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: P636984

Luminaire Tested: GWS-SA4B-830-U-SL2-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:	P636984
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-28)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4B-830-U-SL2-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	6751.6 lumens
Efficiency:	N/A
Efficacy:	71.5 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

Input Watts (W):	94.4
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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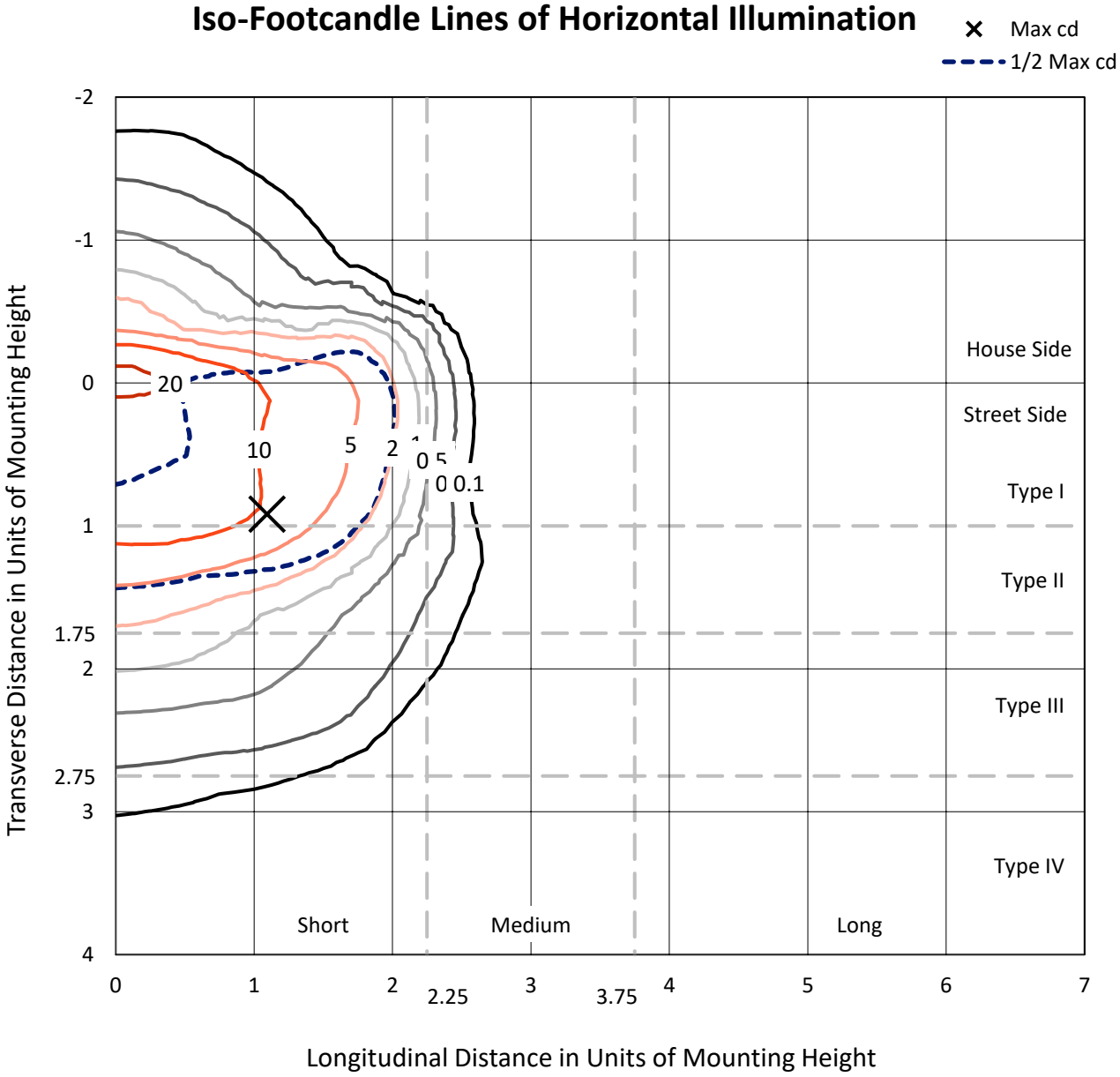
REPORT NUMBER: P636984
CATALOG NUMBER: GWS-SA4B-830-U-SL2-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 23.7 fc
Type II - Short - N/A

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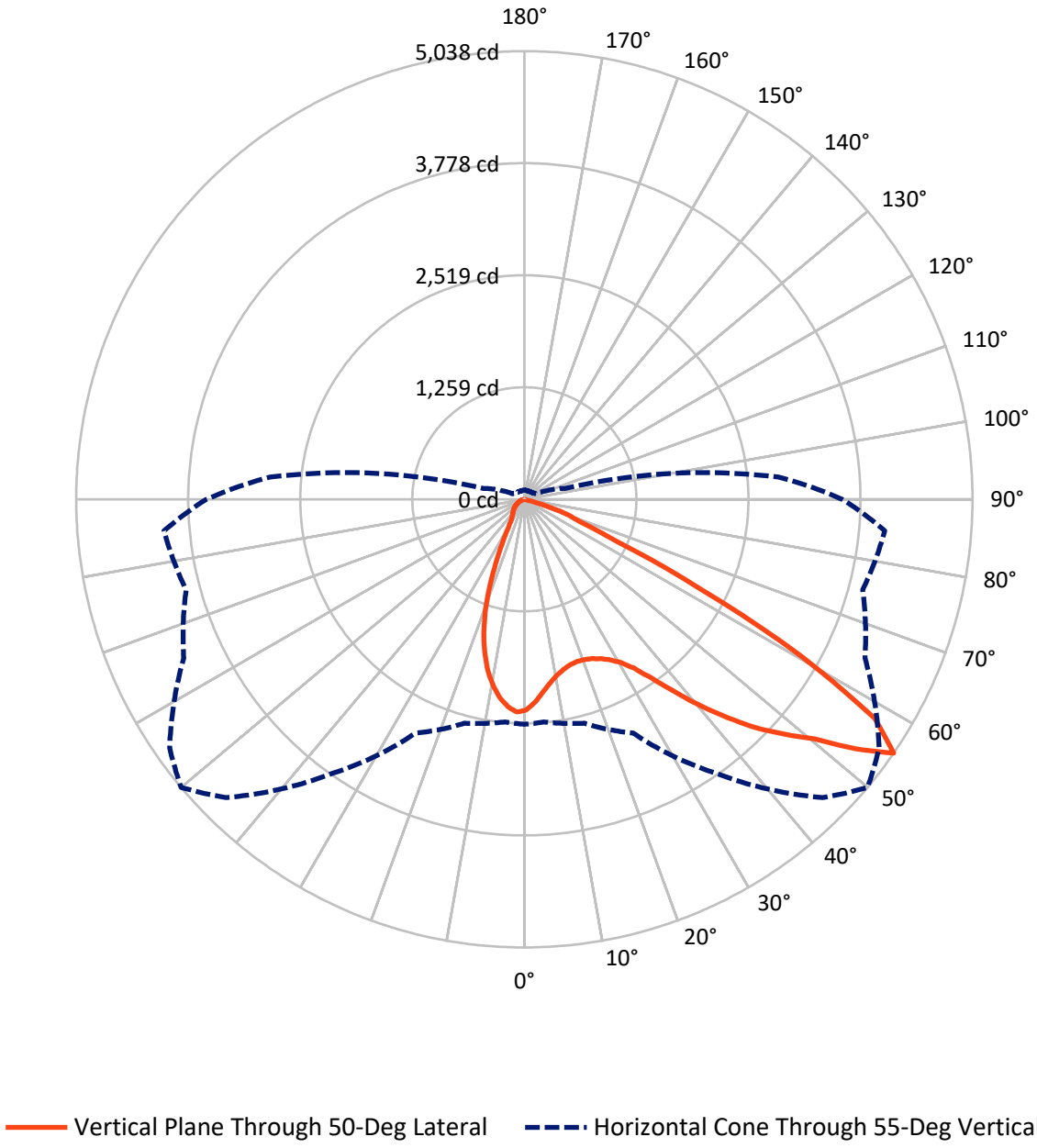
Luminous Intensity Polar Plot



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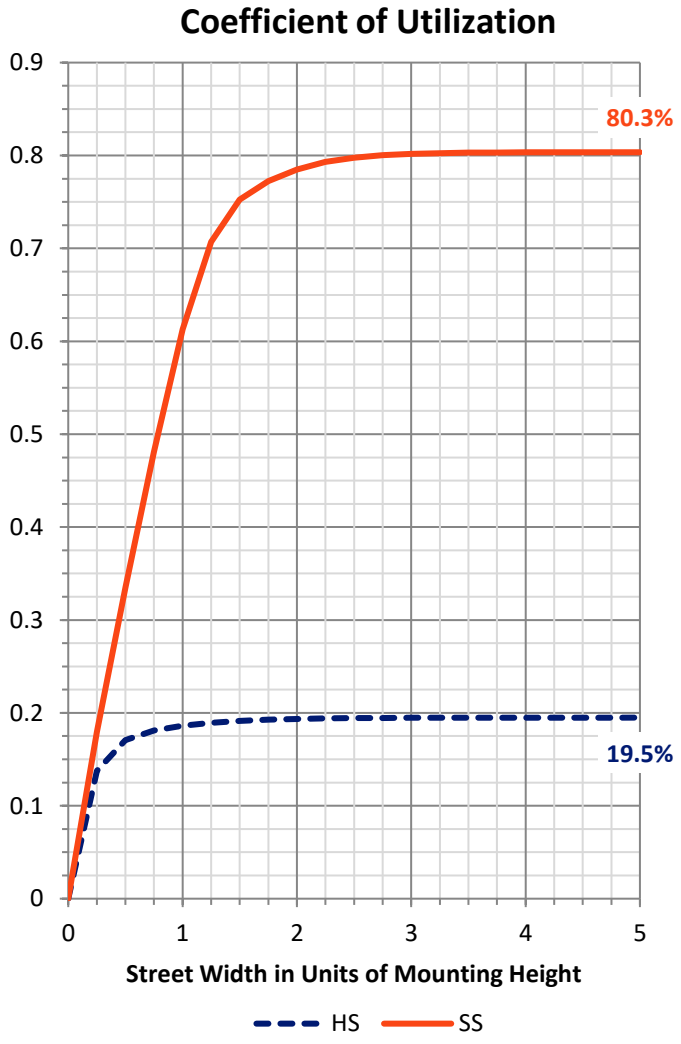
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1330.4	0.0	1330.4
	% Fixture	19.7	0.0	19.7
Street Side	Lumens	5421.2	0.0	5421.2
	% Fixture	80.3	0.0	80.3
Total	Lumens	6751.6	0.0	6751.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.0	3.1
10°-20°	511.9	7.6
20°-30°	722.1	10.7
30°-40°	1068.6	15.8
40°-50°	1541.6	22.8
50°-60°	1818.4	26.9
60°-70°	811.2	12.0
70°-80°	69.7	1.0
80°-90°	0.0	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°	6751.6	100.0
0°-180°	6751.6	100.0



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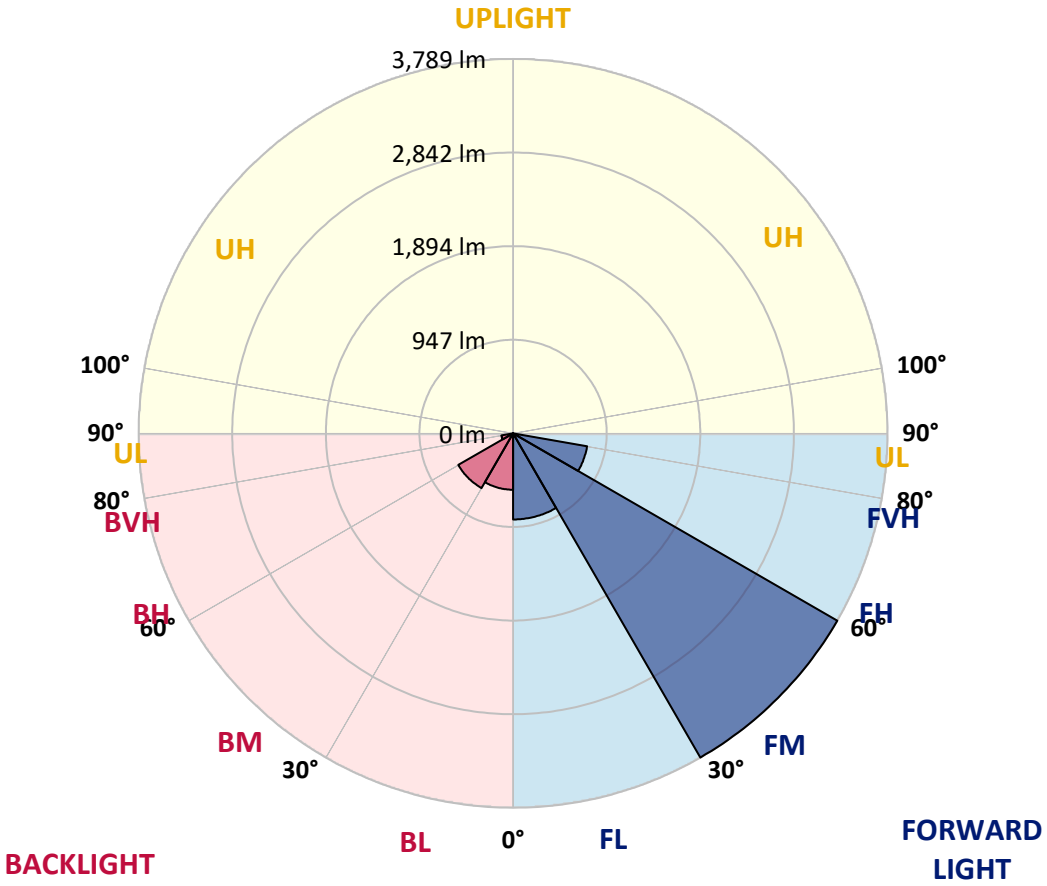
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	871.7	12.9			
FM	(30°-60°)	3788.8	56.1			
FH	(60°-80°)	760.8	11.3			G1/1800
FVH	(80°-90°)	0.0	0.0			G0/10
BL	(0°-30°)	570.4	8.4	B2/1000		
BM	(30°-60°)	639.8	9.5	B1/1000		
BH	(60°-80°)	120.1	1.8	B1/500		G1/500
BVH	(80°-90°)	0.0	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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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	2368.8	2368.8	2368.8	2368.8	2368.8	2368.8	2368.8	2368.8	2368.8	2368.8	2368.8
2.5°	2200.7	2202.3	2203.2	2225.4	2233.7	2266.6	2283.9	2293.0	2316.9	2344.9	2368.0
5°	2053.2	2050.7	2054.8	2082.8	2101.0	2149.6	2176.0	2194.1	2246.9	2312.8	2368.0
7.5°	1924.6	1929.5	1934.5	1965.0	1992.2	2044.9	2082.8	2110.0	2183.4	2281.5	2374.6
10°	1833.9	1833.9	1841.3	1875.9	1908.1	1973.2	2011.1	2045.7	2133.1	2253.4	2382.0
12.5°	1767.1	1768.0	1777.0	1816.6	1853.7	1921.3	1960.8	1994.6	2091.1	2225.4	2383.7
15°	1735.8	1733.4	1740.8	1782.8	1824.0	1887.5	1928.7	1961.7	2061.4	2209.8	2391.9
17.5°	1727.6	1725.9	1731.7	1772.9	1815.0	1876.8	1917.2	1950.1	2057.3	2214.7	2416.6
20°	1751.5	1748.2	1745.7	1781.2	1820.7	1881.7	1923.8	1960.8	2077.1	2241.9	2454.6
22.5°	1808.4	1808.4	1802.6	1819.9	1846.3	1901.5	1945.2	1993.8	2129.0	2296.3	2510.6
25°	1913.0	1904.8	1894.1	1901.5	1898.2	1932.8	1984.7	2052.3	2227.1	2386.1	2579.0
27.5°	2032.6	2040.0	2021.8	2022.7	1993.8	1981.4	2041.6	2143.8	2373.0	2513.1	2680.4
30°	2194.9	2189.2	2190.0	2187.5	2120.7	2062.2	2127.3	2263.3	2556.8	2706.8	2812.3
32.5°	2321.9	2330.1	2357.3	2373.0	2285.6	2191.6	2260.9	2425.7	2766.1	2927.7	2973.8
35°	2456.2	2471.0	2526.3	2577.4	2504.0	2396.0	2470.2	2640.8	2963.1	3146.1	3159.3
37.5°	2598.0	2627.6	2693.6	2783.4	2771.9	2676.3	2743.9	2893.9	3118.1	3278.0	3312.6
40°	2760.3	2789.2	2897.2	3026.6	3053.8	3032.3	3054.6	3142.0	3220.3	3283.7	3378.5
42.5°	2938.4	2977.9	3114.8	3287.9	3390.1	3409.0	3357.1	3348.0	3264.8	3217.8	3364.5
45°	3148.6	3194.7	3349.7	3573.9	3736.2	3761.8	3671.9	3555.7	3292.8	3169.2	3322.5
47.5°	3384.3	3428.0	3582.1	3851.6	4093.1	4103.0	3946.4	3759.3	3376.0	3225.2	3354.6
50°	3463.4	3490.6	3624.1	3940.6	4385.7	4461.6	4234.9	3988.4	3543.4	3390.1	3511.2
52.5°	3191.4	3202.1	3318.3	3638.2	4326.4	4813.5	4656.1	4330.5	3840.9	3641.4	3752.7
55°	2528.7	2511.4	2605.4	2898.8	3760.1	4741.8	5037.7	4867.9	4224.2	3936.5	4066.8
57.5°	1768.8	1748.2	1726.8	1925.4	2805.7	4019.8	4642.1	4942.9	4589.3	4229.1	4405.5
60°	1453.9	1434.2	1330.3	1238.8	1696.3	2886.5	3565.6	4131.9	4559.6	4214.3	4394.8
62.5°	1256.1	1244.6	1202.6	1078.1	998.1	1647.6	2232.8	2775.2	3498.9	3309.3	3319.2
65°	986.6	983.3	1012.2	1025.3	882.8	911.6	1139.1	1442.4	1891.6	1783.6	1691.3
67.5°	674.2	666.8	721.2	886.9	849.0	719.6	666.8	672.6	818.5	500.3	397.3
70°	428.6	411.3	412.1	549.8	690.7	567.9	514.3	452.5	407.2	74.2	84.1
72.5°	274.5	263.8	226.7	248.1	319.8	276.9	279.4	240.7	160.7	39.6	46.2
75°	115.4	106.3	81.6	65.1	64.3	40.4	35.4	33.0	22.3	22.3	23.9
77.5°	0.8	0.0	0.0	0.8	1.6	0.8	0.8	1.6	3.3	4.9	5.8
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CATALOG NUMBER: GWS-SA4B-830-U-SL2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2368.8	2368.8	2368.8	2368.8	2368.8	2368.8	2368.8	2368.8	2368.8	2368.8	2368.8
2.5°	2382.0	2362.2	2384.5	2392.7	2391.9	2392.7	2368.8	2352.4	2351.5	2330.9	2321.0
5°	2391.1	2375.4	2391.9	2381.2	2355.6	2323.5	2280.6	2243.6	2227.1	2203.2	2191.6
7.5°	2408.4	2391.9	2389.4	2346.6	2283.1	2215.5	2139.7	2072.1	2035.8	1992.2	1994.6
10°	2420.8	2401.8	2369.7	2282.3	2176.8	2068.8	1955.9	1855.3	1791.9	1733.4	1723.5
12.5°	2425.7	2397.7	2322.7	2190.8	2042.4	1901.5	1735.8	1592.4	1493.5	1416.9	1406.1
15°	2434.8	2389.4	2262.5	2080.4	1876.8	1677.3	1466.3	1270.1	1139.1	1050.9	1058.3
17.5°	2448.8	2380.4	2194.9	1956.7	1698.7	1416.9	1131.7	906.7	786.3	735.2	736.0
20°	2468.6	2369.7	2120.7	1820.7	1485.3	1122.6	791.3	621.5	587.7	586.0	583.6
22.5°	2494.9	2358.9	2041.6	1671.5	1232.2	786.3	526.7	473.9	487.9	515.1	520.1
25°	2526.3	2345.8	1953.4	1503.4	956.1	516.0	394.8	386.6	420.4	456.6	464.9
27.5°	2574.9	2339.2	1852.9	1312.2	670.9	370.1	323.1	328.0	358.5	389.0	396.5
30°	2657.3	2351.5	1743.2	1097.9	431.1	295.1	280.2	287.7	304.1	319.8	326.4
32.5°	2769.4	2387.8	1636.9	863.8	307.4	256.3	253.0	257.2	263.8	272.8	275.3
35°	2900.5	2450.4	1527.3	618.2	253.9	234.1	230.8	230.8	234.1	235.7	236.6
37.5°	3008.4	2516.4	1424.3	411.3	227.5	216.8	211.8	209.4	208.5	210.2	211.0
40°	3055.4	2543.6	1312.2	299.2	208.5	201.1	193.7	186.3	186.3	192.0	192.9
42.5°	3022.5	2513.1	1182.8	247.3	195.3	184.6	173.1	166.5	169.8	175.6	177.2
45°	2952.4	2438.1	1040.2	218.4	182.2	168.1	155.0	150.8	154.1	161.5	163.2
47.5°	2940.9	2388.6	869.6	199.5	168.1	154.1	140.1	136.0	140.1	145.9	147.5
50°	3055.4	2431.5	680.0	183.0	155.0	139.3	127.8	123.6	126.1	129.4	131.1
52.5°	3264.8	2590.6	548.9	167.3	139.3	124.5	117.0	112.1	112.1	115.4	116.2
55°	*3573.9*	*2868.3*	*473.9*	*149.2*	*121.2*	*112.9*	*106.3*	*101.4*	*101.4*	*103.0*	*103.9*
57.5°	3929.9	3204.6	491.2	125.3	106.3	102.2	96.4	92.3	94.0	94.0	94.0
60°	3880.5	3179.9	525.9	105.5	94.0	92.3	87.4	85.7	89.8	86.5	84.9
62.5°	2858.4	2196.6	275.3	86.5	80.8	79.1	75.8	79.1	84.9	75.8	72.5
65°	1388.0	1063.3	110.4	70.9	68.4	66.8	65.1	70.1	73.4	59.3	56.0
67.5°	326.4	265.4	71.7	60.2	56.9	53.6	55.2	56.0	53.6	40.4	38.7
70°	84.9	83.2	56.0	50.3	45.3	42.0	42.0	41.2	35.4	25.6	23.9
72.5°	46.2	45.3	40.4	37.9	31.3	28.0	28.8	25.6	19.8	14.8	14.0
75°	23.1	24.7	23.1	21.4	17.3	15.7	15.7	14.0	9.9	5.8	5.8
77.5°	4.9	5.8	5.8	4.9	4.1	3.3	3.3	4.1	1.6	0.0	0.0
80°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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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

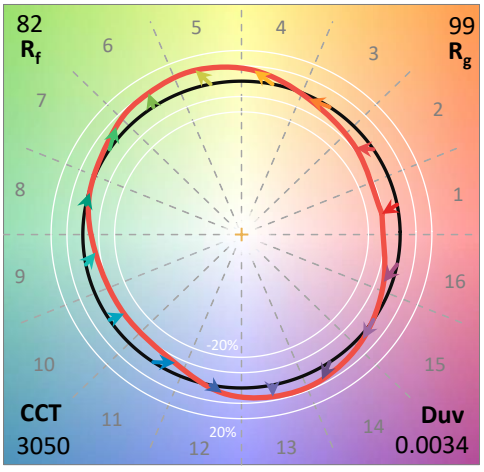
Test Information

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

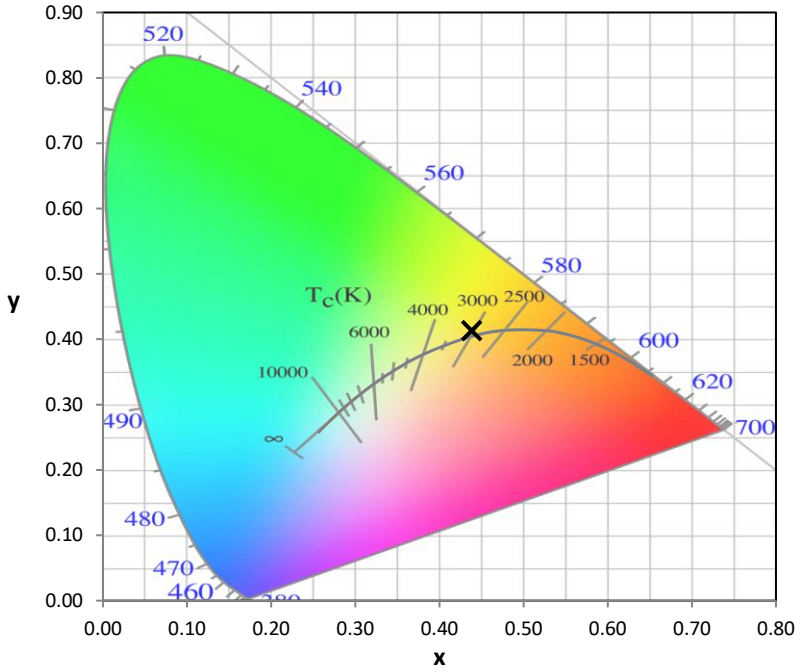
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

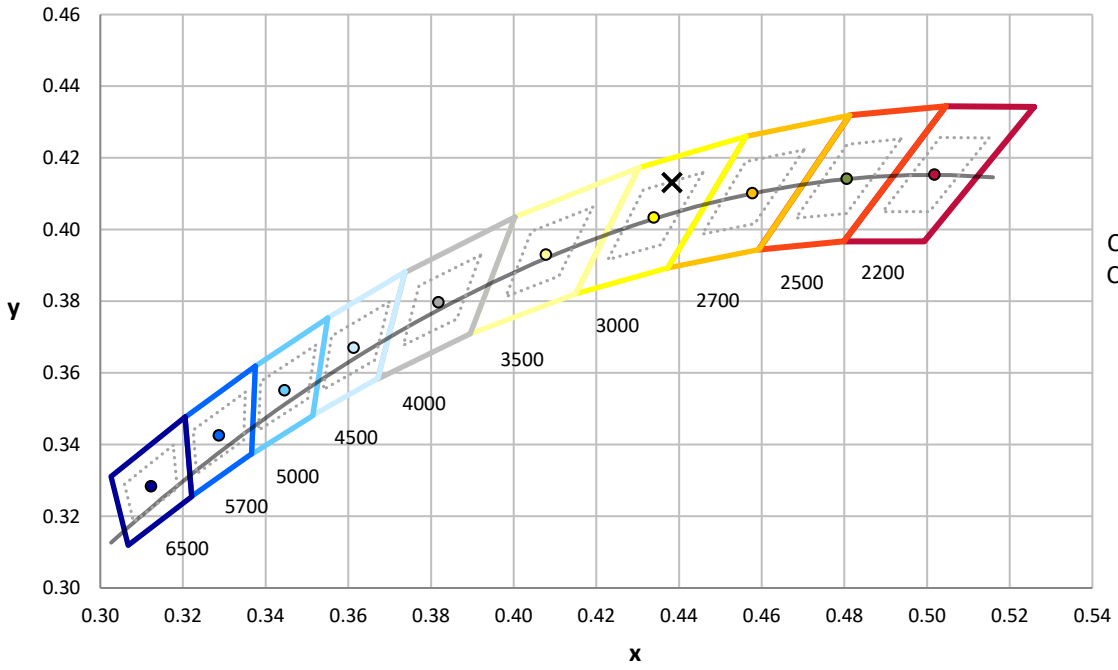
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

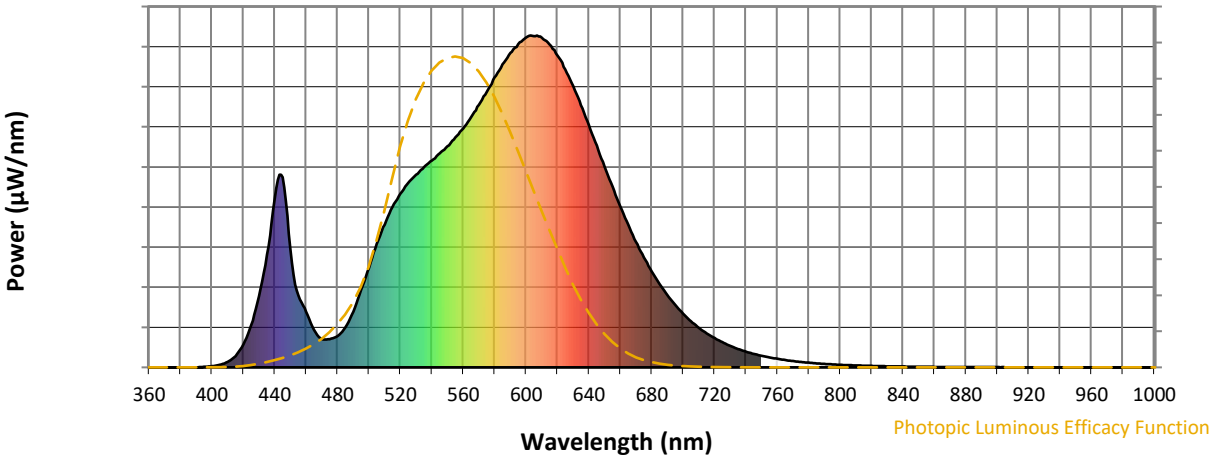


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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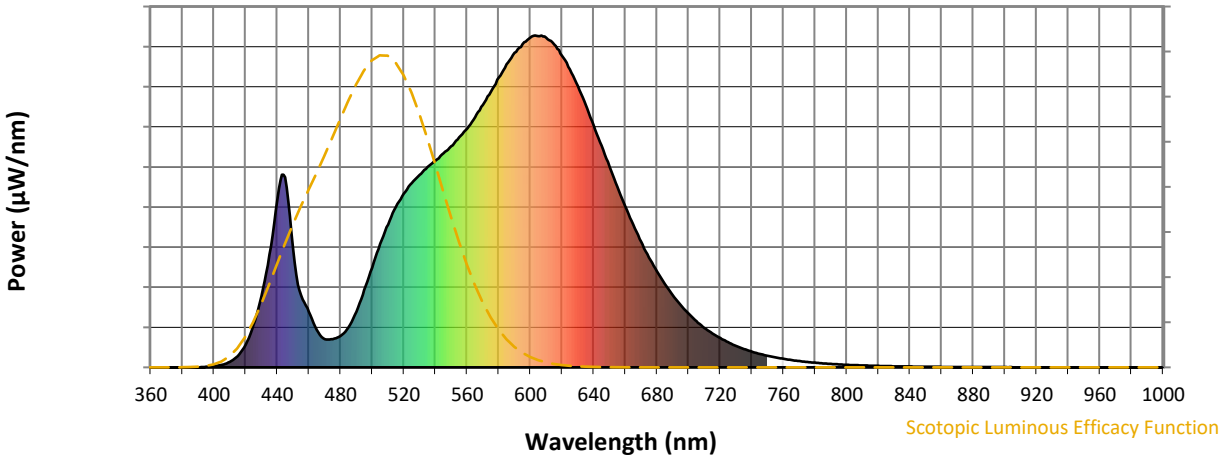
Scotopic Flux vs. Wavelength



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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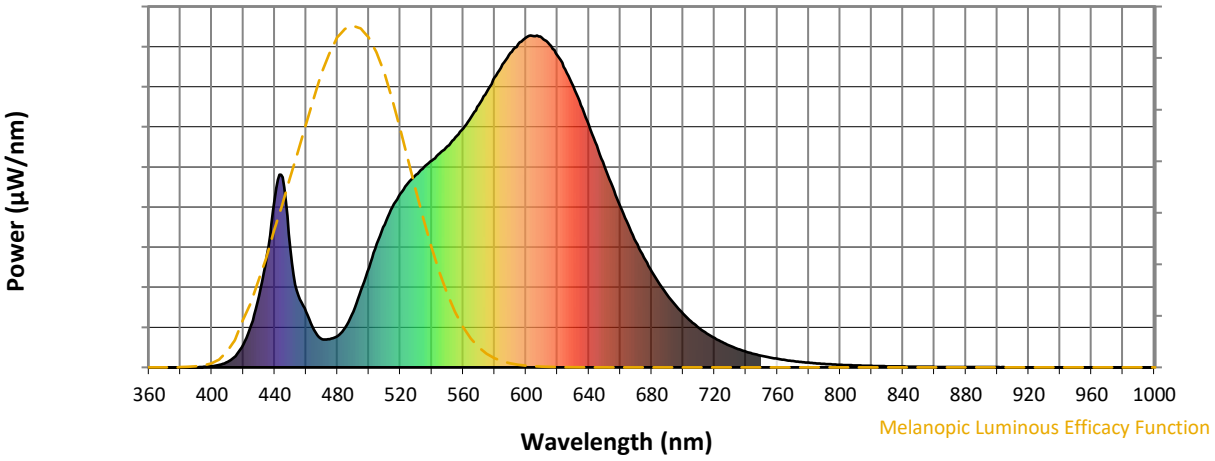
Melanopic Flux vs. Wavelength



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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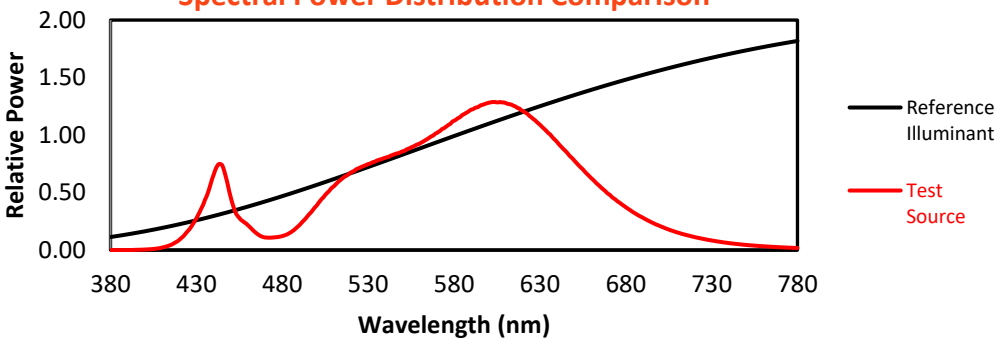
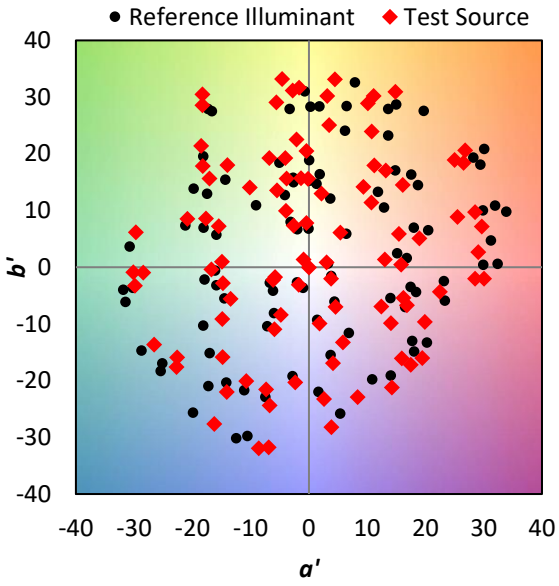
Summary

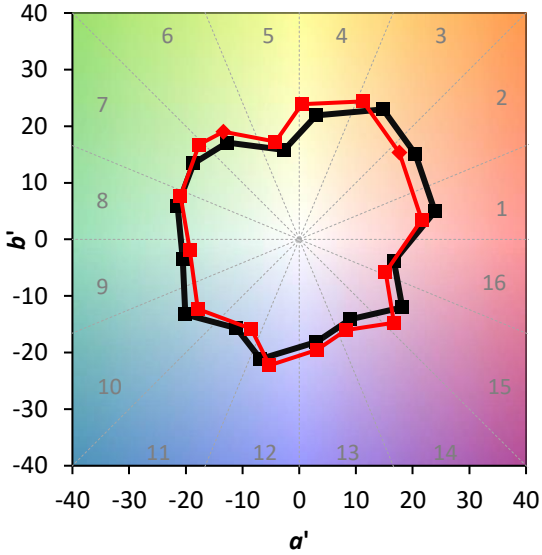
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

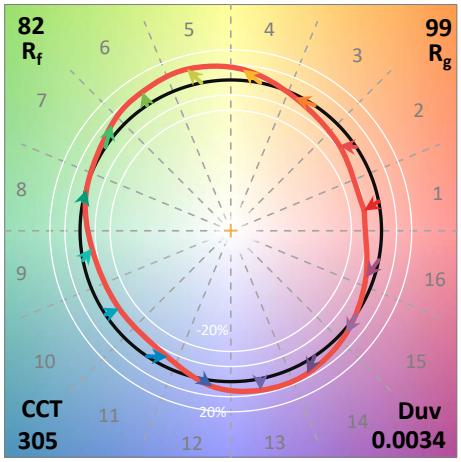
Spectral Power Distribution Comparison

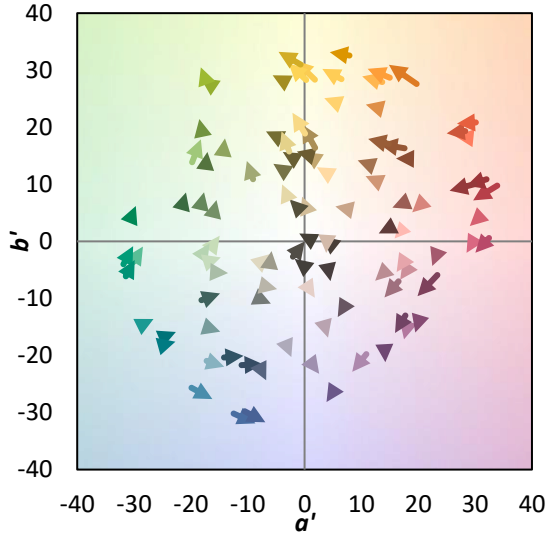


Color Vector Graphics









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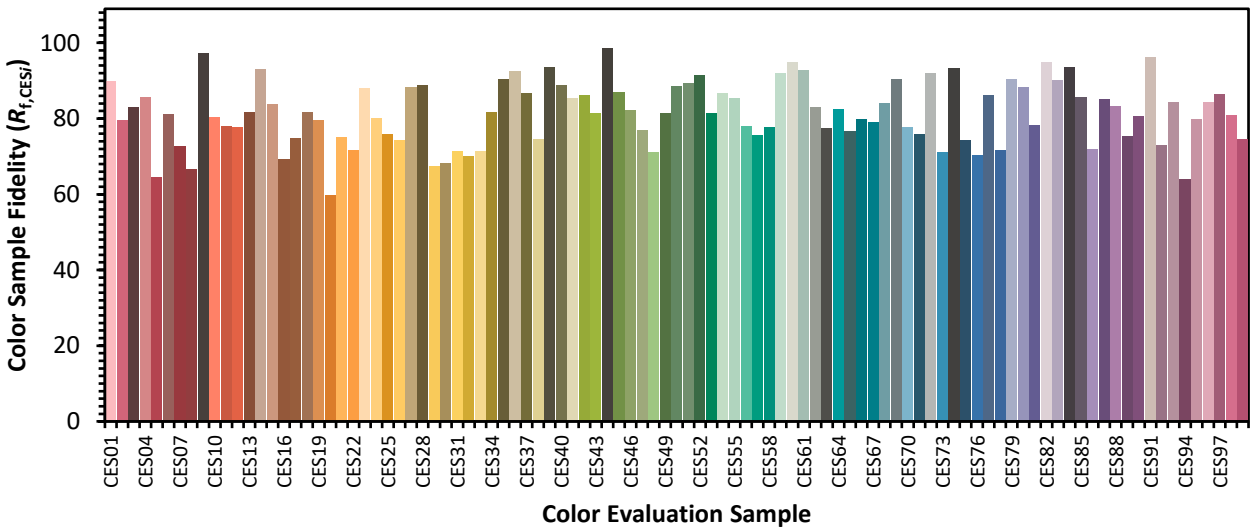
Individual Sample Fidelity Index ($R_{f,i}$)

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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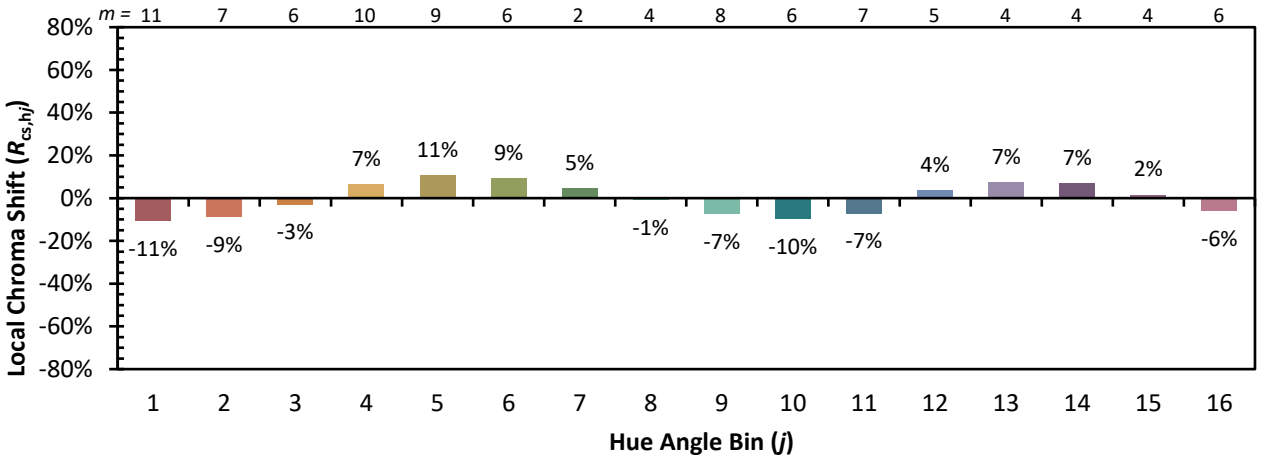
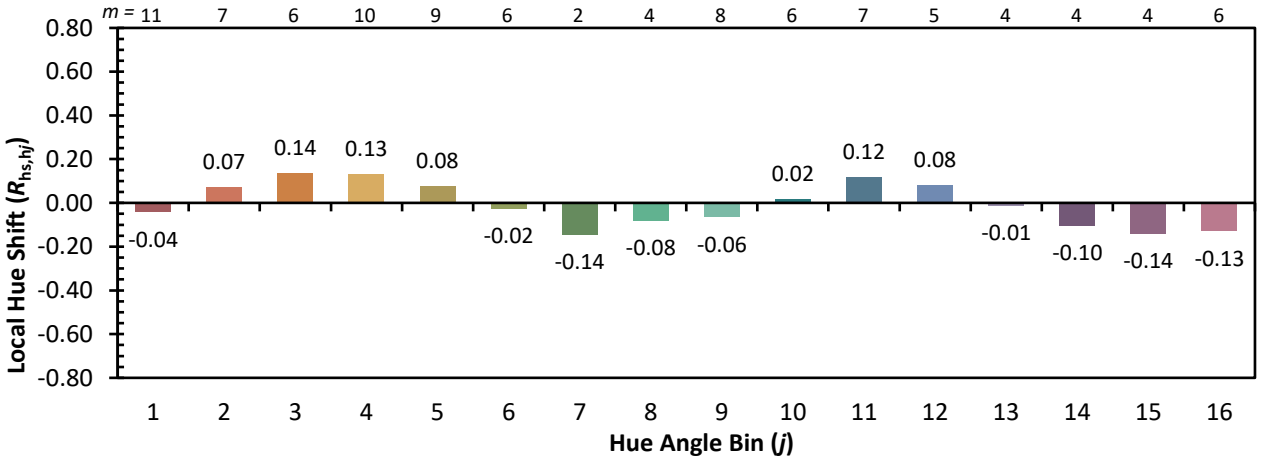
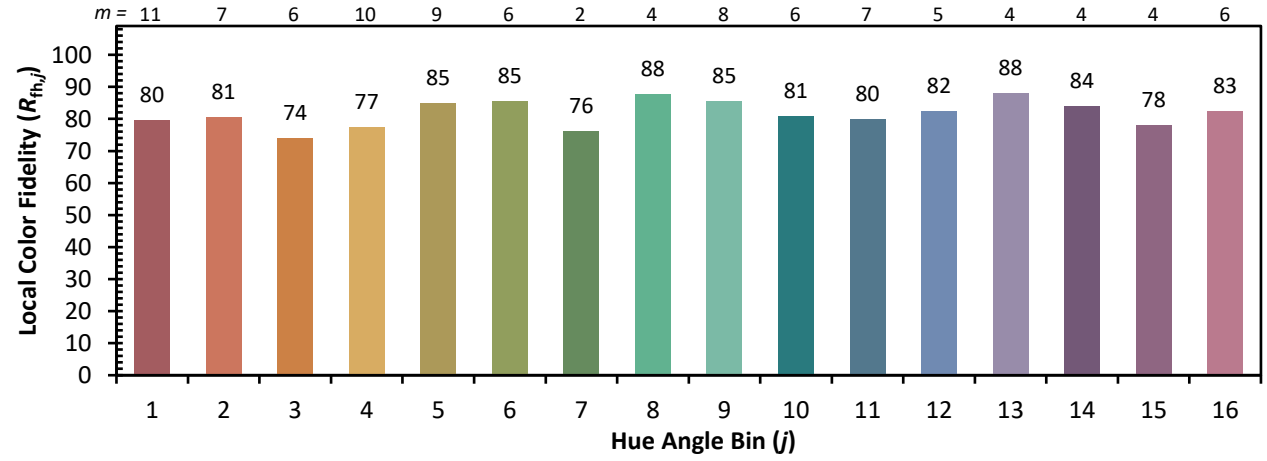
Color Rendition by Hue-Angle Bin







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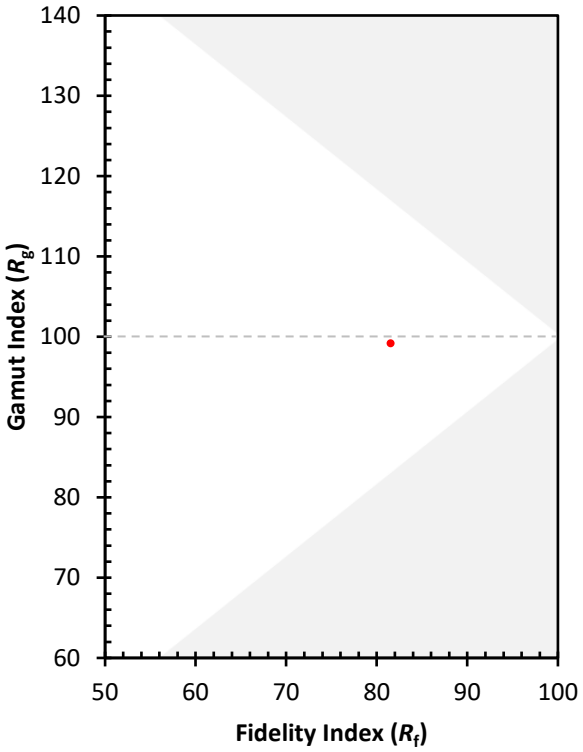
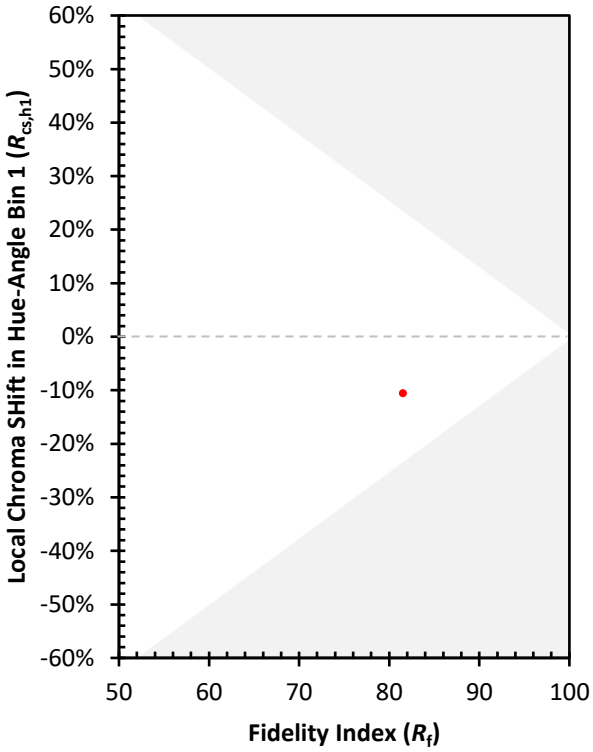
Measure Comparisons





(END OF REPORT)