

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: P320144

Luminaire Tested: **GLEON-SA0D-827-U-SL4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P320144  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA0D-827-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(10) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 53647 lumens  
Efficiency: N/A  
Efficacy: 83.8 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

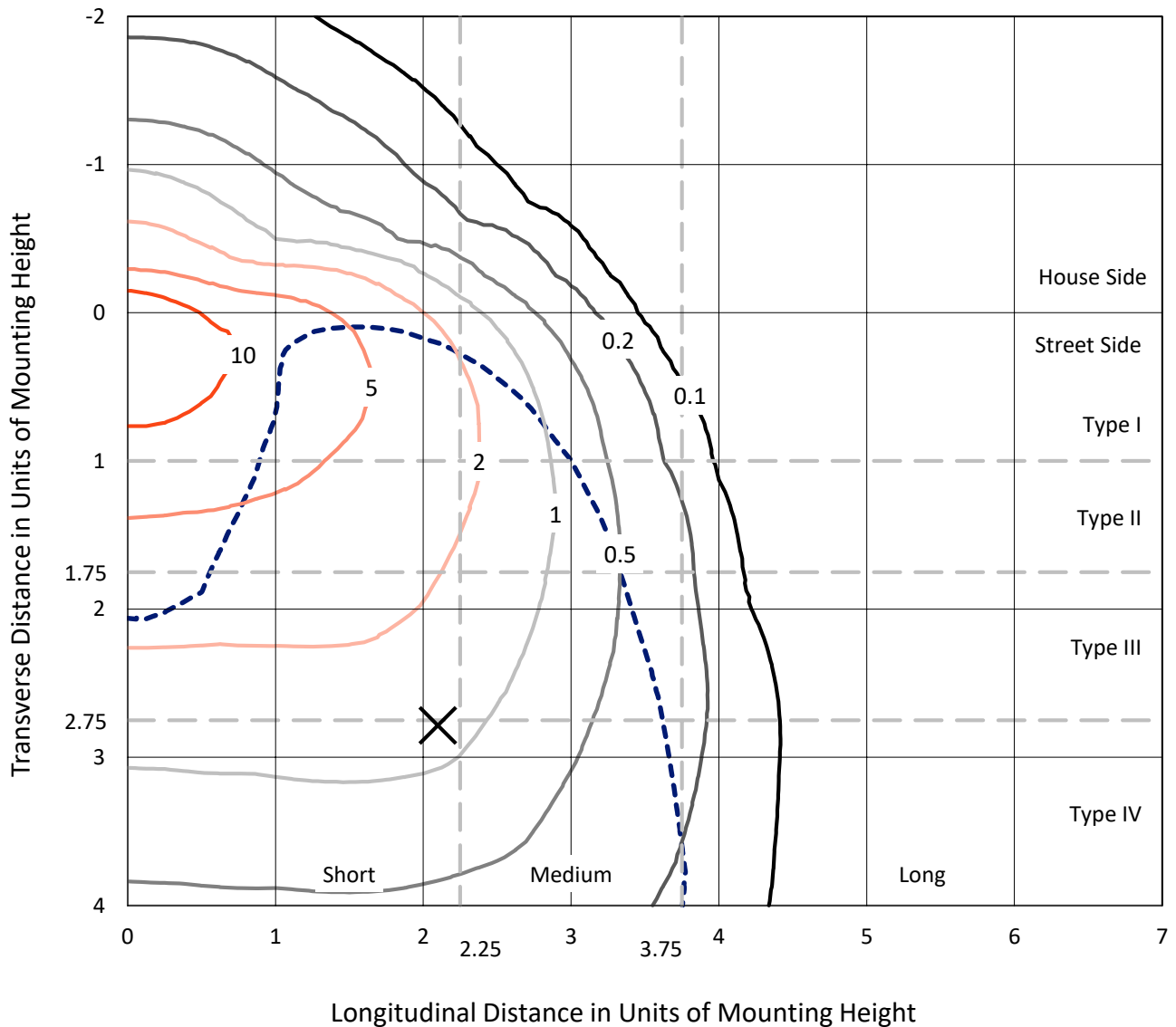
Input Watts (W): 640  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P320144  
 CATALOG NUMBER: GLEON-SA0D-827-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

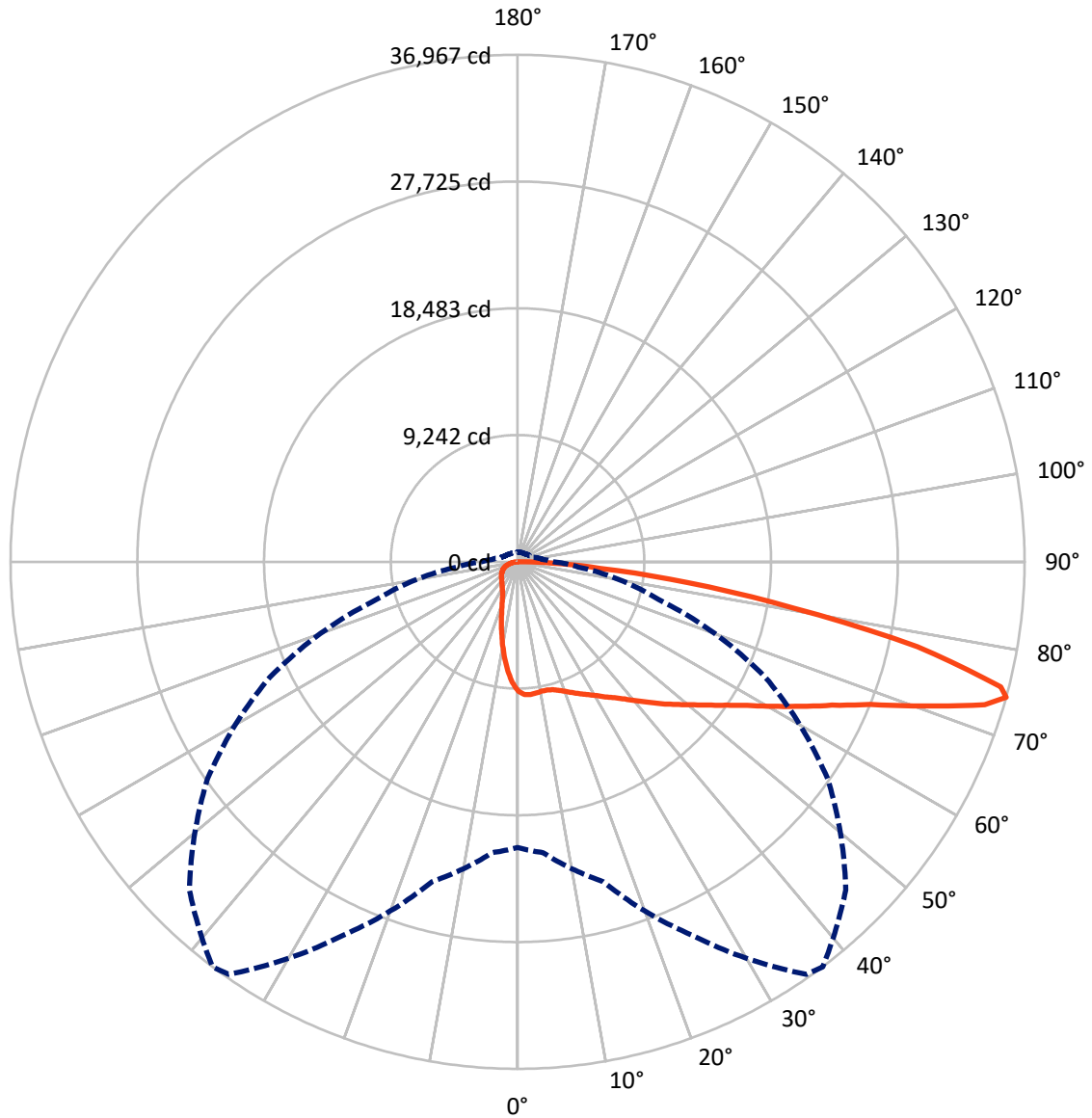
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.4 fc  
 Type IV - Short - N/A

REPORT NUMBER: P320144  
CATALOG NUMBER: GLEON-SA0D-827-U-SL4

### Luminous Intensity Polar Plot



— Vertical Plane Through 37-Deg Lateral      - - - Horizontal Cone Through 74-Deg Vertical

REPORT NUMBER: P320144  
 CATALOG NUMBER: GLEON-SA0D-827-U-SL4

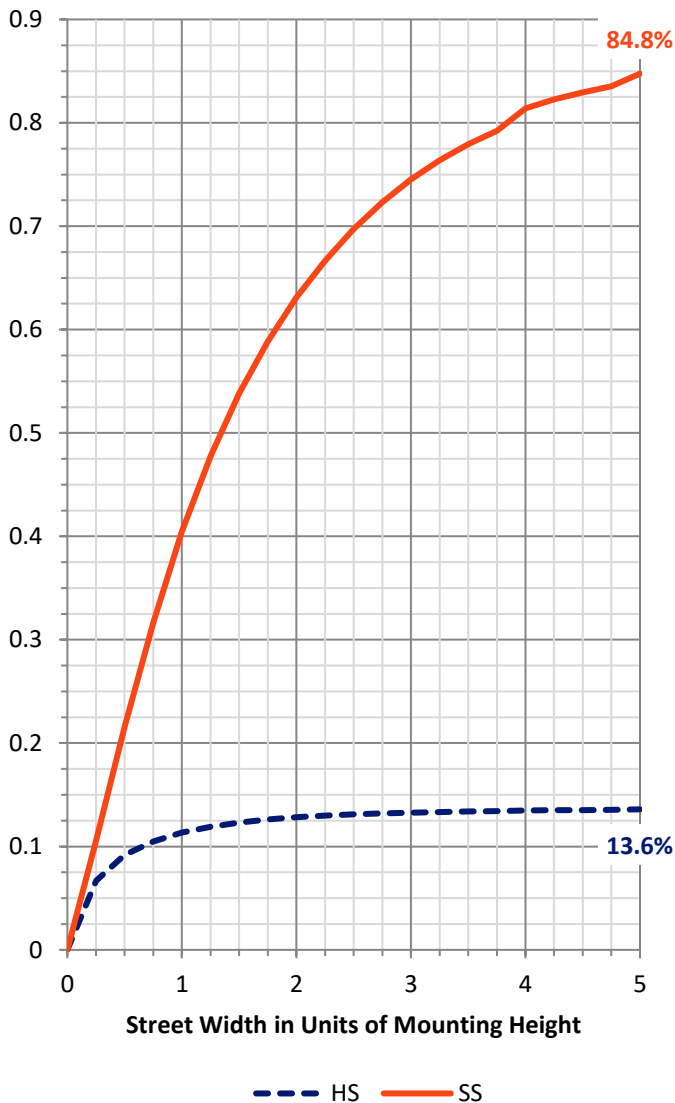
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7381.4	0.0	7381.4
	% Fixture	13.8	0.0	13.8
<b>Street Side</b>	Lumens	46265.6	0.0	46265.6
	% Fixture	86.2	0.0	86.2
<b>Total</b>	Lumens	53647.0	0.0	53647.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	832.4	1.6
10°-20°	2133.6	4.0
20°-30°	3287.5	6.1
30°-40°	4780.5	8.9
40°-50°	7036.1	13.1
50°-60°	9881.0	18.4
60°-70°	12506.3	23.3
70°-80°	11012.2	20.5
80°-90°	2177.4	4.1
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°	53647.0	100.0
0°-180°	53647.0	100.0

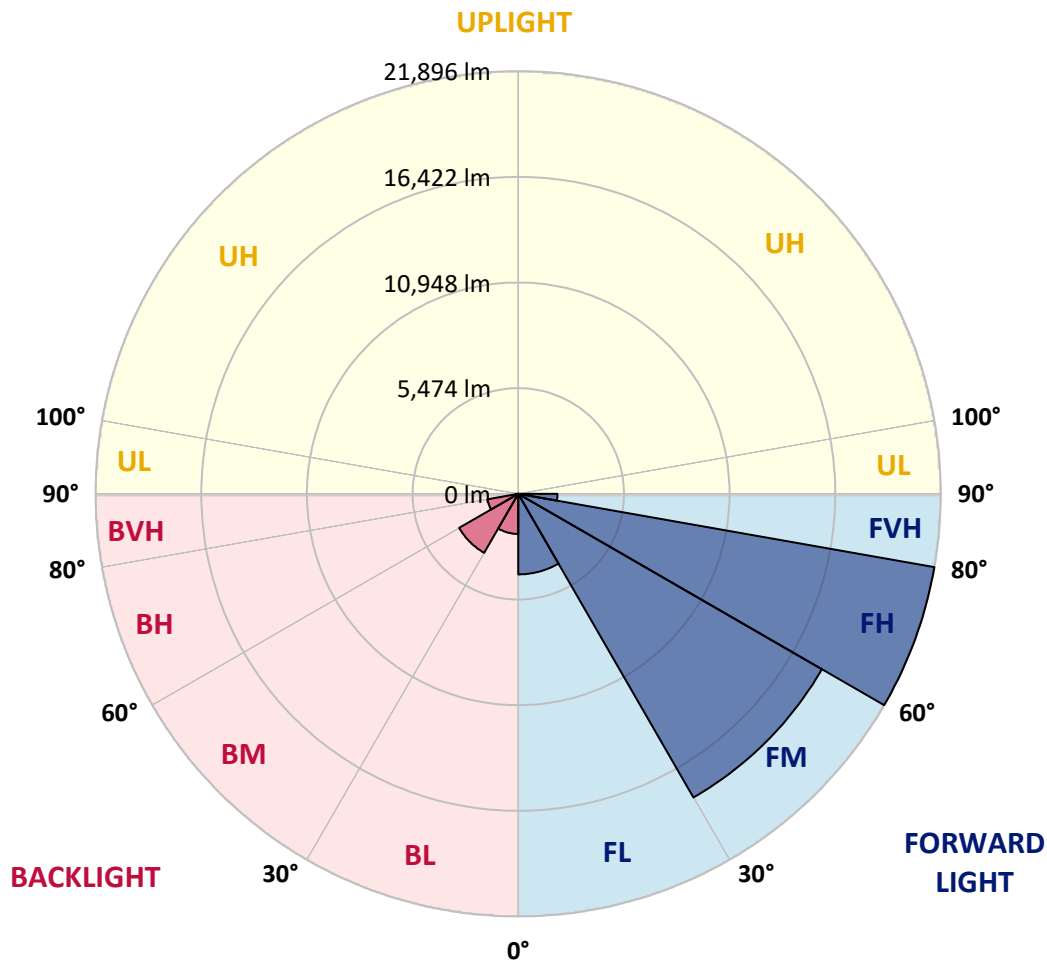


REPORT NUMBER: P320144  
 CATALOG NUMBER: GLEON-SA0D-827-U-SL4

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4174.4	7.8			
FM (30°-60°)	18165.3	33.9			
FH (60°-80°)	21896.0	40.8			G5
FVH (80°-90°)	2029.9	3.8			G5
BL (0°-30°)	2079.2	3.9	B3/2500		
BM (30°-60°)	3532.3	6.6	B3/5000		
BH (60°-80°)	1622.5	3.0	B3/2500		G3/2500
BVH (80°-90°)	147.4	0.3			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**  
 Type IV Short





REPORT NUMBER: P320144  
 CATALOG NUMBER: GLEON-SA0D-827-U-SL4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	9452.4	9452.4	9452.4	9452.4	9452.4	9452.4	9452.4	9452.4	9452.4	9452.4	9452.4
2.5°	9775.5	9777.4	9775.5	9760.4	9724.5	9694.3	9669.7	9633.8	9554.4	9494.0	9403.3
5°	9868.1	9856.8	9849.2	9820.9	9764.2	9730.2	9682.9	9614.9	9484.5	9363.6	9216.2
7.5°	9824.7	9811.4	9794.4	9760.4	9696.2	9667.8	9601.7	9512.9	9356.0	9197.3	8985.6
10°	9690.5	9686.7	9679.2	9671.6	9616.8	9594.1	9533.7	9439.2	9284.2	9091.5	8843.9
12.5°	9541.2	9550.7	9580.9	9620.6	9596.0	9584.7	9546.9	9482.6	9323.9	9116.0	8817.4
15°	9446.7	9473.2	9554.4	9658.4	9679.2	9675.4	9665.9	9624.4	9456.2	9225.6	8877.9
17.5°	9414.6	9458.1	9613.0	9785.0	9845.5	9858.7	9862.5	9790.7	9603.6	9359.8	8940.3
20°	9473.2	9528.0	9754.7	9991.0	10087.3	10094.9	10077.9	9953.2	9743.4	9475.1	8974.3
22.5°	9650.8	9699.9	9983.4	10249.9	10359.5	10370.8	10319.8	10130.8	9890.8	9611.1	9021.5
25°	9992.9	10053.3	10336.8	10603.2	10659.9	10661.8	10588.1	10353.8	10083.6	9802.0	9123.6
27.5°	10438.8	10499.3	10754.4	11015.2	10985.0	10968.0	10867.8	10633.5	10334.9	10064.7	9305.0
30°	10935.8	11002.0	11243.9	11429.0	11357.2	11323.2	11242.0	10939.6	10684.5	10423.7	9582.8
32.5°	11449.8	11510.3	11722.0	11848.6	11757.9	11742.7	11619.9	11344.0	11139.9	10971.7	10032.5
35°	11977.1	12020.5	12228.4	12300.2	12179.3	12175.5	12141.5	11888.2	11759.7	11839.1	10686.4
37.5°	12515.6	12527.0	12704.6	12708.4	12672.5	12687.6	12723.5	12564.8	12600.7	12848.2	11536.8
40°	12995.6	13025.9	13154.4	13194.0	13256.4	13309.3	13488.8	13384.9	13662.7	14101.1	12595.0
42.5°	13350.9	13409.5	13615.5	13717.5	13919.7	14002.8	14256.1	14352.4	14911.8	15569.4	13853.6
45°	13651.4	13742.1	14072.8	14282.5	14624.6	14770.1	15132.9	15456.0	16323.4	17162.5	15178.3
47.5°	13976.4	14091.7	14505.5	14906.1	15371.0	15535.4	16194.9	16678.7	17829.5	18764.9	16427.4
50°	14454.5	14543.3	14947.7	15577.0	16157.1	16368.8	17281.5	17975.0	19360.2	20291.8	17510.2
52.5°	15121.6	15087.5	15429.6	16312.1	17090.7	17351.4	18441.8	19354.5	20911.7	21673.2	18424.8
55°	15792.4	15735.7	15975.7	17081.2	18179.1	18453.1	19719.3	20739.7	22387.5	22916.7	19125.9
57.5°	16538.9	16431.1	16633.3	17948.6	19418.8	19745.7	21149.8	22211.8	23838.9	23922.0	19571.9
60°	17308.0	17162.5	17389.2	19023.8	20992.9	21378.4	22824.1	23648.0	25207.0	24727.0	19715.5
62.5°	17980.7	17878.7	18228.3	20223.8	22767.4	23190.7	24468.1	25174.9	26556.3	25061.5	19197.7
65°	18568.4	18585.4	19190.1	21573.1	24745.9	25197.6	26354.1	27057.1	27618.3	24863.1	17986.4
67.5°	19269.5	19365.9	20397.7	23349.4	27236.6	27731.7	29098.0	29109.3	28211.7	23699.0	15601.6
70°	20291.8	20490.3	22058.7	25813.6	30777.9	31458.2	32512.7	30314.9	27378.3	20543.2	12275.6
72.5°	21198.9	21569.3	23825.6	28633.1	35094.0	35609.9	34510.1	29619.5	23895.5	15395.6	7647.7
74°	20830.4	21289.6	24146.9	30022.0	36719.2	36966.8	33835.5	27590.0	19923.3	10661.8	4444.6
75°	20036.7	20535.6	23678.2	30008.8	36513.2	36375.3	32206.5	25271.3	16408.5	7271.7	2957.4
77.5°	16170.4	16697.6	19951.7	25719.1	29938.9	29808.5	24740.3	16952.7	7186.6	2384.8	1502.3
80°	9401.4	9803.9	12385.2	16332.9	20187.9	20424.1	16270.5	8388.5	2827.0	1339.8	1018.6
82.5°	4176.3	4454.1	5982.9	8337.5	12183.0	12487.3	8520.8	4395.5	1746.1	814.5	612.3
85°	2740.1	2946.1	3632.0	3970.3	5801.4	6009.3	4170.6	3422.3	1152.7	447.9	449.8
87.5°	1971.0	2169.4	2698.5	2356.5	2662.6	2520.9	2269.6	3167.2	463.0	255.1	151.2
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: P320144  
 CATALOG NUMBER: GLEON-SA0D-827-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9452.4	9452.4	9452.4	9452.4	9452.4	9452.4	9452.4	9452.4	9452.4	9452.4	9452.4
2.5°	9363.6	9333.3	9265.3	9136.8	9065.0	9004.5	8904.4	8845.8	8819.3	8817.4	8828.8
5°	9131.1	9061.2	8885.5	8670.0	8498.1	8341.2	8146.6	8029.4	7946.3	7897.2	7910.4
7.5°	8860.9	8751.3	8475.4	8131.5	7855.6	7551.3	7250.9	7071.3	6931.5	6827.6	6846.5
10°	8675.7	8524.5	8122.0	7626.9	7167.7	6725.5	6311.7	6064.1	5867.6	5716.4	5727.7
12.5°	8613.4	8409.3	7851.8	7190.4	6546.0	5941.3	5400.8	5021.0	4818.8	4646.8	4660.1
15°	8622.8	8348.8	7625.0	6797.3	5986.6	5225.1	4569.3	4125.3	3851.3	3732.2	3734.1
17.5°	8630.4	8278.9	7386.9	6375.9	5433.0	4556.1	3843.7	3393.9	3135.1	3025.4	3027.3
20°	8605.8	8165.5	7092.1	5892.2	4854.7	3942.0	3252.2	2870.5	2674.0	2588.9	2588.9
22.5°	8573.7	8031.3	6759.5	5406.5	4284.0	3409.1	2828.9	2537.9	2424.5	2367.8	2365.9
25°	8588.8	7931.2	6419.4	4907.6	3758.7	2983.9	2547.3	2354.6	2279.0	2243.1	2241.2
27.5°	8670.0	7883.9	6105.7	4410.6	3299.5	2664.5	2358.4	2222.3	2173.2	2150.5	2150.5
30°	8817.4	7883.9	5778.8	3987.3	2917.7	2428.3	2212.9	2120.3	2086.3	2071.1	2071.1
32.5°	9074.4	7927.4	5463.2	3567.8	2613.5	2243.1	2091.9	2029.6	2003.1	1995.5	1995.5
35°	9516.6	8074.8	5155.2	3171.0	2367.8	2091.9	1976.7	1940.7	1921.8	1920.0	1925.6
37.5°	10138.4	8375.3	4866.0	2878.0	2194.0	1969.1	1880.3	1851.9	1840.6	1850.0	1857.6
40°	10920.7	8783.4	4603.4	2613.5	2061.7	1870.8	1791.5	1772.6	1766.9	1780.1	1791.5
42.5°	11865.6	9335.2	4387.9	2422.6	1959.6	1787.7	1715.9	1693.2	1687.5	1702.6	1717.8
45°	12887.9	9928.6	4236.8	2280.9	1880.3	1725.3	1649.7	1625.2	1613.8	1621.4	1638.4
47.5°	13817.7	10489.9	4176.3	2180.7	1804.7	1672.4	1591.1	1560.9	1542.0	1538.2	1551.5
50°	14601.9	10907.5	4204.6	2120.3	1744.2	1613.8	1534.5	1500.4	1472.1	1455.1	1464.5
52.5°	15172.6	11170.2	4231.1	2093.8	1697.0	1549.6	1472.1	1440.0	1402.2	1373.8	1373.8
55°	15586.4	11230.6	4172.5	2073.0	1661.1	1479.7	1402.2	1371.9	1334.1	1302.0	1298.2
57.5°	15748.9	11060.5	3955.2	2042.8	1636.5	1413.5	1328.5	1305.8	1273.7	1235.9	1234.0
60°	15529.7	10535.2	3535.7	1978.5	1604.4	1358.7	1254.8	1239.7	1224.5	1188.6	1186.7
62.5°	14649.1	9382.5	2993.3	1848.1	1540.1	1300.1	1186.7	1194.3	1196.2	1171.6	1167.8
65°	13052.3	7798.9	2464.2	1678.1	1443.7	1230.2	1116.8	1152.7	1173.5	1169.7	1164.1
67.5°	10731.7	6069.8	2088.1	1498.6	1317.1	1133.8	1041.2	1082.8	1099.8	1113.0	1109.3
70°	7965.2	4280.2	1727.2	1309.6	1164.1	1020.5	943.0	963.8	952.4	967.5	973.2
72.5°	4440.8	2568.1	1407.8	1120.6	1005.3	888.2	833.4	829.6	805.0	805.0	805.0
74°	2664.5	1884.1	1237.8	1003.4	909.0	801.2	754.0	737.0	714.3	716.2	714.3
75°	2142.9	1619.5	1135.7	926.0	840.9	750.2	703.0	680.3	663.3	663.3	661.4
77.5°	1353.0	1230.2	914.6	737.0	672.7	617.9	585.8	555.6	555.6	553.7	551.8
80°	1022.3	978.9	712.4	557.5	515.9	474.3	453.5	440.3	440.3	446.0	444.1
82.5°	701.1	737.0	500.8	389.3	368.5	338.3	334.5	336.4	330.7	323.1	321.3
85°	512.1	553.7	338.3	245.7	224.9	206.0	221.1	228.7	219.2	202.2	194.6
87.5°	196.5	362.8	181.4	102.0	94.5	81.3	94.5	98.3	105.8	83.1	85.0
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)