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: P631065

Luminaire Tested: GWS-SA1E-830-U-T2-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:	P631065
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-22)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA1E-830-U-T2-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	4509 lumens
Efficiency:	N/A
Efficacy:	77.2 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B0 - U0 - G1

Input Watts (W):	58.4
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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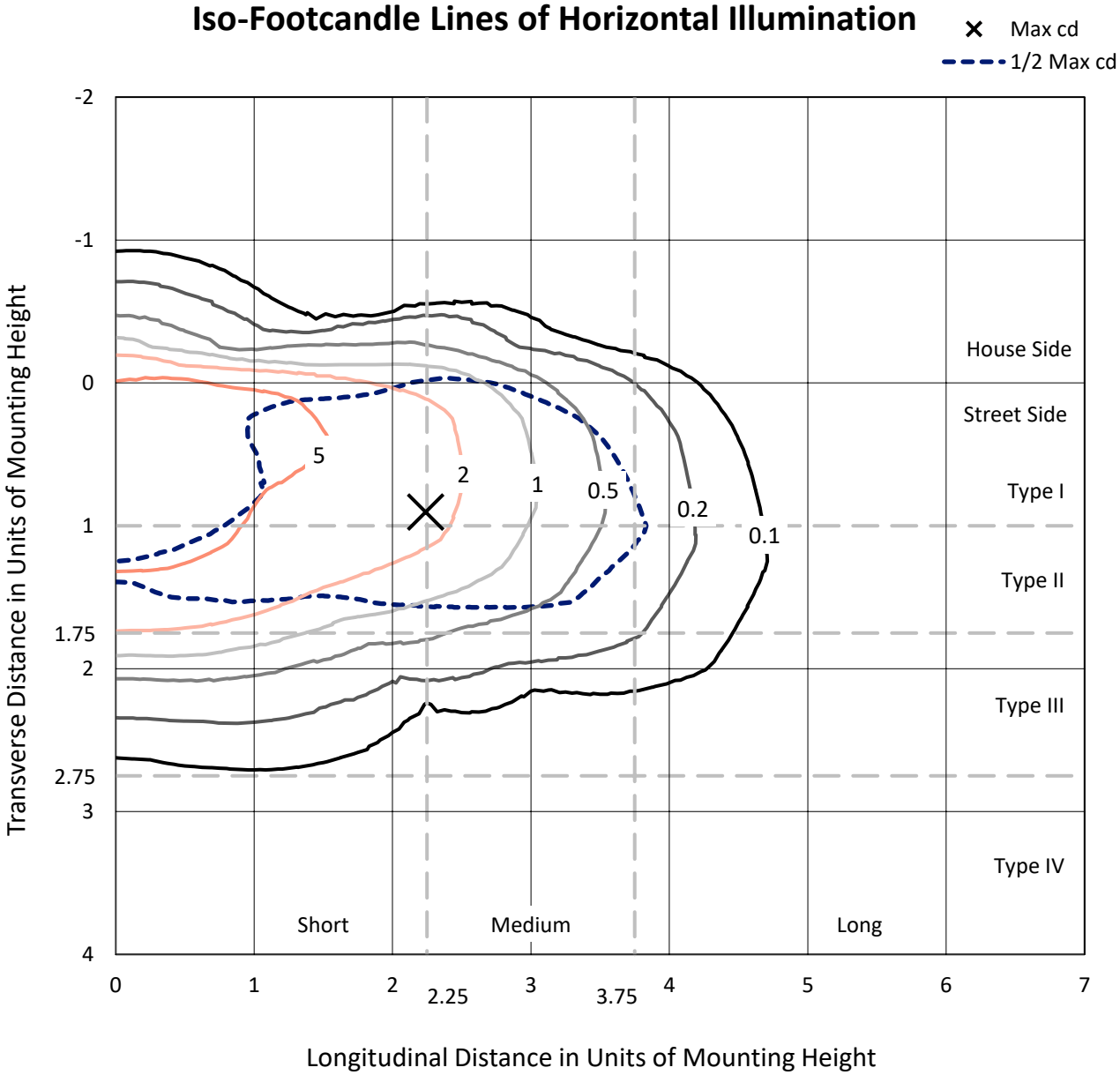
REPORT NUMBER: P631065
CATALOG NUMBER: GWS-SA1E-830-U-T2-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 8.5 fc
Type II - Short - N/A

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REPORT NUMBER: P631065
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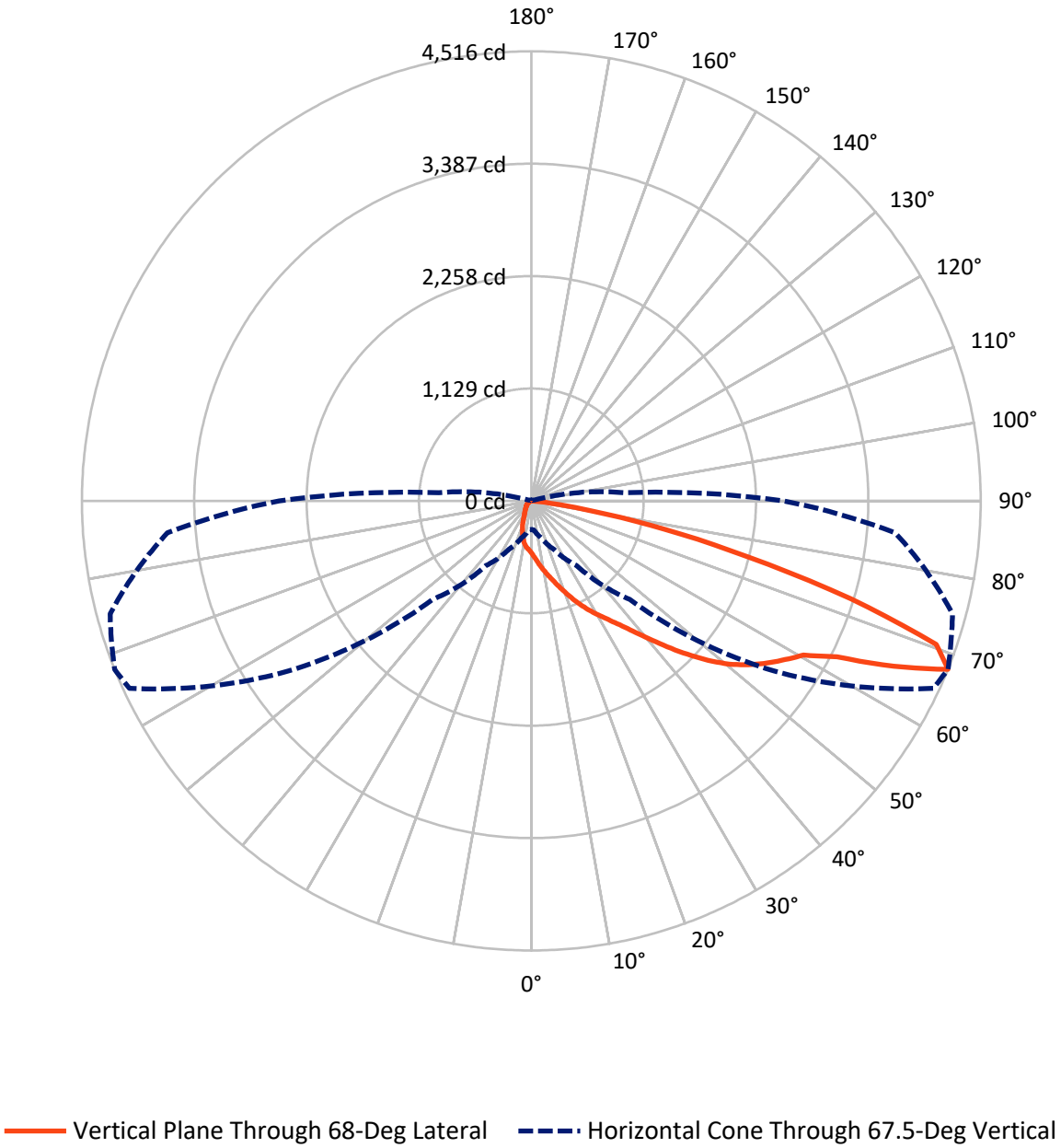
Luminous Intensity Polar Plot



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REPORT NUMBER: P631065
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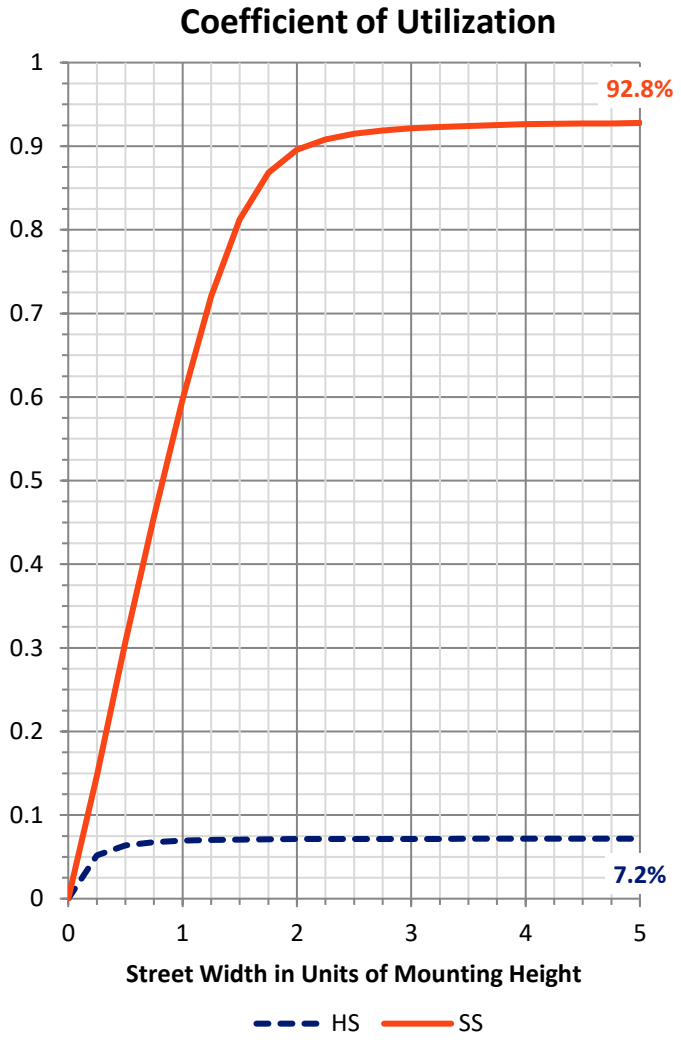
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	325.6	0.0	325.6
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	4183.4	0.0	4183.4
	% Fixture	92.8	0.0	92.8
Total	Lumens	4509.0	0.0	4509.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.2	1.1
10°-20°	147.0	3.3
20°-30°	252.6	5.6
30°-40°	439.1	9.7
40°-50°	766.2	17.0
50°-60°	1155.6	25.6
60°-70°	1158.8	25.7
70°-80°	511.2	11.3
80°-90°	27.3	0.6
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°	4509.0	100.0
0°-180°	4509.0	100.0



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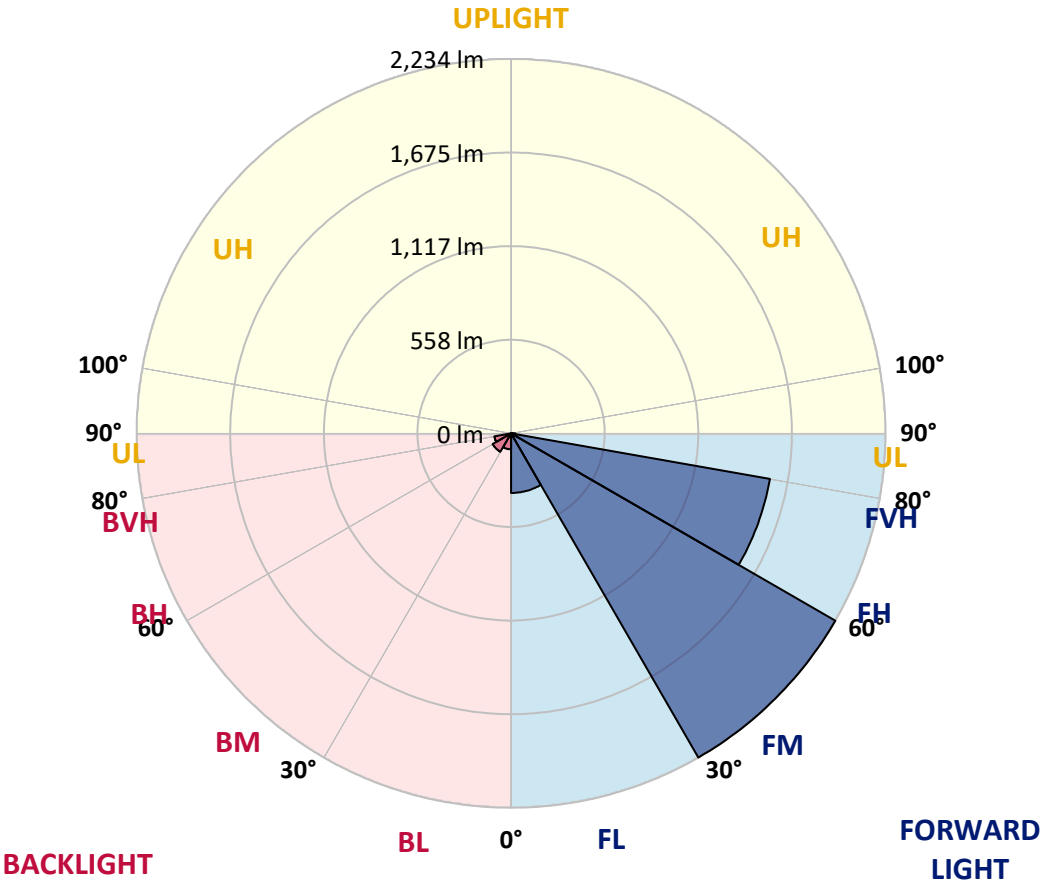
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	355.4	7.9			
FM	(30°-60°)	2233.8	49.5			
FH	(60°-80°)	1568.4	34.8			G1/1800
FVH	(80°-90°)	25.8	0.6			G1/100
BL	(0°-30°)	95.3	2.1	B0/110		
BM	(30°-60°)	127.2	2.8	B0/220		
BH	(60°-80°)	101.6	2.3	B0/110		G0/110
BVH	(80°-90°)	1.5	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1
Type II Short



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Scaled Data Report

REPORT NUMBER: P631065
CATALOG NUMBER: GWS-SA1E-830-U-T2-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	524.7	524.7	524.7	524.7	524.7	524.7	524.7	524.7	*524.7*	524.7	524.7
2.5°	611.0	614.9	611.0	611.9	600.7	595.5	584.3	568.7	*564.9*	554.9	539.8
5°	685.7	689.1	685.3	684.4	671.5	662.0	643.4	616.6	*608.9*	589.5	559.7
7.5°	726.3	728.4	729.7	731.9	727.1	719.4	702.5	669.3	*661.1*	629.6	587.7
10°	730.6	732.3	738.8	751.7	761.2	766.0	756.5	725.8	*712.9*	682.2	622.3
12.5°	718.5	721.1	731.4	753.0	779.3	803.5	809.5	782.8	*771.1*	731.9	662.8
15°	702.5	704.7	718.9	748.3	788.0	832.4	857.4	845.8	*832.8*	791.8	707.7
17.5°	677.9	680.9	700.8	740.5	791.8	855.3	909.2	913.1	*904.0*	859.6	757.3
20°	664.1	666.3	684.0	725.0	789.3	872.1	957.6	994.2	*984.3*	937.7	814.3
22.5°	675.8	677.5	689.1	721.1	780.6	881.6	1002.4	1075.4	*1069.7*	1021.4	874.3
25°	737.0	742.7	735.7	741.4	784.5	886.8	1038.7	1156.5	*1157.8*	1109.0	936.4
27.5°	861.3	854.0	837.6	809.5	814.7	900.6	1069.7	1232.9	*1244.1*	1194.5	991.6
30°	987.8	983.4	973.5	929.9	893.7	931.2	1096.1	1311.0	*1328.7*	1278.6	1040.8
32.5°	1129.7	1134.0	1116.4	1064.1	1002.4	993.4	1123.3	1385.2	*1418.4*	1374.0	1098.7
35°	1299.3	1300.6	1265.7	1207.8	1137.9	1096.1	1172.0	1467.2	*1528.5*	1495.7	1175.9
37.5°	1464.6	1472.4	1453.4	1362.3	1300.2	1223.8	1252.7	1572.5	*1658.8*	1645.8	1273.0
40°	1610.9	1623.0	1616.9	1528.9	1447.3	1383.0	1377.9	1695.9	*1816.3*	1831.0	1401.2
42.5°	1727.4	1735.2	1739.9	1677.3	1605.3	1569.0	1532.3	1839.2	*2002.3*	2062.3	1558.2
45°	1850.4	1853.0	1862.9	1820.6	1757.6	1760.6	1714.9	2013.1	*2198.2*	2318.6	1738.6
47.5°	2007.0	2015.6	2010.9	1966.5	1909.5	1943.6	1903.5	2192.1	*2391.5*	2592.2	1923.3
50°	2197.8	2206.8	2202.5	2150.7	2087.3	2101.5	2076.5	2366.0	*2577.9*	2850.2	2076.9
52.5°	2296.1	2303.5	2357.0	2380.3	2347.1	2256.4	2224.1	2557.2	*2735.4*	3062.5	2218.0
55°	2248.7	2253.8	2370.4	2468.7	2590.4	2499.8	2372.5	2704.8	*2874.4*	3228.2	2322.9
57.5°	2051.9	2079.9	2238.3	2404.9	2660.8	2740.2	2613.3	2865.3	*3008.2*	3343.4	2426.0
60°	1648.4	1647.1	1874.1	2173.2	2523.6	2806.2	2953.3	3082.4	*3142.4*	3431.9	2564.1
62.5°	910.9	919.1	1221.2	1615.2	2142.1	2635.3	3208.4	3457.4	*3448.3*	3586.4	2780.3
65°	453.5	469.9	633.9	925.2	1425.3	2177.9	3252.4	4029.6	*4003.7*	3950.2	3226.9
67.5°	*287.8*	*294.3*	*384.9*	*537.7*	*792.3*	*1399.9*	*2978.4*	*4456.3*	*4516.3*	*4381.7*	*3670.1*
70°	186.4	197.2	267.5	367.7	478.1	721.5	2181.8	4179.7	*4317.4*	4334.2	3393.9
72.5°	101.4	109.2	170.9	262.4	345.2	360.8	1225.5	3136.7	*3358.1*	3676.6	2655.2
75°	57.8	63.4	93.6	178.2	253.3	219.6	543.3	2099.8	*2240.9*	2627.5	1902.6
77.5°	35.0	39.7	52.6	86.7	158.8	146.7	205.4	1278.2	*1367.9*	1567.7	998.5
80°	16.0	19.0	33.2	47.9	86.7	69.5	78.5	595.9	*615.4*	643.4	330.5
82.5°	7.3	8.6	15.1	28.5	49.2	40.1	30.2	137.7	*193.8*	183.4	84.1
85°	0.9	0.9	5.6	11.7	13.8	10.4	12.5	31.1	*39.3*	55.2	24.2
87.5°	0.0	0.0	0.4	0.4	0.9	1.3	2.6	3.9	*5.6*	9.1	6.0
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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Scaled Data Report

REPORT NUMBER: P631065
CATALOG NUMBER: GWS-SA1E-830-U-T2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	524.7	524.7	524.7	524.7	524.7	524.7	524.7	524.7	524.7	524.7	524.7
2.5°	532.9	520.8	510.1	494.1	483.3	471.2	463.0	453.1	449.2	446.2	441.9
5°	545.0	525.6	499.3	469.9	445.8	422.9	401.7	387.9	375.9	374.1	368.1
7.5°	564.9	536.0	491.5	443.6	402.6	364.6	334.9	310.7	298.6	294.7	287.8
10°	591.2	551.5	479.9	406.5	347.4	302.1	268.4	241.2	222.2	215.3	210.2
12.5°	620.5	565.7	461.3	360.8	293.4	241.7	198.9	170.0	157.9	153.6	149.7
15°	654.2	579.1	432.0	315.0	240.8	177.8	147.6	135.1	129.9	128.6	127.3
17.5°	686.6	587.7	397.0	267.5	185.1	138.1	123.8	119.1	117.8	116.5	115.6
20°	723.2	593.8	356.0	222.7	143.7	116.9	110.0	106.6	104.0	101.4	101.0
22.5°	760.8	593.8	311.6	178.7	120.4	104.9	97.1	90.6	85.9	83.3	82.4
25°	796.6	585.6	267.5	142.8	106.2	93.2	83.3	75.9	69.5	66.5	65.6
27.5°	822.1	564.4	229.1	120.8	96.2	82.9	70.8	62.6	57.4	54.4	53.9
30°	838.0	532.9	193.8	107.9	87.6	72.1	60.0	53.1	49.2	47.0	46.2
32.5°	850.1	494.1	162.3	98.8	79.4	62.6	52.2	46.6	43.2	41.4	41.0
35°	874.3	457.4	139.0	90.6	70.8	54.8	45.7	41.4	38.8	36.7	36.2
37.5°	907.9	426.8	120.4	83.3	62.6	48.8	41.4	37.5	35.4	33.2	32.8
40°	957.6	407.4	106.6	75.9	55.2	44.0	38.0	34.5	31.5	29.3	28.9
42.5°	1033.9	398.3	97.5	68.6	48.8	39.7	35.0	30.6	27.6	25.5	25.0
45°	1125.0	403.0	89.8	61.3	44.4	36.7	31.1	26.8	23.7	21.6	21.1
47.5°	1222.5	419.9	83.3	54.4	40.1	33.7	27.6	22.9	20.3	18.1	17.7
50°	1324.3	447.5	77.7	47.9	36.7	30.2	23.7	19.9	17.3	15.5	15.1
52.5°	1412.8	485.0	72.1	43.2	33.7	26.8	20.7	17.3	14.7	12.9	12.5
55°	1497.4	520.4	67.7	38.8	30.2	23.3	18.1	14.7	12.5	10.8	10.4
57.5°	1589.3	558.0	62.6	35.0	27.2	20.7	16.0	12.5	10.8	9.1	8.6
60°	1723.1	613.6	54.8	31.9	23.7	18.1	13.8	11.2	9.5	7.3	6.9
62.5°	1916.0	715.0	46.2	27.6	20.3	15.5	11.7	9.5	7.8	6.0	5.2
65°	2276.7	887.6	38.0	22.9	16.4	12.9	9.9	7.8	6.0	4.3	3.9
67.5°	*2536.5*	*932.5*	*30.6*	*18.6*	*13.4*	*9.9*	*8.2*	*6.0*	*4.3*	*3.0*	*2.6*
70°	2217.6	669.7	23.7	15.1	11.2	7.8	6.5	4.7	3.0	2.2	1.7
72.5°	1670.9	437.6	17.7	11.7	8.6	6.5	4.7	3.9	2.6	1.7	1.3
75°	1177.6	252.9	12.9	8.6	6.0	4.7	3.9	3.0	2.2	1.3	1.3
77.5°	603.7	104.4	9.1	6.0	4.3	3.0	2.6	1.7	1.7	1.3	0.9
80°	183.4	34.5	5.2	3.9	3.0	2.2	1.3	1.3	1.3	0.9	0.4
82.5°	41.9	11.2	3.0	3.0	2.2	1.7	1.3	0.4	0.4	0.0	0.0
85°	10.8	3.5	2.6	2.2	2.2	1.7	0.9	0.4	0.0	0.0	0.0
87.5°	3.9	2.2	2.2	2.2	1.7	1.3	0.9	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

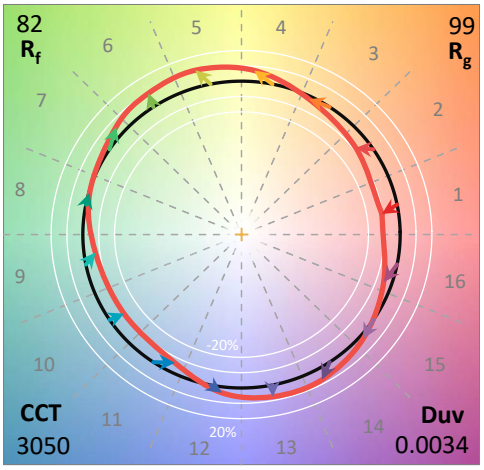
Test Information

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

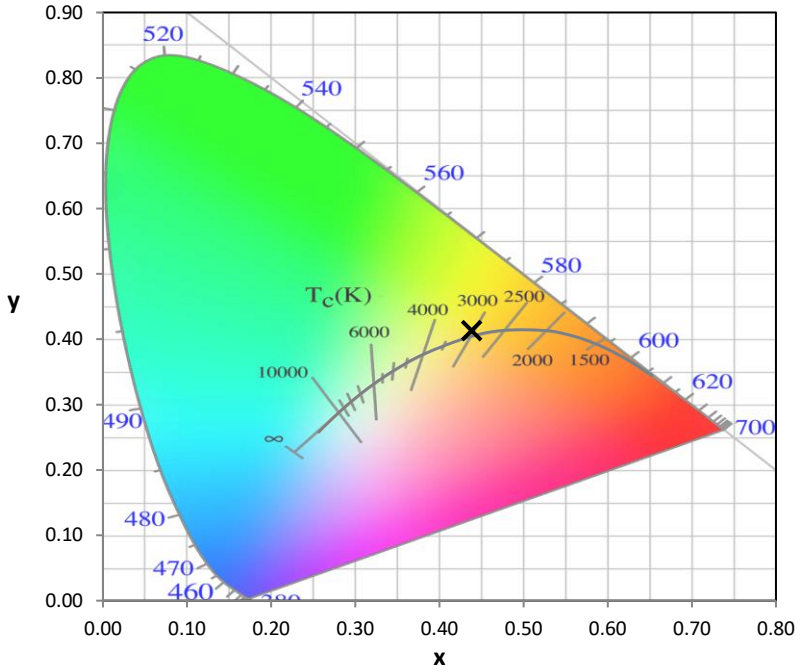
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

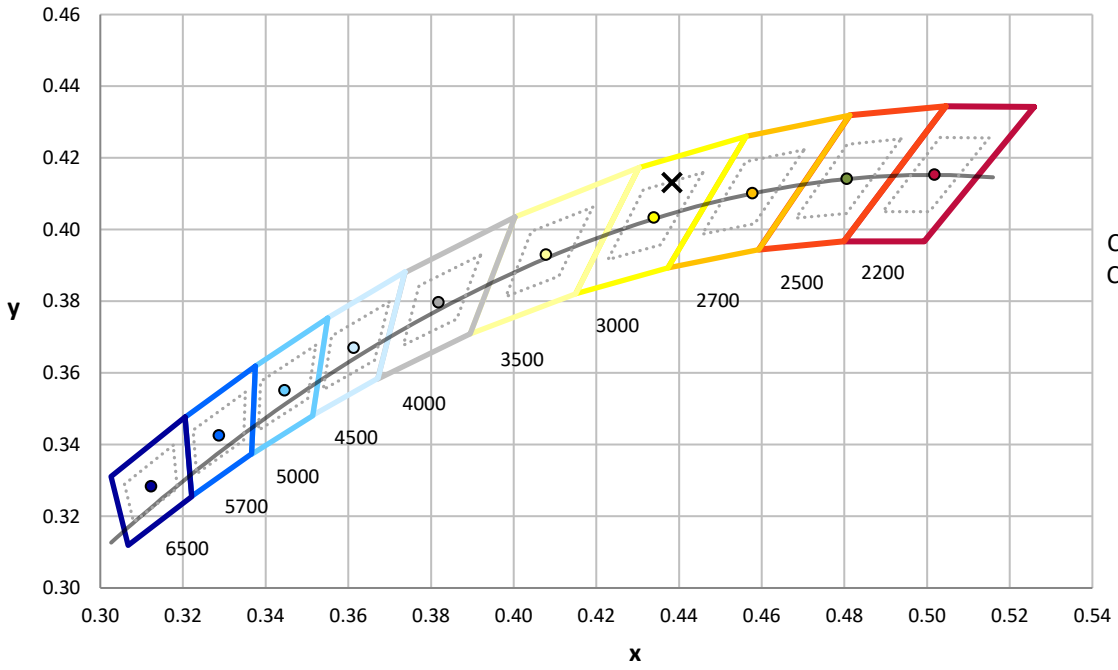
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

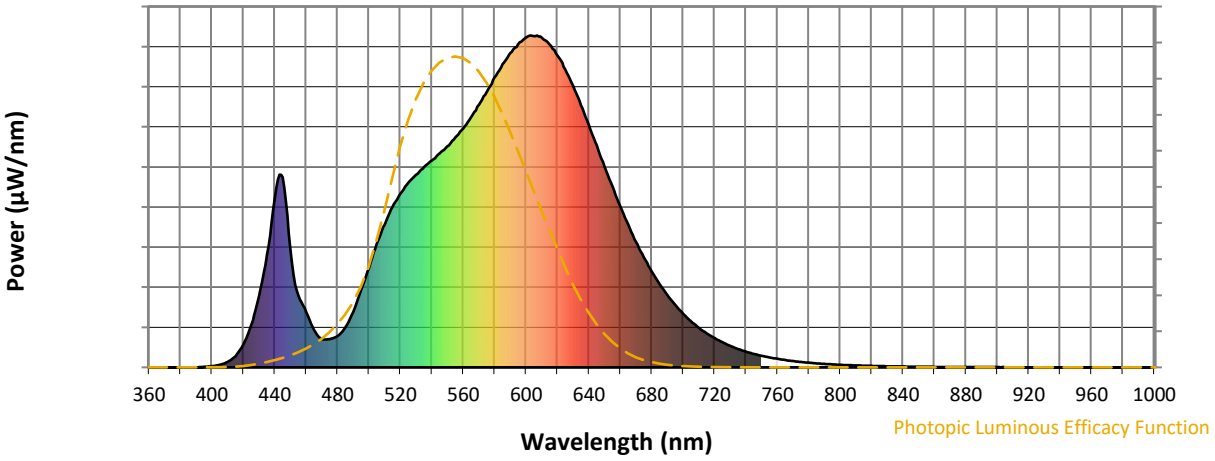


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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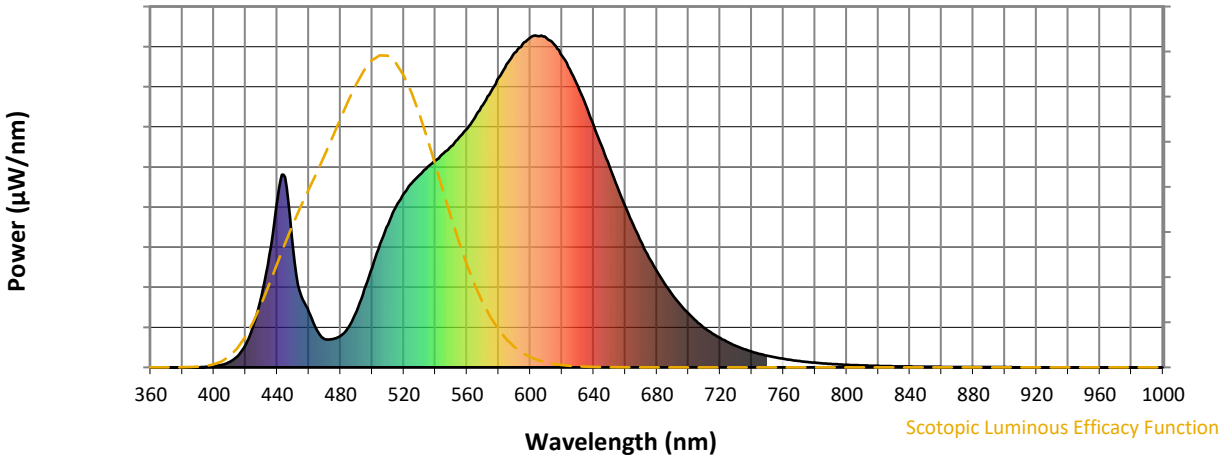
Scotopic Flux vs. Wavelength



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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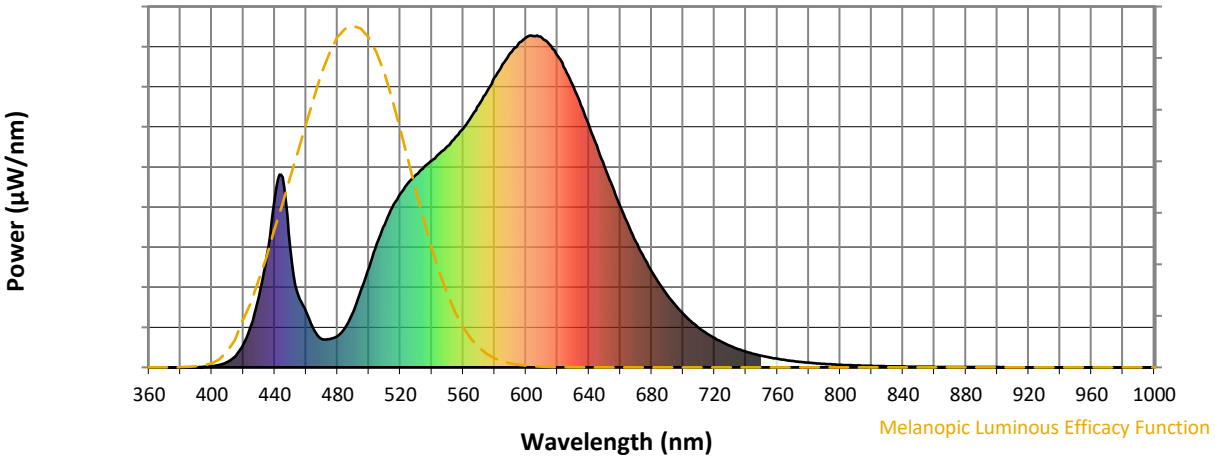
Melanopic Flux vs. Wavelength



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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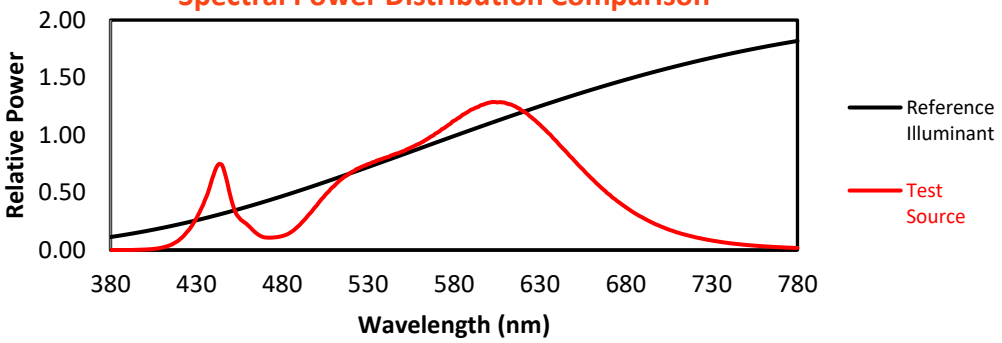
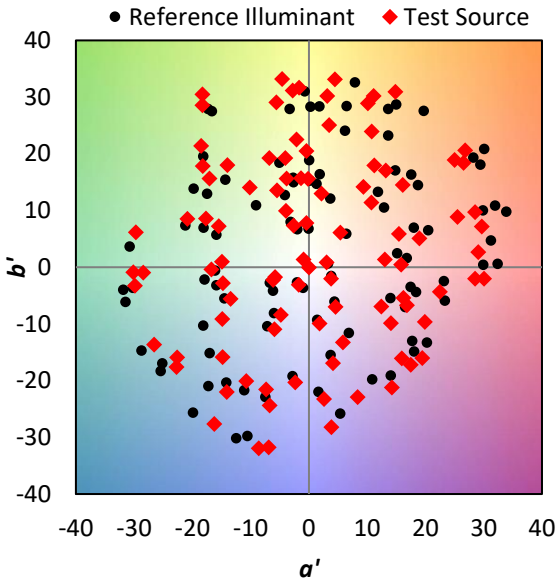
Summary

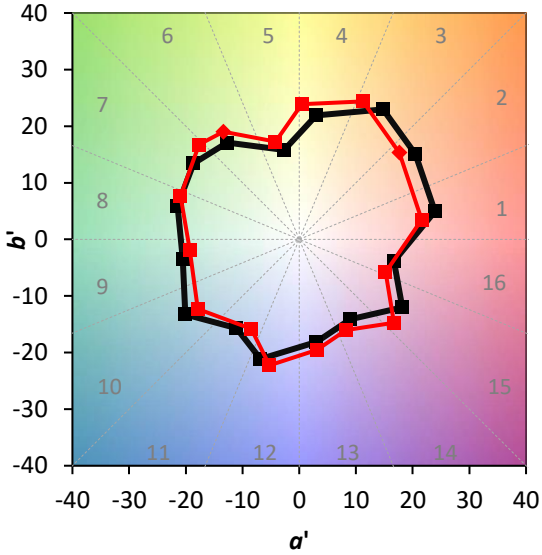
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

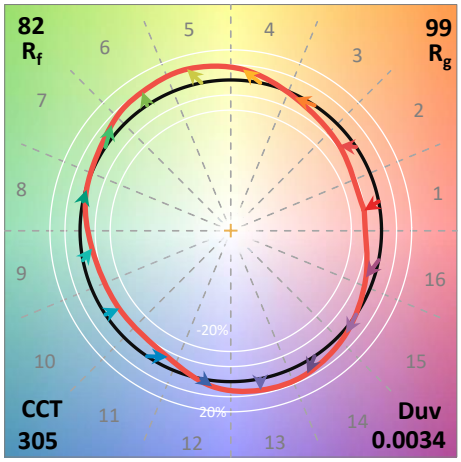
Spectral Power Distribution Comparison

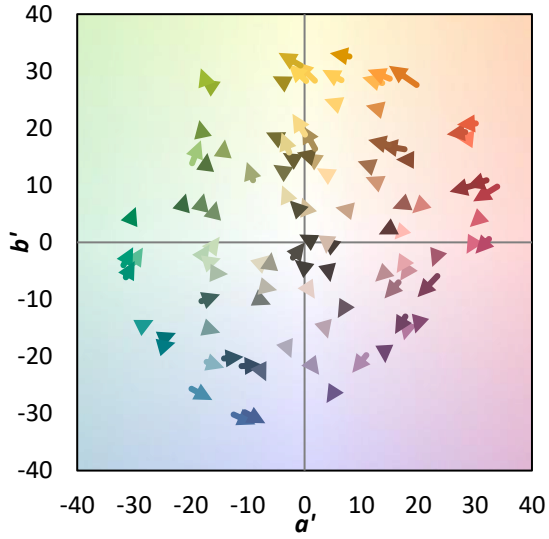


Color Vector Graphics









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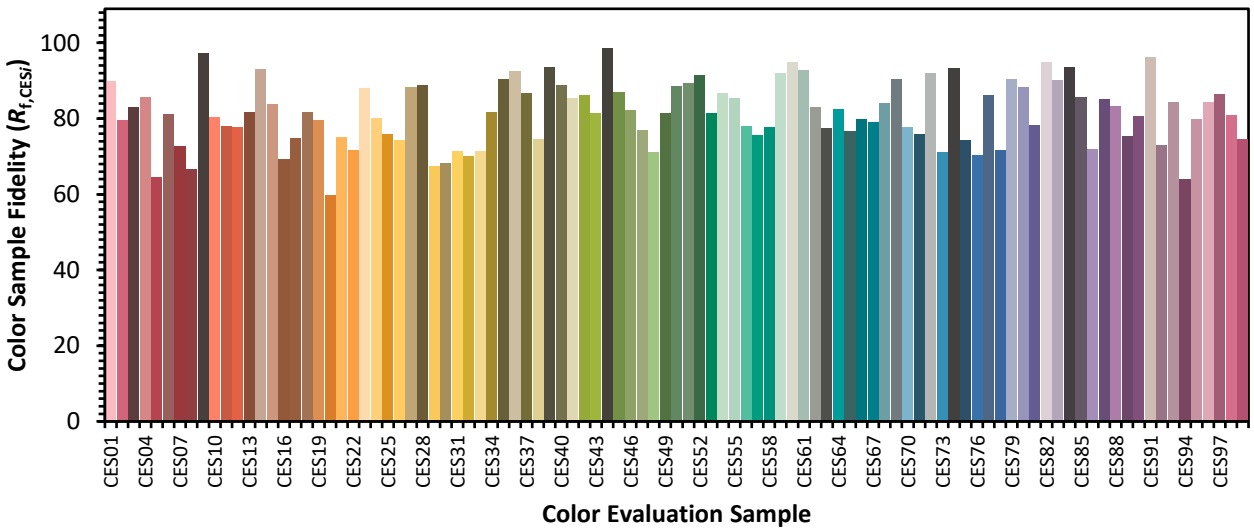
Individual Sample Fidelity Index ($R_{f,i}$)

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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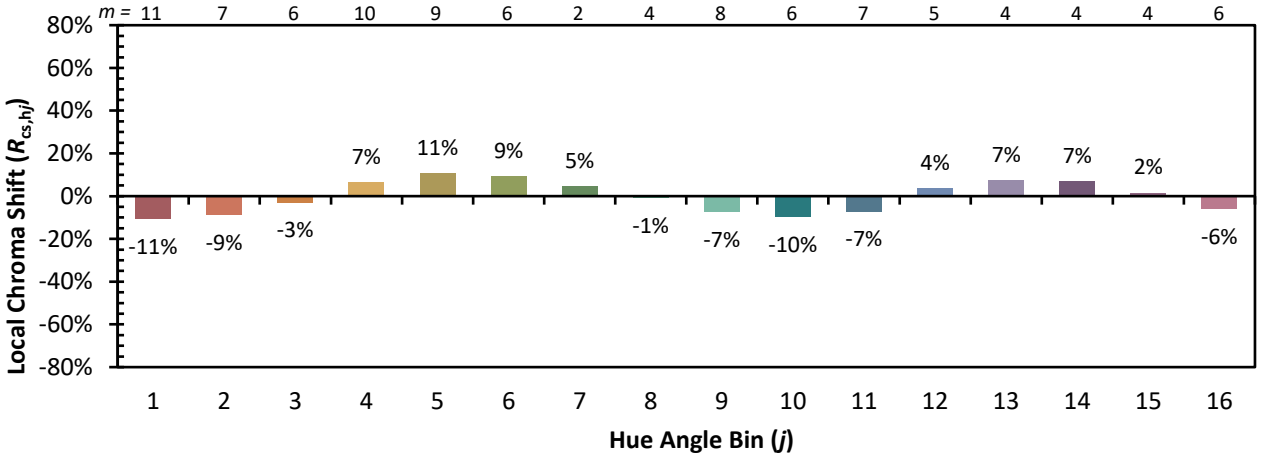
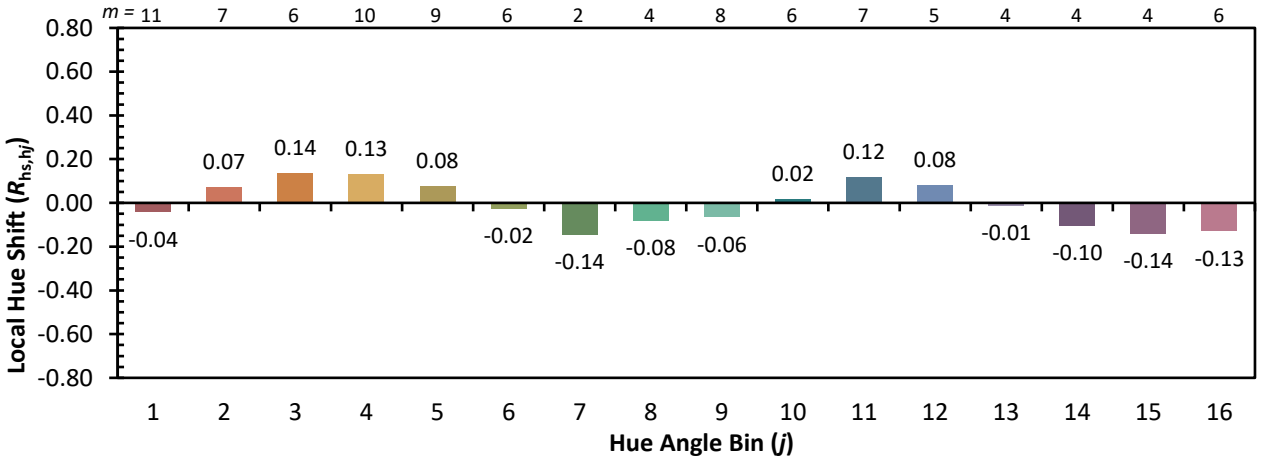
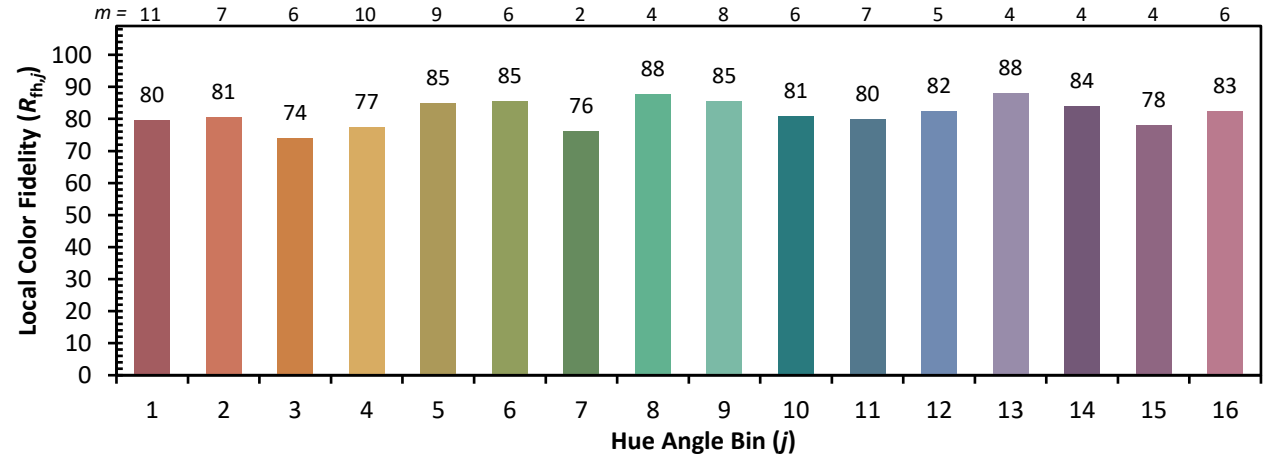
Color Rendition by Hue-Angle Bin







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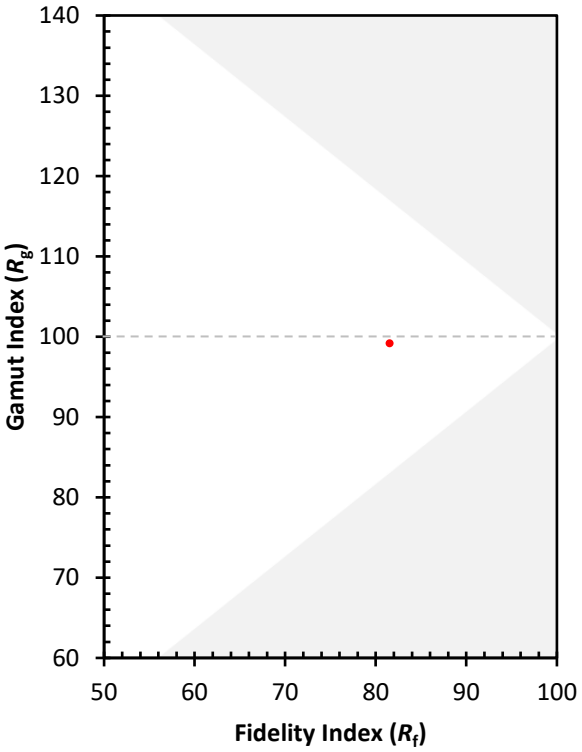
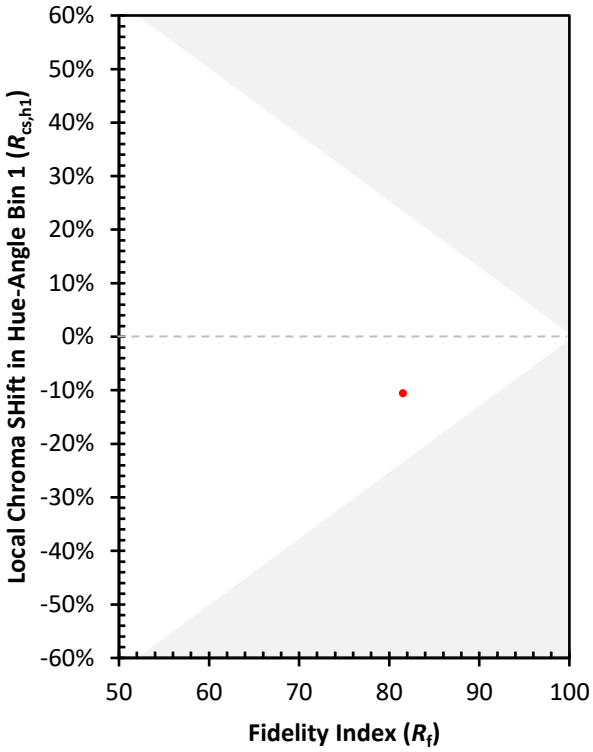
Measure Comparisons





(END OF REPORT)