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: P634530

Luminaire Tested: GWS-SA3B-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:	P634530
	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-SA3B-830-U-T2-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	6189.3 lumens
Efficiency:	N/A
Efficacy:	90.6 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G2

Input Watts (W):	68.3
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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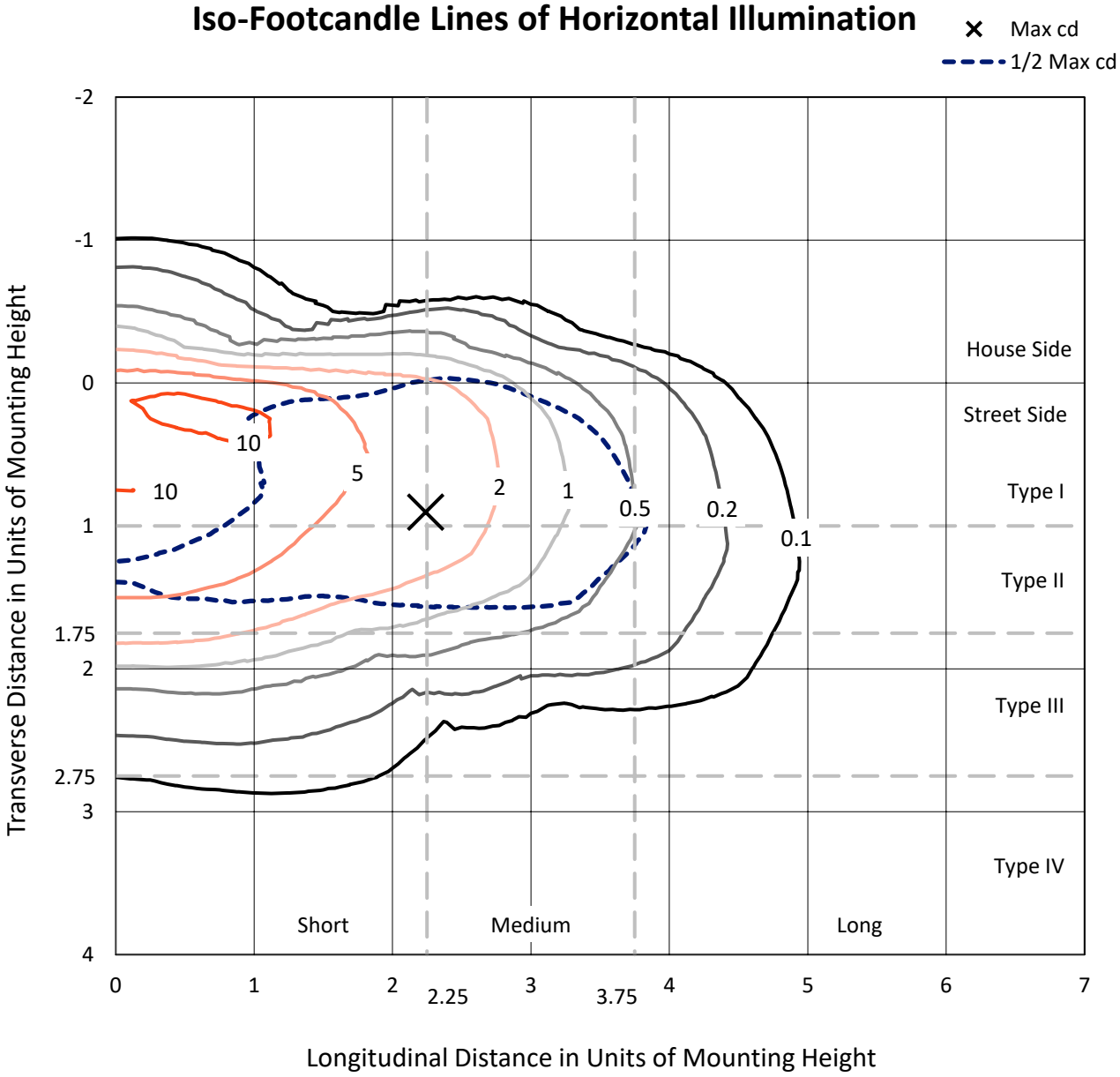
REPORT NUMBER: P634530
CATALOG NUMBER: GWS-SA3B-830-U-T2-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 11.6 fc
Type II - Short - N/A

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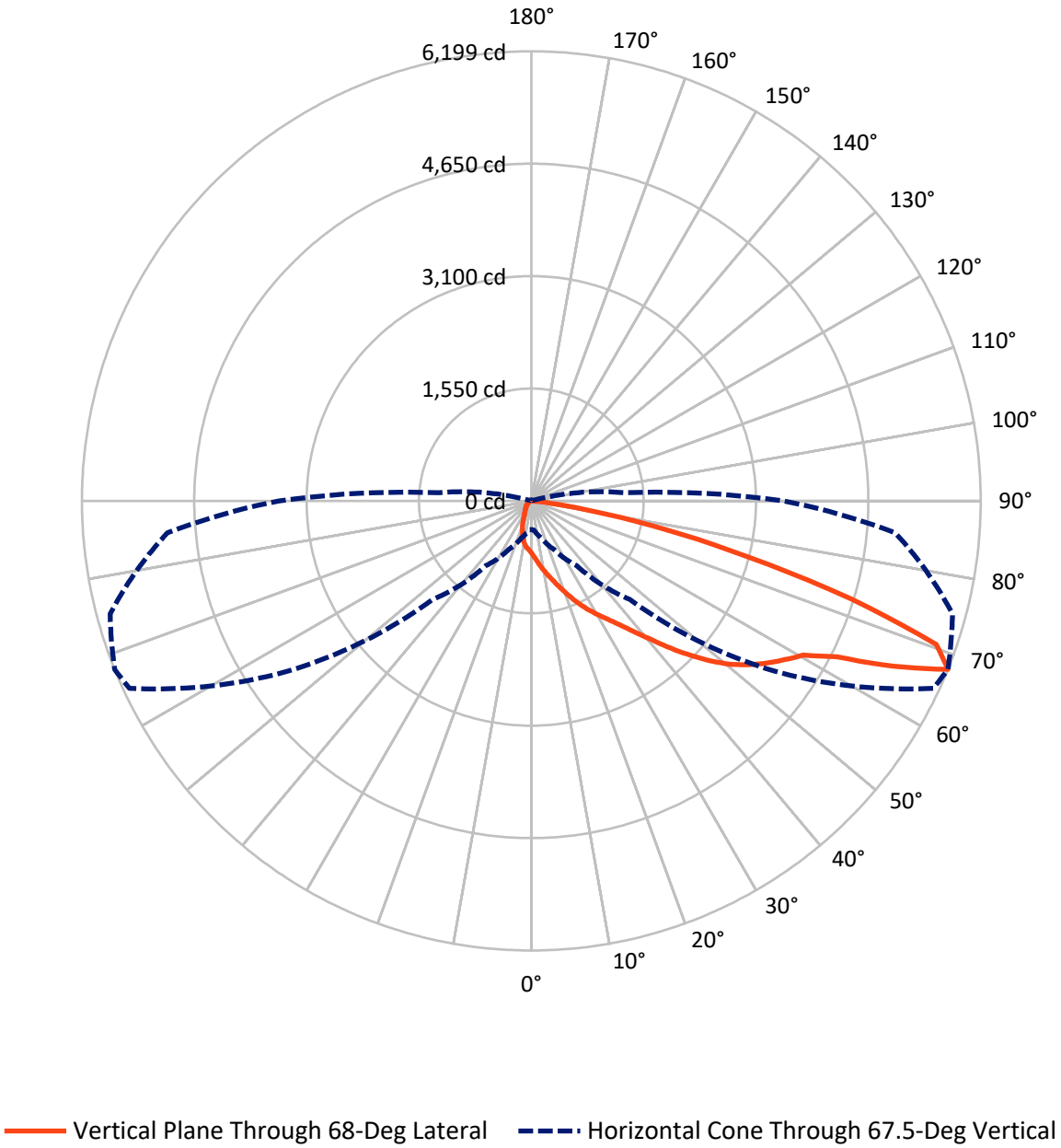
Luminous Intensity Polar Plot



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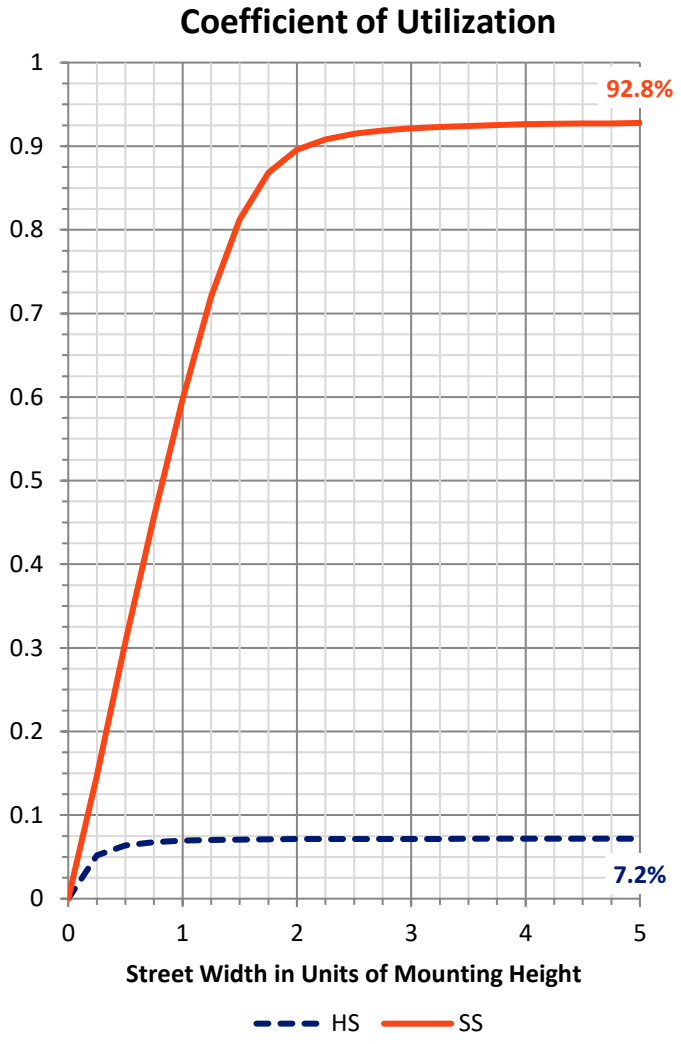
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	446.9	0.0	446.9
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	5742.4	0.0	5742.4
	% Fixture	92.8	0.0	92.8
Total	Lumens	6189.3	0.0	6189.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.2	1.1
10°-20°	201.7	3.3
20°-30°	346.7	5.6
30°-40°	602.7	9.7
40°-50°	1051.7	17.0
50°-60°	1586.3	25.6
60°-70°	1590.6	25.7
70°-80°	701.8	11.3
80°-90°	37.5	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°	6189.3	100.0
0°-180°	6189.3	100.0



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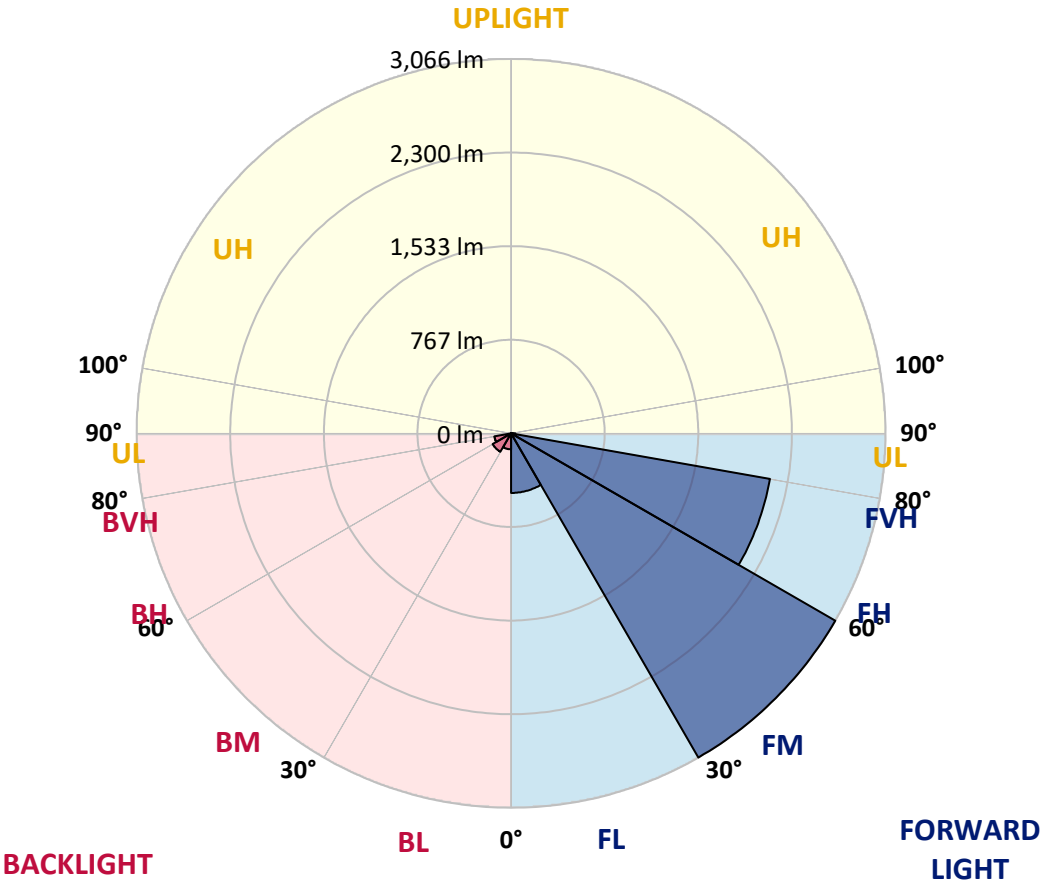
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	487.9	7.9			
FM	(30°-60°)	3066.2	49.5			
FH	(60°-80°)	2152.9	34.8			G2/5000
FVH	(80°-90°)	35.4	0.6			G1/100
BL	(0°-30°)	130.8	2.1	B1/500		
BM	(30°-60°)	174.6	2.8	B0/220		
BH	(60°-80°)	139.5	2.3	B1/500		G1/500
BVH	(80°-90°)	2.1	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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REPORT NUMBER: P634530
CATALOG NUMBER: GWS-SA3B-830-U-T2-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	720.3	720.3	720.3	720.3	720.3	720.3	720.3	720.3	*720.3*	720.3	720.3
2.5°	838.7	844.1	838.7	839.9	824.5	817.4	802.0	780.7	*775.4*	761.7	741.0
5°	941.2	946.0	940.6	939.4	921.7	908.6	883.2	846.4	*835.8*	809.1	768.3
7.5°	996.9	999.9	1001.6	1004.6	998.1	987.4	964.3	918.7	*907.5*	864.2	806.8
10°	1002.8	1005.2	1014.1	1031.8	1044.9	1051.4	1038.4	996.3	*978.5*	936.5	854.1
12.5°	986.2	989.8	1004.0	1033.6	1069.8	1102.9	1111.2	1074.5	*1058.5*	1004.6	909.8
15°	964.3	967.3	986.8	1027.1	1081.6	1142.6	1177.0	1161.0	*1143.2*	1086.9	971.4
17.5°	930.6	934.7	961.9	1016.4	1086.9	1174.0	1248.0	1253.4	*1240.9*	1179.9	1039.5
20°	911.6	914.6	938.8	995.1	1083.4	1197.1	1314.4	1364.7	*1351.1*	1287.1	1117.7
22.5°	927.6	930.0	946.0	989.8	1071.5	1210.1	1376.0	1476.1	*1468.4*	1402.1	1200.1
25°	1011.7	1019.4	1009.9	1017.6	1076.9	1217.2	1425.7	1587.5	*1589.2*	1522.3	1285.4
27.5°	1182.3	1172.2	1149.7	1111.2	1118.3	1236.2	1468.4	1692.3	*1707.7*	1639.6	1361.2
30°	1355.9	1349.9	1336.3	1276.5	1226.7	1278.3	1504.5	1799.5	*1823.8*	1755.1	1428.7
32.5°	1550.7	1556.7	1532.4	1460.7	1376.0	1363.6	1541.8	1901.4	*1947.0*	1886.0	1508.1
35°	1783.5	1785.3	1737.3	1657.9	1562.0	1504.5	1608.8	2013.9	*2098.0*	2053.0	1614.1
37.5°	2010.4	2021.0	1995.0	1870.0	1784.7	1679.9	1719.5	2158.5	*2276.9*	2259.2	1747.4
40°	2211.2	2227.8	2219.5	2098.6	1986.7	1898.4	1891.3	2327.9	*2493.1*	2513.3	1923.3
42.5°	2371.1	2381.8	2388.3	2302.4	2203.5	2153.7	2103.4	2524.5	*2748.4*	2830.8	2138.9
45°	2539.9	2543.5	2557.1	2499.1	2412.6	2416.7	2353.9	2763.2	*3017.3*	3182.6	2386.5
47.5°	2754.9	2766.8	2760.3	2699.3	2621.1	2667.9	2612.8	3009.1	*3282.7*	3558.1	2640.0
50°	3016.8	3029.2	3023.3	2952.2	2865.1	2884.7	2850.3	3247.8	*3538.6*	3912.4	2850.9
52.5°	3151.8	3161.9	3235.3	3267.3	3221.7	3097.3	3052.9	3510.2	*3754.8*	4203.8	3044.6
55°	3086.6	3093.8	3253.7	3388.7	3555.8	3431.4	3256.6	3712.7	*3945.5*	4431.2	3188.5
57.5°	2816.5	2855.0	3072.4	3301.1	3652.3	3761.3	3587.2	3933.1	*4129.2*	4589.4	3330.1
60°	2262.7	2260.9	2572.5	2983.0	3464.0	3851.9	4053.9	4231.0	*4313.4*	4710.8	3519.6
62.5°	1250.4	1261.7	1676.3	2217.1	2940.3	3617.4	4404.0	4745.8	*4733.3*	4922.9	3816.4
65°	622.5	645.1	870.1	1270.0	1956.5	2989.5	4464.4	5531.2	*5495.7*	5422.2	4429.5
67.5°	*395.1*	*404.0*	*528.4*	*738.0*	*1087.5*	*1921.5*	*4088.3*	*6117.0*	*6199.4*	*6014.6*	*5037.8*
70°	255.9	270.7	367.2	504.7	656.3	990.4	2994.8	5737.3	*5926.3*	5949.4	4658.7
72.5°	139.2	149.9	234.6	360.1	473.9	495.2	1682.2	4305.7	*4609.5*	5046.7	3644.6
75°	79.4	87.1	128.5	244.6	347.7	301.5	745.7	2882.3	*3076.0*	3606.7	2611.6
77.5°	48.0	54.5	72.3	119.1	218.0	201.4	282.0	1754.5	*1877.7*	2151.9	1370.7
80°	21.9	26.1	45.6	65.7	119.1	95.4	107.8	818.0	*844.7*	883.2	453.7
82.5°	10.1	11.8	20.7	39.1	67.5	55.1	41.5	189.0	*266.0*	251.7	115.5
85°	1.2	1.2	7.7	16.0	19.0	14.2	17.2	42.6	*53.9*	75.8	33.2
87.5°	0.0	0.0	0.6	0.6	1.2	1.8	3.6	5.3	*7.7*	12.4	8.3
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: P634530
CATALOG NUMBER: GWS-SA3B-830-U-T2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	720.3	720.3	720.3	720.3	720.3	720.3	720.3	720.3	720.3	720.3	720.3
2.5°	731.5	714.9	700.1	678.2	663.4	646.8	635.6	621.9	616.6	612.5	606.5
5°	748.1	721.5	685.3	645.1	611.9	580.5	551.5	532.5	515.9	513.6	505.3
7.5°	775.4	735.7	674.7	608.9	552.6	500.5	459.7	426.5	409.9	404.6	395.1
10°	811.5	757.0	658.7	558.0	476.8	414.6	368.4	331.1	305.1	295.6	288.5
12.5°	851.8	776.5	633.2	495.2	402.8	331.7	273.1	233.4	216.8	210.9	205.5
15°	898.0	794.9	592.9	432.4	330.5	244.0	202.6	185.4	178.3	176.5	174.7
17.5°	942.4	806.8	544.9	367.2	254.1	189.5	170.0	163.5	161.7	159.9	158.7
20°	992.8	815.1	488.7	305.6	197.2	160.5	151.0	146.3	142.8	139.2	138.6
22.5°	1044.3	815.1	427.7	245.2	165.3	143.9	133.3	124.4	117.9	114.3	113.1
25°	1093.4	803.8	367.2	196.1	145.7	127.9	114.3	104.3	95.4	91.2	90.0
27.5°	1128.4	774.8	314.5	165.9	132.1	113.7	97.1	85.9	78.8	74.6	74.0
30°	1150.3	731.5	266.0	148.1	120.2	98.9	82.3	72.9	67.5	64.6	63.4
32.5°	1166.9	678.2	222.7	135.6	109.0	85.9	71.7	64.0	59.2	56.9	56.3
35°	1200.1	627.9	190.7	124.4	97.1	75.2	62.8	56.9	53.3	50.3	49.8
37.5°	1246.3	585.8	165.3	114.3	85.9	66.9	56.9	51.5	48.6	45.6	45.0
40°	1314.4	559.2	146.3	104.3	75.8	60.4	52.1	47.4	43.2	40.3	39.7
42.5°	1419.2	546.7	133.9	94.2	66.9	54.5	48.0	42.1	37.9	34.9	34.4
45°	1544.2	553.2	123.2	84.1	61.0	50.3	42.6	36.7	32.6	29.6	29.0
47.5°	1678.1	576.3	114.3	74.6	55.1	46.2	37.9	31.4	27.8	24.9	24.3
50°	1817.9	614.2	106.6	65.7	50.3	41.5	32.6	27.2	23.7	21.3	20.7
52.5°	1939.3	665.8	98.9	59.2	46.2	36.7	28.4	23.7	20.1	17.8	17.2
55°	2055.4	714.4	93.0	53.3	41.5	32.0	24.9	20.1	17.2	14.8	14.2
57.5°	2181.6	765.9	85.9	48.0	37.3	28.4	21.9	17.2	14.8	12.4	11.8
60°	2365.2	842.3	75.2	43.8	32.6	24.9	19.0	15.4	13.0	10.1	9.5
62.5°	2630.0	981.5	63.4	37.9	27.8	21.3	16.0	13.0	10.7	8.3	7.1
65°	3125.1	1218.4	52.1	31.4	22.5	17.8	13.6	10.7	8.3	5.9	5.3
67.5°	*3481.7*	*1280.0*	*42.1*	*25.5*	*18.4*	*13.6*	*11.3*	*8.3*	*5.9*	*4.1*	*3.6*
70°	3044.0	919.3	32.6	20.7	15.4	10.7	8.9	6.5	4.1	3.0	2.4
72.5°	2293.5	600.6	24.3	16.0	11.8	8.9	6.5	5.3	3.6	2.4	1.8
75°	1616.5	347.1	17.8	11.8	8.3	6.5	5.3	4.1	3.0	1.8	1.8
77.5°	828.7	143.3	12.4	8.3	5.9	4.1	3.6	2.4	2.4	1.8	1.2
80°	251.7	47.4	7.1	5.3	4.1	3.0	1.8	1.8	1.8	1.2	0.6
82.5°	57.5	15.4	4.1	4.1	3.0	2.4	1.8	0.6	0.6	0.0	0.0
85°	14.8	4.7	3.6	3.0	3.0	2.4	1.2	0.6	0.0	0.0	0.0
87.5°	5.3	3.0	3.0	3.0	2.4	1.8	1.2	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

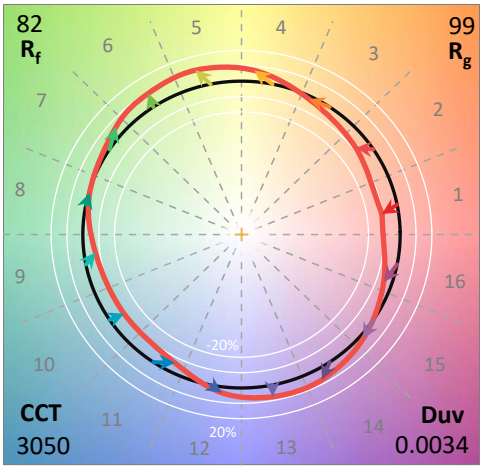
Test Information

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

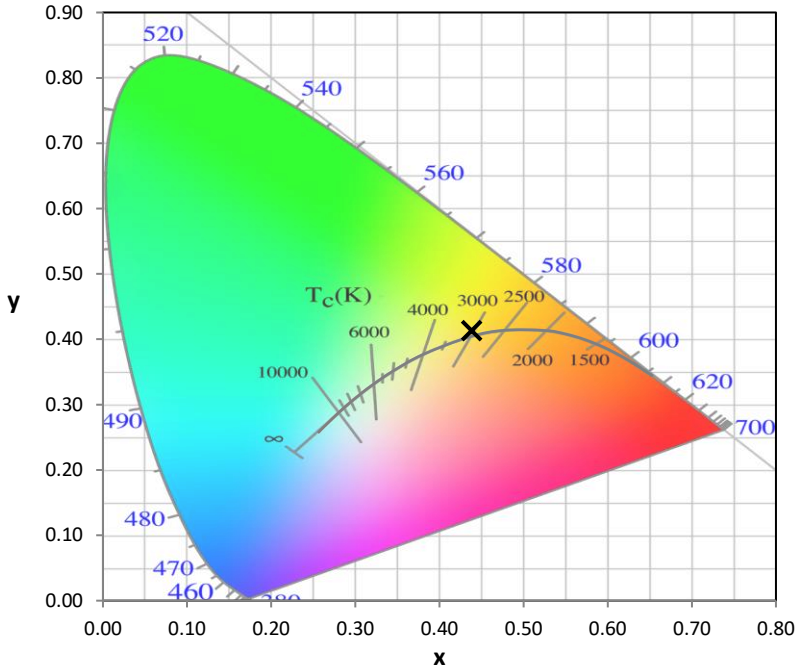
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

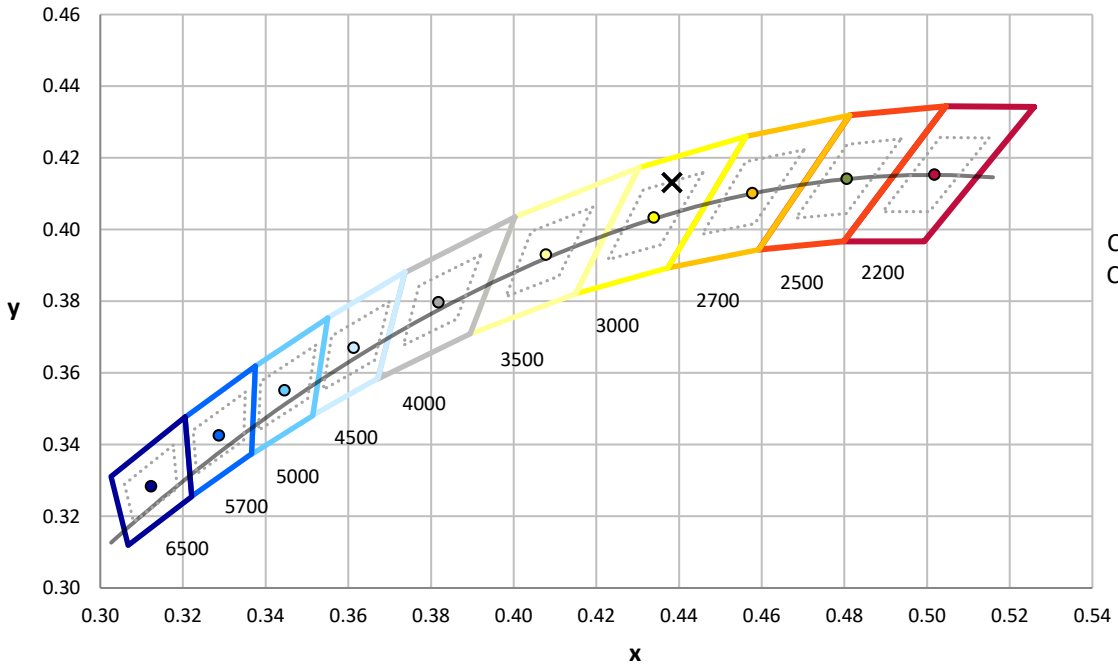
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

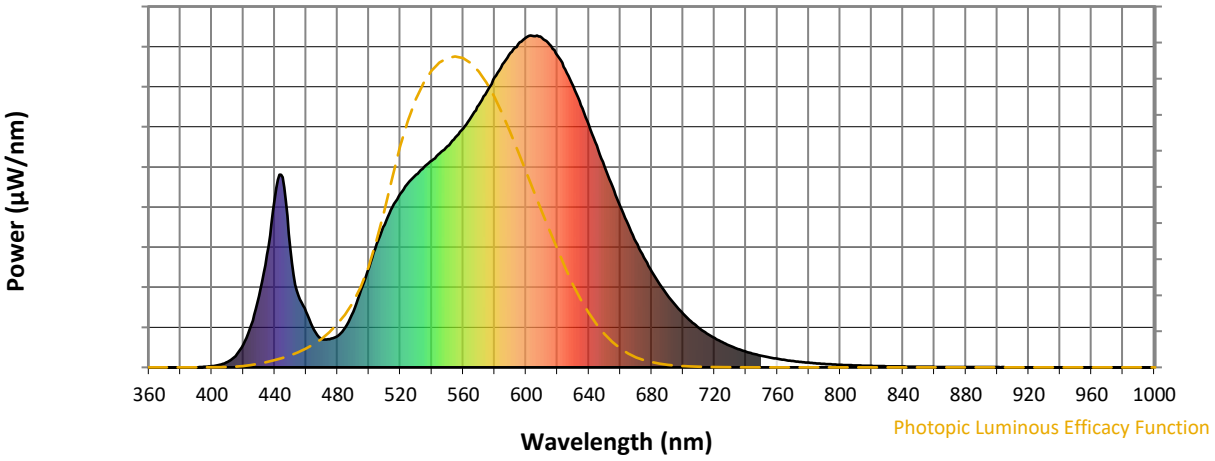


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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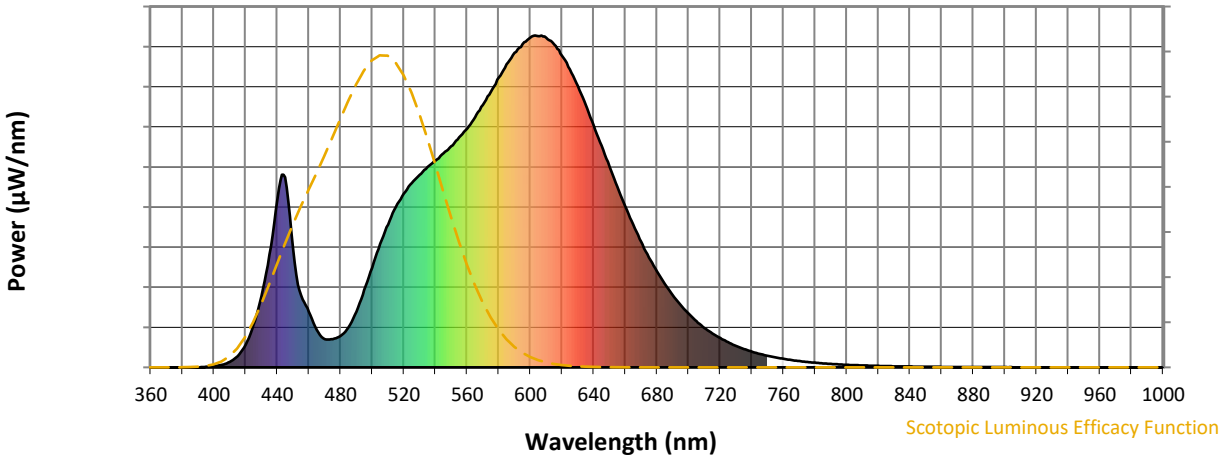
Scotopic Flux vs. Wavelength



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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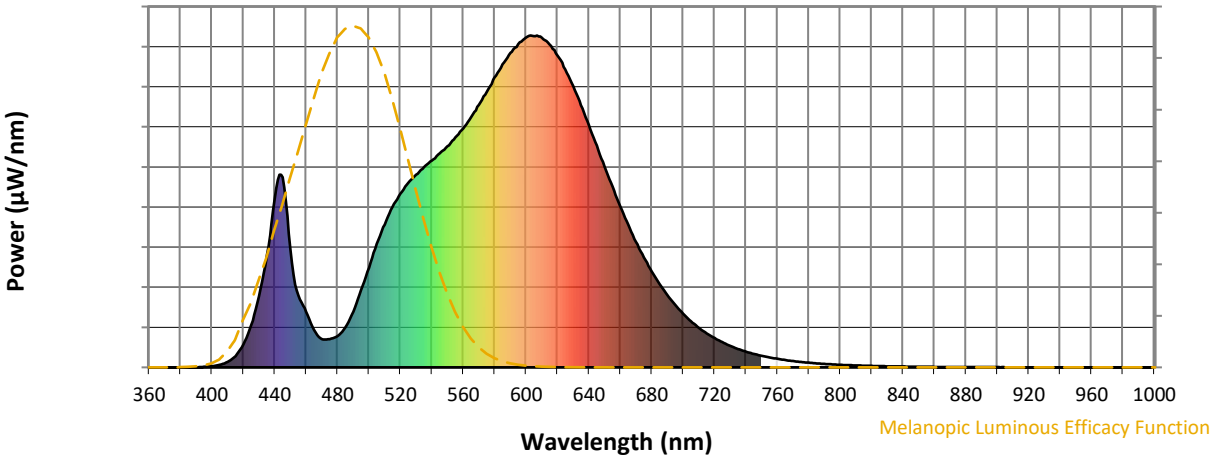
Melanopic Flux vs. Wavelength



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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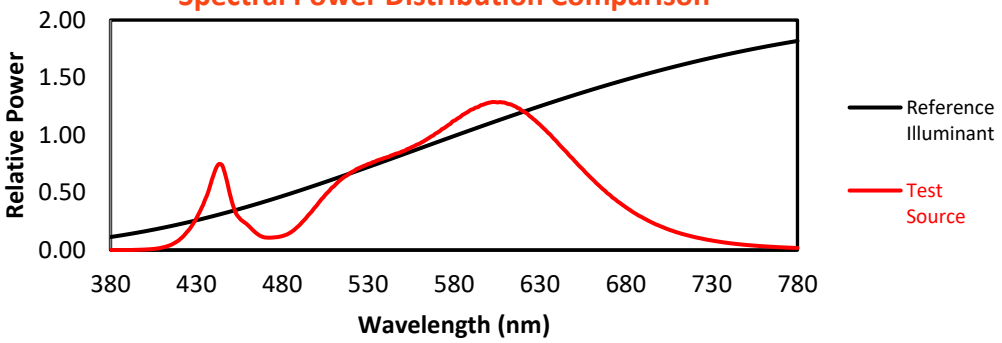
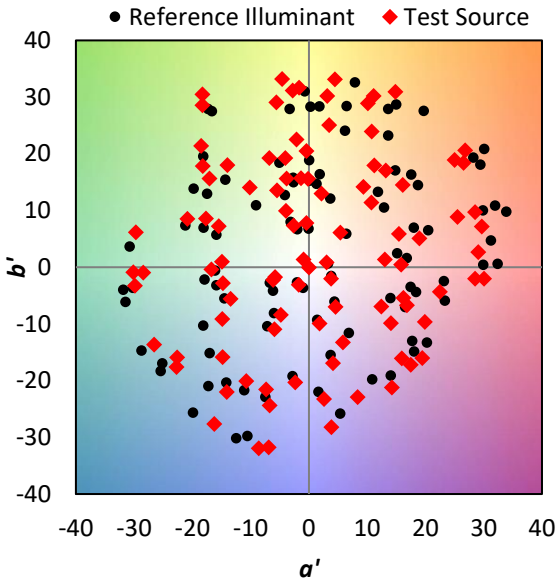
Summary

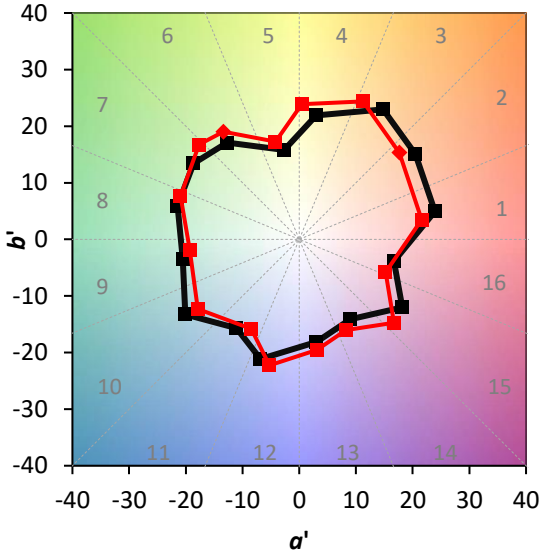
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

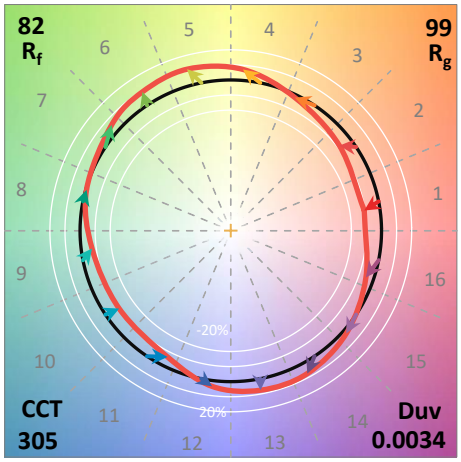
Spectral Power Distribution Comparison

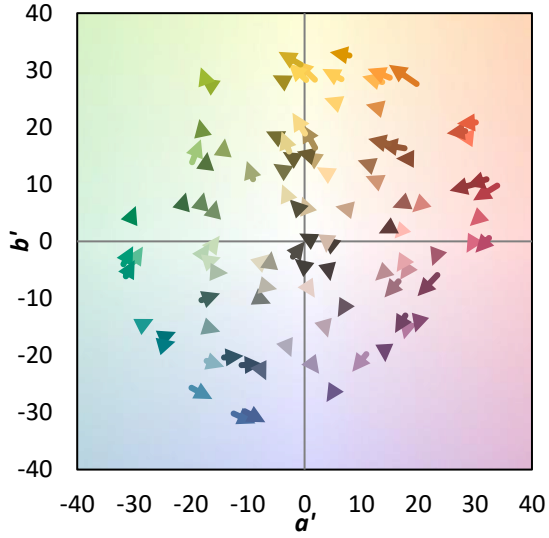


Color Vector Graphics









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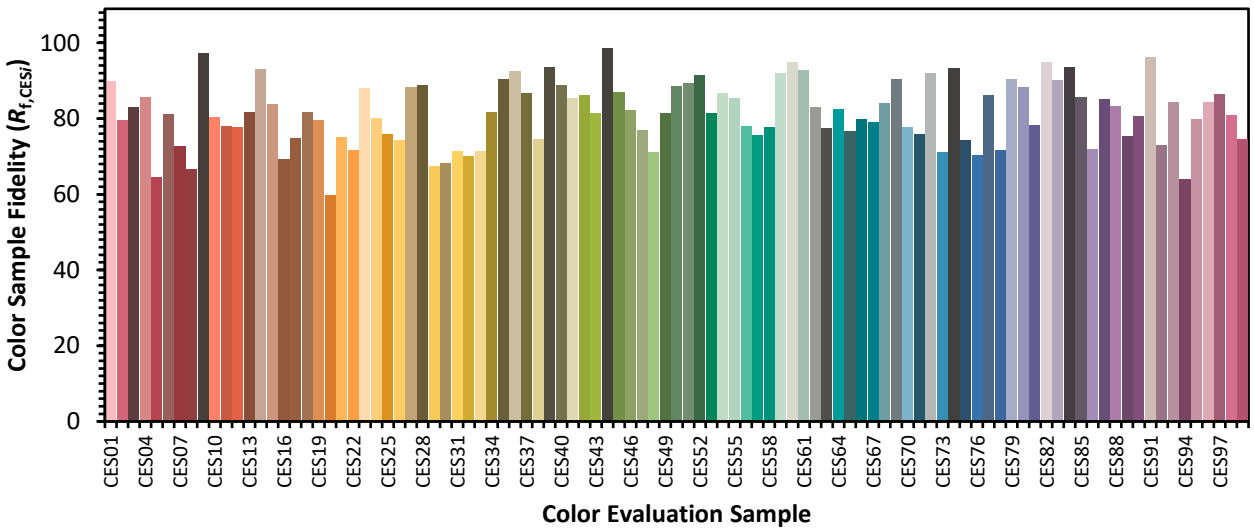
Individual Sample Fidelity Index ($R_{f,i}$)

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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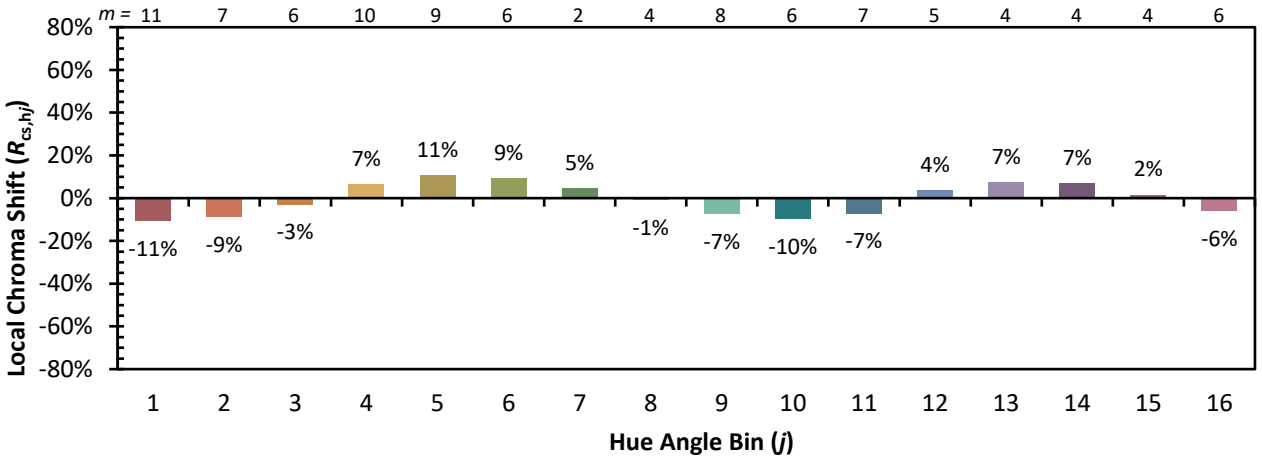
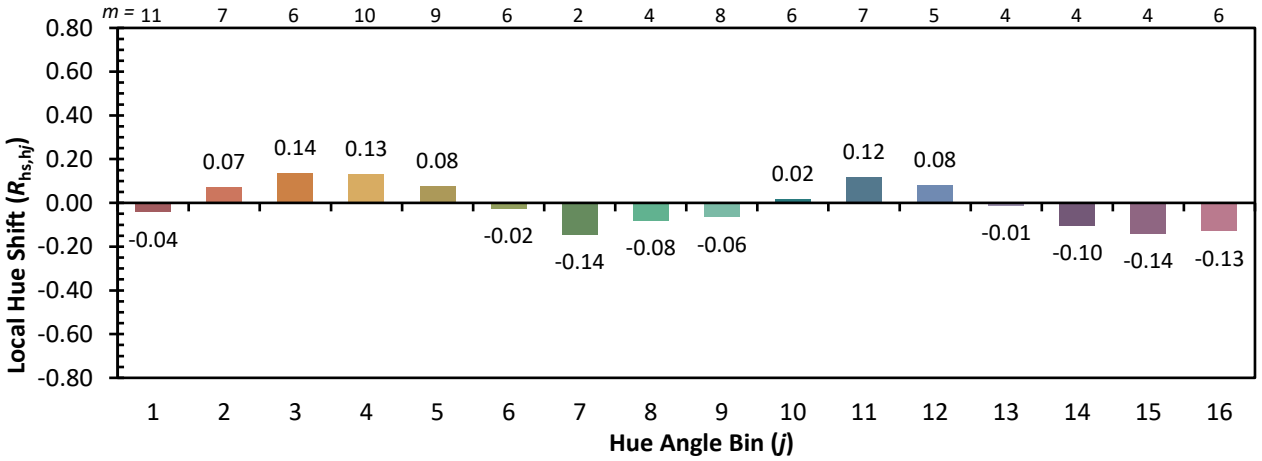
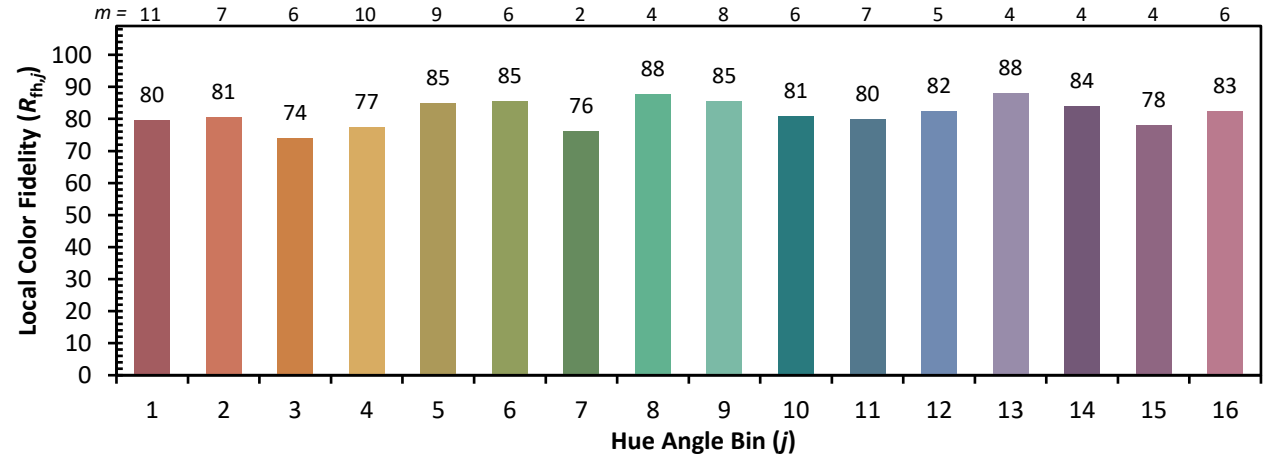
Color Rendition by Hue-Angle Bin







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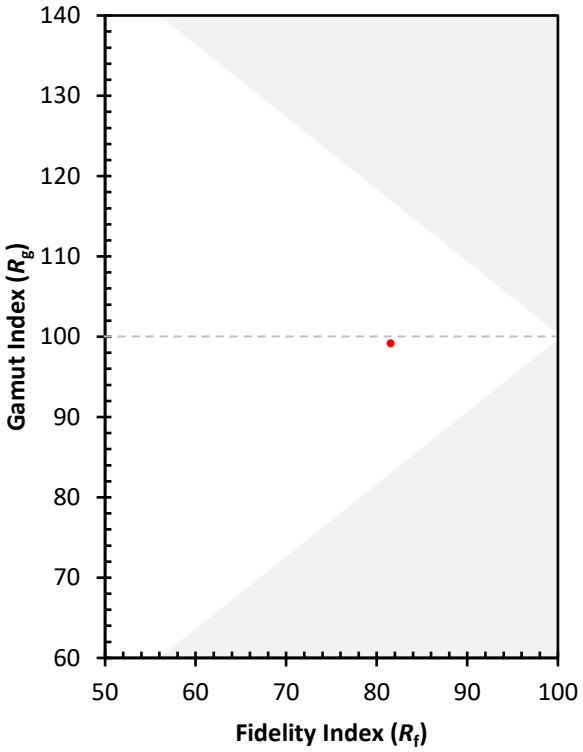
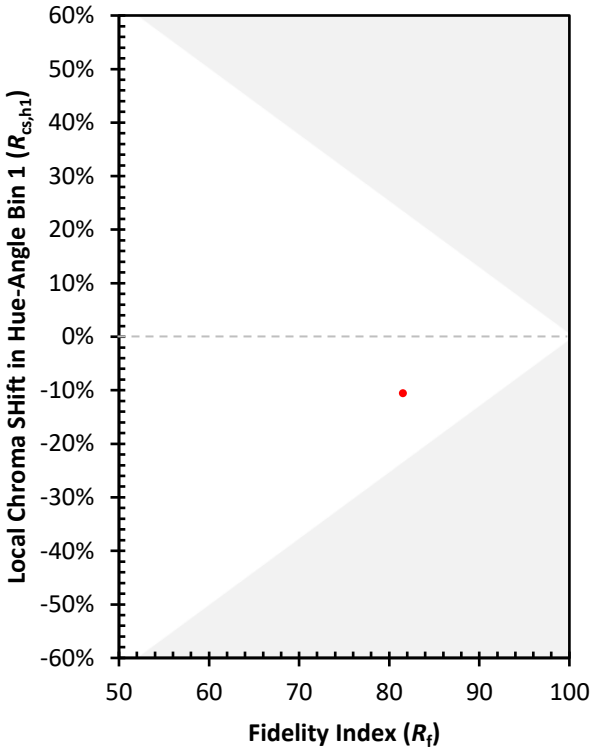
Measure Comparisons





(END OF REPORT)