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: P631068

Luminaire Tested: GWS-SA1E-830-U-T2R-W-GRSWH

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:	P631068
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-13)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1E-830-U-T2R-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5297.8 lumens
Efficiency:	N/A
Efficacy:	90.7 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G1

Input Watts (W):	58.4
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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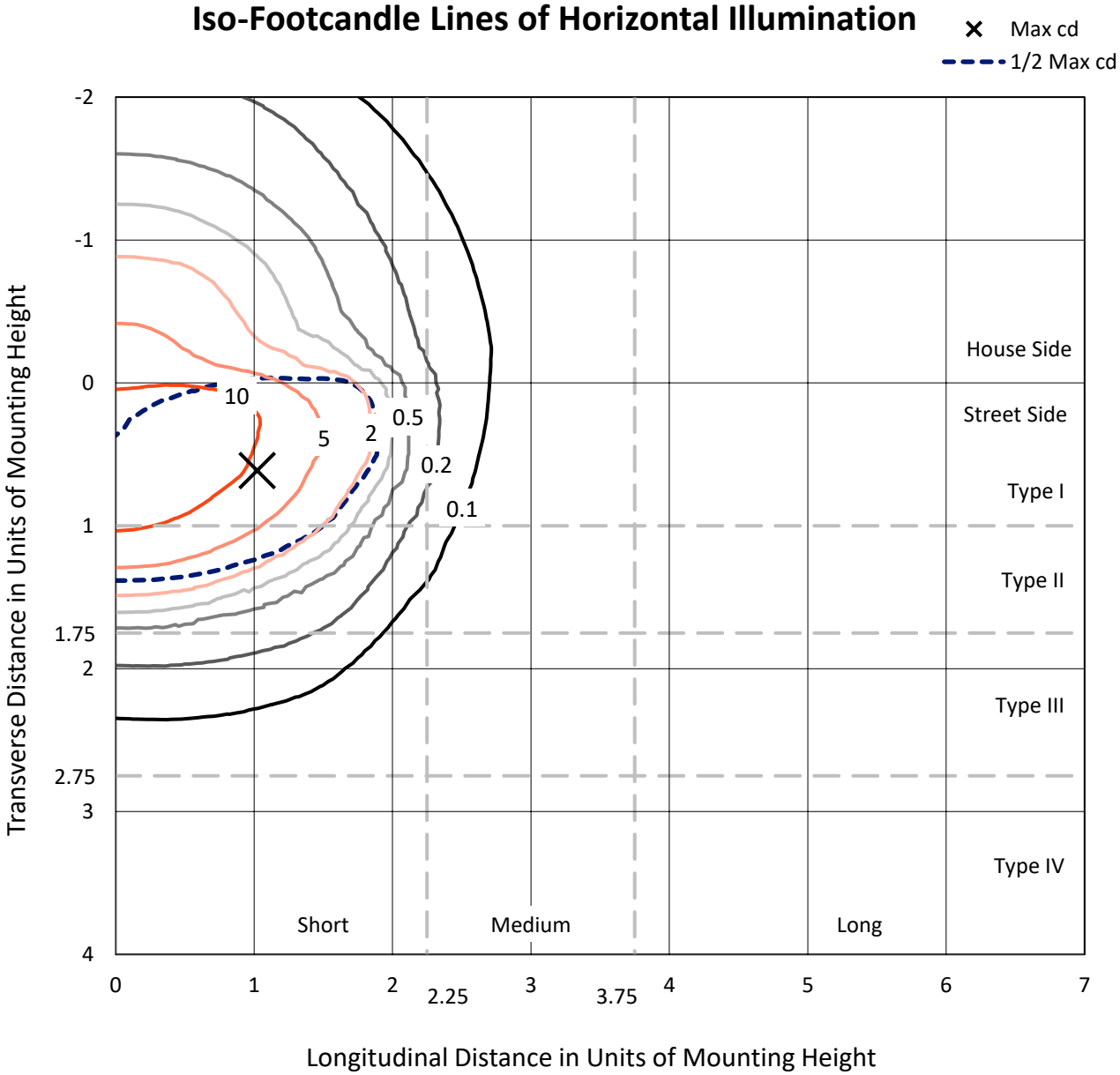
REPORT NUMBER: P631068
CATALOG NUMBER: GWS-SA1E-830-U-T2R-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 15.9 fc
Type II - Short - N/A

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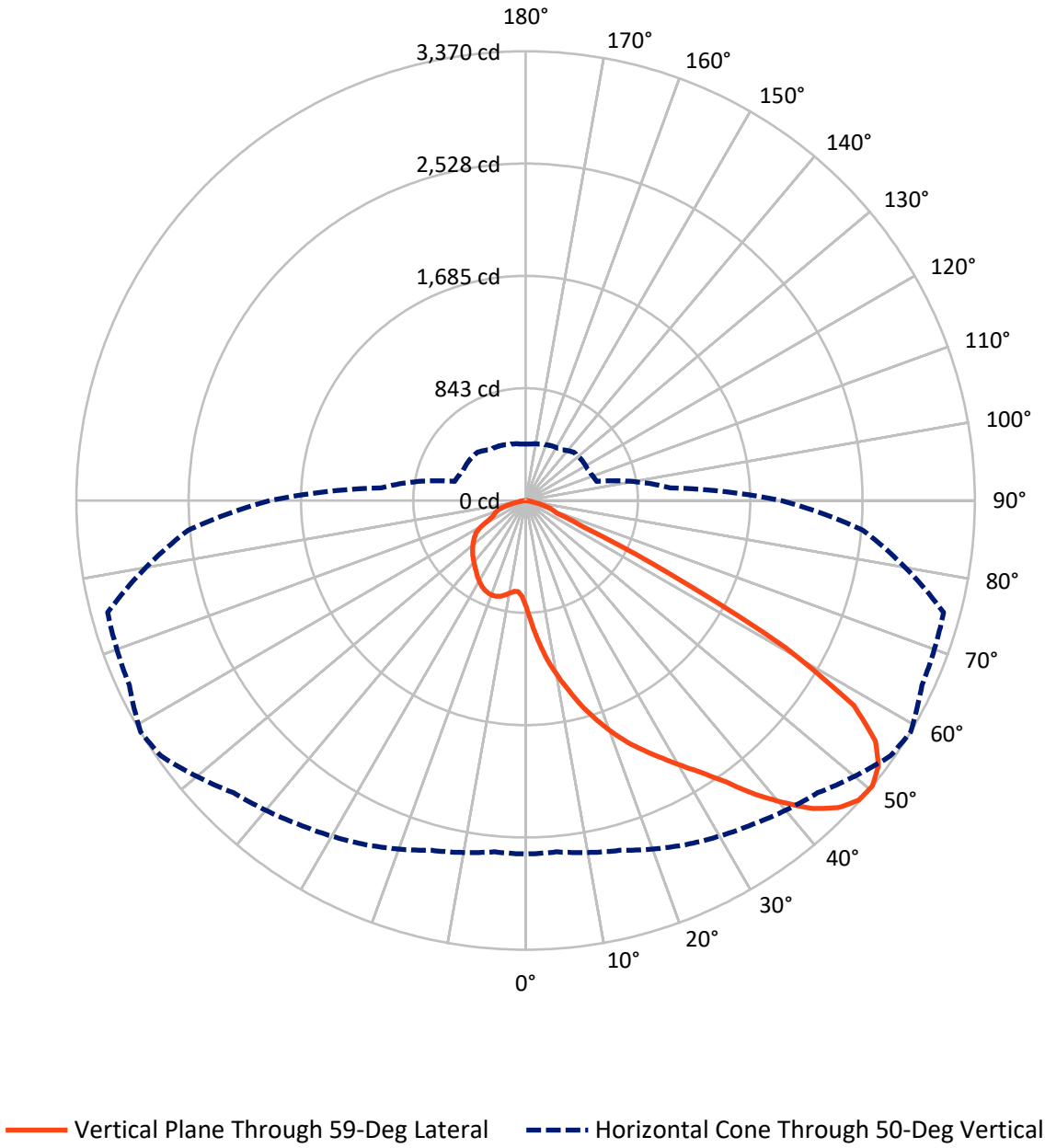
Luminous Intensity Polar Plot



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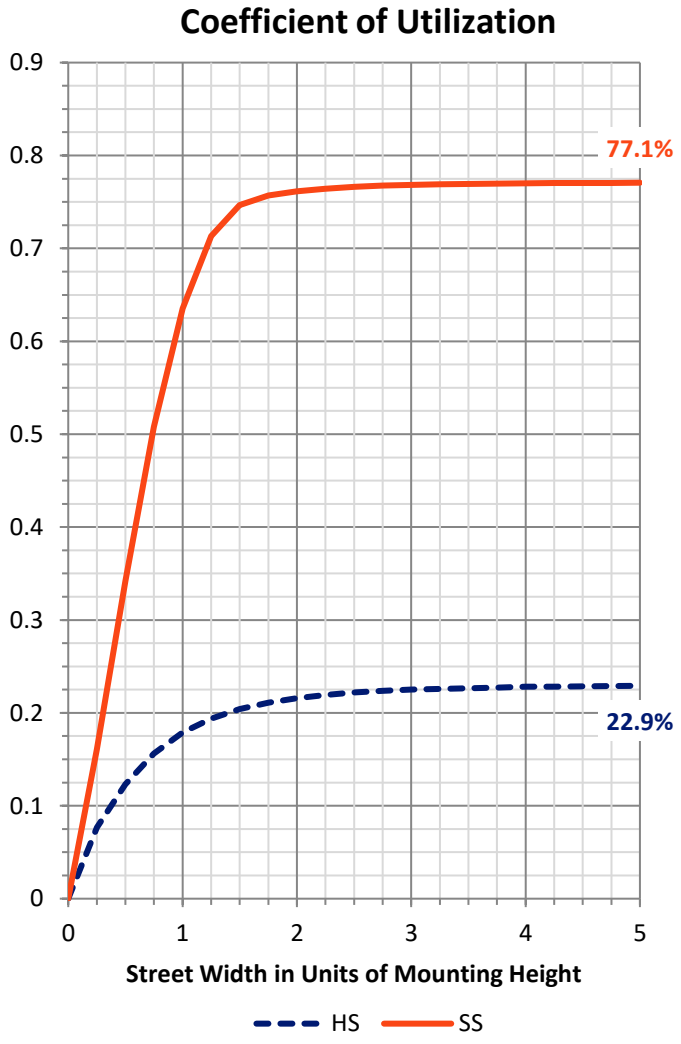
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1218.6	0.0	1218.6
	% Fixture	23.0	0.0	23.0
Street Side	Lumens	4079.2	0.0	4079.2
	% Fixture	77.0	0.0	77.0
Total	Lumens	5297.8	0.0	5297.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.0	1.7
10°-20°	326.9	6.2
20°-30°	619.0	11.7
30°-40°	1026.4	19.4
40°-50°	1402.2	26.5
50°-60°	1272.8	24.0
60°-70°	423.9	8.0
70°-80°	123.6	2.3
80°-90°	13.0	0.2
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°	5297.8	100.0
0°-180°	5297.8	100.0



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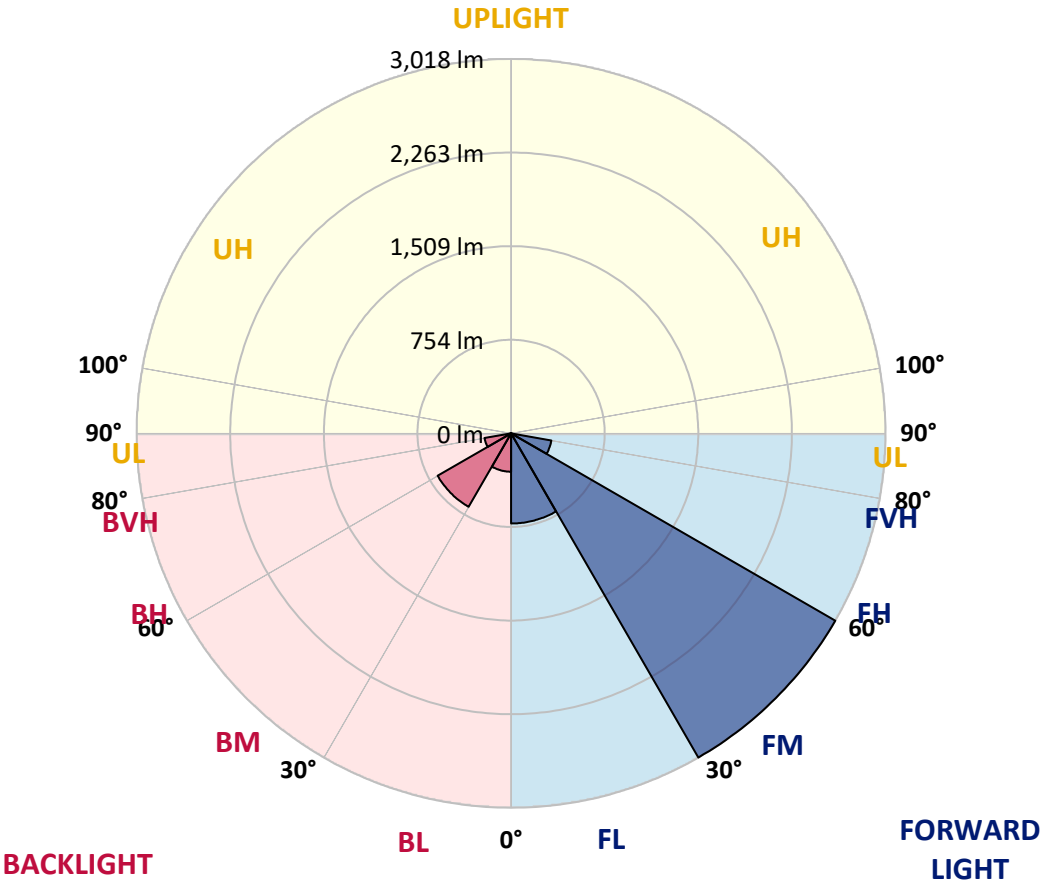
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	726.5	13.7			
FM	(30°-60°)	3017.7	57.0			
FH	(60°-80°)	330.0	6.2			G0/660
FVH	(80°-90°)	5.1	0.1			G0/10
BL	(0°-30°)	309.4	5.8	B1/500		
BM	(30°-60°)	683.7	12.9	B1/1000		
BH	(60°-80°)	217.5	4.1	B1/500		G1/500
BVH	(80°-90°)	7.9	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-G1
Type II Short



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REPORT NUMBER: P631068
CATALOG NUMBER: GWS-SA1E-830-U-T2R-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	802.7	802.7	802.7	802.7	802.7	802.7	802.7	*802.7*	802.7	802.7	802.7
2.5°	1040.0	1047.8	1035.7	1036.5	1006.3	992.5	953.7	*930.8*	915.7	873.4	835.0
5°	1249.7	1240.7	1231.2	1225.6	1199.2	1162.1	1113.8	*1075.4*	1040.0	957.1	877.3
7.5°	1378.3	1373.6	1367.1	1363.6	1337.8	1298.9	1250.6	*1217.8*	1166.4	1054.2	928.7
10°	1487.5	1481.9	1478.0	1480.6	1459.4	1434.4	1381.8	*1344.2*	1286.4	1156.9	990.8
12.5°	1572.1	1575.1	1576.4	1590.2	1581.1	1566.0	1511.7	*1472.0*	1407.7	1265.3	1063.7
15°	1639.0	1638.1	1653.2	1679.5	1694.2	1684.7	1641.1	*1607.9*	1529.4	1371.8	1142.3
17.5°	1654.5	1655.4	1679.1	1725.3	1773.2	1796.5	1771.9	*1732.2*	1654.5	1477.1	1223.8
20°	1667.0	1668.7	1693.3	1746.0	1815.9	1881.1	1884.9	*1856.5*	1789.6	1591.1	1306.7
22.5°	1746.0	1749.9	1756.3	1789.6	1852.6	1935.0	1980.3	*1974.3*	1918.2	1710.6	1396.0
25°	1953.6	1941.9	1910.4	1900.9	1925.1	1992.0	2069.2	*2080.9*	2053.2	1842.2	1492.2
27.5°	2209.9	2197.4	2150.8	2101.6	2049.4	2072.7	2155.1	*2190.0*	2190.5	1987.2	1588.9
30°	2442.5	2432.6	2394.6	2324.2	2234.1	2200.4	2261.2	*2308.3*	2336.3	2154.7	1699.0
32.5°	2641.4	2632.4	2581.0	2523.6	2435.6	2367.8	2389.8	*2435.1*	2500.7	2371.3	1835.7
35°	2808.9	2799.8	2750.6	2692.8	2611.2	2570.7	2562.9	*2594.0*	2679.0	2597.4	1992.8
37.5°	2944.8	2935.7	2884.4	2830.0	2767.9	2770.5	2782.1	*2797.2*	2846.0	2839.5	2160.7
40°	3032.8	3023.3	2986.7	2947.8	2908.5	2939.6	2997.4	*2979.3*	3005.2	3035.0	2315.2
42.5°	3072.1	3060.0	3038.9	3030.2	3018.2	3066.5	3177.8	*3159.7*	3128.6	3165.3	2430.0
45°	3032.8	3022.5	3022.0	3048.4	3076.4	3138.6	3302.5	*3287.9*	3209.3	3228.3	2498.6
47.5°	2912.4	2903.4	2928.0	2997.0	3066.1	3156.7	3358.2	*3360.8*	3266.7	3254.6	2543.0
50°	*2652.2*	*2646.2*	*2717.4*	*2848.1*	*2967.2*	*3100.1*	*3340.5*	*3370.3*	*3280.5*	*3246.4*	*2537.4*
52.5°	2123.1	2151.2	2306.1	2524.5	2755.8	3000.9	3274.9	*3313.8*	3214.1	3192.5	2507.2
55°	1453.4	1466.4	1621.3	1940.2	2307.0	2786.0	3124.3	*3184.3*	3135.5	3183.4	2538.7
57.5°	752.6	763.0	885.1	1168.2	1564.7	2201.7	2706.2	*2902.9*	2977.2	3229.2	2636.7
60°	309.0	317.6	368.1	504.9	789.3	1282.1	1947.5	*2239.2*	2413.6	2949.1	2341.5
62.5°	224.4	228.7	252.9	301.2	413.4	628.3	1102.1	*1209.6*	1332.1	1848.3	1486.6
65°	189.0	193.8	213.2	242.5	301.6	385.4	470.8	*473.4*	521.7	753.0	551.1
67.5°	158.4	162.7	179.9	205.0	243.8	273.6	252.9	*253.3*	252.4	273.2	264.1
70°	123.4	126.9	144.1	170.9	191.2	175.6	197.6	*218.8*	209.7	217.9	230.4
72.5°	90.2	94.1	109.2	129.5	124.3	125.1	160.1	*181.7*	176.5	185.6	197.2
75°	65.2	67.8	75.5	64.7	68.2	82.4	112.6	*124.3*	129.5	137.2	147.6
77.5°	21.1	21.1	23.7	29.8	37.1	45.7	57.4	*62.1*	69.9	78.5	85.9
80°	10.8	11.2	13.4	16.4	20.7	26.3	33.7	*35.8*	39.7	44.4	47.5
82.5°	5.2	5.6	6.5	8.2	10.8	13.8	18.6	*20.7*	23.3	26.3	28.5
85°	1.3	1.3	1.7	2.6	3.5	5.2	6.9	*8.2*	10.4	12.5	13.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.4	1.3	*1.7*	2.2	2.6	3.5
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: P631068
CATALOG NUMBER: GWS-SA1E-830-U-T2R-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	802.7	802.7	802.7	802.7	802.7	802.7	802.7	802.7	802.7	802.7	802.7
2.5°	817.8	793.6	762.5	736.2	712.0	693.5	677.5	669.7	662.4	657.2	659.0
5°	840.2	798.8	740.9	700.8	676.2	663.7	655.1	650.8	649.9	646.4	645.1
7.5°	873.0	813.9	736.6	696.1	679.7	673.2	668.4	665.9	667.2	663.7	662.4
10°	913.6	838.9	747.4	711.6	697.4	692.6	687.4	684.0	682.3	677.1	676.2
12.5°	964.0	870.0	766.8	731.5	717.2	709.0	702.1	696.1	692.2	685.7	684.0
15°	1018.4	904.5	789.7	750.9	734.0	722.0	710.7	701.7	694.8	686.1	684.8
17.5°	1077.5	940.7	808.7	764.2	742.7	726.7	710.3	696.9	687.4	676.2	674.9
20°	1139.3	977.4	822.9	770.7	743.1	721.5	699.5	681.8	669.7	658.5	657.7
22.5°	1203.1	1011.1	831.6	769.0	736.2	709.4	683.1	663.3	649.0	635.7	634.8
25°	1267.4	1043.5	833.7	762.1	722.4	691.3	665.0	641.7	625.7	610.6	608.9
27.5°	1332.6	1070.6	828.5	748.3	703.8	670.2	643.8	621.0	604.6	589.5	586.9
30°	1402.1	1093.9	817.3	730.2	682.3	647.7	621.8	604.6	589.0	573.9	571.4
32.5°	1476.3	1114.2	801.4	708.1	657.2	625.3	606.3	590.8	575.2	561.9	559.3
35°	1564.7	1127.6	777.6	679.7	633.9	608.9	595.9	577.8	558.8	544.2	542.9
37.5°	1656.2	1138.0	749.1	652.5	613.6	599.4	588.6	564.0	540.3	522.6	520.4
40°	1744.7	1146.6	713.8	627.0	595.1	592.5	577.8	547.2	506.2	486.3	484.6
42.5°	1827.1	1149.2	676.6	599.8	578.3	577.0	560.6	513.1	481.6	469.1	467.4
45°	1883.6	1147.0	638.2	574.4	561.4	554.5	537.3	488.5	469.1	457.9	455.7
47.5°	1925.5	1135.8	595.1	547.6	542.4	532.9	495.8	473.0	454.8	443.6	441.5
50°	*1918.2*	*1089.2*	*551.5*	*521.7*	*519.6*	*511.4*	*465.6*	*453.5*	*437.6*	*425.5*	*423.8*
52.5°	1880.2	1000.7	507.1	493.2	497.6	481.6	444.0	430.2	416.4	402.6	399.6
55°	1889.7	936.9	473.4	465.6	473.4	437.1	419.9	405.2	392.3	378.9	376.3
57.5°	1931.1	873.9	437.6	435.8	444.0	403.1	388.8	370.3	351.7	340.9	340.9
60°	1621.7	636.9	374.6	378.9	397.4	375.4	362.9	343.9	323.7	314.2	314.2
62.5°	958.9	399.6	310.7	306.0	317.6	331.4	338.3	322.8	298.6	286.1	286.5
65°	422.5	290.9	274.0	270.1	266.7	276.2	295.2	296.5	271.0	256.3	256.8
67.5°	260.2	263.2	256.3	253.3	250.3	248.6	246.8	247.7	240.8	227.4	227.0
70°	234.8	243.0	238.2	235.6	231.7	228.7	218.4	201.5	189.9	186.4	190.3
72.5°	202.0	213.2	210.6	209.3	204.5	197.2	183.4	167.0	153.2	144.6	146.3
75°	152.3	161.4	162.7	163.1	157.9	151.0	136.8	123.0	110.9	101.8	104.0
77.5°	87.6	92.8	94.1	95.4	91.5	88.9	79.4	69.5	63.0	53.5	56.1
80°	48.8	50.9	50.9	51.4	49.2	46.2	39.7	34.1	31.1	26.8	27.2
82.5°	29.3	30.2	30.6	31.1	29.8	26.8	22.0	18.1	16.4	14.2	13.8
85°	14.2	15.1	15.1	15.5	13.4	11.7	9.1	6.9	6.0	4.3	4.7
87.5°	3.5	3.9	3.9	3.5	3.0	2.2	1.3	0.4	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

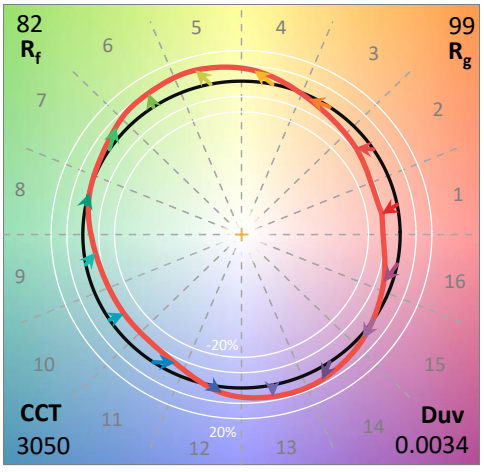
Test Information

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

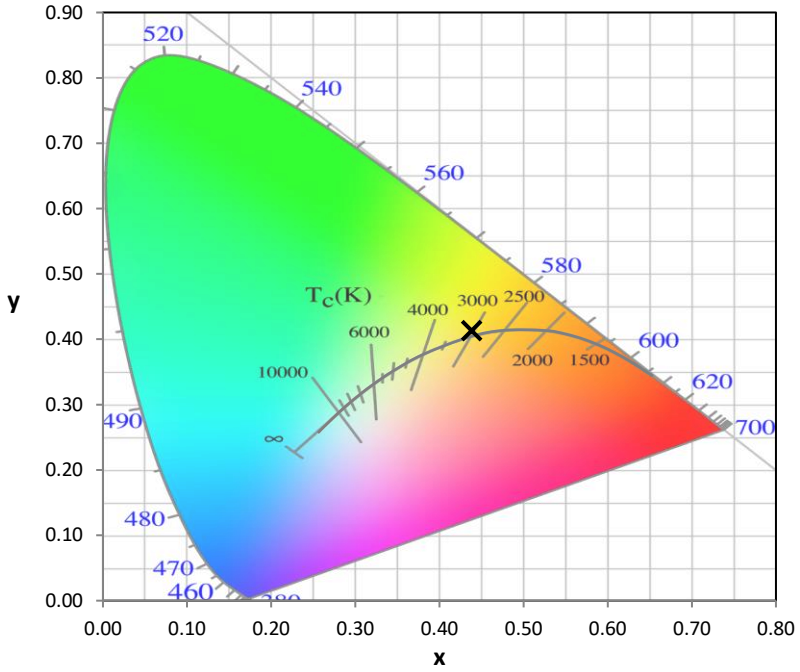
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

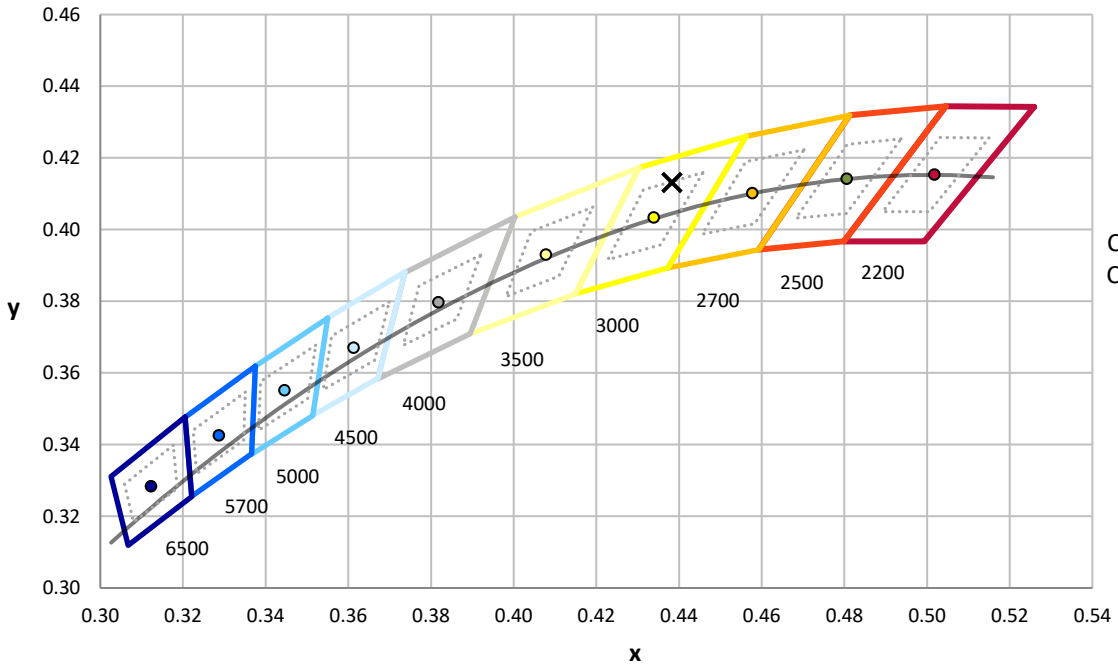
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

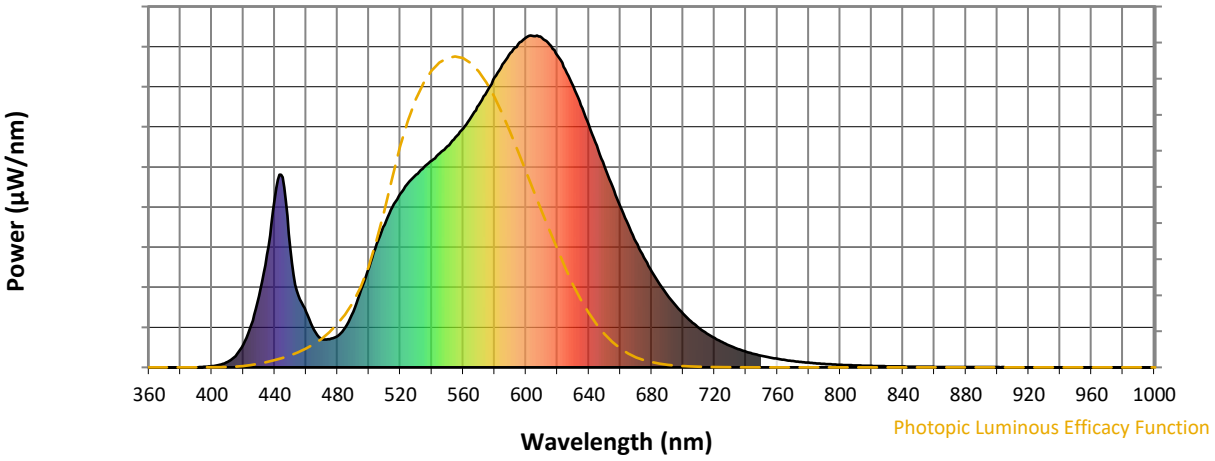


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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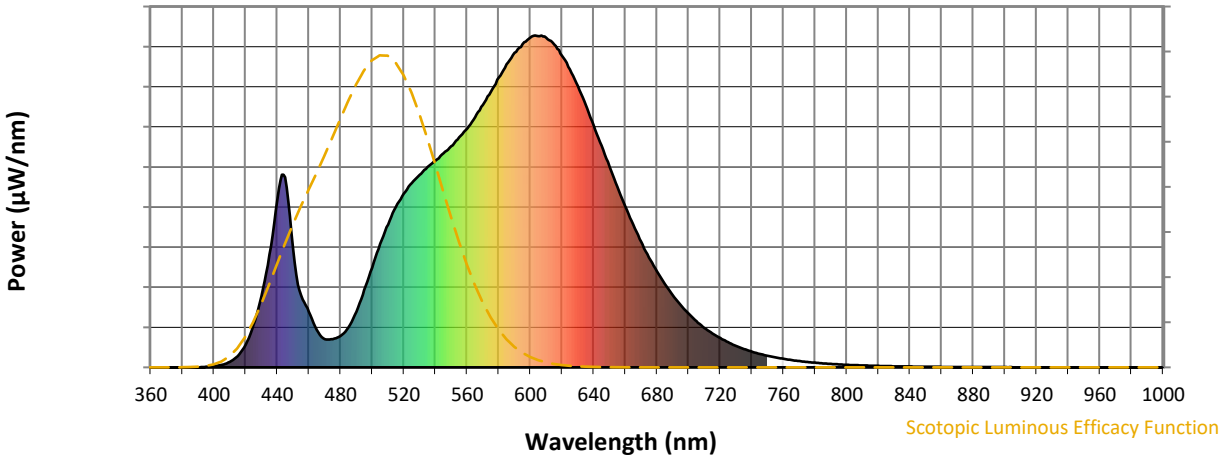
Scotopic Flux vs. Wavelength



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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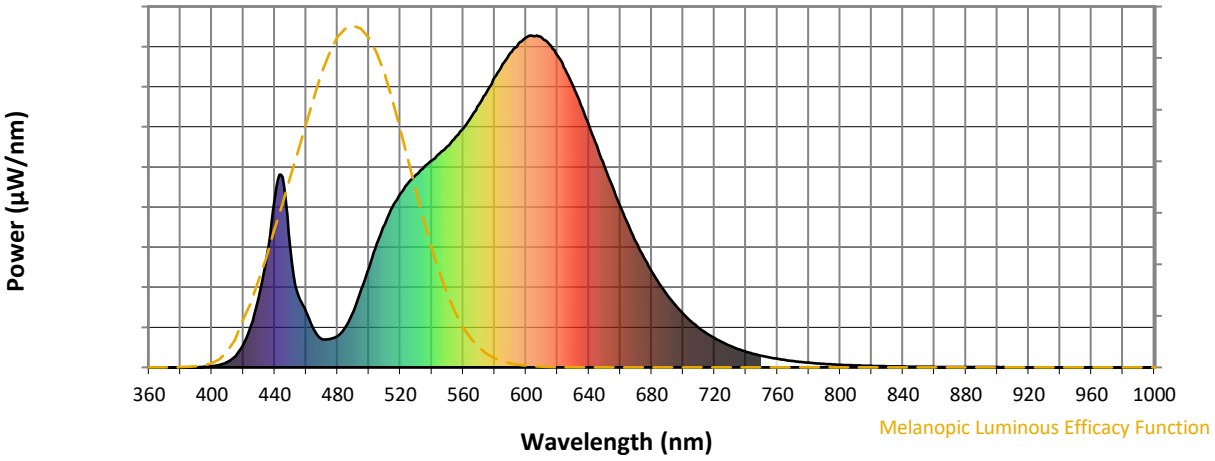
Melanopic Flux vs. Wavelength



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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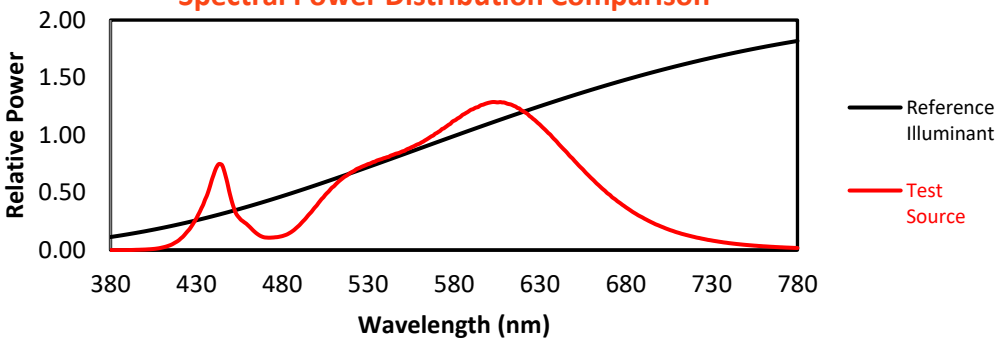
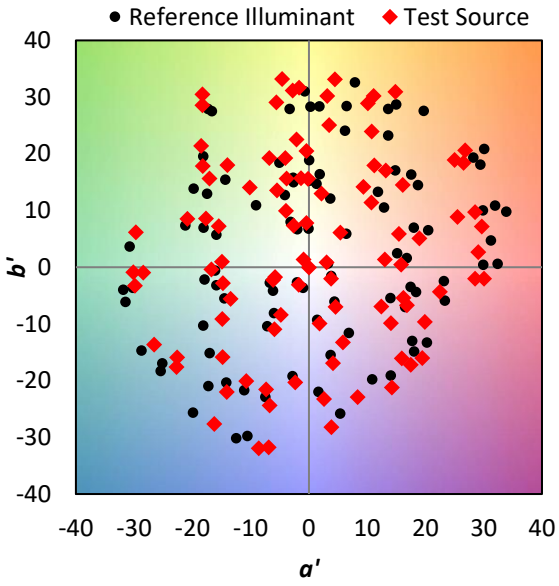
Summary

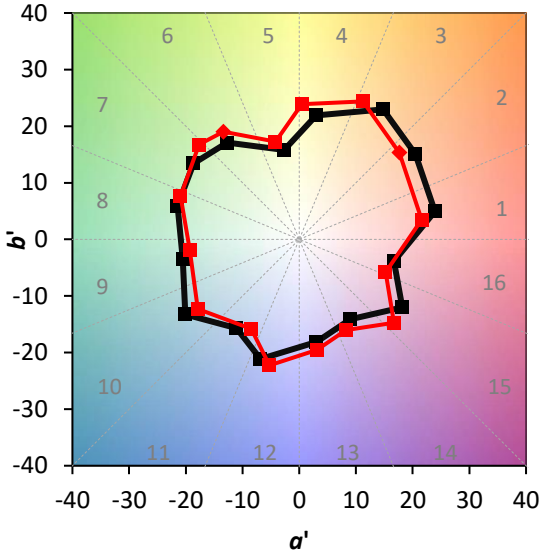
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

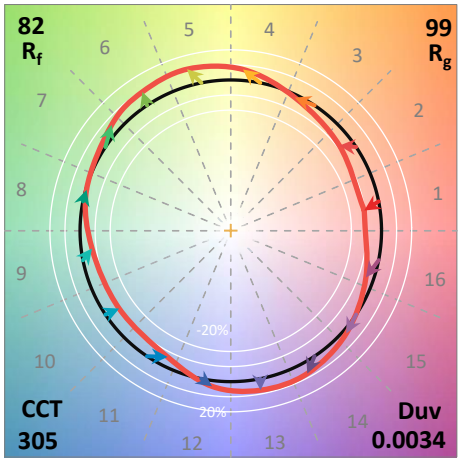
Spectral Power Distribution Comparison

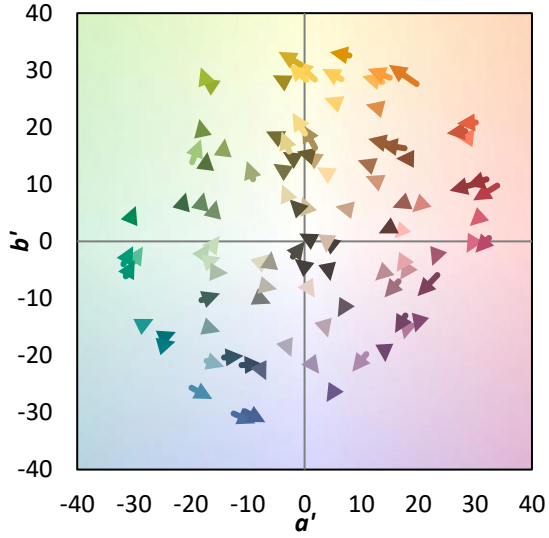


Color Vector Graphics









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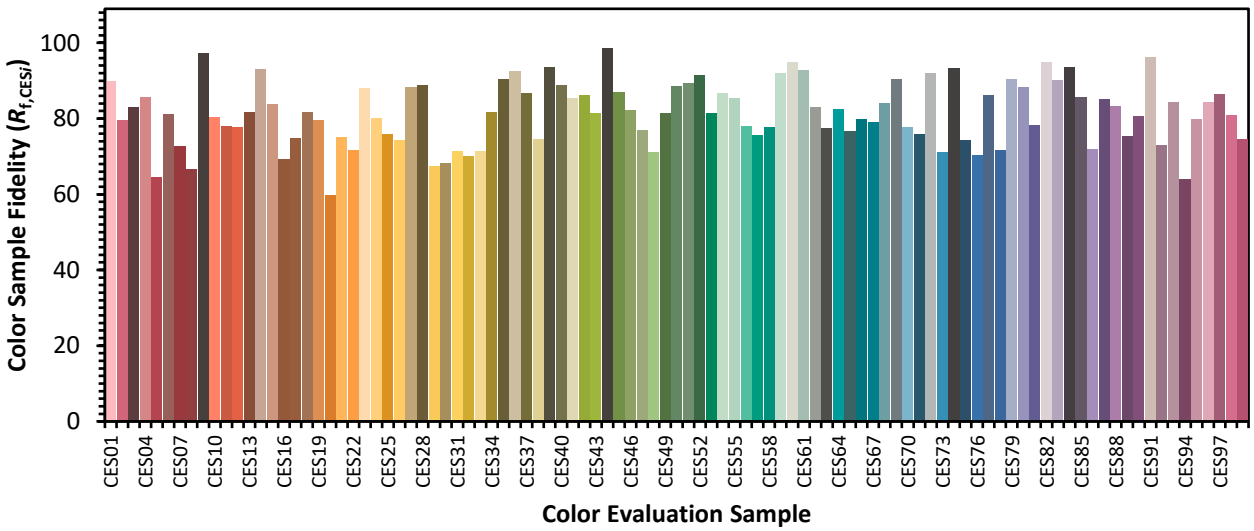
Individual Sample Fidelity Index ($R_{f,i}$)

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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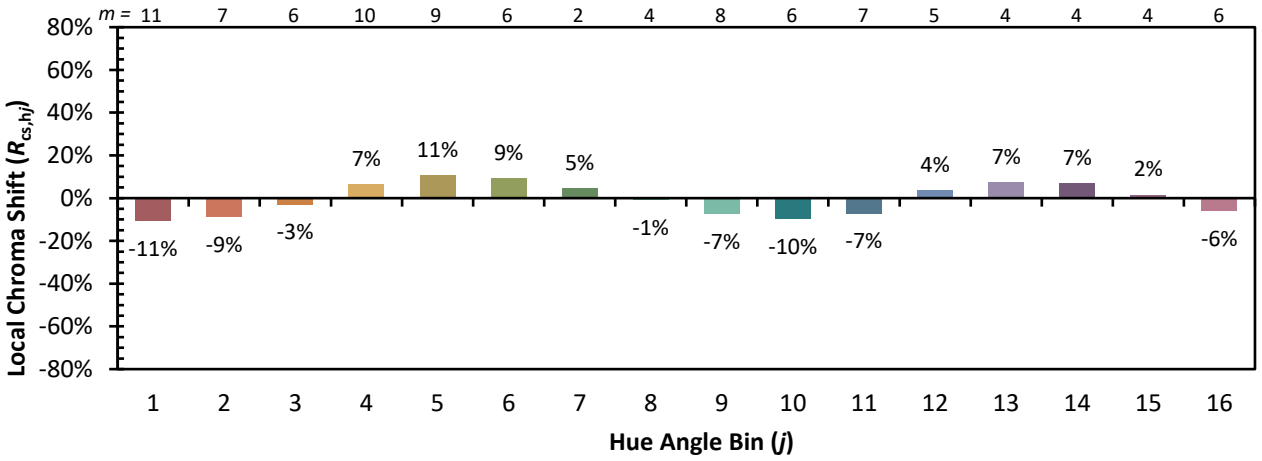
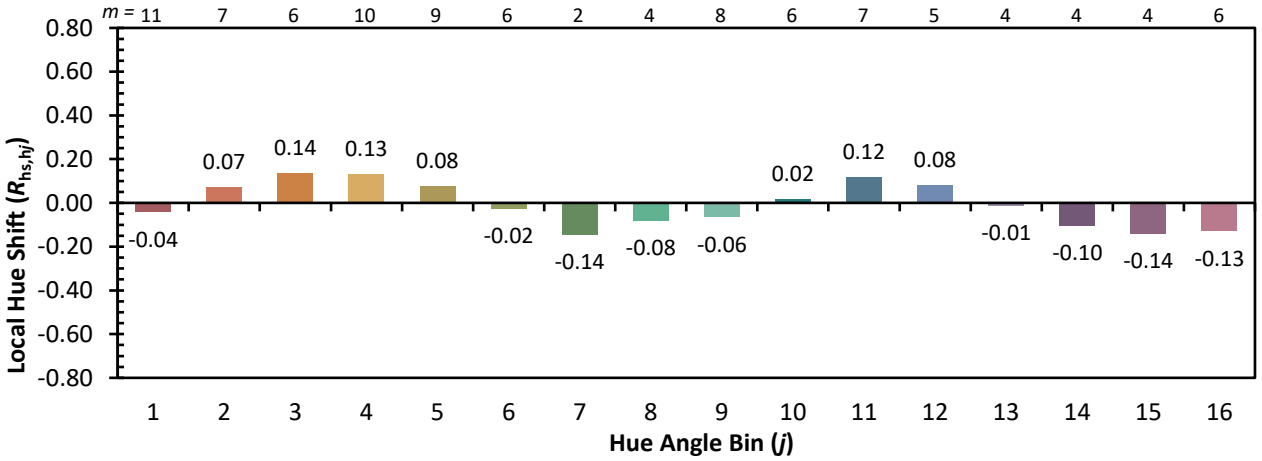
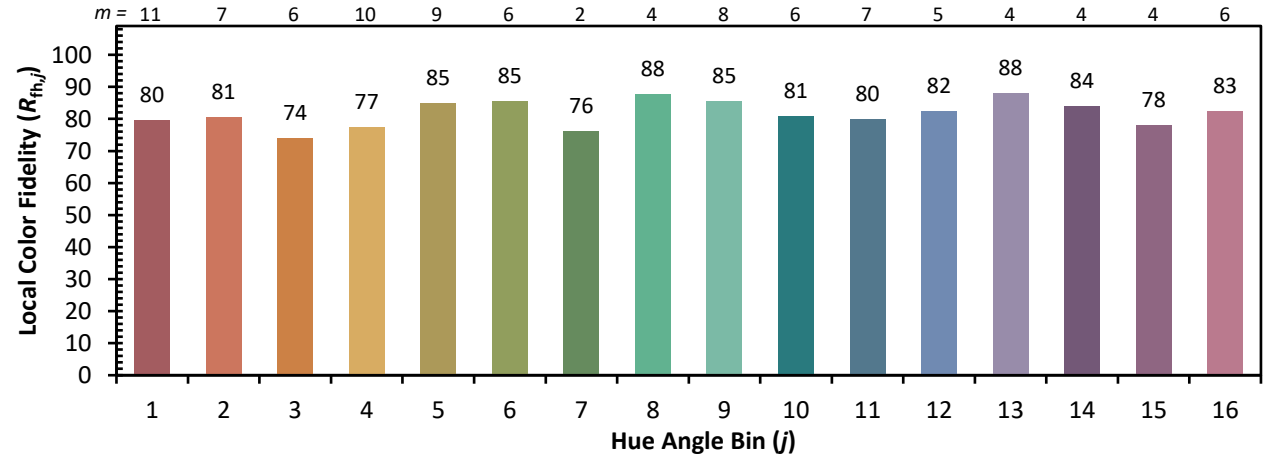
Color Rendition by Hue-Angle Bin







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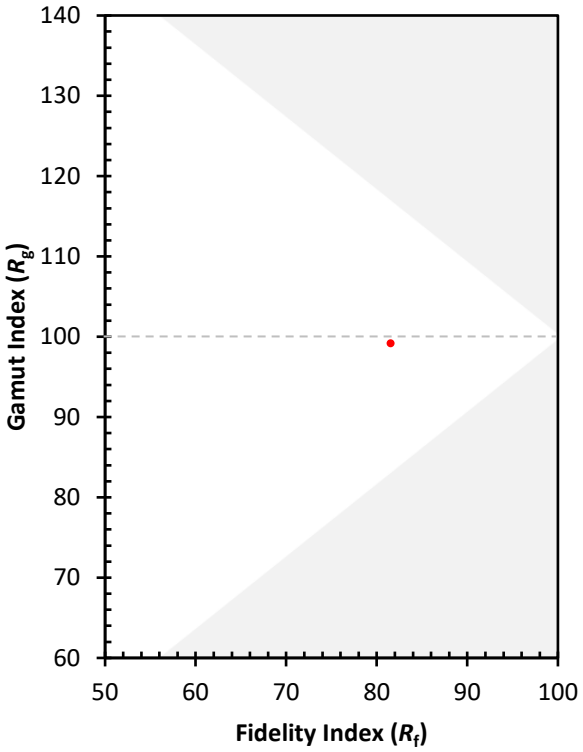
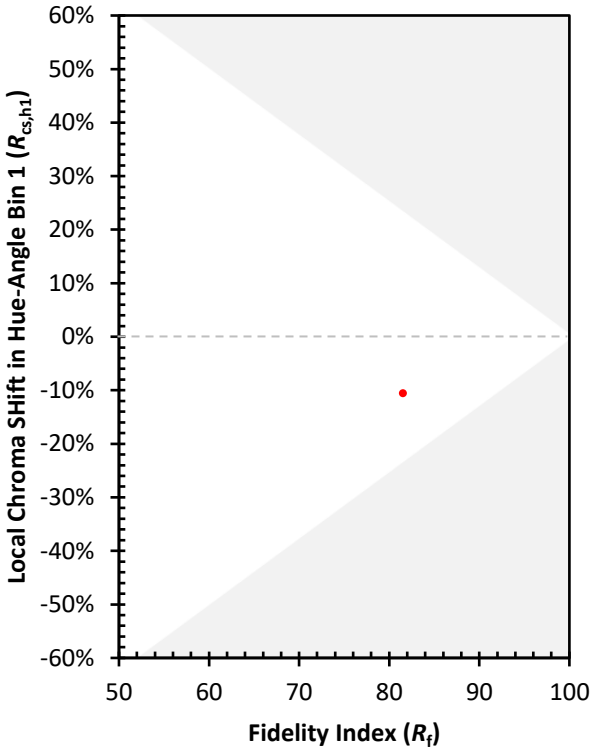
Measure Comparisons





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