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: P632522

Luminaire Tested: GWS-SA2C-830-U-AFL-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:	P632522
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-46)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA2C-830-U-AFL-W-GRSBK
Description:	GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source:	(32) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5537.3 lumens
Efficiency:	N/A
Efficacy:	87.6 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G0

Input Watts (W):	63.2
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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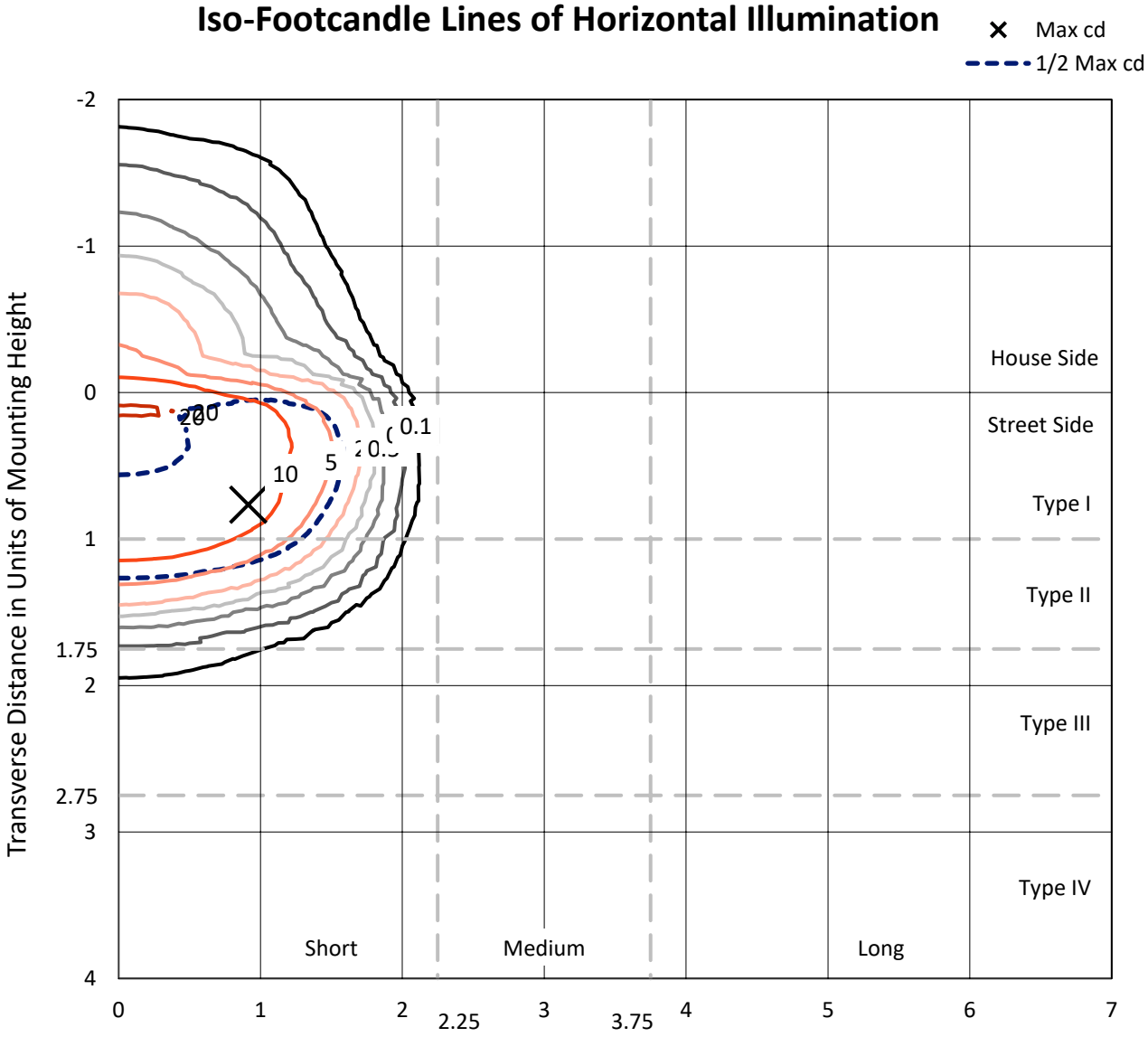
REPORT NUMBER: P632522
CATALOG NUMBER: GWS-SA2C-830-U-AFL-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 21.5 fc
Type II - Short - N/A

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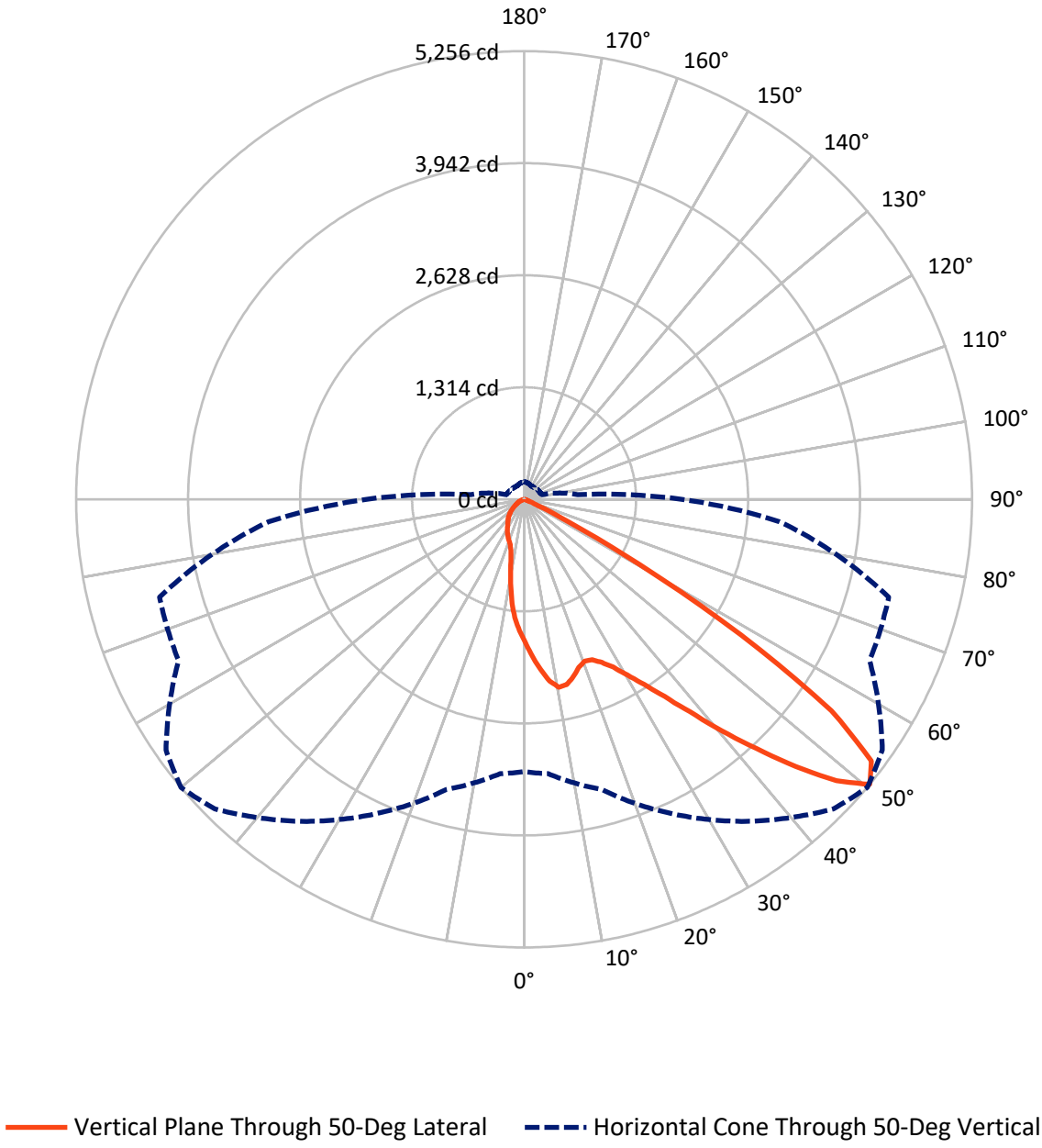
Luminous Intensity Polar Plot



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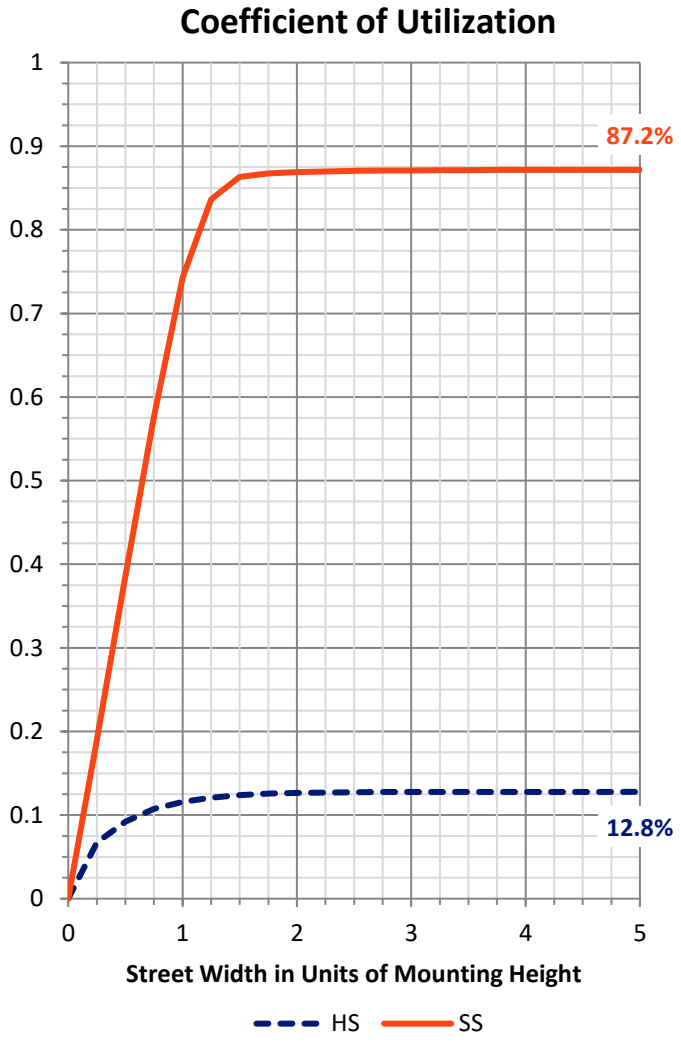
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	711.5	0.0	711.5
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	4825.8	0.0	4825.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	5537.3	0.0	5537.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.6	2.8
10°-20°	401.5	7.3
20°-30°	662.6	12.0
30°-40°	1093.5	19.7
40°-50°	1730.2	31.2
50°-60°	1309.9	23.7
60°-70°	163.9	3.0
70°-80°	18.5	0.3
80°-90°	1.4	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°	5537.3	100.0
0°-180°	5537.3	100.0



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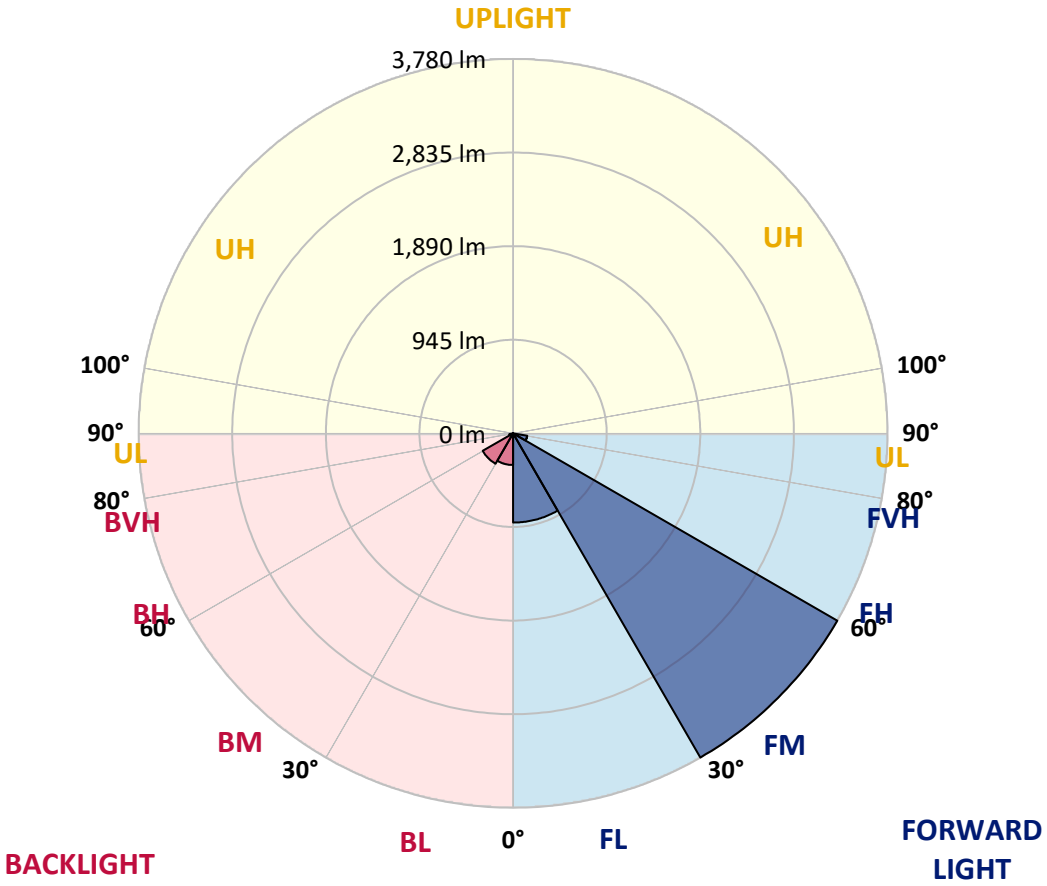
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	900.4	16.3			
FM	(30°-60°)	3779.8	68.3			
FH	(60°-80°)	145.0	2.6			G0/660
FVH	(80°-90°)	0.7	0.0			G0/10
BL	(0°-30°)	319.3	5.8	B1/500		
BM	(30°-60°)	353.8	6.4	B1/1000		
BH	(60°-80°)	37.5	0.7	B0/110		G0/110
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: B1-U0-G0
Type II Short



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Scaled Data Report

REPORT NUMBER: P632522
CATALOG NUMBER: GWS-SA2C-830-U-AFL-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	1677.6	1677.6	1677.6	1677.6	1677.6	1677.6	1677.6	1677.6	1677.6	1677.6	1677.6
2.5°	1911.6	1926.9	1922.7	1902.6	1881.0	1865.7	1842.0	1834.6	1780.9	1743.5	1703.9
5°	2142.4	2147.2	2141.9	2117.7	2079.7	2043.4	2004.3	1981.7	1891.6	1810.4	1727.7
7.5°	2197.8	2192.0	2202.0	2214.1	2208.8	2193.0	2151.9	2127.2	2019.6	1887.3	1761.9
10°	2024.9	2011.7	2049.1	2111.9	2177.7	2252.1	2241.5	2243.6	2144.5	1984.3	1806.7
12.5°	1795.6	1790.4	1818.3	1891.0	2020.2	2188.8	2229.4	2297.4	2258.9	2089.2	1857.8
15°	1695.0	1697.6	1714.5	1760.3	1853.1	2062.9	2160.4	2283.2	2361.2	2190.9	1914.2
17.5°	1710.3	1719.7	1719.2	1734.5	1790.9	1959.0	2072.9	2238.4	2440.2	2307.9	1979.1
20°	1814.1	1823.6	1809.3	1797.7	1816.7	1932.7	2027.0	2193.0	2493.4	2426.0	2047.6
22.5°	1969.6	1980.6	1946.9	1913.7	1901.6	1975.9	2044.4	2174.6	2534.0	2534.0	2108.7
25°	2157.7	2173.0	2120.8	2061.8	2028.1	2067.1	2118.7	2216.2	2575.7	2631.0	2150.3
27.5°	2368.0	2368.5	2323.7	2257.3	2194.1	2198.8	2229.9	2310.0	2621.5	2735.4	2183.0
30°	2604.7	2606.2	2546.7	2467.1	2387.5	2365.9	2392.3	2452.9	2716.9	2866.6	2228.3
32.5°	2910.3	2917.7	2832.3	2715.3	2612.0	2571.4	2586.7	2650.5	2868.7	3031.0	2296.3
35°	3323.5	3331.4	3205.5	3051.1	2886.6	2825.5	2840.8	2905.1	3088.5	3264.5	2404.9
37.5°	3731.5	3742.0	3614.5	3470.6	3245.0	3143.8	3159.6	3220.8	3418.4	3587.1	2578.8
40°	4013.4	4027.7	3988.1	3891.2	3681.9	3549.1	3568.1	3590.2	3781.5	3972.9	2804.4
42.5°	4162.1	4182.1	4199.0	4248.5	4138.4	4027.1	3995.0	3996.6	4151.0	4366.0	3038.9
45°	4171.0	4190.5	4277.0	4468.3	4552.1	4528.9	4470.4	4430.9	4433.0	4628.0	3185.5
47.5°	3881.2	3917.5	4079.3	4454.1	4769.2	4961.6	4932.1	4838.3	4551.6	4645.4	3169.6
50°	3194.4	3230.3	3524.3	4063.5	4611.1	5134.5	5256.2	5130.2	4474.1	4428.8	3006.8
52.5°	2320.0	2323.7	2514.5	3144.3	3970.2	4815.6	5102.3	5090.2	4356.0	4166.3	2784.4
55°	1102.0	1088.9	1303.4	1774.6	2745.9	3894.9	4378.2	4515.2	4188.4	3976.5	2612.0
57.5°	321.0	327.3	422.7	692.5	1373.5	2489.2	2998.4	3253.4	3437.9	3269.3	2026.0
60°	143.9	144.4	160.7	210.8	457.5	1157.9	1550.0	1865.7	2055.5	1904.7	1005.1
62.5°	104.4	104.9	111.2	119.1	155.5	392.1	581.3	774.8	789.0	516.5	254.6
65°	87.0	87.0	88.0	88.0	93.3	140.2	176.6	227.7	191.8	142.3	99.6
67.5°	70.1	70.6	71.7	71.7	70.1	70.1	75.9	83.3	89.1	110.2	91.7
70°	54.8	54.3	54.3	54.8	53.2	45.3	49.0	55.9	61.1	85.9	79.6
72.5°	42.7	43.2	42.7	40.6	36.9	26.9	29.0	36.4	39.0	53.8	53.8
75°	32.1	32.7	30.6	23.2	15.3	8.4	11.1	17.9	22.7	26.4	19.5
77.5°	4.2	4.2	3.2	3.2	2.6	3.2	3.2	4.2	6.3	6.3	4.7
80°	0.5	0.5	0.5	1.1	1.6	2.1	2.1	2.1	2.1	2.6	2.6
82.5°	0.5	0.5	0.5	0.5	1.6	1.6	2.1	2.1	2.1	2.1	2.1
85°	0.0	0.0	0.0	0.5	1.1	1.6	1.6	2.1	2.1	2.1	2.1
87.5°	0.0	0.0	0.0	0.5	1.1	1.6	1.6	1.6	2.1	2.1	2.1
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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Scaled Data Report

REPORT NUMBER: P632522
CATALOG NUMBER: GWS-SA2C-830-U-AFL-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1677.6	1677.6	1677.6	1677.6	1677.6	1677.6	1677.6	1677.6	1677.6	1677.6	1677.6
2.5°	1680.2	1649.6	1612.8	1587.5	1551.6	1527.9	1494.2	1471.5	1452.0	1436.7	1445.2
5°	1680.7	1632.3	1556.9	1492.6	1422.5	1358.2	1289.2	1234.9	1185.8	1163.7	1175.8
7.5°	1691.3	1621.7	1506.3	1391.9	1257.5	1124.7	1000.3	899.1	849.1	825.4	832.7
10°	1711.8	1617.0	1449.9	1260.2	1042.0	860.7	740.0	671.5	643.5	628.8	631.4
12.5°	1730.8	1613.8	1376.6	1086.8	822.2	667.8	605.0	595.6	601.4	601.9	601.4
15°	1756.6	1608.0	1286.0	908.6	657.8	577.1	578.7	592.4	606.1	610.3	609.3
17.5°	1784.0	1599.1	1169.0	737.9	558.1	550.8	569.2	587.7	601.4	603.5	604.0
20°	1812.5	1580.6	1035.6	602.4	511.8	530.7	551.3	565.0	575.0	578.2	579.2
22.5°	1825.7	1541.6	881.7	505.4	480.7	506.0	521.2	539.2	542.3	530.7	532.8
25°	1818.8	1475.7	731.5	440.1	449.6	474.9	497.5	488.6	475.4	467.0	469.6
27.5°	1797.2	1388.2	584.5	392.1	416.4	448.5	451.1	441.1	439.0	432.2	434.3
30°	1774.0	1287.6	470.1	353.6	382.6	416.4	408.5	412.1	412.7	404.8	407.4
32.5°	1759.8	1182.2	374.2	327.8	361.0	367.3	383.2	390.5	391.1	372.6	375.8
35°	1764.5	1078.3	316.8	306.7	341.0	339.4	361.6	365.8	335.2	309.9	312.5
37.5°	1803.0	982.4	284.1	290.4	306.2	318.3	335.2	307.3	300.4	288.8	290.4
40°	1874.7	900.7	264.6	280.4	282.5	302.0	276.2	279.9	280.4	273.0	274.6
42.5°	1958.5	832.7	253.0	274.6	269.3	272.5	246.7	254.0	261.9	258.8	259.3
45°	2000.7	766.3	243.0	254.6	256.1	226.1	220.3	228.2	238.2	239.8	240.3
47.5°	1963.2	703.1	232.4	225.6	236.1	206.1	199.2	201.9	213.5	219.8	220.8
50°	*1848.9*	*630.3*	*216.6*	*199.7*	*194.0*	*185.0*	*178.7*	*179.2*	*192.4*	*203.4*	*205.5*
52.5°	1688.1	554.5	190.8	169.2	156.0	162.9	164.4	161.3	173.4	184.5	186.6
55°	1532.1	459.6	151.3	137.6	125.4	140.2	144.4	140.2	143.9	151.3	151.8
57.5°	1078.9	259.8	115.9	113.8	103.8	120.2	127.0	120.7	114.4	119.1	120.2
60°	500.2	136.0	89.1	89.1	86.4	103.3	114.9	105.9	93.8	95.9	97.5
62.5°	156.5	85.9	65.4	61.7	70.6	88.0	97.5	88.5	74.3	74.3	76.4
65°	88.5	73.8	51.7	47.4	57.4	70.6	76.4	66.9	54.3	53.2	53.2
67.5°	82.2	70.1	45.9	38.5	40.6	45.3	47.4	41.1	37.4	36.9	37.4
70°	68.0	58.5	36.9	26.4	24.8	24.2	25.3	23.7	22.7	23.2	24.8
72.5°	42.2	35.3	23.2	15.8	13.7	13.2	13.2	13.2	12.6	12.6	12.6
75°	15.3	13.2	10.5	7.9	6.9	6.3	6.3	6.9	6.3	5.8	5.3
77.5°	4.7	4.2	4.2	4.2	3.7	3.2	2.6	2.6	2.1	1.6	1.6
80°	2.6	2.6	2.6	2.6	2.1	2.1	1.6	1.1	0.5	0.5	0.0
82.5°	2.6	2.6	2.6	2.1	2.1	2.1	1.6	1.1	0.5	0.0	0.0
85°	2.1	2.1	2.1	2.1	2.1	2.1	1.6	1.1	0.5	0.0	0.0
87.5°	2.1	2.1	2.1	2.1	2.1	2.1	1.6	1.1	0.5	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

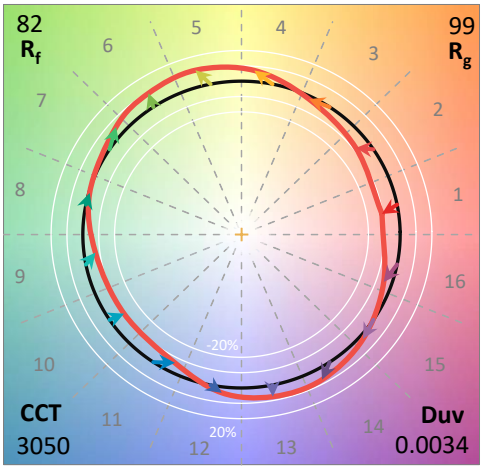
Test Information

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

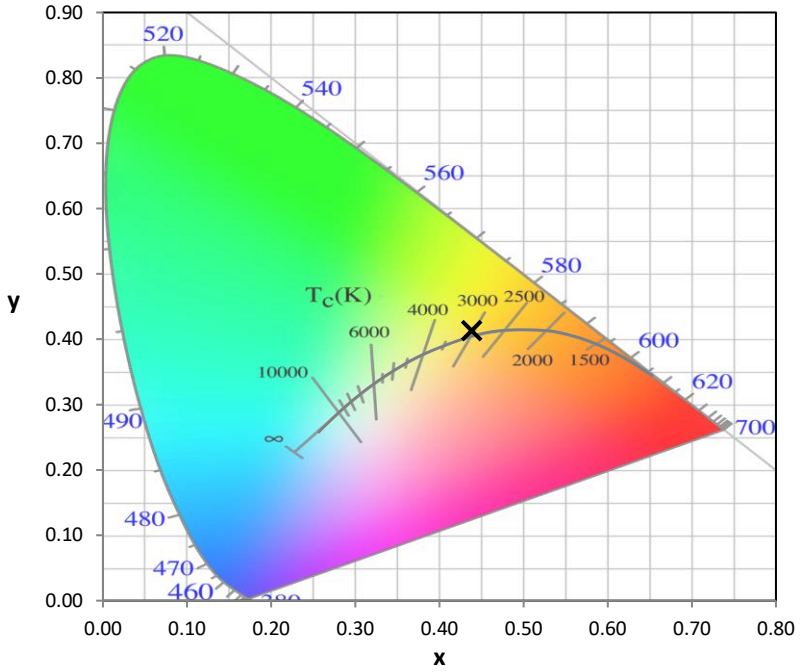
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

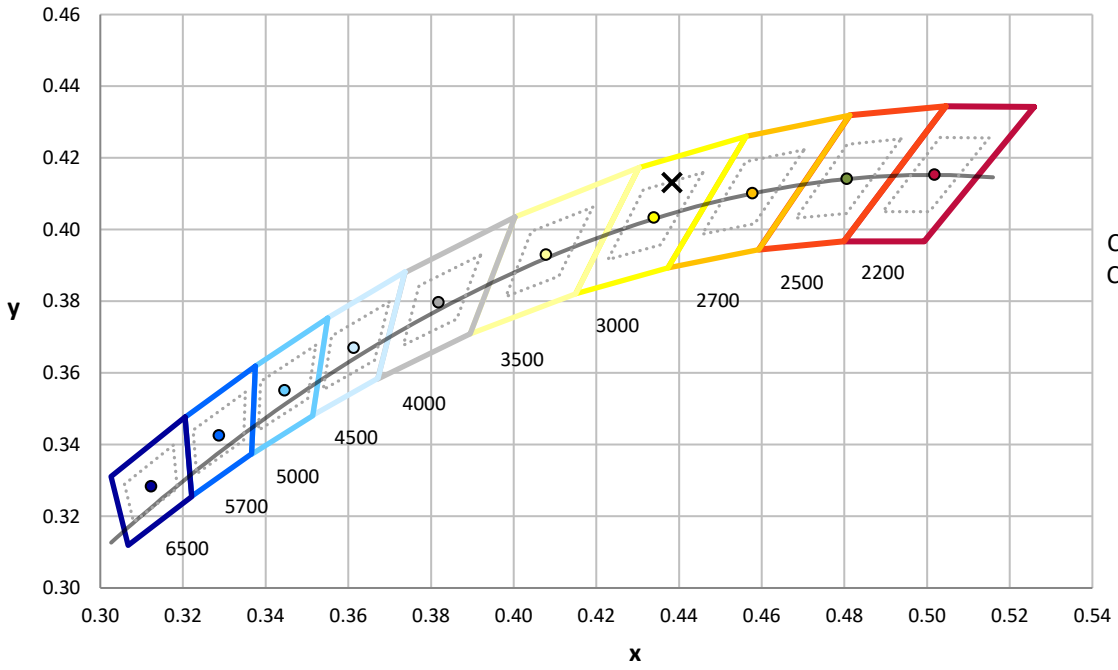
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

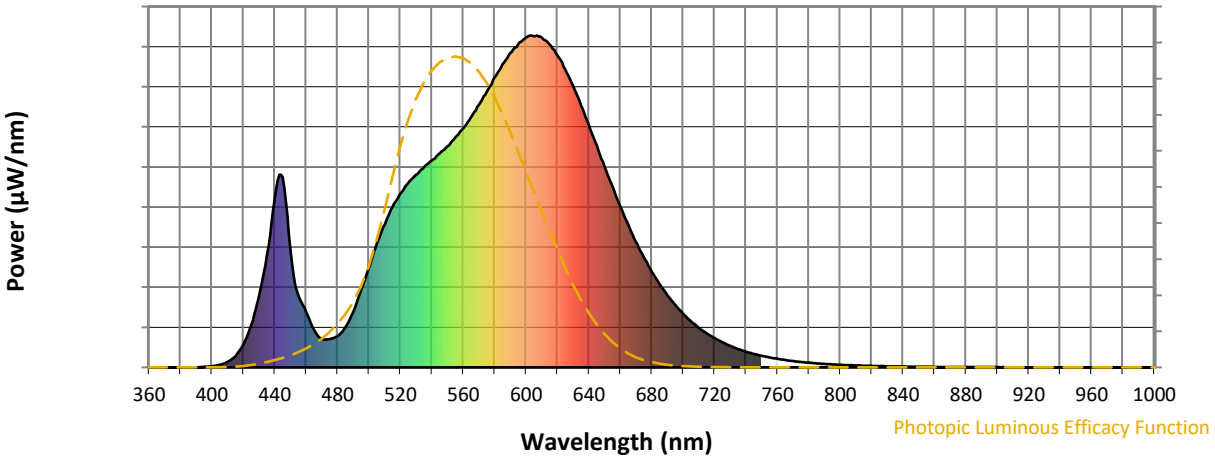


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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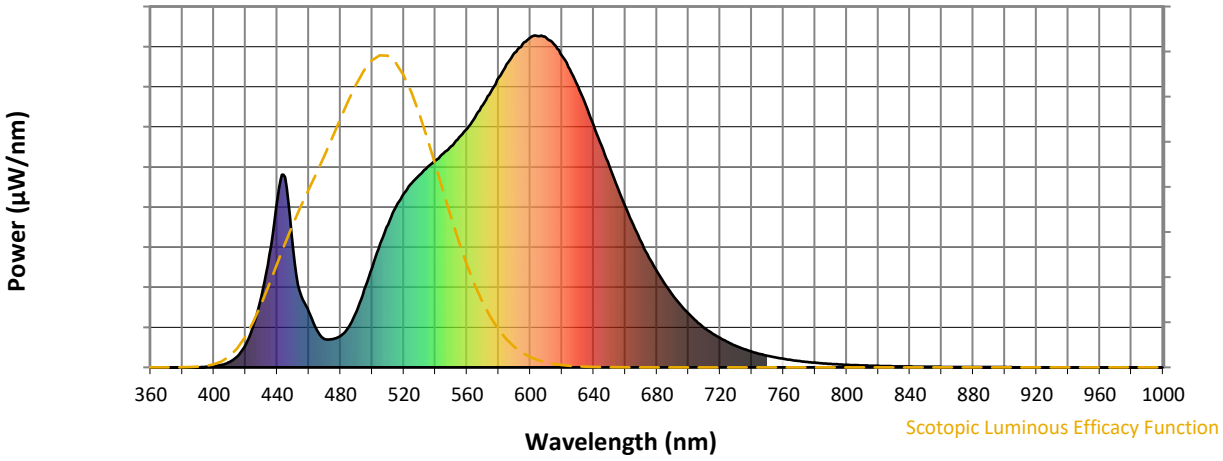
Scotopic Flux vs. Wavelength



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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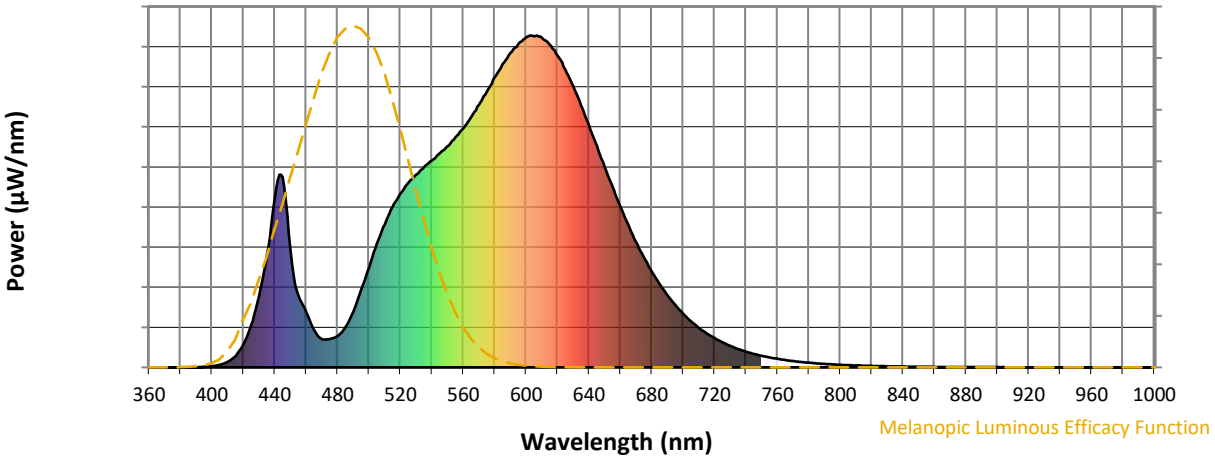
Melanopic Flux vs. Wavelength



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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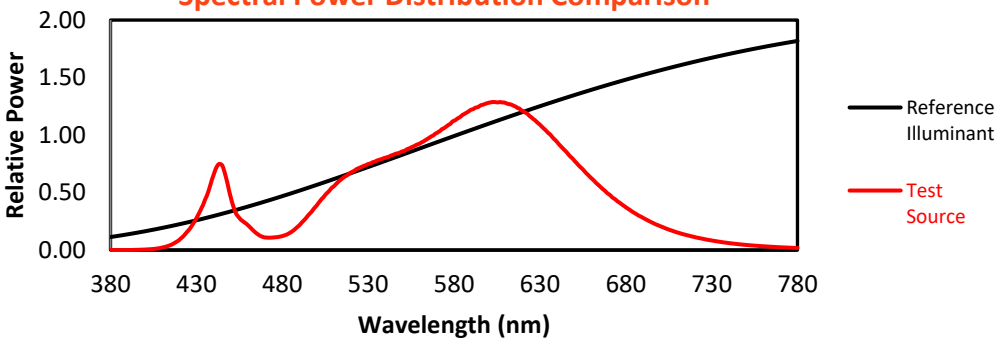
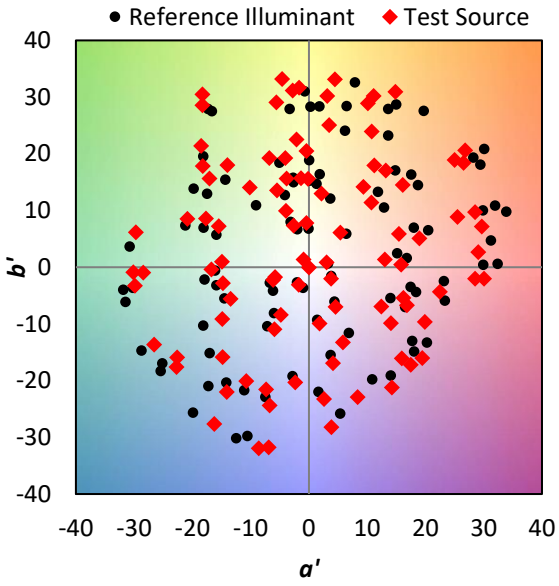
Summary

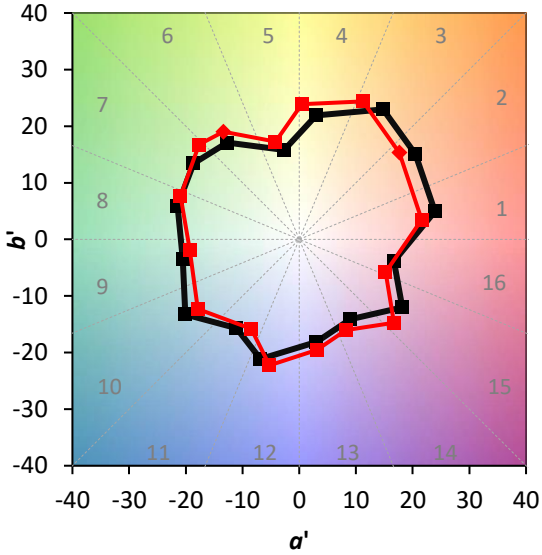
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

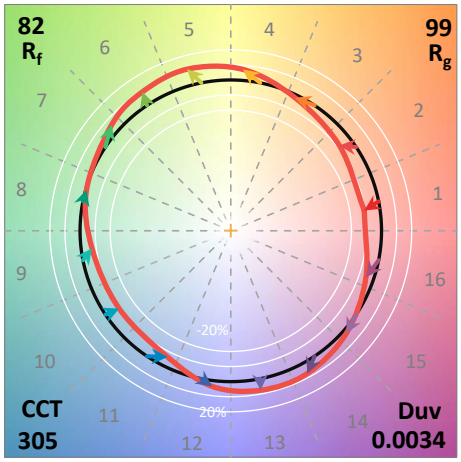
Spectral Power Distribution Comparison

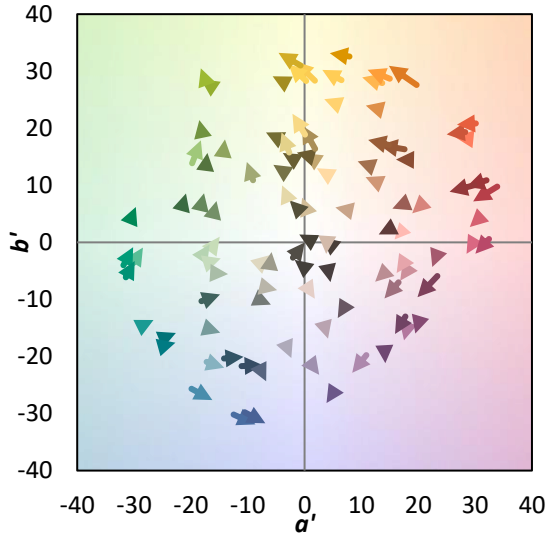


Color Vector Graphics









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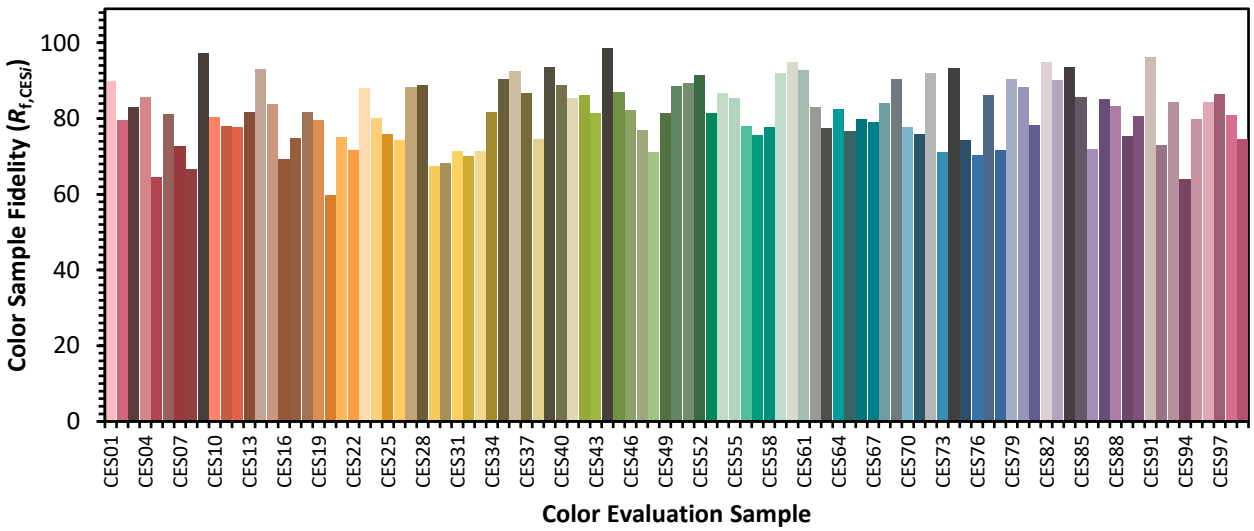
Individual Sample Fidelity Index ($R_{f,i}$)

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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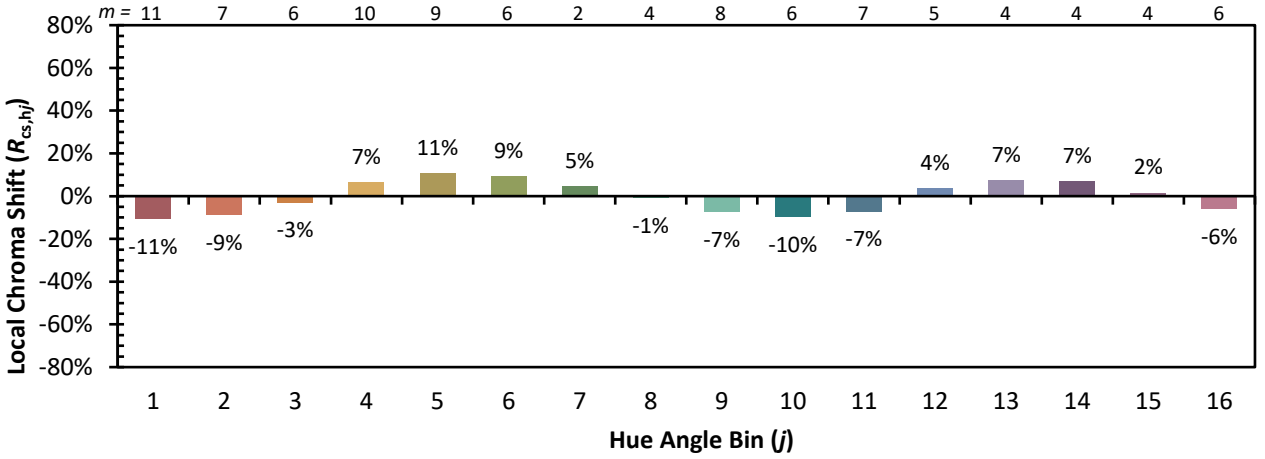
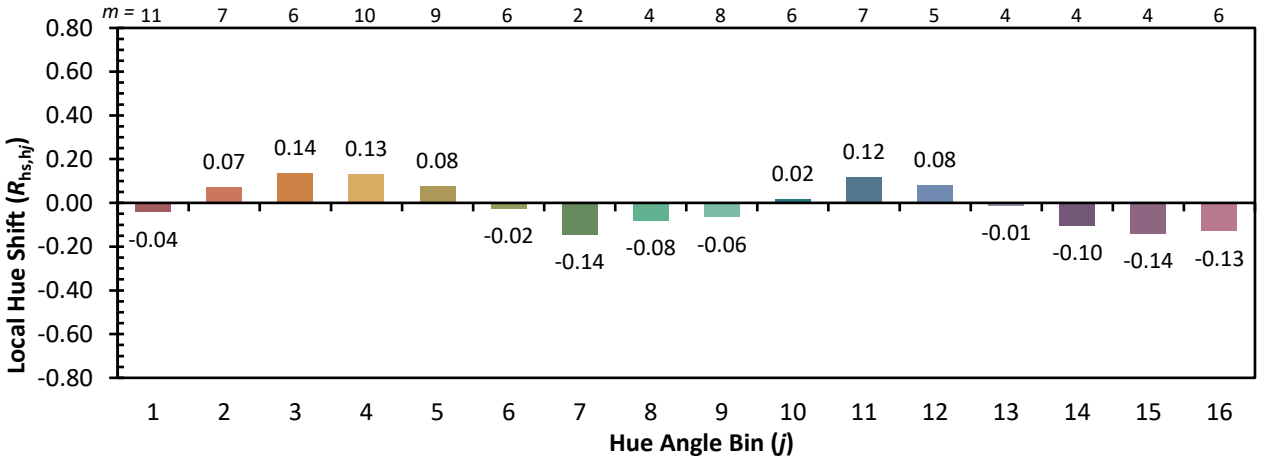
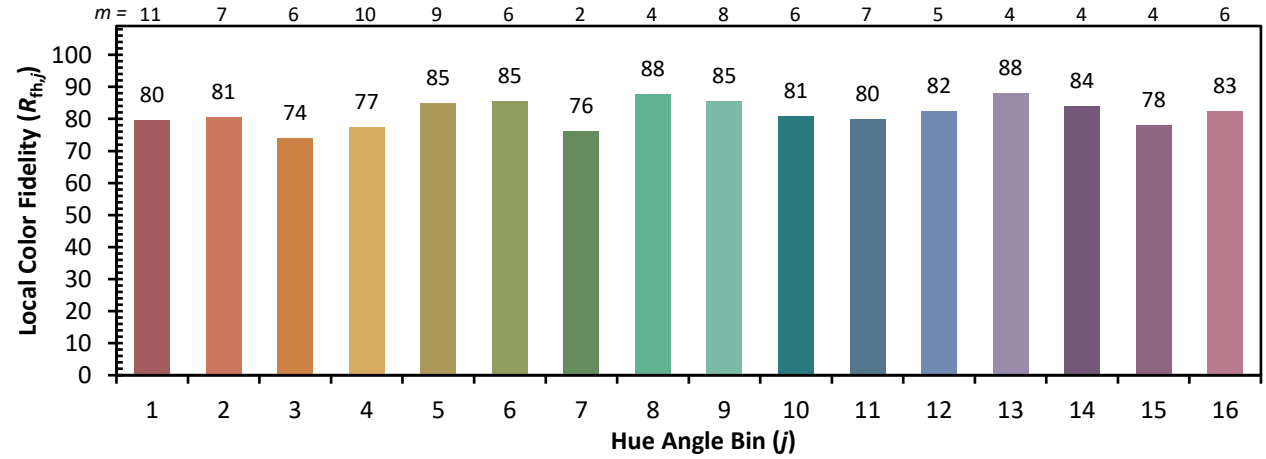
Color Rendition by Hue-Angle Bin







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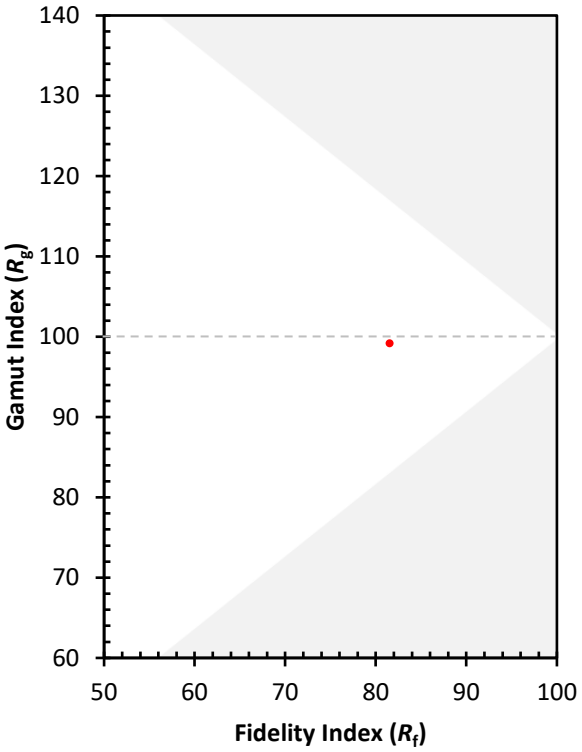
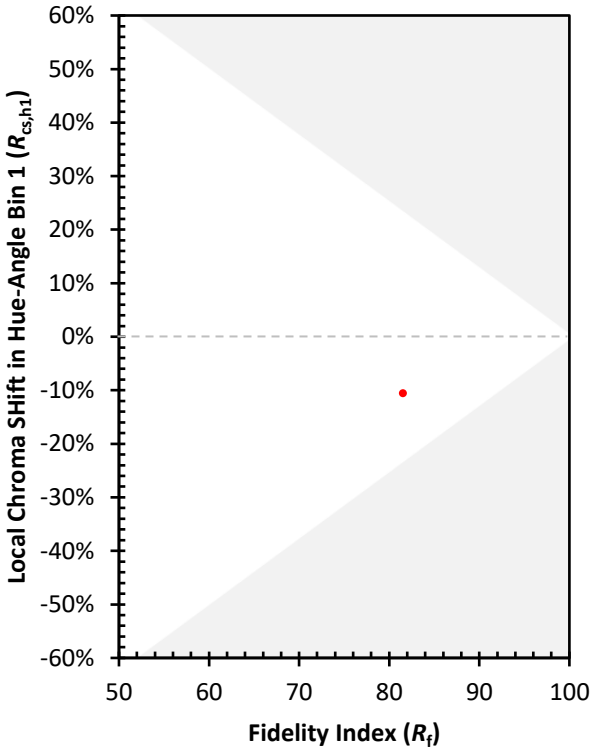
Measure Comparisons





(END OF REPORT)