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: P633048

Luminaire Tested: GWS-SA2D-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:	P633048
	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-SA2D-830-U-T2R-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(32) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	8163.3 lumens
Efficiency:	N/A
Efficacy:	99.4 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

Input Watts (W):	82.1
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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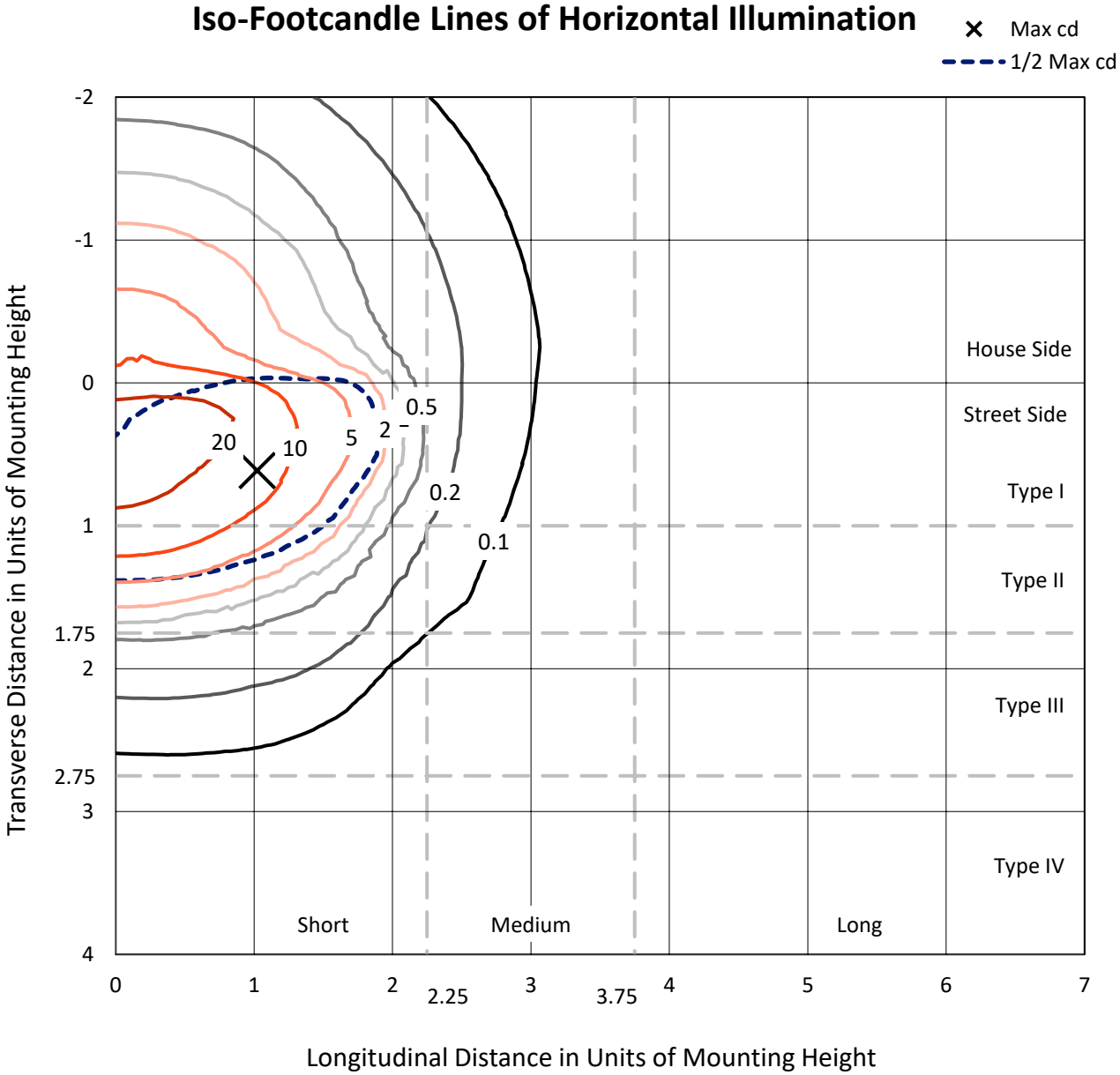
Scaled Data Report

REPORT NUMBER: P633048
CATALOG NUMBER: GWS-SA2D-830-U-T2R-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 24.4 fc
Type II - Short - N/A

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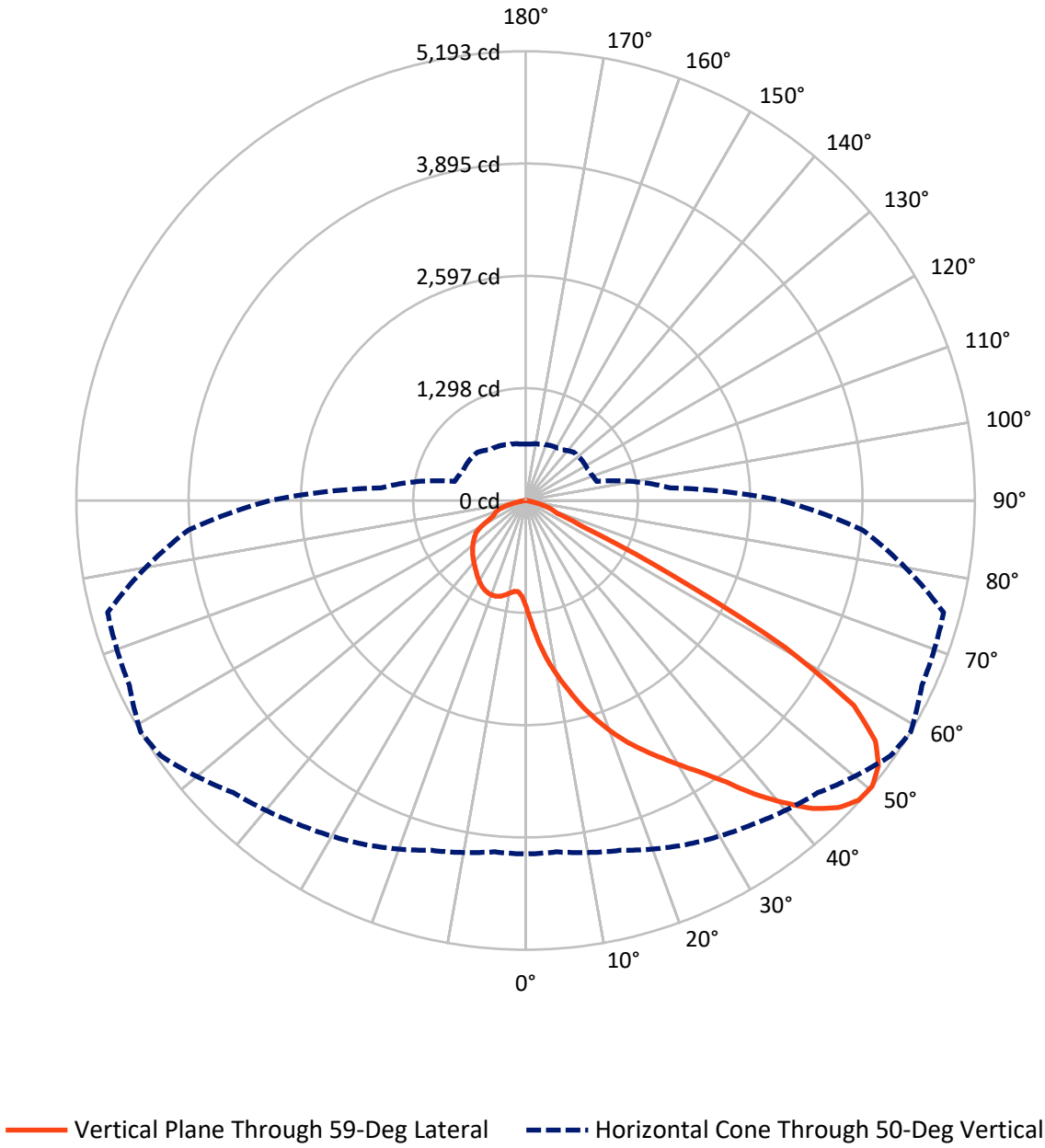
Luminous Intensity Polar Plot



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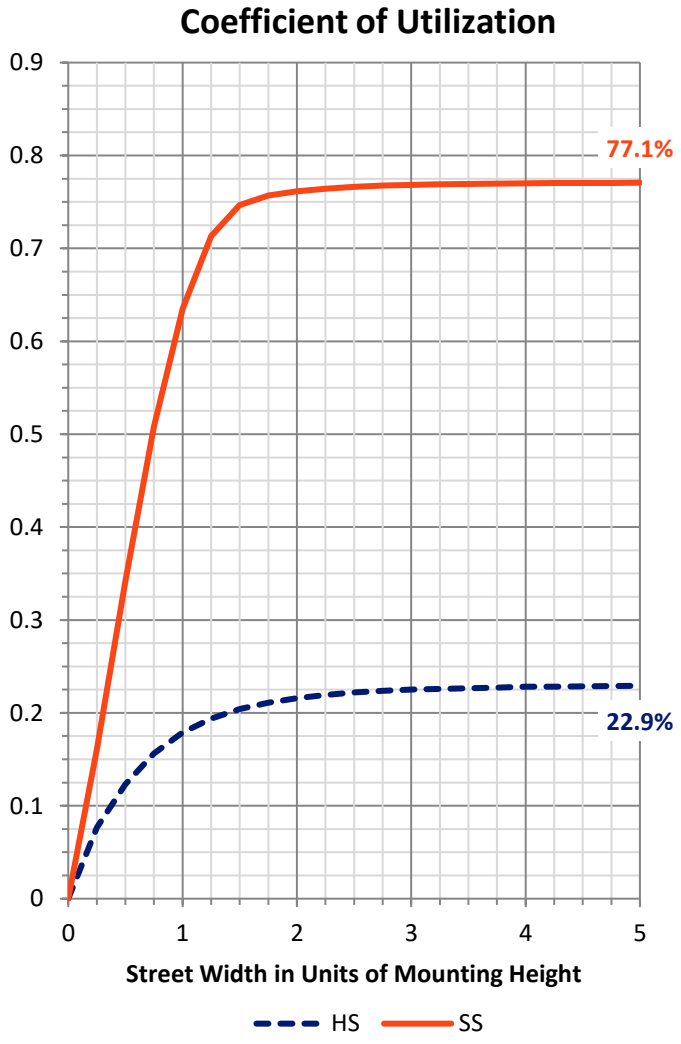
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1877.7	0.0	1877.7
	% Fixture	23.0	0.0	23.0
Street Side	Lumens	6285.6	0.0	6285.6
	% Fixture	77.0	0.0	77.0
Total	Lumens	8163.3	0.0	8163.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.7	1.7
10°-20°	503.7	6.2
20°-30°	953.8	11.7
30°-40°	1581.6	19.4
40°-50°	2160.6	26.5
50°-60°	1961.3	24.0
60°-70°	653.1	8.0
70°-80°	190.5	2.3
80°-90°	20.0	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°	8163.3	100.0
0°-180°	8163.3	100.0



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REPORT NUMBER: P633048
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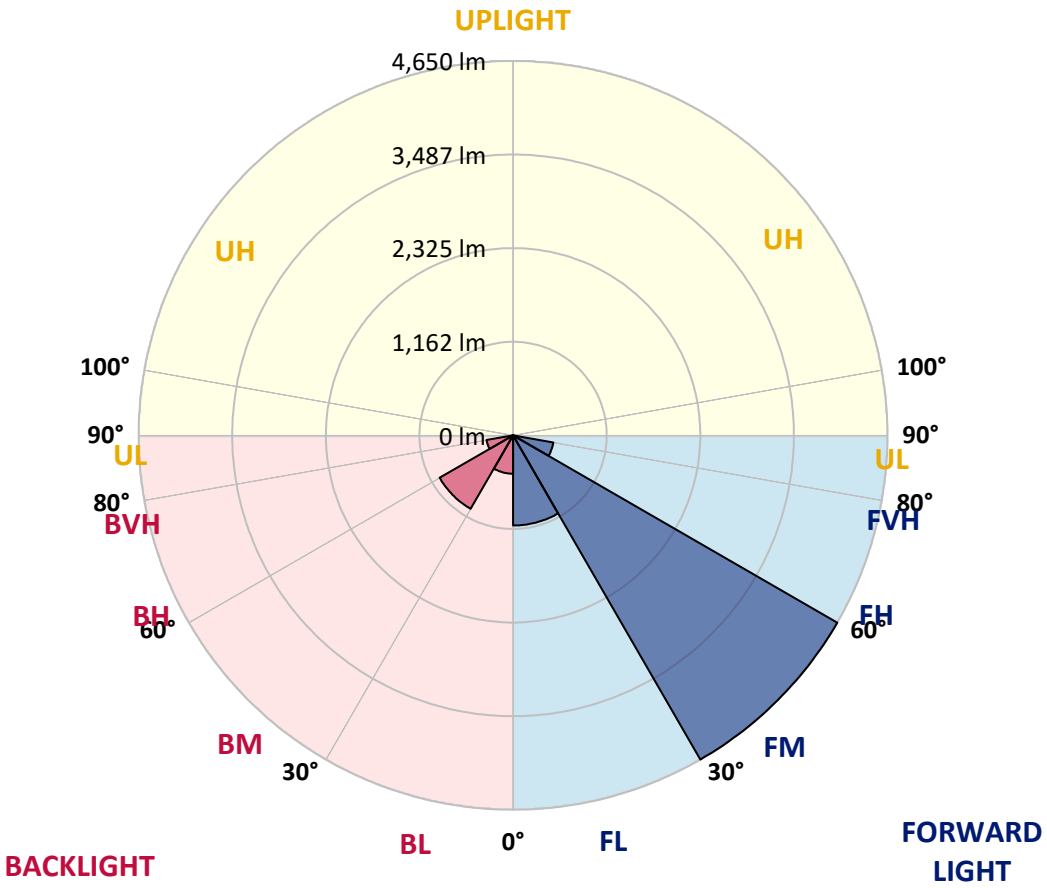
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1119.4	13.7			
FM	(30°-60°)	4649.9	57.0			
FH	(60°-80°)	508.5	6.2			G0/660
FVH	(80°-90°)	7.8	0.1			G0/10
BL	(0°-30°)	476.8	5.8	B1/500		
BM	(30°-60°)	1053.6	12.9	B2/2500		
BH	(60°-80°)	335.2	4.1	B1/500		G1/500
BVH	(80°-90°)	12.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1
Type II Short



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Scaled Data Report

REPORT NUMBER: P633048
CATALOG NUMBER: GWS-SA2D-830-U-T2R-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1236.8	1236.8	1236.8	1236.8	1236.8	1236.8	1236.8	1236.8	1236.8	1236.8	1236.8
2.5°	1602.5	1614.5	1595.9	1597.2	1550.7	1529.4	1469.5	1434.3	1411.0	1345.8	1286.7
5°	1925.7	1911.7	1897.1	1888.4	1847.9	1790.7	1716.2	1657.0	1602.5	1474.8	1351.8
7.5°	2123.8	2116.5	2106.5	2101.2	2061.3	2001.5	1927.0	1876.5	1797.3	1624.5	1431.0
10°	2292.1	2283.4	2277.4	2281.4	2248.8	2210.3	2129.2	2071.3	1982.2	1782.7	1526.7
12.5°	2422.4	2427.0	2429.0	2450.3	2436.4	2413.1	2329.3	2268.1	2169.1	1949.6	1639.1
15°	2525.5	2524.1	2547.4	2588.0	2610.6	2595.9	2528.8	2477.6	2356.6	2113.9	1760.1
17.5°	2549.4	2550.7	2587.3	2658.5	2732.3	2768.2	2730.3	2669.1	2549.4	2276.1	1885.8
20°	2568.7	2571.3	2609.2	2690.4	2798.1	2898.5	2904.5	2860.6	2757.5	2451.7	2013.5
22.5°	2690.4	2696.4	2706.3	2757.5	2854.6	2981.6	3051.4	3042.1	2955.7	2635.8	2151.1
25°	3010.2	2992.3	2943.7	2929.1	2966.3	3069.4	3188.4	3206.4	3163.8	2838.7	2299.4
27.5°	3405.2	3385.9	3314.1	3238.3	3157.8	3193.7	3320.7	3374.6	3375.3	3062.1	2448.3
30°	3763.6	3748.3	3689.8	3581.4	3442.4	3390.6	3484.3	3556.8	3600.0	3320.1	2617.9
32.5°	4070.1	4056.2	3977.0	3888.6	3752.9	3648.6	3682.5	3752.3	3853.4	3653.9	2828.7
35°	4328.1	4314.2	4238.4	4149.3	4023.6	3961.1	3949.1	3997.0	4128.0	4002.3	3070.7
37.5°	4537.6	4523.6	4444.5	4360.7	4265.0	4268.9	4286.9	4310.2	4385.3	4375.3	3329.4
40°	4673.2	4658.6	4602.1	4542.2	4481.7	4529.6	4618.7	4590.8	4630.7	4676.6	3567.4
42.5°	4733.7	4715.1	4682.5	4669.2	4650.6	4725.1	4896.7	4868.7	4820.9	4877.4	3744.3
45°	4673.2	4657.3	4656.6	4697.2	4740.4	4836.1	5088.8	5066.2	4945.2	4974.5	3850.0
47.5°	4487.7	4473.7	4511.7	4618.0	4724.4	4864.1	5174.6	5178.6	5033.6	5015.0	3918.5
50°	4086.8	4077.4	4187.2	4388.6	4572.2	4777.0	5147.3	5193.2	5054.9	5002.4	3909.9
52.5°	3271.5	3314.8	3553.5	3889.9	4246.3	4624.0	5046.3	5106.1	4952.5	4919.3	3863.3
55°	2239.5	2259.5	2498.2	2989.6	3554.8	4292.9	4814.2	4906.6	4831.5	4905.3	3911.9
57.5°	1159.7	1175.6	1363.8	1800.0	2411.1	3392.5	4169.9	4473.1	4587.5	4975.8	4062.8
60°	476.1	489.4	567.2	778.0	1216.2	1975.6	3000.9	3450.4	3719.0	4544.2	3608.0
62.5°	345.8	352.4	389.7	464.1	637.0	968.2	1698.3	1863.8	2052.7	2848.0	2290.7
65°	291.2	298.6	328.5	373.7	464.8	593.8	725.5	729.4	803.9	1160.3	849.1
67.5°	244.0	250.7	277.3	315.8	375.7	421.6	389.7	390.3	389.0	420.9	406.9
70°	190.2	195.5	222.1	263.3	294.6	270.6	304.5	337.1	323.2	335.8	355.1
72.5°	139.0	145.0	168.2	199.5	191.5	192.8	246.7	279.9	272.0	285.9	303.9
75°	100.4	104.4	116.4	99.7	105.1	127.0	173.6	191.5	199.5	211.5	227.4
77.5°	32.6	32.6	36.6	45.9	57.2	70.5	88.4	95.8	107.7	121.0	132.3
80°	16.6	17.3	20.6	25.3	31.9	40.6	51.9	55.2	61.2	68.5	73.1
82.5°	8.0	8.6	10.0	12.6	16.6	21.3	28.6	31.9	35.9	40.6	43.9
85°	2.0	2.0	2.7	4.0	5.3	8.0	10.6	12.6	16.0	19.3	21.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.7	2.0	2.7	3.3	4.0	5.3
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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Scaled Data Report

REPORT NUMBER: P633048
CATALOG NUMBER: GWS-SA2D-830-U-T2R-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1236.8	1236.8	1236.8	1236.8	1236.8	1236.8	1236.8	1236.8	1236.8	1236.8	1236.8
2.5°	1260.1	1222.8	1175.0	1134.4	1097.2	1068.6	1044.0	1032.0	1020.7	1012.7	1015.4
5°	1294.6	1230.8	1141.7	1079.9	1042.0	1022.7	1009.4	1002.7	1001.4	996.1	994.1
7.5°	1345.2	1254.1	1135.1	1072.6	1047.3	1037.3	1030.0	1026.0	1028.0	1022.7	1020.7
10°	1407.7	1292.7	1151.7	1096.5	1074.6	1067.2	1059.3	1053.9	1051.3	1043.3	1042.0
12.5°	1485.5	1340.5	1181.6	1127.1	1105.1	1092.5	1081.9	1072.6	1066.6	1056.6	1053.9
15°	1569.3	1393.7	1216.8	1157.0	1131.1	1112.5	1095.2	1081.2	1070.6	1057.3	1055.3
17.5°	1660.4	1449.6	1246.1	1177.6	1144.4	1119.8	1094.5	1073.9	1059.3	1042.0	1040.0
20°	1755.5	1506.1	1268.1	1187.6	1145.0	1111.8	1077.9	1050.6	1032.0	1014.7	1013.4
22.5°	1853.9	1558.0	1281.3	1184.9	1134.4	1093.2	1052.6	1022.0	1000.1	979.5	978.1
25°	1952.9	1607.8	1284.7	1174.3	1113.1	1065.2	1024.7	988.8	964.2	940.9	938.2
27.5°	2053.4	1649.7	1276.7	1153.0	1084.5	1032.7	992.1	956.9	931.6	908.3	904.3
30°	2160.4	1685.6	1259.4	1125.1	1051.3	998.1	958.2	931.6	907.6	884.4	880.4
32.5°	2274.8	1716.9	1234.8	1091.2	1012.7	963.5	934.2	910.3	886.4	865.8	861.8
35°	2411.1	1737.5	1198.2	1047.3	976.8	938.2	918.3	890.4	861.1	838.5	836.5
37.5°	2552.1	1753.5	1154.3	1005.4	945.6	923.6	907.0	869.1	832.5	805.2	801.9
40°	2688.4	1766.8	1099.8	966.2	917.0	913.0	890.4	843.2	780.0	749.4	746.7
42.5°	2815.4	1770.7	1042.6	924.3	891.0	889.0	863.8	790.6	742.1	722.8	720.1
45°	2902.5	1767.4	983.5	885.0	865.1	854.5	827.9	752.7	722.8	705.5	702.2
47.5°	2967.0	1750.1	917.0	843.8	835.8	821.2	764.0	728.8	700.9	683.6	680.2
50°	*2955.7*	*1678.3*	*849.8*	*803.9*	*800.6*	*788.0*	*717.5*	*698.9*	*674.3*	*655.6*	*653.0*
52.5°	2897.2	1542.0	781.3	760.0	766.7	742.1	684.2	663.0	641.7	620.4	615.7
55°	2911.8	1443.6	729.4	717.5	729.4	673.6	647.0	624.4	604.4	583.8	579.8
57.5°	2975.6	1346.5	674.3	671.6	684.2	621.1	599.1	570.5	541.9	525.3	525.3
60°	2498.9	981.5	577.2	583.8	612.4	578.5	559.2	530.0	498.7	484.1	484.1
62.5°	1477.5	615.7	478.8	471.4	489.4	510.7	521.3	497.4	460.1	440.9	441.5
65°	651.0	448.2	422.2	416.3	410.9	425.6	454.8	456.8	417.6	395.0	395.6
67.5°	401.0	405.6	395.0	390.3	385.7	383.0	380.3	381.7	371.0	350.4	349.8
70°	361.7	374.4	367.0	363.1	357.1	352.4	336.5	310.5	292.6	287.3	293.2
72.5°	311.2	328.5	324.5	322.5	315.2	303.9	282.6	257.3	236.1	222.8	225.4
75°	234.7	248.7	250.7	251.3	243.4	232.7	210.8	189.5	170.9	156.9	160.3
77.5°	135.0	143.0	145.0	147.0	141.0	137.0	122.3	107.1	97.1	82.5	86.4
80°	75.1	78.5	78.5	79.1	75.8	71.1	61.2	52.5	47.9	41.2	41.9
82.5°	45.2	46.5	47.2	47.9	45.9	41.2	33.9	27.9	25.3	21.9	21.3
85°	21.9	23.3	23.3	23.9	20.6	18.0	14.0	10.6	9.3	6.6	7.3
87.5°	5.3	6.0	6.0	5.3	4.7	3.3	2.0	0.7	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

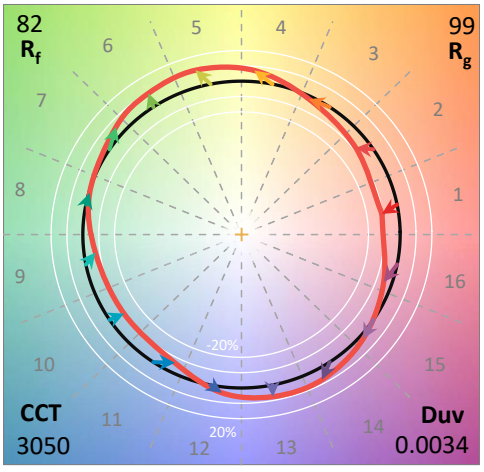
Test Information

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

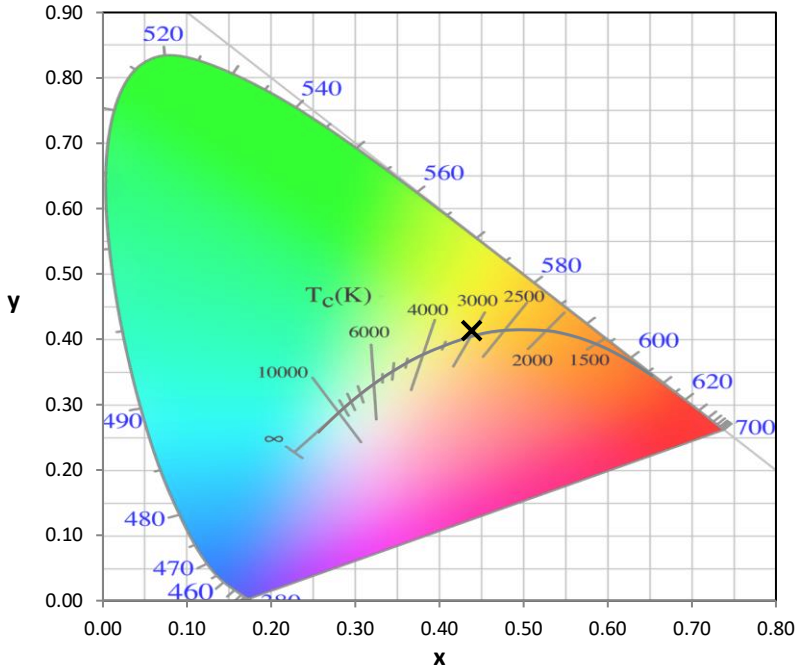
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

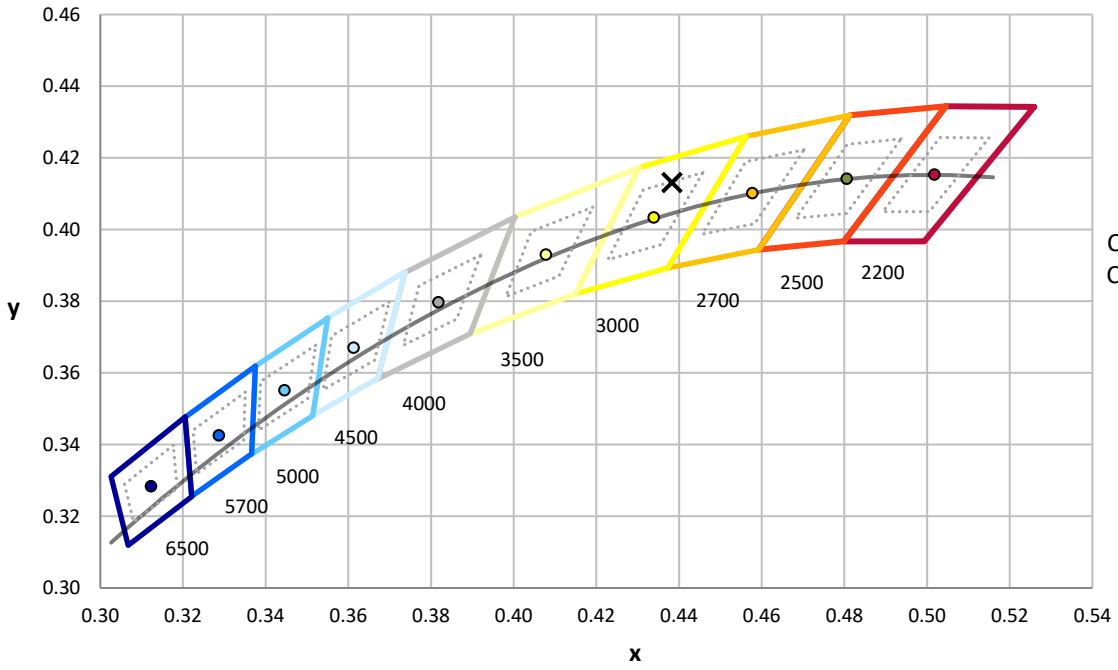
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

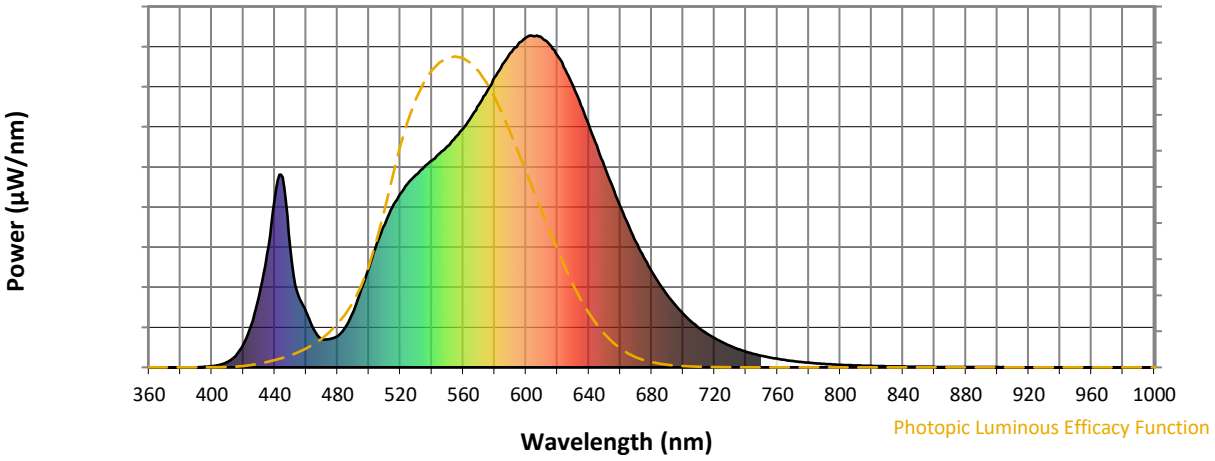


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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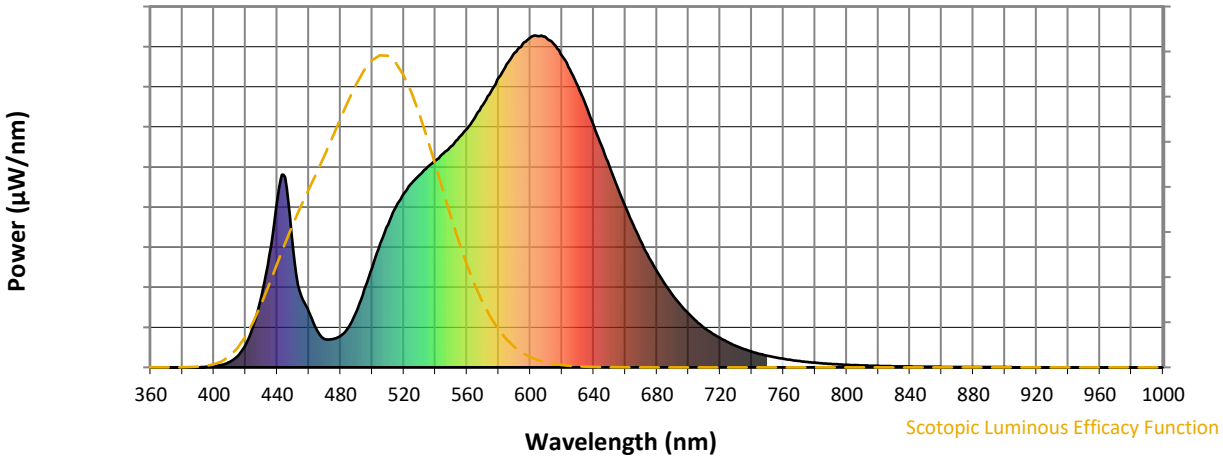
Scotopic Flux vs. Wavelength



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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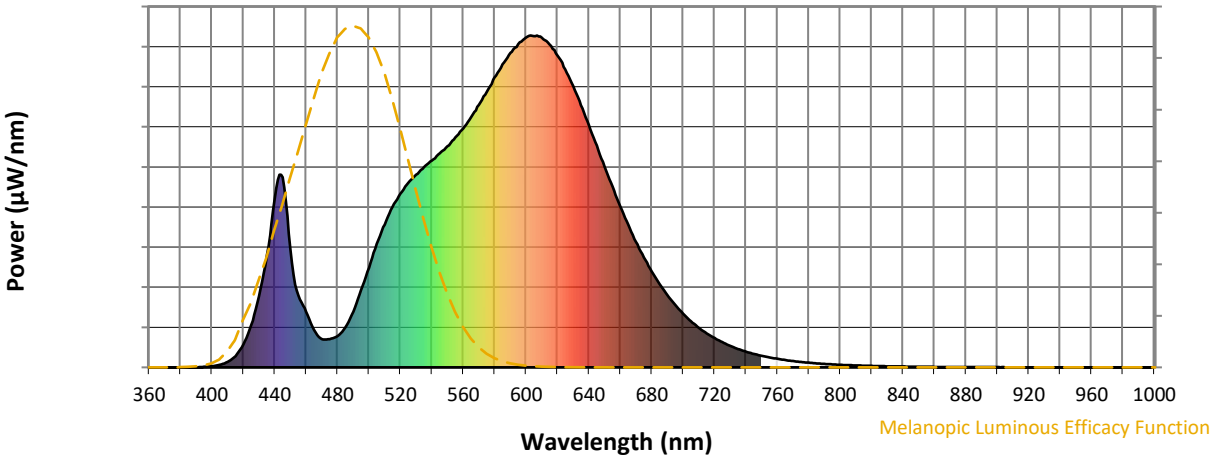
Melanopic Flux vs. Wavelength



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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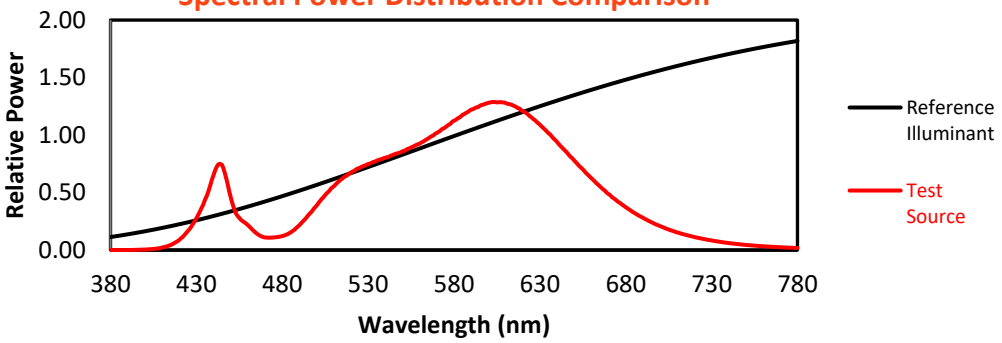
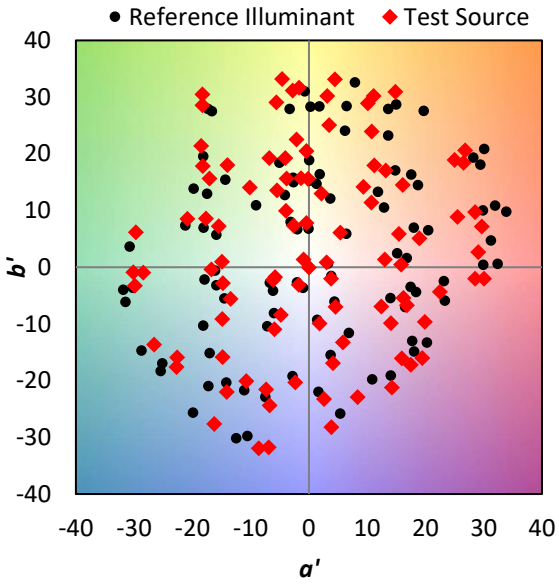
Summary

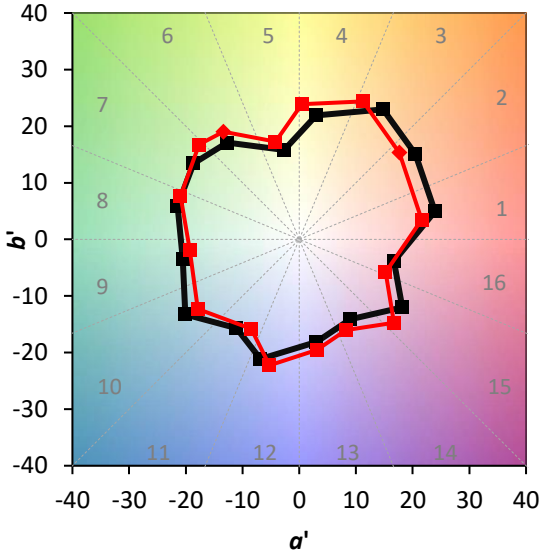
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

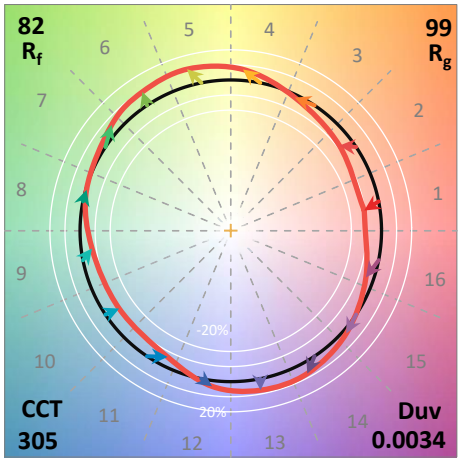
Spectral Power Distribution Comparison

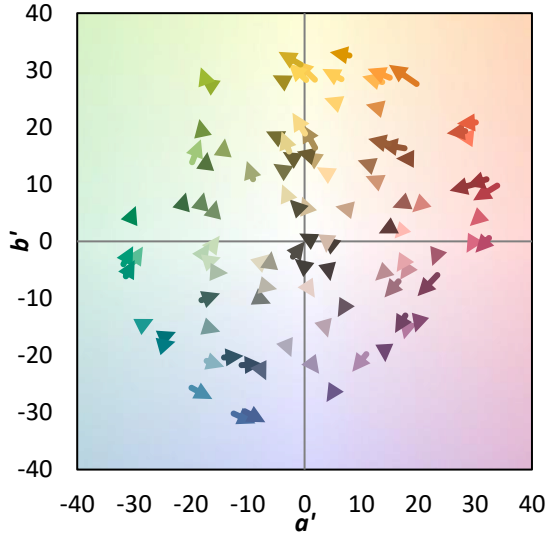


Color Vector Graphics









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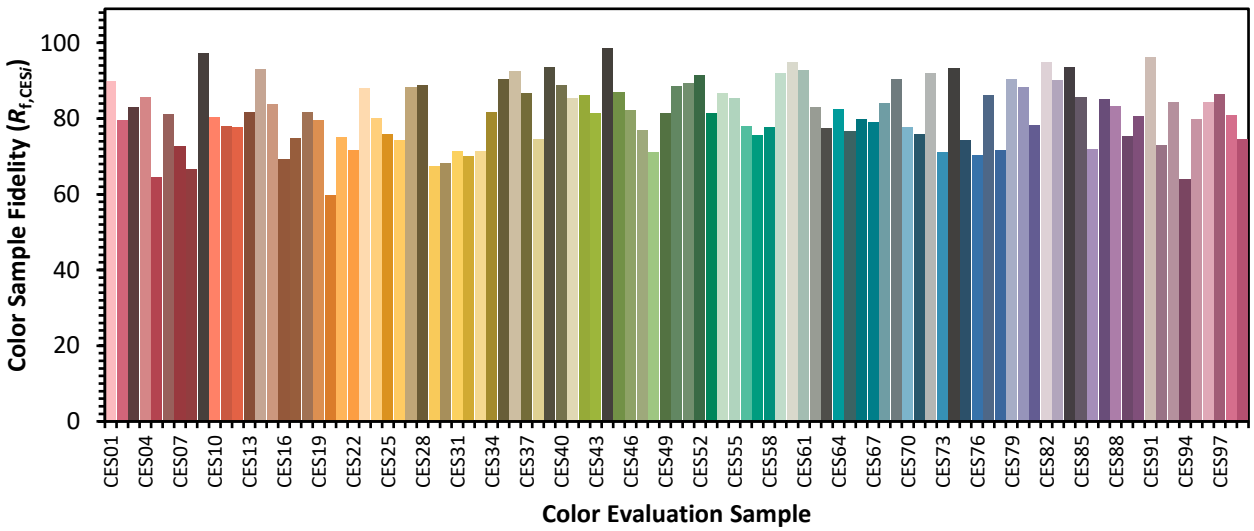
Individual Sample Fidelity Index ($R_{f,i}$)

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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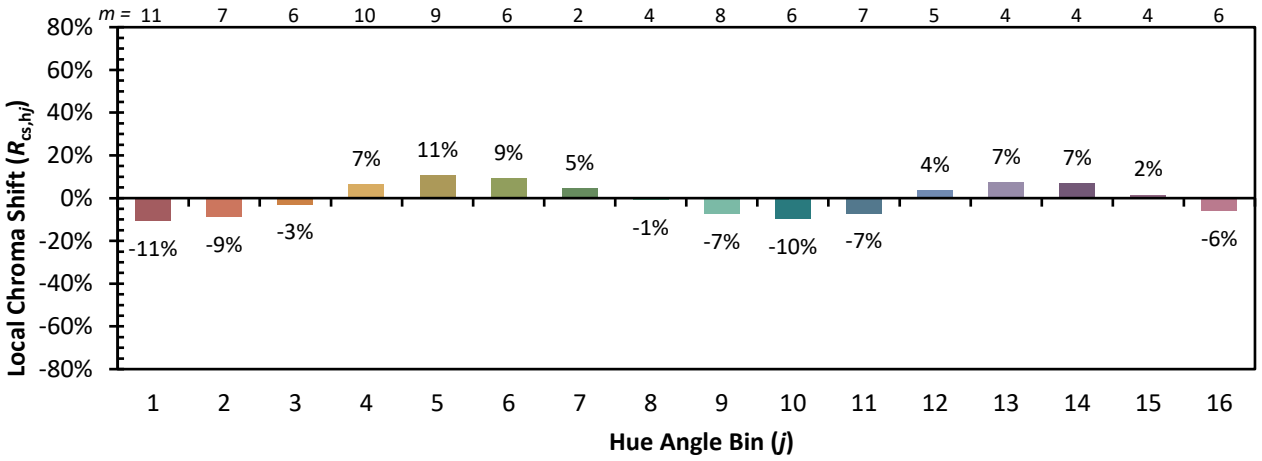
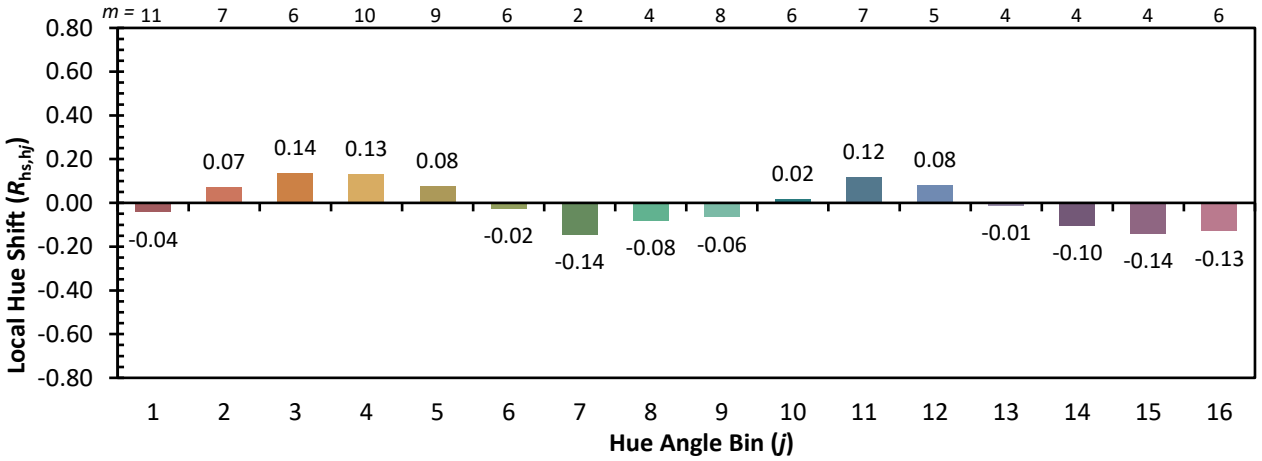
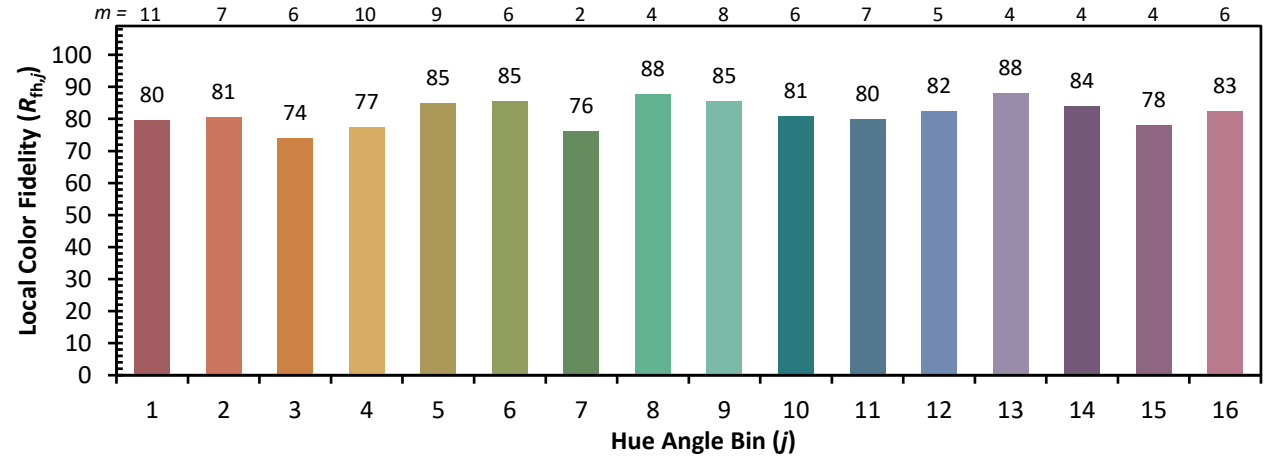
Color Rendition by Hue-Angle Bin







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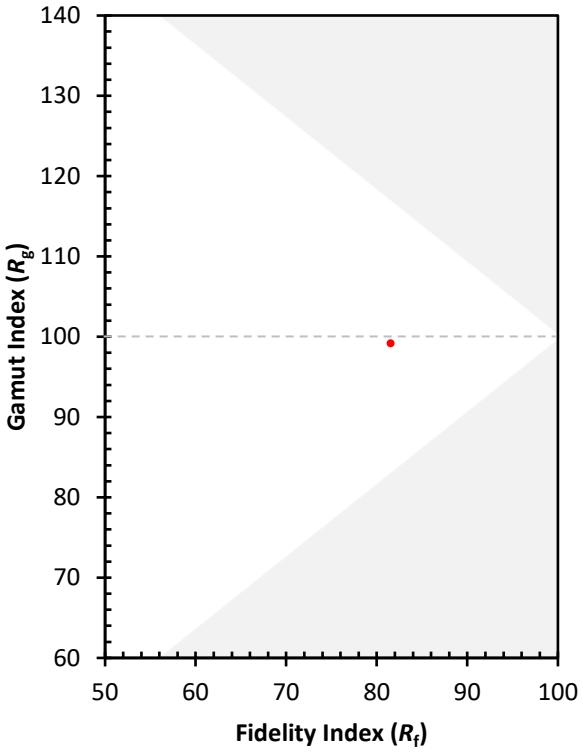
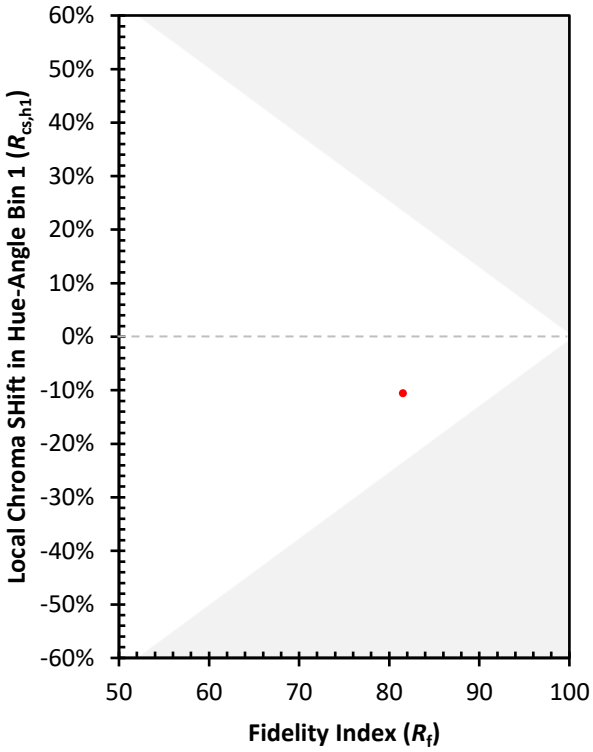
Measure Comparisons





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