

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: P191042

Luminaire Tested: **GAN-AF-04-LED-U-SL2-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191042
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-04-LED-U-SL2-800-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16436.8 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G3

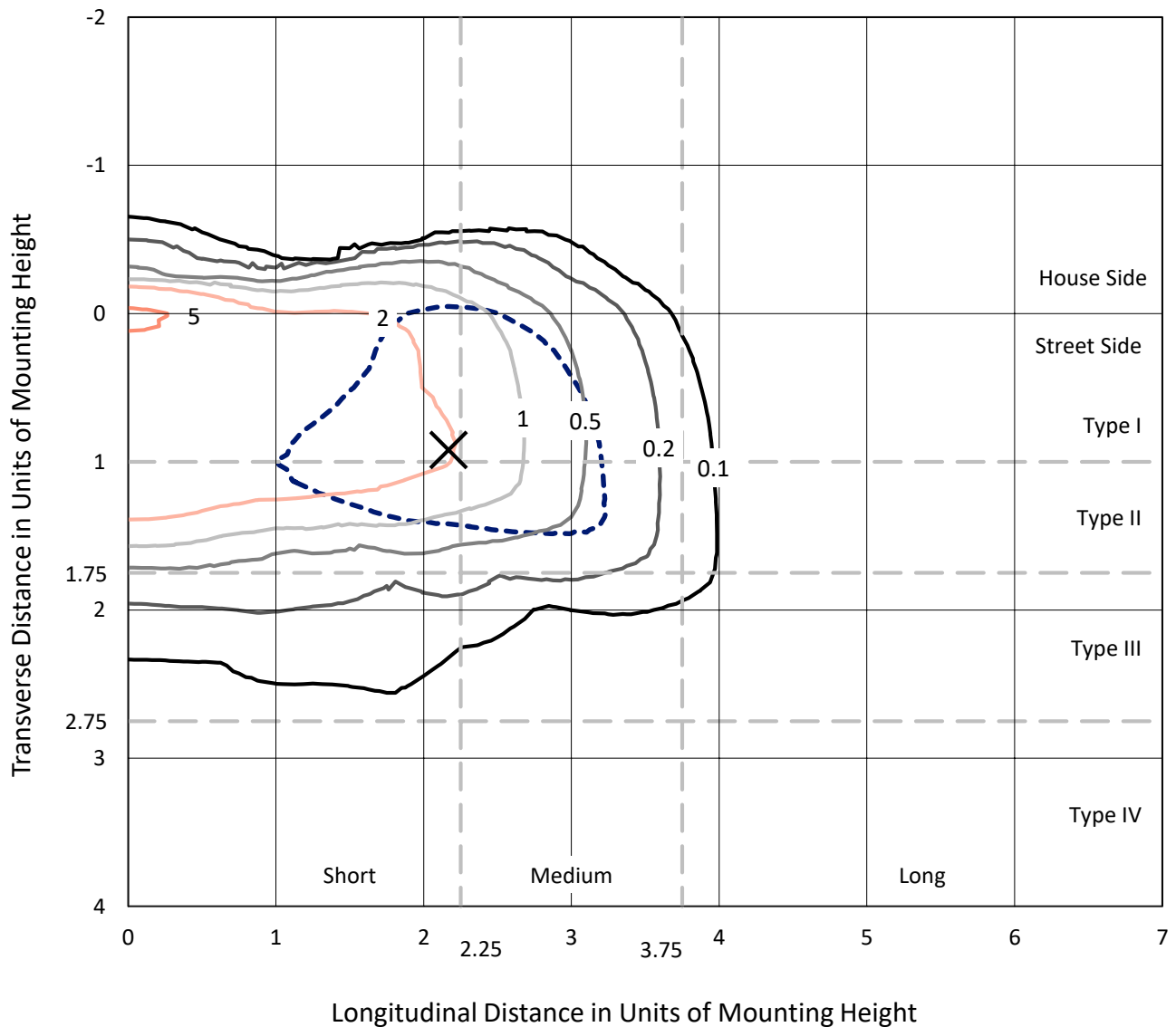
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P191042
 CATALOG NUMBER: GAN-AF-04-LED-U-SL2-800-HSS

Iso-Footcandle Lines of Horizontal Illumination

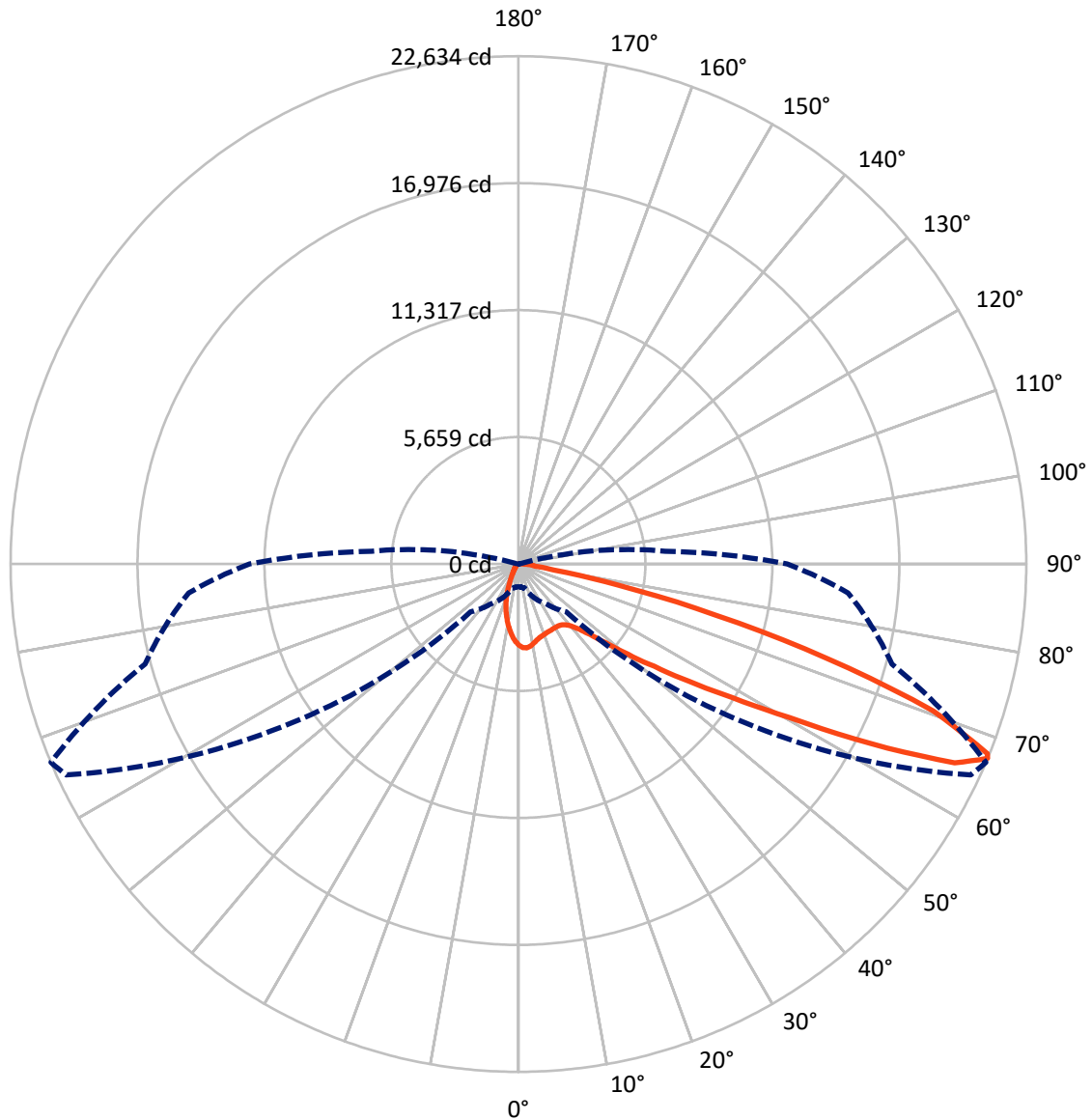
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P191042
CATALOG NUMBER: GAN-AF-04-LED-U-SL2-800-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

REPORT NUMBER: P191042

CATALOG NUMBER: GAN-AF-04-LED-U-SL2-800-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1706.6 | 0.0 | 1706.6 |
| | % Fixture | 10.4 | 0.0 | 10.4 |
| Street Side | Lumens | 14730.1 | 0.0 | 14730.1 |
| | % Fixture | 89.6 | 0.0 | 89.6 |
| Total | Lumens | 16436.8 | 0.0 | 16436.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 295.0 | 1.8 |
| 10°-20° | 627.8 | 3.8 |
| 20°-30° | 912.7 | 5.6 |
| 30°-40° | 1423.9 | 8.7 |
| 40°-50° | 2522.3 | 15.3 |
| 50°-60° | 3991.4 | 24.3 |
| 60°-70° | 4571.6 | 27.8 |
| 70°-80° | 1896.3 | 11.5 |
| 80°-90° | 195.9 | 1.2 |
| 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° | 16436.8 | 100.0 |
| 0°-180° | 16436.8 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P191042

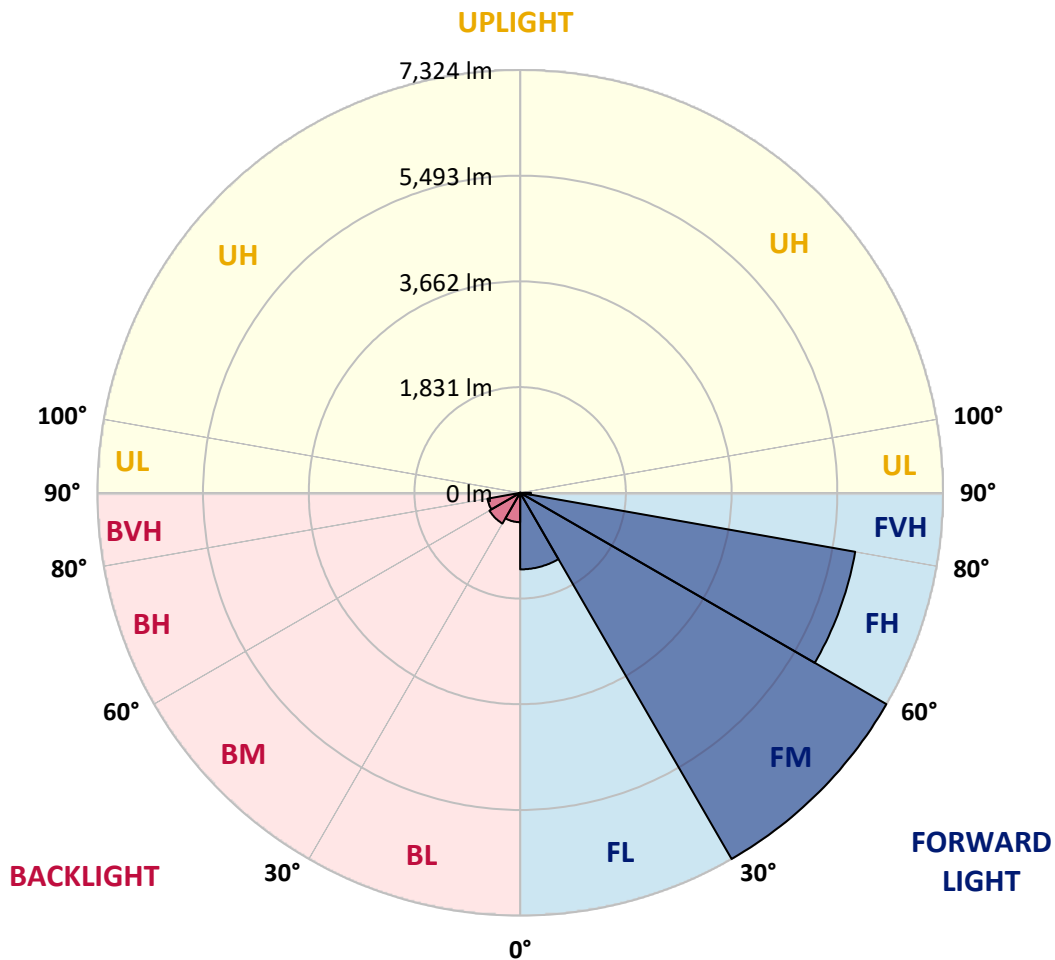
CATALOG NUMBER: GAN-AF-04-LED-U-SL2-800-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1326.2 | 8.1 | | | |
| FM (30°-60°) | 7324.3 | 44.6 | | | |
| FH (60°-80°) | 5892.6 | 35.9 | | | G3/7500 |
| FVH (80°-90°) | 187.1 | 1.1 | | | G2/225 |
| BL (0°-30°) | 509.3 | 3.1 | B2/1000 | | |
| BM (30°-60°) | 613.3 | 3.7 | B1/1000 | | |
| BH (60°-80°) | 575.2 | 3.5 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 8.8 | 0.1 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type II Short





REPORT NUMBER: P191042

CATALOG NUMBER: GAN-AF-04-LED-U-SL2-800-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 67° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0° | 3624.9 | 3624.9 | 3624.9 | 3624.9 | 3624.9 | 3624.9 | 3624.9 | 3624.9 | 3624.9 | 3624.9 | 3624.9 |
| 2.5° | 3747.7 | 3755.3 | 3754.3 | 3760.1 | 3773.6 | 3774.5 | 3761.1 | 3735.2 | 3729.4 | 3695.8 | 3637.4 |
| 5° | 3456.1 | 3478.2 | 3491.6 | 3546.3 | 3607.6 | 3681.5 | 3737.0 | 3757.2 | 3754.3 | 3730.4 | 3642.2 |
| 7.5° | 3123.5 | 3145.6 | 3160.9 | 3225.2 | 3306.6 | 3433.1 | 3578.0 | 3696.8 | 3707.4 | 3733.3 | 3638.3 |
| 10° | 2902.0 | 2905.9 | 2927.0 | 2988.3 | 3073.7 | 3203.1 | 3375.6 | 3583.7 | 3615.3 | 3710.2 | 3628.7 |
| 12.5° | 2719.9 | 2722.8 | 2750.6 | 2816.7 | 2907.8 | 3038.2 | 3219.3 | 3460.0 | 3508.9 | 3681.5 | 3626.9 |
| 15° | 2590.4 | 2601.0 | 2625.9 | 2695.0 | 2791.8 | 2921.2 | 3107.2 | 3369.0 | 3427.4 | 3671.0 | 3644.1 |
| 17.5° | 2547.4 | 2558.8 | 2566.5 | 2616.3 | 2704.6 | 2831.1 | 3021.9 | 3309.5 | 3375.6 | 3676.7 | 3677.6 |
| 20° | 2592.4 | 2601.0 | 2583.8 | 2596.2 | 2650.9 | 2764.0 | 2950.0 | 3258.7 | 3337.3 | 3683.4 | 3720.8 |
| 22.5° | 2760.1 | 2764.0 | 2717.1 | 2662.3 | 2652.8 | 2715.1 | 2893.4 | 3218.4 | 3302.8 | 3701.6 | 3771.6 |
| 25° | 3047.8 | 3041.0 | 2964.4 | 2846.5 | 2735.3 | 2706.4 | 2859.9 | 3193.4 | 3285.5 | 3720.8 | 3824.3 |
| 27.5° | 3394.9 | 3404.4 | 3298.9 | 3127.4 | 2915.5 | 2764.0 | 2855.1 | 3182.9 | 3277.8 | 3734.2 | 3870.3 |
| 30° | 3816.6 | 3830.1 | 3709.3 | 3493.6 | 3189.7 | 2905.9 | 2899.1 | 3181.1 | 3273.0 | 3725.6 | 3874.2 |
| 32.5° | 4247.1 | 4263.5 | 4168.5 | 3946.1 | 3555.9 | 3143.6 | 2998.9 | 3202.1 | 3282.6 | 3695.8 | 3852.1 |
| 35° | 4697.7 | 4720.7 | 4657.5 | 4466.7 | 4052.5 | 3486.8 | 3174.3 | 3266.4 | 3327.8 | 3693.0 | 3830.1 |
| 37.5° | 5320.0 | 5341.0 | 5222.2 | 5019.8 | 4653.6 | 3947.1 | 3456.1 | 3387.2 | 3434.1 | 3739.0 | 3835.9 |
| 40° | 6248.9 | 6246.0 | 5939.3 | 5629.6 | 5314.1 | 4531.9 | 3852.1 | 3605.7 | 3629.7 | 3878.0 | 3906.8 |
| 42.5° | 7261.3 | 7256.5 | 6803.0 | 6332.4 | 6047.6 | 5251.8 | 4372.7 | 3983.5 | 3967.2 | 4133.9 | 4090.9 |
| 45° | 8041.7 | 8040.8 | 7670.7 | 7140.5 | 6930.6 | 6078.3 | 5045.7 | 4508.9 | 4483.9 | 4550.1 | 4430.2 |
| 47.5° | 8374.4 | 8380.1 | 8194.1 | 7821.3 | 7909.5 | 7196.2 | 5894.2 | 5270.0 | 5232.7 | 5205.8 | 5023.7 |
| 50° | 8115.6 | 8127.0 | 8142.4 | 8069.5 | 8627.5 | 8698.5 | 7032.2 | 6342.9 | 6324.7 | 6204.8 | 5920.1 |
| 52.5° | 7270.0 | 7328.4 | 7508.7 | 7739.7 | 8876.8 | 10140.4 | 8816.4 | 7675.5 | 7577.7 | 7450.3 | 7136.7 |
| 55° | 5845.3 | 5909.6 | 6251.8 | 6812.6 | 8505.7 | 11087.6 | 11316.7 | 9393.6 | 9230.5 | 8850.0 | 8397.4 |
| 57.5° | 3868.4 | 3968.1 | 4464.8 | 5178.1 | 7428.2 | 11240.0 | 13811.3 | 11777.8 | 11210.3 | 10168.1 | 9658.1 |
| 60° | 2131.2 | 2227.1 | 2765.9 | 3412.1 | 5365.0 | 10486.5 | 15489.0 | 14882.2 | 13879.4 | 11641.7 | 11189.2 |
| 62.5° | 1312.4 | 1364.2 | 1762.1 | 2363.2 | 3217.5 | 8276.6 | 15836.1 | 18783.2 | 17622.2 | 13539.1 | 13038.5 |
| 65° | 1045.0 | 1067.0 | 1261.7 | 1931.8 | 2306.7 | 4923.1 | 14715.4 | 21757.1 | 21369.9 | 15836.1 | 14694.3 |
| 67° | 1014.4 | 1023.0 | 1115.0 | 1658.6 | 2174.4 | 3018.0 | 12328.2 | 22241.3 | 22634.4 | 17226.3 | 14746.0 |
| 67.5° | 1021.0 | 1030.6 | 1117.9 | 1582.8 | 2170.5 | 2773.5 | 11505.5 | 22050.5 | 22547.2 | 17336.6 | 14516.9 |
| 70° | 984.6 | 1014.4 | 1279.9 | 1581.9 | 2064.1 | 2304.8 | 6890.3 | 19105.3 | 19622.1 | 16108.4 | 12317.7 |
| 72.5° | 348.9 | 350.9 | 553.2 | 1279.9 | 2244.4 | 2329.7 | 3460.0 | 14005.9 | 14388.4 | 12322.4 | 8880.6 |
| 75° | 207.0 | 176.4 | 184.0 | 364.3 | 2144.6 | 2262.6 | 1996.1 | 8949.6 | 9092.5 | 7060.9 | 4497.3 |
| 77.5° | 142.8 | 124.6 | 128.5 | 161.1 | 816.8 | 2231.0 | 1585.7 | 4667.0 | 4514.6 | 2476.4 | 957.8 |
| 80° | 81.5 | 71.9 | 76.7 | 141.0 | 297.2 | 2081.4 | 1495.6 | 1892.6 | 1613.5 | 419.9 | 264.6 |
| 82.5° | 43.2 | 36.4 | 44.1 | 116.0 | 207.0 | 1297.1 | 1498.5 | 914.6 | 724.8 | 141.9 | 180.2 |
| 85° | 15.3 | 12.5 | 21.1 | 79.6 | 138.1 | 397.8 | 1389.2 | 768.8 | 604.0 | 69.0 | 137.1 |
| 87.5° | 2.9 | 2.9 | 8.6 | 32.6 | 55.6 | 121.7 | 821.6 | 456.3 | 305.9 | 41.2 | 93.9 |
| 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: P191042

CATALOG NUMBER: GAN-AF-04-LED-U-SL2-800-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3624.9 | 3624.9 | 3624.9 | 3624.9 | 3624.9 | 3624.9 | 3624.9 | 3624.9 | 3624.9 | 3624.9 | 3624.9 |
| 2.5° | 3613.4 | 3572.1 | 3516.6 | 3448.5 | 3368.0 | 3297.1 | 3244.3 | 3189.7 | 3178.1 | 3159.0 | 3156.1 |
| 5° | 3589.4 | 3518.5 | 3380.4 | 3222.3 | 3053.5 | 2901.1 | 2777.4 | 2667.1 | 2618.2 | 2576.1 | 2571.3 |
| 7.5° | 3553.9 | 3447.5 | 3212.7 | 2957.7 | 2694.0 | 2454.4 | 2251.1 | 2107.3 | 1975.0 | 1911.7 | 1902.1 |
| 10° | 3512.7 | 3360.3 | 3023.8 | 2670.0 | 2305.7 | 1967.3 | 1665.3 | 1412.2 | 1258.8 | 1167.7 | 1156.2 |
| 12.5° | 3474.4 | 3275.0 | 2831.1 | 2371.9 | 1887.8 | 1435.2 | 1046.9 | 805.4 | 644.3 | 579.1 | 571.4 |
| 15° | 3456.1 | 3205.9 | 2650.9 | 2067.0 | 1450.5 | 913.7 | 572.3 | 442.9 | 390.2 | 374.8 | 373.9 |
| 17.5° | 3454.3 | 3147.5 | 2474.4 | 1751.6 | 1016.2 | 531.1 | 373.0 | 340.3 | 329.8 | 326.0 | 326.0 |
| 20° | 3453.3 | 3091.9 | 2298.1 | 1424.7 | 645.2 | 353.7 | 310.7 | 303.0 | 295.3 | 290.5 | 290.5 |
| 22.5° | 3463.8 | 3042.1 | 2113.9 | 1091.0 | 406.5 | 286.6 | 273.2 | 265.6 | 255.9 | 249.3 | 248.3 |
| 25° | 3474.4 | 3003.7 | 1926.1 | 776.5 | 294.3 | 249.3 | 235.9 | 225.3 | 211.9 | 203.3 | 202.3 |
| 27.5° | 3476.3 | 2955.7 | 1724.7 | 519.7 | 246.4 | 217.6 | 200.4 | 184.0 | 168.7 | 160.1 | 159.2 |
| 30° | 3447.5 | 2875.2 | 1501.4 | 350.9 | 217.6 | 188.8 | 165.8 | 148.6 | 134.2 | 127.5 | 127.5 |
| 32.5° | 3391.0 | 2775.5 | 1255.9 | 264.6 | 193.6 | 162.0 | 137.1 | 120.8 | 111.2 | 108.3 | 107.4 |
| 35° | 3340.1 | 2668.2 | 1003.8 | 224.3 | 173.5 | 137.1 | 112.2 | 101.6 | 95.9 | 94.9 | 93.9 |
| 37.5° | 3310.5 | 2581.8 | 767.0 | 203.3 | 154.4 | 115.1 | 94.9 | 87.3 | 84.4 | 82.4 | 83.4 |
| 40° | 3333.5 | 2509.9 | 566.6 | 186.0 | 135.1 | 95.9 | 80.5 | 76.7 | 73.9 | 72.8 | 72.8 |
| 42.5° | 3434.1 | 2497.4 | 420.8 | 170.6 | 116.9 | 79.6 | 70.0 | 67.1 | 65.2 | 64.2 | 65.2 |
| 45° | 3698.8 | 2574.2 | 326.9 | 156.3 | 98.7 | 67.1 | 59.4 | 58.5 | 57.5 | 57.5 | 57.5 |
| 47.5° | 4096.6 | 2732.3 | 272.3 | 139.9 | 82.4 | 57.5 | 51.8 | 50.8 | 49.8 | 50.8 | 50.8 |
| 50° | 4770.6 | 3021.9 | 243.6 | 123.7 | 68.0 | 48.9 | 44.1 | 44.1 | 44.1 | 44.1 | 45.0 |
| 52.5° | 5795.4 | 3591.4 | 224.3 | 107.4 | 55.6 | 41.2 | 37.4 | 37.4 | 38.4 | 38.4 | 39.3 |
| 55° | 6937.2 | 4346.8 | 207.0 | 91.0 | 47.0 | 34.5 | 30.7 | 31.6 | 32.6 | 33.6 | 33.6 |
| 57.5° | 8175.9 | 5183.8 | 192.7 | 74.8 | 40.3 | 27.8 | 25.9 | 26.8 | 27.8 | 29.8 | 29.8 |
| 60° | 9670.6 | 6089.8 | 171.7 | 58.5 | 33.6 | 22.1 | 20.2 | 22.1 | 25.0 | 26.8 | 27.8 |
| 62.5° | 11311.9 | 6966.1 | 144.7 | 46.0 | 27.8 | 17.3 | 16.3 | 20.2 | 23.9 | 25.9 | 26.8 |
| 65° | 12433.7 | 7241.2 | 111.2 | 37.4 | 21.1 | 12.5 | 13.4 | 18.2 | 23.0 | 25.9 | 25.9 |
| 67° | 11979.2 | 6565.3 | 91.0 | 31.6 | 17.3 | 9.6 | 12.5 | 18.2 | 23.0 | 25.0 | 25.9 |
| 67.5° | 11663.8 | 6300.7 | 87.3 | 30.7 | 16.3 | 9.6 | 12.5 | 18.2 | 23.0 | 25.9 | 25.9 |
| 70° | 9490.3 | 4733.2 | 72.8 | 23.0 | 13.4 | 8.6 | 10.5 | 17.3 | 22.1 | 25.0 | 25.0 |
| 72.5° | 6594.0 | 2918.4 | 65.2 | 16.3 | 11.5 | 7.7 | 9.6 | 16.3 | 21.1 | 23.9 | 25.0 |
| 75° | 3135.0 | 1056.5 | 55.6 | 12.5 | 10.5 | 6.8 | 8.6 | 16.3 | 21.1 | 23.9 | 23.9 |
| 77.5° | 639.4 | 245.4 | 45.0 | 10.5 | 8.6 | 6.8 | 7.7 | 15.3 | 20.2 | 23.0 | 23.0 |
| 80° | 209.9 | 94.9 | 33.6 | 9.6 | 8.6 | 6.8 | 7.7 | 14.4 | 20.2 | 22.1 | 23.0 |
| 82.5° | 151.5 | 48.0 | 22.1 | 9.6 | 8.6 | 6.8 | 6.8 | 14.4 | 19.1 | 22.1 | 22.1 |
| 85° | 116.0 | 33.6 | 14.4 | 9.6 | 8.6 | 6.8 | 6.8 | 13.4 | 18.2 | 21.1 | 21.1 |
| 87.5° | 76.7 | 13.4 | 11.5 | 9.6 | 8.6 | 6.8 | 6.8 | 13.4 | 17.3 | 20.2 | 21.1 |
| 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)