

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: P320788

Luminaire Tested: **GLEON-SA4A-830-U-SLR**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P320788
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-SA4A-830-U-SLR
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 615mA 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: 13128 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

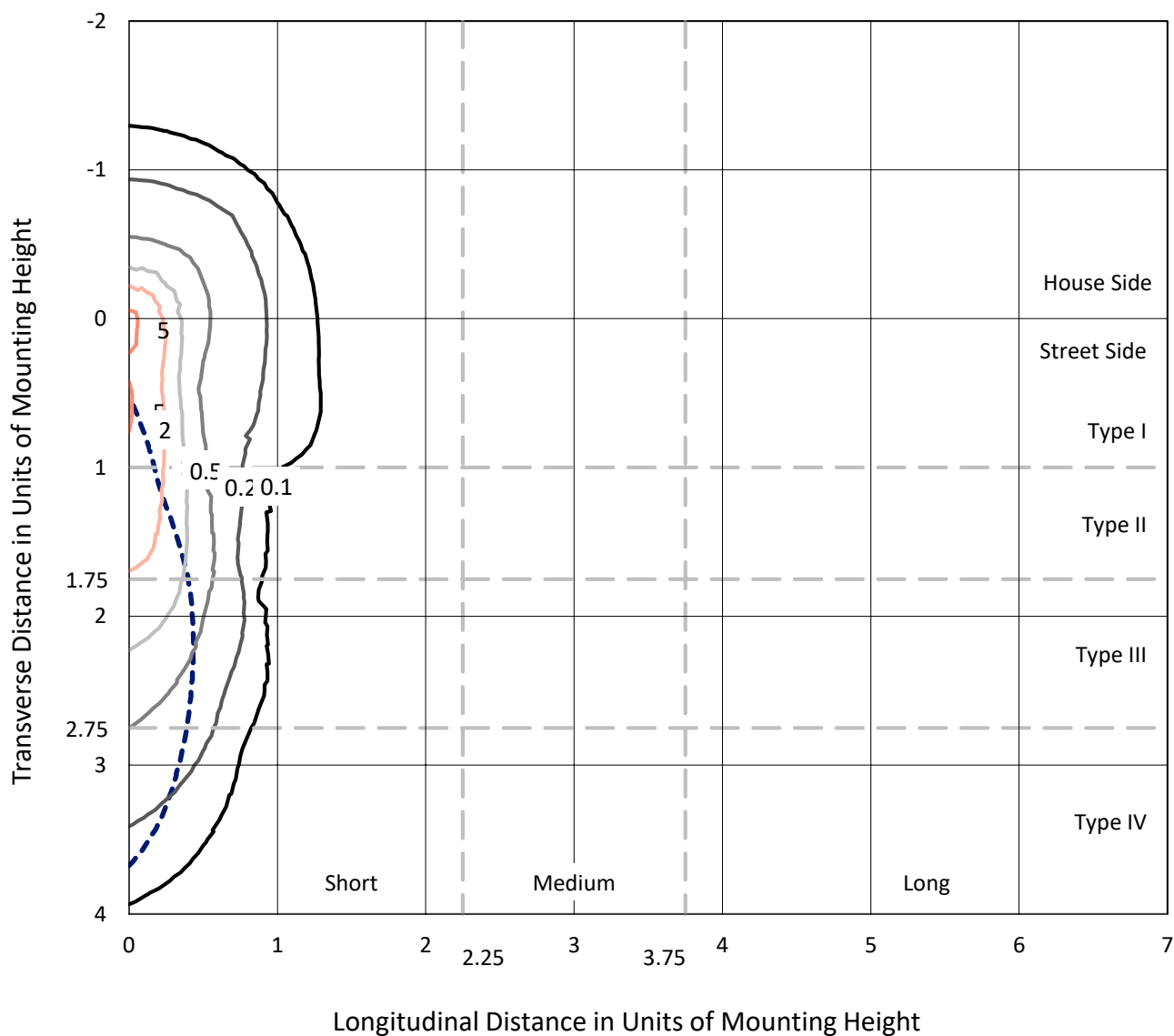
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

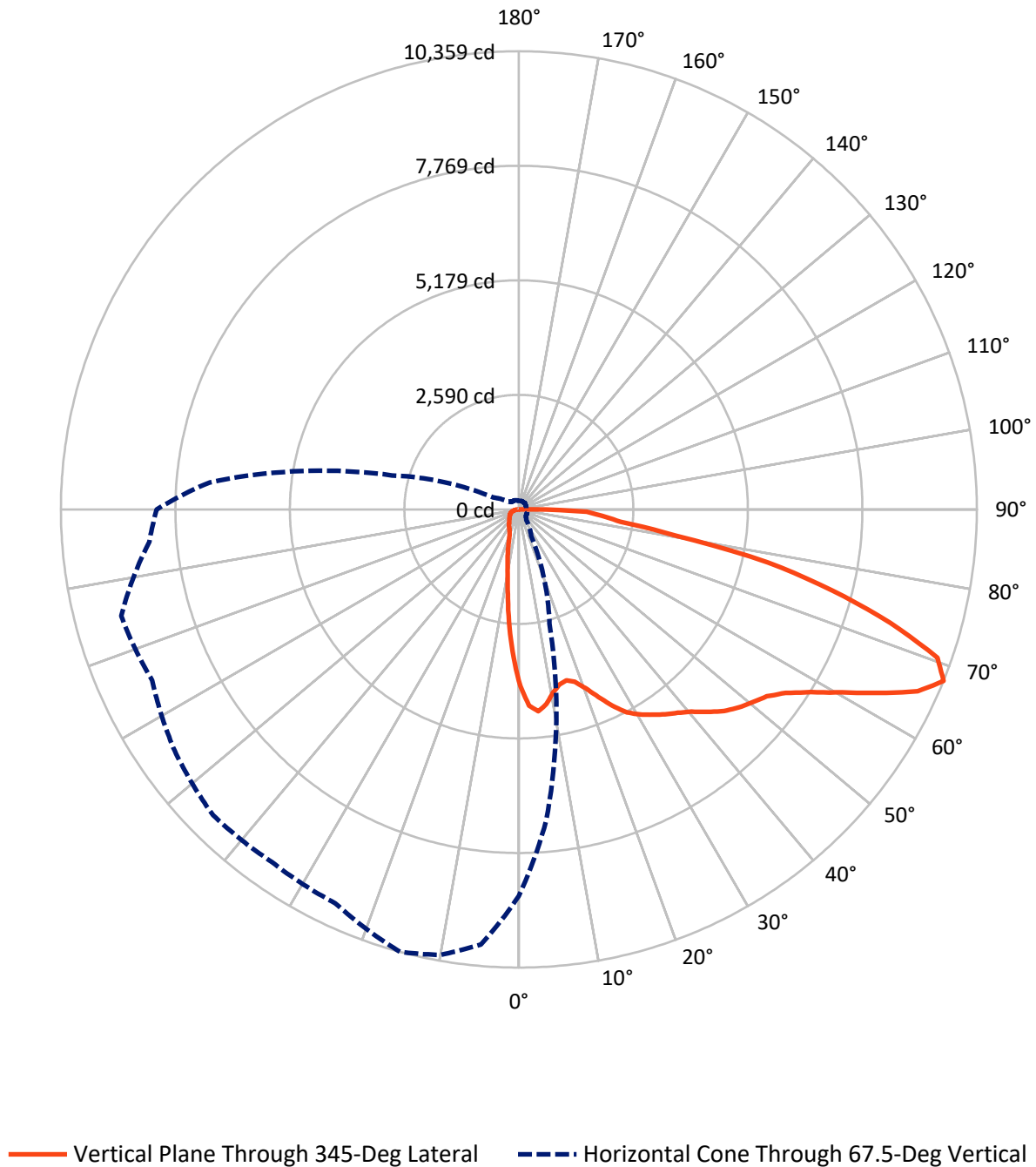
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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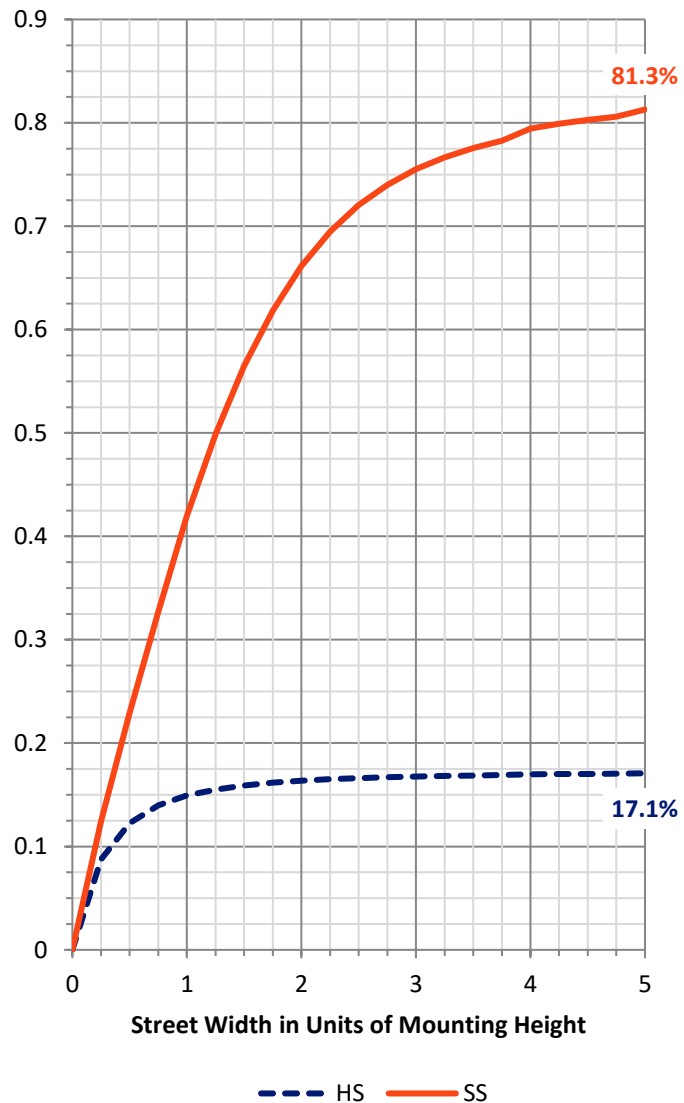
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2269.5	0.0	2269.5
	% Fixture	17.3	0.0	17.3
Street Side	Lumens	10858.4	0.0	10858.4
	% Fixture	82.7	0.0	82.7
Total	Lumens	13128.0	0.0	13128.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.7	2.4
10°-20°	641.2	4.9
20°-30°	912.0	6.9
30°-40°	1314.2	10.0
40°-50°	1852.0	14.1
50°-60°	2574.6	19.6
60°-70°	3113.5	23.7
70°-80°	1913.8	14.6
80°-90°	498.0	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°	13128.0	100.0
0°-180°	13128.0	100.0

Coefficient of Utilization



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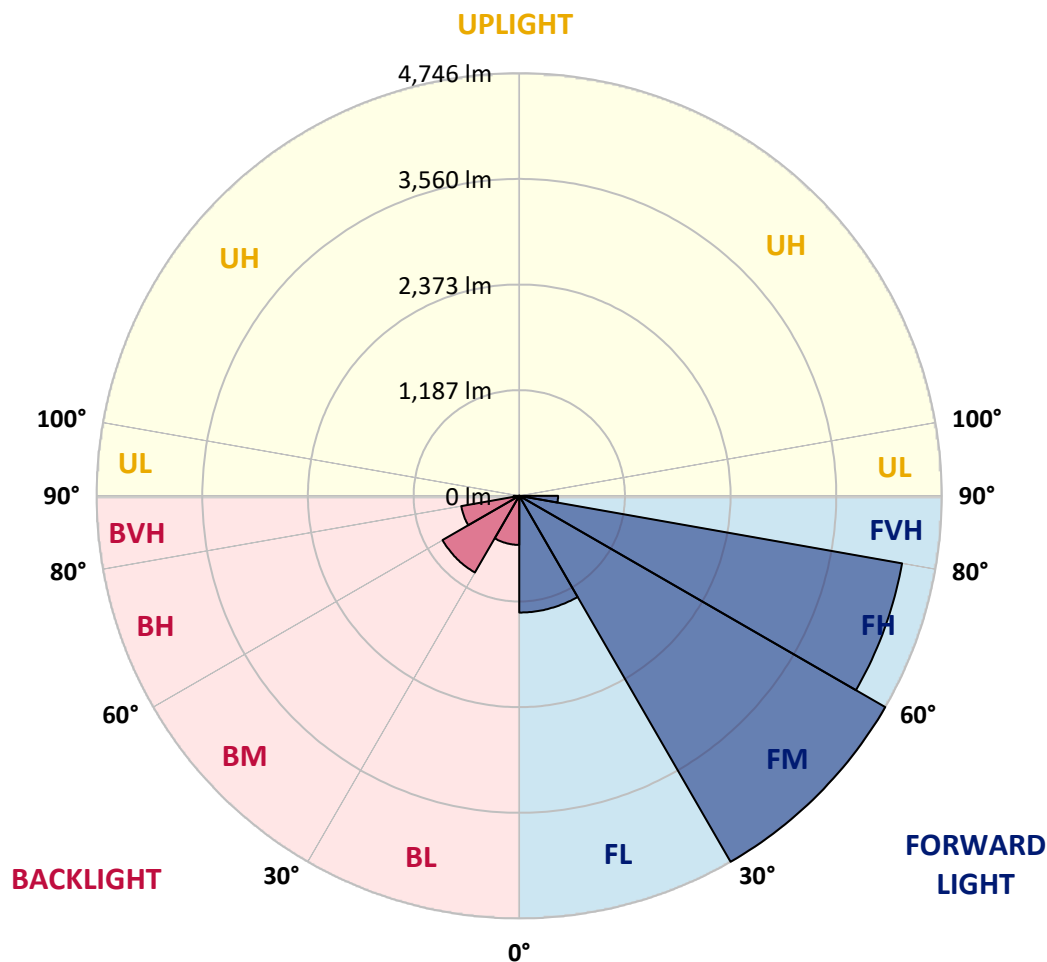
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1310.9	10.0			
FM	(30°-60°)	4746.1	36.2			
FH	(60°-80°)	4365.9	33.3			G2/5000
FVH	(80°-90°)	435.6	3.3			G3/500
BL	(0°-30°)	551.0	4.2	B2/1000		
BM	(30°-60°)	994.7	7.6	B1/1000		
BH	(60°-80°)	661.4	5.0	B2/1000		G2/1000
BVH	(80°-90°)	62.4	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5
2.5°	4284.5	4246.8	4189.5	4132.3	4089.8	4046.8	3998.0	3949.1	3893.5	3837.4	3804.3
5°	4213.7	4108.7	3972.2	3835.8	3745.5	3655.2	3552.9	3450.5	3349.2	3247.9	3193.3
7.5°	3894.6	3737.1	3559.7	3382.3	3251.1	3119.3	2977.6	2835.4	2709.4	2582.9	2504.7
10°	3580.7	3391.7	3188.1	2983.9	2815.9	2648.0	2505.7	2363.0	2268.0	2173.0	2101.1
12.5°	3355.5	3146.1	2922.0	2697.3	2529.4	2361.4	2271.1	2180.8	2102.1	2023.4	1940.5
15°	3266.3	3029.6	2800.2	2570.3	2417.6	2264.8	2164.6	2063.8	1958.3	1852.3	1750.5
17.5°	3345.0	3067.9	2818.6	2569.3	2369.3	2169.3	2029.2	1888.5	1749.4	1610.3	1492.2
20°	3590.7	3236.9	2910.9	2584.5	2318.4	2052.3	1864.4	1675.9	1497.5	1319.0	1185.2
22.5°	3935.5	3467.3	3041.6	2616.0	2272.2	1927.9	1692.2	1456.0	1245.0	1034.0	902.8
25°	4354.4	3772.8	3230.1	2686.8	2253.3	1819.2	1529.5	1239.8	1017.2	794.1	700.7
27.5°	4795.8	4137.1	3464.2	2790.8	2256.4	1722.1	1392.5	1062.3	861.8	661.3	597.3
30°	5163.7	4553.3	3737.1	2920.4	2268.5	1616.6	1263.4	910.1	744.8	579.5	538.0
32.5°	5500.1	4843.5	3942.8	3041.6	2282.2	1522.1	1163.6	804.6	669.7	534.3	500.2
35°	5847.6	5101.2	4086.7	3071.6	2258.5	1445.0	1095.4	745.8	621.5	496.5	467.7
37.5°	6230.2	5380.0	4225.2	3070.0	2218.6	1367.3	1042.4	717.0	590.0	462.4	441.4
40°	6657.0	5688.1	4375.3	3062.6	2182.4	1301.7	1003.0	703.9	572.6	440.9	423.0
42.5°	7074.2	5982.0	4515.0	3047.9	2153.0	1257.6	964.2	670.8	556.9	442.5	417.3
45°	7387.6	6238.6	4636.2	3033.2	2131.0	1228.7	933.7	638.8	542.2	445.6	413.6
47.5°	7625.4	6496.4	4770.6	3044.3	2128.9	1213.5	912.2	611.0	514.4	417.3	404.2
50°	7927.7	6806.0	4966.4	3126.7	2157.8	1188.8	887.0	584.7	487.6	390.5	408.4
52.5°	8304.0	7248.0	5269.7	3291.0	2218.1	1145.3	847.1	549.0	455.1	360.6	388.4
55°	8856.7	7814.3	5657.6	3500.4	2291.1	1081.2	786.8	491.8	412.0	331.7	356.4
57.5°	9352.7	8386.4	6029.7	3672.5	2336.7	1000.4	710.7	420.9	363.7	306.5	320.7
60°	9573.7	8681.4	6204.0	3726.1	2309.4	892.8	625.1	356.9	321.2	285.5	282.9
62.5°	9487.6	8494.0	6032.4	3570.7	2176.1	781.5	549.5	317.5	290.8	263.5	257.7
65°	9235.7	7905.1	5551.6	3198.1	1951.0	703.9	501.8	299.7	269.8	239.9	233.6
67.5°	8739.1	7066.9	4870.3	2673.7	1664.9	656.1	474.5	292.9	256.7	219.9	212.6
70°	7847.9	6058.1	4085.6	2112.6	1369.9	626.7	456.6	286.6	242.5	197.9	191.1
72.5°	6446.0	4857.2	3262.6	1667.5	1145.3	623.0	454.5	286.1	230.9	175.8	169.5
75°	4615.2	3689.3	2490.5	1291.2	937.9	584.7	431.4	278.2	215.2	151.7	145.9
77.5°	3105.7	2553.5	1731.0	908.0	696.0	483.9	362.7	241.4	184.2	127.0	121.2
80°	1994.5	1767.2	1160.0	552.7	451.4	350.1	259.3	168.5	134.4	99.7	95.0
82.5°	1463.3	1315.3	806.2	297.1	250.9	204.2	158.5	112.8	91.9	70.9	68.8
85°	930.1	1025.6	593.6	161.7	132.3	102.9	85.0	67.2	53.0	38.8	38.8
87.5°	180.6	249.8	164.3	78.2	57.2	36.2	31.0	25.2	14.2	2.6	3.1
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



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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°	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5
2.5°	3770.7	3734.5	3698.3	3657.3	3615.9	3577.5	3538.7	3496.2	3504.1	3471.5	3439.0
5°	3138.7	3081.0	3022.7	2972.4	2922.0	2878.4	2834.3	2795.0	2829.1	2806.0	2782.9
7.5°	2426.0	2354.6	2282.7	2222.3	2162.0	2115.2	2068.0	2035.5	2069.1	2064.9	2060.7
10°	2029.2	1959.9	1890.1	1823.4	1756.8	1700.1	1642.9	1594.6	1586.2	1562.0	1537.4
12.5°	1857.0	1762.0	1666.5	1596.7	1526.9	1459.1	1391.4	1334.8	1309.0	1269.1	1228.7
15°	1648.6	1536.3	1424.0	1344.7	1264.9	1199.3	1133.2	1084.4	1068.1	1037.2	1006.2
17.5°	1374.1	1251.3	1128.5	1048.2	967.3	914.9	861.8	829.3	829.3	820.4	811.5
20°	1051.3	941.6	831.9	770.5	709.1	681.3	652.9	639.3	643.5	644.0	644.0
22.5°	771.0	703.9	636.7	612.0	586.8	576.8	566.9	561.1	563.2	563.7	564.2
25°	607.3	581.6	555.3	542.7	529.6	523.3	517.0	514.9	519.6	520.1	520.1
27.5°	533.3	517.5	501.3	493.4	485.0	482.4	479.7	476.1	480.8	480.8	480.3
30°	496.0	479.2	462.4	452.4	442.5	443.5	444.0	443.0	446.1	448.2	449.8
32.5°	465.6	449.3	433.0	423.0	412.6	411.0	409.4	408.4	415.2	418.8	422.5
35°	438.3	420.4	402.6	393.1	383.7	380.0	376.3	373.7	380.0	384.7	389.5
37.5°	419.9	401.5	382.6	373.7	364.3	359.5	354.8	351.7	354.3	356.4	358.5
40°	405.2	386.3	366.9	356.4	345.9	341.2	336.4	333.8	335.4	335.9	336.4
42.5°	391.6	373.2	354.8	343.3	331.2	325.4	319.6	316.5	317.5	318.6	319.1
45°	381.6	363.2	344.3	330.7	316.5	310.2	303.9	300.2	300.8	300.8	300.8
47.5°	391.0	364.3	337.0	321.2	305.0	297.6	290.3	286.6	285.5	284.5	283.4
50°	425.7	380.0	333.8	313.9	293.4	285.5	277.1	272.9	270.3	269.3	268.2
52.5°	415.7	376.3	336.4	310.7	284.5	275.0	265.6	258.8	256.1	254.6	253.0
55°	380.5	355.9	330.7	299.7	268.7	260.3	251.4	246.7	242.0	240.9	239.9
57.5°	334.3	324.4	314.4	282.9	251.4	243.5	235.1	232.0	227.8	227.8	227.3
60°	279.8	294.5	309.2	272.9	236.2	227.3	218.3	215.7	214.1	213.6	213.1
62.5°	251.4	275.6	299.2	260.9	222.0	212.6	203.1	200.0	199.5	200.0	200.0
65°	227.3	234.6	242.0	224.1	206.3	196.8	186.9	183.7	184.8	186.3	187.9
67.5°	205.2	203.7	202.1	195.8	189.0	181.1	172.7	169.5	170.1	172.2	174.3
70°	184.2	182.1	179.5	174.8	170.1	163.2	156.4	154.3	153.8	156.4	158.5
72.5°	163.2	160.6	157.5	153.8	149.6	143.8	138.0	136.5	137.0	138.6	140.1
75°	140.1	138.0	135.4	132.3	128.6	123.3	118.1	117.0	118.1	119.7	121.2
77.5°	114.9	114.4	113.4	110.7	108.1	102.4	96.1	95.5	97.1	98.7	99.7
80°	89.8	90.3	90.8	88.7	86.6	80.3	73.5	73.0	74.5	76.1	77.7
82.5°	66.1	67.7	68.8	66.1	63.5	56.2	48.8	47.8	53.0	54.6	56.2
85°	38.3	40.4	42.5	40.4	38.3	31.0	23.6	23.1	27.8	30.4	33.1
87.5°	3.1	4.2	5.2	4.7	4.2	2.1	0.0	0.0	0.5	2.6	4.7
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: P320788
 CATALOG NUMBER: GLEON-SA4A-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: P320788

CATALOG NUMBER: GLEON-SA4A-830-U-SLR

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5
2.5°	3418.5	3398.0	3391.7	3385.4	3362.3	3338.7	3362.9	3386.5	3396.5	3406.4	3380.7
5°	2779.7	2776.1	2776.1	2775.5	2754.5	2733.0	2749.3	2765.0	2729.9	2694.7	2691.0
7.5°	2083.2	2105.8	2124.2	2142.0	2135.2	2128.4	2143.6	2158.8	2114.2	2069.1	2047.0
10°	1542.6	1547.3	1567.3	1587.2	1591.9	1596.1	1615.0	1633.4	1598.8	1564.1	1548.9
12.5°	1203.5	1178.3	1181.0	1183.1	1192.5	1201.4	1221.4	1240.8	1226.6	1211.9	1213.5
15°	974.7	942.7	929.6	915.9	926.4	936.9	951.1	964.7	965.2	965.2	978.9
17.5°	795.7	779.4	766.3	752.7	766.8	780.5	782.1	783.6	784.2	784.7	783.6
20°	651.9	659.8	655.6	651.4	656.6	661.3	665.5	669.2	664.5	659.2	646.1
22.5°	571.6	578.4	583.7	588.4	597.3	605.7	601.5	596.8	587.3	577.4	567.4
25°	524.9	529.6	534.8	540.1	547.4	554.3	546.9	539.6	532.7	525.9	519.1
27.5°	485.5	490.2	495.0	499.2	506.0	512.3	505.5	498.6	492.9	487.1	481.8
30°	453.5	456.6	460.3	464.0	470.3	476.1	470.3	464.0	459.8	455.1	451.4
32.5°	426.2	429.3	430.9	432.5	438.3	444.0	439.8	435.6	432.0	428.3	425.7
35°	396.3	402.6	403.6	404.7	410.5	416.2	413.6	410.5	406.3	402.1	397.3
37.5°	365.8	373.2	377.4	381.1	386.8	392.6	390.0	387.4	381.6	375.8	367.4
40°	340.1	343.3	351.1	358.5	367.9	376.9	371.6	365.8	356.9	348.0	343.8
42.5°	318.6	318.1	325.4	332.8	346.9	360.6	351.1	341.7	333.3	324.9	323.8
45°	299.7	298.1	301.8	305.5	320.7	335.4	325.9	316.0	311.2	306.5	306.5
47.5°	282.9	281.9	284.5	286.6	296.0	305.0	300.2	295.5	292.9	290.3	290.8
50°	267.7	266.6	269.3	271.4	275.0	278.2	279.2	279.8	278.2	276.6	277.7
52.5°	253.5	253.5	254.6	255.1	259.8	264.5	264.5	264.0	264.0	264.0	265.1
55°	241.4	242.5	242.5	242.5	249.8	256.7	254.6	252.5	253.0	253.0	254.0
57.5°	229.4	230.9	232.0	233.0	240.4	247.7	245.6	243.5	243.5	243.5	244.1
60°	215.7	217.8	219.9	222.0	229.4	236.7	234.6	232.0	232.5	233.0	233.6
62.5°	202.6	204.7	206.8	208.9	216.2	223.6	221.5	218.9	220.4	221.5	221.5
65°	190.0	191.6	193.7	195.8	202.6	209.4	207.3	205.2	207.3	208.9	209.9
67.5°	175.8	176.9	179.0	181.1	187.9	194.7	192.6	190.0	192.6	194.7	196.8
70°	159.6	160.6	163.2	165.3	172.2	179.0	176.4	173.7	176.4	179.0	181.1
72.5°	141.7	142.8	145.4	147.5	155.4	163.2	160.1	156.9	160.1	163.2	164.3
75°	122.3	123.3	126.5	129.1	137.0	144.9	142.2	139.1	141.7	144.3	144.9
77.5°	101.3	102.9	107.1	111.3	117.6	123.9	122.3	120.7	122.3	123.9	123.9
80°	79.3	80.8	86.1	90.8	94.5	98.2	98.7	99.2	99.7	100.3	99.7
82.5°	58.8	60.9	65.6	70.3	70.3	70.3	74.5	78.2	78.2	77.7	77.2
85°	36.2	38.8	43.0	47.2	44.6	42.0	48.8	55.1	55.1	54.6	53.5
87.5°	7.3	10.0	14.2	17.8	15.2	12.6	19.4	26.2	26.8	26.8	25.7
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: P320788
 CATALOG NUMBER: GLEON-SA4A-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: P320788

CATALOG NUMBER: GLEON-SA4A-830-U-SLR

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5
2.5°	3354.5	3395.4	3435.8	3446.3	3462.1	3468.9	3475.2	3526.6	3577.5	3637.4	3697.2
5°	2686.8	2717.3	2747.7	2752.4	2768.7	2777.1	2785.5	2848.0	2909.9	2993.4	3076.8
7.5°	2025.0	2032.3	2039.7	2038.6	2052.3	2070.6	2088.5	2155.1	2221.3	2311.0	2400.2
10°	1533.7	1550.5	1566.7	1582.0	1611.9	1646.5	1680.6	1748.9	1817.1	1905.8	1994.0
12.5°	1215.1	1234.5	1253.4	1270.2	1304.8	1351.0	1396.7	1478.6	1560.4	1666.5	1772.0
15°	992.0	990.4	988.9	1000.4	1030.9	1081.2	1131.1	1217.7	1304.3	1420.8	1536.8
17.5°	782.6	774.7	766.8	775.8	804.1	845.6	886.5	960.0	1033.0	1145.8	1258.6
20°	633.0	627.7	622.5	630.9	648.7	666.1	683.4	736.4	788.9	880.7	972.1
22.5°	556.9	556.4	555.3	560.0	568.4	577.4	585.8	611.5	636.7	696.0	754.8
25°	512.3	511.8	511.2	513.3	520.1	527.0	533.8	550.6	567.4	595.7	624.1
27.5°	476.6	475.5	474.5	475.0	476.6	487.1	497.1	504.9	512.3	531.7	550.6
30°	447.7	447.2	446.7	446.7	445.1	448.8	452.4	464.5	476.1	496.0	516.0
32.5°	423.0	420.4	417.8	412.0	408.4	413.6	418.8	431.4	444.0	462.4	480.8
35°	392.1	385.3	377.9	374.8	375.3	380.5	385.8	398.4	410.5	430.4	449.8
37.5°	358.5	356.4	353.8	353.2	354.8	360.1	365.3	376.3	386.8	406.8	426.2
40°	339.6	338.5	337.5	336.4	337.5	342.7	348.0	358.5	368.5	387.9	406.8
42.5°	322.8	322.3	321.7	321.7	322.3	328.0	333.8	344.3	354.3	371.6	388.9
45°	306.5	307.1	307.1	308.1	309.7	315.4	320.7	332.2	343.8	360.6	377.4
47.5°	291.3	292.9	293.9	296.6	298.1	304.4	310.2	322.8	335.4	356.4	376.9
50°	278.2	279.8	280.8	282.9	287.1	294.5	301.8	317.0	331.7	366.9	401.5
52.5°	266.1	267.7	269.3	271.4	276.6	285.0	293.4	312.3	330.7	371.6	412.6
55°	255.1	256.7	257.7	260.9	266.1	273.5	280.3	303.4	326.5	356.4	386.3
57.5°	244.6	246.2	247.2	249.3	251.9	259.8	267.2	291.8	316.5	337.5	358.0
60°	233.6	234.6	235.1	235.1	237.2	246.2	255.1	286.6	317.5	313.9	309.7
62.5°	221.5	222.5	223.1	221.5	224.1	233.6	243.0	284.0	324.9	299.7	274.5
65°	210.5	209.9	209.4	207.8	211.0	220.4	229.4	249.8	270.3	260.3	250.4
67.5°	198.4	196.8	195.3	193.2	196.3	204.7	212.6	219.4	226.2	227.3	228.3
70°	183.2	181.1	179.0	178.5	180.0	186.9	193.7	198.4	202.6	204.7	206.3
72.5°	165.3	163.8	162.2	161.1	161.7	167.4	172.7	176.9	181.1	182.7	183.7
75°	145.4	145.4	144.9	141.7	141.7	146.4	150.6	154.3	158.0	160.1	162.2
77.5°	123.9	124.4	124.4	120.2	119.7	124.4	128.6	131.7	134.4	136.5	138.0
80°	99.2	98.2	97.1	94.5	93.4	99.2	104.4	107.1	109.2	109.7	109.7
82.5°	76.1	74.0	71.4	65.6	66.1	72.4	78.2	80.3	82.4	82.4	82.4
85°	52.0	47.8	43.0	38.3	38.8	45.7	52.0	54.1	56.2	57.2	57.7
87.5°	24.7	20.5	15.7	12.1	12.1	17.8	23.1	24.1	25.2	27.3	29.4
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: P320788
 CATALOG NUMBER: GLEON-SA4A-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: P320788

CATALOG NUMBER: GLEON-SA4A-830-U-SLR

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5
2.5°	3742.9	3788.0	3834.7	3881.4	3935.0	3988.5	4051.0	4112.9	4165.9	4218.9	4263.0
5°	3148.7	3220.6	3305.1	3389.6	3497.2	3604.8	3736.6	3867.8	3984.8	4101.9	4237.8
7.5°	2494.2	2587.6	2697.8	2808.1	2947.2	3086.3	3256.8	3427.4	3592.8	3757.6	3966.5
10°	2092.1	2190.3	2298.9	2407.1	2548.8	2690.0	2870.5	3050.6	3236.4	3421.7	3657.8
12.5°	1881.1	1989.8	2085.3	2180.8	2295.8	2410.2	2585.0	2759.8	2978.1	3196.0	3423.2
15°	1656.0	1774.6	1889.0	2003.4	2128.9	2253.8	2423.9	2593.9	2832.7	3071.6	3332.9
17.5°	1383.6	1508.5	1648.1	1787.2	1951.0	2114.2	2332.0	2549.8	2832.7	3115.1	3423.2
20°	1099.6	1227.2	1394.1	1561.0	1764.6	1967.8	2250.1	2532.5	2913.6	3294.1	3687.2
22.5°	867.6	979.9	1162.1	1343.7	1578.8	1814.0	2176.1	2537.8	3035.9	3533.4	4064.1
25°	703.3	782.6	961.6	1140.0	1411.4	1682.7	2131.0	2578.7	3213.8	3848.4	4506.6
27.5°	602.6	654.5	821.4	987.8	1284.4	1580.4	2112.6	2644.3	3439.5	4234.7	4987.9
30°	552.2	588.4	729.6	870.2	1171.5	1472.8	2090.6	2708.3	3656.8	4604.7	5364.2
32.5°	510.2	539.0	659.8	780.0	1073.9	1367.8	2048.1	2727.8	3808.5	4889.2	5682.8
35°	474.5	498.6	603.6	708.6	997.3	1285.9	1976.7	2667.4	3903.5	5139.6	6014.5
37.5°	445.6	464.5	561.6	658.7	931.1	1203.5	1895.3	2587.1	3988.0	5388.9	6387.7
40°	423.0	439.3	530.1	620.9	868.1	1115.4	1825.5	2535.1	4104.5	5673.9	6781.9
42.5°	410.5	431.4	502.8	573.7	808.3	1042.9	1769.3	2495.8	4212.6	5929.0	7126.7
45°	407.3	437.2	488.7	540.1	763.7	987.3	1719.5	2451.2	4282.4	6113.7	7386.5
47.5°	402.1	426.7	477.6	528.5	741.6	954.2	1692.7	2430.7	4352.3	6273.3	7602.3
50°	405.2	408.4	468.7	528.5	738.5	948.4	1723.2	2497.9	4503.4	6508.4	7849.0
52.5°	399.4	385.8	451.9	518.1	738.0	957.9	1810.8	2663.7	4784.2	6904.2	8116.1
55°	369.0	351.1	420.4	489.7	726.9	963.7	1915.3	2866.3	5161.1	7455.3	8596.4
57.5°	342.2	325.9	384.7	443.0	693.4	943.7	2022.9	3101.5	5559.5	8016.9	9137.5
60°	306.5	302.9	344.8	386.8	641.4	895.4	2111.6	3327.2	5827.1	8326.6	9345.9
62.5°	277.1	279.2	310.2	341.2	576.3	810.9	2141.0	3470.5	5819.8	8169.1	9135.9
65°	254.6	258.2	288.7	319.1	520.7	722.2	2044.4	3366.0	5525.3	7684.1	8720.8
67.5°	232.5	236.7	272.9	308.6	471.3	633.5	1802.9	2971.8	4995.7	7019.1	8192.8
70°	211.5	216.8	256.1	295.5	435.6	575.3	1491.7	2408.1	4332.8	6257.0	7581.3
72.5°	189.0	194.2	236.2	278.2	413.1	547.4	1216.1	1884.3	3516.1	5147.4	6484.8
75°	165.9	169.5	215.2	260.3	382.1	503.9	954.2	1404.0	2691.0	3978.0	4898.1
77.5°	142.8	147.5	185.8	223.6	324.4	424.6	719.1	1013.5	1974.6	2935.1	3406.4
80°	113.9	118.1	145.4	172.2	250.4	328.0	494.4	660.8	1358.9	2057.0	2322.6
82.5°	87.1	91.9	110.2	128.1	178.5	228.8	299.7	370.6	902.8	1434.5	1456.5
85°	59.8	61.4	74.5	87.1	110.2	133.3	171.6	209.9	597.3	984.7	820.4
87.5°	29.9	29.9	38.8	47.8	59.3	70.9	90.8	110.2	191.1	271.9	156.4
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: P320788
 CATALOG NUMBER: GLEON-SA4A-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: P320788

CATALOG NUMBER: GLEON-SA4A-830-U-SLR

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5
2.5°	4319.2	4357.5	4396.3	4425.7	4455.7	4498.7	4541.7	4549.6	4558.0	4541.2	4524.4
5°	4374.8	4490.8	4607.3	4714.9	4822.5	4887.1	4951.7	4964.8	4977.9	4937.5	4896.5
7.5°	4168.5	4370.6	4572.7	4758.0	4943.3	5055.6	5168.4	5193.6	5219.3	5153.2	5087.1
10°	3893.0	4141.3	4389.5	4633.6	4877.6	5040.9	5204.1	5236.7	5269.2	5186.8	5104.4
12.5°	3679.9	3944.9	4210.0	4467.2	4724.9	4893.9	5062.9	5103.3	5143.8	5083.9	5023.6
15°	3614.3	3863.6	4112.9	4337.0	4561.7	4699.7	4838.3	4854.6	4871.4	4861.9	4852.5
17.5°	3733.4	3958.6	4184.3	4306.1	4428.4	4483.5	4539.1	4557.0	4575.3	4598.9	4623.1
20°	4022.1	4180.6	4339.7	4334.4	4328.6	4301.9	4274.6	4269.8	4265.1	4332.8	4401.1
22.5°	4453.0	4516.0	4579.5	4432.0	4284.5	4194.8	4104.5	4086.7	4068.3	4140.2	4212.6
25°	4920.7	4909.1	4897.1	4616.3	4334.9	4163.8	3992.7	3972.8	3952.8	4014.2	4076.2
27.5°	5383.6	5308.0	5232.5	4850.9	4469.3	4221.0	3972.8	3952.8	3932.9	3987.5	4042.1
30°	5723.2	5602.0	5480.7	5048.8	4616.8	4321.8	4026.8	3994.3	3961.2	4028.4	4095.6
32.5°	5988.3	5825.6	5662.9	5209.4	4755.9	4436.8	4117.6	4066.7	4015.8	4105.6	4195.3
35°	6252.8	6024.0	5794.6	5352.7	4910.2	4572.7	4234.7	4172.2	4109.8	4233.1	4356.5
37.5°	6585.6	6257.0	5927.9	5513.8	5099.7	4776.3	4452.5	4388.5	4324.4	4481.4	4638.8
40°	6946.7	6508.4	6070.2	5690.2	5310.1	5058.2	4805.7	4744.9	4683.4	4874.5	5065.6
42.5°	7246.9	6742.5	6238.1	5902.7	5566.8	5389.4	5211.5	5210.9	5209.9	5403.6	5597.3
45°	7491.0	6937.8	6384.0	6110.1	5835.5	5743.2	5650.8	5724.8	5798.8	5973.6	6148.9
47.5°	7673.1	7101.5	6529.4	6347.3	6165.2	6178.8	6192.5	6343.1	6493.7	6606.1	6718.9
50°	7791.7	7250.1	6707.9	6651.7	6595.6	6717.9	6840.7	7013.4	7186.6	7263.2	7339.8
52.5°	7964.4	7451.6	6938.3	7001.3	7064.3	7314.1	7564.0	7738.7	7913.5	7941.9	7970.7
55°	8363.9	7822.2	7280.0	7400.7	7522.0	7888.3	8255.2	8391.7	8528.1	8538.6	8549.1
57.5°	8931.2	8341.3	7751.3	7881.5	8011.7	8434.7	8858.3	9005.3	9152.7	9132.3	9111.3
60°	9355.9	8834.1	8311.9	8443.1	8574.3	8986.9	9399.4	9568.4	9738.0	9692.8	9647.7
62.5°	9382.1	9103.4	8824.2	8942.8	9061.9	9466.1	9870.2	10044.0	10217.7	10139.0	10060.3
65°	8964.8	9089.8	9214.7	9254.0	9293.4	9670.3	10047.7	10180.4	10313.8	10273.9	10234.0
67.5°	8390.1	8850.4	9311.3	9232.0	9152.7	9329.6	9506.5	9643.5	9780.5	9757.9	9734.8
70°	7816.4	8431.0	9045.7	8656.2	8266.2	8193.3	8120.3	8267.8	8415.8	8324.5	8232.6
72.5°	6839.6	7494.7	8150.2	7432.7	6715.2	6465.9	6216.6	6404.0	6591.4	6446.0	6300.1
75°	5368.9	6092.7	6817.1	5961.0	5104.9	4772.1	4439.4	4600.5	4761.7	4661.9	4561.7
77.5°	3996.9	4710.2	5423.5	4553.3	3682.5	3435.3	3187.6	3235.3	3283.6	3266.8	3249.5
80°	2711.0	3208.0	3705.6	3126.1	2546.7	2565.6	2585.0	2562.4	2539.3	2572.9	2606.5
82.5°	1730.0	2113.7	2497.9	2190.3	1882.7	2059.1	2235.4	2148.8	2061.7	2093.7	2126.3
85°	987.3	1362.6	1738.4	1620.3	1501.7	1604.5	1707.9	1573.6	1439.2	1498.0	1557.3
87.5°	260.3	753.7	1247.6	1132.7	1017.7	884.4	751.1	573.2	395.2	577.4	759.5
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: P320788
 CATALOG NUMBER: GLEON-SA4A-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: P320788

CATALOG NUMBER: GLEON-SA4A-830-U-SLR

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5	3999.5
2.5°	4515.5	4506.6	4474.5	4442.0	4393.7	4353.8	4284.5
5°	4839.9	4783.2	4685.5	4587.4	4478.2	4352.8	4213.7
7.5°	4954.8	4822.0	4634.6	4446.7	4277.7	4079.3	3894.6
10°	4906.0	4707.1	4463.5	4219.5	4014.2	3785.9	3580.7
12.5°	4812.6	4601.0	4332.8	4064.1	3830.5	3585.4	3355.5
15°	4684.0	4515.0	4263.5	4012.1	3777.0	3538.7	3266.3
17.5°	4543.3	4463.0	4281.4	4099.3	3895.6	3664.7	3345.0
20°	4429.9	4459.3	4386.9	4314.5	4151.2	3949.7	3590.7
22.5°	4353.3	4494.5	4550.1	4606.3	4508.1	4350.7	3935.5
25°	4310.3	4544.4	4730.7	4917.5	4874.0	4752.7	4354.4
27.5°	4329.2	4616.3	4905.5	5195.2	5235.6	5202.0	4795.8
30°	4385.8	4676.6	5028.8	5381.5	5542.7	5587.8	5163.7
32.5°	4480.3	4765.3	5149.0	5533.2	5776.8	5920.6	5500.1
35°	4623.1	4889.7	5289.7	5689.6	6004.6	6267.0	5847.6
37.5°	4868.2	5097.6	5466.6	5836.1	6244.4	6638.6	6230.2
40°	5227.2	5389.4	5701.2	6013.5	6527.3	7059.5	6657.0
42.5°	5680.2	5763.6	6010.9	6258.1	6822.8	7441.7	7074.2
45°	6170.9	6193.0	6348.3	6504.2	7056.9	7702.0	7387.6
47.5°	6643.3	6567.7	6629.7	6691.6	7236.4	7887.8	7625.4
50°	7129.4	6918.9	6886.3	6853.8	7415.9	8106.7	7927.7
52.5°	7623.8	7276.8	7148.3	7019.1	7630.1	8396.9	8304.0
55°	8107.7	7666.3	7493.1	7319.9	7957.6	8751.2	8856.7
57.5°	8611.1	8110.9	7950.3	7789.6	8438.9	9200.0	9352.7
60°	9152.7	8657.3	8528.7	8399.6	9037.3	9685.0	9573.7
62.5°	9666.6	9272.9	9205.2	9137.0	9642.5	10057.6	9487.6
65°	10009.9	9785.2	9848.2	9911.7	10100.1	10150.5	9235.7
67.5°	9780.5	9826.2	10092.3	10358.9	10229.3	9874.4	8739.1
70°	8506.1	8780.1	9410.5	10041.4	9753.7	9134.9	7847.9
72.5°	6607.6	6915.7	7851.6	8788.0	8522.9	7765.0	6446.0
75°	4909.1	5257.1	6290.1	7323.0	6955.1	5808.3	4615.2
77.5°	3482.5	3715.6	4735.4	5755.8	5155.8	3866.2	3105.7
80°	2535.1	2463.8	3032.2	3600.6	3500.9	2557.2	1994.5
82.5°	1952.0	1777.7	2045.4	2313.1	2298.4	1774.6	1463.3
85°	1487.5	1417.7	1654.4	1891.1	1688.5	1202.0	930.1
87.5°	867.1	975.2	1253.9	1533.2	1150.5	364.8	180.6
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: P320788
 CATALOG NUMBER: GLEON-SA4A-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.

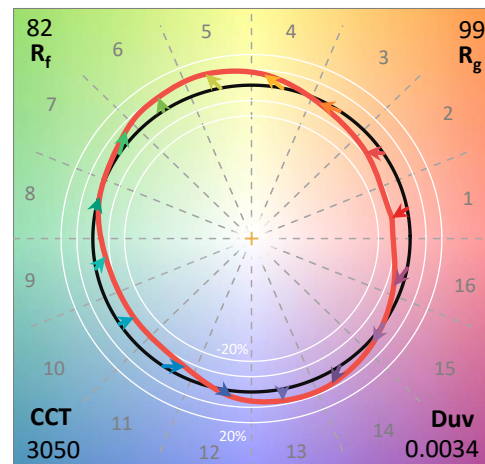
Test Information

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

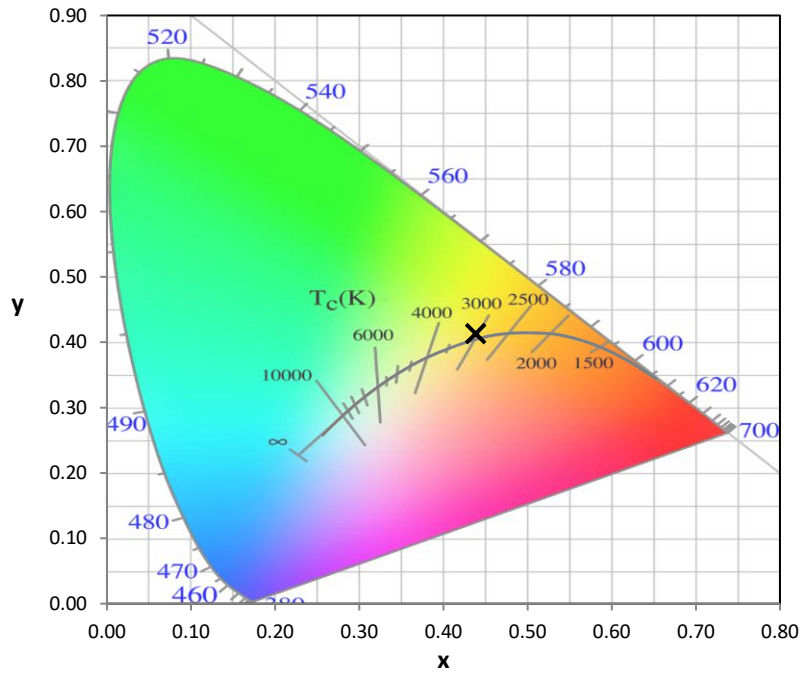
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

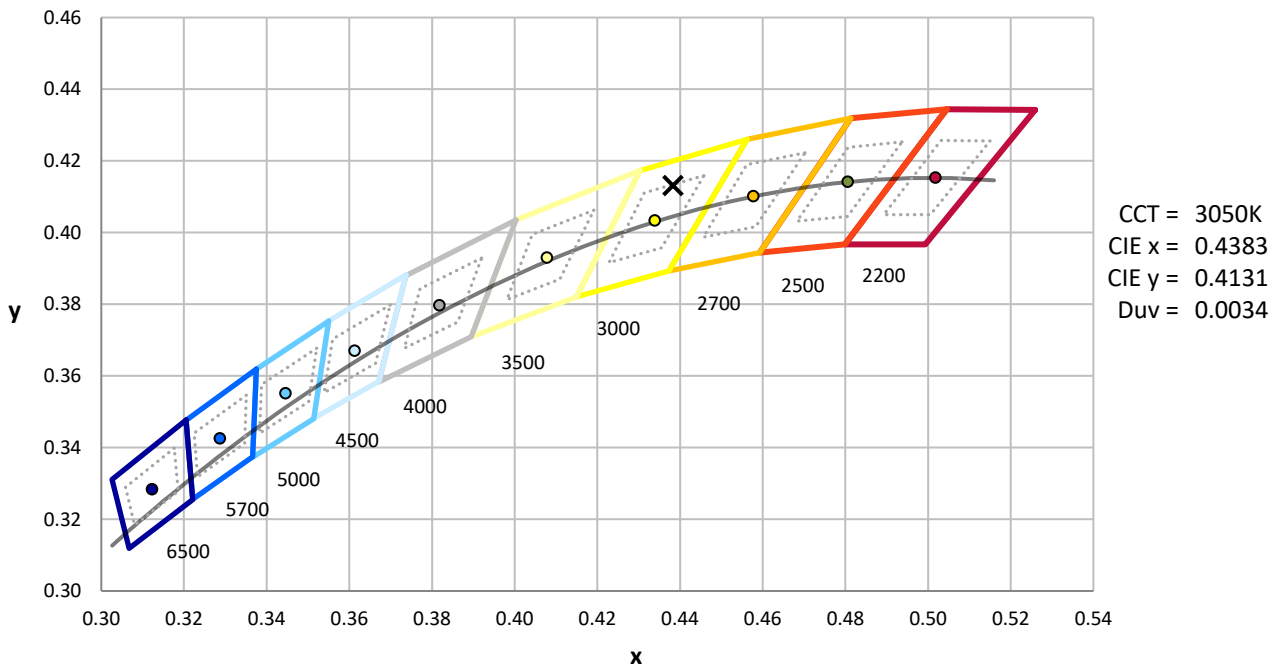
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



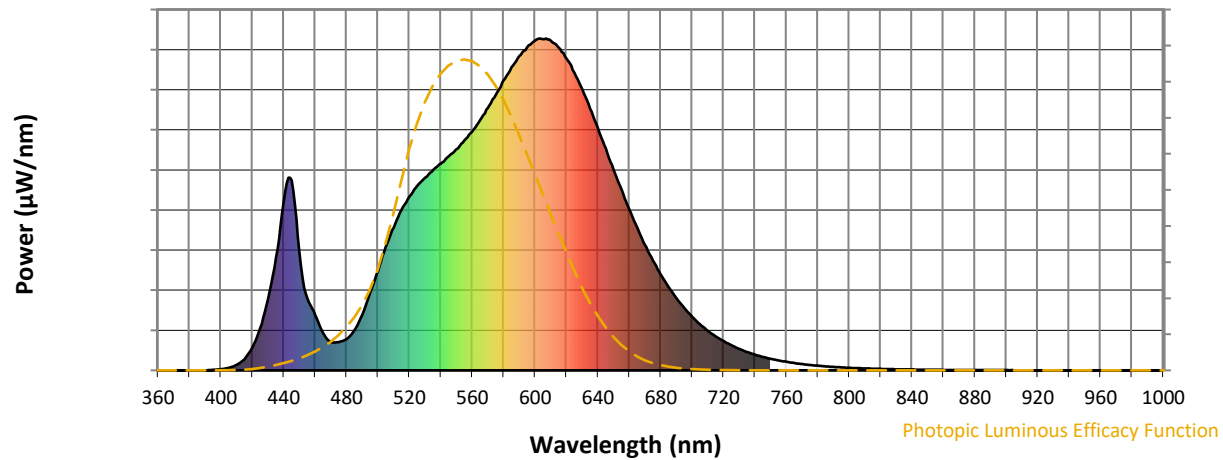
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

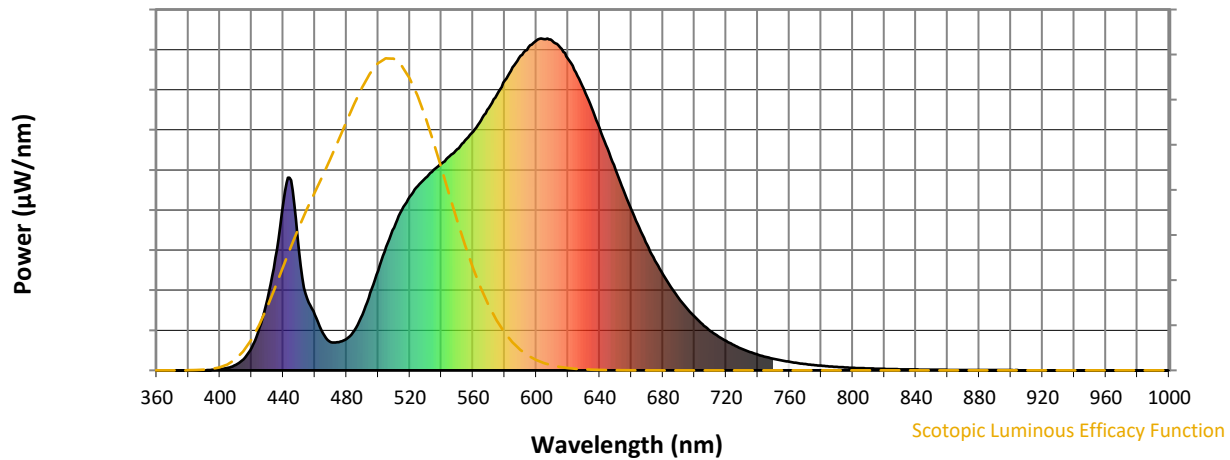


Photopic Lumens: NR

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



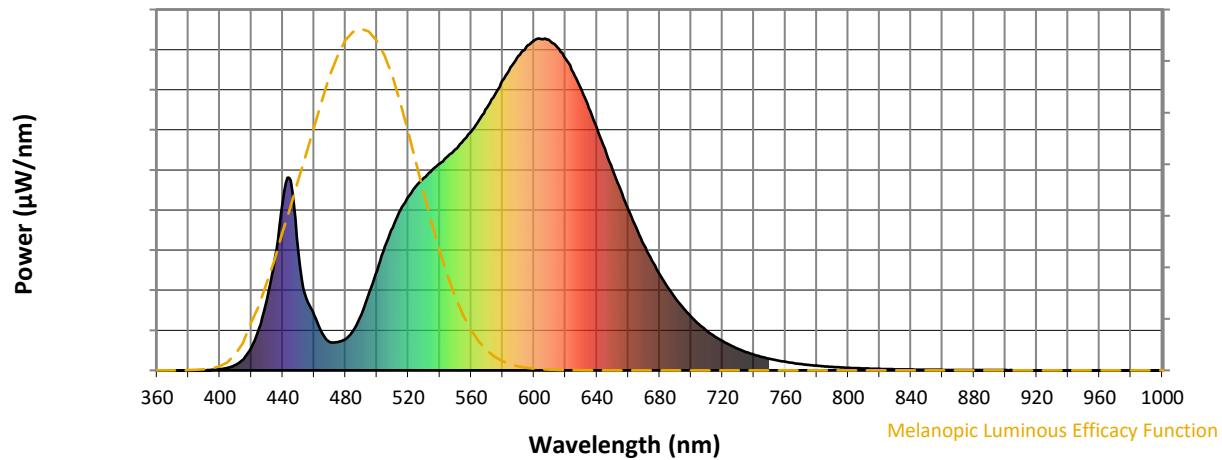
Scotopic Lumens: NR

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

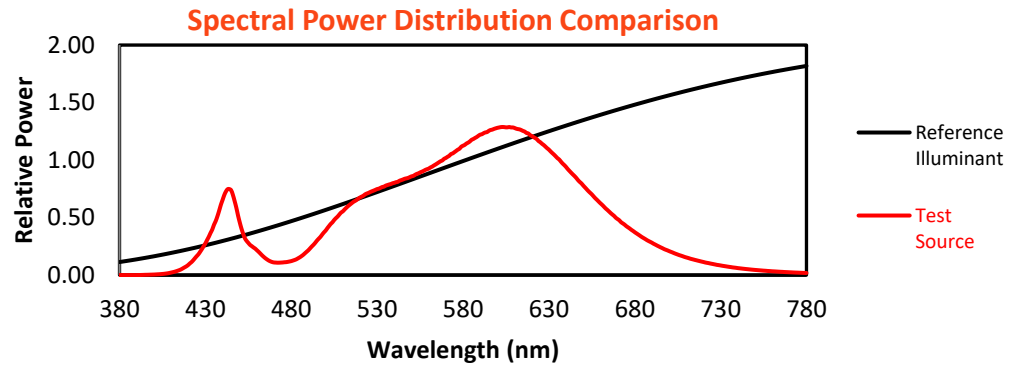
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168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

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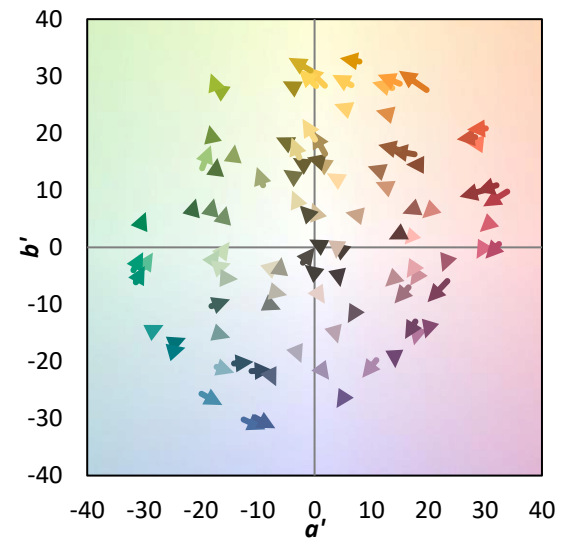
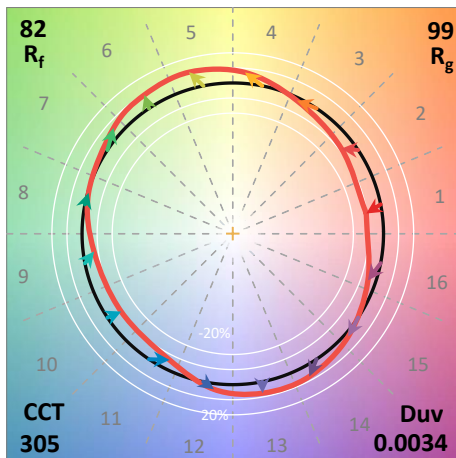
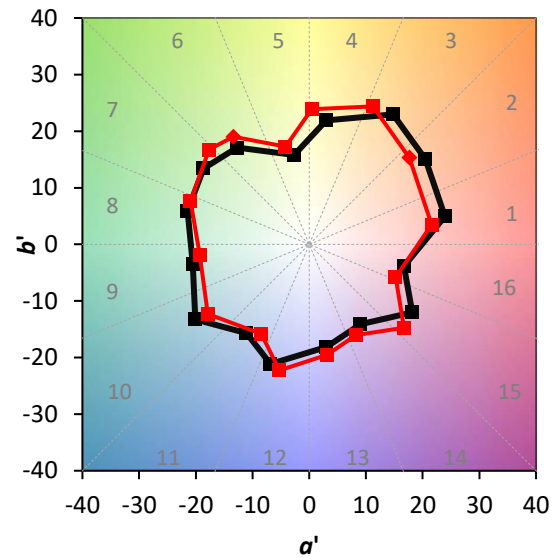
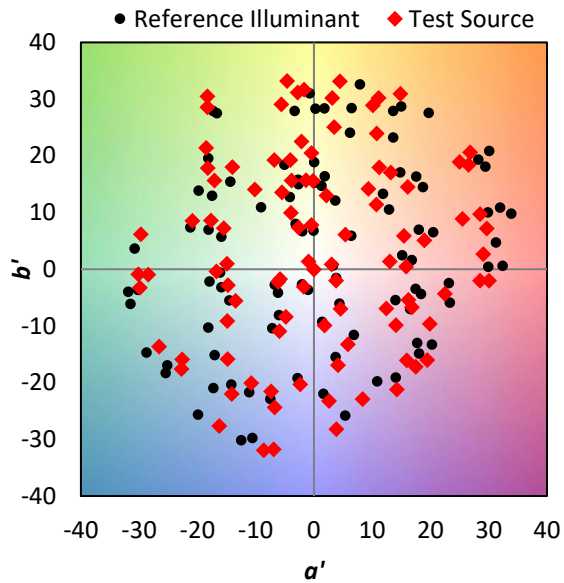
TM-30-18

Summary

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

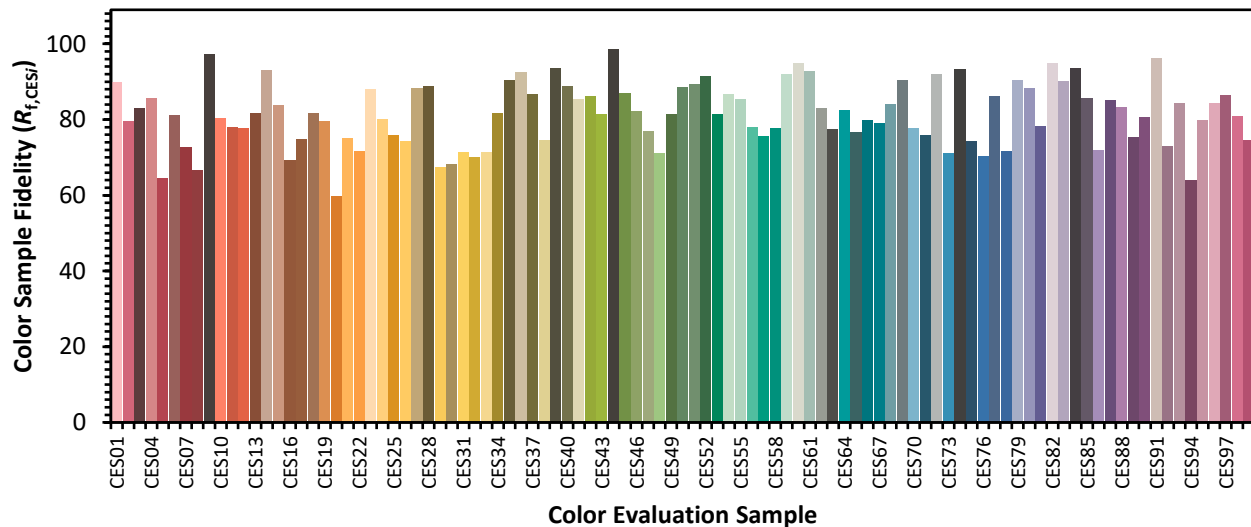


Color Vector Graphics

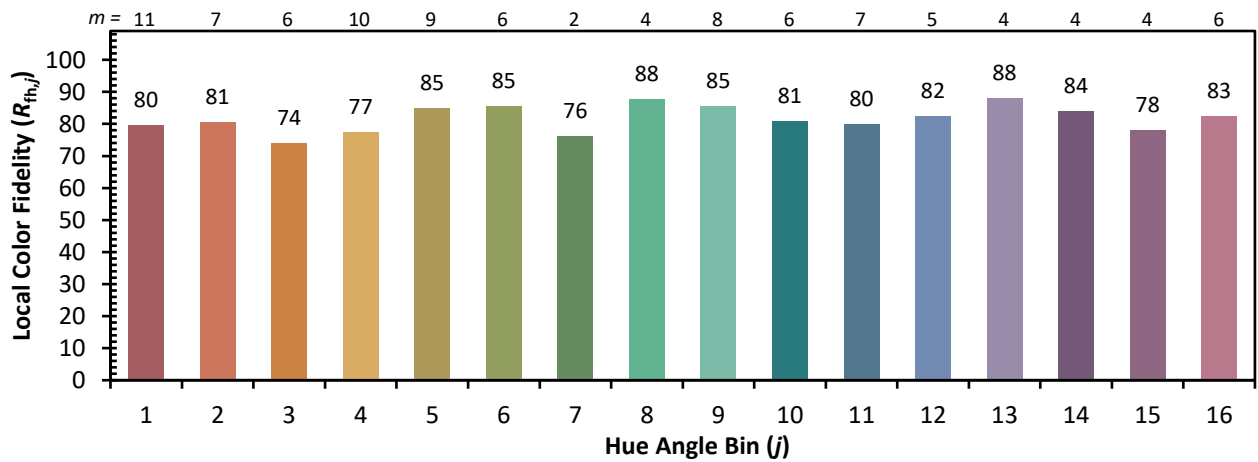
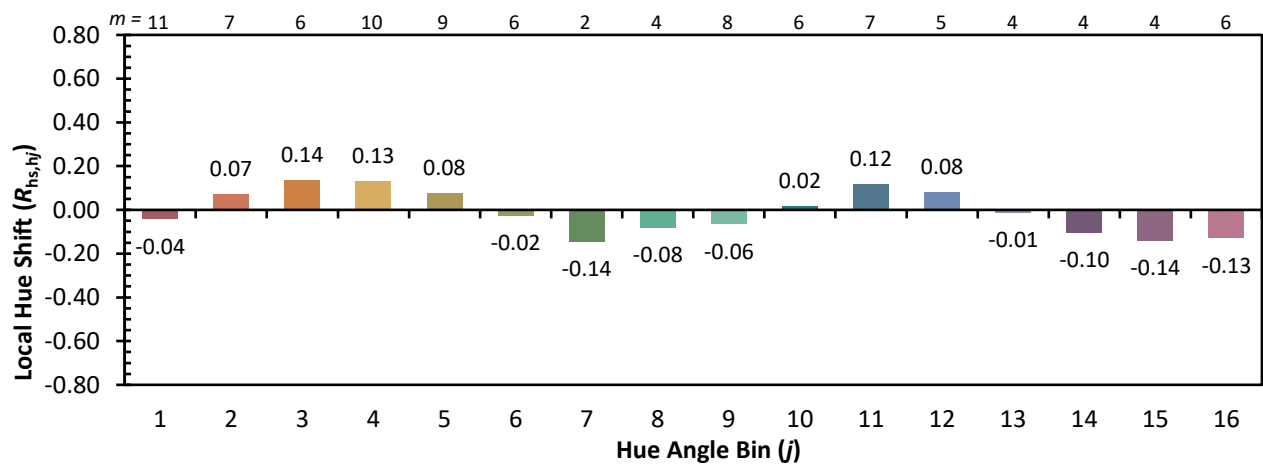
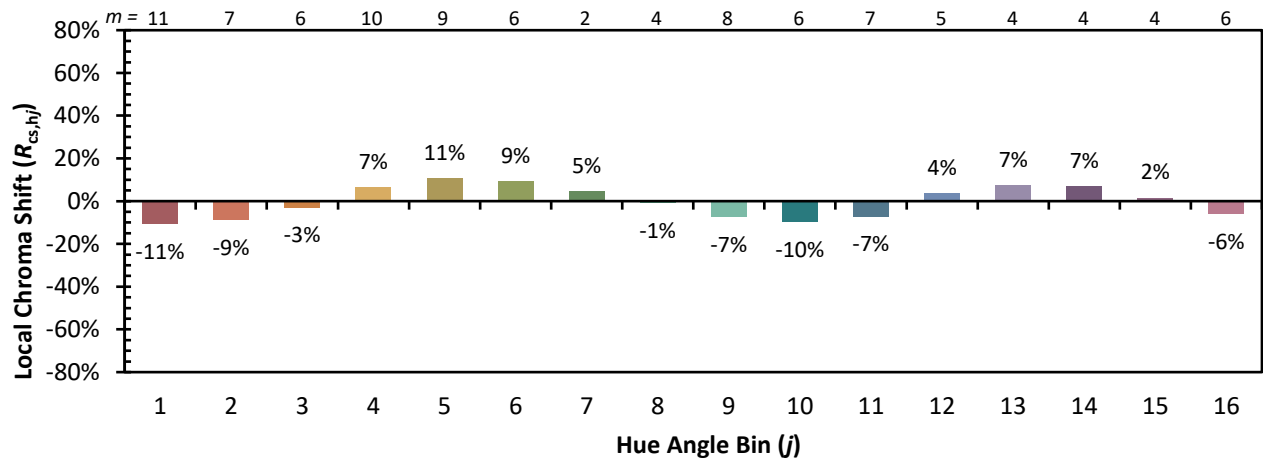


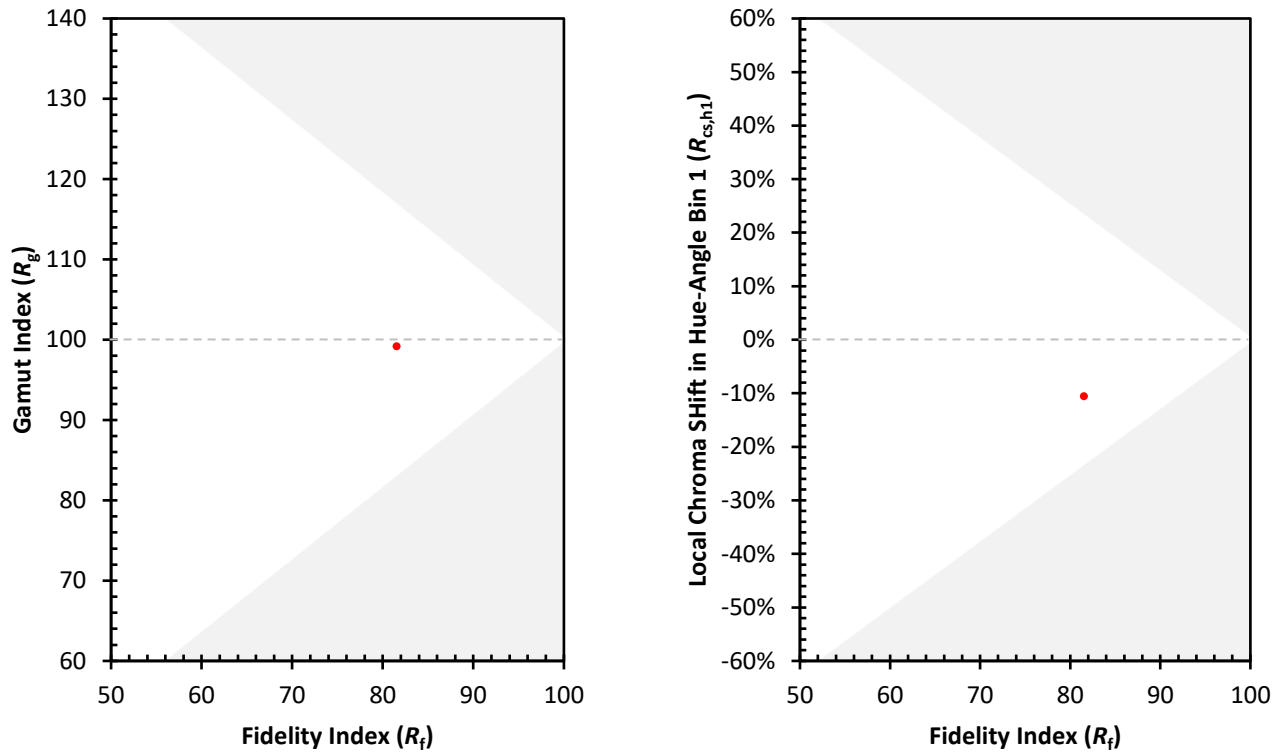
Individual Sample Fidelity Index ($R_{f,i}$)

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)