

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: P324586

Luminaire Tested: **GLEON-SA2A-827-U-SLR-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P324586  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA2A-827-U-SLR-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5196 lumens  
Efficiency: N/A  
Efficacy: 78.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G1

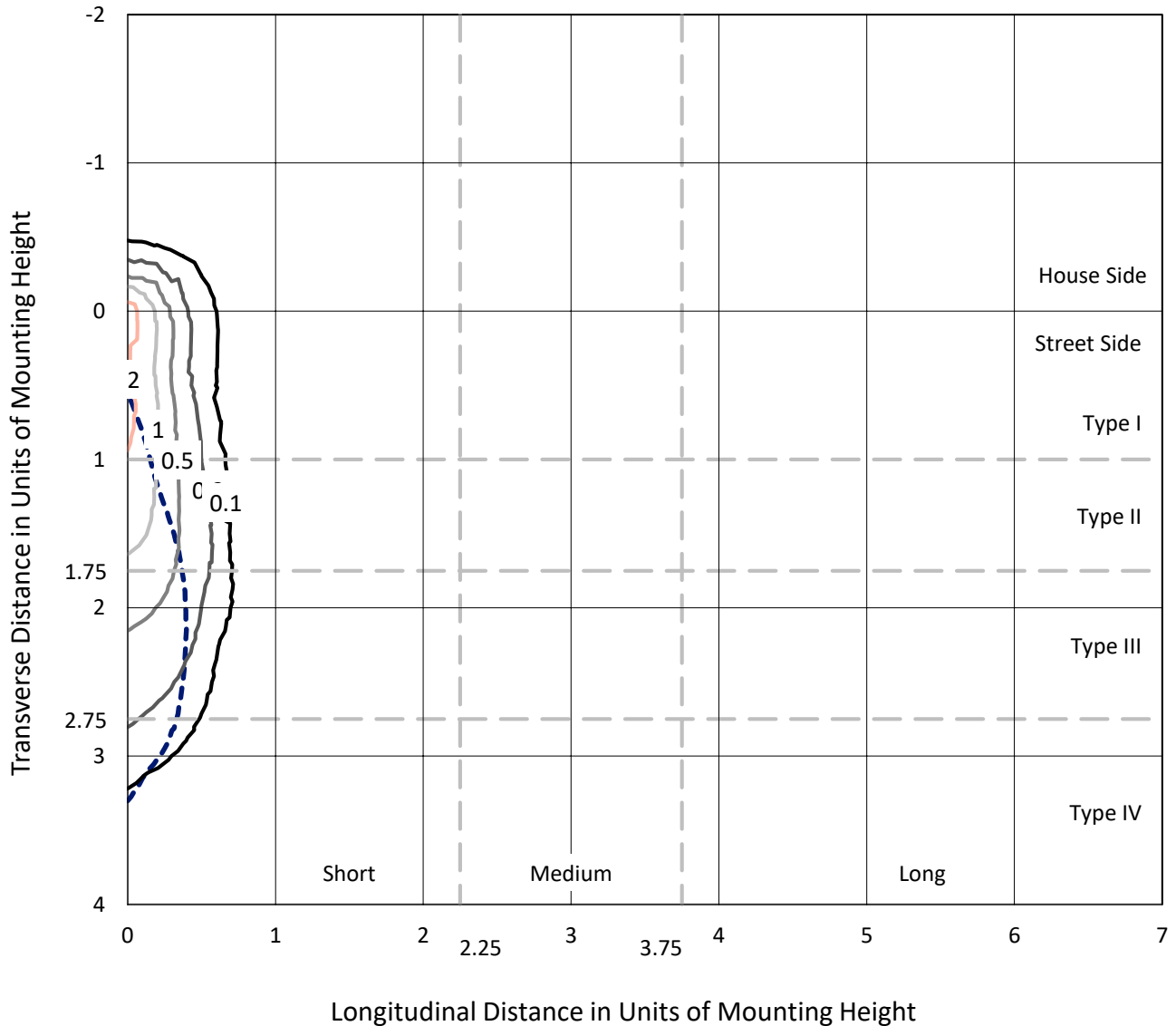
Input Watts (W): 66  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P324586  
 CATALOG NUMBER: GLEON-SA2A-827-U-SLR-HSS

### Iso-Footcandle Lines of Horizontal Illumination

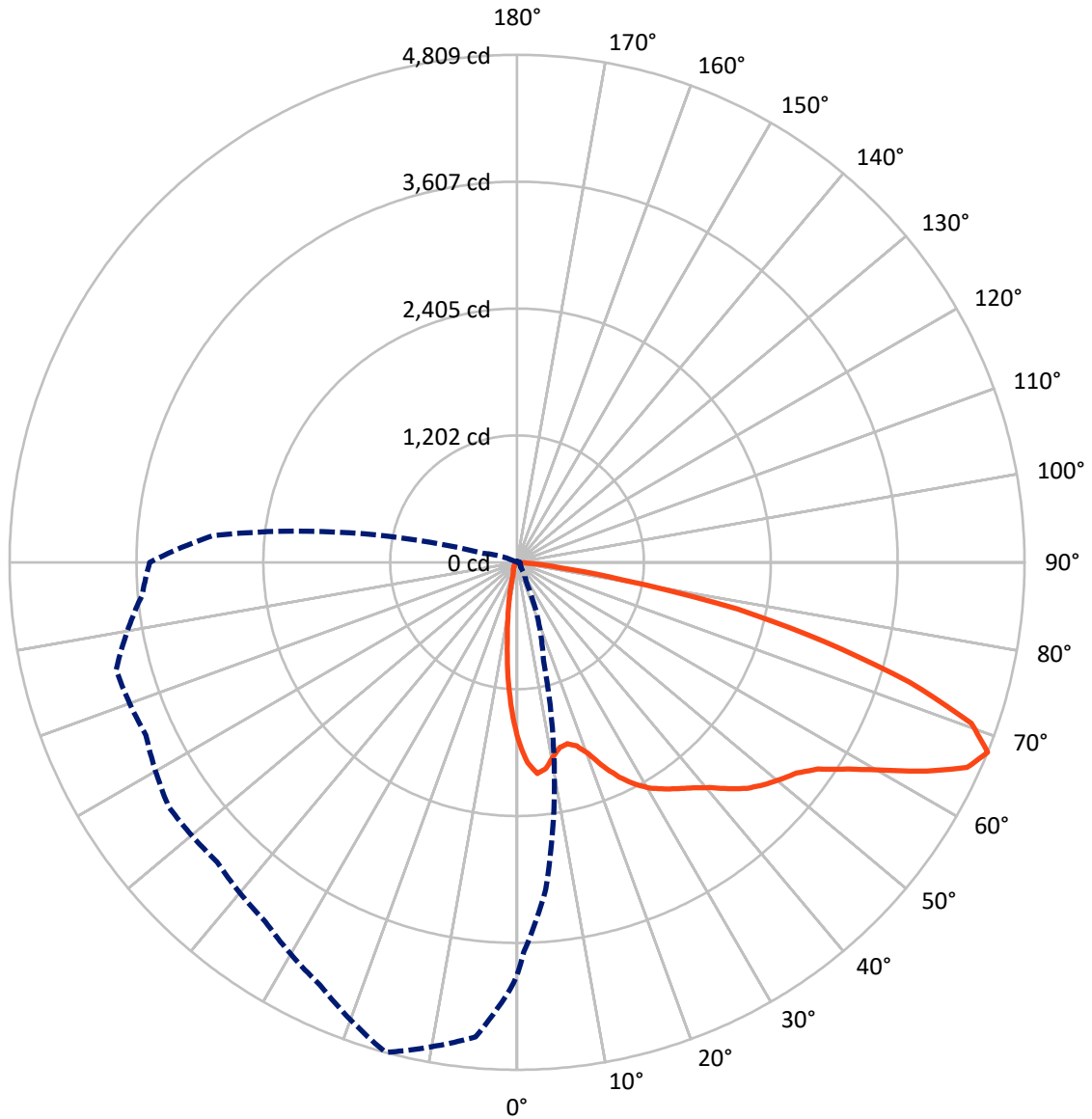
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P324586  
CATALOG NUMBER: GLEON-SA2A-827-U-SLR-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 345-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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 CATALOG NUMBER: GLEON-SA2A-827-U-SLR-HSS

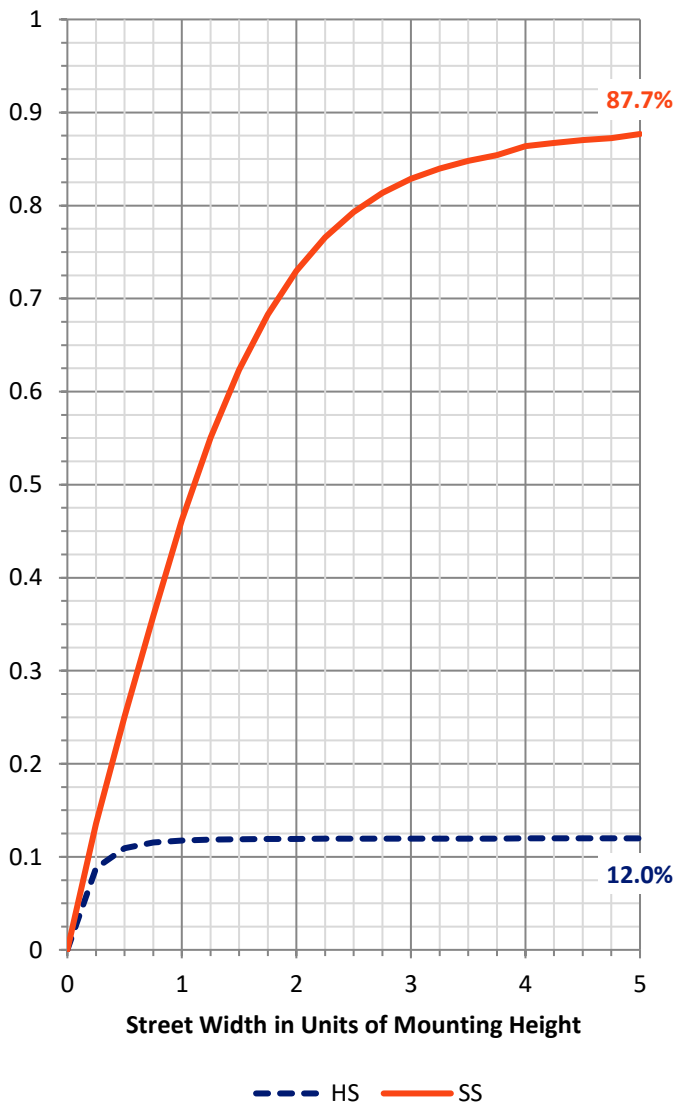
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	628.9	0.0	628.9
	% Fixture	12.1	0.0	12.1
<b>Street Side</b>	Lumens	4567.1	0.0	4567.1
	% Fixture	87.9	0.0	87.9
<b>Total</b>	Lumens	5196.0	0.0	5196.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.9	2.5
10°-20°	258.6	5.0
20°-30°	367.2	7.1
30°-40°	542.3	10.4
40°-50°	782.2	15.1
50°-60°	1098.0	21.1
60°-70°	1279.9	24.6
70°-80°	654.3	12.6
80°-90°	83.6	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°	5196.0	100.0
0°-180°	5196.0	100.0

**Coefficient of Utilization**

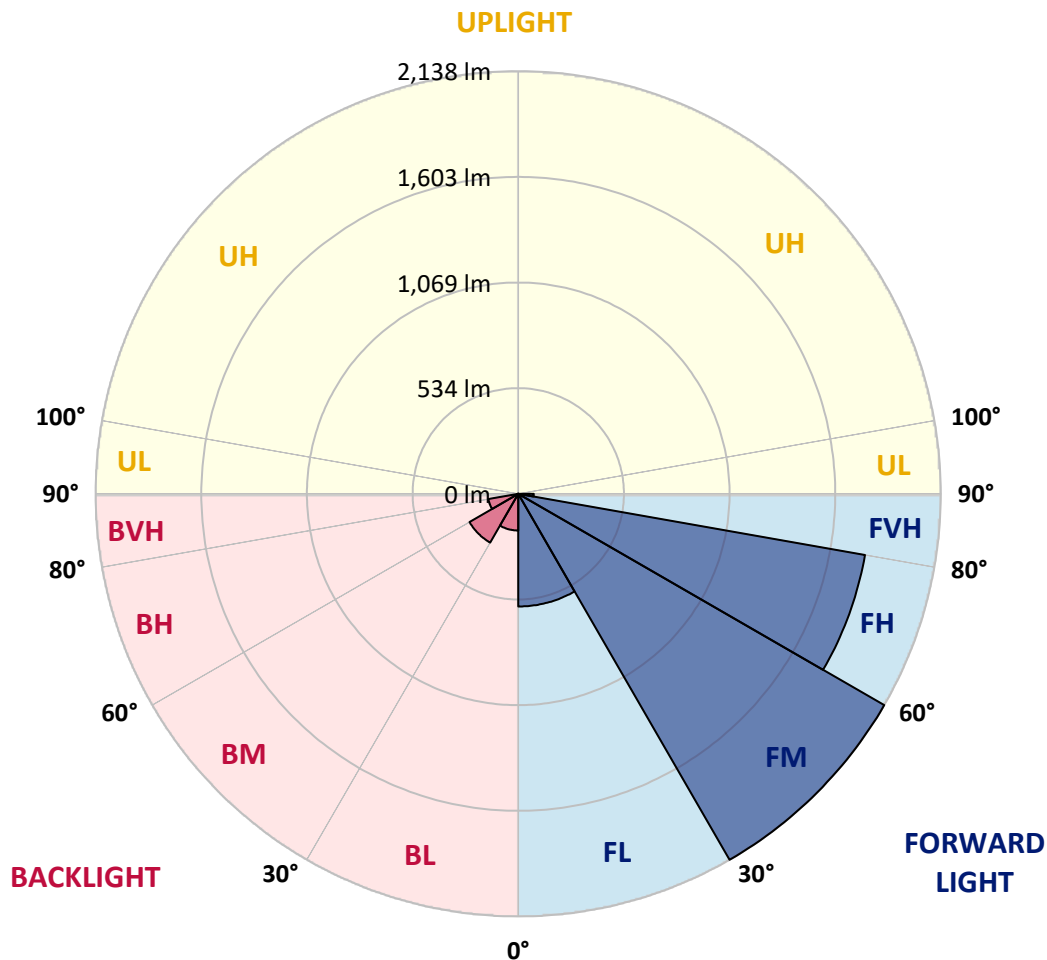


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 CATALOG NUMBER: GLEON-SA2A-827-U-SLR-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	569.9	11.0			
FM (30°-60°)	2137.7	41.1			
FH (60°-80°)	1781.0	34.3			G1/1800
FVH (80°-90°)	78.5	1.5			G1/100
BL (0°-30°)	185.8	3.6	B1/500		
BM (30°-60°)	284.8	5.5	B1/1000		
BH (60°-80°)	153.3	2.9	B1/500		G1/500
BVH (80°-90°)	5.1	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-G1**  
 Type IV Medium





REPORT NUMBER: P324586

CATALOG NUMBER: GLEON-SA2A-827-U-SLR-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6
2.5°	1853.3	1839.1	1823.3	1771.9	1724.1	1669.4	1624.9	1593.9	1555.0	1504.5	1491.7
5°	1840.0	1824.8	1775.3	1660.8	1560.6	1463.2	1369.1	1314.0	1245.6	1176.1	1158.9
7.5°	1706.4	1690.4	1619.0	1462.2	1327.3	1186.5	1064.4	988.8	911.5	848.0	814.3
10°	1567.3	1549.8	1469.6	1279.3	1113.1	985.9	896.3	824.1	751.0	683.1	628.9
12.5°	1471.5	1448.6	1361.5	1145.9	1001.1	914.7	831.0	744.6	645.7	572.8	513.2
15°	1431.4	1405.3	1313.3	1094.4	961.5	860.1	751.0	644.9	529.0	445.5	390.9
17.5°	1462.4	1428.5	1329.7	1091.0	911.8	773.7	635.8	511.3	385.5	301.1	262.2
20°	1567.8	1523.2	1397.9	1090.0	851.5	671.0	496.3	355.5	254.0	204.3	183.9
22.5°	1733.7	1674.9	1495.9	1097.9	789.2	563.2	358.4	241.5	190.8	164.9	152.9
25°	1934.1	1865.9	1637.0	1125.7	734.5	458.3	260.4	190.8	161.0	142.0	131.9
27.5°	2124.6	2069.2	1815.2	1165.8	692.2	373.7	211.5	161.7	137.6	125.0	116.9
30°	2314.9	2245.2	1998.1	1213.6	641.2	316.3	185.8	147.4	123.3	110.0	104.9
32.5°	2453.2	2395.4	2141.3	1248.0	586.8	278.9	166.2	134.9	115.2	101.7	94.0
35°	2615.9	2550.5	2264.2	1255.7	551.9	255.3	149.4	121.4	99.9	87.9	79.8
37.5°	2791.7	2710.2	2406.0	1238.9	524.6	243.7	136.9	115.2	93.3	81.0	72.4
40°	2986.2	2894.1	2542.1	1214.8	497.7	239.8	127.3	110.5	88.1	75.6	66.7
42.5°	3191.0	3082.4	2660.0	1189.4	480.7	226.2	126.3	105.8	84.2	70.6	61.8
45°	3363.0	3253.0	2781.1	1181.1	468.7	211.5	130.5	102.6	81.5	66.7	58.1
47.5°	3500.1	3396.0	2905.2	1199.8	461.8	197.9	118.9	106.8	80.0	63.3	54.9
50°	3663.8	3545.9	3079.9	1255.7	451.7	184.4	107.6	122.3	80.0	61.0	52.2
52.5°	3869.1	3752.4	3274.9	1342.3	431.5	165.7	96.7	122.6	80.7	58.1	48.7
55°	4127.3	4042.7	3553.3	1437.3	399.3	138.1	83.7	105.4	77.8	52.7	45.5
57.5°	4375.0	4305.8	3807.1	1502.3	356.2	107.8	72.9	84.9	71.1	46.3	40.6
59°	4442.7	4367.1	3900.1	1505.3	323.9	94.0	67.4	70.2	69.7	43.3	37.7
60°	4442.7	4362.4	3927.0	1489.5	300.6	86.4	64.0	62.5	72.6	41.4	35.9
62.5°	4362.2	4249.4	3839.8	1382.9	245.2	73.6	55.9	51.7	65.2	37.2	31.8
65°	4194.8	4030.6	3543.0	1190.2	218.6	67.4	48.2	42.3	45.3	32.7	27.8
67.5°	3915.6	3693.1	3114.9	961.5	208.0	65.7	41.6	35.9	34.2	28.1	24.4
70°	3424.1	3177.2	2595.3	756.0	198.9	65.0	35.0	30.3	27.6	23.6	20.7
72.5°	2492.1	2234.6	1842.5	591.0	193.5	66.5	28.1	25.4	22.6	18.5	16.0
75°	1425.5	1256.9	1035.6	390.4	164.9	63.5	21.7	21.2	16.2	13.3	11.1
77.5°	736.5	714.1	620.6	149.9	79.0	27.8	14.3	12.3	9.6	8.1	6.6
80°	317.8	314.3	272.0	43.3	20.9	15.5	8.1	5.2	4.4	3.4	2.7
82.5°	109.8	109.8	96.7	14.5	9.4	7.6	1.0	0.0	0.0	0.0	0.0
85°	22.2	24.9	17.5	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P324586

CATALOG NUMBER: GLEON-SA2A-827-U-SLR-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6
2.5°	1476.2	1446.4	1444.5	1425.8	1402.4	1391.8	1385.6	1396.5	1409.8	1411.2	1431.2
5°	1145.9	1114.6	1127.7	1094.4	1101.1	1094.4	1083.6	1085.6	1091.5	1073.0	1095.9
7.5°	804.7	781.1	796.1	787.2	799.0	803.7	797.1	787.2	758.2	754.7	774.7
10°	606.5	579.7	563.7	547.0	550.7	558.3	555.8	548.7	530.2	531.2	550.4
12.5°	487.4	457.4	425.6	384.5	374.4	380.1	374.4	370.2	352.5	354.0	371.0
15°	369.7	345.1	311.9	278.9	260.9	262.7	246.9	235.8	224.7	211.5	221.8
17.5°	249.6	234.6	224.7	214.9	193.5	188.6	168.6	147.2	138.8	132.7	137.1
20°	176.7	168.6	164.7	164.2	151.9	145.7	126.3	113.0	108.8	107.6	110.3
22.5°	147.7	141.8	136.1	132.9	126.8	119.6	104.9	98.2	95.3	93.8	95.8
25°	128.5	124.1	118.2	112.7	110.3	102.6	92.1	87.1	85.2	83.7	84.7
27.5°	114.2	110.3	103.4	99.9	98.0	91.3	82.2	78.3	76.6	76.1	75.8
30°	102.9	99.2	92.8	88.9	85.4	79.5	74.1	70.2	68.4	67.9	67.4
32.5°	91.6	88.6	84.4	80.5	76.8	71.4	66.7	63.5	60.8	60.3	60.1
35°	77.3	74.3	72.1	71.9	68.4	63.3	59.8	55.6	53.4	52.7	52.9
37.5°	68.7	64.7	59.8	61.5	60.6	56.9	52.2	48.0	45.8	45.3	45.3
40°	63.3	59.1	53.4	50.5	53.4	52.7	45.3	41.1	38.9	38.6	38.2
42.5°	58.1	53.9	47.5	42.6	44.1	46.3	39.1	35.2	33.0	32.5	31.8
45°	54.4	50.0	42.8	37.2	34.2	38.9	33.5	28.6	27.3	26.3	25.8
47.5°	51.0	46.8	38.6	32.2	27.3	28.1	26.8	23.4	21.9	20.9	20.7
50°	48.0	43.6	35.0	27.6	22.6	20.7	21.7	18.5	17.2	16.2	15.8
52.5°	44.6	40.4	31.0	23.9	19.0	16.2	16.5	14.5	13.3	12.6	12.3
55°	41.8	37.7	27.8	20.9	16.7	13.3	11.8	11.3	10.6	10.1	9.8
57.5°	38.2	34.2	24.6	17.7	14.3	10.8	9.1	9.1	8.9	8.4	8.1
59°	35.9	32.5	22.6	16.0	13.0	9.4	8.1	8.4	8.1	7.6	7.4
60°	34.2	31.0	21.2	14.8	12.3	8.6	7.4	7.9	7.6	7.1	6.9
62.5°	30.3	28.1	18.2	12.3	10.8	6.9	6.2	6.6	6.6	6.4	6.2
65°	26.6	24.1	15.5	10.3	10.1	5.9	4.9	5.9	6.2	5.7	5.2
67.5°	23.1	20.7	13.5	8.4	9.4	4.7	3.7	4.9	6.6	5.2	4.7
70°	19.7	17.2	10.6	6.6	9.8	3.2	3.0	4.4	7.9	5.7	4.4
72.5°	15.3	13.3	7.4	4.9	10.6	2.2	2.2	3.7	8.9	6.2	4.2
75°	10.6	8.6	4.4	3.0	8.6	1.5	1.5	3.4	8.4	5.7	3.9
77.5°	6.2	4.7	1.5	0.2	4.4	0.0	0.2	2.5	5.9	3.4	1.7
80°	2.2	1.0	0.0	0.0	2.7	0.0	0.0	0.0	0.5	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P324586

CATALOG NUMBER: GLEON-SA2A-827-U-SLR-HSS

**CANDELA DISTRIBUTION (continued):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6
2.5°	1436.3	1469.6	1499.4	1544.4	1597.8	1659.4	1712.3	1769.1	1822.6	1844.7	1860.0
5°	1100.6	1141.7	1189.7	1255.9	1344.0	1452.6	1554.2	1669.2	1792.8	1854.6	1912.7
7.5°	778.1	820.0	879.5	949.9	1056.5	1185.7	1318.7	1477.4	1644.8	1742.6	1838.8
10°	559.5	611.0	666.6	762.8	871.2	993.7	1130.6	1307.8	1494.4	1602.7	1718.7
12.5°	380.8	439.4	523.6	631.4	758.7	878.8	997.7	1166.8	1383.4	1490.7	1615.0
15°	228.4	260.9	350.0	474.8	630.9	780.6	910.8	1080.4	1311.3	1442.7	1572.0
17.5°	140.8	155.8	204.3	306.7	470.7	660.0	838.4	1051.1	1321.6	1481.6	1620.0
20°	112.2	118.2	133.7	181.2	311.9	527.0	756.9	1045.2	1406.1	1603.0	1751.4
22.5°	97.5	103.1	113.5	131.7	196.2	394.6	679.6	1050.6	1527.2	1784.9	1958.2
25°	85.9	90.8	100.7	115.7	143.8	277.9	596.9	1074.7	1685.0	2010.6	2194.8
27.5°	76.8	81.0	90.1	103.9	123.3	194.0	503.1	1104.0	1872.0	2241.5	2423.2
30°	68.4	72.1	80.2	93.0	107.1	149.2	400.3	1124.0	2059.4	2423.2	2586.4
32.5°	61.3	64.0	71.4	82.2	93.0	118.9	304.3	1120.8	2198.4	2574.3	2703.8
35°	53.9	56.6	63.0	72.4	81.0	98.2	239.3	1060.9	2319.6	2731.1	2838.2
37.5°	45.8	49.2	55.4	63.8	69.7	86.4	193.5	988.8	2442.4	2910.3	2988.1
40°	38.9	42.3	47.8	56.9	60.6	82.0	148.7	900.9	2580.5	3110.7	3152.6
42.5°	32.2	35.4	41.1	49.0	57.1	70.6	110.0	800.5	2713.2	3282.0	3302.5
45°	26.1	29.3	35.2	43.1	61.0	58.6	85.2	692.9	2820.2	3424.6	3431.2
47.5°	20.7	23.6	29.8	40.6	56.9	46.8	60.8	608.5	2910.1	3535.8	3518.3
50°	16.0	18.5	24.9	46.5	49.7	38.6	46.0	580.4	2990.6	3604.7	3559.5
52.5°	12.6	14.8	20.4	43.6	38.6	32.0	38.6	606.8	3100.9	3661.9	3582.6
55°	10.1	12.3	16.0	24.9	26.3	27.1	33.0	631.4	3291.1	3795.8	3719.2
57.5°	8.4	10.6	13.0	17.5	19.9	22.9	29.3	634.1	3515.4	4018.3	3945.9
59°	7.6	9.6	11.8	15.5	17.5	20.9	27.6	619.3	3594.4	4099.3	4063.1
60°	7.1	9.1	11.1	14.3	16.2	19.7	26.6	605.3	3597.9	4096.3	4113.1
62.5°	6.2	8.1	9.8	12.1	13.8	16.7	23.9	553.4	3452.1	3962.2	4083.0
65°	5.4	7.1	8.9	10.3	11.8	15.0	21.7	458.6	3203.3	3745.8	3877.5
67.5°	4.9	6.2	8.1	9.1	10.6	13.3	19.2	326.9	2892.4	3481.2	3566.6
70°	4.4	5.9	7.4	8.4	9.6	11.6	16.5	187.8	2442.4	3093.7	3154.5
72.5°	4.2	5.7	6.6	7.9	8.6	10.3	15.0	88.4	1788.3	2478.3	2637.1
75°	3.7	5.2	6.2	7.4	8.1	9.4	12.8	42.3	1189.4	1793.5	1973.9
77.5°	2.2	4.2	5.7	6.6	7.1	8.1	10.6	24.4	759.2	1241.4	1462.2
80°	0.0	1.5	4.2	5.7	6.2	6.9	8.1	19.2	406.2	709.2	851.2
82.5°	0.0	0.0	3.0	4.4	4.2	4.7	6.2	12.1	183.1	463.5	522.3
85°	0.0	0.0	1.0	3.4	3.0	2.2	4.2	4.2	40.1	234.6	292.7
87.5°	0.0	0.0	0.0	0.2	1.5	1.0	1.7	0.5	0.2	17.5	70.9
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: P324586

CATALOG NUMBER: GLEON-SA2A-827-U-SLR-HSS

**CANDELA DISTRIBUTION (continued):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6
2.5°	1913.4	1931.6	1962.4	1976.9	1969.8	1939.5	1903.3	1866.4	1844.7	1853.3
5°	2031.1	2124.8	2179.0	2197.0	2166.9	2099.0	2010.1	1893.0	1851.4	1840.0
7.5°	2031.1	2207.6	2319.3	2339.0	2272.0	2138.9	1972.2	1789.3	1728.5	1706.4
10°	1959.7	2199.9	2355.7	2387.0	2293.5	2094.3	1871.1	1662.3	1590.2	1567.3
12.5°	1879.2	2137.9	2302.1	2345.2	2268.4	2050.0	1800.9	1576.4	1491.5	1471.5
15°	1829.7	2061.6	2197.5	2228.7	2196.2	2024.2	1784.2	1550.6	1450.6	1431.4
17.5°	1847.4	2002.5	2051.5	2069.7	2091.6	2015.1	1829.7	1607.2	1480.6	1462.4
20°	1914.1	1940.2	1914.9	1937.8	1996.8	2023.9	1938.3	1744.0	1592.2	1567.8
22.5°	2027.4	1908.0	1836.8	1845.9	1917.8	2053.2	2104.2	1939.5	1764.2	1733.7
25°	2159.3	1934.1	1793.5	1785.4	1859.2	2091.9	2255.8	2152.2	1967.8	1934.1
27.5°	2325.2	1992.7	1784.7	1776.5	1838.8	2128.0	2381.8	2362.4	2182.2	2124.6
30°	2453.2	2050.3	1811.0	1792.3	1859.2	2153.2	2483.0	2540.9	2353.0	2314.9
32.5°	2545.0	2118.2	1853.8	1826.7	1916.8	2196.5	2561.0	2704.3	2511.1	2453.2
35°	2614.9	2192.0	1923.0	1878.4	1996.1	2262.2	2634.1	2878.3	2679.2	2615.9
37.5°	2680.4	2295.7	2031.1	1977.9	2120.4	2368.0	2711.4	3075.8	2867.3	2791.7
40°	2771.7	2413.1	2197.7	2150.4	2329.4	2512.3	2807.9	3281.5	3081.2	2986.2
42.5°	2863.1	2539.1	2368.3	2381.1	2590.1	2687.6	2932.5	3499.1	3292.4	3191.0
45°	2946.5	2669.1	2611.3	2670.3	2832.1	2879.8	3056.3	3624.9	3461.0	3363.0
47.5°	3020.9	2831.6	2852.7	3010.0	3107.3	3053.8	3148.9	3733.5	3586.5	3500.1
50°	3107.3	3041.8	3171.0	3393.5	3424.1	3211.4	3233.0	3862.0	3733.2	3663.8
52.5°	3201.8	3263.3	3523.5	3719.7	3709.9	3382.5	3317.7	4006.0	3934.4	3869.1
55°	3309.1	3442.3	3833.9	4024.9	4016.6	3573.5	3458.0	4184.0	4186.4	4127.3
57.5°	3468.4	3596.4	4044.6	4271.8	4285.9	3794.0	3695.8	4383.3	4414.4	4375.0
59°	3582.6	3696.3	4128.1	4375.0	4432.1	3964.6	3869.6	4499.0	4478.6	4442.7
60°	3667.3	3759.8	4169.4	4428.9	4517.0	4080.3	3997.9	4567.0	4486.2	4442.7
62.5°	3876.8	3898.2	4244.0	4489.9	4614.7	4337.3	4358.7	4682.7	4433.3	4362.2
65°	3974.5	3985.6	4243.0	4380.6	4520.2	4537.4	4686.1	4686.1	4304.1	4194.8
67.5°	3933.6	3880.2	4032.6	4018.3	4157.6	4418.5	4809.2	4514.3	4056.9	3915.6
70°	3601.3	3395.8	3328.1	3334.2	3440.8	3843.3	4565.5	4008.7	3589.2	3424.1
72.5°	2996.5	2503.4	2336.3	2527.1	2554.9	2953.7	3890.8	3018.9	2646.9	2492.1
75°	2410.1	1764.7	1493.0	1694.3	1741.6	2161.5	3009.8	1880.2	1546.1	1425.5
77.5°	1731.5	1266.7	1071.3	1057.3	1118.3	1370.9	2135.7	946.2	789.2	736.5
80°	983.7	833.7	897.7	847.0	877.8	857.1	1014.7	415.0	339.9	317.8
82.5°	593.7	492.8	533.7	444.3	562.2	489.6	390.9	132.9	115.4	109.8
85°	386.2	269.3	140.3	94.0	193.7	312.9	87.4	36.2	27.8	22.2
87.5°	133.2	68.7	6.9	3.0	20.7	58.3	3.2	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)