Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

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

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P639490

Luminaire Tested: GWS-SA5B-830-U-T3R-W-GRSBK

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P639490
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-16)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5B-830-U-T3R-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	8846.5 lumens
Efficiency:	N/A
Efficacy:	76.5 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

Input Watts (W):	115.7
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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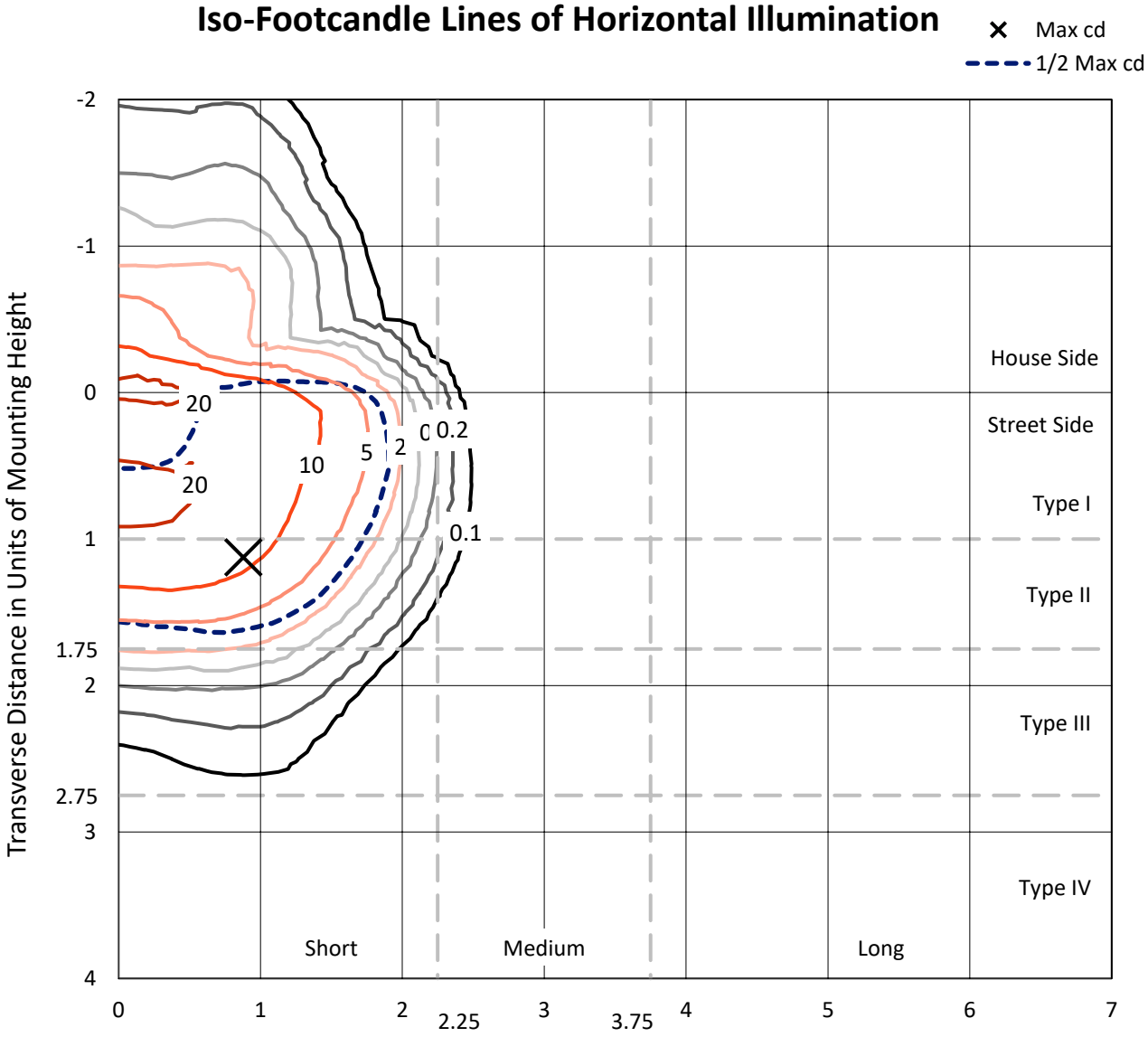
REPORT NUMBER: P639490
CATALOG NUMBER: GWS-SA5B-830-U-T3R-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 22.2 fc
Type II - Short - N/A

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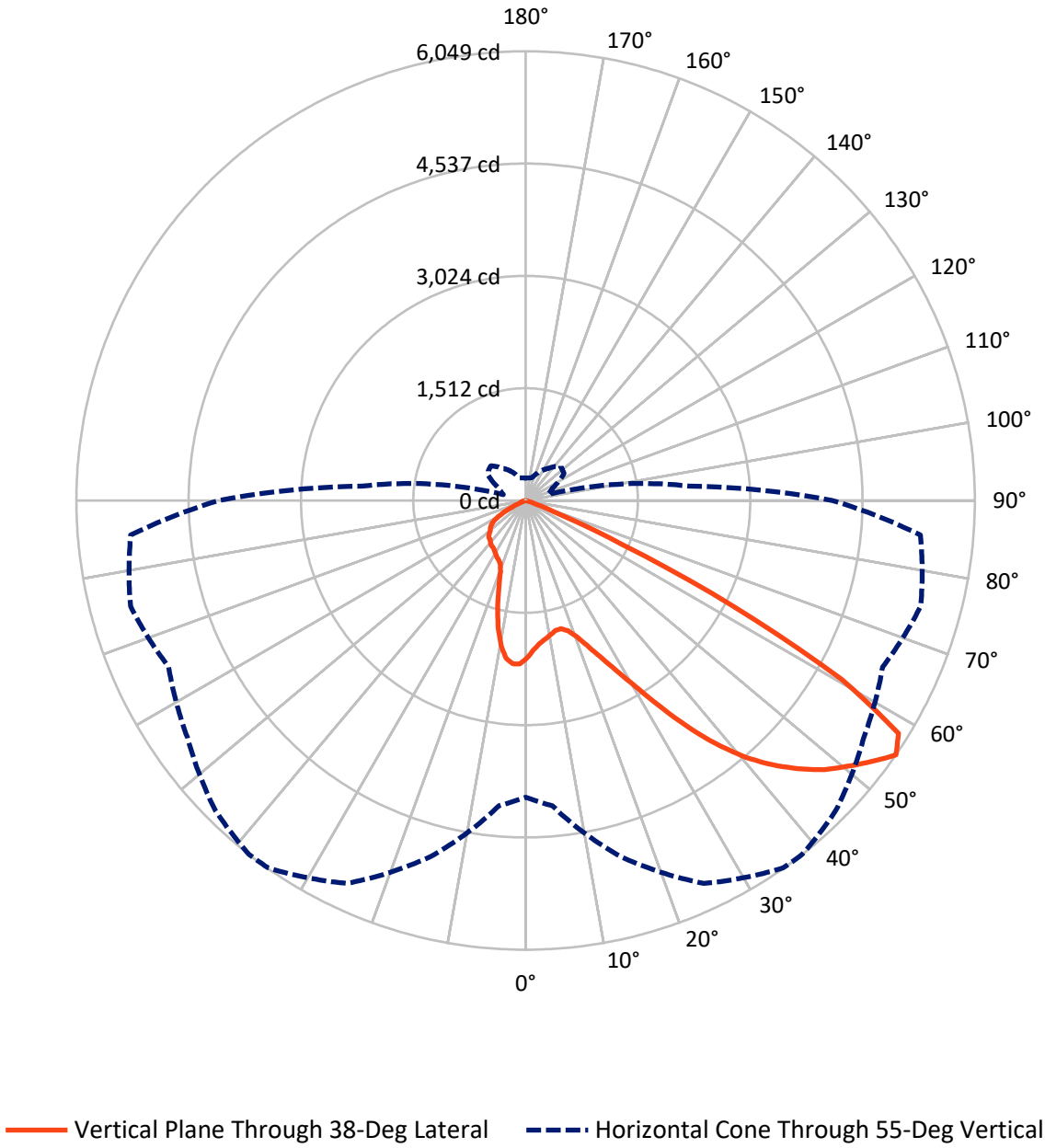
Luminous Intensity Polar Plot



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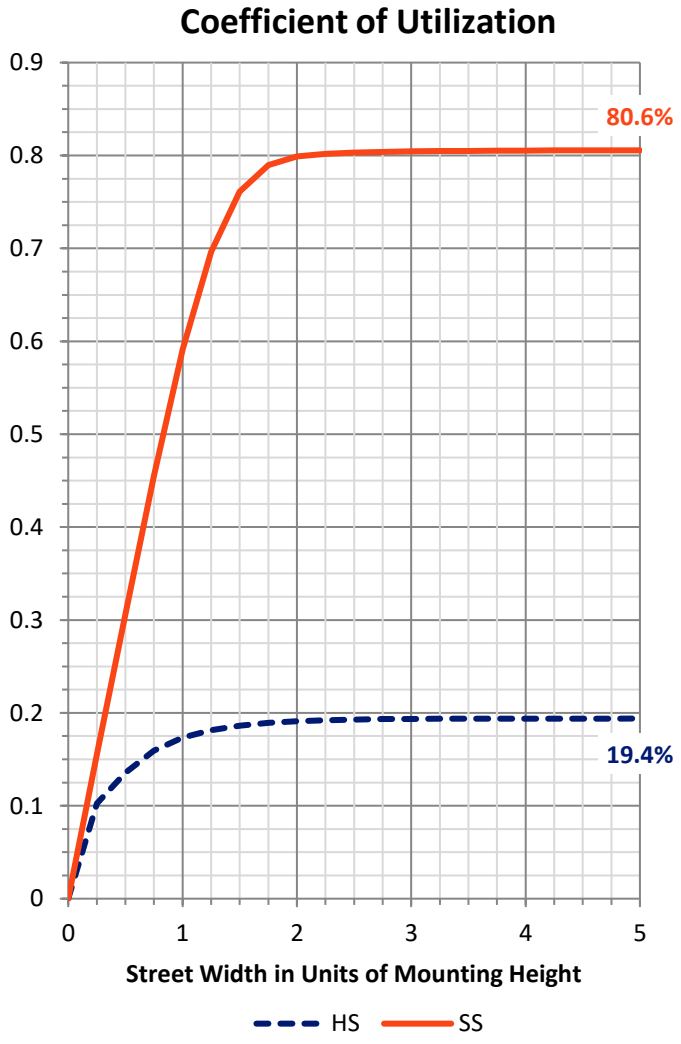
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1723.6	0.0	1723.6
	% Fixture	19.5	0.0	19.5
Street Side	Lumens	7122.9	0.0	7122.9
	% Fixture	80.5	0.0	80.5
Total	Lumens	8846.5	0.0	8846.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.2	2.2
10°-20°	528.1	6.0
20°-30°	906.2	10.2
30°-40°	1503.0	17.0
40°-50°	2209.5	25.0
50°-60°	2581.9	29.2
60°-70°	875.2	9.9
70°-80°	44.7	0.5
80°-90°	1.7	0.0
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°	8846.5	100.0
0°-180°	8846.5	100.0



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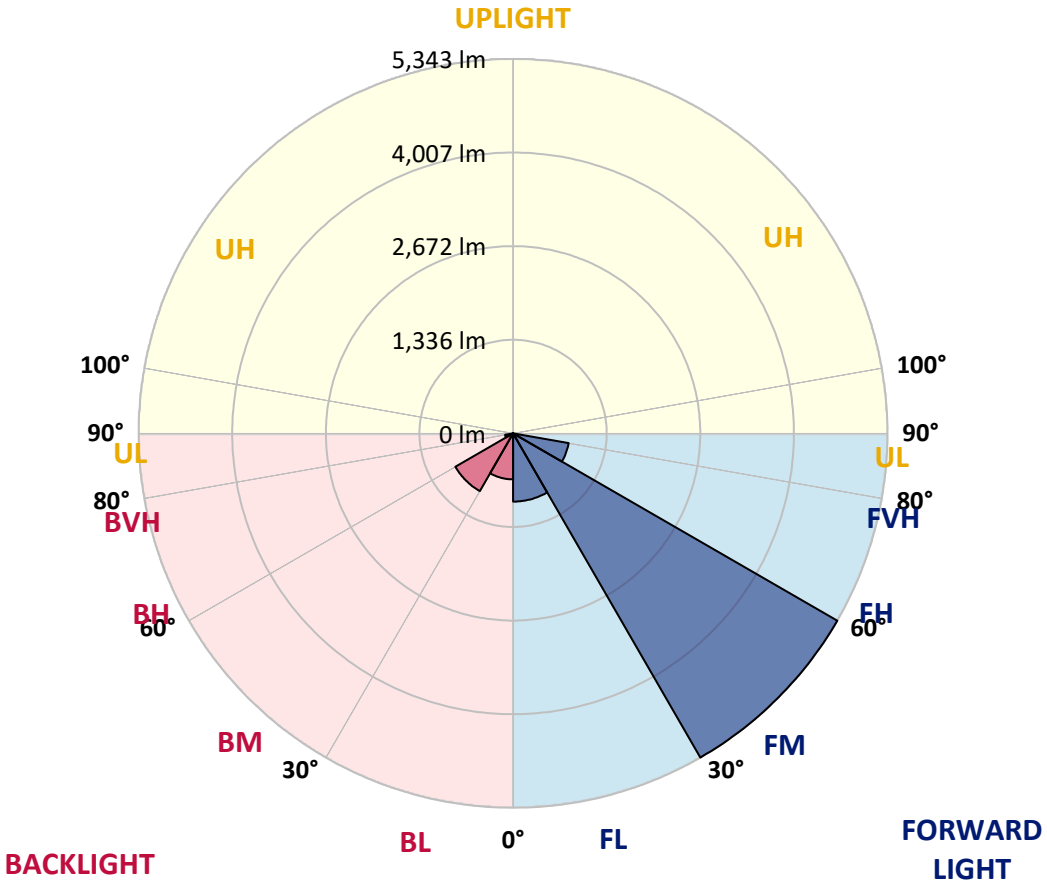
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	973.8	11.0			
FM	(30°-60°)	5343.0	60.4			
FH	(60°-80°)	805.2	9.1			G1/1800
FVH	(80°-90°)	0.9	0.0			G0/10
BL	(0°-30°)	656.7	7.4	B2/1000		
BM	(30°-60°)	951.3	10.8	B1/1000		
BH	(60°-80°)	114.7	1.3	B1/500		G1/500
BVH	(80°-90°)	0.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1
Type II Short



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REPORT NUMBER: P639490
CATALOG NUMBER: GWS-SA5B-830-U-T3R-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	2121.5	2121.5	2121.5	2121.5	2121.5	2121.5	2121.5	2121.5	2121.5	2121.5	2121.5
2.5°	1975.8	1971.8	1979.9	1996.1	2011.2	2016.3	2031.5	2052.7	2065.8	2097.2	2122.5
5°	1886.9	1884.8	1892.9	1907.1	1927.3	1934.4	1957.6	1993.0	2028.4	2083.0	2136.6
7.5°	1806.0	1805.0	1817.1	1848.4	1877.8	1886.9	1915.2	1958.7	2006.2	2090.1	2169.0
10°	1699.8	1700.8	1724.1	1768.6	1822.1	1840.4	1885.9	1948.5	2010.2	2118.4	2227.6
12.5°	1665.4	1667.4	1679.6	1714.0	1772.6	1795.9	1859.6	1954.6	2033.5	2158.9	2303.5
15°	1749.3	1749.3	1739.2	1743.3	1769.6	1790.8	1857.5	1974.8	2072.9	2207.4	2378.3
17.5°	1912.1	1906.1	1880.8	1846.4	1837.3	1844.4	1898.0	2018.3	2128.5	2264.0	2463.2
20°	2132.6	2134.6	2085.1	2013.3	1955.6	1954.6	1987.0	2095.2	2208.4	2331.8	2555.3
22.5°	2399.5	2391.4	2325.7	2227.6	2127.5	2119.4	2132.6	2212.5	2323.7	2439.0	2668.5
25°	2709.0	2704.9	2611.9	2480.4	2348.0	2328.8	2328.8	2407.6	2488.5	2591.7	2804.0
27.5°	3032.5	3032.5	2942.5	2790.9	2614.9	2580.5	2575.5	2668.5	2722.1	2742.3	2918.3
30°	3365.2	3361.2	3272.2	3116.5	2928.4	2893.0	2878.8	2947.6	2986.0	2925.3	3060.8
32.5°	3702.9	3710.0	3620.0	3475.4	3307.6	3284.3	3240.8	3240.8	3272.2	3187.2	3285.3
35°	4066.0	4063.9	3993.2	3895.1	3751.5	3725.2	3653.4	3541.2	3588.7	3551.3	3595.8
37.5°	4386.5	4401.7	4367.3	4294.5	4178.2	4151.9	4033.6	3830.4	3866.8	3925.4	3964.8
40°	4712.1	4724.2	4758.6	4735.4	4588.7	4540.2	4329.9	3996.2	4036.6	4237.9	4351.1
42.5°	5031.6	5037.7	5107.5	5145.9	4949.7	4864.8	4554.4	4097.3	4139.8	4482.6	4680.8
45°	5234.9	5248.0	5363.3	5480.6	5268.3	5152.0	4749.5	4226.7	4244.9	4652.4	4924.5
47.5°	5226.8	5257.1	5473.5	5686.9	5542.3	5416.9	4984.1	4434.0	4403.7	4812.2	5085.2
50°	5064.0	5100.4	5410.8	5749.6	5739.5	5623.2	5245.0	4734.4	4639.3	4953.8	5105.5
52.5°	4726.3	4831.4	5300.6	5757.7	5898.2	5839.6	5567.6	5138.8	4957.8	5157.0	5137.8
55°	3996.2	4125.6	4965.9	5688.9	6041.8	6048.9	5906.3	5560.5	5303.6	5506.9	5337.0
57.5°	3033.5	3136.7	3822.3	5064.0	5804.2	5920.5	6037.8	5782.9	5517.0	5745.5	5383.5
60°	1828.2	1947.5	2393.5	3716.1	4687.8	4886.0	5346.1	5296.6	4976.0	5074.1	4414.8
62.5°	741.2	803.9	1105.2	2047.6	2950.6	3135.7	3576.5	3651.4	3572.5	3472.4	2677.6
65°	271.0	296.3	442.9	846.4	1357.0	1424.8	1657.3	1789.8	1899.0	1616.9	996.0
67.5°	167.9	184.0	288.2	434.8	493.5	459.1	467.2	557.2	531.9	328.6	178.0
70°	124.4	137.5	225.5	301.3	199.2	153.7	104.2	111.2	100.1	88.0	87.0
72.5°	86.0	98.1	168.9	178.0	76.8	54.6	38.4	53.6	60.7	59.7	61.7
75°	56.6	65.7	106.2	69.8	19.2	15.2	13.1	28.3	36.4	36.4	37.4
77.5°	33.4	38.4	37.4	14.2	4.0	4.0	3.0	5.1	8.1	9.1	11.1
80°	4.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0
82.5°	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
85°	0.0	0.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
87.5°	0.0	0.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CATALOG NUMBER: GWS-SA5B-830-U-T3R-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2121.5	2121.5	2121.5	2121.5	2121.5	2121.5	2121.5	2121.5	2121.5	2121.5	2121.5
2.5°	2141.7	2134.6	2163.9	2185.2	2202.4	2210.4	2199.3	2198.3	2198.3	2176.1	2170.0
5°	2167.0	2170.0	2211.5	2229.7	2232.7	2222.6	2197.3	2180.1	2170.0	2146.7	2133.6
7.5°	2215.5	2225.6	2265.0	2262.0	2234.7	2188.2	2121.5	2069.9	2036.5	2000.1	1977.9
10°	2285.3	2304.5	2328.8	2286.3	2199.3	2081.0	1943.5	1845.4	1786.8	1745.3	1720.0
12.5°	2370.2	2389.4	2381.3	2281.2	2100.2	1888.9	1711.9	1570.4	1502.6	1465.2	1438.9
15°	2456.2	2468.3	2415.7	2220.6	1925.3	1641.1	1444.0	1303.4	1220.5	1190.2	1167.9
17.5°	2544.1	2541.1	2421.8	2101.2	1691.7	1362.1	1167.9	1071.9	1048.6	1043.5	1041.5
20°	2636.1	2608.8	2397.5	1930.3	1410.6	1086.0	975.8	981.9	1024.3	1044.6	1048.6
22.5°	2741.3	2672.6	2336.8	1698.8	1123.4	905.0	916.1	975.8	1033.4	1060.7	1064.8
25°	2853.6	2731.2	2235.7	1401.5	885.8	832.2	897.9	966.7	1028.4	1061.7	1065.8
27.5°	2927.4	2745.4	2069.9	1102.2	760.4	803.9	873.7	939.4	1003.1	1039.5	1044.6
30°	3007.3	2739.3	1844.4	849.4	717.9	779.6	840.3	900.0	958.6	999.0	1003.1
32.5°	3124.6	2735.2	1569.4	689.6	700.7	760.4	804.9	854.4	894.9	918.2	915.1
35°	3278.2	2730.2	1248.8	621.9	690.6	745.2	780.6	803.9	759.4	745.2	748.3
37.5°	3475.4	2742.3	978.8	593.6	687.6	741.2	771.5	704.8	636.0	609.7	605.7
40°	3693.8	2773.7	746.3	582.4	697.7	751.3	737.2	626.9	542.0	490.4	479.3
42.5°	3913.3	2808.1	590.5	578.4	714.9	779.6	680.5	570.3	442.9	413.6	409.5
45°	4076.1	2802.0	510.6	571.3	730.1	795.8	665.4	489.4	395.4	382.2	383.2
47.5°	4158.0	2735.2	467.2	555.1	736.1	779.6	627.9	456.0	363.0	377.2	389.3
50°	4114.5	2562.3	426.7	523.8	723.0	758.4	568.3	430.8	346.8	405.5	432.8
52.5°	4061.9	2350.0	382.2	475.3	691.6	729.1	545.0	423.7	336.7	391.3	411.6
55°	*4131.7*	*2215.5*	*309.4*	*400.4*	*630.0*	*660.3*	*526.8*	*422.7*	*313.5*	*304.4*	*301.3*
57.5°	4033.6	1947.5	221.4	288.2	483.3	522.8	513.7	415.6	278.1	277.1	281.1
60°	3117.5	1188.1	151.7	183.0	296.3	333.7	466.2	397.4	239.6	220.4	221.4
62.5°	1771.6	505.6	104.2	113.3	151.7	180.0	355.9	361.0	221.4	210.3	221.4
65°	616.8	181.0	80.9	75.8	83.9	96.1	204.3	279.1	201.2	182.0	184.0
67.5°	127.4	90.0	71.8	62.7	62.7	62.7	104.2	173.9	165.8	144.6	146.6
70°	80.9	76.8	62.7	53.6	51.6	47.5	59.7	96.1	114.3	105.2	106.2
72.5°	59.7	58.6	49.5	43.5	38.4	34.4	37.4	47.5	58.6	60.7	61.7
75°	36.4	37.4	32.4	27.3	24.3	21.2	22.2	22.2	22.2	20.2	22.2
77.5°	11.1	12.1	10.1	8.1	7.1	7.1	7.1	6.1	5.1	3.0	3.0
80°	3.0	3.0	3.0	3.0	3.0	2.0	2.0	1.0	1.0	0.0	0.0
82.5°	3.0	3.0	3.0	3.0	2.0	2.0	1.0	1.0	0.0	0.0	0.0
85°	3.0	3.0	3.0	3.0	2.0	2.0	1.0	1.0	0.0	0.0	0.0
87.5°	3.0	3.0	3.0	3.0	2.0	2.0	1.0	1.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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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.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

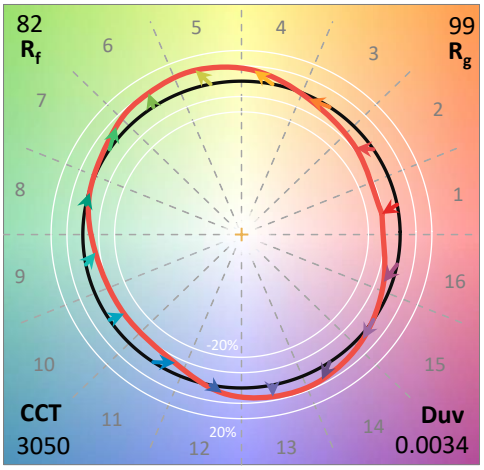
Test Information

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	CRI (Ra):	81.0		
CIE u':	0.2476	R1:	79.6	R9:	7.1
CIE v':	0.5251	R2:	85.6	R10:	67.0
Duv:	0.0034	R3:	92.0	R11:	82.7
CIE x:	0.4383	R4:	82.6	R12:	63.2
CIE y:	0.4131	R5:	78.9	R13:	80.3
CIE z:	0.1487	R6:	81.7	R14:	95.0
Peak Wavelength (nm):	603	R7:	85.2	R15:	71.7
Dominant Wavelength (nm):	581	R8:	62.0		
Purity:	55.55201				

Rf:	81.5
Rg:	99.2



Test Conditions

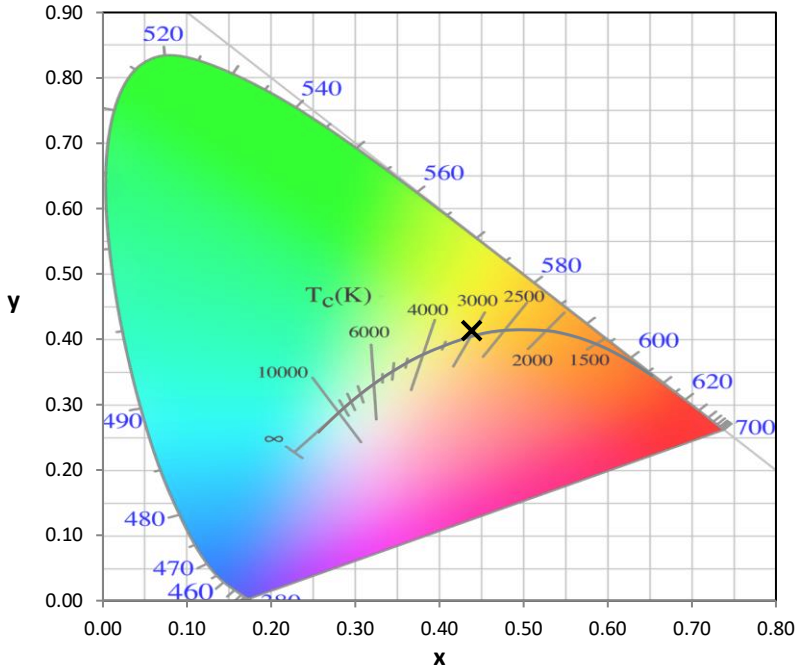
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

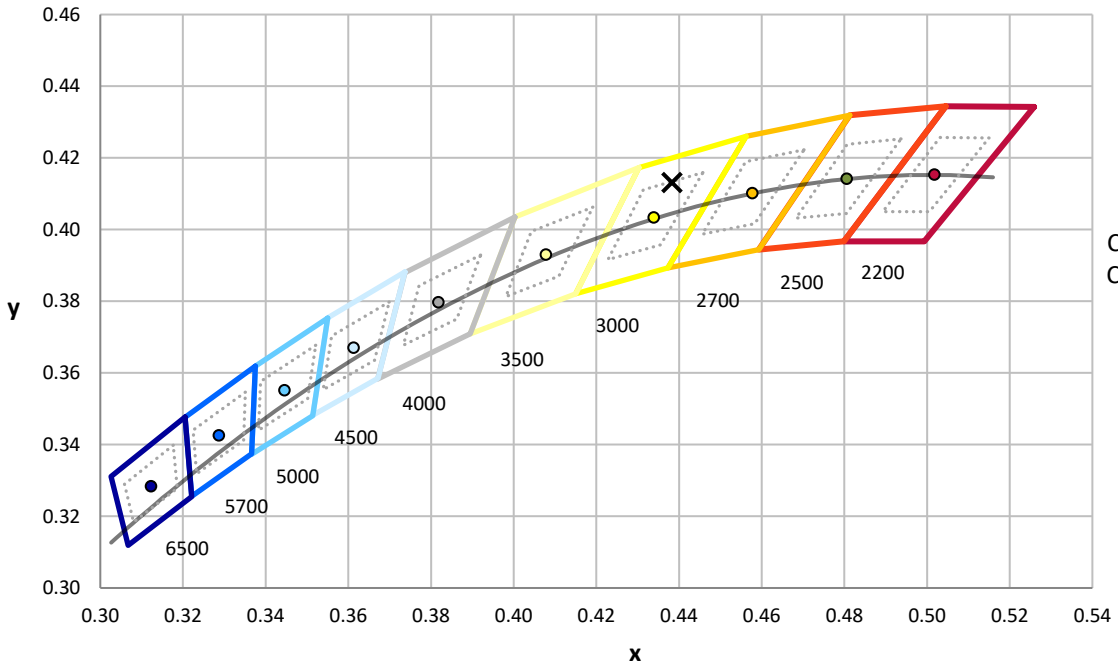
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

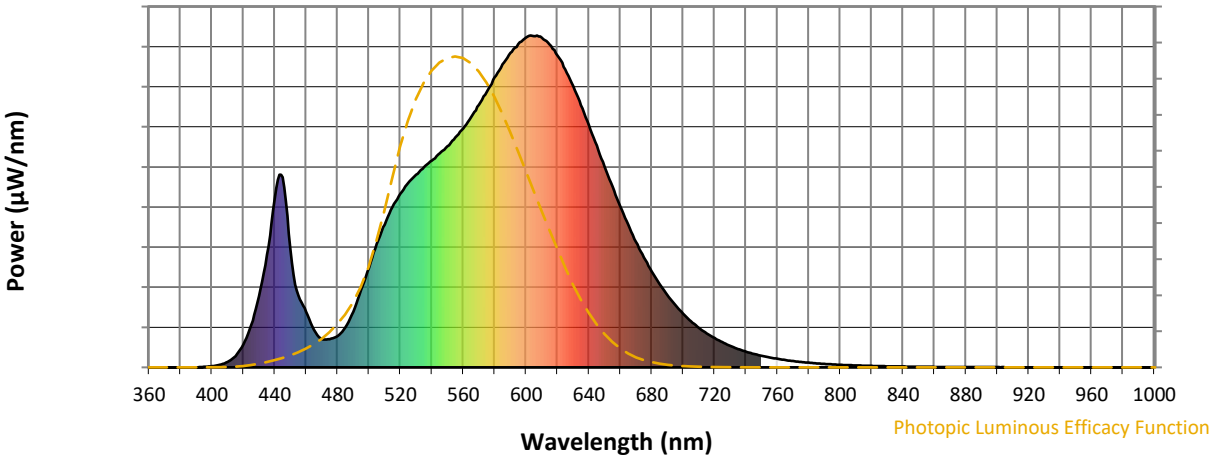


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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 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			

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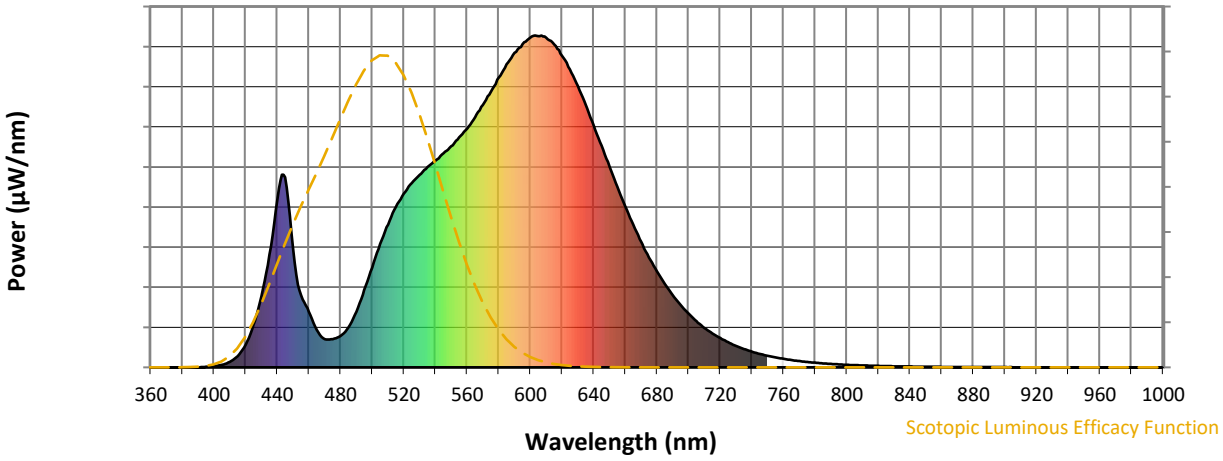
Scotopic Flux vs. Wavelength



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			

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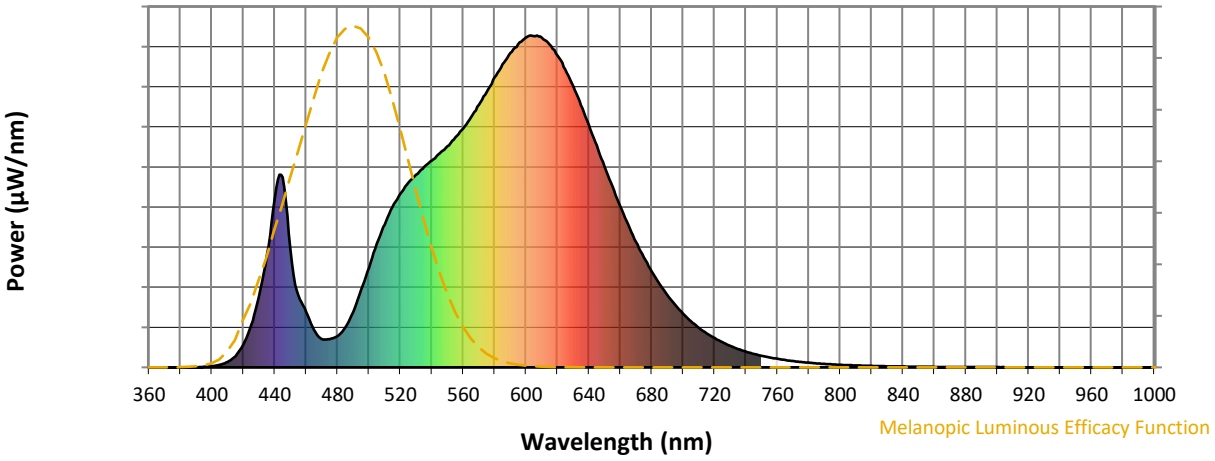
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.32**

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			

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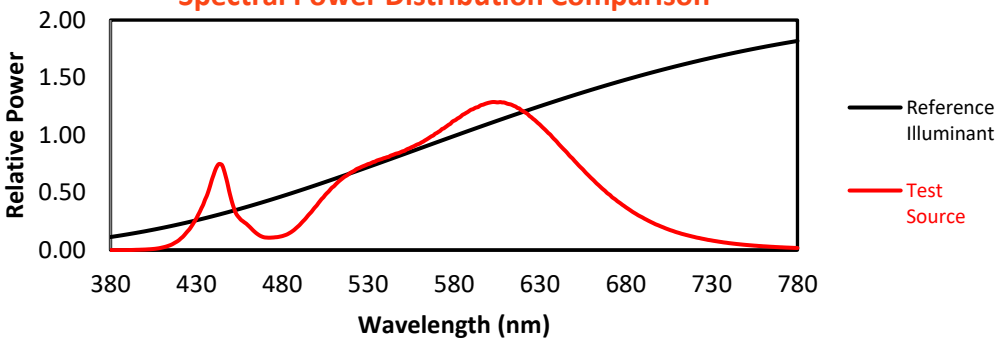
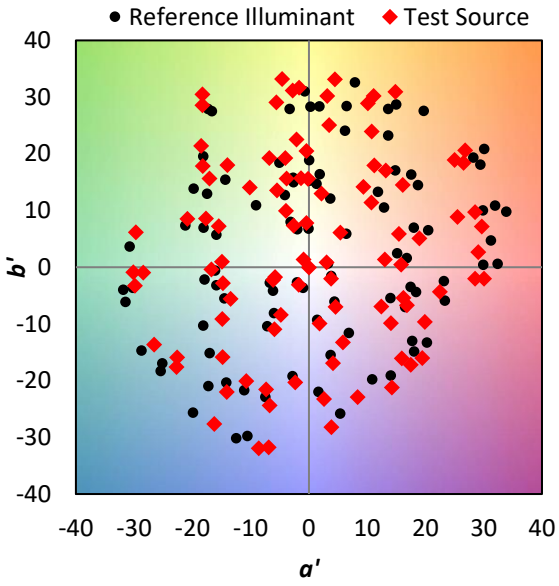
Summary

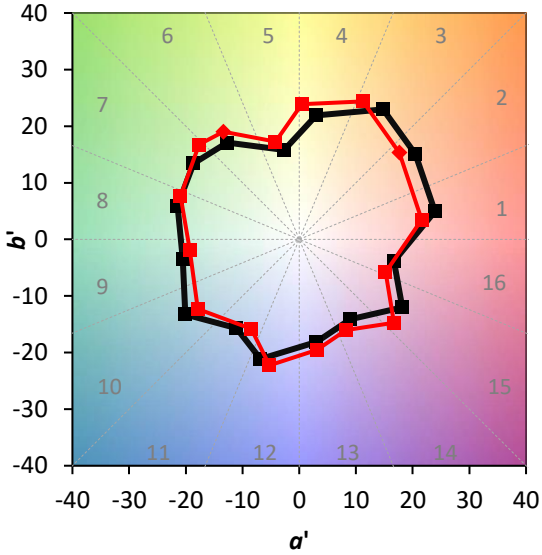
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

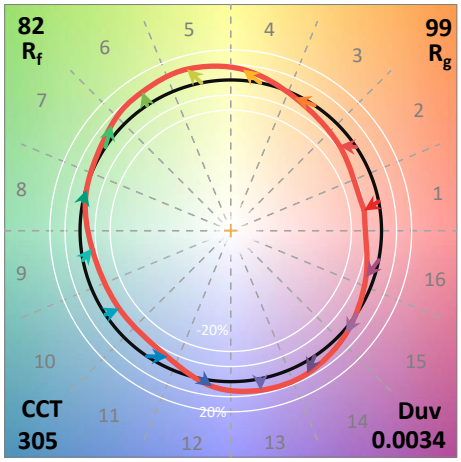
Spectral Power Distribution Comparison

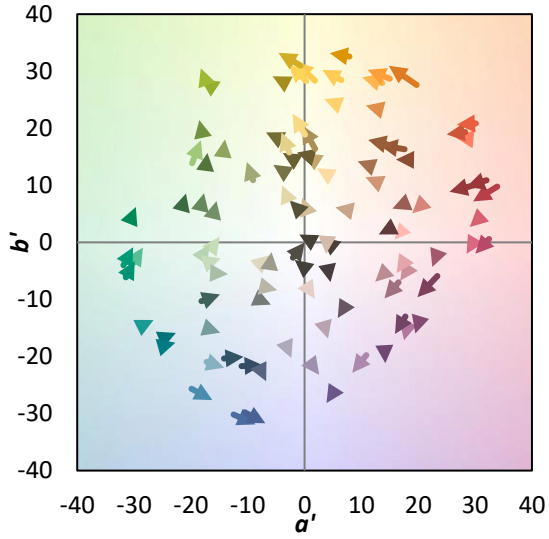


Color Vector Graphics









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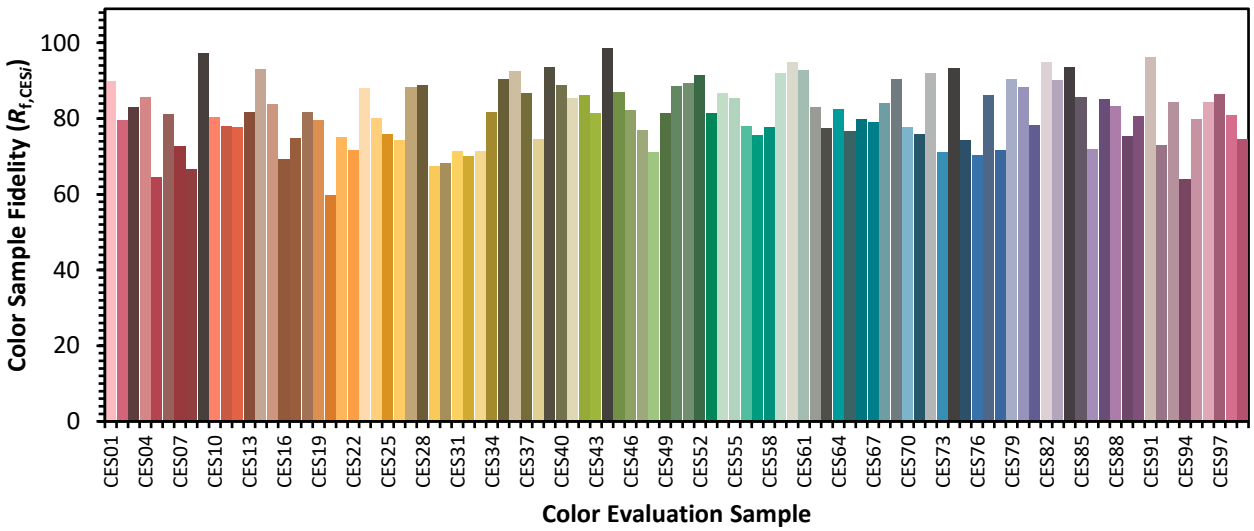
Individual Sample Fidelity Index ($R_{f,i}$)

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	



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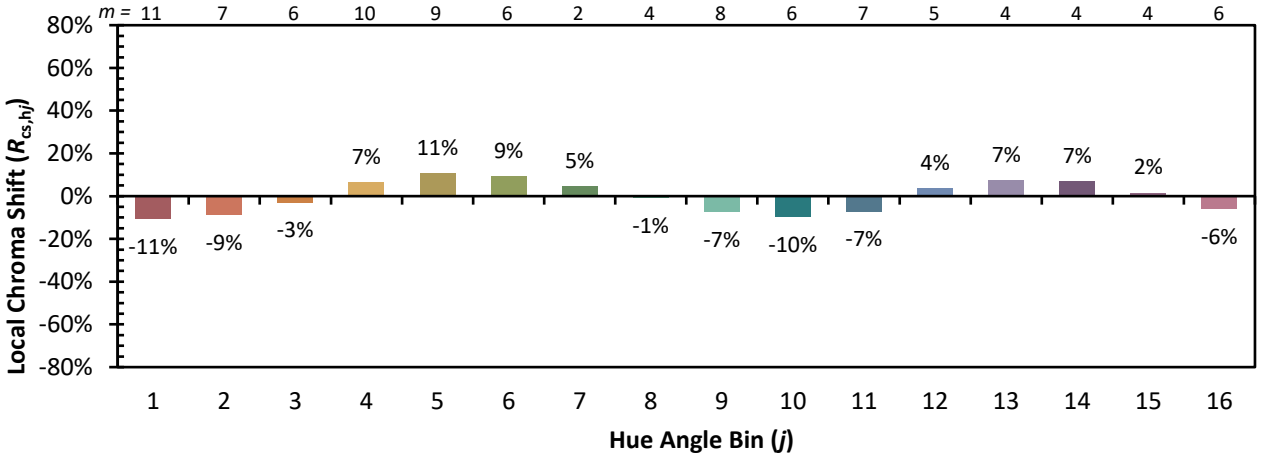
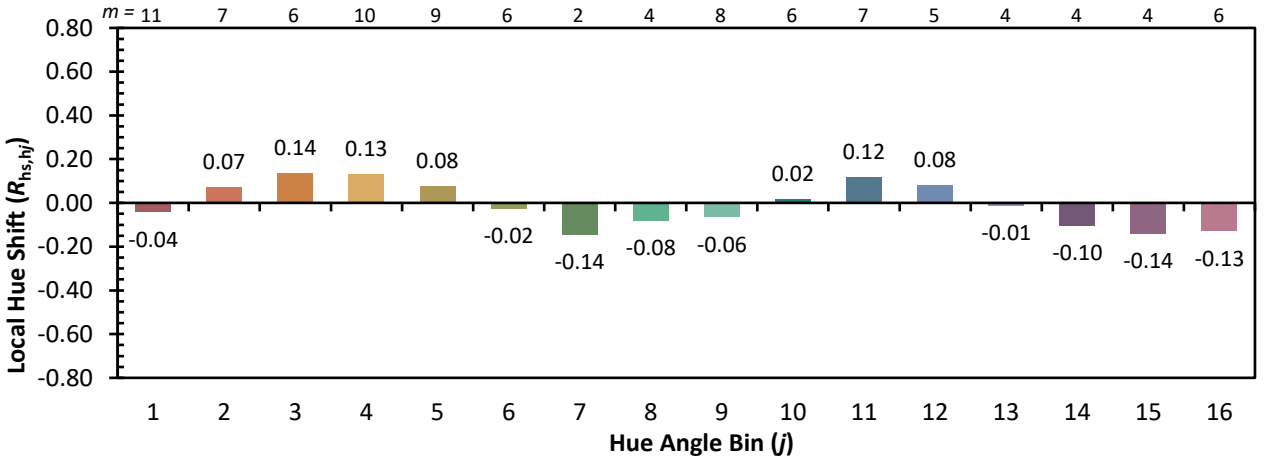
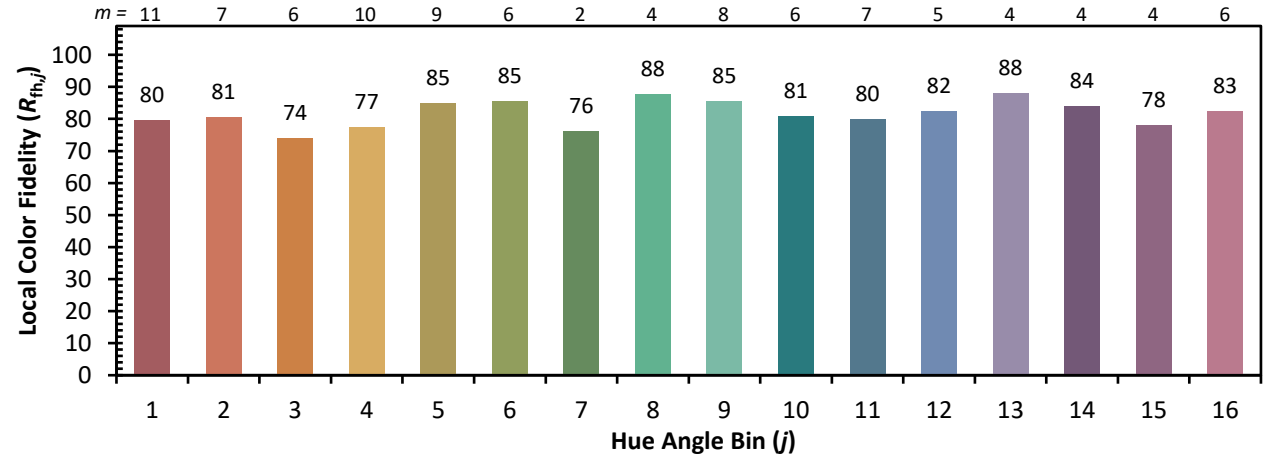
Color Rendition by Hue-Angle Bin







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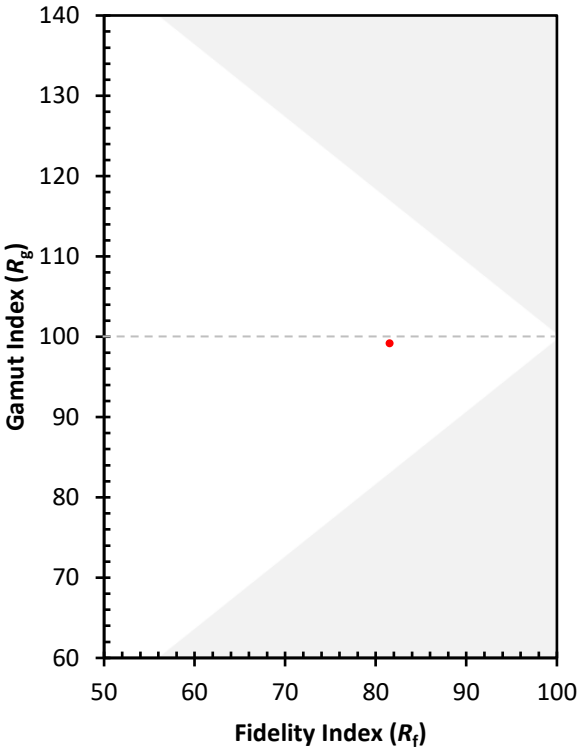
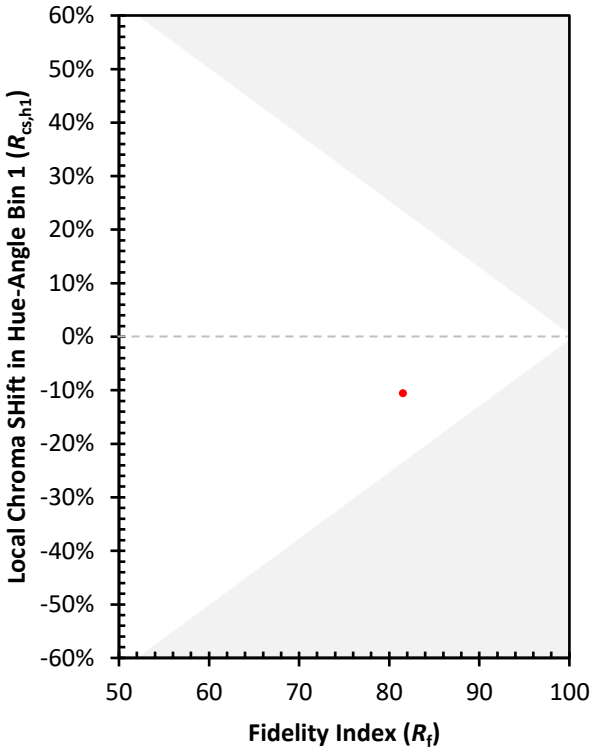
Measure Comparisons





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