

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: P191061

Luminaire Tested: **GLEON-AF-03-LED-E1-SL2-1200-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191061
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: MCGRAW-EDISON
Catalog Number: GLEON-AF-03-LED-E1-SL2-1200-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 4000K, 1200mA 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: 16891 lumens
Efficiency: N/A
Efficacy: 88.4 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): 191
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

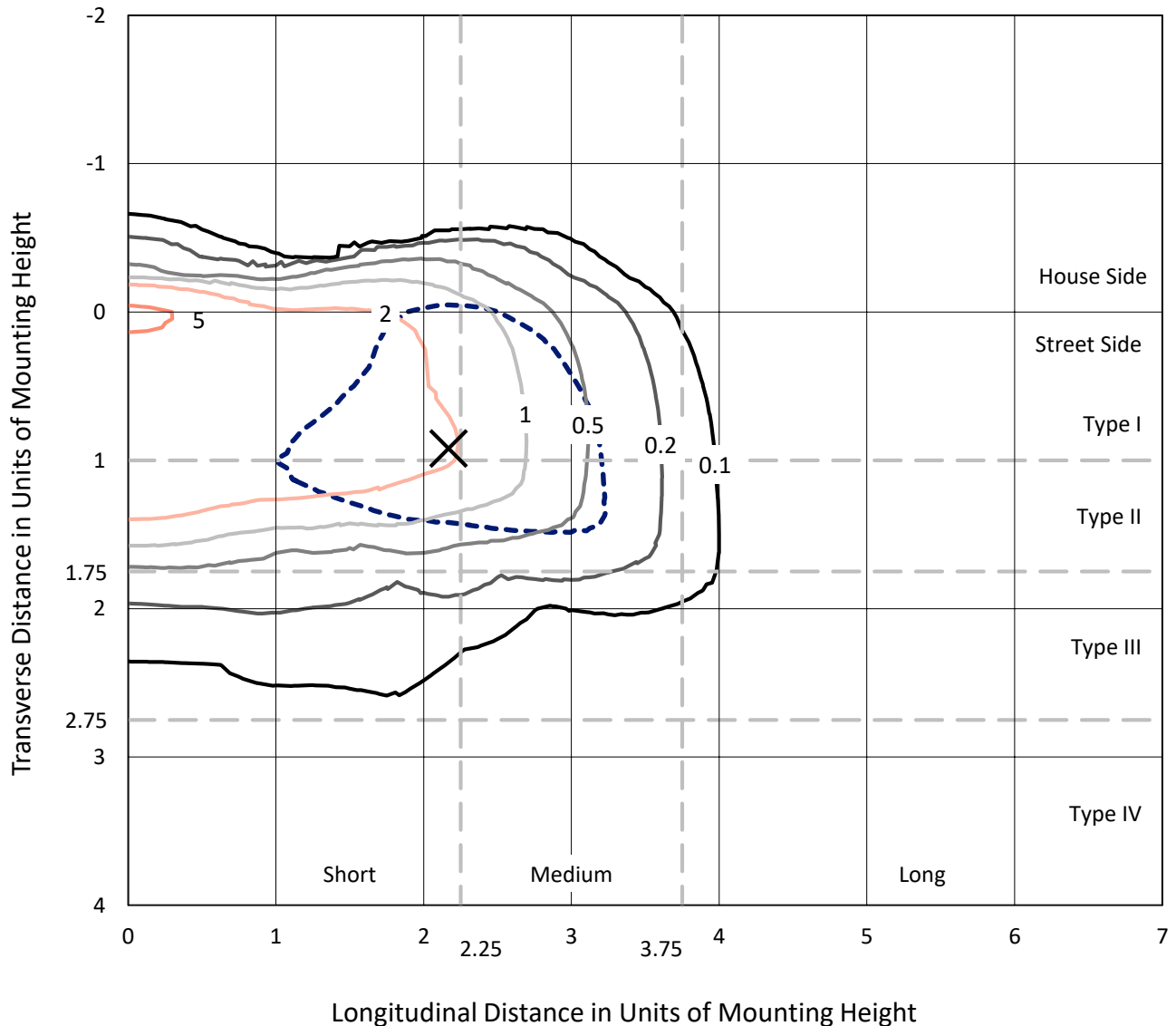


REPORT NUMBER: P191061

CATALOG NUMBER: GLEON-AF-03-LED-E1-SL2-1200-HSS

Iso-Footcandle Lines of Horizontal Illumination

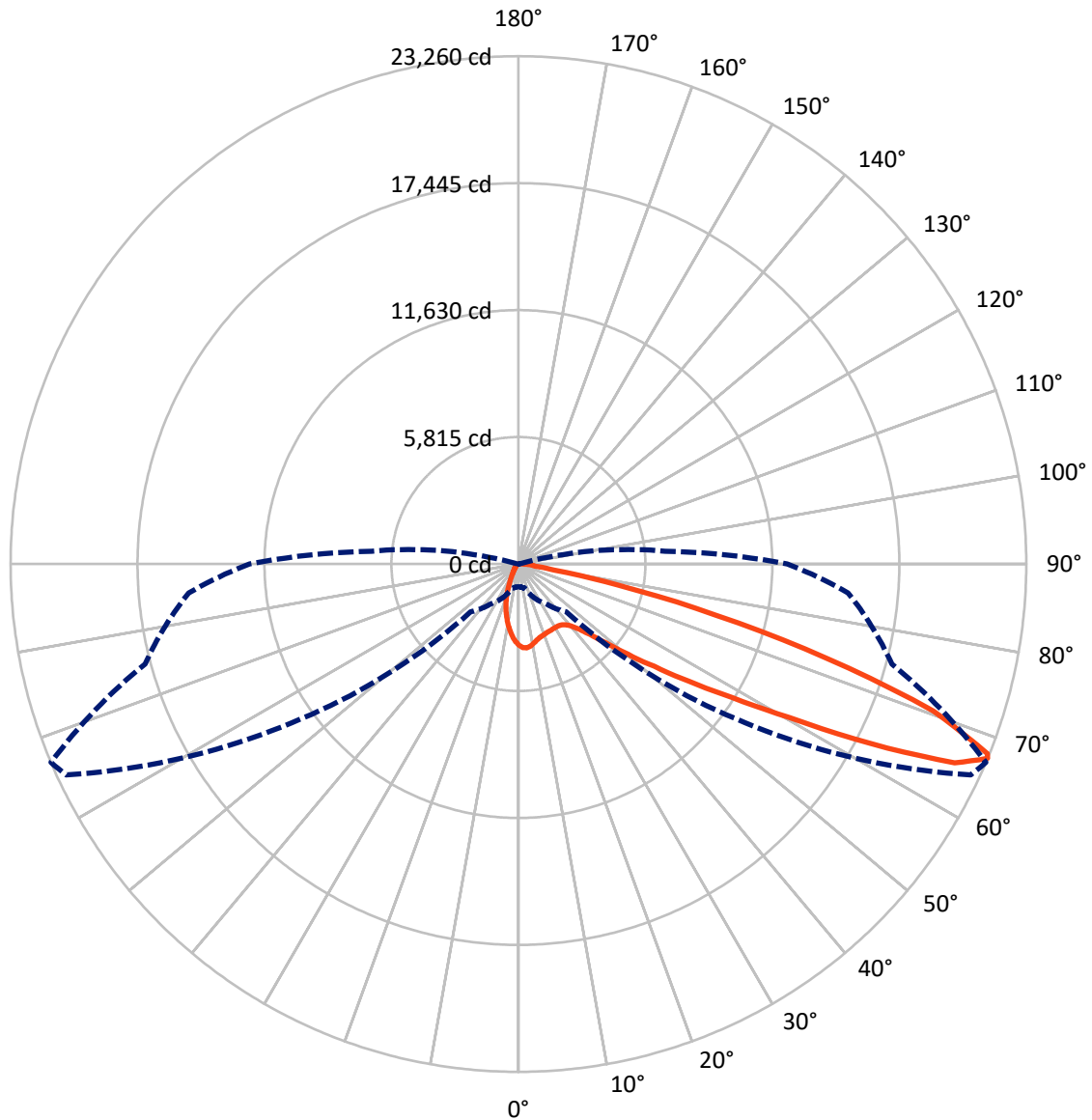
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1753.8 | 0.0 | 1753.8 |
| | % Fixture | 10.4 | 0.0 | 10.4 |
| Street Side | Lumens | 15137.2 | 0.0 | 15137.2 |
| | % Fixture | 89.6 | 0.0 | 89.6 |
| Total | Lumens | 16891.0 | 0.0 | 16891.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 303.1 | 1.8 |
| 10°-20° | 645.1 | 3.8 |
| 20°-30° | 937.9 | 5.6 |
| 30°-40° | 1463.2 | 8.7 |
| 40°-50° | 2592.0 | 15.3 |
| 50°-60° | 4101.7 | 24.3 |
| 60°-70° | 4697.9 | 27.8 |
| 70°-80° | 1948.7 | 11.5 |
| 80°-90° | 201.3 | 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° | 16891.0 | 100.0 |
| 0°-180° | 16891.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P191061

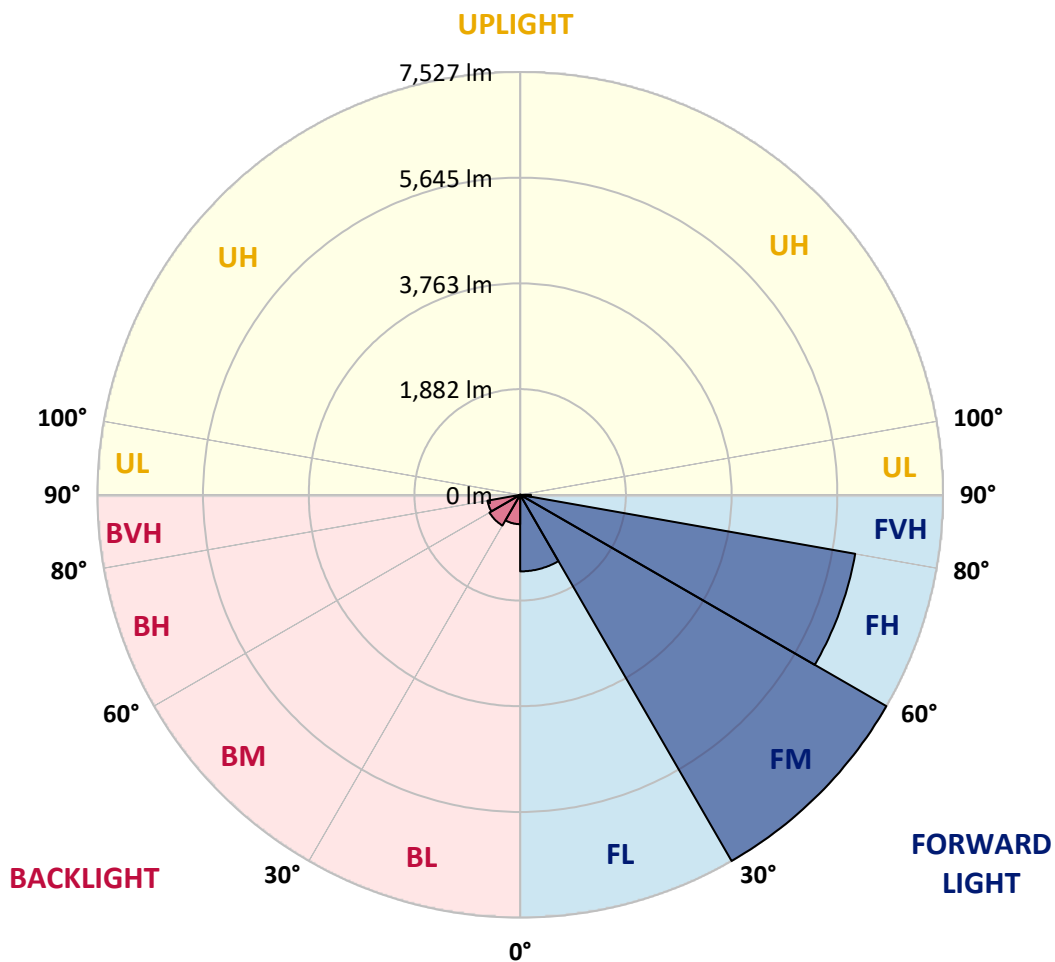
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1362.8 | 8.1 | | | |
| FM (30°-60°) | 7526.7 | 44.6 | | | |
| FH (60°-80°) | 6055.5 | 35.9 | | | G3/7500 |
| FVH (80°-90°) | 192.2 | 1.1 | | | G2/225 |
| BL (0°-30°) | 523.3 | 3.1 | B2/1000 | | |
| BM (30°-60°) | 630.3 | 3.7 | B1/1000 | | |
| BH (60°-80°) | 591.1 | 3.5 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 9.1 | 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: P191061

CATALOG NUMBER: GLEON-AF-03-LED-E1-SL2-1200-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 67° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0° | 3725.1 | 3725.1 | 3725.1 | 3725.1 | 3725.1 | 3725.1 | 3725.1 | 3725.1 | 3725.1 | 3725.1 | 3725.1 |
| 2.5° | 3851.2 | 3859.1 | 3858.1 | 3864.0 | 3877.8 | 3878.8 | 3865.0 | 3838.4 | 3832.5 | 3798.0 | 3737.9 |
| 5° | 3551.7 | 3574.4 | 3588.1 | 3644.3 | 3707.4 | 3783.2 | 3840.4 | 3861.0 | 3858.1 | 3833.4 | 3742.8 |
| 7.5° | 3209.8 | 3232.5 | 3248.3 | 3314.3 | 3398.0 | 3528.1 | 3676.8 | 3798.9 | 3809.8 | 3836.4 | 3738.9 |
| 10° | 2982.2 | 2986.2 | 3007.9 | 3070.9 | 3158.6 | 3291.5 | 3468.9 | 3682.7 | 3715.3 | 3812.7 | 3729.1 |
| 12.5° | 2795.0 | 2798.0 | 2826.6 | 2894.5 | 2988.1 | 3122.1 | 3308.3 | 3555.7 | 3605.9 | 3783.2 | 3727.0 |
| 15° | 2662.0 | 2672.9 | 2698.4 | 2769.4 | 2869.0 | 3002.0 | 3193.0 | 3462.1 | 3522.1 | 3772.3 | 3744.8 |
| 17.5° | 2617.7 | 2629.5 | 2637.4 | 2688.6 | 2779.3 | 2909.4 | 3105.4 | 3400.9 | 3468.9 | 3778.3 | 3779.3 |
| 20° | 2664.0 | 2672.9 | 2655.2 | 2668.0 | 2724.1 | 2840.3 | 3031.5 | 3348.7 | 3429.5 | 3785.2 | 3823.6 |
| 22.5° | 2836.4 | 2840.3 | 2792.0 | 2735.9 | 2726.1 | 2790.1 | 2973.4 | 3307.3 | 3394.0 | 3803.9 | 3875.9 |
| 25° | 3132.0 | 3125.1 | 3046.2 | 2925.1 | 2810.8 | 2781.2 | 2938.8 | 3281.7 | 3376.4 | 3823.6 | 3930.0 |
| 27.5° | 3488.7 | 3498.5 | 3390.1 | 3213.8 | 2996.0 | 2840.3 | 2933.9 | 3270.9 | 3368.5 | 3837.4 | 3977.3 |
| 30° | 3922.1 | 3935.9 | 3811.8 | 3590.1 | 3277.8 | 2986.2 | 2979.2 | 3268.9 | 3363.5 | 3828.5 | 3981.2 |
| 32.5° | 4364.5 | 4381.2 | 4283.7 | 4055.1 | 3654.2 | 3230.5 | 3081.7 | 3290.6 | 3373.4 | 3798.0 | 3958.6 |
| 35° | 4827.5 | 4851.1 | 4786.2 | 4590.1 | 4164.5 | 3583.2 | 3262.0 | 3356.6 | 3419.6 | 3795.0 | 3935.9 |
| 37.5° | 5467.0 | 5488.6 | 5366.4 | 5158.5 | 4782.2 | 4056.1 | 3551.7 | 3480.8 | 3529.0 | 3842.3 | 3941.8 |
| 40° | 6421.6 | 6418.6 | 6103.3 | 5785.2 | 5461.0 | 4657.1 | 3958.6 | 3705.3 | 3730.0 | 3985.2 | 4014.8 |
| 42.5° | 7462.0 | 7457.1 | 6991.1 | 6507.3 | 6214.7 | 5397.0 | 4493.5 | 4093.5 | 4076.8 | 4248.2 | 4203.9 |
| 45° | 8263.9 | 8263.0 | 7882.7 | 7337.8 | 7122.1 | 6246.2 | 5185.1 | 4633.5 | 4607.8 | 4675.8 | 4552.6 |
| 47.5° | 8605.8 | 8611.7 | 8420.6 | 8037.3 | 8128.0 | 7395.0 | 6057.1 | 5415.7 | 5377.2 | 5349.7 | 5162.5 |
| 50° | 8339.8 | 8351.7 | 8367.4 | 8292.6 | 8865.9 | 8938.9 | 7226.5 | 6518.1 | 6499.4 | 6376.3 | 6083.7 |
| 52.5° | 7470.8 | 7531.0 | 7716.2 | 7953.6 | 9122.1 | 10420.6 | 9060.0 | 7887.6 | 7787.1 | 7656.1 | 7333.9 |
| 55° | 6006.9 | 6072.8 | 6424.5 | 7000.9 | 8740.8 | 11393.9 | 11629.4 | 9653.1 | 9485.6 | 9094.4 | 8629.5 |
| 57.5° | 3975.3 | 4077.8 | 4588.1 | 5321.1 | 7633.4 | 11550.6 | 14192.9 | 12103.3 | 11520.1 | 10449.1 | 9925.0 |
| 60° | 2190.1 | 2288.6 | 2842.4 | 3506.4 | 5513.2 | 10776.3 | 15917.0 | 15293.4 | 14262.9 | 11963.4 | 11498.4 |
| 62.5° | 1348.8 | 1402.0 | 1810.8 | 2428.6 | 3306.4 | 8505.3 | 16273.7 | 19302.3 | 18109.2 | 13913.2 | 13398.8 |
| 65° | 1073.9 | 1096.5 | 1296.5 | 1985.2 | 2370.4 | 5059.1 | 15122.0 | 22358.3 | 21960.3 | 16273.7 | 15100.3 |
| 67° | 1042.4 | 1051.2 | 1145.8 | 1704.4 | 2234.4 | 3101.5 | 12668.8 | 22855.9 | 23259.9 | 17702.3 | 15153.5 |
| 67.5° | 1049.2 | 1059.1 | 1148.8 | 1626.6 | 2230.5 | 2850.2 | 11823.5 | 22659.9 | 23170.1 | 17815.6 | 14918.1 |
| 70° | 1011.8 | 1042.4 | 1315.2 | 1625.6 | 2121.2 | 2368.4 | 7080.7 | 19633.3 | 20164.3 | 16553.5 | 12658.0 |
| 72.5° | 358.6 | 360.6 | 568.5 | 1315.2 | 2306.3 | 2394.0 | 3555.7 | 14392.9 | 14786.0 | 12662.9 | 9126.1 |
| 75° | 212.8 | 181.3 | 189.1 | 374.4 | 2203.9 | 2325.1 | 2051.2 | 9196.9 | 9343.7 | 7256.1 | 4621.6 |
| 77.5° | 146.8 | 128.1 | 132.1 | 165.5 | 839.4 | 2292.5 | 1629.6 | 4796.0 | 4639.4 | 2544.8 | 984.2 |
| 80° | 83.8 | 73.9 | 78.8 | 144.8 | 305.5 | 2138.9 | 1536.9 | 1944.8 | 1658.1 | 431.5 | 271.9 |
| 82.5° | 44.3 | 37.4 | 45.3 | 119.2 | 212.8 | 1333.0 | 1539.8 | 939.9 | 744.8 | 145.8 | 185.3 |
| 85° | 15.8 | 12.8 | 21.7 | 81.7 | 141.9 | 408.9 | 1427.5 | 790.1 | 620.7 | 70.9 | 140.9 |
| 87.5° | 3.0 | 3.0 | 8.9 | 33.5 | 57.2 | 125.1 | 844.3 | 468.9 | 314.3 | 42.4 | 96.6 |
| 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: P191061

CATALOG NUMBER: GLEON-AF-03-LED-E1-SL2-1200-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3725.1 | 3725.1 | 3725.1 | 3725.1 | 3725.1 | 3725.1 | 3725.1 | 3725.1 | 3725.1 | 3725.1 | 3725.1 |
| 2.5° | 3713.2 | 3670.9 | 3613.8 | 3543.8 | 3461.1 | 3388.1 | 3334.0 | 3277.8 | 3266.0 | 3246.2 | 3243.3 |
| 5° | 3688.7 | 3615.7 | 3473.8 | 3311.3 | 3137.9 | 2981.3 | 2854.1 | 2740.9 | 2690.6 | 2647.3 | 2642.4 |
| 7.5° | 3652.1 | 3542.8 | 3301.5 | 3039.4 | 2768.4 | 2522.2 | 2313.3 | 2165.5 | 2029.5 | 1964.5 | 1954.7 |
| 10° | 3609.8 | 3453.2 | 3107.3 | 2743.9 | 2369.5 | 2021.7 | 1711.3 | 1451.3 | 1293.6 | 1200.0 | 1188.2 |
| 12.5° | 3570.4 | 3365.5 | 2909.4 | 2437.4 | 1939.9 | 1474.9 | 1075.8 | 827.6 | 662.1 | 595.1 | 587.2 |
| 15° | 3551.7 | 3294.5 | 2724.1 | 2124.2 | 1490.6 | 938.9 | 588.2 | 455.2 | 401.0 | 385.2 | 384.2 |
| 17.5° | 3549.7 | 3234.5 | 2542.9 | 1800.0 | 1044.3 | 545.8 | 383.2 | 349.7 | 338.9 | 335.0 | 335.0 |
| 20° | 3548.7 | 3177.3 | 2361.6 | 1464.0 | 663.1 | 363.6 | 319.2 | 311.3 | 303.4 | 298.5 | 298.5 |
| 22.5° | 3559.6 | 3126.0 | 2172.3 | 1121.2 | 417.8 | 294.6 | 280.8 | 272.9 | 263.0 | 256.1 | 255.1 |
| 25° | 3570.4 | 3086.7 | 1979.3 | 798.0 | 302.5 | 256.1 | 242.3 | 231.5 | 217.7 | 208.9 | 207.9 |
| 27.5° | 3572.3 | 3037.4 | 1772.4 | 534.0 | 253.2 | 223.6 | 205.9 | 189.1 | 173.4 | 164.5 | 163.6 |
| 30° | 3542.8 | 2954.7 | 1542.8 | 360.6 | 223.6 | 194.1 | 170.4 | 152.7 | 137.9 | 131.0 | 131.0 |
| 32.5° | 3484.7 | 2852.2 | 1290.7 | 271.9 | 199.0 | 166.5 | 140.9 | 124.2 | 114.3 | 111.3 | 110.4 |
| 35° | 3432.5 | 2741.8 | 1031.5 | 230.6 | 178.3 | 140.9 | 115.3 | 104.4 | 98.5 | 97.5 | 96.6 |
| 37.5° | 3401.9 | 2653.1 | 788.2 | 208.9 | 158.7 | 118.3 | 97.5 | 89.6 | 86.7 | 84.7 | 85.7 |
| 40° | 3425.6 | 2579.3 | 582.3 | 191.1 | 138.9 | 98.5 | 82.8 | 78.8 | 75.9 | 74.9 | 74.9 |
| 42.5° | 3529.0 | 2566.5 | 432.5 | 175.3 | 120.2 | 81.7 | 71.9 | 68.9 | 67.0 | 66.0 | 67.0 |
| 45° | 3801.0 | 2645.2 | 335.9 | 160.6 | 101.5 | 68.9 | 61.1 | 60.0 | 59.1 | 59.1 | 59.1 |
| 47.5° | 4209.9 | 2807.9 | 279.8 | 143.8 | 84.7 | 59.1 | 53.2 | 52.2 | 51.2 | 52.2 | 52.2 |
| 50° | 4902.4 | 3105.4 | 250.2 | 127.1 | 70.0 | 50.2 | 45.3 | 45.3 | 45.3 | 45.3 | 46.3 |
| 52.5° | 5955.6 | 3690.6 | 230.6 | 110.4 | 57.2 | 42.4 | 38.5 | 38.5 | 39.4 | 39.4 | 40.4 |
| 55° | 7128.9 | 4466.9 | 212.8 | 93.6 | 48.3 | 35.5 | 31.5 | 32.5 | 33.5 | 34.5 | 34.5 |
| 57.5° | 8401.9 | 5327.0 | 198.0 | 76.8 | 41.4 | 28.5 | 26.6 | 27.6 | 28.5 | 30.6 | 30.6 |
| 60° | 9937.9 | 6258.1 | 176.4 | 60.0 | 34.5 | 22.7 | 20.7 | 22.7 | 25.6 | 27.6 | 28.5 |
| 62.5° | 11624.5 | 7158.5 | 148.7 | 47.3 | 28.5 | 17.7 | 16.8 | 20.7 | 24.7 | 26.6 | 27.6 |
| 65° | 12777.2 | 7441.3 | 114.3 | 38.5 | 21.7 | 12.8 | 13.8 | 18.7 | 23.6 | 26.6 | 26.6 |
| 67° | 12310.2 | 6746.8 | 93.6 | 32.5 | 17.7 | 9.8 | 12.8 | 18.7 | 23.6 | 25.6 | 26.6 |
| 67.5° | 11986.1 | 6474.8 | 89.6 | 31.5 | 16.8 | 9.8 | 12.8 | 18.7 | 23.6 | 26.6 | 26.6 |
| 70° | 9752.6 | 4864.0 | 74.9 | 23.6 | 13.8 | 8.9 | 10.8 | 17.7 | 22.7 | 25.6 | 25.6 |
| 72.5° | 6776.2 | 2999.0 | 67.0 | 16.8 | 11.9 | 7.9 | 9.8 | 16.8 | 21.7 | 24.7 | 25.6 |
| 75° | 3221.7 | 1085.7 | 57.2 | 12.8 | 10.8 | 6.9 | 8.9 | 16.8 | 21.7 | 24.7 | 24.7 |
| 77.5° | 657.1 | 252.3 | 46.3 | 10.8 | 8.9 | 6.9 | 7.9 | 15.8 | 20.7 | 23.6 | 23.6 |
| 80° | 215.7 | 97.5 | 34.5 | 9.8 | 8.9 | 6.9 | 7.9 | 14.7 | 20.7 | 22.7 | 23.6 |
| 82.5° | 155.7 | 49.3 | 22.7 | 9.8 | 8.9 | 6.9 | 6.9 | 14.7 | 19.7 | 22.7 | 22.7 |
| 85° | 119.2 | 34.5 | 14.7 | 9.8 | 8.9 | 6.9 | 6.9 | 13.8 | 18.7 | 21.7 | 21.7 |
| 87.5° | 78.8 | 13.8 | 11.9 | 9.8 | 8.9 | 6.9 | 6.9 | 13.8 | 17.7 | 20.7 | 21.7 |
| 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)