

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: P324299

Luminaire Tested: **GLEON-SA5D-827-U-SLL-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324299
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-SA5D-827-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 1200mA 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: 21135 lumens
Efficiency: N/A
Efficacy: 66.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

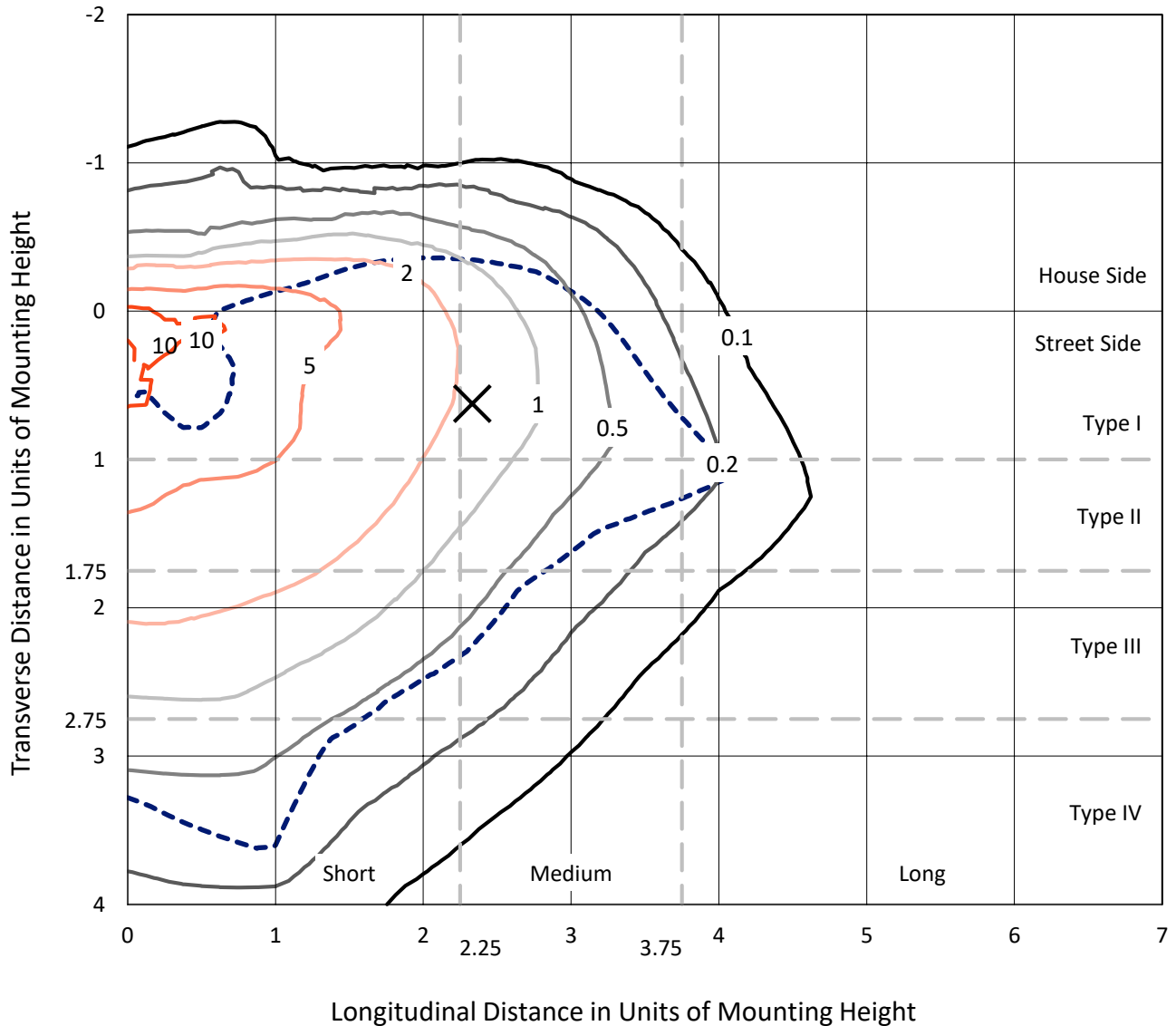
Input Watts (W): 320
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

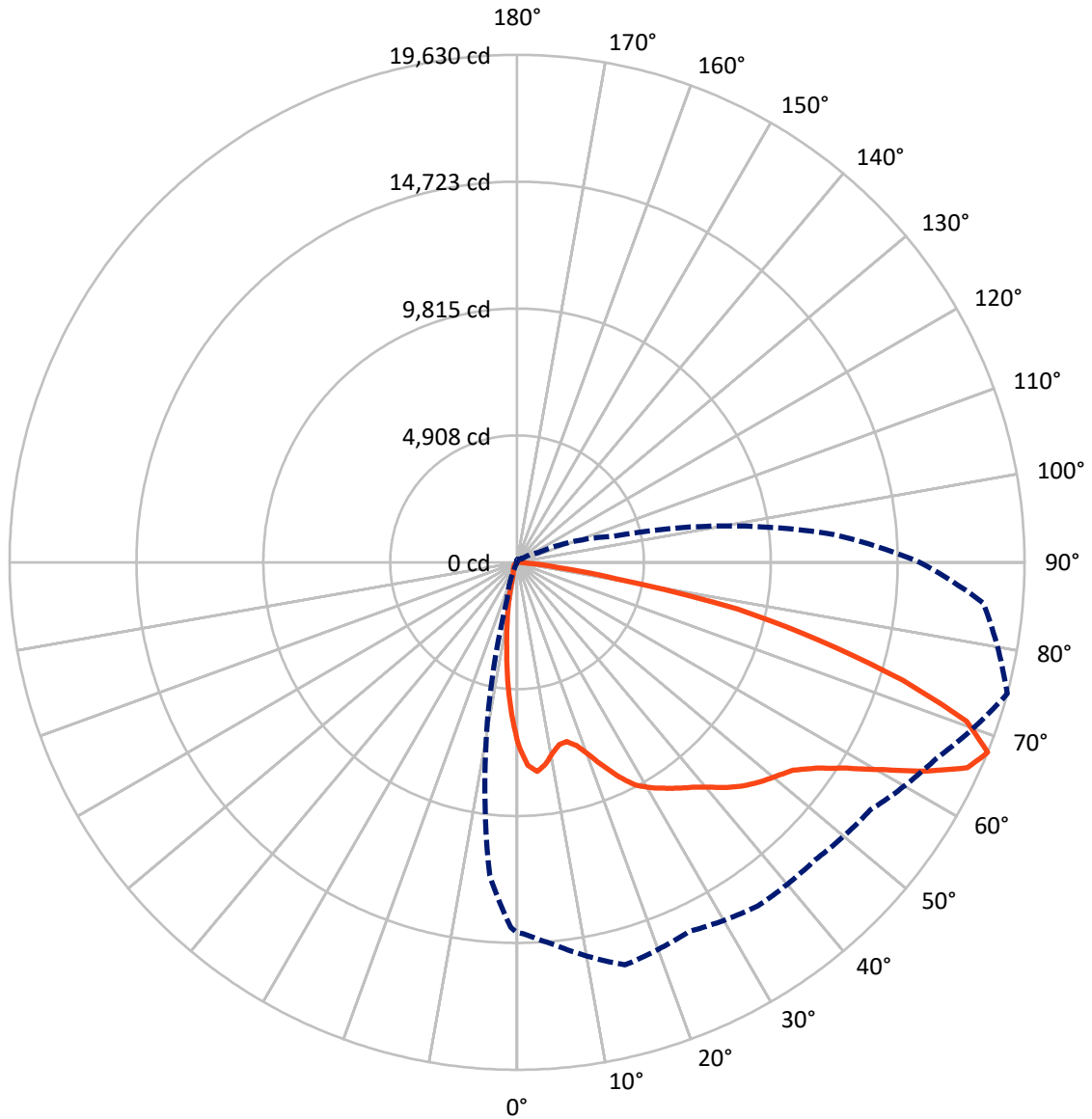
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.7 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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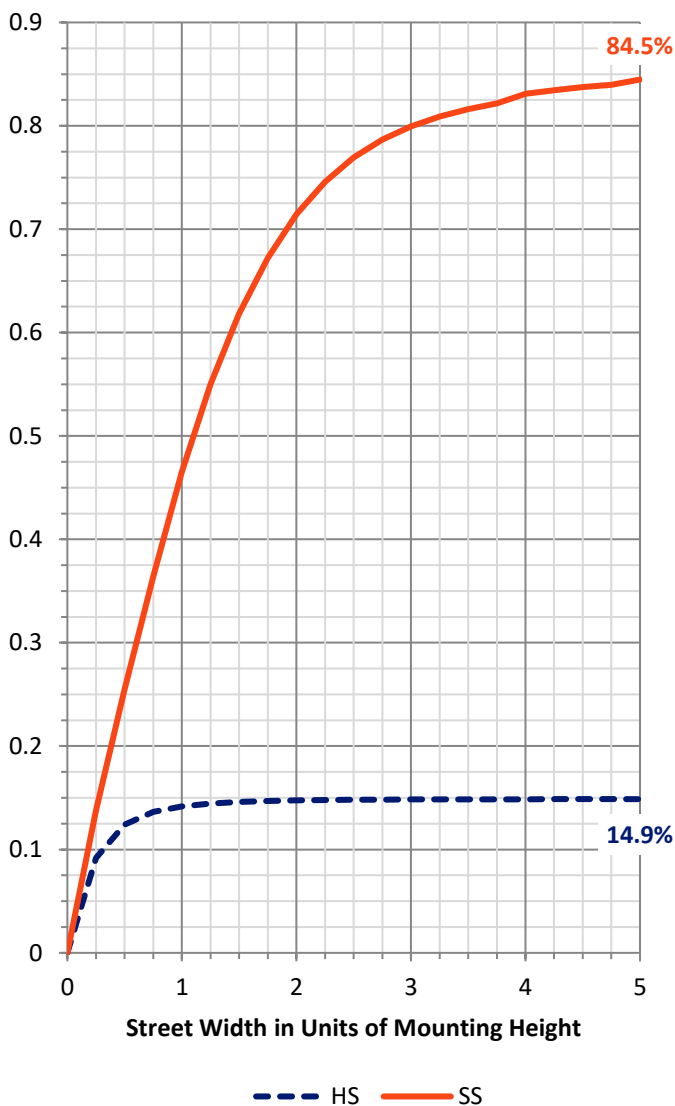
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3171.5	0.0	3171.5
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	17963.5	0.0	17963.5
	% Fixture	85.0	0.0	85.0
Total	Lumens	21135.0	0.0	21135.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	537.8	2.5
10°-20°	1059.0	5.0
20°-30°	1498.2	7.1
30°-40°	2202.8	10.4
40°-50°	3166.1	15.0
50°-60°	4457.1	21.1
60°-70°	5205.5	24.6
70°-80°	2655.7	12.6
80°-90°	352.8	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°	21135.0	100.0
0°-180°	21135.0	100.0

Coefficient of Utilization

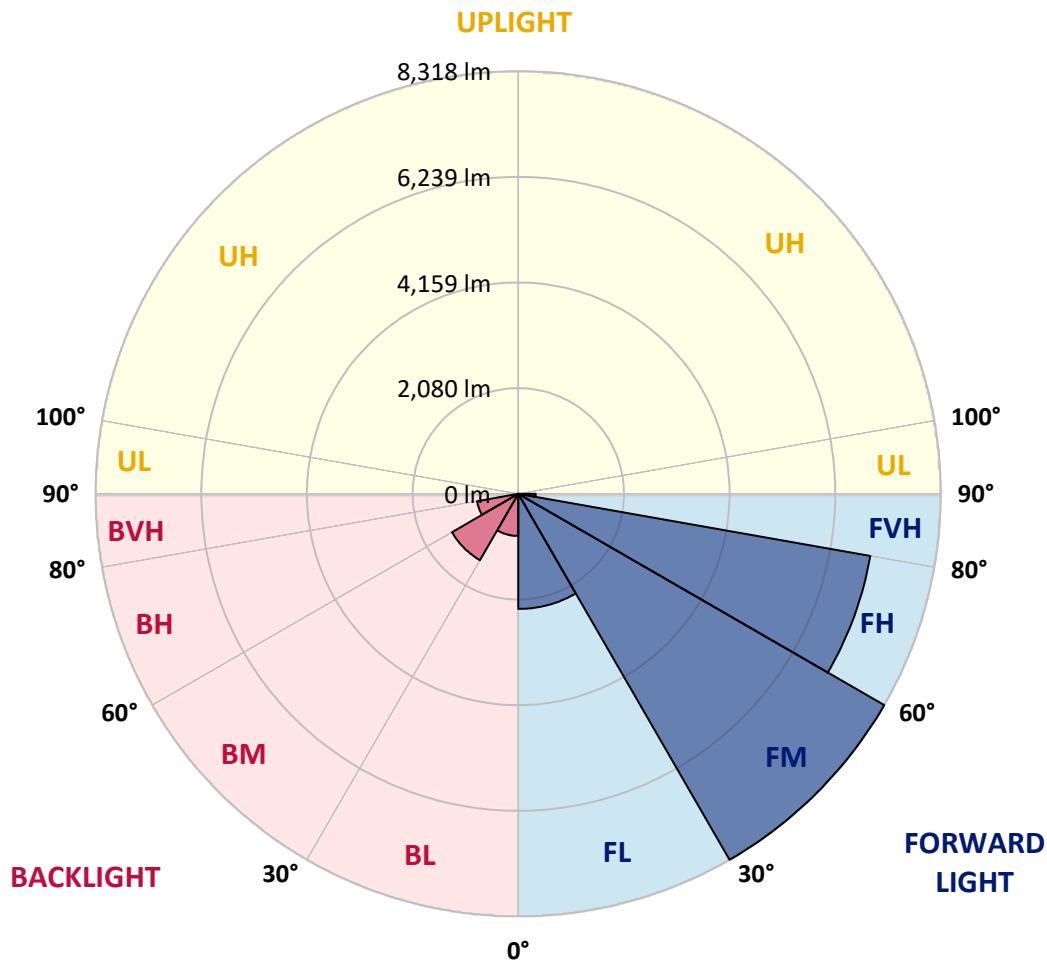


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2265.7	10.7			
FM (30°-60°)	8318.4	39.4			
FH (60°-80°)	7037.3	33.3			G3/7500
FVH (80°-90°)	342.1	1.6			G3/500
BL (0°-30°)	829.4	3.9	B2/1000		
BM (30°-60°)	1507.6	7.1	B2/2500		
BH (60°-80°)	823.8	3.9	B2/1000		G2/1000
BVH (80°-90°)	10.7	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4
2.5°	7686.1	7698.2	7760.2	7904.4	8061.6	8073.6	8179.7	8070.6	8033.6	7857.3	7675.1
5°	7744.2	7790.3	8003.5	8427.0	8794.5	8912.6	8996.7	8782.4	8557.2	8126.7	7667.1
7.5°	7276.7	7353.7	7689.1	8484.1	9140.9	9431.2	9486.3	9150.9	8599.2	7890.4	7199.6
10°	6677.9	6766.0	7170.5	8147.7	9049.8	9547.4	9623.4	9183.9	8391.0	7507.9	6694.0
12.5°	6193.4	6296.5	6710.0	7769.2	8736.4	9287.0	9437.2	9072.8	8210.8	7236.6	6348.5
15°	5970.1	6088.2	6522.8	7524.9	8389.0	8822.5	8946.6	8789.5	8110.6	7193.6	6268.5
17.5°	6098.3	6226.4	6674.9	7546.0	8062.6	8247.8	8347.9	8412.0	8110.6	7452.9	6502.7
20°	6623.9	6762.0	7236.6	7759.2	7792.3	7723.2	7830.3	8055.6	8204.8	7945.4	7065.4
22.5°	7350.7	7512.9	8048.6	8124.7	7660.1	7398.8	7412.8	7766.2	8376.0	8570.2	7846.3
25°	8236.8	8435.0	8979.7	8669.3	7715.2	7205.6	7200.6	7528.0	8543.2	9195.9	8716.4
27.5°	9116.8	9335.1	9813.7	9334.1	7942.4	7170.5	7160.5	7455.9	8706.4	9752.6	9666.5
30°	9854.7	10067.0	10479.5	9815.7	8187.7	7252.6	7204.6	7533.0	8803.5	10114.0	10359.3
32.5°	10455.4	10625.6	10959.0	10147.1	8450.0	7411.8	7307.7	7739.2	8968.7	10419.4	10996.1
35°	11116.2	11295.4	11428.6	10462.4	8744.4	7641.1	7491.9	8066.6	9223.0	10729.8	11693.9
37.5°	11870.1	12048.3	12032.3	10750.8	9117.8	8020.5	7925.4	8585.2	9618.4	11037.1	12472.8
40°	12608.0	12790.2	12660.1	11066.2	9556.4	8646.3	8576.2	9364.1	10148.1	11430.6	13385.9
42.5°	13298.8	13496.0	13217.7	11364.5	10079.0	9435.2	9555.4	10367.3	10810.9	11915.2	14172.9
45°	13855.5	14056.7	13685.3	11654.9	10629.6	10392.4	10753.8	11478.6	11607.8	12324.7	14704.5
47.5°	14260.0	14450.2	14009.7	11945.2	11334.5	11562.7	12192.5	12644.0	12327.7	12680.1	15081.9
50°	14518.3	14666.4	14104.8	12308.6	12259.6	12928.4	13691.3	13911.5	13005.5	13000.5	15540.5
52.5°	14682.5	14749.5	14174.9	12688.1	13224.7	14415.1	15159.0	15228.1	13703.3	13352.9	16158.2
55°	15248.1	15302.2	14671.4	13147.6	14022.7	15717.7	16486.6	16422.5	14493.2	14042.7	16887.1
57.5°	16213.3	16270.3	15697.7	13808.4	14668.4	16522.6	17448.7	17563.9	15419.3	15011.9	17668.0
60°	16697.9	16804.0	16599.7	14645.4	15294.2	17037.3	18104.5	18472.0	16576.7	16289.4	18424.9
62.5°	16258.3	16412.5	16708.9	15573.5	15915.9	17320.6	18308.8	18797.4	17762.1	17778.1	18891.5
65°	15381.3	15504.4	16007.0	16082.1	16276.4	17285.6	17804.2	18342.8	18488.0	19145.8	18866.4
67.5°	14322.0	14368.1	14794.6	16122.2	15753.7	16232.3	16288.4	16686.8	17914.3	19630.3	18108.5
70°	12797.2	12822.2	13194.7	14781.6	13538.1	13643.2	13560.1	13641.2	15401.3	18449.9	16195.3
72.5°	10299.2	10362.3	10892.0	12275.6	9862.7	9559.4	10212.1	10176.1	11861.1	15587.5	12028.3
75°	7583.0	7692.1	8492.1	9887.8	6922.2	6261.4	6738.0	6865.2	8432.0	12057.3	7521.9
77.5°	5309.3	5390.4	6165.3	7268.6	5010.0	4477.3	4305.1	4456.3	5565.6	8722.4	3789.5
80°	3058.6	3088.7	3583.3	4197.0	3376.0	3862.6	3499.2	3603.3	3335.0	3880.6	1629.9
82.5°	2001.4	2006.4	2199.6	2498.0	2102.5	2442.9	1808.2	2311.7	2051.4	1558.9	530.6
85°	1081.3	1087.3	1275.5	1773.1	1190.4	672.8	395.5	812.0	1268.5	357.4	145.2
87.5°	119.1	109.1	384.5	644.8	330.4	61.1	21.0	91.1	203.2	23.0	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4
2.5°	7582.0	7498.9	7291.7	7072.4	6896.2	6731.0	6564.8	6361.6	6204.4	6172.3	6120.3
5°	7419.8	7156.5	6722.0	6285.5	5934.1	5490.5	5209.2	4989.9	4775.7	4762.7	4719.6
7.5°	6853.1	6506.7	5895.0	5291.3	4796.7	4374.2	3947.7	3662.4	3438.1	3359.0	3311.9
10°	6308.5	5919.0	5155.1	4466.3	4024.8	3651.3	3351.0	3052.6	2782.3	2596.1	2512.0
12.5°	5928.0	5497.5	4655.5	4061.8	3745.5	3391.0	3024.6	2652.2	2340.8	2116.5	1979.4
15°	5780.9	5321.3	4488.3	3901.6	3511.2	3062.6	2594.1	2168.6	1823.2	1619.9	1496.8
17.5°	5956.1	5421.4	4475.3	3706.4	3160.8	2603.1	2085.5	1582.9	1257.5	1103.3	1024.2
20°	6400.6	5739.8	4470.3	3467.1	2744.3	2058.4	1412.7	1041.2	844.0	757.9	720.9
22.5°	7029.4	6146.3	4510.4	3230.8	2310.7	1470.7	975.2	764.9	663.8	617.7	596.7
25°	7838.3	6717.0	4623.5	3016.6	1903.3	1097.3	759.9	640.8	569.7	533.6	518.6
27.5°	8700.3	7373.8	4799.7	2830.4	1571.9	875.0	650.8	548.7	497.6	472.6	458.5
30°	9411.2	8134.7	4977.9	2623.1	1331.6	762.9	595.7	500.6	441.5	425.5	412.5
32.5°	10032.9	8710.4	5104.1	2435.9	1174.4	677.8	538.6	447.5	407.5	376.4	362.4
35°	10676.7	9189.9	5100.1	2304.7	1066.3	613.7	490.6	400.5	352.4	316.4	305.4
37.5°	11373.5	9731.6	5013.0	2192.6	1019.2	562.7	463.6	375.4	327.4	291.3	277.3
40°	12189.5	10300.2	4923.9	2087.5	1006.2	521.6	444.5	355.4	304.4	269.3	255.3
42.5°	12984.4	10812.9	4845.8	2009.4	950.1	520.6	427.5	340.4	286.3	252.3	236.3
45°	13620.2	11290.4	4830.7	1962.3	891.1	538.6	418.5	330.4	272.3	238.3	223.3
47.5°	14148.8	11809.0	4926.9	1929.3	835.0	491.6	440.5	323.4	259.3	226.3	209.2
50°	14777.6	12445.8	5153.1	1875.2	775.9	442.5	504.6	325.4	248.3	214.3	196.2
52.5°	15654.6	13326.8	5485.5	1784.1	694.8	397.5	496.6	327.4	236.3	201.2	183.2
55°	16637.8	14427.2	5842.9	1632.9	581.7	338.4	425.5	313.4	213.3	187.2	170.2
57.5°	17671.0	15425.3	6055.2	1452.7	462.6	292.3	340.4	285.3	188.2	168.2	157.2
60°	17833.2	15804.8	5958.1	1231.5	367.4	254.3	252.3	290.3	168.2	148.2	140.2
62.5°	17429.7	15328.2	5488.5	1034.2	307.4	223.3	207.2	253.3	152.2	132.2	124.1
65°	16653.8	14039.7	4727.6	932.1	285.3	191.2	172.2	178.2	133.2	115.1	108.1
67.5°	15574.5	12319.6	3881.6	874.0	282.3	164.2	147.2	135.2	115.1	100.1	94.1
70°	13367.9	10263.2	3096.7	842.0	274.3	138.2	124.1	110.1	96.1	85.1	80.1
72.5°	9838.7	7272.6	2408.9	807.0	276.3	110.1	108.1	91.1	77.1	66.1	64.1
75°	5684.8	4154.9	1579.9	653.8	263.3	85.1	90.1	64.1	54.1	46.1	46.1
77.5°	3029.6	2534.0	601.7	272.3	96.1	54.1	51.1	38.0	34.0	28.0	27.0
80°	1320.6	1115.3	181.2	76.1	53.1	29.0	19.0	17.0	15.0	12.0	11.0
82.5°	467.6	403.5	59.1	37.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	106.1	76.1	0.0	9.0	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



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4
2.5°	6014.2	5992.1	5862.0	5867.0	5890.0	5923.0	5845.0	5881.0	5978.1	6071.2	6106.3
5°	4650.5	4655.5	4576.4	4625.5	4669.6	4699.6	4573.4	4575.4	4652.5	4757.7	4812.7
7.5°	3276.9	3268.9	3272.9	3390.0	3473.1	3413.1	3460.1	3296.9	3306.9	3382.0	3326.0
10°	2435.9	2325.8	2263.7	2351.8	2442.9	2409.9	2328.8	2275.7	2312.8	2395.8	2389.8
12.5°	1914.3	1756.1	1663.0	1599.9	1675.0	1612.9	1610.9	1564.9	1514.8	1523.8	1657.0
15°	1439.7	1324.6	1214.4	1113.3	1111.3	1090.3	983.2	863.0	853.0	859.0	928.1
17.5°	990.2	951.1	906.1	819.0	795.9	707.8	603.7	555.7	531.6	542.6	565.7
20°	695.8	680.8	685.8	638.8	605.7	521.6	460.5	441.5	437.5	448.5	459.5
22.5°	576.7	549.7	546.7	525.6	492.6	431.5	398.5	387.5	382.5	392.5	400.5
25°	504.6	477.6	466.6	453.5	418.5	376.4	356.4	346.4	341.4	347.4	352.4
27.5°	444.5	419.5	409.5	400.5	366.4	336.4	320.4	311.4	307.4	309.4	314.4
30°	399.5	377.4	364.4	353.4	324.4	303.4	289.3	280.3	276.3	276.3	281.3
32.5°	352.4	340.4	328.4	314.4	287.3	273.3	259.3	249.3	245.3	246.3	250.3
35°	293.3	289.3	292.3	279.3	256.3	244.3	230.3	219.3	216.3	217.3	221.3
37.5°	260.3	242.3	253.3	246.3	233.3	217.3	199.2	189.2	184.2	187.2	189.2
40°	239.3	217.3	209.2	216.3	214.3	188.2	172.2	162.2	158.2	159.2	161.2
42.5°	221.3	195.2	177.2	176.2	188.2	164.2	147.2	138.2	133.2	133.2	135.2
45°	204.2	176.2	154.2	137.2	158.2	139.2	123.1	115.1	109.1	109.1	110.1
47.5°	191.2	160.2	134.2	112.1	119.1	114.1	101.1	93.1	87.1	87.1	88.1
50°	179.2	144.2	116.1	94.1	89.1	94.1	82.1	73.1	69.1	68.1	70.1
52.5°	166.2	128.2	99.1	80.1	70.1	71.1	64.1	58.1	53.1	53.1	55.1
55°	153.2	115.1	86.1	68.1	58.1	53.1	51.1	47.1	43.1	43.1	45.1
57.5°	140.2	101.1	73.1	56.1	46.1	42.1	42.1	39.0	36.0	36.0	38.0
60°	128.2	87.1	60.1	46.1	36.0	35.0	36.0	33.0	31.0	31.0	33.0
62.5°	114.1	74.1	49.1	38.0	29.0	28.0	31.0	29.0	27.0	27.0	29.0
65°	97.1	63.1	39.0	29.0	22.0	22.0	26.0	24.0	22.0	22.0	24.0
67.5°	82.1	53.1	30.0	21.0	16.0	17.0	22.0	20.0	19.0	19.0	21.0
70°	68.1	41.0	21.0	13.0	9.0	13.0	17.0	17.0	17.0	17.0	19.0
72.5°	51.1	28.0	12.0	5.0	4.0	9.0	14.0	16.0	15.0	15.0	18.0
75°	33.0	16.0	4.0	0.0	0.0	5.0	11.0	13.0	13.0	12.0	15.0
77.5°	19.0	5.0	0.0	0.0	0.0	0.0	7.0	6.0	5.0	4.0	7.0
80°	5.0	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: P324299

CATALOG NUMBER: GLEON-SA5D-827-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4	7090.4
2.5°	6247.4	6365.6	6531.8	6708.0	6979.3	7194.6	7405.8	7587.0	7657.1	7686.1
5°	4944.9	5118.1	5361.4	5673.7	6163.3	6603.9	7050.4	7499.9	7695.2	7744.2
7.5°	3548.2	3769.5	4078.9	4470.3	5044.0	5614.7	6238.4	6898.2	7200.6	7276.7
10°	2626.1	2896.4	3250.9	3663.4	4211.0	4797.7	5477.5	6231.4	6576.8	6677.9
12.5°	1863.2	2228.7	2703.2	3204.8	3679.4	4203.0	4890.8	5721.8	6084.2	6193.4
15°	1094.3	1447.7	2009.4	2681.2	3288.9	3819.5	4518.4	5460.5	5860.0	5970.1
17.5°	627.7	804.0	1228.5	1977.4	2802.3	3537.2	4401.2	5525.6	5996.1	6098.3
20°	479.6	535.6	707.8	1273.5	2233.7	3259.9	4401.2	5894.0	6473.7	6623.9
22.5°	419.5	460.5	530.6	759.9	1644.0	2962.5	4452.3	6426.6	7184.5	7350.7
25°	372.4	409.5	469.6	571.7	1121.3	2609.1	4573.4	7080.4	8021.5	8236.8
27.5°	333.4	368.4	422.5	500.6	766.9	2182.6	4736.6	7847.3	8944.6	9116.8
30°	298.4	331.4	380.5	435.5	591.7	1699.0	4875.8	8570.2	9669.5	9854.7
32.5°	265.3	295.4	339.4	380.5	484.6	1256.5	4890.8	9142.9	10271.2	10455.4
35°	234.3	261.3	301.4	333.4	401.5	992.2	4657.5	9639.5	10872.9	11116.2
37.5°	204.2	230.3	265.3	289.3	353.4	809.0	4301.1	10193.1	11644.8	11870.1
40°	176.2	199.2	235.3	251.3	334.4	621.7	3913.7	10773.8	12401.7	12608.0
42.5°	150.2	172.2	207.2	238.3	293.3	464.6	3495.2	11318.5	13082.6	13298.8
45°	125.1	148.2	183.2	252.3	243.3	347.4	3047.6	11679.9	13620.2	13855.5
47.5°	101.1	127.2	175.2	240.3	194.2	255.3	2693.2	12022.3	14027.7	14260.0
50°	81.1	107.1	197.2	214.3	159.2	195.2	2545.0	12328.7	14295.0	14518.3
52.5°	66.1	90.1	186.2	164.2	133.2	161.2	2625.1	12825.3	14542.3	14682.5
55°	55.1	71.1	112.1	114.1	113.1	137.2	2724.2	13538.1	15182.1	15248.1
57.5°	48.1	57.1	78.1	88.1	95.1	122.1	2726.2	14561.3	16172.2	16213.3
60°	41.0	50.1	65.1	71.1	82.1	109.1	2627.1	14918.7	16561.7	16697.9
62.5°	36.0	44.1	54.1	59.1	69.1	98.1	2394.8	14401.1	16027.1	16258.3
65°	32.0	40.0	45.1	50.1	61.1	88.1	2012.4	13365.9	15140.0	15381.3
67.5°	28.0	35.0	40.0	45.1	55.1	78.1	1481.8	12163.5	14121.8	14322.0
70°	25.0	31.0	36.0	40.0	48.1	66.1	899.1	10321.3	12714.1	12797.2
72.5°	24.0	28.0	33.0	36.0	42.1	58.1	455.5	7585.0	10164.1	10299.2
75°	21.0	25.0	30.0	32.0	37.0	50.1	185.2	4981.9	7365.8	7583.0
77.5°	17.0	23.0	27.0	29.0	32.0	41.0	94.1	3183.8	5169.1	5309.3
80°	6.0	17.0	23.0	24.0	27.0	30.0	62.1	1743.1	2998.6	3058.6
82.5°	0.0	11.0	18.0	17.0	19.0	23.0	40.0	829.0	1979.4	2001.4
85°	0.0	5.0	14.0	11.0	8.0	16.0	14.0	181.2	1038.2	1081.3
87.5°	0.0	0.0	1.0	5.0	4.0	6.0	2.0	1.0	94.1	119.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)