

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: P191002

Luminaire Tested: **GAN-AF-04-LED-U-RW-800-ADJ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191002
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24166)
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-RW-800-ADJ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20285.1 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Medium - Full Cutoff
BUG Rating: B4 - U0 - G2

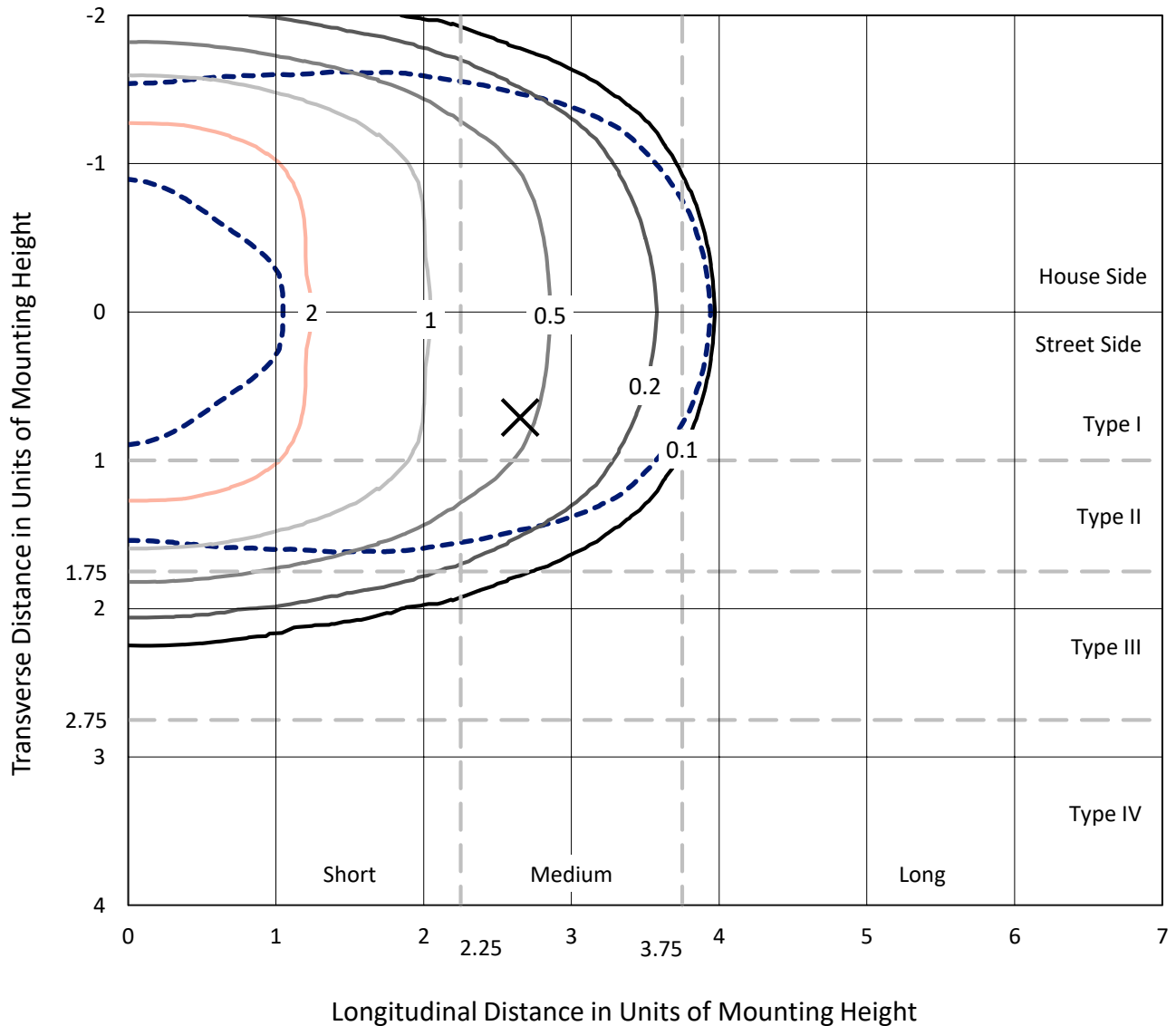
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P191002
 CATALOG NUMBER: GAN-AF-04-LED-U-RW-800-ADJ

Iso-Footcandle Lines of Horizontal Illumination

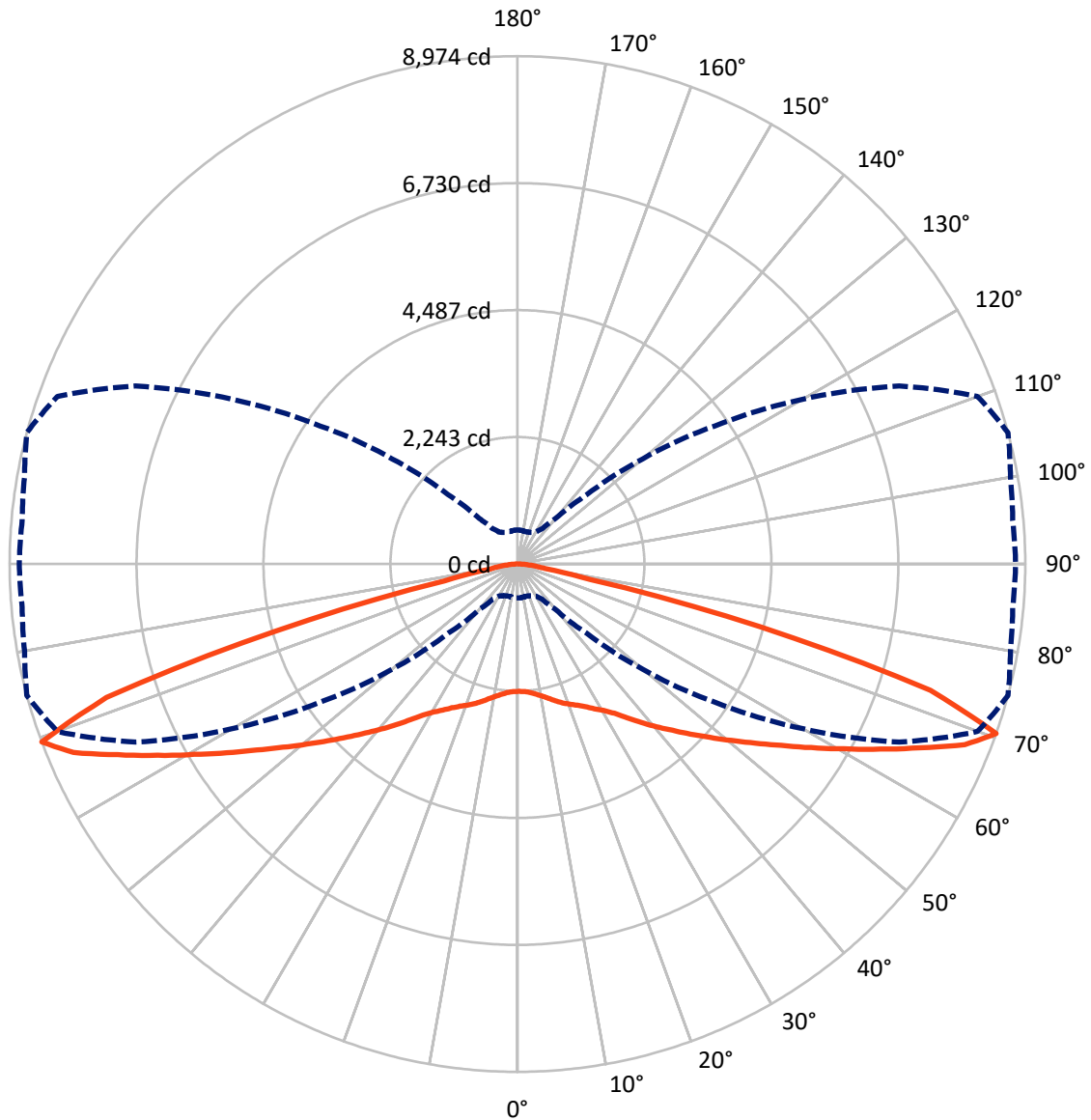
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type V - Medium - Full Cutoff

REPORT NUMBER: P191002
CATALOG NUMBER: GAN-AF-04-LED-U-RW-800-ADJ

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P191002

CATALOG NUMBER: GAN-AF-04-LED-U-RW-800-ADJ

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 10142.6 | 0.0 | 10142.6 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 10142.6 | 0.0 | 10142.6 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 20285.1 | 0.0 | 20285.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 215.8 | 1.1 |
| 10°-20° | 670.5 | 3.3 |
| 20°-30° | 1262.0 | 6.2 |
| 30°-40° | 2234.8 | 11.0 |
| 40°-50° | 3737.3 | 18.4 |
| 50°-60° | 5208.0 | 25.7 |
| 60°-70° | 4829.6 | 23.8 |
| 70°-80° | 1924.7 | 9.5 |
| 80°-90° | 202.3 | 1.0 |
| 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° | 20285.1 | 100.0 |
| 0°-180° | 20285.1 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P191002

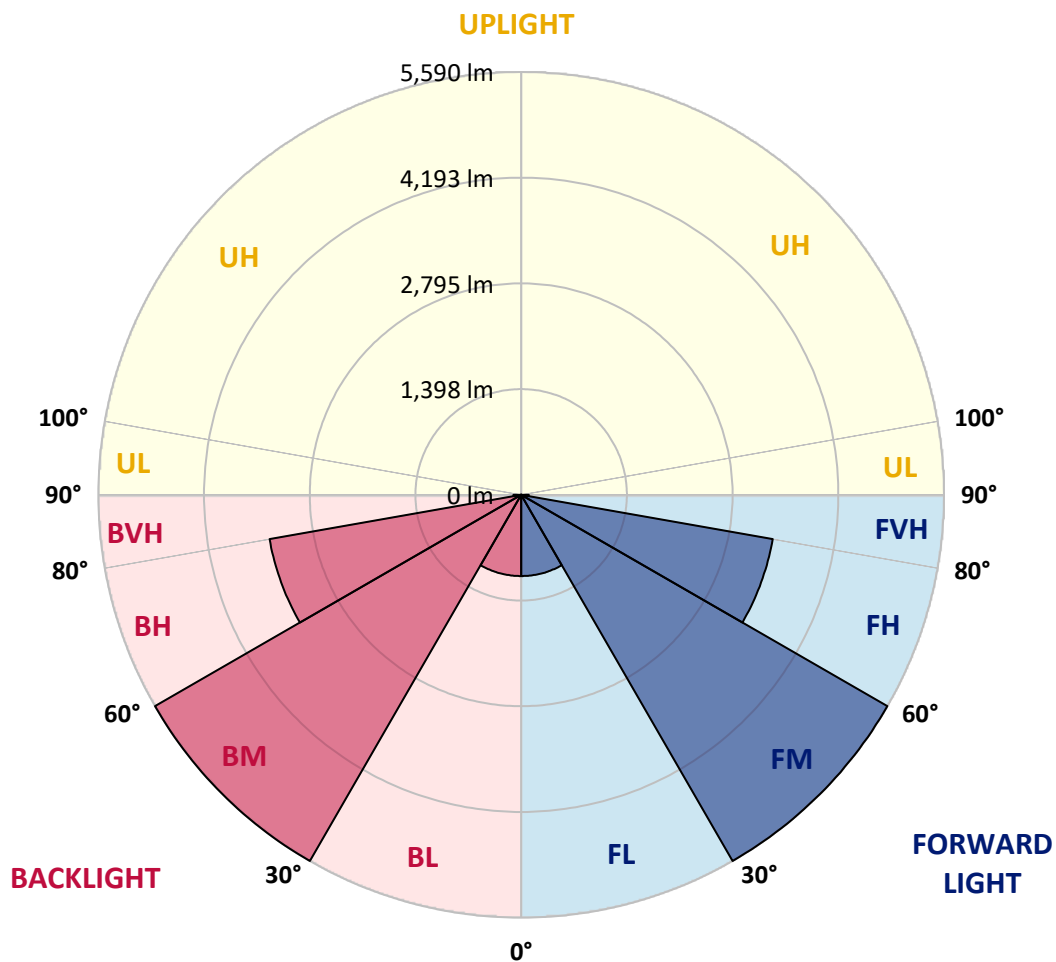
CATALOG NUMBER: GAN-AF-04-LED-U-RW-800-ADJ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1074.2 | 5.3 | | | |
| FM | (30°-60°) | 5590.1 | 27.6 | | | |
| FH | (60°-80°) | 3377.2 | 16.6 | | | G2/5000 |
| FVH | (80°-90°) | 101.2 | 0.5 | | | G2/225 |
| BL | (0°-30°) | 1074.2 | 5.3 | B3/2500 | | |
| BM | (30°-60°) | 5590.1 | 27.6 | B4/8500 | | |
| BH | (60°-80°) | 3377.2 | 16.6 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 101.2 | 0.5 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G2

Type V Medium





REPORT NUMBER: P191002
 CATALOG NUMBER: GAN-AF-04-LED-U-RW-800-ADJ

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2250.1 | 2250.1 | 2250.1 | 2250.1 | 2250.1 | 2250.1 | 2250.1 | 2250.1 | 2250.1 | 2250.1 | 2250.1 |
| 2.5° | 2246.3 | 2244.4 | 2246.3 | 2245.3 | 2247.2 | 2247.2 | 2249.2 | 2252.9 | 2252.9 | 2255.8 | 2254.9 |
| 5° | 2224.2 | 2223.3 | 2226.1 | 2229.0 | 2231.9 | 2237.6 | 2243.3 | 2252.0 | 2258.7 | 2263.5 | 2268.3 |
| 7.5° | 2181.0 | 2181.0 | 2184.9 | 2191.6 | 2198.3 | 2210.8 | 2224.2 | 2241.5 | 2258.7 | 2273.1 | 2285.6 |
| 10° | 2145.6 | 2147.5 | 2152.3 | 2163.8 | 2175.3 | 2194.5 | 2212.7 | 2237.6 | 2261.6 | 2285.6 | 2304.7 |
| 12.5° | 2124.5 | 2127.3 | 2136.0 | 2153.3 | 2172.4 | 2198.3 | 2226.1 | 2257.8 | 2284.6 | 2313.4 | 2332.5 |
| 15° | 2131.2 | 2133.2 | 2145.6 | 2166.7 | 2191.6 | 2224.2 | 2261.6 | 2299.0 | 2330.6 | 2361.3 | 2387.2 |
| 17.5° | 2168.6 | 2171.5 | 2185.8 | 2209.8 | 2235.8 | 2274.0 | 2314.3 | 2356.5 | 2395.9 | 2430.3 | 2461.9 |
| 20° | 2235.8 | 2238.6 | 2256.8 | 2282.7 | 2313.4 | 2352.7 | 2393.0 | 2437.1 | 2481.2 | 2517.6 | 2553.1 |
| 22.5° | 2330.6 | 2335.4 | 2352.7 | 2378.6 | 2413.0 | 2455.3 | 2503.2 | 2550.2 | 2592.4 | 2625.9 | 2657.5 |
| 25° | 2455.3 | 2465.8 | 2482.1 | 2510.8 | 2547.2 | 2585.6 | 2637.4 | 2685.3 | 2725.7 | 2757.3 | 2780.3 |
| 27.5° | 2631.6 | 2646.1 | 2658.5 | 2686.3 | 2721.8 | 2758.2 | 2809.9 | 2852.2 | 2890.6 | 2921.1 | 2938.4 |
| 30° | 2865.6 | 2879.9 | 2892.4 | 2919.3 | 2951.8 | 2986.4 | 3035.3 | 3072.6 | 3096.7 | 3120.6 | 3119.6 |
| 32.5° | 3149.4 | 3164.7 | 3169.5 | 3198.3 | 3231.8 | 3269.2 | 3313.3 | 3334.4 | 3353.5 | 3356.4 | 3339.2 |
| 35° | 3466.7 | 3474.4 | 3493.6 | 3531.8 | 3570.2 | 3600.9 | 3643.1 | 3653.7 | 3653.7 | 3639.2 | 3600.9 |
| 37.5° | 3814.7 | 3819.5 | 3846.3 | 3889.5 | 3928.7 | 3960.5 | 3989.2 | 4010.3 | 3999.7 | 3969.0 | 3904.8 |
| 40° | 4196.2 | 4204.9 | 4243.2 | 4281.6 | 4325.6 | 4355.4 | 4386.1 | 4389.9 | 4379.4 | 4334.3 | 4247.1 |
| 42.5° | 4560.6 | 4568.3 | 4606.6 | 4667.0 | 4724.5 | 4765.7 | 4794.5 | 4800.3 | 4766.7 | 4725.5 | 4617.2 |
| 45° | 4874.1 | 4894.2 | 4944.0 | 5015.0 | 5098.4 | 5156.9 | 5196.2 | 5212.5 | 5182.8 | 5129.1 | 5003.5 |
| 47.5° | 5122.4 | 5142.5 | 5213.5 | 5297.9 | 5401.4 | 5496.3 | 5561.5 | 5596.0 | 5588.3 | 5548.1 | 5411.0 |
| 50° | 5304.5 | 5323.7 | 5400.4 | 5504.0 | 5624.8 | 5742.6 | 5853.8 | 5936.3 | 5965.1 | 5946.9 | 5821.3 |
| 52.5° | 5325.6 | 5357.3 | 5447.4 | 5586.4 | 5743.7 | 5904.7 | 6062.9 | 6202.9 | 6297.8 | 6312.1 | 6219.1 |
| 55° | 5031.3 | 5063.0 | 5187.6 | 5393.7 | 5627.7 | 5890.4 | 6143.4 | 6379.2 | 6566.2 | 6662.1 | 6613.2 |
| 57.5° | 4337.2 | 4393.8 | 4525.1 | 4766.7 | 5110.9 | 5504.0 | 5907.5 | 6326.5 | 6707.2 | 6961.2 | 7010.1 |
| 60° | 3323.9 | 3391.0 | 3523.2 | 3780.2 | 4163.7 | 4632.5 | 5171.3 | 5790.6 | 6462.7 | 7034.0 | 7375.4 |
| 62.5° | 2132.1 | 2195.5 | 2334.5 | 2557.9 | 2870.4 | 3378.5 | 3956.6 | 4692.0 | 5595.0 | 6497.2 | 7310.2 |
| 65° | 1095.8 | 1130.4 | 1203.2 | 1338.3 | 1581.9 | 1961.5 | 2480.1 | 3213.6 | 4246.2 | 5359.1 | 6534.6 |
| 67.5° | 694.1 | 700.8 | 717.1 | 736.3 | 798.6 | 930.0 | 1171.6 | 1628.8 | 2478.3 | 3639.2 | 5015.0 |
| 70° | 600.2 | 600.2 | 592.5 | 589.6 | 597.3 | 615.5 | 652.8 | 759.3 | 1046.0 | 1727.6 | 2892.4 |
| 72.5° | 549.3 | 543.6 | 530.2 | 519.7 | 517.7 | 517.7 | 525.4 | 541.7 | 587.7 | 703.7 | 1132.2 |
| 75° | 506.2 | 489.9 | 471.7 | 459.2 | 454.4 | 449.6 | 448.7 | 451.5 | 461.1 | 479.4 | 540.7 |
| 77.5° | 453.5 | 432.4 | 411.3 | 398.8 | 393.1 | 386.4 | 380.6 | 373.9 | 369.1 | 374.8 | 401.7 |
| 80° | 390.2 | 366.2 | 350.0 | 342.3 | 336.6 | 326.9 | 314.5 | 303.0 | 292.4 | 290.5 | 306.8 |
| 82.5° | 314.5 | 286.6 | 287.7 | 290.5 | 280.0 | 266.5 | 253.1 | 240.6 | 222.4 | 212.9 | 222.4 |
| 85° | 254.1 | 239.7 | 232.9 | 251.1 | 235.9 | 215.7 | 194.7 | 172.6 | 143.8 | 120.8 | 131.3 |
| 87.5° | 98.7 | 98.7 | 147.6 | 227.2 | 204.2 | 166.8 | 142.8 | 121.7 | 75.7 | 58.5 | 59.4 |
| 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: P191002

CATALOG NUMBER: GAN-AF-04-LED-U-RW-800-ADJ

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2250.1 | 2250.1 | 2250.1 | 2250.1 | 2250.1 | 2250.1 | 2250.1 | 2250.1 |
| 2.5° | 2254.0 | 2255.8 | 2254.9 | 2254.0 | 2254.0 | 2252.9 | 2254.0 | 2254.0 |
| 5° | 2271.2 | 2276.0 | 2276.0 | 2277.9 | 2277.9 | 2278.8 | 2279.9 | 2278.8 |
| 7.5° | 2297.0 | 2305.7 | 2311.5 | 2318.2 | 2319.1 | 2320.1 | 2322.0 | 2320.1 |
| 10° | 2322.9 | 2340.2 | 2352.7 | 2365.2 | 2370.9 | 2372.8 | 2374.7 | 2374.7 |
| 12.5° | 2355.5 | 2379.5 | 2401.6 | 2423.6 | 2434.2 | 2439.9 | 2439.9 | 2443.7 |
| 15° | 2409.3 | 2433.2 | 2459.1 | 2488.8 | 2507.0 | 2516.7 | 2519.5 | 2519.5 |
| 17.5° | 2485.0 | 2506.0 | 2528.1 | 2556.9 | 2579.9 | 2592.4 | 2595.2 | 2594.3 |
| 20° | 2573.1 | 2593.3 | 2605.8 | 2624.0 | 2644.1 | 2658.5 | 2662.3 | 2662.3 |
| 22.5° | 2673.9 | 2685.3 | 2687.3 | 2693.0 | 2709.3 | 2728.5 | 2737.1 | 2739.1 |
| 25° | 2785.1 | 2788.0 | 2780.3 | 2780.3 | 2790.8 | 2809.0 | 2817.6 | 2818.6 |
| 27.5° | 2928.8 | 2914.5 | 2895.3 | 2888.6 | 2895.3 | 2916.4 | 2927.0 | 2930.8 |
| 30° | 3108.1 | 3073.7 | 3029.6 | 3005.5 | 3001.7 | 3029.6 | 3048.7 | 3051.6 |
| 32.5° | 3313.3 | 3263.4 | 3205.0 | 3156.1 | 3143.6 | 3160.8 | 3183.8 | 3182.9 |
| 35° | 3556.8 | 3497.4 | 3426.5 | 3364.1 | 3335.3 | 3352.6 | 3385.3 | 3389.0 |
| 37.5° | 3837.7 | 3760.1 | 3678.5 | 3600.0 | 3554.9 | 3559.7 | 3594.2 | 3605.7 |
| 40° | 4151.2 | 4050.6 | 3948.0 | 3842.5 | 3778.3 | 3765.8 | 3808.0 | 3814.7 |
| 42.5° | 4486.8 | 4357.4 | 4228.0 | 4097.5 | 4015.1 | 3996.0 | 4044.7 | 4041.9 |
| 45° | 4844.4 | 4679.5 | 4528.0 | 4384.2 | 4286.4 | 4257.6 | 4297.9 | 4297.9 |
| 47.5° | 5228.8 | 5025.6 | 4845.3 | 4682.4 | 4576.0 | 4534.7 | 4573.0 | 4576.0 |
| 50° | 5636.3 | 5420.5 | 5208.7 | 5027.5 | 4899.9 | 4847.3 | 4897.1 | 4904.7 |
| 52.5° | 6041.8 | 5831.8 | 5618.0 | 5411.0 | 5256.6 | 5192.4 | 5249.9 | 5274.8 |
| 55° | 6453.1 | 6247.0 | 6042.8 | 5840.4 | 5657.3 | 5581.6 | 5643.0 | 5674.6 |
| 57.5° | 6887.3 | 6696.5 | 6502.0 | 6297.8 | 6121.3 | 6003.4 | 6068.7 | 6110.8 |
| 60° | 7396.4 | 7233.5 | 7031.2 | 6805.9 | 6627.6 | 6507.7 | 6545.1 | 6582.5 |
| 62.5° | 7799.1 | 7862.4 | 7690.7 | 7430.0 | 7200.9 | 7047.5 | 7083.9 | 7123.2 |
| 65° | 7604.5 | 8253.6 | 8406.0 | 8142.3 | 7825.0 | 7586.3 | 7571.0 | 7591.1 |
| 67.5° | 6356.2 | 7617.0 | 8536.3 | 8787.6 | 8522.0 | 8190.3 | 8128.9 | 8158.6 |
| 70° | 4251.9 | 5822.2 | 7444.4 | 8652.3 | 8973.5 | 8845.0 | 8784.7 | 8802.9 |
| 72.5° | 2042.0 | 3391.0 | 5050.5 | 6656.3 | 7634.2 | 8082.8 | 8226.7 | 8296.6 |
| 75° | 746.9 | 1346.0 | 2434.2 | 3668.0 | 4428.3 | 5126.2 | 5581.6 | 5767.6 |
| 77.5° | 450.6 | 543.6 | 777.5 | 1170.6 | 1325.8 | 1484.1 | 1422.7 | 1453.4 |
| 80° | 333.6 | 376.8 | 426.7 | 479.4 | 496.6 | 496.6 | 477.4 | 462.1 |
| 82.5° | 233.9 | 261.8 | 285.7 | 314.5 | 322.1 | 307.7 | 253.1 | 201.3 |
| 85° | 150.5 | 163.0 | 173.5 | 191.7 | 187.0 | 178.3 | 119.9 | 106.4 |
| 87.5° | 69.0 | 78.7 | 82.4 | 91.0 | 87.3 | 83.4 | 59.4 | 49.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)