

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: P194300

Luminaire Tested: **GLEON-AF-02-LED-E1-AFL-7060-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P194300  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-AF-02-LED-E1-AFL-7060-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 5700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10095 lumens  
Efficiency: N/A  
Efficacy: 118.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 85  
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



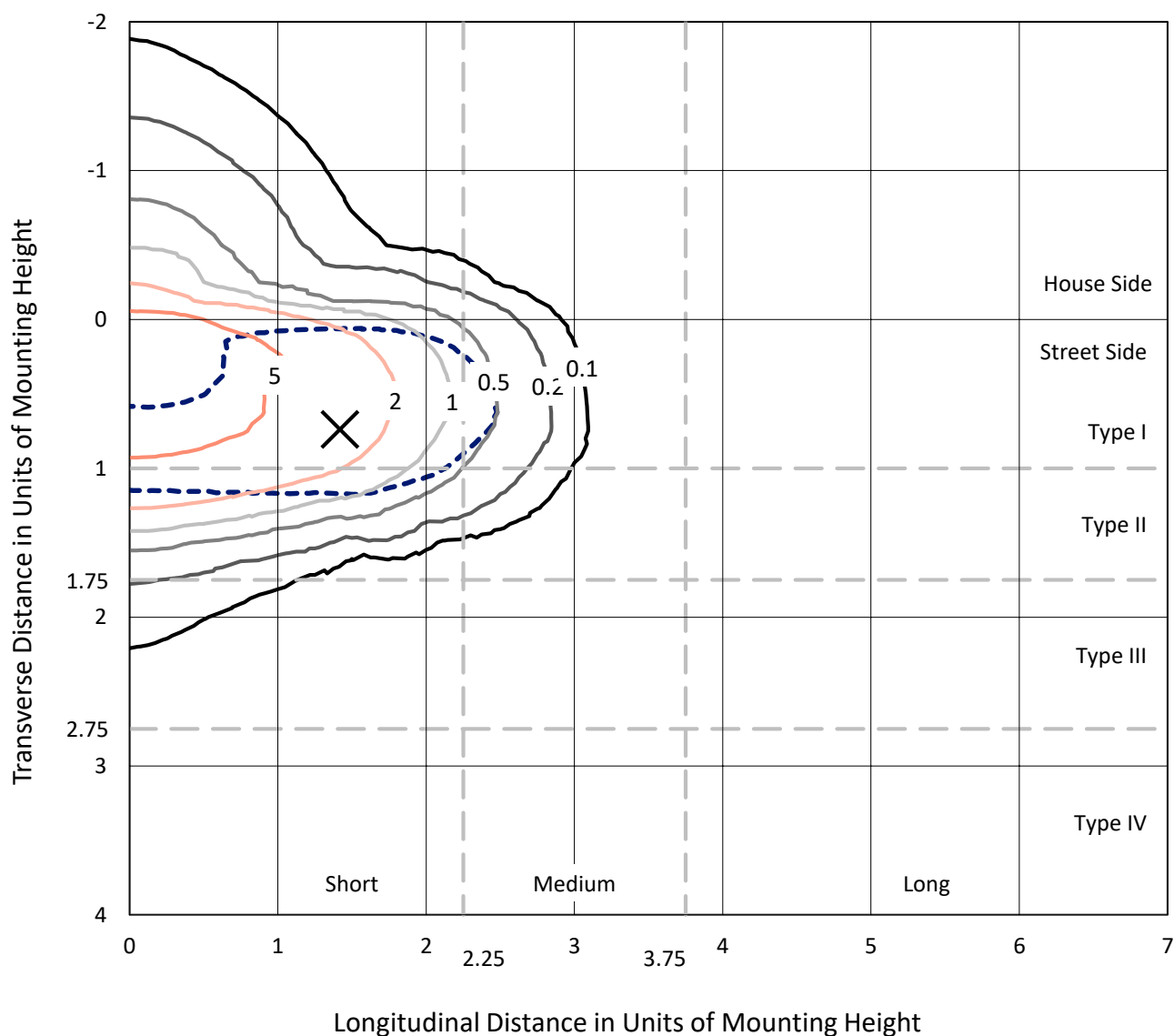
REPORT NUMBER: P194300

CATALOG NUMBER: GLEON-AF-02-LED-E1-AFL-7060-800

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

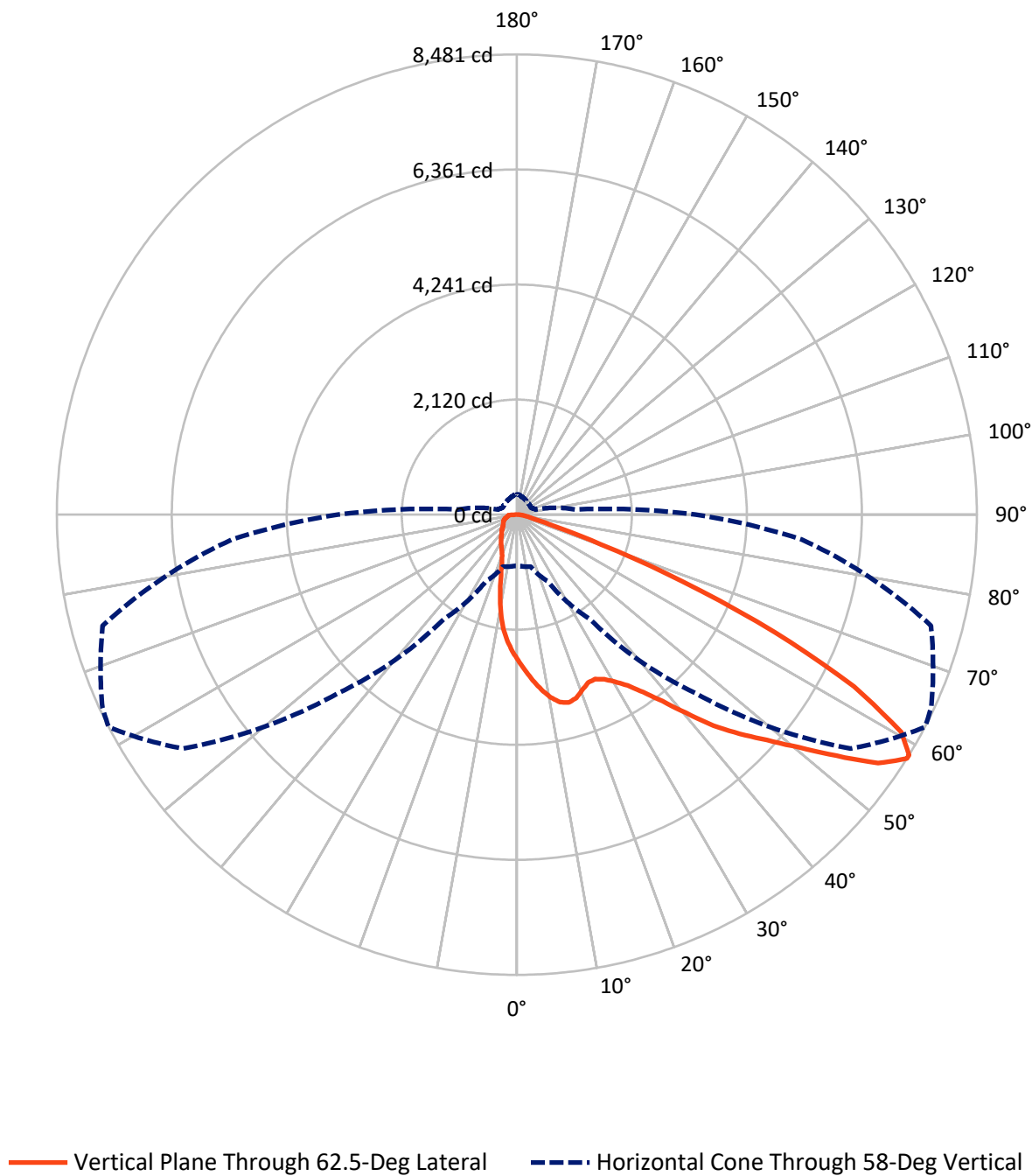


Based on 20 foot mounting height. Maximum calculated value = 8.2 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P194300

CATALOG NUMBER: GLEON-AF-02-LED-E1-AFL-7060-800

## Luminous Intensity Polar Plot



REPORT NUMBER: P194300

CATALOG NUMBER: GLEON-AF-02-LED-E1-AFL-7060-800

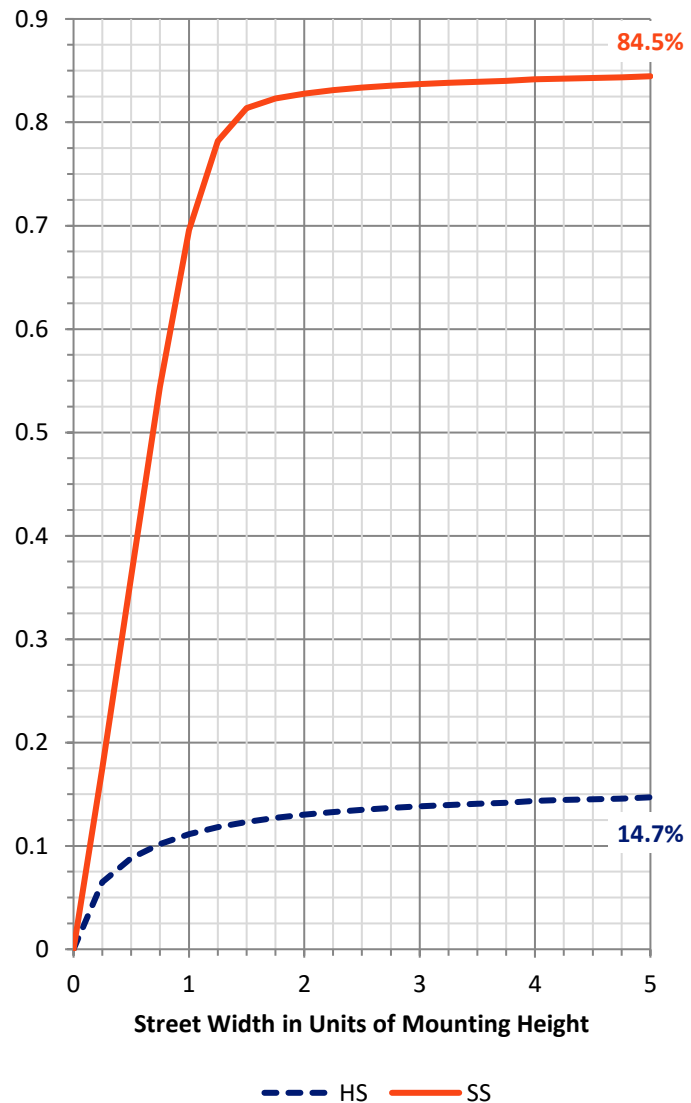
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1539.5   | 0.0    | 1539.5  |
|                    | % Fixture | 15.3     | 0.0    | 15.3    |
| <b>Street Side</b> | Lumens    | 8555.5   | 0.0    | 8555.5  |
|                    | % Fixture | 84.7     | 0.0    | 84.7    |
| <b>Total</b>       | Lumens    | 10095.0  | 0.0    | 10095.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 239.8   | 2.4       |
| 10°-20°   | 613.0   | 6.1       |
| 20°-30°   | 991.0   | 9.8       |
| 30°-40°   | 1573.2  | 15.6      |
| 40°-50°   | 2301.9  | 22.8      |
| 50°-60°   | 2407.6  | 23.8      |
| 60°-70°   | 1422.4  | 14.1      |
| 70°-80°   | 400.7   | 4.0       |
| 80°-90°   | 145.5   | 1.4       |
| 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°    | 10095.0 | 100.0     |
| 0°-180°   | 10095.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P194300

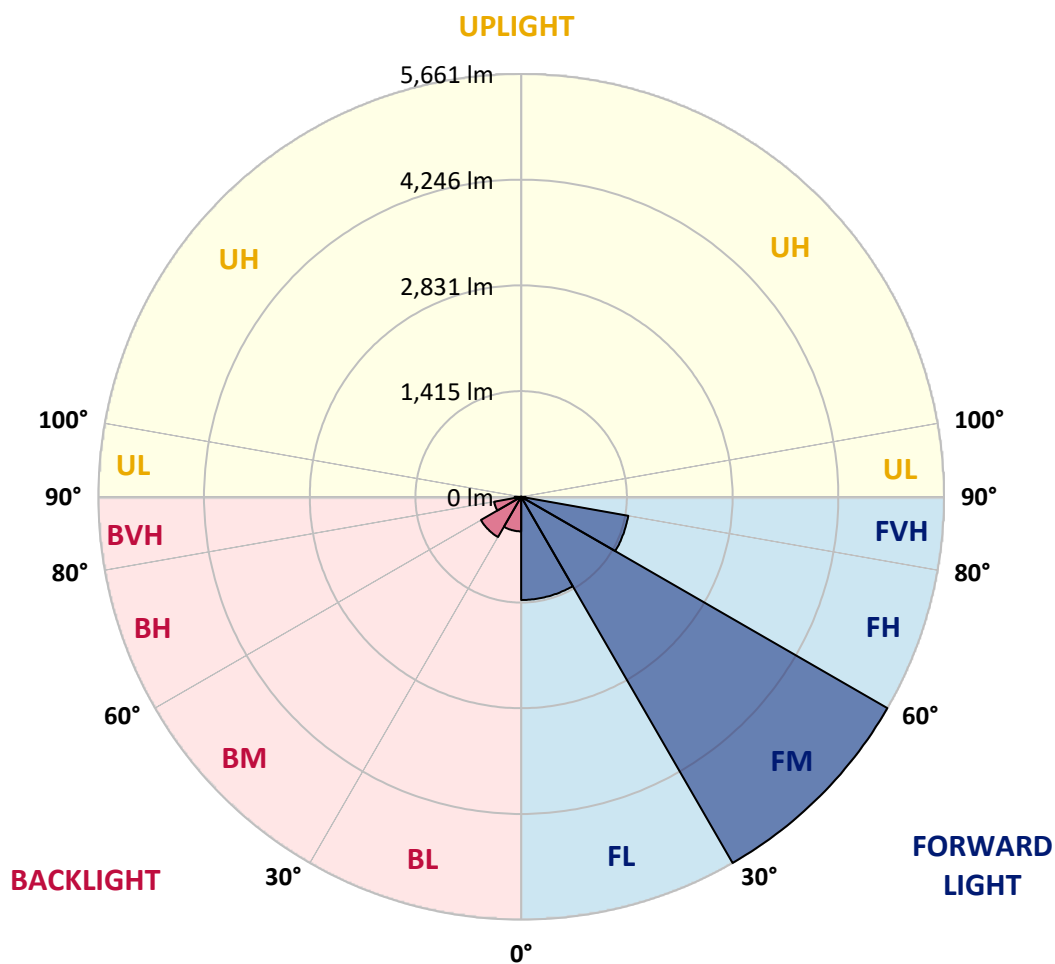
CATALOG NUMBER: GLEON-AF-02-LED-E1-AFL-7060-800

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1381.1 | 13.7      |                         |      |         |
| FM   | (30°-60°)   | 5661.2 | 56.1      |                         |      |         |
| FH   | (60°-80°)   | 1455.7 | 14.4      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 57.4   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 462.7  | 4.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 621.4  | 6.2       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 367.3  | 3.6       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 88.1   | 0.9       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type II Short



REPORT NUMBER: P194300

CATALOG NUMBER: GLEON-AF-02-LED-E1-AFL-7060-800

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 62.5°  | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2681.5 | 2681.5 | 2681.5 | 2681.5 | 2681.5 | 2681.5 | 2681.5 | 2681.5 | 2681.5 | 2681.5 | 2681.5 |
| 2.5°  | 3064.2 | 3039.5 | 3023.8 | 3010.0 | 2991.9 | 2953.4 | 2901.6 | 2868.8 | 2852.2 | 2795.6 | 2728.6 |
| 5°    | 3364.6 | 3342.8 | 3326.6 | 3308.1 | 3275.7 | 3215.4 | 3131.7 | 3065.2 | 3032.4 | 2919.2 | 2785.2 |
| 7.5°  | 3294.3 | 3303.3 | 3331.4 | 3380.3 | 3422.1 | 3414.1 | 3339.4 | 3254.8 | 3211.6 | 3054.2 | 2850.8 |
| 10°   | 2870.3 | 2885.9 | 2934.4 | 3049.0 | 3234.4 | 3424.5 | 3482.5 | 3424.1 | 3380.3 | 3187.8 | 2918.3 |
| 12.5° | 2785.2 | 2784.7 | 2788.5 | 2818.9 | 2929.2 | 3196.8 | 3487.3 | 3546.2 | 3520.1 | 3315.2 | 2987.2 |
| 15°   | 2819.9 | 2820.8 | 2818.0 | 2830.8 | 2865.0 | 2971.0 | 3341.8 | 3593.3 | 3611.8 | 3443.5 | 3058.5 |
| 17.5° | 2911.1 | 2908.8 | 2897.8 | 2897.8 | 2910.2 | 2951.5 | 3170.7 | 3549.5 | 3635.1 | 3557.2 | 3121.2 |
| 20°   | 3064.2 | 3053.3 | 3024.3 | 2997.6 | 2984.3 | 3006.7 | 3100.3 | 3448.8 | 3594.7 | 3656.5 | 3173.1 |
| 22.5° | 3249.6 | 3241.0 | 3194.0 | 3136.9 | 3090.8 | 3090.3 | 3136.5 | 3360.8 | 3524.8 | 3750.2 | 3216.8 |
| 25°   | 3489.2 | 3475.4 | 3405.5 | 3314.2 | 3233.4 | 3202.5 | 3215.4 | 3356.5 | 3486.8 | 3851.9 | 3255.8 |
| 27.5° | 3770.6 | 3745.4 | 3662.7 | 3531.0 | 3412.2 | 3349.9 | 3331.4 | 3434.0 | 3521.5 | 3977.9 | 3310.0 |
| 30°   | 4111.9 | 4082.9 | 3976.9 | 3805.3 | 3637.5 | 3535.3 | 3495.8 | 3571.4 | 3636.5 | 4131.4 | 3397.0 |
| 32.5° | 4500.3 | 4458.4 | 4335.8 | 4146.6 | 3926.0 | 3770.1 | 3705.9 | 3753.0 | 3804.8 | 4316.3 | 3505.8 |
| 35°   | 5037.0 | 4987.0 | 4809.7 | 4548.8 | 4299.7 | 4085.3 | 3982.6 | 4016.8 | 4067.2 | 4592.0 | 3663.2 |
| 37.5° | 5403.0 | 5380.7 | 5262.8 | 5017.5 | 4746.5 | 4499.8 | 4341.0 | 4361.0 | 4389.5 | 4936.7 | 3864.7 |
| 40°   | 5399.7 | 5408.7 | 5411.1 | 5413.5 | 5229.0 | 4992.8 | 4822.1 | 4801.2 | 4795.5 | 5315.1 | 4093.8 |
| 42.5° | 5129.2 | 5166.3 | 5286.1 | 5529.0 | 5641.2 | 5532.8 | 5376.4 | 5316.0 | 5286.1 | 5760.9 | 4336.8 |
| 45°   | 4715.1 | 4735.1 | 4959.5 | 5433.9 | 5852.2 | 6067.6 | 5949.2 | 5759.0 | 5704.8 | 6170.7 | 4538.3 |
| 47.5° | 4501.7 | 4523.6 | 4664.8 | 5181.9 | 5849.8 | 6499.7 | 6568.1 | 6205.9 | 6108.9 | 6527.2 | 4712.3 |
| 50°   | 3993.5 | 4039.2 | 4217.0 | 4743.7 | 5636.4 | 6698.4 | 7215.1 | 6738.3 | 6537.7 | 6874.2 | 4886.7 |
| 52.5° | 3060.4 | 3130.8 | 3329.9 | 4023.0 | 5095.0 | 6600.0 | 7732.8 | 7383.8 | 7100.5 | 7233.6 | 5036.5 |
| 55°   | 1930.5 | 1982.7 | 2150.1 | 2841.3 | 4075.8 | 6088.0 | 7929.1 | 8082.1 | 7830.2 | 7574.0 | 5166.3 |
| 57.5° | 1049.6 | 1072.9 | 1135.6 | 1568.7 | 2651.1 | 4956.2 | 7642.9 | 8479.6 | 8375.0 | 7863.0 | 5264.2 |
| 58°   | 939.3  | 955.0  | 994.0  | 1359.5 | 2351.2 | 4646.7 | 7516.0 | 8481.0 | 8428.7 | 7905.3 | 5271.8 |
| 60°   | 696.9  | 688.8  | 654.1  | 775.8  | 1308.7 | 3210.1 | 6748.7 | 8141.6 | 8295.1 | 7957.1 | 5234.7 |
| 62.5° | 612.3  | 592.8  | 522.0  | 513.9  | 636.5  | 1478.9 | 5163.9 | 6974.1 | 7336.8 | 7661.4 | 5009.4 |
| 65°   | 575.2  | 554.3  | 463.0  | 433.5  | 459.2  | 625.6  | 3041.9 | 5230.4 | 5685.4 | 6764.9 | 4433.2 |
| 67.5° | 547.6  | 520.5  | 425.5  | 385.0  | 386.9  | 413.6  | 1219.3 | 3294.3 | 3806.2 | 5136.3 | 3448.3 |
| 70°   | 521.0  | 491.5  | 393.6  | 347.0  | 336.1  | 327.1  | 484.9  | 1649.0 | 2113.5 | 3244.4 | 2198.6 |
| 72.5° | 492.5  | 463.5  | 365.6  | 317.1  | 295.7  | 265.7  | 316.6  | 674.5  | 942.2  | 1535.0 | 997.3  |
| 75°   | 451.1  | 425.0  | 337.5  | 290.4  | 260.0  | 220.1  | 239.1  | 352.2  | 422.6  | 611.3  | 480.6  |
| 77.5° | 400.3  | 378.9  | 306.1  | 268.6  | 230.6  | 178.7  | 184.0  | 244.3  | 271.0  | 349.9  | 285.7  |
| 80°   | 287.6  | 295.2  | 272.4  | 241.5  | 205.4  | 145.0  | 141.2  | 178.3  | 192.5  | 224.8  | 185.9  |
| 82.5° | 202.0  | 206.3  | 225.3  | 197.3  | 169.7  | 114.1  | 104.1  | 125.5  | 134.1  | 147.8  | 100.3  |
| 85°   | 139.3  | 134.5  | 154.5  | 137.4  | 122.6  | 76.1   | 71.3   | 85.1   | 90.3   | 91.7   | 51.8   |
| 87.5° | 83.7   | 83.7   | 89.4   | 73.7   | 66.1   | 39.5   | 38.5   | 48.5   | 51.8   | 49.4   | 28.5   |
| 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: P194300

CATALOG NUMBER: GLEON-AF-02-LED-E1-AFL-7060-800

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2681.5 | 2681.5 | 2681.5 | 2681.5 | 2681.5 | 2681.5 | 2681.5 | 2681.5 | 2681.5 | 2681.5 | 2681.5 |
| 2.5°  | 2688.7 | 2654.9 | 2583.1 | 2525.6 | 2452.9 | 2377.3 | 2335.0 | 2289.8 | 2258.9 | 2236.6 | 2272.2 |
| 5°    | 2709.1 | 2640.2 | 2491.9 | 2351.2 | 2195.7 | 2034.1 | 1911.4 | 1797.4 | 1718.0 | 1668.5 | 1715.1 |
| 7.5°  | 2741.4 | 2635.4 | 2399.2 | 2158.6 | 1879.6 | 1610.5 | 1370.0 | 1219.3 | 1131.4 | 1088.1 | 1115.2 |
| 10°   | 2778.5 | 2627.8 | 2290.3 | 1897.7 | 1498.3 | 1159.4 | 979.7  | 918.9  | 898.9  | 890.8  | 894.6  |
| 12.5° | 2809.4 | 2611.7 | 2156.7 | 1582.0 | 1125.2 | 915.6  | 863.7  | 862.3  | 866.6  | 867.5  | 869.0  |
| 15°   | 2831.3 | 2587.9 | 1958.5 | 1253.1 | 899.9  | 834.3  | 831.4  | 840.0  | 848.1  | 851.4  | 853.3  |
| 17.5° | 2846.0 | 2538.9 | 1734.6 | 990.7  | 806.2  | 794.8  | 801.5  | 812.4  | 821.0  | 823.3  | 825.2  |
| 20°   | 2844.6 | 2467.1 | 1467.9 | 826.2  | 755.4  | 755.4  | 766.8  | 775.3  | 775.8  | 772.9  | 774.4  |
| 22.5° | 2829.8 | 2368.7 | 1209.3 | 738.7  | 710.2  | 718.3  | 729.7  | 721.6  | 688.3  | 666.5  | 667.9  |
| 25°   | 2805.1 | 2251.3 | 987.8  | 683.1  | 668.4  | 682.6  | 679.3  | 618.4  | 570.9  | 549.5  | 549.5  |
| 27.5° | 2783.3 | 2112.5 | 817.6  | 634.6  | 626.5  | 644.1  | 585.2  | 530.0  | 510.1  | 500.1  | 496.8  |
| 30°   | 2767.6 | 1962.8 | 704.0  | 588.0  | 587.1  | 574.2  | 507.7  | 492.5  | 489.2  | 481.1  | 478.2  |
| 32.5° | 2771.4 | 1811.1 | 631.3  | 547.1  | 550.5  | 491.5  | 470.6  | 473.9  | 471.1  | 462.5  | 458.7  |
| 35°   | 2802.7 | 1667.1 | 583.7  | 510.1  | 500.1  | 444.0  | 448.7  | 454.9  | 454.0  | 442.1  | 438.3  |
| 37.5° | 2858.8 | 1530.7 | 552.4  | 479.2  | 436.4  | 420.2  | 427.8  | 437.3  | 435.0  | 426.9  | 424.0  |
| 40°   | 2917.8 | 1402.3 | 526.7  | 454.9  | 398.8  | 404.1  | 410.7  | 415.9  | 418.3  | 420.7  | 418.8  |
| 42.5° | 2975.3 | 1268.3 | 495.3  | 430.2  | 383.1  | 388.8  | 391.7  | 396.9  | 409.8  | 418.8  | 418.3  |
| 45°   | 3009.5 | 1142.3 | 463.0  | 395.0  | 370.8  | 374.1  | 372.2  | 382.7  | 398.4  | 413.1  | 413.6  |
| 47.5° | 3047.6 | 1044.4 | 437.3  | 362.7  | 358.9  | 361.3  | 355.6  | 366.0  | 380.3  | 398.4  | 400.3  |
| 50°   | 3093.7 | 985.9  | 416.9  | 337.0  | 342.7  | 342.7  | 341.3  | 350.8  | 370.8  | 391.7  | 395.5  |
| 52.5° | 3146.0 | 974.5  | 399.8  | 318.5  | 326.6  | 326.1  | 327.5  | 341.8  | 363.7  | 384.1  | 387.4  |
| 55°   | 3209.7 | 1005.4 | 381.2  | 304.7  | 310.9  | 312.8  | 317.5  | 333.7  | 352.2  | 375.5  | 377.0  |
| 57.5° | 3283.8 | 1068.1 | 366.5  | 293.8  | 296.6  | 302.8  | 310.4  | 325.1  | 345.1  | 370.8  | 372.2  |
| 58°   | 3296.2 | 1081.5 | 364.1  | 292.8  | 293.8  | 300.9  | 309.5  | 323.7  | 343.7  | 371.7  | 373.2  |
| 60°   | 3296.7 | 1125.7 | 358.9  | 288.5  | 282.8  | 294.7  | 304.2  | 318.5  | 341.3  | 375.1  | 378.4  |
| 62.5° | 3179.7 | 1125.2 | 355.1  | 282.4  | 271.4  | 286.2  | 297.1  | 313.7  | 338.9  | 383.1  | 389.8  |
| 65°   | 2799.9 | 1022.5 | 337.0  | 272.9  | 262.4  | 278.6  | 290.9  | 310.4  | 345.6  | 418.3  | 422.6  |
| 67.5° | 2190.0 | 838.1  | 303.3  | 259.5  | 250.5  | 271.0  | 287.1  | 309.9  | 352.7  | 426.4  | 429.3  |
| 70°   | 1448.0 | 627.0  | 266.2  | 244.3  | 238.2  | 261.9  | 289.0  | 326.1  | 344.6  | 409.3  | 401.7  |
| 72.5° | 751.6  | 440.2  | 236.3  | 225.3  | 223.9  | 253.8  | 316.6  | 324.2  | 336.6  | 385.0  | 375.5  |
| 75°   | 394.6  | 305.7  | 210.1  | 204.4  | 206.8  | 251.9  | 373.6  | 315.6  | 326.1  | 368.4  | 386.5  |
| 77.5° | 241.5  | 246.7  | 187.8  | 185.4  | 190.1  | 246.2  | 373.2  | 304.7  | 310.9  | 338.9  | 358.9  |
| 80°   | 161.6  | 200.1  | 170.7  | 171.1  | 174.5  | 225.3  | 335.1  | 287.6  | 292.3  | 320.4  | 340.8  |
| 82.5° | 102.2  | 118.4  | 155.0  | 163.1  | 158.8  | 185.9  | 284.7  | 261.9  | 268.6  | 366.5  | 387.4  |
| 85°   | 51.8   | 74.2   | 134.5  | 156.9  | 143.1  | 130.2  | 231.0  | 229.6  | 232.9  | 264.3  | 276.2  |
| 87.5° | 23.8   | 40.9   | 105.1  | 136.9  | 107.9  | 81.3   | 167.8  | 170.2  | 183.5  | 187.8  | 187.8  |
| 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)