

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: P194073

Luminaire Tested: **GLEON-AF-05-LED-E1-T4FT-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P194073
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-05-LED-E1-T4FT-8030
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24422 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 279
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

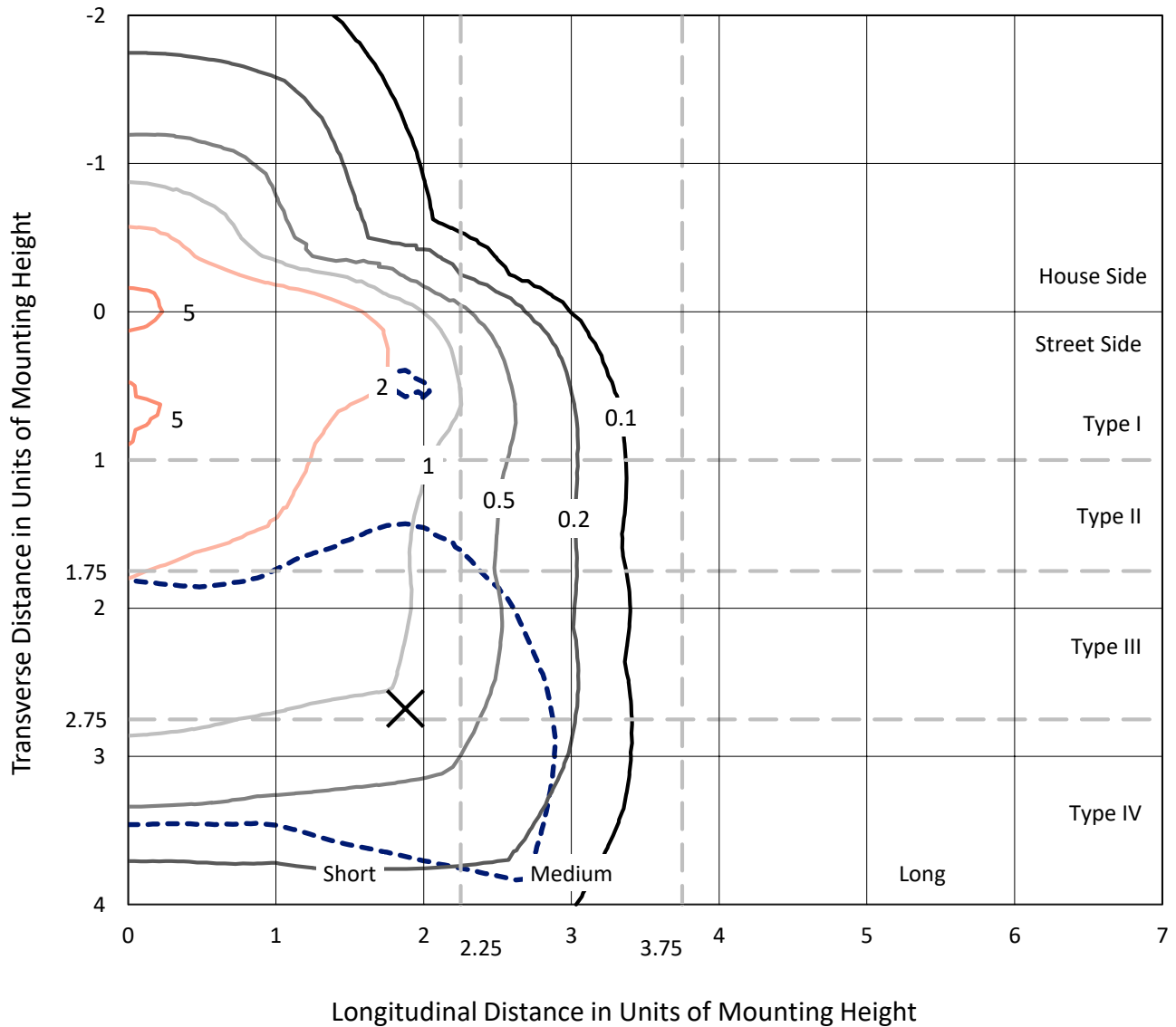


REPORT NUMBER: P194073

CATALOG NUMBER: GLEON-AF-05-LED-E1-T4FT-8030

Iso-Footcandle Lines of Horizontal Illumination

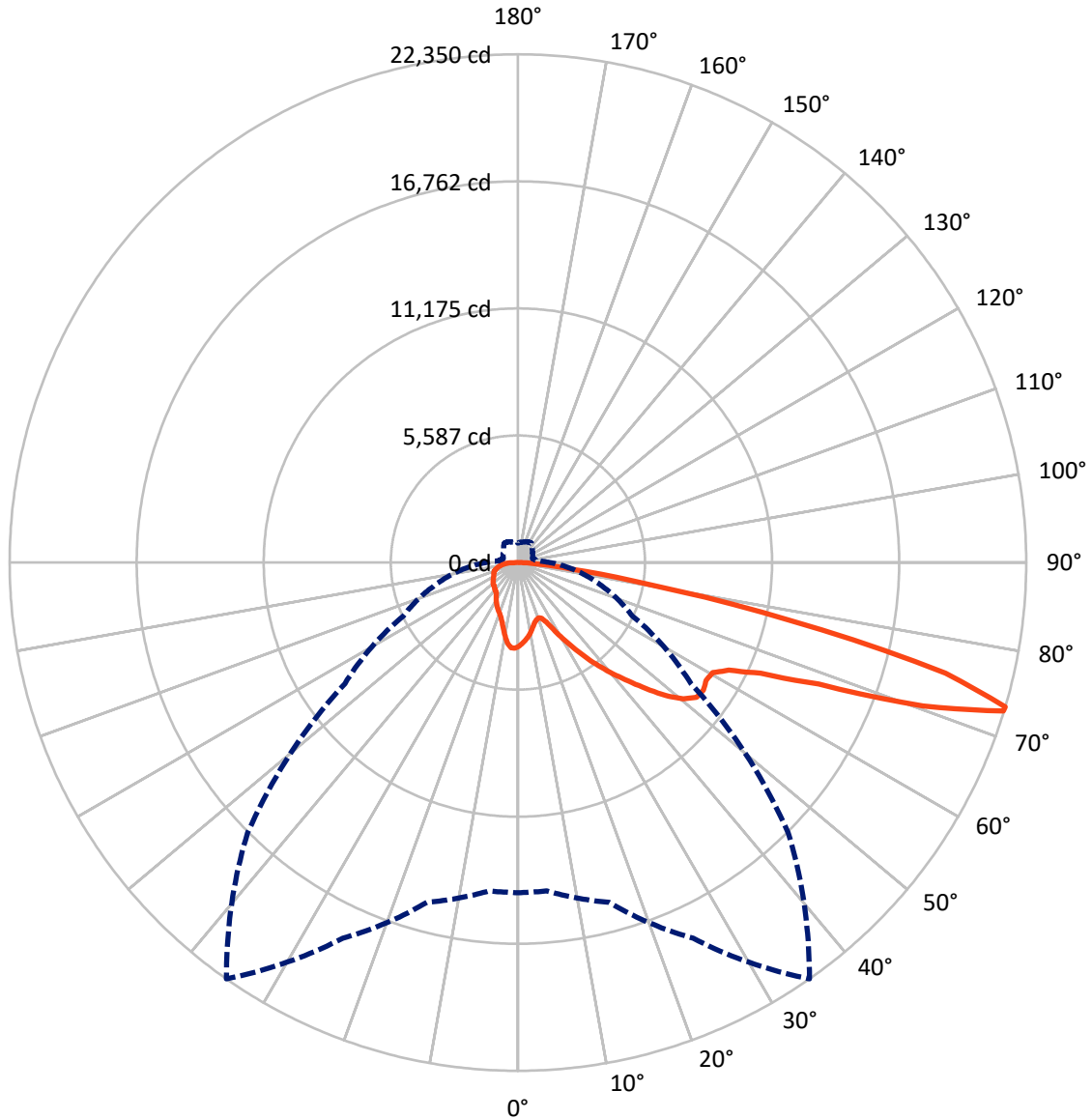
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P194073
CATALOG NUMBER: GLEON-AF-05-LED-E1-T4FT-8030

Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

REPORT NUMBER: P194073

CATALOG NUMBER: GLEON-AF-05-LED-E1-T4FT-8030

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4658.0 | 0.0 | 4658.0 |
| | % Fixture | 19.1 | 0.0 | 19.1 |
| Street Side | Lumens | 19764.1 | 0.0 | 19764.1 |
| | % Fixture | 80.9 | 0.0 | 80.9 |
| Total | Lumens | 24422.0 | 0.0 | 24422.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 333.7 | 1.4 |
| 10°-20° | 832.8 | 3.4 |
| 20°-30° | 1346.4 | 5.5 |
| 30°-40° | 2257.8 | 9.2 |
| 40°-50° | 3480.2 | 14.3 |
| 50°-60° | 4669.1 | 19.1 |
| 60°-70° | 6220.2 | 25.5 |
| 70°-80° | 4744.1 | 19.4 |
| 80°-90° | 537.7 | 2.2 |
| 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° | 24422.0 | 100.0 |
| 0°-180° | 24422.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P194073

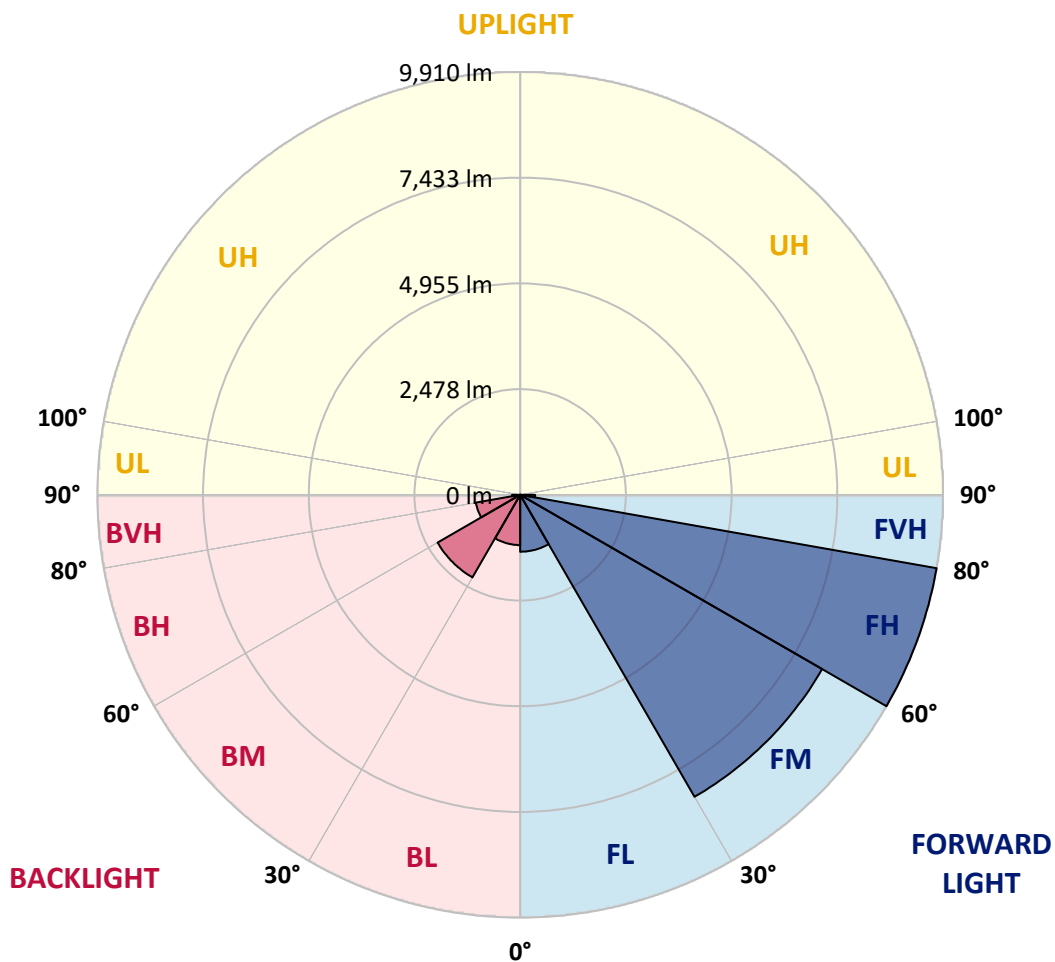
CATALOG NUMBER: GLEON-AF-05-LED-E1-T4FT-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 1334.3 | 5.5 | | | |
| FM | (30°-60°) | 8171.8 | 33.5 | | | |
| FH | (60°-80°) | 9910.4 | 40.6 | | | G4/12000 |
| FVH | (80°-90°) | 347.6 | 1.4 | | | G3/500 |
| BL | (0°-30°) | 1178.7 | 4.8 | B3/2500 | | |
| BM | (30°-60°) | 2235.3 | 9.2 | B2/2500 | | |
| BH | (60°-80°) | 1053.8 | 4.3 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 190.1 | 0.8 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type IV Short





REPORT NUMBER: P194073

CATALOG NUMBER: GLEON-AF-05-LED-E1-T4FT-8030

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|--------|
| 0° | 3686.0 | 3686.0 | 3686.0 | 3686.0 | 3686.0 | 3686.0 | 3686.0 | 3686.0 | 3686.0 | 3686.0 | 3686.0 |
| 2.5° | 3540.6 | 3547.7 | 3539.4 | 3550.0 | 3567.6 | 3586.4 | 3599.3 | 3618.0 | 3639.1 | 3668.4 | 3675.5 |
| 5° | 3374.1 | 3384.6 | 3384.6 | 3403.4 | 3437.4 | 3467.9 | 3496.0 | 3526.5 | 3571.1 | 3621.5 | 3641.5 |
| 7.5° | 3191.1 | 3197.0 | 3207.5 | 3235.7 | 3284.9 | 3328.3 | 3368.2 | 3417.5 | 3478.5 | 3545.3 | 3580.5 |
| 10° | 2970.6 | 2978.9 | 2995.3 | 3035.1 | 3102.0 | 3161.8 | 3219.3 | 3287.3 | 3364.7 | 3448.0 | 3492.5 |
| 12.5° | 2814.7 | 2812.3 | 2819.4 | 2848.7 | 2907.3 | 2980.0 | 3063.3 | 3150.1 | 3245.1 | 3342.4 | 3396.4 |
| 15° | 2761.9 | 2749.0 | 2722.0 | 2715.0 | 2746.6 | 2819.4 | 2915.5 | 3022.2 | 3136.0 | 3253.3 | 3320.1 |
| 17.5° | 2794.7 | 2772.4 | 2698.6 | 2644.6 | 2639.9 | 2695.0 | 2797.1 | 2916.7 | 3048.0 | 3191.1 | 3274.4 |
| 20° | 3001.1 | 2948.4 | 2766.6 | 2641.1 | 2597.7 | 2624.7 | 2713.8 | 2840.5 | 2995.3 | 3185.3 | 3292.0 |
| 22.5° | 3494.9 | 3417.5 | 3031.6 | 2798.2 | 2651.6 | 2618.8 | 2685.7 | 2820.5 | 3001.1 | 3258.0 | 3394.0 |
| 25° | 4213.8 | 4103.5 | 3486.7 | 3190.0 | 2887.4 | 2712.6 | 2727.9 | 2866.3 | 3084.4 | 3426.9 | 3591.0 |
| 27.5° | 4781.4 | 4709.9 | 4081.3 | 3742.3 | 3316.6 | 2966.0 | 2865.1 | 2981.2 | 3254.5 | 3703.6 | 3871.3 |
| 30° | 5119.2 | 5075.8 | 4716.9 | 4368.6 | 3864.3 | 3369.4 | 3127.8 | 3197.0 | 3520.7 | 4087.1 | 4225.5 |
| 32.5° | 5510.9 | 5485.1 | 5309.2 | 4989.0 | 4455.4 | 3899.5 | 3544.1 | 3519.5 | 3877.2 | 4548.0 | 4611.4 |
| 35° | 5916.7 | 5908.5 | 5805.2 | 5575.4 | 5089.9 | 4598.5 | 4096.5 | 3930.0 | 4265.4 | 5026.5 | 4986.6 |
| 37.5° | 6294.3 | 6280.2 | 6220.4 | 6086.7 | 5753.6 | 5349.0 | 4659.4 | 4351.0 | 4684.1 | 5483.9 | 5306.8 |
| 40° | 6989.8 | 6879.5 | 6674.3 | 6573.4 | 6424.5 | 5981.2 | 5106.3 | 4743.9 | 5118.0 | 5920.2 | 5583.6 |
| 42.5° | 7837.7 | 7658.2 | 7275.9 | 7137.5 | 7116.4 | 6479.6 | 5411.2 | 5125.0 | 5555.4 | 6352.9 | 5855.7 |
| 45° | 8505.0 | 8336.1 | 8006.5 | 7831.8 | 7909.2 | 6931.1 | 5717.3 | 5532.0 | 6005.8 | 6806.8 | 6136.0 |
| 47.5° | 9216.9 | 8951.8 | 8515.5 | 8568.3 | 8737.2 | 7358.0 | 6029.2 | 5969.4 | 6499.5 | 7314.6 | 6484.3 |
| 50° | 9242.7 | 9039.8 | 8848.6 | 9164.1 | 9426.8 | 7750.9 | 6419.8 | 6428.0 | 7103.5 | 7953.8 | 6947.5 |
| 52.5° | 8706.7 | 8663.3 | 8967.1 | 9463.1 | 9841.9 | 8061.7 | 6864.3 | 6901.8 | 7876.4 | 8687.9 | 7456.5 |
| 55° | 8519.1 | 8469.8 | 8820.5 | 9358.8 | 9898.2 | 8318.5 | 7346.3 | 7414.3 | 8811.1 | 9462.0 | 7952.6 |
| 57.5° | 8976.4 | 8867.4 | 8890.8 | 9309.5 | 9761.0 | 8600.0 | 7871.7 | 8008.9 | 9826.7 | 10138.7 | 8271.6 |
| 60° | 10254.8 | 10021.4 | 9578.1 | 9567.5 | 9834.9 | 9022.2 | 8479.2 | 8646.9 | 10882.2 | 10462.3 | 8147.3 |
| 62.5° | 12047.9 | 11814.6 | 10984.2 | 10443.6 | 10403.7 | 9718.8 | 9225.1 | 9269.6 | 11492.0 | 10023.7 | 7388.5 |
| 65° | 13988.9 | 13780.1 | 12852.5 | 12089.0 | 11720.7 | 10872.8 | 10091.7 | 9547.6 | 11292.7 | 8816.9 | 6060.9 |
| 67.5° | 16345.0 | 16121.0 | 15323.5 | 14618.7 | 14264.5 | 12735.2 | 10700.4 | 9281.4 | 10027.2 | 6830.3 | 4356.9 |
| 70° | 17992.7 | 17764.1 | 17449.8 | 18020.9 | 18887.6 | 15422.0 | 10779.0 | 8198.9 | 7489.4 | 4539.8 | 2622.3 |
| 72.5° | 15843.0 | 15736.3 | 16309.8 | 18715.2 | 22325.0 | 17052.2 | 9743.4 | 5969.4 | 4349.8 | 2410.1 | 1517.6 |
| 73° | 14515.5 | 14492.0 | 15470.1 | 18228.5 | 22349.6 | 16801.2 | 9289.6 | 5548.4 | 3730.6 | 2132.1 | 1387.4 |
| 75° | 6554.7 | 6743.5 | 8887.3 | 13923.2 | 19417.7 | 13844.6 | 6538.2 | 3182.9 | 2107.5 | 1473.0 | 1047.3 |
| 77.5° | 1575.0 | 1640.7 | 2780.7 | 6612.1 | 12262.6 | 8250.5 | 2962.4 | 1573.9 | 1347.5 | 1040.3 | 764.7 |
| 80° | 670.8 | 693.1 | 1070.7 | 2442.9 | 5773.6 | 3322.5 | 1365.1 | 1054.3 | 932.4 | 725.9 | 536.0 |
| 82.5° | 372.9 | 396.4 | 607.5 | 1108.3 | 2330.3 | 1132.9 | 832.7 | 734.2 | 613.4 | 437.4 | 348.3 |
| 85° | 211.1 | 224.0 | 355.4 | 619.2 | 987.5 | 455.0 | 498.4 | 487.9 | 346.0 | 225.2 | 171.2 |
| 87.5° | 99.7 | 107.9 | 171.2 | 287.3 | 387.0 | 178.3 | 253.3 | 279.1 | 217.0 | 137.2 | 89.1 |
| 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: P194073
 CATALOG NUMBER: GLEON-AF-05-LED-E1-T4FT-8030

CANDELA DISTRIBUTION (continued):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3686.0 | 3686.0 | 3686.0 | 3686.0 | 3686.0 | 3686.0 | 3686.0 | 3686.0 | 3686.0 | 3686.0 |
| 2.5° | 3683.7 | 3704.8 | 3729.4 | 3742.3 | 3754.1 | 3768.1 | 3782.2 | 3782.2 | 3784.6 | 3785.7 |
| 5° | 3657.9 | 3701.3 | 3740.0 | 3756.4 | 3759.9 | 3759.9 | 3756.4 | 3737.6 | 3721.2 | 3728.3 |
| 7.5° | 3603.9 | 3667.3 | 3700.1 | 3694.2 | 3649.7 | 3598.1 | 3554.7 | 3501.9 | 3474.9 | 3470.2 |
| 10° | 3526.5 | 3599.3 | 3605.1 | 3546.5 | 3436.2 | 3326.0 | 3234.5 | 3145.4 | 3103.2 | 3092.6 |
| 12.5° | 3440.9 | 3507.8 | 3470.2 | 3349.5 | 3172.4 | 3011.7 | 2895.6 | 2805.3 | 2765.4 | 2754.9 |
| 15° | 3371.7 | 3417.5 | 3322.5 | 3132.5 | 2909.7 | 2739.6 | 2643.4 | 2576.6 | 2548.4 | 2540.2 |
| 17.5° | 3335.4 | 3344.8 | 3171.2 | 2914.4 | 2677.5 | 2535.5 | 2475.7 | 2444.1 | 2433.5 | 2427.6 |
| 20° | 3353.0 | 3287.3 | 3026.9 | 2711.5 | 2487.5 | 2387.8 | 2373.7 | 2365.5 | 2363.1 | 2359.6 |
| 22.5° | 3440.9 | 3269.7 | 2894.4 | 2519.1 | 2320.9 | 2277.5 | 2289.3 | 2288.1 | 2285.7 | 2283.4 |
| 25° | 3598.1 | 3284.9 | 2765.4 | 2336.2 | 2181.4 | 2172.0 | 2193.1 | 2193.1 | 2183.7 | 2183.7 |
| 27.5° | 3805.7 | 3316.6 | 2621.2 | 2162.6 | 2054.7 | 2055.9 | 2072.3 | 2067.6 | 2057.1 | 2050.0 |
| 30° | 4059.0 | 3336.6 | 2452.3 | 2006.6 | 1936.3 | 1931.6 | 1936.3 | 1916.3 | 1884.7 | 1882.3 |
| 32.5° | 4318.2 | 3311.9 | 2256.4 | 1868.2 | 1810.8 | 1800.2 | 1796.7 | 1768.5 | 1732.2 | 1721.6 |
| 35° | 4552.7 | 3221.6 | 2057.1 | 1758.0 | 1691.1 | 1667.7 | 1684.1 | 1674.7 | 1641.9 | 1633.7 |
| 37.5° | 4723.9 | 3053.9 | 1877.6 | 1660.7 | 1605.5 | 1599.7 | 1610.2 | 1613.7 | 1575.0 | 1566.8 |
| 40° | 4838.9 | 2826.4 | 1724.0 | 1578.6 | 1589.1 | 1566.8 | 1531.6 | 1507.0 | 1495.3 | 1491.8 |
| 42.5° | 4931.5 | 2589.5 | 1595.0 | 1539.9 | 1592.6 | 1528.1 | 1451.9 | 1412.0 | 1433.1 | 1442.5 |
| 45° | 5038.3 | 2358.5 | 1487.1 | 1491.8 | 1575.0 | 1483.6 | 1396.8 | 1358.1 | 1366.3 | 1368.6 |
| 47.5° | 5184.8 | 2077.0 | 1371.0 | 1414.4 | 1516.4 | 1453.1 | 1362.8 | 1307.6 | 1268.9 | 1251.4 |
| 50° | 5387.7 | 1743.9 | 1250.2 | 1327.6 | 1458.9 | 1430.8 | 1310.0 | 1251.4 | 1179.8 | 1163.4 |
| 52.5° | 5528.5 | 1433.1 | 1150.5 | 1254.9 | 1407.3 | 1386.2 | 1267.8 | 1191.5 | 1116.5 | 1102.4 |
| 55° | 5452.2 | 1190.4 | 1063.7 | 1173.9 | 1339.3 | 1331.1 | 1232.6 | 1130.6 | 1071.9 | 1060.2 |
| 57.5° | 5071.1 | 1036.7 | 996.9 | 1097.7 | 1256.0 | 1284.2 | 1185.7 | 1079.0 | 1036.7 | 1028.5 |
| 60° | 4344.0 | 940.6 | 954.6 | 1046.1 | 1188.0 | 1237.3 | 1138.8 | 1050.8 | 1022.7 | 1016.8 |
| 62.5° | 3370.6 | 876.1 | 923.0 | 1008.6 | 1135.2 | 1204.4 | 1113.0 | 1047.3 | 1036.7 | 1029.7 |
| 65° | 2414.7 | 824.5 | 889.0 | 971.1 | 1087.2 | 1173.9 | 1103.6 | 1042.6 | 1044.9 | 1039.1 |
| 67.5° | 1640.7 | 778.7 | 847.9 | 928.8 | 1040.3 | 1147.0 | 1090.7 | 1026.2 | 1055.5 | 1048.5 |
| 70° | 1148.1 | 734.2 | 799.8 | 874.9 | 981.6 | 1109.4 | 1067.2 | 1001.6 | 999.2 | 971.1 |
| 72.5° | 896.0 | 675.5 | 734.2 | 799.8 | 906.6 | 1056.7 | 1020.3 | 946.4 | 907.7 | 878.4 |
| 73° | 855.0 | 661.4 | 717.7 | 783.4 | 890.1 | 1043.8 | 1007.4 | 931.2 | 887.8 | 860.8 |
| 75° | 707.2 | 600.5 | 652.1 | 710.7 | 819.8 | 982.8 | 944.1 | 862.0 | 806.9 | 790.5 |
| 77.5° | 555.9 | 513.7 | 562.9 | 615.7 | 722.4 | 893.7 | 850.3 | 771.7 | 741.2 | 727.1 |
| 80° | 411.6 | 425.7 | 469.1 | 516.0 | 626.3 | 798.7 | 760.0 | 681.4 | 817.4 | 783.4 |
| 82.5° | 289.7 | 322.5 | 362.4 | 404.6 | 525.4 | 706.0 | 659.1 | 578.2 | 598.1 | 497.3 |
| 85° | 171.2 | 211.1 | 248.6 | 285.0 | 378.8 | 585.2 | 544.2 | 460.9 | 377.6 | 360.0 |
| 87.5° | 99.7 | 117.3 | 127.8 | 165.4 | 260.4 | 441.0 | 383.5 | 341.3 | 195.9 | 132.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)