

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: P320503

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P320503
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-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT 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 III - Medium
BUG Rating: B3 - U0 - G5

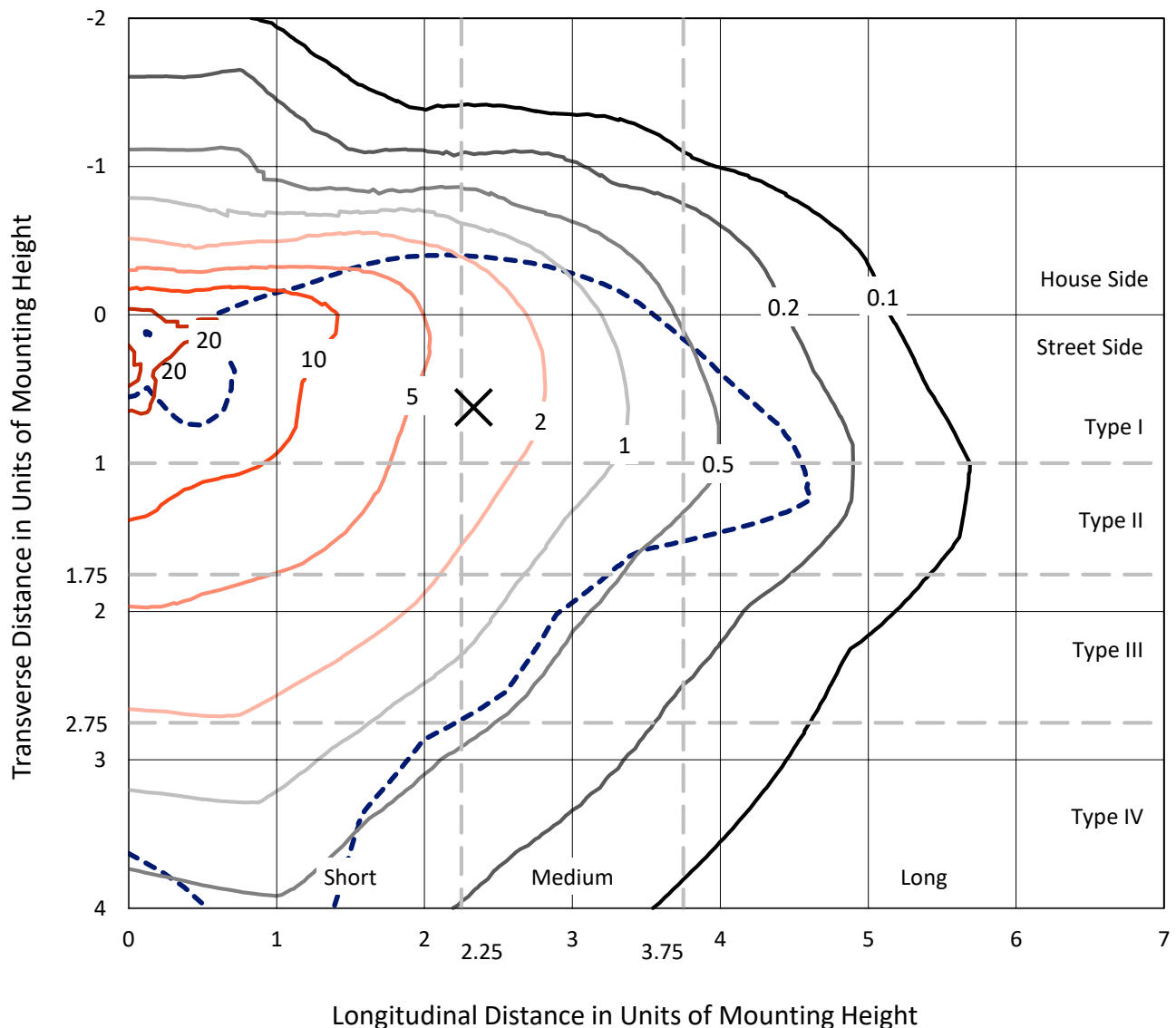
Input Watts (W): 575
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P320503
 CATALOG NUMBER: GLEON-SA9D-830-U-SLL

Iso-Footcandle Lines of Horizontal Illumination

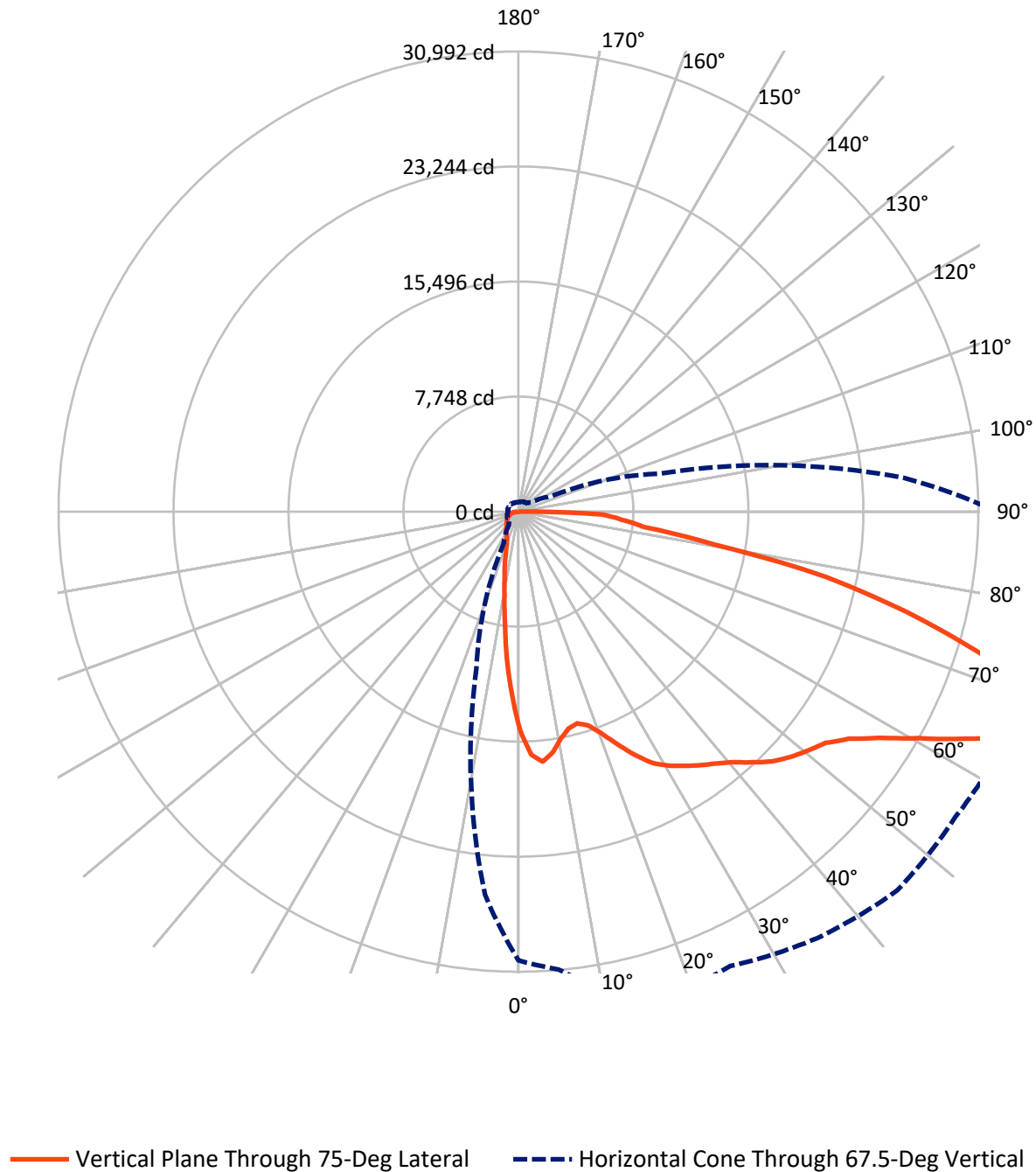
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 29.7 fc
 Type III - Medium - N/A

REPORT NUMBER: P320503
CATALOG NUMBER: GLEON-SA9D-830-U-SLL

Luminous Intensity Polar Plot



REPORT NUMBER: P320503

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

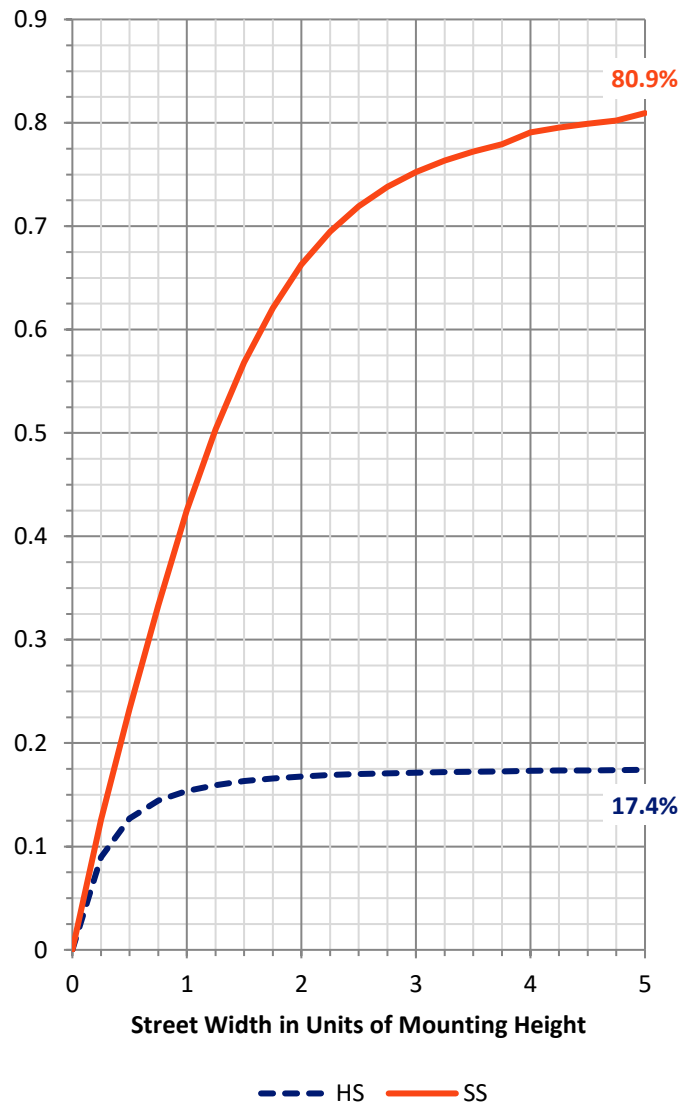
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8531.6	0.0	8531.6
	% Fixture	17.6	0.0	17.6
Street Side	Lumens	39909.4	0.0	39909.4
	% Fixture	82.4	0.0	82.4
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°	1837.6	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



REPORT NUMBER: P320503

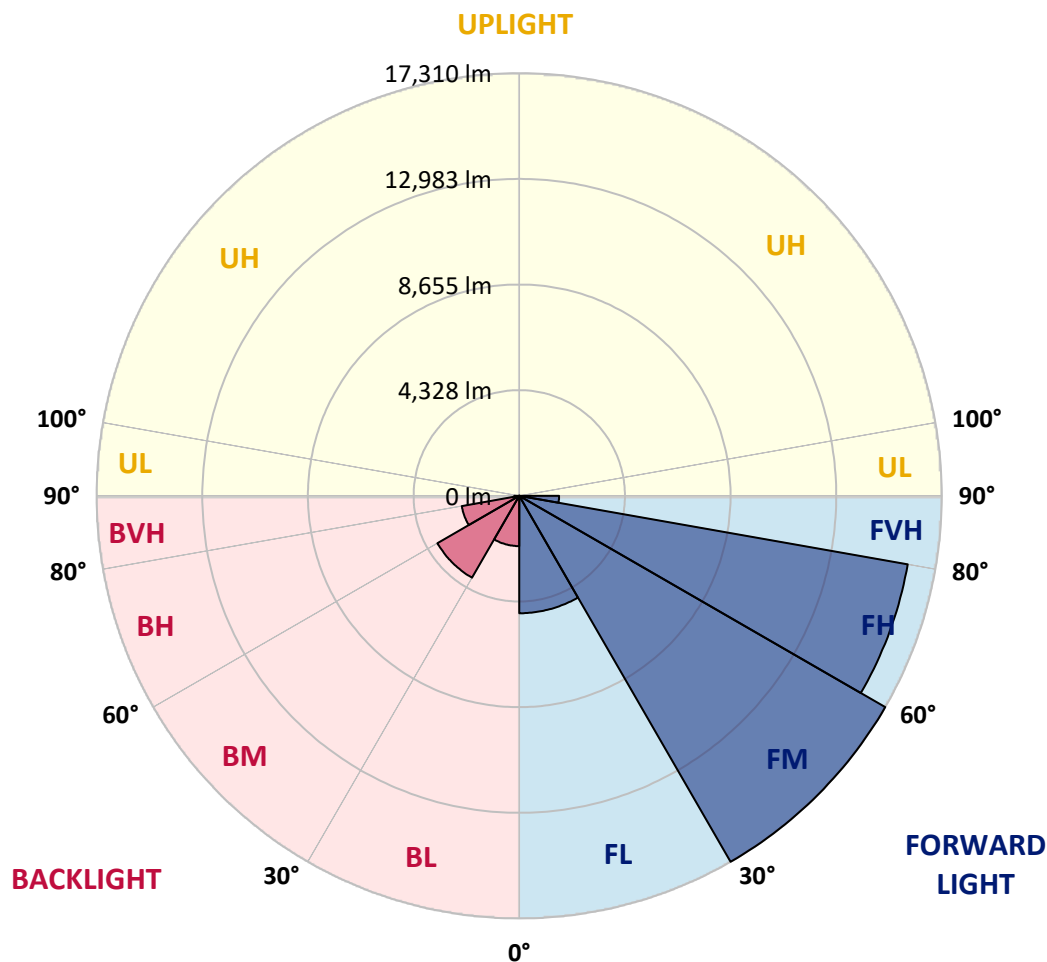
CATALOG NUMBER: GLEON-SA9D-830-U-SLL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4809.7	9.9			
FM	(30°-60°)	17310.2	35.7			
FH	(60°-80°)	16158.3	33.4			G5
FVH	(80°-90°)	1631.1	3.4			G5
BL	(0°-30°)	2060.5	4.3	B3/2500		
BM	(30°-60°)	3872.7	8.0	B3/5000		
BH	(60°-80°)	2392.0	4.9	B3/2500		G3/2500
BVH	(80°-90°)	206.5	0.4			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 III Medium





REPORT NUMBER: P320503

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8
2.5°	15730.0	15937.2	16080.6	16221.9	16332.3	16440.8	16599.6	16758.4	16789.4	16818.4	16756.5
5°	15637.0	16142.5	16572.5	17000.5	17397.5	17794.5	18032.8	18271.0	18319.4	18367.8	18218.7
7.5°	14635.8	15381.4	16127.0	16872.7	17556.3	18240.0	18656.4	19070.8	19165.7	19258.7	19014.7
10°	13497.0	14364.6	15280.7	16196.8	17097.3	17997.9	18600.2	19202.5	19322.6	19442.7	19138.6
12.5°	12631.3	13578.3	14556.4	15534.4	16485.3	17434.3	18057.9	18681.6	18830.7	18979.8	18759.0
15°	12298.1	13336.2	14256.2	15176.1	16005.0	16832.0	17343.3	17852.7	17914.6	17974.7	17939.8
17.5°	12631.3	13775.9	14608.7	15439.5	15890.8	16340.1	16545.4	16748.7	16816.5	16882.4	16971.4
20°	13605.4	14841.1	15427.9	16012.8	15993.4	15972.1	15873.3	15772.6	15755.2	15737.8	15989.5
22.5°	14996.0	16431.1	16665.4	16897.8	16353.6	15809.4	15478.2	15145.1	15079.3	15011.5	15278.8
25°	16628.6	18156.7	18114.1	18069.6	17033.4	15995.3	15364.0	14732.6	14659.0	14585.4	14813.9
27.5°	18404.6	19864.9	19586.0	19307.1	17899.1	16491.1	15575.1	14659.0	14585.4	14511.8	14713.2
30°	19793.2	21118.0	20670.6	20223.2	18629.3	17035.4	15946.9	14858.5	14738.4	14616.4	14864.3
32.5°	20968.8	22096.0	21495.6	20895.2	19221.9	17548.6	16371.1	15193.5	15005.7	14817.8	15149.0
35°	22192.8	23072.1	22227.7	21381.3	19750.6	18118.0	16872.7	15625.4	15395.0	15164.5	15619.6
37.5°	23569.8	24300.0	23087.6	21873.3	20345.2	18817.1	17624.1	16429.2	16192.9	15956.6	16537.6
40°	25024.3	25632.4	24015.3	22398.1	20995.9	19593.8	18664.1	17732.6	17507.9	17281.3	17986.3
42.5°	26296.7	26740.2	24879.1	23017.9	21780.3	20540.8	19886.2	19229.7	19227.7	19223.8	19938.5
45°	27255.4	27640.8	25599.5	23556.3	22545.3	21532.4	21191.5	20850.7	21123.8	21396.8	22043.7
47.5°	28051.4	28312.9	26203.8	24092.7	23420.7	22748.7	22799.0	22849.4	23405.2	23961.1	24377.4
50°	28961.7	28750.6	26751.9	24751.2	24544.0	24336.8	24790.0	25241.2	25880.3	26517.5	26800.3
52.5°	29947.4	29387.7	27495.6	25601.5	25833.9	26066.3	26988.1	27910.0	28554.9	29199.9	29306.4
55°	31719.5	30861.6	28862.9	26862.3	27309.6	27755.1	29108.8	30460.7	30964.2	31467.8	31506.5
57.5°	33716.3	32955.2	30778.3	28601.4	29081.7	29562.0	31125.0	32686.0	33230.2	33772.5	33696.9
60°	34485.2	34522.0	32596.9	30669.8	31154.0	31638.2	33160.5	34682.7	35308.3	35931.9	35765.3
62.5°	33710.5	34618.8	33590.4	32560.1	32999.7	33437.4	34928.7	36419.9	37061.0	37702.1	37411.5
65°	32178.5	33079.1	33540.1	34001.0	34146.2	34291.5	35684.0	37074.6	37566.5	38056.5	37909.3
67.5°	30230.2	30958.4	32658.8	34357.3	34064.9	33772.5	34425.1	35077.8	35583.3	36088.8	36005.5
70°	27973.9	28841.6	31109.5	33377.4	31940.3	30501.3	30232.1	29962.9	30509.1	31053.3	30716.3
72.5°	23928.1	25237.3	27656.3	30073.3	27425.8	24778.3	23858.4	22938.5	23629.9	24321.3	23784.8
75°	18073.4	19810.7	22483.3	25154.1	21995.3	18836.5	17608.6	16380.7	16975.3	17569.9	17201.9
77.5°	12569.3	14748.1	17380.1	20012.1	16801.0	13588.0	12675.8	11761.7	11939.9	12116.1	12054.1
80°	8570.0	10003.1	11839.1	13673.2	11535.1	9396.9	9468.6	9538.3	9455.0	9369.8	9493.8
82.5°	5374.4	6383.4	7801.1	9216.8	8081.9	6947.0	7597.7	8248.5	7928.9	7607.4	7727.5
85°	3027.1	3643.0	5029.7	6414.4	5978.6	5540.9	5922.5	6302.1	5806.3	5310.5	5529.3
87.5°	577.1	960.6	2783.1	4603.6	4179.4	3755.3	3263.4	2771.4	2114.9	1458.3	2130.4
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: P320503
 CATALOG NUMBER: GLEON-SA9D-830-U-SLL

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

REPORT NUMBER: P320503

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8
2.5°	16694.5	16661.6	16628.6	16510.5	16390.4	16212.3	16065.1	15809.4	15670.0	15458.9	15247.8
5°	18067.6	17858.5	17649.3	17289.1	16926.9	16524.1	16061.2	15548.0	15160.6	14657.1	14153.5
7.5°	18770.7	18282.6	17792.6	17101.2	16407.9	15784.2	15052.2	14370.4	13789.4	13134.8	12480.2
10°	18834.6	18102.5	17368.5	16469.8	15569.3	14812.0	13969.5	13212.3	12515.1	11763.6	11010.2
12.5°	18536.3	17757.8	16977.3	15987.6	14996.0	14136.1	13229.7	12381.4	11608.7	10781.7	9952.8
15°	17904.9	17283.3	16659.6	15731.9	14804.3	13936.6	13057.3	12052.2	11178.7	10332.4	9484.1
17.5°	17058.6	16764.2	16467.9	15797.8	15125.8	14374.3	13522.2	12342.7	11320.1	10400.2	9480.2
20°	16239.4	16347.8	16454.3	16187.1	15919.8	15317.5	14573.8	13249.1	11943.7	10741.0	9536.4
22.5°	15544.1	16065.1	16584.1	16791.3	16996.6	16634.5	16053.4	14521.5	12793.9	11223.3	9652.6
25°	15040.5	15904.3	16768.1	17457.6	18145.1	17984.3	17537.0	16067.0	13921.1	11918.6	9914.1
27.5°	14914.7	15974.0	17033.4	18102.5	19169.6	19318.7	19194.8	17695.8	15265.2	12782.3	10297.5
30°	15112.2	16185.1	17256.1	18557.6	19857.2	20451.7	20618.3	19053.4	16801.0	13789.4	10775.9
32.5°	15480.2	16531.8	17583.4	19001.1	20416.9	21315.5	21846.2	20294.8	17872.0	14548.6	11223.3
35°	16074.7	17058.6	18042.4	19518.2	20994.0	22156.0	23124.4	21577.0	18822.9	15079.3	11333.7
37.5°	17116.7	17963.0	18809.4	20172.8	21534.3	23041.1	24495.6	22988.8	19851.3	15590.6	11327.9
40°	18691.2	19289.7	19886.2	21038.5	22189.0	24085.0	26048.8	24563.4	20988.2	16144.5	11300.7
42.5°	20653.1	20961.1	21267.1	22179.3	23091.5	25175.4	27458.8	26103.1	22072.8	16659.6	11246.5
45°	22688.6	22770.0	22851.3	23426.5	23999.8	26039.1	28419.4	27259.3	23019.8	17107.0	11192.3
47.5°	24791.9	24513.0	24234.1	24462.7	24691.2	26701.5	29105.0	28136.6	23970.7	17602.8	11233.0
50°	27083.0	26306.4	25529.8	25409.7	25289.6	27363.9	29912.6	29252.2	25113.4	18325.2	11537.0
52.5°	29411.0	28130.8	26850.6	26376.1	25899.7	28154.0	30983.6	30640.8	26744.1	19444.6	12143.2
55°	31545.2	29916.5	28287.7	27648.6	27009.4	29362.6	32290.9	32680.1	28833.8	20875.9	12916.0
57.5°	33619.5	31773.8	29928.1	29335.4	28742.8	31138.5	33946.8	34510.3	30944.9	22249.0	13551.2
60°	35598.8	33772.5	31944.2	31469.7	30993.3	33346.4	35736.3	35325.7	32033.3	22892.0	13748.7
62.5°	37121.0	35668.5	34216.0	33966.1	33714.4	35579.4	37111.4	35008.1	31341.9	22258.7	13175.5
65°	37762.1	36935.1	36106.2	36340.5	36572.9	37268.2	37454.2	34078.5	29168.9	20484.6	11800.4
67.5°	35920.3	36088.8	36257.3	37241.1	38223.0	37744.7	36435.4	32246.3	26075.9	17970.8	9865.6
70°	30377.4	31388.4	32397.4	34725.3	37051.3	35990.0	33706.6	28957.8	22353.6	15075.4	7795.3
72.5°	23246.4	24383.3	25518.2	28973.3	32426.4	31448.4	28651.8	23784.8	17922.4	12038.6	6152.9
75°	16832.0	18116.0	19398.1	23209.6	27021.1	25663.4	21431.7	17029.5	13613.2	9189.7	4764.3
77.5°	11990.2	12850.1	13710.0	17475.0	21238.0	19026.3	14265.9	11459.5	9422.1	6387.3	3350.5
80°	9617.7	9354.3	9090.9	11188.4	13285.9	12917.9	9435.7	7359.5	6520.9	4280.1	2039.4
82.5°	7845.6	7202.6	6559.7	7547.4	8535.1	8480.9	6548.0	5399.6	4853.4	2974.8	1096.2
85°	5746.2	5488.7	5231.1	6104.5	6978.0	6232.4	4435.1	3431.9	3784.3	2190.4	596.5
87.5°	2802.4	3201.4	3598.4	4628.8	5657.1	4247.2	1346.0	666.2	921.9	606.2	288.6
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



REPORT NUMBER: P320503
 CATALOG NUMBER: GLEON-SA9D-830-U-SLL

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: P320503

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

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8
2.5°	15090.9	14932.1	14752.0	14571.9	14366.6	14159.3	14037.3	13913.4	13779.7	13646.1	13495.0
5°	13820.4	13487.3	13109.6	12732.0	12358.2	11984.4	11783.0	11581.6	11368.5	11153.5	10967.6
7.5°	11996.0	11509.9	10987.0	10462.1	9997.3	9530.6	9242.0	8951.5	8688.1	8422.8	8200.1
10°	10390.5	9770.7	9245.9	8719.1	8368.6	8018.0	7752.7	7487.3	7231.7	6974.1	6728.2
12.5°	9333.0	8713.3	8380.2	8047.1	7756.5	7466.0	7160.0	6852.1	6501.6	6149.1	5891.5
15°	8920.5	8356.9	7987.0	7615.2	7225.9	6834.7	6458.9	6083.2	5668.8	5254.3	4961.9
17.5°	8742.3	8004.4	7487.3	6968.3	6455.1	5941.8	5506.1	5070.3	4617.1	4163.9	3867.6
20°	8554.5	7572.6	6879.2	6183.9	5525.5	4867.0	4373.1	3879.2	3474.5	3069.7	2843.1
22.5°	8384.0	7113.6	6244.0	5372.5	4593.9	3815.3	3331.2	2845.0	2597.1	2349.2	2258.2
25°	8314.3	6712.7	5643.6	4574.5	3753.4	2930.3	2585.5	2240.8	2145.9	2049.0	2002.6
27.5°	8325.9	6354.4	5138.1	3919.9	3180.1	2440.3	2204.0	1967.7	1909.6	1849.6	1820.5
30°	8370.5	5965.1	4661.7	3358.3	2748.2	2138.1	1985.1	1830.2	1768.2	1706.2	1669.4
32.5°	8420.8	5616.5	4293.7	2969.0	2471.2	1971.6	1845.7	1717.9	1657.8	1597.8	1561.0
35°	8333.7	5331.8	4041.9	2752.1	2293.1	1832.1	1725.6	1617.2	1551.3	1485.5	1450.6
37.5°	8186.5	5045.1	3846.3	2645.6	2176.9	1706.2	1628.8	1549.4	1481.6	1411.9	1378.9
40°	8052.9	4803.1	3701.1	2597.1	2113.0	1626.8	1561.0	1495.1	1425.4	1353.8	1315.0
42.5°	7944.4	4640.4	3557.7	2475.1	2054.9	1632.7	1539.7	1444.8	1377.0	1309.2	1266.6
45°	7863.1	4533.9	3445.4	2357.0	2000.6	1644.3	1526.1	1408.0	1340.2	1270.5	1220.1
47.5°	7855.3	4477.7	3366.0	2254.3	1898.0	1539.7	1491.3	1442.9	1344.1	1243.4	1185.3
50°	7961.8	4386.7	3273.1	2157.5	1799.2	1440.9	1506.8	1570.7	1402.2	1231.8	1158.2
52.5°	8184.6	4225.9	3125.9	2025.8	1679.1	1330.5	1433.2	1533.9	1388.6	1241.4	1146.5
55°	8453.8	3989.6	2903.1	1814.7	1520.3	1224.0	1315.0	1404.1	1313.1	1220.1	1105.9
57.5°	8622.3	3691.4	2622.3	1553.2	1342.1	1131.0	1183.3	1233.7	1196.9	1160.1	1043.9
60°	8521.6	3294.4	2306.6	1317.0	1185.3	1053.6	1043.9	1032.3	1086.5	1140.7	1007.1
62.5°	8029.6	2883.8	2027.7	1171.7	1072.9	972.2	950.9	927.7	1016.8	1103.9	962.5
65°	7198.8	2597.1	1851.5	1105.9	995.5	885.1	861.8	838.6	865.7	892.8	827.0
67.5°	6143.3	2420.9	1750.8	1080.7	947.1	811.5	784.4	757.3	751.4	745.6	722.4
70°	5054.8	2312.4	1684.9	1057.4	894.8	730.1	705.0	679.8	672.0	662.4	644.9
72.5°	4225.9	2298.9	1677.2	1055.5	852.2	648.8	625.6	602.3	592.6	581.0	567.5
75°	3460.9	2157.5	1592.0	1026.5	794.1	559.7	538.4	517.1	509.4	499.7	488.1
77.5°	2568.1	1785.7	1338.3	890.9	679.8	468.7	447.4	424.1	422.2	418.3	408.6
80°	1665.6	1291.8	956.7	621.7	495.8	368.0	350.5	331.2	333.1	335.1	327.3
82.5°	925.8	753.4	584.9	416.4	338.9	261.5	253.7	244.0	249.8	253.7	244.0
85°	488.1	379.6	313.7	247.9	195.6	143.3	143.3	141.4	149.1	156.9	149.1
87.5°	211.1	133.6	114.3	93.0	52.3	9.7	11.6	11.6	15.5	19.4	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: P320503
 CATALOG NUMBER: GLEON-SA9D-830-U-SLL

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: P320503

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

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8
2.5°	13342.0	13200.7	13057.3	12900.5	12929.5	12809.4	12689.4	12613.8	12538.3	12515.1	12491.8
5°	10781.7	10621.0	10458.3	10313.0	10438.9	10353.7	10268.5	10256.8	10243.3	10243.3	10241.4
7.5°	7977.3	7805.0	7630.7	7510.6	7634.5	7619.0	7603.5	7686.8	7770.1	7837.9	7903.7
10°	6482.2	6273.0	6061.9	5883.7	5852.8	5763.7	5672.6	5692.0	5709.4	5783.0	5856.6
12.5°	5633.9	5384.1	5134.2	4925.1	4830.2	4683.0	4533.9	4440.9	4347.9	4357.6	4365.4
15°	4667.5	4425.4	4181.4	4001.3	3941.2	3827.0	3712.7	3596.5	3478.3	3429.9	3379.6
17.5°	3569.4	3375.7	3180.1	3060.0	3060.0	3027.1	2994.2	2936.1	2876.0	2827.6	2777.3
20°	2616.5	2513.9	2409.3	2358.9	2374.4	2376.4	2376.4	2405.4	2434.5	2419.0	2403.5
22.5°	2165.2	2128.5	2091.7	2070.3	2078.1	2080.0	2082.0	2109.1	2134.3	2153.6	2171.1
25°	1954.1	1930.9	1907.7	1899.9	1917.3	1919.3	1919.3	1936.7	1954.1	1973.5	1992.9
27.5°	1789.5	1779.8	1770.2	1756.6	1774.0	1774.0	1772.1	1791.5	1808.9	1826.3	1841.8
30°	1632.7	1636.5	1638.5	1634.6	1646.2	1654.0	1659.8	1673.3	1684.9	1698.5	1712.1
32.5°	1522.3	1516.4	1510.6	1506.8	1531.9	1545.5	1559.1	1572.6	1584.2	1590.0	1595.9
35°	1415.7	1402.2	1388.6	1378.9	1402.2	1419.6	1437.0	1462.2	1485.5	1489.3	1493.2
37.5°	1344.1	1326.7	1309.2	1297.6	1307.3	1315.0	1322.8	1349.9	1377.0	1392.5	1406.1
40°	1276.3	1258.9	1241.4	1231.8	1237.6	1239.5	1241.4	1255.0	1266.6	1295.7	1322.8
42.5°	1222.1	1200.8	1179.5	1167.8	1171.7	1175.6	1177.5	1175.6	1173.7	1200.8	1227.9
45°	1167.8	1144.6	1121.4	1107.8	1109.7	1109.7	1109.7	1105.9	1100.1	1113.6	1127.2
47.5°	1125.2	1098.1	1071.0	1057.4	1053.6	1049.7	1045.8	1043.9	1040.0	1049.7	1057.4
50°	1082.6	1053.6	1022.6	1007.1	997.4	993.5	989.7	987.7	983.9	993.5	1001.3
52.5°	1049.7	1014.8	980.0	954.8	945.1	939.3	933.5	935.4	935.4	939.3	941.2
55°	991.6	960.6	927.7	910.3	892.8	889.0	885.1	890.9	894.8	894.8	894.8
57.5°	927.7	898.6	867.6	856.0	840.5	840.5	838.6	846.3	852.2	856.0	859.9
60°	871.5	838.6	805.7	796.0	790.2	788.2	786.3	796.0	803.7	811.5	819.2
62.5°	819.2	784.4	749.5	737.9	736.0	737.9	737.9	747.6	755.3	763.1	770.8
65°	761.1	726.3	689.5	677.9	681.7	687.5	693.3	701.1	706.9	714.6	722.4
67.5°	697.2	668.2	637.2	625.6	627.5	635.2	643.0	648.8	652.7	660.4	668.2
70°	627.5	602.3	577.1	569.4	567.5	577.1	584.9	588.8	592.6	602.3	610.1
72.5°	552.0	530.7	509.4	503.5	505.5	511.3	517.1	522.9	526.8	536.5	544.2
75°	474.5	455.1	435.8	431.9	435.8	441.6	447.4	451.3	455.1	466.7	476.4
77.5°	399.0	377.7	354.4	352.5	358.3	364.1	368.0	373.8	379.6	395.1	410.6
80°	319.6	296.3	271.1	269.2	275.0	280.8	286.6	292.4	298.3	317.6	335.1
82.5°	234.3	207.2	180.1	176.2	195.6	201.4	207.2	216.9	224.7	242.1	259.5
85°	141.4	114.3	87.2	85.2	102.6	112.3	122.0	133.6	143.3	158.8	174.3
87.5°	15.5	7.7	0.0	0.0	1.9	9.7	17.4	27.1	36.8	52.3	65.8
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: P320503

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

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: P320503

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

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8
2.5°	12406.6	12319.5	12408.5	12495.7	12532.5	12569.3	12474.4	12377.6	12528.6	12677.7	12716.5
5°	10163.9	10084.5	10144.5	10202.6	10072.9	9943.1	9929.5	9914.1	10026.4	10138.7	10156.1
7.5°	7878.6	7853.4	7909.5	7965.7	7801.1	7634.5	7553.2	7471.9	7499.0	7526.1	7522.2
10°	5874.1	5889.6	5959.3	6027.1	5899.2	5771.4	5715.2	5659.1	5721.1	5781.1	5837.3
12.5°	4400.2	4433.1	4506.7	4578.4	4526.1	4471.9	4477.7	4483.5	4555.2	4624.9	4686.9
15°	3418.3	3457.0	3509.3	3559.7	3561.6	3561.6	3612.0	3660.4	3654.6	3648.8	3691.4
17.5°	2829.5	2879.9	2885.7	2891.5	2893.5	2895.4	2891.5	2887.6	2858.6	2829.5	2862.5
20°	2422.8	2440.3	2455.8	2469.3	2451.9	2432.5	2384.1	2335.7	2316.3	2296.9	2327.9
22.5°	2204.0	2235.0	2219.5	2202.0	2167.2	2130.4	2093.6	2054.9	2052.9	2049.0	2066.5
25°	2020.0	2045.2	2018.1	1990.9	1965.8	1940.6	1915.4	1890.2	1888.3	1886.4	1894.1
27.5°	1867.0	1890.2	1865.1	1839.9	1818.6	1797.3	1777.9	1758.5	1754.7	1750.8	1752.7
30°	1735.3	1756.6	1735.3	1712.1	1696.6	1679.1	1665.6	1652.0	1650.1	1648.1	1648.1
32.5°	1617.2	1638.5	1623.0	1607.5	1593.9	1580.4	1570.7	1561.0	1551.3	1541.6	1520.3
35°	1514.5	1535.8	1526.1	1514.5	1499.0	1483.5	1466.1	1446.7	1421.5	1394.4	1382.8
37.5°	1427.4	1448.7	1439.0	1429.3	1408.0	1386.7	1355.7	1322.8	1315.0	1305.3	1303.4
40°	1357.6	1390.6	1371.2	1349.9	1317.0	1284.0	1268.5	1253.1	1249.2	1245.3	1241.4
42.5°	1280.2	1330.5	1295.7	1260.8	1229.8	1198.8	1195.0	1191.1	1189.1	1187.2	1187.2
45°	1183.3	1237.6	1202.7	1165.9	1148.5	1131.0	1131.0	1131.0	1133.0	1133.0	1136.9
47.5°	1092.3	1125.2	1107.8	1090.4	1080.7	1071.0	1072.9	1074.9	1080.7	1084.6	1094.2
50°	1014.8	1026.5	1030.3	1032.3	1026.5	1020.6	1024.5	1026.5	1032.3	1036.1	1043.9
52.5°	958.7	976.1	976.1	974.2	974.2	974.2	978.0	981.9	987.7	993.5	1001.3
55°	921.9	947.1	939.3	931.6	933.5	933.5	937.4	941.2	947.1	950.9	962.5
57.5°	887.0	914.1	906.4	898.6	898.6	898.6	900.6	902.5	908.3	912.2	919.9
60°	846.3	873.5	865.7	856.0	858.0	859.9	861.8	861.8	865.7	867.6	867.6
62.5°	797.9	825.0	817.3	807.6	813.4	817.3	817.3	817.3	821.2	823.1	817.3
65°	747.6	772.7	765.0	757.3	765.0	770.8	774.7	776.6	774.7	772.7	766.9
67.5°	693.3	718.5	710.8	701.1	710.8	718.5	726.3	732.1	726.3	720.5	712.7
70°	635.2	660.4	650.7	641.1	650.7	660.4	668.2	675.9	668.2	660.4	658.5
72.5°	573.3	602.3	590.7	579.1	590.7	602.3	606.2	610.1	604.3	598.4	594.6
75°	505.5	534.5	524.9	513.2	522.9	532.6	534.5	536.5	536.5	534.5	522.9
77.5°	433.8	457.1	451.3	445.4	451.3	457.1	457.1	457.1	459.0	459.0	443.5
80°	348.6	362.2	364.1	366.0	368.0	369.9	368.0	366.0	362.2	358.3	348.6
82.5°	259.5	259.5	275.0	288.6	288.6	286.6	284.7	280.8	273.1	263.4	242.1
85°	164.6	154.9	180.1	203.4	203.4	201.4	197.5	191.7	176.2	158.8	141.4
87.5°	56.2	46.5	71.7	96.8	98.8	98.8	94.9	91.0	75.5	58.1	44.5
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: P320503
 CATALOG NUMBER: GLEON-SA9D-830-U-SLL

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: P320503

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

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8
2.5°	12774.6	12799.8	12823.0	13012.8	13200.7	13421.4	13642.2	13810.7	13977.3	14149.6	14322.0
5°	10216.2	10247.2	10278.2	10508.6	10737.2	11045.1	11353.0	11618.4	11883.7	12195.5	12507.3
7.5°	7572.6	7640.3	7706.2	7952.2	8196.2	8527.4	8856.6	9203.3	9548.0	9954.7	10361.4
10°	5947.7	6075.5	6201.4	6453.1	6704.9	7032.2	7357.6	7719.8	8081.9	8482.8	8881.8
12.5°	4814.7	4985.1	5153.6	5455.7	5757.9	6149.1	6538.4	6941.2	7342.1	7694.6	8047.1
15°	3803.7	3989.6	4173.6	4493.2	4812.7	5242.7	5670.7	6110.3	6548.0	6970.2	7392.4
17.5°	2967.0	3120.0	3271.1	3542.3	3811.5	4227.9	4644.2	5105.2	5566.1	6081.3	6594.5
20°	2393.8	2457.7	2521.6	2717.2	2910.9	3249.8	3586.8	4057.4	4528.0	5143.9	5759.8
22.5°	2097.5	2130.4	2161.4	2256.3	2349.2	2568.1	2785.0	3201.4	3615.8	4287.9	4958.0
25°	1919.3	1944.5	1969.6	2031.6	2093.6	2198.2	2302.8	2595.2	2887.6	3548.1	4206.5
27.5°	1758.5	1797.3	1834.1	1863.1	1890.2	1961.9	2031.6	2223.4	2415.1	3031.0	3644.9
30°	1642.3	1655.9	1669.4	1714.0	1756.6	1830.2	1903.8	2037.4	2171.1	2692.0	3211.1
32.5°	1506.8	1526.1	1545.5	1592.0	1638.5	1706.2	1774.0	1882.5	1989.0	2434.5	2878.0
35°	1384.8	1404.1	1423.5	1470.0	1514.5	1588.1	1659.8	1750.8	1839.9	2227.2	2614.6
37.5°	1309.2	1328.6	1348.0	1388.6	1427.4	1501.0	1572.6	1644.3	1714.0	2072.3	2430.6
40°	1245.3	1264.7	1284.0	1322.8	1359.6	1431.2	1501.0	1561.0	1621.0	1956.1	2291.1
42.5°	1189.1	1210.4	1231.8	1270.5	1307.3	1371.2	1435.1	1514.5	1592.0	1855.4	2116.8
45°	1142.7	1164.0	1183.3	1225.9	1268.5	1330.5	1392.5	1502.9	1613.3	1803.1	1992.9
47.5°	1100.1	1123.3	1144.6	1191.1	1237.6	1315.0	1390.6	1483.5	1574.6	1762.4	1950.3
50°	1059.4	1086.5	1113.6	1169.8	1224.0	1353.8	1481.6	1495.1	1506.8	1729.5	1950.3
52.5°	1020.6	1051.6	1082.6	1152.3	1220.1	1371.2	1522.3	1473.8	1423.5	1667.5	1911.5
55°	981.9	1009.0	1034.2	1119.4	1204.6	1315.0	1425.4	1361.5	1295.7	1551.3	1807.0
57.5°	929.6	958.7	985.8	1076.8	1167.8	1245.3	1320.8	1262.7	1202.7	1419.6	1634.6
60°	875.4	908.3	941.2	1057.4	1171.7	1158.2	1142.7	1131.0	1117.5	1272.4	1427.4
62.5°	827.0	861.8	896.7	1047.8	1198.8	1105.9	1012.9	1022.6	1030.3	1144.6	1258.9
65°	778.6	813.4	846.3	921.9	997.4	960.6	923.8	939.3	952.9	1065.2	1177.5
67.5°	724.3	755.3	784.4	809.5	834.7	838.6	842.5	858.0	873.5	1007.1	1138.8
70°	664.3	689.5	714.6	732.1	747.6	755.3	761.1	780.5	799.9	945.1	1090.4
72.5°	596.5	617.8	637.2	652.7	668.2	674.0	677.9	697.2	716.6	871.5	1026.5
75°	522.9	540.3	555.8	569.4	583.0	590.7	598.4	612.0	625.6	794.1	960.6
77.5°	441.6	459.0	474.5	486.1	495.8	503.5	509.4	526.8	544.2	685.6	825.0
80°	344.7	366.0	385.4	395.1	402.8	404.8	404.8	420.3	435.8	536.5	635.2
82.5°	244.0	267.3	288.6	296.3	304.1	304.1	304.1	321.5	338.9	406.7	472.6
85°	143.3	168.5	191.7	199.5	207.2	211.1	213.0	220.8	226.6	275.0	321.5
87.5°	44.5	65.8	85.2	89.1	93.0	100.7	108.5	110.4	110.4	143.3	176.2
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: P320503
 CATALOG NUMBER: GLEON-SA9D-830-U-SLL

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: P320503

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

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8	14757.8
2.5°	14519.6	14717.1	14947.6	15176.1	15371.7	15567.3	15730.0
5°	12904.3	13301.4	13787.5	14271.7	14703.5	15135.4	15637.0
7.5°	10874.7	11387.9	12017.3	12646.8	13256.8	13865.0	14635.8
10°	9404.7	9925.7	10591.9	11256.2	11941.8	12625.5	13497.0
12.5°	8471.2	8893.4	9538.3	10183.3	10988.9	11792.7	12631.3
15°	7855.3	8316.3	8943.8	9571.3	10452.5	11333.7	12298.1
17.5°	7198.8	7801.1	8604.8	9408.6	10452.5	11494.4	12631.3
20°	6511.2	7260.7	8302.7	9344.7	10750.7	12154.8	13605.4
22.5°	5825.6	6693.3	8029.6	9364.0	11202.0	13038.0	14996.0
25°	5207.8	6209.1	7863.1	9515.1	11858.5	14200.0	16628.6
27.5°	4739.1	5831.5	7795.3	9757.2	12691.3	15625.4	18404.6
30°	4322.8	5434.4	7713.9	9993.5	13493.1	16990.8	19793.2
32.5°	3962.5	5047.1	7557.1	10065.1	14052.8	18040.5	20968.8
35°	3679.8	4745.0	7293.7	9842.4	14403.4	18964.3	22192.8
37.5°	3435.7	4440.9	6993.5	9546.1	14715.2	19884.3	23569.8
40°	3203.3	4115.5	6735.9	9354.3	15145.1	20935.9	25024.3
42.5°	2982.5	3848.3	6528.7	9209.1	15544.1	21877.1	26296.7
45°	2817.9	3643.0	6344.7	9044.5	15801.7	22558.9	27255.4
47.5°	2736.6	3521.0	6245.9	8968.9	16059.3	23147.6	28051.4
50°	2725.0	3499.6	6358.2	9216.8	16617.0	24015.3	28961.7
52.5°	2723.0	3534.5	6681.7	9828.8	17653.2	25475.6	29947.4
55°	2682.4	3555.8	7067.1	10576.4	19043.7	27509.1	31719.5
57.5°	2558.4	3482.2	7464.1	11444.1	20513.7	29581.4	33716.3
60°	2366.7	3304.0	7791.4	12276.8	21501.4	30724.1	34485.2
62.5°	2126.5	2992.2	7899.9	12805.6	21474.3	30143.1	33710.5
65°	1921.2	2664.9	7543.5	12420.2	20387.8	28353.5	32178.5
67.5°	1739.2	2337.6	6652.6	10965.7	18433.7	25899.7	30230.2
70°	1607.5	2122.6	5504.1	8885.7	15987.6	23087.6	27973.9
72.5°	1524.2	2020.0	4487.4	6952.8	12974.1	18993.4	23928.1
75°	1409.9	1859.2	3521.0	5180.7	9929.5	14678.4	18073.4
77.5°	1196.9	1566.8	2653.3	3739.8	7285.9	10830.1	12569.3
80°	923.8	1210.4	1824.4	2438.3	5014.2	7590.0	8570.0
82.5°	658.5	844.4	1105.9	1367.3	3331.2	5293.0	5374.4
85°	406.7	491.9	633.3	774.7	2204.0	3633.3	3027.1
87.5°	218.8	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
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: P320503

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

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.

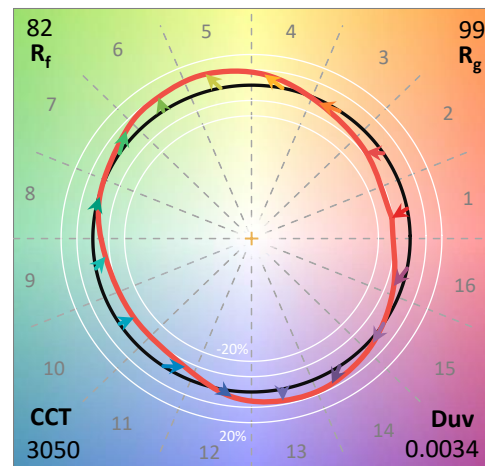
Test Information

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

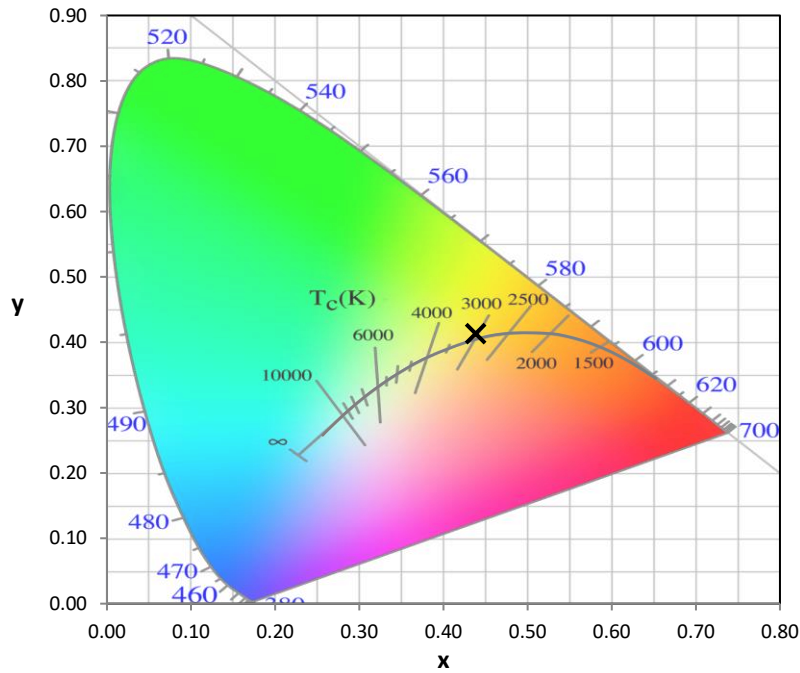
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

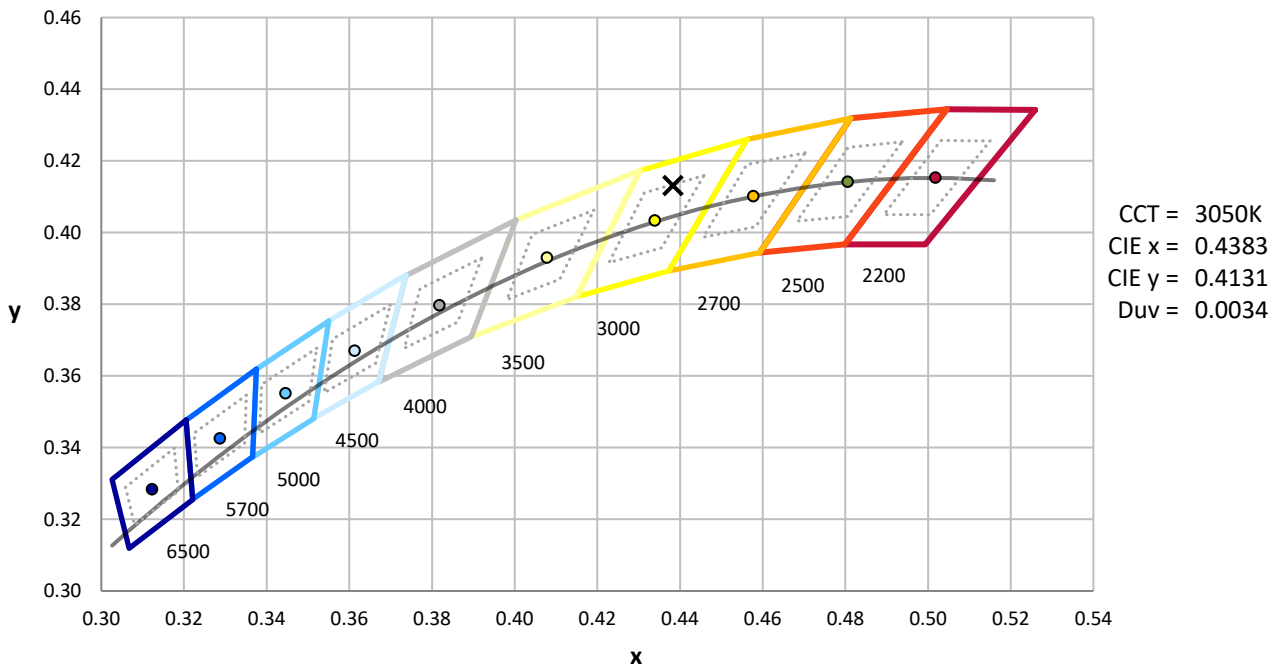
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



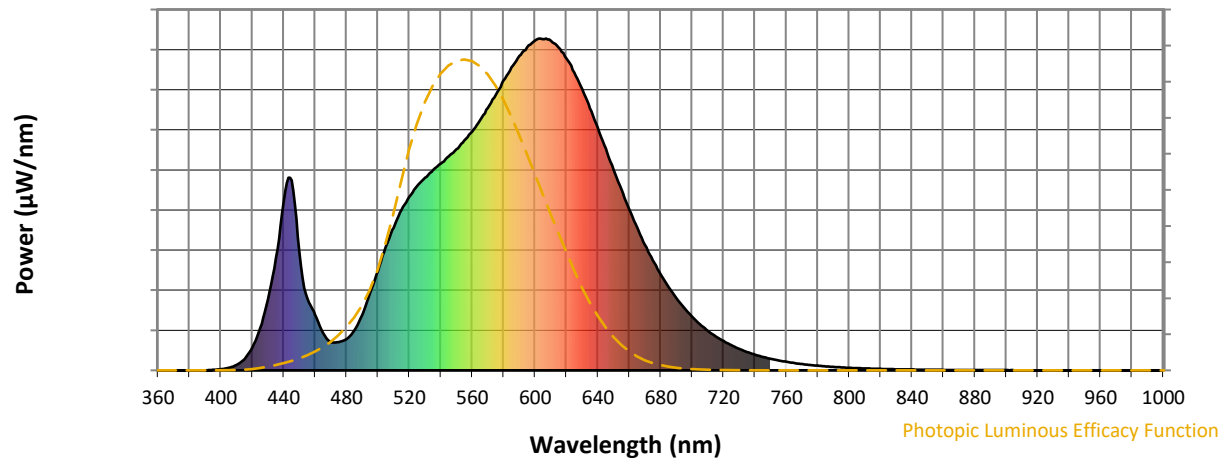
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

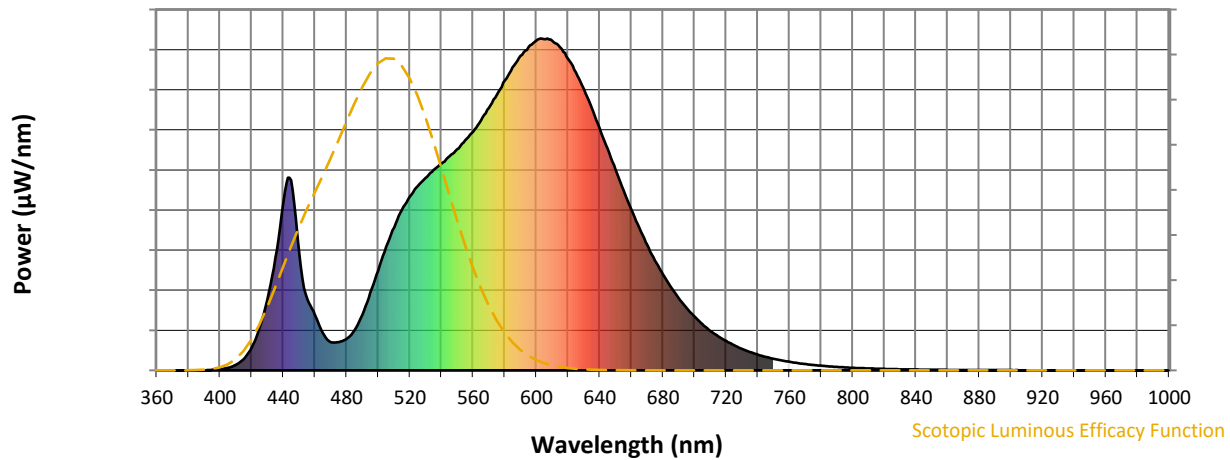


Photopic Lumens: NR

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



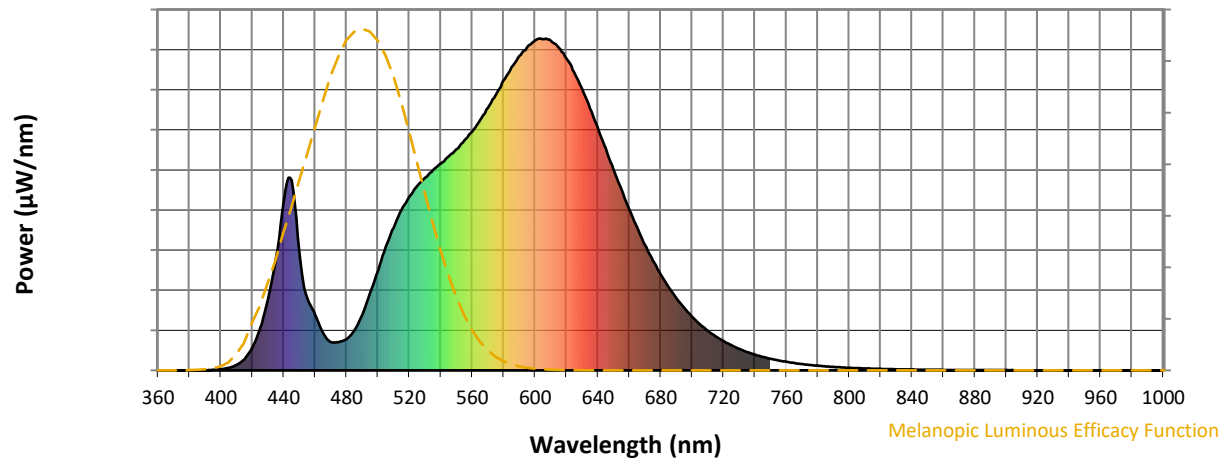
Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /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

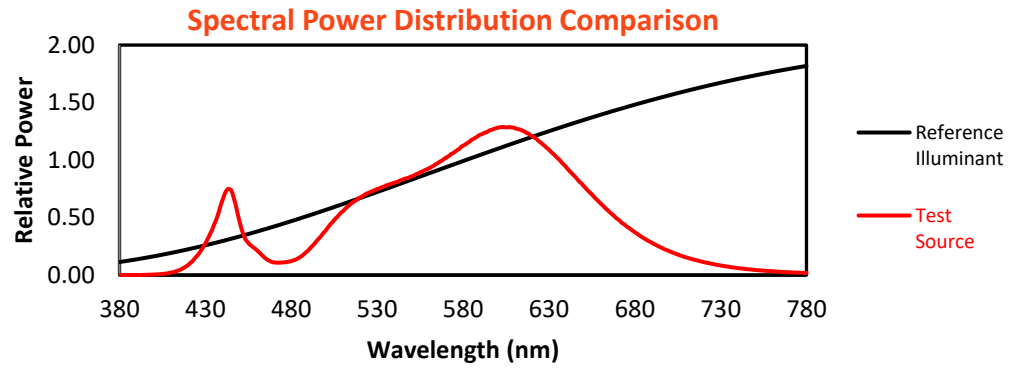
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	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			

REPORT NUMBER: SP1-2408-195-9

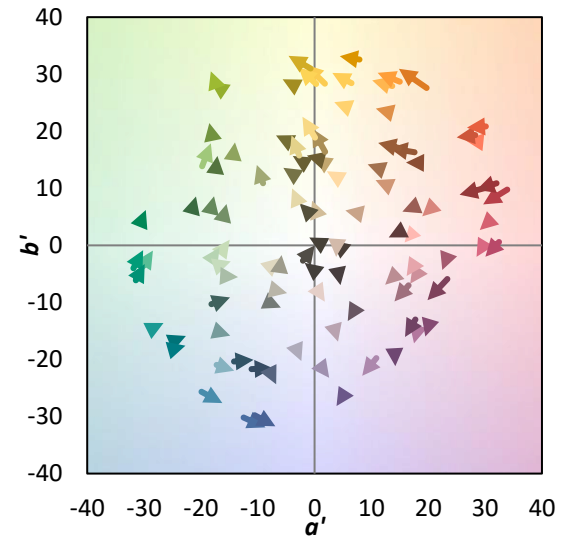
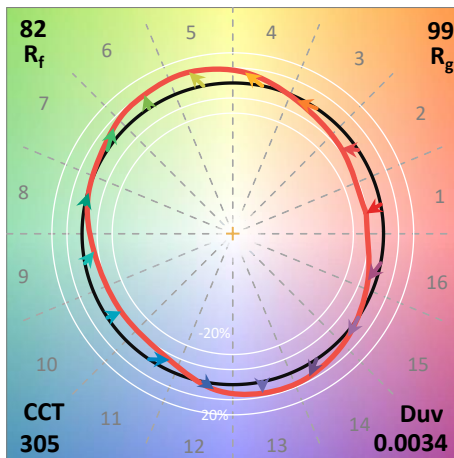
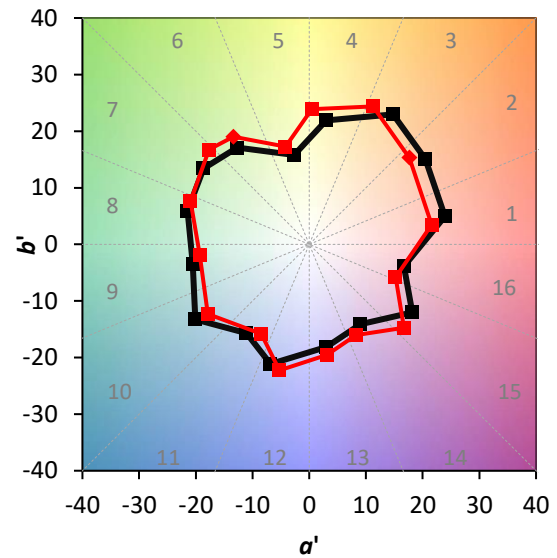
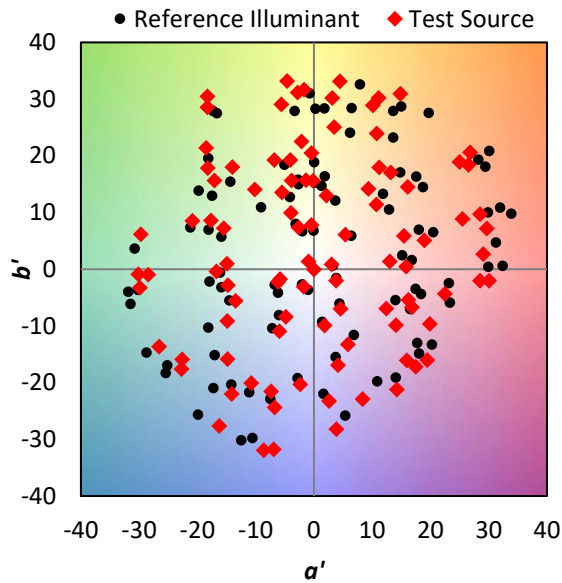
TM-30-18

Summary

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

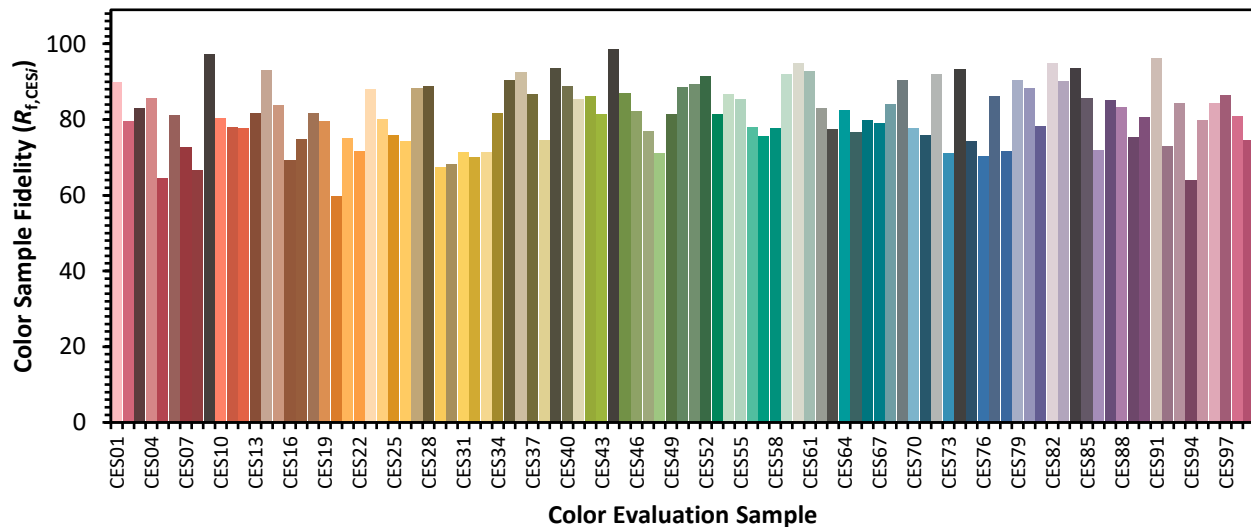


Color Vector Graphics

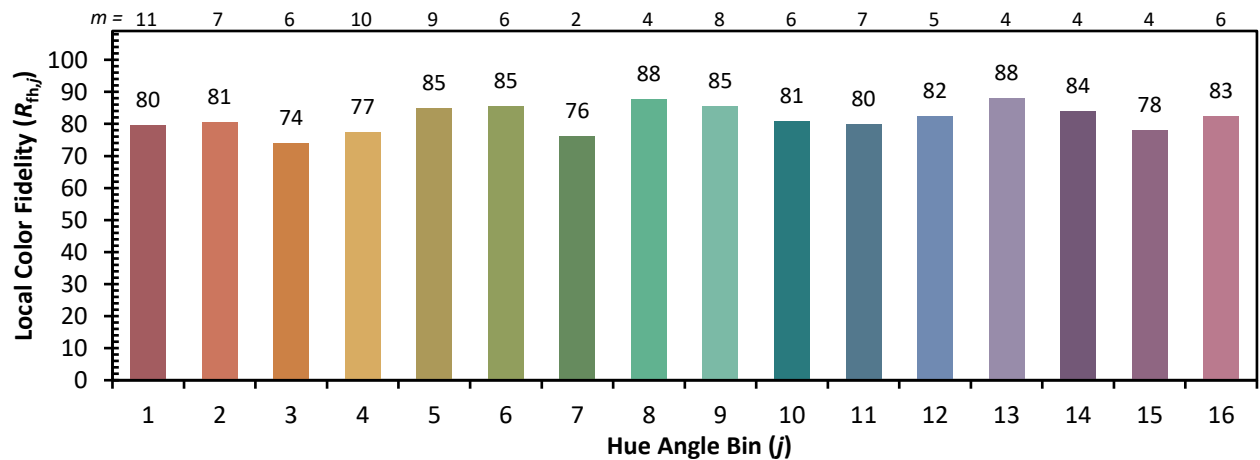
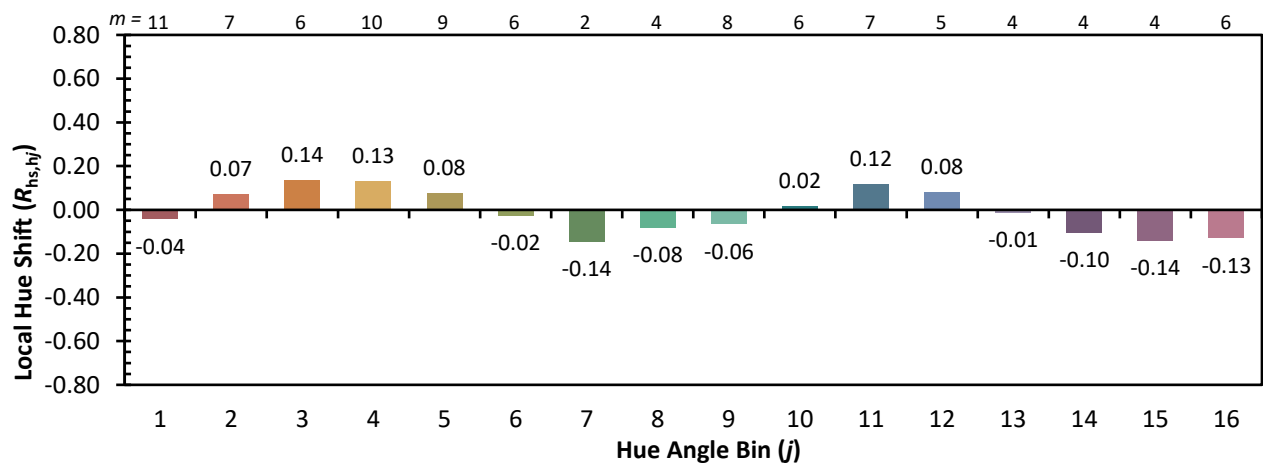
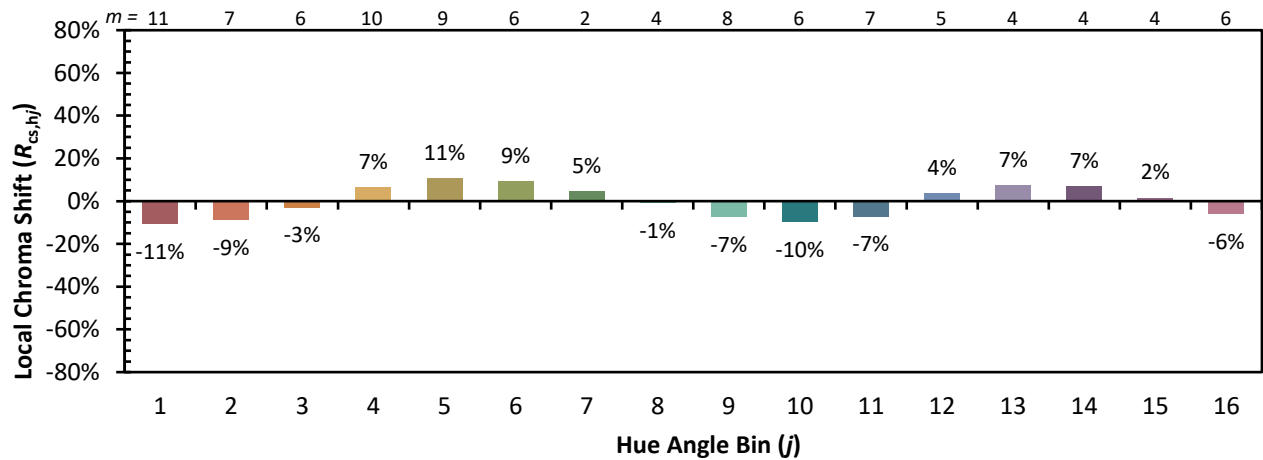


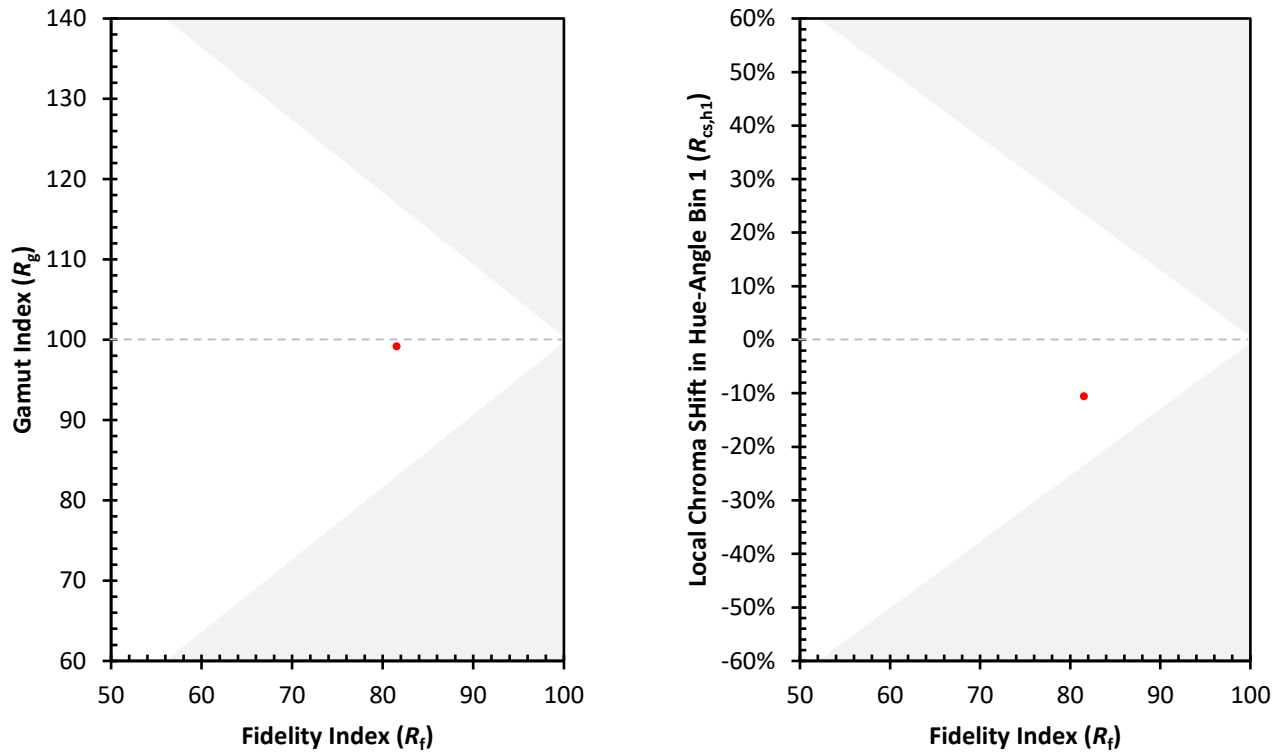
Individual Sample Fidelity Index ($R_{f,i}$)

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)