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: P637009

Luminaire Tested: GWS-SA4B-830-U-T2R-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:	P637009
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-14)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4B-830-U-T2R-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	9273.1 lumens
Efficiency:	N/A
Efficacy:	98.2 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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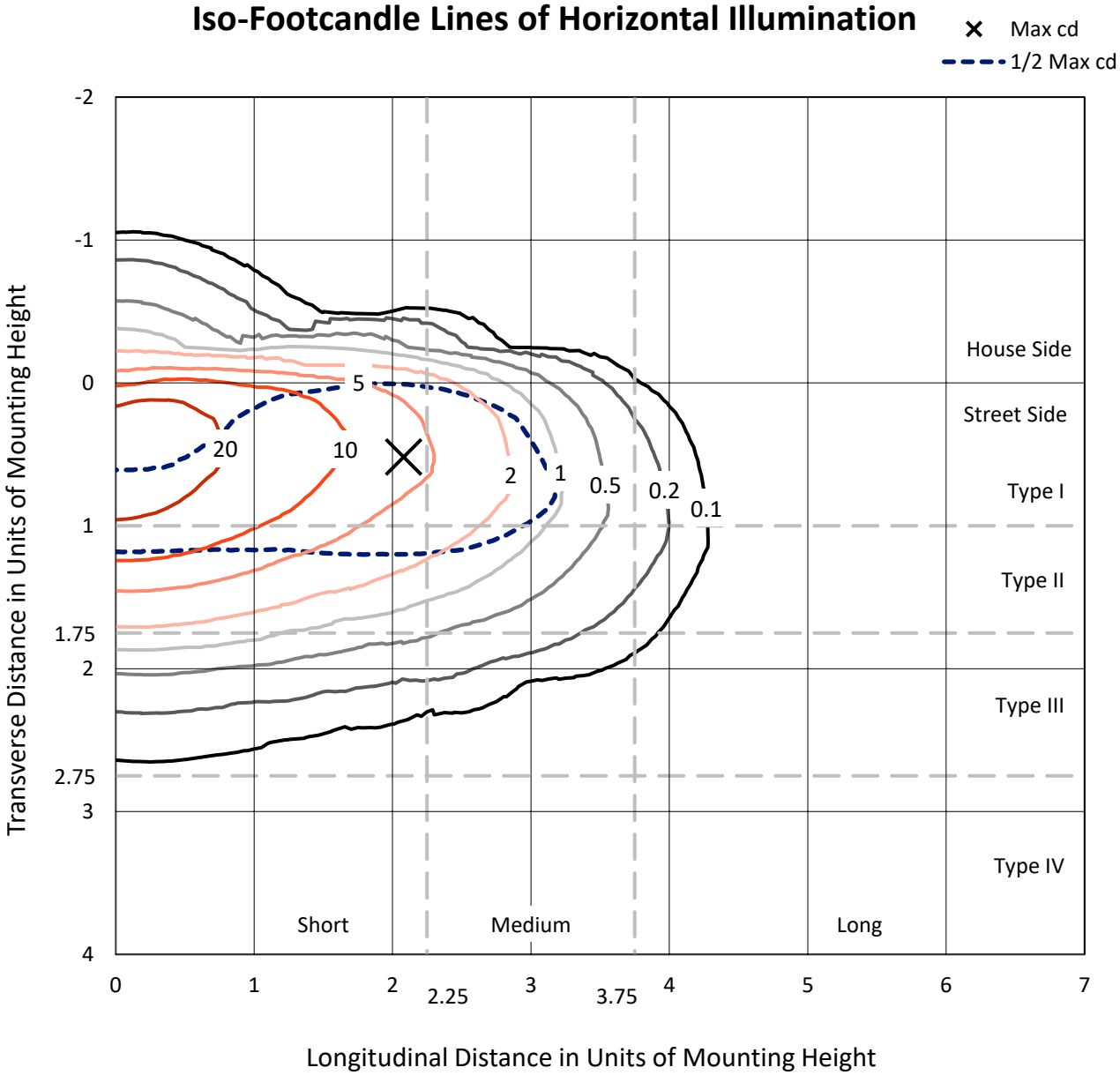
REPORT NUMBER: P637009
CATALOG NUMBER: GWS-SA4B-830-U-T2R-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 27.8 fc
Type II - Short - N/A

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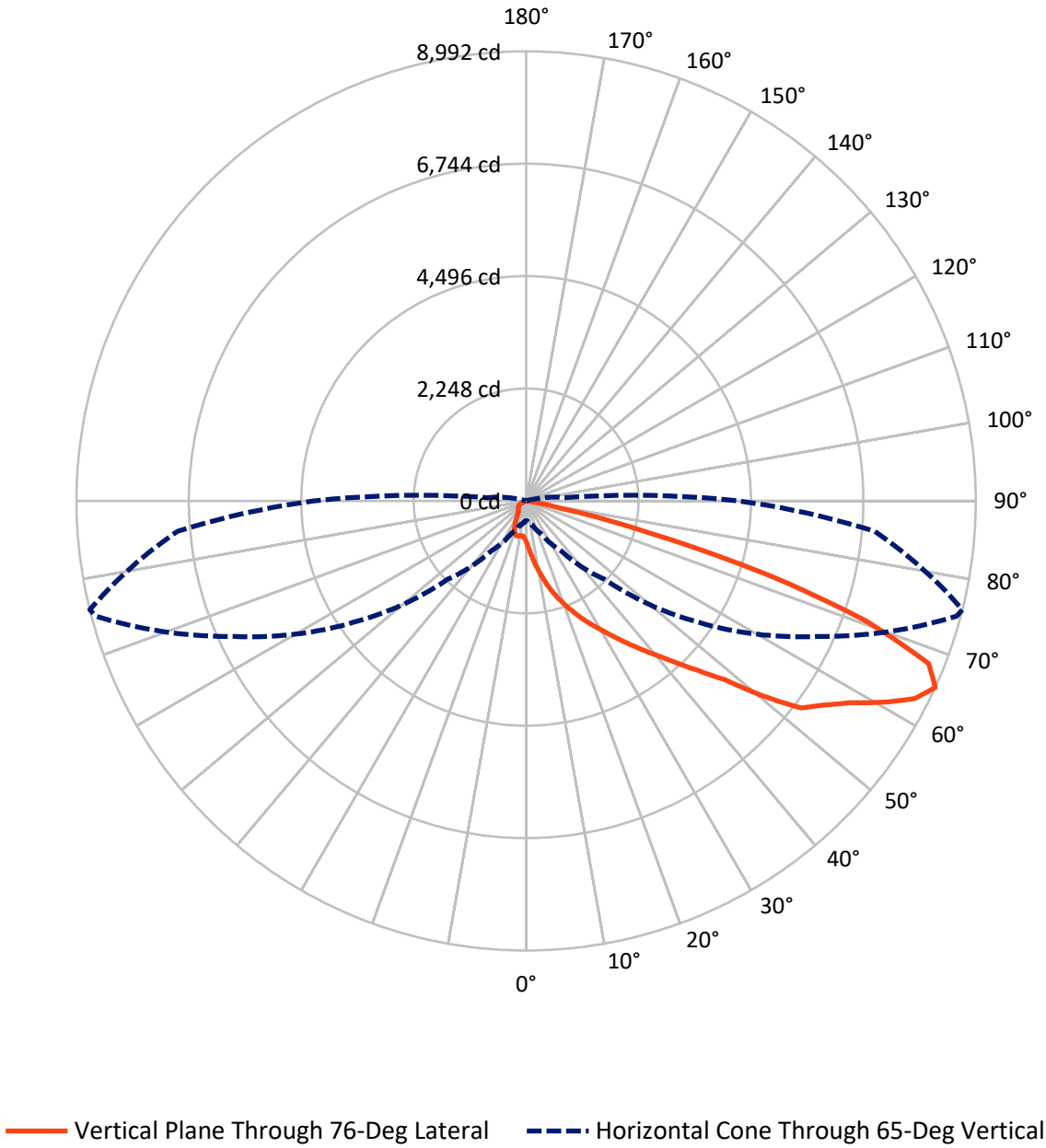
Luminous Intensity Polar Plot



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REPORT NUMBER: P637009
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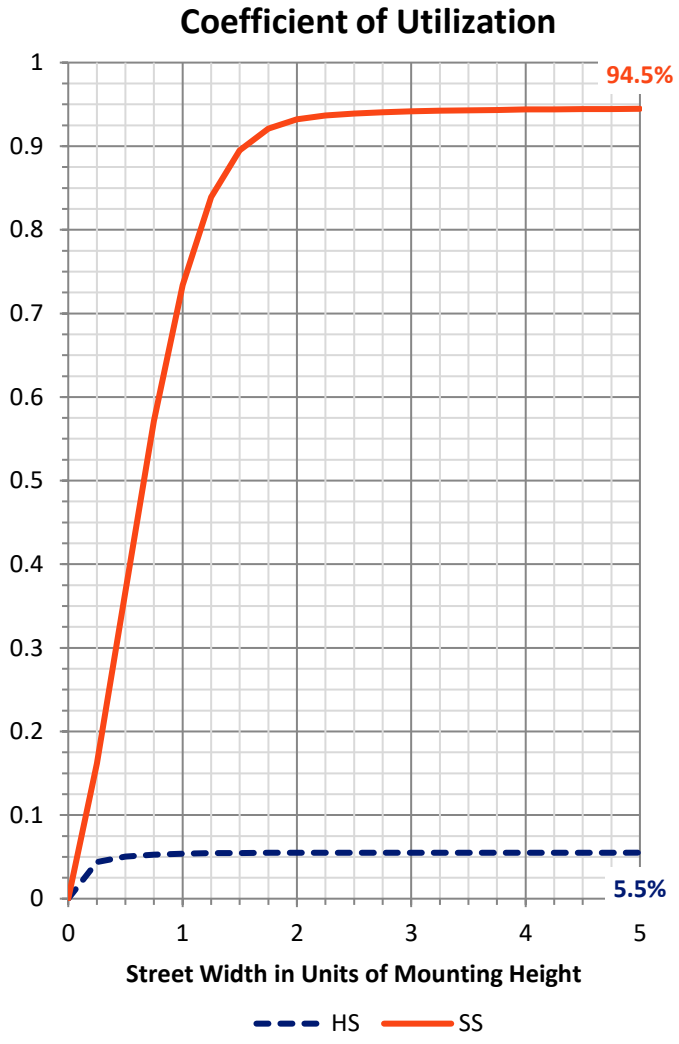
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	512.7	0.0	512.7
	% Fixture	5.5	0.0	5.5
Street Side	Lumens	8760.4	0.0	8760.4
	% Fixture	94.5	0.0	94.5
Total	Lumens	9273.1	0.0	9273.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	1.1
10°-20°	379.0	4.1
20°-30°	773.2	8.3
30°-40°	1375.2	14.8
40°-50°	2032.8	21.9
50°-60°	2327.4	25.1
60°-70°	1775.7	19.1
70°-80°	497.4	5.4
80°-90°	12.5	0.1
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°	9273.1	100.0
0°-180°	9273.1	100.0



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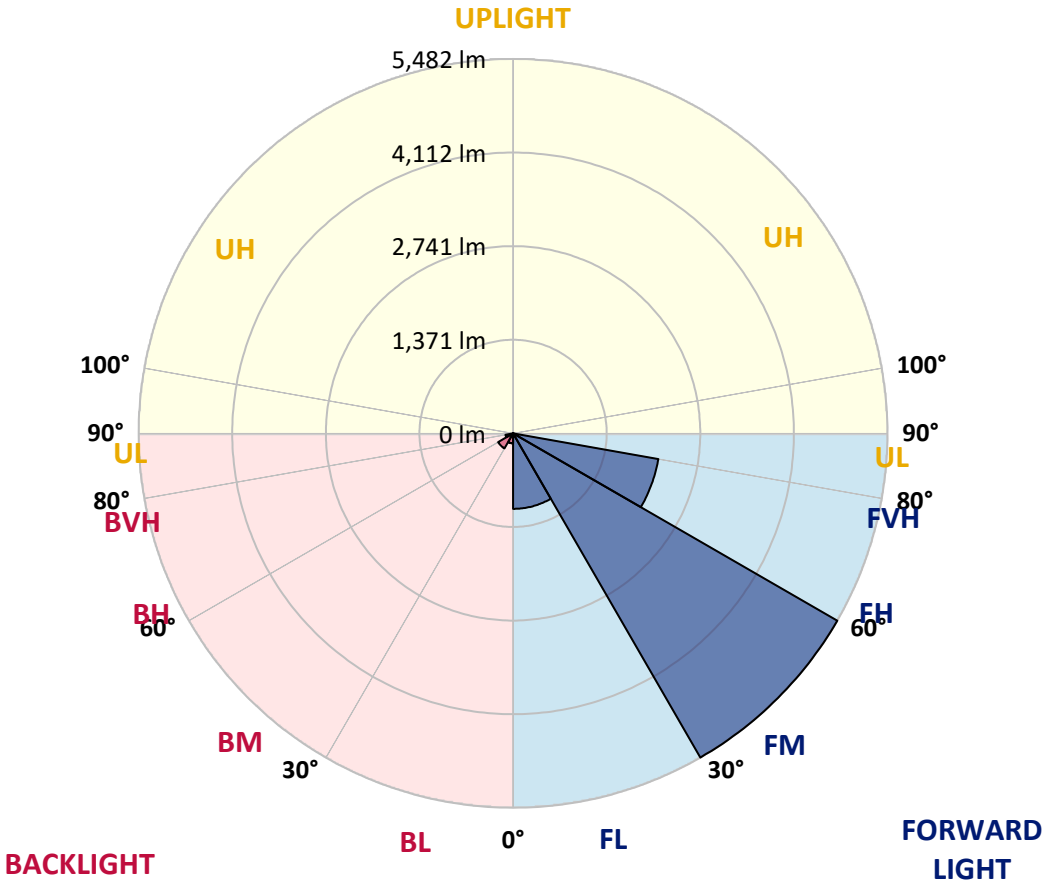
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1105.7	11.9			
FM	(30°-60°)	5482.4	59.1			
FH	(60°-80°)	2160.4	23.3			G2/5000
FVH	(80°-90°)	11.8	0.1			G1/100
BL	(0°-30°)	146.3	1.6	B1/500		
BM	(30°-60°)	253.0	2.7	B1/1000		
BH	(60°-80°)	112.7	1.2	B1/500		G1/500
BVH	(80°-90°)	0.7	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-G2
Type II Short



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Scaled Data Report

REPORT NUMBER: P637009
CATALOG NUMBER: GWS-SA4B-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	821.0	821.0	821.0	821.0	821.0	821.0	821.0	821.0	821.0	*821.0*	821.0
2.5°	1265.3	1284.3	1269.4	1244.7	1196.9	1150.7	1091.4	1009.8	944.7	*936.4*	875.4
5°	1708.8	1707.1	1675.0	1642.8	1592.6	1513.4	1393.9	1242.2	1096.3	*1084.0*	947.1
7.5°	1972.6	1975.0	1956.9	1932.2	1882.7	1801.1	1676.6	1493.6	1280.1	*1255.4*	1045.2
10°	2194.3	2193.5	2180.3	2168.7	2124.2	2069.8	1936.3	1735.2	1478.0	*1439.2*	1154.9
12.5°	2360.8	2366.6	2373.2	2384.7	2365.8	2312.2	2186.1	1966.8	1678.3	*1635.4*	1280.1
15°	2492.7	2494.3	2519.1	2563.6	2579.2	2551.2	2436.6	2191.0	1876.1	*1839.0*	1424.4
17.5°	2532.3	2535.6	2577.6	2659.2	2741.6	2757.3	2670.7	2416.9	2070.7	*2031.1*	1564.5
20°	2615.5	2622.9	2654.3	2726.0	2829.8	2913.9	2880.1	2645.2	2265.2	*2213.3*	1708.0
22.5°	2877.6	2881.8	2871.1	2880.1	2933.7	3031.0	3051.6	2866.1	2464.7	*2409.4*	1862.9
25°	3328.5	3330.2	3255.2	3184.3	3143.9	3162.0	3207.4	3069.7	2662.5	*2608.1*	2007.2
27.5°	3796.7	3802.5	3712.7	3592.3	3448.1	3365.6	3352.4	3256.0	2862.0	*2801.8*	2149.8
30°	4237.8	4237.8	4143.0	3996.2	3803.3	3642.6	3547.8	3443.9	3075.5	*3009.5*	2295.7
32.5°	4634.2	4630.9	4509.8	4350.7	4160.3	3983.9	3784.4	3640.1	3312.9	*3239.5*	2463.8
35°	4961.5	4953.2	4815.6	4663.1	4459.5	4328.4	4105.9	3851.2	3570.1	*3496.7*	2637.0
37.5°	5208.8	5199.7	5073.6	4912.0	4723.3	4638.4	4452.1	4104.2	3841.3	*3774.5*	2829.0
40°	5343.1	5325.0	5237.6	5117.3	4959.0	4884.8	4807.3	4418.3	4160.3	*4077.0*	3055.7
42.5°	5382.7	5361.3	5303.6	5247.5	5151.9	5093.4	5176.6	4772.7	4510.6	*4438.9*	3314.5
45°	5265.7	5253.3	5248.3	5288.7	5306.1	5322.5	5527.8	5165.1	4897.2	*4842.8*	3640.1
47.5°	4983.7	4980.4	5024.1	5192.3	5375.3	5549.2	5909.4	5649.0	5398.4	*5339.8*	4095.1
50°	4462.8	4496.6	4618.6	4913.7	5279.7	5677.8	6266.4	6319.9	6209.5	*6123.8*	4688.6
52.5°	3648.4	3713.5	3987.2	4435.6	4961.5	5641.5	6431.2	6857.4	6970.3	*6881.3*	5114.0
55°	2862.8	2923.8	3167.8	3736.6	4438.1	5365.4	6438.6	7042.9	7289.3	*7206.9*	5401.7
57.5°	2132.5	2188.5	2410.3	2954.3	3725.9	4822.2	6262.2	7145.9	7667.7	*7614.9*	5855.9
60°	1393.9	1449.1	1649.4	2125.1	2890.0	4030.9	5827.8	7124.5	8182.9	*8177.9*	6413.9
62.5°	773.2	816.9	962.0	1332.9	2017.1	3121.6	5145.3	6909.3	8681.6	*8712.9*	6873.9
65°	*395.7*	*423.7*	*511.9*	*732.8*	*1220.8*	*2213.3*	*4247.6*	*6416.4*	*8912.4*	*8991.5*	*6995.1*
67.5°	258.8	267.9	289.3	380.8	653.7	1392.3	3196.7	5625.9	8587.6	*8679.9*	6588.7
70°	210.2	217.6	230.0	253.9	337.1	739.4	2099.5	4493.3	7175.6	*7238.2*	5246.7
72.5°	154.1	164.0	187.9	203.6	243.2	405.6	1092.2	2949.4	4927.7	*5038.2*	3297.2
75°	113.8	119.5	139.3	160.7	198.7	256.4	417.9	1550.5	2544.6	*2480.3*	1384.8
77.5°	68.4	72.5	89.0	103.0	141.8	159.9	145.9	572.9	774.0	*727.9*	334.7
80°	33.8	37.9	58.5	77.5	90.7	64.3	61.0	159.9	172.3	*172.3*	84.1
82.5°	11.5	14.8	31.3	51.1	44.5	24.7	28.9	41.2	46.2	*48.6*	24.7
85°	0.0	0.0	7.4	14.8	6.6	3.3	7.4	9.1	11.5	*12.4*	8.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.5	*3.3*	3.3
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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CATALOG NUMBER: GWS-SA4B-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	821.0	821.0	821.0	821.0	821.0	821.0	821.0	821.0	821.0	821.0	821.0
2.5°	842.4	803.7	745.2	692.4	652.0	614.1	585.3	562.2	558.1	544.9	546.5
5°	880.4	810.3	702.3	619.1	560.5	521.0	488.0	463.3	452.5	441.8	433.6
7.5°	938.9	837.5	685.8	584.4	516.0	455.0	403.9	362.7	342.9	330.5	322.3
10°	1010.6	875.4	686.6	563.8	462.4	369.3	299.2	253.9	232.5	225.9	225.0
12.5°	1096.3	923.2	693.2	530.0	385.0	274.5	221.7	201.1	194.5	188.8	188.8
15°	1187.0	976.8	693.2	468.2	293.5	214.3	192.1	178.9	170.6	167.3	165.7
17.5°	1282.6	1027.1	676.8	383.3	225.0	188.8	170.6	158.3	151.7	146.7	145.1
20°	1384.8	1074.9	635.5	293.5	192.9	169.0	151.7	139.3	132.7	127.8	127.8
22.5°	1488.7	1119.4	568.8	225.9	170.6	150.0	133.5	122.0	115.4	110.5	110.5
25°	1585.1	1149.1	483.0	186.3	154.1	133.5	118.7	107.2	99.7	96.4	94.8
27.5°	1675.0	1168.0	388.2	164.0	138.5	119.5	103.9	93.1	87.4	84.9	83.3
30°	1768.1	1173.0	296.7	149.2	125.3	105.5	90.7	82.4	77.5	74.2	74.2
32.5°	1858.8	1167.2	226.7	136.8	113.8	93.1	80.8	73.4	69.2	66.8	65.9
35°	1951.1	1140.8	183.8	126.1	102.2	81.6	71.7	65.9	63.5	60.2	60.2
37.5°	2051.7	1105.4	159.9	115.4	90.7	73.4	64.3	60.2	56.9	54.4	53.6
40°	2177.0	1064.2	146.7	106.3	80.0	65.9	57.7	53.6	51.1	48.6	47.8
42.5°	2325.4	1023.8	140.1	96.4	71.7	58.5	51.9	47.0	44.5	41.2	40.4
45°	2535.6	1014.7	132.7	85.7	64.3	52.8	45.3	40.4	37.1	34.6	33.8
47.5°	2873.5	1040.3	120.3	74.2	56.9	46.2	38.7	34.6	30.5	28.0	26.4
50°	3209.0	1033.7	108.0	64.3	50.3	39.6	33.0	28.9	24.7	22.3	21.4
52.5°	3392.0	1002.4	96.4	56.9	43.7	33.8	28.0	23.1	20.6	18.1	17.3
55°	3557.7	990.0	84.9	49.5	37.1	29.7	23.1	19.0	17.3	14.8	14.0
57.5°	3882.5	1018.8	75.0	42.9	32.1	25.6	19.8	15.7	14.0	11.5	10.7
60°	4222.1	1022.1	64.3	37.1	28.0	21.4	15.7	12.4	10.7	8.2	7.4
62.5°	4399.3	938.9	52.8	31.3	23.1	18.1	13.2	9.9	8.2	4.9	4.9
65°	*4250.9*	*759.2*	*44.5*	*25.6*	*18.1*	*14.0*	*9.9*	*7.4*	*4.9*	*2.5*	*0.8*
67.5°	3762.1	539.9	37.1	20.6	13.2	9.9	7.4	4.9	0.8	0.0	0.0
70°	2754.8	308.3	28.9	14.8	9.9	6.6	4.9	2.5	0.0	0.0	0.0
72.5°	1693.1	164.9	21.4	9.9	7.4	4.9	4.1	1.6	0.0	0.0	0.0
75°	642.1	79.1	13.2	6.6	5.8	4.1	2.5	0.8	0.0	0.0	0.0
77.5°	173.9	38.7	7.4	4.9	4.1	2.5	1.6	0.0	0.0	0.0	0.0
80°	45.3	18.1	4.9	3.3	2.5	1.6	0.0	0.0	0.0	0.0	0.0
82.5°	15.7	8.2	2.5	2.5	1.6	0.8	0.0	0.0	0.0	0.0	0.0
85°	6.6	3.3	1.6	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	0.8	0.8	0.8	0.8	0.0	0.0	0.0	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

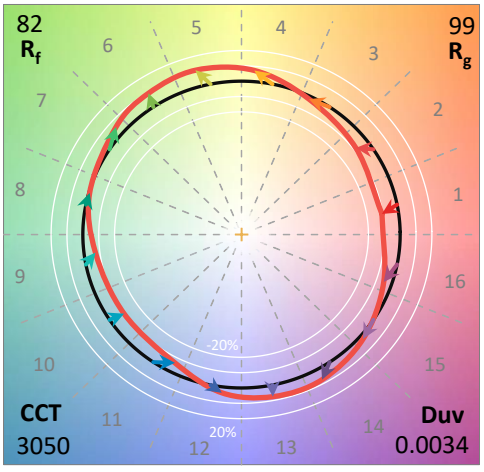
Test Information

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

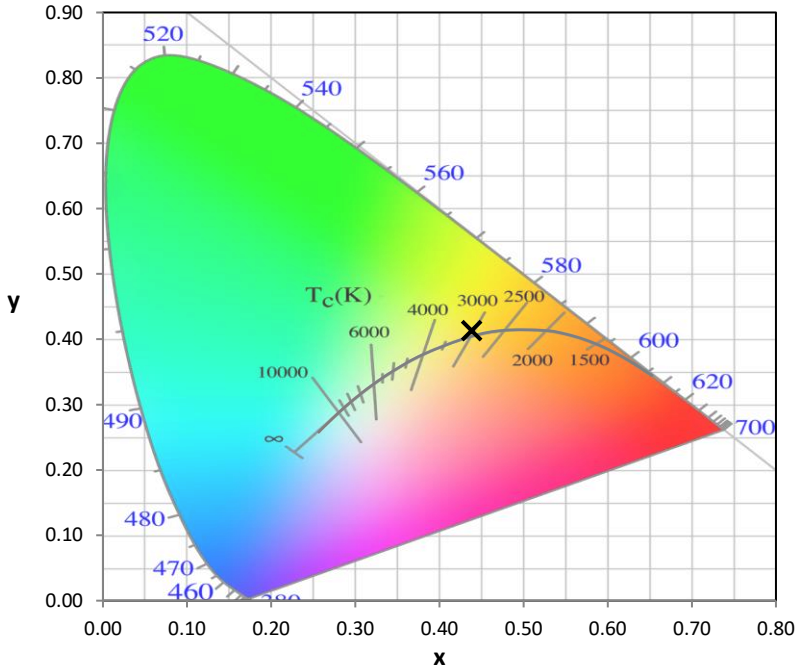
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

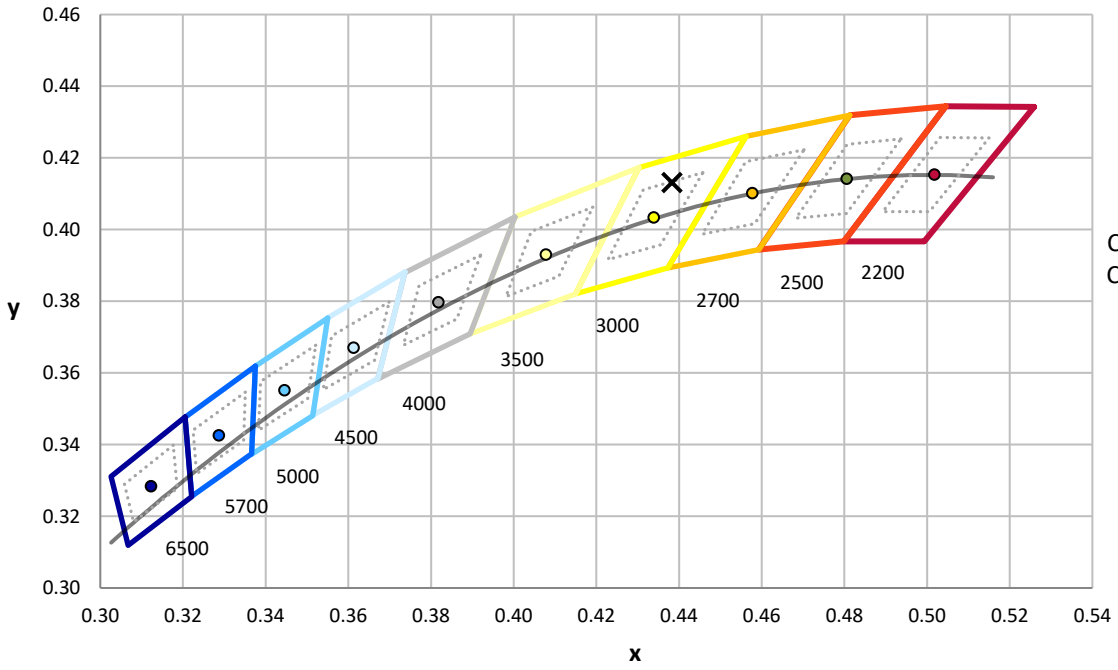
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

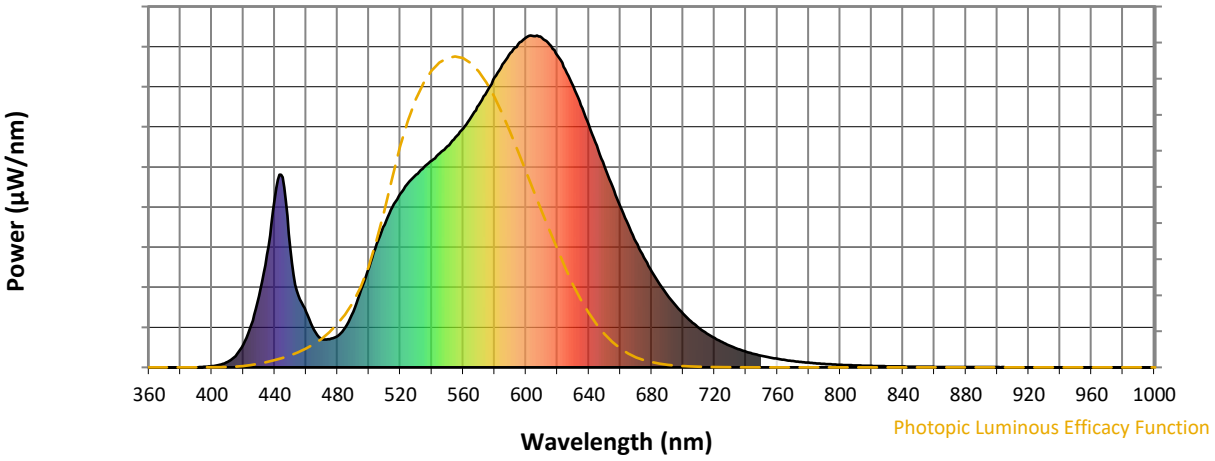


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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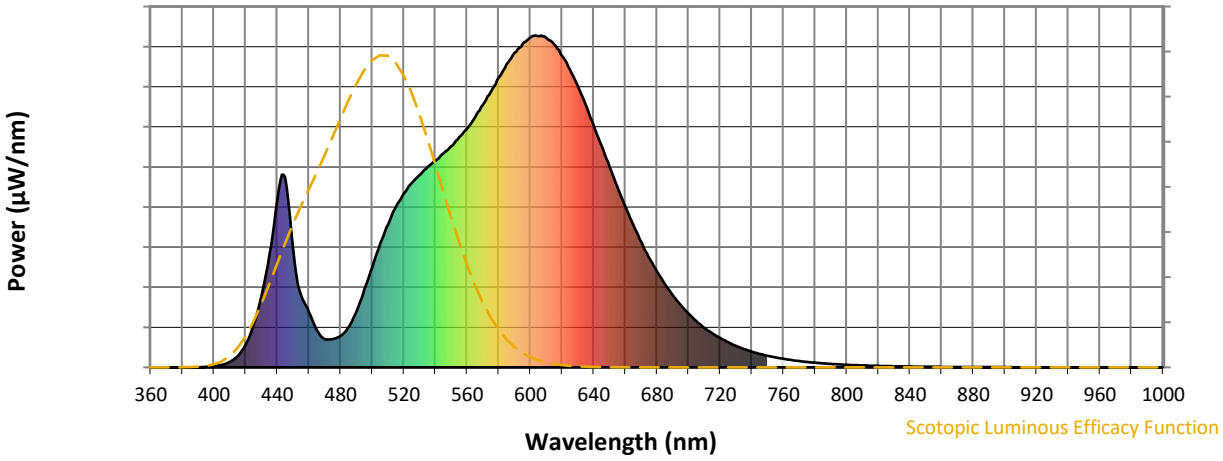
Scotopic Flux vs. Wavelength



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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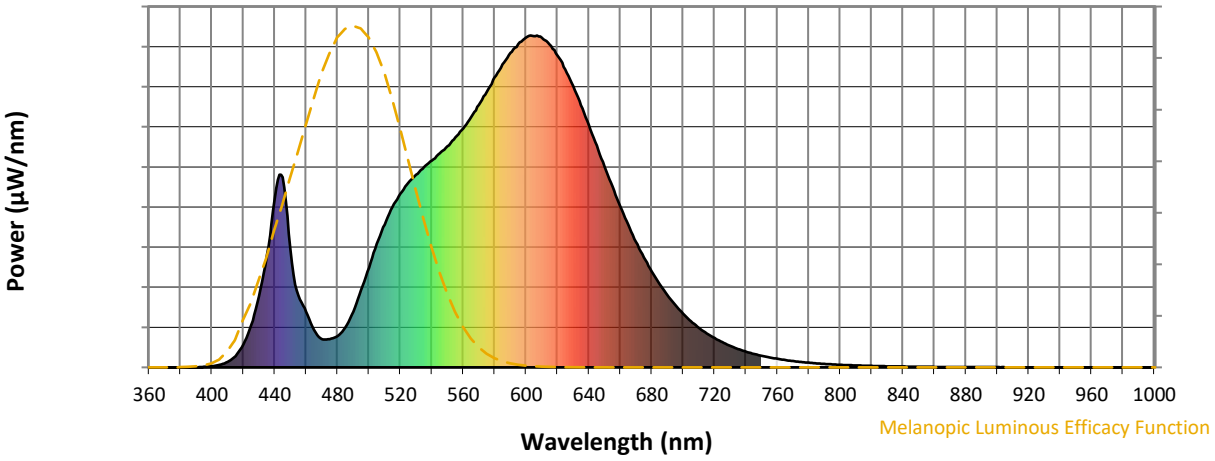
Melanopic Flux vs. Wavelength



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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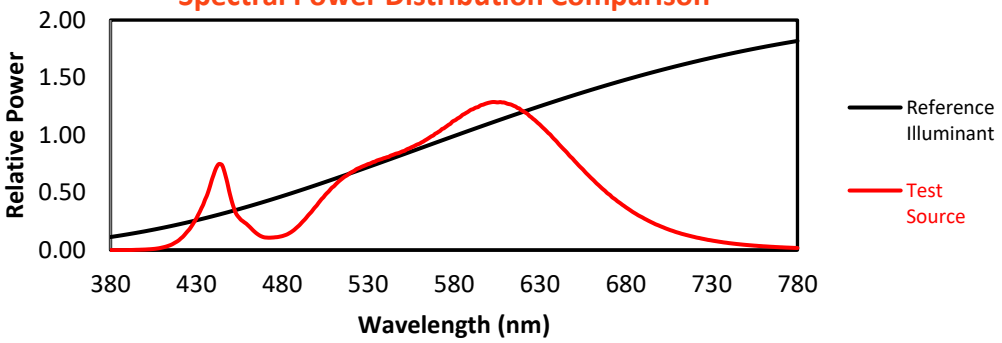
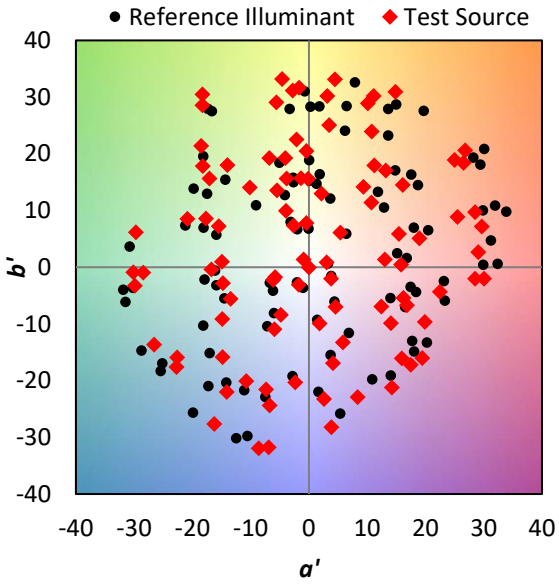
Summary

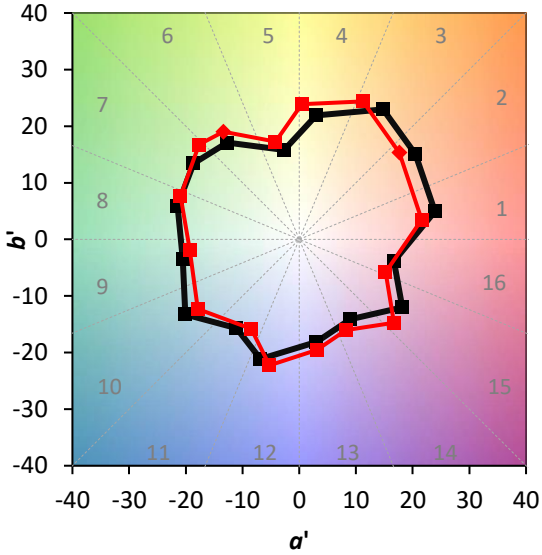
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

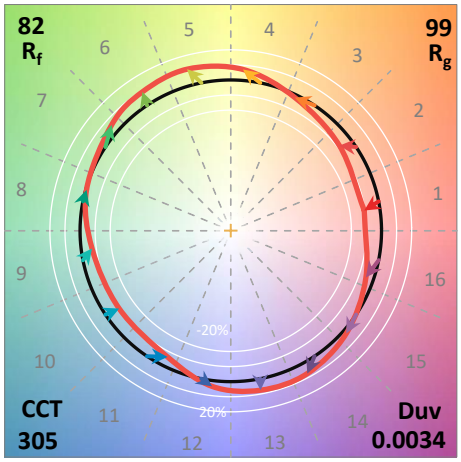
Spectral Power Distribution Comparison

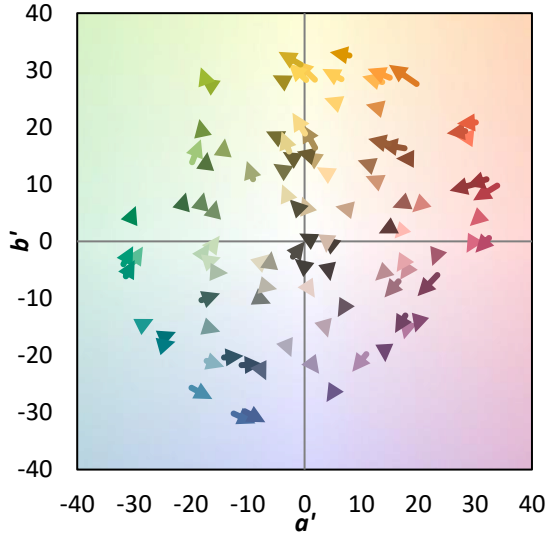


Color Vector Graphics









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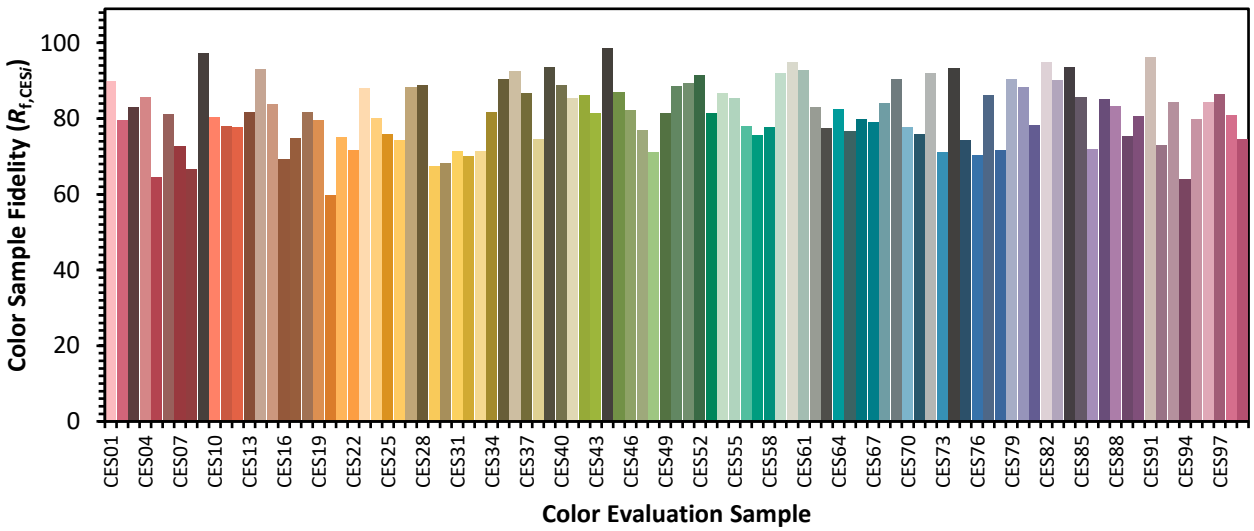
Individual Sample Fidelity Index ($R_{f,i}$)

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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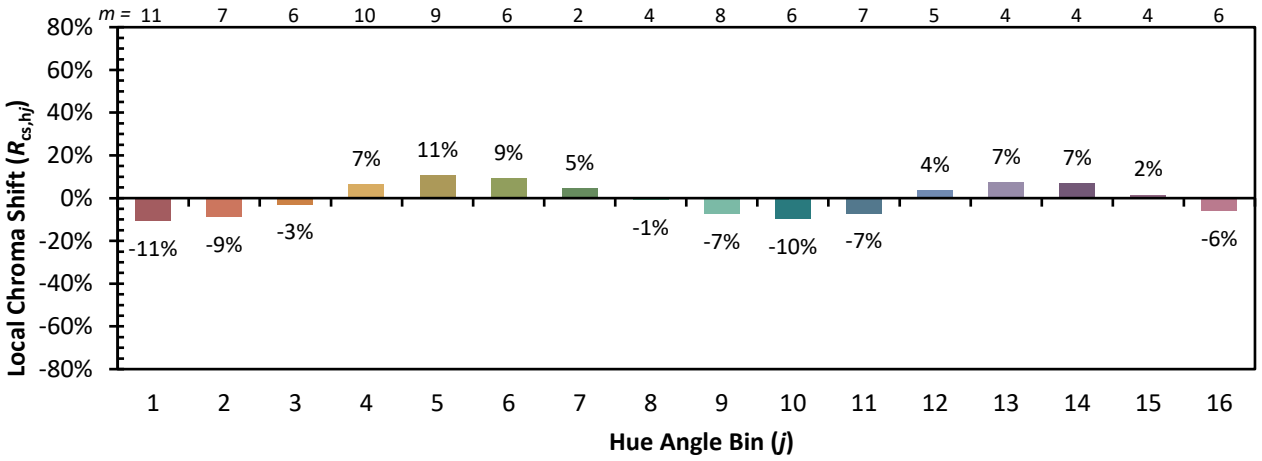
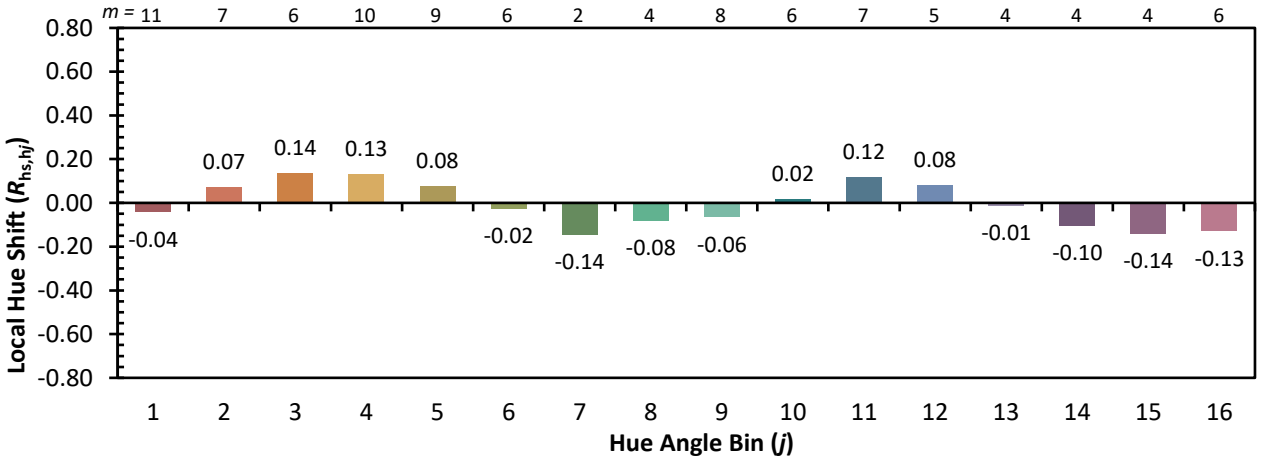
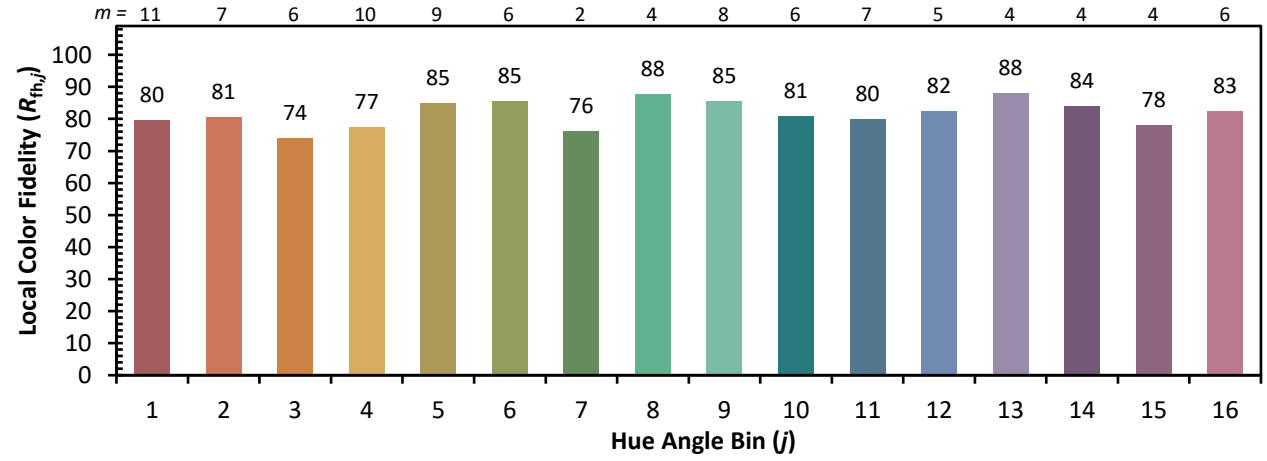
Color Rendition by Hue-Angle Bin







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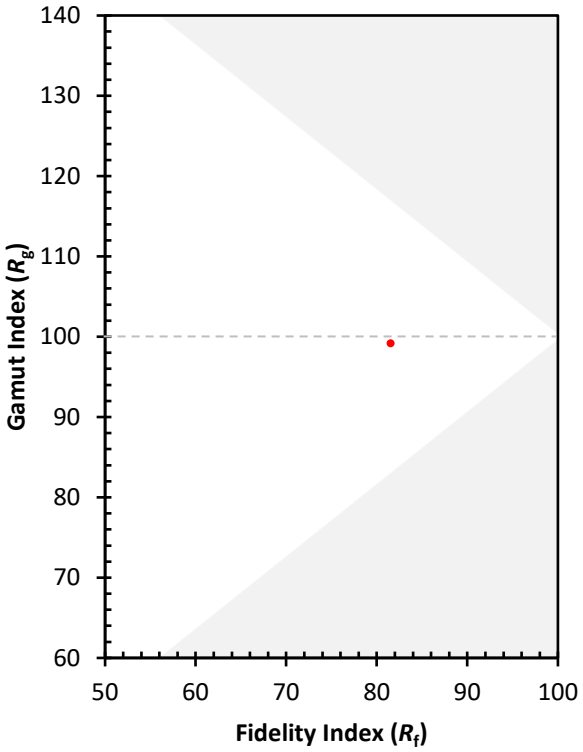
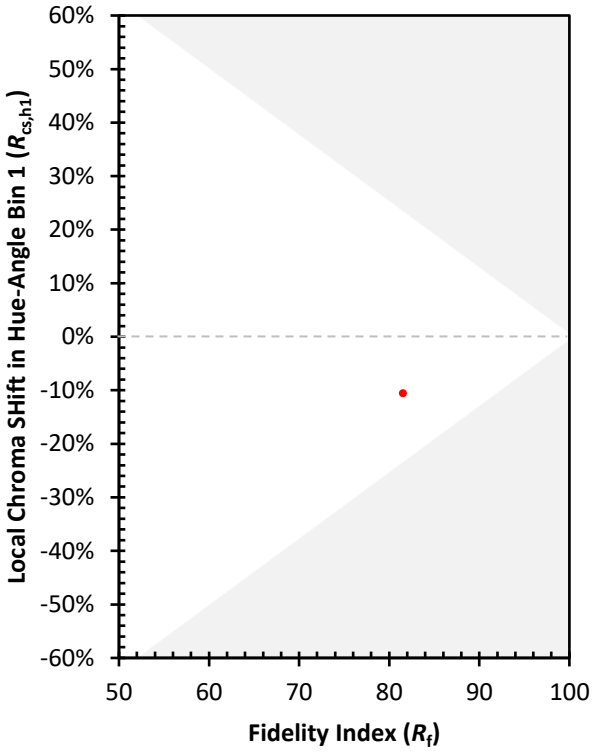
Measure Comparisons





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