

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: P318187

Luminaire Tested: **GLEON-SA3A-827-U-T2**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P318187  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA3A-827-U-T2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10263 lumens  
Efficiency: N/A  
Efficacy: 106.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G2

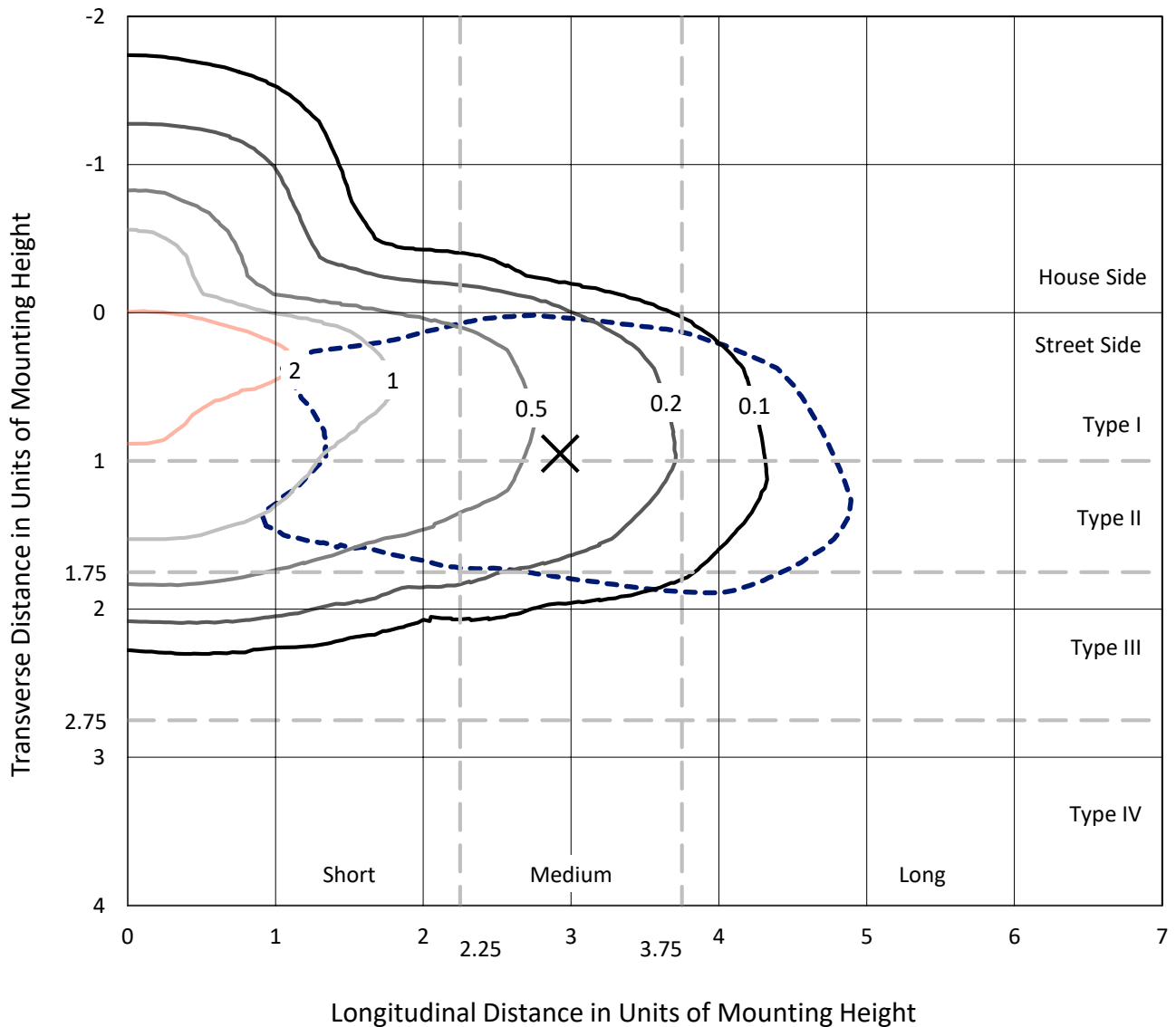
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P318187  
 CATALOG NUMBER: GLEON-SA3A-827-U-T2

### Iso-Footcandle Lines of Horizontal Illumination

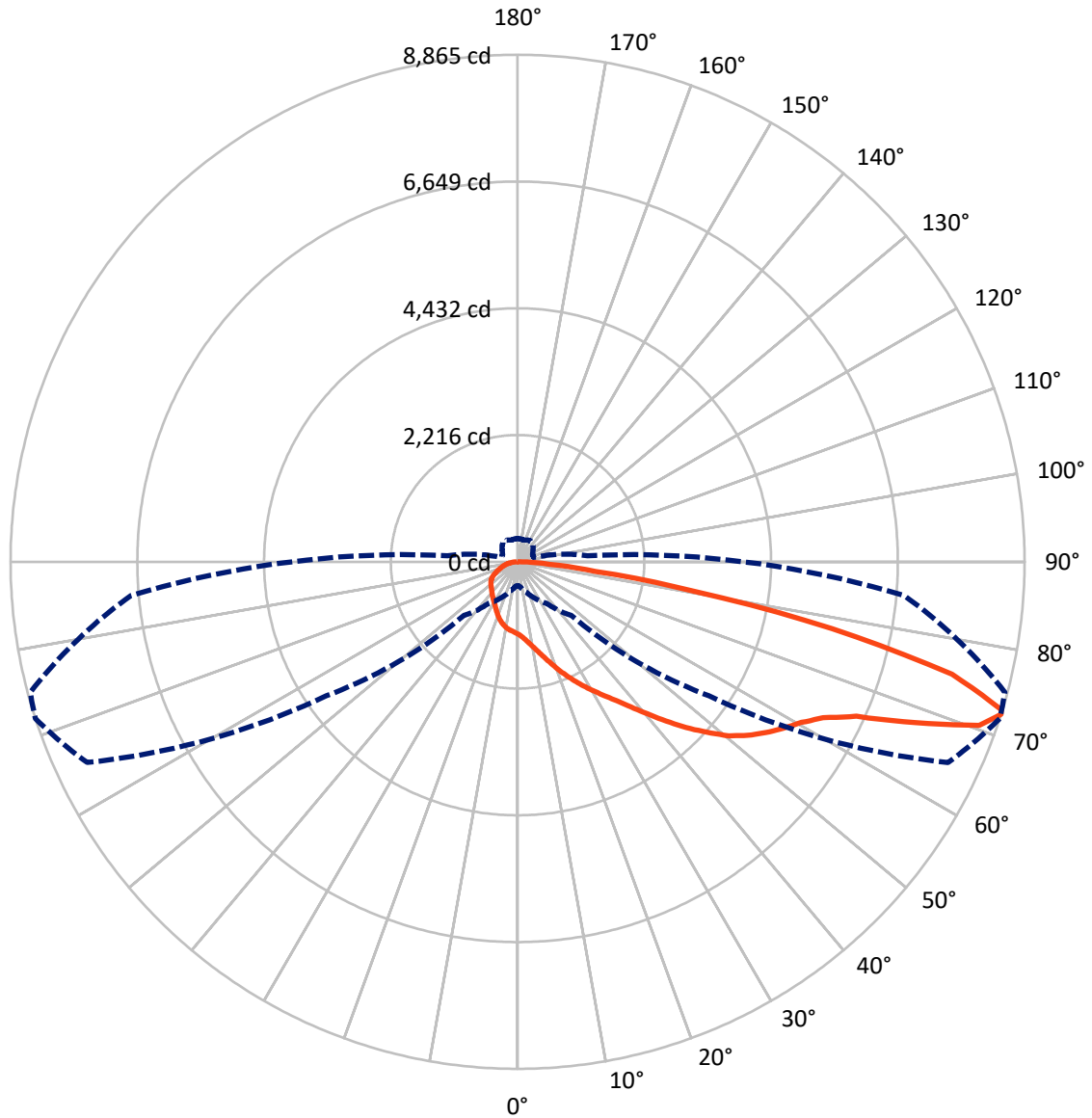
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc  
 Type III - Medium - N/A

REPORT NUMBER: P318187  
CATALOG NUMBER: GLEON-SA3A-827-U-T2

### Luminous Intensity Polar Plot



— Vertical Plane Through 72-Deg Lateral      - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P318187  
 CATALOG NUMBER: GLEON-SA3A-827-U-T2

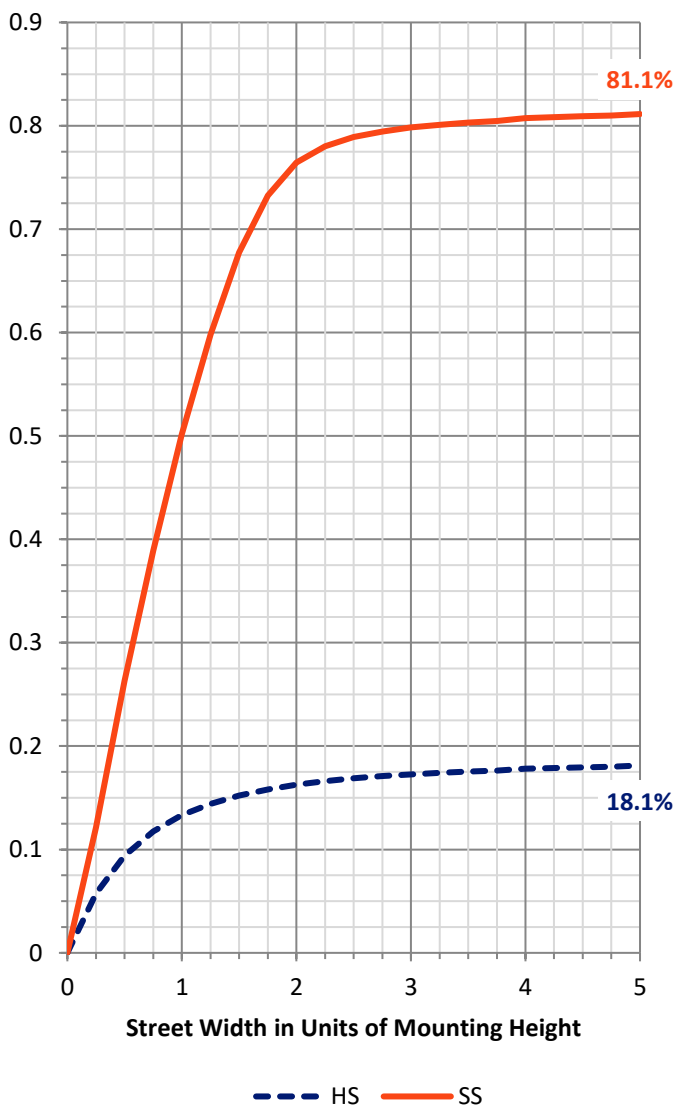
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1903.8   | 0.0    | 1903.8  |
|                    | % Fixture | 18.6     | 0.0    | 18.6    |
| <b>Street Side</b> | Lumens    | 8359.1   | 0.0    | 8359.1  |
|                    | % Fixture | 81.4     | 0.0    | 81.4    |
| <b>Total</b>       | Lumens    | 10263.0  | 0.0    | 10263.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 126.5   | 1.2       |
| 10°-20°   | 408.8   | 4.0       |
| 20°-30°   | 716.4   | 7.0       |
| 30°-40°   | 1062.2  | 10.4      |
| 40°-50°   | 1553.6  | 15.1      |
| 50°-60°   | 2137.7  | 20.8      |
| 60°-70°   | 2379.9  | 23.2      |
| 70°-80°   | 1612.6  | 15.7      |
| 80°-90°   | 265.0   | 2.6       |
| 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°    | 10263.0 | 100.0     |
| 0°-180°   | 10263.0 | 100.0     |

**Coefficient of Utilization**

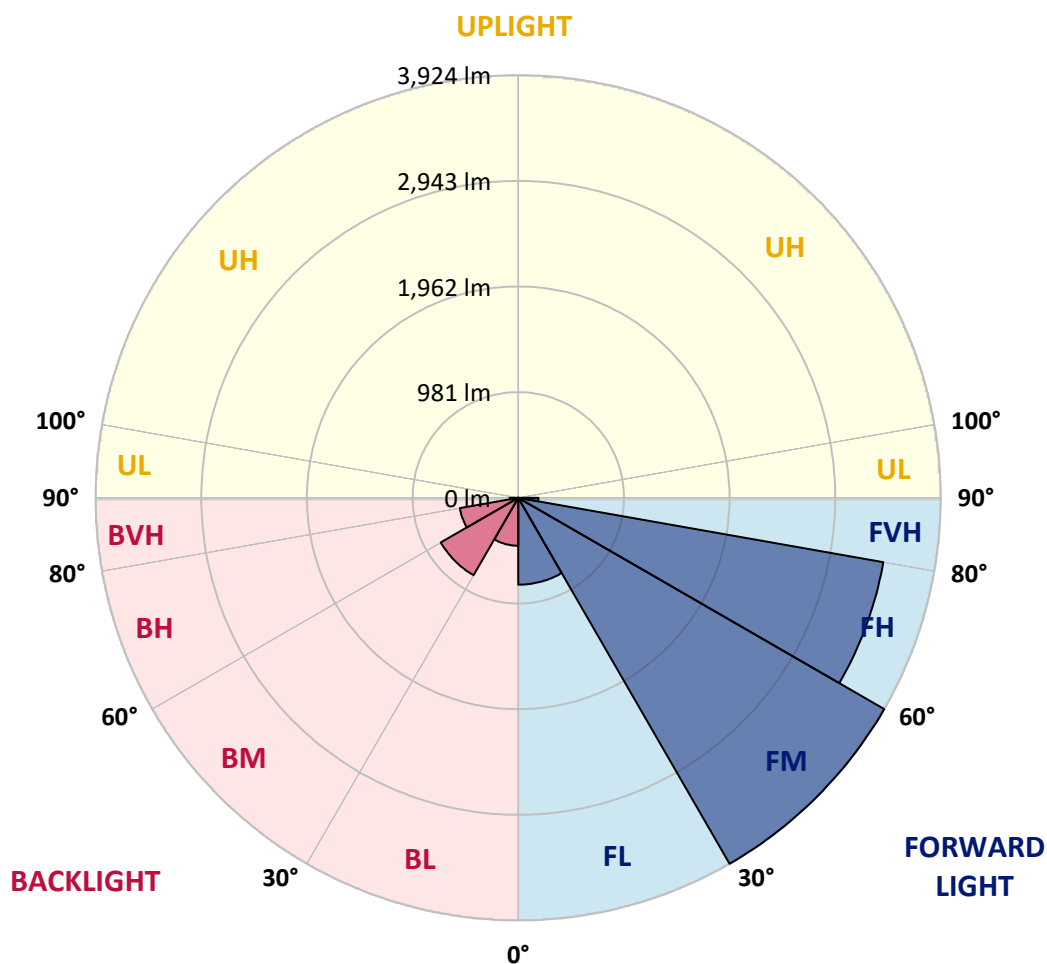


REPORT NUMBER: P318187  
 CATALOG NUMBER: GLEON-SA3A-827-U-T2

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 806.7  | 7.9       |                         |      |         |
| FM (30°-60°)   | 3923.7 | 38.2      |                         |      |         |
| FH (60°-80°)   | 3441.8 | 33.5      |                         |      | G2/5000 |
| FVH (80°-90°)  | 187.0  | 1.8       |                         |      | G2/225  |
| BL (0°-30°)    | 445.1  | 4.3       | B1/500                  |      |         |
| BM (30°-60°)   | 829.9  | 8.1       | B1/1000                 |      |         |
| BH (60°-80°)   | 550.8  | 5.4       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 78.1   | 0.8       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**  
 Type III Medium





REPORT NUMBER: P318187  
 CATALOG NUMBER: GLEON-SA3A-827-U-T2

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 72°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1262.6 | 1262.6 | 1262.6 | 1262.6 | 1262.6 | 1262.6 | 1262.6 | 1262.6 | 1262.6 | 1262.6 | 1262.6 |
| 2.5°  | 1394.8 | 1392.7 | 1385.2 | 1385.2 | 1371.1 | 1359.1 | 1336.5 | 1321.3 | 1303.3 | 1296.9 | 1275.7 |
| 5°    | 1529.8 | 1530.5 | 1521.3 | 1514.9 | 1494.1 | 1468.6 | 1430.1 | 1395.1 | 1360.1 | 1346.0 | 1302.5 |
| 7.5°  | 1643.2 | 1641.8 | 1639.3 | 1634.0 | 1614.6 | 1588.4 | 1536.5 | 1484.5 | 1432.9 | 1411.7 | 1336.8 |
| 10°   | 1716.0 | 1719.2 | 1721.3 | 1723.8 | 1715.6 | 1696.9 | 1647.8 | 1584.5 | 1517.0 | 1488.1 | 1377.8 |
| 12.5° | 1752.8 | 1758.4 | 1768.3 | 1785.3 | 1798.7 | 1796.6 | 1760.9 | 1693.7 | 1613.5 | 1577.1 | 1429.1 |
| 15°   | 1774.3 | 1781.7 | 1797.3 | 1827.7 | 1865.5 | 1887.0 | 1877.5 | 1816.7 | 1727.3 | 1682.4 | 1491.6 |
| 17.5° | 1787.7 | 1793.7 | 1817.8 | 1858.4 | 1914.6 | 1971.8 | 1996.9 | 1946.0 | 1855.9 | 1804.7 | 1563.3 |
| 20°   | 1796.9 | 1801.5 | 1831.6 | 1879.3 | 1952.1 | 2043.2 | 2113.2 | 2100.5 | 1997.6 | 1931.2 | 1638.3 |
| 22.5° | 1817.4 | 1821.3 | 1849.9 | 1898.0 | 1978.6 | 2096.2 | 2225.2 | 2244.3 | 2147.1 | 2071.9 | 1718.5 |
| 25°   | 1874.7 | 1874.7 | 1898.7 | 1932.3 | 2007.9 | 2142.2 | 2319.9 | 2404.4 | 2299.8 | 2212.1 | 1792.7 |
| 27.5° | 1983.9 | 1982.8 | 1991.6 | 2003.3 | 2060.5 | 2188.8 | 2404.4 | 2545.7 | 2458.1 | 2362.3 | 1864.8 |
| 30°   | 2113.2 | 2120.3 | 2121.3 | 2115.7 | 2142.5 | 2247.1 | 2482.5 | 2694.9 | 2617.5 | 2514.3 | 1938.6 |
| 32.5° | 2279.6 | 2284.2 | 2278.9 | 2260.2 | 2256.3 | 2329.8 | 2559.2 | 2851.0 | 2789.9 | 2672.9 | 2006.1 |
| 35°   | 2491.0 | 2482.1 | 2465.5 | 2427.3 | 2391.0 | 2440.4 | 2646.8 | 3007.2 | 2983.6 | 2864.8 | 2099.1 |
| 37.5° | 2717.5 | 2717.8 | 2697.3 | 2610.8 | 2560.6 | 2581.8 | 2767.7 | 3184.3 | 3217.9 | 3093.1 | 2218.1 |
| 40°   | 2899.1 | 2908.6 | 2921.4 | 2807.6 | 2742.6 | 2771.9 | 2921.4 | 3389.6 | 3494.9 | 3363.8 | 2373.3 |
| 42.5° | 3026.0 | 3036.9 | 3073.0 | 3001.6 | 2934.1 | 2988.5 | 3102.3 | 3608.7 | 3805.9 | 3676.2 | 2554.9 |
| 45°   | 3160.3 | 3166.3 | 3191.7 | 3161.0 | 3117.8 | 3240.5 | 3306.2 | 3835.6 | 4134.9 | 4009.1 | 2758.1 |
| 47.5° | 3301.6 | 3308.0 | 3334.1 | 3313.6 | 3291.0 | 3475.8 | 3518.9 | 4049.3 | 4450.1 | 4374.8 | 2975.1 |
| 50°   | 3476.2 | 3480.4 | 3505.1 | 3468.0 | 3475.1 | 3653.2 | 3709.0 | 4245.5 | 4780.5 | 4703.5 | 3192.8 |
| 52.5° | 3714.3 | 3715.4 | 3749.7 | 3716.1 | 3682.9 | 3783.3 | 3872.7 | 4430.3 | 5039.5 | 5003.1 | 3410.4 |
| 55°   | 3900.9 | 3912.2 | 4024.6 | 4017.5 | 3998.5 | 3901.3 | 4009.4 | 4606.3 | 5270.6 | 5287.9 | 3641.6 |
| 57.5° | 3781.8 | 3826.0 | 4053.6 | 4214.0 | 4370.2 | 4194.9 | 4194.2 | 4804.5 | 5485.5 | 5567.5 | 3895.6 |
| 60°   | 3312.2 | 3372.3 | 3707.6 | 4063.5 | 4552.2 | 4705.9 | 4578.0 | 5046.6 | 5702.4 | 5844.5 | 4214.0 |
| 62.5° | 2365.5 | 2464.5 | 2918.9 | 3487.1 | 4302.7 | 5044.5 | 5359.0 | 5430.7 | 5997.5 | 6165.4 | 4627.8 |
| 65°   | 1195.8 | 1270.7 | 1651.7 | 2336.2 | 3437.7 | 4823.2 | 6207.8 | 6271.7 | 6510.3 | 6659.4 | 5265.0 |
| 67.5° | 726.5  | 754.8  | 940.7  | 1299.4 | 2107.5 | 3757.1 | 6484.8 | 7673.6 | 7502.6 | 7581.7 | 6173.5 |
| 70°   | 535.4  | 556.2  | 672.1  | 862.9  | 1212.1 | 2204.7 | 5634.6 | 8674.0 | 8561.6 | 8552.8 | 6844.9 |
| 72°   | 417.0  | 432.2  | 534.7  | 697.2  | 886.3  | 1322.7 | 4084.0 | 8304.7 | 8864.8 | 8820.3 | 6783.4 |
| 72.5° | 395.4  | 408.9  | 502.1  | 656.2  | 837.5  | 1199.0 | 3671.9 | 8055.6 | 8842.9 | 8822.8 | 6703.9 |
| 75°   | 311.3  | 320.9  | 371.8  | 507.4  | 655.5  | 680.3  | 2012.1 | 6242.8 | 7844.6 | 8170.8 | 6029.7 |
| 77.5° | 257.6  | 259.0  | 285.9  | 369.3  | 511.0  | 480.9  | 988.4  | 4331.3 | 5617.3 | 5976.0 | 4271.3 |
| 80°   | 209.9  | 211.7  | 224.4  | 259.0  | 386.6  | 355.9  | 469.3  | 2490.6 | 3145.1 | 3148.9 | 2031.2 |
| 82.5° | 167.1  | 167.5  | 181.6  | 189.4  | 277.8  | 254.4  | 268.9  | 1169.3 | 1374.3 | 1322.0 | 730.1  |
| 85°   | 117.7  | 115.2  | 177.4  | 155.5  | 181.6  | 163.3  | 148.4  | 462.9  | 568.2  | 543.5  | 228.6  |
| 87.5° | 39.2   | 40.6   | 78.8   | 100.7  | 106.0  | 92.6   | 66.1   | 177.4  | 214.5  | 212.7  | 72.4   |
| 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: P318187  
 CATALOG NUMBER: GLEON-SA3A-827-U-T2

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1262.6 | 1262.6 | 1262.6 | 1262.6 | 1262.6 | 1262.6 | 1262.6 | 1262.6 | 1262.6 | 1262.6 | 1262.6 |
| 2.5°  | 1269.0 | 1257.7 | 1241.1 | 1222.7 | 1208.2 | 1193.4 | 1182.4 | 1176.7 | 1170.4 | 1165.1 | 1171.4 |
| 5°    | 1282.4 | 1261.2 | 1225.9 | 1191.2 | 1165.8 | 1143.2 | 1126.9 | 1118.4 | 1110.7 | 1105.4 | 1106.1 |
| 7.5°  | 1304.3 | 1270.0 | 1210.7 | 1160.1 | 1124.8 | 1100.4 | 1083.8 | 1078.2 | 1073.2 | 1071.8 | 1073.6 |
| 10°   | 1327.6 | 1277.1 | 1190.5 | 1123.4 | 1083.1 | 1063.0 | 1055.5 | 1059.4 | 1063.0 | 1066.1 | 1069.7 |
| 12.5° | 1354.1 | 1283.5 | 1161.2 | 1080.3 | 1046.0 | 1038.2 | 1045.6 | 1062.6 | 1075.0 | 1082.4 | 1087.0 |
| 15°   | 1388.8 | 1289.1 | 1127.3 | 1037.2 | 1014.2 | 1023.0 | 1048.1 | 1077.4 | 1099.0 | 1112.8 | 1114.9 |
| 17.5° | 1420.6 | 1288.8 | 1083.8 | 993.7  | 988.4  | 1014.2 | 1052.0 | 1093.3 | 1122.3 | 1141.8 | 1145.6 |
| 20°   | 1453.4 | 1279.2 | 1033.3 | 951.3  | 962.2  | 1004.7 | 1053.8 | 1103.6 | 1138.6 | 1161.2 | 1166.5 |
| 22.5° | 1484.2 | 1262.6 | 977.8  | 912.8  | 940.3  | 991.9  | 1047.1 | 1097.6 | 1132.6 | 1150.9 | 1156.6 |
| 25°   | 1505.0 | 1233.6 | 921.6  | 880.3  | 920.9  | 976.4  | 1025.1 | 1065.8 | 1091.9 | 1101.1 | 1102.5 |
| 27.5° | 1515.6 | 1195.8 | 868.6  | 852.0  | 900.8  | 950.9  | 984.5  | 1004.7 | 1012.1 | 1011.4 | 1010.0 |
| 30°   | 1517.0 | 1146.0 | 823.0  | 829.0  | 877.4  | 913.5  | 929.4  | 925.5  | 916.0  | 899.7  | 901.1  |
| 32.5° | 1512.5 | 1089.8 | 784.9  | 807.1  | 847.8  | 867.9  | 868.6  | 849.9  | 824.4  | 798.6  | 791.6  |
| 35°   | 1513.9 | 1034.7 | 751.3  | 782.4  | 811.7  | 820.5  | 812.4  | 784.9  | 750.2  | 717.0  | 709.9  |
| 37.5° | 1529.4 | 986.6  | 722.3  | 753.8  | 771.8  | 773.9  | 762.2  | 733.3  | 707.8  | 675.3  | 672.5  |
| 40°   | 1566.5 | 952.4  | 694.7  | 721.6  | 731.8  | 732.9  | 716.3  | 695.8  | 697.9  | 680.6  | 680.3  |
| 42.5° | 1633.3 | 937.5  | 670.4  | 688.0  | 694.4  | 696.5  | 683.8  | 670.7  | 689.1  | 677.8  | 673.9  |
| 45°   | 1719.5 | 941.0  | 649.9  | 655.2  | 666.8  | 676.7  | 668.9  | 653.0  | 660.1  | 611.0  | 594.7  |
| 47.5° | 1819.2 | 963.7  | 633.6  | 626.9  | 647.0  | 665.8  | 653.7  | 629.7  | 604.6  | 555.9  | 546.7  |
| 50°   | 1935.8 | 998.6  | 618.8  | 599.0  | 625.5  | 650.9  | 638.9  | 604.6  | 566.8  | 543.1  | 540.0  |
| 52.5° | 2057.4 | 1041.4 | 603.9  | 568.2  | 598.3  | 639.6  | 633.6  | 599.0  | 552.3  | 529.0  | 524.8  |
| 55°   | 2195.2 | 1084.5 | 585.2  | 532.5  | 568.9  | 634.3  | 631.1  | 578.5  | 541.4  | 528.3  | 525.1  |
| 57.5° | 2366.6 | 1133.6 | 560.5  | 495.4  | 541.4  | 615.2  | 605.3  | 566.1  | 530.1  | 520.2  | 519.1  |
| 60°   | 2589.9 | 1206.1 | 524.8  | 455.9  | 507.8  | 585.9  | 583.8  | 548.1  | 512.0  | 505.0  | 503.6  |
| 62.5° | 2924.9 | 1325.9 | 475.6  | 416.3  | 470.3  | 536.1  | 555.5  | 523.7  | 493.0  | 492.6  | 493.3  |
| 65°   | 3444.4 | 1506.1 | 422.3  | 381.6  | 432.5  | 494.0  | 522.6  | 498.6  | 473.5  | 480.6  | 481.7  |
| 67.5° | 4046.5 | 1655.6 | 370.0  | 347.7  | 394.0  | 454.1  | 493.0  | 473.5  | 447.7  | 466.1  | 466.5  |
| 70°   | 4246.9 | 1522.0 | 324.0  | 314.2  | 354.1  | 415.6  | 460.8  | 446.0  | 419.8  | 438.2  | 436.4  |
| 72°   | 3952.2 | 1228.7 | 294.4  | 288.7  | 324.0  | 383.8  | 432.2  | 420.2  | 394.4  | 406.7  | 402.1  |
| 72.5° | 3859.2 | 1171.4 | 286.9  | 282.3  | 315.9  | 375.6  | 424.8  | 413.8  | 388.0  | 398.6  | 394.4  |
| 75°   | 3442.6 | 1017.4 | 246.7  | 247.7  | 275.6  | 336.1  | 383.1  | 379.5  | 353.0  | 354.1  | 352.7  |
| 77.5° | 2497.0 | 746.0  | 207.8  | 214.9  | 234.6  | 295.4  | 341.0  | 338.9  | 309.9  | 304.6  | 303.6  |
| 80°   | 1158.7 | 380.6  | 169.3  | 172.4  | 192.9  | 247.0  | 290.8  | 288.0  | 264.7  | 258.0  | 254.1  |
| 82.5° | 396.8  | 180.9  | 127.2  | 129.3  | 149.5  | 199.0  | 252.3  | 250.5  | 231.1  | 218.0  | 209.9  |
| 85°   | 141.7  | 90.1   | 89.1   | 86.9   | 106.7  | 156.5  | 219.8  | 210.3  | 181.6  | 154.8  | 154.1  |
| 87.5° | 45.9   | 38.5   | 45.9   | 45.6   | 62.2   | 106.0  | 159.7  | 136.1  | 131.8  | 109.5  | 107.4  |
| 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)