

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: P321737

Luminaire Tested: **GLEON-SA3D-827-U-T3R-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P321737  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA3D-827-U-T3R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13393 lumens  
Efficiency: N/A  
Efficacy: 70.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G3

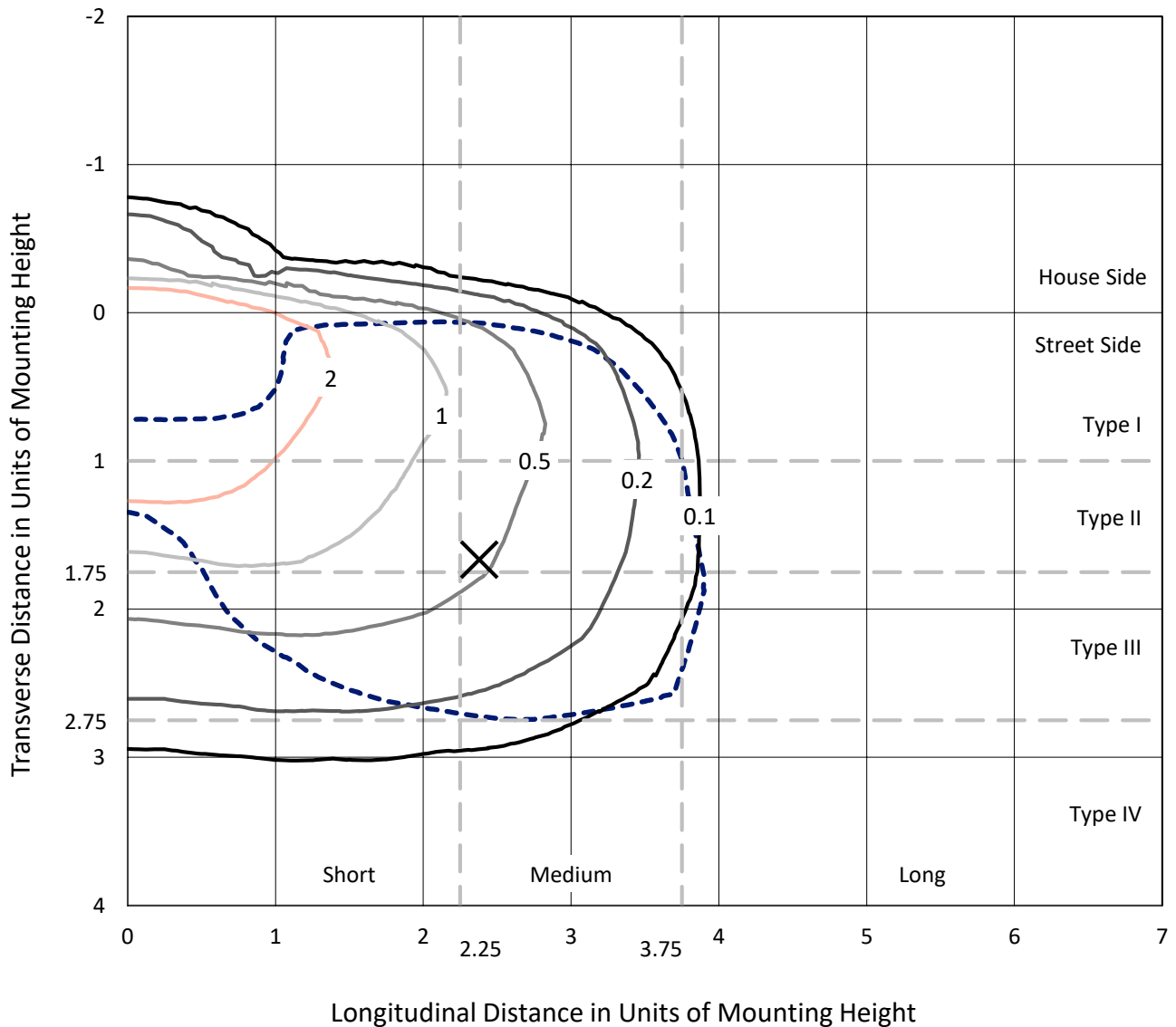
Input Watts (W): 191  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

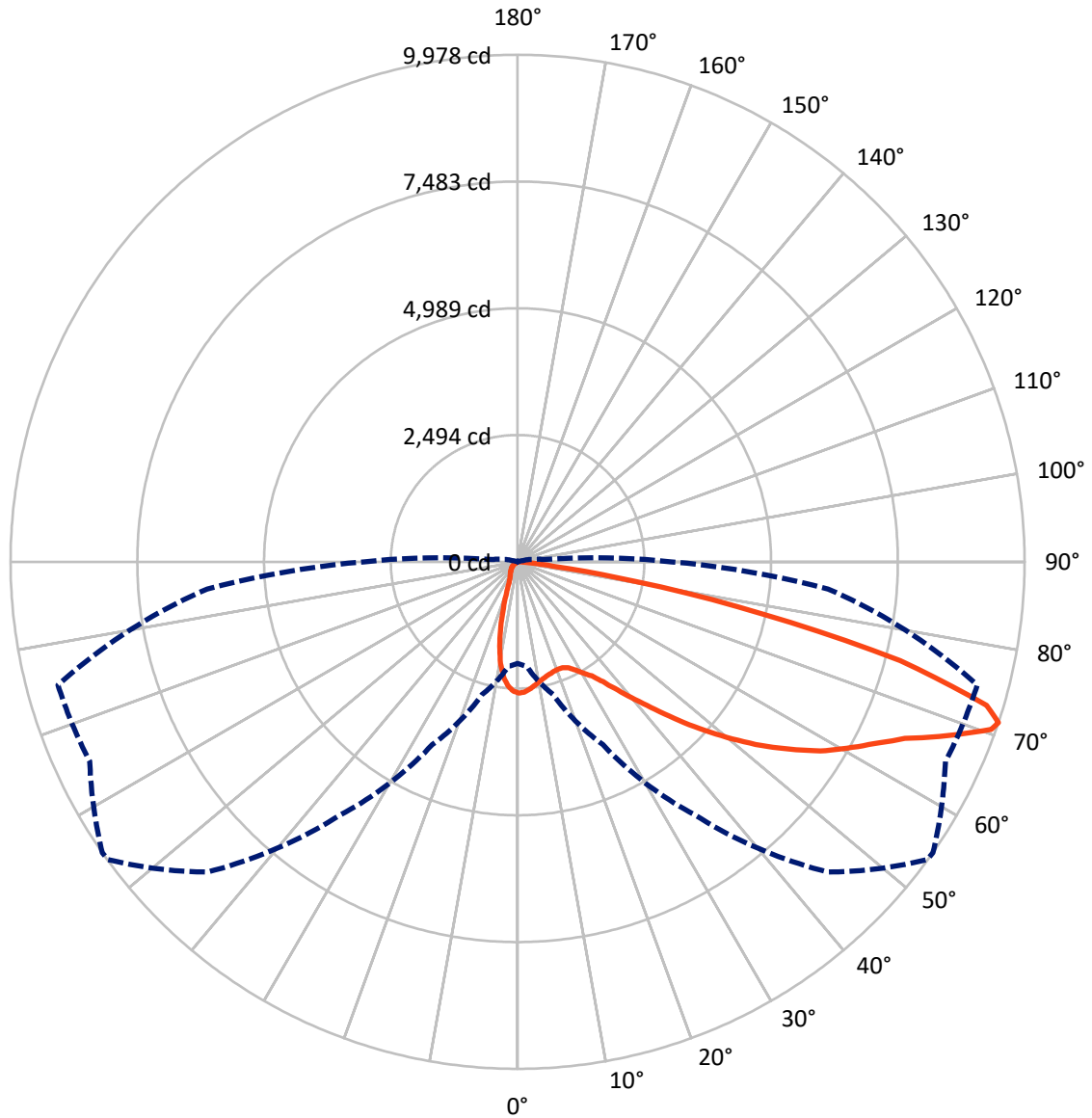
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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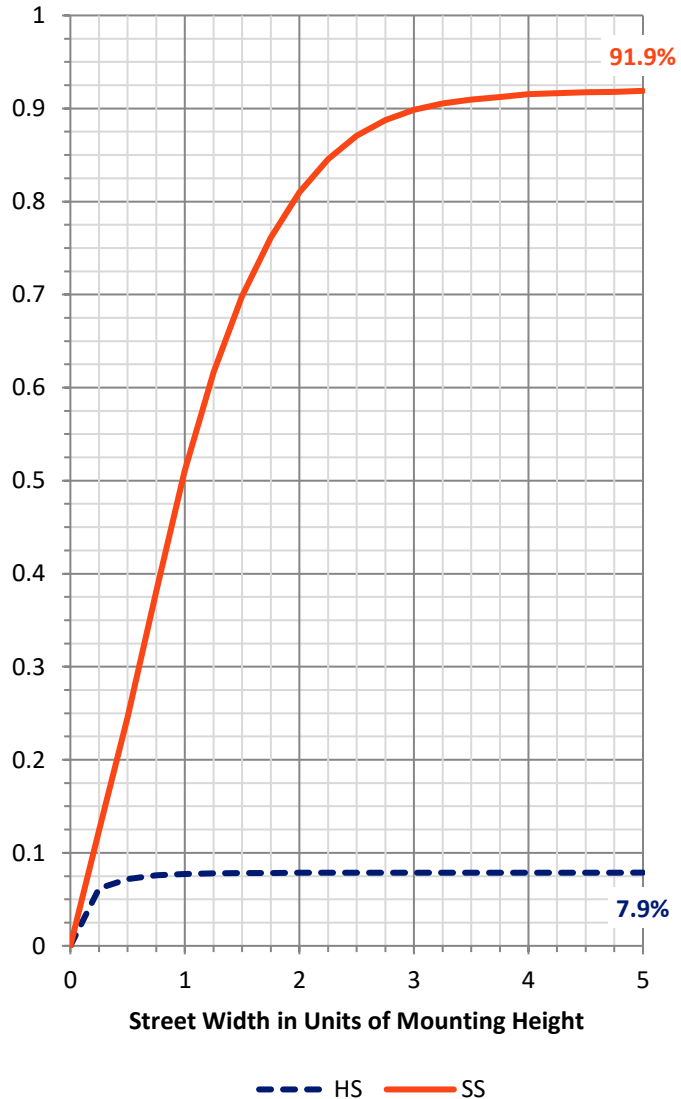
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1060.3	0.0	1060.3
	% Fixture	7.9	0.0	7.9
<b>Street Side</b>	Lumens	12332.6	0.0	12332.6
	% Fixture	92.1	0.0	92.1
<b>Total</b>	Lumens	13393.0	0.0	13393.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	220.2	1.6
10°-20°	497.2	3.7
20°-30°	799.0	6.0
30°-40°	1357.5	10.1
40°-50°	2107.0	15.7
50°-60°	2832.8	21.2
60°-70°	3465.5	25.9
70°-80°	2026.2	15.1
80°-90°	87.6	0.7
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°	13393.0	100.0
0°-180°	13393.0	100.0

**Coefficient of Utilization**

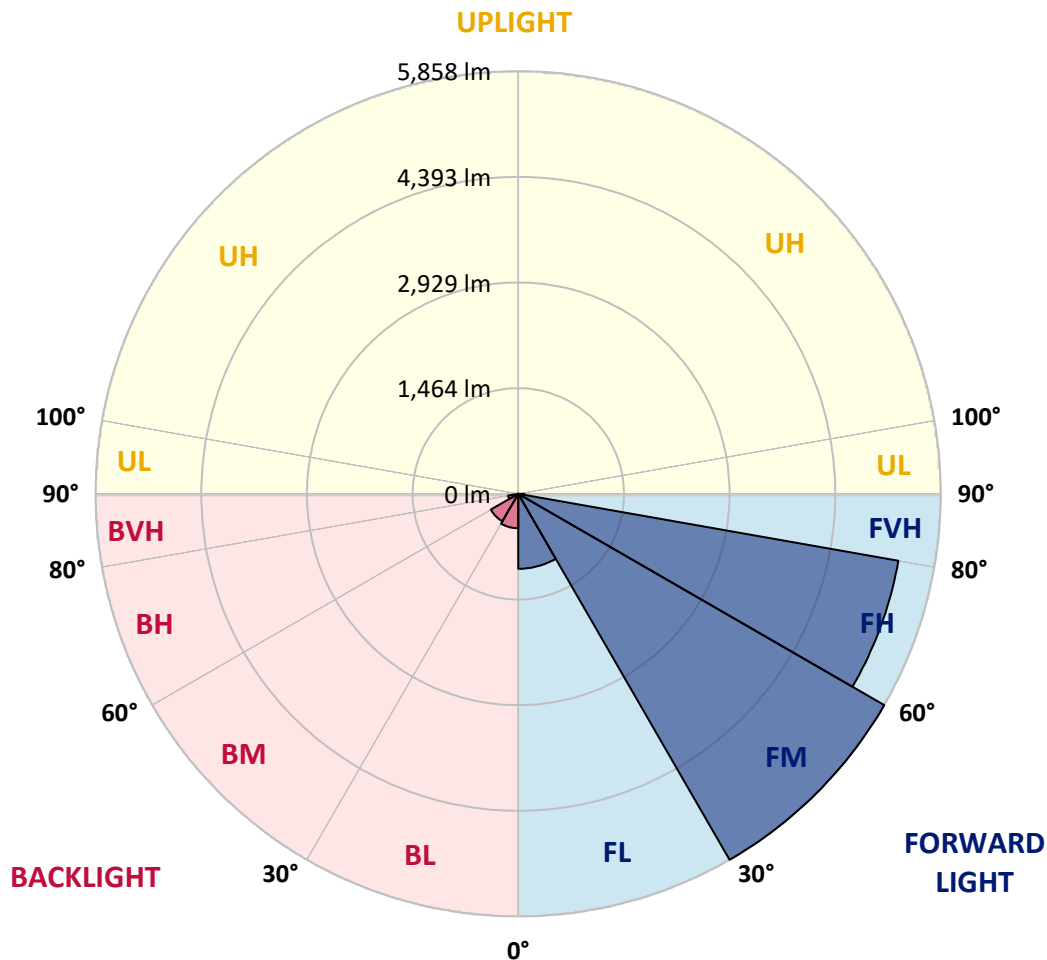


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1039.1	7.8			
FM (30°-60°)	5857.7	43.7			
FH (60°-80°)	5349.6	39.9			G3/7500
FVH (80°-90°)	86.2	0.6			G1/100
BL (0°-30°)	477.3	3.6	B1/500		
BM (30°-60°)	439.6	3.3	B1/1000		
BH (60°-80°)	142.0	1.1	B1/500		G1/500
BVH (80°-90°)	1.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2582.9	2582.9	2582.9	2582.9	2582.9	2582.9	2582.9	2582.9	2582.9	2582.9	2582.9
2.5°	2507.1	2510.1	2520.9	2525.8	2537.2	2556.4	2566.0	2566.7	2582.3	2588.3	2593.1
5°	2329.7	2347.8	2365.8	2385.0	2419.9	2466.2	2511.9	2516.1	2566.7	2603.9	2623.8
7.5°	2177.0	2193.2	2214.8	2245.5	2294.8	2367.6	2444.0	2453.0	2548.6	2633.4	2677.9
10°	2020.0	2033.2	2064.5	2109.6	2177.6	2275.0	2377.8	2392.9	2532.4	2673.1	2751.3
12.5°	1852.2	1860.0	1897.9	1962.9	2062.7	2186.6	2321.9	2341.7	2522.1	2718.8	2837.9
15°	1724.7	1728.3	1764.4	1831.8	1946.0	2107.2	2278.6	2302.6	2524.6	2773.5	2932.3
17.5°	1692.3	1694.1	1713.3	1759.6	1860.6	2036.2	2244.3	2273.8	2531.8	2827.0	3027.3
20°	1824.0	1811.3	1791.5	1784.3	1827.6	1993.5	2223.9	2256.9	2541.4	2874.6	3112.7
22.5°	2185.4	2148.1	2065.7	1955.7	1888.9	1996.6	2229.3	2262.4	2572.1	2932.9	3211.3
25°	2721.8	2670.1	2530.0	2313.5	2105.4	2083.1	2274.4	2308.1	2631.6	3002.6	3305.7
27.5°	3332.2	3281.1	3109.7	2800.6	2445.8	2254.5	2377.8	2409.1	2720.0	3064.6	3377.9
30°	3916.7	3902.3	3700.2	3349.0	2874.0	2532.4	2511.3	2537.8	2785.6	3101.9	3435.0
32.5°	4412.3	4389.4	4227.0	3885.5	3364.1	2866.1	2668.3	2676.1	2834.9	3150.0	3509.6
35°	4871.7	4843.4	4700.9	4378.0	3866.8	3273.9	2910.0	2898.6	2942.5	3246.8	3617.8
37.5°	5272.8	5298.7	5140.5	4833.2	4317.8	3697.8	3236.0	3201.7	3110.9	3404.4	3774.8
40°	5608.4	5608.4	5526.0	5269.8	4805.0	4136.2	3604.6	3559.5	3364.1	3647.3	3973.9
42.5°	5729.3	5755.1	5785.8	5640.9	5240.9	4592.1	4015.4	3968.4	3720.7	3991.9	4225.2
45°	5736.5	5777.4	5934.3	5933.7	5634.8	5044.9	4478.4	4456.2	4177.7	4434.5	4536.7
47.5°	5634.8	5686.0	5944.6	6091.3	5947.0	5466.5	4984.8	4957.1	4714.7	4976.9	4862.7
50°	5477.9	5534.4	5835.1	6153.2	6159.2	5833.3	5518.2	5476.7	5305.9	5597.0	5199.5
52.5°	5197.0	5306.5	5737.1	6167.7	6298.8	6150.2	6025.7	6007.7	5967.4	6194.1	5467.7
55°	4596.3	4717.8	5491.1	6172.5	6428.1	6431.1	6501.4	6506.2	6587.4	6752.2	5667.3
57.5°	4312.4	4381.0	5061.7	6195.3	6619.9	6749.8	6986.1	7023.4	7149.1	7282.0	5895.2
60°	4133.8	4215.0	4850.1	6164.1	6921.2	7167.7	7435.4	7448.0	7582.7	7828.6	6203.7
62.5°	3991.3	4071.3	4716.6	6043.8	7259.7	7670.5	7874.4	7875.6	7976.6	8479.9	6554.3
65°	3639.5	3706.9	4446.5	5908.5	7483.5	8167.8	8384.3	8376.5	8458.9	9166.7	6961.5
67.5°	3130.7	3182.5	3895.1	5395.5	7399.3	8620.1	9154.1	9128.2	9028.4	9760.3	7121.4
70°	2420.5	2439.2	3070.0	4496.5	6610.3	8793.8	9898.0	9884.7	9377.8	9653.8	6535.1
71°	2000.8	2062.1	2705.6	3968.4	6081.7	8633.3	9970.1	9977.9	9290.0	9363.9	6131.6
72.5°	1161.8	1214.2	1961.1	3047.7	5163.4	7963.4	9596.1	9652.6	8879.8	8517.2	5237.3
75°	249.0	266.4	727.1	1475.2	2840.3	5581.3	7574.3	7775.7	7237.5	5794.2	3156.6
77.5°	173.2	187.0	311.5	669.3	938.7	2757.9	4705.1	4932.4	4323.9	2177.6	1010.3
80°	137.1	152.7	243.0	330.8	253.8	889.4	2204.0	2342.9	1442.1	485.9	170.2
82.5°	76.4	90.8	189.4	178.6	97.4	169.0	617.0	697.6	288.7	98.0	40.3
85°	22.3	27.1	122.1	129.9	41.5	32.5	105.2	130.5	54.7	25.9	18.0
87.5°	0.0	0.0	58.9	49.9	12.0	4.8	9.6	10.8	10.8	10.8	12.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: GLEON-SA3D-827-U-T3R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2582.9	2582.9	2582.9	2582.9	2582.9	2582.9	2582.9	2582.9	2582.9	2582.9	2582.9
2.5°	2593.1	2597.3	2582.3	2562.4	2541.4	2515.5	2488.5	2467.4	2466.8	2456.6	2446.4
5°	2625.0	2622.6	2581.1	2517.9	2443.4	2365.8	2291.8	2208.2	2180.6	2146.3	2134.9
7.5°	2683.9	2667.1	2579.3	2441.0	2277.4	2115.0	1947.2	1778.3	1706.1	1641.1	1629.7
10°	2757.9	2726.0	2567.9	2325.5	2025.4	1725.9	1472.8	1243.0	1142.0	1064.4	1060.8
12.5°	2834.9	2786.2	2536.0	2151.1	1695.3	1274.3	982.6	756.5	672.3	618.2	623.0
15°	2915.4	2842.7	2467.4	1916.0	1319.4	864.8	603.8	470.9	437.2	423.4	427.0
17.5°	2997.8	2881.8	2371.8	1632.7	948.4	558.1	418.0	380.7	380.7	383.7	384.9
20°	3069.4	2902.8	2231.1	1315.2	642.9	406.5	365.6	360.2	363.2	368.0	368.6
22.5°	3140.4	2904.0	2047.7	993.5	449.8	356.0	348.2	345.8	347.6	353.0	353.6
25°	3198.1	2889.6	1817.9	706.6	359.0	335.6	332.0	330.8	332.0	338.6	338.6
27.5°	3221.5	2837.3	1537.7	496.7	321.7	312.7	311.5	312.7	314.5	319.3	319.9
30°	3223.9	2745.9	1232.2	359.6	291.7	282.0	284.4	288.7	286.9	285.7	286.9
32.5°	3230.0	2640.0	934.5	295.9	266.4	251.4	248.4	248.4	241.1	236.9	234.5
35°	3249.8	2515.5	677.7	265.8	240.5	223.1	211.7	198.5	184.6	177.4	175.6
37.5°	3281.1	2385.0	485.3	246.0	217.7	197.9	176.2	152.7	132.9	127.5	127.5
40°	3338.2	2250.3	359.0	230.3	199.7	175.0	142.5	111.9	93.8	90.8	90.8
42.5°	3428.4	2108.4	286.3	216.5	184.0	151.5	108.8	81.2	68.0	66.2	65.5
45°	3522.2	1952.1	250.2	203.3	167.2	124.5	80.6	60.1	52.3	50.5	50.5
47.5°	3616.0	1785.5	232.7	190.6	150.9	96.8	60.1	47.5	43.9	43.9	44.5
50°	3695.4	1611.7	220.1	176.8	129.9	73.4	47.5	40.3	39.1	41.5	42.1
52.5°	3715.3	1440.9	204.5	159.4	104.0	55.9	39.1	35.5	35.5	35.5	35.5
55°	3703.2	1308.6	184.0	137.7	77.0	44.5	33.7	31.3	30.7	30.7	30.7
57.5°	3744.1	1230.4	147.3	107.0	55.3	36.1	29.5	27.7	26.5	25.9	25.9
60°	3826.5	1179.3	105.2	77.0	41.5	30.1	25.3	23.5	21.6	20.4	20.4
62.5°	3936.0	1134.8	78.2	57.1	31.9	24.1	21.0	19.2	16.8	15.6	15.6
65°	4020.2	1055.4	59.5	42.7	24.1	19.2	16.2	15.6	12.0	10.8	10.2
67.5°	3891.5	881.0	48.1	31.3	18.0	15.0	12.6	12.0	7.2	6.0	6.0
70°	3337.6	613.4	38.5	22.9	13.2	12.0	10.2	7.8	5.4	4.8	4.8
71°	3026.7	512.4	34.9	19.2	11.4	11.4	9.6	6.6	4.8	4.2	4.2
72.5°	2514.3	363.8	29.5	15.0	10.2	12.0	10.2	6.0	4.8	4.2	3.6
75°	1459.5	152.1	20.4	10.2	7.8	14.4	13.2	5.4	3.6	3.0	3.0
77.5°	439.0	55.9	11.4	6.6	6.0	12.6	15.0	4.8	1.8	0.6	0.6
80°	80.0	24.1	7.2	4.2	4.2	7.8	11.4	2.4	0.0	0.0	0.0
82.5°	28.3	12.0	4.2	2.4	1.8	3.6	5.4	0.0	0.0	0.0	0.0
85°	16.2	8.4	2.4	1.2	0.0	0.6	1.2	0.0	0.0	0.0	0.0
87.5°	10.8	2.4	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

(END OF REPORT)