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: P636986

Luminaire Tested: GWS-SA4B-830-U-SL2-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:	P636986
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-30)
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-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	9114.8 lumens
Efficiency:	N/A
Efficacy:	96.6 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G2

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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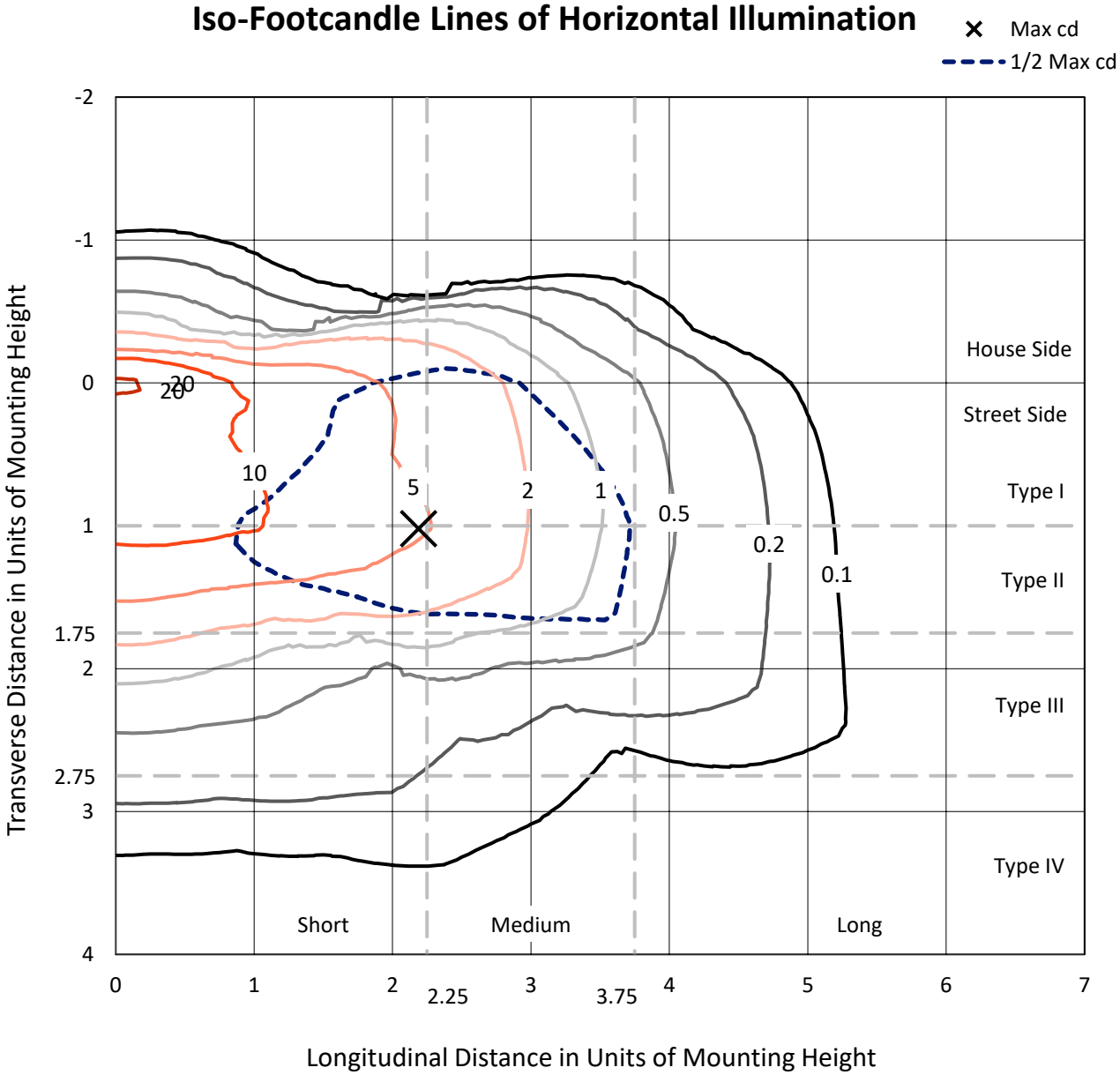
REPORT NUMBER: P636986
CATALOG NUMBER: GWS-SA4B-830-U-SL2-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 22.1 fc
Type II - Short - N/A

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REPORT NUMBER: P636986
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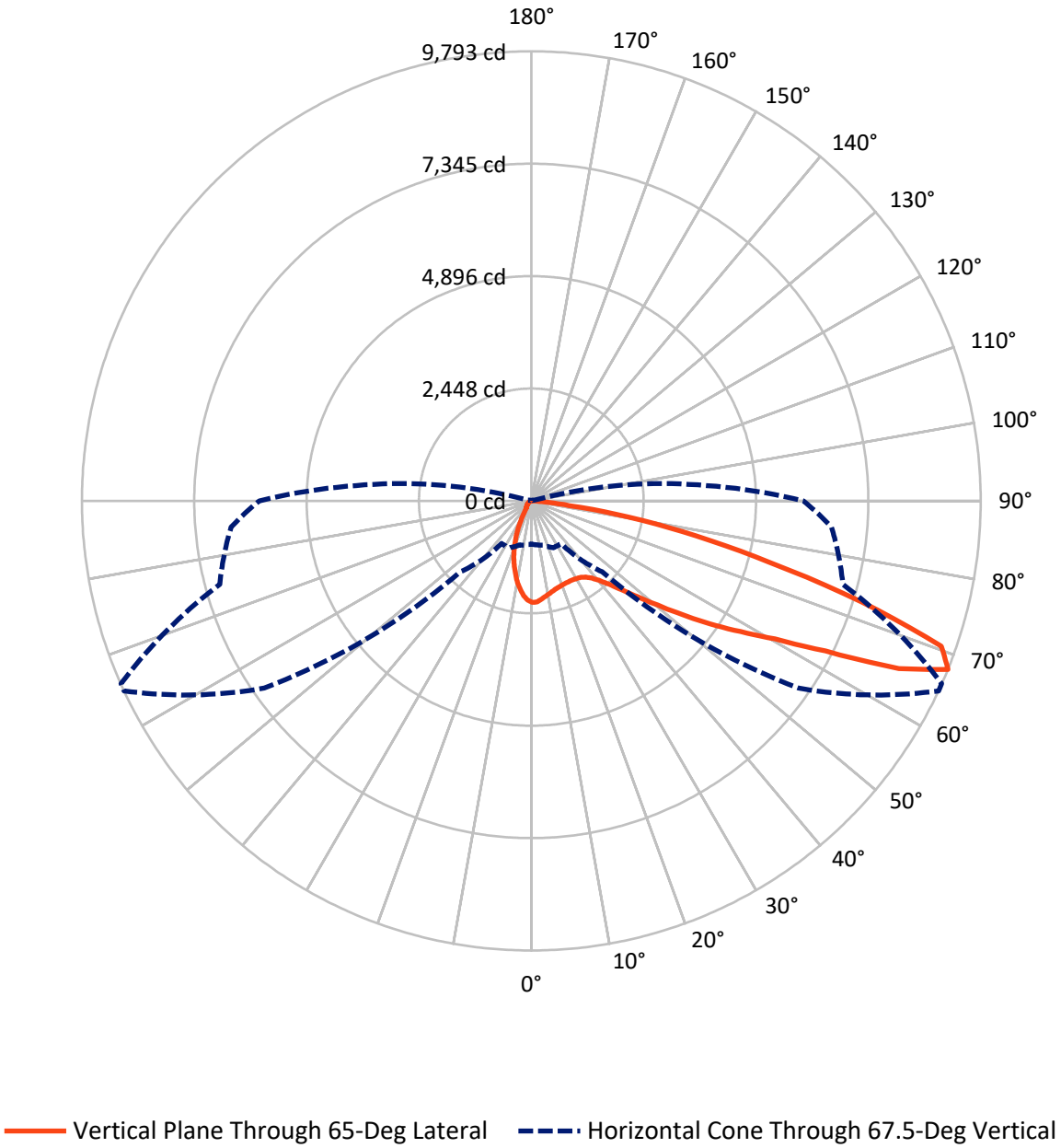
Luminous Intensity Polar Plot



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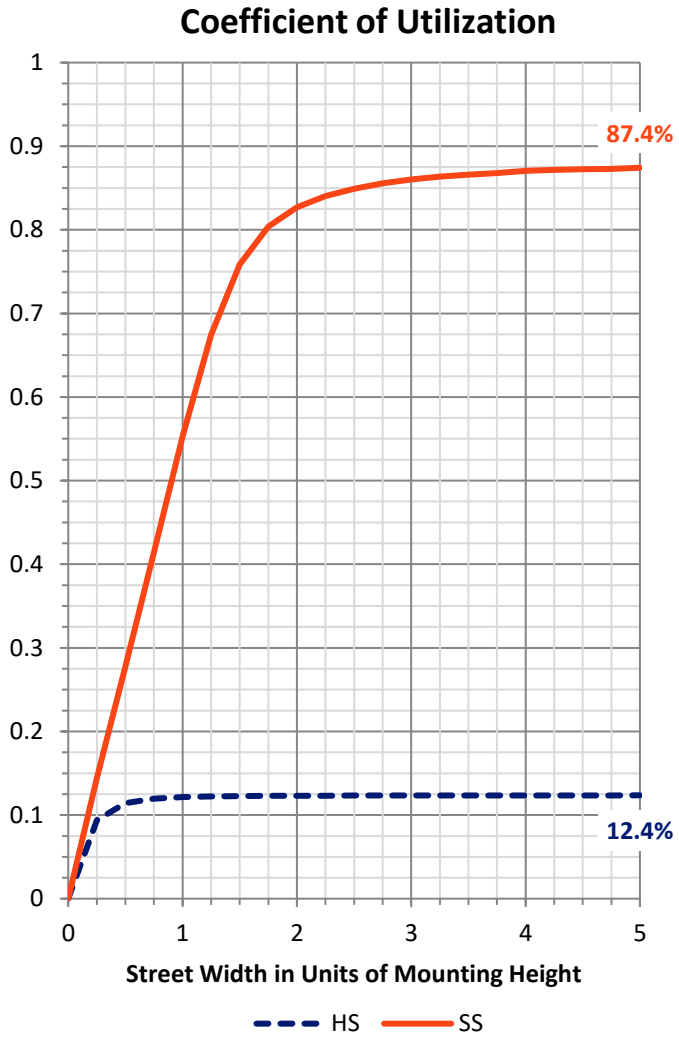
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1138.2	0.0	1138.2
	% Fixture	12.5	0.0	12.5
Street Side	Lumens	7976.6	0.0	7976.6
	% Fixture	87.5	0.0	87.5
Total	Lumens	9114.8	0.0	9114.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.6	2.0
10°-20°	412.7	4.5
20°-30°	589.8	6.5
30°-40°	858.0	9.4
40°-50°	1343.8	14.7
50°-60°	2096.4	23.0
60°-70°	2302.8	25.3
70°-80°	1225.5	13.4
80°-90°	102.0	1.1
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°	9114.8	100.0
0°-180°	9114.8	100.0



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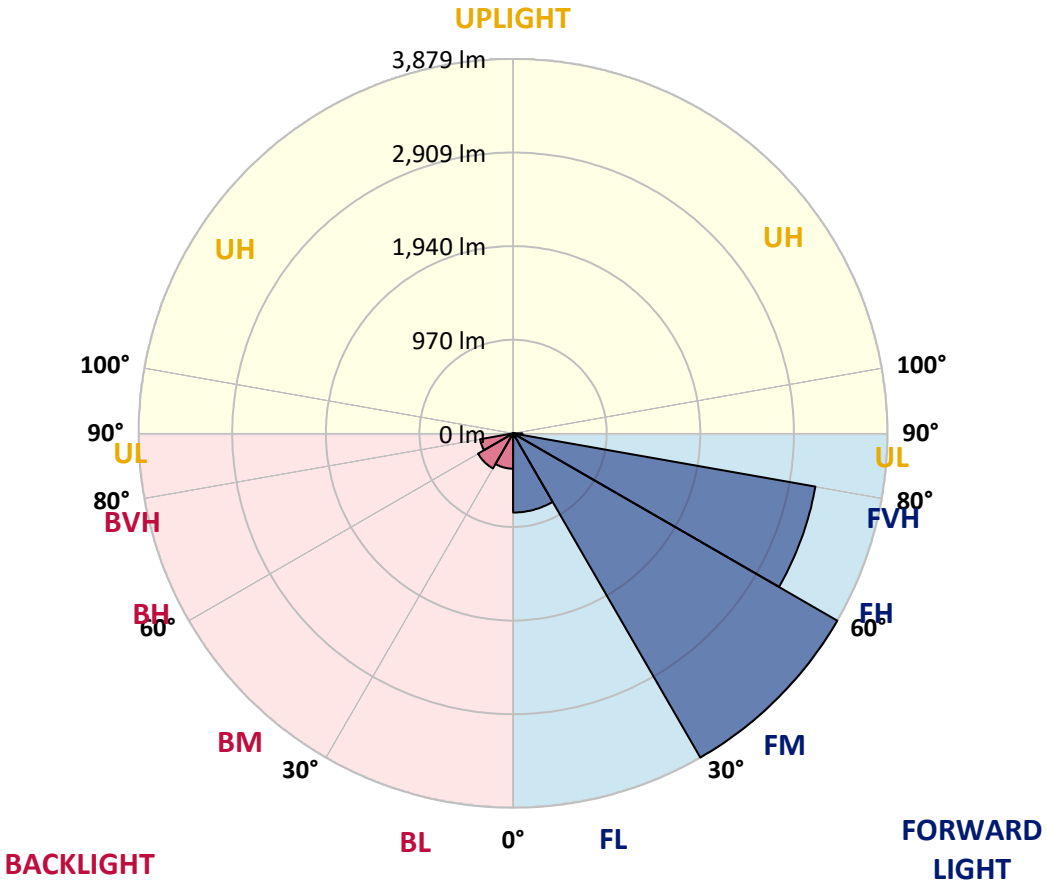
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	820.3	9.0			
FM	(30°-60°)	3879.1	42.6			
FH	(60°-80°)	3180.7	34.9			G2/5000
FVH	(80°-90°)	96.6	1.1			G1/100
BL	(0°-30°)	365.8	4.0	B1/500		
BM	(30°-60°)	419.2	4.6	B1/1000		
BH	(60°-80°)	347.6	3.8	B1/500		G1/500
BVH	(80°-90°)	5.5	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 II Short



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REPORT NUMBER: P636986
CATALOG NUMBER: GWS-SA4B-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2210.6	2210.6	2210.6	2210.6	2210.6	2210.6	2210.6	2210.6	2210.6	2210.6	2210.6
2.5°	2134.0	2140.6	2131.5	2153.8	2157.9	2182.6	2196.6	2206.5	2205.7	2218.0	2218.0
5°	2008.7	2015.3	2010.3	2034.2	2053.2	2091.9	2124.1	2161.2	2162.8	2200.7	2214.7
7.5°	1902.4	1903.2	1903.2	1932.9	1957.6	2005.4	2053.2	2110.1	2116.7	2175.2	2212.3
10°	1815.0	1817.5	1818.3	1852.1	1879.3	1937.0	1998.0	2066.4	2073.8	2152.9	2210.6
12.5°	1754.8	1755.6	1758.9	1794.4	1824.1	1884.2	1946.0	2024.3	2034.2	2127.4	2203.2
15°	1726.0	1724.3	1726.0	1755.6	1785.3	1843.0	1906.5	1990.6	2001.3	2105.9	2204.0
17.5°	1724.3	1721.8	1720.2	1742.5	1761.4	1812.5	1876.8	1968.3	1979.8	2096.1	2213.1
20°	1748.2	1746.6	1738.3	1748.2	1752.3	1794.4	1857.8	1951.0	1962.5	2094.4	2232.9
22.5°	1810.9	1806.7	1794.4	1785.3	1763.1	1787.8	1844.7	1938.6	1951.8	2098.5	2258.4
25°	1904.0	1902.4	1886.7	1864.4	1807.6	1797.7	1845.5	1938.6	1951.0	2103.5	2285.6
27.5°	2044.1	2034.2	2014.5	1975.7	1894.1	1836.4	1862.0	1943.6	1955.9	2110.1	2307.9
30°	2186.7	2185.9	2179.3	2139.7	2018.6	1910.6	1896.6	1956.8	1968.3	2115.8	2328.5
32.5°	2334.3	2336.7	2353.2	2322.7	2190.0	2021.0	1959.2	1984.0	1992.2	2127.4	2346.6
35°	2474.4	2479.3	2523.0	2533.7	2398.6	2188.4	2061.4	2038.4	2039.2	2152.9	2370.5
37.5°	2608.7	2625.2	2695.3	2747.2	2658.2	2391.1	2209.0	2130.7	2124.1	2204.0	2406.8
40°	2761.2	2792.5	2880.7	2968.9	2940.9	2659.0	2410.1	2272.4	2258.4	2298.0	2471.9
42.5°	2930.2	2964.0	3081.0	3204.7	3217.9	2982.9	2661.5	2479.3	2455.4	2456.3	2593.9
45°	3111.5	3156.9	3292.9	3470.9	3550.8	3344.0	2971.4	2758.7	2734.8	2699.4	2790.1
47.5°	3349.7	3389.3	3520.4	3725.6	3878.9	3731.4	3377.8	3118.1	3074.4	3022.5	3095.0
50°	3555.0	3589.6	3702.5	3959.7	4278.7	4230.9	3838.5	3567.3	3525.3	3437.1	3497.3
52.5°	3600.3	3627.5	3731.4	4020.7	4584.5	4861.4	4403.1	4110.5	4080.8	3917.6	3940.7
55°	3396.7	3437.9	3531.1	3852.5	4664.4	5477.9	5135.9	4722.9	4661.1	4400.6	4441.9
57.5°	2882.4	2955.7	3043.1	3461.0	4447.6	5806.0	6159.6	5371.6	5315.6	4865.5	4866.3
60°	2112.5	2171.9	2230.4	2612.9	3933.3	5783.7	7088.5	6100.2	5998.0	5245.5	5231.5
62.5°	1536.4	1566.9	1566.1	1702.1	2701.1	5402.9	7576.5	7198.1	6959.9	5651.9	5571.9
65°	1208.3	1207.5	1243.0	1287.5	1508.4	4170.7	7636.6	8801.3	8544.1	6196.7	6030.2
67.5°	940.5	958.6	994.0	1125.1	1133.3	2182.6	7107.5	9792.9	9787.9	7028.3	6566.8
70°	725.3	750.1	800.3	991.6	1046.8	1221.5	5318.0	9478.8	9558.8	7400.1	6186.8
72.5°	465.7	464.1	538.2	801.2	1005.6	1017.9	2940.9	7529.5	7620.1	6702.8	5002.3
75°	260.5	262.1	304.1	490.4	937.2	957.8	1456.4	5369.1	5440.8	5225.7	3843.5
77.5°	102.2	105.5	142.6	258.0	618.2	855.6	865.5	3661.3	3672.0	3238.5	2357.3
80°	41.2	43.7	72.5	159.9	376.7	576.1	618.2	2157.1	2113.4	1253.7	685.8
82.5°	12.4	13.2	28.8	90.7	197.0	409.6	417.1	827.5	781.4	269.5	174.7
85°	0.8	0.8	6.6	28.0	70.1	103.0	277.8	269.5	239.0	67.6	77.5
87.5°	0.0	0.0	0.8	0.8	1.6	3.3	29.7	49.5	50.3	12.4	34.6
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: P636986
CATALOG NUMBER: GWS-SA4B-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2210.6	2210.6	2210.6	2210.6	2210.6	2210.6	2210.6	2210.6	2210.6	2210.6	2210.6
2.5°	2218.0	2188.4	2185.9	2162.8	2139.7	2110.9	2077.1	2052.4	2035.1	2004.6	1998.8
5°	2214.7	2175.2	2138.1	2072.2	1998.8	1919.7	1850.4	1786.1	1745.8	1718.6	1707.0
7.5°	2208.2	2157.9	2072.2	1947.7	1824.9	1686.4	1578.4	1479.5	1411.9	1372.4	1355.1
10°	2203.2	2135.6	1996.3	1807.6	1617.2	1425.9	1261.9	1115.2	1033.6	969.3	958.6
12.5°	2193.3	2103.5	1899.1	1643.5	1397.9	1144.1	934.7	755.0	630.5	574.5	554.7
15°	2183.4	2069.7	1801.8	1470.5	1158.9	845.7	591.8	418.7	333.0	306.6	305.0
17.5°	2181.8	2039.2	1696.3	1306.4	908.3	553.9	337.1	271.2	253.0	246.4	246.4
20°	2186.7	2013.6	1592.4	1117.7	661.9	337.1	251.4	234.9	224.2	218.4	218.4
22.5°	2191.7	1987.3	1492.7	927.3	439.3	246.4	221.7	207.7	195.3	188.8	185.5
25°	2195.0	1958.4	1382.3	736.1	286.8	214.3	194.5	176.4	161.6	153.3	153.3
27.5°	2194.1	1923.8	1271.0	548.9	222.5	190.4	166.5	147.5	132.7	123.6	124.5
30°	2187.5	1885.9	1155.6	383.3	194.5	166.5	142.6	122.8	108.0	100.6	99.7
32.5°	2182.6	1845.5	1022.1	269.5	174.7	145.9	121.2	102.2	89.8	84.1	83.2
35°	2176.8	1805.9	895.1	205.2	157.4	126.1	102.2	86.5	76.7	71.7	71.7
37.5°	2178.5	1764.7	757.5	176.4	140.1	109.6	87.4	74.2	65.9	61.0	60.2
40°	2204.0	1740.0	622.3	159.9	124.5	94.8	75.8	64.3	56.0	51.1	50.3
42.5°	2267.5	1740.8	492.9	147.5	110.4	80.8	65.9	55.2	47.8	42.0	41.2
45°	2394.4	1775.4	378.3	134.4	95.6	70.1	56.9	47.0	39.6	34.6	33.8
47.5°	2602.1	1878.5	286.8	122.8	83.2	61.0	48.6	39.6	33.0	28.8	28.0
50°	2932.7	2064.7	225.8	108.8	70.1	52.8	41.2	33.0	27.2	23.1	22.3
52.5°	3330.0	2344.2	193.7	96.4	60.2	46.2	35.4	27.2	22.3	19.0	18.1
55°	3786.6	2678.0	178.9	84.1	51.1	39.6	28.8	22.3	18.1	15.7	14.0
57.5°	4205.3	2978.8	178.0	71.7	43.7	33.8	23.9	19.0	15.7	12.4	11.5
60°	4613.3	3230.2	167.3	59.3	37.9	28.0	20.6	15.7	13.2	10.7	9.9
62.5°	4983.4	3434.6	140.1	47.8	32.1	23.1	17.3	14.0	11.5	9.1	9.1
65°	5448.3	3695.1	107.2	38.7	26.4	19.0	14.8	12.4	10.7	8.2	8.2
67.5°	*5928.8*	*3832.7*	*76.7*	*32.1*	*21.4*	*16.5*	*13.2*	*11.5*	*9.1*	*7.4*	*7.4*
70°	5370.0	3238.5	55.2	26.4	18.1	14.0	11.5	10.7	9.1	7.4	6.6
72.5°	4193.8	2335.1	41.2	20.6	15.7	13.2	10.7	9.9	8.2	6.6	6.6
75°	3109.9	1361.7	31.3	16.5	12.4	10.7	10.7	9.9	8.2	6.6	5.8
77.5°	1690.5	474.8	23.9	13.2	9.9	8.2	9.1	9.1	7.4	5.8	4.9
80°	447.6	130.2	16.5	9.9	8.2	6.6	6.6	8.2	6.6	4.9	4.9
82.5°	130.2	37.9	11.5	8.2	6.6	5.8	5.8	5.8	4.9	4.1	3.3
85°	63.5	14.0	8.2	6.6	5.8	4.9	4.1	4.1	3.3	2.5	2.5
87.5°	28.0	5.8	6.6	5.8	5.8	4.1	3.3	2.5	2.5	1.6	0.8
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

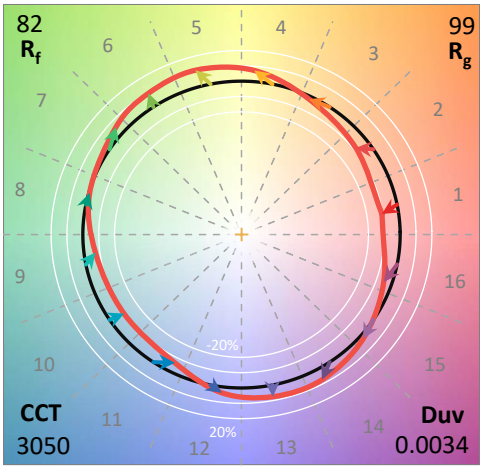
Test Information

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

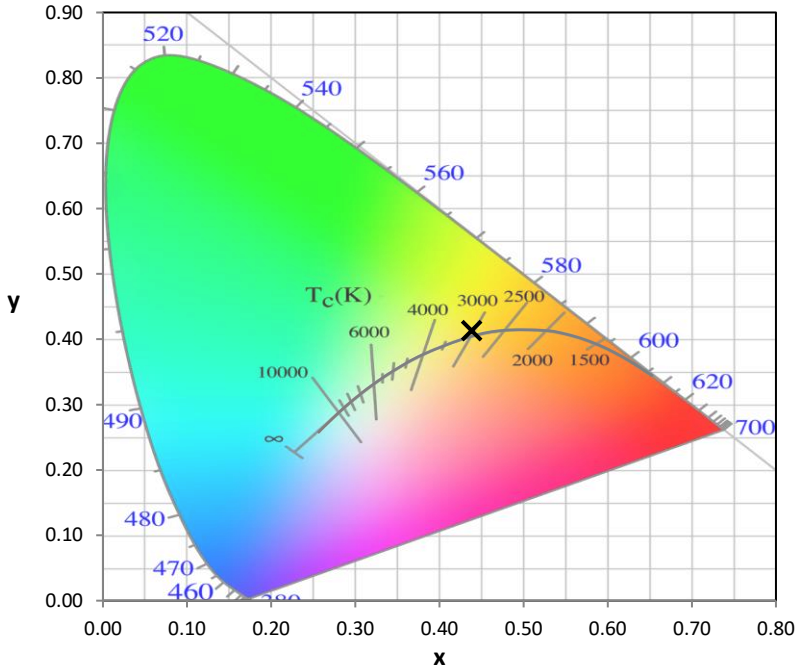
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

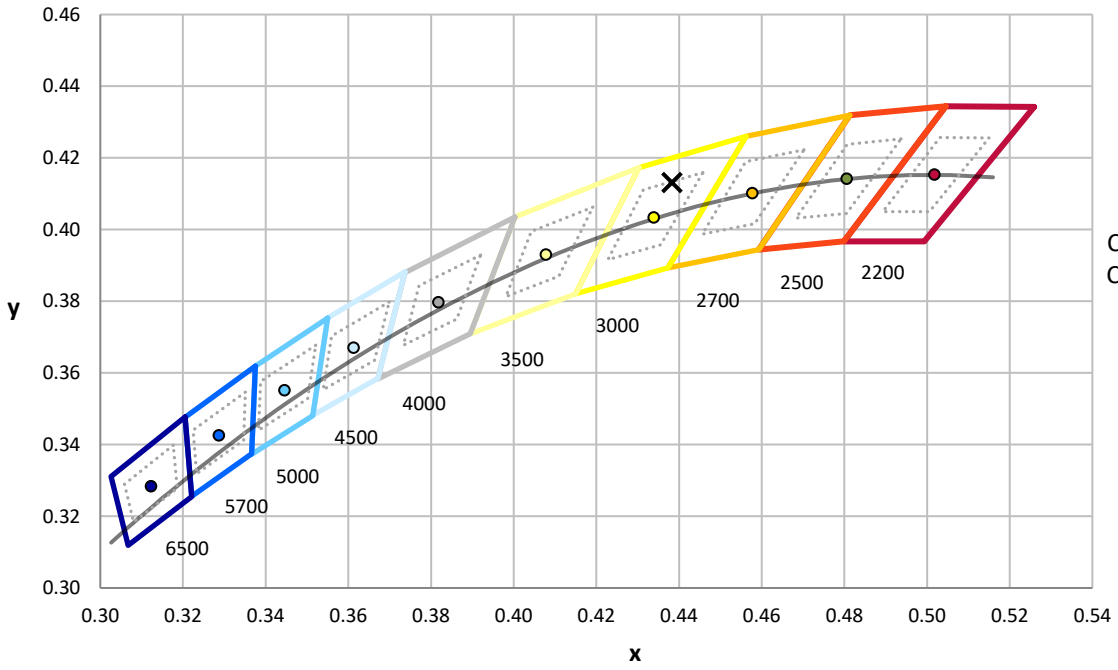
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

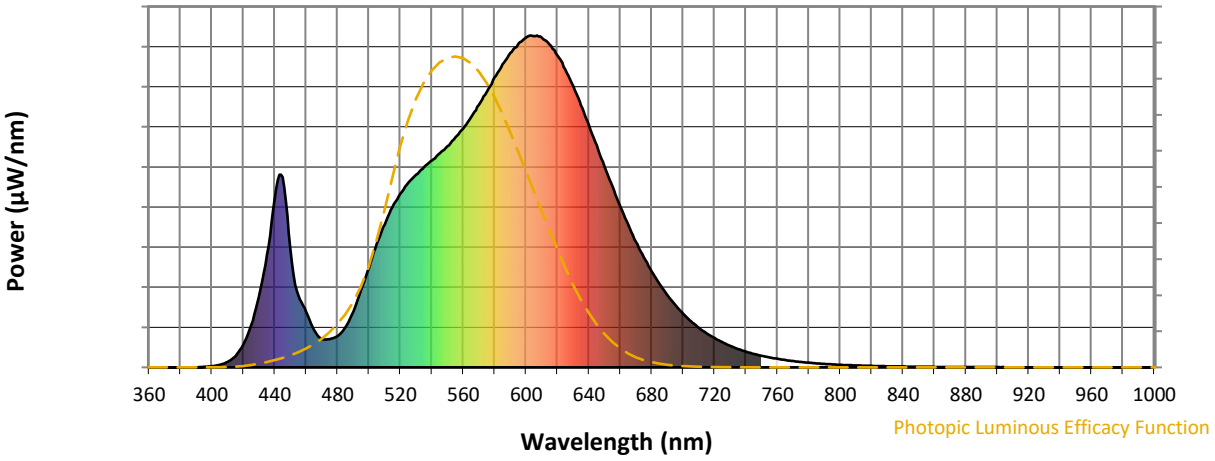


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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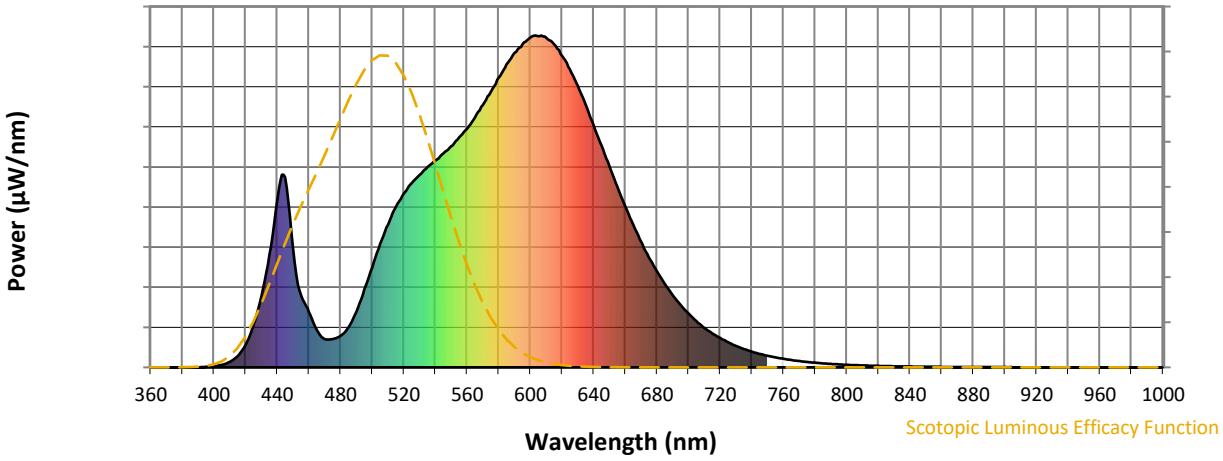
Scotopic Flux vs. Wavelength



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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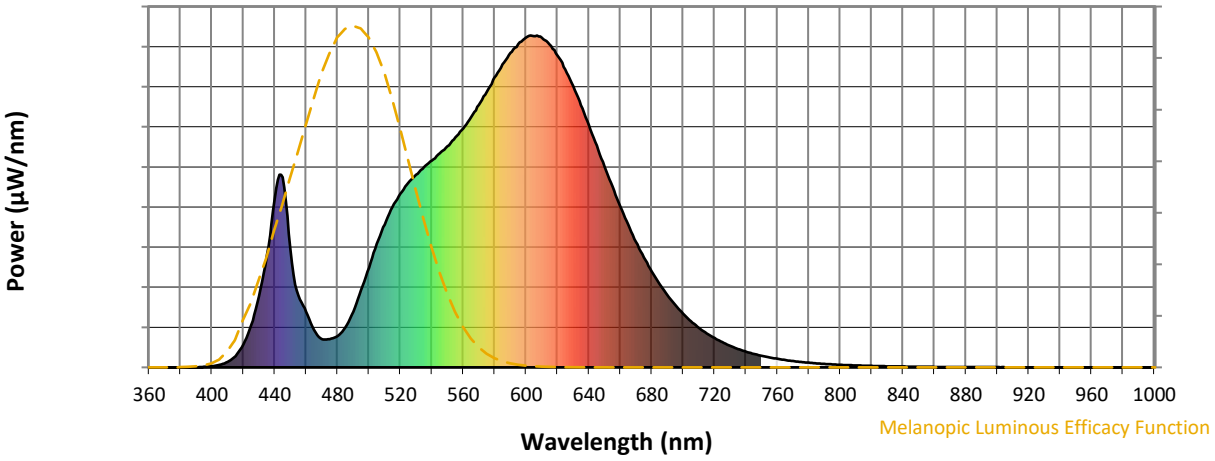
Melanopic Flux vs. Wavelength



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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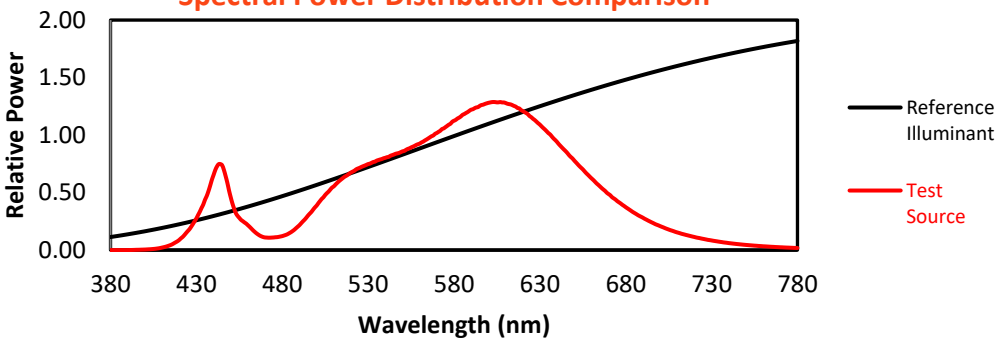
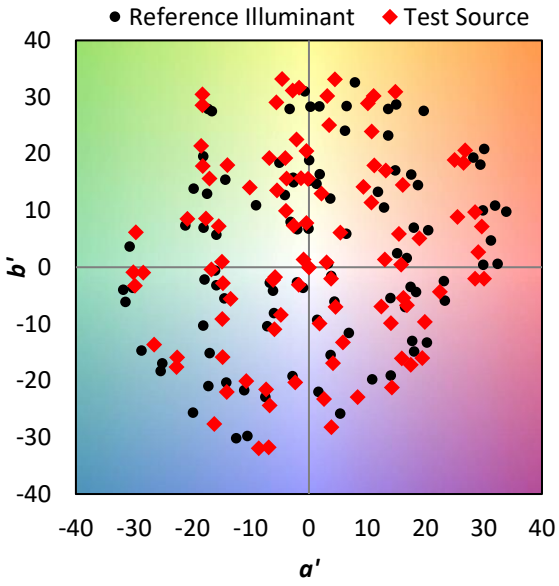
Summary

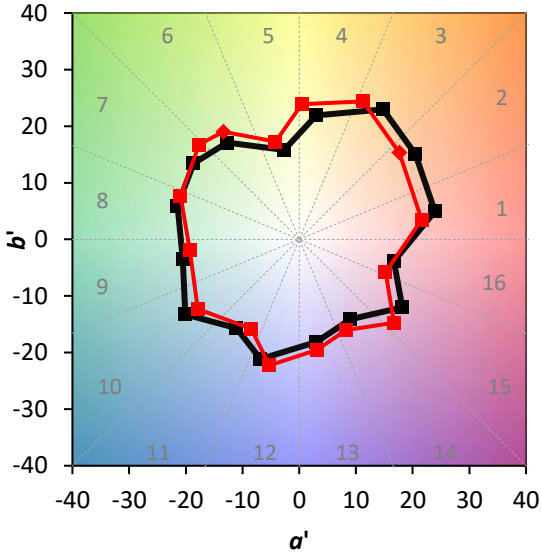
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

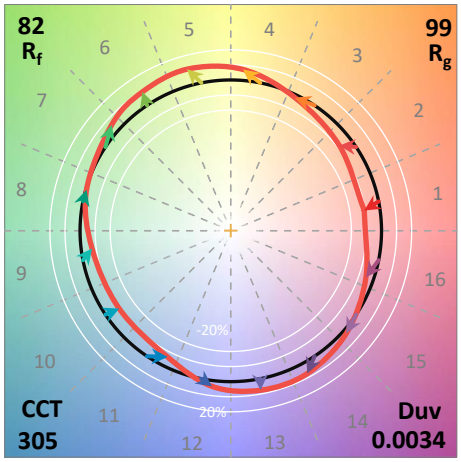
Spectral Power Distribution Comparison

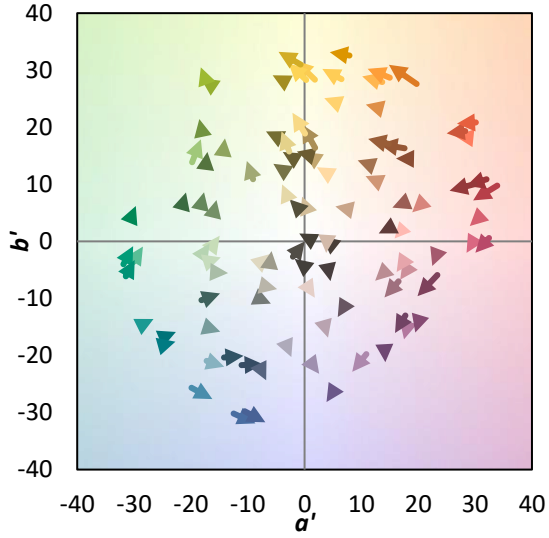


Color Vector Graphics









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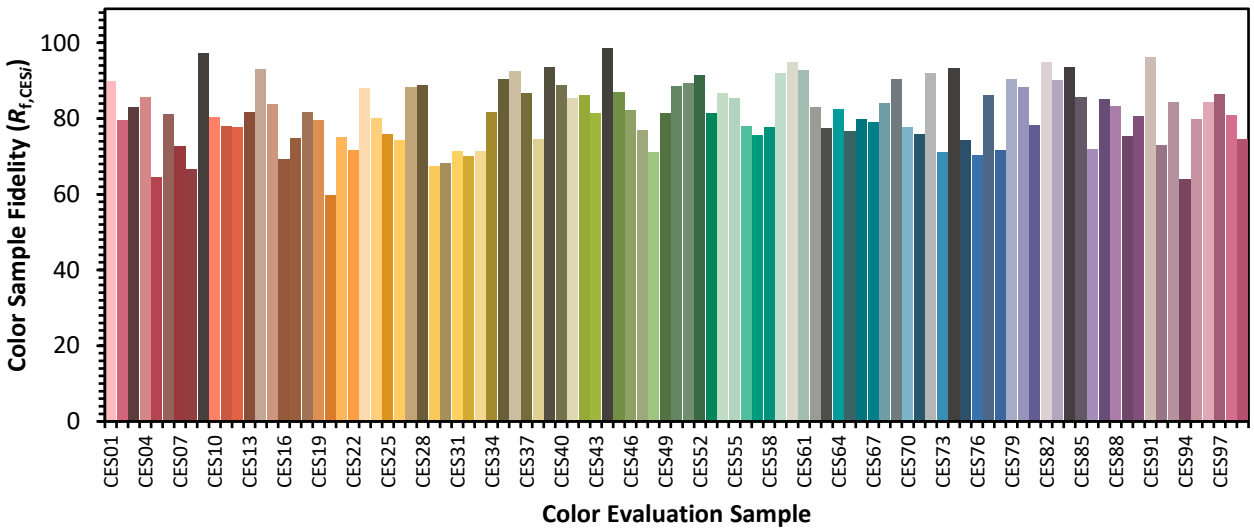
Individual Sample Fidelity Index ($R_{f,i}$)

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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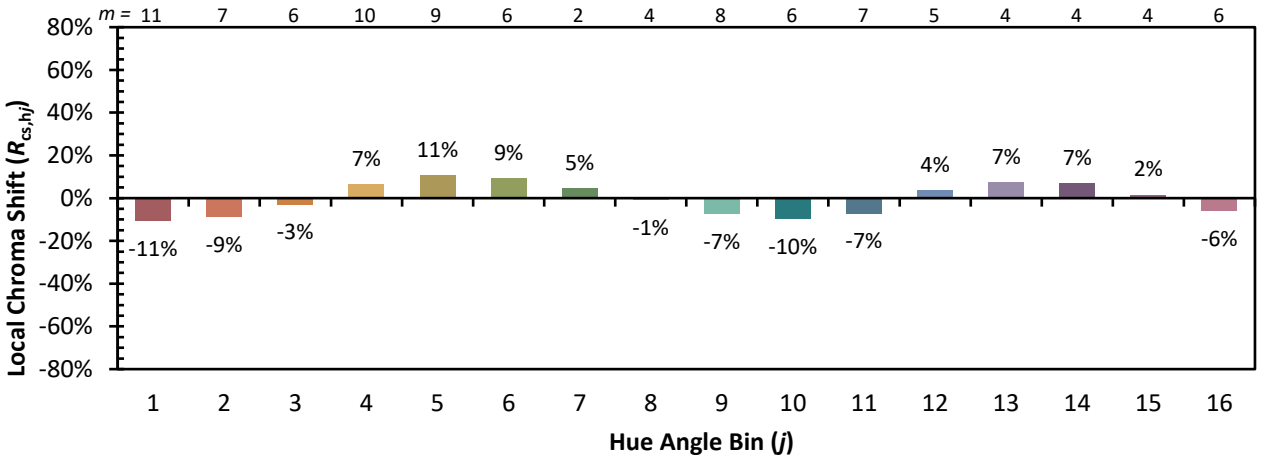
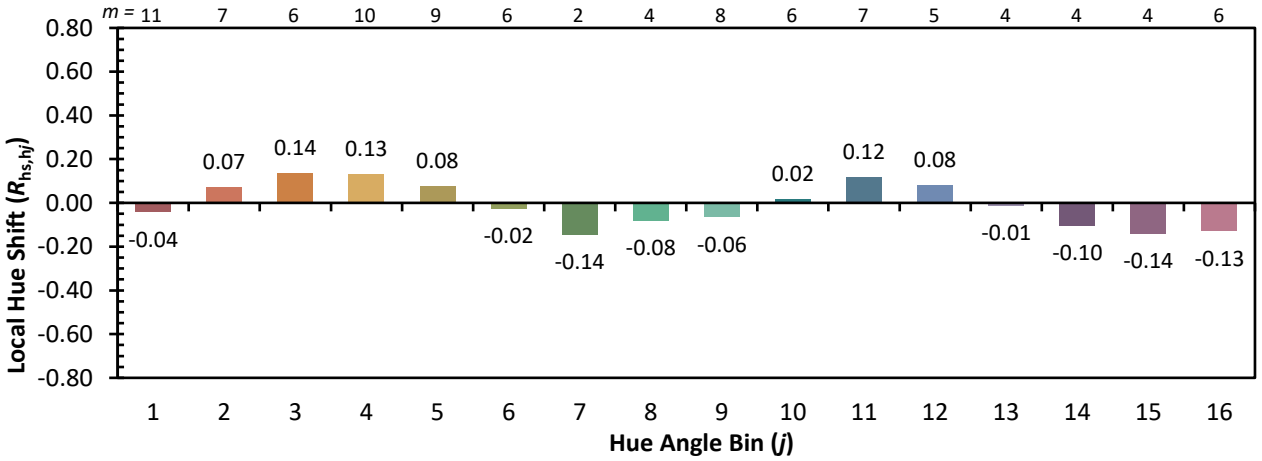
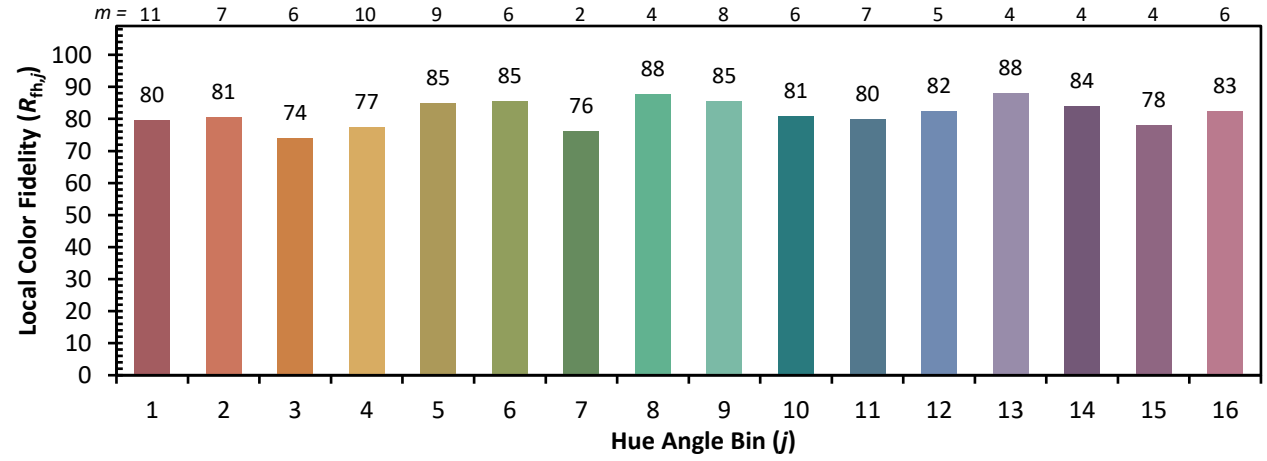
Color Rendition by Hue-Angle Bin







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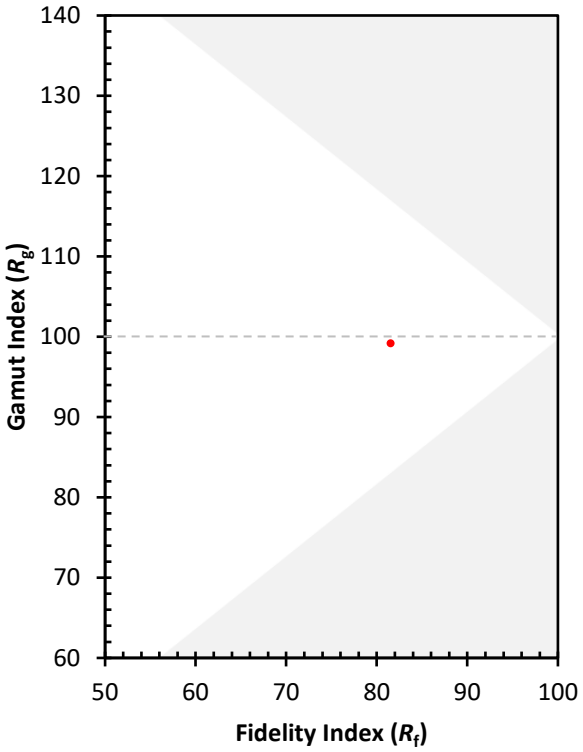
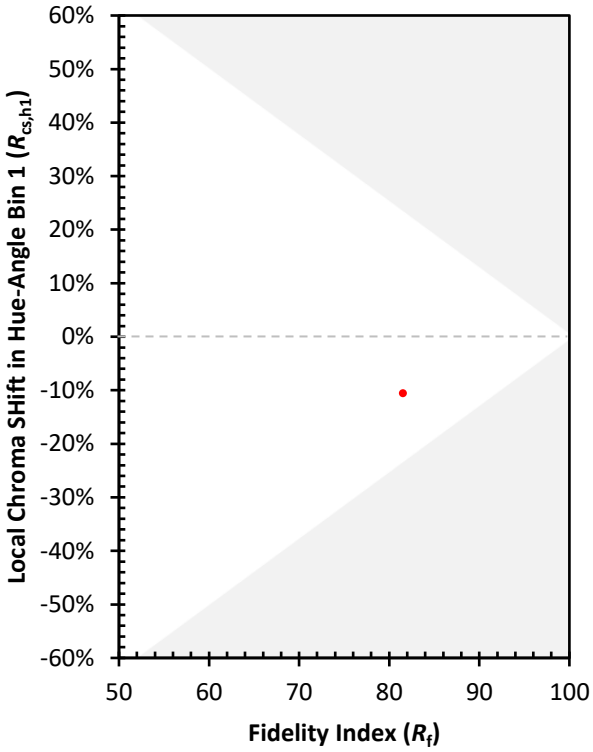
Measure Comparisons





(END OF REPORT)