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: P637004

Luminaire Tested: GWS-SA4B-830-U-T2-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:	P637004
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-21)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4B-830-U-T2-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS W/ FACTORY INSLLED GLARE SHIELD, WH
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	9586.3 lumens
Efficiency:	N/A
Efficacy:	101.5 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - 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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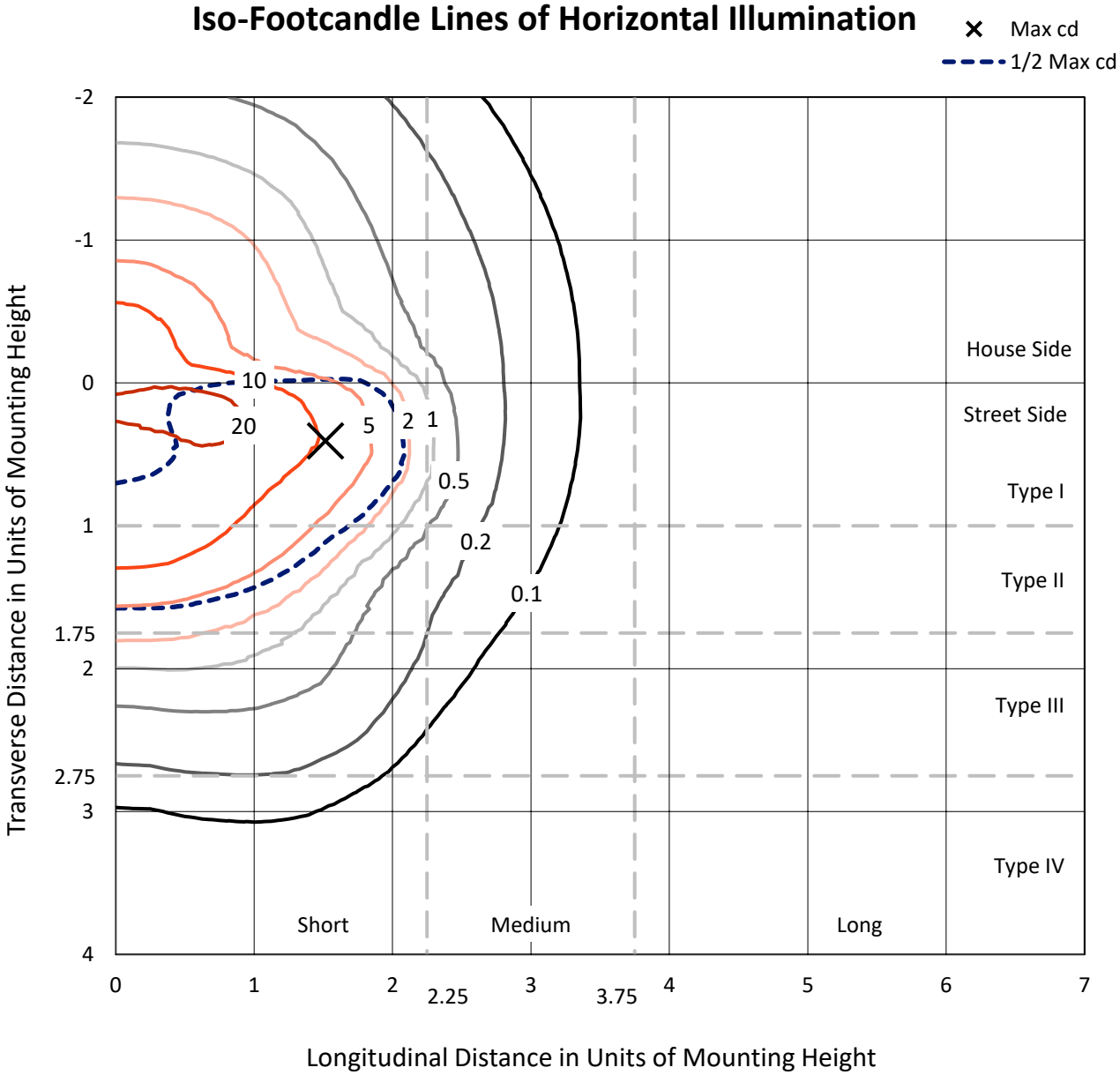
REPORT NUMBER: P637004
CATALOG NUMBER: GWS-SA4B-830-U-T2-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 25.4 fc
Type II - Short - N/A

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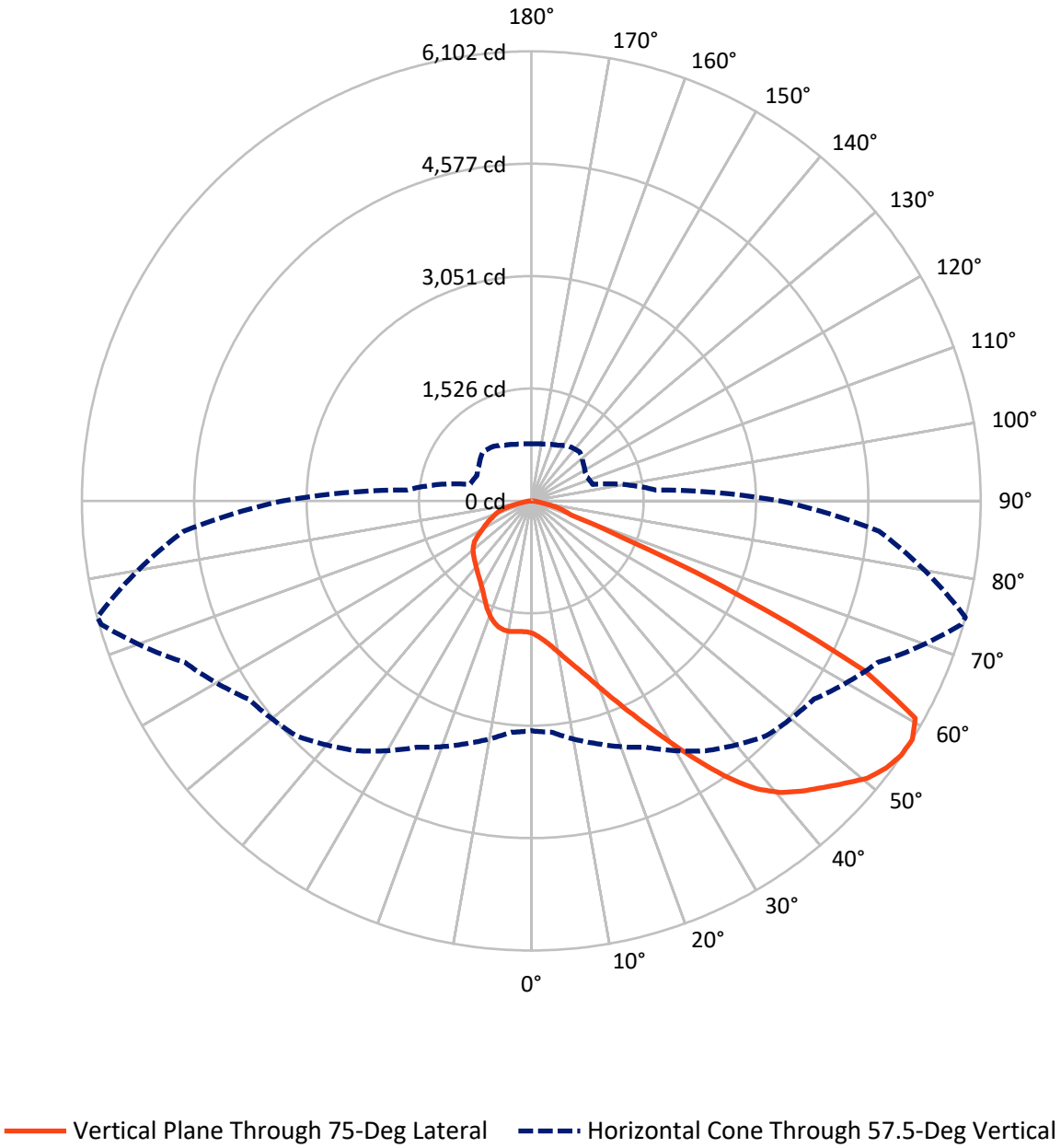
Luminous Intensity Polar Plot



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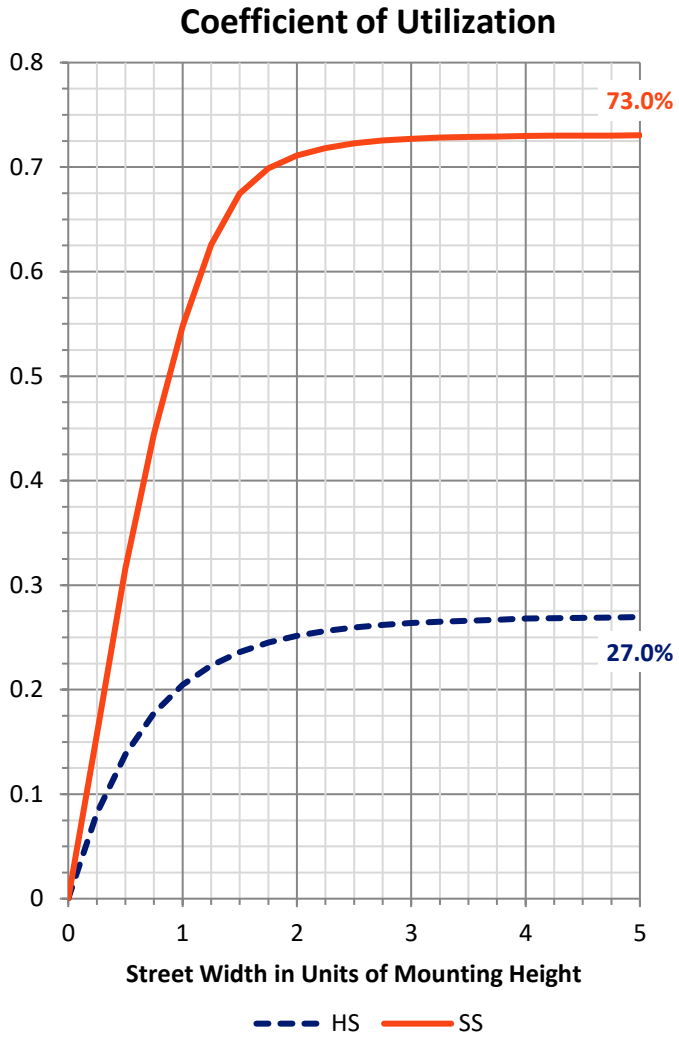
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2593.3	0.0	2593.3
	% Fixture	27.1	0.0	27.1
Street Side	Lumens	6993.0	0.0	6993.0
	% Fixture	72.9	0.0	72.9
Total	Lumens	9586.3	0.0	9586.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.7	1.9
10°-20°	572.0	6.0
20°-30°	1014.4	10.6
30°-40°	1552.9	16.2
40°-50°	2162.2	22.6
50°-60°	2477.5	25.8
60°-70°	1273.0	13.3
70°-80°	320.5	3.3
80°-90°	34.3	0.4
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°	9586.3	100.0
0°-180°	9586.3	100.0



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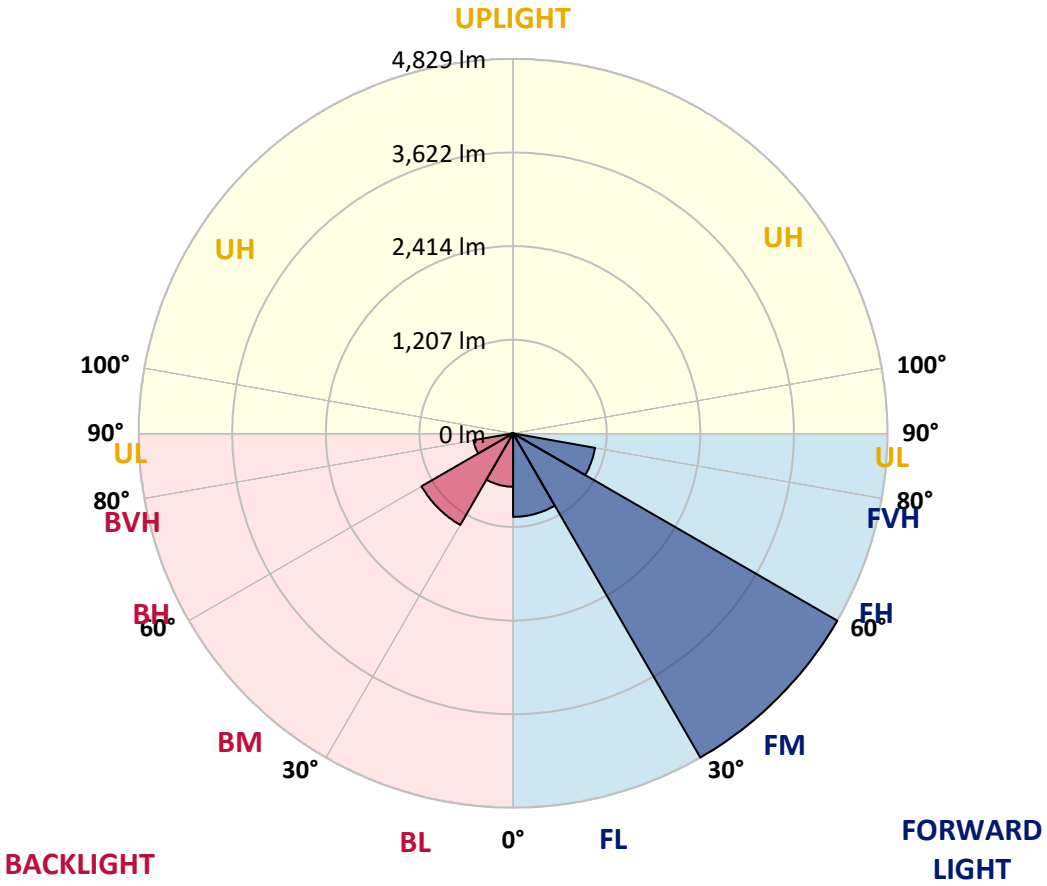
REPORT NUMBER: P637004
CATALOG NUMBER: GWS-SA4B-830-U-T2-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1077.1	11.2			
FM	(30°-60°)	4828.7	50.4			
FH	(60°-80°)	1074.5	11.2			G1/1800
FVH	(80°-90°)	12.7	0.1			G1/100
BL	(0°-30°)	688.9	7.2	B2/1000		
BM	(30°-60°)	1363.8	14.2	B2/2500		
BH	(60°-80°)	518.9	5.4	B2/1000		G2/1000
BVH	(80°-90°)	21.6	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
Type II Short



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Scaled Data Report

REPORT NUMBER: P637004
CATALOG NUMBER: GWS-SA4B-830-U-T2-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1795.3	1795.3	1795.3	1795.3	1795.3	1795.3	1795.3	1795.3	1795.3	*1795.3*	1795.3
2.5°	1928.8	1933.8	1928.8	1937.1	1920.6	1913.2	1895.0	1867.8	1846.4	*1843.1*	1819.2
5°	2078.8	2089.6	2083.0	2079.7	2057.4	2040.9	2013.7	1959.3	1914.8	*1908.2*	1861.2
7.5°	2175.3	2182.7	2182.7	2185.2	2176.9	2158.0	2129.1	2064.8	2002.2	*1992.3*	1921.4
10°	2207.4	2213.2	2223.9	2244.5	2261.0	2266.8	2247.8	2186.0	2109.3	*2099.4*	2000.5
12.5°	2214.8	2221.4	2237.9	2275.8	2321.2	2362.4	2365.7	2320.4	2234.6	*2223.9*	2092.0
15°	2228.9	2235.4	2257.7	2304.7	2371.5	2450.6	2499.2	2467.9	2373.1	*2361.6*	2195.9
17.5°	2227.2	2234.6	2267.6	2330.2	2420.1	2534.7	2628.6	2641.8	2543.7	*2523.9*	2313.8
20°	2223.1	2229.7	2265.1	2341.8	2453.1	2610.5	2780.3	2848.7	2743.2	*2725.1*	2451.4
22.5°	2256.1	2263.5	2290.7	2354.1	2470.4	2669.0	2920.4	3085.3	2979.8	*2954.2*	2609.7
25°	2330.2	2341.0	2357.4	2401.1	2501.7	2721.0	3063.9	3353.2	3245.2	*3214.7*	2781.9
27.5°	2444.8	2458.0	2481.1	2501.7	2571.8	2786.9	3206.5	3653.2	3545.2	*3513.1*	2964.1
30°	2584.9	2602.3	2631.9	2645.9	2693.8	2884.2	3361.4	3962.3	3899.7	*3855.2*	3169.4
32.5°	2778.7	2802.6	2830.6	2834.7	2863.6	3031.7	3514.7	4269.0	4268.1	*4236.8*	3402.6
35°	3030.9	3056.4	3062.2	3068.0	3082.0	3234.5	3700.2	4548.4	4656.4	*4620.1*	3656.5
37.5°	3306.2	3343.3	3352.4	3326.8	3346.6	3478.5	3908.7	4772.6	4994.3	*4955.6*	3902.1
40°	3600.5	3615.3	3640.0	3599.6	3624.4	3757.9	4113.2	4916.0	5246.5	*5205.3*	4095.9
42.5°	3811.5	3838.7	3875.8	3860.9	3874.9	3996.9	4256.6	4985.3	5426.2	*5385.0*	4235.2
45°	4040.6	4048.9	4072.8	4069.5	4077.7	4191.5	4359.6	5015.7	5587.0	*5549.9*	4353.9
47.5°	4240.1	4252.5	4268.1	4250.0	4231.9	4306.0	4443.7	5042.1	5772.4	*5727.9*	4478.3
50°	4432.2	4442.9	4461.8	4409.1	4341.5	4360.4	4484.9	5078.4	5946.4	*5915.0*	4576.4
52.5°	4467.6	4479.1	4568.2	4578.9	4492.3	4425.6	4557.4	5158.4	6048.6	*6028.8*	4611.9
55°	4021.7	4042.3	4219.5	4423.1	4636.6	4615.1	4673.7	5200.4	6089.0	*6093.9*	4675.3
57.5°	*3121.6*	*3151.2*	*3410.1*	*3689.5*	*4138.7*	*4510.5*	*4688.5*	*5189.7*	*6075.0*	*6102.2*	*4740.4*
60°	2047.5	2064.8	2371.5	2684.7	3150.4	3664.8	4196.4	4996.8	5950.5	*5989.2*	4724.0
62.5°	1236.4	1256.2	1502.7	1740.1	2014.5	2358.3	2846.2	4015.9	4987.7	*5074.3*	3783.4
65°	863.0	889.4	1105.4	1300.7	1395.5	1324.6	1441.7	2242.9	3107.5	*3143.8*	2312.1
67.5°	625.6	643.8	821.0	1053.4	1158.1	935.6	713.0	993.3	1353.5	*1366.7*	953.7
70°	409.7	430.3	591.0	802.0	945.5	758.3	533.3	537.4	569.6	*576.2*	553.9
72.5°	225.0	237.4	365.2	532.5	558.9	453.4	416.3	446.8	469.0	*469.0*	474.8
75°	116.2	126.9	149.2	175.6	211.8	248.1	300.0	345.4	369.3	*370.9*	368.5
77.5°	59.3	63.5	80.0	86.5	94.8	110.5	143.4	183.8	205.2	*213.5*	211.8
80°	28.0	29.7	33.8	39.6	48.6	61.8	77.5	92.3	105.5	*107.2*	116.2
82.5°	14.8	16.5	18.1	21.4	26.4	33.0	45.3	54.4	62.6	*64.3*	71.7
85°	5.8	6.6	7.4	8.2	11.5	14.0	19.0	25.6	31.3	*31.3*	37.1
87.5°	0.0	0.0	0.0	0.0	0.8	1.6	3.3	4.1	5.8	*5.8*	9.9
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

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CATALOG NUMBER: GWS-SA4B-830-U-T2-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1795.3	1795.3	1795.3	1795.3	1795.3	1795.3	1795.3	1795.3	1795.3	1795.3	1795.3
2.5°	1813.4	1789.5	1778.8	1761.5	1747.5	1731.8	1719.5	1710.4	1704.6	1701.3	1698.0
5°	1843.1	1806.8	1778.0	1743.4	1719.5	1696.4	1677.4	1664.2	1657.6	1652.7	1649.4
7.5°	1889.3	1840.6	1786.2	1732.6	1690.6	1653.5	1629.6	1615.6	1606.5	1603.2	1600.8
10°	1952.7	1885.1	1795.3	1710.4	1647.7	1607.3	1590.9	1584.3	1585.1	1583.4	1582.6
12.5°	2024.4	1932.1	1792.8	1670.8	1601.6	1577.7	1578.5	1589.2	1601.6	1604.9	1605.7
15°	2101.9	1978.3	1768.9	1619.7	1565.3	1567.8	1589.2	1614.8	1637.8	1646.9	1648.6
17.5°	2186.0	2017.0	1725.2	1563.7	1535.6	1562.0	1601.6	1643.6	1677.4	1692.2	1696.4
20°	2280.0	2050.0	1663.4	1508.4	1507.6	1551.3	1609.0	1664.2	1707.1	1726.9	1730.2
22.5°	2379.7	2070.6	1587.6	1457.3	1478.8	1537.3	1603.2	1660.9	1706.3	1726.0	1730.2
25°	2480.3	2077.2	1504.3	1410.3	1449.1	1515.0	1575.2	1621.4	1664.2	1681.5	1684.8
27.5°	2574.2	2058.2	1425.2	1370.0	1421.9	1482.1	1522.4	1547.2	1576.8	1590.0	1592.5
30°	2669.8	2020.3	1358.4	1337.8	1391.4	1436.7	1454.9	1456.5	1468.0	1468.0	1469.7
32.5°	2766.3	1964.3	1299.9	1306.5	1353.5	1383.1	1385.6	1366.7	1352.6	1329.6	1328.7
35°	2877.6	1907.4	1252.1	1271.0	1309.0	1327.1	1319.7	1283.4	1249.6	1211.7	1210.0
37.5°	2980.6	1848.9	1211.7	1234.8	1258.7	1271.9	1254.6	1210.9	1182.8	1144.1	1138.3
40°	3065.5	1796.1	1173.0	1196.9	1208.4	1219.9	1191.9	1156.5	1160.6	1139.2	1138.3
42.5°	3115.0	1745.0	1136.7	1154.8	1162.2	1170.5	1145.8	1119.4	1141.6	1125.1	1126.0
45°	3151.2	1700.5	1103.7	1110.3	1128.4	1140.8	1117.7	1088.1	1093.0	1029.5	1014.7
47.5°	3192.4	1675.8	1072.4	1065.8	1097.9	1119.4	1083.9	1041.1	1011.4	948.7	943.0
50°	3236.1	1666.7	1039.4	1021.3	1060.0	1080.6	1039.4	985.8	947.1	913.3	910.0
52.5°	3251.0	1665.9	998.2	967.7	1006.4	1035.3	1000.7	946.3	900.1	867.1	865.5
55°	3309.5	1689.8	945.5	894.3	930.6	990.0	964.4	886.1	849.0	834.2	832.5
57.5°	*3377.9*	*1693.9*	*862.2*	*814.4*	*864.7*	*934.7*	*902.6*	*835.0*	*794.6*	*776.5*	*774.8*
60°	3349.9	1592.5	773.2	753.4	808.6	882.8	853.1	794.6	747.6	730.3	728.7
62.5°	2552.8	1124.3	708.1	700.6	748.4	807.8	802.0	741.0	696.5	684.2	682.5
65°	1535.6	789.7	645.4	644.6	678.4	735.3	742.7	693.2	646.2	628.9	628.9
67.5°	759.2	604.2	574.5	570.4	591.8	632.2	663.5	623.2	583.6	567.1	564.6
70°	536.6	532.5	522.6	511.1	515.2	531.7	544.8	511.1	469.0	452.5	449.2
72.5°	464.1	464.9	458.3	449.2	445.9	434.4	422.9	398.1	372.6	355.3	356.9
75°	360.2	361.9	366.0	362.7	353.6	341.3	328.9	297.6	277.0	260.5	257.2
77.5°	210.2	218.4	231.6	228.3	230.0	212.7	207.7	177.2	158.3	146.7	144.2
80°	118.7	123.6	129.4	133.5	128.6	121.2	110.5	94.0	88.2	80.0	78.3
82.5°	71.7	76.7	79.1	82.4	80.8	70.9	62.6	51.9	47.0	42.9	42.0
85°	36.3	39.6	42.0	43.7	38.7	32.1	28.8	23.1	19.8	17.3	17.3
87.5°	9.1	9.9	11.5	9.9	9.1	4.1	3.3	0.8	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

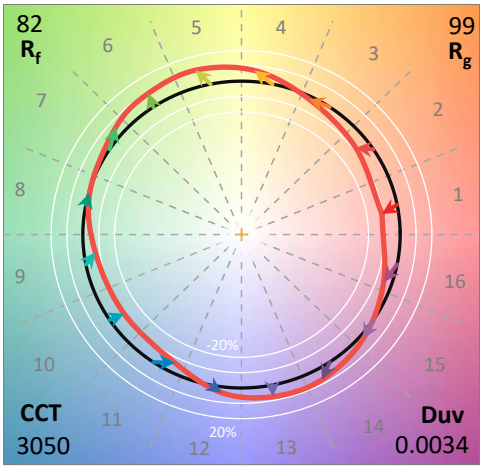
Test Information

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

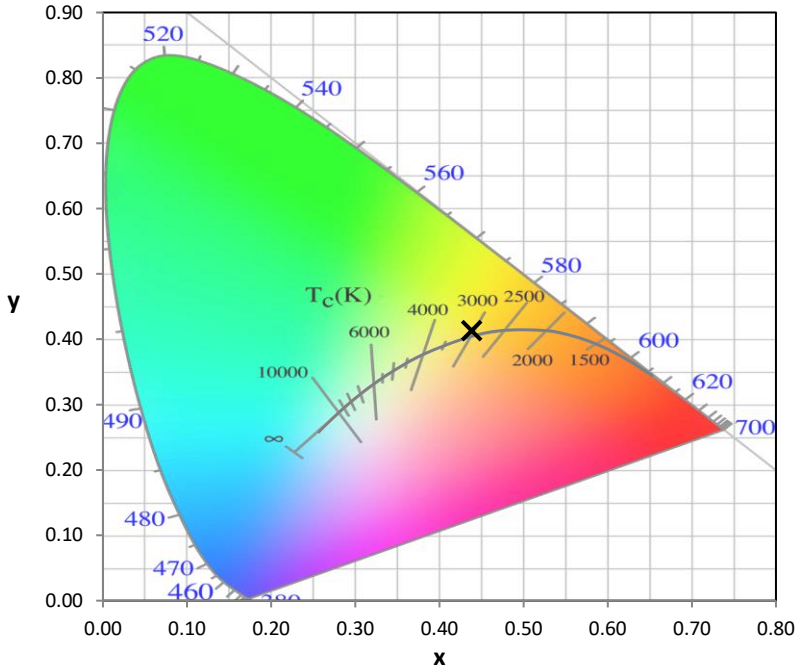
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

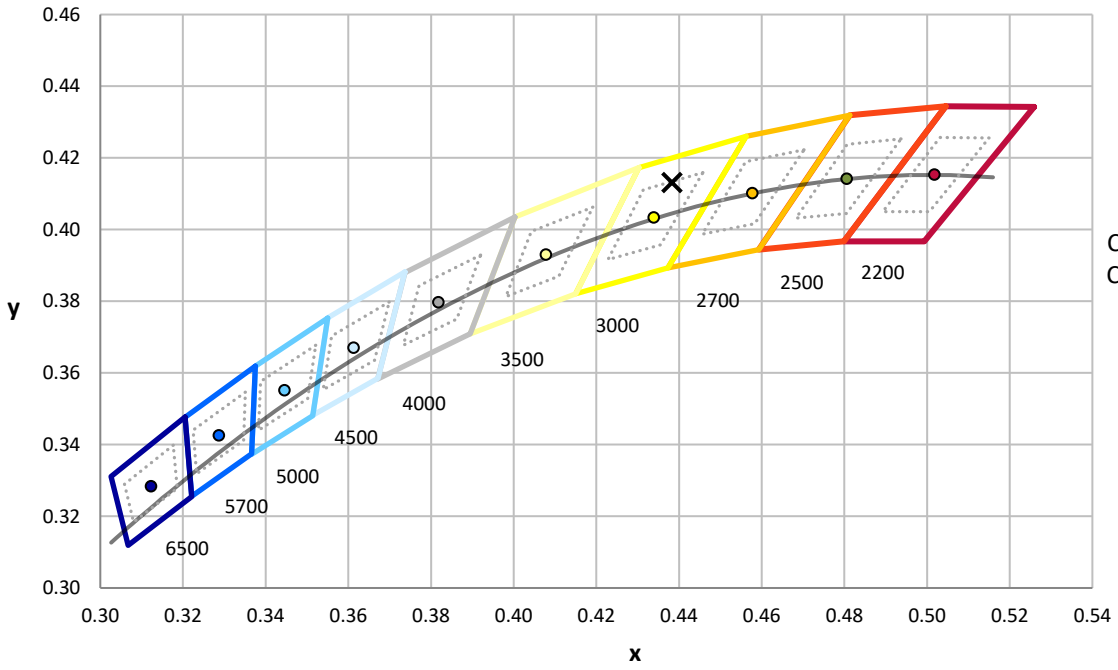
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

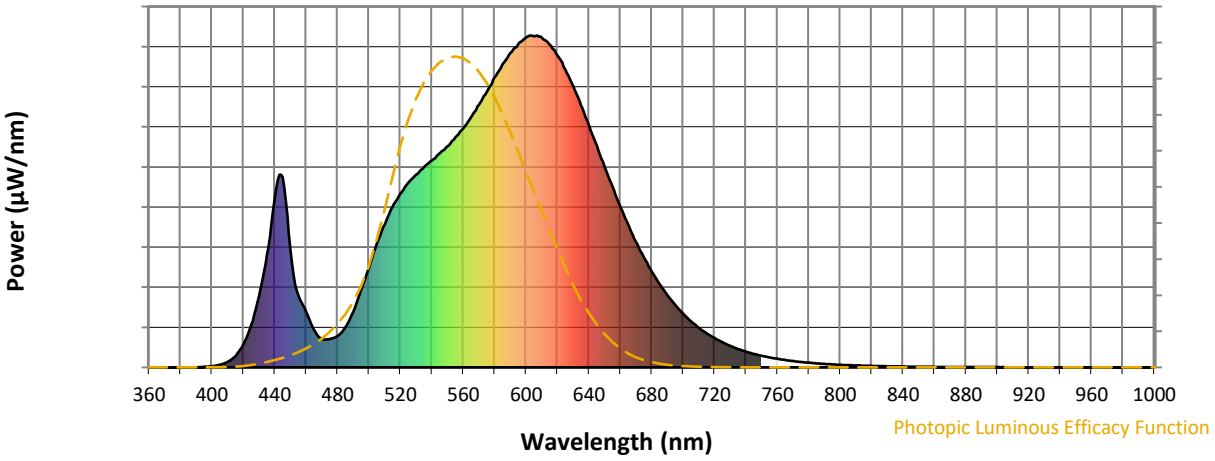


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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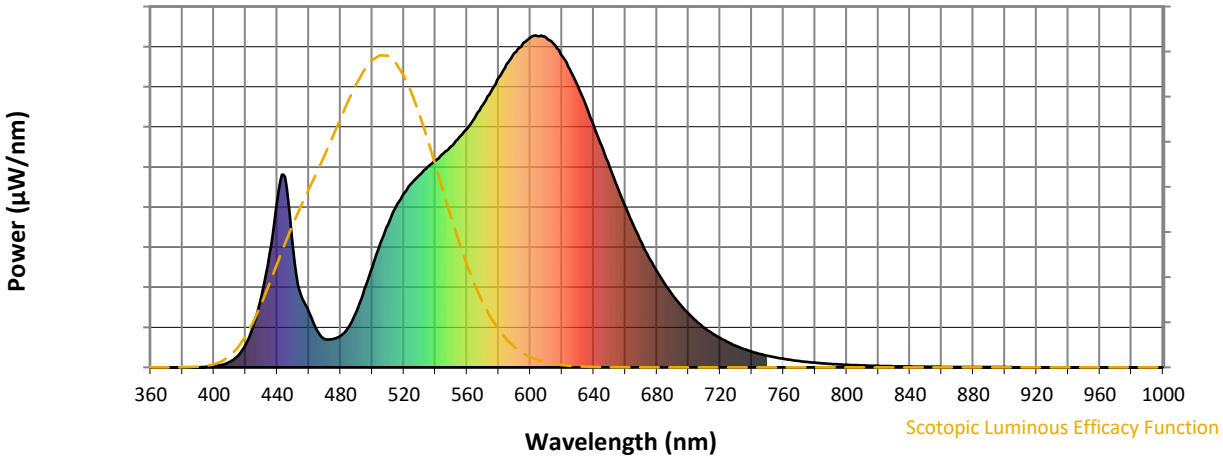
Scotopic Flux vs. Wavelength



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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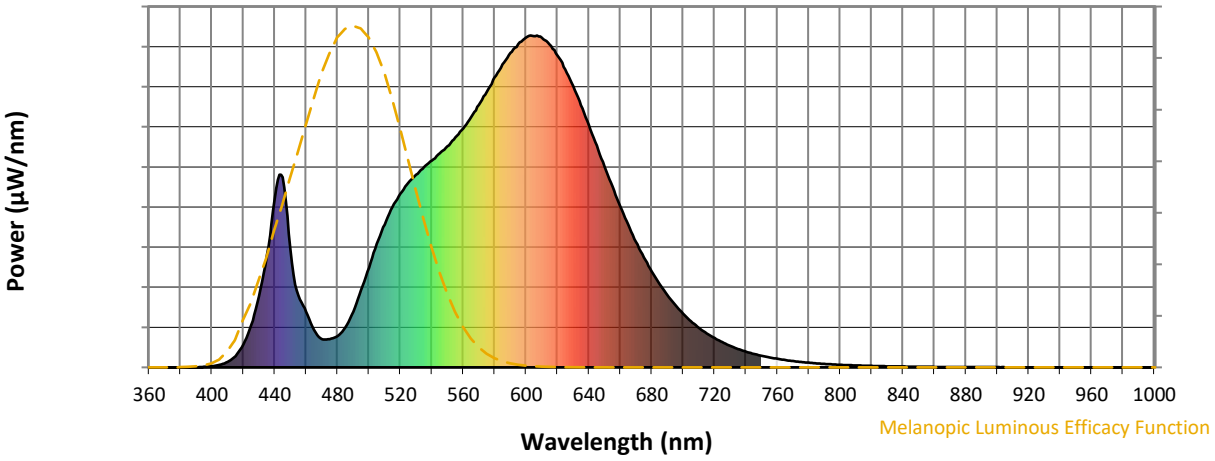
Melanopic Flux vs. Wavelength



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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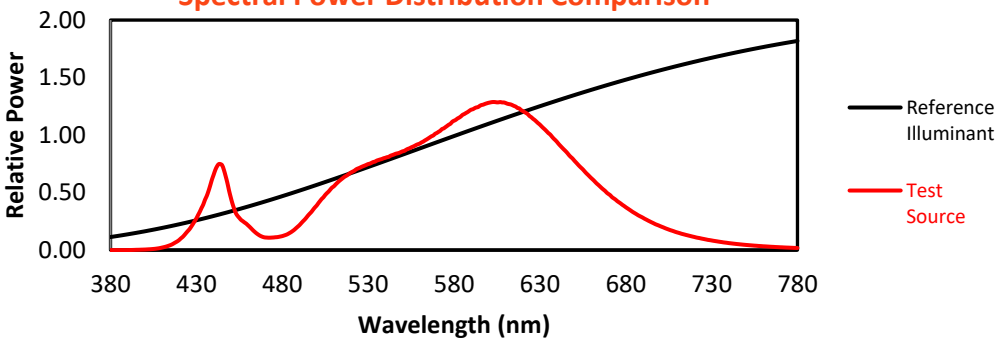
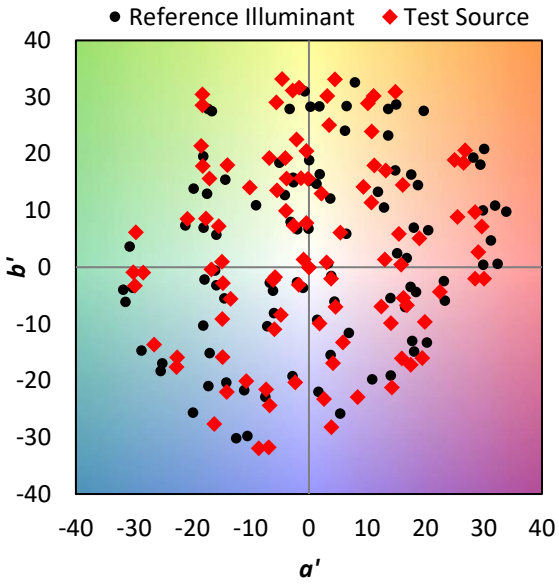
Summary

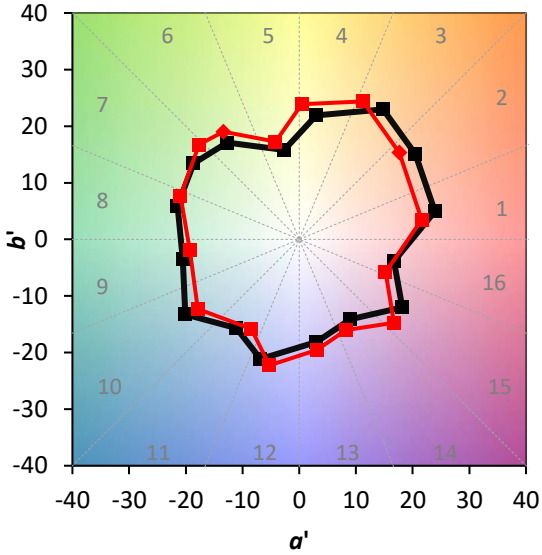
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

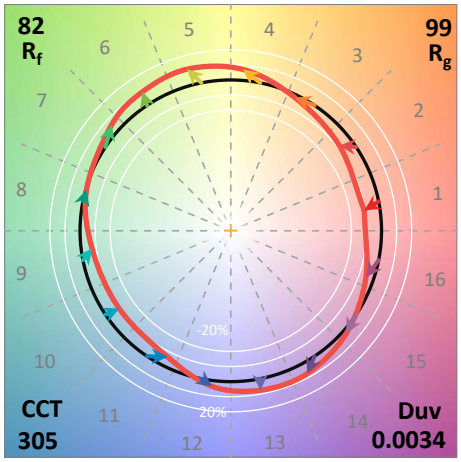
Spectral Power Distribution Comparison

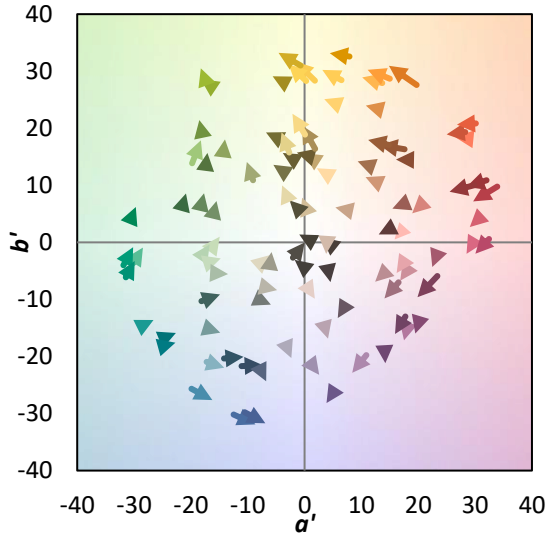


Color Vector Graphics









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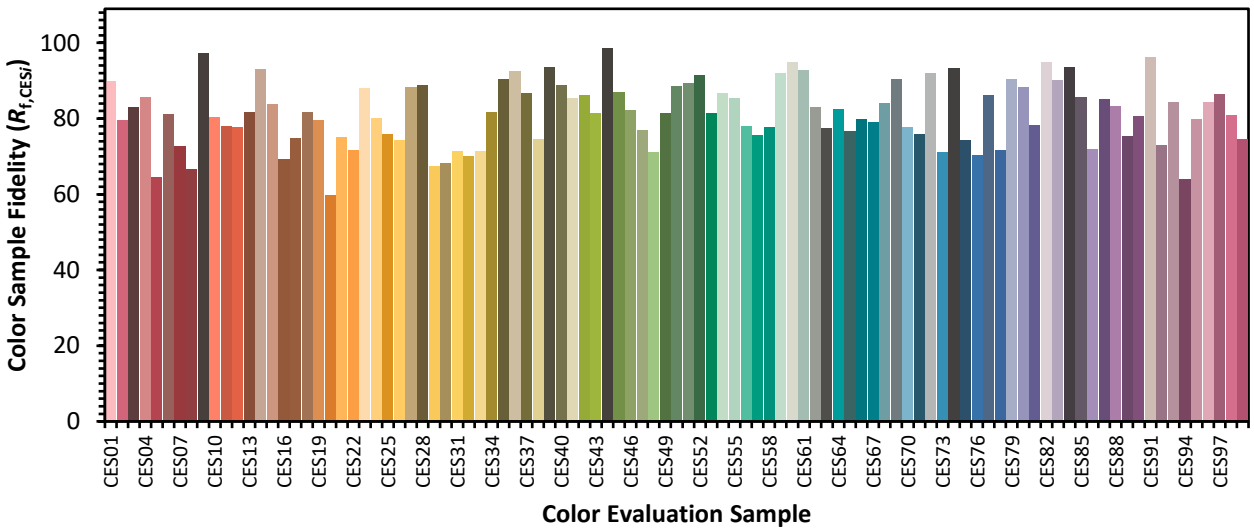
Individual Sample Fidelity Index ($R_{f,i}$)

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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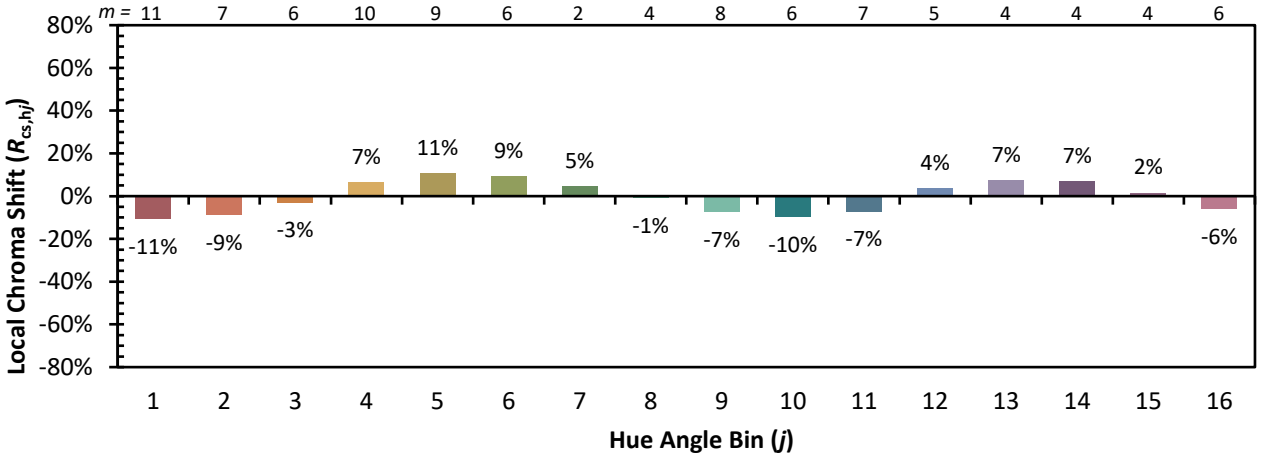
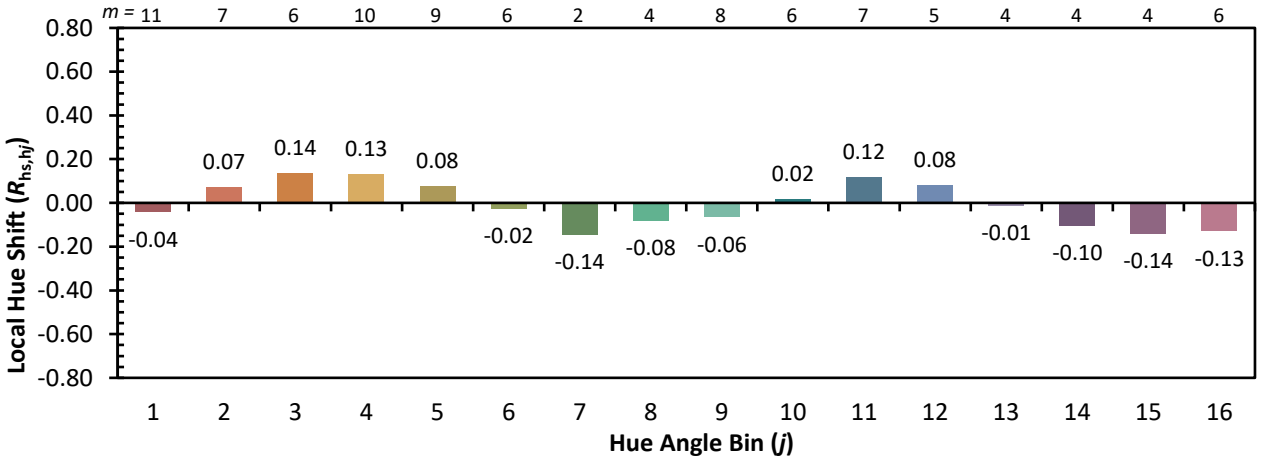
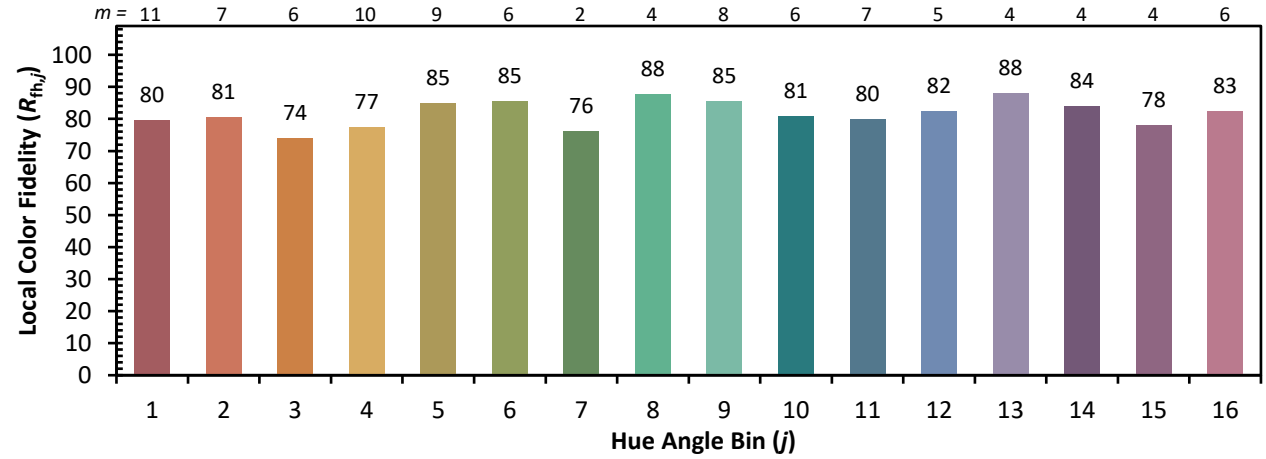
Color Rendition by Hue-Angle Bin







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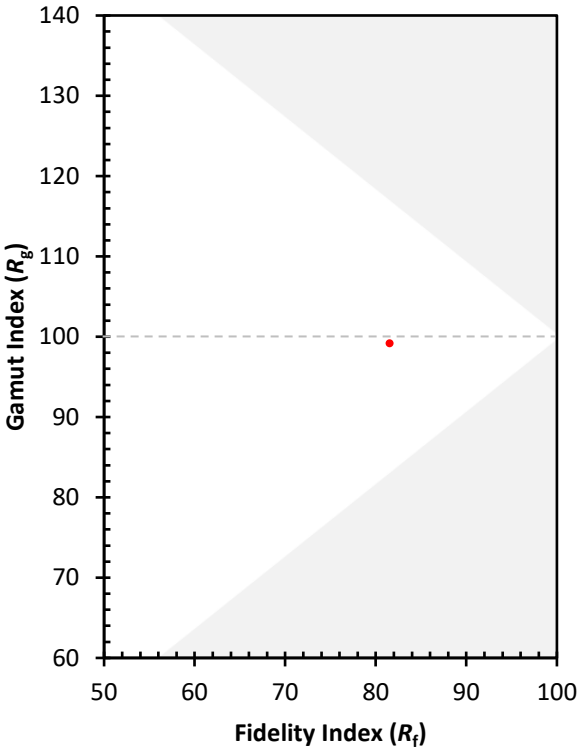
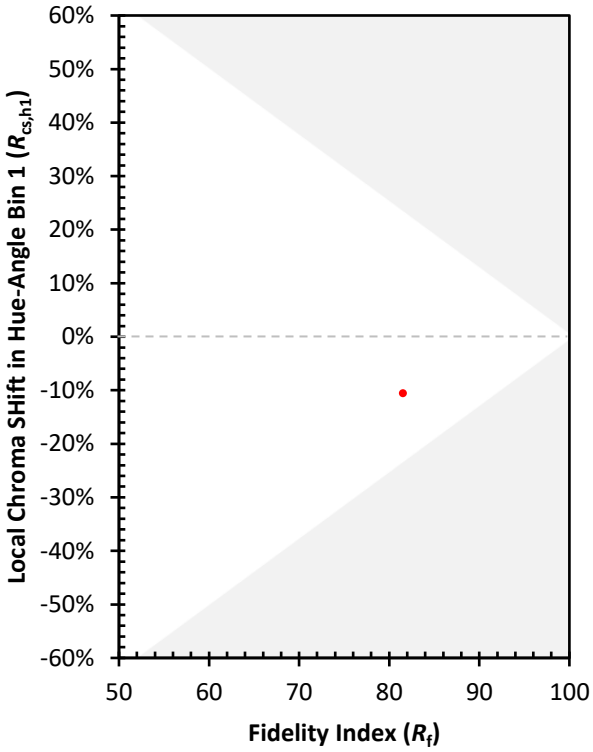
Measure Comparisons





(END OF REPORT)