

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: P193731

Luminaire Tested: **GLEON-AF-03-LED-E1-SL4-8030-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193731
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
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-SL4-8030-600-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7930 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 96
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

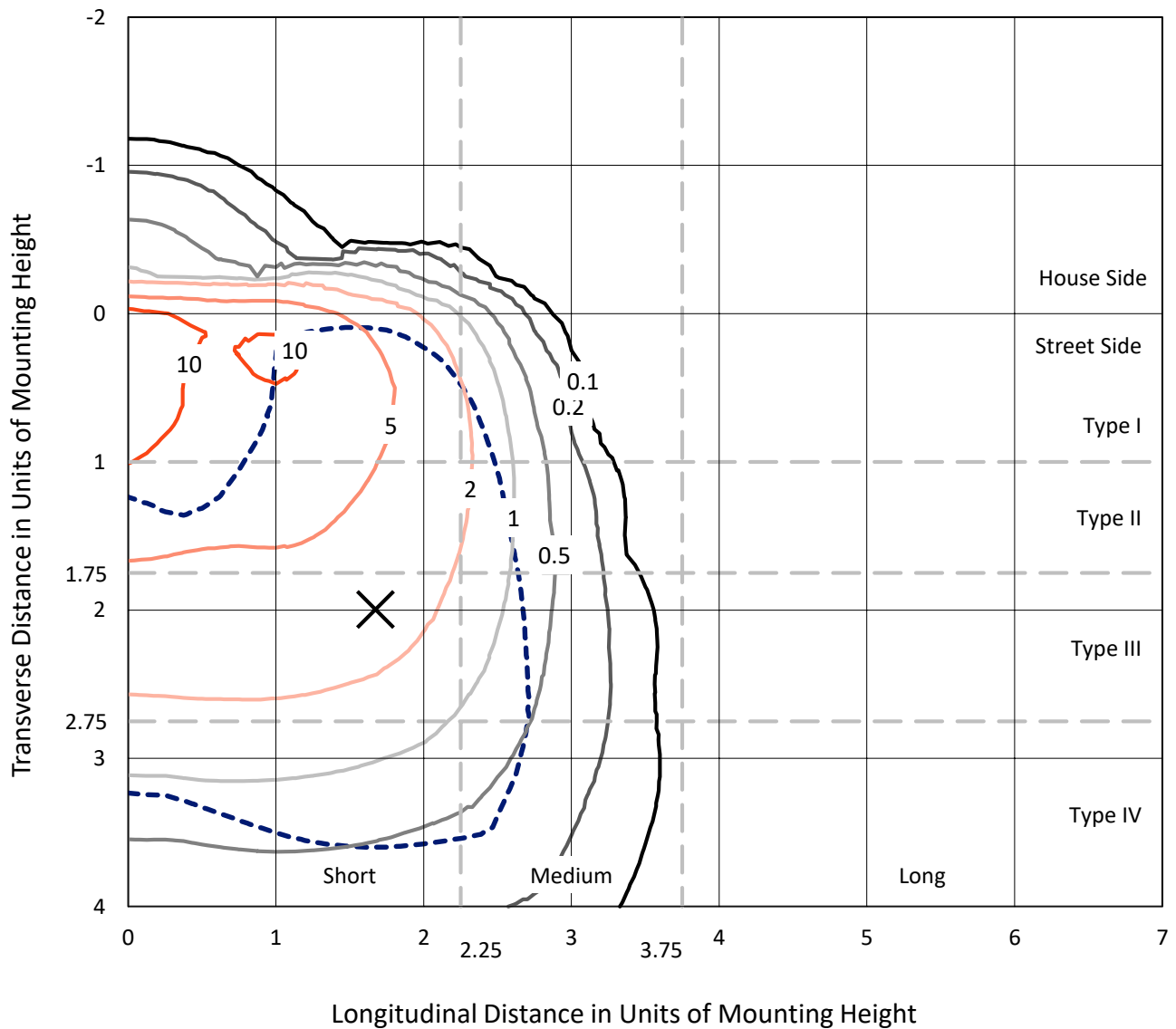


REPORT NUMBER: P193731

CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-8030-600-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

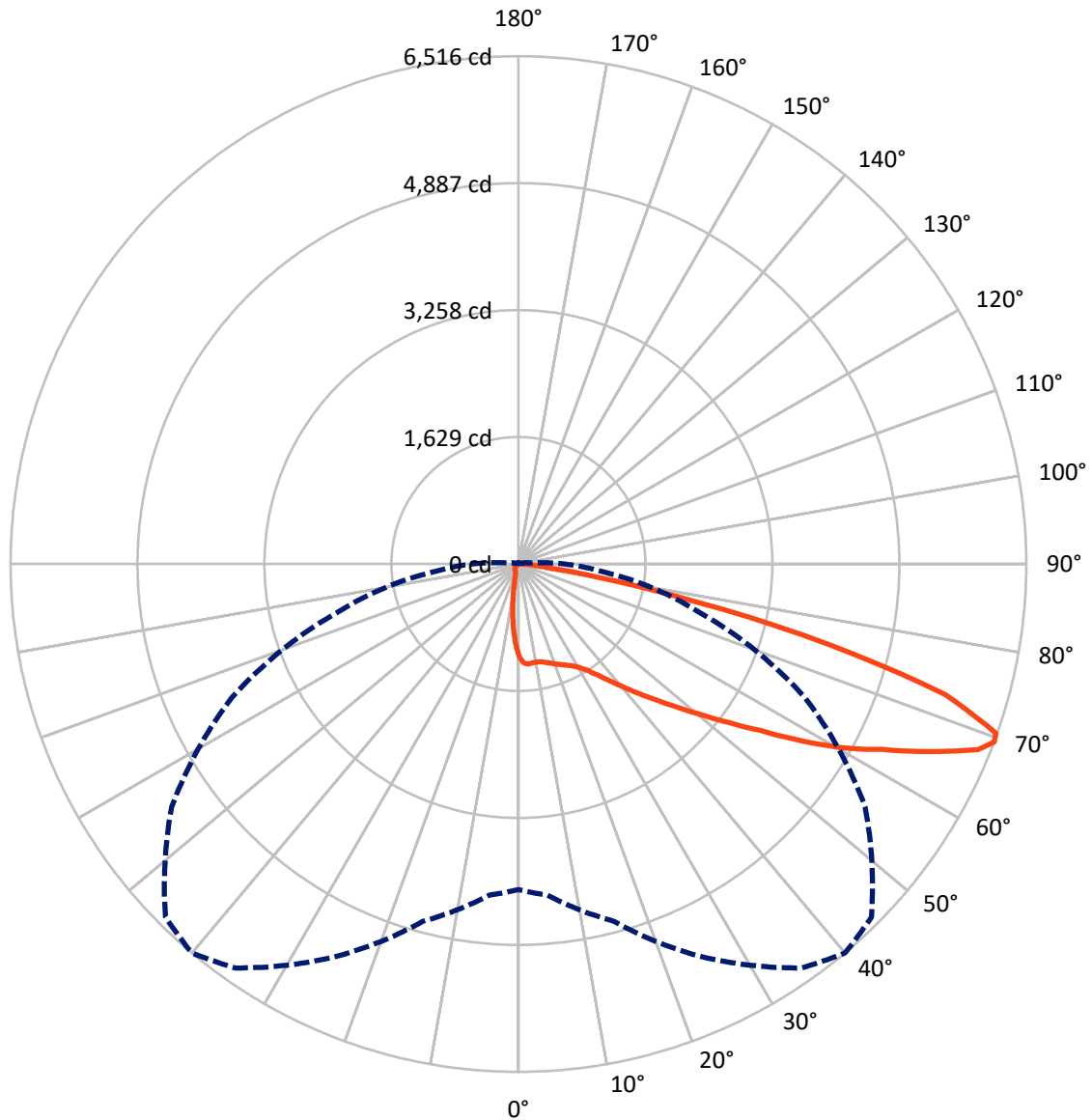


Based on 10 foot mounting height. Maximum calculated value = 13 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P193731

CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-8030-600-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P193731

CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-8030-600-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 464.0 | 0.0 | 464.0 |
| | % Fixture | 5.9 | 0.0 | 5.9 |
| Street Side | Lumens | 7466.1 | 0.0 | 7466.1 |
| | % Fixture | 94.1 | 0.0 | 94.1 |
| Total | Lumens | 7930.0 | 0.0 | 7930.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 96.1 | 1.2 |
| 10°-20° | 236.2 | 3.0 |
| 20°-30° | 397.9 | 5.0 |
| 30°-40° | 651.4 | 8.2 |
| 40°-50° | 1127.8 | 14.2 |
| 50°-60° | 1776.5 | 22.4 |
| 60°-70° | 2320.0 | 29.3 |
| 70°-80° | 1194.9 | 15.1 |
| 80°-90° | 129.3 | 1.6 |
| 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° | 7930.0 | 100.0 |
| 0°-180° | 7930.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P193731

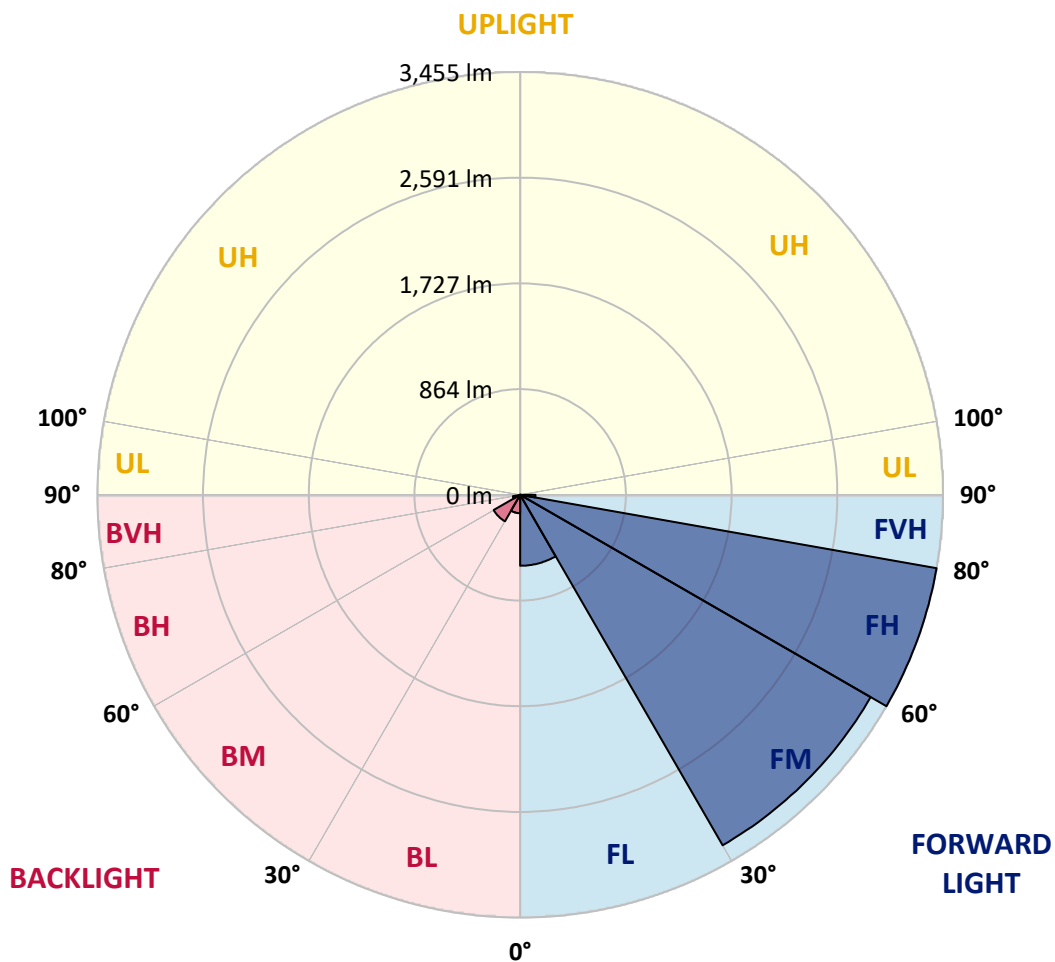
CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-8030-600-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 579.9 | 7.3 | | | |
| FM (30°-60°) | 3306.3 | 41.7 | | | |
| FH (60°-80°) | 3454.6 | 43.6 | | | G2/5000 |
| FVH (80°-90°) | 125.2 | 1.6 | | | G2/225 |
| BL (0°-30°) | 150.3 | 1.9 | B1/500 | | |
| BM (30°-60°) | 249.4 | 3.1 | B1/1000 | | |
| BH (60°-80°) | 60.3 | 0.8 | B0/110 | | G0/110 |
| BVH (80°-90°) | 4.1 | 0.1 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type IV Short





REPORT NUMBER: P193731

CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-8030-600-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1184.8 | 1184.8 | 1184.8 | 1184.8 | 1184.8 | 1184.8 | 1184.8 | 1184.8 | 1184.8 | 1184.8 | 1184.8 |
| 2.5° | 1300.9 | 1293.8 | 1289.6 | 1283.9 | 1276.8 | 1270.7 | 1268.3 | 1250.9 | 1234.3 | 1211.7 | 1185.7 |
| 5° | 1325.0 | 1322.6 | 1315.1 | 1307.5 | 1299.0 | 1289.6 | 1284.4 | 1263.6 | 1240.0 | 1207.0 | 1161.7 |
| 7.5° | 1327.3 | 1324.5 | 1315.1 | 1304.7 | 1292.9 | 1281.5 | 1272.6 | 1251.8 | 1230.1 | 1196.6 | 1141.4 |
| 10° | 1323.6 | 1320.3 | 1313.2 | 1301.8 | 1287.2 | 1276.4 | 1267.4 | 1247.6 | 1229.2 | 1198.9 | 1137.6 |
| 12.5° | 1319.3 | 1316.0 | 1312.7 | 1307.0 | 1294.3 | 1286.7 | 1279.2 | 1260.3 | 1243.8 | 1218.3 | 1151.3 |
| 15° | 1323.6 | 1321.7 | 1325.4 | 1323.1 | 1316.0 | 1309.4 | 1301.8 | 1284.9 | 1269.7 | 1248.5 | 1176.3 |
| 17.5° | 1341.5 | 1341.5 | 1353.3 | 1354.7 | 1348.1 | 1338.7 | 1327.8 | 1310.8 | 1298.1 | 1280.1 | 1206.0 |
| 20° | 1383.5 | 1382.1 | 1397.2 | 1400.0 | 1384.0 | 1369.3 | 1353.3 | 1332.5 | 1322.6 | 1311.3 | 1235.3 |
| 22.5° | 1455.7 | 1449.1 | 1458.1 | 1455.3 | 1423.6 | 1401.0 | 1381.1 | 1355.7 | 1350.5 | 1345.3 | 1267.9 |
| 25° | 1549.7 | 1545.9 | 1552.0 | 1524.2 | 1468.5 | 1437.8 | 1414.2 | 1385.4 | 1385.4 | 1390.6 | 1304.7 |
| 27.5° | 1686.1 | 1671.9 | 1651.1 | 1602.1 | 1518.5 | 1479.3 | 1453.8 | 1423.2 | 1431.2 | 1450.5 | 1353.3 |
| 30° | 1825.8 | 1810.2 | 1762.5 | 1687.0 | 1579.4 | 1538.3 | 1508.6 | 1476.5 | 1495.4 | 1530.8 | 1418.4 |
| 32.5° | 1963.6 | 1946.2 | 1878.7 | 1783.3 | 1666.7 | 1625.7 | 1596.9 | 1561.5 | 1593.1 | 1652.6 | 1513.8 |
| 35° | 2097.2 | 2081.6 | 2003.7 | 1891.4 | 1782.8 | 1748.9 | 1722.4 | 1691.7 | 1732.3 | 1815.4 | 1648.3 |
| 37.5° | 2247.3 | 2230.3 | 2135.4 | 2013.7 | 1924.0 | 1899.4 | 1880.1 | 1849.4 | 1920.2 | 2042.0 | 1835.7 |
| 40° | 2431.9 | 2403.1 | 2275.2 | 2153.9 | 2087.3 | 2075.5 | 2062.3 | 2058.0 | 2168.0 | 2336.5 | 2085.4 |
| 42.5° | 2643.3 | 2596.1 | 2421.5 | 2301.6 | 2266.7 | 2275.2 | 2271.9 | 2290.7 | 2478.1 | 2702.8 | 2389.4 |
| 45° | 2854.8 | 2793.9 | 2584.3 | 2459.3 | 2464.0 | 2493.7 | 2512.1 | 2587.6 | 2866.6 | 3122.9 | 2716.5 |
| 47.5° | 3034.2 | 2974.2 | 2740.6 | 2629.7 | 2686.3 | 2744.8 | 2794.9 | 2937.9 | 3265.9 | 3536.4 | 2970.9 |
| 50° | 3187.6 | 3130.9 | 2906.3 | 2817.0 | 2944.5 | 3038.9 | 3120.1 | 3332.0 | 3695.5 | 3851.3 | 3149.4 |
| 52.5° | 3313.1 | 3275.4 | 3078.1 | 3031.8 | 3239.5 | 3377.8 | 3496.8 | 3750.7 | 4075.9 | 4107.1 | 3288.1 |
| 55° | 3435.4 | 3408.5 | 3262.6 | 3287.2 | 3586.0 | 3774.3 | 3924.9 | 4194.9 | 4403.5 | 4320.4 | 3421.2 |
| 57.5° | 3576.1 | 3551.5 | 3473.2 | 3611.0 | 4041.5 | 4278.4 | 4442.7 | 4588.6 | 4691.9 | 4538.5 | 3546.8 |
| 60° | 3719.6 | 3705.4 | 3707.3 | 3970.7 | 4564.5 | 4792.0 | 4882.6 | 4920.4 | 4975.1 | 4743.9 | 3553.9 |
| 62.5° | 3856.4 | 3883.3 | 3974.9 | 4371.0 | 5065.3 | 5239.9 | 5285.7 | 5323.0 | 5258.8 | 4776.4 | 3283.4 |
| 65° | 4088.2 | 4132.1 | 4350.7 | 4906.7 | 5616.2 | 5803.1 | 5850.3 | 5722.4 | 5303.7 | 4355.4 | 2670.7 |
| 67.5° | 4201.5 | 4281.7 | 4671.6 | 5406.1 | 6150.5 | 6358.2 | 6340.7 | 5748.3 | 4759.4 | 3321.2 | 1713.9 |
| 69° | 4177.9 | 4263.3 | 4745.7 | 5559.0 | 6328.0 | 6516.3 | 6405.4 | 5430.6 | 4054.7 | 2405.9 | 1052.1 |
| 70° | 4084.4 | 4170.8 | 4707.5 | 5553.4 | 6350.6 | 6499.8 | 6285.5 | 5038.4 | 3428.3 | 1759.2 | 658.0 |
| 72.5° | 3410.9 | 3485.4 | 4179.3 | 5019.5 | 5850.3 | 5729.0 | 5258.4 | 3490.6 | 1670.5 | 479.1 | 148.2 |
| 75° | 2099.6 | 2141.1 | 2998.8 | 3781.4 | 4418.6 | 4107.1 | 3503.4 | 1736.6 | 498.0 | 135.5 | 82.1 |
| 77.5° | 1109.3 | 1128.1 | 1641.7 | 2228.9 | 2801.0 | 2317.6 | 1795.6 | 677.4 | 229.4 | 85.0 | 59.5 |
| 80° | 655.6 | 669.8 | 884.1 | 1019.1 | 1212.2 | 1012.5 | 718.0 | 415.9 | 164.3 | 53.3 | 52.9 |
| 82.5° | 375.3 | 384.2 | 641.0 | 566.4 | 477.7 | 407.8 | 357.3 | 394.1 | 98.7 | 35.9 | 54.8 |
| 85° | 137.8 | 139.7 | 360.6 | 431.0 | 284.2 | 169.0 | 177.5 | 326.6 | 26.4 | 22.7 | 43.0 |
| 87.5° | 64.2 | 62.8 | 185.5 | 263.9 | 166.2 | 107.1 | 138.3 | 71.7 | 10.4 | 14.6 | 11.8 |
| 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: P193731

CATALOG NUMBER: GLEON-AF-03-LED-E1-SL4-8030-600-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1184.8 | 1184.8 | 1184.8 | 1184.8 | 1184.8 | 1184.8 | 1184.8 | 1184.8 | 1184.8 | 1184.8 | 1184.8 |
| 2.5° | 1170.6 | 1153.2 | 1121.5 | 1089.0 | 1055.9 | 1030.4 | 1005.4 | 985.6 | 979.0 | 966.7 | 967.7 |
| 5° | 1134.7 | 1102.7 | 1036.6 | 969.5 | 899.7 | 842.1 | 787.8 | 743.9 | 722.7 | 701.0 | 701.0 |
| 7.5° | 1103.6 | 1056.9 | 953.5 | 844.5 | 731.6 | 636.8 | 551.3 | 487.1 | 451.7 | 423.4 | 422.9 |
| 10° | 1091.8 | 1028.5 | 884.1 | 727.9 | 570.7 | 441.3 | 339.9 | 274.7 | 241.2 | 219.5 | 218.5 |
| 12.5° | 1097.0 | 1018.6 | 830.8 | 620.2 | 422.9 | 283.7 | 196.8 | 154.8 | 140.7 | 134.1 | 134.1 |
| 15° | 1112.1 | 1015.8 | 777.4 | 515.0 | 298.8 | 177.5 | 130.8 | 119.4 | 118.5 | 118.5 | 118.5 |
| 17.5° | 1130.5 | 1016.7 | 722.7 | 412.5 | 203.4 | 127.0 | 112.8 | 111.4 | 112.3 | 112.3 | 112.3 |
| 20° | 1149.4 | 1017.2 | 663.7 | 317.7 | 143.5 | 110.5 | 106.2 | 105.7 | 106.7 | 106.7 | 107.1 |
| 22.5° | 1172.5 | 1019.6 | 604.7 | 237.4 | 118.5 | 104.3 | 101.0 | 101.0 | 101.5 | 101.5 | 101.0 |
| 25° | 1198.9 | 1024.3 | 543.3 | 176.1 | 108.1 | 100.1 | 97.2 | 96.8 | 97.2 | 96.8 | 96.3 |
| 27.5° | 1232.0 | 1030.9 | 474.9 | 137.8 | 103.4 | 95.8 | 93.5 | 93.5 | 93.0 | 92.5 | 92.0 |
| 30° | 1273.5 | 1038.5 | 397.9 | 117.1 | 98.7 | 92.0 | 89.7 | 89.2 | 88.7 | 87.8 | 87.8 |
| 32.5° | 1336.8 | 1055.0 | 321.9 | 106.2 | 93.5 | 86.9 | 85.0 | 85.0 | 84.0 | 83.1 | 82.6 |
| 35° | 1434.0 | 1087.5 | 253.9 | 99.6 | 87.8 | 81.2 | 78.8 | 78.8 | 77.9 | 77.4 | 76.9 |
| 37.5° | 1568.5 | 1137.1 | 197.3 | 93.5 | 82.1 | 75.1 | 72.7 | 72.2 | 71.3 | 70.3 | 69.9 |
| 40° | 1747.4 | 1198.5 | 155.3 | 87.8 | 76.5 | 68.9 | 67.0 | 66.1 | 64.2 | 62.8 | 62.8 |
| 42.5° | 1972.1 | 1268.3 | 126.0 | 81.7 | 69.9 | 63.3 | 61.8 | 60.4 | 57.1 | 55.7 | 55.2 |
| 45° | 2207.2 | 1331.1 | 106.7 | 74.6 | 63.3 | 57.6 | 56.6 | 54.3 | 50.0 | 48.6 | 48.6 |
| 47.5° | 2376.6 | 1345.7 | 93.9 | 68.0 | 57.1 | 51.5 | 51.0 | 46.7 | 43.0 | 42.0 | 41.5 |
| 50° | 2482.4 | 1316.9 | 83.5 | 61.4 | 51.5 | 45.8 | 44.4 | 39.2 | 36.8 | 35.9 | 35.4 |
| 52.5° | 2553.7 | 1265.5 | 75.1 | 55.7 | 46.3 | 40.6 | 37.3 | 33.5 | 31.6 | 30.7 | 30.7 |
| 55° | 2610.8 | 1192.8 | 66.6 | 50.5 | 42.0 | 36.3 | 31.6 | 28.8 | 26.9 | 26.0 | 26.0 |
| 57.5° | 2626.8 | 1094.2 | 58.1 | 46.3 | 37.8 | 32.1 | 26.9 | 25.0 | 22.7 | 22.2 | 22.2 |
| 60° | 2510.2 | 916.2 | 51.5 | 41.1 | 34.0 | 27.8 | 23.6 | 21.2 | 18.9 | 18.4 | 17.9 |
| 62.5° | 2202.9 | 709.0 | 45.3 | 36.3 | 29.7 | 24.1 | 20.3 | 17.5 | 15.6 | 15.6 | 15.6 |
| 65° | 1680.4 | 475.3 | 39.7 | 31.6 | 26.0 | 20.3 | 17.5 | 14.2 | 13.2 | 13.2 | 13.7 |
| 67.5° | 1005.9 | 258.7 | 34.0 | 26.9 | 22.2 | 17.0 | 14.6 | 12.3 | 11.8 | 12.3 | 12.3 |
| 69° | 589.6 | 152.0 | 30.7 | 24.1 | 19.4 | 15.1 | 12.7 | 10.9 | 11.8 | 12.3 | 12.3 |
| 70° | 363.9 | 102.4 | 28.3 | 21.7 | 17.5 | 13.7 | 11.8 | 10.4 | 11.3 | 11.8 | 11.8 |
| 72.5° | 101.5 | 52.9 | 22.7 | 17.0 | 14.2 | 11.3 | 9.4 | 9.4 | 10.9 | 11.3 | 11.3 |
| 75° | 66.1 | 39.2 | 17.5 | 12.7 | 10.9 | 9.0 | 8.0 | 9.0 | 10.4 | 10.9 | 10.9 |
| 77.5° | 54.8 | 32.1 | 14.2 | 10.4 | 9.0 | 8.5 | 7.6 | 8.0 | 9.4 | 9.9 | 9.9 |
| 80° | 50.0 | 22.7 | 11.3 | 9.4 | 8.0 | 7.6 | 7.1 | 6.6 | 8.5 | 9.0 | 9.0 |
| 82.5° | 47.7 | 17.9 | 9.9 | 8.5 | 7.6 | 6.6 | 6.1 | 6.6 | 7.6 | 8.0 | 8.5 |
| 85° | 29.7 | 11.8 | 9.0 | 8.0 | 6.6 | 6.1 | 6.1 | 6.1 | 7.1 | 7.6 | 7.6 |
| 87.5° | 10.9 | 9.4 | 8.0 | 6.6 | 5.7 | 5.7 | 5.7 | 5.7 | 6.1 | 7.1 | 7.1 |
| 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)