

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P320823

Luminaire Tested: **GLEON-SA9D-830-U-SLR**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P320823
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-26)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA9D-830-U-SLR
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48441 lumens
Efficiency: N/A
Efficacy: 84.2 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

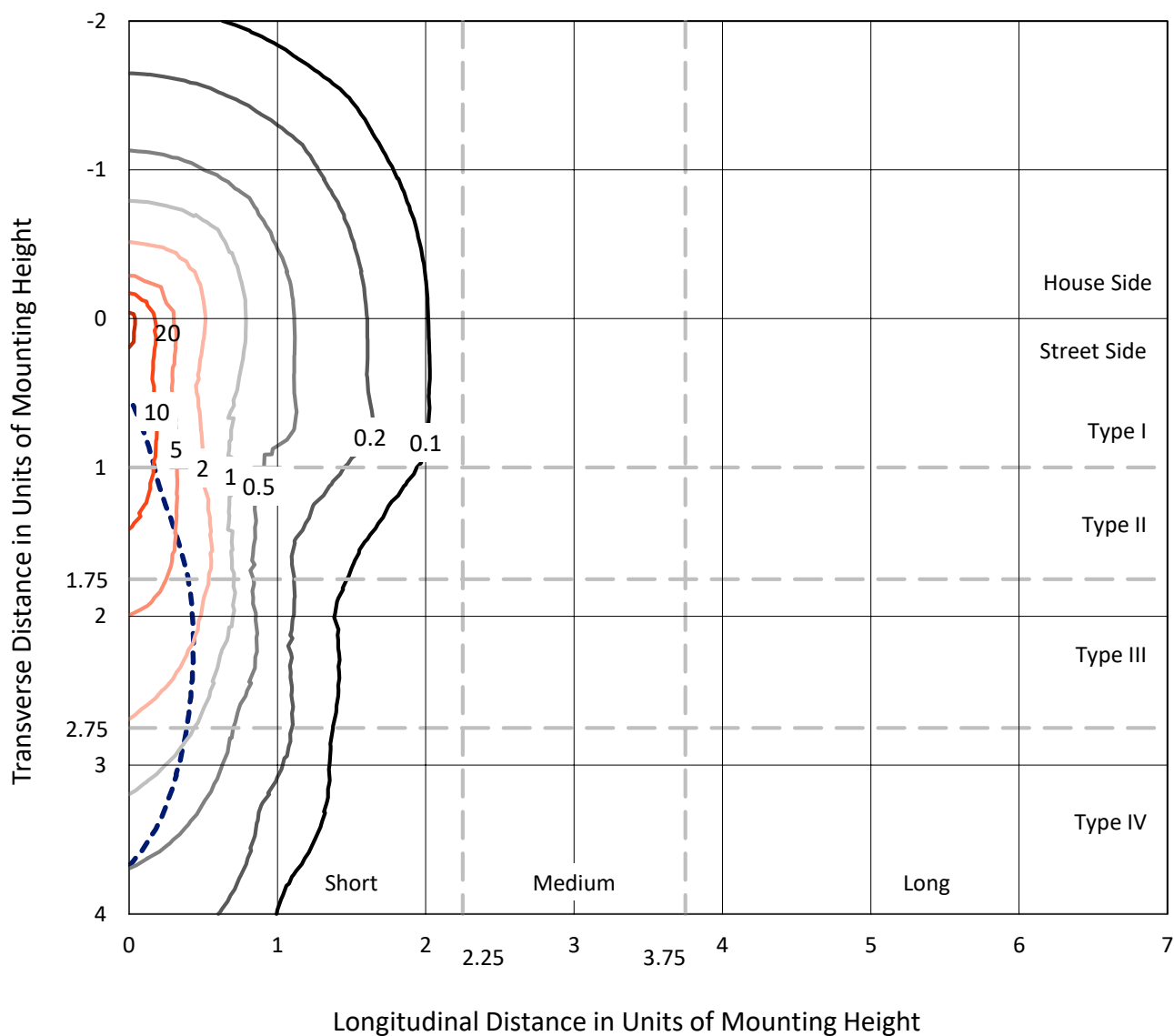
Input Watts (W): 575
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

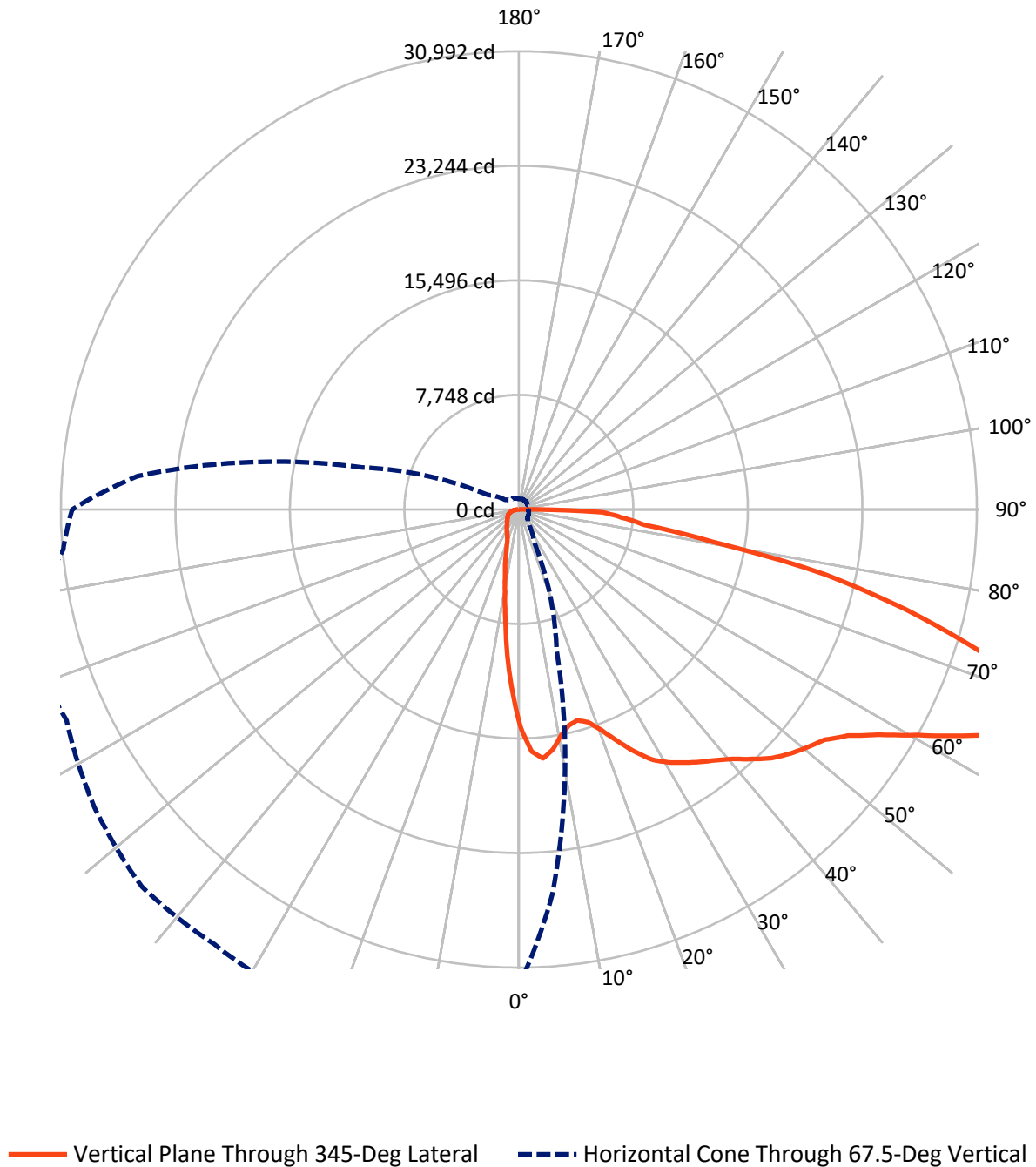
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 23.6 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8374.4	0.0	8374.4
	% Fixture	17.3	0.0	17.3
Street Side	Lumens	40066.6	0.0	40066.6
	% Fixture	82.7	0.0	82.7
Total	Lumens	48441.0	0.0	48441.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1139.0	2.4
10°-20°	2366.1	4.9
20°-30°	3365.1	6.9
30°-40°	4849.1	10.0
40°-50°	6833.8	14.1
50°-60°	9500.1	19.6
60°-70°	11488.5	23.7
70°-80°	7061.8	14.6
80°-90°	1837.5	3.8
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°	48441.0	100.0
0°-180°	48441.0	100.0

Coefficient of Utilization



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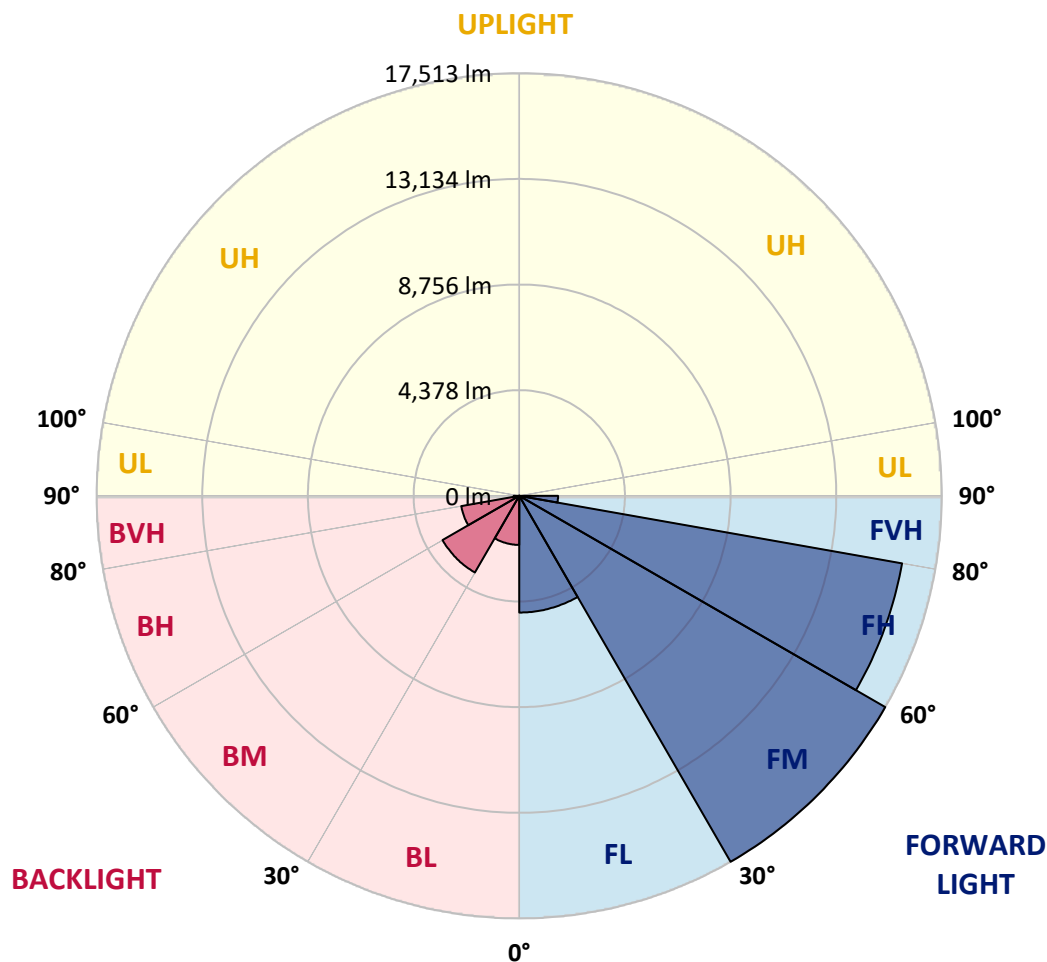
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4836.9	10.0			
FM	(30°-60°)	17512.6	36.2			
FH	(60°-80°)	16109.8	33.3			G5
FVH	(80°-90°)	1607.2	3.3			G5
BL	(0°-30°)	2033.2	4.2	B3/2500		
BM	(30°-60°)	3670.4	7.6	B3/5000		
BH	(60°-80°)	2440.4	5.0	B3/2500		G3/2500
BVH	(80°-90°)	230.3	0.5			G3/500
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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9
2.5°	15809.5	15670.1	15459.0	15247.9	15091.0	14932.2	14752.1	14572.0	14366.7	14159.4	14037.4
5°	15548.1	15160.7	14657.2	14153.6	13820.5	13487.4	13109.7	12732.1	12358.3	11984.5	11783.1
7.5°	14370.5	13789.5	13134.9	12480.3	11996.1	11510.0	10987.1	10462.2	9997.4	9530.7	9242.1
10°	13212.4	12515.2	11763.7	11010.3	10390.6	9770.8	9246.0	8719.2	8368.6	8018.1	7752.7
12.5°	12381.5	11608.8	10781.8	9952.9	9333.1	8713.4	8380.2	8047.1	7756.6	7466.1	7160.1
15°	12052.3	11178.8	10332.5	9484.2	8920.6	8357.0	7987.1	7615.2	7225.9	6834.7	6459.0
17.5°	12342.8	11320.2	10400.2	9480.3	8742.4	8004.5	7487.4	6968.4	6455.1	5941.9	5506.1
20°	13249.2	11943.8	10741.1	9536.5	8554.5	7572.6	6879.3	6184.0	5525.5	4867.0	4373.1
22.5°	14521.6	12794.0	11223.4	9652.7	8384.1	7113.6	6244.0	5372.5	4593.9	3815.4	3331.2
25°	16067.1	13921.2	11918.6	9914.1	8314.4	6712.7	5643.6	4574.6	3753.4	2930.3	2585.5
27.5°	17695.9	15265.3	12782.4	10297.6	8326.0	6354.4	5138.1	3919.9	3180.1	2440.3	2204.0
30°	19053.6	16801.1	13789.5	10776.0	8370.5	5965.1	4661.7	3358.3	2748.2	2138.2	1985.1
32.5°	20295.0	17872.1	14548.7	11223.4	8420.9	5616.5	4293.7	2969.0	2471.3	1971.6	1845.7
35°	21577.1	18823.1	15079.4	11333.7	8333.8	5331.8	4042.0	2752.1	2293.1	1832.1	1725.6
37.5°	22989.0	19851.5	15590.7	11327.9	8186.6	5045.2	3846.3	2645.6	2176.9	1706.3	1628.8
40°	24563.6	20988.3	16144.6	11300.8	8052.9	4803.1	3701.1	2597.2	2113.0	1626.9	1561.0
42.5°	26103.3	22072.9	16659.8	11246.6	7944.5	4640.4	3557.8	2475.1	2054.9	1632.7	1539.7
45°	27259.5	23020.0	17107.1	11192.4	7863.1	4533.9	3445.4	2357.0	2000.6	1644.3	1526.1
47.5°	28136.8	23970.9	17602.9	11233.0	7855.4	4477.7	3366.0	2254.4	1898.0	1539.7	1491.3
50°	29252.4	25113.6	18325.3	11537.1	7961.9	4386.7	3273.1	2157.5	1799.2	1440.9	1506.8
52.5°	30641.0	26744.3	19444.8	12143.3	8184.6	4225.9	3125.9	2025.8	1679.1	1330.5	1433.2
55°	32680.4	28834.0	20876.0	12916.1	8453.8	3989.7	2903.2	1814.7	1520.3	1224.0	1315.0
57.5°	34510.6	30945.1	22249.2	13551.3	8622.3	3691.4	2622.3	1553.3	1342.2	1131.1	1183.3
60°	35326.0	32033.5	22892.2	13748.8	8521.6	3294.4	2306.6	1317.0	1185.3	1053.6	1043.9
62.5°	35008.3	31342.1	22258.8	13175.6	8029.7	2883.8	2027.8	1171.7	1072.9	972.2	950.9
65°	34078.7	29169.1	20484.8	11800.5	7198.8	2597.2	1851.5	1105.9	995.5	885.1	861.8
67.5°	32246.6	26076.1	17970.9	9865.7	6143.3	2420.9	1750.8	1080.7	947.1	811.5	784.4
70°	28958.0	22353.7	15075.5	7795.3	5054.9	2312.5	1685.0	1057.5	894.8	730.1	705.0
72.5°	23785.0	17922.5	12038.7	6153.0	4225.9	2298.9	1677.2	1055.5	852.2	648.8	625.6
75°	17029.7	13613.3	9189.8	4764.4	3460.9	2157.5	1592.0	1026.5	794.1	559.7	538.4
77.5°	11459.6	9422.2	6387.3	3350.5	2568.1	1785.7	1338.3	890.9	679.8	468.7	447.4
80°	7359.6	6521.0	4280.2	2039.4	1665.6	1291.8	956.7	621.7	495.8	368.0	350.5
82.5°	5399.6	4853.4	2974.8	1096.2	925.8	753.4	584.9	416.4	338.9	261.5	253.7
85°	3431.9	3784.4	2190.4	596.5	488.1	379.6	313.8	247.9	195.6	143.3	143.3
87.5°	666.2	921.9	606.2	288.6	211.1	133.6	114.3	93.0	52.3	9.7	11.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	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):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9
2.5°	13913.5	13779.8	13646.2	13495.1	13342.1	13200.8	13057.4	12900.6	12929.6	12809.5	12689.5
5°	11581.6	11368.6	11153.6	10967.7	10781.8	10621.0	10458.3	10313.1	10439.0	10353.8	10268.5
7.5°	8951.6	8688.2	8422.8	8200.1	7977.4	7805.0	7630.7	7510.6	7634.6	7619.1	7603.6
10°	7487.4	7231.8	6974.2	6728.2	6482.2	6273.1	6062.0	5883.8	5852.8	5763.7	5672.7
12.5°	6852.2	6501.6	6149.1	5891.5	5633.9	5384.1	5134.3	4925.1	4830.2	4683.0	4533.9
15°	6083.3	5668.8	5254.3	4961.9	4667.5	4425.4	4181.4	4001.3	3941.2	3827.0	3712.7
17.5°	5070.4	4617.2	4164.0	3867.7	3569.4	3375.7	3180.1	3060.0	3060.0	3027.1	2994.2
20°	3879.3	3474.5	3069.7	2843.1	2616.5	2513.9	2409.3	2358.9	2374.4	2376.4	2376.4
22.5°	2845.1	2597.2	2349.3	2258.2	2165.3	2128.5	2091.7	2070.4	2078.1	2080.0	2082.0
25°	2240.8	2145.9	2049.1	2002.6	1954.2	1930.9	1907.7	1899.9	1917.4	1919.3	1919.3
27.5°	1967.7	1909.6	1849.6	1820.5	1789.5	1779.9	1770.2	1756.6	1774.0	1774.0	1772.1
30°	1830.2	1768.2	1706.3	1669.5	1632.7	1636.5	1638.5	1634.6	1646.2	1654.0	1659.8
32.5°	1717.9	1657.8	1597.8	1561.0	1522.3	1516.5	1510.6	1506.8	1532.0	1545.5	1559.1
35°	1617.2	1551.3	1485.5	1450.6	1415.7	1402.2	1388.6	1379.0	1402.2	1419.6	1437.1
37.5°	1549.4	1481.6	1411.9	1379.0	1344.1	1326.7	1309.2	1297.6	1307.3	1315.0	1322.8
40°	1495.2	1425.4	1353.8	1315.0	1276.3	1258.9	1241.4	1231.8	1237.6	1239.5	1241.4
42.5°	1444.8	1377.0	1309.2	1266.6	1222.1	1200.8	1179.5	1167.8	1171.7	1175.6	1177.5
45°	1408.0	1340.2	1270.5	1220.1	1167.8	1144.6	1121.4	1107.8	1109.7	1109.7	1109.7
47.5°	1442.9	1344.1	1243.4	1185.3	1125.2	1098.1	1071.0	1057.5	1053.6	1049.7	1045.8
50°	1570.7	1402.2	1231.8	1158.2	1082.6	1053.6	1022.6	1007.1	997.4	993.5	989.7
52.5°	1533.9	1388.6	1241.4	1146.5	1049.7	1014.8	980.0	954.8	945.1	939.3	933.5
55°	1404.1	1313.1	1220.1	1105.9	991.6	960.6	927.7	910.3	892.8	889.0	885.1
57.5°	1233.7	1196.9	1160.1	1043.9	927.7	898.6	867.7	856.0	840.5	840.5	838.6
60°	1032.3	1086.5	1140.7	1007.1	871.5	838.6	805.7	796.0	790.2	788.2	786.3
62.5°	927.7	1016.8	1103.9	962.6	819.2	784.4	749.5	737.9	736.0	737.9	737.9
65°	838.6	865.7	892.8	827.0	761.1	726.3	689.5	677.9	681.7	687.5	693.3
67.5°	757.3	751.5	745.6	722.4	697.2	668.2	637.2	625.6	627.5	635.2	643.0
70°	679.8	672.0	662.4	644.9	627.5	602.3	577.1	569.4	567.5	577.1	584.9
72.5°	602.3	592.6	581.0	567.5	552.0	530.7	509.4	503.5	505.5	511.3	517.1
75°	517.1	509.4	499.7	488.1	474.5	455.1	435.8	431.9	435.8	441.6	447.4
77.5°	424.1	422.2	418.3	408.7	399.0	377.7	354.4	352.5	358.3	364.1	368.0
80°	331.2	333.1	335.1	327.3	319.6	296.3	271.1	269.2	275.0	280.8	286.6
82.5°	244.0	249.8	253.7	244.0	234.3	207.2	180.1	176.2	195.6	201.4	207.2
85°	141.4	149.1	156.9	149.1	141.4	114.3	87.2	85.2	102.6	112.3	122.0
87.5°	11.6	15.5	19.4	17.4	15.5	7.7	0.0	0.0	1.9	9.7	17.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P320823

CATALOG NUMBER: GLEON-SA9D-830-U-SLR

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P320823

CATALOG NUMBER: GLEON-SA9D-830-U-SLR

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9
2.5°	12613.9	12538.4	12515.2	12491.9	12406.7	12319.5	12408.6	12495.8	12532.6	12569.4	12474.5
5°	10256.9	10243.4	10243.4	10241.4	10164.0	10084.6	10144.6	10202.7	10072.9	9943.2	9929.6
7.5°	7686.9	7770.2	7837.9	7903.8	7878.6	7853.4	7909.6	7965.8	7801.2	7634.6	7553.2
10°	5692.1	5709.5	5783.1	5856.7	5874.1	5889.6	5959.3	6027.1	5899.3	5771.5	5715.3
12.5°	4440.9	4348.0	4357.6	4365.4	4400.3	4433.2	4506.8	4578.4	4526.1	4471.9	4477.7
15°	3596.5	3478.4	3429.9	3379.6	3418.3	3457.1	3509.4	3559.7	3561.6	3561.6	3612.0
17.5°	2936.1	2876.0	2827.6	2777.3	2829.6	2879.9	2885.7	2891.5	2893.5	2895.4	2891.5
20°	2405.4	2434.5	2419.0	2403.5	2422.8	2440.3	2455.8	2469.3	2451.9	2432.5	2384.1
22.5°	2109.1	2134.3	2153.6	2171.1	2204.0	2235.0	2219.5	2202.1	2167.2	2130.4	2093.6
25°	1936.7	1954.2	1973.5	1992.9	2020.0	2045.2	2018.1	1991.0	1965.8	1940.6	1915.4
27.5°	1791.5	1808.9	1826.3	1841.8	1867.0	1890.2	1865.1	1839.9	1818.6	1797.3	1777.9
30°	1673.3	1685.0	1698.5	1712.1	1735.3	1756.6	1735.3	1712.1	1696.6	1679.1	1665.6
32.5°	1572.6	1584.2	1590.1	1595.9	1617.2	1638.5	1623.0	1607.5	1593.9	1580.4	1570.7
35°	1462.2	1485.5	1489.3	1493.2	1514.5	1535.8	1526.1	1514.5	1499.0	1483.5	1466.1
37.5°	1349.9	1377.0	1392.5	1406.1	1427.4	1448.7	1439.0	1429.3	1408.0	1386.7	1355.7
40°	1255.0	1266.6	1295.7	1322.8	1357.6	1390.6	1371.2	1349.9	1317.0	1284.1	1268.6
42.5°	1175.6	1173.7	1200.8	1227.9	1280.2	1330.5	1295.7	1260.8	1229.8	1198.8	1195.0
45°	1105.9	1100.1	1113.6	1127.2	1183.3	1237.6	1202.7	1165.9	1148.5	1131.1	1131.1
47.5°	1043.9	1040.0	1049.7	1057.5	1092.3	1125.2	1107.8	1090.4	1080.7	1071.0	1072.9
50°	987.7	983.9	993.5	1001.3	1014.8	1026.5	1030.3	1032.3	1026.5	1020.7	1024.5
52.5°	935.4	935.4	939.3	941.3	958.7	976.1	976.1	974.2	974.2	974.2	978.0
55°	890.9	894.8	894.8	894.8	921.9	947.1	939.3	931.6	933.5	933.5	937.4
57.5°	846.4	852.2	856.0	859.9	887.0	914.1	906.4	898.6	898.6	898.6	900.6
60°	796.0	803.7	811.5	819.2	846.4	873.5	865.7	856.0	858.0	859.9	861.8
62.5°	747.6	755.3	763.1	770.8	797.9	825.0	817.3	807.6	813.4	817.3	817.3
65°	701.1	706.9	714.7	722.4	747.6	772.8	765.0	757.3	765.0	770.8	774.7
67.5°	648.8	652.7	660.4	668.2	693.3	718.5	710.8	701.1	710.8	718.5	726.3
70°	588.8	592.6	602.3	610.1	635.2	660.4	650.7	641.1	650.7	660.4	668.2
72.5°	522.9	526.8	536.5	544.2	573.3	602.3	590.7	579.1	590.7	602.3	606.2
75°	451.3	455.1	466.8	476.4	505.5	534.5	524.9	513.2	522.9	532.6	534.5
77.5°	373.8	379.6	395.1	410.6	433.8	457.1	451.3	445.4	451.3	457.1	457.1
80°	292.4	298.3	317.6	335.1	348.6	362.2	364.1	366.0	368.0	369.9	368.0
82.5°	216.9	224.7	242.1	259.5	259.5	259.5	275.0	288.6	288.6	286.6	284.7
85°	133.6	143.3	158.8	174.3	164.6	154.9	180.1	203.4	203.4	201.4	197.5
87.5°	27.1	36.8	52.3	65.8	56.2	46.5	71.7	96.8	98.8	98.8	94.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P320823
 CATALOG NUMBER: GLEON-SA9D-830-U-SLR

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P320823

CATALOG NUMBER: GLEON-SA9D-830-U-SLR

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9
2.5°	12377.6	12528.7	12677.8	12716.6	12774.7	12799.9	12823.1	13012.9	13200.8	13421.5	13642.3
5°	9914.1	10026.5	10138.8	10156.2	10216.3	10247.2	10278.2	10508.7	10737.2	11045.2	11353.1
7.5°	7471.9	7499.0	7526.1	7522.3	7572.6	7640.4	7706.3	7952.2	8196.2	8527.4	8856.7
10°	5659.1	5721.1	5781.1	5837.3	5947.7	6075.5	6201.4	6453.2	6705.0	7032.3	7357.6
12.5°	4483.5	4555.2	4624.9	4686.9	4814.7	4985.1	5153.6	5455.8	5757.9	6149.1	6538.4
15°	3660.4	3654.6	3648.8	3691.4	3803.7	3989.7	4173.7	4493.2	4812.8	5242.7	5670.7
17.5°	2887.7	2858.6	2829.6	2862.5	2967.1	3120.1	3271.1	3542.3	3811.5	4227.9	4644.3
20°	2335.7	2316.3	2297.0	2328.0	2393.8	2457.7	2521.6	2717.2	2910.9	3249.8	3586.8
22.5°	2054.9	2052.9	2049.1	2066.5	2097.5	2130.4	2161.4	2256.3	2349.3	2568.1	2785.0
25°	1890.2	1888.3	1886.4	1894.1	1919.3	1944.5	1969.7	2031.6	2093.6	2198.2	2302.8
27.5°	1758.6	1754.7	1750.8	1752.7	1758.6	1797.3	1834.1	1863.1	1890.2	1961.9	2031.6
30°	1652.0	1650.1	1648.2	1648.2	1642.3	1655.9	1669.5	1714.0	1756.6	1830.2	1903.8
32.5°	1561.0	1551.3	1541.6	1520.3	1506.8	1526.1	1545.5	1592.0	1638.5	1706.3	1774.0
35°	1446.7	1421.6	1394.4	1382.8	1384.8	1404.1	1423.5	1470.0	1514.5	1588.1	1659.8
37.5°	1322.8	1315.0	1305.4	1303.4	1309.2	1328.6	1348.0	1388.6	1427.4	1501.0	1572.6
40°	1253.1	1249.2	1245.3	1241.4	1245.3	1264.7	1284.1	1322.8	1359.6	1431.2	1501.0
42.5°	1191.1	1189.2	1187.2	1187.2	1189.2	1210.5	1231.8	1270.5	1307.3	1371.2	1435.1
45°	1131.1	1133.0	1133.0	1136.9	1142.7	1164.0	1183.3	1226.0	1268.6	1330.5	1392.5
47.5°	1074.9	1080.7	1084.6	1094.3	1100.1	1123.3	1144.6	1191.1	1237.6	1315.0	1390.6
50°	1026.5	1032.3	1036.2	1043.9	1059.4	1086.5	1113.6	1169.8	1224.0	1353.8	1481.6
52.5°	981.9	987.7	993.5	1001.3	1020.7	1051.6	1082.6	1152.4	1220.1	1371.2	1522.3
55°	941.3	947.1	950.9	962.6	981.9	1009.0	1034.2	1119.4	1204.6	1315.0	1425.4
57.5°	902.5	908.3	912.2	919.9	929.6	958.7	985.8	1076.8	1167.8	1245.3	1320.9
60°	861.8	865.7	867.7	867.7	875.4	908.3	941.3	1057.5	1171.7	1158.2	1142.7
62.5°	817.3	821.2	823.1	817.3	827.0	861.8	896.7	1047.8	1198.8	1105.9	1012.9
65°	776.6	774.7	772.8	766.9	778.6	813.4	846.4	921.9	997.4	960.6	923.8
67.5°	732.1	726.3	720.5	712.7	724.3	755.3	784.4	809.6	834.7	838.6	842.5
70°	675.9	668.2	660.4	658.5	664.3	689.5	714.7	732.1	747.6	755.3	761.1
72.5°	610.1	604.3	598.4	594.6	596.5	617.8	637.2	652.7	668.2	674.0	677.9
75°	536.5	536.5	534.5	522.9	522.9	540.3	555.8	569.4	583.0	590.7	598.4
77.5°	457.1	459.0	459.0	443.5	441.6	459.0	474.5	486.1	495.8	503.5	509.4
80°	366.0	362.2	358.3	348.6	344.7	366.0	385.4	395.1	402.8	404.8	404.8
82.5°	280.8	273.1	263.4	242.1	244.0	267.3	288.6	296.3	304.1	304.1	304.1
85°	191.7	176.2	158.8	141.4	143.3	168.5	191.7	199.5	207.2	211.1	213.0
87.5°	91.0	75.5	58.1	44.5	44.5	65.8	85.2	89.1	93.0	100.7	108.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P320823

CATALOG NUMBER: GLEON-SA9D-830-U-SLR

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P320823

CATALOG NUMBER: GLEON-SA9D-830-U-SLR

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9
2.5°	13810.8	13977.4	14149.8	14322.1	14519.7	14717.2	14947.7	15176.2	15371.8	15567.4	15730.1
5°	11618.4	11883.8	12195.6	12507.4	12904.4	13301.5	13787.6	14271.8	14703.7	15135.5	15637.2
7.5°	9203.3	9548.1	9954.8	10361.5	10874.7	11388.0	12017.4	12646.9	13256.9	13865.1	14635.9
10°	7719.8	8082.0	8482.9	8881.8	9404.8	9925.7	10592.0	11256.3	11941.9	12625.5	13497.1
12.5°	6941.2	7342.1	7694.6	8047.1	8471.3	8893.5	9538.4	10183.3	10989.0	11792.8	12631.4
15°	6110.4	6548.1	6970.3	7392.5	7855.4	8316.3	8943.8	9571.3	10452.5	11333.7	12298.2
17.5°	5105.2	5566.2	6081.3	6594.6	7198.8	7801.2	8604.9	9408.6	10452.5	11494.5	12631.4
20°	4057.5	4528.1	5144.0	5759.8	6511.3	7260.8	8302.8	9344.7	10750.8	12154.9	13605.5
22.5°	3201.4	3615.9	4287.9	4958.0	5825.7	6693.3	8029.7	9364.1	11202.0	13038.1	14996.1
25°	2595.2	2887.7	3548.1	4206.6	5207.9	6209.2	7863.1	9515.2	11858.6	14200.1	16628.8
27.5°	2223.4	2415.1	3031.0	3644.9	4739.2	5831.5	7795.3	9757.2	12691.4	15625.5	18404.7
30°	2037.4	2171.1	2692.1	3211.1	4322.8	5434.5	7714.0	9993.5	13493.2	16990.9	19793.4
32.5°	1882.5	1989.0	2434.5	2878.0	3962.6	5047.1	7557.1	10065.2	14052.9	18040.6	20969.0
35°	1750.8	1839.9	2227.2	2614.6	3679.8	4745.0	7293.7	9842.5	14403.5	18964.5	22193.0
37.5°	1644.3	1714.0	2072.3	2430.6	3435.8	4440.9	6993.5	9546.1	14715.3	19884.4	23570.0
40°	1561.0	1621.0	1956.1	2291.2	3203.4	4115.6	6735.9	9354.4	15145.2	20936.1	25024.5
42.5°	1514.5	1592.0	1855.4	2116.8	2982.6	3848.3	6528.7	9209.2	15544.2	21877.3	26296.9
45°	1502.9	1613.3	1803.1	1992.9	2817.9	3643.0	6344.7	9044.5	15801.8	22559.0	27255.6
47.5°	1483.5	1574.6	1762.4	1950.3	2736.6	3521.0	6246.0	8969.0	16059.4	23147.8	28051.6
50°	1495.2	1506.8	1729.5	1950.3	2725.0	3499.7	6358.3	9216.9	16617.1	24015.5	28961.9
52.5°	1473.9	1423.5	1667.5	1911.6	2723.0	3534.5	6681.7	9828.9	17653.3	25475.8	29947.7
55°	1361.5	1295.7	1551.3	1807.0	2682.4	3555.8	7067.1	10576.5	19043.9	27509.3	31719.8
57.5°	1262.7	1202.7	1419.6	1634.6	2558.4	3482.2	7464.2	11444.1	20513.8	29581.6	33716.5
60°	1131.1	1117.5	1272.4	1427.4	2366.7	3304.1	7791.5	12276.9	21501.6	30724.3	34485.4
62.5°	1022.6	1030.3	1144.6	1258.9	2126.5	2992.2	7899.9	12805.7	21474.5	30143.3	33710.7
65°	939.3	952.9	1065.2	1177.5	1921.2	2664.9	7543.6	12420.3	20388.0	28353.7	32178.8
67.5°	858.0	873.5	1007.1	1138.8	1739.2	2337.6	6652.7	10965.8	18433.8	25899.9	30230.4
70°	780.5	799.9	945.1	1090.4	1607.5	2122.7	5504.2	8885.7	15987.7	23087.8	27974.1
72.5°	697.2	716.6	871.5	1026.5	1524.2	2020.0	4487.4	6952.9	12974.2	18993.5	23928.3
75°	612.0	625.6	794.1	960.6	1409.9	1859.3	3521.0	5180.8	9929.6	14678.5	18073.6
77.5°	526.8	544.2	685.6	825.0	1196.9	1566.8	2653.3	3739.8	7286.0	10830.2	12569.4
80°	420.3	435.8	536.5	635.2	923.8	1210.5	1824.4	2438.3	5014.2	7590.0	8570.0
82.5°	321.5	338.9	406.7	472.6	658.5	844.4	1105.9	1367.3	3331.2	5293.1	5374.4
85°	220.8	226.6	275.0	321.5	406.7	491.9	633.3	774.7	2204.0	3633.3	3027.1
87.5°	110.4	110.4	143.3	176.2	218.9	261.5	335.1	406.7	705.0	1003.2	577.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P320823
 CATALOG NUMBER: GLEON-SA9D-830-U-SLR

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P320823

CATALOG NUMBER: GLEON-SA9D-830-U-SLR

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9
2.5°	15937.4	16078.7	16222.1	16330.5	16440.9	16599.7	16758.5	16787.6	16818.6	16756.6	16694.6
5°	16142.6	16570.7	17000.6	17397.6	17794.7	18032.9	18271.1	18319.5	18368.0	18218.8	18067.8
7.5°	15381.5	16127.2	16872.8	17556.5	18240.1	18654.6	19071.0	19163.9	19258.8	19014.8	18770.8
10°	14364.7	15280.8	16196.9	17097.5	17998.0	18600.4	19202.7	19322.8	19442.8	19138.8	18834.7
12.5°	13578.4	14556.5	15534.5	16483.5	17434.4	18058.1	18681.7	18830.8	18980.0	18759.2	18536.4
15°	13336.3	14256.3	15176.2	16003.2	16832.1	17341.5	17852.8	17912.8	17974.8	17939.9	17905.1
17.5°	13776.0	14606.8	15439.6	15888.9	16340.2	16543.6	16748.8	16814.7	16882.5	16969.6	17058.7
20°	14841.2	15426.1	16012.9	15993.5	15972.2	15873.4	15772.7	15755.3	15737.9	15987.7	16239.5
22.5°	16431.2	16663.6	16898.0	16353.8	15809.5	15478.3	15145.2	15079.4	15011.6	15276.9	15544.2
25°	18156.8	18114.2	18069.7	17033.5	15995.5	15364.1	14732.7	14659.1	14585.5	14812.1	15040.6
27.5°	19865.0	19586.2	19307.3	17899.3	16491.3	15575.2	14659.1	14585.5	14511.9	14713.3	14914.8
30°	21118.1	20670.7	20223.3	18629.4	17035.5	15947.0	14858.6	14738.5	14616.5	14864.4	15112.3
32.5°	22096.2	21495.8	20895.4	19222.0	17548.7	16371.2	15193.7	15005.8	14817.9	15149.1	15480.3
35°	23072.3	22227.9	21381.5	19750.8	18118.1	16872.8	15625.5	15395.1	15164.6	15619.7	16074.9
37.5°	24300.2	23087.8	21873.4	20345.4	18817.3	17624.2	16429.3	16193.0	15956.7	16535.8	17116.8
40°	25632.6	24015.5	22398.3	20996.1	19593.9	18664.3	17732.7	17508.0	17281.4	17986.4	18691.4
42.5°	26740.4	24879.2	23018.0	21780.5	20541.0	19886.3	19229.8	19227.9	19224.0	19938.6	20653.3
45°	27641.0	25599.7	23556.5	22545.5	21532.6	21191.7	20850.8	21123.9	21397.0	22041.9	22688.8
47.5°	28313.1	26204.0	24092.9	23420.9	22748.8	22799.2	22849.5	23405.4	23961.2	24375.7	24792.1
50°	28750.8	26752.1	24751.4	24544.2	24337.0	24788.2	25241.4	25878.6	26517.7	26800.5	27083.2
52.5°	29387.9	27495.8	25601.6	25834.0	26066.5	26988.3	27910.2	28555.2	29200.1	29304.7	29411.2
55°	30861.8	28863.1	26862.5	27307.9	27755.3	29107.1	30460.9	30964.4	31468.0	31506.7	31545.5
57.5°	32955.4	30778.5	28601.6	29081.9	29562.3	31123.3	32686.2	33228.5	33772.7	33697.2	33619.7
60°	34522.2	32597.1	30670.1	31154.2	31638.4	33160.7	34683.0	35306.6	35932.2	35765.6	35599.0
62.5°	34619.1	33590.7	32560.3	32998.0	33437.7	34928.9	36420.2	37061.3	37702.3	37411.8	37121.3
65°	33079.4	33540.3	34001.2	34146.5	34291.7	35682.3	37074.8	37564.8	38056.8	37909.6	37762.4
67.5°	30958.6	32657.1	34357.6	34065.2	33772.7	34425.4	35078.1	35583.5	36089.0	36005.8	35920.5
70°	28841.8	31109.7	33377.6	31940.6	30501.6	30232.4	29963.2	30507.4	31053.5	30716.5	30377.6
72.5°	25237.5	27654.6	30073.6	27426.0	24778.5	23858.6	22938.6	23630.0	24321.5	23785.0	23246.6
75°	19810.8	22481.6	25154.3	21995.4	18836.6	17608.8	16380.9	16975.4	17570.0	17202.0	16832.1
77.5°	14748.2	17380.2	20012.2	16801.1	13588.1	12675.9	11761.8	11938.0	12116.2	12054.2	11990.3
80°	10003.2	11837.3	13673.3	11535.2	9397.0	9466.7	9538.4	9455.1	9369.9	9493.9	9617.8
82.5°	6383.5	7799.2	9216.9	8082.0	6947.1	7597.8	8248.5	7929.0	7607.5	7725.6	7845.7
85°	3643.0	5027.8	6414.5	5978.7	5541.0	5920.6	6302.1	5806.3	5310.5	5527.4	5746.3
87.5°	960.6	2781.1	4603.6	4179.5	3755.3	3263.4	2771.5	2114.9	1458.4	2130.4	2802.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P320823

CATALOG NUMBER: GLEON-SA9D-830-U-SLR

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P320823

CATALOG NUMBER: GLEON-SA9D-830-U-SLR

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9	14757.9
2.5°	16661.7	16628.8	16510.6	16390.6	16212.4	16065.2	15809.5
5°	17858.6	17649.4	17289.2	16927.0	16524.2	16061.3	15548.1
7.5°	18282.7	17792.7	17101.3	16408.0	15784.4	15052.3	14370.5
10°	18102.6	17368.6	16470.0	15569.4	14812.1	13969.6	13212.4
12.5°	17757.9	16977.4	15987.7	14996.1	14134.3	13229.8	12381.5
15°	17283.4	16659.8	15732.1	14804.4	13936.7	13057.4	12052.3
17.5°	16764.3	16468.0	15797.9	15125.9	14374.4	13522.3	12342.8
20°	16346.0	16454.5	16187.2	15919.9	15317.6	14573.9	13249.2
22.5°	16063.2	16584.2	16789.5	16996.7	16634.6	16053.6	14521.6
25°	15904.4	16768.2	17455.8	18145.2	17984.5	17537.1	16067.1
27.5°	15974.2	17033.5	18100.7	19169.8	19318.9	19194.9	17695.9
30°	16183.3	17256.3	18555.8	19857.3	20451.9	20618.4	19053.6
32.5°	16531.9	17583.6	18999.3	20417.0	21315.7	21846.3	20295.0
35°	17058.7	18042.6	19518.4	20994.2	22156.2	23124.6	21577.1
37.5°	17963.2	18809.5	20171.0	21534.5	23041.3	24495.8	22989.0
40°	19287.9	19886.3	21036.8	22189.1	24085.2	26049.0	24563.6
42.5°	20959.3	21267.2	22179.4	23091.6	25175.6	27459.0	26103.3
45°	22770.1	22851.5	23424.8	24000.0	26039.3	28419.6	27259.5
47.5°	24513.2	24234.3	24462.8	24691.4	26701.7	29105.2	28136.8
50°	26306.6	25530.0	25409.9	25289.8	27364.1	29912.8	29252.4
52.5°	28131.0	26850.8	26376.3	25899.9	28154.3	30983.8	30641.0
55°	29916.7	28287.9	27648.8	27009.6	29362.8	32291.1	32680.4
57.5°	31774.0	29928.3	29335.7	28743.0	31138.8	33947.0	34510.6
60°	33772.7	31944.4	31469.9	30993.5	33346.6	35736.6	35326.0
62.5°	35668.8	34216.2	33966.4	33714.6	35579.7	37111.6	35008.3
65°	36935.4	36106.5	36338.9	36573.2	37268.5	37454.4	34078.7
67.5°	36089.0	36257.5	37239.5	38223.3	37744.9	36435.7	32246.6
70°	31386.7	32397.6	34723.6	37051.6	35990.3	33706.9	28958.0
72.5°	24381.5	25518.4	28971.6	32426.7	31448.6	28652.0	23785.0
75°	18114.2	19398.3	23209.8	27021.3	25663.6	21431.9	17029.7
77.5°	12850.2	13710.1	17473.2	21238.2	19024.5	14266.0	11459.6
80°	9354.4	9091.0	11188.5	13286.0	12918.0	9435.8	7359.6
82.5°	7202.7	6559.7	7547.4	8535.2	8480.9	6548.1	5399.6
85°	5488.7	5231.1	6104.6	6978.0	6230.5	4435.1	3431.9
87.5°	3199.5	3598.4	4626.8	5657.2	4245.3	1346.0	666.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P320823
 CATALOG NUMBER: GLEON-SA9D-830-U-SLR

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2408-195-9
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/07/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: MCGRAW EDISON
 Catalog Number: **GALN-SB1A-830-U-5WQ**
 Description: GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K): 3050
 CIE u' : 0.2476
 CIE v' : 0.5251
 Duv: 0.0034
 CIE x: 0.4383
 CIE y: 0.4131
 CIE z: 0.1487
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 581
 Purity: 55.55201
 R_f: 81.5
 R_g: 99.2

CRI (Ra): 81.0
 R1: 79.6
 R2: 85.6
 R3: 92.0
 R4: 82.6
 R5: 78.9
 R6: 81.7
 R7: 85.2
 R8: 62.0
 R9: 7.1
 R10: 67.0
 R11: 82.7
 R12: 63.2
 R13: 80.3
 R14: 95.0
 R15: 71.7



Test Conditions

Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

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CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

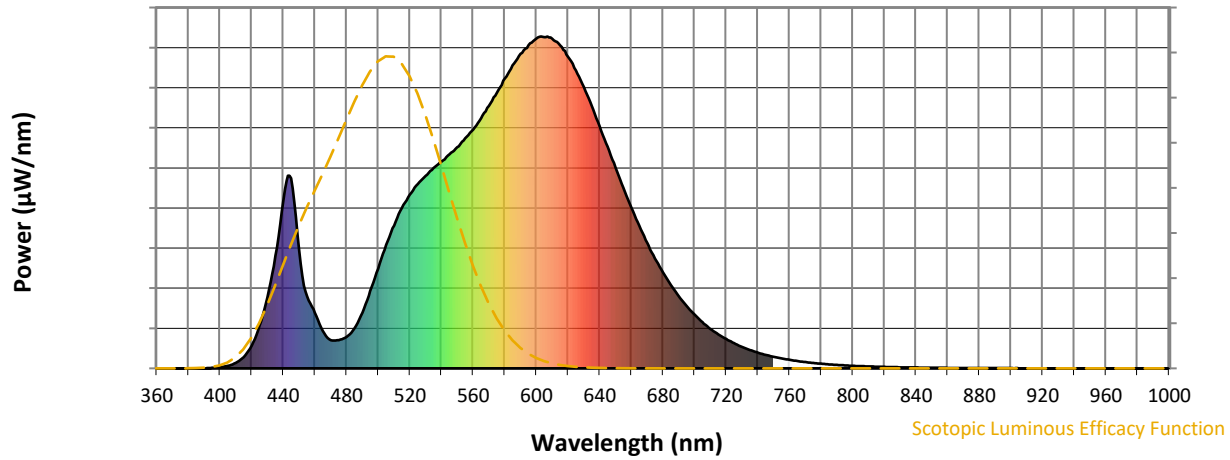


Photopic Lumens: NR

λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 2.32

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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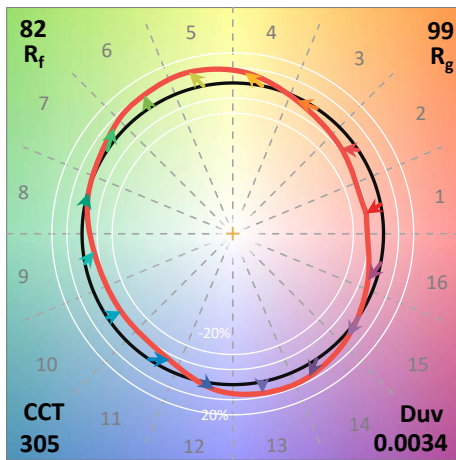
TM-30-18

Summary

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 81.0$
 $R_9 = 7.1$



Color Vector Graphics

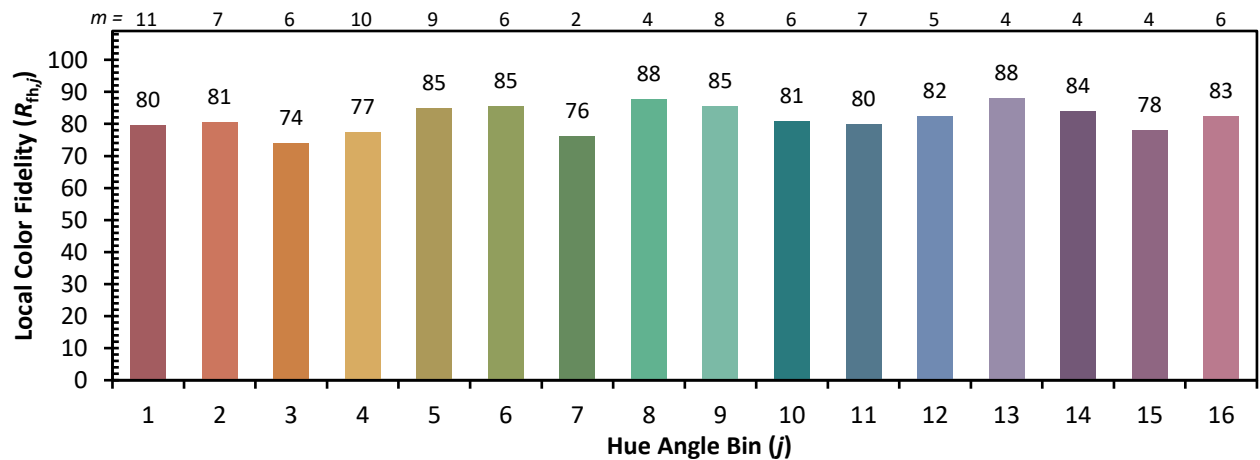
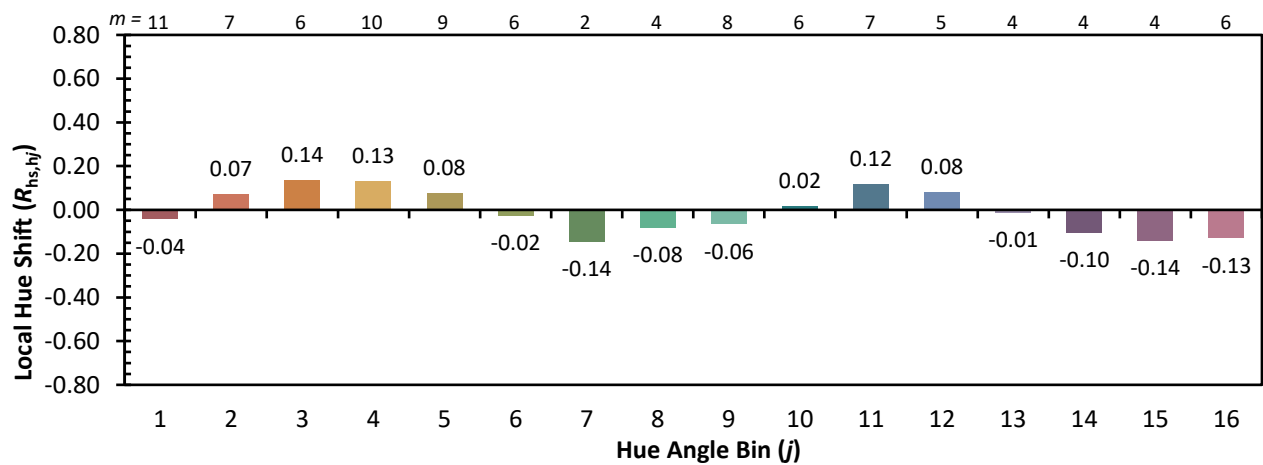


Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)