

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: P191137

Luminaire Tested: **GAN-AF-09-LED-U-SL3-HSS-ADJ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191137
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24289)
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-SL3-HSS-ADJ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 46505.4 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

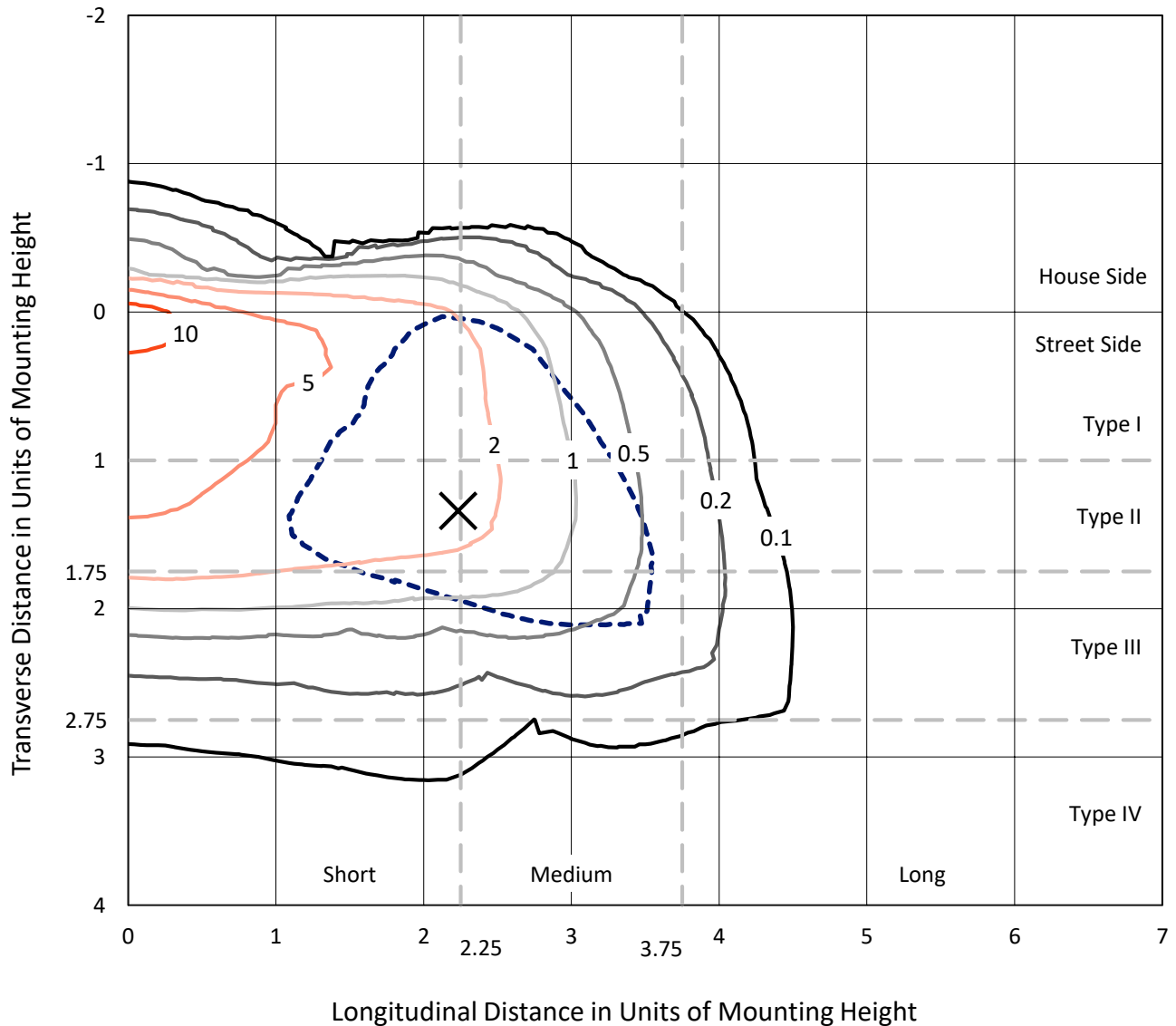
Input Watts (W): 501
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

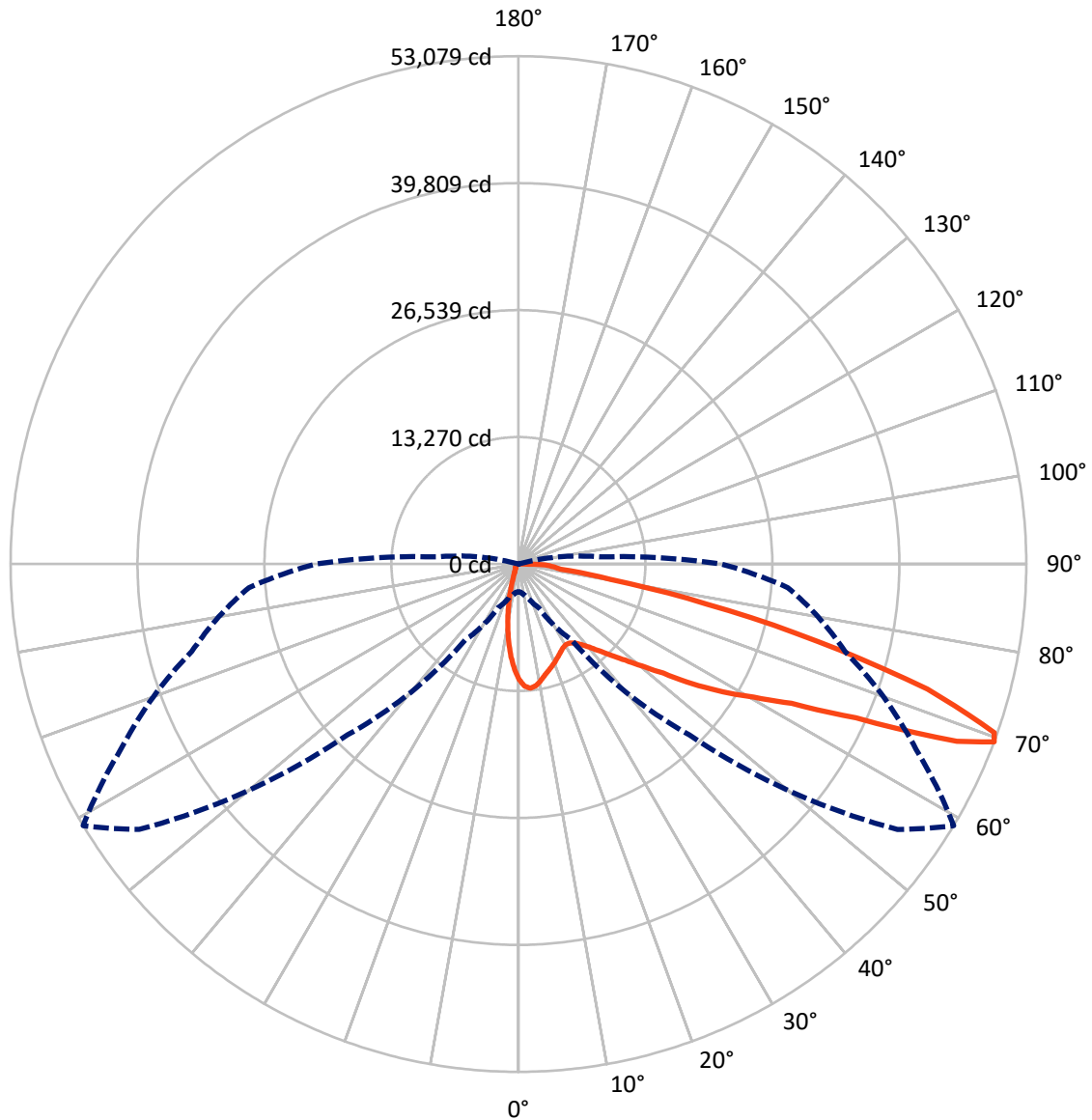
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.5 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3787.2 | 0.0 | 3787.2 |
| | % Fixture | 8.1 | 0.0 | 8.1 |
| Street Side | Lumens | 42718.1 | 0.0 | 42718.1 |
| | % Fixture | 91.9 | 0.0 | 91.9 |
| Total | Lumens | 46505.4 | 0.0 | 46505.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 982.5 | 2.1 |
| 10°-20° | 2030.2 | 4.4 |
| 20°-30° | 2731.9 | 5.9 |
| 30°-40° | 3966.6 | 8.5 |
| 40°-50° | 6604.6 | 14.2 |
| 50°-60° | 10303.1 | 22.2 |
| 60°-70° | 12749.3 | 27.4 |
| 70°-80° | 6461.2 | 13.9 |
| 80°-90° | 676.1 | 1.5 |
| 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° | 46505.4 | 100.0 |
| 0°-180° | 46505.4 | 100.0 |



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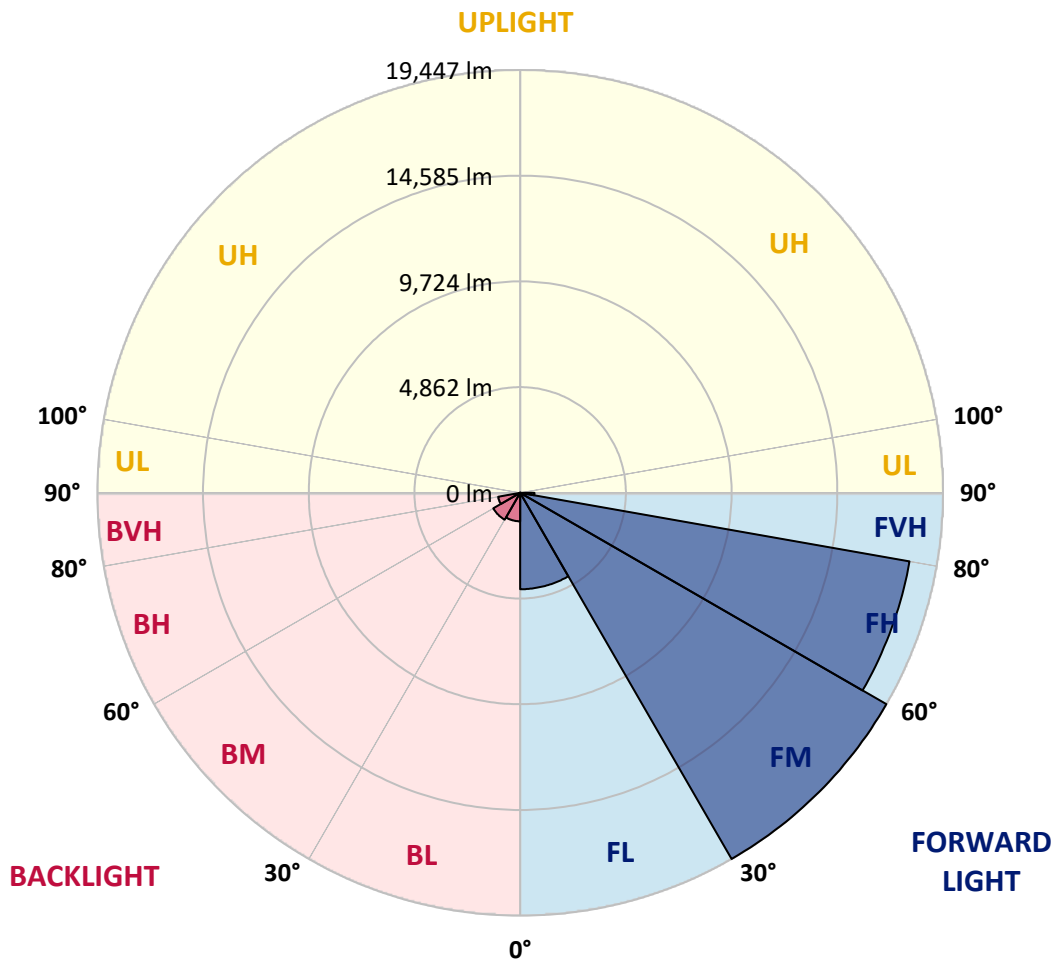
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 4433.8 | 9.5 | | | |
| FM | (30°-60°) | 19447.2 | 41.8 | | | |
| FH | (60°-80°) | 18181.9 | 39.1 | | | G5 |
| FVH | (80°-90°) | 655.3 | 1.4 | | | G4/750 |
| BL | (0°-30°) | 1310.9 | 2.8 | B3/2500 | | |
| BM | (30°-60°) | 1427.0 | 3.1 | B2/2500 | | |
| BH | (60°-80°) | 1028.5 | 2.2 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 20.8 | 0.0 | | | 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 III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 59° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 12104.7 | 12104.7 | 12104.7 | 12104.7 | 12104.7 | 12104.7 | 12104.7 | 12104.7 | 12104.7 | 12104.7 | 12104.7 |
| 2.5° | 13267.1 | 13261.8 | 13203.9 | 13177.7 | 13130.3 | 13030.3 | 12875.3 | 12793.7 | 12662.2 | 12433.5 | 12125.8 |
| 5° | 13146.0 | 13209.2 | 13243.4 | 13246.0 | 13280.3 | 13243.4 | 13104.0 | 13035.7 | 12854.2 | 12486.0 | 11933.7 |
| 7.5° | 12325.6 | 12349.3 | 12446.5 | 12530.7 | 12693.8 | 12849.0 | 12898.9 | 12869.9 | 12762.1 | 12367.7 | 11634.0 |
| 10° | 11447.2 | 11471.0 | 11586.7 | 11697.1 | 11918.0 | 12157.3 | 12409.7 | 12462.4 | 12507.1 | 12199.4 | 11344.7 |
| 12.5° | 10689.9 | 10713.6 | 10831.9 | 10976.6 | 11234.3 | 11528.8 | 11920.7 | 12007.4 | 12204.6 | 12039.0 | 11113.3 |
| 15° | 10037.7 | 10048.2 | 10163.9 | 10342.7 | 10650.5 | 11029.1 | 11473.6 | 11612.9 | 11915.3 | 11925.9 | 10910.8 |
| 17.5° | 9482.9 | 9509.1 | 9580.1 | 9751.1 | 10087.7 | 10555.8 | 11073.9 | 11273.7 | 11628.7 | 11831.2 | 10713.6 |
| 20° | 9143.6 | 9169.9 | 9167.3 | 9262.0 | 9564.4 | 10064.0 | 10674.1 | 10913.5 | 11344.7 | 11734.0 | 10537.4 |
| 22.5° | 9077.9 | 9077.9 | 9009.5 | 8996.3 | 9175.2 | 9593.3 | 10258.7 | 10550.5 | 11089.6 | 11691.8 | 10413.7 |
| 25° | 9311.9 | 9301.4 | 9130.4 | 8991.1 | 8999.0 | 9248.8 | 9856.2 | 10203.4 | 10874.0 | 11720.8 | 10348.1 |
| 27.5° | 9806.3 | 9793.1 | 9577.5 | 9311.9 | 9098.9 | 9096.3 | 9551.2 | 9924.7 | 10703.0 | 11857.5 | 10374.4 |
| 30° | 10490.1 | 10484.8 | 10250.8 | 9916.8 | 9530.2 | 9175.2 | 9446.0 | 9785.2 | 10592.7 | 12104.7 | 10434.8 |
| 32.5° | 11236.9 | 11229.0 | 11052.8 | 10700.5 | 10211.3 | 9530.2 | 9556.5 | 9840.5 | 10624.2 | 12433.5 | 10582.1 |
| 35° | 12028.5 | 12015.3 | 11939.1 | 11631.4 | 11092.3 | 10185.0 | 9919.3 | 10140.3 | 10824.0 | 12925.2 | 10871.4 |
| 37.5° | 12885.7 | 12898.9 | 12954.1 | 12659.6 | 12094.1 | 11102.8 | 10526.9 | 10676.7 | 11226.4 | 13593.2 | 11342.1 |
| 40° | 14150.7 | 14148.0 | 14166.4 | 13779.9 | 13235.4 | 12225.7 | 11376.2 | 11423.6 | 11899.6 | 14479.4 | 12057.4 |
| 42.5° | 16446.4 | 16286.0 | 15799.5 | 15010.6 | 14463.6 | 13509.0 | 12446.5 | 12396.6 | 12722.7 | 15576.0 | 13059.3 |
| 45° | 19531.1 | 19189.2 | 17927.0 | 16414.9 | 15715.4 | 14955.3 | 13764.1 | 13603.7 | 13811.4 | 16893.5 | 14295.3 |
| 47.5° | 22184.5 | 21829.5 | 20043.9 | 17877.0 | 17043.4 | 16328.0 | 15307.7 | 15018.5 | 15086.9 | 18368.7 | 15862.6 |
| 50° | 23086.6 | 22913.0 | 21353.5 | 19149.8 | 18329.3 | 18055.8 | 17098.6 | 16746.2 | 16648.9 | 20075.5 | 17679.8 |
| 52.5° | 22773.5 | 22760.5 | 21721.6 | 19975.6 | 19507.5 | 19844.0 | 19352.3 | 18944.6 | 18587.0 | 21874.2 | 19528.4 |
| 55° | 22271.3 | 22337.1 | 21871.6 | 20698.7 | 20682.9 | 21477.2 | 22434.3 | 22095.1 | 21059.0 | 23828.1 | 21122.1 |
| 57.5° | 20885.4 | 21166.8 | 21787.4 | 22066.2 | 22713.1 | 23525.7 | 25001.0 | 25200.8 | 23975.4 | 25324.5 | 22444.9 |
| 60° | 16946.1 | 17564.1 | 19594.2 | 22263.4 | 25329.7 | 27354.6 | 28098.8 | 28269.8 | 26368.4 | 26568.3 | 24230.4 |
| 62.5° | 12028.5 | 12659.6 | 15234.1 | 19749.4 | 25369.2 | 32385.3 | 32714.0 | 32043.4 | 29003.4 | 28411.7 | 27309.9 |
| 65° | 6385.1 | 6871.6 | 8975.3 | 14255.8 | 21995.2 | 33552.9 | 40784.7 | 38786.1 | 33652.8 | 32038.2 | 31288.7 |
| 67.5° | 3266.2 | 3413.4 | 4249.6 | 6976.7 | 15121.1 | 29802.9 | 48019.2 | 49426.0 | 41665.7 | 35635.6 | 31096.7 |
| 69° | 2890.0 | 2976.9 | 3531.7 | 5043.9 | 9682.7 | 25242.9 | 48371.5 | 53078.8 | 45860.1 | 35335.9 | 28259.2 |
| 70° | 2798.1 | 2874.3 | 3379.2 | 4565.2 | 7568.4 | 21169.5 | 47022.5 | 52757.9 | 46933.1 | 34194.6 | 26139.7 |
| 72.5° | 2374.7 | 2440.4 | 3008.4 | 4034.0 | 6151.0 | 10508.5 | 38197.0 | 44705.6 | 42115.3 | 28485.4 | 18921.0 |
| 75° | 1588.3 | 1804.0 | 2887.5 | 3781.5 | 5722.3 | 5969.5 | 25182.4 | 32306.4 | 30010.6 | 19212.9 | 9856.2 |
| 77.5° | 381.4 | 410.2 | 815.2 | 3008.4 | 5233.2 | 5254.2 | 12951.5 | 20083.4 | 16380.7 | 6847.8 | 2330.0 |
| 80° | 205.1 | 197.2 | 228.8 | 597.0 | 4872.9 | 4930.7 | 5830.1 | 9748.4 | 5848.5 | 1136.1 | 767.9 |
| 82.5° | 144.6 | 136.8 | 147.3 | 249.8 | 1533.1 | 4491.6 | 4218.1 | 4412.7 | 2424.6 | 436.5 | 344.5 |
| 85° | 52.6 | 49.9 | 81.5 | 226.2 | 481.2 | 2582.4 | 4333.8 | 3639.6 | 1964.4 | 199.9 | 252.5 |
| 87.5° | 18.4 | 15.8 | 31.5 | 123.6 | 147.3 | 1099.3 | 2674.4 | 2750.7 | 773.1 | 121.0 | 118.4 |
| 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-SL3-HSS-ADJ

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 12104.7 | 12104.7 | 12104.7 | 12104.7 | 12104.7 | 12104.7 | 12104.7 | 12104.7 | 12104.7 | 12104.7 | 12104.7 |
| 2.5° | 11996.9 | 11833.8 | 11534.1 | 11226.4 | 10942.4 | 10600.5 | 10429.6 | 10261.2 | 10190.2 | 10163.9 | 10040.4 |
| 5° | 11649.8 | 11373.7 | 10737.2 | 10098.3 | 9509.1 | 8883.3 | 8470.4 | 8139.0 | 7944.4 | 7849.8 | 7699.9 |
| 7.5° | 11205.3 | 10753.1 | 9787.9 | 8801.8 | 7884.0 | 6979.4 | 6308.7 | 5793.3 | 5438.3 | 5267.4 | 5112.2 |
| 10° | 10774.0 | 10171.8 | 8799.1 | 7455.4 | 6208.8 | 5009.7 | 4084.0 | 3413.4 | 2984.8 | 2787.5 | 2661.3 |
| 12.5° | 10387.5 | 9606.4 | 7844.5 | 6143.1 | 4578.4 | 3174.1 | 2232.7 | 1698.8 | 1433.3 | 1341.2 | 1296.5 |
| 15° | 10043.0 | 9085.7 | 6942.6 | 4896.6 | 3100.5 | 1814.5 | 1220.2 | 1038.7 | 996.7 | 996.7 | 991.4 |
| 17.5° | 9716.9 | 8575.6 | 6072.0 | 3726.3 | 1946.0 | 1109.8 | 928.3 | 904.6 | 904.6 | 915.1 | 915.1 |
| 20° | 9404.0 | 8089.1 | 5230.6 | 2674.4 | 1225.5 | 881.0 | 838.9 | 833.6 | 838.9 | 852.0 | 852.0 |
| 22.5° | 9135.8 | 7647.3 | 4444.3 | 1835.6 | 909.9 | 794.2 | 773.1 | 765.3 | 767.9 | 775.8 | 781.0 |
| 25° | 8935.9 | 7273.9 | 3702.7 | 1243.9 | 783.7 | 723.2 | 699.5 | 686.4 | 675.9 | 675.9 | 681.1 |
| 27.5° | 8809.7 | 6958.3 | 2984.8 | 904.6 | 704.8 | 657.5 | 620.6 | 599.6 | 575.9 | 562.7 | 568.0 |
| 30° | 8717.6 | 6658.5 | 2311.6 | 739.0 | 631.2 | 583.8 | 536.4 | 502.3 | 468.1 | 452.3 | 457.6 |
| 32.5° | 8683.4 | 6416.6 | 1727.8 | 652.1 | 565.4 | 512.8 | 454.9 | 410.2 | 373.4 | 360.3 | 362.9 |
| 35° | 8775.5 | 6224.6 | 1264.9 | 589.0 | 512.8 | 447.0 | 381.4 | 331.3 | 302.4 | 294.5 | 297.2 |
| 37.5° | 9017.4 | 6122.1 | 946.7 | 536.4 | 465.4 | 391.8 | 318.2 | 270.9 | 252.5 | 252.5 | 255.1 |
| 40° | 9475.0 | 6119.4 | 760.0 | 499.6 | 423.4 | 339.2 | 263.0 | 228.8 | 218.3 | 223.5 | 226.2 |
| 42.5° | 10143.0 | 6258.8 | 662.7 | 465.4 | 386.6 | 289.3 | 218.3 | 194.6 | 192.0 | 197.2 | 199.9 |
| 45° | 11055.4 | 6513.8 | 610.1 | 436.5 | 347.1 | 241.9 | 184.1 | 168.3 | 168.3 | 176.2 | 178.8 |
| 47.5° | 12173.1 | 6887.3 | 565.4 | 407.6 | 307.7 | 202.4 | 157.7 | 147.3 | 149.9 | 157.7 | 160.4 |
| 50° | 13519.5 | 7358.0 | 520.7 | 376.0 | 278.8 | 168.3 | 136.8 | 128.9 | 131.4 | 142.0 | 144.6 |
| 52.5° | 15052.6 | 7991.8 | 483.9 | 347.1 | 241.9 | 139.3 | 115.7 | 110.5 | 115.7 | 126.2 | 128.9 |
| 55° | 16367.5 | 8559.8 | 439.2 | 323.5 | 194.6 | 115.7 | 94.6 | 94.6 | 99.9 | 113.0 | 115.7 |
| 57.5° | 17632.4 | 9154.2 | 399.8 | 278.8 | 152.5 | 92.1 | 78.9 | 81.5 | 89.4 | 102.6 | 105.2 |
| 60° | 19489.1 | 10161.4 | 352.4 | 234.1 | 115.7 | 73.7 | 65.8 | 68.3 | 78.9 | 92.1 | 94.6 |
| 62.5° | 22642.1 | 11694.5 | 305.0 | 194.6 | 89.4 | 57.9 | 52.6 | 57.9 | 71.0 | 86.7 | 89.4 |
| 65° | 25487.4 | 12317.8 | 249.8 | 163.1 | 68.3 | 44.7 | 44.7 | 52.6 | 68.3 | 84.2 | 86.7 |
| 67.5° | 23901.8 | 10369.0 | 194.6 | 128.9 | 52.6 | 34.2 | 36.8 | 49.9 | 65.8 | 84.2 | 86.7 |
| 69° | 21137.8 | 8478.3 | 165.7 | 102.6 | 44.7 | 31.5 | 34.2 | 49.9 | 65.8 | 81.5 | 84.2 |
| 70° | 18984.1 | 7158.2 | 147.3 | 86.7 | 39.5 | 31.5 | 34.2 | 47.4 | 65.8 | 81.5 | 84.2 |
| 72.5° | 12714.8 | 3865.7 | 118.4 | 63.1 | 36.8 | 28.9 | 28.9 | 47.4 | 63.1 | 78.9 | 81.5 |
| 75° | 5464.6 | 1067.7 | 94.6 | 44.7 | 31.5 | 26.3 | 26.3 | 44.7 | 60.5 | 76.3 | 81.5 |
| 77.5° | 999.3 | 270.9 | 76.3 | 39.5 | 31.5 | 26.3 | 23.6 | 42.0 | 57.9 | 73.7 | 76.3 |
| 80° | 397.1 | 134.1 | 60.5 | 34.2 | 28.9 | 23.6 | 21.1 | 39.5 | 55.2 | 71.0 | 73.7 |
| 82.5° | 239.3 | 76.3 | 49.9 | 31.5 | 28.9 | 21.1 | 18.4 | 34.2 | 52.6 | 68.3 | 71.0 |
| 85° | 194.6 | 52.6 | 39.5 | 31.5 | 26.3 | 21.1 | 15.8 | 31.5 | 47.4 | 65.8 | 68.3 |
| 87.5° | 94.6 | 36.8 | 36.8 | 28.9 | 26.3 | 21.1 | 15.8 | 28.9 | 44.7 | 63.1 | 65.8 |
| 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)