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: P631069

Luminaire Tested: GWS-SA1E-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:	P631069
	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-SA1E-830-U-T2R-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(16) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	4854.6 lumens
Efficiency:	N/A
Efficacy:	83.1 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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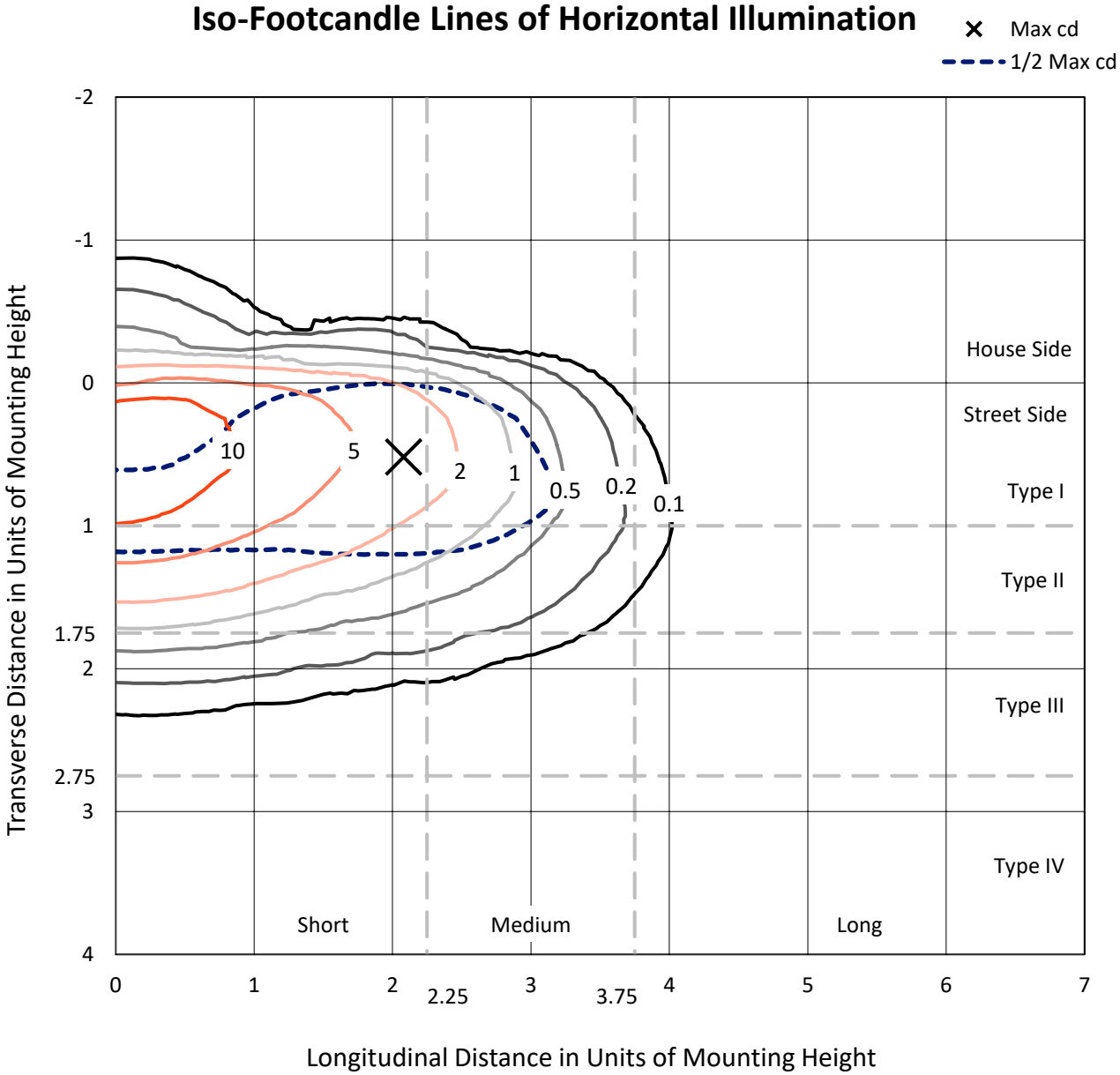
REPORT NUMBER: P631069
CATALOG NUMBER: GWS-SA1E-830-U-T2R-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 14.5 fc
Type II - Short - N/A

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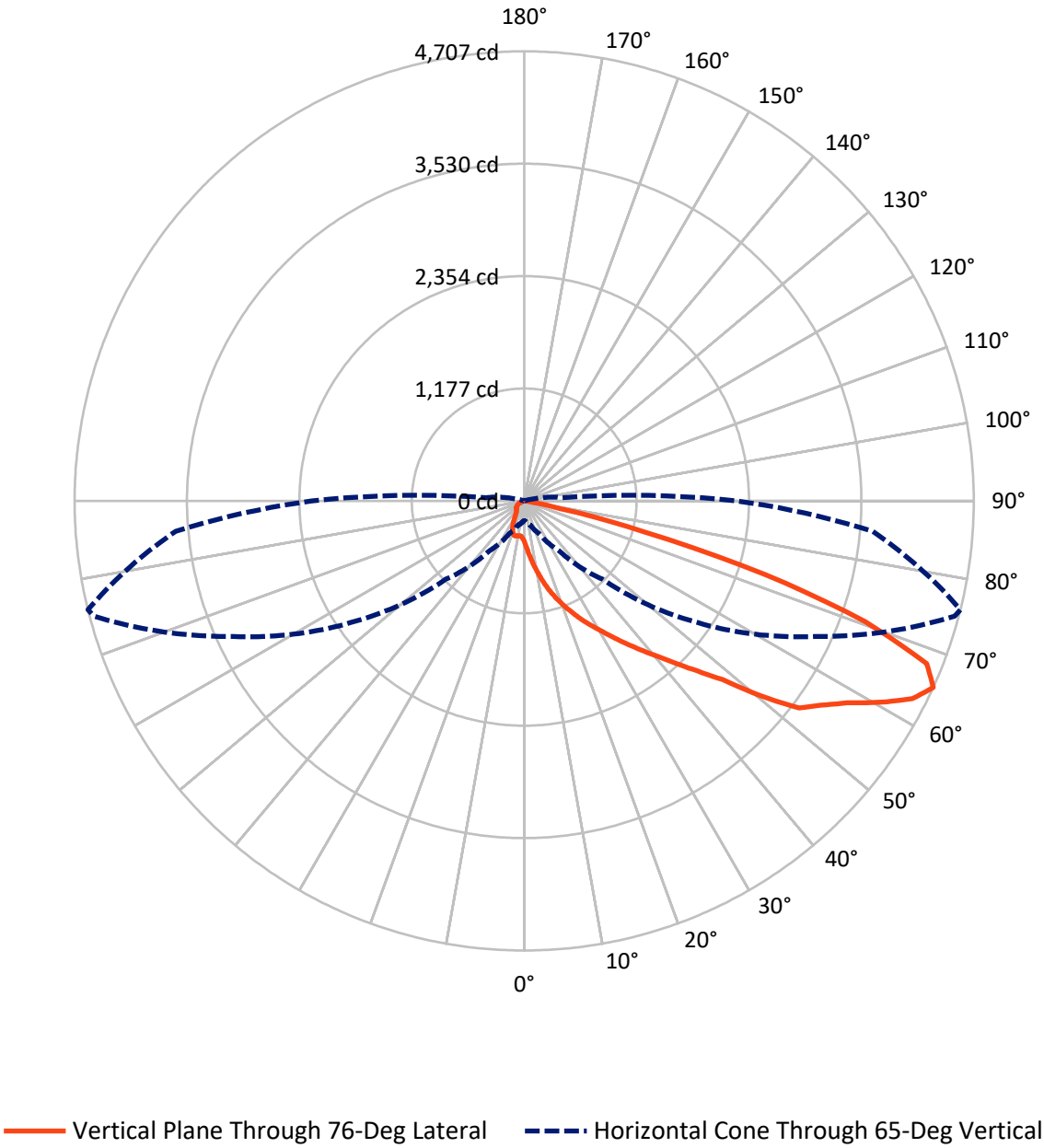
Luminous Intensity Polar Plot



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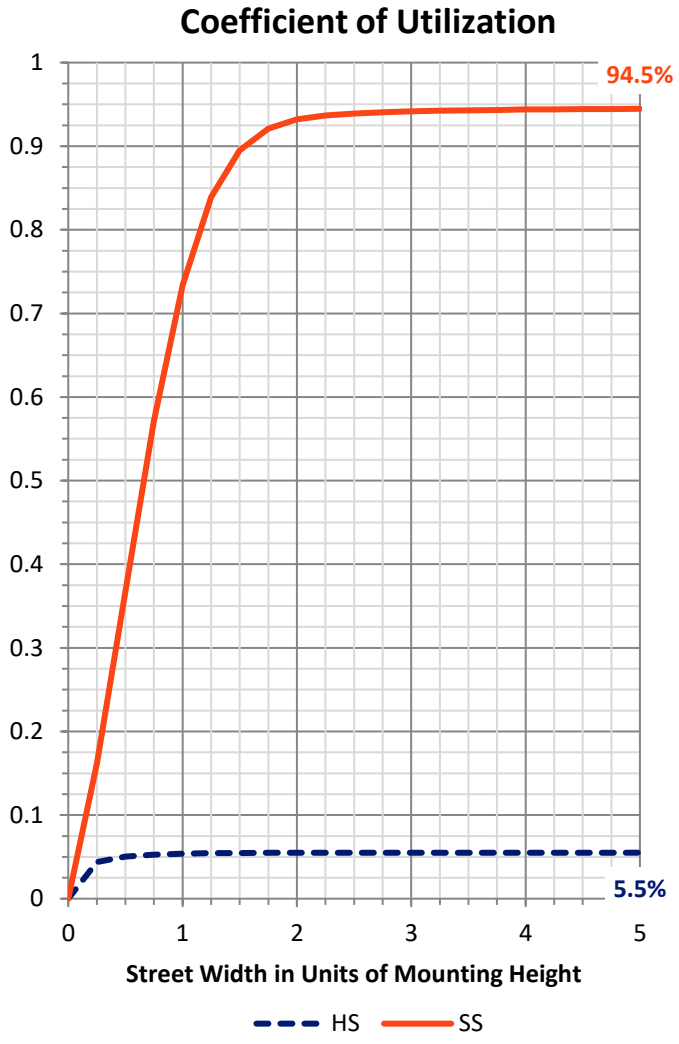
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	268.4	0.0	268.4
	% Fixture	5.5	0.0	5.5
Street Side	Lumens	4586.2	0.0	4586.2
	% Fixture	94.5	0.0	94.5
Total	Lumens	4854.6	0.0	4854.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	1.1
10°-20°	198.4	4.1
20°-30°	404.8	8.3
30°-40°	719.9	14.8
40°-50°	1064.2	21.9
50°-60°	1218.4	25.1
60°-70°	929.6	19.1
70°-80°	260.4	5.4
80°-90°	6.6	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°	4854.6	100.0
0°-180°	4854.6	100.0



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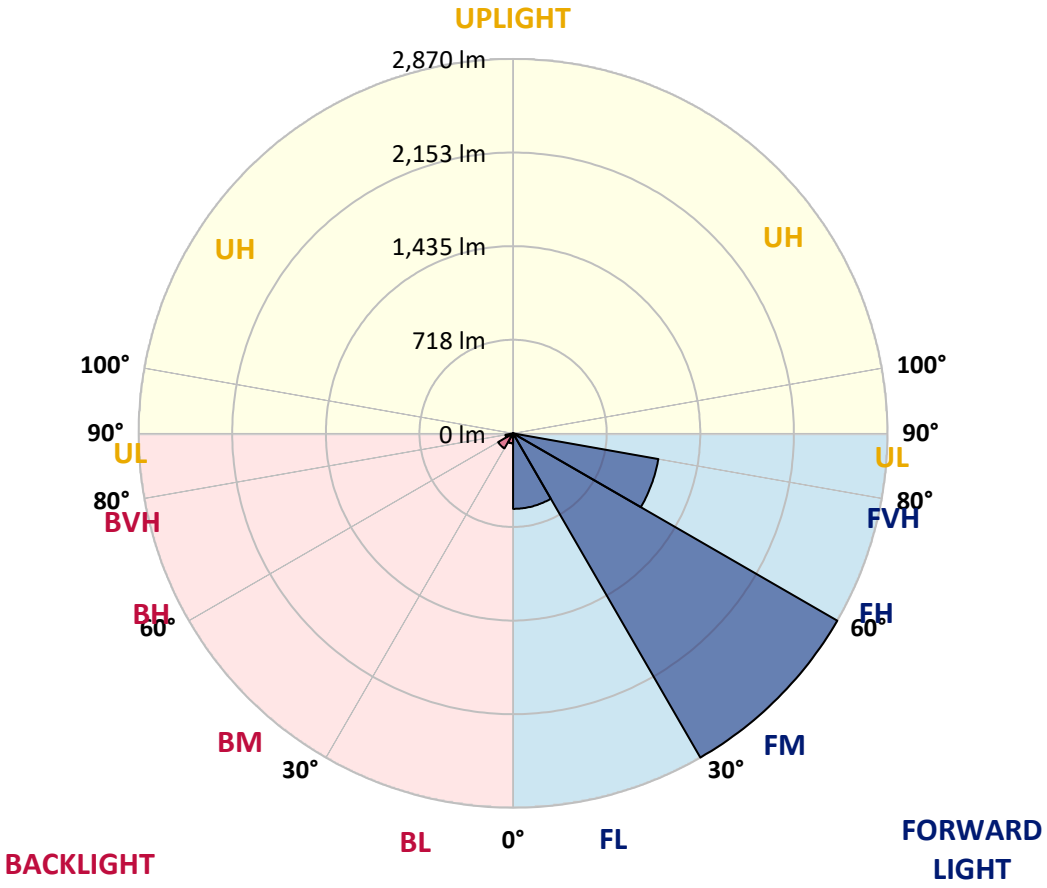
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	578.9	11.9			
FM	(30°-60°)	2870.1	59.1			
FH	(60°-80°)	1131.0	23.3			G1/1800
FVH	(80°-90°)	6.2	0.1			G0/10
BL	(0°-30°)	76.6	1.6	B0/110		
BM	(30°-60°)	132.4	2.7	B0/220		
BH	(60°-80°)	59.0	1.2	B0/110		G0/110
BVH	(80°-90°)	0.4	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: P631069
CATALOG NUMBER: GWS-SA1E-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	*429.8*	429.8
2.5°	662.4	672.3	664.6	651.6	626.6	602.4	571.4	528.6	494.5	*490.2*	458.3
5°	894.6	893.7	876.9	860.0	833.7	792.3	729.7	650.3	573.9	*567.5*	495.8
7.5°	1032.7	1034.0	1024.5	1011.5	985.6	942.9	877.7	781.9	670.2	*657.2*	547.2
10°	1148.7	1148.3	1141.4	1135.4	1112.1	1083.6	1013.7	908.4	773.7	*753.5*	604.6
12.5°	1235.9	1238.9	1242.4	1248.4	1238.5	1210.5	1144.4	1029.6	878.6	*856.2*	670.2
15°	1305.0	1305.8	1318.8	1342.1	1350.3	1335.6	1275.6	1147.0	982.2	*962.8*	745.7
17.5°	1325.7	1327.4	1349.4	1392.1	1435.3	1443.5	1398.2	1265.3	1084.0	*1063.3*	819.1
20°	1369.3	1373.1	1389.5	1427.1	1481.5	1525.5	1507.8	1384.8	1185.9	*1158.7*	894.1
22.5°	1506.5	1508.6	1503.0	1507.8	1535.8	1586.8	1597.5	1500.4	1290.3	*1261.4*	975.3
25°	1742.5	1743.4	1704.1	1667.0	1645.9	1655.4	1679.1	1607.0	1393.9	*1365.4*	1050.8
27.5°	1987.7	1990.7	1943.6	1880.6	1805.1	1762.0	1755.1	1704.6	1498.3	*1466.8*	1125.4
30°	2218.5	2218.5	2168.9	2092.1	1991.1	1907.0	1857.3	1803.0	1610.1	*1575.5*	1201.8
32.5°	2426.1	2424.4	2360.9	2277.6	2178.0	2085.6	1981.2	1905.7	1734.3	*1695.9*	1289.9
35°	2597.4	2593.1	2521.0	2441.2	2334.6	2266.0	2149.5	2016.1	1869.0	*1830.6*	1380.5
37.5°	2726.9	2722.1	2656.1	2571.5	2472.7	2428.2	2330.7	2148.6	2011.0	*1976.0*	1481.0
40°	2797.2	2787.7	2742.0	2679.0	2596.1	2557.3	2516.7	2313.0	2178.0	*2134.4*	1599.7
42.5°	2817.9	2806.7	2776.5	2747.2	2697.1	2666.5	2710.0	2498.6	2361.4	*2323.8*	1735.2
45°	2756.6	2750.2	2747.6	2768.7	2777.8	2786.4	2893.9	2704.0	2563.8	*2535.3*	1905.7
47.5°	2609.1	2607.3	2630.2	2718.2	2814.0	2905.1	3093.7	2957.3	2826.1	*2795.5*	2143.9
50°	2336.3	2354.0	2417.9	2572.4	2764.0	2972.4	3280.5	3308.6	3250.8	*3205.9*	2454.6
52.5°	1910.0	1944.1	2087.3	2322.1	2597.4	2953.4	3366.8	3589.9	3649.1	*3602.5*	2677.2
55°	1498.7	1530.7	1658.4	1956.1	2323.4	2808.9	3370.7	3687.0	3816.1	*3772.9*	2827.9
57.5°	1116.4	1145.7	1261.8	1546.6	1950.5	2524.5	3278.4	3741.0	4014.1	*3986.5*	3065.6
60°	729.7	758.6	863.5	1112.5	1513.0	2110.2	3051.0	3729.8	4283.9	*4281.3*	3357.8
62.5°	404.8	427.7	503.6	697.8	1056.0	1634.2	2693.6	3617.1	4544.9	*4561.3*	3598.6
65°	*207.1*	*221.8*	*268.0*	*383.6*	*639.1*	*1158.7*	*2223.7*	*3359.1*	*4665.8*	*4707.2*	*3662.0*
67.5°	135.5	140.2	151.5	199.4	342.2	728.9	1673.5	2945.2	4495.7	*4544.1*	3449.3
70°	110.0	113.9	120.4	132.9	176.5	387.1	1099.1	2352.3	3756.5	*3789.3*	2746.7
72.5°	80.7	85.9	98.4	106.6	127.3	212.3	571.8	1544.0	2579.7	*2637.5*	1726.1
75°	59.6	62.6	72.9	84.1	104.0	134.2	218.8	811.7	1332.1	*1298.5*	725.0
77.5°	35.8	38.0	46.6	53.9	74.2	83.7	76.4	299.9	405.2	*381.0*	175.2
80°	17.7	19.9	30.6	40.6	47.5	33.7	31.9	83.7	90.2	*90.2*	44.0
82.5°	6.0	7.8	16.4	26.8	23.3	12.9	15.1	21.6	24.2	*25.5*	12.9
85°	0.0	0.0	3.9	7.8	3.5	1.7	3.9	4.7	6.0	*6.5*	4.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	*1.7*	1.7
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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REPORT NUMBER: P631069
CATALOG NUMBER: GWS-SA1E-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8	429.8
2.5°	441.0	420.7	390.1	362.5	341.3	321.5	306.4	294.3	292.1	285.2	286.1
5°	460.9	424.2	367.7	324.1	293.4	272.7	255.5	242.5	236.9	231.3	227.0
7.5°	491.5	438.4	359.0	306.0	270.1	238.2	211.5	189.9	179.5	173.0	168.7
10°	529.1	458.3	359.5	295.2	242.1	193.3	156.6	132.9	121.7	118.2	117.8
12.5°	573.9	483.3	362.9	277.5	201.5	143.7	116.1	105.3	101.8	98.8	98.8
15°	621.4	511.4	362.9	245.1	153.6	112.2	100.5	93.6	89.3	87.6	86.7
17.5°	671.5	537.7	354.3	200.7	117.8	98.8	89.3	82.9	79.4	76.8	76.0
20°	725.0	562.7	332.7	153.6	101.0	88.5	79.4	72.9	69.5	66.9	66.9
22.5°	779.4	586.0	297.8	118.2	89.3	78.5	69.9	63.9	60.4	57.8	57.8
25°	829.8	601.6	252.9	97.5	80.7	69.9	62.1	56.1	52.2	50.5	49.6
27.5°	876.9	611.5	203.3	85.9	72.5	62.6	54.4	48.8	45.7	44.4	43.6
30°	925.6	614.1	155.4	78.1	65.6	55.2	47.5	43.2	40.6	38.8	38.8
32.5°	973.1	611.1	118.7	71.6	59.6	48.8	42.3	38.4	36.2	35.0	34.5
35°	1021.4	597.2	96.2	66.0	53.5	42.7	37.5	34.5	33.2	31.5	31.5
37.5°	1074.1	578.7	83.7	60.4	47.5	38.4	33.7	31.5	29.8	28.5	28.0
40°	1139.7	557.1	76.8	55.7	41.9	34.5	30.2	28.0	26.8	25.5	25.0
42.5°	1217.4	536.0	73.4	50.5	37.5	30.6	27.2	24.6	23.3	21.6	21.1
45°	1327.4	531.2	69.5	44.9	33.7	27.6	23.7	21.1	19.4	18.1	17.7
47.5°	1504.3	544.6	63.0	38.8	29.8	24.2	20.3	18.1	16.0	14.7	13.8
50°	1680.0	541.1	56.5	33.7	26.3	20.7	17.3	15.1	12.9	11.7	11.2
52.5°	1775.8	524.7	50.5	29.8	22.9	17.7	14.7	12.1	10.8	9.5	9.1
55°	1862.5	518.3	44.4	25.9	19.4	15.5	12.1	9.9	9.1	7.8	7.3
57.5°	2032.5	533.4	39.3	22.4	16.8	13.4	10.4	8.2	7.3	6.0	5.6
60°	2210.3	535.1	33.7	19.4	14.7	11.2	8.2	6.5	5.6	4.3	3.9
62.5°	2303.1	491.5	27.6	16.4	12.1	9.5	6.9	5.2	4.3	2.6	2.6
65°	*2225.4*	*397.4*	*23.3*	*13.4*	*9.5*	*7.3*	*5.2*	*3.9*	*2.6*	*1.3*	*0.4*
67.5°	1969.5	282.7	19.4	10.8	6.9	5.2	3.9	2.6	0.4	0.0	0.0
70°	1442.2	161.4	15.1	7.8	5.2	3.5	2.6	1.3	0.0	0.0	0.0
72.5°	886.4	86.3	11.2	5.2	3.9	2.6	2.2	0.9	0.0	0.0	0.0
75°	336.2	41.4	6.9	3.5	3.0	2.2	1.3	0.4	0.0	0.0	0.0
77.5°	91.1	20.3	3.9	2.6	2.2	1.3	0.9	0.0	0.0	0.0	0.0
80°	23.7	9.5	2.6	1.7	1.3	0.9	0.0	0.0	0.0	0.0	0.0
82.5°	8.2	4.3	1.3	1.3	0.9	0.4	0.0	0.0	0.0	0.0	0.0
85°	3.5	1.7	0.9	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	0.4	0.4	0.4	0.4	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

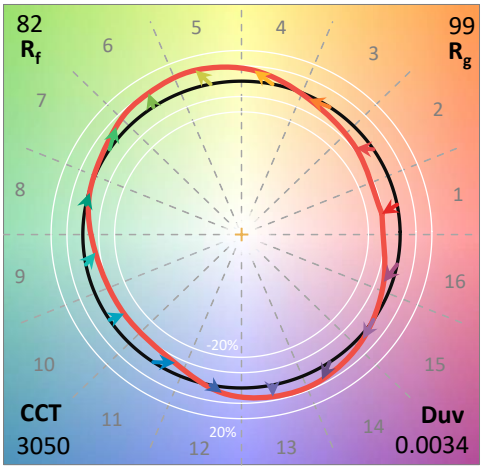
Test Information

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

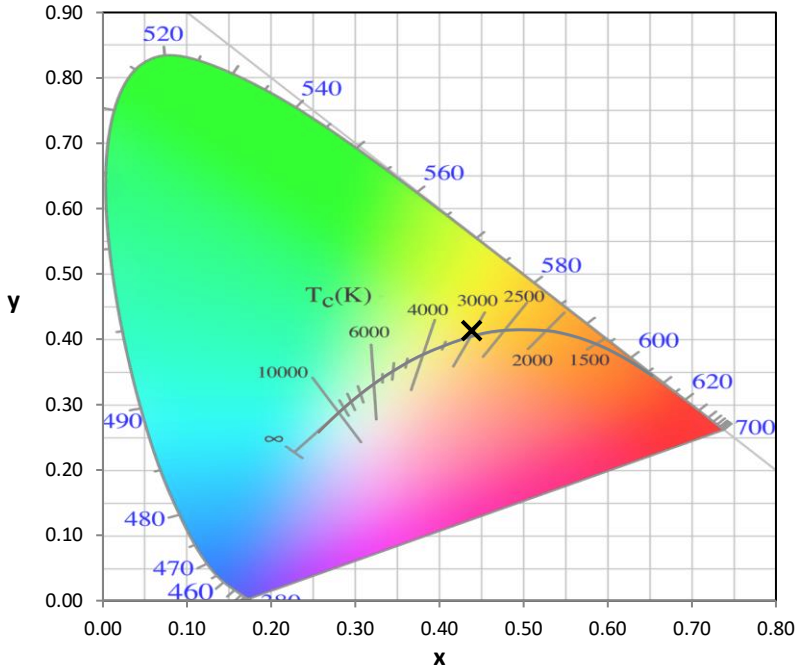
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

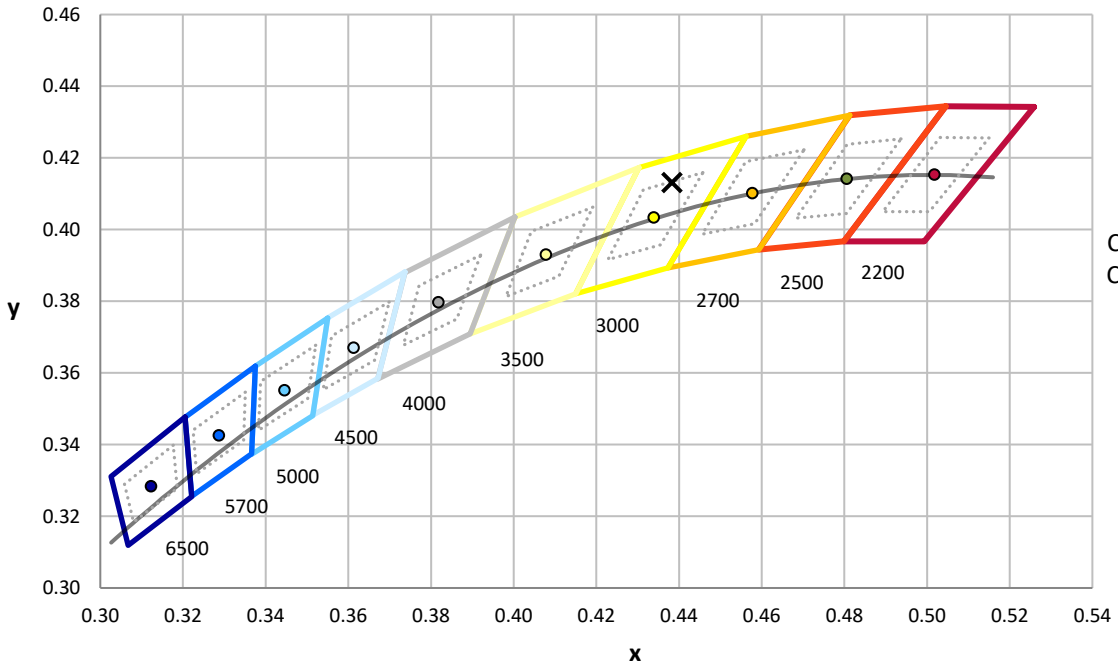
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

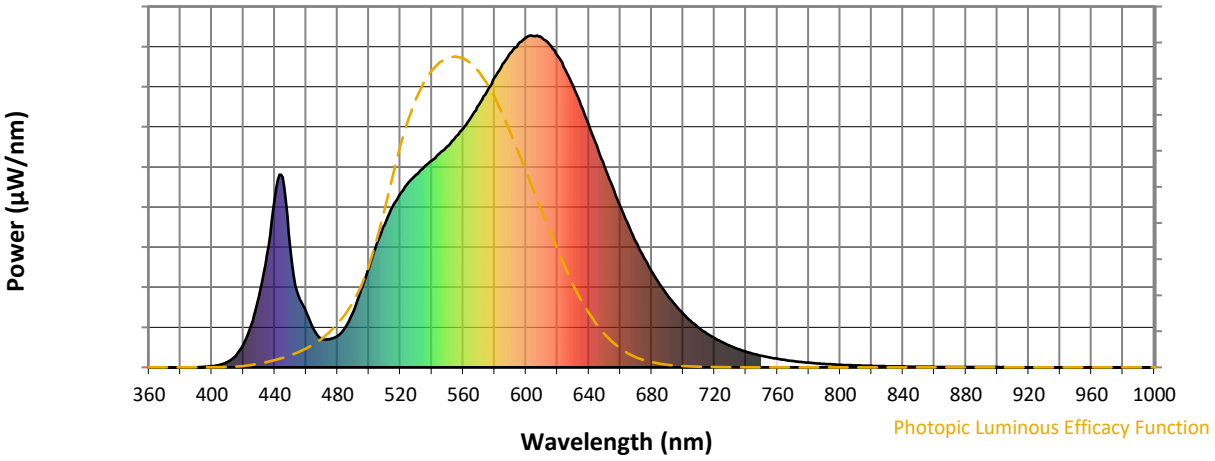


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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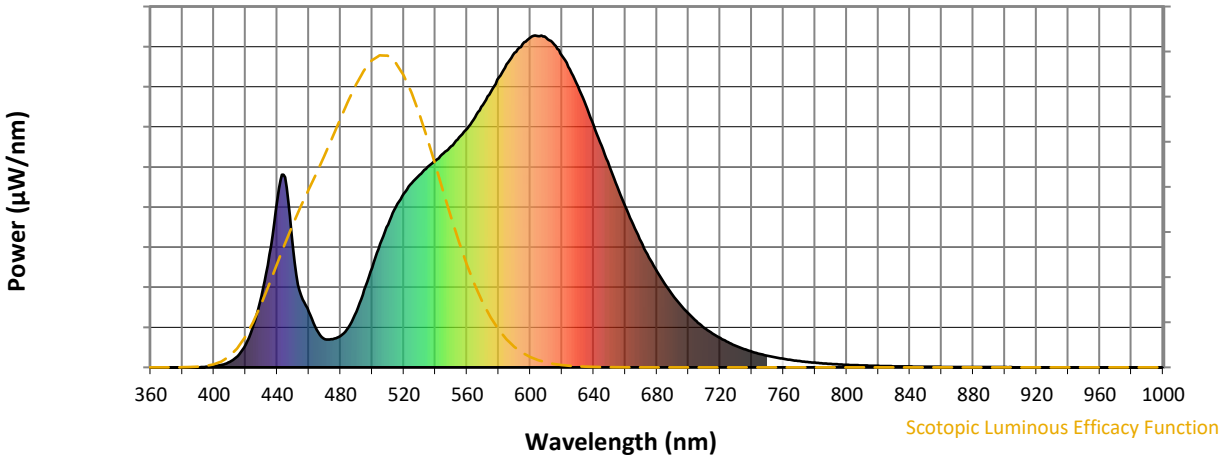
Scotopic Flux vs. Wavelength



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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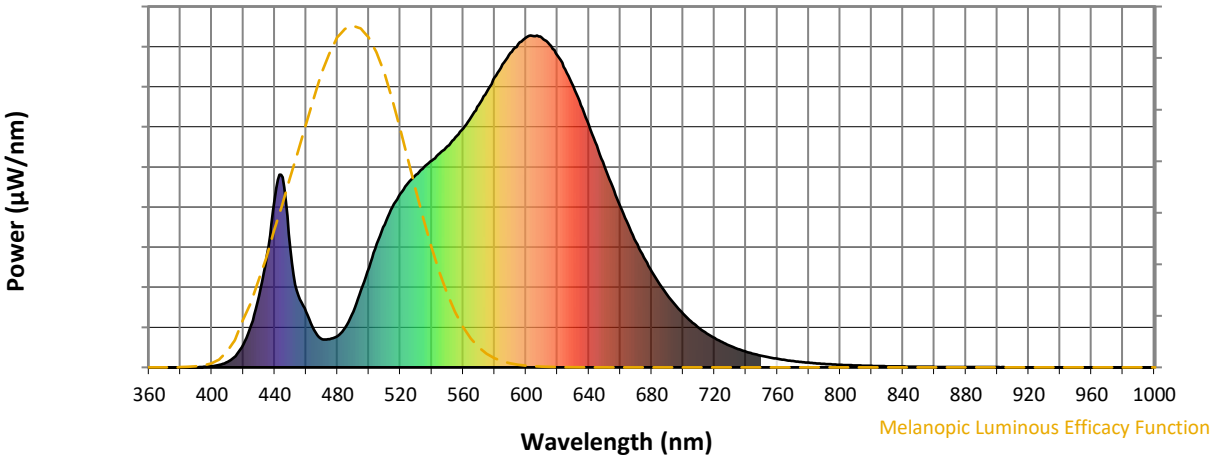
Melanopic Flux vs. Wavelength



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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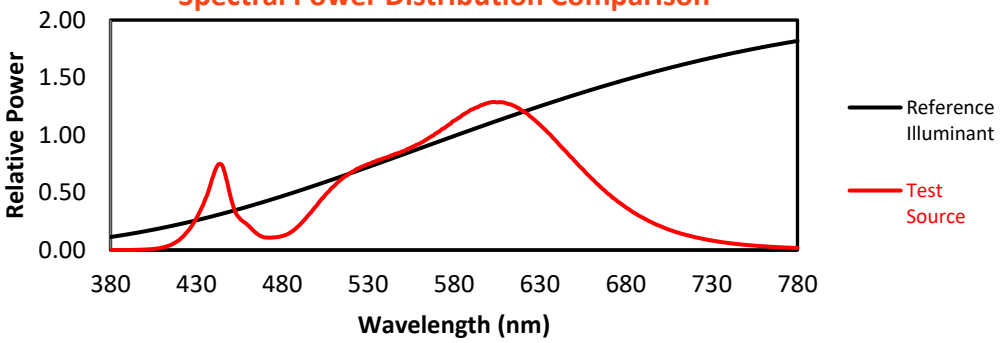
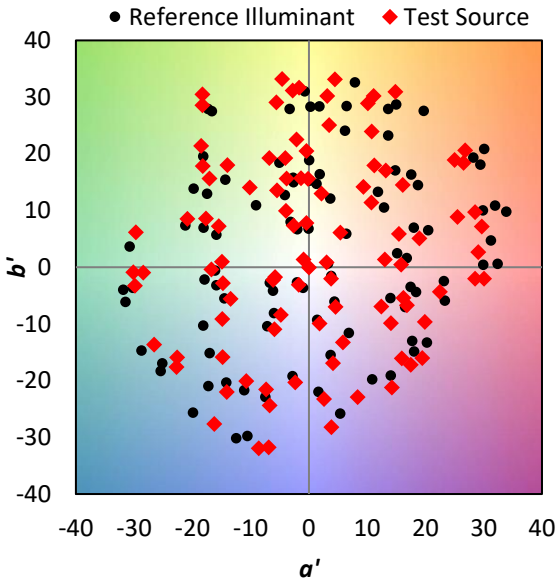
Summary

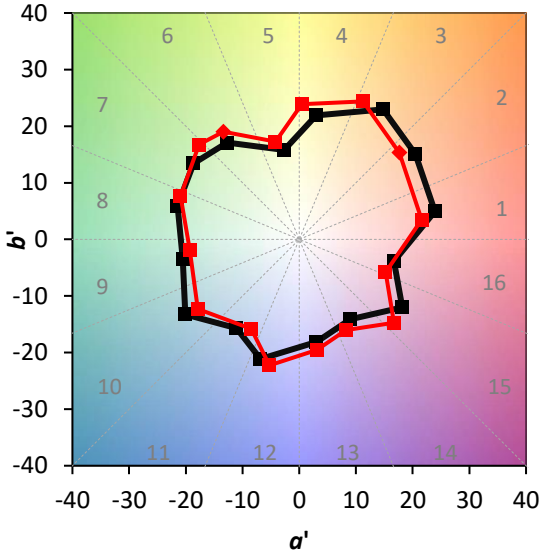
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

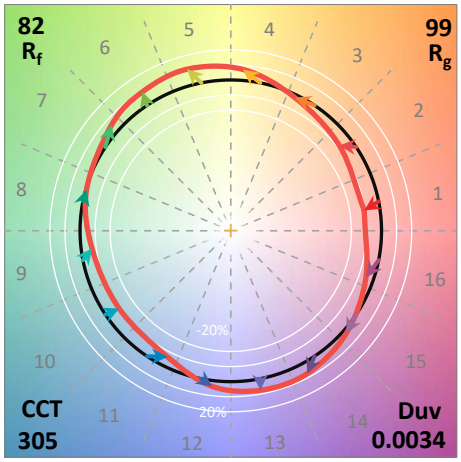
Spectral Power Distribution Comparison

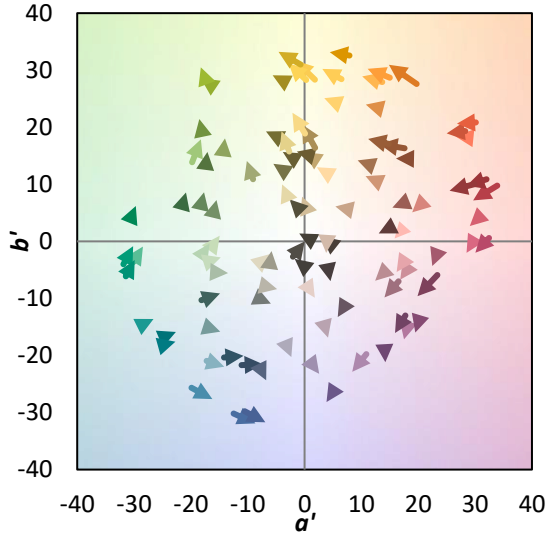


Color Vector Graphics









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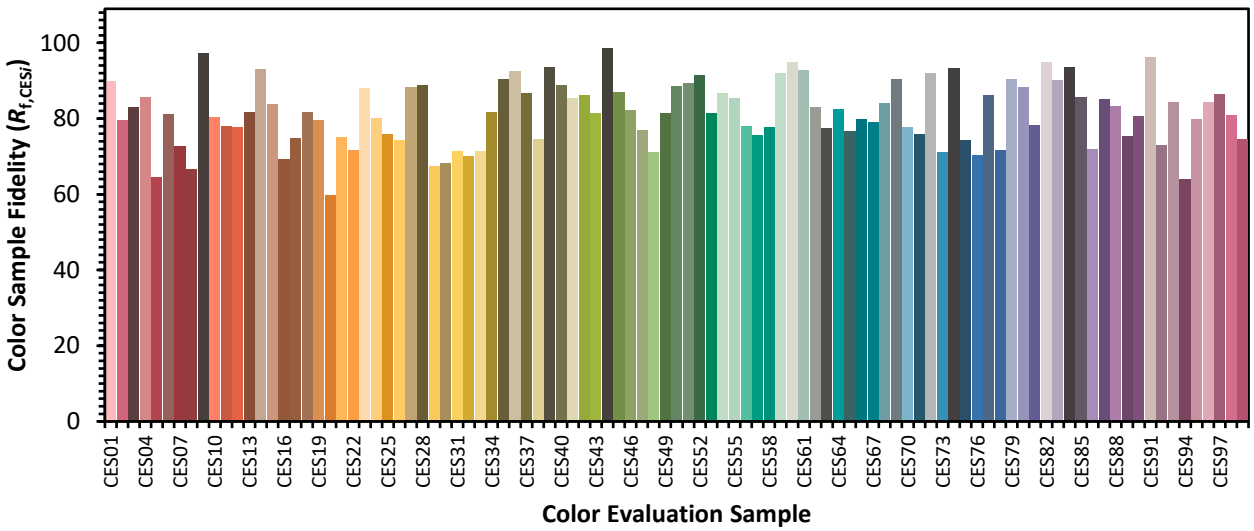
Individual Sample Fidelity Index ($R_{f,i}$)

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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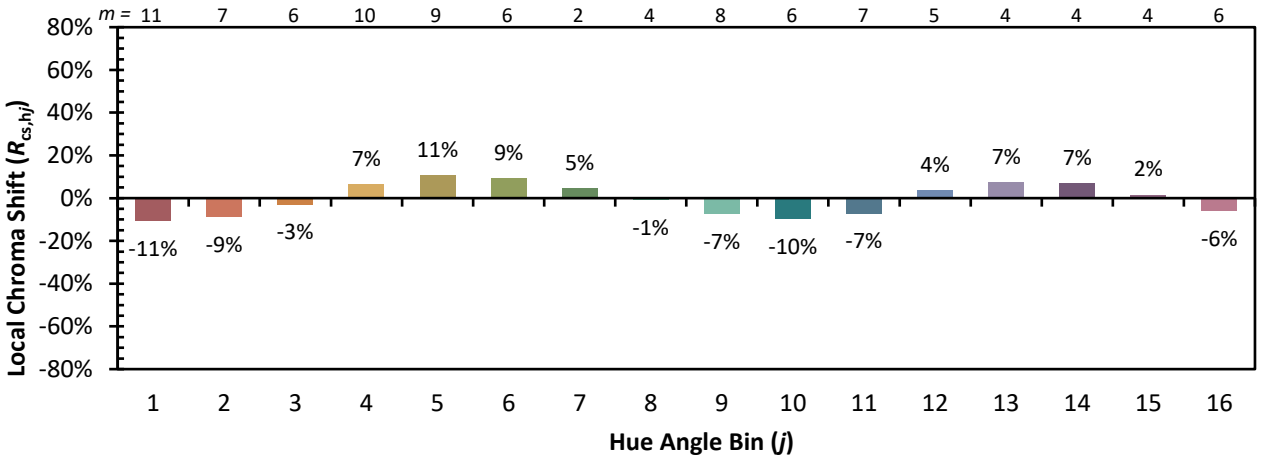
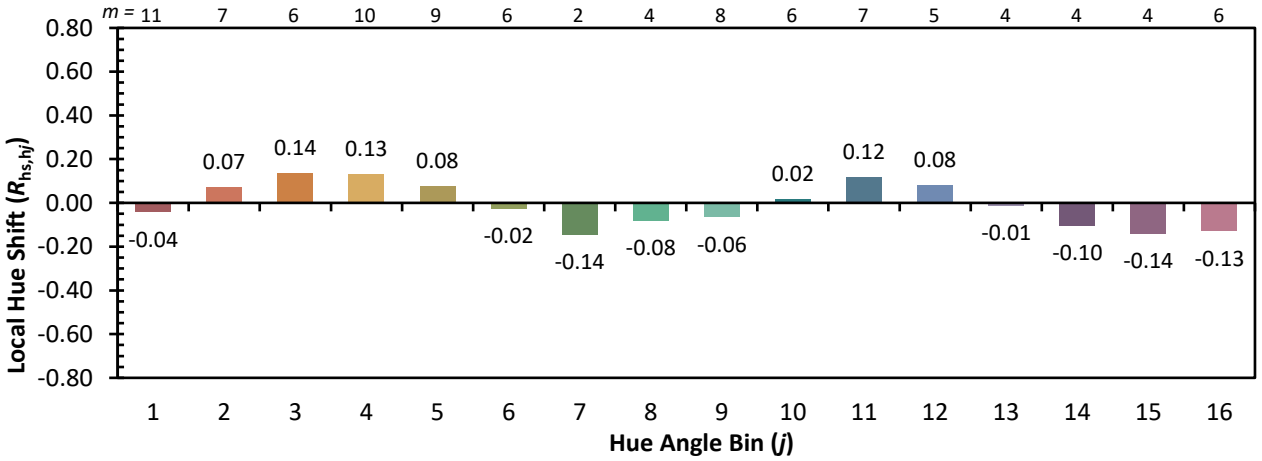
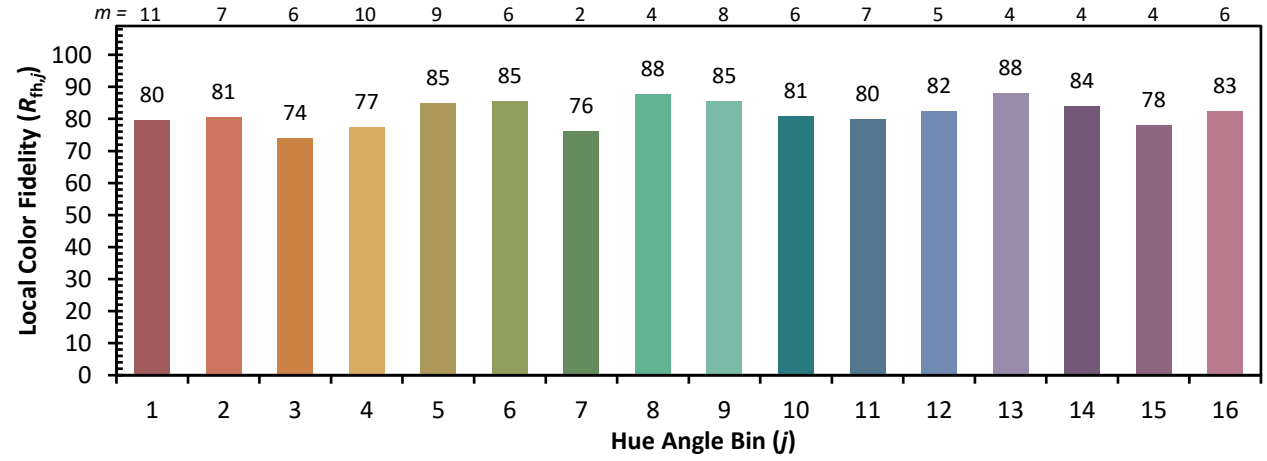
Color Rendition by Hue-Angle Bin







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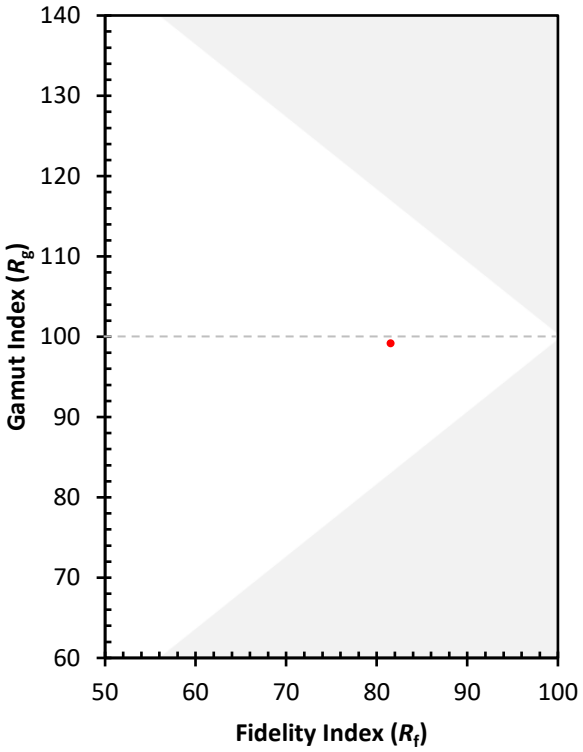
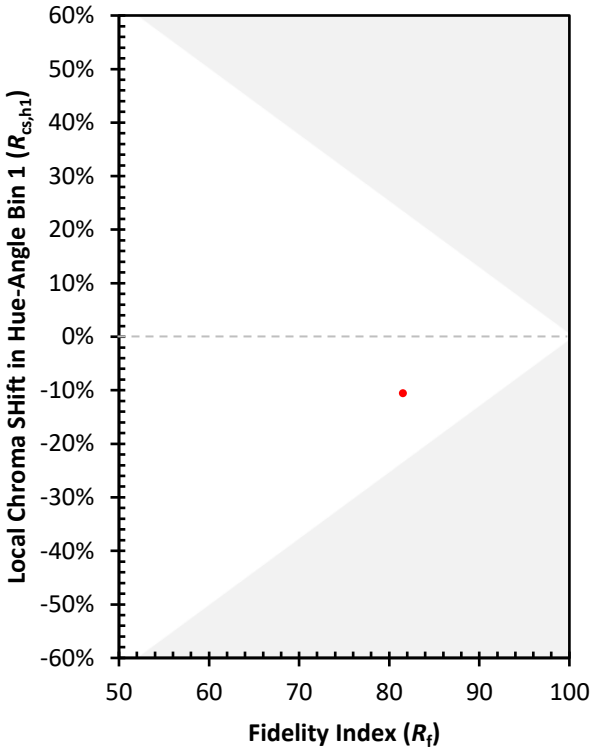
Measure Comparisons





(END OF REPORT)