

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: P324278

Luminaire Tested: **GLEON-SA4B-827-U-SLL-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324278
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-27)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA4B-827-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12563 lumens
Efficiency: N/A
Efficacy: 73.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

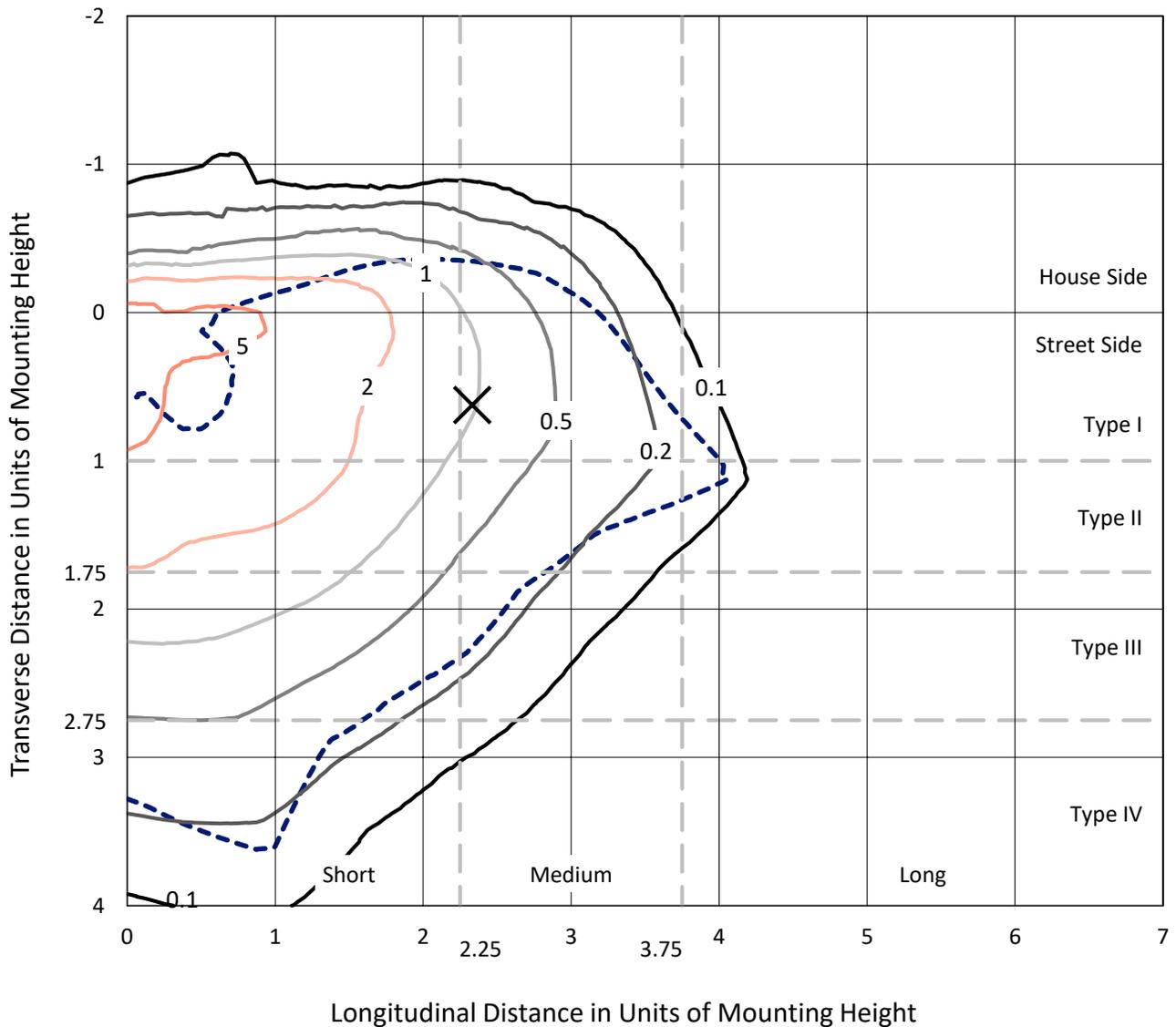
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

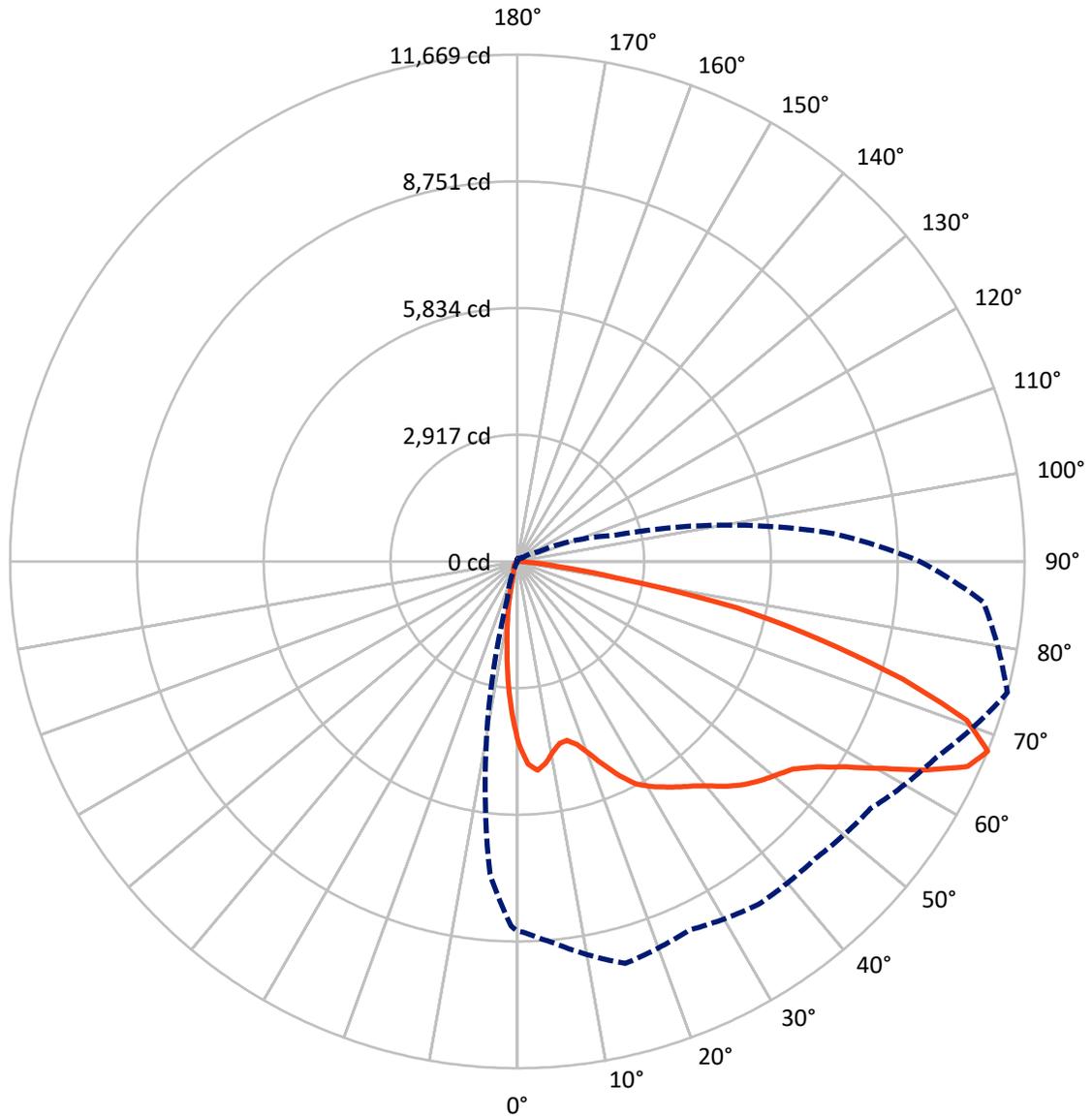
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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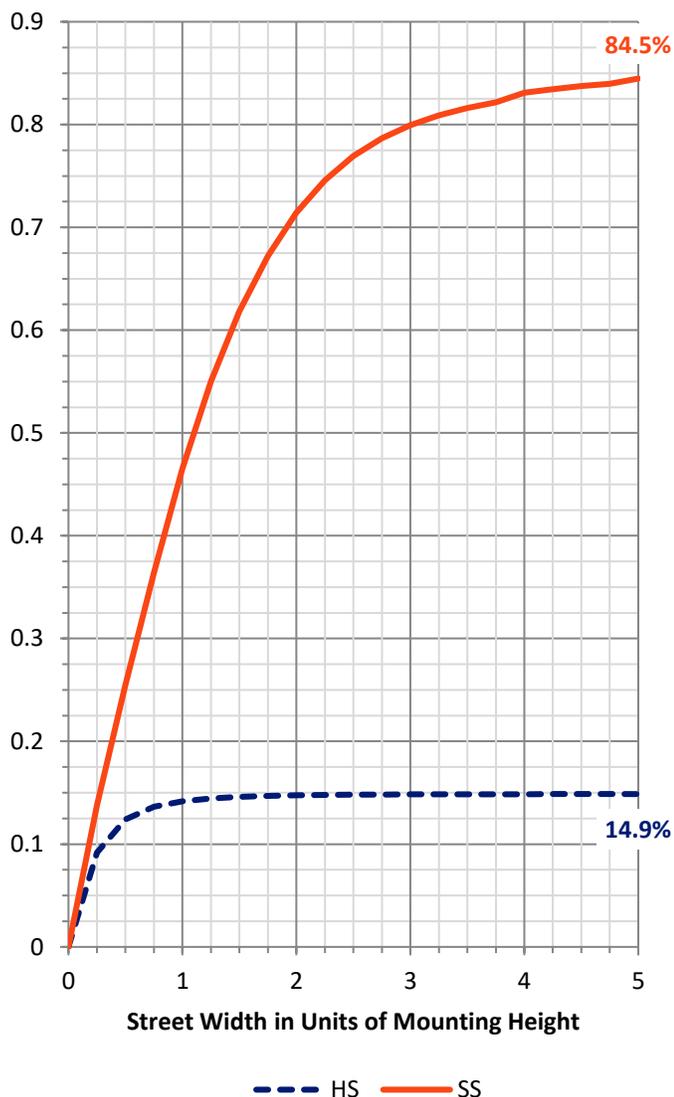
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1885.2	0.0	1885.2
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	10677.8	0.0	10677.8
	% Fixture	85.0	0.0	85.0
Total	Lumens	12563.0	0.0	12563.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	319.7	2.5
10°-20°	629.5	5.0
20°-30°	890.6	7.1
30°-40°	1309.4	10.4
40°-50°	1882.0	15.0
50°-60°	2649.4	21.1
60°-70°	3094.2	24.6
70°-80°	1578.6	12.6
80°-90°	209.7	1.7
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°	12563.0	100.0
0°-180°	12563.0	100.0

Coefficient of Utilization

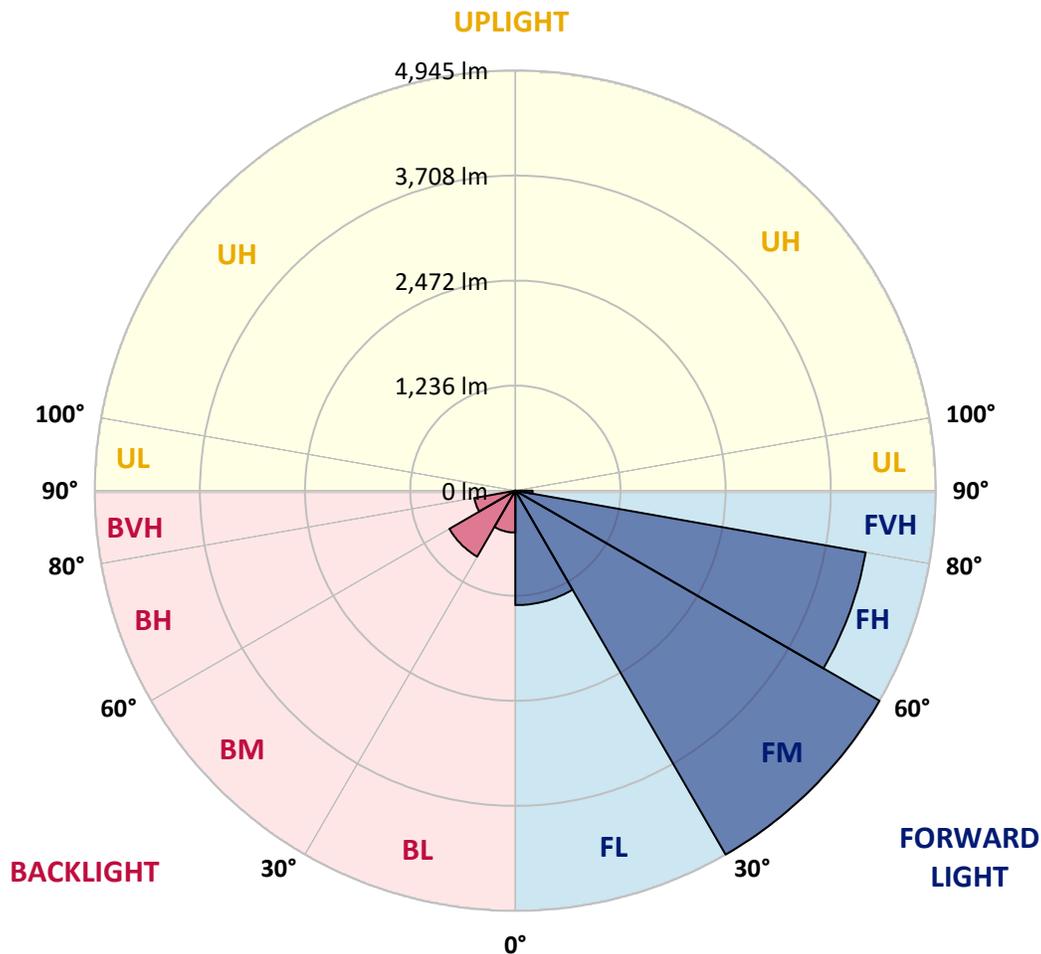


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1346.8	10.7			
FM (30°-60°)	4944.6	39.4			
FH (60°-80°)	4183.1	33.3			G2/5000
FVH (80°-90°)	203.3	1.6			G2/225
BL (0°-30°)	493.0	3.9	B1/500		
BM (30°-60°)	896.2	7.1	B1/1000		
BH (60°-80°)	489.7	3.9	B1/500		G1/500
BVH (80°-90°)	6.4	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-G2
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7
2.5°	4568.8	4575.9	4612.8	4698.5	4791.9	4799.1	4862.2	4797.3	4775.3	4670.5	4562.2
5°	4603.3	4630.7	4757.4	5009.2	5227.6	5297.8	5347.8	5220.4	5086.5	4830.6	4557.5
7.5°	4325.4	4371.2	4570.6	5043.1	5433.5	5606.1	5638.8	5439.4	5111.5	4690.2	4279.5
10°	3969.5	4021.9	4262.3	4843.1	5379.3	5675.1	5720.3	5459.1	4987.7	4462.8	3979.0
12.5°	3681.4	3742.7	3988.5	4618.2	5193.1	5520.4	5609.6	5393.0	4880.6	4301.6	3773.7
15°	3548.7	3619.0	3877.2	4473.0	4986.5	5244.2	5318.0	5224.6	4821.1	4276.0	3726.1
17.5°	3624.9	3701.1	3967.7	4485.5	4792.5	4902.6	4962.1	5000.2	4821.1	4430.1	3865.3
20°	3937.3	4019.5	4301.6	4612.2	4631.9	4590.8	4654.5	4788.4	4877.0	4722.9	4199.8
22.5°	4369.4	4465.8	4784.2	4829.4	4553.3	4398.0	4406.3	4616.4	4978.8	5094.3	4664.0
25°	4896.1	5013.9	5337.7	5153.2	4586.0	4283.1	4280.1	4474.7	5078.2	5466.2	5181.2
27.5°	5419.2	5548.9	5833.4	5548.3	4721.1	4262.3	4256.3	4431.9	5175.2	5797.1	5745.9
30°	5857.8	5984.0	6229.2	5834.6	4866.9	4311.1	4282.5	4477.7	5232.9	6011.9	6157.8
32.5°	6214.9	6316.1	6514.2	6031.6	5022.9	4405.7	4343.8	4600.3	5331.1	6193.5	6536.3
35°	6607.7	6714.2	6793.3	6219.1	5197.8	4542.0	4453.3	4794.9	5482.3	6377.9	6951.1
37.5°	7055.8	7161.7	7152.2	6390.4	5419.8	4767.5	4711.0	5103.2	5717.4	6560.7	7414.1
40°	7494.4	7602.7	7525.3	6577.9	5680.5	5139.5	5097.8	5566.2	6032.2	6794.5	7956.8
42.5°	7905.0	8022.3	7856.8	6755.3	5991.1	5608.5	5679.9	6162.5	6426.2	7082.6	8424.6
45°	8235.9	8355.5	8134.8	6927.8	6318.4	6177.4	6392.2	6823.1	6899.9	7326.0	8740.6
47.5°	8476.4	8589.4	8327.6	7100.4	6737.4	6873.1	7247.4	7515.8	7327.8	7537.3	8965.0
50°	8629.9	8718.0	8384.1	7316.5	7287.3	7684.8	8138.3	8269.3	7730.7	7727.7	9237.5
52.5°	8727.5	8767.4	8425.8	7542.0	7861.0	8568.6	9010.8	9051.8	8145.5	7937.2	9604.7
55°	9063.7	9095.9	8721.0	7815.2	8335.3	9342.9	9799.9	9761.8	8615.0	8347.2	10038.0
57.5°	9637.4	9671.4	9331.0	8208.0	8719.2	9821.3	10371.8	10440.3	9165.5	8923.3	10502.2
60°	9925.5	9988.6	9867.2	8705.5	9091.1	10127.2	10761.6	10980.0	9853.5	9682.7	10952.1
62.5°	9664.2	9755.9	9932.0	9257.2	9460.7	10295.7	10883.0	11173.5	10558.1	10567.6	11229.4
65°	9142.9	9216.1	9514.9	9559.5	9674.9	10274.8	10583.1	10903.3	10989.6	11380.6	11214.5
67.5°	8513.3	8540.6	8794.2	9583.3	9364.3	9648.8	9682.1	9918.9	10648.6	11668.6	10764.0
70°	7606.9	7621.8	7843.1	8786.4	8047.3	8109.8	8060.4	8108.6	9154.8	10967.0	9626.7
72.5°	6122.0	6159.5	6474.4	7296.8	5862.6	5682.2	6070.3	6048.8	7050.4	9265.5	7149.8
75°	4507.5	4572.3	5047.8	5877.4	4114.7	3721.9	4005.2	4080.8	5012.1	7167.1	4471.2
77.5°	3155.9	3204.2	3664.8	4320.6	2978.0	2661.4	2559.0	2648.9	3308.3	5184.7	2252.5
80°	1818.1	1836.0	2130.0	2494.8	2006.8	2296.0	2080.0	2141.9	1982.4	2306.7	968.9
82.5°	1189.7	1192.6	1307.5	1484.8	1249.8	1452.1	1074.8	1374.1	1219.4	926.6	315.4
85°	642.7	646.3	758.2	1054.0	707.6	399.9	235.1	482.6	754.0	212.5	86.3
87.5°	70.8	64.9	228.5	383.3	196.4	36.3	12.5	54.2	120.8	13.7	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7
2.5°	4506.9	4457.5	4334.3	4204.0	4099.2	4001.0	3902.2	3781.4	3688.0	3668.9	3638.0
5°	4410.5	4253.9	3995.7	3736.2	3527.3	3263.7	3096.4	2966.1	2838.7	2831.0	2805.4
7.5°	4073.6	3867.7	3504.1	3145.2	2851.2	2600.1	2346.6	2177.0	2043.7	1996.6	1968.7
10°	3749.9	3518.4	3064.3	2654.9	2392.4	2170.4	1991.9	1814.5	1653.9	1543.2	1493.2
12.5°	3523.7	3267.8	2767.3	2414.4	2226.4	2015.7	1797.9	1576.5	1391.4	1258.1	1176.6
15°	3436.2	3163.1	2667.9	2319.2	2087.1	1820.5	1542.0	1289.0	1083.7	962.9	889.7
17.5°	3540.4	3222.6	2660.2	2203.2	1878.8	1547.3	1239.6	940.9	747.5	655.8	608.8
20°	3804.6	3411.8	2657.2	2060.9	1631.2	1223.6	839.7	618.9	501.7	450.5	428.5
22.5°	4178.4	3653.5	2681.0	1920.5	1373.5	874.2	579.7	454.7	394.6	367.2	354.7
25°	4659.2	3992.7	2748.3	1793.1	1131.3	652.3	451.7	380.9	338.6	317.2	308.3
27.5°	5171.6	4383.1	2853.0	1682.4	934.3	520.1	386.8	326.1	295.8	280.9	272.6
30°	5594.2	4835.4	2959.0	1559.2	791.5	453.5	354.1	297.6	262.4	252.9	245.2
32.5°	5963.7	5177.6	3033.9	1447.9	698.1	402.9	320.2	266.0	242.2	223.8	215.4
35°	6346.4	5462.6	3031.6	1370.0	633.8	364.8	291.6	238.0	209.5	188.1	181.5
37.5°	6760.6	5784.6	2979.8	1303.3	605.8	334.5	275.5	223.2	194.6	173.2	164.8
40°	7245.6	6122.6	2926.8	1240.8	598.1	310.1	264.2	211.3	180.9	160.1	151.8
42.5°	7718.2	6427.3	2880.4	1194.4	564.8	309.5	254.1	202.3	170.2	150.0	140.4
45°	8096.1	6711.2	2871.5	1166.4	529.7	320.2	248.8	196.4	161.9	141.6	132.7
47.5°	8410.3	7019.5	2928.6	1146.8	496.3	292.2	261.9	192.2	154.1	134.5	124.4
50°	8784.0	7398.0	3063.1	1114.7	461.2	263.0	299.9	193.4	147.6	127.4	116.6
52.5°	9305.4	7921.7	3260.7	1060.5	413.0	236.3	295.2	194.6	140.4	119.6	108.9
55°	9889.8	8575.7	3473.1	970.6	345.8	201.2	252.9	186.3	126.8	111.3	101.2
57.5°	10503.9	9169.1	3599.3	863.5	274.9	173.8	202.3	169.6	111.9	100.0	93.4
60°	10600.4	9394.6	3541.6	732.0	218.4	151.2	150.0	172.6	100.0	88.1	83.3
62.5°	10360.5	9111.4	3262.5	614.8	182.7	132.7	123.2	150.6	90.5	78.6	73.8
65°	9899.3	8345.4	2810.2	554.1	169.6	113.7	102.4	105.9	79.2	68.4	64.3
67.5°	9257.8	7323.0	2307.3	519.5	167.8	97.6	87.5	80.3	68.4	59.5	55.9
70°	7946.1	6100.6	1840.7	500.5	163.1	82.1	73.8	65.5	57.1	50.6	47.6
72.5°	5848.3	4323.0	1431.9	479.7	164.3	65.5	64.3	54.2	45.8	39.3	38.1
75°	3379.1	2469.8	939.1	388.6	156.5	50.6	53.6	38.1	32.1	27.4	27.4
77.5°	1800.8	1506.3	357.7	161.9	57.1	32.1	30.4	22.6	20.2	16.7	16.1
80°	785.0	663.0	107.7	45.2	31.5	17.3	11.3	10.1	8.9	7.1	6.5
82.5°	277.9	239.8	35.1	22.0	13.7	0.0	0.0	0.0	0.0	0.0	0.0
85°	63.1	45.2	0.0	5.4	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



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7
2.5°	3574.9	3561.8	3484.5	3487.4	3501.1	3520.8	3474.3	3495.8	3553.5	3608.8	3629.7
5°	2764.4	2767.3	2720.3	2749.5	2775.7	2793.5	2718.5	2719.7	2765.5	2828.0	2860.8
7.5°	1947.8	1943.1	1945.5	2015.1	2064.5	2028.8	2056.8	1959.7	1965.7	2010.3	1977.0
10°	1447.9	1382.5	1345.6	1397.9	1452.1	1432.5	1384.3	1352.7	1374.7	1424.1	1420.6
12.5°	1137.9	1043.8	988.5	951.0	995.6	958.7	957.6	930.2	900.4	905.8	984.9
15°	855.8	787.3	721.9	661.8	660.6	648.1	584.4	513.0	507.0	510.6	551.7
17.5°	588.6	565.4	538.6	486.8	473.1	420.8	358.9	330.3	316.0	322.6	336.2
20°	413.6	404.7	407.7	379.7	360.1	310.1	273.8	262.4	260.1	266.6	273.2
22.5°	342.8	326.7	324.9	312.4	292.8	256.5	236.9	230.3	227.3	233.3	238.0
25°	299.9	283.9	277.3	269.6	248.8	223.8	211.9	205.9	202.9	206.5	209.5
27.5°	264.2	249.4	243.4	238.0	217.8	200.0	190.4	185.1	182.7	183.9	186.9
30°	237.5	224.4	216.6	210.1	192.8	180.3	172.0	166.6	164.3	164.3	167.2
32.5°	209.5	202.3	195.2	186.9	170.8	162.5	154.1	148.2	145.8	146.4	148.8
35°	174.4	172.0	173.8	166.0	152.4	145.2	136.9	130.3	128.5	129.1	131.5
37.5°	154.7	144.0	150.6	146.4	138.7	129.1	118.4	112.5	109.5	111.3	112.5
40°	142.2	129.1	124.4	128.5	127.4	111.9	102.4	96.4	94.0	94.6	95.8
42.5°	131.5	116.0	105.3	104.7	111.9	97.6	87.5	82.1	79.2	79.2	80.3
45°	121.4	104.7	91.6	81.5	94.0	82.7	73.2	68.4	64.9	64.9	65.5
47.5°	113.7	95.2	79.7	66.7	70.8	67.8	60.1	55.3	51.8	51.8	52.4
50°	106.5	85.7	69.0	55.9	53.0	55.9	48.8	43.4	41.1	40.5	41.7
52.5°	98.8	76.2	58.9	47.6	41.7	42.3	38.1	34.5	31.5	31.5	32.7
55°	91.1	68.4	51.2	40.5	34.5	31.5	30.4	28.0	25.6	25.6	26.8
57.5°	83.3	60.1	43.4	33.3	27.4	25.0	25.0	23.2	21.4	21.4	22.6
60°	76.2	51.8	35.7	27.4	21.4	20.8	21.4	19.6	18.4	18.4	19.6
62.5°	67.8	44.0	29.2	22.6	17.3	16.7	18.4	17.3	16.1	16.1	17.3
65°	57.7	37.5	23.2	17.3	13.1	13.1	15.5	14.3	13.1	13.1	14.3
67.5°	48.8	31.5	17.9	12.5	9.5	10.1	13.1	11.9	11.3	11.3	12.5
70°	40.5	24.4	12.5	7.7	5.4	7.7	10.1	10.1	10.1	10.1	11.3
72.5°	30.4	16.7	7.1	3.0	2.4	5.4	8.3	9.5	8.9	8.9	10.7
75°	19.6	9.5	2.4	0.0	0.0	3.0	6.5	7.7	7.7	7.1	8.9
77.5°	11.3	3.0	0.0	0.0	0.0	0.0	4.2	3.6	3.0	2.4	4.2
80°	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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: P324278

CATALOG NUMBER: GLEON-SA4B-827-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7	4214.7
2.5°	3713.6	3783.8	3882.6	3987.3	4148.6	4276.6	4402.1	4509.9	4551.5	4568.8
5°	2939.3	3042.3	3186.9	3372.6	3663.6	3925.4	4190.9	4458.1	4574.1	4603.3
7.5°	2109.1	2240.6	2424.5	2657.2	2998.2	3337.5	3708.2	4100.4	4280.1	4325.4
10°	1561.0	1721.7	1932.4	2177.6	2503.1	2851.8	3255.9	3704.1	3909.4	3969.5
12.5°	1107.5	1324.7	1606.8	1905.0	2187.1	2498.3	2907.2	3401.1	3616.6	3681.4
15°	650.5	860.6	1194.4	1593.7	1955.0	2270.4	2685.8	3245.8	3483.3	3548.7
17.5°	373.1	477.9	730.2	1175.4	1665.8	2102.6	2616.2	3284.5	3564.2	3624.9
20°	285.1	318.4	420.8	757.0	1327.7	1937.7	2616.2	3503.5	3848.1	3937.3
22.5°	249.4	273.8	315.4	451.7	977.2	1761.0	2646.5	3820.1	4270.6	4369.4
25°	221.4	243.4	279.1	339.8	666.5	1550.9	2718.5	4208.7	4768.1	4896.1
27.5°	198.2	219.0	251.1	297.6	455.9	1297.4	2815.5	4664.6	5316.8	5419.2
30°	177.3	197.0	226.1	258.9	351.7	1009.9	2898.3	5094.3	5747.7	5857.8
32.5°	157.7	175.6	201.7	226.1	288.0	746.9	2907.2	5434.7	6105.4	6214.9
35°	139.3	155.3	179.1	198.2	238.6	589.8	2768.5	5729.9	6463.1	6607.7
37.5°	121.4	136.9	157.7	172.0	210.1	480.9	2556.7	6059.0	6921.9	7055.8
40°	104.7	118.4	139.9	149.4	198.8	369.6	2326.3	6404.1	7371.8	7494.4
42.5°	89.3	102.4	123.2	141.6	174.4	276.1	2077.6	6727.9	7776.5	7905.0
45°	74.4	88.1	108.9	150.0	144.6	206.5	1811.6	6942.7	8096.1	8235.9
47.5°	60.1	75.6	104.1	142.8	115.5	151.8	1600.9	7146.3	8338.3	8476.4
50°	48.2	63.7	117.2	127.4	94.6	116.0	1512.8	7328.4	8497.2	8629.9
52.5°	39.3	53.6	110.7	97.6	79.2	95.8	1560.4	7623.5	8644.2	8727.5
55°	32.7	42.3	66.7	67.8	67.2	81.5	1619.3	8047.3	9024.5	9063.7
57.5°	28.6	33.9	46.4	52.4	56.5	72.6	1620.5	8655.5	9613.0	9637.4
60°	24.4	29.8	38.7	42.3	48.8	64.9	1561.6	8868.0	9844.5	9925.5
62.5°	21.4	26.2	32.1	35.1	41.1	58.3	1423.5	8560.3	9526.8	9664.2
65°	19.0	23.8	26.8	29.8	36.3	52.4	1196.2	7944.9	8999.5	9142.9
67.5°	16.7	20.8	23.8	26.8	32.7	46.4	880.8	7230.2	8394.2	8513.3
70°	14.9	18.4	21.4	23.8	28.6	39.3	534.4	6135.1	7557.5	7606.9
72.5°	14.3	16.7	19.6	21.4	25.0	34.5	270.8	4508.7	6041.7	6122.0
75°	12.5	14.9	17.9	19.0	22.0	29.8	110.1	2961.3	4378.3	4507.5
77.5°	10.1	13.7	16.1	17.3	19.0	24.4	55.9	1892.5	3072.6	3155.9
80°	3.6	10.1	13.7	14.3	16.1	17.9	36.9	1036.1	1782.4	1818.1
82.5°	0.0	6.5	10.7	10.1	11.3	13.7	23.8	492.8	1176.6	1189.7
85°	0.0	3.0	8.3	6.5	4.8	9.5	8.3	107.7	617.1	642.7
87.5°	0.0	0.0	0.6	3.0	2.4	3.6	1.2	0.6	55.9	70.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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