

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: P190865

Luminaire Tested: **GAN-AF-07-LED-U-5NQ-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190865
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: GAN-AF-07-LED-U-5NQ-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48734.4 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

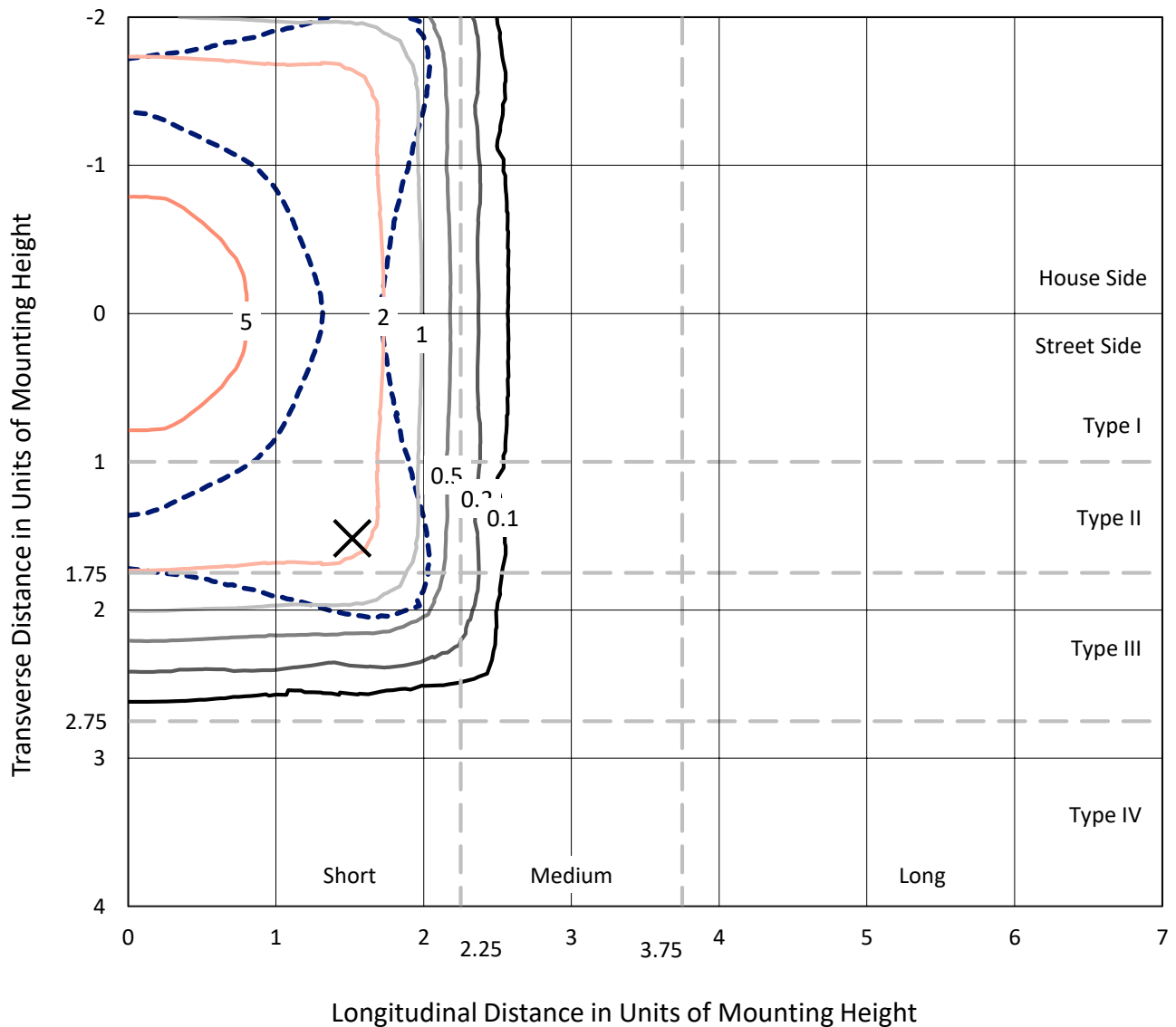
Input Watts (W): 448
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

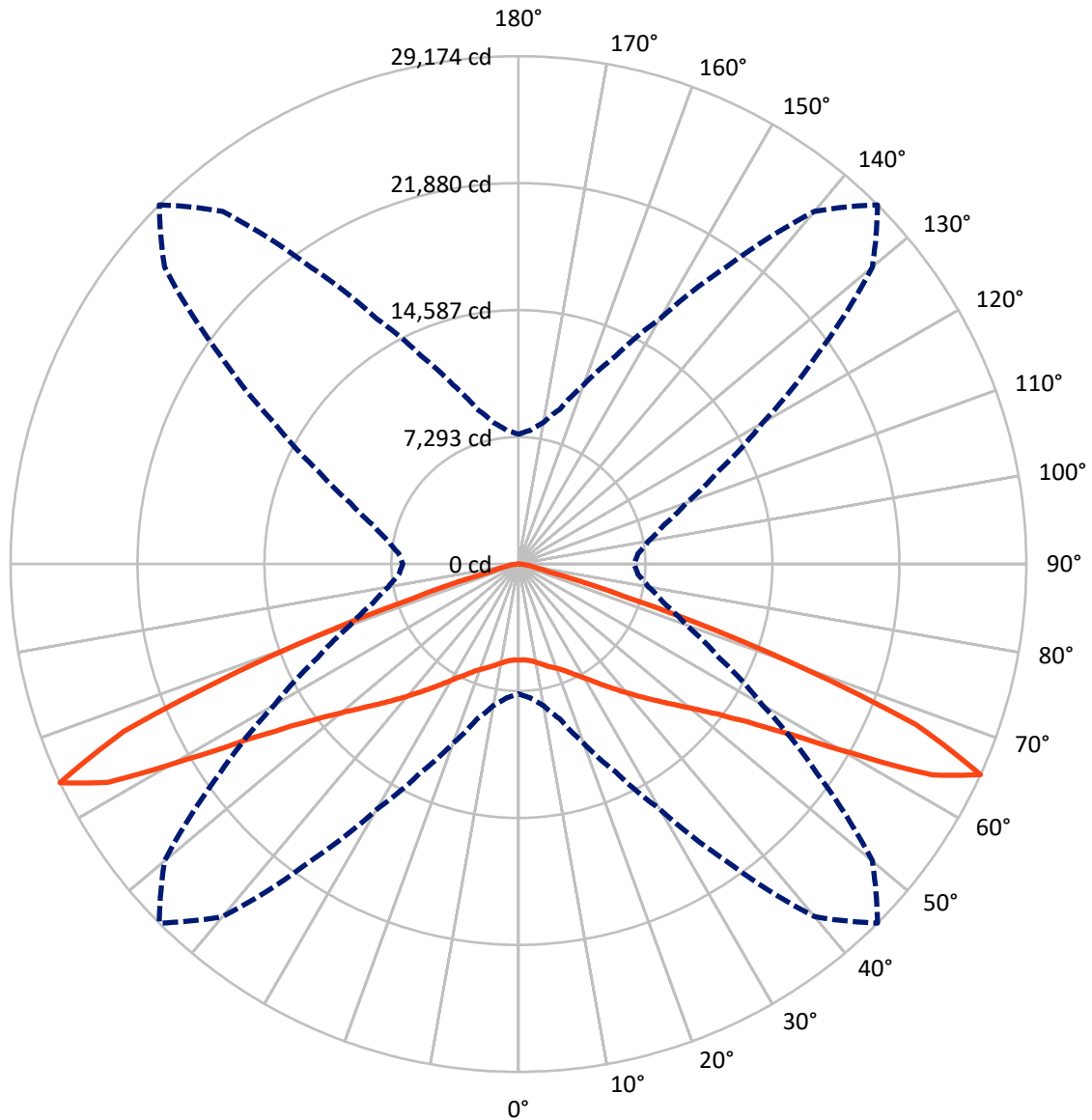
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.1 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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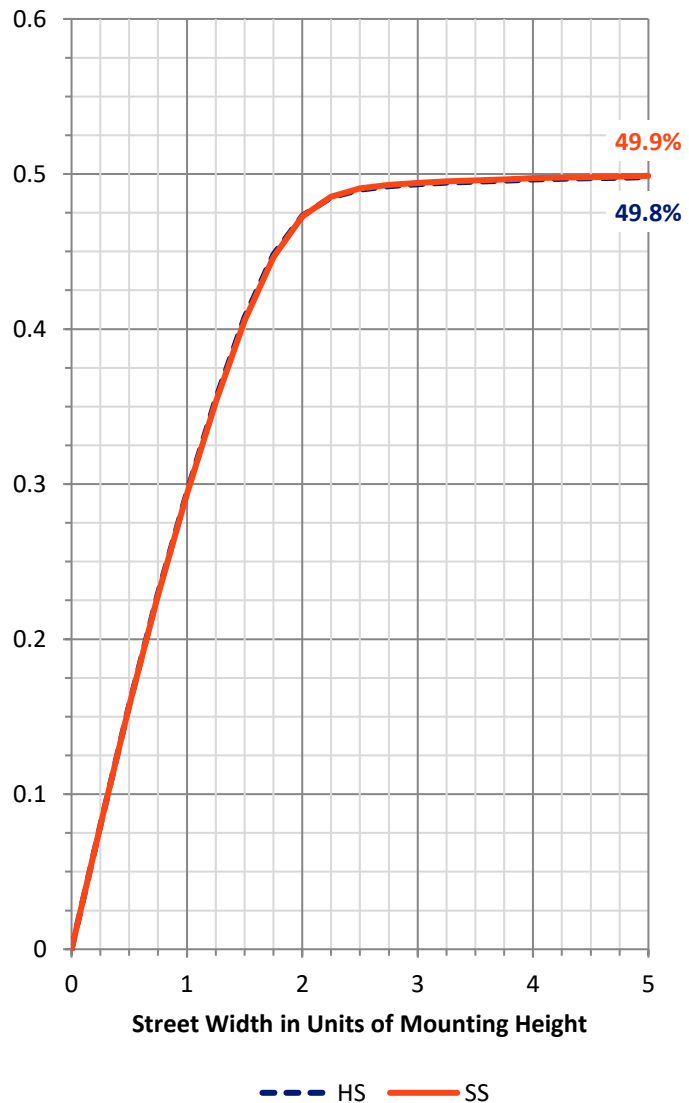
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 24367.2 | 0.0 | 24367.2 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 24367.2 | 0.0 | 24367.2 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 48734.4 | 0.0 | 48734.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 537.5 | 1.1 |
| 10°-20° | 1723.8 | 3.5 |
| 20°-30° | 3223.1 | 6.6 |
| 30°-40° | 5451.2 | 11.2 |
| 40°-50° | 8913.2 | 18.3 |
| 50°-60° | 14173.5 | 29.1 |
| 60°-70° | 12811.9 | 26.3 |
| 70°-80° | 1621.4 | 3.3 |
| 80°-90° | 278.9 | 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° | 48734.4 | 100.0 |
| 0°-180° | 48734.4 | 100.0 |

Coefficient of Utilization



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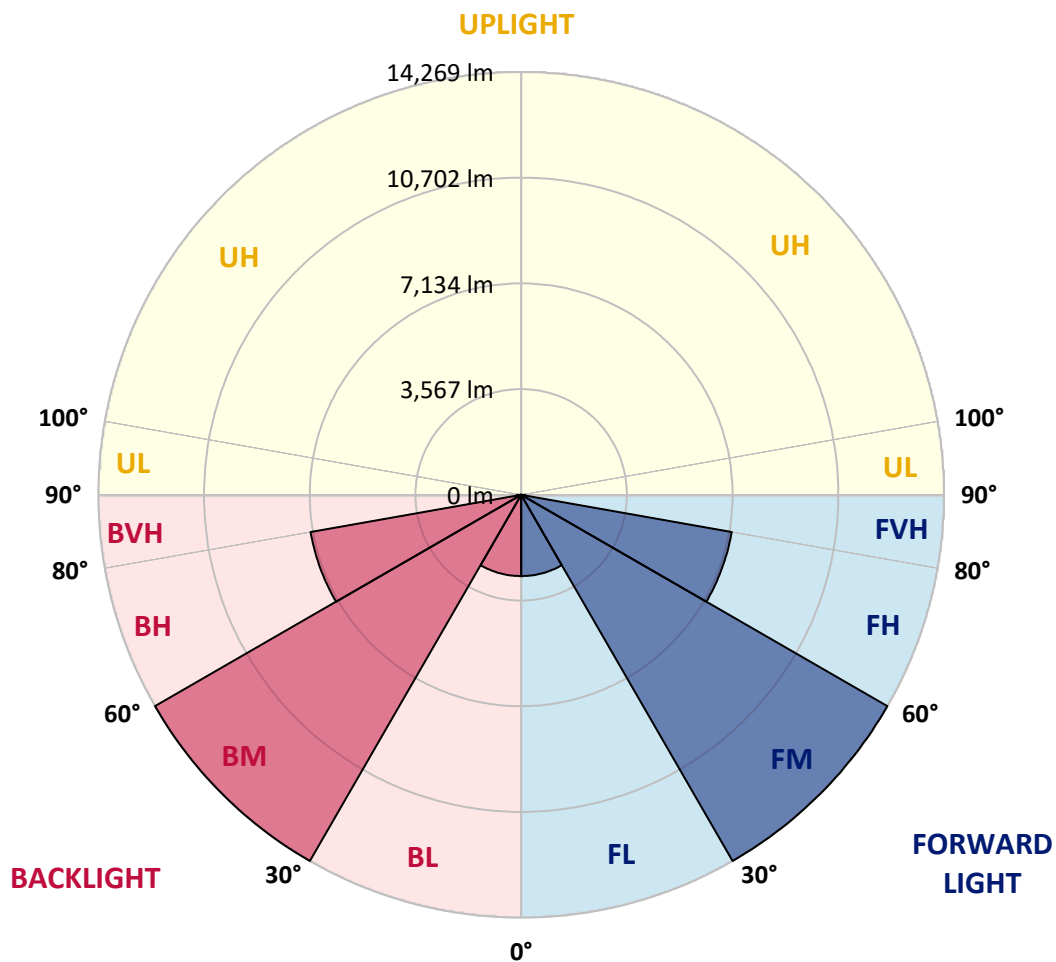
CATALOG NUMBER: GAN-AF-07-LED-U-5NQ-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 2742.2 | 5.6 | | | |
| FM | (30°-60°) | 14268.9 | 29.3 | | | |
| FH | (60°-80°) | 7216.6 | 14.8 | | | G3/7500 |
| FVH | (80°-90°) | 139.5 | 0.3 | | | G2/225 |
| BL | (0°-30°) | 2742.2 | 5.6 | B4/5000 | | |
| BM | (30°-60°) | 14268.9 | 29.3 | B5 | | |
| BH | (60°-80°) | 7216.6 | 14.8 | B5 | | G3/7500 |
| BVH | (80°-90°) | 139.5 | 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° | 5514.3 | 5514.3 | 5514.3 | 5514.3 | 5514.3 | 5514.3 | 5514.3 | 5514.3 | 5514.3 | 5514.3 | 5514.3 |
| 2.5° | 5518.9 | 5523.4 | 5528.0 | 5523.4 | 5528.0 | 5521.2 | 5516.6 | 5523.4 | 5516.6 | 5509.7 | 5514.3 |
| 5° | 5566.8 | 5569.1 | 5569.1 | 5562.3 | 5569.1 | 5564.5 | 5557.7 | 5566.8 | 5559.9 | 5553.1 | 5557.7 |
| 7.5° | 5646.7 | 5655.8 | 5648.9 | 5642.2 | 5646.7 | 5642.2 | 5637.6 | 5639.8 | 5637.6 | 5630.7 | 5633.0 |
| 10° | 5754.0 | 5760.8 | 5756.2 | 5754.0 | 5758.5 | 5756.2 | 5751.7 | 5749.4 | 5751.7 | 5744.9 | 5744.9 |
| 12.5° | 5884.1 | 5881.8 | 5879.5 | 5881.8 | 5888.6 | 5888.6 | 5886.4 | 5888.6 | 5893.2 | 5895.5 | 5891.0 |
| 15° | 6011.9 | 6016.5 | 6016.5 | 6016.5 | 6030.2 | 6041.5 | 6048.4 | 6053.0 | 6062.1 | 6064.4 | 6055.3 |
| 17.5° | 6171.7 | 6171.7 | 6169.4 | 6171.7 | 6185.4 | 6203.6 | 6210.4 | 6219.5 | 6228.7 | 6235.6 | 6224.1 |
| 20° | 6349.7 | 6354.3 | 6354.3 | 6358.9 | 6377.1 | 6397.6 | 6397.6 | 6402.1 | 6397.6 | 6402.1 | 6395.4 |
| 22.5° | 6566.5 | 6580.2 | 6580.2 | 6582.5 | 6600.8 | 6625.9 | 6619.0 | 6625.9 | 6614.4 | 6623.6 | 6614.4 |
| 25° | 6849.6 | 6870.0 | 6865.5 | 6865.5 | 6879.2 | 6895.2 | 6897.5 | 6911.2 | 6908.9 | 6920.3 | 6913.4 |
| 27.5° | 7169.0 | 7201.1 | 7210.2 | 7207.9 | 7217.0 | 7233.0 | 7237.6 | 7253.5 | 7244.4 | 7253.5 | 7248.9 |
| 30° | 7552.5 | 7566.3 | 7584.5 | 7591.3 | 7602.8 | 7618.7 | 7618.7 | 7621.0 | 7609.6 | 7623.2 | 7630.1 |
| 32.5° | 7949.7 | 7974.7 | 7993.0 | 8034.2 | 8054.6 | 8066.1 | 8063.8 | 8068.3 | 8057.0 | 8075.2 | 8088.9 |
| 35° | 8474.6 | 8492.8 | 8522.5 | 8554.5 | 8581.9 | 8579.6 | 8572.7 | 8575.1 | 8575.1 | 8591.0 | 8604.8 |
| 37.5° | 9106.8 | 9111.4 | 9150.2 | 9195.8 | 9209.5 | 9195.8 | 9154.8 | 9145.7 | 9125.1 | 9145.7 | 9168.5 |
| 40° | 9775.6 | 9791.6 | 9869.2 | 9898.9 | 9905.7 | 9880.6 | 9821.2 | 9787.0 | 9741.4 | 9766.4 | 9798.4 |
| 42.5° | 10476.3 | 10508.3 | 10579.1 | 10631.5 | 10654.3 | 10638.4 | 10556.1 | 10503.7 | 10444.3 | 10458.0 | 10490.0 |
| 45° | 11252.4 | 11291.1 | 11391.6 | 11441.8 | 11485.2 | 11460.0 | 11380.1 | 11300.2 | 11206.6 | 11213.5 | 11263.7 |
| 47.5° | 12119.6 | 12158.5 | 12288.5 | 12373.0 | 12395.8 | 12391.2 | 12302.2 | 12192.7 | 12064.9 | 12060.3 | 12103.7 |
| 50° | 13091.9 | 13130.8 | 13292.8 | 13422.9 | 13489.1 | 13482.3 | 13377.2 | 13222.0 | 13066.9 | 13069.1 | 13123.9 |
| 52.5° | 14041.4 | 14089.4 | 14258.3 | 14481.9 | 14612.0 | 14705.6 | 14641.7 | 14495.6 | 14306.2 | 14310.8 | 14361.0 |
| 55° | 14931.6 | 15011.5 | 15205.4 | 15509.1 | 15751.0 | 16013.5 | 16088.8 | 16084.2 | 15970.1 | 16002.0 | 16052.2 |
| 57.5° | 15363.0 | 15481.6 | 15780.7 | 16259.9 | 16753.0 | 17287.1 | 17739.0 | 18076.8 | 18220.6 | 18437.4 | 18387.1 |
| 60° | 14545.8 | 14735.3 | 15175.8 | 15881.1 | 16855.7 | 17969.5 | 19163.1 | 20329.5 | 21324.6 | 22075.6 | 21644.2 |
| 62.5° | 11909.7 | 12156.1 | 12690.2 | 13594.1 | 15068.6 | 16851.1 | 19135.8 | 21893.0 | 24896.6 | 26708.8 | 25414.7 |
| 65° | 7452.1 | 7707.7 | 8250.9 | 9218.7 | 10944.2 | 13160.5 | 16259.9 | 20829.3 | 26441.8 | 29173.8 | 26539.9 |
| 67.5° | 2905.5 | 3044.7 | 3339.2 | 3957.7 | 5254.1 | 7226.1 | 10337.1 | 15522.8 | 22235.4 | 24629.6 | 21822.2 |
| 70° | 1456.2 | 1469.9 | 1524.6 | 1638.8 | 1917.2 | 2490.2 | 3788.8 | 7196.5 | 12751.9 | 15401.8 | 12293.1 |
| 72.5° | 1052.2 | 1054.5 | 1081.9 | 1132.1 | 1221.1 | 1348.9 | 1595.4 | 2202.5 | 4147.1 | 6338.3 | 3887.0 |
| 75° | 805.7 | 814.8 | 830.8 | 858.2 | 906.1 | 970.1 | 1059.1 | 1269.1 | 1572.6 | 1823.6 | 1533.8 |
| 77.5° | 620.8 | 639.0 | 650.5 | 675.6 | 705.2 | 748.6 | 773.8 | 853.7 | 992.9 | 1045.4 | 1029.4 |
| 80° | 472.5 | 488.5 | 513.5 | 534.1 | 554.6 | 575.2 | 566.0 | 602.5 | 675.6 | 718.9 | 696.1 |
| 82.5° | 301.3 | 319.6 | 392.6 | 410.8 | 419.9 | 433.6 | 417.7 | 419.9 | 451.9 | 479.4 | 451.9 |
| 85° | 194.1 | 205.4 | 248.8 | 271.6 | 273.8 | 283.1 | 276.2 | 260.2 | 260.2 | 237.3 | 267.1 |
| 87.5° | 89.0 | 91.2 | 111.8 | 132.4 | 137.0 | 123.3 | 121.0 | 116.4 | 93.6 | 89.0 | 95.9 |
| 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-07-LED-U-5NQ-1200

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5514.3 | 5514.3 | 5514.3 | 5514.3 | 5514.3 | 5514.3 | 5514.3 | 5514.3 |
| 2.5° | 5512.1 | 5516.6 | 5518.9 | 5525.8 | 5528.0 | 5528.0 | 5530.3 | 5534.9 |
| 5° | 5555.4 | 5562.3 | 5564.5 | 5573.6 | 5575.9 | 5573.6 | 5578.3 | 5580.5 |
| 7.5° | 5633.0 | 5644.4 | 5648.9 | 5658.1 | 5651.3 | 5660.4 | 5662.6 | 5662.6 |
| 10° | 5747.1 | 5758.5 | 5760.8 | 5770.0 | 5765.4 | 5770.0 | 5770.0 | 5765.4 |
| 12.5° | 5897.7 | 5900.1 | 5893.2 | 5900.1 | 5891.0 | 5895.5 | 5888.6 | 5884.1 |
| 15° | 6064.4 | 6057.5 | 6041.5 | 6041.5 | 6027.8 | 6030.2 | 6027.8 | 6025.6 |
| 17.5° | 6226.4 | 6212.8 | 6201.3 | 6196.7 | 6185.4 | 6183.0 | 6176.3 | 6176.3 |
| 20° | 6404.5 | 6397.6 | 6390.8 | 6381.7 | 6370.2 | 6358.9 | 6356.5 | 6361.1 |
| 22.5° | 6619.0 | 6616.8 | 6616.8 | 6612.1 | 6596.2 | 6584.7 | 6577.9 | 6577.9 |
| 25° | 6906.6 | 6886.1 | 6886.1 | 6883.7 | 6876.9 | 6870.0 | 6856.4 | 6863.3 |
| 27.5° | 7230.7 | 7219.3 | 7228.4 | 7226.1 | 7219.3 | 7219.3 | 7210.2 | 7210.2 |
| 30° | 7630.1 | 7625.6 | 7639.3 | 7627.8 | 7605.0 | 7602.8 | 7593.6 | 7582.2 |
| 32.5° | 8091.1 | 8086.6 | 8107.2 | 8093.5 | 8057.0 | 8036.4 | 8018.1 | 8009.0 |
| 35° | 8604.8 | 8607.0 | 8632.1 | 8623.0 | 8581.9 | 8568.2 | 8536.2 | 8531.7 |
| 37.5° | 9166.2 | 9202.7 | 9246.0 | 9255.2 | 9221.0 | 9211.9 | 9177.6 | 9159.3 |
| 40° | 9825.9 | 9873.7 | 9939.9 | 9955.9 | 9919.3 | 9912.5 | 9864.6 | 9839.5 |
| 42.5° | 10528.8 | 10611.0 | 10693.1 | 10706.8 | 10670.3 | 10633.8 | 10588.2 | 10569.8 |
| 45° | 11313.9 | 11412.1 | 11519.3 | 11546.8 | 11491.9 | 11448.7 | 11389.2 | 11389.2 |
| 47.5° | 12195.0 | 12318.2 | 12439.2 | 12514.5 | 12464.2 | 12418.6 | 12347.8 | 12302.2 |
| 50° | 13235.8 | 13404.6 | 13562.2 | 13639.7 | 13559.8 | 13473.1 | 13349.9 | 13308.8 |
| 52.5° | 14541.2 | 14723.8 | 14860.8 | 14819.8 | 14696.5 | 14575.5 | 14440.9 | 14386.1 |
| 55° | 16207.4 | 16269.1 | 16269.1 | 16113.8 | 15867.4 | 15664.2 | 15452.0 | 15381.2 |
| 57.5° | 18291.3 | 18054.0 | 17688.8 | 17225.4 | 16643.4 | 16136.7 | 15794.4 | 15632.3 |
| 60° | 20740.3 | 19599.1 | 18309.6 | 17042.8 | 16002.0 | 15143.9 | 14634.8 | 14402.0 |
| 62.5° | 22372.2 | 19386.9 | 16803.2 | 14769.6 | 13272.3 | 12238.4 | 11535.3 | 11261.5 |
| 65° | 20909.2 | 16168.7 | 12708.5 | 10275.4 | 8643.5 | 7591.3 | 6895.2 | 6639.6 |
| 67.5° | 15315.0 | 10131.6 | 6767.3 | 4850.1 | 3553.7 | 2834.8 | 2549.5 | 2430.7 |
| 70° | 6874.6 | 3567.4 | 2186.6 | 1707.2 | 1472.1 | 1351.2 | 1298.7 | 1280.4 |
| 72.5° | 2072.4 | 1499.5 | 1264.5 | 1141.2 | 1047.6 | 988.3 | 944.9 | 940.4 |
| 75° | 1250.8 | 1040.8 | 924.3 | 851.3 | 792.0 | 744.1 | 721.3 | 714.4 |
| 77.5° | 874.2 | 764.7 | 709.8 | 657.3 | 611.7 | 575.2 | 554.6 | 538.7 |
| 80° | 614.0 | 561.5 | 536.3 | 506.7 | 477.0 | 442.8 | 413.1 | 399.5 |
| 82.5° | 410.8 | 399.5 | 399.5 | 381.2 | 356.1 | 324.1 | 264.7 | 251.0 |
| 85° | 264.7 | 262.5 | 267.1 | 260.2 | 241.9 | 207.7 | 171.1 | 162.0 |
| 87.5° | 123.3 | 125.5 | 139.2 | 137.0 | 132.4 | 109.6 | 86.7 | 82.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)