

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: P194576

Luminaire Tested: **GLEON-AF-08-LED-E1-SL4-7060-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P194576
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24294)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-08-LED-E1-SL4-7060-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 5700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29867 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G5

Input Watts (W): 257
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

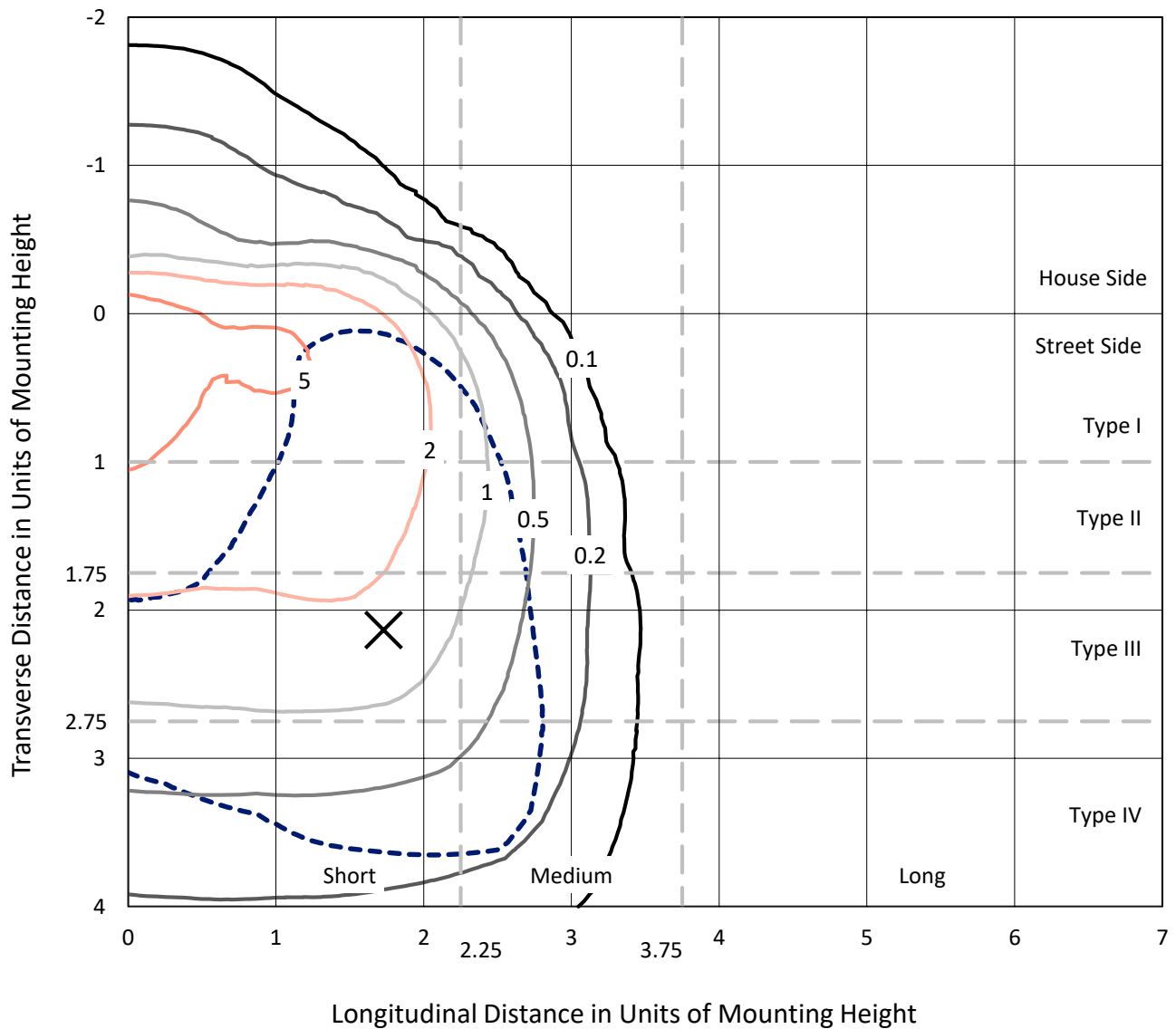


REPORT NUMBER: P194576

CATALOG NUMBER: GLEON-AF-08-LED-E1-SL4-7060-600

Iso-Footcandle Lines of Horizontal Illumination

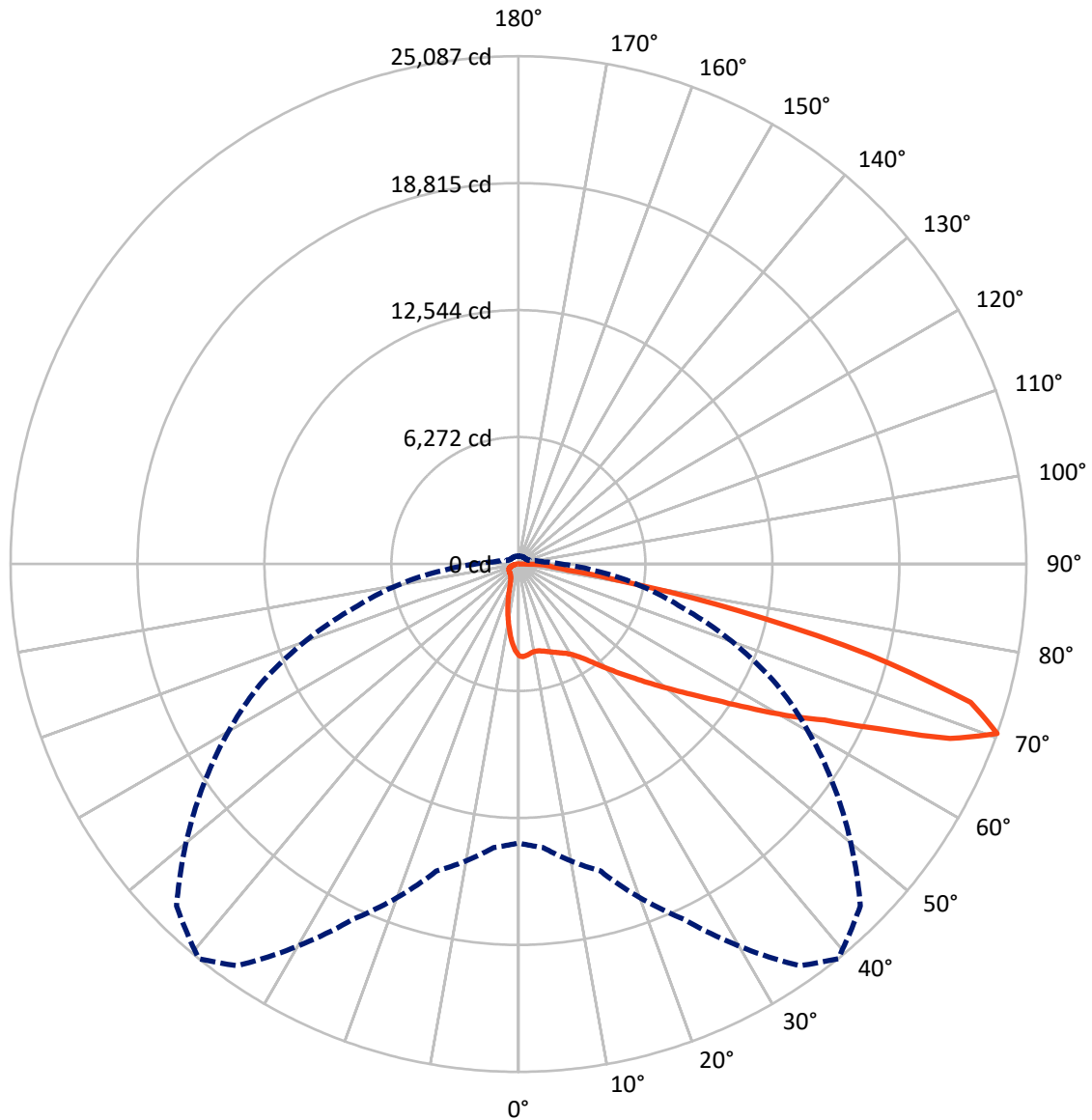
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P194576
CATALOG NUMBER: GLEON-AF-08-LED-E1-SL4-7060-600

Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P194576

CATALOG NUMBER: GLEON-AF-08-LED-E1-SL4-7060-600

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3396.9 | 0.0 | 3396.9 |
| | % Fixture | 11.4 | 0.0 | 11.4 |
| Street Side | Lumens | 26470.1 | 0.0 | 26470.1 |
| | % Fixture | 88.6 | 0.0 | 88.6 |
| Total | Lumens | 29867.0 | 0.0 | 29867.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 389.1 | 1.3 |
| 10°-20° | 972.7 | 3.3 |
| 20°-30° | 1514.5 | 5.1 |
| 30°-40° | 2359.3 | 7.9 |
| 40°-50° | 3960.8 | 13.3 |
| 50°-60° | 6292.1 | 21.1 |
| 60°-70° | 8392.9 | 28.1 |
| 70°-80° | 5068.3 | 17.0 |
| 80°-90° | 917.3 | 3.1 |
| 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° | 29867.0 | 100.0 |
| 0°-180° | 29867.0 | 100.0 |



REPORT NUMBER: P194576

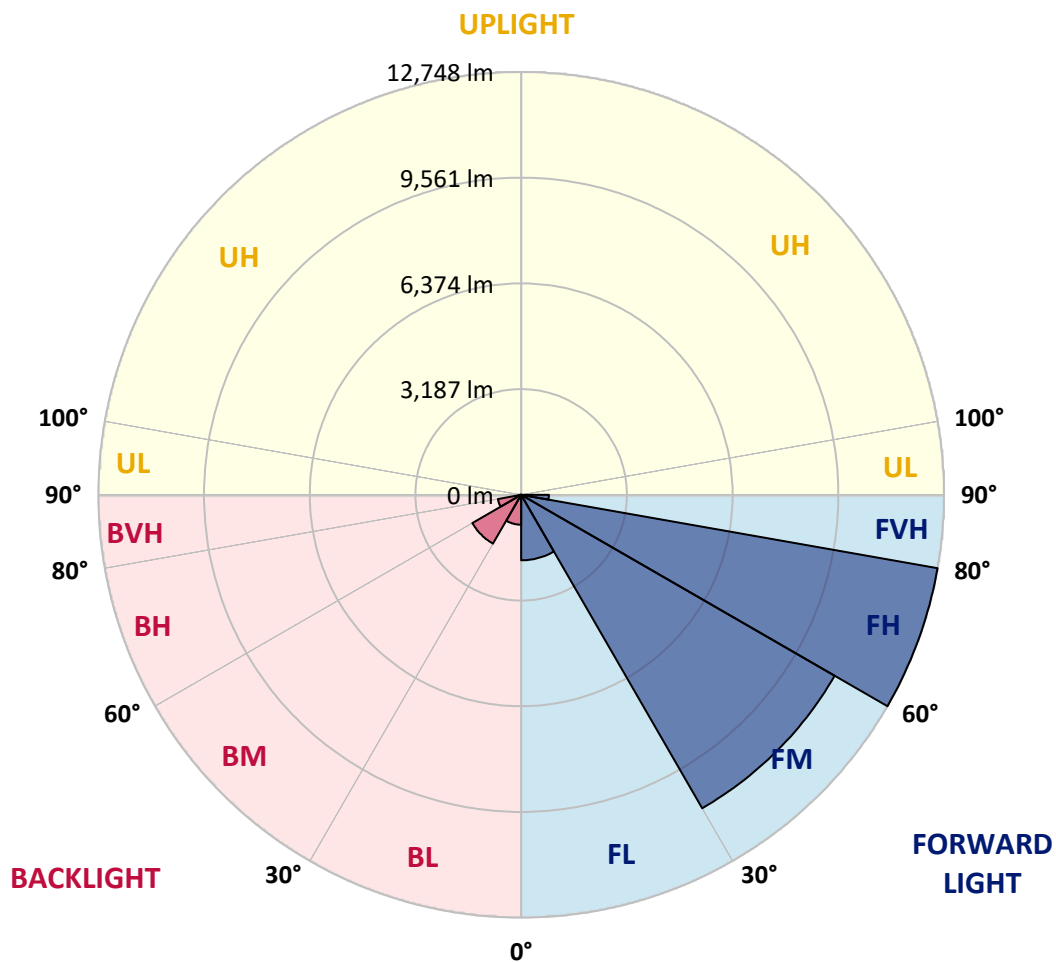
CATALOG NUMBER: GLEON-AF-08-LED-E1-SL4-7060-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1975.1 | 6.6 | | | |
| FM (30°-60°) | 10912.2 | 36.5 | | | |
| FH (60°-80°) | 12748.1 | 42.7 | | | G5 |
| FVH (80°-90°) | 834.6 | 2.8 | | | G5 |
| BL (0°-30°) | 901.1 | 3.0 | B2/1000 | | |
| BM (30°-60°) | 1699.9 | 5.7 | B2/2500 | | |
| BH (60°-80°) | 713.1 | 2.4 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 82.7 | 0.3 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G5

Type IV Short





REPORT NUMBER: P194576

CATALOG NUMBER: GLEON-AF-08-LED-E1-SL4-7060-600

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 39° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4534.3 | 4534.3 | 4534.3 | 4534.3 | 4534.3 | 4534.3 | 4534.3 | 4534.3 | 4534.3 | 4534.3 | 4534.3 |
| 2.5° | 4622.3 | 4620.8 | 4608.7 | 4599.6 | 4592.0 | 4588.9 | 4595.0 | 4572.2 | 4552.5 | 4528.2 | 4502.4 |
| 5° | 4587.4 | 4585.9 | 4566.2 | 4547.9 | 4529.7 | 4523.6 | 4522.1 | 4481.1 | 4456.8 | 4420.4 | 4371.8 |
| 7.5° | 4549.5 | 4541.9 | 4516.1 | 4485.7 | 4453.8 | 4438.6 | 4423.4 | 4370.3 | 4342.9 | 4306.5 | 4250.3 |
| 10° | 4510.0 | 4500.9 | 4476.6 | 4446.2 | 4415.8 | 4393.1 | 4367.2 | 4315.6 | 4286.8 | 4259.4 | 4194.1 |
| 12.5° | 4469.0 | 4461.4 | 4455.3 | 4441.6 | 4420.4 | 4400.6 | 4380.9 | 4336.9 | 4306.5 | 4274.6 | 4198.7 |
| 15° | 4462.9 | 4459.9 | 4473.5 | 4482.6 | 4470.5 | 4458.3 | 4437.1 | 4399.1 | 4367.2 | 4335.3 | 4236.6 |
| 17.5° | 4511.5 | 4510.0 | 4544.9 | 4569.2 | 4563.1 | 4541.9 | 4513.0 | 4470.5 | 4444.7 | 4417.3 | 4294.3 |
| 20° | 4617.8 | 4625.4 | 4667.9 | 4699.8 | 4669.4 | 4639.1 | 4592.0 | 4532.8 | 4519.1 | 4506.9 | 4353.6 |
| 22.5° | 4818.2 | 4825.8 | 4856.2 | 4868.3 | 4789.4 | 4745.3 | 4680.1 | 4604.1 | 4595.0 | 4604.1 | 4424.9 |
| 25° | 5131.0 | 5123.5 | 5118.9 | 5073.3 | 4929.1 | 4860.8 | 4777.2 | 4698.3 | 4702.8 | 4743.8 | 4525.2 |
| 27.5° | 5545.6 | 5504.6 | 5440.8 | 5304.2 | 5074.9 | 4998.9 | 4897.2 | 4824.3 | 4853.2 | 4932.1 | 4675.5 |
| 30° | 5975.3 | 5929.8 | 5782.5 | 5559.3 | 5266.2 | 5182.7 | 5068.8 | 4986.8 | 5062.7 | 5187.2 | 4875.9 |
| 32.5° | 6373.2 | 6367.1 | 6151.5 | 5864.5 | 5530.4 | 5457.5 | 5343.6 | 5251.0 | 5374.0 | 5563.8 | 5176.6 |
| 35° | 6807.5 | 6821.2 | 6563.0 | 6218.3 | 5887.3 | 5811.3 | 5729.3 | 5659.5 | 5823.5 | 6084.7 | 5612.4 |
| 37.5° | 7272.1 | 7299.5 | 6994.3 | 6605.5 | 6294.2 | 6262.3 | 6213.7 | 6183.4 | 6437.0 | 6798.4 | 6221.3 |
| 40° | 7893.2 | 7865.9 | 7442.2 | 7042.9 | 6793.8 | 6792.3 | 6777.1 | 6813.6 | 7235.7 | 7730.7 | 7003.4 |
| 42.5° | 8558.3 | 8477.8 | 7917.5 | 7512.1 | 7342.0 | 7393.6 | 7424.0 | 7572.8 | 8196.9 | 8863.5 | 7957.0 |
| 45° | 9275.1 | 9094.4 | 8411.0 | 8008.6 | 7950.9 | 8060.3 | 8163.5 | 8487.0 | 9328.2 | 10152.8 | 9001.7 |
| 47.5° | 9847.5 | 9672.9 | 8921.3 | 8529.5 | 8655.5 | 8821.0 | 9020.0 | 9531.7 | 10594.7 | 11484.5 | 10032.8 |
| 50° | 10298.5 | 10184.7 | 9436.0 | 9136.9 | 9431.5 | 9686.6 | 10011.5 | 10714.6 | 11912.7 | 12781.3 | 10987.9 |
| 52.5° | 10735.9 | 10650.8 | 9955.4 | 9759.5 | 10342.6 | 10694.9 | 11136.8 | 11984.1 | 13264.2 | 14056.9 | 11791.2 |
| 55° | 11130.7 | 11069.9 | 10514.2 | 10535.4 | 11414.6 | 11873.2 | 12429.0 | 13429.7 | 14737.1 | 15194.2 | 12471.5 |
| 57.5° | 11575.6 | 11498.2 | 11151.9 | 11508.8 | 12791.9 | 13387.2 | 14110.0 | 15054.5 | 16119.0 | 16205.5 | 12989.3 |
| 60° | 12023.6 | 11956.8 | 11859.6 | 12632.5 | 14541.3 | 15166.9 | 15851.7 | 16629.2 | 17520.6 | 16990.6 | 12959.0 |
| 62.5° | 12412.3 | 12419.9 | 12591.5 | 13812.4 | 16254.1 | 16978.5 | 17813.7 | 18582.0 | 18788.5 | 17127.3 | 12000.8 |
| 65° | 13071.3 | 13191.3 | 13703.0 | 15482.7 | 18665.5 | 19634.3 | 20659.3 | 20536.3 | 19139.3 | 15850.2 | 9946.2 |
| 67.5° | 13854.9 | 14066.0 | 15103.1 | 17708.9 | 21713.2 | 22999.4 | 23395.7 | 20978.2 | 17734.7 | 12884.6 | 7089.9 |
| 70° | 13775.9 | 14066.0 | 15707.5 | 19368.6 | 24224.8 | 25087.3 | 23884.7 | 18985.9 | 14082.7 | 8417.1 | 3765.9 |
| 72.5° | 12233.1 | 12647.7 | 14476.0 | 18607.8 | 23433.7 | 23357.7 | 20735.3 | 14154.0 | 8367.0 | 3380.2 | 1471.4 |
| 75° | 9323.7 | 9742.8 | 11315.9 | 14700.7 | 18521.3 | 17883.5 | 14712.9 | 7818.8 | 3175.2 | 1342.4 | 927.8 |
| 77.5° | 5363.4 | 5688.3 | 6903.2 | 9015.4 | 11750.2 | 11095.8 | 8189.3 | 3477.4 | 1545.8 | 935.4 | 724.3 |
| 80° | 2994.5 | 3175.2 | 3913.2 | 4573.8 | 5758.2 | 5278.3 | 3664.2 | 2160.8 | 1154.1 | 678.8 | 558.8 |
| 82.5° | 2367.4 | 2528.3 | 3164.6 | 2885.2 | 2630.1 | 2426.6 | 2104.7 | 1924.0 | 921.7 | 428.2 | 334.1 |
| 85° | 2068.2 | 2221.6 | 2678.7 | 2271.7 | 1796.4 | 1647.6 | 1709.8 | 1893.6 | 716.7 | 258.1 | 285.5 |
| 87.5° | 1916.4 | 2121.4 | 2387.1 | 1750.8 | 1398.5 | 1239.1 | 1577.7 | 2075.8 | 230.8 | 161.0 | 115.4 |
| 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: P194576

CATALOG NUMBER: GLEON-AF-08-LED-E1-SL4-7060-600

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4534.3 | 4534.3 | 4534.3 | 4534.3 | 4534.3 | 4534.3 | 4534.3 | 4534.3 | 4534.3 | 4534.3 | 4534.3 |
| 2.5° | 4479.6 | 4455.3 | 4415.8 | 4380.9 | 4326.2 | 4297.4 | 4265.5 | 4242.7 | 4224.5 | 4209.3 | 4233.6 |
| 5° | 4341.4 | 4295.9 | 4212.3 | 4122.8 | 4016.5 | 3932.9 | 3863.1 | 3797.8 | 3752.2 | 3721.9 | 3743.1 |
| 7.5° | 4210.8 | 4136.4 | 4005.8 | 3843.4 | 3661.1 | 3506.2 | 3378.7 | 3266.3 | 3188.9 | 3138.8 | 3158.5 |
| 10° | 4136.4 | 4043.8 | 3841.8 | 3586.7 | 3317.9 | 3076.5 | 2876.1 | 2702.9 | 2583.0 | 2514.7 | 2525.3 |
| 12.5° | 4118.2 | 3998.2 | 3718.8 | 3368.1 | 3000.6 | 2665.0 | 2382.5 | 2142.6 | 1974.1 | 1886.0 | 1889.0 |
| 15° | 4131.9 | 3978.5 | 3603.4 | 3158.5 | 2693.8 | 2270.2 | 1917.9 | 1626.3 | 1430.4 | 1330.2 | 1328.7 |
| 17.5° | 4154.6 | 3963.3 | 3481.9 | 2932.2 | 2382.5 | 1890.5 | 1497.3 | 1211.8 | 1038.7 | 958.2 | 952.1 |
| 20° | 4178.9 | 3939.0 | 3345.3 | 2687.8 | 2059.1 | 1538.3 | 1172.3 | 949.1 | 839.7 | 795.7 | 792.7 |
| 22.5° | 4213.9 | 3917.8 | 3204.1 | 2429.6 | 1741.7 | 1252.8 | 964.3 | 813.9 | 756.2 | 733.4 | 730.4 |
| 25° | 4270.1 | 3907.1 | 3053.7 | 2160.8 | 1456.3 | 1047.8 | 839.7 | 747.1 | 713.7 | 698.5 | 697.0 |
| 27.5° | 4364.2 | 3922.3 | 2912.5 | 1899.7 | 1223.9 | 909.6 | 769.9 | 713.7 | 689.4 | 675.7 | 674.2 |
| 30° | 4485.7 | 3969.4 | 2763.7 | 1652.1 | 1043.2 | 815.4 | 727.4 | 690.9 | 671.2 | 657.5 | 657.5 |
| 32.5° | 4687.6 | 4048.4 | 2607.3 | 1438.0 | 914.1 | 750.1 | 695.5 | 671.2 | 654.5 | 643.8 | 642.3 |
| 35° | 4985.3 | 4197.2 | 2461.5 | 1260.4 | 821.5 | 703.1 | 668.1 | 649.9 | 637.8 | 631.7 | 631.7 |
| 37.5° | 5418.0 | 4432.5 | 2332.4 | 1132.8 | 765.3 | 671.2 | 642.3 | 628.7 | 621.1 | 621.1 | 621.1 |
| 40° | 5999.6 | 4757.5 | 2227.7 | 1047.8 | 733.4 | 648.4 | 622.6 | 612.0 | 607.4 | 608.9 | 608.9 |
| 42.5° | 6717.9 | 5179.6 | 2157.8 | 988.6 | 718.3 | 634.7 | 608.9 | 599.8 | 595.3 | 593.7 | 595.3 |
| 45° | 7536.4 | 5659.5 | 2150.2 | 944.5 | 703.1 | 625.6 | 599.8 | 590.7 | 581.6 | 575.5 | 575.5 |
| 47.5° | 8332.1 | 6146.9 | 2212.5 | 929.3 | 686.4 | 615.0 | 592.2 | 583.1 | 569.4 | 555.8 | 555.8 |
| 50° | 9035.1 | 6561.5 | 2296.0 | 935.4 | 680.3 | 599.8 | 580.1 | 575.5 | 554.3 | 539.1 | 537.6 |
| 52.5° | 9594.0 | 6880.4 | 2364.3 | 953.6 | 686.4 | 589.2 | 564.9 | 566.4 | 543.6 | 526.9 | 525.4 |
| 55° | 10041.9 | 7089.9 | 2346.1 | 971.8 | 700.0 | 583.1 | 551.2 | 554.3 | 536.0 | 519.3 | 519.3 |
| 57.5° | 10237.8 | 7012.5 | 2144.1 | 956.7 | 710.7 | 584.6 | 540.6 | 552.7 | 537.6 | 522.4 | 522.4 |
| 60° | 9817.2 | 6324.6 | 1766.0 | 889.8 | 697.0 | 580.1 | 536.0 | 558.8 | 557.3 | 542.1 | 540.6 |
| 62.5° | 8544.7 | 5093.1 | 1369.7 | 791.1 | 649.9 | 557.3 | 523.9 | 557.3 | 574.0 | 569.4 | 567.9 |
| 65° | 6585.8 | 3627.7 | 1046.3 | 684.8 | 586.1 | 519.3 | 492.0 | 522.4 | 545.1 | 551.2 | 549.7 |
| 67.5° | 4274.6 | 2223.1 | 806.3 | 584.6 | 514.8 | 475.3 | 451.0 | 464.7 | 469.2 | 469.2 | 466.2 |
| 70° | 2101.6 | 1196.6 | 642.3 | 492.0 | 441.9 | 428.2 | 414.6 | 407.0 | 399.4 | 393.3 | 393.3 |
| 72.5° | 1037.1 | 782.0 | 528.4 | 416.1 | 381.1 | 375.1 | 372.0 | 362.9 | 356.9 | 349.3 | 346.2 |
| 75° | 766.8 | 636.3 | 449.5 | 350.8 | 328.0 | 321.9 | 328.0 | 320.4 | 318.9 | 312.8 | 309.8 |
| 77.5° | 630.2 | 542.1 | 387.2 | 300.7 | 280.9 | 270.3 | 279.4 | 280.9 | 282.4 | 273.3 | 270.3 |
| 80° | 511.7 | 458.6 | 323.4 | 249.0 | 230.8 | 223.2 | 229.3 | 241.4 | 244.5 | 230.8 | 224.7 |
| 82.5° | 369.0 | 375.1 | 261.2 | 194.4 | 179.2 | 173.1 | 185.3 | 200.4 | 203.5 | 183.7 | 179.2 |
| 85° | 309.8 | 312.8 | 200.4 | 138.2 | 123.0 | 113.9 | 133.6 | 148.8 | 159.4 | 139.7 | 135.1 |
| 87.5° | 129.1 | 183.7 | 115.4 | 77.4 | 68.3 | 59.2 | 71.4 | 79.0 | 95.7 | 88.1 | 86.6 |
| 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)