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: P639467

Luminaire Tested: GWS-SA5B-830-U-SL4-W-HSS

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:	P639467
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-36)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5B-830-U-SL4-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	11113.5 lumens
Efficiency:	N/A
Efficacy:	96.1 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U0 - G2

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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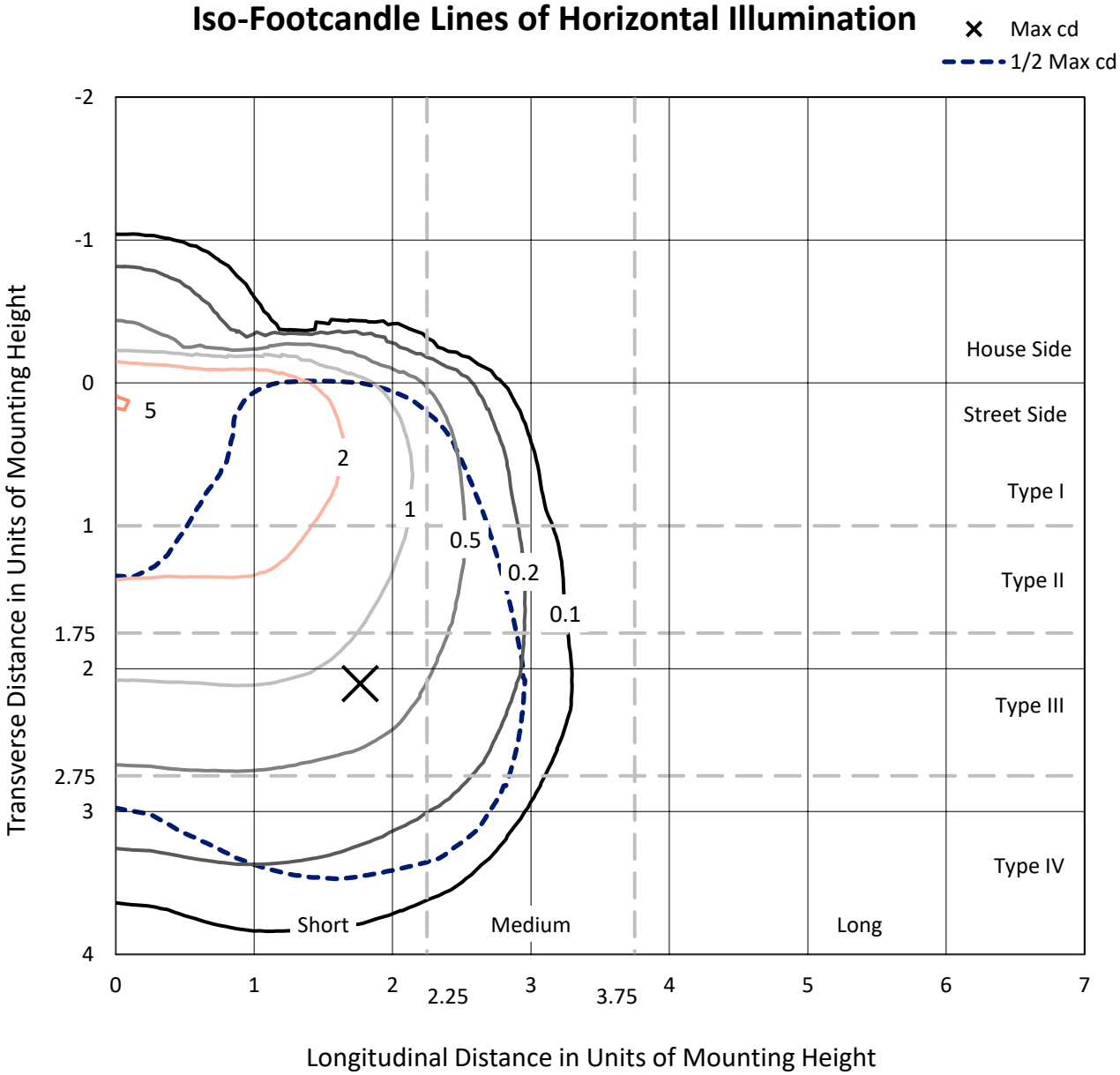
Scaled Data Report

REPORT NUMBER: P639467
CATALOG NUMBER: GWS-SA5B-830-U-SL4-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 5.1 fc
Type IV - Short - N/A

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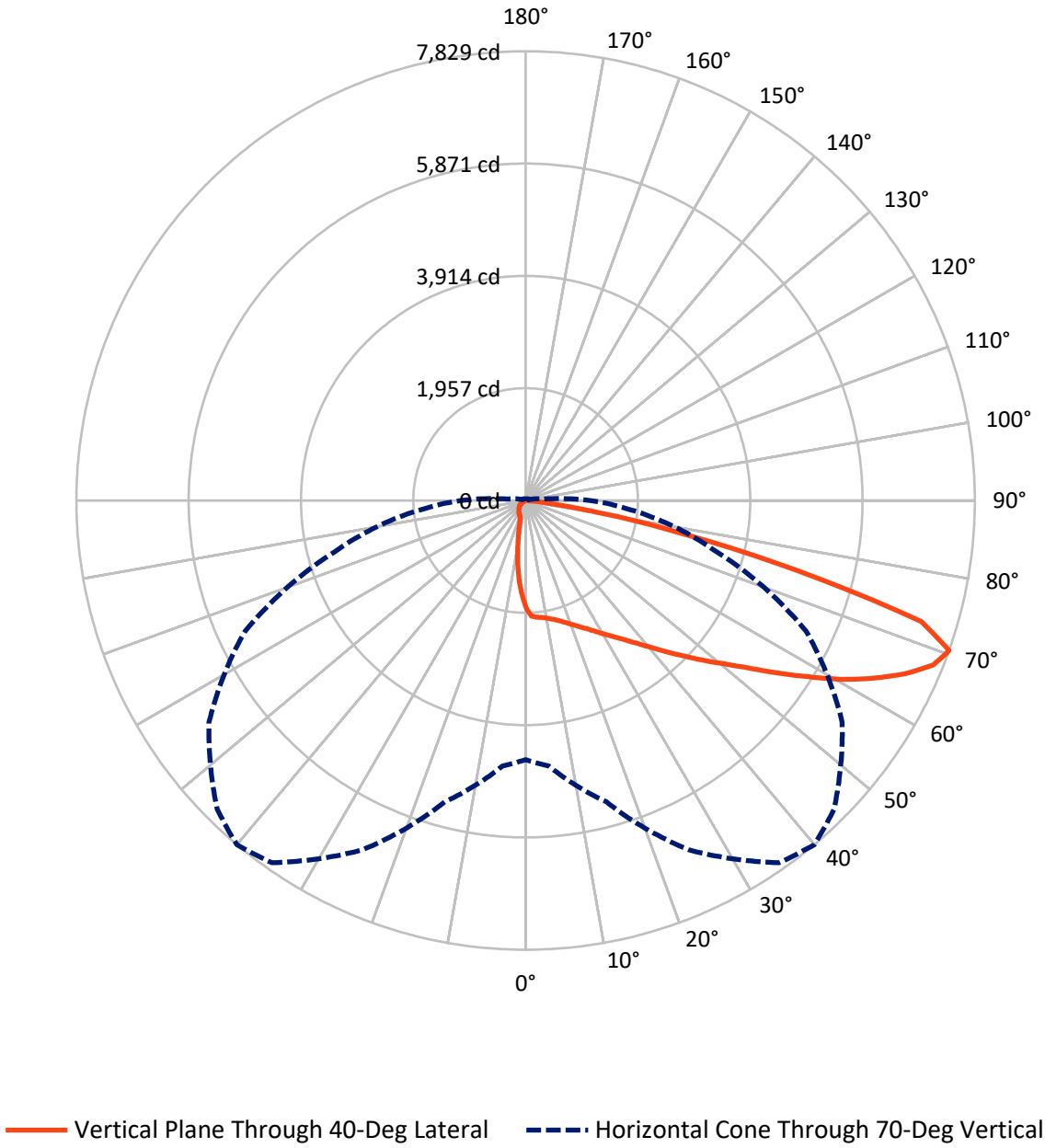
Luminous Intensity Polar Plot



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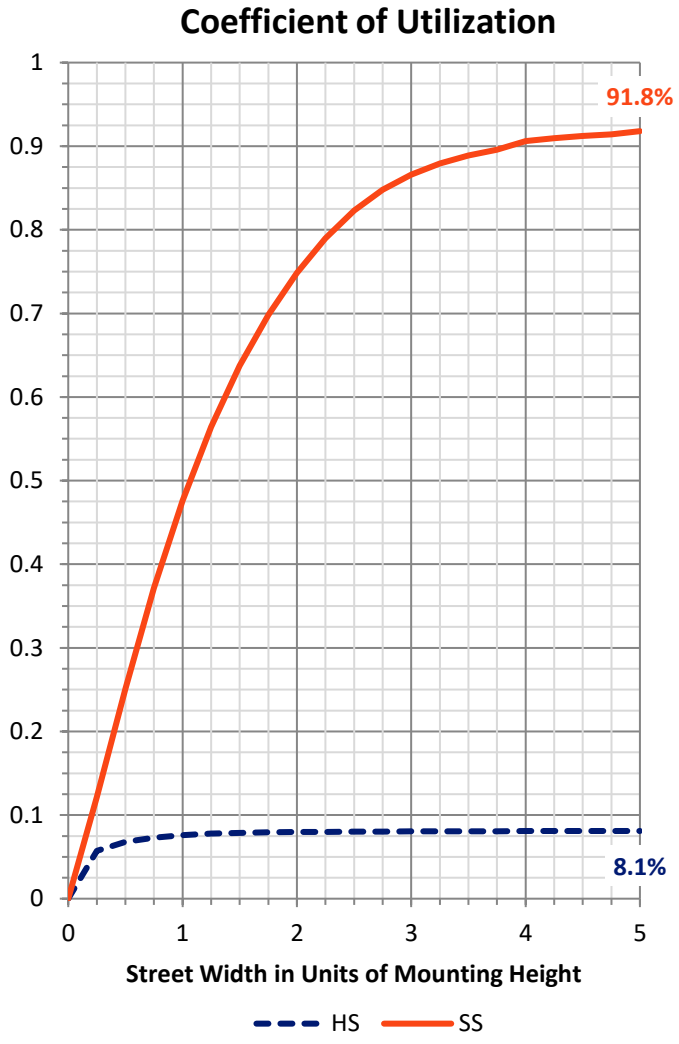
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	908.8	0.0	908.8
	% Fixture	8.2	0.0	8.2
Street Side	Lumens	10204.7	0.0	10204.7
	% Fixture	91.8	0.0	91.8
Total	Lumens	11113.5	0.0	11113.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.4	1.4
10°-20°	404.3	3.6
20°-30°	676.6	6.1
30°-40°	1062.7	9.6
40°-50°	1680.9	15.1
50°-60°	2452.0	22.1
60°-70°	3039.6	27.4
70°-80°	1537.8	13.8
80°-90°	100.4	0.9
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°	11113.5	100.0
0°-180°	11113.5	100.0



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REPORT NUMBER: P639467
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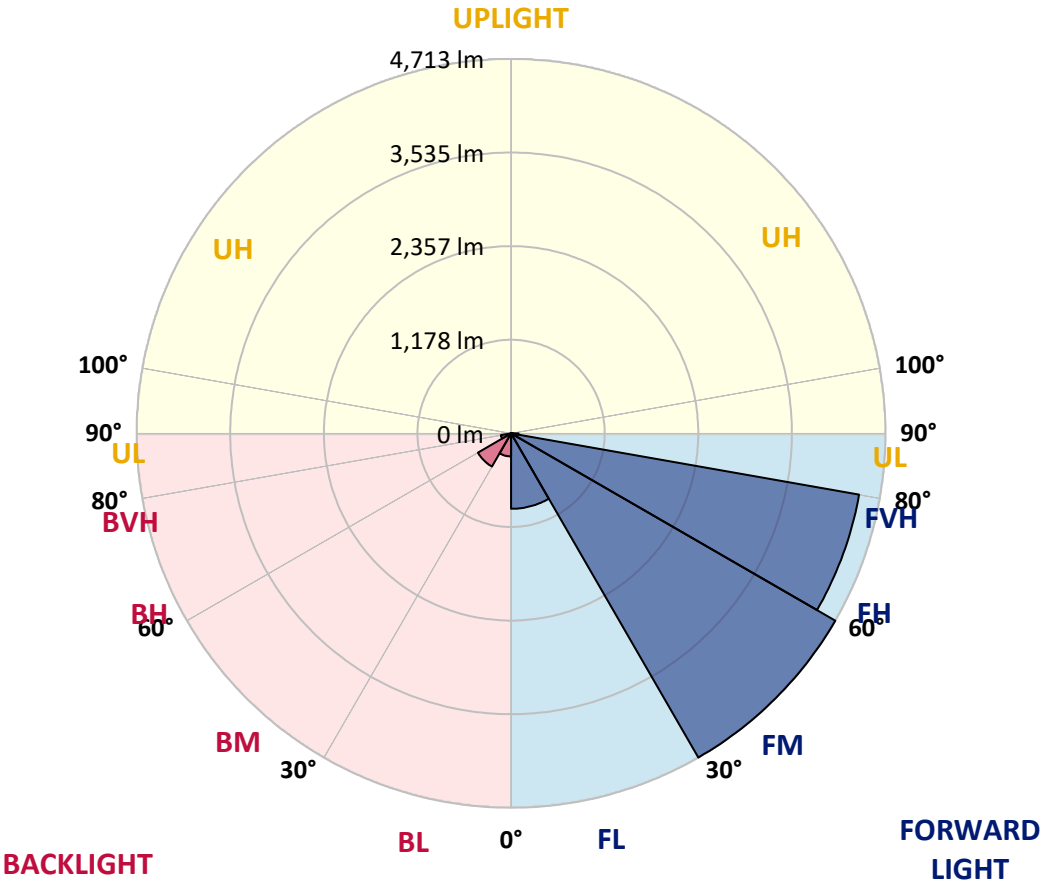
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	950.0	8.5			
FM	(30°-60°)	4713.1	42.4			
FH	(60°-80°)	4447.8	40.0			G2/5000
FVH	(80°-90°)	93.8	0.8			G1/100
BL	(0°-30°)	290.2	2.6	B1/500		
BM	(30°-60°)	482.4	4.3	B1/1000		
BH	(60°-80°)	129.6	1.2	B1/500		G1/500
BVH	(80°-90°)	6.6	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
Type IV Short



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REPORT NUMBER: P639467
CATALOG NUMBER: GWS-SA5B-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1885.8	1885.8	1885.8	1885.8	1885.8	*1885.8*	1885.8	1885.8	1885.8	1885.8	1885.8
2.5°	2027.4	2034.5	2033.5	2036.5	2029.4	*2018.3*	2016.3	2001.1	1973.8	1939.4	1901.0
5°	2068.8	2076.9	2070.9	2067.8	2054.7	*2042.6*	2039.5	2023.3	1992.0	1945.5	1878.7
7.5°	2104.2	2106.3	2102.2	2095.1	2075.9	*2059.7*	2048.6	2026.4	1989.0	1942.5	1865.6
10°	2110.3	2109.3	2111.3	2112.3	2100.2	*2086.0*	2076.9	2046.6	1999.1	1949.5	1866.6
12.5°	2103.2	2103.2	2116.4	2131.5	2131.5	*2124.5*	2115.4	2088.1	2032.4	1973.8	1886.8
15°	2112.3	2115.4	2140.6	2169.0	2178.1	*2171.0*	2166.9	2138.6	2081.0	2016.3	1923.2
17.5°	2144.7	2147.7	2188.2	2230.6	2241.8	*2233.7*	2225.6	2197.3	2135.6	2064.8	1964.7
20°	2192.2	2200.3	2251.9	2306.5	2316.6	*2306.5*	2290.3	2250.9	2189.2	2117.4	2004.1
22.5°	2279.2	2284.2	2339.8	2397.5	2402.5	*2386.4*	2362.1	2307.5	2242.8	2173.0	2048.6
25°	2394.4	2401.5	2457.1	2512.8	2499.6	*2475.3*	2442.0	2380.3	2306.5	2238.7	2105.3
27.5°	2532.0	2540.1	2594.7	2643.2	2608.8	*2580.5*	2543.1	2466.2	2391.4	2329.7	2178.1
30°	2680.6	2687.7	2736.2	2779.7	2734.2	*2700.8*	2656.3	2577.5	2501.6	2455.1	2281.2
32.5°	2824.2	2823.2	2869.7	2905.1	2858.6	*2832.3*	2791.8	2712.0	2651.3	2631.1	2434.9
35°	2957.7	2957.7	2996.1	3031.5	2998.1	*2984.0*	2946.5	2882.8	2848.5	2872.7	2640.2
37.5°	3092.2	3085.1	3121.5	3160.9	3157.9	*3158.9*	3137.7	3107.3	3109.3	3195.3	2922.3
40°	3203.4	3200.3	3242.8	3294.4	3334.8	*3367.2*	3354.0	3365.2	3428.9	3589.6	3283.3
42.5°	3292.4	3299.4	3354.0	3435.9	3538.1	*3603.8*	3612.9	3658.4	3822.2	4071.0	3690.8
45°	3394.5	3395.5	3471.3	3596.7	3759.5	*3863.7*	3900.1	4017.4	4249.9	4570.5	4137.7
47.5°	3519.9	3507.7	3592.7	3768.6	4004.2	*4157.9*	4222.6	4369.3	4729.2	5057.9	4501.7
50°	3658.4	3636.2	3732.2	3971.9	4278.3	*4470.4*	4601.8	4816.2	5204.5	5458.3	4772.7
52.5°	3819.2	3797.9	3907.2	4205.4	4606.9	*4840.5*	5009.3	5225.7	5612.0	5763.7	4934.5
55°	4023.4	4002.2	4117.5	4485.5	4995.2	*5298.5*	5475.5	5657.5	5991.2	5989.1	5051.8
57.5°	4249.9	4220.6	4380.4	4839.4	5479.5	*5795.0*	5975.0	6064.0	6279.4	6164.1	5130.7
60°	4509.8	4483.5	4705.0	5261.1	6038.7	*6330.9*	6444.2	6407.8	6516.0	6267.2	5103.4
62.5°	4744.4	4732.3	5007.3	5708.0	6571.6	*6818.3*	6849.6	6690.9	6689.9	6269.2	4919.3
65°	4988.1	5011.3	5419.9	6222.7	7107.5	*7273.3*	7219.7	6972.0	6759.7	6021.5	4375.3
67.5°	5079.1	5146.8	5691.9	6687.9	7530.2	*7659.6*	7565.6	7112.6	6469.5	5188.3	3331.8
70°	*4516.9*	*4644.3*	*5435.0*	*6714.2*	*7705.1*	*7828.5*	*7603.0*	*6734.4*	*5393.6*	*3437.0*	*1825.2*
72.5°	3434.9	3583.6	4529.0	5497.7	6929.5	*7210.6*	6825.4	5486.6	3476.4	1505.6	612.8
75°	1922.2	2083.0	3373.3	4139.7	4652.4	*4909.2*	4767.7	3519.9	1540.0	393.3	183.0
77.5°	650.2	703.8	1569.3	2561.3	3070.9	*2840.4*	2404.6	1748.3	566.3	149.7	97.1
80°	385.3	405.5	584.5	1275.1	1615.8	*1339.8*	1057.7	646.1	288.2	79.9	67.7
82.5°	115.3	136.5	322.6	473.2	633.0	*394.4*	333.7	369.1	149.7	43.5	56.6
85°	0.0	0.0	68.8	146.6	165.8	*64.7*	64.7	209.3	27.3	18.2	41.5
87.5°	0.0	0.0	0.0	0.0	0.0	*0.0*	1.0	5.1	3.0	4.0	9.1
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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REPORT NUMBER: P639467
CATALOG NUMBER: GWS-SA5B-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1885.8	1885.8	1885.8	1885.8	1885.8	1885.8	1885.8	1885.8	1885.8	1885.8	1885.8
2.5°	1873.7	1838.3	1796.8	1757.4	1720.0	1671.5	1648.2	1619.9	1595.6	1582.5	1589.6
5°	1836.3	1780.7	1695.7	1609.8	1522.8	1440.9	1367.1	1317.6	1273.1	1249.8	1254.9
7.5°	1803.9	1729.1	1596.6	1456.1	1316.5	1176.0	1061.7	972.7	904.0	875.7	870.6
10°	1789.8	1695.7	1508.7	1306.4	1092.1	903.0	741.2	643.1	573.3	539.0	545.0
12.5°	1796.8	1678.5	1433.8	1159.8	881.7	661.3	506.6	414.6	365.0	344.8	339.8
15°	1817.1	1674.5	1367.1	1010.2	680.5	462.1	349.9	312.5	302.3	300.3	300.3
17.5°	1840.3	1675.5	1298.3	858.5	516.7	342.8	299.3	292.2	289.2	287.2	288.2
20°	1863.6	1675.5	1219.5	704.8	388.3	296.3	285.1	280.1	277.1	276.0	276.0
22.5°	1891.9	1675.5	1131.5	562.2	311.4	281.1	272.0	269.0	265.9	264.9	263.9
25°	1926.3	1676.5	1034.4	439.9	283.1	268.0	260.9	257.8	254.8	252.8	252.8
27.5°	1975.8	1684.6	927.2	342.8	266.9	255.8	249.8	246.7	243.7	240.7	240.7
30°	2047.6	1704.8	806.9	283.1	251.8	242.7	236.6	234.6	231.6	228.5	227.5
32.5°	2154.8	1740.2	682.5	253.8	237.6	228.5	221.4	219.4	216.4	213.4	212.3
35°	2304.5	1804.9	561.2	235.6	219.4	210.3	206.3	205.3	201.2	198.2	198.2
37.5°	2523.9	1910.1	444.9	217.4	204.3	197.2	192.1	190.1	186.1	183.0	182.0
40°	2791.8	2046.6	345.8	203.2	190.1	183.0	178.0	174.9	169.9	165.8	163.8
42.5°	3133.6	2213.4	273.0	188.1	177.0	169.9	165.8	159.8	152.7	146.6	145.6
45°	3489.5	2385.3	225.5	173.9	164.8	158.8	153.7	145.6	135.5	128.4	126.4
47.5°	3762.6	2492.5	197.2	158.8	151.7	146.6	140.6	130.4	118.3	110.2	108.2
50°	3957.7	2508.7	175.9	144.6	140.6	135.5	126.4	114.3	101.1	93.0	91.0
52.5°	4053.8	2435.9	158.8	131.5	128.4	123.4	112.2	99.1	84.9	76.8	74.8
55°	4097.3	2298.4	142.6	120.3	116.3	110.2	98.1	83.9	69.8	62.7	60.7
57.5°	4080.1	2095.1	128.4	109.2	104.2	97.1	83.9	68.8	57.6	50.6	49.5
60°	3952.7	1810.0	114.3	98.1	92.0	83.9	70.8	56.6	46.5	41.5	40.4
62.5°	3677.6	1456.1	100.1	84.9	80.9	72.8	60.7	46.5	38.4	35.4	34.4
65°	3114.4	1029.4	85.9	71.8	69.8	61.7	50.6	38.4	33.4	31.3	30.3
67.5°	2238.7	625.9	72.8	61.7	59.7	52.6	42.5	33.4	30.3	29.3	29.3
70°	*1125.4*	*296.3*	*57.6*	*50.6*	*50.6*	*43.5*	*36.4*	*30.3*	*29.3*	*28.3*	*28.3*
72.5°	382.2	126.4	43.5	39.4	41.5	37.4	31.3	28.3	28.3	28.3	28.3
75°	130.4	66.7	30.3	28.3	30.3	30.3	27.3	27.3	28.3	28.3	28.3
77.5°	84.9	44.5	21.2	19.2	23.3	23.3	23.3	25.3	27.3	27.3	27.3
80°	69.8	24.3	14.2	13.1	17.2	17.2	19.2	23.3	25.3	25.3	25.3
82.5°	59.7	15.2	8.1	9.1	12.1	13.1	16.2	19.2	22.2	23.3	23.3
85°	40.4	8.1	6.1	7.1	8.1	10.1	13.1	16.2	18.2	20.2	20.2
87.5°	11.1	3.0	4.0	5.1	5.1	7.1	10.1	12.1	14.2	15.2	15.2
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

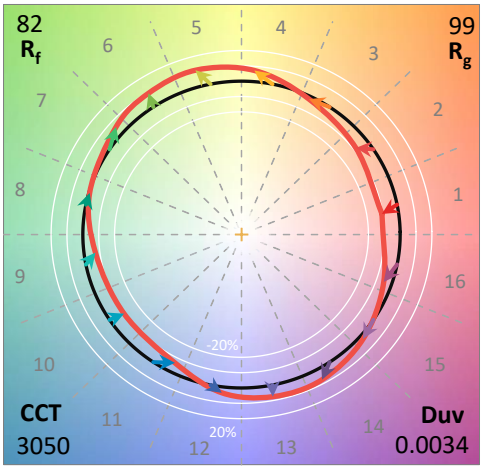
Test Information

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

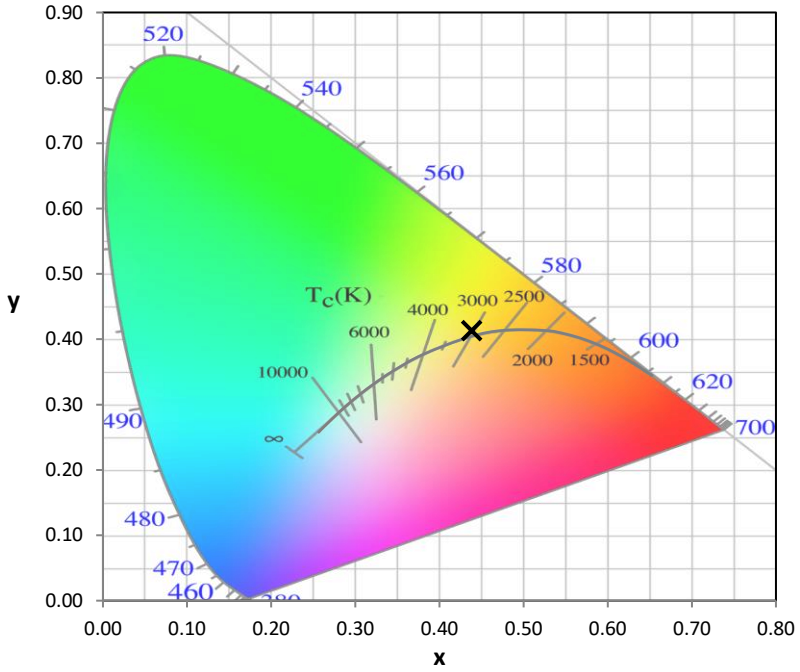
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

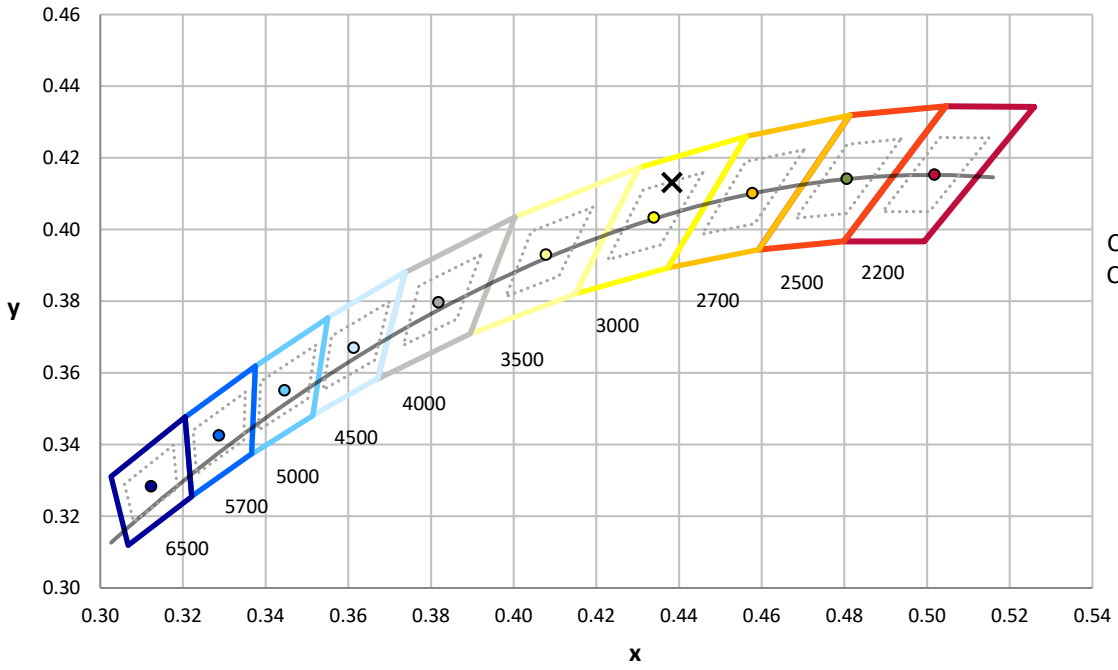
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

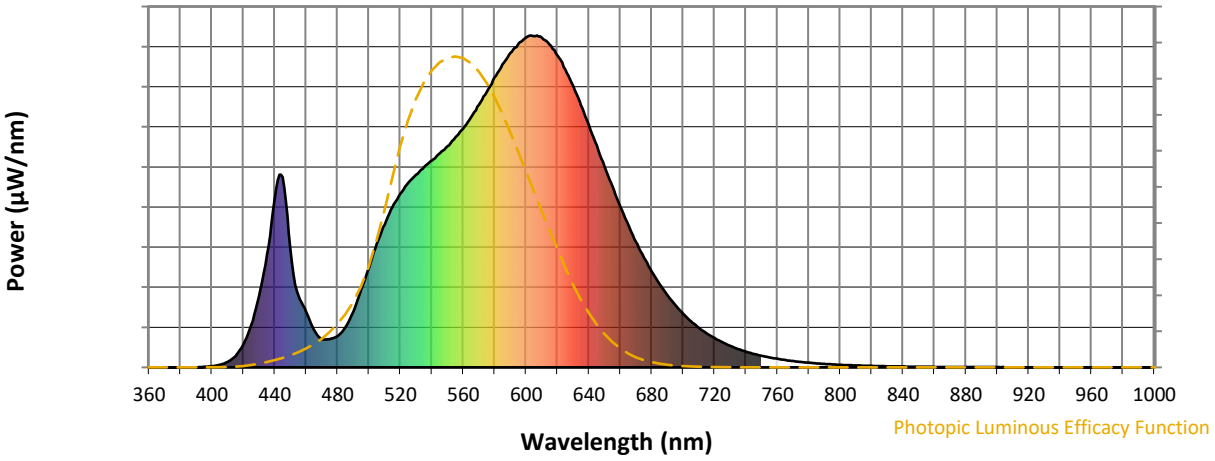


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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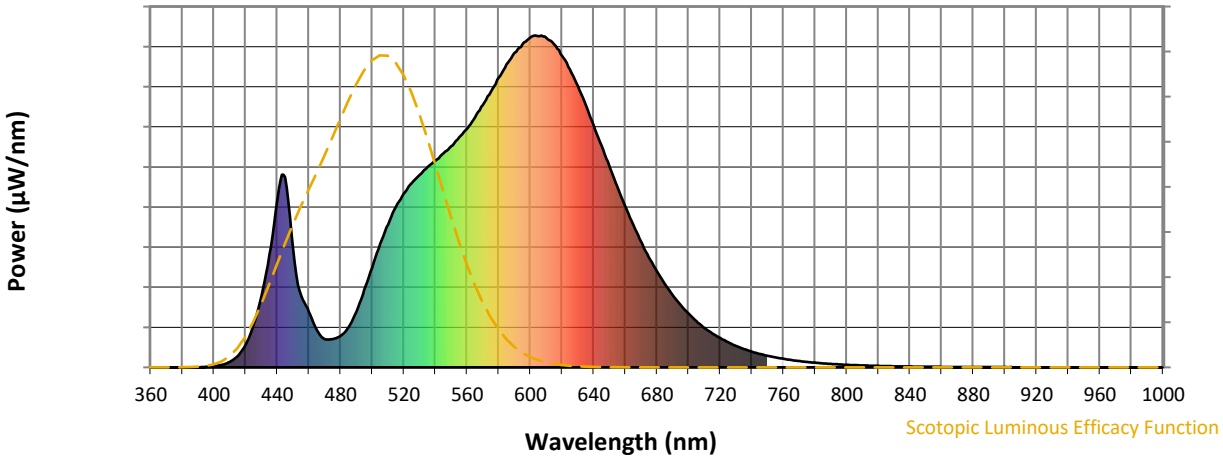
Scotopic Flux vs. Wavelength



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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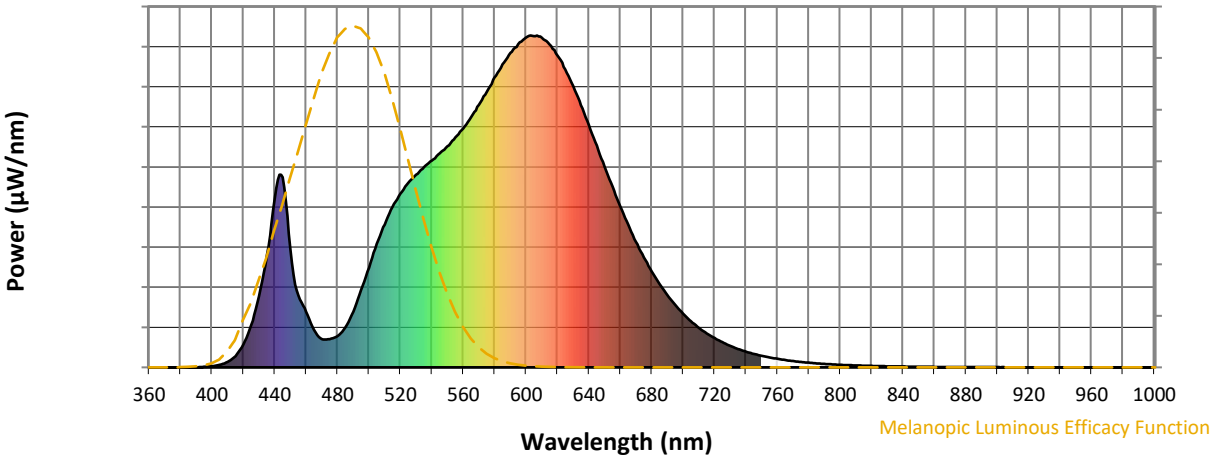
Melanopic Flux vs. Wavelength



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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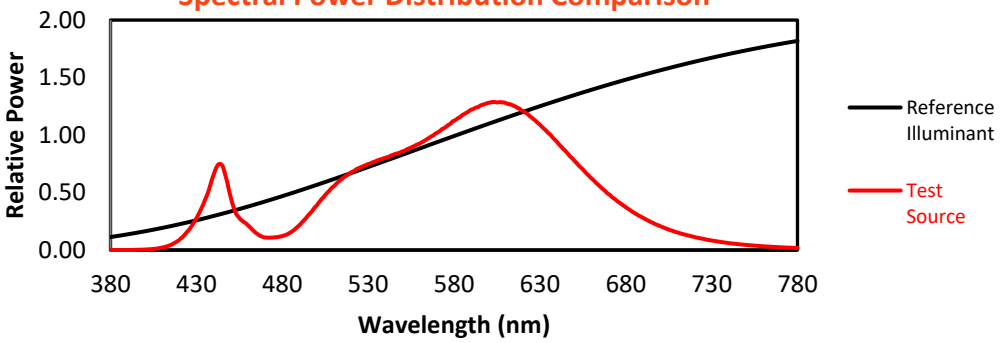
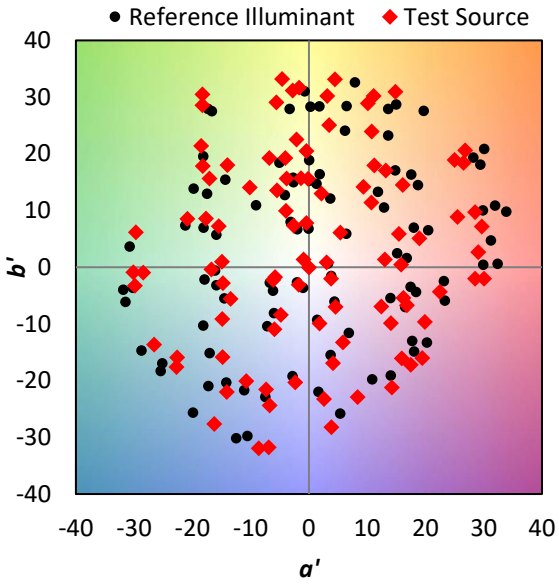
Summary

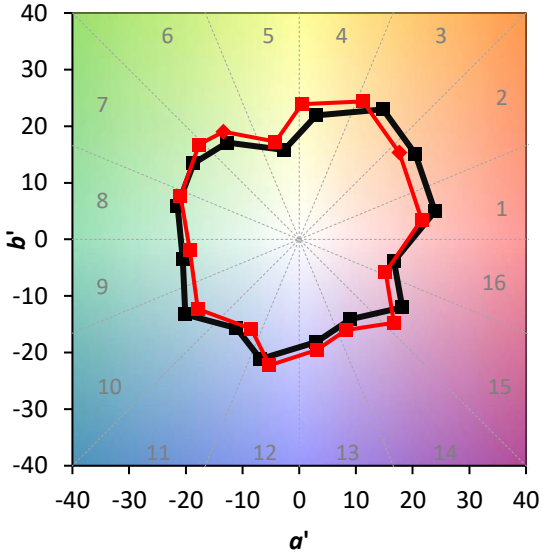
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

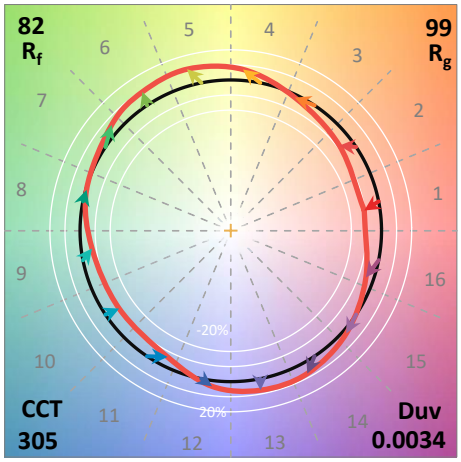
Spectral Power Distribution Comparison

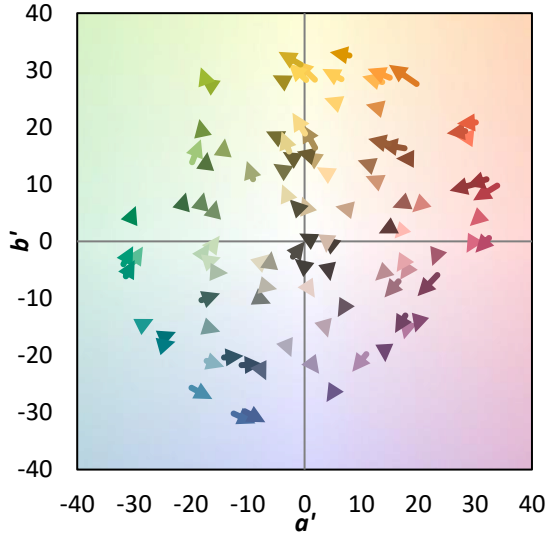


Color Vector Graphics









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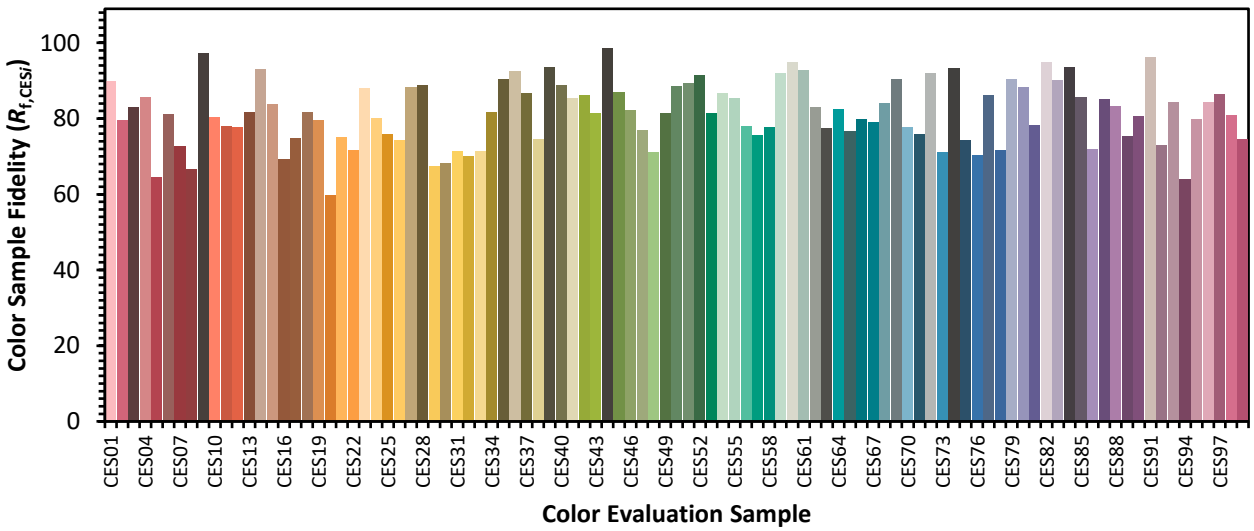
Individual Sample Fidelity Index ($R_{f,i}$)

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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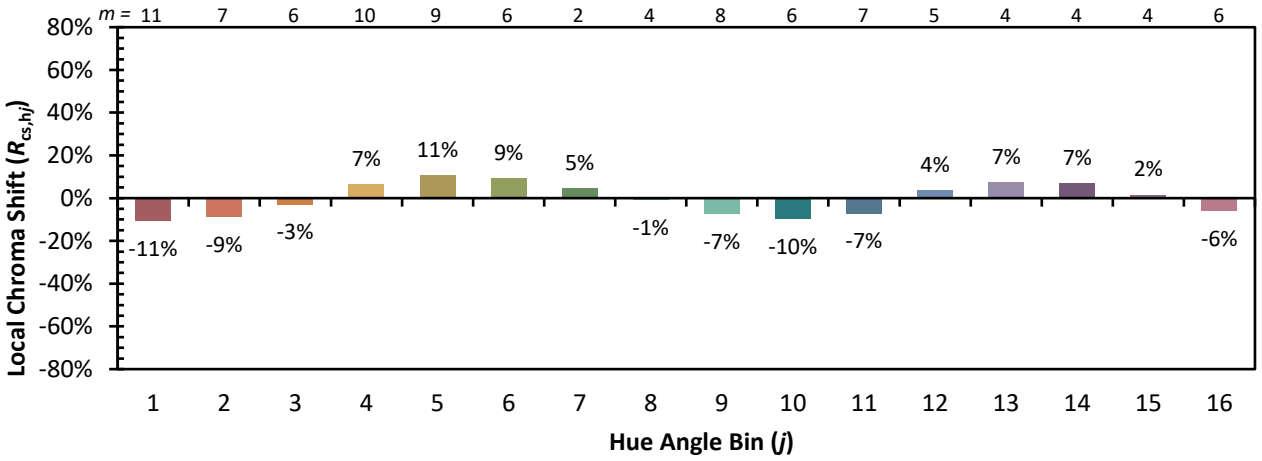
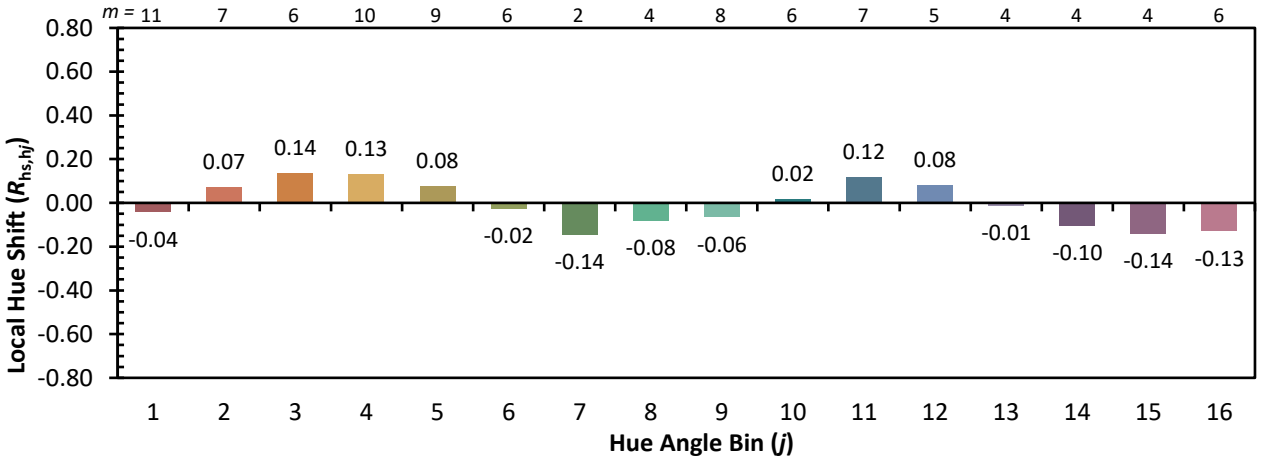
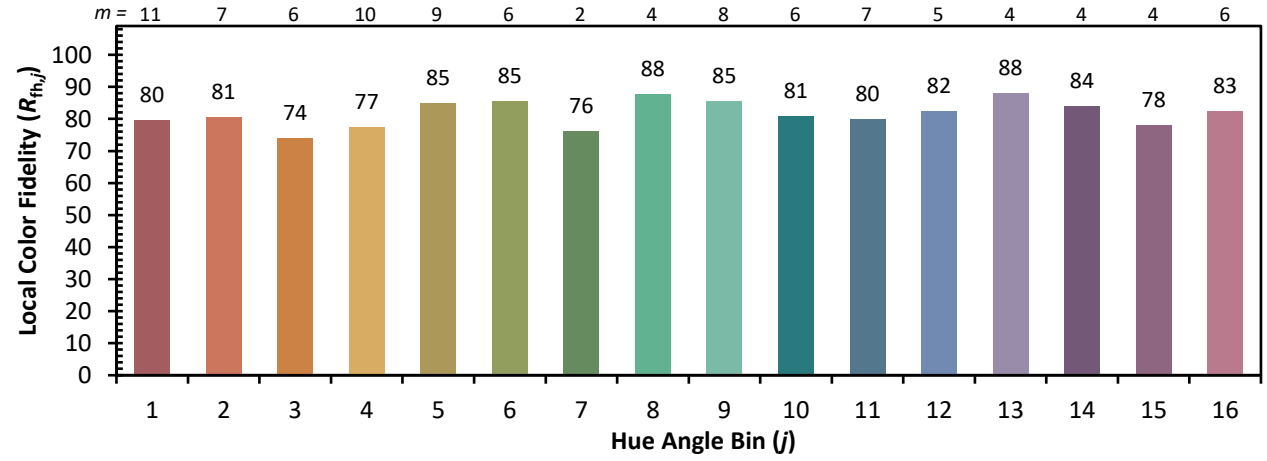
Color Rendition by Hue-Angle Bin







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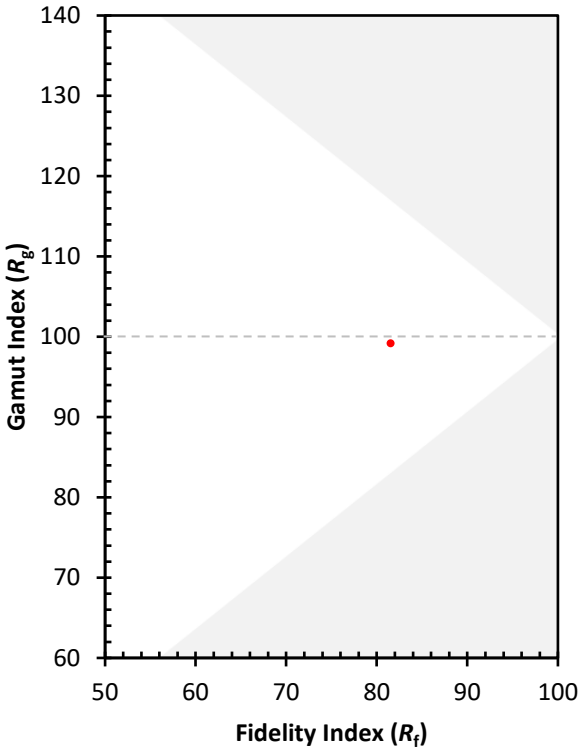
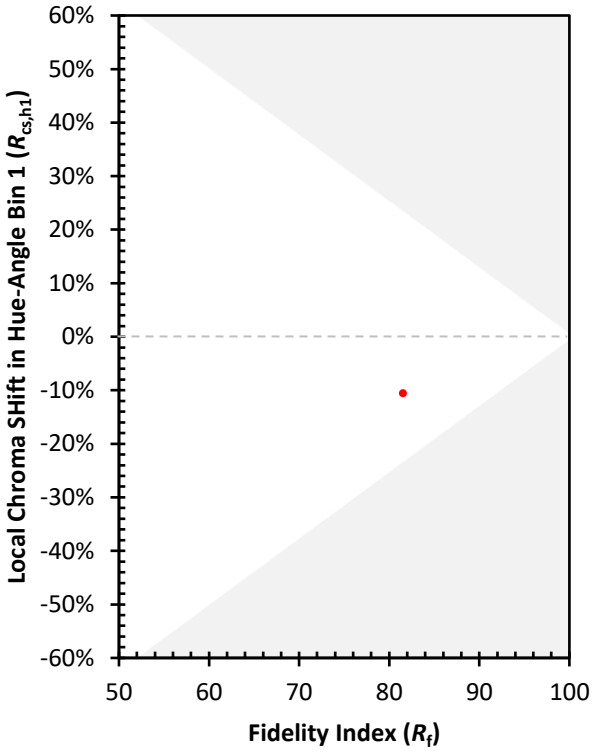
Measure Comparisons





(END OF REPORT)