 4647.2 | 4642.2 | 4635.5 | 4627.3 | 4619.0 | 4617.3 | 4620.6 |
| 22.5° | 4808.0 | 4806.3 | 4806.3 | 4803.0 | 4791.4 | 4783.1 | 4778.1 | 4778.1 |
| 25° | 5016.9 | 5001.9 | 5001.9 | 5000.3 | 4995.3 | 4990.3 | 4980.4 | 4985.4 |
| 27.5° | 5252.3 | 5244.0 | 5250.6 | 5249.0 | 5244.0 | 5244.0 | 5237.4 | 5237.4 |
| 30° | 5542.4 | 5539.1 | 5549.1 | 5540.8 | 5524.2 | 5522.5 | 5515.9 | 5507.6 |
| 32.5° | 5877.3 | 5874.0 | 5888.9 | 5879.0 | 5852.5 | 5837.5 | 5824.3 | 5817.6 |
| 35° | 6250.4 | 6252.0 | 6270.3 | 6263.6 | 6233.8 | 6223.8 | 6200.6 | 6197.3 |
| 37.5° | 6658.2 | 6684.7 | 6716.2 | 6722.9 | 6698.0 | 6691.4 | 6666.5 | 6653.2 |
| 40° | 7137.3 | 7172.2 | 7220.2 | 7231.8 | 7205.3 | 7200.3 | 7165.5 | 7147.3 |
| 42.5° | 7648.0 | 7707.7 | 7767.4 | 7777.3 | 7750.8 | 7724.3 | 7691.1 | 7677.8 |
| 45° | 8218.3 | 8289.6 | 8367.5 | 8387.4 | 8347.6 | 8316.1 | 8273.0 | 8273.0 |
| 47.5° | 8858.3 | 8947.8 | 9035.7 | 9090.4 | 9053.9 | 9020.7 | 8969.3 | 8936.2 |
| 50° | 9614.3 | 9737.0 | 9851.4 | 9907.7 | 9849.7 | 9786.7 | 9697.2 | 9667.3 |
| 52.5° | 10562.6 | 10695.2 | 10794.7 | 10764.9 | 10675.3 | 10587.5 | 10489.7 | 10449.9 |
| 55° | 11772.9 | 11817.7 | 11817.7 | 11704.9 | 11525.9 | 11378.3 | 11224.1 | 11172.7 |
| 57.5° | 13286.6 | 13114.2 | 12848.9 | 12512.3 | 12089.6 | 11721.5 | 11472.8 | 11355.1 |
| 60° | 15065.5 | 14236.6 | 13299.8 | 12379.7 | 11623.7 | 11000.3 | 10630.6 | 10461.5 |
| 62.5° | 16250.9 | 14082.4 | 12205.6 | 10728.4 | 9640.8 | 8889.8 | 8379.1 | 8180.2 |
| 65° | 15188.2 | 11744.7 | 9231.3 | 7464.0 | 6278.5 | 5514.2 | 5008.6 | 4822.9 |
| 67.5° | 11124.6 | 7359.5 | 4915.7 | 3523.1 | 2581.4 | 2059.1 | 1851.9 | 1765.7 |
| 70° | 4993.7 | 2591.3 | 1588.3 | 1240.1 | 1069.4 | 981.5 | 943.4 | 930.1 |
| 72.5° | 1505.4 | 1089.3 | 918.5 | 829.0 | 761.0 | 717.9 | 686.4 | 683.1 |
| 75° | 908.5 | 756.0 | 671.5 | 618.4 | 575.3 | 540.5 | 523.9 | 518.9 |
| 77.5° | 635.0 | 555.4 | 515.6 | 477.5 | 444.3 | 417.8 | 402.9 | 391.3 |
| 80° | 446.0 | 407.8 | 389.6 | 368.1 | 346.5 | 321.6 | 300.1 | 290.1 |
| 82.5° | 298.4 | 290.1 | 290.1 | 276.9 | 258.6 | 235.4 | 192.3 | 182.4 |
| 85° | 192.3 | 190.7 | 194.0 | 189.0 | 175.7 | 150.9 | 124.3 | 117.7 |
| 87.5° | 89.5 | 91.2 | 101.1 | 99.5 | 96.2 | 79.6 | 63.0 | 59.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)