

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: McGRAW-EDISON

Report Number: P190841

Luminaire Tested: **GLEON-AF-03-LED-E1-5NQ-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190841
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: MCGRAW-EDISON
Catalog Number: GLEON-AF-03-LED-E1-5NQ-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15492.6 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G2

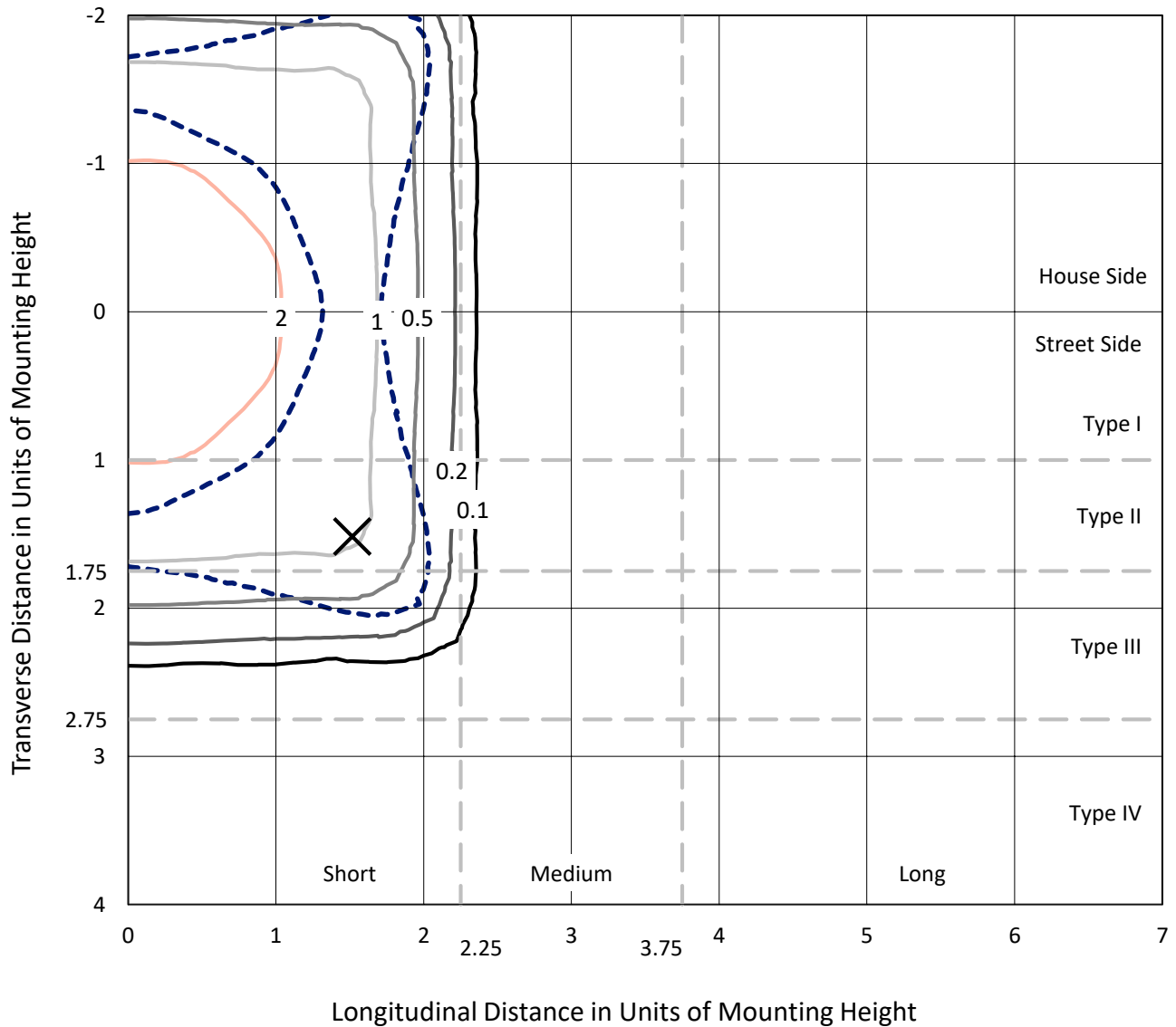
Input Watts (W): 124
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P190841
 CATALOG NUMBER: GLEON-AF-03-LED-E1-5NQ-800

Iso-Footcandle Lines of Horizontal Illumination

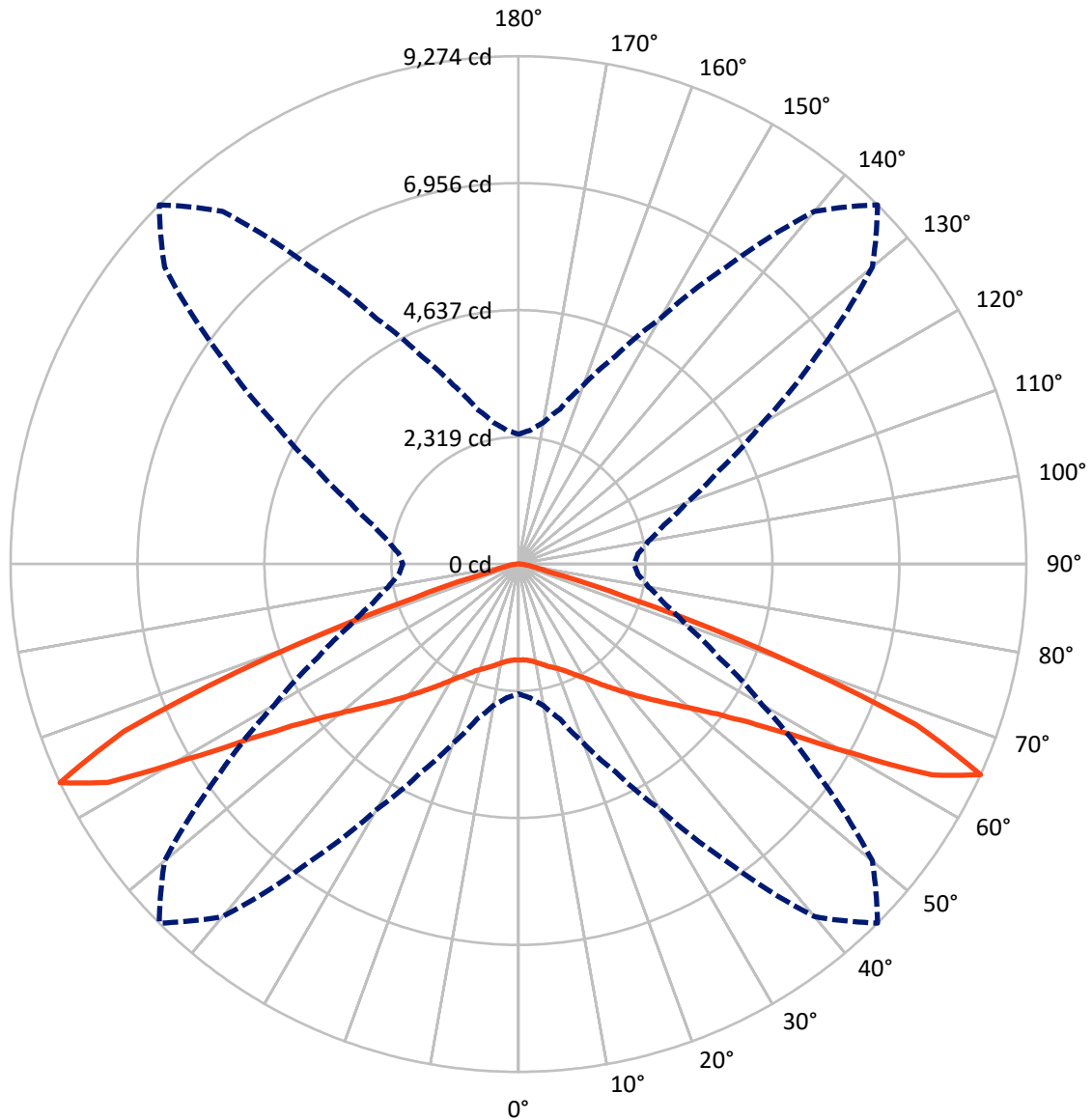
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P190841
CATALOG NUMBER: GLEON-AF-03-LED-E1-5NQ-800

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P190841

CATALOG NUMBER: GLEON-AF-03-LED-E1-5NQ-800

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 7746.3 | 0.0 | 7746.3 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 7746.3 | 0.0 | 7746.3 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 15492.6 | 0.0 | 15492.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 170.9 | 1.1 |
| 10°-20° | 548.0 | 3.5 |
| 20°-30° | 1024.6 | 6.6 |
| 30°-40° | 1732.9 | 11.2 |
| 40°-50° | 2833.5 | 18.3 |
| 50°-60° | 4505.7 | 29.1 |
| 60°-70° | 4072.9 | 26.3 |
| 70°-80° | 515.4 | 3.3 |
| 80°-90° | 88.7 | 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° | 15492.6 | 100.0 |
| 0°-180° | 15492.6 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P190841

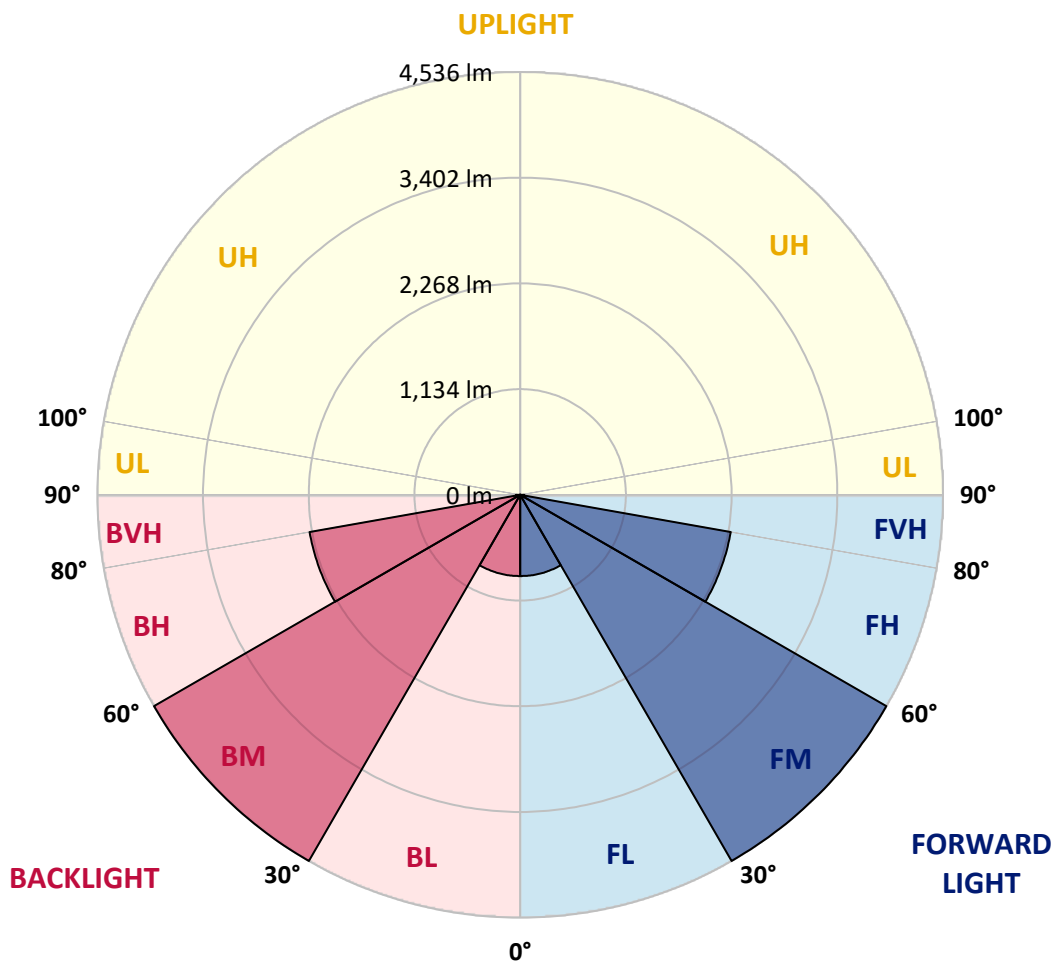
CATALOG NUMBER: GLEON-AF-03-LED-E1-5NQ-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 871.7 | 5.6 | | | |
| FM | (30°-60°) | 4536.1 | 29.3 | | | |
| FH | (60°-80°) | 2294.2 | 14.8 | | | G2/5000 |
| FVH | (80°-90°) | 44.3 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 871.7 | 5.6 | B2/1000 | | |
| BM | (30°-60°) | 4536.1 | 29.3 | B3/5000 | | |
| BH | (60°-80°) | 2294.2 | 14.8 | B3/2500 | | G2/5000 |
| BVH | (80°-90°) | 44.3 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G2

Type V Short





REPORT NUMBER: P190841

CATALOG NUMBER: GLEON-AF-03-LED-E1-5NQ-800

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1753.0 | 1753.0 | 1753.0 | 1753.0 | 1753.0 | 1753.0 | 1753.0 | 1753.0 | 1753.0 | 1753.0 | 1753.0 |
| 2.5° | 1754.5 | 1755.9 | 1757.3 | 1755.9 | 1757.3 | 1755.2 | 1753.7 | 1755.9 | 1753.7 | 1751.5 | 1753.0 |
| 5° | 1769.7 | 1770.4 | 1770.4 | 1768.3 | 1770.4 | 1769.0 | 1766.7 | 1769.7 | 1767.6 | 1765.3 | 1766.7 |
| 7.5° | 1795.1 | 1797.9 | 1795.8 | 1793.6 | 1795.1 | 1793.6 | 1792.2 | 1792.9 | 1792.2 | 1790.0 | 1790.7 |
| 10° | 1829.1 | 1831.4 | 1830.0 | 1829.1 | 1830.7 | 1830.0 | 1828.4 | 1827.7 | 1828.4 | 1826.3 | 1826.3 |
| 12.5° | 1870.6 | 1869.9 | 1869.1 | 1869.9 | 1872.0 | 1872.0 | 1871.3 | 1872.0 | 1873.4 | 1874.1 | 1872.7 |
| 15° | 1911.2 | 1912.6 | 1912.6 | 1912.6 | 1917.0 | 1920.6 | 1922.7 | 1924.3 | 1927.1 | 1927.9 | 1925.0 |
| 17.5° | 1961.9 | 1961.9 | 1961.2 | 1961.9 | 1966.3 | 1972.1 | 1974.3 | 1977.2 | 1980.1 | 1982.3 | 1978.7 |
| 20° | 2018.6 | 2020.0 | 2020.0 | 2021.5 | 2027.3 | 2033.8 | 2033.8 | 2035.3 | 2033.8 | 2035.3 | 2033.1 |
| 22.5° | 2087.5 | 2091.8 | 2091.8 | 2092.5 | 2098.4 | 2106.4 | 2104.2 | 2106.4 | 2102.7 | 2105.6 | 2102.7 |
| 25° | 2177.5 | 2184.0 | 2182.6 | 2182.6 | 2186.9 | 2192.0 | 2192.7 | 2197.1 | 2196.3 | 2200.0 | 2197.8 |
| 27.5° | 2279.0 | 2289.2 | 2292.1 | 2291.4 | 2294.3 | 2299.4 | 2300.8 | 2305.9 | 2303.0 | 2305.9 | 2304.4 |
| 30° | 2401.0 | 2405.3 | 2411.1 | 2413.2 | 2416.9 | 2421.9 | 2421.9 | 2422.7 | 2419.1 | 2423.5 | 2425.6 |
| 32.5° | 2527.2 | 2535.2 | 2541.0 | 2554.0 | 2560.5 | 2564.2 | 2563.5 | 2564.9 | 2561.3 | 2567.1 | 2571.5 |
| 35° | 2694.0 | 2699.9 | 2709.3 | 2719.5 | 2728.2 | 2727.5 | 2725.2 | 2726.0 | 2726.0 | 2731.1 | 2735.5 |
| 37.5° | 2895.1 | 2896.5 | 2908.9 | 2923.4 | 2927.7 | 2923.4 | 2910.3 | 2907.4 | 2900.9 | 2907.4 | 2914.7 |
| 40° | 3107.6 | 3112.7 | 3137.4 | 3146.8 | 3149.1 | 3141.1 | 3122.1 | 3111.3 | 3096.8 | 3104.8 | 3114.9 |
| 42.5° | 3330.4 | 3340.5 | 3363.1 | 3379.7 | 3387.0 | 3381.9 | 3355.8 | 3339.1 | 3320.2 | 3324.6 | 3334.7 |
| 45° | 3577.1 | 3589.4 | 3621.3 | 3637.3 | 3651.1 | 3643.1 | 3617.8 | 3592.3 | 3562.6 | 3564.8 | 3580.7 |
| 47.5° | 3852.8 | 3865.1 | 3906.5 | 3933.3 | 3940.6 | 3939.2 | 3910.8 | 3876.1 | 3835.5 | 3833.9 | 3847.7 |
| 50° | 4161.9 | 4174.3 | 4225.8 | 4267.1 | 4288.2 | 4286.0 | 4252.6 | 4203.3 | 4153.9 | 4154.6 | 4172.1 |
| 52.5° | 4463.7 | 4479.0 | 4532.7 | 4603.8 | 4645.1 | 4674.9 | 4654.5 | 4608.2 | 4547.9 | 4549.4 | 4565.3 |
| 55° | 4746.7 | 4772.2 | 4833.7 | 4930.3 | 5007.2 | 5090.6 | 5114.5 | 5113.1 | 5076.9 | 5087.0 | 5103.0 |
| 57.5° | 4883.9 | 4921.6 | 5016.7 | 5169.0 | 5325.8 | 5495.5 | 5639.2 | 5746.5 | 5792.3 | 5861.2 | 5845.2 |
| 60° | 4624.1 | 4684.3 | 4824.3 | 5048.6 | 5358.4 | 5712.5 | 6092.0 | 6462.7 | 6779.1 | 7017.7 | 6880.7 |
| 62.5° | 3786.0 | 3864.4 | 4034.2 | 4321.6 | 4790.3 | 5356.9 | 6083.3 | 6959.7 | 7914.6 | 8490.7 | 8079.3 |
| 65° | 2369.1 | 2450.3 | 2622.9 | 2930.7 | 3479.2 | 4183.7 | 5169.0 | 6621.7 | 8405.8 | 9274.4 | 8437.0 |
| 67.5° | 923.6 | 967.9 | 1061.5 | 1258.1 | 1670.3 | 2297.1 | 3286.1 | 4934.6 | 7068.6 | 7829.7 | 6937.2 |
| 70° | 462.9 | 467.3 | 484.7 | 521.0 | 609.5 | 791.6 | 1204.4 | 2287.7 | 4053.9 | 4896.1 | 3908.0 |
| 72.5° | 334.5 | 335.2 | 343.9 | 359.9 | 388.2 | 428.8 | 507.2 | 700.2 | 1318.4 | 2014.9 | 1235.6 |
| 75° | 256.1 | 259.0 | 264.1 | 272.8 | 288.1 | 308.4 | 336.7 | 403.5 | 499.9 | 579.7 | 487.5 |
| 77.5° | 197.3 | 203.2 | 206.8 | 214.8 | 224.2 | 237.9 | 246.0 | 271.4 | 315.6 | 332.4 | 327.2 |
| 80° | 150.2 | 155.3 | 163.3 | 169.8 | 176.4 | 182.8 | 179.9 | 191.6 | 214.8 | 228.5 | 221.3 |
| 82.5° | 95.7 | 101.6 | 124.8 | 130.6 | 133.5 | 137.9 | 132.8 | 133.5 | 143.6 | 152.4 | 143.6 |
| 85° | 61.7 | 65.3 | 79.1 | 86.3 | 87.1 | 90.0 | 87.8 | 82.8 | 82.8 | 75.5 | 84.9 |
| 87.5° | 28.3 | 29.1 | 35.6 | 42.0 | 43.6 | 39.2 | 38.5 | 37.0 | 29.8 | 28.3 | 30.5 |
| 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: P190841

CATALOG NUMBER: GLEON-AF-03-LED-E1-5NQ-800

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1753.0 | 1753.0 | 1753.0 | 1753.0 | 1753.0 | 1753.0 | 1753.0 | 1753.0 |
| 2.5° | 1752.3 | 1753.7 | 1754.5 | 1756.6 | 1757.3 | 1757.3 | 1758.0 | 1759.5 |
| 5° | 1766.0 | 1768.3 | 1769.0 | 1771.9 | 1772.6 | 1771.9 | 1773.3 | 1774.0 |
| 7.5° | 1790.7 | 1794.4 | 1795.8 | 1798.8 | 1796.5 | 1799.5 | 1800.2 | 1800.2 |
| 10° | 1827.0 | 1830.7 | 1831.4 | 1834.3 | 1832.8 | 1834.3 | 1834.3 | 1832.8 |
| 12.5° | 1874.9 | 1875.6 | 1873.4 | 1875.6 | 1872.7 | 1874.1 | 1872.0 | 1870.6 |
| 15° | 1927.9 | 1925.7 | 1920.6 | 1920.6 | 1916.3 | 1917.0 | 1916.3 | 1915.5 |
| 17.5° | 1979.4 | 1975.0 | 1971.4 | 1969.9 | 1966.3 | 1965.6 | 1963.5 | 1963.5 |
| 20° | 2036.0 | 2033.8 | 2031.6 | 2028.7 | 2025.1 | 2021.5 | 2020.7 | 2022.2 |
| 22.5° | 2104.2 | 2103.5 | 2103.5 | 2102.0 | 2096.9 | 2093.3 | 2091.1 | 2091.1 |
| 25° | 2195.6 | 2189.1 | 2189.1 | 2188.3 | 2186.1 | 2184.0 | 2179.6 | 2181.9 |
| 27.5° | 2298.7 | 2295.0 | 2297.9 | 2297.1 | 2295.0 | 2295.0 | 2292.1 | 2292.1 |
| 30° | 2425.6 | 2424.2 | 2428.5 | 2424.9 | 2417.6 | 2416.9 | 2414.0 | 2410.4 |
| 32.5° | 2572.2 | 2570.7 | 2577.2 | 2572.9 | 2561.3 | 2554.7 | 2549.0 | 2546.0 |
| 35° | 2735.5 | 2736.2 | 2744.2 | 2741.2 | 2728.2 | 2723.8 | 2713.7 | 2712.3 |
| 37.5° | 2913.9 | 2925.5 | 2939.3 | 2942.2 | 2931.4 | 2928.4 | 2917.6 | 2911.7 |
| 40° | 3123.6 | 3138.8 | 3159.9 | 3165.0 | 3153.3 | 3151.2 | 3136.0 | 3128.0 |
| 42.5° | 3347.1 | 3373.2 | 3399.4 | 3403.7 | 3392.1 | 3380.4 | 3365.9 | 3360.2 |
| 45° | 3596.7 | 3627.9 | 3662.0 | 3670.7 | 3653.3 | 3639.5 | 3620.6 | 3620.6 |
| 47.5° | 3876.8 | 3916.0 | 3954.4 | 3978.4 | 3962.4 | 3947.9 | 3925.4 | 3910.8 |
| 50° | 4207.6 | 4261.3 | 4311.4 | 4336.1 | 4310.6 | 4283.1 | 4243.9 | 4230.8 |
| 52.5° | 4622.6 | 4680.7 | 4724.2 | 4711.2 | 4672.0 | 4633.6 | 4590.7 | 4573.3 |
| 55° | 5152.3 | 5171.9 | 5171.9 | 5122.5 | 5044.2 | 4979.6 | 4912.1 | 4889.7 |
| 57.5° | 5814.8 | 5739.4 | 5623.3 | 5476.0 | 5290.9 | 5129.8 | 5020.9 | 4969.5 |
| 60° | 6593.3 | 6230.5 | 5820.6 | 5417.9 | 5087.0 | 4814.2 | 4652.4 | 4578.4 |
| 62.5° | 7112.1 | 6163.1 | 5341.7 | 4695.2 | 4219.3 | 3890.6 | 3667.1 | 3580.0 |
| 65° | 6647.0 | 5140.0 | 4040.0 | 3266.6 | 2747.7 | 2413.2 | 2192.0 | 2110.7 |
| 67.5° | 4868.6 | 3220.9 | 2151.4 | 1541.9 | 1129.7 | 901.1 | 810.5 | 772.7 |
| 70° | 2185.4 | 1134.0 | 695.1 | 542.8 | 468.0 | 429.5 | 412.9 | 407.0 |
| 72.5° | 658.8 | 476.7 | 402.0 | 362.7 | 333.1 | 314.1 | 300.3 | 298.9 |
| 75° | 397.6 | 330.8 | 293.9 | 270.7 | 251.7 | 236.5 | 229.2 | 227.1 |
| 77.5° | 277.9 | 243.1 | 225.7 | 209.0 | 194.5 | 182.8 | 176.4 | 171.2 |
| 80° | 195.2 | 178.5 | 170.5 | 161.1 | 151.6 | 140.8 | 131.3 | 126.9 |
| 82.5° | 130.6 | 126.9 | 126.9 | 121.2 | 113.2 | 103.0 | 84.2 | 79.8 |
| 85° | 84.2 | 83.5 | 84.9 | 82.8 | 76.9 | 66.0 | 54.4 | 51.6 |
| 87.5° | 39.2 | 39.9 | 44.3 | 43.6 | 42.0 | 34.8 | 27.6 | 26.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)